MEGA GENERAL & ENVIRONMENTAL CONTRACTING

June 27, 1989

Mr. Dennis Byrne Alameda County Health Dept. 80 Swan Way, Room 200 Oakland, Ca 94607

RE: 5903 Christie Avenue, Emeryville

Dear Dennis

Attached are copies of the Geologist Report of the Well Drilling, Construction, and Sampling done at the above location. The results at this time are clean and we feel that we were able to remove the contamination problem with the earlier removal of soil. The geologist recommends periodic rechecks for possible contamination migration.

If additional sampling is required, Mega proposes to sample the well every three (3) months. A report will be submitted to the Health Dept. with sampling results within 15 days of each sampling. This process will continue for a period of one year including this current report. It should be noted at this time that Mr. Weatherford feels that he has complied fully with all requirements to this point and wishes to close the well at this point. If you have any further questions or comments, please call me at (415) 724-7143.

Sincerely

William L. Ridle

cc Greg Weatherford Weatherford BMW

S.F. Bay Regional Water

NORTHERN CALIFORNIA P.O. Box 462 Pinole, CA 94564 (415) 223-5973 FAX (415) 223-3400 SOUTHERN CALIFORNIA

7530 Rosedale Hwy. P.O. Box 1891-93303 Bakersfield, CA 93308 (805) 589-7135



CROSBY & OVERTON, INC.

Environmental Management

8430 Amelia Street
Oakland, California 94621
FAX (415) 633-0759
(415) 633-0336 • (800) 821-0424

June 23, 1989

Mr. Bill Ridle Mega General and Environmental Contracting, Inc. P.O. Box 462 Pinole, CA 94564

RE: Groundwater Monitoring well at 5903 Christie Ave in Emeryville, CA,

Dear Mr. Ridle:

Crosby & Overton, Inc. is pleased to submit the following report pertaining to the installation, development, and sampling of a groundwater monitoring well at 5903 Christie Ave in Emeryville, California (see map and site plans).

During the excavation and removal of two underground fuel tanks, it was discovered that at least one of the tanks had leaked or had been overfilled, contaminating soil in the vicinity. Pursuant to San Francisco Bay Regional Water Quality Control Board (SFBRWCCB) guidelines, the installation of a groundwater monitor well was proposed.

FIELD WORK

On June 2, 1989, Crosby & Overton directed a subcontractor, Datum Exploration, in the drilling of the borehole, and subsequent installation and development of a monitoring well at the site.

A B-61 truck-mounted drill rig was used to advance 6 inch outer-diameter continuous flight hollow stem augers. A soil sample was obtained from 6.5' below ground surface (bgs). A California split spoon sampler, holding three clean, new 6" brass tubes was used for sample procurement. Immediately after extraction from the borehole, the middle brass tube ends were sealed by aluminum foil, plastic cap plugs, duct tape; then labelled and placed on blue ice.

Drilling operations encountered pea-gravel fill to about 5' bgs, clayey silts and sand to about 16' bgs, then clay to a final drilling depth of 21'. No evidence of hydrocarbon contamination could be detected during the drilling or from groundwater, first encountered at 7.5' bgs.

The proposed depth of the well was 25 feet bgs; however, the clay aquitard encountered from 16' bgs to 21' bgs necessitated restricting the well depth in order to prevent possible aquifer cross-contamination (see well construction diagram).

After completion, the well was developed by pumping more than 10 well volumes (45 gallons) into a holding drum. The well was then allowed to fully recharge, at which time aqueous samples were obtained by using a steam cleaned teflon bailer. Samples to be analyzed for volatile organics were secured in new 40 ml. VOA vials, with no headspace allowed. Other samples were secured in appropriate containers. Immediately after being secured in the containers, the samples were labelled, and placed on blue ice for transportation to SMC laboratory in Bakersfield, and Trace Analysis laboratory in Hayward (both are California State certified hazardous materials laboratories). Chain of custody documentation accompanied all samples.

