



January 18, 1996

Alameda County Health Department Hazardous Materials Division 1131 Harbor Bay Parkway Alameda, California 94502

Attention: Ms. Madhulla Logan

Subject: Fuel Tank Closure Report

265 30th Street, Oakland, California

(CCI Project No. 12058-1))

Dear Ms. Logan:

In Accordance with instructions from Mr. Warren Hagstrom, Compliance & Closure, Inc. is here by forwarding the December 1995 Fuel Tank Closure Report for the Property located at 265 30th Street, in the City of Oakland, Alameda County, California.

We would appreciate any comments you might have on this report. If you have any questions, please call me at (510) 426-5395.

Sincerely,

Compliance & Closure, Inc.

Gary R. Mulkey, R.G. 5842

cc: Mr. Warren Hagstrom

# FUEL TANK CLOSURE REPORT 265 30TH STREET, OAKLAND, CALIFORNIA

FOR

HAGSTROM PROPERTIES ORINDA, CALIFORNIA

CCI PROJECT No. 12058-1 (December 1995)

### FUEL TANK CLOSURE REPORT 265 30TH STREET, OAKLAND, CALIFORNIA

#### FOR

#### HAGSTROM PROPERTIES

#### Introduction

Compliance & Closure, Inc. (CCI) is pleased to present this Fuel Tank Closure Report for the removal of two underground storage tanks at the property located at 265 30th Street in the City of Oakland, Alameda County, California (Figure 1). This report has been prepared on behalf of Hagstrom Properties for submittal to Alameda County Health Agency. The report presents the procedures and results of the removal of the two 8,000-gallon underground fuel tanks at the subject site.

### Pre-field Activity

CCI met at the site with Mr. Warren Hagstrom in late September 1995 to determine whether fuel tanks exist under the sidewalk area located along 30th Street at the subject site. CCI retained an underground locating service in an attempt to locate the exact placement of the fuel tanks and determine the number of fuel tanks. It was concluded that underground fuel tanks existed under the sidewalk area, however, the size of the tanks and quantity of tanks could not be determined. On behalf of Hagstrom Properties, CCI obtained bids to have the fuel tanks removed. Hagstrom Properties selected TAC Environmental Services (TAC) of Cordelia, California as the lowest responsive bidder. TAC submitted an Underground Tank Closure Plan to the Alameda County Health Agency and applied for an underground storage tank removal permit from the City of Oakland. The closure plan was approved by the County and permit No. 9972 was issued by the City on December 4, 1995. The approved closure plan and storage tank removal permit are attached in Appendix A.

The tank removal was scheduled for the first week in December 1995. Field work to uncover the tops of the fuel tanks began on November 30, 1995. Since the exact size of the fuel tanks was not known, it was assumed that there were at least two 550-gallon fuel tanks under the sidewalk area (Figure 2). After carefully exposing

Fuel Tank Closure Report Hagstrom Properties Page 2

the fill ports by removing the sidewalk and excavating down, it was determined that the fuel tanks were considerably larger than originally expected.

### Field Procedures and Tank Removal

Prior to any further excavation; an attempt was made to determine if any product remained within of the two fuel tanks. ports extended down approximately two feet, then elbowed out at approximately 30 degrees, then elbowed straight down into the top It was determined that some product existed in of the two tanks. both tanks, however, the pumping truck from Erickson Inc. required a straight fill pipe in order to remove the product. Additional excavation was done to expose the tops of the two tanks and the fill port elbows were removed. At this time it was estimated that the size of the tanks were approximately 8,000-gallons each and the top portion of the tanks appeared to be in good condition. Erickson removed approximately 400-gallons of tank rinsate under Uniform Hazardous Manifest No. 95592808 and removed it to a recycling facility in Patterson, California. The rinsate consisted of approximately 70 to 99 percent water, with the remainder being petroleum hydrocarbons.

Continued excavation of the two fuel tanks took place on December 4th, 5th and 6, 1995. The clean soil was separated from the soil with suspected petroleum contamination. A large concrete block was uncovered which separated the two fuel tanks. It appeared that the purpose of the concrete block was to separate and hold the two tanks in place. Soil contamination was noted mainly on the central and south sides of the excavation.

On December 7, the remainder of the fuel tanks were exposed. this point, approximately 300 cubic yards of soil was removed and stockpiled at the site, under plastic sheeting. The tanks were then rinsed with a high pressure washer and the rinsate, approximately 500 gallons, was pumped into a vacuum truck and taken to Patterson, California under manifest No. 95592747. Two hundred pounds of dry ice were placed inside each tank. The Oakland Fire Department arrived to verify the lower explosive limit (LEL) and oxygen level inside each tank. The levels were reported at 3% LEL and 4.5% oxygen for tank No. 1 (southeast tank, Figure 2) and 2% LEL and 4.8% oxygen in tank No. 2 (northwest tank). Department gave authorization to remove the tanks. Upon removal, Both tanks were no apparent holes were observed in either tank. transported under Uniform Hazardous Waste Manifest (Permit No. 95893660) to Erickson, Inc. in Richmond, California for proper processing and final destruction. The hazardous waste manifest are included in Appendix B.

Fuel Tank Closure Report Hagstrom Properties Page 3

After the tanks were removed, Ms. Madhulla Logan from the Alameda County Health Agency (the County) requested that areas of obvious contamination be sampled from within the excavation prior to over-excavation of those areas. There appeared to be noticeable areas of contamination along the bottom of the excavation and to approximately 3 to 4 feet above the bottom, along the 30th Street side of the excavation. In addition, there was approximately 6-inches of standing water with a heavy sheen at the bottom of the excavation on the southeast side, apparently from recent rain.

Under the direction of the County, soil samples S-1, S-2, S-3 and S-4 were collected from areas under each end of the fuel tanks and in areas of what appeared to be soil contamination (Figure 2). A backhoe bucket was used to collect soil from the bottom of the excavation and bring it to the surface. The soil samples were labeled, logged on a chain-of-custody form and placed into a cooler containing ice for transport to a state-certified laboratory. Approximately 100 gallons of water and sludge were removed from the bottom of the excavation prior to over-excavating contaminated areas. The water and sludge were hauled under Manifest No. 95593077 to Patterson, California.

An additional 35 yards of soil were removed from the bottom of the excavation. The soil contamination along the northeast side wall which borders 30th Street, was left in place to avoid the possibility collapsing the street. Soil samples S-5 and S-6 were taken from over-excavated areas. All of the soil samples collected from the excavation were analyzed for total petroleum hydrocarbons as gasoline (TPHG), benzene, toluene, ethylbenzene and total xylenes (BTEX), total petroleum hydrocarbons as diesel (TPHD), using EPA Test Methods 8015 and 8020 and benzopyrene and naphthalene using EPA 8270 Test Method.

### Laboratory Results

The laboratory reported soil samples S-3 to contain 6,700 parts-per-million (ppm) TPHG, S-1 to contain 390 ppm TPHG and 2 ppm TPHG in soil sample S-4. Soil samples S-2, S-5 and S-6 were all reported by the laboratory to be free of detectable TPHG. In addition, all six soil samples (S-1 through S-6) were reported by the laboratory to be free of detectable TPHD, benzene, benzopyrene and naphthalene. Small concentrations of toluene, ethylbenzene and total xylenes were detected in soil samples S-1, S-3 and S-4. The laboratory results are summarized in Table 1 and the laboratory reports are attached in Appendix C.



Fuel Tank Closure Report Hagstrom Properties Page 4

### Excavation Backfill

The excavation was backfilled during December 1995. The stockpiled soil was sampled for disposal at an appropriate landfill. A total of 10 discrete soil samples were collected from the stockpiled soil and submitted to the laboratory for analysis of TPHG/BTEX, TPHD, Oil and Grease, R.C.I. (reactivity, corrosivity, and ignitability) and one sample for total lead. Copies of the laboratory reports on the stockpiled materials are also attached in Appendix C. The excavation was backfilled in mid-December, with approximately 5 to 6 feet of 3/4 - inch drain rock, then class 2 baserock to the surface. The sidewalk was repoured on December 27, 1995. The 20 yards of clean, stockpiled soil will be used to finish the slope from the sidewalk to the parking lot area at the subject site.

#### Conclusion and Recommendations

Based on data obtained during the fuel tank(s) excavation, visual observations, analytical laboratory results and conditions of the two fuel tanks upon their removal, it is CCI's opinion that some soil contamination has occurred at the site. The suspected source may be leakage in the product lines leading to the fuel dispenser located at the back of the existing building. The two fuel tanks were found to be in good condition, with no apparent holes and very minor corrosion. Some of the visually contaminated soil below the fuel tanks was removed from the bottom of the excavation. the location of the excavation, with regard to the street and underground utilities, some of the sidewall soil contamination was The two soil samples collected from approximately left in place. 2 to 3 feet below the bottom of the fuel tanks were reported by the laboratory to be free of detectable petroleum hydrocarbons. excavation has been back filled and recompacted with clean, imported, 3/4-inch drain rock and class 2 baserock. Photographs/of the tank removal are attached in Appendix D.

CCI has also sampled the stockpiled soil at the site. There are currently approximately 335 cubic yards of soil. The laboratory data suggest this soil may qualify for disposal at a Class 3 landfill facility. CCI is currently working with Hagstrom Properties to dispose of this material. The stockpile laboratory data is summarized in Table 2.

CCI recommends that a few soil borings be drilled away from the former fuel tank excavation to define the extent of soil contamination.







TABLE 1 **EXCAVATION SOIL ANALYSIS DATA** 

Sample No.	Date Sampled	Sample Depth (feet)	TPHD (ppm)	TPHG (ppm)	Benzene (ppm)	Toluene (ppm)	Ethyl Bertzene (ppm)	Total Xylenes (ppm)	Benzopyrene (ppb)	Naphtalene (ppb)
S-1	12/07/95	19	<10	390	<0.005	2	1.4	5.1	<300	<300
S-2	12/07/95	13	<1	<1	<0.005	<0.005	<0.005	<0.005	<300	<300
S-3	12/07/95	13	<100	6700	<0.005	35	25	67 .	<3000	<3000
S-4	12/07/95	13	<1	2	<0.005	0.019	0.016	0.047	<300	<300
S-5	12/07/95	16	<1	<1	<0.005	<0.005	<0.005	<0.005	<300	<300
S-6	12/07/95	16	<1	<1	<0.005.	<0.005	<0.005	<0.005	<300	<300

TPHD TPHG

ppm

Total Petroleum Hydrocarbons as Diesel
Total Petroleum Hydrocarbons as Gasoline
Parts per million
Below laboratory detection limit
Samples Analyzed for 8270, All Reported to Be Below The Lab Detection Limit
Parts per billion \*N.D.

ppb









TABLE 2 STOCKPILED SOIL ANALYSIS DATA

Sample No.	Date Sampled	TPHD (ppm)	TPHG (ppm)	Benzene (ppm)	Toluene (ppm)	Ethyl Benzene (ppm)	Total Xylenes (ppm)	Oil & Grease (ppm)	pH*
SP-1	12/07/95	<1	1	<0.005	0.010	0.017	0.041	<20	8.35
SP-2	12/07/95	<1	<1	<0.005	<0.005	<0.005	<0.005	39	8.07
SP-3	12/07/95	<1	<1	<0.005	<0.005	<0.005	<0.005	<20	7.85
SP-4	12/07/95	<1	<1	<0.005	<0.005	<0.005	<0.005	<20	8.09
SP-5	12/07/95	<1	<1	<0.005	<0.005	<0.005	<0.005	<20	7.58
SP-6	12/07/95	<1	2	<0.005	<0.005	<0.005	0.011	<20	7.88
SP-7	12/07/95	<1	<1	<0.005	<0.005	<0.005	<0.005	<20	8.79
SP-8	12/07/95	<1	<1	<0.005	<0.005	<0.005	<0.005	<20	8.19
SP-9	12/07/95	<1	270	<0.005	1.6	0.80	1.5	55	8.18
SP-10	12/07/95	<1	3	<0.005	<0.005	0.012	0.022	<20	7.75

**TPHD** 

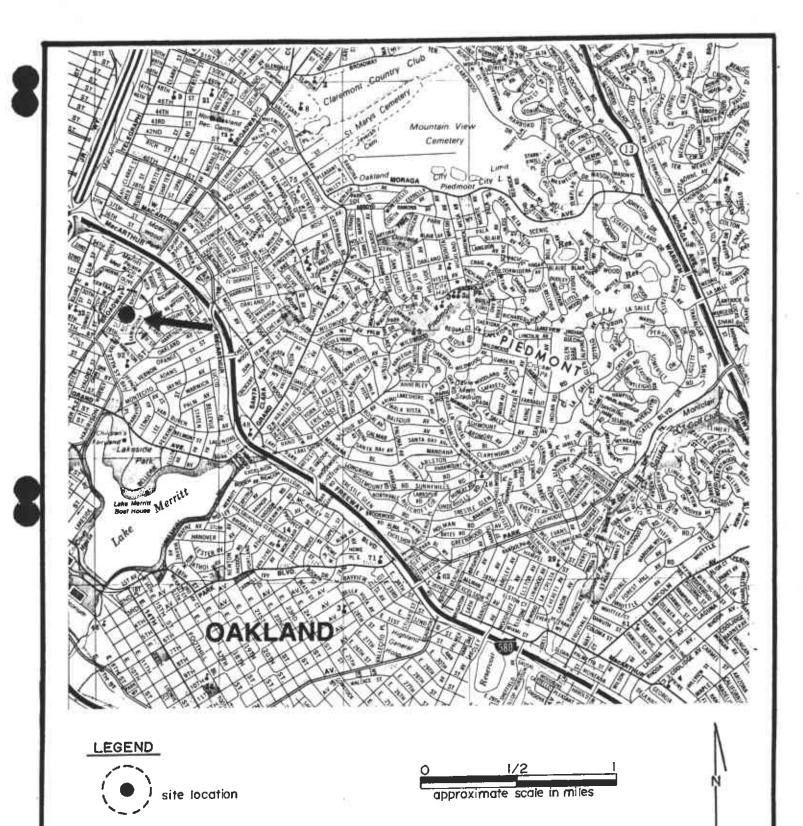
**TPHG** 

ppm

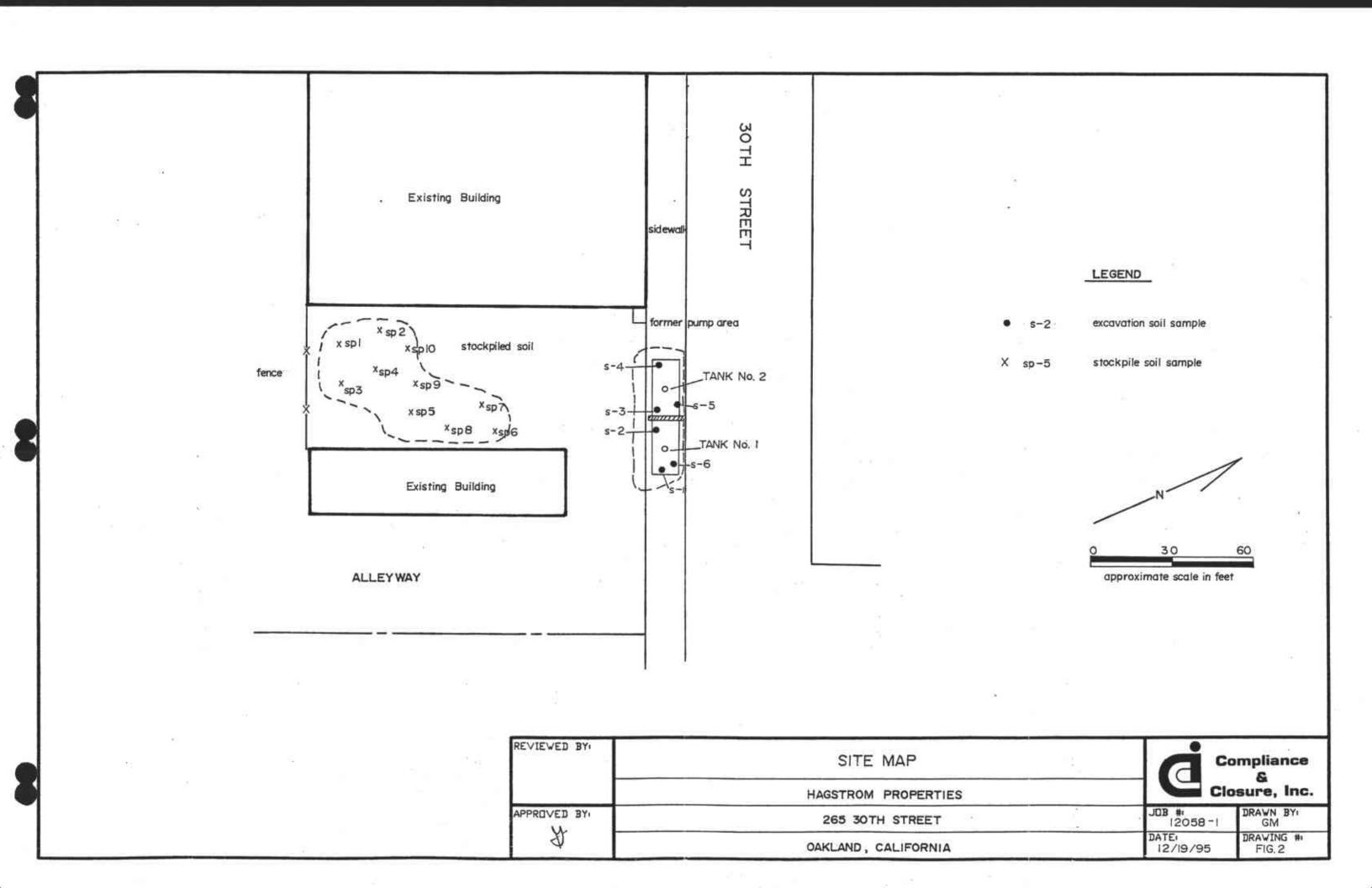
<

Total Petroleum Hydrocarbons as Diesel
Total Petroleum Hydrocarbons as Gasoline
Parts per million
Below laboratory detection limit
R.C.I. data was conducted on soil samples and is attached in lab report





reviewed by:	VICINITY MAP		ompliance
approved by:	HAGSTROM PROPERTIES		8
drawn by:	265 30TH STREET	GI	osure, inc.
Job no. 12058-1	OAKLAND, CALIFORNIA	date: 12/19/95	FIG. 1



