



ENVIRONMENTAL
PROTECTION

99 FEB 18 PM 3:33

February 17, 1999

Mr. Tom Peacock
Alameda County Health Care Services Agency
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502

Re: The Salvation Army
810 Clay Street
Oakland, CA 94604

Dear Mr. Peacock:

Enclosed please find an environmental site assessment report prepared by Ceres Associates for a potential buyer of the site. Our client, The Salvation Army, is the owner of the property. They would like to work toward obtaining case closure at this site. They would appreciate any regulatory guidance you may offer. I understand that you will require a deposit to open this case. Our client has requested that the deposit request be made in writing directly to them. Their address is as follows:

Major Al Summerfield
The Salvation Army
810 Clay Street, P.O. Box 12397
Oakland, CA 94604

If you have any questions, please feel free to call me at (925) 820-9391.

Respectfully submitted,

AQUA SCIENCE ENGINEERS, INC.

Robert E. Kitay, R.G., R.E.A.
Senior Geologist

January 25, 1999
Project CA451-2

Paula Mock
P. Mock Investments
554 8th Street
Oakland, California 94607

**Soil and Groundwater Sampling Report
Salvation Army Facility
810 Clay Street
Oakland, California**

Dear Ms. Mock:

On January 11, 1999, Ceres Associates conducted soil and groundwater sampling at the Salvation Army facility located at 810 Clay Street, Oakland, California (Property) (see Figure 1). The sampling was conducted to assess whether or not subsurface soil and groundwater beneath the Property has been affected by previous use of the Property and to assess regional groundwater conditions.

BACKGROUND

In approximately 1965, the current structure, which includes a basement, was built at the Property.

In December 1998, Ceres Associates conducted a Phase I Environmental Site Assessment (ESA) of the Property. Based on a review of historical aerial photographs and business directories, it appeared that a portion of the Property was in use as a gasoline service station from at least 1939 through approximately 1965. No information was not found to indicating the condition of the underground storage tanks (USTs), or details regarding their removal from the Property.

Based on the results of the December 1998 ESA, P. Mock Investments elected to conduct a subsurface soil and groundwater investigation to assess if previous operations at the Property had impacted subsurface conditions.

SCOPE OF WORK

Ceres Associates conducted the following scope of work on November 20, 1998 to assess soil and groundwater quality conditions beneath the Property:

- Outlined proposed sample areas for Underground Services Alert notification (USA);

- Obtained necessary permits from the Alameda County Water District (ACWD) and City of Oakland Office of Planning and Building (OPB) (see Appendix B);
- Advanced three (3) Geoprobe® borings in and/or around areas suspected of previously containing USTs;
- Collected soil and grab groundwater samples and submit for laboratory analysis; and
- Prepared report of findings.

ASSESSMENT ACTIVITIES

Mobilization for field investigation activities included: notification of Underground Services Alert (USA) regarding field operations at the Property, preparation of a site specific health and safety plan, and scheduling the field activities with the appropriate subcontractors and Property contacts. Appropriate permits were obtained from the ACWD and OPB prior to conducting proposed field activities.

SAMPLE METHODOLOGY

Soil and groundwater samples were collected using Geoprobe® sampling equipment provided by Vironex, Incorporated (Vironex) of Hayward, California. The Geoprobe® sampler utilizes direct push technology to collect soil and groundwater samples from specific subsurface depths without generating soil cuttings. The Geoprobe® sampling system consists of a series of 1.5-inch diameter hollow stainless steel rods which are hydraulically driven into the ground using a truck-mounted pneumatic hammer. Soil samples are collected by driving a 2-foot long stainless steel sample sleeve attached to the end of the steel rods into soil at a specified sample depth. Soil samples are then collected in an acetate sample tube installed inside the sample sleeve. After the rod assembly has been hydraulically extended to the target sample depth, the sample sleeve is retrieved to ground surface and the sample tube containing soil from the appropriate sample interval is capped with Teflon®-lined plastic end caps, placed in a Ziploc® bag and stored in a chest cooled with ice. Soil from each sample interval was used for lithologic description and field screening purposes.

Groundwater samples were collected using Hydropunch sampling equipment and polyethylene tubing with a check-ball fluid delivery system. The Hydropunch sampler consists of a 4-foot long, ¾-inch diameter temporary stainless steel well screen which is used to create a conduit between groundwater and ground surface. Once groundwater was drawn towards ground surface via the polyethylene tubing, it was discharged into the appropriate sample containers and placed in a chest cooled with ice for transport to the analytical laboratory.

After the soil borings had been completed each borehole was backfilled to within 3 or 4-inches of the ground surface with 5% bentonite and neat cement, and the remainder of the hole was filled with asphalt patch.

SAMPLE LOCATIONS

Based on the regional groundwater gradient and information obtained from nearby sites it appears that the local groundwater gradient is to the southwest. Based on the assumed gradient direction, soil borings SB-1 through SB-2 were located downgradient of the USTs and associated fuel delivery systems. SB-3 was advanced in an upgradient groundwater flow direction to assess the potential for upgradient sources to impact the environmental quality of the Property (Refer to Figure 1). Discrete soil samples were collected from approximately 15 feet beneath ground surface (bgs), and grab groundwater samples were obtained from approximately 28 feet bgs.

SAMPLE ANALYSIS

Soil and groundwater samples collected for laboratory analysis from SB-1 through SB-3 were submitted to McCampbell Analytical, Incorporated (MAI), a State of California-certified laboratory located in Pacheco, California. The soil and groundwater samples were analyzed for total petroleum hydrocarbon compounds as gasoline (TPH-g) and diesel (TPH-d) using United States Environmental Protection Agency (U.S. EPA) Method 8015-modified, methyl tertiary-butyl ether (MTBE), benzene, toluene, ethylbenzene and total xylenes (BTEX) using U.S. EPA Method 8020/602 and halogenated volatile organic compounds (HVOCs) using U.S. EPA Method 8010.

