HALLIBURTON

ACOUSTIC CEMENT BOND LOG

Company	LARAMIE ENERGY II, LLC.
Well	HAWXHURST 17-03C
Field	BRUSH CREEK
County	MESA
State	CO

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API No.: 05077101600000 Serv #: 9490473

Location: SURFACE HOLE:
1268' FNL & 0396' FWL

BOTTOM HOLE:
0833' FNL & 1952' FWL

Sec: 17 Twp: 09S Rge: 94W

Other Services
TEMP

Permanent Datum GROUND LEVEL Elevation 6786'
Log Measured From KB , 21 Ft. above perm. datum
Drilling Measured From KB

Elevation
K.B. 6807'
D.F. 6806'
G.L. 6786'

Date @ Time Logged	04 MAY 2012	Type Fluid in Hole	WATER
Run No.	ONE	Density of Fluid	8.3#
Depth - Driller	7490'	Fluid Level	FULL
Depth - Logger	7421'	Cement Top Est. Logged	SEE LOG
Bottom - Logged Interval	7421'	Equipment / Location	11726117 / G.J.
Top - Log Interval	SURFACE	Recorded by	D. SOLIS
Max. Recorded Temp.	221 DEG F	Witnessed by	N/A

CEMENTING DATA	Surface String	Protection String	Production String	Liner
Date / Time Cemented	N/A	N/A	N/A	N/A
Primary / Squeeze				
Expected Compressive Strength	psi@ hrs	psi@ hrs	psi@ hrs	psi@ hrs
Cement Volume				
Cement Type / Weight	/	/	/	/
Formulation				
Mud Type / Mud Wgt.	/	/	/	/

Borehole Record				Casing & Tubing Record			
Run Number	Bit	From	To	Size	Weight	From	To
ONE	12.25"	SURFACE	1585'	8.625"	32.0#	SURFACE	1585'
TWO	7.875"	1585'	7490'	4.5"	11.6#	SURFACE	7790'

<<< Fold Here >>>

HALLIBURTON DOES NOT GUARANTEE THE ACCURACY OF ANY INTERPRETATION OF THE LOG DATA, CONVERSION OF LOG DATA TO PHYSICAL ROCK PARAMETERS OR RECOMMENDATIONS WHICH MAY BE GIVEN BY HALLIBURTON PERSONNEL OR WHCIH APPEAR ON THE LOG OR IN ANY OTHER FORM. ANY USER OF SUCH DATA, INTERPRETATIONS, CONVERSIONS, OR RECOMMENDATIONS AGREES THAT HALLIBURTON IS NOT RESPONSIBLE EXCEPT WHERE DUE TO GROSS NEGLIGENCE OR WILLFUL MISCONDUCT, FOR ANY LOSS, DAMAGES, OR EXPENSES RESULTING FROM THE USE THEREOF.

Comments

CORRELATED TO HALLIBURTON DENSITY-NEUTRON-RESISTIVITY LOG DATED: 28 NOV 2011.

CBL-GR-TEMP RAN IN COMBINATION.

LOG INTERVALS PER CUSTOMER REQUEST.

SHORT JOINTS @:4340' - 4366' AND 6434' - 6465'.

THANK YOU FOR CHOOSING HALLIBURTON ENERGY SERVICES.

Service Ticket No. 9490473 API No. 05077101600000 PGM Ver 111027_R1

The Well Name, Location, Borehole Description, and / or Cementing Data Furnished by Client

EQUIPMENT DATA

ACOUSTIC BOND TOOL		GAMMA RAY / CCL		TEMPERATURE TOOL			
Run No.	ONE	Run No.	ONE	Run No.	ONE	Run No.	
Serial No.	080544	Serial No.	061015	Serial No.	001	Serial No.	
Model No.	CBL-PROBE	Model No.	GR-PROBE	Model No.	TEMP 1.375"	Model No.	
Diameter	2.75"	Diameter	2.75"	Diameter	1.375"	Diameter	

LOGGING DATA

General Data

Pass	Depths		Well Head	Speed	Logging Run Comments
No.	From	To	Pressure	Ft/Min	
ONE	7421'	100'	0	70	MAIN LOG SECTION

	GR		CCL		AMP		MSG	
Pass	Scale		Scale		Scale		Scale	
No.	L	R	L	R	L	R	L	L
ONE	0	200	-9	1	0	100	200	1200

DIRECTIONAL INFORMATION

Maximum Deviation	N/A	deg. @	N/A	KOP	N/A

HALLIBURTON

MAIN LOG SECTION

5" = 100'

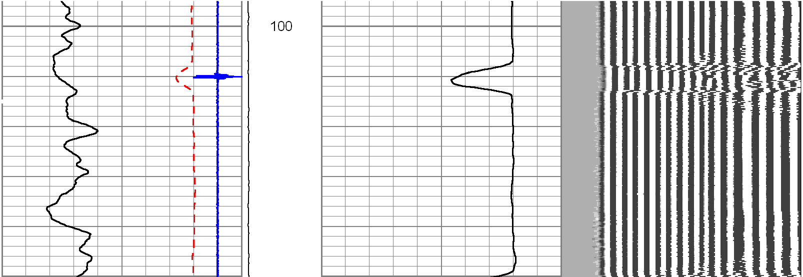
Database File: hawxhurst_17_03c_cbl.db
Dataset Pathname: FINAL1
Presentation Format: cbl_main
Dataset Creation: Wed May 04 18:56:30 2011
Charted by: Depth in Feet scaled 1:240

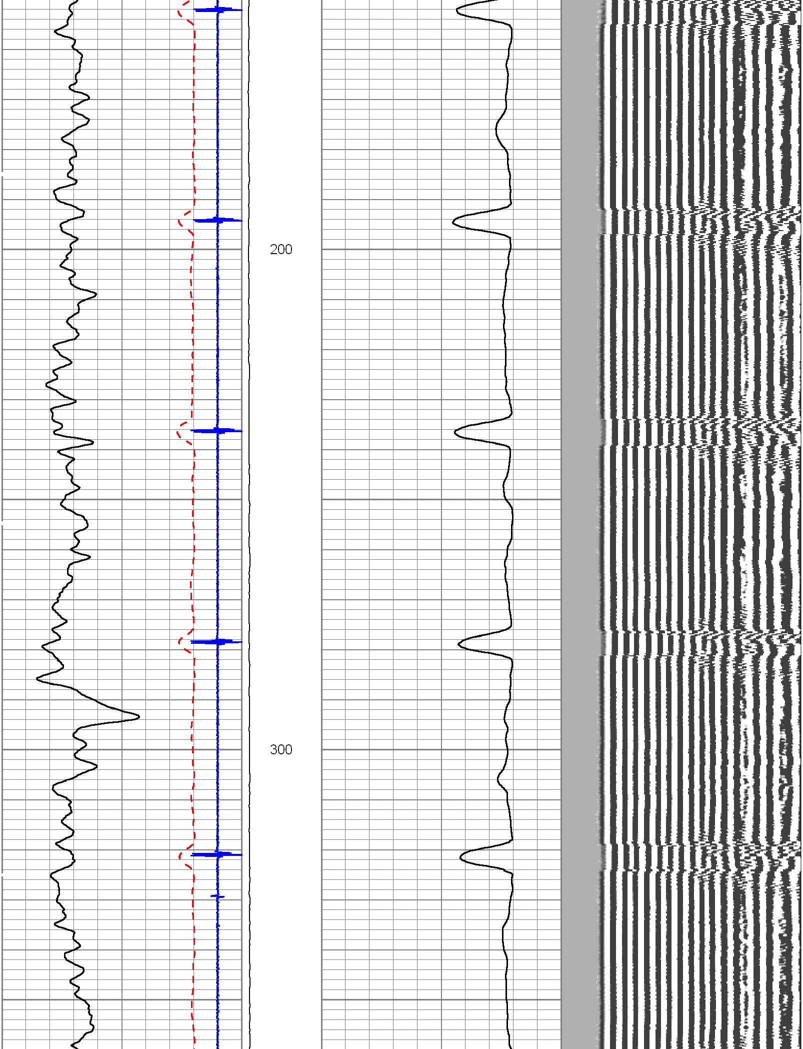
374 TRAVEL TIME (usec) 274
-9 Collar Locator 1
0 Gamma Ray (GAPI) 200

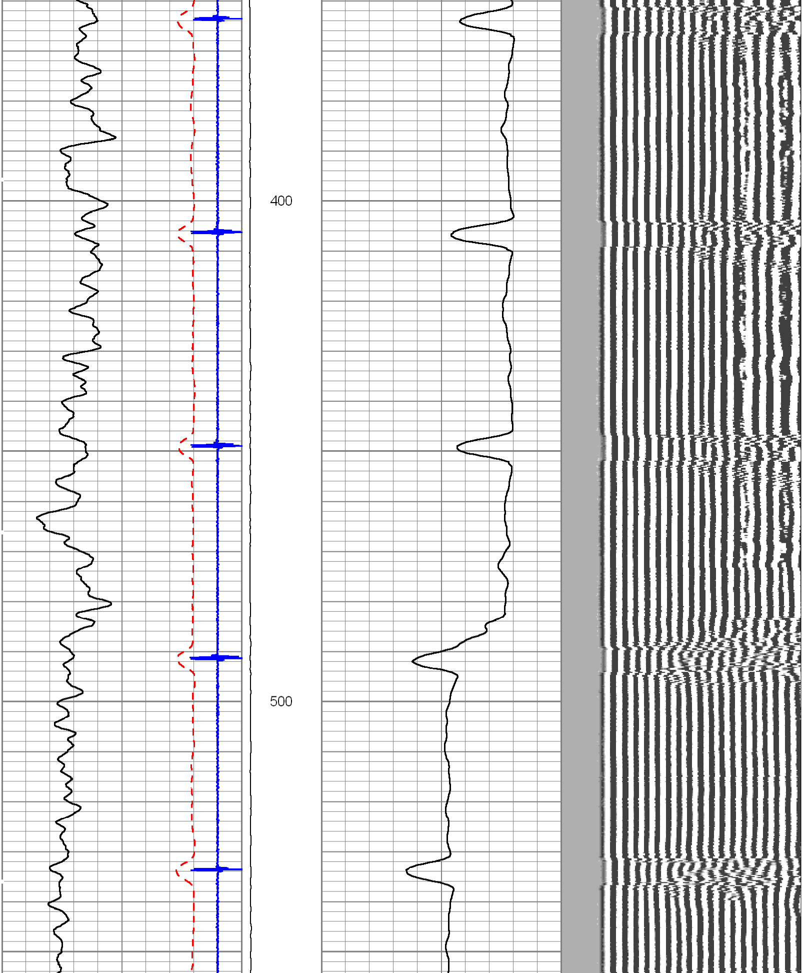
LTEN
0 (lb) 3000

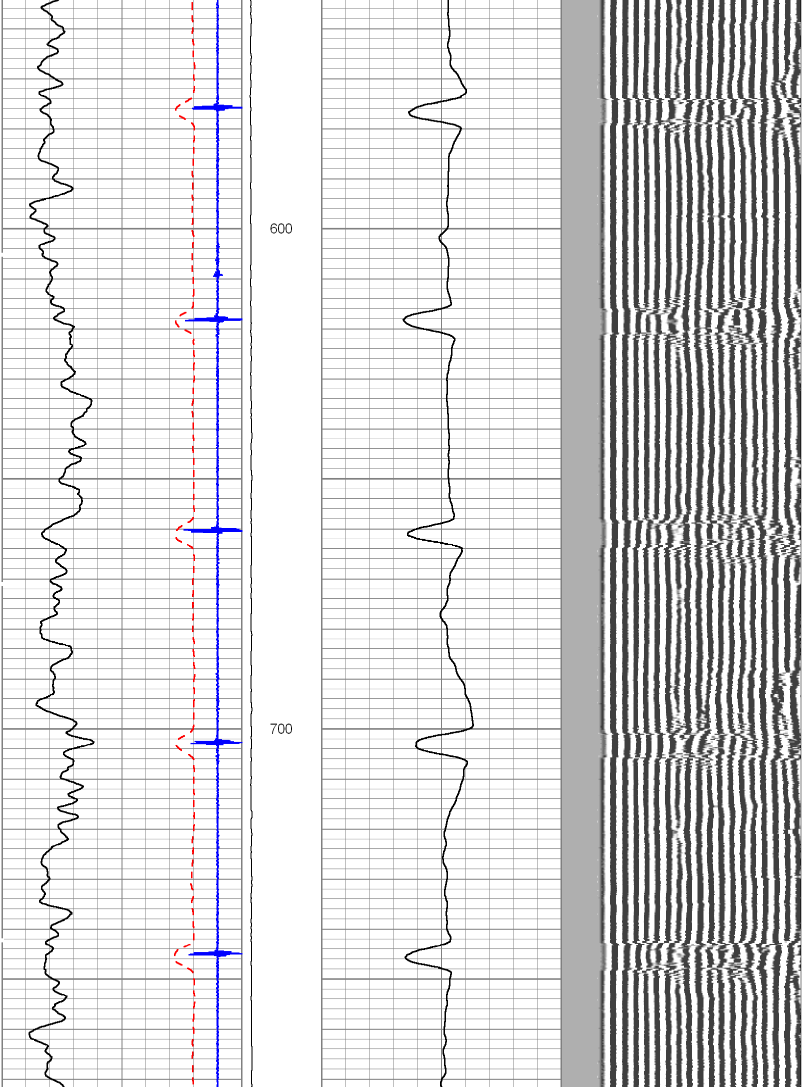
0 AMP AMPLITUDE (mV) 10
0 AMPLITUDE (mV) 100

