

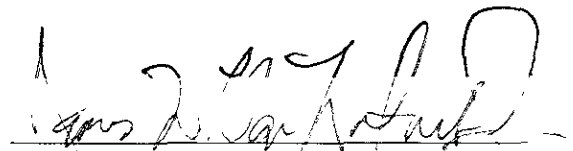
March 94

**UNDERGROUND STORAGE TANK CLOSURE
DOCUMENTATION REPORT
ARATEX SERVICES, INC.
OAKLAND, CA**

**PREPARED FOR
ARATEX SERVICES, INC.
SCHAUMBURG, IL**

**PREPARED BY
RMT, INC.
MARINA DEL REY, CA**

MARCH 1994



James W. Van Nortwick, Jr., Ph.D., P.E.
Project Manager



RMT, INC. — LOS ANGELES
4640 ADMIRALTY WAY SUITE 301
MARINA DEL REY, CA 90292-6621
310/578-1241 310/821-3280 FAX

March 16, 1994

Ms. Jennifer Eberle
Alameda County Health Care Service Agency
Department of Environmental Health
UST Local Oversight Program
80 Swan Way, Room 200
Oakland, CA 94621

RE: UNDERGROUND STORAGE TANK CLOSURE DOCUMENTATION REPORT
Aratex Services, Inc., 330 Chestnut Street, Oakland, California

Dear Ms. Eberle:

July
On September 29, 1993, three underground storage tanks were removed from the referenced facility in compliance with the Alameda County Health Care Service Agency, Department of Environmental Health (ACHCSA) regulations and permits.

No visual evidence of impact damage, holes, pitting, corrosion, or contamination were apparent during the gasoline and diesel fuel storage tank removal activities and the tanks appeared structurally sound. Some pitting and corrosion was observed on the bottom of the mop oil tank during removal activities, however, the integrity of the tank did not appear to be compromised. Evidence of a diesel fuel release was identified in the vicinity of the diesel fuel dispenser vault area and the fuel regulator located along the loading dock wall. In addition, evidence of a product release was also identified in the mop oil tank excavation. The results of additional soil sampling activities indicated that the extent of diesel fuel-impacted soil was limited to the area immediately surrounding the dispenser vaults and diesel fuel regulator. Based on these findings, additional soil excavation activities were conducted in January 1994.

The results of the tank removal activities and additional soil excavation and sampling activities are presented in the enclosed underground storage tank removal documentation report. If you have any questions or comments please feel free to contact me at (310) 578-1241.

Sincerely,

James W. Van Nortwick, Jr.
James W. Van Nortwick, Jr., Ph.D., P.E.
Project Manager

Enc: Underground Storage Tank Closure Documentation Report

cc: Robert J. Robbins, C.P.G.
Phillip Krejci
File: 505/Tanks



RMT, Inc. — LOS ANGELES
4640 ADMIRALTY WAY SUITE 301
MARINA DEL REY, CA 90292-6621
310/578-1241 310/821-3280 FAX

TABLE OF CONTENTS

<u>Section</u>		<u>Page</u>
1.	INTRODUCTION	1
	1.1 Background	1
	1.2 Purpose and Scope	4
2.	TANK REMOVAL ACTIVITIES	5
	2.1 Tank Removal Permits	5
	2.2 Excavation of Overburden	5
	2.3 Pumping, Rinsing, and Degassing	5
	2.4 Tank Removal Procedures	6
	2.5 Soil Sampling Procedures	6
	2.6 Chemical Analyses of Soil	8
	2.7 Excavation Backfill and Surface Restoration	8
3.	SOIL SAMPLING ACTIVITIES	12
	3.1 Soil Sampling Procedures	12
	3.2 Chemical Analyses of Soil	12
4.	SOIL EXCAVATION ACTIVITIES	14
	4.1 Soil Excavation Procedures	14
	4.2 Soil Sampling Procedures	14
	4.3 Chemical Analyses of Soil	16
	4.4 Excavation Backfill and Surface Restoration	17
5.	UNDERGROUND STORAGE TANK CLOSURE	18
	5.1 Summary of Results	18
	5.2 Request for Site Closure - Diesel Fuel and Gasoline Storage Tank Area	19
	5.3 Request for Site Closure - Mop Oil Tank Area	20

List of Figures

Figure 1	Site Location Map	2
Figure 2	Site Plan	3
Figure 3	Sampling Locations - Tank Removal Activities	7
Figure 4	Chemical Analyses - Mop Oil, Diesel Fuel, and Gasoline Tank Areas	9
Figure 5	Chemical Analyses - Diesel Fuel Dispenser Vault Area	10
Figure 6	Chemical Analyses - Soil Sampling Activities	13
Figure 7	Chemical Analyses - Soil Excavation Activities	15

List of Tables

Table 1	Underground Storage Tank Information	1
Table 2	Chemical Analyses - Tank Removal Activities	11
Table 3	Chemical Analyses - Soil Sampling Activities	12
Table 4	Excavation Area Dimensions and Sampling Depths	16
Table 5	Chemical Analyses - Soil Excavation Activities	16

List of Appendices

Appendix A	Tank Removal Permits
Appendix B	Hazardous Waste Disposal Manifest
Appendix C	City of Oakland Inspection Report/Dry Ice Receipts
Appendix D	Alameda County Department of Environmental Health Inspection Reports
Appendix E	Tank Disposal Manifests and Destruction Certificates
Appendix F	Photo-documentation of Tank Removal Activities
Appendix G	Material Safety and Data Sheet - Mop Oil
Appendix H	Laboratory Reports - Tank Removal Activities
Appendix I	Laboratory Reports - Soil Sampling Activities
Appendix J	Soil Excavation Work Plan
Appendix K	Bills of Lading and Certificate of Recycling
Appendix L	Photo-documentation of Soil Excavation Activities
Appendix M	Laboratory Reports - Soil Excavation Activities

Section 1
INTRODUCTION

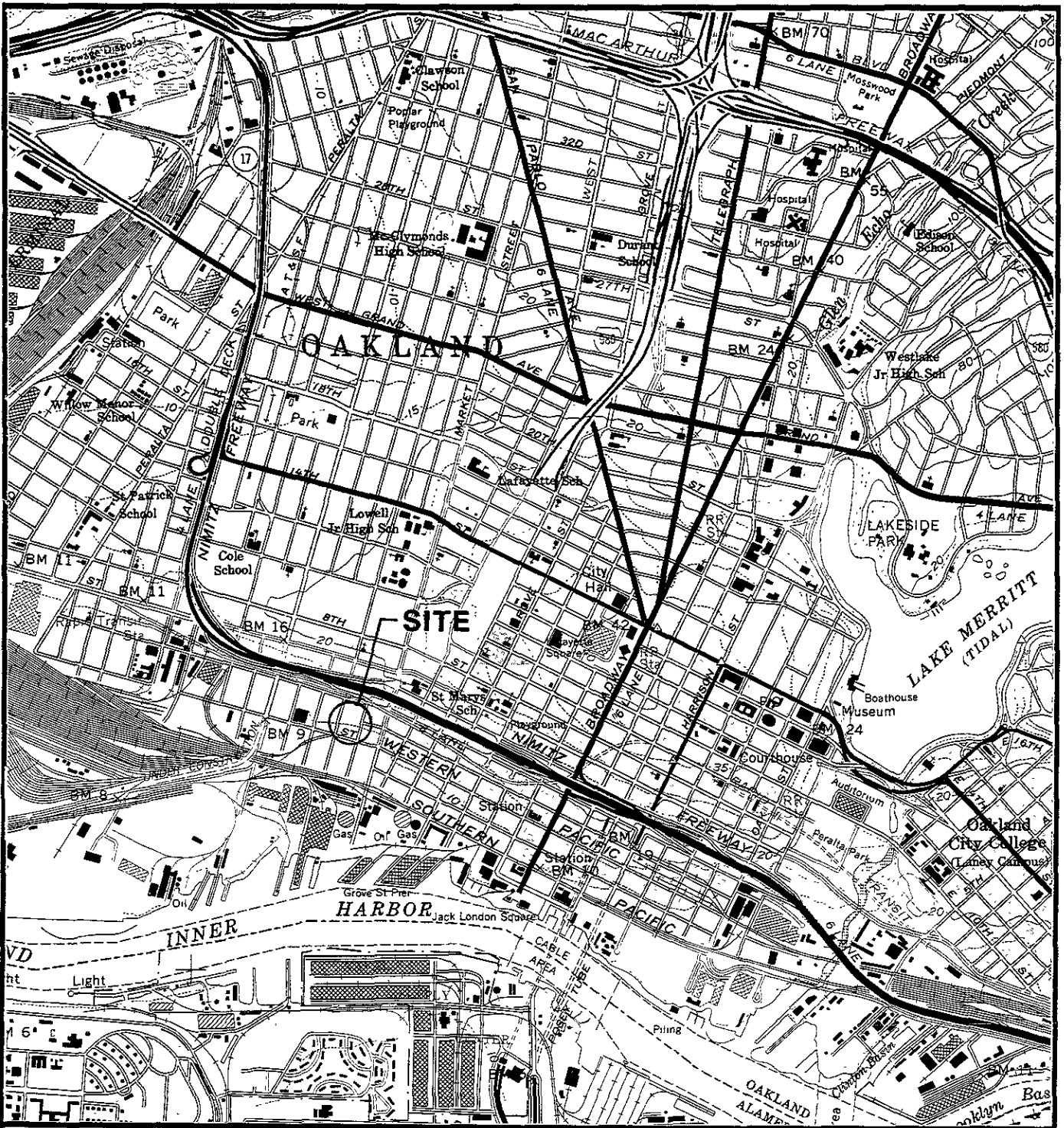
1.1 Background

Aratex Services, Inc., (ARATEX) owns and operates an industrial laundry facility located at 330 Chestnut Street in Oakland, California. Two single walled, steel, underground petroleum hydrocarbon storage tanks were maintained at this facility to supply fuel for the delivery vehicles. In addition, an underground mop oil storage tank was also maintained at the facility. RMT, Inc. (RMT) was retained by ARATEX to document the removal and disposal of the underground storage tanks and perform soil sampling as required by the Alameda County Health Care Service Agency, Department of Environmental Health (ACHCSA). ARATEX arranged with Paradiso Construction Company (Paradiso) to provide for the tank removal. Paradiso was responsible for the means and methods of the residual product removal and disposal, tank removal, excavation backfilling, and their necessary health-and-safety considerations. Copies of the ACHCSA and City of Oakland tank removal permits, uniform hazardous waste manifest, tank destruction certificate, ACHCSA inspection forms, City of Oakland inspection reports, chain-of-custody documents, and laboratory reports are presented in the appendices.

The approximate dimensions and capacities of each tank are summarized in Table 1. All three underground storage tanks were installed approximately 15 years ago and were located approximately 2.5 ft to 3.5 ft below ground surface (bgs) along the eastern property boundary near the mop oil building. A general area map is presented in Figure 1, a site plan of the facility showing the former location of the underground gasoline storage tank is shown in Figure 2.

TABLE 1
Underground Storage Tank Information

Tank Contents	Tank Dimensions	Tank Capacity
Gasoline	8-ft Diameter x 13-ft Length	5,000-gallons ✓
Mop Oil	8-ft Diameter x 27-ft Length	10,000-gallons
Diesel Fuel	8-ft Diameter x 32-ft Length	12,000-gallons ✓



NOTE: BASE MAP TAKEN FROM OAKLAND WEST,
CALIFORNIA USGS 7.5 Min. QUADRANGLE

ARATEX - OAKLAND
OAKLAND, CALIFORNIA
SITE LOCATION MAP

NORTH
SCALE: 1 = 2000



OWN. BY	RAS
DATE	SEPT. 1993
PROJ #	12036.01
FILE #	0101

FIGURE 1

ST. 1

CHESTNUT

PARKING
AREA

8' HIGH CHAINLINK
FENCE

TRUCK
WELL

FORMER
MOP OIL
TANK

MOP OIL
BUILDING

CONCRETE
PAD
wasteoil

shed

FORMER
DIESEL
TANK

FUEL
ISLAND

FORMER
GASOLINE
TANK

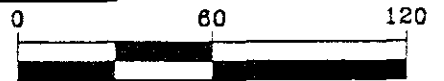
TRUCK
WELL

ARATEX
RED STAR
330 CHESTNUT STREET
OAKLAND, CALIFORNIA

*East Bay
Ford*

THIRD

ST.



SCALE: 1" = 60'

SITE PLAN



OWN. BY:	RAS
DATE:	FEB., 1994
PROJ. #	12013.11
FILE #	1102

FIGURE 2

1.2 Purpose and Scope

The purpose of this report is to provide written documentation of the underground tank removal activities, additional soil sampling activities, and soil excavation activities in compliance with ACHCSA tank closure regulations. The scope of RMT's documentation is limited to the following:

- Observation of the tank removal activities related to the 5,000-gallon gasoline tank, the 10,000-gallon mop oil tank, and the 12,000-gallon diesel fuel tank (tank decontamination, excavation, and backfilling procedures, and condition of the tank, piping, and surrounding soils).
- Air monitoring, soil sampling, laboratory analyses, and interpretation of results.
- Additional soil sampling activities to determine the extent of petroleum hydrocarbon-impacted soil.
- Observation of soil excavation and disposal activities.
- Preparation of tank closure documentation report including copies of permits, soil disposal manifests, tank destruction certification, site inspection reports, and laboratory results (as provided by the involved parties).

Section 2 TANK REMOVAL ACTIVITIES

2.1 Tank Removal Permits

Underground storage tank removal permits were received from the Alameda County Health Care Services Agency, Department of Environmental Health, Hazardous Materials Division and the City of Oakland on July 23, 1993, and tank removal activities were initiated on June 28, 1993. Copies of the tank removal permits are included in Appendix A.

July?

2.2 Excavation of Overburden

The underground storage tank removal activities were conducted by Paradiso Construction Company of San Leandro, California. Tank removal activities included the removal of the asphalt overlying the tanks, the excavation of the overburden soil to expose the tanks, and the removal of the tanks from the excavations. The asphalt material and soil removed from the excavations were stockpiled on-site.

During soil excavation activities the presence of potential soil contamination was continuously monitored using visual indications as well as an organic vapor monitor (OVM). Although no evidence of petroleum contamination was observed in the overburden soil or soil surrounding the gasoline tank piping, OVM measurements recorded in the vicinity of the diesel fuel fill pie and dispenser identified the presence of vapor-phase volatile organic compounds (VOC).

2.3 Pumping, Rinsing, and Degassing

Prior to initiating degassing activities, approximately 400 gallons of petroleum hydrocarbons and rinsate were removed from the petroleum product storage tanks and transported by Erickson, Inc., (Erickson) of Richmond, California, for disposal at Gibson Oil/Pilot Petroleum in Redwood City, California. A copy of the hazardous waste manifest is presented in Appendix B.

The tanks were degassed by venting off-gases and by the addition of approximately 50 lbs of dry ice per 1,000 gallons of tank capacity to the inside of the each tank until LEL readings were below 10 percent. The LEL reading was certified by a representative of the City of Oakland, Fire Prevention Bureau before the tank was removed from the excavation. Copies of the City of Oakland inspection reports are presented in Appendix C.

2.4 Tank Removal Procedures

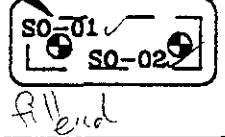
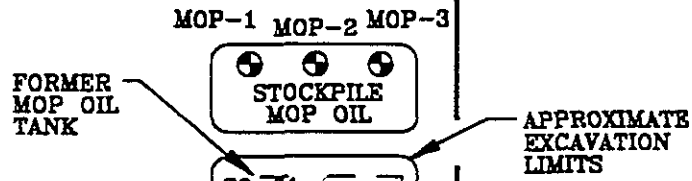
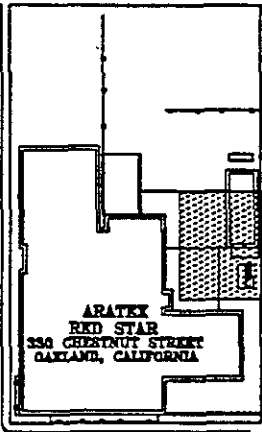
When tank degassing operations had been completed, the storage tanks were removed from the excavations and inspected for structural integrity and evidence of corrosion. All tank seams and welds were scraped and inspected for holes or cracks. No signs of impact damage, holes, pitting, or corrosion were apparent and the petroleum product tanks appeared structurally sound. Although some pitting and corrosion was observed in the bottom of the mop oil tank, no signs of impact damage or holes were noted and the tank appeared to be structurally sound. All tanks were transported from the site by Erickson of for destruction at the Erickson facility. The tank disposal manifests and destruction certificates are presented in Appendix D. *DE ✓*

The presence of potential soil contamination was monitored during tank removal activities using visual indications and an OVM. Evidence of product releases were observed in the soils immediately underlying the mop oil tank and surrounding the diesel fuel fill pipe and dispensers.

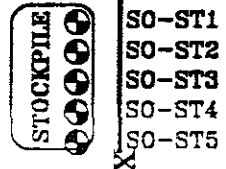
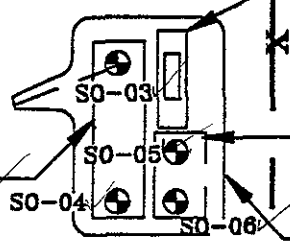
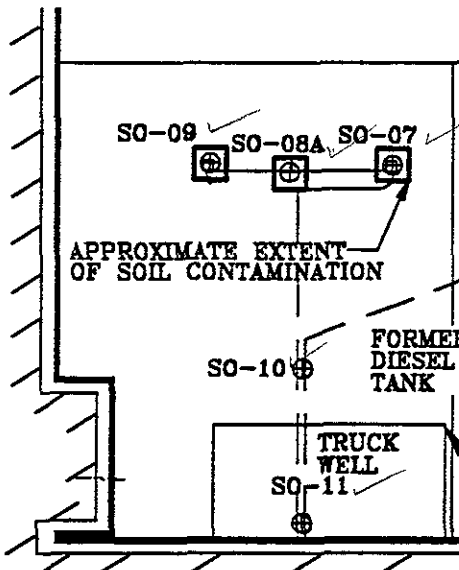
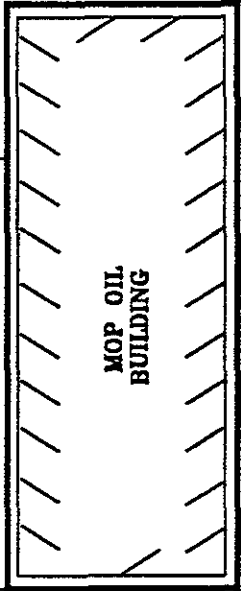
A representative of the ACHCSA was on-site during the tank removal activities and inspected the tanks, excavation areas, and stockpiled soils. *✓* Approximately 100 yds³ of soil were removed from the gasoline/diesel fuel tank excavation and stockpiled on-site pending chemical analyses. In addition, approximately 75 yds³ of soil removed from the mop oil excavation was also stockpiled on-site pending chemical analyses. Groundwater was not encountered during the petroleum product tank removal activities, however, a small amount of groundwater was encountered during the removal of the mop oil tank. ACHCSA inspection forms are included in Appendix E and photographs documenting the tank removal activities are presented in Appendix F. *✓*

2.5 Soil Sampling Procedures

The stratigraphy at the site, in the vicinity of the excavation, consists primarily of sandy silty clay. Soil sampling activities were conducted after tank excavation activities had been completed. Soil samples were collected from the north and south ends of the gasoline and diesel fuel tank excavation floors at a depths ranging between approximately 11.5 ft to 13 ft bgs. Soil samples were also collected from the floor of the east and west ends of the mop oil excavation floor at a depth of approximately 14 ft bgs. Soil sampling locations were selected based on OVM readings and instructions from Ms. Jennifer Eberle, of the ACHCSA. Composite samples of the overburden soil removed from the gasoline/diesel fuel excavation area and mop oil excavation were also collected for chemical analyses at the request of the ACHCSA. A site plan showing the soil sampling locations is presented in Figure 3.



CONCRETE PAD



SAMPLING LOCATIONS
TANK REMOVAL ACTIVITIES



DWN. BY:	RAS
DATE:	FEB., 1994
PROJ. #	12013.11
FILE #	1103

FIGURE 3

The soil samples were collected by RMT using a stainless steel sampler. The sampler was decontaminated prior to sampling and between each sampling event by scrubbing with tri-sodium phosphate (TSP) and rinsing with organic-free deionized water to minimize the possibility of sample contamination. All soil samples were placed in glass sampling jars equipped with teflon lids, capped, sealed, and stored on ice pending shipment to a California certified independent laboratory following standard chain-of-custody procedures.

2.6 Chemical Analyses of Soil

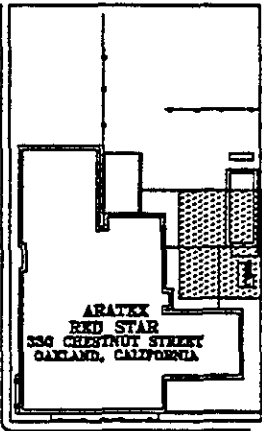
Soil samples collected from the floor of the gasoline/diesel fuel excavation and the stockpiled overburden soil were analyzed for the presence of total petroleum hydrocarbons as gasoline (TPH-G) and diesel (TPH-D), benzene, toluene, ethylbenzene, and xylenes (BTEX), and organic lead using a California modified EPA SW-846 Method 8015, Method 8020, and Flame Atomic Absorption, respectively. Soil samples collected from the floor of the mop oil excavation were analyzed for the presence of total recoverable petroleum hydrocarbons (TRPH), and TPH-G, TPH-D, TPH as mineral spirits (TPH-MS), TPH as kerosene (TPH-K), and TPH as motor oil (TPH-MO), using a EPA SW-846 Method 418.1 and Method 8015M, respectively. The analytical procedures used in analyzing the soil samples collected from the mop oil excavation were selected based on the composition of the mop oil and conversations with Ms. Jennifer Eberle of the ACHCSA. A copy of the Material Safety and Data Sheet for the mop oil is included in Appendix G.

