Casedhole Solutions

GAMMA RAY CCL
CEMENT BOND VDL

Company NOBLE ENERGY
Well BOHLENDER 29-02
Field WATTENBERG
County WELD
State COLO

Company	**NOBLE ENERGY**
Well	**BOHLENDER 29-02**
Field	**WATTENBERG**
County	**WELD**
State	**COLO**

Location: API # : 05-123-13035

NW/NE

SEC 29 TWP 4N RGE 65W

Permanent Datum	GL	Elevation	4857
Log Measured From	KB		
Drilling Measured From	KB		

Other Services

Elevation
K.B. 4868
D.F.
G.L. 4857

Date	JAN-29-2016		
Run Number	ONE		
Depth Driller	7356		
Depth Logger	2000		
Bottom Logged Interval	2000		
Top Log Interval	SURFACE		
Casing Size	4.5		
Type Fluid	WATER		
Max. Recorded Temp.	NA		
Estimated Cement Top	NA		
Time Well Ready	7:30		
Time Logger On Bottom	8:00		
Unit Number	92-3827		
Tool Size / ID Number	1 11/16 PROBE		
Location	STERLING		
Recorded By	KYLE GIRDLER		
Witnessed By	PETE BURNS		

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	11	298
Prot. String				
Production String	4.5	12.75	11	7356
Liner				

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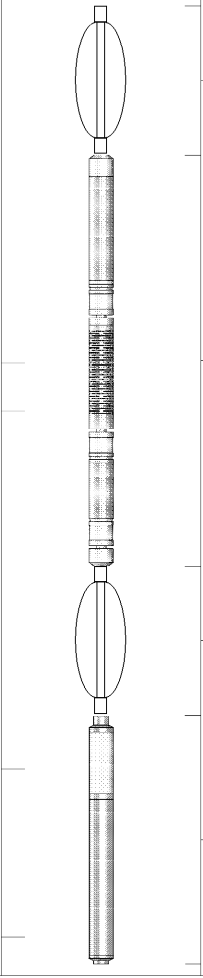
All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs,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

