HALLIBURTON

CEMENT BOND LOG

Company	CARRIZO
Well	SPEAKER 2-27-11-8-61
Field	WILDCAT
County	WELD
State	CO

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Well	SPEAKER 2-27-11-8-61
Field	WILDCAT
County	WELD
State	CO

API No.: 05-123-38332 Serv #: 900949844

Location: LAT: 40.63923° LONG: -104.18806°

Sec: 27 Twp: 8N Rge: 61W

Other Services

N/A

Permanent Datum	GL	Elevation 4999'		Elevation
Log Measured From	KB , 12 Ft. above perm. datum		K.B.	5011'
			D.F.	5010'
Drilling Measured From	KB		G.L.	4999'

Date @ Time Logged	5-DEC-2013	Type Fluid in Hole	FRESH WATER
Run No.	ONE	Density of Fluid	8.33
Depth - Driller	10832'	Fluid Level	SURFACE
Depth - Logger	6130'	Cement Top Est. Logged	1460'
Bottom - Logged Interval	6118'	Equipment / Location	11874896 / BRIGHTON
Top - Log Interval	100'	Recorded by	JOSHUA MCDANIEL
Max. Recorded Temp.	218	Witnessed by	BLASE SHABALL

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
				7	23	0	5894'

<<< 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

TOL @ 5894'

ESTIMATED TOP OF CEMENT @ 1460'

MAX TEMP = 218 DEG F FLUID JUST PUMPED TO BOTTOM

THANK YOU FOR CHOOSING HALLIBURTON ENERGY SERVICES!

HALLIBURTON

MAIN PASS

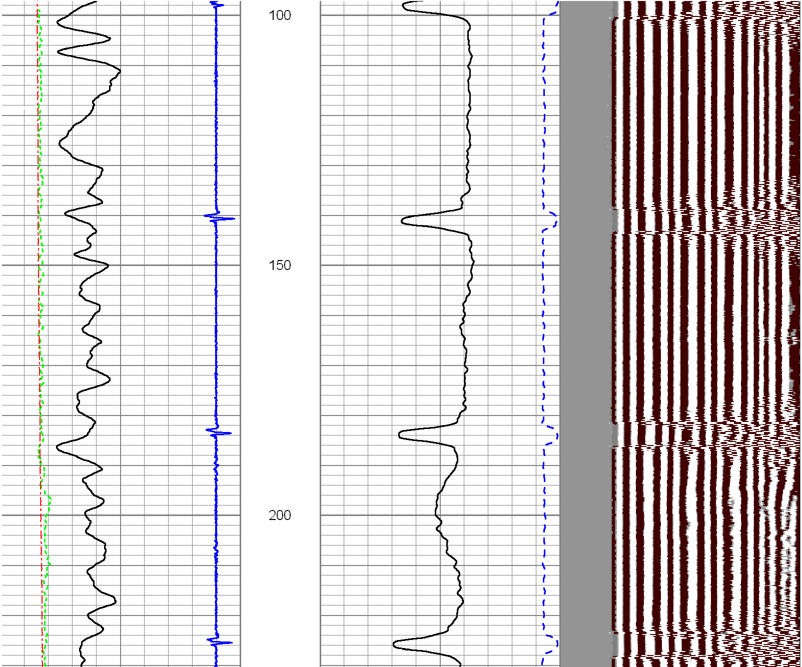
SCALE: 5"=100'

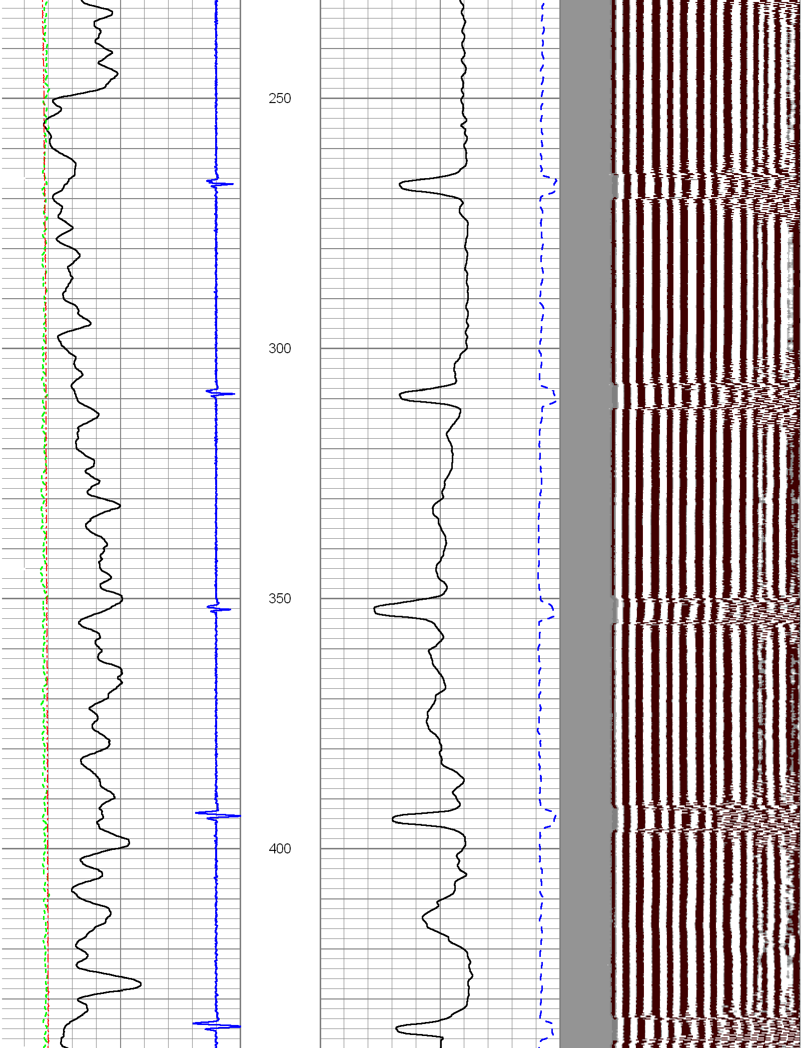
Database File: speaker.db
Dataset Pathname: pass12
Presentation Format: 1cbl
Dataset Creation: Thu Dec 05 11:09:55 2013 by Log Halliburton Casedho
Charted by: Depth in Feet scaled 1:240

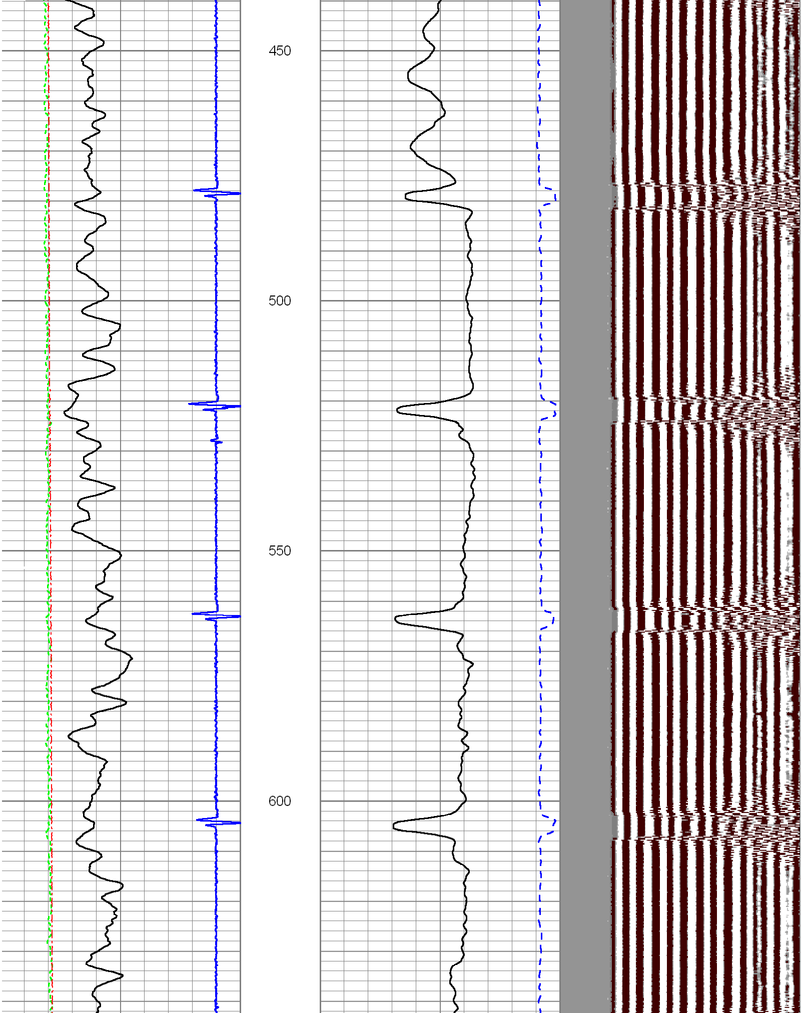
9 Collar Locator -1
0 Gamma Ray (GAPI) 150
0 LTEN (lb) 1500
0 TEMP (degF) 300

