

**GRACE AUTO REPAIR
2504 MacArthur Boulevard
OAKLAND, CALIFORNIA**

**TANK REMOVAL REPORT
PREPARED FOR MR. MICHAEL MARR**

COPY

October 1994

**WAHLER ASSOCIATES
A RUST ENVIRONMENT & INFRASTRUCTURE COMPANY
ONE WALNUT CREEK CENTER
100 PRINGLE AVENUE, SUITE 580
WALNUT CREEK, CALIFORNIA 94596
(510) 746-8890**

JOB NUMBER 89477.000



Wahler Associates

A RUST Environment & Infrastructure Company

One Walnut Creek Center, 100 Pringle Avenue, Suite 580
Walnut Creek, CA 94596
Tel. (510) 746-8890 • FAX (510) 746-3838

Job Number: 89477.000
October 7, 1994

Mr. Michael Marr
27737 Fallen Leaf Court
Hayward, California 94542

Subject: Tank Removal Report
Grace Auto Repair
2504 MacArthur Boulevard
Oakland, California

Dear Mr. Marr:

Wahler Associates, A Rust Environment & Infrastructure Company (Wahler) is pleased to present this report for the removal of four underground storage tanks from the property located at 2504 MacArthur Boulevard in Oakland, California. The scope of services for this project included preparing a site safety plan, coordinating with and obtaining permits from the Alameda County Health Agency, Oakland Fire Department, and the Bay Area Air Quality Management District; conducting a site reconnaissance; employing a licensed subcontractor to perform the tank removal operation; coordinating and observing the removal activities carried out by that subcontractor; conducting necessary soil sampling and chemical analysis and preparing a written report detailing the project results and recommending necessary additional investigations, if required.

On June 27, 1994, three approximately 4,000-gallon steel, single-walled, gasoline underground storage tanks, and one approximately 500-gallon single-walled, steel underground waste oil storage tank, were removed from the property located at 2504 MacArthur Boulevard, in Oakland, California. At the direction of the representative of the regulatory agency, two soil samples were collected from native soil below each of the 4000-gallon tanks at a depth of about 11 feet below ground surface (bgs), and one sample was collected from beneath the 500-gallon tank at a depth of about 7 feet bgs.



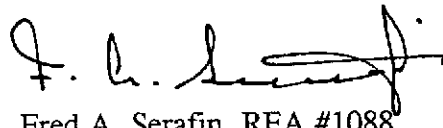
Mr. Michael Marr
October 7, 1994
Page 2

Chemical analyses of these samples indicated existence of moderate to high levels of hydrocarbon pollutants. In compliance with the requirements of the California Regional Water Quality Control Board, (CRWQCB), it is recommended that a Phase II subsurface investigation be performed at this site in order to characterize the fuel hydrocarbon pollutants in the subsurface and to define the horizontal and vertical extent of the pollutants. In addition, this will further define the geologic and hydrogeologic parameters needed for determining the most effective and feasible remedial action for this site. Wahler will, at your request, prepare a proposal to perform the subsurface investigation. We further recommend copies of this report be submitted to the Alameda County Health Agency, Division Of Hazardous Materials, Department of Environmental Health, and the Oakland Fire Department.

If you have any questions or comments regarding this report, please do not hesitate to call.

Very truly yours,

WAHLER ASSOCIATES
A Rust Environment & Infrastructure Company



Fred A. Serafin, REA #1088
Environmental Section Head

**GRACE AUTO REPAIR
2504 MacArthur Boulevard
OAKLAND, CALIFORNIA**

**TANK REMOVAL REPORT
PREPARED FOR MR. MICHAEL MARR**

October 1994

**WAHLER ASSOCIATES
A RUST ENVIRONMENT & INFRASTRUCTURE COMPANY
ONE WALNUT CREEK CENTER
100 PRINGLE AVENUE, SUITE 580
WALNUT CREEK, CALIFORNIA 94596
(510) 746-8890**

JOB NUMBER 89477.000

TABLE OF CONTENTS

	<u>PAGE</u>
A. INTRODUCTION	1
B. TANK REMOVALS	1
C. SAMPLING AND CHEMICAL ANALYSIS	3
D. CONCLUSIONS	5
E. LIMITATIONS	6
Figure 1	Site Location Map
Figure 2	Site Plan
Figure 3	Sample Location Map - Tank Excavation
Figure 4	Sample Location Map - Overexcavation
Table 1	Summary of Soil Analyses Data
Table 2	Summary of Soil Analyses Data For Sample Number DB-1
Table 3	Summary of RCI Analyses Data
Site Photographs	
Appendix A	Manifests/Permits/Inspection Forms
Appendix B	Original Lab Results Chain of Custody Forms
Appendix C	Sampling Protocol

**TANK REMOVAL REPORT
2504 MACARTHUR BOULEVARD
OAKLAND, CALIFORNIA**

A. INTRODUCTION

At the request of Mr. Michael Marr (Mr. Marr) Wahler Associates, A RUST Environment & Infrastructure Company (Wahler) removed four underground storage tanks from the property located at 2504 MacArthur Boulevard in Oakland, California. The site location is identified in Figure 1. The approximate tank locations are sketched in Figure 2. The tank excavation operation photographs are presented in photos 1 through 6.

The scope of services for this project included preparing a site safety plan and coordinating with, and obtaining permits from the Alameda County Health Department, Oakland Fire Department, and the Bay Area Air Quality Management District; conducting a site reconnaissance; employing a licensed subcontractor to perform the tank removal operation; coordinating and observing the removal activities and soil sampling carried out by that subcontractor; and preparing a written report detailing the project results and recommending necessary additional investigations.

B. TANK REMOVALS

On June 27th 1994, three approximately 4000-gallon, and one approximately 500-gallon, steel, single-walled, underground storage tanks, previously containing gasoline and waste oil, respectively, were removed from the property. Prior to tank removal, flammable vapors were purged from within the tank by displacement with dry ice. A combustible gas monitor (Gastechtor Model 1314) was used to verify vapor levels. The tank removal operation was performed under the direction of inspectors from the Alameda County Health Agency, Division

Of Hazardous Materials, Department of Environmental Health; and from the Oakland Fire Department; Ms. Susan Hugo and Mr. Larry James, respectively. Relevant permits and inspection reports are included in Appendix A. All product and vapor piping were disconnected and removed. All piping was single-walled steel and not cathodically protected. The vapor and product piping did not display any holes or visible damage. The overburden consisted of sand and clay, and displayed soil discoloration. Hydrocarbon odor was also detected during the excavation. The tanks appeared to be corroded and rusty and a few small holes were observed on the bottom of tank B (Photos 2 and 5). An Underground Storage Tank Unauthorized Release (Leak)/Contamination Site Report was prepared for this site previously, based on earlier investigations at the site and submitted to the Alameda County Environmental Health Department. A copy of that report is included in Appendix A.

The tanks were transported off site by Erickson, Inc., as hazardous waste under Uniform Hazardous Waste Manifest, State Manifest Document Number 93238409 and 93239544, to Erickson, Inc., at 255 Parr Boulevard in Richmond, California. Manifest copies are included in Appendix A.

Based on extensive visible staining on the sidewalls and in the floor of the excavation, and the existence of hydrocarbon odor, the vadose zone appeared to be contaminated by fuel hydrocarbons. Groundwater was not encountered in the excavation. The excavated soil displayed visual evidence of contamination. The excavated soil was stockpiled on the property, on visqueen spread over an asphalt covered surface. The soil stockpile was also covered with visqueen. The tank pits and over-excavated areas were backfilled and compacted to ground surface on July 7, and 8, 1994, using approximately 270 tons of fresh imported peagravel and aggregate base. The area was subsequently resurfaced to match the surrounding area.

C. SAMPLING AND CHEMICAL ANALYSIS

Under the direction of Ms. Susan Hugo from the Alameda County Health Agency, two soil samples were collected from native soil below each 4000-gallon tank at a depth of about 11 feet, at each end of the tank, and one sample was collected from the native soil below the 500-gallon capacity tank, at a depth of approximately 7 feet at approximately the middle of the pit. All samples were collected in accordance with the California Regional Water Quality Control Board "Tri-Regional Board Staff Recommendations for Preliminary Evaluation and Investigation of Underground Tank Sites, dated August 1991."

The soil samples were collected by excavating native soil with a backhoe bucket and collecting a sample from the bucket in a 2-inch diameter by 6-inch long brass tube driven by a slide-hammer corer. After collection of the samples, the brass tube ends were covered with aluminum foil and capped with plastic end-caps which were taped to the brass tubes with duct tape. The tubes were then labeled and placed in an iced cooler for transport under chain-of-custody to a State-certified laboratory for chemical analysis.

how?
A total of seven soil samples were collected from beneath the tanks, and chemically analyzed for total petroleum hydrocarbons as diesel, and gasoline (TPH-D and TPH-G), as well as for benzene, toluene, ethylbenzene, and xylenes (BTEX) and organic lead. Additionally, two 3-part composite soil samples were taken from the stockpiled soil. All samples collected were chemically analyzed for total petroleum hydrocarbons as gasoline, (TPH-G), as well as for benzene, toluene, ethylbenzene, and xylenes (BTEX), and for organic lead. Sample locations are identified in the Sample Location Map labeled "Tank Excavation", in Figure 3. With the exception of samples AB-1 and AB-2 which revealed no concentrations of TPH-G or BTEX above the laboratory detection limits; all samples collected from beneath the tanks, detected TPH-G at concentrations ranging from 3.4 parts per million (ppm) to 24 ppm. All BTEX

compounds were present in all samples from beneath the tanks except for samples AB-1 and AB-2. Sample DB-1 was found to contain no concentrations of Diesel or Oil and Grease above the laboratory detection limits. Additionally two 3-part composite samples were taken from the excavated stockpiled soil. Soil Sample SP-1A,B,C revealed concentrations of 1600 ppm of TPH-G, 870, 12000, 14000 and 77000 Parts per billion (ppb) of Benzene, Toluene, Ethylbenzene, and total Xylenes, respectively. Soil Sample SP-2A,B,C was found to contain no concentrations of TPH-G or BTEX compounds above the laboratory detection limits. Organic lead ranging in concentration between 5.9 ppm and 14 ppm was detected in sample numbers AB-1, AB-2, BB-1, BB-2, CB-1, CB-2, SP-1ABC, and SP-2ABC. Laboratory analytical results are included in Appendix B. A summary of the soil analysis data is presented in tables 1, 2 and 3. (See Appendix C for the appropriate sampling protocol.)

Based on extensive visible staining on the sidewalls and in the floor of the excavation, and the existence of gasoline odor, the vadose zone appeared to be contaminated by fuel hydrocarbons. Under the direction of Ms. Hugo and with the concurrence of Mr. Marr, approximately 80 additional tons of soil were overexcavated subsequent to the removal of the tanks. A total of 13 soil samples were taken from the sidewalls at a depth of about 8.5 feet bgs, and from the bottom of the pit in the overexcavated areas. Sample locations are identified in the Sample Location Map labeled "Overexcavation", in Figure 4. The Pit was then lined with visqueen, and backfilled with clean imported fill material. Samples SW-2, SW-3, SW-4, SW-5, SW-8 and SW-9 revealed no concentrations of TPH-G or BTEX above the laboratory detection limits. Samples SW-1, SW-2, SW-6, SW-7, SW-10, SW-11, SW-12 and SW-13 detected TPH-G at concentrations ranging from 1.8 parts per million (ppm) to 250 ppm. With the exception of sample SW-13 which revealed no BTEX compounds, at least 3 BTEX compounds were present in each of the 12 samples.

