



Nicole Arceneaux
Property Specialist, Marketing Business Unit

November 10, 2016



VIA EMAIL AND U.S. MAIL

Karel Detterman
Alameda County Environmental Health
1131 Harbor Bay Parkway
Alameda, CA 94502

**Re: Former Chevron Station No. 90955
Case # RO0003230; Geotracker ID# T10000009401
1200 Park Street, Alameda, California (“Property”); APN 070-0184-015**

Ms. Detterman:

Chevron Environmental Management Company (CEMC), on behalf of its affiliate, Chevron U.S.A. Inc. (CUSA), provides this letter concerning historical service station operations at the above-referenced Property, as requested by Alameda County Environmental Health during a telephone conference call on October 31, 2016.

According to CUSA archive records, CUSA’s predecessor, Standard Oil Company of California (Standard) leased the Property from David and Diana Garfinkle (“property owner”) from 1933 to 1978. At various times Standard leased the service station to independent third party dealers. In 1952, Standard requested permission from Alameda County Fire Department (AFD) to replace three (3) 550-gallon underground storage tanks (USTs) with three (3) 5,000-gallon USTs on the Property. A copy of the 1952 memo can be found in Attachment A. In 1967, Standard requested permission from AFD to relocate one (1) 550-gallon waste oil UST on the Property. A copy of the 1967 memo can be found in Attachment B. In 1978, CUSA terminated the lease agreement with the property owner and removed three (3) 5,000-gallon USTs, canopy, pumps and pump blocks from the Property. Subsequently, CUSA sold the station building, one hoist and compressor to the property owner. In 1988, CUSA removed one (1) 490-gallon waste oil UST from the Property. A copy of the Tank Removal Report can be found in Attachment C.

The table below summaries available UST records. A historical site plan from CUSA archive records can be found in Attachment D.

Tank #	Size in Gallons	Removed or Active	Date
1,2,3	550	Removed	1952
4,5,6	5,000	Removed	1978
7	500	Removed	1988

During the conference call on October 31, 2016, the property owner acknowledged that the Clamp Swing Pricing Company (owned by the property owner) operated a metal fabricating facility adjacent to the former service station from the 1920s to the mid-1950s. CUSA had no involvement with this facility, and CEMC and CUSA have no information on its operations. During the conference call the property owner also stated that a tire company has operated at the property from the 1980s to the present. CUSA had no involvement with this facility, and CUSA and CEMC have no information on its operations. However, the website for the current tenant, "Big Discount Tire Pros," states that the tenant performs a wide range of vehicle maintenance and repairs. See <http://bigdiscounttirepros.com/tires-auto-repair-alameda-ca> CEMC understands that the property owner will provide additional information on the metal fabricating operation and the tire company.

If you have any questions or comments with regard to this matter, please contact me at the information provided above or the Chevron project manager, Mark Horne, at 925-842-0973 or send an email to MarkHorne@chevron.com.

Sincerely,



Nicole Arceneaux
Property Specialist

Attachments:

Attachment A – 1952 Memo to Fire Department
Attachment B – 1967 Memo to Fire Department
Attachment C – Tank Removal Report
Attachment D – Historical Site Plan

cc: Mark Horne – Chevron Environmental Management Company
Dilan Roe – Alameda County Environmental Health

Attachment A

October 17 1952

Fire Prevention Bureau
City of Alameda
Alameda, California

Gentlemen:

We request permission to install three (3) five thousand (5000) gallon gasoline storage tanks on the premises of Standard Oil Company Service Station located on the north east corner of Park Street and San Jose Avenue. Tanks to be Underwriters Laboratories Inc. labeled and to be located at a position designated by the Fire Marshal.

Tanks shall be protected from corrosion by suitable coating and shall be of the following specifications and used for the storage of gasoline.

<u>Gallons Capacity</u>	<u>U.S.S. Gauge Steel</u>	<u>Vent Size</u>	<u>Contents</u>	<u>Location</u>
5000	1/4 inch	2 in.	Gasoline	4 ft underground

Swing joints shall be installed in piping and the entire installation shall be in accordance with requirements as specified in the provisions of the Alameda Municipal Ordinances pertaining to storage of Petroleum Products.

There are at present three (3) five hundred fifty (550) gallon tanks, which will be removed, at this Service Station. This will make the total gallon capacity fifteen thousand (15,000).

Very truly yours,

Standard Oil Co of Calif
R P Clark

Standard Oil Company
1212 Broadway, Oakland

Permit No. 18

Approved by:

Thomas M. Lane

Permission granted by:

Carl Brown
City Manager

Refer to card in file under 1200 Park St. - "p"

Permit #18

Attachment B

December 13 1967

Fire Prevention Bureau
City of Alameda
Alameda, California

We request permission to relocate one 550 gallon waste oil tank on the premises of Standard Oil Service Station located at 1200 Park Street. Tank to be 4 ft underground and at position designated by the Fire Marshal.

Swing joints shall be installed in piping and the entire installation shall be in accord with requirements as specified in the provisions of the Alameda Municipal Ordinances pertaining to storage of Petroleum Products.

R Ballard

Fletcher Construction Co
9220 - G Street, Oakland
562-5511

Approved by

E Severino
Fire Marshal

Granted by

H Keller
City Manager

✓

No 134 Alameda Dec 13 1967

Permit is granted to *Standard Oil Sta*
 *1200 Park St*

to store *waste oil*

on premises located at *1200 Park St*
 *4 ft underground*

in quantities not to exceed *1 - 550 gal*
 *waste oil tank*

Permit granted by *H Keller*
 *City Mgr*

Permit approved by *Ermitt L Severino*
 *Fire Marshal*

\$5.00 Plumbing Inspection fee paid:

A W Spadoni *E K*

PERMIT NO. 134

Attachment C

November 10, 1988

Alameda County Environmental Health
Attn: Mr. Rafat Shahid
470 - 27th Street, Room 324
Oakland, California 94612

Re: Former Chevron Service Station #9-0955
1200 Park Street
Alameda, California

Gentlemen:

Chevron removed one 490 gallon underground waste oil tank from this site on September 27, 1988. Attached is the Blaine Tech. Services, Inc. sampling report.

The soil sample from the waste oil tank showed non-detectable levels of total oil and grease (modified EPA 503E) and non-detectable levels of high boiling hydrocarbons at 9' below grade.

Based on the above information, we plan no further action at this site. If you have any questions, call Lisa Marinaro at (415) 842-9527.

