GEOMATRIX

REPORT ID# 261
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UNDERGROUND STORAGE TANK REMOVAL

8900 Earhart Road
Oakland, California

Prepared for:

Port of Oakland
530 Water Street
Oakland, California 94607

December 2003

Project No. 8207.005

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Geomatrix Consultants

PORT OF OAKLAND

December 23, 2003

Mr. Keith Matthews
Hazardous Materials Inspector
City of Oakland Fire Service Agency
Office of Emergency Services
1605 Martin Luther King, Jr. Way
Oakland, CA 94612

RE: Request for No Further Action / Closure
UST Site LF-17 and LF-18 – 8900 Earhart Road
Building L311, North Field, Oakland International Airport
Oakland, CA

Dear Mr. Matthews:

Please find enclosed for your review is our report prepared by Geomatrix Consultants, Inc. that documents excavation and removal of the subject underground storage tanks (USTs) LF-17 and LF-18 at Building L311 located at 8900 Earhart Road, North Field, Oakland International Airport. These two USTs were removed on September 22, 2003 with your oversight and approval.

The former gasoline and diesel USTs were removed in accordance with City of Oakland Fire Service Agency (OFSA) and San Francisco Bay Area Regional Water Quality Control Board (RWQCB) requirements and guidelines. The tanks were visually inspected after removal. Holes were not observed in either tank and the exteriors were intact. Confirmation soil and groundwater samples were collected and analyzed as required by OFSA and the RWQCB.

Subject to your review, the Port respectfully requests a letter to confirm no further action is necessary for these former USTs and the site is closed. Thank you in advance for your assistance. If you have any questions, please contact me at (510) 627-1134.

Sincerely,

Jeffrey L. Rubin, CPSS, REA
Port Associate Environmental Scientist
Environmental Health and Safety Compliance

Enclosure: noted

Cc (w/o encl.): Ted Mankowski
Dale Stone
Michael McMillan
Jeff Jones
Roberta Schoenholz

530 Water Street ■ Jack London Square ■ P.O. Box 2064 ■ Oakland, California 94604–2064
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2101 Webster Street
12th Floor
Oakland, CA 94612
(510) 663-4100 • FAX (510) 663-4141

GEOMATRIX

December 19, 2003
Project 8207.005

Mr. Jeff Rubin
Port of Oakland
530 Water Street, Second Floor
Oakland, California 94607

Subject: Underground Storage Tank Removal
8900 Earhart Road
Oakland, California

Dear Mr. Rubin:

Geomatrix Consultants, Inc. (Geomatrix), has prepared this report on behalf of the Port of Oakland for documenting underground storage tank removal activities performed at the 8900 Earhart Road Site. This work was performed in accordance with Geomatrix's August 15, 2003 *Scope of Work and Cost Estimate – Task Order #5.*

Geomatrix is pleased to be of continuing service to the Port of Oakland. Please call either of the undersigned if you have questions.

Sincerely yours,
GEOMATRIX CONSULTANTS, INC.

Shakeel Jogia
Staff Engineer

Jennifer L. Patterson, P.E.
Senior Engineer

sj/jlp/smm
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cc: Susan M. Gallardo, Geomatrix Consultants, Inc.

GEOMATRIX

UNDERGROUND STORAGE TANK REMOVAL

8900 Earhart Road
Oakland, California

Prepared for:

Port of Oakland
530 Water Street
Oakland, California 94607

Prepared by:

Geomatrix Consultants, Inc.
2101 Webster Street, 12th Floor
Oakland, California 94612

December 2003

Project No. 8207.005

GEOMATRIX

TABLE OF CONTENTS

TABLES

FIGURES

APPENDIXES

GEOMATRIX

UNDERGROUND STORAGE TANK REMOVAL
8900 Earhart Road
Oakland, California

1.0 INTRODUCTION

This report describes underground storage tank (UST) removal activities conducted at a Port of Oakland (Port) facility located at 8900 Earhart Road in Oakland, California (Figure 1). One 1,000-gallon capacity diesel UST (Tank 1) and one 2,000-gallon capacity unleaded gasoline UST (Tank 2) were removed by Dillard Environmental Services Company (Dillard) of Byron, California, a California-licensed contractor under contract to the Port. Geomatrix Consultants, Inc. (Geomatrix), observed tank and piping removal, excavation, and backfilling activities and collected soil and groundwater samples for chemical analysis. UST removal and the associated soil and groundwater sampling activities were performed under the oversight of Mr. Keith Matthews of the Oakland Fire Services Agency (OFSA).

Tank removal, soil and groundwater sampling, and chemical analytical procedures were performed in accordance with applicable guidelines contained in the August 1990 "Tri-Regional Board Staff Recommendations For Preliminary Evaluation and Investigation of Underground Tank Sites" (Tri-Regional), unless otherwise directed by the OFSA. UST removal, excavation, and backfilling activities, soil and groundwater sampling, and laboratory analytical results are described below.

2.0 SITE CONDITIONS

The site is located at 8900 Earhart Road in the City of Oakland, located in Alameda County, California. The USTs were installed at a maintenance/refueling facility near the building shown on Figure 2 (both USTs were located within one excavation). According to Mr. Michael McMillan of the Port, Tanks 1 and 2 originally were installed in 1986 and contained diesel and regular unleaded gasoline, respectively. Both tanks were upgraded in 1998.

A refueling station was located adjacent to the UST area. The refueling station consisted of gasoline and diesel fuel dispensers, both of which had previously been decommissioned and taken off-site. The fuel dispensers were connected to the USTs by galvanized steel pipe enclosed in 4-inch diameter polyvinyl chloride (PVC) pipe, installed approximately 1.5 feet below ground surface (bgs). The diesel fuel dispenser was located approximately 9 feet south

of the UST excavation area, and the gasoline fuel dispenser was located approximately 6 feet south of the UST excavation. Dimensions of the refueling station area are approximately 21 feet long and 24 feet wide. The former UST locations and refueling station are shown on Figure 2.

3.0 UNDERGROUND STORAGE TANK PIPING REMOVAL

Prior to UST removal activities, Geomatrix obtained a removal permit from the OFSA (Tank Permit Number 2003-045) for the Port. A copy of the permit issued by the OFSA is included in Appendix A. Dillard performed UST removal and excavation activities September 22 through 24, 2003. A Geomatrix field engineer observed removal of the USTs and piping and collected excavation and soil stockpile samples during the tank removal activities on September 22, 24, and 30, 2003. The soil samples were submitted for chemical analysis. UST stabilization and removal, soil and groundwater sampling, and waste disposal activities are discussed in the following sections.

3.1 UST STABILIZATION AND REMOVAL

Fuel dispensers, concrete, and soil overlying the USTs were removed to access and prepare the USTs for removal. The top of Tank 1 was encountered at approximately 3 feet bgs. The top of Tank 2 was encountered at approximately 2 feet bgs. Backfill material surrounding the USTs consisted of 0.5-inch to 1-inch pea gravel. Native soil outside the excavation backfill consisted of clayey sand and sandy lean clay. Excavated soil was stockpiled on plastic sheeting at the site. Stained soil was not observed in the excavation prior to UST removal.

After rinsing, Dillard inserted approximately 50 and 100 pounds of dry ice into Tank 1 and Tank 2, respectively, to facilitate evacuation of oxygen and potentially explosive vapors. Immediately prior to removal of the USTs, Dillard measured explosive vapor levels through the fill-pipe opening in the top of the USTs. The final vapor readings indicated that a non-explosive atmosphere (less than 10% oxygen and less than 10% of the lower explosive limit) existed inside the tanks. Mr. Matthews approved the readings and removal of the USTs.

A crane was used to lift the tanks from the excavation. The tanks were lowered onto a truck bed for visual examination by the Geomatrix field engineer and Mr. Matthews. Tank 1 measured 5.3 feet in diameter and 7 feet in length, and Tank 2 measured 5.6 feet in diameter and 13.1 feet in length. Both tanks were composed of steel composite and were coated with fiberglass for cathodic protection. Holes were not observed in either tank, although slight

damage to each tank's fiberglass coating was observed. The damage reportedly occurred during excavation of overburden soil.

The average dimensions of the cut concrete were approximately 42 feet long and 24 feet wide. The UST excavation was rectangular in shape, with an average length and width of approximately 21 and 24 feet, respectively. Depth to groundwater in a portion of the excavation following UST removal was approximately 5 feet bgs. Soil beneath the tanks where groundwater was not present did not appear to be affected by hydrocarbons. Light product was observed on the groundwater surface. Affected groundwater was pumped into 55-gallon drums and disposed of off-site.

3.2 PIPING REMOVAL AND OVEREXCAVATION OF REFUELING STATION AREA

In addition to UST removal, Dillard removed two lengths of galvanized steel delivery pipe and the 4-inch diameter PVC pipe that enclosed it. The pipe was installed approximately 1.5 feet bgs between the USTs and the adjacent refueling station. There were no holes along the length of either delivery pipe.

Following pipe removal, the refueling station area was excavated to 5 feet bgs and confirmation soil samples were collected for chemical analysis. Analytical results of the confirmation samples indicated no further excavation was necessary. The refueling station over-excavation area is shown on Figure 2.

3.3 SOIL AND GROUNDWATER SAMPLING

Geomatrix collected samples from the site on September 22, 24, and 30, 2003. Excavation and refueling station sample locations are shown on Figure 2.

- On September 22, Geomatrix collected three soil samples from the sidewalls of the excavation and one grab groundwater sample from the pooled groundwater in the excavation as directed by Mr. Matthews. One soil sample (T1-N-092203-1) was collected at the soil/groundwater interface (approximately 5 feet bgs) near the north side of the former Tank 1. Two soil samples, T2-N-092203-1, and T2-S-092203-1, were collected at the soil/groundwater interface (approximately 5 feet bgs) near the north and south sides, respectively, of the former Tank 2. The grab groundwater sample (GW-092203-1) was collected from pooled groundwater beneath the former Tank 1 location. Under the direction of Mr. Matthews, groundwater was not purged prior to sample collection.

- On September 24, Geomatrix collected three soil samples from the refueling station area located adjacent to the UST excavation, as directed by Mr. Matthews. Soil

sample pipe1-092403-1 was collected from beneath where the 4-inch diameter PVC delivery pipe ran between Tank 1 and 2 and the adjacent refueling station. Soil sample dies-092403-1 was collected at the approximate location of the diesel fuel dispenser, and sample gaso-092403-1 was collected at the approximate location of the gasoline fuel dispenser. The samples were collected approximately 1 foot below the backfill/native soil interface, at approximately 2.5 feet bgs.

- On September 30, after over-excavation of the refueling station area, Geomatrix collected two post-excavation confirmation soil samples from the refueling station area located adjacent to the UST excavation. Soil sample pipe1-093003-2 was collected in the refueling station excavation beneath where the 4-inch PVC delivery pipe had previously existed. Soil sample dies-093003-1 was collected in the refueling station excavation beneath the approximate location of the diesel fuel dispenser. The samples were collected from the bottom of the refueling station excavation, at approximately 5 feet bgs.

Soil samples were collected in clean, 6-inch-long, 2-inch-diameter brass tubes. The ends of the tubes were sealed with Teflon® sheets and plastic end-caps and were secured with silicon tape. The grab groundwater sample was collected by using a new, disposable bailer. The sample was decanted into laboratory-supplied bottles. All samples were labeled and stored in an ice-cooled chest until delivery under Geomatrix chain-of-custody procedures to Curtis & Tompkins, Ltd. (Curtis & Tompkins), of Berkeley, California, a California-certified analytical laboratory. Chain-of-custody documents are included in Appendix B.

3.4 RINSATE, UST, GROUNDWATER, AND SOIL DISPOSAL

Dillard, a state-licensed liquid waste transporter, transported the tanks to Ecology Control Industries (ECI) in Richmond, California. Tank rinsate, pumped groundwater, and delivery piping was transported to Clean Harbors, in Buttonwillow, California. Soil and crushed concrete was transported to Vasco Road Landfill in Livermore, California, a Class 2 disposal facility. Copies of the Uniform Hazardous Waste Manifest and certificate of destruction are included in Appendix C.

4.0 ANALYTICAL METHODS AND RESULTS

Soil and groundwater samples were analyzed according to Tri-Regional and OFSA guidelines for total petroleum hydrocarbons quantified as gasoline (TPHg) and as diesel (TPHd) using U.S. Environmental Protection Agency (EPA) Method 8015B; benzene, toluene, ethylbenzene, and total xylenes (collectively BTEX) and methyl tertiary butyl ether (MTBE) using EPA Method 8260B; and lead using EPA Method 6010B. Silica gel preparation (EPA Method 3630C) was performed on grab groundwater sample GW-092203-1 prior to TPHd analysis.

The grab groundwater sample was filtered by Curtis and Tompkins prior to lead analysis. The analytical results for the soil and grab groundwater samples are presented in Tables 1 and 2, respectively. Analytical data sheets are included in Appendix B.

4.1 EXCAVATION SOIL SAMPLE RESULTS

The following section summarizes the analytical results for excavation and stockpile soil samples. Analytical data for the soil samples are presented in Table 1.

- Lead concentrations were low in each of the soil samples and do not suggest an impact from the former USTs.

- MTBE was detected at concentrations up to 0.330 milligrams per kilogram (mg/kg) in soil samples from the UST excavation area and concentrations up to 0.017 mg/kg in soil samples from the refueling station area. After overexcavation of the refueling station area, MTBE was detected at a concentration of 0.0053 mg/kg in the deeper soil sample (5 feet bgs) collected from beneath the approximate location of the diesel fuel dispenser.

- TPHg was not detected in the soil samples from the UST excavation. TPHg was detected at concentrations of 1.3 and 29 mg/kg, respectively, in soil samples pipe1-092403-1 and dies-092403-1, collected from the refueling station area. Based on these results, the refueling station area was overexcavated, and additional sampling was performed. After overexcavation of the refueling station area, TPHg was detected in only one of the confirmation samples (pipe1-093003-2) at 1.3 mg/kg.

- TPHd was detected at concentrations of 90, 18, and 8.2 mg/kg, respectively, in soil samples TI-N-092203-1, T2-N-092203-1, and T2-S-092203-1, collected from the UST excavation. TPHd was detected at concentrations of 200 mg/kg, and 2,600 mg/kg, respectively, in samples pipe1-092403-1, and dies-092403-1, collected from the refueling station area. Based on these results, the refueling station area was overexcavated, and additional sampling was performed. After overexcavation of the refueling station area, TPHd was detected at concentrations of 34 mg/kg, and 9.6 mg/kg, respectively, in the deeper confirmation soil samples (dies-093003-2 and pipe1-093003-2).

- BTEX were not detected in soil samples from the UST excavation. BTEX was detected at concentrations of 0.0083 mg/kg (benzene), 0.053 mg/kg (toluene), 0.0051 mg/kg (ethylbenzene), and 0.017 mg/kg (total xylenes) in sample dies-092403-1, and at 0.016 mg/kg (total xylenes) in sample pipe1-092403-1, collected from the refueling station area. After excavation of the refueling station area, BTEX were detected at concentrations of 0.038 mg/kg (benzene) and 0.0053 mg/kg (total xylenes) in sample dies-093003-2, and at concentrations of 0.036 mg/kg (benzene), 0.0052 (ethylbenzene), and 0.051 (total xylenes) in sample pipe1-093003-2, collected from the refueling station area.

4.2 GRAB GROUNDWATER SAMPLE RESULTS

TPHg and TPHd were detected in the grab groundwater sample (GW-060503) at concentrations of 1,100 and 54,000 micrograms per liter (µg/L), respectively. The reported concentration of diesel in the groundwater sample is well above its solubility of 2,000 to 6,000 µg/L.[1] Therefore, the reported concentration likely is attributed to petroleum adhered to sediment or product in the water sample, and is not the dissolved concentration of TPHd in water. BTEX were detected in the groundwater sample at concentrations ranging from 7.8 (benzene) to 75 (toluene) µg/L. MTBE was detected at a concentration of 390 µg/L. Lead was not detected in the groundwater sample (<3.0 µg/L).

5.0 EXCAVATION BACKFILLING

Backfilling and compaction of the UST and refueling station area excavations were performed by Dillard on September 25, September 29, and September 30, 2003. Geomatrix provided earthwork recommendations for backfilling to the Port in a letter dated September 23, 2003. During the backfilling, Geomatrix or our subcontractor, Construction Materials Testing, Inc., of Concord, California, observed the placement methods and tested the compaction of the backfill material. Prior to backfilling the excavation, samples of the backfill were collected by Geomatrix and submitted to Curtis & Tompkins for chemical analysis and Cooper Testing Labs, Inc., of Mountain View, California, for geotechnical analysis. The laboratory data sheet for the chemical analysis is included in Appendix A, and laboratory data sheet for the geotechnical analyses is included in Appendix D.

The total depth of the UST excavation was approximately 8 feet bgs. Groundwater was present in the UST excavation at the time of backfilling at approximately 5 feet bgs. Therefore, approximately 3 feet of 1½-inch open-graded, crushed rock was placed through the water to above the water level, approximately 5 feet bgs. Following placement of the crushed rock, Dillard compacted the crushed rock using a vibratory compactor plate backhoe attachment. A non-woven geotextile filter fabric (geotextile) was then placed over the compacted crushed rock.

The total depth of the refueling station area over-excavation was approximately 5 feet bgs. No groundwater was encountered in the refueling station area excavation.

[1] Massachusetts Department of Environmental Protection (MADEP), June 2001, "Implementation of MADEP VPH/EPH Approach, Final Draft"

Imported fill was placed in both excavations in approximately 8-inch lifts and compacted using a vibratory compactor plate backhoe attachment. Approximately 4 to 5 feet of imported fill was used to backfill the UST excavation and approximately 3 feet of imported fill was used to backfill the refueling station excavation. After each lift was placed, density tests were performed according to American Society of Testing Materials (ASTM) Test Methods D 2922 (Density of Soil and Rock in Place by Nuclear Methods) and D3017 (Water Content of Soil and Rock in Place by Nuclear Methods). Our observations and the test results indicated that the overall compaction of the fill was generally above 90 percent of the maximum dry density determined in the laboratory by ASTM test method D 1557 (Moisture-Density Relations of Soils and Soil-Aggregate Mixtures Using 10-lb Rammer and 18-in. Drop). It is our opinion that the backfill and compaction was accomplished in general accordance with the project recommendations. The surface of the backfilled excavation will be covered with asphalt.

6.0 SUMMARY

A summary of the UST removal activities is presented below.

- One 1,000-gallon diesel UST and one 2000-gallon unleaded gasoline UST were removed from the 8900 Earhart Road site in Oakland, California, on September 22, 2003. The tanks were removed under the supervision of Mr. Keith Matthews of the OFSA. Once the USTs were removed, they were visually inspected. The tank exteriors were intact and did not appear to contain holes.

- Staining was not visible in the UST excavation sidewalls, and a hydrocarbon odor was not observed.

- Groundwater was encountered at a depth of 5 feet bgs, and slight product was observed on the groundwater surface within the excavation. Product-affected groundwater was pumped from excavation prior to backfilling.

- Three soil samples were collected from the UST excavation, as directed by the OFSA. TPHd , MTBE, and lead were detected in the three soil samples. TPHg and BTEX constituents were not detected in the three soil samples.

- Three soil samples were collected from the refueling station area, as directed by the OFSA. TPHg, TPHd, MTBE, and lead were detected in two of the three soil samples, and BTEX constituents were detected in one of the three soil samples. Based on these results, the refueling station area was excavated, and two additional samples were collected. After excavation of the refueling station area, low concentrations of TPHg, TPHd, MTBE, lead, and BTEX constituents were detected in soil samples. Additional excavation was not deemed necessary.

- One grab groundwater sample was collected from the excavation, as directed by the OFSA. TPHg, TPHd, BTEX constituents, and MTBE were detected in the sample.

- A total of approximately 130 cubic yards of soil and pea gravel were removed from around the USTs and the excavation bottom. The stockpiled soil was disposed of off site at Vasco Road Landfill in Livermore, California, a Class 2 disposal facility.

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Tables

TABLE 1

SOIL SAMPLE ANALYTICAL RESULTS[1]

8900 Earhart Road
Oakland, California

Concentrations in milligrams per kilograms (mg/kg)

Sample ID[2]	Sample Location[2]	Sample Date	Sample Depth (ft bgs)[3]	Constituents Detected[4]							
				TPHg	TPHd	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE	Lead
Excavation Samples											
T1-N-092203-1	North of Tank 1	9/22/03	5	<1.1[5]	**90[6] J**	<0.005	<0.005	<0.005	<0.005	**0.110**	**4.5**
T2-N-092203-1	North of Tank 2	9/22/03	5	<1.0	**18[6] J**	<0.0049	<0.0049	<0.0049	<0.0049	**0.097**	**4.3**
T2-S-092203-1	South of Tank 2	9/22/03	5	<1.0	**8.2[6] J**	<0.005	<0.005	<0.005	<0.005	**0.330**	**4.4**
Refueling Station Area Samples											
pipe1-092403-1	Fuel delivery underground piping area	9/24/03	2.5	**1.3[6] J**	**200[7] J**	<0.0047	<0.0047	<0.0047	<0.0047	**0.016**	**9.7**
dies-092403-1	Diesel fuel dispenser area	9/24/03	2.5	**29[6] J**	**2600[7] J**	**0.0083 J**	**0.053 J**	**0.0051J**	**0.0093 J**	**0.017 J**	**6.5**
gaso-092403-1	Gasoline dispenser area	9/24/03	2.5	<1.1	<0.99	<0.0048	<0.0048	<0.0048	<0.0048	<0.0048	**3.2**
dies-093003-2	Post-excavation diesel fuel dispenser area	9/30/03	3.0	<1.1	**34[6] J**	**0.038**	<0.005	<0.005	<0.005	**0.0053**	**5.2**
pipe1-093003-2	Post-excavation gasoline dispenser area	9/30/03	3.0	**1.3**	**9.6[6] J**	**0.036**	<0.0045	**0.0052**	**0.051**	<0.0045	**4.3**

Notes:

[1] Samples collected by Geomatrix Consultants, Inc. (Geomatrix), and analyzed by Curtis & Tompkins, Ltd., of Berkeley, California, for total petroleum hydrocarbons quantified as gasoline and as diesel using EPA Method 8015B; benzene, toluene, ethylbenzene, total xylenes, and methyl tertiary butyl ether using EPA Method 8260B; and lead using EPA Method 6010B. A silica gel preparation (EPA Method 3630C) was performed on soil samples prior to analysis of TPHd.

[2] Sample locations shown on Figure 2.

[3] ft bgs = feet below ground surface

[4] TPHg = total petroleum hydrocarbons quantified as gasoline
TPHd = total petroleum hydrocarbons quantified as diesel
MTBE = methyl teriary butyl ether

[5] "<" indicates analyte was not detected at or above the laboratory reporting limit shown.

[6] Laboratory indicated that heavier hydrocarbons contributed to quantitation and the chromatographic pattern did not match the laboratory standard. The result is considered estimated (J flagged) and may be biased high.

[7] Laboratory indicated that lighter hydrocarbons contributed to quantitation. The result is consdered estimated (J flagged) and maybe biased high.

TABLE 2

GROUNDWATER SAMPLE ANALYTICAL RESULTS[1]

8900 Earhart Road
Oakland, California

Concentrations in micrograms per liter (µg/l)

Sample ID	Sample Date	Constituents Detected[2]							
		TPHg	TPHd	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE	Lead
GW-092203-1	9/22/03	1100[3] J	54,000	7.8	75	7.9	66	390	<3.0[4]

Notes:

[1] Samples collected by Geomatrix Consultants, Inc. (Geomatrix), and analyzed by Curtis & Tompkins, Ltd., of Berkeley, California, for total petroleum hydrocarbons quantified as gasoline and diesel using EPA Method 8015B; benzene, toluene, ethylbenzene, total xylenes, and methyl tertiary butyl ether using EPA Method 8260B; and lead using EPA Method 6010B. A silica gel preparation (EPA Method 3630C) was performed solely on the grab groundwater sample prior to analysis of TPHd. Lead samples were filtered by Curftis and Tompkins prior to analysis.

[2] TPHg = total petroleum hydrocarbons quantified as gasoline
TPHd = total petroleum hydrocarbons quantified as diesel
MTBE = methyl teritiary butyl ether

[3] Laboratory indicated that heavier hydrocarbons contributed to quantitation. The result is consdered estimated (J flagged) and maybe biased high.

[4] "<" indicates analyte was not detected at or above the laboratory reporting limit shown.

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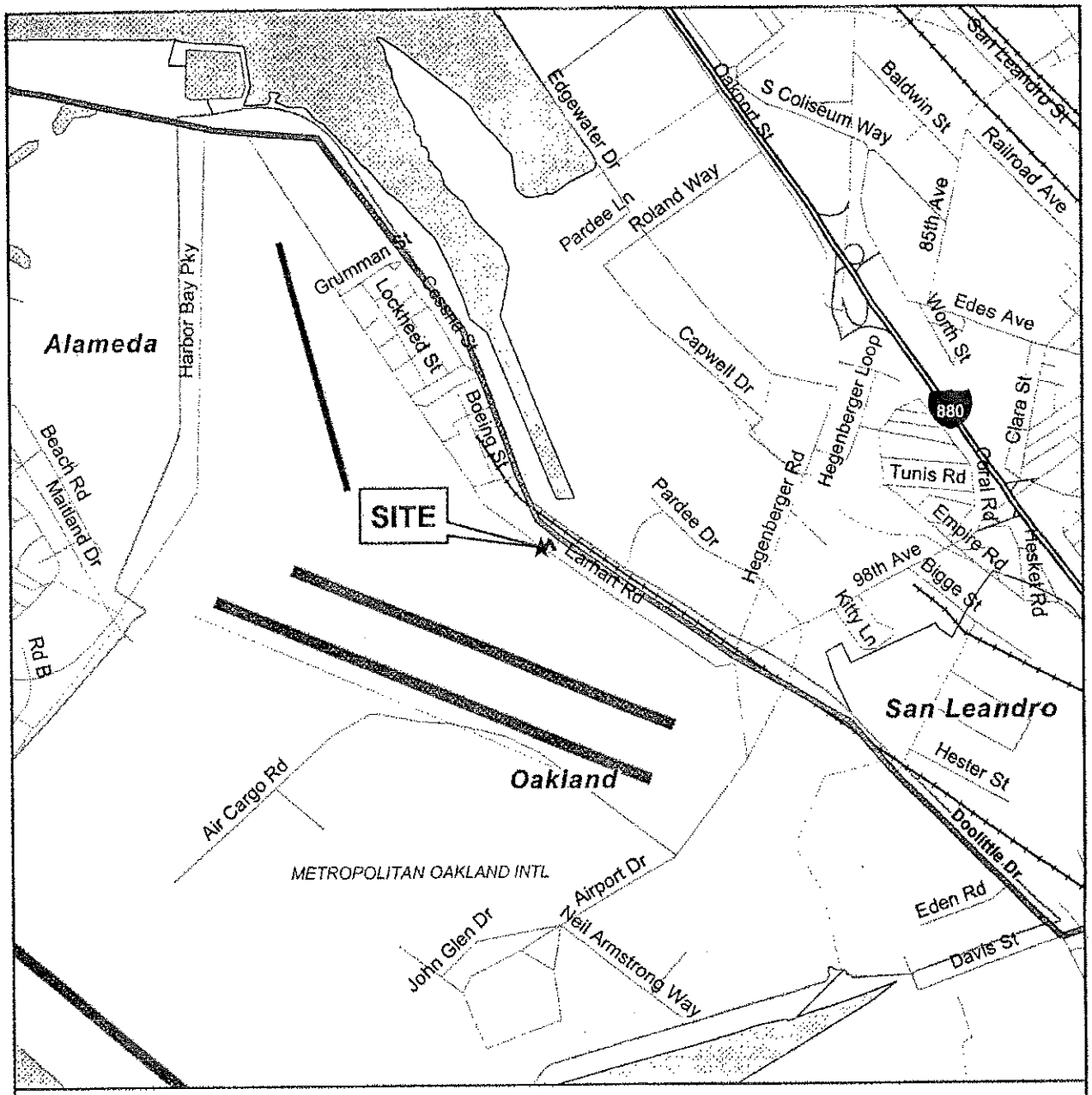
Figures



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GEOMATRIX

SITE LOCATION MAP
8900 Earhart Road
Oakland, California

Project No.
8207.005

Figure
1

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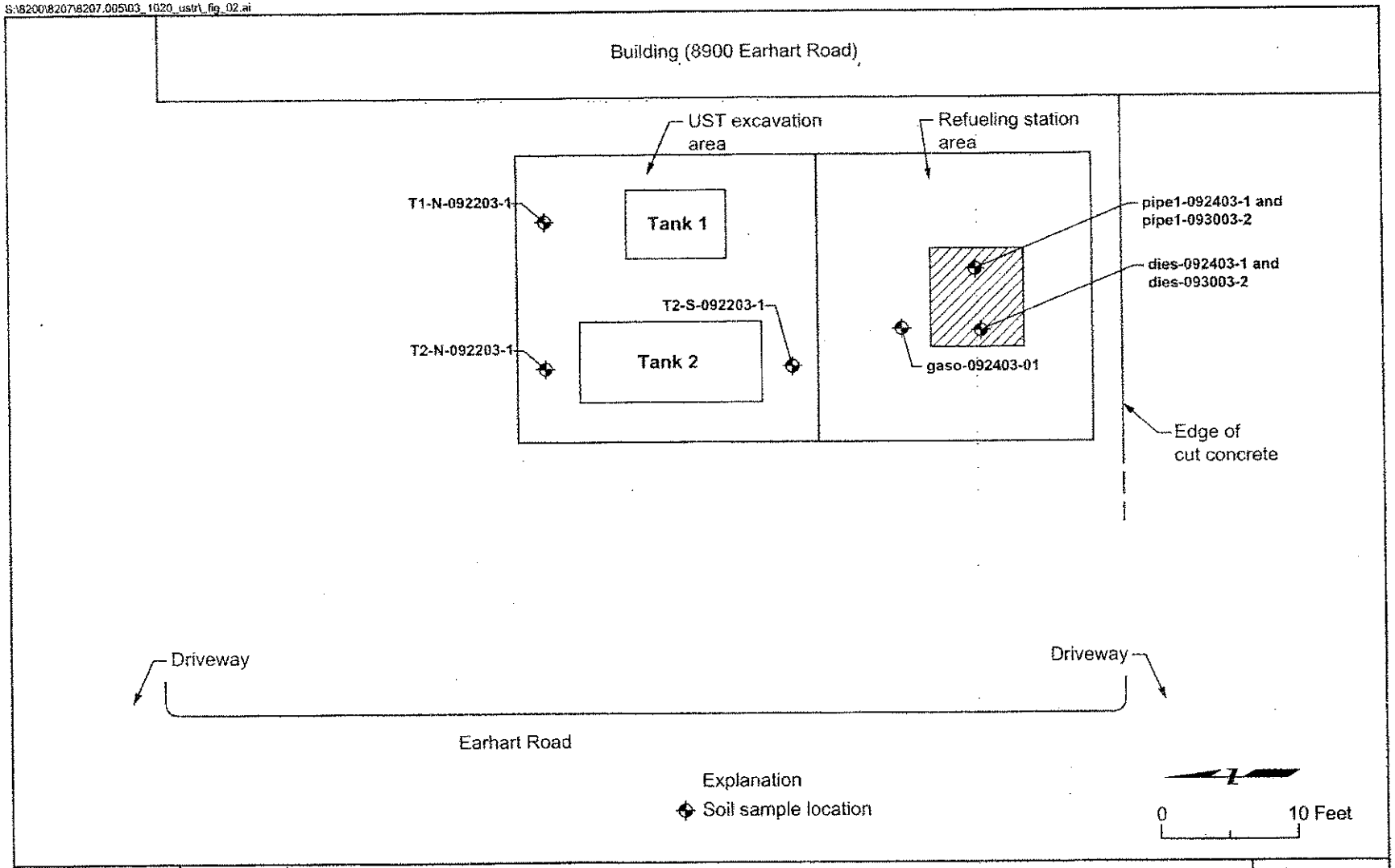

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SITE PLAN
8900 Earhart Road
Oakland, California

Project No.
8207.005

Figure
2

GEOMATRIX

Appendix A
Underground Storage Tank Removal Permit

City Of Oakland
FIRE PREVENTION BUREAU

250 Frank Ogawa Plaza, Ste. 3341
Oakland California 94612-2032
510-238-3851

Permit To Excavate And Install, Repair, Or Remove Inflammable Liquid Tanks

Oakland, California September 3, 2003

Tank Permit Number: 2003 - 045

Permission Is Hereby Granted To:
Remove - Underground Gasoline & Diesel **Tank And Excavate Commencing:** **Feet Inside:** Property **Line.**

On The:

Site Address: 8900 Earhart Road **Present Storage:**

Owner: Port of Oakland **Address:** 530 Water St. **Phone:** 627-1134

Applicant: Geomatrix Consultants, Inc. **Address:** 2101 Webster St., 12th floor, Oakland, 94612 **Phone:** 663-4100

Dimensions Of Street (sidewalk) Surface To Be Disturbed : **X** **No. Of Tanks** 2 **Capacity** 1,000 & 2,000 **Gallons, Each**

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.

CERTIFICATE OF TANK AND EQUIPMENT INSPECTION

Type Of Inspection:

Inspected And Passed On:

By:

Approved: COPY
Fire Marshal

UST/AST Installations/modifications:

Pressure Test: Inspected By: **Date:**

Primary Piping Test: Inspected By: **Date:**

Inspection Fee Paid: $ 650.00

Received By: M McCarthy ck # 11051 Rec # 863409

Secondary Containment & Sump Testing:

Inspected By: **Date:**

Final: Inspected By: **Date:**

Before Covering Tanks, Above Certification Must Be Signed When Ready For Inspection Notify Fire Prevention Bureau 238-3851

THIS PERMIT MUST BE LEFT ON THE WORK SITE AS AUTHORITY THEREFORE

Distribution: White - Fire Prevention Bureau, Yellow - Contractor, Pink - Electrical Inspection

OAKLAND FIRE DEPARTMENT, OES
UNDERGROUND STORAGE TANK CLOSURE/REMOVAL FIELD INSPECTION REPORT

Site Address:	8900 Earhart Rd	Name of Facility:	Air Port Maintenance facility
Inspector:	Earl Marbon	Contact on site:	Mike McMinn 627-1402
Date and Time of Arrival:	1400 on 22Sep03	Contractor/Consultant:	Geomatrix

General Requirements	Yes	No	N/A
Approved closure plan on site.	✓		
Changes to approved plan noted.			✓
Residuals properly stored/transported.	✓		
Receipt for adequate dry ice noted.	✓		

General Requirements	Yes	No	N/A
Site Safety Plan properly signed.	✓		
40B:C fire extinguisher on site.	✓		
"No Smoking" signs posted.	✓		
Gas detector challenged by inspector.	✓		

Tank Observations	T #1	T #2	T #3	T #4
Tank Capacity (gallons)	1K	2K		
Material last stored	Diesel	Gas		
Dry ice used (pounds)	50	100		
Combustible gas concentration as %LEL. *(Note time & sampling point)*				
(1)	6	10		
(2)				
(3)				
Oxygen concentration as % volume. *(Note time &sampling point.)*				
(1)	0	0		
(2)				
(3)				
Tank Material				
Wrapping/Coating, if any				
Obvious holes?				