D. CONCLUSIONS

On June 27th, 1994, four underground storage tanks were removed from the property located at 2504 Macarthur Boulevard in Oakland, California. During the excavation, extensive visible staining in the sidewalls was observed and hydrocarbon fuel odor was detected. Chemical analysis of samples taken during the tank removal operation, indicated hydrocarbon pollutants and organic lead in the soil. A total of 270 tons of contaminated soil was excavated and stockpiled on the property, and was subsequently removed and treated by thermal desorption at a licensed facility.

Based on conditions encountered during the excavation, including visual evidence, soil staining and odor, as well as the results of the chemical analysis of soil samples taken under regulatory oversight, it appears that the soil and/or groundwater at the property may have been impacted by a release of fuel from the underground storage tanks. During the excavation, extensive visible staining in the sidewalls was observed and strong hydrocarbon fuel odor was detected. In addition, chemical analysis of samples taken during the tank removal operation, indicated moderate to high levels of hydrocarbon pollutants in the soil.

Based on the above, and in accordance with the requirements of CRWQCB, Wahler recommends that Mr. Marr perform an investigation of pollutants in the soil and groundwater in and around the area where the tanks were previously located. The scope of work for a subsurface investigation should include a review of pertinent information, advancement of soil borings, installation of groundwater and vadose zone monitoring wells, sampling and chemical analysis, data evaluation and analysis, and the preparation of probable cost for any anticipated remedial action. The automotive repair business previously occupying the site (Grace Auto Repair) has since resumed operation at the site.

Wahler recommends that a copy of this report be submitted to the Alameda County Health Agency, Division Of Hazardous Materials, Department of Environmental Health; and to the Oakland Fire Department.

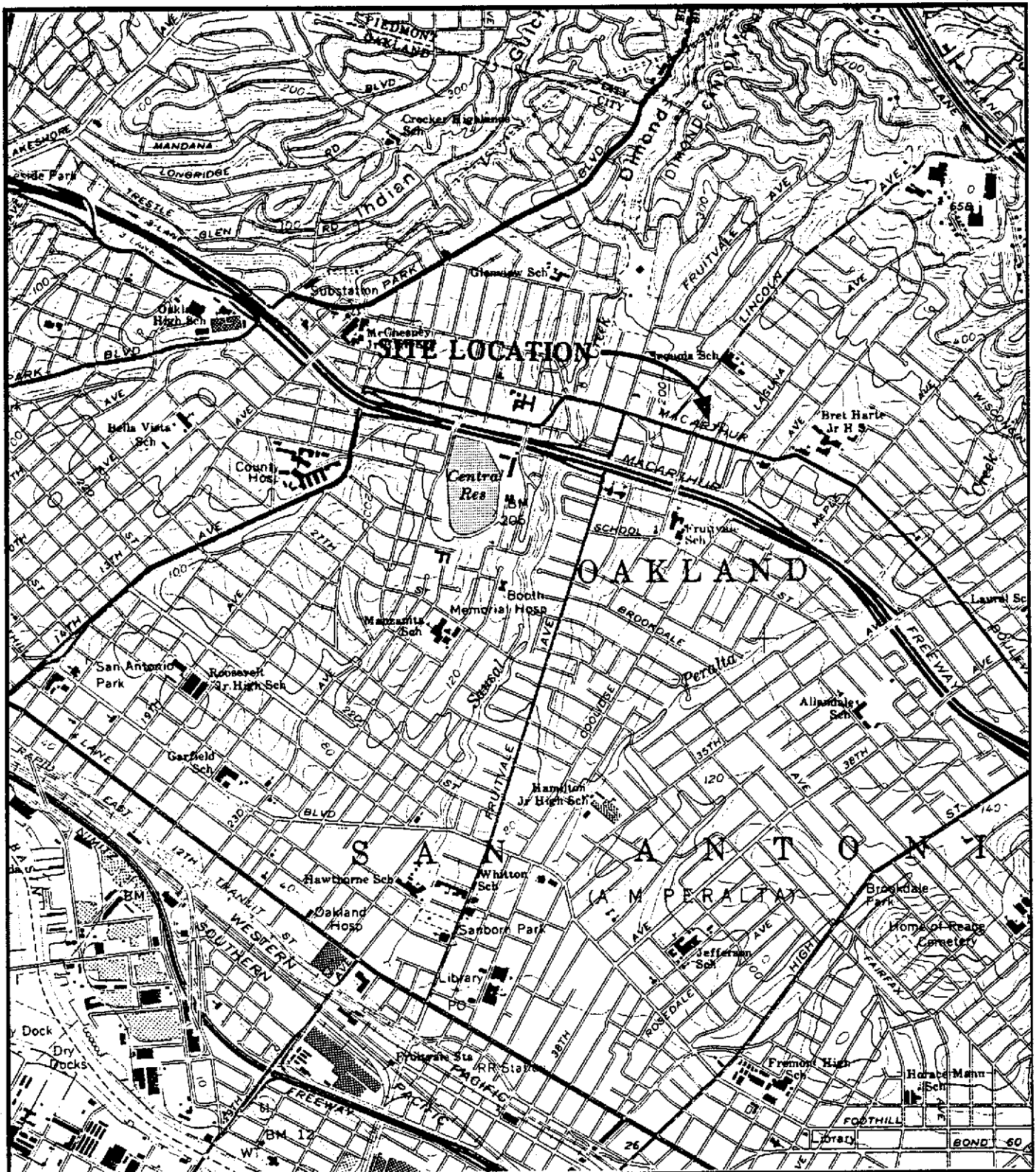
E. LIMITATIONS

The data, information, interpretations, and recommendations contained in this technical report are presented solely as preliminary bases and guides to the existing environmental conditions of 2504 MacArthur Boulevard in Oakland, California. The conclusions and professional opinions presented herein were developed by Wahler in accordance with generally accepted engineering principles and practices. As with all geotechnical and environmental reports, the opinions expressed here are subject to revisions in light of new information, new governmental regulations or new interpretations of existing regulations, which may be developed in the future, and no warranties are expressed or implied.

This report has not been prepared for use by parties other than Mr. Michael Marr. It may not contain sufficient information for the purposes of other parties or other uses. If any changes are made in the project as described in this report, the conclusions and recommendations contained herein should not be considered valid, unless the changes are reviewed by Wahler, and the conclusions and recommendations are modified or approved in writing.

Soil deposits may vary in type, strength, permeability, and many other important properties between points of observation and exploration. Additionally, changes can occur in groundwater and soil moisture conditions due to seasonal variations, or for other reasons. Furthermore, the distribution of chemical concentrations in the soil and groundwater can vary spatially and over time. The chemical analysis results presented herein are illustrative of only the sampling locations at the time of sampling. Therefore, it must be recognized that Wahler does not and

cannot have complete knowledge of the subsurface conditions underlying the subject site. The opinions presented are based upon the findings at the points of exploration and upon interpretative data, including interpolation and extrapolation of information obtained at points of observation.



Base from USGS 7.5' Topographic Map, Oakland East, California, Photorevised 1980.
 Scale: 1:24,000.



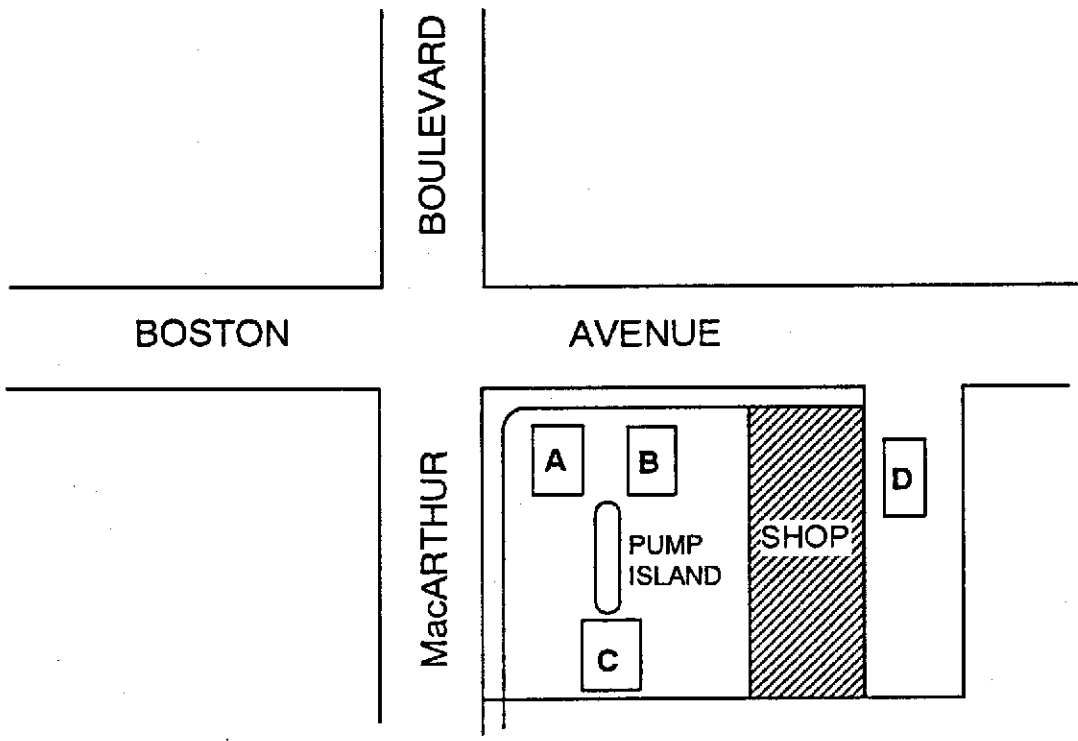
RUST ENVIRONMENT &
 INFRASTRUCTURE

Walnut Creek, California


2504 MacArthur Blvd.
 Oakland, California

Site Location Map

Project No.	Date	Figure No.
89477.000	September 1994	1



LEGEND

 Approximate Tank Location

Not to Scale

RUST ENVIRONMENT & INFRASTRUCTURE Walnut Creek, California	2504 MacArthur Blvd. Oakland, California	Site Plan		
		Project No.	Date	Figure No.
		89477.000	September 1994	2