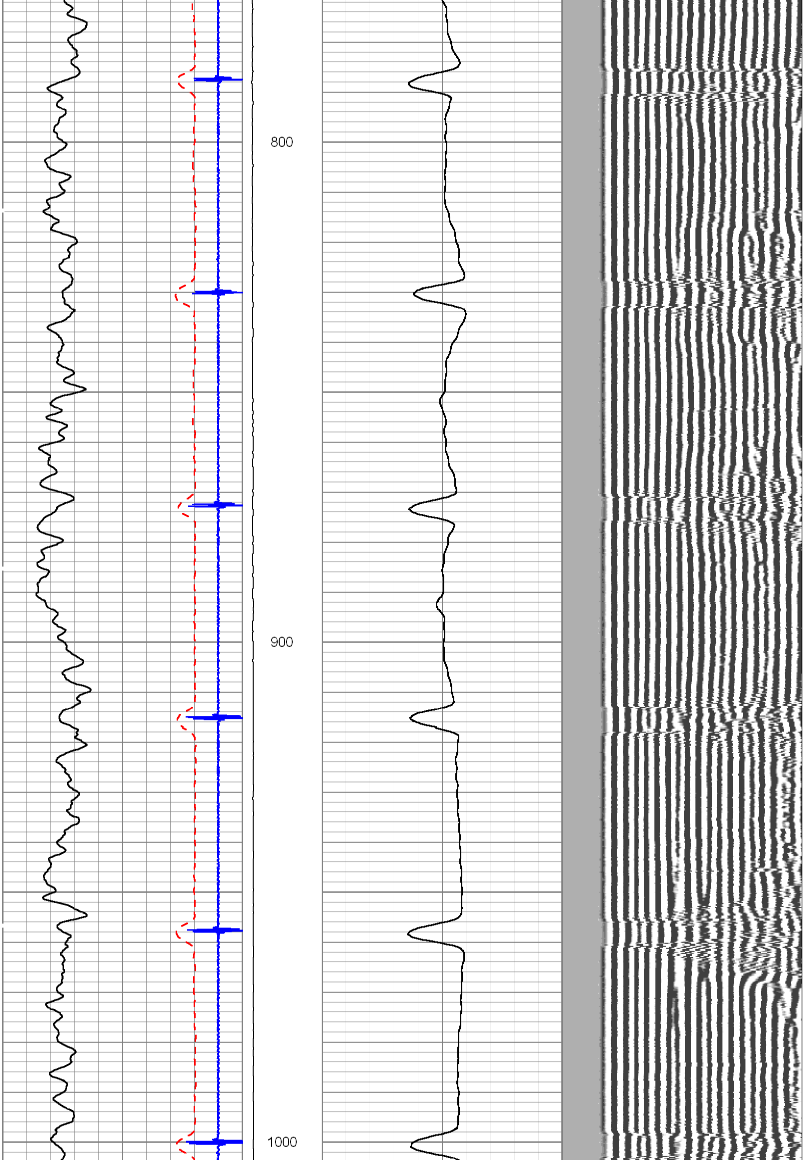
200 MSG 1200

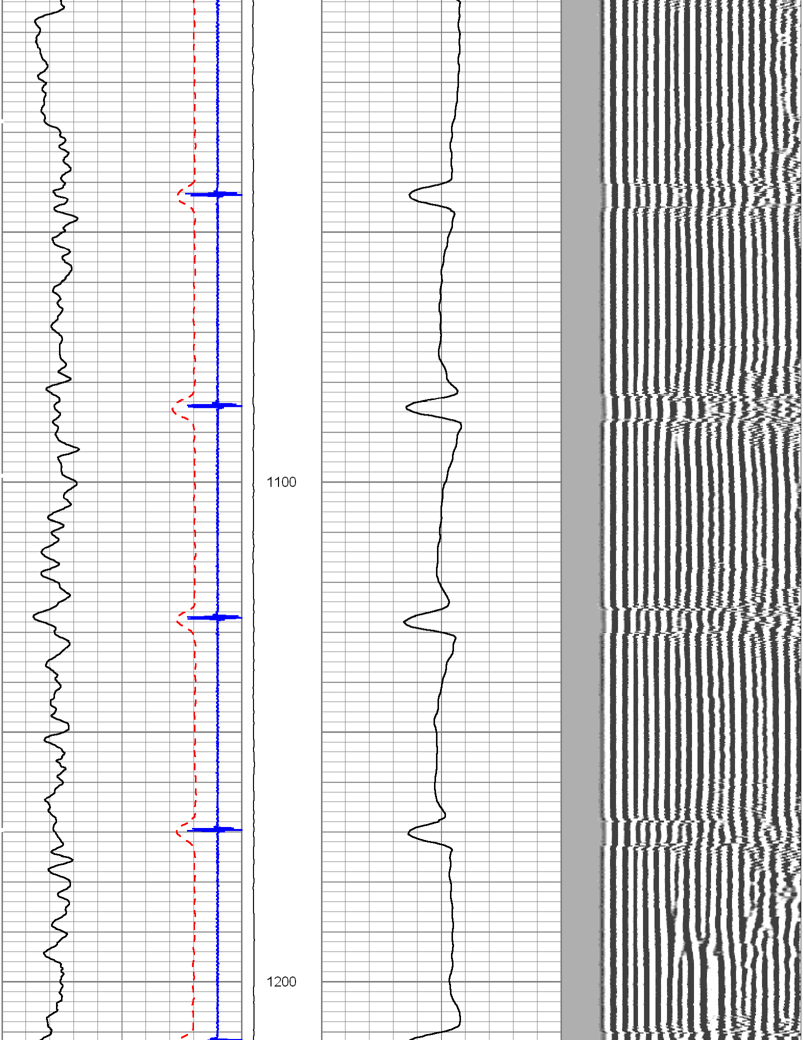


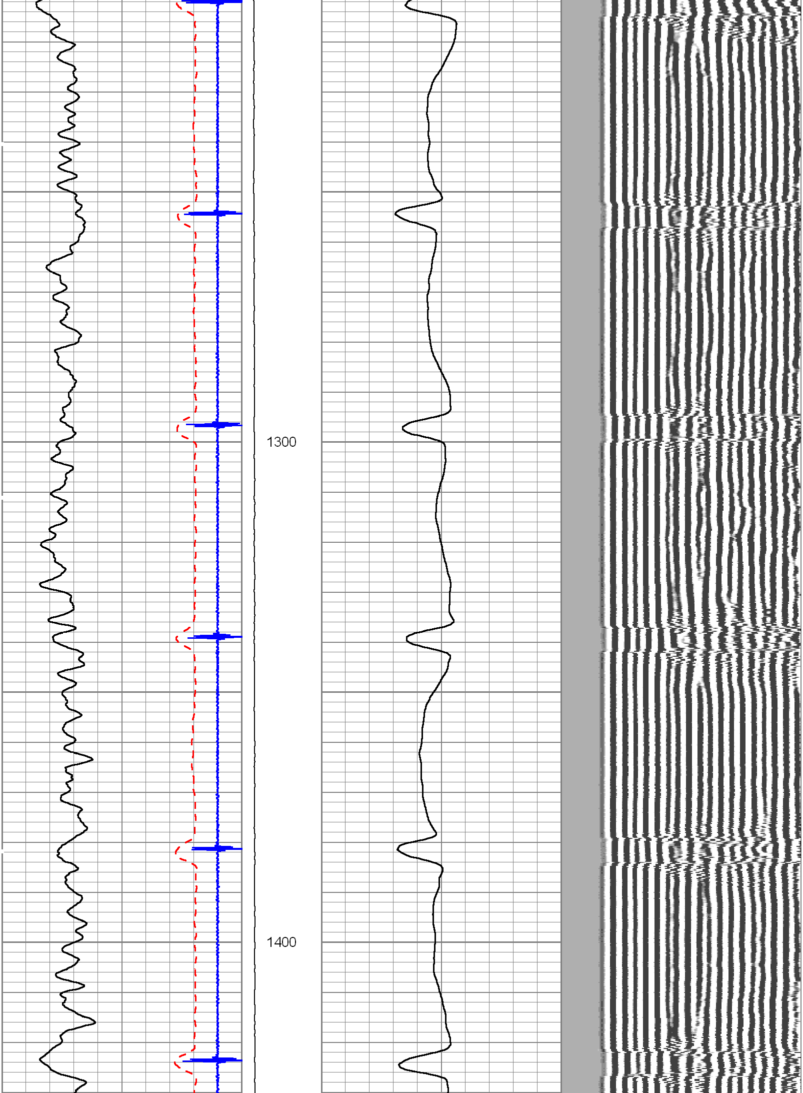


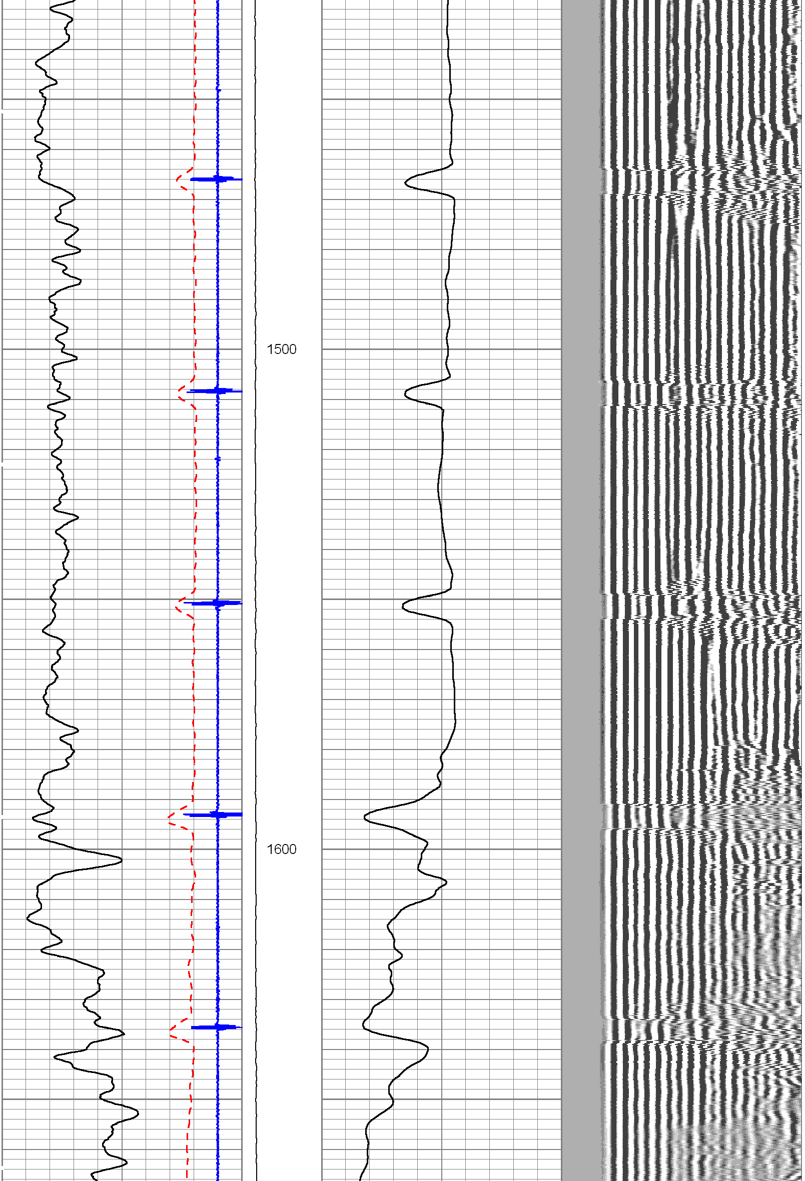


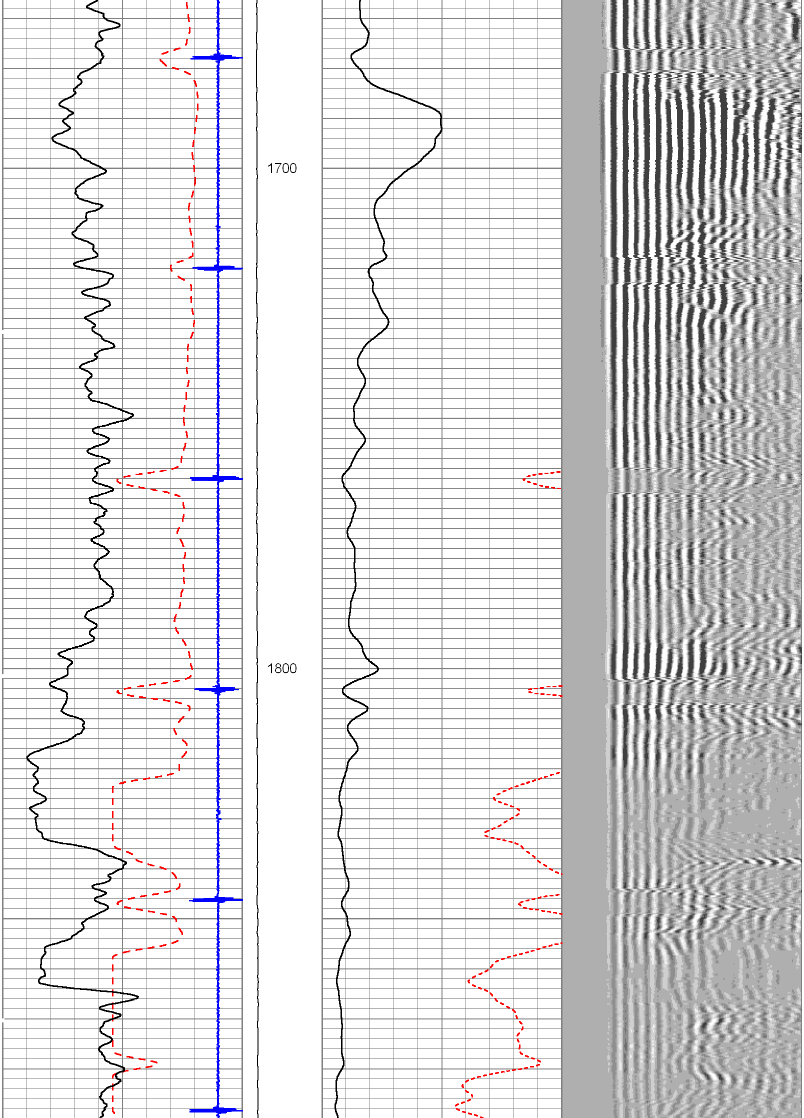


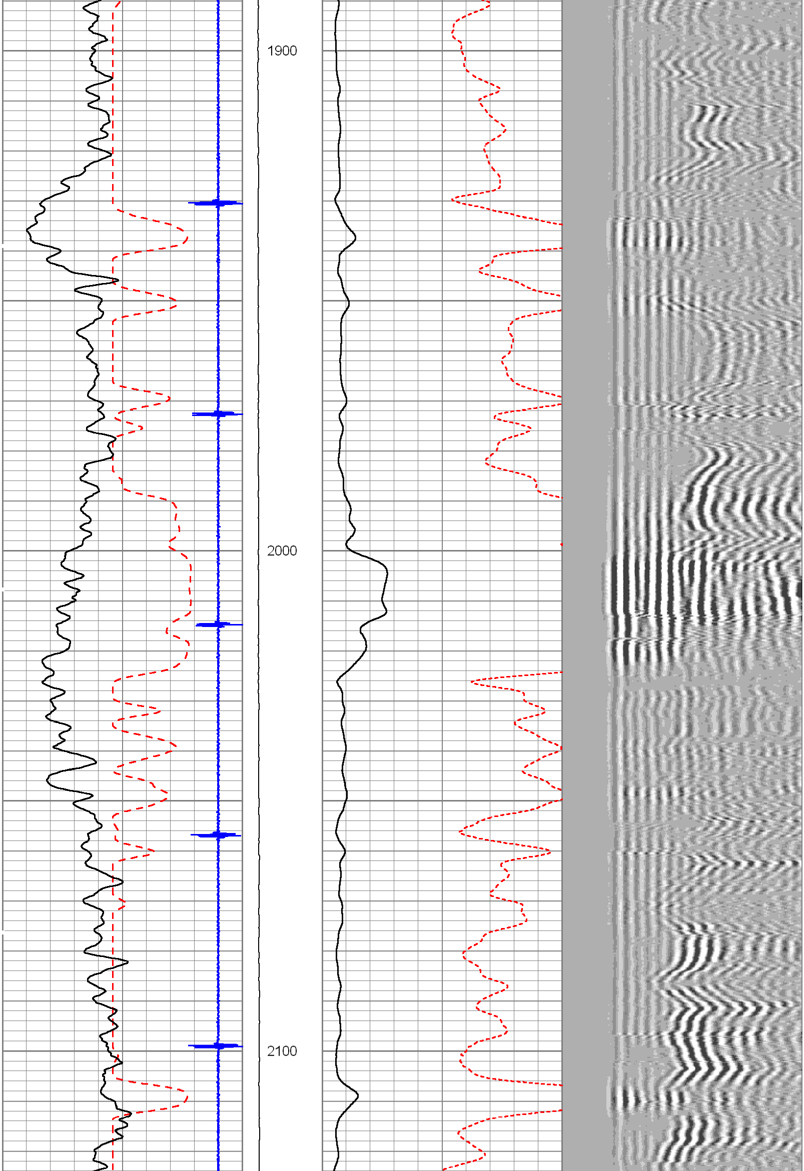


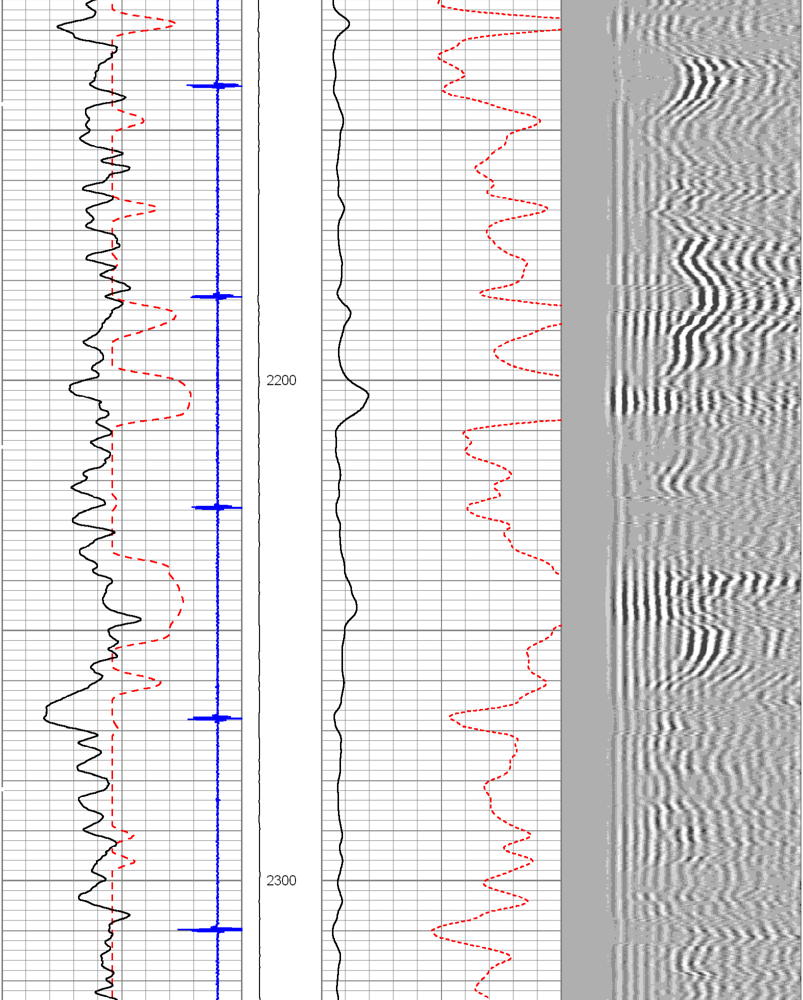


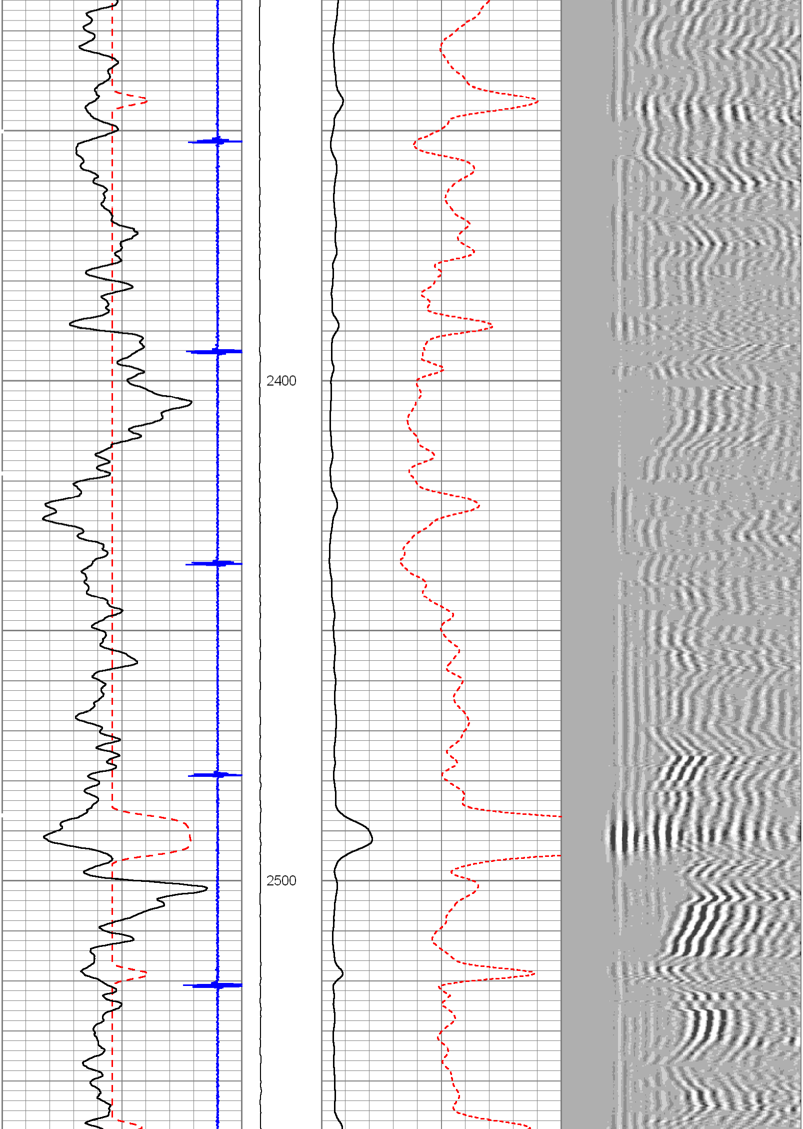


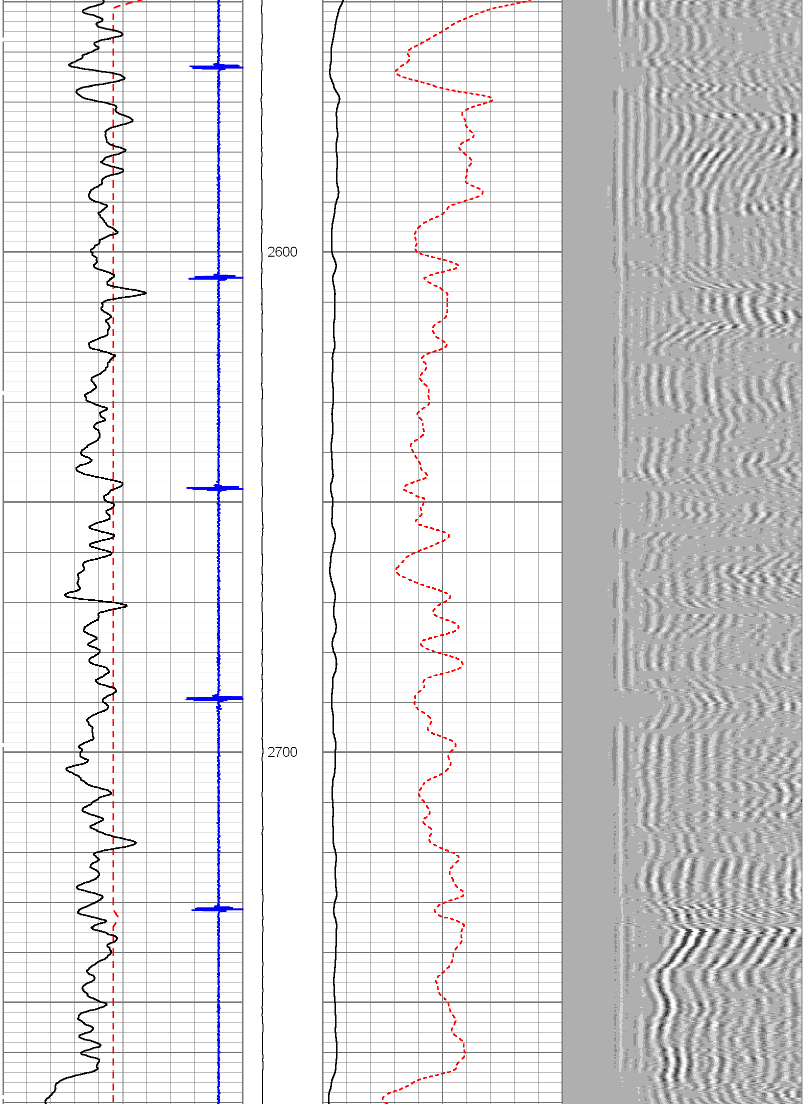


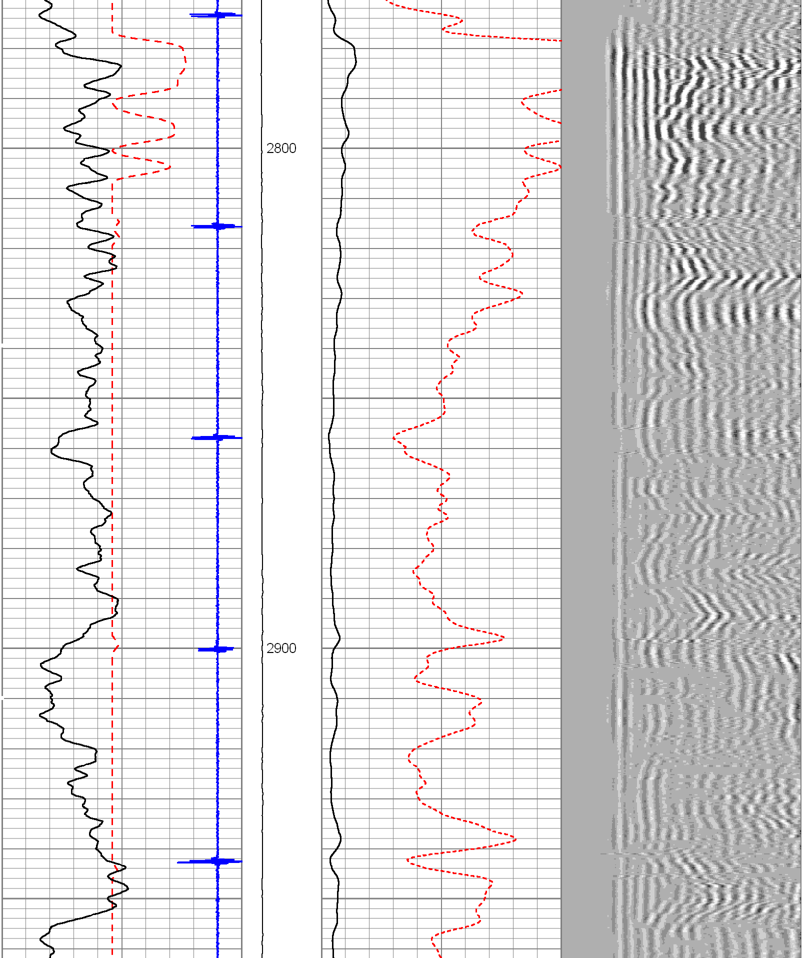


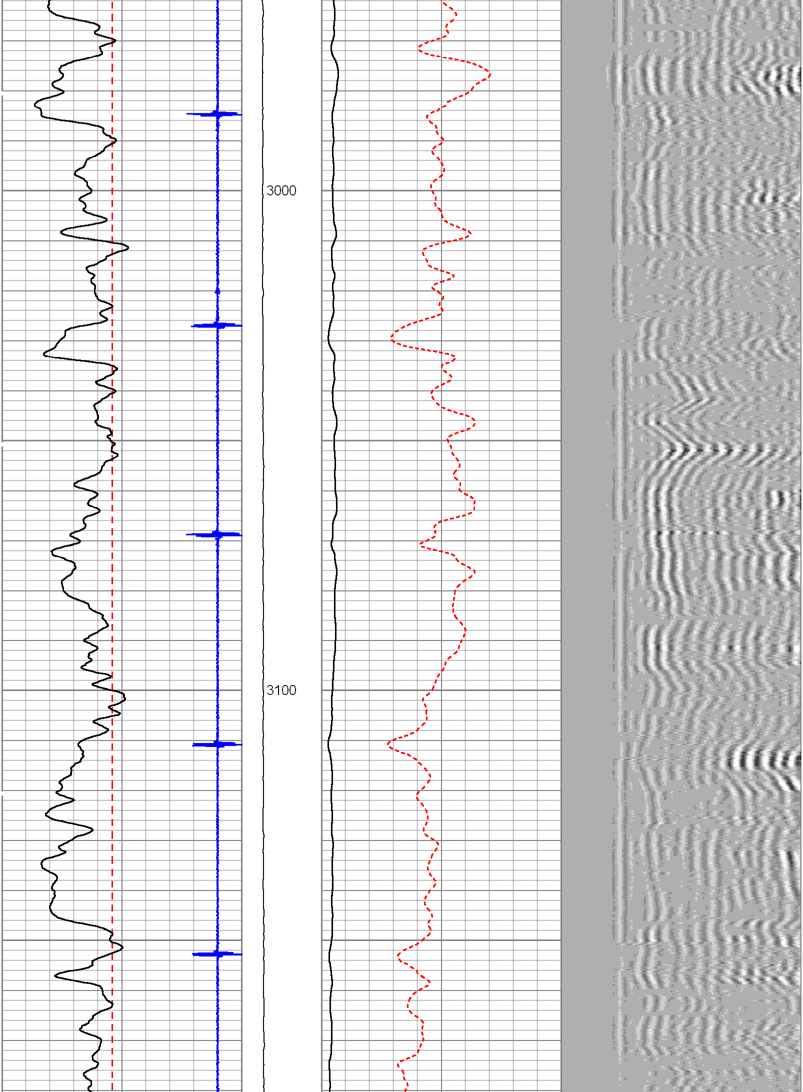


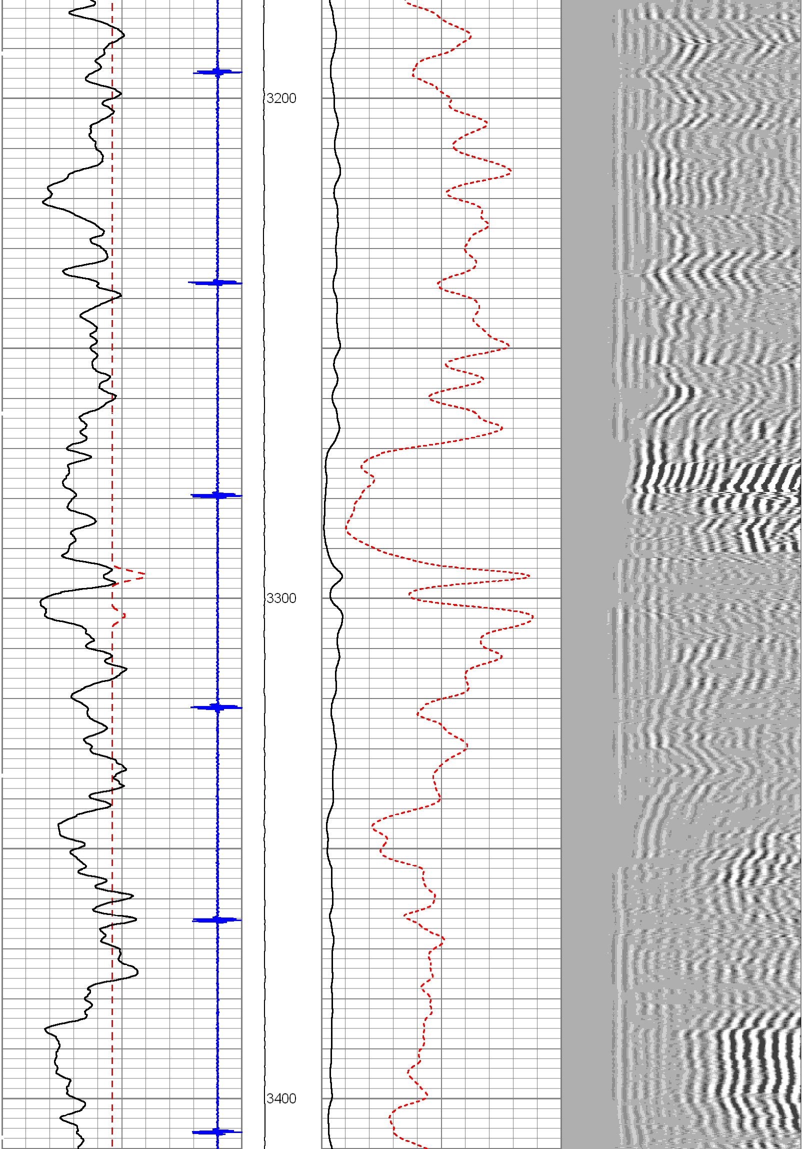


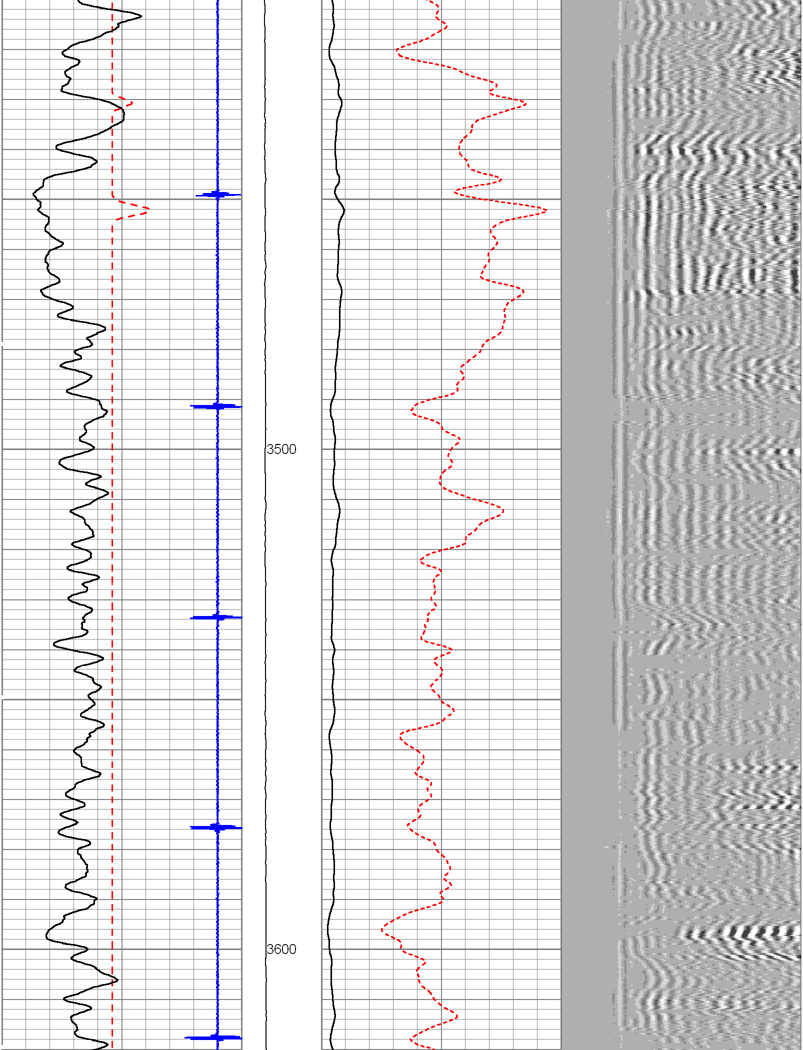


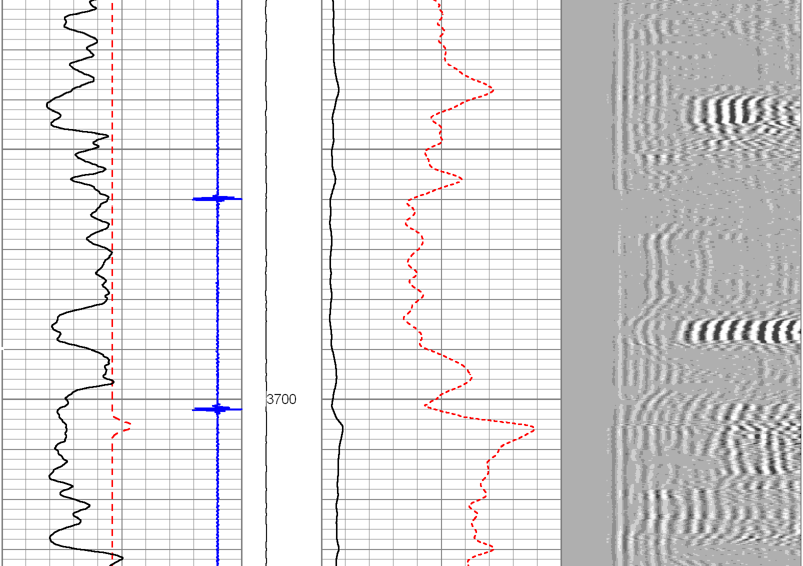


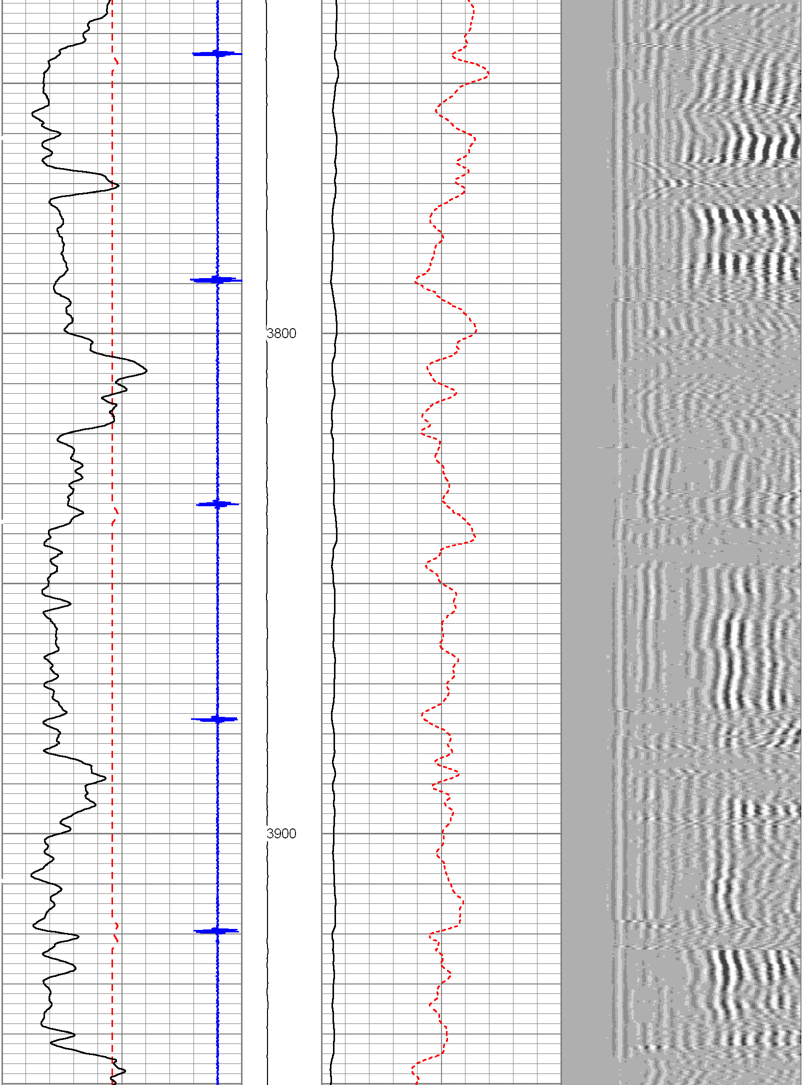


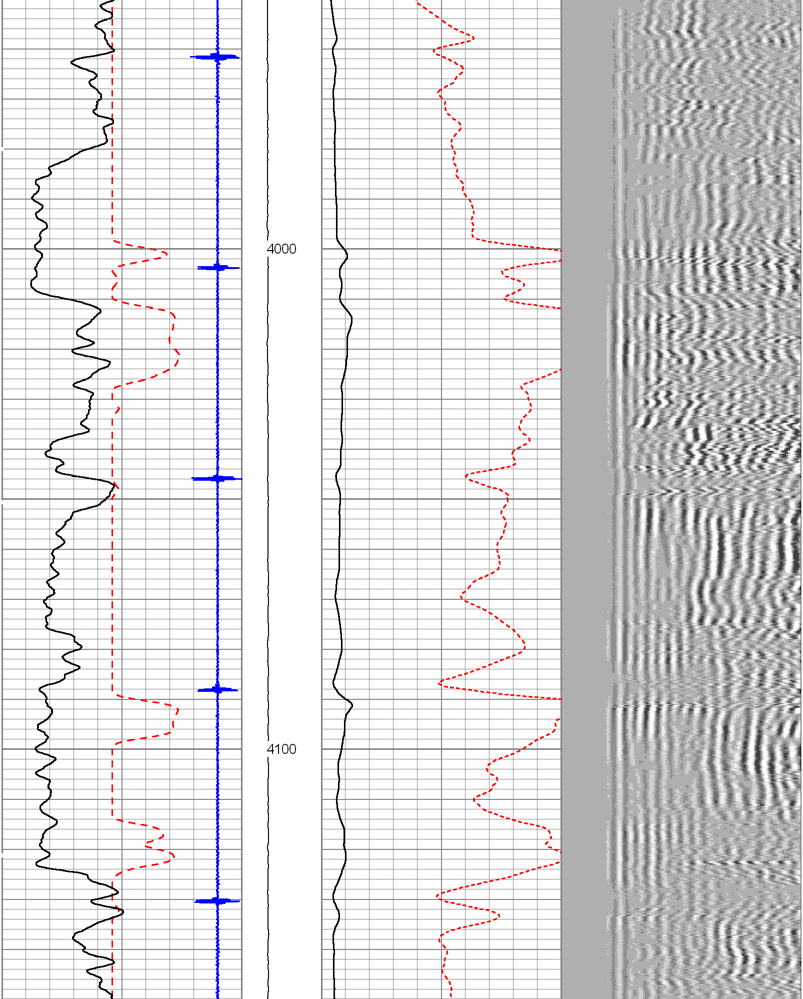