In addition, composite soil samples collected from the stockpiled overburden soil removed from the mop oil excavation were analyzed for TRPH using EPA SW-846 Method 418.1. The results of the chemical analyses performed on the soil samples are summarized in Table 1 and presented in Figures 4 and 5. A copy of the laboratory report is presented in Appendix H.

2.7 Excavation Backfill and Surface Restoration

Following soil sampling analyses, the gasoline/diesel fuel tank excavation and the mop oil excavation were backfilled with a mixture of imported fill material and the overburden soil. The excavation area was covered with asphalt and paved to match the existing grade.

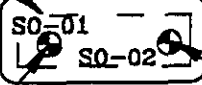
was OK'd for backfill



FORMER
MOP OIL
TANK

STOCKPILE
MOP OIL

APPROXIMATE
EXCAVATION
LIMITS

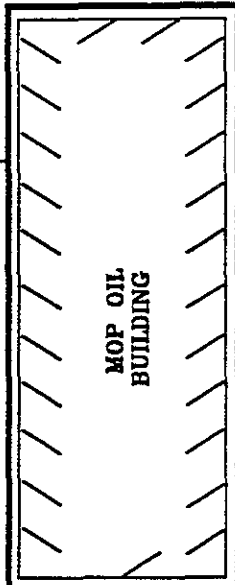


TPH-S <10, <100 ✓
TRPH <5 ✓

? it means
TPH-g, -ms,
-k, -d, +-mo.

TPH-S <10, <100 ✓
TRPH <5 ✓

CONCRETE
PAD



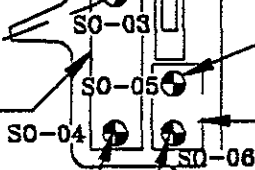
TPH-D =<1 ✓
B =<0.010 ✓
T =<0.010 ✓
E =<0.010 ✓
X =<0.15 ✓
Pb =<5 ✓

shed

FORMER
FUEL
ISLAND

TPH-G =<1 ✓
B =<0.010 ✓
T =<0.010 ✓
E =<0.010 ✓
X =<0.15 ✓
Pb =<5 ✓

FORMER
DIESEL
TANK



FORMER
GASOLINE
TANK

TRUCK
WELL

APPROXIMATE
EXCAVATION
LIMITS

TPH-D =<10 ✓
B =<0.010 ✓
T =<0.010 ✓
E =<0.010 ✓
X =<0.15 ✓



TPH-G =<1 ✓
B =<0.010 ✓
T =<0.010 ✓
E =<0.010 ✓
X =<0.15 ✓
Pb =<5 ✓

NOTE:

ALL CONCENTRATIONS
IN mg/kg



SCALE: 1" = 30'

CHEMICAL ANALYSES
MOP OIL, DIESEL FUEL,
AND GASOLINE TANK AREAS



DWN. BY:	RAS
DATE:	FEB., 1994
PROJ. #	12013.11
FILE #	1104

FIGURE 4

TPH-D = 62 ✓
 B = <0.010
 T = <0.010
 E = <0.010
 X = 0.059

TPH-D = 9,400 ✓
 B = <0.010
 T = <0.010
 E = <0.010
 X = <0.15

TPH-D = 1,300 ✓
 B = 0.014
 T = 0.021
 E = <0.005
 X = <0.15

TPH-D = <10 ✓
 B = <0.010
 T = <0.010
 E = <0.010
 X = <0.15

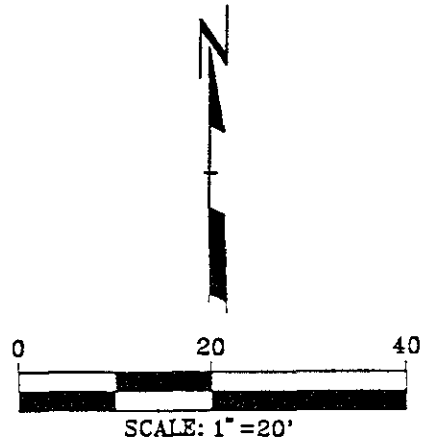
TPH-D = 4,200 ✓
 B = 0.010
 T = 0.009
 E = <0.005
 X = 0.015

LEGEND:

⊕ SOIL SAMPLE LOCATIONS

NOTE:

ALL CONCENTRATIONS
 IN mg/Kg



CHEMICAL ANALYSES
 DIESEL FUEL DISPENSER
 VAULT AREA

RMT INC.	OWN. BY: RAS
	DATE: FEB., 1994
	PROJ. # 12013.11
	FILE # 1105

FIGURE 5

TABLE 2
Chemical Analyses - Tank Removal Activities

Sample Location	Sample Depth (ft-bgs)	Parameter (mg/kg)								
		TPH-G	TPH-D	TPH-MS/K/MO TRPH	TPH (418.1)	Benzene	Toluene	Ethylbenzene	Xylene	Lead
MOP OIL EXCAVATION										
SO-01	14	--	--	BMDL	--	--	--	--	--	--
SO-02	13	--	--	BMDL	--	--	--	--	--	--
GASOLINE/DIESEL FUEL EXCAVATION										
SO-03	12	--	<1	--	--	<0.010	<0.010	<0.010	<0.15	<5
SO-04	13	--	<10	--	--	<0.010	<0.010	<0.010	<0.15	--
SO-05	11.5	<1	--	--	--	<0.010	<0.010	<0.010	<0.15	<5
SO-06	13	<1	--	--	--	<0.010	<0.010	<0.010	<0.15	<5
DIESEL FUEL DISPENSER VAULTS/REGULATOR EXCAVATION										
SO-07	5	--	1,300	--	--	0.014	0.021	<0.005	<0.15	--
SO-08	5	--	9,400	--	--	<0.010	<0.010	<0.010	<0.15	--
SO-09	4	--	62	--	--	<0.010	<0.010	<0.010	0.59	--
SO-10	2	--	<10	--	--	<0.010	<0.010	<0.010	<0.15	--
SO-11	1	--	4,200	--	--	0.010	0.009	<0.005	0.015	--
STOCKPILED SOIL - GASOLINE/DIESEL FUEL EXCAVATION										
SO-ST1	NA	<1	36	--	--	<0.010	<0.010	<0.010	<0.15	21
SO-ST2	NA	<1	23	--	--	<0.010	<0.010	<0.010	<0.15	18
SO-ST3	NA	<1	<10	--	--	<0.010	<0.010	<0.010	<0.15	9
SO-ST4	NA	<1	<10	--	--	<0.010	<0.010	<0.010	<0.15	26
SO-ST5	NA	<1	<10	--	--	<0.010	<0.010	<0.010	<0.15	44
STOCKPILED SOIL - MOP OIL EXCAVATION										
MOP-1	NA	--	--	--	290	--	--	--	--	--
MOP-2	NA	--	--	--	110	--	--	--	--	--
MOP-3	NA	--	--	--	140	--	--	--	--	--

BMDL - Below Method Detection Limit
 TPH-MS = 10 mg/kg
 TPH-K = 10 mg/kg
 TPH-MO = 100 mg/kg
 TRPH = 5 mg/kg

NA - Not Applicable
 -- - Not Analyzed

but will be MWS

Section 3
SOIL SAMPLING ACTIVITIES

The results of the soil sampling activities conducted during the tank removal activities identified the presence of petroleum hydrocarbons in the soil underlying the former diesel fuel dispenser vaults and regulator. Based on these findings, additional soil sampling activities were conducted in the vicinity of both the diesel fuel dispenser vaults and the regulator to determine the extent of petroleum hydrocarbon-impacted soil.

3.1 Soil Sampling Procedures

Soil sampling activities were conducted in September 1993, and included the advancement of ten soil boring (SB-1 through SB-4, SB-6, SB-7, SB-10 through SB-12, and SB-14). Each borehole was advanced to a depth of approximately 10 ft bgs using hand augering techniques. Soil samples were collected at depths of approximately 5 and 10-ft bgs using a stainless steel sampler. Based on PID readings and visual observations noted during sample collection, several soil samples were submitted for chemical analyses. Soil sampling locations are presented in Figure 6.

3.2 Chemical Analyses of Soil

Soil samples collected from the diesel fuel dispenser vault and regulator areas during the soil sampling activities were analyzed for the presence of TPH-D and BTEX using EPA SW-846 Methods 8015 (California modified) and Method 8020, respectively. The results of the chemical analyses performed are presented in Table 3 and Figure 6. A copy of the laboratory report is presented in Appendix I.

TABLE 3

Chemical Analyses - Soil Sampling Activities

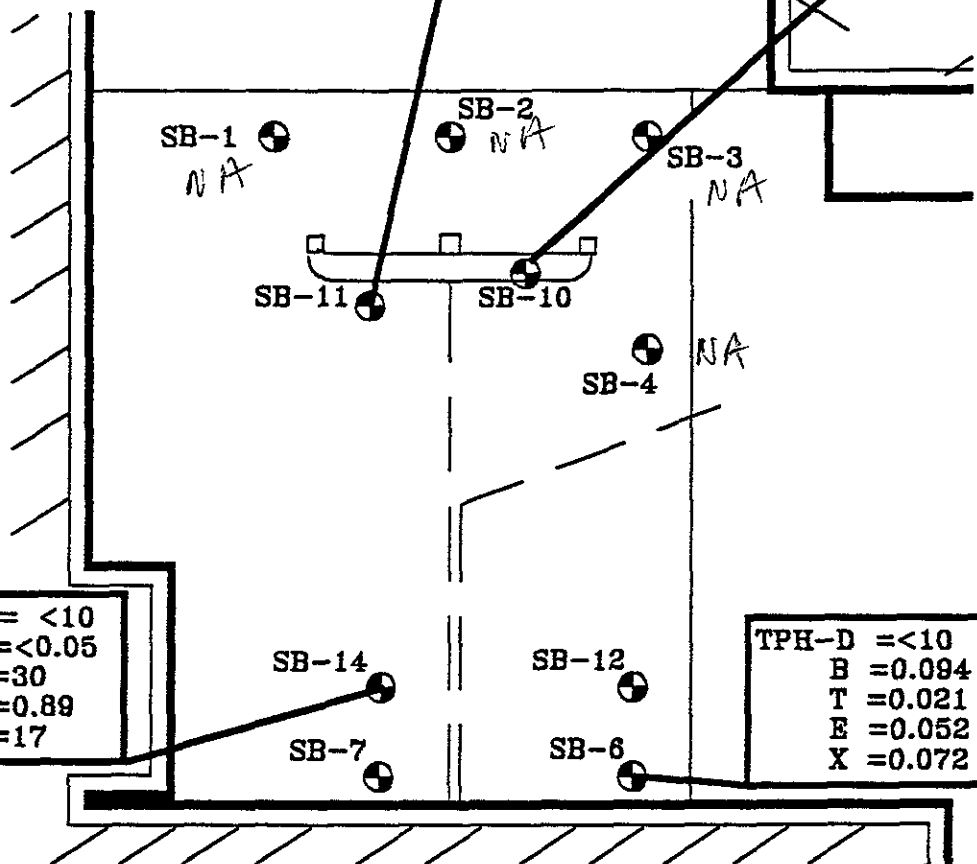
9-93

Sample Location	Sample Depth (ft bgs)	Parameter (mg/kg)				
		TPH-D	Benzene	Toluene	Ethylbenzene	Xylene
SB-06-5	5	<10	0.094	0.021	0.052	0.072
SB-10-5	5	<10	<0.005	<0.005	<0.005	<0.005
SB-11-5	5	--	<0.05	30	0.89	17
SB-14-5	5	<10 ^a	<0.005	<0.005	<0.005	<0.005

a - Hydrocarbon pattern not indicative of diesel fuel (pattern resembles motor oil)

TPH-D = NA
 B = <0.05
 T = <0.005
 E = <0.005
 X = <0.015

TPH-D = <10
 B = <0.005
 T = <0.005
 E = <0.015
 X = <0.015



TPH-D = <10
 B = <0.05
 T = 30
 E = 0.89
 X = 17

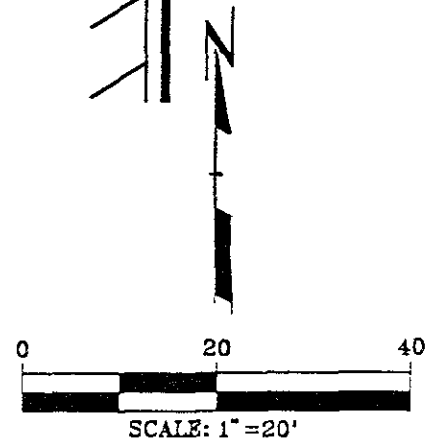
TPH-D = <10
 B = 0.094
 T = 0.021
 E = 0.052
 X = 0.072

LEGEND:

⊕ SOIL SAMPLE LOCATIONS AND ANALYTICAL RESULTS

NOTE:

- 1 SAMPLE DEPTH = 5 FEET bgs.
- 2 ALL CONCENTRATIONS IN mg/Kg



CHEMICAL ANALYSES
 SOIL SAMPLING ACTIVITIES

RMT INC.	OWN. BY: RAS
	DATE: FEB., 1994
	PROJ.# 12013.11
	FILE # 1106

FIGURE 6

Section 4 SOIL EXCAVATION ACTIVITIES

The results of the additional soil sampling activities conducted in September 1993, identified the presence of petroleum hydrocarbons in soil samples collected in the vicinity of the diesel fuel dispenser vault and regulator areas. The results also indicated that the extent of petroleum hydrocarbon-impacted soil was limited to the uppermost 5 to 10-ft bgs. Based on the results of the chemical analyses, a workplan for the removal of the petroleum hydrocarbon-impacted soil was submitted to the ACHCSA on December 7, 1993 (See Appendix J). The workplan was verbally approved by Ms. Jennifer Eberle of the ACHCSA on December 27, 1993.

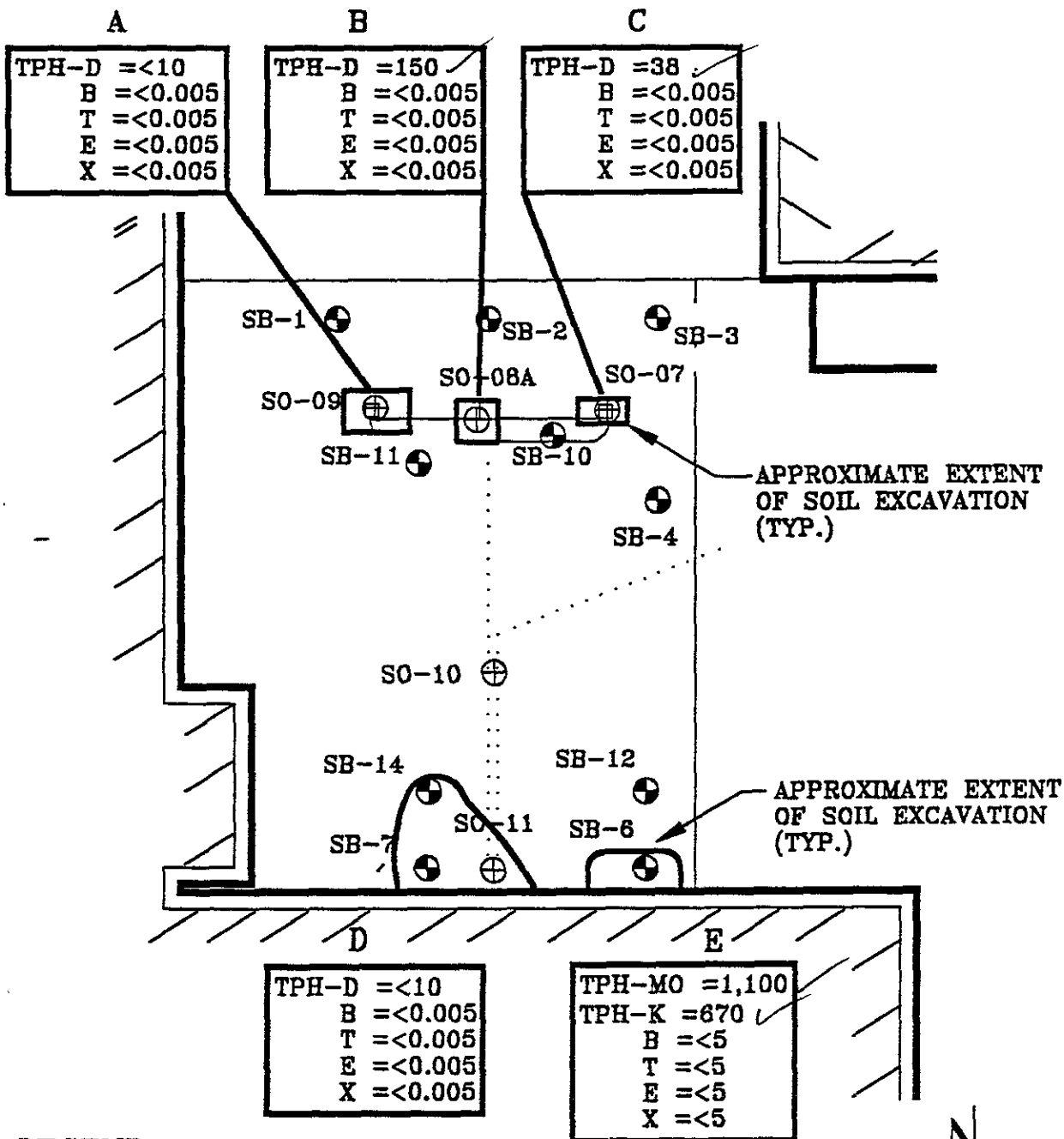
4.1 Soil Excavation Procedures

The soil excavation activities were conducted by Kroeker, Inc., of Fresno, California, on January 22, 1994. Field activities included the removal of the concrete pavement and the excavation of soil in the vicinity of the three diesel fuel dispenser vaults (Areas A, B, and C), the diesel fuel regulator (Area D), and the eastern section of the loading dock (Area E). The location of the excavations are presented in Figure 7.

Soil excavation activities were conducted until all visibly stained soil was removed and no petroleum hydrocarbon odor was discernable. Excavation activities conducted in the vicinity of the eastern section of the loading dock were halted at a depth of approximately 3-ft bgs because of the presence of a layer of asphaltic material approximately 1½-ft in thickness. Approximately 30-yd³ (45-tons) of soil was removed from the site during the excavation activities. The concrete debris and excavated soil was transported as non-hazardous waste to Specialty Crushing, of Emeryville, California, and Port Costa Materials, located in Port Costa, California, respectively, for recycling and re-use as an aggregate material. A copy of the waste manifest, bill of lading, and the Certificate of Recycling is presented in Appendix K and photo-documentation of the excavation activities are included in Appendix L.

4.2 Soil Sampling Procedures

Soil sampling activities were conducted after soil excavation activities had been completed. Soil samples were typically collected from the bottom of each excavation, however, due to the presence of an asphaltic layer in the excavation located near the eastern section of the loading dock, Ms. Eberle of the ACHCSA requested that a soil sample be collected at a depth of approximately 1-ft bgs. Soil sampling locations were selected based on OVM readings and instructions from Ms. Jenifer Eberle. All soil samples were collected using disposable sampling equipment, placed in brass sampling sleeves, capped with teflon



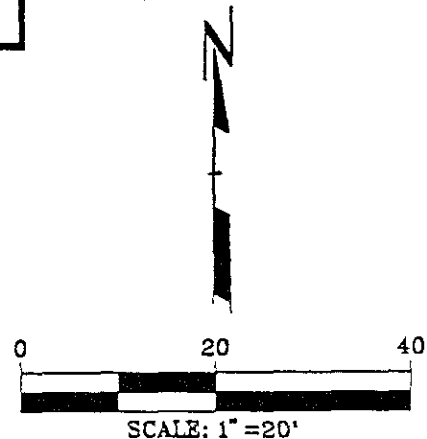
LEGEND:

- ⊙ SOIL SAMPLE LOCATIONS OF SEPTEMBER, 1993.
- ⊕ SOIL SAMPLE LOCATIONS OF AUGUST, 1993 SAMPLING
- APPROXIMATE EXTENT OF SOIL EXCAVATION

NOTE:

ALL CONCENTRATIONS
IN mg/Kg

**CHEMICAL ANALYSES
SOIL EXCAVATION ACTIVITIES**



RMT INC.	DWN. BY: RAS
	DATE: FEB., 1994
	PROJ. # 12013.11
	FILE # 1107

FIGURE 7

lined plastic lids, sealed, and stored on ice pending shipment to a California certified independent laboratory following standard chain-of-custody procedures. All sampling activities were conducted under the supervision of Ms. Jennifer Eberle of the ACHCSA. A site plan showing the soil sampling locations is presented in Figure 7. The approximate size of each excavation is summarized in Table 4.

TABLE 4
Excavation Area Dimensions and Sampling Depths

Excavation Area (See Figure 7)	Approximate Excavation Dimensions
A - Diesel Fuel Dispenser Vault	8-ft x 5-ft x 9.5-ft deep
B - Diesel Fuel Dispenser Vault	4-ft x 5-ft x 8.0-ft deep
C - Diesel Fuel Dispenser Vault	3-ft x 6-ft x 8.0-ft deep
D - Diesel Fuel Regulator	10-ft x 12-ft x 9.0-ft deep
E - Eastern Section of Loading Dock	5-ft x 6-ft x 3.0-ft deep

4.3 Chemical Analyses of Soil

Soil samples collected from the floor of the excavations were analyzed for the presence of TPH-D and BTEX using EPA SW-846 Method 8015M and Method 8020, respectively. The results of the chemical analyses performed on the soil samples are presented in Table 5 and Figure 7. A copy of the laboratory report is presented in Appendix M.

