NABORS
COMPLETION & PRODUCTION SERVICES CO.

GAMMA RAY CCL CEMENT BOND VDL

Company NOBLE ENERGY INC.
Well TREBOR B11-08
Field WATTENBERG
County WELD
State COLORADO

Company	**NOBLE ENERGY INC.**
Well	**TREBOR B11-08**
Field	**WATTENBERG**
County	**WELD**
State	**COLORADO**

Location: API #: 0512313402

SE/NE

SEC 11 TWP 5N RGE 64W

Other Services

Permanent Datum	GL	Elevation	4603
Log Measured From	KB		
Drilling Measured From	KB		

Elevation
K.B. 4613
D.F.
G.L. 4603

Date	AUGUST 15, 2013		
Run Number	ONE		
Depth Driller	6868		
Depth Logger	2062		
Bottom Logged Interval	2061		
Top Log Interval	SURFACE		
Open Hole Size	7-7/8		
Type Fluid	WATER		
Density / Viscosity	N/A		
Max. Recorded Temp.	N/A		
Estimated Cement Top			
Time Well Ready	LEED RIG		
Time Logger on Bottom	2-3/4 PROBE 110803		
Equipment Number	4838		
Location	45		
Recorded By	GREG NOLAN		
Witnessed By	KEVIN MONAGHAN		

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#	10	314
Prot. String				
Production String	4-1/2	15.10#	10	6846
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

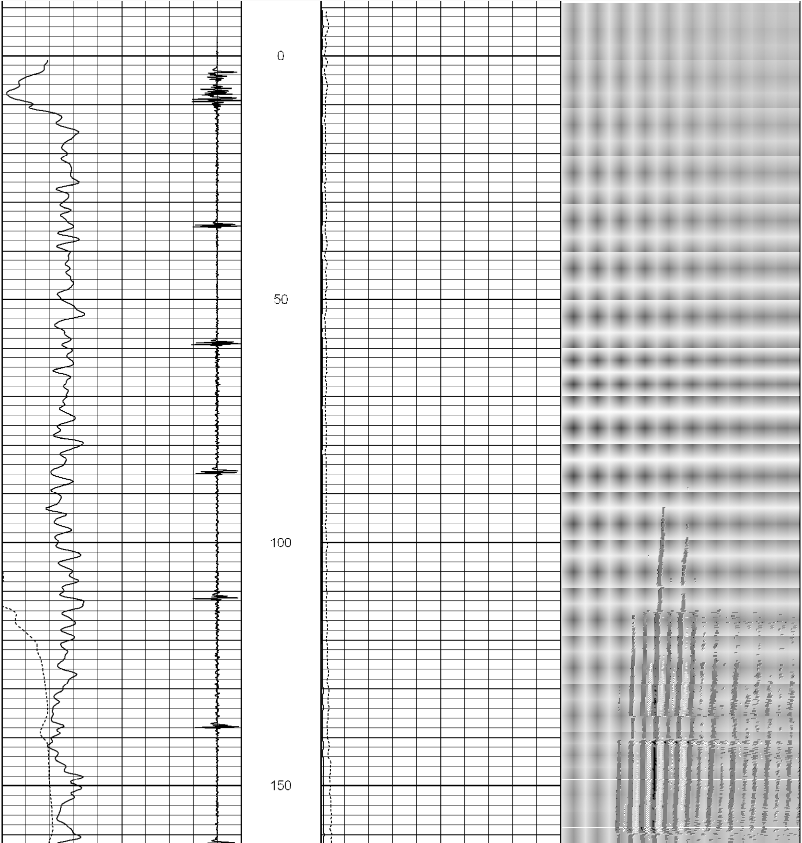
THANK YOU FOR CHOOSING NCPS!!!
LOG NOT CORRELATED
WCR 58.5 & WCR 59, N.2, W INTO

