Company	Noble Energy INC.
Well	SHABLE USX AB 11-02
Field	Wattenberg
County	Weld
State	Colorado

SUPERIOR WELL SERVICES

CEMENT BOND LOG
GAMMA RAY C C L
V D L

Company Noble Energy INC.
Well SHABLE USX AB 11-02
Field Wattenberg
County Weld State Colorado

Location: API #: 05123306160
SFL: 310' FNL & 2085' FEL NW NE
LAT: 40.53280 DEG, LONG: 104.51240 DEG
SEC TWP RGE

Other Services

Permanent Datum GL Elevation 4881
Log Measured From KB 13'
Drilling Measured From KB

Elevation
K.B. 4894
D.F. 4894
G.L. 4881

Date	July 15, 2010	
Run Number	One	
Depth Driller	9187	
Depth Logger	9094	
Bottom Logged Interval	9093	
Top Log Interval	2030	
Casing Size	4 1/2"	
Type Fluid	Water	
Density / Viscosity	Not Recorded	
Max. Recorded Temp.	268 deg F	
Estimated Cement Top	2279	
Time Well Ready	11:00AM	
Time Logger on Bottom	11:40AM	
Equipment Number	T5 (3344)	1 11/16 Tool 1 RED
Location	Platteville, CO	
Recorded By	K. Monaghan	
Witnessed By	C. Holnstein	

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	Surface	TD
Liner				

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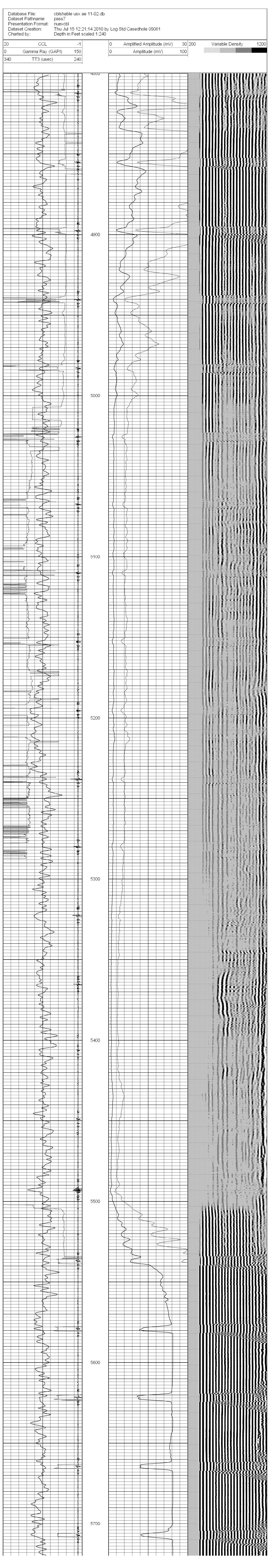
All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs,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

