

October 21, 1996

PROJECT REPORT UNDERGROUND STORAGE TANK REMOVAL (ASE JOB NO. 2991)

for

Geo M. Martin Company 1250 67th Street Emeryville, California

96 OCT 22 PM 2: 32

Submitted by:

Aqua Science Engineers 2411 Old Crow Canyon Road # San Ramon, California 94583 (510) 820-9391

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CHAIN OF CUSTODY

1.0 INTRODUCTION

This report documents the removal, disposal and related activities of the underground storage tank (UST) closure performed at the 1308 67th Street in Emeryville, California (Figure 1). The following UST was removed from the site (Figure 2):

OUANTITY TYPE AND SIZE UST FORMER CONTENTS

1 Steel, 700 gallon Diesel

The scope of services provided by Aqua Science Engineers, Inc. (ASE), were conducted on behalf of the property owner, Geo M. Martin Company, in accordance with ASE proposal No. 96-115 and included the following tasks:

- o Preparing a health and safety plan.
- o Obtaining permits from appropriate agencies.
- o Removing and disposing of liquids from the UST.
- o Removing and disposing of the UST and piping.
- o Sampling and analyzing the soil beneath the UST.
- o Offhaul and disposal of contaminated soil.
- o Backfilling and resurfacing the excavation.
- o Preparing this report of methods and findings.

2.0 PERMITS

Permits and approvals required to remove the UST were obtained by ASE from the City of Emeryville Fire Department (EFD), the Alameda County Health Care Services Agency (ACHCSA), CAL-OSHA, and the Bay Area Air Quality Management District (BAAQMD). Copies of these permits, application forms, and notification documents are contained in Appendix A.

3.0 MOBILIZATION

ASE mobilized for on-site activities on September 20, 1996. Field operations were conducted by trained technicians who are certified per the mandatory 40-hour safety program as specified in the OSHA Hazardous Waste Operations and Emergency Response Standard (29 CFR 1910.120). A tailgate safety meeting was conducted and the health and safety plan was signed by all field personnel. Personnel present during the activities included ASE Senior Project Manager David Allen, ASE Environmental Specialist Scott Ferriman, representative from Break Away Bobcat Service

(equipment and labor), Geo M. Martin personnel and Mr. Brian Oliva of the Alameda County Health Care Services Agency.

4.0 PRE-EXCAVATION ACTIVITIES

ASE staff began on-site activities on September 20, 1996 by removing the concrete on top of the UST. After the concrete was removed, ASE uncovered the UST to gain access for product evacuation and rinsing. The piping was cut at the excavation wall and capped at both ends.

5.0 LIQUID REMOVAL

Upon completion of the uncovering activities, the UST was pumped of residual fuel and then triple rinsed with tap water. A total of 650 gallons of rinsate and residual fuel was pumped from the UST and transported to the Alviso Oil facility in Alviso, CA under Hazardous Waste Manifest No. 95877508 by Waste Oil Recovery Services of Oakland, a licensed hazardous waste hauler (State Transporters ID #616066) on September 20, 1996. A copy of the manifest is attached in Appendix B.

6.0 TANK PREPARATION

The UST was made inert through the addition of 100 pounds of dry ice to the UST. The UST removal operations were witnessed by Mr. Brian Oliva of the ACHCSA. The Lower Explosive Limit (LEL) of the UST atmosphere was measured and found to be within the allowable range; therefore, approval for the UST removal was granted by Mr. Brian Oliva. Mr. George Warren of the EFD was unable to attend and witness the UST removal; he gave his authority for removal of the UST to Mr. Brian Oliva.

7.0 TANK REMOVAL OPERATIONS

On September 20, 1996, the UST was lifted from the excavation and placed on the edge of the excavation to allow the residual sludge to drain out of the UST. The UST contained many holes and its bottom was mostly rusted away. This sludge was placed on the stockpiled soil for future disposal. At this time the UST was inspected by ASE and the ACHCSA. Upon inspection of the UST, several holes were noted throughout the UST. The UST was then wrapped in plastic sheeting and loaded onto the transport vehicle.

The UST was transported to the Erickson, Inc. facility in Richmond, CA (a licensed recycling facility, No. CAD009466392) by Dexanna, Inc. (State Transporter's ID No. 602255) under Hazardous Waste Manifest No.

95269996 on September 20, 1996. See Appendix B for a copy of the manifest. Also see Appendix C for a copy of the Tank Disposal Certificate.

8.0 OVEREXCAVATION OF CONTAMINATED SOIL

ASE was prepared to remove accessible contaminated soil surrounding the UST. After the UST was removed and the soil sample was collected, ASE removed approximately 1 ton of contaminated soil and sludge which drained from the tank during removal. Overexcavation was limited horizontally and vertically due to the proximity of the brick building and sump. In total, 7.5 tons of petroleum-hydrocarbon contaminated soil was removed from the excavation. This material was stockpiled next to the excavation for future disposal. Groundwater was not observed in the UST excavation.

9.0 SOIL SAMPLE COLLECTION AND CHEMICAL ANALYSES

On September 20, 1996 at the direction of Mr. Brian Oliva of the ACHCSA, ASE collected the following soil samples (see Figure 2).

TABLE ONE SOIL SAMPLE LOCATIONS

Sample Name	Location	<u>Depth</u>
T1-5'	Southern End Bottom of Excavation	5' bgs
STKP(A-D)	Composite of Stockpile Soil	N/A

The soil sample collected at 5' below ground surface (bgs) was to assess the soil contamination, if any, below the bottom of the former UST. Based on the visual inspection and odor of the excavated soils, it was apparent that some degree of soil contamination existed in the soil adjacent to and below the UST. Excavation of soils deeper than 5' bgs was not considered due to the proximity of the building and sump adjacent to the excavation. Soil samples were collected from the native material which consisted of a brown and/or green, damp clay.

The soil samples were collected in brass sample tubes, covered on each end with teflon tape and plastic end caps, labeled, placed on ice and transported to Chromalab, Inc., of Pleasanton, CA (ELAP #1094) under chain of custody. The above-referenced samples were analyzed for total petroleum hydrocarbons as diesel (TPH-D) by EPA Method 3550/8015M, benzene, toluene, ethylbenzene, and total xylenes (BTEX) by EPA Method

8020, halogenated volatile organics by EPA Method 8010, and LUFT 5 metals. Analytical results are shown below in Table Two; copies of laboratory data can be found in Appendix D.

TABLE TWO SOIL SAMPLE RESULTS All Results in Parts Per Million

Cem	Sample Name	TPH Diesel	Benzene 7	Foluene	Ethyl Benzene	Total Xylenes	HVOC's
ST pit +	STKP(A-D)	3,400 1,300	< 2.5 < 0.10	< 2.5 0.35	6.0 2.5	44 20	< 0.020-0.040 < 0.005-0.010
from Sit	e EPA METHOD	8015M	8020	8020	8020	8020	8010
	Sample Name	Cadmium	Chromiun	n	Lead	Nickel	Zinc
	T1-5' STKP(A-D)	< 0.50 < 0.50	20 23		5.6 26	34 34	32 100
	EPA METHOD	6010	6010		6010	6010	6010

10.0 EXCAVATION BACKFILLING

On September 20, 1996, ASE backfilled and compacted the entire excavation with 12 tons of clean, imported, granular backfill material.

