



PO.083

December 20, 2002

Alameda County  
DEC 26 2002  
Environmental Health

REPORT  
of  
AREA WELL SURVEY  
AND  
SUBSURFACE CONDUIT STUDY  
ASE JOB NO. 3857  
at  
California College of Arts and Crafts  
810 Clay Street  
Oakland, California

Submitted by:  
AQUA SCIENCE ENGINEERS, INC.  
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Danville, CA 94526  
(925) 820-9391

## **1.0 INTRODUCTION**

This report presents an area well survey and subsurface conduit study for the property located at 810 Clay Street in Oakland, California. This work was conducted to meet the requirements of the Alameda County Health Care Services Agency (ACHCSA). This property was formerly owned and used by The Salvation Army, but has been sold to California College of Arts and Crafts (CCAC), who is in the process of reselling the property.

## **2.0 SCOPE OF WORK (SOW)**

ASE's SOW for this project was as follows:

- 1) Prepare an area well survey to locate water supply wells within a 2,000-foot radius of the site.
- 2) Conduct a subsurface conduit study to determine whether sewer lines in the city street could provide a potential conduit for the movement of groundwater contamination.
- 3) Prepare a report presenting the results of this assessment.

Details of the assessment are presented below.

## **3.0 AREA WELL SURVEY**

ASE conducted an area well survey to locate water supply wells within a 2,000-foot radius of the site. Water supply wells include municipal, domestic, irrigation and industrial wells. Monitoring wells, groundwater remediation wells, soil borings and destroyed wells were excluded from the search.

To locate these wells, ASE researched records from the Alameda County Public Works Agency (ACPWA), which is the local well permitting agency. The ACPWA had no records of water supply wells in the site vicinity. ASE also contacted the California Department of Water Resources (DWR) for information in their records. Three water supply wells were located in their records. The location of wells within 2,000-feet of the site are shown on Figure 1. Well information is tabulated in Table 1. The DWR water well drillers reports are presented in Appendix A.

## TABLE ONE

Wells Within 2,000-foot Radius of  
810 Clay Street, Oakland, California

Well No.	Well Owner	Well Location	Well Type	Year Drilled
1	Bramalea Pacific	1111 Broadway	Irrigation	1990
2	Sunrise Laundry	717 7 <sup>th</sup> Street	Unknown	Unknown
3	Millwain Brothers	202 Grove Street	Unknown	Unknown

Well #1 is in an upgradient location approximately 1,100-feet from the site. This well is 470-feet deep with the screen starting at 180-feet. Given the depth and upgradient location of this well, this well should not be impacted from any hydrocarbons that may have originated at the site.

Well #2 is located at the limit of the 2,000-foot radius study area. There is little information on this well other than a boring log. It is unknown when this well was installed, but it is on an old style DWR record indicating that this well is likely very old, possibly no longer in use. This well is listed as 144-feet deep. Since this well was owned by a laundry, it is likely that it was constructed to supply water for clothes washing activities and it is unlikely that it supplies water for drinking purposes. It is highly unlikely that any hydrocarbons that may have originated from the site will have the potential to impact this well.

Well #3 is located at the limit of the 2,000-foot radius study area. There is little information on this well other than a boring log. It is unknown when this well was installed, but it is on an old style DWR record indicating that this well is likely very old, possibly no longer in use. It is hard to determine the total depth from the boring log; however, the well appears to be at least 192-feet deep. The boring log also shows a thick clay layer from 88-feet to 166-feet in depth which would seal off the deeper zones from any potential contamination. Given the location and depth of this well, it does not appear that this well could be impacted from hydrocarbons that originated from the site.

#### 4.0 AREA CONDUIT SURVEY

ASE conducted a subsurface conduit survey to determine whether there are any deep sewer lines in the site vicinity that could act as a conduit for

the movement of groundwater contamination. As discussed with Ms. Eva Chu of the ACHCSA prior to conducting this work, electric, water, gas, telephone and cable TV lines were not researched for this study since these utility lines are usually very shallow and are seldom located deeper than 5-feet below grade.

ASE studied the sewer maps at the offices of the City of Oakland Department of Public Works on December 18, 2002. The deepest sewer line at the intersection of Clay Street and 8<sup>th</sup> Street is the sewer line that runs down Clay Street. The bottom of this line is at a depth of 16.67-feet below the elevation of the curb. This sewer line runs directly down Clay Street.

Groundwater beneath the site has generally been deeper than 20-feet below ground surface with the shallowest groundwater depth recorded being 19.42-feet in April 2000. Based on this data, the sewer lines in the site vicinity will not act as a conduit for the movement of groundwater contamination.

## **5.0 CONCLUSIONS AND RECOMMENDATIONS**

Three water supply wells were located within 2,000-feet of the site. However, due to the location and depth of these wells, it appears that none of these wells are in danger of being impacted by hydrocarbons that may have originated from the site.

