John P. Cummings & Associates

Environmental Consultants

Ph. (510) 505-0722
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P.O. Box 2847
Fremont, CA 94536-2847

Reviewed BE 6/20/95

File No. 0293002.02
March 24, 1995

PERSONNEL AND CONFIDENTIAL

Mr. Reuben Hausauer
6017 East 14th Street
Oakland, CA 94601

Re: Groundwater Monitoring
3927 E. 14th Street, Oakland CA

Dear Mr. Hausauer:

John P. Cummings and Associates (JPCA) is pleased to present the results of the quarterly groundwater monitoring at 3927 East 14th Street, in Oakland, California. An Underground Storage Tank (UST), formerly used for waste oil, was closed in place beneath the sidewalk on this site.

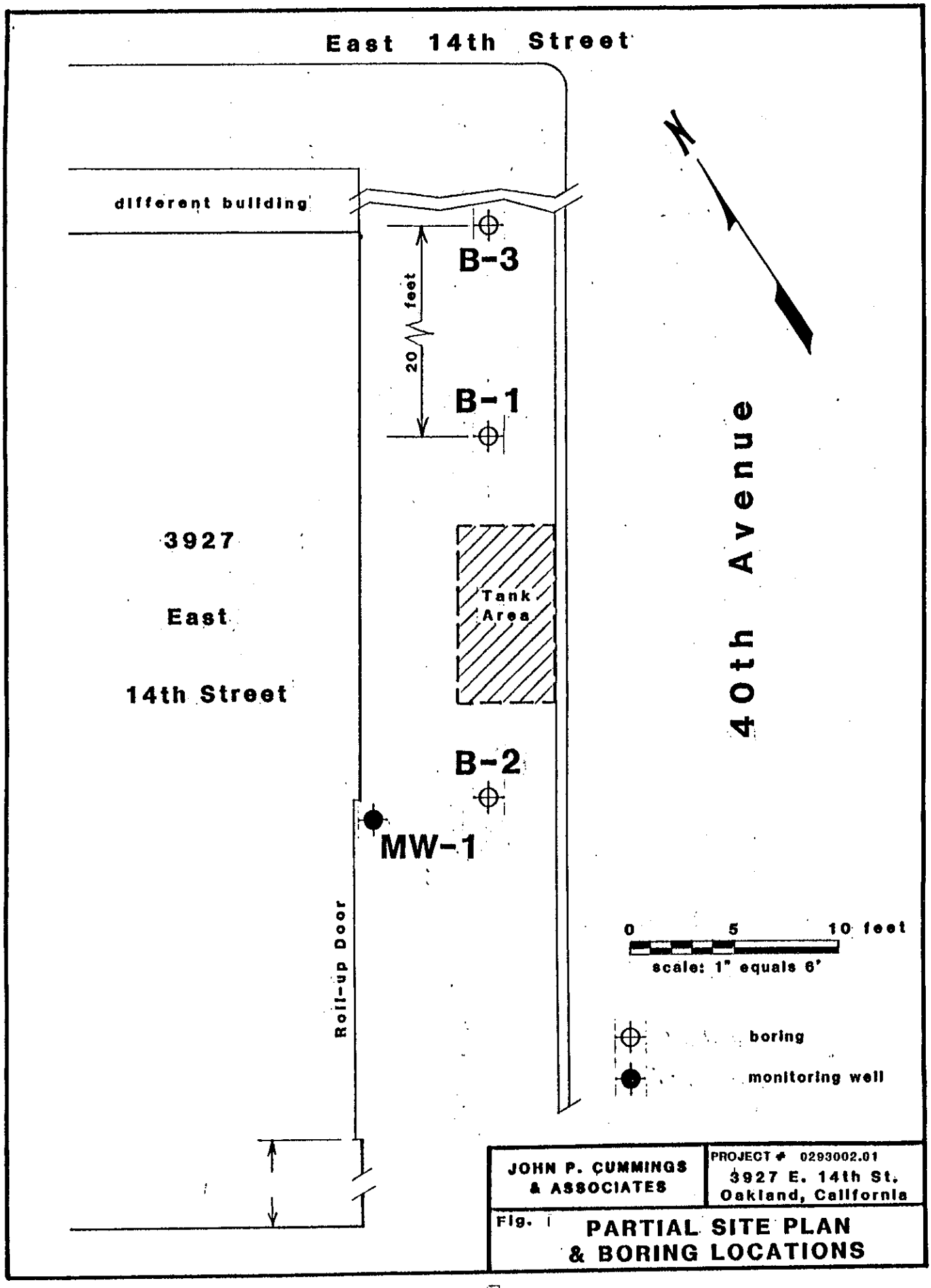
Soil samples from three borings and one well construction collected during previous investigations were analyzed. The results reported from the soil and groundwater analysis indicated levels of Total Petroleum Hydrocarbon as Gasoline (TPHG), Total Petroleum Hydrocarbon as Diesel (TPHD), Oil and Grease (TOG), Benzene, Toluene, Ethylbenzene, and Xylene (BTEX) and Cadmium, Chromium, Lead, Nickel and Zinc, (CAM 5 Metals), contamination which required further soil and groundwater investigation.