11.0 OFFHAUL AND DISPOSAL OF CONTAMINATED SOIL

On October 10, 1996, 7.5 tons of contaminated soil was transported and disposed at FORWARD, Inc., a California non-hazardous landfill under proper manifest. A copy of the manifest is attached in Appendix B.

12.0 CONCLUSIONS AND RECOMMENDATIONS

- * On September 20, 1996, one (1) 700 gallon diesel UST was removed from 1308 67th Street in Emeryville, CA and disposed of off site.
- * Contaminated soil around the UST was excavated, stockpiled and disposed of at FORWARD, Inc., a non-hazardous landfill.
- * The entire excavation was then backfilled with imported fill material and compacted.

* Elevated concentrations of petroleum hydrocarbons as diesel and xylenes exist in the soil below the former UST. These concentrations typically warrant additional assessment activities per the guidelines set by the ACHCSA.

ASE recommends no further soil excavation or remedial activities related to the former underground storage tank. We recommend that a copy of this report be mailed to Ms. Amy Leech of the ACHCSA for further guidance from that agency.

13.0 REPORT LIMITATIONS

The results of this project represent conditions at the time and specific location at which samples were collected, and for the specific parameters analyzed by the laboratory. It does not fully characterize the site for contamination resulting from sources other than the former UST and associated piping at the site, or for parameters not analyzed for by the laboratory. All of the laboratory work cited in this report was prepared under the direction of independent CA-DHS certified laboratory. The independent laboratory is solely responsible for the contents and conclusions of the chemical analysis data.

ASE appreciates the opportunity to assist with the environmental needs of this property. Should questions or comments arise, please feel free to give us a call at (510) 820-9391.

Respectfully submitted,

AQUA SCIENCE ENGINEERS, INC.

Scott Ferriman

Environmental Specialist

Enclosures: Figure 1 - Site Location Map

Figure 2 - Site & Sampling Plan

Appendices A - D

copies to: Mr. Kevin Graves, S.F. Bay Regional Water Quality Control

Board

Ms. Amy Leech, Alameda County Health Care Services

Agency

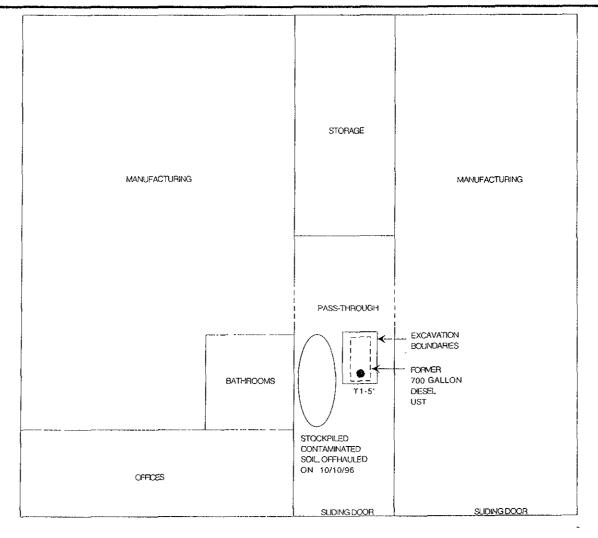
FIGURES



SITE LOCATION MAP

GEO M. MARTIN COMPANY 1308 67th STREET EMERYVILLE, CALIFORNIA

Aqua Science Engineers

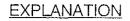




NORTH

Scale: 1" = 20'

67TH STREET



T1-5'

SOIL SAMPLE LOCATION

Ī____

FORMER UNDERGROUND STORAGE TANK

SITE & SAMPLING

PLAN

GEO. M. MARTIN COMPANY 1308 67TH STREET EMERYVILLE, CALIFORNIA

Aqua Science Engineers, Inc.

Figure 2

APPENDIX A PERMITS

ALAMEDA COUNTY HEALTH CARE SERVICES AGENCY DEPARTMENT OF ENVIRONMENTAL HEALTH ENVIRONMENTAL PROTECTION DIVISION 1131 HARBOR BAY PARKWAY, RM 250 ALAMEDA, CA 94502-6577 PHONE #
FAX # 510/567-6700

510/337-9335

Underground Storage Tank Closuré Permit Application Alameda County Division of Hazardous Materials 1131 Harbor Bay Parkway, Suite 250 Alameda, CA 94502-8577 ACCEPTED

These closure/removal plans have been received and found to be acceptable and essentially meet the requirements of State and Local Health Laws. Changes to your closure plans indicated by this Department are to assure compliance with

State and local laws. The project proposed herein is now released for issuance of any required building permits for One copy of the accepted plans must be on the job and available to all contractors and cuatismen involved with the construction/destruction, removal

Notify this Department at least 72 hours prior to the following. and Building inspections Department to determine it such must be submitted to this this Department and to the Fire Any changes or alterations of these plans and specifications changes most the requirements of State and local taws.

closure, is dependent on compliance with accepted plans permanent Removal of Tarik(s) and Piping ssuance of a) permit to operate, b) and all applicable laws and regulations, Final Inspection Sampling

THERE IS A FINANCIAL PENALTY FOR NOT OBTAINING THESE INSPECTIONS:

Contact Specialist:

UNDERGROUND TANK CLOSURE PLAN Complete according to attached instructions

1.	Name of Business Geo M. Martin Company
	Business Owner or Contact Person (PRINT) David GoodearL
2.	site Address 1308 Sixty Seventh Street
	city <u>Emeryville</u> zip <u>94608</u> Phone <u>652-2200</u>
3.	Mailing Address 1250 Sixty Seventh Steet
	city Emery.ll zip _94608 Phone 652-2200
4.	Property Owner Geo. M. Marin Company.
	Business Name (if applicable)
	Address 1750 Suty-Seventh St.
	City, State Emeryelle, CA 9000 Zip 94608
5.	Generator name under which tank will be manifested
	Geo. M. Martin Company.
	EPA ID# under which tank will be manifested C A 050 1074856
	of Remail
	OF Kimari I

6.	Contractor House Science Engineers, Inc.
	Address 2411 old Crow Canyon Rd, 5 # 4
	City San Ramon
	License Type* Class A Haz ID# 487000
•	*Effective January 1, 1992, Business and Professional Code Section 7058.7 requires prime contractors to also hold Hazardous Waste Certification issued by the State Contractors License Board.
7.	Consultant (if applicable) Sec ± 6
	Address
	City, State Phone
8.	Main Contact Person for Investigation (if applicable)
	Name Scott Ferriman Title Environmental Specialist
	Company ASE, Inc.
-	Phone 510-820-9391
9.	Number of underground tanks being closed with this plan
	Length of piping being removed under this plan20'
	Total number of underground tanks at this facility (**confirmed with owner or 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 W.O. R. S. EPA I.D. No. <u>CADoco 624515</u>
	Hauler License No. CAL rub-106399 License Exp. Date 7/31/96
	Address 6401 Leona Street
	CityOakland State CA zip 94605
	b) Product/Residual Sludge/Rinsate Disposal Site
	Name Alvisa . 0,1 EPA ID# (AL00064857)
	Address 5001 Archer Street
	City Alviso State (A zip 95002
	"

c)	Tank and Piping Transporter
	Name Ecickson Inc EPA I.D. No. CAPO09466392
•	Hauler License No. 0019 License Exp. Date 7/96
	Address Z55 Pari Blvd
	city Richmond stateCA zip9480
ď) Tank and Piping Disposal Site
~	Name Erickson, Inc EPA I.D. No. CADoo9466392
	Address 45 Alove
	City State Zip
	Sample Collector
,	Name Scott Ferriman
	Company Apue Science Engineers, Inc.
	Address 2411 Old Crow Canyon Rd, #4
	city <u>San Ramon</u> State <u>CA</u> Zip <u>94583</u> Phone <u>570.820.9391</u>
12.	Laboratory
	Name Cartis and Tompkin, LTD.
	Address 2323 fifth Street
	city <u>Barkely</u> State <u>CA</u> Zip <u>94710</u>
	State Certification No. ELAP # 1459
	Have tanks or pipes leaked in the past? Yes[] No[] Unknown[X]
13.	
	If yes, describe.