Very truly yours,

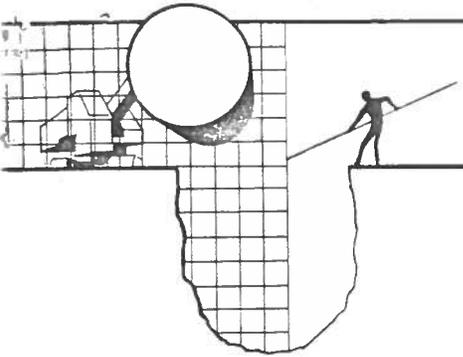
D. MOLLER

By Lisa Marinaro
Lisa Marinaro
Engineer

LAM:vjs:QK2-21
Attachment

cc: Mr. Marvin Helms
Alameda Fire Department
1300 Park Street
Alameda, California 94501

bcc: Ms. A. M. Meier
Mr. John Ough



**BLAINE
TECH SERVICES INC.**

1370 TULLY RD., SUITE 505
SAN JOSE, CA 95122
(408) 995-5535

October 4, 1988

Chevron USA, Inc.
2410 Camino Ramon
San Ramon, CA 94583

Attn: Lisa Marinaro

SITE:
CHEVRON SERVICE STATION NO. 0955 *Abandonment*
1200 PARK STREET
ALAMEDA, CALIFORNIA

PROJECT:
TANK REMOVAL SAMPLING

SAMPLED ON:
SEPTEMBER 27, 1988

TANK REMOVAL SAMPLING REPORT 88271-M-1

This report describes the initial environmental sampling and documentation performed by our firm on this project. In addition to the Sampling Report text itself, supporting documents are provided as attachments. These include the chain of custody and the certified analytical laboratory report. All these documents should be kept together and preserved as a file of interrelated records which, together, comprise the documentation of the work performed at the site. If additional work is required, then a cumulative report format will be followed so that all information on the various phases of work at the site can be easily reviewed.

THE SCOPE OF WORK

In accordance with your request, field personnel would be dispatched to the site to observe the tank removal, collect samples, arrange for the proper analyses of the samples and maintain adequate documentation resulting in the issuance of a formal Sampling Report. The collection of environmental samples was to be performed in accordance with the requirements of the State Water Resources Control Board, Regional Water Quality Control Board, and the specific directions of the Local Implementing Agency (LIA) inspector present at the site at the time of removal.

EXECUTION OF THE TANK REMOVAL SAMPLING

Personnel from our office were present at the subject site for the tank removal on Tuesday, September 27, 1988.

<u>TANK I.D.</u>	<u>TANK SIZE IN GALLONS</u>	<u>TANK CONTENT</u>	<u>MATERIAL OF CONSTRUCTION</u>	<u>INSPECTION FOUND</u>
WO	490	WASTE OIL	STEEL	TWO HOLES

The subject site is located within the overall jurisdiction of the Regional Water Quality Control Board -- San Francisco Bay Region. Initial inspection and evaluation of the site is customarily conducted by the local implementing agency (LIA), which in this case was the Alameda Fire Dept. The local implementing agency was represented by Captain Marvin Helms, who was present to observe the tank removal and sampling.

In accordance with the local regulations and the field judgement of the LIA representative, a detailed inspection was conducted in which the tank was visually inspected and likely failure points were probed with small pointed metal examination tools. The inspection found two holes in the waste oil tank. The size and location of all such holes or failure points will be found on the UNDERGROUND STORAGE TANK REMOVAL AND SAMPLING LOG sheet.

Under the direction of Captain Marvin Helms one standard interface sample was taken from each end of the waste oil tank at 9'. These samples were designated as sample #1 and sample #2. At the request of Lisa Marinaro two more precautionary samples were taken at 11' and were designated as samples #1A and #2A. Samples #1A and #2A were placed on hold at the lab pending the results of samples #1 and #2.

Information on the exact location of a particular sampling point will be found on the UNDERGROUND STORAGE TANK REMOVAL AND SAMPLING LOG and the TABLE OF SAMPLING LOCATIONS AND ANALYTICAL RESULTS. The location of individual sampling points is shown on DIAGRAM TWO. Additional information on the exact method of sample collection will be found in the SAMPLING METHODOLOGY section of this report.

After completion of the field work, the sample containers were delivered to Anamatrix Incorporated in San Jose, California. Anamatrix is a California Department of Health Services certified Hazardous Materials Testing Laboratory and is listed as DOHS HMTL #151. It was requested that the analytical procedures used for these analyses be those specified by the Regional Water Quality Control Board -- San Francisco Bay Region. The methods are defined in attachments to the San Francisco RWQCB (Region 2) publication, Guidelines For Addressing Fuel Leaks.

D I A G R A M S & T A B L E S

Graphic and Tabular presentation of all samples

The TABLE OF SAMPLING LOCATIONS AND ANALYTICAL RESULTS relies on a system of designated SAMPLING AREAS which are specific locations on the site which correspond to the fuel dispensing fixtures that were originally in place there. Briefly, the tanks are assigned a letter and a suffix which comprise a descriptive identification. Even when the tanks have been removed, all samples taken in that area of the site are referenced to that particular SAMPLING AREA which can be cross referenced to construction blueprints, permit drawings and similar documents.

DIAGRAM ONE shows the location of key features of the site including streets, property lines, and the location of underground storage tanks. The diagram shows that each tank has been assigned an arbitrary letter designation (Tank A, Tank B etc.). This simplifies communications concerning a particular tank by providing a nomenclature that does not rely on descriptions by size and tank contents.

DIAGRAM TWO shows a finer level of detail. A descriptive suffix is added to the tank identification letter, in order to designate a SAMPLING AREA at that particular end of that tank. For example, Tank A is given an F suffix to indicate the fill pipe end and AF is used to define the area in which samples are taken. The opposite end of the tank from the fill pipe is given an OP suffix, and that SAMPLING AREA is, thereafter, referred to as Aop. The approximate midpoint of the tank is given an M suffix if a sample is taken from that location.

The relationship between a given tank and its sample collection points is more precisely illustrated in the UNDERGROUND STORAGE TANK REMOVAL AND SAMPLING LOGS. A log sheet is filled out for each of the tanks that was removed from the site. The log sheets contain end views and cross sections of each tank which graphically depict the SAMPLING AREAS at each end of that tank. Whenever holes are discovered in a tank during either removal or a post-removal inspection, the location of the holes is indicated on the TSR projection.

