Company	CARRIZO		
Well	BRINGELSON 2-20-11-9-58		
Field	WILDCAT		
County	WELD	State	CO

HALLIBURTON

CEMENT BOND LOG

Company	CARRIZO		
Well	BRINGELSON 2-20-11-9-58		
Field	WILDCAT		
County	WELD	State	CO

API No.: 05-123-36068 Serv #: 900492962

Location: LAT: 40.74041 LONG:-103.89667

Other Services

N/A

Sec: 20 Twp: 9N Rge: 58W

Permanent Datum GL Elevation 4868'

Log Measured From KB , 17 Ft. above perm. datum

Drilling Measured From KB

Elevation
K.B. 4885'
D.F. 4884'
G.L. 4868'

Date @ Time Logged	5-JUNE-2013	Type Fluid in Hole	FRESH WATER
Run No.	ONE	Density of Fluid	8.33
Depth - Driller	10265	Fluid Level	SURFACE
Depth - Logger	5352	Cement Top Est. Logged	400
Bottom - Logged Interval	5340	Equipment / Location	11014931 / BRIGHTON
Top - Log Interval	110	Recorded by	JOSHUA MCDANIEL
Max. Recorded Temp.	118	Witnessed by	KIRK 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
SURF	12.25	0	1400	9.625	36	O	1400
ONE	8.75	0	6274	7	23	0	6274
LINER	6.25	5161	10265	4.5	11.6	5161	10265

<<< 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

FIRST LOG IN THE WELL

TOL @ 5150'

ESTIMATED TOP OF CEMENT @ 400'

THANK YOU FOR CHOOSING HALLIBURTON ENERGY SERVICES!

HALLIBURTON

MAIN PASS 1000 PSI

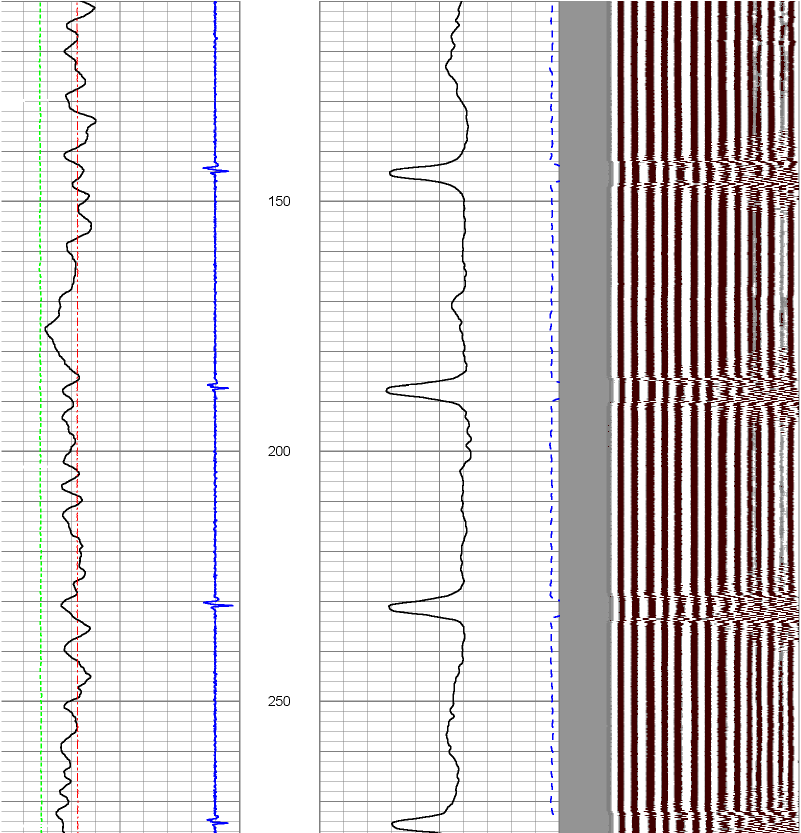
SCALE: 5"=100'

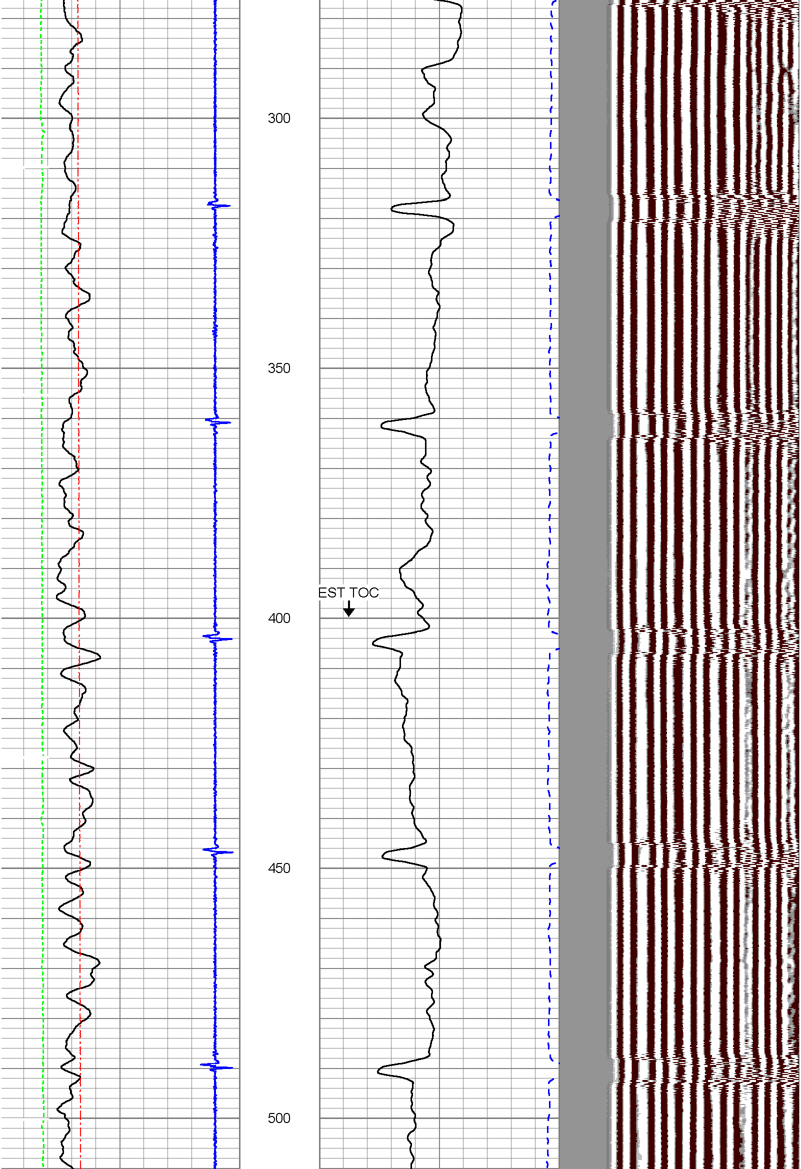
Database File:	bringelson.db
Dataset Pathname:	pass9
Presentation Format:	1cbl
Dataset Creation:	Wed Jun 05 09:31:42 2013 by Log Halliburton Casedho
Charted by:	Depth in Feet scaled 1:240

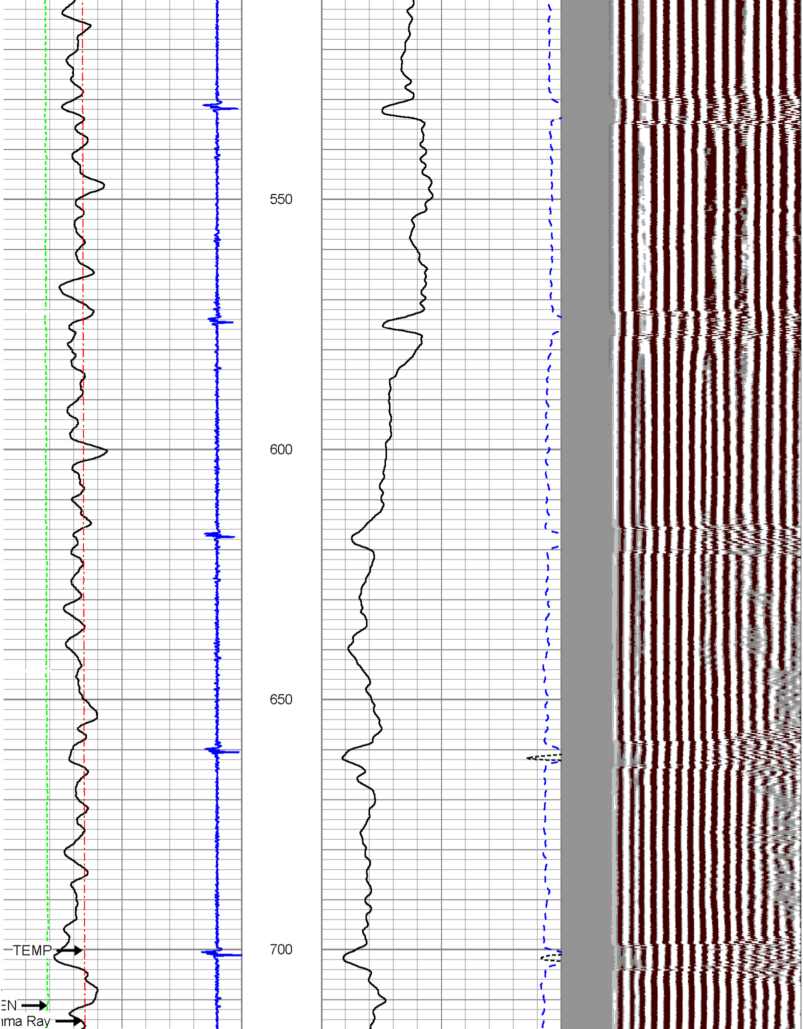
9	Collar Locator	-1
0	Gamma Ray (GAPI)	150
0	LTEN (lb)	2500
0	TEMP (degF)	200

