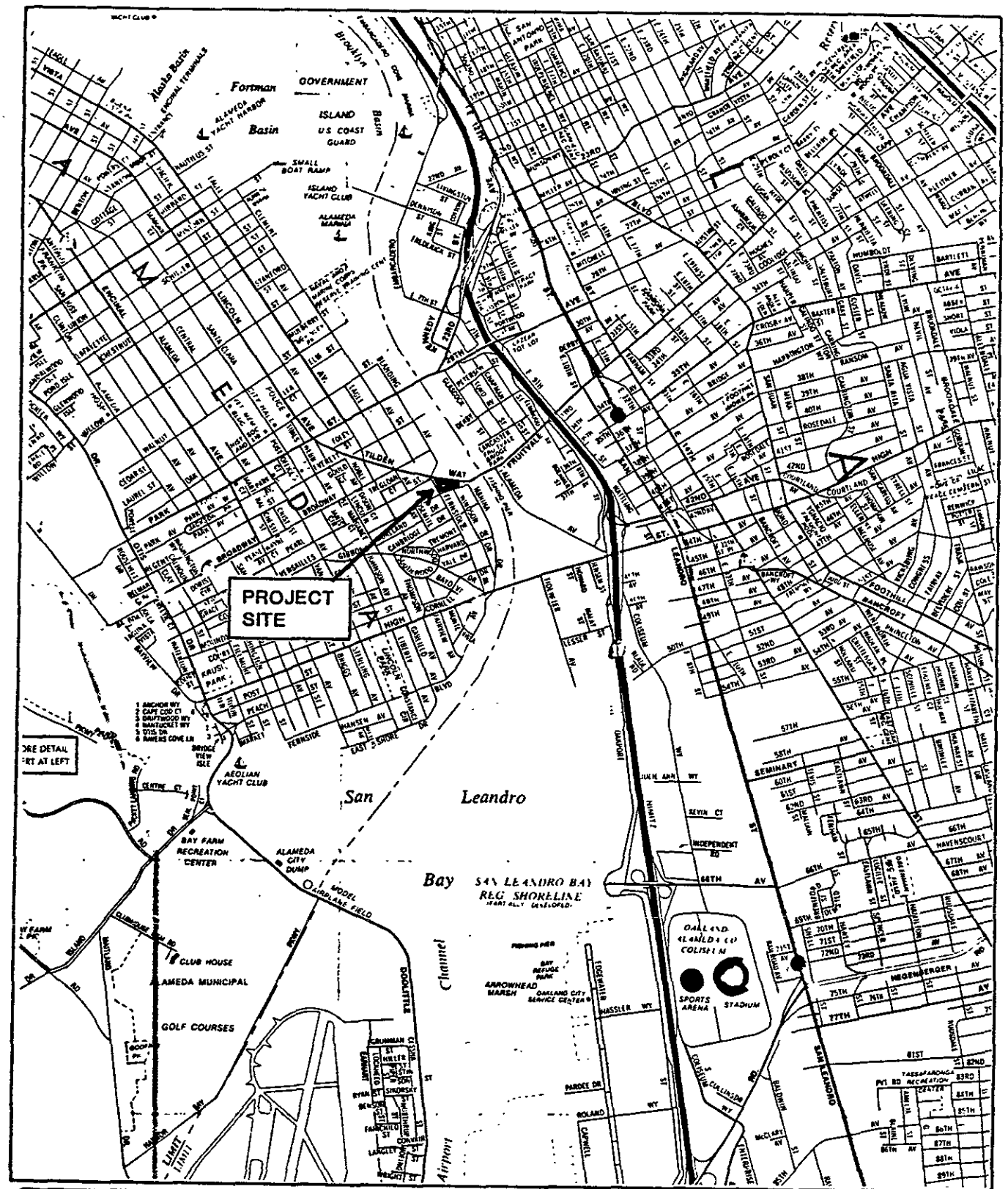
(4)

REVIEW OF ENVIRONMENTAL DOCUMENTS AND SITE INSPECTION OF THE KING PETROLEUM PROPERTY IN ALAMEDA, CALIFORNIA

Prepared for:

Mr. Clifford Mapes

September 25, 1989



earth metrics

SCALE
1" = 2400'

FIGURE 1. LOCATION MAP OF THE KING PETROLEUM SITE IN ALAMEDA, CALIFORNIA

EM0007

REVIEW OF ENVIRONMENTAL DOCUMENTS

AND SITE INSPECTION

OF THE KING PETROLEUM PROPERTY

IN

ALAMEDA, CALIFORNIA

Prepared for:

Mr. Clifford Mapes

September 25, 1989

Prepared by:

EARTH METRICS INCORPORATED
2855 Campus Drive, Suite 300
San Mateo, CA 94403
(415) 578-9900

10149

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1. SUMMARY AND RECOMMENDATIONS

Earth Metrics advises the prospective buyer, who engaged Earth Metrics to prepare this report, to continue to approach purchase and site development with due caution and prudence. The site inspections and available asbestos and water test results do not indicate presence of any of the following:

* Groundwater contamination

The site's soil, however, has been tested to contain fuel constituents (benzene, ethylbenzene, and toluene) and extractable organic compounds. The two extractable organic compounds found are called di-n-butyl phthalate and bis (z-ethylhexyl) phthalate. According to the Merck Index both chemicals are found in lubricants used in pump motors. At the concentrations found on-site, the two above extractables would probably not cause the soil to be classified as hazardous. Waste oil, however, is classified as hazardous.