ALAMEDA COUNTY HEALTH CARE SERVICES AGENCY
DEPARTMENT OF ENVIRONMENTAL HEALTH
ENVIRONMENTAL PROTECTION DIVISION
1131 HARBOR BAY PARKWAY, RM 250
ALAMEDA, CA 94502-6577
PHONE # 510/567-6700
FAX # 510/337-9335

UNDERGROUND TANK CLOSURE PLAN

\* \* \* Complete according to attached instructions \* \* \*

a) Demoi

1.	Name of Business Hagstrom Properties, LP.
	Business Owner or Contact Person (PRINT) Warren Hagstrom
2.	Site Address 265 30th Street
	City Oakland Zip 94601 Phone (510) 254-2814
3.	Mailing Address 360 Village Square
	City. Orinda Zip 94563 Phone (510) 254-2814
4.	Property Owner Warren Hagstrom
	Business Name (if applicable) N/A
	Address 360 Village Square
	City, State Orinda, CA Zip 94563
5.	Generator name under which tank will be manifested
	Hagstrom Properties, LP
	EPA ID# under which tank will be manifested C A C 0 0 1 2 0 0 7 8 4

6.	'Contractor TAC Environmental Services/Klemetson Construction .
	Address 151 Link Road
	City Cordelia Phone(707) 864-4760
	License Type* A ASB B C57 C61/D40 HAZ ID# 538628
	*Effective January 1, 1992, Business and Professional Code Section 7058.7 requires prime contractors to also hold Hazardous Waste Certification issued by the State Contractors License Board.
7.	Consultant (if applicable) Compliance & Closure, Inc. (CCI)
	Address 7020 Koll Center Parkway, Suite 134
	City, State Pleasanton CA 94566 Phone (510) 426-5395
8.	Main Contact Person for Investigation (if applicable)
	Name Dave Solis/Scott Parker Title Sr. Pjct. Mng/Prin. Geol.
	Company TAC Environmental Services
	Phone (707) 864-4760
9.	Number of underground tanks being closed with this plan4
_	Length of piping being removed under this plan Piping being abandoned in
	place. Total number of underground tanks at this facility (**confirmed with owner or operator) $4$
10.	State Registered Hazardous Waste Transporters/Facilities (see instructions).
**	Underground storage tanks must be handled as hazardous waste **
	a) Product/Residual Sludge/Rinsate Transporter
	Name Erickson, Inc. EPA I.D. No. CAD009466392
	Hauler License No. 0019 License Exp. Date 7/31/96
	Address 255 Parr Boulevard
	City Richmond State CA Zip 94801
	b) Product/Residual Sludge/Rinsate Disposal Site
	Name Erickson, Inc EPA ID#CAD009466392
	Address 255 Parr Boulevard
	City Richmond State CA Zip .94801
,	

•	c) Tai	ik and Piping Transport	er · ·
	Nar	e Erickson, Inc.	EPA I.D. No. CAD009466392
	Hav	ler License No. 0019	License Exp. Date 7/31/96
	Ado	iress 255 Parr Boulevan	rd .
-	Ci	y Richmond	StateCA Zip94801
	d) Tai	nk and Piping Disposal	Site
			EPA I.D. No. CAD009466392
	Ado	dress 255 Parr Boulevar	rd
	Ci	Richmond	State CA Zip 94801
11.	Samp	le Collector	·-
	Name	CCI	
	•	any CCI	
	_	<del></del>	Parkway, Suite 134
			State CA Zip 94566 Phone (510) 426-539
	<b>_</b>		
12.		ratory	
	Name	Unknown at this ti	me
	Addr	ess	
	City	· · ·	StateZip
	Stat	e Certification No	
13.	Have	tanks or pipes leaked	in the past? Yes[ ] No[ ] Unknown[X]
	If y	es, describe.	
		·	
		3	en la companya de la companya della companya della companya de la companya della

14. Describe methods to be used for rendering tank(s) inert:

Triple rinse and apply dry ice.

Before tanks are pumped out and inerted, all associated piping must be flushed out into the tanks. All accessible associated piping must then be removed. Inaccessible piping must be permanently plugged.

The Bay Area Air Quality Management District, 415/771-6000, along with local Fire and Building Departments, must also be contacted for tank removal permits. Fire departments typically require the use of a combustible gas indicator to verify tank inertness. It is the contractor's responsibility to bring a working combustible gas indicator on-site to verify that the tank is inert.

15. Tank History and Sampling Information \*\*\* (see instructions) \*\*\*

	Tank	Material to be sampled	Location and
Capacity	Use History include date last used (estimated)	(tank contents, soil, groundwater)	Depth of Samples
550 Gallons	N/A	Gasoline/Diesel/BTEX	Sidewalls and bottom of excavation @ appx. 8 -10'bgs.
	, .	·	

One soil sample must be collected for every 20 linear feet of piping that is removed. A ground water sample must be collected if any ground water is present in the excavation.

### Excavated/Stockpiled Soil

Stockpiled Soil Volume (estimated)

Sampling Plan

25 yards

Will obtain 2 soil samples from stockpile and profile for disposal.

Stockpiled soil must be placed on bermed plastic and must be completely covered by plastic sheeting.

Will the excavated soil be returned to the excavation immediately after tank removal? [ ] yes [ X ] no [ ] unknown

If yes, explain reasoning \_

If unknown at this point in time, please be aware that excavated soil may not be returned to the excavation without prior approval from Alameda County. This means that the contractor, consultant, or responsible party must communicate with the specialist IN ADVANCE of backfilling operations.

16. Chemical methods and associated detection limits to be used for analyzing

The Tri-Regional Board recommended minimum verification analyses and practical quantitation reporting limits should be followed.

See attached Table 2.

17. Submit Site Health and Safety Plan (See Instructions)

Contaminant Sought	EPA or Other Sample Preparation Method Number	EPA or Other Analysis Method Number	Method Detection Limit
ТРНG	8020	· ·	
TPHD	80,15		
BTEX.	8020	·	
Sinu production following Benzapyre ne Nagothalene		included:  Browpying	ppm-soul

18. Submit Worker's Compensation Certificate copy

Name of Insurer James C. Jenkins Insurance Company

- 19.
  - 9. Submit Plot Plan \*\*\* (See Instructions) \*\*\*
  - 20. Enclose Deposit (See Instructions)
  - 21. Report any leaks or contamination to this office within 5 days of discovery.

    The written report shall be made on an Underground Storage Tank Unauthorized Leak/Contamination Site Report (ULR) form.
  - 22. Submit a closure report to this office within 60 days of the tank removal. The report must contain all information listed in item 22 of the instructions.
  - 23. Submit State (Underground Storage Tank Permit Application) Forms A and B (one B form for each UST to be removed) (mark box 8 for "tank removed" in the upper right hand corner)

I declare that to the best of my knowledge and belief that the statements and information provided above are correct and true.

I understand that information, in addition to that provided above, may be needed in order to obtain approval from the Environmental Protection Division and that no work is to begin on this project until this plan is approved.

I understand that any changes in design, materials or equipment will void this plan if prior approval is not obtained.

I understand that all work performed during this project will be done in compliance with all applicable OSHA (Occupational Safety and Health Administration) requirements concerning personnel health and safety. I understand that site and worker safety are solely the responsibility of the property owner or his agent and that this responsibility is not shared nor assumed by the County of Alameda.

Once I have received my stamped, accepted closure plan, I will contact the project Hazardous Materials Specialist at least three working days in advance of site work to schedule the required inspections.

## CONTRACTOR INFORMATION

Name of Business	(lemetson Construction/ TAC )	Environmental
Name of Individual	Stanley Klemetson/ Scott Par	ker
Signature Aut 1	Parlin	Date 11/17/95
• •	RECENT TANK OPERATOR (Circle	e one)
Name of Business	Hagstrom Properties, LP	
Name of Individual	Warren Hagstrom	•
Signature Lod Par	his agent for warren Hazetism	Date 1/17/95

### **ALAMEDA COUNTY ENVIRONMENTAL PROTECTION DIVISION**

## DECLARATION OF SITE ACCOUNT REFUND RECIPIENT

There may be excess funds remaining in the Site Account at the completion of this project. The PAYOR (person or company that issues the check) will use this form to predesignate another party to receive any funds refunded at the completion of this project. In the absence of this form, the PAYOR will receive the refund.

SITE INFORMATION: Site ID Number (if known) Name of Site Street Address City, State & Zip Code I designate the following person or business to receive any refund due at the completion of all deposit/refund projects: Name Street Address City, State & Zip Code Date Signature of Payor

Company Name of Payor

### **RETURN FORM TO:**

County of Alameda, Environmental Protection 1131 Harbor Bay Parkway, Rm 250 Alameda CA 94502-6577 Phone#(510) 567-6700

Name of Payor (PLEASE PRINT CLEARLY)



# State of California CONTRACTORS STATE LICENSE BOARD ACTIVE LICENSE

License Number **538628** 

Entity | ND | W

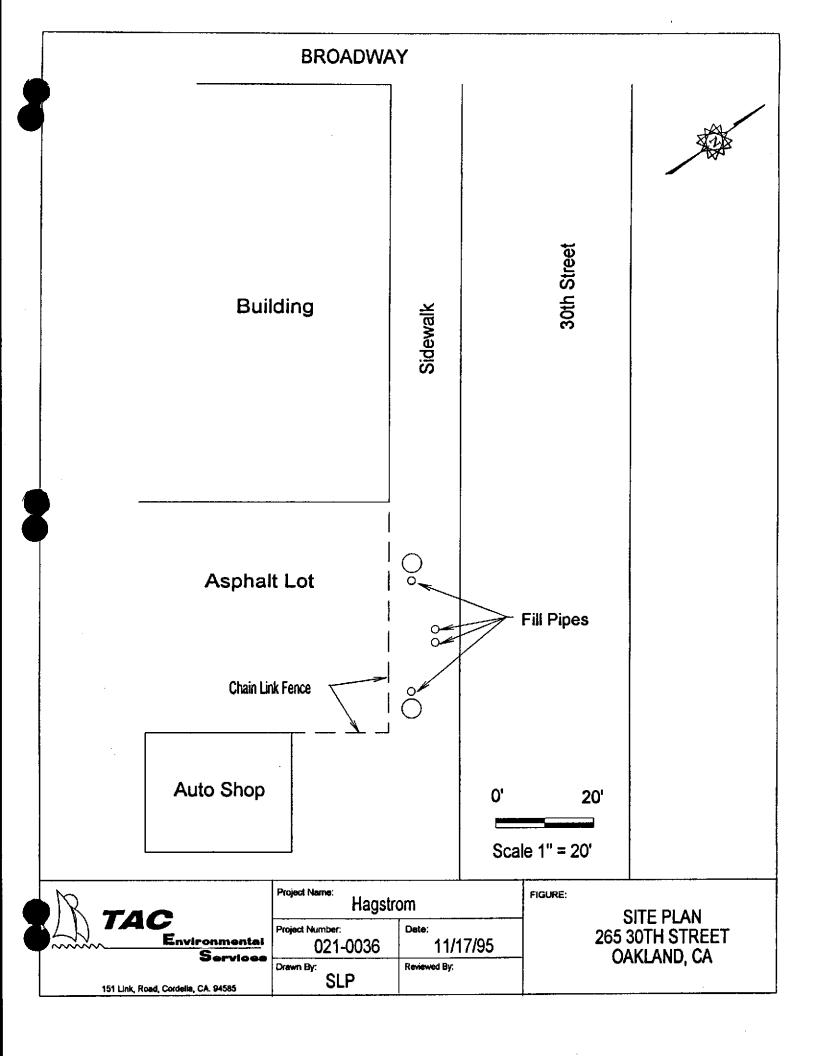
Business Name KLEMETSON CONSTRUCTION

Classification(s) A ASB B C57 C61/D40 HAZ

Expiration Date 08/31/96



	WALE OF IN	*******************				P. 2/2 useum date dam/dd/yy) 11/16/95
Jenkina/Welch Corp.		CONTERS NO RIGH	IS UPON THE CER	TIMCATE N	nformation only and folder thus centificati erage apporded by the	: :
P.O. Box 5668	,	CO	MPANIES	AFFO	RDING COVE	RAGE
		COMPANY LETTER A				
Concord, CA 94524	·	COMPANY TO				
INSURED)		COMPANY			<u>.</u>	1
TAC Environmental Sve Bay Area Exploration, In		COMPANY				;
151 Link Road			Republic Indom	ily of C		:
Cordelia CA 9458	35	COMPANY LETTER E				
This is to certify that the policies of in indicated. Notwithstanding any requisi- certificate may be issued or may pertai exclusions and conditions of such policies.	embnt, term or condition of a in. The imbid ance apparago by	ny contract on <i>ot</i> The policies descr En reduced by Pai	TER DOCUMENT IBED HEREIN IG E CLAIMS.	With Resp Ubject to	PARTO MANUSCO SEUTA	 
TYPE OF INSURANCE	POLICY NUMBER	DATE (MOM/E	1	EXP. EM/DD/ITY)	ı.i	MITE
CRNRRAL LIABILITY					Ceneral acgregate	
COMM. GENERAL LIABILITY  CLAIMS MADE OCC.					PROD-COMP/OF AGG.	
					PRRS. & ADV. INJURY	
OWNERS & CONTRACTS PROT					EACH OCCURRENCE	<del>  ,</del>
					FIRE DAMAGE(One Fire)  MED. EXF. (One Fer)	
ANY AUTO ANY AUTO					COMBINED SINGLE	i
ALL OWNED AUTOS					BODILY INJURY (Per person)	
HURIED AUTOS					BODILY INTURY	!
NON-OWNED AUTOS					(Fer accident)	
					PROPERTY DAMAGE	:
EXCESS LIABILITY		ļ			Bach occurrence	i
OTHER THAN UMBRELLA FORM		i	İ		ACCRECATE	
	···					
WORKERS COMPENSATION	3511996	7/01/95	7/01/96		X STATUTORY LIMITS	lananan
AND					BACH ACCIDENT  DISEASE POLICY LIMIT	1000000
EMPLOYER'S LIABILITY				ŀ	DISEASE-BACH EMP.	1000000
отнен						
						i
RSCRIPTION OF OPERATIONS/LOCATIONS/VE	ECLESSIFECIAL PTEMS					
Ro: Job #95-021-036, 265 30th Street,						, !
ertificate holder 2000 2000 2000 2000 2000 2000 2000 20			NAMES OF THE PROPERTY OF THE P	osovania se		magakoting daga katata
					es se cancelled befori	
					PANY WILL ENDEAVOR TO	i
Hagetrom Properties, L.P.					Certificate Holder NA	•
					LL DAPOSE NO OBLIGATION	
Atta: Werren Hagstrom		LIABILITY OF ANY	EIND UPON TEEK C	OMPANY, I	ib agents or represent	ATIVES.
265 30th Street Oakland, CA 94601		AUTHORIZED REPAI	SENTATIVE	1	VV -	:
XCORD 25-S (7/90)	7:12		$\rho O \gamma \gamma$	ν 1 (	TKUNG	<u>. Д.</u>



# APPENDIX B HEALTH & SAFETY PLAN

# 8

### Standard Procedures No. SHS-02

# SITE SPECIFIC HEALTH AND SAFETY PLAN 265 30th Street Oakland, CA

### L PROJECT PLAN

### **Objectives and Project Description**

TAC Environmental Services has prepared this Health and Safety Plan for Hagstrom Properties, Limited Partnership, prior to work at 265 30th Street, Oakland, CA. The following emergency response plan will be implemented prior to beginning site work to handle on-site emergencies. The first priority in all emergency incidents will be to minimize adverse health risks to workers.