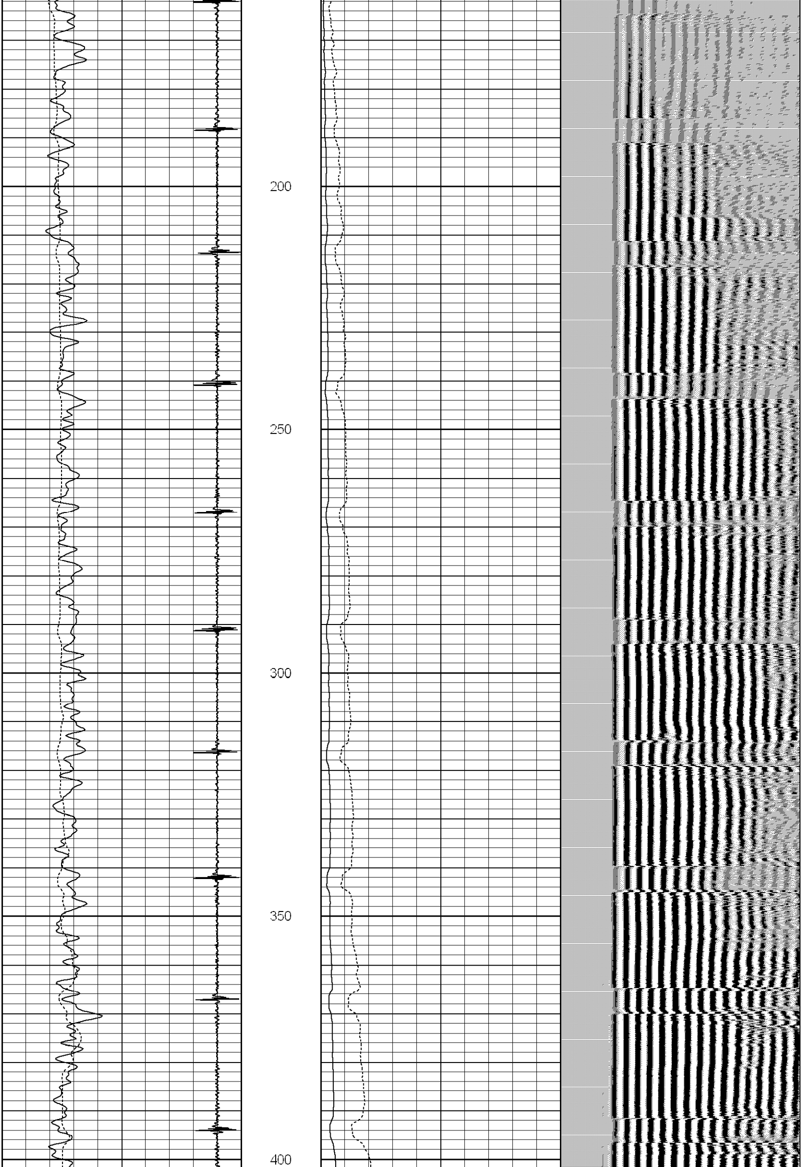
Database File:	cbl nbole trebor b11-08.db
Dataset Pathname:	pass2
Presentation Format:	noble en
Dataset Creation:	Thu Aug 15 07:41:32 2013 by Log SCH 120430
Charted by:	Depth in Feet scaled 1:240

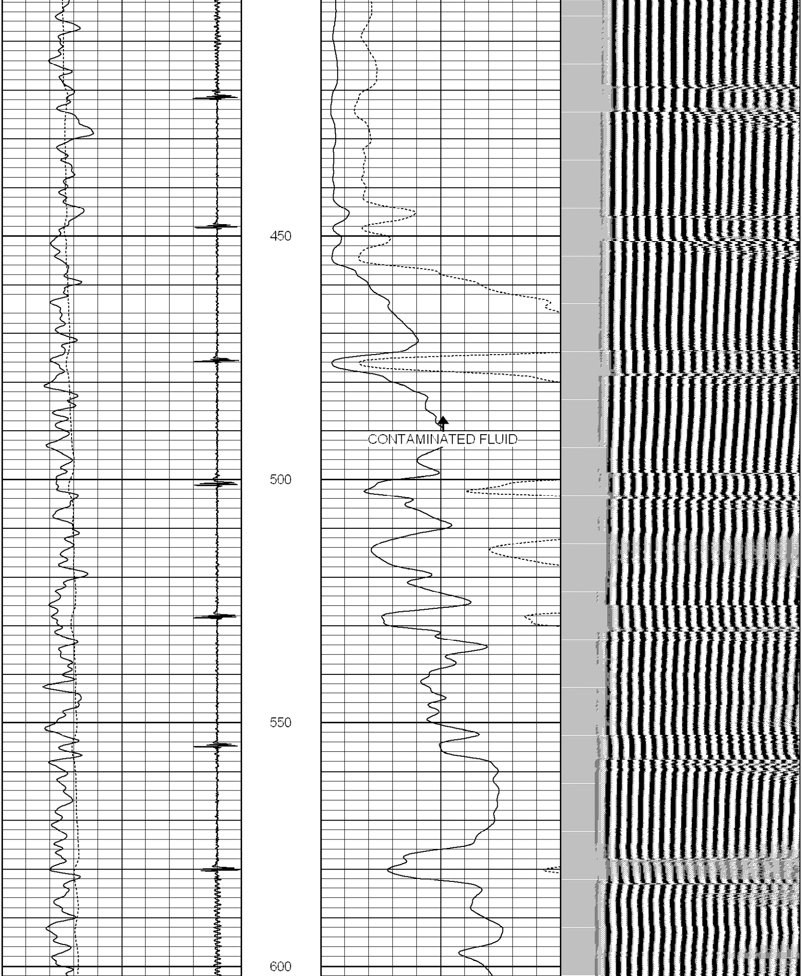
50 CCL -5.5
0 Gamma Ray (GAPI) 130
400 TT3 (usec) 0

