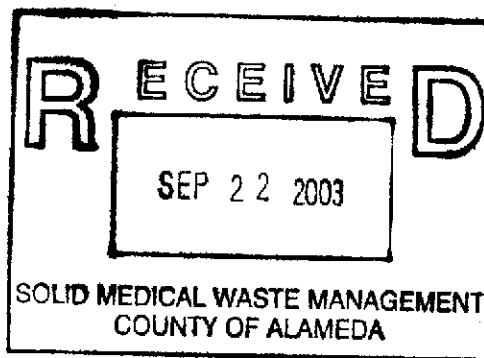


September 17, 2003

Ms. eva chu
Alameda County Health Care Services Agency
Environmental Health Services Division
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502



**SUBJECT: WATER WELL SURVEY,
ARCO SERVICE STATION #0771,
899 RINCON AVENUE, LIVERMORE, CALIFORNIA**

Dear Ms. Chu:

On behalf of Atlantic Richfield Company (ARCO - an affiliated company of the Group Environmental Management Company), URS Corporation (URS) submits the results of a water well survey conducted within a ½-mile radius of ARCO Service Station #0771, located at 899 Rincon Avenue, Livermore, California (the Site). URS requested well logs from the California Department of Water Resources (DWR) to determine potential impact on water producing wells within a ½ -mile radius of the Site. Based on the DWR well logs, the locations of all water wells within a ½-mile radius of the Site are shown on Figure 1 and their respective well details are presented in Table 1. The historic groundwater flow direction at the Site has ranged between north through northwest. Since the DWR well logs are classified as confidential, they have not been attached. URS will retain the DWR well logs on file. The details of the water well survey results are as follows:

- One municipal water supply well (742270) is located approximately 2,500 feet cross-gradient of the site (Figure 1: Well 1).
- One well (01-2000) of unknown use is located approximately 240 feet cross-gradient of the site (Figure 1: Well 2). A previous well survey conducted for the Site indicated the respective well to be a public well, however, the well log provided by DWR does not indicate the designated use of the well. Also, the DWR well log did not provide an accurate address for the respective well, therefore, the well location on Figure 1 has been approximated.
- One municipal water supply well (01-2001) is located approximately 2,300, feet cross-gradient of the site (Figure 1: Well 3). Since the DWR well log did not provide an accurate address for the respective well, the well location on Figure 1 is approximate.

- One well (01-2002) of unknown use is located approximately 2,300 feet up-gradient of the Site (Figure 1: Well 4). Please note that the address provided on the DWR well log for the respective well does not exist and is likely to have changed since the well installation in 1943. Accordingly, the well location on Figure 1 has been approximated.
- A previous well survey conducted for the Site indicated the presence of one municipal water supply well approximately 360 feet cross-gradient of the Site (Figure 1: Well 5). However, the well logs provided by DWR for all wells located within a ½ mile radius of the Site did not include the well log for the respective well. Additional information on the well is unavailable.

Should you have any concerns or questions, please contact me at (510) 874-3280.

Sincerely,

URS CORPORATION



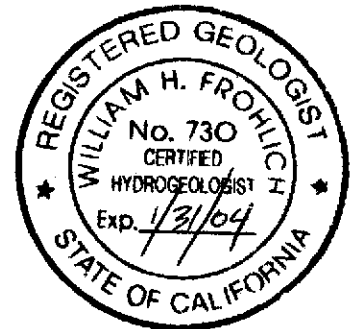
Scott Robinson
Project Manager



William Frohlich, C. Hg., C.E.G.
Project Geologist

Attachment: Table 1 – Well Survey Details
Figure 1 - Well Survey Map

cc: Mr. Paul Supple, ARCO (electronic copy uploaded to ENFOS)



