Bill

BLYMYER & SONS

ENGINEERS, INC.

Soil & Groundwater Contamination Investigation

Final Report

Conducted at:

1750 Adams Avenue
San Leandro, California

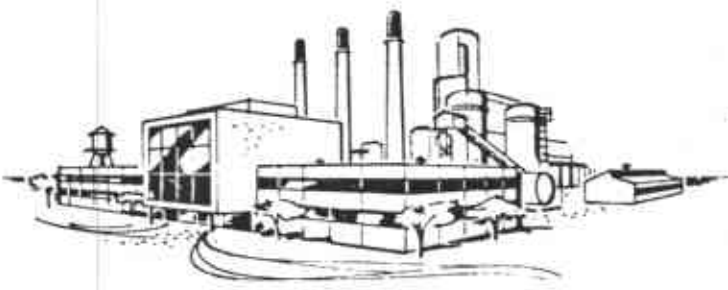
For:

MILNE TRUCK LINES
6689 Owens Drive
Pleasanton, CA. 94566

July 15, 1987

File

COPY



BSE NO. 8618

BSE JOB NO. 8618
June 12, 1987

BACKGROUND

Blymyer & Sons Engineers was retained by Milne Truck Lines to bring five underground storage tanks at Milne's San Leandro Facility into compliance with the City of San Leandro Underground Storage Tank Regulations. The schedule of tanks was as follows (See Figure 1 for layout):

3 - 12,000 gallon diesel tanks
1 - 12,000 gallon gasoline tank
1 - 800 gallon waste oil tank

The regulations allowed for nine monitoring alternatives for buried tanks, of which alternative number nine, in-tank level sensing, was chosen. Prior to installing the system, a precision tank test was ordered for all five tanks, to insure the integrity of the system before a monitoring system was installed.

PRECISION TESTING

Precision testing of the five underground tanks was scheduled for completion on July 29th, 1986. The testing method proposed, Hunter's "leak lokator" method, required that all five tanks be filled completely, up to within an inch of grade. Because the three diesel tanks were manifolded together, valves were installed in the syphon line to isolate each tank, so that fuel could be transferred from one tank to another for testing. The fuel tanks were filled without incident. However, the waste oil tank would not hold product during attempts to fill it. Product levels would continually drop 24 inches in 5 minutes and then hold at that level. Product was immediately removed when it was decided the tank could not be tested.

The other tanks were tested without incident and tested tight.

LEAKING TANK INVESTIGATION

Because the underground storage tanks at the facility were fiberglass, the decision was made to uncover the waste oil tank to see if it could be repaired. A representative of the tank manufacturer, Xerxes Fiberglass Inc., inspected the tank on September 29, 1986. Upon uncovering the tank and cutting a hole on top for access, the manufacturer's representative performed a visual inspection of the inside wells of the tank. He reported that the bottom of the tank appeared to be ruptured or "pushed in". Damage appeared to have been caused by forcing the tank against the pea gravel during installation. At that point it was determined that the tank was unrepairable and would have to be removed.

The leaking tank was removed on December 4, 1986. After the tank was removed from the excavation, it was discovered that groundwater, soil and pea gravel underneath the tank had been contaminated with waste oil. Because of a periodically high water table (due to tidal fluctuations), holding material inside the tank, the contamination did not appear extensive. However, pea gravel that had underlain the tank was saturated with oily material, and free product was observed to be at least three inches thick on the water table. To define the extent of both soil and groundwater contamination, four soils bores were done and were converted into monitoring wells surrounding the tank excavation. (Figure 2) Pavlak and Associates performed the well installation and soil sampling, while Blaine Technical Services performed the water sampling. (See Appendices A and B).

As indicated by the laboratory analyses of both the soil samples and water samples, no levels of contamination were found. These results indicated that product lost from the leaking tank had been confined to the underground tank pit itself and had not migrated away from the immediate area.

SITE REMEDIATION

Based on the results of all investigatory work done at the site, it was determined that all contaminated soil and pea gravel, approximately 45 cubic yards, should be removed and disposed of at a Class 1 Facility. This conclusion was reached after several in place soil treatments, such as steam cleaning and leaching, were researched and dismissed as unfeasible. For the groundwater contamination it was decided to hire a waste oil recycler to pump out the excavation until only a sheen of material was left on the water table. This process was repeated twice in order to remove any waste oil that recharged into the excavation. The soil was removed and disposed of on April 6, 1987.

After the contaminated soil was removed from the excavation, the removal contractor noted that the excavation, in which standing water was visible, started to fill up with diesel fuel, which appeared to seep in from the direction of the [redacted] storage tanks on the property. The contractor immediately notified Blymyer & Sons Engineers, who ordered that the tanks stop being used, so that they could immediately be tested. At the same time, a waste oil recycler was hired to pump out the excavation again. The depth of product in the excavation was approximately 8". Once the pumping was completed the excavation was monitored in order to see if diesel fuel recharged into the pit. Recharge

did occur but only to a product thickness of four inches. The process was repeated until only a sheen was left on the water table in the excavation. At that point the excavation was back-filled with pea gravel, and a twelve inch diameter, perforated sump was installed to a depth of 5 feet below the water table. The purpose of the sump was to recover any free product that may accumulate since the backfilling of the excavation. However, it is believed that most free product has been recovered from the water table. No product has appeared in any of the monitoring wells to this date.

ADDITIONAL PRECISION TESTING

Once diesel was discovered in the open excavation, it was determined that the (3) 12,000 gallon diesel tanks at the site needed to be precision tested, despite the fact that they had tested tight in June 1986. All three tanks were scheduled for testing April 20, 1987, by Hunter-Environmental, the precision tank testing company. On that date one tank was certified tight. However, testing on the other two tanks indicated inconclusive results. These two tanks were scheduled for retesting on April 27, 1987. On April 27, 1987, the two remaining diesel tanks were certified tight.