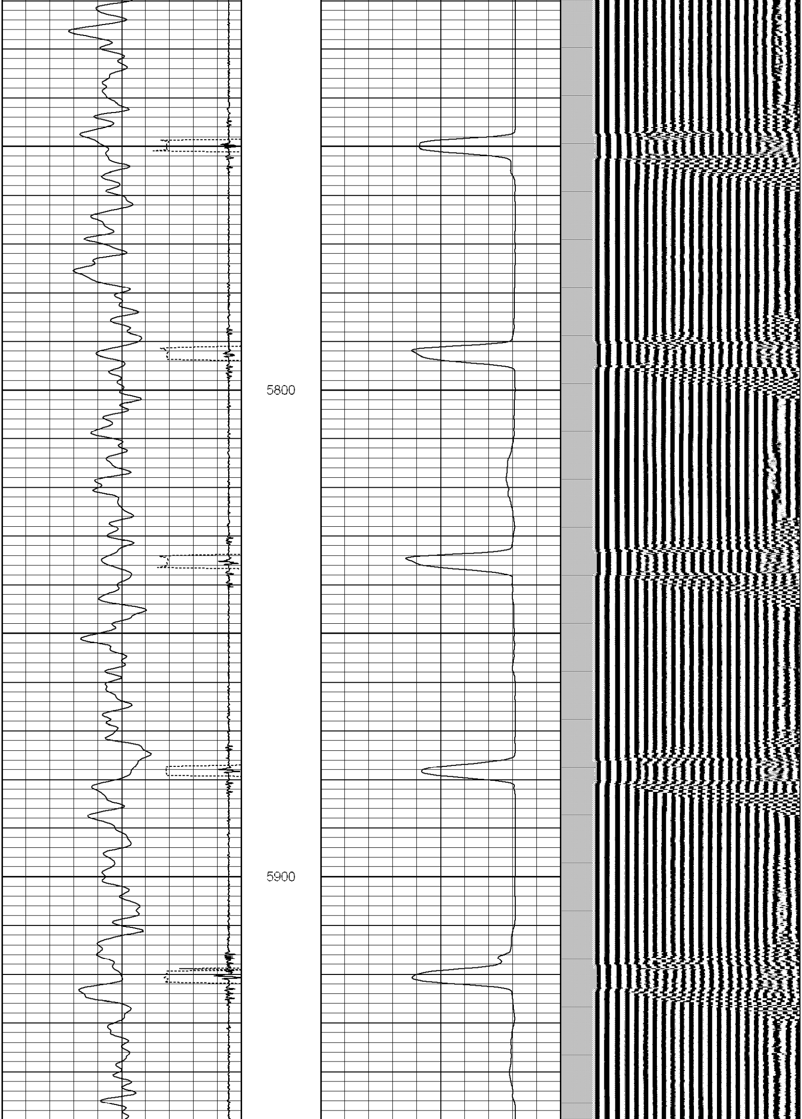
Comments

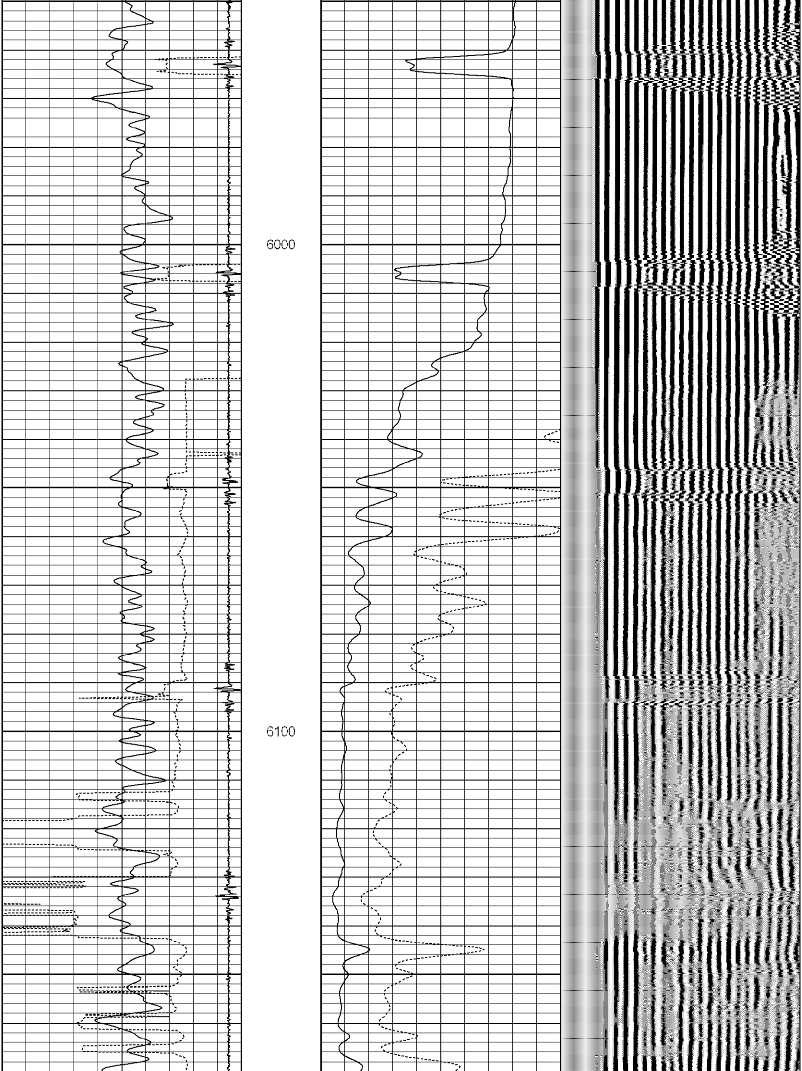
Thank You For Choosing Superior Well Services!!!
API # 05-123-30616-00
Correlated to H.E.S's
Spectral Density / Dual Spaced Neutron / Array Compensated / True Resistivity / Gamma Ray Log
Dated: July 3, 2010
Directions: 80&55, N 2mi, E1.3mi, S Into

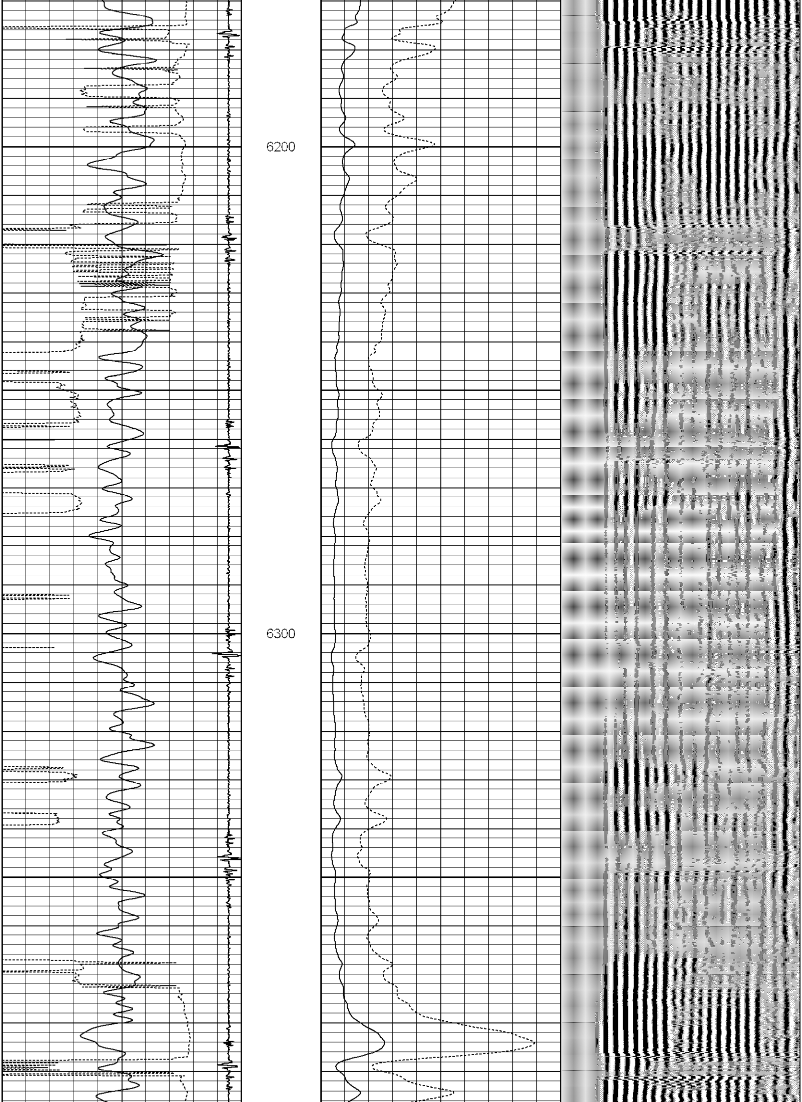
Database File: cblshable usx ae 11-02.db
Dataset Pathname: pass8
Presentation Format: nuexcbl
Dataset Creation: Thu Jul 15 12:44:31 2010 by Log Std Casedhole 09061
Charted by: Depth in Feet scaled 1:240

