HALLIBURTON

CEMENT BOND LOG

Company	CARRIZO OIL & GAS
Well	NELSON RANCHES 1-27-10-59
Field	WILDCAT
County	WELD
State	CO

Company CARRIZO OIL & GAS
Well NELSON RANCHES 1-27-10-59
Field WILDCAT
County WELD State CO

API No.: 05-123-37554 Serv #: 900662820
Location: LAT: 40.810060 LONG: -103.975660
SHL: 2219' FSL & 193' FEL
BHL: 1242' FNL & 650' FEL

Sec: 28 Twp: 10N Rge: 59W

Other Services
N/A

Permanent Datum GL Elevation 5170
Log Measured From KB , 15 Ft. above perm. datum
Drilling Measured From KB

Elevation
K.B. 5185
D.F. 5184
G.L. 5170

Date @ Time Logged	13-AUG-13	Type Fluid in Hole	FRESH WATER
Run No.	ONE	Density of Fluid	8.33
Depth - Driller	11595	Fluid Level	SURFACE
Depth - Logger	6393	Cement Top Est. Logged	1202
Bottom - Logged Interval	6382	Equipment / Location	11014931 / BRIGHTON
Top - Log Interval	400	Recorded by	T. SCHROCK
Max. Recorded Temp.	N/A	Witnessed by	K. WILLIAMS

CEMENTING DATA	Surface String	Protection String	Production String	Liner
Date / Time Cemented				
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"	0	1400	9.625"	36	0	1400
ONE	8.75"	0	6617	7"	23	0	6617
ONE	6.125"	5734	11811	4.5"	11.6	5734	11811

<<< 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 @ 1202

TOP OF LINER @ 5679

BLANKET VALUE: 241 GAPI

THANK YOU FOR CHOOSING HALLIBURTON ENERGY SERVICES
CREW TODAY: M. THEIS, E. FRIEDLAND, AND K. KING

HALLIBURTON

MAIN PASS (1000 PSI)

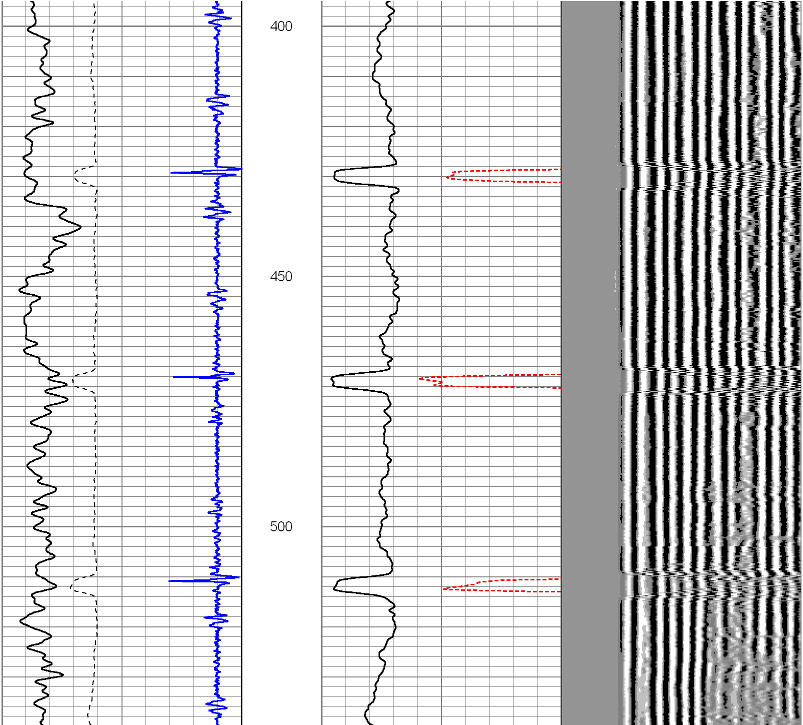
SCALE: 5"=100'

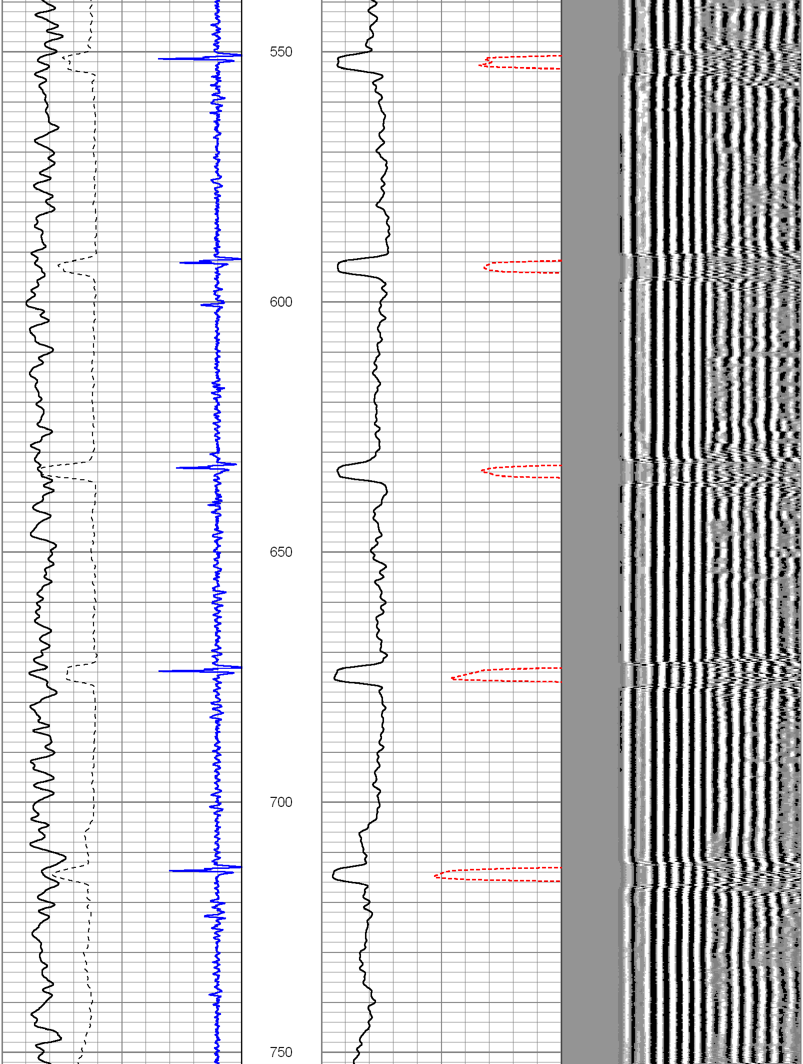
Database File: carrizo_nelson_ranches_1_27_10_59.db
Dataset Pathname: cbl/pass7
Presentation Format: 1katcbl
Dataset Creation: Tue Aug 13 09:32:53 2013 by Log Halliburton Casedho
Charted by: Depth in Feet scaled 1:240

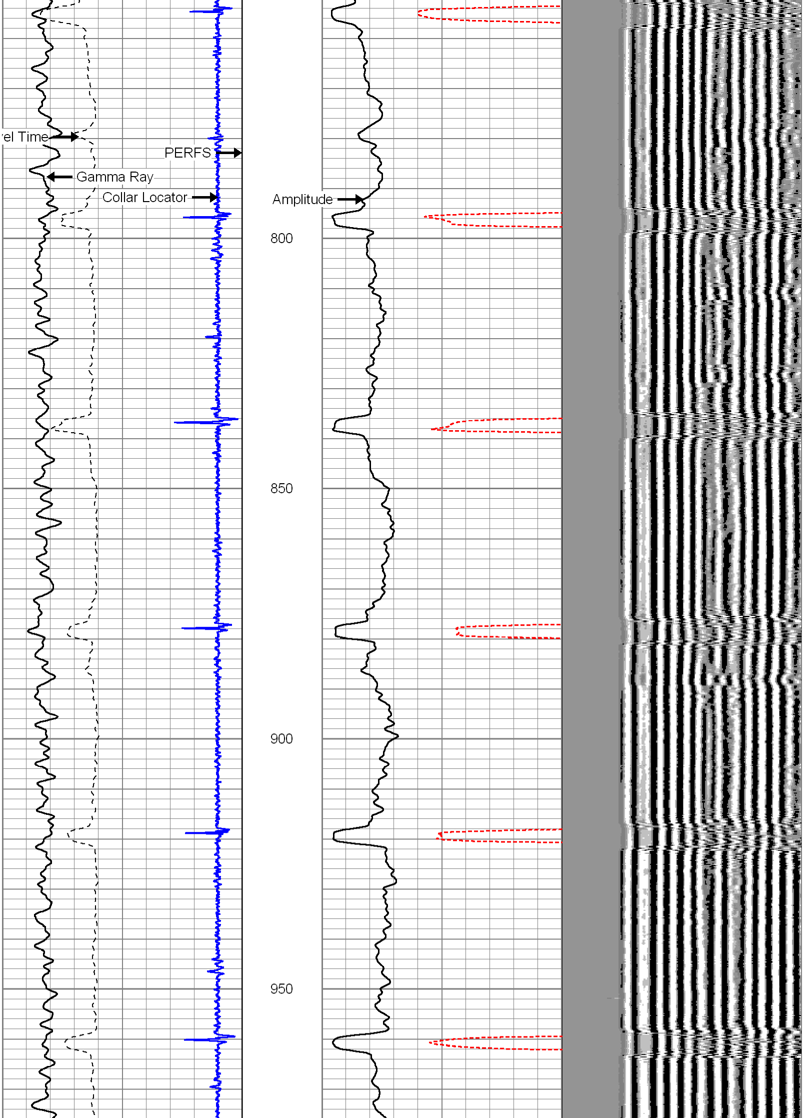
9 Collar Locator -1
0 Gamma Ray (GAPI) 300
340 Travel Time (usec) 240