LITHOLOGIC CONDITIONS

Based on the soil types encountered during this investigation, native soil underlying the Property appear to consist of dark brown to dark olive brown sandy silt and sand with low plasticity. Petroleum odors were not detected in soil samples collected from SB-2 or SB-3. Soil sample SB-1 exhibited a strong petroleum odor. Groundwater was encountered at approximately 28 feet bgs and it remained at this depth while groundwater samples were collected from each boring.

ANALYTICAL LABORATORY RESULTS

TPH-d was detected in soil and groundwater samples collected from all three borings at concentrations ranging from 3.3 milligrams per kilogram (mg/kg) to 1,000 mg/kg in soil samples and at concentrations ranging from 380 micrograms per liter ($\mu\text{g/L}$) to 1,000 $\mu\text{g/L}$ in groundwater samples. TPH-g was detected in only the soil sample and groundwater sample collected from SB-1 at concentrations of 3,800 mg/kg and 610 $\mu\text{g/L}$, respectively. MTBE was not detected in any soil or groundwater samples submitted for analysis. Benzene, toluene, ethylbenzene and xylenes were detected above method detection limits in samples collected from SB-1. Benzene was detected in samples SB-1 and GW-1 reported at concentrations of 22 mg/kg and 47 $\mu\text{g/L}$, respectively. Low levels of toluene and xylenes were also detected in samples GW-2 and SB-3. Volatile Halocarbons were not detected in any of the soil and groundwater samples submitted for analysis.

The analytical laboratory reported that TPH-g detected in SB-1 was indicative of "aged" gasoline. This appears consistent with the TPH-g to BTEX ratios which are indicated as aged or degraded hydrocarbons.

Target analytes which were reported above the method detection limit concentrations in various soil and groundwater samples during this investigation are tabulated in Table 1, and copies of the analytical laboratory data sheets are provided in Appendix A.

Table 1

Analytical Laboratory Results

Sample	Sample Depth	Matrix	Analytical Laboratory Results (ppm)						
			TPH-diesel	TPH-gasoline	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE
SB-1	15	soil	1,000	3,800	22	88	28	170	<0.05
GW-1	28	water	0.61	0.61	0.047	0.030	0.026	0.120	<0.005
SB-2	15	soil	1.3	<1.0	<0.005	<0.005	<0.005	<0.005	<0.05
GW-2	28	water	0.52	<0.050	<0.0005	0.00056	<0.0005	0.0019	<0.005
SB-3	15	soil	5.6	<1.0	<0.005	0.009	<0.005	0.016	<0.05
GW-3	28	water	0.38	<0.050	<0.0005	<0.0005	<0.0005	<0.0005	<0.005

Groundwater samples were reported by the analytical laboratory in micrograms per liter ($\mu\text{g/l}$), which are equivalent to parts per billion (ppb). Soil samples were reported in milligrams per kilogram (mg/kg) which is equivalent to parts per million (ppm). However, to reduce confusion all soil and groundwater samples shown in the above table have been converted into their equivalent parts per million (ppm) concentrations for comparison purposes. Bold type indicates detected above laboratory reporting concentration.

SUMMARY AND CONCLUSIONS

Based on historic use of the Property, the analytical laboratory results submitted by MAI and Ceres Associates' observations in the field, it appears that the former use of the Property as a vehicle repair facility and/or gasoline service station have adversely impacted soil and groundwater beneath the Property. The levels of TPH-d, TPH-g and BTEX compounds in soil and groundwater reported for SB-1 relative to SB-2 and SB-3 indicates that the historic use of the former gasoline service station caused a release that impacted Property soil and groundwater. In addition based on TPH-d being detected in groundwater at all three locations (including the upgradient samples collected from SB-3), it appears that a regional wide hydrocarbon groundwater plume is also impacting the Property and surrounding area. The source of the TPH-d is unknown at this time.

LIMITATIONS

Much of the information on which the conclusions and recommendations of this report are based, comes from data provided by others. Ceres Associates is not responsible for the accuracy or completeness of this information. Inaccurate data provided by others, as well as information that was not found or made available to Ceres Associates, may result in a modification of the conclusions presented in this report.

It is possible unpermitted, undocumented or concealed improvements or alterations to the Property



could exist beyond what was found during assessment activities. Variations in Property specific soil and groundwater conditions are probable beyond what field characterization can record. Changes in the conditions found on the Property could occur at some time in the future due to variations in environmental and physical conditions.

In today's technology, no amount of assessment can ascertain that the Property is completely free of environmental concern.

Any geologic and hydrogeologic data are for drawing conclusions, by Ceres Associates, within the context and timing of this report only.

This report was prepared for the sole use and benefit of P. Mock Investments. This report is not a legal opinion and does not offer warranties or guarantees.

If you have any questions regarding this report, please contact me at (925) 825-4466.