Site closure requirements including asbestos removal and soil testing will be certainly imposed by the Alameda County Hazardous Materials Unit. The above agency has been responsible for the State's Underground Storage Tank program and soils contamination cleanup since 1987.

It is extremely difficult to estimate with any accuracy the special expenses that will likely accrue to conclude closure and testing. Earth Metrics approached this part of the assignment by using (i) analogous situations and experiences and (ii) direct cost estimation. The most unpredictable special expense is for potential off-haul of excess or contaminated soil waste to a Class I or II landfill. If off-haul of even 1,000 cubic yards to a Class II facility becomes necessary (e.g., for removal of surface oil spillage) then the cost of hauling and disposal fees would be approximately $200,000.

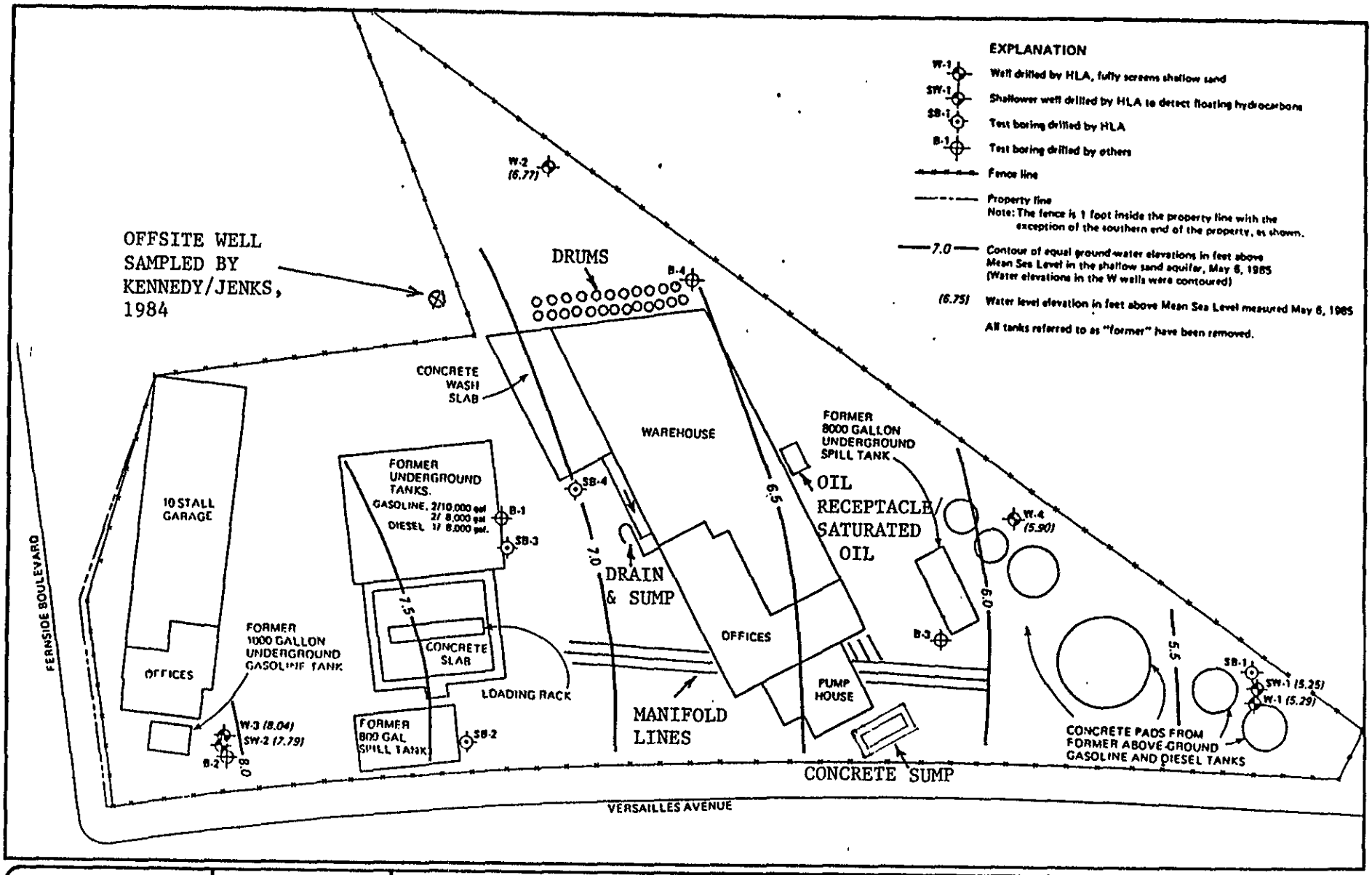
At this time there is no way to discount or rate the probability of the above potential off-haul scenario. Earth Metrics, therefore, recommends that the buyer and owner arrange a contingency fund in an escrow account to cover all of the known and potential special environmental and closure expenses identified in this report. The minimum amount recommended by Earth Metrics is $250,000.

2. SITE DESCRIPTION AND BACKGROUND INFORMATION

The subject site located in the City and County of Alameda is bounded by Tilden Way on the north, Versailles Avenue on the east, and Fernside Boulevard on the south (see Figure 1). The site was used historically for bulk loading of gasoline, diesel, lubrication oils and other petroleum products.

Currently, the site is not used for bulk loading. One of two warehouse type buildings on the property is used for automotive repair. The other building is leased as rehearsal space to a local rock and roll band.