TABLE 5
Chemical Analyses - Soil Excavation Activities

Sample Location	Sample Depth (ft bgs)	Parameter (mg/kg)				
		TPH-D	Benzene	Toluene	Ethylbenzene	Xylene
A-1	9.5	<10	<0.005	<0.005	<0.005	<0.005
B-1	8.0	150 ✓	<0.005	<0.005	<0.005	<0.005
C-1	8.0	38 ✓	<0.005	<0.005	<0.005	<0.005
D-1	9.0	<10	<0.005	<0.005	<0.005	<0.005
E-1	1.0 3.0	<10 ^a ✓	<0.500 ^b ✓	<0.500 ^b ✓	<0.500 ^b ✓	<0.500 ^b ✓

a - Hydrocarbon pattern not indicative of diesel fuel. The presence of TPH as kerosene (TPH-K) and TPH as motor oil (TPH-MO) were identified at concentrations of 670-mg/kg and 1,100-mg/kg, respectively.

b - Raised detection limit due to high concentration of non-target hydrocarbons in sample. ✓

1-22-94
TPH-MO

TPH-K
Kerosene
670
TPH-MO
1,100

4.4 Excavation Backfill and Surface Restoration

Following soil sample collection, the excavations were backfilled with imported fill material, placed in 12-14" lifts and compacted to approximately 95% compaction. The surface was repaved with 6" thick concrete pavement reinforced with #4 rebar placed at 12" on center.

Section 5
UNDERGROUND STORAGE TANK CLOSURE

5.1 Summary of Results

The 5,000-gallon gasoline storage tank and the 12,000-gallon diesel fuel storage tank were formerly located south of the Mop Oil Building and the 10,000-gallon mop oil tank was formerly located north of the Mop Oil Building. All three tanks were located along the eastern property boundary and were removed on July 27, 1993, in compliance with ACHCSA and City of Oakland regulations and permits.

yes!

Gasoline and Diesel Fuel Tanks. No signs of impact damage, holes, pitting, or corrosion were apparent and the gasoline and diesel fuel storage tanks appeared structurally sound. No visible evidence of petroleum contamination was encountered in the soil surrounding the gasoline and diesel fuel storage tank or product piping; however, evidence of a diesel fuel release was noted in the vicinity of the diesel fuel dispenser vaults and diesel fuel regulator. The results of chemical analyses performed on soil samples collected from the south and north end of the floor of both the gasoline tank excavation and the diesel fuel excavation did not identify the presence of TPH-G, TPH-D, BTEX, and organic lead.

Approximately 100 yd³ of soil were removed from the gasoline and diesel fuel tank excavation areas during the tank removal activities. The results of chemical analyses performed on composite samples of the soil removed from the gasoline and diesel fuel storage tank excavation did not identify the presence of BTEX or TPH-G above method detection limits, therefore, the soil was returned to excavation as backfill.

Additional soil sampling activities were conducted in the vicinity of the diesel fuel dispenser vaults, diesel fuel regulator, and eastern section of the loading dock to determine the extent of diesel fuel-impacted soil. Based on the results of the soil sampling activities, soil excavation activities were conducted in January 1994. Soil excavation activities were conducted until all visibly stained soil was removed and no petroleum hydrocarbon odor was discernable. Approximately 30-yd³ of soil was removed for the area surrounding the three diesel fuel dispenser vaults (Areas A, B, and C), the diesel fuel regulator (Area D), and the eastern section of the loading dock (Area E).

The results of the chemical analyses performed on the soil samples collected from the floor of diesel fuel dispenser vault excavation (Area A), the diesel fuel regulator (Area D), and the eastern section of the loading dock did not identify the presence of TPH-D or BTEX at concentrations above the method detection limit. The results of chemical analyses performed on soil samples collected from the floor of the diesel fuel dispenser vault excavations Areas B and C, identified the presence of TPH-D at concentrations of 150-mg/kg and 38-mg/kg.

The results of chemical analyses performed on soil samples collected from the excavation located near the eastern section of the loading dock identified the presence of TPH-K and TPH-MO at concentrations of 670-mg/kg and 1,100-mg/kg, respectively.

Notes:
4/15/94
page

Mop Oil Tank. No signs of impact damage, or holes were apparent and although some pitting and corrosion were observed the mop oil storage tank appeared structurally sound. Visible evidence of a mop oil release was encountered in the soil surrounding the mop oil tank. The results of laboratory analyses performed on soil samples collected from the floor of the excavation did not reveal the presence of petroleum hydrocarbons above the method detection limit.

The results of chemical analyses performed on composite samples of the soil removed from the mop oil storage tank excavation identified the presence of TPH using EPA SW-846 Method 418.1 at concentrations of ranging from 110 to 290-mg/kg.

5.2 Request for Site Closure - Diesel Fuel and Gasoline Storage Tank Area

The results of chemical analyses performed on soil samples collected from the south and north end of the floor of both the gasoline tank and diesel fuel tank excavations, diesel fuel dispenser vault excavation (Area A), the diesel fuel regulator excavation (Area D), and the excavation located near the eastern section of the loading dock did not identify the presence of TPH-G, TPH-D, or BTEX. In addition, no signs of impact damage, holes, pitting, or corrosion were apparent during tank removal activities, no evidence of petroleum contamination was observed in the overburden soil or soil surrounding the associated tank piping, and the tanks appeared structurally sound.

Although the results of the chemical analyses performed on the soil samples collected from the diesel fuel dispenser vault excavations Area B and Area C identified the presence of TPH-D at concentrations of 150-mg/kg and 38-mg/kg, respectively, the results of chemical analyses performed on soil samples collected in close proximity to the former diesel fuel vaults did not identified the presence of TPH-D or BTEX. In addition, the bulk of the petroleum hydrocarbon-impacted soil has been removed.

The results of chemical analyses performed on soil samples collected from the excavation located near the eastern section of the loading dock did not identify the presence of TPH-D, or BTEX. The results did identify the presence of TPH-K (670-mg/kg) and TPH-MO (1,100-mg/kg), however, it is likely that the presence of TPH-K and TPH-MO is due to the presence of asphaltic material approximately 1½-ft in thickness located at a depth of approximately 1½-ft bgs. Based on the results of the chemical analyses and the findings presented above, it is requested that this area be closed in accordance with ACHCSA regulations.

5.3 Request for Site Closure - Mop Oil Tank Area

Visible evidence of a mop oil release was encountered in the soil surrounding the mop oil tank during tank removal activities, however, the results of chemical analyses performed on soil samples collected from the floor of the excavation did not reveal the presence of petroleum hydrocarbons above the method detection limit. The results of chemical analyses performed on composite samples of the soil removed from the excavation identified the presence of TPH using EPA SW-846 Method 418.1 at concentrations ranging from 110 to 290 mg/kg. Mop oil consists of highly refined base oil which the International Agency for Research on Cancer (IARC) classifies as having no evidence of carcinogenic potential and is not expected to present any environmental problems. Significant inaccuracies are associated with EPA SW-846 Method 418.1 when determining total petroleum hydrocarbon concentrations, therefore, based on the results of the chemical analyses and the information presented above, it is requested that the mop oil underground storage tank area be closed in accordance with ACHCSA regulations.

APPENDIX A
TANK REMOVAL PERMITS

**PARADISO CONSTRUCTION
GENERAL & PETROLEUM CONTRACTORS**

LETTER OF TRANSMITTAL

2600 WILLIAMS ST. P.O. BOX 1836
SAN LEANDRO, CA 94577
(510)614-8390 FAX (510)614-8396
CONTRACTORS LICENSE #259820

RECEIVED

AUG 20 1993

DATE	8/18/93	JOB NO.	819
ATTENTION TOM DAVIS			
RE: ARATEX SERVICES, INC.			
330 CHESTNUT ST.			
OAKLAND			

TO R.M.T., INC.
3250 OCEAN PARK BLVD., SUITE 370
SANTA MONICA, CA 90405

WE ARE SENDING YOU Attached Under Separate Cover via _____ the following items:

- Shop drawings Prints Plans Samples Specifications
 Copy of Letter Change Order _____

COPIES	DATE	NO.	DESCRIPTION
1	7/23/93		ALAMEDA COUNTY HEALTH CARE SERVICES AGENCY APPROVED UNDERGROUND TANK CLOSURE PLAN
1	7/26/93		CITY OF OAKLAND FIRE DEPARTMENT PERMIT TO EXCAVATE AND INSTALL, REPAIR, OR REMOVE INFLAMMABLE LIQUID TANKS

THESE ARE TRANSMITTED as checked below:

- For approval Approved as submitted Resubmit _____ copies for approval
 For your use Approved as noted Submit _____ copies for distribution
 As requested Returned for corrections Return _____ corrected prints
 For review and comment _____
 FOR BIDS DUE _____, 19____ PRINTS RETURNED AFTER LOAN TO US

REMARKS _____

COPY TO _____

SIGNED: Cheri Gill
Cheri Gill

ALAMEDA COUNTY HEALTH CARE SERVICES AGENCY
 DEPARTMENT OF ENVIRONMENTAL HEALTH
 HAZARDOUS MATERIALS DIVISION
 80 SWAN WAY, ROOM 200
 OAKLAND, CA 94621
 PHONE NO. 510/271-4320

see comments on p.5
Liberto
7-23-93

ACCEPTED

Underground Storage Tank Closure Permit Application
 Alameda County Division of Hazardous Materials
 80 Swan Way, Suite 200,
 Oakland, CA 94621
 Telephone: (510) 271-4320

These closure/removal plans have been received and found to be acceptable and essentially meet the requirements of State and local health laws. Changes to your closure plans indicated by this Department are to assure compliance with State and local laws. The notice period herein is now reduced for issuance of any required building permits for construction/destruction. One copy of the accepted plans must be on the job and available to all contractors and craftsmen involved with the removal. Any changes or alteration of these plans and specifications must be submitted to this Department and to the Fire and Building Inspections Department for determining if such changes meet the requirements of State and local laws.

Notify this Department at least 72 hours prior to the following required inspections:

- _____ Removal of Tank(s) and Piping
- _____ Sampling
- _____ Final Inspection

Insurance of all permit to operate, B) permanent site closure, is dependent on compliance with accepted plans and all applicable laws and regulations.

***** THERE IS A FINANCIAL PENALTY FOR NOT OBTAINING THESE INSPECTIONS *****
 Contact Specialist:

UNDERGROUND TANK CLOSURE PLAN

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

1. Business Name ARATEX Services, Inc.
 Business Owner ARATEX Services, Inc.
2. Site Address 330 Chestnut St.
 City Oakland Zip 94607 Phone 510-835-9285
3. Mailing Address 330 Chestnut St.
 City Oakland Zip 94607 Phone 510-835-9285
4. Land Owner ARATEX Services, Inc.
 Address 1827 Walden Office City, State Schaumburg, Zip 60143
Sq., Suite 200 IL
5. Generator name under which tank will be manifested ARATEX Services, Inc.

EPA I.D. No. under which tank will be manifested CAD 980814248

6. Contractor Paradiso Construction Co.
Address 2600 Williams St.
City San Leandro Phone 510-614-8390
License Type* A, B, C-8, C10, C61/D23 & HAZ ID# 259820

*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. Indicate that the certificate has been received, in addition, to holding the appropriate contractors license type.

7. Consultant R.M.T., Inc.
Address 3250 Ocean Park Blvd., Suite 370
City Santa Monica, CA 90405 Phone 310-452-5078

8. Contact Person for Investigation
Name Tom Davis Title Environmental Consultant
Phone 310-452-5078

9. Number of tanks being closed under this plan 3
Length of piping being removed under this plan approx. 120 feet
Total number of tanks at facility 3

10. State Registered Hazardous Waste Transporters/Facilities (see instructions).

** Underground tanks are hazardous waste and must be handled **
as hazardous waste

a) Product/Residual Sludge/Rinsate Transporter

Name Erickson, Inc. EPA I.D. No. CAD009466392
Hauler License No. 019 License Exp. Date 5/31/94
Address 255 Parr Blvd.
City Richmond State CA Zip 94801

b) Product/Residual Sludge/Rinsate Disposal Site

Name Gibson Pilot EPA I.D. No. CAD043260702
Address 475 Seaport Blvd.
City Redwood City State CA Zip 94604

c) Tank and Piping Transporter

Name Erickson, Inc. EPA I.D. No. CAD009466392
Hauler License No. 019 License Exp. Date 5/31/94
Address 255 Parr Blvd.
City Richmond State CA Zip 94801

d) Tank and Piping Disposal Site

Name Erickson, Inc. EPA I.D. No. CAD009466392
Address 255 Parr Blvd.
City Richmond State CA Zip 94801

11. Experienced Sample Collector

Name Tom Davis
Company R.M.T., Inc.
Address 3250 Ocean Park Blvd., Suite 370
City Santa Monica State CA Zip 90405 Phone 310-452-5078

12. Laboratory

Name Gtel Environmental Lab, Inc.
Address 4080 Pike Lane
City Concord State CA Zip 94520
State Certification No. E1074

13. Have tanks or pipes leaked in the past? Yes [] No [X]

If yes, describe. _____

14. Describe methods to be used for rendering tank inert

50 lbs. of dry ice per 1000 gallons of tank capacity

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 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 explosion proof combustible gas meters to verify tank inertness. It is the contractor's responsibility to bring a working combustible gas meter on site to verify tank inertness.

15. Tank History and Sampling Information

Tank		Material to be sampled (tank contents, soil, ground water, etc.)	Location and Depth of Samples
Capacity	Use History (see instructions)		
10,000 Gallon	Mop Oil Tank (Mineral Oil)	Soil samples of undisturbed natural material beneath the excavation. And ground water if encountered.	One soil sample beneath the tank at a maximum of 2 feet below the native soil/backfill interface. One soil sample beneath the piping at a maximum of 2 feet below the native soil/backfill interface where it connects to the pump/day tank. One soil sample for every 20 linear feet of product piping. Soil samples will be taken beneath any suspected leak site or stained soil.
12,000 Gallon	Diesel Tank		
10,000 Gallon	Regular Unleaded Tank		
	Date of installation on all tanks are unknown, last day of use was July 1, 1993.		

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

Excavated/Stockpiled Soil	
Stockpiled Soil Volume (Estimated)	Sampling Plan
100 Yards	Composite stockpile plan. One (1) sample per 50 cubic yards. <i>if soil is offhauled</i>

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

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

The Tri-Regional Board recommended minimum verification analyses and practical quantitation reporting limits should be followed. See attached Table 2.

Containment Sought	EPA, DHS, or Other Sample Preparation Method Number	EPA, DHS, or Other Analysis Method Number	Method Detection Limit
TPH-G	5030		1.0
TPH-D	3550		1.0
BTX&E	8020		0.005
O&G	5520		50.0
TPH & BTX&E	8260		
<i>top oil: TPH screen O+G</i>	<i>5030 / 8015 5520 418.1</i>		

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

18. Submit Worker's Compensation Certificate copy

Name of Insurer Republic Indemnity Co. of America

19. 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 report shall be made on an Underground Storage Tank Unauthorized Leak/Contamination Site Report form. (See Instructions)

22. Submit a closure report to this office within 60 days of the tank removal. This report must contain all the information listed in item 22 of the instructions.

I declare that to the best of my knowledge and belief 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 an approval from the Department of Environmental Health 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.

Signature of Contractor

Name (please type) Robert S. Corsun

Signature 

Date July 21, 1993

Signature of Site Owner or Operator

Name (please type) Bryant Burnette - General Manager

Signature 

Date July 21, 1993

CITY OF OAKLAND

Tank Permit

Permit to Excavate and Install, Repair, or Remove Inflammable Liquid Tanks. No. 9723

Oakland, California, July 26, 19 93

PERMISSION IS HEREBY GRANTED TO ~~Install~~ remove ~~xxxx~~ Gasoline tank and excavate commencing _____ feet inside property line

on the east side of Chestnut Street Avenue 100 feet south of 5th Street Street Avenue

House No. 330 Chestnut Street Street Avenue Present Storage _____

Owner Aratex Services, Inc. Address 330 Chestnut Street Phone 835-9285

Applicant Paradiso Construction Company Address 2600 Williams St., San Leandro Phone 945-7614-8390

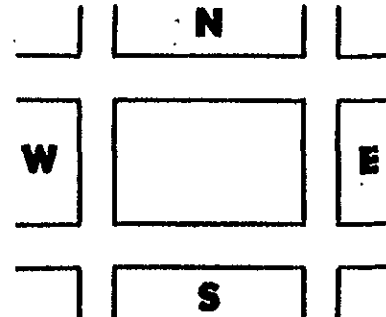
Dimensions of street (sidewalk) surface to be disturbed _____ X _____ Number of Tanks 2 Capacity 10,000 Gallons, each. 12,000

Remarks: _____

This Permit is granted in accordance with existing City Ordinances.
Owner hereby agrees to remove tanks on discontinuance of use or when notified by the City Authorities.
When installing, removing or repairing tanks, no open flame to be on or near premises.

Approved _____
Fire Marshal

Approved _____
Drainage Division Engineering Dept.



EXCAVATING PERMIT

Issued in accordance with Ord. No. 278 CMS, Sec. 4-2.04

_____ square feet of digging or removal granted.

The receipt of \$ _____ special deposit is hereby acknowledged.

GENERAL DEPOSIT.

BUREAU OF PERMITS AND LICENSES.

CERTIFICATE OF TANK AND EQUIPMENT INSPECTION

Inspected and passed on _____ 19 _____

By _____
Fire Marshal

Inspection Fee Paid \$ 160.00 ck#29904 rec#685773

Received by G. Johnson
FIRE PREVENTION BUREAU

NOTICE

Before Covering Tanks, Above Certificate Must Be Signed.

When ready for inspection notify Fire Prevention Bureau, 273-3851

THIS PERMIT MUST BE LEFT ON THE WORK AS AUTHORITY THEREFOR.

APPENDIX B
HAZARDOUS WASTE DISPOSAL MANIFEST

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. **CIA1D1918101911421480101010111** of **1**
 Manifest Document No.
 2. Page 1
 Information in the shaded areas is not required by Federal law

3. Generator's Name and Mailing Address
ARATEX
330 CHESTNUT ST OAKLAND, CA

A. State Manifest Document Number
93231206

4. Generator's Phone **510 835-9285**
 5. Transporter 1 Company Name
Erickson, Inc.

B. State Generator's ID
 C. State Transporter's ID
112 402 943

6. US EPA ID Number
C A D 0 0 9 4 6 6 3 9 2
 7. Transporter 2 Company Name
 8. US EPA ID Number

D. Transporter's Phone
(510) 235-1393
 E. State Transporter's ID
 Transporter's Phone

9. Designated Facility Name and Site Address
Gibson Oil/Pilot Petroleum
475 Sea Port Blvd. 94063
Redwood City, Ca. 94063
 10. US EPA ID Number
C A D 0 4 3 2 6 0 7 0 2

F. State Facility's ID
CIA1D1043260702
 Facility's Phone
(415) 368-5511

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

a. RQ Hazardous Waste Liquids NOS ORM E NA9189 D018	12. Containers		13. Total Quantity	14. Unit Wt/Val
	No.	Type		
	01011	TT	00400	G.
b.				
c.				
d.				

12. Containers	13. Total Quantity	14. Unit Wt/Val	15. Work Item
			State 223
			EPA/Other
			State
			EPA/Other
			State
			EPA/Other

15. Additional Descriptions for Materials Listed Above
Hydrocarbon Mixture with Water
(99% Water, 1% Hydrocarbons)
602 3091

16. Handling Codes for Wastes Listed Above
01

15. Special Handling Instructions and Additional Information
Gibson Oil Waste Stream Profile # **ERG 31**
24 Hr. Contact **PAUL PARADISO** **24 Hr. Phone#** **(510) 614 8390**

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of the consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable federal, state and international laws.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name: **Albert R. Garcia**
 Signature: *Albert R. Garcia*
 Month Day Year: **07 28 93**

17. Transporter 1 Acknowledgement of Receipt of Materials
 Printed/Typed Name: **Michael Davenport**
 Signature: *Michael Davenport*
 Month Day Year: **07 28 93**

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

19. Discrepancy Indication Space

20. Facility Owner or Operator Certification of receipt of hazardous materials covered by this manifest except as noted in item 19
 Printed/Typed Name: **Albert R. Garcia**
 Signature: *Albert R. Garcia*
 Month Day Year: **07 28 93**

KENNETH RICKOFF DO NOT WRITE BELOW THIS LINE.

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

APPENDIX C
CITY OF OAKLAND INSPECTION REPORTS
DRY ICE RECEIPTS

CITY OF OAKLAND
REPORT OF FIRE INSPECTION

ENGINE CO.

ADDRESS 330 CHESTNUT ST.

211

NAME ARATEX SERVICES

GENERAL INSPECTION PERMIT OTHER HAZARD NOTED HAZARD ABATED

NOTICE LEFT LETTER 1st NOTICE 2nd NOTICE FINAL

DATE	VIOLATION	O.F.C.	CONTACTED
7-29-93	OBSERVED REMOVAL OF 10,000 GAL "MOP OIL" TANK LEL @ 0% OXY @ 1% NO LEAKS OBSERVED OK!		BRYAN GRIBSBY R.M.T.

A REINSPECTION WILL BE MADE WITHIN 2 DAYS.
#2
338-5 (Rev. 5-77) FIRE PREVENTION BUREAU PHONE 273-3851
INSPECTOR [Signature]

CITY OF OAKLAND
REPORT OF FIRE INSPECTION

ENGINE CO.

ADDRESS 330 CHESTNUT ST.

211

NAME ARATEX SERVICES

GENERAL INSPECTION PERMIT OTHER HAZARD NOTED HAZARD ABATED

NOTICE LEFT LETTER 1st NOTICE 2nd NOTICE FINAL

DATE	VIOLATION	O.F.C.	CONTACTED
7-29-93	OBSERVED REMOVAL OF (GASOLINE) ONE 5,000 & ONE (DIESEL) 12,000 GAL TANKS, OK! NO LEAKS OBSERVED 5,000 LEL @ 8% OXY @ 10% 12,000 LEL @ 5% OXY @ 10%		BRYAN GRIBSBY R.M.T.

A REINSPECTION WILL BE MADE WITHIN 2 DAYS.
#1
338-5 (Rev. 5-77) FIRE PREVENTION BUREAU PHONE 273-3851
INSPECTOR [Signature]

CITY OF OAKLAND
REPORT OF FIRE INSPECTION

ENGINE CO.

ADDRESS 330 CHESTNUT ST.