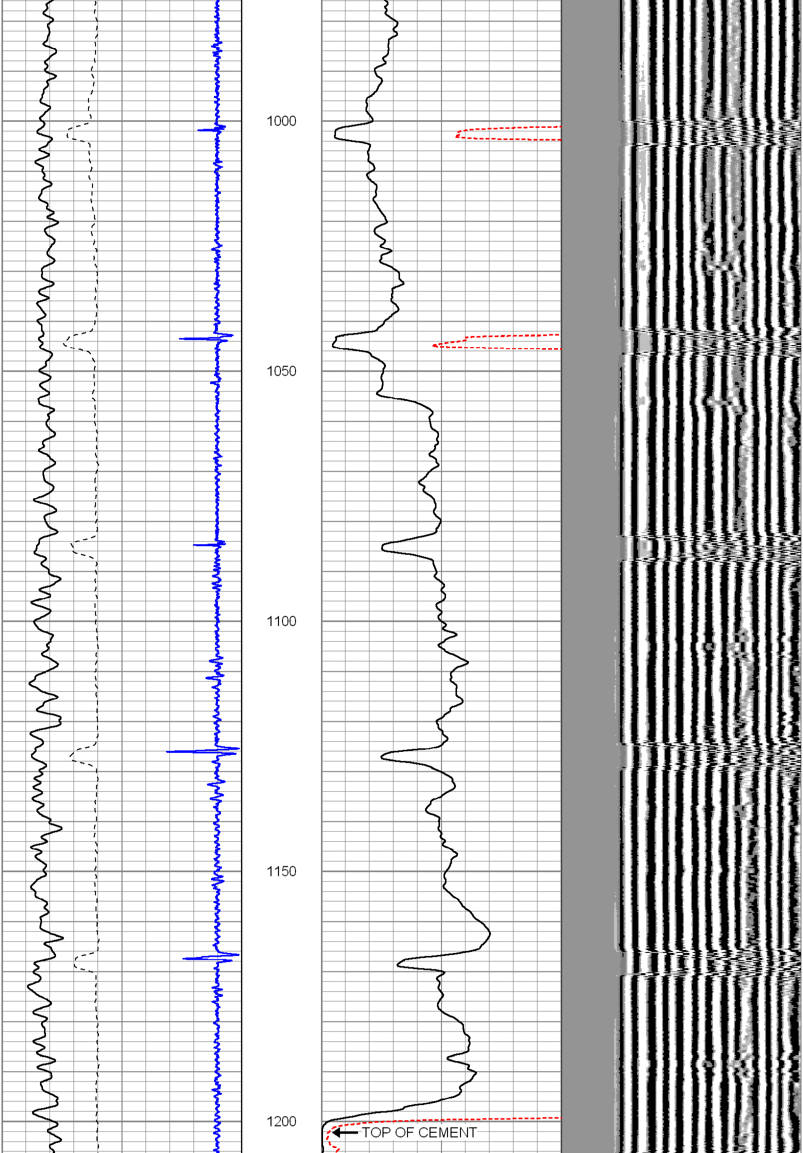
0 Amplified Amplitude (mV) 10
0 Amplitude (mV) 100