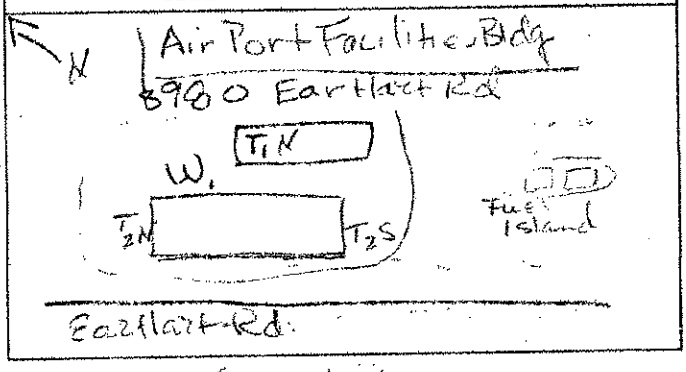
Tank Observations	T #1	T #2	T #3	T #4
Obvious corrosion?	N	N		
Obvious odors from tank?	N	N		
Seams intact?	Y	Y		
Tank bed backfill material	Y	Y		
Obvious discoloration?	N	N		
Obvious odors ex tank bed?	Y	N		
Water in excavation?	Y	Y		
Sheen/product on water?	Y	Y		
Tank tagged by transporter?	Y	Y		
Tank wrapped for transport?	N	N		
Tank plugged w/ vent cap?	N	N		
Date/time tank hauled off?	9-22-03	15:15		
No. of soil samples taken?	1	2		
Depth of soil samples (ft. bgs)	5'	5'		

Piping Removal	Yes	No	N/A
All piping removed hauled off w/ tanks?		✓	
Obvious holes on pipes?		✓	
Obvious odors from pipes?		✓	
Obvious soil discoloration in piping trench?		✓	
Obvious odors from piping trench?		✓	
Water in piping trench?		✓	
Number & depth of soil samples from piping trench?		N/A	
Number & depth of water samples from piping trench?		N/A	

General Observations	Yes	No	N/A
Leak from any tank suspected?	✓		
"Leak Report" form given to the operator?		✓	
Obviously contaminated soil excavated?		✓	
Soil stockpile sampled?	✓		
Stockpile lined AND covered?	✓		
Water in excavation sampled?	✓		
Number/depth of water samples taken?	1 @ 6'		
All samples properly preserved for transport?	✓		

Additional Observations	Yes	No	N/A
Soil/water sampling protocols acceptable?	✓		
Sampling "chain of custody" noted?	✓		
Tank pit filled in or covered?		✓	
Tank pit fenced or barricaded?	✓		
Transporter a registered HW hauler?	✓		
Uniform HW Manifest completed?	✓		
Contractor/Consultant reminded of complete UST Removal Report due within 30 days?	✓		
Date/Time removal/closure operations completed?			
OT hours or additional charges due from contractor?		NA	

SITE & SAMPLING DIAGRAM



Notes/Comments: Sketch Please / Contractor Comments

OAKLAND FIRE DEPARTMENT/OFFICE OF EMERGENCY SERVICES
HAZARDOUS MATERIALS UNIT

1605 Martin Luther King Jr. Way, Oakland, CA 94612 • (510) 238-3938

HAZARDOUS MATERIALS INSPECTION REPORT

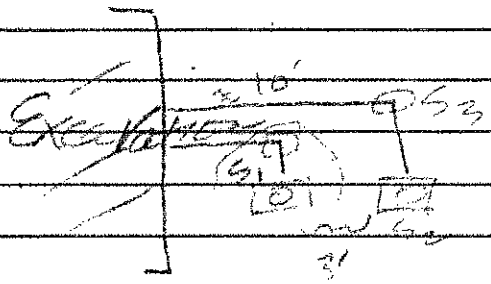
Site Number	Facility Name	Facility Address	Zip Code
	Airport Maintenance	8100 Earhart	21

Facility **Inspection Report**

☒ **PERMISSION TO INSPECT GRANTED**

Geomatrix - UST removal

Removed fueling Island piping



3 Sample
Samples acquired w/i First
2' of Native

Fax analytical results to: (510)238-7761

Facility Contact/Print Name:	Inspected By:			
Shakeel Jogia	KM	☐		
Facility Contact/Signature:	238-3938	☒	Insp. Matthews	238-2396
		☐	Insp. Craford	238-7758
		☐	Insp. Gomez	238-7253
		Date:	24 Sept 03	

538-156 (9/01)

CITY OF OAKLAND
FIRE PREVENTION BUREAU
250 Frank Ogawa Plaza, Suite 3341
Oakland, California 94612-2032
(510) 238-3851

APPLICATION for PERMIT to INSTALL, REMOVE or REPAIR TANKS
In the CITY OF OAKLAND

Request Submittal Date: August 19, 2003

PLEASE CIRLCE APPROPRIATE ACTIONS: Application is hereby made for permit to:

(a) Remove (b) Install (c) Repair (d) Modify (e) Abandon/Close in Place A

(a) Gasoline (b) Fuel oil (c) Diesel (d)_____tank(s) and excavate, commencing:

(a) four feet inside the curb line* (b) inside the property line; (c) aboveground: (d) underground tank(s)
*inside curb line, please attach copy of sidewalk/excavation permit from PLANNING AND BUILDING

on the North side of Earhart ROAD St.Ave._____feet West of Swan ~~St./Ave.~~ Way

Site Address: 8900 Earhart Road Present storage_____

Owner: Port of Oakland Address 530 Water Street Phone (510) 627-1134

Applicant: Geomatrix Consultants Address 2101 Webster St, 12th Floor Phone (510) 663-4100

Sidewalk surface to be disturbed 0 X 0 Number of Tanks 2 Capacity 1,000 and 2,000 Gallons ea.

Remarks_____

Signature_____ (Geomatrix)

PLEASE ATTACH/SUBMIT: (All applicants must have a City Business License Permit)

- (2) Copies of Closure Plans for underground tank removal (s)
- (2) Sets of plans and (1) copy of specifications for above ground tank removal
- (2) Sets of plans and (2) sets of application packets for underground tank installation/modifications
- (2) Sets of plans for aboveground tank installation and specifications
- copy or prepare to show Planning and Building approval for aboveground tank removal and tank repair

NOTE: FOR TANK INSTALLATION PLEASE SUBMIT THIS APPLICATION FORM ALONG WITH A APPLICATION FOR PERMIT TO OPERATE, MAINTAIN OR STORE

FOR OFFICE USE ONLY

Permit No._____ Amt. Recv'd_____ Date Issued:_____

Copies to: Electrical Inspection ck#_____ Cash_____

Receipt#_____ Recv'd by:_____

City of Oakland, Fire Department, Office of Emergency Services
Hazardous Materials Program
APPLICATION FOR UNDERGROUND TANK REMOVAL

FACILITY

Project Contact & Phone # Jeff Rubin	
Facility Name Port of Oakland, Airport Facilities	**Phone#** (510) 627-1134
Address 8900 Earhart Road, Oakland, CA 94621	
Cross Street ~~Hegenberger Road~~ Swan Way	
Owner/Operator Port of Oakland	**Phone #** (510) 272-1100

CONTRACTOR

Contractor Name Dillard Environmental Services		**Phone #** (925) 634-6850
Contractor Address PO Box 579 Byron, CA 94514	**CA License #** 624665	**Class** A Haz
Hazardous Waste Certified: (Qualifying license category A Haz #624665 Yes ☒ No ☐		**Workers Comp#** 1599162-02 10/03
City of Oakland Business Tax License # 887293, exp. 12/31/03		**Permit #**

Does this site have a leaking UST (or did it have a leaking tank system?) Yes ☐ No ☒

TANKS

State Tank ID#	Tank Size	Material That Was Stored	Proposed Removal Date
39- 000568-26480	1,000 gallons	Diesel	September 1, 2003
39- 000568-204802	2,000 gallons	unleaded gasoline	September 1, 2003
39-			
39-			
39-			
39-			

PLAN

___APPROVED ___APPROVED WITH CONDITION(S) ___DISAPPROVED

PLAN REVIEWER S SIGNATURE_____ DATE OF APPROVAL_____

APPLICANT MUST PERFORM ALL WORK IN ACCORDANCE WITH CITY OF OAKLAND ORDINANCES, STATE LAWS, AND RULES AND REGULATIONS OF THE CITY OF OAKLAND FIRE SERVICES AGENCY. OWNER OR LICENSED AGENT S SIGNATURE CERTIFIES THE FOLLOWING: I CERTIFY THAT IN THE PERFORMANCE OF THE WORK FOR WHICH THIS INSTALLATION PLAN IS ISSUED, I SHALL NOT EMPLOY ANY PERSON IS SUCH A MANNER AS TO BECOME SUBJECT TO WORKER S COMPENSATION LAWS OF CALIFORNIA. CONTRACTOR S HIRING OR SUBCONTRACTING SIGNATURE CERTIFIES THE FOLLOWING: I CERTIFY THAT IN THE PERFORMANCE OF THE WORK FOR WHICH THIS INSTALLATION PLAN IS ISSUED, I SHALL EMPLOY PERSONS SUBJECT TO WORKER S COMPENSATION LAWS OF CALIFORNIA.

APPLICANT S SIGNATURE _____ TITLE: PORT SCIENTIST DATE: 8/19/03

INDICATE THE RESPONSIBLE PARTY TO BE BILLED FOR ADDITIONAL FSA/OES STAFF TIME EXPENDED BEYOND THE HOURS COVERED BY THE INITIAL DEPOSIT AMOUNT. THE PARTY MUST ACKNOWLEDGE THIS RESPONSIBILITY FOR THE ADDITIONAL BILLING BY SIGNATURE AND DATE BELOW.

NAME Erin Zavarin, Geomatrix Consultants

MAILING ADDRESS 2101 Webster Street, 12th floor Oakland, CA 94612
STREET **CITY, STATE, ZIP**

DAY PHONE NUMBER (510) 663-4199
area code **phone #**

SIGNATURE [signature]

DATE 8/14/03

CITY OF OAKLAND
Fire Department
Fire Prevention Bureau
Hazardous Materials Program
250 Frank H. Ogawa Plaza, Ste. 3341
Oakland, CA 94612-2032

UNDERGROUND TANK CLOSURE PLAN

(Complete according to instructions)

1) Name of Business Port of Oakland

Business Owner or Contact Person (PRINT) Jeff Rubin

2) Site Address 8900 Earhart Road

City Oakland Zip 9621 Phone NA

3) Mailing Address 530 Water Street

City Oakland Zip 94607 Phone (510) 627 - 1134

4) Property Owner Port of Oakland

Business Name (if applicable)

Address 530 Water Street

City, State Oakland, CA Zip 94607

5) Generator name under which tank will be manifested

Port of Oakland

EPA ID Under which tank will be manifested CAD 982501421

6) Contractor Dillard Environmental Services

Address PO Box 579

City Byron, CA Phone (925) 634-6850

License Type Engineering A - Haz IDS

Effective January 1, 1992, Business and Professional Code Section 7058.7 require contractors to also hold Hazardous Waste certification issued by the State Contractor License Board

7) Consultant (if applicable) Geomatrix Consultants, Inc.
Address 2101 Webster ST, 12th Floor
City, State Oakland, CA Phone (510) 663-4100

8) Main Contact Person for Investigation (if applicable)

Name Erin Tavarin Title Staff Engineer

Company Geomatrix Consultants, Inc.

Phone (510) 663-4199

9) Number of underground tanks being closed with this plan 2 (Confirmed with owner operator)

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

****Underground storage tanks must be handled as hazardous waste ****

a) Product/Residual Sludge/Rinsate Transporter

Name Dillard Environmental Services EPA I.D. NO. CAD982523433

Hauler License No. 1715 (DTSC) License Exp. Date 2/29/04

Address PO Box 579

City Byron State CA Zip 94514

b) Product/Residual Sludge/Rinsate Disposal Site

Name Romic Technologies EPA ID No. CAD009452657

Address 2081 Bay Road

City East Palo Alto State CA Zip 94303

c) Tank and Piping Transporter

Name Dillard Environmental Services EPA I.D. No. CAD 982523433

c) Hauler License No. 1715 (DTSC) License Exp. Date 2/29/04

Address PO BOX 579

City Byron State CA Zip 94514

d) Tank and Piping Disposal Site

Name Ecology Control Industries EPA I.D. No. CAD 009466392

Address 255 Parr Blvd.

City Richmond State CA Zip 94801

11) Sample Collector

Name Erin Zavarin

Company Geomatrix Consultants

Address 2101 Webster St, 12th Floor

City Oakland State CA Zip 94612

Phone (510) 663-4199

12) Laboratory

Name Curtis and Tompkins, Ltd.

Address 2323 5th Street

City Berkeley State CA Zip 94710

State Certification No. 01107 CA

13) Have tanks or pipes leaked in the past Yes ☐ No ☒ Unknown ☐

If yes, describe

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

Contents of tanks will be removed, and tanks will be cleaned. Dry ice will be used to achieve appropriate LEL % / O2 conditions inside tanks.

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

The Bay Area Air Quality Management District, 415/771-6000 must also be contacted for tank removal permit. The use of a combustible gas indicator to verify tank inertness is required. It is the contractor's responsibility to bring a working combustible gas indicator on-site to verify that the tank is inert. **Note: you may be required to recalibrate the combustible gas indicator on site, to show that it is working properly.**

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

Tank		Material to be sampled (tank contents, soil, groundwater)	Location and Depth of Samples
Capacity	Use History include date last used (estimated)		
1,000 gallons	Installed in 1986. Contained diesel fuel.	Soil	If groundwater absent: 2 samples below tank (at each end of tank) at least 2 feet into native soil. If groundwater present: One sample at each end of tank at soil/gw interface.
		groundwater	one sample from excavation after it has been pumped and allowed to refill.
2,000 gallons	Installed in 1986. Contains regular unleaded gasoline.	Same as above	Same as above

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

EXCAVATED/STOCKPILED SOIL

Stockpiled Soil volume (estimated)	Sampling Plan
100 cubic yards (cy)	One 4-point composite per 50 cy; collected in clean, brass tubes sealed with teflon sheets, plastic end caps, and silicon tape.

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

Will the excavated soil be returned to the excavation immediately after tank removal?

☐ yes ☒ No ☐ unknown

If yes, explain reasoning_____

If unknown at this point in time, please be aware that excavated soil may no be returned to the excavation without prior approval from Fire Services Agency, Office of Emergency Services. This means that the contractor, consultant, or responsible party must communicate with the Hazardous Materials Inspector **IN ADVANCE** of backfilling operations.

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.

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

Contaminant Sought	EPA or Other Sample Preparation Method Number	EPA or Other Analysis Method Number	Method Detection Limit Soil	Method Detection Limit Water
TPHg	—	EPA 8015B	1.0 mg/kg	50 µg/L
TPHd	silica gel prep (EPA Meth 3630B)	EPA 8015B	1.0 mg/kg	50 µg/L
BTEX	—	EPA 8260B	0.005 mg/kg	0.5 µg/L
MTBE	—	EPA 8260B	0.005 mg/kg	0.5 µg/L
Pb	gw - filtered in the field	EPA 6010B	0.15 mg/kg	3 µg/L

18. Submit Workers Compensation Certificate copy

Name of Insurer State Fund - SEE Copy.

19. Submit Plot Plan ***(Be Instructions)***

20. Enclose Permit fee (See Instructions)

21. Report any leaks or contamination to this office within 5 days of discovery.

The written report shall be made on an Underground Storage Tank Unauthorized Leak/Contamination Site Report, (ULR) form.

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

23. Submit State (Underground storage Tank Permit Application) Forms A and B (one B form for each UST to be removed) (mark box 8 for tank removed in the upper right hand corner)

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

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

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

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

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

CONTRACTOR INFORMATION

Name of Business Dillard Environmental Services

Name of Individual MELISSA KIRK

Signature [signature] Date 8-4-03

PROPERTY OWNER OR MOST RECENT TANK OPERATOR (Circle one)

Name of Business PORT OF OAKLAND

Name of Individual DALE STUNZ

Signature _____ Date 5/19/03

General Instructions

- Three (3) copies of this plan plus attachments and permit must be submitted to this Department.
- Any cutting into tanks requires Fire Services Agency approval.
- One complete copy of your approved plan must be at the construction site at all times; a copy of your approved plan must also be sent to the landowner.
- State of California Permit Application Forms A and B are to submit to this office One Form A per site, one Form B for each removed tank.

Line Item Specific Instructions

2. SITE ADDRESS
Address at which closure is taking place.

5. EPA I.D. NO. - under which the tanks will be manifested
EPA I.D. numbers may be obtained from the State Department of Toxic Substances Control, 916/324-1781

6. CONTRACTOR
Prime contractor for the project.

10. STATE REGISTERED HAZARDOUS WASTE TRANSPORTERS/FACILITIES
a) All residual liquids and sludges are to be removed from tanks before tanks are inerted.
c) Tanks must be hauled as hazardous waste.
d) This is the place where tanks will be taken for cleaning.

15) TANK HISTORY AND SAMPLING INFORMATION
Use History - This information is essential and must be accurate. Include tank installation date, products stored in the tank, and the date when the tank was last used.
Material to be sampled - e.g. water, oil, sludge, soil, etc.

Location and depth of samples - e.g. beneath the tank a maximum of two feet below the native soil/backfill interface, side wall at the trig} water mark, etc.

16) CHEMICAL METHODS AND ASSOCIATED DETECTION LIMITS
See attached Table 2.

17) SITE HEALTH AND SAFETY PLAN
A site specific Health and Safety plan must be submitted. We advocate the site health and safety plan include the following items, at a minimum:
a) The name and responsibilities of the site health and safety officer.
b) An outline of briefings to be held before work each day to appraise employees of site health and safety hazards;

UNIFIED PROGRAM CONSOLIDATED FORM

UNDERGROUND STORAGE TANKS - FACILITY

TANKS

(one page per site) Page 1 of 5

TYPE OF ACTION (Check one item only) ☐ 1. NEW SITE PERMIT ☐ 3. RENEWAL PERMIT ☐ 4. AMENDED PERMIT ☐ 5.CHANGE OF INFORMATION specify change local use only ☐ 6.TEMPORARY SITE CLOSURE ☐ 7.PERMANENTLY CLOSED SITE ☒ 8. TANK REMOVED 400

I. FACILITY / SITE INFORMATION

BUSINESS NAME (Same as FACILITY NAME or DBA – Doing Business As) 3: Airport Facilities, Bldg L-311

FACILITY ID#: 1

NEAREST CROSS STREET 401: Earhart Road + Hegenberger Street

BUSINESS TYPE ☐ 1. GAS STATION ☐ 2. DISTRIBUTOR ☐ 3. FARM ☐ 4. PROCESSOR ☒ 6. OTHER ☐ 5. COMMERCIAL 403

FACILITY OWNER TYPE ☐ 1. CORPORATION ☐ 2. INDIVIDUAL ☐ 3. PARTNERSHIP ☒ 4. LOCAL AGENCY/DISTRICT* ☐ 5. COUNTY AGENCY* ☐ 6. STATE AGENCY* ☐ 7. FEDERAL AGENCY* 402

TOTAL NUMBER OF TANKS REMAINING AT SITE: 0 404

Is facility on Indian Reservation or trustlands? ☐ Yes ☒ No 405

*If owner of UST is a public agency: name of supervisor of division, section or office which operates the UST (This is the contact person for the tank records.): Jeffrey R. Jones 406

II. PROPERTY OWNER INFORMATION

PROPERTY OWNER NAME 407: Port of Oakland

PHONE 408: (510) 627-1134

MAILING OR STREET ADDRESS 409: 530 Water Street

CITY 410: Oakland

STATE 411: CA

ZIP CODE 412: 94607

PROPERTY OWNER TYPE ☐ 1. CORPORATION ☐ 2. INDIVIDUAL ☐ 3. PARTNERSHIP ☒ 4. LOCAL AGENCY / DISTRICT ☐ 5. COUNTY AGENCY ☐ 6. STATE AGENCY ☐ 7. FEDERAL AGENCY 413

III. TANK OWNER INFORMATION

TANK OWNER NAME 414: Port of Oakland

PHONE 415: (510) 627-1134

MAILING OR STREET ADDRESS 416: 530 Water Street

CITY 417: Oakland

STATE 418: CA

ZIP CODE 419: 94607

TANK OWNER TYPE ☐ 1. CORPORATION ☐ 2. INDIVIDUAL ☐ 3. PARTNERSHIP ☒ 4. LOCAL AGENCY / DISTRICT ☐ 5. COUNTY AGENCY ☐ 6. STATE AGENCY ☐ 7. FEDERAL AGENCY 420

IV. BOARD OF EQUALIZATION UST STORAGE FEE ACCOUNT NUMBER

TY (TK) HQ 44- 0 0 5 6 8 Call (916) 322-9669 if questions arise 421

V. PETROLEUM UST FINANCIAL RESPONSIBILITY

INDICATE METHOD(s) ☒ 1. SELF-INSURED ☐ 2. GUARANTEE ☐ 3. INSURANCE ☐ 4. SURETY BOND ☐ 5. LETTER OF CREDIT ☐ 6. EXEMPTION ☐ 7. STATE FUND ☐ 8. STATE FUND & CFO LETTER ☐ 9. STATE FUND & CD ☐ 10. LOCAL GOVT MECHANISM ☐ 99. OTHER: 422

VI. LEGAL NOTIFICATION AND MAILING ADDRESS

Check one box to indicate which address should be used for legal notifications and mailing. Legal notifications and mailings will be sent to the tank owner unless box 1 or 2 is checked. ☐ 1. FACILITY ☐ 2. PROPERTY OWNER ☒ 3. TANK OWNER 423

VII. APPLICANT SIGNATURE

Certification: I certify that the information provided herein is true and accurate to the best of my knowledge.

SIGNATURE OF APPLICANT

DATE 424: 8/14/03

PHONE 425: (510) 663-4199

NAME OF APPLICANT (print) 426: Erin Tavarin

TITLE OF APPLICANT 427: Staff Engineer

STATE UST FACILITY NUMBER (For local use only) 428

1998 UPGRADE CERTIFICATE NUMBER (For local use only) 429

UNIFIED PROGRAM CONSOLIDATED FORM

TANKS

UNDERGROUND STORAGE TANKS -- TANK PAGE 1

(two pages per tank)

Page 2 of 5

TYPE OF ACTION (Check one item only)
☐ 1 NEW SITE PERMIT ☐ 4 AMENDED PERMIT ☐ 5 CHANGE OF INFORMATION ☐ 6 TEMPORARY SITE CLOSURE
☐ 3 RENEWAL PERMIT (Specify reason – for local use only) (Specify reason – for local use only) ☐ 7 PERMANENTLY CLOSED ON SITE
☒ 8 TANK REMOVED 430

BUSINESS NAME (Same as FACILITY NAME or DBA – Doing Business As): Airport Facilities Bldg L-311
FACILITY ID: 3

LOCATION WITHIN SITE (Optional) 431

I. TANK DESCRIPTION (A scaled plot plan with the location of the UST system including buildings and landmarks shall be submitted to the local agency.)

TANK ID # 432	TANK MANUFACTURER 433	COMPARTMENTALIZED TANK ☐ Yes ☒ No 434
LF17	Modern Welding Co., Inc.	If "Yes", complete one page for each compartment.
DATE INSTALLED (YEAR/MO) 435	TANK CAPACITY IN GALLONS 436	NUMBER OF COMPARTMENTS 437
1986	1,000	1

ADDITIONAL DESCRIPTION (For local use only) 438

II. TANK CONTENTS

TANK USE 439
☒ 1. MOTOR VEHICLE FUEL (If marked complete Petroleum Type)
☐ 2. NON-FUEL PETROLEUM
☐ 3. CHEMICAL PRODUCT
☐ 4. HAZARDOUS WASTE (Includes Used Oil)
☐ 95. UNKNOWN

PETROLEUM TYPE 440
☐ 1a. REGULAR UNLEADED ☐ 2. LEADED ☐ 5. JET FUEL
☐ 1b. PREMIUM UNLEADED ☒ 3. DIESEL ☐ 6. AVIATION FUEL
☐ 1c. MIDGRADE UNLEADED ☐ 4. GASOHOL ☐ 99. OTHER

COMMON NAME (from Hazardous Materials Inventory page) 441
CAS# (from Hazardous Materials Inventory page) 442

III. TANK CONSTRUCTION

TYPE OF TANK (Check one item only) 443
☐ 1. SINGLE WALL ☐ 3. SINGLE WALL WITH EXTERIOR MEMBRANE LINER ☐ 5. SINGLE WALL WITH INTERNAL BLADDER SYSTEM ☐ 95. UNKNOWN
☒ 2. DOUBLE WALL ☐ 4. SIGNLE WALL IN VAULT ☐ 99. OTHER

TANK MATERIAL – primary tank (Check one item only) 444
☐ 1. BARE STEEL ☐ 3. FIBERGLASS / PLASTIC ☐ 5. CONCRETE ☐ 95. UNKNOWN
☐ 2. STAINLESS STEEL ☒ 4. STEEL CLAD W/FIBERGLASS REINFORCED PLASTIC (FRP) ☐ 8. FRP COMPTIBLE W/100% METHANOL ☐ 99. OTHER

TANK MATERIAL – secondary tank (Check one item only) 445
☐ 1. BARE STEEL ☐ 3. FIBERGLASS / PLASTIC ☐ 5. CONCRETE ☐ 95. UNKNOWN
☐ 2. STAINLESS STEEL ☐ 4. STEEL CLAD W/FIBERGLASS REINFORCED PLASTIC (FRP) ☐ 8. FRP COMPTIBLE W/100% METHANOL ☐ 99. OTHER
☐ 5. CONCRETE ☐ 10. COATED STEEL

TANK INTERIOR LINING OR COATING (Check one item only) 446
☐ 1. RUBBER LINED ☐ 3. EPOXY LINING ☐ 5. GLASS LINING ☐ 95. UNKNOWN
☐ 2 ALKYD LINING ☐ 4 PHENOLIC LINING ☒ 6 UNLINED ☐ 99 OTHER
DATE INSTALLED 447 (For local use only)

OTHER CORROSION PROTECTION IF APPLICABLE (Check one item only) 448
☐ 1 MANUFACTURED CATHODIC PROTECTION ☒ 3 FIBERGLASS REINFORCED PLASTIC ☐ 95 UNKNOWN
☐ 4 IMPRESSED CURRENT ☐ 99 OTHER
☐ 2 SACRIFICIAL ANODE
DATE INSTALLED 449 (For local use only)

SPILL AND OVERFILL (Check all that apply) 450
YEAR INSTALLED 1998 TYPE (local use only) 451
☒ 1 SPILL CONTAINMENT
☒ 2 DROP TUBE
☒ 3 STRIKER PLATE

OVERFILL PROTECTION EQUIPMENT: YEAR INSTALLED 1998 452
☐ 1 ALARM ☒ 3 FILL TUBE SHUT OFF VALVE
☐ 2 BALL FLOAT ☐ 4 EXEMPT

IV. TANK LEAK DETECTION (A description of the monitoring program shall be submitted to the local agency.)

IF SINGLE WALL TANK (Check all that apply) 453
☐ 1 VISUAL (EXPOSED PORTION ONLY)
☐ 2 AUTOMATIC TANK GAUGING (ATG)
☐ 3 CONTINUOUS ATG
☐ 4 STATISTICAL INVENTORY RECONCILIATION (SIR) BIENNIAL TANK TESTING
☐ 5 MANUAL TANK GAUGING (MTG)
☐ 6 VADOSE ZONE
☐ 7 GROUNDWATER
☐ 8 TANK TESTING
☐ 99 OTHER

IF DOUBLE WALL TANK OR TANK WITH BLADDER (Check one item only) 454
☐ 1 VISUAL (SINGLE WALL IN VAULT ONLY)
☒ 2 CONTINUOUS INTERSTITIAL MONITORING
☐ 3 MANUAL MONITORING

IV. TANK CLOSURE INFORMATION / PERMANENT CLOSURE IN PLACE

ESTIMATED DATE LAST USED (YR/MO/DAY) 455	ESTIMATED QUANTITY OF SUBSTANCE REMAINING 456	TANK FILLED WITH INERT MATERIAL? 457
	_____ gallons	☐ Yes ☐ No

UNIFIED PROGRAM CONSOLIDATED FORM

TANKS

UNDERGROUND STORAGE TANKS – TANK PAGE 2

VI. PIPING CONSTRUCTION (Check all that apply)

UNDERGROUND PIPING		ABOVEGROUND PIPING	
SYSTEM TYPE	☐ 1. PRESSURE ☒ 2. SUCTION ☐ 3. GRAVITY 458	☐ 1. PRESSURE ☐ 2. SUCTION ☐ 3. GRAVITY	459
CONSTRUCTION	☐ 1. SINGLE WALL ☐ 3. LINED TRENCH ☐ 99. OTHER 460	☐ 1. SINGLE WALL ☐ 95. UNKNOWN	462
MANUFACTURER	☒ 2. DOUBLE WALL ☐ 95. UNKNOWN	☐ 2. DOUBLE WALL ☐ 99. OTHER	
MANUFACTURER	461	MANUFACTURER	463
☐ 1. BARE STEEL	☐ 6. FRP COMPATIBLE w/100% METHANOL	☐ 1. BARE STEEL	☐ 6. FRP COMPATIBLE W/100% METHANOL
☐ 2. STAINLESS STEEL	☐ 7. GALVANIZED STEEL ☐ Unknown	☐ 2. STAINLESS STEEL	☐ 7. GALVANIZED STEEL
☐ 3. PLASTIC COMPATIBLE W/ CONTENTS	☐ 99. Other	☐ 3. PLASTIC COMPATIBLE W/ CONTENTS	☐ 8. FLEXIBLE (HDPE) ☐ 99. OTHER
☒ 4. FIBERGLASS	☐ 8. FLEXIBLE (HDPE)	☐ 4. FIBERGLASS	☐ 9. CATHODIC PROTECTION
☐ 5. STEEL W/COATING	☐ 9. CATHODIC PROTECTION 464	☐ 5. STEEL W/COATING	☐ 95. UNKNOWN 465

VII. PIPING LEAK DETECTION (Check all that apply) (A description of the monitoring program shall be submitted to the local agency.)

UNDERGROUND PIPING

SINGLE WALL PIPING 466

PRESSURIZED PIPING (Check all that apply):

☐ 1. ELECTRONIC LINE LEAK DETECTOR 3.0 GPH TEST WITH AUTO PUMP SHUT OFF FOR LEAK, SYSTEM FAILURE, AND SYSTEM DISCONNECTION + AUDIBLE AND VISUAL ALARMS.

☐ 2. MONTHLY 0.2 GPH TEST

☐ 3. ANNUAL INTEGRITY TEST (0.1GPH)

CONVENTIONAL SUCTION SYSTEMS

☐ 5. DAILY VISUAL MONITORING OF PUMPING SYSTEM + TRIENNIAL PIPING INTEGRITY TEST (0.1 GPH)

SAFE SUCTION SYSTEMS (NO VALUES IN BELOW GROUNDPIPING):

☐ 7. SELF MONITORING

GRAVITY FLOW

☐ 9. BIENNIAL INTEGRITY TEST (0.1 GPH)

SECONDARILY CONTAINED PIPING

PRESSURIZED PIPING (Check all that apply):

10. CONTINUOUS TURBINE SUMP SENSOR WITH AUDIBLE AND VISUAL ALARMS AND (Check one)
   - ☐ a. AUTO PUMP SHUT OFF WHEN A LEAK OCCURS
   - ☐ b. AUTO PUMP SHUT OFF FOR LEAKS, SYSTEM FAILURE AND SYSTEM DISCONNECTION
   - ☐ c. NO AUTO PUMP SHUT OFF

☐ 11. AUTOMATIC LINE LEAK DETECTOR (3.0 GPH TEST) WITH FLOW SHUT OFF OR RESTRICTION

☐ 12. ANNUAL INTEGRITY TEST (0.1 GPH)

SUCTION/GRAVITY SYSTEM

☒ 13. CONTINUOUS SUMP SENSOR + AUDIBLE AND VISUAL ALARMS

EMERGENCY GENERATORS ONLY (Check all that apply)

☐ 14. CONTINUOUS SUMP SENSOR WITHOUT AUTO PUMP SHUT OFF + AUDIBLE AND VISUAL ALARMS

☐ 15. AUTOMATIC LINE LEAK DETECTOR (3.0 GPH TEST) WITHOUT FLOW SHUT OFF OR RESTRICTION

☐ 16. ANNUAL INTEGRITY TEST (0.1 GPH)

☐ 17. DAILY VISUAL CHECK

ABOVEGROUND PIPING

SINGLE WALL PIPING 467

PRESSURIZED PIPING (Check all that apply):

☐ 1. ELECTRONIC LINE LEAK DETECTOR 3.0 GPH TEST WITH AUTO PUMP SHUT OFF FOR LEAK, SYSTEM FAILURE, AND SYSTEM DISCONNECTION + AUDIBLE AND VISUAL ALARMS.

☐ 2. MONTHLY 0.2 GPH TEST

☐ 3. ANNUAL INTEGRITY TEST (0.1GPH)

☐ 4. DAILY VISUAL CHECK

CONVENTIONAL SUCTION SYSTEMS (Check all that apply)

☐ 5. DAILY VISUAL MONITORING OF PIPING AND PUMPING SYSTEM

☐ 6. TRIENNIAL INTEGRITY TEST (0.1 GPH)

SAFE SUCTION SYSTEMS (NO VALVES IN BELOW GROUND PIPING):

☐ 7. SELF MONITORING

GRAVITY FLOW (Check all that apply):

☐ 8. DAILY VISUAL MONITORING

☐ 9. BIENNIAL INTEGRITY TEST (0.1 GPH)

SECONDARILY CONTAINED PIPING

PRESSURIZED PIPING (Check all that apply):

10. CONTINUOUS TURBINE SUMP SENSOR WITH AUDIBLE AND VISUAL ALARMS AND (Check one)
   - ☐ a AUTO PUMP SHUT OFF WHEN A LEAK OCCURS
   - ☐ b AUTO PUMP SHUT OFF FOR LEAKS, SYSTEM FAILURE AND SYSTEM DISCONNECTION
   - ☐ c NO AUTO PUMP SHUT OFF

☐ 11. AUTOMATIC LEAK DETECTOR

☐ 12. ANNUAL INTEGRITY TEST (0.1 GPH)

SUCTION/GRAVITY SYSTEM

☐ 13. CONTINUOUS SUMP SENSOR + AUDIBLE AND VISUAL ALARMS

EMERGENCY GENERATORS ONLY (Check all that apply)

☐ 14. CONTINUOUS SUMP SENSOR WITHOUT AUTO PUMP SHUT OFF + AUDIBLE AND VISUAL ALARMS

☐ 15. AUTOMATIC LINE LEAK DETECTOR (3.0 GPH TEST)

☐ 16. ANNUAL INTEGRITY TEST (0.1 GPH)

☐ 17. DAILY VISUAL CHECK

VIII. DISPENSER CONTAINMENT

DISPENSER CONTAINMENT

DATE INSTALLED 468

- ☐ 1. FLOAT MECHANISM THAT SHUTS OFF SHEAR VALVE
- ☐ 2. CONTINUOUS DISPENSER PAN SENSOR + AUDIBLE AND VISUAL ALARMS
- ☐ 3. CONTINUOUS DISPENSER PAN SENSOR WITH AUTO SHUT OFF FOR DISPENSER + AUDIBLE AND VISUAL ALARMS
- ☐ 4. DAILY VISUAL CHECK
- ☐ 5. TRENCH LINER / MONITORING
- ☒ 6. NONE UNKNOWN 469

IX. OWNER/OPERATOR SIGNATURE

I certify that the information contained herein is true and accurate to the best of my knowledge.

SIGNATURE OF OWNER/OPERATOR	DATE 8/19/03	470
NAME OF OWNER/OPERATOR (print) 471	TITLE OF OWNER/OPERATOR 472	
PORT OF OAKLAND M MCMILLAN	PORT SCIENTIST	

Permit Number (For local use only) 473 | Permit Approved (For local use only) 474 | Permit Expiration Date (For local use only) 475

UNIFIED PROGRAM CONSOLIDATED FORM

TANKS

UNDERGROUND STORAGE TANKS – TANK PAGE 1

(two pages per tank)

TYPE OF ACTION (Check one item only) ☐ 1 NEW SITE PERMIT ☐ 4 AMENDED PERMIT ☐ 5 CHANGE OF INFORMATION ☐ 6 TEMPORARY SITE CLOSURE ☐ 7 PERMANENTLY CLOSED ON SITE ☐ 3 RENEWAL PERMIT (Specify reason – for local use only) (Specify reason – for local use only) ☒ 8 TANK REMOVED 430

BUSINESS NAME (Same as FACILITY NAME or DBA – Doing Business As): Airport Facilities Bldg L-311

FACILITY ID: 3 [ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ] 1

LOCATION WITHIN SITE (Optional) 431

I. TANK DESCRIPTION (A scaled plot plan with the location of the UST system including buildings and landmarks shall be submitted to the local agency.)