Sincerely,


Ceres Associates

Craig W. Hiatt
Project Environmental Specialist

Michael Siembieda, R.G. 4007
Director of Environmental Services



Appendix A -- Analytical Laboratory Results

 McCAMPBELL ANALYTICAL INC.	110 Second Avenue South, #D7, Pacheco, CA 94553-5560 Telephone : 925-798-1620 Fax : 925-798-1622 http://www.mccampbell.com E-mail: main@mccampbell.com	

Ceres Associates 5040 Commercial Circle, Ste F Concord, CA 94520	Client Project ID: #CA451-2	Date Sampled: 01/11/99
		Date Received: 01/11/99
	Client Contact: Craig W. Haitt	Date Extracted: 01/11/99
	Client P.O:	Date Analyzed: 01/11/99

01/18/99

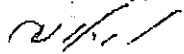
Dear: Craig

Enclosed are:


- 1). the results of 6 samples from your #CA451-2 project,
- 2). a QC report for the above samples
- 3). a copy of the chain of custody, and
- 4). a bill for analytical services.

All analyses were completed satisfactorily and all QC samples were found to be within our control limits. If you have any questions please contact me. McCampbell Analytical Laboratories strives for excellence in quality, service and cost. Thank you for your business and I look forward to working with you again.

Yours truly,



Edward Hamilton, Lab Director

 McCAMPBELL ANALYTICAL INC.	110 Second Avenue South, #D7, Pacheco, CA 94553-5560 Telephone: 925-798-1620 Fax: 925-798-1622 http://www.mccampbell.com E-mail: main@mccampbell.com
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	Client Contact: Craig W. Haitt	Date Extracted: 01/11/99
	Client P.O.:	Date Analyzed: 01/11-01/15/99


Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline*, with Methyl tert-Butyl Ether* & 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)*	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes	% Recovery Surrogate
01554	SB-1	S	3800,b,j	ND<10	22	88	28	170	97
01555	GW-1	W	610,a	ND	47	30	26	120	---
01556	SB-2	S	ND	ND	ND	ND	ND	ND	95
01557	GW-2	W	ND	ND	ND	0.56	ND	1.9	104
01558	SB-3	S	ND	ND	ND	0.009	ND	0.016	94
01559	GW-3	W	ND	ND	ND	ND	ND	ND	93
Reporting Limit unless otherwise stated; ND means not detected above the reporting limit	W		50 ug/L	5.0	0.5	0.5	0.5	0.5	
	S		1.0 mg/kg	0.05	0.005	0.005	0.005	0.005	

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

* cluttered chromatogram; sample peak coelutes 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 having broad chromatographic peaks are significant; biologically altered gasoline?; 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; i) liquid sample that contains greater than ~5 vol. % sediment; j) no recognizable pattern.

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	Client Contact: Craig W. Haitt	Date Extracted: 01/11/99
	Client P.O:	Date Analyzed: 01/11-01/12/99

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
01554	SB-1	S	1000,d	118
01555	GW-1	W	610,d,b	107
01556	SB-2	S	3.3,b	104
01557	GW-2	W	520,b,g	105
01558	SB-3	S	5.6,b	104
01559	GW-3	W	380,b,g	106
Reporting Limit unless otherwise stated; ND means not detected above the reporting limit		W	50 ug/L	
		S	1.0 mg/kg	

* water and vapor samples are reported in ug/L, wipe samples in ug/wipe, soil and sludge samples in mg/kg, and all TCLP / STLC / SPLP extracts in ug/L

* cluttered chromatogram resulting in coeluted surrogate and sample peaks, or; surrogate peak is on elevated baseline, or; surrogate has been diminished by dilution of original extract.

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) aged diesel? is 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; i) liquid sample that contains greater than ~5 vol. % sediment.



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		Date Received: 01/11/99
	Client Contact: Craig W. Haitr	Date Extracted: 01/11-01/14/99
	Client P.O.:	Date Analyzed: 01/12-01/14/99

Volatile Halocarbon				
EPA method 601 or 8010				
Lab ID	01554	01555	01556	01557
Client ID	SB-1	GW-1	SB-2	SB-2
Matrix	S	W	S	W
Compound	Concentration			
Bromodichloromethane	ND<50	ND	ND	ND
Bromoform ^(b)	ND<50	ND	ND	ND
Bromomethane	ND<50	ND	ND	ND
Carbon Tetrachloride ^(d)	ND<50	ND	ND	ND
Chlorobenzene	ND<50	ND	ND	ND
Chloroethane	ND<50	ND	ND	ND
2-Chloroethyl Vinyl Ether ^(h)	ND<50	ND	ND	ND
Chloroform ^(f)	ND<50	ND	ND	ND
Chloromethane	ND<50	ND	ND	ND
Dibromochloromethane	ND<50	ND	ND	ND
1,2-Dichlorobenzene	ND<50	ND	ND	ND
1,3-Dichlorobenzene	ND<50	ND	ND	ND
1,4-Dichlorobenzene	ND<50	ND	ND	ND
Dichlorodifluoromethane	ND<50	ND	ND	ND
1,1-Dichloroethane	ND<50	ND	ND	ND
1,2-Dichloroethane	ND<50	ND	ND	ND
1,1-Dichloroethene	ND<50	ND	ND	ND
cis 1,2-Dichloroethene	ND<50	ND	ND	ND
trans 1,2-Dichloroethene	ND<50	ND	ND	ND
1,2-Dichloropropane	ND<50	ND	ND	ND
cis 1,3-Dichloropropene	ND<50	ND	ND	ND
trans 1,3-Dichloropropene	ND<50	ND	ND	ND
Methylene Chloride ^(g)	ND<50	ND	ND	ND
1,1,2,2-Tetrachloroethane	ND<50	ND	ND	ND
Tetrachloroethene	ND<50	ND	ND	ND
1,1,1-Trichloroethane	ND<50	ND	ND	ND
1,1,2-Trichloroethane	ND<50	ND	ND	ND
Trichloroethene	ND<50	ND	ND	ND
Trichlorofluoromethane	ND<50	ND	ND	ND
Vinyl Chloride ^(a)	ND<50	ND	ND	ND
% Recovery Surrogate	113	104	97	102
Comments	j			

* water and vapor samples and all TCLP & SPLP extracts are reported in ug/L, soil and sludge samples in ug/kg, wipe samples in ug/wipe
 Reporting limit unless otherwise stated: water/TCLP/SPLP extracts, ND<0.5ug/L; soils and sludges, ND<5ug/kg; wipes, ND<0.2ug/wipe
 ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis

(b) tribromomethane; (c) tetrachloromethane; (d) (2-chloroethoxy)ethene; (e) trichloromethane; (f) dichloromethane; (g) chloroethene; (h) a lighter than water immiscible sheen is present; (i) liquid sample that contains greater than ~5 vol. % sediment; (j) sample diluted due to high organic content.