211

NAME ARATEX SERVICES

GENERAL INSPECTION PERMIT OTHER HAZARD NOTED HAZARD ABATED

NOTICE LEFT LETTER 1st NOTICE 2nd NOTICE FINAL

DATE	VIOLATION	O.F.C.	CONTACTED
7-29-93	OBSERVED REMOVAL OF 10,000 GAL "MOP OIL" TANK LEL @ 0% OXY @ 1% NO LEAKS OBSERVED OK!		BRYAN GRIBSBY R.M.T.

A REINSPECTION WILL BE MADE WITHIN 2 DAYS.

#2
338-5 (Rev. 5-77)

FIRE PREVENTION BUREAU PHONE 273-3851
INSPECTOR [Signature]

CITY OF OAKLAND
REPORT OF FIRE INSPECTION

ENGINE CO.

ADDRESS 330 CHESTNUT ST.

211

NAME ARATEX SERVICES

GENERAL INSPECTION PERMIT OTHER HAZARD NOTED HAZARD ABATED

NOTICE LEFT LETTER 1st NOTICE 2nd NOTICE FINAL

DATE	VIOLATION	O.F.C.	CONTACTED
7-29-93	OBSERVED REMOVAL OF (GASOLINE) ONE 5,000 & ONE (DIESEL) 12,000 GAL TANKS, OK! NO LEAKS OBSERVED 5,000 LEL @ 8% OXY @ 10% 12,000 LEL @ 5% OXY @ 10%		BRYAN GRIBSBY R.M.T.

A REINSPECTION WILL BE MADE WITHIN 2 DAYS.

#1
338-5 (Rev. 5-77)

FIRE PREVENTION BUREAU PHONE 273-3851
INSPECTOR [Signature]



Abel Carbonic

CUSTOMER NUMBER	PURCHASE ORDER NO.	DATE	DELIVERY NUMBER
11806700		7/29/93	1-225997

BY ACCEPTING THIS ORDER, CUSTOMER AGREES TO ALL OF THE TERMS AND CONDITIONS SET FORTH HEREIN, INCLUDING THOSE PRINTED ON THE REVERSE SIDE.

NAME PARADISE CREST	ACCEPTED BY:
SHIPPED TO	

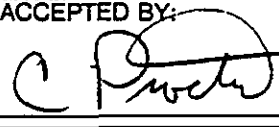
20 SOLID	21 HALF	22 SLICES	23 ROCKS	24 AIRPORT	29 WET ICE	
UNIT	DESCRIPTION			CODE	POUNDS	
18 17		DRY ICE	ORM-A	UN1845	22	850
		JOB # 819			23	850
						1700



Abel Carbonic

CUSTOMER NUMBER	PURCHASE ORDER NO.	DATE	DELIVERY NUMBER
11806700		7/29/93	1-225997

BY ACCEPTING THIS ORDER, CUSTOMER AGREES TO ALL OF THE TERMS AND CONDITIONS SET FORTH HEREIN, INCLUDING THOSE PRINTED ON THE REVERSE SIDE.

NAME <u>PARADISE CREST</u>	ACCEPTED BY: 
SHIPPED TO	

20 SOLID	21 HALF	22 SLICES	23 ROCKS	24 AIRPORT	29 WET ICE	
UNIT	DESCRIPTION				CODE	POUNDS
18 17		DRY ICE	ORM-A	UN1845	22	850
		JOB #	Q19		23	850
						1700

APPENDIX D
ALAMEDA COUNTY DEPARTMENT OF ENVIRONMENTAL HEALTH
INSPECTION REPORTS

white -env.health
yellow -facility
pink -files

ALAMEDA COUNTY, DEPARTMENT OF ENVIRONMENTAL HEALTH
Hazardous Materials Inspection Form

80 Swan Way, #200
Oakland, CA 94621
(415) 271-4320

P. 1 of 2

II, III

Site ID # _____ Site Name Aratex Today's Date 7/29/93

II.A BUSINESS PLANS (Title 19)

- ___ 1. Immediate Reporting 2703
- ___ 2. Bus. Plan Stmt. 25503(b)
- ___ 3. RR Gase > 30 days 25503.7
- ___ 4. Inventory Information 25504(a)
- ___ 5. Inventory Complete 2730
- ___ 6. Emergency Response 25504(b)
- ___ 7. Training 25504(c)
- ___ 8. Deficiency 25505(a)
- ___ 9. Modification 25505(b)

II.B ACUTELY HAZ. MATS

- ___ 10. Registration Form Filed 25533(a)
- ___ 11. Form Complete 25533(b)
- ___ 12. RMPP Contents 25534(c)
- ___ 13. Implement Sch. Req'd? (Y/N)
- ___ 14. OnSite Conseq. Assess. 25524(c)
- ___ 15. Probable Risk Assessment 25534(d)
- ___ 16. Persons Responsible 25534(e)
- ___ 17. Certification 25534(f)
- ___ 18. Exemption Request? (Y/N) 25536(b)
- ___ 19. Trade Secret Requested? 25538

III. UNDERGROUND TANKS (Title 23)

- | | |
|-------------------------------|---|
| General | ___ 1. Permit Application 25284 (H&S) |
| | ___ 2. Pipeline Leak Detection 25292 (H&S) |
| | ___ 3. Records Maintenance 2712 |
| | ___ 4. Release Report 2651 |
| | ___ 5. Closure Plans 2670 |
| Monitoring for Existing Tanks | ___ 6. Method |
| | 1) Monthly Test |
| | 2) Daily Vadose
Semi-annual groundwater
One time soil |
| | 3) Daily Vadose
One time soil
Annual tank test |
| | 4) Monthly Gndwater
One time soil |
| | 5) Daily Inventory
Annual tank testing
Cont pipe leak det
Vadose/gndwater mon. |
| | 6) Daily Inventory
Annual tank testing
Cont pipe leak det |
| | 7) Weekly Tank Gauge
Annual tank testing |
| | 8) Annual Tank Testing
Daily inventory |
| | 9) Other _____ |
| New Tanks | ___ 7. Precis Tank Test 2643 |
| | Date: _____ |
| | ___ 8. Inventory Rec. 2644 |
| | ___ 9. Soil Testing 2646 |
| ___ 10. Ground Water 2647 | |
| ___ 11. Monitor Plan 2632 | |
| ___ 12. Access, Secure 2634 | |
| ___ 13. Plans Submit 2711 | |
| Date: _____ | |
| ___ 14. As Built 2635 | |
| Date: _____ | |

Site Address 330 Chestnut St.
City Oakland Zip 94607 Phone _____

___ MAX AMT stored > 500 lbs, 55 gal., 200 cft.?
12,000 gal. diesel
5,000 gal. gas.

Inspection Categories:
___ I. Haz. Mat/Waste GENERATOR/TRANSPORTER
___ II. Business Plans, Acute Hazardous Materials
 III. Underground Tanks removal

* Calif. Administration Code (CAC) or the Health & Safety Code (HS&C)

Comments: Dwight Langford of OFD onsite.
Manifest # 93231415 for 12000 gal diesel US
+ " " # 93231400 for gas + mop oil USTs
Diesel UST is tar coated + has no
apparent holes, just a few rusty areas.
Soil is greenish below tank.
Gasoline UST is tar coated + has no
apparent holes; minor rust.
Tanks hauled by Erickson.
Depth to tank inverts is ~ 11' bgs.
Mop oil UST is tar coated + has no
apparent holes, but some deep pitting in
one area on the bottom. There is a small
amt of gw in pit. Sample 50-01 + 50-02
taken from bottom at ~ 14' bgs. Soil below
tank is sandy w/some greenish discoloration.
Mop oil SP is ~ 75-100 yd³. This pit
will remain open until results are back.

Contact: BRYAN GRIGSBY - RMT
Title: PROJECT MANAGER
Signature: [Signature]

Inspector: Jennifer Eberle
Signature: [Signature]

ALAMEDA COUNTY, DEPARTMENT OF ENVIRONMENTAL HEALTH

Hazardous Materials Inspection Form

p. 2 of 2

II, III

Today's Date 7/29/93

white -env.health
yellow -facility
pink -files

Site ID # _____ Site Name Aratex

Site Address 330 Chestnut St.

City Oakland Zip 94607 Phone _____

MAX AMT stored > 500 lbs, 55 gal., 200 cft.?

Inspection Categories:

- I. Haz. Mat/Waste GENERATOR/TRANSPORTER
- II. Business Plans, Acute Hazardous Materials
- III. Underground Tanks

• Calif. Administration Code (CAC) or the Health & Safety Code (HS&C)

Comments:

Diesel tank: soil samples taken below UST at ~12.5' bgs into sandy soil. Samples SO-03 + SO-04

Gas tank: soil samples taken below UST at ~11.5' bgs (tank invert was ~10'). Samples SO-05 + SO-06. Soil is sandy. SO05 at ~11.5' + SO06 at ~13'

Glass jars w/teflon seals were used in place of brass sleeves. No HC odor in any of the soil collected.

SP for diesel/gas USTs is ~100 yd³ + will be sampled - 4 pt. composite every 20 yd³ because they intend to use it as backfill

II.A BUSINESS PLANS (Title 19)

- 1. Immediate Reporting 2703
- 2. Bus. Plan Stds. 25503(b)
- 3. RR Cars > 30 days 25503.7
- 4. Inventory Information 25504(c)
- 5. Inventory Complete 2730
- 6. Emergency Response 25504(b)
- 7. Training 25504(c)
- 8. Deficiency 25505(a)
- 9. Modification 25505(b)

II.B ACUTELY HAZ. MATLS

- 10. Registration Form Filed 25533(a)
- 11. Form Complete 25533(b)
- 12. RMPP Contents 25534(c)
- 13. Implement Sch. Req'd? (Y/N) _____
- 14. OnSite Conseq. Assess. 25524(c)
- 15. Probable Risk Assessment 25534(d)
- 16. Persons Responsible 25534(g)
- 17. Certification 25534(i)
- 18. Exemption Request? (Y/N) 25536(b)
- 19. Trade Secret Requested? 25538

III. UNDERGROUND TANKS (Title 23)

- 1. Permit Application 25284 (HS&S)
- 2. Pipeline Leak Detection 25292 (HS&S)
- 3. Records Maintenance 2712
- 4. Release Report 2651
- 5. Closure Plans 2670
- 6. Method
 - 1) Monthly Test
 - 2) Daily Vadose
 - Semi-annual groundwater
 - One time soil
 - 3) Daily Vadose
 - One time soil
 - Annual tank test
 - 4) Monthly Groundwater
 - One time soil
 - 5) Daily Inventory
 - Annual tank testing
 - Conf pipe leak det
 - Vadose/gndwater mon.
 - 6) Daily Inventory
 - Annual tank testing
 - Conf pipe leak det
 - 7) Weekly Tank Gauge
 - Annual tank testing
 - 8) Annual Tank Testing
 - Daily Inventory
 - 9) Other _____
- 7. Periodic Tank Test Date: _____ 2643
- 8. Inventory Rec. 2644
- 9. Soil Testing. 2646
- 10. Ground Water. 2647
- 11. Monitor Plan 2632
- 12. Access, Secure 2634
- 13. Plans Submit Date: _____ 2711
- 14. As Built Date: _____ 2635

Monitoring for Existing Tanks

New Tanks

Contact: BRYAN GRISSAY - RMT
 Title: PROJECT MANAGER
 Signature: [Signature]

Inspector: Jennifer Eberk
 Signature: [Signature]

II, III

white -env.health
 yellow -facility
 pink -files

ALAMEDA COUNTY, DEPARTMENT OF ENVIRONMENTAL HEALTH
 Hazardous Materials Inspection Form

80 Swan Way, #200
 Oakland, CA 94621
 (415) 271-4320

II, III

Site ID # _____ Site Name Aratex Today's Date 1/31/93

II.A BUSINESS PLANS (Title 19)

- 1. Immediate Reporting 2703
- 2. Bus. Plan Stds. 25503(b)
- 3. RR Cars > 30 days 25503.7
- 4. Inventory Information 25504(a)
- 5. Inventory Complete 2730
- 6. Emergency Response 25504(b)
- 7. Training 25504(c)
- 8. Deficiency 25505(a)
- 9. Modification 25505(b)

II.B ACUTELY HAZ. MATLS

- 10. Registration Form Filed 25533(a)
- 11. Form Complete 25533(b)
- 12. RMPP Contents 25534(c)
- 13. Implement Sch. Req'd? (Y/N)
- 14. OffSite Conseq. Assess. 25524(c)
- 15. Probable Risk Assessment 25534(d)
- 16. Persons Responsible 25534(g)
- 17. Certification 25534(i)
- 18. Exemption Request? (Y/N) 25534(b)
- 19. Trade Secret Requested? 25538

III. UNDERGROUND TANKS (Title 23)

- General**
- 1. Permit Application 25284 (H&S)
- 2. Pipeline Leak Detection 25292 (H&S)
- 3. Records Maintenance 2712
- 4. Release Report 2651
- 5. Closure Plans 2670
- Monitoring for Existing Tanks**
- 4. Method
- 1) Monthly Test
- 2) Daily Vadose
Semi-annual groundwater
One time soils
- 3) Daily Vadose
One time soils
Annual tank test
- 4) Monthly Groundwater
One time soils
- 5) Daily Inventory
Annual tank testing
Cont pipe leak det
Vadose/groundwater man.
- 6) Daily Inventory
Annual tank testing
Cont pipe leak det
- 7) Weekly Tank Gauge
Annual tank testing
- 8) Annual Tank Testing
Daily Inventory
- 9) Other
- 7. Precs Tank Test Date: 2643
- 8. Inventory Rec. 2644
- 9. Soil Testing 2646
- 10. Ground Water 2647
- New Tanks**
- 11. Monitor Plan 2632
- 12. Access Secure 2634
- 13. Plans Submit Date: 2711
- 14. As Built Date: 2635

Site Address 330 Chestnut St.
 City Oakland Zip 94607 Phone _____

MAX AMT stored > 500 lbs, 55 gal., 200 cft.?

Inspection Categories:

- I. Haz. Mat/Waste GENERATOR/TRANSPORTER
- II. Business Plans, Acute Hazardous Materials
- III. Underground Tanks

Calif. Administration Code (CAC) or the Health & Safety Code (HS&C)

Comments:

Stockpile for gas + diesel USTs was sampled yesterday. It was tank filled with nit because RP needs truck address. Piping still needs to be reinforced. Took soil samples below remote fuel line pits: 50-07 taken at ~4-5' bgs. (Some black-stained soil in this pit). 50-08 taken at ~3.5' bgs (stained soil). 50-11 taken under meter stand at 1' bgs. All of Paradise mid line lines were washed out prior to removal of tank. 50-09 taken at ~4' bgs from isolation stained (+ odorous) soil front side of tank piping. 50-10 taken from below elbow of piping at ~2' bgs. (Soil not stained). Stockpiled soil from 10 pits of UST was covered + will be sampled. Also samples from 10 pits will be analyzed for TCE + PCE.

Rev 8/88

Contact: BRYAN GEIGSBY
 Title: PROJECT MGR - RMT
 Signature: [Signature]

Inspector: Jennifer Shook
 Signature: [Signature]

II, III

APPENDIX E
TANK DISPOSAL MANIFESTS AND DESTRUCTION CERTIFICATIONS

DAY OR NIGHT
TELEPHONE
(510) 235-1393

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

NO. 17148

CUSTOMER
PARADISO
JOB NO. 82248

Erickson, Inc. 11740
FOR: _____ TANK NO. _____

Richmond 08/03/93 07:28:15
LOCATION: _____ DATE: _____ TIME: _____

Visual Gastech/1314 SMPN UO

TEST METHOD _____ LAST PRODUCT _____

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

10000 Gallon Tank SAFE FOR FIRE
TANK SIZE _____ CONDITION _____

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

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

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

STANDARD SAFETY DESIGNATION

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

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

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

[Signature] _____ *KA* _____
REPRESENTATIVE TITLE INSPECTOR

DAY OR NIGHT
TELEPHONE
(510) 235-1393

CERTIFICATE CERTIFIED SERVICES COMPANY

255 Parr Boulevard • Richmond, California 94801

NO. 17129

CUSTOMER
PARADISO

JOB NO.

82248

FOR: Erickson, Inc. TANK NO. 11741

LOCATION: Richmond DATE: 07/31/93 TIME: 07:32:19

TEST METHOD Visual Gastech/1314 SMPN LAST PRODUCT UG

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

TANK SIZE 5000 Gallon Tank CONDITION SAFE FOR FIRE

REMARKS OXYGEN 20.9%

LOWER EXPLOSIVE LIMIT LESS THAN 0.1%

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

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

STANDARD SAFETY DESIGNATION

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

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

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

David Sato

REPRESENTATIVE

TITLE

ISA

INSPECTOR

DAY OR NIGHT
TELEPHONE
(510) 235-1393

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

NO. 17128

CUSTOMER
PARADISO
JOB NO.
82248

FOR: Erickson, Inc. TANK NO. 11739

LOCATION: Richmond DATE: 07/31/93 TIME: 07:32:19

TEST METHOD Visual Gastech/1314 SMPN LAST PRODUCT D

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

TANK SIZE 12000 Gallon Tank CONDITION SAFE FOR FIRE

REMARKS OXYGEN 20.9%
LOWER EXPLOSIVE LIMIT LESS THAN 0.1%

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

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

STANDARD SAFETY DESIGNATION

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

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

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

[Signature]
REPRESENTATIVE

TITLE

KA
INSPECTOR

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No. CA1D1981018114124882248		Manifest Document No. 1 of 1		2. Page 1		Information in the shaded areas is not required by Federal law.			
3. Generator's Name and Mailing Address ARATEX SERVICES INC. 330 CHESTNUT ST. OAKLAND CA 94607		4. Generator's Phone 510 835-9285		6. US EPA ID Number		7. Transporter 1 Company Name ERICKSON INC.		8. US EPA ID Number CA1D10019466392			
9. Designated Facility Name and Site Address Erickson, Inc. 255 Parr Blvd. Richmond, Ca. 94801		10. US EPA ID Number CA1D10019466392		11. US DOT Description (including Proper Shipping Name, Hazard Class, and ID Number)		12. Containers No. Type		13. Total Quantity		14. Unit Wt/Vol	
a. Waste Empty Storage Tank NON-RCRA Hazardous Waste Solid. diesel		0011 TP		1210100		P					
b.											
c.											
d.											
15. Special Handling Instructions and Additional Information		Keep away from sources of ignition. Always wear hardhats when working around U.G.S.T.'s 24 Hr. Contact Name <u>Paul Mathis</u> & Phone <u>510-835-5510</u>									
16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of the consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable federal, state and international laws. If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.											
Printed/Typed Name <u>Albert P. Garcia</u>		Signature <u>Albert P. Garcia</u>				Month <u>07</u>		Day <u>21</u>		Year <u>1993</u>	
17. Transporter 1 Acknowledgement of Receipt of Materials Printed/Typed Name <u>John Douglas</u>		Signature <u>John Douglas</u>				Month <u>07</u>		Day <u>19</u>		Year <u>1993</u>	
18. Transporter 2 Acknowledgement of Receipt of Materials Printed/Typed Name		Signature				Month		Day		Year	
19. Discrepancy Indication Space											
20. Facility Owner or Operator Certification of receipt of hazardous materials covered by this manifest except as noted in item 19											
Printed/Typed Name		Signature				Month		Day		Year	

GENERATOR

TRANSPORTER

FACILITY

DO NOT WRITE BELOW THIS LINE.