TANK ID # 432	TANK MANUFACTURER 433	COMPARTMENTALIZED TANK ☐ Yes ☒ No 434
LF18	Modern Welding Co., Inc.	If "Yes", complete one page for each compartment.
DATE INSTALLED (YEAR/MO) 435	TANK CAPACITY IN GALLONS 436	NUMBER OF COMPARTMENTS 437
1986	2,000	1

ADDITIONAL DESCRIPTION (For local use only) 438

II. TANK CONTENTS

TANK USE 439
☒ 1. MOTOR VEHICLE FUEL (If marked complete Petroleum Type)
☐ 2. NON-FUEL PETROLEUM
☐ 3. CHEMICAL PRODUCT
☐ 4. HAZARDOUS WASTE (Includes Used Oil)
☐ 95. UNKNOWN

PETROLEUM TYPE 440
☒ 1a. REGULAR UNLEADED ☐ 2. LEADED ☐ 5. JET FUEL
☐ 1b. PREMIUM UNLEADED ☐ 3. DIESEL ☐ 6. AVIATION FUEL
☐ 1c. MIDGRADE UNLEADED ☐ 4. GASOHOL ☐ 99. OTHER

COMMON NAME (from Hazardous Materials Inventory page) 441

CAS# (from Hazardous Materials Inventory page) 442

III. TANK CONSTRUCTION

TYPE OF TANK (Check one item only) 443
☐ 1. SINGLE WALL ☐ 3. SINGLE WALL WITH EXTERIOR MEMBRANE LINER ☐ 5. SINGLE WALL WITH INTERNAL BLADDER SYSTEM ☐ 95. UNKNOWN
☒ 2. DOUBLE WALL ☐ 4. SIGNLE WALL IN VAULT ☐ 99. OTHER

TANK MATERIAL – primary tank (Check one item only) 444
☐ 1. BARE STEEL ☐ 3. FIBERGLASS / PLASTIC ☐ 5. CONCRETE ☐ 95. UNKNOWN
☐ 2. STAINLESS STEEL ☒ 4. STEEL CLAD W/FIBERGLASS REINFORCED PLASTIC (FRP) ☐ 8. FRP COMPTIBLE W/100% METHANOL ☐ 99. OTHER

TANK MATERIAL – secondary tank (Check one item only) 445
☐ 1. BARE STEEL ☐ 3. FIBERGLASS / PLASTIC ☐ 5. CONCRETE ☐ 95. UNKNOWN
☐ 2. STAINLESS STEEL ☐ 4. STEEL CLAD W/FIBERGLASS REINFORCED PLASTIC (FRP) ☐ 8. FRP COMPTIBLE W/100% METHANOL ☐ 99. OTHER ☐ 10. COATED STEEL ☐ 5. CONCRETE

TANK INTERIOR LINING OR COATING (Check one item only) 446
☐ 1. RUBBER LINED ☐ 3. EPOXY LINING ☐ 5. GLASS LINING ☐ 95. UNKNOWN
☐ 2 ALKYD LINING ☐ 4 PHENOLIC LINING ☒ 6 UNLINED ☐ 99 OTHER
DATE INSTALLED 447 _____ (For local use only)

OTHER CORROSION PROTECTION IF APPLICABLE (Check one item only) 448
☐ 1 MANUFACTURED CATHODIC PROTECTION ☒ 3 FIBERGLASS REINFORCED PLASTIC ☐ 95 UNKNOWN
☐ 2 SACRIFICIAL ANODE ☐ 4 IMPRESSED CURRENT ☐ 99 OTHER
DATE INSTALLED 449 _____ (For local use only)

SPILL AND OVERFILL (Check all that apply) 1998 YEAR INSTALLED 450 TYPE (local use only) 451
☒ 1 SPILL CONTAINMENT
☒ 2 DROP TUBE
☒ 3 STRIKER PLATE

OVERFILL PROTECTION EQUIPMENT: YEAR INSTALLED 452
☐ 1 ALARM ☒ 3 FILL TUBE SHUT OFF VALVE
☐ 2 BALL FLOAT ☐ 4 EXEMPT

IV. TANK LEAK DETECTION (A description of the monitoring program shall be submitted to the local agency.)

IF SINGLE WALL TANK (Check all that apply) 453
☐ 1 VISUAL (EXPOSED PORTION ONLY)
☐ 2 AUTOMATIC TANK GAUGING (ATG)
☐ 3 CONTINUOUS ATG
☐ 4 STATISTICAL INVENTORY RECONCILIATION (SIR) BIENNIAL TANK TESTING
☐ 5 MANUAL TANK GAUGING (MTG)
☐ 6 VADOSE ZONE
☐ 7 GROUNDWATER
☐ 8 TANK TESTING
☐ 99 OTHER

IF DOUBLE WALL TANK OR TANK WITH BLADDER (Check one item only) 454
☐ 1 VISUAL (SINGLE WALL IN VAULT ONLY)
☒ 2 CONTINUOUS INTERSTITIAL MONITORING
☐ 3 MANUAL MONITORING

IV. TANK CLOSURE INFORMATION / PERMANENT CLOSURE IN PLACE

ESTIMATED DATE LAST USED (YR/MO/DAY) 455	ESTIMATED QUANTITY OF SUBSTANCE REMAINING 456	TANK FILLED WITH INERT MATERIAL? 457
	_____ gallons	☐ Yes ☐ No

UNIFIED PROGRAM CONSOLIDATED FORM

TANKS

UNDERGROUND STORAGE TANKS – TANK PAGE 2

VI. PIPING CONSTRUCTION (Check all that apply)

UNDERGROUND PIPING		ABOVEGROUND PIPING	
SYSTEM TYPE	☐ 1. PRESSURE ☒ 2. SUCTION ☐ 3. GRAVITY 458	☐ 1. PRESSURE ☐ 2. SUCTION ☐ 3. GRAVITY	459
CONSTRUCTION	☐ 1. SINGLE WALL ☐ 3. LINED TRENCH ☐ 99. OTHER 460	☐ 1. SINGLE WALL ☐ 95. UNKNOWN	462
MANUFACTURER	☒ 2. DOUBLE WALL ☐ 95. UNKNOWN	☐ 2. DOUBLE WALL ☐ 99. OTHER	
MANUFACTURER	461	MANUFACTURER	463
☐ 1. BARE STEEL ☐ 6. FRP COMPATIBLE w/100% METHANOL		☐ 1. BARE STEEL ☐ 6. FRP COMPATIBLE W/100% METHANOL	
☐ 2. STAINLESS STEEL ☐ 7. GALVANIZED STEEL ☐ Unknown		☐ 2. STAINLESS STEEL ☐ 7. GALVANIZED STEEL	
☐ 3. PLASTIC COMPATIBLE W/ CONTENTS ☐ 99. Other		☐ 3. PLASTIC COMPATIBLE W/ CONTENTS ☐ 8. FLEXIBLE (HDPE) ☐ 99. OTHER	
☒ 4. FIBERGLASS ☐ 8. FLEXIBLE (HDPE)		☐ 4. FIBERGLASS ☐ 9. CATHODIC PROTECTION	
☐ 5. STEEL W/COATING ☐ 9. CATHODIC PROTECTION	464	☐ 5. STEEL W/COATING ☐ 95. UNKNOWN	465

VII. PIPING LEAK DETECTION (Check all that apply) (A description of the monitoring program shall be submitted to the local agency.)

UNDERGROUND PIPING

SINGLE WALL PIPING 466

PRESSURIZED PIPING (Check all that apply):

☐ 1. ELECTRONIC LINE LEAK DETECTOR 3.0 GPH TEST WITH AUTO PUMP SHUT OFF FOR LEAK, SYSTEM FAILURE, AND SYSTEM DISCONNECTION + AUDIBLE AND VISUAL ALARMS.

☐ 2. MONTHLY 0.2 GPH TEST

☐ 3. ANNUAL INTEGRITY TEST (0.1GPH)

CONVENTIONAL SUCTION SYSTEMS

☐ 5. DAILY VISUAL MONITORING OF PUMPING SYSTEM + TRIENNIAL PIPING INTEGRITY TEST (0.1 GPH)

SAFE SUCTION SYSTEMS (NO VALUES IN BELOW GROUNDPIPING):

☐ 7. SELF MONITORING

GRAVITY FLOW

☐ 9. BIENNIAL INTEGRITY TEST (0.1 GPH)

SECONDARILY CONTAINED PIPING

PRESSURIZED PIPING (Check all that apply):

10. CONTINUOUS TURBINE SUMP SENSOR WITH AUDIBLE AND VISUAL ALARMS AND (Check one)
- ☐ a. AUTO PUMP SHUT OFF WHEN A LEAK OCCURS
- ☐ b. AUTO PUMP SHUT OFF FOR LEAKS, SYSTEM FAILURE AND SYSTEM DISCONNECTION
- ☐ c. NO AUTO PUMP SHUT OFF

☐ 11. AUTOMATIC LINE LEAK DETECTOR (3.0 GPH TEST) WITH FLOW SHUT OFF OR RESTRICTION

☐ 12. ANNUAL INTEGRITY TEST (0.1 GPH)

SUCTION/GRAVITY SYSTEM

☒ 13. CONTINUOUS SUMP SENSOR + AUDIBLE AND VISUAL ALARMS

EMERGENCY GENERATORS ONLY (Check all that apply)

☐ 14. CONTINUOUS SUMP SENSOR WITHOUT AUTO PUMP SHUT OFF + AUDIBLE AND VISUAL ALARMS

☐ 15. AUTOMATIC LINE LEAK DETECTOR (3.0 GPH TEST) WITHOUT FLOW SHUT OFF OR RESTRICTION

☐ 16. ANNUAL INTEGRITY TEST (0.1 GPH)

☐ 17. DAILY VISUAL CHECK

ABOVEGROUND PIPING

SINGLE WALL PIPING 467

PRESSURIZED PIPING (Check all that apply):

☐ 1. ELECTRONIC LINE LEAK DETECTOR 3.0 GPH TEST WITH AUTO PUMP SHUT OFF FOR LEAK, SYSTEM FAILURE, AND SYSTEM DISCONNECTION + AUDIBLE AND VISUAL ALARMS.

☐ 2. MONTHLY 0.2 GPH TEST

☐ 3. ANNUAL INTEGRITY TEST (0.1GPH)

☐ 4. DAILY VISUAL CHECK

CONVENTIONAL SUCTION SYSTEMS (Check all that apply)

☐ 5. DAILY VISUAL MONITORING OF PIPING AND PUMPING SYSTEM

☐ 6. TRIENNIAL INTEGRITY TEST (0.1 GPH)

SAFE SUCTION SYSTEMS (NO VALVES IN BELOW GROUND PIPING):

☐ 7. SELF MONITORING

GRAVITY FLOW (Check all that apply):

☐ 8. DAILY VISUAL MONITORING

☐ 9. BIENNIAL INTEGRITY TEST (0.1 GPH)

SECONDARILY CONTAINED PIPING

PRESSURIZED PIPING (Check all that apply):

10. CONTINUOUS TURBINE SUMP SENSOR WITH AUDIBLE AND VISUAL ALARMS AND (Check one)
- ☐ a. AUTO PUMP SHUT OFF WHEN A LEAK OCCURS
- ☐ b. AUTO PUMP SHUT OFF FOR LEAKS, SYSTEM FAILURE AND SYSTEM DISCONNECTION
- ☐ c. NO AUTO PUMP SHUT OFF

☐ 11. AUTOMATIC LEAK DETECTOR

☐ 12. ANNUAL INTEGRITY TEST (0.1 GPH)

SUCTION/GRAVITY SYSTEM

☐ 13. CONTINUOUS SUMP SENSOR + AUDIBLE AND VISUAL ALARMS

EMERGENCY GENERATORS ONLY (Check all that apply)

☐ 14. CONTINUOUS SUMP SENSOR WITHOUT AUTO PUMP SHUT OFF + AUDIBLE AND VISUAL ALARMS

☐ 15. AUTOMATIC LINE LEAK DETECTOR (3.0 GPH TEST)

☐ 16. ANNUAL INTEGRITY TEST (0.1 GPH)

☐ 17. DAILY VISUAL CHECK

VIII. DISPENSER CONTAINMENT

DISPENSER CONTAINMENT

DATE INSTALLED 468

- ☐ 1. FLOAT MECHANISM THAT SHUTS OFF SHEAR VALVE
- ☐ 2. CONTINUOUS DISPENSER PAN SENSOR + AUDIBLE AND VISUAL ALARMS
- ☐ 3. CONTINUOUS DISPENSER PAN SENSOR WITH AUTO SHUT OFF FOR DISPENSER + AUDIBLE AND VISUAL ALARMS
- ☐ 4. DAILY VISUAL CHECK
- ☐ 5. TRENCH LINER / MONITORING
- ☒ 6. NONE / UNKNOWN 469

IX. OWNER/OPERATOR SIGNATURE

I certify that the information provided herein is true and accurate to the best of my knowledge.

SIGNATURE OF OWNER/OPERATOR		DATE	470
		5/19/03	
NAME OF OWNER/OPERATOR (print)	471	TITLE OF OWNER/OPERATOR	472
PORT OF OAKLAND		PORT SCIENTIST	

Permit Number (For local use only)	473	Permit Approved (For local use only)	474	Permit Expiration Date (For local use only)	475

GEOMATRIX

SITE SPECIFIC HEALTH AND SAFETY PLAN

Approvals		
	Initials	Date
Prepared By	EZ	8/14/03
Approved By	DK	8/15/03

PROJECT INFORMATION

Date(s) of Field Work: *9/1/03 – 9/15/03*
Project Name: *8900 Earhart Road* Project Number: *8207.005*
Client: *Jeff Rubin* Site Phone: *NA*
Site Address: *8900 Earhart Rd., Oakland* ☒ Site Plan Attached
Scope of Work: *Removal of underground storage tanks*

Type of Project: ☒Environmental; ☒Geotechnical; ☐Industrial Process; ☐Other: _____
☒HAZWOPER Project: Training & Medical Surveillance must conform to 29 CFR 1910.120 & Geomatrix Guidelines.
☐Client Specific Requirements (Attached)

KEY CONTACTS

Project Manager: *Jennifer Patterson*	Phone: *510-663-4167*	Cell: *510-821-8925*
Project H&S Manager: *Jennifer Patterson*	Phone: *510-663-4167*	Cell: *510-821-8925*
Site H&S Manager: *Erin Zavarin*	Phone: *510-663-4199*	Cell: *510-914-5165*
Client Contact: *Jeff Rubin*	Phone: *510-627-1134*	Cell: _____
Client's Site Contact: *Jeff Rubin*	Phone:	Cell: _____
Other: *Don Kubik*	Phone: *510-663-4115*	Cell: *510-368-6433*
Other: _____		

Emergency Medical Facility: *Alameda Hospital*
Address: *2070 Clinton Avenue, Alameda*
Phone Number (general): *510-522-3700* Phone Number (emergency): *510-522-3700*
☒Emergency Medical Facility Confirmed ☒Map to the hospital is attached

Police: 911 Fire: 911 Paramedic/Ambulance: 911
Poison Control Center: *800-222-1222*

EMERGENCY PROCEDURES

Medical Emergencies

1. Remove injured or exposed person(s) from immediate danger if possible.
2. Evacuate other on-site personnel to a safe place in an upwind direction until it is safe for work to resume.
3. If serious injury or life-threatening condition exists, call 911 - Paramedics, fire department, police, hospital emergency room. Clearly describe location, injury and conditions to dispatcher/hospital. Designate a person to direct emergency equipment to the injured person(s).
4. Provide first aid if necessary. Remove contaminated clothing only if this can be done without endangering the injured person.
5. Call the project manager and/or project health and safety officer.
6. Immediately implement steps to prevent recurrence of the accident.

Accidental Release of Hazardous Materials or Wastes

1. Evacuate all on-site personnel to a safe place in an upwind direction until the PM or PHSO determines that it is safe for work to resume.
2. Immediately instruct a designated person to contact the PM or PHSO.
3. Contain spill, if it is possible and it can be done safely.
4. Initiate cleanup.

General Emergencies

In the case of fire, flood, explosion, or other hazard, work shall be halted and the local police/ fire department shall be notified by calling 911. All on-site personnel will be immediately evacuated to a safe place.

Emergency Equipment Onsite

☒First Aid Kit; ☒Fire Extinguisher; ☐Eye Wash; ☐Other: _____

CHEMICAL HAZARDS

CHEMICAL	EXPOSURE LIMITS		KNOWN/EXPECTED CONCENTRATIONS	HEALTH HAZARDS
	OSHA	ACGIH		
Gasoline	Pel: 300 ppm	TLV: 300 ppm	Unknown	Inhalation, dermal
Benzene	Pel: 1 ppm	TLV: 0.3 ppm	Unknown	Inhalation, dermal
Toluene	Pel: 50 ppm	TLV: 50 ppm	Unknown	Inhalation, dermal
Ethyl Benzene	Pel: 100 pm	TLV: 100 ppm	Unknown	Inhalation, dermal
Xylenes	Pel: 100 pm	TLV: 100 ppm	Unknown	Inhalation, dermal
MTBE	Pel: none	TLV: 40 ppm	Unknown	Inhalation, dermal
Diesel	Pel: none	TLV: 100 mg/m^3	Unknown	Inhalation, dermal

PHYSICAL HAZARDS:

☐Heat Stress ☐Cold Stress ☐Wet ☒Noise

☒Slip,Trip, & Fall ☒Heavy Equipment ☒Electrical Hazards

☒Underground Hazards: One Call Ticket # _____ Date Called: *Contractor to contact USA*

☐Private Locator Utilized: _____ ☐Overhead Hazards

☐Traffic ☒Excavations/Trenching ☐Confined Space

☐Other: _____

Excavation entrance requirements:

1. *If excavation is 4-feet or greater there must be a means of egress within 25-feet of the person.*
2. *If excavation is 5-feet or less, the person may enter as long as a competent person provides no indication of a potential cave-in.*
3. *Deeper excavations will require shoring or benching.*
4. *The atmosphere of the excavation will be checked for oxygen and contaminants.*

Note: contractor to clear excavation location with USA and private utility locator.

BIOLOGICAL HAZARDS:

☐Pathogens: _____ ☐Mold: _____

☐Plants: _____ ☐Insects: _____

☐Other Fauna: _____ ☐Other: _____

SITE CONTROLS: *Site is a fuel facility that is secured with fencing.*

PERSONAL DECONTAMINATION PROCEDURES: *Remove disposable gloves and clothing and place in plastic bags. Wash hands before eating, drinking, or smoking and at end of day.*

PERSONAL PROTECTIVE EQUIPMENT – R = REQUIRED, A = HAVE AVAILABLE

R Eye Protection: ***R*** Safety Glasses; __ Splash Goggles; __ Face Shield; __Other: _____

R Hard Hat ***R*** Steel-Toed Boots __ Chemical Resistant Boots

R Traffic Safety Vest ***A*** Hearing Protection: _____

__ Protective Clothing: ☐Tyvek®; ☐Coated Tyvek®; ☐Sarinex; ☐Other: _____

R Gloves: ☒Nitrile; ☐PVC; ☐Neoprene; ☐cloth/leather; ☐Other _____

A Respiratory: ☐Full-Face APR; ☒Half-Face APR

A Filter: ☒Organic Vapor; ☐Acid Gas; ☒HEPA; ☐Other: _____

__ Other: _____

If air monitoring in the workers' breathing zone exceeds *10 ppm* for 60 seconds or longer, upgrade to Level C (APR) or vacate the immediate area.

MONITORING EQUIPMENT

- ☒ Photo Ionization Detector with *10.2* eV lamp
- ☐ Flame Ionization Detector
- ☐ Combustible Gas Indicator
- ☐ Oxygen Meter
- ☐ Detector Tube (Brand: _____) – Tubes: _____
- ☐ Hydrogen Sulfide Meter
- ☐ Passive Dosimeter _____
- ☐ Air Sampling Pump – Filter Media: _____
- ☒ Other: *Contractor will provide combustible gas indicator to monitor excavation and tanks.*

Frequency of monitoring: *15 minutes*

GEOMATRIX

TAILGATE SAFETY MEETING

Date:

Project Name:

Project Number:

Site Location:

Scope of Work for Day:

Lead By:

Name (printed)	Signature

YAHOO! GetLocal Maps

Maps | Yellow Pages | City Guic

Starting from: A 8900 Earhart Rd, Oakland, CA 94621-4546

Arriving at: B Alameda Hospital
2070 Clinton Ave, Alameda, CA 94501-4320
(510) 522-3700

ER (510) 522-3700

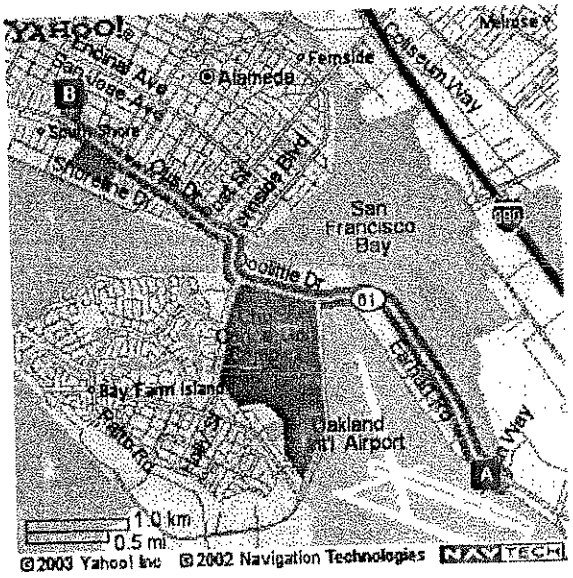
Distance: 4.0 miles **Approximate Travel Time:** 8 mins

Directions

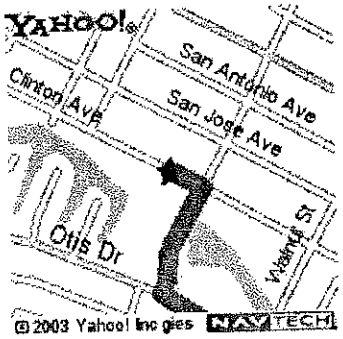
1.	Start at **8900 EARHART RD, OAKLAND** on **EARHART RD** going towards **DE HAVILLAND ST** - go **0.1** mi
2.	Turn L on **SWAN WAY** - go **0.1** mi
3.	Turn L on **DOOLITTLE DR** - go **2.1** mi
4.	Turn R on **BAY FARM ISLAND BRG** - go **0.3** mi
5.	**BAY FARM ISLAND BRG** becomes **OTIS DR** - go **1.2** mi
6.	Turn R on **WILLOW ST** - go **0.2** mi
7.	Turn L on **CLINTON AVE** - go **0.1** mi
8.	Arrive at **2070 CLINTON AVE, ALAMEDA**

When using any driving directions or map, it's a good idea to do a reality check and make sure the road still exists, watch out for construction, and follow all traffic safety precautions. This is only to be used as an aid in planning.

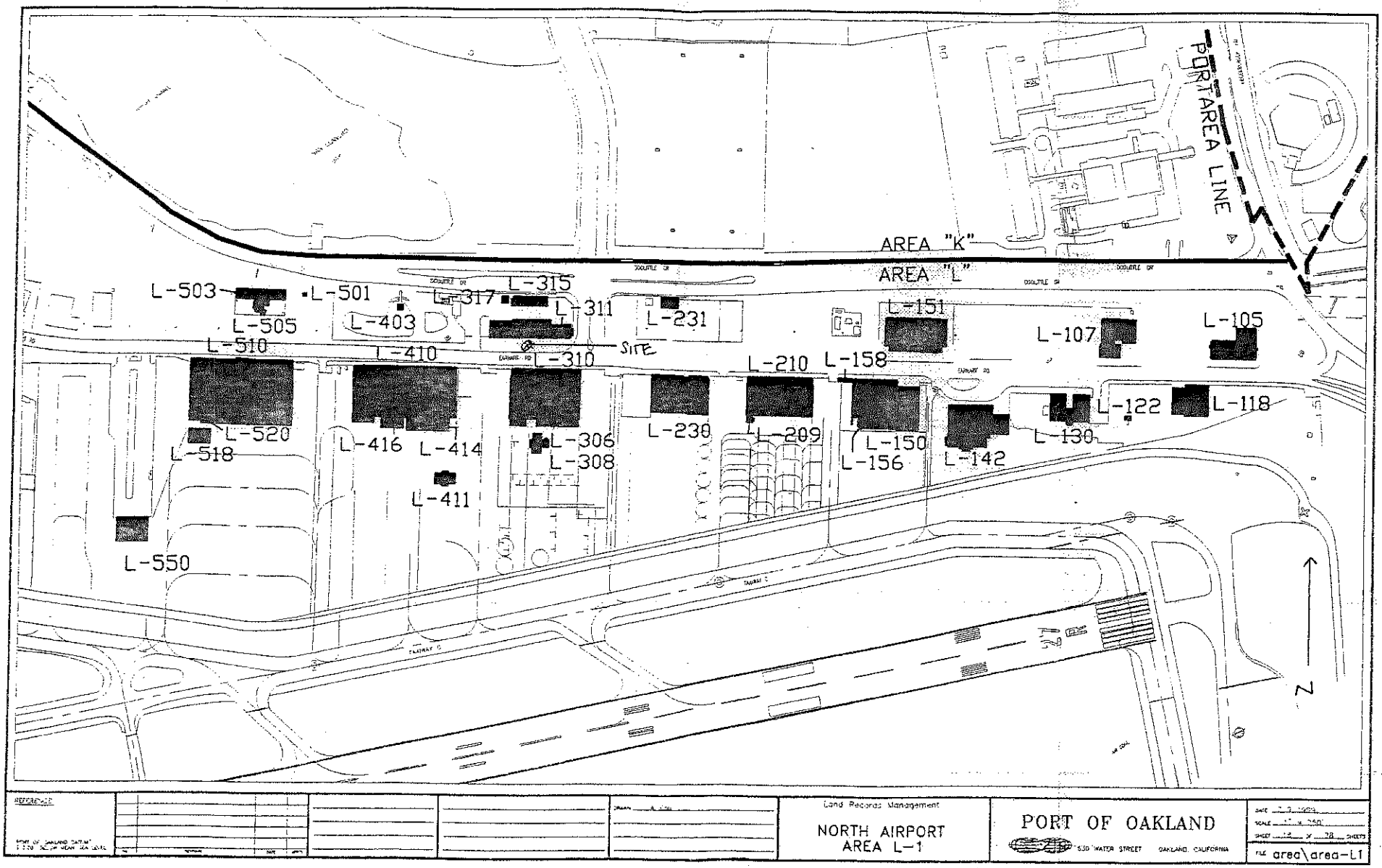
Full Route



Destination



2070 Clinton Ave
Alameda, CA 94501-4320



Land Records Management

NORTH AIRPORT
AREA L-1

PORT OF OAKLAND
530 WATER STREET OAKLAND, CALIFORNIA

DATE
SCALE 1" = 200'
SHEET OF SHEETS
FILE area\area-L1

ACORD CERTIFICATE OF LIABILITY INSURANCE

OP ID CO: DILLA-1 | DATE (MM/DD/YYYY): 07/21/03

PRODUCER
Argo Insurance Brokers, Inc.
CA License #0560864
P. O. Box 232017
Pleasant Hill CA 94523-6017
Phone: 925-682-7001 Fax: 925-682-7024

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW.

INSURED
Dillard Trucking Inc.
Dillard Environmental Services
Donald & Patricia Dillard
P.O. Box 579
Byron CA 94514

INSURERS AFFORDING COVERAGE	NAIC #
INSURER A: Greenwich Insurance Company	
INSURER B: State Compensation Ins. Fund	
INSURER C:	
INSURER D:	
INSURER E:	

COVERAGES

THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. AGGREGATE LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	ADD'L INSRD	TYPE OF INSURANCE	POLICY NUMBER	POLICY EFFECTIVE DATE (MM/DD/YY)	POLICY EXPIRATION DATE (MM/DD/YY)	LIMITS	
A	X	GENERAL LIABILITY X COMMERCIAL GENERAL LIABILITY CLAIMS MADE [X] OCCUR X Ded $5,000 GEN'L AGGREGATE LIMIT APPLIES PER: POLICY PRO-JECT LOC	GEC001144501	04/01/03	10/01/03	EACH OCCURRENCE DAMAGE TO RENTED PREMISES (Ea occurrence) MED EXP (Any one person) PERSONAL & ADV INJURY GENERAL AGGREGATE PRODUCTS - COMP/OP AGG Emp Benef	$1,000,000 $ 100,000 $ 5,000 $1,000,000 $2,000,000 $2,000,000 1,000,000
A	X	AUTOMOBILE LIABILITY X ANY AUTO ALL OWNED AUTOS SCHEDULED AUTOS X HIRED AUTOS X NON-OWNED AUTOS X Coll Ded $2,000 X Comp Ded $2,000	AEC001144401	04/01/03	10/01/03	COMBINED SINGLE LIMIT (Ea accident) BODILY INJURY (Per person) BODILY INJURY (Per accident) PROPERTY DAMAGE (Per accident)	$1,000,000 $ $ $
		GARAGE LIABILITY ANY AUTO				AUTO ONLY - EA ACCIDENT OTHER THAN AUTO ONLY: EA ACC AGG	$ $ $
A	X	EXCESS/UMBRELLA LIABILITY X OCCUR CLAIMS MADE DEDUCTIBLE X RETENTION $10,000	UEC001144901	04/01/03	10/01/03	EACH OCCURRENCE AGGREGATE	$4,000,000 $4,000,000
B		WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? If yes, describe under SPECIAL PROVISIONS below	1599162-02	10/01/02	10/01/03	X WC STATU-TORY LIMITS OTH-ER E.L. EACH ACCIDENT E.L. DISEASE - EA EMPLOYEE E.L. DISEASE - POLICY LIMIT	$1,000,000 $1,000,000 $1,000,000
A		OTHER PollutionLiability Professional Liab	PEC001144701	04/01/03	10/01/03	5,000,000 5,000,000	10,000 ded 10,000 ded

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES / EXCLUSIONS ADDED BY ENDORSEMENT / SPECIAL PROVISIONS

RE: All California Operations
The City of Oakland, a municipal corporation, acting by & through its Board of Port Commissioners, and their officers, agents, employees, consultants & representives, while acting in the scope of their authority are named additional insureds.forms:CG2026 11/85, CG2404 10/93, AUTO133 07/99, AUTO114

CERTIFICATE HOLDER

PORT530

Port of Oakland
Risk Management Department
530 Water Street
Oakland CA 94607

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, THE ISSUING INSURER WILL ENDEAVOR TO MAIL 30 DAYS WRITTEN NOTICE TO THE CERTIFICATE HOLDER NAMED TO THE LEFT, BUT FAILURE TO DO SO SHALL IMPOSE NO OBLIGATION OR LIABILITY OF ANY KIND UPON THE INSURER, ITS AGENTS OR REPRESENTATIVES.

AUTHORIZED REPRESENTATIVE

ACORD 25 (2001/08)

POLICY NUMBER: GEC001144501 Greenwich Insurance Company CG 20 26 11 85

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

ADDITIONAL INSURED – DESIGNATED PERSON OR ORGANIZATION

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART

SCHEDULE

Name of Person or Organization: The City of Oakland, a municipal corporation, acting by and through its Board of Port Commissioners, and their officers, agents, employees, consultants and representives, while acting in the scope of their authority ARE named additional insureds.

(If no entry appears above, information required to complete this endorsement will be shown in the Declarations as applicable to this endorsement.)

WHO IS AN INSURED (Section II) is amended to include as an insured the person or organization shown in the Schedule as an insured but only with respect to liability arising out of your operations or premises owned by or rented to you.

POLICY NUMBER: GEC001144501 Greenwich Insurance Company CG 24 04 10 93

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

WAIVER OF TRANSFER OF RIGHTS OF RECOVERY AGAINST OTHERS TO US

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART

SCHEDULE

Name of Person or Organization: The City of Oakland, a municipal corporation, Board of Port Commissioners, officers, agents, emp

Any person or organization that you are required in a written contract or agreement to waive any right of recovery we may have against the person or organization, provided the "bodily injury" or "property damage" occurs subsequent to the execution of the written contract or agreement.

(If no entry appears above, information required to complete this endorsement will be shown in the Declarations as applicable to this endorsement.)

The TRANSFER OF RIGHTS OF RECOVERY AGAINST OTHERS TO US Condition (Section IV – COMMERCIAL GENERAL LIABILITY CONDITIONS) is amended by the addition of the following:

We waive any right of recovery we may have against the person or organization shown in the Schedule above because of payments we make for injury or damage arising out of your ongoing operations or "your work" done under a contract with that person or organization and included in the "products-completed operations hazard." This waiver applies only to the person or organization shown in the Schedule above.

ENDORSEMENT #

This endorsement, effective 12:01 a.m., 4/1/2003 forms a part of

Policy No. AEC001144401 issued to Dillard Trucking, Inc.

by Greenwich Insurance Company

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

AUTOMATIC ADDITIONAL INSURED

This endorsement modifies insurance provided under the following:

Business Auto Coverage Form
Garage Coverage Form
Motor Carrier Coverage Form
Truckers Coverage Form
Business Auto Physical Damage Coverage Form

LIABILITY COVERAGE, WHO IS AN INSURED is changed to include as an "insured" any person or organization you are required in a written contract ("the contract") to name as an insured (the Additional Insured), but only for "bodily injury " or "property damage" to which this insurance applies resulting from the acts or omissions of:

1. You, while using a covered "auto."
2. Any other person, while using a covered "auto" with your permission.

The insurance provided by this endorsement shall be subject to the following additional conditions.

1. The Limits of Insurance provided for the Additional Insured shall not be greater than those required by contract and, in no event, shall the policy Limits of Insurance be increased by the contract.
2. All insuring agreements, exclusions, terms and conditions of the policy shall apply to the coverage(s) provided to the Additional Insured, and such coverage shall not be enlarged or expanded by reason of the contract.
3. Any coverage provided hereunder shall be excess over any other valid and collectible insurance available to the Additional Insured(s) whether primary, excess, contingent or on any other basis unless a contract specifically requires that this insurance be primary or you request that it apply on a primary basis prior to loss.

All other terms and conditions of this policy remain unchanged.

(Authorized Representative)

ENDORSEMENT #

This endorsement, effective 12:01 a.m., 4-1-03 , forms a part of

Policy No. AEC001144401 issued to Dillard Trucking, Inc. and Dillard Environmental Services

by Greenwich Insurance Company

THIS ENDORSEMENT CHANGES THE POLICY PLEASE READ IT CAREFULLY.

WAIVER OF TRANSFER OF RIGHTS OF RECOVERY AGAINST OTHER TO US

This endorsement modifies insurance provided under the following:

Business Auto Coverage Form
Garage Coverage Form
Motor Carrier Coverage Form
Truckers Coverage Form
Business Auto Physical Damage Coverage Form

The TRANSFER OF RIGHTS OF RECOVERY AGAINST OTHERS TO US Condition of the policy is amended by the addition of the following:

We waive any right of recovery we may have against the person or organization shown in the Schedule below because of payments we make for "bodily injury" or "property damage" arising out of your ongoing operations or "work you performed" under a contract with that person or organization. This waiver applies only to the person or organization shown in the Schedule below:

SCHEDULE

Name of Person(s) or Organization(s):

See Certificate of Insurance for Complete Name

Any person or organization that you are required in a written contract or agreement to waive any right of recovery we may have against the person or organization, provided the "bodily injury" or "property damage" occurs subsequent to the execution of the written contract or agreement.

(If no entry appears above, information required to complete this endorsement will be shown in the Declarations as applicable to this endorsement.)

All other terms and conditions remain the same.

Carmen Eller

(Authorized Representative)

AUTO114 (07/99)

POST IN A
CONSPICUOUS
PLACE

BUSINESS TAX CERTIFICATE

CITY OF OAKLAND

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

EXPIRES

PLEASE READ REVERSE SIDE

EXPIRES: DECEMBER 31, 2009

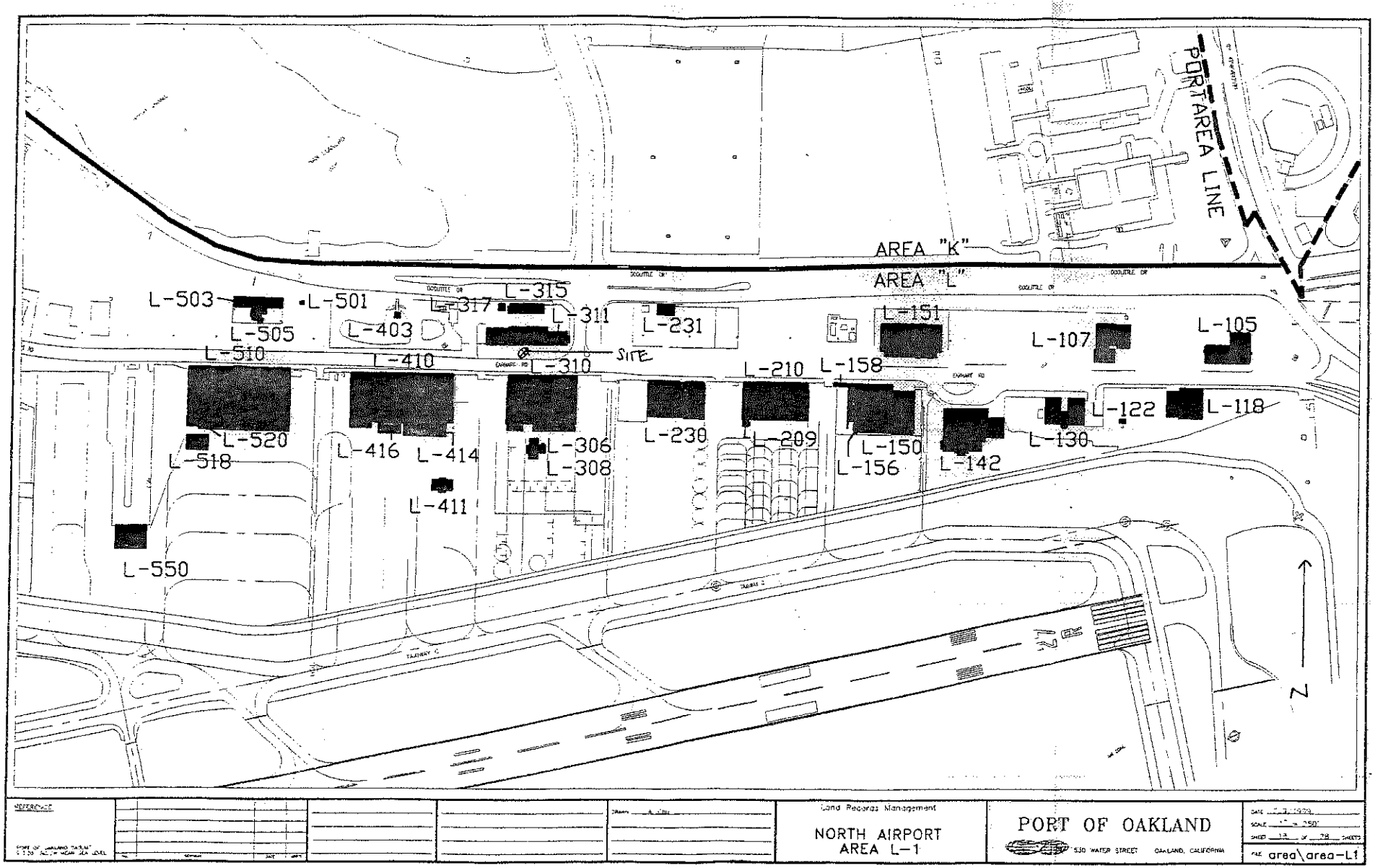
ACCOUNT NUMBER 887293

BUSINESS NAME OAKLAND TRUCKING INC

LOCATION 1120 CAMINO REAL

MISCELLANEOUS TAX

TYPE OF BUSINESS



REFERENCE					Land Regarss Management	PORT OF OAKLAND	DATE 7-3-1979
					NORTH AIRPORT AREA L-1	530 WATER STREET OAKLAND, CALIFORNIA	SCALE 1" = 250'
							SHEET 13 OF 78 SHEETS
							FILE area\area-L1

GEOMATRIX

Appendix B
Chain-of Custody Records and Analytical Laboratory Reports

Curtis & Tompkins, Ltd., Analytical Laboratories. Since 1878
2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

ANALYTICAL REPORT

Prepared for:

Geomatrix Consultants
2101 Webster Street
12th Floor
Oakland, CA 94612

Date: 19-OCT-03
Lab Job Number: 167885
Project ID: 8207.005
Location: Port of Oakland

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signatures. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis.

