SUPERIOR WELL SERVICES

CEMENT BOND LOG
GAMMA RAY C C L
V D L

Company Noble Energy INC.
Well SHERWOOD L30-29D
Field Wattenberg
County Weld
State Colorado

Company	Noble Energy INC.
Well	SHERWOOD L30-29D
Field	Wattenberg
County	Weld
	State Colorado

Location: API # : 051233113500

SHL: 721' FNL & 783' FWL NW NW
BHL: 45' & 1388' FWL NE NW

SEC 30 TWP 3N RGE 66W

Other Services

Permanent Datum	GL	Elevation	4820
Log Measured From	KB 15'		
Drilling Measured From	KB		

Elevation
K.B. 4835
D.F. 4834
G.L. 4820

Date	December 13, 2010		
Run Number	One		
Depth Driller	8095		
Depth Logger	8012		
Bottom Logged Interval	8011		
Top Log Interval	800		
Casing Size	4 1/2"		
Type Fluid	Water		
Max. Recorded Temp.	260 deg F		
Estimated Cement Top	1510		
Time Well Ready	Mast Truck		
Time Logger On Bottom	AM		
Unit Number	3344		
Tool Size / ID Number	1 11/16 Tool 1 RED		
Location	Platteville, CO		
Recorded By	K. Monaghan		
Witnessed By	M. Trimble		

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

Casing Record	Size	Wgt/Ft	Top	Bottom
Surface String				
Prot. String				
Production String	4 1/2"	11.6 lb/ft M-80	Surface	8083
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 Superior Well Services!!!
API# 05-123-31135-00
Correlated to P.S.I's
Compensated Density / Compensated Neutron / Gamma Ray MIcrolog
Dated: November 20th, 2010
Second well from West. East of SHERWOOD L30-30D

Database File:	cblsherwood l30-29d.db
Dataset Pathname:	pass5
Presentation Format:	nuexcbl
Dataset Creation:	Mon Dec 13 07:08:24 2010 by Log Std Casedhole 10081
Charted by:	Depth in Feet scaled 1:240

