HALLIBURTON

CEMENT BOND LOG

Company	CARRIZO
Well	BOB WHITE 3-36-8-62
Field	WILDCAT
County	WELD
State	CO

Company	CARRIZO
Well	BOB WHITE 3-36-8-62
Field	WILDCAT
County	WELD
State	CO

API No.: 05-123-37742 Serv #: 900739800

Location: LAT:40.61109 LONG:-104.27506

Sec: 36 Twp: 8N Rge: 62W

Other Services

N/A

Permanent Datum	GL	Elevation	4939 '
Log Measured From	KB , 15 Ft. above perm. datum		
Drilling Measured From	KB		

Elevation	
K.B.	4954 '
D.F.	4953 '
G.L.	4939 '

Date @ Time Logged	09/13/2013 @ 11:00	Type Fluid in Hole	FRESH WATER
Run No.	01	Density of Fluid	8.33
Depth - Driller	10795 '	Fluid Level	SURFACE
Depth - Logger	6463 '	Cement Top Est. Logged	900 '
Bottom - Logged Interval	6451 '	Equipment / Location	11703208 / BRIGHTON
Top - Log Interval	SURFACE	Recorded by	F.KUMA/ T. SCHROCK
Max. Recorded Temp.	196 DEG	Witnessed by	K. WILLIAMS

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

Borehole Record				Casing & Tubing Record			
Run Number	Bit	From	To	Size	Weight	From	To
ONE	8.75	0	6382	7	23.0	0	6382
LINER	6.25	5658	10795	4.5	11.60	5658	10795

<<< 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 WHICH 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

PRIMARY DEPTH REFERENCE

ESTIMATED TOP OF CEMENT @ 900 '

TOP OF LINER @ 5282 '

BLANKET VALUE : 237 GAPI

THANK YOU FOR CHOOSING HALLIBURTON ENERGY SERVICES
YOUR CREW TODAY: F. KUMA, T. SCHROCK, J. SAAD, E. FRIEDLAND.

HALLIBURTON

MAIN PASS (1000 PSI)

SCALE: 5"=100'

Database File:	carrizobobwhite3-36-8-62.db
Dataset Pathname:	pass6
Presentation Format:	1katcbl
Dataset Creation:	Fri Sep 13 11:50:02 2013 by Log Halliburton Casedho
Charted by:	Depth in Feet scaled 1:240

9 Collar Locator -1

0 Gamma Ray (GAPI) 150

340 Travel Time (usec) 240

Tension

0 (lb 2000

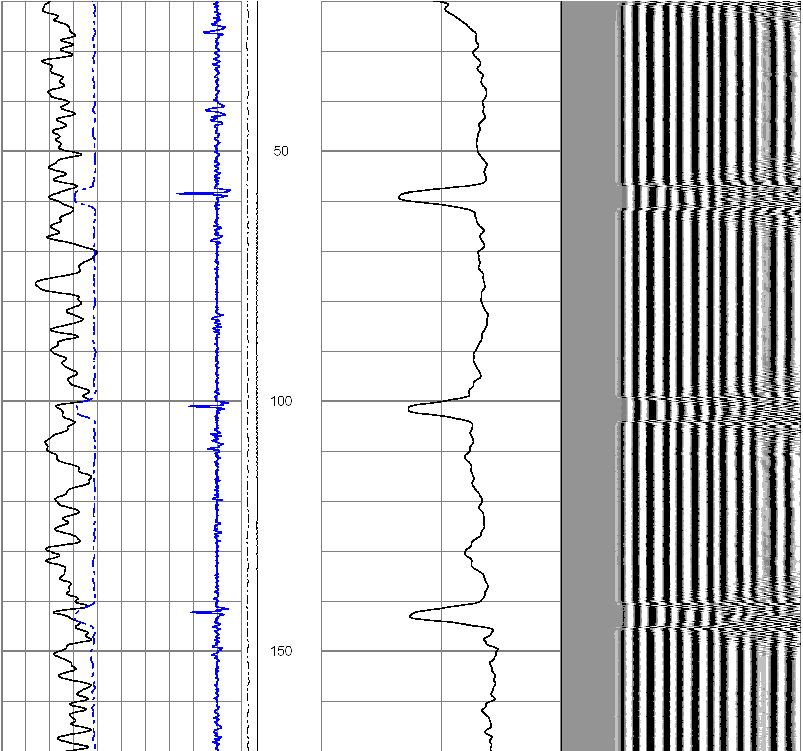
Temperature (degF)

