ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY
DAVID J. KEARS, Agency Director

ENVIRONMENTAL HEALTH SERVICES
ENVIRONMENTAL PROTECTION
1131 Harbor Bay Parkway, #250
Alameda, CA 94502-6577
(510) 567-6700 FAX (510) 337-9335

September 16, 1996

Mr. Sum Arigala
San Francisco Bay RWQCB
2101 Webster Street, Suite 500
Oakland, California 94612

RE: Case Closure Recommendation for
CAN Transport - 196 Burma Road, Oakland, California 94607

Dear Sum:

This office has completed review of the case file including the last Quarterly Groundwater Monitoring Report (May 14, 1996) prepared by Baseline Environmental Consulting and submitted under cover letter by the Port of Oakland for the above referenced site. The property is located in the Oakland Army Base, leased by Port of Oakland and sub-leased by CAN Transport, Inc. The site is underneath the new Cal Trans Highway 880 interchange and currently used for industrial activity.

In March 1989, evidence of surface contamination (discharge of used crankcase oil in the soil) was discovered along the northern property boundary near the fenceline during an inspection conducted by this department. Contaminated soil (approximately 100 cubic yards) was excavated in May 1989 to depths ranging from 2.5 feet to 3.5 feet below ground surface (bgs). Eighteen soil samples were subsequently collected at 20 foot-linear intervals along the excavation trench (Figure 2). TPH gasoline, TPH kerosene, benzene (B), toluene (T), ethylbenzene (E) and xylene (X) were not identified above detection levels. TPH diesel (up to 780 ppm) and oil & grease (up to 28,000 ppm using SMWW 503E) were found in the soil samples collected from the trench (Table 1). To determine the background levels of oil and grease in the soil at the site, two samples (BG1 and BG2) were collected at 2 feet and 4 feet bgs near the site entrance. Oil and grease was not detected in both background samples. One additional verification soil sample (#1) collected in the excavated trench at 4.5 feet bgs (soil/water interface) identified up to 1,600 ppm oil and grease (Table 1).

Further excavation (approximately 150 cubic yards of soil) was conducted in February 1991 along the entire length of the trench. The trench was enlarged to a depth of about five feet bgs to groundwater and about two feet southeastward (away from the property boundary). Ten verification soil samples were collected at intervals of 36 feet from the southeastern sidewall in the groundwater interface and found oil and grease ranging from nd to 4,500 ppm (Table 2). Three of the ten verification soil samples have oil and grease concentrations above 1,000 ppm.

Additional excavation was conducted in March 1991 along those portions of the trench where oil and grease above 1,000 ppm were detected. The trench was enlarged approximately two feet southeastward. The four confirmation soil samples collected at the soil/groundwater interface found oil and grease ranging from 430 ppm to 830 ppm (Table 3).

In addition to the petroleum hydrocarbon contamination, soluble lead at 9 ppm was found in the shallow soil at the site. The stockpiled soil (approximately 250 cubic yards) was characterized and disposed off site.

On August 11, 1995, one shallow groundwater monitoring well was installed within the previously excavated areas impacted by oil and grease and lead, about 25 feet south of the northwest fence (Figure 3). The well (MW-CTI) was constructed to a total depth of 14 feet and screen interval extended from 4 feet bgs to 14 feet bgs. First encountered groundwater was established at 4.5 feet bgs. Soil sample collected from the boring at 4 feet to 4.5 feet bgs found 9,400 ppm TPH as motor oil (by Method 8015M) and 1,800 ppm oil and grease (by SMWW 5520BF). Groundwater sample collected from the well identified the presence of TPH diesel at 610 ppb (Table 8). Concentration of lead at 39 ppm was found in the soil but was not detected in the groundwater. Other metals were detected in the soil and groundwater samples (see Table 7).

The electrical conductivity values for the underlying shallow groundwater was measured ranging from 6,500 umhos/cm to 7,000 umhos/cm which exceeded the 5,000 umhos/cm limit for potable water per State Water Resource Control Board (SWRQCB) Resolution 88-63.

Groundwater monitoring well (MW-CTI) was sampled again in April 1996. TPH diesel in groundwater was found at low concentration (390 ppb). However, a groundwater sample subjected to a silica gel cleanup showed no detectable level of TPH diesel (Table 4).

