NABORS
COMPLETION & PRODUCTION SERVICES CO.

GAMMA RAY CCL CEMENT BOND VDL

Company	NOBLE ENERGY INC.
Well	FIVE RIVERS K15-31D
Field	WATTENBERG
County	WELD
State	COLORADO

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Well	**FIVE RIVERS K15-31D**		
Field	**WATTENBERG**		
County	**WELD**	**State**	**COLORADO**

Location: API #: 0512332466

SHL; 240' FNL & 246' FEL NE/NE
BHL; 1320' FNL & 75' FEL SE/NE

SEC 16 TWP 4N RGE 66W

Other Services

Permanent Datum	GL	Elevation	4730
Log Measured From	KB		
Drilling Measured From	KB		

Elevation
K.B. 4745
D.F. 4744
G.L. 4730

Date	14-MARCH-2014		
Run Number	ONE		
Depth Driller	7573		
Depth Logger	2000		
Bottom Logged Interval	2000		
Top Log Interval	SURFACE		
Open Hole Size	7.875		
Type Fluid	WATER		
Density / Viscosity	N/A		
Max. Recorded Temp.	N/A		
Estimated Cement Top	88		
Time Well Ready	MAST UNIT		
Time Logger on Bottom	2-3/4 PROBE 101020/785		
Equipment Number	4838		
Location	45		
Recorded By	GREG NOLAN		
Witnessed By	RYAN BEAM		

Borehole Record				Tubing Record			
Run Number	Bit	From	To	Size	Weight	From	To

Casing Record	Size	Wgt/Ft	Top	Bottom
Surface String	8-5/8	24.00 / J-55	SURFACE	687.00
Prot. String				
Production String	4-1/2	11.60 / M-80	SURFACE	7563.00
Liner				

