



MSE ENVIRONMENTAL, INC.

PHASE II
ENVIRONMENTAL SURVEY

regarding

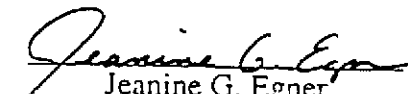
ALASKA BASIN
ALAMEDA, CALIFORNIA


submitted to

Mr. Robert M. Hunt, Esq.
Hane & Hunt
c/o Watt Industries, Inc.
2716 Ocean Park Boulevard
Santa Monica, California 90405

prepared by

MSE ENVIRONMENTAL, INC.


Jeanine G. Egner
Environmental Engineer


Joel L. Dispenza
Senior Environmental Engineer
Registered Environmental Assessor

March 16, 1990

TABLE OF CONTENTS

1.0	INTRODUCTION	1
2.0	SCOPE OF WORK	1
3.0	BACKGROUND	1
4.0	RESEARCH	1
5.0	GROUNDWATER SAMPLING	2
6.0	SUBSURFACE INVESTIGATION	3
7.0	DISCUSSION	3
8.0	CONCLUSIONS	3
9.0	RECOMMENDATIONS	3
10.0	LIMITATIONS	3
11.0	REFERENCES	
	11.1 Published References	4
	11.2 Personal Communications	4
APPENDICES		
	Appendix A - Laboratory Results	

1.0 INTRODUCTION

MSE Environmental, Inc. conducted a Phase II Environmental Survey on the Alaska Basin Property, Alameda, California. This survey was performed under contract with the Law Firm of Hane & Hunt, Santa Monica, California, on behalf of their Client, Watt/Smartt, Inc.

2.0 SCOPE OF WORK

The Scope of Work was to research the possible existence of underground storage tanks on the Property in Question (PIQ), research the regulatory disposition of environmental problems encountered during the adjacent Marina Village development, analyze groundwater samples from three test borings and perform a subsurface investigation to determine the possible location of underground fuel storage tanks. The investigation period began on February 15, 1990 and ended on March 9, 1990. This Scope of Work was based on recommendations included in the January 26, 1990 Phase I Environmental Survey Report regarding Alaska Basin, prepared by MSE Environmental, Inc.

3.0 BACKGROUND

The PIQ is located at the north end of Sherman Street in the City of Alameda, County of Alameda, State of California. The approximately 5 acre site is located along the Oakland/Alameda Estuary within the Encinal Terminals operations area. Unofficially, the PIQ address is known as 2020 Sherman Street and the current owner has been reported as Encinal Real Estate, Inc.

Research performed during MSE's Phase I investigation indicated numerous and varied undocumented activities have taken place within the north harbor vicinity for many years. The area has been an active shipping port, storage facility and transfer station for a wide variety of materials and products. Many of the operations were not documented and construction was not always permitted due to the lack of official street addresses in the area and the absence of structured regulation at the time. Additionally, several previously unidentified underground storage tanks and other environmental problems were encountered during the adjacent Marina Village development, triggering a concern for subsurface conditions on the PIQ. Leaking product from the tanks found at Marina Village caused soil and groundwater contamination adjacent to the PIQ.

4.0 RESEARCH

MSE performed research to investigate the possible existence of underground storage tanks on the PIQ as well as the location and extent of hazardous materials deposition found during the adjacent Marina Village development. Mr. Edgar Howell of the Alameda County Health Care Services Agency, Department of Environmental Health performed a complete search of files for records of underground tanks or hazardous materials releases concerning 2020 Sherman Street. No such records were found for the PIQ. The City of Alameda Fire Department has no records of underground storage tanks on the PIQ. According to Lt. Mckinley, the Fire Department was remotely involved in the environmental problems encountered at Marina Village, that being overseeing safety and proper manifesting during the removal of underground storage tanks. He noted that the County of Alameda Environmental Health Department regulated the clean-up of hazardous materials at Marina Village.

The U.S. Coast Guard Marine Safety Office, Chief of Port Safety informed MSE the Coast Guard does not monitor the transportation of hazardous materials into the harbor. However, Captain Martin had previously worked for Encinal Terminals, Inc. and did not recall the existence of any underground storage tanks or other hazardous materials stored on the PIQ.

