CEECON
CALIFORNIA ENVIRONMENTAL ENGINEERS & CONTRACTORS

April 26, 1993

Mr. Safa Toma
East Bay Municipal Utility District
Industrial Discharge Division
P.O. Box 24055
Oakland, California 94623-1055

Subject: EBMUD Permit Application for Proposed Discharge of Treated Groundwater from Former Texaco Station, 1127 Lincoln Avenue, Alameda, California.

Dear Mr. Toma:

The enclosed East Bay Municipal Utility District (EBMUD) permit application for discharge of treated groundwater is being submitted by California Environmental Engineers and Contractors (CEECON) on behalf of Texaco Environmental Services (TES) for the Former Texaco Bay Street Station, 1127 Lincoln Avenue, in Alameda, California. The location of the site, and adjacent buildings, are shown on the Area Map, AM-1. A layout of the site is shown on the Site Plan, SP-1. Prior subsurface environmental investigations indicate that soil underlying this site contains residual gasoline hydrocarbons and dissolved petroleum hydrocarbons are present in groundwater. An interim soil and groundwater remediation system is proposed for use at this site.

INTRODUCTION

The objectives of the soil and groundwater remediation program include removal of residual and dissolved hydrocarbons from soil and groundwater underlying the site, and prevention of further migration offsite. To accomplish these objectives, a remediation system consisting of a vapor-extraction system, a groundwater recovery system, and above-ground equipment for treatment of extracted soil vapor and groundwater prior to discharge to the atmosphere and sanitary sewer is proposed for this site. However, before system installation can be initiated, a treated groundwater discharge permit must be acquired from EBMUD.

The dissolved gasoline-petroleum hydrocarbons are currently present onsite and possibly down-gradient from the site. As the elevation of the groundwater surface changes due to

natural seasonal fluctuations or induced drawdown, soil will be brought into contact with the additional dissolved hydrocarbons, resulting in the adsorption of these hydrocarbons onto sediment grains. The resulting residual hydrocarbons are generally more difficult to remove, especially if the affected soil is re-saturated with groundwater. We therefore recommend that a gradual depression of the groundwater surface be induced to elevations below the previous seasonal low (twelve to thirteen feet below ground surface). This recommendation places constraints on the rate of groundwater extraction. Maximum drawdown can be deferred for several months until a significant reduction is observed in the rate of the hydrocarbon removal from the soil above groundwater and the existing capillary fringe.

GROUNDWATER ANALYTICAL RESULTS

Results of laboratory analysis of groundwater samples collected from an onsite groundwater monitoring well, MW-1, are summarized on Table 1, Results of Laboratory Analyses of Water Samples. Concentrations of total petroleum hydrocarbons as gasoline (TPHg) and benzene are shown on Plate 3, TPHg/Benzene Concentrations in Groundwater.

GROUNDWATER EXTRACTION AND TREATMENT SYSTEM

The vapor-extraction component of the remediation system will remove a significant portion of the residual hydrocarbons, and will also enhance volatilization of dissolved hydrocarbons from groundwater. Extracting groundwater from the well (MW-2) will assist in providing hydraulic control, depressing the water table, thus increasing the vadose zone for enhanced performance of the vapor extraction system, and additional recovery of the dissolved hydrocarbon plume. TES proposes to utilize an existing groundwater monitoring well for groundwater extraction. The proposed location of the well, MW-2, is shown on SM-1. Allowances will be made to connect to MW-5 or MW-1 to allow for changes in groundwater flow direction.

TES will be utilizing a modular approach to remediation at this site. A trailer-mounted groundwater treatment system, including water filters, an aeration system, a water hardness chemical injector, and activated carbon polishing is proposed for this site. Instrumentation and controls on this system include water level indicators, transfer pumps, flow indicator, flow totalizer, and sample ports. The system is trailer-mounted and is provided with double-containment for all water and chemical storage drums. An approximate layout of this trailer-mounted system is shown on the attached GTS-1. The system can also be operated without aeration treatment. The aeration tank then serves as only a settling tank before

extracted groundwater is treated by liquid-phase activated carbon. A process flow diagram of this system, along with the compressor and groundwater extraction pump, is shown on the attached GTS-2.

Due to the low transmissivity of the water-table aquifer, productivity from the extraction wells is limited. Available disposal options and disposal rates for treated groundwater are also limited. TES proposes to use a groundwater pump to recover an average of 0.5 gpm and a maximum of approximately 2.0 gpm of groundwater, from the groundwater extraction well. We propose to operate the groundwater extraction pump only at the minimum pumping rate required to produce adequate hydraulic control of the dissolved hydrocarbon plume. The hydraulic control will be evaluated by monitoring the drawdown of the potentiometric surface on a monthly frequency; quantitative analyses of groundwater samples will also continue on a quarterly basis. The groundwater extraction wells will be fitted with quick-disconnect fittings to the piping of the groundwater removal system. This will allow relocation of the pump within the system, or the installation of additional pumps, without rewiring or re-piping of the groundwater removal system. These quick-disconnect fittings also enhance flexibility to focus groundwater removal in the area of greatest concern. As remediation progresses, these areas of concern will be identified through laboratory analyses of water and vapor samples from each well.

Treatment of an average of 0.5 gpm and maximum 2.0 gpm effluent stream removed by the groundwater extraction system will be in two stages. The first stage will consist of an aeration system consisting of spray, and diffused aeration. Air removed from this aeration system will be treated by the internal combustion engine as part of the off-gas treatment system. Typical removal rates for diffused aeration tanks such as these are above 95 percent reduction from inlet conditions. Activated carbon will be used as secondary water treatment. Two in-line canisters of liquid-phase granular activated carbon will be used for this secondary water treatment. If the system is operated without aeration treatment, the aeration tank then serves as only a settling tank before extracted groundwater is treated by liquid-phase activated carbon. When inlet vapor-phase hydrocarbon concentrations have been reduced to below 200 ppmv, the system can be modified to operate with activated carbon as the emission control device. Activated carbon can then be used to treat liquid and vapor phases of petroleum hydrocarbons. As initially configured, the groundwater treatment system is capable of processing up to ten gallons per minute.

A layout of the remediation system trench and wellhead cover locations are shown on WT-1. A Process Flow Diagram of the proposed remediation system is shown on PF-1. The vapor-extraction portion of the process flow diagram is being permitted through the Bay Area Air Quality Management District. Also attached are the completed EBMUD Wastewater

Discharge Permit Application. Installation and start-up for this proposed remediation will commence upon receipt of all permit approvals.

The Permitting Fee of $2,800 is calculated as follows:

Industrial Permit Fee	$2,260
Capacity Fee	540
TOTAL	**$2,800**

Please call if you have any questions, comments, or need any additional information.

