

3164 Gold Camp Drive Suite 200 Rancho Cordova, CA 95670 916/638-2085 FAX: 916/638-8385

November 20, 1995

Ms. Marla Guensler Exxon Company, U.S.A. 2300 Clayton Road, Suite 640 Concord, California 94520

Subject:

Work Plan for Additional Assessment Activities

Exxon Service Station No. 7-7003

349 Main Street Pleasanton, California

Delta Project No. D094-838

Dear Ms. Guensler:

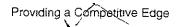
Delta Environmental Consultants, Inc. (Delta), has been authorized to conduct additional assessment work at Exxon Service Station No. 7-7003 located at 349 Main Street, Pleasanton, Alameda County, California. The proposed additional assessment will consist of utilizing a push-technology drilling technique to obtain two ground water samples for analysis. No additional monitoring wells will be installed. The analysis results of the ground water samples will be used to assess the horizontal extent of petroleum hydrocarbons in ground water associated with a release from the former UST tank basin at the Exxon site.

This letter describes the proposed work. The location of the site is shown in Figure 1, and a site vicinity map is presented in Figure 2.

## **Project Background Information**

In July 1989, three 8,000 gallon steel underground storage tanks (USTs) and a used-oil UST were removed from the site and replaced with fiberglass USTs in a new tankhold area. Samples obtained for analysis on excavated soil detected the presence of petroleum hydrocarbons. Ground water monitoring wells (MW-1 through MW-5) were subsequently installed on-site in January 1990 to assess the potential of petroleum hydrocarbons in ground water and quarterly ground water monitoring was initiated at the site. Hydrocarbon constituents have been primarily detected in the ground water samples collected from MW-4.

Off-site monitoring wells MW-6 and MW-7 were installed in March 1991, based on the interpreted ground water flow direction towards the northwest. RESNA Industries installed vapor extraction wells (VE-1 and VE-2) at the site in July 1993, and completed an interim remedial investigation in July 1994.



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## Scope of Work

The proposed work includes advancing two push technology "hydropunch" borings to a depth of approximately 25 feet below surface grade (bsg) or just below the static ground water level. The proposed locations for the wells are depicted on Figure 3.

The borings (HP-1 and HP-2) will be drilled by a licensed drilling contractor using continuous stainless steel push type augers. The borings will extend approximately two to three feet into the saturated zone or a maximum of 3 feet into a competent aquitard. Capillary zone soil samples will be obtained and field-analyzed for the possible presence of petroleum hydrocarbon vapors with a photoionization detector (PID). If petroleum hydrocarbons are detected in the soil sample, the sample will be submitted to Sequoia Analytical for laboratory analysis of benzene, toluene, ethylbenzene, total xylenes (BTEX), and total petroleum hydrocarbons (TPH) as gasoline. The methods proposed to drill and sample the soil borings are described in Enclosure A.

The hydropunch sampler will be used to collect ground water samples from each boring through a metal screen and poly-vinyl tubing. Samples will be analyzed for BTEX by EPA Method 8020 and TPH as gasoline by EPA Method 8015 Modified.

Following the completion of ground water sampling, the borings will be grouted to the surface. No purged water or soil cuttings waste will be generated using the push technology sampling technique.

#### Authorization

It is Delta's understanding that there are no well permit fees associated with hydropunch ground water sampling. Off-site drilling access and Right of Entry from Bank of America (west of the Exxon property) will be required prior to project initiation. Enclosed is a completed Zone 7 Water Conservation District Agency permit application for the proposed work. Delta recommends that a copy of this work plan and the well permit application be forwarded to:

Mr. Jerry Killingstad Alameda County Flood Control Water Conservation District (Zone 7) 5997 Parkside Drive Pleasanton, California 94566

Mr. Scott Seery
Alameda County Department of
Environmental Health
Hazardous Material Division
80 Swan Way, Room 200
Oakland, California 94621

Mr. Sum Arigalia
California Regional Water Quality Control
Board, San Francisco Bay Region
2102 Webster Street, Suite 500
Oakland, California 94612

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If you have any questions regarding this project, please contact Linda McGahan at (916) 638-2085.

Sincerely,

DELTA ENVIRONMENTAL CONSULTANTS, INC.