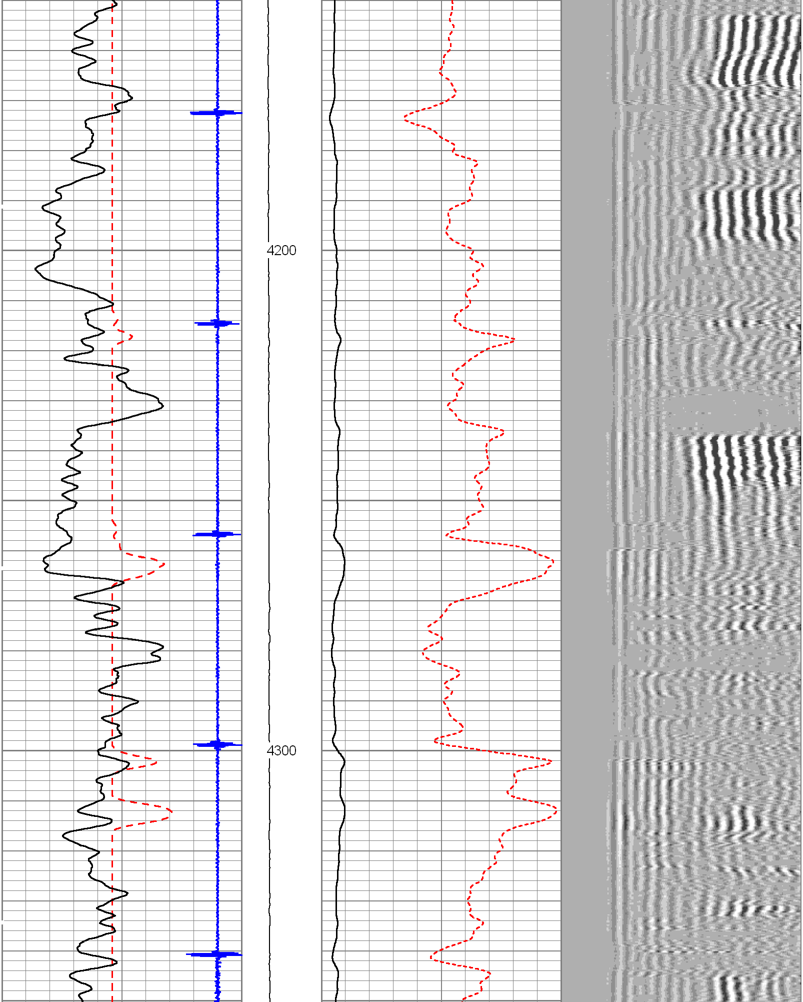


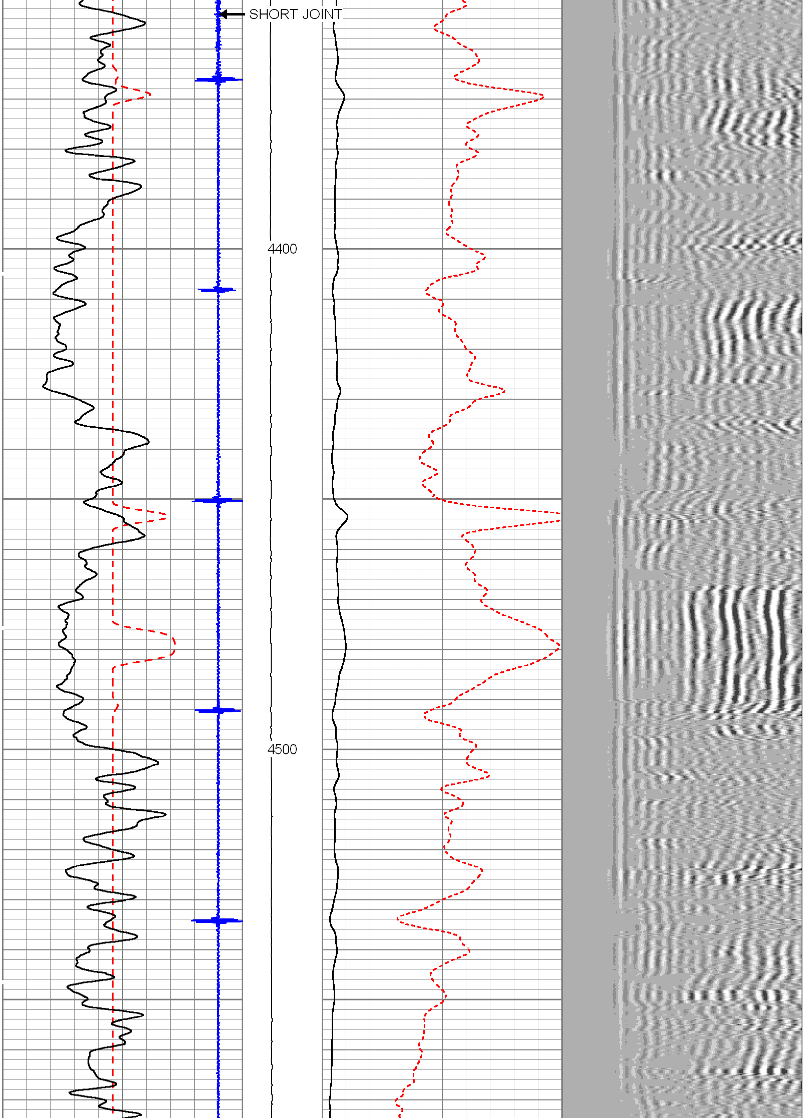


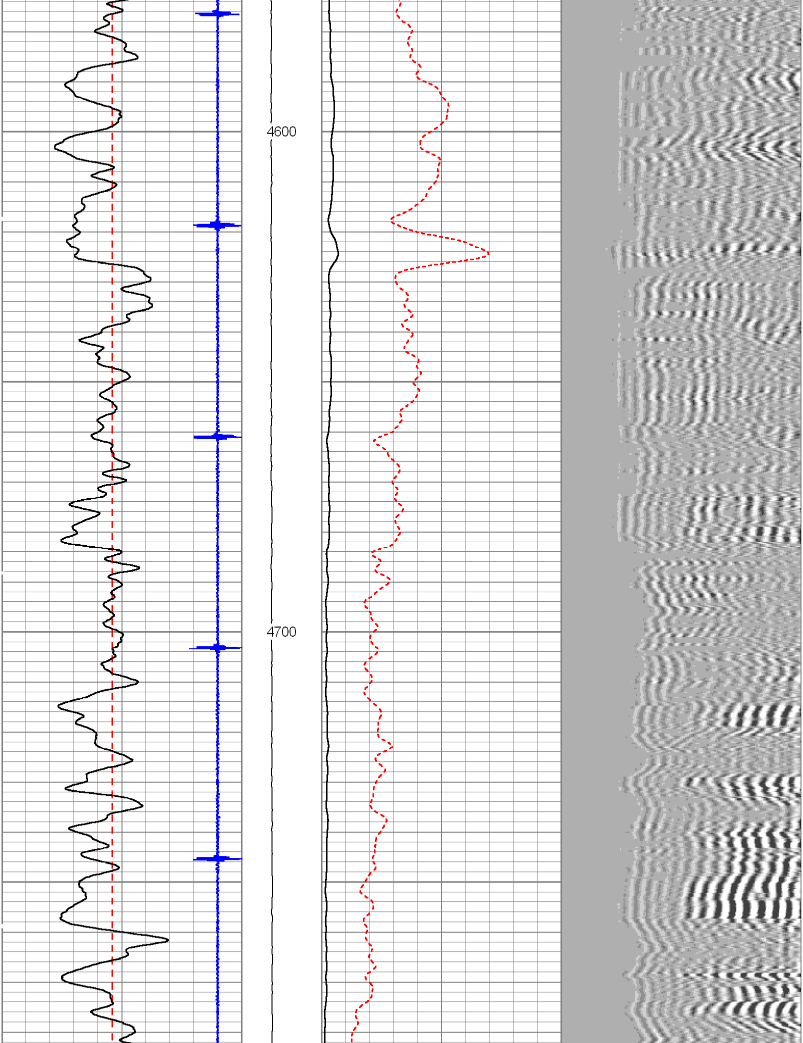


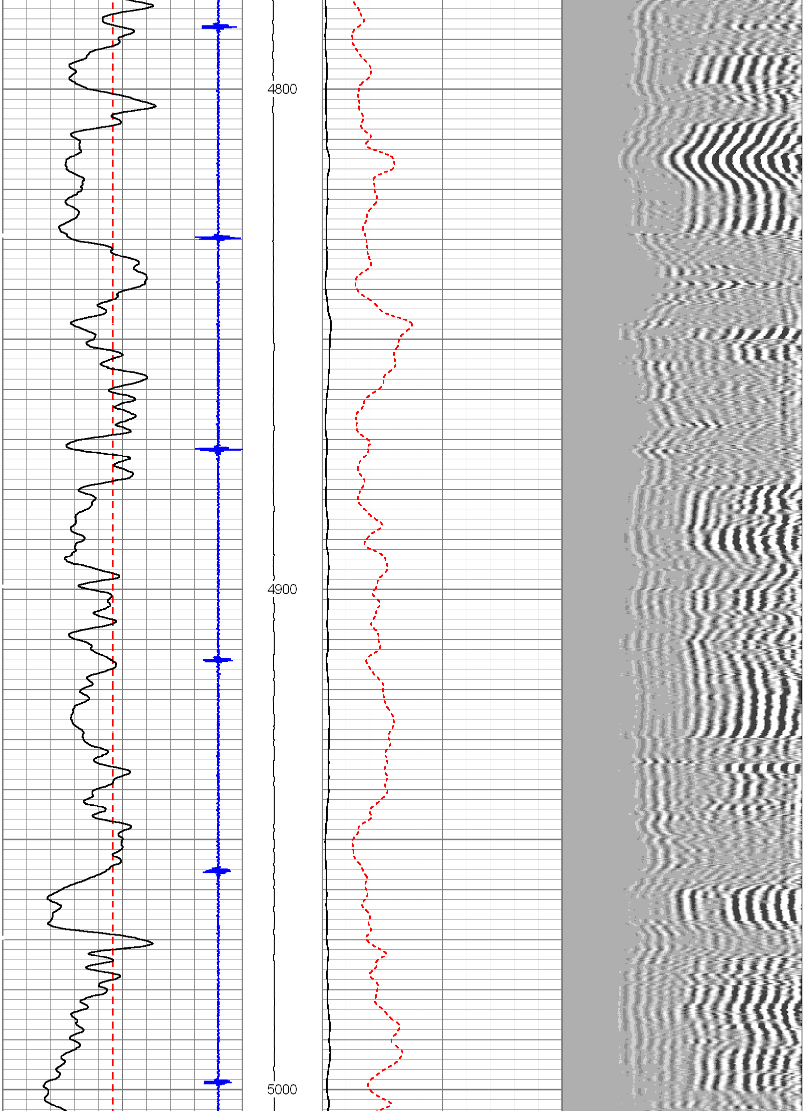


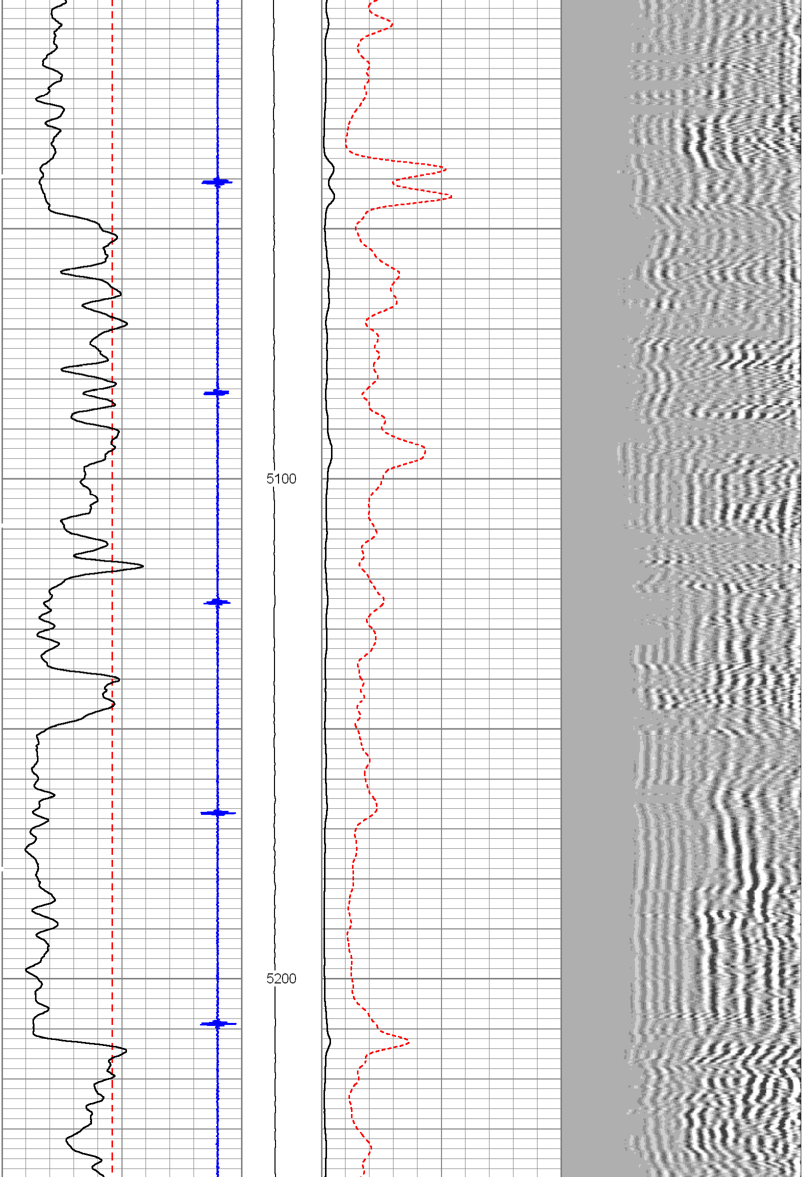


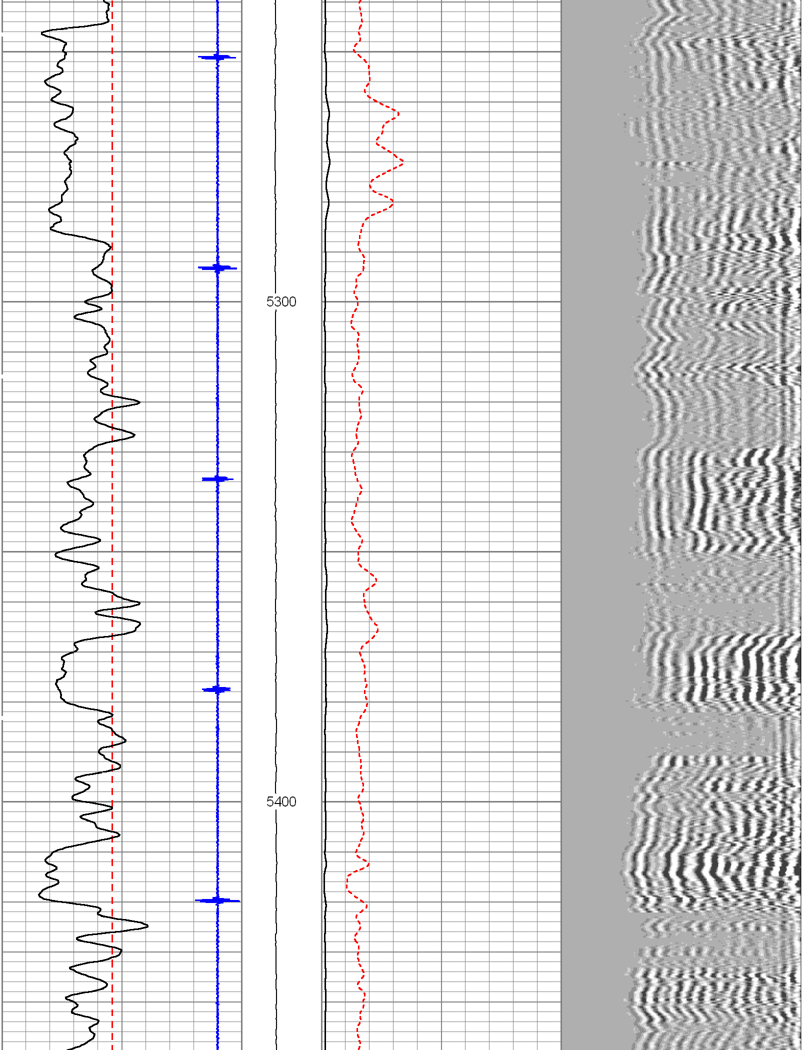


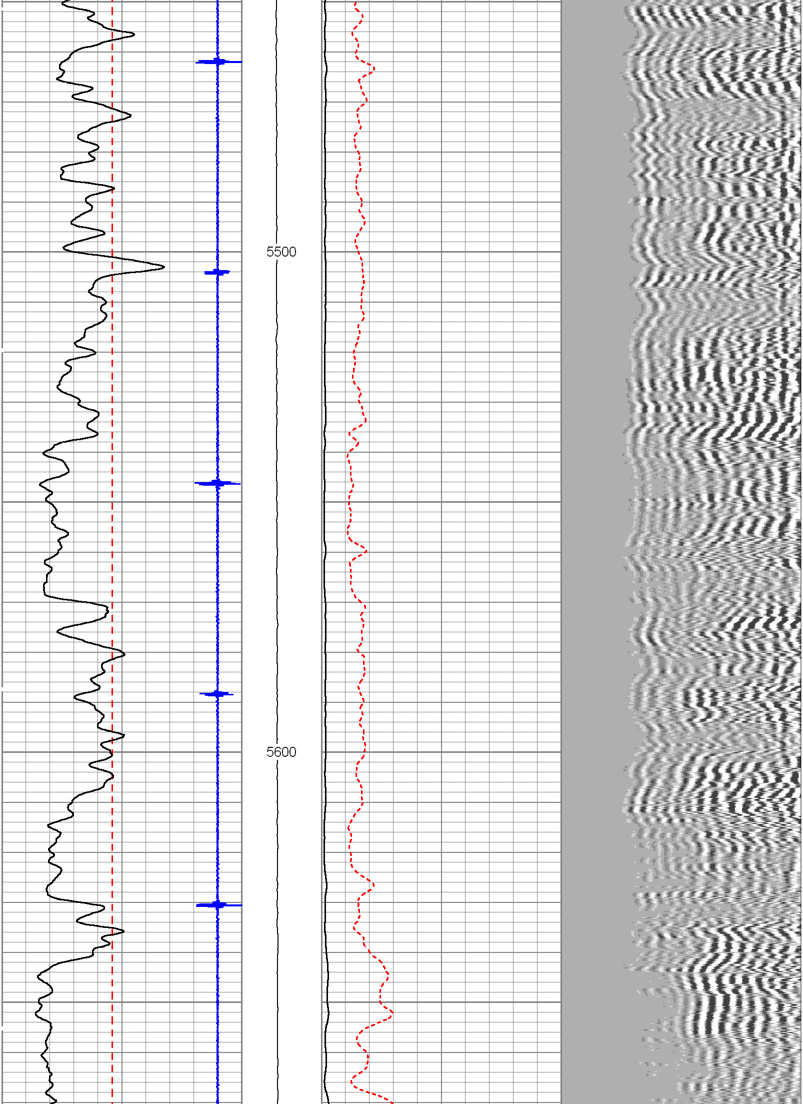


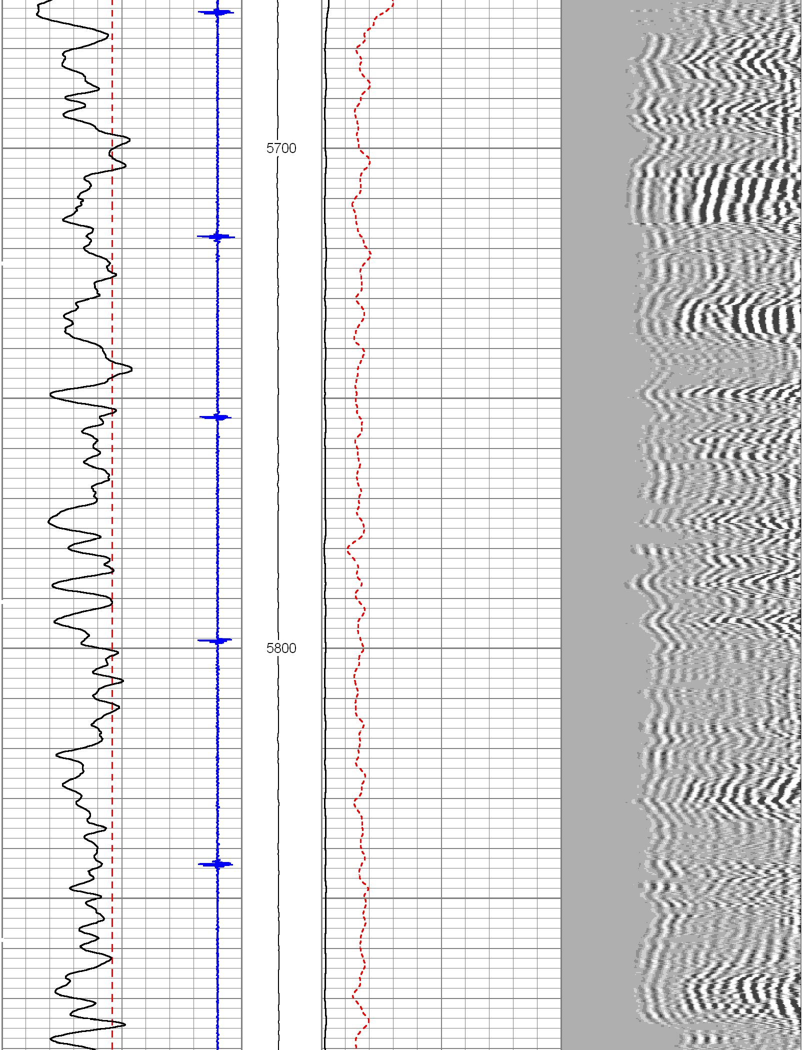


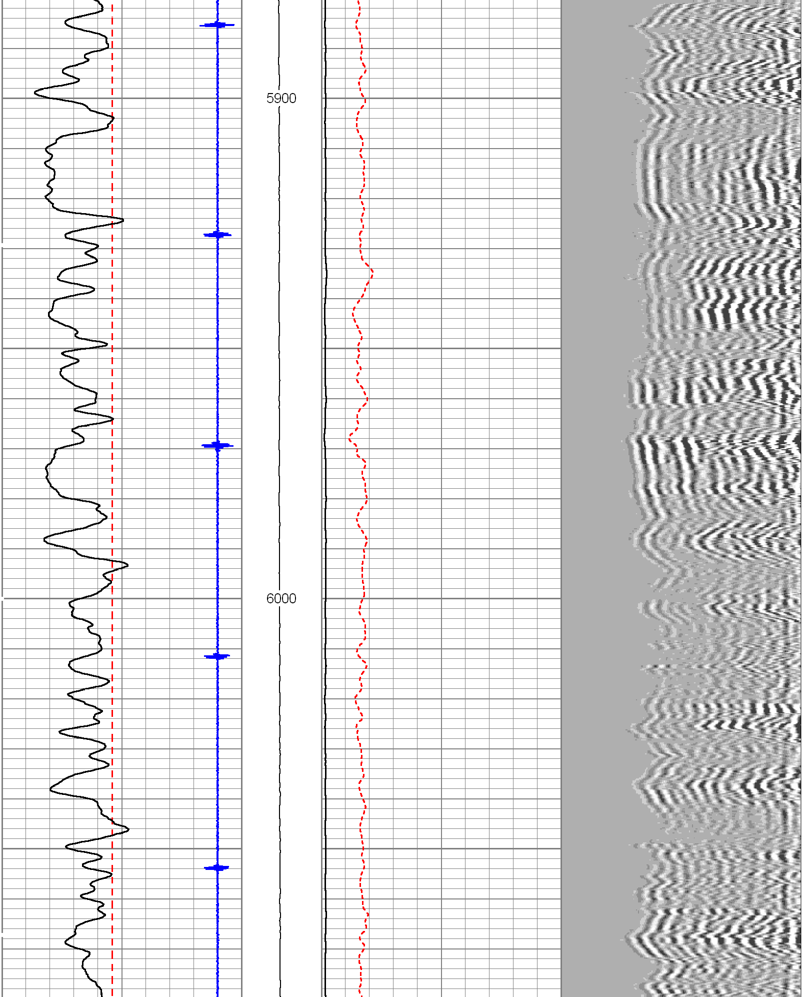


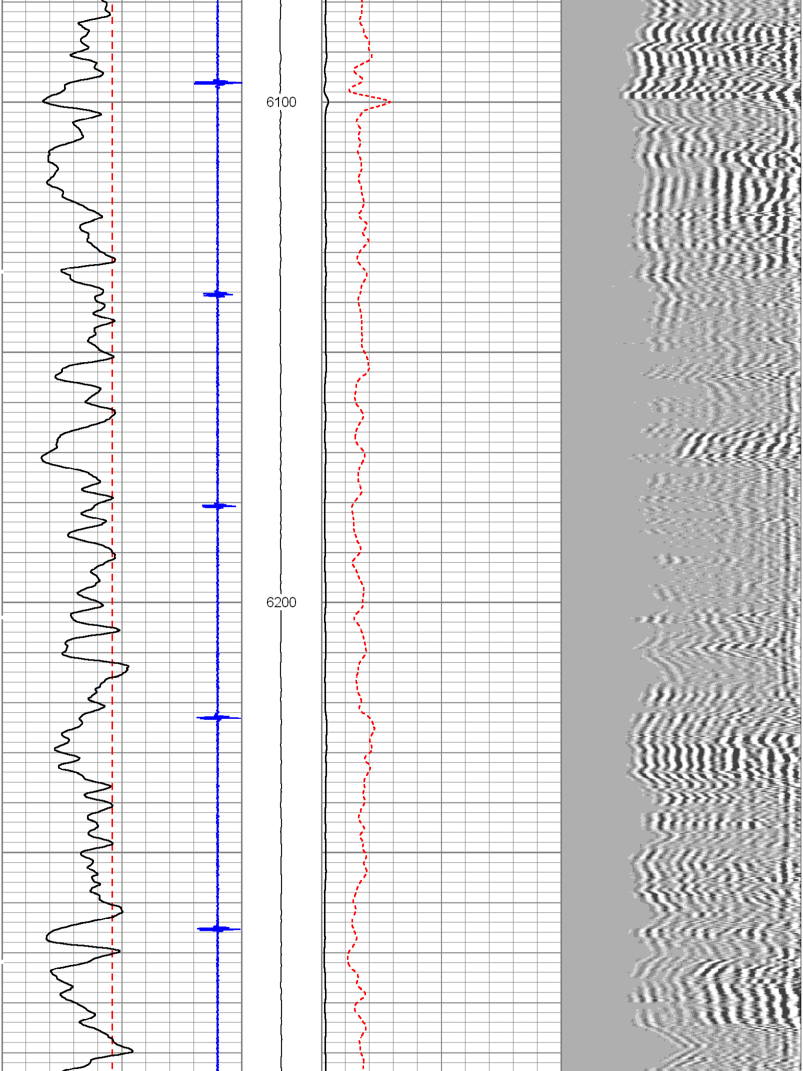


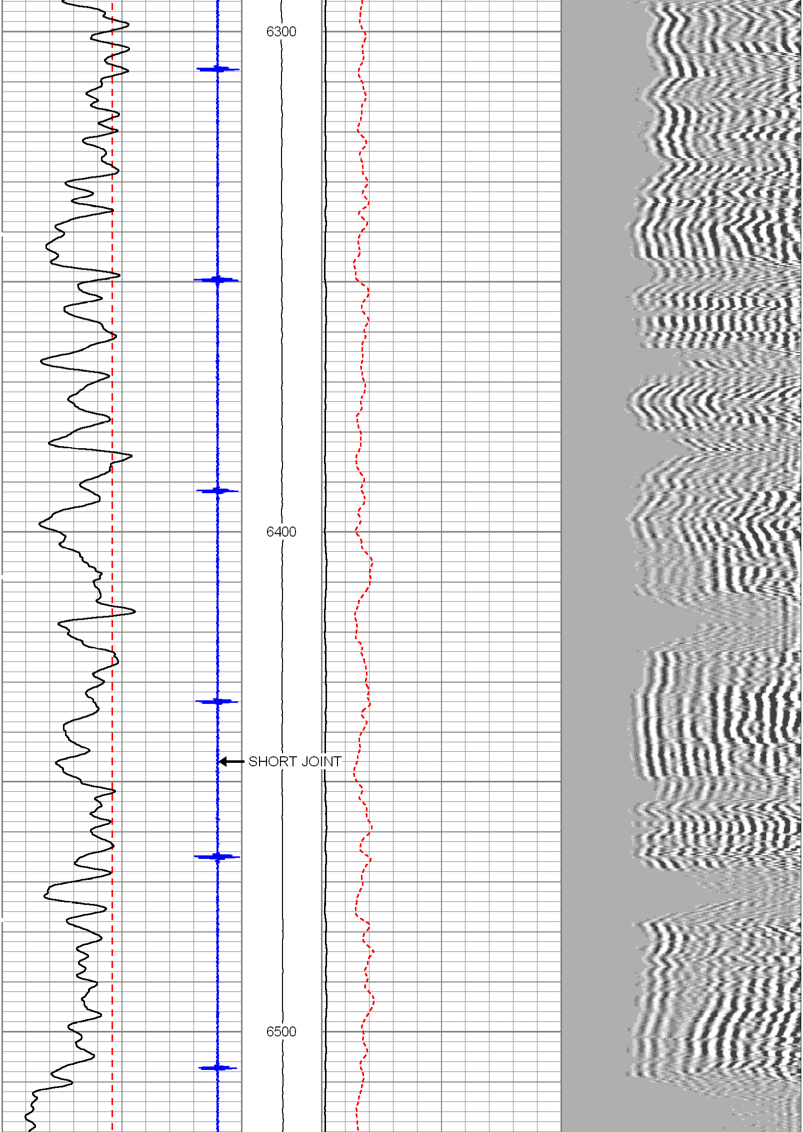


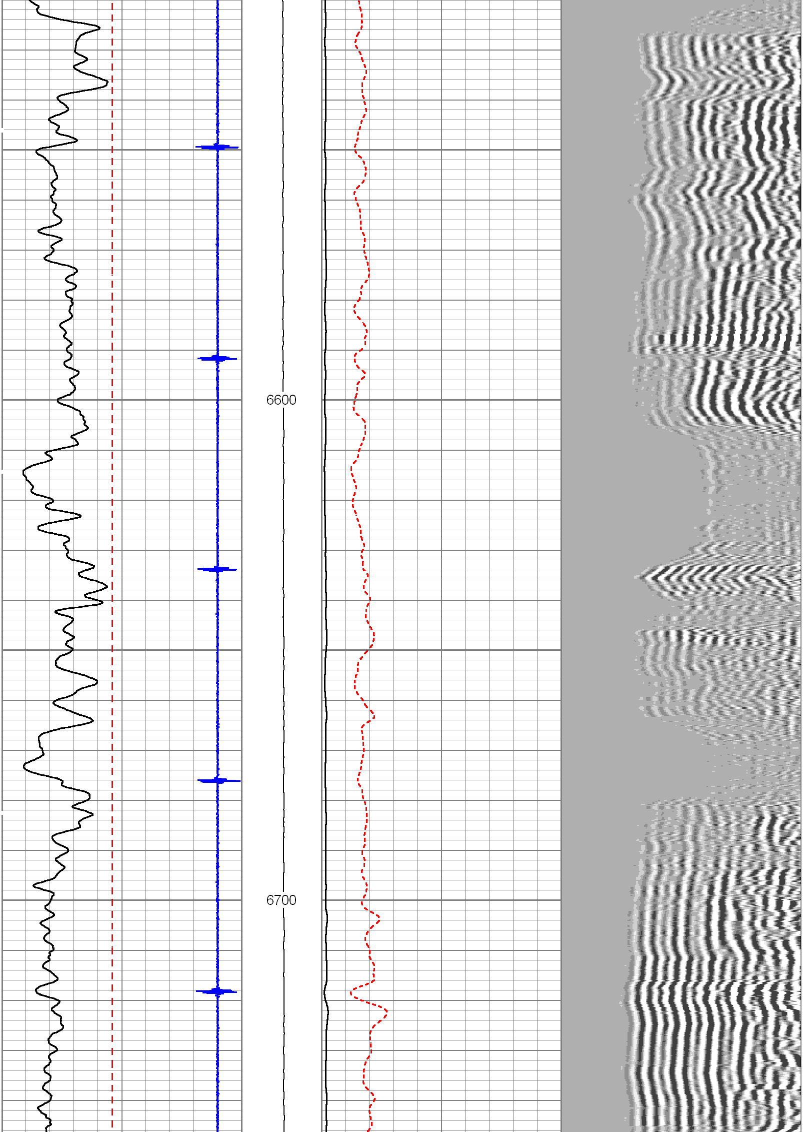


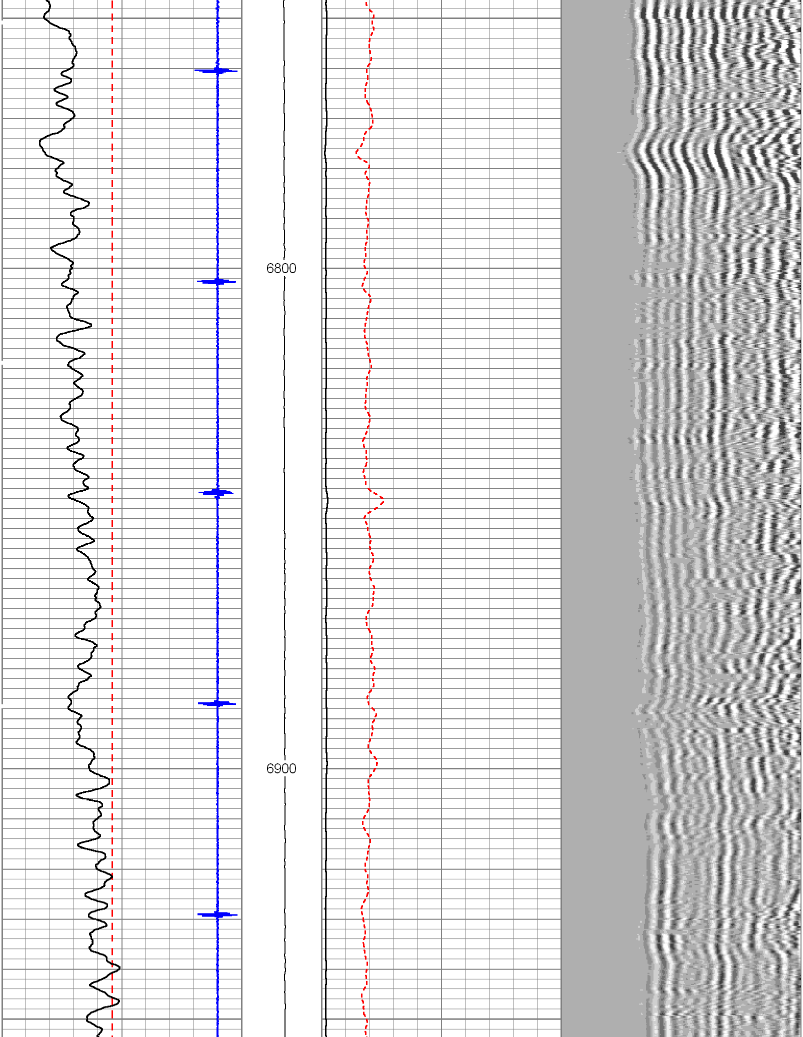


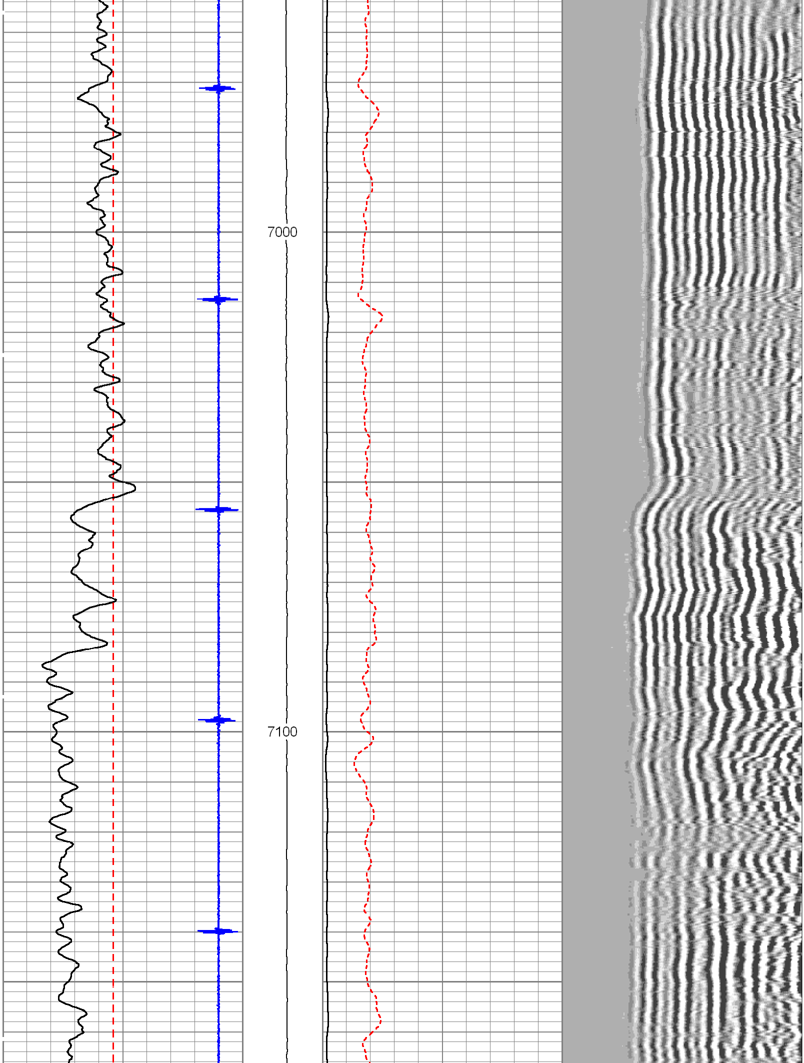


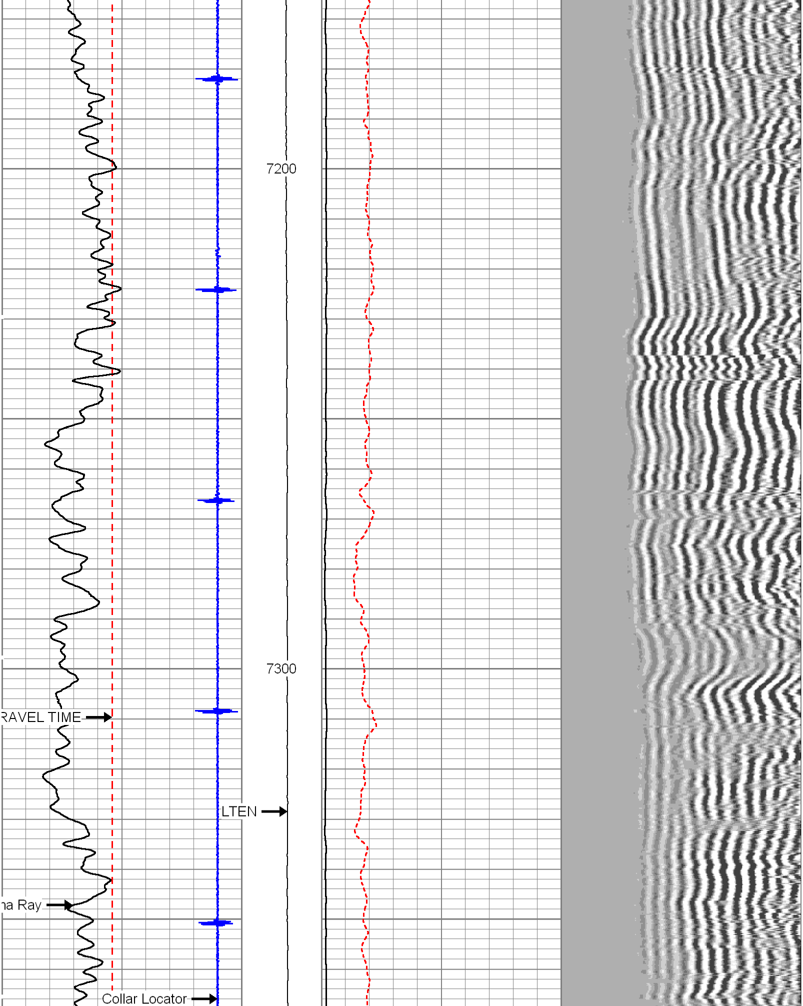


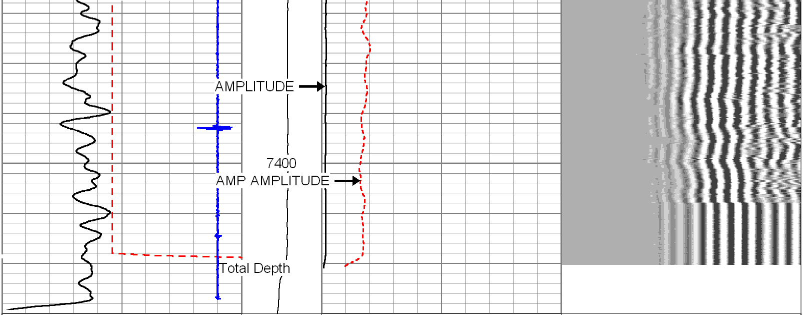