In addition, groundwater at the site has always been deeper than the bottom of the deepest sewer line in either Clay Street or 8<sup>th</sup> Street. Based on this information, there does not appear to be any potential conduits for the preferential flow of groundwater.

**ASE once again recommends that this case be reviewed for closure.**

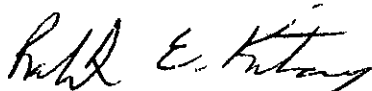
## **6.0 REPORT LIMITATIONS**

The area well survey in this report presents all data available to ASE at the time this survey was completed. It is possible that other wells may exist within the study area that could not be located or that some records may exist that were not made available to ASE.

Aqua Science Engineers appreciates the opportunity provide environmental consulting services for this project. Should you have any questions or comments, please feel free to call us at (925) 820-9391.

Respectfully submitted,

AQUA SCIENCE ENGINEERS, INC.



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



Attachments: Figure 1  
Appendix A

cc: Mr. David Kirshman, California College of Arts and Crafts. 5212  
Broadway, Oakland, CA 94618

Mr. Larry Westland, BT Commercial Real Estate, 530 Water Street,  
Suite 750, Oakland, CA 94607-3746

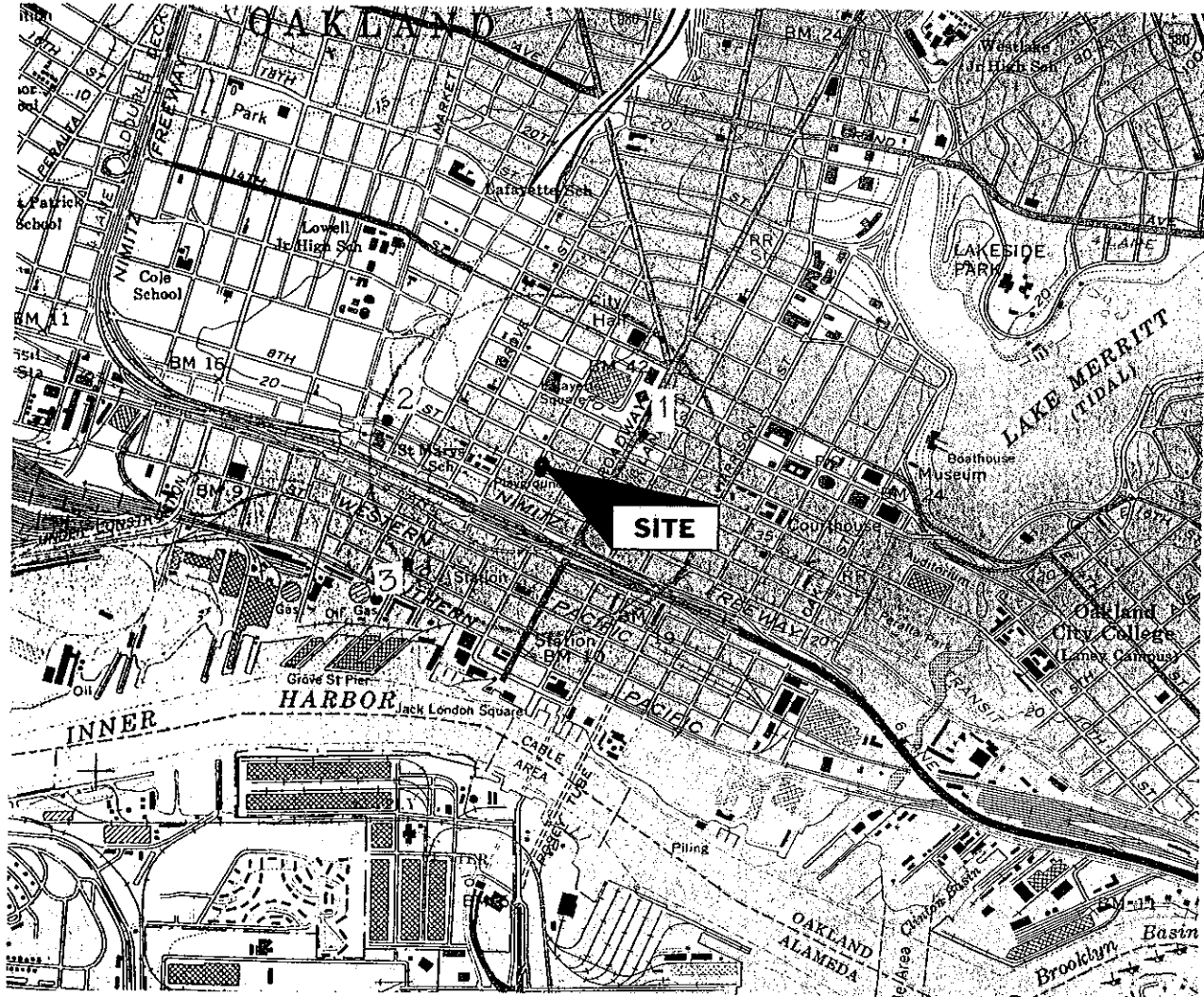
Ms. Eva Chu, Alameda County Health Care Services Agency, 1131  
Harbor Bay Parkway, Suite 250, Alameda, CA 94502