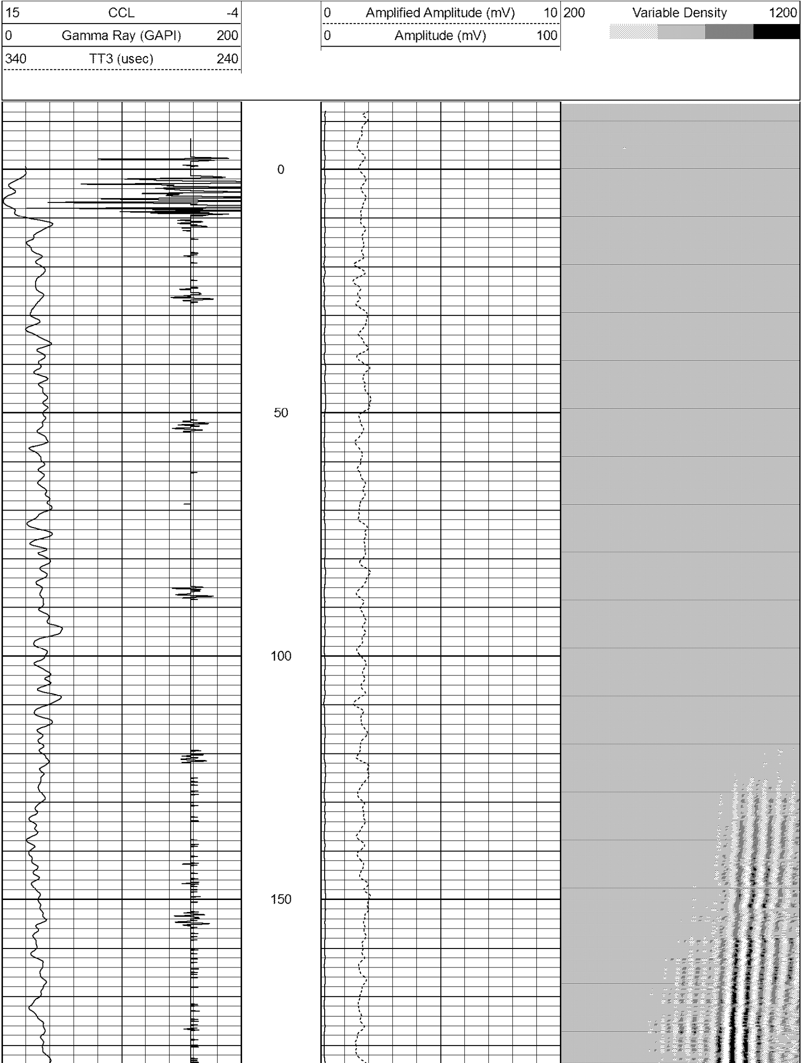
THANK YOU FOR USING CASEDHOLE SOLUTIONS

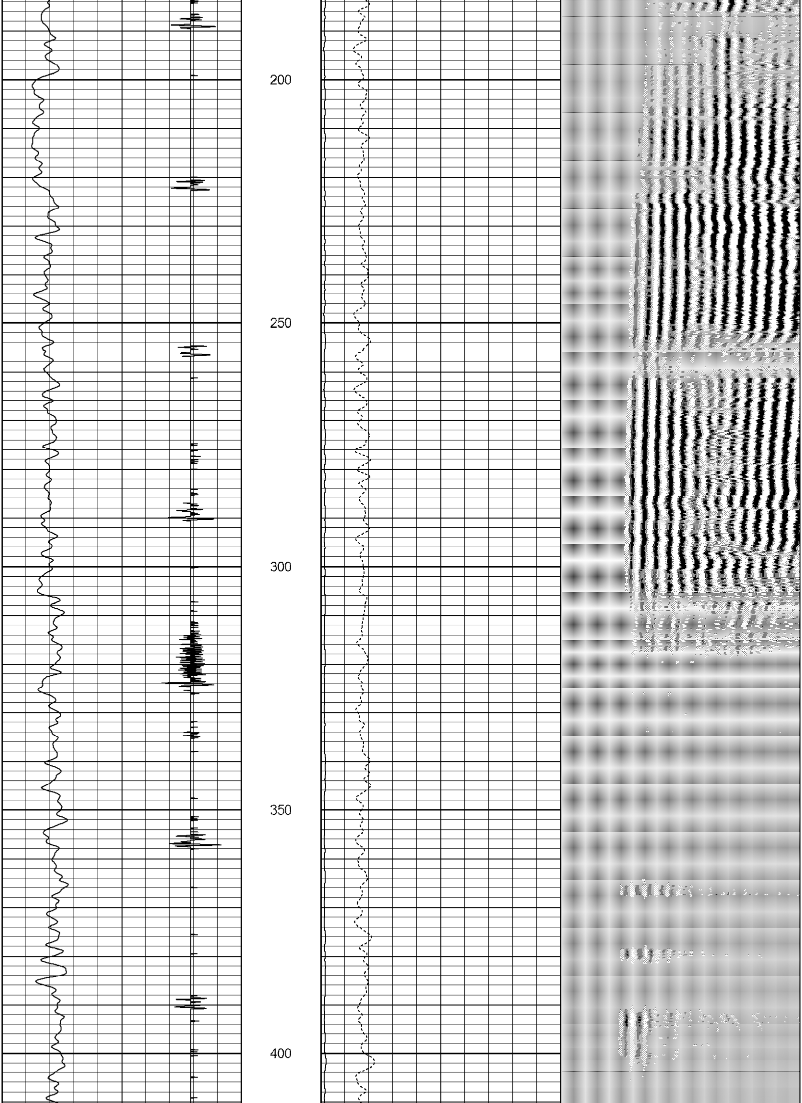
AIR POSSIBLY PRESENT FROM 120' TO SURFACE