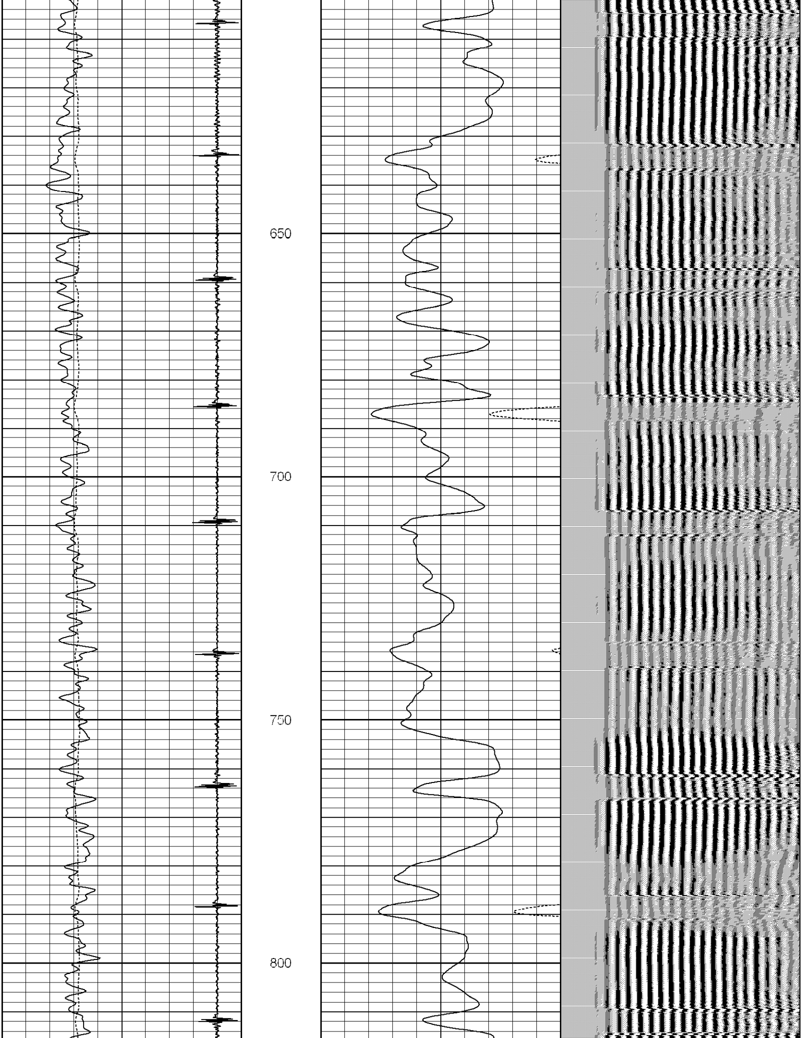
0 Amplified Amplitude (mV) 30
0 Amplitude (mV) 100