DHS Certification No. 1644

Edward Hamilton, Lab Director



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	Client P.O:	Date Extracted: 01/11-01/14/99
		Date Analyzed: 01/12-01/14/99

Volatile Halocarbons

EPA method 601 or 8010

Lab ID	01558	01559		
Client ID	SB-3	GW-3		
Matrix	S	W		
Compound	Concentration			
Bromodichloromethane	ND	ND		
Bromoform ^(b)	ND	ND		
Bromomethane	ND	ND		
Carbon Tetrachloride ^(c)	ND	ND		
Chlorobenzene	ND	ND		
Chloroethane	ND	ND		
2-Chloroethyl Vinyl Ether ^(d)	ND	ND		
Chloroform ^(e)	ND	ND		
Chloromethane	ND	ND		
Dibromochloromethane	ND	ND		
1,2-Dichlorobenzene	ND	ND		
1,3-Dichlorobenzene	ND	ND		
1,4-Dichlorobenzene	ND	ND		
Dichlorodifluoromethane	ND	ND		
1,1-Dichloroethane	ND	ND		
1,2-Dichloroethane	ND	ND		
1,1-Dichloroethene	ND	ND		
cis 1,2-Dichloroethene	ND	ND		
trans 1,2-Dichloroethene	ND	ND		
1,2-Dichloropropane	ND	ND		
cis 1,3-Dichloropropene	ND	ND		
trans 1,3-Dichloropropene	ND	ND		
Methylene Chloride ^(f)	ND	ND		
1,1,2,2-Tetrachloroethane	ND	ND		
Tetrachloroethene	ND	ND		
1,1,1-Trichloroethane	ND	ND		
1,1,2-Trichloroethane	ND	ND		
Trichloroethene	ND	ND		
Trichlorofluoromethane	ND	ND		
Vinyl Chloride ^(g)	ND	ND		
% Recovery Surrogate	97	106		
Comments				

* water and vapor samples and all TCLP & SPLP extracts are reported in ug/L, soil and sludge samples in ug/kg, wipe samples in ug/wipe
 Reporting limit unless otherwise stated: water/TCLP/SPLP extracts, ND<0.5ug/L; soils and sludges, ND<5ug/kg; wipes, ND<0.2ug/wipe
 ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis

(b) tribromomethane; (c) tetrachloromethane; (d) (2-chloroethoxy)ethene; (e) trichloromethane; (f) dichloromethane; (g) chloroethene; (h) a lighter than water immiscible sheen is present; (i) liquid sample that contains greater than ~5 vol. % sediment; (j) sample diluted due to high organic content.

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QC REPORT FOR HYDROCARBON ANALYSES

Date: 01/11/99-01/12/99

Matrix: WATER

Analyte	Concentration (mg/L) Sample (#01376)			Amount Spiked	% Recovery		RPD
	MS	MSD			MS	MSD	
TPH (gas)	0.0	85.5	88.0	100.0	85.5	88.0	2.9
Benzene	0.0	8.9	9.2	10.0	89.0	92.0	3.3
Toluene	0.0	10.1	10.4	10.0	101.0	104.0	2.9
Ethyl Benzene	0.0	10.7	11.0	10.0	107.0	110.0	2.8
Xylenes	0.0	32.1	33.0	30.0	107.0	110.0	2.8
TPH(diesel)	0.0	139	168	150	93	112	19.1
TRPH (oil & grease)	0	24800	26100	23700	105	110	5.1

$$\% \text{ Rec.} = (\text{MS} - \text{Sample}) / \text{amount spiked} \times 100$$

$$\text{RPD} = (\text{MS} - \text{MSD}) / (\text{MS} + \text{MSD}) \times 2 \times 100$$

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QC REPORT FOR HYDROCARBON ANALYSES

Date: 01/11/99

Matrix: SOIL

Analyte	Concentration (mg/kg) Sample			Amount Spiked	% Recovery		RPD
	(#95831)	MS	MSD		MS	MSD	
TPH (gas)	0.000	2.165	2.267	2.03	107	112	4.6
Benzene	0.000	0.202	0.194	0.2	101	97	4.0
Toluene	0.000	0.230	0.224	0.2	115	112	2.6
Ethylbenzene	0.000	0.230	0.228	0.2	115	114	0.9
Xylenes	0.000	0.674	0.676	0.6	112	113	0.3
TPH(diesel)	0	340	340	300	113	113	0.2
TRPH (oil and grease)	N/A	N/A	N/A	N/A	N/A	N/A	N/A

$$\% \text{ Rec.} = (\text{MS} - \text{Sample}) / \text{amount spiked} \times 100$$

$$\text{RPD} = (\text{MS} - \text{MSD}) / (\text{MS} + \text{MSD}) \times 2 \times 100$$

McCAMPBELL ANALYTICAL INC.