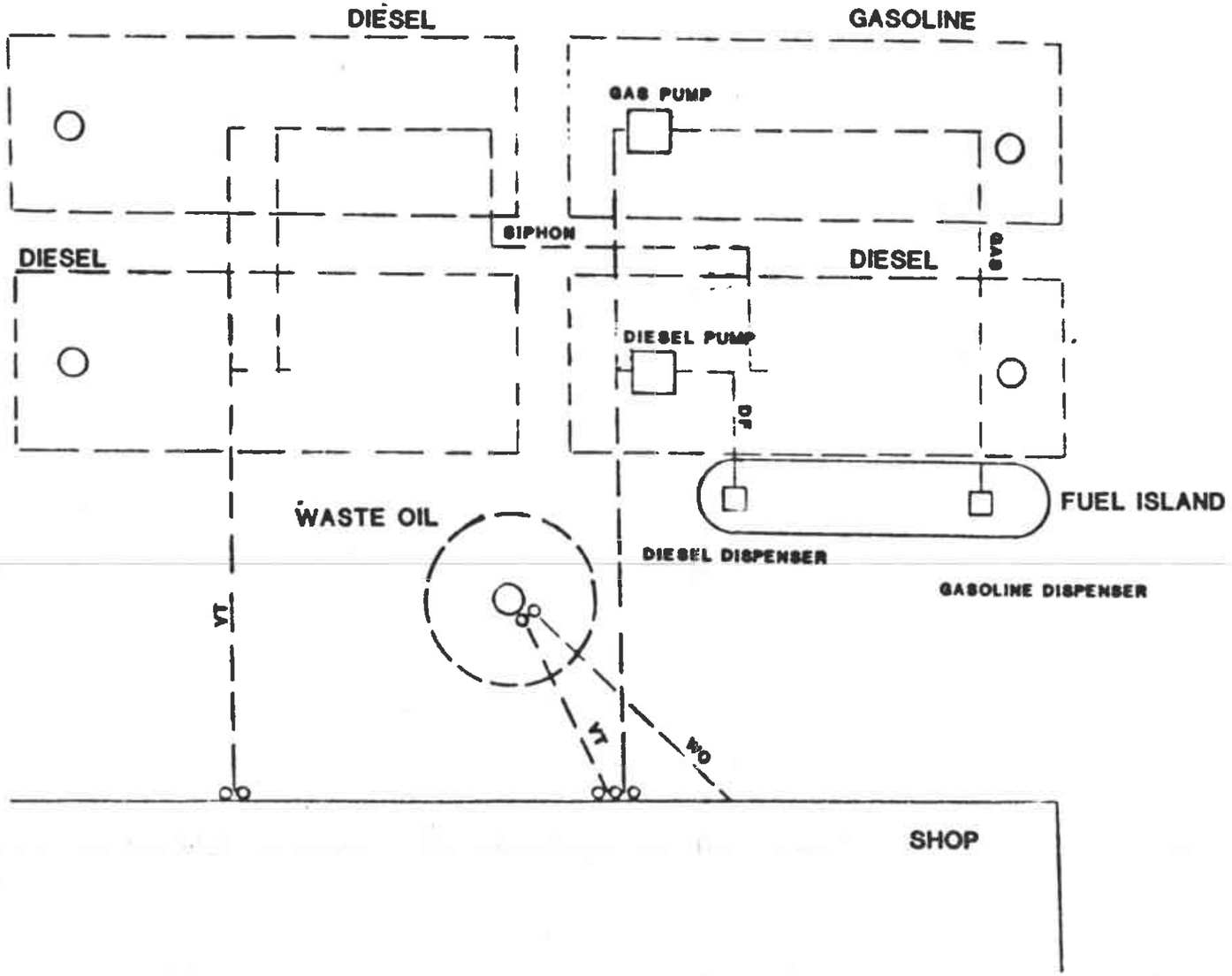
CONCLUSION

Because all three diesel tanks tested tight, it is assumed that the source of the diesel fuel is not a current leak. Terminal personnel had reported that during past operations trucks have knocked over the diesel dispenser at the fuel island, damaging the product delivery line. Fuel may have escaped at this time and may have been held in the tank backfill, because of the

surrounding geology (predominantly clays). The excavation of the waste oil contaminated pea gravel may have disturbed the area and caused the pooled diesel to flow into the open excavation. This explanation is confirmed by the fact that the soil sampling and monitoring wells around the excavation have indicated no contamination at the site.

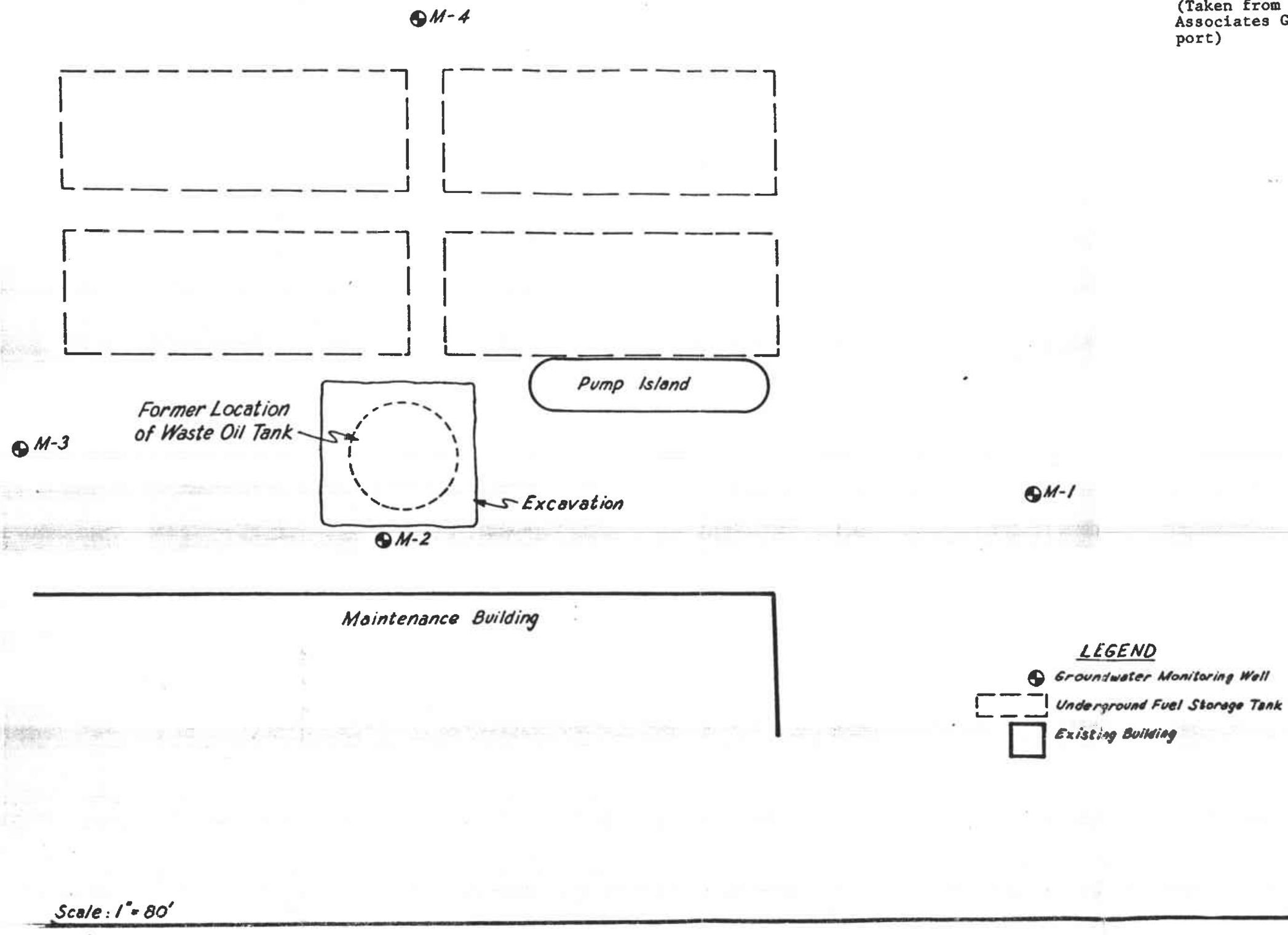
At the present time, no contamination problem exists at the site. Milne proposes to monitor the four monitoring wells and the 12" on a quarterly basis for one year, for diesel contamination, to certify that there is no problem at the site. An approved in-tank monitoring system has been installed in the remaining underground storage tanks, to insure that there will be no problems in the future.

Figure 1. Diesel Tank Layout



BLYMYER & SONS ENGINEERS, INC. 1829 CLEMENT STREET • ALAMEDA CA 94501	
SCALE	FOR MILNE TRUCK LINES
DRAWN / DATE	
CHECKED	TITLE UNDERGROUND TANK LAYOUT
APPROVED	
JOB NO. 8810	DRAWING NO. TR-1

Figure 2. Monitoring Well Location (Taken from Pavlak and Associates Geological Report)



PAVLAK & Associates
GEOTECHNICAL / ENVIRONMENTAL CONSULTANTS

Project No. 86-1026M
February 17, 1987

Milne Truck Lines
C/O Blymer and Sons Engineers, Inc.
1829 Clement Avenue
Alameda, CA 94501

Attention: Mr. Chris Falbo

Subject: Milne Truck Lines
1750 Adams Avenue
San Leandro, California
GROUNDWATER CONTAMINATION INVESTIGATION

Gentlemen:

In accordance with your authorization, we have completed an invesitgation of the soil and groundwater conditions in the vicinity of a waste oil tank excavation at the subject site. Four exploratory borings were drilled during the course of this investigation. They were all converted to groundwater monitoring wells.

The project site is located on the northwest side of Adams Avenue in the City of San Leandro, Alameda County California. It is currently utilized as a truck terminal and repair facility. The 800 gallon underground waste tank which was removed from the site was located between a maintenance building and a cluster of four 12,000 gallon underground fuel storage tanks, as shown on the Site Plan (Figure 1). Three of the fuel tanks contain diesel and the other stores gasoline. The ground surface in the area of investigation is generally flat and is paved with asphalt and concrete.

The subject waste oil tank was excavated and removed from the site on December 4, 1986. Contamination was detected in the excavation and the backfill material which overlay the tank. Field work performed during this phase of the investigation consisted of drilling four exploratory borings which were converted to groundwater monitoring wells.

Soil and Groundwater Conditions

The ground surface at all of the boring locations was paved with asphalt with an aggregate base. Native soils encountered consisted of interlayered sandy and silty clays, clayey gravel, and sandy silt from the ground surface to an average depth of 13 feet. At this point, saturated sandy clays, silty sands, and sandy silts were revealed. These saturated units were underlain at an average depth of 24 feet by silty clay which extended to the termination depth of the borings (25 feet). Groundwater was encountered at depths of 9 to 10½ feet below the existing pavement surface. Details of the soils encountered during the drilling operation are shown on the Boring Logs (Figures 2 through 5).