Reviewed by: _____
Project Manager

Reviewed by: _____ for JG
Operations Manager

SOP Volume: Client Services
Section: 1.1.2
Page: 1 of 1
Effective Date: 10-May-99
Revision: 1 Number 3 of 3
Filename: F:\QC\Forms\QC\Cooler.wpd

Curtis & Tompkins, Ltd.

COOLER RECEIPT CHECKLIST

Login#: 16165 Date Received: 9/30/03 Number of Coolers: 1
Client: Geomatrix Project: 82C7.CC5

A. Preliminary Examination Phase
Date Opened: 9/30/03 By (print): Peter Pinecka (sign)

1. Did cooler come with a shipping slip (airbill, etc.)? YES NO
   If YES, enter carrier name and airbill number:
2. Were custody seals on outside of cooler? YES NO
   How many and where? Seal date: Seal name: N/A
3. Were custody seals unbroken and intact at the date and time of arrival? YES NO
4. Were custody papers dry and intact when received? YES NO
5. Were custody papers filled out properly (ink, signed, etc.)? YES NO
6. Did you sign the custody papers in the appropriate place? YES NO
7. Was project identifiable from custody papers? YES NO
   If YES, enter project name at the top of this form.
8. If required, was sufficient ice used? Samples should be 2-6 degrees C. YES NO
   Type of ice: WET Temperature: Cold

B. Login Phase
Date Logged In: 9/30/03 By (print): Peter Pinecka (sign)

1. Describe type of packing in cooler: 2 ice bags
2. Did all bottles arrive unbroken? YES NO
3. Were labels in good condition and complete (ID, date, time, signature, etc.)? YES NO
4. Did bottle labels agree with custody papers? YES NO
5. Were appropriate containers used for the tests indicated? YES NO
6. Were correct preservatives added to samples? YES NO
7. Was sufficient amount of sample sent for tests indicated? YES NO
8. Were bubbles absent in VOA samples? If NO, list sample Ids below. YES NO
9. Was the client contacted concerning this sample delivery? YES NO
   If YES, give details below.
   Who was called? By whom? Date:

Additional Comments:

Curtis & Tompkins, Ltd.

Total Volatile Hydrocarbons

Lab #:	167885	Location:	Port of Oakland
Client:	Geomatrix Consultants	Prep:	EPA 5030B
Project#:	8207.005	Analysis:	8015B
Matrix:	Soil	Batch#:	84934
Units:	mg/Kg	Sampled:	09/30/03
Basis:	as received	Received:	09/30/03
Diln Fac:	1.000		

Field ID: DIES-093003-2 Lab ID: 167885-001
Type: SAMPLE Analyzed: 10/02/03

Analyte	Result	RL
Gasoline C7-C12	ND	1.1

Surrogate	%REC	Limits
Trifluorotoluene (FID)	100	56-144
Bromofluorobenzene (FID)	114	51-142

Field ID: PIPE1-093003-2 Lab ID: 167885-002
Type: SAMPLE Analyzed: 10/02/03

Analyte	Result	RL
Gasoline C7-C12	1.3	1.1

Surrogate	%REC	Limits
Trifluorotoluene (FID)	106	56-144
Bromofluorobenzene (FID)	113	51-142

Type: BLANK Analyzed: 10/01/03
Lab ID: QC227364

Analyte	Result	RL
Gasoline C7-C12	ND	0.20

Surrogate	%REC	Limits
Trifluorotoluene (FID)	89	56-144
Bromofluorobenzene (FID)	112	51-142

ND= Not Detected
RL= Reporting Limit

1.0

Curtis & Tompkins, Ltd.

Total Volatile Hydrocarbons

Lab #:	167885	Location:	Port of Oakland
Client:	Geomatrix Consultants	Prep:	EPA 5030B
Project#:	8207.005	Analysis:	8015B
Type:	LCS	Basis:	as received
Lab ID:	QC227366	Diln Fac:	1.000
Matrix:	Soil	Batch#:	84934
Units:	mg/Kg	Analyzed:	10/01/03

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	10.00	9.870	99	80-120

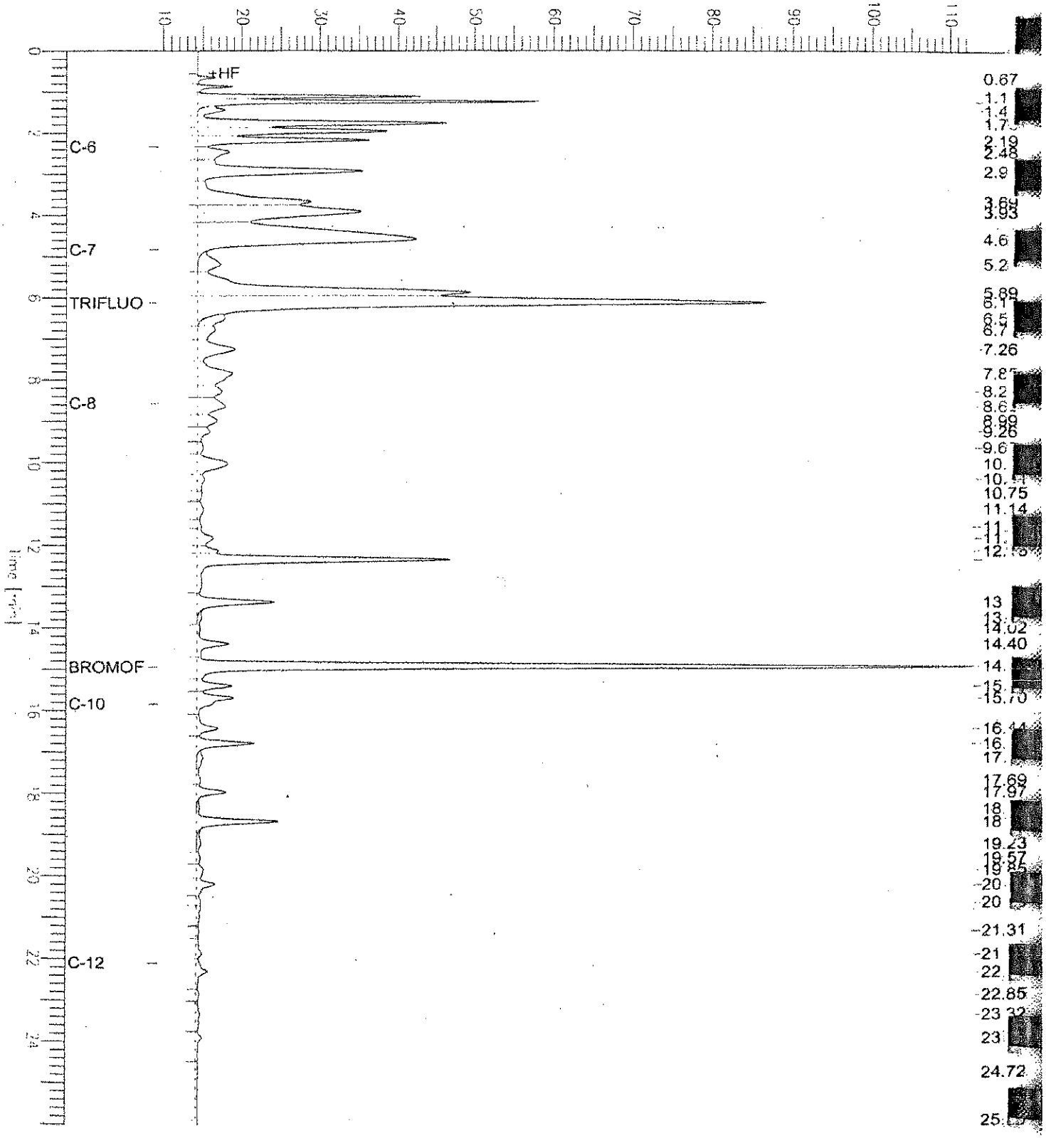
Surrogate	%REC	Limits
Trifluorotoluene (FID)	100	56-144
Bromofluorobenzene (FID)	112	51-142

GC07 TVH 'A' Data File RTX 502

Sample Name : 167885-002,84934,tvh opnly
FileName : G:\GC07\DATA\274A030.raw
Method : TVHBTXE
Start Time : 0.00 min End Time : 26.00 min
Scale Factor: 1.0 Plot Offset: 9 mV

Sample #: a Page 1 of 1
Date : 10/2/03 09:03 AM
Time of Injection: 10/2/03 02:33 AM
Low Point : 9.34 mV High Point : 112.89 mV
Plot Scale: 103.6 mV

PIPE 1-093003-2

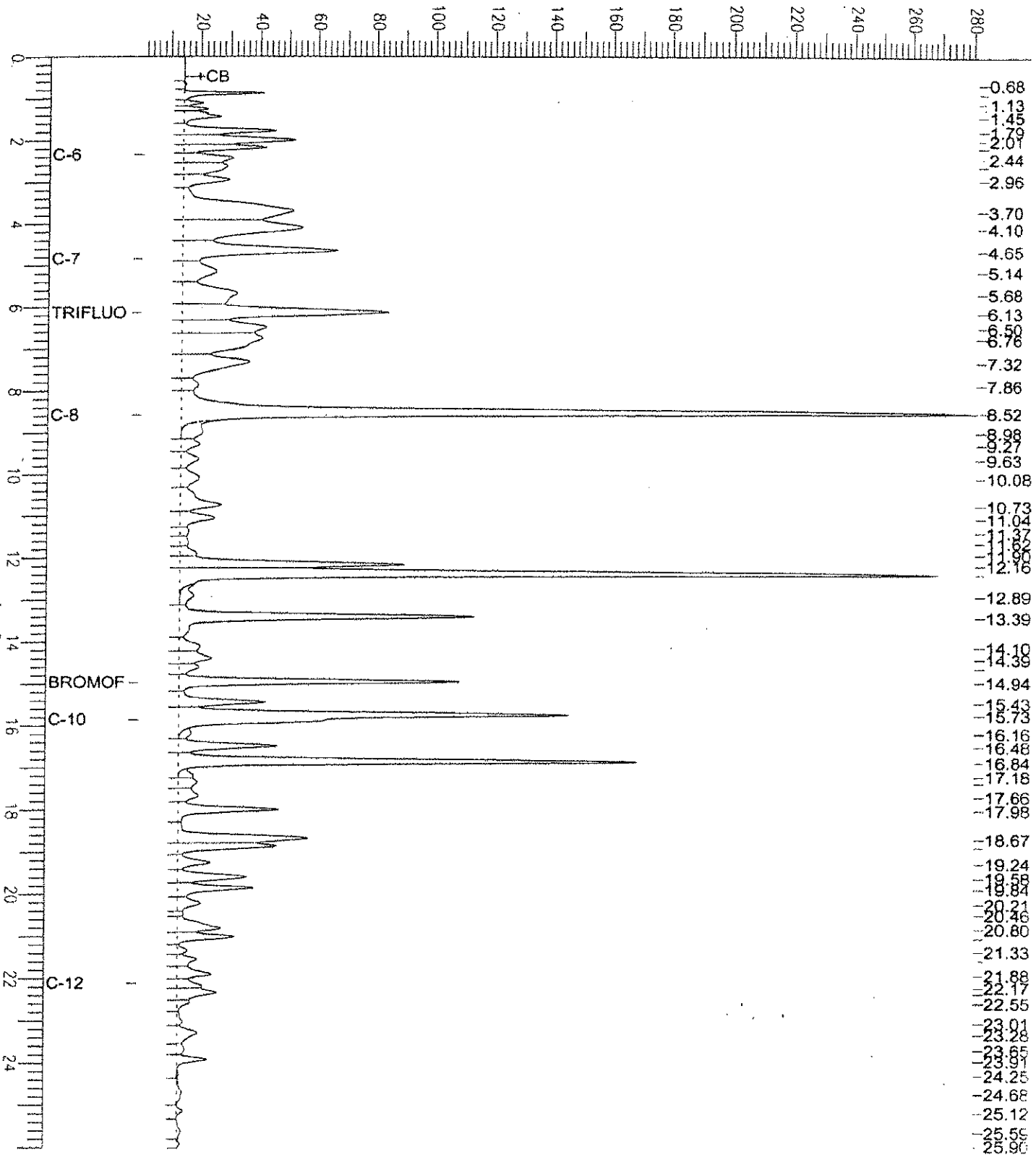


GC07 TVH 'A' Data File RTX 502

Sample Name : ccv/lcs,qc227366,84934,03ws1335,5/5000
FileName : g:\gc07\data\274a003.raw
Method : TVHBTXE
Start Time : 0.00 min End Time : 26.00 min
Scale Factor: 1.0 Plot Offset: 1 mV

Sample #: Page 1 of 1
Date : 10/1/03 01:11 PM
Time of Injection: 10/1/03 10:19 AM
Low Point : 0.93 mV High Point : 281.23 mV
Plot Scale: 280.3 mV

Gasoline



Curtis & Tompkins, Ltd.

Total Volatile Hydrocarbons

Lab #:	167885	Location:	Port of Oakland
Client:	Geomatrix Consultants	Prep:	EPA 5030B
Project#:	8207.005	Analysis:	8015B
Field ID:	ZZZZZZZZZZ	Diln Fac:	1.000
MSS Lab ID:	167858-003	Batch#:	84934
Matrix:	Soil	Sampled:	09/29/03
Units:	mg/Kg	Received:	09/29/03
Basis:	as received	Analyzed:	10/01/03

Type: MS Lab ID: QC227420

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	<0.09900	10.20	6.675	65	24-134

Surrogate	%REC	Limits
Trifluorotoluene (FID)	107	56-144
Bromofluorobenzene (FID)	119	51-142

Type: MSD Lab ID: QC227563

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	10.00	6.584	66	24-134	1	32

Surrogate	%REC	Limits
Trifluorotoluene (FID)	107	56-144
Bromofluorobenzene (FID)	118	51-142

RPD= Relative Percent Difference

3.0

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	167885	Location:	Port of Oakland
Client:	Geomatrix Consultants	Prep:	SHAKER TABLE
Project#:	8207.005	Analysis:	EPA 8015B
Matrix:	Soil	Sampled:	09/30/03
Units:	mg/Kg	Received:	09/30/03
Basis:	as received	Prepared:	10/01/03
Diln Fac:	1.000	Analyzed:	10/02/03
Batch#:	84980		

Field ID: DIES-093003-2 Lab ID: 167885-001
Type: SAMPLE Cleanup Method: EPA 3630C

Analyte	Result	RL
Diesel C10-C24	34 H Y	0.99

Surrogate	%REC	Limits
Hexacosane	76	36-141

Field ID: PIPE1-093003-2 Lab ID: 167885-002
Type: SAMPLE Cleanup Method: EPA 3630C

Analyte	Result	RL
Diesel C10-C24	9.6 H Y	1.0

Surrogate	%REC	Limits
Hexacosane	88	36-141

Type: BLANK Cleanup Method: EPA 3630C
Lab ID: QC227537

Analyte	Result	RL
Diesel C10-C24	ND	0.99

Surrogate	%REC	Limits
Hexacosane	62	36-141

H= Heavier hydrocarbons contributed to the quantitation
Y= Sample exhibits chromatographic pattern which does not resemble standard
ND= Not Detected
RL= Reporting Limit

4.

Chromatogram

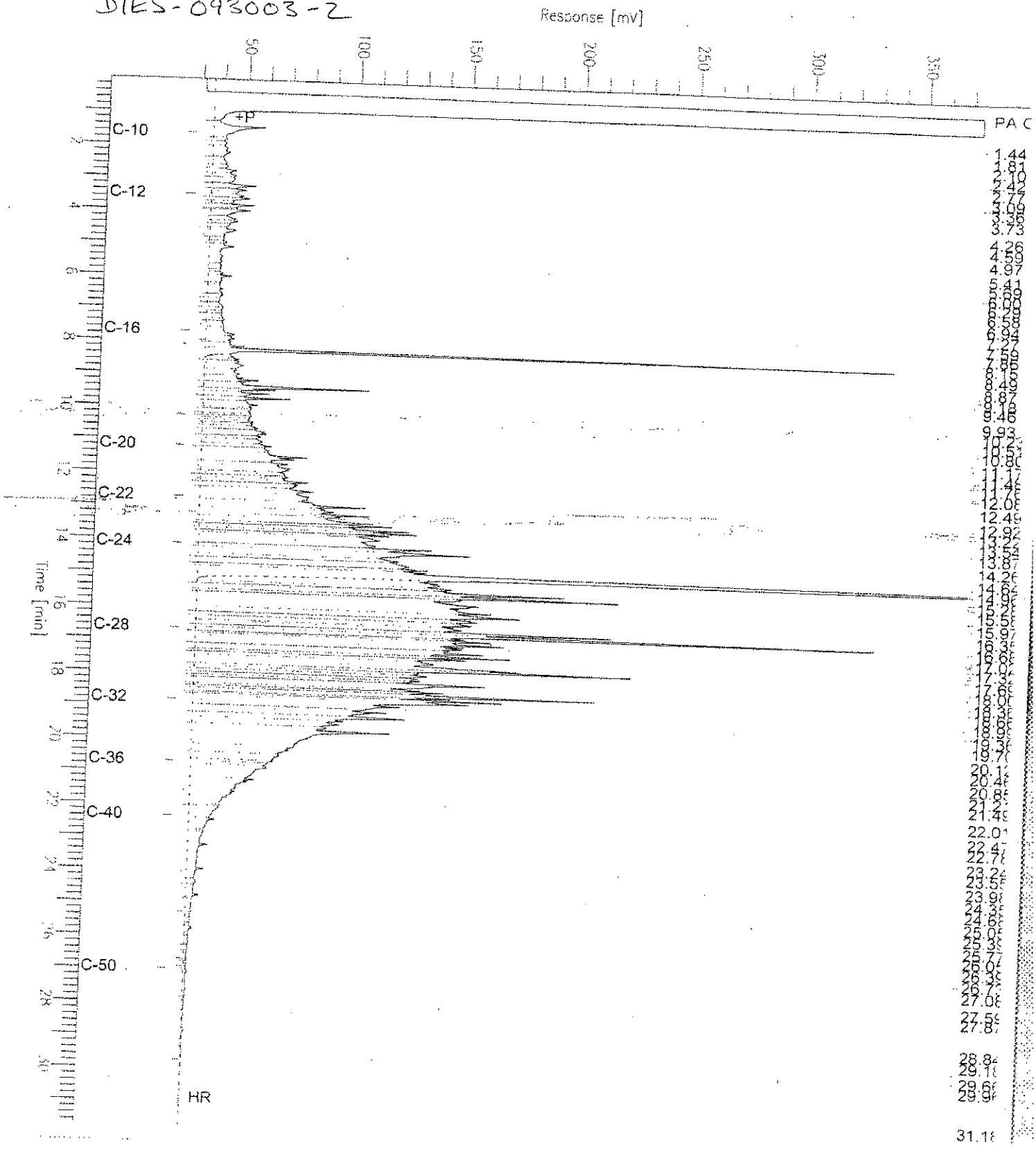
Sample Name : 167885-001sg,84980
FileName : G:\GC13\CHB\275B015.RAW
Method :
Start Time : 0.01 min
Scale Factor: 0.0

End Time : 31.91 min
Plot Offset: 28 mV

Sample #: 84980
Date : 10/3/03 09:12 AM
Time of Injection: 10/2/03 08:50 PM
Low Point : 27.66 mV
Plot Scale: 345.9 mV

High Point : 373.59 mV

DIES-093003-2

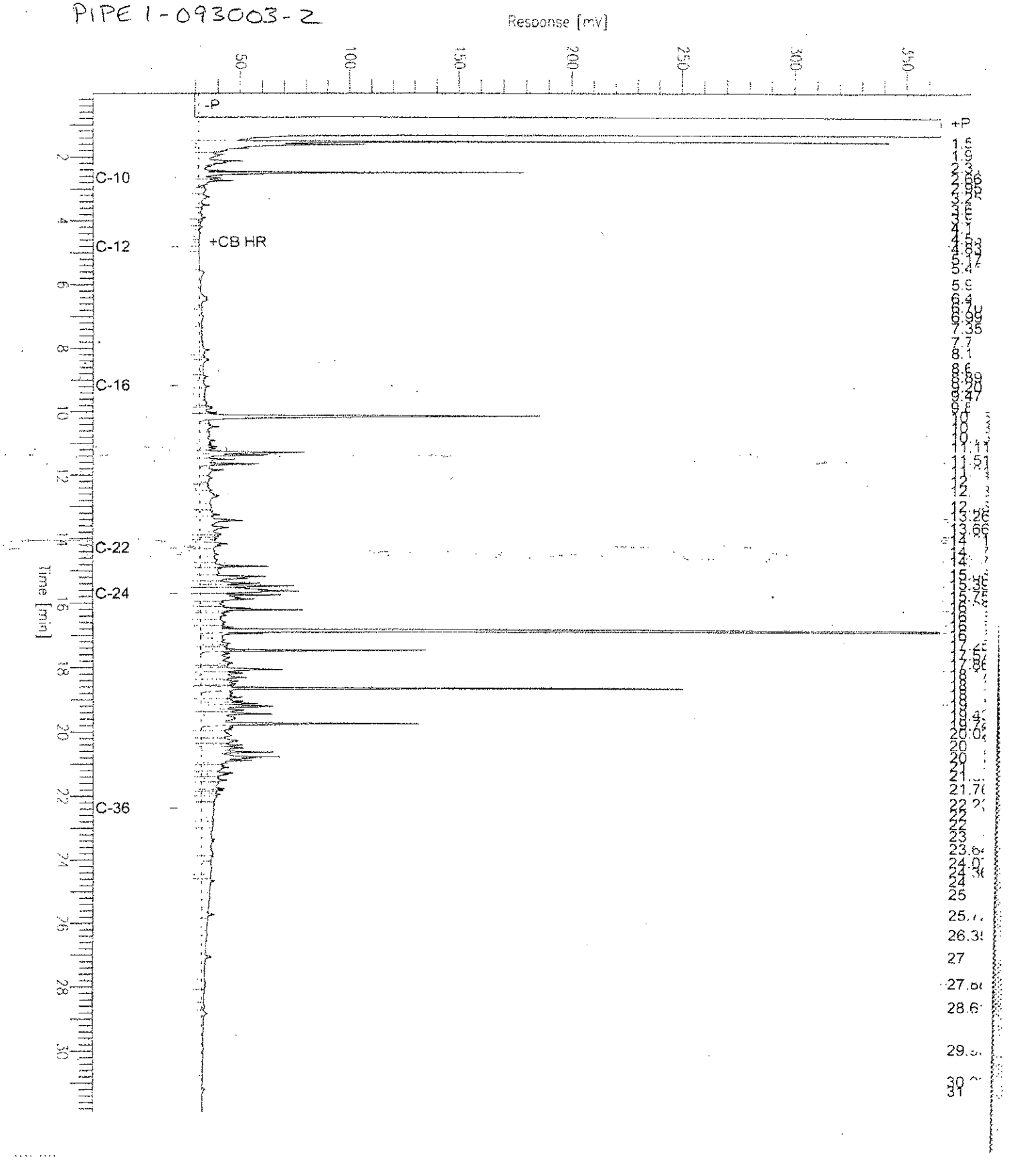


Chromatogram

Sample Name : 167885-002sg,84980
FileName : G:\GC11\CHA\274A028.RAW
Method : ATEH272.MTH
Start Time : 0.01 min End Time : 31.91 min
Scale Factor: 0.0 Plot Offset: 23 mV

Sample #: 84980 Page 1 of 1
Date : 10/2/03 12:27 PM
Time of Injection: 10/2/03 11:46 AM
Low Point : 22.55 mV High Point : 365.08 mV
Plot Scale: 342.5 mV

PIPE 1-093003-2

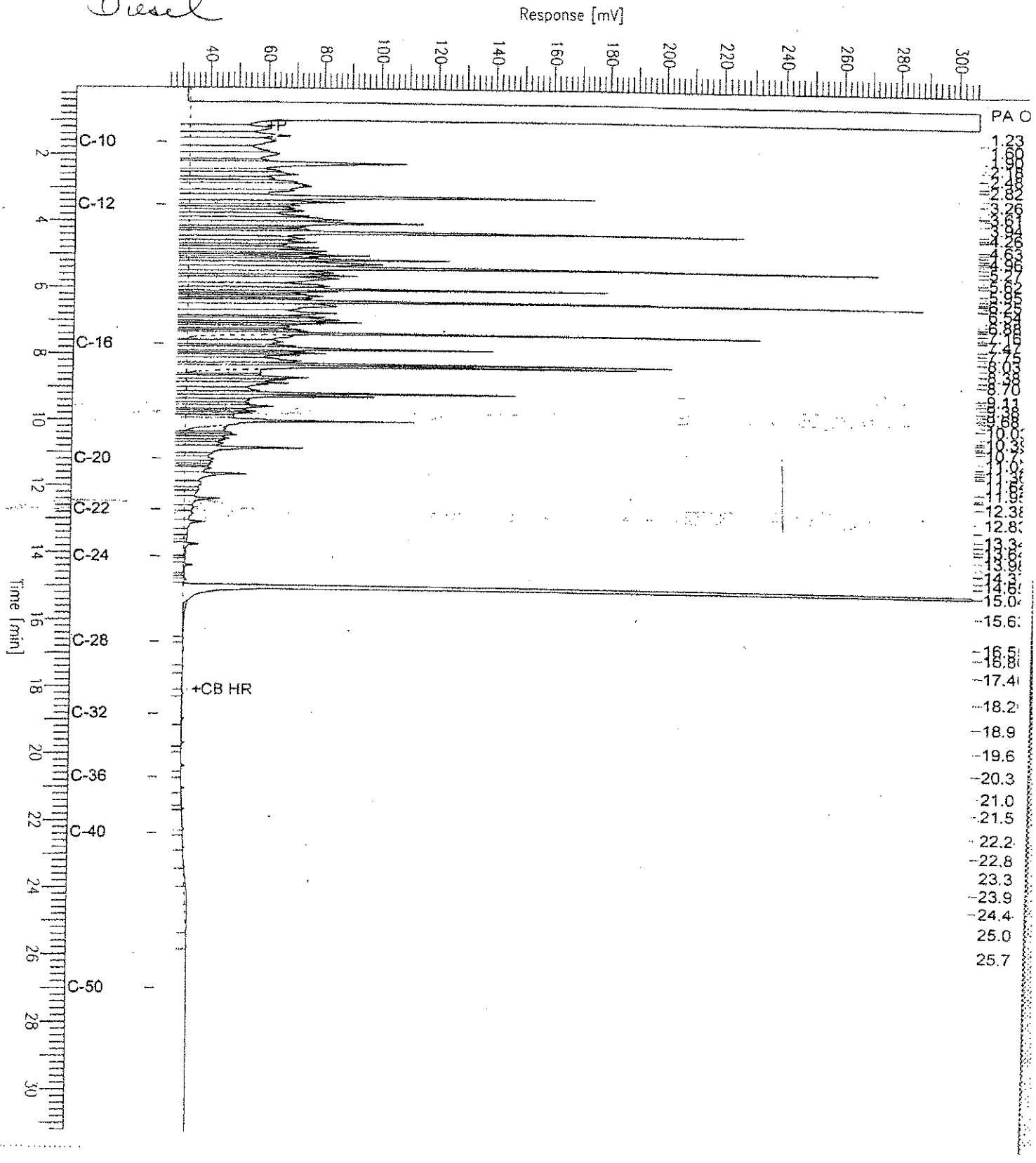


Chromatogram

mple Name : ccv,03ws1374,dsl
leName : G:\GC13\CHB\274B002.RAW
ethod : BTEH264.MTH
Start Time : 0.01 min End Time : 31.91 min
Scale Factor: 0.0 Plot Offset: 25 mV

Sample #: 500mg/L
Date : 10/1/03 10:25 AM
Time of Injection: 10/1/03 09:50 AM
Low Point : 24.66 mV High Point : 306.45 mV
Plot Scale: 281.8 mV

Diesel



Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	167885	Location:	Port of Oakland
Client:	Geomatrix Consultants	Prep:	SHAKER TABLE
Project#:	8207.005	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC227538	Batch#:	84980
Matrix:	Soil	Prepared:	10/01/03
Units:	mg/Kg	Analyzed:	10/02/03
Basis:	as received		

Cleanup Method: EPA 3630C

Analyte	Spiked	Result	%REC	Limits
Diesel C10-C24	49.71	33.67	68	49-129

Surrogate	%REC	Limits
Hexacosane	56	36-141

5.

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	167885	Location:	Port of Oakland
Client:	Geomatrix Consultants	Prep:	SHAKER TABLE
Project#:	8207.005	Analysis:	EPA 8015B
Field ID:	PIPE1-093003-2	Batch#:	84980
MSS Lab ID:	167885-002	Sampled:	09/30/03
Matrix:	Soil	Received:	09/30/03
Units:	mg/Kg	Prepared:	10/01/03
Basis:	as received	Analyzed:	10/02/03
Diln Fac:	1.000		

Type: MS
Lab ID: QC227539

Cleanup Method: EPA 3630C

Analyte	MSS Result	Spiked	Result	%REC	Limits
Diesel C10-C24	9.555	49.75	48.09	77	32-134

Surrogate	%REC	Limits
Hexacosane	81	36-141

Type: MSD
Lab ID: QC227540

Cleanup Method: EPA 3630C

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Diesel C10-C24	49.68	36.33	54	32-134	28	48

Surrogate	%REC	Limits
Hexacosane	64	36-141

RPD= Relative Percent Difference

6.0

Curtis & Tompkins, Ltd.

Purgeable Aromatics by GC/MS

Lab #:	167885	Location:	Port of Oakland
Client:	Geomatrix Consultants	Prep:	EPA 5030B
Project#:	8207.005	Analysis:	EPA 8260B
Field ID:	DIES-093003-2	Diln Fac:	1.000
Lab ID:	167885-001	Batch#:	85022
Matrix:	Soil	Sampled:	09/30/03
Units:	ug/Kg	Received:	09/30/03
Basis:	as received	Analyzed:	10/02/03

Analyte	Result	RL
MTBE	5.3	5.0
Benzene	38	5.0
Toluene	ND	5.0
Ethylbenzene	ND	5.0
m,p-Xylenes	ND	5.0
o-Xylene	ND	5.0

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	104	76-130
Toluene-d8	98	80-120
Bromofluorobenzene	94	76-125

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Aromatics by GC/MS

Lab #:	167885	Location:	Port of Oakland
Client:	Geomatrix Consultants	Prep:	EPA 5030B
Project#:	8207.005	Analysis:	EPA 8260B
Field ID:	PIPE1-093003-2	Diln Fac:	0.9091
Lab ID:	167885-002	Batch#:	85022
Matrix:	Soil	Sampled:	09/30/03
Units:	ug/Kg	Received:	09/30/03
Basis:	as received	Analyzed:	10/02/03

Analyte	Result	RL
MTBE	ND	4.5
Benzene	36	4.5
Toluene	ND	4.5
Ethylbenzene	5.2	4.5
m,p-Xylenes	40	4.5
o-Xylene	11	4.5

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	106	76-130
Toluene-d8	99	80-120
Bromofluorobenzene	94	76-125

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Aromatics by GC/MS

Lab #:	167885	Location:	Port of Oakland
Client:	Geomatrix Consultants	Prep:	EPA 5030B
Project#:	8207.005	Analysis:	EPA 8260B
Type:	BLANK	Basis:	as received
Lab ID:	QC227696	Diln Fac:	1.000
Matrix:	Soil	Batch#:	85022
Units:	ug/Kg	Analyzed:	10/02/03

Analyte	Result	RL
MTBE	ND	5.0
Benzene	ND	5.0
Toluene	ND	5.0
Ethylbenzene	ND	5.0
m,p-Xylenes	ND	5.0
o-Xylene	ND	5.0

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	104	76-130
Toluene-d8	98	80-120
Bromofluorobenzene	94	76-125

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Aromatics by GC/MS

Lab #:	167885	Location:	Port of Oakland
Client:	Geomatrix Consultants	Prep:	EPA 5030B
Project#:	8207.005	Analysis:	EPA 8260B
Type:	LCS	Basis:	as received
Lab ID:	QC227695	Diln Fac:	1.000
Matrix:	Soil	Batch#:	85022
Units:	ug/Kg	Analyzed:	10/02/03

Analyte	Spiked	Result	%REC	Limits
Benzene	50.00	42.52	85	78-120
Toluene	50.00	44.10	88	79-120

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	98	76-130
Toluene-d8	99	80-120
Bromofluorobenzene	88	76-125

10.0

Curtis & Tompkins, Ltd

Purgeable Aromatics by GC/MS

Lab #:	167885	Location:	Port of Oakland
Client:	Geomatrix Consultants	Prep:	EPA 5030B
Project#:	8207.005	Analysis:	EPA 8260B
Field ID:	ZZZZZZZZZZ	Diln Fac:	0.9804
MSS Lab ID:	167903-006	Batch#:	85022
Matrix:	Soil	Sampled:	10/01/03
Units:	ug/Kg	Received:	10/01/03
Basis:	as received	Analyzed:	10/02/03

Type: MS Lab ID: QC227727

Analyte	MSS Result	Spiked	Result	%REC	Limits
Benzene	<0.3900	49.02	40.28	82	55-12
Toluene	<0.4800	49.02	41.00	84	44-12

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	100	76-130
Toluene-d8	99	80-120
Bromofluorobenzene	87	76-125

Type: MSD Lab ID: QC227728

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Benzene	49.02	39.83	81	55-121	1	20
Toluene	49.02	39.89	81	44-129	3	20

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	101	76-130
Toluene-d8	98	80-120
Bromofluorobenzene	88	76-125

RPD= Relative Percent Difference

11.0

Curtis & Tompkins, Ltd.

Lead

Lab #:	167885	Location:	Port of Oakland
Client:	Geomatrix Consultants	Prep:	EPA 3050
Project#:	8207.005	Analysis:	EPA 6010B
Analyte:	Lead	Batch#:	85008
Matrix:	Soil	Sampled:	09/30/03
Units:	mg/Kg	Received:	09/30/03
Basis:	as received	Prepared:	10/02/03
Diln Fac:	1.000	Analyzed:	10/03/03

Field ID	Type	Lab ID	Result	RL
DIES-093003-2	SAMPLE	167885-001	5.2	0.14
PIPE1-093003-2	SAMPLE	167885-002	4.3	0.15
	BLANK	QC227632	ND	0.15

ND= Not Detected
RL= Reporting Limit

12.0

Curtis & Tompkins, Ltd.

Lead

Lab #:	167885	Location:	Port of Oakland
Client:	Geomatrix Consultants	Prep:	EPA 3050
Project#:	8207.005	Analysis:	EPA 6010B
Analyte:	Lead	Diln Fac:	1.000
Matrix:	Soil	Batch#:	85008
Units:	mg/Kg	Prepared:	10/02/03
Basis:	as received	Analyzed:	10/03/03

Type	Lab ID	Spiked	Result	%REC	Limits	RPD	Lim
BS	QC227633	100.0	90.50	91	71-120		
BSD	QC227634	100.0	89.00	89	71-120	2	20

RPD= Relative Percent Difference

13.0

Curtis & Tompkins, Ltd.

