

# PACIFIC SURVEYS

## ELECTRIC LOG GAMMA-RAY

Job No. 22784  
 Company ROMALDO COMMUNITY WATER COMPANY  
 Well WELL NO.2  
 File No. Field SANTA BARBARA  
 County SANTA BARBARA State CA

Location:  
 5599 W. CAMINO CIELO  
 GPS: 34.5023 -119.8182

Other Services:  
 DEVIATION

Sec. Twp. Rge. Elevation  
 Permanent Datum G.L. Elevation  
 Log Measured From G.L. 0' above perm. datum  
 Drilling Measured From G.L. K.B.  
 D.F.  
 G.L.

Date	05/22/2017		
Run Number	ONE		
Depth Driller	710'		
Depth Logger	697.4'		
Bottom Logged Interval	697.4'		
Top Log Interval	220'		
Casing Driller	10.875" ID @ 60'		
Casing Logger	N/A		
Bit Size	9.875"		
Type Fluid in Hole	WATER / SOAP		
Density / Viscosity	-- / --		
pH / Fluid Loss	8.3 / --		
Source of Sample	BOTTLE		
Rm @ Meas. Temp	5.6 @ 79.5 F		
Rmf @ Meas. Temp	5.35 @ 79.5 F		
Rmc @ Meas. Temp	N/A		
Source of Rmf / Rmc	MEASURED		
Rm @ BHT	N/A		
Time Circulation Stopped	N/A		
Time Logger on Bottom	11:30		
Max. Recorded Temperature	N/A		
Equipment Number	PS-3		
Location	VENTURA		
Recorded By	C.VILLALOBOS		
Witnessed By	W.ANIKOUCHINE		

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All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs, damages, or expenses incurred or sustained by anyone resulting from any interpretation made by any of our officers, agents or employees. These interpretations are also subject to our general terms and conditions set out in our current Price Schedule.

### Comments

UNABLE TO OBTAIN A SAMPLE FOR RM/RMF SO DRILLER/CONSULTANT MADE A SAMPLE WITH WATER AND SOAP.

### Calibration Report

Database File 22784.db  
 Dataset Pathname Elog4  
 Dataset Creation Mon May 22 13:12:39 2017

### ELOG Calibration Report

Serial:  
Model:

D4  
DTQ

Shop Calibration Performed:  
Before Survey Verification Performed:  
After Survey Verification Performed:

Wed Nov 30 16:10:20 2016  
Sun Oct 09 12:50:33 2016  
Sun Oct 09 12:51:05 2016

Shop Calibration

	Readings			References			Results	
	Zero	Cal		Zero	Cal		Gain	Offset
Short	0.815	51.150		0.500	50.000	Ohm-m	0.983	-0.301
Long	2.957	205.119		2.000	200.000	Ohm-m	0.979	-0.896
IEE	0.000	3549.760	counts	0.000	3.885	A		
VSN	87.000	4029.580	counts	1.659	76.859	V		
VLN	78.740	1018.100	counts	1.502	19.419	V		

Before Survey Verification

	Readings			References			Results	
	Zero	Cal		Zero	Cal		Gain	Offset
Short	29.192	0.020		28.897	0.019	Ohm-m	0.990	-0.001
Long	556.944	2.333		556.575	2.330	Ohm-m	0.999	-0.001
IEE	118.300	24529.439	counts	0.129	26.845	A		
VSN	38.800	5.620	counts	0.740	0.107	V		
VLN	185.060	160.720	counts	3.530	3.066	V		

After Survey Verification

	Readings			References			Results	
	Zero	Cal		Zero	Cal		Gain	Offset
Short	29.268	0.019		29.192	0.020	Ohm-m	0.997	0.002
Long	556.764	2.332		556.944	2.333	Ohm-m	1.000	-0.000
IEE	118.300	24504.439	counts	0.129	26.818	A		
VSN	38.900	5.200	counts	0.742	0.099	V		
VLN	185.000	160.520	counts	3.529	3.062	V		

After Survey Verification compared to Before Survey Calibration

	Zero			Cal		
	Before	After		Before	After	
Short	28.897	29.192	Ohm-m	0.019	0.020	Ohm-m
Long	556.575	556.944	Ohm-m	2.330	2.333	Ohm-m