Field Activities

Site work will include tank removal and testing

Personnel

Field geologist, engineer, and drillers

Requirements

Key Personnel and Owner Representative

Project Assignment	Name/Agency	Telephone
Project Manager & Assistant Site Safety Officer	Scott L. Parker/Dave Solis	(707)864-4760
Responsible Professional Engineer or Geologists	Philip L.Chang, P.E.	(707)864-4760
Site Safety Officer	Scott L. Parker	(707) 864-4760
Owner Representative	Warren Hagstrom	(510) 254-2814



### II. JOB HAZARD ANALYSES

## Threshold Limit Values for Anticipated Chemical Substances

Substance	OSHA PEL	ACGIH TVL	NIOSH REL
Benzene	10 ppm	10 ppm	0.1 ppm
Toluene	200	100	100
Xylene	100	100	-



# Toxicological Hazards of Wastes

Human exposure to benzene concentrations in excess of 150 ppm may cause headache, weariness, and loss of appetite. Vapors at high concentrations may cause smarting of the eyes and dermatitis.

## Physical Hazards Associated with Site Activities

- Slip, trip and fall hazards
- Hazards due to falling or swinging objects and heavy equipment
- Excessive noise



# 8

### III. SITE CHARACTERIZATION

### A. Site Information

Location

265 30th Street

Oakland, California

Topography

Subject property gently slopes to the East

Accessibility

There are no access problems.

Pathways for

**Hazardous Substance** 

Dispersion

Gasoline may volatilize slightly from soil

Anticipated Weather

**Conditions** 

Mild weather with possible participation

Past and Present Use

of Site

Fomer Firestone Tire Store and various auto body repair shops

### B. Description of Wastes On Site

Location

Not Applicable

Physical State of

Not Applicable

Wastes

**Concentrations Found** 

Not Applicable

## IV. PERSONAL PROTECTIVE EQUIPMENT

Level of Protection

Level D

Respiratory Protection

Half mask dual cartridge respirator with organic vapor cartridges: will only be required if airborne concentrations are above action levels.

Protective Clothing

- Hard hat (required)
- Work boots (required)
- Safety Glasses (optional)
- Hearing Protection (optional)
- Protective gloves (optional)

Action Levels and Work Requirements Don respirators if organics in the breathing zone exceed

constant 30 ppm - what is the realisable?

10 ppm tored on 5% of benzene
en gasoline.

### V. EXPOSURE MONITORING PLAN

Frequency and Type of

Monitoring

Air should be monitored every 30 minutes using an organic vapor meter while excavating and sampling in contaminated areas.

Methodology

Monitor downwind in the breathing zone.

### VI. DECONTAMINATION PROCEDURES

For PPE

Leave the work area and remove clothing, respirator last. All nonreusable clothing will be disposed of in garbage containers.

### VII. PROTECTION OF GENERAL PUBLIC

Procedures

The tank removal contractor will redirect pedestrian traffic around the work area using temporary fencing, or barricades and warning ribbon. The temporary pedestrian walkway will also be protected from automobile traffic using barricades and warning ribbon. Any excavation left open over night will be enclosed with fencing.

Only authorized personnel will be permitted within 10 ft. of heavy equipment.



### VII. EMERGENCY RESPONSE

Command and Control

The on-site TAC representative will be responsible for health and safety issues related to sampling and drilling.

Directions to Hospital

See area map for route to Hospital.

Emergency Procedures for Personnel Injured or Exposed in the Work Zone

- 1. Assist the injured or exposed worker out of the sampling area.
- 2. Call for medical help.
- 3. Administer CPR/first aid as needed.
- 4. If possible, carefully remove the victim's PPE and begin decontamination procedures.

# Emergency Agencies with Telephone Numbers

Emergency Service	Name/Agency	Telephon <b>e</b>		
Ambulance	Oakland	911		
Hospital	Peralta Hospital 350 Hawthorne Oakland, CA 94609	(510) 655-4000		
Police	Oakland	911		
Fire Department	Oakland	911		
Public Health	Susan Hugo Alameda County	(510)567-6700		
Project Manager	Scott L. Parker	(707) 864-4760		
Emergency Spills	CalEPA	(415) 974-8131		
Worker Health and Safety	OSHA	(800) 648-1003		
CHEMTREC	CHEMTREC	(800) 424-9300		
Utilities	Underground Service Alert	(800) 227-2600		

POST IN A CONSPICUOUS PLACE

# BUSINESS TAX CERTIFICATE

The issuing of a Business Tax Certificate is for revenue purposes only. It does not relieve the laxpayer from the responsibility of complying with the requirements of any other department of the City of Oakland and/or any other ordinance, law or regulation of the City of Oakland, State of California, or any other governmental agency.



**EXPIRES** 

**DECEMBER 31, 1995** 

### PLEASE READ REVERSE SIDE

**ACCOUNT NUMBER** 

**BUSINESS NAME** 

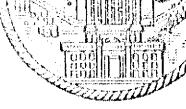
AT KLIPSOHNIS OF PROFICIENT ENVIRONMENTAL SERVICES, INC.

**ADDRESS** 

212 TOTH ST CA 94607 - 0000 DAKLAND 11

MANAGEMENT+ KIND OF BUSINESS

ELRUBLIC RELATIONS





white -env.health yellow -facility pink -files

# ALAMEDA COUNTY, DEPARTMENT OF ENVIRONMENTAL HEALTH

1131 Harbor Bay Pkwy. Sulte 250 Alameda, CA 94502-6577 (510) 567-6700

## **Hazardous Materials Inspection Form**

11,111

_			SIte I ID #	Site Nai	me /	lugpshor	n Prope	Today's Date	18 195
II.A	BUSINESS PLANS (Title 19)  1, immediate Reporting 2, 8us. Plan Sids.	2703 25503(b)		Address	265	House		mabre	£
	3. RR Care > 30 days 4. Inventory Information 5. Inventory Complete 6. Emergency Response 7. Training	25503.7 25504(a) 2730 25504(b) 25504(c)	Clty _	() PKI		Zlp 94 (,			6764
	8. Deficiency 9. Modification	25505(t) 25505(b)	-	Inspeciio	on Catea				,"
II.B	ACUTELY HAZ MATLS  10. Registration form filed 11. Form Complete 12. RMPP Contents	25533(a) 25533(b) 25534(c)	- -	II. Busine		kcute Hazardo			
	13. Implement Sch. Regid? (Y/N 14. OffSile Corseq. Assess. 15. Probable Risk Assessment 16. Persons Responsible 17. Certification	25524(c) 25534(d) 25534(d) 25534(q) 25534(f)	• Callf	. Administrat	lion Code (	(CAC) or the H	lealth & Safet	y Code (H\$&¢	<b>)</b>
	18. Exemption Request? (Y/N) 19. Trade Secret Requested?	25536(b) 25538	Comm	enis:	TA	NK RI	rnoval		· .
<b>III.</b> 1	UNDERGROUND TANKS (Title	23)	2	8,000	gail	on kun	k Ken	wed.	
JD C	1. Permit Application 2. Pipeline Leak Detection 3. Records Maintenance 4. Release Report 5. Closure Pions	25284 (H&S) 25292 (H&S) 2712 2651 2670		3% A	vel s	wood	1 ly ?	oline.	to Moren
Monitoring for Existing Yeaks			A Bar One al			tank de ver	isomalis A WUS 18 V VISI & Ut · Et	could .	te
	9) Other	2643 2644	0.	n was	nee w	course mas	uly o	was a	2he
ing Tonka	11. Monitor Plan 12. Access. Secure 13. Plans Submit Date:	2646 2647 2632 2634 2711	Ossi Vic Tan	wated.	on a	so blo k worled	tapeled,	s work	L holes
ż	14. As Built Date:	2635	40	anall	colleg	led for	n bokh	ends,	by_
iov D	). ).	_5	[G) 6071	PARK	Much try	101)84	-4166 C	looure	- II, III
	Contact: _					<u>.</u>	hA II	11/10	100 -
	Title:	1.	1/2-1			nspector:	- Frank	· · ·	- Eg as
	\$ignature:	MAN	2 y arriv	₩	519	gnature:		in the	,,,-,,,,-,-,-,-,-,-,-,-,-,-,-,-,-,-,-,

:	ام	<u>- · · · · · · · · · · · · · · · · · · ·</u>					
-		UNDERGROUND STORAGE TANK UNAUTHORIZE	ED RELEASE (LEAK) / CONTAMINAT	TION SITE REPORT			
	F	HAS STATE OFFICE OF EMERGENCY SERVICES REPORT BEEN FILED? YES NO YES NO	FOR LOCAL AGENCY USE ONLY  THEREBY CERTIFY THAT I HAVE DISTRIBUTED THIS INFORMATION ACCORDING TO THE  DISTRIBUTION SHOWN ON THE INSTRUCTION SHEET ON THE BACK PAGE OF THIS FORM.				
	1	UNICE P					
Y	_	41 M d d9 45 V	SIGNED SIGNATURE	DATE			
1	<u></u>		1)864-4760	•			
		REPRESENTING OWNER/OPERATOR REGIONAL BOARD	COMPANY OR AGENCY NAME				
	REPORTED	LOCAL AGENCY OTHER	SEE ABOVE - CONTACT: D	ave Solis			
		ADORESS					
L		51 Link Road, Corgelia	спу	CA 94585			
H.E.		NAME	CONTACT PERSON	PHONE			
ONS	HTY	Warren Hagstrom UNKNOWN	SAME	(510) 254-2814			
RESP	PARTY	360 Village Square	Orinda cov	CA 94563			
		FACILITY NAME (IF APPLICABLE)	OPERATOR	PHONE			
1,	Š	Former Firestone Tires ADDRESS	Unknown	( ) N/A			
	SITE LOCATION	265 30th Street STREET	Oakland crry	Alameda zip			
	\$	Broadway					
-	_	LOCAL AGENCY AGENCY NAME	CONTACT PERSON	PHONE			
Į	₹ ω		Medula Logan	310 ) 567-6700			
1	AGENC	REGIONAL BOARD		PHONE			
1	. ₹	Same as above		( )			
	0	(1) NAME		QUANTITY LOST (GALLONS)			
-	INVOLVED	Waste Oil		UNKNOWN			
15	Ž						
┡		DATE DISCOVERED HOW DISCOVERED INDUSTRIES		NIKNOWN			
	TEMENT		INTORY CONTROL SUBSURFACE MONITORING K REMOVAL OTHER	NUISANCE CONDITIONS			
	- 1	1 1 2 8 9 4 TANK TEST K TAN DATE DISCHARGE BEGAN	METHOD USED TO STOP DISCHARGE (CHECK ALL THA	T APPLY)			
	DISCOVERY/AB/	ין ון אן אן גע ( <b>X</b> ∪ טאגאסשאא	REMOVE CONTENTS K CLOSE TANK & REMO				
	Š	HAS DISCHARGE BEEN STOPPED?	REPAIR TANK CLOSE TANK & FILL IN	PLACE CHANGE PROCEDURE			
	2	TES X NO IF YES, DATE 1 1 2 8 9 9 5	REPLACE TANK OTHER	· · · · · · · · · · · · · · · · · · ·			
ij	щ	SOURCE OF DISCHARGE CAUSE(S)		***			
Š	CAUSE		ERFILL	SPILL			
	TYPE	TOTHER CO	RROSION UNKNOWN [	OTHER			
3	7	XX UNDETERMINED SOIL ONLY GROUNDWATER	DRINKING WATER - (CHECK ONLY IF WATER WELL	S HAVE ACTUALLY BEEN AFFECTED)			
<u>_</u>	_	CHECK ONE ONLY					
RREA	STATUS	NO ACTION TAKEN PRELIMINARY SITE ASSESSMENT LEAK BEING CONFIRMED PRELIMINARY SITE ASSESSMENT	=	ARACTERIZATION MONITORING IN PROGRESS			
3	S	REMEDIATION PLAN CASE CLOSED (CLEANUP COMPU					
-		CHECK APPROPRIATE ACTION(S)		ENHANCED BIO DEGRADATION (IT)			
¥	ž	(REE BACK FOR DETAILS)  CAP SITE (CD)  EXCAVATE & DISPOSE (ED)	PUMP & TREAT GROUNDWATER (GT)	REPLACE SUPPLY (RS)			
REMEDIAL	ACTI	CONTAINMENT BARRIER (CB) NO ACTION REQUIRED (NA)	TREATMENT AT HOOKUP (HU)	VENT SOIL (VS)			
ľ		VACUUM EXTRACT (VE) X OTHER (OT) AWBILL		·			
	-			· · · · · · · · · · · · · · · · · · ·			

HSC OS (A/90)





## CITY OF OAKLAND

Tank Permit

Permit to Excavate and Install, Repair, or Remove Inflammable Liquid Tanks. No. 9972

	Oakland, C	California,	December 4		10 95
	XXXX e	esoline tank and o	excevete commencing_	Cour feet inside_c	
on the South side of 30th St. Street	150	feet East	of Broadway		Street
House No. 265 30th Ave. Stree	4			•	1,31
Owner Warren Hagstrom Addr	035	360 Village	Sq., Orinda	Phone 254-	2814
Applicant TAC Environmental Services Addres	151 L	ink Rd., Co	rdelia, 94585	Phone 707) 8	
Dimensions of street (sidewalk) surface to be disturbed X	Num	ber of Tanks 4	Capacity_	550	Pallons, Feech.
This fermit is grented in accordance to remove tanks on discontinution. When installing, removing or repairing tan	uance of use	or when notified	by the City Authorities		
ApprovedFire Marshal	•	ev .	N	The state of the s	マラフ 1947 - 11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Approved				<b>-</b>	
Drainage Division Engineering Dept.		w		E	
EXCAVATING PERMIT	,	·			
issued in accordance with Ord. No. 278 CMS, Sec. 6-2,04					
squere feet of digging or removal granted.		:		सङ्ग्रह सर्वे । सङ्ग्रह सर्वे	
The receipt of \$special deposit is hereby acknowledged.  GENERAL DEPOSIT.		RTIFICATE OI ed and passed o	TANK AND EQ	UIPMENT INSF	ECTION
BUREAU OF PERMITS AND LICENSES.	Bv				
		·			Fire Mershel
Inspection Fee Paid 200.00	• .		NOTIC		
Received by D. Clemons ck#811 Rec#730205	В	efore Covering	Tanks, Above Cor	_	Signed.
	' SAPE				

THIS PERMIT MUST BE LEFT ON THE WORK AS AUTHORITY THEREFOR

335-68 (6-67)



### OBSTRUCTION

Job Site 265 30TH ST

App1# 0B950336

obstruction permit for 501in ft of sidewalk and parking lane Permit Issued 11/30/95 signs will be posted for pedestrians to use other side of street. effective 12/01/95 thru 12/15/95

265 30TH ST

Nor of days: 14

Effective: 12/01/95

Linear feet:

12/15/95

SHORT TERM NON-METERED

Applent/

License Classes--

Owner

Contractor KLEMETSON CONSTRUCTION

Applic Addr 131 CLEOPATRA DR, PLEASANT HILL, CA, 94523

(415)799-6073 538628 B A

C61

Agent

Arch/Engr

\$210.00 TOTAL FEES PAID AT ISSUANCE

\$.00 Applic

\$210.00 Permit

\$.00 Process

\$.00 Rec Mgmt

\$,00 Gen Plan

\$.00 Invstg

\$.00 Other

Applicant:

ued by:

Date: 11/30/95 Aut Paid: \$210.88 By: PC Register R82 Receipt# 001461 **EXCAVATION** 

Job Site 265 30TH ST

Parce1#

App1# X950085

Descr fuel tank removal under the sidewalk?