17 CCL -0.9

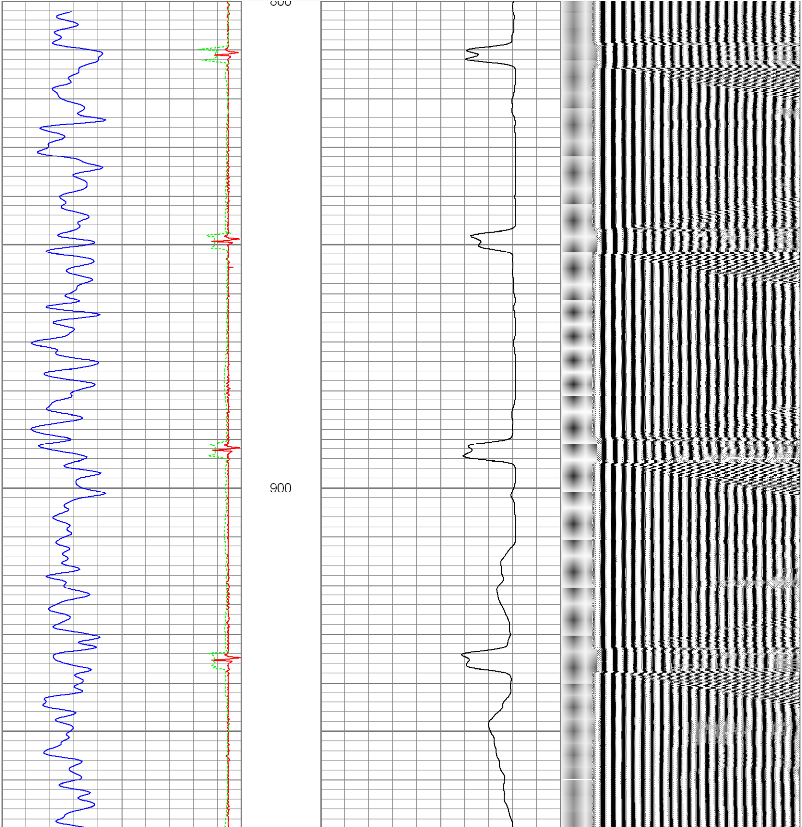
0 Gamma Ray (GAPI) 100

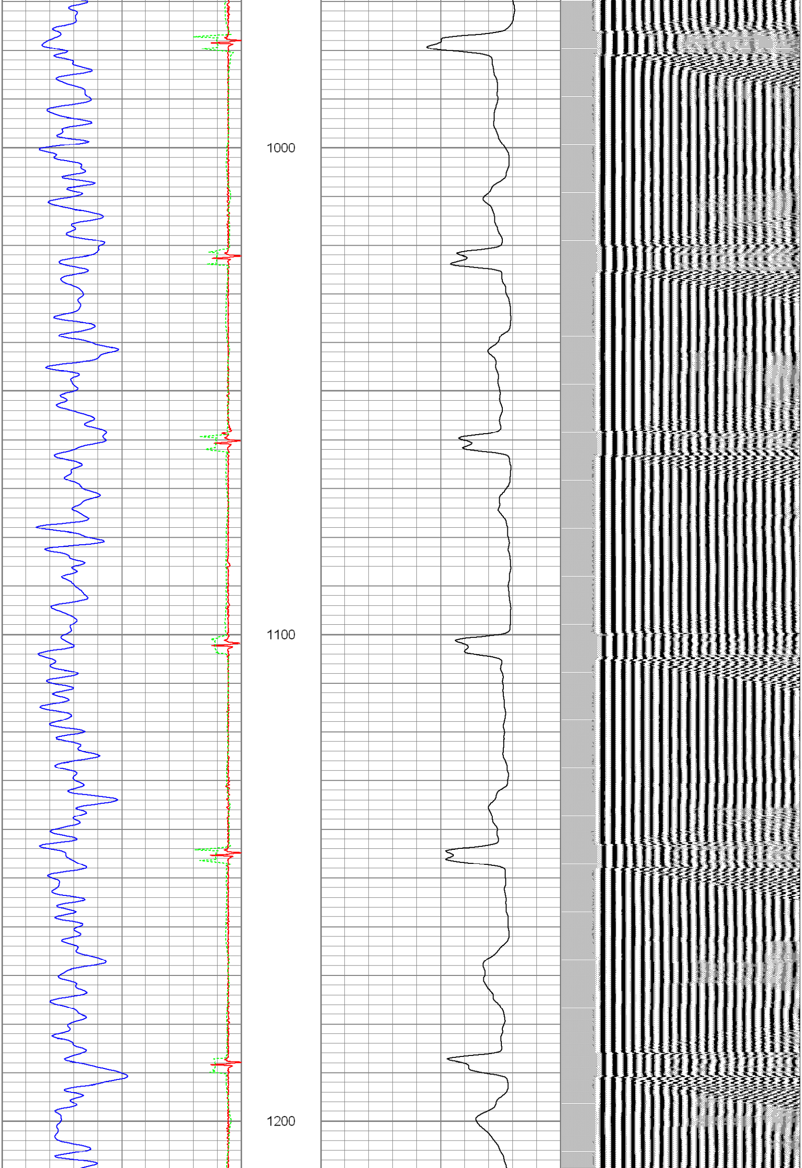
340 TT3 (usec) 240

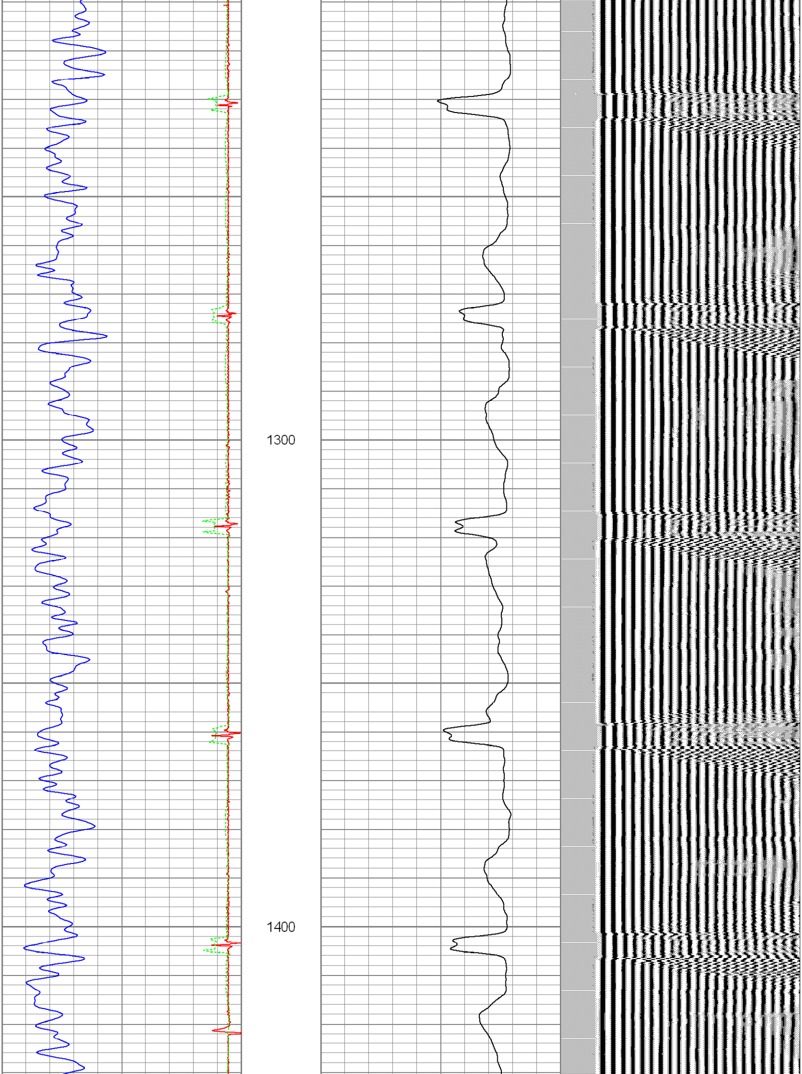
0 Amplified Amplitude (mV) 30

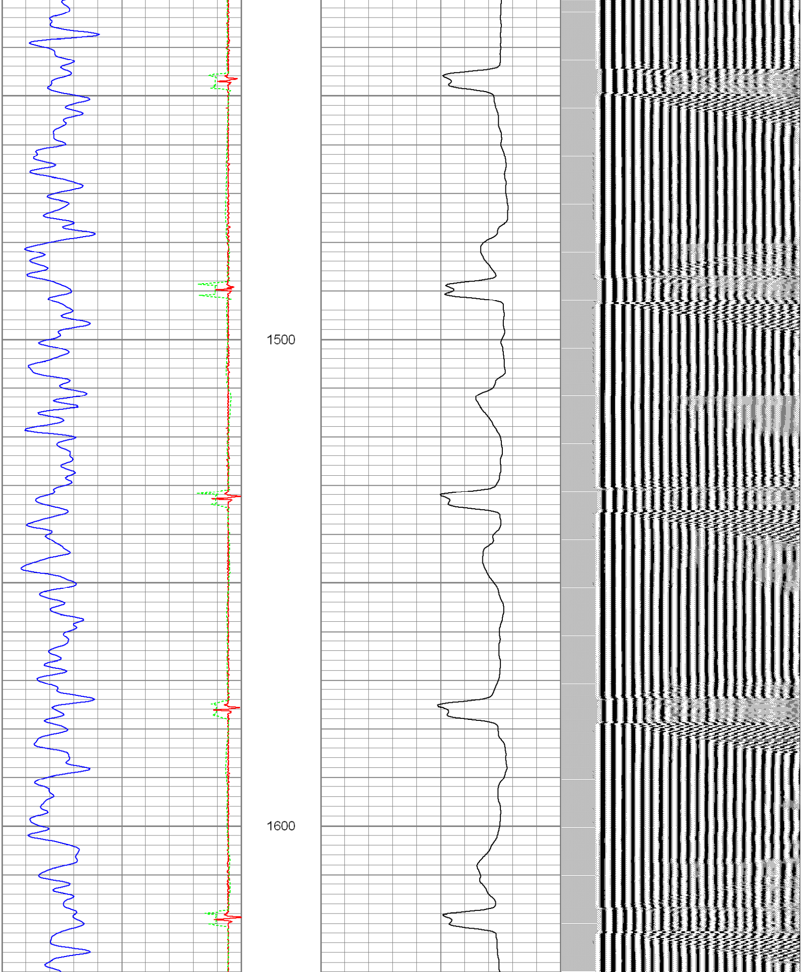
0 Amplitude (mV) 100

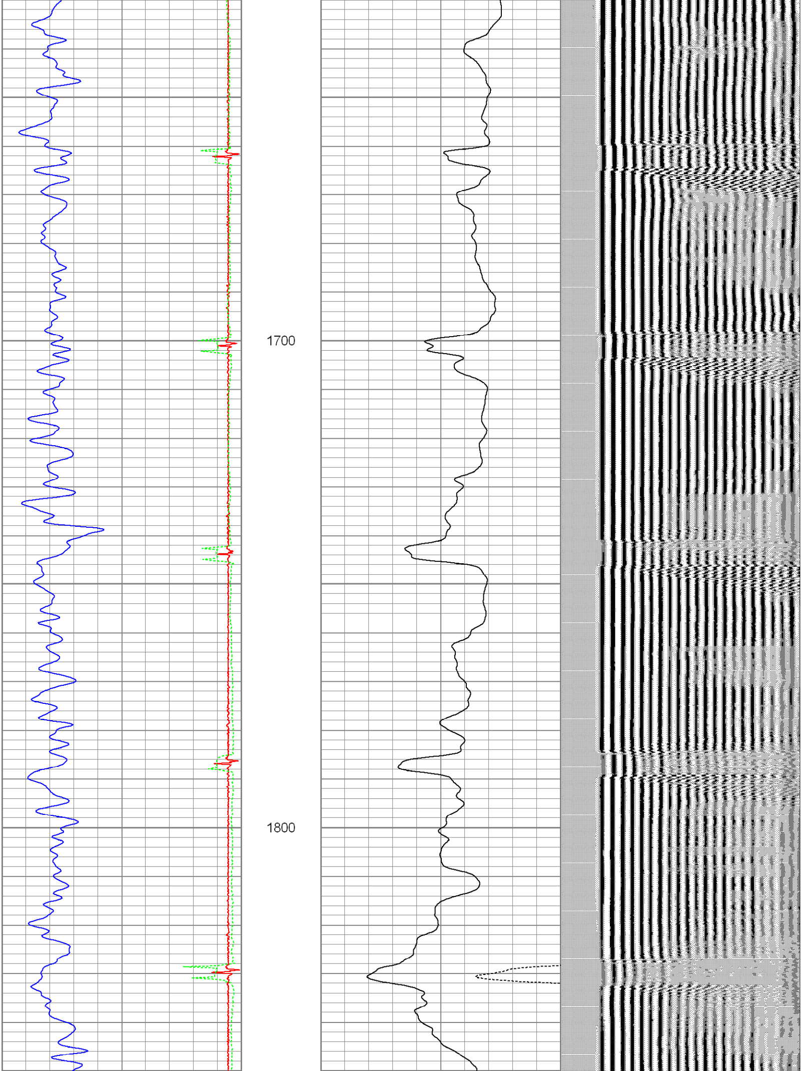
200 Variable Density 1200

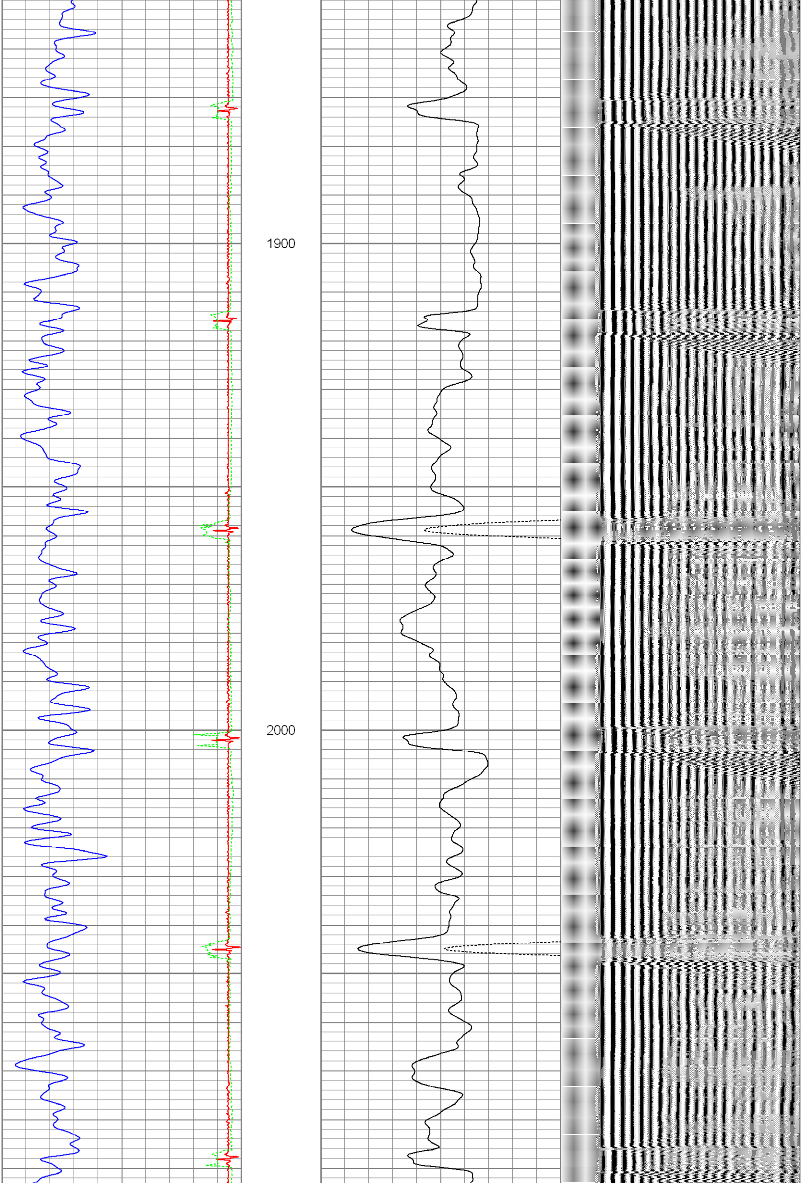


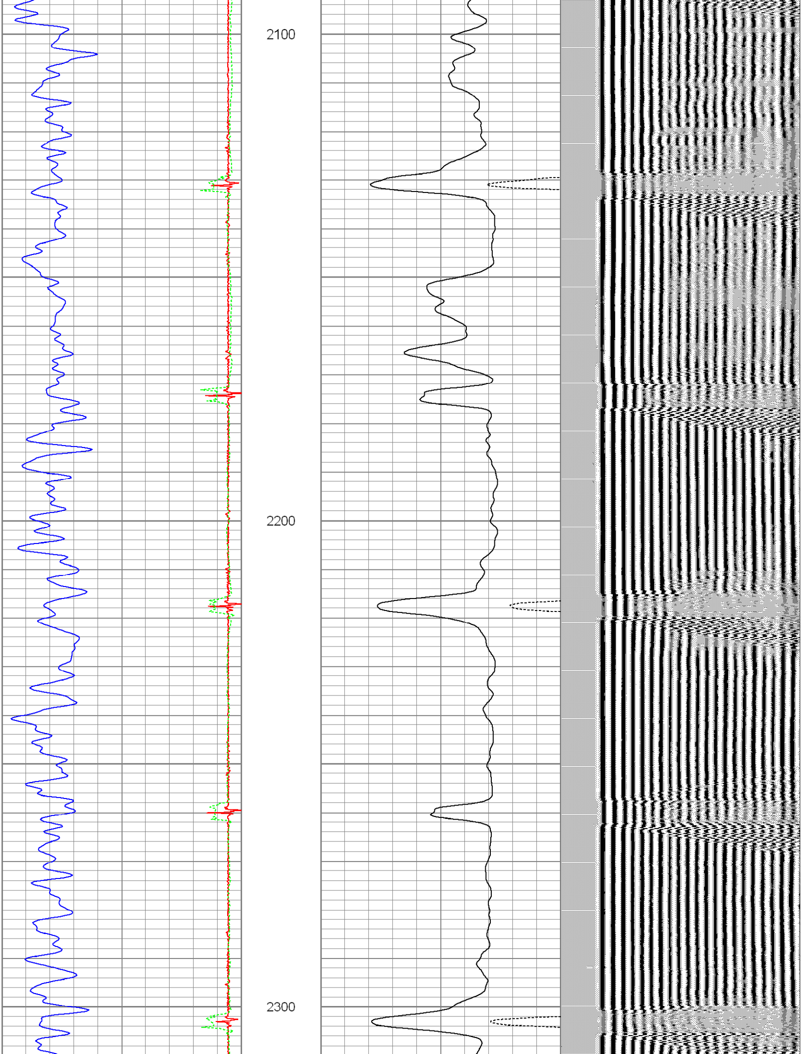