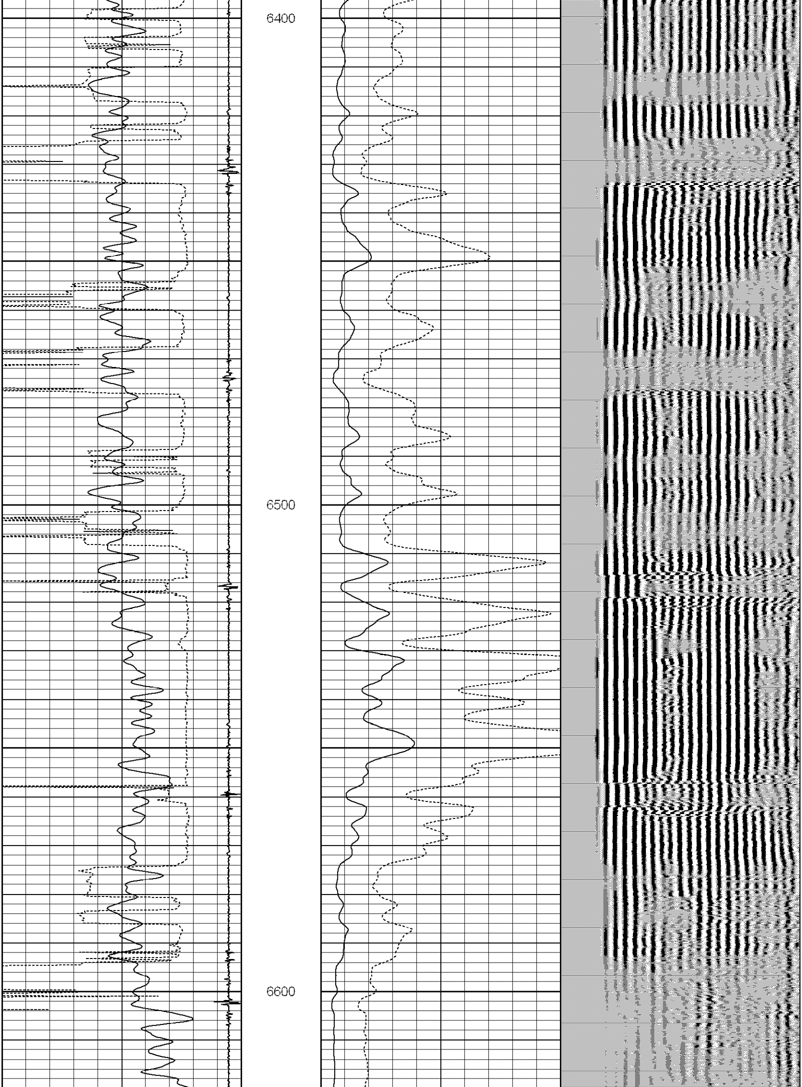
Database File: cblshable usx ae 11-02.db
Dataset Pathname: pass7
Presentation Format: nuexcbl
Dataset Creation: Thu Jul 15 12:21:14 2010 by Log Std Casedhole 09061
Charted by: Depth in Feet scaled 1:240