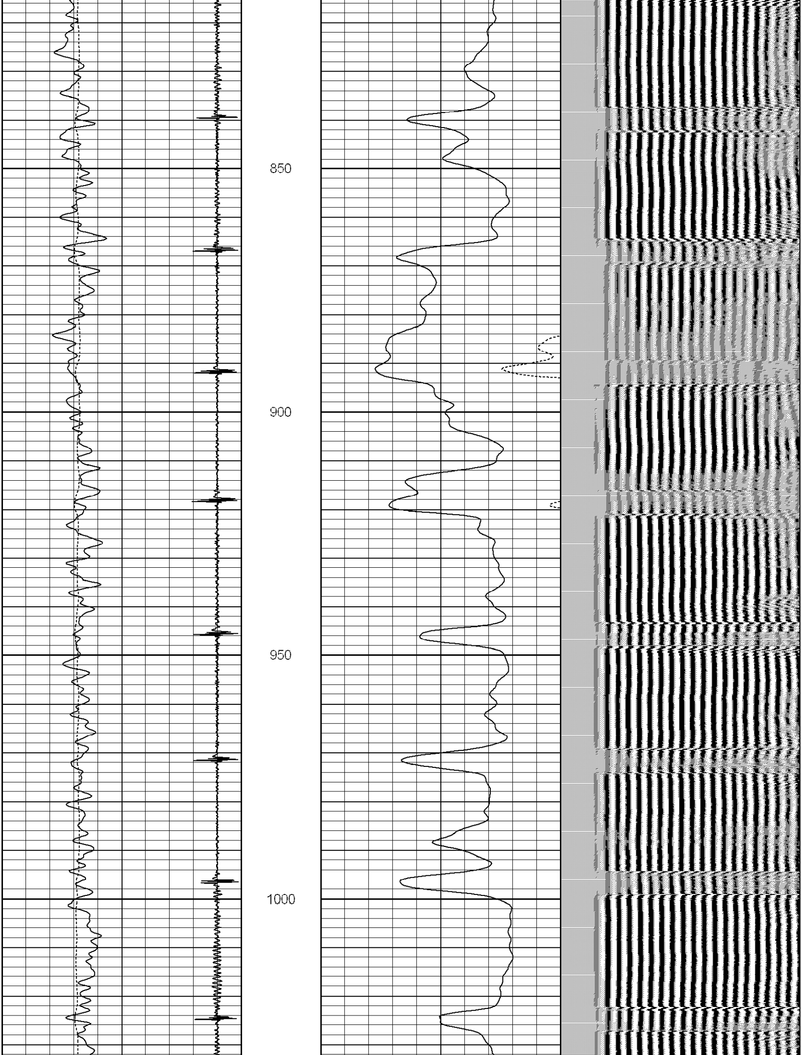
200 Variable Density 1200

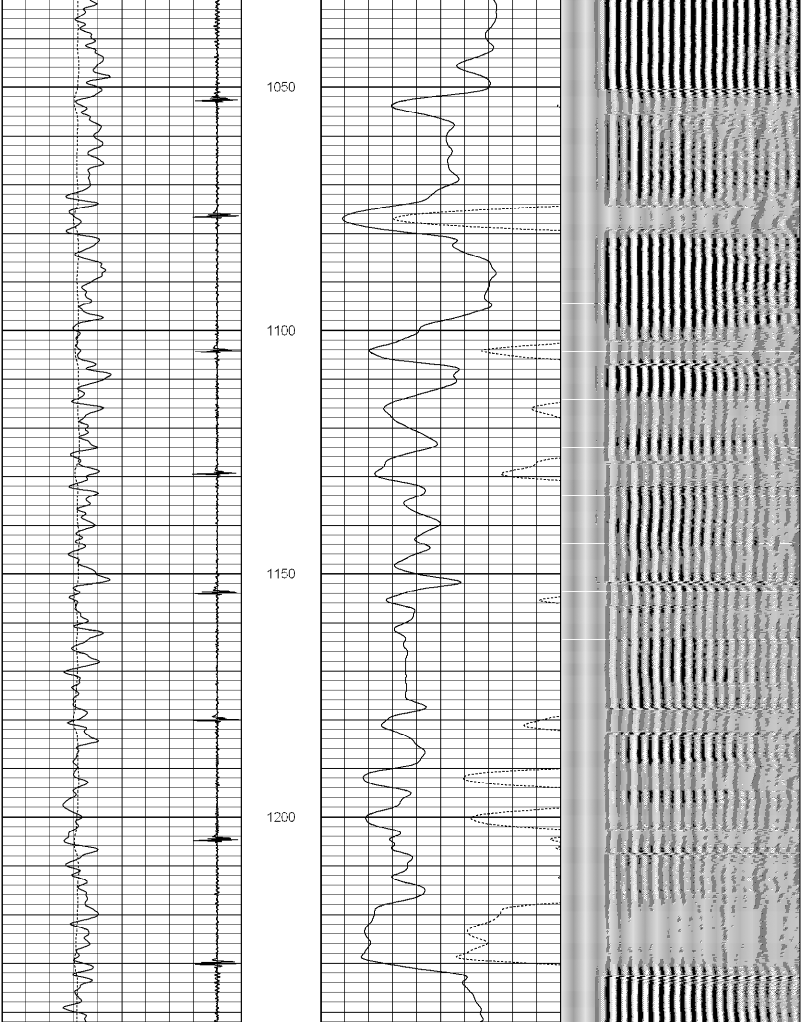


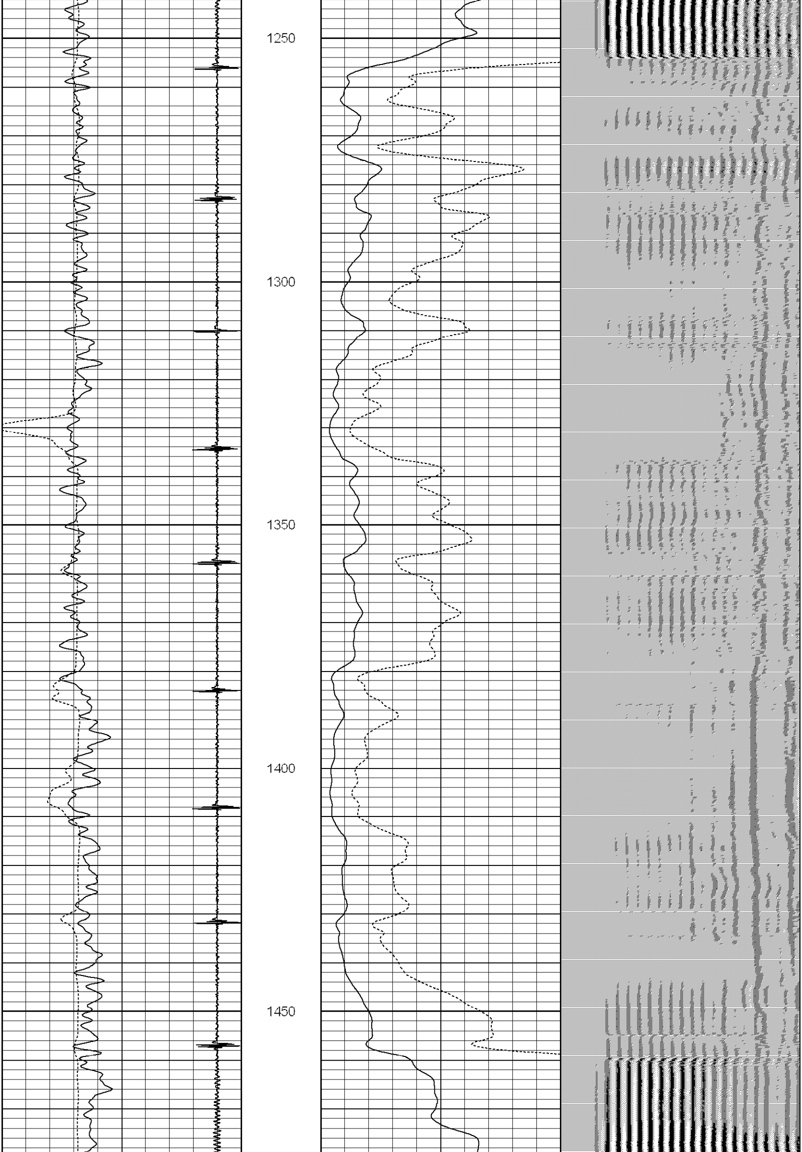


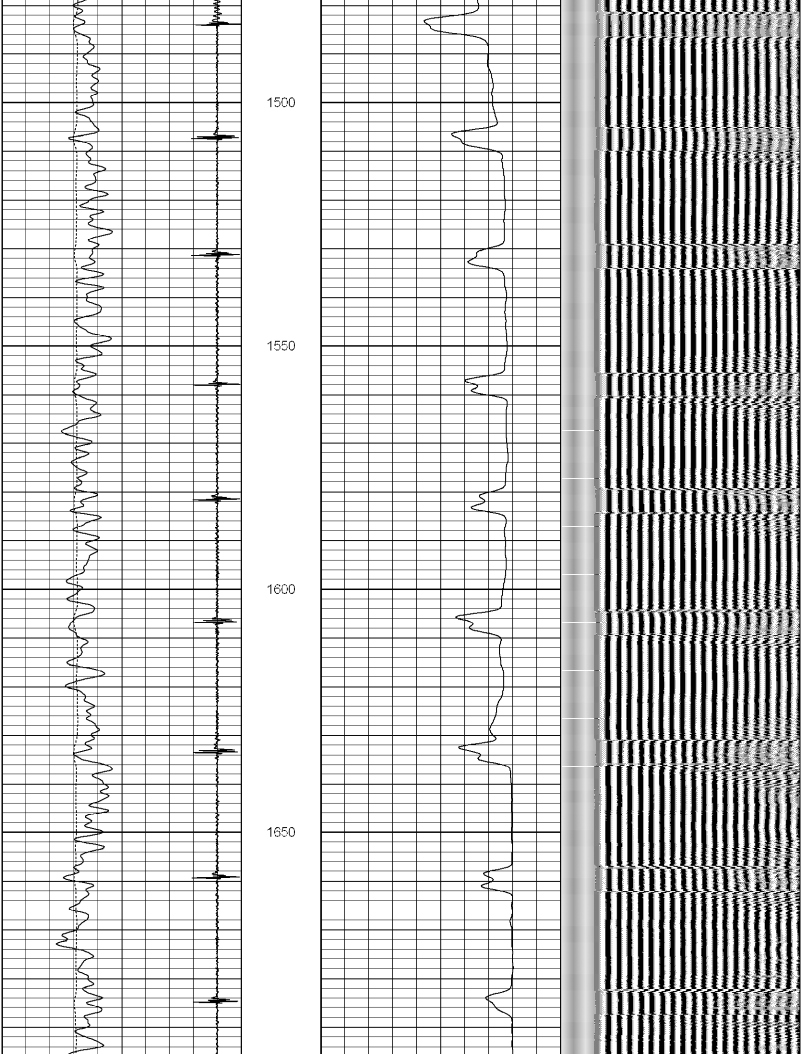


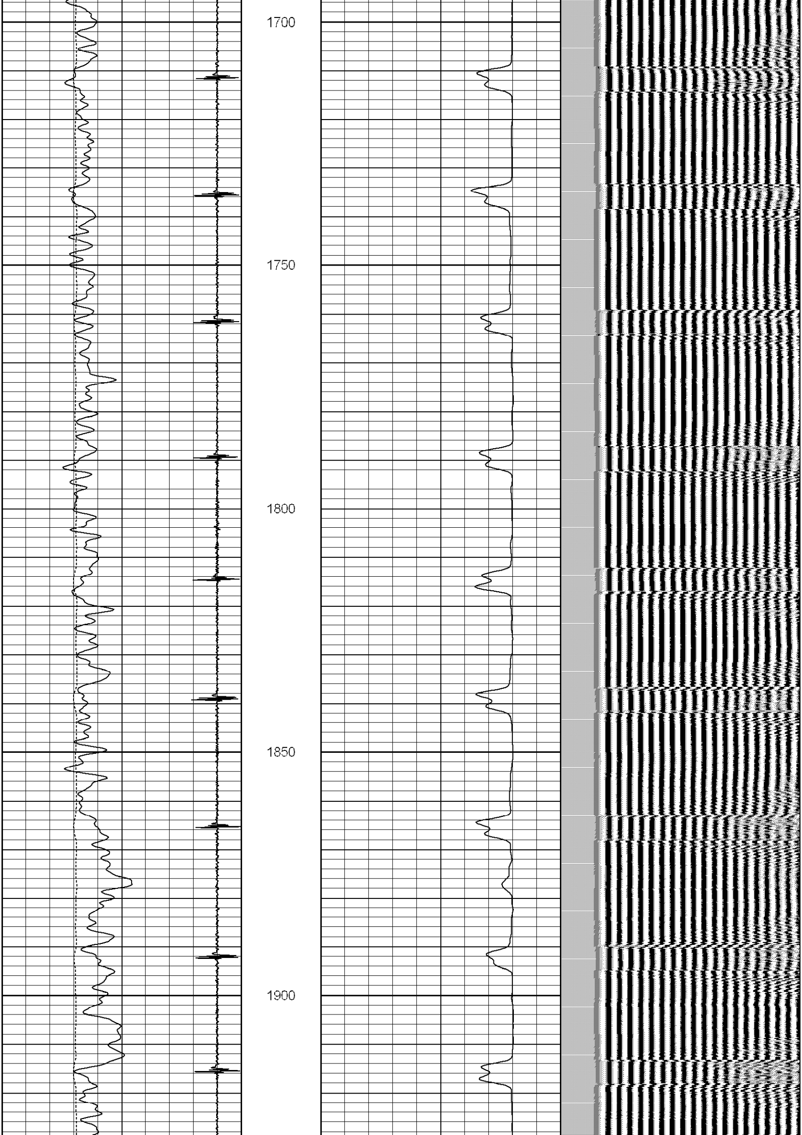