This agency recommends that further investigation or cleanup actions related to the waste oil spill that occurred in March 1989 at the subject site is not required at this time. The rationale for recommending case closure for the site are as follows:

1) Aggressive source removal has occurred at the site. Approximately 250 cubic yards of contaminated soil was excavated, sampled and disposed off site.

2) The site has been adequately characterized. Residual petroleum hydrocarbon contamination in the soil and groundwater appeared to be limited in extent.

3) The TPH diesel plume in groundwater appeared to be stable and very low in concentration.

4) Shallow groundwater at the site does not appear to be a drinking water source (exceeded the 5,000 umhos/cm limit for potable water). Deeper drinking water aquifers and surface water are not likely to be impacted.

5) The site does not appear to present a significant risk to human health and the environment. Most sensitive current use of the property is for industrial activity. BTEX was not detected in soil and groundwater samples collected at the site.

Please consider the subject site for closure. This office will issue a Remedial Action Completion Certification for the site after receiving your agency's concurrence for case closure.

You may reach me at (510) 567-6780 concerning any questions or comments you may have regarding this site.

Sincerely,

Susan L. Hugo

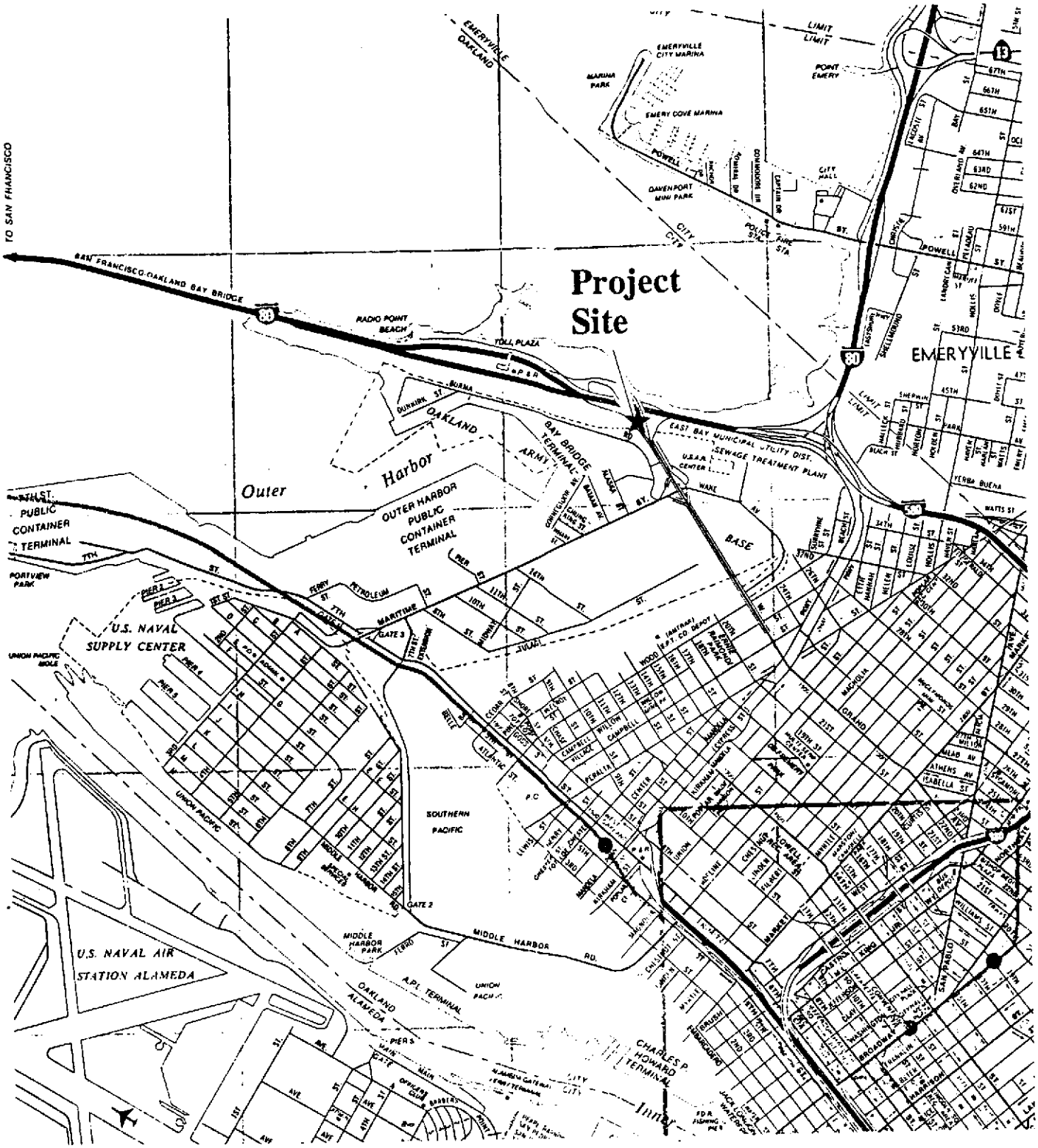
Susan L. Hugo
Senior Hazardous Materials Specialist