110 2nd Avenue South, #D7, Facheo, CA 94553
Tele: 925-798-1620 Fax: 925-798-1622

QC REPORT FOR EPA 8010/8020/EDB

Date: 01/12/99

Matrix: WATER

Analyte	Concentration (ug/L)			Amount Spiked	% Recovery		
	Sample (#01215)	MS	MSD		MS	MSD	RPD
1,1-DCE	0.0	11.1	10.4	10.0	111	104	6.5
Trichloroethene	0.0	9.9	9.6	10.0	99	96	3.1
EDB	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Chlorobenzene	0.0	10.2	10.3	10.0	102	103	1.0
Benzene	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Toluene	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Chlorobz (PID)	N/A	N/A	N/A	N/A	N/A	N/A	N/A

$$\% \text{ Rec.} = (\text{MS} - \text{Sample}) / \text{Amount spiked} \times 100$$

$$\text{RPD} = (\text{MS} - \text{MSD}) / (\text{MS} + \text{MSD}) \times 2 \times 100$$

McCAMPBELL ANALYTICAL INC.

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Tele: 925-798-1620 Fax: 925-798-1622

QC REPORT FOR EPA 8010/8020/EDS

Date: 01/14/99-01/15/99

Matrix: WATER

Analyte	Concentration (ug/L)			Amount Spiked	% Recovery		RPD
	Sample (#01401)	MS	MSD		MS	MSD	
1,1-DCE	0.0	10.1	10.1	10.0	101	101	0.0
Trichloroethene	0.0	9.6	9.5	10.0	96	95	1.0
EDB	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Chlorobenzene	0.0	10.4	10.4	10.0	104	104	0.0
Benzene	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Toluene	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Chlorobz (PID)	N/A	N/A	N/A	N/A	N/A	N/A	N/A

$$\% \text{ Rec.} = (\text{MS} - \text{Sample}) / \text{amount spiked} \times 100$$

$$\text{RPD} = (\text{MS} - \text{MSD}) / (\text{MS} + \text{MSD}) \times 2 \times 100$$

McCAMPBELL ANALYTICAL INC.	110 2nd Avenue South, #D7, Pacheco, CA 94553 Tele: 925-798-1620 Fax: 925-798-1622
----------------------------	--

QC REPORT FOR EPA 8010/8020/EDB

Date: 01/11/99-01/12/99 Matrix: SOIL

Analyte	Concentration (ug/kg)				% Recovery		
	Sample (#95831)	MS	MSD	Amount Spiked	MS	MSD	RPD
1,1-DCE	0	87	81	100	87	81	7.1
Trichloroethene	0	80	84	100	80	84	4.9
EDB	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Chlorobenzene	0	87	91	100	87	91	4.5
Benzene	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Toluene	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Chlorobz (PID)	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Rec. = (MS - Sample) / amount spiked x 100

RPD = (MS - MSD) / (MS + MSD) x 2 x 100



CHAIN OF CUSTODY

Page 1 of 1
Project CA451-2

5040 Commercial Circle, Suite F
Concord, California 94520
(925) 825-4466 / fax (925) 825-4441

Send Results to: Craig W. Hiatt
Sampler's Signature: [Signature]

Laboratory: U CAMPBELL ANALYTICAL
INC
Attention: _____

5 DAY T.A.T
PLEASE
Fax Results to
Craig Hiatt
(925) 825-4441

SAMPLE	Sample Collection Date/Time	MATRIX	8015/8020 gasoline/BTEX/MTBE		8015 Diesel	8010 HVOCs														(HCl)	PRESERVATIVE	COMMENT
			8015/8020	8015/8020																		
SB-1	1/14/99 0917	S	X	X	X																	01554
GW-1	1/14/99 0949	W	X	X	X																	01555
SB-2	1/14/99 1035	S	X	X	X																	01556
GW-2	1/14/99 1100	W	X	X	X																	01557
SB-3	1/14/99 1139	S	X	X	X																	01558
GW-3	1/14/99 1156	W	X	X	X																	01559

ICEN PRESEVATION
GOOD CONDITION APPROPRIATE
HEAD SPACE ABSENT CONTAINERS

Relinquished by [Signature] of Ceres Associates - Date/Time 1/14/99, 1445
Received by Simon A. Butler of MRT - Date/Time 1/14/99, 0545

COPIES - White delivered to Ceres Associates with final Laboratory Report, Yellow - remains with laboratory, Pink - remains with Ceres Associates at sample pickup

10:12
CERES ASSOCIATES, INC. 7 10102/20455
NU. 912
P18

Appendix B -- Drilling and Excavation Permits



ALAMEDA COUNTY PUBLIC WORKS AGENCY

WATER RESOURCES SECTION
 351 TURNER COURT, SUITE 300, HAYWARD, CA 94545-2631
 PHONE (510) 470-5575 ANDREAS GODFREY FAX (510) 470-5162
 (510) 470-5248 AZATH KAN

DRILLING PERMIT APPLICATION

FOR APPLICANT TO COMPLETE

FOR OFFICE USE

LOCATION OF PROJECT SALVATION Army
510 CLAY STREET
OAKLAND, CA

PERMIT NUMBER 99 WR004
 WELL NUMBER _____
 APN _____

California Coordinates Source _____ A. Accuracy = _____ ft.
 CGN _____ A CCE _____ ft.
 APN _____

PERMIT CONDITIONS

CIRCLE PERMIT REQUIREMENTS APPLY

CLIENT
 Name P. MOUL INVESTMENTS
 Address 254 5th STREET Phone (510) 272-0454
 City OAKLAND Zip 94607

- A. GENERAL**
1. A permit application should be submitted to as to arrive at the ACPWA office five days prior to proposed starting date.
 2. Submit to ACPWA within 30 days after completion of permitted work the original Department of Water Resources Water Well Drillers Report or equivalent for well projects, or drilling logs and location sketch for non-well projects.
 3. Permit is void if project not begun within 90 days of approval date.
- B. WATER SUPPLY WELLS**
1. Minimum surface seal thickness is two inches of cement grout placed by tremie.
 2. Minimum seal depth is 30 feet for municipal and industrial wells or 20 feet for domestic and irrigation wells unless a lesser depth is specially approved.