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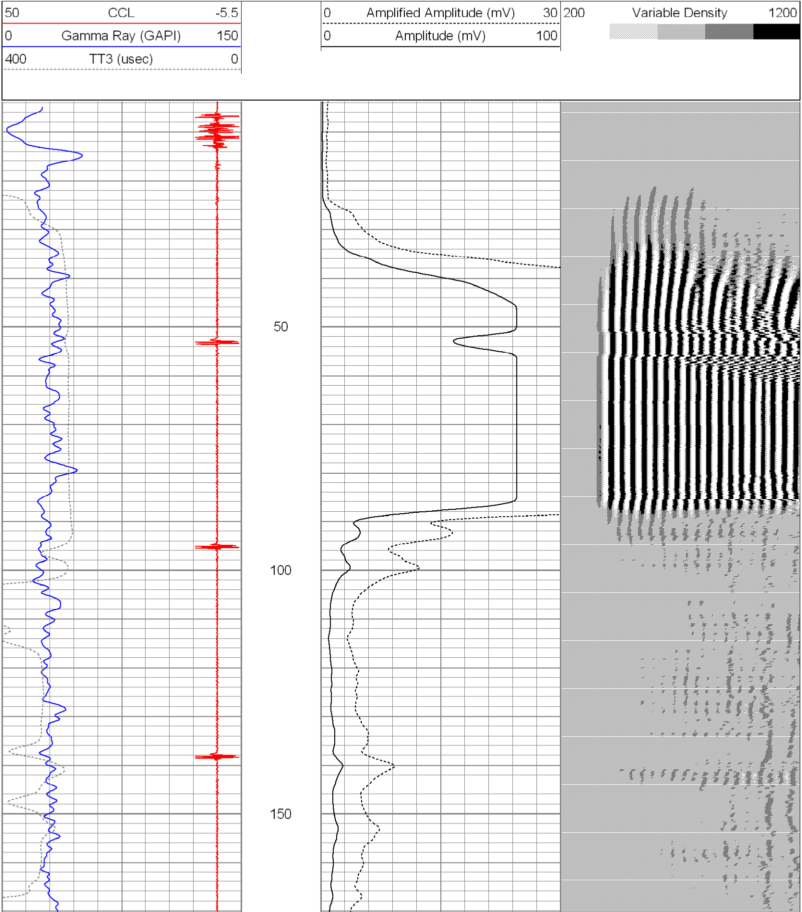
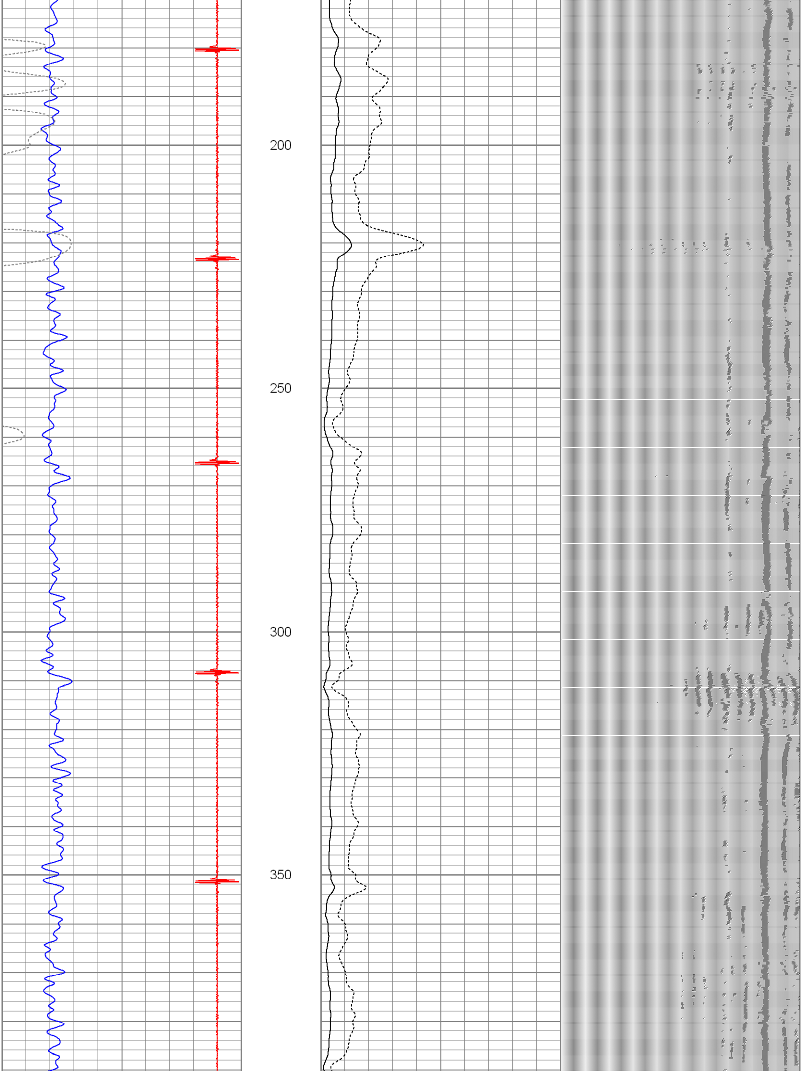
All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs, 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.