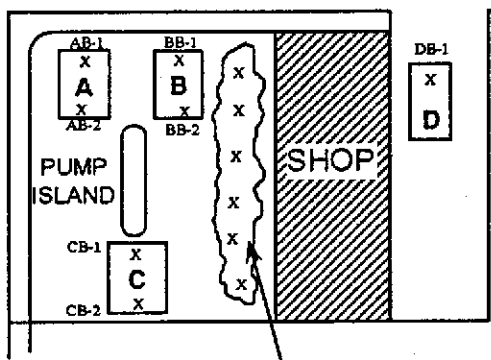


BOULEVARD

BOSTON

AVENUE

MacARTHUR



SOIL STOCKPILE
 2,3 PART COMPOSITES
 SP-1A,B,C
 SP-2A,B,C

LEGEND



Approximate Tank Location

X Approximate Sample Location

AB-1 Sample Number

Not to Scale

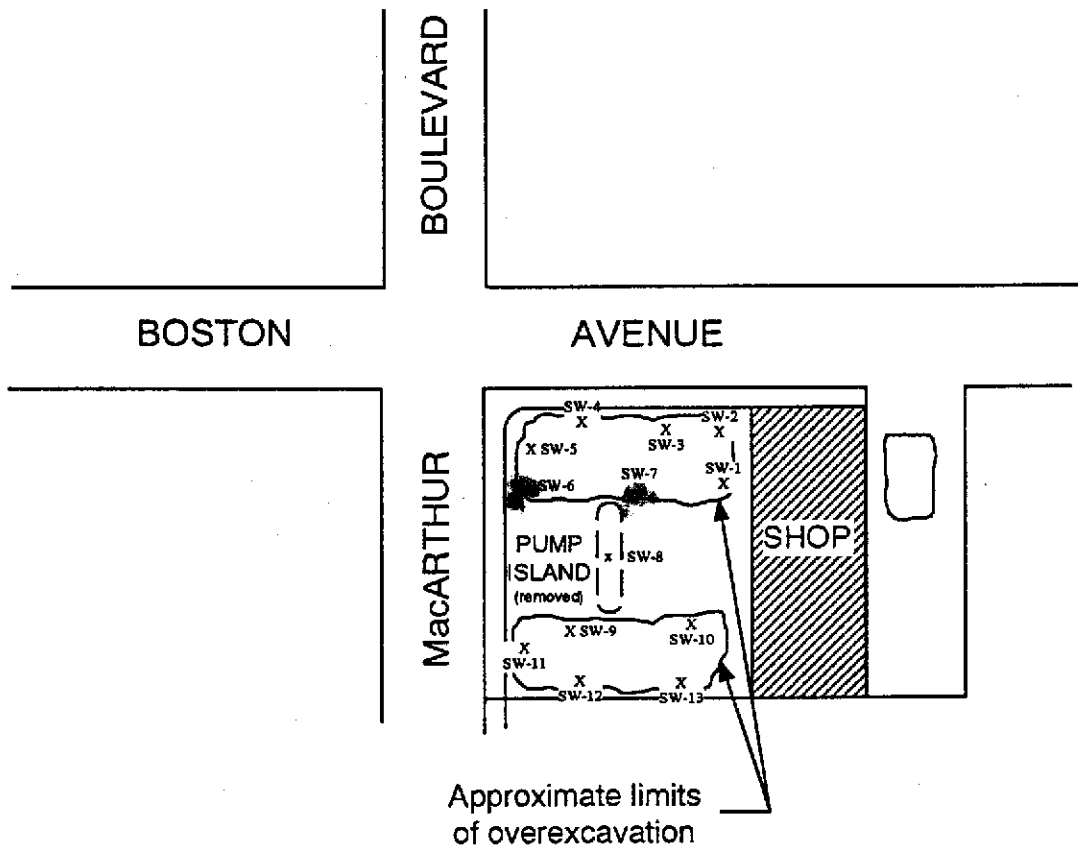
RUST ENVIRONMENT &
 INFRASTRUCTURE

Walnut Creek, California

2504 MacArthur Blvd.
 Oakland, California

**Sample Location Map -
 Tank Excavation**

Project No.	Date	Figure No.
89477.000	September 1994	3



Approximate limits of overexcavation

LEGEND

X Approximate Sample Location

SW-1 Sample Number

Not to Scale

RUST ENVIRONMENT & INFRASTRUCTURE
Walnut Creek, California

2504 MacArthur Blvd.
Oakland, California

Sample Location Map - Overexcavation

Project No.	Date	Figure No.
89477.000	September 1994	4

TABLE 1
SUMMARY OF SOIL ANALYSES DATA
FOR SAMPLES FROM TANK EXCAVATION

Sample Number	Date	Sample Matrix	TPH-G mg/Kg	Benzene ug/Kg	Toluene ug/Kg	Ethyl Benzene ug/Kg	Total Xylenes ug/Kg	Lead mg/Kg
AB-1	6/27/94	SOIL	N.D.	N.D.	N.D.	N.D.	N.D.	8.0
BB-1	6/27/94	SOIL	3.4	12	68	75	320	5.9
CB-1	6/27/94	SOIL	12	N.D.	N.D.	29	40	6.9
AB-2	6/27/94	SOIL	N.D.	N.D.	N.D.	N.D.	N.D.	8.5
BB-2	6/27/94	SOIL	15	8.8	160	170	980	10.0
SP-1A,B,C	6/27/94	SOIL	1,600	870	12,000	14,000	77,000	14
CB-2	6/27/94	SOIL	24	N.D.	N.D.	39	56	9.3
SP-2A,B,C	6/27/94	SOIL	N.D.	N.D.	N.D.	N.D.	N.D.	14
SW-1	7/6/94	SOIL	9.5	8.3	N.D.	58	81	---
SW-2	7/6/94	SOIL	N.D.	N.D.	N.D.	N.D.	N.D.	---
SW-3	7/6/94	SOIL	N.D.	N.D.	N.D.	N.D.	N.D.	---
SW-4	7/6/94	SOIL	N.D.	N.D.	N.D.	N.D.	N.D.	---
SW-5	7/6/94	SOIL	N.D.	N.D.	N.D.	N.D.	N.D.	---
SW-6	7/6/94	SOIL	210	400	990	2,800	11,000	---
SW-7	7/6/94	SOIL	250	400	120	330	480	---
SW-8	7/6/94	SOIL	N.D.	N.D.	N.D.	N.D.	N.D.	---

**TABLE 1
SUMMARY OF SOIL ANALYSES DATA
FOR SAMPLES FROM TANK EXCAVATION**

Sample Number	Date	Sample Matrix	TPH-G mg/Kg	Benzene ug/Kg	Toluene ug/Kg	Ethyl Benzene ug/Kg	Total Xylenes ug/Kg	Lead mg/Kg
SW-9	7/6/94	SOIL	N.D.	N.D.	N.D.	N.D.	N.D.	---
SW-10	7/6/94	SOIL	5.4	N.D.	N.D.	20	37	---
SW-11	7/6/94	SOIL	8.2	15	N.D.	16	23	---
SW-12	7/6/94	SOIL	22	N.D.	N.D.	42	34	---
SW-13	7/6/94	SOIL	1.8	N.D.	N.D.	N.D.	N.D.	---
Detection Limits			1.0	5.0	5.0	5.0	5.0	0.5
NOTES:	mg/Kg	Milligrams per Kilogram (parts per million)						
	ug/Kg	Micrograms per Kilogram (parts per billion)						
	TPH-G	Total Petroleum Hydrocarbons as Gasoline						

**TABLE 2
SUMMARY OF SOIL ANALYSES DATA
FOR SAMPLE NUMBER DB-1**

Sample Number	Date	Sample Matrix	TPH-D mg/Kg	Oil & Grease mg/kg	EPA 8240/8260 ug/Kg
DB-1	6/27/94	SOIL	N.D.	N.D.	N.D.
NOTES: mg/Kg Milligrams per Kilogram (parts per million) ug/Kg Micrograms per Kilogram (parts per billion) TPH-D Total Petroleum Hydrocarbons as Diesel					

**TABLE 3
SUMMARY OF SOIL RCI ANALYSES DATA**

Sample Number	Date	Sample Matrix	Reactivity	Corrosivity	Ignitability
SP1 ABC	6/27/94	SOIL	No	pH 8.4	No
SP2 ABC	6/27/94	SOIL	No	pH 9.0	No



