



July 21, 1993

STID 2673

Ms. Pamela J. Evans
Mr. Amir Gholami
Alameda County Health Care Services
Hazardous Materials Program
80 Swan Way, Room 200
Oakland, California 94621

**RE: GROUNDWATER SAMPLING - MARCH 1993 QUARTERLY REPORT
J&M, Inc., 3826 Depot Road, Hayward (unincorporated)**

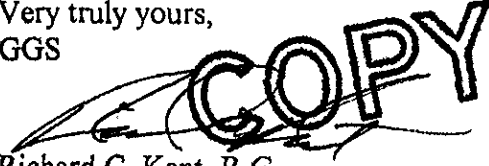
Dear Ms. Evans and Mr. Gholami:

According to a letter dated July 1, 1993 from Ms. Juliet Shin of your agency to J&M, Inc., she has not received your copy of the referenced report. A copy of the letter and the title page of the report are attached. Also attached is a copy of the cover letter to you dated March 15, 1993.

Because she did not receive a copy of the Quarterly Report, she has stated that three groundwater sampling reports were completed. However, the fourth report dated March 1993, was not forwarded by you to Ms. Shin.

It would be appreciated if you would forward your copy of the March 1993 Quarterly Report to Ms. Shin.

Very truly yours,
GGS


Richard C. Kent, R.G.



93 AUG 20 PM 1:07

March 15, 1993

Ms. Pamela J. Evans
Mr. Amir Gholami
Alameda County Health Care Services
Hazardous Materials Program
80 Swan Way, Room 200
Oakland, California 94621

**RE: 3826 Depot Road, Hayward (unincorporated)
Groundwater Sampling**

Dear Ms. Evans and Mr. Gholami:

Enclosed please find our report titled "Groundwater Monitoring Tank No. 1 and 2 Excavation, March 1993" for the referenced Site.

Fuel from the excavation, either from the tanks or a spill as described by the landowner, after the tanks had been removed, and detected on August 2, 1990, has apparently dissipated, dissolved, or degraded. Continued sampling from the wells would not contribute to an understanding of aquifer contamination, potential risk to groundwater supplies, or Site conditions. In our opinion, further monitoring of the Tank No. 1 and 2 Excavation is not warranted.

On February 17, 1992, a final report was submitted per approved Work Plan dated December 31, 1991, and concluded that Tank No. 1 (as scrap metal) did not contain hazardous material.

We request:

1. closure of the case regarding the Tank No. 1 and 2 Excavation; and,
2. approval that Tank No. 1 is nonhazardous material.

Very truly yours,
GGS

Richard C. Kent, R.G.

cc: Manuel Marques III
J&M, Inc.
P.O. Box 128
3826 Depot Road
Hayward, CA 94543



March 15, 1993

Project No. 390

Mr. Manuel Marques III
J & M, Inc.
Post Office Box 128
Hayward, California 94543

RE: TANK NO. 1 and 2 EXCAVATION GROUNDWATER SAMPLING REPORT

Dear Manuel:

Enclosed please find our final report on groundwater water sampling for the Tank No. 1 and No. 2 Excavation, March 1993.

A minor amount of diesel was again detected in Monitor Well MW-2. We have requested closure of the case regarding the excavation as described in the attached letter to the Alameda County Health Care Services Agency.

Should you have any questions, or need further information, please do not hesitate to call upon us.

Very truly yours,
GGS

COPY

Richard C. Kent, R.G.