Permit Issued 11/21/95

Work Type EXCAVATION-PRIVATE P

USA # 256492

Util-Co. Job #

Util Fund #:

App cnt

cense Classes

Owner

Contractor KLEMETSON CONSTRUCTION

(415)799-6073.538628

Arch/Engr

Agent

Applic Addr 131 CLEOPATRA DR, PLEASANT HILL, CA, 94523

\$235.00 TOTAL FEES PAID AT ISSUANCE

\$40.00 Applic

\$195.00 Permit

\$.00 Process \$.00 Gen Plan \$.00 Rec Mgmt \$.00 Invstg

\$.00 Other



# **EXCAVATION PERMIT**

CIVIL ENGINEERING

TO EXCAVATE IN STREETS OR OTHER SPECIFIED WORK

X9500851	SITE ADDRESS/LOCATION  265 - 3045  ST				
APPROX. START DATE APPROX. END DATE	24-HOUR EMERGENCY PHONE NUMBER (Permit not valid without 24-Hour number)				
CONTRACTOR'S LICENSE # AND CLASS	CITY BUSINESS TAX #				
ATTENTION:					
1) State law requires that the contractor/owner call Underground Ser	vice Alert (USA) two working days before excavating. This permit is not valid unless applicant has secured an enumber is 1 (800) 642-2444. UNDERGROUND SERVICE ALERT (USA) #:				
48 hours prior to starting work, YOU MU	UST CALL (510) 238-3651 TO SCHEDULE AN INSPECTION.				
OWNER/BUILDER					
construct, alter, improve, demolish, or repair any structure, prior to its issuan provisions of the Contractor's License law Chapter 9 (commencing with Sec. alleged exemption. Any violation of Section 7031.5 by any applicant for a per Contractor's License Law does not apply to an owner provided that such improvements are not intended or offered for sale. If however, an exempt from the sale requirements of the appropriate of the property, am exempt from the sale requirements of the appropriate prior to sale, (3) I have resided in the residence for the 12 montiouctures more than once during any three-year period. (Sec. 7044 Business at 1, as owner of the property, am exclusively contracting with licensed contradoes not apply to an owner of property who builds or improves thereon, and to I am exempt under Sec	compensation, will do the work, and the structure is not intended or offered for sale (Sec. 7044, Business of property who builds or improves thereon, and who does such work himself or through his own employees, ever, the building or improvement is sold within one year of completion, the owner-builder will have the above due to: (1) I am improving my principal place of residence or appurtenances thereto, (2) the work will his prior to completion of the work, and (4) I have not claimed exemption on this subdivision on more than two and Professions Code), actors to construct the project, (Sec. 7044, Business and Professions Code; The Contractor's License Law who contracts for such projects with a contractor(s) licensed pursuant to the Contractor's License law).				
	ficate of Worker's Compensation Insurance, or a certified copy thereof (Sec. 3700, Labor Code).				
Poticy # Company Name	e				
☐ I certify that in the performance of the work for which this permit is issue of California (not required for work valued at one hundred dollars (\$100) or leading to the control of the	d. I shall not employ any person in any manner so as to become subject to the Worker's Compensation Laws ess).				
NOTICE TO APPLICANT: If, after making this Certificate of Exemption, you should become subject to the Worker's Compensation provisions of the Labor Code, you must forthwith comply with such provisions or this permit shall be deemed revoked. This permit is issued pursuant to all provisions of Chapter 6, Article 2 of the Oakland Municipal Code. It is granted upon the express condition that the permittee shall be responsible for all claims and liabilities arising out of work performed under the permit or arising out of permittee's failure to perform the obligations with respect to street maintenance. The permittee shall, and by acceptance of the permit agrees to defend, indemnify, save and hold harmless the City, its officers and employees, from and against any and all suits, claims, or actions brought by any person for or on account of any bodily injuries, disease or illness or damage to persons and/or property sustained or arising in the construction of the work performed under the permit or in consequence of permittee's failure to perform the obligations with respect to street maintenance. This permit is void 90 days from the date of issuance unless an extension is granted by the Director of the Office of Planning and Building.					
I hereby affirm that I am licensed under provisions of Chapter 9 of Division 3 this permit and agree to its requirements, and that the above information is true.	I hereby affirm that I am licensed under provisions of Chapter 9 of Division 3 of the Business and Professions Code and my license is in full force and effect (if contractor), that I have read this permit and agree to its requirements, and that the above information is true and correct under penalty of law.  **Loot Haule**  **Loot H				
Signature of Permittee Agent for Contractor Owner					
DATE CENTER LAST COCCIAL DAVING DOTAIL	HOLIDAY RESTRICTION? LIMITED OPERATION AREA?				
SURFACED SE REQUIRED? THE YES NO	(NOV 1 - JAN 1) DYES NO (7AM-9AM & 4PM-6PM) DYES ONO				
SUED BY	DATE ISSUED //- 21-95				

Printed/Typed Name S CO     ( ( ) ) ( )	Signature / 1	Month Day CYea
SCOT! FAM ULA	/scole Marken	112011
17. Transporter 1 Acknowledgement of Receipt of Materials		
FACE TACOLO	Signature Law fre and to	Month 10 Day 9 0
18. Transporter 2 Acknowledgement of Receipt of Materials		
Printed/Typed Name	Signature	Month Day Yea
19. Discrepancy Indication Space		

20. Facility Owner or Operator Certification of receipt of hazardous ma	terials covered by this manifest except as noted in Item 19.			
Printed/Typed Name	Signature	Month	Day	Yea
	,	1_1		

DO NOT WRITE BELOW THIS LINE.

95893660

### See Instructions on back of page 6.

Department of Toxic Substances Can-Sacramento, California

	UNIFORM HAZARDOUS	1. Generator's US EPA ID No.	Maniles	t Document	No.	2. Page 1	Information in the sha	
	WASTE MANIFEST	MENTERATIONS	17811/12	217t	417	of /	is not required by Federal law.	
)	Penerator's Name and Mailing Address	TAC ENVIRCE	<u> अक्सूब</u>	1	A. State	Manifest Document		2747
)		ISIGINK RU	ad Ourse		B. State (	Senerator's ID	3000	12141
	rator's Phone (C)	CARLO NO YEAR	aCOME					
	orter 1 Company Name	6. US EPA ID	Number	•	C. State 1	ransporter's ID	61020Co	A. War
	orter 2 Compony Name	PHIDE	OFILIBLE	31712	D. Tronsp	orter's Phone	0-235-	38
	orter 2 Company Name	8, US EPA ID	Number		E. State T	ransporter's ID		
			المثلب			orter's Phone Facility's ID		
	resignated Facility Name and Site Address	10. US EPA ID	Number		J. State I			
	- 主ミシストル・Hレコ つろ		سنور الدمراد المانية		t. Facility	s Phone	W-807	1571
	11. US DOT Description (including Proper Ships		X BITCLE	12. Conta	iners	13. Total	14. Unit	4016
				No.	Туре	Quantity	Wt/Vol J. Waste State	Number 772
	. War both Ha	COLLEGE CONTRA	,			~ · · ·	EPA/Othe	
	Li Charles				117 \$	2500	State	200_
	•			İ			EPA/Othe	
			-	1.1			State	Table 1
)	c.						EPA/Othe	
							2 1/4	
	d.				í		State	
	•	•					EPA/Othe	* Stage 1
,	J. Additional Descriptions for Materials Listed A		Atron Pr	CRH	Handli	ng Codes for Wast	s Listed Above	A STATE
)	pictile 089563	CX LA	5-3411	S) [				10,2
		Och	dandi B	/\}   '	l.		<b>d.</b>	
	15. Special Handling Instructions and Additional	I Information	<i>(</i> )	- Q	41	056	merger	1Cark
			Cul		510	Dru	- 2814	,
	16. GENERATOR'S CERTIFICATION: 1 hereby	THOH FRIC	15: 1 140 6310	بک. ۱۱۰	3,-/	32-1-	3019	
	16. GENERATOR'S CERTIFICATION: I hereby packed, marked, and labeled, and are in a	declare that the contents of this con	signment are fully and	accurately	described	above by proper s	hipping name and are	classified,
	If I am a large quantity generator, I certif economically practicable and that I have so	elected the practicable method of tr	eatment, storage, or a	disposal curr	ently ava	ilable to me which	minimizes the present	and tuture
	threat to human health and the environmer waste management method that is available	to me and that I can afford.	<del></del>	a good ram	n errort i	o minimize my wor		
,	Printed/Typed Name  M. Land Davis	Signature		last.		<u> </u>	Month   Do	7195
	17. Transporter 1 Acknowledgement of Receipt Printed/Typed Name	of Materials Signature	11/1/1/1	To the second			Month Do	y Year
	18. Transporter 2 Acknowledgement of Receipt	of Materials	X for	<del>2</del>			1/12 K) I	7475
	Printed/Typed Name	Signature		-			Month Do	y Year
	19. Discrepancy Indication Space							
•			41 41 24 4			10		<del></del>
)	20. Facility Owner or Operator Certification of Printed/Typed Name	receipt of hazardous materials cover Signature	red by this monitest ex	cept as not	od in Item	17.	Month Do	y . Year
		į					1 1 1	1 1

DO NOT WRITE BELOW THIS LINE.

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

19. Discrepancy Indication Space

Printed/Typed Name

Printed/Typed Name

18. Transporter 2 Acknowledgement of Receipt of Materials

ement of Receipt of Materials

DO NOT WRITE BELOW THIS LINE.

Signature

Signature

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

ö

Z

930

55

တ

Month

Month

Dan

Dav

Year

Year

Printed Typed Name	Signature .	Moreth   Day   Yea
17. Transporter 1 Acknowledgement of Receipt of Materials		
Printed / TANLEY D. WILES  18. Transporter 2 Acknowledgement of Receipt of Materials	Signory Well	177 30 198
Printed/Typed Name	Signature	Month Day Yea
19 Discrepancy Indication Space		

20. Facility Owner or Operator Certification of receipt of hazardous ma	iterials covered by this manifest except as noted in Item 19.	<del></del>	<del></del>	
Printed/Typed Name	Signature	Month	Day	Yeor
		1 1	1 1	1 1

DO NOT WRITE BELOW THIS LINE.



COMPLIANCE & CLOSURE, INC. 7020 KOLL CENTER PKWY #134 PLEASANTON, CA 94566

Attn: GARY MULKEY

Laboratory Number : 20600

Date: December 27, 1995

Project Number/Name : 12058-1

This report has been reviewed and approved for release.

Senior Chemist Account Manager



Attn: GARY MULKEY

Project 12058-1 Reported on December 13, 1995

EPA	SW-846	Method	8270	Semivolatile	Organics	by (	GC/MS

Chronology					Labo	ratory Nu	mber 2060
Sample ID		Sampled	Received	Extract.	Analyzed	QC Batcl	n LAB#
s-1		12/07/95	12/07/95	12/11/95	12/11/95	BL111.2	4 01
S-2					12/13/95	BL111.2	4 02
s-3					12/13/95	BL111.2	<b>4</b> 03
S-4					12/13/95	BL111.2	<b>4</b> 04
S-5					12/13/95	BL111.2	4 05
S-6					12/13/95	BL111.2	<b>1</b> 06
QC Samples							
QC Batch #	QC Sample ID		туј	peRef.	Matrix	Extract.	Analyzed
BL111.24-01	Method Blank		МВ		Soil	12/11/95	12/11/95
BL111.24-02	Laboratory Spike		LS		Soil	12/11/95	12/11/95
BL111.24-03	Laboratory Spike	Duplicate	LSI		Soil	12/11/95	12/11/95
EL111.24-04	NPD-WD-1	_	MS	20610-0	1 Soil	12/11/95	12/11/95
L111.24-05	NPD-WD-1		MSI	20610-0	1 Soil	12/11/95	12/11/95



### Superior

# **Analytical Laboratory**

MPLIANCE & CLOSURE, INC.

Attn: GARY MULKEY

Project 12058-1 Reported on December 13, 1995

LAB ID	Sample ID					Matrix	Dil.Fa	actor	Moisture
20600-01	S-1	<del></del>				Soil		1.0	_
20600-02	S-2					Soil	1	1.0	_
20600-03	S-3					Soil	10	0.0	-
20600-04	S-4					Soil	1	1.0	-
		RESU	L T S	O F A	N A L	y s I s			
Compound		20600-	-01	20600-	-02	20600-	03	20600-	-04
-		Conc.	RL	Conc.	RL	Conc.	RL	Conc.	RL
		ug/Kg		ug/Kg		ug/Kg		ug/Kg	
naphthalene		ND	300	ND	300	ND	3000	ND	300
Benzo(a)Pyren	ne .	ND	300	ND	300	ND	3000	ND	300
>> Surrogate F	Recoveries (%)	<<							
2-fluoropheno	01	1431		73		90		70	
enol-d5		120		79		113		78	
trobenzene-	-d5	93		84		103		72	
fluorobiphe	enyl	83		92		104		90	
2,4,6-tribron	nophenol	86		90		61		89	
terphenyl-d14	_	81		89		100		86	



LAB ID	Sample ID					Matrix	Dil.Factor	Moisture
20600-05	S-5					Soil	1.0	
20600-06	S-6					Soil	1.0	
		RESU	L T S	OF A	N A L Y	s I s		
Compound		20600	-05	20600-	-06			
-		Conc.	RL	Conc.	RL			
		ug/Kg		ug/Kg				
naphthalene		ND	300	ND	300			
Benzo(a)Pyren	e	ND	300	ND	300			
Surrogate R	ecoveries (%)	<<						
fluoropheno		74		74				
menol-d5		81		83				
nitrobenzene-	d5	76		82				
2-fluorobiphe	nyl	92		94				
2,4,6-tribrom	ophenol	88		90				

91

91

terphenyl-d14



Quality Assurance and Control Data

Laboratory Number: 20600 Method Blank(s)

BL111.24-01 Conc. RL ug/kg

bis(2-chloroethyl)ether	ND	300		
aniline	ND	300		
phenol	ND	300		
2-chlorophenol	ND	300		
1,3-dichlorobenzene	ND	300		
1,4-dichlorobenzene	ND	300		
1,2-dichlorobenzene	ND	300		
benzyl alcohol	ND	300		
bis-(2-chloroisopropyl)ether	ND	300		
2-methylphenol	ND	300		
hexachloroethane	ND	300		
nitroso-di-n-propylamine	ND	300		
methylphenol	ND	300		
trobenzene	ND	300		
Isophorone	ND	300		
2-nitrophenol	ND	300		
2,4-dimethylphenol	ND	300		
bis(2-chloroethoxy)methane	ND	300		
2,4-dichlorophenol	ND	300		
1,2,4-trichlorobenzene	ND	300		
naphthalene	ND	300		
benzoic acid	ND	300		
4-chloroaniline	ND	300		
hexachlorobutadiene	ND	300		
4-chloro-3-methylphenol	ND	300		
2-methyl-naphthalene	ND	300		
hexaclorocyclopentadiene	ND	300		
2,4,6-trichlorophenol	ND	300		
2,4,5-trichlorophenol	ND	300		
2-chloronaphthalene	ND	300		
2-nitroaniline	ND	300		
acenaphthylene	ND	300		
dimethylphthlate	ND	300		
2,6-dinitrotoluene	ND	300		
Acenaphthene	ND	300		
3-nitroaniline	ND	300		
2,4-dinitrophenol	ND	300		



Quality Assurance and Control Data

Laboratory Number: 20600 Method Blank(s)