APPLICANT
 Name CELOS INVESTMENTS
 Address 500 COMMERCIAL AVENUE Phone (925) 838-4466
 City CONCORD Zip 94620

TYPE OF PROJECT

Well Construction		Geotechnical Investigation	
Cathodic Protection	<input type="checkbox"/>	Seismic	<input type="checkbox"/>
Water Supply	<input type="checkbox"/>	Contamination	<input checked="" type="checkbox"/>
Maintenance	<input type="checkbox"/>	Well Destruction	<input type="checkbox"/>

PROPOSED WATER SUPPLY WELL USE

New Domestic	<input type="checkbox"/>	Replacement Domestic	<input type="checkbox"/>
Municipal	<input type="checkbox"/>	Industrial	<input type="checkbox"/>
Industrial	<input type="checkbox"/>	Other _____	<input type="checkbox"/>

DRILLING METHOD:

Hot Rotary	<input type="checkbox"/>	Air Rotary	<input type="checkbox"/>	Auger	<input checked="" type="checkbox"/>
Cable	<input type="checkbox"/>	Other	<input type="checkbox"/>	Hand Driven	<input type="checkbox"/>

DRILLER'S LICENSE NO. 57 705927 (VIRONEX, INC.)

WELL PROJECTS

OMI Hole Diameter	_____ in.	Maximum	_____ ft.
Casing Diameter	_____ in.	Depth	_____ ft.
Surface Seal Depth	_____ ft.	Number	_____

GEOTECHNICAL PROJECTS

Number of Boreholes	<u>3</u>	Max Hole Depth	<u>25</u> ft.
Hole Diameter	<u>2.1</u> in.		

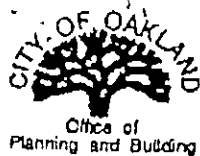
ESTIMATED STARTING DATE 1/16/99
 ESTIMATED COMPLETION DATE 1/16/99

- C. GROUNDWATER MONITORING WELLS INCLUDING PIEZOMETERS**
1. Minimum surface seal thickness is two inches of cement grout placed by tremie.
 2. Minimum seal depth for monitoring wells is the maximum depth practicable or 20 feet.
- D. GEOTECHNICAL**
- Backfill bore hole with compacted castings or heavy bentonite and grout five feet with compacted material. In areas of known or suspected contamination, treated cement grout shall be used in place of compacted castings.
- E. CATHODIC**
- Fill hole above anode zone with concrete placed by tremie.
- F. WELL DESTRUCTION**
- See attached.
- G. SPECIAL CONDITIONS**

APPROVED [Signature] DATE 1/8/99

I hereby agree to comply with all requirements of this permit and Alameda County Ordinance No. 73 68.

APPLICANT'S SIGNATURE [Signature] DATE 1/6/99



EXCAVATION PERMIT

TO EXCAVATE IN STREETS OR OTHER SPECIFIED WORK

CIVIL ENGINEERING

PAGE 2 of 2

PERMIT NUMBER X9900031		SITE ADDRESS/LOCATION 810 clay St.
APPROX. START DATE	APPROX. END DATE	24-HOUR EMERGENCY PHONE NUMBER (Permit not valid without 24-Hour number) clay side
CONTRACTOR'S LICENSE # AND CLASS		CITY BUSINESS TAX #

ATTENTION:

- State law requires that the contractor/owner call *Underground Service Alerts (USA)* two working days before excavating. This permit is not valid unless applicant has secured an inquiry identification number issued by USA. The USA telephone number is 1 (800) 642-2444. UNDERGROUND SERVICE ALERT (USA) #: **343076**
- 48 hours prior to starting work, YOU MUST CALL (510) 238-3651 TO SCHEDULE AN INSPECTION.**

OWNER/BUILDER

I hereby affirm that I am exempt from the Contractor's License Law for the following reason (Sec. 7031.5 Business and Professions Code: Any city or county which requires a permit to construct, alter, improve, demolish, or repair any structure, prior to its issuance, also requires the applicant for such permit to file a signed statement that he is licensed pursuant to the provisions of the Contractor's License Law Chapter 9 (commencing with Sec. 7000) of Division 3 of the Business and Professions Code, or that he is exempt therefrom and the basis for the alleged exemption. Any violation of Section 7031.5 by any applicant for a permit subjects the applicant to a civil penalty of not more than \$500):

I, as an owner of the property, or my employees with wages as their sole compensation, will do the work, and the structure is not intended or offered for sale (Sec. 7044, Business Professions Code: The Contractor's License Law does not apply to an owner of property who builds or improves thereon, and who does such work himself or through his own employees, provided that such improvements are not intended or offered for sale. If however, the building or improvement is sold within one year of completion, the owner-builder will have the burden of proving that he did not build or improve for the purpose of sale).

I, as owner of the property, am exempt from the sale requirements of the above due to: (1) I am improving my principal place of residence or appurtenances thereto, (2) the work will be performed prior to sale, (3) I have resided in the residence for the 12 months prior to completion of the work, and (4) I have not claimed exemption on this subdivision on more than two structures more than once during any three-year period. (Sec. 7044 Business and Professions Code).