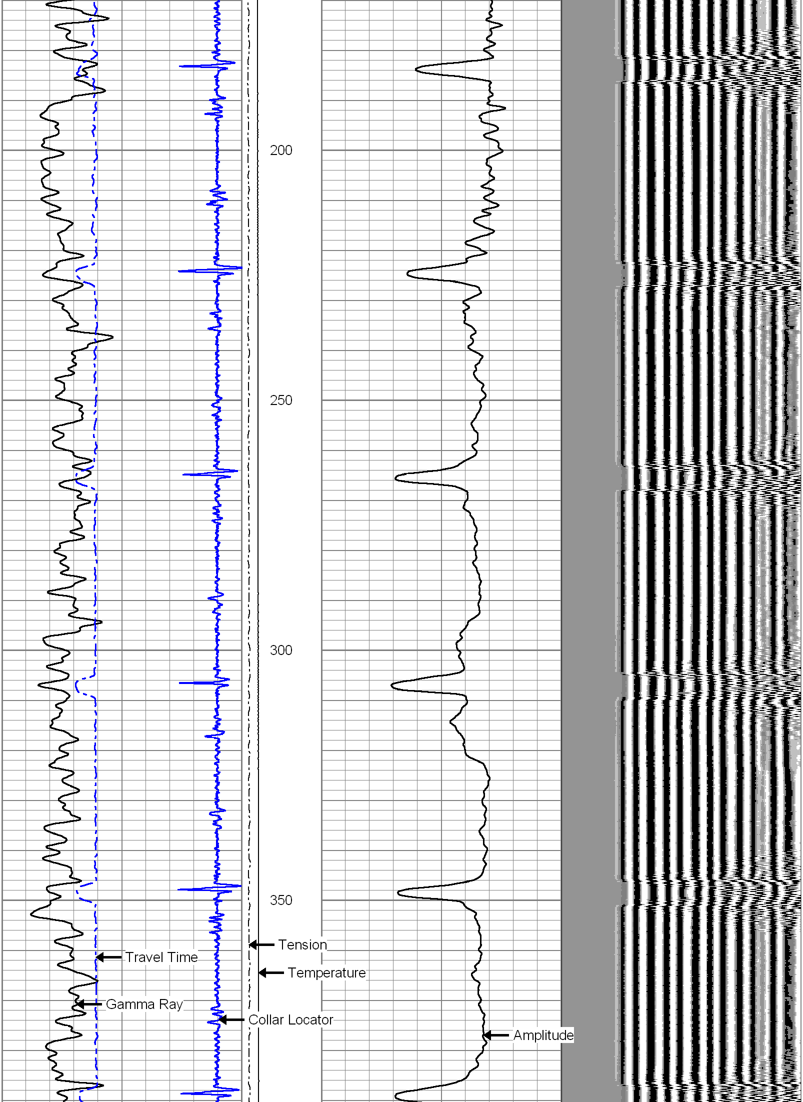
0 300

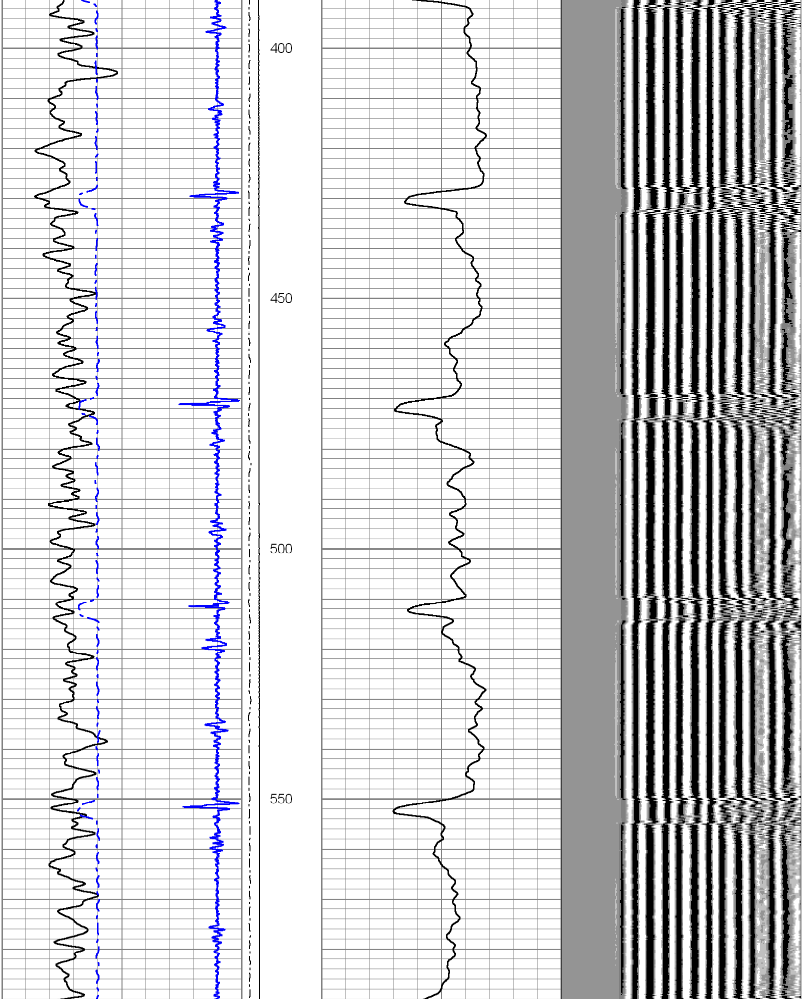
0 Amplified Amplitude (mV) 10

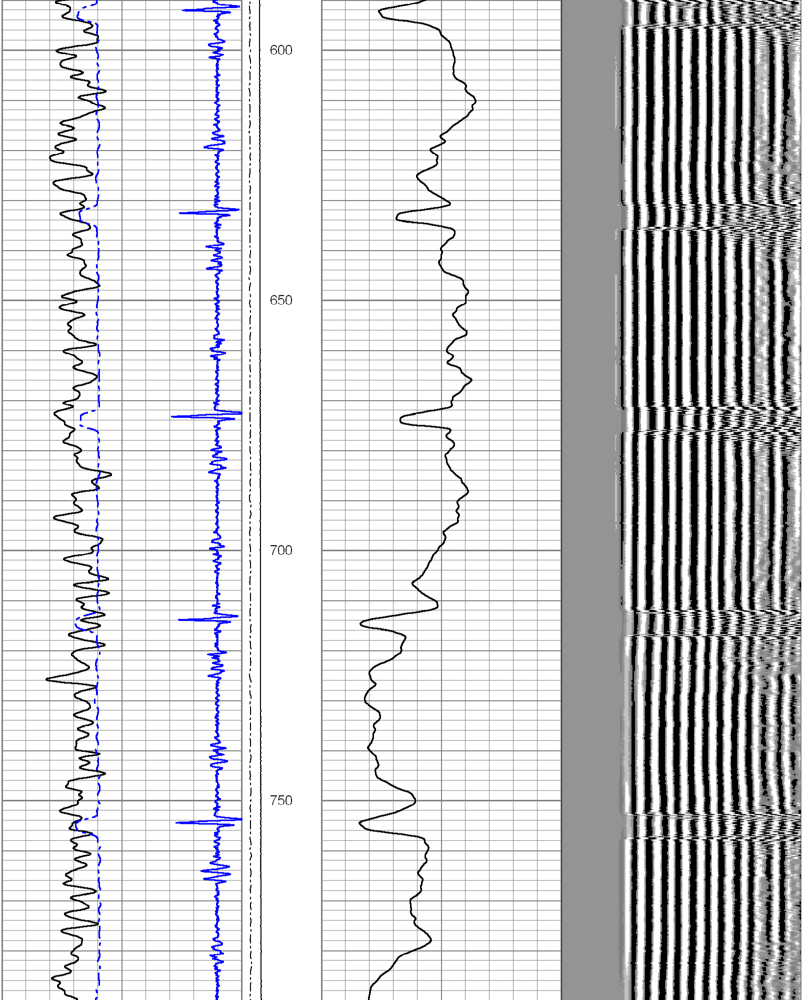
0 Amplitude (mV) 100

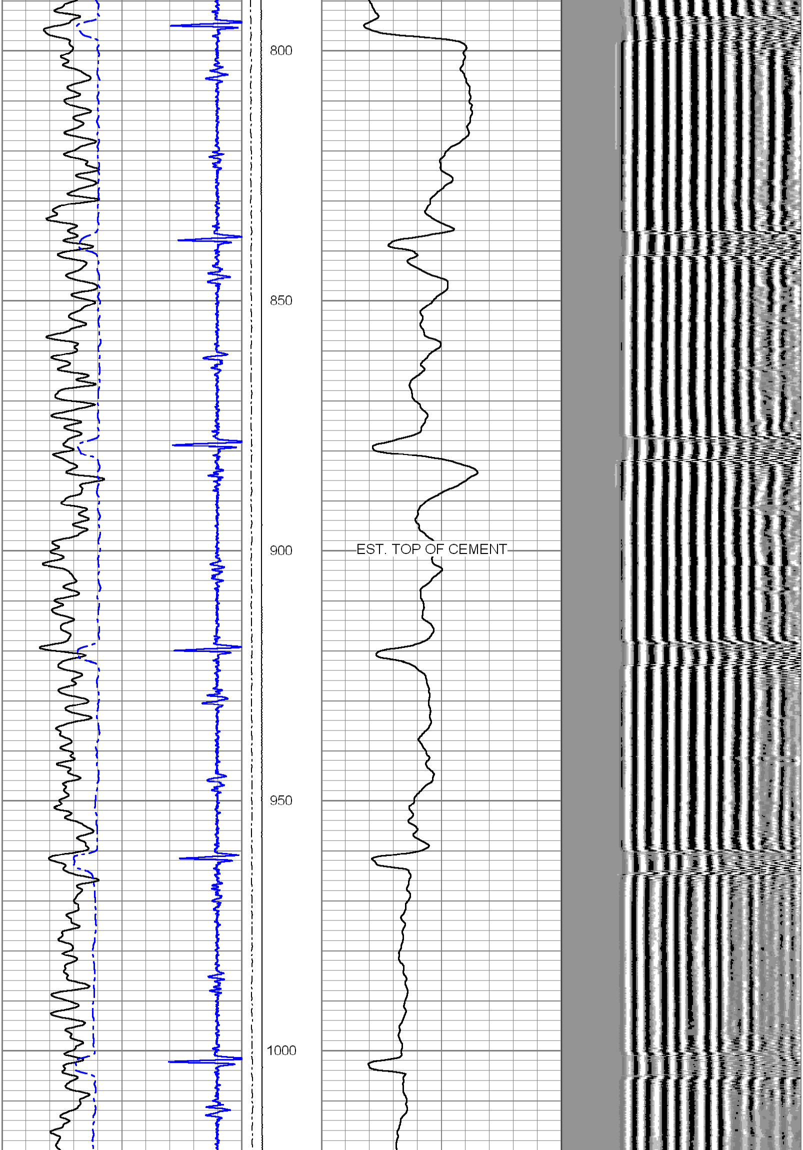
200 MSG 1200