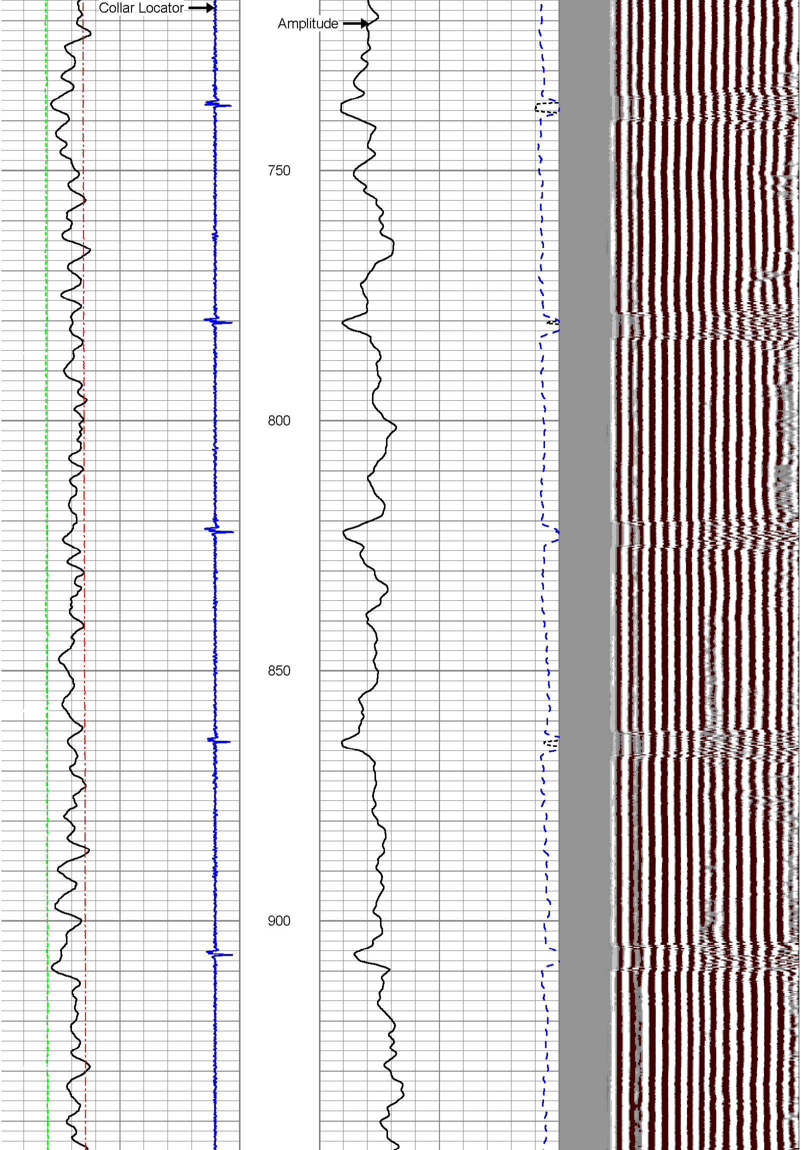
0	Amplified Amplitude (mV)	10
0	Amplitude (mV)	100
180	TRAVEL TIME (usec)	280