Although the County of Alameda Environmental Health Department has no records for the PIQ, records are on file for 2051 Sherman Street, the Rigging International Building formerly located west of the PIQ. Two underground storage tanks were removed from 2051 Sherman Street on March 2, 1988. The tanks, one 1,000 gallon and one 5,000 gallon capacity, reportedly stored diesel and possibly gasoline. The tanks were over 15 years old and had experienced leaks, causing both soil and groundwater contamination. The contaminated soil was removed from the site and a groundwater monitoring well was installed. The work was conducted by Levine-Fricke, Emeryville, California, under the regulatory authority of Alameda County Environmental Health Department and San Francisco Bay Area Regional Water Quality Control Board (RWQCB).

A Marina Village manager informed MSE the contamination from the two leaking underground storage tanks existed approximately 500 feet west of the PIQ. According to the report prepared by Levine-Fricke, the contaminated soil was removed, aerated on site and later disposed of at a Class III landfill. Final soil samples confirmed the contamination had been removed. Low but detectable quantities of contaminants remained in the shallow groundwater underlying the site (1.5 parts per million total petroleum hydrocarbons as diesel). It appears that RWQCB has not commented on the remaining contamination.

Files maintained by the San Francisco Bay Area Regional Water Quality Control Board for Marina Village indicated a 10,000 gallon capacity underground storage tank was removed from 1150 Marina Village Parkway. This site is over 1/2 mile west of the PIQ and is not expected to impact the PIQ. A third environmental problem was encountered at Marina Village nearly one mile west of the PIQ and also is not expected to impact the PIQ.

5.0 GROUNDWATER SAMPLING

MSE Engineers completed three test borings on the PIQ on February 17, 1990. The drilling was performed using a B-53 Mobile Drill Rig equipped with a 6-7/8 inch hollow stem continuous-flight auger. Boring No. 1 (TB-1) was located along the southern section of the PIQ and Boring No. 2 (TB-2) was positioned along the western edge of the PIQ (See Figure 1). Both were drilled to a total depth of 15 feet, penetrating the shallow groundwater underlying the site. Boring No. 3 (TB-3) was located at the north end of the property and was drilled to a total depth of 25 feet.

Sufficient time was allowed for the groundwater to settle into the borings. Samples were obtained from TB-1 and TB-2 by lowering a teflon bailer into the boring and then transferring the water into pre-cleaned 40 ml volatile organic analysis (VOA) vials. Groundwater was encountered at eight feet below the ground surface in both TB-1 and TB-2. Groundwater was not encountered in TB-3, possibly due to glazing of the Bay Mud along the sides of the boring. No water sample was obtained.

Following collection, the two water samples (GW-TB-1-8 and GW-TB-2-8) were placed in a cooled ice chest and transported to a State Certified Testing Laboratory under Chain-of-Custody procedures. The samples were analyzed for the presence of Benzene, Toluene, Ethylbenzene and Xylene by EPA Method 602 and for Total Petroleum Hydrocarbons by

TB-3



DEBRIS AREA

TB-2



GATE

WAREHOUSE

GATE

R
A
I
L
R
O
A
D

TB-1



SCALES



MSE ENVIRONMENTAL, INC.

FIGURE 1
APPROXIMATE LOCATION OF TEST
BORINGS

SCALE: NONE

APPROVED BY:

DATE:

DRAWING NUMBER:

DRAWN BY:

REVISED

EPA Method 8015. Results indicated the levels of constituents tested for were below the method detection limits in both samples. Complete laboratory results are included in Appendix "A".

6.0 SUBSURFACE INVESTIGATION

MSE performed a PIQ subsurface investigation on February 16 and 23, 1990. The survey was performed using magnetics to locate significant anomalies which may indicate underground storage tanks. Any anomalies were further investigated with the use of ground penetrating radar (GPR) to determine the actual source. The areas surveyed included the southern portion of the PIQ, the western section along the driveway and warehouse and the northern portion up to the debris pile north of the warehouse (See Figure 2). The eastern side of the warehouse was not investigated due to the railroad spurs. The areas of heavy debris piles were likewise not surveyed due to inaccessibility. Numerous metallic objects on the PIQ reduced the reliability of the magnetics investigation. However, no evidence was found to suggest the existence of underground storage tanks within the areas investigated on the PIQ.