**GROUNDWATER MONITORING
TANK NO. 1 AND 2 EXCAVATION
MARCH 1993**

**3826 DEPOT ROAD
HAYWARD, CALIFORNIA**

Prepared For

J & M, Inc.
Post Office Box 128
3826 Depot Road
Hayward, California 94543

Project Number 390

March 15, 1993

TABLE OF CONTENTS

	<u>Page</u>
1. INTRODUCTION	3
1.1. Purpose and Scope of Work	3
1.2. Location	3
1.3. Site Contacts	4
2. PREVIOUS WORK	4
3. SAMPLING METHODS AND PROCEDURES	5
3.1. Well Locations	5
3.2. Groundwater Sampling	5
4. ANALYTICAL RESULTS	6
4.1. Laboratory Methods	6
4.2. Laboratory Results	7
4.3. Interpretation of Data	7
4.3.1. Extent of Contamination	7
5. CONCLUSIONS	7
6. LIMITATIONS	8

ILLUSTRATIONS

TABLES

Table 1 - August 20, 1990 Surface Water Sampling Results	4
Table 2 - January 3, 1992 Groundwater Sampling Results	5
Table 3 - March 6, 1993 Groundwater Sample Field Logs	6
Table 4 - March 6, 1993 Groundwater Sampling Results	7

FIGURES

Figure 1 - Vicinity Map	9
Figure 2 - Site Plan Map	10

APPENDIX

Appendix A - Laboratory Report

1. INTRODUCTION

1.1. Purpose and Scope of Work

The purpose of this report is to summarize a periodic groundwater monitoring investigation in response to soil or groundwater contamination found during closure of underground storage tanks ("UST") by excavation and removal at 3826 Depot Road, Hayward, California ("Site"). The work included the purging and sampling of three (3) groundwater monitor wells, MW-1, MW-2, and MW-3 surrounding a previous excavation for Tank No. 1 and No. 2 at the Site. This groundwater monitoring progress report is submitted at the request of the Alameda Health Care Services Agency ("ACHCSA"), Oakland, California.

1.2. Location

The property is located at 3826 Depot Road, Hayward, California 94543 (see Figure 1 - "Vicinity Map" and Figure 2 - "Site Plan Map"). The Site is adjacent to a pallet storage business (to the southwest), St. Francis Electric vehicle storage yard (to the east), and an apparent wrecking junk yard (to the west). A State of California Water Resources Control Board Underground Storage Tank Program Facility/Site Information and/or Permit Application was signed by the landowner on August 16, 1990. A State of California Water Resources Control Board Underground Storage Tank Program Tank Permit Application Information was signed by the landowner on August 16, 1990 for each existing and removed tank on the Site.

The Site is located approximately 1.1-miles east of the San Francisco Bay and approximately 1.25-miles south of the Hayward Airport, Hayward, California. Businesses within the vicinity are a mixture of older industrial-type currently being renovated or demolished and replaced with commercial offices .

The hydrogeologic setting for the Site is further described in a Work Plan dated March 26, 1991 and submitted to ACHCSA. In summary, the Site is located in the San Francisco plain, a northwest-southeast trending structural depression, bordered on the east by the Hayward fault and the Diablo Range, and bordered on the west by San Francisco Bay. The Site is slightly above sea level and 1.1-miles from the nominal tideline of the San Francisco Bay. The area is underlain by late Quaternary alluvial deposits that are generally comprised of clays, silts, sands and gravels. Near the Site, these alluvial deposits are generally underlain by fine sands, silts and gravels of the Santa Clara Formation. Regional ground-water flow is generally west-southwest toward the Bay. The area is principally drained by two streams, San Lorenzo Creek to the north of the Site and Alameda Creek, both which discharge directly into San Francisco Bay.

The area is generally underlain by unconsolidated alluvial fan deposits of Pliocene-Pleistocene age near a discrete alluvial fan deposit known as the San Lorenzo Cone. Westward sloping sand and gravel beds were deposited by the braided creek, and during times of flood, finer grain layers of silt and clay were deposited. The total thickness of the unconsolidated deposits reportedly is in excess of 1,000 feet. Apparently the depth of water supplies in the vicinity of the

Site range from 32 to 581 feet and the depth to ground-water ranges from 16 to 90 feet. Local municipality water is imported from Hetch Hetchy Reservoir in the Sierra Nevada. Ground-water has not been apparently actively used by the City of Hayward for drinking water for approximately 30 years.