Sincerely,
CEECON

COPY

Michael Hodges
Engineering Manager

Attachment:
- Completed EBMUD Wastewater Discharge Permit Application
- EBMUD Process Description Form
- EBMUD Water Balance/Strength Summary Form
- Table 1, Cumulative Results of Laboratory Results of Water Samples
- Results of Laboratory Analyses for Groundwater Samples & Chain of Custody Records
- AM-1, Area Map
- SP-1, Site Plan
- Plate 3, TPHg/Benzene Concentrations in Groundwater
- WT-1, Remediation Wellhead and Trench Layout
- GTS-1, Trailer Mounted Groundwater Treatment System
- GTS-2, Groundwater Extraction and Treatment System Process Diagram

cc: Mr. Robert Robles
Texaco Environmental Services
10 Universal City Plaza, 7th Floor
Universal City, California 91608

Ms. Juliet Shin
Alameda County Health Care Service Agencies
Department of Environmental Health
Hazardous Materials Division
80 Swan Way, Room 200
Oakland, California 95621

California Regional Water Quality Control Board
San Francisco Bay Region
Alameda County Oversight Personnel
2101 Webster Street, Suite 500
Oakland, California 94612

EBMUD WASTEWATER DISCHARGE PERMIT APPLICATION

EBMUD

Business Name CEECON

Water Balance / Strength Summary

PURPOSE: This information will enable EBMUD to evaluate the volumes, source(s) and strengths of wastewater discharged to the community sewer.

Permit Number

WATER USE AND DISPOSITION: Show on a separate sheet the method and calculations used to determine the quantities shown in the table.

Figures are: ☐ gallons per calendar day ☐ gallons per working day Number of working days per year_____

WATER USE	WATER SUPPLY FROM:			WASTEWATER DISCHARGED TO:					
	EBMUD	OTHER (1)		SIDE SEWER (gal/day)				OTHER (2)	
	gal/day	gal/day	CODE	No.1	No. ___	No. ___	No. ___	gal/day	CODE
Sanitary									
Processes									
Boiler									
Cooling									
Washing									
Irrigation									
Product									
Stormwater									
Other (3)	720		(3)						
Subtotal									

EBMUD AND OTHER SUPPLY TOTAL 720 **ALL SIDE SEWERS TOTAL** 720

Maximum groundwater extraction rates will not exceed 2,880 gal/day

NOTES:

1. Enter the quantity and the appropriate code letter indicating the source:
   a. Well **b.** Creek **c.** Stormwater **d.** Reclaimed Water **e.** Raw Materials.
2. Enter the quantity and appropriate code letter indicating the discharge point:
   a. Stormdrain **b.** Rail, Truck, Barge **c.** Evaporation **d.** Product
3. Describe Other: Extacted subsurface hydrocarbon impacted groundwater remediated by aeration and carbon adsorption, prior to discharge to sewer

SANITARY DISCHARGE: Please use the following data from the Uniform Plumbing Code, 1985, to determine sanitary wastewater volumes.

Field service employees - 5 gallons per employee per day
Office employees - 20 gallons per employee per day
Production employees - 25 gallons per employee per day
Production employees with showers - 35 gallons per employee per day

Include the effect that seasonal and weekend staffing changes may have on determining average volumes

AVERAGE WASTEWATER STRENGTH: Data base must be attached, average self-monitoring and EBMUD data

	SIDE SEWER (mg/L)			
	No. 1	No	No	No
COD	Est. 0 - 5 ppm			
TSS	Est. 0 - 5 ppm			

SD 34 • 10.88

EBMUD

Texaco Environmental Services /CEECON
BUSINESS NAME

Process Description

PURPOSE — The **Process Description** is intended to provide a description of the primary business activities and the substances which may enter into the wastewater from the business activity.

EBMUD USE
Permit Number
Business Classification Code

BUSINESS ACTIVITY

Former Gas Station - Groundwater Remediation

DESCRIPTION OF PRODUCT

TYPE OF PRODUCT OR BRAND NAME	QUANTITIES	
	Past Calendar Year	Estimated This Year
Petrolem Hydrocarbon Impacted Groundwater	NA	720 gpm (avg)
		2,880 gpm (max)

PROCESS DESCRIPTION

PROCESS DESCRIPTION List all wastewater generating operations	CHARACTERISTICS List all substances that may be discharged to the sewer.
Example: Rinsewater from electroplating bath	**Cr, Cu, Ni, Zn**
Example: Washdown of milk filling area	**fatty acids, milk**
Remediation of hydrocarbon impacted groundwater by extraction, treatment by aeration and carbon adsorption, prior to discharge to the sewer.	Benzene, Toluene, Ethylbenzene, Xylenes (BTEX) and Total Petroleum Hydrocarbons as gasoline (TPHg). Nondetectable levels of volatile organic compounds (VOCs)

DISCHARGE PERIOD

Continuous (24 hr/day)

a. Time of day from _____ to _____

b. Days of the week 7 days/week

BATCH DISCHARGE(S)

a. Day(s) of the week _____ b. Time(s) of the day _____

c. Volume discharged _____ d. Rate of discharge _____

OTHER WASTES — List the type and volume of liquid waste and sludges removed from the premises by means other than the community sewer

WASTE REMOVED BY (Name, address and State Transporter ID No.)	TYPE OF WASTE Example: alkaline cleaners, organic solvents, treatment sludge)	WASTE I.D. No	VOLUME (Gallons, etc.)

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EBMUD

WASTEWATER DISCHARGE PERMIT APPLICATION

PERMIT NUMBER

APPLICANT BUSINESS NAME

Texaco Environmental Services (TES) Technical Representative: CEECON

ADDRESS OF PREMISE DISCHARGING WASTEWATER	BUSINESS MAILING ADDRESS
1127 Lincoln Avenue	Tech. Rep. 1517 Palmeto Ave. Suite 4
STREET ADDRESS	STREET ADDRESS
Alameda, California	Pacifica, California 94044
CITY ZIP CODE	CITY ZIP CODE

CHIEF EXECUTIVE OFFICER

Michael Hodges	President/Engineering Manager
NAME	TITLE
1517 Palmeto Avenue Suite 4	Pacfica, California 94044
STREET ADDRESS	CITY ZIP CODE

PERSON TO BE CONTACTED ABOUT THIS APPLICATION	PERSON TO BE CONTACTED IN EVENT OF EMERGENCY
Michael Hodges	Michael Hodges
NAME	NAME
President (415) 738-1115	(415) 738-1115 (415) 738-1115
TITLE PHONE	DAY PHONE NIGHT PHONE

DOCUMENTATION TO BE RETURNED WITH THE PERMIT APPLICATION:

- ☒ PROCESS DESCRIPTION
- ☒ WATER BALANCE CALCULATIONS
- ☒ WASTEWATER STRENGTH DATA BASE
- ☒ SCHEMATIC FLOW DIAGRAM
- ☒ BUILDING LAYOUT PLAN
- ☒ DESCRIPTION OF TREATMENT SYSTEM
- ☒ SELF-MONITORING METHOD
- ☒ SPILL PREVENTION AND CONTAINMENT PLAN
- ☒ A LIST OF ALL ENVIRONMENTAL PERMITS (E.G. Air, Hazardous Waste)
- ☒ OTHER See cover for additional info. (SPECIFY)

PROVISIONS

Applicant will comply with the EBMUD Wastewater Control Ordinance and all applicable rules and regulations.

Applicant will report to EBMUD, Wastewater Department any changes, permanent or temporary, to the premise or operations that significantly change the quality or volume of the wastewater discharge or deviation from the terms and conditions under which this permit is granted.