The historic facilities included several above-ground and below-ground tanks. These historic facilities are illustrated in Figure 2. All below-ground tanks have been removed from the site.



earth metrics

SCALE
1" = 45'

FIGURE 2. SITE PLAN SHOWING PREVIOUS EXPLORATORY DRILLING LOCATIONS AND HISTORICAL PETROLEUM BALK STROAGE FACILITIES

3. INSPECTION OF CURRENT SITE CONDITIONS

The site was inspected by Earth Metrics staff in August and again in September, 1989. Salient observations are described as follows:

- Drums. There are several 55-gallon drums of product stored in an unpaved unbermed area (see Figure 2). These drums are pending disposal according to Mr. King.

- Sump. There is a concrete lined sump near the end of one of the two existing buildings.

- Waste Oil Receptacle. There is another waste oil receptacle located above-ground in the back of the above-mentioned building on the north side of the building.

- Product Lines. There are subsurface product lines traversing south-north beneath the above-mentioned building. The lines were once connected to former above-ground tanks on the northeast corner of the site and the dispensing area in the center of the site.

- Potential Asbestos Containing Building Materials. These potential materials have been sampled by Earth Metrics and tested by Forensics Analytical Laboratory. Test results from the laboratory are provided in Appendix A.

All previous historic underground tasks have been pulled and removed from the site, according to the property owner (King, 1989). Drums were stated to be in preparation for off-site disposal or recycling (King, 1989).

ASBESTOS INSPECTION

Two main buildings and miscellaneous out-structures were inspected on September 22, 1989 for potential asbestos containing building materials (ACBM). Such building materials (ceiling tiles, floor tiles, ductwork, and others), if found to contain asbestos, are subject to special handling in removal and disposal prior to building demolition. The inspection was performed by a registered Asbestos Health Emergency Response Act (AHERA) inspector.

In the main building, the heating system, main duct, flume, and several of the above-ceiling ducts were found to contain asbestos insulation (greater than one percent asbestos content). This material requires removal by a licensed asbestos removal contractor and disposal by a licensed waste hauler prior to routine demolition.

There are approximately 110 linear feet of the subject asbestos-containing ductwork. Removal and disposal will cost $18 - $20 per linear foot. The other building is unheated and has no ductwork.

Floor tile in the office was sampled and tested to contain asbestos (five to ten percent chrysotile). Removal and disposal of the floor tile will cost $4 to $6 per square foot of tile area. A precise estimate of the square footage is not available because access into the second unheated building was limited to visual inspection through windows on September 22. The best estimate is

approximately 3,000 square feet, 1,500 square feet in each of the two main buildings. Under certain conditions, depending on demolition method and disposal site selected, vinyl asbestos floor tiles may be exempt from removal by an asbestos contractor prior to demolition. The demolition contractor should be consulted in this matter.

The space beneath the buildings is uninsulated. The attic space is uninsulated. The roofing and wallboard material is not subject to any special demolition requirement.

Water lines are not wrapped with any potential asbestos material. None of the out-structures contains any potential asbestos building material.

4. REVIEW OF PREVIOUS SITE INVESTIGATION DOCUMENTATION

The site is the subject of previous environmental investigations. Chronologically those previous documents are listed in Table 1.

The previous investigations addressed potential soil and groundwater contamination. The April and May 1984 reports noted "strong petroleum odors" at near surface depth in Borings #B-1, B-2 and B-4. Groundwater was noted two to three feet below grade. Soil from Boring #B-3 at the #3.5 foot depth (below grade) contained benzene at 350 parts per billion (ppb) and ethylbenzene at 640 ppb (see Table 2). Tests of petroleum hydrocarbons in the other soil samples from Borings #B-1, B-2 and B-4 were not performed.

The June 1985 report additional samples from the 5 to 5.5 foot depth were tested. The June 1985 soil borings are labelled "SB-" in Figure 2 to distinguish them from the April 1984 borings labelled simply as "B-". Wells are labelled as "W-" or "SW-", the latter representing a shallow well drilled to inspect for potential floating petroleum product.

Strong hydrocarbon odors were noted in April 1985 in the logs of soil and well borings as listed below:

#W-4	No odors were detected to a total depth of 35 feet.
#SB-1	Strong hydrocarbon odor at 4.5 - 5.5 foot interval.
#SB-2	No odors were detected to a total depth of five feet.
#SB-3	No odors were detected to a total depth of five feet.
#SB-4	Strong hydrocarbon odor at 0.5 to 5.5 depth interval.

Boring logs for #W-1, W-2, and W-3 and also for #SW-1 and SW-2 were not available for review by Earth Metrics Incorporated.

DISCUSSION

Boring #B-3 (K/JE) was downgradient 120 feet from the former fuel island and upgradient of the historic 8,000 gallon underground spill tank. Borings #B-1 (K/JE) #SB-4 (HLA) were downgradient of the former fuel island. Soil boring #SB-1 was directly downgradient of former above-ground gasoline and diesel tanks and generally downgradient 240 feet from the former fuel island. Soil samples from #B-3, #SB-4, and #SB-1 were tested to have benzene, ethylbenzene, or toluene in the parts per billion range.

Water samples from wells #W-3, W-4, and SW-2 were collected on May 1, 1985; tested, and found not to contain any detectable volatile or semivolatile hydrocarbons. It is on the basis of these water test results that RWQCB closed the King Petroleum case file. Closure of the case by RWQCB does not obviate future investigative or cleanup actions by RWQCB or by the Alameda County Haz Mat Unit.