Gamma Ray Calibration Report

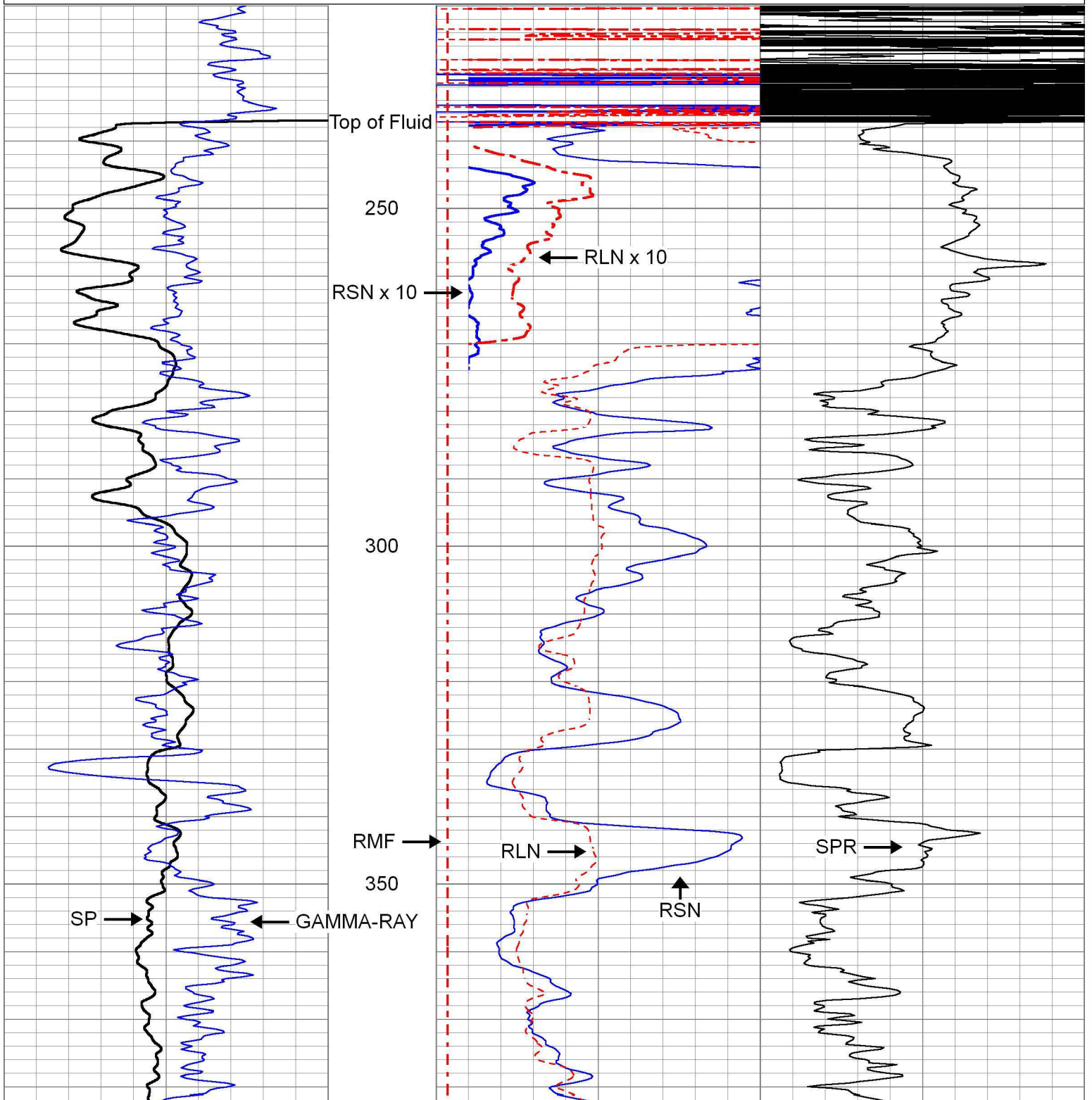
Serial Number: D4  
Tool Model: ELOG  
Performed: Thu Dec 03 12:34:25 2015

Calibrator Value: 162.0 GAPI

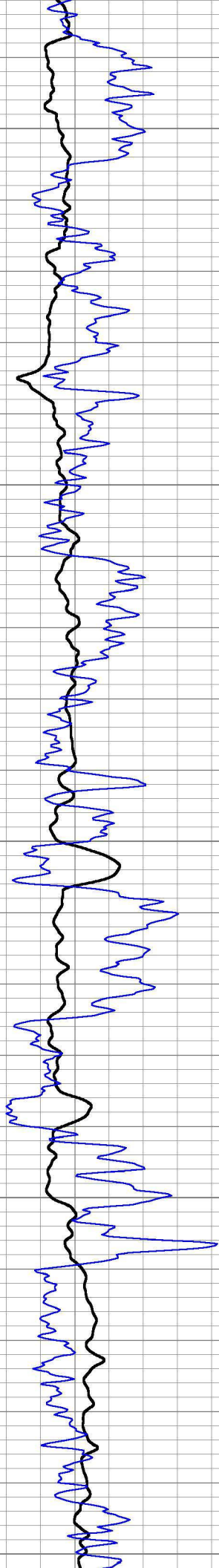
Background Reading: 101.7 cps  
Calibrator Reading: 326.7 cps