CERTIFICATION

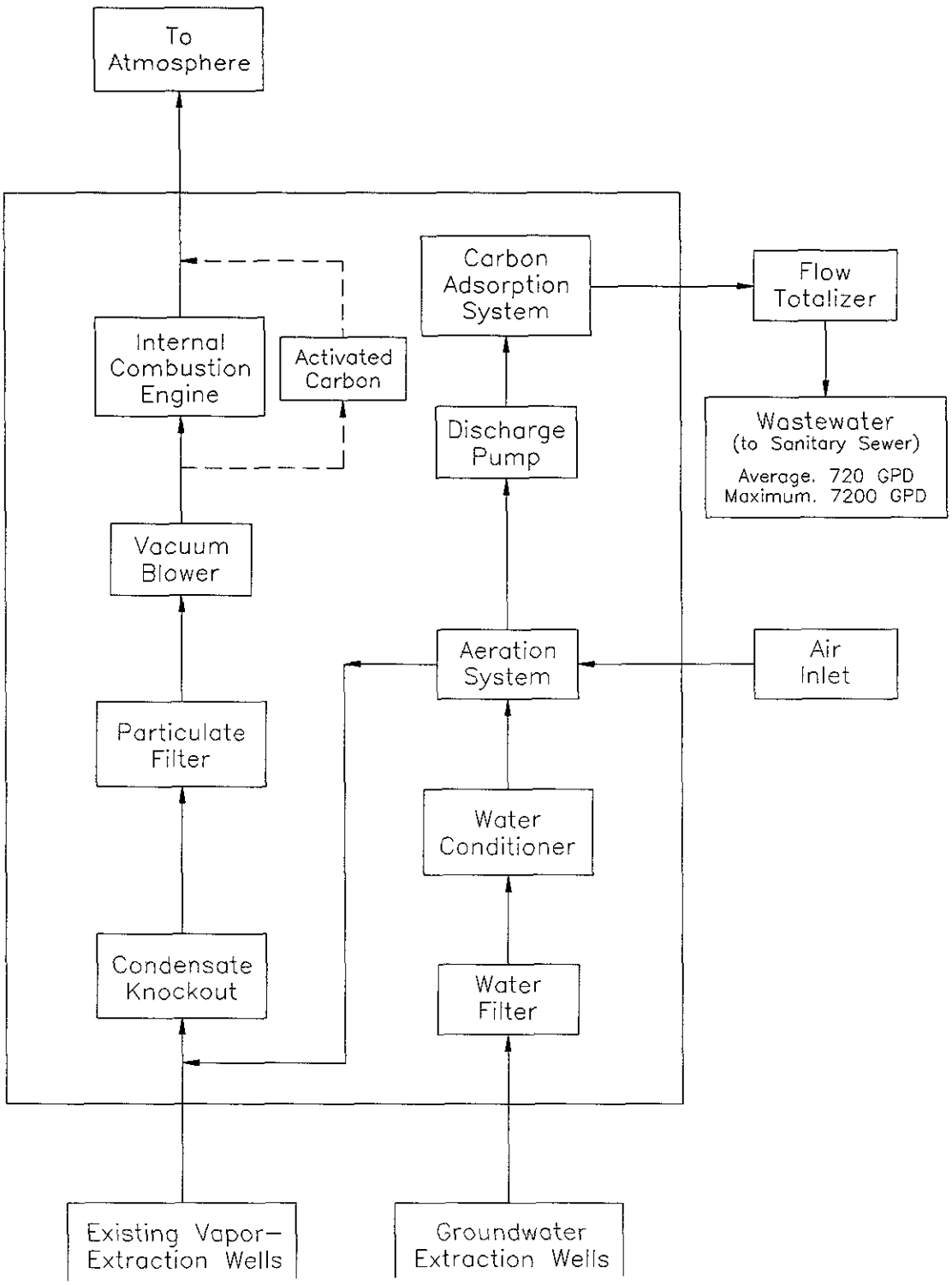
I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that the qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

NAME (See certification requirements on reverse)

SIGNATURE

TITLE

DATE


To Atmosphere
Internal Combustion Engine
Activated Carbon
Carbon Adsorption System
Flow Totalizer
Wastewater (to Sanitary Sewer)
Average. 720 GPD
Maximum. 7200 GPD
Discharge Pump
Vacuum Blower
Aeration System
Air Inlet
Particulate Filter
Water Conditioner
Condensate Knockout
Water Filter
Existing Vapor–Extraction Wells
Groundwater Extraction Wells

CEECON

TABLE 1
RESULTS OF LABORATORY ANALYSES
OF WATER SAMPLES
Former Texaco Service Station
1127 Lincoln Avenue
Alameda, California
(Page 1 of 2)

Sample Number	Date	TPHg	B	T	E	X	VOCs	Pesticides	Cyanide[1]
W-9-MW1	11/07/92	NA	980*	<5.0*	<0.5*	<20.0*	<50.0	<0.050	NA
W-8-MW1	11/17/92	730	250	22	27	12	NA	NA	NA
W-8-MW1	12/09/92	NA	NA	NA	NA	NA	NA	NA	<0.01

Results are reported in parts per billion (ppb) with the exception of cyanide, which was reported in parts per million (ppm).
TPHg: Total petroleum hydrocarbons as gasoline
B: Benzene.
T: Toluene.
E: Ethylbenzene.
X: Xylenes (total).
NA: Not analyzed.
<: Less than the detection limit for the specified method of analysis.
*: BTEX was included in the volatile organic compounds (VOCs) results.
TPHg and BTEX were analyzed by Environmental Protection Agency (EPA) Methods 5030/602/TPH LUFT.
VOCs were analyzed by Environmental Protection Agency (EPA) Method 8240.
Pesticides were analyzed by EPA Method 625.

Sample Identification:

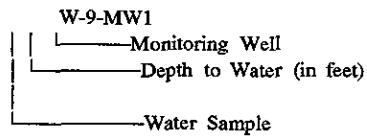


TABLE 1
RESULTS OF LABORATORY ANALYSES
OF WATER SAMPLES
Former Texaco Service Station
1127 Lincoln Avenue
Alameda, California
(Page 2 of 2)

Metals	Sampling Date	Sample ID	Concentration (ppm)
	11/05/92	W-9-MW1	
Antimony			<0.020
Arsenic			<0.005
Beryllium			<0.001
Cadmium			0.002
Chromium			<0.01
Copper			<0.005
Lead			<0.010
Mercury			0.002
Nickel			<0.020
Selenium			<0.005
Silver			<0.005
Thallium			0.06
Zinc			0.008

Results in parts per million (ppm).
<: Less than the detection limit for the specified method of analysis.

Sample Identification: W-9-MW1
- W-9-MW1 — Monitoring Well
- W-9-MW1 — Depth to Water (in feet)
- W-9-MW1 — Water Sample

CHAIN OF CUSTODY
AND
RESULTS OF LABORATORY ANALYSIS OF GROUNDWATER SAMPLES

CHAIN OF CUSTODY RECORD

PROJECT NO	SITE NAME & ADDRESS
1-15-1006	ALAMEDA Frmr TEXACO 1127 Lincoln Av

WITNESSING AGENCY / INSPECTOR NAME / DATE: Peter Schurman PETER SCHURMAN

ANALYSES REQUESTED

ID NO	DATE	TIME	SOIL	WATER	SAMPLING LOCATION	TPH (Gasoline) & B, T, X, & E	TPH (Diesel) & B, T, X, & E	Total Oil & Grease	EPA 624 ~~Halogenated HC's~~	EPA 625 ~~B, T, X & E~~	Title 22 FP ~~Heavy Metals~~ METALS CYANIDE		REMARKS
W-9-MW1	11/7/92	530		✓	MW 1 1127 Lincoln Av				✓	✓	✓		NORMAL TAT
													9 containers per

(1) See attached "Table 2" for specific analysis method.