A request for quarterly groundwater monitoring of the existing well was sent from the Alameda County Department of Environmental Health (ACDEH) by letter dated February 22, 1995.

FIELD METHODS

On March 15, 1995 prior to purging and sampling the depth to groundwater was measured at 3.98 feet, by an electronic probe, from the mark located on the top of the casing. Larry Duffield, an Environmental Technician from GROWTH ENVIRONMENTAL SERVICES INC.(GROWTH), was collecting samples and measuring depth to groundwater at the same time I was collecting the groundwater sample from MW-1. He measured MW-1 as well as the OWEN'S parcel wells and gave me the data. MW-1 and the wells in the street need to be surveyed to determine the gradient.

Field notes are in Appendix A. The Site Plan is Figure 1.



JOHN P. CUMMINGS & ASSOCIATES	PROJECT # 0293002.01 3927 E. 14th St. Oakland, California

Fig. 1 **PARTIAL SITE PLAN & BORING LOCATIONS**

Approximately 3 gallons of groundwater was removed from MW 1, by a pump which pumped the well to dryness. The water so removed was stored in a 55 gallon drum, marked awaiting analysis.

After the well recovered, groundwater samples were collected from the well with a clean, dedicated acrylic bailer and placed in two pre-cleaned 40-ml vials with Teflon-coated septa, acidified with hydrochloric acid, two one-liter glass containers, one for TPHD and the other for TOG analysis were filled with the groundwater sample and one plastic 500 cc container was also filled for the CAM-5 analysis. The containers were labeled with sample identification, placed in an ice chest with "Blue-Ice", along with a Chain of Custody (COC) document and transported to MCCAMPBELL ANALYTICAL INC., a State Certified Laboratory in Pacheco, CA.

ANALYTICAL RESULTS

The groundwater sample was analyzed for TPHG, TPHD, BTEX TOG and CAM 5 metals. The results of the chemical analysis for TPHG, TPHD, BTEX and TOG in parts per billion (ppb) for the groundwater sample collected from Monitoring Well 1 are shown in Table 1 below. Laboratory Data Sheets, with detection limits, and a copy of the Chain of Custody (COC) are contained in Appendix B.

TABLE 1.

ppb

Sample ID	TPHD	TOG	TPHG	B	T	E	X
MW-1 Water	3200	21000	14000	2000	250	590	930

The CAM 5 metal analysis was non-detectable for Cadmium, Chromium, Nickel and Zinc in the groundwater. The Lead concentration was 29 ppb, a low value, and most likely indigenous to the local soil. The metals previously detected in the soil analysis were low and most likely indigenous to the local soil deposits, in other words background levels.

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

The groundwater level has risen considerably with the recent rains and is approximately 4 feet below grade.

No detectable levels of Cadmium, Chromium, Nickel and Zinc were found in the groundwater. The Lead concentration was 29 ppb a low value and most likely indigenous to the local soil. The metals previously detected in the soil samples are considered background.

The levels of petroleum product contamination in the groundwater are above action levels, however JPCA recommends that the results of the OWEN'S site investigation should be reviewed prior to any further action being commenced with the ACDEH.

JPCA will send the data on the subject parcel to GROWTH as agreed.

This report has been prepared specifically for Mr. Hausauer, through his Attorney, Robert W. Shapiro, with specific application to a possible hazardous waste investigation. The report has been prepared with the care and skill generally exercised by reputable professionals, under similar circumstances, in this or similar localities. No other warranty, either expressed or implied, is made as to the professional advice presented.