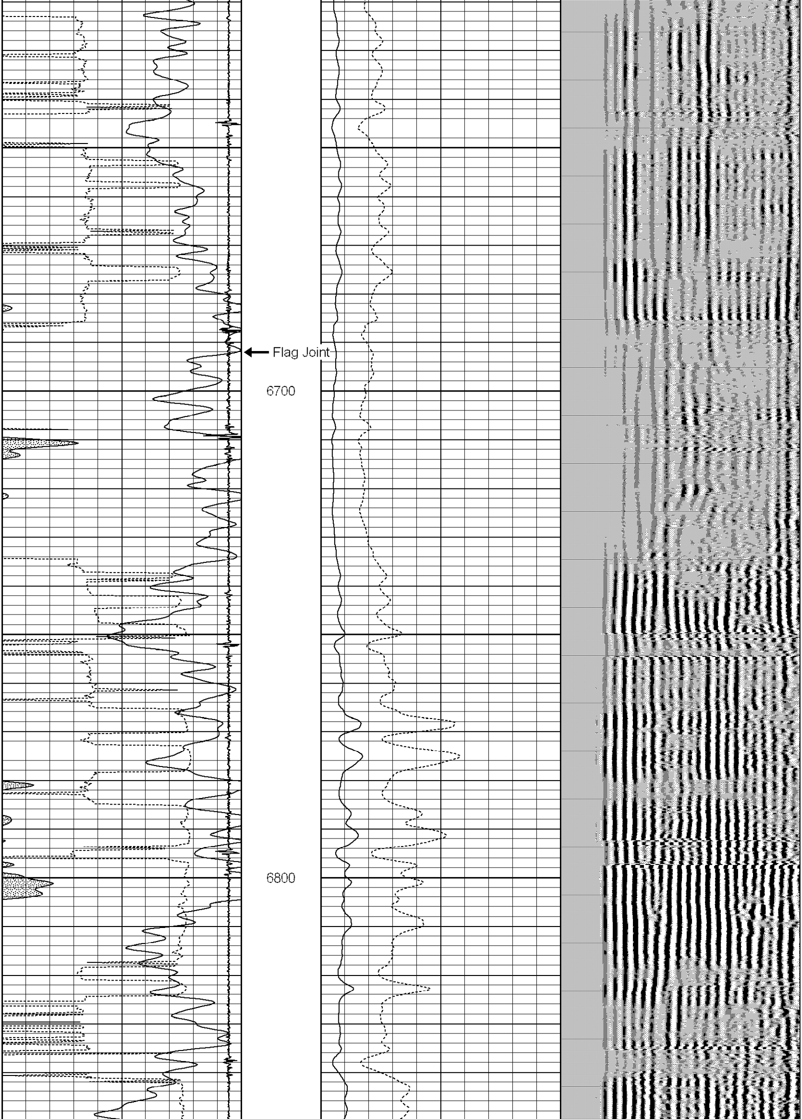


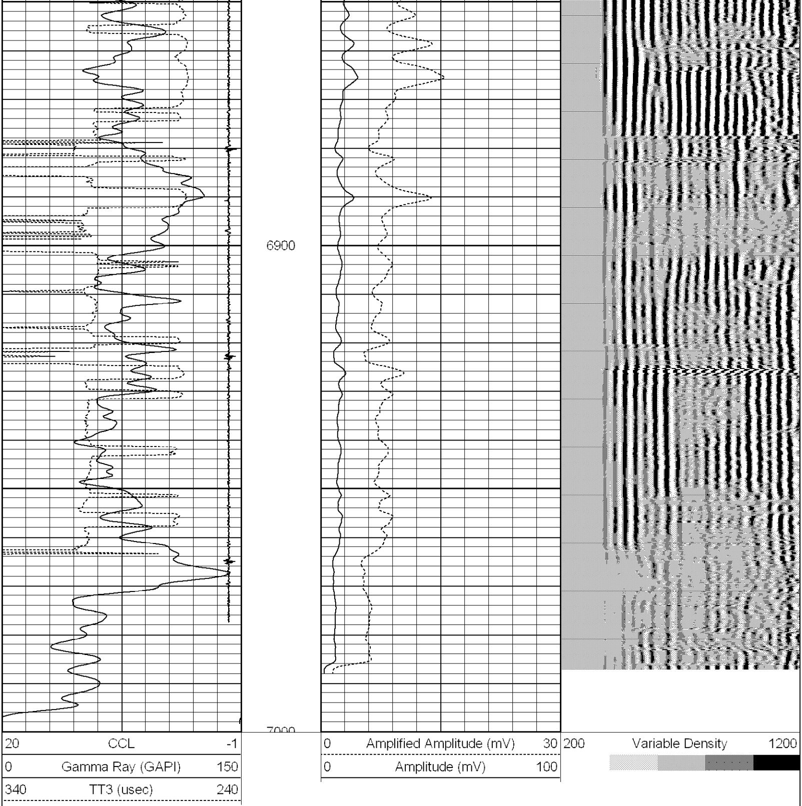






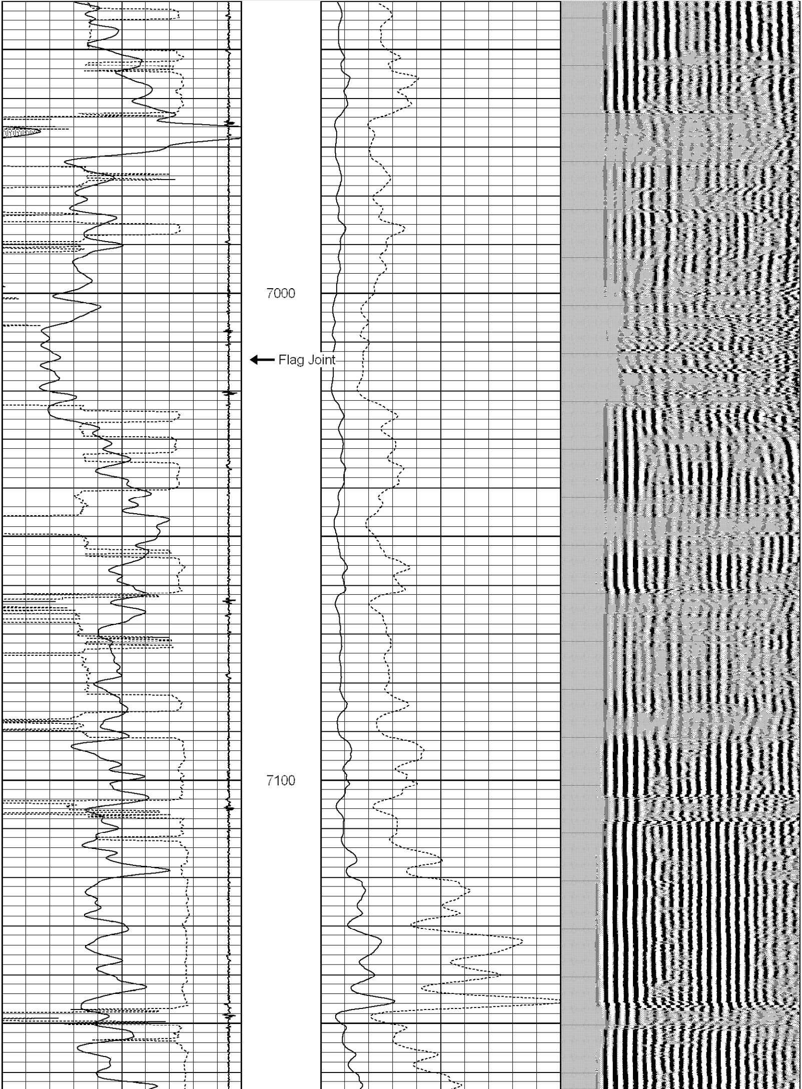


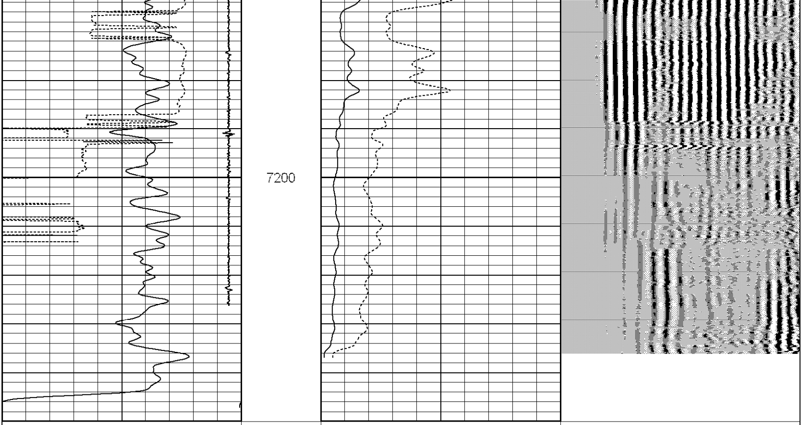




Database File: cblshable usx ae 11-02.db
Dataset Pathname: pass6
Presentation Format: nuexcbl
Dataset Creation: Thu Jul 15 12:15:44 2010 by Log Std Casedhole 09061
Charted by: Depth in Feet scaled 1:240

20	CCL	-1	0	Amplified Amplitude (mV)	30	200	Variable Density	1200
0	Gamma Ray (GAPI)	150	0	Amplitude (mV)	100			
340	TT3 (usec)	240						