7.0 DISCUSSION

Based on the available reports regarding the adjacent Marina Village contamination from leaking underground fuel storage tanks, it appears the soil contamination has been removed from the site and the remaining groundwater contamination has not impacted the PIQ. Due to the low permeability characteristics of the Bay Mud underlying the area, it is unlikely the contaminants would migrate onto the PIQ. Also, the remaining contamination exists at a relatively low concentration which will continue to degrade over time.

Results of the subsurface investigation indicate no significant anomalies resembling underground storage tanks exist within the areas explored on the PIQ. Additionally, no records were found to suggest the existence of underground storage tanks on the PIQ.

8.0 CONCLUSIONS

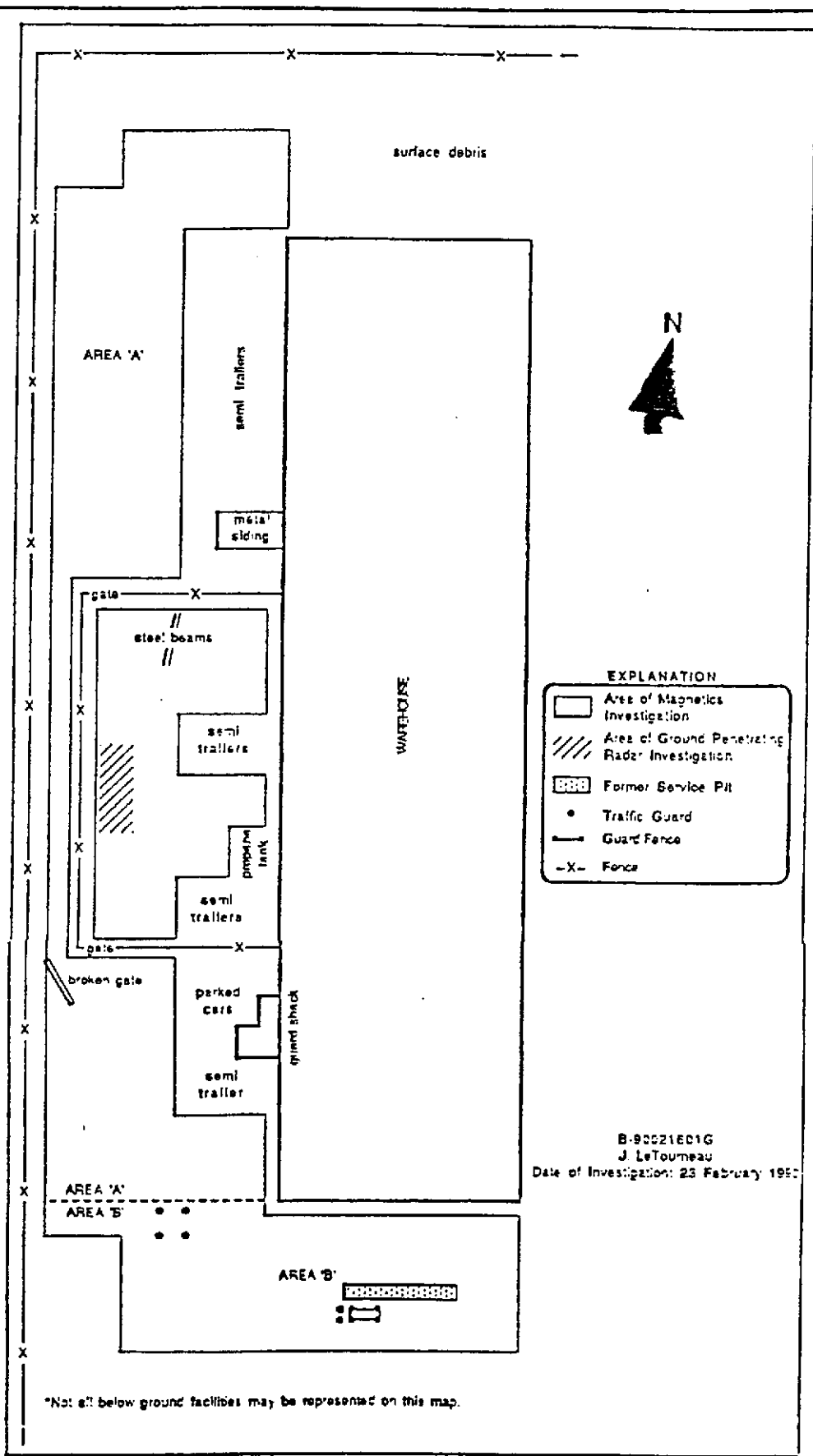
In order to determine the presence of, and potential for hazardous materials/waste deposition, MSE has focused on review of regulatory files, investigation into the groundwater conditions underlying the site and subsurface investigation to identify possible underground storage tanks on the Property in Question. The results of the PIQ investigation do not constitute reason to believe that hazardous materials/wastes and/or environmental stress has occurred on the property.