enclosures

c: Mee Ling Tung, Director, Environmental Health
Gordon Coleman, Acting Chief, Environmental Protection
John Prull, Port of Oakland, 530 Water Street, 5th Floor
Oakland, CA 94607 (with enclosures)
Rhodora Del Rosario, Baseline Environmental Consulting
5900 Hollis Street, Suite D, Emeryville, CA 94608

REGIONAL LOCATION

Figure 1



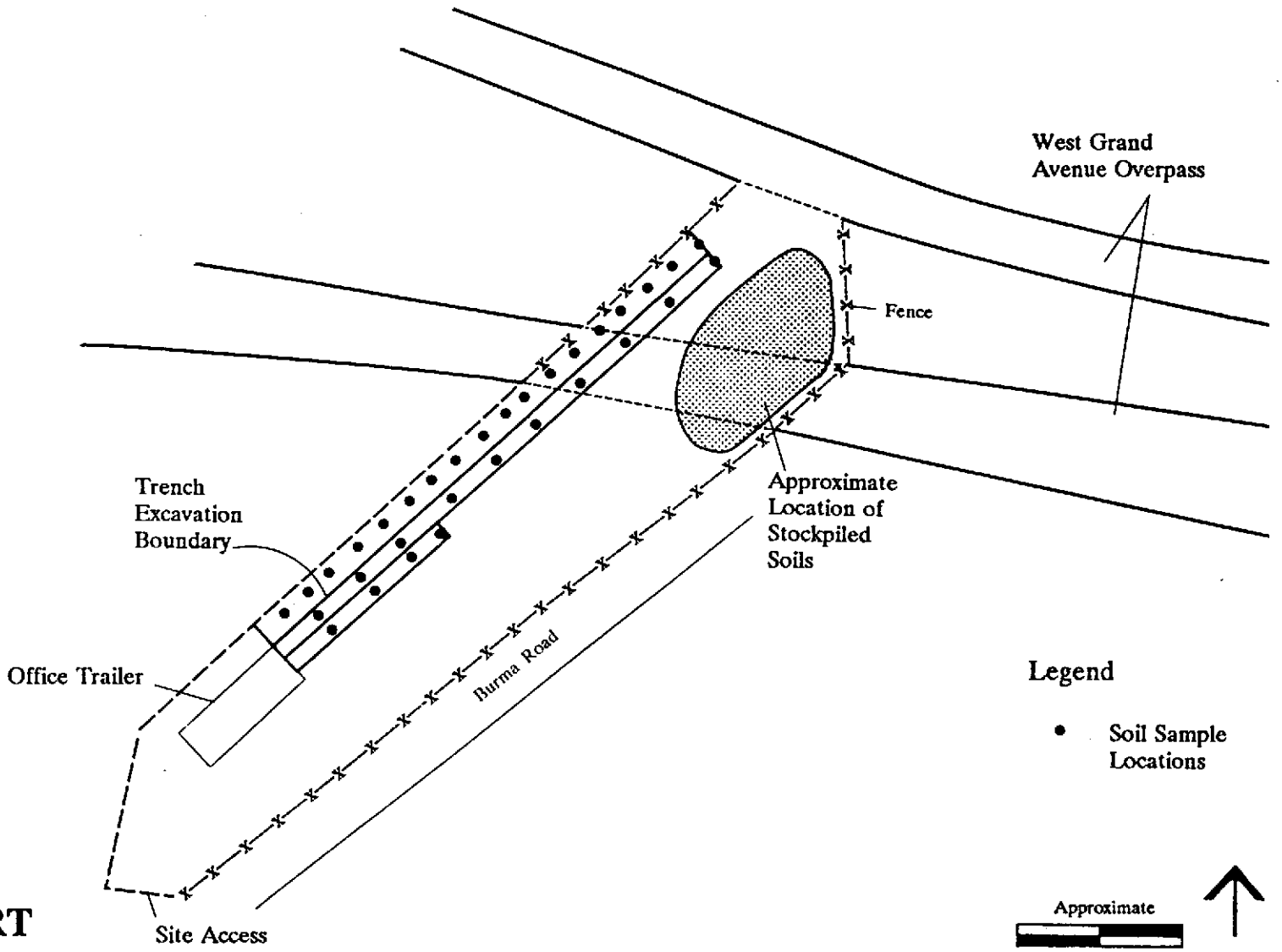
CAN TRANSPORT
196 Burma Road
Oakland, California