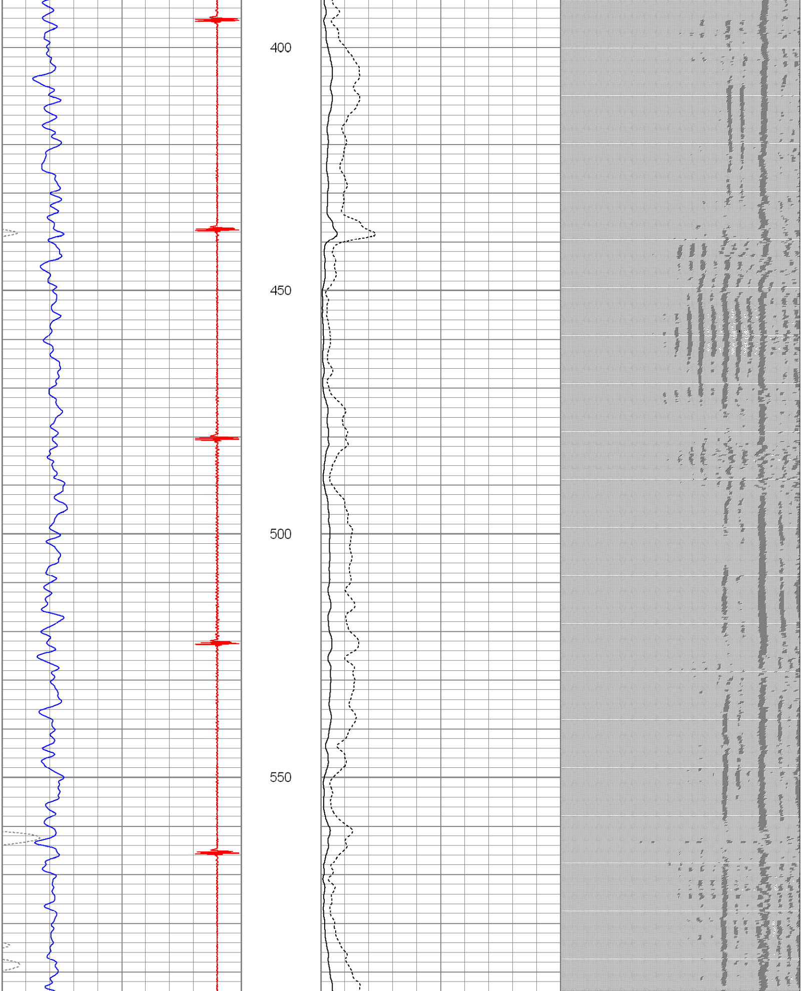
Comments

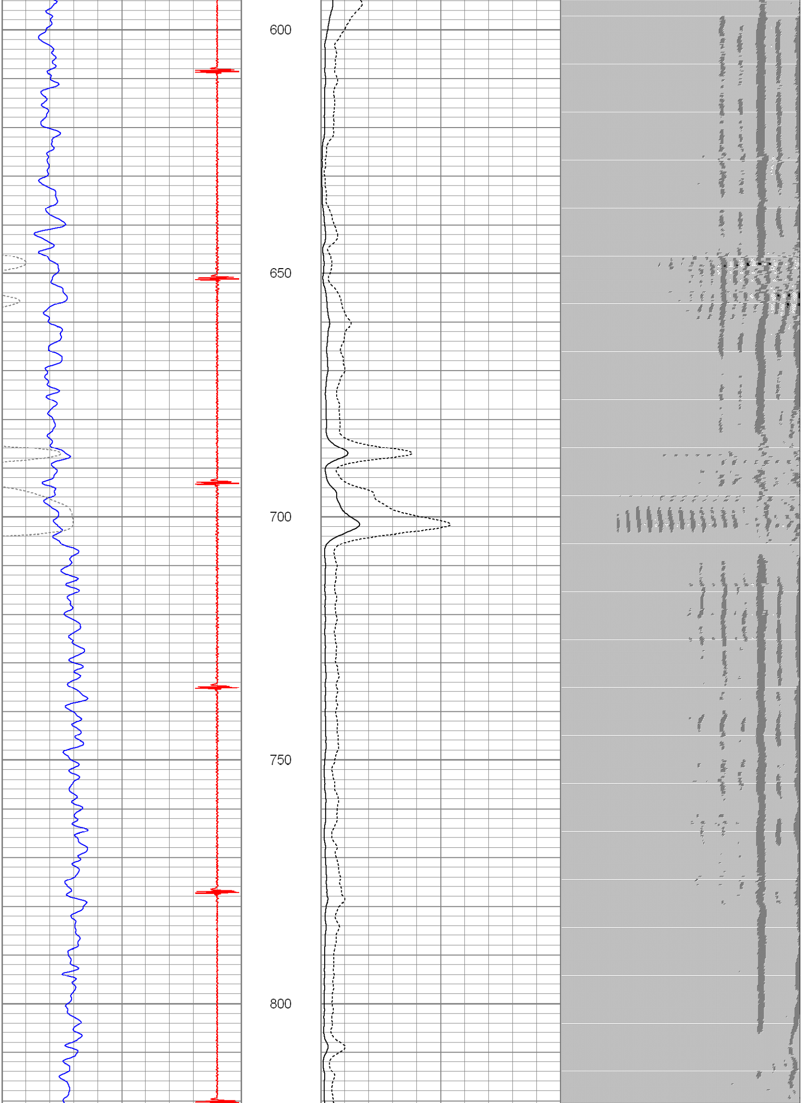
THANK YOU FOR CHOOSING NCPS!!!
LOG NOT CORRELATED
WCR 46 & WCR 31, W.1, W200', E INTO