Copies of this quarterly report are being forwarded to the ACDEH and the Regional Water Quality Control Board (RWQCB), as requested by Mr. Hausauer.

If you have any questions, please contact JPCA at (510) 505-0722.

Sincerely,

John P. Cummings
Principal

John N. Alt, CEG
EPIGENE International

REGISTERED GEOLOGIST
JOHN N. ALT
№ 1136
CERTIFIED ENGINEERING GEOLOGIST
STATE OF CALIFORNIA

cc; Rich Hiett, RWQCB
Barney Chan, ACDEH
GROWTH ENVIRONMENTAL SERVICES INC.

APPENDIX A

John P. Cummings and Associates
P O Box 2847
38750 Paseo Padre Pkwy B-4
Fremont, CA 94536

Well Data Sheet Monitoring Well Sampling

Date: 3/15/95 Well No.: MW-1

Project Name: Amse Project No.: 293 002.02

Project Location:

Possible Contaminants: TPHG/TPH D/BTEX/TOG/Metal 13.9

Well Diameter: 2" Well Depth: ≈15

Depth To Groundwater: 3.98 Approximate Casing Volume: ≈1.7 gal

Purge Method: Pump

Evidence of Floating Product: Yes___ No X; if yes, thickness___

Sheen: Yes___ No X; Odor: Yes X No___

TIME	PURGE VOLUME	CUMULATIVE PURGE	TEMP °F	COND.	pH	COMMENTS
9:30	3 gal	3 gal				Dryness

Sampling Method: Bailer

Comments: Dryness after ≈ 3.0 gal // odor hydrocarbon

Signature: John P. Cummings

MW1 (Hansen)

21.75

MW3 3.65

MW2 4.30

19.5

APPENDIX B

McCAMPBELL ANALYTICAL INC. | 110 2nd Avenue South, #D7, Pacheco, CA 94553
Tele: 510-798-1620 Fax: 510-798-1622

John P. Cummings & Associates P.O. Box 2847 Fremont, CA 94536-2847	Client Project ID: # 293002.02; Hansen	Date Sampled: 03/15/95
		Date Received: 03/17/95
	Client Contact: John Cummings	Date Extracted: 03/17/95
	Client P.O:	Date Analyzed: 03/17-03/20/95

LUFT Metals*

EPA analytical methods				239.2,7420*	213.1,7130	218.1,7190	249.1,7520	289.1,7950
Lab ID	Client ID	Matrix	Extraction°	Lead*	Cadmium*	Chromium*	Nickel*	Zinc*
50953	MW-1	W	TTLC	0.029	ND	ND	ND	ND
Detection Limit unless otherwise stated; ND means Not Detected		W	TTLC	0.005mg/L	0.05	0.25	0.10	0.05
		S	TTLC	4.0 mg/kg	1.0	5.0	2.0	1.0
		---	STLC,TCLP	0.20 mg/L	0.05	0.25	0.10	0.05

* soil samples are reported in mg/kg, and water samples and all STLC & TCLP extracts in mg/L

* Lead is analysed using EPA method 7420 (AA Flame)for soils, STLC & TCLP extracts and method 239.2 (AA Furnace) for water samples

° EPA extraction methods 1311(TCLP), 3010/3020(water,TTLC), 3040(organic matrices,TTLC), 3050(solids,TTLC); STLC from CA Title 22

DHS Certification No. 1644

Edward Hamilton, Lab Director

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

John P. Cummings & Associates P.O. Box 2847 Fremont, CA 94536-2847	Client Project ID: # 293002.02; Hansen	Date Sampled: 03/15/95
		Date Received: 03/17/95
	Client Contact: John Cummings	Date Extracted: 03/17/95
	Client P.O:	Date Analyzed: 03/17/95

Total Recoverable Petroleum Hydrocarbons as Oil & Grease (with Silica Gel Clean-up) by Scanning IR Spectrometry*

EPA method 418.1 or 9073; Standard Methods 5520 C&F

Lab ID	Client ID	Matrix	TRPH+
50953	MW-1	W	21
Detection Limit unless otherwise stated; ND means Not Detected		W	1.0 mg/L
		S	50 mg/kg

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

+ If TPH(d) is not requested then all positive results are run by direct injection chromatography with FID detection. The following comments pertain to these GC results: a) gasoline-range compounds (C6-C12) present; b) diesel range compounds (C10-C23) present; c) oil-range compounds (> C18) present; d) other patterned solvent(?); e) isolated peaks; f) GC compounds are absent or insignificant relative to TRPH inferring that complex biologically derived molecules (lipids?)are the source of IR absorption.