Photo 1



Photo 2



Photo 3

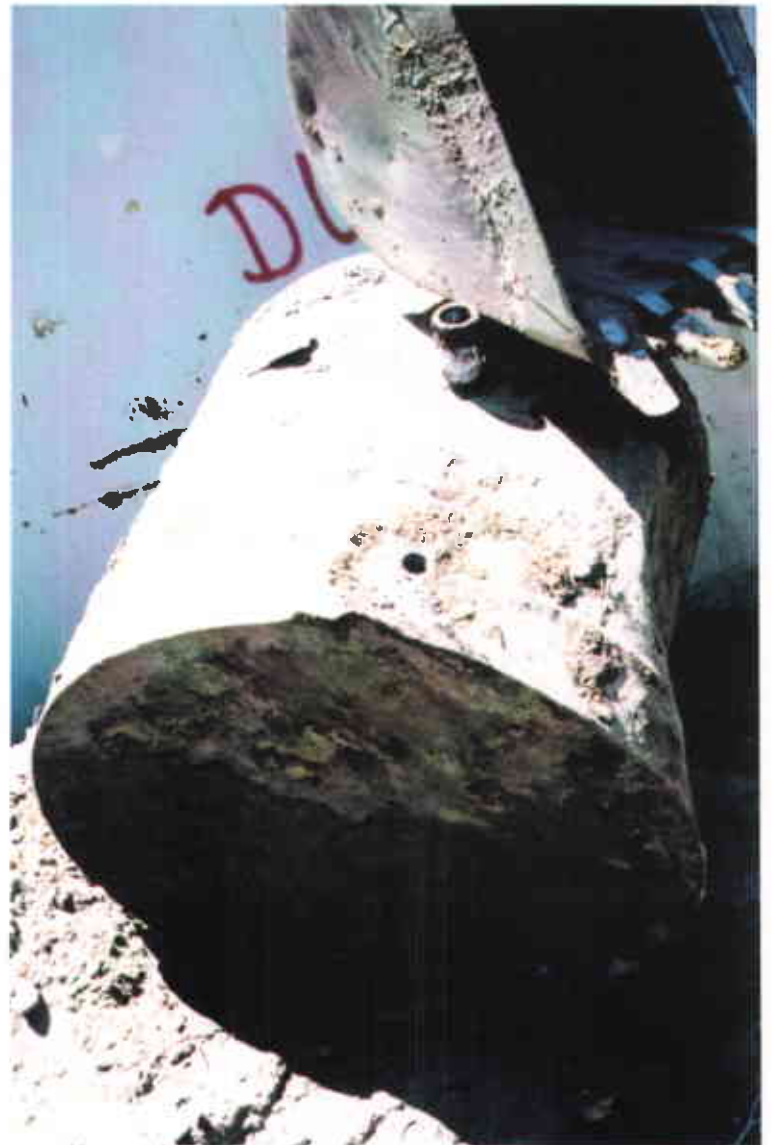


Photo 4

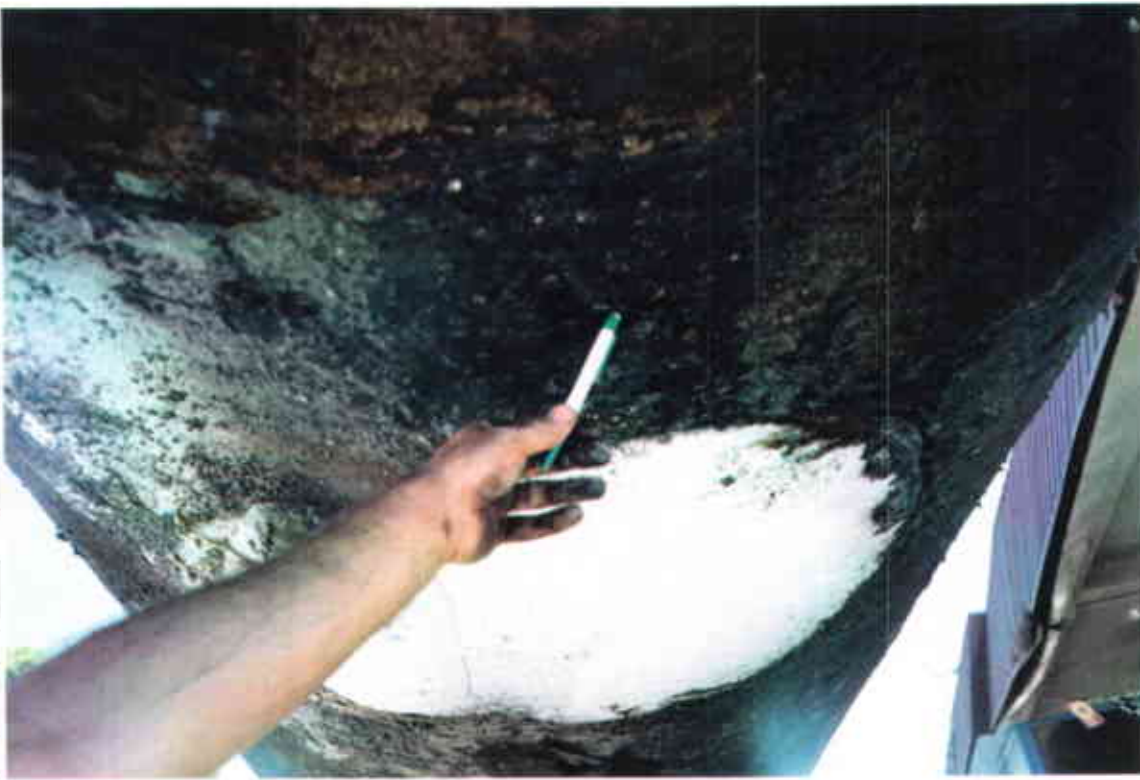


Photo 5



Photo 6

ALAMEDA COUNTY, DEPARTMENT OF
ENVIRONMENTAL HEALTH

Hazardous Materials Inspection Form

II, III

white - env. health
yellow - facility
pink - files

Site ID # _____ Site Name Grace Auto Repair Today's Date 6/27/94

Site Address 2504 MacArthur Blvd.

City Oakland Zip 94602 Phone _____

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

Inspection Categories:

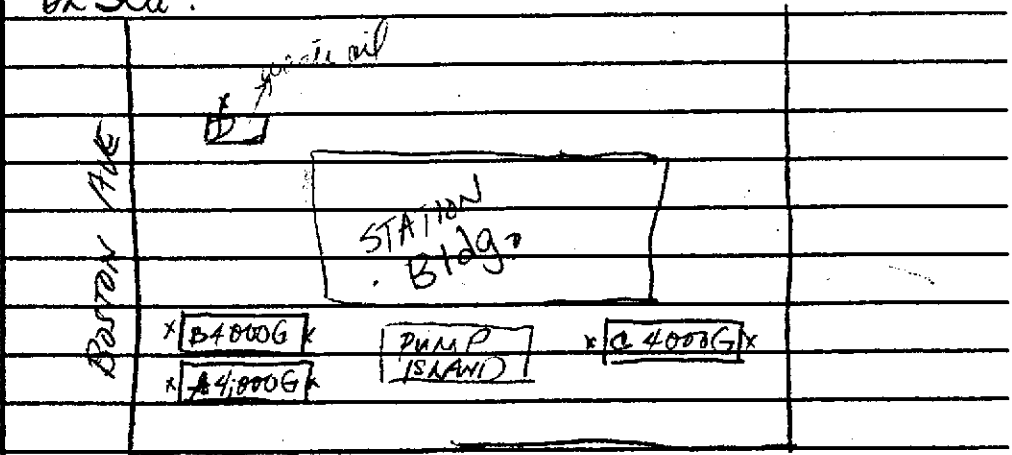
- I. Haz. Mat/Waste GENERATOR/TRANSPORTER
- II. Business Plans, Acute Hazardous Materials
- III. Underground Tanks

Page 1

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

Comments:

4 UGTs Removal:
On Site:



2504 MacArthur Blvd.

TANK B - TRIDENT TRUCKING # 430867 exp
Huber Manifest # 93238409 6/95

Tank had a hole at the bottom area
where they stick the tank
4000 gal steel tank (gasoline) tank,
strong sitting condition

LEL = 2% O2 = 5%

Contact: Robert S. ... Inspector: _____
Title: ... Signature: _____
Signature: ... Signature: Susan L. Hays

- II.A BUSINESS PLANS (Title 19)**
- 1. Immediate Reporting 2703
 - 2. Bus. Plan Sids. 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. MAT'L**
- 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(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 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 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. Precs 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: _____

II, III

ALAMEDA COUNTY, DEPARTMENT OF ENVIRONMENTAL HEALTH

Hazardous Materials Inspection Form

white -env.health
yellow -facility
pink -files

II, III

Site ID # _____ Site Name GRACE AUTO REPAIR Today's Date 6/27/94

Site Address 2504 MacArthur Blvd.

City Oakland Zip 94602 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

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. MAT'S

- 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(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
- 6. 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 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 _____
- 7. Precls Tank Test 2643
Date: _____
- 8. Inventory Rec. 2644
- 9. Soil Testing. 2646
- 10. Ground Water. 2647
- Monitoring for Existing Tanks**
- 11. Monitor Plan 2632
- 12. Access. Secure 2634
- 13. Plans Submit 2711
Date: _____
- 14. As Built 2635
Date: _____
- New Tanks**

Rev 8/88

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

Comments: Tank A, C, D hauler - Erickson # 430334 49.5/8
PAGE 2 manifest # 93239344

Tank A - 4000 gal. steel tank w/ machine
the wrapping dissolved fr. overfilling
LEL = 10% O2 = 6%
strong corrosion, pitting; soil discoloration

Tank C - 4000 gal. machine tank (steel)
tan wrapped, strong corrosion, pitting
LEL = 4% O2 = 7%
SO2 staining present

Tank D - waste oil tank (steel) 250 gal.
LEL = 2% O2 = 6.5 - 7%
tank is rusty w/no obvious holes

All piping associated with the tanks must be removed.
Hazardous waste must be characterized for proper disposal

II, III

Contact: Robert Seraphin Per Michael

Title: Senior Project Scientist

Signature: [Signature]

Inspector: [Signature]

Signature: [Signature]

white -env.health
 yellow -facility
 pink -files

ALAMEDA COUNTY, DEPARTMENT OF ENVIRONMENTAL HEALTH

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

Hazardous Materials Inspection Form

II, III

Site ID # _____ Site Name Grace Auto Repair Today Date 6/27/94

Site Address 2504 MacArthur Blvd.

City Oakland Zip 94602 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:

Page 3 Oakland Fire Dept drop by on site
 Sat 1:00 PM; All UGTs have been removed.

One soil sample from each end of the
 3-4000 gal tanks collected.

One soil sample from the waste oil tank
 area collected.

Unauthorized Leak report must be filed.

The site is very limited in space &
 lots of electrical utilities hanging over the
 facilities.

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) 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 Groundwater
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. Precs 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: _____

Rev 8/88

Contact: Robert Seaman / Michael Marr
 Title: Senior Project Scientist
 Signature: Robert Seaman

Inspector: _____
 Signature: James L. Huey

II, III

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. **CAL000097694438409** Manifest Document No. **1** of **1**

Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
MICHAEL MARR
27737 FALCON LAKE COURT
HAYWARD, CA 94542

4. Generator's Phone
510 482 1536

5. Transporter 1 Company Name
TRIDENT TRUCKLINE

6. US EPA ID Number
CAL0902484370

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
CA00009466392

11. US DOT Description (including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers		13. Total Quantity	14. Unit Wt/Vol
	No.	Type		
a. NON-RCRA Hazardous Waste Solid Waste Empty Storage Tank.	001	T P	04000	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 **FRED SEMAR** Phone **510-746-8890**

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 _____ Signature _____ Month _____ Day _____ Year _____

17. Transporter 1 Acknowledgement of Receipt of Materials
 Printed/Typed Name **TOMMY PULKINGTON** Signature _____ Month **06** Day **27** Year **94**

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 _____

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

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

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No. CA000976944		Manifest Document No. 39544		2. Page 1 of 1		Information in the shaded areas is not required by Federal law.					
3. Generator's Name and Mailing Address MICHAEL MARR 27737 Fallbrook Court. Hayward, CA 94542													
4. Generator's Phone 510 482-1536													
5. Transporter 1 Company Name ERICKSON INC					6. US EPA ID Number CA0009466392								
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 CA101019466392								
11. US DOT Description (including Proper Shipping Name, Hazard Class, and ID Number)						12. Containers		13. Total Quantity		14. Unit			
						No.		Type		Quantity		Wt/Vol	
a. NON-RCRA Hazardous Waste Solid. Waste Empty Storage Tank.						002		TP		08000 P			
b. NON-RCRA HAZARDOUS WASTE SOLID - WASTE EMPTY STORAGE TANK						001		TP		00500 P			
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 Robert DE & Phone (510)-746-8890 FRANK SCRAFFI													
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 Robert De				Signature <i>Robert De</i>				Month 06		Day 27		Year 94	
17. Transporter 1 Acknowledgement of Receipt of Materials													
Printed/Typed Name Dennis L Ester				Signature <i>Dennis L Ester</i>				Month 06		Day 27		Year 94	
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	

DO NOT WRITE BELOW THIS LINE.