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

Dry Ice (it 25#/1000 sci. of UST Volume

Before tanks are pumped out and inerted, 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, along with local Fire and Building Departments, must also be contacted for tank removal permits. Fire departments typically require the use of a combustible gas indicator to verify tank inertness. It is the contractor's responsibility to bring a working combustible gas indicator on-site to verify that the tank is inert.

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

•	Tank	Material to be sampled	Location and
Capacity	Use History include date last used (estimated)	(tank contents, soil, groundwater)	Depth of Samples
1-300 gallan	Contents is Diesel. Tank is a closed System pumped Through Miters for Calibration purposes.	Scil and Groundwater if encumbered	one (1) sample under UST. one (1) sample in pipe Trench. one (1) sample in meter unea.

One soil sample must be collected for every 20 linear feet of 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		
20 yards.	1-four point composite and analyzed for land fill requierments.		

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

Will the excavated soil be returned to the excavation immediately after tank removal? [] yes [] no [X] unknown

Ιf	yes,	explain	reasoning
----	------	---------	-----------

If unknown at this point in time, please be aware that excavated soil may not be returned to the excavation without <u>prior</u> approval from Alameda County. This means that the contractor, consultant, or responsible party must communicate with the Specialist 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
Duse 1 . BTEX	3550/8015 M 5030	8050 8012 W	1.0 ppm
Groundwater Diese BTEX	is not antisopated, it e 35.0 5030	encountered parameters vill 8020	be meet. 50 ppb 0.5 ppb

18. Submit Worker's Compensation Certificate Copy
Name of Insurer Superior National Insurance
19. Submit Plot Plan ***(See Instructions)***
20. Enclose Deposit (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 provided above, may be needed in order to obtain approval from the Environmental Protection 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 agent and that this responsibility is not shared nor assumed by the County of Alameda.
Once I have received my stamped, accepted closure plan, I will contact the project Hazardous Materials Specialist at least three working days in advance of site work to schedule the required inspections.
CONTRACTOR INFORMATION
Name of Business - Aqua Science Engineers Inc.
Name of Individual Scott Ferrings
Signature Scatt 7. Land Date 4-29-96
PROPERTY OWNER OR MOST RECENT TANK OPERATOR (Circle one)
Name of Business Geo. M. Marko Company
Name of Individual David Coodia
Signature Date 4-29-96

CITY OF EMERYVILLE FIRE DEPARTMENT 6303 HOLLIS STREET EMERYVILLE,CA.,94608 (510) 596-3750	FIRE DEPARTMENT USE ONLY FPB-996-1308 (PERMIT NUMBER) Application Received:
THIS APPLICATION IS YOUR PERMIT WHEN PROPERLY FILLED OUT, SIGNED, VALIDATED AND FEES PAID. ADDRESS: 1308 67 5 Strut BUSINESS NAME: Geo M. Markin Company CONTACT PERSON: David Gnodes TELEPHONE NUMBER: 652-2200	Date: 9/13/96 Signed: 100 Permit Issued: Date: 9/13/96 Signed. 100 EFD Fermit Type(s) (see reverse) FL-UGST # 4 Expiration Date: (Q.M.O., FROM DATE OF ISSUE) TOTAL FEES DUE: #125.00/TANK
DESCRIPTION OF OPERATION: UST Removel within Bld	MAKE CHECK PAYABLE TO THE CITY OF EMERYVILLE. FEES ARE ESTABLISHED THRU THE CITY OF EMERYVILLE MASTER FEE SCHEDULE ADOPTED JUNE 1, 1993. COPY AYAILABLE ON REQUEST.
APPLICANT READ AND SIGN BELOW. I CERTIFY THAT I HAVE READ THIS APPLICATION AND STATE THAT THE INFORMATION GIVEN IS TRUE AND CORRECT. I AGREE TO COMPLY WITH ALL LOCAL ORDINANCES AND STATE LAWS THAT RELATE TO THIS PERMIT. I HEREBY AUTHORIZE REPRESENTATIVES OF THE CITY TO ENTER UPON THE ABOVE MENTIONED PROPERTY TO VERIFY COMPLIANCE WITH THE CONDITIONS OF THIS PERMIT, AT ANY REASONABLE TIME. Building Owner Scott	
THIS PERMIT MUST BE AVAILABLE FOR I	DSPECTION AT ALL TIMES

REVOCATION OF PERMIT

THE CHIEF IS AUTHORIZED TO SUSPEND/REVOKE A PERMIT WHEN THE CHIEF HAS DETERMINED THAT SECTION 4.107, 1991 UFC HAS BEEN VIOLATED.

POSTING OF PERMIT

PERMIT(S) SHALL BE KEPT ON THE PREMISES DESIGNATED AT ALL TIMES AND SHALL BE AVAILABLE FOR INSPECTION AT ANY TIME BY ANY PERSON(S) WHO ARE AUTHORIZED BY THE CHIEF OF THE EMERYVILLE FIRE DEPARTMENT

DATE	INSPECTION NOTES/COMMENTS	INSPECTOR
9/13/96	permit is seed to applicant.	<u> </u>
	pull scheduled for 9/20/94, assiot.	XW
	1/1400 hr. 1	
	Check # 17992	<u> </u>
	COE Fin Carh rept # 31142	
		· · · · · · · · · · · · · · · · · · ·
		· · · · · · · · · · · · · · · · · · ·

ACTIVITY NOTIFICATION FORM

Buildings Structures Scaffolding Falsework Demolition Trenches Excavations

Company Name: Aqua Science Engineers. Inc.	Field Phone: 5/0-409-3536
000	Office Phone: 5/6 - 820 - 939
Specific Activity Location: 1308 Sixty Seventh Street Emeryville, cA	Number of Employees: 4
Nearest Major Cross Street: Hollis Sheet	Starting bate.
City: Emryville	Anticipated Completion Date: 1 day Tob
County: Alameda	High Voltage Lines in Proximity? No X Yes
INSTRUCTIONS: The appropriate item(s) must be completed and signactivity covered by a permit. Please fill in or check	ned by a person knowledgeable about the project for each off the blanks where appropriate.
Construction of: Building Structure Type	e: Steel Frame Tiered Concrete
Tilt-up Wood Frame Liftslab Precast	Slip Form Depth No. of Stories
Description:	
Description	
(See 8 CCR 1709-30: Appendix A Plate A-2-a & b.)	
Scaffolding: Height Metal Wood W	ood over 60 Feet Metal over 125 Feet
'4etal>125 Feet or Wood>60 Feet requires design by California Registered	Civil Engineer & Plans at Site.(See 8 CCR 1644(c)(7))
ascription:	
Falsework/Vertical Shoring: Maximum Height	Maximum Span Material
Description:	
(See 8 CCR 1717)	
Demolition of: Building Structure Height	No of Stories Type: Steel Frame
Wood Frame Concrete Demolition Ball	Clam Explosives
Loader/Tractors Other	
(See 8 CCR 1734-37)	
Trenches/Excavation: Depth Range(Min/Max) 6/8 ff W	lidth Range(Min/Max) 8/16 C4, Total Length 6
Ground Protection Method: Shoring Sloping X To	
257034	
Underground Services Alert(USA) Number To be determine	(NORTH 1-800-642-2444/SOUTH 1-800-422-4133)
Soil Analysis to be done? Yes No If No, You	Must Slope 1.5 to 1.
scription: UST Rimora	
osipasii	
(See 8 CCR 1504, 1540-1547)	
* Ground protection methods for excavations deeper than 20 feet must be	e designed by a Registered Professional Engineer.
See 8 CCR 1541.1, Appendix F.	Form B-10/9
3	Foun B-roys