374 TRAVEL TIME (usec) 274	LTEN	0 AMP AMPLITUDE (mV) 10	200 MSG 1200
-9 Collar Locator 1	0 (lb'3000	0 AMPLITUDE (mV) 100	
0 Gamma Ray (GAPI) 200			

HALLIBURTON

MAIN LOG SECTION

5" = 100'

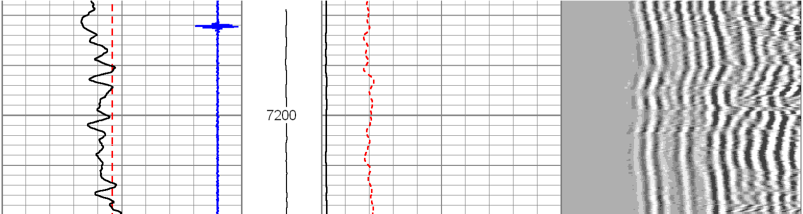
HALLIBURTON

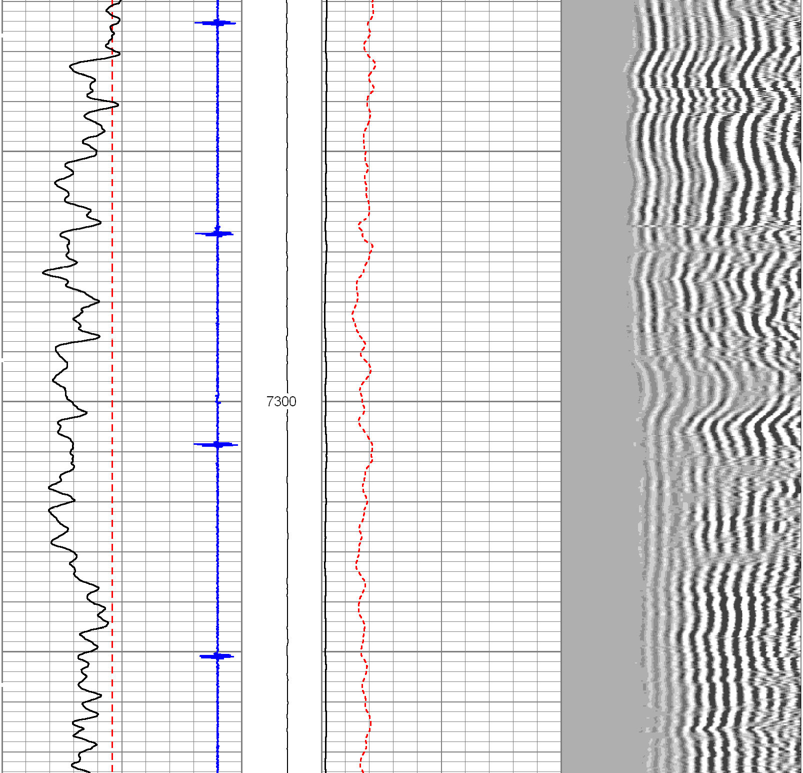
REPEAT LOG SECTION

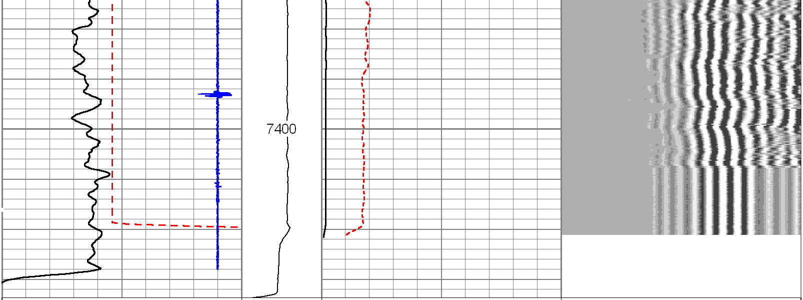
5" = 100'

Database File:	hawxhurst_17_03c_cbl.db
Dataset Pathname:	UP1
Presentation Format:	cbl_main
Dataset Creation:	Wed May 04 16:55:07 2011 by Log Halliburton Casedho
Charted by:	Depth in Feet scaled 1:240

374 TRAVEL TIME (usec) 274	LTEN	0 AMP AMPLITUDE (mV) 10	200 MSG 1200
-9 Collar Locator 1	0 (lb'3000	0 AMPLITUDE (mV) 100	
0 Gamma Ray (GAPI) 200			