1.3. Site Contacts

The following can be contacted for further information regarding this report:

Name: Manuel Marques III
 Company: J & M, Inc.
 Address: Post Office Box 128
 3826 Depot Road, Hayward, California 94543
 Telephone: (510) 782-3434

Consultant: Geoenvironmental and Geologic Services
 Richard C. Kent, California Registered Geologist No. 4321
 Post Office Box 26, Battle Ground, Washington 98604
 (206) 687-0509

2. PREVIOUS WORK

Four (4) soil and one (1) groundwater samples were collected on August 20, 1990 from the previous location of Tank No. 1 (diesel) and No. 2 (diesel) per the ACHCSA Notice of Violation to J & M, Inc. dated July 25, 1990. The samples were analyzed for total petroleum hydrocarbons as diesel ("TPHd") and benzene, toluene, total xylenes and ethyl-benzene ("BTXE"). Detectable levels of diesel and gasoline constituents were found in the soil and water samples as shown below in Table 1 - "August 20, 1990 Sampling Results". The water sample was collected as a surface grab sample from the re-excavated tank location, at approximately six (6)-feet depth below grade.

TABLE 1 - August 2, 1990 SURFACE WATER SAMPLING RESULTS
(Tank No. 1 and 2 Re-Excavation)

Sample	TPHd	Benzene	Toluene	Xylenes	Ethylbenzene
Water Sample # 1	8,100 mg/l	4.7 mg/l	9.1 mg/l	22 mg/l	6.0 mg/l
Soil Sample # 2	<3,000 mg/kg	<50 mg/kg	<50 mg/kg	<200 mg/kg	<50 mg/kg
Soil Sample # 3	<3,000 mg/kg	<50 mg/kg	<50 mg/kg	<200 mg/kg	<50 mg/kg
Soil Sample # 4	110,000 mg/kg	<700 mg/kg	6,200 mg/kg	<4,700 mg/kg	<1,300 mg/kg
Soil Sample # 5	<3,000 mg/kg	<50 mg/kg	<50 mg/kg	<200 mg/kg	<50 mg/kg

On January 3, 1992, the three (3) existing groundwater monitor wells, MW-1, MW-2, and MW-3 surrounding a previous excavation for Tank No. 1 and No. 2 at the Site were sampled, as described in a report to ACHCSA titled "Groundwater Monitoring Tank No. 1 and 2 Excavation, January 1992". The results are summarized below in Table 2.

TABLE 2 - January 3, 1992 GROUNDWATER SAMPLING RESULTS

all concentrations in micrograms per liter [parts per billion, ppb]; TPHd = diesel

Sample Number	TPHd	B	T	X	E
MW-1/0192	ND	ND	ND	ND	ND
MW-2/0192	57	ND	ND	ND	ND
MW-3/0192	ND	ND	ND	ND	ND

3. SAMPLING METHODS AND PROCEDURES

3.1. Well Locations

Groundwater monitor wells MW-2 and MW-3 are located in an assumed downgradient direction. Well MW-1 was installed in the assumed upgradient [background] direction to the previous excavation of UST No.'s 1 and 2. The wells were apparently installed to a depth of approximately fifteen (15)-feet with screened intervals from five (5)- to ten (10)-feet depth. The well casings are constructed of four (4)-inch PVC pipe with lockable, water tight caps. Each well is protected by surface traffic boxes.

Each monitor well is designed to collect water samples from the first encounter of water beneath the Site, at approximate depths of near six (6)- to eight (8)-feet. Possible fluctuations in the groundwater table due to tidal influence from the San Francisco Bay are assumed and could cause the groundwater table to rise and fall around the first encounter depth.

3.2. Groundwater Sampling

Prior to sampling, each well was checked for free product and anomalous odors. The wells were sampled beginning at the well with the least suspected contamination (Well MW-1). Each well was purged of stagnant water in the casing and filter by setting a submersible pump within one (1)-foot of total well depth. Samples were collected following purging of the well when pH, conductivity and temperature stabilized. The sample was collected after approximately three well volumes were purged and each well was allowed to recover to at least 80% of the water level recorded prior to purging.