REGULATION 8, RULE 40

Aeration of Contaminated Soil and Removal of Underground Storage Tanks

NOTIFICATION FORM

Removal or Replacement of Tanks
 Excavation of Contaminated Soil

	SITE INFORMATION
SITE ADDRESS Geo M. Martin	CA Sixty - Seventh Street CA ZIP 94608
OWNER NAME	Building Structure
TANK REMOVAL	CONTAMINATED SOIL EXCAVATION
SCHEDULED STARTUP DATE Sept 20, 1996	SCHEDULED STARTUP DATE
VAPORS REMOVED BY:	STOCKPILES WILL BE COVERED? YES NO
[X] WATER WASH	ALTERNATIVE METHOD OF AERATION (DESCRIBE BELOW):
[X] VAPOR FREEING (co^2)	
[X] VENTILATION	(MAY REQUIRE PERMIT)
CON	TRACTOR INFORMATION
NAME Agun Schair Engineers, ADDRESS 2411 Old Crow Canyon CITY, STATE, ZIP San Ramon, CA	TAC CONTACT Scott Ferriman Rd, PHONE (510) 820-9391 94583
CON	NSULTANT INFORMATION (IF APPLICABLE)
NAMEA \ /,	CONTACT
	PHONE ()
CITY, STATE, ZIP	
o.,, o.,, e.,	
FOR OFFICE USE ONLY	
DATE RECEIVED FAX	(init.)
DATE POSTMARKED	BY(init.)
	(ina.) -
CC: INSPECTOR NO.	DATEBY(init.)
UPDATE: CONTACT NAME	` '
BAAQMD N #	DATA ENTRY

	UNDERGROUND STORAGE TANK UNAUTHO	ORIZE	D RELEASE (LE	AK) / CONTAMINAT	TON SITE REPORT
EWE	RGENCY HAS STATE OFFICE OF EMERGENCY SERVI			I HAVE DISTRIBUTED THIS INFO	RMATION ACCORDING TO THE THE BACK PAGE OF THIS FORM
REPO	ORT DATE CASE #				
1 4	NAME OF INDIVIDUAL FILING REPORT	1		SIGNATURE	CANAGO SA CASTA CANDATE CONTROL OF THE
		PHONE	1820-9291	0 40	(
<u>}</u>	Scott T. Ferriman	<u> </u>	COMPANY OR AGENCY	NAME	
RTEC	REPRESENTING OWNER/OPERATOR REGIONAL	BOARD	_	ence Enginee	
REPORTED BY	LOCAL AGENCY X OTHER COnsultant		Hour Sur	ence Enginee	-s Loc.
	ADDRESS ZYII Old Crow Cunyon Rd # 4 San NAME	Ra	CONTACT PERSON	CA	STATE 94583 ZIP
RESPONSIBLE PARTY	Geo M. Martin Co. DUN	KNOWN		poodearL	(510) 652-2200
SPO	ADDRESS	ı.		c	94/08
<u>a.</u>	1250 67th Street Emeryu.	lle	СПҮ	<u> CA</u>	STATE 94608 ZIP
	FACILITY NAME (IF APPLICABLE)		OPERATOR		/)
8					
Sc	ADDRESS	. T		CA	COUNTY 94608 718
SITE LOCATION	1308 67th Start STREET Emery's	,1h	CITY	<u> </u>	COUNTY / / C C / C ZIP
<u>s</u>					
	Hollis Street		CONTACT PERSON		PHONE
IMPLEMENTING AGENCIES	(1) A C A A A A L		1 ~	Hills	(510)567-6700
NEW CONTRACT	Alameda County Haith Agency REGIONAL BOARD		Susan	11490	PHONE
MPLE	San Francisac Bay Region		Kevin G	ca vie	(570) 286-1255
-	1,700	NAME	1 (13-11-1		QUANTITY LOST (GALLONS)
NGE SE	Diesel			_	MINKNOWN
SUBSTANCES	(2)				UNKNOWN
RY/ABATEMENT	DATE DISCOVERED HOW DISCOVERED OM 9 M ZD OD 9 46 Y TANK TEST		YENTORY CONTROL	SUBSURFACE MONITORIN	NUISANCE CONDITIONS
3ATE	DATE DISCHARGE BEGAN			OP DISCHARGE (CHECK ALL TI	HAT APPLY)
3Y/A8	IN IN DI DI YI YI WUNKNOWN		REMOVE CONTE	NTS 🔀 CLOSE TANK & REM	IOVE REPAIR PIPING
	HAS DISCHARGE BEEN STOPPED ?		REPAIR TANK	CLOSE TANK & FILL	IN PLACE CHANGE PROCEDURE
DISCOVE	YES NO IF YES, DATE ON 9 M ZOO OF	7A	REPLACE TANK	OTHER EX CO	valed
-	ACCUPATION OF DISCULLARS	CAUSE(S)			
SOURCE/	TANK LEAK UNKNOWN		VERFILL	RUPTURE/FAILURE	SPILL
OS S	PIPING LEAK OTHER	\boxtimes	ORROSION	UNKNOWN	OTHER
SE	CHECK ONE ONLY				
CASE	UNDETERMINED SOIL ONLY GROUND	WATER	DRINKING WATER	- (CHECK ONLY IF WATER WE	ELLS HAVE ACTUALLY BEEN AFFECTED)
	CHECK ONE ONLY				
CURRENT	NO ACTION TAKEN PRELIMINARY SITE AS	SESSMEN	NT WORKPLAN SUBMITTE		CHARACTERIZATION
15	LEAK BEING CONFIRMED PRELIMINARY SITE AS				IUP MONITORING IN PROGRESS
	REMEDIATION PLAN CASE CLOSED (CLEAN	TOP COMP	PLETED OR UNNECESSAR	Y) CLEANUP UN	
ـ بـِـا	CHECK APPROPRIATE ACTION(S) EXCAVATE & DI	SPOSE (E		FREE PRODUCT (FP)	ENHANCED BIO DEGRADATION (IT
REMEDIAL	CAP SITE (CD) EXCAVATE & TF			TREAT GROUNDWATER (GT)	REPLACE SUPPLY (RS)
E S	CONTAINMENT BARRIER (CB) NO ACTION REC	_		ENT AT HOOKUP (HU)	VENT SOIL (VS)
_	VACUUM EXTRACT (VE) X OTHER (OT)	105	sible site	<u>Characteriza</u>	ton Report
13			- 1		
COMMENTS	UST Removal Repo	,,,	Submitted	to Local	Agency
1 00	, , ,	-			- /
1					