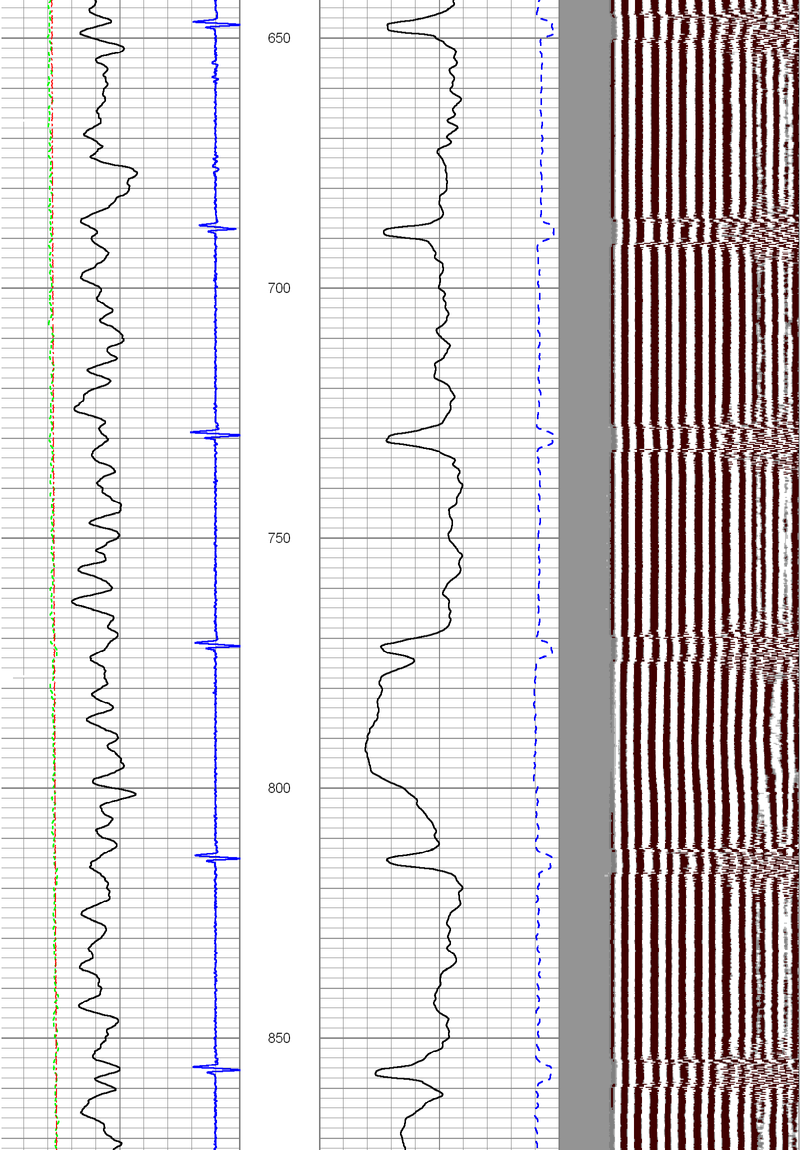
0 Amplified Amplitude (mV) 10
0 Amplitude (mV) 100
200 TRAVEL TIME (usec) 300

