

Job No. 6758  
 Company HELBENT DRILLING  
 Well TEST WELL #10  
 Field CROSSROADS  
 County LOS ANGELES  
 State CA

Location: NORTH OF I-80  
 Other Services: GRILL3 CALIPER  
 Sec. Twp. Rge. Elevation above perm. datum  
 Permanent Datum G.L. 0  
 Log Measured From G.L.  
 Drilling Measured From G.L.  
 Date 12-03-03

Run Number ONE  
 Depth Driller 1518  
 Depth Logger 1518  
 Bottom Logged Interval 1518  
 Top Log Interval 100'  
 Casing Driller 40" @ 100'  
 Casing Logger 100'  
 Bit Size 17.5"  
 Type Fluid in Hole WATER  
 Density / Viscosity N/A  
 pH / Fluid Loss N/A  
 Source of Sample PIT  
 Rm @ Meas. Temp 14.08 @ 77F  
 Rm @ Meas. Temp 14.08 @ 77F  
 Rm @ Meas. Temp N/A  
 Source of Rm / Rmc MEAS  
 Rm @ BHT N/A  
 Time Circulation Stopped 14:30  
 Time Logger on Bottom 17:45  
 Max. Recorded Temperature N/A  
 Equipment Number PS-1  
 Location L.A.  
 Recorded By RIDDER  
 Witnessed By M. HERZOG

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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

### ELOG Calibration Report

Serial: D1  
 Model: DTQ  
 Shop Calibration Performed: Tue Jan 28 07:43:53 2003  
 Before Survey Verification Performed: Fri Mar 28 18:39:54 2003  
 After Survey Verification Performed: Tue Nov 20 13:45:24 2001

#### Shop Calibration

	Readings			References			Results	
	Zero	Cal		Zero	Cal		Gain	Offset
Short	9.385	100.922		10.200	102.200	Ohm-m	1.005	0.768
Long	8.969	98.662		10.200	102.200	Ohm-m	1.026	-21.001
IEE	132.093	6559.140	counts	0.145	7.178	A		
VSN	68.926	7399.514	counts	1.315	141.137	V		
VLN	123.157	1902.449	counts	2.349	36.287	V		

#### Before Survey Verification

	Readings			References			Results	
	Zero	Cal		Zero	Cal		Gain	Offset
Short	255.170	100.412		46.444	100.411	Ohm-m	-0.349	135.426
Long	1150.040	103.869		103.264	103.264	Ohm-m	0.219	80.559
IEE	140.620	6475.111	counts	0.154	7.086	A		
VSN	403.139	7304.796	counts	7.689	139.330	V		
VLN	454.231	1889.074	counts	8.664	36.032	V		

#### After Survey Verification

	Readings			References			Results	
	Zero	Cal		Zero	Cal		Gain	Offset
Short	0.000	99.861		0.000	99.853	Ohm-m	1.000	0.000
Long	0.000	102.069		102.055	102.055	Ohm-m	1.000	0.000
IEE	129.370	6528.851	counts	0.142	7.145	A		
VSN	142.833	7325.000	counts	2.724	139.715	V		
VLN	114.778	1871.738	counts	2.189	35.701	V		