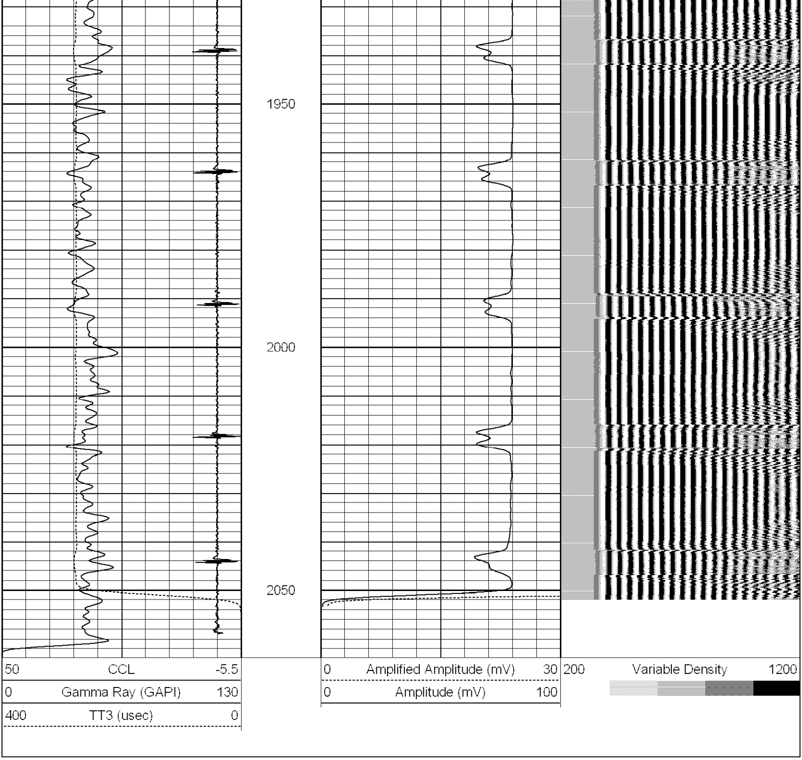












Calibration Report

Database File: cbl nbole trebor b11-08.db
Dataset Pathname: pass2
Dataset Creation: Thu Aug 15 07:41:32 2013 by Log SCH 120430

Gamma Ray Calibration Report

Type / Serial: Probe275dig / 101010

SHOP CALIBRATION

Fri Aug 09 08:08:12 2013

	Counts/Sec.	Gain	Offset	Jig	Units
Background	0.0				cps
Calibrator	1.0				cps
		0.4700			GAPI/cps

PRIMARY VERIFICATION

	Counts/Sec.	Gain	Offset	Jig	Units
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: Thu Aug 15 07:41:25 2013

Depth: 2062.59 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:	-0.00605469	-0.00593262	V
Reading in Free Pipe:	2.49763	2.27617	V
Gain:	32.151	35.5795	
Offset:	0.894664	0.211079	