



# Housing Authority of the City of Alameda

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## FAX TRANSMITTAL

TO: Juliet Shin  
ACHCSA  
(510) 569-4757

DATE: Feb 23, 1994

FROM: Sasha George  
Project Administrator

RE: 1916 Webster Soil Remediation

MESSAGE:

Attached is a copy of the report by Versar dated November 4, 1991 (Versar Job # 7703.22) as it pertains to the monitoring well installation. If you need a complete copy of this report, I will send it to you.

Let me know if there is anything else I can do to obtain the necessary approvals so we may mobilize on Monday, February 28th in keeping with our original schedule.

Thank you. I look forward to hearing from you soon.

Total number of pages sent including this transmittal sheet: 3

Please advise this office if this fax was not received clearly or if any pages were missing.

cc:

Eileen Duffy

feet to approximately 5.5 feet, a medium gray, clayey sand was encountered and then drilling stopped. Ground water was encountered at approximately five feet below surface. Strong hydrocarbon odor was noted in soil samples at two feet and at four feet.

3.2 Monitoring Well Installation

The borehole in which the monitoring well was installed, MW3, was drilled to a total depth of 15.5 feet. The ground-water level was estimated at five feet below the surface from soil samples collected during drilling. No confining layers below five feet were observed during drilling.

The monitoring well was constructed using ten feet of two-inch inside diameter, Schedule 40 PVC screen with 0.020-inch slots, and two-inch inside diameter, Schedule 40 PVC blank casing to the surface. Clean sand was placed in the annular space between the screen and the borehole wall. There is a one-foot

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sand plug below the screen at total depth and the sand was placed to a height approximately one foot above the top of the screen. Approximately one foot of bentonite pellets was placed above the sand. Above the bentonite, the annular space was filled with neat cement to just below the surface. A locking cap was placed on top of the PVC casing and a traffic box was set in concrete over the well. The top of the traffic box is slightly above grade to help prevent surface water from entering the well. A copy of the well construction record is included as Appendix C.

3.3 Ground-Water Sampling and Analysis

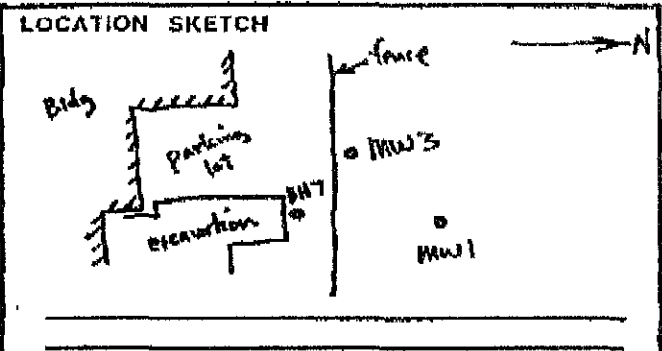
Prior to conducting any ground-water sampling, each monitoring well was surveyed to a common elevation and the depth to ground water was measured. Ground water was present at depths below surface of 4.92 feet, 4.76 feet, and 4.50 feet, for monitoring wells MW1, MW2, and MW3, respectively. This data was used to calculate the hydraulic gradient, which was determined to be toward the north. The survey data with flow direction is shown in Figure 4.

After measurement of



WELL CONSTRUCTION RECORD

PROJECT: ALAMEDA HOUSING / HACA JOB NUMBER: 7703.022  
 LOCATION: WEBSTER & ATLANTIC, ALAMEDA, CALIFORNIA  
 WELL NUMBER: MW 3 GROUND ELEVATION: APPROXIMATELY 6 FEET  
 DATE INSTALLED: 7-12-91 WELL CASING ELEVATION:  
 FIELD REPRESENTATIVE: J. C. JAMES / L. J. KLINGBE PROTECTOR CASING ELEVATION:  
 DRILLING CONTRACTOR: Woodward DRILLING CO.  
 DRILLER: W. Woodward LICENSE NO. C-57/SALVAD  
 DRILLING METHOD: HOLLOW STEM AUGER  
 RIG TYPE: MOBILE B-57  
 CONDITION OF GROUND SURFACE: Weathered  
 FORMATION SCREENED: Particulate



BIT TYPE	HOLE DIA. (IN.)	END DEPTH* (FT.)	FLUID TYPE

TIME LOG			
ACTIVITY	DATE	START	END
DRILLING			
CASING			
FILTER PACK			
SEAL			
GROUT			
DEVELOPMENT			
SURVEY			
OTHER			

PROTECTOR, CASING & SCREEN RECORD				
DESCRIPTION	DIA. (IN.)	TOTAL LENGTH	TOP	BOTTOM
Blank PVC cas	2"	4.5'	surf.	4.5'
0.020 Screen PVC w/ plug	2"	10'	4.5'	14.5'
Total depth				15.5'

GROUND WATER LEVELS

DURING DRILLING:  
 5' by samples during drilling  
 4.47' measured @ 12:00 PM 7-12-91

COMPLETION MATERIALS RECORD		
DESCRIPTION	TOP	BOTTOM
Grout	surf.	3'
Bentonite	3'	3'10"
Sand	3'10"	15.5'

WELL DEVELOPMENT

\* DEPTH FROM GROUND SURFACE

COMMENTS: \_\_\_\_\_

*J. C. James*