IN CASE OF EMERGENCY OR SPILL, CALL THE NATIONAL RESPONSE CENTER 1-800-424-8802; WITHIN CALIFORNIA, CALL 1-800-632-7350

GENERATOR

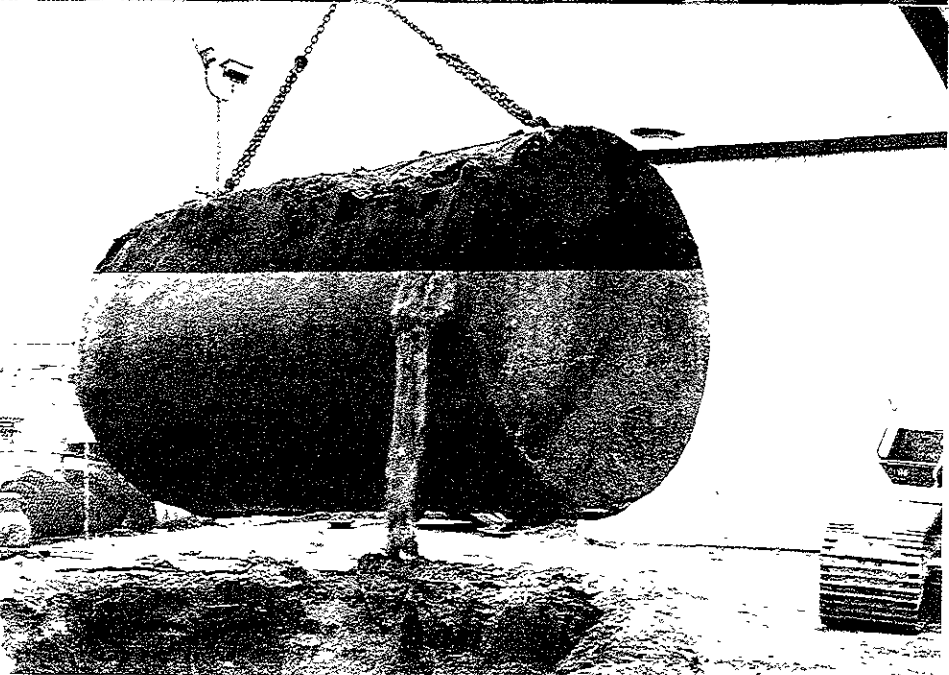
TRANSPORTER

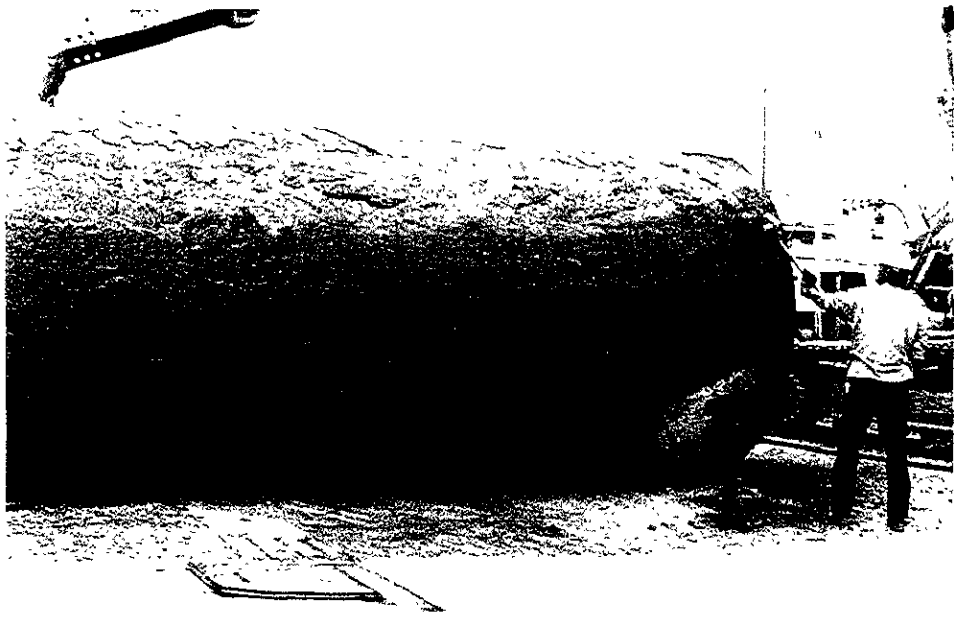
FACILITY

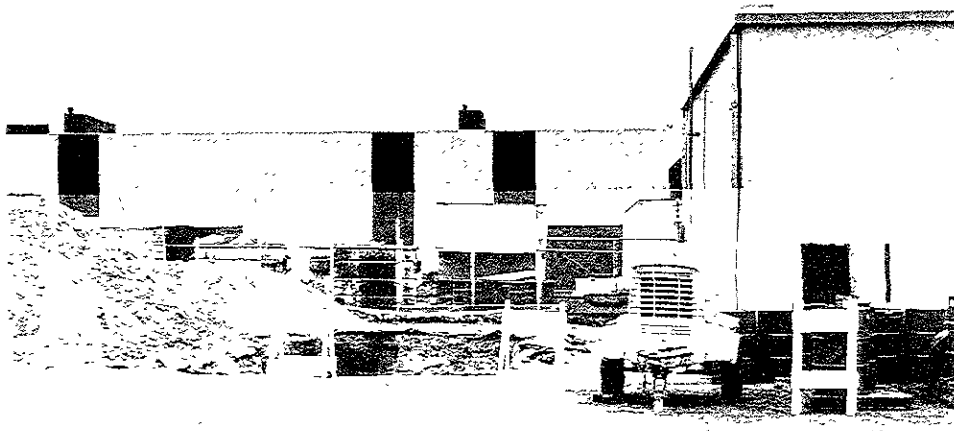
UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No. CAD918108114248	Manifest Document No. 8122418	2. Page 1 1 of 1	Information in the shaded areas is not required by Federal law.
3. Generator's Name and Mailing Address HRATEX SERVICES INC, 330 CHASTNUT ST, OAKLAND CA 94607		4. Generator's Phone 510 835 9285			
5. Transporter 1 Company Name ERICKSON INC.		6. US EPA ID Number END00914663912			
7. Transporter 2 Company Name		8. US EPA ID Number			
9. Designated Facility Name and Site Address Erickson, Inc. 255 Parr Blvd. Richmond, Ca. 94801		10. US EPA ID Number KA1010104663912			
11. US DOT Description (including Proper Shipping Name, Hazard Class, and ID Number)		12. Containers No.	13. Total Quantity	14. Unit Wt/Vol	15. Special Handling Instructions and Additional Information
		Type			
a. Waste Empty Storage Tank NON-RCRA Hazardous Waste Solid. 10K mop oil		CO2	TF	151000	<p>Keep away from sources of ignition. Always wear hardhats when working around U.G.S.T.'s 24 Hr. Contact Name: <u> </u> & Phone: <u>141-376</u></p> <p>16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of the consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable federal, state and international laws.</p> <p>If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.</p>
b. + 5K gas					
c.					
d.					
17. Transporter 1 Acknowledgement of Receipt of Materials		Signature <i>[Signature]</i>		Month Day Year 07 29 13	
18. Transporter 2 Acknowledgement of Receipt of Materials		Signature <i>[Signature]</i>		Month Day Year 07 29 13	
19. Discrepancy Indication Space					
20. Facility Owner or Operator Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19		Signature		Month Day Year	

DO NOT WRITE BELOW THIS LINE.

APPENDIX F
PHOTO-DOCUMENTATION OF TANK REMOVAL ACTIVITIES







APPENDIX G
MATERIAL SAFETY AND DATA SHEET - MOP OIL

Dear Customer: This MSDS contains important environmental, health and toxicology information for your employees who recently ordered this product. Please make sure this information is given to them. If you resell this product, this MSDS should be given to the Buyer. This form may be reproduced without permission.

Chevron USA Inc



Material Safety Data Sheet

Prepared According to the OSHA Hazard Communication Standard (29 CFR 1910.1200).
(Formerly Called MATERIAL INFORMATION BULLETIN)

CHEVRON Utility Oil 22

CPS 231200

A HAZARD WARNING STATEMENT IS NOT REQUIRED FOR THIS PRODUCT UNDER OSHA HAZARD COMMUNICATION STANDARD (29 CFR 1910.1200)

TYPICAL COMPOSITION

Highly refined base oil (CAS 64741-96-4/64742-52-5) 100%

EXPOSURE STANDARD

The Federal OSHA exposure standard and the ACGIH (1986-87) TLV for mineral oil mists is 5 mg/m³ for a daily 8-hour exposure.

PHYSIOLOGICAL & HEALTH EFFECTS

EMERGENCY & FIRST AID PROCEDURES

Eyes

Expected to cause no more than minor eye irritation.

Flush eyes immediately with fresh water for at least 15 minutes while holding the eyelids open. If irritation persists, see a doctor.

Skin

Expected to cause no more than minor skin irritation following prolonged or frequently repeated contact.

Wash skin thoroughly with soap and water. Launder contaminated clothing.

Inhalation

Not expected to be acutely toxic by inhalation. Breathing mineral oil mist at concentrations in air that exceed the Federal OSHA exposure standard can cause respiratory irritation or discomfort. See Additional Health Data.

If respiratory discomfort or irritation occurs, move the person to fresh air. See a doctor if discomfort or irritation continues.

Ingestion

Not expected to be acutely toxic by ingestion.

If swallowed, give water or milk to drink and telephone for medical advice. Consult medical personnel before inducing vomiting. If medical advice cannot be obtained, then take the person and product container to the nearest medical emergency treatment center or hospital.

ADDITIONAL HEALTH DATA

Signs and symptoms of respiratory tract irritation may include, but may not be limited to, one or more of the following, depending on concentration and length of exposure: nasal discharge, sore throat, coughing, bronchitis, pulmonary edema and difficulty in breathing.

This product contains a base oil which the International Agency for Research on Cancer (IARC) classifies as having no evidence of carcinogenic potential.

SPECIAL PROTECTIVE INFORMATION

Eye Protection: No special eye protection is necessary.

Skin Protection: No special skin protection is necessary.

Respiratory Protection: No special respiratory protection is normally required. However, if operating conditions create airborne concentrations which exceed the exposure standard, the use of an approved respirator is recommended.

Ventilation: Use adequate ventilation to keep the airborne concentrations of this material below the Federal OSHA exposure standard.

FIRE PROTECTION

Flash Point: (COC) 320°F (160°C)

Autoignition Temp.: NDA

Flammability Limits: n/a

Extinguishing Media: CO₂, Dry Chemical, Foam, Alcohol-type Foam, Water Fog.

Special Fire Fighting Procedures: For fires involving this material, do not enter any enclosed or confined fire space without proper protective equipment. This may include self-contained breathing apparatus to protect against the hazardous effects of normal products of combustion or oxygen deficiency. Read the entire MSDS.

SPECIAL PRECAUTIONS

DO NOT weld, heat or drill container. Residue may ignite with explosive violence if heated sufficiently.

CAUTION! Do not use pressure to empty drum or explosion may result.

ENVIRONMENTAL PROTECTION

Environmental Impact: This material is not expected to present any environmental problems other than those associated with oil spills.

Precautions if Material is Released or Spilled: Stop the source of the leak or release. Clean up releases as soon as possible. Contain liquid to prevent further contamination of soil, surface water or groundwater. Clean up small spills using appropriate techniques such as sorbent materials or pumping. Where feasible and appropriate, remove contaminated soil. Follow prescribed procedures for reporting and responding to larger releases.

Waste Disposal Methods: Place contaminated materials in disposable containers and dispose of in a manner consistent with applicable regulations. Contact local environmental or health authorities for approved disposal of this material.

REACTIVITY DATA

Stability (Thermal, Light, etc.): Stable

Incompatibility (Materials to Avoid): May react with strong oxidizing materials.

Hazardous Decomposition Products: Normal combustion forms carbon dioxide and water vapor; incomplete combustion can produce carbon monoxide.

Hazardous Polymerization: Will not occur.

PHYSICAL PROPERTIES

Solubility: Soluble in hydrocarbon solvents; insoluble in water.

Appearance (Color, Odor, etc.): Clear, colorless liquid.

Boiling Point: NDA

Melting Point: n/a

Specific Gravity: 0.89 @ 15.6/15.6°C

Vapor Pressure: n/a

Vapor Density (Air=1): n/a

Percent Volatile (Volume %): n/a

Evaporation: n/a

Pour Point: -48°C (-55°F)

Viscosity: 22 cSt @ 37.8°C

n/a = Not Applicable

NDA = No Data Available

The above information is based on data of which we are aware and is believed to be correct as of the date hereof. Since the information contained herein may be applied under conditions beyond our control and with which we may be unfamiliar and since data made available subsequent to the date hereof may suggest modifications of the information, we do not assume any responsibility for the results at its use. This information is furnished upon the condition that the person receiving it shall make his own determination of the suitability of the material for his particular purpose.

APPENDIX H
LABORATORY REPORTS
TANK REMOVAL ACTIVITIES



GTEL

ENVIRONMENTAL
LABORATORIES, INC.

4080 Pike Lane
Concord, CA 94520
(510) 685-7852
(800) 544-3422 Inside CA
(800) 423-7143 Outside CA
(510) 825-0720 FAX

Client Number: RMT01RMT01
Consultant Project Number: 12036.01
Project ID: Aratex Services
330 Chestnut
Oakland, CA
Work Order Number: C3-07-0507

August 3, 1993

Jim Van Nortwick
RMT, Inc.
3250 Ocean Park Blvd., Suite 370
Santa Monica, CA 90405

Enclosed please find the analytical results for samples received by GTEL Environmental Laboratories, Inc. on 07/30/93, under chain of custody records 28299, 28300 and 28301.

A formal Quality Assurance/Quality Control (QA/QC) program is maintained by GTEL, which is designed to meet or exceed the EPA requirements. Analytical work for this project met QA/QC criteria, unless otherwise stated in the footnotes.

GTEL is certified by the California State Department of Health Services, Laboratory certification number E1075, to perform analyses for drinking water, wastewater, and hazardous waste materials according to EPA protocols.

If you have any questions concerning this analysis or if we can be of further assistance, please call our Customer Service Representative.

Sincerely,
GTEL Environmental Laboratories, Inc.

Eileen F. Bullen
Laboratory Director

Client Number: RMT01RMT01
 Consultant Project Number: 12036.01
 Project ID: Aratex Services
 330 Chestnut
 Oakland, CA
 Work Order Number: C3-07-0507

Table 1

ANALYTICAL RESULTS

**Total Petroleum Hydrocarbons in Soil
 by Infrared Spectrometry¹**

EPA 3550 (Mod.)/EPA 418.1 (SM 5520 FC)²

GTEL Sample Number		01	02	080293 TPH	
Client Identification		SO-01	SO-02	METHOD BLANK	
Date Sampled		07/29/93	07/29/93	-	
Date Prepared		08/02/93	08/02/93	08/02/93	
Date Analyzed		08/03/93	08/03/93	08/03/93	
Analyte	Detection Limit, mg/Kg	Concentration, mg/Kg			
Total Petroleum Hydrocarbons	5	<5	<5	<5	
Detection Limit Multiplier		1	1	1	
Percent solids		84.3	85.5	NA	

1. The sample is sonication extracted using a modification of EPA 3550. The extract is analyzed, as in EPA 418.1 (SM 5520 CF), to yield results reported as Total Petroleum Hydrocarbons. Results are reported on a wet weight basis.
2. Standard Methods for the Examination of Water and Wastewater, 17th ed., American Public Health Association, 1989.

NA = Not Applicable

Note: Samples were received at 12° C.

Client Number: RMT01RMT01
 Consultant Project Number: 12036.01
 Project ID: Aratex Services
 330 Chestnut
 Oakland, CA
 Work Order Number: C3-07-0507

Table 1
ANALYTICAL RESULTS
 Hydrocarbons in Soil
 Method: GC-FID^a

GTEL Sample Number		01	02	080393 GC-K	
Client Identification		SO-01	SO-02	METHOD BLANK	
Date Sampled		07/28/93	07/29/93	--	
Date Extracted		08/02/93	08/02/93	08/02/93	
Date Analyzed		08/03/93	08/03/93	08/03/93	
Analyte	Detection Limit, mg/Kg	Concentration, mg/Kg			
TPH as gasoline	10	<10	<10	<10	
TPH as mineral spirits	10	<10	<10	<10	
TPH as kerosene	10	<10	<10	<10	
TPH as diesel fuel	10	<10	<10	<10	
TPH as motor oil	100	<100	<100	<100	
Detection Limit Multiplier		1	1	1	
Percent solids		84.3	88.5	NA	
O-Terphenyl surrogate, % recovery		102	104	122	

a. Test Methods for Evaluating Solid Waste, SW-846, Third Edition, Revision 0, USEPA, November, 1986. Results reported on a wet weight basis. O-Terphenyl surrogate acceptability limits are 50-150%.

NA = Not Applicable

Note: Samples were received at 12° C.

Company Name: **RMT, Inc** Phone #: **310-452-5078**
 Company Address: **SANTA MONICA, CA** Site location: **ARATEX SERVICES**
 Project Manager: **JIM VAN NORTWICK** Client Project ID: (#) **12036.01**
 (NAME) **ARATEX-OAKLAND UST**
 I attest that the proper field sampling procedures were used during the collection of these samples. Sampler Name (Print): **BRYAN GRIGSBY**

Field Sample ID	GTEL Lab # (Lab use only)	# Containers	Matrix						Method Preserved				Sampling		
			WATER	SOIL	AIR	SLUDGE	PRODUCT	OTHER	HCl	HNO ₃	H ₂ SO ₄	ICE	UNPRESERVED	OTHER (SPECIFY)	DATE
50-ST1	05	4	X								X			7/29/93	6:15
50-ST2	06	4	Y								X			7/29	6:30
50-ST3	07	4	X								X			↓	6:40
50-ST4	08	4	X								X			↓	6:50
50-ST5	08	4	X								X			↓	7:05

<input type="checkbox"/> BTEX/602 <input type="checkbox"/> 8020 <input type="checkbox"/> with MTBE <input type="checkbox"/>	<input type="checkbox"/> BTEX/Gas Hydrocarbons PID/FID <input checked="" type="checkbox"/> with MTBE <input type="checkbox"/>	<input type="checkbox"/> Hydrocarbons GC/FID Gas <input type="checkbox"/> Diesel <input checked="" type="checkbox"/> Screen <input type="checkbox"/>	<input type="checkbox"/> Hydrocarbon Profile (SIMDIS) <input type="checkbox"/>	<input type="checkbox"/> Oil and Grease 413.1 <input type="checkbox"/> 413.2 <input type="checkbox"/> SM 503 <input type="checkbox"/>	<input type="checkbox"/> TPH/IR 418.1 <input type="checkbox"/> SM 503 <input type="checkbox"/>	<input type="checkbox"/> EDB by 504 <input type="checkbox"/> DBCP by 504 <input type="checkbox"/>	<input type="checkbox"/> EPA 503.1 <input type="checkbox"/> EPA 502.2 <input type="checkbox"/>	<input type="checkbox"/> EPA 601 <input type="checkbox"/> EPA 8010 <input type="checkbox"/>	<input type="checkbox"/> EPA 602 <input type="checkbox"/> EPA 8020 <input type="checkbox"/>	<input type="checkbox"/> EPA 608 <input type="checkbox"/> 8080 <input type="checkbox"/> PCB only <input type="checkbox"/>	<input type="checkbox"/> EPA 824/PPL <input type="checkbox"/> 8240/TAL <input type="checkbox"/> NBS (+15) <input type="checkbox"/>	<input type="checkbox"/> EPA 825/PPL <input type="checkbox"/> 8270/TAL <input type="checkbox"/> NBS (+25) <input type="checkbox"/>	<input type="checkbox"/> EPA 610 <input type="checkbox"/> 8310 <input type="checkbox"/>	<input type="checkbox"/> EP TOX Metals <input type="checkbox"/> Pesticides <input type="checkbox"/> Herbicides <input type="checkbox"/>	<input type="checkbox"/> TCLP Metals <input type="checkbox"/> VOA <input type="checkbox"/> Semi-VOA <input type="checkbox"/> Pest <input type="checkbox"/> Hero <input type="checkbox"/>	<input type="checkbox"/> EPA Metals - Priority Pollutant <input type="checkbox"/> TAL <input type="checkbox"/> RCRA <input type="checkbox"/>	<input type="checkbox"/> CAM Metals TTLC <input type="checkbox"/> STLC <input type="checkbox"/>	<input checked="" type="checkbox"/> Lead 309.2 <input type="checkbox"/> 200.7 <input type="checkbox"/> 7420 <input type="checkbox"/> 6010 <input type="checkbox"/>	<input type="checkbox"/> Organic Lead <input type="checkbox"/>	<input type="checkbox"/> Corrosivity <input type="checkbox"/> Flash Point <input type="checkbox"/> Reactivity <input type="checkbox"/>	<input type="checkbox"/> OTHER
---	---	--	--	---	--	---	--	---	---	---	--	--	---	---	--	--	---	--	--	--	--------------------------------

TAT
 Priority (24 hr)
 Expedited (48 hr)
 7 Business Days
 Other 10 Day
 Business Days

Special Handling
 GTEL Contact _____
 Quote/Contract # _____
 Confirmation # _____
 PO # _____

QA / QC LEVEL
 BLUE CLP OTHER _____

SPECIAL DETECTION LIMITS

SPECIAL REPORTING REQUIREMENTS

FAK

P 2 of 3

REMARKS
 Call Tom Davis - RMT for appropriate lead analysis method

Lab Use Only Lot # _____ Storage Location: **M-2**

Work Order **C3070508** (BSC)

CUSTODY RECORD

Relinquished by Sampler: *[Signature]*
 Relinquished by: *[Signature]*
 Relinquished by:

Date Time
 7/30/93 | 12:55
 Date Time
 7/30/93 | 1430
 Date Time
 7/30/93 | 1430

Received by: *[Signature]*
 Received by:
 Received by Laboratory: *[Signature]*
 Waybill #

Company Name: **RMT, Inc** Phone #: **310-450-452-5078**
 Company Address: **Santa Monica, CA** Site location: **ARATEX SERVICES**
330 CHESTNUT ST, OAKLAND, CA
 Project Manager: **Jim Van Nortwick** Client Project ID: (#) **12036.01**
 (NAME) **ARATEX-OAKLAND UST**
 I attest that the proper field sampling procedures were used during the collection of these samples. Sampler Name (Print): **BRYAN GRUBBY**

BTEX/602 8020 with MTBE
 BTEX/Gas Hydrocarbons PID/FID with MTBE
 Hydrocarbons GC/FID Gas Diesel Screen
 Hydrocarbon Profile (SIMDIS)
 Oil and Grease 413.1 413.2 SM 503
 TPH/IR 418.1 SM 503
 EDB by 504 DBCP by 504
 EPA 503.1 EPA 502.2
 EPA 601 EPA 8010
 EPA 602 EPA 8020
 EPA 608 8080 PCB only
 EPA 624/PPL 8240/TAL NBS (+15)
 EPA 625/PPL 8270/TAL NBS (+25)
 EPA 610 8310
 EP TOX Metals Pesticides Herbicides
 TCLP Metals VOA Semi-VOA Pest Herb
 EPA Metals - Priority Pollutant TAL RCRA
 CAM Metals T1C STLC
 Lead 239.2 200.7 7420 7421 6010
 Organic Lead
 Corrosivity Flash Point Reactivity (H)

Field Sample ID	GTEL Lab # (Lab use only)	# Containers	Matrix						Method Preserved				Sampling		
			WATER	SOIL	AIR	SLUDGE	PRODUCT	OTHER	HCl	HNO ₃	H ₂ SO ₄	ICE	UNPRESERVED	OTHER (SPECIFY)	DATE
50-ST6	19	1	<input checked="" type="checkbox"/>											7/30/93	8:45
50-ST7	19	1	<input checked="" type="checkbox"/>											7/30	8:55

TAT
 Priority (24 Hr)
 Expedited (48 Hr)
 7 Business Days
 Other Business Days

Special Handling
 GTEL Contact _____
 Quote/Contract # _____
 Confirmation # _____
 PO # _____

QA / QC LEVEL
 BLUE CLP OTHER _____

SPECIAL DETECTION LIMITS
ON ICF AS 12°C 7/30/93
(RSC)

SPECIAL REPORTING REQUIREMENTS
 FAX

REMARKS
DO NOT ANALYZE. HOLD UNTIL FURTHER INSTRUCTIONS FROM RMT

Lab Use Only Lot # _____ Storage Location: **M-2**

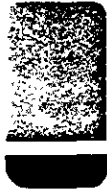
P 3 of 3 Work Order # **C3070508**

CUSTODY RECORD

Relinquished by Sampler: *[Signature]*
 Relinquished by: *[Signature]*
 Relinquished by: _____

Date Time
 7/30/93 | 12:55
 7/30/93 | 14:30
 7/30/93 | 14:30

Received by: *[Signature]*
 Received by: _____
 Received by Laboratory: *[Signature]*
 Waybill # _____



GTEL

ENVIRONMENTAL
LABORATORIES, INC.