374 TRAVEL TIME (usec) 274	LTEN	0 AMP AMPLITUDE (mV) 10	200 MSG 1200
-9 Collar Locator 1	0 (lb)3000	0 AMPLITUDE (mV) 100	
0 Gamma Ray (GAPI) 200			

HALLIBURTON

REPEAT LOG SECTION

5" = 100'

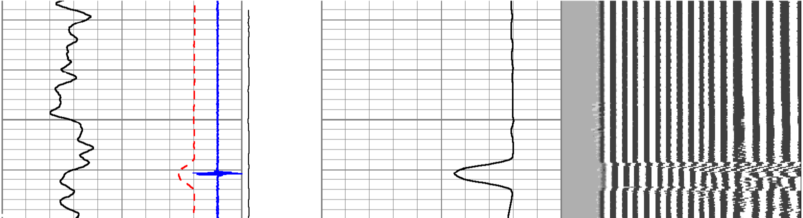
HALLIBURTON

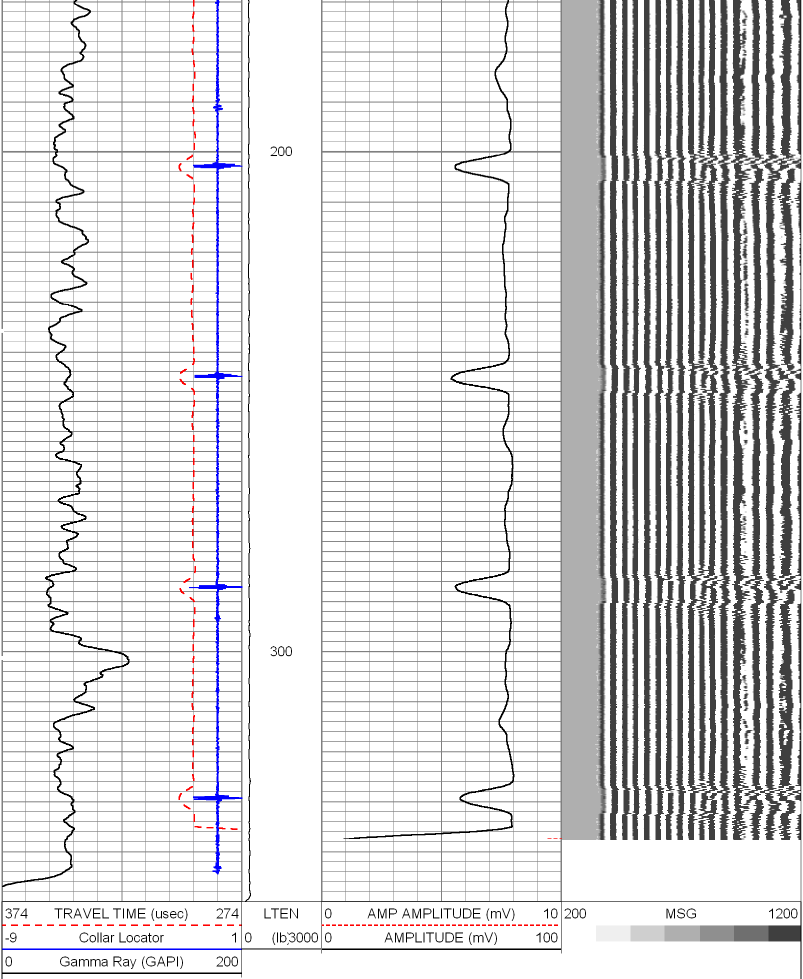
FREE PIPE LOG SECTION

5" = 100'

Database File:	hawxhurst_17_03c_cbl.db
Dataset Pathname:	pass3
Presentation Format:	cbl_main
Dataset Creation:	Wed May 04 15:05:01 2011 by Log Halliburton Casedho
Charted by:	Depth in Feet scaled 1:240

374 TRAVEL TIME (usec) 274	LTEN	0 AMP AMPLITUDE (mV) 10	200 MSG 1200
-9 Collar Locator 1	0 (lb)3000	0 AMPLITUDE (mV) 100	
0 Gamma Ray (GAPI) 200			





HALLIBURTON