0 3000 Feet

BASELINE

SITE PLAN

Figure 2



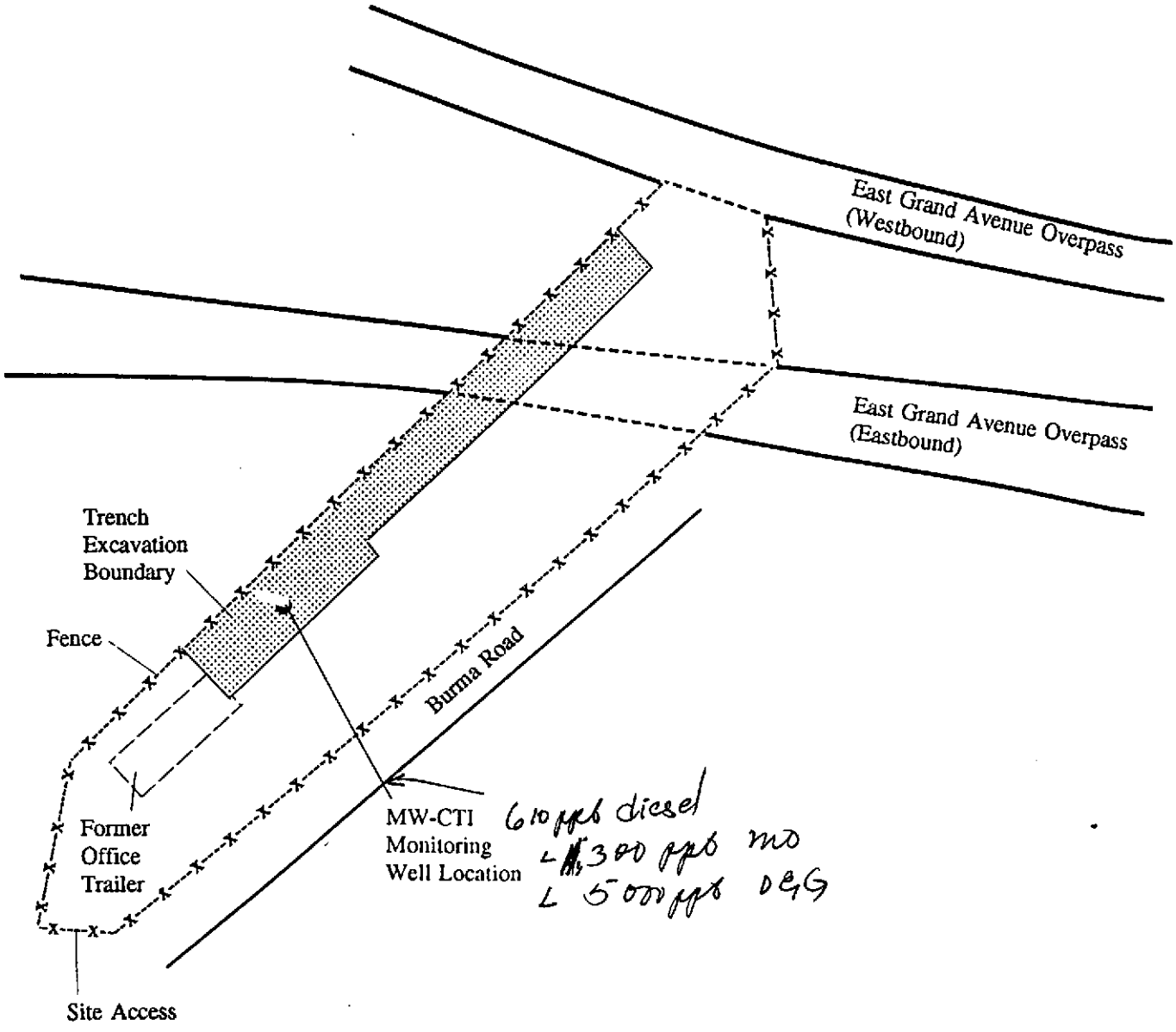
CAN TRANSPORT
196 Burma Road
Oakland, California