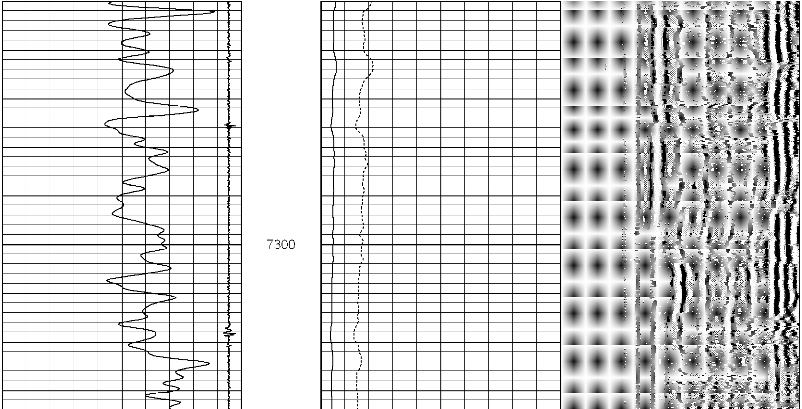


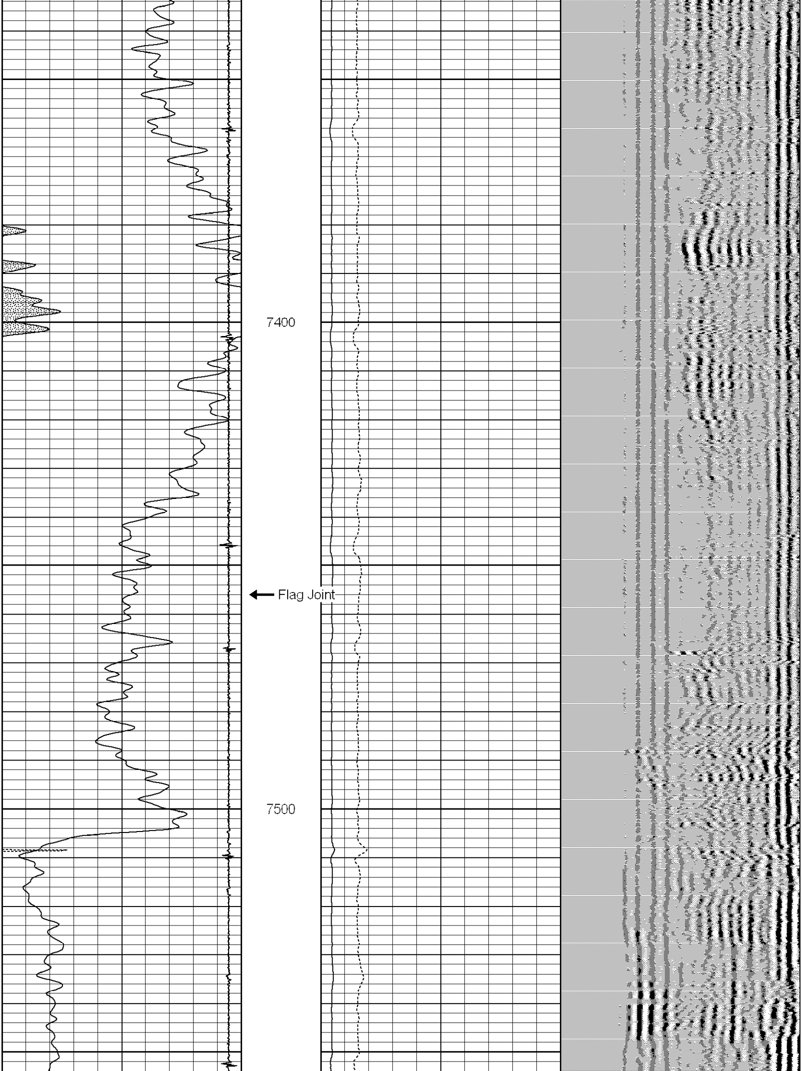


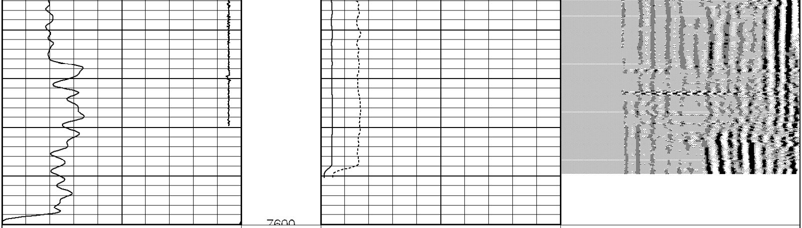
20	CCL	-1	0	Amplified Amplitude (mV)	30	200	Variable Density	1200
0	Gamma Ray (GAPI)	150	0	Amplitude (mV)	100		░ ▒ ▓ █	
340	TT3 (usec)	240						

Database File: cblshable usx ae 11-02.db
Dataset Pathname: pass5
Presentation Format: nuexcbl
Dataset Creation: Thu Jul 15 12:11:52 2010 by Log Std Casedhole 09061
Charted by: Depth in Feet scaled 1:240

20	CCL	-1	0	Amplified Amplitude (mV)	30	200	Variable Density	1200
0	Gamma Ray (GAPI)	150	0	Amplitude (mV)	100		░ ▒ ▓ █	
340	TT3 (usec)	240						