#### After Survey Verification compared to Before Survey Calibration

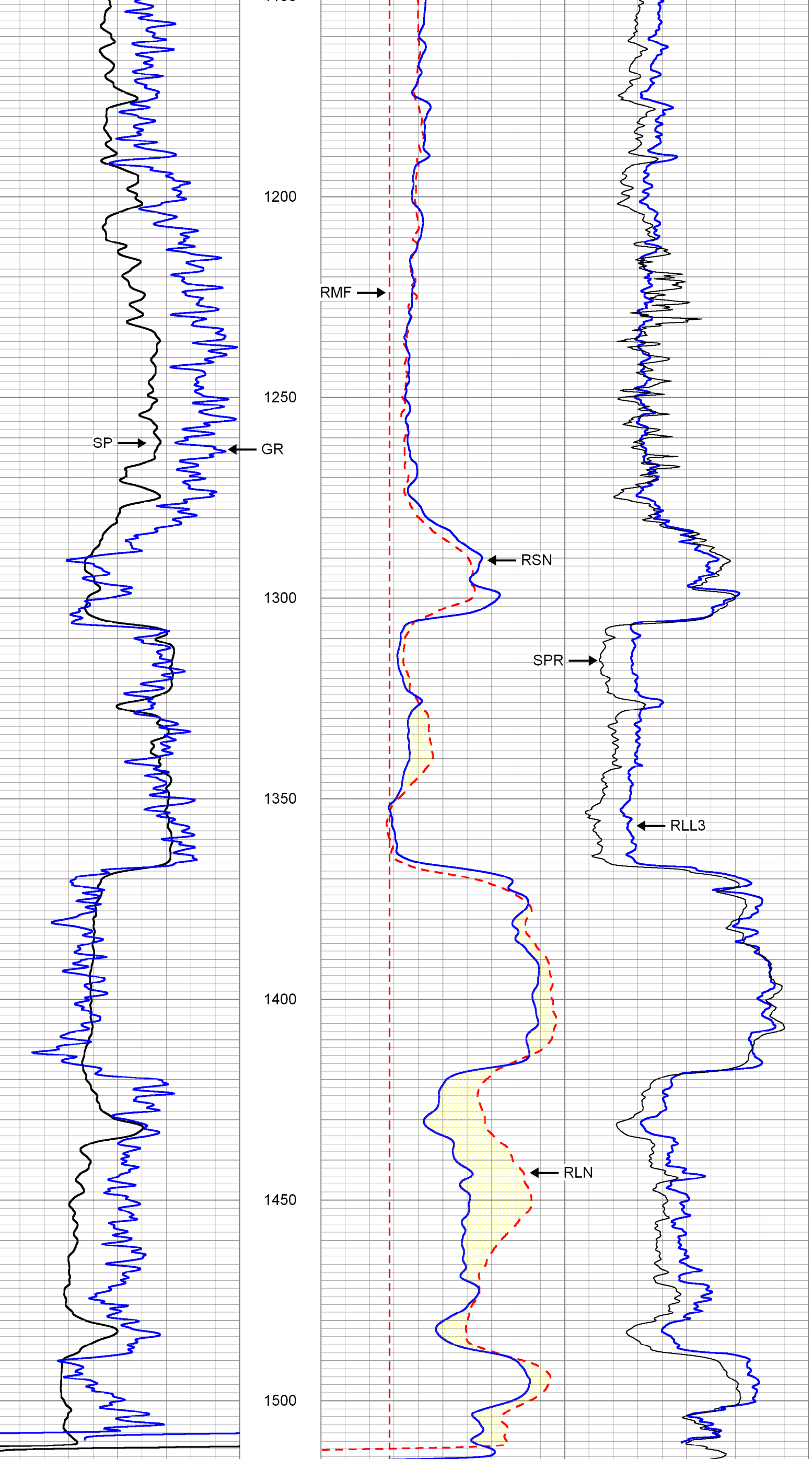
	Zero			Cal		
	Before	After		Before	After	
Short	46.444	0.000	Ohm-m	100.411	99.853	Ohm-m
Long	331.945	0.000	Ohm-m	103.264	102.055	Ohm-m

### Gamma Ray Calibration Report

Serial Number: D1  
 Tool Model: ELOG  
 Performed: Thu Oct 10 15:27:30 2002  
 Calibrator Value: 162 GAPI  
 Background Reading: 172.547 cps  
 Calibrator Reading: 717.938 cps  
 Sensitivity: 0.297034 GAPI/cps

Database File: I13.db  
 Dataset Pathname: Pacific/Bore1/run1/EL  
 Presentation Format: elog2  
 Dataset Creation: Fri Jun 11 15:23:22 2004  
 Charted by: Depth in Feet scaled 1:300

40	S.P. (mV)	80	0	RLN (Ohm-m)	50	0	RLL3 (Ohm-m)	50
35	Gamma-Ray (GAPI)	90	0	RMF (Ohm-m)	50	-5	SPR (Ohm-m)	25
			0	RSN (Ohm-m)	50			



40	S.P. (mV)	80	0	RLN (Ohm-m)	50	0	RLL3 (Ohm-m)	50
35	Gamma-Ray (GAPI)	90	0	RMF (Ohm-m)	50	-5	SPR (Ohm-m)	25
			0	RSN (Ohm-m)	50			