Project No. 86-1026M
February 17, 1987

Field Investigation Procedures

The borings were drilled using a continuous flight, hollow-stem auger and were logged by a Certified Engineering Geologist from PAVLAK & Associates. Soil samples were obtained using a California Split Spoon Sampler. The soil samples for laboratory analysis were collected in brass liners, sealed, labeled, and placed on ice for transportation to the laboratory. During the drilling operation, the soil samples and auger cuttings were checked for odors and visual evidence indicative of petroleum product contamination. None were detected.

Each boring was converted to a groundwater monitoring well by the installation of a 2-inch diameter PVC casing with a locking cap. Well construction details are described on the Boring Logs (Figures 2 through 5).

Groundwater samples were collected for laboratory analysis from wells M-1, M-2, M-3, and M-4 by Blaine Tech Services of San Jose, California. The monitoring wells were purged by removing a minimum of five well-casing volumes of groundwater prior to sampling. After the wells were allowed to recharge, groundwater samples were collected. A pneumatic, non-aerating pump was utilized for the well development and sampling. The samples were placed in VOA bottles and transported on ice to the laboratory for analysis.

Laboratory Analysis

The laboratory testing program was directed toward a quantitative evaluation of the soil and groundwater quality in the area surrounding the former location of the waste oil tank. Analysis of the soil samples was performed by S & W Soil and Water Laboratory of Boulder Creek, California. The water samples were analyzed by Sequoia Analytical Laboratory of Redwood City, California. A copy of their laboratory report is included in Appendix B.

Laboratory Results

Soil Samples

Boring No.	Sample No.	Sample Depth (ft)	Waste Oil Concentrations (mg/L)
M-1	1-1	4	110
M-1	1-2	8	80
M-2	2-1	5	210
M-2	2-2	9	118
M-3	3-2	8	137
M-4	4-1	5	91
M-4	4-2	10	71

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February 17, 1987

Laboratory Results

Water Samples

Well No.	Waste Oil Concentration (mg/L)
M-1	ND
M-2	ND
M-3	ND
M-4	ND

ND = None Detected Limits of detection are 5 mg/L.

Waste oil was identified in each of the soil samples tested at concentrations ranging from 71 to 210 mg/L (parts per million). No waste oil was revealed in any of the water samples submitted for analysis.

Reporting Requirements

It is the responsibility of the property owner to forward a copy of this report to each of the following agencies:

San Leandro Fire Department
835 East 14th Street
San Leandro, California 94577
ATTENTION: Inspector Joe Ferreira

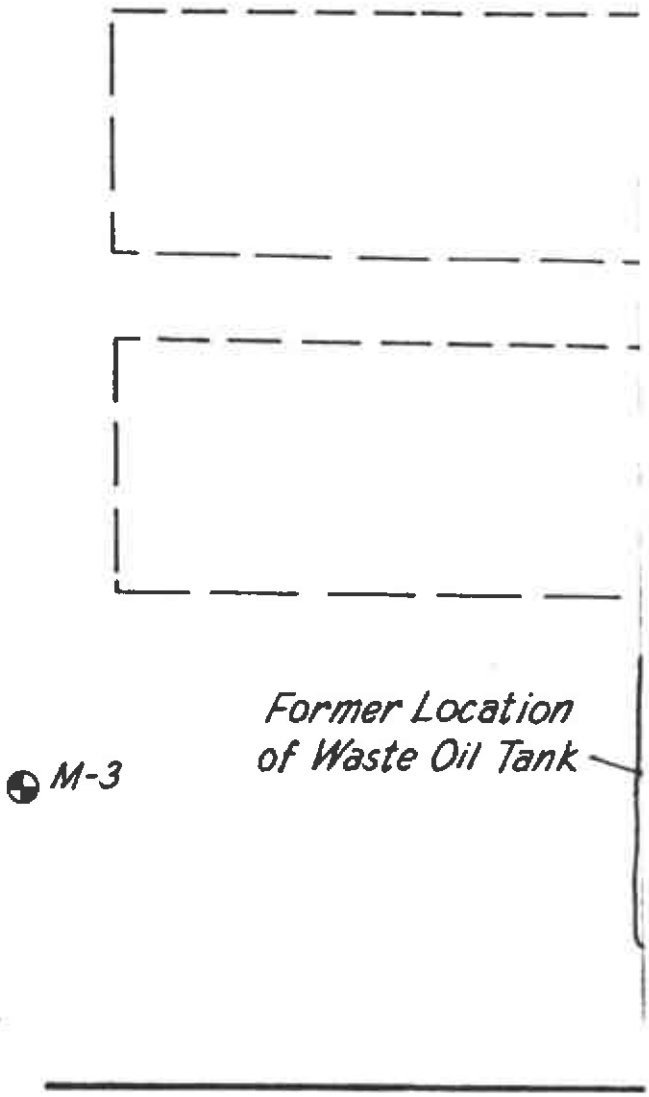
Regional Water Quality Control Board
San Francisco Bay Region
1111 Jackson Street
Room 6040
Oakland, California 94607

If you have any questions or require additional information, please call our office at your convenience.

Yours truly,

Lawrence D. Pavlak, C.E.G.
Principal Geologist
Pavlak and Associates

LDP/nmp



VD

er Monitoring Well

d Fuel Storage Tank

ilding

Scale: 1" = 80'

Figure No. 1 - SITE PLAN

Project no. 86-1026 M

LOGGED BY LDP DATE DRILLED 12-31-86 BORING DIAMETER 8" BORING NO. [redacted]

Depth, ft.	Sample No. and type	Symbol	SOIL DESCRIPTION	Unified Soil Classification	Blows/Foot 300 ft-lbs.	Qu - t.s.f. Penetrometer	Dry Density p.c.f.	Moisture % dry wt.	MISC. LAB RESULTS
0			A.C. & A. B.						
2			Dark grey sl. sandy CLAY, moist	CL					
4	1		(Dark brown, very sandy)						
6									
8	2		Dark grey silty CLAY, moist	CH					
10			(Tan mottling, wet)						
12			Buff & olive green sandy CLAY, wet	CL					
14									
16									
18			(Light brown)						
20									
22									
24			Interlayered brown & grey silty CLAY, moist	CH					
26			BOH 25 feet						

Well Construction Details:
Set 25' of 2" diameter sch.40 PVC Casing, lower 15' perforated. Aquarium sand backfill to 5', cement seal to surface. Installed vault box and locking well cap.

PAVLAK & Associates FIGURE NO. 2 - BORING LOG

Project No. 86-1026-M

LOGGED BY LDP DATE DRILLED 12-31-86 BORING DIAMETER 8" BORING [redacted]

Depth, ft.	Sample No. and type	Symbol	SOIL DESCRIPTION	Unified Soil Classification	Blows/foot 350 ft-lbs.	Qu - t.s.f. Penetrometer	Dry Density p.c.f.	Moisture % dry wt.	MISC. LAB RESULTS
2			A.C. & A.B.						
4			Blue-green silty CLAY, moist, minor fine sand	CL					
6	1		(brown)						
8			(Grey-green, wet, minor GRAVEL						
10	2								
12									
14			Mottled buff and olive green sandy CLAY, wet	CL					
16									
18			Mottled grey & brown clayey fine SAND, wet	SC					
20									
22									
24			Blue-grey silty CLAY, moist (brown)	CH					
26			BOH 25 feet						

Well Construction Details:
Set 25' of 2" diameter sch.40 PVC casing, lower 15' perforated, aquarium sand backfill to 5', concrete seal to surface. Installed vault box and locking well cap.

PAVLAK & Associates FIGURE NO. 3 - BORING LOG

Project N[redacted]86-1026 A

LOGGED BY LDP DATE DRILLED 12-31-86 BORING DIAMETER 8" BORING NO. [redacted]

Depth, ft.	Sample No. and type	Symbol	SOIL DESCRIPTION	Unified Soil Classification	Blows/Foot 350 ft-lbs.	Qu - t.s.f. Penetrometer	Dry Density p.c.f.	Moisture % dry wt.	MISC. LAB RESULTS
0			A.C. & A.B.						
2			Blue-grey very silty CLAY, moist	CH					
4	1								
6									
8	2		(Mottled olive green and grey, very moist)						
10									
12									
14			Buff and olive green sandy CLAY, wet	CL					
16									
18			(tan)						
20			Lt brown fine sandy SILT, wet	ML					
22									
24			Olive green and grey silty CLAY, moist	CH					
26									

BOH 25 feet

Well Construction Details:
Set 25' of 2" diameter sch. 40 PVC casing, lower [redacted] perforated. Aquerium sand backfill to 5', cement seal to surface. Installed vault box and locking well cap.