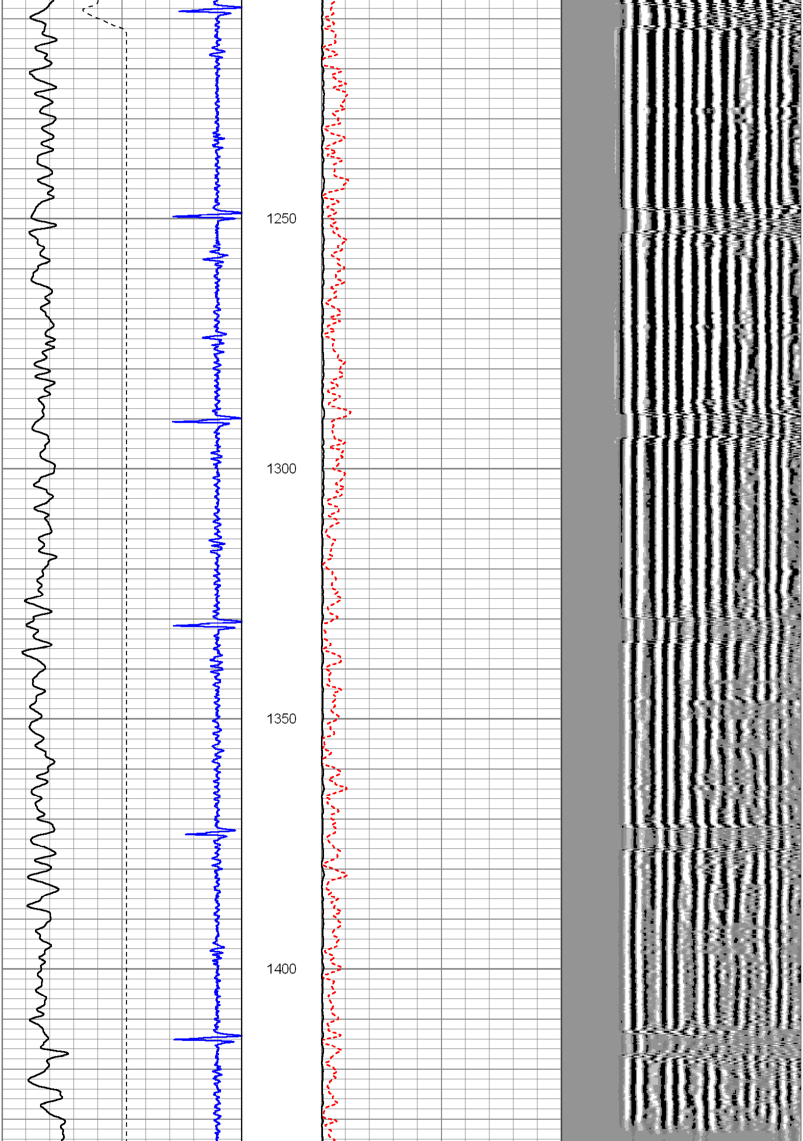
200 Variable Density 1200

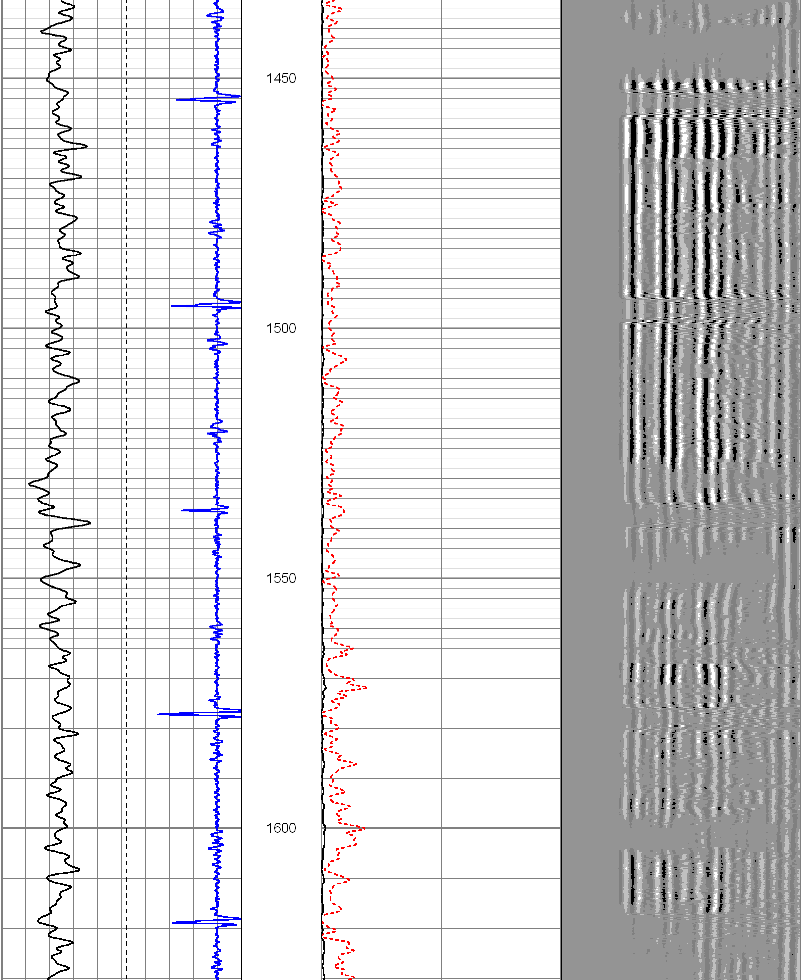


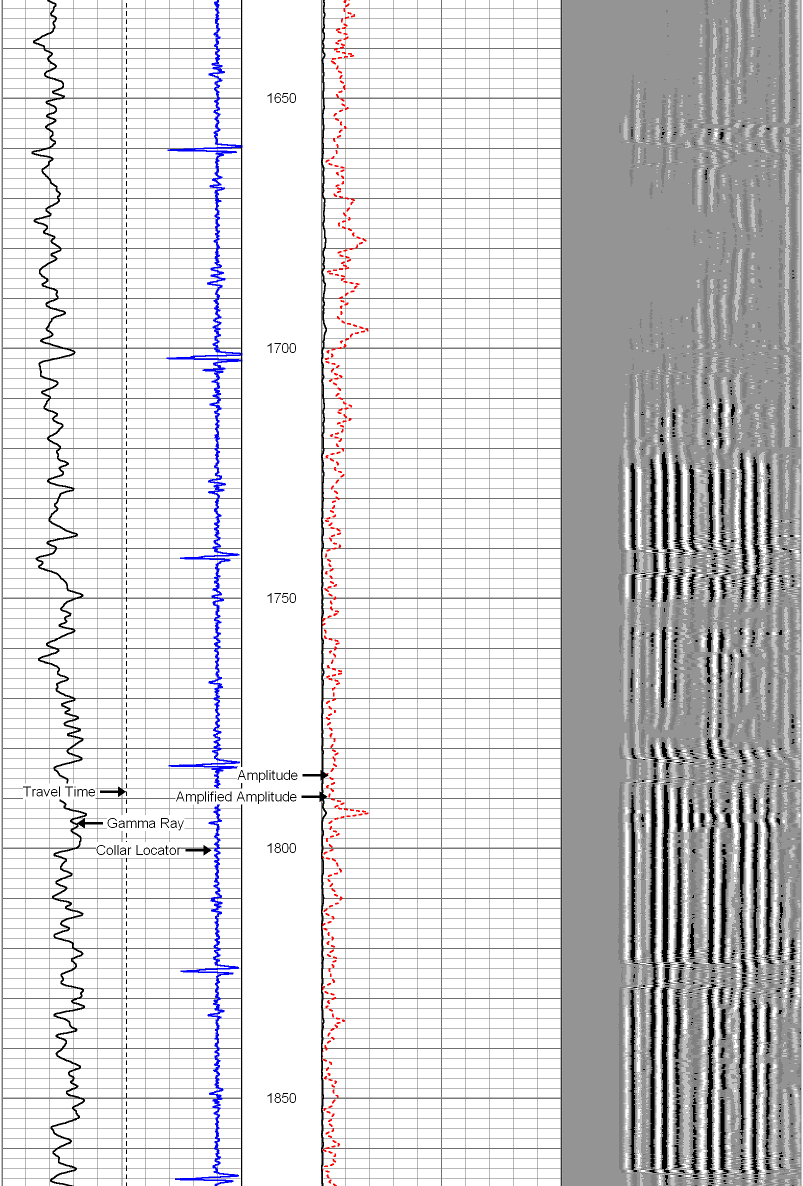


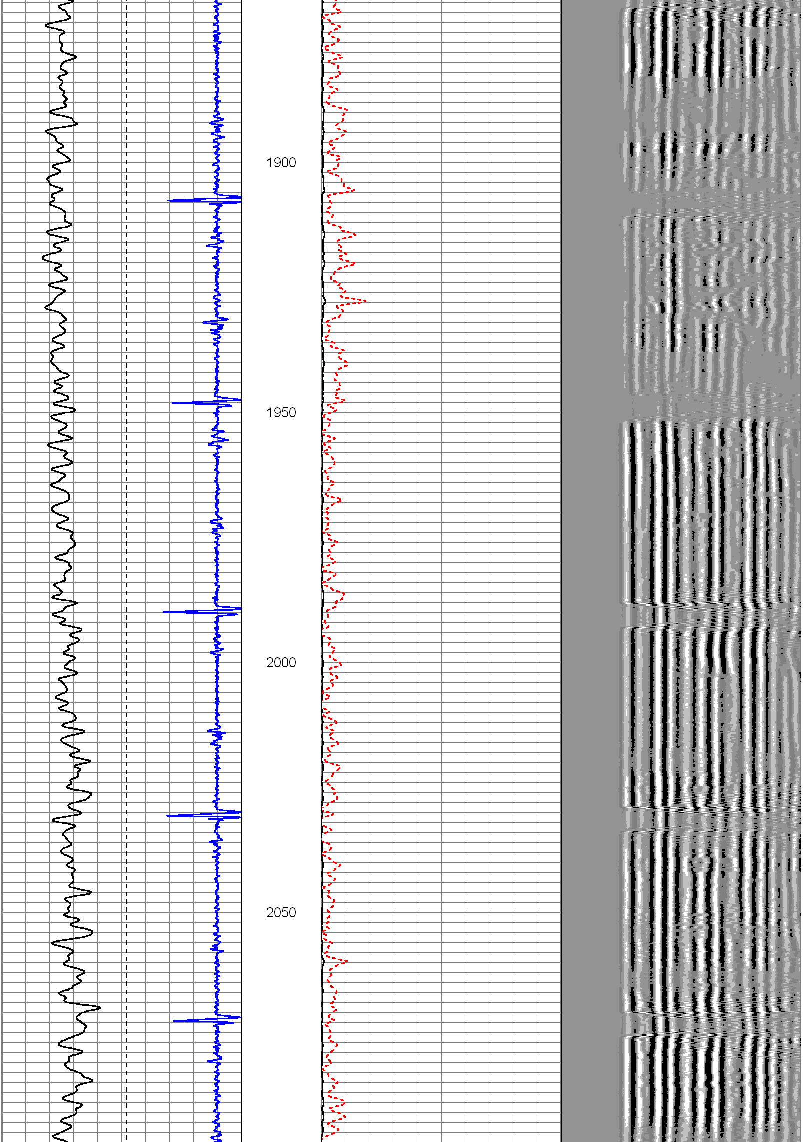


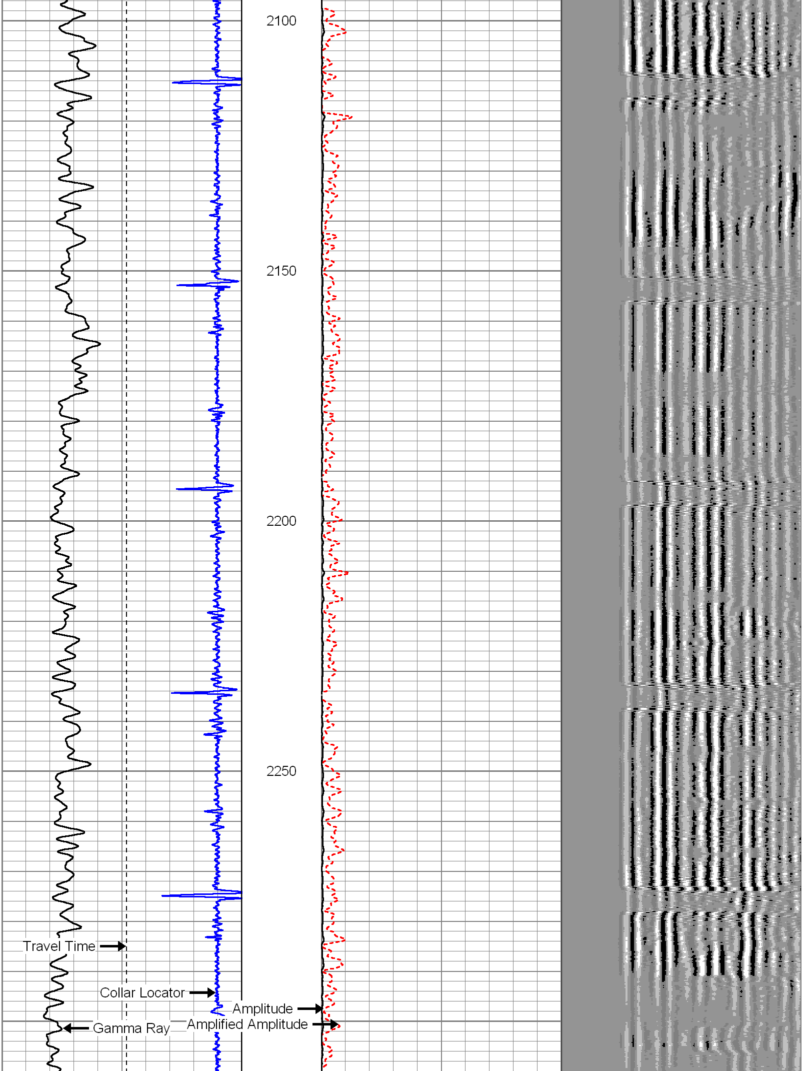


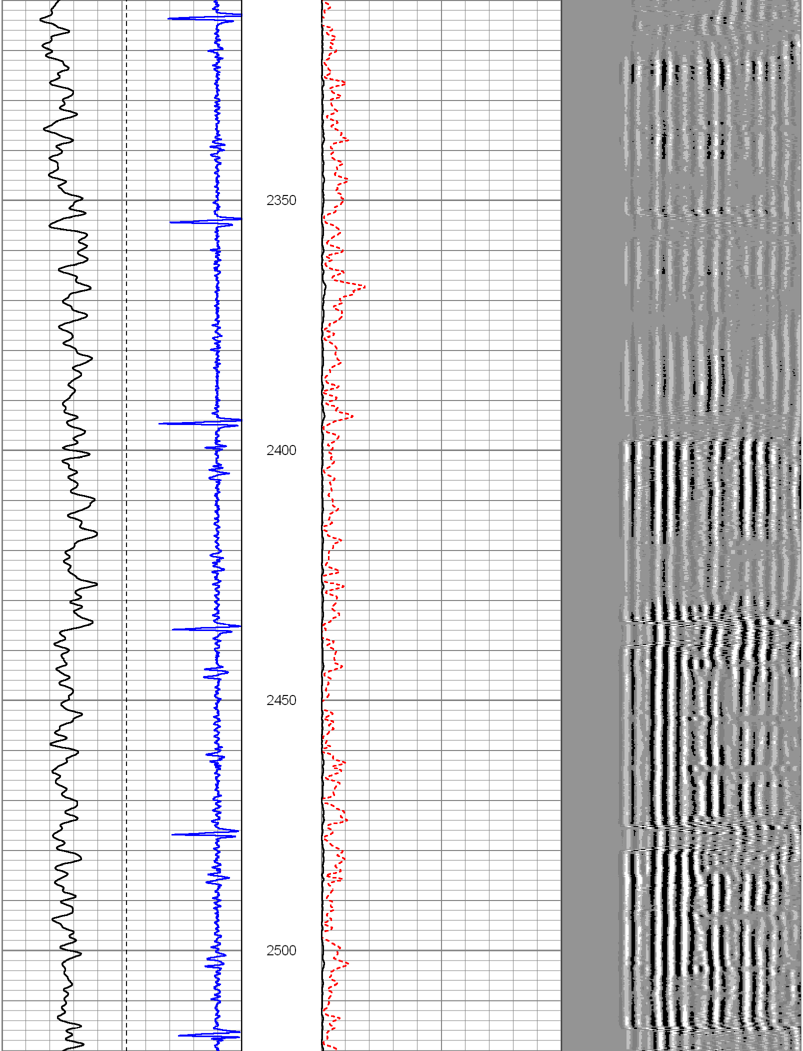


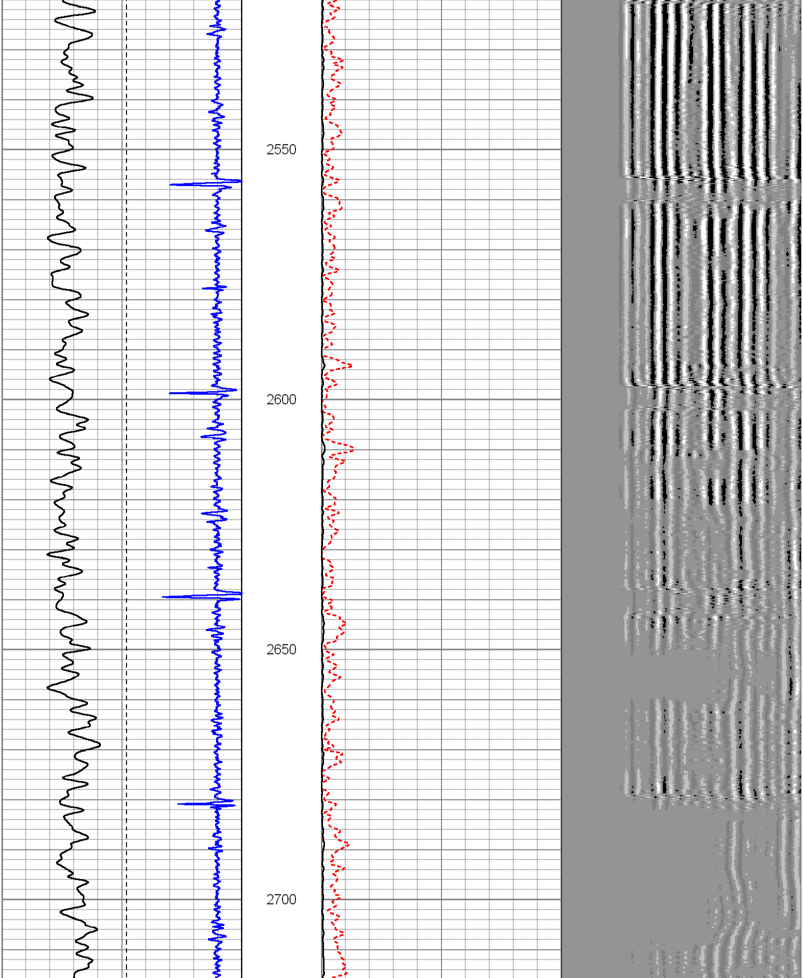


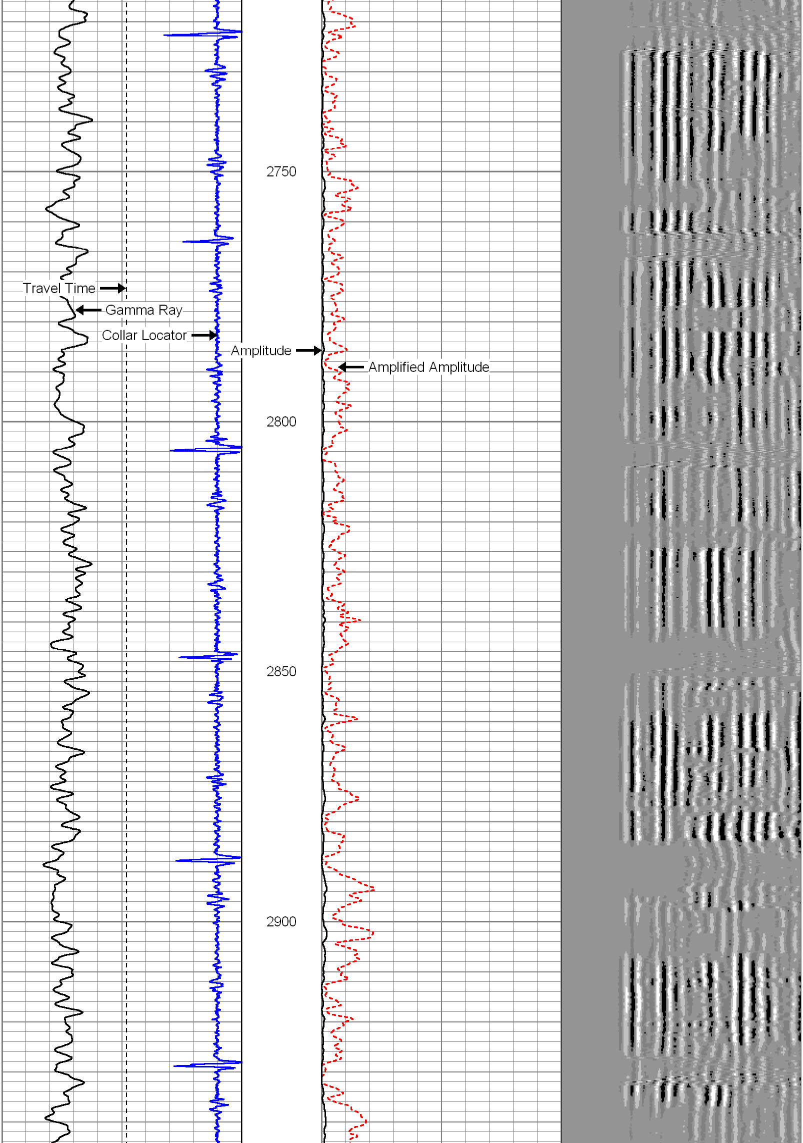


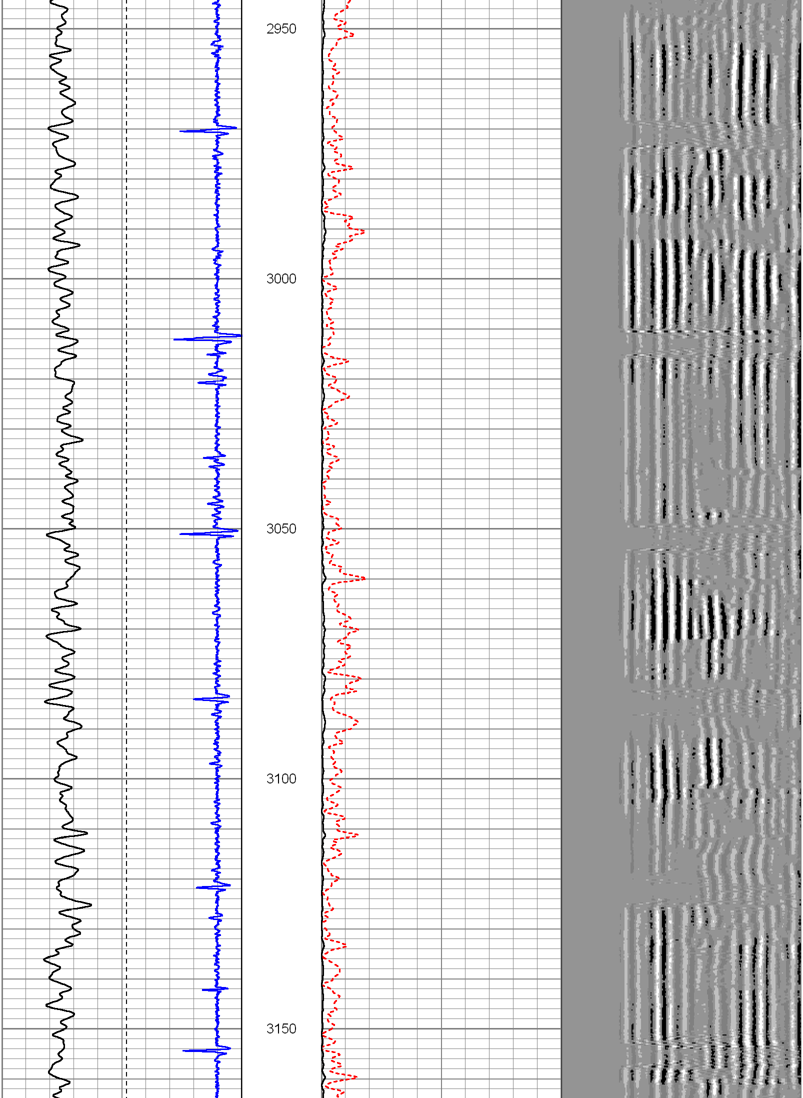


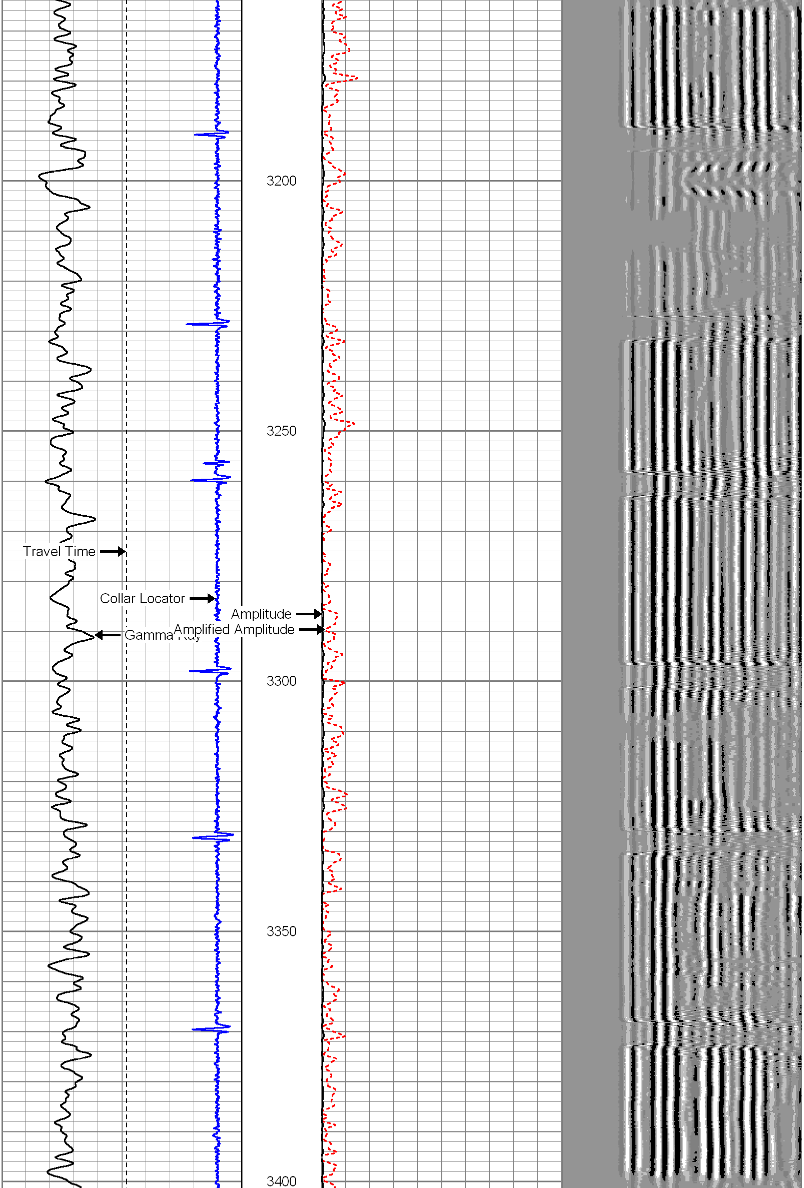


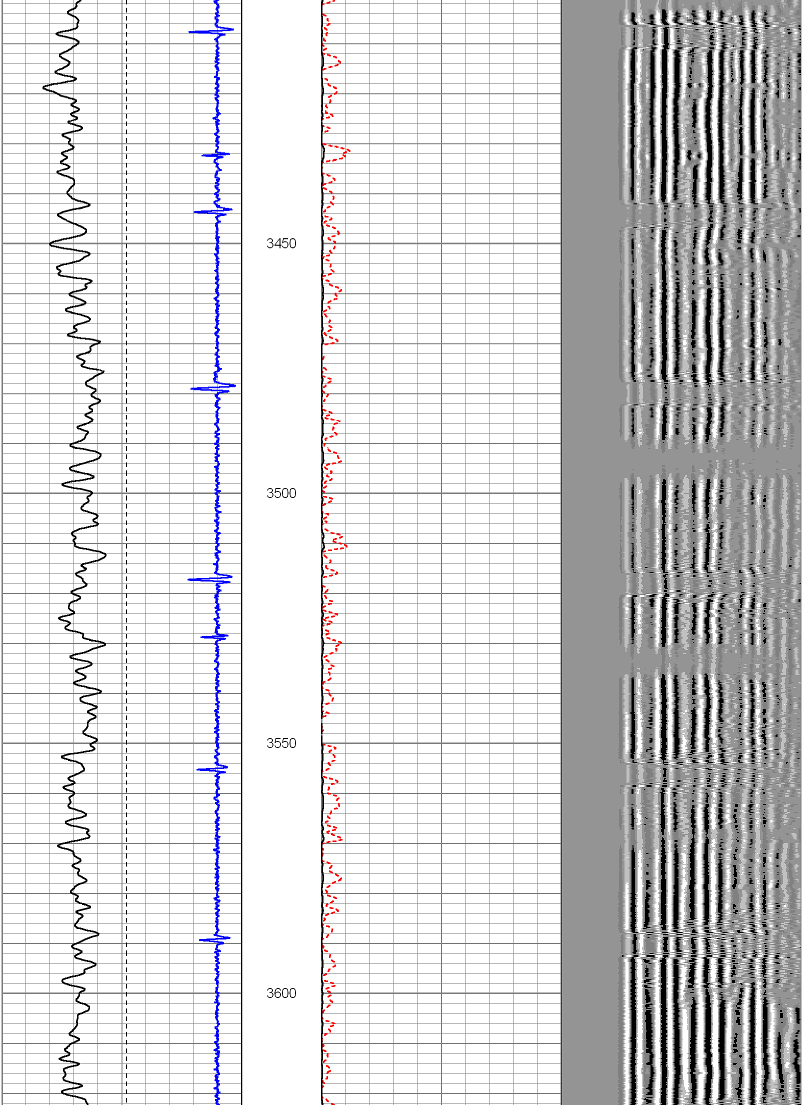


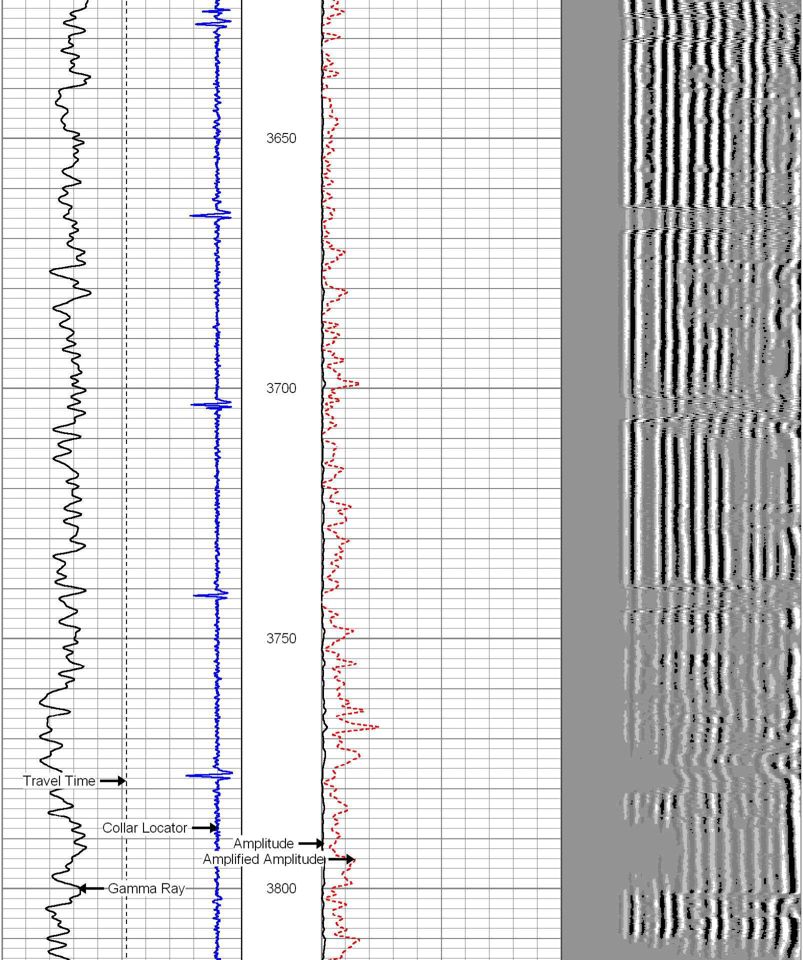


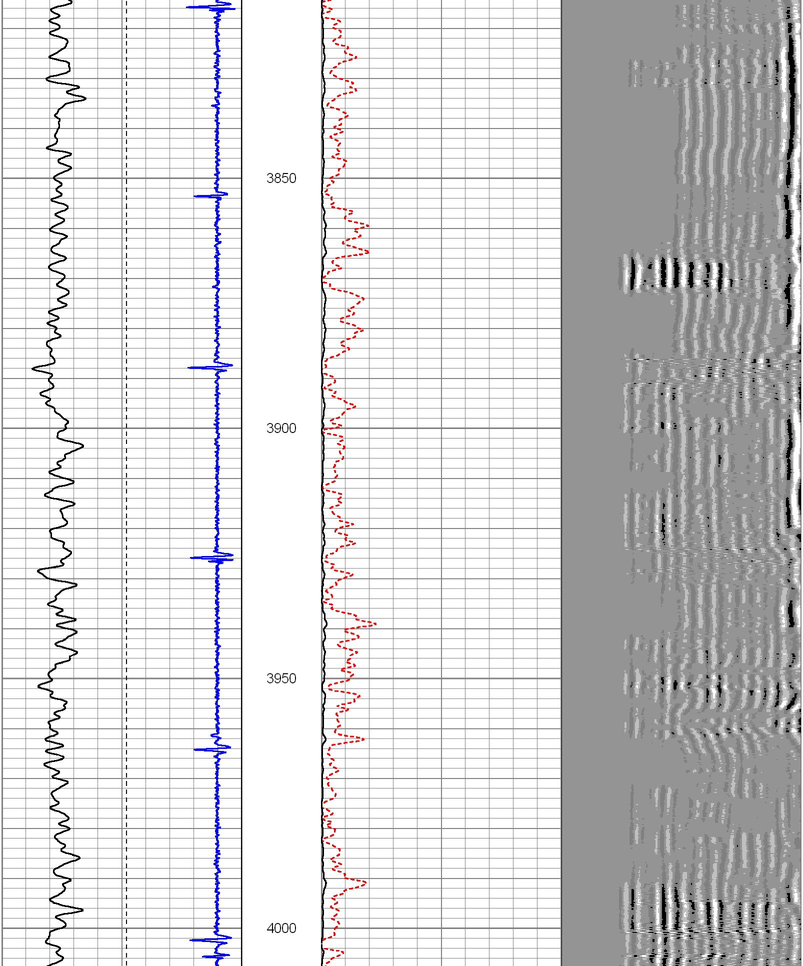


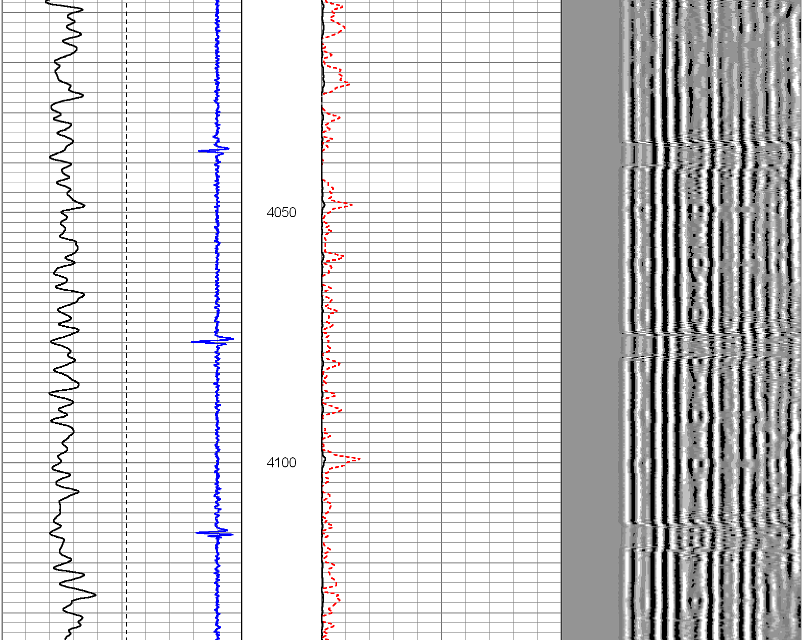