Mr. Chuck Headlee, California Regional Water Quality Control Board,  
San Francisco Bay Region, 1515 Clay Street, Suite 1400, Oakland, CA  
94612

## **FIGURES**



NORTH



LOCATION OF WELLS WITHIN  
2,000-FOOT RADIUS OF SITE

810 Clay Street  
Oakland, California

AQUA SCIENCE ENGINEERS, INC.

Figure 1

# **APPENDIX A**

DWR Water Well Drillers Reports



REGION \_\_\_\_\_ STATE OF CALIFORNIA  
 COUNTY \_\_\_\_\_ DEPARTMENT OF WATER RESOURCES  
 NRAR \_\_\_\_\_

15/4/41. 21K  
 BASIN \_\_\_\_\_  
 DWR NO. 15/4/41-262  
 OTHER NO. \_\_\_\_\_

WELL LOG

01-795

LOCATION 202  
202 Grove Street, well No. 1  
 OWNER Millman Brothers ADDRESS \_\_\_\_\_  
 DRILLED BY Ough ADDRESS \_\_\_\_\_  
 DRILLING METHOD \_\_\_\_\_ GRAVEL PACKED \_\_\_\_\_ DATE COMPLETED \_\_\_\_\_  
 SIZE OF CASING DEPTH \_\_\_\_\_ STRUCK WATER AT \_\_\_\_\_  
 PERFORATIONS \_\_\_\_\_ SIZE \_\_\_\_\_ No. \_\_\_\_\_  
 WATER LEVEL BEFORE PERFORATING \_\_\_\_\_ AFTER \_\_\_\_\_  
 TEST DATA: DISCHARGE G. P. M. \_\_\_\_\_ DRAWDOWN FT. \_\_\_\_\_ HOURS RUN \_\_\_\_\_  
 OTHER DATA AVAILABLE: WATER LEVEL RECORD \_\_\_\_\_ ANALYSIS \_\_\_\_\_  
 SURFACE ELEV. \_\_\_\_\_ DATUM \_\_\_\_\_ SOURCE OF INFORMATION \_\_\_\_\_

FOR FIELD COPIES USE ALTERNATE LINES

DEPTH	ELEV. OF BOTTOM OF STRATUM	MATERIAL	THICKNESS	SP. YIELD %
0 - 0		filled in ground		
11 - 19		yellow sand		
14 - 33		blue clay		
7 - 49		yellow clay		
19 - 39		yellow ss and		
70 - 100		yellow clay		
6 - 172		yellow sand clay		
1 - 176		sand and gravel		
3 - 184		gravel		
4 - 188		yellow clay		
4 - 192		sand and gravel		
177 - 192		yellow clay		
		water table 50 feet.		
		water table pumping 1200 gal per hr		
		80 ft. #3		
		100 ft. of 1 1/2" surface		
		10 ft. gal. starter		
		13 ft. of top 900		