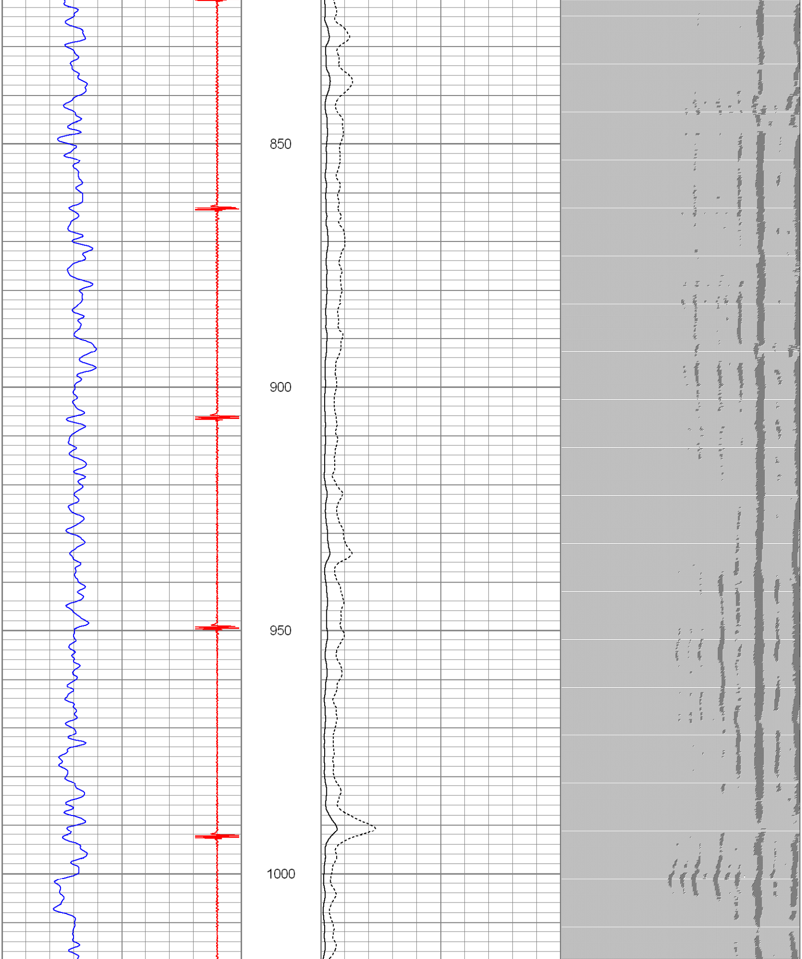
Database File:	cbl noble five river k15-31d.db
Dataset Pathname:	pass2
Presentation Format:	noble en
Dataset Creation:	Fri Mar 14 08:04:13 2014 by Log SCH 120430
Charted by:	Depth in Feet scaled 1:240