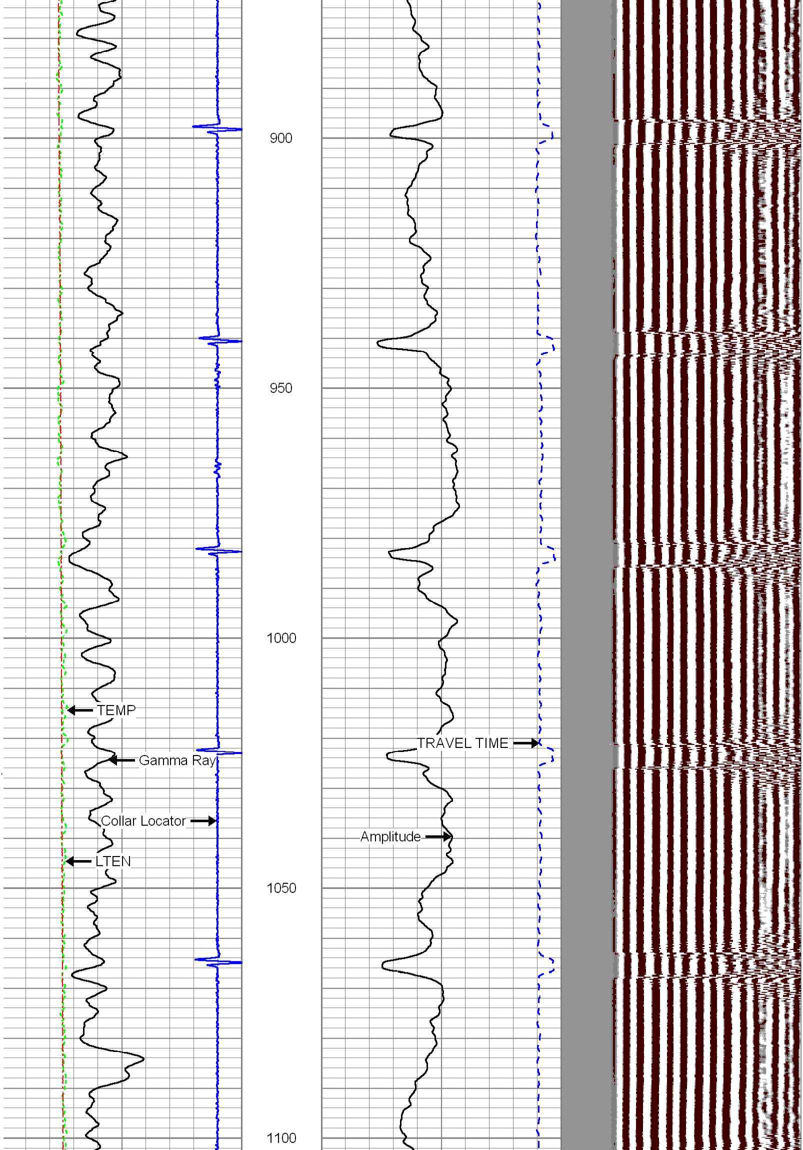
200 MSG 1200

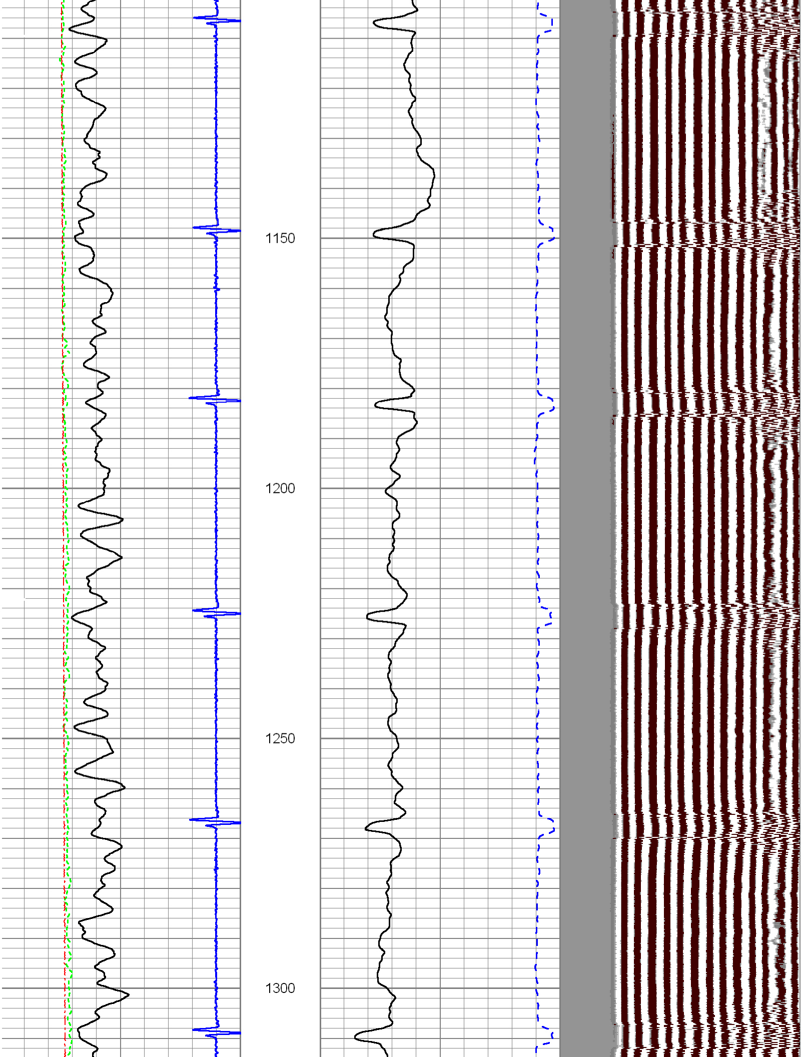


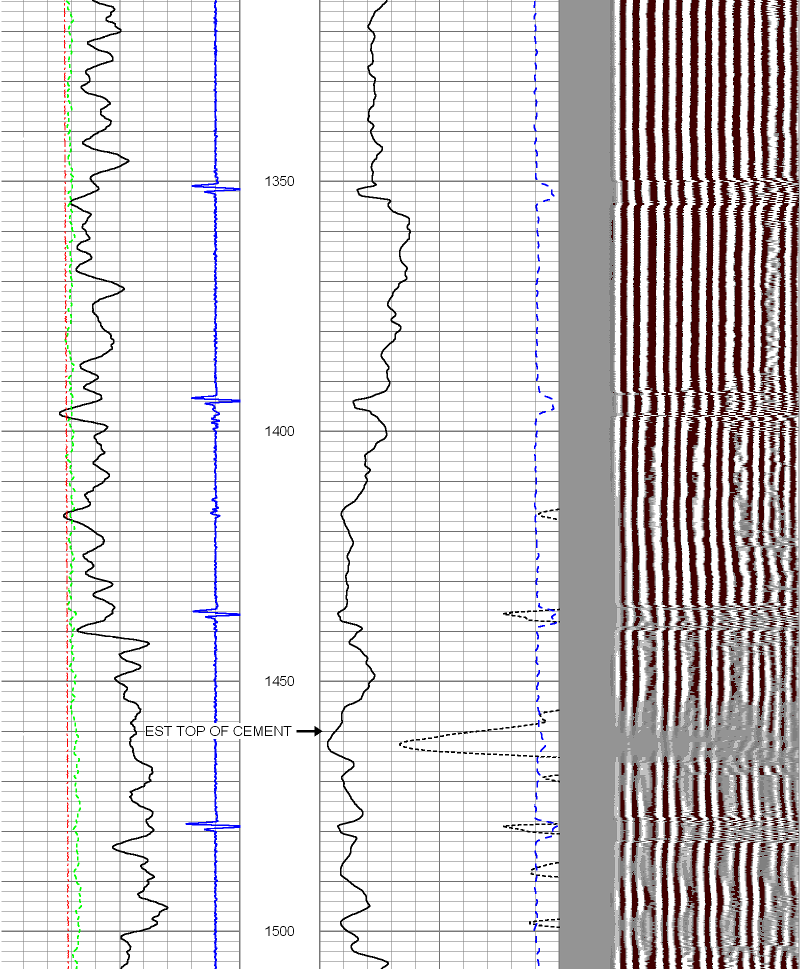


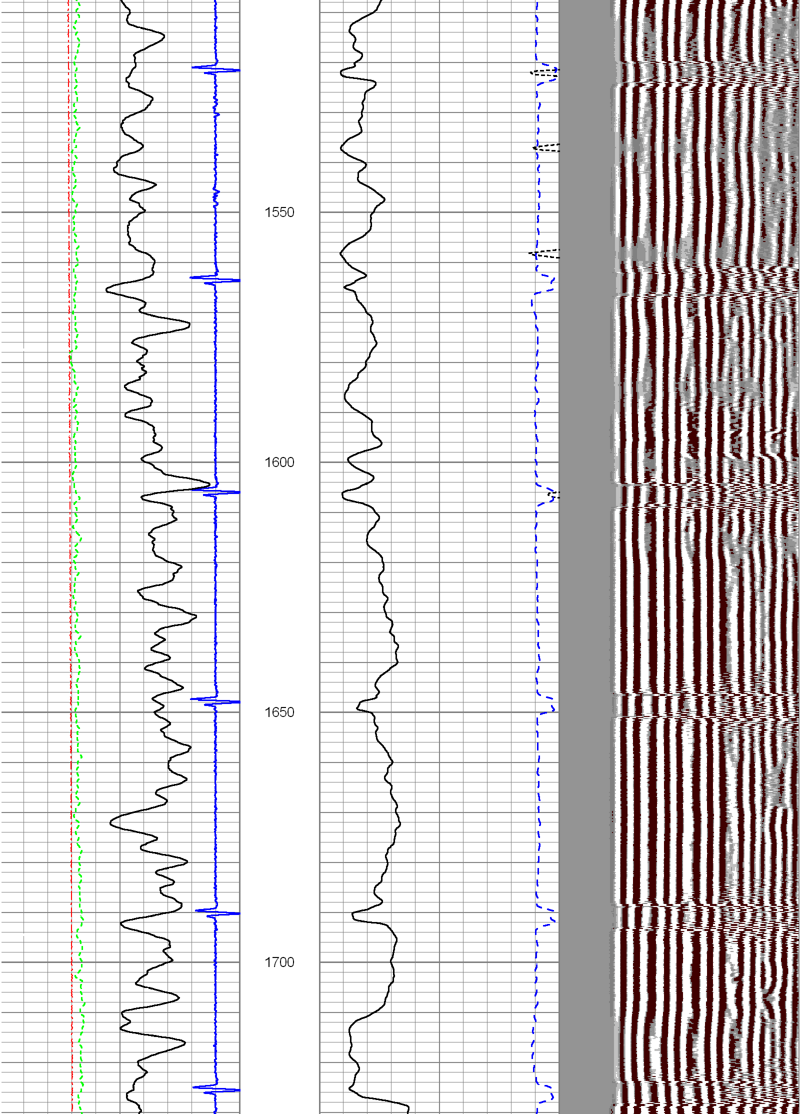