BL111.24-01 Conc. RL ug/kg

dibenzofuran	ND	300
2,4-dinitrotoluene	ND	300
4-nitrophenol	ND	300
fluorene	ND	300
4-chlorophenyl-phenylether	ND	300
diethylphthlate	ND	300
4-nitroaniline	ND	300
4,6-dinitro-2-methylphenol	ND	300
n-nitrosodiphenylamine	ND	300
4-bromo-phenyl-phenylether	ND	300
hexachlorobenzene	ND	300
<pre>mentachlorophenol</pre>	ND	300
enanthrene	ND	300
thracene	ND	300
ui-n-butylphthlate	ND	300
fluoranthene	ND	300
benzidine	ND	300
pyrene	ND	300
butylbenzylphthlate	ND	300
3.3'-dichlorobenzidine	ND	300
Benzo(a)Anthracene	ND	300
chrysene	ND	300
bis(2-ethylhexyl)phthalate	ND	300
di-n-octylphthalate	ND	300
benzo(b,k)fluoranthene	ND	300
Benzo(a)Pyrene	ND	300
Indeno(1,2,3)Pyrene	ND	300
dibenzo[a,h]anthracene	ND	300
9H-Carbazole	ND	300
Benzo(g,h,i)Perylene	ND	300
>> Surrogate Recoveries (%) <	_	
parroduce uccoverses (s) /	-	

2-fluorophenol 88
phenol-d5 96
nitrobenzene-d5 93
2-fluorobiphenyl 108
2,4,6-tribromophenol 100
rphenyl-d14 105

5of7



### Superior

# Analytical Laboratory Method 8270 Semivolatile Organics by GC/MS

Quality Assurance and Control Data

Laboratory Number: 20600

### Prof Soil Matrix (ug/Kg) ### BL111.24	Compound	Sample conc.	SPK Level	SPK Result	Recovery %	Limits %	RPC %
Phenol		Fo	r Soil Matrix	(ug/Kg)			
2-chlorophenol 3300 2969/3068 90/93 25-102 3 1,4-dichlorobenzene 1650 1640/1578 99/96 28-104 3 n-nitroso-di-n-propylamine 1650 1780/1744 108/106 41-126 2 1,2,4-trichlorobenzene 1650 1821/1722 110/104 38-107 6 4-chloro-3-methylphenol 3300 3097/3221 94/98 26-103 4 Acenaphthene 1650 1678/1690 102/102 28-89 0 4-nitrophenol 3300 2551/3032 80/92 11-114 14 pentachlorophenol 3300 2752/2819 82/85 17-109 4 pyrene 1650 2109/2039 128/124 35-142 3  Surrogate Recoveries (%) < fluorophenol 99/95 25-121 phenol-d5 99/95 24-113 nitrobenzene-d5 97/93 23-120 2-fluorobiphenyl 111/107 30-115 2,4,6-tribromophenol 99/95 24-113 cherphenyl-d14 105/98 19-122 terphenyl-d14 105/98 19-122 terphenyl-d14 105/98 19-122 112/104 18-137  For Soil Matrix (ug/Kg) BL111.24 04 / 05 - Sample Spiked: 20610 - 01  phenol ND 3300 2633/2680 80/81 26-90 1 2-chlorophenol ND 3300 2696/2818 82/85 25-102 4 1,4-dichlorobenzene ND 1650 1395/1423 85/86 28-104 1 n-nitroso-di-n-propylamine ND 1650 1395/1423 85/86 28-104 1 n-nitroso-di-n-propylamine ND 1650 1517/1550 92/94 38-107 2 4-chloro-3-methylphenol ND 3300 2958/3059 90/93 26-103 3 Acenaphthene ND 1650 1513/1550 92/94 38-107 2 4-dinitrotoluene ND 1650 1513/1650 92/100 28-89 8 4-nitrophenol ND 3300 2802/3187 85/97 11-114 13	BL11				pikes		
2-chlorophenol 3300 2969/3068 90/93 25-102 3 1,4-dichlorobenzene 1650 1640/1578 99/96 28-104 3 n-nitroso-di-n-propylamine 1650 1780/1744 108/106 41-126 2 1,2,4-trichlorobenzene 1650 1821/1722 110/104 38-107 6 4-chloro-3-methylphenol 3300 3097/3221 94/98 26-103 4 Acenaphthene 1650 1678/1690 102/102 28-89 0 4-nitrophenol 3300 2551/3032 80/92 11-114 14 pentachlorophenol 3300 2752/2819 82/85 17-109 4 pyrene 1650 2109/2039 128/124 35-142 3  Surrogate Recoveries (%) < fluorophenol 99/95 25-121 phenol-d5 99/95 24-113 nitrobenzene-d5 97/93 23-120 2-fluorobiphenyl 111/107 30-115 2,4,6-tribromophenol 99/95 24-113 cherphenyl-d14 105/98 19-122 terphenyl-d14 105/98 19-122 terphenyl-d14 105/98 19-122 112/104 18-137  For Soil Matrix (ug/Kg) BL111.24 04 / 05 - Sample Spiked: 20610 - 01  phenol ND 3300 2633/2680 80/81 26-90 1 2-chlorophenol ND 3300 2696/2818 82/85 25-102 4 1,4-dichlorobenzene ND 1650 1395/1423 85/86 28-104 1 n-nitroso-di-n-propylamine ND 1650 1395/1423 85/86 28-104 1 n-nitroso-di-n-propylamine ND 1650 1517/1550 92/94 38-107 2 4-chloro-3-methylphenol ND 3300 2958/3059 90/93 26-103 3 Acenaphthene ND 1650 1513/1550 92/94 38-107 2 4-dinitrotoluene ND 1650 1513/1650 92/100 28-89 8 4-nitrophenol ND 3300 2802/3187 85/97 11-114 13	phenol		3300	2778/2884	84/87	26-90	4
1,4-dichlorobenzene 1650 1640/1578 99/96 28-104 3 n-nitroso-di-n-propylamine 1650 1780/1744 108/106 41-126 2 1,2,4-trichlorobenzene 1650 1821/1722 110/104 38-107 6 4-chloro-3-methylphenol 3300 3097/3221 94/98 26-103 4 Acenaphthene 1650 2148/2109 130/128 31-137 2 2,4-dinitrotoluene 1650 1678/1690 102/102 28-89 0 4-nitrophenol 3300 2551/3032 80/92 11-114 14 pentachlorophenol 3300 2722/2819 82/85 17-109 4 pyrene 1650 2109/2039 128/124 35-142 3  Surrogate Recoveries (%) <	<del>-</del>		3300	•	90/93	25-102	3
n-nitroso-di-n-propylamine	<del>-</del>		1650	· · · · · · · · · · · · · · · · · · ·	•	28-104	3
1,2,4-trichlorobenzene 1650 1821/1722 110/104 38-107 6 4-chloro-3-methylphenol 3300 3097/3221 94/98 26-103 4 Acenaphthene 1650 2148/2109 130/128 31-137 2 2,4-dinitrotoluene 1650 1678/1690 102/102 28-89 0 4-nitrophenol 3300 2651/3032 80/92 11-114 14 pentachlorophenol 3300 2722/2819 82/85 17-109 4 pyrene 1650 2109/2039 128/124 35-142 3  Surrogate Recoveries (%) << fluorophenol 99/95 25-121 phenol-d5 98/95 24-113 nitrobenzene-d5 97/93 23-120 2-fluorobiphenyl 111/107 30-115 2,4,6-tribromophenol 105/98 19-122 terphenyl-d14 Por Soil Matrix (ug/Kg) BL111.24 04 / 05 - Sample Spiked: 20610 - 01  phenol ND 3300 2633/2680 80/81 26-90 1 2-chlorophenol ND 3300 2696/2818 82/85 25-102 4 1,4-dichlorobenzene ND 1650 1395/1423 85/86 28-104 1 n-nitroso-di-n-propylamine ND 1650 1395/1423 85/86 28-104 1 n-nitroso-di-n-propylamine ND 1650 1517/1550 92/94 38-107 2 4-chloro-3-methylphenol ND 3300 2958/3059 90/93 26-103 3 Acenaphthene ND 1650 1909/1937 116/117 31-137 1 2,4-dinitrotoluene ND 1650 1513/1650 92/100 28-89 8 4-nitrophenol ND 3300 2802/3187 85/97 11-114 13	•		1650	•	•		2
## A-chloro-3-methylphenol			1650	•		38-107	6
Acenaphthene 1650 2148/2109 130/128 31-137 2 2,4-dinitrotoluene 1650 1678/1690 102/102 28-89 0 4-nitrophenol 3300 2651/3032 80/92 11-114 14 pentachlorophenol 3300 2722/2819 82/85 17-109 4 pyrene 1650 2109/2039 128/124 35-142 3  Surrogate Recoveries (%) << fluorophenol 99/95 25-121 phenol-d5 98/95 24-113 nitrobenzene-d5 97/93 23-120 2-fluorobiphenyl 111/107 30-115 2,4,6-tribromophenol 105/98 19-122 terphenyl-d14 105/98 19-122 terphenyl-d14 112/104 18-137  For Soil Matrix (ug/Kg) BL111.24 04 / 05 - Sample Spiked: 20610 - 01  phenol ND 3300 2633/2680 80/81 26-90 1 2-chlorophenol ND 3300 2696/2818 82/85 25-102 4 1,4-dichlorobenzene ND 1650 1585/1685 96/102 41-126 6 1,2,4-trichlorobenzene ND 1650 1517/1550 92/94 38-107 2 4-chloro-3-methylphenol ND 3300 2958/3059 90/93 26-103 3 Acenaphthene ND 1650 1513/1650 92/100 28-89 8 4-nitrophenol ND 3300 2802/3187 85/97 11-114 13			3300		•	26-103	4
2,4-dinitrotoluene 1650 1678/1690 102/102 28-89 0 4-nitrophenol 3300 2651/3032 80/92 11-114 14 pentachlorophenol 3300 2722/2819 82/85 17-109 4 pyrene 1650 2109/2039 128/124 35-142 3  Surrogate Recoveries (%) <<	_ <del>_</del> <del>_</del> _		1650	· ·	•	31-137	2
4-nitrophenol 3300 2651/3032 80/92 11-114 14 pentachlorophenol 3300 2722/2819 82/85 17-109 4 pyrene 1650 2109/2039 128/124 35-142 3  Surrogate Recoveries (%) <<			1650	•	·	28-89	0
pentachlorophenol 3300 2722/2819 82/85 17-109 4 pyrene 1650 2109/2039 128/124 35-142 3  Surrogate Recoveries (%) <<			3300		80/92	11-114	14
Surrogate Recoveries (%) <<   Surrogate Recoveries (%) <<   Surrogate Recoveries (%) <<   Surrogate Recoveries (%) <<   Surrogate Recoveries (%) <<   Surrogate Recoveries (%) <<   Surrogate Recoveries (%) <<   Surrogate Recoveries (%) <<   Surrogate Recoveries (%) <<   Surrogate Recoveries (%) <<   Surrogate Recoveries (%) <<   Surrogate Recoveries (%) <<   Surrogate Recoveries (%) <<   Surrogate Recoveries (%) <<   Surrogate Recoveries (%) <<   Surrogate Recoveries (%) <<   Surrogate Recoveries (%) <<   Surrogate Recoveries (%) <<   Surrogate Recoveries (%) <<   Surrogate Recoveries (%) <<   Surrogate Recoveries (%) <<   Surrogate Recoveries (%) <<   Surrogate Recoveries (%)	<del></del>		3300	2722/2819	82/85	17-109	4
Fluorophenol   99/95   25-121	_		1650	2109/2039	128/124	35-142	3
### BL111.24 O4 / O5 - Sample Spiked: 20610 - O1    Phenol	-fluorophenol phenol-d5 nitrobenzene-d5 2-fluorobiphenyl 2,4,6-tribromophenol				98/95 97/93 111/107 105/98	24-113 23-120 30-115 19-122	
2-chlorophenolND33002696/281882/8525-10241,4-dichlorobenzeneND16501395/142385/8628-1041n-nitroso-di-n-propylamineND16501585/168596/10241-12661,2,4-trichlorobenzeneND16501517/155092/9438-10724-chloro-3-methylphenolND33002958/305990/9326-1033AcenaphtheneND16501909/1937116/11731-13712,4-dinitrotolueneND16501513/165092/10028-8984-nitrophenolND33002802/318785/9711-11413	BL11				- 01		
2-chlorophenolND33002696/281882/8525-10241,4-dichlorobenzeneND16501395/142385/8628-1041n-nitroso-di-n-propylamineND16501585/168596/10241-12661,2,4-trichlorobenzeneND16501517/155092/9438-10724-chloro-3-methylphenolND33002958/305990/9326-1033AcenaphtheneND16501909/1937116/11731-13712,4-dinitrotolueneND16501513/165092/10028-8984-nitrophenolND33002802/318785/9711-11413	nhenol	ND	3300	2633/2680	80/81	26-90	1
1,4-dichlorobenzeneND16501395/142385/8628-1041n-nitroso-di-n-propylamineND16501585/168596/10241-12661,2,4-trichlorobenzeneND16501517/155092/9438-10724-chloro-3-methylphenolND33002958/305990/9326-1033AcenaphtheneND16501909/1937116/11731-13712,4-dinitrotolueneND16501513/165092/10028-8984-nitrophenolND33002802/318785/9711-11413	-			•	•	-	
n-nitroso-di-n-propylamine ND 1650 1585/1685 96/102 41-126 6 1,2,4-trichlorobenzene ND 1650 1517/1550 92/94 38-107 2 4-chloro-3-methylphenol ND 3300 2958/3059 90/93 26-103 3 Acenaphthene ND 1650 1909/1937 116/117 31-137 1 2,4-dinitrotoluene ND 1650 1513/1650 92/100 28-89 8 4-nitrophenol ND 3300 2802/3187 85/97 11-114 13	_			*.	•		1
1,2,4-trichlorobenzene       ND       1650       1517/1550       92/94       38-107       2         4-chloro-3-methylphenol       ND       3300       2958/3059       90/93       26-103       3         Acenaphthene       ND       1650       1909/1937       116/117       31-137       1         2,4-dinitrotoluene       ND       1650       1513/1650       92/100       28-89       8         4-nitrophenol       ND       3300       2802/3187       85/97       11-114       13	•		= : : :	•	-		6
4-chloro-3-methylphenol       ND       3300       2958/3059       90/93       26-103       3         Acenaphthene       ND       1650       1909/1937       116/117       31-137       1         2,4-dinitrotoluene       ND       1650       1513/1650       92/100       28-89       8         4-nitrophenol       ND       3300       2802/3187       85/97       11-114       13				•	•		
Acenaphthene ND 1650 1909/1937 116/117 31-137 1 2,4-dinitrotoluene ND 1650 1513/1650 92/100 28-89 8 4-nitrophenol ND 3300 2802/3187 85/97 11-114 13					· · · · · · · · · · · · · · · · · · ·		
2,4-dinitrotoluene     ND     1650     1513/1650     92/100     28-89     8       4-nitrophenol     ND     3300     2802/3187     85/97     11-114     13	<del>-</del> -			•	,	31-137	
4-nitrophenol ND 3300 2802/3187 85/97 11-114 13				-	•		8
ullet	-			•	· ·		13
	<del>-</del>	ND	3300	*	81/82	17-109	1



#### Quality Assurance and Control Data

Laboratory Number: 20600

Compound	Sample conc.	SPK Level	SPK Result	Recovery %	Limits %	RPI %
pyrene	ND	1650	1901/1877	115/114	35-142	1
>> Surrogate Recoveries (%) <<						
2-fluorophenol				87/89	25-121	
phenol-d5				88/88	24-113	
nitrobenzene-d5				85/90	23-120	
2-fluorobiphenyl				101/102	30-115	
2,4,6-tribromophenol				92/91	19-122	
terphenyl-d14				98/93	18-137	

I - The surrogate recovery was high due to the presence of interfering compounds in the sample.