Northwest Region

4080 Pike Lane
Suite C
Concord, CA 94520
(510) 685-7852
(800) 544-3422 Inside CA
FAX (510) 825-0720

Client Number: RMT01RMT01
Consultant Project Number: 12036.01
Project ID: Aratex Services
330 Chestnut
Oakland, CA
Work Order Number: C3-07-0508

August 13, 1993

Jim Van Nortwick
RMT Inc.
3250 Ocean Park Blvd
Santa Monica, CA 90405

Enclosed please find the analytical results for samples received by GTEL Environmental Laboratories, Inc. on 07/30/93, under chain of custody record 28299 and 28300.

A formal Quality Assurance/Quality Control (QA/QC) program is maintained by GTEL, which is designed to meet or exceed the EPA requirements. Analytical work for this project met QA/QC criteria, unless otherwise stated in the footnotes.

GTEL is certified by the California State Department of Health Services, Laboratory certification number E1075, to perform analyses for drinking water, wastewater, and hazardous waste materials according to EPA protocols.

If you have any questions concerning this analysis or if we can be of further assistance, please call our Customer Service Representative.

Sincerely,
GTEL Environmental Laboratories, Inc.

Eileen F. Bullen
Laboratory Director

Client Number: RMT01RMT01
 Consultant Project Number: 12036.01
 Project ID: Aratex Services
 330 Chestnut
 Oakland, CA
 Work Order Number: C3-07-0508

Table 1
ANALYTICAL RESULTS
Lead in Soil
EPA Method 6010^a

a. Test Methods for Evaluating Solid Waste, SW-846, Third Edition, Revision 0, US EPA November 1986. Sample preparation by EPA Method 3050.

GTEL Sample Number		03	04	05	06
Client Identification		SO-05	SO-06	SO-ST1	SO-ST2
Date Sampled		07/29/93	07/29/93	07/29/93	07/29/93
Date Prepared		08/06/93	08/06/93	08/06/93	08/06/93
Date Analyzed		08/09/93	08/09/93	08/09/93	08/09/93
Analyte	Detection Limit, mg/Kg	Concentration, mg/Kg			
Lead, total	5	<5	<5	21	18
Detection Limit Multiplier		1	1	1	1
Percent solids		84.6	84.3	92.4	92.7

GTEL Sample Number		07	08	09	080693MET
Client Identification		SO-ST3	SO-ST4	SO-ST5	METHOD BLANK
Date Sampled		07/29/93	07/29/93	07/29/93	--
Date Prepared		08/06/93	08/06/93	08/06/93	08/06/93
Date Analyzed		08/09/93	08/09/93	08/09/93	08/09/93
Analyte	Detection Limit, mg/Kg	Concentration, mg/Kg			
Lead, total	5	9	26	44	<5
Detection Limit Multiplier		1	1	1	1
Percent solids		95.3	90.3	92.7	NA

NA = Not Applicable
 Note: Samples were received at 12^o C.

Client Number: RMT01RMT01
 Consultant Project Number: 12036.01
 Project ID: Aratex Services
 330 Chestnut
 Oakland, CA
 Work Order Number: C3-07-0508

Table 1
ANALYTICAL RESULTS

Total Petroleum Hydrocarbons as Diesel Fuel in Soil
Modified EPA Methods 3550/8015^a

a. Test Methods for Evaluating Solid Waste, SW-846, Third Edition, Revision 0, US EPA November 1986. Results reported on a wet weight basis.

GTEL Sample Number		01	02	03	04
Client Identification		SO-03	SO-04	SO-ST1	SO-ST2
Date Sampled		07/29/93	07/29/93	07/29/93	07/29/93
Date Extracted		08/05/93	08/05/93	08/05/93	08/05/93
Date Analyzed		08/10/93	08/10/93	08/10/93	08/10/93
Analyte	Detection Limit, mg/Kg	Concentration, mg/Kg			
TPH as diesel fuel	10	<10	<10	36	23
Detection Limit Multiplier		1	1	1	1
Percent solids		85.3	84.7	92.4	92.7
OTP surrogate, % recovery		96.5	105	130	122

GTEL Sample Number		07	08	09	081093 GCK
Client Identification		SO-ST3	SO-ST4	SO-ST5	METHOD BLANK
Date Sampled		07/29/93	07/29/93	07/29/93	--
Date Extracted		08/05/93	08/05/93	08/05/93	08/05/93
Date Analyzed		08/10/93	08/11/93	08/11/93	08/10/93
Analyte	Detection Limit, mg/Kg	Concentration, mg/Kg			
TPH as diesel fuel	10	<10	<10	<10	<10
Detection Limit Multiplier		1	1	1	1
Percent solids		95.3	90.3	92.7	NA
OTP surrogate, % recovery		102	108	76.1	112

NA= Not Applicable.
 Note: Samples were received at 12° C.

Client Number: RMT01RMT01
 Consultant Project Number: 12036.01
 Project ID: Aratex Services
 330 Chestnut
 Oakland, CA
 Work Order Number: C3-07-0508

Table 1
ANALYTICAL RESULTS
Volatile Organics in Soil

EPA Methods 8020 and Modified 8015^a

GTEL Sample Number		01	02	03	04
Client Identification		SO-03	SO-04	SO-05	SO-06
Date Sampled		07/29/93	07/29/93	07/29/93	07/29/93
Date Extracted		08/09/93	08/09/93	08/09/93	08/09/93
Date Analyzed		08/12/93	08/12/93	08/12/93	08/12/93
Analyte	Detection Limit, mg/kg	Concentration, mg/kg			
Benzene	0.005	<0.005	<0.005	<0.005	<0.005
Toluene	0.005	<0.005	<0.005	<0.005	<0.005
Ethylbenzene	0.005	<0.005	<0.005	<0.005	<0.005
Xylene, total	0.015	<0.015	<0.015	<0.015	<0.015
BTEX, total	--	--	--	--	--
TPH as Gasoline	1	NR	NR	<1	<1
Detection Limit Multiplier		1	1	1	1
Percent solids		85.3	84.7	84.6	84.3
BFB surrogate, % recovery		78.6	79.7	79.3	75.9

a. Test Methods for Evaluating Solid Waste, SW-846, Third Edition, Revision 0, US EPA November 1986. Modification for TPH as gasoline as per California State Water Resources Board LUFT Manual procedures. Bromofluorobenzene surrogate recovery acceptability limits are 60-140%

NR = Not Requested

Note: Samples were received at 12^o C.

Client Number: RMT01RMT01
 Consultant Project Number: 12036.01
 Project ID: Aratex Services
 330 Chestnut
 Oakland, CA
 Work Order Number: C3-07-0508

Table 1 (continued)
ANALYTICAL RESULTS
Volatile Organics in Soil

EPA Methods 8020 and Modified 8015a

GTEL Sample Number		05	06	07	08
Client Identification		SO-ST1	SO-ST2	SO-ST3	SO-ST4
Date Sampled		07/29/93	07/29/93	07/29/93	07/29/93
Date Extracted		08/09/93	08/09/93	08/09/93	08/09/93
Date Analyzed		08/12/93	08/12/93	08/12/93	08/12/93
Analyte	Detection Limit, mg/kg	Concentration, mg/kg			
Benzene	0.005	<0.005	<0.005	<0.005	<0.005
Toluene	0.005	<0.005	<0.005	<0.005	<0.005
Ethylbenzene	0.005	<0.005	<0.005	<0.005	<0.005
Xylene, total	0.015	<0.015	<0.015	<0.015	<0.015
BTEX, total	--	--	--	--	
TPH as Gasoline	1	<1	<1	<1	<1
Detection Limit Multiplier		1	1	1	1
Percent solids		92.4	92.7	95.3	90.3
BFB surrogate, % recovery		85.5	86.9	82.8	66.7

a. Test Methods for Evaluating Solid Waste, SW-846, Third Edition, Revision 0, US EPA November 1986. Modification for TPH as gasoline as per California State Water Resources Board LUFT Manual procedures. Bromofluorobenzene surrogate recovery acceptability limits are 60-140%.

Note: Samples were received at 12° C.

Client Number: RMT01RMT01
 Consultant Project Number: 12036.01
 Project ID: Aratex Services
 330 Chestnut
 Oakland, CA
 Work Order Number: C3-07-0508

Table 1 (continued)
ANALYTICAL RESULTS
Volatile Organics in Soil

EPA Methods 8020 and Modified 8015^a

GTEL Sample Number		09	Q080993		
Client Identification		SO-ST5	METHOD BLANK		
Date Sampled		07/29/93	--		
Date Extracted		08/09/93	08/09/93		
Date Analyzed		08/12/93	08/09/93		
Analyte	Detection Limit, mg/kg	Concentration, mg/kg			
Benzene	0.005	<0.005	<0.005		
Toluene	0.005	<0.005	<0.005		
Ethylbenzene	0.005	<0.005	<0.005		
Xylene, total	0.015	<0.015	<0.015		
BTEX, total	--	--	--		
TPH as Gasoline	1	<1	<1		
Detection Limit Multiplier		1	1		
Percent solids		92.7	NA		
BFB surrogate, % recovery		57.6	90.5		

=
 a. Test Methods for Evaluating Solid Waste, SW-846, Third Edition, Revision 0, US EPA November 1986. Modification for TPH as gasoline as per California State Water Resources Board LUFI Manual procedures. Bromofluorobenzene surrogate recovery acceptability limits are 60-140%.

NA = Not Applicable.

Note: Samples were received at 12^o C.



1000 PINE LANE, SUITE 5
 CONCORD, CA 94520
 (510) 685-7852
 (800) 423-7143

IN-COMPLETION REQUEST
 AND ANALYSIS REQUEST

28299

Company Name: **RMT Inc** Phone #: **310-452-5078**
 Company Address: **SANTA MONICA, CA** Site location: **ARATEX SERVICES**
 Project Manager: **JIM VAN NORTWICK** Client Project ID: (#) **12036.01**
 (NAME) **ARATEX-OAKLAND UST**
 attest that the proper field sampling procedures were used during the collection of these samples. Sampler Name (Print): **BRYAN GRIGSBY**

Matrix	Method Preserved	Sampling	OTHER
BTEX/602	with MTBE	<input checked="" type="checkbox"/>	
BTEX/Gas Hydrocarbons PID/FID	with MTBE	<input type="checkbox"/>	
Hydrocarbons GC/FID	Gas	<input type="checkbox"/>	Screen <input type="checkbox"/>
Hydrocarbon	Screen	<input checked="" type="checkbox"/>	Screen
Oil and Grease	413.1 <input type="checkbox"/> 413.2 <input type="checkbox"/> SM 503 <input type="checkbox"/>	<input type="checkbox"/>	
TPH/IR 418.1	SM 503 <input checked="" type="checkbox"/>	<input type="checkbox"/>	
EDB by 504	DBCP by 504 <input type="checkbox"/>	<input type="checkbox"/>	
EPA 503.1	EPA 502.2 <input type="checkbox"/>	<input type="checkbox"/>	
EPA 601	EPA 6010 <input type="checkbox"/>	<input type="checkbox"/>	
EPA 602	EPA 8020 <input type="checkbox"/>	<input type="checkbox"/>	
EPA 608	8080 <input type="checkbox"/> PCB only <input type="checkbox"/>	<input type="checkbox"/>	
EPA 624/PPL	8240/TAL <input type="checkbox"/> NBS (+15) <input type="checkbox"/>	<input type="checkbox"/>	
EPA 625/PPL	8270/TAL <input type="checkbox"/> NBS (+25) <input type="checkbox"/>	<input type="checkbox"/>	
EPA 610	8310 <input type="checkbox"/>	<input type="checkbox"/>	
EP TOX Metals	Pesticides <input type="checkbox"/> Herbicides <input type="checkbox"/>	<input type="checkbox"/>	
TCLP Metals	VOA <input type="checkbox"/> Semi-VOA <input type="checkbox"/> Pest <input type="checkbox"/> Herb <input type="checkbox"/>	<input type="checkbox"/>	
EPA Metals - Priority Pollutant	TAL <input type="checkbox"/> RCRA <input type="checkbox"/>	<input type="checkbox"/>	
CAM Metals	TTLIC <input type="checkbox"/> STLIC <input type="checkbox"/>	<input type="checkbox"/>	
Lead	339.2 <input type="checkbox"/> 200.7 <input type="checkbox"/> 7420 <input type="checkbox"/> 7421 <input type="checkbox"/> 6010 <input type="checkbox"/>	<input type="checkbox"/>	
Organic Lead	<input type="checkbox"/>	<input type="checkbox"/>	
Corrosivity	Flash Point <input type="checkbox"/> Reactivity <input type="checkbox"/>	<input type="checkbox"/>	

Field Sample ID	GTEL Lab # (Lab use only)	# Containers	Matrix						Method Preserved						Sampling	
			WATER	SOIL	AIR	SLUDGE	PRODUCT	OTHER	HCl	HNO ₃	H ₂ SO ₄	ICE	UNPRESERVED	OTHER (SPECIFY)	DATE	TIME
50-φ1	01 507	4	X									X			7/29/93	2:05
50-φ2	02 507	4	X									X			7/29	2:20
50-φ3	03 01	4	X									X			7/29	2:45
50-φ4	04 02	4	X									X			7/29	3:00
50-φ5	05 03	3	X									X			7/29	3:10
50-φ6	06 04	3	X									X			7/29	3:20

TAT
 Priority (24 hr)
 Expedited (48 hr)
 7 Business Days
 Other **See Above**
 Business Days

Special Handling
 GTEL Contact _____
 Quote/Contract # _____
 Confirmation # _____
 PO # _____

QA / QC LEVEL
 BLUE CLP OTHER _____

SPECIAL DETECTION LIMITS
SEAL INTACT, ON ICE
AS IFC 7/30/93 (BE)

SPECIAL REPORTING REQUIREMENTS
P 1 of 3

REMARKS
 Call Tom Davis - RMT for appropriate lead analysis method.
 All 10-day TAT except 50-φ1 & 50-φ2
 Lab Use Only Lot # _____ Storage Location: **M-2**
C3070507-48 HR
C3070508-10 DAY
 Work Order # _____

CUSTODY RECORD

Relinquished by Sampler: <i>[Signature]</i>	Date 7/30/93	Time 12:50 PM	Received by: Joel Weber	GTEL
Relinquished by: <i>[Signature]</i>	Date 7/30/93	Time 14:30	Received by:	
Relinquished by:	Date 7/30/93	Time 14:30	Received by Laboratory: <i>[Signature]</i>	Waybill # _____

OTHER

Company Name: **RMT, Inc** Phone #: **310-450-462-5078**
 Company Address: **SANTA MONICA, CA** Site location: **ARATEX SERVICES**
330 CHESTNUT ST, OAKLAND, CA
 Project Manager: **Jim Van Nortwick** Client Project ID: (#) **12036.01**
 (NAME) **ARATEX - OAKLAND UST**
 I attest that the proper field sampling procedures were used during the collection of these samples. Sampler Name (Print): **BRYAN GRUBBY**

Field Sample ID	GTEL Lab # (Lab use only)	# Containers	Matrix					Method Preserved					Sampling		
			WATER	SOIL	AIR	SLUDGE	PRODUCT	OTHER	HCl	HNO ₃	H ₂ SO ₄	ICE	UNPRESERVED	OTHER (SPECIFY)	DATE
SO-ST6	19	1	X									X		7/30/93	8:45
SO-ST7	19	1	X									X		7/30	8:55

BTEX/602 8020 with MTBE
 BTEX/Gas Hydrocarbons PID/FID with MTBE
 Hydrocarbons GC/FID Gas Diesel Screen
 Hydrocarbon Profile (SIMDIS)
 Oil and Grease 413.1 413.2 SM 503
 TPH/IR 418.1 SM 503
 EDB by 504 DBCP by 504
 EPA 503.1 EPA 502.2
 EPA 601 EPA 8010
 EPA 602 EPA 8020
 EPA 608 8080 PCB only
 EPA 624/PPL 8240/TAL NBS (+15)
 EPA 625/PPL 8270/TAL NBS (+25)
 EPA 610 8310
 EP TOX Metals Pesticides Herbicides
 TCLP Metals VOA Semi-VOA Pest Herb
 EPA Metals - Priority Pollutant TAL RCRA
 CAM Metals TTLC STLC
 Lead 239.2 200.7 7420 7421 6010
 Organic Lead
 Corrosivity Flash Point Reactivity How

TAT
 Priority (24 hr)
 Expedited (48 hr)
 7 Business Days
 Other Business Days
 HOLD UNTIL FURTHER INSTRUCTIONS

Special Handling

QA / QC LEVEL
 BLUE CLP OTHER _____

SPECIAL DETECTION LIMITS
 QWICK AS 12°C 7/30/93
 (BSC)

SPECIAL REPORTING REQUIREMENTS

FAX

REMARKS
 DO NOT ANALYZE. HOLD UNTIL FURTHER INSTRUCTIONS FROM RMT

Lab Use Only Lot # _____ Storage Location: **M-2**

Work Order # **C3070508**

CUSTODY RECORD

Relinquished by Sampler: <i>[Signature]</i>	Date 7/30/93	Time 12:55
Relinquished by: <i>[Signature]</i>	Date 7/30/93	Time 1430
Relinquished by:	Date 7/30/93	Time 1430

Received by:
[Signature]

Received by:
[Signature]

Received by Laboratory:
[Signature]

Waybill # _____



4080 Pike Lane
Concord, CA 94520
(510) 685-7852
(800) 544-3422 Inside CA
(800) 423-7143 Outside CA
(510) 825-0720 FAX

Client Number: RMT01RMT01
Consultant Project Number: 12036.01
Project ID: Oakland
Work Order Number: C3-08-0014

August 9, 1993

James Van Nortwick
RMT, Inc.
3250 Ocean Park Blvd., Suite 370
Santa Monica, CA 90405

Enclosed please find the analytical results for samples received by GTEL Environmental Laboratories, Inc. on 08/02/93, under chain of custody record 28219.

A formal Quality Assurance/Quality Control (QA/QC) program is maintained by GTEL, which is designed to meet or exceed the EPA requirements. Analytical work for this project met QA/QC criteria, unless otherwise stated in the footnotes.

GTEL is certified by the California State Department of Health Services, Laboratory certification number E1075, to perform analyses for drinking water, wastewater, and hazardous waste materials according to EPA protocols.

If you have any questions concerning this analysis or if we can be of further assistance, please call our Customer Service Representative.

Sincerely,
GTEL Environmental Laboratories, Inc.

Eileen F. Bullen - Inorganic
Group
Lead

Eileen F. Bullen
Laboratory Director

Client Number: RMT01RMT01
 Consultant Project Number: 12036.01
 Project ID: Oakland
 Work Order Number: C3-08-0014

Table 1

ANALYTICAL RESULTS

**Total Petroleum Hydrocarbons in Soil
 by Infrared Spectrometry¹**

EPA 3550 (Mod.)/EPA 418.1 (SM 5520 FC)²

GTEL Sample Number		01	02	03	080593 TPH
Client Identification		MOP #1	MOP #2	MOP #3	METHOD BLANK
Date Sampled		08/02/93	08/02/93	08/02/93	--
Date Prepared		08/03/93	08/03/93	08/03/93	08/03/93
Date Analyzed		08/03/93	08/03/93	08/03/93	08/03/93
Analyte	Detection Limit, mg/Kg	Concentration, mg/Kg			
Total Petroleum Hydrocarbons	5	290	110	140	<5
Detection Limit Multiplier		1	1	1	1
Percent solids		96.6	99.1	98.6	NA

1. The sample is sonication extracted using a modification of EPA 3550. The extract is analyzed, as in EPA 418.1 (SM 5520 CF), to yield results reported as Total Petroleum Hydrocarbons. Results are reported on a wet weight basis. NA = Not Applicable.
2. Standard Methods for the Examination of Water and Wastewater, 17th ed., American Public Health Association, 1989.



80 LAM SUIT
 CONCORD, CA 94520
 (510) 685-7852
 (800) 423-7143

STAIN-RESISTANT SURFACE
 AND ANALYSIS REQUEST

20219

Company Name: **BMT** Phone #: **310 452-3078**
 Company Address: **Santa Monica** Site location: **Oakland**
 Project Manager: **James Van Nortwick** Client Project ID: (#) _____
 I attest that the proper field sampling procedures were used during the collection of these samples. Sampler Name (Print): **VORTWICK**

BTEX/602 8020 with MTBE
 BTEX/Gas Hydrocarbons PID/FID with MTBE
 Hydrocarbons GC/FID Gas Diesel Screening
 Hydrocarbon Profile (SIMDIS)
 Oil and Grease 413.1 413.2 SM 503
 TPH/IR 418.1 SM 503
 EDB by 504 DBCP by 504
 EPA 503.1 EPA 502.2
 EPA 601 EPA 6010
 EPA 602 EPA 8020
 EPA 608 8080 PCB only
 EPA 624/PPL 8240/TAL NBS (+15)
 EPA 625/PPL 8270/TAL NBS (+25)
 EPA 610 8310
 EP TOX Metals Pesticides Herbicides
 TCLP Metals VOA Semi-VOA Pest Herb
 EPA Metals - Priority Pollutant TAL RCRA
 CAM Metals TLC STLC
 Lead 239.2 200.7 7420 7421 6010
 Organic Lead
 Corrosivity Flash Point Reactivity

*** IDH SCREEN by IR 4/8/93**

Field Sample ID	GTEL Lab # (Lab use only)	# Containers	Matrix						Method Preserved						Sampling	
			WATER	SOIL	AIR	SLUDGE	PRODUCT	OTHER	HCl	HNO ₃	H ₂ SO ₄	ICE	UNPRESERVED	OTHER (SPECIFY)	DATE	TIME
map # 1	01	2		X							X	X			8-2-93	
map # 2	02	2		X							X	X			↓	
map # 3	03	2		X							X	X			↓	

TAT: Priority (24 hr) Expedited (48 hr) 7 Business Days Other Business Days

Special Handling: GTEL Contact _____ Quote/Contract # _____ Confirmation # _____ PO # _____

QA / QC LEVEL: BLUE CLP OTHER _____ FAX

SPECIAL DETECTION LIMITS _____

SPECIAL REPORTING REQUIREMENTS _____

REMARKS: **5 DAY TAT Feed Temp. 5.0 seal intact 8/2/93**

Lab Use Only Lot # **C3080014** Storage Location: _____

Work Order # _____

CUSTODY RECORD

Relinquished by Sampler: **Paul Key**

Relinquished by: _____

Relinquished by: **Kelly Biam**

Date Time: **8-2-93**

Date Time: _____

Date Time: **8-2-93 4:40**

Received by: **Kelly Harper-Rhodes**

Received by: _____

Received by Laboratory: **Kelly Biam 8/2/93 4:40**

Waybill # _____



Northwest Region
4080 Pike Lane
Suite C
Concord, CA 94520
(510) 685-7852
(800) 544-3422 Inside CA
FAX (510) 825-0720

Client Number: RMT01RMT01
Consultant Project Number: 12036.01
Project ID: Aratex Services
330 Chestnut St., Oakland
Work Order Number: C3-07-0519

August 16, 1993

Bryan Grigsby
RMT, Inc.
3250 Ocean Park Blvd., Suite 370
Santa Monica, CA 90405

Enclosed please find the analytical results for samples received by GTEL Environmental Laboratories, Inc. on 07/31/93, under chain of custody record 28302.