TABLE 1. CHRONOLOGICAL LIST OF SITE INVESTIGATION REPORTS ON THE KING PETROLEUM PROPERTY IN ALAMEDA, CALIFORNIA

DATE OF REPORT	REPORT/DOCUMENT TITLE (AUTHOR)	AGENCY/PARTY INITIATING INVESTIGATION
4-26-84	*Draft Report: Initial Site Investigation of the King Petroleum Property in Alameda, CA (Kennedy/Jenks Engineers)	City of Alameda Planning Commission
5-28-84	*Final Report: Initial Site Investigation of the King Petroleum Property in Alameda, CA (Kennedy/Jenks Engineers)	same as above
12-3-84	Initial Report (Exact Title Unknown) (Harding Lawson Associates)	(unknown)
3-13-85	Proposed Scope of Work (Harding Lawson Associates)	RWQCB
6-4-85	*Subsurface Investigation - Phase 2, King Petroleum, Alameda, CA (Harding Lawson Associates)	RWQCB
6-6-85	Harding Lawson letter to RWQCB	

"*" Indicates that this report was available to and reviewed by Earth Metrics Incorporated.

TABLE 2. SUMMARY OF AVAILABLE 1984/85 SOIL TEST RESULTS OF KING PETROLEUM IN ALAMEDA, CALIFORNIA (PPB)

TEST PARAMETER	BORING IDENTIFICATION\ SAMPLING DEPTH (Feet)	B-1 (K/JE) -	B-2 (K/JE) 3.5	B-3 (K/JE) -	B-4 (K/JE) 5-5.5	W-4 (HLA) 5-5.5	SB-1 (HLA) 5-5.5	SB-2 (HLA) 5-5.5	SB-3 (HLA) 5-5.5	SB-4 (HLA)
Benzene		NT	NT	350	NT	<1	<1	<1	<1	<1
Ethylbenzene		NT	NT	640	NT	<1	<1	<1	<1	6
Toluene		NT	NT	<5	NT	<1	15	<1	<1	<1
Xylenes		NT	NT	NT	NT	NT	NT	NT	NT	NT
Methylene Chloride		NT	NT	NT	NT	5	21	6	8	12
Di-n-butyl Phthalate (a)		NT	NT	NT	NT	1,900	970	700	1,100	1,800
Bis(-ethylhexyl) Pthalate (b)		NT	NT	NT	NT	80	67	100	230	400

(K/JE) Kennedy/Jenks Engineering
(HLA) Harding Lawson Associates
NT Not Tested
< Less than the Stated Detection Limit
PPB Parts Per Billion
(a) Merck Index 1559
(b) Merck Index 1248

Refer to Figure 2 for boring locations
Source: Kennedy/Jenks Engineers Laboratory Division 3/26/84
EAL Corporation 5/23/85, 5/24/85

TABLE 3. SUMMARY OF AVAILABLE 1984/85 GROUNDWATER TEST RESULTS OF KING PETROLEUM IN ALAMEDA, CALIFORNIA (PPB)

TEST PARAMETER	WELL IDENTIFICATION
	Total Depth(feet)
	Screen Interval(feet)
		#B-1 (a) (K/JE)
		12.5(est.)
		None
			Off-Site WELL
			30 (est.)
			Unknown
				W-3 (HLA)
				~~Unknown~~ 35
				~~Unknown~~ 18-34
					W-4 (HLA)
					35
					10-35
						SW-2 (HLA)
						Unknown
						(Shallow)
						2-10

Benzene		29	<2	<1	<1	<1
Ethylbenzene		<2	<2	<1	<1	<1
Toluene		<2	<2	<1	<1	<1
Xylenes		NT	NT	NT	NT	NT
Methylene Chloride		NT	NT	<1	<1	<1
Di-n-butyl Pthalate		NT	NT	<1	<1	<1
Bis(z-ethylhexyl) Pthalate		NT	NT	<1	<1	<1

(a) Unscreened boring hole
(K/JE) Kennedy/Jenks Engineers
(HLA) Harding Lawson Associates
NT Not tested
"<" Less than the stated detection limit
PPB Parts Per Billion

Refer to Figure 2 for well locations

Source: Kennedy/Jenks Engineers, Laboratory Division 3/26/84
EAL Corporation 5/23/85, 5/28/85.

5. ALAMEDA COUNTY HAZARDOUS MATERIALS UNIT

The Hazardous Materials Unit is a division of the Alameda County Environmental Health Department. The Hazardous Materials Units, established in May, 1984, is the agency responsible for enforcing and implementing State of California codes and regulations concerning:

* Underground Storage Tanks (October 1987)
* Hazardous Waste Generators
* Hazardous Waste Minimization
* AB 2185 (Hazardous Materials Management Plans)
* Proposition 65
* Emergency Response (October 1984)

Where provided, the date in parenthesis above indicates when the Haz Mat Unit assumed responsibility for the stated program.

With regard to the subject site, it is noted that the Alameda County Haz Mat Unit has neither issued a citation nor requested a plan of correction. However, the Haz Mat Unit will be responsible for approval of demolition plans that pertain to the following items:

Disposal of Hazardous Waste. California Administrative Code, Title 22, Section 66680, lists "waste oil" and "oil and water" as hazardous wastes. Recycling of liquids or removal and disposal of contaminated soil are required.