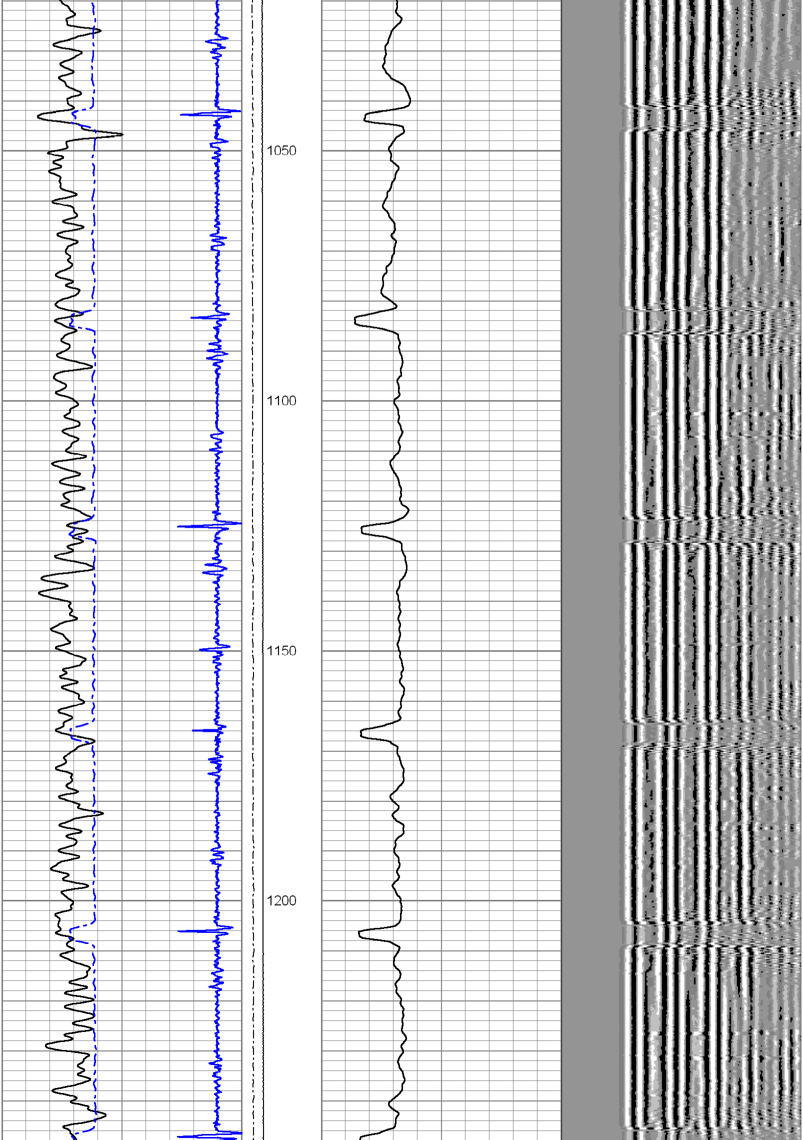


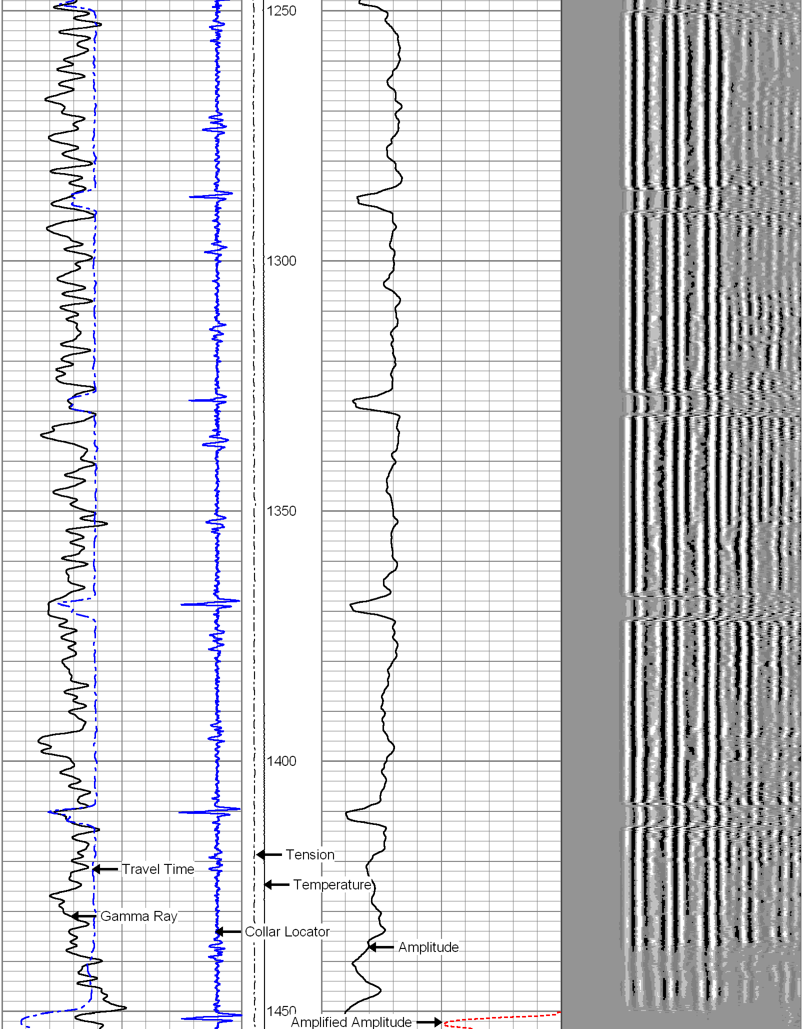


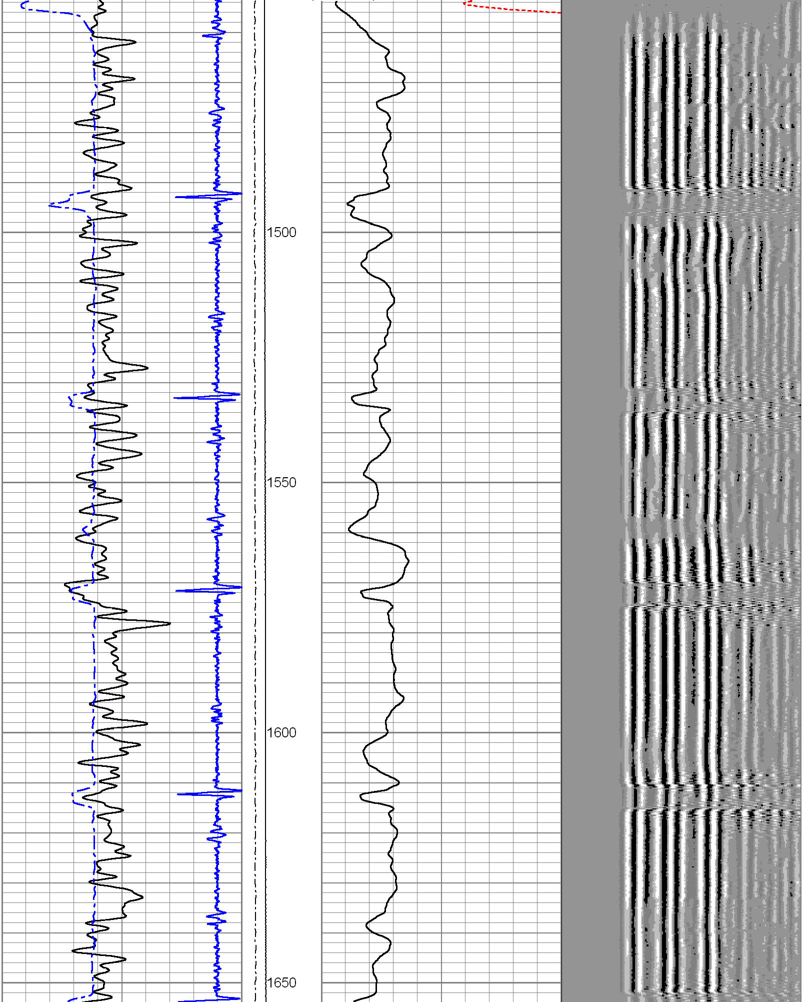


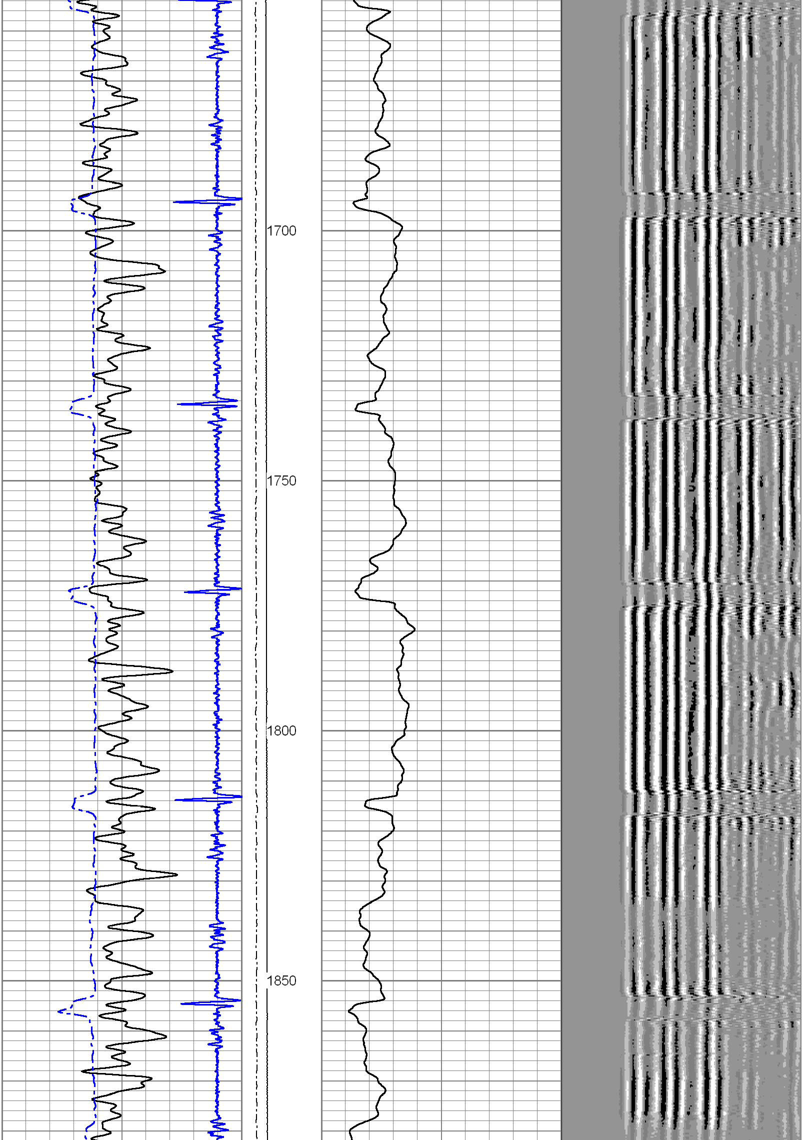


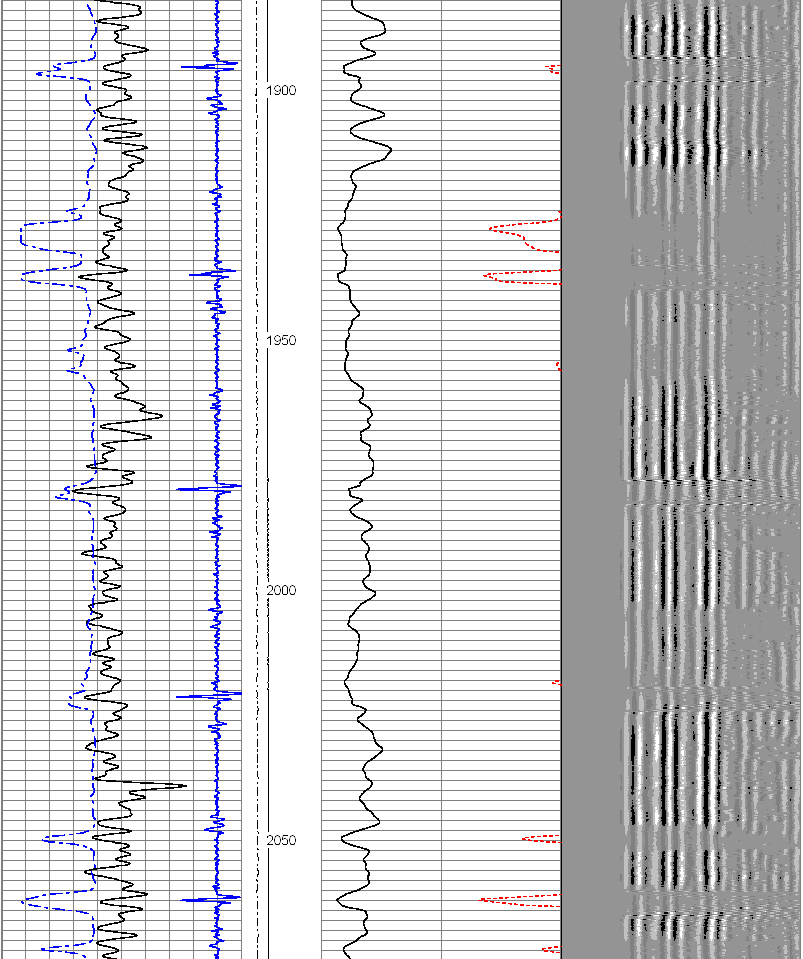