#### Definitions:

ND = Not Detected RL = Reporting Li

RL = Reporting Limit
NA = Not Analysed

RPD = Relative Percent Difference

ug/L = parts per billion (ppb)

 $m\alpha/L = parts per million (ppm)$ 

ug/kg = parts per billion (ppb)
mg/kg = parts per million (ppm)

Compliance CHAIN OF CUSTOM RECORD AND ANALYSIS REQUEST Closure, Inc. X000 PROJECT NAME/SITE PROJECT NO. **ANALYSIS REQUESTED** P.O. #: 265 30th street 12058-1 OAKlAND, CA samples Kept @ 40°C NO. CONTAINERS (626,805,805,80) 705 418 1/5520 SAMPLE TYPE SAMPLERS (SIGN) GARY R. Mulkey 70Hg (8075) 70Ha (8015) (PRINT) 60/18010 029/200 Cocasta Cocasta GRAB CED COMP PRES. TIME DATE SAMPLE IDENTIFICATION USED REMARKS 8270 RUN FOR BENECKY MONE 14/95 11:45 wite X × 5-1 of weatherless out + wie 11:55 5-2 × X X 11:58 5-3 None 1/2 1 × X 12:00 reve 5-4 5-5

	<u>0-3</u>		193 0.03					<b>→</b>	<u> </u>		44	$\rightarrow$	<u>`</u>	<del>_</del>	╃━╃	<del>i</del> -	<del></del>
	5-6	12/7	195 2:45		* rex	~ ×	1 50,	; +	<u>د</u> ۲	1_			+	1_			
	Please initial:	1	7							ļ						1	ļ <u> </u>
	Samples Stored in ice	4	- t=	2001										T			
	Appropriate containers Samples preserved	\$ <del>                                    </del>	9					1		1			十	1	$\Box$		
	VOA's without hoodspo									$\dagger$	$\dagger$	1	十	+	$\vdash$	$\vdash$	
<del></del>	Comments:		NA					<del>                                     </del>		+-	<del> </del>	$\vdash$	+	+	╁	<del>  </del> -	
						-				╁	╂	$\vdash$	+-		+		
			Z		-1-	-		-			+		$\dashv$		╀	<del>-  </del> -	
L		_//			<del>-   </del>						1	$\vdash$	-	-	<del> </del>		
		<u> </u>		0505			<del></del> -	<u> </u>	ATORY		J			<u> </u>			 SEND RESULTS TO:
RELINOL	DISHED BY:	TE    2/95	TIME 3:33	HECE	IVED BY:		<b>'</b>   '	ABUN Su	Deric	VL 1	sus L	fica	1.1	VC.	"	EASE (	SEND RESULTS TO.
<u> </u>	any R mulkey 12,	1/95	V. J.				_	<b>4</b> -7	DEFIC MAL	Live.	2, CA	,	, –		1	C 01	MPLIANCE & CLOSURE
RELINO	JISHED BY: DA	ATE /	TIME	RECE	IVED BY:						•						20 KOLL CENTER
										_							SUITE 134
RELINO	JISHED BY D	ATE	TIME	RECE	IVED BY:		F	REQUE	STEDT	URNA	ROUN	ID TIM	E				EASANTON, CA 94566
									NORM	n L						(5	10) 426–5395
BELINO	JISHED BY D	ATE	TIME	RECE	IVED BY L	ABORATO	PQY F	RECEIF	T CON	DITIO	N.	<del></del>			Pf	OJEC	T MANAGER
			ì	$\mathcal{N}$	In	$\sim$	) [	5	0 0		- ,					GA	RY R. MULKEY



CULIANCE & CLOSURE, A GARY MULKEY

Samples

Project 12058-1 Reported on December 15, 1995

Chronology				Labo	ratory Numbe	er <b>2060</b> 0
Sample ID	Sampled	Received	Extract.	Analyzed	QC Batch	LAB #
S-1	12/07/95	12/07/95	12/11/95	12/12/95	BL111.21	01
s-2	12/07/95	12/07/95	12/11/95	12/12/95	BL111.21	02
s-3				12/12/95	BL111.21	03
S-4				12/12/95	BL111.21	04
\$ <b>-</b> 5				12/12/95	BL111.21	05
S-6	12/07/95	12/07/95	12/11/95	12/12/95	BL111.21	06
SP-1				12/12/95	BL111.21	07
SP-2				12/12/95	BL111.21	80
SP-3				12/12/95	BL111.21	09
SP-4				12/12/95	BL111.21	10
SP-5				12/12/95	BL111.21	11
SP-6				12/12/95	BL111.21	12
SP-7	· ·			12/12/95	BL111.21	13
SP-8	• •			12/12/95	BL111.21	14
<b>CD-9</b>				12/12/95	BL111.21	15
10				12/12/95	BL111.21	16

QC Batch #	QC Sample ID	TypeRef.	Matrix	Extract. Analyzed
BL111.21-01	Method Blank	мв	Soil	12/11/95 12/11/95
BL111.21-02	Laboratory Spike	LS	Soil	12/11/95 12/11/95
BL111.21-03	Laboratory Spike Duplicate	LSD	Soil	12/11/95 12/11/95
BL111.21-04	·	MS 20600-01	Soil	12/11/95 12/12/95
BL111.21-05	S-1	MSD 20600-01	Soil	12/11/95 12/12/95



CLIANCE & CLOSURE, INC. ACEN: GARY MULKEY Project 12058-1 Reported on December 15, 1995

LAB ID	Sample ID					Matrix	Dil.	Factor	Moisture
20600-01	s-1	-		<del>_</del> -		Soil	<u> </u>	10.0	_
20600-02	s-2					Soil		1.0	-
20600-03	s-3					Soil	1	00.0	-
20600-04	S-4					Soil		1.0	-
		RESU	L T S	OF A	N A L Y	SIS			
Compound		20600-	-01	20600-	02	20600-	03	20600	0-04
-		Conc. mg/kg	RL	Conc. mg/kg	RL	Conc. mg/kg	RL	Conc. mg/kg	
Diesel:		ND##	10	ND	1	ND##	100	ND	1





### Superior

# **Analytical Laboratory**

CLIANCE & CLOSURE, INC. Attn: GARY MULKEY

Project 12058-1 Reported on December 15, 1995

LAB ID	Sample ID					Matrix	Dil.Fac	tor	Moisture
20600-05	S-5				···	Soil	1.	0	
20600-06	s-6					Soil	1.	0	-
20600-07	SP-1					Soil	1.	0	_
20600-08	SP-2					Soil	1.	0	-
	:	RESU	L T S	OF A	NALY	s I s			
Compound		20600-	05	20600-	06	20600-	07	20600	-08
_		Conc. mg/kg	RL	Conc. mg/kg	RL	Conc. mg/kg	RL	Conc. mg/kg	RL
Diesel:		ND	1	ND**	1	ND@@	1	NDXX	1
> Surrogate R	ecoveries (%) <-	<							
Tetracosane		98		106		113		114	





CLIANCE & CLOSURE, INC. Attn: GARY MULKEY

Project 12058-1 Reported on December 15, 1995

LAB ID	Sample ID					Matrix	Dil.Factor	Moisture
20600-09	SP-3	<u> </u>		· · ·		Soil	1.0	
20600-10	SP-4					Soil	1.0	-
20600-11	SP-5					Soil	1.0	-
20600-12	SP-6					Soil	1.0	-
		RESU	L T S	OF A	NALY	s I s		
Compound		20600-	-09	20600-3	10	20600-	11 2060	00-12
•		Conc.	RL	Conc.	RL	Conc.	RL Cond	. RL
		mg/kg		mg/kg		mg/kg	mg/)	kg .
Diesel:		ND	1	NDXX	1	NDXX	1 ND@6	9 1
> Surrogate R	lecoveries (%) <	<						
Tetracosane		116		108		114	118	





### Superior

## **Analytical Laboratory**

C LIANCE & CLOSURE, INC. Attn: GARY MULKEY Project 12058-1 Reported on December 15, 1995

LAB ID	Sample ID					Matrix	Dil.F	actor	Moisture
20600-13	SP-7					Soil		1.0	
20600-14	SP-8					Soil		1.0	~
20600-15	SP-9					Soil		1.0	-
20600-16	SP-10					Soil		1.0	-
		RESU	n 1 3	OF A	u u n	YSIS			
Compound		20600- Conc. mg/kg		20600- Conc. mg/kg		20600- Conc. mg/kg	15 RL	20600 Conc. mg/kg	RL





Total Extractable Petroleum Hydrocarbons by EPA SW-846 Method 8015M

Quality Assurance and Control Data

Laboratory Number: 20600 Method Blank(s)

BL111.21-01 Conc. RL mg/kg

Diesel:

ND

>> Surrogate Recoveries (%) <<
 Tetracosane</pre>

121



Total Extractable Petroleum Hydrocarbons by EPA SW-846 Method 8015M

Quality Assurance and Control Data

Laboratory Number: 20600

Compound	Sample conc.	SPK Level	SPK Result	Recovery %	Limits %	RPD %
E		Soil Matrix 03 - Labora	(mg/Kg) tory Control Sp	ikes	•	
Diesel:		33	32/41	97/124	50-150	24
>> Surrogate Recoveries (%) Tetracosane	<b>&lt;&lt;</b>			109/129	50-150	
B		Soil Matrix 05 - Sample	(mg/Kg) Spiked: 20600	- 01		
esel:	ND	33	59n/50n	179/152	50-150	16
>> Surrogate Recoveries (%) Tetracosane	<<			2601/1801	50-150	





## - Sample does not contain diesel however significant levels of lighter hydrocarbons are present. Sample reporting limit raised due to significant levels of lighter hydrocarbons.

00 - Sample does not contain diesel, however lighter and heavier hydrocarbons are present.

XX - Heavier hydrocarbons are present. Sample does not contain diesel.

I - The surrogate recovery was high due to the presence of interfering compounds in the sample.

- \*\* Hydrocarbons were found in the range of diesel, but do not resemble a diesel fingerprint.
- I The surrogate recovery was high due to the presence of interfering compounds in the sample.
   N Spike sample recovery not within control limits.

#### De hitions:

ND = Not Detected RL = Reporting Limit

NA = Not Analysed

RPD = Relative Percent Difference

ug/L = parts per billion (ppb)

mg/L = parts per million (ppm)

ug/kg = parts per billion (ppb)

mg/kg = parts per million (ppm)



LIANCE & CLOSURE, INC.

Project 12058-1 Reported on December 15, 1995

Total Recoverable Hydrocarbons by EPA Method 418.1

Chronology				Labo	ratory Numbe	er 20600
Sample ID	Sampled	Received	Extract.	Analyzed	QC Batch	LAB #
SP-1	12/07/95	12/07/95	12/14/95	12/14/95	BL142.13	07
SP-2	12/07/95	12/07/95	12/14/95	12/14/95	BL142.13	08
SP-3	12/07/95	12/07/95	12/14/95	12/14/95	BL142.13	09
SP-4	12/07/95	12/07/95	12/14/95	12/14/95	BL142.13	10
SP-5	12/07/95	12/07/95	12/14/95	12/14/95	BL142.13	11
SP-6	12/07/95	12/07/95	12/14/95	12/14/95	BL142.13	12
SP-7	12/07/95	12/07/95	12/14/95	12/14/95	BL142.13	13
SP-8	12/07/95	12/07/95	12/14/95	12/14/95	BL142.13	14
SP-9	12/07/95	12/07/95	12/14/95	12/14/95	BL142.13	15
SP-10	12/07/95	12/07/95	12/14/95	12/14/95	BL142.13	16

QC Samples

: GARY MULKEY

QC Batch #	QC Sample ID	TypeRef.	Matrix	Extract. Analyz	:ed
142.13-01	Method Blank	МВ	Soil	12/14/95 12/14/	95
142.13-02	Laboratory Spike	LS	Soil	12/14/95 12/14/	'95
142.13-03	Laboratory Spike Duplicate	LSD	Soil	12/14/95 12/14/	95
BL142.13-04	SP-10	MS 20600-16	Soil	12/14/95 12/14/	'95
BL142.13-05	SP-10	MSD 20600-16	Soil	12/14/95 12/14/	95



### Superior

# Analytical Laboratory

CLIANCE & CLOSURE, INC. Attal: GARY MULKEY Project 12058-1 Reported on December 15, 1995

	Total	Recovera	ble Hyd	rocarbons	by EP	A Method 41	8.1	
LAB ID	Sample ID					Matrix	Dil.Factor	Moisture
20600-07	SP-1					Soil	1.0	-
20600-08	SP-2					Soil	1.0	-
20600-09	SP-3					Soil	1.0	-
20600-10	SP-4					Soil	1.0	-
		RESU	L T S	OF A	N A L	y s I s		
Compound		20600	-07	20600-	-08	20600-	09 2060	00-10
-		Conc.	RL	Conc.	RL	Conc.	RL Cond	. RL
		mg/kg		mg/kg		mg/kg	mg/l	ιg
Petroleum Hy	drocarbons	ND	20	39	20	ND	20 ND	20



CLIANCE & CLOSURE, INC. Attal: GARY MULKEY Project 12058-1 Reported on December 15, 1995

	Total	Recoverab	ole Hyd	rocarbons	by EPA	Method 41	8.1	
LAB ID	Sample ID					Matrix	Dil.Factor	Moisture
20600-11	SP-5		<del></del>		<del></del> .	Soil	1.0	-
20600-12	SP-6					Soil	1.0	_
20600-13	SP-7					Soil	1.0	-
20600-14	SP-8					Soil	1.0	-
		R E S U	L T S	OF A	N A L	YSIS		
Compound		20600-	-11	20600-	12	20600-	13 2060	0-14
•		Conc. mg/kg	RL	Conc. mg/kg	RL	Conc. mg/kg	RL Cond	
Petroleum Hyd	drocarbons	ND	20	ND	20	ND	20 ND	20



LIANCE & CLOSURE, INC.

Project 12058-1 Reported on December 15, 1995

	Total	Recoveral	ole Hyd	lrocarbon	s by EPA	A Method 41	8.1	
LAB ID	Sample ID					Matrix	Dil.Factor	Moisture
20600-15	SP-9			<u> </u>		Soil	1.0	
20600-16	SP-10					Soil	1.0	-
		RESU	L T S	O F	ANAL	y s I s		
Compound		20600-	-15	2060	0-16			
-		Conc. mg/kg	RL	Conc mg/k	RL g			
Petroleum Hyd	drocarbons	55	20	ND	20			



Total Recoverable Hydrocarbons by EPA Method 418.1

Quality Assurance and Control Data

Laboratory Number: 20600 Method Blank(s)

BL142.13-01 Conc. RL mg/kg

Petroleum Hydrocarbons

20

ND

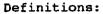


Total Recoverable Hydrocarbons by EPA Method 418.1

Quality Assurance and Control Data

Laboratory Number: 20600

SPK Level SPK Result Recovery Limits RPD Compound Sample conc. For Soil Matrix (mg/kg) BL142.13 02 / 03 - Laboratory Control Spikes 75-125 6 91/86 91/86 100 Petroleum Hydrocarbons For Soil Matrix (mg/kg) BL142.13 04 / 05 - Sample Spiked: 20600 - 16 75-125 83/83 100 83/83 Petroleum Hydrocarbons ND



ND = Not Detected

RL = Reporting Limit

NA = Not Analysed

RPD = Relative Percent Difference

ug/L = parts per billion (ppb)

mg/L = parts per million (ppm)

ug/kg = parts per billion (ppb)
mg/kg = parts per million (ppm



Laboratory No.: 20600

Client: COMPLIANCE & CLOSURE, INC.