I, as owner of the property, am exclusively contracting with licensed contractors to construct the project, (Sec. 7044, Business and Professions Code: The Contractor's License Law does not apply to an owner of property who builds or improves thereon, and who contracts for such projects with a contractor(s) licensed pursuant to the Contractor's License law).

I am exempt under Sec. _____, B&PC for this reason _____.

WORKER'S COMPENSATION

- I hereby affirm that I have a certificate of consent to self-insure, or a certificate of Worker's Compensation insurance, or a certified copy thereof (Sec. 3700, Labor Code).
- Policy # _____ Company Name _____
- I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the Worker's Compensation Laws of California (not required for work valued at one hundred dollars (\$100) or less).

NOTICE TO APPLICANT: If, after making this Certificate of Exemption, you should become subject to the Worker's Compensation provisions of the Labor Code, you must forthwith comply with such provisions or this permit shall be deemed revoked. This permit is issued pursuant to all provisions of Title 12 Chapter 12.12 of the Oakland Municipal Code. It is granted upon the express condition that the permittee shall be responsible for all claims and liabilities arising out of work performed under the permit or arising out of permittee's failure to perform the obligations with respect to street maintenance. The permittee shall, and by acceptance of the permit agrees to defend, indemnify, save and hold harmless the City, its officers and employees, from and against any and all suits, claims, or actions brought by any person for or on account of any bodily injuries, disease or illness or damage to persons and/or property sustained or arising in the construction of the work performed under the permit or in consequence of permittee's failure to perform the obligations with respect to street maintenance. This permit is void 90 days from the date of issuance unless an extension is granted by the Director of the Office of Planning and Building.

I hereby affirm that I am licensed under provisions of Chapter 9 of Division 3 of the Business and Professions Code and my license is in full force and effect (if contractor), that I have read this permit and agree to its requirements, and that the above information is true and correct under penalty of law.

Signature of Permittee: *[Signature]* Agent for Contractor Owner Date: **1/7/99**

DATE STREET LAST RESURFACED 88	SPECIAL PAYING DETAIL REQUIRED? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	HOLIDAY RESTRICTION? (NOV 1 - JAN 1) <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	LIMITED OPERATION AREA? (7AM-9AM & 4PM-6PM) <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
ISSUED BY <i>m. Mill</i>		DATE ISSUED 1/7/99	



EXCAVATION PERMIT

TO EXCAVATE IN STREETS OR OTHER SPECIFIED WORK

CIVIL ENGINEERING

PAGE 2 of 2

PERMIT NUMBER X9900032		SITE ADDRESS/LOCATION 810 Clay St.	
APPROX. START DATE	APPROX. END DATE	24-HOUR EMERGENCY PHONE NUMBER (Permit not valid without 24-Hour number) 8th St.	
CONTRACTOR'S LICENSE # AND CLASS		CITY BUSINESS TAX # none.	

ATTENTION:

1) State law requires that the contractor/owner call Underground Service Alert (USA) two working days before excavating. This permit is not valid unless applicant has secured an inquiry identification number issued by USA. The USA telephone number is 1 (800) 642-2444. UNDERGROUND SERVICE ALERT (USA) # 343876

2) **48 hours prior to starting work, YOU MUST CALL (510) 238-3651 TO SCHEDULE AN INSPECTION.**

OWNER/BUILDER

I hereby affirm that I am exempt from the Contractor's License Law for the following reason (Sec. 7031.5 Business and Professions Code: Any city or county which requires a permit to construct, alter, improve, demolish, or repair any structure, prior to its issuance, also requires the applicant for such permit to file a signed statement that he is licensed pursuant to the provisions of the Contractor's License Law Chapter 9 (commencing with Sec. 7000) of Division 3 of the Business and Professions Code, or that he is exempt therefrom and the basis for the alleged exemption. Any violation of Section 7031.5 by any applicant for a permit subjects the applicant to a civil penalty of not more than \$500):

I, as an owner of the property, or my employees with wages as their sole compensation, will do the work, and the structure is not intended or offered for sale (Sec. 7044, Business Professions Code: The Contractor's License Law does not apply to an owner of property who builds or improves thereon, and who does such work himself or through his own employees, provided that such improvements are not intended or offered for sale. If however, the building or improvement is sold within one year of completion, the owner-builder will have the burden of proving that he did not build or improve for the purpose of sale).

I, as owner of the property, am exempt from the sale requirements of the above due to: (1) I am improving my principal place of residence or apartments thereon, (2) the work will be performed prior to sale, (3) I have resided in the residence for the 12 months prior to completion of the work, and (4) I have not claimed exemption on this subdivision on more than two structures more than once during any three-year period. (Sec. 7044 Business and Professions Code).

I, as owner of the property, am exclusively contracting with licensed contractors to construct the project. (Sec. 7044, Business and Professions Code: The Contractor's License Law does not apply to an owner of property who builds or improves thereon, and who contracts for such projects with a contractor(s) licensed pursuant to the Contractor's License law).

I am exempt under Sec. _____, B&PC for this reason _____.

WORKER'S COMPENSATION

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Policy # _____ Company Name _____

I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the Worker's Compensation Laws of California (not required for work valued at one hundred dollars (\$100) or less).