Lead

Lab #:	167885	Location:	Port of Oakland
Client:	Geomatrix Consultants	Prep:	EPA 3050
Project#:	8207.005	Analysis:	EPA 6010B
Analyte:	Lead	Diln Fac:	1.000
Field ID:	ZZZZZZZZZZ	Batch#:	85008
MSS Lab ID:	167872-001	Sampled:	09/26/03
Matrix:	Soil	Received:	09/30/03
Units:	mg/Kg	Prepared:	10/02/03
Basis:	as received	Analyzed:	10/03/03

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
MS	QC227635	5.755	98.04	82.35	78	23-137		
MSD	QC227636		93.90	80.28	79	23-137	2	40

RPD= Relative Percent Difference

167885

Chain-of Custody Record

Date: 9/30/03 Page 1 of 1

Project No.: 8207.005

Samplers (Signature:)

M —

Date	Time	Sample Number
9/30/03	1005	DIES-093003-2
9/30/03	1010	PIPE1-093003-2

ANALYSES

Sample Number	EPA Method 8021 (Full Scan)	EPA Method 8021 (Hal. VOCs only)	EPA Method 8021 (BETX only)	EPA Method 8260	EPA Method 8270 (Full Scan)	EPA Method 8270 SIM (PAHS only)	Method 8015m (Gasoline)	Method 8015m (Diesel)	Method 8015m (Motor Oil)	Silica Gel Cleanup	BTEX 8260B MTBE	LEAD 6010B
DIES-093003-2							X	X			X	X
PIPE1-093003-2							X	X			X	X

REMARKS

Sample Number	Soil (S), Water (W) Vapor (V), or Other (o)	Filtered	Preserved	Cooled	No. of Containers
DIES-093003-2	S	-	-	Y	1
PIPE1-093003-2	S	-	-	Y	1

Additional Comments: BILL PORT OF OAKLAND DIRECTLY

MPG

Laboratory: CURTIS & TOMPKINS

Turnaround Time: STANDARD

Results to: JENNIFER PATTERSON

Total No. of Containers: 2

Relinquished by (Signature):	Date: 9/30/03	Relinquished by (Signature):	Date:	Relinquished by (Signature):	Date:	Method of Shipment:	
Printed Name: MATT GOERZ	Time: 1200	Printed Name:	Time:	Printed Name:	Time:	Laboratory Comments and Log No.:	
Company: Geomatrix		Company:		Company:			
Received by:	Date: 9/30	Received by:	Date:	Received by:	Date:		
Printed Name: Peter Petricka	Time: 4:40 pm	Printed Name:	Time:	Printed Name:	Time:		
Company: CT		Company:		Company:			

Geomatrix Consultants
2101 Webster Street, 12th Floor • Oakland, CA 94612
Phone: 510-663-4100 Fax: 510-663-4141

Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878
2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

ANALYTICAL REPORT

Prepared for:

Geomatrix Consultants
2101 Webster Street
12th Floor
Oakland, CA 94612

Date: 10-OCT-03
Lab Job Number: 167716
Project ID: 8207.005
Location:

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signatures. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis.

Reviewed by: _____
Project Manager

Reviewed by: _____
Operations Manager

Curtis & Tompkins, Ltd.

Laboratory Number: 167716
Client: Geomatrix Consultants
Project#: 8207.005
Location: Port of Oakland

Receipt Date: 09/22/03

CASE NARRATIVE

This hardcopy data package contains sample and QC results for one water and four soil samples that were received on September 22, 2003. The samples were received cold and intact.

TPH-Purgeables/BTEX by EPA 8015B/8021

No analytical problems were encountered.

TPH-Extractables by EPA 8015B

All extracts were silica gel cleaned prior to analysis. The soil matrix spike duplicate recovery and the relative percent difference were outside of acceptance limits. This outlier can be attributed to non-homogeneity of the matrix spike sample, which was not from this Project. The associated laboratory control sample met acceptance criteria.

No other analytical problems were encountered.

Volatile Organics by EPA 8260B

No analytical problems were encountered.

California Title 26 Metals by EPA 6020/7470A

The chromium, copper, and nickel matrix spike and matrix spike duplicate recoveries were considered not meaningful because the concentration of these elements in the matrix spike sample was twice the spiked amounts. The associated blank spike and blank spike duplicate met acceptance criteria.

No other analytical problems were encountered.

167114 (1) 018204

Chain-of Custody Record

Date: 9/22/03 Page 1 of 1

Project No.: 8207.005

Samplers (Signature:)

Date	Time	Sample Number
9/22/03	1302	Backfill-092203-1
	1510	T2-N-092203-1
	1515	T1-N-092203-1
	1525	T2-S-092203-1
↓	1545	GW-092203-1

ANALYSES

Sample Number	EPA Method 8021 (Full Scan)	EPA Method 8021 (Hal. VOCs only)	EPA Method 8021 (BETX only)	EPA Method 8260	EPA Method 8270 (Full Scan)	EPA Method 8270 SIM (PAHs only)	Method 8015m (Gasoline)	Method 8015m (Diesel)	Method 8015m (Motor Oil)	Silica Gel Cleanup	CAM-17 Metals	LEAD-Dissolved (1)	MTBE, BTEX (2)	TOTAL-LEAD
Backfill-092203-1				X			X	X			X			
T2-N-092203-1							X	X		###			X	X
T1-N-092203-1							X	X		###			X	X
T2-S-092203-1							X	X			*		X	X
GW-092203-1							X	X		X	X		X	

REMARKS

Sample Number	Soil (S), Water (W) Vapor (V), or Other (o)	Filtered	Preserved	Cooled	No. of Containers
Backfill-092203-1	S	N	N	Y	1
T2-N-092203-1	S	N	–	Y	1
T1-N-092203-1	S	N	–	Y	1
T2-S-092203-1	S	N	–	Y	1
GW-092203-1	W	N	~~N~~	Y	6
					2
					1

Additional Comments

(1) Please Filter Sample before analysis is Sample is not preserved

(2) MTBE, BTEX by 8260

3 40ml VOAs with HCl

2 1 liter Ambers-unpres

1 500ml Poly-unpres..

* Container has HNO_3 Sticker on it, when ph was checked the sample is basic; acid added

JMW 9-22-03 alb MA

Laboratory: CURTIS & TOMPKINS

Turnaround Time: 48 24 HOUR

Results to: DEN PATTERSON

Total No. of Containers: 10

Relinquished by (Signature):	Date: 9/22/03	Relinquished by (Signature):	Date:	Relinquished by (Signature):	Date:
Printed Name: Shakeel Jogia	Time: 1714	Printed Name:	Time:	Printed Name:	Time:
Company: GMX		Company:		Company:	
Received by: Anna Paganetto	Date: 9/22/03	Received by:	Date:	Received by:	Date:
Printed Name: Anna Paganetto	Time: 1714	Printed Name:	Time:	Printed Name:	Time:
Company: Curtis & Tompkins, Ltd.		Company:		Company:	

Method of Shipment: Drop Off

Laboratory Comments and Log No.: Received Cold, on Ice, Intact. AP 9/22/03

Geomatrix Consultants
2101 Webster Street, 12th Floor • Oakland, CA 94612
Phone: 510-663-4100 Fax: 510-663-4141

SOP Volume: Client Services
Section: 1.1.2
Page: 1 of 1
Effective Date: 10-May-99
Revision: 1 Number 3 of 3
Filename: F:\QC\Forms\QC\Cooler.wpd

Curtis & Tompkins, Ltd.

COOLER RECEIPT CHECKLIST

Login#: 167716 Date Received: 9-22-03 Number of Coolers: 1
Client: Geomatrix Project: 8207.005

A. Preliminary Examination Phase
Date Opened: 9-22-03 By (print): Troy Windsor (sign) Troy E Windsor

1. Did cooler come with a shipping slip (airbill, etc.)? YES (NO)
   If YES, enter carrier name and airbill number:
2. Were custody seals on outside of cooler? YES (NO)
   How many and where? Seal date: Seal name: N/A
3. Were custody seals unbroken and intact at the date and time of arrival? YES NO
4. Were custody papers dry and intact when received? (YES) NO
5. Were custody papers filled out properly (ink, signed, etc.)? (YES) NO
6. Did you sign the custody papers in the appropriate place? (YES) NO
7. Was project identifiable from custody papers? (YES) NO
   If YES, enter project name at the top of this form.
8. If required, was sufficient ice used? Samples should be 2-6 degrees C. (YES) NO
   Type of ice: wet Temperature: 4.5

B. Login Phase
Date Logged In: 9-22-03 By (print): Troy Windsor (sign) Troy E Windsor

1. Describe type of packing in cooler: In ziploc bags
2. Did all bottles arrive unbroken? (YES) NO
3. Were labels in good condition and complete (ID, date, time, signature, etc.)? (YES) NO
4. Did bottle labels agree with custody papers? (YES) NO
5. Were appropriate containers used for the tests indicated? (YES) NO
6. Were correct preservatives added to samples? (YES) NO
7. Was sufficient amount of sample sent for tests indicated? * (YES) NO
8. Were bubbles absent in VOA samples? If NO, list sample Ids below. (YES) NO
9. Was the client contacted concerning this sample delivery? YES NO
   If YES, give details below.
   Who was called? By whom? Date:

Additional Comments:
* 7- only 3 vials for TVH & 8020MS

Curtis & Tompkins, Ltd.

Total Volatile Hydrocarbons

Lab #:	167716	Prep:	EPA 5030B
Client:	Geomatrix Consultants	Analysis:	8015B
Project#:	8207.005		
Field ID:	GW-092203-1	Batch#:	84734
Matrix:	Water	Sampled:	09/22/03
Units:	ug/L	Received:	09/22/03
Diln Fac:	1.000	Analyzed:	09/22/03

Type: SAMPLE Lab ID: 167716-005

Analyte	Result	RL
Gasoline C7-C12	1,100 H	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	109	57-150
Bromofluorobenzene (FID)	114	65-144

Type: BLANK Lab ID: QC226564

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	113	57-150
Bromofluorobenzene (FID)	124	65-144

H= Heavier hydrocarbons contributed to the quantitation
ND= Not Detected
RL= Reporting Limit

4.0

Curtis & Tompkins, Ltd

Total Volatile Hydrocarbons

Lab #:	167716	Prep:	EPA 5030B
Client:	Geomatrix Consultants	Analysis:	8015B
Project#:	8207.005		
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC226565	Batch#:	84734
Matrix:	Water	Analyzed:	09/22/03
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	2,000	2,018	101	80-120

Surrogate	%REC	Limits
Trifluorotoluene (FID)	129	57-150
Bromofluorobenzene (FID)	129	65-144

Curtis & Tompkins, Ltd.

Total Volatile Hydrocarbons

Lab #:	167716	Prep:	EPA 5030B
Client:	Geomatrix Consultants	Analysis:	8015B
Project#:	8207.005		
Field ID:	ZZZZZZZZZZ	Batch#:	84734
MSS Lab ID:	167713-001	Sampled:	09/22/03
Matrix:	Water	Received:	09/22/03
Units:	ug/L	Analyzed:	09/22/03
Diln Fac:	1.000		

Type: MS Lab ID: QC226566

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	12.60	2,000	1,970	98	76-120

Surrogate	%REC	Limits
Trifluorotoluene (FID)	128	57-150
Bromofluorobenzene (FID)	125	65-144

Type: MSD Lab ID: QC226567

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	2,000	1,934	96	76-120	2	20

Surrogate	%REC	Limits
Trifluorotoluene (FID)	128	57-150
Bromofluorobenzene (FID)	122	65-144

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Total Volatile Hydrocarbons

Lab #:	167716	Prep:	EPA 5030B
Client:	Geomatrix Consultants	Analysis:	8015B
Project#:	8207.005	Batch#:	84701
Matrix:	Soil	Sampled:	09/22/03
Units:	mg/Kg	Received:	09/22/03
Basis:	as received	Analyzed:	09/22/03
Diln Fac:	1.000		

Field ID: BACKFILL-092203-1 Lab ID: 167716-001
Type: SAMPLE

Analyte	Result	RL
Gasoline C7-C12	ND	1.1

Surrogate	%REC	Limits
Trifluorotoluene (FID)	97	56-144
Bromofluorobenzene (FID)	114	51-142

Field ID: T2-N-092203-1 Lab ID: 167716-002
Type: SAMPLE

Analyte	Result	RL
Gasoline C7-C12	ND	1.0

Surrogate	%REC	Limits
Trifluorotoluene (FID)	96	56-144
Bromofluorobenzene (FID)	114	51-142

Field ID: T1-N-092203-1 Lab ID: 167716-003
Type: SAMPLE

Analyte	Result	RL
Gasoline C7-C12	ND	1.1

Surrogate	%REC	Limits
Trifluorotoluene (FID)	102	56-144
Bromofluorobenzene (FID)	124	51-142

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Total Volatile Hydrocarbons

Lab #:	167716	Prep:	EPA 5030B
Client:	Geomatrix Consultants	Analysis:	8015B
Project#:	8207.005		
Matrix:	Soil	Batch#:	84701
Units:	mg/Kg	Sampled:	09/22/03
Basis:	as received	Received:	09/22/03
Diln Fac:	1.000	Analyzed:	09/22/03

Field ID: T2-S-092203-1 Lab ID: 167716-004
Type: SAMPLE

Analyte	Result	RL
Gasoline C7-C12	ND	1.0

Surrogate	%REC	Limits
Trifluorotoluene (FID)	103	56-144
Bromofluorobenzene (FID)	122	51-142

Type: BLANK Lab ID: QC226471

Analyte	Result	RL
Gasoline C7-C12	ND	1.0

Surrogate	%REC	Limits
Trifluorotoluene (FID)	97	56-144
Bromofluorobenzene (FID)	110	51-142

ND= Not Detected
RL= Reporting Limit

3.0

Curtis & Tompkins, Ltd

Total Volatile Hydrocarbons

Lab #:	167716	Prep:	EPA 5030B
Client:	Geomatrix Consultants	Analysis:	8015B
Project#:	8207.005		
Type:	LCS	Basis:	as received
Lab ID:	QC226472	Diln Fac:	1.000
Matrix:	Soil	Batch#:	84701
Units:	mg/Kg	Analyzed:	09/22/03

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	5.000	5.272	105	80-120

Surrogate	%REC	Limits
Trifluorotoluene (FID)	106	56-144
Bromofluorobenzene (FID)	112	51-142

Curtis & Tompkins, Ltd

Total Volatile Hydrocarbons

Lab #:	167716	Prep:	EPA 5030B
Client:	Geomatrix Consultants	Analysis:	8015B
Project#:	8207.005		
Field ID:	ZZZZZZZZZZ	Diln Fac:	1.000
MSS Lab ID:	167711-001	Batch#:	84701
Matrix:	Soil	Sampled:	09/22/03
Units:	mg/Kg	Received:	09/22/03
Basis:	as received	Analyzed:	09/22/03

Type: MS Lab ID: QC226553

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	0.1229	10.42	10.27	97	24-134

Surrogate	%REC	Limits
Trifluorotoluene (FID)	131	56-144
Bromofluorobenzene (FID)	139	51-142

Type: MSD Lab ID: QC226554

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	10.53	10.73	101	24-134	3	32

Surrogate	%REC	Limits
Trifluorotoluene (FID)	132	56-144
Bromofluorobenzene (FID)	140	51-142

RPD= Relative Percent Difference

3.0

Curtis & Tompkins, Ltd

Total Extractable Hydrocarbons

Lab #:	167716	Prep:	EPA 3520C
Client:	Geomatrix Consultants	Analysis:	EPA 8015B
Project#:	8207.005		
Field ID:	GW-092203-1	Sampled:	09/22/03
Matrix:	Water	Received:	09/22/03
Units:	ug/L	Prepared:	09/23/03
Batch#:	84753	Analyzed:	09/24/03

Type:	SAMPLE	Diln Fac:	10.00
Lab ID:	167716-005	Cleanup Method:	EPA 3630C

Analyte	Result	RL
Diesel C10-C24	54,000	500

Surrogate	%REC	Limits
Hexacosane	DO	44-146

Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC226633	Cleanup Method:	EPA 3630C

Analyte	Result	RL
Diesel C10-C24	ND	50

Surrogate	%REC	Limits
Hexacosane	79	44-146

DO= Diluted Out
ND= Not Detected
RL= Reporting Limit

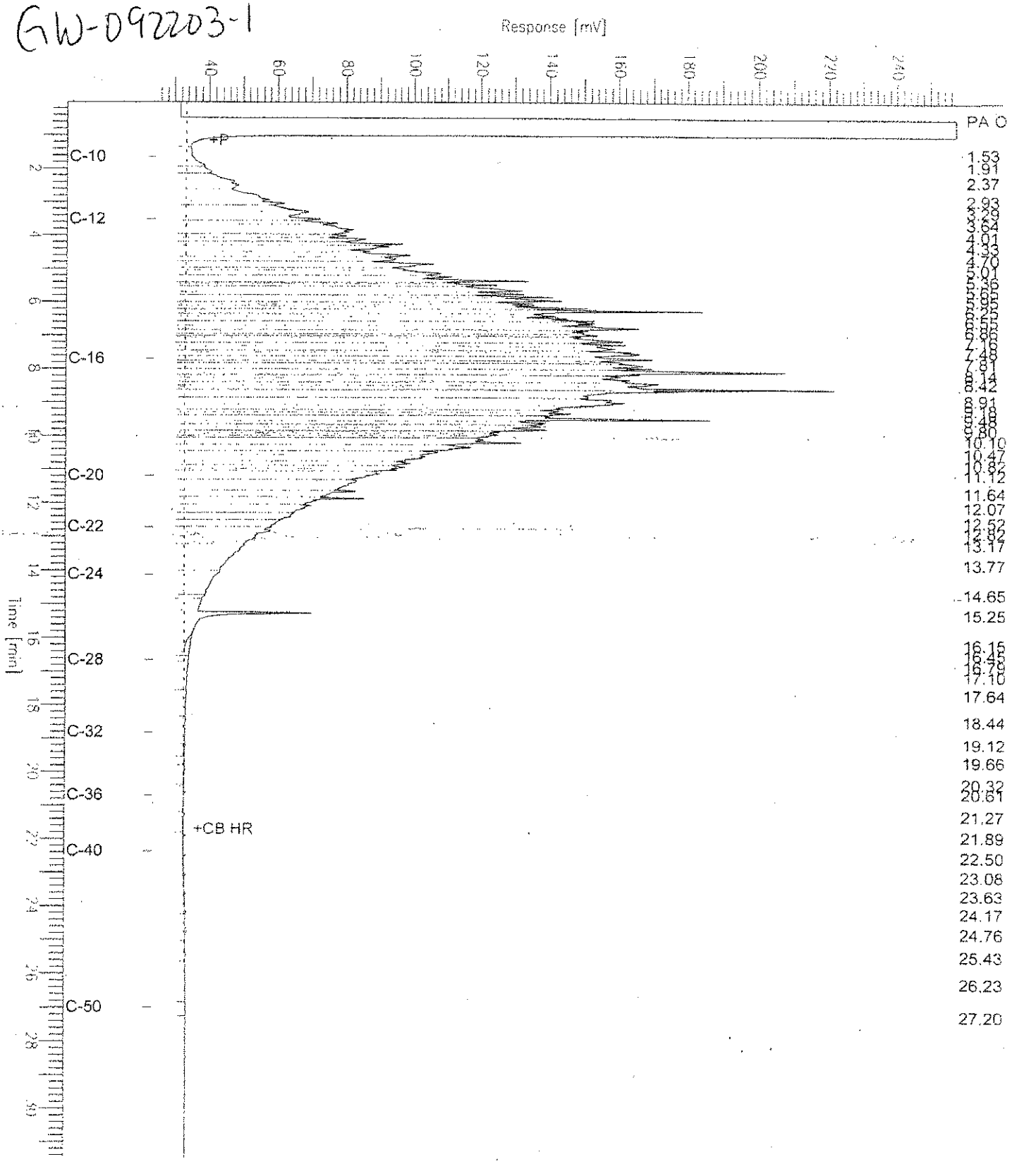
21.1

Chromatogram

Sample Name : 167716-005sg,84753
FileName : G:\GC13\CHB\266B037.RAW
Method : BTEH264.MTH
Start Time : 0.01 min End Time : 31.91 min
Scale Factor: 0.0 Plot Offset: 24 mV

Sample #: 84753 Page 1 of 1
Date : 9/24/03 12:56 PM
Time of Injection: 9/24/03 12:20 PM
Low Point : 24.40 mV High Point : 257.36 mV
Plot Scale: 233.0 mV

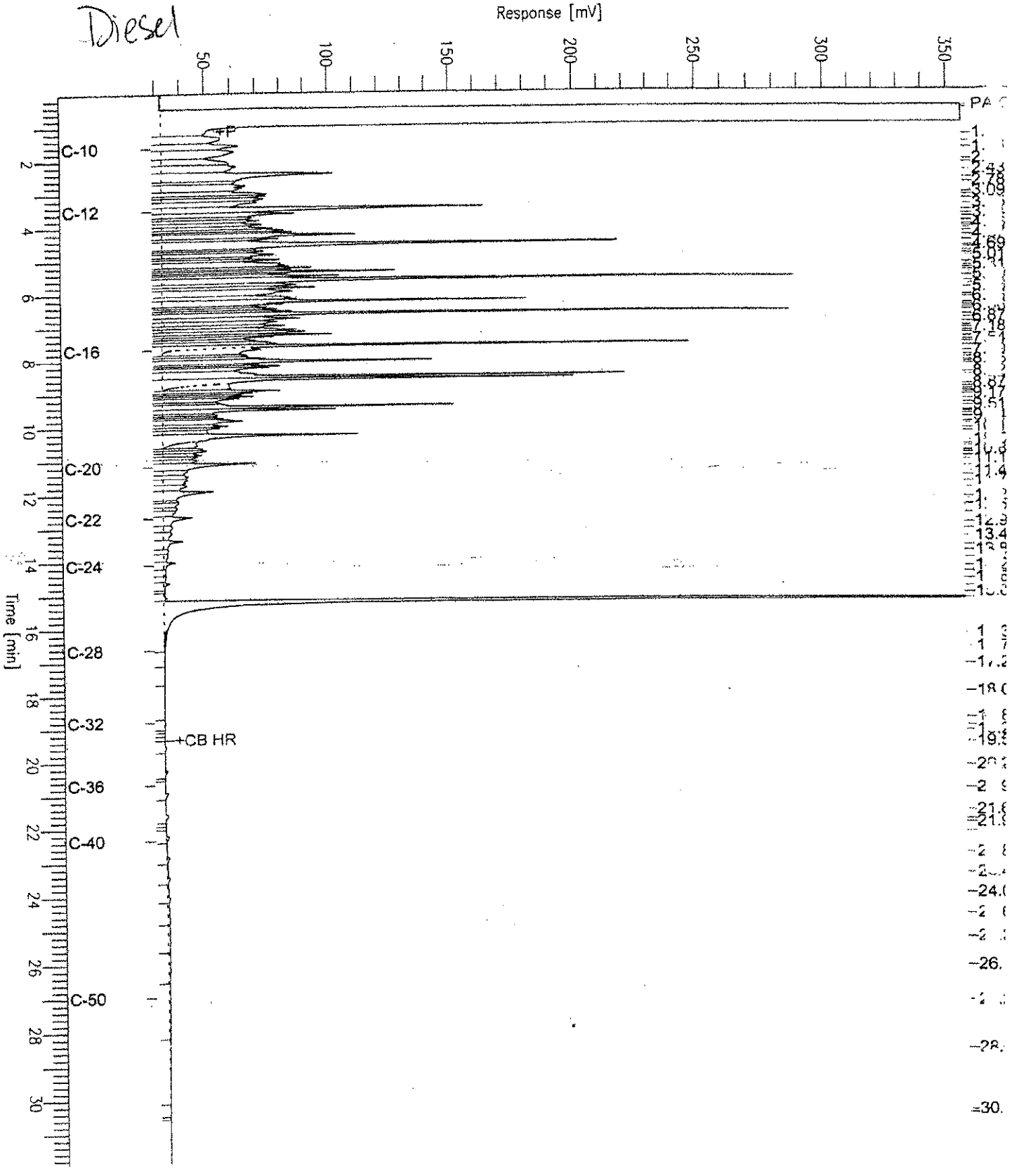
GW-092203-1



Chromatogram

Sample Name : ccv,03ws1374,dsl
FileName : G:\GC13\CHB\266B002.RAW
Method : BTEH264.MTH
Start Time : 0.01 min End Time : 31.91 min
Scale Factor: 0.0 Plot Offset: 29 mV

Sample #: 500mg/L Page 1 of 1
Date : 9/23/03 10:29 AM
Time of Injection: 9/23/03 09:45 AM
Low Point : 28.76 mV High Point : 355.45 mV
Plot Scale: 326.7 mV



Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	167716	Prep:	EPA 3520C
Client:	Geomatrix Consultants	Analysis:	EPA 8015B
Project#:	8207.005		
Matrix:	Water	Batch#:	84753
Units:	ug/L	Prepared:	09/23/03
Diln Fac:	1.000	Analyzed:	09/24/03

Type: BS
Lab ID: QC226634
Cleanup Method: EPA 3630C

Analyte	Spiked	Result	%REC	Limits
Diesel C10-C24	2,500	2,213	89	38-137

Surrogate	%REC	Limits
Hexacosane	92	44-146

Type: BSD
Lab ID: QC226635
Cleanup Method: EPA 3630C

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Diesel C10-C24	2,500	1,799	72	38-137	21	35

Surrogate	%REC	Limits
Hexacosane	75	44-146

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	167716	Prep:	SHAKER TABLE
Client:	Geomatrix Consultants	Analysis:	EPA 8015B
Project#:	8207.005		
Matrix:	Soil	Sampled:	09/22/03
Units:	mg/Kg	Received:	09/22/03
Basis:	as received	Prepared:	09/22/03
Diln Fac:	1.000	Analyzed:	09/23/03
Batch#:	84726		

Field ID: BACKFILL-092203-1 Lab ID: 167716-001
Type: SAMPLE Cleanup Method: EPA 3630C

Analyte	Result	RL
Diesel C10-C24	1.7 H Y	1.0

Surrogate	%REC	Limits
Hexacosane	86	36-141

Field ID: T2-N-092203-1 Lab ID: 167716-002
Type: SAMPLE Cleanup Method: EPA 3630C

Analyte	Result	RL
Diesel C10-C24	18 H Y	1.0

Surrogate	%REC	Limits
Hexacosane	75	36-141

Field ID: T1-N-092203-1 Lab ID: 167716-003
Type: SAMPLE Cleanup Method: EPA 3630C

Analyte	Result	RL
Diesel C10-C24	90 H Y	1.0

Surrogate	%REC	Limits
Hexacosane	82	36-141

Field ID: T2-S-092203-1 Lab ID: 167716-004
Type: SAMPLE Cleanup Method: EPA 3630C

Analyte	Result	RL
Diesel C10-C24	8.2 H Y	1.0

Surrogate	%REC	Limits
Hexacosane	88	36-141

Type: BLANK Cleanup Method: EPA 3630C
Lab ID: QC226538

Analyte	Result	RL
Diesel C10-C24	ND	1.0

Surrogate	%REC	Limits
Hexacosane	91	36-141

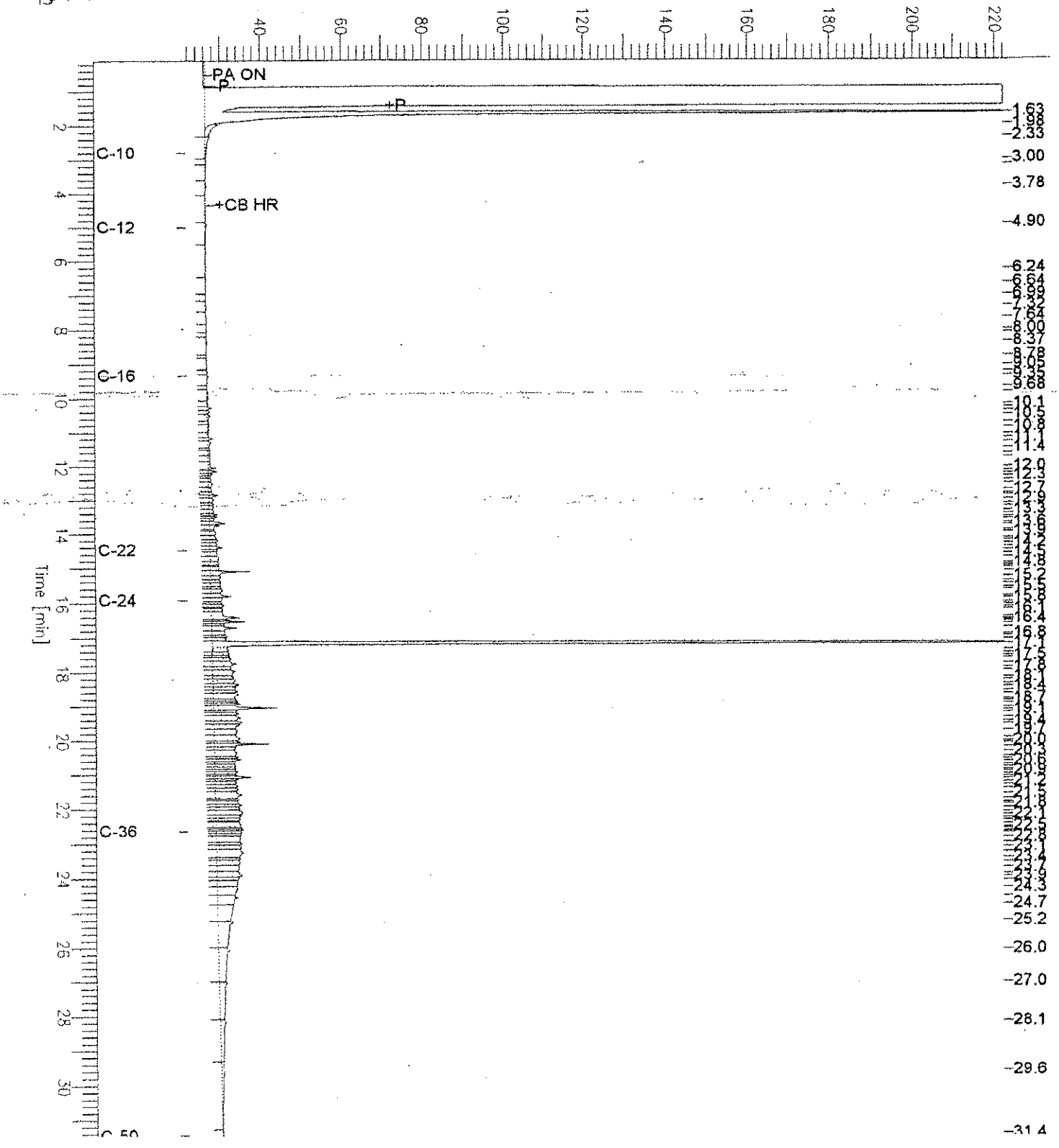
H= Heavier hydrocarbons contributed to the quantitation
Y= Sample exhibits chromatographic pattern which does not resemble standard
ND= Not Detected
RL= Reporting Limit

Chromatogram

Sample Name : 167716-001sg,84726
FileName : G:\GC17\CHA\266A006.RAW
Method : ATEH262.MTH
Start Time : 0.09 min End Time : 31.91 min
Scale Factor: 0.0 Plot Offset: 22 mV

Sample #: 84726 Page 1 of 1
Date : 9/23/03 01:32 PM
Time of Injection: 9/23/03 12:44 PM
Low Point : 21.80 mV High Point : 222.04 mV
Plot Scale: 200.2 mV

BACKFILL-092203-1

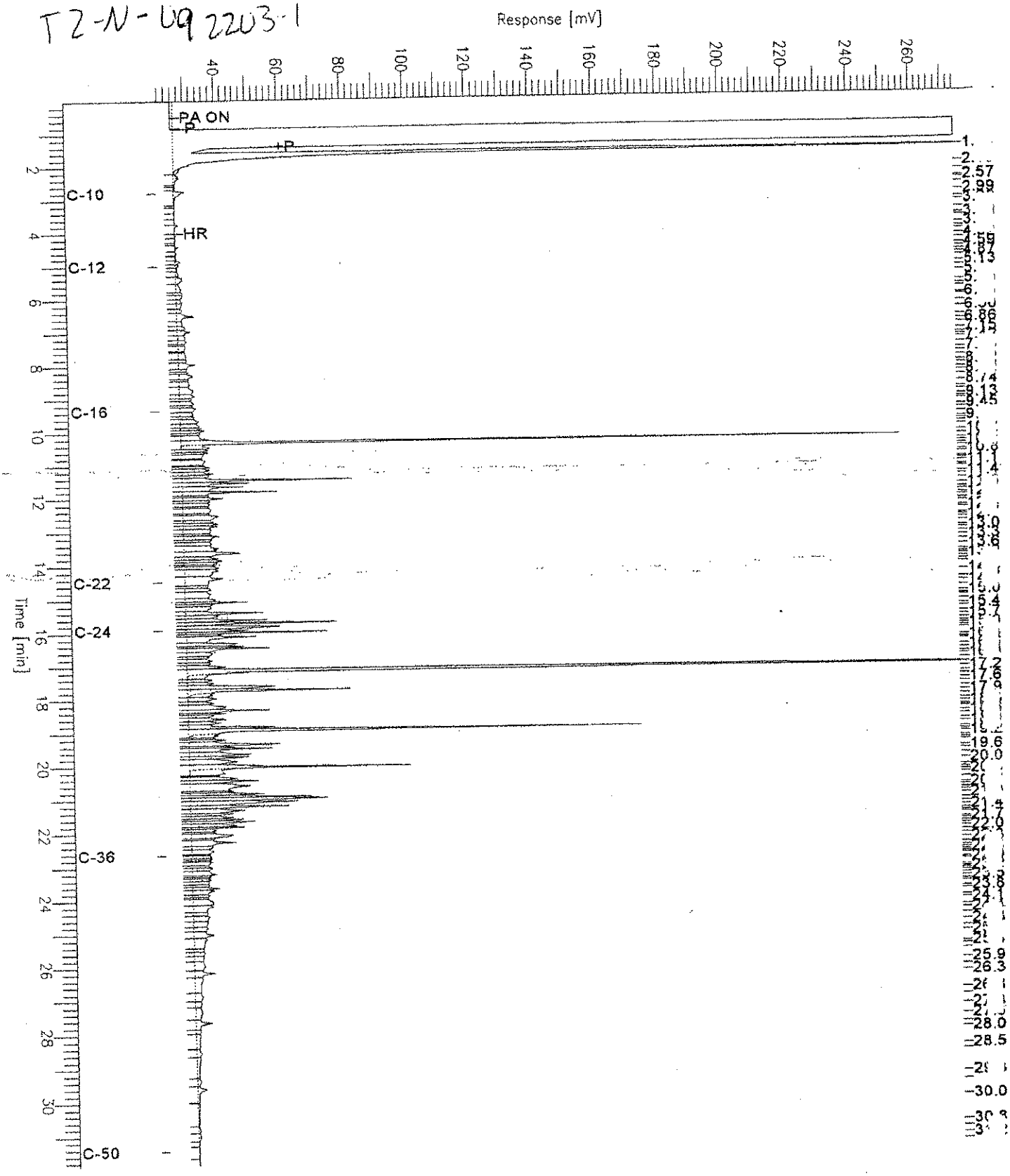


Chromatogram

Sample Name : 167716-002sg,84726
FileName : G:\GC17\CHA\266A008.RAW
Method : ATEH262.MTH
Start Time : 0.01 min End Time : 31.91 min
Scale Factor: 0.0 Plot Offset: 21 mV

Sample #: 84726 Page 1 of 1
Date : 9/23/03 02:37 PM
Time of Injection: 9/23/03 02:04 PM
Low Point : 21.40 mV High Point : 274.23 mV
Plot Scale: 252.8 mV

T2-N-092203-1

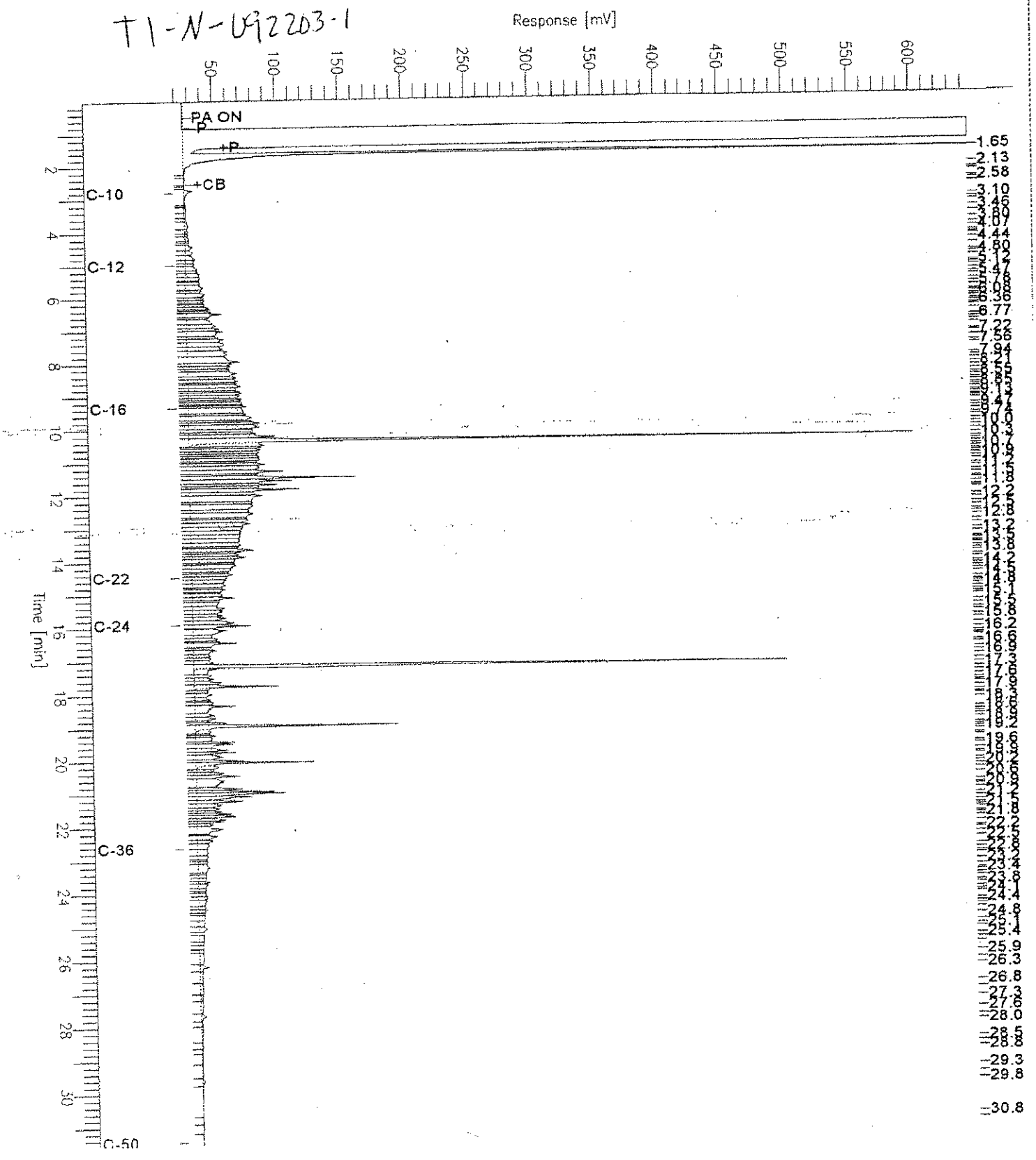


Chromatogram

Sample Name : 167716-003sg,84726
FileName : G:\GC17\CHA\266A009.RAW
Method : ATEH262.MTH
Start Time : 0.01 min End Time : 31.91 min
Scale Factor: 0.0 Plot Offset: 19 mV