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	Client Contact: John Cummings	Date Extracted: 03/17/95
	Client P.O:	Date Analyzed: 03/17/95

Diesel Range (C10-C23) Extractable Hydrocarbons 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)+	% Recovery Surrogate
50953	MW-1	W	3200,d,g,h	100
Detection Limit unless otherwise stated; ND means Not Detected		W	50 ug/L	
		S	10 mg/kg	

*water samples are reported in ug/L, soil samples in mg/kg, and all TCLP extracts in mg/L

cluttered chromatogram; surrogate and sample peaks co-elute or surrogate peak is on elevated baseline

+ The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation: a) unmodified or weakly modified diesel is significant; b) diesel range compounds are significant; no recognizable pattern; c) modified diesel?; light(c_L) or heavy(c_H) diesel compounds are significant); d) gasoline range compounds are significant; e) medium boiling point pattern that does not match diesel(?); f) one to a few isolated peaks present; g) oil range compounds are significant; h) lighter than water immiscible sheen is present.

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		Date Received: 03/17/95
	Client Contact: John Cummings	Date Extracted: 03/17/95
	Client P.O:	Date Analyzed: 03/17/95

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline*, with BTEX*

EPA methods 5030, modified 8015, and 8020 or 602; California RWQCB (SF Bay Region) method GCFID(3030)

Lab ID	Client ID	Matrix	TPH(g)+	Benzene	Toluene	Ethylben-zene	Xylenes	% Rec. Surrogate
50953	MW-1	W	14,000,a,h	2000	250	590	930	98
Detection Limit unless otherwise stated; ND means Not Detected		W	50 ug/L	0.5	0.5	0.5	0.5	
		S	1.0 mg/kg	0.005	0.005	0.005	0.005	

*water samples are reported in ug/L, soil samples in mg/kg, and all TCLP extracts in mg/L

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) unmodified or weakly modified gasoline is significant; b) heavier gasoline range compounds are significant(aged gasoline?); c) lighter gasoline range compounds (the most mobile fraction) are significant; d) gasoline range compounds are significant; no recognizable pattern; e) TPH pattern that does not appear to be derived from gasoline (?); f) one to a few isolated peaks present; g) strongly aged gasoline or diesel range compounds are significant; h) lighter than water immiscible sheen is present.

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CHAIN OF CUSTODY

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P.O. Box 2847
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Laboratory: McCampbell Analytical
110 2nd Avenue South D-7
Pacheco, CA 94553
510-798-1620
Contact: Ed Hamilton

Contact: John P. Cummings
Sampler: JC
Project Name: Hansen
No. V29300202
Date: 3/15/95

Analyses Requested

Sample I.D.	Date/Time Sampled	Matrix Desc.	Container No. of	Container Type	Lab. #	TPH/Gasoline	BTEX	TPH/Diesel	601/8010	602/8020	Oil & Grease	Cam 5 Metals			Comments
1. MW-1	3/15/95 5:51	water	2	40 mL VOAS		X	X								
2. ↓	↓	"		Liter				X							
3.		"		Liter											50953
4.		"		Plastic ½ Liter							X				
5.												X			
6.															
7.															
8.															
9.															
10.															

ICE/T° ✓
GOOD CONDITION ✓
HEAD SPACE ABSENT ✓
PRESERVATIVE ✓ (VOAS | O&G | METALS ✓ | OTHER)
APPROPRIATE CONTAINERS ✓

Relinquished by	Date	Time	Received by	Date	Time
John P. Cummings	3/16/95	1710	Martin Corona AERO 660	03/16/95	17:10
Martin Corona	03/16/95	5:30	Scott Carnes	3/16/95	5:30 pm
Scott Carnes	3/17/95	9:05 AM	Nicole Ricca	3/17/95	9:05 AM

Turnaround Time: Normal

Additional Comments: Cam 5 Metals Cd, Cr, Pb, Ni + Zn

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