Client Job No.: 12058-1

Date Received: December 7, 1995 Date Reported: December 15, 1995

Flashpoint by EPA Method 1010 60 degrees C = 140 degrees F

#	Sample ID	Date Date  ample ID Sampled Analyzed Ar		Analyte	Results		Unit
:							
80	SP-2	12/07/95	12/12/95	Flashpoint	ND	60	С
09	SP-3	12/07/95	12/13/95	Flashpoint	ND	60	С
10	SP-4	12/07/95	12/13/95	Flashpoint	ND	60	С
11	SP-5	12/07/95	12/14/95	Flashpoint	ND	60	С

Senior Chemist Account Manager

Compliance																					
Closure, Inc.	200	00	CHA	ИIV	OF C	ะบรา	O D	F	REC	OR	D A	NC	At	<b>IAL</b>	.YS	IS I	REC	วบเ	EST	Γ	
PROJECT NO. PROJECT	NAME/SITE												AN	ALYS	SIS R	EQU	ESTE	D			P.O. #:
12058-1	NAME/SITE LS 3074 On-Klimod, o	Street.					AS .							Τ,	// Samples kept						
SAMPLERS Linelle	GIGN) (PRINT	, Gary	R. A	tu li	Kay		CONTAINER	SAMPLE TYPE			(0%) (5/0%) (1/d)	(5,0)	25.5				/ <sub>\sy</sub>	Le	4	//	samples kept @4°C
SAMPLE IDENTIFICATION	DATE	E TIME	COMP	GRAB	PRES. USED		NO. O	SAMPL	Á			(\$1.00)		(S) 48	05.20						REMARKS
Sp-1	12/1/9	95 1:05		X	للكف و	_ X	1	٤.ز		X	X	X				٨					
50-2	12/7/5	5 1125		χ		Х	İ	Ш	1	×	X	X				<u>}</u>					
\$P-3	12/7/9	5 1:07		χ		X	1		X	X	7	×			_	>				_	
50-4	12/7/55		<u> </u>	X		X	1	Ц	<u>                                     </u>	×	<u> </u>	×				<b>)</b>			_		
5 p · 5	12/7/55	1:21		X		λ	<u>l</u>	$\coprod$	1 1	×	14	<u> ኦ</u>				7	X				
Sp-6	12/7/9	5 127		λ		λ	1	11	X	X	X	7				Υ			_	<u> </u>	
<u> </u>	12/2/	8 1:32	_	X		X	1	Ц.	X	¥	×	X	<u> </u>			7				_	
sp-8	12/7/5	7 1:42		X		X	1	Ш	X	X	1	1	<u> </u>			7		_	_		
Sp-9_	12/7/9	8 1:45		Х		X	11	Ш	X	×	X	Y.	<u> </u>			×		<u>L</u>		<u> </u>	
Sp-10	12/7/	195 1:48		X	V	V	1	1	1	X	X	人				X	<u> </u>	_	$oxed{oxed}$		
	/		<u> </u>	<u></u>	1		<u> </u>			_	<u> </u>		<u> </u>			<u>.</u>	<u> </u>		_	_	
				<u> </u>		_	_	<u> </u>		_	<u> </u>		<u> </u>			_		_	<u> </u>		
			1_						<u> </u>	_					_					L	
								L		<u> </u>		<u> </u>	ļ							L	
						Ш,	1		1_	丄	<u></u>	<u></u>	<u> </u>	<u> </u>	<u> </u>			L	<u> </u>	<u> </u>	
RELINQUISHED BY:	DATE	TIME	RECE	IVED	BY:			"	ABOF			•			. ,	A		Pi	LEAS	E SE	IND RESULTS TO:
Hay R-nulky	2/7/95	3.30	_		$-\!\!/$					S	spe	ran I	- A		y foc	a I			r	n w c	PLIANCE & CLOSURE
RELINQUISHED BY:	DATE	TIME	RECE	EIVEC	BY:			Superior mustifical martinez, ca						O KOLL CENTER SUITE 134							
RELINQUISHED BY	DATE	TIME	RECE	IVE	D BY:			R	EQUI			IRNA		IT DI	ME	•					ASANTON. CA 94566 D) 426-5395
RELINOUISHED BY	DATE	TIME (	RECE	IVE	D BY LAI	BORAT	ORY	R	ECEI	PT C	OND	ITION	4:					PROJECT MANAGER:  GARY R. MITIKEY			



Attn: GARY MULKEY

Chronology

Project 12058-1 Reported on December 15, 1995

Laboratory Number 20600

Sample ID		Sampled	Received	Extract.	Analyzed	QC Batcl	n LAB#
S-1		12/07/95	12/07/95	12/15/95	12/15/95	BL141.37	7 01
S-2					12/14/95	BL141.37	7 02
S-3		12/07/95	12/07/95	12/15/95	12/15/95	BL141.37	7 03
S-4		12/07/95	12/07/95	12/14/95	12/14/95	BL131.09	5 04
S-5		12/07/95	12/07/95	12/14/95	12/14/95	BL131.09	5 05
s-6		12/07/95	12/07/95	12/14/95	12/14/95	BL131.09	5 06
SP-1		12/07/95	12/07/95	12/14/95	12/14/95	BL131.05	5 07
SP-2		12/07/95	12/07/95	12/14/95	12/14/95	BL131.05	6 08
sp-3		12/07/95	12/07/95	12/14/95	12/14/95	BL131.05	5 09
SP-4		12/07/95	12/07/95	12/14/95	12/14/95	BL141.37	7 10
<b>-5</b> P-5		12/07/95	12/07/95	12/14/95	12/14/95	BL141.37	7 11
P-6		12/07/95	12/07/95	12/14/95	12/14/95	BL141.37	7 12
P-7		12/07/95	12/07/95	12/14/95	12/14/95	BL141.37	7 13
SP-8		12/07/95	12/07/95	12/14/95	12/14/95	BL141.37	7 14
SP-9		12/07/95	12/07/95	12/15/95	12/15/95	BL141.37	7 15
SP-10		12/07/95	12/07/95	12/14/95	12/14/95	BL141.37	7 16
QC Samples		•					
QC Batch #	QC Sample ID		Туј	peRef.	Matrix	Extract.	Analyzed
BL131.05-02	Laboratory Spike		LS		Soil	12/13/95	12/13/95
BL131.05-12			MS	20595-03	l Soil	12/13/95	
BL131.05-13	MW-1 @ 5'		MSI	20595-0		12/13/95	
BL141.37-03	Laboratory Spike		LS		Soil	12/14/95	12/14/95
BL141.37-07	S-2		MS	20600-0	2 Soil	12/14/95	12/14/95
BL141.37-08	<b>\$-</b> 2		MSI	20600-0	2 Soil	12/14/95	12/14/95
BL131.05-01	Method Blank		MB		Soil	12/13/95	12/13/95
BL141.37-02	Method Blank		MB		Soil	12/14/95	12/14/95
BL131.05-03	Laboratory Spike		LS		Soil	12/13/95	12/13/95
BL131.05-14	MW-1 @ 5'		MS	20595-03	l Soil	12/13/95	12/13/95
BL131.05-15	MW-1 @ 5'		MSI	20595-0	l Soil	12/13/95	
BL141.37-04			LS		Soil	12/14/95	• •
BL141.37-09			MS	20600-02	2 Soil	12/14/95	
BL141.37-10	s-2		MSI	20600-02	2 Soil	12/14/95	



PLIANCE & CLOSURE, INC.

Attn: GARY MULKEY

Project 12058-1 Reported on December 15, 1995

LAB ID	Sample ID					Matrix	Dil.F	actor	Moisture
20600-01	s-1					Soil	1	0.0	_
20600-02	S-2					Soil		1.0	-
20600-03	s-3					Soil	25	0.0	_
20600-04	S-4					Soil		1.0	-
		RESU	LTS	O F A	NALY	SIS			
Compound		20600-	-01	20600-	-02	20600-	03	20600	-04
		Conc. mg/kg	RL	Conc. mg/kg	RL	Conc. mg/kg	RL	Conc. mg/kg	
Gasoline_Range		390	10	ND	1	6700	250	2	1
nzene		ND	0.050	ND	0.005	ND	1.3	ND	0.005
luene		2.0	0.050	ND	0.005	35	1.3	0.019	0.005
yl Benzene		1.4	0.050	ND	0.005	25	1.3	0.016	0.005
Xylenes		5.1	0.050	ND	0.005	67	1.3	0.047	0.005
>> Surrogate Rec	overies (%) <	:<							
Trifluorotoluen	e (SS)	77		106		87		106	



### Superior

# **Analytical Laboratory**

Attn: GARY MULKEY

Project 12058-1 Reported on December 15, 1995

LAB ID	Sample ID					Matrix	Dil.Fa	ctor	Moisture
20600-05	S-5					Soil	1	.0	-
20600-06	s-6					Soil	1	.0	-
20600-07	SP-1					Soil	1	.0	_
20600-08	SP-2					Soil	1	.0	-
		RESU	LTS	O F A	NALY	SIS			
Compound		20600-	∙05	20600-	06	20600-	07	20600·	-08
		Conc. mg/kg	RL	Conc. mg/kg	RL	Conc. mg/kg	RL	Conc. mg/kg	RL
Gasoline_Range		ND	1	ND	1	1	1	ND	1
enzene		ND	0.005	ND	0.005	ND	0.005	ND	0.005
luene		ND	0.005	ND	0.005	0.010	0.005	ND	0.005
hyl Benzene		ND	0.005	ND	0.005	0.017	0.005	ND	0.005
xylenes		ND	0.005	ND	0.005	0.041	0.005	NĎ	0.005
>> Surrogate Rec	coveries (%) <	<<							
Trifluorotoluer		101		100		105		103	



Attn: GARY MULKEY

Project 12058-1 Reported on December 15, 1995

LAB ID	Sample ID					Matrix	Dil.Fa	ctor	Moisture
20600-09	SP-3		· -			Soil	1	.0	
20600-10	SP-4					Soil	1	.0	_
20600-11	SP-5					Soil	1	.0	-
20600-12	SP-6					Soil	1	.0	-
		RESU	L T S	O F A	N A L Y	s I s			
Compound		20600-	.09	20600-	10	20600-	11	20600-	-12
Compound		Conc. mg/kg	RL	Conc. mg/kg	RL	Conc. mg/kg	RL	Conc. mg/kg	RL
Gasoline Range	, <del></del>	ND	1	ND	1	ND	1	2	1
enzene		ND	0.005	ND	0.005	ND	0.005	ND	0.005
luene		ND	0.005	ND	0.005	ND	0.005	ND	0.005
hyl Benzene		ND	0.005	ND	0.005	ND	0.005	ND	0.005
xylenes		ND	0.005	ND	0.005	ND	0.005	0.011	0.005
>> Surrogate Rec	coveries (%) <	<<							
Trifluorotoluer		102		102		118		105	



APLIANCE & CLOSURE, INC. Attn: GARY MULKEY Project 12058-1 Reported on December 15, 1995

LAB ID	Sample ID					Matrix	Dil.Fa	ctor	Moisture
20600-13	SP-7					Soil	1	.0	-
20600-14	SP-8					Soil	1	.0	-
20600-15	SP-9					Soil	5	.0	-
20600-16	SP-10					Soil	1	.0	-
		RESU	L T S	o F A	N A L Y	SIS			
Compound		20600-	·13	20600-	14	20600-	15	20600	-16
Compound		Conc. mg/kg	RL	Conc. mg/kg	RL	Conc. mg/kg	RL	Conc. mg/kg	RL
Gasoline Range		ND	1	ND	1	270	5	3	1
enzene		ND	0.005	ND	0.005	ND	0.025	ND	0.005
luene		ND	0.005	ND	0.005	1.6	0.025	ND	0.005
hyl Benzene		ND	0.005	ND	0.005	0.80	0.025	0.012	0.005
xylenes		ND	0.005	ND	0.005	1.5	0.025	0.022	0.005
>> Surrogate Rec	overies (%) <	:<							
Trifluorotoluer		103		98		88		108	



Gasoline Range Petroleum Hydrocarbons and BTXE by EPA SW-846 5030/8015M/8020 Gasoline Range quantitated as all compounds from C6-C10

#### Quality Assurance and Control Data

Laboratory Number: 20600 Method Blank(s)

	BL131	BL131.05-01		.37-02	
	Conc. mg/kg		Conc. mg/kg		
Gasoline Range	ND	1	ND	1	
Benzene	ND	0.005	ND	0.005	
Toluene	ND	0.005	ND	0.005	
Ethyl Benzene	ND	0.005	ND	0.005	
Xylenes	ND	0.005	ND	0.005	
>> Surrogate Recoveries (%)	<<				
rifluorotoluene (SS)	100		104		



Gasoline Range Petroleum Hydrocarbons and BTXE by EPA SW-846 5030/8015M/8020 Gasoline Range quantitated as all compounds from C6-C10

### Quality Assurance and Control Data

Laboratory Number: 20600

Compound	Sample conc.	SPK Level	SPK Result	Recovery %	Limits %	RP %
	For	Soil Matrix	(mg/kg)			
BL13			ory Control Sp	oikes		
D		0.200	0.21	105	65-125	
Benzene Toluene		0.200	0.22	110	65-125	
Ethyl Benzene		0.200	0.21	105	65-125	
Xylenes		0.600	0.64	107	65-125	
Surrogate Recoveries (%) <<						
rifluorotoluene (SS)				103	50-150	
	For	Soil Matrix	(mg/kg)			
BL14	1.37 03 /	- Laborat	ory Control Sp	ikes		
_		0.000	0.10	95	65-125	
Benzene		0.200 0.200	0.19 0.20	100	65-125	
Toluene		0.200	0.20	100	65-125	
Ethyl Benzene Xylenes		0.600	0.57	95	65-125	
> Surrogate Recoveries (%) <<						
Trifluorotoluene (SS)				105	50-150	
		Soil Matrix				
BL13	1.05 03 /	- Laborat	ory Control Sp	oikes		
Gasoline_Range		20	20	100	65-135	
BL14		Soil Matrix - Laborat	(mg/kg) cory Control Sp	oikes		
asoline_Range	_	20 Page 7 of 9	19	95	65-135	



Gasoline Range Petroleum Hydrocarbons and BTXE by EPA SW-846 5030/8015M/8020 Gasoline Range quantitated as all compounds from C6-C10

### Quality Assurance and Control Data

Laboratory Number: 20600

Compound	Sam con	ple c.	SPK Level	SPK Result	Recovery %	Limits %	RPI %
	BL131.05		oil Matrix 3 - Sample	(mg/kg) Spiked: 2059	5 - 01		
Benzene	ND		0.200	0.18/0.19	90/95	65-125	5
Toluene	ND		0.200	0.19/0.21	95/105	65-125	10
Ethyl Benzene	ND		0.200	0.19/0.20	95/100	65-125	5
Xylenes	ND		0.600	0.58/0.61	97/102	65-125	5
Surrogate Recoveries rifluorotoluene (SS)	(%) <<				98/98	50-150	
	BL141.37		oil Matrix 8 - Sample	(mg/kg) Spiked: 2060	0 - 02		
Benzene	ND		0.200	0.18/0.19	90/95	65-125	5
Toluene	ND		0.200	0.19/0.20	95/100	65-125	5
Ethyl Benzene	ND		0.200	0.19/0.20	95/100	65-125	5
Xylenes	ND		0.600	0.54/0.56	90/93	65-125	3
>> Surrogate Recoveries Trifluorotoluene (SS)	(%) <<				105/104	50-150	
	BL131.05		oil Matrix 5 - Sample	(mg/kg) Spiked: 2059	5 - 01		
Gasoline_Range	ND		20	19/19	95/95	65-135	0
	BL141.37		oil Matrix O - Sample	(mg/kg) Spiked: 2060	0 - 02		
asoline_Range	ND	Pa	20 ge 8 of 9	19/18	95/90	65-135	5





#### Definitions:

ND = Not Detected RL = Reporting Limit NA = Not Analysed

RPD = Relative Percent Difference

ug/L = parts per billion (ppb)
mg/L = parts per million (ppm)

ug/kg = parts per billion (ppb)
mg/kg = parts per million (ppm)





Laboratory No.: 20600

Client: COMPLIANCE & CLOSURE, INC.