Linda J. McGahan

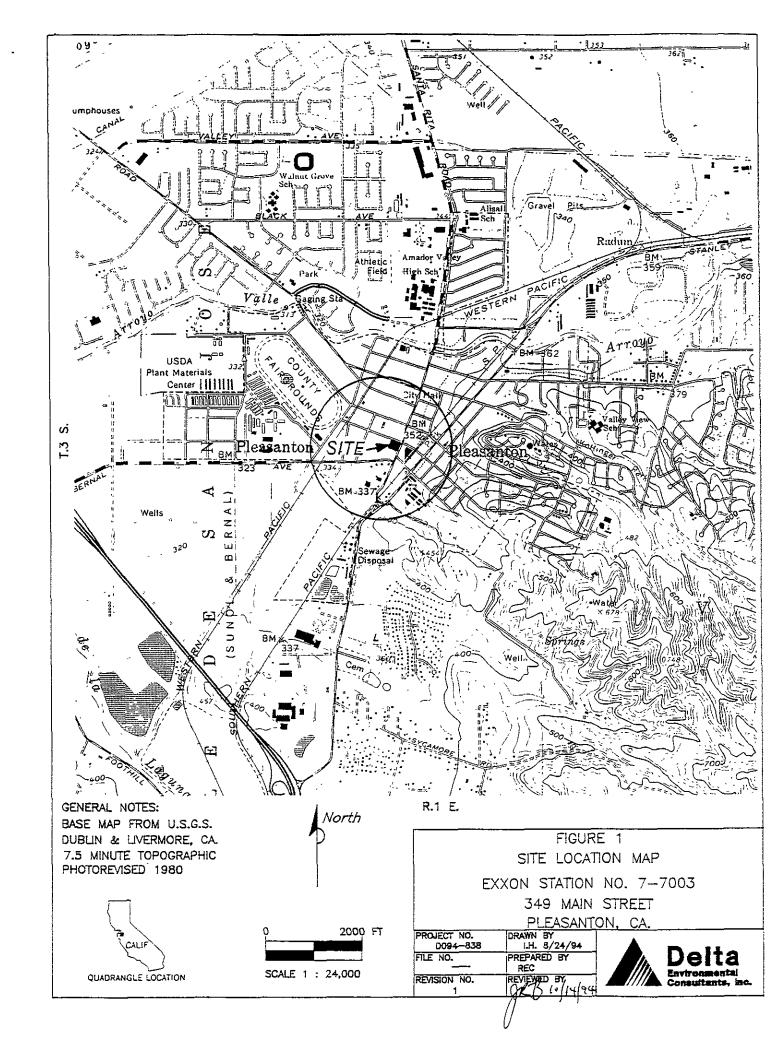
Project Manger

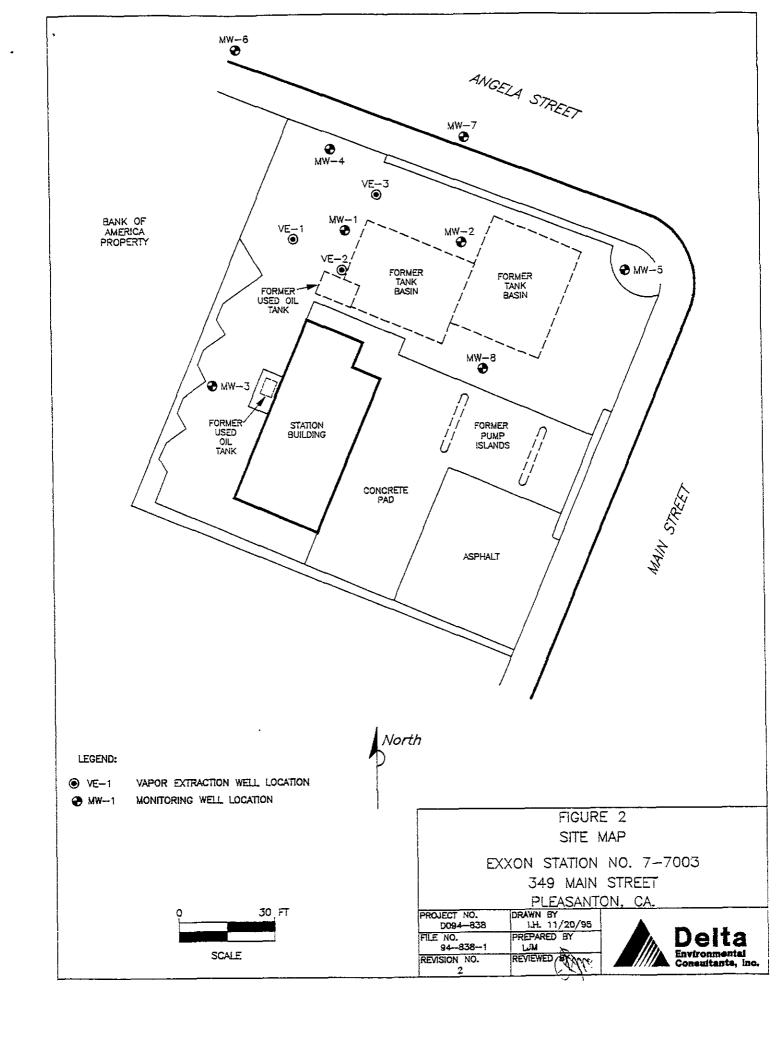
Eric J. Holm, R.G.