DIAGRAM ONE

MAP REF: THOMAS BROS.
ALLAMEDA COUNTY
P.11 D-3

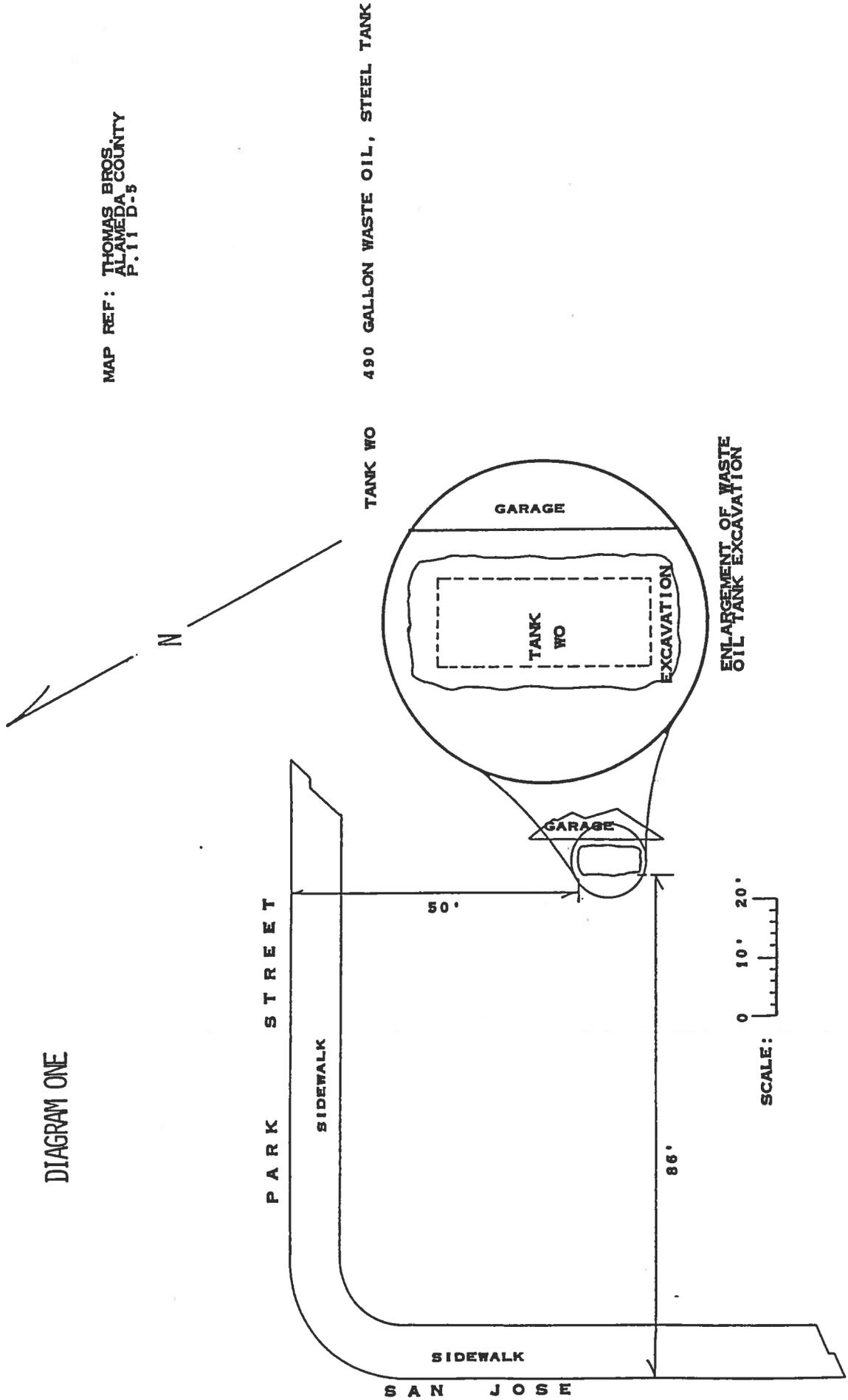
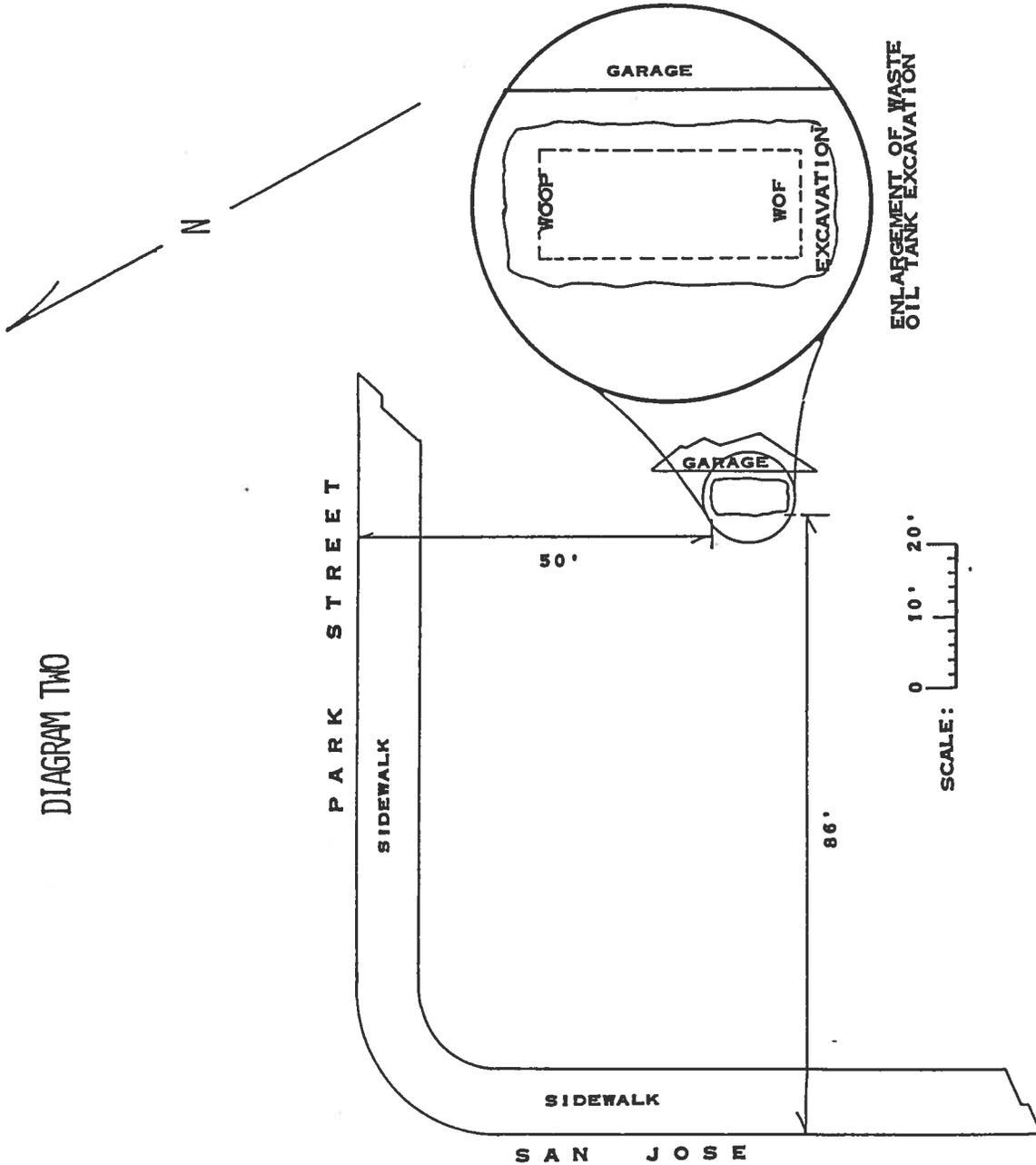