BASELINE

S9121A 5/1/91

SITE PLAN AND MONITORING WELL LOCATION

Figure 3



Legend

Extent of Excavation

CAN TRANSPORT
196 Burma Road
Oakland, California

Approximate
0 100 Feet

BASELINE

S9121-B0 9/13/95

TABLE 1

SUMMARY OF ANALYTICAL RESULTS, SOILS
196 Burma Road
1989
(in mg/kg)

503 D = TOG as dry solids

PPM

Sample Location	Gasoline	Kerosene	Diesel	Oil & Grease 503E/503D	Benzene	Toluene	Ethyl-benzene	Xylenes
1-20	ND	ND	37[1]	1,600/1,400	ND	ND	ND	ND
2-40	ND	ND	ND	1,300/1,700	ND	ND	ND	ND
3-60	ND	ND	11[1]	650/1,900	ND	ND	ND	ND
4-80	ND	ND	27[1]	1,400/680	ND	ND	ND	ND
5-100	ND	ND	Trace[1]	1,100/2,100	ND	ND	ND	ND
6-120	ND	ND	ND	2,100/4,900	ND	ND	ND	ND
7-140	ND	ND	ND	820/1,000	ND	ND	ND	ND
8-160	ND	ND	ND	1,800/2,200	ND	ND	ND	ND
9-180	ND	ND	100[1]	5,400/6,300	ND	ND	ND	ND
10-200	ND	ND	ND	3,700/6,300	ND	ND	ND	ND
11-220	ND	ND	130[1]	8,800/9,200	ND	ND	ND	ND
12-240	ND	ND	780	28,000/17,000	ND	ND	ND	ND
13-260	ND	ND	62	4,800/6,300	--	--	--	--
14-280	ND	ND	220	--	ND	ND	ND	ND
15-300	ND	ND	ND	3,300/5,600	--	--	--	--
16-320	ND	ND	ND	--	ND	ND	ND	ND
17-340	ND	ND	ND	1,200/1,500	--	--	--	--
18-360	ND	ND	ND	--	ND	ND	ND	ND
1	--	--	--	1,000/1,600	--	--	--	--
BG1	--	--	--	ND/ND	--	--	--	--
BG2	--	--	--	ND/ND	--	--	--	--

Notes: ND = Not detected.
-- = Not analyzed for.
Laboratory reports are included in Attachments A and B.

[1] Petroleum hydrocarbon range of C12-C22.

CHROMALAB, INC.

Analytical Laboratory
Specializing in GC-GC/MS

- Environmental Analysis
- Hazardous Waste (#E694)
- Drinking Water (#955)
- Waste Water
- Consultation

February 12, 1991

ChromaLab File No.: 0291018

BASELINE ENGINEERS, INC.

Attn: Yane Norhow

RE: Ten soil samples for Oil& Grease analyses

Project Name: CAR TRANSPORT
Project Number: S9-121A
Date Sampled: Feb. 4-5, 1991 Date Submitted: Feb. 6, 1991
Date Extracted: February 11-12, 1991

RESULTS: TABLE 2

Sample No.	Oil & Grease (mg/Kg)
CT-36	1200
CT-72	4500
CT-108	1100
CT-144	250
CT-180	51
CT-216	100
CT-252	43
CT-288	N.D.
CT-324	610
CT-360	430
BLANK	N.D.
DETECTION LIMIT	10
METHOD OF ANALYSIS	5520 E&F

ChromaLab, Inc.

David Duong
Chief Chemist

Eric Tam (by DD)

Eric Tam
Laboratory Director

2239 Omega Road, #1 • San Ramon, California 94583
415/831-1788 • Facsimile 415/831-8798
Federal ID #68-0140157

Client: Baseline Environmental

Laboratory Login Number: 103276

Project Name: Can Transport
Project Number: S9-121A

Report Date: 01 April 91

TABLE 3

ANALYSIS: Hydrocarbon Oil & Grease (Gravimetric)