Water samples were collected with disposable or dedicated bailers with a nozzle attached to the bottom of the bailer that did not allow air contact in order to minimize the loss of volatiles from the bailer to the sample container.

Groundwater samples for analysis of gasoline constituents (BTXE) were collected in 40-ml amber glass volatile organic analysis ("VOA") vials. Each vial was closed by a plastic screw cap with a Teflon-faced septum that was used to seal the sample without headspace. Water samples for TPHd (diesel) analyses were collected in one (1)-liter amber glass bottles.

All sample containers were new (except VOA's containing a preservative prepared by the laboratory). Sample containers were labeled with self-adhesive labels containing the project number and name, date and time of collection, and location. Sample vials and bottles were filled to overflow to remove entrapped air, and then inverted and tapped to test for air bubbles.

All samples were accompanied from the field to laboratory by Chain-Of-Custody and request for analysis that was signed and dated at the time of transferring possession of the samples by each person authorized to turn over and receive the samples (see Appendix A - "Laboratory Report").

Purged water was pumped directly into 55-gallon barrels and temporarily stored on-Site for disposal, if necessary, by client. Non-disposable sampling equipment was triple-rinsed cleaned with Alconox detergent solution and air dried. Waste cleaning water was placed in the 55-gallon barrels. Each barrel is labeled with information including date filled, source, matrix type, known or suspected contaminant, barrel owner, owner contact name and telephone number.

The following is a summary of water sample field logs.

TABLE 3 - SUMMARY OF GROUNDWATER SAMPLE FIELD LOGS
(samples collected on March 6, 1993)

Sample No.	Well No.	Well Depth (feet)	Initial SWL (feet)	Gallons Purged	Pump Rate (gpm)	Sample Odor	Sample Color	Sample Turbidity
MW-1 /0393	MW-1	15.1	5.21	55	1.0	none	clear	clear
MW-2 /0393	MW-2	15.0	4.78	55	2.3	none	clear	clear
MW-3 /0393	MW-3	14.8	4.69	55	2.5	none	clear	clear

4. ANALYTICAL RESULTS

4.1. Laboratory Methods

All water samples were analyzed for total petroleum hydrocarbons ("TPH") as diesel ("TPHd"), benzene, toluene, total xylenes, and ethyl benzene ("BTXE"). Analytical procedures followed those outlined in "Regional Board Staff Recommendations for Initial Evaluation and Investigation of Underground Tanks, Tri-Regional Recommendations" by the North Coast, San Francisco Bay, and Central Valley California Regional Water Quality Control Boards as supported by the "Leaking Underground Fuel Tank (LUFT) Field Manual" by the State Water Resources Control Board.

4.2. Laboratory Results

The following is a summary table for analyses reported by McCampbell Analytical laboratory, Pacheco, California, Department of Health Services Certification No. 1644 (see Appendix A).

TABLE 4 - March 6, 1993 GROUNDWATER SAMPLING RESULTS

all concentrations in micrograms per liter [parts per billion, ppb]

Sample Number	TPHd	B	T	X	E
MW-1/0393	ND	ND	ND	ND	ND
MW-2/0393	75	ND	ND	ND	ND
MW-3/0393	ND	ND	ND	ND	ND

Table Notes:

TPHd - total petroleum hydrocarbons as DIESEL ("high boiling point total petroleum fuel hydrocarbons); described as "aged/old" by lab
B - benzene; T - toluene; X - total xylenes; E - ethyl-benzene; ND - not detected

4.3. Interpretation of Data

4.3.1. Extent of Contamination

Minor groundwater contamination by diesel was detected in a sample collected from Monitor Well MW-2. The extent of contamination is not mappable. BTEX was not detected in wells MW-1, MW-2 or MW-3. Diesel was not detected in wells MW-1 or MW-3.