LOG OBTAINED BY \_\_\_\_\_ DATE \_\_\_\_\_ SHEET 1 OF \_\_\_\_\_

REGION \_\_\_\_\_  
 COUNTY \_\_\_\_\_  
 NEAR \_\_\_\_\_

STATE OF CALIFORNIA  
 DEPARTMENT OF WATER RESOURCES

BASIN 15/110 7/1  
 DWR NO. 15/110-353  
 OTHER NOS. \_\_\_\_\_

WELL LOG

01-813

LOCATION Sunrise Laundry, 717 7th Street, Oakland

#1924

OWNER \_\_\_\_\_ ADDRESS \_\_\_\_\_

DRILLED BY \_\_\_\_\_ ADDRESS \_\_\_\_\_

DRILLING METHOD \_\_\_\_\_ GRAVEL PACKED \_\_\_\_\_ DATE COMPLETED \_\_\_\_\_

SIZE OF CASING DEPTH \_\_\_\_\_ STRUCK WATER AT \_\_\_\_\_

PERFORATIONS \_\_\_\_\_ SIZE \_\_\_\_\_ No. \_\_\_\_\_

WATER LEVEL BEFORE PERFORATING \_\_\_\_\_ AFTER \_\_\_\_\_

TEST DATA: DISCHARGE G. P. M. \_\_\_\_\_ DRAWDOWN FT. \_\_\_\_\_ HOURS RUN \_\_\_\_\_

OTHER DATA AVAILABLE: WATER LEVEL RECORD \_\_\_\_\_ ANALYSIS \_\_\_\_\_

SURFACE ELEV. \_\_\_\_\_ DATUM \_\_\_\_\_ SOURCE OF INFORMATION \_\_\_\_\_

FOR FIELD COPIES USE ALTERNATE LINES

DEPTH	ELEV. OF BOTTOM OF STRATUM	MATERIAL	THICKNESS	SP. YIELD %
0 - 21		Dry yellow sand		
21 - 35		Hard gray sand		
35 - 48		Fine water sand		
48 - 50		Hard yellow sandy clay		
50 - 77		Soft blue sandy clay		
77 - 80		Blue clay oyster shells mix		
80 - 84		Fine water gravel		
84 - 85		Soft yellow sand		
85 - 95		Hard cement gravel		
95 - 120		Hard yellow sandy clay		
120 - 135		Dirty yellow sand		
135 - 140		Clean fine water gravel		
140 - 144		Hard fine sandy clay		
		Water 8 1/2 feet 6 inch from top		
		95 feet 12 inches casing in hole		
		52 feet 10 inches casing in hole		
		20 feet perforated of 12 inch casing.		
		20 feet perforated of 10 inch casing.		

LOG OBTAINED BY \_\_\_\_\_ DATE \_\_\_\_\_

FORM 200

**CONFIDENTIAL**

STATE OF CALIFORNIA DWR  
WELL COMPLETION REPORT  
(WELL LOGS)

**REMOVED**

# GEO-HYDRO-DATA

INCORPORATED

## GROUNDWATER LOG

29733

COMPANY : BRAMLEA PACIFIC  
WELL : 1  
LOCATION/FIELD : OAKLAND  
COUNTY : ALAMEDA  
STATE : CALIFORNIA, U.S.A.  
SECTION : N/A TOWNSHIP : N/A RANGE : N/A

OTHER SERVICES:  
INVOICE-  
7283  
300 PPM

DATE : 09/14/90 PERMANENT DATUM : G.L. ELEVATIONS  
DEPTH DRILLER : 400 FEET ELEV. PERM. DATUM : N/A KB : N/A  
LOG BOTTOM : 400.00 LOG MEASURED FROM : G.L. DF : N/A  
LOG TOP : -2.38 BRL MEASURED FROM : G.L. GL : N/A

CASING DRILLER : 58 LOGGING UNIT : 2  
CASING TYPE : STEEL FIELD OFFICE : STOCKTON, CA  
CASING THICKNESS : .125 RECORDED BY : D SHANHOLTZR