APPENDIX B

HAZARDOUS & NON-HAZARDOUS WASTE MANIFESTS

pne	nt or type. Form designed for use on elite (12-prich) typewriter.			7 7 7	Information in the charled arrest
	UNIFORM HAZARDOUS WASTE MANIFEST	0748562	rfest Document No. 	2. Page 1	Information in the shaded areas is not required by Federal law.
		MARTIN CON		Manifes) Document	Mombo:
		LLE OH 941	608 B. Side	Émaior (19	
		US EPA ID Number) (c.)	1 - 10 - 10 - 10 - 10 - 10 - 10 - 10 -	
	of the special in desirable of the second			migrations	
	7. Transporter 2 Company Name 8.	US EPA ID Number	1-1717	romaniary (D	
		· · · · · · · · · · · · · · · · · · ·	G. Jean	postero Promo	
	7/15(0/6	US EPA 1D Number	S. Sign	icoldyydd 1 - Eddad ol	
	THISO MICHIN	WER COLLAR			
	11. US DOT Description (including Proper Shipping Name, Hazard Cla		12. Containers	13, Total	14. Unit ; Wt/Vol 1. Weste Number :
	· USED OR NOW RIPE		No. Type	Quantity	Selection
) } 	MPCARBOIS WIST 1		4477	0,06510	EPA/OHIO/
7	b.			***************************************	FPA/Other####################################
`	,				Simple State of the State of th
2	с.				EPA/Other, \$28, sp.
	d.			 	State STATE
					ERA/Other
	1Additional Descriptions for Materials Listed Above		K. Hand d	ling Codes for Wast	es tisted Above
				4// (2) 4.	
	15. Special Handling Instructions and Additional Information	SITE	1208	_/.7发	STREET
	USBR P.P.T.	e de la companya de l			•
	- 24 NOUSE 3 6 73			MARKET	
	 GENERATOR'S CERTIFICATION: I hereby declare that the conter packed, marked, and labeled, and are in all respects in proper con 	nts of this consignment are fully ndition for transport by highwa	and accurately describe y according to applicabl	d above by proper : e international and i	shipping name and are classified, national government regulations.
	If I am a large quantity generator, I certify that I have a progreeconomically practicable and that I have selected the practicable threat to human health and the environment; OR, if I am a small waste management method that I available to me and that I can	method of treatment, storage, I quantity generator, I have mo	or disposal currently av	railable to me which	minimizes the present and future
	Printed/Typed Name	Signature /	J		Month, Day Year,
T R	17. Transporter 1 Acknowledgement of Receipt of Materials Printed/Typed Name	Signature			Month Day Year
S	1. S. F. F. S.			<u> </u>	
D R	18. Transporter 2 Acknowledgement of Receipt of Materials Printed/Typed Name	Signature			Month Day Year
κ	19. Discrepancy Indication Space	<u> </u>	·	-	
F A					
Ĭ L					
T	 Facility Owner or Operator Certification of receipt of hazardous n Printed/Typed Name 	naterials covered by this manife Signature	st except as noted in the	m 19.	Month Day Year
ľ		1			

DO NOT WRITE BELOW THIS LINE.

SSR77508 IN CASE OF EMERGENCY OR SPILL, CALL THE NATIONAL RESPONSE CENTER 1-800-424-8802; WITHIN CALIFORNIA, CALL 1-800-852-7550

t or type. Form designed for use on elite (12-pi	itch) typewriter.			Sacramento, California
UNIFORM HAZARDOUS WASTE MANIFEST		anifest Document No. $0 \mid 0 \mid 9 \mid 7 \mid 8$		Information in the shaded areas is not required by Federal law.
3. Generator's Name and Mailing Address (1250 Sixty Serra	Acorge M. Martin Com th Street- Emgyli			Number 69996
4. Generator's Phone (570 650)	والمعد معاركة والمعاركة	□ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □	Senerator's ID	
5. Transporter 1 Company Name	6. US EPA ID Number	C. State	Transporter's ID	
Dexanna	C A D 9 8 2 4 3 8. US EPA ID Number	8 5 6 6 0 1000	orter's Phone	510) - 68/- 1292
7. Transporter 2 Company Name	8. US EPA ID Number	Ein State	ransporter's ID	
· · · · · · · · ·			orter's Phone	
 Designated Facility Name and Site Address Erickson, Inc 2. 				9 4 6 6 3 9 2
Richmond, Californ	ia 94801 C A D 0 0 9 4 6	6 3 9 2 H. Facilit		0) 235-1393
11. US DOT Description (including Proper Shi	ipping Name, Hazard Class, and ID Number)	12. Containers No. Type	13. Total Quantity	14. Unit Wt/Vol 1: Waste Number
° Waste Empty Sto NON-RCRA Hazard	rage Tank ous Waste Solid.	0 0 1 T P	00000	P EPA/Offer NONI
ь.				State (EPA/Other
с.				State EPA/Other
d.				State EPA/Other
15 1bs DRY ICE pe	ank has been inerted war 1000 gallons capacit		ing Codes for Wast	d San
Site Location: 13	08-67 Street - E. ne: David Goodcart			652-3200
 GENERATOR'S CERTIFICATION: 1 here packed, marked, and labeled, and are in 	by declare that the contents of this consignment are fun all respects in proper condition for transport by high	Ily and accurately describe way according to applicabl	d above by proper s e international and s	shipping name and are classified, national government regulations.
economically practicable and that I have	ertify that I have a program in place to reduce the versity that I have a program in place to reduce the versity selected the practicable method of treatment, storagment; OR, if I am a small quantity generator, I have able to me and that I can afford.	ge, or disposal currently as	ailable to me which	minimizes the present and futur
Printed/Typed Name	Signature			Month Day
17. Transporter 1 Acknowledgement of Rece Printed/Typed Name Janes R.	Cox	×12.6	01 \$1	Month Day 9
 Transporter 2 Acknowledgement of Recei Printed/Typed Name 	ipt of Materials Signature			Month Day Y
19. Discrepancy Indication Space				
	of receipt of hazardous materials covered by this ma	nifest except as noted in Ite	m 19.	
Printed/Typed Name	Signature			Month Day Y

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

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P.O. Box 633r 1535 W. Charter Way - Stockton, CA 952 (209) 466-4462 - (900) 204-4242 - FAX (209) 466-1067

October 21, 1996

Aqua Science Engineers 2411 Old Crow Canyon Road San Ramon, CA 95483

Attention: Scott Ferriman

RE:

FORWARD, INC. Approval No. 547522 Disposal of Petroleum Contaminated Soils

1308 67th Street Emeryville, California

Dear Mr. Ferriman:

FORWARD, INC. is pleased to confirm the disposal of 7.43 tons of material as referenced above. The material was received at our Manteca, California facility for disposal on October 11, 1996. The material was placed in a Class 2 waste management unit.

Approval for this material was based on the information provided in the waste profile and associated materials submitted on behalf of George M Martin (Generator). Acceptance of the waste is subject to the "Terms and Conditions" agreed to and signed by the Generator on the Waste Profile Form

Thank you for the opportunity to be of service. Should you have any questions regarding this matter, please call myelf or customer service at (800) 204-4242.

Sincerely,

FORWARD, INC.