NOTICE TO APPLICANT: If, after making this Certificate of Exemption, you should become subject to the Worker's Compensation provisions of the Labor Code, you must forthwith comply with such provisions or this permit shall be deemed revoked. This permit is issued pursuant to all provisions of Title 12 Chapter 12.12 of the Oakland Municipal Code. It is granted upon the express condition that the permittee shall be responsible for all claims and liabilities arising out of work performed under the permit or arising out of permittee's failure to perform the obligations with respect to street maintenance. The permittee shall, and by acceptance of the permit agrees to defend, indemnify, save and hold harmless the City, its officers and employees, from and against any and all suits, claims, or actions brought by any person for or on account of any bodily injuries, disease or illness or damage to persons and/or property sustained or arising in the construction of the work performed under the permit or in consequence of permittee's failure to perform the obligations with respect to street maintenance. This permit is void 90 days from the date of issuance unless an extension is granted by the Director of the Office of Planning and Building.

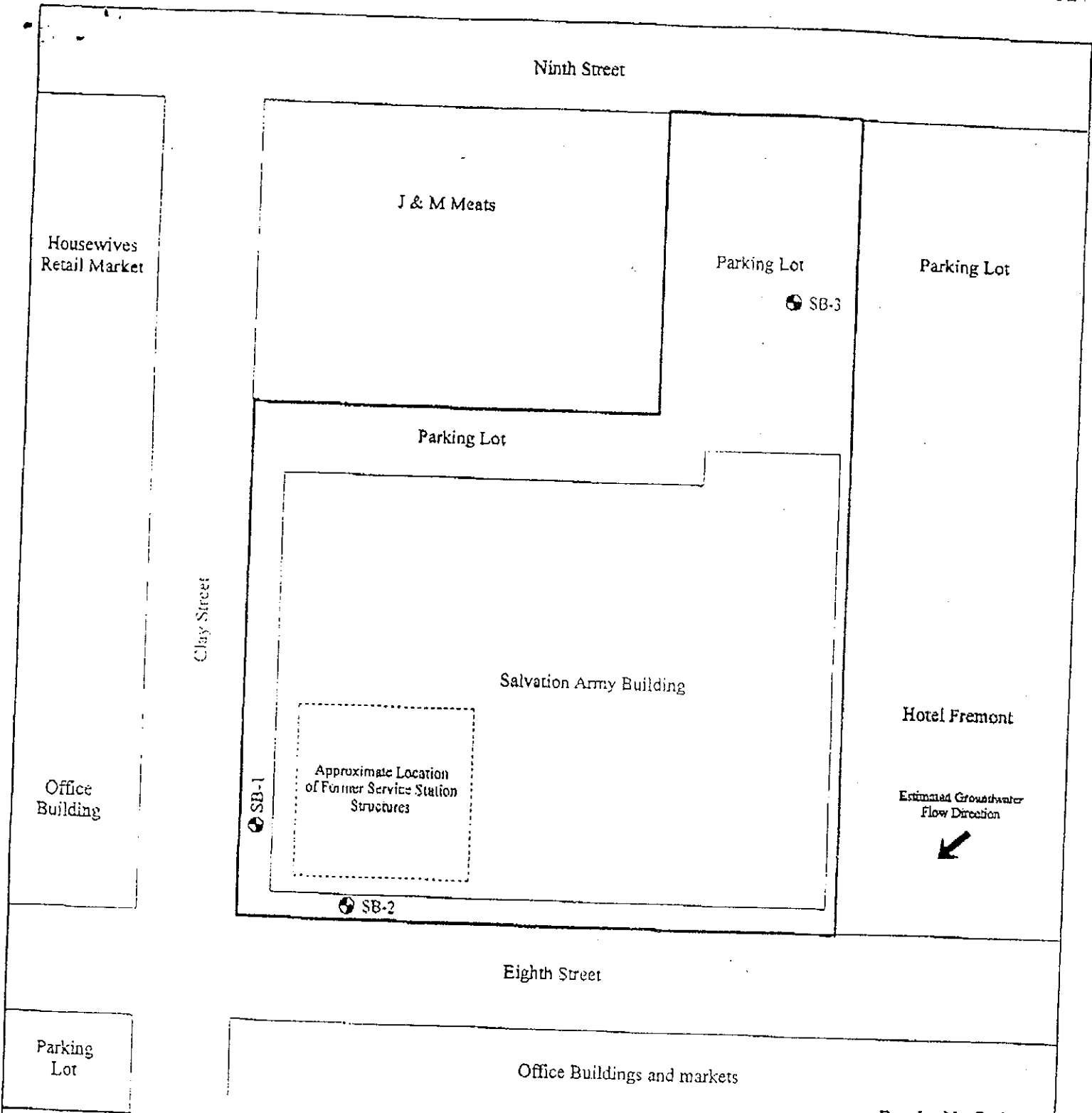
I hereby affirm that I am licensed under provisions of Chapter 9 of Division 3 of the Business and Professions Code and my license is in full force and effect (if contractor), that I have read this permit and agree to its requirements, and that the above information is true and correct under penalty of law.

Signature of Permittee: *[Signature]* Agent for Contractor Owner Date: **1/7/99**

DATE STREET LAST RESURFACED	SPECIAL PAVING DETAIL REQUIRED? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	HOLIDAY RESTRICTION? (NOV 1 - JAN 1) <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	LIMITED OPERATION AREA? (7AM-9AM & 4PM-6PM) <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
ISSUED BY: M. Miller	DATE ISSUED: 1/7/99		

Ceres Assoc

Figure



Salvation Army Building
 810 Clay Street
 Oakland, California

Project CA451-2

CA CERES
 Associates

— Property Boundary

● SB-X Soil Boring Location

Drawing Not To Scale

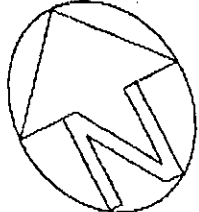


FIGURE 1 - SAMPLE LOCATION MAP