Relinquished by (Signature)	Date/Time	Received by: (Signature)
Peter Schurman	11/9/92	
Relinquished by (Signature)	Date/Time	Received by: (Signature)
Relinquished by (Signature)	Date/Time	Received by: (Signature)
Relinquished by (Signature)	Date/Time 11/9/92 11:20	Rec'd for Laboratory by: (Signature) Chris Leece Michael Hodges

The following MUST BE completed by the laboratory accepting samples for analysis:

1. Have all samples received for analysis been stored in ice?
2. Will samples remain refrigerated until analyzed?
3. Did any samples received for analysis have head space?
4. Were samples in appropriate containers and properly packaged?

Signature ____ Title ____ Date ____

CEECON

CALIFORNIA ENVIRONMENTAL ENGINEERS & CONTRACTORS

MOBILE CHEM LABS INC.

5021 Blum Road, Suite 3 • Martinez, CA 94553
Phone (415) 372-3700 • Fax (415) 372-6955

1-15-1006\1718\012293

CEECON
72 Paloma Avenue
Pacifica, CA 94044
Attn: Michael Hodges
Project Manager

Date Sampled: 11-07-92
Date Received: 11-09-92
Date Analyzed: 11-20-92

Sample Number	Sample Description
112172	Proj# 1-15-1006 Texaco - Alameda 1127 Lincoln Avenue W-9-MW1 WATER

EPA METHOD 8240
PURGEABLE ORGANICS

	Detection Limit µg/kg	Results µg/kg	Spike Recovery
Benzene	<5.0	980	
Bromodichloromethane	<5.0	ND	
Bromoform	<5.0	ND	
Bromomethane	<10.0	ND	
Carbon Tetrachloride	<5.0	ND	
Chlorobenzene	<5.0	ND	
Chloroethane	<10.0	ND	
Chloroform	<5.0	ND	
Chloromethane	<10.0	ND	
Dibromochloromethane	<5.0	ND	
1,1-Dichloroethane	<5.0	ND	
1,2-Dichloroethane	<5.0	ND	
1,1-Dichloroethene	<5.0	ND	
Trans-1,2-Dichloroethene	<5.0	ND	
1,2-Dichloropropane	<5.0	ND	
Cis-1,3-Dichloropropene	<5.0	ND	
Trans-1,3-Dichloropropene	<5.0	ND	
Ethylbenzene	<5.0	ND	
Methylene Chloride	<20.0	ND	
1,1,2,2-Tetrachloroethane	<5.0	ND	
Tetrachloroethene	<5.0	ND	
Toluene	<5.0	ND	
1,1,1-Trichloroethane	<5.0	ND	
1,1,2-Trichloroethane	<5.0	ND	
Trichloroethene	<5.0	ND	

MOBILE CHEM LABS INC.

5021 Blum Road, Suite 3 • Martinez, CA 94553
Phone (415) 372-3700 • Fax (415) 372-6955

1-15-1006\1718\012293

CEECON
72 Paloma Avenue
Pacifica, CA 94044
Attn: Michael Hodges
Project Manager

Date Sampled: 11-07-92
Date Received: 11-09-92
Date Analyzed: 11-20-92

Sample Number	Sample Description
112172	Proj# 1-15-1006 Texaco - Alameda 1127 Lincoln Avenue W-9-MW1 WATER

EPA METHOD 8240
PURGEABLE ORGANICS

	Detection Limit µg/kg	Results µg/kg	Spike Recovery
Vinyl Chloride	<10.0	ND	
Total Xylenes	<20.0	ND	
Acetone	<50.0	ND	
2-Butanone	<50.0	ND	
Carbon Disulfide	<5.0	ND	
2-Hexanone	<15.0	ND	
4-Methyl-2-Pentanone	<15.0	ND	
Styrene	<5.0	ND	
Vinyl Acetate	<50.0	ND	
Cis-1,2-Dichloroethene	<5.0	ND	

QA/QC: Sample blank is none detected

Note: Analysis was performed using EPA methods 5030 and 8240

MOBILE CHEM LABS, INC.

Ronald G. Evans
Lab Director

CHROMALAB, INC.

Environmental Laboratory (1094)

5 DAYS TURNAROUND

November 17, 1992 ChromaLab File No.: 1192080

MOBILE CHEM LABS, INC.

Attn: David Levine

RE: One water sample for Priority Pollutants Metals (13) analyses

Project Name: CEE TEXACO ALAMEDA
Project Number: 1-15-1006
Date Sampled: Nov. 5, 1992 Date Submitted: Nov. 10, 1992
Date Analyzed: Nov. 13, 1992

RESULTS: Sample I.D.: 112172

Metals	Concentration (mg/L)	Detection Limit (mg/L)
Antimony (Sb)	N.D.	0.020
Arsenic (As)	N.D.	0.005
Beryllium (Be)	N.D.	0.001
Cadmium (Cd)	0.002	0.001
Chromium (Cr)	N.D.	0.01
Copper (Cu)	N.D.	0.005
Lead (Pb)	N.D.	0.010
Mercury (Hg)	0.002	0.001
Nickel (Ni)	N.D.	0.020
Selenium (Se)	N.D.	0.005
Silver (Ag)	N.D.	0.005
Thallium (Tl)	0.06	0.04
Zinc (Zn)	0.008	0.005

Method of Analysis: 3010/6010/7470

ChromaLab, Inc.

Jack Kelly
Analytical Chemist

Refaat Mankarious
Inorganic Supervisor

cc

2239 Omega Road,#1 • San Ramon, California 94583
(510) 831-1788 • Facsimile (510) 831-8798
Federal ID #68-0140157

CHROMALAB, INC.

Environmental Laboratory (1094)

5 DAYS TURNAROUND

November 17, 1992 — ChromaLab File # 1192080 A

Mobile Chem Labs, Inc. — Attn: David Levine

Date Sampled: Nov. 05, 1992 — Date Submitted: Nov. 10, 1992
Date Extracted: Nov. 16, 1992 — Date Analyzed: Nov. 17, 1992

Project Name: CEE TEXACO, ALAMEDA — Project Number: 1-15-1006
Sample I.D.: 112172
Method of Analysis: EPA 625 — Matrix: water

COMPOUND NAME	Sample mg/l	MDL mg/l	Spike Recovery
PHENOL	N.D.	0.010	-----
BIS(2-CHLOROETHYL) ETHER	N.D.	0.010	90% 103%
2-CHLOROPHENOL	N.D.	0.010	-----
1,3-DICHLOROBENZENE	N.D.	0.010	-----
1,4-DICHLOROBENZENE	N.D.	0.010	-----
BENZYL ALCOHOL	N.D.	0.020	-----
1,2-DICHLOROBENZENE	N.D.	0.010	-----
2-METHYLPHENOL	N.D.	0.010	-----
BIS(2-CHLOROISOPROPYL)ETHER	N.D.	0.010	-----
4-METHYLPHENOL	N.D.	0.010	-----
N-NITROSO-DI-N-PROPYLAMINE	N.D.	0.010	-----
HEXACHLOROETHANE	N.D.	0.010	-----
NITROBENZENE	N.D.	0.010	-----
ISOPHORONE	N.D.	0.010	-----
2-NITROPHENOL	N.D.	0.010	-----
2,4-DIMETHYLPHENOL	N.D.	0.010	-----
BENZOIC ACID	N.D.	0.050	-----
BIS(2-CHLOROETHOXY)METHANE	N.D.	0.010	101% 84%
2,4-DICHLOROPHENOL	N.D.	0.010	-----
1,2,4-TRICHLOROBENZENE	N.D.	0.010	-----
NAPHTHALENE	N.D.	0.010	-----
4-CHLOROANILINE	N.D.	0.020	-----
HEXACHLOROBUTADIENE	N.D.	0.010	-----
4-CHLORO-3-METHYLPHENOL	N.D.	0.020	-----
2-METHYLNAPHTHALENE	N.D.	0.010	-----
HEXACHLOROCYCLOPENTADIENE	N.D.	0.010	-----
2,4,6-TRICHLOROPHENOL	N.D.	0.010	-----
2,4,5-TRICHLOROPHENOL	N.D.	0.010	-----
2-CHLORONAPHTHALENE	N.D.	0.010	-----
2-NITROANILINE	N.D.	0.050	-----
DIMETHYL PHTHALATE	N.D.	0.010	-----
ACENAPHTHYLENE	N.D.	0.010	-----
3-NITROANILINE	N.D.	0.050	-----
ACENAPHTHENE	N.D.	0.010	106% 110%
2,4-DINITROPHENOL	N.D.	0.050	-----
4-NITROPHENOL	N.D.	0.050	-----
DIBENZOFURAN	N.D.	0.010	-----