ANALYTICAL RESULTS

The results of the analyses of both the soil and aqueous samples submitted indicated any hydrocarbon evidence to be below detection levels.

However, since the well was completed for monitoring, periodic re-checks for possible contamination migration are recommended.

Additional copies of this report are included herein, and it is recommended that one be forwarded to each of the individuals listed below:

- Mr. Scott Hugenburger San Francisco Bay Regional Water Quality Control Board 1111 Jackson Street, Sixth Floor Oakland, CA 94607
- Mr. Dennis Byrne
 Alameda County Department of Health
 80 Swan Way, Room 200
 Oakland, CA, 94697

Sincerely,

Dave Sadoff

Environmental Geologist

Roger Nielson

CA Registered Geologist #1801

Enclosure

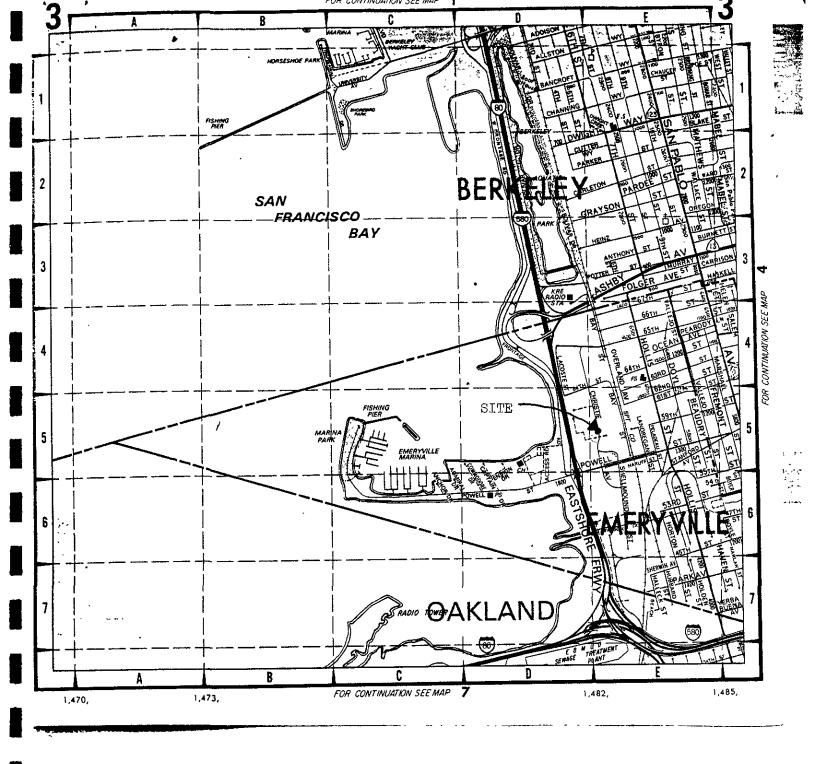
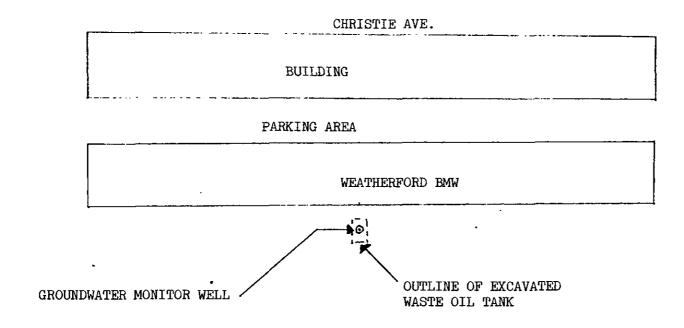


FIGURE 1. SITE MAP



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FIGURE 2. SITE PLAN

SCALE 1"=100'



DATE:

6/12/89

LOG NO.:

7464

DATE SAMPLED:

6/2/89

DATE RECEIVED:

6/6/89

CUSTOMER:

Crosby and Overton, Inc.