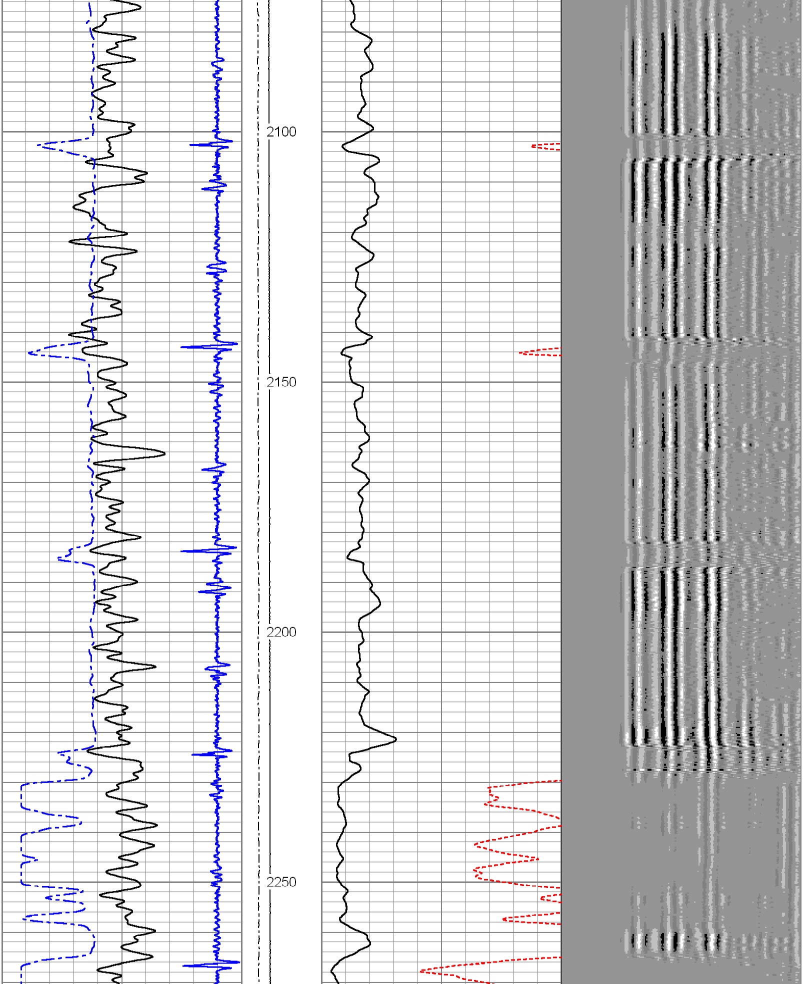


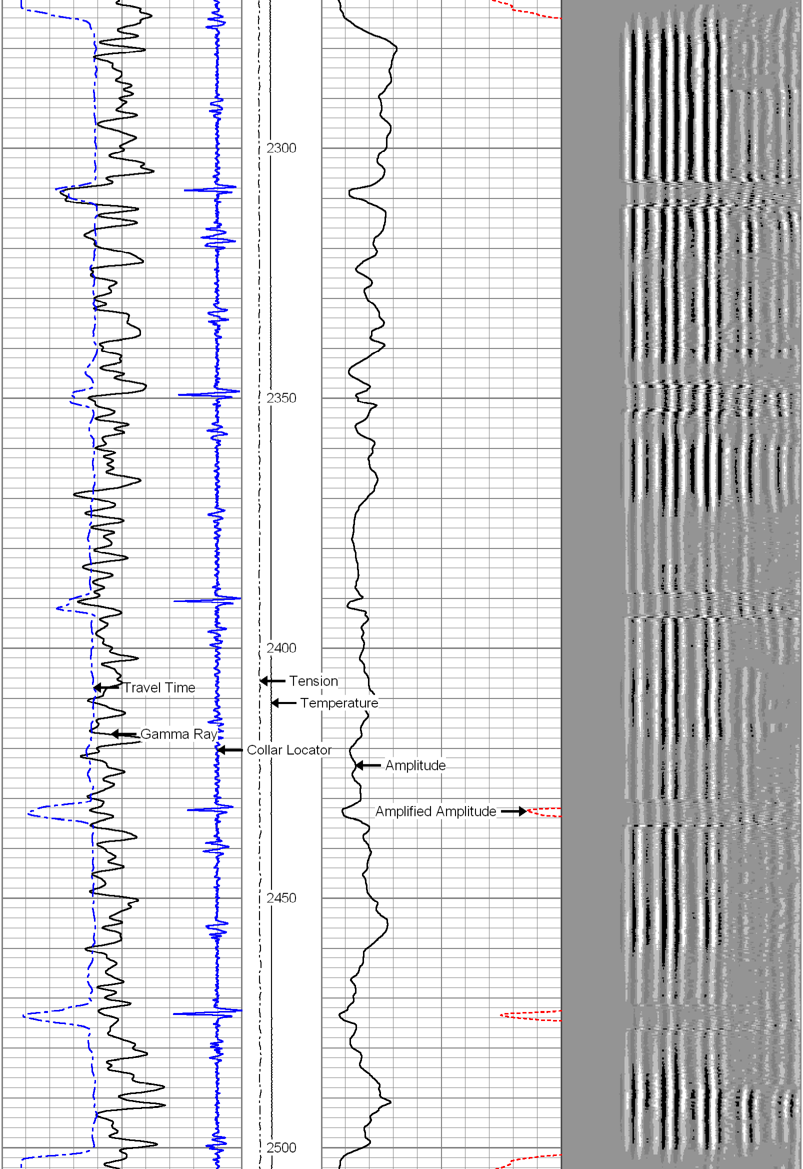


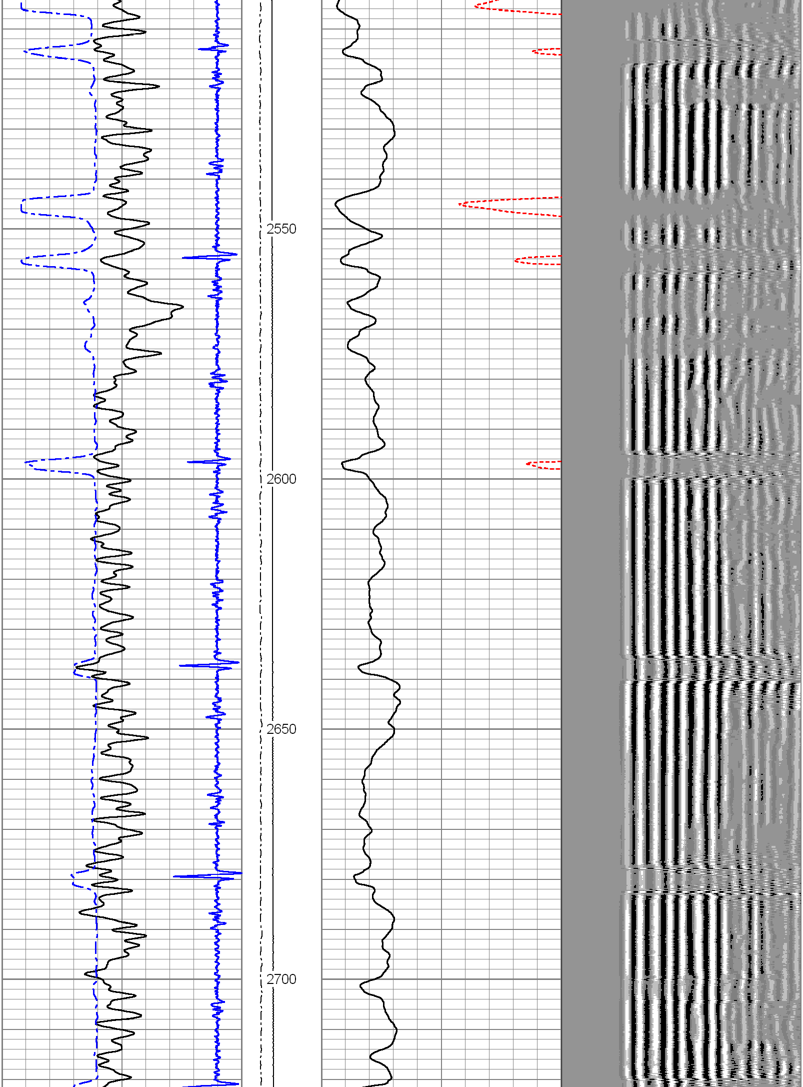


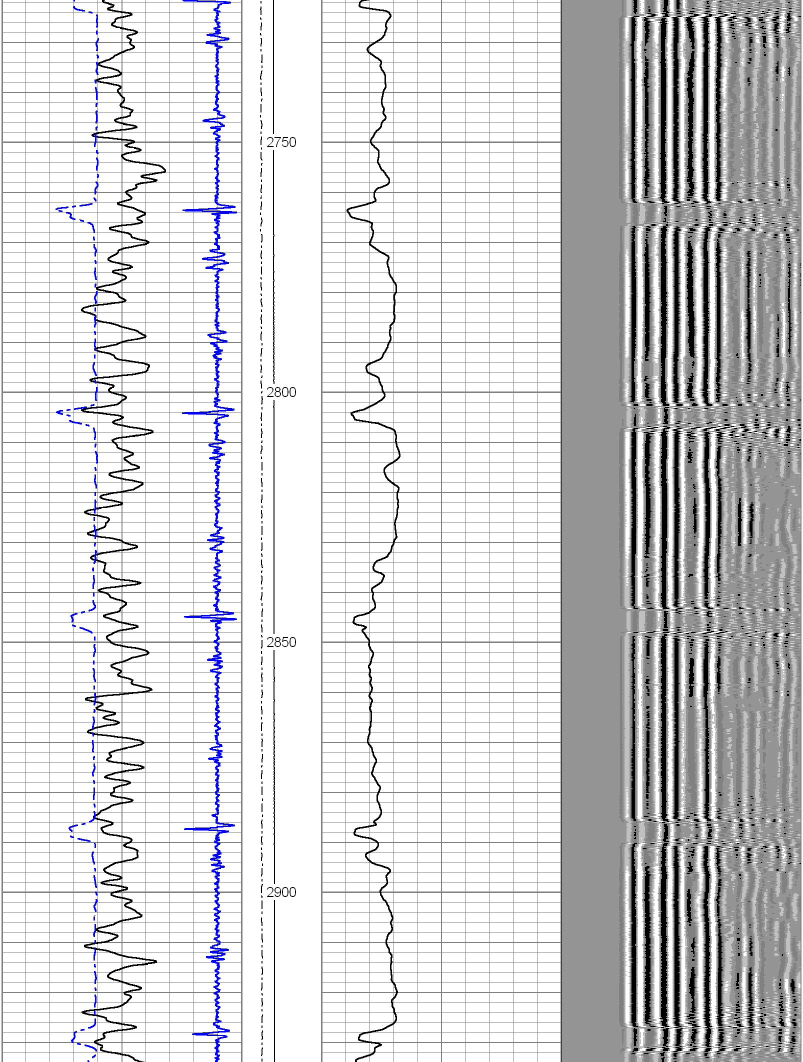


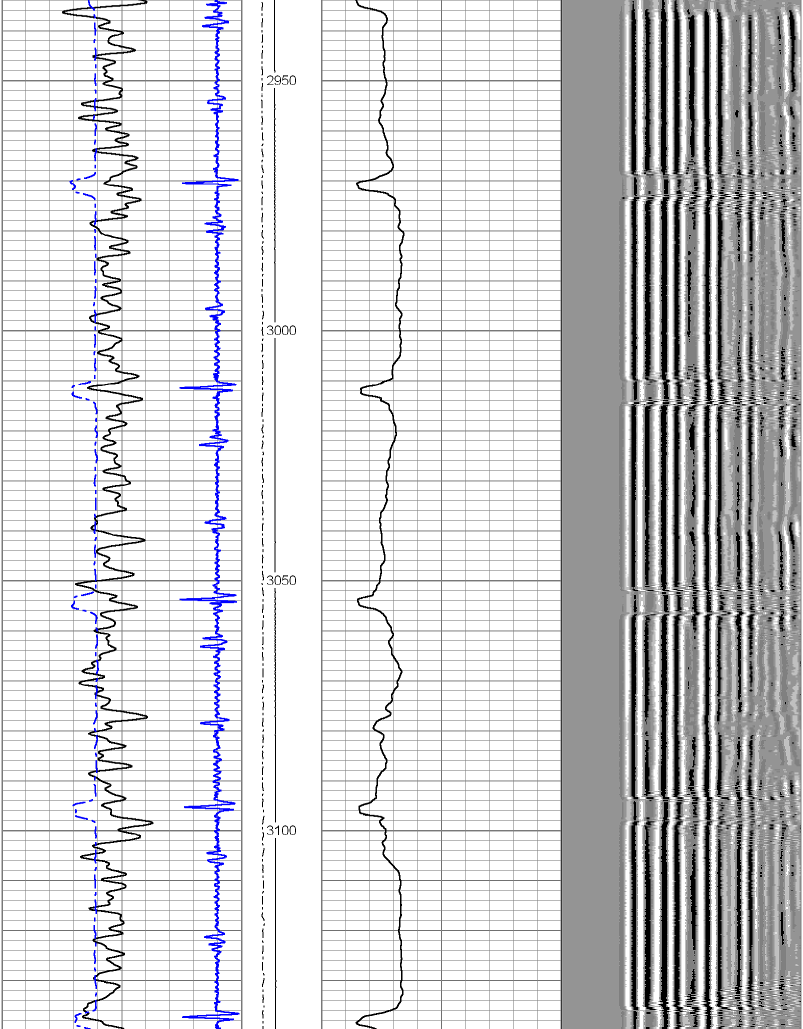


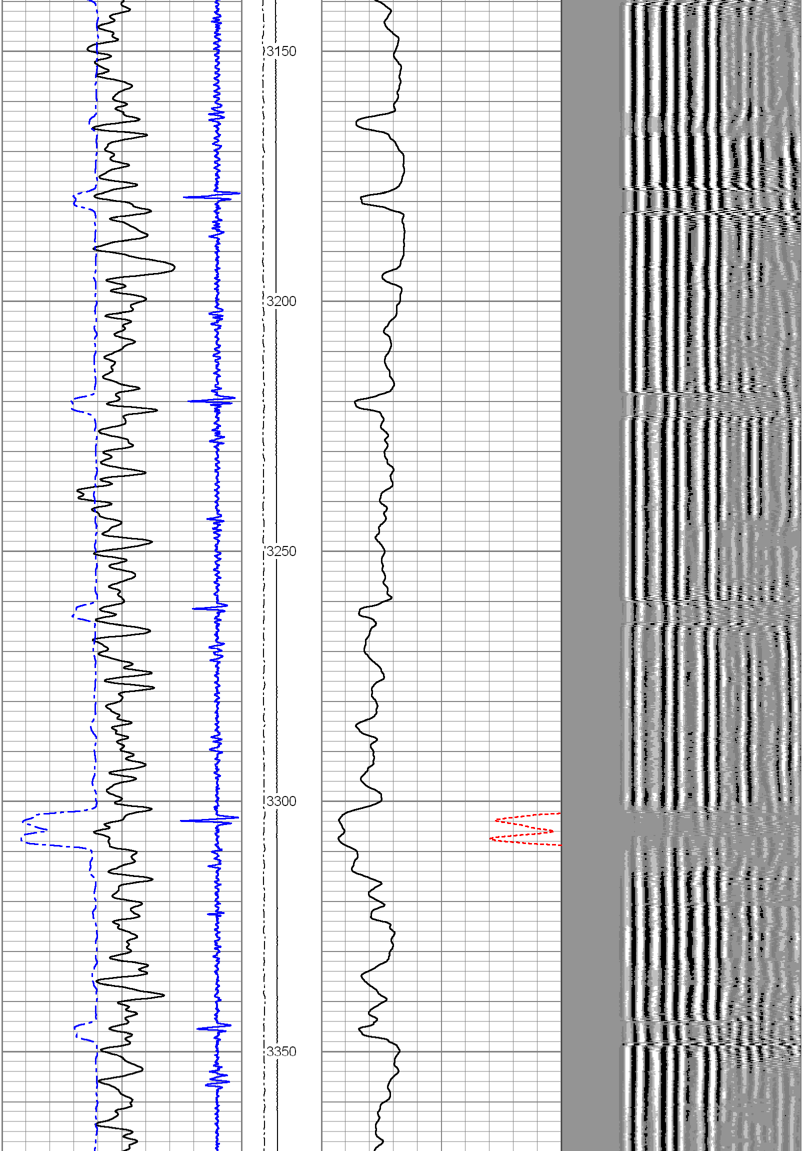