5. CONCLUSIONS

It is concluded that groundwater Monitor Well MW-2 contains detectable aged, old diesel in the apparent downgradient direction from the previous excavation for underground storage tanks No. 1 and No. 2. Both tanks previously held diesel fuel.

The level of contamination at this time is not significant and no groundwater remediation is planned. Investigation results have shown a minor detection of diesel in one (1) monitor well during groundwater sampling in 1992 and 1993. It is concluded that periodic sampling has shown no significant fuel migration to the monitor wells from the excavation for Tanks No. 1 and No. 2.

Fuel from the excavation, either from the tanks or a spill as described by the landowner, after the tanks had been removed, and detected on August 2, 1990, has apparently dissipated, dissolved, or degraded. Continued sampling from the wells would not contribute to an understanding of aquifer contamination, potential risk to groundwater supplies, or Site conditions. In our opinion, further monitoring is not warranted.

6. LIMITATIONS

This report is restricted to an environmental investigation involving the closure of underground storage tanks previously containing known or suspected products that have been identified either by the property owner(s), historical records, or previous investigations. This report specifically excludes an environmental assessment for radon or other radioactive materials, as well as, asbestos.

GG'S services were performed in accordance with generally accepted professional practices, in the same or similar localities, related to the nature of the work accomplished, at the time services were rendered. Findings apply only to present conditions, and opinions expressed are subject to revision when additional or new information is submitted in writing by Client. GGS's services shall not be subject to any express or implied warranties whatsoever.

Hazardous materials not discovered through appropriate and mutually agreed-upon sampling techniques does not guarantee that hazardous materials do not exist at the Site. Similarly, a Site which in fact is unaffected by hazardous materials at the time of GGS's exploration, may later, due to natural causes or human intervention, become contaminated. GGS is not liable for failing to discover hazardous materials whose exact location is not possible to foretell from the surface, or for failing to discover hazardous materials which in fact did not exist at specific sampling locations at the time such samples were obtained.