Sump and Manifold Line Removal. Although sumps and manifold lines are not underground storage "tanks," they are processed as such by regulatory agencies. Removal permits and soil testing at the time of removal, therefore, will be required by Alameda County. Lines and sumps will have to be rinsed clean prior to off-haul.

Concrete Spoils. The concrete slabs at the former product dispensing area and above-ground tank area, and also the concrete sump, can probably be broken up and disposed at a Class III landfill. If the surface is contaminated the concrete could be hydroblasted prior to demolition and off-hauled to a Class III landfill.

Closure Soil Testing. The requirement for soil testing at the time of manifold line or sump removal is to ensure that hazardous material or waste has not been released to the environment around lines, sumps, storage, or dispensing areas. The Alameda County Haz Mat Unit will require several kinds of soil testing (see Table 4 Summary).

Asbestos Containing Building Materials. California Administrative Code, Title 22, lists friable (crumbly) asbestos in concentrations greater than one (1) percent as hazardous waste. Even so, asbestos can be disposed at a Class III sanitary landfill.

Discretionary Soil Testing. In addition to the closure test requirement for manifold lines and sumps, the Alameda County Haz Mat Unit has broad authority to monitor, inspect and issue cleanup orders for apparent soil contamination. There are no current citations of the subject property to submit a plan of correction to the Haz Mat Unit.

TABLE 4. SUMMARY OF PROBABLE SOIL TESTING REQUIREMENTS OF THE ALAMEDA COUNTY HAZARDOUS MATERIALS UNIT AT KING PETROLEUM, ALAMEDA

ITEM	SOIL SAMPLING REQUIREMENT	TEST PARAMETER/METHOD	BASIS OF STATE REQUIREMENT
Drum Storage Area	Minimum of two (2) composite samples of 0-6 inch and 12-18 inch depth (a).	Oil & Grease/ SM503 D&E or EPA 418.1	Drums were improperly stored without secondary containment on bare ground.
Sump/ Oil Receptacles	Minimum of two (2) grab samples, one beneath each receptacle (a).	Oil & Grease/ SM 503 D&E or EPA 418.1	Concrete may have leaked from a crack; both recptacles lack secondary containment.
Product Lines	Minimum of four (4) grab samples, one per 50 feet of product line trench.	Gasoline, diesel volatiles/GCFID (5030), GCFID (3550) EPA (8020)	Lines are abandoned.

(a) If any contamination is discovered, then additional tests and test parameters may be required including the following:

Semi-volatiles	EPA 8270
PCBs	EPA 8080
Metals	EPA 7000/6010

Source: Earth Metrics Incorporated, 1989

APPENDIX

Asbestos Lab Test Results

Forensic Analytical Specialties, Inc.

Bulk Material Analysis Report

Client:
Earth Metrics Incorporated

2855 Campus Drive - Suite 300
San Mateo, CA 94403

Client Number: 182
Report Number: 30366
Date Received: 09/22/89
Date Examined: 09/25/89

Lab Number: 8948270
Sample Number: G1-922
Site: 2001 Versailles Ave., Alameda, CA

Analyst: RW

Location: Floor tile - front office.

P.O./Job ID: 03444/10149

Gross Description: Brown tile with black adhesive.

Comments: Asbestos detected in the tile (5-10%) only. Composite repoted.

Microscopic Description

TOTAL ASBESTOS PRESENT:			5-10 %
Chrysotile	5-10	%	
Amosite	Non-Det.	%	
Crocidolite	Non-Det.	%	
		%	
TOTAL NON-ASBESTOS FIBROUS MATERIAL PRESENT:			Trace %
Cellulose	Trace	%	
Fibrous Glass	Non-Det.	%	
		%	
		%	
TOTAL NON-ASBESTOS NON-FIBROUS MATERIAL PRESENT:			90-95 %
Unspecified Particulates	90-95	%	
		%	
		%	
		%	

Director: Janis Teichman
Janis Teichman

SEE REVERSE FOR EXPLANATION OF TERMS AND REPORTING PRACTICES
Analytical method: 40 CFR 763, Subpart F, Appendix A (AHERA)

EM0018

EXPLANATION OF TERMS AND REPORTING PRACTICES

Bulk Materials Analysis Reports

Bulk asbestos samples are examined at Forensic Analytical Specialties, Inc., by Polarized Light Microscopy (PLM) with Dispersion Staining, as recommended by the U.S. Environmental Protection Agency (EPA). Our analysts are trained professionals and our laboratory is accredited by the NBS and Certified by the California Department of Health Services to perform these analyses.

The lower limit of reliable detection for components of a mixture examined by PLM is 1%. When "None Detected" appears on our reports it should be interpreted as meaning that the indicated material was not observed and that, if present, it exists in a concentration below the reliable detection limit. When we observe asbestos or other materials in a concentration we believe to be less than the reliable limit of detection we will report the concentration as "Trace".

Analytical results are an estimate of the amount of asbestos present in the sample. Although our analysts are carefully trained and quality control practices are a part of our laboratory routine, some variation in analytical results is to be expected for similar samples. In addition, materials submitted for analysis may not be homogeneous. Consequently, a sample taken from one area may show significantly more or less asbestos than samples taken nearby. Test results pertain only to items tested.