A formal Quality Assurance/Quality Control (QA/QC) program is maintained by GTEL, which is designed to meet or exceed the EPA requirements. Analytical work for this project met QA/QC criteria, unless otherwise stated in the footnotes.

GTEL is certified by the California State Department of Health Services, Laboratory certification number E1075, to perform analyses for drinking water, wastewater, and hazardous waste materials according to EPA protocols.

If you have any questions concerning this analysis or if we can be of further assistance, please call our Customer Service Representative.

Sincerely,
GTEL Environmental Laboratories, Inc.

Eileen F. Bullen
Laboratory Director

Client Number: RMT01RMT01
 Consultant Project Number: 12036.01
 Project ID: Aratex Services
 330 Chestnut St., Oakland
 Work Order Number: C3-07-0519

Table 1

ANALYTICAL RESULTS

Total Petroleum Hydrocarbons as Diesel Fuel in Soil

Modified EPA Methods 3550/8015^a

a. Test Methods for Evaluating Solid Waste, SW-846, Third Edition, Revision 0, US EPA November 1986. Results reported on a wet weight basis.

GTEL Sample Number		01*	02*	03+	04
Client Identification		SO-07	SO-08A	SO-09	SO-10
Date Sampled		07/30/93	07/30/93	07/30/93	07/30/93
Date Extracted		08/05/93	08/05/93	08/05/93	08/05/93
Date Analyzed		08/11/93	08/12/93	08/11/93	08/11/93
Analyte	Detection Limit, mg/Kg	Concentration, mg/Kg			
TPH as diesel fuel	10	1300	9400	62	<10
Detection Limit Multiplier		20	100	1	1
Percent solids		91.4	90+	91.7	92.7
OTP surrogate, % recovery		137	109	102	102

GTEL Sample Number		05*	081093 GC-K		
Client Identification		SO-11	METHOD BLANK		
Date Sampled		07/30/93	--		
Date Extracted		08/05/93	08/05/93		
Date Analyzed		08/12/93	08/10/93		
Analyte	Detection Limit, mg/Kg	Concentration, mg/Kg			
TPH as diesel fuel	10	4200	<10		
Detection Limit Multiplier		20	1		
Percent solids		91.3	NA		
OTP surrogate, % recovery		85.8	112		

* Detection limit raised due to the high concentration of target compounds
 + Other hydrocarbons also present.

Client Number: RMT01RMT01
 Consultant Project Number: 12036.01
 Project ID: Aratex Services
 330 Chestnut St., Oakland
 Work Order Number: C3-07-0519

Table 1
ANALYTICAL RESULTS
Volatile Organics in Soil
EPA Method 8020^a

GTEL Sample Number		01	02*	03*	04
Client Identification		SO-07	SO-08A	SO-09	SO-10
Date Sampled		07/30/93	07/30/93	07/30/93	07/30/93
Date Extracted		08/11/93	08/11/93	08/11/93	08/12/93
Date Analyzed		08/13/93	08/13/93	08/13/93	08/12/93
Analyte	Detection Limit, mg/kg	Concentration, mg/kg			
Benzene	0.005	0.014	<0.05	<0.010	<0.005
Toluene	0.005	0.021	<0.05	<0.010	0.011
Ethylbenzene	0.005	<0.005	<0.05	<0.010	<0.005
Xylene, total	0.015	<0.015	<0.15	0.059	<0.015
BTEX, total	--	0.035	--	0.059	--
Detection Limit Multiplier		1	10	2	1
Percent Solids		91.4	90.8	91.7	92.7
BFB surrogate, % recovery		110	99.5	93.4**	78.0

a. Test Methods for Evaluating Solid Waste, SW-846, Third Edition, Revision 0, US EPA November 1986. Bromofluorobenzene surrogate recovery acceptability limits are 31-127%

* Detection limit raised due to high levels of hydrocarbons

** TFT reported due to target compound interference at the BFB peak.

Client Number: RMT01RMT01
 Consultant Project Number: 12036.01
 Project ID: Aratex Services
 330 Chestnut St., Oakland
 Work Order Number: C3-07-0519

Table 1 (Continued)
ANALYTICAL RESULTS
Volatile Organics in Soil
EPA Method 8020^a

GTEL Sample Number		05	F081193		
Client Identification		SO-11	METHOD BLANK		
Date Sampled		07/30/93	--		
Date Extracted		08/12/93	--		
Date Analyzed		08/12/93	08/11/93		
Analyte	Detection Limit, mg/kg	Concentration, mg/kg			
Benzene	0.005	0.010	<0.005		
Toluene	0.005	0.009	<0.005		
Ethylbenzene	0.005	<0.005	<0.005		
Xylene, total	0.015	0.015	<0.015		
BTEX, total	--	0.034	--		
Detection Limit Multiplier		1	1		
Percent Solids		91.3	NA		
BFB surrogate, % recovery		58.1	105		

a. Test Methods for Evaluating Solid Waste, SW-846, Third Edition, Revision 0, US EPA November 1986. Bromofluorobenzene surrogate recovery acceptability limits are 31-127% NA = Not Applicable.

APPENDIX I
LABORATORY REPORTS
SOIL SAMPLING ACTIVITIES

SBS
9-93



Client Number: RMT01RMT01
Consultant Project Number: 12036.01
Work Order Number: C3-09-0557

Northwest Region
4080 Pike Lane
Suite C
Concord, CA 94520
(510) 685-7852
(800) 544-3422 Inside CA
FAX (510) 825-0720

October 19, 1993

Robert Suhosky
RMT Laboratories, Inc.
3250 Ocean Park Blvd., Suite 370
Santa Monica, CA 90405

Enclosed please find the analytical results for samples received by GTEL Environmental Laboratories, Inc. on 09/24/93, under chain of custody records 045493 and 045494.

A formal Quality Assurance/Quality Control (QA/QC) program is maintained by GTEL, which is designed to meet or exceed the EPA requirements. Analytical work for this project met QA/QC criteria, unless otherwise stated in the footnotes.

GTEL is certified by the California State Department of Health Services, Laboratory certification number E1075, to perform analyses for drinking water, wastewater, and hazardous waste materials according to EPA protocols.

If you have any questions concerning this analysis or if we can be of further assistance, please call our Customer Service Representative.

Sincerely,
GTEL Environmental Laboratories, Inc.

Eileen F. Bullen
Laboratory Director

Table 1
ANALYTICAL RESULTS
Volatile Organics in Soil
EPA Method 8020^a

GTEL Sample Number	09	13 ^b	14	15	
Client Identification	SB-6-5	SB-11	SB-10	SB-14	
Date Sampled	09/22/93	09/23/93	09/23/93	09/23/93	
Date Extracted	10/06/93	10/06/93	10/06/93	10/06/93	
Date Analyzed	10/07/93	10/07/93	10/07/93	10/07/93	
Analyte	Detection Limit, mg/kg	Concentration, mg/kg			
Benzene	0.005	0.094	<0.05	<0.005	<0.005
Toluene	0.005	0.021	30	<0.005	<0.005
Ethylbenzene	0.005	0.052	0.89	<0.005	<0.005
Xylene, total	0.015	0.072	17	<0.015	<0.015
BTEX, total	--	0.24	48	--	--
Detection Limit Multiplier		1	10	1	1
Percent Solids		86.0	81.1	91.0	90.5
BFB surrogate, % recovery		74.2	108 ^c	76.9	70.3

- a. Test Methods for Evaluating Solid Waste, SW-846, Third Edition, Revision 0, US EPA November 1986. Bromofluorobenzene surrogate recovery acceptability limits are 60-140%
- b. Detection limit raised due to high levels of hydrocarbons.
- c. TFT recovery reported due to matrix interference at BFB peak.

Table 1 (Continued)
ANALYTICAL RESULTS
Volatile Organics in Soil
EPA Method 8020a

GTEL Sample Number		Z100693			
Client Identification		METHOD BLANK			
Date Sampled		--			
Date Extracted		10/06/93			
Date Analyzed		10/06/93			
Analyte	Detection Limit, mg/kg	Concentration, mg/kg			
Benzene	0.005	<0.005			
Toluene	0.005	<0.005			
Ethylbenzene	0.005	<0.005			
Xylene, total	0.015	<0.015			
BTEX, total	--	--			
Detection Limit Multiplier		1			
Percent Solids		NA			
BFB surrogate, % recovery		93.1			

- a. Test Methods for Evaluating Solid Waste, SW-846, Third Edition, Revision 0, US EPA November 1986. Bromofluorobenzene surrogate recovery acceptability limits are 60-140%. NA = Not Applicable.

Table 1

ANALYTICAL RESULTS
Total Petroleum Hydrocarbons as Diesel Fuel in Soil
Modified EPA Methods 3550/8015^a

- a. Test Methods for Evaluating Solid Waste, SW-846, Third Edition, Revision 0, US EPA November 1986. Results reported on a wet weight basis.
- b. Hydrocarbon pattern not indicative of diesel hydrocarbon requested.
- c. Sample extract lost during extraction. Not enough sample for re-extraction.

NA = Not Available.

GTEL Sample Number		09 ^b	13 ^c	14	15
Client Identification		SB-6-5	SB-11	SB-10	SB-14
Date Sampled		09/22/93	09/23/93	09/23/93	09/23/93
Date Extracted		10/06/93	NA	10/06/93	10/06/93
Date Analyzed		10/15/93	NA	10/15/93	10/15/93
Analyte	Detection Limit, mg/Kg	Concentration, mg/Kg			
TPH as diesel fuel	10	<10	NA	<10	<10
Detection Limit Multiplier		1	NA	1	1
Percent solids		86.0	NA	91.0	90.5
OTP surrogate, % recovery		91.4	NA	76.9	82.8

GTEL Sample Number		100693 GCI			
Client Identification		METHOD BLANK			
Date Sampled		--			
Date Extracted		10/06/93			
Date Analyzed		10/14/93			
Analyte	Detection Limit, mg/Kg	Concentration, mg/Kg			
TPH as diesel fuel	10	<10			
Detection Limit Multiplier		1			
Percent solids		NA			
OTP surrogate, % recovery		95.1			



SEQUOIA ANALYTICAL

1900 Bates Avenue • Suite LM • Concord, California 94520
(510) 686-9600 • FAX (510) 686-9689

GTEL
4080 Pike Lane, Ste. C
Concord, CA 94520
Attention: Debra Tiernan

Client Project ID: 12036.01
Sample Descript: Soil, SB-6-5,SB-11,SB-10,SB-14
Lab Number: 401-0369

Sampled: Sep 22-23, 1993
Received: Jan 12, 1994
Analyzed: Jan 14, 1994
Reported: Jan 18, 1994

INORGANIC PERSISTENT AND BIOACCUMULATIVE TOXIC SUBSTANCES

Soluble Threshold Limit Concentration

Total Threshold Limit Concentration

Waste Extraction Test

Analyte	STLC Max. Limit (mg/L)	Detection Limit (mg/L)	Analysis Result (mg/L)	TTL Max. Limit (mg/kg)	Detection Limit (mg/kg)	Analysis Result (mg/kg)
Antimony	15	0.10	-	500	5.0	N.D.
Arsenic	5.0	0.10	-	500	5.0	N.D.
Barium	100	0.10	-	10,000	0.50	58
Beryllium	0.75	0.010	-	75	0.50	N.D.
Cadmium	1.0	0.010	-	100	0.50	N.D.
Chromium (VI)	5.0	0.0050	-	500	0.050	-
Chromium (III)	560	0.010	-	2,500	0.50	31
Cobalt	80	0.050	-	8,000	0.50	13
Copper	25	0.010	-	2,500	0.50	50
Lead	5.0	0.10	-	1,000	1.0	18
Mercury	0.20	0.0020	-	20	0.010	0.085
Molybdenum	350	0.050	-	3,500	0.50	0.61
Nickel	20	0.050	-	2,000	1.0	23
Selenium	1.0	0.10	-	100	5.0	N.D.
Silver	5.0	0.010	-	500	0.50	N.D.
Thallium	7.0	0.10	-	700	5.0	N.D.
Vanadium	24	0.050	-	2,400	0.50	21
Zinc	250	0.010	-	5,000	1.0	85
Asbestos	-	10	-	10,000	100	-
Fluoride	180	0.10	-	18,000	1.0	-

TTL results are reported as mg/kg of wet weight. Asbestos results are reported as fibers/g.
Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL

Karen L. Enstrom
Project Manager



SEQUOIA ANALYTICAL

1900 Bates Avenue • Suite LM • Concord, California 94520
(510) 686-9600 • FAX (510) 686-9689

GTEL
4080 Pike Lane, Ste. C
Concord, CA 94520
Attention: Debra Tiernan

Client Project ID: 12036.01
Sample Descript: Soil, SB-6-5,SB-11,SB-10,SB-14
Lab Number: 401-0369

Sampled: 09/22-09/23
Received: Jan 12, 1994
Analyzed: Jan 12-14, 1994
Reported: Jan 18, 1994

CORROSIVITY, IGNITABILITY, AND REACTIVITY

Analyte	Detection Limit	Sample Results
Corrosivity:		
pH.....	N.A.	7.4
Ignitability:		
Flashpoint (Pensky-Martens), °C.....	N.A.	> 100 °C
Reactivity:		
Sulfide, mg/kg.....	13	N.D.
Cyanide, mg/kg.....	0.50	N.D.
Reaction with water.....	N.A.	Negative

Analytes reported as N D were not present above the stated limit of detection

SEQUOIA ANALYTICAL


Karen L. Enstrom
Project Manager



SEQUOIA ANALYTICAL

1900 Bates Avenue • Suite LM • Concord, California 94520
(510) 686-9600 • FAX (510) 686-9689

GTEL
4080 Pike Lane, Ste. C
Concord, CA 94520
Attention: Debra Tieman

Client Project ID: 12036.01
Matrix: Solid

QC Sample Group: 401-0369

Reported: Jan 19, 1994

QUALITY CONTROL DATA REPORT

ANALYTE	Thallium	Selenium	Arsenic	Molybdenum	Cobalt	Mercury
Method:	EPA 6010	EPA 6010	EPA 6010	EPA 6010	EPA 6010	EPA 7471
Analyst:	J.D./S.P.	J.D./S.P.	J.D./S.P.	J.D./S.P.	J.D./S.P.	K.V.S.

MS/MSD

Batch#:	3112504	3112504	3112504	3112504	3112504	4010369
Date Prepared:	1/12/94	1/12/94	1/12/94	1/12/94	1/12/94	1/13/94
Date Analyzed:	1/14/94	1/14/94	1/14/94	1/14/94	1/14/94	1/14/94
Instrument I.D.#:	Liberty-100	Liberty-100	Liberty-100	Liberty-100	Liberty-100	SpectrAA-20
Conc. Spiked:	50 mg/kg	50 mg/kg	50 mg/kg	50 mg/kg	50 mg/kg	0.50 mg/kg

**Matrix Spike
% Recovery:**

83 80 89 81 82 89

**Matrix Spike
Duplicate %
Recovery:**

87 85 95 84 88 89

**Relative %
Difference:**

4.7 6.1 6.5 3.6 7.1 0.0

LCS Batch#:	BLK011294	BLK011294	BLK011294	BLK011294	BLK011294	BLK011394
Date Prepared:	1/12/94	1/12/94	1/12/94	1/12/94	1/12/94	1/13/94
Date Analyzed:	1/14/94	1/14/94	1/14/94	1/14/94	1/14/94	1/14/94
Instrument I.D.#:	Liberty-100	Liberty-100	Liberty-100	Liberty-100	Liberty-100	SpectrAA-20

**LCS %
Recovery:**

85 92 94 90 91 85

% Recovery Control Limits:	75-125	75-125	75-125	75-125	75-125	75-125
---------------------------------------	--------	--------	--------	--------	--------	--------

Please Note

The LCS is a control sample of known, interferent free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

SEQUOIA ANALYTICAL


Karen L. Enstrom
Project Manager



SEQUOIA ANALYTICAL

1900 Bates Avenue • Suite LM • Concord, California 94520
(510) 686-9600 • FAX (510) 686-9689

GTEL
4080 Pike Lane, Ste. C
Concord, CA 94520
Attention: Debra Tiernan

Client Project ID: 12036.01
Matrix: Solid

QC Sample Group: 401-0369

Reported: Jan 19, 1994

QUALITY CONTROL DATA REPORT

ANALYTE	Corrosivity	Ignitability	Reactive Cyanide	Reactive Sulfide
Method:	EPA 9045	EPA 1010	SW 846	SW 846
Analyst:	A. Pannu	D. Newcomb	M. Nguyen	K. Newberry

Date Analyzed:	1/12/94	1/12/94	1/14/94	1/14/94
Sample #:	4010369	4010369	9401529-01	9401529-01
Sample Concentration:	7.4	> 100 °C	N.D.	N.D.
Sample Duplicate Concentration:	7.4	> 100 °C	N.D.	N.D.
% RPD:	0.0	0.0	0.0	0.0
% RPD:				
Control Limits:	0-30	0-30	±20	±20

SEQUOIA ANALYTICAL


Karen L. Enstrom
Project Manager

APPENDIX J
SOIL EXCAVATION WORK PLAN

December 7, 1993

Ms. Jennifer Eberle
Alameda County Health Care Service Agency
Department of Environmental Health
UST Local Oversight Program
80 Swan Way, Room 200
Oakland, CA 94621

Re: **ARATEX Services, Inc., 330 Chestnut Street, Oakland, California**
Soil Sampling Results/Proposed Soil Excavation Activities

Dear Ms. Eberle:


On September 29, 1993, three underground storage tanks were removed from the referenced facility. As you know, evidence of a diesel fuel release was identified in the vicinity of the diesel fuel dispenser vault area and the fuel regulator located along the loading dock wall during tank removal activities. In response to these findings, ARATEX Services, Inc., (ARATEX) engaged the services of RMT, Inc., (RMT) to conduct soil sampling activities and evaluate potential remediation techniques for the diesel fuel impacted soil.

The results of the soil sampling activities indicate that the extent of diesel fuel contamination is limited to the area immediately surrounding each dispenser vault and the diesel fuel regulator (See Attached Figures). Based on these findings and a review of available remedial techniques, limited soil excavation and off-site disposal has been selected for the remediation of the diesel fuel impacted soil at the ARATEX facility.

It is anticipated that the soil excavation activities will be conducted during January 1994. Soil samples will be collected from the base of the excavations to confirm that impacted soils have been removed. A description of the soil excavation activities and the soil sampling results will be included in the Tank Removal Documentation report.

If you have any questions please feel free to contact me at (310) 578-1241 or Robert J. Robbins of Aratex at (608) 492-3222.