Brad J. Bonner

Senior Account Manager

Burad J. Bonner 115

/snr

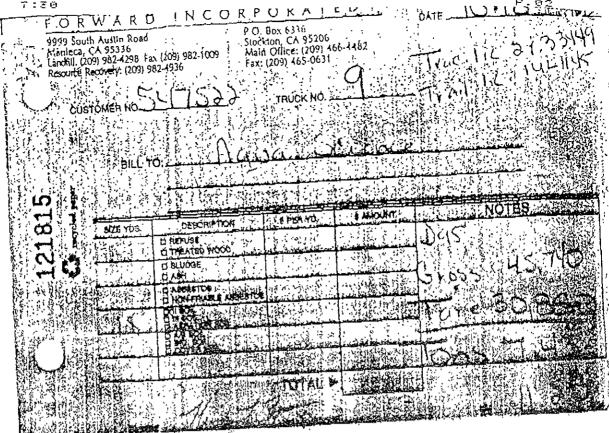




NON-HAZARDOUS WASTE MANIFEST WASTE TREATMENT AND DISPOSAL FACILITY

IOB	ACCEPTANCE NO.	
,) (W W	

, JOB ACOLF MICE NO.	
GENERATOR AND	·
# South July agent for 600 10-10-96	"
WASTETYPE ASSESSED SELECTION SOIL SLUDGE NON-FRIABLE ASSESTOS DISPOSAL SOIL WOOD SASH OTHER	FORWARD INC. LANDFILL 9999 SOUTH AUSTIN ROAD MANTECA, CALIFORNIA 95336 (209) 982-4298 PHONE (209) 982-1009 FAX
and whateless the first the contract of the co	
ADDRESS PLOS 1194 CITY, STATE, ZIP PHONE PHONE TO 846 - 7/24 SIGNATURE OF AUTHORIZED AGENT OR DRIVER DATE	2 X 3 3 Y 4 9 £ 1 U L 11 Y END DUMP BOTTOM DUMP TRANSFER HOLL-OFF(S) FLAT-BED VAN DRUMS
* Harry 10-10-96	CUBIC YARDS
FORWARD INC. LANDFILL Forward shell have no obligation to accept the waste if weather or other conditions impair the sale and effective disposal of the waste or if the waste impairs the sale and effective operation of the Landfull Forward shall use reasonable efforts to promptly notify Disposer of its inability to accept the waste for any reason it Forward's refusal to accept the waste is based or weather or other site conditions, Forward shall notify the Disposer when effect conditions are expected to change such that Forward will be able to accept the waste. REMARKS FACILITY TICKET NUMBER SIGNATURE OF AUTHORIZED AGENT DATE	DISPOSAL METHOD: (TO BE COMPLETED BY FORWAP) DISPOSE BIO AERATE STOCKPILE OTHER



APPENDIX C

TANK DISPOSAL CERTIFICATE

DAY OR NIGHT ~TELEPHONE (510) 235-1393

CERTIFICATE

CERTIFIED SERVICES COMPANY

255 Parr Boulevard • Richmond, California 94801

NO. 16171

	CUSTOMER	
-	JOB NO.	<u>e</u>
Ļ	69173	

FOR:	ERICKSON, INC.	TANK NO1987	2	
LOCATION:RICHI	MOND	DATE: 96/09/2 5	TIME: <u>12:47</u>	
TEST METHODVISUAL_GASTE	CH/1314 SMPN -	LAST PRODUCT	D .	- 4
This is to certify that I have persented and have for This certificate is based on completed and is issued subject to	and the condition onditions existing	to be in accordance at the time the ins	with its assigned designection herein set for	gnation.
TANK SIZE 700 GA	LLON TANK	CONDITION	SAFE FOR FIRE	
WASTE FACILITY.	CERTIFIES THAT NO THERFFORE D APPPOPRIATE D	THE ABOVE NUMB DESTROYED AT OUR		<u>DUS</u>
In the event of any physical or atmosph immediately stop all hot work and cont changes occur.				
STANDARD SAFETY DES	SIGNIATION			
SAFE FOR MEN: Means that in the com 19.5 percent by volume; and that (b) To judgment of the Inspector, the residues while maintained as directed on the Inspe	partment or space so oxic materials in the at are not capable of p	mosphere are within pern	nissable concentrations; and	(c) In the
SAFE FOR FIRE: Means that in the atmosphere is below 10 percent of the not capable of producing a higher cond and while maintained as directed on the sufficiently to prevent the spread of fire necessary by the Inspector.	lower explosive limit; centration that permitte e Inspector's certificate	and that (b) In the judgmed under existing atmosphe, and further, (c) All adja	nent of the Inspector, the reserveric conditions in the preserverness that spaces have either bee	sidues are nce of fire n cleaned
The undersigned representative acknowled which it was issued.	edges receipt of this c	ertificate and understands	the conditions and limitatio	ns under
REPRESENTATIVE /	TITLE		INSPECTOR	
L				

APPENDIX D

LABORATORY ANALYSES and CHAIN OF CUSTODY

Environmental Services (SDB)

September 25, 1996

Submission #: 9609280

AQUA SCIENCE ENGINEERS INC

Atten: Scott Ferriman

Project: GEO M. MARTIN CO.

Project#: 2991

Received: September 20, 1996

re: One sample for Miscellaneous Metals analysis.

Method: EPA 3050A/6010A

Client Sample ID: T1-5'

Spl#: 100881 Matrix: SOIL Extracted: September 23, 1996 Sampled: September 20, 1996 Run#: 3223 - Analyzed: September 24, 1996

REPORTING BLANK BLANK DILUTION LIMIT RESULT SPIKE FACTOR RESULT <u>(mg/Kg)</u> (mg/Kg) (mg/Kg) (%) <u>ANALYTE</u> 90.9 $\overline{N}.D.$ 0.50 N.D. CADMIUM 93.0 1 20 1.0 N.D. CHROMIUM 5.6 34 1.0 93.4 1 N.D. LEAD 90.8 1.0 N.D. NICKEL 1.0 32 93.5 N.D. ZINC

Christopher Arndt

Chemist

John's. Labash

Inorganics Supervisor

Environmental Services (SDB)

September 25, 1996

Submission #: 9609280

AOUA SCIENCE ENGINEERS INC

Atten: Scott Ferriman

Project: GEO M. MARTIN CO.

Received: September 20, 1996

Project#: 2991

re: One sample for Miscellaneous Metals analysis. Method: EPA 3050A/6010A

Client Sample ID: STKP(A-D)

Sp1#: 100882

Matrix: SOIL

Extracted: September 23, 1996

Sampled: September 20, 1996 Run#: 3223

Analyzed: September 24, 1996

ANALYTE	RESULT (mg/Kg)	REPORTING LIMIT (mg/Kg)	BLANK RESULT (mg/Kg)	BLANK SPIKE (%)	DILUTION FACTOR
CADMIUM CHROMIUM LEAD NICKEL	N.D. 23 26 34	0.50 1.0 1.0	N.D. N.D. N.D. N.D.	90.9 93.0 93.4 90.8	1 1 1 1
ZINC	100	î.ŏ	N.D	93.5	1

ganics Supervisor

Environmental Services (SDB)

September 27, 1996

Submission #: 9609280

AQUA SCIENCE ENGINEERS INC

Atten: Scott Ferriman

Project: GEO M. MARTIN CO.

Project#: 2991

Received: September 20, 1996

re: 2 samples for TPH - Diesel analysis.