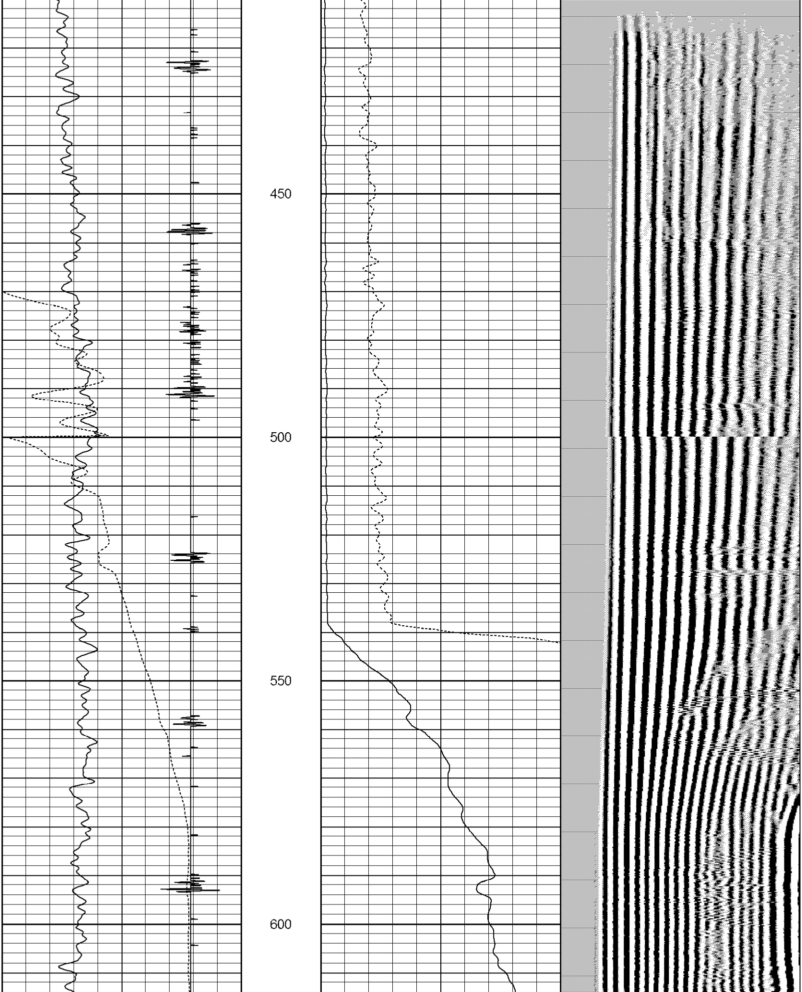
Sensor	Offset (ft)	Schematic	Description	Len (ft)	OD (in)	Wt (lb)
			1 PROBE	3.13	2.00	8.00
WVF3	12.59		CBL-Probe (FW1406-029) 1-11/16	8.60	1.69	41.00
WVF5	11.59					
			1 PROBE	3.13	2.00	8.00
CCL	4.08					
			GR-CCL/GR (FW1406-009) 1-11/16	5.21	1.69	
GR	0.57					