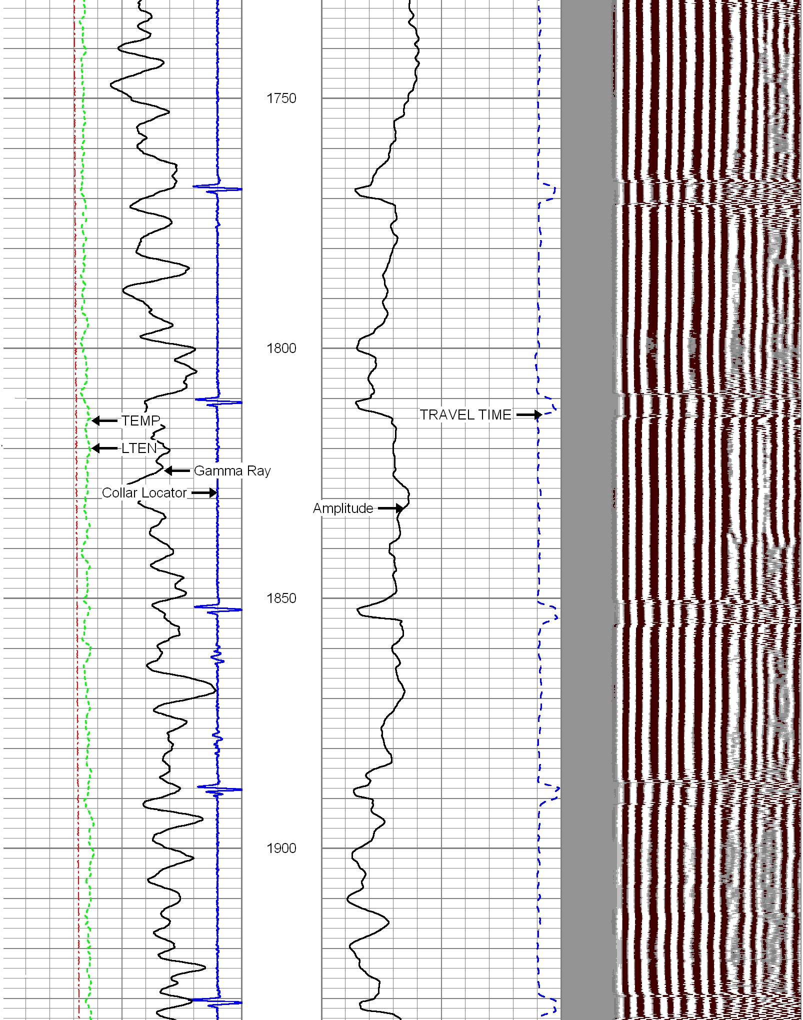


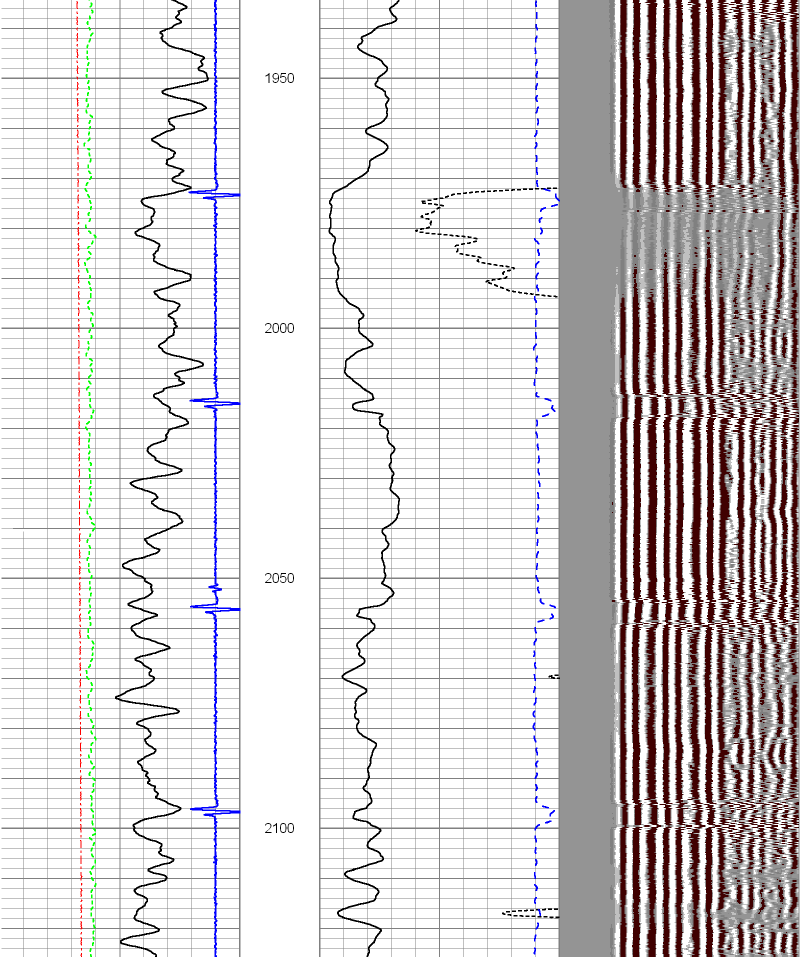


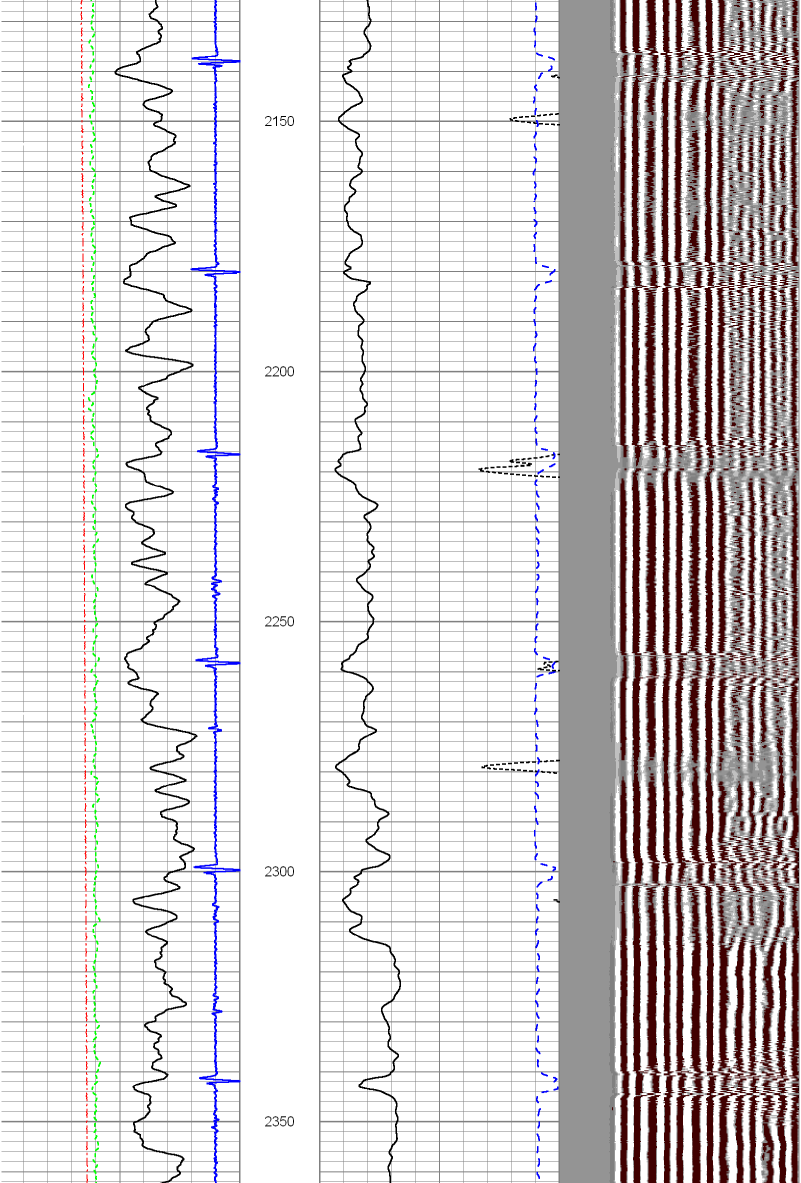


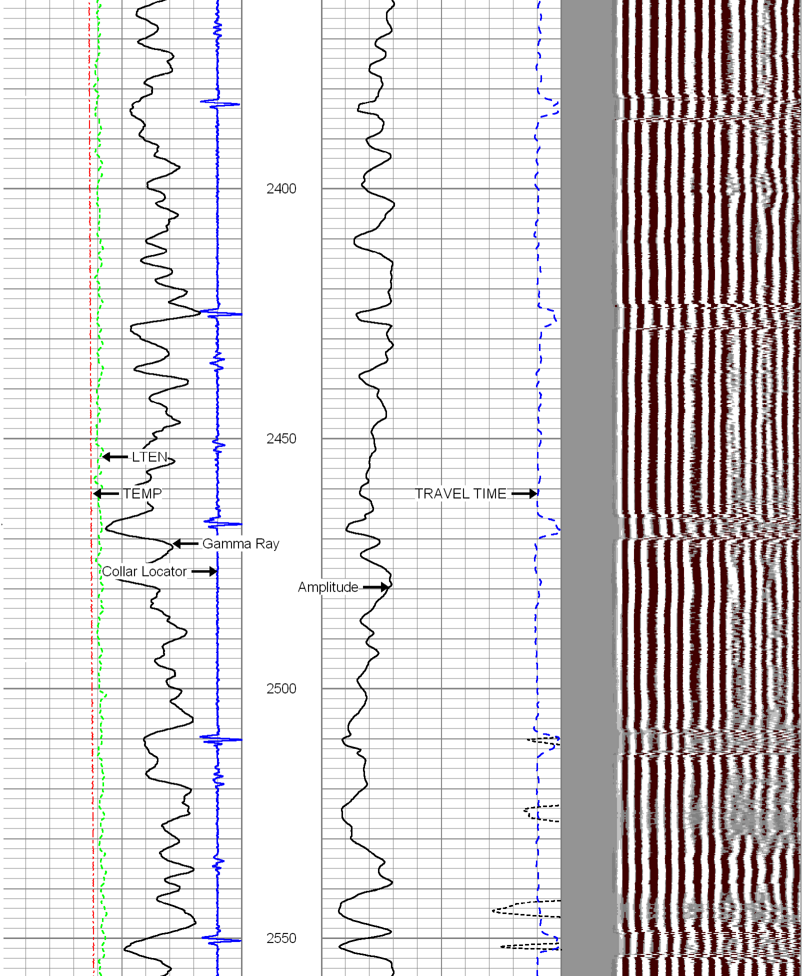