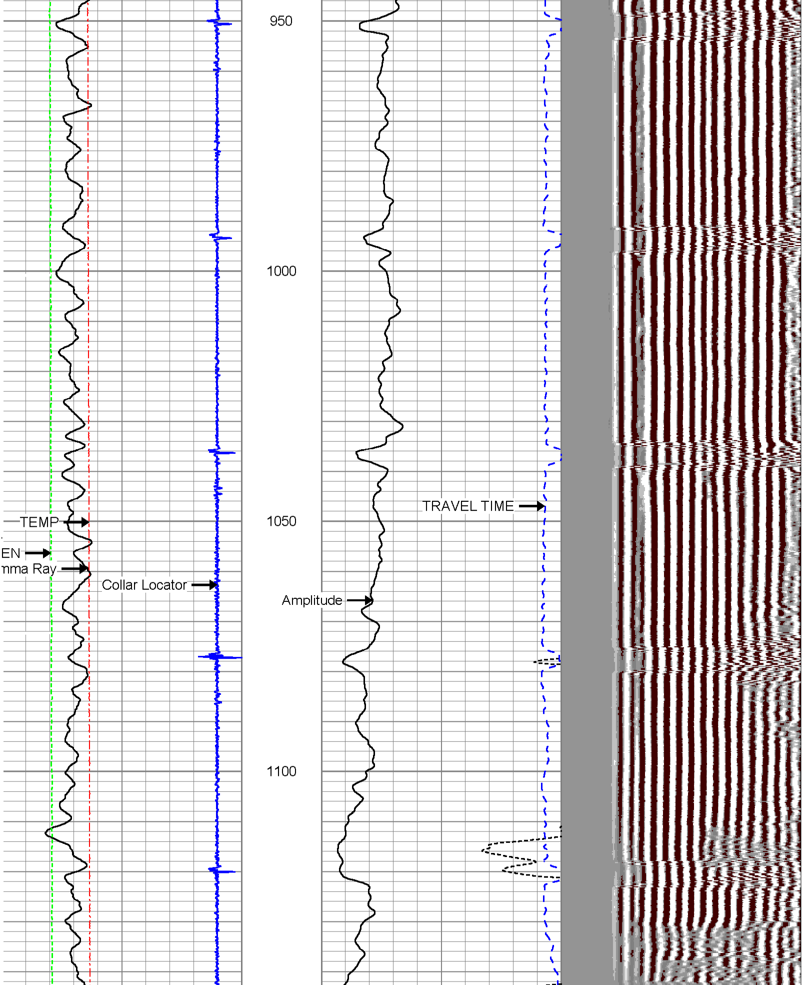
200	MSG	1200

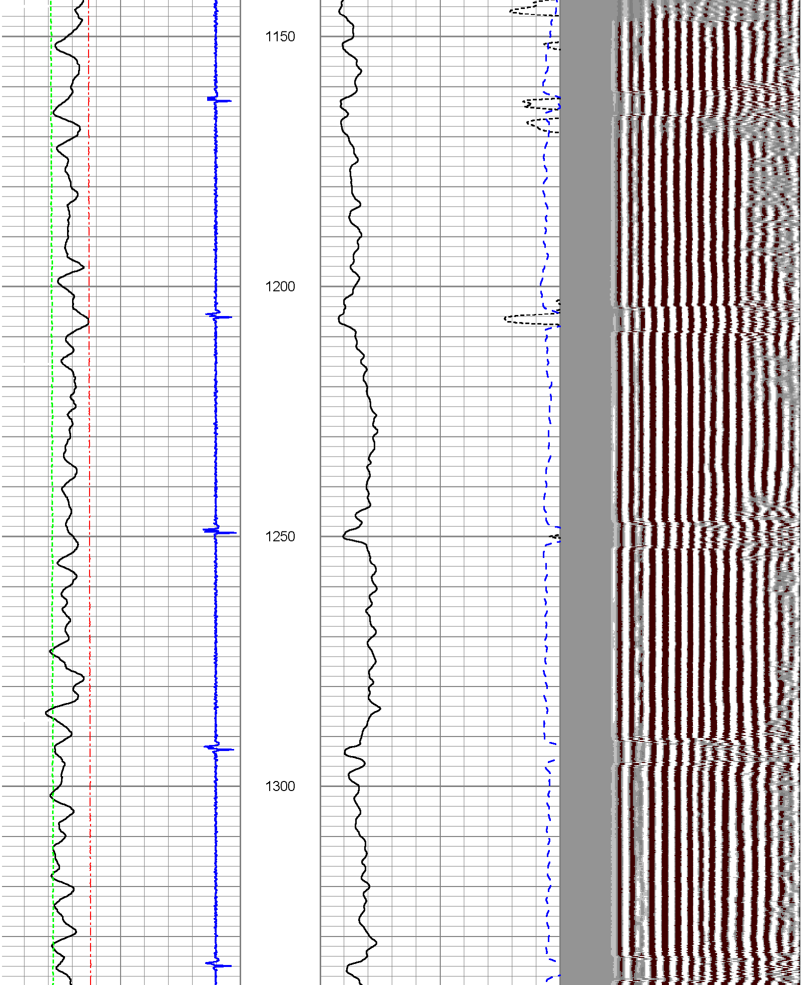


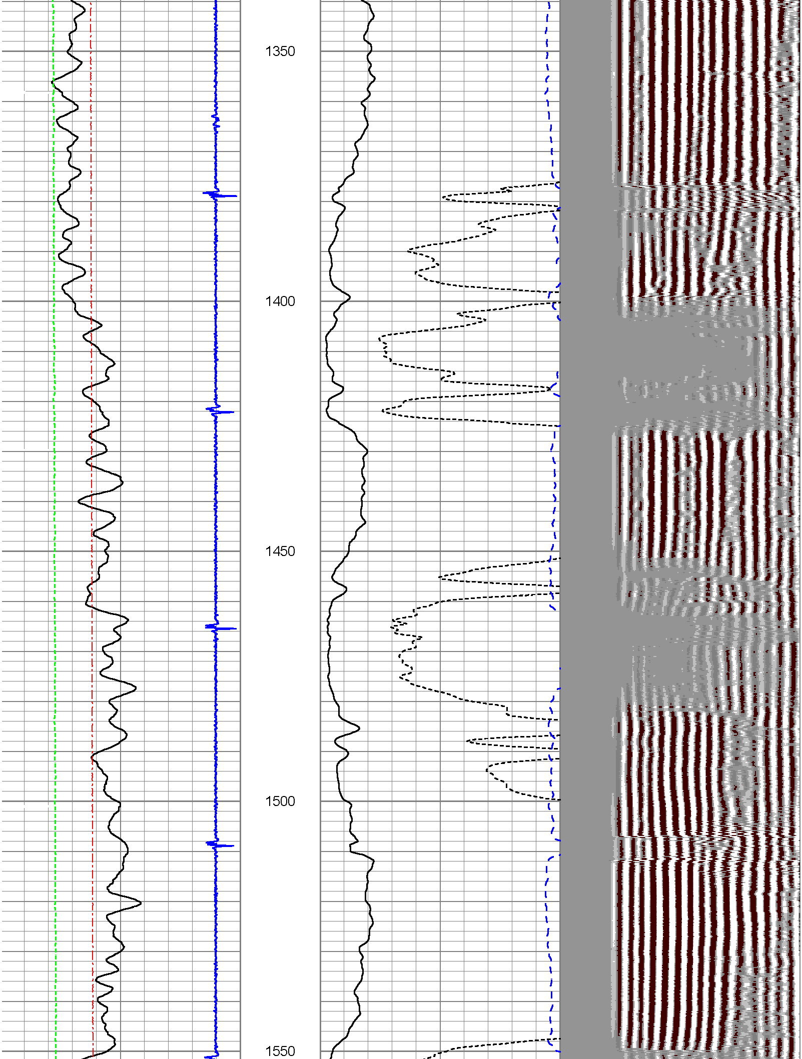


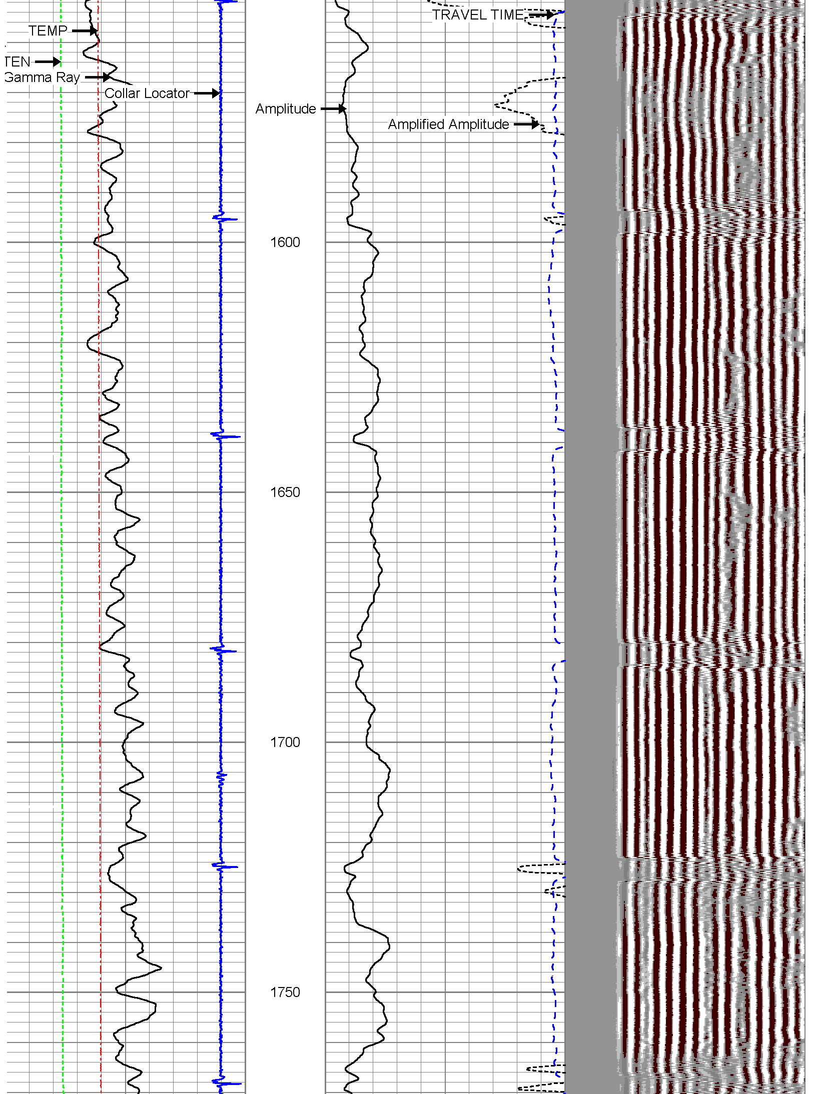


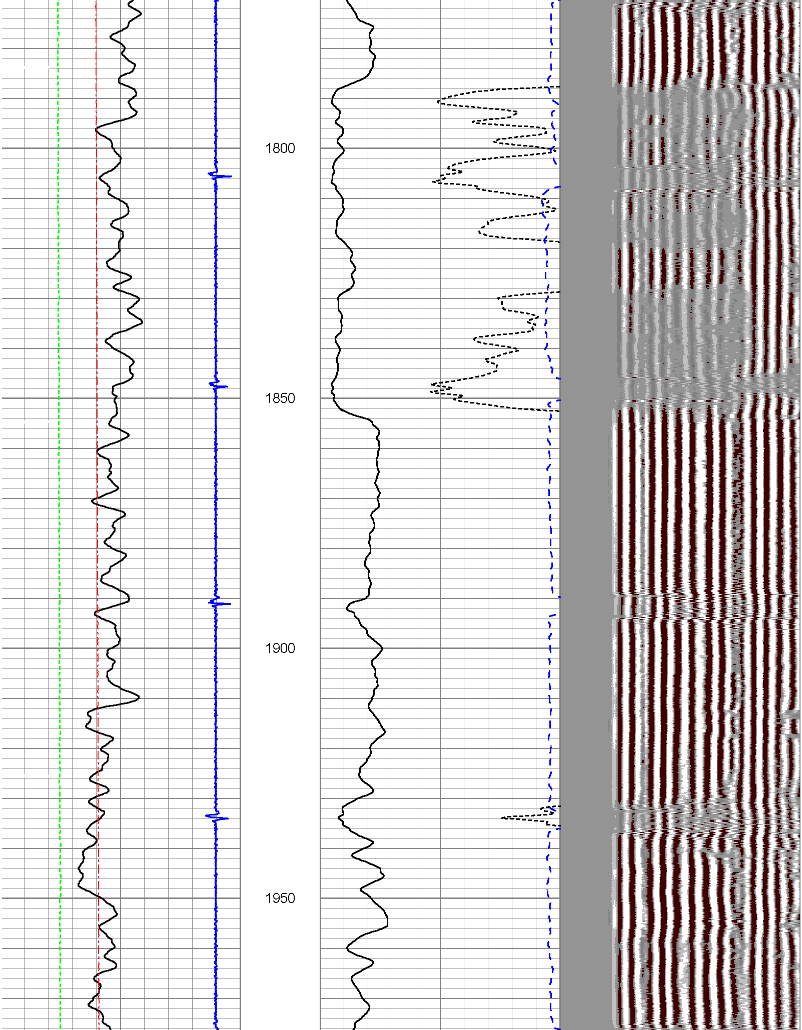


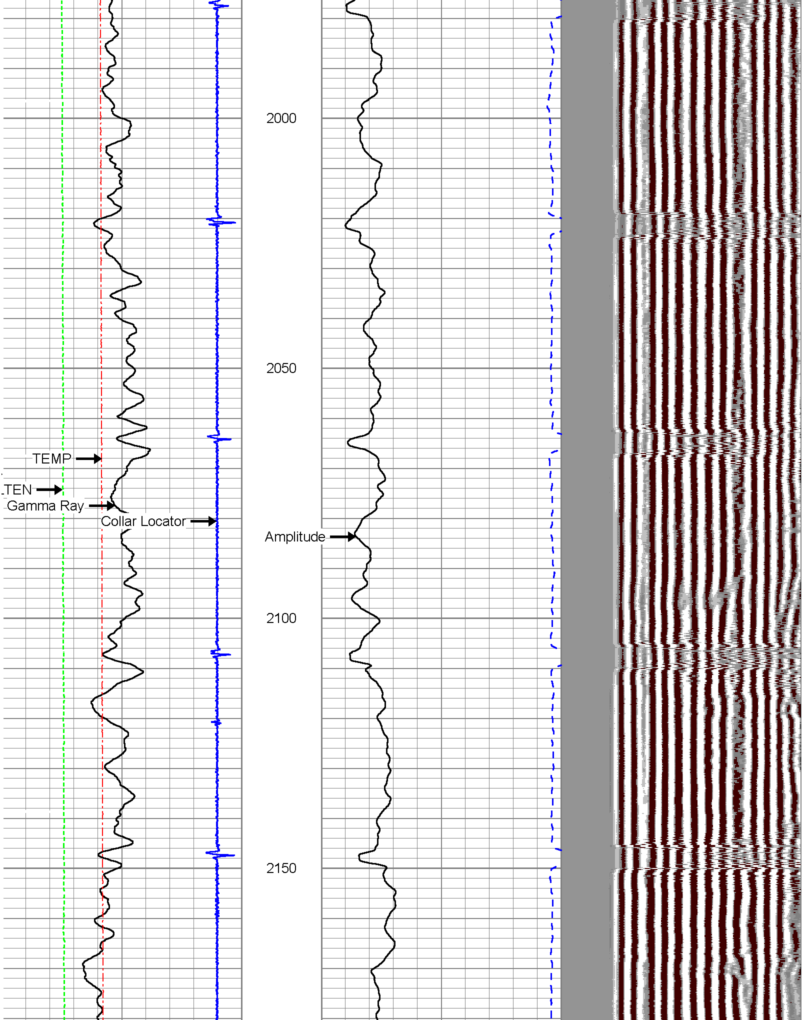


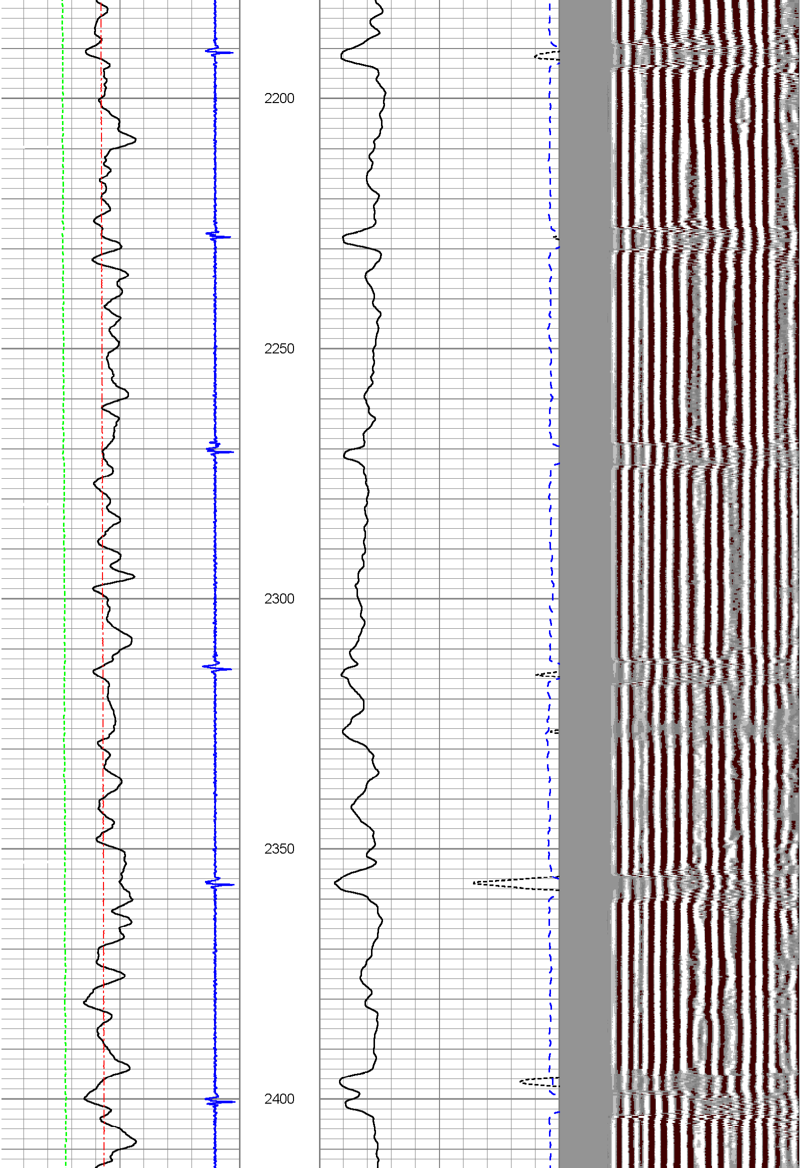