Method: EPA 3510/8015M

Matrix: SOIL

Extracted: September 25, 1996

Sampled: September 20, 1996 Run#: 3293 Analyzed: September 27, 1996

					REPORTING	3 E	BLANK	BLANK	DILUTION
			DIESE	Ŀ	LIMIT	I	RESULT	SPIKE	FACTOR
		T SPL I	D(mo	7/Kq)	(mg/Kg)	(n	ng/Kg)	(%)	
100881	_		_	100	200		N.D.	75.5	200
			d concentration	due to	overlapping	fuel	patterns		
100882	STKP (A-D)	1:	300	25		N.D.	75.5	25
N	ote:	Estimated	l concentration	due to	overlapping	fuel	patterns		

Bruče Havlik

Chemist

Alex Tam

Semivolatiles Supervisor

Environmental Services (SDB)

September 27, 1996

Submission #: 9609280

AQUA SCIENCE ENGINEERS INC

Atten: Scott Ferriman

Project: GEO M. MARTIN CO.

Project#: 2991

Received: September 20, 1996

re: 1 sample for BTEX compounds analysis.

Method: EPA 8020

Matrix: SOIL

Sampled: September 20, 1996 Run#: 3283

Analyzed: September 26, 1996

Spl# CLIENT SPL ID	Benzene (mg/Kg)	Toluene (mg/Kg)	Ethyl Benzene (mg/Kg)	Total Xylenes (mg/Kg)	
100881 T1-5' Note: Reporting limit raised	N.D.	N.D.	6.0	44	
Reporting Limits Blank Result Blank Spike Result (%)	2.5 N.D. 81.5	2.5 N.D. 86.5	2.5 N.D. 88.5	2.5 N.D. 88.8	

June Zhao Chemist

Marianne Alexander Gas/BTEX Supervisor

Environmental Services (SDB)

September 27, 1996

Submission #: 9609280

AQUA SCIENCE ENGINEERS INC

Atten: Scott Ferriman

Project: GEO M. MARTIN CO.

Project#: 2991

Received: September 20, 1996

re: 1 sample for BTEX compounds analysis.

Method: EPA 8020

Matrix: SOIL

Sampled: September 20, 1996 Run#: 3250

Analyzed: September 24, 1996

Spl# CLIENT SPL ID	Benzene (mg/Kg)	Toluene (mg/Kg)	Ethyl Benzene (mg/Kg)	Total Xylenes (mg/Kg)
100882 STKP(A-D) Note: Reporting limit raised	N.D. due to sample	0.35 interference.	2.5	20
Reporting Limits Blank Result Blank Spike Result (%)	0.10 N.D. 102	0.10 N.D. 108	0.10 N.D. 111	0.10 N.D. 110

June Zhao Chemist Marianne Alexander Gas/BTEX Supervisor

Environmental Services (SDB)

September 27, 1996

Submission #: 9609280

AQUA SCIENCE ENGINEERS INC

Atten: Scott Ferriman

Project: GEO M. MARTIN CO.

Project#: 2991

Received: September 20, 1996

re: One sample for 8010 Purgeable Halocarbons by GC/MS analysis.

Method: EPA 8240A July, 1992

Client Sample ID: T1-5'

Analyzed: September 23, 1996

		REPORTING	BLANK	BLANK DI	LUTION
•	RESULT	LIMIT	RESULT		ACTOR
ANALYTE	(ug/Kg)	(ug/Kg)	(ug/Kg)	(%)	1101011
CHLOROMETHANE	N.D.	40	N.D.		4
VINYL CHLORIDE	N.D.	20	Ñ.D.		
BROMOCHLOROMETHANE	N.D.	20	N.D.		4
CHLOROETHANE	N.D.	20	Ñ.D.		4
TRICHLOROFLUOROMETHANE	N.D.	40	N.D.		4 4 4 4
1,1-DICHLOROETHENE	Ñ.D.	20	N.D.	86.9	$\overset{\circ}{4}$
MÉTHYLENE CHLORIDE	N.D.	40	N.D.		4
TRANS-1,2-DICHLOROETHENE	N.D.	20	N.D.		4
CIS-1,2-DICHLOROETHENE	N.D.	20	Ñ.D.		4
1,1-DICHLOROETHANE	N.D.	20	Ñ.D.		4
CHLOROFORM	N.D.	20	N.D.		4 4 4 4
1,1,1-TRICHLOROETHANE	N.D.	$\bar{20}$	N.D.		$\bar{4}$
CÀRBON TETRACHLORIDE	N.D.	20	N.D.		$\overline{4}$
1,2-DICHLOROETHANE	N.D.	20	N.D.		$\bar{4}$
TRICHLOROETHENE	N.D.	$\frac{1}{2}$ 0	N.D.	98.7	$\bar{4}$
1,2-DICHLOROPROPANE	N.D.	$\frac{1}{2}$ 0	N.D.		$\bar{4}$
BROMODICHLOROMETHANE	N.D.	20	N.D.		
2-CHLOROETHYL VINYL ETHER	N.D.	40	N.D.		4 4 4
TRANS-1,3-DICHLOROPROPENE	N.D.	20	N.D.		$\tilde{4}$
CIS-1,3-DICHLOROPROPENE	N.D.	20	N.D.		$\overline{4}$
1,1,2-TRICHLOROETHANE	N.D.	$\frac{1}{20}$	N.D.		$\frac{1}{4}$
TETRACHLOROETHENE	N.D.	40	N.D.	= =	$\frac{1}{4}$
DIBROMOCHLOROMETHANE	N.D.	20	N.D.		$\frac{4}{4}$
CHLOROBENZENE	N.D.	20	N.D.	101	4
BROMOFORM	N.D.	20	N.D.		$\overline{4}$
1,1,2,2-TETRACHLOROETHANE	N.D.	20	N.D.		4
1,3-DICHLOROBENZENE	N.D.	20	N.D.		4
1,4-DICHLOROBENZENE	N.D.	20	N.D.		4
1,2-DICHLOROBENZENE	N.D.	20	N.D.		4
TRICHLOROTRIFLUOROETHANE	N.D.	20	N.D.		4
Note: Surrogate recovery	was outside /			interference	

Note: Surrogate recovery was outside QA/QC limits due to matrix interference. See Surrogate Summary page.

In

June Zhao Chemist Chip Poalinelli Operations Manager

Environmental Services (SDB)

September 27, 1996

Submission #: 9609280

AQUA SCIENCE ENGINEERS INC

Atten: Scott Ferriman

Project: GEO M. MARTIN CO.

Project#: 2991

Received: September 20, 1996

re: One sample for 8010 Purgeable Halocarbons by GC/MS analysis.