9.0 RECOMMENDATIONS

None

10.0 LIMITATIONS

Our professional services have been performed using that degree of care and skill ordinarily exercised, under similar circumstances, by reputable engineers practicing in this or similar



localities. No other warranty, either expressed or implied, is made as to the professional advice included in this report.

The conclusions and recommendations in this report are based on:

1. The investigation performed for this site.
2. The observations of our field personnel.
3. The results of laboratory tests.
4. Referenced documents.

It is possible that variations in the groundwater and subsurface conditions could exist beyond the points explored in this investigation. It should be noted that it was not the intent of this investigation to explore every possible location on this site. In accepting the data, conclusions and recommendations of this report, the Client should acknowledge that it is possible that any investigation, no matter how thorough in concept, may not encounter subsurface conditions which may have environmental implications.

This report has been prepared for the Law Firm of Hane & Hunt, Santa Monica, California, and their Client, to be used solely in evaluating the impact, if any, of hazardous material deposition on the property. The report has not been prepared for use by other parties and may not contain sufficient technical information for purposes of other parties or other uses.

11.0 REFERENCES

11.1 Published References

Alameda County Health Care Services Agency, Department of Environmental Health, Hazardous Materials Files.

Alameda Fire Department, Hazardous Materials Files.

Levine-Fricke, Report on Removal of Petroleum-Affected Soils in the Vicinity of the Rigging International Building, 2051 Sherman Street, Alameda, California 94501, April 25, 1988.

Levine-Fricke, Response to Comments Regarding April 25, 1988 Report on the Removal of Petroleum-Affected Soils in the Vicinity of the Rigging International Building, 2051 Sherman Street, Alameda, California, July 27, 1988.

Marina Village, Letter Regarding Disposal of Soils Removed From Underground Tank Excavation, 2051 Sherman Street, Alameda, California, September 27, 1988.

San Francisco Bay Region, California Regional Water Quality Control Board, Hazardous Materials Files.

11.2 Personal Communications

Mr. Stephen Getty

Marina Village, Alameda, CA

Mr. Edgar Howell
Mr. Ariu Levi

Alameda County Health Care
Services Agency, Department
of Environmental Health

Captain Martin

U.S. Coast Guard
Marine Safety Office

Lt. McKinley

Alameda Fire Department

APPENDIX A



Performance Analytical Inc.
Environmental Testing & Consulting

LABORATORY REPORT

Client: MSE Environmental Inc.
Address: 1250 Avenida Acaso, Suite H
Camarillo, CA 93010
Contact: Mr. Kurt B. Martin

Date of Report: 03/01/90
Date Received: 02/20/90
PAI Project No: 2220
Purchase Order: Verbal