UNDERGROUND STORAGE TANK UNAUTHORIZED RELEASE (LEAK) / CONTAMINATION SITE REPORT

EMERGENCY <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO		HAS STATE OFFICE OF EMERGENCY SERVICES REPORT BEEN FILED? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO		FOR LOCAL AGENCY USE ONLY I HEREBY CERTIFY THAT I AM A DESIGNATED GOVERNMENT EMPLOYEE AND THAT I HAVE REPORTED THIS INFORMATION TO LOCAL OFFICIALS PURSUANT TO SECTION 25180.7 OF THE HEALTH AND SAFETY CODE.	
REPORT DATE M / D / Y		CASE #		SIGNED _____ DATE _____	
REPORTED BY	NAME OF INDIVIDUAL FILING REPORT Michael Marr		PHONE (510) 482-1536		SIGNATURE
	REPRESENTING <input checked="" type="checkbox"/> OWNER/OPERATOR <input type="checkbox"/> REGIONAL BOARD <input type="checkbox"/> LOCAL AGENCY <input type="checkbox"/> OTHER _____		COMPANY OR AGENCY NAME		
	ADDRESS 27737 Fallen Leaf Ct. Hayward CA 94542 <small>STREET CITY STATE ZIP</small>				
RESPONSIBLE PARTY	NAME Michael Marr <input type="checkbox"/> UNKNOWN		CONTACT PERSON Michael Marr		PHONE (510) 482-1536
	ADDRESS 27737 Fallen Leaf Ct. Hayward CA 94542 <small>STREET CITY STATE ZIP</small>				
SITE LOCATION	FACILITY NAME (IF APPLICABLE) Former Service Station		OPERATOR -		PHONE () -
	ADDRESS 2504 MacArthur Blvd. Oakland Alameda <small>STREET CITY COUNTY ZIP</small>				
	CROSS STREET Boston Avenue				
IMPLEMENTING AGENCIES	LOCAL AGENCY _____ AGENCY NAME _____		CONTACT PERSON _____		PHONE ()
	REGIONAL BOARD _____		CONTACT PERSON _____		PHONE ()
SUBSTANCES INVOLVED	(1) NAME Petroleum Hydrocarbon		QUANTITY LOST (GALLONS) _____ <input type="checkbox"/> UNKNOWN		
	(2) _____		_____ <input type="checkbox"/> UNKNOWN		
DISCOVERY/ABATEMENT	DATE DISCOVERED 1 / 0 / 1 3 / 9 / 3		HOW DISCOVERED <input type="checkbox"/> TANK TEST <input type="checkbox"/> TANK REMOVAL <input type="checkbox"/> INVENTORY CONTROL <input checked="" type="checkbox"/> SUBSURFACE MONITORING <input type="checkbox"/> NUISANCE CONDITIONS		
	DATE DISCHARGE BEGAN _____ <input checked="" type="checkbox"/> UNKNOWN		METHOD USED TO STOP DISCHARGE (CHECK ALL THAT APPLY) <input checked="" type="checkbox"/> REMOVE CONTENTS <input type="checkbox"/> REPLACE TANK <input type="checkbox"/> CLOSE TANK <input type="checkbox"/> REPAIR TANK <input type="checkbox"/> REPAIR PIPING <input type="checkbox"/> CHANGE PROCEDURE <input type="checkbox"/> OTHER _____		
	HAS DISCHARGE BEEN STOPPED? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO IF YES, DATE _____				
SOURCE/ CAUSE	SOURCE OF DISCHARGE <input type="checkbox"/> TANK LEAK <input checked="" type="checkbox"/> UNKNOWN <input type="checkbox"/> PIPING LEAK <input type="checkbox"/> OTHER _____		CAUSE(S) <input type="checkbox"/> OVERFILL <input type="checkbox"/> RUPTURE/FAILURE <input type="checkbox"/> SPILL <input type="checkbox"/> CORROSION <input checked="" type="checkbox"/> UNKNOWN <input type="checkbox"/> OTHER _____		
	CASE TYPE CHECK ONE ONLY <input checked="" type="checkbox"/> UNDETERMINED <input type="checkbox"/> SOIL ONLY <input type="checkbox"/> GROUNDWATER <input type="checkbox"/> DRINKING WATER - (CHECK ONLY IF WATER WELLS HAVE ACTUALLY BEEN AFFECTED)				
CURRENT STATUS	CHECK ONE ONLY <input type="checkbox"/> NO ACTION TAKEN <input type="checkbox"/> PRELIMINARY SITE ASSESSMENT WORKPLAN SUBMITTED <input type="checkbox"/> POLLUTION CHARACTERIZATION <input checked="" type="checkbox"/> LEAK BEING CONFIRMED <input type="checkbox"/> PRELIMINARY SITE ASSESSMENT UNDERWAY <input type="checkbox"/> POST CLEANUP MONITORING IN PROGRESS <input type="checkbox"/> REMEDIATION PLAN <input type="checkbox"/> CASE CLOSED (CLEANUP COMPLETED OR UNNECESSARY) <input type="checkbox"/> CLEANUP UNDERWAY				
	REMEDIAL ACTION CHECK APPROPRIATE ACTION(S) <small>(SEE BACK FOR DETAILS)</small> <input type="checkbox"/> CAP SITE (CD) <input type="checkbox"/> EXCAVATE & DISPOSE (ED) <input type="checkbox"/> REMOVE FREE PRODUCT (FP) <input type="checkbox"/> ENHANCED BIO DEGRADATION (IT) <input type="checkbox"/> CONTAINMENT BARRIER (CB) <input type="checkbox"/> EXCAVATE & TREAT (ET) <input type="checkbox"/> PUMP & TREAT GROUNDWATER (GT) <input type="checkbox"/> REPLACE SUPPLY (RS) <input type="checkbox"/> VACUUM EXTRACT (VE) <input type="checkbox"/> NO ACTION REQUIRED (NA) <input type="checkbox"/> TREATMENT AT HOOKUP (HU) <input type="checkbox"/> VENT SOIL (VS) <input type="checkbox"/> OTHER (OT) _____				
COMMENTS	 				

Excavation Permit Granted _____ No. _____

CITY OF OAKLAND

Tank Permit No. 9824

Permit to Excavate and Install, Repair, or Remove Inflammable Liquid Tanks.

Oakland, California, JUNE 22, 1994

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

on the _____ side of _____ Street Avenue _____ feet _____ of _____ Street Avenue

House No. 2504 MacArthur Blvd. Street Avenue _____ Present Storage _____

Owner Michael Marr Address 27737 Fallen Leaf Ct., Hayward Phone 482-1536

Applicant Fred Serafin Address 100 Pringle Ave. Ste 580 94542 Phone _____

Dimensions of street (sidewalk) surface to be disturbed no X Walnut Creek, Ca 94596 Number of Tanks 4 Capacity 3/4000 Gallons each

Remarks: _____ 1/500

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 flames 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. 6-2.04

_____ square feet of digging or removal granted.

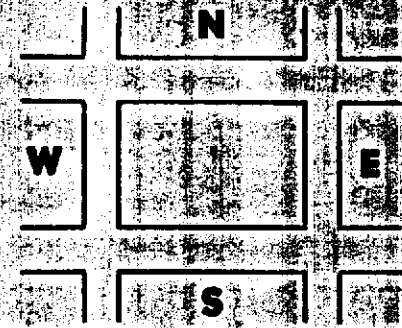
The receipt of \$ _____ special deposit is hereby acknowledged.

GENERAL DEPOSIT.

BUREAU OF PERMITS AND LICENSES.

Inspection Fee Paid \$300.00 ck#1361, rec #703641

Received by D. Clemons
FIRE PREVENTION BUREAU



CERTIFICATE OF TANK AND EQUIPMENT INSPECTION

Inspected and passed on _____

By _____ Fire Marshal

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.

CITY OF OAKLAND
REPORT OF FIRE INSPECTION

ENGINE CO.

ADDRESS 2504 MACARTHUR BLVD

NAME GRAY'S AUTO REPAIR

GENERAL INSPECTION

PERMIT OTHER

HAZARD NOTED

HAZARD ABATED

NOTICE LEFT LETTER

1st NOTICE

2nd NOTICE

FINAL

DATE	VIOLATION	O.F.C.	CONTACTED
6/27/94	LEL LEVEL @ 10% / 0-2% FROM A 4000 GAL TANK #2, LEL @ 2% #3, OXY @ 5% 4000, LEL @ 4% OXY @ 7% #4, ALSO 200 GAL WASTE OIL @ LEL @ 2%, OXY @ 6.5-7.0%		SUE YUGO ALCO BENTON

A REINSPECTION WILL BE MADE WITHIN _____ DAYS.

FIRE PREVENTION BUREAU PHONE 273-3855

INSPECTOR [Signature]

CHROMALAB, INC.

Environmental Services (SDB)

July 6, 1994

Submission #: 9406323

RUST E&I

Atten: ROBERT SERAFIN

Project: MAR-WO2H

Project#: 89477.00

Received: June 27, 1994

re: 8 samples for Gasoline and BTEX analysis.

Matrix: SOIL

Sampled: June 27, 1994

Lab Run#: 3265

Analyzed: July 1, 1994

Method: EPA 5030/8015M/8020

Lab #	SAMPLE ID	Gasoline (mg/Kg)	Benzene (ug/Kg)	Toluene (ug/Kg)	Ethyl Benzene (ug/Kg)	Total Xylenes (ug/Kg)
55815	AB-1	N.D.	N.D.	N.D.	N.D.	N.D.
55816	BB-1	3.4	12	68	75	320
55817	CB-1	12	N.D.	N.D.	29	40
55820	AB-2	N.D.	N.D.	N.D.	N.D.	N.D.
55821	BB-2	15	8.8	160	170	980

Matrix: SOIL

Sampled: June 27, 1994


Lab Run#: 3284

Analyzed: July 5, 1994

Method: EPA 5030/8015M/8020

Lab #	SAMPLE ID	Gasoline (mg/Kg)	Benzene (ug/Kg)	Toluene (ug/Kg)	Ethyl Benzene (ug/Kg)	Total Xylenes (ug/Kg)
55819	SP-1A,B,C	1600	870	12000	14000	77000
55822	CB-2	24	N.D.	N.D.	39	56
55823	SP-2A,B,C	N.D.	N.D.	N.D.	N.D.	N.D.
DETECTION LIMITS		1.0	5.0	5.0	5.0	5.0
BLANK		N.D.	N.D.	N.D.	N.D.	N.D.
BLANK SPIKE RECOVERY(%)		90	104	109	102	108

ChromaLab, Inc.



Billy Thach
Chemist



Ali Kharrazi
Organic Manager

BILLY 13:39:27

CHROMALAB, INC.

Environmental Services (SDB)

July 5, 1994

Submission #: 9406323

RUST E&I

Atten: ROBERT SERAFIN

Project: MAR-WO2H
Received: June 27, 1994

Project#: 89477.00

re: 1 sample for Diesel analysis

Matrix: SOIL
Sampled: June 27, 1994

Analyzed: July 1, 1994

RESULTS:

<u>Sample I.D.</u>	<u>Diesel (mg/Kg)</u>
DB-1	N.D.
BLANK	N.D.
SPIKE RECOVERY	84%
DUP SPIKE RECOVERY	99%
DETECTION LIMIT	1.0
METHOD OF ANALYSIS	3550/8015

ChromaLab, Inc.

Sirirat Chullakorn

Sirirat Chullakorn
Analytical Chemist

Ali Kharrazi

Ali Kharrazi
Organic Manager

gg

CHROMALAB, INC.

Environmental Services (SDB)

July 6, 1994

Submission #: 9406323

RUST E&I

Atten: ROBERT SERAFIN

Project: MAR-WO2H

Project#: 89477.00

Received: June 27, 1994

re: 1 sample for Oil & Grease analysis

Matrix: SOIL


Sampled: June 27, 1994


Analyzed: July 1, 1994

RESULTS:

Sample I.D.	Oil & Grease (mg/Kg)
DB-1	N.D.
BLANK	N.D.
DETECTION LIMIT	50
METHOD OF ANALYSIS	STD METHOD 5520 E & F

ChromaLab, Inc.


Carolyn M. House
Analyst


Ali Kharrazi
Organic Manager

gg

CHROMALAB, INC.

Environmental Services (SDB)

July 7, 1994

Submission #: 9406323

RUST E&I

Atten: ROBERT SERAFIN

Project: MAR-WO2H

Project#: 89477.00

Received: June 27, 1994

re: One sample for Volatile Organic Compounds analysis.