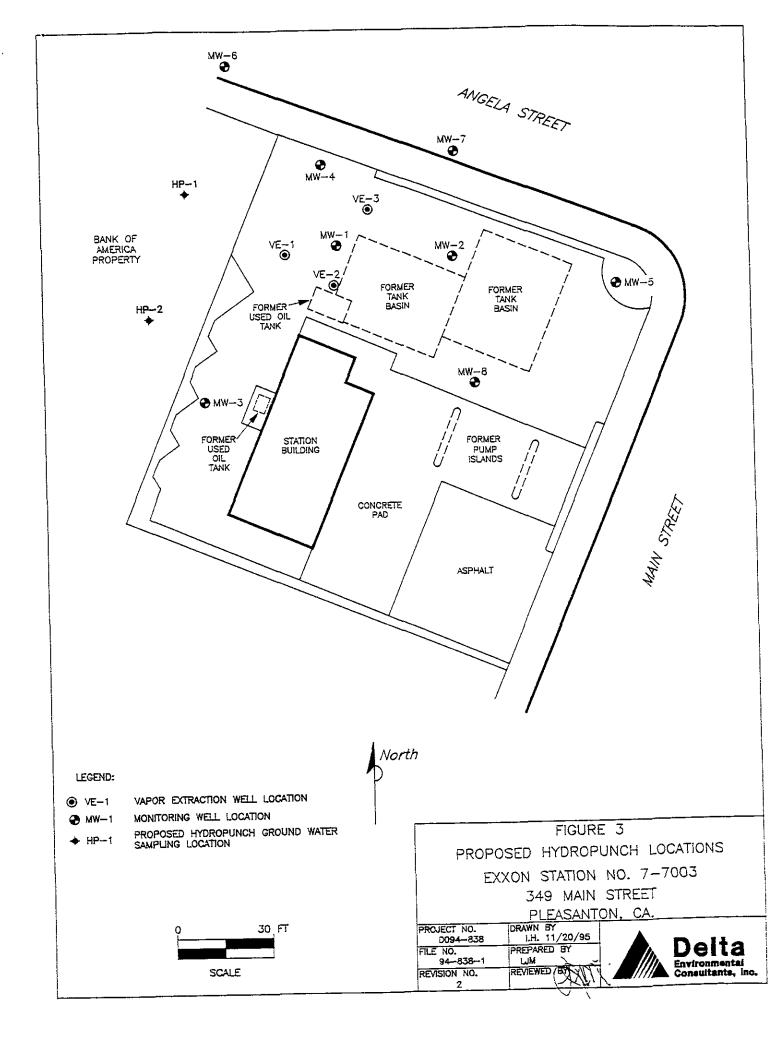
California Registered Geologist No. 5880

LJM (LRP644.SJS) Enclosures









## **ENCLOSURE A**

Field Methods and Procedures

## FIELD METHODS AND PROCEDURES

#### 1.0 GEOPROBE SAMPLING PROTOCOL

Soil sampling will be performed under the direction of a Delta geologist. Geoprobe soil borings will be advanced using a truck-mounted, hydraulically-powered, soil probing machine that utilizes static force and percussion to advance small diameter (less than 2 inches in diameter) sampling tools in the subsurface. Soil samples will be collected from each boring at the saturated zone interface, and stored in plastic bags.

## 1.1 SOIL SAMPLE SCREENING

Soil sample vapors will be allowed to equilibrate with the headspace air in the plastic bags. The organic vapors within the headspace will be screened with a PID equipped with a 10.2 eV lamp calibrated to hexane. Each sample bag will be opened and the detector probe immediately placed within the headspace of the bag. Any observed readings will be recorded. This number will provide a relative comparison of the petroleum hydrocarbon concentration in the soil sample (but is not quantitative).