PAVLAK & Associates | FIGURE NO. 4 - BORING LOG

Project 1 86-1026M

LOGGED BY LLF DATE DRI[redacted] 1c-21-86 BORING DIAMET[redacted] 8" BORING NO. 1--

Depth, ft.	Sample No. and type	Symbol	SOIL DESCRIPTION	Unified Soil Classification	Blows/Foot 350 ft-lbs.	Qu - t.s.f. Penetrometer	Dry Density p.c.f.	Moisture % dry wt.	MISC. LAB RESULTS
0			A.C. & A.B.						
2			Brown clayey mec. GRAVEL, moist	GC					
4			Brown very sandy SILT, moist	ML					
6	1		Dk. brown silty CLAY, moist	CH					
8									
10	2		(Grey-green, very moist, minor GRAVEL, minor orange oxide staining)						
12									
14	3		Mottled buff, olive green, olive brown, very sandy CLAY with minor fine gravel, wet	CL					
16									
18									
20	4		Lt. brown silty very fine SAND very moist to wet	SM					
22									
24									
26	5		Olive green silty CLAY, moist, (Brown, minor fine GRAVEL)	CH					
28									

BOH 26½ feet

Well Construction Details:
Set 25' of 2" diameter, Sch. 40 PVC casing, lower 15' perforated. Aquarium sand backfill to 5', Cement seal to surface. Installed vault box and locking well cap.

PAVLAK & Associates FIGURE NO. 5 - BORING LOG

S&W
SOIL AND WATER
LABORATORY
Soil Fertility—Plant Tissue
Pollution and Residue Control
Drinking Water

14072 W. Park Avenue
Boulder Creek, CA 95006

(408) 338-3053

Laboratory Report

Client	Report Date
Blaine Tech Services P. O. Box 5745 San Jose, CA. 95150	1/13/87
Sample Site	**Date Received**
EGI Drilling (Project 8618) Blymer & Sons Engineers at Milne Trucking Co. 8618	1/5/87

Analysis Requested	Procedure	Date Analyzed
Soil/Waste Oil	EPA 3550	1/11/87

S&W Ref. #	Client Ref. #	Matrix/Analysis	Concentration (ppm)	Detection Limit (ppm)
005B7-11	4'	Soil/Waste Oil	110	20 ppm
005B7-12	8'	Soil/Waste Oil	80	20 ppm
005B7-13	5'	Soil/Waste Oil	210	20 ppm
005B7-14	9'	Soil/Waste Oil	118	20 ppm
005B7-15	8'	Soil/Waste Oil	137	20 ppm
005B7-16	5'	Soil/Waste Oil	91	20 ppm
005B7-17	10'	Soil/Waste Oil	71	20 ppm

Analyst Signature R. H. Lenoy

SEQUOIA Analytical Laboratory
2549 Middlefield Road
Redwood City, CA 94063 • (415) 364-9222

Blaine Tech Services
P.O. Box 5745
San Jose, CA 95150
Attn: Richard Blaine

Date Sampled: 01/27/87
Date Received: 01/30/87
Date Reported: 02/03/87

Sample Number	Sample Description	Oil & Grease mg/L
	BTS #87027F1, Blymer & Sons Proj. at 1750 Adams Avenue in San Leandro	
7011585	Water MW-1	< 5
7011586	Water MW-2	< 5
7011587	Water MW-3	< 5
7011588	Water MW-4	< 5

SEQUOIA ANALYTICAL LABORATORY

Arthur G. Burton
Laboratory Director

sls

BLAINE
TECH SERVICES

February 3, 1987

Blymer & Sons Engineers
1829 Clement Avenue
Alameda, CA 94501

Attention: Chris Falbo

Re: Sampling of wells at 1750 Adams Avenue
San Leandro, CA
on
January 27, 1987

SAMPLING REPORT

Sampling was performed in accordance with approved methodology which included repeated evacuation of the well. Samples were collected in containers appropriate for the analysis to be performed and were chilled during transport to the laboratory. Chain of custody records were maintained.

Samples were drawn from the following wells:

Well Designation	Well Diameter	Depth to Water Surface	Well Depth
MW-1	2''	6.14'	25.0'
MW-2	2''	6.67'	25.0'
MW-3	2''	5.90'	25.0'
MW-4	2''	5.93'	25.0'

Data collection during well evacuation:

Well Designation	Electrical Conductivity (micromhos/cm)	pH	Volume purged (gallons)
MW-1	1,100	6.7	17.0
MW-2	---	---	15.0
MW-3	1,200	7.0	18.0
MW-4	1,150	6.8	18.0

Evacuation and sample collection were accomplished with a stainless steel and teflon bladder pump. Samples obtained from these wells were delivered to Sequoia Analytical Laboratory to be tested for waste oil.

Reportage

Submission to the Regional Water Quality Control Board and the Fire Department should include copies of both the sampling report and the laboratory report. A cover letter from the responsible corporate representative should be attached. Forwarding a package of this sort will enable the regulatory agencies to note your compliance and update their files. The following addresses have been listed here for your convenience:

Water Quality Control Board
San Francisco Bay Region
1111 Jackson Street
Room 6040
Oakland, CA 94607
ATTN: Tom Callaghan

City of San Leandro Fire Department
835 East 14th Street
San Leandro, CA 94577
ATTN: Inspector Joe Ferreira

If I can be of any further assistance, please call.

Richard C. Blaine

RCB/tls

SEQ 2-13-87

BLAINE TECH SERVICES

P O BOX 5745
SAN JOSE CA 9515[illegible]
(408) 723-3974

Include ALL of the following designation in lab reports and invoices

870327F1

EVERYTHING written above this line is the project designation

Field sampling completed 10:15 hrs. 1-27-86 performed by [signature]

RELEASED BY		ACCEPTED BY	
[illegible] hrs. 1-[illegible]-86		__:__ hrs. [illegible]-86	[signature]
11:05 hrs. 1-30-87	[signature]	11:05 hrs. 1-30-87	[signature]
__:__ hrs. - -86		__:__ hrs. - -86	
__:__ hrs. - -86		__:__ hrs. - -86	

I.D.	TYPE	ANALYSIS	LAB #	PRELIMS	FINAL
MW-1	[illegible]	[illegible]			
MW-2					
MW-3					
MW-4	↓	↓			

TURN AROUND [illegible]

REPORT TO: [illegible]

BILLING INVOICE TO: [illegible]

Attn

Phone

Attn

Verbal/Ref PO From:

cc BLAINE TECH SERVICES (always)
cc OTHERS:

SPECIAL INSTRUCTIONS

Phone results to BTS
Phone results to client direct

SEQUOIA Analytical Laboratory
2549 Middlefield Road
Redwood City, CA 94063 • (415) 364-9222

Blaine Tech Services
P.O. Box 5745
San Jose, CA 95150
Attn: Richard Blaine

Date Sampled: 01/27/87
Date Received: 01/30/87
Date Reported: 02/03/87

Sample Number	Sample Description	Oil & Grease mg/L
	BTS #87027F1, Blymer & Sons Proj. at 1750 Adams Avenue in San Leandro	
7011585	Water MW-1	< 5
7011586	Water MW-2	< 5
7011587	Water MW-3	< 5
7011588	Water MW-4	< 5

SEQUOIA ANALYTICAL LABORATORY

Arthur G. Burton
Laboratory Director

sls

S&W
SOIL AND WATER LABORATORY
Soil Fertility—Plant Tissue
Pollution and Residue Control
Drinking Water

14072 W. Park Avenue
Boulder Creek, CA 95006

(408) 338-3053

Laboratory Report

Client	Report Date
Blaine Tech Services P. O. Box 5745 San Jose, CA. 95150	1/13/87
Sample Site	**Date Received**
EGI Drilling (Project 8618) Blymer & Sons Engineers at Milne Trucking Co. 8618	1/5/87

Analysis Requested	Procedure	Date Analyzed
Soil/Waste Oil	EPA 3550	1/11/87

S&W Ref. #	Client Ref. #	Matrix/Analysis	Concentration (ppm)	Detection Limit (ppm)
005B7-11	4'	Soil/Waste Oil	110	20 ppm
005B7-12	8'	Soil/Waste Oil	80	20 ppm
005B7-13	5'	Soil/Waste Oil	210	20 ppm
005B7-14	9'	Soil/Waste Oil	118	20 ppm
005B7-15	8'	Soil/Waste Oil	137	20 ppm
005B7-16	5'	Soil/Waste Oil	91	20 ppm
005B7-17	10'	Soil/Waste Oil	71	20 ppm