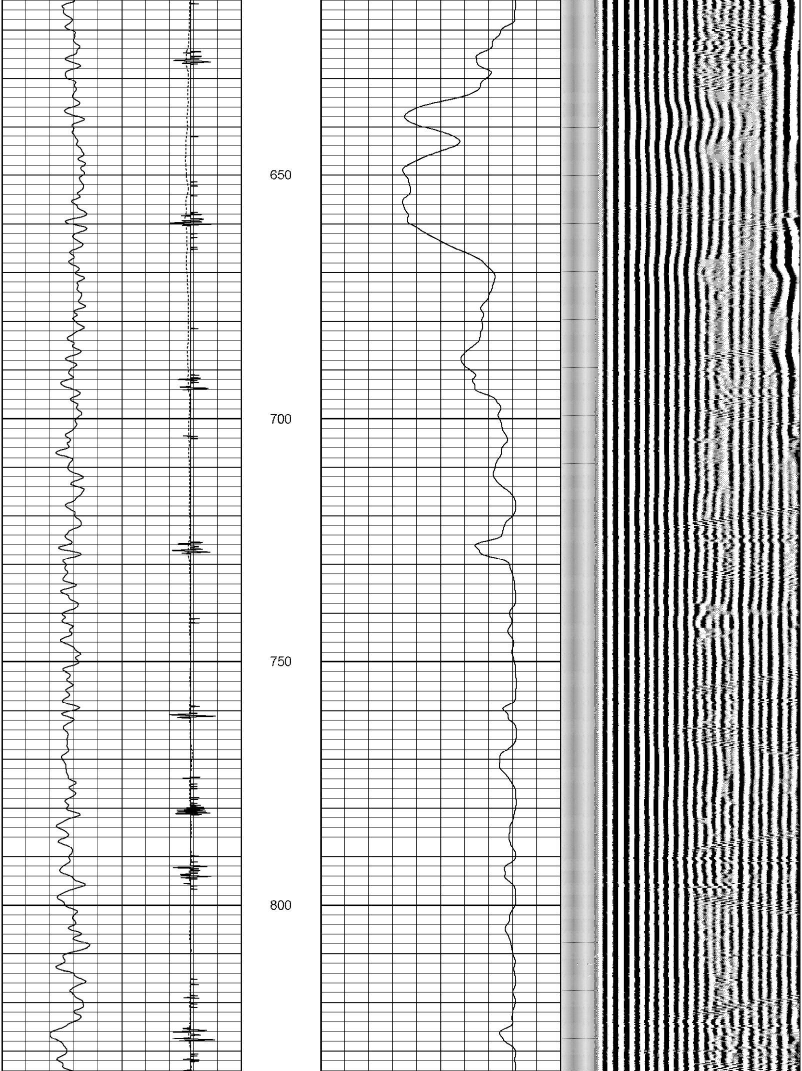
Dataset: bohlender 29-02 cbl.db: field/well/run1/merge1
Total Length: 20.07 ft
Total Weight: 57.00 lb
O.D. 2.00 in