DIAGRAM TWO

MAP REF: THOMAS BROS.
ALAMEDA COUNTY
P. 11 D-5



SAMPLING PERFORMED BY
MARGO MACKEY
DIAGRAMS PREPARED BY
BRENT ADAMS

TABLE OF SAMPLING LOCATIONS AND ANALYTICAL RESULTS

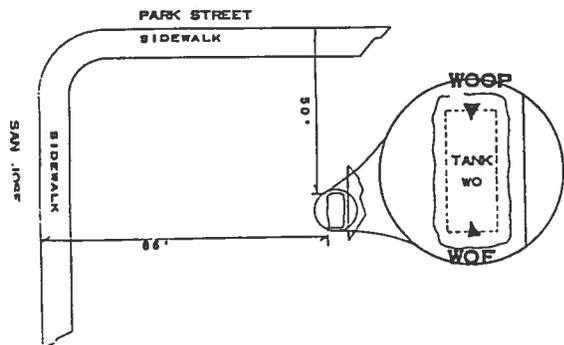
I.D. GIVEN THIS SAMPLE /ABRA	SAMPLE DEPTH IN FT. BELOW GRADE	SAMPLING LOCATION DICTATED BY	TYPE & METHOD FOR THE SAMPLE OBTAINED	SAMPLE MATRIX	DATE SAMPLED	BTS CHAIN OF CUSTODY I.D.	BTS SAMPLE I.D.	NAME OF DOHS HMTL LABORATORY	LABORATORY SAMPLE I.D.	ANALYTICAL RESULTS		
										PPM TPH-HBF DIESEL	PPM TOTAL OIL & GREASE	(PARTS PER BILLI PPB EPA 8240 COMPOUNDS
WoF	9'	LIA/BLEC	INTERFACE	SOIL	9/27/88	88271-M-1	#1	ANAMETRIX	8809211-01	ND	ND	ND
	11'	BLECTIVE	INTERFACE	SOIL	9/27/88	88271-M-1	#1A	ANAMETRIX	8809211-02	PLACED ON HOLD		
Woop	9'	LIA/BLEC	INTERFACE	SOIL	9/27/88	88271-M-1	#2	ANAMETRIX	8809211-03	ND	ND	ND
	11'	BLECTIVE	INTERFACE	SOIL	9/27/88	88271-M-1	#2A	ANAMETRIX	8809211-04	PLACED ON HOLD		

BLAINE
TECH SERVICES

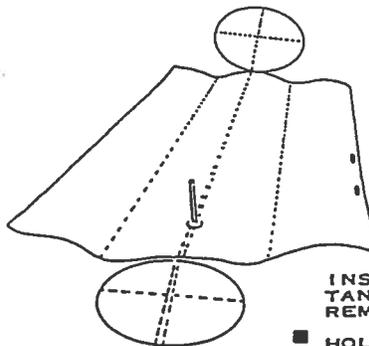
TANK
WO

UNDERGROUND STORAGE TANK
REMOVAL AND SAMPLING LOG

TANK WO 490 GALLON WASTE OIL TANK
STEEL CONSTRUCTION



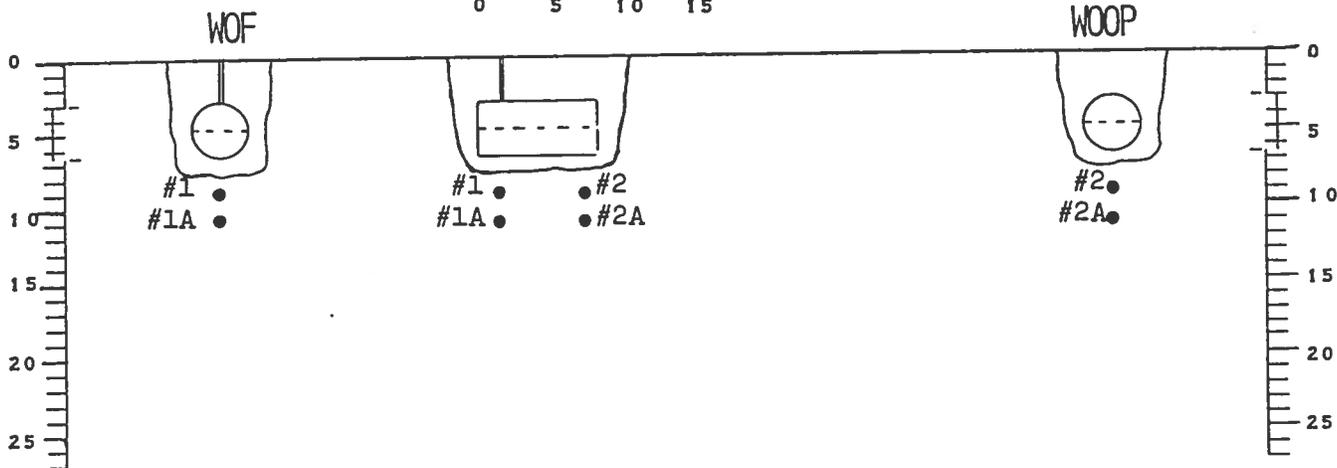
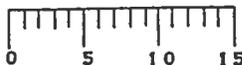
SITE DIAGRAM



TSR PROJECTION

INSPECTION OF THE
TANK FOLLOWING
REMOVAL FOUND

- HOLES IN THE LOCATIONS DEPICTED ON THE TSR PROJECTION
- NO HOLES



I.D. GIVEN THIS SAMPLE AREA	SAMPLE DEPTH IN FT. BELOW GRADE	SAMPLING LOCATION DICTATED BY	TYPE & METHOD FOR THE SAMPLE OBTAINED	SAMPLE MATRIX	DATE SAMPLED	BTS CHAIN OF CUSTODY I.D.	BTS SAMPLE I.D.	NAME OF DOBS HNTL LABORATORY	LABORATORY SAMPLE I.D.	ANALYTICAL RESULTS		
										PPM TPH-HBP DIESEL	PPM TOTAL OIL & GREASE	(PARTS PER BILLION) PPB EPA 8240 COMPOUNDS
Wof	9'	LIA/BLEC	INTERFACE	SOIL	9/27/88	88271-M-1	#1	ANAMETRIX	8809211-01	ND	ND	ND
	11'	ELECTIVE	INTERFACE	SOIL	9/27/88	88271-M-1	#1A	ANAMETRIX	8809211-02	PLACED ON HOLD		
Woop	9'	LIA/BLEC	INTERFACE	SOIL	9/27/88	88271-M-1	#2	ANAMETRIX	8809211-03	ND	ND	ND
	11'	ELECTIVE	INTERFACE	SOIL	9/27/88	88271-M-1	#2A	ANAMETRIX	8809211-04	PLACED ON HOLD		

PROCEDURES

Methodologies and Conventions

GENERAL PRACTICES WITHIN A MULTIPLE AGENCY HIERARCHY

U.S. Environmental Protection Agency standards serve as the foundation for all field sampling operations performed by our firm. The EPA SW 846 is the primary publication from which procedures are derived, though there are additional EPA sources such as training films and verbal communications. Sampling related to underground storage tanks and tank related threats to groundwater are governed by the California Water Resources Control Board and its Regional Water Quality Control Boards. While some aspects of field and laboratory work may be delegated to the California Department of Health Services, the CWRCB and the nine Regional Water Quality Control Boards establish the general and specific criteria for sampling performed in connection with underground storage tanks. This is done through the publication of guidance documents, the issuance of memoranda, and verbal announcements.