Sample: DB-1

Matrix: SOIL

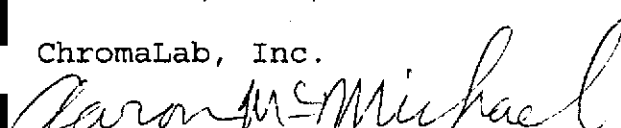
Sampled: June 27, 1994


Lab#: 55818 Run: 3315 Analyzed: July 2, 1994

Method: EPA 8240/8260

ANALYTE	RESULT (ug/Kg)	REPORTING LIMIT (ug/Kg)	BLANK RESULT (ug/Kg)	BLANK SPIKE RESULT (%)
ACETONE	N.D.	25	N.D.	--
BENZENE	N.D.	5.0	N.D.	67
BROMODICHLOROMETHANE	N.D.	5.0	N.D.	--
BROMOFORM	N.D.	5.0	N.D.	--
BROMOMETHANE	N.D.	5.0	N.D.	--
2-BUTANONE	N.D.	5.0	N.D.	--
CARBON TETRACHLORIDE	N.D.	5.0	N.D.	--
CHLOROBENZENE	N.D.	5.0	N.D.	99
CHLOROETHANE	N.D.	5.0	N.D.	--
2-CHLOROETHYLVINYLETHER	N.D.	5.0	N.D.	--
CHLOROFORM	N.D.	5.0	N.D.	--
CHLOROMETHANE	N.D.	5.0	N.D.	--
DIBROMOCHLOROMETHANE	N.D.	5.0	N.D.	--
1,1-DICHLOROETHANE	N.D.	5.0	N.D.	--
1,2-DICHLOROETHANE	N.D.	5.0	N.D.	--
1,1-DICHLOROETHENE	N.D.	5.0	N.D.	93
1,2-DICHLOROETHENE (CIS)	N.D.	5.0	N.D.	--
1,2-DICHLOROETHENE (TRANS)	N.D.	5.0	N.D.	--
1,2-DICHLOROPROPANE	N.D.	5.0	N.D.	--
1,3-DICHLOROPROPENE (CIS)	N.D.	5.0	N.D.	--
1,3-DICHLOROPROPENE (TRANS)	N.D.	5.0	N.D.	--
ETHYL BENZENE	N.D.	5.0	N.D.	--
2-HEXANONE	N.D.	5.0	N.D.	--
METHYLENE CHLORIDE	N.D.	25	N.D.	--
4-METHYL-2-PENTANONE	N.D.	5.0	N.D.	--
STYRENE	N.D.	5.0	N.D.	--
1,1,2,2-TETRACHLOROETHANE	N.D.	5.0	N.D.	--
TETRACHLOROETHENE	N.D.	5.0	N.D.	--
TOLUENE	N.D.	5.0	N.D.	104
1,1,1-TRICHLOROETHANE	N.D.	5.0	N.D.	--
1,1,2-TRICHLOROETHANE	N.D.	5.0	N.D.	--
TRICHLOROETHENE	N.D.	5.0	N.D.	99
TRICHLOROFLUOROMETHANE	N.D.	5.0	N.D.	--
VINYL ACETATE	N.D.	5.0	N.D.	--
VINYL CHLORIDE	N.D.	5.0	N.D.	--
XYLENES (TOTAL)	N.D.	5.0	N.D.	--

ChromaLab, Inc.


Aaron McMichael
Chemist


Ali Kharrazi
Organic Manager

DATA\AARON 15:0

CHROMALAB, INC.

Environmental Services (SDB)

July 21, 1994

Submission #: 9406323

RUST E&I

Atten: ROBERT SERAFIN

Project: MAR-WO2H

Project#: 89477.00

Received: June 27, 1994

re: 2 samples for reactivity, corrosivity, and
ignitability (RCI) analyses.

Matrix: SOIL


Sampled: June 27, 1994


Analyzed: July 21, 1994

Method: CA Title 22 SEC.66261.23(1-4)

<u>Sample #</u>	<u>Client Sample ID</u>	<u>Reactivity</u>	<u>Corrosivity</u>	<u>Ignitability</u>
55819	SP1 ABC	No	pH 8.4	No
55823	SP2 ABC	No	pH 9.0	No
Blank		No	pH 7.0	No

ChromaLab, Inc.


Carolyn M. House
Analyst


Ali Kharrazi
Organic Manager

gg

CHROMALAB, INC.

Environmental Services (SDB)

July 5, 1994

Submission #: 9406323

RUST E&I

Atten: ROBERT SERAFIN

Project: MAR-WO2H

Project#: 89477.00

Received: June 27, 1994

re: 8 samples for Lead analysis.

Matrix: SOIL

Extracted: July 5, 1994

Sampled: June 27, 1994

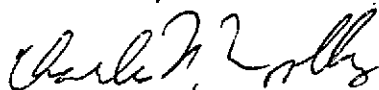
Lab Run#: 3287

Analyzed: July 5, 1994

Method: EPA 3050/7420

LAB #	SAMPLE ID	LEAD (mg/Kg)	REPORTING LIMIT (mg/Kg)	BLANK RESULT (mg/Kg)	BLANK SPIKE RESULT (%)
55815	AB-1	8.0	0.5	N.D.	93
55816	BB-1	5.9	0.5	N.D.	93
55817	CB-1	6.9	0.5	N.D.	93
→ 55819	SP-1A,B,C	14	0.5	N.D.	93
55820	AB-2	8.5	0.5	N.D.	93
55821	BB-2	10.0	0.5	N.D.	93
55822	CB-2	9.3	0.5	N.D.	93
→ 55823	SP-2A,B,C	14	0.5	N.D.	93

ChromaLab, Inc.



Charles Woolley
Chemist



Eric Tam
Laboratory Director

CHARLES 18:03:31

CHROMALAB, INC.

Environmental Services (SDB)

July 27, 1994

Submission #: 9407073

RUST E&I

Atten: Robert Serafin

Project: MARR TANK EXC.

Project#: MAR-W02H

Received: July 7, 1994

re: 13 samples for Gasoline and BTEX analysis.

Matrix: SOIL

Sampled: July 6, 1994

Lab Run#: 3360

Analyzed: July 11, 1994

Method: EPA 5030/8015M/8020

Spl #	CLIENT	SMPL ID	Gasoline (mg/Kg)	Benzene (ug/Kg)	Toluene (ug/Kg)	Ethyl Benzene (ug/Kg)	Total Xylenes (ug/Kg)
56976	SW-1		9.5	8.3	N.D.	58	81
56977	SW-2		N.D.	N.D.	N.D.	N.D.	N.D.
56978	SW-3		N.D.	N.D.	N.D.	N.D.	N.D.
56979	SW-4		N.D.	N.D.	N.D.	N.D.	N.D.
56980	SW-5		N.D.	N.D.	N.D.	N.D.	N.D.
56981	SW-6		210	400	990	2800	11000
56982	SW-7		250	120	120	330	480
Note: MATRIX INTERFERENCE VERIFIED BY RE-ANALYSIS							
56983	SW-8		N.D.	N.D.	N.D.	N.D.	N.D.

Matrix: SOIL

Sampled: July 6, 1994

Lab Run#: 3382

Analyzed: July 13, 1994

Method: EPA 5030/8015M/8020

Spl #	CLIENT	SMPL ID	Gasoline (mg/Kg)	Benzene (ug/Kg)	Toluene (ug/Kg)	Ethyl Benzene (ug/Kg)	Total Xylenes (ug/Kg)
56984	SW-9		N.D.	N.D.	N.D.	N.D.	N.D.
56985	SW-10		5.4	N.D.	N.D.	20	37
56986	SW-11		8.2	15	N.D.	16	23
Note: MATRIX INTERFERENCE VERIFIED BY RE-ANALYSIS							
56987	SW-12		22	N.D.	N.D.	42	34
Note: MATRIX INTERFERENCE VERIFIED BY RE-ANALYSIS							
56988	SW-13		1.8	N.D.	N.D.	N.D.	N.D.

Reporting Limits

0.0

5.0

5.0

5.0

5.0

Blank Result

N.D.

N.D.

N.D.

N.D.

N.D.

Blank Spike Result (%)

111

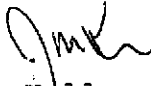
110

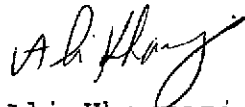
114

111

107

ChromaLab, Inc.


Jack Kelly
Chemist


Ali Kharrazi
Organic Manager

CCAPP JACK 14:38:10

CHROMALAB, INC.

Environmental Services (SDB)

August 17, 1994

Submission #: 9406323

RUST E&I
100 PRINGE AVE #580,1 WALNUT CRK CENTER
WALNUT CREEK, CA 94596

Attn: ROBERT SERAFIN

RE: Analysis for project MAR-WO2H, number 89477.00.


REPORTING INFORMATION

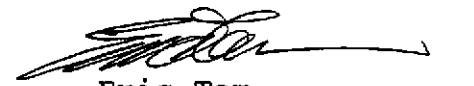
Samples were received cold and in good condition on June 27, 1994. They were refrigerated upon receipt and analyzed as described in the attached report. ChromaLab followed EPA or equivalent methods for all testing reported.

No discrepancies were observed or difficulties encountered with the testing.

SAMPLES TESTED IN THIS REPORT

<u>Client Sample ID</u>	<u>Matrix</u>	<u>Date collected</u>	<u>Sample #</u>
AB-1	SOIL	June 27, 1994	55815
BB-1	SOIL	June 27, 1994	55816
CB-1	SOIL	June 27, 1994	55817
DB-1	SOIL	June 27, 1994	55818
SP-1A,B,C	SOIL	June 27, 1994	55819
AB-2	SOIL	June 27, 1994	55820
BB-2	SOIL	June 27, 1994	55821
CB-2	SOIL	June 27, 1994	55822
SP-2A,B,C	SOIL	June 27, 1994	55823


Jill Thomas
Quality Assurance Manager


Eric Tam
Laboratory Director

CHROMALAB, INC.

Environmental Services (SDB)

July 28, 1994

Submission #: 9406323

RUST E&I

Attn: ROBERT SERAFIN

Project: MAR-WO2H
Submitted: June 27, 1994

Project#: 89477.00

re: **MATRIX SPIKE** report for Gasoline and BTEX analysis.

Matrix: SOIL

Run number: 3265

Method: EPA 5030/8015M/8020

Analyzed on: July 1, 1994

Analyte	Spiked Sample Result	Spike Amt.	% Spike Rec	Dup. Spike Rec	Control Limits	% RPD	% RPD Lim
GASOLINE	N.D. mg/Kg	5.0 mg/Kg	118	--	80-118	N/A	20
BENZENE	N.D. ug/Kg	25 ug/Kg	97.0	94.0	80-127	3.1	20
TOLUENE	N.D. ug/Kg	25 ug/Kg	97.0	95.0	81-122	2.1	20
ETHYL BENZENE	N.D. ug/Kg	25 ug/Kg	98.0	96.0	81-119	2.1	20
XYLENES	N.D. ug/Kg	75 ug/Kg	97.0	95.0	83-118	2.1	20
TRIFLUOROTOLUENE	100 ng	100 ng	103	99.0	80-120	4.0	20

Sample spiked: Spl #: 55815
Submission #: 9406323
Client Sample ID: AB-1

CHROMALAB, INC.