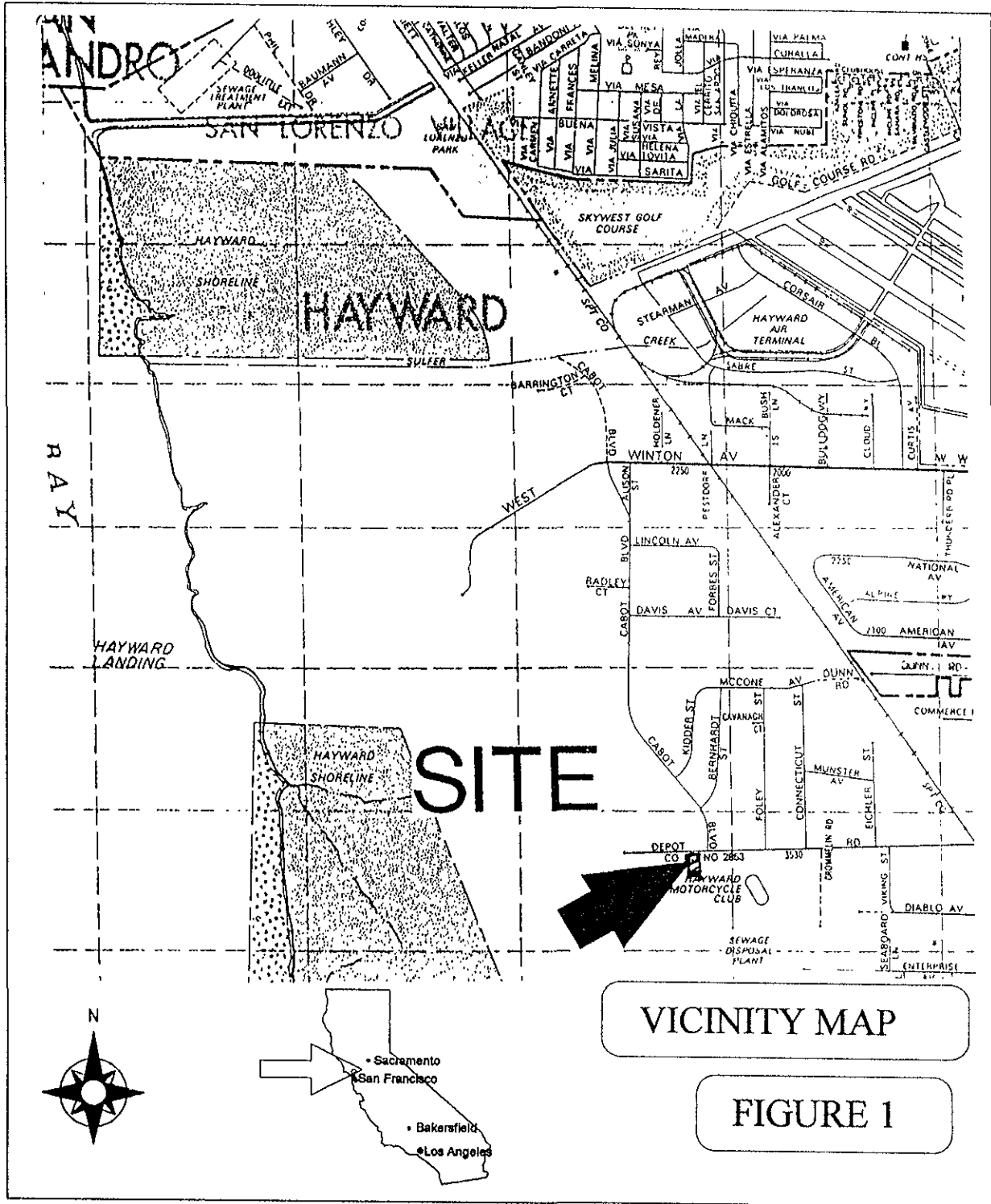
In the preparation of this report, GGS may have reviewed and interpreted certain information provided by third parties, including government authorities, testing laboratories, or other third parties. GGS did not conduct an independent evaluation of the accuracy or completeness of such information, and is not responsible for any errors or omissions contained in such information.

This report should not be construed as presenting a value to the Site nor the condition as to construction capabilities. In the event of changes in future development plans as we understand them at the time of this report, the conclusions and recommendations made herein shall be invalid until we have been given the opportunity to review and modify this report in writing. Final approval of environmental investigations and remediation is authorized only by appropriate governmental agencies.