Other agencies, such as Air Pollution Control Districts, may require additional samples, but these are usually in addition to samples required by the RWQCB. Local implementing agency (LIA) inspectors are frequently present during the tank removal phase of a project and either direct or request that samples be taken according to RWQCB specifications. Additional samples may, and frequently are, taken at the request of the LIA inspector.

Based on field conditions directly observable by the LIA inspector, our field personnel may be asked to collect samples that are tailored to the specific situation and which the inspector judges will provide substantial information about the site. Quite often these directions or suggestions coincide with the sampling areas established by the RWQCB as the proper collection points for samples which will be used as the Primary Criteria for a Regulatory Agency Determination on whether additional exploration or remediation will be required at a particular site. Similarly, there are instances when the LIA inspector's judgements do not coincide with Board specifications.

Two common examples of this are as follows:

1. A local implementing agency inspector notes that soil dug up from the correct RWQCB interface sampling point is relatively clean, but observes that there is quite obviously contaminated backfill underlying the center of the tank. The inspector directs that the contaminated backfill should be taken instead of the clean interface soil so as to provide information about the "worst case" conditions within the tank pit.
2. The soil at the specified interface sampling depth is found to be slightly contaminated, but much less so than the soil only a few inches above. Noting the relatively dense soil, the local implementing agency inspector decides not to have the interface soil sampled and has the backhoe dig deeper to see

if the contamination diminishes to acceptable levels. This exploration saves the property owner the cost of running two samples at that location, and enables the inspector to directly observe the condition of the deeper soil.

In both examples, different material is collected in lieu of a standard RWQCB interface sample. Further, the material collected is substantially different from what would have been obtained by taking representative soil at the Board specified sampling location. Note that both of these samples were taken at the direction of the local implementing agency inspector who was present at the site and elected to select alternative sampling locations. Note too, that these alternative samples may provide more information about the site than standard Board specified samples. However, as the LIA elected samples do not accurately reflect soil conditions at the sampling points specified by the RWQCB, the decision making process may be hampered.

Clearly there is no advantage in limiting the ability of the regulator in the field to make prudent judgements. Likewise, regulatory personnel and consultants who will review the reports without benefit of having been present at the site need to know that the samples taken were not obtained at the standard locations. A simple resolution to these situations is a brief notation indicating that the sampling was elective rather than in accordance with a standard Board specification. These notations appear in the third column of the TABLE OF SAMPLING LOCATIONS AND ANALYTICAL RESULTS. By referring to the notations in column three and four in the TABLE, any party reviewing the report should be able to determine if something other than Board standard samples were obtained, and when variant sampling was performed, clarify whether it was elected by the LIA inspector, elected by our field personnel, or the result of some physical condition at the site that made it impossible to obtain material from the correct sampling location.

SAMPLING METHODOLOGIES USED ON THIS PROJECT

STANDARD RWQCB INTERFACE SAMPLE: The tank removal sampling followed the standard protocol for obtaining interface samples. These samples fall into the category of samples which are known to be of primary concern to the interested regulatory agencies for determining if additional action will be required at a site and the methodology has been closely defined in state and RWQCB publications, supplements, and presentations. These specify both the acceptable depth and lateral situation of sample collection points. In accordance with these specifications, sample collection is executed as close as possible to the center line (longitudinal axis) of the tank and on a vertical axis with the fill pipe. A corresponding location is also found at the opposite end of the tank whenever standard interface samples are being collected.

Briefly, the method consists of digging up native soil from directly below the fill pipe and the corresponding opposite end of the tank and obtaining a sample from the backfill/native soil interface or a short distance below the interface. In the case of tanks less than 1,000 gallons in capacity, only

one sample from beneath the tank is required. A short distance has been defined by Region 2 Board engineers as not greater than twenty-four inches below the backfill/native soil interface and is generally taken to be one foot below the the backfill/native soil interface. This soil is brought up in the backhoe bucket. A shovel or trowel is used to cut away surface soil and backfill material which may have been included in the bucket, and the sample is taken by pushing or driving a brass sample liner into the newly exposed soil from the designated depth and location. Additional clarifications by Region 2 Board engineers have indicated that when there is an obvious difference in the relative contamination of soil brought up from the interface depth, then it is the relatively more contaminated soil that should be selected for inclusion in the sample.

ELECTIVE EXPLORATORY SAMPLES: This type of sampling employs the same sample collection and handling procedures as are used in standard RWQCB interface sampling, but soil is typically obtained at a greater depth or from a position that is laterally offset from the interface location.

SAMPLE CONTAINERS

Our firm uses new sample containers of the type specified by either EPA or the RWQCB for the collection of samples at sites where underground storage tanks are involved. Soil samples for volatile, semivolatile and nonvolatile analyses are all collected in properly prepared new brass liners which are 2 inches in diameter by 4 inches in length. Closure is accomplished with press fit plastic end caps which are fitted to the open ends of brass tube after a sheet of aluminum foil is wrapped over the exposed sample material. A non-contributing/nonsubtractive tape is wrapped completely around the joint areas where the plastic caps meet the outer wall of the brass tube. No preservative other than cold storage is used on samples captured in sample containers of this type.

SAMPLE HANDLING PROCEDURES

Solid sample material is captured by advancing the liner into the soil. This may be done by pushing the liner into soft soils or by containing the liner in a drive shoe which can be advanced and then retracted by means of a slide hammer. The open ends of the sample liner are covered with aluminum foil and plastic end caps. Excess aluminum foil is removed and the edge of the plastic end caps is tightly sealed against the outer surface of the brass liner with an unbroken wrap made with a tape which has been tested to confirm that it does not contribute compounds that would be detected in the type of analyses intended for the sample contained inside of the brass liner. The brass liner is then labeled with the appropriate identification numbers which specify the sampling activity designation number, sample collection area, depth etc. that apply to that particular sample. The sample liner is then placed in an ice chest which contains pre-frozen blocks of an inert ice substitute such a Blue Ice or Super Ice.

SAMPLE DESIGNATIONS

All samples containers are identified with both an activity number and a discrete sample identification. Please note that the activity number is the number that appears on our chain of custody. It is roughly equivalent to a job number, but applies only to work done on a particular day of the year rather than spanning several days as an actual activity often does. This is followed by the sample I.D. number which is usually a simple number such as #1, #2, #3.