Client Job No.: 12058-1

Date Received: December 7, 1995 Date Reported: December 21, 1995

Analysis for pH by EPA Method 9045

#	Sample ID	Date Sampled	Date Analyzed	Analyte	Results	
07	SP-1	12/07/95	12/12/95	рН	8.35	0
08	SP-2	12/07/95	12/12/95	рН	8.07	0
09	SP-3	12/07/95	12/12/95	рН	7.85	0
10	SP-4	12/07/95	12/12/95	рН	8.09	0
11	SP-5	12/07/95	12/12/95	рН	7.58	0
12	SP-6	12/07/95	12/12/95	рН	7.88	o
	SP-7	12/07/95	12/12/95	рН	8.78	o
	SP-8	12/07/95	12/12/95	рН	8.19	o
15	SP-9	12/07/95	12/12/95	рН	8.18	o
16	SP-10	12/07/95	12/12/95	рН	7.75	0
QC QC	DUP - SP-9 DUP - SP-9	Soil Soil	12/15/95 12/13/95	рН	8.11/8.18	RPD= 1 (<25)

Senior Chemist Account Manager



# **Analytical Laboratory**

PLIANCE & CLOSURE, INC. n: GARY MULKEY Project 12058-1 Reported on December 19, 1995

EPA	SW-846	Method	6010	and/or	7000	Series	Metals
-----	--------	--------	------	--------	------	--------	--------

	EFA SW-040 Nectica 00	TO an	a, or 7000	001100	coard		
Chronology					Labo	ratory Num	ber 20600
Sample ID	Sam	pled	Received	Extract.	Analyzed	QC Batch	LAB#
SP-5	12/	07/95	12/07/95	12/11/95	12/11/95	BL111.44	. 11
QC Samples							
QC Batch #	QC Sample ID		Тур	eRef.	Matrix	Extract.	Analyzed
BL111.44-01	Method Blank		MB		Soil	12/11/95	12/11/95
BL111.44-02	Laboratory Spike		LS		Soil	12/11/95	12/11/95
BL111.44-03	Laboratory Spike Duplicate		LSI		Soil	12/11/95	12/11/95
BL111.44-04	NPD-WD-1		MS	20610-0	l Soil	12/11/95	12/11/95
BL111.44-05	NPD-WD-1		MSI	20610-0	l Soil	12/11/95	12/11/95



# **Analytical Laboratory**

PLIANCE & CLOSURE, INC.

Attn: GARY MULKEY

Project 12058-1 Reported on December 19, 1995

	EPA SW-846 Method 601	.0 and/or 7000 Series Meta	als	
LAB ID	Sample ID	Matrix	Dil.Factor	Moisture
20600-11	SP-5	Soil	1.0	_

RESULTS OF ANALYSIS

Compound

20600-11 Conc. RL mg/kg

Lead (SW-846 6010)

5.8 2.5



EPA SW-846 Method 6010 and/or 7000 Series Metals

Quality Assurance and Control Data

Laboratory Number: 20600 Method Blank(s)

BL111.44-01 Conc. RL mg/kg

Lead (SW-846 6010)

ND 2.5



EPA SW-846 Method 6010 and/or 7000 Series Metals

Quality Assurance and Control Data

Laboratory Number: 20600

Compound SPK Level SPK Result Recovery Limits RPD Sample conc. 용 For Soil Matrix (mg/kg) BL111.44 02 / 03 - Laboratory Control Spikes Lead (SW-846 6010) 50 51.6/52 103/104 75-125 For Soil Matrix (mg/kg) BL111.44 04 / 05 - Sample Spiked: 20610 - 01 Lead (SW-846 6010) 56.2/51.6 100/91 6 50 75-125 9

#### Definitions:

ND = Not Detected RL = Reporting Limit NA = Not Analysed

RPD = Relative Percent Difference
ug/L = parts per billion (ppb)

ug/L = parts per billion (ppb)
mg/L = parts per million (ppm)

ug/kg = parts per billion (ppb)
mg/kg = parts per million (ppm)

G - The variation in spike recoveries reflects the nonhomogeneity of the sample.

R - MS and/or MSD recoveries were out of control limits. LCS / LCSD recoveries were within acceptable limits.

1252 Quarry Lane P.O. Box 9019 Pleasanton, CA 94566 (510) 426-2600 Fax (510) 426-0106



December 21, 1995

Ms. Sandra Cassina Kea SUPERIOR ANALYTICAL LABORATORY 825 Arnold Drive, Suite 114 Martinez, CA 94553

> Client Ref.: 12058-1/20600 Clayton Project No.: 95121.03

Dear Ms. Kea:

Attached is our analytical laboratory report for the samples received on December 8, 1995. Following the cover letter is the Quality Control Narrative detailing sample information/problems and a summary of the quality control issues. Also enclosed is a copy of the Chain-of-Custody record acknowledging receipt of these samples.

Please note that any unused portion of the samples will be discarded after January 20, 1996, unless you have requested otherwise.

We appreciate the opportunity to assist you. If you have any questions concerning this report, please contact Suzanne Haus, Client Services Supervisor, at (510) 426-2657.

Sincerely,

Harriotte A. Hurley, CIH
Director, Laboratory Services
San Francisco Regional Office

HAH/tjb

Attachments

Page 1a

## QUALITY CONTROL NARRATIVE for

Superior Analytical Laboratory Client Reference: 12058-1/20600 Clayton Project No. 95121.03

#### Sample Information/Problems:

There were no problems with sample receipt.

#### Analytical Problems:

No problems were encountered with the sample analyses.

#### Quality Control:

The quality control data is summarized in the Quality Assurance Data Package, which follows the analytical report.

- MS/MSD: A matrix spike and matrix spike duplicate were analyzed where applicable, and all results were acceptable.
- ICV/CCV: Response for all analytes met Clayton acceptance criteria.

Quality Assurance Results Summary

Matrix Spike/Matrix Spike Duplicate Results

for

Clayton Project No. 95121.03



#### Quality Assurance Results Summary -





Clayton Project No. 95121.03

Clayton Lab Number: Ext./Prep. Method:

9512103-10A EPA 7.3.3.2

Date: Analyst:

Std. Source: Sample Matrix/Media: 12/18/95 MALL 6881

SOIL

Analytical Method:

Instrument ID: Date:

EPA 7.3.3.2 07487 12/20/95 12:45 HYW

Time: Analyst: Units: QC Batch No:

mg/Kg 9512203H

Analyte	Sample Result	Spike Level	Matrix Spike Result	MS Recovery (%)	Matrix Spike Duplicate Result	MSD Recovery (%)	Average Recovery (% R)	LCL (% R)	UCL (% R)	RPD (%)	UCL (%RPD)
REACTIVE CYANIDE	ND	2.00	1.45	72	1.47	74	73	50	125	1.9	25



#### Quality Assurance Results Summary -





Clayton Project No. 95121.03

Clayton Lab Number: Ext./Prep. Method: Date:

9512103-10A EPA 7.3.4.2

Analyst:

Std. Source: Sample Matrix/Media: 12/18/95

TT BAKER 611700

SOIL

Analytical Method: Instrument ID:

80000 12/19/95 11:10 HYW

Time: Analyst: Units: QC Batch No:

Date:

mg/Kg 9512191H

EPA 7.3.4.2

Analyte	Sample Result	Spike Level	Matrix Spike Result	MS Recovery (%)	Matrix Spike Duplicate Result	MSD Recovery (%)	Average Recovery (% R)	LCL (% R)	UCL (% R)	RPD (%)	UCL (%RPD)
REACTIVE SULFIDE	ND	272	272	100	264	97	99	50	125	3.0	30

DEC-11-95 MON 03:33 PM SUPERIOR ANALYTICAL LAB

951210

## CHAIN OF CUSTODY AND ANALYSIS REQUEST

<b>5</b> :	Paula	SALs Job Number: 20600 - 426-0172 .	From	٠,	Sandra	a Ked

Superior Analytical Laboratory

825 Arnold Dr. Suite 114

Martinez, CA 94553

Contact:

Fax/Tel.: 510-229-1526/510-313-0850

Sandra Cassina Kea

Bill to: Superior Analytical Laboratory

P.O. Box. 2648

Martinez, California 94553

Project: 12058-1 20600 P.O.:

Work Subcontracted to : Clayton Env. Consultants

1252 Quarry Lane Pleasanton, CA 94566

Phone 510-4262657 Fax 510-.

Lal	b# Client ID	Sampled	#Con Pres.	Due	Analysis
07	SP-1	SO 12/07/95	1	12/14/95	REACT
08	SP-2	so 12/07/95	1	12/14/95	REACT
09	SP-3	SO 12/07/95	1	12/14/95	REACT
10	SP-4	SO 12/07/95	1	12/14/95	REACT
$\mathbf{Q}_1$	SP-5	SO 12/07/95	1	12/14/95	REACT
	SP-6	SO 12/07/95	1	12/14/95	REACT
13	SP-7	so 12/07/95	1	12/14/95	REACT
14	SP-8	so 12/07/95	1	12/14/95	REACT
15		so 12/07/95	1	12/14/95	REACT
16		SO 12/07/95	1	12/14/95	REACT
	se client sample			V&L	
[	] Fax invoice o		Fax results	to SAL-M	artinez

	Samples stored in ice :	Approp	riate	Conte	iners	· —	Samples preserved	·	VOAs wi	thout	head	space :	
_				_		_	Received By:		Date:	1	1	Time	:
	elinquished By:	Date:	/	1	Time	-	Received By:		_ Date:	1	1	Time	ï
	elinquished By:	Date:	1	/	Time	•	Kecoure al.		-				

### CHAIN OF CUSTODY AND ANALYSIS REQUEST 9512103

SALs Job Number: 20600

Superior Analytical Laboratory

825 Arnold Dr. Suite 114

Martinez, CA 94553

Fax/Tel.: 510-229-1526/510-313-0850

Contact: Sandra Cassina Kea

Bill to: Superior Analytical Laboratory

P.O. Box. 2648 Martinez, California 94553

Project: 12058-1 P.O.: 20600

Work Subcontracted to : Clayton Env. Consultants

1252 Quarry Lane Pleasanton, CA 94566

Phone 510-4262657 Fax 510-

Lab	# Client ID		Sampled	#Con Pres.	Due	Analysis
07	SP-1	so	12/07/95	1	12/14/95	REACT OI A
08	SP-2	so	12/07/95	1	12/14/95	REACT O2
09	SP-3	so	12/07/95	1	12/14/95	REACT 03
10	SP-4	so	12/07/95	1	12/14/95	REACT 64
11	SP-5	so	12/07/95	1	12/14/95	REACT OF
12	SP-6	so	12/07/95	1	12/14/95	REACT 🕠
13	SP-7	so	12/07/95	1	12/14/95	REACT 07
14	SP-8	so	12/07/95	1	12/14/95	REACT 08
15	SP-9	so	12/07/95	1	12/14/95	REACT 09
16	SP-10	so	12/07/95	1	12/14/95	REACT (O

Use client sample ID on C.O.A !

[ ]	Fax	invoice	or	quote	ASAP	[X]	Fax	results	to	SAL-Martinez
-----	-----	---------	----	-------	------	-----	-----	---------	----	--------------

f / 1	Appropriate Containers :	η ,	VOAs without heads	
Relinquished By:	Bate 12108195 Time 1:550	Received By: To Ferry S		Time / :5-5
elinquished By:	Date: 2/8/97 Time 2:57	Received By: AND KINNE	Marte: 12/8/95	Time 2:57pm
	Dama 1	` ~ F 1	1	,

Page 1 of 1

<sup>[ ]</sup> Fax results to our client

## CHAIN OF CUSTODY AND ANALYSIS REQUEST

SALs Job Number: 20600

uperior Analytical Laboratory

325 Arnold Dr. Suite 114

Martinez, CA 94553

Fax/Tel.: 510-229-1526/510-313-0850

Contact: Sandra Cassina Kea

Bill to: Superior Analytical Laboratory

P.O. Box. 2648

Martinez, California 94553

Project: 12058-1 P.O.: 20600

Work Subcontracted to : Clayton Env. Consultants

1252 Quarry Lane Pleasanton, CA 94566

Phone 510-4262657 Fax 510-

Lab	# Client ID		Sampled	#Con	Pres.	Due	Analysis
12	SP-6	SO	12/07/95	1	NO	12/15/95	FLASHPT
13	SP-7	so	12/07/95	1	NO	12/15/95	FLASHPT
14	SP-8	SO	12/07/95	1	NO	12/15/95	FLASHPT
15	SP-9	SO	12/07/95	1	NO	12/15/95	FLASHPT
16	SP-10	SO	12/07/95	1	NO	12/15/95	FLASHPT
se	client sample ID on	C.(	O.A !				
[]	Fax invoice or quot	e A	SAP [X] I	ax re	esults	to SAL-Ma	artinez

	] ]	Fax	invoice	or	quote	ASAP	[X]	Fax	results	to	SAL-Marti	nez
--	-----	-----	---------	----	-------	------	-----	-----	---------	----	-----------	-----

[ ] Fax results to our client

		VOAs without headspace :
Relinguished By: 1 Thompate: 17,30,16 Time/0:05	Received By: BBOOK	- Date:にため/タラ Time/0:0 5
inquished By: Boly Osol Date: 12 120 Ft Time : 55	Received By: Shy Blad	Date 2 /20 / 95 Time/2: 55



of 2 Page 2

#### Analytical Results for

Superior Analytical Laboratory Client Reference: 12058-1/20600 Clayton Project No. 95122.53

Sample Identification: See Below

Date Received: 12/20/95

Lab Number:

9512253

Date Analyzed: 12/20/95

Sample Matrix/Media: Method Reference:

EPA 1030

SOIL

Lab Number	Sample Identification	Date Sampled	Ignitability (Degrees F)	Method Detection Limit (Degrees F)
-01	SP-6	12/07/95	N.I.	
-02	SP-7	12/07/95	N.I.	
-03	SP-8	12/07/95	N.I.	
-04	SP-9	12/07/95	N.I.	
<b>2</b> 5	SP-10	12/07/95	N.I.	

Not detected at or above limit of detection Information not available or not applicable

NI = Not Ignitable

Page 2 of 3

#### Analytical Results for

Superior Analytical Laboratory Client Reference: 12058-1 / 20600 Clayton Project No. 95121.03

Sample Identification: See Below

12/08/95 12/20/95

Date Received:

Date Analyzed:

Lab Number:

9512103

Sample Matrix/Media:

SOIL

Method Reference:

SW 7.3.3.2

Lab Number	Sample Identification	Date Sampled	Reactive Cyanide (mg/kg)	Method Detection Limit (mg/kg)
-01	SP-1	12/07/95	<1	1
-02	SP-2	12/07/95	<1	1
-03	SP-3	12/07/95	<1	1
-04	SP-4	12/07/95	<1	1
<del>-</del> 5	SP-5	12/07/95	<1	1
	SP-6	12/07/95	<1	1
	SP-7	12/07/95	<1	1
-08	SP-8	12/07/95	<1	1
-09	SP-9	12/07/95	<1	1
-10	SP-10	12/07/95	<1	1
-11	METHOD BLANK	<del>-</del> -	<1	1

ND: Not detected at or above limit of detection Information not available or not applicable



Page 3 of 3

## Analytical Results

for

Superior Analytical Laboratory Client Reference: 12058-1 / 20600 Clayton Project No. 95121.03

Sample Identification: See Below

12/08/95 12/19/95

Date Received:

Date Analyzed:

Lab Number:

9512103

Sample Matrix/Media:

SOIL

Method Reference:

SW 7.3.4.2

Lab Number	Sample Identification	Date Sampled	Reactive Sulfide (mg/kg)	Method Detection Limit (mg/kg)
-01	SP-1	12/07/95	<10	10
-02	SP-2	12/07/95	<10	10
-03	SP-3	12/07/95	<10	10
-04	SP-4	12/07/95	<10	10
<b>6</b> 5	SP-5	12/07/95	<10	10
	SP-6	12/07/95	<10	10
	SP-7	12/07/95	<10	10
-08	SP-8	12/07/95	<10	10
-09	SP-9	12/07/95	<10	10
-10	SP-10	12/07/95	<10	10
-11	METHOD BLANK	<b>-</b> -	<10	10

Not detected at or above limit of detection ND: Information not available or not applicable



Uncovering top of fuel tanks under sidewalk adjacent to 30th Street.







Adding dry ice to the fuel tanks prior to removal



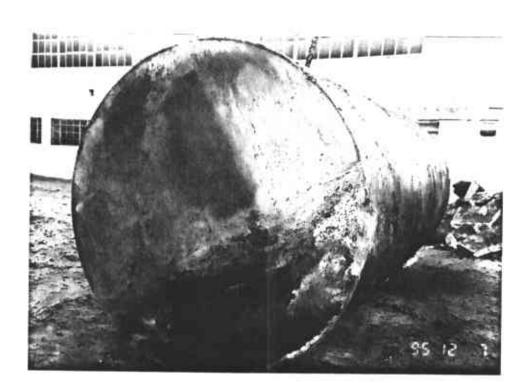




View of Tank No. 1 prior to being removed. Note the concrete separation wall between the two tanks. The separation wall was left in place.







View of removed fuel tank. Tank appeared to be in very good condition with minor corrosion.







Views of soil contamination on the southwest and southeast sides of the excavation. There was approximately 6-inches of rain water at the bottom of the excavation.









(TOP) - View of the site excavation activity, (Bottom) - View of the stockpiled soil.