(continued on next page)

2239 Omega Road, #1 • San Ramon, California 94583
510/831-1788 • Facsimile 510/831-8798
Federal ID #68-0140157

CHROMALAB, INC.

Environmental Laboratory (1094)

5 DAYS TURNAROUND

ChromaLab File # 1192080 A

Project Name: CEE TEXACO, ALAMEDA
Project No: 1-15-1006
Sample I.D.: 112172
Method of Analysis: EPA 625 Matrix: water

COMPOUND NAME	Sample mg/l	MDL mg/l	Spike Recovery
2,4-DINITROTOLUENE	N.D.	0.010	-----
2,6-DINITROTOLUENE	N.D.	0.010	96% 102%
DIETHYL PHTHALATE	N.D.	0.010	-----
4-CHLORO-PHENYL PHENYL ETHER	N.D.	0.010	-----
FLUORENE	N.D.	0.010	-----
4-NITROANILINE	N.D.	0.050	-----
4,6-DINITRO-2-METHYL PHENOL	N.D.	0.050	-----
N-NITROSODIPHENYLAMINE	N.D.	0.010	-----
4-BROMOPHENYL PHENYL ETHER	N.D.	0.010	-----
HEXACHLOROBENZENE	N.D.	0.010	-----
PENTACHLOROPHENOL	N.D.	0.050	-----
PHENANTHRENE	N.D.	0.010	-----
ANTHRACENE	N.D.	0.010	-----
DI-N-BUTYL PHTHALATE	N.D.	0.010	-----
FLUORANTHENE	N.D.	0.010	-----
PYRENE	N.D.	0.010	-----
BUTYLBENZYLPHTHALATE	N.D.	0.010	-----
3,3'-DICHLOROBENZIDINE	N.D.	0.020	-----
BENZO(A)ANTHRACENE	N.D.	0.010	-----
BIS(2-ETHYLHEXYL)PHTHALATE	N.D.	0.010	-----
CHRYSENE	N.D.	0.010	88% 103%
DI-N-OCTYLPHTHALATE	N.D.	0.010	-----
BENZO(B)FLUORANTHENE	N.D.	0.010	-----
BENZO(K)FLUORANTHENE	N.D.	0.010	-----
BENZO(A)PYRENE	N.D.	0.010	-----
INDENO(1,2,3 C,D)PYRENE	N.D.	0.010	-----
DIBENZO(A,H)ANTHRACENE	N.D.	0.010	-----
BENZO(G,H,I)PERYLENE	N.D.	0.010	-----

ChromaLab, Inc.

Yiu Tam
Analytical Chemist

Eric Tam
Lab Director

2239 Omega Road, #1 • San Ramon, California 94583
510/831-1788 • Facsimile 510/831-8798
Federal ID #68-0140157

122147

CHAIN OF CUSTODY RECORD

PROJECT NO	SITE NAME & ADDRESS
115 1006	Form TEXACO Lincoln Av Alameda Is.

WITNESSING AGENCY / INSPECTOR NAME / DATE: PETER SCHURMAN 9DEC92

ID NO	DATE	TIME	SOIL	WATER	SAMPLING LOCATION	TPH (Gasoline) & B,T,X,& E	TPH (Diesel) & B,T,X,& E	Total Oil & Grease	Halogenated HC's	B,T,X & E	Heavy Metals	CYANIDE	REMARKS
W-8.MW1	9DEC92	1420		✓	MW1 147							✓	24 HR TAT on Cyanide per Chris @ Mobil Chem

ANALYSES REQUESTED (1)

(1) See attached "Table 2" for specific analysis method.

Relinquished by (Signature)	Date/Time	Received by: (Signature)
[signature]	9DEC92 1535	
Relinquished by (Signature)	Date/Time	Received by: (Signature)
Relinquished by (Signature)	Date/Time	Received by: (Signature)
Relinquished by (Signature)	Date/Time 12/9/92 1535	Rec'd for Laboratory by: (Signature) C. Cecce

The following MUST BE completed by the laboratory accepting samples for analysis:

1. Have all samples received for analysis been stored in ice?
2. Will samples remain refrigerated until analyzed?
3. Did any samples received for analysis have head space?
4. Were samples in appropriate containers and properly packaged?

Signature | Title | Date

CEECON

CALIFORNIA ENVIRONMENTAL ENGINEERS & CONTRACTORS

CERCO ANALYTICAL
1850 Bates Ave., Suite D • Concord, CA 94520 • (510) 687-4947 • FAX (510) 687-2905

Mobile Chem Labs, Inc.
5021 Blum Road, Ste.3
Martinez, CA 94553

Project I.D. CEE #1/15/1006 & 1/5/1008
Date Sampled: 12/9/92
Date Received: 12/10/92
Date Analyzed: 12/10/92
Matrix: Waste Water