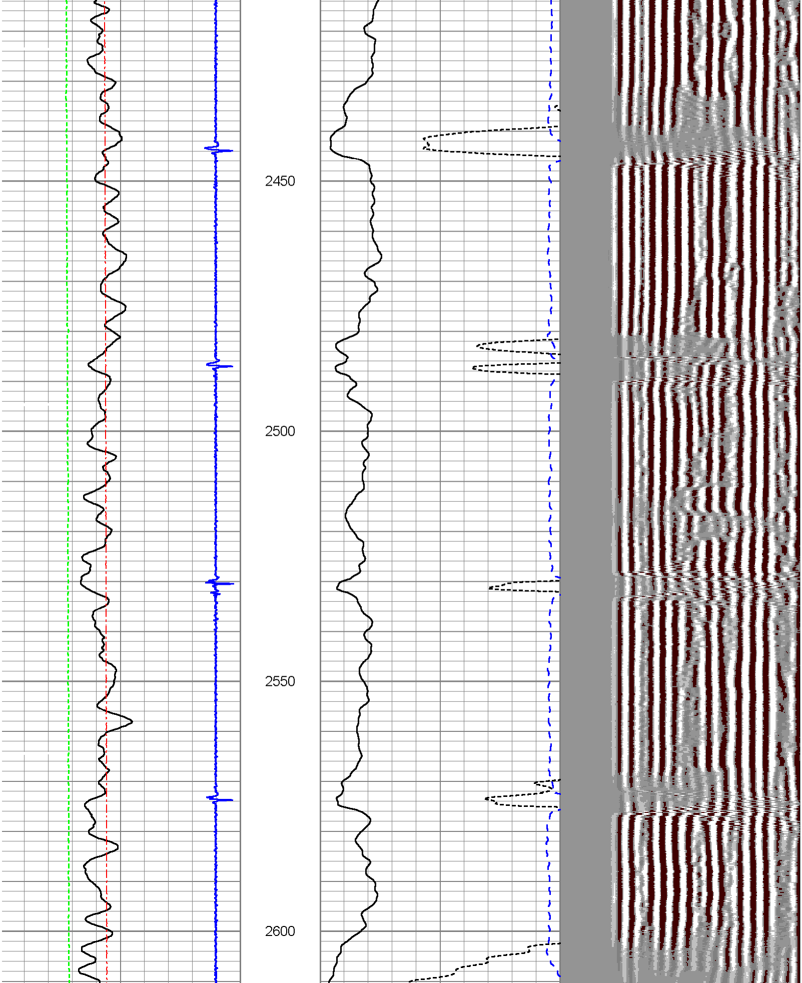


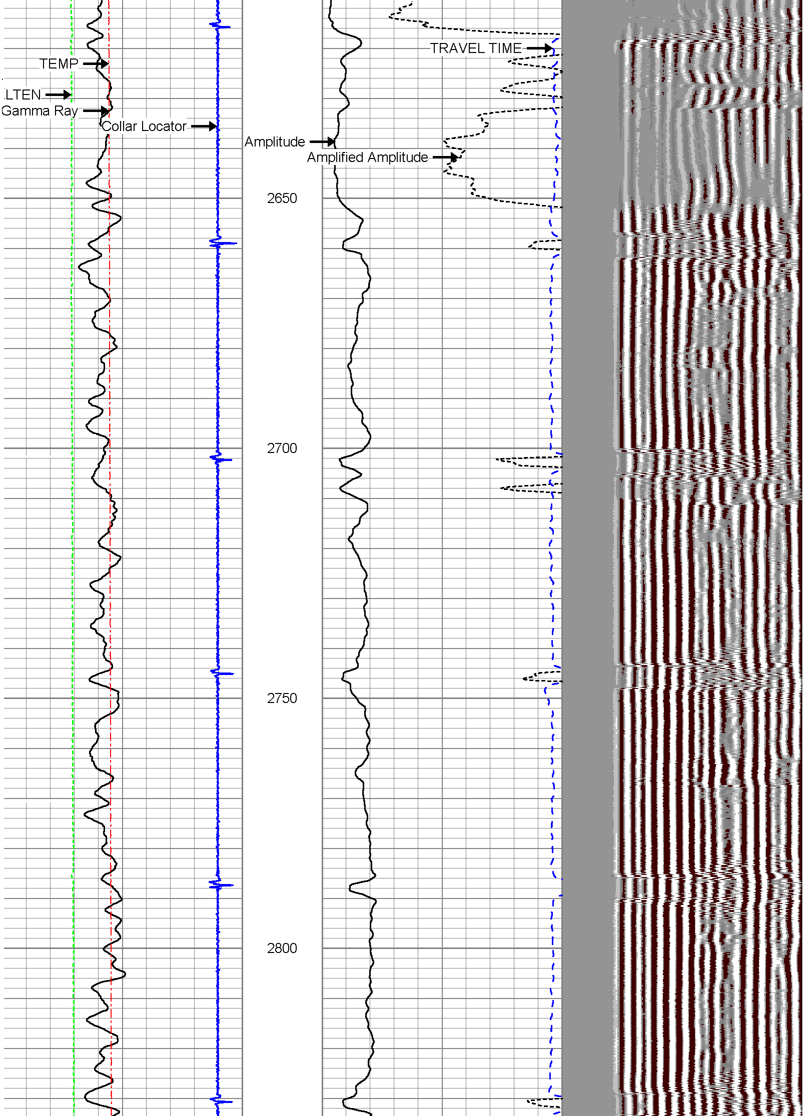


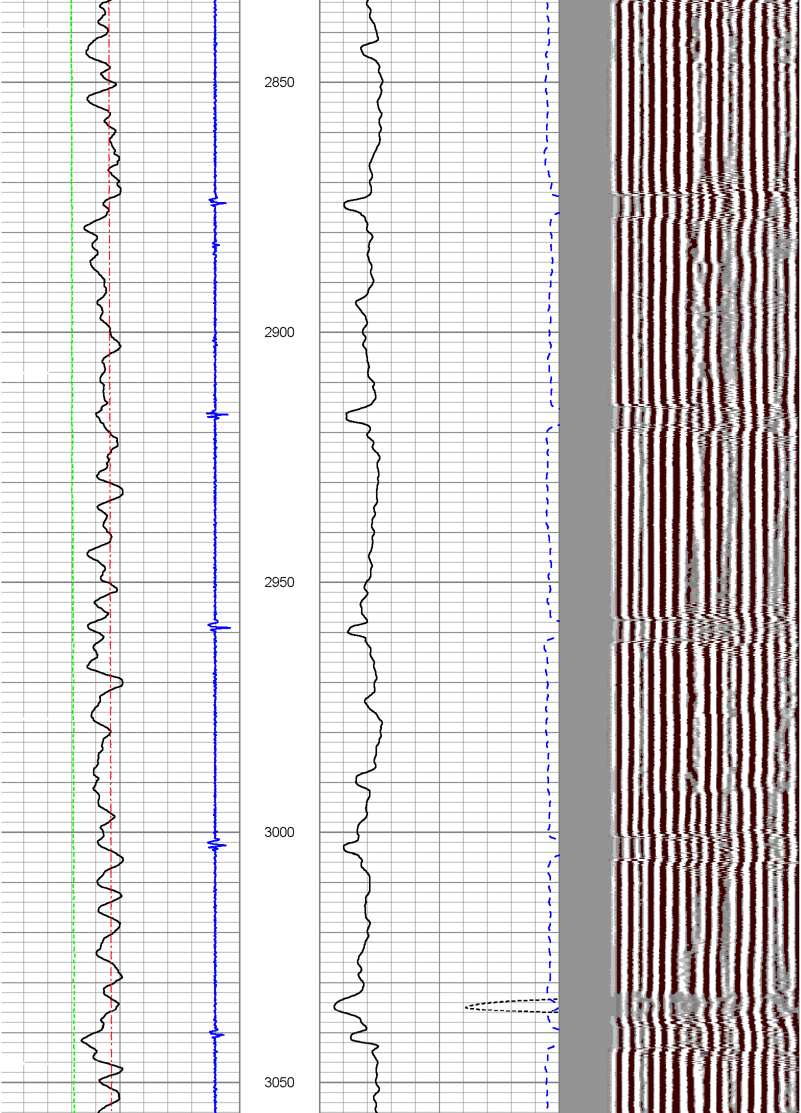


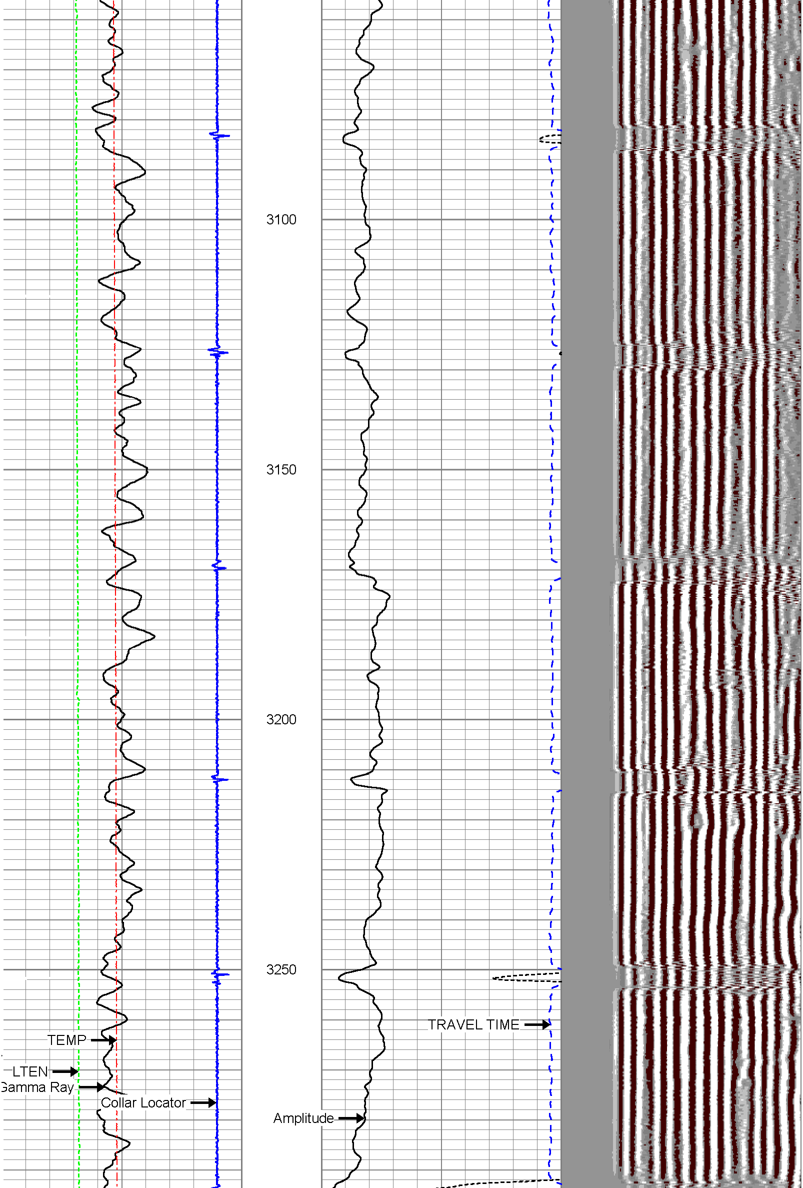


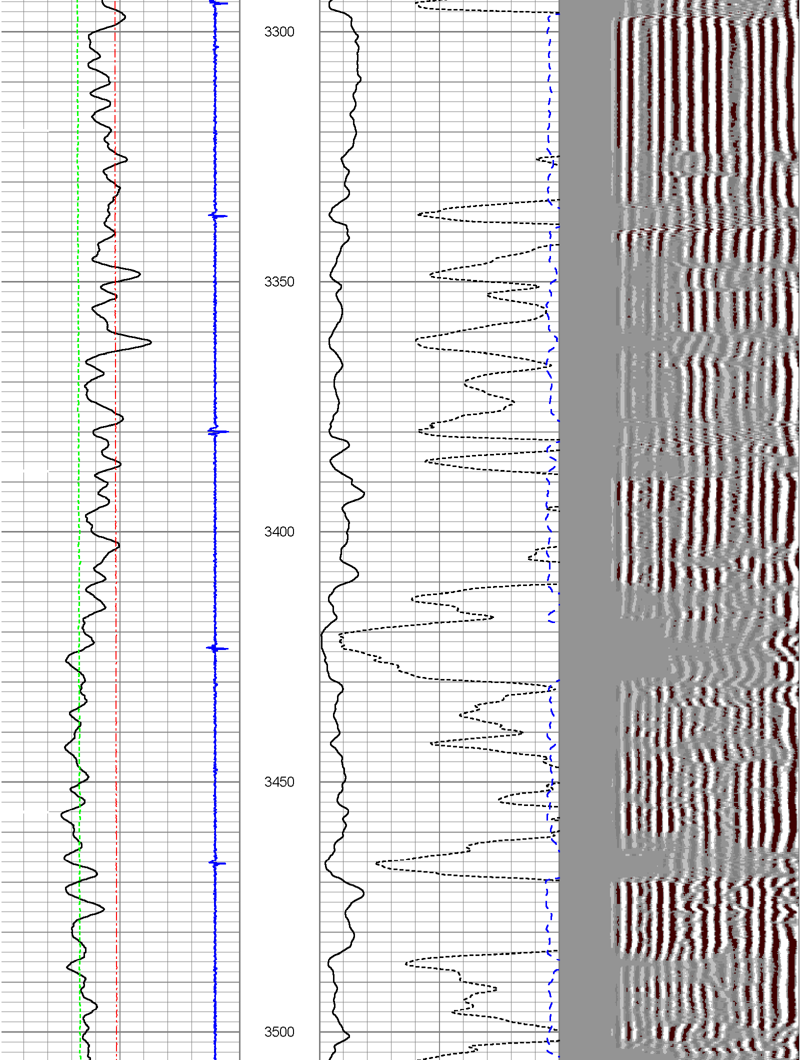


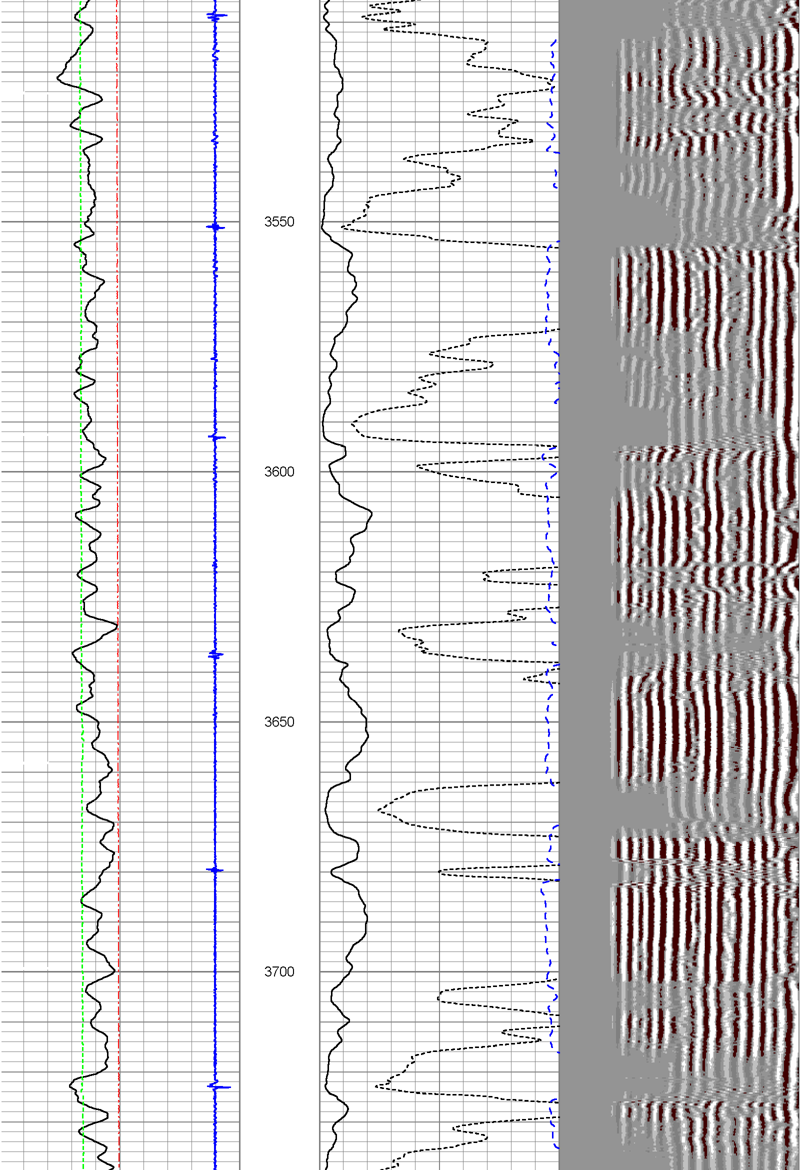


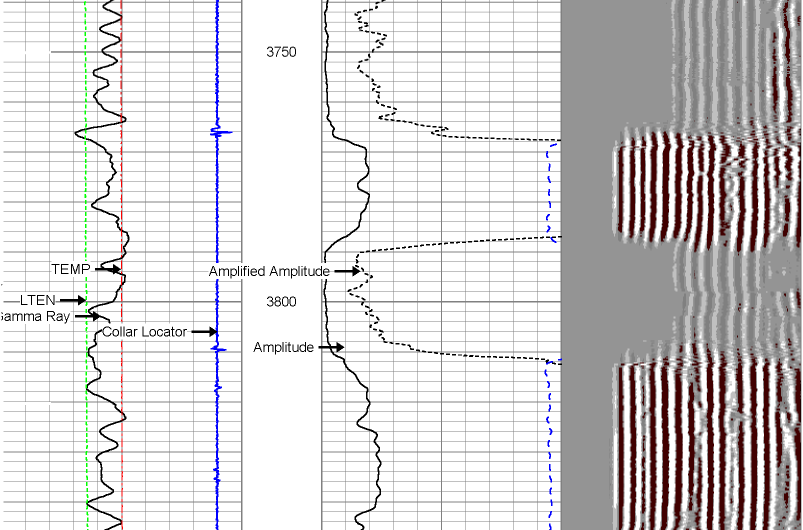