Lab ID	Sample ID	Matrix	Sampled	Received	Ordered	Analyzed	Result	Units	RL	Method	Analyst	QC Batch
103276-001	CT-36A	Soil	18-MAR-91	18-MAR-91	18-MAR-91	26-MAR-91	520	mg/Kg	50	5520EF	TR	1089
103276-002	CT-72A	Soil	18-MAR-91	18-MAR-91	18-MAR-91	26-MAR-91	440	mg/Kg	50	5520EF	TR	1089
103276-003	CT-108A	Soil	18-MAR-91	18-MAR-91	18-MAR-91	26-MAR-91	840	mg/Kg	50	5520EF	TR	1089
103276-004	CT-124A	Soil	18-MAR-91	18-MAR-91	18-MAR-91	26-MAR-91	430	mg/Kg	50	5520EF	TR	1089
103276-005	CT-SP-6	Soil	18-MAR-91	18-MAR-91	18-MAR-91	26-MAR-91	380	mg/Kg	50	5520EF	TR	1089
103276-006	CT-SP-7	Soil	18-MAR-91	18-MAR-91	18-MAR-91	26-MAR-91	1000	mg/Kg	50	5520EF	TR	1089

ND = Not Detected at or above Reporting Limit (RL).

Curtis & Tompkins, Ltd.

TABLE 4

LEAD AND PETROLEUM CONCENTRATIONS IN GROUNDWATER
Can Transport, 196 Burma Road, Oakland
mg/L

Sample ID	Date	TPH as Diesel[1]	TPH as Motor Oil[1]	Oil and Grease[2]
MW-CT1	8/11/95	0.610[4]	<1.300	<5
	4/30/96	0.390[3,4]	<0.300	--
MW-CT1A[5]	4/30/96	<0.05	<0.300	--

Notes: TPH = Total petroleum hydrocarbons.
<x.x = Compound not detected above laboratory reporting limits.
-- = Compound not analyzed.
Laboratory report is provided in Attachment C.
Sample location is shown on Figure 2.

[1] Analyzed by EPA Method 8015M.
[2] Analyzed by SMWW 5520BF.
[3] Heavier hydrocarbon than indicated standard.
[4] Sample exhibits fuel pattern which does not resemble laboratory fuel pattern.
[5] Sample subjected to a silica gel cleanup prior to the TPH analyses.

TABLE 5

GROUNDWATER LEVEL DATA
Can Transport, 196 Burma Road, Oakland

Date	Water level (feet below top of casing)
8/21/95	4.21
4/30/96	4.44

TABLE 6

SUMMARY OF METALS ANALYSES IN GROUNDWATER
Can Transport, 196 Burma Road, Oakland, California
(mg/L)

Sample ID	Date	Sb	As	Ba	Be	Cd	Cr	Co	Cu	Pb	Hg	Mo	Ni	Se	Ag	Tl	V	Zn
MW-CT1	8/21/95	0.25	0.017	0.23	<0.002	<0.005	<0.01	<0.02	<0.01	<0.3	<0.0002	<0.02	<0.02	<0.005	<0.01	<0.005	<0.01	0.036
	4/30/96	--	--	--	--	--	--	--	--	0.0046	--	--	--	--	--	--	--	--

Notes: -- = Not analyzed.
<x.x = Metal not detected above laboratory reporting limit of x.x.
Metals analyzed by EPA Methods 6010A/7470/7471.
Laboratory report is provided in Attachment C.
Sampling locations are shown on Figure 2.

TABLE 7

SUMMARY OF METALS ANALYSES
Can Transport, 196 Burma Road, Oakland, California
August 1995

Sample ID	Date	Sample Depth (feet)	Sb	As	Ba	Be	Cd	Cr	Co	Cu	Pb	Hg	Mo	Ni	Se	Ag	Tl	V	Zn
Soil (mg/kg)																			
MW-CT1	8/11/95	4.0-4.5	<2.9	3.4	74	0.41	0.68	30	6.3	17	39	<0.10	<0.97	32	<0.24	<0.49	<0.24	27	85
Groundwater (mg/L)																			
MW-CT1	8/21/95	--	0.25	0.017	0.23	<0.002	<0.005	<0.01	<0.02	<0.01	<0.3	<0.0002	<0.02	<0.02	<0.005	<0.01	<0.005	<0.01	0.036

Notes: -- = Not applicable.
<x.x = Metal not detected above laboratory reporting limit of x.x.
Metals analyzed by EPA Methods 6010A/7470/7471.
Laboratory report is provided in Appendix B
Sampling locations are shown on Figure 2.