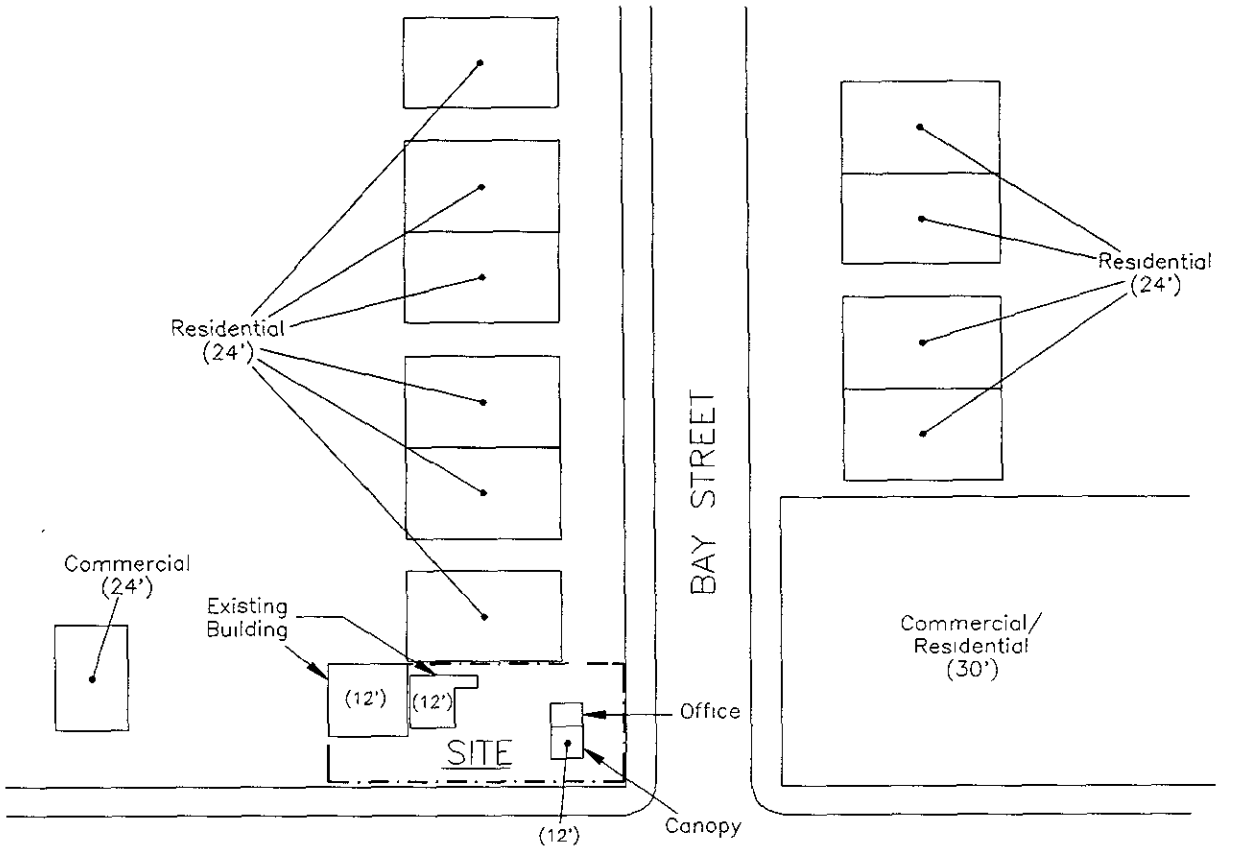
December 11, 1992
Job No. 921582
Sample No. 001-003
Cust. No. 10334

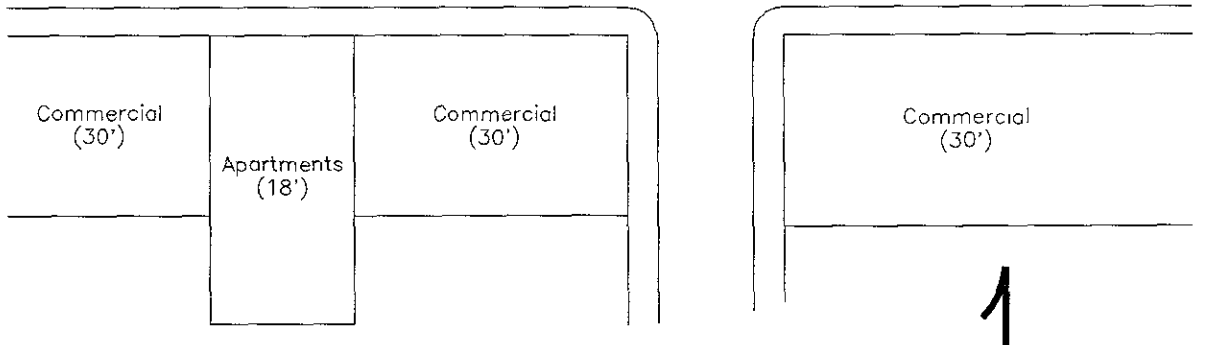
	Client I.D.	Cyanide mg/L
001	122147	N.D.
002	122148	N.D.
003	122149'	N.D.

Detection Limit	0.01
Method No.:	4500E
Date Analyzed:	12/10/92

Paula Spiese

Paula Spiese - Lab Director


Residential
(24')
Residential
(24')
BAY STREET
Commercial
(24')
Existing
Building
(12')
(12')
SITE
Office
Canopy
(12')
Commercial/
Residential
(30')
LINCOLN AVENUE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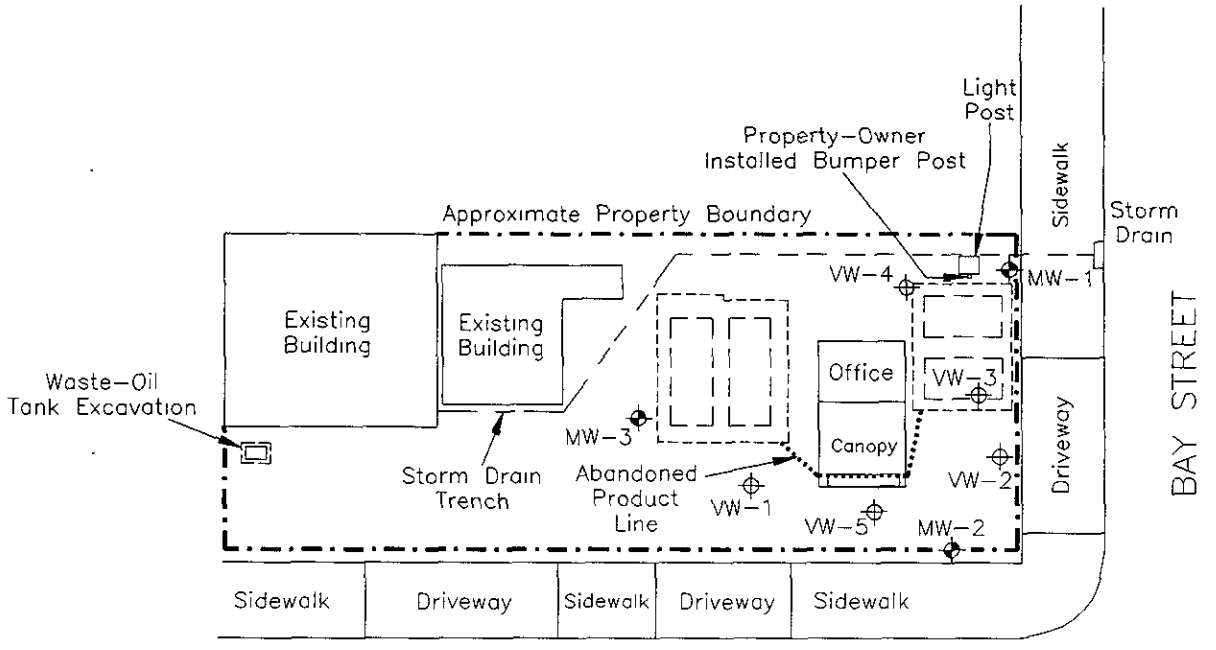
(30')
Apartments
(18')
Commercial
(30')
Commercial
(30')


N

CEECON



LINCOLN AVENUE

EXPLANATION:

VW-5 ⊕ Vapor Monitoring/ Extraction Well

MW-3 ⊕ Monitoring Well

Former Underground Product Storage Tank

N

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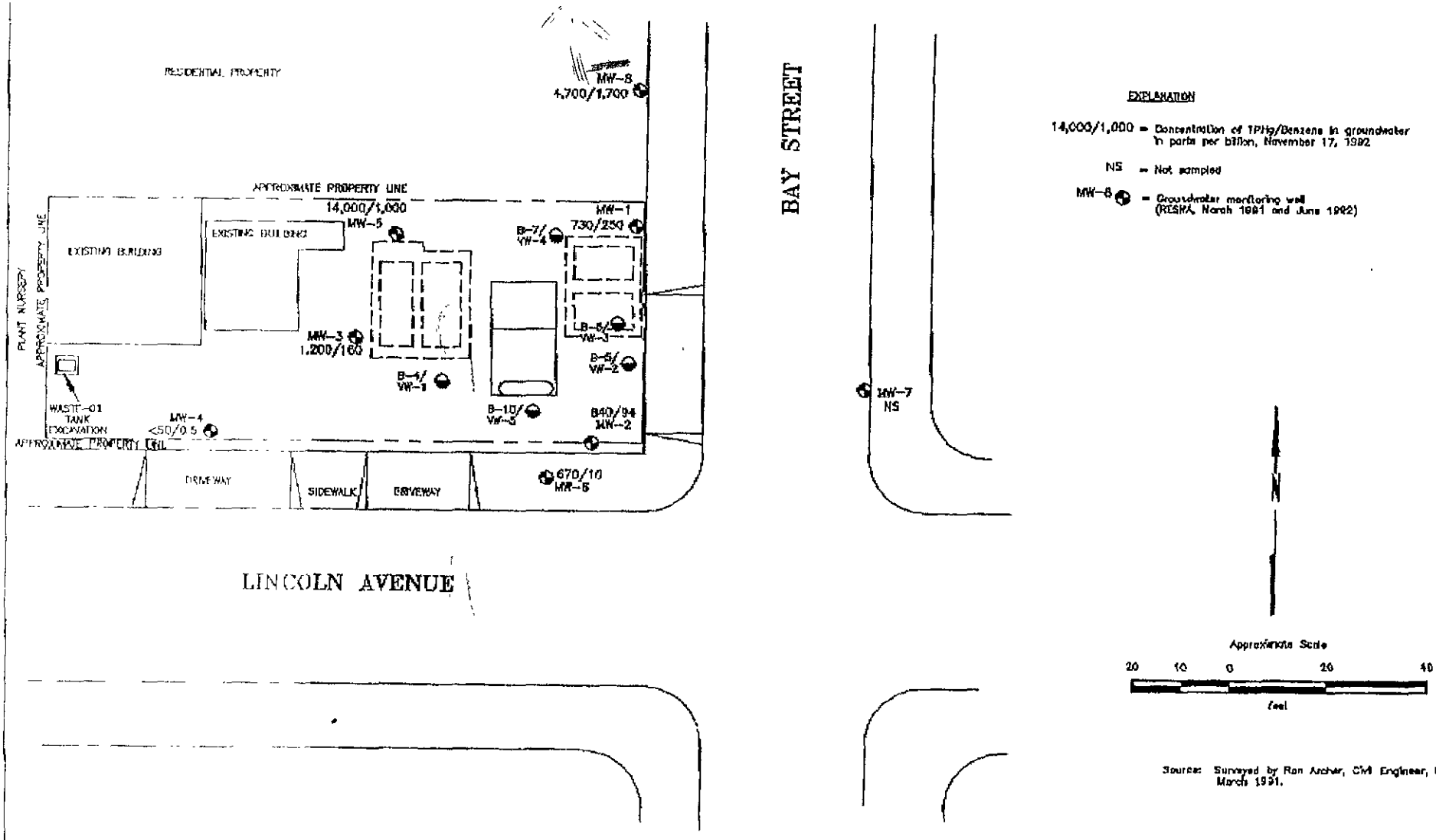
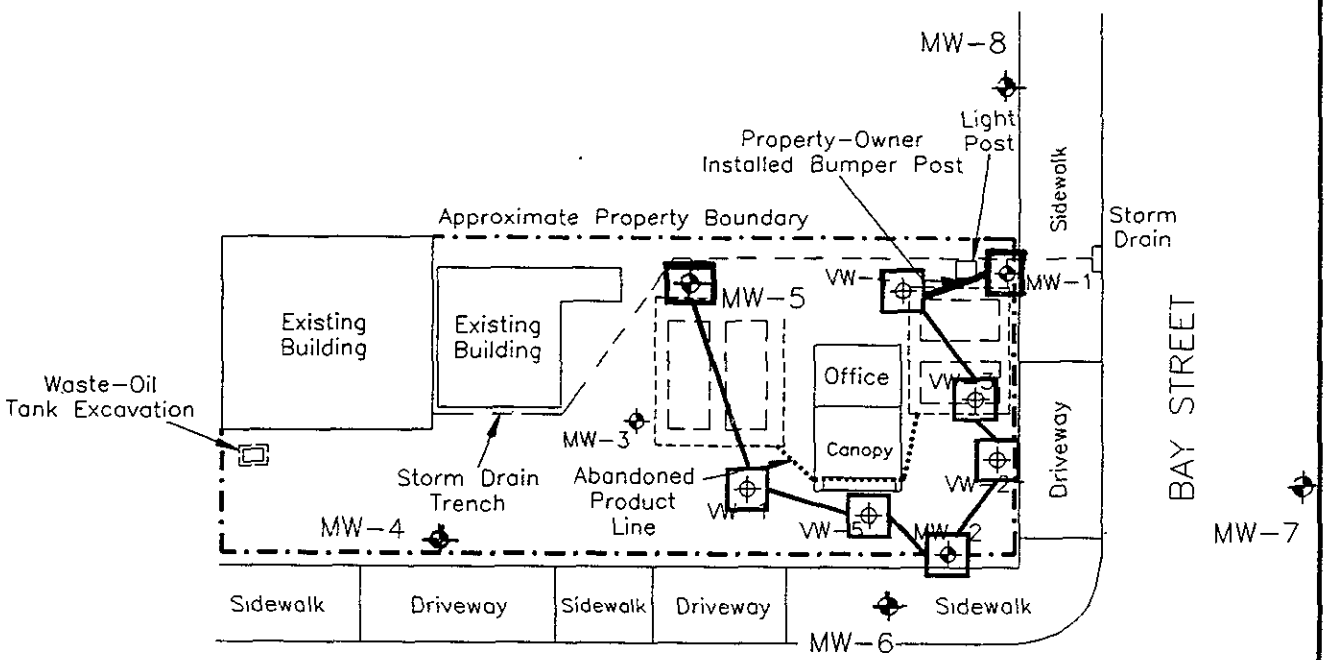


RESNA
Working to Restore Nature

PROJECT 62074.01

TPHg/BENZENE CONCENTRATIONS IN GROUNDWATER
Former Bay Street Texaco Station
1127 Lincoln Avenue
Alameda, California

PLATE
3



EXPLANATION:

- Remediation Wellhead Cover
- VW-5 — Vapor Monitoring/ Extraction Well
- MW-3 — Monitoring Well
- Former Underground Product Storage Tank