Respectfully submitted,
GEOENVIRONMENTAL AND GEOLOGIC SERVICES



Richard C. Kent
California Registered Geologist No. 4231



VICINITY MAP

FIGURE 1

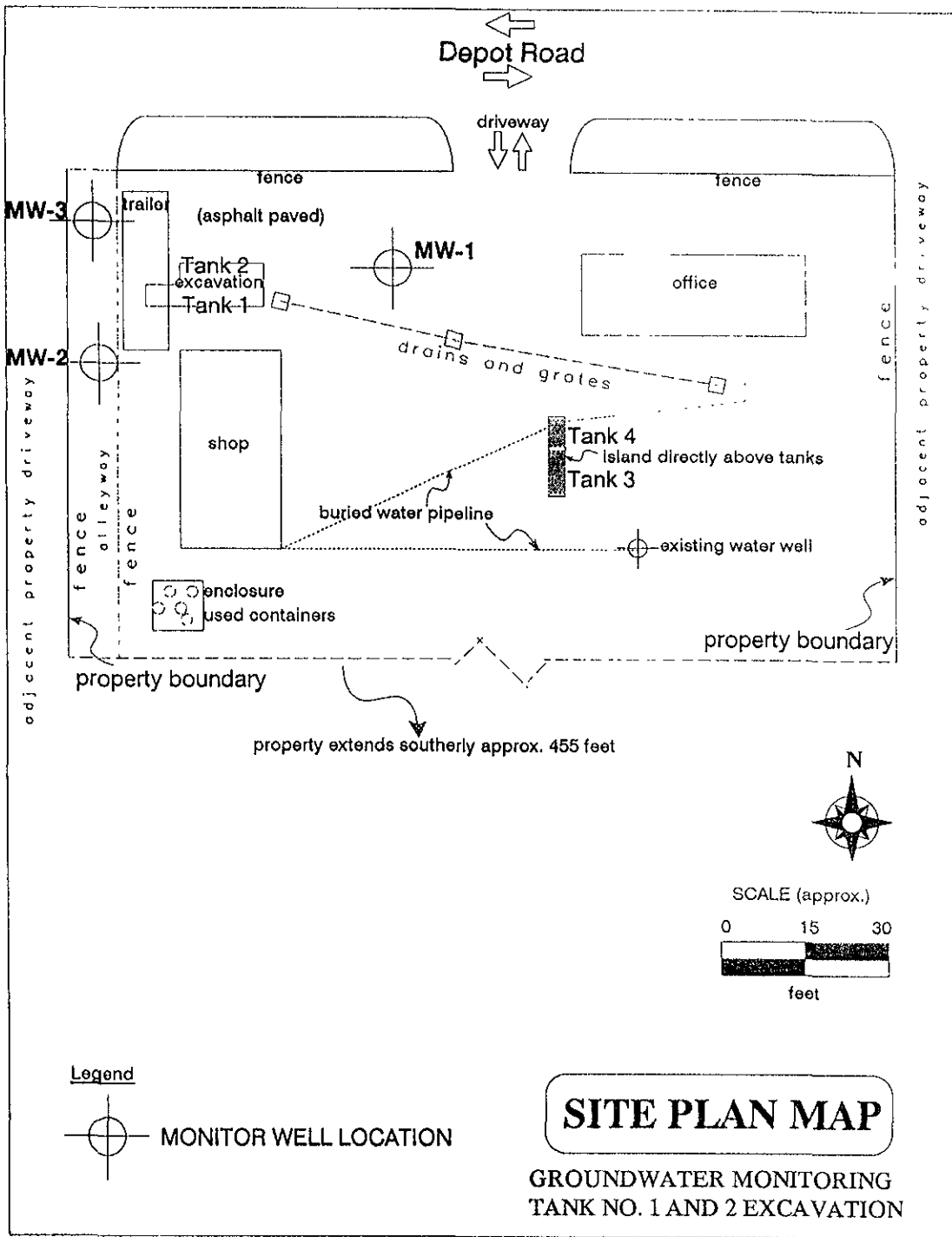


FIGURE 2

APPENDIX A

LABORATORY REPORT

Geoenvironmental & Geologic Services P.O. Box 26 Battle Ground, WA 98604	Client Project ID: #390; J&M Construction	Date Sampled: 03/06/93
	Client Contact: Richard Kent	Date Received: 03/06/93
	Client P.O:	Date Extracted:
		Date Analyzed: 03/06/93

Low Boiling Point (C6-C12) TPH* as Gasoline and BTEX*

EPA methods 5030, modified 8015, and 8020 or 602; California RWQCB (SF Bay Region) method GCFID(5030)

Lab ID	Client ID	Matrix	TPH(G) ⁺	Benzene	Toluene	Ethyl Benzene	Xylenes	% Rec. Surrogate
21738	MW-1	W	---	ND	ND	ND	ND	106
21739	MW-2	W	---	ND	ND	ND	ND	106
21740	MW-3	W	---	ND	ND	ND	ND	105
Detection Limit unless otherwise stated; ND means Not Detected	W	50 ug/L	0.5	0.5	0.5	0.5	0.5	
	S	1.0 mg/kg	0.005	0.005	0.005	0.005	0.005	

*water samples are reported in ug/L and soils in mg/kg

* cluttered chromatogram; sample peak co-elutes with surrogate peak

⁺The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation: a) predominately unmodified or weakly modified gasoline; b) heavier gasoline range compounds predominate (aged gasoline?); c) lighter gasoline range compounds predominate (the most mobile gasoline compounds); d) heavy and light gasoline range compounds predominate (aged gasoline together with introduced light compounds?); e) gasoline range compounds predominate; no recognizable pattern; f) one to a few isolated peaks present; g) strongly aged gasoline or diesel range compounds predominate.