Database File 22784.db  
 Dataset Pathname Elog4  
 Presentation Format elog\_cwa  
 Dataset Creation Mon May 22 13:12:39 2017  
 Charted by Depth in Feet scaled 1:240

0	SP (mV)	150	0	RSN (Ohm-m)	150	300	SPR (Ohm-m)	700
0	Gamma-Ray (GAPI)	200	0	RLN (Ohm-m)	150			
			0	RMF (Ohm-m)	150			
			150	RSN x 10 (Ohm-m)	1500			
			150	RLN x 10 (Ohm-m)	1500			







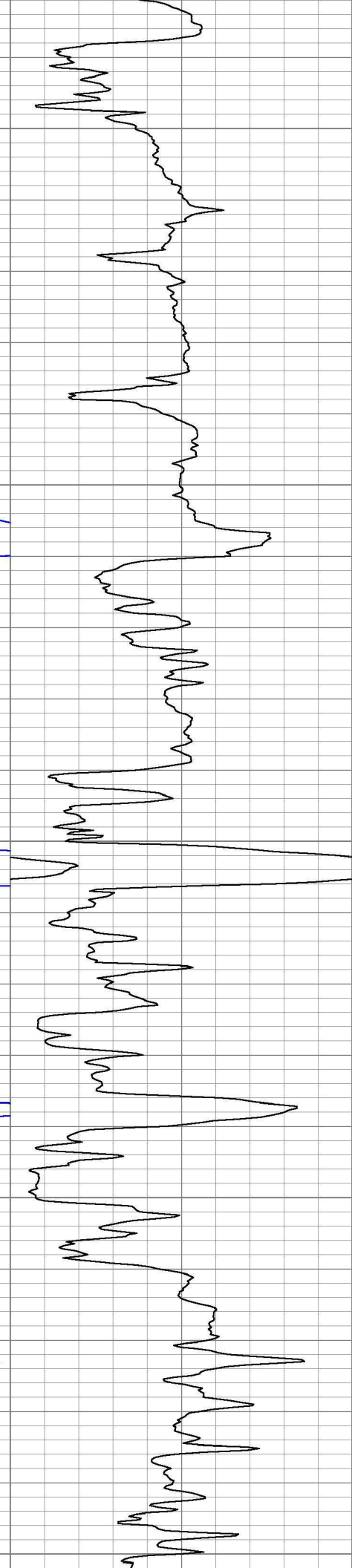
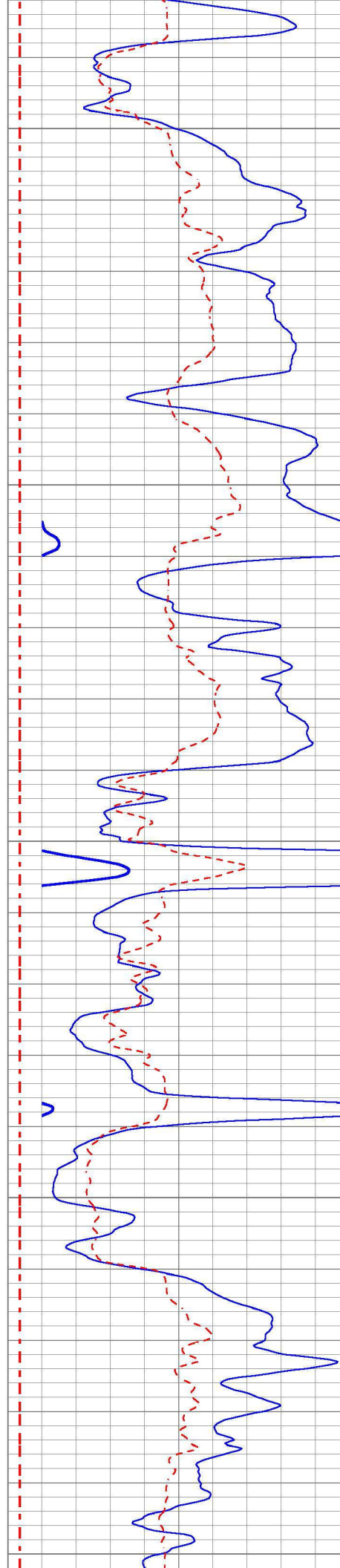
400