N

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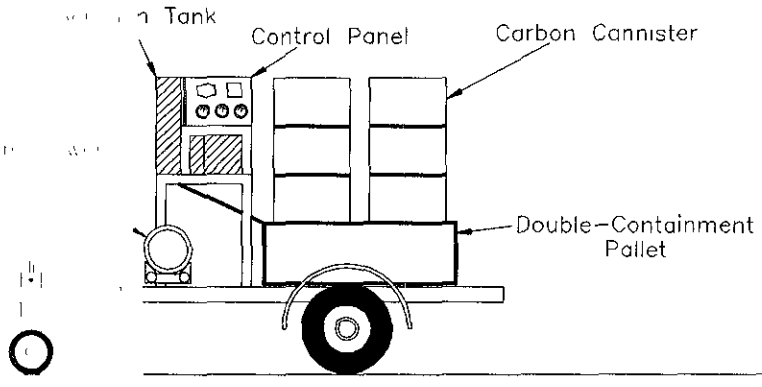
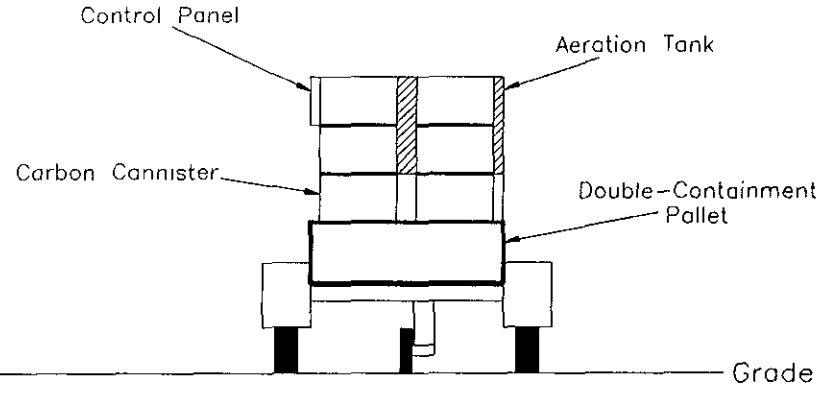
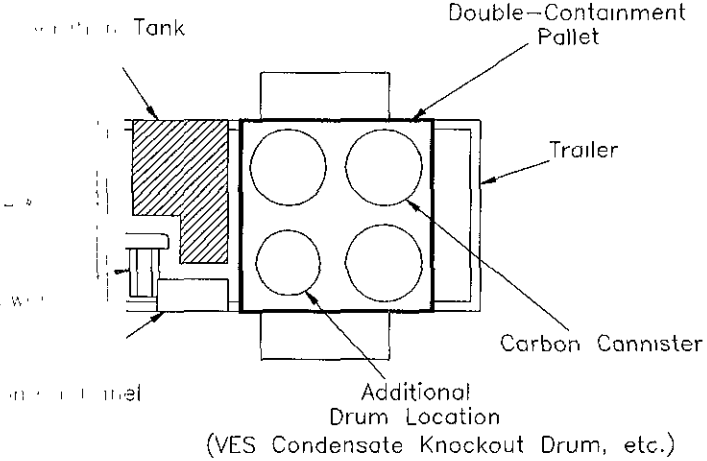
SIDE VIEW



REAR VIEW



PLAN VIEW



Instrumentation Readouts

Flow Meter
Flow Totalizer
Inlet High Pressure Switch
Inlet High-High Pressure Switch
Aeration Tank High-High Level Switch
Activated Carbon High Pressure Switch

Sample Ports

Influent (Between Aeration Tank And First Carbon Cannister)
Effluent (Between Carbon Cannisters)
Easy Disconnects At Carbon Cannisters

Remote Signal Capabilities

Water Flow
Total Water Flow
On/Off Status

8

FEET

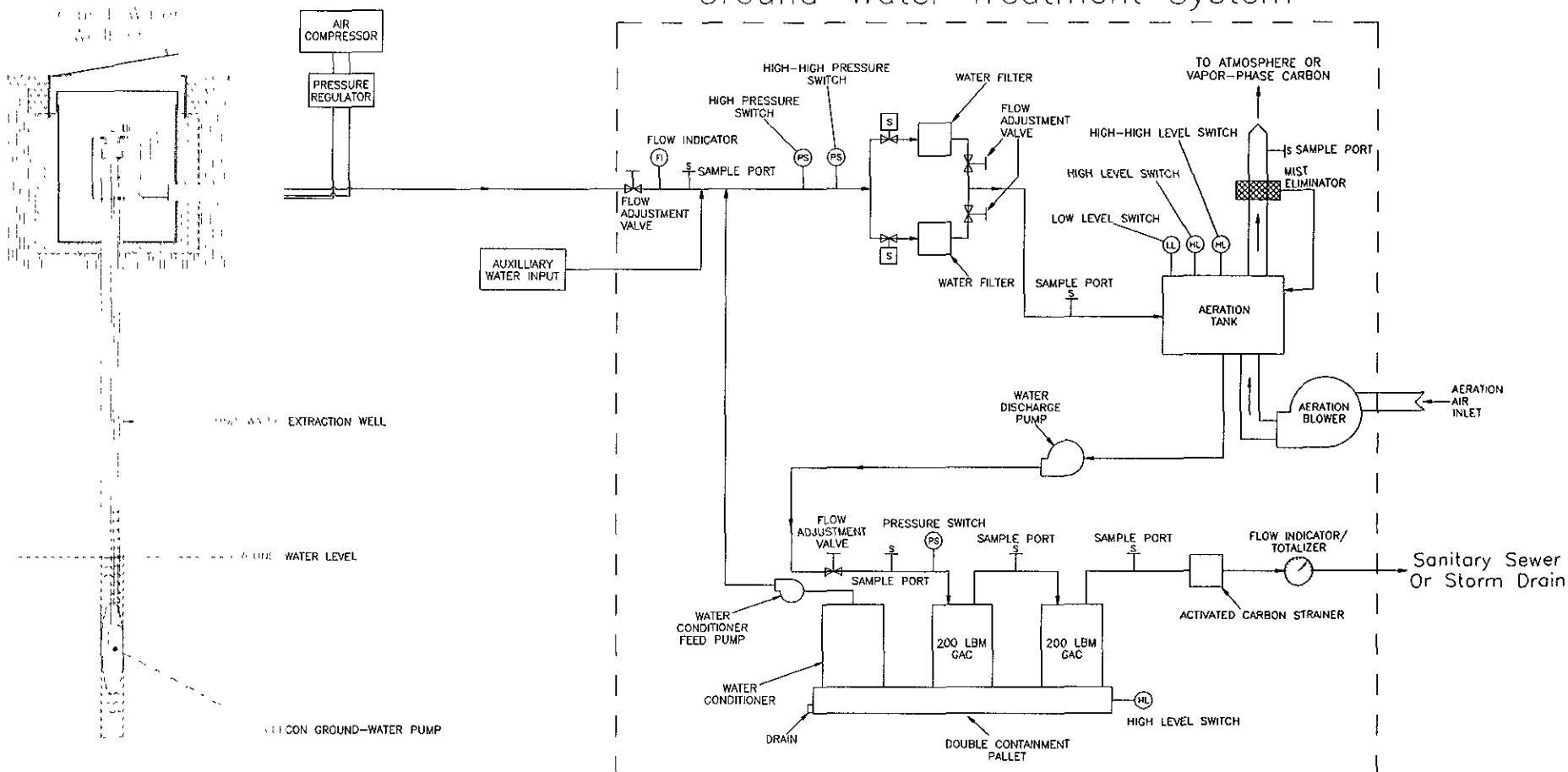
CEECON
CALIFORNIA ENVIRONMENTAL ENGINEERS & CONTRACTORS

Drawing: GTS-1

Date: 5/1/92

Trailer-Mounted Groundwater Treatment System

CEECON Skid-Mounted or Trailer-Mounted Ground-Water Treatment System



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Drawing: GTS-2 | Date: 5/1/92

Ground-Water Extraction And Treatment System Process Diagram