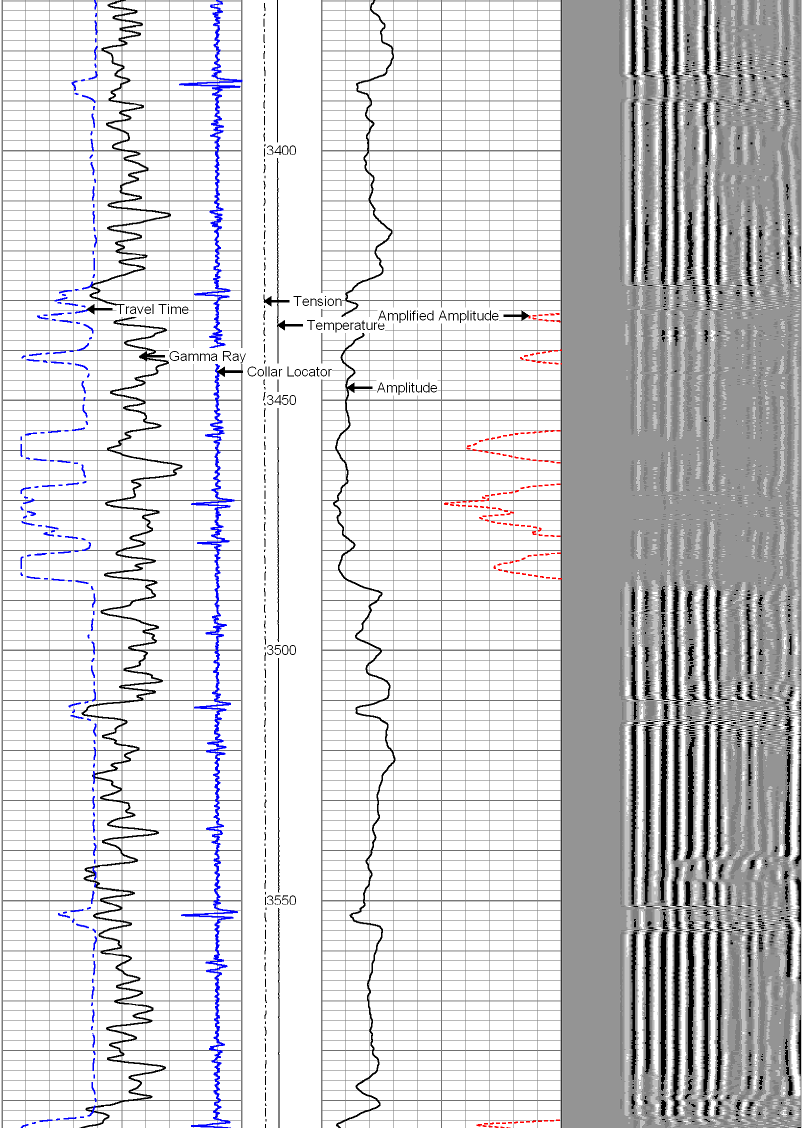


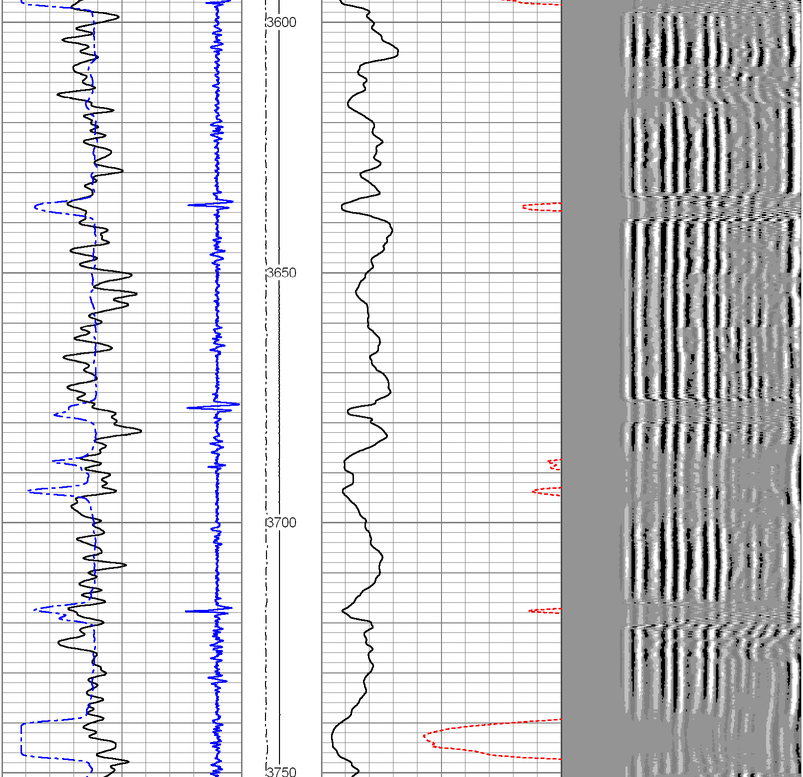


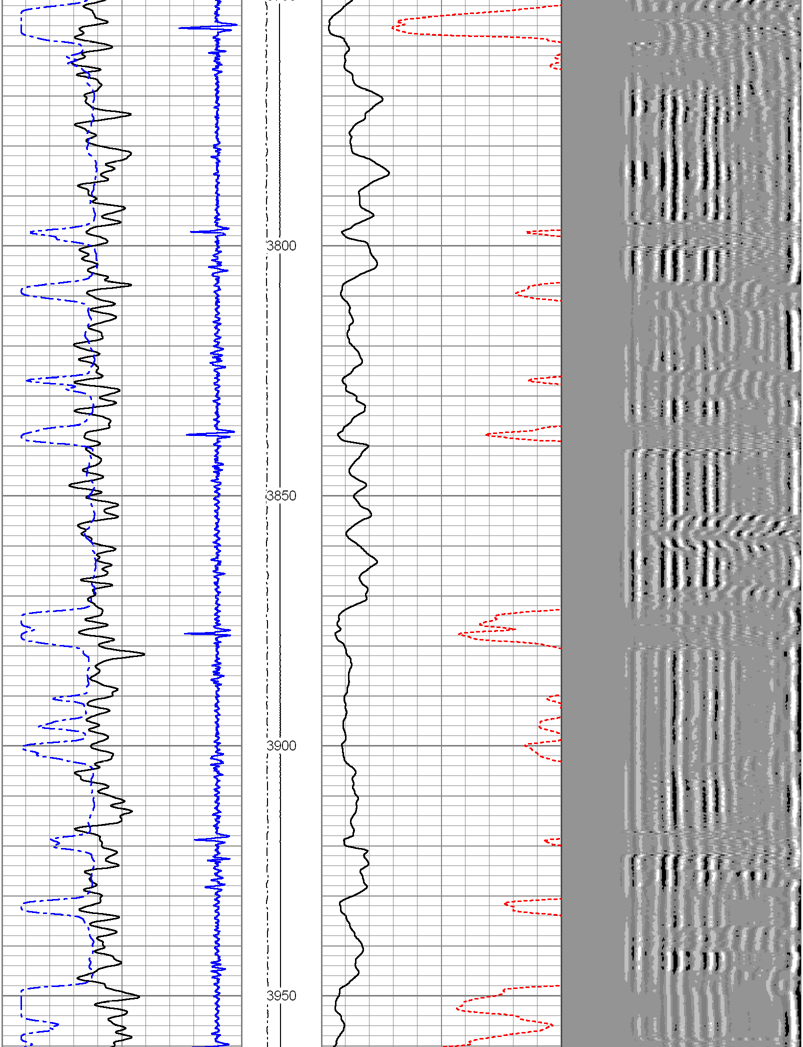


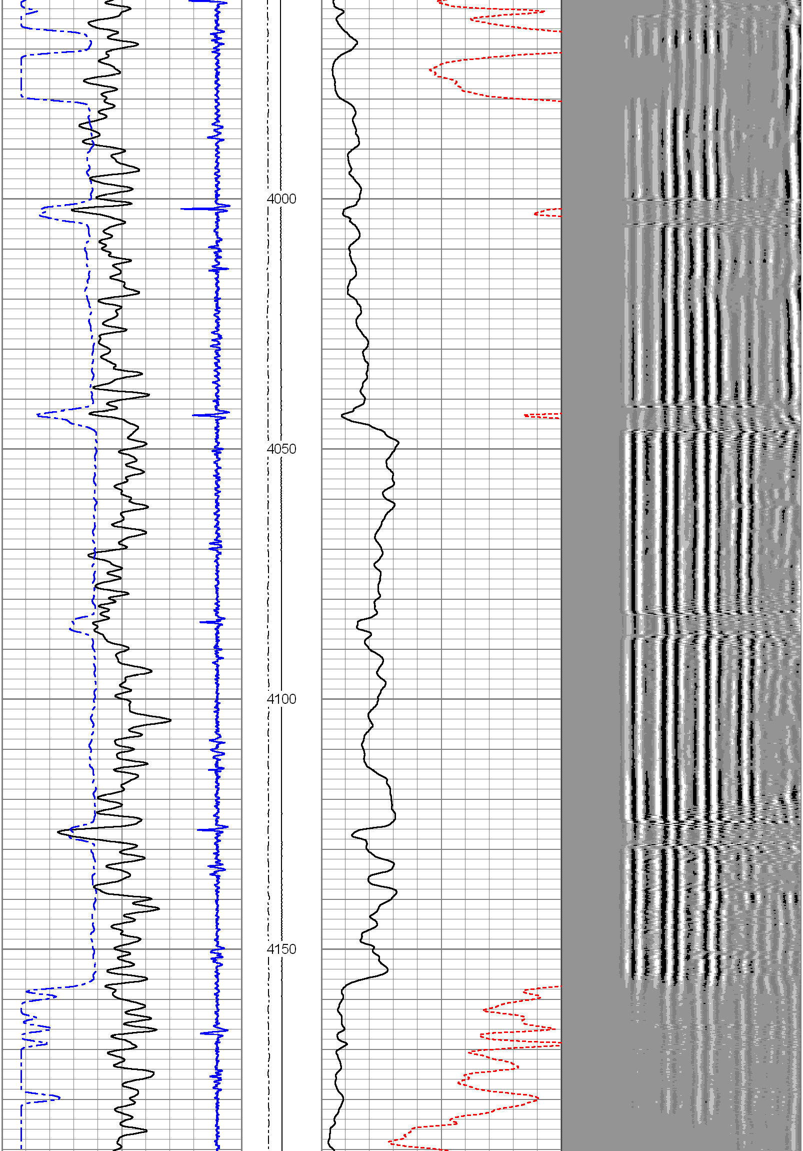


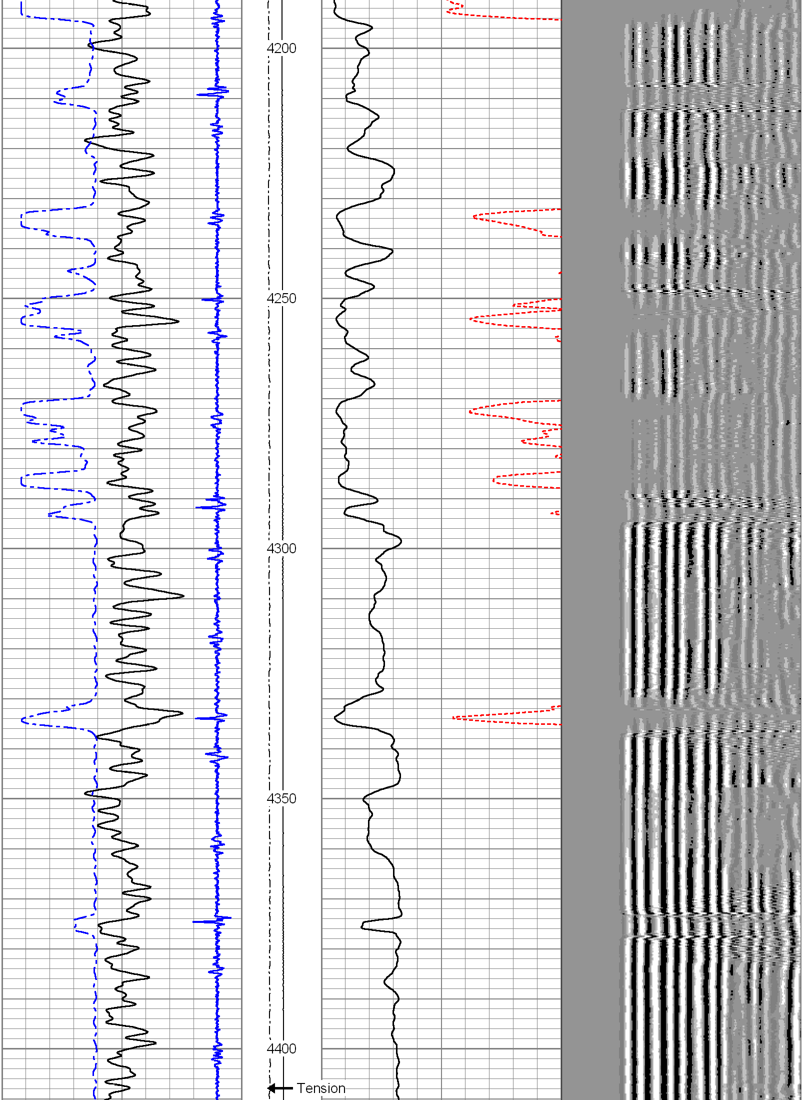