The extent of any hazard resultant from the presence of asbestos in a building material is dependent on the extent to which fibers are being freed from the material into air breathed by building occupants. The presence of asbestos is best viewed as a potential hazard which may become an actual hazard if fibers are freed from the material. **Forensic Analytical Specialties is not able to assess the degree of hazard resultant from materials we examine.**

Airborne Fiber Analysis and TEM Reports

Airborne asbestos sample cassettes are examined at Forensic Analytical Specialties, Inc. (FASI), by two different analytical techniques. Phase Contrast Microscopy (PCM) is used to analyze the filters according to the NIOSH Method 7400 under counting rules "A". Transmission Electron Microscopy (TEM) is used to analyze air filters under Yamate Levels I, II, and III protocols, NIOSH Method 7402, and the AHERA protocol. Our analysts are trained professionals registered by the American Industrial Hygiene Association and our laboratory participates in the NIOSH Proficiency Analytical Testing (PAT) Program.

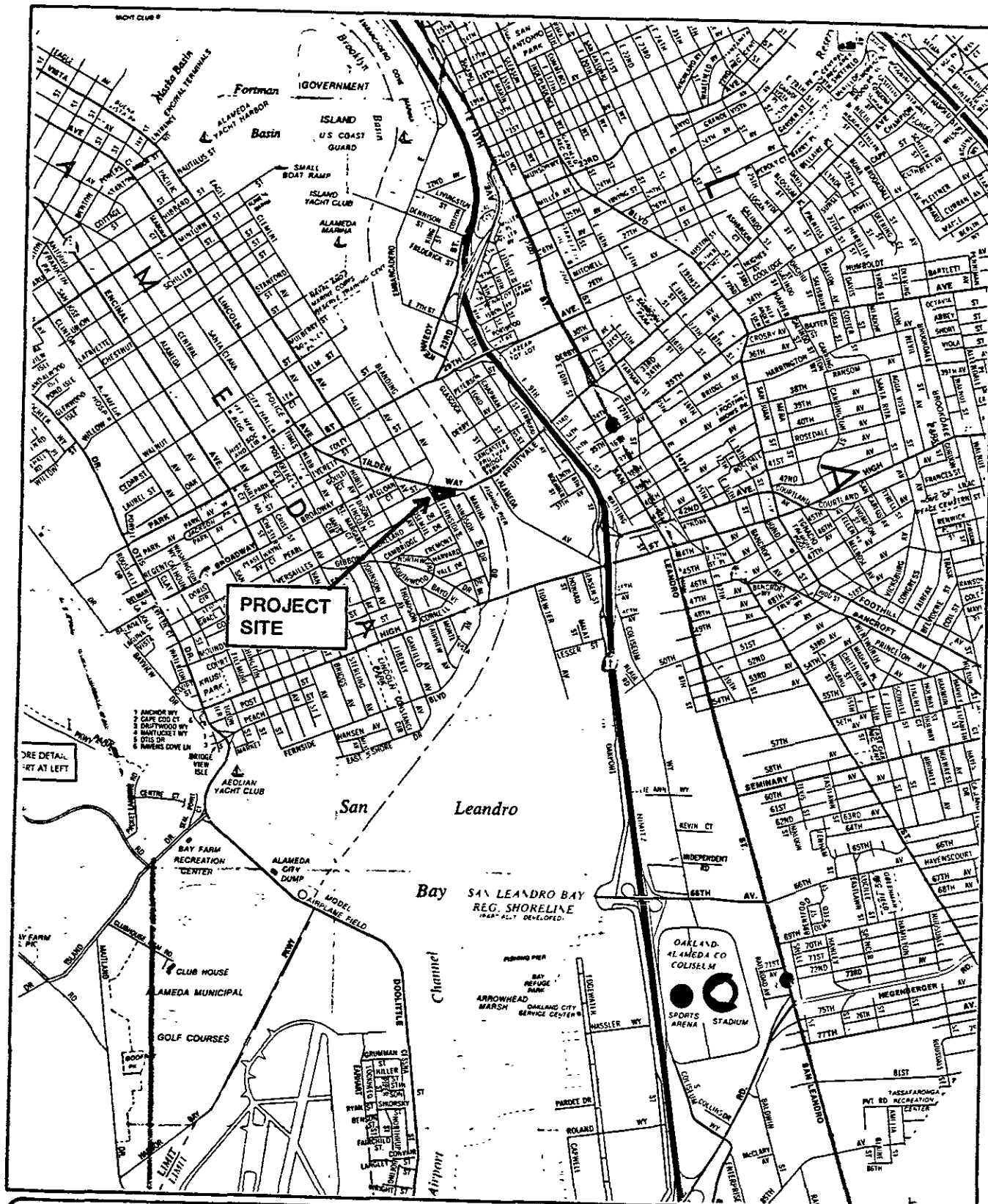
Our reporting practices for samples analyzed by PCM are as follows. The client and FASI sample numbers, the air volume, and the total fiber count are first indicated. These figures are used to calculate the fibers-per-cubic centimeter (f/cc) value reported next. The next figure is the limit of detection (LOD) for the sample under the 7400 analytical method. The last figure is the 95% upper confidence limit (95% UCL) estimate of f/cc, calculated according to the 7400 analytical method from data developed in our laboratory.

For samples analyzed by TEM, the terminology used on the report follows the definitions of the AHERA and Yamate Methods. The client and laboratory sample numbers are reported, as is the total filter area, the area analyzed, and the analytical sensitivity. Fibers and structures counted, fiber and structure concentration, and structure concentration on the filter surface are all reported. These figures are all reported separately for fibers or structures less than and greater than five microns in length, and the total count or concentration. For detailed definitions of these terms, the user is referred to the AHERA protocol.