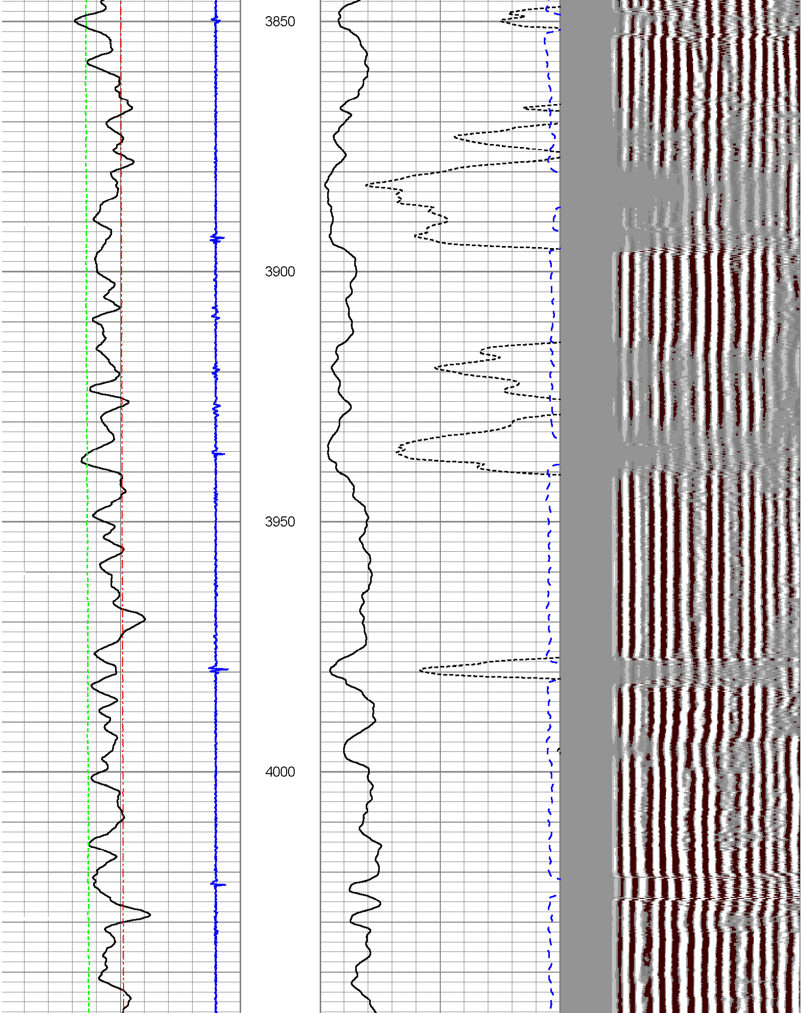


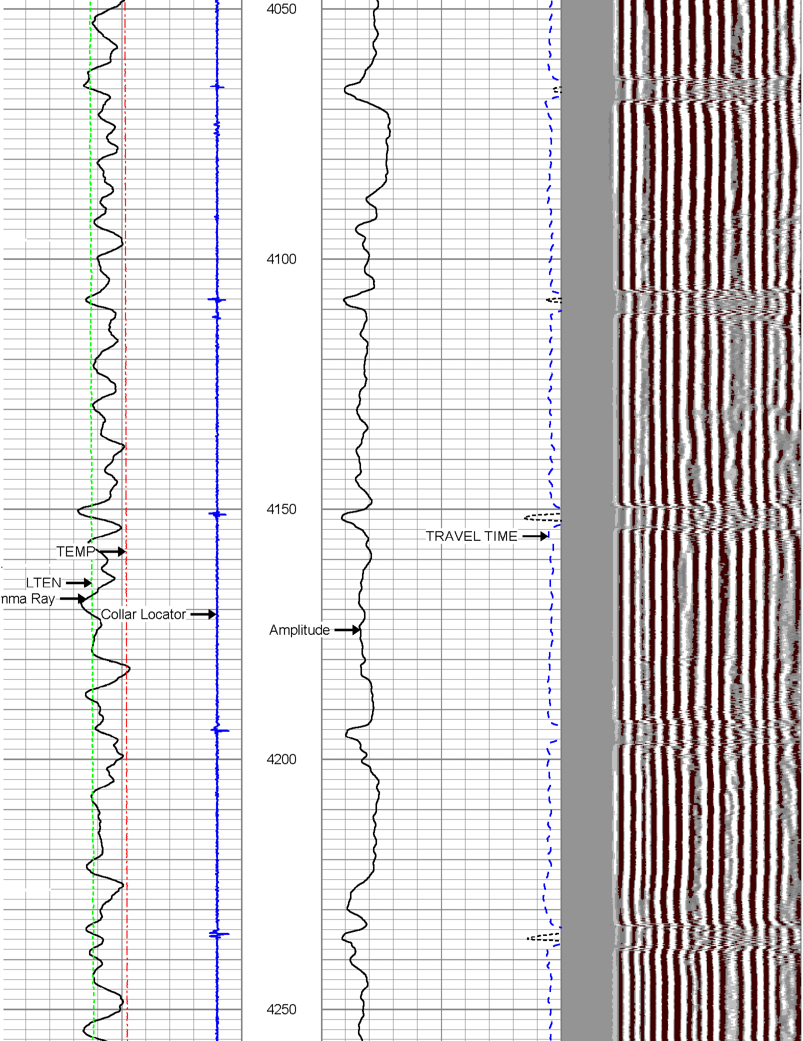


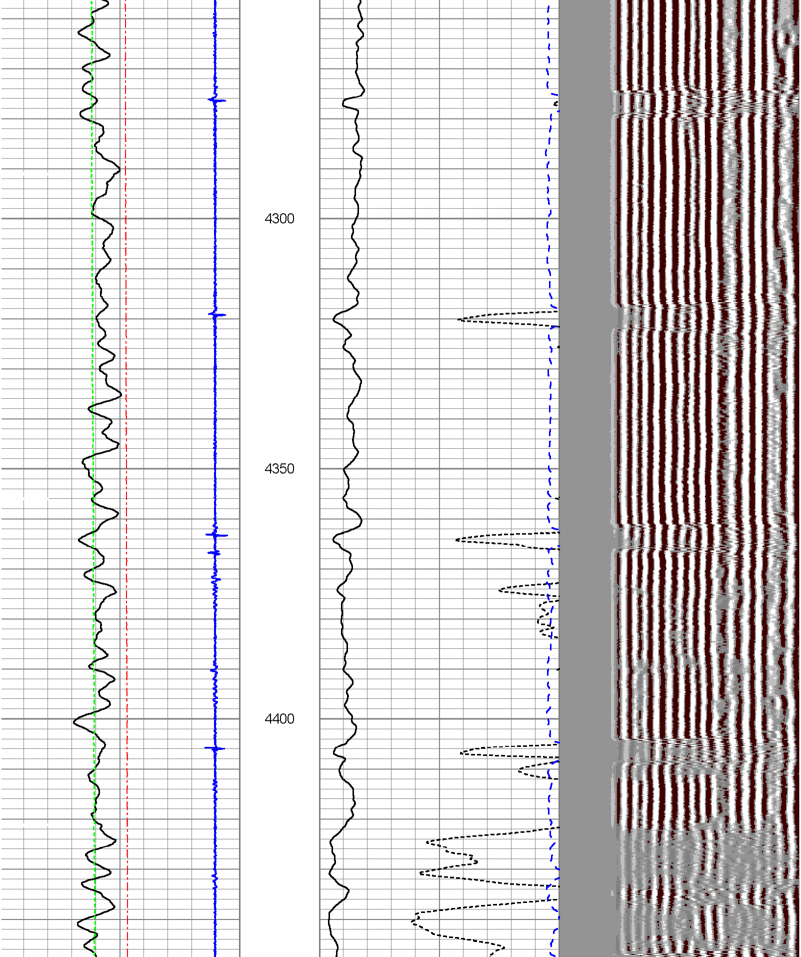


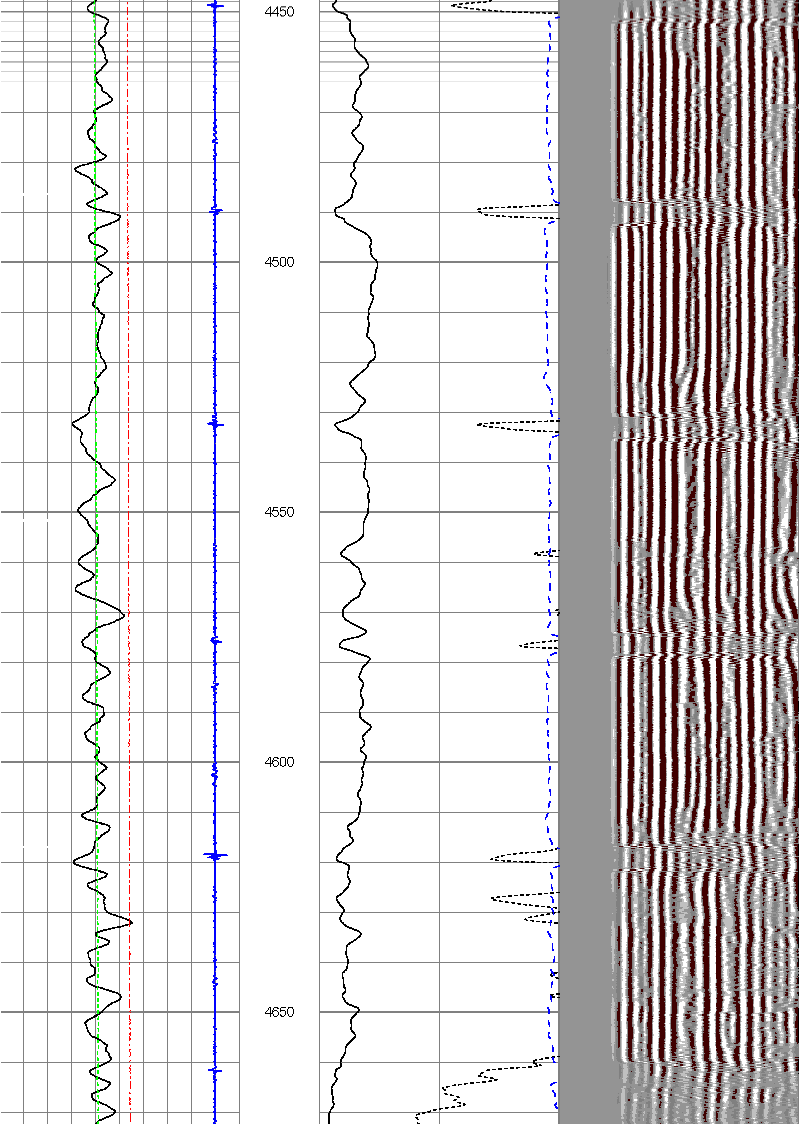


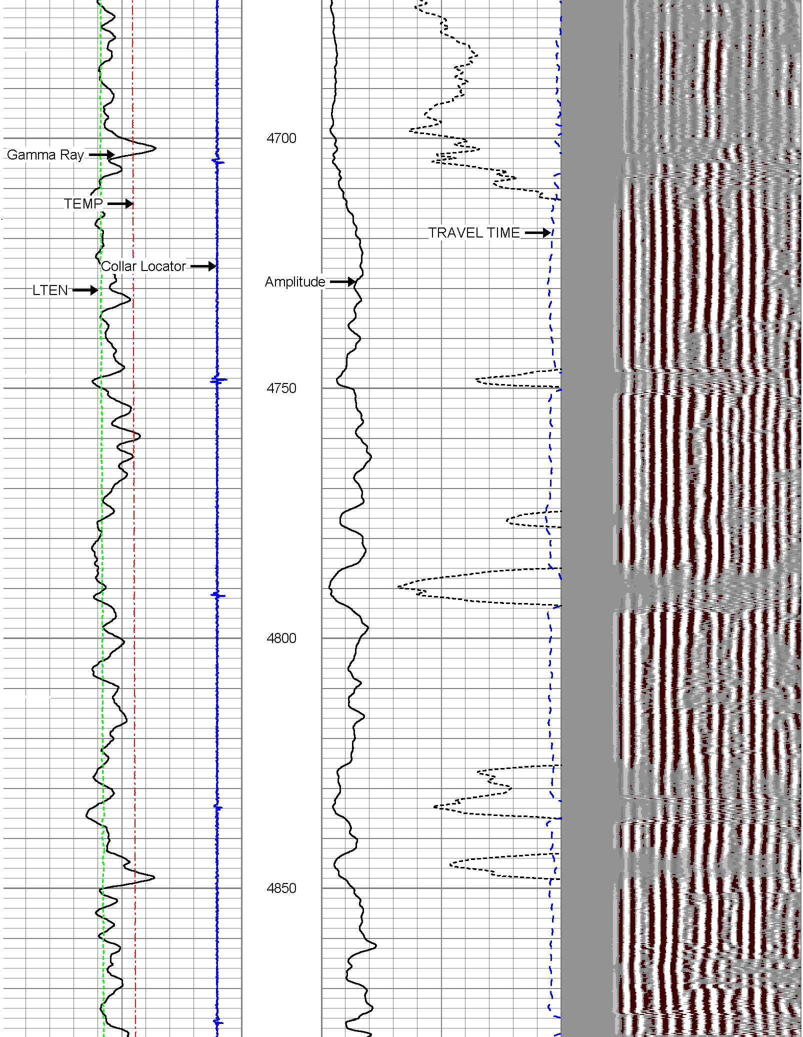


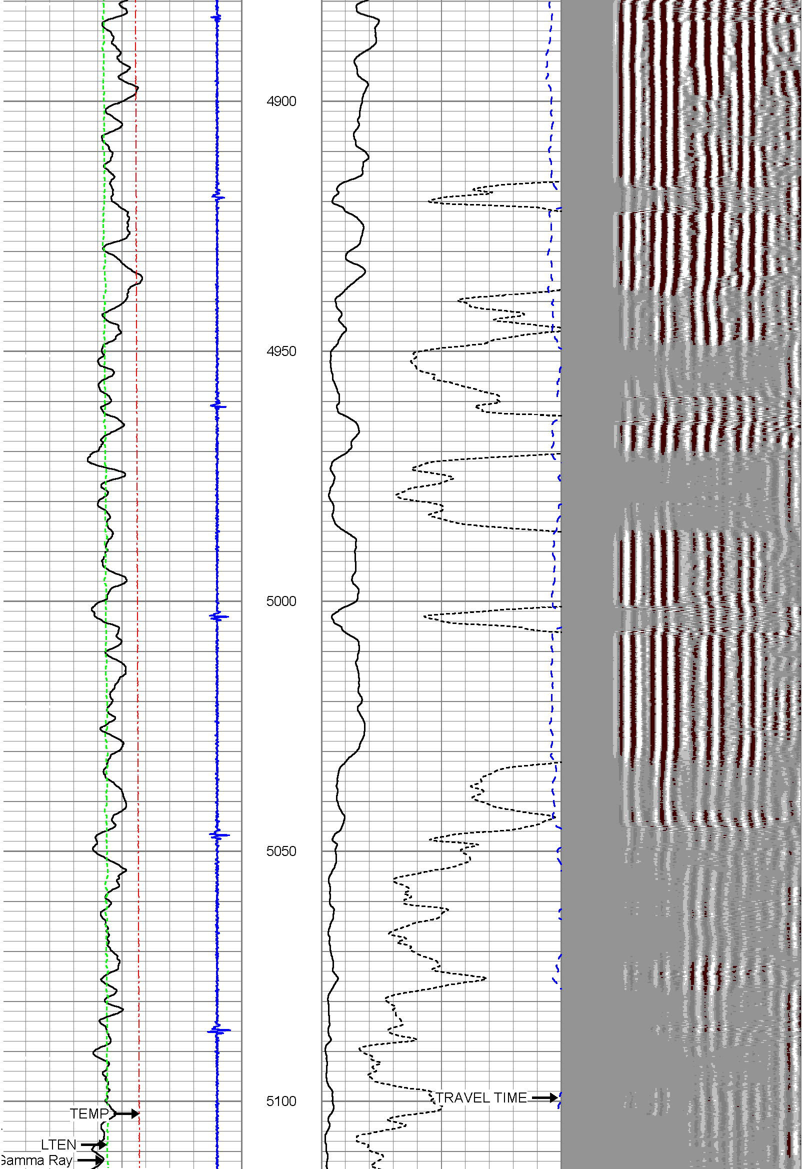


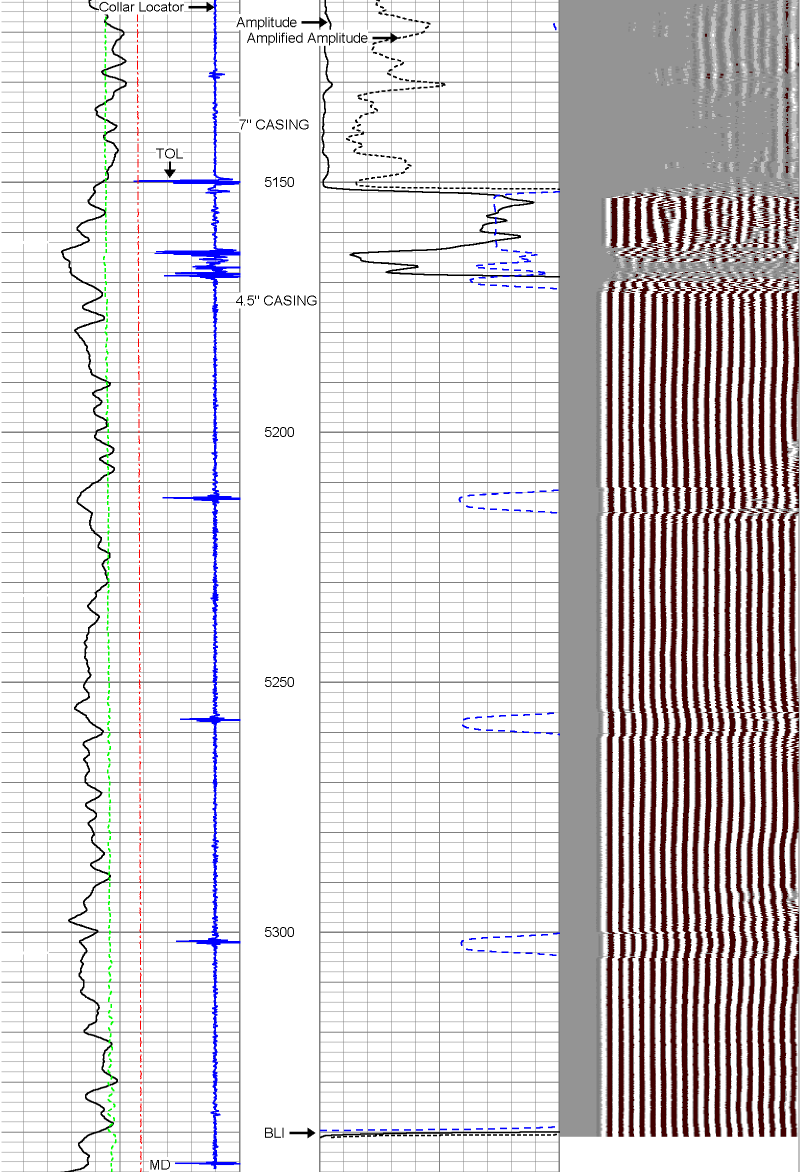