TABLE 8

PETROLEUM CONCENTRATIONS IN GROUNDWATER AND SOIL
Can Transport, 196 Burma Road, Oakland
August 1995

Sample ID	Date	Sample Depth (feet)	TPH as Diesel[1]	TPH as Motor Oil[1]	Oil and Grease[2]
Soil (mg/kg)					
MW-CT1	8/11/95	4.0-4.5	<20	9,400[3]	1,800
Groundwater (mg/L)					
MW-CT1	8/21/95	--	0.61[4]	<1.3	<5

50 5.

Notes: TPH = Total petroleum hydrocarbons.
<x.x = Compound not detected above laboratory reporting limits.
Laboratory report is provided in Appendix B.
Sampling locations are shown on Figure 2.

[1] Analyzed by EPA Method 8015M.
[2] Analyzed by SMWW 5520BF.
[3] Heavier hydrocarbon than indicated standard.
[4] Sample exhibits fuel pattern which does not resemble laboratory fuel pattern.

BTEX?

WELL CONSTRUCTION SUMMARY

Project name	CAN Transport	Project no.	S9121-B0
Location	196 Burma Road	Well no.	MW-CT1
	Oakland, CA	Date	8/11/95
		Personnel	BBA
		Driller	Gregg Drilling

DRILLING SUMMARY

Drill rig	Mobile B-61
Auger/bits	Hollow-stem augers
Drilling fluid	None
Boring diameter (inch)	8
Boring depth (feet)	14.0
Surface completion	Heavy-duty, watertight Christy
Ground surface elevation (feet)	--
TOC elevation (feet)	--

WELL DESIGN

Basis: × Geologic log Geophysical log

Casing Diameter (inch)	Material and Length (feet)	Slot Size	Interval (feet bgs)
2	Sch 40 PVC 10'	0.020	4.0-14.0
2	Sch 40 PVC 3.27'	Solid	0.73-4.0

Centralizer	None	
Filter material	RMC Lonestar #3	3.0-14.0
Bentonite	3/8" pellets	2.0-3.0
Cement	Concrete	0.0-2.0

WATER LEVELS

	Date	Time	Depth (ft bgs)
During drilling:	8/11/95	9:15	4.5
After completion:	8/11/95	10:30	11.1*
Before development:			

* slowly rising

CONSTRUCTION TIME LOG

Task	Start Date	Start Time	Finish Date	Finish Time
Drilling	8/11/95	8:55	8/11/95	9:20
Geophys log				
Casing	8/11/95	9:30	8/11/95	9:40
Filter placement	8/11/95	9:45	8/11/95	10:30
Cementing	8/11/95	10:30	8/11/95	11:00
Development				
Other				

WELL DEVELOPMENT

Method _____ Date _____

Time	Gallons	Appearance

COMMENTS

Signature: _____

S9121AUG.XLW (8/11/95)

[Scale: 1 inch = 5 feet]

BASELINE · 5900 Hollis Street, Suite D · Emeryville, CA 94608 · (510) 420-8686 · Fax (510) 420-1707

DRILLING LOG

Location	CAN Transport, 196 Burma Road, Oakland	Boring no.	MW-CT1
Driller	Gregg Drilling	Project no.	S9121-B0
Method	Hollow-stem auger	Date	8/11/95
Logger	BBA Datum	Bore size 8 inches	Casing size 2-inch

Depth (ft.)	Graphic	Lithology	Notes
0	SP	Dark brown, gravelly SAND with minor fines, moist (Fill).	
1			
2			
3			6-20-18
4	SM	Gray, gravelly, silty SAND, fine-grained, very moist.	
▼			
5	SP	Dark brown to black, SAND with minor fines, fine-grained, wet.	
6	CH	Black, silty CLAY, with shells, wet (Bay mud).	
7			
8			
9			
10			

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DRILLING LOG

Location	CAN Transport, 196 Burma Road, Oakland	Boring no.	MW-CT1
Driller	Gregg Drilling	Project no.	S9121-B0
Method	Hollow-stem auger	Date	8/11/95
Logger	BBA Datum	Bore size 8 inches	Casing size 2-inch

Depth (ft.)	Graphic	Lithology	Notes
10	CH	Black, silty CLAY, with shells, wet (Bay mud).	2-2-2
11			
12			
13			2-2-1
14		Total depth = 14.0 feet.	
15			
16			
17			
18			
19			
20			

S9121AUG.XLW (8/22/95)

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