REQUESTER:

Dave Sadoff

PROJECT:

No. 4538-S Mega/Weatherford

6	· l'·	Sample Type: Soil	
Method and Constituent	<u>Units</u>	S-1 Concen- tration	Detection 7 Limit 7
Total Petroleum Hydro carbons as Diesel	ug/kg	< 7,000	7,000
Stanard Method 503E, Hydrocart Oil and Grease	oons: ug/kg	< 10,000	10,000 10 pfm

Dan Farah, Ph.D. Supervisory Chemist

DF:sm

Client Name: Mega General & Environmental Contracting, Inc. matrix - water

: 7530 Rosedale Hwy. Address

Bakersfield, CA 93308

Date samples received : 6-05-89 Date analysis completed: 6-08-89 : 6-12-89

Date of report

Laboratory No. 1332

Project No. 4538-5 Project: Weatherford BMW

RESULTS OF ANALYSIS

	ugm/L	MRL,ugm/L
#1332 ID: A-1	ND	0.3
Benzene	ND	0.3
Toluene	ND	0.3
Ethylbenzene	ND	0.3
p-Xylene	ИD	0.3
m-Xylene	ND	0.3
o-Xylene	ND	0.3
Isopropylbenzene	ND	50
TPH (Gasoline)		
	ND	100

TPH (Diesel)

ppms/LV MRL, mg/L 10 ND V

Total Oil & Grease

Method of Analysis for BTX/TPH: California DOHS buff manual Method of Analysis for Total Oil & Grease MRL = Minimum Reporting Level TPH = Total Petroleum Hydrocarbons ugm/L = micrograms per liter mg/L = milligrams per liter ND = Not detected

(805) 393-3597 Bakersfield, CA 93308 3155 Pegasus Drive FAX (805) 393-3623 Bakersfield, CA 93380 P.O. Box 80835



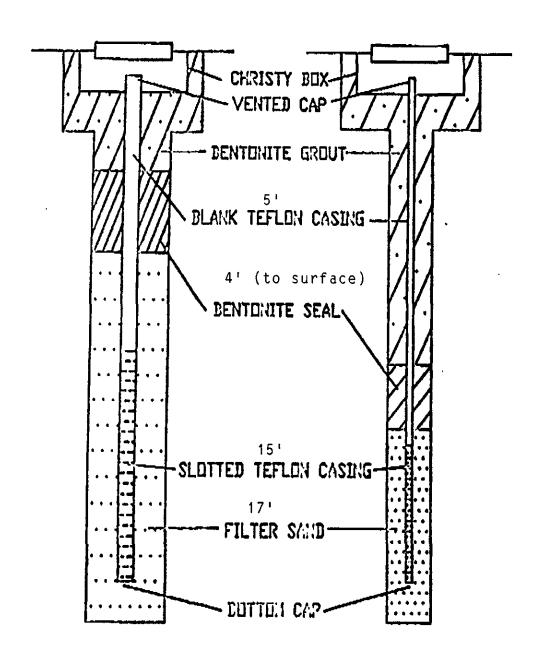
8430 Amelia Street Oakland, California 94621 FAX (415) 633-0759 (415) 633-0336 • (800) 821-0424

FIELD DRILL // LITHOLOGIC LOG

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DEPTH FEED	CO	FILL SEF	PID (PPM)	SAM		3LOW	GRAPHIC		DESCRIPTION/SOIL CLASSIFICATION (COLOR, TEXTURE, STRUCTURES)							
1 2 3									CRETE PAD - GRAVEL FILL							
5 6 7 8 9 1 10				s-1	1 2 2			NO 1	Y "BAY MUD" MEDIUM PLASITICITY HYDROCARBON ODOR GROUNDWATER AT 7.5'							
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17 18 19 20 21						- -		RAD MOI	CLAY, VERY RARE SMALL PEBBLES OF QUARTZ, IOCARIAN CHERT. MEDIUM PLASTICITY, LOW STURE. BORING TERMINATED DUE TO AQUITARD							

MONITORING WELL

PIEZOMETER



Monitoring Well and Plezometer Construction Diagnose

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