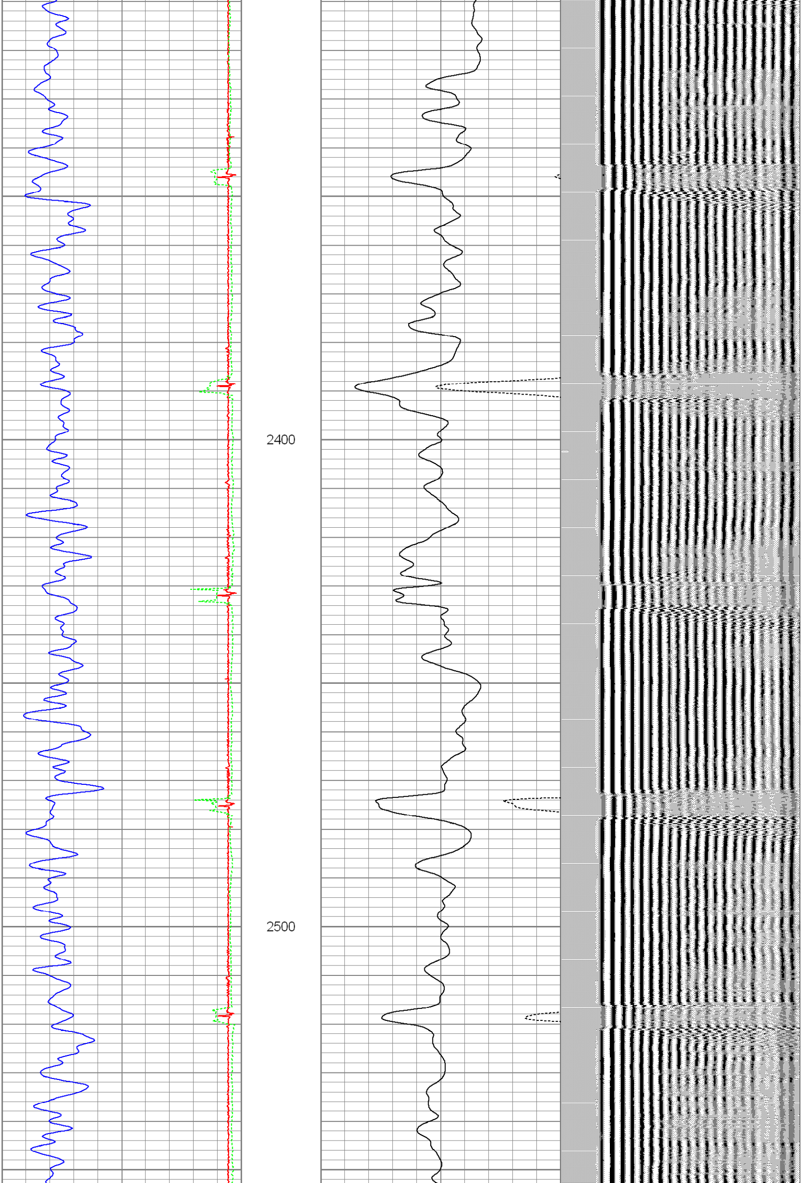


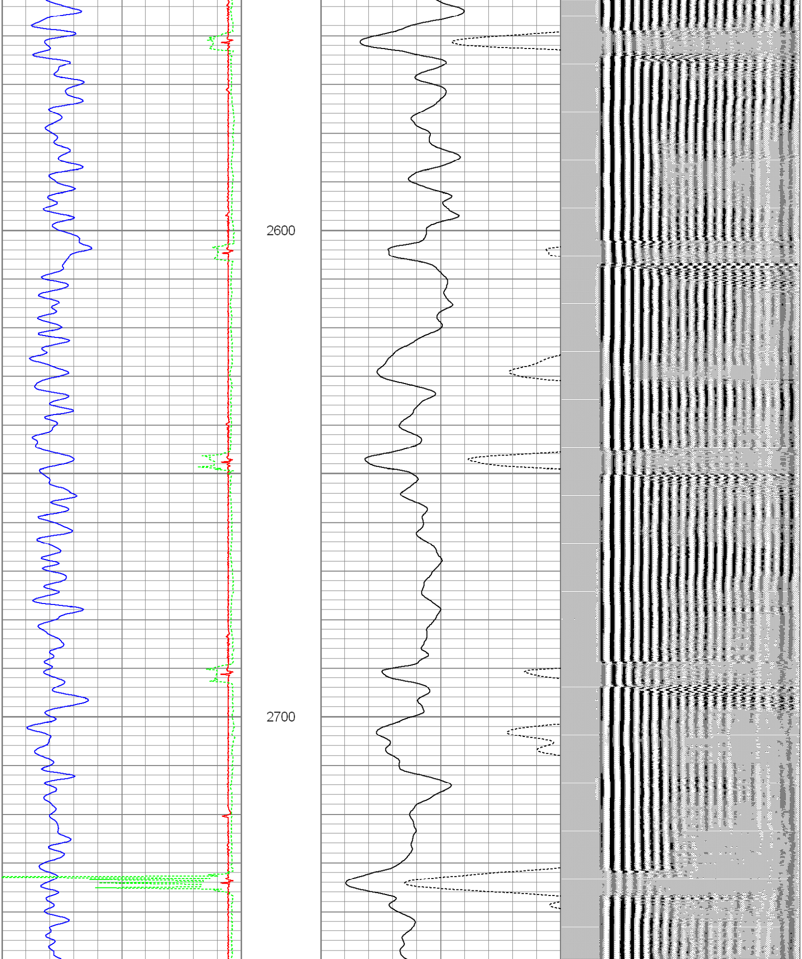


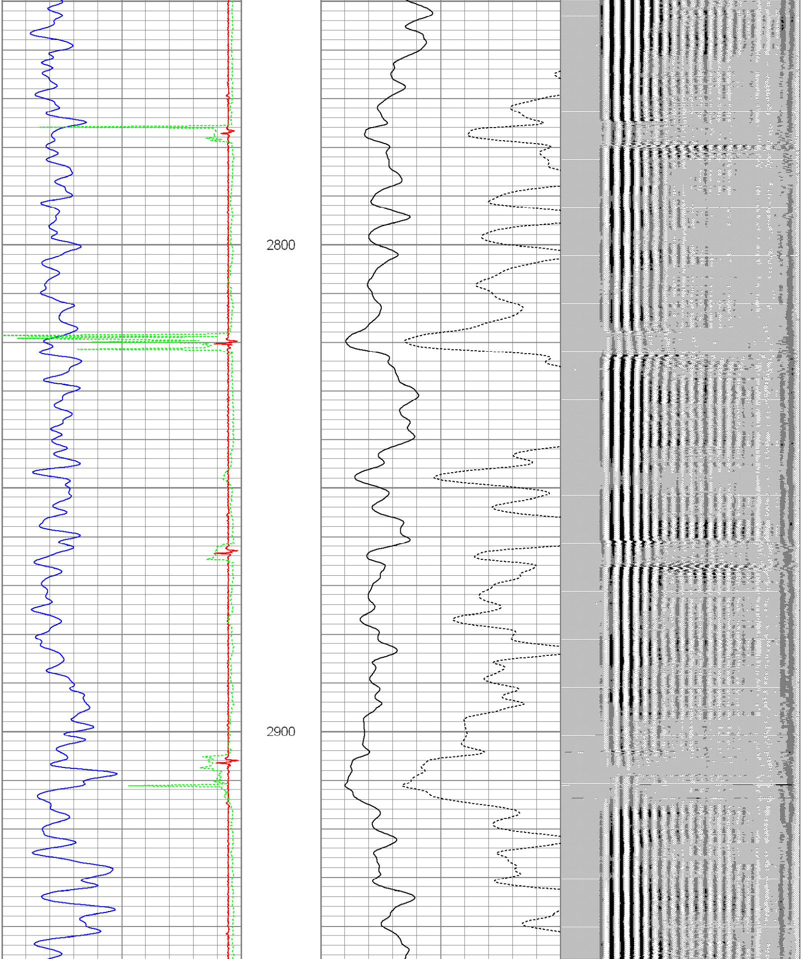


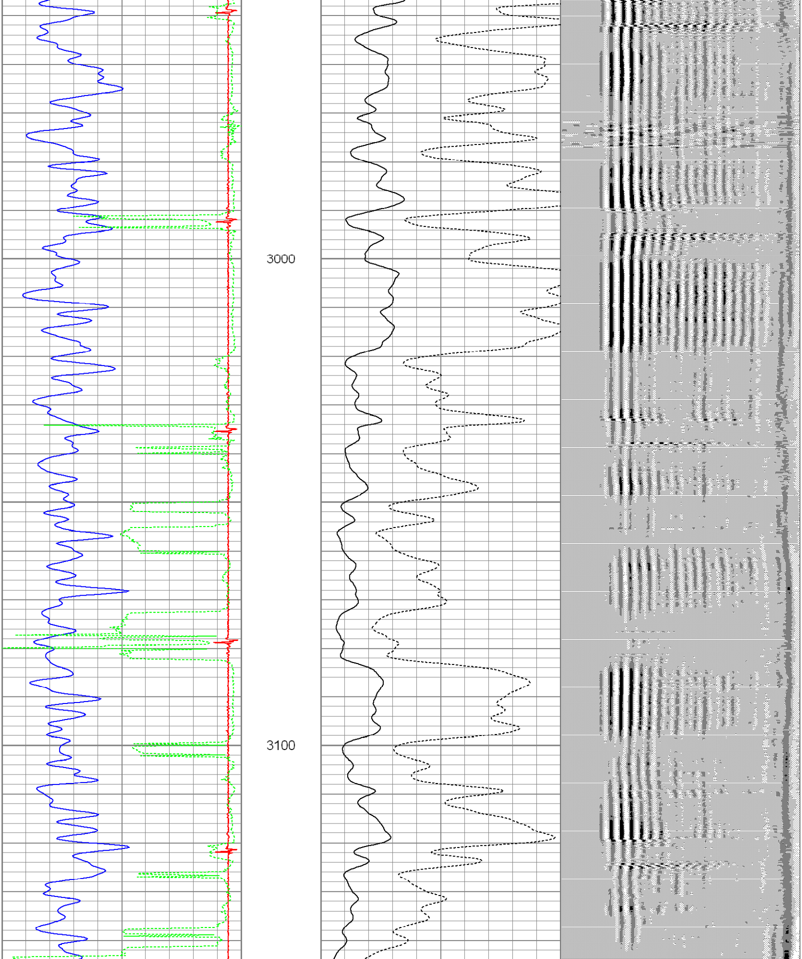


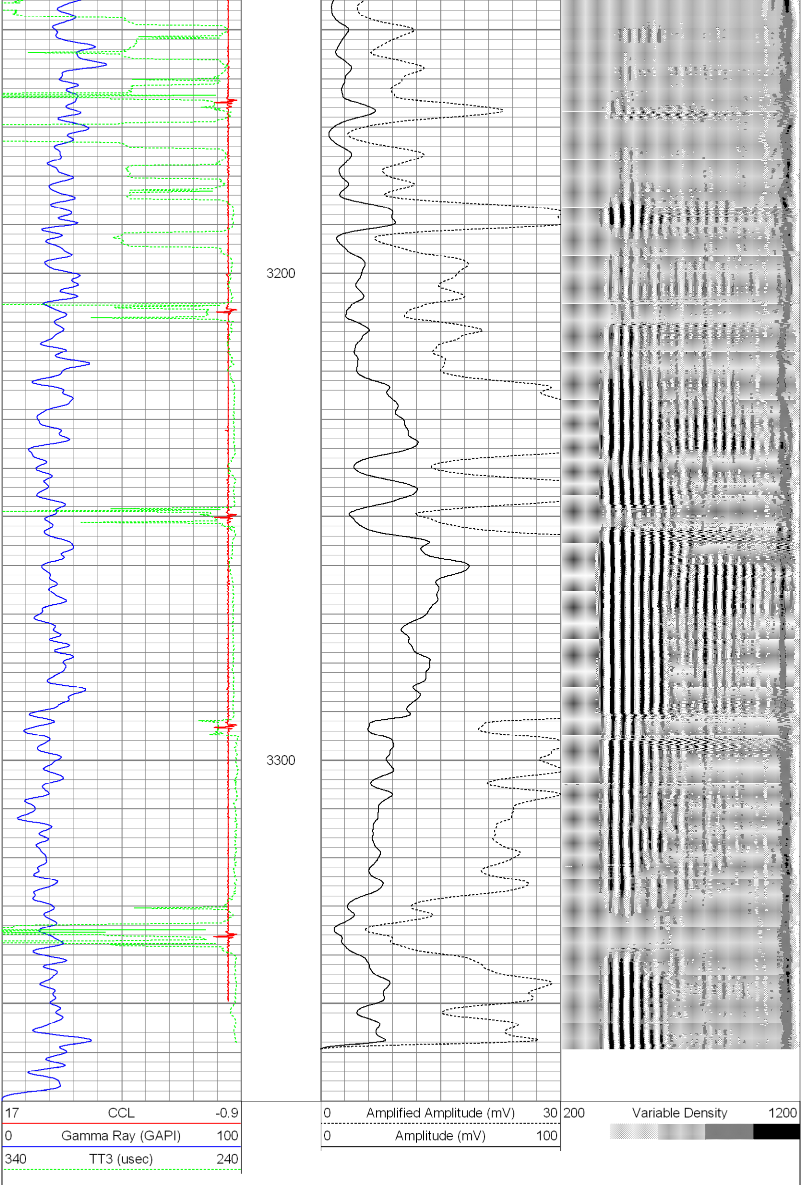












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Dataset Pathname:	pass4
Presentation Format:	nuexcbl
Dataset Creation:	Mon Dec 13 06:54:00 2010 by Log Std Casedhole 10081
Charted by:	Depth in Feet scaled 1:240