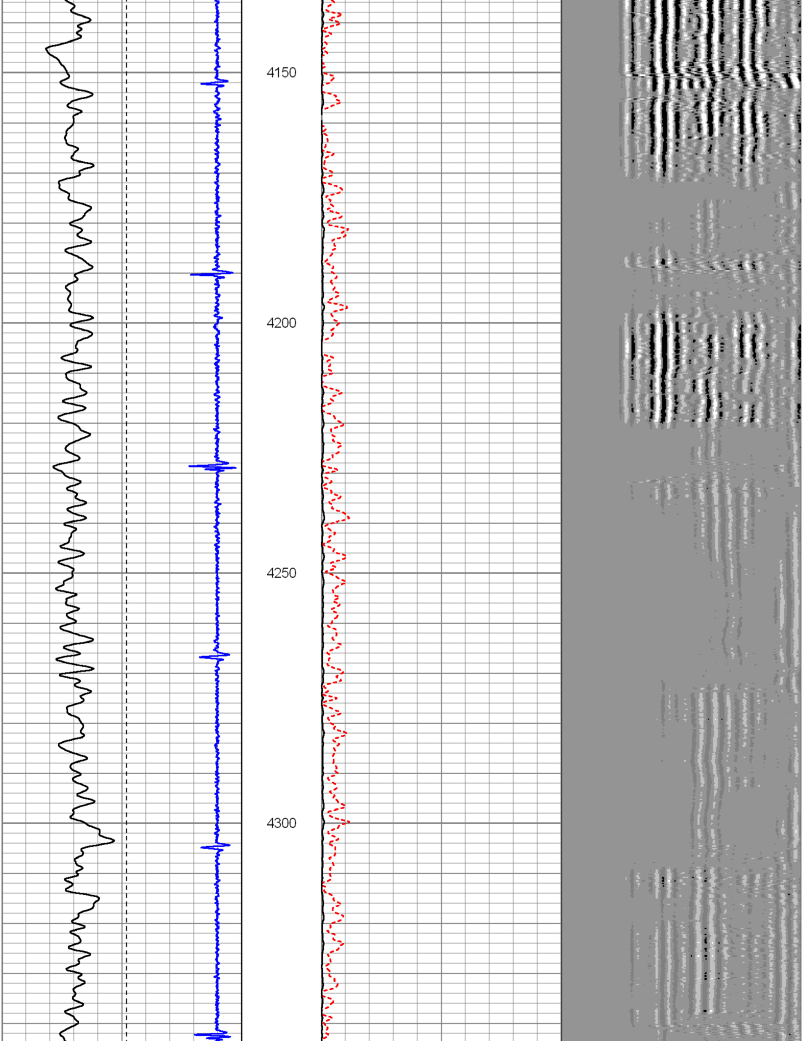


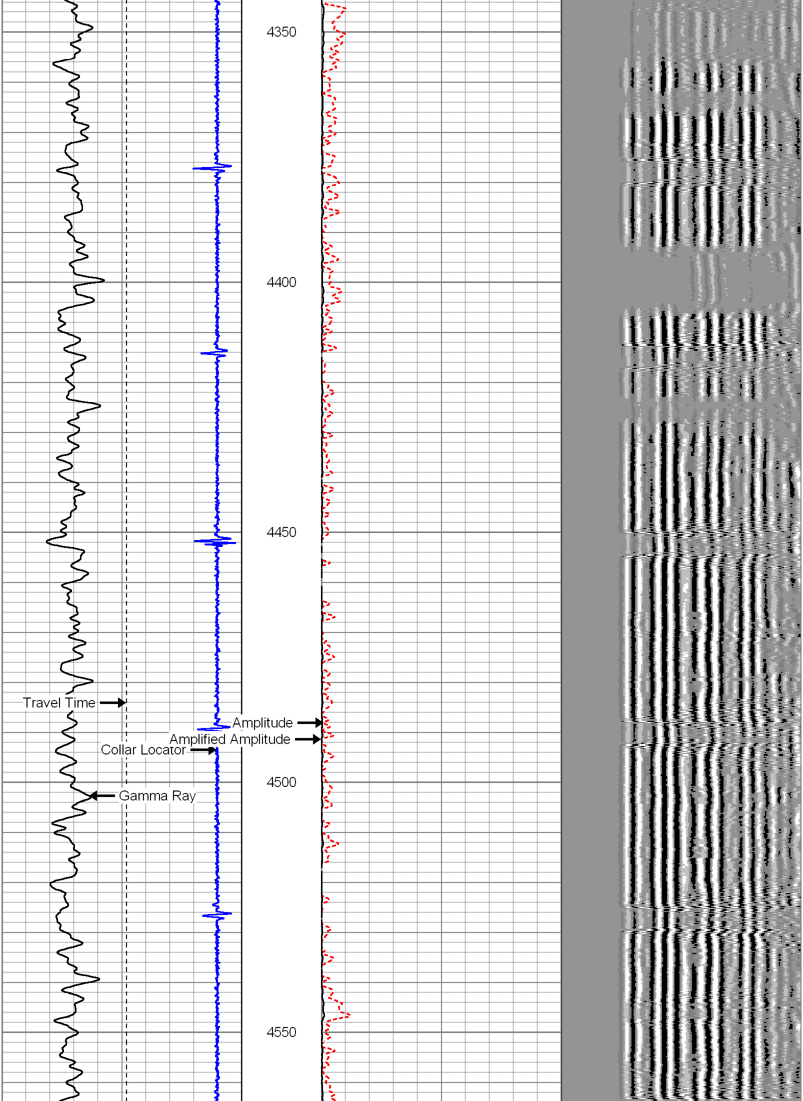


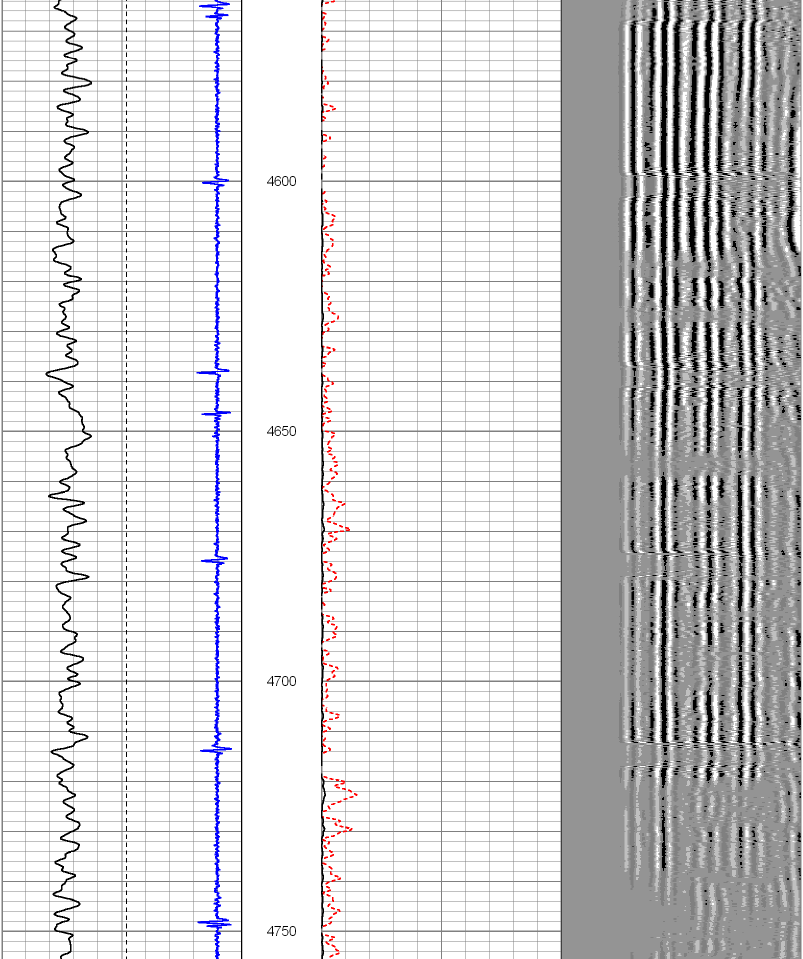


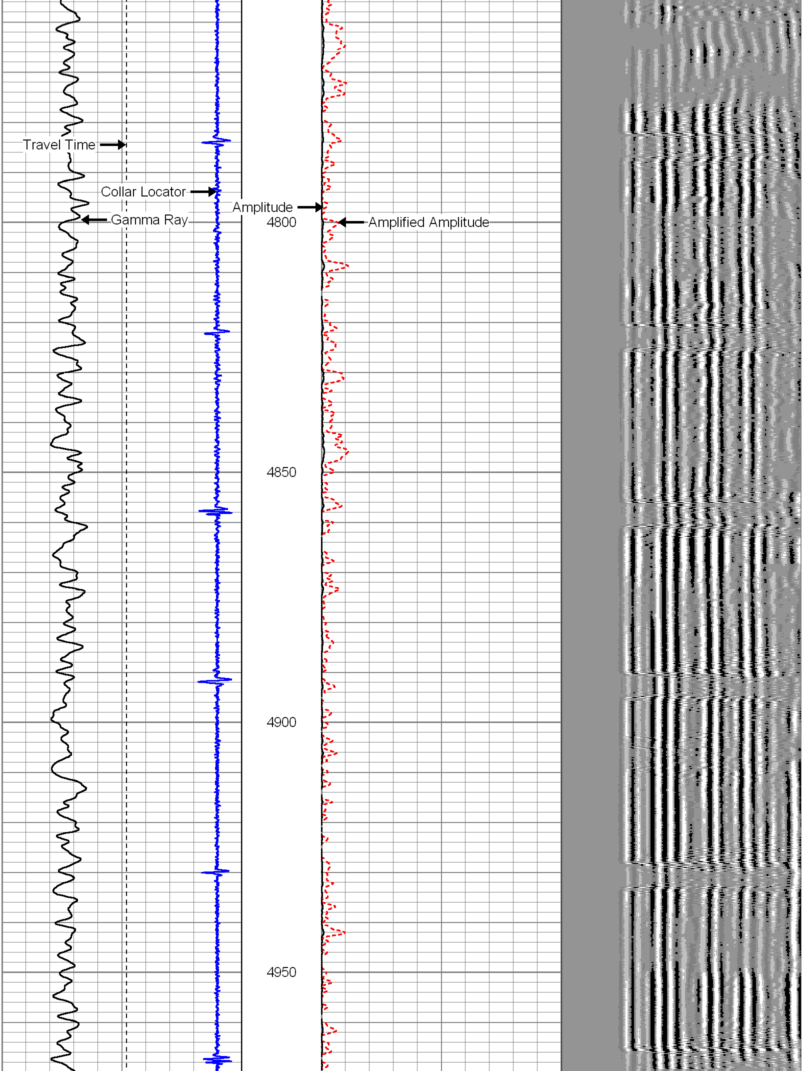


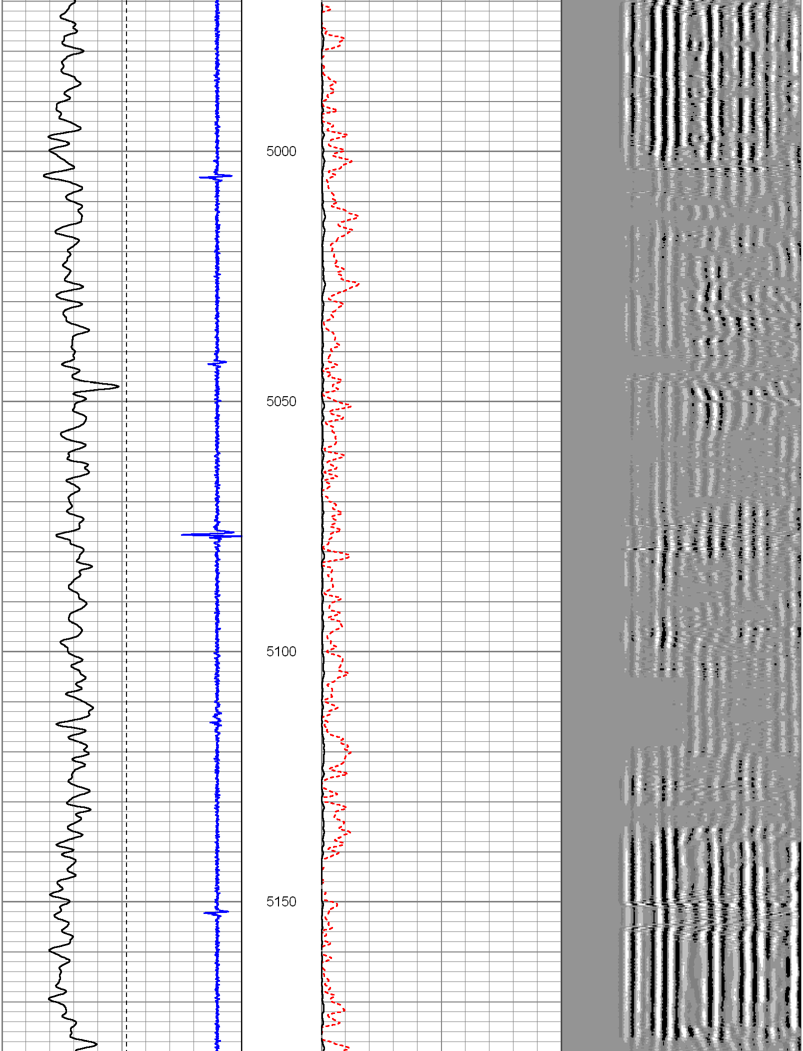


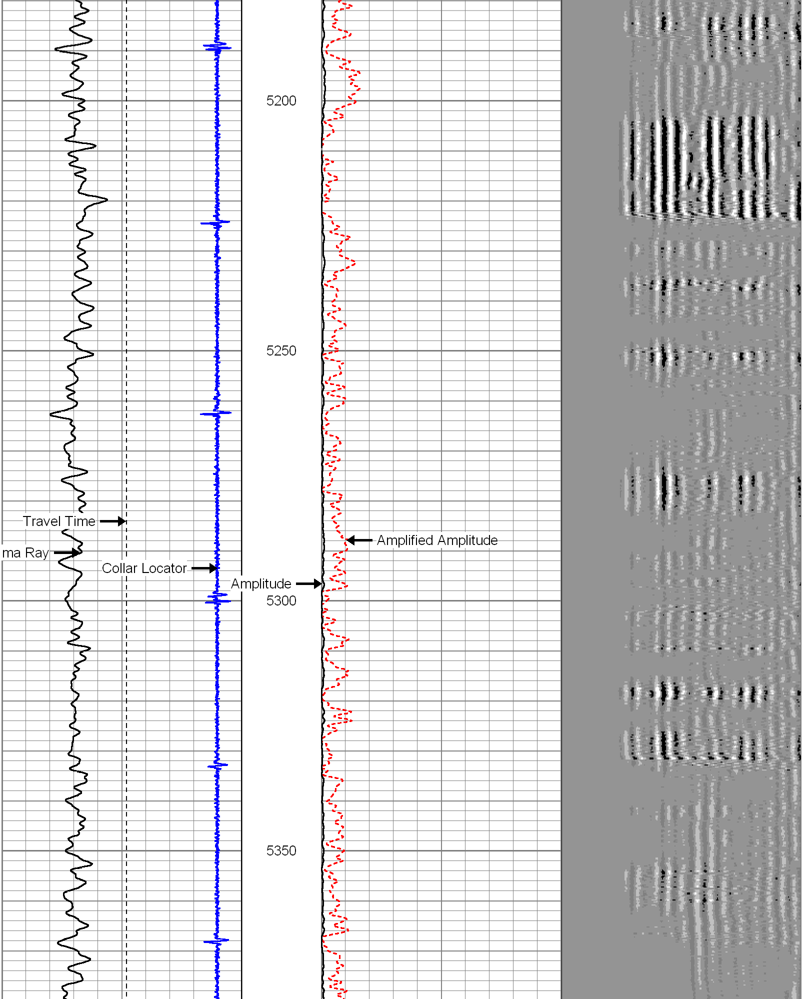


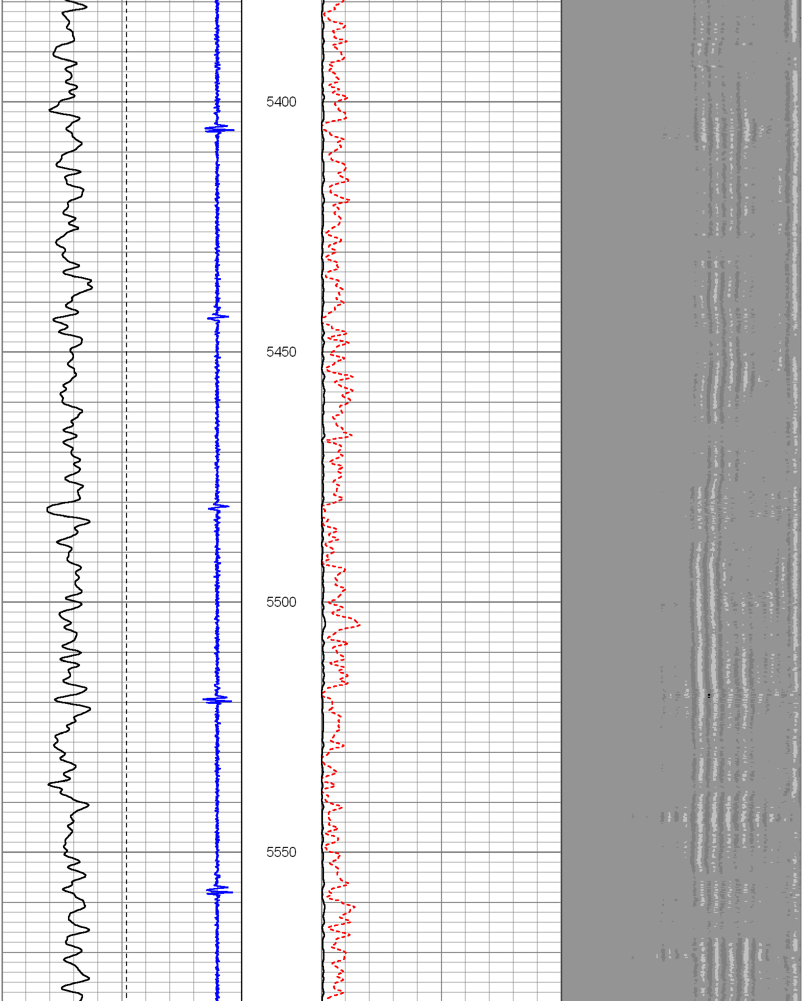


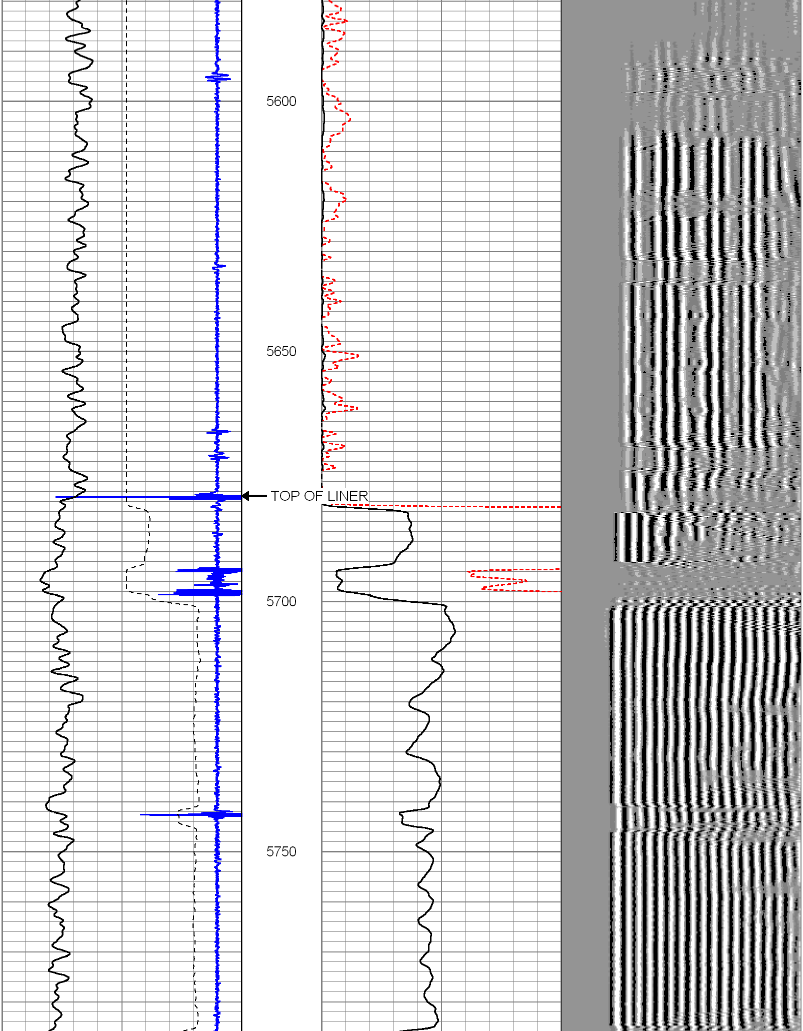


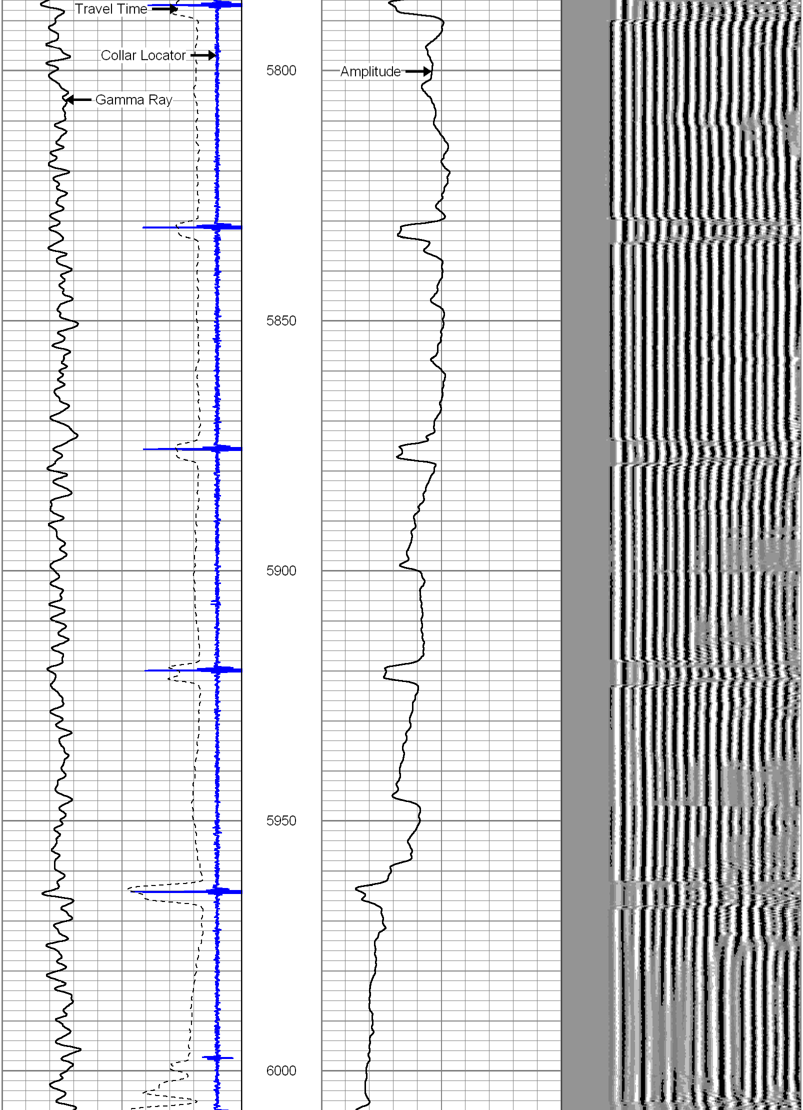


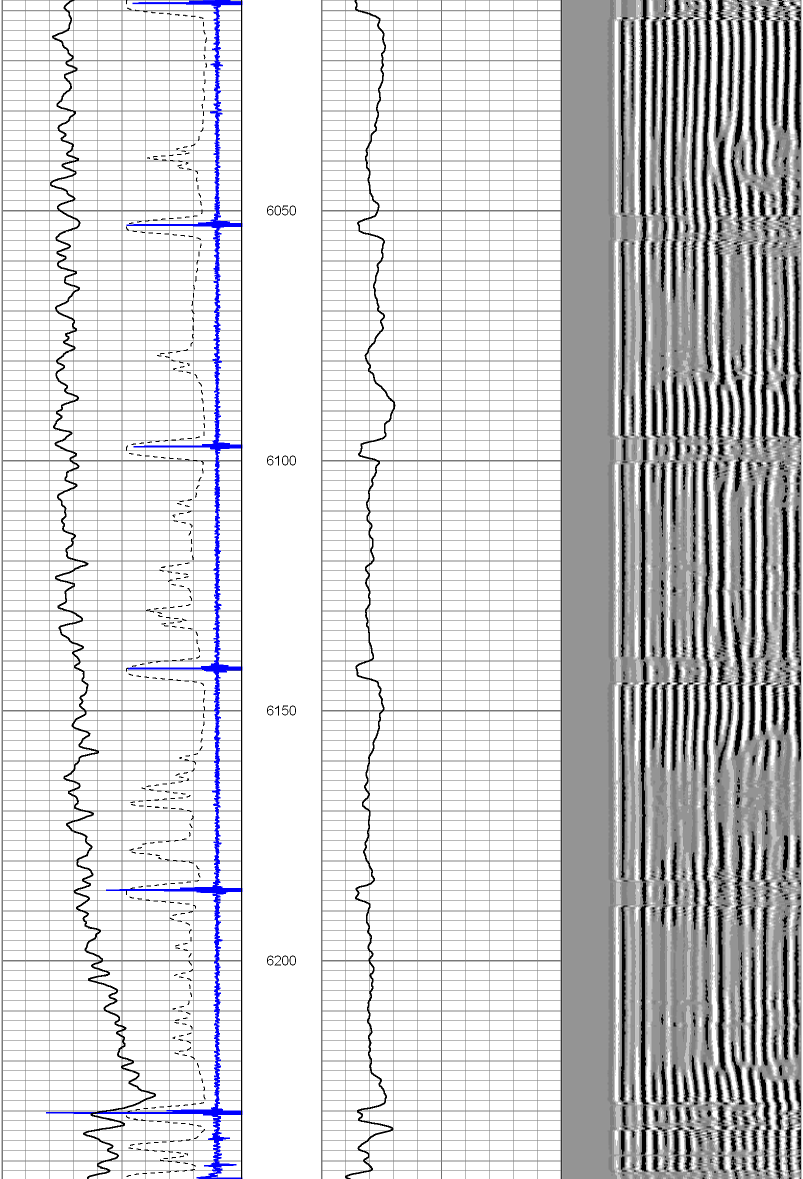


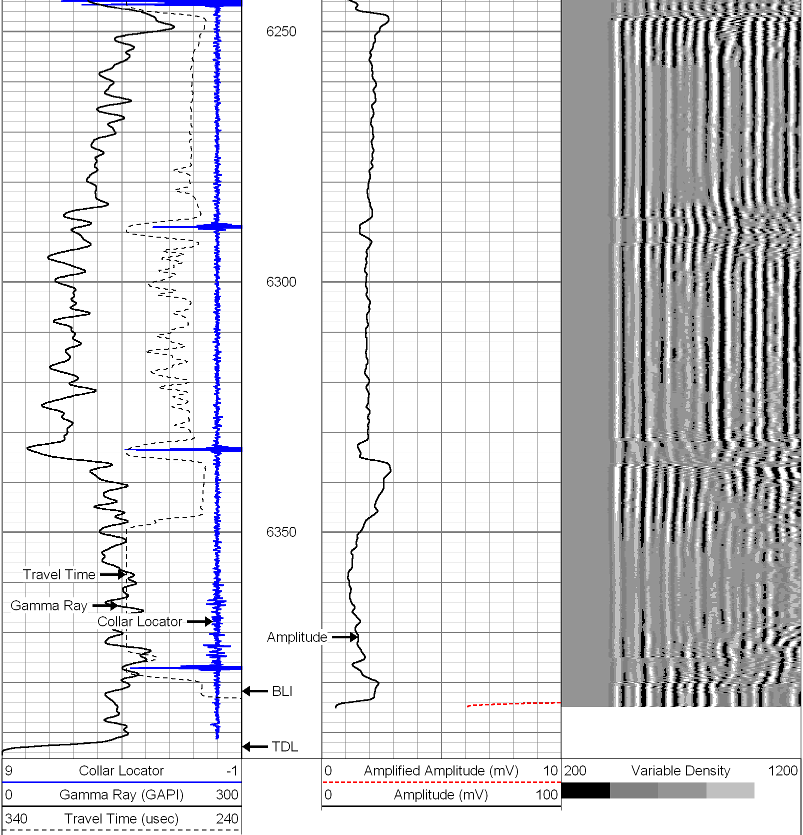












HALLIBURTON

MAIN PASS (1000 PSI)

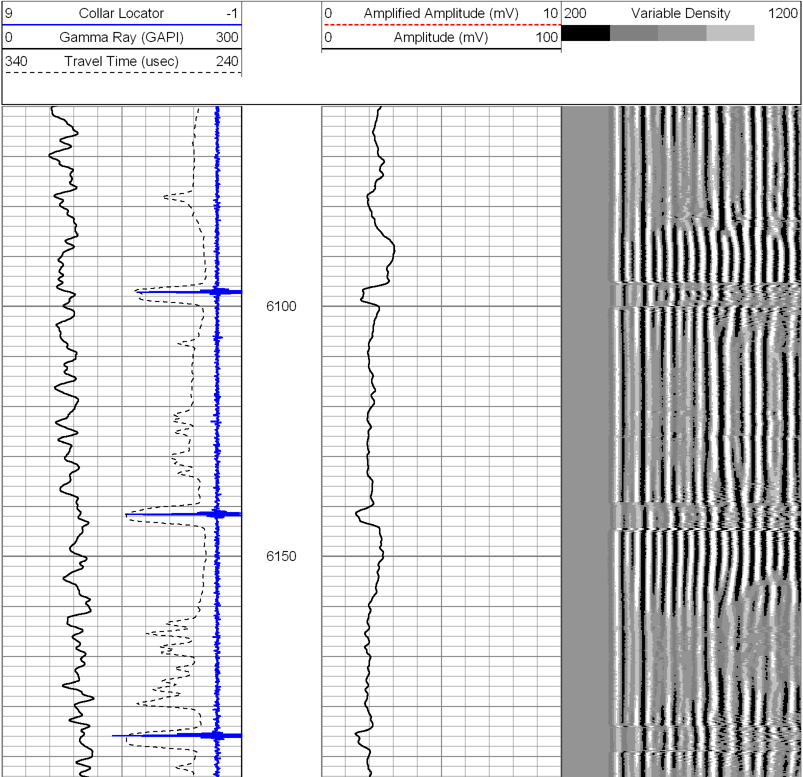
SCALE: 5"=100'