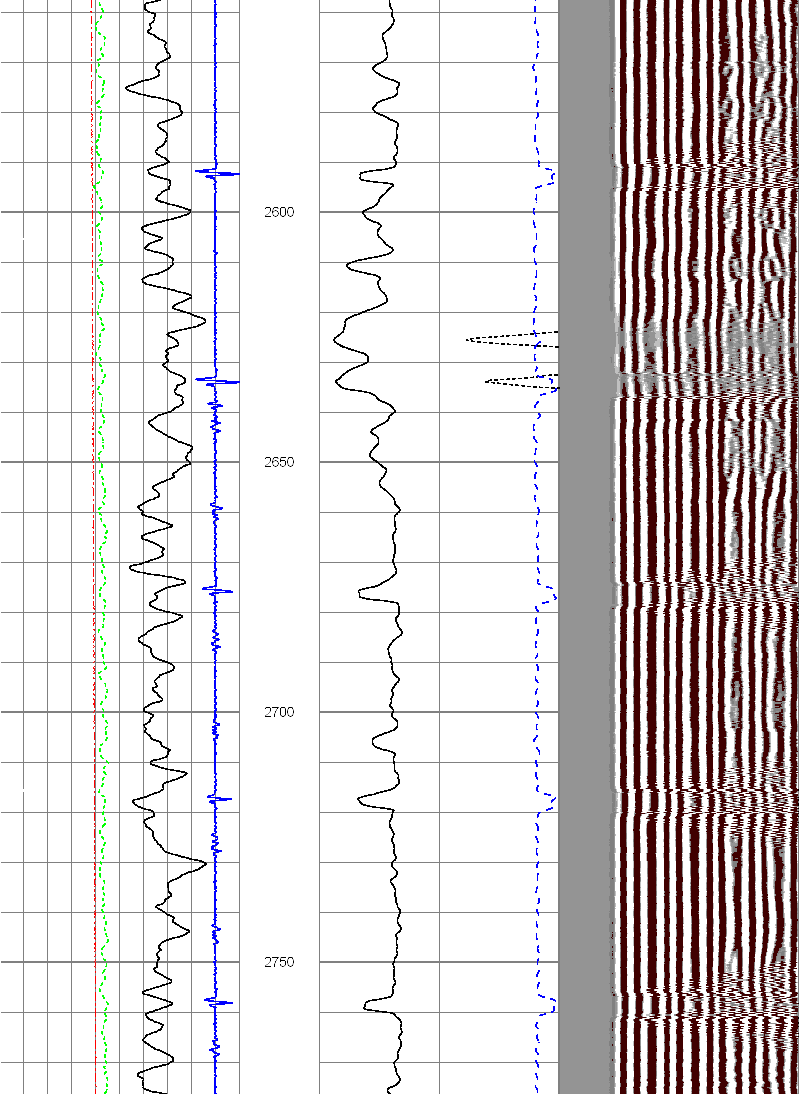


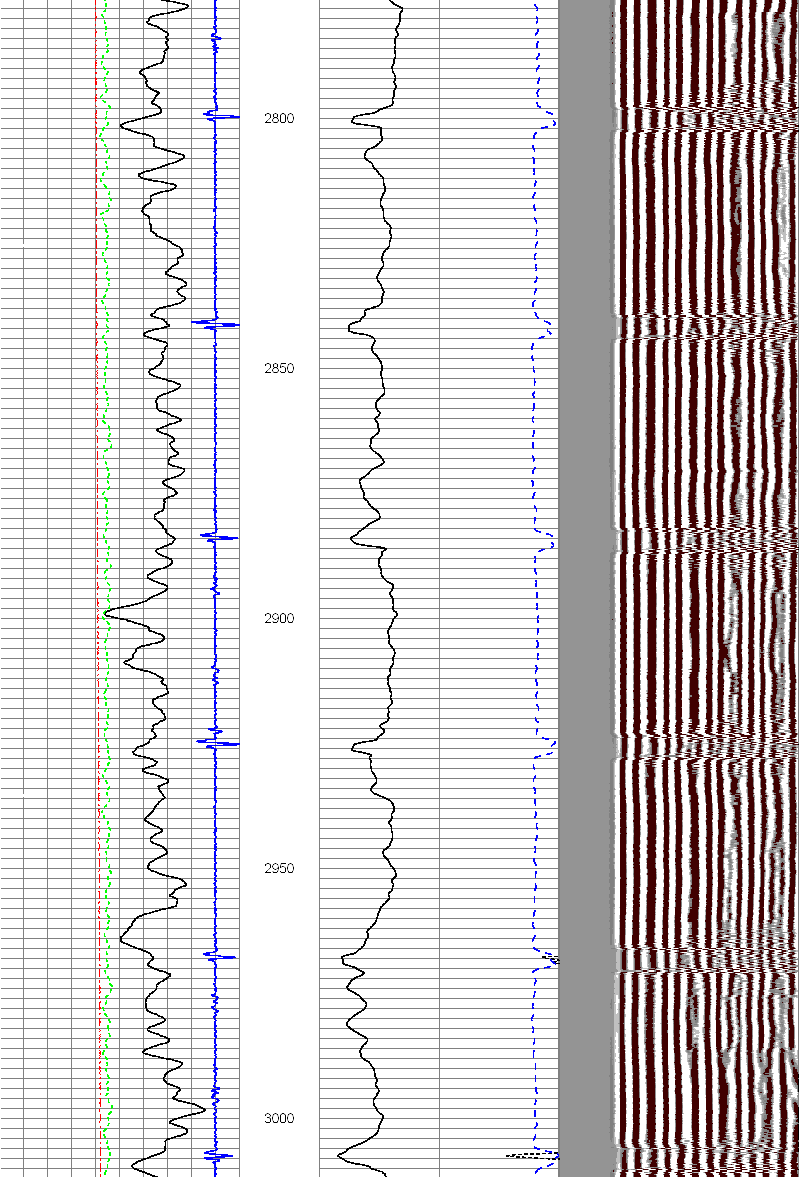


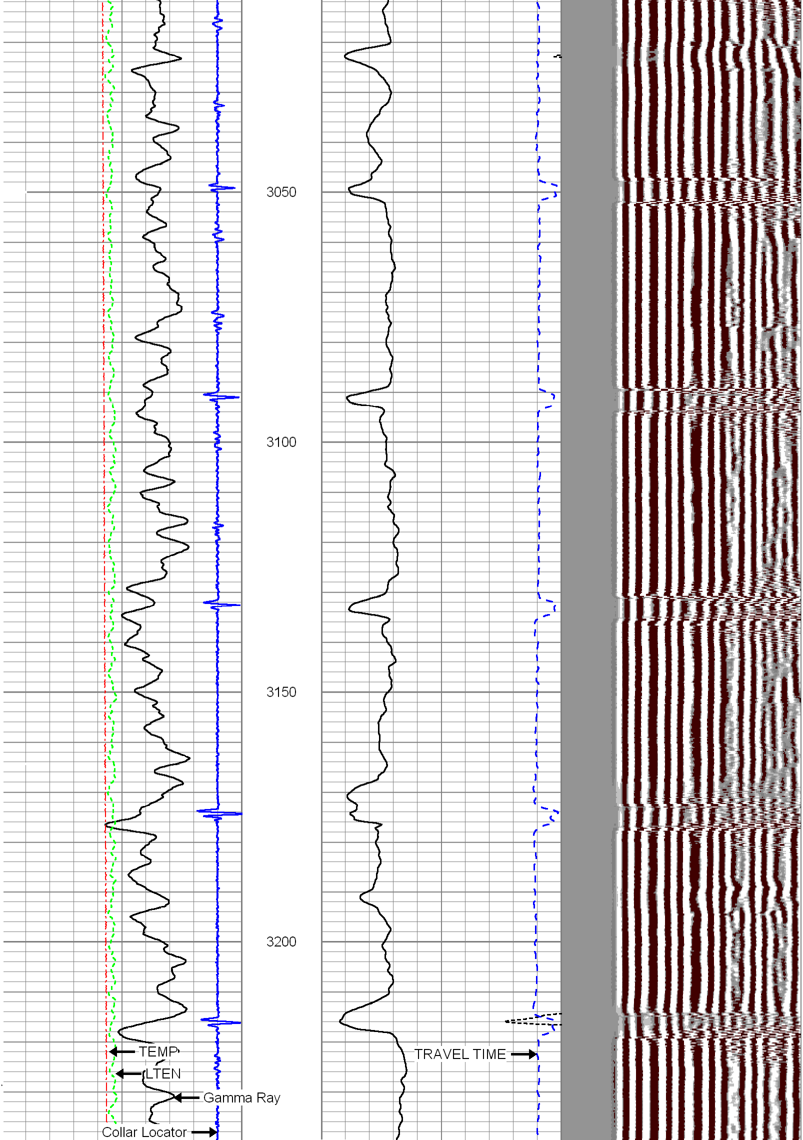


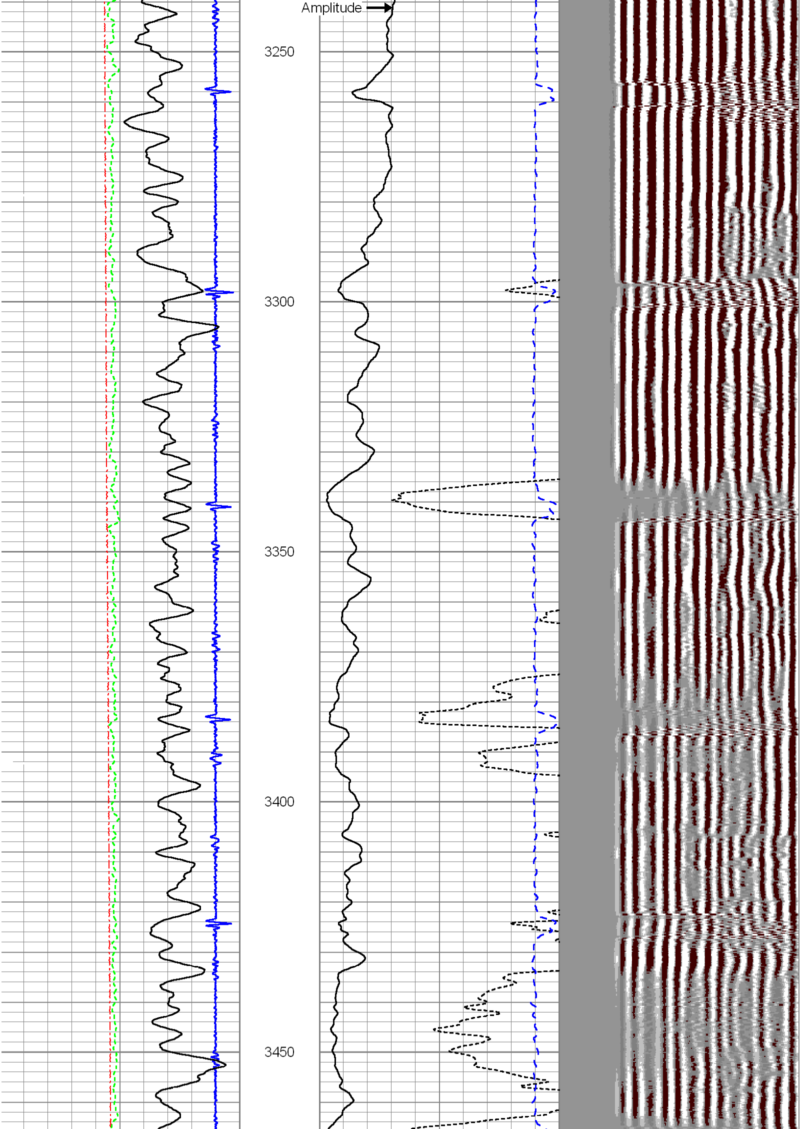