17 CCL -0.9

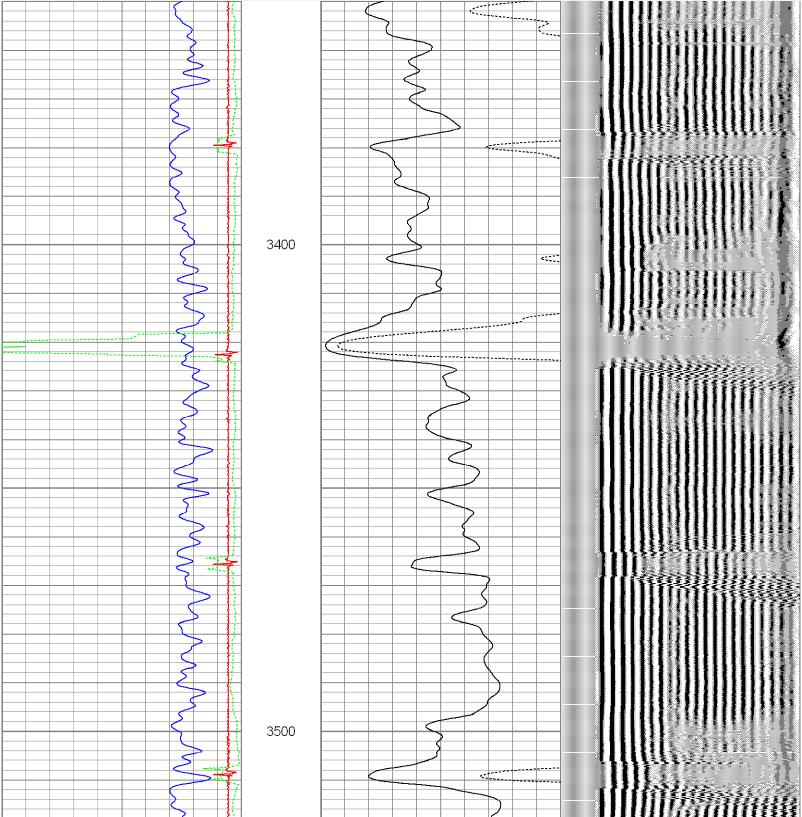
30 Gamma Ray (GAPI) 130

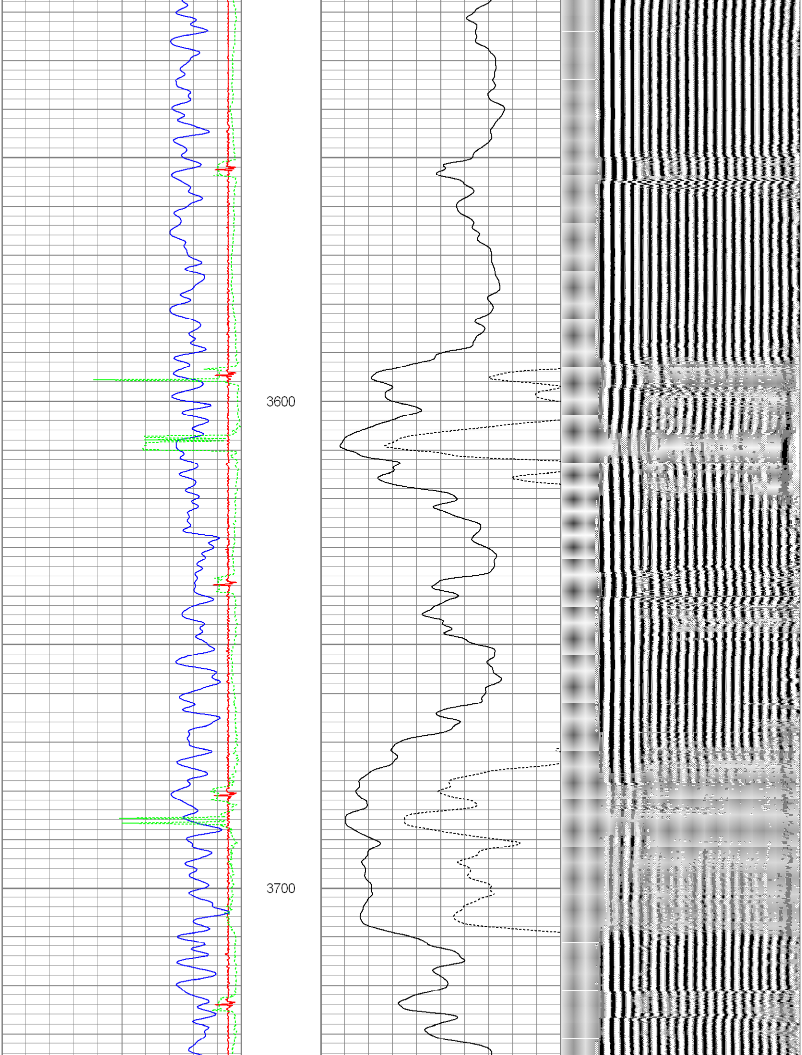
340 TT3 (usec) 240

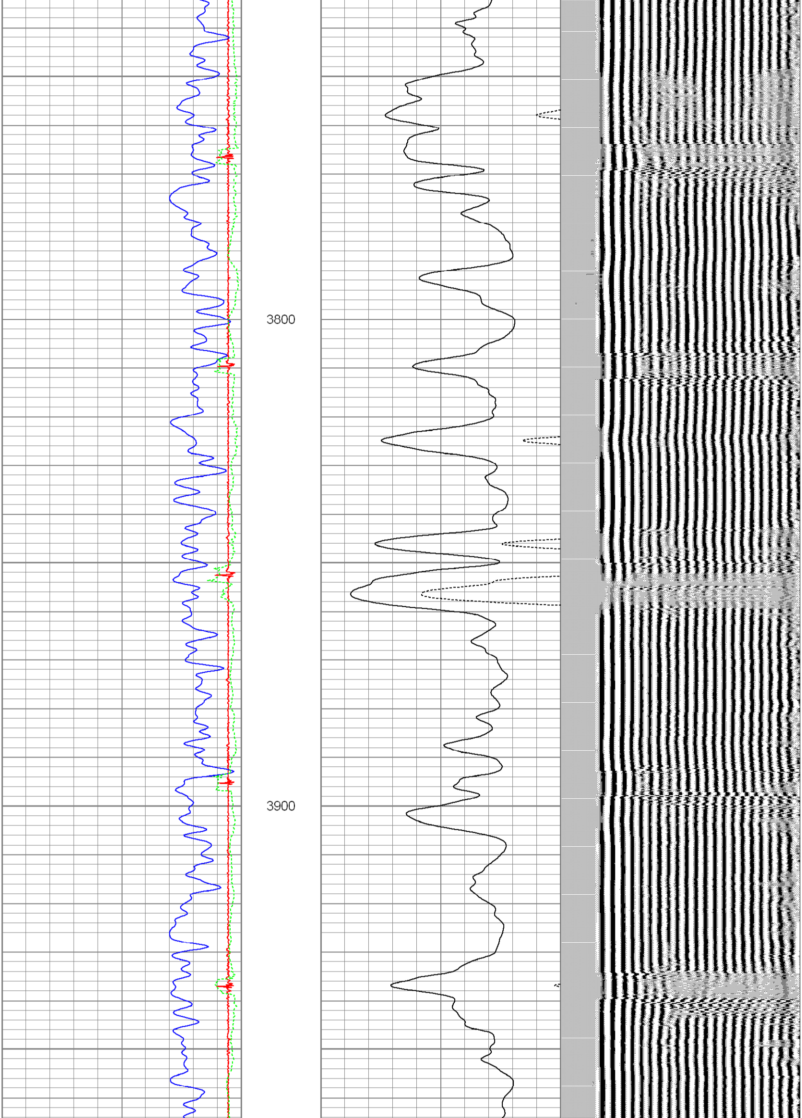
0 Amplified Amplitude (mV) 30

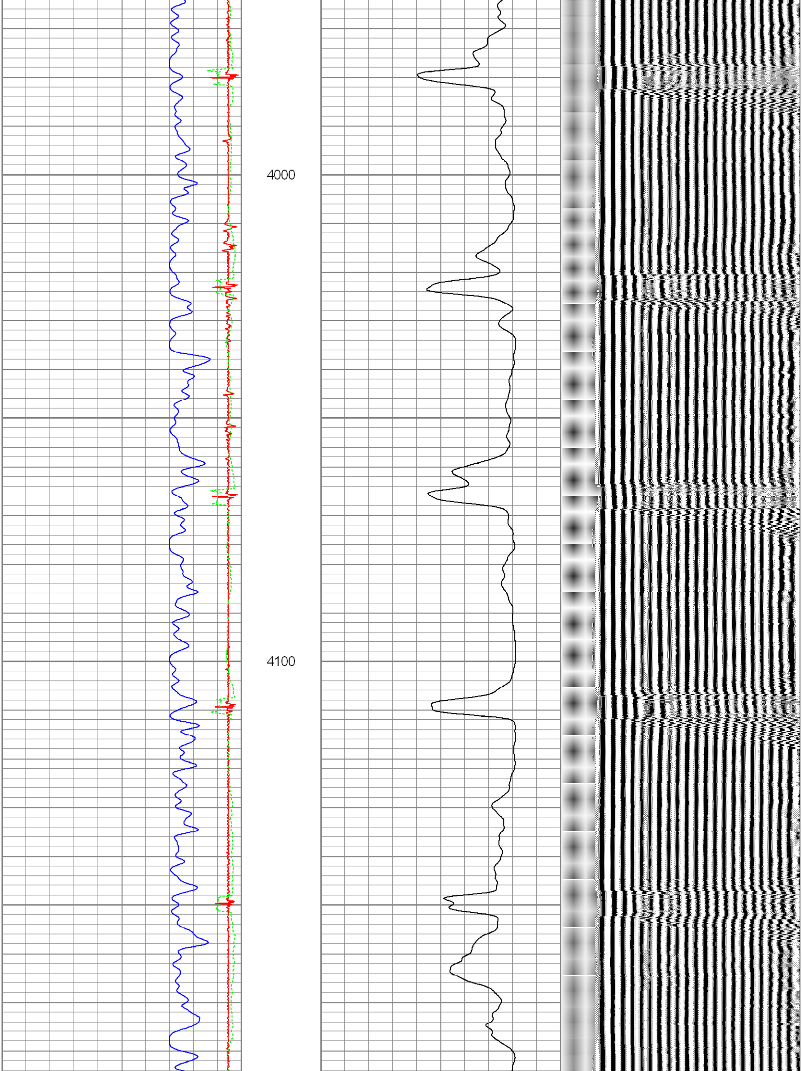
0 Amplitude (mV) 100

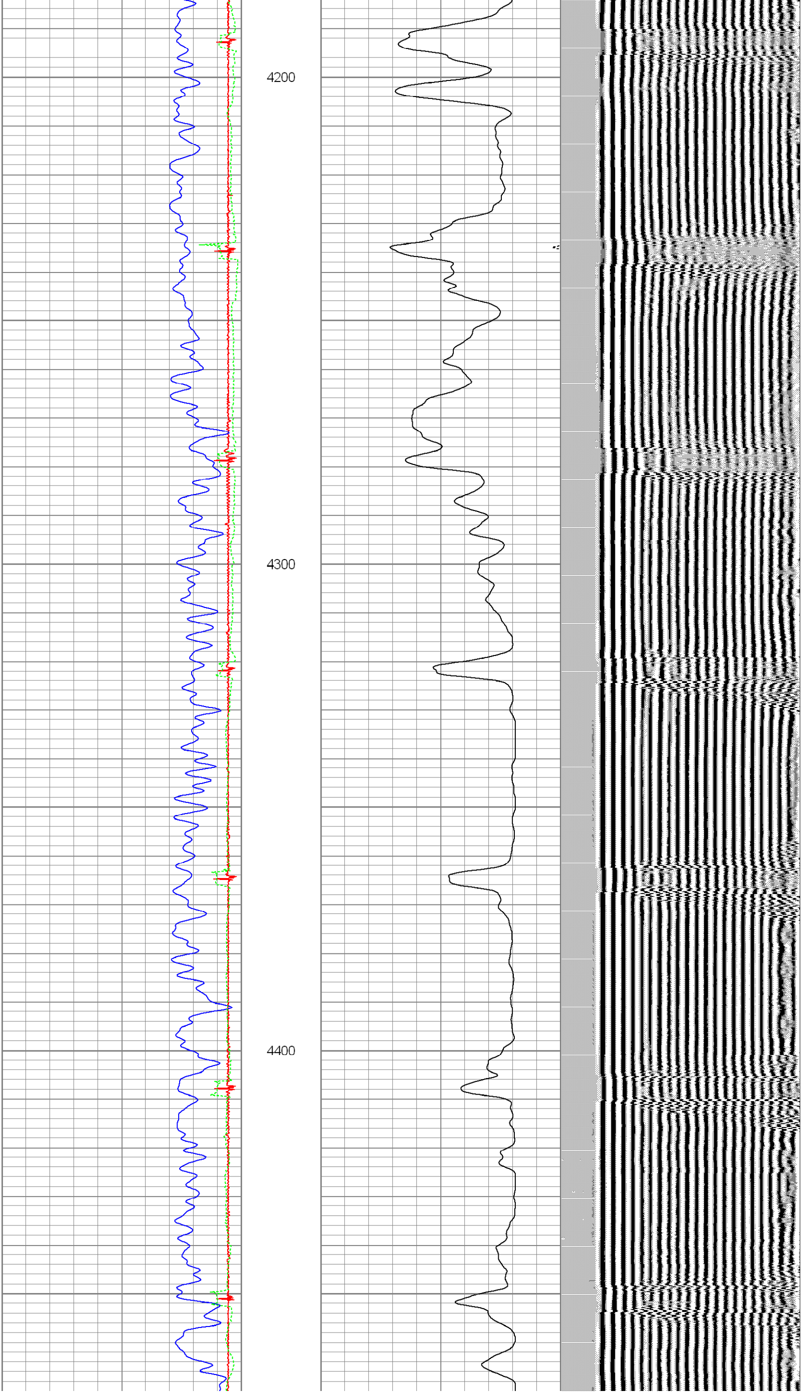
200 Variable Density 1200

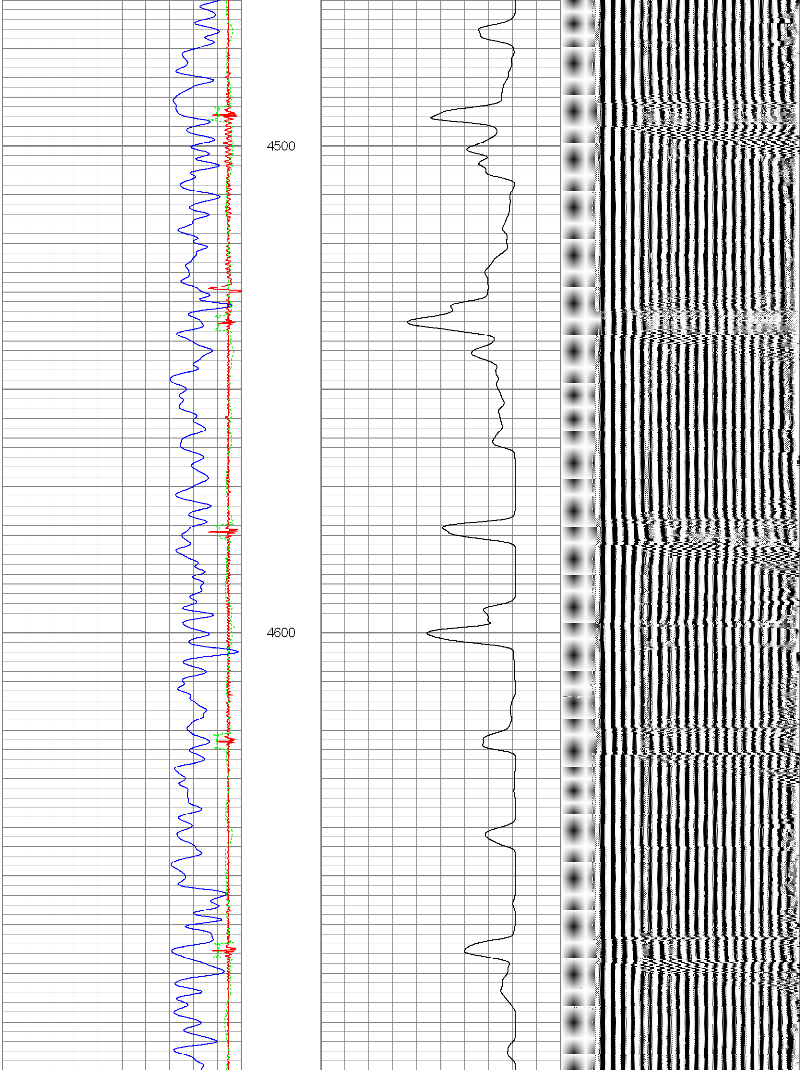