McCAMPBELL ANALYTICAL INC.

110 2nd Avenue South, #D7, Pacheco, CA 94553
 Tele: 510-798-1620 Fax: 510-798-1622

Geoenvironmental & Geologic Services P.O. Box 26 Battle Ground, WA 98604	Client Project ID: #390; J&M Construction	Date Sampled: 03/06/93
	Client Contact: Richard Kent	Date Received: 03/06/93
	Client P.O:	Date Extracted: 03/08/93
		Date Analyzed: 03/08/93


Medium Boiling Point (C10-C23) TPH* as Diesel

EPA methods modified 8015, and 3550 or 3510; California RWQCB (SF Bay Region) method GCFID(3550) or GCFID(3510)

Lab ID	Client ID	Matrix	TPH(D) ⁺
21738	MW-1	W	ND,e
21739	MW-2	W	75,e
21740	MW-3	W	ND,e
Detection Limit unless otherwise stated; ND means Not Detected	W	50 ug/L	
	S	10 mg/kg	

*water samples are reported in ug/L and soils in mg/kg
 # cluttered chromatogram; sample peak co-elutes with surrogate peak

⁺ The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation: a) predominately unmodified or weakly modified diesel; b) diesel range compounds predominate; no recognizable pattern; c) diesel range compounds together with gasoline range compounds; d) gasoline range compounds predominate; e) medium boiling point pattern that does not match diesel(aged diesel?); f) one to a few isolated peaks present; g) oil range compounds predominate.

 Edward Hamilton, Lab Director

AN6653

CHAIN OF CUSTODY RECORD

TURN AROUND TIME: RUSH 24 HOUR 48 HOUR 5 DAY

McCAMPBELL ANALYTICAL

110 2nd AVENUE, # D7
PACHECO, CA 94553

(510) 798-1620

FAX (510) 798-1622

REPORT TO: *Rick Kent GGS* BILL TO: *GGS FAX 2066870509*

PROJECT NUMBER: *390* PROJECT NAME: *JTM construction*

PROJECT LOCATION: *Hayward, CA* SAMPLER SIGNATURE: *[Signature]*

SAMPLE ID	LOCATION	SAMPLING		# CONTAINERS	TYPE CONTAINERS	MATRIX						METHOD PRESERVED		BTEX & SPM (8015)	TPH as Deset (8015)	Total Petroleum Oil & Grease (C620 CUF/5820 INF)	Total Petroleum Hydrocarbons (18:1)	EPA 601/6010	EPA 602/6020	EPA 608/6080	EPA 609/6090 - PCBs Only	EPA 624/6240/6250	EPA 655/6270	CAN - 17 Metals	EPA - Priority Pollutant Metals	LEAD (7240/7481/839.2/6010)	ORGANIC LEAD	PC1					
		DATE	TIME			WATER	SOIL	AIR	SLUDGE	OTHER	HCL	PHOS	OTHER																				
MW-1	MW-1	3/6/93	11:22			X	X							X	X																		
MW-2	MW-2	↓	1:05			X	X							X	X																		
MW-3	MW-3	↓	12:20			X	X							X	X																		

No. 21738
No. 21739
No. 21740

COMMENTS

RELINQUISHED BY: *[Signature]* DATE: *3/6/93* TIME: *2:20* RECEIVED BY: *[Signature]*
RELINQUISHED BY: DATE: TIME: RECEIVED BY:
RELINQUISHED BY: DATE: TIME: RECEIVED BY LABORATORY:

REMARKS:
NO TPA(16)

ICET PRESERVATIVE
GOOD CONDITION APPROPRIATE
SEAL STATE