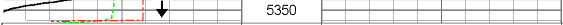












9	Collar Locator	-1
0	Gamma Ray (GAPI)	150
0	LTEN (lb)	2500
0	TEMP (degF)	200

0	Amplified Amplitude (mV)	10
0	Amplitude (mV)	100
180	TRAVEL TIME (usec)	280

200	MSG	1200

HALLIBURTON

MAIN PASS 1000 PSI

SCALE: 5"=100'

HALLIBURTON

CORRELATION PASS

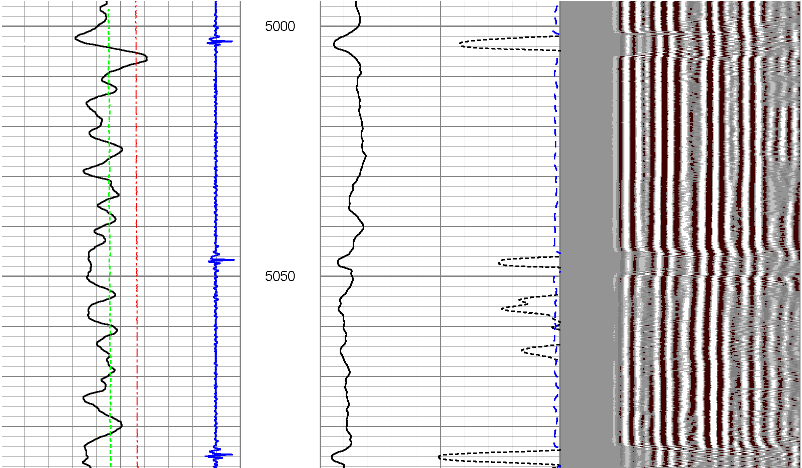
SCALE 5"=100'

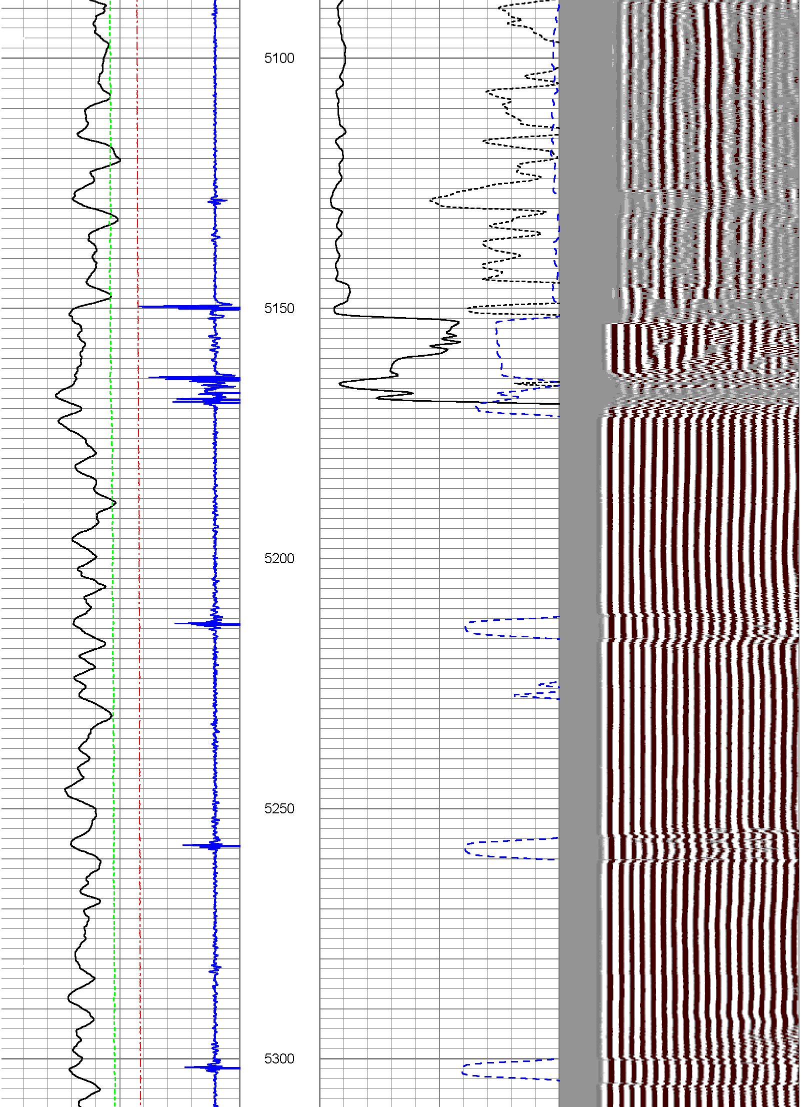
Database File:	bringelson.db
Dataset Pathname:	pass7
Presentation Format:	1cbl
Dataset Creation:	Wed Jun 05 09:16:19 2013 by Log Halliburton Casedho
Charted by:	Depth in Feet scaled 1:240