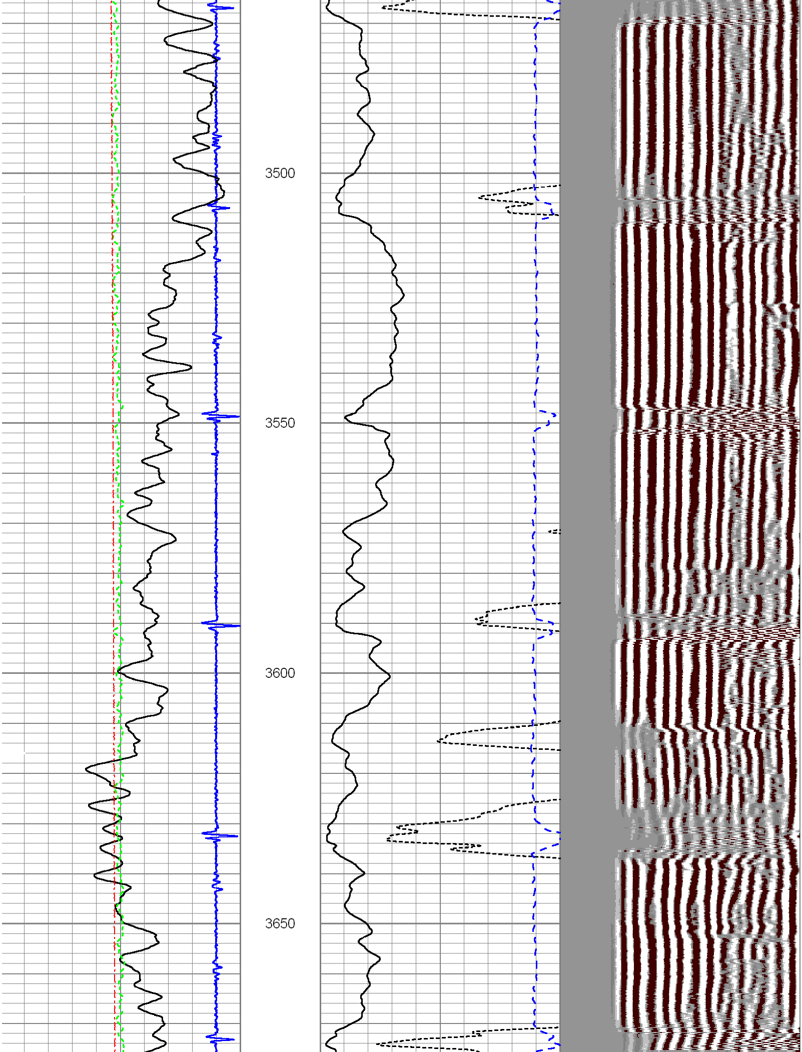


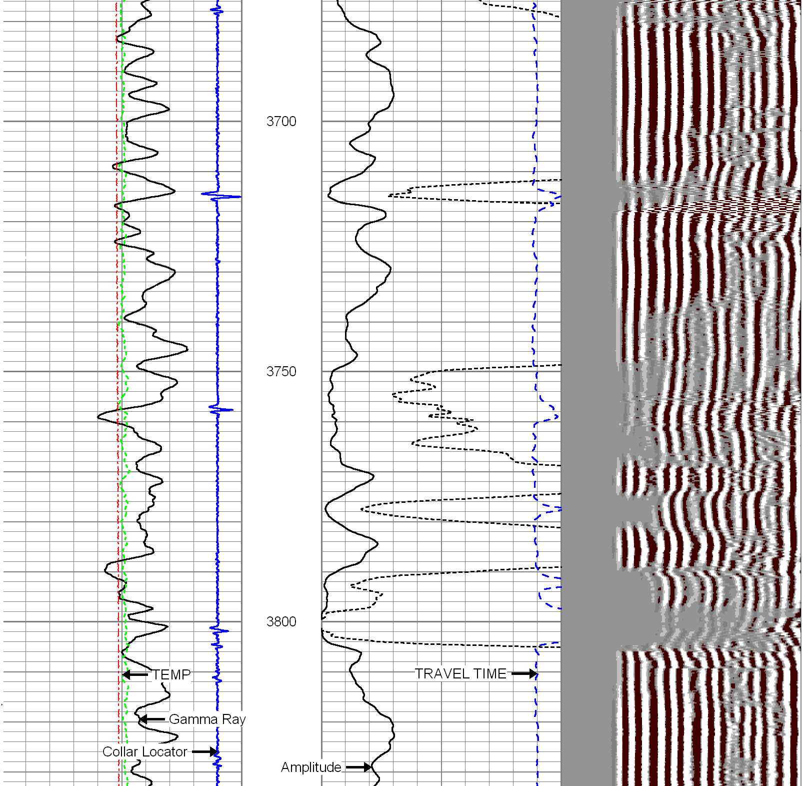


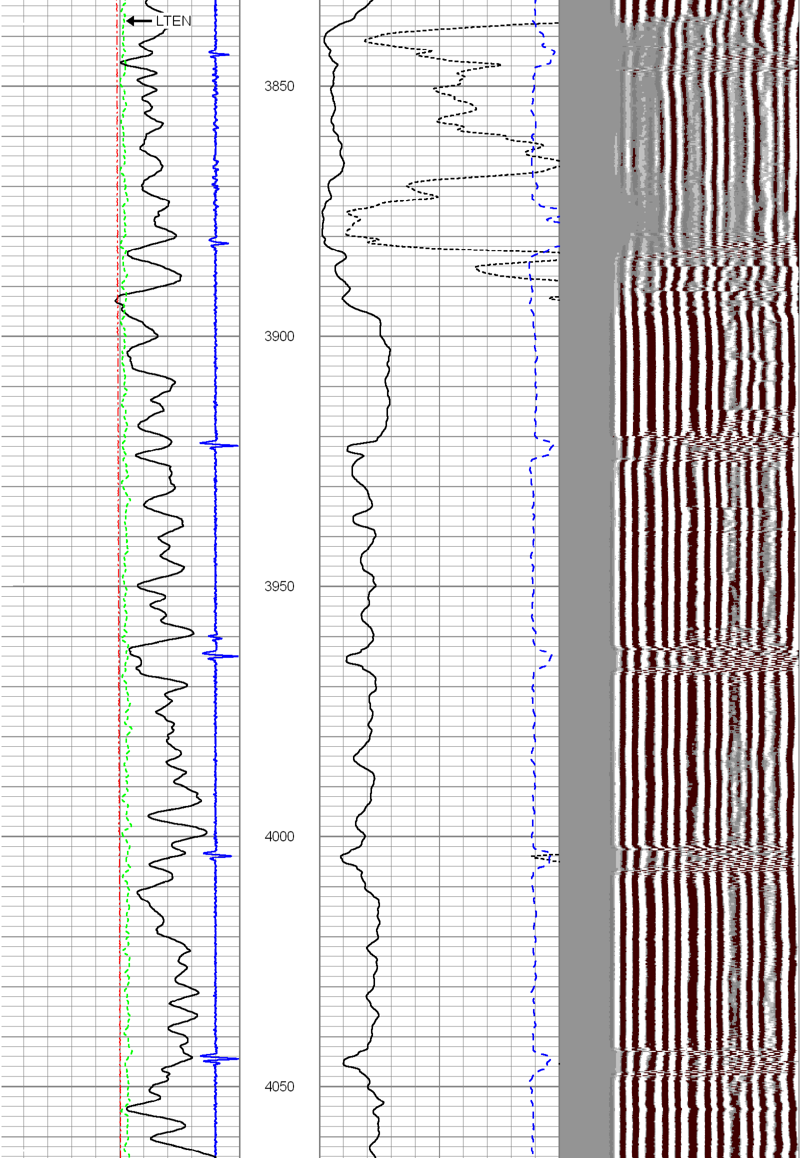


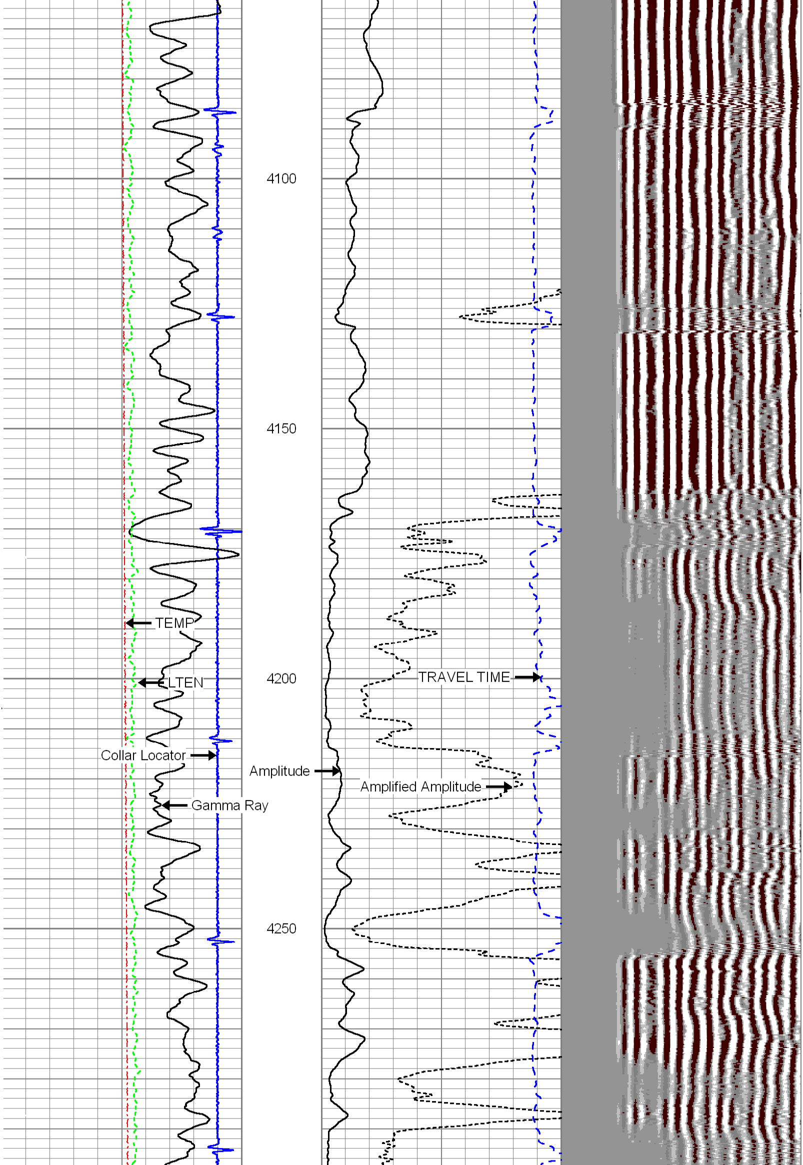