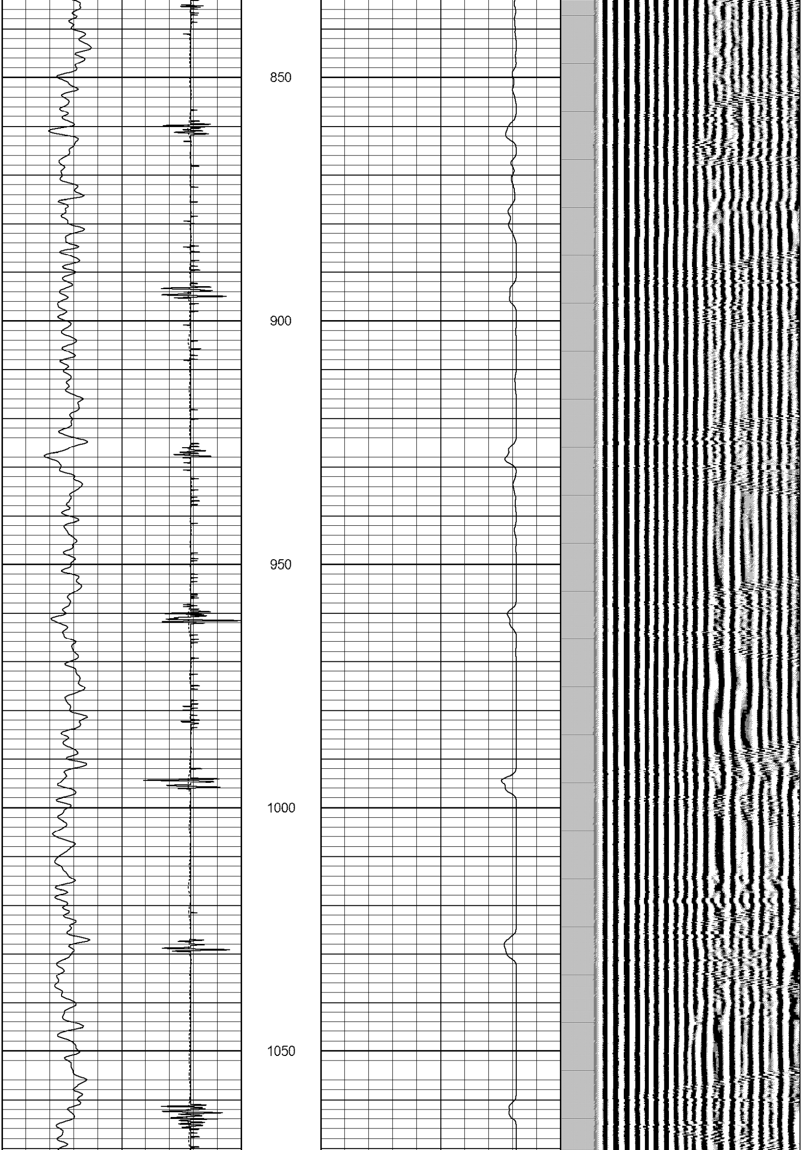
Database File: bohlender 29-02 cbl.db
Dataset Pathname: merge1
Presentation Format: nuexcbl
Dataset Creation: Fri Jan 29 08:52:17 2016
Charted by: Depth in Feet scaled 1:240