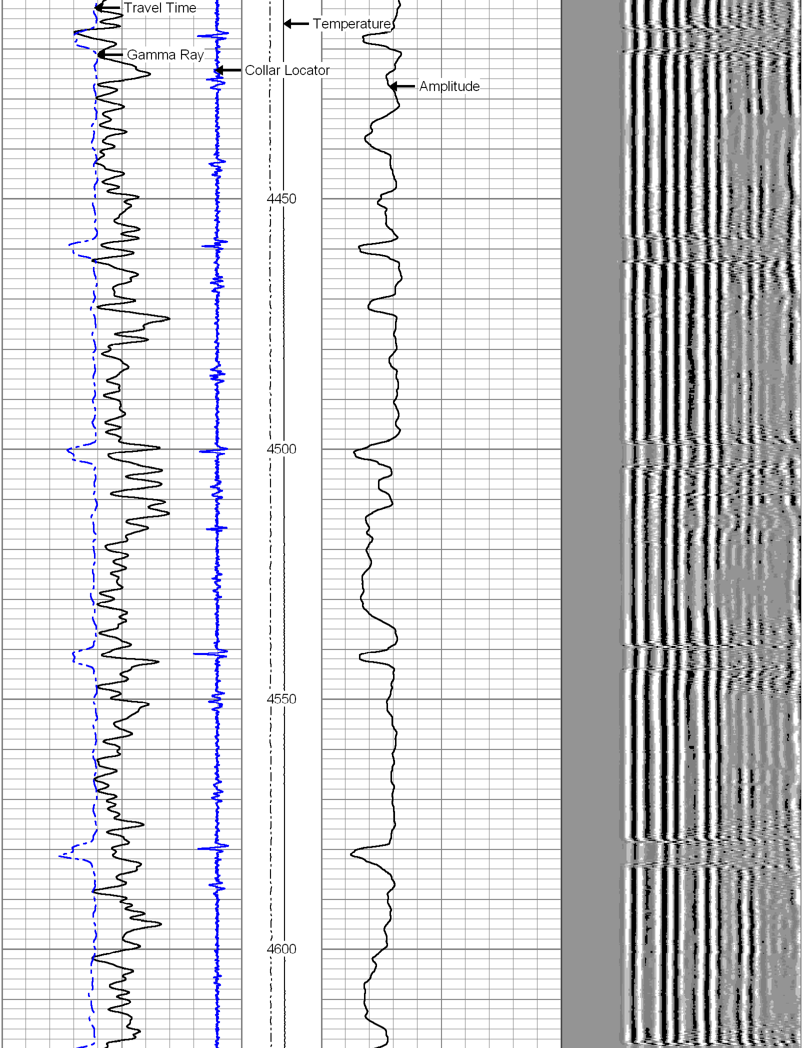


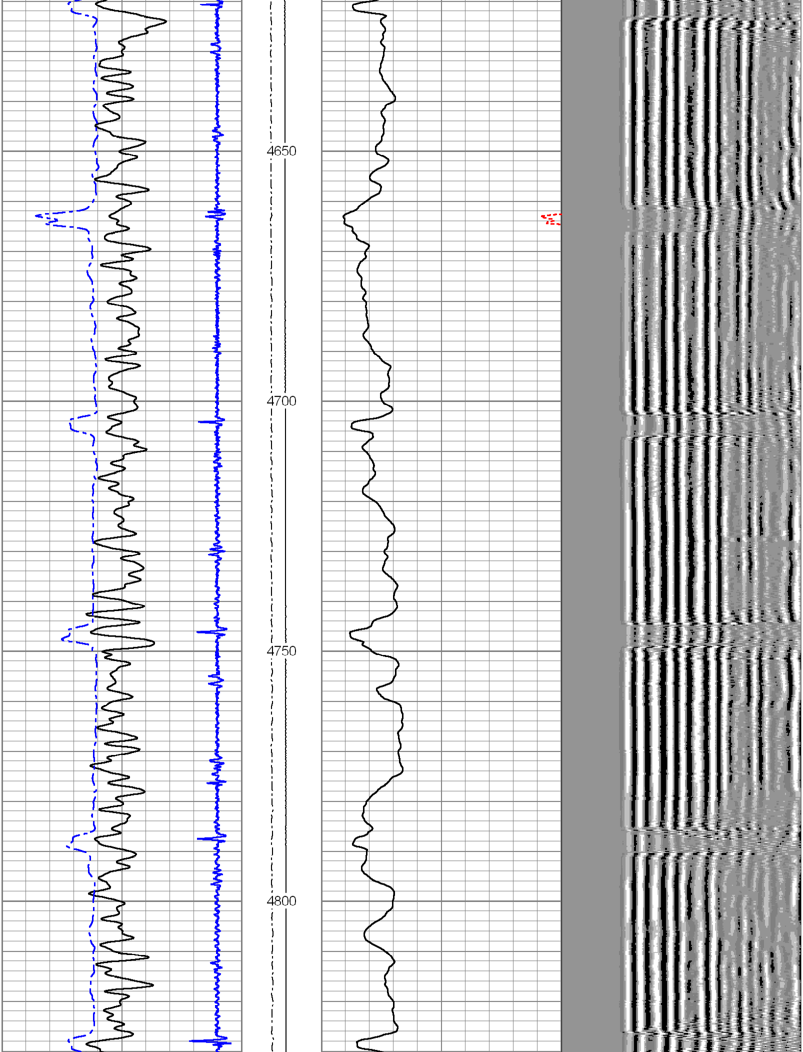


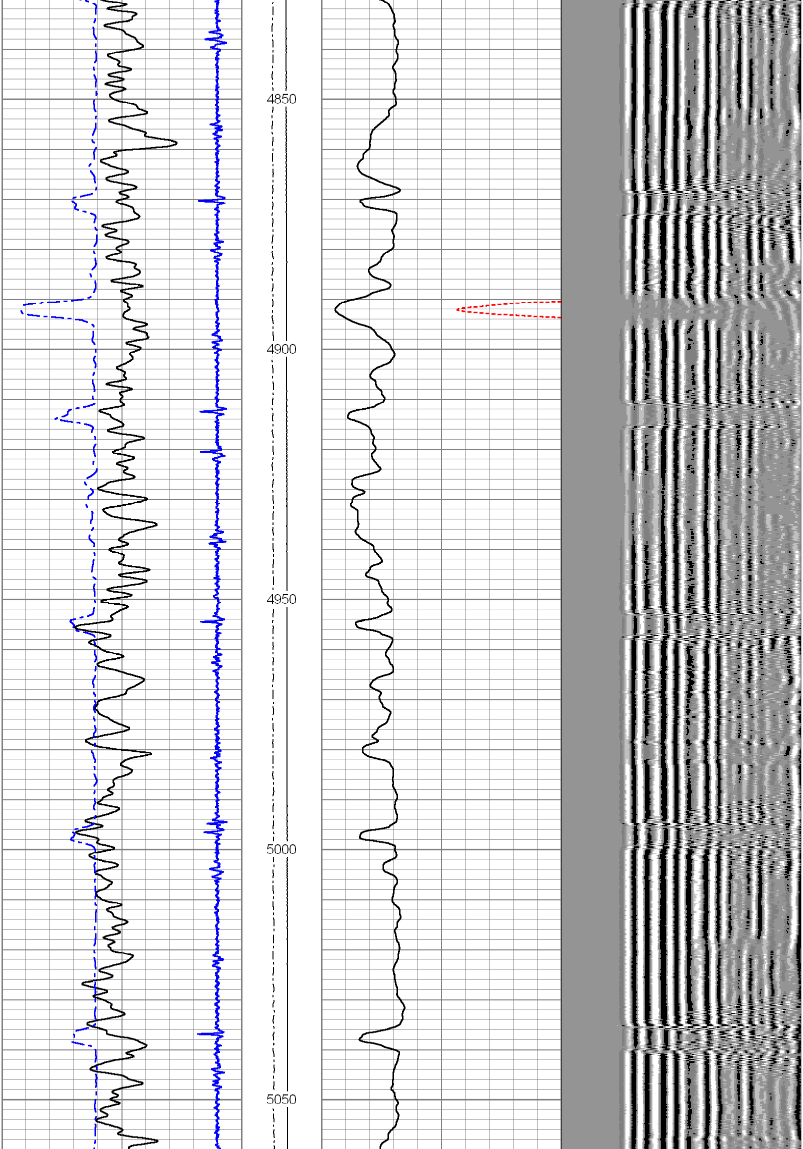


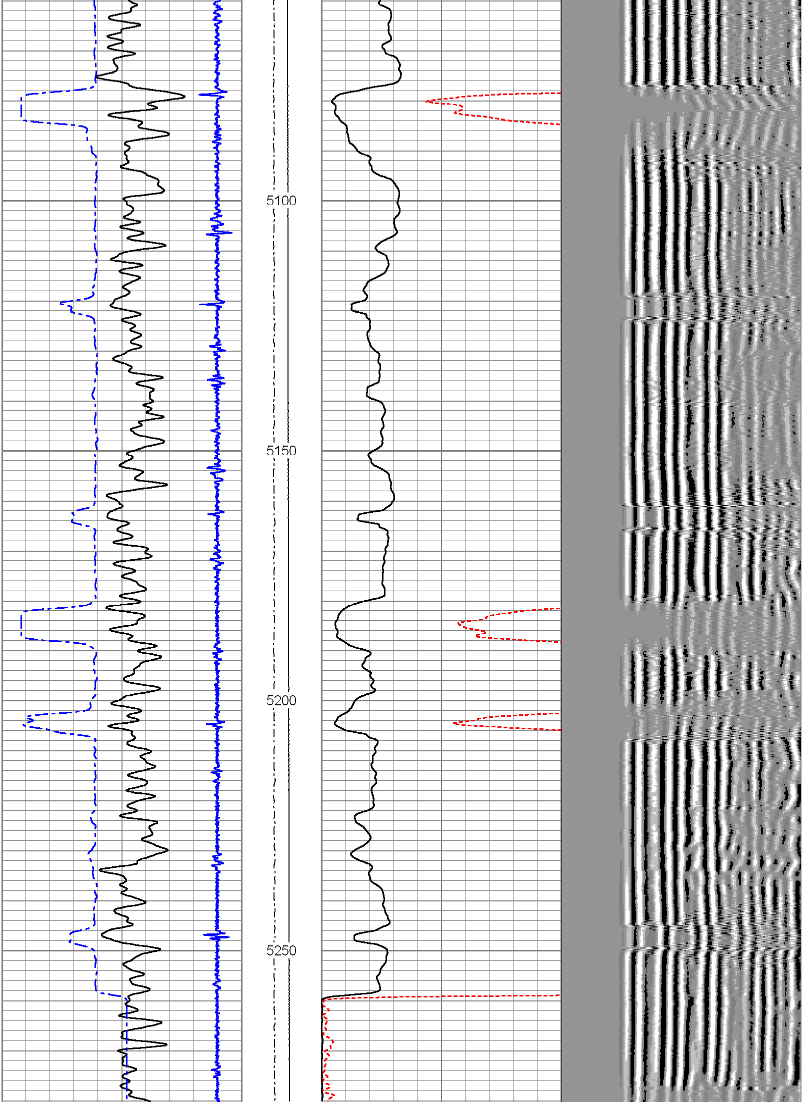


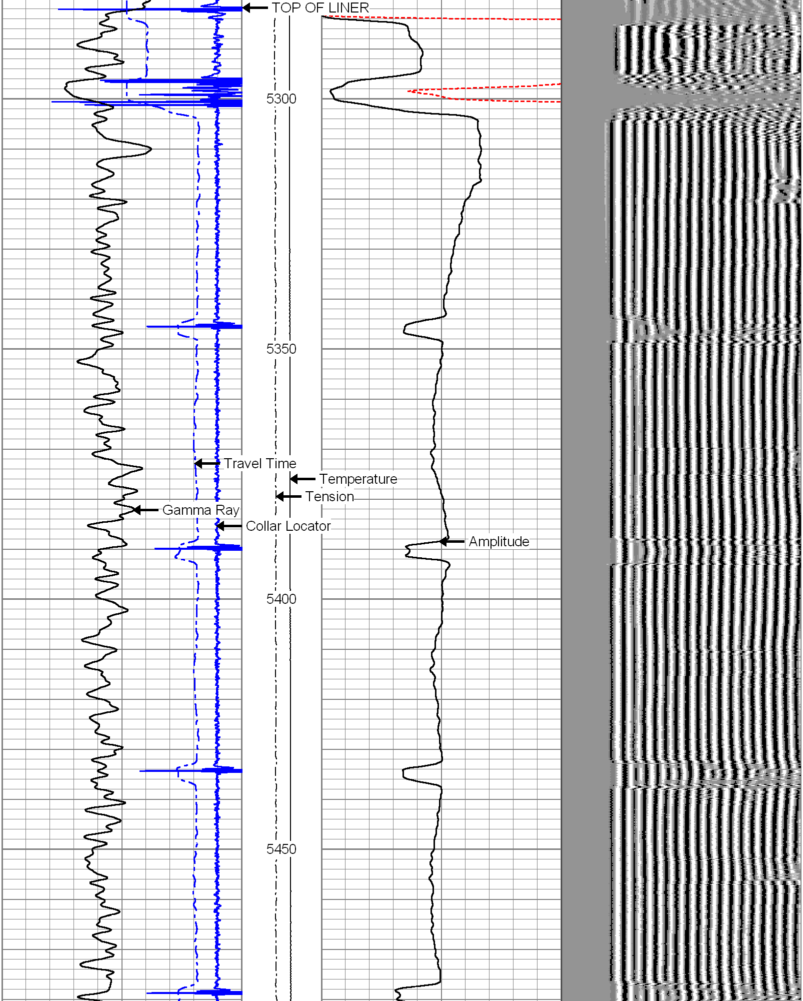


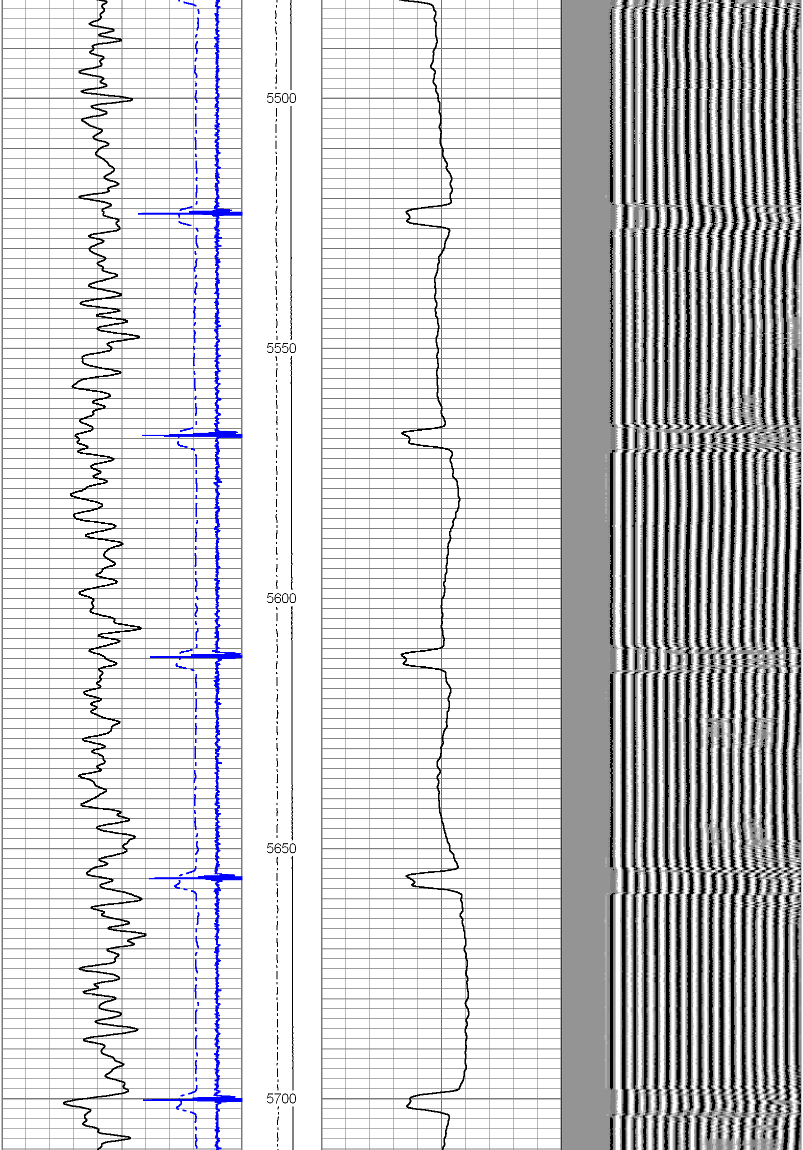