Analyst Signature R. H. Lenox

BLAINE TECH SERVICES

P O BOX 5745
SAN JOSE CA 95150
(408) 723-3974

Include ALL of the following designation in lab reports and invoices:

B700ASH [illegible]

BOB DRILLING (PROJECT BOIP)
BLYMER & SONS ENGINEERS
AT MILNE TRUCKING CO

EVERYTHING written above this line is the project designation

Field sampling completed __:__ hrs. 12-31-86 performed by L PALAK

RELEASED BY | ACCEPTED BY

__:__ hrs. [illegible] | 11:30 hrs. 1-1-87 [signature]

__:__ hrs. 1-[illegible]-87 | __:__ hrs. [illegible] [signature]

__:__ hrs. -86 | __:__ hrs. -86

__:__ hrs. -86 | __:__ hrs. -86

MW 1	1-1	4'	SOIL	[illegible]			
MW 1	1-2	6'	↓				
MW 2	2-1	5'	↓	[illegible]			
MW 2	2-2	9'	↓	↓			
MW 3	3-2	8'	↓	[illegible]			
MW 4	4-1	5	↓	↓			
MW 4	4-2	10'	↓	↓			

C. Sallo

8612

HUNTER ENVIRONMENTAL SERVICES, INC.

*15 DEWALT AVENUE, N.W.
JITE 400
NTON, OH 44702
16-453-1800 800-523-4370

FINAL REPORT

TEST RESULTS

leak lokator

DATE OF TEST: July 28, 1986

CONTRACT NUMBER:

CUSTOMER: M. Inc Trucking

LOCATION – IDENTIFICATION NUMBER:

NAME:

ADDRESS: 1150 Adams Ave.

CITY: San Leandro

STATE: CA

RECEIVED AUG 1986 BLYMYER & SONS

TEST RESULTS SUMMARY

NO.	SYSTEM PRODUCT	TANK SIZE GALLONS	TANK SIZE DIA/MATL	WATER INCHES	LEAK LOKATOR RESULTS* LEVEL INCHES	LEAK LOKATOR RESULTS* ALR GPH	CONCLUSION	RECOMMENDATIONS	LEAK LOKATOR USE ONLY CONCL. CODE TEST	TANK	SYS
1	Unleaded	11780	92 FG	.75	147	+.023	Tight		1		
2	DIESEL #1	11780	92 FG	0	130.75	-.023	tight		1		

OTHER INFORMATION

PRODUCT LINES – HYDROSTATIC PRESSURE TEST RESULTS

NO.	SYSTEM PRODUCT	TYPE OF PUMP REMOTE	TYPE OF PUMP SUCTION	# APPLIED	MINUTES APPLIED	PRODUCT LOSS CC'S	PRODUCT LOSS GPH	CONCLUSION/ RESULT
1	Unleaded	Red Jacket		50	10			Tight
2	Diesel	Red Jacket		47	10			Tight

NOTE: On suction systems, NEVER put more than 15 psi on any pump system.

OTHER CONTRACTORS, OFFICIALS, CUSTOMER REPRESENTATIVES PRESENT

DETAIL OF TEST RESULTS

NO.	SYSTEM PRODUCT	TEST NO.	TEST LEVEL (INCHES)	TIME CLOCK START	TIME DURATION HRS.-MIN.	LEAK RATE CC/DIV	LEAK RATE CC/MIN	TEMPERATURE COMPENSATION Δ°F	TEMPERATURE COMPENSATION CC/MIN	ABSOLUTE LEAK RATE CC/MIN	ABSOLUTE LEAK RATE GPH	CHECK TEST V OR N
1	Unleaded	1	147	1205	1h min	1.452	+28.219	+.036	+20.267	+1.457	+.023	N
2	Diesel #1	1	130.75	1326	22 min	2.225	+.965	+.006	+1.926	7.461	-.023	N

* LEVEL – INCHES FROM TANK BOTTOM TO TEST LEVEL
ALR – ABSOLUTE LEAK RATE (MEASURED LEAK RATE – TEMPERATURE COMPENSATION) IN GALLONS PER HOUR
CONCLUSION – NFPA 329 CRITERION OF ±0.05 GPH IS USED TO CERTIFY TIGHTNESS

CERTIFICATION This is to certify that the above described tank systems were tested, using the HUNTER ENVIRONMENTAL SERVICES, INC. LEAK LOKATOR according to all standard operating procedures. Those indicated as tight at full system meet the criterion established by the National Fire Protection Association Pamphlet 329 for Precision Testing.

TESTS CONDUCTED BY		CERTIFIED BY		
TEST VAN NO.	TANK TESTING SPECIALIST	SIGNATURE		DATE
LL 17	Al Duncan			7-28-86
	TANK TESTING SPECIALIST	NAME	TITLE	
	[illegible]	[illegible]	TEAM MANAGER	

TANK AND LOCATION DATA

Schematic #1

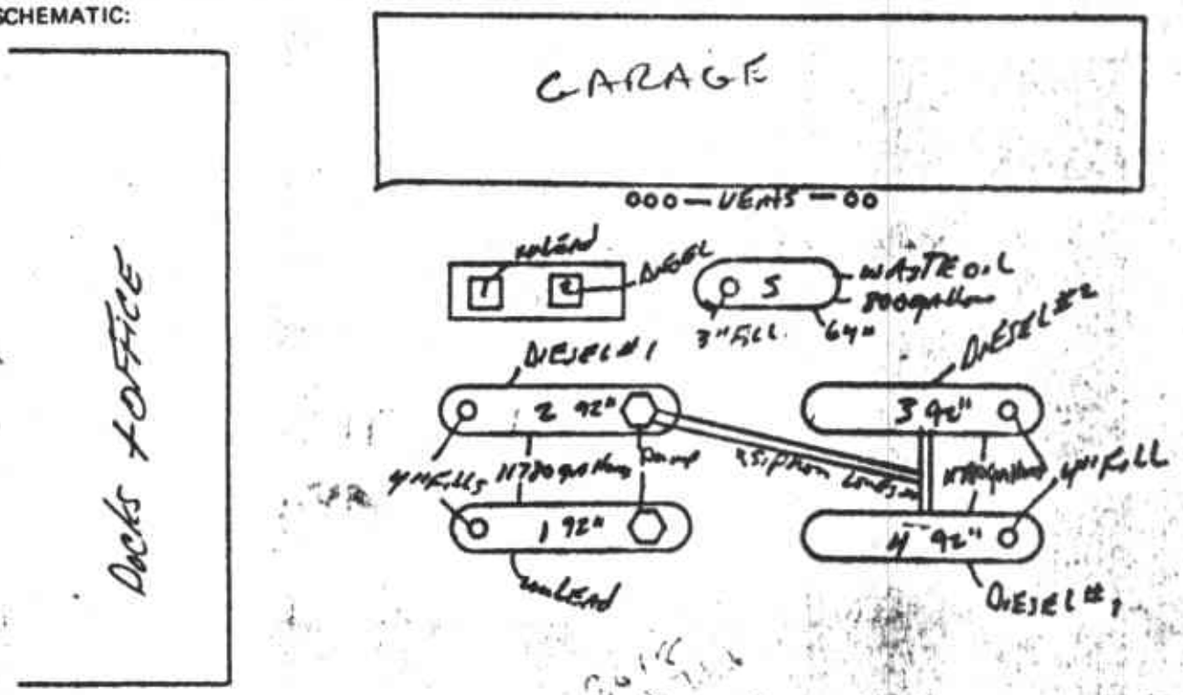
DATE: JULY 28, 1986

CUSTOMER: MILNE TRUCKING CITY: SAN LEANDRO

I.D. # 1750 ADAMS AVE STATE: CALIFORNIA

WEATHER	TIME	TEMPERATURE	COMMENTS
BEFORE TEST – CLOUDY	0815	62°	cloudy
AFTER TEST –	1700	69°	CLEAR

SCHEMATIC:



	PRODUCT/TANK NO.	UNLEAD/1		DIESEL #1/2		DIESEL #2/3		DIESEL #2/4		WASTE OIL 2/5	
BEFORE DELIVERY	LEVEL	Fill 93	Gauge	Fill 124	Gauge	Fill 129	Gauge	Fill 130	Gauge	Fill 37	Gauge
	GALLONS	Full		Full		3128		3283		?	
	WATER	.75		0		0		0		—	
	TOP OF RISER	125		124		1345		132		96	
	GRADE	134		130.5		136		136		101	
	DROP TUBE	YES		NO		NO		NO		NO	
	CAPACITY, GALLONS	11,780		11,780		11780		11780		300	
	DIAMETER, INCHES	92"		92"		92"		92		64	
	MATERIAL	FG		FG		F.G.		F.G.		ST	
	PUMP TYPE	RJ		RJ		NO Pump		NO pump		NO Pump	
	TYPE OF COVER	CEMENT		CEMENT		CEMENT		CEMENT		CEMENT	
	AGE OF TANK	—		—		—		—		—	
	SIPHON	NO		YES		YES		YES		NO	
	TANK OPENINGS	1		1		1		1		1	
	EXTRACTORS	0		0		0		0		0	
VAPOR RECOVERY	TYPE	P-11		P-1		P-1		P-1		Pump	
	VENT CONFIGURATION										
	P-V VENT VALVE TYPE	✓		✓		✓		✓		✓	

REPLACEMENT PARTS:

PART #	DESCRIPTION	QUANTITY	PRICE
041-0613-5	R.J. Func Element	1	57.00
	4" GASKET	1	2.00
4840	R.J. ORing Kit	3	3.00EA

ADDITIONAL CHARGES: (pumpovers, overtime, etc.) 634 JT-2 Trip Charge 1 25.00

3000 gallon pumpover Diesel #1 to Diesel #2

*Data obtained from ☒ Station ☐ LL Charts ☐ Other

Schematic #2

TANK AND LOCATION DATA

DATE: July 27, 1990

CUSTOMER: Milne Trucking CITY: San Leandro

I.D. # 1750 Adams Avenue STATE: California

WEATHER	TIME	TEMPERATURE	COMMENTS
BEFORE TEST –	0600	57°	OVERCAST
AFTER TEST –	1130	61°	Clear + Sunny

SCHEMATIC:

PLEASE REFER to Schematic #1 For Tank Location

	PRODUCT/TANK NO.	DIESEL #2/3		DIESEL #3/4							
		Fill	Gauge	Fill	Gauge	Fill	Gauge	Fill	Gauge	Fill	Gauge
BEFORE DELIVERY	LEVEL	13.5		70							
	GALLONS	Full		9681							
	WATER	0		0							
	TOP OF RISER	13.5		13=							
	GRADE	136		136							
	DROP TUBE	NO		NO							
	CAPACITY, GALLONS	11780		11780							
	DIAMETER, INCHES	92		92							
	MATERIAL	F.G.		F.G.							
	PUMP TYPE	Sub Pump		Sub pump							
	TYPE OF COVER	CEMENT		CEMENT							
	AGE OF TANK	–		–							
	SIPHON	YES		YES							
	TANK OPENINGS	1		1							
	EXTRACTORS	0		0							
VAPOR RECOVERY	TYPE	P-1		P-1							
	VENT CONFIGURATION										
	P-V VENT VALVE TYPE	✓		✓							

REPLACEMENT PARTS:

PART #	DESCRIPTION	QUANTITY	PRICE
-1	4" GASKET	2	2.00EA

ADDITIONAL CHARGES: (pumpovers, overtime, etc.) 2100 gallons pumpover Diesel #2 to Diesel #3

*Data obtained from ☒ Station ☐ LL Charts ☐ Other

HUNTER ENVIRONMENTAL SERVICES, INC.

115 DEWALT AVENUE, N.W.
SUITE 400
CANTON, OH 44702
216-453-1800 800-523-4370

TEST RESULTS

8618

leak lokator LO 2000

DATE OF TEST

CONTRACT NUMBER

CUSTOMER

LOCATION – IDENTIFICATION NUMBER,

NAME

ADDRESS

CITY

STATE

TEST RESULTS SUMMARY

	SYSTEM PRODUCT	TANK SIZE GALLONS	TANK SIZE DIA/MATL	WATER INCHES	LEAK LOKATOR RESULTS* LEVEL INCHES	ALR GPH	CONCLUSION	RECOMMENDATIONS	LEAK LOKATOR USE ONLY CONCL CODE TEST	TANK	SYS
1											
2											
3											

OTHER INFORMATION

PRODUCT LINES – HYDROSTATIC PRESSURE TEST RESULTS

NO.	SYSTEM PRODUCT	TYPE OF PUMP REMOTE	TYPE OF PUMP SUCTION	# APPLIED	MINUTES APPLIED	PRODUCT LOSS CC'S	PRODUCT LOSS GPH	CONCLUSION/ RESULT

NOTE: On suction systems, **NEVER** put more than 15 psi on any pump system.

OTHER CONTRACTORS, OFFICIALS, CUSTOMER REPRESENTATIVES PRESENT

DETAIL OF TEST RESULTS

NO.	SYSTEM PRODUCT	TEST NO.	TEST LEVEL (INCHES)	TIME CLOCK START	TIME DURATION HRS. MIN.	LEAK RATE CC/DIV	LEAK RATE CC/MIN	TEMPERATURE COMPENSATION Δ °F	TEMPERATURE COMPENSATION CC/MIN	ABSOLUTE LEAK RATE CC/MIN	ABSOLUTE LEAK RATE GPH	CHECK TEST Y or N
1												
2												
3												

* LEVEL – INCHES FROM TANK BOTTOM TO TEST LEVEL
ALR – ABSOLUTE LEAK RATE (MEASURED LEAK RATE – TEMPERATURE COMPENSATION) IN GALLONS PER HOUR
CONCLUSION – NFPA 329 CRITERION OF ± 0.05 GPH IS USED TO CERTIFY TIGHTNESS

CERTIFICATION This is to certify that the above described tank systems were tested, using the HUNTER ENVIRONMENTAL SERVICES, INC. LEAK LOKATOR according to all standard operating procedures. Those indicated as tight at full system meet the criterion established by the National Fire Protection Association Pamphlet 329 for Precision Testing.

TESTS CONDUCTED BY		CERTIFIED BY		
TEST VAN NO.	TANK TESTING SPECIALIST	SIGNATURE		DATE
	TANK TESTING SPECIALIST	NAME	TITLE	

8618

TANK AND LOCATION DATA

DATE: Apr. 1 20, 1987

CUSTOMER: Milne Trucking · CITY: San Leadro

I.D. # _____ STATE: Ca

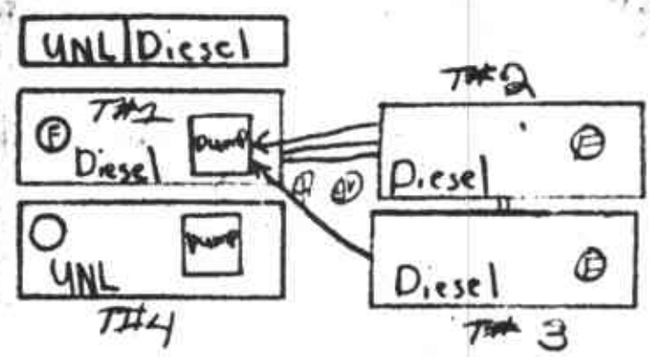
WEATHER	TIME	TEMPERATURE	COMMENTS
BEFORE TEST –			
AFTER TEST –			

SCHEMATIC:

Milne Trucking

Milne

Trucking



	PRODUCT/TANK NO.	Diesel T1		Diesel T2		Diesel T3					
		Fill	Gauge	Fill	Gauge	Fill	Gauge	Fill	Gauge	Fill	Gauge
BEFORE DELIVERY	LEVEL										
	GALLONS										
	WATER	0		0		0					
	TOP OF RISER	186		133		128					
	GRADE	130		125		125					
	DROP TUBE	No		No		No					
	CAPACITY, GALLONS	1170									
	DIAMETER, INCHES	91		91		91					
	MATERIAL	Fiberglass		Fiberglass		Fiberglass					
	PUMP TYPE										
	TYPE OF COVER	Concrete		Concrete		Concrete					
	AGE OF TANK	?		?		?					
	SIPHON	yes →		yes →		↔ yes					
	TANK OPENINGS	1									
	EXTRACTORS	No									
VAPOR RECOVERY	TYPE										
	VENT CONFIGURATION	Balanced		Balanced		Balanced					
	P-V VENT VALVE TYPE										