CHAIN OF CUSTODY

Samples are continuously maintained in either a chilled ice chest, refrigerator, or freezer from the time of collection until acceptance by the State certified Hazardous Materials Testing Laboratory selected to perform the analytical procedures. If the samples are taken charge of by a different party (such as another person from our office, a courier, etc.) prior to being delivered to the laboratory, appropriate release and acceptance records are made on the chain of custody (time, date, and signature of person releasing the samples followed by the time, date and signature of the person accepting custody of the samples).

LABORATORY IDENTIFICATION NUMBERS

Following receipt of the samples and completion of the Chain of Custody form, the laboratory then assigns their own identification numbers to the samples. Different laboratories use different numbering systems and, according to their own internal conventions, may or may not assign sequential numbers to samples which are placed on temporary "hold", pending the results of other analyses. Laboratory identification numbers (if assigned and available) are included in the TABLE, and will be found on the certified analytical report by the analytical laboratory.

CERTIFIED ANALYTICAL REPORT

The certified analytical report (CAR) generated by the laboratory is the official document in which they issue their findings. The Results of Analyses section of the TABLE OF SAMPLING LOCATIONS AND ANALYTICAL RESULTS should correspond exactly with the laboratory's CAR. Any discrepancy between analytical values should be decided in favor of the CAR, for while it may, itself, be in error with regard to a particular number, the CAR remains the recognized document until such time as it is amended with a corrected report.

The certified analytical report should also be reviewed when samples are taken from below waste oil tanks as any detection of the EPA halogenated and purgeable aromatic compounds may be grounds for requiring further action. Also the TABLE OF SAMPLING LOCATIONS AND ANALYTICAL RESULTS is insufficiently spacious to allow anything more than a simple listing of the detected compounds. The TABLE does not include such information as the detection

limits at which other compounds were not detected. The full text of the laboratory report will be found in Section Four of this report.

GENERAL ADVISORY ON POSITIVE RESULTS

Though our firm specializes in sampling, monitoring and documentation, rather than interpretation and remediation, we have been asked by the engineering staff of the Regional Water Quality Control Board to include in our reports an advisory section outlining the general type of additional actions which may be required when contamination is found. This advisory is not intended to characterize conditions at this particular site or replace the services of a consulting firm specializing in the investigation, characterization and remediation of such conditions as may exist. Rather, it is intended to advise you that such additional actions may be required even though some time may elapse before you are contacted by one of the interested regulatory agencies.

In Region 2 (which is regulated by the San Francisco Regional Water Quality Control Board), the thresholds are readily defined in the Board's publication, Guidelines For Addressing Fuel Leaks. According to this document, soil which has less than 100 parts per million total petroleum fuel hydrocarbon (TPH) contamination does not generally require immediate additional action. Board engineers emphasize that this does not mean that some action might not be required in the future. Still, the site is assigned a low priority unless it is situated in an area of high hydrogeologic concern.

The detection of more than 100 ppm TPH in the native soil beneath a tank is generally considered grounds for requiring an additional investigation in the form of soil borings and installation of at least one groundwater monitoring well followed by periodic monitoring. The detection of 1000 ppm TPH is usually viewed by the Board as an unacceptable level of fuel saturation which will mandate excavation of the effected ground down to the furthest practicable reach of conventional excavating machinery followed by soil borings and installation of groundwater monitoring wells. Other regions use different standards for determining when a groundwater investigation will be required. For example benzene is often used in lieu of TPH. Even very low levels of benzene are often seen as grounds for requiring a subsurface investigation. This criteria may be relaxed or stiffened depending on the location of the site in relation to different groundwater systems, the depth to water, type of soil, and the concentrations of benzene involved.

The above standards apply only to fuels. When samples taken in connection with a waste oil tank or a solvent tank are found to contain even small amounts of any of the EPA priority pollutants (such as TCE, PCE, DCE etc. which are detected by EPA methods 8010, 8020, and 8240) more stringent standards are often applied. In these cases, soil borings and monitoring well installation may be required if there is any detectable amount of any of the EPA priority pollutant compounds.

When contaminants are found to have reached the water underlying a site, the Board customarily requires that additional work be undertaken in order to define the extent of the contamination.

REPORTAGE

Submission to the Regional Water Quality Control Board and the local implementing agency should include copies of the sampling report, the chain of custody, and the certified analytical report issued by the Hazardous Materials Testing Laboratory. The property owner should attach a cover letter and submit all documents together in a package.

The following addresses have been listed here for your convenience:

Water Quality Control Board
San Francisco Bay Region
1111 Jackson Street
Room 6040
Oakland, CA 94607
ATTN: Leslie Ferguson

Alameda Fire Dept.
1300 Park Street
Alameda, CA 94501
ATTN: Captain Marvin Helms

Please call if we can be of any further assistance.


for Richard C. Blaine

RCB/rp

attachments: supporting documents

LABORATORY RESULTS

Supporting documents

This section contains the following:

CHAIN OF CUSTODY
ANAMETRIX INCORPORATED LAB REPORTS
TABLE OF SAMPLING LOCATIONS AND ANALYTICAL RESULTS

ANAMETRIX, INC.
LABORATORY SERVICES
ENVIRONMENTAL • ANALYTICAL CHEMISTRY
1961 CONCOURSE DR., SUITE E • SAN JOSE, CA 95131
TEL: (408) 432-8192 • FAX: (408) 432-8198

Lisa Marinaro
Chevron U.S.A., Inc.
2 Annabel Ln., Ste. 200
San Ramon, CA 94583

September 30, 1988
Work Order Number 8809211
Date Received 09/27/88
Release No. 48
Chevron Station #0955
1200 Park St., Alameda, CA
Blaine Tech Project # 88271M1

Dear Ms. Marinaro:

Four soil samples were received for analysis of:

- 1) Volatiles by GC/MS,
 - 2) total extractable hydrocarbons as diesel by GC and
 - 3) total oil and grease by gravimetric analysis,
- using the following method(s):

ANAMETRIX I.D.	SAMPLE I.D.	METHOD(S)
8809211-01	9-0955 #1	8240/8015/503E
-02	" #1A	HOLD
-03	" #2	8240/8015/503E
-04	" #2A	HOLD

RESULTS

See enclosed data sheets, Pages 2 thru 5.

EXTRA COMPOUNDS

None detected.

QUALITY ASSURANCE REPORTS

See enclosed data sheet, Page 6.

If there is any more that we can do, please give us a call. Thank you for using ANAMETRIX, INC.