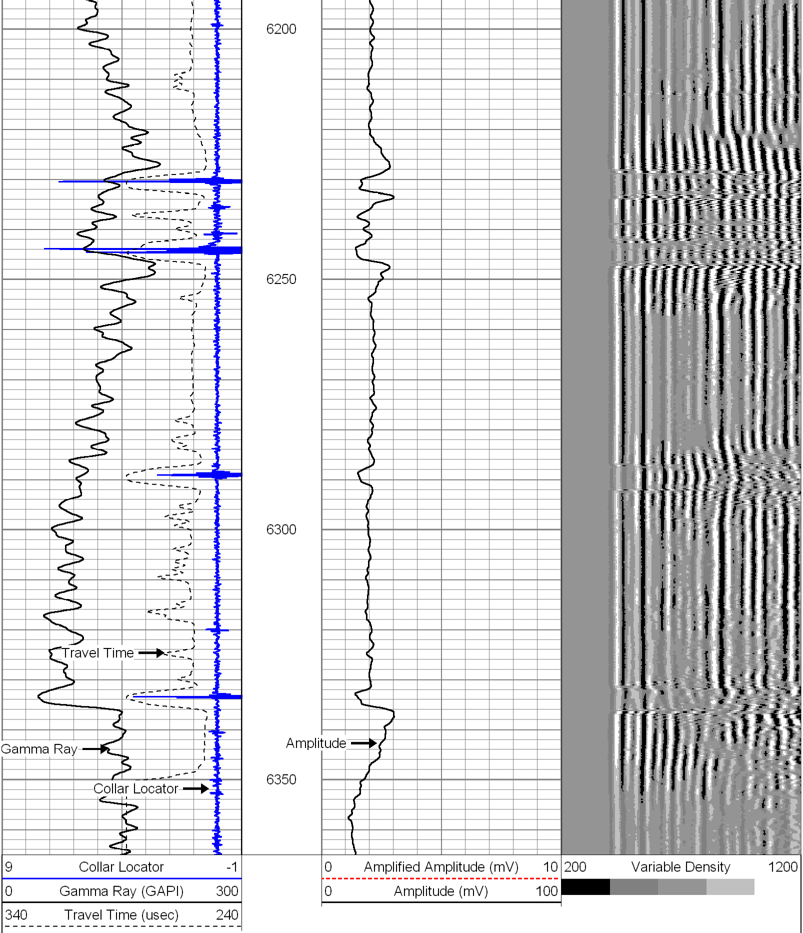
HALLIBURTON

REPEAT PASS

SCALE: 5"=100'

Database File: carrizo_nelson_ranches_1_27_10_59.db
Dataset Pathname: cbl/pass5
Presentation Format: 1katcbl
Dataset Creation: Tue Aug 13 09:17:52 2013 by Log Halliburton Casedho
Charted by: Depth in Feet scaled 1:240





HALLIBURTON

REPEAT PASS

SCALE: 5"=100'

Calibration Report

Database File: carrizo_nelson_ranches_1_27_10_59.db
Dataset Pathname: cbl/pass8
Dataset Creation: Tue Aug 13 10:43:25 2013 by Log Halliburton Casedho

Gamma Ray Calibration Report

Type / Serial: Probe / 275

	Counts/Sec.	Gain	Offset	Jig	Units