Sample #: 84726 Page 1 of 1
Date : 9/23/03 03:54 PM
Time of Injection: 9/23/03 02:57 PM
Low Point : 18.97 mV High Point : 644.78 mV
Plot Scale: 625.8 mV

T1-N-092203-1

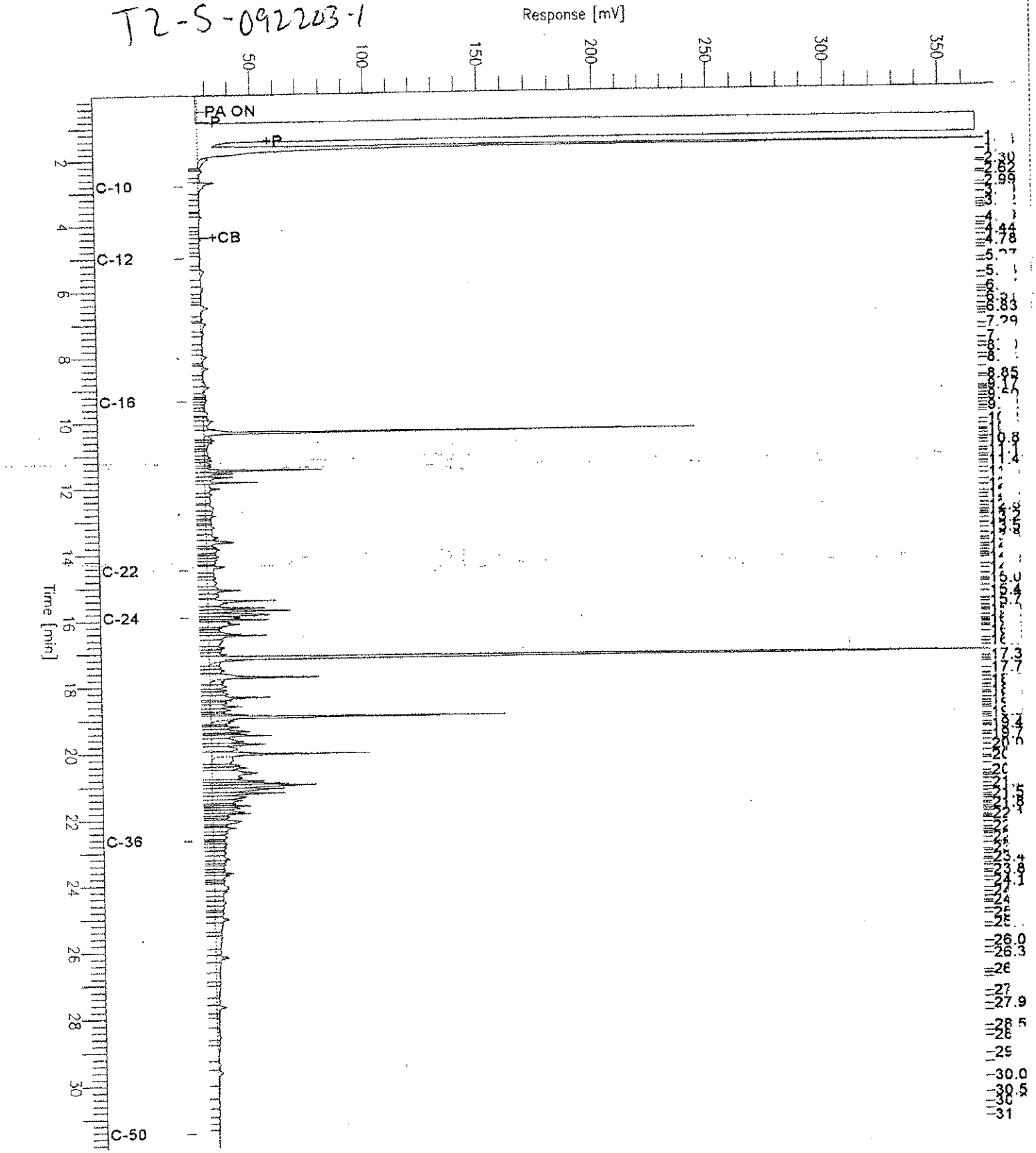


Chromatogram

Sample Name : 167716-004sg,84726
FileName : G:\GC17\CHA\266A007.RAW
Method : ATEH262.MTH
Start Time : 0.01 min
Scale Factor: 0.0
End Time : 31.91 min
Plot Offset: 20 mV

Sample #: 84726
Date : 9/23/03 02:34 PM
Time of Injection: 9/23/03 01:24 PM
Low Point : 20.38 mV
Plot Scale: 345.1 mV
High Point : 365.50 mV

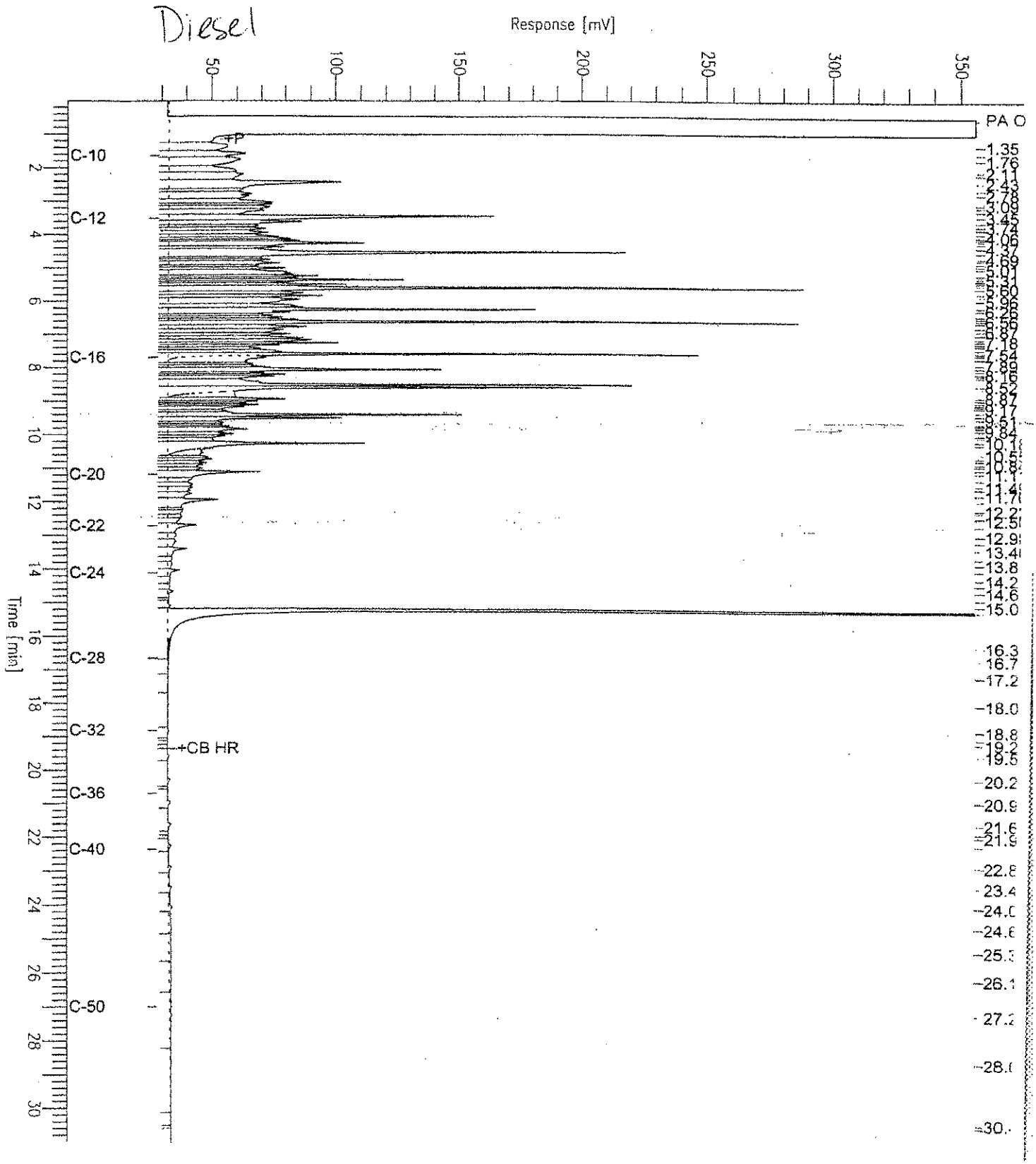
T2-S-092203-1



Chromatogram

mple Name : ccv,03wsl374,dsl
leName : G:\GC13\CHB\266B002.RAW
Method : BTEH264.MTH
Start Time : 0.01 min End Time : 31.91 min
cale Factor: 0.0 Plot Offset: 29 mV

Sample #: 500mg/L
Date : 9/23/03 10:29 AM
Time of Injection: 9/23/03 09:45 AM
Low Point : 28.76 mV High Point : 355.45 mV
Plot Scale: 326.7 mV



Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	167716	Prep:	SHAKER TABLE
Client:	Geomatrix Consultants	Analysis:	EPA 8015B
Project#:	8207.005		
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC226539	Batch#:	84726
Matrix:	Soil	Prepared:	09/22/03
Units:	mg/Kg	Analyzed:	09/23/03
Basis:	as received		

Cleanup Method: EPA 3630C

Analyte	Spiked	Result	%REC	Limits
Diesel C10-C24	50.25	45.56	91	49-129

Surrogate	%REC	Limits
Hexacosane	91	36-141

B.C

Curtis & Tompkins, Ltd

Total Extractable Hydrocarbons

Lab #:	167716	Prep:	SHAKER TABLE
Client:	Geomatrix Consultants	Analysis:	EPA 8015B
Project#:	8207.005		
Field ID:	ZZZZZZZZZZ	Batch#:	84726
MSS Lab ID:	167675-001	Sampled:	09/18/03
Matrix:	Soil	Received:	09/18/03
Units:	mg/Kg	Prepared:	09/22/03
Basis:	as received	Analyzed:	09/23/03
Diln Fac:	1.000		

Type: MS Lab ID: QC226540

Analyte	MSS Result	Spiked	Result	%REC	Limits
Diesel C10-C24	22.21	50.15	68.08	91	32-134

Surrogate	%REC	Limits
Hexacosane	101	36-141

Type: MSD Lab ID: QC226541

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Diesel C10-C24	50.11	121.2	198 *	32-134	56 *	48

Surrogate	%REC	Limits
Hexacosane	98	36-141

*= Value outside of QC limits; see narrative
RPD= Relative Percent Difference

9.0

Curtis & Tompkins, Ltd.

Purgeable Aromatics by GC/MS

Lab #:	167716	Prep:	EPA 5030B
Client:	Geomatrix Consultants	Analysis:	EPA 8260B
Project#:	8207.005		
Field ID:	GW-092203-1	Batch#:	84757
Lab ID:	167716-005	Sampled:	09/22/03
Matrix:	Water	Received:	09/22/03
Units:	ug/L	Analyzed:	09/23/03
Diln Fac:	3.333		

Analyte	Result	RL
MTBE	390	1.7
Benzene	7.8	1.7
Toluene	75	1.7
Ethylbenzene	7.9	1.7
m,p-Xylenes	45	1.7
o-Xylene	21	1.7

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	102	77-129
Toluene-d8	89	80-120
Bromofluorobenzene	98	80-123

RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Aromatics by GC/MS

Lab #:	167716	Prep:	EPA 5030B
Client:	Geomatrix Consultants	Analysis:	EPA 8260B
Project#:	8207.005		
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC226646	Batch#:	84757
Matrix:	Water	Analyzed:	09/23/03
Units:	ug/L		

Analyte	Result	RL
MTBE	ND	0.5
Benzene	ND	0.5
Toluene	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	96	77-129
Toluene-d8	93	80-120
Bromofluorobenzene	105	80-123

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd

Purgeable Aromatics by GC/MS

Lab #:	167716	Prep:	EPA 5030B
Client:	Geomatrix Consultants	Analysis:	EPA 8260B
Project#:	8207.005		
Matrix:	Water	Batch#:	84757
Units:	ug/L	Analyzed:	09/23/03
Diln Fac:	1.000		

Type: BS Lab ID: QC226644

Analyte	Spiked	Result	%REC	Limits
MTBE	50.00	49.54	99	69-124
Benzene	50.00	50.06	100	80-120
Toluene	50.00	45.50	91	80-120
Ethylbenzene	50.00	52.45	105	80-120
m,p-Xylenes	100.0	100.6	101	80-121
o-Xylene	50.00	52.30	105	80-120

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	94	77-129
Toluene-d8	92	80-120
Bromofluorobenzene	104	80-123

Type: BSD Lab ID: QC226645

Analyte	Spiked	Result	%REC	Limits	RPD	Li
MTBE	50.00	52.15	104	69-124	5	20
Benzene	50.00	48.61	97	80-120	3	20
Toluene	50.00	44.38	89	80-120	2	20
Ethylbenzene	50.00	49.28	99	80-120	6	20
m,p-Xylenes	100.0	100.7	101	80-121	0	20
o-Xylene	50.00	50.16	100	80-120	4	20

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	91	77-129
Toluene-d8	92	80-120
Bromofluorobenzene	94	80-123

RPD= Relative Percent Difference

24.0

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	167716	Prep:	EPA 5030B
Client:	Geomatrix Consultants	Analysis:	EPA 8260B
Project#:	8207.005		
Field ID:	BACKFILL-092203-1	Diln Fac:	0.8621
Lab ID:	167716-001	Batch#:	84754
Matrix:	Soil	Sampled:	09/22/03
Units:	ug/Kg	Received:	09/22/03
Basis:	as received	Analyzed:	09/23/03

Analyte	Result	RL
Freon 12	ND	8.6
Chloromethane	ND	8.6
Vinyl Chloride	ND	8.6
Bromomethane	ND	8.6
Chloroethane	ND	8.6
Trichlorofluoromethane	ND	4.3
Acetone	ND	17
Freon 113	ND	4.3
1,1-Dichloroethene	ND	4.3
Methylene Chloride	ND	17
Carbon Disulfide	ND	4.3
MTBE	ND	4.3
trans-1,2-Dichloroethene	ND	4.3
Vinyl Acetate	ND	43
1,1-Dichloroethane	ND	4.3
2-Butanone	ND	8.6
cis-1,2-Dichloroethene	ND	4.3
2,2-Dichloropropane	ND	4.3
Chloroform	ND	4.3
Bromochloromethane	ND	4.3
1,1,1-Trichloroethane	ND	4.3
1,1-Dichloropropene	ND	4.3
Carbon Tetrachloride	ND	4.3
1,2-Dichloroethane	ND	4.3
Benzene	ND	4.3
Trichloroethene	ND	4.3
1,2-Dichloropropane	ND	4.3
Bromodichloromethane	ND	4.3
Dibromomethane	ND	4.3
4-Methyl-2-Pentanone	ND	8.6
cis-1,3-Dichloropropene	ND	4.3
Toluene	ND	4.3
trans-1,3-Dichloropropene	ND	4.3
1,1,2-Trichloroethane	ND	4.3
2-Hexanone	ND	8.6
1,3-Dichloropropane	ND	4.3
Tetrachloroethene	ND	4.3

ND= Not Detected
RL= Reporting Limit

17.0

Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	167716	Prep:	EPA 5030B
Client:	Geomatrix Consultants	Analysis:	EPA 8260B
Project#:	8207.005		
Field ID:	BACKFILL-092203-1	Diln Fac:	0.8621
Lab ID:	167716-001	Batch#:	84754
Matrix:	Soil	Sampled:	09/22/03
Units:	ug/Kg	Received:	09/22/03
Basis:	as received	Analyzed:	09/23/03

Analyte	Result	RL
Dibromochloromethane	ND	4.3
1,2-Dibromoethane	ND	4.3
Chlorobenzene	ND	4.3
1,1,1,2-Tetrachloroethane	ND	4.3
Ethylbenzene	ND	4.3
m,p-Xylenes	ND	4.3
o-Xylene	ND	4.3
Styrene	ND	4.3
Bromoform	ND	4.3
Isopropylbenzene	ND	4.3
1,1,2,2-Tetrachloroethane	ND	4.3
1,2,3-Trichloropropane	ND	4.3
Propylbenzene	ND	4.3
Bromobenzene	ND	4.3
1,3,5-Trimethylbenzene	ND	4.3
2-Chlorotoluene	ND	4.3
4-Chlorotoluene	ND	4.3
tert-Butylbenzene	ND	4.3
1,2,4-Trimethylbenzene	ND	4.3
sec-Butylbenzene	ND	4.3
para-Isopropyl Toluene	ND	4.3
1,3-Dichlorobenzene	ND	4.3
1,4-Dichlorobenzene	ND	4.3
n-Butylbenzene	ND	4.3
1,2-Dichlorobenzene	ND	4.3
1,2-Dibromo-3-Chloropropane	ND	4.3
1,2,4-Trichlorobenzene	ND	4.3
Hexachlorobutadiene	ND	4.3
Naphthalene	ND	4.3
1,2,3-Trichlorobenzene	ND	4.3

Surrogate	%REC	Limits
Dibromofluoromethane	104	74-128
1,2-Dichloroethane-d4	104	76-130
Toluene-d8	98	80-120
Bromofluorobenzene	98	76-125

ND= Not Detected
RL= Reporting Limit

17.0

Curtis & Tompkins, Ltd.

Purgeable Aromatics by GC/MS

Lab #:	167716	Prep:	EPA 5030B
Client:	Geomatrix Consultants	Analysis:	EPA 8260B
Project#:	8207.005		
Field ID:	T2-N-092203-1	Diln Fac:	0.9804
Lab ID:	167716-002	Batch#:	84754
Matrix:	Soil	Sampled:	09/22/03
Units:	ug/Kg	Received:	09/22/03
Basis:	as received	Analyzed:	09/23/03

Analyte	Result	RL
MTBE	97	4.9
Benzene	ND	4.9
Toluene	ND	4.9
Ethylbenzene	ND	4.9
m,p-Xylenes	ND	4.9
o-Xylene	ND	4.9

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	104	76-130
Toluene-d8	97	80-120
Bromofluorobenzene	95	76-125

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd

Purgeable Aromatics by GC/MS

Lab #:	167716	Prep:	EPA 5030B
Client:	Geomatrix Consultants	Analysis:	EPA 8260B
Project#:	8207.005		
Field ID:	T1-N-092203-1	Diln Fac:	1.000
Lab ID:	167716-003	Batch#:	84754
Matrix:	Soil	Sampled:	09/22/03
Units:	ug/Kg	Received:	09/22/03
Basis:	as received	Analyzed:	09/23/03

Analyte	Result	RL
MTBE	110	5.0
Benzene	ND	5.0
Toluene	ND	5.0
Ethylbenzene	ND	5.0
m,p-Xylenes	ND	5.0
o-Xylene	ND	5.0

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	104	76-130
Toluene-d8	98	80-120
Bromofluorobenzene	93	76-125

ND= Not Detected
RL= Reporting Limit

12.0

Curtis & Tompkins, Ltd

Purgeable Aromatics by GC/MS

Lab #:	167716	Prep:	EPA 5030B
Client:	Geomatrix Consultants	Analysis:	EPA 8260B
Project#:	8207.005		
Field ID:	T2-S-092203-1	Batch#:	84754
Lab ID:	167716-004	Sampled:	09/22/03
Matrix:	Soil	Received:	09/22/03
Units:	ug/Kg	Analyzed:	09/23/03
Basis:	as received		

Analyte	Result	RL	Diln Fac
MTBE	330	21	4.167
Benzene	ND	5.0	1.000
Toluene	ND	5.0	1.000
Ethylbenzene	ND	5.0	1.000
m,p-Xylenes	ND	5.0	1.000
o-Xylene	ND	5.0	1.000

Surrogate	%REC	Limits	Diln Fac
1,2-Dichloroethane-d4	104	76-130	1.000
Toluene-d8	97	80-120	1.000
Bromofluorobenzene	96	76-125	1.000

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd

Purgeable Aromatics by GC/MS

Lab #:	167716	Prep:	EPA 5030B
Client:	Geomatrix Consultants	Analysis:	EPA 8260B
Project#:	8207.005		
Type:	BLANK	Basis:	as received
Lab ID:	QC226637	Diln Fac:	1.000
Matrix:	Soil	Batch#:	84754
Units:	ug/Kg	Analyzed:	09/23/03

Analyte	Result	RL
MTBE	ND	5.0
Benzene	ND	5.0
Toluene	ND	5.0
Ethylbenzene	ND	5.0
m,p-Xylenes	ND	5.0
o-Xylene	ND	5.0

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	106	76-130
Toluene-d8	98	80-120
Bromofluorobenzene	92	76-125

ND= Not Detected
RL= Reporting Limit

14.0

Curtis & Tompkins, Ltd

Purgeable Organics by GC/MS

Lab #:	167716	Prep:	EPA 5030B
Client:	Geomatrix Consultants	Analysis:	EPA 8260B
Project#:	8207.005		
Type:	BLANK	Basis:	as received
Lab ID:	QC226637	Diln Fac:	1.000
Matrix:	Soil	Batch#:	84754
Units:	ug/Kg	Analyzed:	09/23/03

Analyte	Result	RL
Freon 12	ND	10
Chloromethane	ND	10
Vinyl Chloride	ND	10
Bromomethane	ND	10
Chloroethane	ND	10
Trichlorofluoromethane	ND	5.0
Acetone	ND	20
Freon 113	ND	5.0
1,1-Dichloroethene	ND	5.0
Methylene Chloride	ND	20
Carbon Disulfide	ND	5.0
MTBE	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
Vinyl Acetate	ND	50
1,1-Dichloroethane	ND	5.0
2-Butanone	ND	10
cis-1,2-Dichloroethene	ND	5.0
2,2-Dichloropropane	ND	5.0
Chloroform	ND	5.0
Bromochloromethane	ND	5.0
1,1,1-Trichloroethane	ND	5.0
1,1-Dichloropropene	ND	5.0
Carbon Tetrachloride	ND	5.0
1,2-Dichloroethane	ND	5.0
Benzene	ND	5.0
Trichloroethene	ND	5.0
1,2-Dichloropropane	ND	5.0
Bromodichloromethane	ND	5.0
Dibromomethane	ND	5.0
4-Methyl-2-Pentanone	ND	10
cis-1,3-Dichloropropene	ND	5.0
Toluene	ND	5.0
trans-1,3-Dichloropropene	ND	5.0
1,1,2-Trichloroethane	ND	5.0
2-Hexanone	ND	10
1,3-Dichloropropane	ND	5.0
Tetrachloroethene	ND	5.0
Dibromochloromethane	ND	5.0

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd

Purgeable Organics by GC/MS

Lab #:	167716	Prep:	EPA 5030B
Client:	Geomatrix Consultants	Analysis:	EPA 8260B
Project#:	8207.005		
Type:	BLANK	Basis:	as received
Lab ID:	QC226637	Diln Fac:	1.000
Matrix:	Soil	Batch#:	84754
Units:	ug/Kg	Analyzed:	09/23/03

Analyte	Result	RL
1,2-Dibromoethane	ND	5.0
Chlorobenzene	ND	5.0
1,1,1,2-Tetrachloroethane	ND	5.0
Ethylbenzene	ND	5.0
m,p-Xylenes	ND	5.0
o-Xylene	ND	5.0
Styrene	ND	5.0
Bromoform	ND	5.0
Isopropylbenzene	ND	5.0
1,1,2,2-Tetrachloroethane	ND	5.0
1,2,3-Trichloropropane	ND	5.0
Propylbenzene	ND	5.0
Bromobenzene	ND	5.0
1,3,5-Trimethylbenzene	ND	5.0
2-Chlorotoluene	ND	5.0
4-Chlorotoluene	ND	5.0
tert-Butylbenzene	ND	5.0
1,2,4-Trimethylbenzene	ND	5.0
sec-Butylbenzene	ND	5.0
para-Isopropyl Toluene	ND	5.0
1,3-Dichlorobenzene	ND	5.0
1,4-Dichlorobenzene	ND	5.0
n-Butylbenzene	ND	5.0
1,2-Dichlorobenzene	ND	5.0
1,2-Dibromo-3-Chloropropane	ND	5.0
1,2,4-Trichlorobenzene	ND	5.0
Hexachlorobutadiene	ND	5.0
Naphthalene	ND	5.0
1,2,3-Trichlorobenzene	ND	5.0

Surrogate	%REC	Limits
Dibromofluoromethane	104	74-128
1,2-Dichloroethane-d4	106	76-130
Toluene-d8	98	80-120
Bromofluorobenzene	92	76-125

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Aromatics by GC/MS

Lab #:	167716	Prep:	EPA 5030B
Client:	Geomatrix Consultants	Analysis:	EPA 8260B
Project#:	8207.005		
Type:	LCS	Basis:	as received
Lab ID:	QC226636	Diln Fac:	1.000
Matrix:	Soil	Batch#:	84754
Units:	ug/Kg	Analyzed:	09/23/03

Analyte	Spiked	Result	%REC	Limits
Benzene	50.00	46.29	93	78-120
Toluene	50.00	45.45	91	79-120

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	104	76-130
Toluene-d8	99	80-120
Bromofluorobenzene	89	76-125

Curtis & Tompkins, Ltd

Purgeable Organics by GC/MS

Lab #:	167716	Prep:	EPA 5030B
Client:	Geomatrix Consultants	Analysis:	EPA 8260B
Project#:	8207.005		
Type:	LCS	Basis:	as received
Lab ID:	QC226636	Diln Fac:	1.000
Matrix:	Soil	Batch#:	84754
Units:	ug/Kg	Analyzed:	09/23/03

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	50.00	48.39	97	72-125
Benzene	50.00	46.29	93	78-120
Trichloroethene	50.00	46.12	92	76-127
Toluene	50.00	45.45	91	79-120
Chlorobenzene	50.00	45.80	92	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	106	74-128
1,2-Dichloroethane-d4	104	76-130
Toluene-d8	99	80-120
Bromofluorobenzene	89	76-125

Curtis & Tompkins, Ltd.

Purgeable Aromatics by GC/MS

Lab #:	167716	Prep:	EPA 5030B
Client:	Geomatrix Consultants	Analysis:	EPA 8260B
Project#:	8207.005		
Field ID:	T2-N-092203-1	Diln Fac:	0.9804
MSS Lab ID:	167716-002	Batch#:	84754
Matrix:	Soil	Sampled:	09/22/03
Units:	ug/Kg	Received:	09/22/03
Basis:	as received	Analyzed:	09/23/03

Type: MS Lab ID: QC226655

Analyte	MSS Result	Spiked	Result	%REC	Limits
Benzene	0.3984	49.02	35.32	71	55-121
Toluene	<0.4800	49.02	34.85	71	44-129

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	105	76-130
Toluene-d8	99	80-120
Bromofluorobenzene	95	76-125

Type: MSD Lab ID: QC226656

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Benzene	49.02	35.02	71	55-121	1	20
Toluene	49.02	33.69	69	44-129	3	20

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	101	76-130
Toluene-d8	98	80-120
Bromofluorobenzene	96	76-125

RPD= Relative Percent Difference

16.0

Curtis & Tompkins, Ltd

Purgeable Organics by GC/MS

Lab #:	167716	Prep:	EPA 5030B
Client:	Geomatrix Consultants	Analysis:	EPA 8260B
Project#:	8207.005		
Field ID:	T2-N-092203-1	Diln Fac:	0.9804
MSS Lab ID:	167716-002	Batch#:	84754
Matrix:	Soil	Sampled:	09/22/03
Units:	ug/Kg	Received:	09/22/03
Basis:	as received	Analyzed:	09/23/03

Type: MS Lab ID: QC226655

Analyte	MSS Result	Spiked	Result	%REC	Limits
1,1-Dichloroethene	<0.2500	49.02	40.22	82	53-135
Benzene	0.3984	49.02	35.32	71	55-121
Trichloroethene	<0.4600	49.02	35.99	73	46-149
Toluene	<0.4800	49.02	34.85	71	44-129
Chlorobenzene	<0.3900	49.02	31.82	65	48-121

Surrogate	%REC	Limits
Dibromofluoromethane	106	74-128
1,2-Dichloroethane-d4	105	76-130
Toluene-d8	99	80-120
Bromofluorobenzene	95	76-125

Type: MSD Lab ID: QC226656

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	49.02	42.73	87	53-135	6	20
Benzene	49.02	35.02	71	55-121	1	20
Trichloroethene	49.02	35.34	72	46-149	2	20
Toluene	49.02	33.69	69	44-129	3	20
Chlorobenzene	49.02	29.62	60	48-121	7	20

Surrogate	%REC	Limits
Dibromofluoromethane	105	74-128
1,2-Dichloroethane-d4	101	76-130
Toluene-d8	98	80-120
Bromofluorobenzene	96	76-125

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd

Lead

Lab #:	167716	Prep:	METHOD
Client:	Geomatrix Consultants	Analysis:	EPA 6010B
Project#:	8207.005		
Analyte:	Lead	Batch#:	84783
Field ID:	GW-092203-1	Sampled:	09/22/03
Matrix:	Filtrate	Received:	09/22/03
Units:	ug/L	Prepared:	09/24/03
Diln Fac:	1.000	Analyzed:	09/24/03

Type	Lab ID	Result	RL
SAMPLE	167716-005	ND	3.0
BLANK	QC226747	ND	3.0

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Lead

Lab #:	167716	Prep:	METHOD
Client:	Geomatrix Consultants	Analysis:	EPA 6010B
Project#:	8207.005		
Analyte:	Lead	Batch#:	84783
Matrix:	Filtrate	Prepared:	09/24/03
Units:	ug/L	Analyzed:	09/24/03
Diln Fac:	1.000		

Type	Lab ID	Spiked	Result	%REC	Limits	RPD	Lim
BS	QC226748	100.0	83.70	84	68-123		
BSD	QC226749	100.0	99.40	99	68-123	17	27

RPD= Relative Percent Difference

37.0

Curtis & Tompkins, Ltd.

Lead

Lab #:	167716	Prep:	METHOD
Client:	Geomatrix Consultants	Analysis:	EPA 6010B
Project#:	8207.005		
Analyte:	Lead	Batch#:	84783
Field ID:	ZZZZZZZZZZ	Sampled:	09/17/03
MSS Lab ID:	167646-002	Received:	09/17/03
Matrix:	Filtrate	Prepared:	09/24/03
Units:	ug/L	Analyzed:	09/24/03
Diln Fac:	1.000		

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
MS	QC226750	<1.300	100.0	74.20	74	33-145		
MSD	QC226751		100.0	94.20	94	33-145	24	43

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd

California Title 26 Metals

Lab #:	167716	Project#:	8207.005
Client:	Geomatrix Consultants		
Field ID:	BACKFILL-092203-1	Basis:	as received
Lab ID:	167716-001	Sampled:	09/22/03
Matrix:	Soil	Received:	09/22/03
Units:	mg/Kg		

Analyte	Result	RL	Diln Fac	Batch#	Prepared	Analyzed	Prep	Analysis
Antimony	ND	2.9	1.000	84771	09/24/03	09/24/03	EPA 3050	EPA 6010B
Arsenic	2.8	0.24	1.000	84771	09/24/03	09/24/03	EPA 3050	EPA 6010B
Barium	29	0.48	1.000	84771	09/24/03	09/24/03	EPA 3050	EPA 6010B
Beryllium	0.21	0.096	1.000	84771	09/24/03	09/24/03	EPA 3050	EPA 6010B
Cadmium	0.91	0.24	1.000	84771	09/24/03	09/24/03	EPA 3050	EPA 6010B
Chromium	7.3	0.48	1.000	84771	09/24/03	09/24/03	EPA 3050	EPA 6010B
Cobalt	20	0.96	1.000	84771	09/24/03	09/24/03	EPA 3050	EPA 6010B
Copper	41	0.48	1.000	84771	09/24/03	09/24/03	EPA 3050	EPA 6010B
Lead	ND	0.14	1.000	84771	09/24/03	09/24/03	EPA 3050	EPA 6010B
Mercury	8.7	0.96	50.00	84746	09/23/03	09/23/03	METHOD	EPA 7471
Molybdenum	ND	0.96	1.000	84771	09/24/03	09/24/03	EPA 3050	EPA 6010B
Nickel	13	0.96	1.000	84771	09/24/03	09/24/03	EPA 3050	EPA 6010B
Selenium	ND	0.24	1.000	84771	09/24/03	09/24/03	EPA 3050	EPA 6010B
Silver	ND	0.24	1.000	84771	09/24/03	09/24/03	EPA 3050	EPA 6010B
Thallium	2.0	0.24	1.000	84771	09/24/03	09/24/03	EPA 3050	EPA 6010B
Vanadium	110	0.48	1.000	84771	09/24/03	09/24/03	EPA 3050	EPA 6010B
Zinc	46	0.96	1.000	84771	09/24/03	09/24/03	EPA 3050	EPA 6010B

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

California Title 26 Metals

Lab #:	167716	Prep:	METHOD
Client:	Geomatrix Consultants	Analysis:	EPA 7471
Project#:	8207.005		
Analyte:	Mercury	Basis:	as received
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC226612	Batch#:	84746
Matrix:	Soil	Prepared:	09/23/03
Units:	mg/Kg	Analyzed:	09/23/03

Result	RL
ND	0.020

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

California Title 26 Metals

Lab #:	167716	Prep:	EPA 3050
Client:	Geomatrix Consultants	Analysis:	EPA 6010B
Project#:	8207.005		
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC226691	Batch#:	84771
Matrix:	Soil	Prepared:	09/24/03
Units:	mg/Kg	Analyzed:	09/24/03
Basis:	as received		

Analyte	Result	RL
Antimony	ND	3.0
Arsenic	ND	0.25
Barium	ND	0.50
Beryllium	ND	0.10
Cadmium	ND	0.25
Chromium	ND	0.50
Cobalt	ND	1.0
Copper	ND	0.50
Lead	ND	0.15
Molybdenum	ND	1.0
Nickel	ND	1.0
Selenium	ND	0.25
Silver	ND	0.25
Thallium	ND	0.25
Vanadium	ND	0.50
Zinc	ND	1.0

ND= Not Detected
RL= Reporting Limit

28.0

Curtis & Tompkins, Ltd.

California Title 26 Metals

Lab #:	167716	Prep:	METHOD
Client:	Geomatrix Consultants	Analysis:	EPA 7471
Project#:	8207.005		
Analyte:	Mercury	Diln Fac:	1.000
Matrix:	Soil	Batch#:	84746
Units:	mg/Kg	Prepared:	09/23/03
Basis:	as received	Analyzed:	09/23/03

Type	Lab ID	Spiked	Result	%REC	Limits	RPD	Lim
BS	QC226613	0.5000	0.5130	103	80-120		
BSD	QC226614	0.5000	0.5320	106	80-120	4	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd

California Title 26 Metals

Lab #:	167716	Prep:	METHOD
Client:	Geomatrix Consultants	Analysis:	EPA 7471
Project#:	8207.005		
Analyte:	Mercury	Diln Fac:	1.000
Field ID:	ZZZZZZZZZZ	Batch#:	84746
MSS Lab ID:	167533-005	Sampled:	09/12/03
Matrix:	Soil	Received:	09/12/03
Units:	mg/Kg	Prepared:	09/23/03
Basis:	as received	Analyzed:	09/23/03

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
MS	QC226615	0.04110	0.4545	0.5682	116	37-144		
MSD	QC226616		0.4386	0.5693	120	37-144	3	3

RPD= Relative Percent Difference

30.