Method: EPA 8240A July, 1992

Client Sample ID: STKP(A-D)

Spl#: 100882 Matrix: SOIL Sampled: September 20, 1996 Run#: 3332

Analyzed: September 25, 1996

ANALYTE	RESULT (ug/Kg)	REPORTING LIMIT (ug/Kg)	BLANK RESULT (ug/Kg)	BLANK I SPIKE (%)	OILUTION FACTOR
CHLOROMETHANE	N.D.	10	N.D.		ī
VINYL CHLORIDE	N.D.	5.0	N.D.	 -	1
BROMOCHLOROMETHANE	N.D.	5.0	N.D.	<u>-</u>	1
CHLOROETHANE	N.D.	5.0	N.D.		1
TRICHLOROFLUOROMETHANE	N.D.	10	N.D.		ī
1,1-DICHLOROETHENE	N.D.	5.0	N.D.	91.1	1
METHYLENE CHLORIDE	N.D.	10	N.D.		1 1 1 1
TRANS-1,2-DICHLOROETHENE	N.D.	5.0	N.D.		1
CIS-1,2-DICHLOROETHENE	N.D.	5.0	N.D.		$\bar{1}$
1,1-DICHLOROETHANE	N.D.	5.0	N.D.		ī
CHLOROFORM	N.D.	5.0	N.D.		ī
1,1,1-TRICHLOROETHANE	N.D.	5.0	N.D.		
CARBON TETRACHLORIDE	N.D.	5.0	N.D.		1 1
1,2-DICHLOROETHANE	N.D.	5.0	N.D.		
TRICHLOROETHENE	N.D.	5.0	N.D.	91.1	1 1
1,2-DICHLOROPROPANE	N.D.	5.0	N.D.		1
BROMODICHLOROMETHANE	Ñ.D.	5.0	N.D.	~ -	ĩ
2-CHLOROETHYL VINYL ETHER	N.D.	10	N.D.	- -	ī
TRANS-1,3-DICHLOROPROPENE	N.D.	5.0	N.D.	- -	ī
CIS-1,3-DICHLOROPROPENE	N.D.	5.0	N.D.	- -	ī
1,1,2-TRICHLOROETHANE	Ñ.D.	5.0	N.D.		ī
TETRACHLOROETHENE	N.D.	10	N.D.		1 1 1
DIBROMOCHLOROMETHANE	N.D.	5.0	N.D.		1
CHLOROBENZENE	N.D.	5.0	N.D.	90.8	ī
BROMOFORM	N.D.	5.0	N.D.	J 0 . 0	ī
1,1,2,2-TETRACHLOROETHANE	N.D.	5.0	N.D.		1 1 1
1,3-DICHLOROBENZENE	N.D.	5.0	N.D.		1
1,4-DICHLOROBENZENE	N.D.	5.0	N.D.		î
1,2-DICHLOROBENZENE	N.D.	5.0	N.D.		1
TRICHLOROTRIFLUOROETHANE	N.D.	5.0	N.D.		1
THE CHAOTOTICE HOOKOBIHANE	м.р.	3.0	1N - 1J -		_

Surrogate recovery was outside QA/QC limits due to matrix interference. See Surrogate Summary page.

June Zhao

Chip Poalinelli Operations Manager

Chemist

Environmental Services (SDB)

September 27, 1996

Submission #: 9609280

AQUA SCIENCE ENGINEERS INC

Atten: Scott Ferriman

Project: GEO M. MARTIN CO. Project#: 2991

Received: September 20, 1996

re: Surrogate report for 1 sample for 8010 Purgeable Halocarbons by

Method: EPA 8240A July, 1992

Lab Run#: 3331 Matrix: SOIL

Sample#	Client Sample ID	Surrogate	% Recovered	Recovery Limits
100881-1	T1-5'	4-BROMOFLOUROBENZENE	240	74-121
100881-1	T1-5'	D4-1,2-DICHLOROETHANE	100	70-121
100881-1	T1-5'	D8-TOLUENE	112	81-117
			%	Recovery
Sample#	QC Sample Type	Surrogate	Recovered	Limits
101817-1	Reagent blank (MDB)	4-BROMOFLOUROBENZENE	90	74-121
101817-1	Reagent blank (MDB)	D4-1,2-DICHLOROETHANE	100	70-121
. 101817-1	Reagent blank (MDB)	D8-TOLUENE	109	81-117
101818-1	Spiked blank (BSP)	4-BROMOFLOUROBENZENE	89	74-121
101818-1	Spiked blank (BSP)	D4-1,2-DICHLOROETHANE	84	70-121
101818-1	Spiked blank (BSP)	D8-TOLUENE	106	81-117
101819-1	Spiked blank duplicate	(BSD)4-BROMOFLOUROBENZENE	89	74-121
101819-1	Spiked blank duplicate	(BSD) D4-1, 2-DICHLOROETHANE	94	70-121
101819-1	Spiked blank duplicate	(BSD)D8-TOLUENE	107	81-117

V035 QCSURR1229 JIEWEI 27-Sep-96 16 -

Environmental Services (SDB)

September 27, 1996

Submission #: 9609280

AQUA SCIENCE ENGINEERS INC

Atten: Scott Ferriman

Project: GEO M. MARTIN CO.

Received: September 20, 1996

Project#: 2991

re: Surrogate report for 1 sample for 8010 Purgeable Halocarbons by

Method: EPA 8240A July, 1992

Lab Run#: 3332 Matrix: SOIL

			%	Recovery
Sample#	Client Sample ID	Surrogate	Recovered	<u>Limits</u>
100882-1	STKP (A-D)	4-BROMOFLOUROBENZENE	361	74-121
100882-1	STKP (A-D)	D4-1,2-DICHLOROETHANE	86.6	70-121
100882-1	STKP (A-D)	D8-TOLUENE	103	81-117
			90	Recovery
Sample#	QC Sample Type	Surrogate	Recovered	<u>Limits</u>
101820-1	Reagent blank (MDB)	4-BROMOFLOUROBENZENE	86	74-123
101820-1	Reagent blank (MDB)	D4-1,2-DICHLOROETHANE	88	70-121
101820-1	Reagent blank (MDB)	D8-TOLUENE	96	81-117
101821-1	Spiked blank (BSP)	4-BROMOFLOUROBENZENE	88	74-121
101821-1	Spiked blank (BSP)	D4-1,2-DICHLOROETHANE	98	70-121
101821-1	Spiked blank (BSP)	D8-TOLUENE	104	81-117
101822-1	Spiked blank duplicate	(BSD)4-BROMOFLOUROBENZENE	90	74-121
101822-1	Spiked blank duplicate	(BSD) D4-1,2-DICHLOROETHANE	82	70-121
101822-1	Spiked blank duplicate	(BSD)D8-TOLUENE	96	81-117

V035 QCSURR1229 JIEWEI 27-Sep-96 16 4

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(510) 820-9	391 -	FAX (5	10) 83:7-	4853										DAT	E 9	-20-	96	PAGE		_OF _		
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	5	-Da	,		5030/e015)	FF- CALLES SS (BTEX) (EPA 5030/CAL-8020)	TPH- DI ESEL (EPA 3510/0015)	PÜRGABLE AROYATICS (EPA 602/0020)	PURCABLE HALOCARBONS (EPA 601(8010), 82405	VOLATILE ORGANICS (EPA 624/8240)	BASE/NUETRALS, (EFA 625/6270)	OIL & GREASE (EPA SS20 E&F OT 1	LUFT METALS (5) (EPA 6010+7000)	TITLE 22 (CAM 17) (EPA 6010+7000)	1311/1310	STLC- CAM WET	REACTIVITY CORROSIVITY ICIGITABILITY					
SAMPLE ID.	DATE	TIME	MATRIX	NO. OF SAMPLES	TPH-C	(EPA	0-HGT (EPA)	PÜRGA (EPA	PURCA (EPA	VOLAT (EPA	BASE/	OIL 6 (EPA	LUFT (EPA	17.E	40 F	STLC-	REACT CORRO 1GIUT					
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Soft Fel	rima.	<u>n 9-20</u>	96 /	. Worn	200	9.70	96/		11/100	<u> </u>	20 9	$\frac{N}{N}$	ume	, ran	J 71-1	20-91	<u>\(\rightarrow\) \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \</u>					
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