Fifteen (15) Soil Samples labeled: Oakland Recon H196

TB-1-5	TB-2-5	TB-3-7	TB-4-5	TB-5-5
TB-1-10	TB-2-10	TB-3-10	TB-4-10	TB-5-10
TB-1-15	TB-2-15	TB-3-15	TB-4-15	TB-5-15

One (1) Water Sample labeled: Oakland Recon H196

GW-TB-2-15

Two (2) Water Samples labeled: Alaska Basin

GW-TB-1-8 GW-TB-2-8

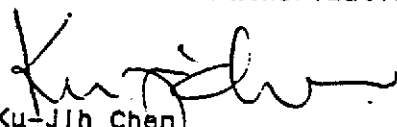
The samples were received at the laboratory under chain of custody on February 20, 1990. All samples were received intact. The laboratory was instructed to composite samples from bore holes #1, 2 and 5. The remaining samples were analyzed individually. The analyses performed on each sample are listed on the following page. Analyses for Total Petroleum Hydrocarbons as gasoline, and for Benzene, Toluene, Ethylbenzene and Xylene were performed by gas chromatography according to Modified EPA Methods 8015/8020. Analyses for Total Lead were performed by flame atomic absorption spectrophotometry according to EPA Method 7420. Analyses for Total Extractable Petroleum Hydrocarbons were performed by fixed wavelength Infrared Spectroscopy according to EPA Method 418.1.

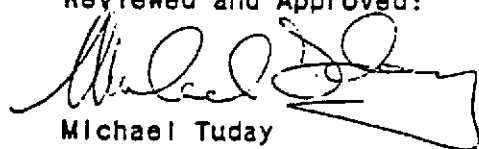
The analyses were performed in accordance with the laboratory analysis procedures outlined in the May, 1988 edition of the Leaking Underground Fuel Tank (LUFT) Field Manual, issued by the State Water Resources Control Board, Appendix C. The Total Petroleum Hydrocarbons (as Gasoline) analysis was performed by the California Department of Health Services approved method (Modified EPA Method 8015) using a Hewlett-Packard 5890A gas chromatograph

Page 1 of 2

Data Release Authorization:

Reviewed and Approved:


Ku-Jih Chen
Principal Chemist


Michael Tuday
Laboratory Director

Page 2 .

equipped with a flame ionization detector. The BTXE analysis was performed according to EPA Method 8020, using an HP5890A gas chromatograph equipped with a Photoionization detector.

After reporting the results from the original analyses, MSE instructed the laboratory to perform analysis for TPH-gasoline/BTXE on each sample from Bore Hole #2. The hydrocarbon "hits" for Samples "TB-2 COMPOSITE" and "TB-2-5" did not match the gas chromatographic "fingerprint" for the gasoline standard, nor did it resemble diesel, jet fuel or kerosene hydrocarbon mixtures. The soil contamination appeared to be a light oil containing C13 to C16 paraffins, olefins, cyclic and aromatic hydrocarbons.

The results of analysis are given on the attached data summary sheets.



Performance Analytical Inc.
Environmental Testing and Consulting

PERFORMANCE ANALYTICAL INC.

RESULTS OF BTEX ANALYSIS

Client: MSE Environmental
Test Code: Modified EPA 8015/8020 Matrix: Water
Analyst: Ku-Jih Chen Date Received: 02/20/90
Instrument ID: HP5890/PID Date Analyzed: 02/21-22/90
Verified by: Michael Taday Weight Analyzed: Approx. 1.0 ml

Client Sample ID	PAI Sample ID	Benzene ug/L (ppb)	Toluene ug/L (ppb)	Ethylbenzene ug/L	Total Xylenes ug/L
GW-TB-1-8 ALASKA BASIN	9000503	ND<0.3	ND<0.3	ND<0.3	ND<0.6
GW-TB-2-8 ALASKA BASIN	9000504	ND<0.3	ND<0.3	ND<0.3	ND<0.6
GW-TB-2-15 OAKLAND RECON	9000502	ND<0.3	ND<0.3	ND<0.3	ND<0.6

PERFORMANCE ANALYTICAL INC.

RESULTS OF TOTAL PETROLEUM HYDROCARBON (TPH) ANALYSIS

Client: MSE Environmental
Test Code: Modified EPA 8015/602 Matrix: Water
Analyst: Ku-Jih Chen Date Received: 02/20/90
Instrument ID: HP5890/FID Date Analyzed: 02/21-22/90
Verified by: Michael Taday Amount Analyzed: Approx. 1.0 ml

Client Sample ID	PAI Sample ID	Total Petroleum Hydrocarbons as Gasoline (mg/L)
GW-TB-1-8 ALASKA BASIN	9000503	ND < 0.5
GW-TB-2-8 ALASKA BASIN	9000504	ND < 0.5
GW-TB-2-15 OAKLAND RECON	9000502	ND < 0.5

ND < - Not Detected - Less Than Indicated Detection Limit