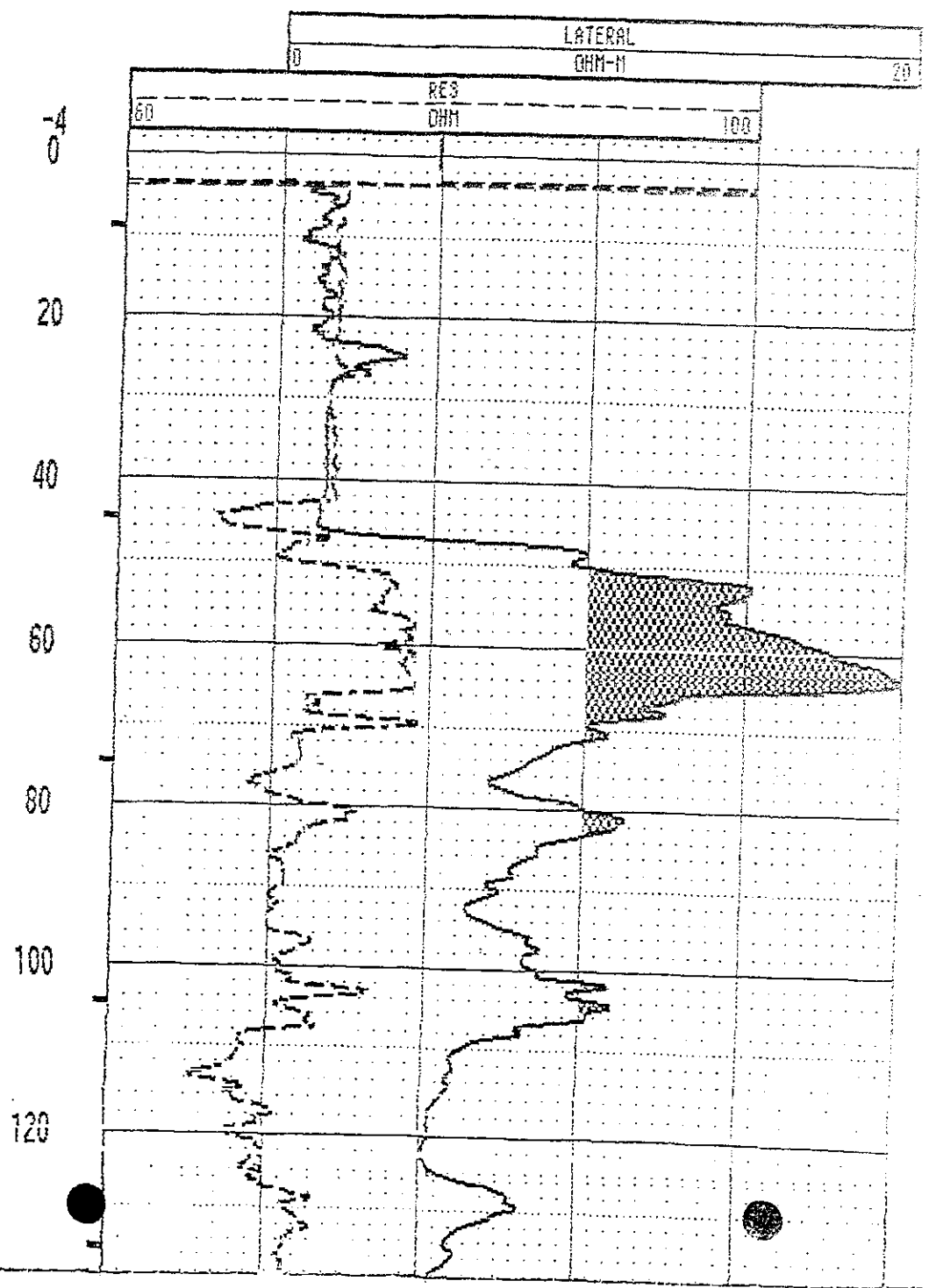
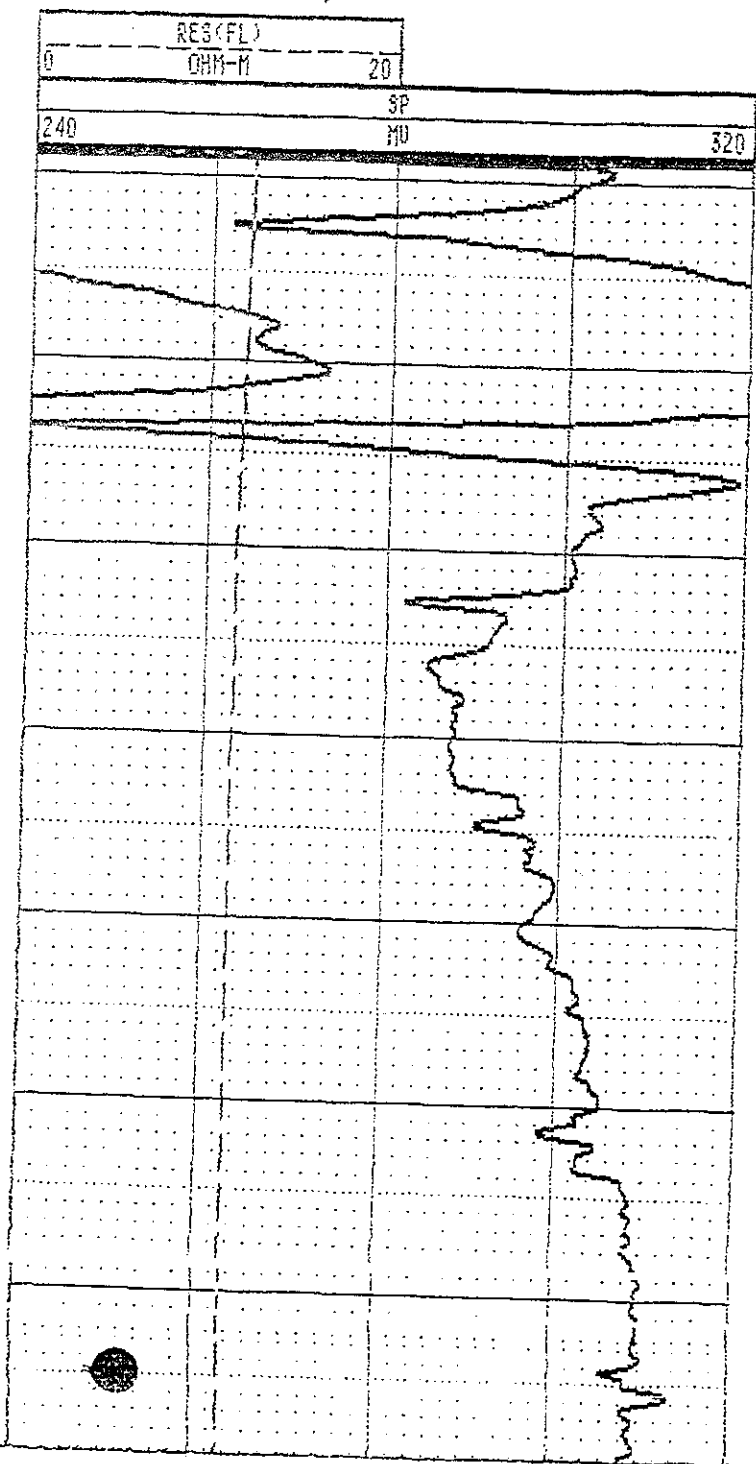
BIT SIZE : 6.75 BOREHOLE FLUID : CLAY/GEL FILE : ORIGINAL  
MAGNETIC DECL. : - RM : - TYPE : 9841A  
MATRIX DENSITY : - RM TEMPERATURE : - LOG : 0  
FLUID DENSITY : - MATRIX DELTA T : - PLOT : GHD 4  
NEUTRON MATRIX : N/A FLUID DELTA T : - THRESH : 300