Environmental Services (SDB)

July 28, 1994

Submission #: 9406323

RUST E&I

Atten: ROBERT SERAFIN

Project: MAR-WO2H
Submitted: June 27, 1994

Project#: July 1, 1994

re: **SURROGATE** results for Gasoline and BTEX analysis.

Matrix: SOIL
Run number: 3265
Method: EPA 5030/8015M/8020

Analyzed on: July 1, 1994

<u>Spl #</u>	<u>Client Sample ID</u>	<u>Surrogate</u>	<u>% Recov</u>	<u>Control Limits</u>
55815	AB-1	TRIFLUOROTOLUENE	101	80-120

SURROG

14:09:50

CHROMALAB, INC.

Environmental Services (SDB)

July 28, 1994

Submission #: 9406323

RUST E&I

Atten: ROBERT SERAFIN

Project: MAR-WO2H
Submitted: June 27, 1994

Project#: July 1, 1994

re: SURROGATE results for Gasoline and BTEX analysis.

Matrix: SOIL
Run number: 3265
Method: EPA 5030/8015M/8020

Analyzed on: July 1, 1994

<u>Spl #</u>	<u>Client Sample ID</u>	<u>Surrogate</u>	<u>% Recov</u>	<u>Control Limits</u>
55815	AB-1	TRIFLUOROTOLUENE	101	80-120
55816	BB-1	TRIFLUOROTOLUENE	110	80-120
55817	CB-1	TRIFLUOROTOLUENE	98	80-120
55819	SP-1A,B,C	TRIFLUOROTOLUENE	92	80-120
55820	AB-2	TRIFLUOROTOLUENE	88	80-120
55821	BB-2	TRIFLUOROTOLUENE	106	80-120
55822	CB-2	TRIFLUOROTOLUENE	128*	80-120
55823	SP-2A,B,C	TRIFLUOROTOLUENE	115	80-120

* Other compound co-eluted with trifluorotoluene. Coelution was verified by re-analysis.

SURROG T5:5

CHROMALAB, INC.

Environmental Services (SDB)

July 28, 1994

Submission #: 9406323

RUST E&I

Attn: ROBERT SERAFIN

Project: MAR-WO2H

Project#: 89477.00

Submitted: June 27, 1994

re: **MATRIX SPIKE** report for Lead analysis.

Matrix: SOIL

Run number: 3287

Extracted: July 5, 1994

Method: EPA 3050/7420

Analyzed on: July 5, 1994

Analyte	Spiked Sample Result	Spike Amt.	% Spike Rec	Dup. Spike Rec	Control Limits	% RPD	% RPD Lim
LEAD	8.0 mg/Kg	5.0 mg/Kg	94.6	90.9	70-130	4.0	20

Sample spiked: Spl #: 55815
Submission #: 9406323
Client Sample ID: AB-1

CHROMALAB, INC.

Environmental Services (SDB)

August 17, 1994

Submission #: 9406323

RUST E&I

Atten: ROBERT SERAFIN

Project: MAR-WO2H

Project#: 89477.00

Submitted: June 27, 1994

re: MATRIX SPIKE report for Volatile Organic Compounds analysis.

Matrix: WATER

Run number: 3315

Method: EPA 624

Analyzed: July 2, 1994

Analyte	Spiked Sample Result	Spike Amt. ($\mu\text{g/L}$)	% Spike Rec	Dup. Spike Rec	Control Limits	% RPD	% RPD Lim
BENZENE	Not Reported	20	95.0	95.0	60-140	0.0	20
CHLOROBEZENE	Not Reported	20	106	111	60-140	4.6	20
1,1-DICHLOROETHENE	Not Reported	20	123	125	56-118	1.6	20
TOLUENE	Not Reported	20	106	106	60-140	0.0	20
TRICHLOROETHENE	Not Reported	20	97.0	99.0	60-129	2.0	20

CHROMALAB, INC.

Environmental Services (SDB)

August 12, 1994

Submission #: 9406323

RUST E&I

Atten: ROBERT SERAFIN

Project: MAR-WO2H

Project#: July 2, 1994

Submitted: June 27, 1994

re: **SURROGATE** results for Volatile Organic Compounds analysis.

Matrix: SOIL

Run number: 3315

Analyzed on: July 2, 1994

Method: EPA 8240/8260

<u>Spl #</u>	<u>Client Sample ID</u>	<u>Surrogate</u>	<u>% Recov</u>	<u>Control Limits</u>
55818	DB-1	1,2-DICHLOROETHANE-D4	103	80-120
55818		4-BROMOFLUOROBENZENE	85	80-120
55818		TOLUENE-D8	103	80-120

SURROG 15:15

GENERAL CHEMISTRY-QUALITY CONTROL

Date: July 27, 1994
Client: RUST E&I
Project: MAR-WO2H

Submission #: 9406323
Method: Reactivity, Corrosivity, and Ignitability
Method #: Title 22 sec. 66702-66708
Matrix: Soil

DUPLICATE RESULTS

Sample duplicated: SP-1 A,B,C

PARAMETER	UNITS	SAMPLE RESULT	DUP RESULT	DIFFERENCE	DIFFERENCE LIMIT
pH	units	8.42	8.40	.02	0.05

CALIBRATION

pH meter calibrated at pH 7.0 and 10.0.

GENERAL CHEMISTRY-QUALITY CONTROL

Date: August 17, 1994
 Client: RUST E&I
 Project: MAR-WO2H

Submission #: 9406323
 Method: OIL & GREASE
 Method #: EPA 5520 E&F
 Matrix: SOIL
 Reporting Limit: 10 mg/Kg

MS/MSD

Sample ID : Blank

PARAMETER	UNITS	SAMPLE RESULT	SPIKE CONC	SPIKED SAMPLE RESULT	% REC	DUP SPIKE RESULT	DUP SPIKE %REC	% RPD	RPD LIMIT
OIL & GREASE	mg/Kg	N.D.	20	21.2	106	20.8	104	1.9	20

% Recovery = (Spike Sample Result-Sample Result)*100/Spike Concentration
 RPD (Relative % Difference) = (Spike Result-Duplicate Result)*100/Average Result

CHROMALAB, INC.

Environmental Services (SDB)

TOTAL EXTRACTABLE PETROLEUM HYDROCARBONS-QUALITY CONTROL

Date: July 29, 1994
Client: RUST E&I
Project: MAR-WO2H

Submission #: 9406323
Method: TEPH
Method number: EPA 8015

SURROGATE RECOVERIES

<u>Sample #</u>	<u>Client Sample ID</u>	<u>o-Terphenyl %</u>
55818	DB-1	82
Blank		79%
Blank Spike		87%

CHROMALAB, INC.

Environmental Services (SDB)

July 28, 1994

Submission #: 9407073

RUST E&I
100 PRINGE AVE #580,1 WALNUT CRK CENTER
WALNUT CREEK, CA 94596

Attn: Robert Serafin

RE: Analysis for project MARR TANK EXC., number MAR-W02H.


REPORTING INFORMATION

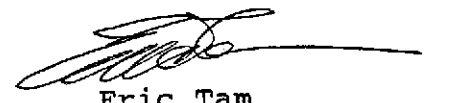
Samples were received cold and in good condition on July 7, 1994. They were refrigerated upon receipt and analyzed as described in the attached report. ChromaLab followed EPA or equivalent methods for all testing reported.

No discrepancies were observed or difficulties encountered with the testing.

SAMPLES TESTED IN THIS REPORT

<u>Client Sample ID</u>	<u>Matrix</u>	<u>Date collected</u>	<u>Sample #</u>
SW-1	SOIL	July 6, 1994	56976
SW-2	SOIL	July 6, 1994	56977
SW-3	SOIL	July 6, 1994	56978
SW-4	SOIL	July 6, 1994	56979
SW-5	SOIL	July 6, 1994	56980
SW-6	SOIL	July 6, 1994	56981
SW-7	SOIL	July 6, 1994	56982
SW-8	SOIL	July 6, 1994	56983
SW-9	SOIL	July 6, 1994	56984
SW-10	SOIL	July 6, 1994	56985
SW-11	SOIL	July 6, 1994	56986
SW-12	SOIL	July 6, 1994	56987
SW-13	SOIL	July 6, 1994	56988


Jill Thomas
Quality Assurance Manager


Eric Tam
Laboratory Director

CHROMALAB, INC.

Environmental Services (SDB)

July 27, 1994

Submission #: 9407073

RUST E&I

Attn: Robert Serafin

Project: MARR TANK EXC.
Submitted: July 7, 1994

Project#: MAR-W02H

re: **MATRIX SPIKE** report for Gasoline and BTEX analysis.

Matrix: SOIL

Run number: 3360

Method: EPA 5030/8015M/8020

Analyzed on: July 11, 1994

Analyte	Spiked Sample Result	Spike Amt.	% Spike Rec	Dup. Spike Rec	Control Limits	% RPD	% RPD Lim
GASOLINE	N.D. mg/Kg	5.0 mg/Kg	117	--	80-118	N/A	20
BENZENE	N.D. ug/Kg	25 ug/Kg	104	95.0	80-127	9.0	20
TOLUENE	N.D. ug/Kg	25 ug/Kg	112	104	81-122	7.4	20
ETHYL BENZENE	N.D. ug/Kg	25 ug/Kg	109	92.0	81-119	17	20
XYLENES	N.D. ug/Kg	75 ug/Kg	105	93.3	83-118	12	20
TRIFLUOROTOLUENE	99 ng	100 ng	108	118	80-120	8.8	20

Sample spiked: Spl #: 56983
Submission #: 9407073
Client Sample ID: SW-8

CHROMALAB, INC.

Environmental Services (SDB)

July 29, 1994

Submission #: 9407073

RUST E & I

Atten: Robert Serafin

Project: MARR TANK EXC.
Submitted: July 7, 1994

Project#: MAR-W02H

re: SURROGATE results for Gasoline and BTEX analysis.

Matrix: SOIL
Run number: 3360
Method: EPA 5030/8015M/8020

Analyzed on: July 11, 1994

<u>Sample #</u>	<u>Client Sample ID</u>	<u>Surrogate</u>	<u>Recovery %</u>
56976	SW-1	TRIFLUOROTOLUENE	135
56977	SW-2	TRIFLUOROTOLUENE	102
56978	SW-3	TRIFLUOROTOLUENE	103
56979	SW-4	TRIFLUOROTOLUENE	106
56980	SW-5	TRIFLUOROTOLUENE	99
56981	SW-6	TRIFLUOROTOLUENE	106
56982	SW-7	TRIFLUOROTOLUENE	44
56983	SW-8	TRIFLUOROTOLUENE	99
56984	SW-9	TRIFLUOROTOLUENE	114
56985	SW-10	TRIFLUOROTOLUENE	103
56986	SW-11	TRIFLUOROTOLUENE	152
56987	SW-12	TRIFLUOROTOLUENE	137
56988	SW-13	TRIFLUOROTOLUENE	92



Wahler Associates

1023 Corporation Way
P.O. Box 10023
Palo Alto, CA 94303
FAX: (415) 968-5365
(415) 968-6250

Walnut Creek

CHAIN OF CUSTODY FORM

Serial Number: _____

WA Authorization: _____

Laboratory: Chromalab

Sheet 1 of 2

Turnaround Time: 5-day

Samplers: _____

Results To: Robert Serafin

Recorder: Robert Serafin
signature required

73/56976-5298

Project: MARR Tank Exc.