Curtis & Tompkins, Ltd.

California Title 26 Metals

Lab #:	167716	Prep:	EPA 3050
Client:	Geomatrix Consultants	Analysis:	EPA 6010B
Project#:	8207.005		
Matrix:	Soil	Batch#:	84771
Units:	mg/Kg	Prepared:	09/24/03
Basis:	as received	Analyzed:	09/24/03
Diln Fac:	1.000		

Type: BS Lab ID: QC226692

Analyte	Spiked	Result	%REC	Limits
Antimony	100.0	111.0	111	73-134
Arsenic	50.00	45.90	92	74-120
Barium	100.0	94.50	95	72-120
Beryllium	2.500	2.290	92	74-120
Cadmium	10.00	8.700	87	72-120
Chromium	100.0	91.00	91	74-120
Cobalt	25.00	21.85	87	70-120
Copper	12.50	11.85	95	70-120
Lead	100.0	88.50	89	71-120
Molybdenum	20.00	19.15	96	76-120
Nickel	25.00	21.75	87	72-120
Selenium	50.00	41.75	84	66-120
Silver	10.00	9.050	91	66-120
Thallium	50.00	42.60	85	69-120
Vanadium	25.00	23.15	93	74-120
Zinc	25.00	21.60	86	68-120

Type: BSD Lab ID: QC226693

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Antimony	100.0	111.5	112	73-134	0	20
Arsenic	50.00	45.75	92	74-120	0	20
Barium	100.0	95.00	95	72-120	1	20
Beryllium	2.500	2.295	92	74-120	0	20
Cadmium	10.00	8.650	87	72-120	1	20
Chromium	100.0	91.50	92	74-120	1	20
Cobalt	25.00	21.95	88	70-120	0	20
Copper	12.50	11.95	96	70-120	1	20
Lead	100.0	89.50	90	71-120	1	20
Molybdenum	20.00	19.70	99	76-120	3	20
Nickel	25.00	22.05	88	72-120	1	20
Selenium	50.00	41.95	84	66-120	0	20
Silver	10.00	9.100	91	66-120	1	20
Thallium	50.00	43.35	87	69-120	2	20
Vanadium	25.00	23.30	93	74-120	1	20
Zinc	25.00	21.70	87	68-120	0	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

California Title 26 Metals

Lab #:	167716	Prep:	EPA 3050
Client:	Geomatrix Consultants	Analysis:	EPA 6010B
Project#:	8207.005	Batch#:	84771
Field ID:	ZZZZZZZZZZ	Sampled:	09/12/03
MSS Lab ID:	167551-001	Received:	09/12/03
Matrix:	Soil	Prepared:	09/24/03
Units:	mg/Kg	Analyzed:	09/24/03
Basis:	as received		
Diln Fac:	1.000		

Type: MS Lab ID: QC226694

Analyte	MSS Result	Spiked	Result	%REC	Limits
Antimony	3.889	89.69	37.71	38	15-123
Arsenic	2.563	44.84	41.97	88	40-126
Barium	96.63	89.69	183.9	97	19-138
Beryllium	0.2712	2.242	2.233	88	58-120
Cadmium	<0.01900	8.969	7.713	86	47-120
Chromium	238.9	89.69	302.7	71 NM	35-131
Cobalt	31.92	22.42	47.09	68	39-120
Copper	24.38	11.21	34.66	92 NM	32-150
Lead	3.889	89.69	74.89	79	23-137
Molybdenum	0.4466	17.94	14.17	77	28-120
Nickel	524.0	22.42	506.7	-77 NM	32-136
Selenium	<0.1600	44.84	33.95	76	38-120
Silver	0.1000	8.969	8.251	91	55-120
Thallium	1.207	44.84	36.41	79	50-120
Vanadium	36.54	22.42	55.16	83	25-130
Zinc	38.46	22.42	56.50	80	20-147

Type: MSD Lab ID: QC226695

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Antimony	98.04	38.24	35	15-123	7	45
Arsenic	49.02	42.65	82	40-126	7	28
Barium	98.04	182.4	87	19-138	5	30
Beryllium	2.451	2.260	81	58-120	7	20
Cadmium	9.804	7.745	79	47-120	8	24
Chromium	98.04	302.9	65 NM	35-131	2	29
Cobalt	24.51	48.73	69	39-120	0	29
Copper	12.25	32.45	66	32-150	9	45
Lead	98.04	78.92	77	23-137	3	40
Molybdenum	19.61	13.97	69	28-120	10	21
Nickel	24.51	504.9	-78 NM	32-136	1	35
Selenium	49.02	35.44	72	38-120	5	23
Silver	9.804	8.431	85	55-120	7	20
Thallium	49.02	37.16	73	50-120	7	20
Vanadium	24.51	54.41	73	25-130	5	26
Zinc	24.51	53.43	61	20-147	9	32

NM= Not Meaningful
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Lead

Lab #:	167716	Prep:	EPA 3050
Client:	Geomatrix Consultants	Analysis:	EPA 6010B
Project#:	8207.005		
Analyte:	Lead	Batch#:	84771
Matrix:	Soil	Sampled:	09/22/03
Units:	mg/Kg	Received:	09/22/03
Basis:	as received	Prepared:	09/24/03
Diln Fac:	1.000	Analyzed:	09/24/03

Field ID	Type	Lab ID	Result	RL
T2-N-092203-1	SAMPLE	167716-002	4.3	0.14
T1-N-092203-1	SAMPLE	167716-003	4.5	0.14
T2-S-092203-1	SAMPLE	167716-004	4.4	0.14
	BLANK	QC226691	ND	0.15

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Lead

Lab #:	167716	Prep:	EPA 3050
Client:	Geomatrix Consultants	Analysis:	EPA 6010B
Project#:	8207.005		
Analyte:	Lead	Diln Fac:	1.000
Matrix:	Soil	Batch#:	84771
Units:	mg/Kg	Prepared:	09/24/03
Basis:	as received	Analyzed:	09/24/03

Type	Lab ID	Spiked	Result	%REC	Limits	RPD	Lim
BS	QC226692	100.0	88.50	89	71-120		
BSD	QC226693	100.0	89.50	90	71-120	1	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Lead

Lab #:	167716	Prep:	EPA 3050
Client:	Geomatrix Consultants	Analysis:	EPA 6010B
Project#:	8207.005		
Analyte:	Lead	Diln Fac:	1.000
Field ID:	ZZZZZZZZZZ	Batch#:	84771
MSS Lab ID:	167551-001	Sampled:	09/12/03
Matrix:	Soil	Received:	09/12/03
Units:	mg/Kg	Prepared:	09/24/03
Basis:	as received	Analyzed:	09/24/03

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
MS	QC226694	3.889	89.69	74.89	79	23-137		
MSD	QC226695		98.04	78.92	77	23-137	3	40

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878
2323 Fifth Street, Berkeley, CA 94710. Phone (510) 486-0900

ANALYTICAL REPORT

Prepared for:

Geomatrix Consultants
2101 Webster Street
12th Floor
Oakland, CA 94612

Date: 10-OCT-03
Lab Job Number: 167747
Project ID: 8207.005
Location:

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signatures. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis.

Reviewed by: _____
Project Manager

Reviewed by: _____ for JG
Operations Manager

Curtis & Tompkins, Ltd

Laboratory Number: 167747
Client: Geomatrix Consultants
Project#: 8207.005
Location: Port of Oakland

Receipt Date: 09/24/03

CASE NARRATIVE

This hardcopy data package contains sample and QC results for three soil samples that were received on September 22, 2003. The samples were received cold and intact.

TPH-Purgeables/BTEX by EPA 8015B/8021

High bromofluorobenzene surrogate recovery was observed in sample DIES-092403-1. This outlier was due to heavy hydrocarbons coeluting with the surrogate peak. No other analytical problems were encountered.

TPH-Extractables by EPA 8015B

All extracts were silica gel cleaned prior to analysis. Sample DIES-092403-1 was analyzed at a dilution, which caused the surrogate to be diluted out. No other analytical problems were encountered.

Volatile Organics by EPA 8260B

Bromofluorobenzene surrogate recoveries were high in sample DIES-092403 and the matrix spikes. High toluene spike recovery was also observed in the matrix spikes. These outliers can be attributed to matrix interference. The associated laboratory control sample met acceptance criteria. No other analytical problems were encountered.

California Title 26 Metals by EPA 6020/7470A

No analytical problems were encountered.

16777 018124

Chain-of Custody Record

Date: 9/24/03 Page 1 of 1

Project No.: 8207.005

Samplers (Signature:) Stephen Jones Elizabeth Wells

	Date	Time	Sample Number
1	9/24/03	1020	pipe1-092403-1
2	9/24/03	1030	dies-092403-1
3	9/24/03	1035	gaso-092403-1

ANALYSES

	EPA Method 8021 (Full Scan)	EPA Method 8021 (Hal. VOCs only)	EPA Method 8021 (BETX only)	EPA Method 8260	EPA Method 8270 (Full Scan)	EPA Method 8270 SIM (PAHS only)	Method 8015m (Gasoline)	Method 8015m (Diesel)	Method 8015m (Motor Oil)	Silica Gel Cleanup	MTBE & BETX by 8260	Total Lead
1							X	X			X	X
2							X	X			X	X
3							X	X			X	X

REMARKS

	Soil (S), Water (W) Vapor (V), or Other (o)	Filtered	Preserved	Cooled	No. of Containers	Additional Comments
1	S	N	N	Y	1	please invoice
2	S	N	N	Y	1	Port of Oakland
3	S	N	N	Y	1	directly

SWJ 9/24/03

Received ☑ On Ice ☐ Cold ☐ Ambient ☐ Intact

Laboratory: C&T

Turnaround Time: 48-hour

Results to: Jenn Patterson

Total No. of Containers: 3

Relinquished by (Signature):	Date: 9/24/03	Relinquished by (Signature):	Date:	Relinquished by (Signature):	Date:	Method of Shipment: drop off	
Printed Name: Shakeel Jogia	Time: 1138	Printed Name:	Time:	Printed Name:	Time:	Laboratory Comments and Log No.:	
Company: GMX		Company:		Company:			
Received by:	Date: 9/24/03	Received by:	Date:	Received by:	Date:		
Printed Name:	Time: 11:45 am	Printed Name:	Time:	Printed Name:	Time:		
Company: C&T		Company:		Company:			

Geomatrix Consultants
2101 Webster Street, 12th Floor • Oakland, CA 94612
Phone: 510-663-4100 Fax: 510-663-4141

SOP Volume: Client Services
Section: 1.1.2
Page: 1 of 1
Effective Date: 10-May-99
Revision: 1 Number 3 of 3
Filename: F:\QC\Forms\QC\Cooler.wpd

Curtis & Tompkins, Ltd.

COOLER RECEIPT CHECKLIST

Login#: 167747 Date Received: 9/24/03 Number of Coolers: 1
Client: GEOMATRIX Project: _____

A. Preliminary Examination Phase
Date Opened: 9/24/03 By (print): G. HAHN (sign) [signature]

1. Did cooler come with a shipping slip (airbill, etc.)? ..... YES (NO)
   If YES, enter carrier name and airbill number: _____
2. Were custody seals on outside of cooler? ..... YES (NO)
   How many and where? _____ Seal date: _____ Seal name: _____
3. Were custody seals unbroken and intact at the date and time of arrival? ..... YES NO N/A
4. Were custody papers dry and intact when received? ..... (YES) NO
5. Were custody papers filled out properly (ink, signed, etc.)? ..... (YES) NO
6. Did you sign the custody papers in the appropriate place? ..... YES NO N/A
7. Was project identifiable from custody papers? ..... YES (NO)
   If YES, enter project name at the top of this form.
8. If required, was sufficient ice used? Samples should be 2-6 degrees C. ..... (YES) NO
   Type of ice: WET Temperature: COLD

B. Login Phase
Date Logged In: 9/24/03 By (print): G. HAHN (sign) [signature]

1. Describe type of packing in cooler: BAGGED IN ZIPLOC
2. Did all bottles arrive unbroken? ..... (YES) NO
3. Were labels in good condition and complete (ID, date, time, signature, etc.)? ..... (YES) NO
4. Did bottle labels agree with custody papers? ..... (YES) NO
5. Were appropriate containers used for the tests indicated? ..... (YES) NO
6. Were correct preservatives added to samples? ..... YES NO N/A
7. Was sufficient amount of sample sent for tests indicated? ..... (YES) NO
8. Were bubbles absent in VOA samples? If NO, list sample Ids below ..... YES NO N/A
9. Was the client contacted concerning this sample delivery? ..... YES NO
   If YES, give details below.
   Who was called? _____ By whom? _____ Date: _____

Additional Comments:

_____

_____

_____

_____

_____

_____

Curtis & Tompkins, Ltd

Total Volatile Hydrocarbons

Lab #:	167747	Prep:	EPA 5030B
Client:	Geomatrix Consultants	Analysis:	8015B
Project#:	8207.005		
Matrix:	Soil	Batch#:	84805
Units:	mg/Kg	Sampled:	09/24/03
Basis:	as received	Received:	09/24/03
Diln Fac:	1.000	Analyzed:	09/24/03

Field ID: PIPE1-092403-1 Lab ID: 167747-001
Type: SAMPLE

Analyte	Result	RL
Gasoline C7-C12	1.3 H Y	1.1

Surrogate	%REC	Limits
Trifluorotoluene (FID)	103	56-144
Bromofluorobenzene (FID)	117	51-142

Field ID: DIES-092403-1 Lab ID: 167747-002
Type: SAMPLE

Analyte	Result	RL
Gasoline C7-C12	29 H Y	1.0

Surrogate	%REC	Limits
Trifluorotoluene (FID)	108	56-144
Bromofluorobenzene (FID)	153 *	51-142

Field ID: GASO-092403-1 Lab ID: 167747-003
Type: SAMPLE

Analyte	Result	RL
Gasoline C7-C12	ND	1.1

Surrogate	%REC	Limits
Trifluorotoluene (FID)	108	56-144
Bromofluorobenzene (FID)	116	51-142

Type: BLANK Lab ID: QC226844

Analyte	Result	RL
Gasoline C7-C12	ND	1.0

Surrogate	%REC	Limits
Trifluorotoluene (FID)	110	56-144
Bromofluorobenzene (FID)	119	51-142

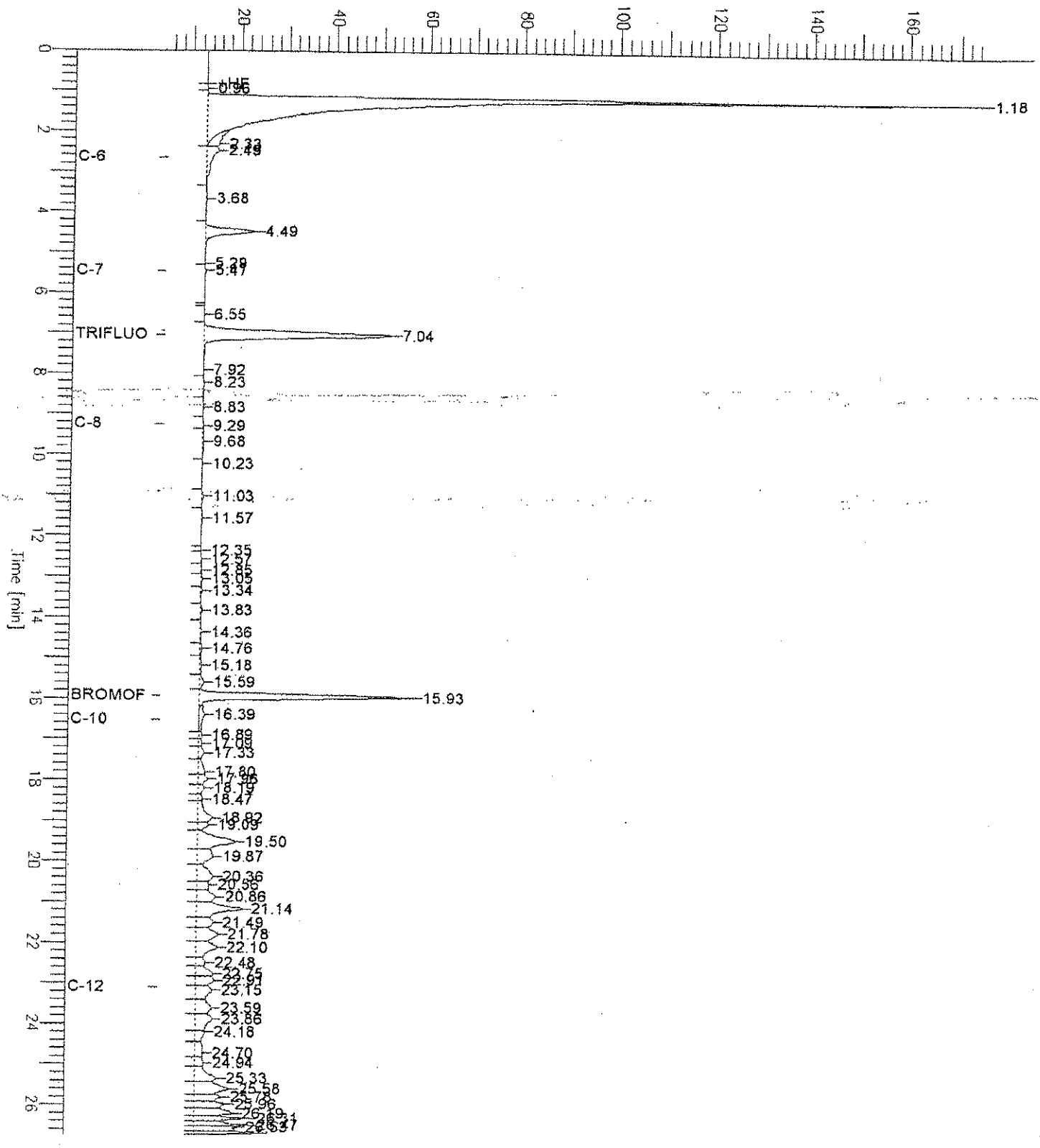
*= Value outside of QC limits; see narrative
H= Heavier hydrocarbons contributed to the quantitation
Y= Sample exhibits chromatographic pattern which does not resemble standard
ND= Not Detected
RL= Reporting Limit

GC19 TVH 'X' Data File (FID)

Sample Name : 167747-001,84805
FileName : G:\GC19\DATA\267X005.raw
Method : TVHBTXE
Start Time : 0.00 min End Time : 26.80 min
Scale Factor: 1.0 Plot Offset: 5 mV

Sample #: a Page 1 of 1
Date : 9/25/03 08:27 AM
Time of Injection: 9/24/03 04:09 PM
Low Point : 4.62 mV High Point : 175.00 mV
Plot Scale: 170.4 mV

PIPE1-092403-1

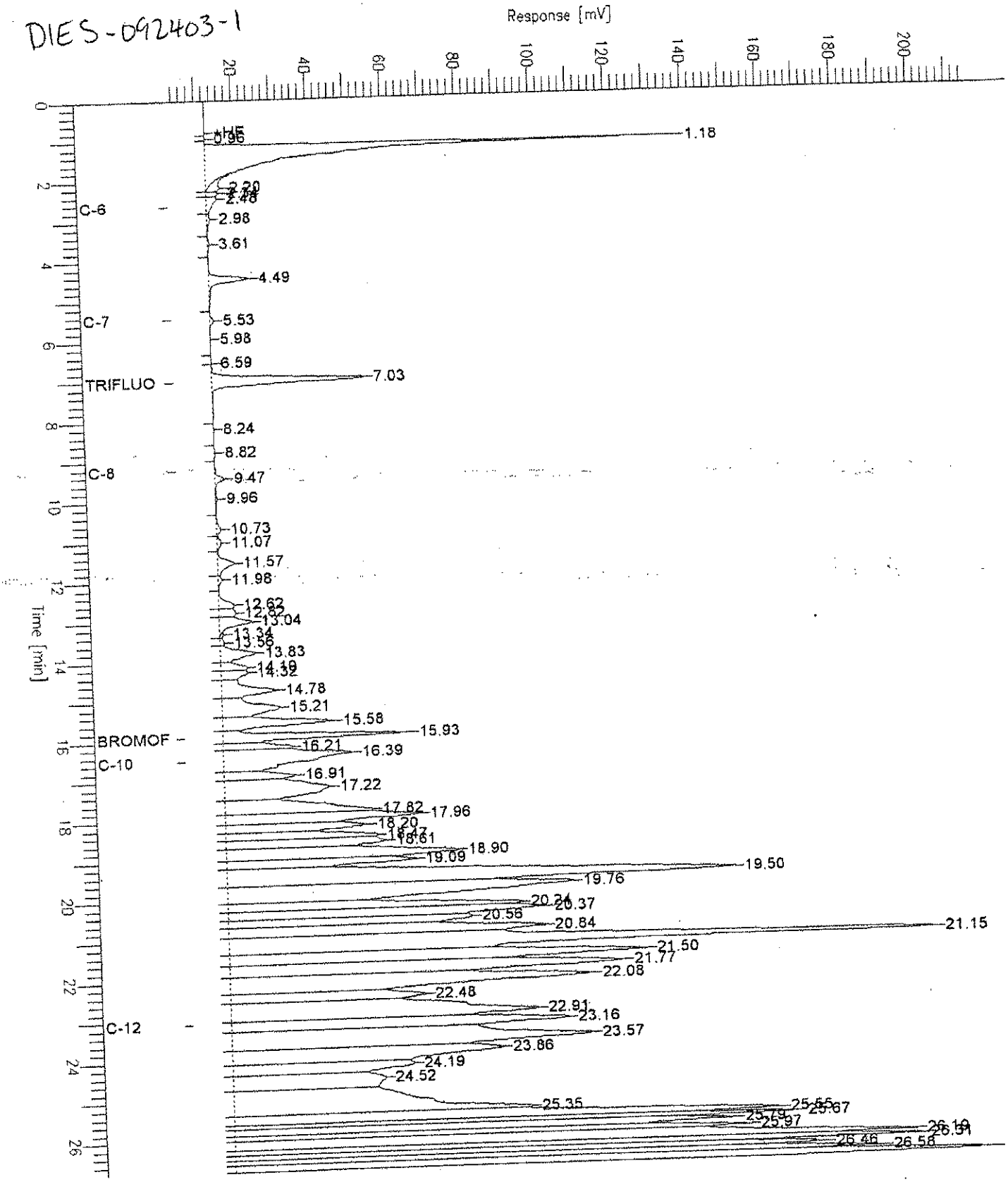


GC19 TVH 'X' Data File (FID)

Sample Name : 167747-002,84805
FileName : G:\GC19\DATA\267X004.raw
Method : TVHBTXE
Start Time : 0.00 min End Time : 26.80 min
Scale Factor: 1.0 Plot Offset: 3 mV

Sample #: a
Date : 9/25/03 08:26 AM
Time of Injection: 9/24/03 03:35 PM
Low Point : 2.53 mV High Point : 215.91 mV
Plot Scale: 213.4 mV

DIES-092403-1

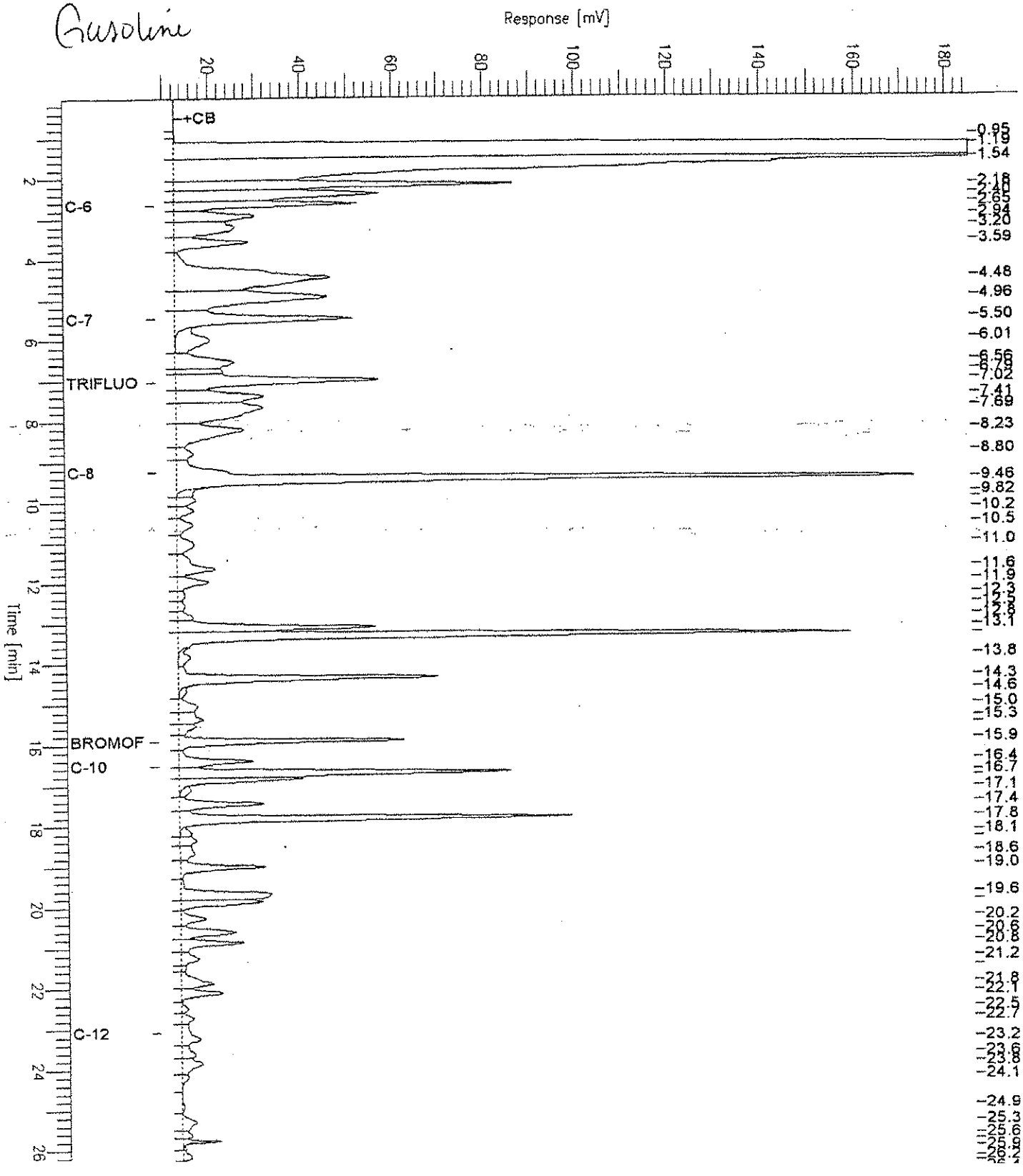


GC19 TVH 'X' Data File (FID)

ample Name : ccv/lcs,qc226845,84805,03ws1106,5/5000
ileName : G:\GC19\DATA\267X001.RAW
Method :
Start Time : 0.02 min End Time : 26.75 min
Scale Factor: 0.0 Plot Offset: 8 mV

Sample #: Page 1 of 1
Date : 9/25/03 09:34 AM
Time of Injection: 9/24/03 01:53 PM
Low Point : 8.42 mV High Point : 185.02 mV
Plot Scale: 176.6 mV

Gasoline



Curtis & Tompkins, Ltd.

Total Volatile Hydrocarbons

Lab #:	167747	Prep:	EPA 5030B
Client:	Geomatrix Consultants	Analysis:	8015B
Project#:	8207.005		
Type:	LCS	Basis:	as received
Lab ID:	QC226845	Diln Fac:	1.000
Matrix:	Soil	Batch#:	84805
Units:	mg/Kg	Analyzed:	09/24/03

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	10.00	10.42	104	80-120

Surrogate	%REC	Limits
Trifluorotoluene (FID)	130	56-144
Bromofluorobenzene (FID)	129	51-142

Curtis & Tompkins, Ltd.

Total Volatile Hydrocarbons

Lab #:	167747	Prep:	EPA 5030B
Client:	Geomatrix Consultants	Analysis:	8015B
Project#:	8207.005		
Field ID:	GASO-092403-1	Diln Fac:	1.000
MSS Lab ID:	167747-003	Batch#:	84805
Matrix:	Soil	Sampled:	09/24/03
Units:	mg/Kg	Received:	09/24/03
Basis:	as received	Analyzed:	09/24/03

Type: MS Lab ID: QC226846

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	<0.06600	9.524	8.421	88	24-134

Surrogate	%REC	Limits
Trifluorotoluene (FID)	126	56-144
Bromofluorobenzene (FID)	122	51-142

Type: MSD Lab ID: QC226847

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	9.804	8.583	88	24-134	1	32

Surrogate	%REC	Limits
Trifluorotoluene (FID)	122	56-144
Bromofluorobenzene (FID)	118	51-142

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd

Total Extractable Hydrocarbons

Lab #:	167747	Prep:	SHAKER TABLE
Client:	Geomatrix Consultants	Analysis:	EPA 8015B
Project#:	8207.005		
Matrix:	Soil	Sampled:	09/24/03
Units:	mg/Kg	Received:	09/24/03
Basis:	as received	Prepared:	09/25/03
Batch#:	84816		

Field ID:	PIPE1-092403-1	Diln Fac:	1.000
Type:	SAMPLE	Analyzed:	09/25/03
Lab ID:	167747-001	Cleanup Method:	EPA 3630C

Analyte	Result	RL
Diesel C10-C24	200 L	1.0

Surrogate	%REC	Limits
Hexacosane	121	36-141

Field ID:	DIES-092403-1	Diln Fac:	20.00
Type:	SAMPLE	Analyzed:	09/26/03
Lab ID:	167747-002	Cleanup Method:	EPA 3630C

Analyte	Result	RL
Diesel C10-C24	2,600 L	20

Surrogate	%REC	Limits
Hexacosane	DO	36-141

Field ID:	GASO-092403-1	Diln Fac:	1.000
Type:	SAMPLE	Analyzed:	09/25/03
Lab ID:	167747-003	Cleanup Method:	EPA 3630C

Analyte	Result	RL
Diesel C10-C24	ND	0.99

Surrogate	%REC	Limits
Hexacosane	83	36-141

Type:	BLANK	Analyzed:	09/25/03
Lab ID:	QC226888	Cleanup Method:	EPA 3630C
Diln Fac:	1.000		

Analyte	Result	RL
Diesel C10-C24	ND	1.0

Surrogate	%REC	Limits
Hexacosane	109	36-141

L= Lighter hydrocarbons contributed to the quantitation
DO= Diluted Out
ND= Not Detected
RL= Reporting Limit

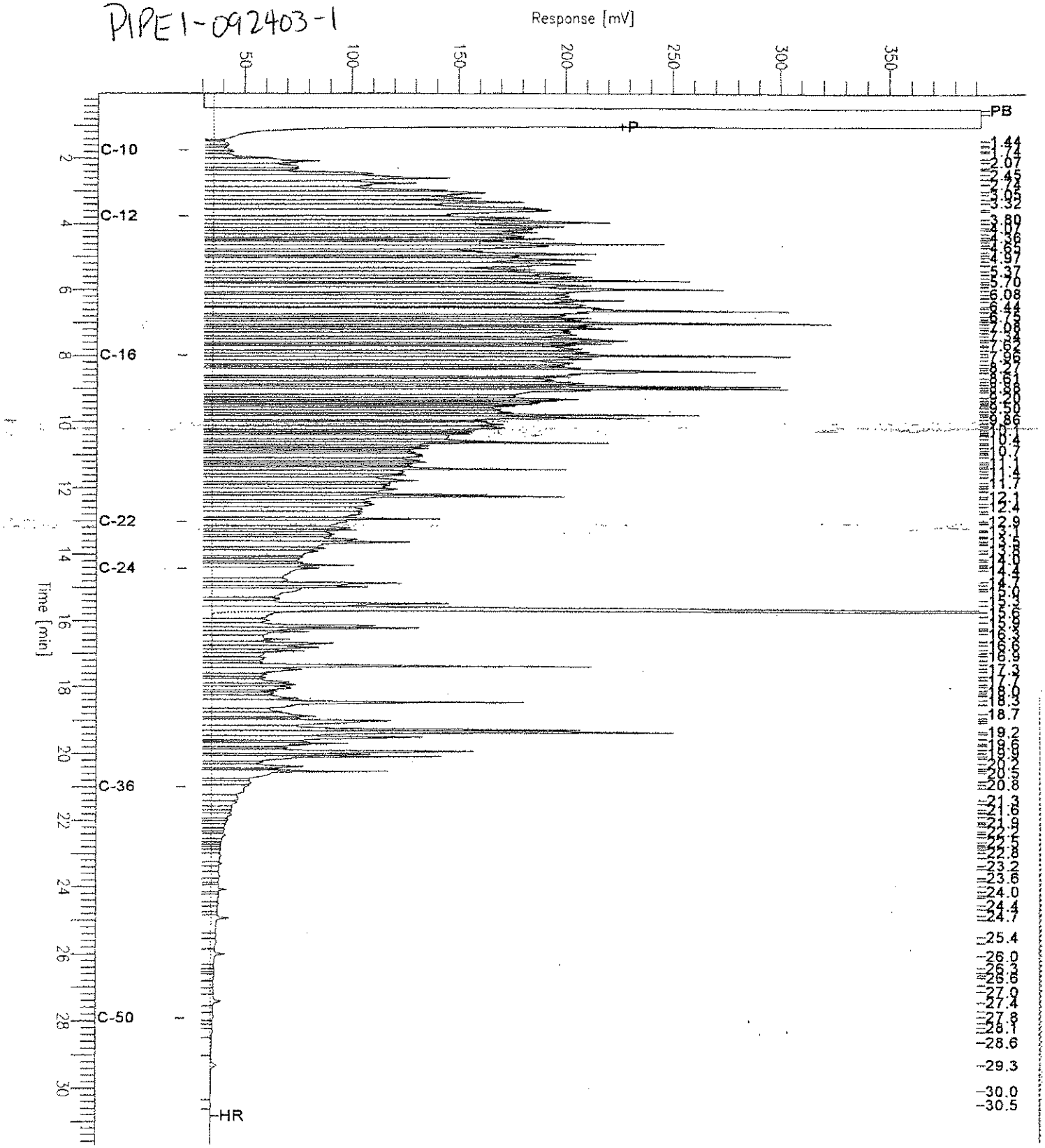
13.1

Chromatogram

Sample Name : 167747-001sg,84816
FileName : G:\GC15\CHB\268B008.RAW
Method : BTEH268.MTH
Start Time : 0.01 min End Time : 31.91 min
Scale Factor: 0.0 Plot Offset: 23 mV

Sample #: 84816 Page 1 of 1
Date : 9/26/03 09:13 AM
Time of Injection: 9/25/03 06:31 PM
Low Point : 23.48 mV High Point : 392.09 mV
Plot Scale: 368.6 mV

PIPE1-092403-1

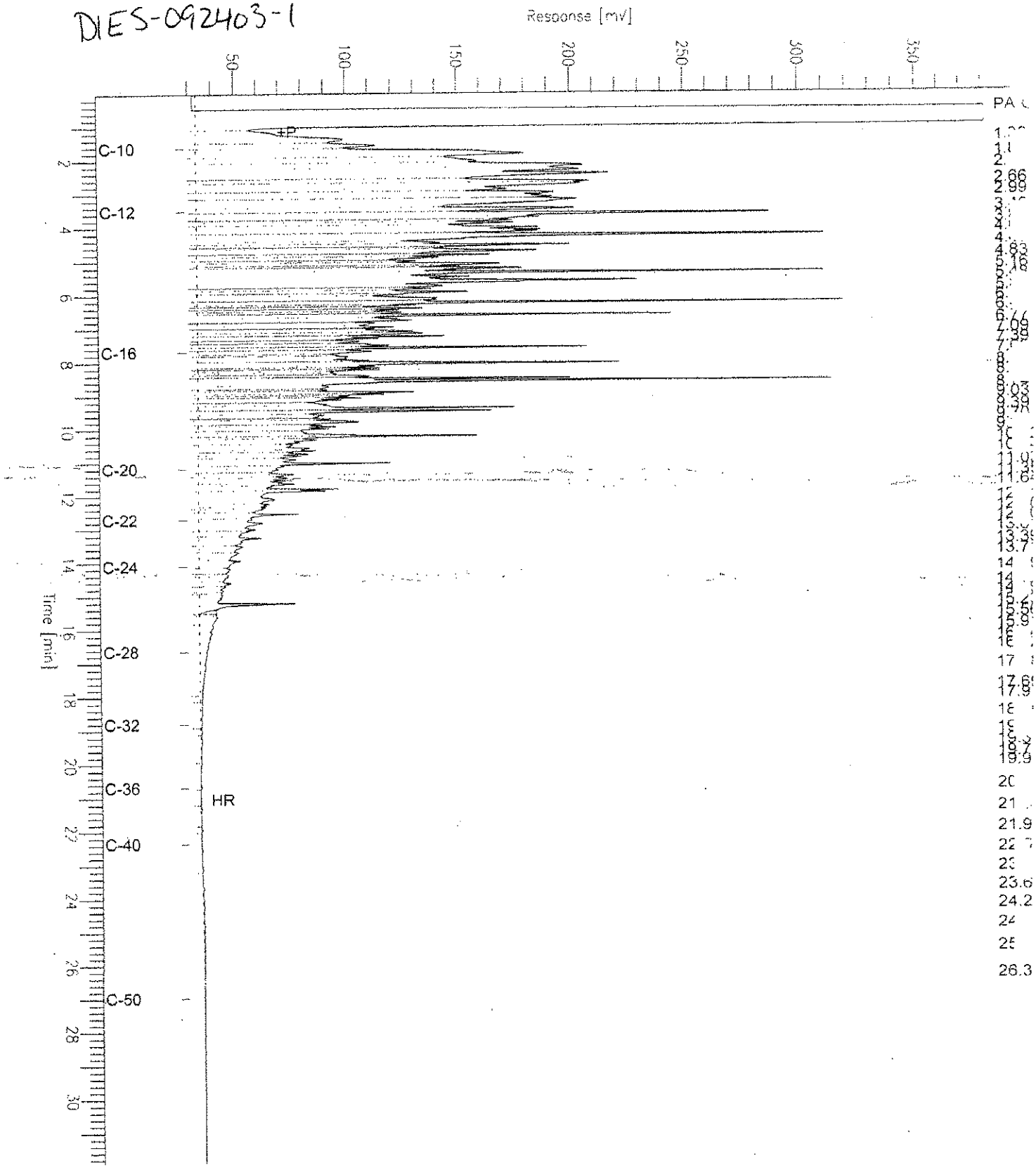


Chromatogram

Sample Name : 167747-002sg,84816
FileName : G:\GC13\CHB\268B030.RAW
Method : BTEH264.MTH
Start Time : 0.01 min End Time : 31.91 min
Scale Factor: 0.0 Plot Offset: 29 mV