Samples submitted to Forensic Analytical Specialties, Inc. are retained in storage for a period of six months following receipt and are then disposed of. Upon prior written arrangement, samples can be returned to the client.

The customer is solely responsible for the use and the interpretation of Forensic Analytical Specialties, Incorporated's reports and test results.

This report must not be used by the client to claim product endorsement by NVLAP or any agency of the U. S. Government.



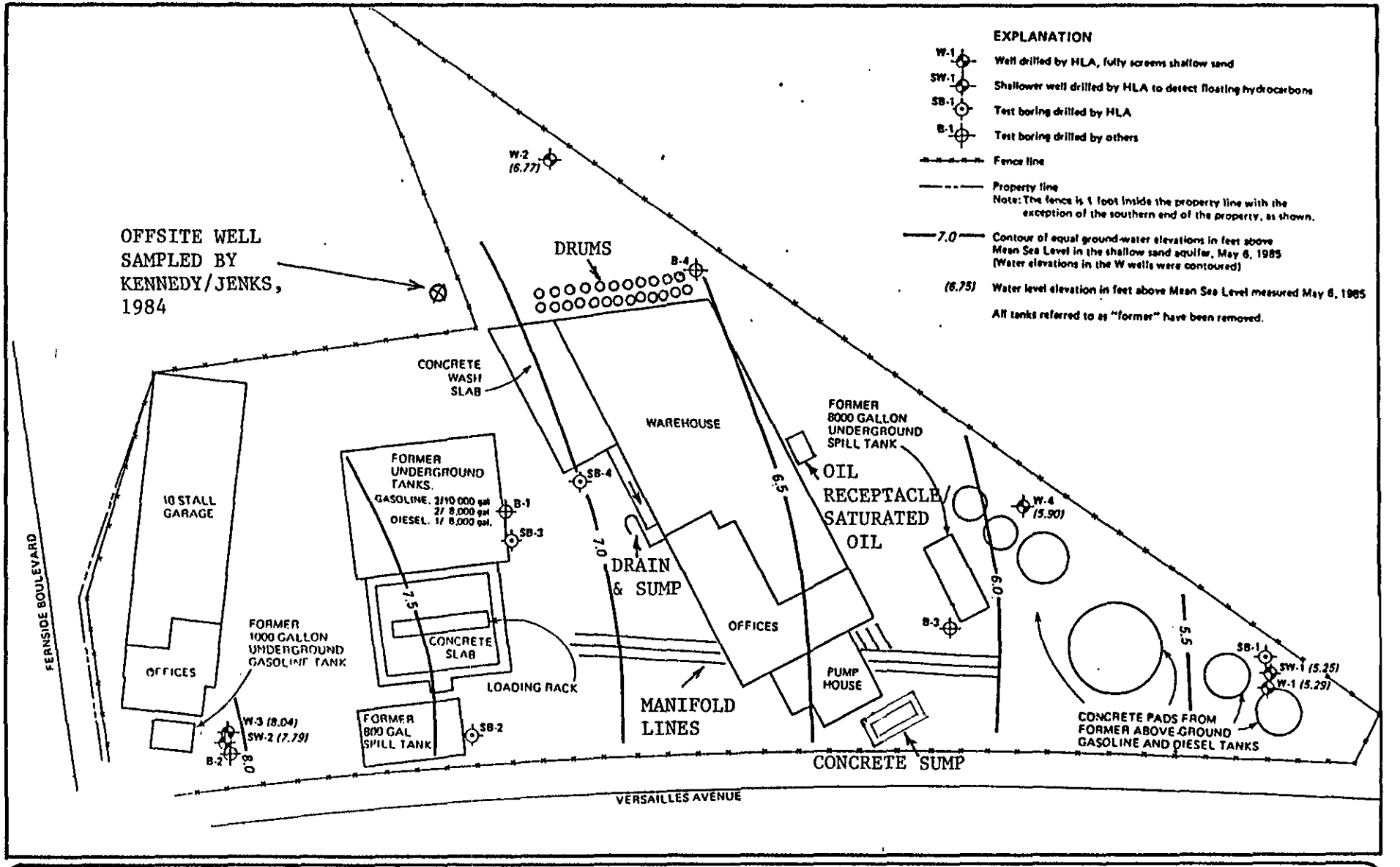
earth metrics

N

SCALE
1" = 2400'

FIGURE 1. LOCATION MAP OF THE KING PETROLEUM SITE IN ALAMEDA, CALIFORNIA

EM0020



earth metrics

SCALE
1" = 45'

FIGURE 2. SITE PLAN SHOWING PREVIOUS EXPLORATORY DRILLING LOCATIONS AND HISTORICAL PETROLEUM BALK STROAGE FACILITIES

EM0021

T. File
King's ~~Peter~~ Me
Client.
Cliff Mapes
10304

Forensic Analytical Specialties, Inc.

Bulk Material Analysis Report

Client:
Earth Metrics Incorporated

2855 Campus Drive - Suite 300
San Mateo, CA 94403

Client Number: 182
Report Number: 30366
Date Received: 09/22/89
Date Examined: 09/25/89

Lab Number: 8948270
Analyst: RW
Sample Number: G1-922
Site: 2001 Versailles Ave., Alameda, CA

Location: Floor tile - front office.

P.O./Job ID: 03444/10149

Gross Description: Brown tile with black adhesive.

Comments: Asbestos detected in the tile (5-10%) only. Composite repoted.