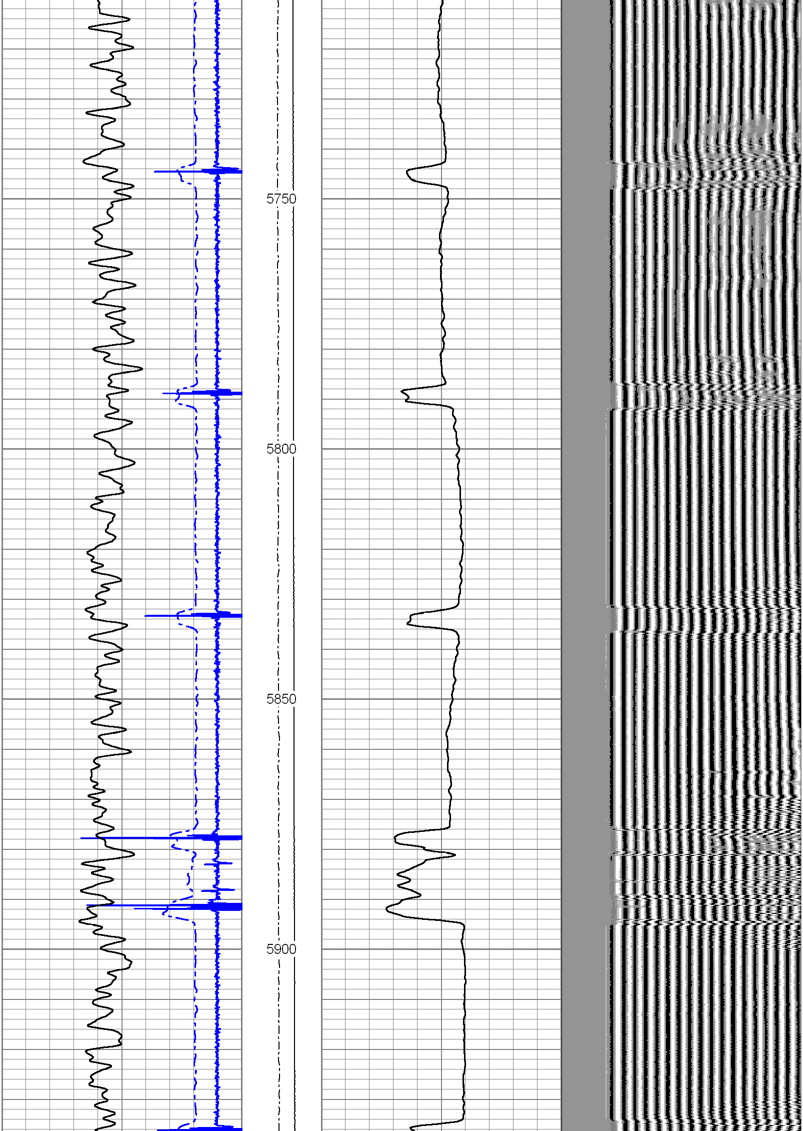


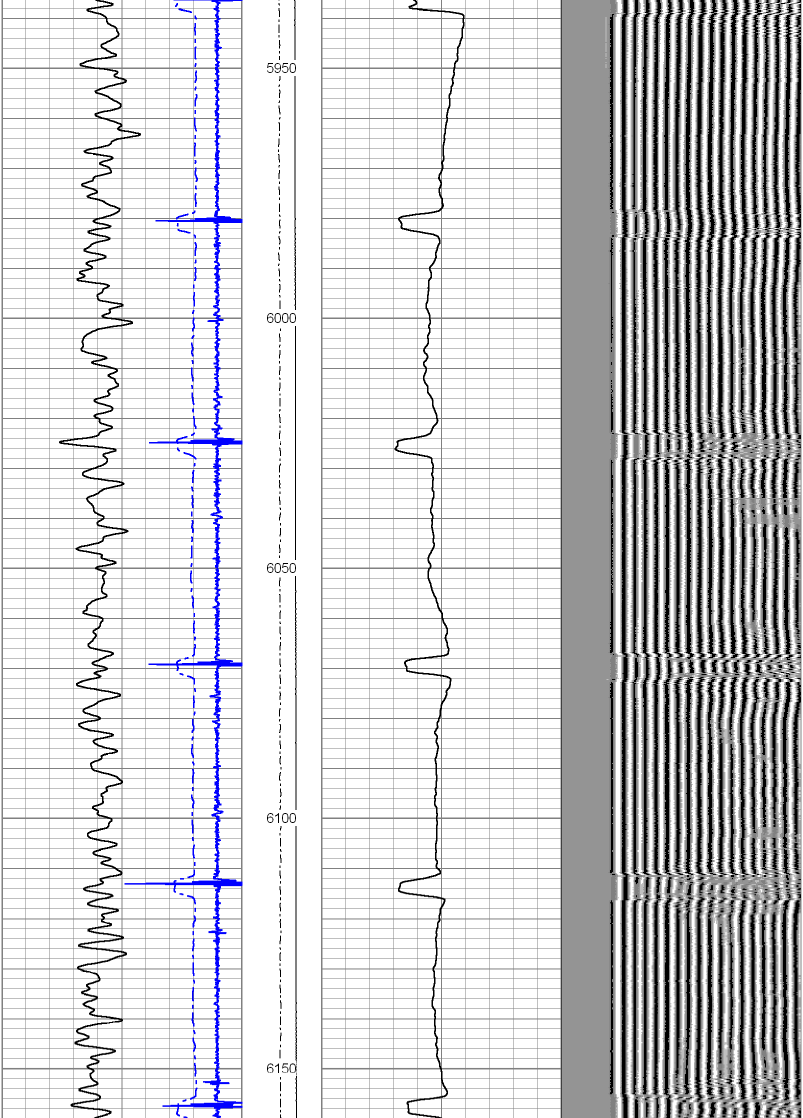


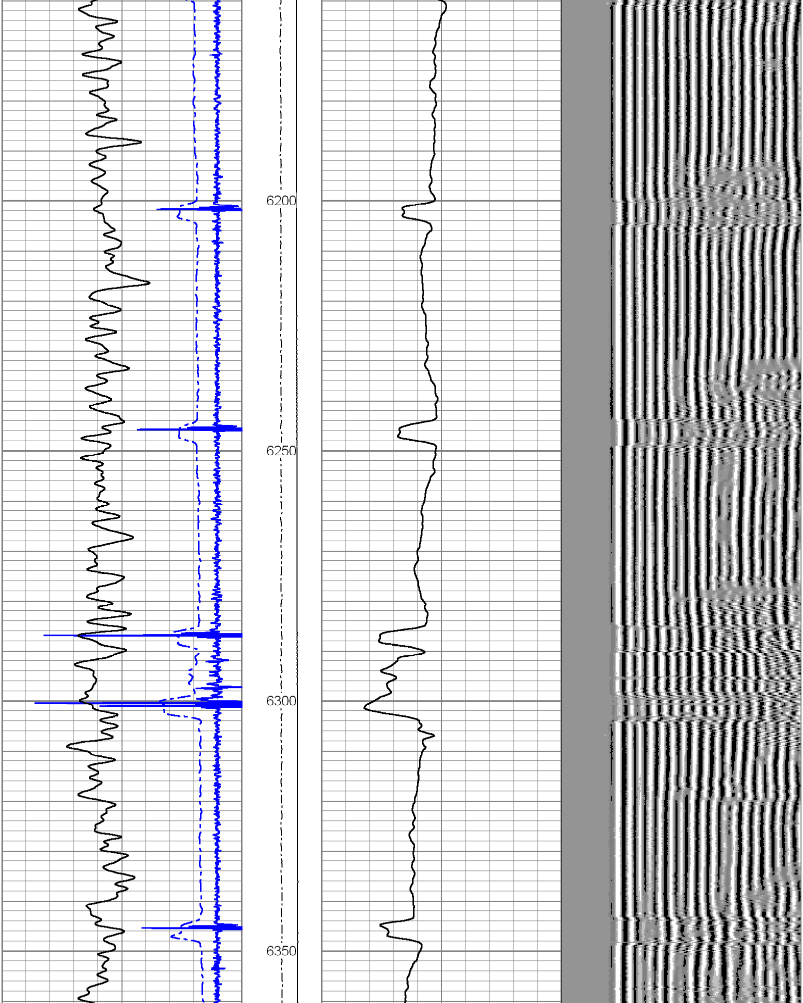


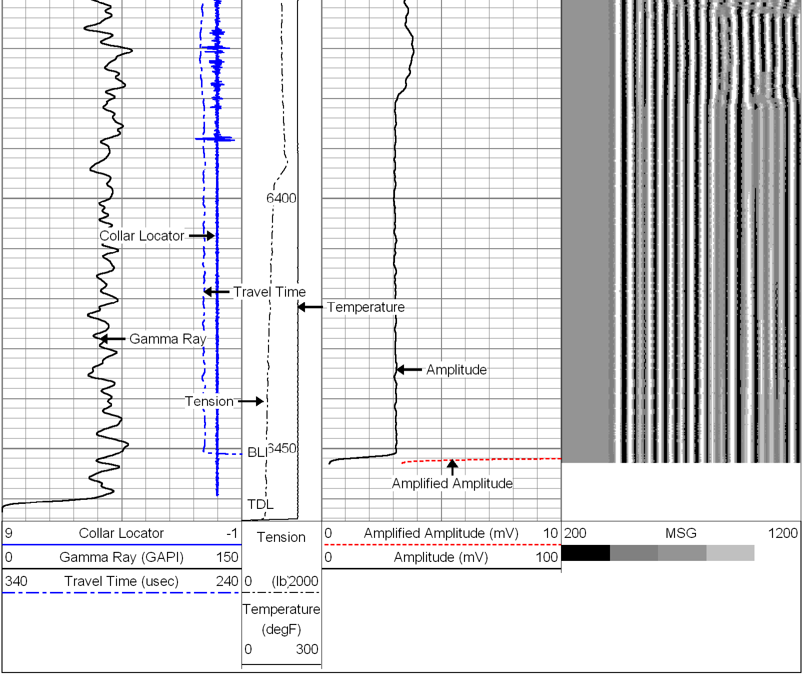












HALLIBURTON

MAIN PASS (1000 PSI)