Sample #: 84816
Date : 9/26/03 01:20 PM
Time of Injection: 9/26/03 12:47 PM
Low Point : 28.86 mV High Point : 381.80 mV
Plot Scale: 352.9 mV

DIES-092403-1

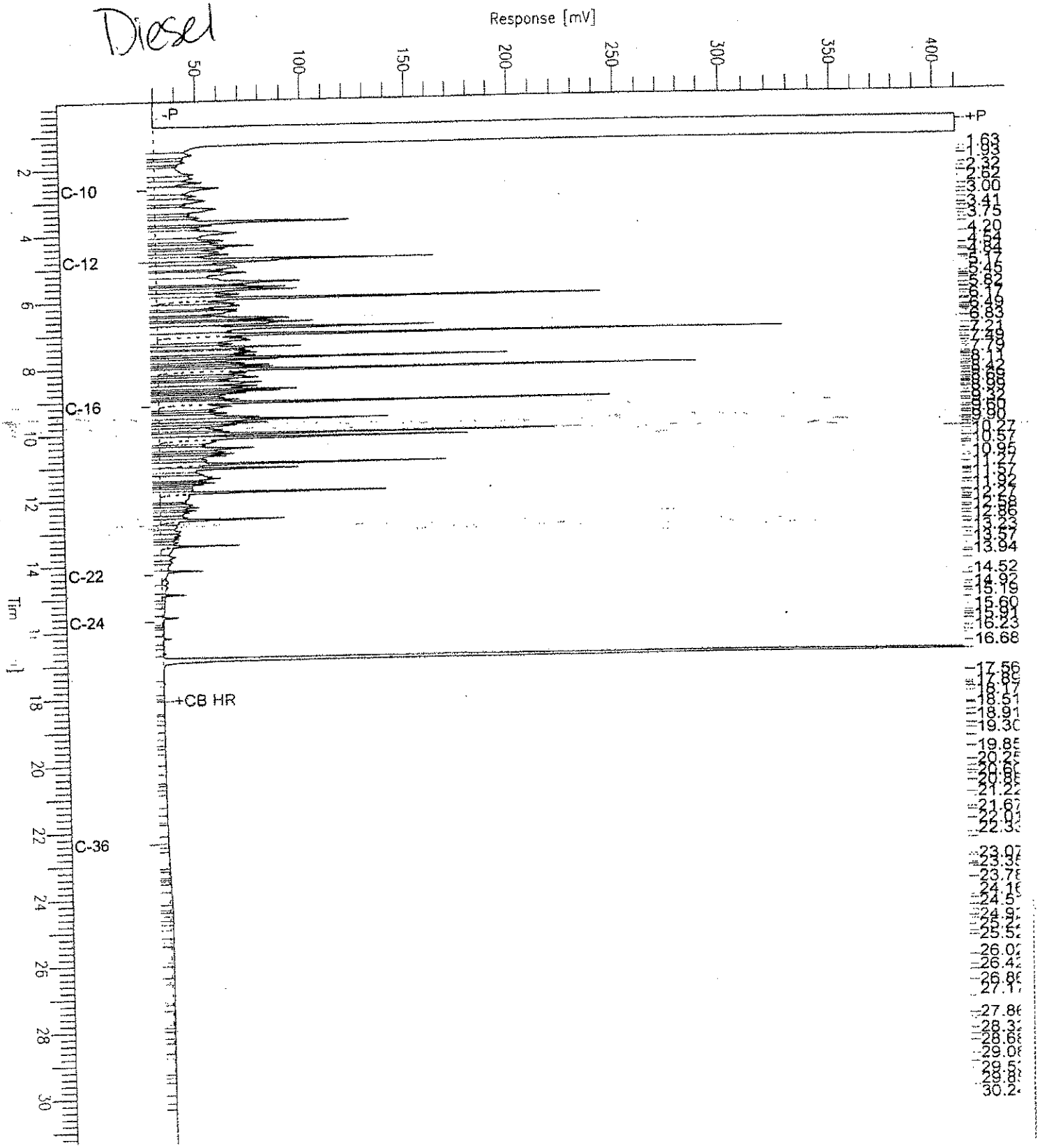


Chromatogram

uple Name : ccv,03ws1374,dsl
.eName : G:\GC11\CHA\268A002.RAW
.thod : ATEH267.MTH
Start Time : 0.01 min End Time : 31.91 min
Scale Factor: 0.0 Plot Offset: 26 mV

Sample #: 500mg/L
Date : 9/25/03 11:17 AM
Time of Injection: 9/25/03 10:15 AM
Low Point : 26.35 mV High Point : 410.33 mV
Plot Scale: 384.0 mV

Diesel



Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	167747	Prep:	SHAKER TABLE
Client:	Geomatrix Consultants	Analysis:	EPA 8015B
Project#:	8207.005		
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC226889	Batch#:	84816
Matrix:	Soil	Prepared:	09/25/03
Units:	mg/Kg	Analyzed:	09/25/03
Basis:	as received		

Cleanup Method: EPA 3630C

Analyte	Spiked	Result	%REC	Limits
Diesel C10-C24	50.13	59.88	119	49-129

Surrogate	%REC	Limits
Hexacosane	116	36-141

14.0

Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	167747	Prep:	SHAKER TABLE
Client:	Geomatrix Consultants	Analysis:	EPA 8015B
Project#:	8207.005		
Field ID:	ZZZZZZZZZZ	Batch#:	84816
MSS Lab ID:	167723-001	Sampled:	09/22/03
Matrix:	Soil	Received:	09/23/03
Units:	mg/Kg	Prepared:	09/25/03
Basis:	as received	Analyzed:	09/25/03
Diln Fac:	1.000		

ype: MS
Lab ID: QC226890

Cleanup Method: EPA 3630C

Analyte	MSS Result	Spiked	Result	%REC	Limits
Diesel C10-C24	18.74	50.07	66.60	96	32-134

Surrogate	%REC	Limits
Hexacosane	110	36-141

Type: MSD
ab ID: QC226891

Cleanup Method: EPA 3630C

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Diesel C10-C24	49.99	72.81	108	32-134	9	48

Surrogate	%REC	Limits
Hexacosane	123	36-141

PD= Relative Percent Difference

15.0

Curtis & Tompkins, Ltd

Purgeable Aromatics by GC/MS

Lab #:	167747	Prep:	EPA 5030B
Client:	Geomatrix Consultants	Analysis:	EPA 8260B
Project#:	8207.005		
Field ID:	PIPE1-092403-1	Diln Fac:	0.9434
Lab ID:	167747-001	Batch#:	84791
Matrix:	Soil	Sampled:	09/24/03
Units:	ug/Kg	Received:	09/24/03
Basis:	as received	Analyzed:	09/24/03

Analyte	Result	RL
MTBE	16	4.7
Benzene	ND	4.7
Toluene	ND	4.7
Ethylbenzene	ND	4.7
m,p-Xylenes	ND	4.7
o-Xylene	ND	4.7

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	105	76-130
Toluene-d8	97	80-120
Bromofluorobenzene	89	76-125

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd

Purgeable Aromatics by GC/MS

Lab #:	167747	Prep:	EPA 5030B
Client:	Geomatrix Consultants	Analysis:	EPA 8260B
Project#:	8207.005		
Field ID:	DIES-092403-1	Diln Fac:	0.9615
Lab ID:	167747-002	Batch#:	84791
Matrix:	Soil	Sampled:	09/24/03
Units:	ug/Kg	Received:	09/24/03
Basis:	as received	Analyzed:	09/24/03

Analyte	Result	RL
MTBE	17	4.8
Benzene	8.3	4.8
Toluene	53	4.8
Ethylbenzene	5.1	4.8
m,p-Xylenes	9.3	4.8
o-Xylene	ND	4.8

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	103	76-130
Toluene-d8	98	80-120
Bromofluorobenzene	134 *	76-125

*= Value outside of QC limits; see narrative
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Aromatics by GC/MS

Lab #:	167747	Prep:	EPA 5030B
Client:	Geomatrix Consultants	Analysis:	EPA 8260B
Project#:	8207.005		
Field ID:	GASO-092403-1	Diln Fac:	0.9615
Lab ID:	167747-003	Batch#:	84833
Matrix:	Soil	Sampled:	09/24/03
Units:	ug/Kg	Received:	09/24/03
Basis:	as received	Analyzed:	09/25/03

Analyte	Result	RL
MTBE	ND	4.8
Benzene	ND	4.8
Toluene	ND	4.8
Ethylbenzene	ND	4.8
m,p-Xylenes	ND	4.8
o-Xylene	ND	4.8

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	106	76-130
Toluene-d8	101	80-120
Bromofluorobenzene	97	76-125

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Purgeable Aromatics by GC/MS

Lab #:	167747	Prep:	EPA 5030B
Client:	Geomatrix Consultants	Analysis:	EPA 8260B
Project#:	8207.005		
Type:	BLANK	Basis:	as received
Lab ID:	QC226774	Diln Fac:	1.000
Matrix:	Soil	Batch#:	84791
Units:	ug/Kg	Analyzed:	09/24/03

Analyte	Result	RL
MTBE	ND	5.0
Benzene	ND	5.0
Toluene	ND	5.0
Ethylbenzene	ND	5.0
m,p-Xylenes	ND	5.0
o-Xylene	ND	5.0

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	104	76-130
Toluene-d8	98	80-120
Bromofluorobenzene	93	76-125

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd

Purgeable Aromatics by GC/MS

Lab #:	167747	Prep:	EPA 5030B
Client:	Geomatrix Consultants	Analysis:	EPA 8260B
Project#:	8207.005		
Type:	BLANK	Basis:	as received
Lab ID:	QC226961	Diln Fac:	1.000
Matrix:	Soil	Batch#:	84833
Units:	ug/Kg	Analyzed:	09/25/03

Analyte	Result	RL
MTBE	ND	5.0
Benzene	ND	5.0
Toluene	ND	5.0
Ethylbenzene	ND	5.0
m,p-Xylenes	ND	5.0
o-Xylene	ND	5.0

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	109	76-130
Toluene-d8	101	80-120
Bromofluorobenzene	110	76-125

ND= Not Detected
RL= Reporting Limit

16.0

Curtis & Tompkins, Ltd

Purgeable Aromatics by GC/MS

Lab #:	167747	Prep:	EPA 5030B
Client:	Geomatrix Consultants	Analysis:	EPA 8260B
Project#:	8207.005		
Type:	LCS	Basis:	as received
Lab ID:	QC226773	Diln Fac:	1.000
Matrix:	Soil	Batch#:	84791
Units:	ug/Kg	Analyzed:	09/24/03

Analyte	Spiked	Result	%REC	Limits
Benzene	50.00	46.37	93	78-120
Toluene	50.00	46.11	92	79-120

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	100	76-130
Toluene-d8	96	80-120
Bromofluorobenzene	88	76-125

Curtis & Tompkins, Ltd.

Purgeable Aromatics by GC/MS

Lab #:	167747	Prep:	EPA 5030B
Client:	Geomatrix Consultants	Analysis:	EPA 8260B
Project#:	8207.005		
Type:	LCS	Basis:	as received
Lab ID:	QC226960	Diln Fac:	1.000
Matrix:	Soil	Batch#:	84833
Units:	ug/Kg	Analyzed:	09/25/03

Analyte	Spiked	Result	%REC	Limits
Benzene	50.00	50.56	101	78-120
Toluene	50.00	47.40	95	79-120

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	112	76-130
Toluene-d8	100	80-120
Bromofluorobenzene	105	76-125

17.0

Curtis & Tompkins, Ltd

Purgeable Aromatics by GC/MS

Lab #:	167747	Prep:	EPA 5030B
Client:	Geomatrix Consultants	Analysis:	EPA 8260B
Project#:	8207.005		
Field ID:	DIES-092403-1	Diln Fac:	0.9615
MSS Lab ID:	167747-002	Batch#:	84791
Matrix:	Soil	Sampled:	09/24/03
Units:	ug/Kg	Received:	09/24/03
Basis:	as received	Analyzed:	09/24/03

Type: MS Lab ID: QC226815

Analyte	MSS Result	Spiked	Result	%REC	Limits
Benzene	8.304	48.08	60.51	109	55-121
Toluene	53.46	48.08	116.2	130 *	44-129

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	106	76-130
Toluene-d8	97	80-120
Bromofluorobenzene	169 *	76-125

Type: MSD Lab ID: QC226816

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Benzene	48.08	61.23	110	55-121	1	20
Toluene	48.08	120.4	139 *	44-129	4	20

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	106	76-130
Toluene-d8	99	80-120
Bromofluorobenzene	150 *	76-125

*= Value outside of QC limits; see narrative
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Purgeable Aromatics by GC/MS

Lab #:	167747	Prep:	EPA 5030B
Client:	Geomatrix Consultants	Analysis:	EPA 8260B
Project#:	8207.005		
Field ID:	ZZZZZZZZZZ	Diln Fac:	0.9615
MSS Lab ID:	167759-001	Batch#:	84833
Matrix:	Soil	Sampled:	09/23/03
Units:	ug/Kg	Received:	09/23/03
Basis:	as received	Analyzed:	09/25/03

Type: MS Lab ID: QC226970

Analyte	MSS Result	Spiked	Result	%REC	Limits
Benzene	<0.07800	48.08	38.87	81	55-121
Toluene	<0.1900	48.08	33.99	71	44-129

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	109	76-130
Toluene-d8	100	80-120
Bromofluorobenzene	89	76-125

Type: MSD Lab ID: QC226971

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Benzene	48.08	39.55	82	55-121	2	20
Toluene	48.08	34.59	72	44-129	2	20

Surrogate	%REC	Limits
1,2-Dichloroethane-d4	105	76-130
Toluene-d8	98	80-120
Bromofluorobenzene	90	76-125

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Lead

Lab #:	167747	Prep:	EPA 3050
Client:	Geomatrix Consultants	Analysis:	EPA 6010B
Project#:	8207.005		
Analyte:	Lead	Batch#:	84812
Matrix:	Soil	Sampled:	09/24/03
Units:	mg/Kg	Received:	09/24/03
Basis:	as received	Prepared:	09/24/03
Diln Fac:	1.000	Analyzed:	09/25/03

Field ID	Type	Lab ID	Result	RL
PIPE1-092403-1	SAMPLE	167747-001	9.7	0.14
DIES-092403-1	SAMPLE	167747-002	6.5	0.12
GASO-092403-1	SAMPLE	167747-003	3.2	0.14
	BLANK	QC226864	ND	0.15

ND= Not Detected
RL= Reporting Limit

10.0

Curtis & Tompkins, Ltd.

Lead

Lab #:	167747	Prep:	EPA 3050
Client:	Geomatrix Consultants	Analysis:	EPA 6010B
Project#:	8207.005		
Analyte:	Lead	Diln Fac:	1.000
Matrix:	Soil	Batch#:	84812
Units:	mg/Kg	Prepared:	09/24/03
Basis:	as received	Analyzed:	09/25/03

Type	Lab ID	Spiked	Result	%REC	Limits	RPD	Lim
BS	QC226865	100.0	89.00	89	71-120		
BSD	QC226866	100.0	89.00	89	71-120	0	20

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Lead

Lab #:	167747	Prep:	EPA 3050
Client:	Geomatrix Consultants	Analysis:	EPA 6010B
Project#:	8207.005		
Analyte:	Lead	Diln Fac:	1.000
Field ID:	ZZZZZZZZZZ	Batch#:	84812
MSS Lab ID:	167688-002	Sampled:	09/17/03
Matrix:	Soil	Received:	09/19/03
Units:	mg/Kg	Prepared:	09/24/03
Basis:	as received	Analyzed:	09/25/03

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
MS	QC226867	4.453	99.50	79.10	75	23-137		
MSD	QC226868		86.21	68.10	74	23-137	1	40

RPD= Relative Percent Difference

GEOMATRIX

Appendix C
Uniform Hazardous Waste Manifests and Certificates of Destruction

Form Approved OMB No. 2050-0039 (Expires 9-30-99)
Please print or type. *Form designed for use on elite (12-pitch) typewriter.*

See instructions on back of page 6.

Department of Toxic Substances Control
Sacramento, California

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.	Manifest Document No.	2. Page 1 of 1	Information in the shaded areas is not required by Federal law.
CA0982501421076811			

GENERATOR

3. Generator's Name and Mailing Address
PORT OF OAKLAND
530 WATER STREET
OAKLAND, CA 94607
4. Generator's Phone (510)627-1134

SITE: PORT OF OAKLAND
EARHART ROAD, BLDG 131
OAKLAND, CA 94607
ATTN: DAWN CRATER

A. State Manifest Document Number: 22907681

B. State Generator's ID:

5. Transporter 1 Company Name: DILLARD ENVIRONMENTAL SVCS
6. US EPA ID Number: CAR000043133
C. State Transporter's ID [Reserved.]
D. Transporter's Phone: (925)634-6850

7. Transporter 2 Company Name:
8. US EPA ID Number:
E. State Transporter's ID [Reserved.]
F. Transporter's Phone:

9. Designated Facility Name and Site Address
EQUILON CONTROL INDUSTRIES
235 PARR BLVD
RICHMOND, CA 94801
10. US EPA ID Number: CAD009466343
G. State Facility's ID:
H. Facility's Phone: (510)235-3393

11. US DOT Description (including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste Number
a. NOS RCRA HAZARDOUS WASTE, SOLID, (CRUDE TANK), (pf: 31023)	001	TP	12000	P	State: 512 EPA/Other: NONE
b. NOS RCRA HAZARDOUS WASTE, SOLID, (CRUDE TANK), (pf: 31024)	001	TP	12000	P	State: 512 EPA/Other: NONE
c.					State: EPA/Other:
d.					State: EPA/Other:

J. Additional Descriptions for Materials Listed Above
LLA X LLB X LLC X LLD X
* : 31023 ** : 31024 *

K. Handling Codes for Wastes Listed Above
a. b. c. d.

15. Special Handling Instructions and Additional Information
JOB# 100-016
Tank Order #03 BP-01, Work Order #201277
Emergency Contact: DILLARD ENV (925)634-6850 WEAR PROPER PROTECTIVE EQUIPMENT (PPE)

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this 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 international and national government regulations.

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Printed/Typed Name	Signature	Month	Day	Year
MICHAEL MCMILLAN		09	12	13

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
Jerry Barksdale		09	12	13

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

FACILITY

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

22907681

DTSC 8022A (1/99)
EPA 8700—22

Blue. GENERATOR SENDS THIS COPY TO DTSC WITHIN 30 DAYS.
To: P.O. Box 400, Sacramento, CA 95812-0400

Please print or type. Form designed for use on elite (12-pitch) typewriter.

Sacramento, California

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. CAD982501421 — Manifest Document No. 07664 — 2. Page 1 of 1

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

3. Generator's Name and Mailing Address
PORT OF OAKLAND
530 WATER STREET
OAKLAND, CA 94607
4. Generator's Phone (510) 627-1134

SITE: PORT OF OAKLAND
EARHART ROAD, BLDG 1311
OAKLAND, CA 94607
ATTN: DAWN CRATER

A. State Manifest Document Number 22907664

B. State Generator's ID

5. Transporter 1 Company Name — 6. US EPA ID Number
DILLARD ENVIRONMENTAL SVCS — CAD982523343

C. State Transporter's ID [Reserved.]

D. Transporter's Phone (925) 634-6850

7. Transporter 2 Company Name — 8. US EPA ID Number

E. State Transporter's ID [Reserved.]

F. Transporter's Phone

9. Designated Facility Name and Site Address
Clean Harbors
2500 West Lokern Road
Buttonwillow, CA 93206-0787
10. US EPA ID Number CAD009606752

G. State Facility's ID

H. Facility's Phone (661) 762-6200

11. US DOT Description (including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste Number
a. NON RCRA HAZARDOUS WASTE, SOLID, (petroleum contaminated debris), (pf: CH46244B)	001	CM	00018	Y	State 331 181 EPA/Other NONE
b.					State EPA/Other
c.					State EPA/Other
d.					State EPA/Other

J. Additional Descriptions for Materials Listed Above
LIA X LIB X LIC X LID X
* CH46244B * Bin # DB3964

K. Handling Codes for Wastes Listed Above
a. b.
c. d.

15. Special Handling Instructions and Additional Information
SUB# 480-016 PO# 09-34591
Task Order #03-AP-01, Work Order #201275
Emergency Contact: DILLARD ENV (925) 634-6850 WEAR PROPER PROTECTIVE EQUIPMENT (PPE)

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this 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 international and national government regulations.

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Printed/Typed Name	Signature	Month	Day	Year
X COLLEEN LIANG	X	09	25	03

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
Jaeger	Moglia X	09	25	03

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.

GENERATOR — TRANSPORTER — FACILITY

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

DTSC 8022A (1/99)
EPA 8700—22

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To: P.O. Box 400, Sacramento, CA 95812-0400

Form Approved OMB No. 2050-0039 (Expires 9-30-99)
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See instructions on back of page 6.

Department of Toxic Substances Control
Sacramento, California

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.	Manifest Document No.	2. Page 1 of 1	Information in the shaded areas is not required by Federal law.
CAD982501421	07665		

GENERATOR

3. Generator's Name and Mailing Address
PORT OF OAKLAND
530 WATER STREET
OAKLAND, CA 94607

SITE: PORT OF OAKLAND
EARHART ROAD, BLDG L311
OAKLAND, CA 94607
ATTN: DAWN CRATER

4. Generator's Phone (510) 627-1134

A. State Manifest Document Number: 22907665

B. State Generator's ID:

5. Transporter 1 Company Name: DILLARD ENVIRONMENTAL SVCS.

6. US EPA ID Number: CAD982523433

C. State Transporter's ID [Reserved.]:

D. Transporter's Phone: (925) 634-6850

7. Transporter 2 Company Name:

8. US EPA ID Number:

E. State Transporter's ID [Reserved.]:

F. Transporter's Phone:

9. Designated Facility Name and Site Address
Clean Harbors
2500 West Lokern Road
Buttonwillow, CA 93206-0787

10. US EPA ID Number: CAD980675276

G. State Facility's ID:

H. Facility's Phone: (661) 762-6200

11. US DOT Description (including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste Number
a. NON RCRA HAZARDOUS WASTE, SOLID, (petroleum contaminated debris), (pf: CH47952B)	001	DT	00018	Y	State 352 EPA/Other NONE
b.					State EPA/Other
c.					State EPA/Other
d.					State EPA/Other

J. Additional Descriptions for Materials Listed Above: 11a. X 11b. X 11c. X 11d. X
* CH47952B *

K. Handling Codes for Wastes Listed Above
a. b. c. d.

15. Special Handling Instructions and Additional Information
JOB# 480-016 PO# 09-34575
Task Order #03-AP-01, Work Order #201275

Emergency Contact: DILLARD ENV (925) 634-6850 WEAR PROPER PROTECTIVE EQUIPMENT (PPE)

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this 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 international and national government regulations.

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Printed/Typed Name	Signature	Month	Day	Year
COLLEEN LIANG		09	25	03

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
Jerry Barksdale		09	25	03

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

FACILITY

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

DTSC 8022A (1/99)
EPA 8700—22

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proved OMB No. 2050-0039 (Expires 9-30-99)
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See instructions on back of page 6.

Department of Toxic Substances Control
Sacramento, California

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. CAD982501921 Manifest Document No. 017C86

2. Page 1 of

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

3. Generator's Name and Mailing Address
Port of Oakland
530 Water St
Oakland, CA 94607
4. Generator's Phone ( )

Site (Airport Bldg L311)
Oakland, CA 94607
ATTN: Dawn Crater

A. State Manifest Document Number 22907686

B. State Generator's ID

5. Transporter 1 Company Name
Dillard Environmental SVCS

6. US EPA ID Number CAD982523433

C. State Transporter's ID [Reserved.]

D. Transporter's Phone 925-634-6850

7. Transporter 2 Company Name

8. US EPA ID Number

E. State Transporter's ID [Reserved.]

F. Transporter's Phone

9. Designated Facility Name and Site Address
Clean Harbors
2500 West Loctom Rd
Buttonwillow, CA 93206

10. US EPA ID Number CAD980627276

G. State Facility's ID

H. Facility's Phone

11. US DOT Description (including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste Number
a. NON RCRA Hazardous Waste Solid (petroleum contaminated debris) PF: CH479528	001	DT	00018	Y	State 352 EPA/Other NA
b.					State EPA/Other
c.					State EPA/Other
d.					State EPA/Other

J. Additional Descriptions for Materials Listed Above

K. Handling Codes for Wastes Listed Above
a. b.
c. d.

15. Special Handling Instructions and Additional Information
PF: CH479528
Emergency contact: Dillard ENV 925-634-6850

Job# 480-016 PO# 09-34575 TASK order# 03-AP-01 work order# 201275

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this 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 international and national government regulations.

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Printed/Typed Name: Jeffrey L. Ruiz (AGENT ON BEHALF OF PORT OF OAKLAND) Signature: [signature] Month: 01 Day: 25 Year: 03

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: D Norman Signature: [signature] Month: 01 Day: 25 Year: 03

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.

322A (1/99)
30—22

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To: P.O. Box 400, Sacramento, CA 95812-0400

Form Approved OMB No. 2050-0039 (Expires 9-30-99)
Please print or type. *Form designed for use on elite (12-pitch) typewriter.*

See instructions on back of page 6.

Department of Toxic Substances Control
Sacramento, California

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.	Manifest Document No.	2. Page 1 of 1	Information in the shaded areas is not required by Federal law.
CAD982501421	07628		

GENERATOR

3. Generator's Name and Mailing Address
PORT OF OAKLAND
530 WATER STREET
OAKLAND, CA 94607
4. Generator's Phone (510) 627-1134

SITE: PORT OF OAKLAND
EARHART ROAD, BLDG L311
OAKLAND, CA 94607
ATTN: DAWN CRATER

A. State Manifest Document Number: 22907628
B. State Generator's ID:

5. Transporter 1 Company Name: DILLARD ENVIRONMENTAL SVCS
6. US EPA ID Number: CAD982523343
C. State Transporter's ID [Reserved.]
D. Transporter's Phone: (925) 634-6850

7. Transporter 2 Company Name:
8. US EPA ID Number:
E. State Transporter's ID [Reserved.]
F. Transporter's Phone:

9. Designated Facility Name and Site Address
Clean Harbors Environmental
1021 Berryessa Road
San Jose, CA 95133
10. US EPA ID Number: CAD059493310
G. State Facility's ID:
H. Facility's Phone: (408) 451-5000

11. US DOT Description (including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste Number
a. NON RCRA HAZARDOUS WASTE, LIQUID, (tank rinsate), (pf: CH476558)	001	TT	01356	G	State: 343 EPA/Other: NONE
b.					State: EPA/Other:
c.					State: EPA/Other:
d.					State: EPA/Other:

J. Additional Descriptions for Materials Listed Above
* CH476558 *

K. Handling Codes for Wastes Listed Above
a. b. c. d.

15. Special Handling Instructions and Additional Information
RWQCB 4SS-016 POE 09-345132
Task Order #03-AP-01, Work Order #201775
Emergency Contact: DILLARD ENV (925) 634-6850 WEAR PROPER PROTECTIVE EQUIPMENT (PPE)

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this 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 international and national government regulations.

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Printed/Typed Name	Signature	Month	Day	Year
JEFFREY L. RUEN (DEPT OF TOXICS)		01	11	01

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
D.R. Hayhead		01	19	01

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

FACILITY

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

DTSC 8022A (1/99)
EPA 8700-22

Yellow: GENERATOR RETAINS

Print or type. Form designed for use on elite (12-pitch) typewriter.

Department of Toxic Substances Control
Sacramento, California

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. C A D 9 8 2 5 0 1 4 2 1 | Manifest Document No. 0 7 6 7 9 | 2. Page 1 of 1 | Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
PORT OF OAKLAND
530 WATER STREET
OAKLAND, CA 94607
4. Generator's Phone (510) 627 1114

SITE: PORT OF OAKLAND
EARHART ROAD, BLDG L311
OAKLAND, CA 94607
ATTN: DANE CRATER

A. State Manifest Document Number 22907679
B. State Generator's ID

5. Transporter 1 Company Name | 6. US EPA ID Number
OILLARD ENVIRONMENTAL SVCS | C A D 0 0 8 3 7 4 1 3 3
C. State Transporter's ID [Reserved.]
D. Transporter's Phone (925) 634-6850

7. Transporter 2 Company Name | 8. US EPA ID Number
E. State Transporter's ID [Reserved.]
F. Transporter's Phone

9. Designated Facility Name and Site Address | 10. US EPA ID Number
Clean Harbors
2700 East Imhoff Road
Northbrook, CA 91320-0767 | C A D 0 0 0 0 2 3 7 4 3
G. State Facility's ID
H. Facility's Phone (661) 762-6200

11. US DOT Description (including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste Number
a. NON RCRA HAZARDOUS WASTE, SOLID, (petroleum contaminated debris), (pf: CR479528)	001	DT	00010	Y	State 352 611 EPA/Other NONE
b.					State EPA/Other
c.					State EPA/Other
d.					State EPA/Other

J. Additional Descriptions for Materials Listed Above
11A X 11B X 11C X 11D X
* ; CR479528 *

K. Handling Codes for Wastes Listed Above
a. | b.
c. | d.

15. Special Handling Instructions and Additional Information
9000 280-016 PID 09-14575
Task Order #03-A0-01, Work Order #201275
Emergency Contact: OILLARD ENV (925)634-6850 WEAR PROPER PROTECTIVE EQUIPMENT (PPE)

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Printed/Typed Name	Signature	Month	Day	Year
JEFFREY L. RUBIN (AGENT ON BEHALF OF PORT OF OAKLAND)		09	23	03

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
Joey D. Ishle		09	23	03

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.

022A (1/99)
00—22

Yellow: GENERATOR RETAINS

Approved OMB No. 2050-0039 (Expires 7-30-01) — See instructions on back of page 2. — Department of Toxic Substances Control, Sacramento, California

Print or type. Form designed for use on elite (12-pitch) typewriter.

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.	Manifest Document No.	2. Page 1 of 1	Information in the shaded areas is not required by Federal law.
CAD982501421	07678		

3. Generator's Name and Mailing Address
PORT OF OAKLAND
530 WATER STREET
OAKLAND, CA 94607

SITE: PORT OF OAKLAND
EARHART ROAD, BLDG L311
OAKLAND, CA 94607
ATT: DAWN CRAIER

4. Generator's Phone (510) 627-1134

A. State Manifest Document Number: 22907678

B. State Generator's ID:

5. Transporter 1 Company Name: DILLARD ENVIRONMENTAL SVCS.

6. US EPA ID Number: CAD982523433

C. State Transporter's ID [Reserved.]:

D. Transporter's Phone: (925) 634-6850

7. Transporter 2 Company Name:

8. US EPA ID Number:

E. State Transporter's ID [Reserved.]:

F. Transporter's Phone:

9. Designated Facility Name and Site Address
CLEAN HARBORS
2500 West Lokern Road
Bakersfield, CA 93206-0787

10. US EPA ID Number: CAD982067527

G. State Facility's ID: 5CFT

H. Facility's Phone: (661) 762-6200

11. US DOT Description (including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste Number
a. NOT DOT HAZARDOUS WASTE, SOLID, (petroleum contaminated debris), (pf: CH47952B)	001	DT	00018	Y	State 352-611 EPA
b.					State / EPA/Other
c.					State / EPA/Other
d.					State / EPA/Other

J. Additional Descriptions for Materials Listed Above: 1. 2. 3. * CH47952B *

K. Handling Codes for Wastes Listed Above: a. b. c. d.

15. Special Handling Instructions and Additional Information
Task Order #03-AP-01, Work Order #201275

Emergency Contact: DILLARD ENV (925) 634-6850 WEAR PROPER PROTECTIVE EQUIPMENT (PPE)

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Printed/Typed Name	Signature	Month	Day	Year
JEFFREY L. RUBIN	AGENT ON BEHALF OF PORT OF OAKLAND	09	23	02

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
Dominic Norman		09	23	02

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

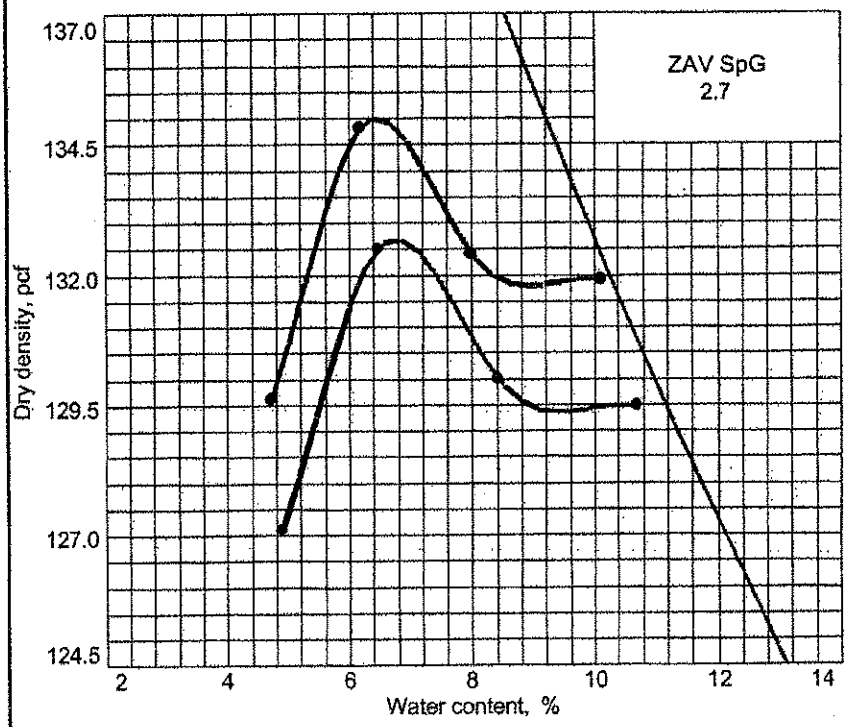
DO NOT WRITE BELOW THIS LINE.

022A (1/99)
)—22

Blue: GENERATOR SENDS THIS COPY TO DTSC WITHIN 30 DAYS.
To: P.O. Box 400, Sacramento, CA 95812-0400

Appendix D
Backfill Geotechnical Testing Report

COMPACTION TEST REPORT



Curve No.

Test Specification:
ASTM D 1557-00 Method C Modified
Oversize correction applied to each point

Hammer Wt.: 10 lb.
Hammer Drop: 18 in.
Number of Layers: five
Blows per Layer: 56
Mold Size: .075 cu.ft.

Test Performed on Material Passing 3/4 in. **Sieve**

Soil Data

NM _____ **Sp.G.** 2.7
LL _____ **PI** _____
%>3/4 in. 7.1 **%<#200** _____
USCS _____ **AASHTO** _____

TESTING DATA

	1	2	3	4	5	6
WM + WS	16.66	16.65	16.08	16.83		
WM	6.08	6.08	6.08	6.08		
WW + T #1	705.80	742.30	679.90	948.00		
WD + T #1	668.80	692.30	652.70	866.00		
TARE #1	96.00	97.60	96.70	99.00		
WW + T #2						
WD + T #2						
TARE #2						
MOISTURE	6.2	8.0	4.7	10.1		
DRY DENSITY	134.8	132.4	129.6	131.9		

ROCK CORRECTED TEST RESULTS	UNCORRECTED	Material Description
Maximum dry density = 135.0 pcf	132.7 pcf	Green Sandy GRAVEL
Optimum moisture = 6.4 %	6.8 %	

Project No. 109-374 **Client:** Geomatrix
Project: 8900 Earhart, Oakland - 8207.005

● **Location:** Backfill

Remarks:

COMPACTION TEST REPORT

COOPER TESTING LABORATORY

Figure