Microscopic Description

TOTAL ASBESTOS PRESENT:			5-10 %
Chrysotile	5-10	%	
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Fibrous Glass	Non-Det.	%	
		%	
		%	
TOTAL NON-ASBESTOS NON-FIBROUS MATERIAL PRESENT:			90-95 %
Unspecified Particulates	90-95	%	
		%	
		%	
		%	

Director: Janis Teichman
Janis Teichman

SEE REVERSE FOR EXPLANATION OF TERMS AND REPORTING PRACTICES

Analytical method: 40 CFR 763, Subpart F, Appendix A (AHERA)

EM0022

NVLAP
redited by the National Bureau
tandards, National Voluntary
aratory Accreditation Program for
ed test methods for asbestos

Consulting and Laboratory Services in the Forensic and Environmental Health Sciences

3777 Depot Road, Suite 406 - 408, Hayward, CA 94545 415/887-8828 FAX 415/887-4218

EARTH METRICS INCORPORATED

CONTACT REPORT

ORGANIZATION		OR FILE AREA	OR OTHER AGENCY (Check both Columns)	DATE
Seyuota	☐ PROJECT ☐ PROPOSAL Kinyon-Petroleum NAME	☐ City ☐ County ☐ Developer ☐ A/E/P	☐ SF ☐ Public ☐ LA ☐ Private ☐ SCTO ☐ _____	10/25/89

PERSON CONTACTED	TITLE/ADDRESS	TELEPHONE	
Belinda			☑ PHONE ☐ WE TO THEM ☐ VISIT ☑ THEY TO US

SUMMARY

	Diesel	Gasoline	Benzene	Toluene	Ethyl Benzene	Xylenes
ML-1	2.1 ppm	11 ppm	0.06	ND	ND	ND
OG-1	1500 ppm	16 ppm	0.06	ND	0.16	0.20

(
Diesel +
early hydrocarbons
(low end of diesel & not gasoline)
(could be something like Kerosene

ACTION	BY	DATE	DISTRIBUTION	
			EM0023	SUBMITTED BY Approved

SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

Earth Metrics	Client Project ID:	King Petroleum, Fernside/Versailles	Sampled:	Oct 13, 1989
2855 Campus Drive	Matrix Descript:	Soil	Received:	Oct 13, 1989
San Mateo, CA 94403	Analysis Method:	EPA 3550/8015		
Attention: Marc Papineau	First Sample #:	910-2014	Analyzed:	Oct 20, 1989
			Reported:	Oct 28, 1989

TOTAL PETROLEUM FUEL HYDROCARBONS (EPA 8015)

Sample Number	Sample Description	High B.P. Hydrocarbons mg/kg (ppm)
910-2014	ML #1	2.1
910-2015	OG #1	1,500

Detection Limits:	1.0

High Boiling Point Hydrocarbons are quantitated against a diesel fuel standard.
Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL

Elizabeth W. Hackl
Project Manager

EM0024

CHAIN OF CUSTODY RECORD

PROJ. NO.	PROJECT NAME	NO OF CONTAINERS	TPH-G + BTEX	TPH-D	REMARKS
	KING PETROLEUM FERNSIDE / VERSAILLES ALAMEDA, CA	Brass Liners			

SAMPLERS: Signature

Marc Popper

STA NO	DATE	TIME	COMP.	GRAB	STATION LOCATION				
ML#1	10/13/89	8:30AM		✓	Manifold Trench 2 foot depth	1	✓	✓	
OG#1	10/13/89	8:45AM		✓	Oil & Grit Separator (Chamber) 3 foot depth	1	✓	✓	

Relinquished by:Signature	Date/Time	Received by:Signature	Date/Time
Marc Popper	10/13/89 10AM	B. McOlvier	10/13 10:00AM
Relinquished by:Signature	Date/Time	Received by:Signature	Date/Time
Relinquished by:Signature	Date/Time	Received by:Signature	Date/Time

REMARKS:

5 DAY RUSH

EARTH METRICS INCORPORATED
2855 Campus Drive Suite 300
San Mateo, CA 94403
(415) 578-9900

EM0025

SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

Earth Metrics	Client Project ID:	King Petroleum, Fernside/Versailles	Sampled:	Oct 13, 1989
2855 Campus Drive	Matrix Descript:	Soil	Received:	Oct 13, 1989
San Mateo, CA 94403	Analysis Method:	EPA 5030/8015/8020	Analyzed:	Oct 20, 1989
Attention: Marc Papineau	First Sample #:	910-2014	Reported:	Oct 28, 1989

TOTAL PETROLEUM FUEL HYDROCARBONS with BTEX DISTINCTION (EPA 8015/8020)

Sample Number	Sample Description	Low/Medium B.P. Hydrocarbons mg/kg (ppm)	Benzene mg/kg (ppm)	Toluene mg/kg (ppm)	Ethyl Benzene mg/kg (ppm)	Xylenes mg/kg (ppm)
910-2014	ML #1	11	0.06	N.D.	N.D.	N.D.
910-2015	OG #1	16	0.06	N.D.	0.16	0.20
Detection Limits:		**1.0**	**0.05**	**0.1**	**0.1**	**0.1**

Low to Medium Boiling Point Hydrocarbons are quantitated against a gasoline standard.
Analytes reported as N.D. were **not** present above the stated limit of detection.

SEQUOIA ANALYTICAL

Elizabeth W. Hackl
Project Manager

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