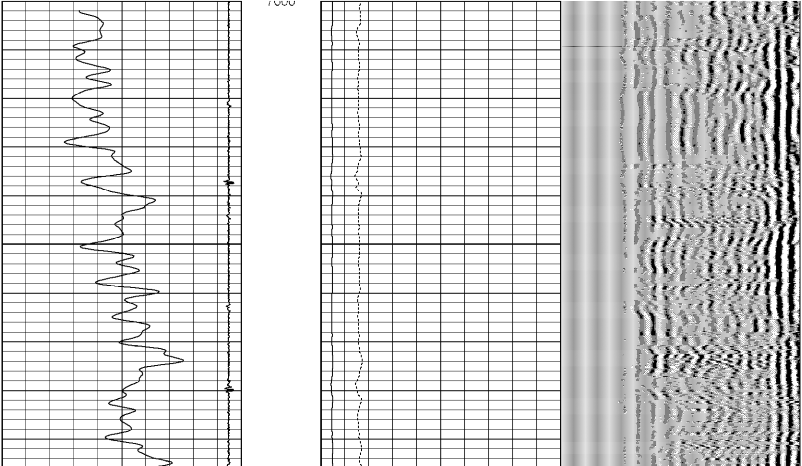


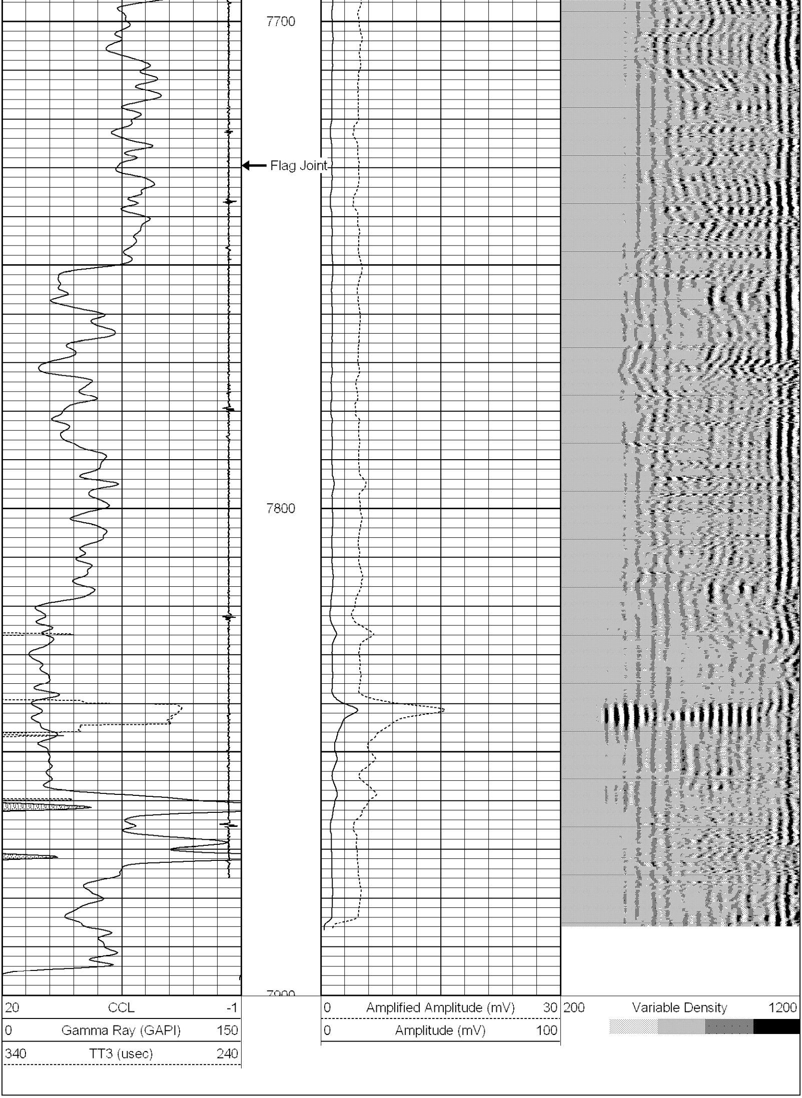


20 CCL -1
0 Gamma Ray (GAPI) 150
340 TT3 (usec) 240
0 Amplified Amplitude (mV) 30
0 Amplitude (mV) 100
200 Variable Density 1200
░ ▒ ▓ █

Database File: cblshable usx ae 11-02.db
Dataset Pathname: pass4
Presentation Format: nuexcbl
Dataset Creation: Thu Jul 15 12:08:33 2010 by Log Std Casedhole 09061
Charted by: Depth in Feet scaled 1:240

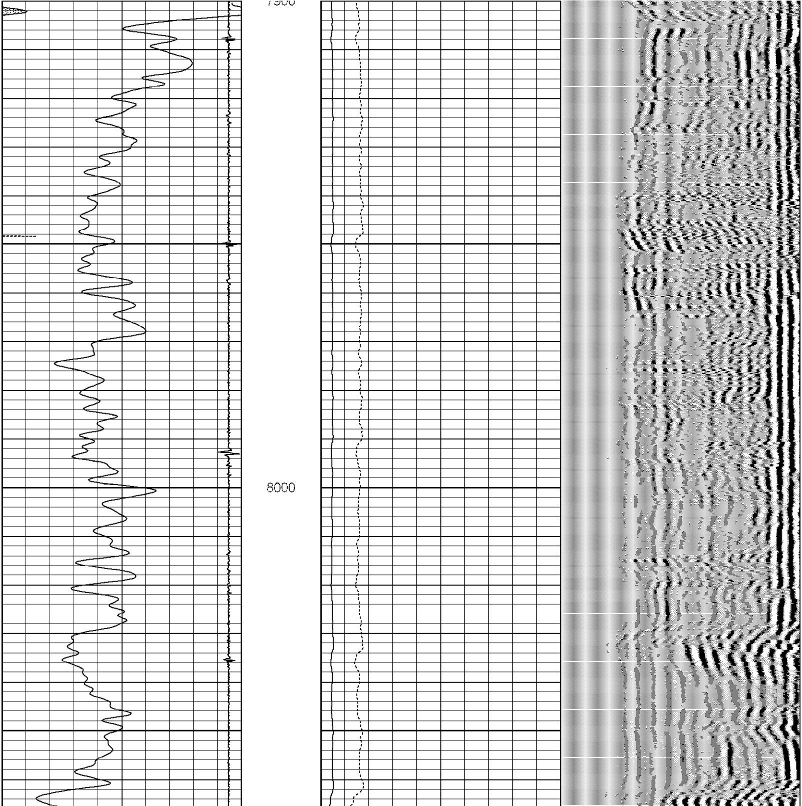
20 CCL -1
0 Gamma Ray (GAPI) 150
340 TT3 (usec) 240
0 Amplified Amplitude (mV) 30
0 Amplitude (mV) 100
200 Variable Density 1200
░ ▒ ▓ █