REMARKS :  
DRILLED BY GLENN MARTEL AND SON DRILLING, PITTSBURG, CA. WITNESSED-DRILLER

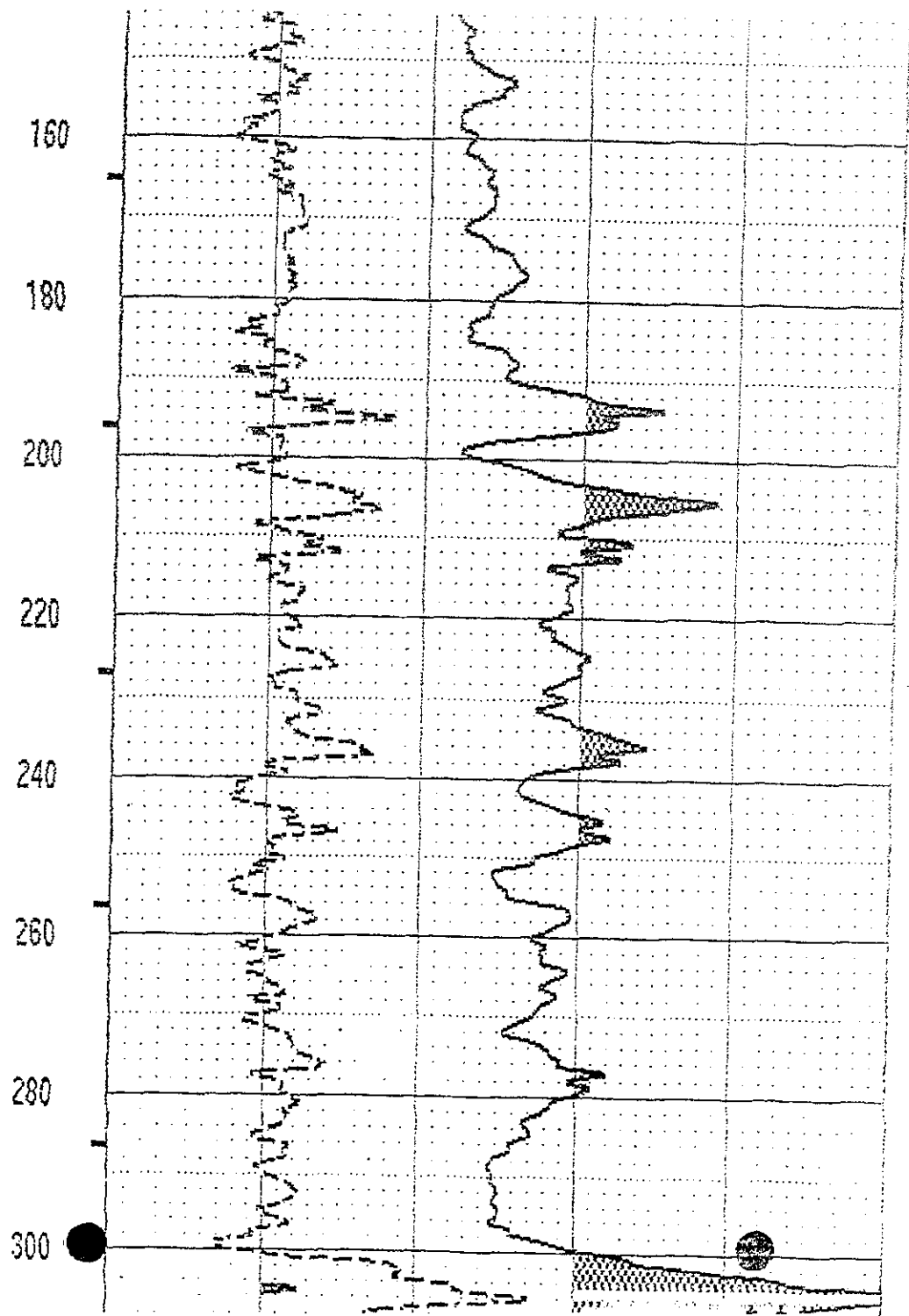
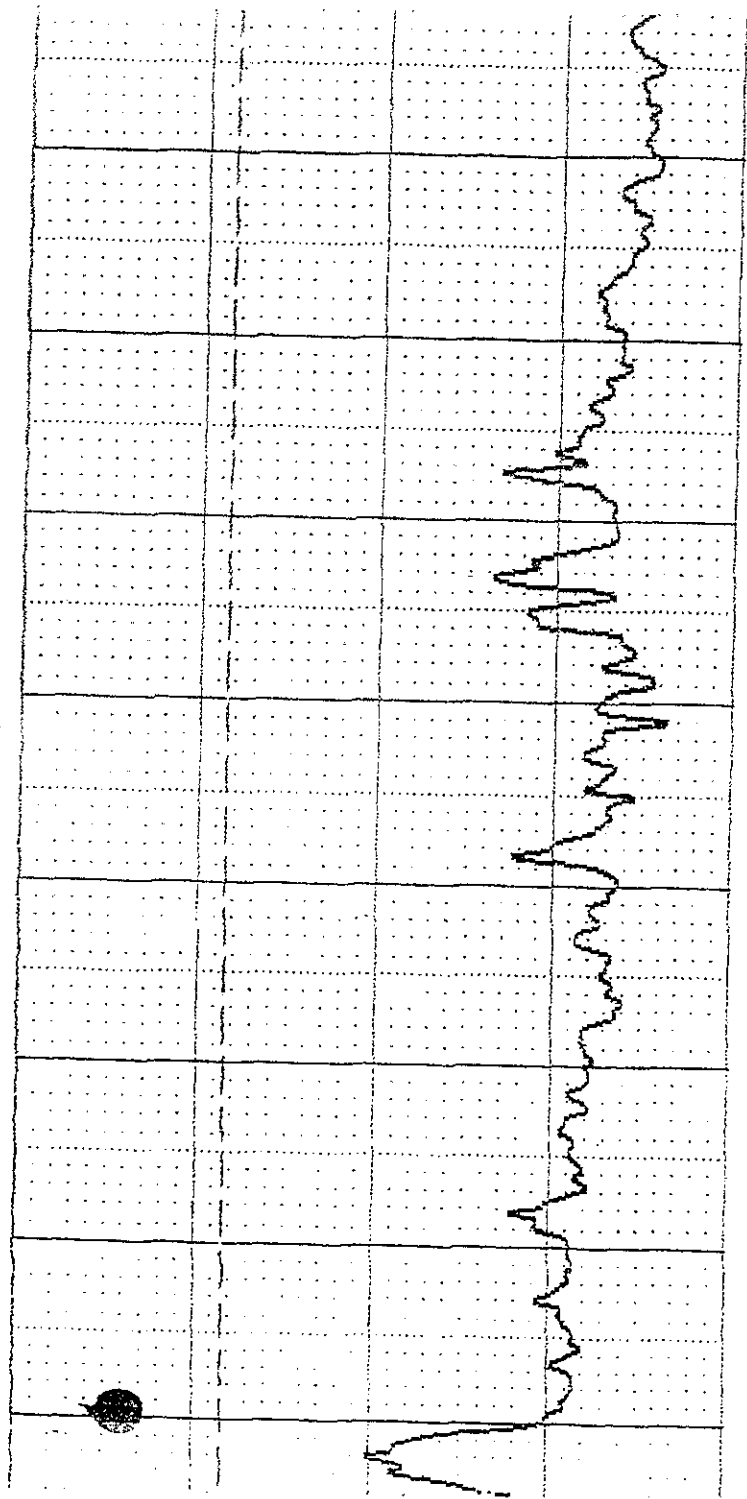
WATER QUALITY-