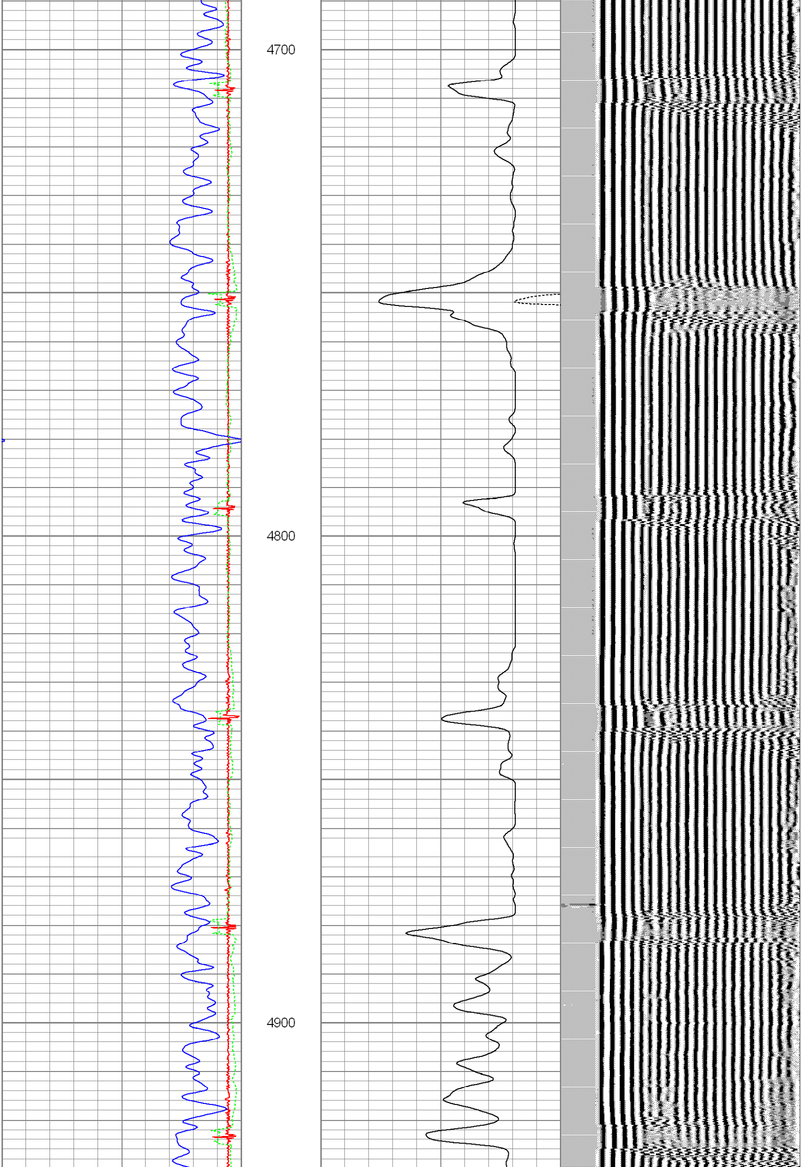


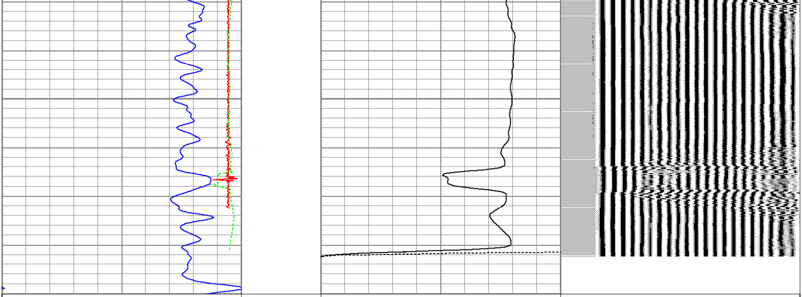








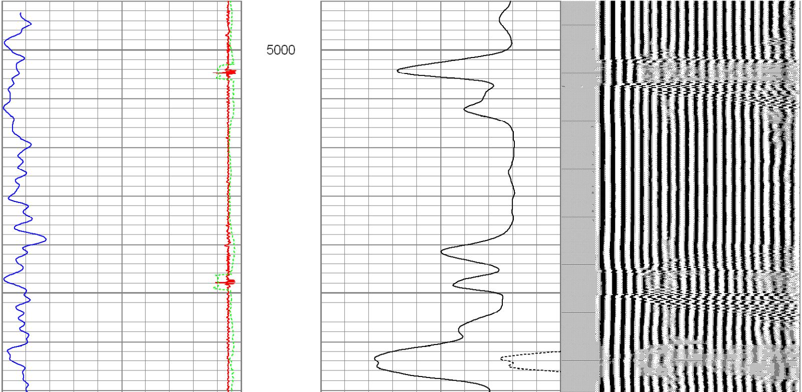


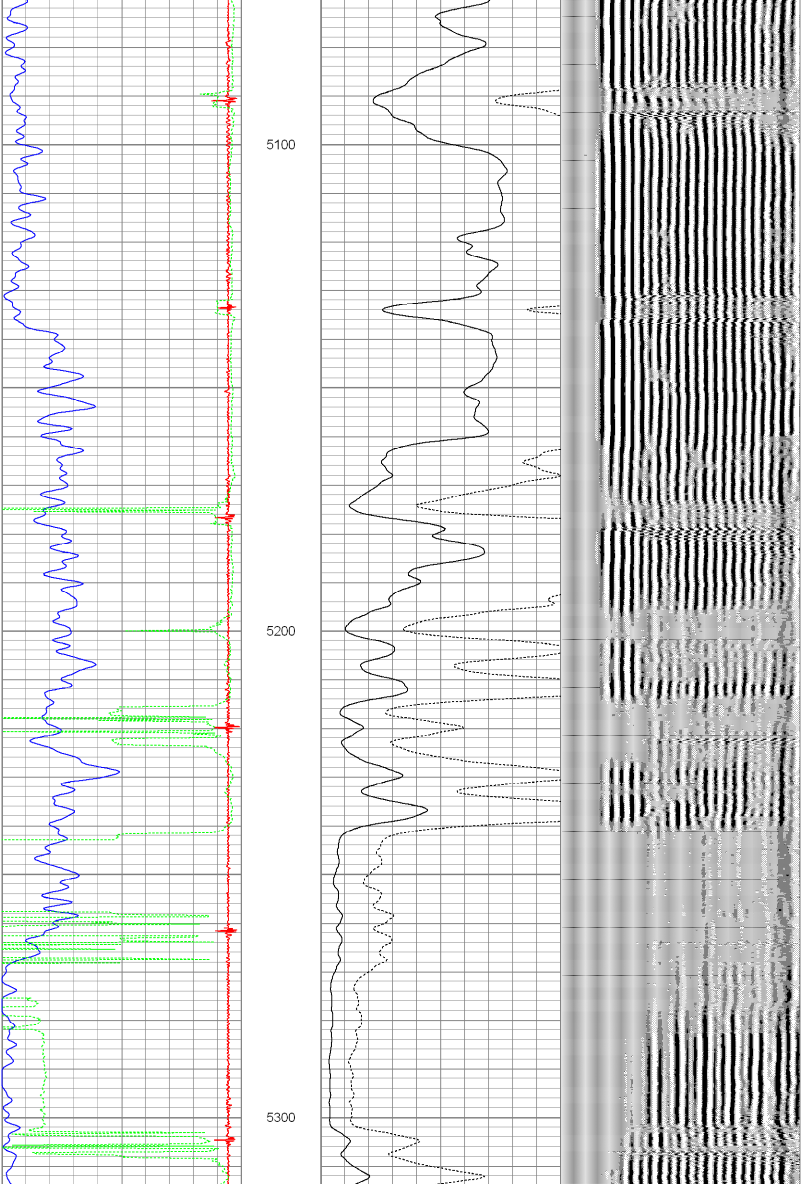


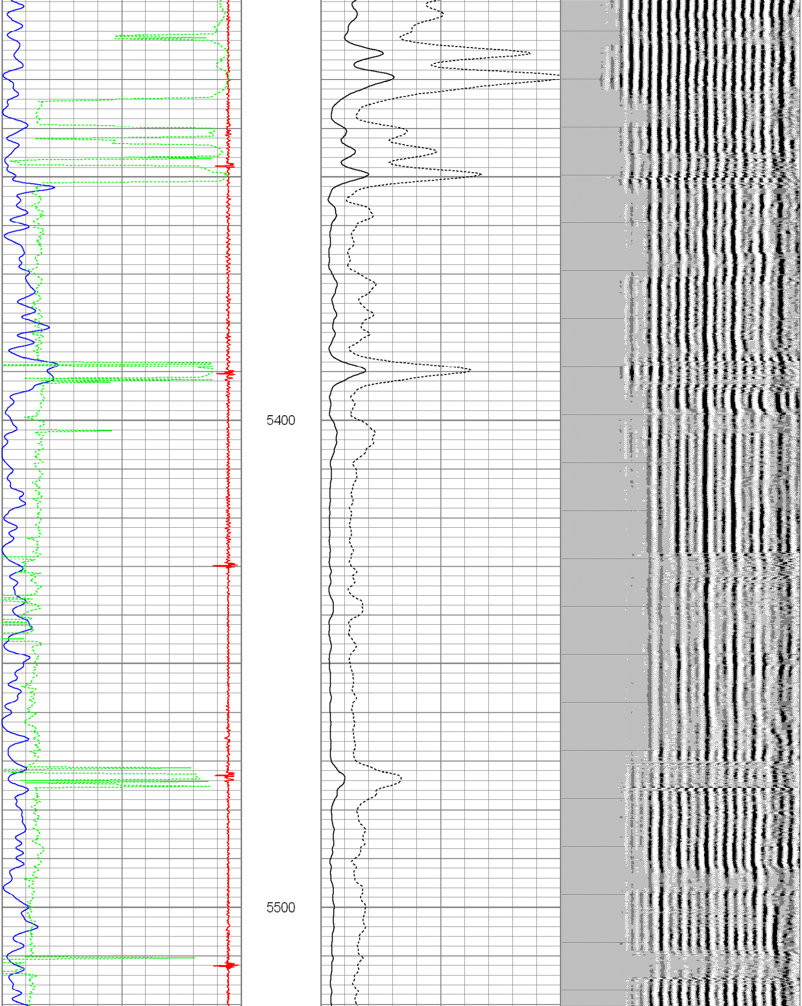
17	CCL	-0.9	0	Amplified Amplitude (mV)	30	200	Variable Density 1200
30	Gamma Ray (GAPI)	130	0	Amplitude (mV)	100		
340	TT3 (usec)	240					

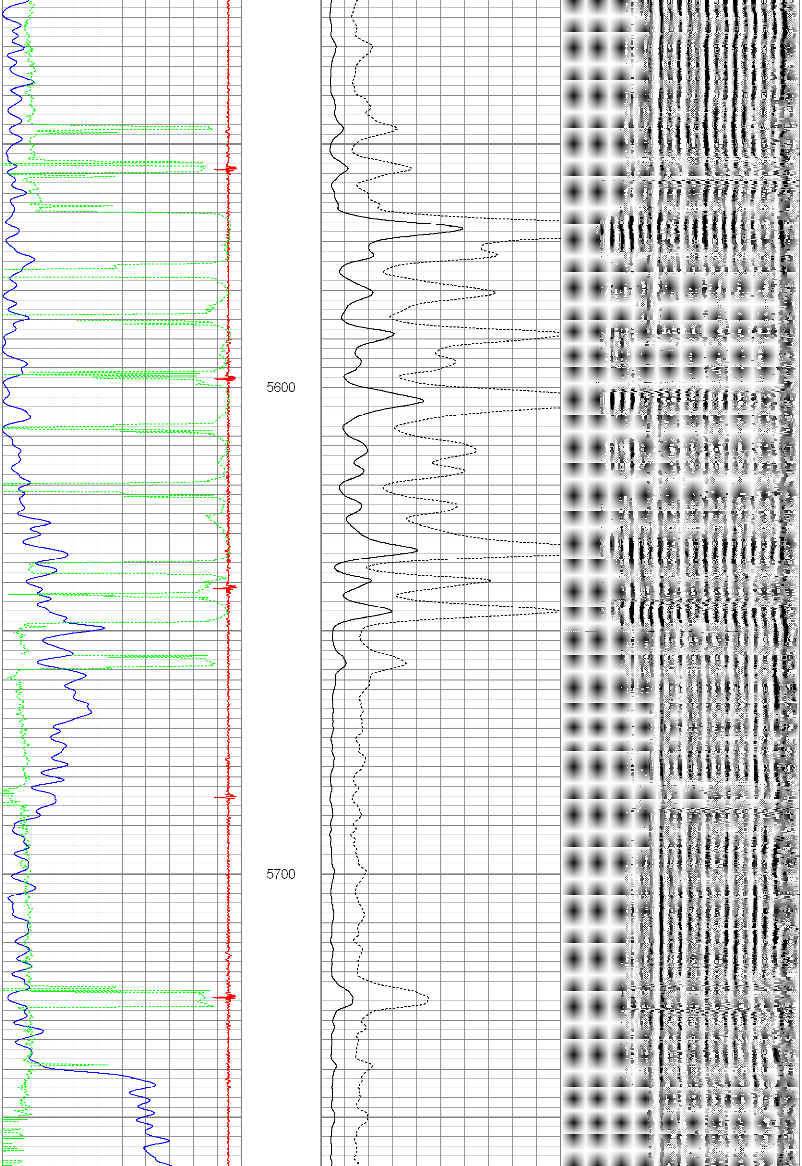