For soil samples with hydrocarbon vapors detected about background levels, the samples will be submitted to Sequoia Analytical (ELAP # 1624) laboratory for analysis of BTEX and TPH as gasoline.

## 1.2 GEOPROBE GROUND WATER SAMPLING

Grab samples of ground water will be recovered from each Geoprobe borehole using a peristaltic pump and tygon tubing inserted through the hollow Geoprobe rods. The ground water samples will be sealed in appropriate containers and stored in an ice chest cooled to approximately 4 degrees centigrade with crushed ice. Upon completion of ground water sampling each borehole will be sealed with a neat cement slurry mixed in a ratio of approximately 5 gallons of water to each 94 pound bag of cement, and emplaced with a tremie pipe.

NO



# **ZONE 7 WATER AGENCY**

5997 PARKSIDE DRIVE

PLEASANTON, CALIFORNIA 94588

VOICE (510) 484-2600 FAX (510) 462-3914

91992

## DRILLING PERMIT APPLICATION

FOR APPLICANT TO COMPLETE	FOR OFFICE USE
LOCATION OF PROJECT EXXON STATICA 7-7003  349 MAIN STREET  PLEASANTON, CA	PERMIT NUMBER LOCATION NUMBER
CLIENT  Name	PERMIT CONDITIONS  Circled Permit Requirements Apply  A. GENERAL  1. A permit application should be submitted so as to arrive at the Zone 7 office five days prior to proposed starting date.
City RANCHE (*CROCVA*, CA Zip 9567C  TYPE OF PROJECT  Well Construction General X Cathodic Protection General X Water Supply Contamination  Monitoring Well Destruction  PROPOSED WATER SUPPLY WELL USE Domestic Industrial Other Sampung Municipal Irrigation  DRILLING METHOD: Mud Rotary Air Rotary Auger Cable Other Posa - Technology  DRILLER'S LICENSE NO. # 705 - 927  WELL PROJECTS NA Drill Hole Diameter in. Maximum Casing Diameter in. Depth ft. Surface Seal Depth ft. Number	<ol> <li>Submit to Zone 7 within 60 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 geotechnical projects.</li> <li>Permit is void if project not begun within 90 days of approval date.</li> <li>WATER WELLS, INCLUDING PIEZOMETERS         <ol> <li>Minimum surface seal thickness is two inches of cement grout placed by tremie.</li> <li>Minimum seal depth is 50 feet for municipal and industrial wells or 20 feet for domestic and irrigation wells unless a lesser depth is specially approved. Minimum seal depth for monitoring wells is the maximum depth practicable or 20 feet.</li> <li>GEOTECHNICAL. Backfill bore hole with compacted cuttings or heavy bentonite and upper two feet with compacted material. In areas of known or suspected contamination, tremied cement grout shall be used in place of compacted cuttings.</li> <li>CATHODIC. Fill hole above anode zone with concrete placed by tremie.</li> <li>WELL DESTRUCTION. See attached.</li> </ol> </li> </ol>
GEOTECHNICAL PROJECTS  Number of Borings 2	ApprovedDate





## TRANSMITTAL

3164 Gold Camp Drive, Suite 200 Rancho Cordova, California 95670

TO: Mr. Scott Seery Alameda County Department of En Hazardous Materia 80 Swan Way, Roo Oakland, California	om 200	DATE: 11-20-95  SUBJECT: Exxon 7-7003	
FROM: Linda J. McGal TITLE: Project Manage			
WE ARE SENDING YOU	[x] Attached [] Under separate	cover via the following items:	
[] Shop drawings [] W	ork Plan [] Letter	[] Change Orders	
COPIES DATED  1 / 11-20-95 /		CRIPTION or Additional Assessment Activities	
THIS IS TRANSMITTED as	checked below:		
[X] For review and comment	[] Approved as submitted	[] Resubmit copies for approval	
[X] As requested	[] Approved as noted	[] Submit copies for distribution	
[X] For approval <b>REMARKS:</b>	[] Return for corrections	[] Return corrected prints	
Scott:			
		in off-site hydropunch ground water review and call me or Marla with any	
Linda McGahan			
CC: Marla Guensler - I	Marla Guensler - Exxon Company (w/attachment)		