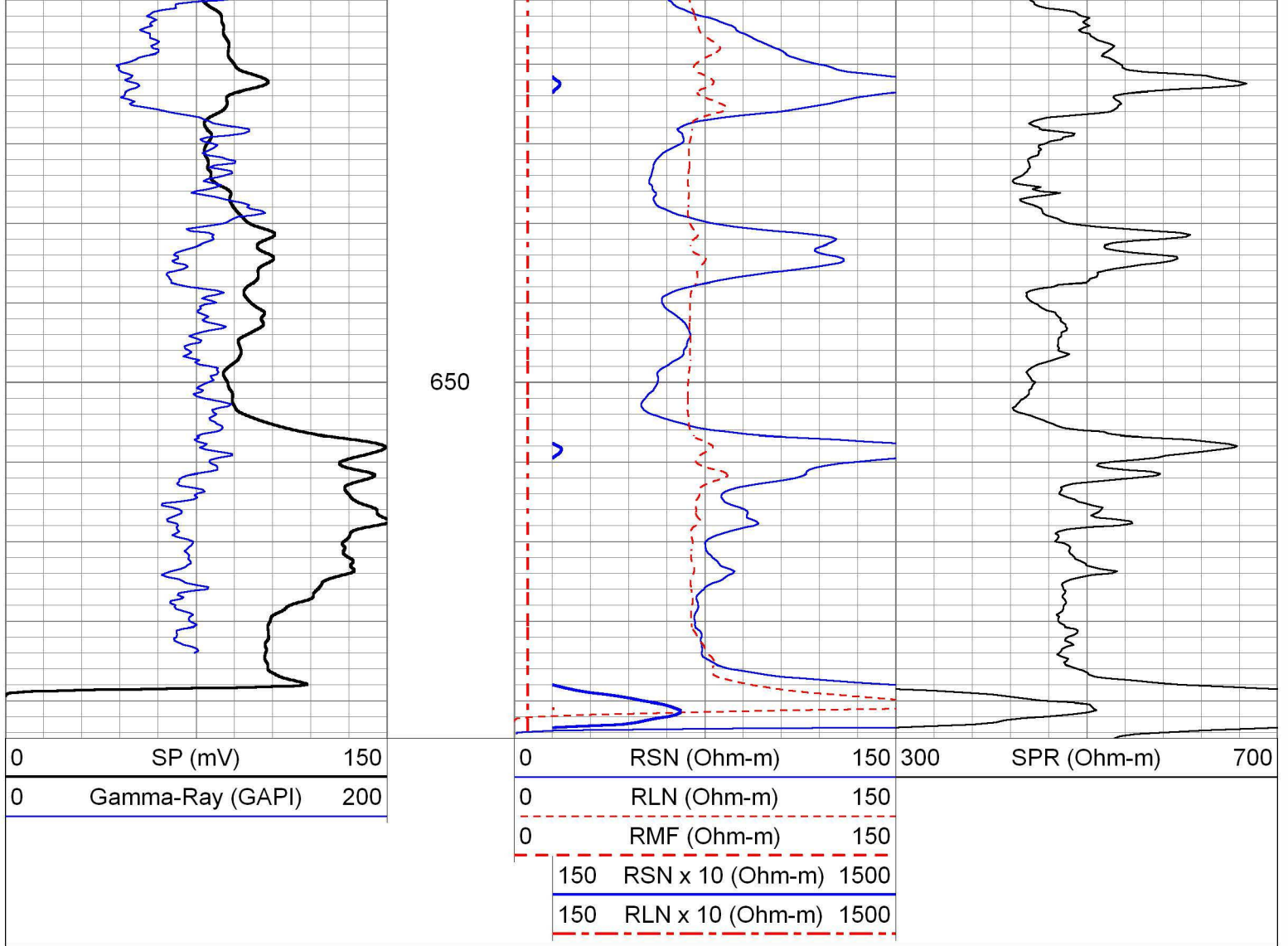
450

500

550

600





## Log Variables

Database C:\ProgramData\Warrior\Data\22784.db

Dataset field/well/run1/Elog4/\_vars\_

### Top - Bottom

BOREID in 9.875	BOTTEMP degF 80.1	CASEOD in 0	CASETHCK in 0	PERFS 0	RM_MEAS_R Ohm-m 5.6	RM_MEAS_T degF 79.5
RMF Ohm-m 5.35	RSH Ohm-m 20	SPSHIFT mV 0	SRFTEMP degF 73	TDEPTH ft 710		