SHOP CALIBRATION		Mon Aug 12 15:46:02 2013			
Background	90.1				cps
Calibrator	341.9				cps
		0.9572			GAPI/cps
PRIMARY VERIFICATION		Mon Aug 12 15:49:42 2013			
Background	88.6				cps
Calibrator	324.5				cps
Difference				235.9	GAPI
BEFORE SURVEY VERIFICATION		Tue Aug 13 08:08:55 2013			
Background	69.3				cps
Calibrator	302.5				cps
Difference				233.2	GAPI
AFTER SURVEY VERIFICATION		Tue Aug 13 10:42:49 2013			
Background	85.3				cps
Calibrator	332.4				cps
Difference				247.2	GAPI

Cement Bond Log Calibration Report

Serial Number: 275
Tool Model: Probe
Performed: Tue Aug 13 08:43:39 2013

Depth: 333.865 ft
Casing Diameter: 7 in

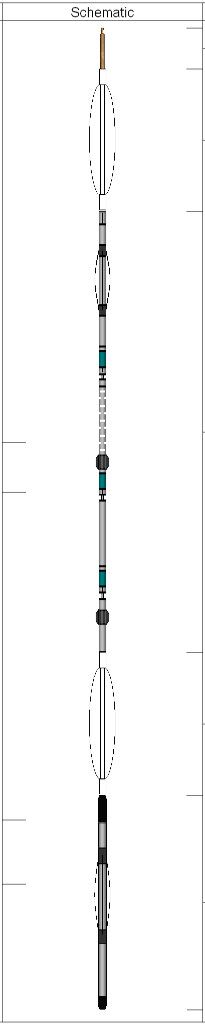
	3' Spacing	5' Spacing	
Signal Zero:	0.1	0.1	mV
Calibrated Amplitude:	65	65	mV
Reading at Signal Zero:	-0.0143066	-0.0130371	V
Reading in Free Pipe:	0.142187	0.13042	V
Gain:	414.712	452.4	
Offset:	6.03314	5.99799	

Log Variables

Database:D:\Warrior_data\carrizo_nelson_ranches_1_27_10_59.db
Dataset: field/well/cbl/pass8

Top - Bottom

PPT usec	MAXAMPL mV	MINAMPL mV	MINATTN db/ft	CASEOD in	PERFS	TDEPTH ft	BOTTEMP degF
287	65	1	0.8	7	0	11595	100
BITSIZE in							
8.75							

Sensor	Offset (ft)	Schematic	Description	Len (ft)	OD (in)	Wt (lb)
			1_CABLEHEAD 1"OD CABLE HEAD	0.83	1.00	3.00
			CENT-Probe (PT_MONO2) Probe 2 3/4 Centralizer	2.88	2.75	35.00
WVF3	11.47		CBL-Probe (275) Probe 2.75" Dual Receiver Bond	8.92	2.75	60.00
WVF5	10.47					
			CENT-Probe (PT_MONO2) Probe 2 3/4 Centralizer	2.88	2.75	35.00
CCL	3.83					
GR	2.54		GR-Probe (275) Probe 2.75" 4 Channel Pulse	4.33	2.75	30.00

Dataset:	carrizo_nelson_ranches_1_27_10_59.db: field/well/cbl/pass8
Total Length:	19.85 ft
Total Weight:	163.00 lb
O.D.	2.75 in

Company	CARRIZO OIL & GAS		
Well	NELSON RANCHES 1-27-10-59		
Field	WILDCAT		
County	WELD	State	CO

HALLIBURTON

CEMENT BOND LOG