Sincerely,

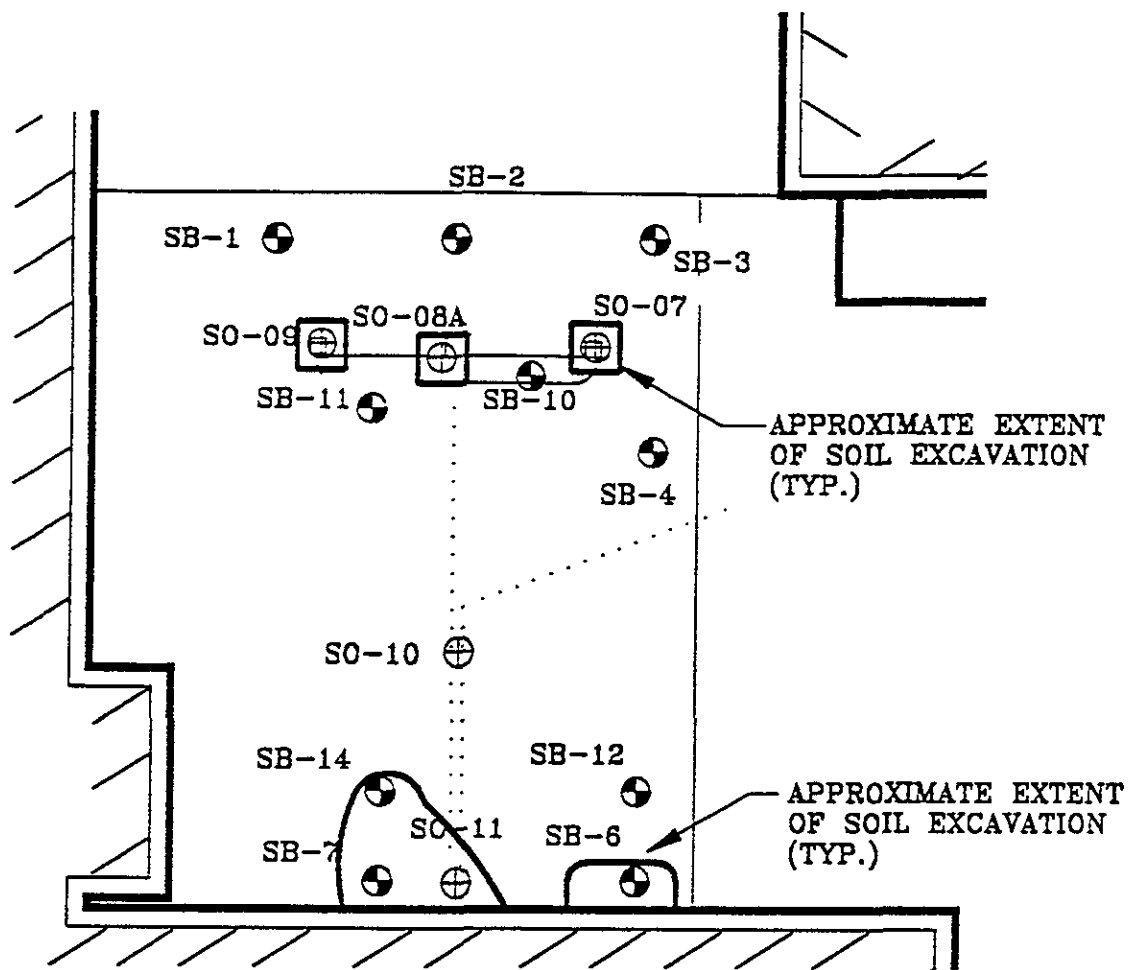

James W. Van Nortwick, Jr., Ph.D., P.E
Project Manager

enc.

cc: Robert J. Robbins, C.P.G.
Phillip Krejci

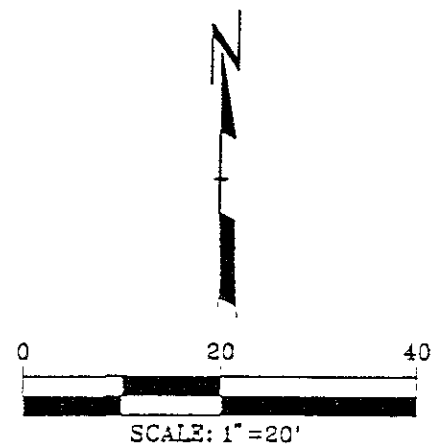


RMT, INC. — LOS ANGELES
4640 ADMIRALTY WAY • SUITE 301
MARINA DEL REY, CA • 90292-6621
310/578-1241 • 310/821-3280 FAX



LEGEND:

- ⊙ SOIL SAMPLE LOCATIONS OF SEPTEMBER, 1993.
- ⊕ SOIL SAMPLE LOCATIONS OF AUGUST, 1993 SAMPLING
- APPROXIMATE EXTENT OF SOIL EXCAVATION



APPROXIMATE EXTENT OF
SOIL CONTAMINATION

RMT INC.	OWN. BY: RAS
	DATE: NOV., 1993
	PROJ # 12013.07
	FILE # 0105

TPH-D =62
 B =<0.010
 T =<0.010
 E =<0.010
 X =0.059

TPH-D =NA
 B =<0.05
 T =<0.005
 E =<0.005
 X =<0.015

TPH-D =9,400
 B =<0.010
 T =<0.010
 E =<0.010
 X =<0.15

TPH-D = <10
 B =<0.005
 T =<0.005
 E =<0.015
 X =<0.015

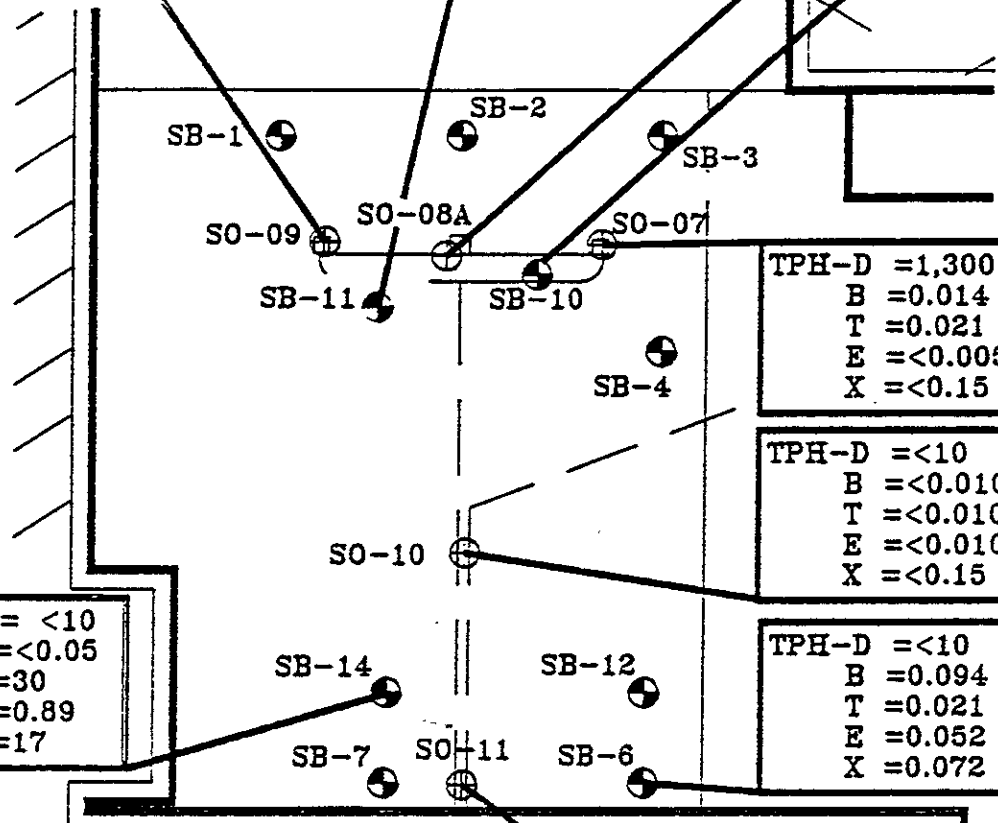
TPH-D =1,300
 B =0.014
 T =0.021
 E =<0.005
 X =<0.15

TPH-D =<10
 B =<0.010
 T =<0.010
 E =<0.010
 X =<0.15

TPH-D =<10
 B =0.094
 T =0.021
 E =0.052
 X =0.072

TPH-D =4,200
 B =0.010
 T =0.009
 E =<0.005
 X =0.015

TPH-D = <10
 B =<0.05
 T =30
 E =0.89
 X =17

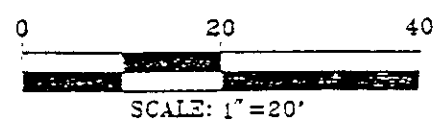


LEGEND:

- ⊕ SOIL SAMPLE LOCATIONS WITH OF SEPTEMBER,1993.
- ⊙ SOIL SAMPLE LOCATIONS OF AUGUST,1993 SAMPLING

NOTE:

SAMPLE DEPTH = 5 FEET bgs.
 EXCEPT SO-10 SAMPLE
 DEPTH = 2 FEET bgs.



SOIL SAMPLE LOCATIONS

RMT INC.	OWN. BY: RAS
	DATE SEPT., 1993
	PROJ.# 12013.07
	FILE # 0104

APPENDIX K
BILLS OF LADING AND CERTIFICATES OF RECYCLING



PORT COSTA MATERIALS

P.O. BOX 50 • 9000 Carquinez Scenic Drive • Port Costa, CA 94569
415/228-7266

DATE
1-24-94

CONTRACTOR: KROEKER.

TAG-BILL OF LADING No. 07431 CS

SOURCE: ARATEX
OAKLAND

LOT # 405

CONTAMINANT TYPE

WEIGHT	CASH SALE DATE		
	PRICE	UNIT	AMOUNT
79220 LB	01/24/94	08:21 AM	

GROSS LBS.

TARE LBS.

TRUCK:

NET 48420 LBS.

TIME ON SCALE _____

TIME OFF SCALE _____

GHERD
DRIVER'S NAME

TONS

65
TRUCK NO.

-B
TRAILER NO.

TRAILER NO.

DRIVER ON OFF GROSS & TARE

24.21

BARGE:

SUB TOTAL

- CONTAINER
- BULK
- OTHER

% SALES TAX

SEAL # _____

TOTAL

SIGN



CARRIER: ROCK TRAWSP
BY: Ed - 47
DATE: 1-24-94

PORT COSTA MATERIALS, INC.

WEIGHMASTER

BY Susan King
DEPUTY

WEIGHMASTER CERTIFICATE

THIS IS TO CERTIFY that the following described commodity was weighed, measured, or counted by a weighmaster, whose signature is on this certificate, who is a recognized authority of accuracy, as prescribed by Chapter 7 (commencing with Section 12700) of Division 5 of the California Business and Professions Code administered by the Division of Measurement Standards of the California Department of Food and Agriculture.

No. 07431 CS



PORT
COSTA
MATERIALS

P.O. BOX 5D • 9000 Carquinez Scenic Drive • Port Costa, CA 94569
415/228-7266

DATE
1/24/94

CONTRACTOR: Kroeker

TAG-BILL OF LADING No. 07430 CS

SOURCE: Arqatex
Oakland

LOT # 405

CONTAMINANT TYPE	WEIGHT	CASH SALE DATE		
		PRICE	UNIT	AMOUNT
GROSS	LBS.			
	73880 LB	01/24/94	08:10 AM	
TARE	LBS.			
	31380 LB	01/24/94	09:27 AM	
NET	LBS.			
	42500 LBS.			
WEIGHT PER CF				
	TONS			
	21.25			
SUB TOTAL				
% SALES TAX				
TOTAL				

TRUCK:

TIME ON SCALE _____

TIME OFF SCALE _____

Lance Harris
DRIVER'S NAME

78 178
TRUCK NO. TRAILER NO. TRAILER NO.

DRIVER ON OFF GROSS & TARE

BARGE:

CONTAINER

BULK

OTHER

SEAL # _____

CARRIER: Rock Transport

BY: Lance Harris

DATE: 1/24/94

PORT COSTA MATERIALS, INC. WEIGHMASTER

BY: Susan King
DEPUTY

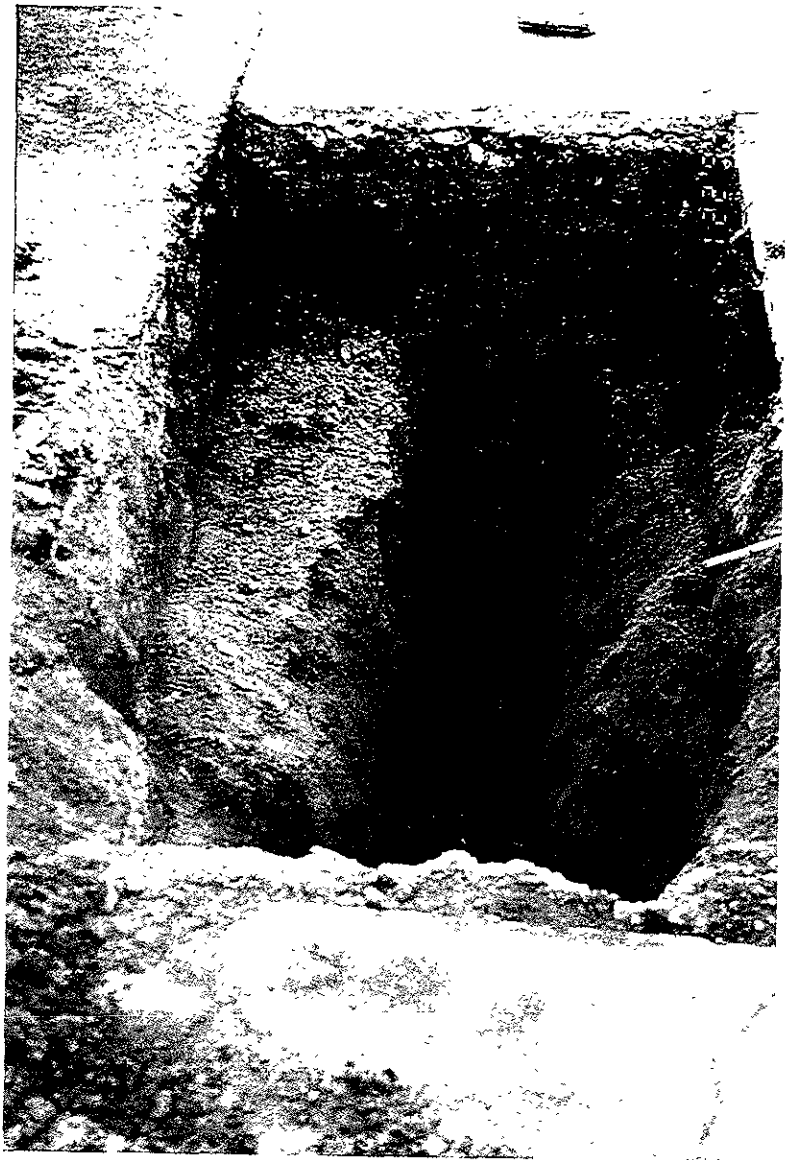
WEIGHMASTER CERTIFICATE

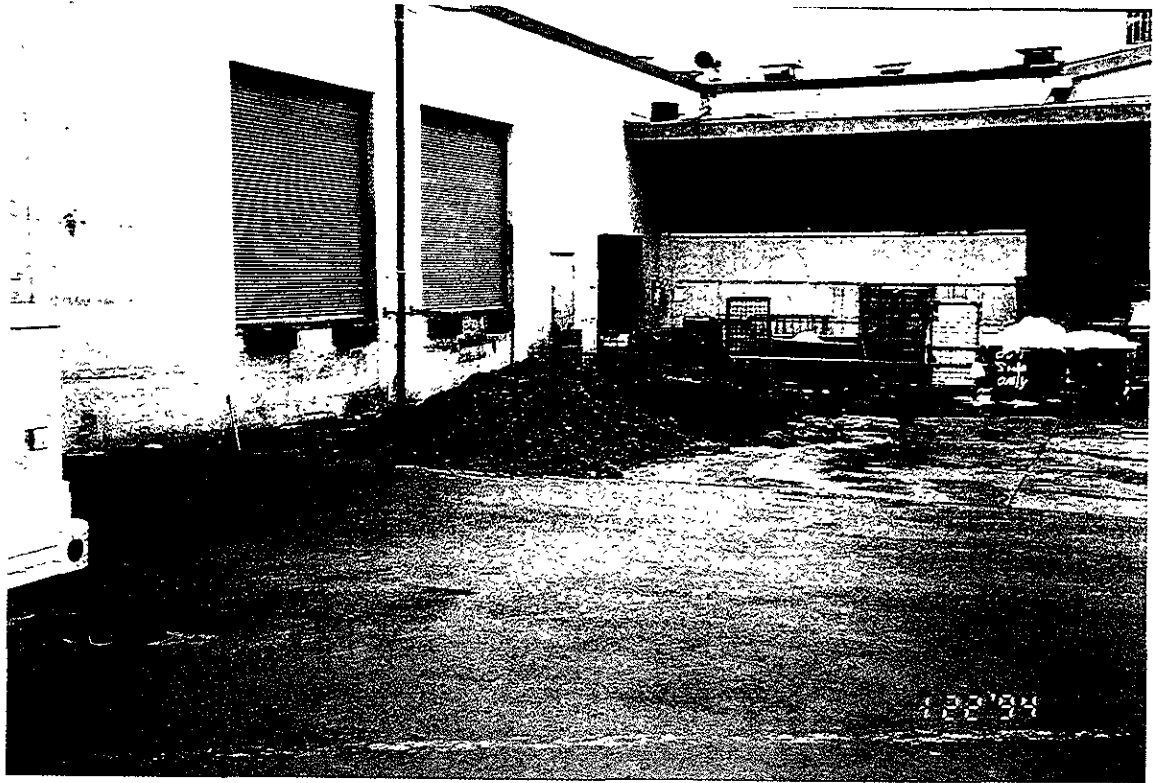
THIS IS TO CERTIFY that the following described commodity was weighed, measured, or counted by a weighmaster, whose signature is on this certificate, who is a recognized authority of accuracy, as prescribed by Chapter 7 (commencing with Section 12700) of Division 5 of the California Business and Professions Code administered by the Division of Measurement Standards of the California Department of Food and Agriculture.

No. 07430 CS

APPENDIX L
PHOTO DOCUMENTATION OF SOIL EXCAVATION ACTIVITIES







APPENDIX M
LABORATORY REPORTS
SOIL EXCAVATION ACTIVITIES

1-22-94



Since 1878

Curtis & Tompkins, Ltd. General Analytical Laboratories

2495 Da Vinci, Irvine CA 92714

Phone 714-252-9700

Fax 714-252-9701

LABORATORY REPORT

Laboratory Number: **208369**

Page 1 of 3

Date Received: **01/24/94**

Date Reported: **01/28/94**

Issued To: **RMT, INC.
4640 ADMIRALTY WAY
SUITE 301
MARINA DEL REY, CA 90292-6621
ATTN: R. SUHOSKY**

Project I.D.: **12013.11**

Location: **ARATEX OAKLAND**

Report On: **FIVE SOLID SAMPLES ANALYZED AS SPECIFIED ON ATTACHED CHAIN OF CUSTODY**

This report certifies that the samples were received in good condition (i.e. intact, chilled, and/or preserved appropriately) and that strict chain of custody procedures were adhered to at all times. It further certifies that the methods of analysis used are in fact those listed within this report and that Curtis & Tompkins, Ltd. has current certification for all work performed in the laboratory. Exceptions to this statement are specifically noted in the analytical report or on the attached chain of custody.

Reviewed By

Berkeley

Irvine

TOTAL EXTRACTABLE PETROLEUM HYDROCARBONS



Laboratory I.D.: 208369
 Client: RMT, INC.

Matrix: Solid
 Method: DHS LUFT Procedure (Modified EPA 8015)
 Extraction: EPA 3550 Sonication Extraction

Page
 2 of 3

Laboratory I.D.	Sample I.D.	Gasoline (mg/Kg)	Kerosene (mg/Kg)	Diesel (mg/Kg)	Motor Oil Range (mg/Kg)	Date Run	Surr. % Rec. BRO/HEX	QC Batch	Analytical Notes
1	E-1 (1') ✓	ND	670(a,b)	ND	1,100	01/28/94	103 / 86	A	a - 1:10 Dilution run on 01/28/94. b - Sample hydrocarbon pattern does not match respective standard fuel pattern.
2	C-1 (8') ✓	ND	ND	38	ND	01/28/94	83 / 77	A	
3	B-1 (8') or 9' ✓	ND	ND	150	ND	01/28/94	89 / 86	A	
4	A-1 (9'6") ✓	ND	ND	ND	ND	01/28/94	78 / 78	A	
5	D-1 (9') ✓	ND	ND	ND	ND	01/28/94	84 / 83	A	
Method Blank		ND	ND	ND	ND	01/27/94	80 / 86	A	
Detection Limit:		10	10	10	40				
								Date Sampled:	01/22/94
								Date Extracted:	01/25/94

Surrogates Used: BRO = Bromobenzene HEX = Hexacosane

Quality Control Data Summary

Method Blank, Laboratory Control Sample, Matrix Spike/Matrix Spike Duplicate Data

Batch I D	Sample I D	Spike Amount (mg/Kg)	LCS %Rec	QC Limits	Spike %Rec	Spk Dup %Rec	QC Limits	RPD	QC Limits
A	208369-004	100	85	80-120	80	95	66-117	17	24

BENZENE, TOLUENE, ETHYL BENZENE, & TOTAL XYLENES



Laboratory I.D.: 208369
 Client: RMT, INC.

Matrix: Solid
 Method: EPA 8020
 Extraction: EPA 5030 Purge & Trap

Page
 3 of 3

Laboratory I.D.	Sample I.D.	Benzene (ug/Kg)	Toluene (ug/Kg)	Ethyl Benzene (ug/Kg)	Total Xylenes (ug/Kg)	Date Run	Surr. % Rec.	QC Batch	Analytical Notes
1	E-1 (1')	ND(500)a	ND(500)a	ND(500)a	ND(500)a	01/25/94	93	A	a - Raised Detection limit due to high concentration of non-target hydrocarbons in sample. Amended Detection limit in parenthesis.
2	C-1 (8')	ND	ND	ND	ND	01/26/94	105	A	
3	B-1 (8')	ND	ND	ND	ND	01/26/94	96	A	
4	A-1 (9'6")	ND	ND	ND	ND	01/25/94	102	A	
5	D-1 (9')	ND	ND	ND	ND	01/26/94	103	A	
Method Blank		ND	ND	ND	ND	01/25/94	104	A	
Detection Limit:		5	5	5	5				
Surrogate Used: a,a,a-Trifluorotoluene									

Quality Control Data Summary

Laboratory Control Sample, Matrix Spike/Matrix Spike Duplicate Data

Batch I D	Sample I D	Spike Amount (ug/Kg)	LCS %Rec	QC Limits	Spike %Rec	Spk Dup %Rec	QC Limits	RPD	QC Limits
A	208371-001	20	102	80-120	95	90	76-137	5	16



ABBREVIATIONS

BTEX - Benzene, Toluene, Ethyl Benzene, and Total Xylenes.

CCR - California Code of Regulations.

DHS - California Department of Health Services.

EPA - United States Environmental Protection Agency.

LCS - Laboratory Control Spike

LUFT - Leaking Underground Fuel Tank.

MDL - Method Detection Limit

NA - Not Applicable.

NC - Not Calculable

ND - Not Detected at or above the defined detection limit.

PQL - Practical Quantitation Limit

RPD - Relative percent difference.

STLC - Soluble Threshold Limit Concentration.

Surr. - Surrogates.

TCLP - Toxicity Characteristic Leaching Procedure.

TEH - Total Extractable Petroleum Hydrocarbons.

Title 26 - Title 26 of the California Code of Regulations (CCR).

TR~ - Trace, estimated value .

TTLC - Total Threshold Limit Concentration.

TVH - Total Volatile Hydrocarbons.

WET - Waste Extraction Test.

UNITS

cm³ - Cubic centimeter

Kg - kilogram.

L - Liter.

mg - Milligrams.

M³ - Cubic meter.

1umhos/cm - uS/cm - Micro Siemens/centimeter

ppb - Parts per billion.

ppm - Parts per million.

ug - Micrograms.

ppbv - Parts per billion per unit volume