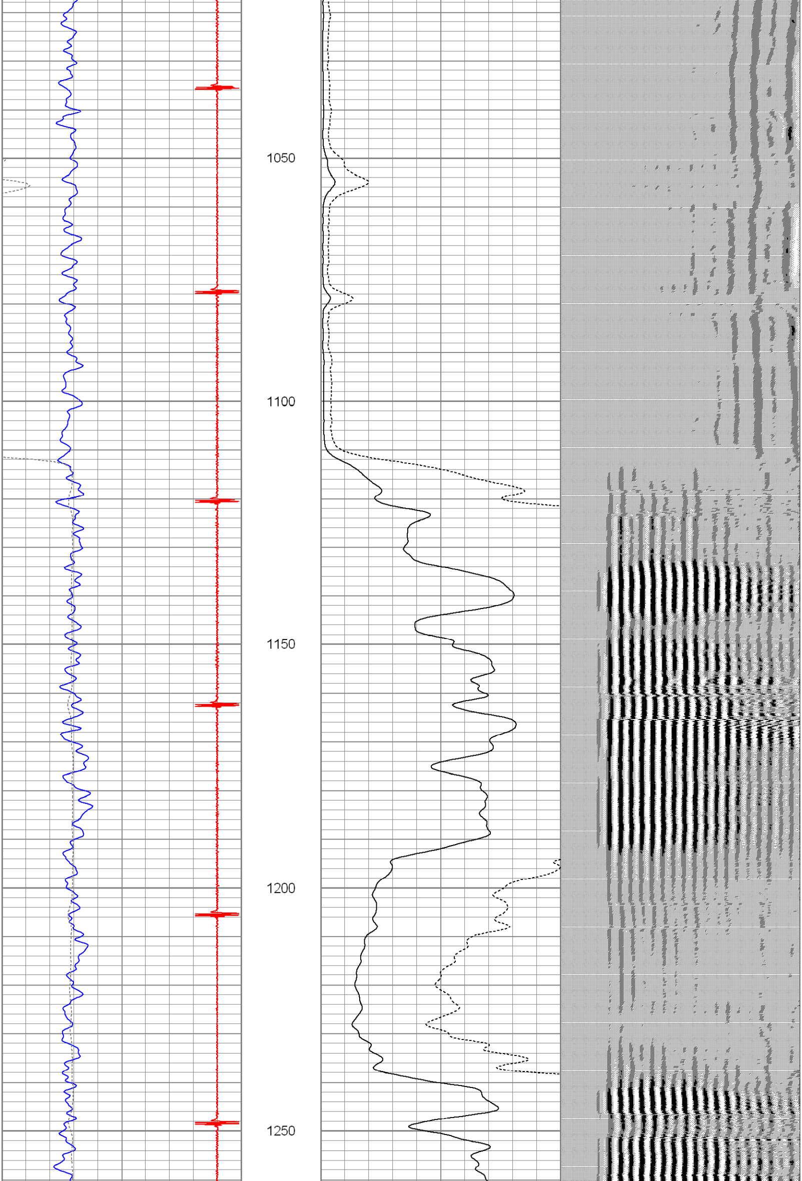


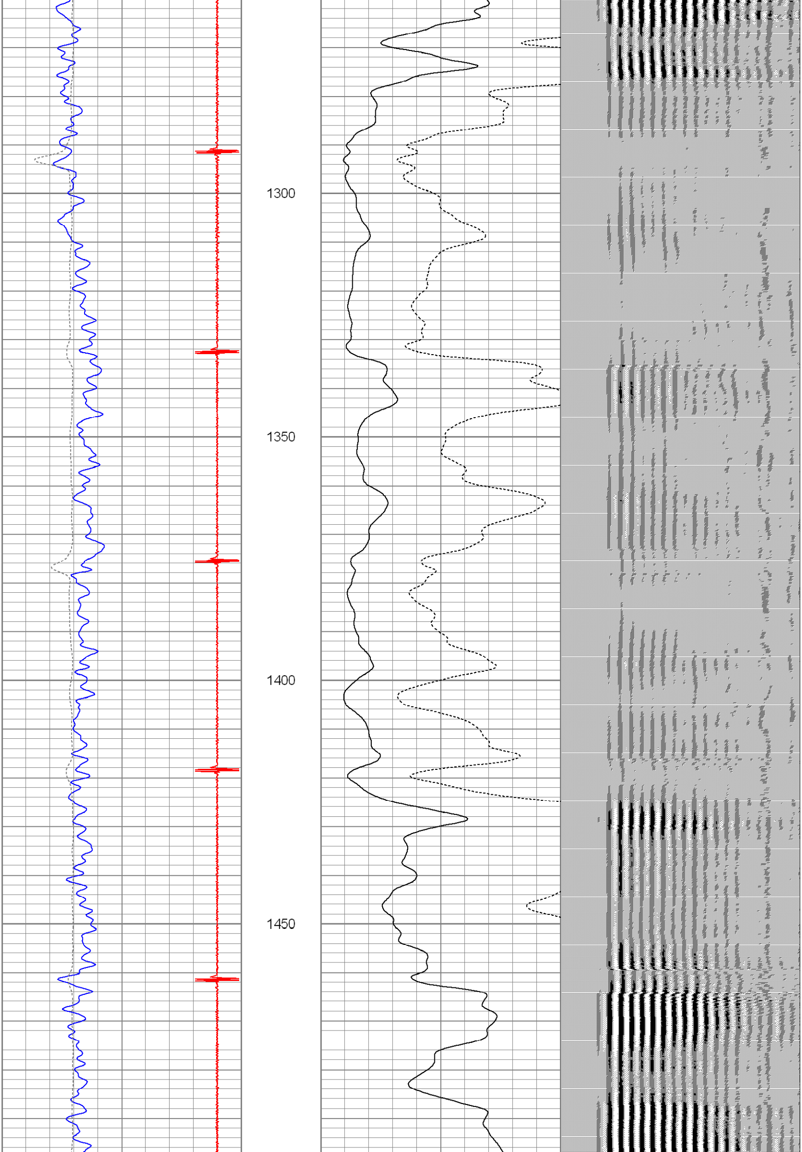


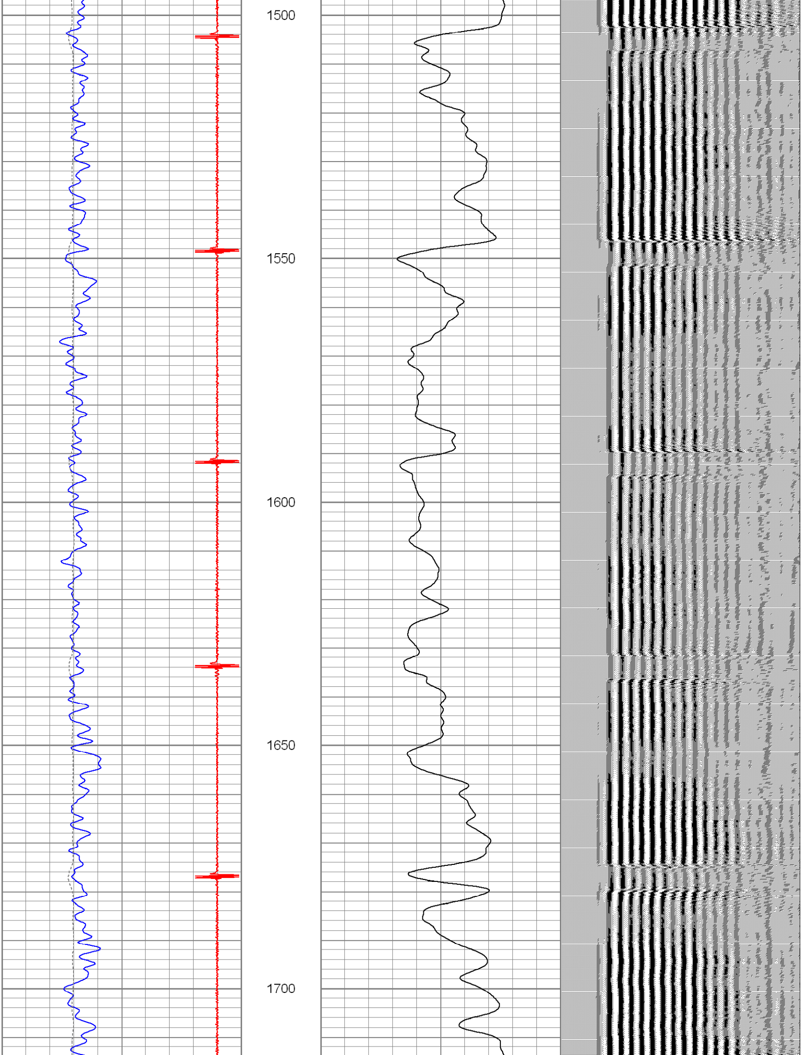


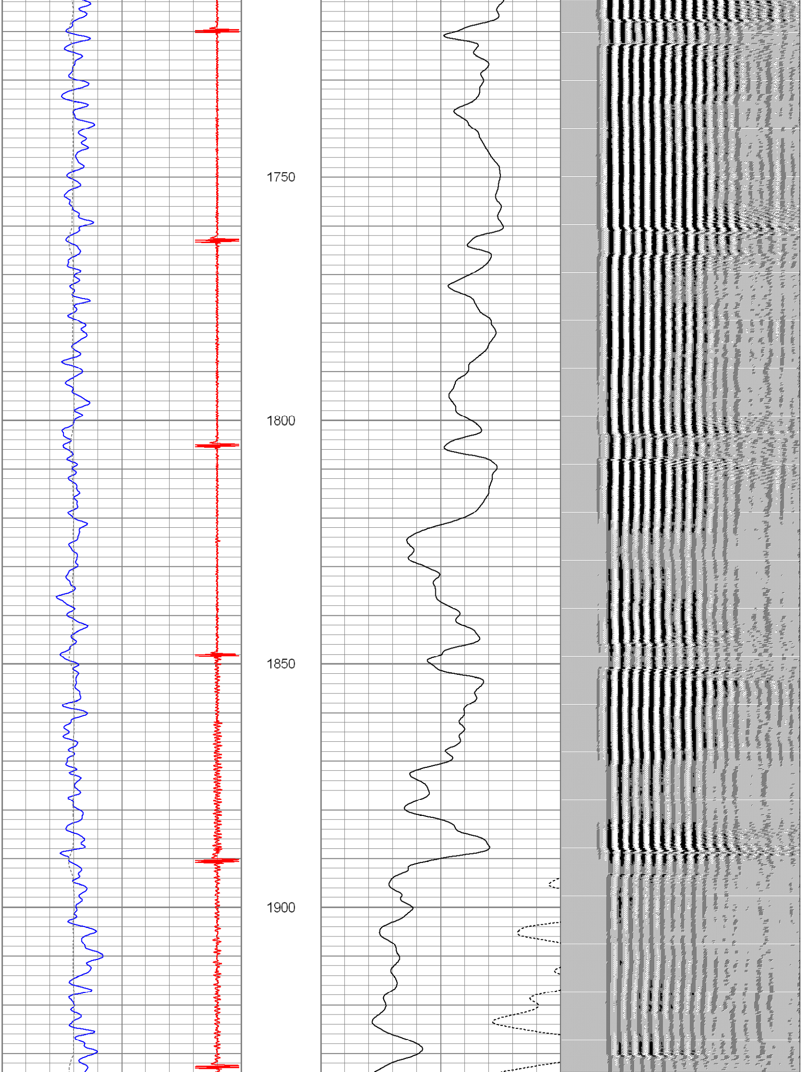


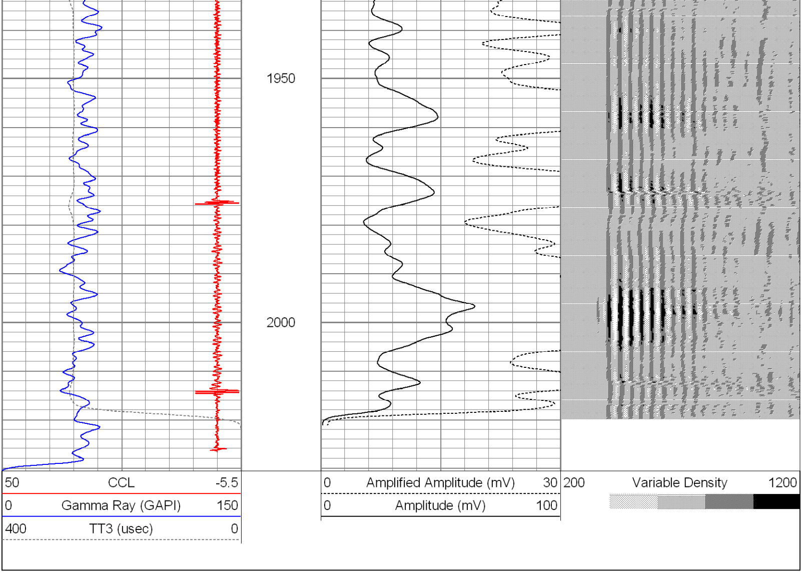












Calibration Report

Database File: cbl noble five river k15-31d.db
Dataset Pathname: pass2
Dataset Creation: Fri Mar 14 08:04:13 2014 by Log SCH 120430

Gamma Ray Calibration Report

Type / Serial: Probe275dig / 110785

	Counts/Sec.	Gain	Offset	Jig	Units
SHOP CALIBRATION	Fri Nov 08 09:38:30 2013				
Background	0.0				cps
Calibrator	1.0				cps
		0.4400			GAPI/cps
PRIMARY VERIFICATION					
Background	0.0				cps
Calibrator	0.0				cps
Difference				0.0	GAPI
BEFORE SURVEY VERIFICATION					
Background	0.0				cps
Calibrator	0.0				cps
Difference				0.0	GAPI
AFTER SURVEY VERIFICATION					
Background	0.0				cps
Calibrator	0.0				cps
Difference				0.0	GAPI

Cement Bond Log Calibration Report

Serial Number: 110802
Tool Model: Probe275Digital
Performed: Fri Mar 14 07:57:16 2014

Depth: 40.2917 ft
Casing Diameter: 4.5 in

	3' Spacing	5' Spacing	
Signal Zero:	0.7	0	mV
Calibrated Amplitude:	81.1961	81.1961	mV
Reading at Signal Zero:	-0.00615234	-0.00593262	V
Reading in Free Pipe:	2.47776	2.32742	V
Gain:	32.407	34.7981	
Offset:	0.899379	0.206444	