**Table 1
Well Survey Details**

Arco Service Station #0771
899 Rincon Avenue
Livermore, California

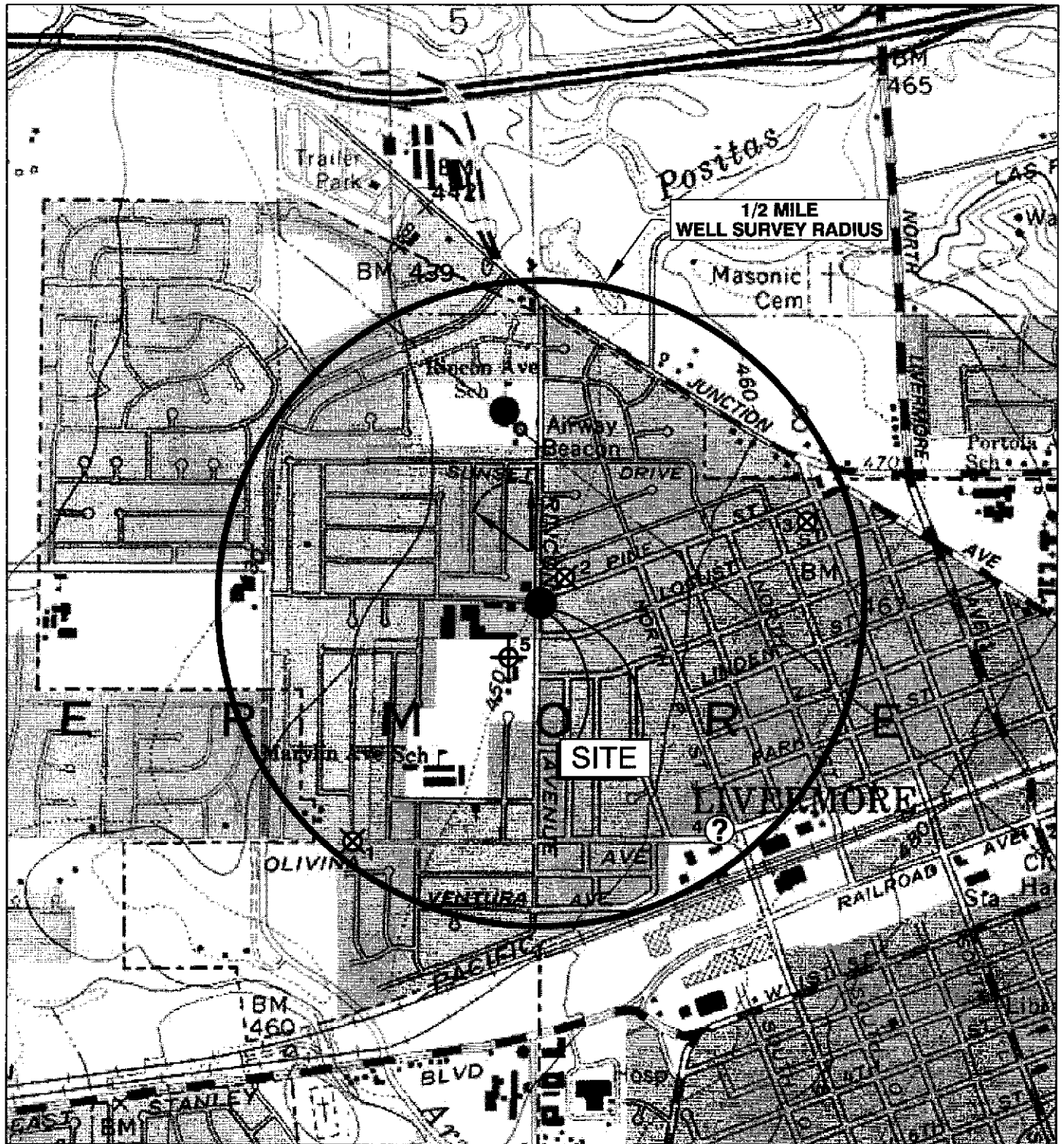
I.D. (Figure 2)	State Well Number	Address	Installation Date	Status	Designated Use	Total Depth (ft)	Screened Interval (ft)	Orientation with Site ^e
1	742270	732 Olivina Avenue	July 8, 2002	In use	Municipal	550	410-450, 505-528	Cross gradient
2	01-2000	North Side of Fire Station, Pine and Rincon ^a	July 5, 1963	Unknown	Unknown ^b	300	Unknown	Cross gradient
3	01-2001	Pine Street and Arroya Road ^a	November 7, 1953	Unknown	Municipal	576	143-433	Cross gradient
4	01-2002	1936 Olivina Avenue ^c	August 3, 1943	Unknown	Unknown ^d	130	118-127	Upgradient

Notes:

Well No. 5 on the well survey map (Figure 1) was noted to be a municipal water supply well in a previous well survey conducted for the Site. However, the well logs provided by the Department of Water Resources did not include a well log for the respective well. The location of the respective well was indicated to be cross-gradient of the Site.

- a Well log did not provide an accurate address. The location on the well survey map is approximate.
- b Well log did not indicate well use designation. However, a previous well survey conducted for the this Site indicated the well to be a public well.
- c This address does not exist and is likely to have changed since the well installation in 1943. The location on the well survey map is approximate.
- d Well log indicates the well was installed for a private owner. The well is likely to be a domestic or irrigation well.
- e During the third quarter 2003 groundwater monitoring session, the groundwater flow direction at the Site was northwesterly.

X:\x_env1_waste\BP_GEM\Sites\Scott Robinson\Paul_Supple\0771_sensitive_receptor_survey\WSM.dwg, 09/17/2003 10:08:18 AM, JKMT, URS



LEGEND

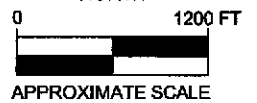
- WATER SUPPLY/MUNICIPAL WELL
- UNKNOWN USAGE
- HISTORIC GROUNDWATER FLOW DIRECTION RANGE
- WATER SUPPLY/MUNICIPAL WELL NOTED IN PREVIOUS WELL SURVEY BUT NOT IN DWR RECORDS PROVIDED



QUADRANGLE LOCATION



NORTH



APPROXIMATE SCALE

REF: BASE MAP FROM USGS TOPOI 7.5 MINUTE TOPOGRAPHIC PHOTOREVISED 1998



Project No. 38486316
 Arco Service Station #0771
 899 Rincon Avenue
 Livermore, California

WELL SURVEY MAP
1/2 MILE RADIUS OF SITE

FIGURE

1