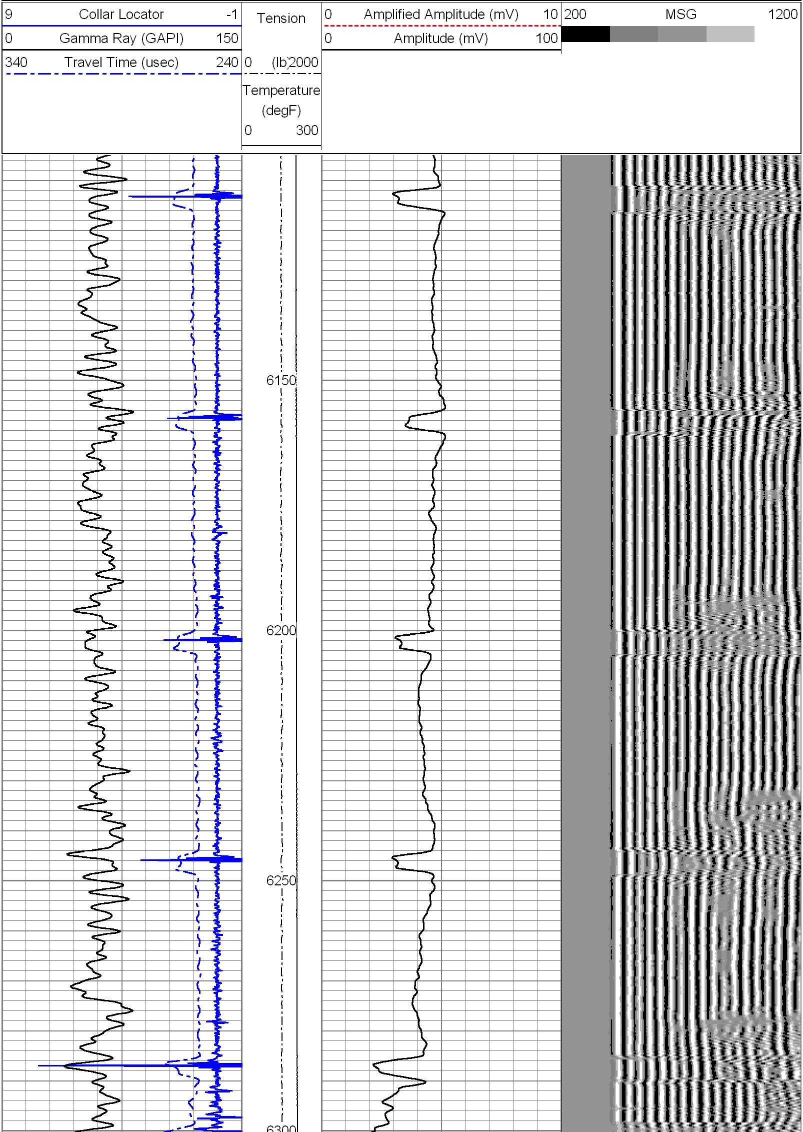
SCALE: 5"=100'

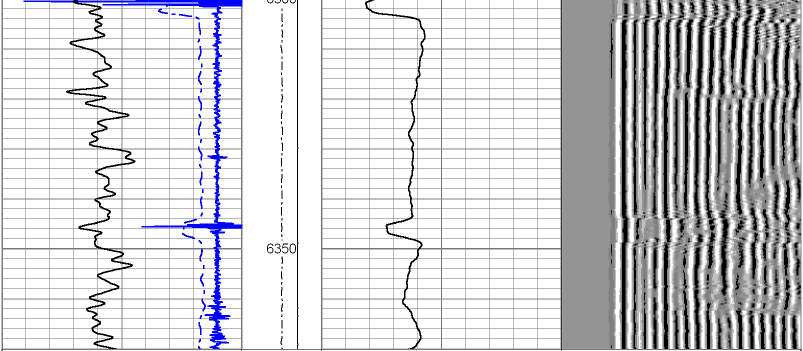
HALLIBURTON

REPEAT PASS

SCALE: 5"=100'

Database File:	carrizobobwhite3-36-8-62.db
Dataset Pathname:	pass4
Presentation Format:	1katcbl
Dataset Creation:	Fri Sep 13 11:42:09 2013 by Log Halliburton Casedho
Charted by:	Depth in Feet scaled 1:240





9 Collar Locator -1	Tension	0 Amplified Amplitude (mV) 10	200 MSG 1200
0 Gamma Ray (GAPI) 150		0 Amplitude (mV) 100	■ ▩ ▨ □
340 Travel Time (usec) 240	0 (lb) 2000		
	Temperature (degF) 0 300		

HALLIBURTON

REPEAT PASS

SCALE: 5"=100'

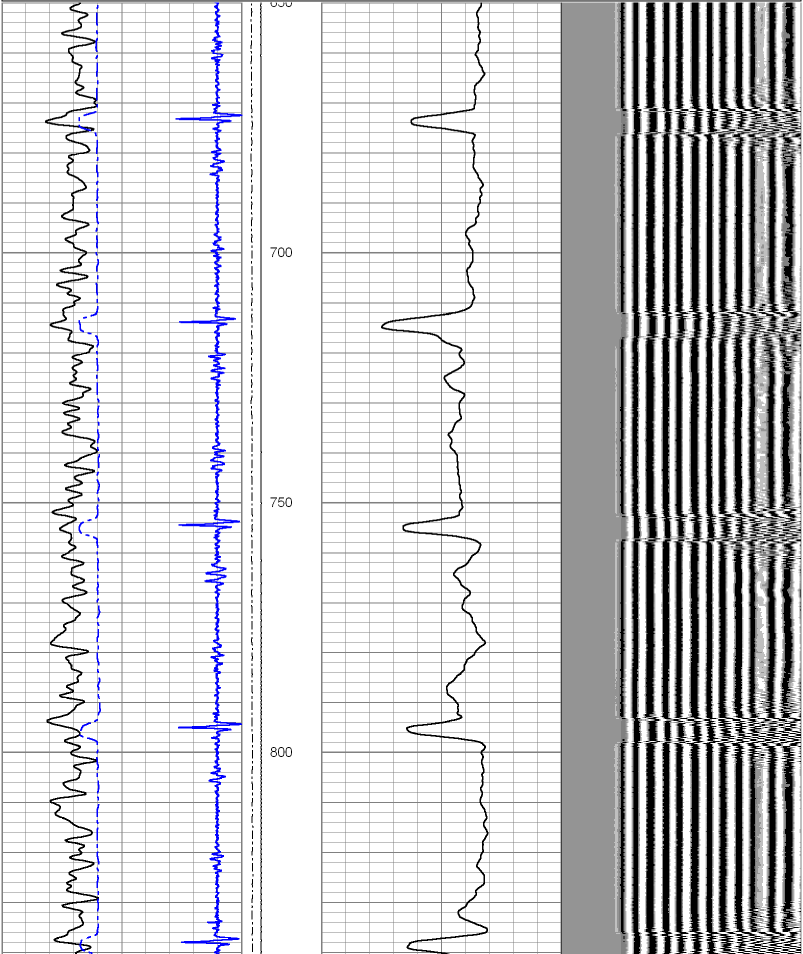
HALLIBURTON

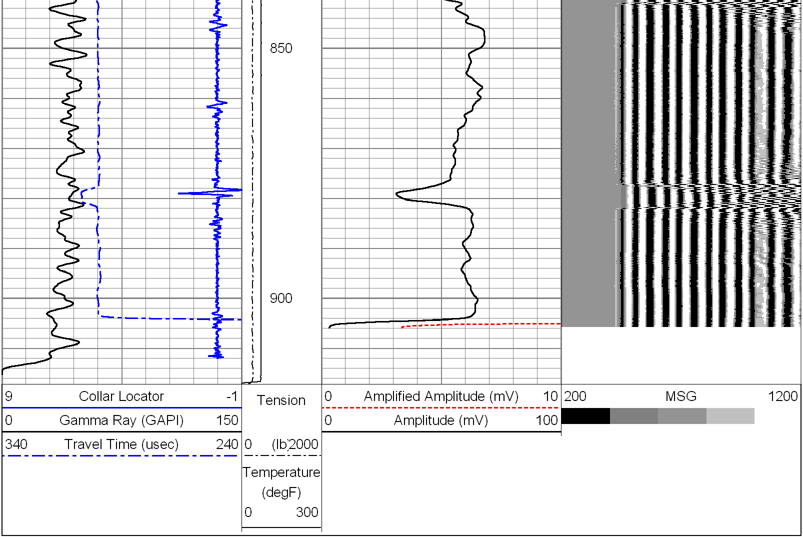
FREE PIPE PASS

SCALE: 5"=100'

Database File:	carrizobobwhite3-36-8-62.db
Dataset Pathname:	pass2
Presentation Format:	1katcbl
Dataset Creation:	Fri Sep 13 11:10:36 2013 by Log Halliburton Casedho
Charted by:	Depth in Feet scaled 1:240

9 Collar Locator -1	Tension	0 Amplified Amplitude (mV) 10	200 MSG 1200
0 Gamma Ray (GAPI) 150		0 Amplitude (mV) 100	■ ▩ ▨ □
340 Travel Time (usec) 240	0 (lb) 2000		
	Temperature (degF) 0 300		





HALLIBURTON

FREE PIPE PASS

SCALE: 5"=100'

Log Variables

Database:D:\Warrior_data\carrizobobwhite3-36-8-62.db
Dataset: field/well/run1/pass6

Top - Bottom

PPT usec	MAXAMPL mV	MINAMPL mV	MINATTN db/ft	CASEOD in	PERFS	TDEPTH ft	BOTTEMP degF
287	65	0	0.8	7	0	10795	100
BITSIZE **in**							
7.875							

Calibration Report

Database File:	carrizobobwhite4-36-8-62.db
Dataset Pathname:	pass9
Dataset Creation:	Fri Sep 13 13:00:44 2013 by Log Halliburton Casedho

Temperature Calibration Report

Serial Number: Tit1.3_02
Tool Model: Titan
Performed: Fri Jan 04 07:55:24 2002

	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 2

Gamma Ray Calibration Report

Type / Serial: Probe / 275

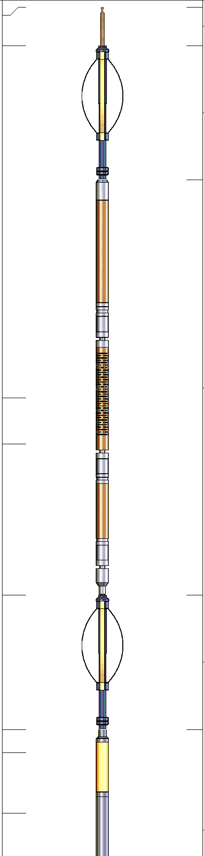
SHOP CALIBRATION	Fri Sep 13 08:01:22 2013				
	Counts/Sec.	Gain	Offset	Jig	Units
Background	77.7				cps
Calibrator	356.5				cps
		0.8500			GAPI/cps
PRIMARY VERIFICATION	Fri Sep 13 08:04:57 2013				
Background	65.9				cps
Calibrator	301.2				cps
Difference				235.3	GAPI
BEFORE SURVEY VERIFICATION	Fri Sep 13 08:09:48 2013				
Background	66.4				cps
Calibrator	298.9				cps
Difference				232.5	GAPI
AFTER SURVEY VERIFICATION	Fri Sep 13 13:00:23 2013				
Background	77.7				cps
Calibrator	322.3				cps
Difference				244.6	GAPI

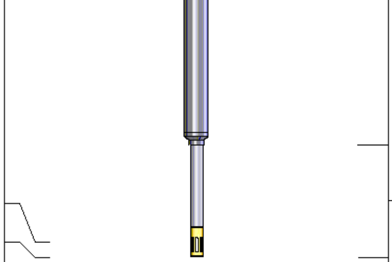
Cement Bond Log Calibration Report

Serial Number: 275
Tool Model: Probe
Performed: Fri Sep 13 08:50:34 2013

Depth: 367.998 ft
Casing Diameter: 5.5 in

	3' Spacing	5' Spacing	
Signal Zero:	0.1	0.1	mV
Calibrated Amplitude:	65	65	mV
Reading at Signal Zero:	-0.0143799	-0.0129883	V
Reading in Free Pipe:	0.274658	0.308008	V
Gain:	224.538	202.183	
Offset:	3.32883	2.72601	

Sensor	Offset (ft)	Schematic	Description	Len (ft)	OD (in)	Wt (lb)
STNDCH	21.10					
			1_CABLEHEAD 1"OD CABLE HEAD	0.83	1.00	3.00
CENT	20.27					
			CENT-Probe (PT_MONO2) Probe 2 3/4 Centralizer	2.88	2.75	35.00
			CBL-Probe (275) Probe 2.75" Dual Receiver Bond	8.92	2.75	60.00
WVF3	12.72					
WVF5	11.72					
CENT	8.47					
			CENT-Probe (PT_MONO2) Probe 2 3/4 Centralizer	2.88	2.75	35.00
GR	5.58					
CCL	5.08					
GR	3.79					
			GR-Probe (275) Probe 2.75" 4 Channel Pulse	4.33	2.75	30.00

TEMP LLMTEN	0.17 0.00		TEMP-Titan (Tit1.3_02) Titan Temp 1.3875	1.25	1.39	10.00

Dataset: carrizobobwhite3-36-8-62.db: field/well/run1/pass6
Total Length: 21.10 ft
Total Weight: 173.00 lb
O.D. 2.75 in

Company	CARRIZO
Well	BOB WHITE 3-36-8-62
Field	WILDCAT
County	WELD
State	CO

HALLIBURTON

CEMENT BOND
LOG