Database File: cblsherwood l30-29d.db
Dataset Pathname: pass3
Presentation Format: nuexcbl
Dataset Creation: Mon Dec 13 06:29:58 2010 by Log Std Casedhole 10081
Charted by: Depth in Feet scaled 1:240

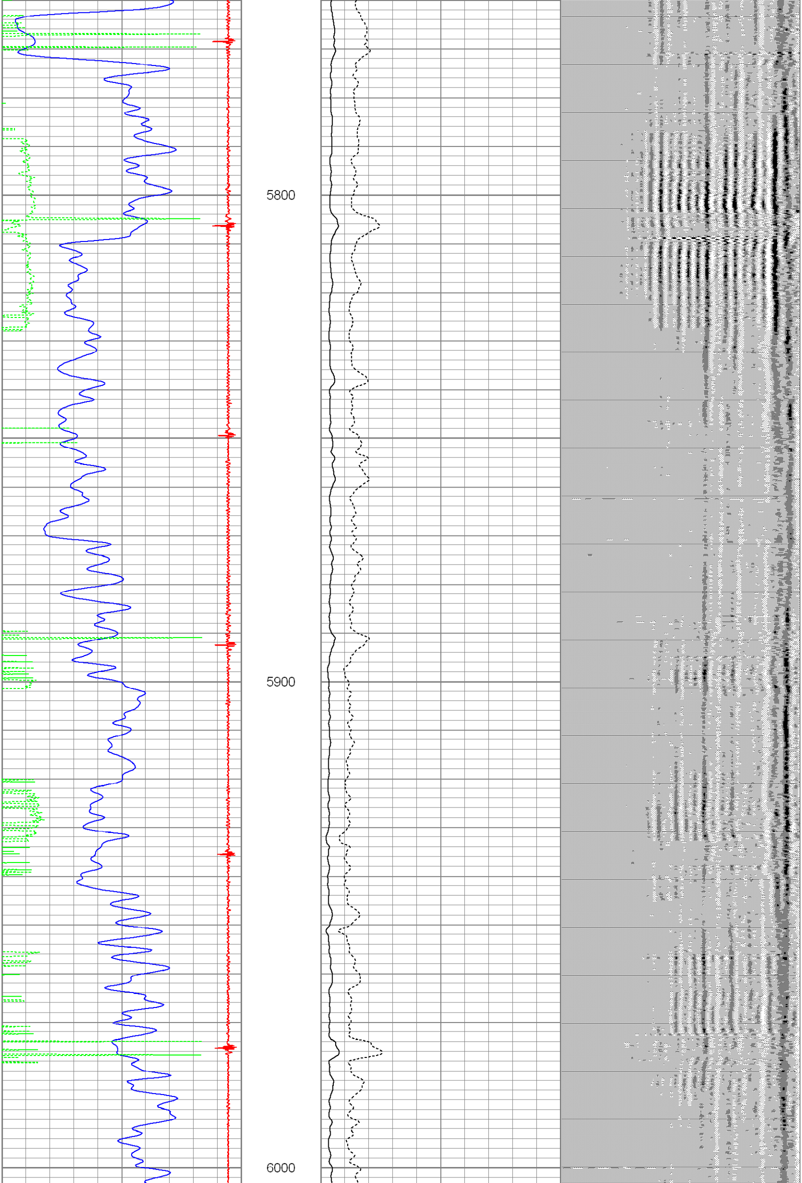
17	CCL	-0.9	0	Amplified Amplitude (mV)	30	200	Variable Density 1200
0	Gamma Ray (GAPI)	150	0	Amplitude (mV)	100		
340	TT3 (usec)	240					