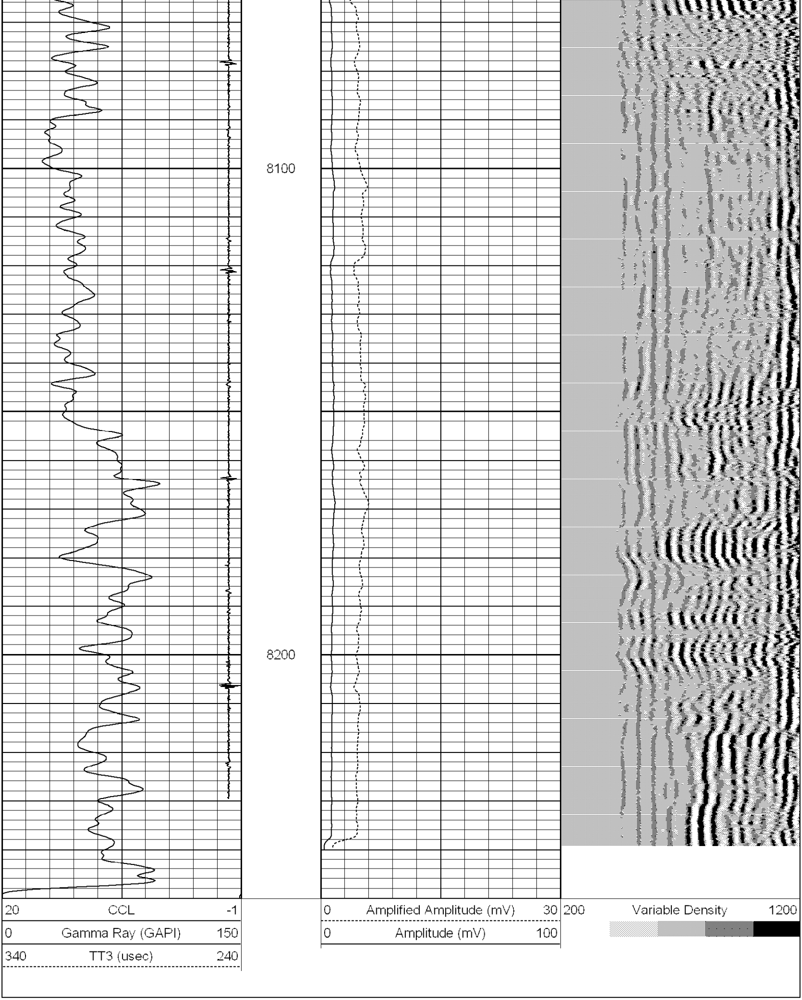




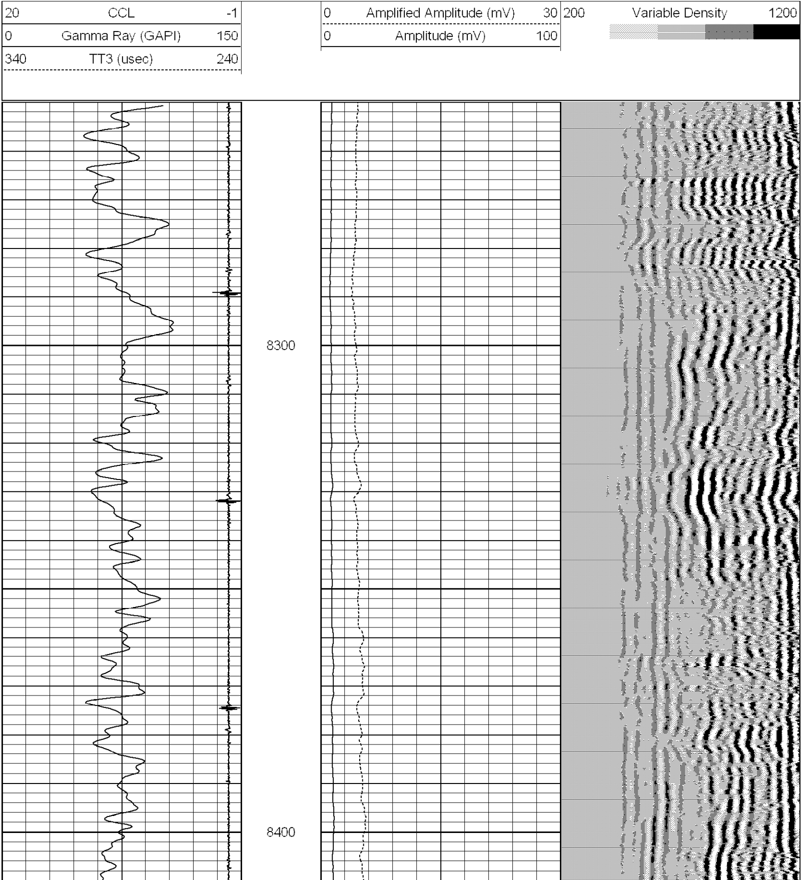
Database File: cblshable usx ae 11-02.db
Dataset Pathname: pass3
Presentation Format: nuexcbl
Dataset Creation: Thu Jul 15 12:04:34 2010 by Log Std Casedhole 09061
Charted by: Depth in Feet scaled 1:240

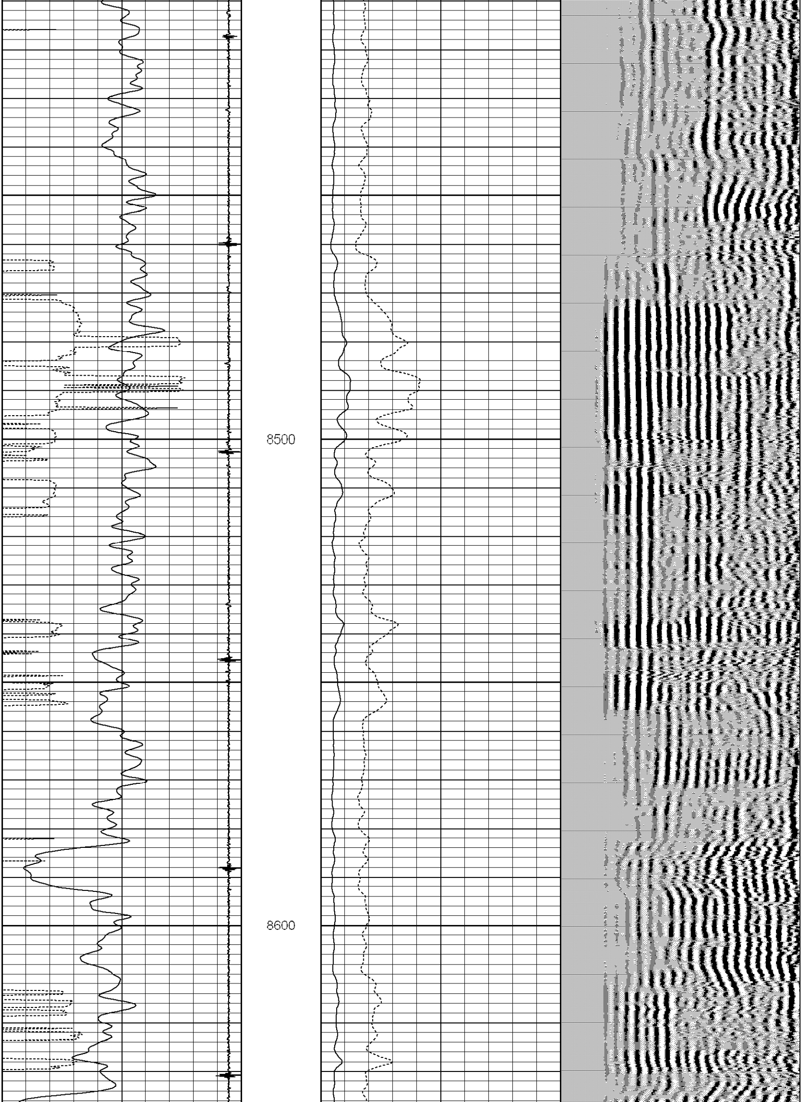
20	CCL	-1
0	Gamma Ray (GAPI)	150
340	TT3 (usec)	240
0	Amplified Amplitude (mV)	30
0	Amplitude (mV)	100
200	Variable Density	1200