Sincerely,



Burt Sutherland
Laboratory Director

BWS/dg

cc: Blaine Tech Services

ORGANIC ANALYSIS DATA SHEET - EPA METHOD 624/8240

ANAMETRIX, INC. (408) 432-8192

Sample I.D. : 9-0955 #1
 Matrix : SOIL
 Date sampled : 09-27-88
 Date analyzed: 09-28-88
 Dilut. factor: NONE

Anametrix I.D. : 8809211-01
 Analyst : PG
 Supervisor : BWS
 Date released : 09-30-88
 Instrument ID : F1

CAS #	Compound Name	Reporting Limit (ug/Kg)	Amount Found (ug/Kg)
74-87-3	* Chloromethane	10	BRL
75-01-4	* Vinyl Chloride	10	BRL
74-83-9	* Bromomethane	10	BRL
75-00-3	* Chloroethane	10	BRL
75-69-4	* Trichlorofluoromethane	5	BRL
75-35-4	* 1,1-Dichloroethene	5	BRL
76-13-1	# Trichlorotrifluoroethane	5	BRL
67-64-1	**Acetone	20	BRL
75-15-0	**Carbondisulfide	5	BRL
75-09-2	* Methylene Chloride	5	BRL
156-60-5	* Trans-1,2-Dichloroethene	5	BRL
75-34-3	* 1,1-Dichloroethane	5	BRL
78-93-3	**2-Butanone	20	BRL
156-59-2	* Cis-1,2-Dichloroethene	5	BRL
67-66-3	* Chloroform	5	BRL
71-55-6	* 1,1,1-Trichloroethane	5	BRL
56-23-5	* Carbon Tetrachloride	5	BRL
71-43-2	* Benzene	5	BRL
107-06-2	* 1,2-Dichloroethane	5	BRL
79-01-6	* Trichloroethene	5	BRL
78-87-5	* 1,2-Dichloropropane	5	BRL
75-27-4	* Bromodichloromethane	5	BRL
110-75-8	* 2-Chloroethylvinylether	5	BRL
108-05-4	**Vinyl Acetate	10	BRL
10061-02-6	* Trans-1,3-Dichloropropene	5	BRL
108-10-1	**4-Methyl-2-Pentanone	10	BRL
108-88-3	* Toluene	5	BRL
10061-01-5	* cis-1,3-Dichloropropene	5	BRL
79-00-5	* 1,1,2-Trichloroethane	5	BRL
127-18-4	* Tetrachloroethene	5	BRL
591-78-6	**2-Hexanone	10	BRL
124-48-1	* Dibromochloromethane	5	BRL
108-90-7	* Chlorobenzene	5	BRL
100-41-4	* Ethylbenzene	5	BRL
1330-20-7	**Total Xylenes	5	BRL
100-42-5	**Styrene	5	BRL
75-25-2	* Bromoform	5	BRL
79-34-5	* 1,1,2,2-Tetrachloroethane	5	BRL
541-73-1	* 1,3-Dichlorobenzene	5	BRL
106-46-7	* 1,4-Dichlorobenzene	5	BRL
95-50-1	* 1,2-Dichlorobenzene	5	BRL

CAS #	Surrogate Compounds	Limits	% Recovery
17060-07-0	1,2-Dichloroethane-d4	85-132%	103%
2037-26-5	Toluene-d8	77-131%	114%
460-00-4	p-Bromofluorobenzene	74-117%	83%

* A Method 624 priority pollutant compound (Federal Register, 10/26/84)
 ** A compound on the U.S. EPA CLP Hazardous Substance List (HSL)
 # A compound added by Anametrix, Inc. BRL : Below reporting limit.

ORGANIC ANALYSIS DATA SHEET - EPA METHOD 624/8240
 ANAMETRIX, INC. (408) 432-8192

Sample I.D. : 9-0955 #2
 Matrix : SOIL
 Date sampled : 09-27-88
 Date analyzed: 09-28-88
 Dilut. factor: NONE

Anamatrix I.D. : 8809211-03
 Analyst : PG
 Supervisor : BWS
 Date released : 09-30-88
 Instrument ID : F1

CAS #	Compound Name	Reporting Limit (ug/Kg)	Amount Found (ug/Kg)
74-87-3	* Chloromethane	10	BRL
75-01-4	* Vinyl Chloride	10	BRL
74-83-9	* Bromomethane	10	BRL
75-00-3	* Chloroethane	10	BRL
75-69-4	* Trichlorofluoromethane	5	BRL
75-35-4	* 1,1-Dichloroethene	5	BRL
76-13-1	# Trichlorotrifluoroethane	5	BRL
67-64-1	**Acetone	20	BRL
75-15-0	**Carbondisulfide	5	BRL
75-09-2	* Methylene Chloride	5	BRL
156-60-5	* Trans-1,2-Dichloroethene	5	BRL
75-34-3	* 1,1-Dichloroethane	5	BRL
78-93-3	**2-Butanone	20	BRL
156-59-2	* Cis-1,2-Dichloroethene	5	BRL
67-66-3	* Chloroform	5	BRL
71-55-6	* 1,1,1-Trichloroethane	5	BRL
56-23-5	* Carbon Tetrachloride	5	BRL
71-43-2	* Benzene	5	BRL
107-06-2	* 1,2-Dichloroethane	5	BRL
79-01-6	* Trichloroethene	5	BRL
78-87-5	* 1,2-Dichloropropane	5	BRL
75-27-4	* Bromodichloromethane	5	BRL
110-75-8	* 2-Chloroethylvinylether	5	BRL
108-05-4	**Vinyl Acetate	10	BRL
10061-02-6	* Trans-1,3-Dichloropropene	5	BRL
108-10-1	**4-Methyl-2-Pentanone	10	BRL
108-88-3	* Toluene	5	BRL
10061-01-5	* cis-1,3-Dichloropropene	5	BRL
79-00-5	* 1,1,2-Trichloroethane	5	BRL
127-18-4	* Tetrachloroethene	5	BRL
591-78-6	**2-Hexanone	10	BRL
124-48-1	* Dibromochloromethane	5	BRL
108-90-7	* Chlorobenzene	5	BRL
100-41-4	* Ethylbenzene	5	BRL
1330-20-7	**Total Xylenes	5	BRL
100-42-5	**Styrene	5	BRL
75-25-2	* Bromoform	5	BRL
79-34-5	* 1,1,2,2-Tetrachloroethane	5	BRL
541-73-1	* 1,3-Dichlorobenzene	5	BRL
106-46-7	* 1,4-Dichlorobenzene	5	BRL
95-50-1	* 1,2-Dichlorobenzene	5	BRL

CAS #	Surrogate Compounds	Limits	% Recovery
17060-07-0	1,2-Dichloroethane-d4	85-132%	110%
2037-26-5	Toluene-d8	77-131%	102%
460-00-4	p-Bromofluorobenzene	74-117%	76%

* A Method 624 priority pollutant compound (Federal Register, 10/26/84)
 ** A compound on the U.S. EPA CLP Hazardous Substance List (HSL)
 # A compound added by Anamatrix, Inc. BRL : Below reporting limit.