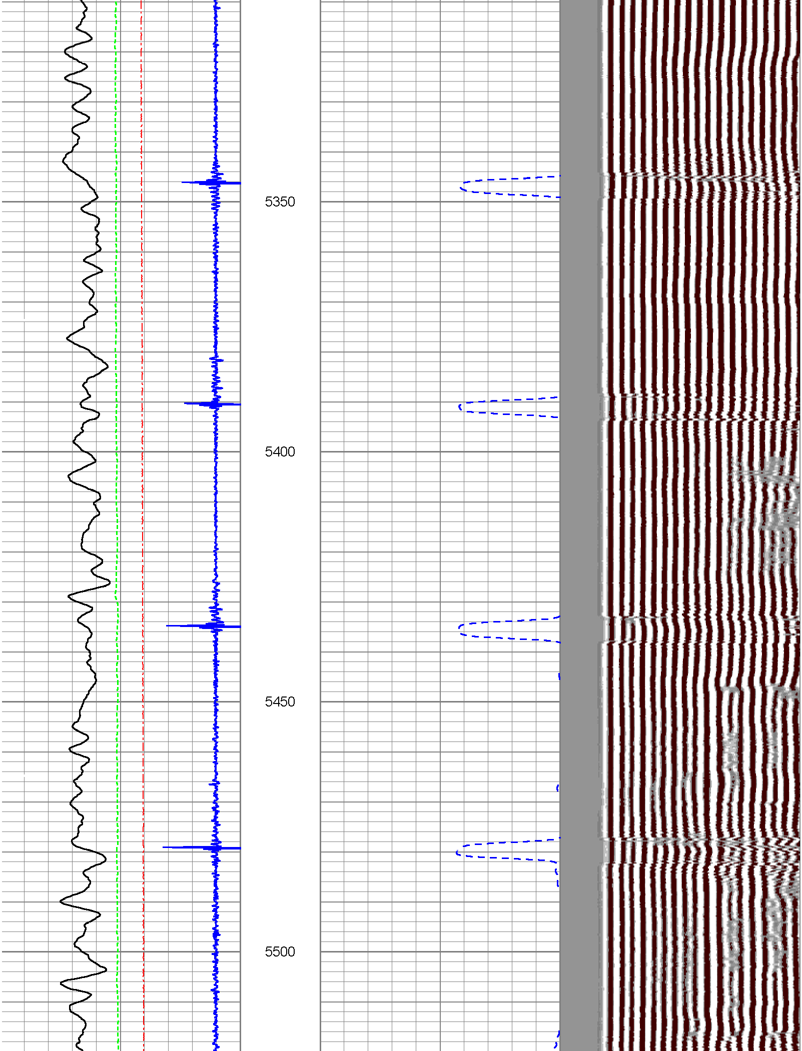
9	Collar Locator	-1
0	Gamma Ray (GAPI)	150
0	LTEN (lb)	2500
0	TEMP (degF)	200

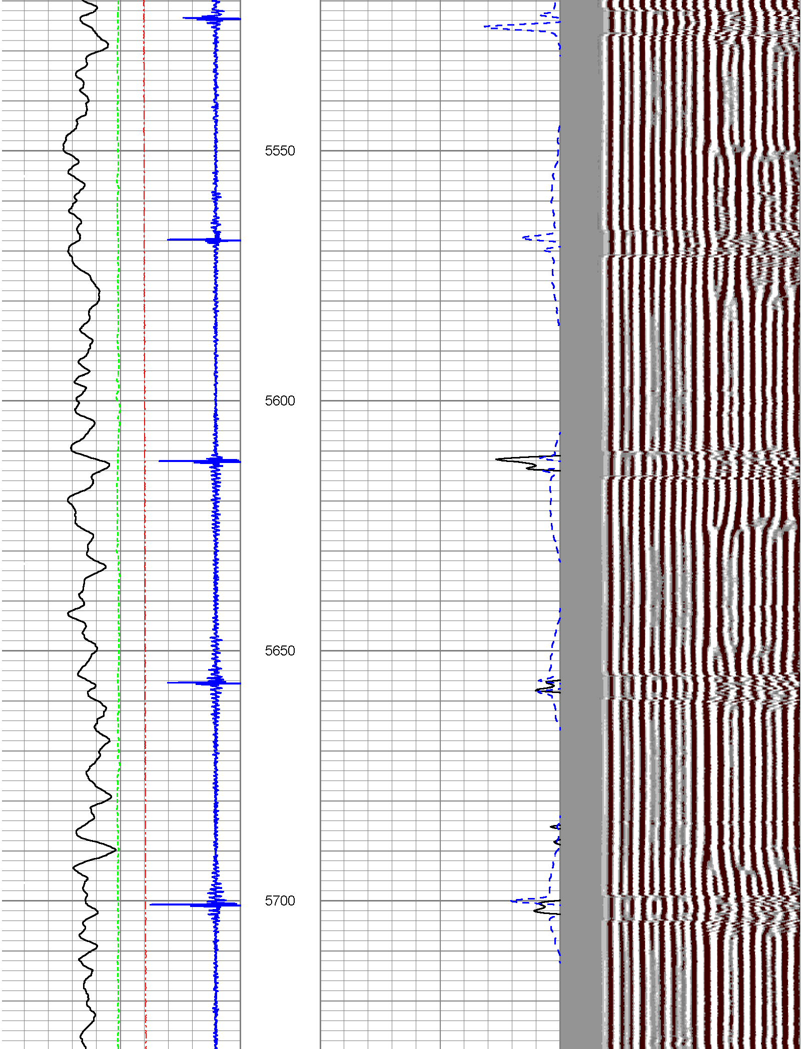
0	Amplified Amplitude (mV)	10
0	Amplitude (mV)	100
180	TRAVEL TIME (usec)	280

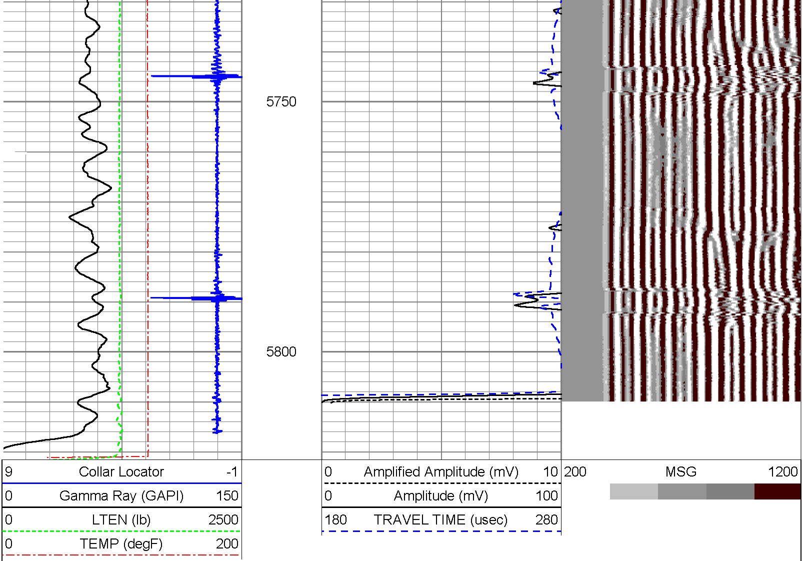
200	MSG	1200











HALLIBURTON

CORRELATION PASS

SCALE 5"=100'

Log Variables

Database:D:\Warrior_data\bringelson.db
Dataset: field/well/run1/pass9

Top - Bottom

PPT usec	MAXAMPL mV	MINAMPL mV	MINATTN db/ft	CASEOD in	PERFS	TDEPTH ft	BOTTEMP degF
287	62	0	0.8	7	0	10265	120

BITSIZE in
7.875

Calibration Report

Database File: bringelson.db
Dataset Pathname: pass9
Dataset Creation: Wed Jun 05 09:31:42 2013 by Log Halliburton Casedho

Temperature Calibration Report

Serial Number: Tit1.3_02
Tool Model: Titan
Performed: Sun Jan 20 14:20:13 2013

	Reference	Reading
Low Reference:	61.00 degF	558.10 cps
High Reference:	120.00 degF	1975.90cps

Gain: 0.04
Offset: 37.78
Delta Spacing 2

Gamma Ray Calibration Report

Type / Serial: Probe / 275

SHOP CALIBRATION Tue Jun 04 12:06:06 2013

	Counts/Sec.	Gain	Offset	Jig	Units
Background	59.3				cps
Calibrator	258.4				cps
		1.2102			GAPI/cps

PRIMARY VERIFICATION Tue Jun 04 12:10:00 2013

	Counts/Sec.	Gain	Offset	Jig	Units
Background	72.0				cps
Calibrator	311.9				cps
Difference				239.8	GAPI

BEFORE SURVEY VERIFICATION Wed Jun 05 08:33:19 2013

	Counts/Sec.	Gain	Offset	Jig	Units
Background	59.9				cps
Calibrator	295.0				cps
Difference				235.1	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: 275
Tool Model: Probe
Performed: Wed Jun 05 08:52:10 2013

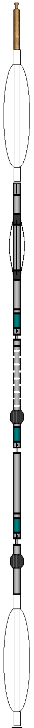
Depth: 191.922 ft
Casing Diameter: 7 in

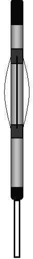
	3' Spacing	5' Spacing	
Signal Zero:	0.15	0.15	mV
Calibrated Amplitude:	62.1651	62.1651	mV
Reading at Signal Zero:	-0.00129395	-0.00231934	V
Reading in Free Pipe:	0.371021	0.358789	V
Gain:	166.566	171.735	
Offset:	0.365528	0.548312	

Sensor Report

Database File: bringelson.db
Dataset Pathname: pass9
Dataset Creation: Wed Jun 05 09:31:42 2013 by Log Halliburton Casedho

Sensor Name	Offset (ft)
WVF3	12.72
WVF5	11.72
CCL	5.08
GR	3.79
TEMP	0.17
Ex1	0
FrameCnt	0
ErrCnt	0
LLMTEN	0
Telemetry	0

Sensor	Offset (ft)	Schematic	Description	Len (ft)	OD (in)	Wt (lb)
			1_CABLEHEAD 1"OD CABLE HEAD	1.02	1.44	3.00
			CENT-Probe (PT_MONO2) Probe 2 3/4 Centralizer	2.88	2.75	35.00
WVF3 WVF5	12.72 11.72		CBL-Probe (275) Probe 2.75" Dual Receiver Bond	8.92	2.75	60.00
			CENT-Probe (PT_MONO2) Probe 2 3/4 Centralizer	2.88	2.75	35.00

CCL	5.08					
GR	3.79		GR-Probe (275) Probe 2.75" 4 Channel Pulse	4.33	2.75	30.00
TEMP	0.17		TEMP-Titan (Tit1.3_02) Titan Temp 1.3875	1.25	1.39	10.00
LLMTEN	0.00					

Dataset: bringelson.db: field/well/run1/pass9
Total Length: 21.29 ft
Total Weight: 173.00 lb
O.D. 2.75 in

Company CARRIZO
Well BRINGELSON 2-20-11-9-58
Field WILDCAT
County WELD State CO

HALLIBURTON

CEMENT BOND
LOG