FREE PIPE LOG SECTION

5" = 100'

Calibration Report

Database File: hawxhurst_17_03c_cbl.db
Dataset Pathname: FINAL1
Dataset Creation: Wed May 04 18:56:30 2011

Temperature Calibration Report

Serial Number: 0001
Tool Model: 1.375TEMP
Performed: Fri Jul 05 03:18:21 1996

	Reference		Reading	
Low Reference:	0.00	degF	0.00	cps
High Reference:	1.00	degF	1.00	cps

Gain: 0.10
Offset: 0.00
Delta Spacing 1

Gamma Ray Calibration Report

Type / Serial: Probe / 061015

SHOP CALIBRATION

Wed May 04 14:51:06 2011

	Counts/Sec.	Gain	Offset	Jig	Units
Background	51.9				cps
Calibrator	304.2				cps
		0.9630			GAPI/cps

PRIMARY VERIFICATION

Wed May 04 14:53:25 2011

	Counts/Sec.	Gain	Offset	Jig	Units
Background	47.7				cps
Calibrator	297.7				cps
Difference				250.0	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

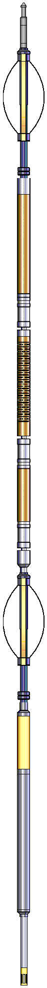
	Counts/Sec.	Gain	Offset	Jig	Units
Background	0.0				cps
Calibrator	0.0				cps
Difference				0.0	GAPI

Cement Bond Log Calibration Report

Serial Number: 080544
Tool Model: Probe
Performed: Wed May 04 15:03:57 2011

Depth: 159.618 ft
Casing Diameter: 4.5 in

	3' Spacing	5' Spacing	
Signal Zero:	1	1	mV
Calibrated Amplitude:	81.1961	81.1961	mV
Reading at Signal Zero:	0.00205078	0.00253906	V
Reading in Free Pipe:	1.748	1.52842	V
Gain:	45.9327	52.5573	
Offset:	0.905802	0.866554	

Sensor	Offset (ft)	Schematic	Description	Len (ft)	OD (in)	Wt (lb)
			STND_CH 1.4375 IN CABLE HEAD	1.02	1.44	2.00
			CENT-Probe (PT_MONO2) Probe 2 3/4 Centralizer	2.88	2.75	35.00
WVF3 WVF5	13.34 12.34		CBL-Probe (080544) Probe 2.75" Dual Receiver Bond	8.75	2.75	108.00
			CENT-Probe (PT_MONO2) Probe 2 3/4 Centralizer	2.88	2.75	35.00
CCL GR	5.50 4.08		GR-Probe (061015) Probe 2.75" 4 Channel Pulse	4.77	2.75	60.00
TEMP LLMTEN	0.08 0.00		TEMP-1.375TEMP (0001) Temperature Tool	1.50	1.38	5.00

Dataset:	hawxhurst_17_03c_cbl.db: field/well/run1/FINAL1
Total Length:	21.81 ft
Total Weight:	245.00 lb
O.D.	2.75 in

Company	LARAMIE ENERGY II, LLC.
Well	HAWXHURST 17-03C
Field	BRUSH CREEK
County	MESA
State	CO

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ACOUSTIC CEMENT BOND LOG