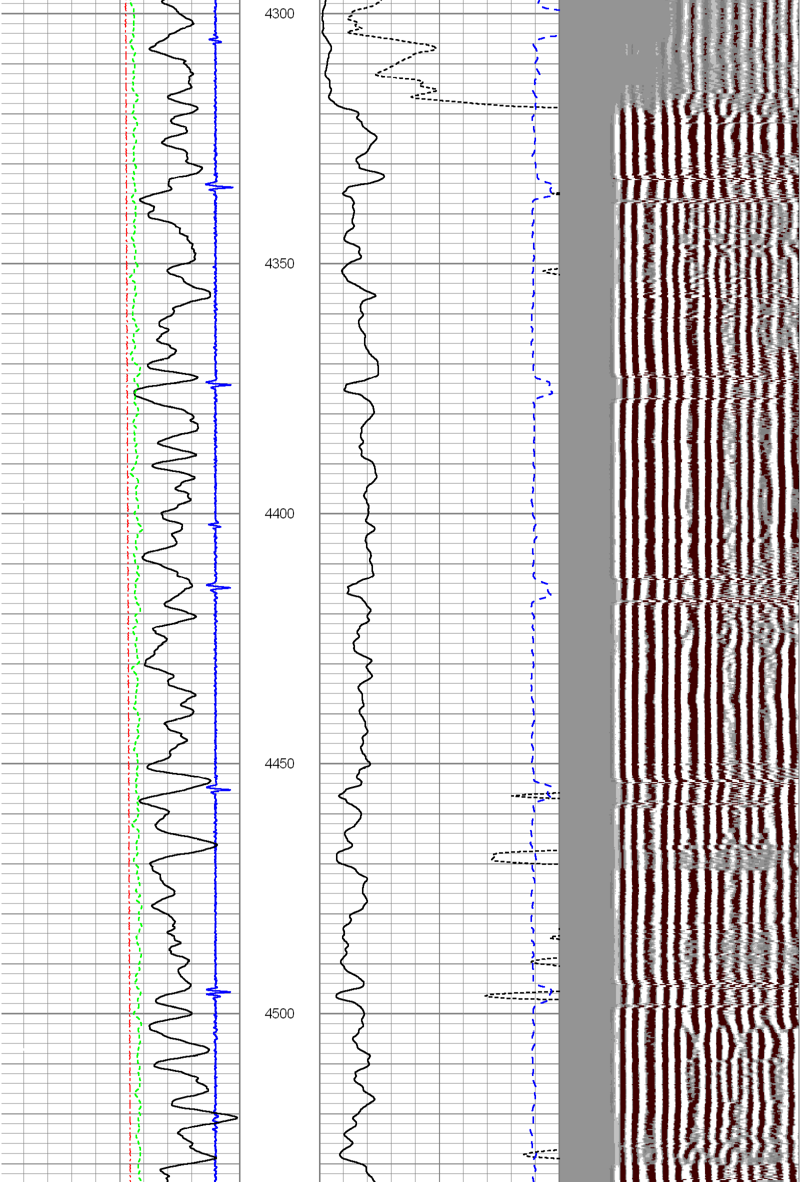


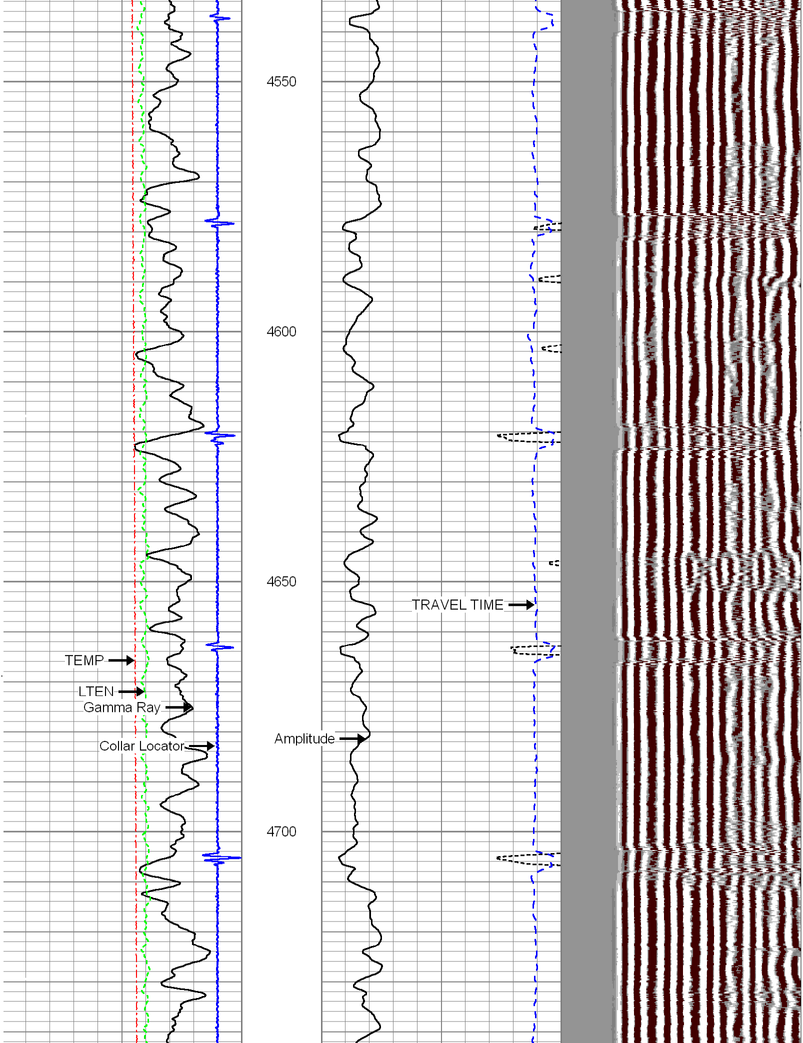


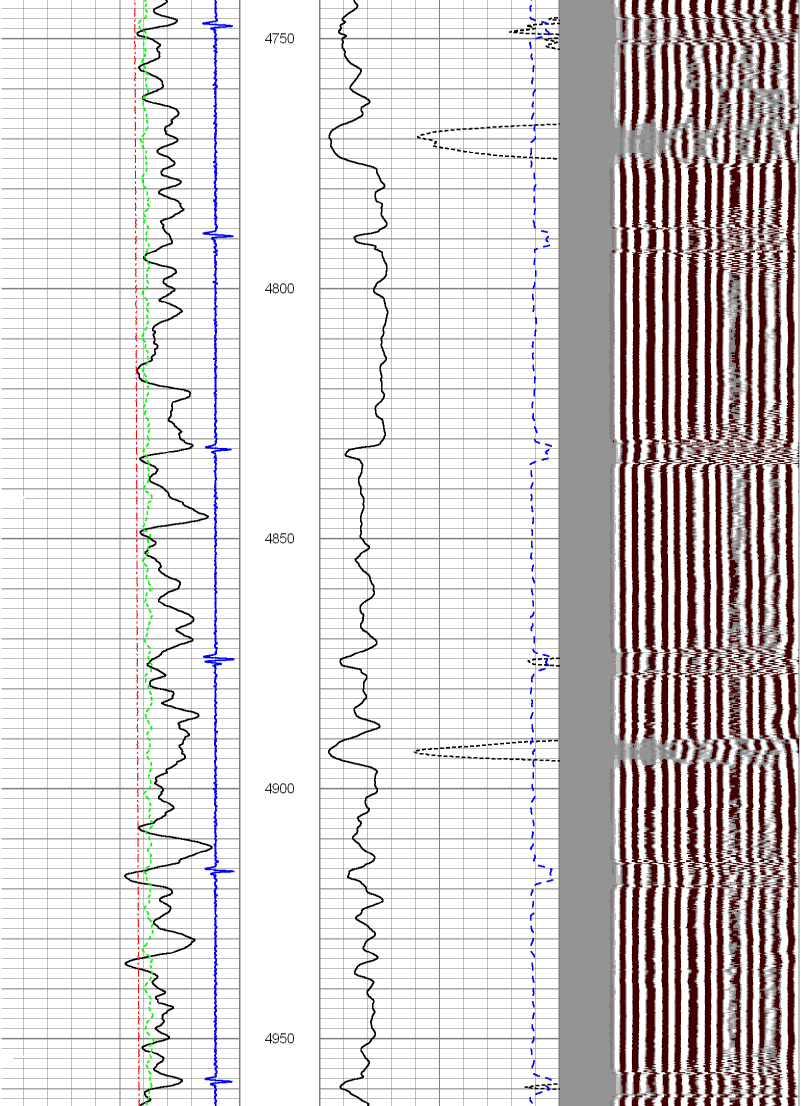


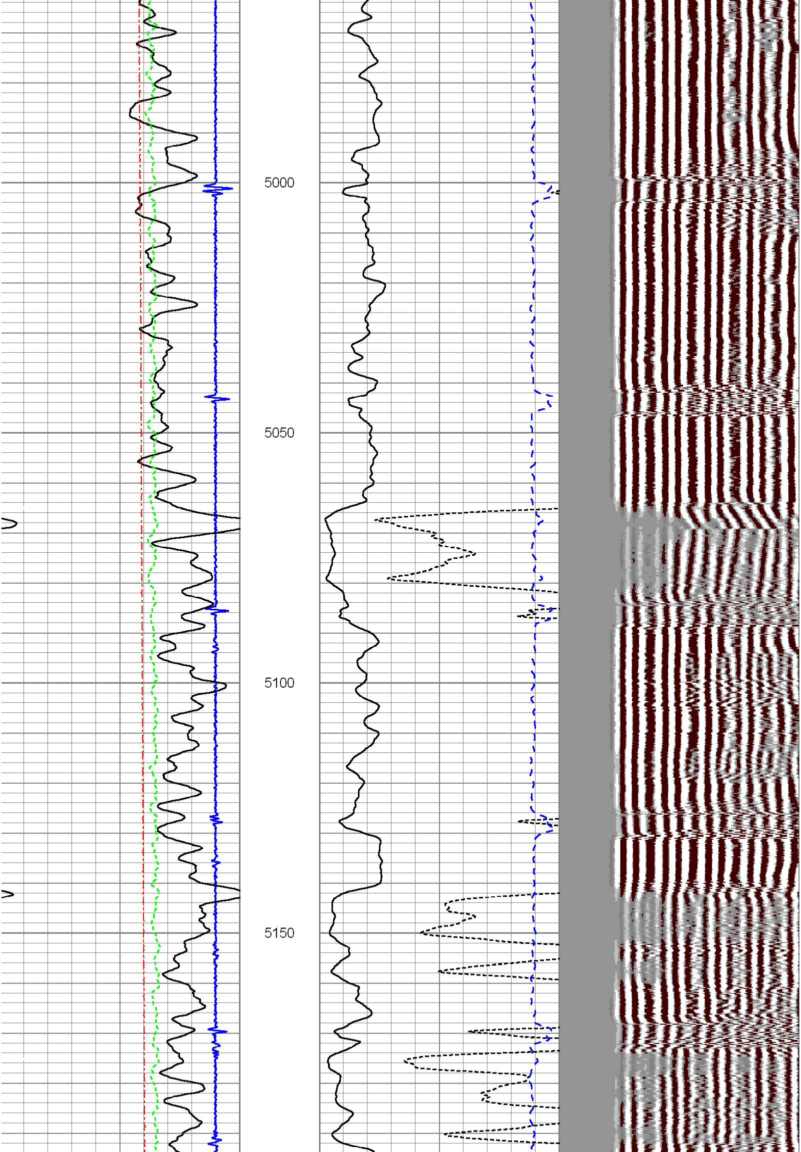