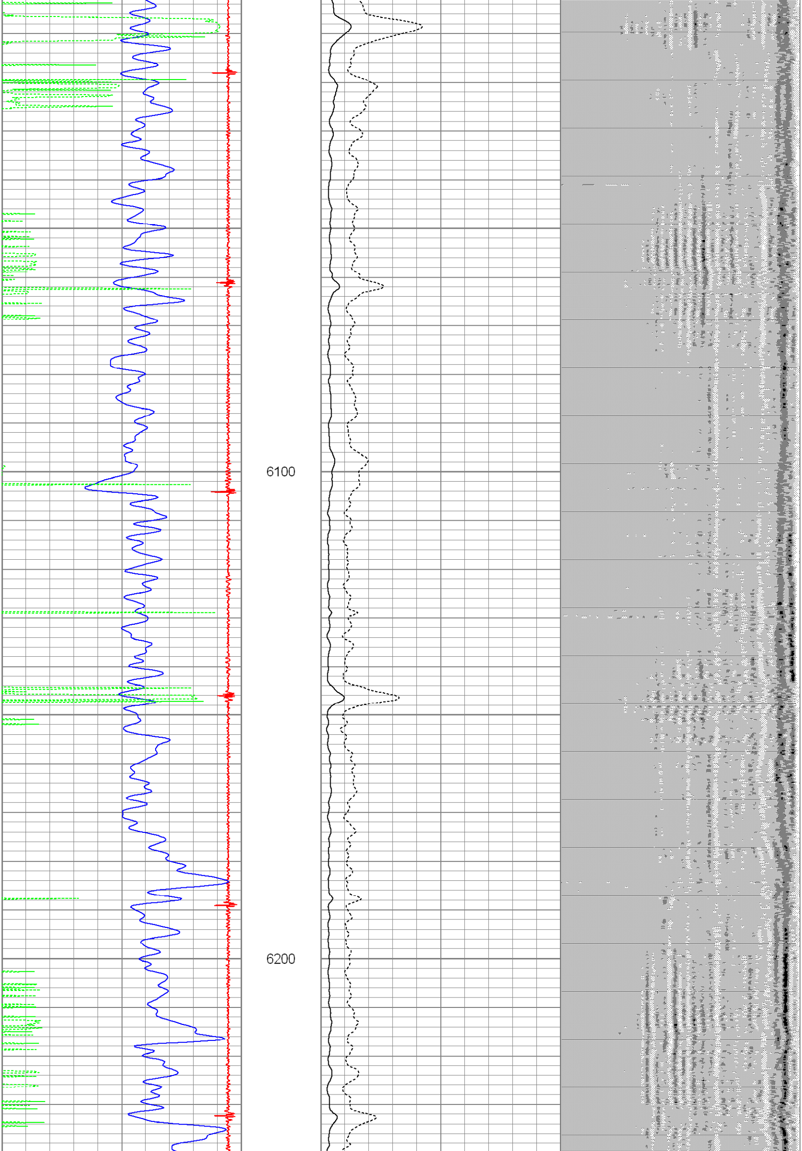


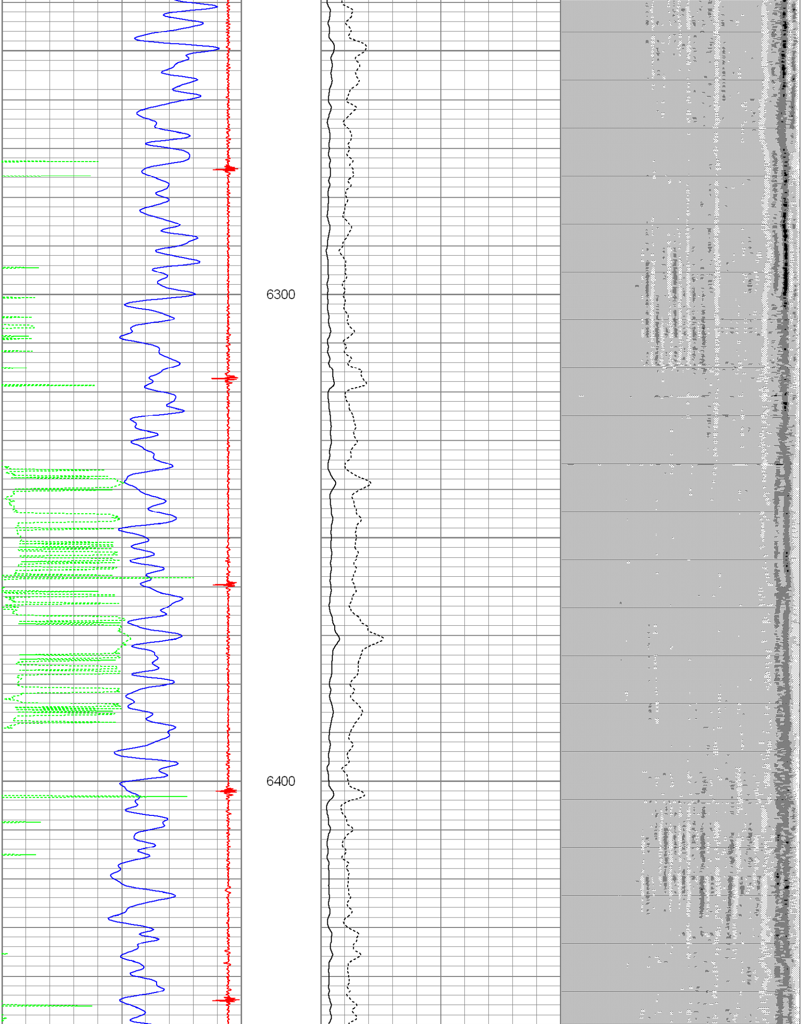


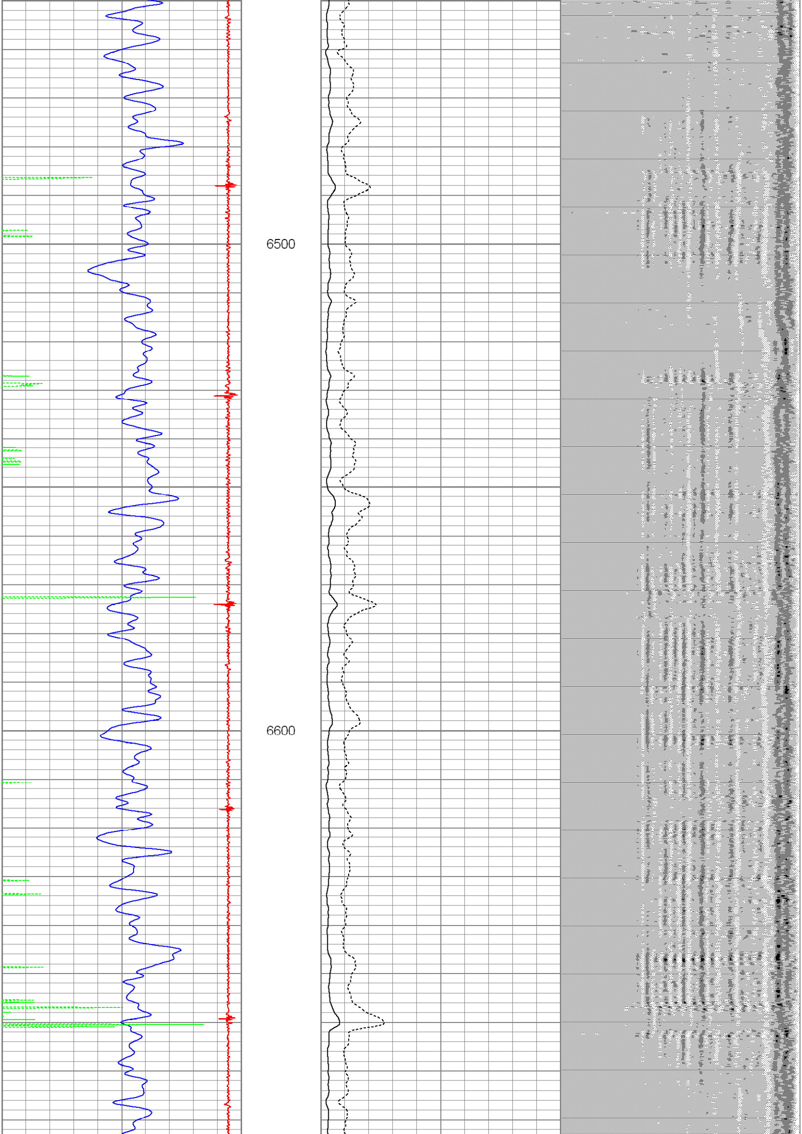


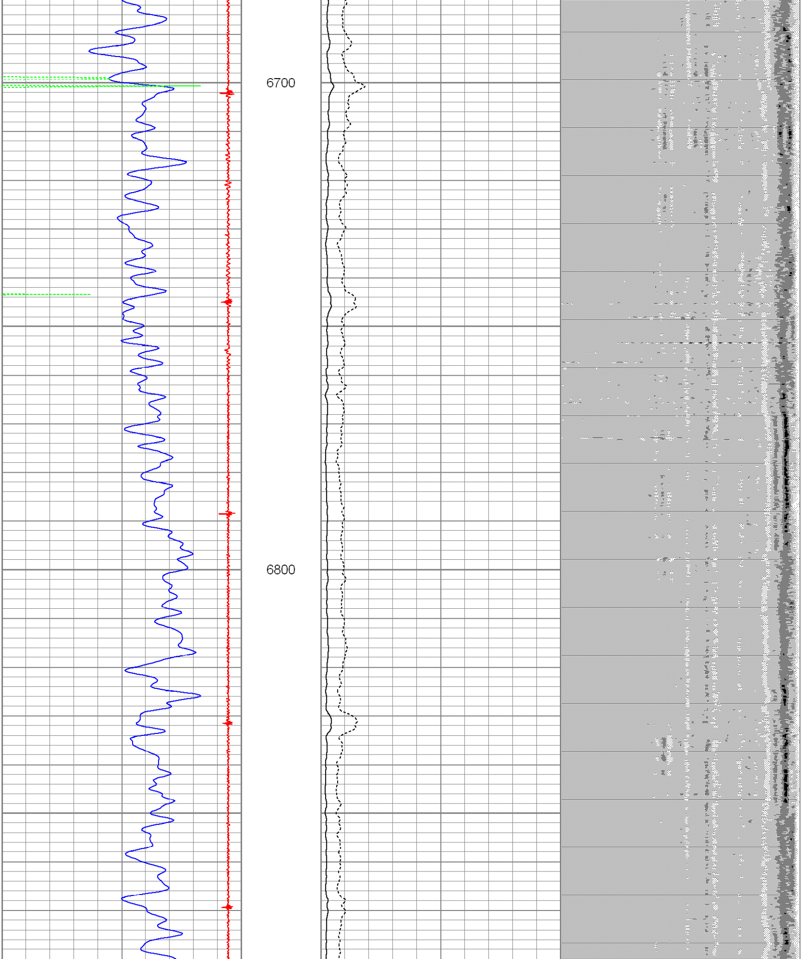


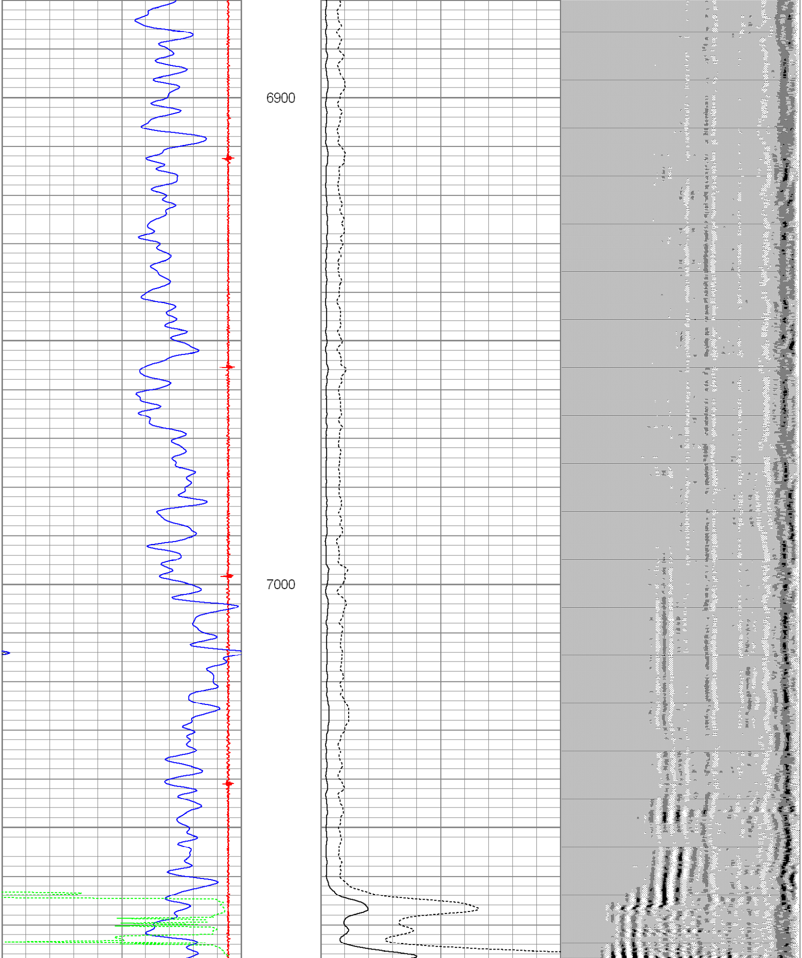


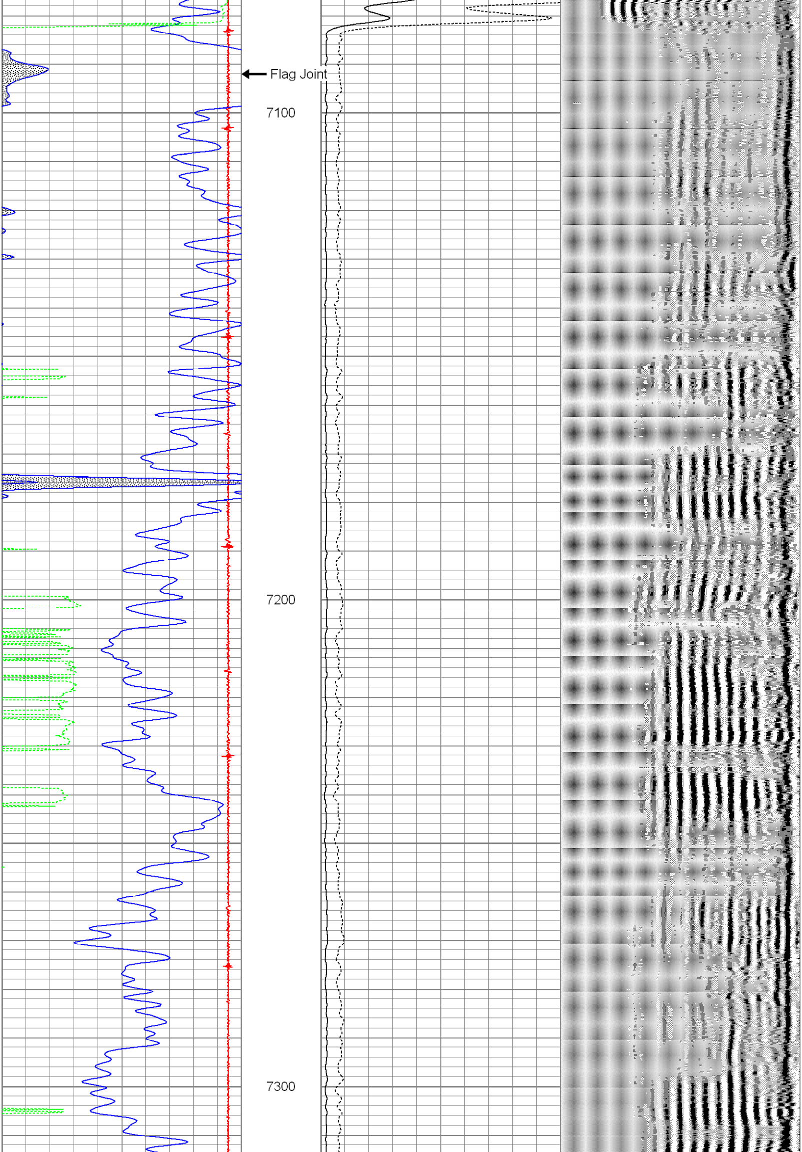


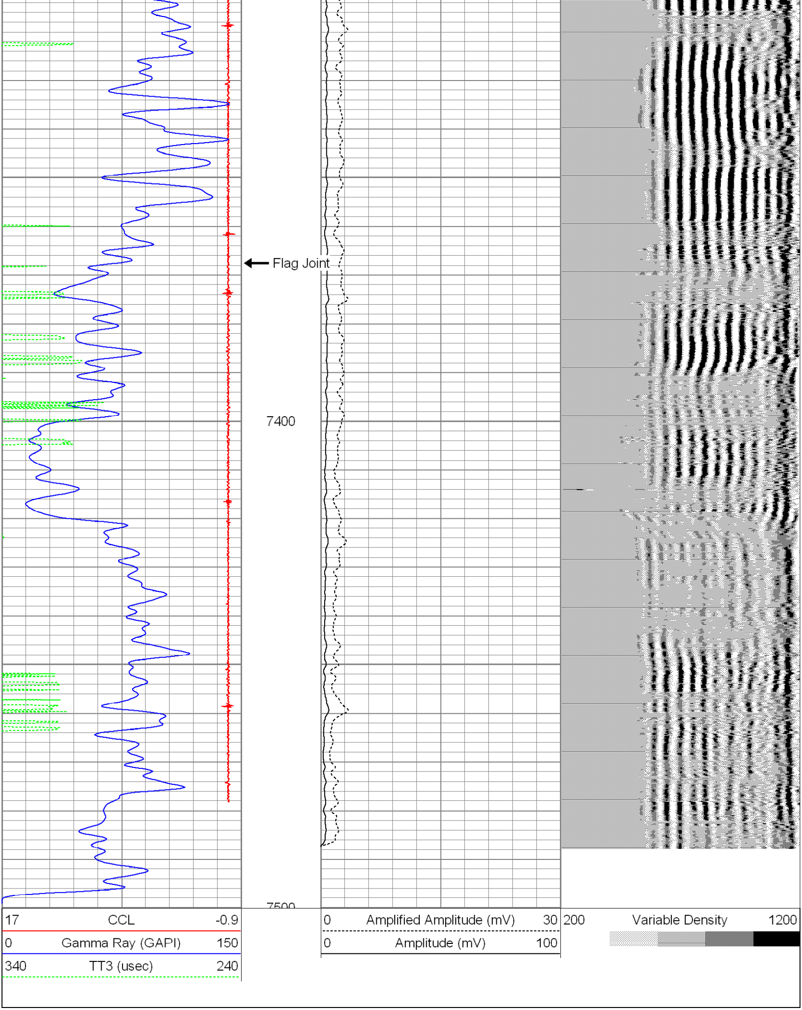




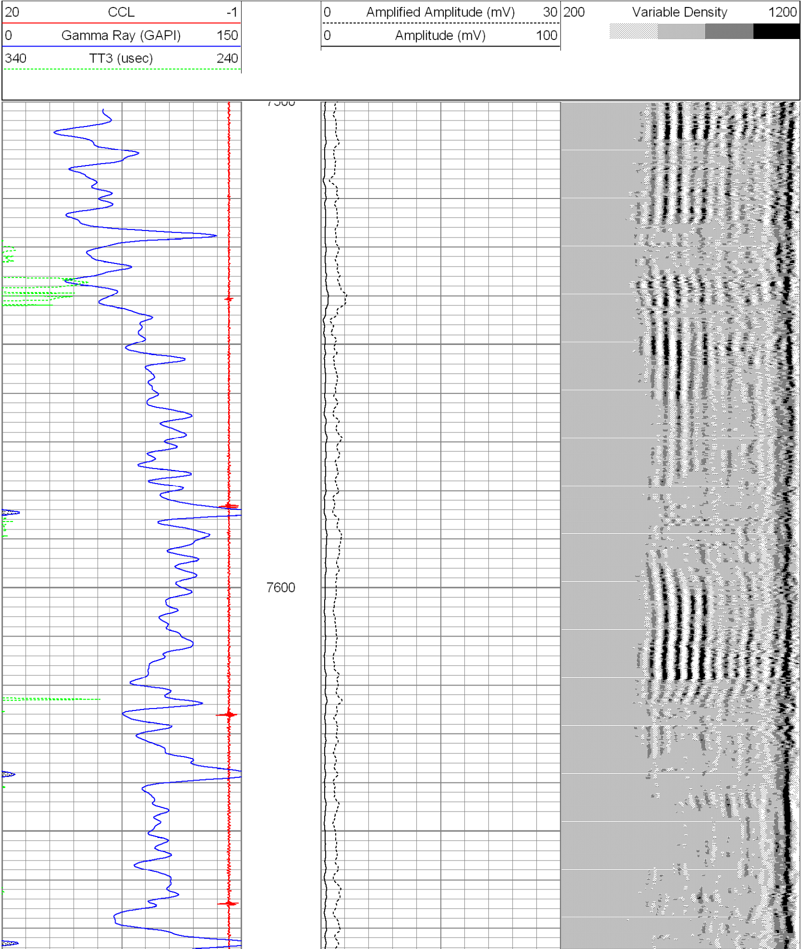


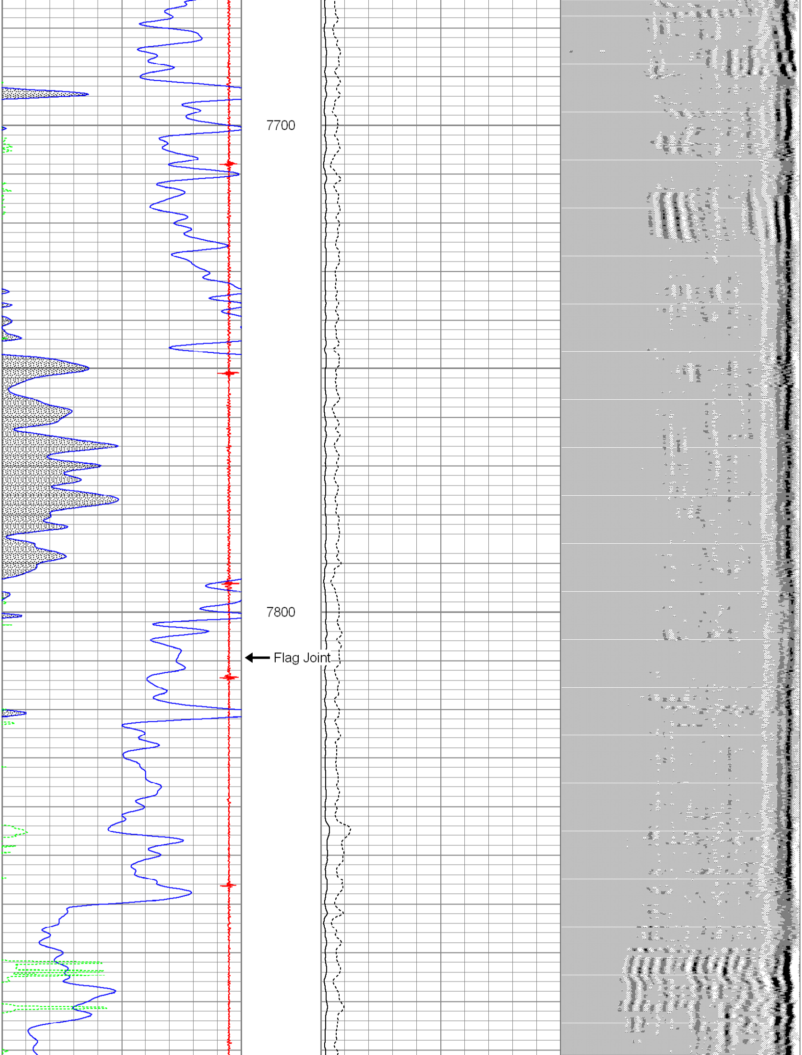


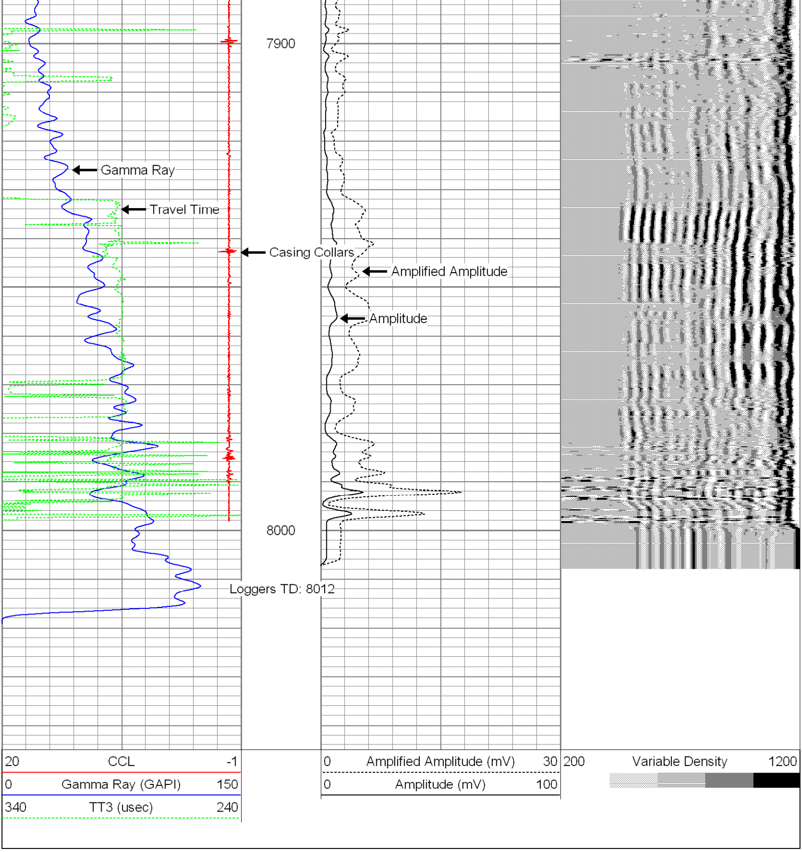




Database File:	cblsherwood l30-29d.db
Dataset Pathname:	pass2
Presentation Format:	nuexcbl
Dataset Creation:	Mon Dec 13 06:23:26 2010 by Log Std Casedhole 10081
Charted by:	Depth in Feet scaled 1:240







Calibration Report

Database File: cblsherwood I30-29d.db
Dataset Pathname: pass5
Dataset Creation: Mon Dec 13 07:08:24 2010 by Log Std Casedhole 10081

Gamma Ray Calibration Report

Serial Number: tit/temp
Tool Model: temp/tit
Performed: Mon Dec 13 06:49:38 2010

Calibrator Value: 2.0 GAPI

Background Reading: 0.0 cps
Calibrator Reading: 1.0 cps

Sensitivity: 2.0000 GAPI/cps

Cement Bond Log Calibration Report

Serial Number: TEKCO-01
Tool Model: TEKCO-1x2
Performed: Mon Dec 13 06:00:45 2010

Depth: 162.2 ft
Casing Diameter: 4.5 in

	3' Spacing	5' Spacing	
Signal Zero:	0.5	0	mV
Calibrated Amplitude:	81.1961	81.1961	mV
Reading at Signal Zero:	0.0370117	0.0148437	V
Reading in Free Pipe:	2.49482	2.49878	V
Gain:	32.8325	32.6885	
Offset:	-0.715187	-0.48522	