Job Number: MAR-WOZH

Project Manager: Robert Serafin

Date: 7/7/1994

SUBM #: 9407073
CLIENT: WAHLER-PA
DUE: 07/14/94
REF: 17149

ITEM NO.	SAMPLE NUMBER	DATE AND TIME SAMPLED		MATRIX	# CONTAINERS & PRESERVATIVES				ANALYSIS R				COMMENTS	
		Date	Time		UNPRESERVED	H ₂ SO ₄	HNO ₃	HCl	TPH-G	BTEX				
1	SW-1	7/6/94	1:25p	Soil					X	X				
2	SW-2		1:35p						X	X				
3	SW-3		1:50p						X	X				
4	SW-4		1:59p						X	X				
5	SW-5		2:10p						X	X				
6	SW-6		2:20p						X	X				
7	SW-7		2:30p						X	X				
8	SW-8		2:40p						X	X				
9	SW-9		2:49p						X	X				
10	SW-10		2:56p						X	X				
11	SW-11		3:01p						X	X				
12	SW-12		3:16p						X	X				

MISCELLANEOUS		CHAIN OF CUSTODY RECORD	
Number of Coolers	Type of Coolant	Relinquished by: (signature & affiliation) <u>Robert Serafin for Wahler</u> <u>7/7/94</u> <u>3:30pm</u>	Received by: (signature & affiliation) <u>J M [Signature]</u> <u>7/7/94</u> <u>1830</u>
COMMENTS: Please hold samples after completion of above indicated analyses for additional possible analysis.		Relinquished by: (signature & affiliation)	Received by: (signature & affiliation)
		Relinquished by: (signature & affiliation)	Received by: (signature & affiliation)
		Relinquished by: (signature & affiliation)	Received by: (signature & affiliation)
LABORATORY COPY PROJECT COPY FIELD or OFFICE COPY WHITE YELLOW PINK		Dispatched by: (signature & affiliation) Date/Time	Received for lab by: Date/Time



Wanler Associates
 1023 Corporation Way
 P.O. Box 10023
 Palo Alto, CA 94303
 FAX: (415) 968-5365
 (415) 968-6250

CHAIN OF CUSTODY FORM

Serial Number: _____
 WA Authorization: _____
 Sheet 2 of 2
 Samplers: _____
 Recorder: [Signature]
signature required

Laboratory: Chromalab
 Turnaround Time: 5 - day
 Results To: Robert Serafin

Project: MARR Tank Exc.
 Job Number: MAR-W02H
 Project Manager: Robert Serafin
 Date: 7/7/94

ITEM NO.	SAMPLE NUMBER	DATE AND TIME SAMPLED		MATRIX	# CONTAINERS & PRESERVATIVES				ANALYSIS REQUESTED / TYPE OF CONTAINER				COMMENTS	
		Date	Time		UNPRESERVED	H ₂ SO ₄	HNO ₃	HCl	TPH-G	BTEX				
1	SW-13	7/6/94	3:25p	Soil					x	x				
2	XXXXXXXXXXXXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX					XXXX	XXXX			XXXXXXXXXX	XXXXXXXXXX
3														
4														
5														
6														
7														
8														
9														
10														
11														
12														

MISCELLANEOUS		CHAIN OF CUSTODY RECORD	
Number of Coolers	Type of Coolant	Relinquished by: (signature & affiliation) <u>Robert Serafin for Wanler 7/7/94</u>	Received by: (signature & affiliation) <u>[Signature]</u> 7/7/94 Date/Time
COMMENTS: <u>See comments on page 1</u>		Relinquished by: (signature & affiliation)	Received by: (signature & affiliation) _____ Date/Time
		Relinquished by: (signature & affiliation)	Received by: (signature & affiliation) _____ Date/Time
		Relinquished by: (signature & affiliation)	Received by: (signature & affiliation) _____ Date/Time
LABORATORY COPY PROJECT COPY FIELD or OFFICE COPY WHITE YELLOW PINK		Dispatched by: (signature & affiliation) _____ Date/Time	Received for lab by: _____ Date/Time



Wahler Associates

1023 Corporation Way
 P.O. Box 10023
 Palo Alto, CA 94303
 FAX: (415) 968-5365
 (415) 968-6250

CHAIN OF CUSTODY FORM

Serial Number: _____

WA Authorization: _____

Laboratory: ChromalabSheet 1 of 2Turnaround Time: 5 - DayResults To: Robert Serafin

SUBM #: 9406323

CLIENT: WAHLER-WC

DUE: 07/05/94

REF: 17032

Project: MAR-W02HJob Number: 89477-000Project Manager: Robert SerafinDate: 6/27/1994

ITEM NO.	SAMPLE NUMBER	DATE AND TIME SAMPLED		MATRIX	# CONTAINERS & PRESERVATIVES				ANALYSIS REQUESTED/TITLE OF CONTAINER							COMMENTS
		Date	Time		UNPRESERVED	H ₂ SO ₄	HNO ₃	HCl	TPH-G	BTEx	TPH-A	EPA 8240	Total Lead	TOG		
1	AB-1	6/27/94	2:10p	Soil					X	X			X			
2	BB-1	6/27/94	1:25p	Soil					X	X			X			
3	CB-1	6/27/94	1:35p	Soil					X	X			X			
4	DB-1	6/27/94	2:15p	Soil							X	X		X		
5	SP-1A	6/27/94	2:20p	Soil					X	X			X			
6	AB-2	6/27/94	1:20p	Soil					X	X			X			
7	BB-2	6/27/94	1:50p	Soil					X	X			X			
8	CB-2	6/27/94	1:57p	Soil					X	X			X			
9	DB-2	6/27/94		Soil							X	X		X		
10	SP-2A	6/27/94	2:40p	Soil					X	X			X			
11	SP-2B	6/27/94	2:35	U												
12	SP-2C	6/27/94	2:30p	U												

MISCELLANEOUS		CHAIN OF CUSTODY RECORD	
Number of Coolers	Type of Coolant	Relinquished by: (signature & affiliation) <u>Robert Serafin for Wahler</u> 6/27/94	Received by: (signature & affiliation) <u>[Signature]</u> 6-27-94 1:28
COMMENTS: Composite as one, as follows: SPC-1A, 1B, 1C → as one SPC-2A, 2B, 2C → as one		Relinquished by: (signature & affiliation)	Received by: (signature & affiliation)
		Relinquished by: (signature & affiliation)	Received by: (signature & affiliation)
		Relinquished by: (signature & affiliation)	Received by: (signature & affiliation)
LABORATORY COPY WHITE	PROJECT COPY YELLOW	FIELD or OFFICE COPY PINK	Dispatched by: (signature & affiliation) Date/Time
			Received for lab by: Date/Time

CHROMALAB, INC.

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

Chain of Custody

DOHS 1094

DATE 6/27/94 PAGE 2 OF 2

PROJ. MGR. Robert Serafin					ANALYSIS REPORT																			
COMPANY Wahler Associates					TPH - Gasoline (EPA 5030, 8015)	TPH - Gasoline (5030, 8015) w/BTEX (EPA 602, 8020)	TPH - Diesel (EPA 3510/3550, 8015)	PURGEABLE AROMATICS BTEX (EPA 602, 8020)	PURGEABLE HALOCARBONS (EPA 601, 8010)	VOLATILE ORGANICS (EPA 624, 8240, 524.2)	BASE/NEUTRALS, ACIDS (EPA 625/627, 8270, 525)	TOTAL OIL & GREASE (EPA 5520, 8+F, E+F)	PCB (EPA 608, 8080)	PESTICIDES (EPA 608, 8080)	TOTAL RECOVERABLE HYDROCARBONS (EPA 418.1)	METALS: Cd, Cr, Pb, Zn, Ni	CAM METALS (17)	PRIORITY POLLUTANT METALS (13)	TOTAL LEAD	EXTRACTION (TCLP, STLC)	NUMBER OF CONTAINERS			
ADDRESS Walnut Creek office																								
SAMPLERS (SIGNATURE)					(PHONE NO.)																			
SAMPLE ID.	DATE	TIME	MATRIX	PRESERV.																				
SP-1B	6/27	2:30p	soil		X			X											X					
SP-1C	6/27	2:25p	4		X			X											X					
PROJECT INFORMATION					SAMPLE RECEIPT					RELINQUISHED BY 1.			RELINQUISHED BY 2.			RELINQUISHED BY 3.								
PROJECT NAME:					TOTAL NO. OF CONTAINERS					SIGNATURE			SIGNATURE			SIGNATURE								
PROJECT NUMBER:					HEAD SPACE					(TIME)			(TIME)			(TIME)								
P.O. #					REC'D GOOD CONDITION/COLD					(DATE)			(DATE)			(DATE)								
CONFORMS TO RECORD										(PRINTED NAME)			(PRINTED NAME)			(PRINTED NAME)								
TAT	STANDARD 5-DAY				24	48	72	OTHER	(COMPANY)			(COMPANY)			(COMPANY)									
SPECIAL INSTRUCTIONS/COMMENTS:					RECEIVED BY 1.					RECEIVED BY 2.			RECEIVED BY (LABORATORY) 3.											
					SIGNATURE					SIGNATURE			SIGNATURE											
					(TIME)					(TIME)			(TIME)											
					(PRINTED NAME)					(PRINTED NAME)			(PRINTED NAME)											
					- Chromalab					(DATE)			(DATE)			(DATE)								
										(COMPANY)			(COMPANY)			(LAB)								

SOIL SAMPLING PROTOCOL

A. GENERAL

1. Any materials supplied by the client will reduce the cost of our work. These may include tap water, 55-gallon drums, and DI-water. Arrangements will be made before the start of the project.
2. Chemical sampling procedures and sample storage will be conducted under the direction of our consulting laboratory or a consulting analytical chemist.
3. All equipment used during the sampling process will be thoroughly steam-cleaned prior to its use.
4. All samples will be stored in an ice chest and packed in blue ice or ice in such a manner as to prevent sample immersion in melted ice.
5. All samples will be delivered to the consulting laboratory as soon as possible after collection.
6. All sample containers will be opened only by the consulting laboratory which performs the chemical testing.

B. SOIL SAMPLES

1. Soil samples will be attempted at 5-foot intervals or more frequently as determined in the field.
2. Sample container cleaning blanks may be taken of the steam-cleaned brass liners for quality control purposes at the rate of one per boring.
3. All soil sampling equipment will be disassembled and thoroughly steam-cleaned prior to each usage.
4. The ends of all soil sample liners will be covered with aluminum foil and an air-tight cap which will be wrapped with aluminized tape and properly labeled. All soil samples will be immediately stored in an ice chest and packed with blue ice or ice in such a manner as to prevent immersion in melted ice.
5. All excess soils will be place in 55-gallon drums for proper disposal.

6. The center of each soil liner will be extracted at the consulting laboratory for appropriate analysis.

C. SAMPLE RECORDS AND CUSTODY

1. Records will be maintained for all samples collected by Wahler Associates.
2. A positive chain-of-custody record will be maintained by Wahler Associates for future reference.
3. All records will be maintained under strict confidence by Wahler Associates and will be released only by written authorization of the client.