REPLACEMENT PARTS: PART # DESCRIPTION QUANTITY PRICE

ADDITIONAL CHARGES: (dumpovers, overtime, etc.) 1½ hrs onsite 1½ Travel

*Data obtained from ☐ Station ☐ LL Charts ☐ Other _____

Milne Trucking
1750 Adams Ave
San Leandro CA

April 20, 1987

All Tanks have E.R.M. Monitoring System Installed
All Diesel Tanks Manifolded With Shut off Values
From Tank #2 and T#3 + T#1 Tank 1 had Full System Leak
Tested Tight at Tank Top. The product Level For T2&3
were at 88" Values shut off. Tested T1 again AT Full System
with T2 & T3 Full and Leaked +. Value From Tank 1 TO T3
NOT Functioning properly. Recommend Divorcing Systems
at gate value or installing New gate values, To Test Tank
Individualy. While Filling T1 T2 + T3 will NOT Fill.
Remote pump is on T1. No Tank Top Test conducted
on T3 due To Time Constraints

UNCover + investigate

HUNTER
ENVIRONMENTAL SERVICES, INC.
115 DEWALT AVENUE, N.W.
SUITE 400
CANTON, OH 44702
216-453-1800 800-523-4370

FINAL REPORT

TEST RESULTS

leak lokator LD2000

DATE OF TEST: July 29, 1986

CONTRACT NUMBER:

CUSTOMER: Mike Trucking

LOCATION – IDENTIFICATION NUMBER:

NAME:

ADDRESS: 1750 Adams Ave

CITY: San Leandro

STATE: CA

TEST RESULTS SUMMARY

	SYSTEM PRODUCT	TANK SIZE GALLONS	TANK SIZE DIA/MATL	WATER INCHES	LEAK LOKATOR RESULTS* LEVEL INCHES	ALR GPH	CONCLUSION	RECOMMENDATIONS	LEAK LOKATOR USE ONLY CONCL. CODE TEST	TANK	SYS
3	Diesel #2	11780	92 / FG	0	148.5	-.027	Tight		1		
4	Diesel #3	11780	92 / FG	0	149.5	-.018	Tight		1		

OTHER INFORMATION

PRODUCT LINES – HYDROSTATIC PRESSURE TEST RESULTS

NO.	SYSTEM PRODUCT	TYPE OF PUMP REMOTE	TYPE OF PUMP SUCTION	# APPLIED	MINUTES APPLIED	PRODUCT LOSS CC'S	PRODUCT LOSS GPH	CONCLUSION/ RESULT
3	Diesel #3			N/A				
4	Diesel #4			N/A				

NOTE: On suction systems, NEVER put more than 15 psi on any pump system.

OTHER CONTRACTORS, OFFICIALS, CUSTOMER REPRESENTATIVES PRESENT

DETAIL OF TEST RESULTS

NO.	SYSTEM PRODUCT	TEST NO.	TEST LEVEL (INCHES)	TIME CLOCK START	TIME DURATION HRS. MIN.	LEAK RATE CC/DIV	LEAK RATE CC/MIN	TEMPERATURE COMPENSATION Δ °F	TEMPERATURE COMPENSATION CC/MIN	ABSOLUTE LEAK RATE CC/MIN	ABSOLUTE LEAK RATE GPH	CHECK TEST √ OK
3	Diesel #2	1	148.5	0710	10 min	1 to 4	+35.07	+.109	+36.072	-1.472	-.027	N
4	Diesel #3	1	149.5	0845	39 min	1 to 4	+4.998	+.098	+6.067	-1.119	-.018	N

* LEVEL – INCHES FROM TANK BOTTOM TO TEST LEVEL

ALR – ABSOLUTE LEAK RATE (MEASURED LEAK RATE – TEMPERATURE COMPENSATION) IN GALLONS PER HOUR

CONCLUSION – NFPA 329 CRITERION OF ±0.05 GPH IS USED TO CERTIFY TIGHTNESS

CERTIFICATION This is to certify that the above described tank systems were tested, using the HUNTER ENVIRONMENTAL SERVICES, INC. LEAK LOKATOR according to all standard operating procedures. Those indicated as tight at full system meet the criterion established by the National Fire Protection Association Pamphlet 329 for Precision Testing.

TESTS CONDUCTED BY		CERTIFIED BY		
TEST VAN NO.	TANK TESTING SPECIALIST	SIGNATURE		DATE
LL-17	O. Duncan			7-21-86
	TANK TESTING SPECIALIST	NAME	TITLE	

TANK AND LOCATION DATA

Schematic #1

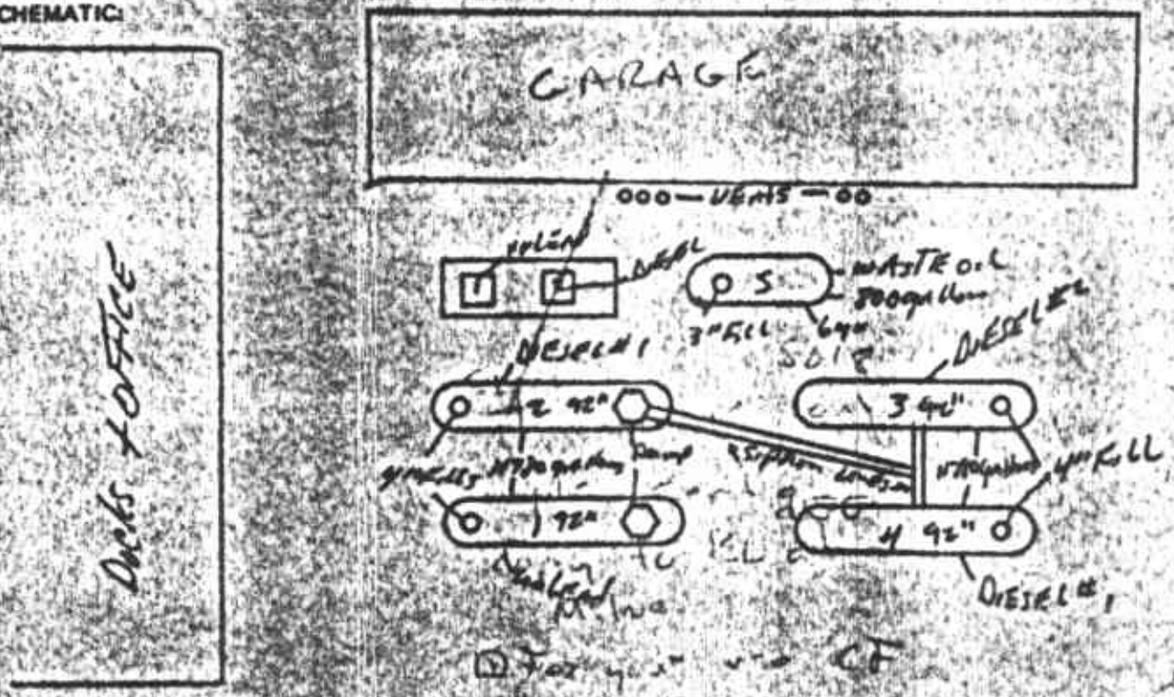
DATE: July 28, 1986

CUSTOMER: Milne Trucking CITY: San Leandro

I.D. # 1750 Adams Ave STATE: California

WEATHER	TIME	TEMPERATURE	COMMENTS
BEFORE TEST – Cloudy	0815	62°	cloudy
AFTER TEST –	1700	69°	clear

SCHEMATIC:



	PRODUCT/TANK NO.	UNLEAD/1		DIESEL #1/2		DIESEL #2/3		DIESEL #2/4		WASTE OIL/5	
		Fill	Gauge	Fill	Gauge	Fill	Gauge	Fill	Gauge	Fill	Gauge
BEFORE DELIVERY	LEVEL	93		124		29		30		37	
	GALLONS	Full		Full		3128		3283		7	
	WATER	.75		0		0		0		—	
	TOP OF RISER	125		124		1315		132		96	
	GRADE	134		130.5		136		136		101	
	DROP TUBE	YES		NO		NO		NO		NO	
	CAPACITY, GALLONS	11,780		11,780		11780		11780		500	
	DIAMETER, INCHES	92"		92"		92		92		64	
	MATERIAL	F.G.		F.G.		F.G.		F.G.		ST	
	PUMP TYPE	R.J.		R.J.		No Pump		No Pump		No Pump	
	TYPE OF COVER	CEMENT		CEMENT		CEMENT		CEMENT		CEMENT	
	AGE OF TANK	—		—		—		—		—	
	SIPHON	NO		YES		YES		YES		NO	
	TANK OPENINGS	1		1		1		1		1	
	EXTRACTORS	0		0		0		0		0	
VAPOR RECOVERY	TYPE	Poppet		Poppet		Poppet		Poppet		Poppet	
	VENT CONFIGURATION										
	P-V VENT VALVE TYPE	—		—		—		—		—	