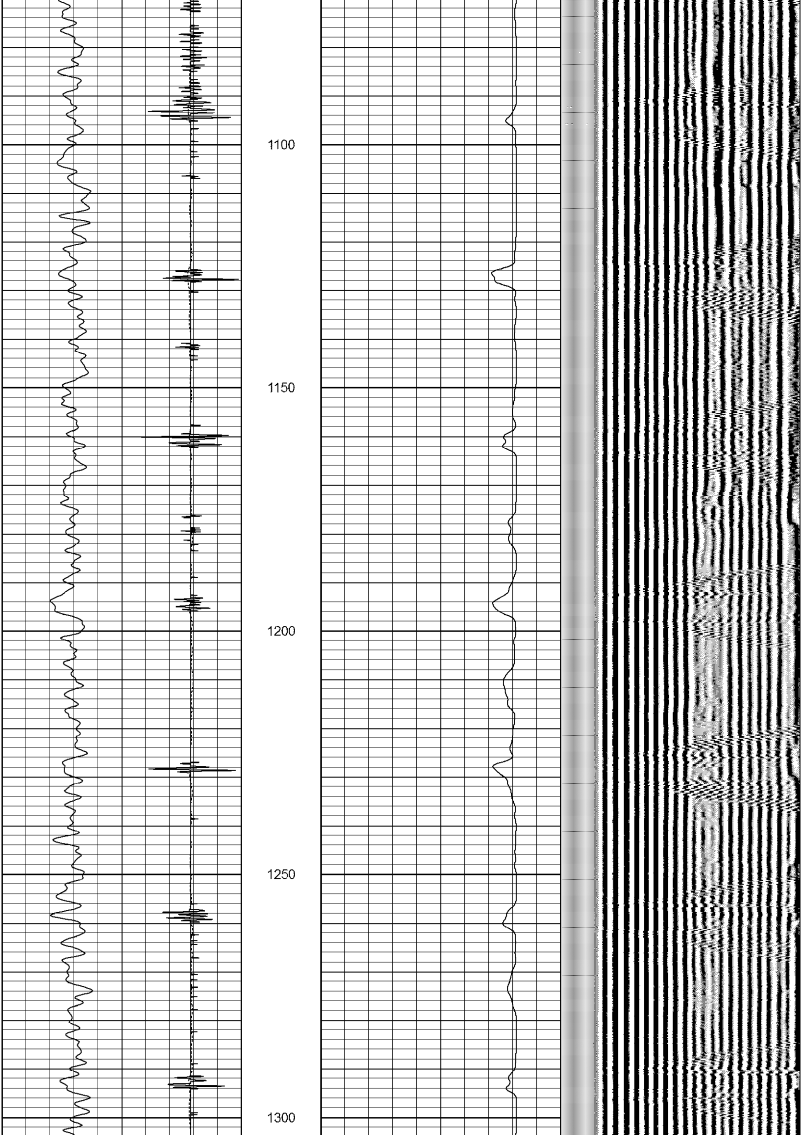


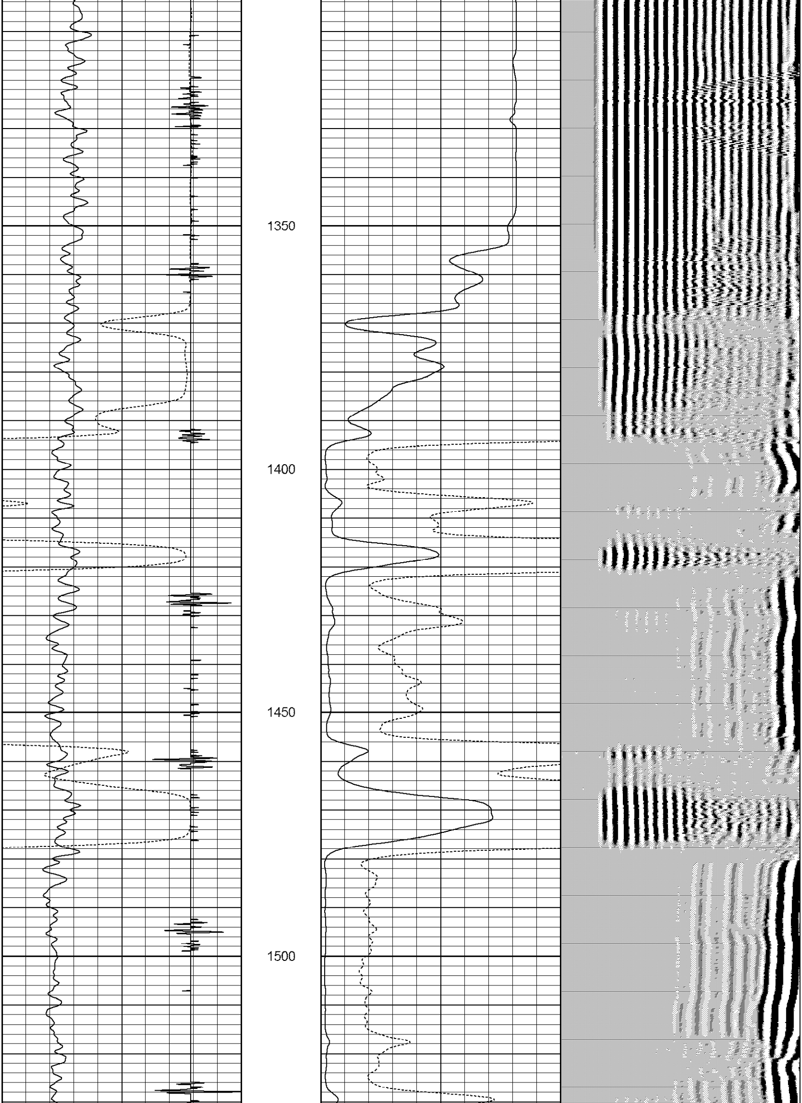


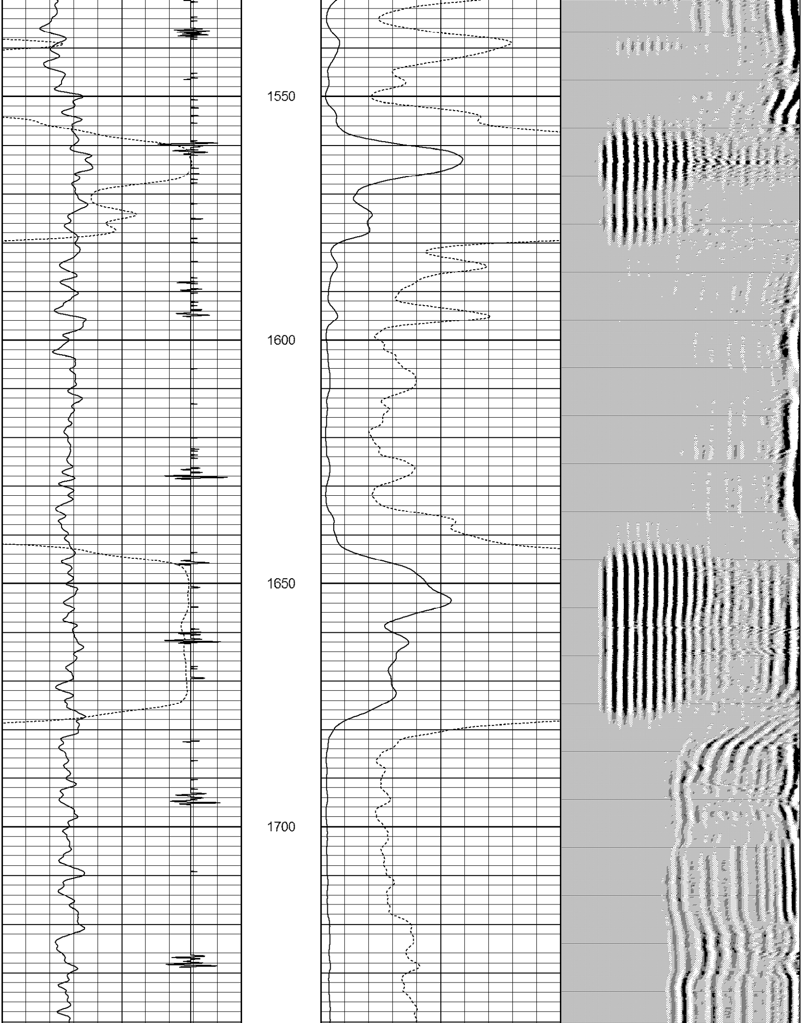


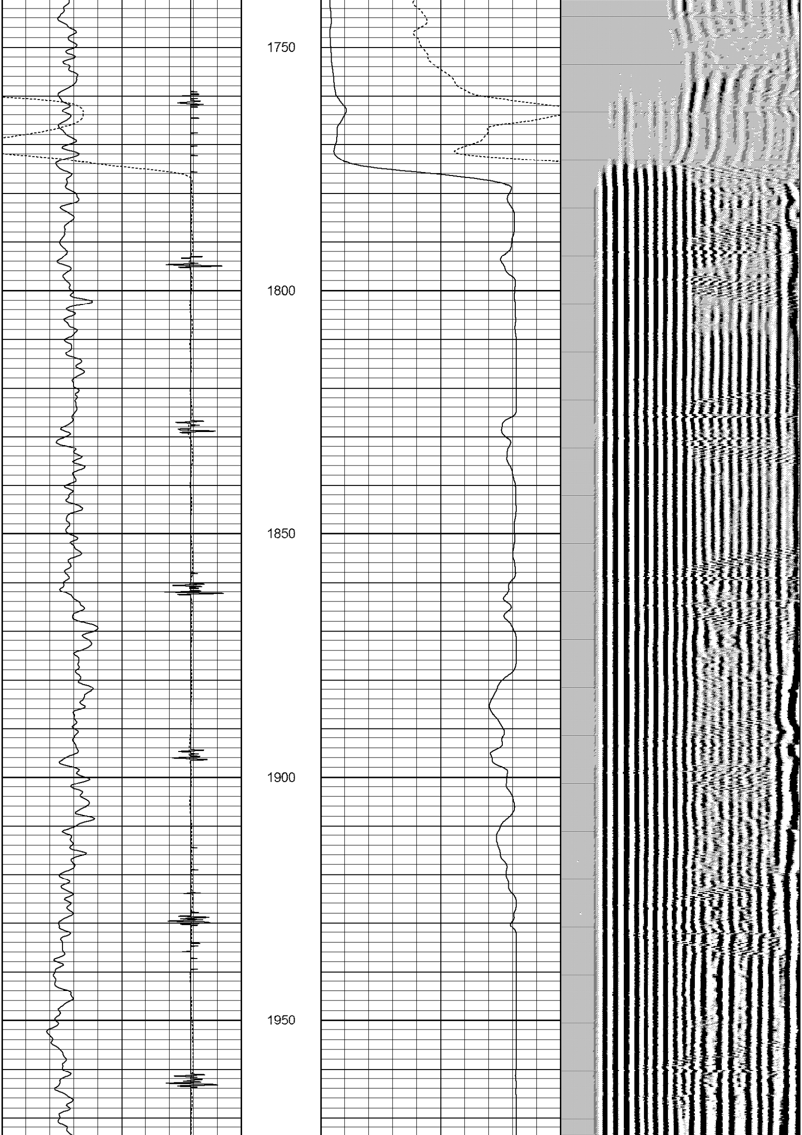


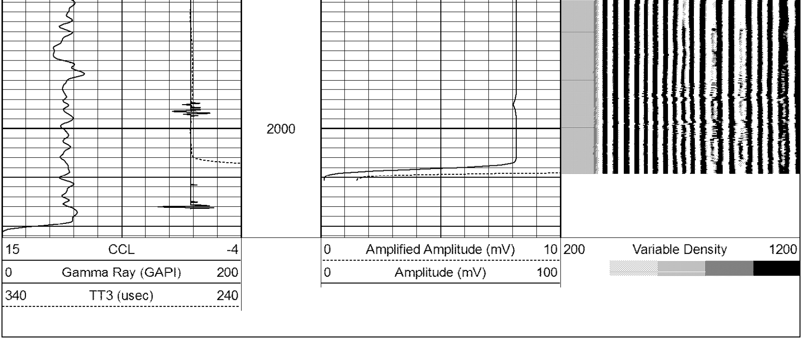












Calibration Report

Database File: bohlender 29-02 cbl.db
Dataset Pathname: pass3
Dataset Creation: Fri Jan 29 07:59:49 2016 by Log 7.0 B1

Gamma Ray Calibration Report

Type / Serial: CCL/GR / FW1406-009

SHOP CALIBRATION Thu Jun 11 13:08:30 2015

	Counts/Sec.	Gain	Offset	Jig	Units
Background	0.0				cps
Calibrator	1.0				cps
		0.7000			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

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

AFTER SURVEY VERIFICATION

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

Cement Bond Log Calibration Report

Serial Number: FW1406-029
Tool Model: Probe
Performed: Fri Jan 29 07:47:38 2016

Depth:	955.708	ft
Casing Diameter:	4.5	in

	3' Spacing	5' Spacing	
Signal Zero:	1.5	0	mV
Calibrated Amplitude:	81.1961	81.1961	mV
Reading at Signal Zero:	0	0	V
Reading in Free Pipe:	2.48459	2.42285	V
Gain:	32.0761	33.5126	
Offset:	1.5	0	