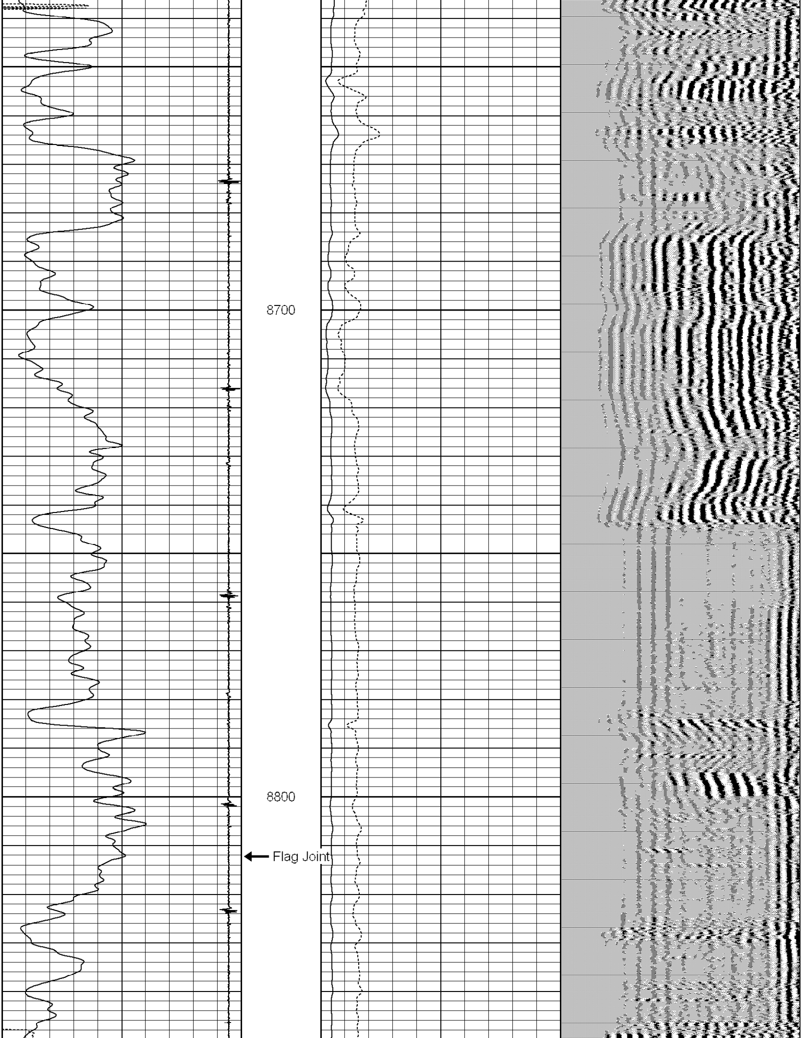


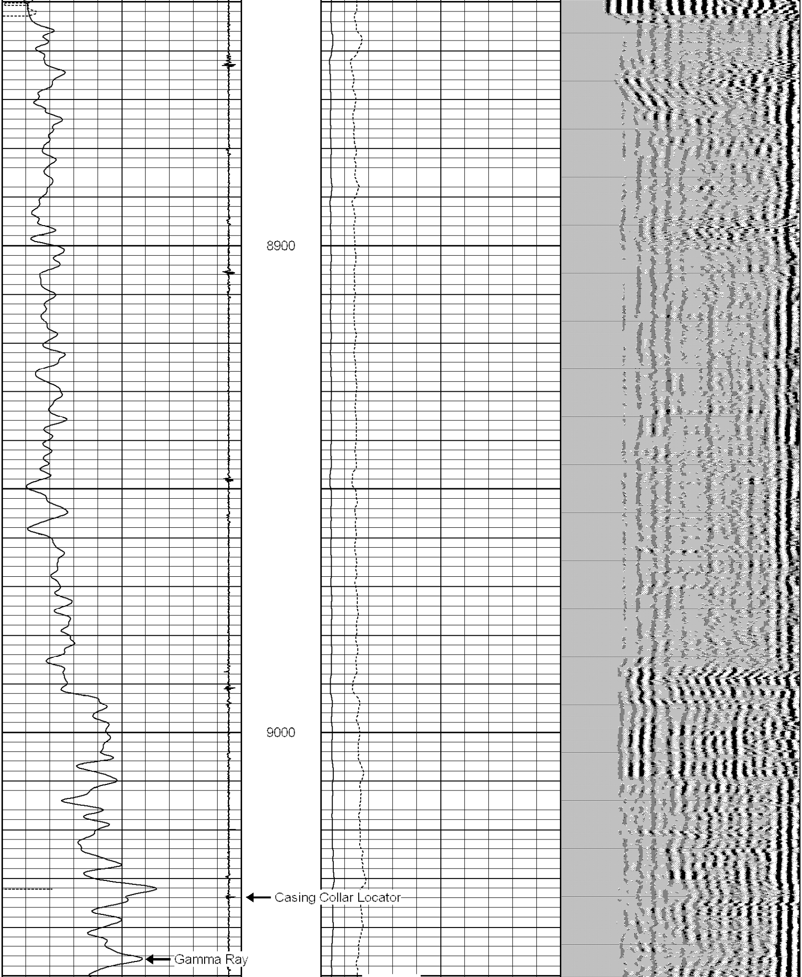


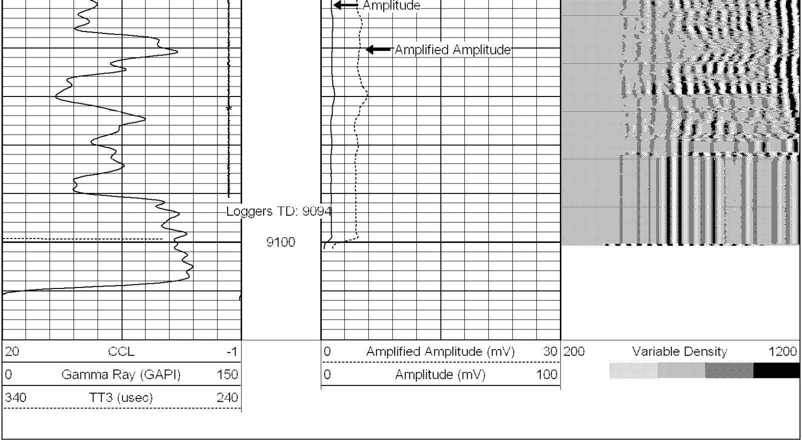
Database File:	cblshable usx ae 11-02.db
Dataset Pathname:	pass2
Presentation Format:	nuexcbl
Dataset Creation:	Thu Jul 15 11:37:22 2010 by Log Std Casedhole 09061
Charted by:	Depth in Feet scaled 1:240











Calibration Report

Database File: cblshable usx ae 11-02.db
Dataset Pathname: pass8
Dataset Creation: Thu Jul 15 12:44:31 2010 by Log Std Casedhole 09061

Gamma Ray Calibration Report

Serial Number: tit/temp
Tool Model: temp/tit
Performed: Wed Dec 16 07:15:29 2009

Calibrator Value: 1.0 GAPI

Background Reading: 0.0 cps
Calibrator Reading: 1.0 cps

Sensitivity: 0.8000 GAPI/cps

Cement Bond Log Calibration Report

Serial Number: TEKCO-01
Tool Model: TEKCO-1x2
Performed: Thu Jul 15 11:16:16 2010

Depth: 1054.6 ft
Casing Diameter: 4.5 in

	3' Spacing	5' Spacing	
Signal Zero:	1	0	mV
Calibrated Amplitude:	81.1961	81.1961	mV
Reading at Signal Zero:	-0.0166748	-0.00512695	V
Reading in Free Pipe:	2.5	2.5	V
Gain:	31.8659	32.412	
Offset:	1.53136	0.166175	