REPLACEMENT PARTS:

PART #	DESCRIPTION	QUANTITY	PRICE
841-0125	F.J. Fuel Element	1	57.00
	4" Gasket	1	2.00
4180	R.J. O-Ring Kit	3	3.00 EA
	634 T-T Cordsealant	1	25.00

ADDITIONAL CHARGES: (permissions, overtime, etc.) 500 gallon pumped Diesel #2 to Diesel #1

Data obtained from ☒ Station ☐ LL Charts ☐ Other

DATE: July 27, 1986

CUSTOMER: [illegible] Trucking

CITY: San [illegible]

I.D. # 1750 [illegible] Avenue

STATE: California

WEATHER	TIME	TEMPERATURE	COMMENTS
BEFORE TEST –	0600	57°	Overcast
AFTER TEST –	1130	67°	Clear + Sunny

SCHEMATIC:

PLEASE REFER to Schematic #1 For Tank Location

	PRODUCT/TANK NO.	Diesel #3		Diesel #2/4							
		Fill	Gauge	Fill	Gauge	Fill	Gauge	Fill	Gauge	Fill	Gauge
BEFORE DELIVERY	LEVEL	131.5		70							
BEFORE DELIVERY	GALLONS	Full		9681							
BEFORE DELIVERY	WATER	0		0							
	TOP OF RISER	131.5		132							
	GRADE	136		136							
	DROP TUBE	NO		NO							
	CAPACITY, GALLONS	11780		11780							
	DIAMETER, INCHES	92		92							
	MATERIAL	F.G.		F.G.							
	PUMP TYPE	[illegible]		[illegible]							
	TYPE OF COVER	Cement		Cement							
	AGE OF TANK	–		–							
	SIPHON	YES		YES							
	TANK OPENINGS			1							
	EXTRACTORS	0		0							
VAPOR RECOVERY	TYPE	[illegible]		[illegible]							
VAPOR RECOVERY	VENT CONFIGURATION										
VAPOR RECOVERY	P-V VENT VALVE TYPE	✓		✓							
VAPOR RECOVERY											

REPLACEMENT PARTS: PART #	DESCRIPTION	QUANTITY	PRICE
	4" Gasket	2	2.00 ea

ADDITIONAL CHARGES: (pumpover, overtime, etc.) 2000 gallon pumpover Diesel #2 [illegible] Diesel #3

*Data obtained from: ☒ Station ☐ LL Charts ☐ Other

HUNTER
ENVIRONMENTAL SERVICES, INC.
715 DEWALT AVENUE, N.W.
SUITE 400
CANTON, OH 44702
716-453-1800 800-523-4370

RECEIVED
APR 1987
BLYMYER & SONS

TEST RESULTS

8618

leak lokator

DATE OF TEST: April 27, 1987
CONTRACT NUMBER:

CUSTOMER: Milne Trucking
LOCATION — IDENTIFICATION NUMBER:
NAME:
ADDRESS: 1750 Adams Ave
CITY: San Leandro
STATE: Ca

TEST RESULTS SUMMARY

	SYSTEM PRODUCT	TANK SIZE GALLONS	TANK SIZE DIA/MATL	WATER INCHES	LEAK LOKATOR RESULTS* LEVEL INCHES	LEAK LOKATOR RESULTS* ALR GPH	LEAK LOKATOR RESULTS* CONCLUSION	RECOMMENDATIONS	LEAK LOKATOR USE ONLY CONCL. CODE TEST	TANK	SYS
1	Diesel	12000	92/0	0	126	+.034	T				

OTHER INFORMATION

PRODUCT LINES — HYDROSTATIC PRESSURE TEST RESULTS

SYSTEM NO.	SYSTEM PRODUCT	TYPE OF PUMP REMOTE	TYPE OF PUMP SUCTION	# APPLIED	MINUTES APPLIED	PRODUCT LOSS CC'S	PRODUCT LOSS GPH	CONCLUSION/ RESULT
				N/A				

NOTE: On suction systems, NEVER put more than 15 psi on any pump system.

OTHER CONTRACTORS, OFFICIALS, CUSTOMER REPRESENTATIVES PRESENT

DETAIL OF TEST RESULTS

NO.	SYSTEM PRODUCT	TEST NO.	TEST LEVEL (INCHES)	TIME CLOCK START	TIME DURATION HRS.-MIN.	LEAK RATE CC/DIV	LEAK RATE CC/MIN	TEMPERATURE COMPENSATION Δ °F	TEMPERATURE COMPENSATION CC/MIN	ABSOLUTE LEAK RATE CC/MIN	ABSOLUTE LEAK RATE GPH	CHECK TEST V OR N
1	Diesel	1	126	730	3-min	5.777	+4.908	+.012	+4.087	+2.178	+.034	
								-.004	-1.363			
									+2.724			

* LEVEL — INCHES FROM TANK BOTTOM TO TEST LEVEL
ALR — ABSOLUTE LEAK RATE (MEASURED LEAK RATE — TEMPERATURE COMPENSATION) IN GALLONS PER HOUR
CONCLUSION — NFPA 329 CRITERION OF ±0.05 GPH IS USED TO CERTIFY TIGHTNESS

CERTIFICATION This is to certify that the above described tank systems were tested, using the HUNTER ENVIRONMENTAL SERVICES, INC. LEAK LOKATOR according to all standard operating procedures. Those indicated as tight at full system meet the criterion established by the National Fire Protection Association Pamphlet 329 for Precision Testing.

TESTS CONDUCTED BY		CERTIFIED BY		
TEST VAN NO.	TANK TESTING SPECIALIST	SIGNATURE		DATE
LL-16	G. Patrick	Eric A Price		04-27-87
	TANK TESTING SPECIALIST E. Mc Arce	NAME Eric A Price	TITLE Terr. Manager	

TANK AND LOCATION DATA

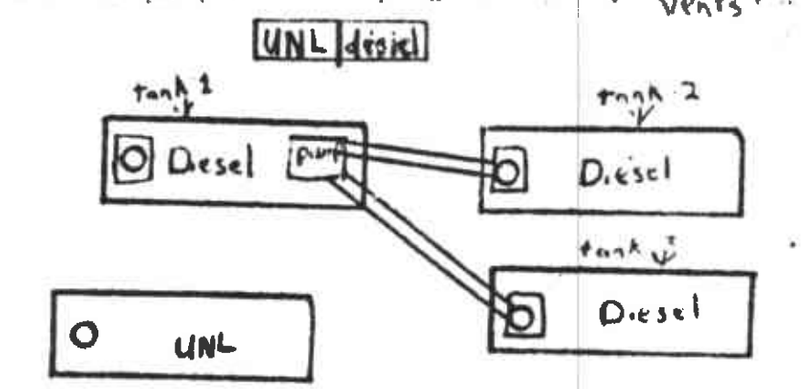
DATE: April 27, 1987

CUSTOMER: Milne truck lines CITY: San Leandro

I.D. # STATE: Ca.

WEATHER	TIME	TEMPERATURE	COMMENTS
BEFORE TEST –			
AFTER TEST –			

SCHEMATIC: Milne truck lines



Milne truck lines

	PRODUCT/TANK NO.	#1 Diesel		#2 Diesel		#3 Diesel					
BEFORE DELIVERY	LEVEL	Fill	Gauge	Fill	Gauge	Fill	Gauge	Fill	Gauge	Fill	Gauge
	GALLONS										
	WATER	~				~					
	TOP OF RISER	127				127					
	GRADE	129				129					
	DROP TUBE	Yes				Yes					
	CAPACITY, GALLONS	12,000				12,000					
	DIAMETER, INCHES	92"				92"					
	MATERIAL	fiberglass				fiberglass					
	PUMP TYPE	Remote				Remote					
	TYPE OF COVER	concrete				concrete					
	AGE OF TANK	?				?					
	SIPHON	yes				yes					
	TANK OPENINGS	1				1					
	EXTRACTORS	No				No					
VAPOR RECOVERY	TYPE										
	VENT CONFIGURATION	Balance				Balance					
	P-V VENT VALVE TYPE										

REPLACEMENT PARTS:

PART #	DESCRIPTION	QUANTITY	PRICE
	Red Jacket Tune	1	No

ADDITIONAL CHARGES: (pumpovers, overtime, etc.) No Charge (Friend)

*Data obtained from ☐ Station ☐ LL Charts ☐ Other