ANALYSIS DATA SHEET - PETROLEUM HYDROCARBON COMPOUNDS
ANAMETRIX, INC. (408) 432-8192

Sample I.D. : 9-0955 #1
 Matrix : SOIL
 Date sampled : 09-27-88
 Date anl. TVH: NA
 Date ext. TEH: 09-28-88
 Date anl. TEH: 09-29-88

Anamatrix I.D. : 8809211-01
 Analyst : KCT
 Supervisor : FW
 Date released : 09-30-88
 Date ext. TOG : 09-28-88
 Date anl. TOG : 09-29-88

CAS #	Compound Name	Reporting Limit (ug/kg)	Amount Found (ug/kg)
-	TEH as Diesel	10000	BRL
	Total Oil & Grease	30000	BRL

- BRL - Below reporting limit.
- TVH - Total Volatile Hydrocarbons is determined by modified EPA 8015 with either headspace or purge and trap.
- TEH - Total Extractable Hydrocarbons is determined by modified EPA 8015 with direct injection.
- TOG - Total Oil & Grease is determined by Standard Method 503E.
- BTEX- Benzene, Toluene, Ethylbenzene, and Total Xylenes are determined by modified EPA 8020.

All testing procedures follow CRWQCB Region 2 guidelines.

ANALYSIS DATA SHEET - PETROLEUM HYDROCARBON COMPOUNDS
ANAMETRIX, INC. (408) 432-8192

Sample I.D. : 9-0955 #2	Anametrix I.D. : 8809211-03
Matrix : SOIL	Analyst : MCT
Date sampled : 09-27-88	Supervisor : JW
Date anl. TVH: NA	Date released : 09-30-88
Date ext. TEH: 09-28-88	Date ext. TOG : 09-28-88
Date anl. TEH: 09-29-88	Date anl. TOG : 09-29-88

CAS #	Compound Name	Reporting Limit (ug/kg)	Amount Found (ug/kg)
-	TEH as Diesel	10000	BRL
	Total Oil & Grease	30000	BRL

- BRL - Below reporting limit.
- TVH - Total Volatile Hydrocarbons is determined by modified EPA 8015 with either headspace or purge and trap.
- TEH - Total Extractable Hydrocarbons is determined by modified EPA 8015 with direct injection.
- TOG - Total Oil & Grease is determined by Standard Method 503E.
- BTEX- Benzene, Toluene, Ethylbenzene, and Total Xylenes are determined by modified EPA 8020.

All testing procedures follow CRWQCB Region 2 guidelines.

ORGANIC ANALYSIS DATA SHEET - EPA METHOD 624/8240

ANAMETRIX, INC. (408) 432-8192

Sample I.D. : METHOD BLANK
 Matrix : SOIL
 Date sampled : NA
 Date analyzed: 09-28-88
 Dilut. factor: NONE

Anamatrix I.D. : 1CB0928V000
 Analyst : PG
 Supervisor : BWS
 Date released : 09-30-88
 Instrument ID : F1

CAS #	Compound Name	Reporting Limit (ug/Kg)	Amount Found (ug/Kg)
74-87-3	* Chloromethane	10	BRL
75-01-4	* Vinyl Chloride	10	BRL
74-83-9	* Bromomethane	10	BRL
75-00-3	* Chloroethane	10	BRL
75-69-4	* Trichlorofluoromethane	5	BRL
75-35-4	* 1,1-Dichloroethene	5	BRL
76-13-1	# Trichlorotrifluoroethane	5	BRL
67-64-1	**Acetone	20	BRL
75-15-0	**Carbondisulfide	5	BRL
75-09-2	* Methylene Chloride	5	BRL
156-60-5	* Trans-1,2-Dichloroethene	5	BRL
75-34-3	* 1,1-Dichloroethane	5	BRL
78-93-3	**2-Butanone	20	BRL
156-59-2	* Cis-1,2-Dichloroethene	5	BRL
67-66-3	* Chloroform	5	BRL
71-55-6	* 1,1,1-Trichloroethane	5	BRL
56-23-5	* Carbon Tetrachloride	5	BRL
71-43-2	* Benzene	5	BRL
107-06-2	* 1,2-Dichloroethane	5	BRL
79-01-6	* Trichloroethene	5	BRL
78-87-5	* 1,2-Dichloropropane	5	BRL
75-27-4	* Bromodichloromethane	5	BRL
110-75-8	* 2-Chloroethylvinylether	5	BRL
108-05-4	**Vinyl Acetate	10	BRL
10061-02-6	* Trans-1,3-Dichloropropene	5	BRL
108-10-1	**4-Methyl-2-Pentanone	10	BRL
108-88-3	* Toluene	5	BRL
10061-01-5	* cis-1,3-Dichloropropene	5	BRL
79-00-5	* 1,1,2-Trichloroethane	5	BRL
127-18-4	* Tetrachloroethene	5	BRL
591-78-6	**2-Hexanone	10	BRL
124-48-1	* Dibromochloromethane	5	BRL
108-90-7	* Chlorobenzene	5	BRL
100-41-4	* Ethylbenzene	5	BRL
1330-20-7	**Total Xylenes	5	BRL
100-42-5	**Styrene	5	BRL
75-25-2	* Bromoform	5	BRL
79-34-5	* 1,1,2,2-Tetrachloroethane	5	BRL
541-73-1	* 1,3-Dichlorobenzene	5	BRL
106-46-7	* 1,4-Dichlorobenzene	5	BRL
95-50-1	* 1,2-Dichlorobenzene	5	BRL

CAS #	Surrogate Compounds	Limits	% Recovery
17060-07-0	1,2-Dichloroethane-d4	85-132%	93%
2037-26-5	Toluene-d8	77-131%	107%
460-00-4	p-Bromofluorobenzene	74-117%	86%

* A Method 624 priority pollutant compound (Federal Register, 10/26/84)
 ** A compound on the U.S. EPA CLP Hazardous Substance List (HSL)
 # A compound added by Anamatrix, Inc. BRL : Below reporting limit.

TABLE OF SAMPLING LOCATIONS AND ANALYTICAL RESULTS

I.D. GIVEN THIS SAMPLE AREA	SAMPLE DEPTH IN FT. BELOW GRADE	SAMPLING LOCATION DICTATED BY	TYPE & METHOD FOR THE SAMPLE OBTAINED	SAMPLE MATRIX	DATE SAMPLED	BTS		NAME OF DOHS HMTL LABORATORY	LABORATORY SAMPLE I.D.	ANALYTICAL RESULTS		(PARTS PER BILL PPB EPA 8240 COMPOUNDS
						CHAIN OF CUSTODY I.D.	SAMPLE I.D.			PPM TPH-HBP DIESEL	PPM TOTAL OIL & GREASE	
WoP	9'	LIA/ELEC	INTRFACE	SOIL	9/27/88	88271-M-1	#1	ANAMETRIX	8809211-01	ND	ND	ND
	11'	ELECTIVE	INTRFACE	SOIL	9/27/88	88271-M-1	#1A	ANAMETRIX	8809211-02	PLACED ON HOLD		
Woop	9'	LIA/ELEC	INTRFACE	SOIL	9/27/88	88271-M-1	#2	ANAMETRIX	8809211-03	ND	ND	ND
	11'	ELECTIVE	INTRFACE	SOIL	9/27/88	88271-M-1	#2A	ANAMETRIX	8809211-04	PLACED ON HOLD		

Attachment D