ALL SERVICES PROVIDED SUBJECT TO STANDARD TERMS AND CONDITIONS

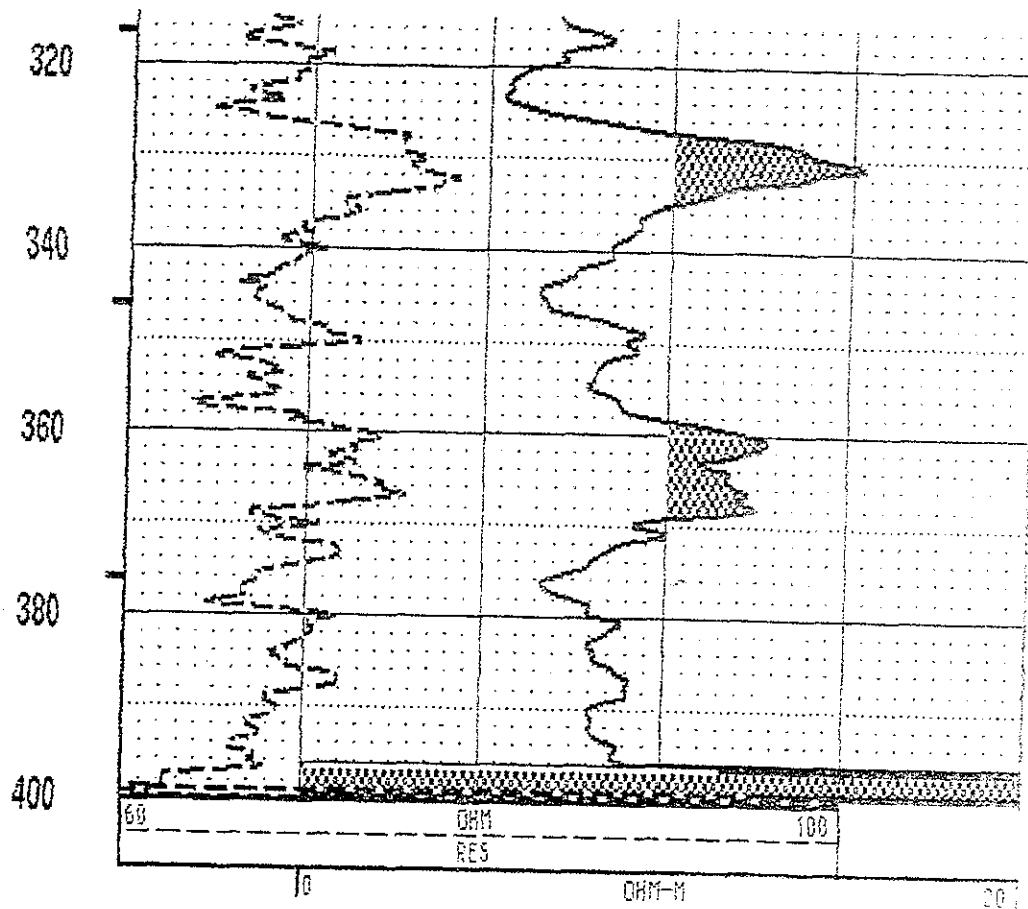
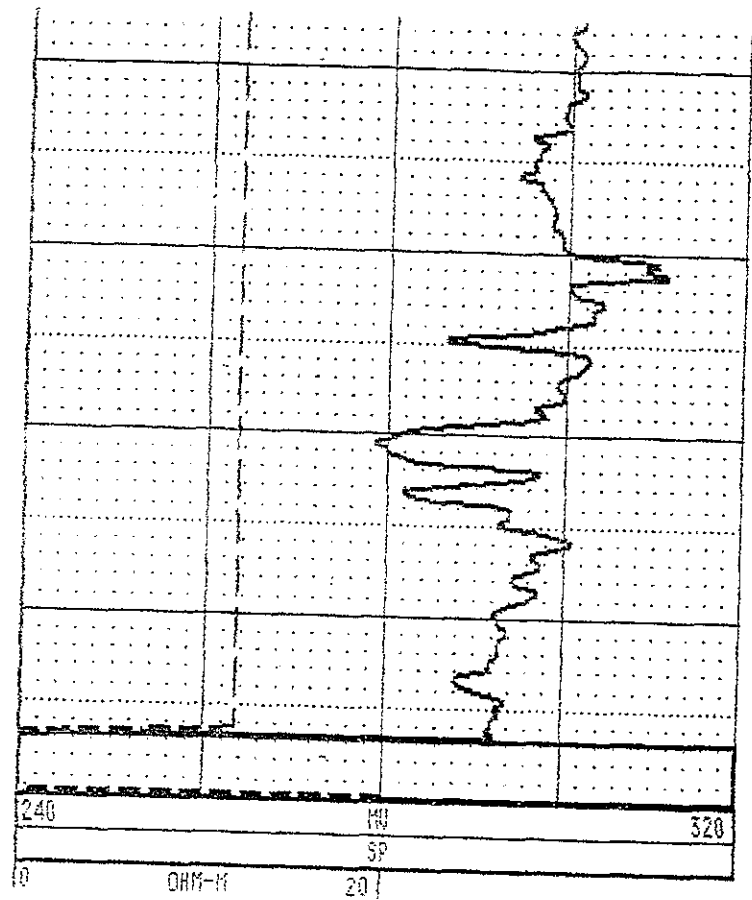
29/7/53



291733



291733



RES (FL)

LATERAL