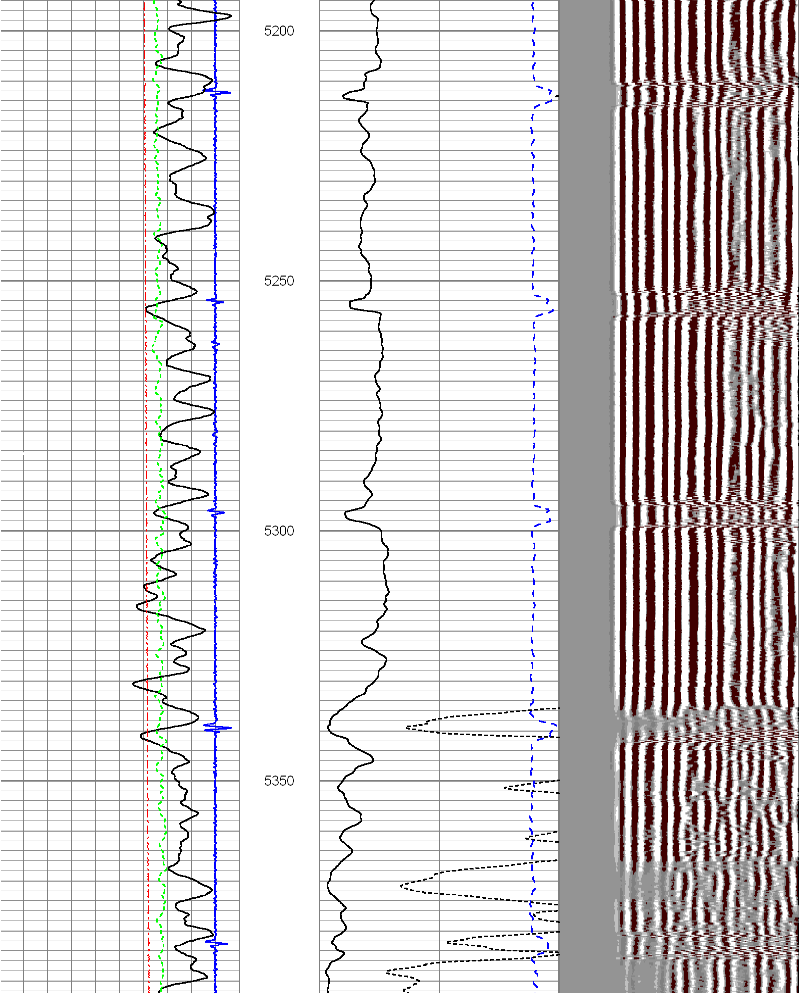


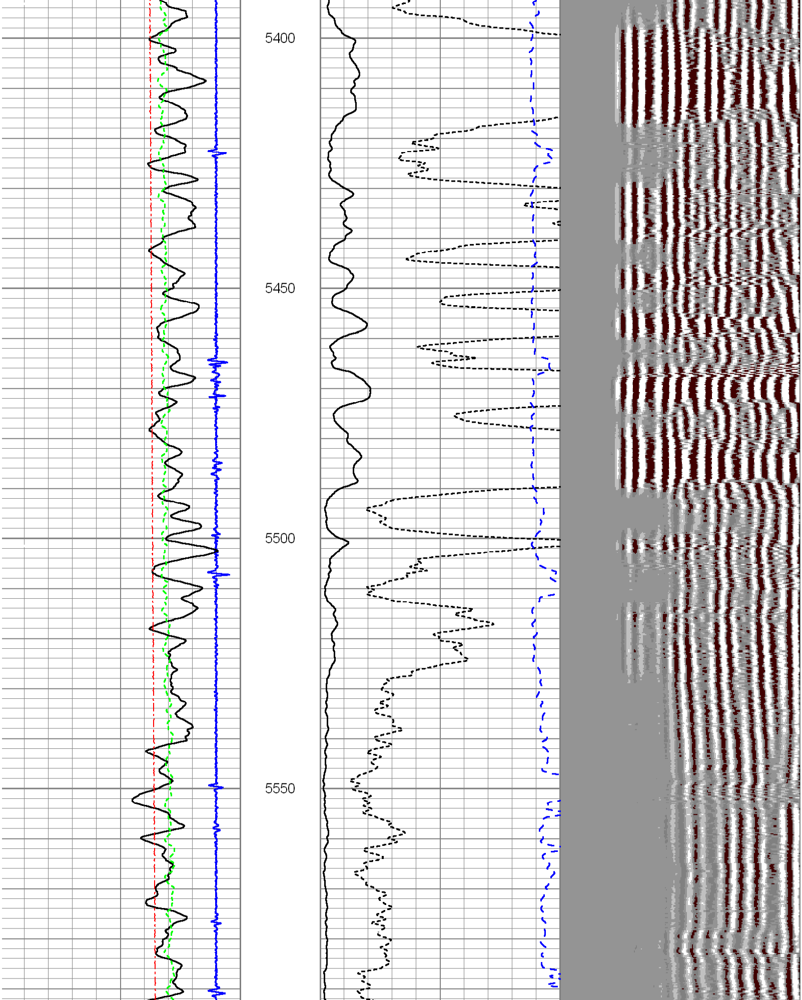


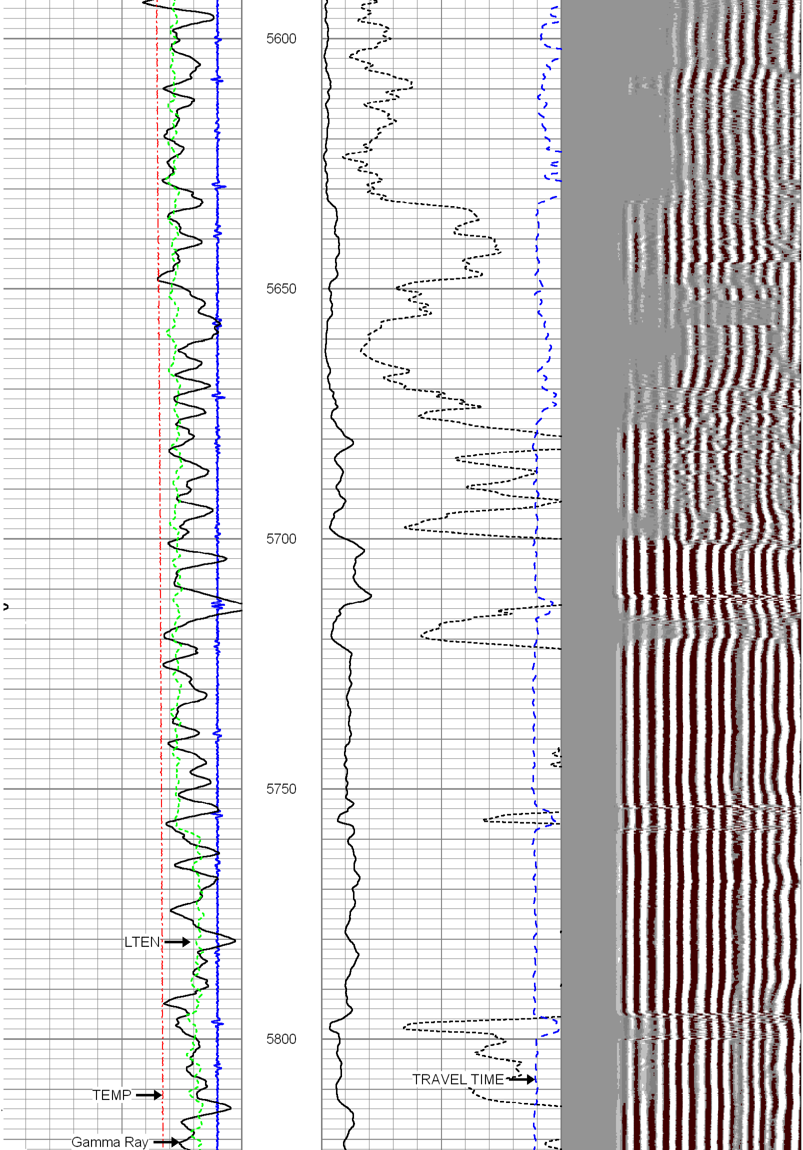


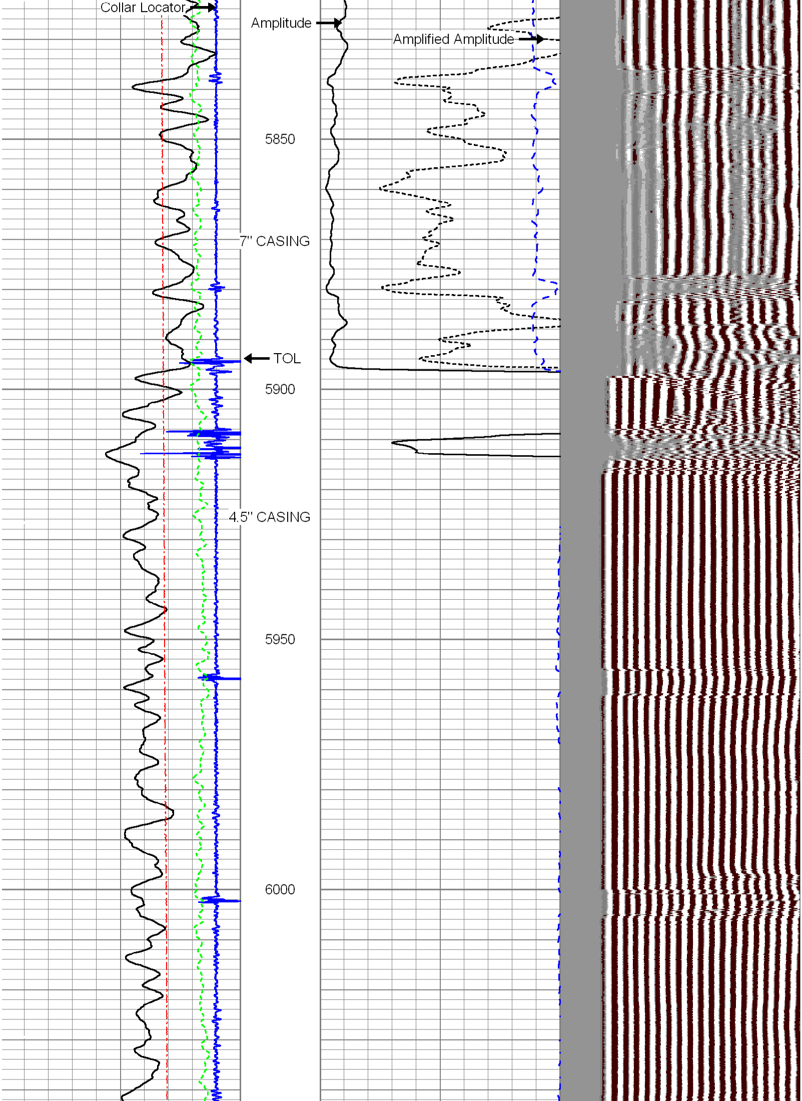


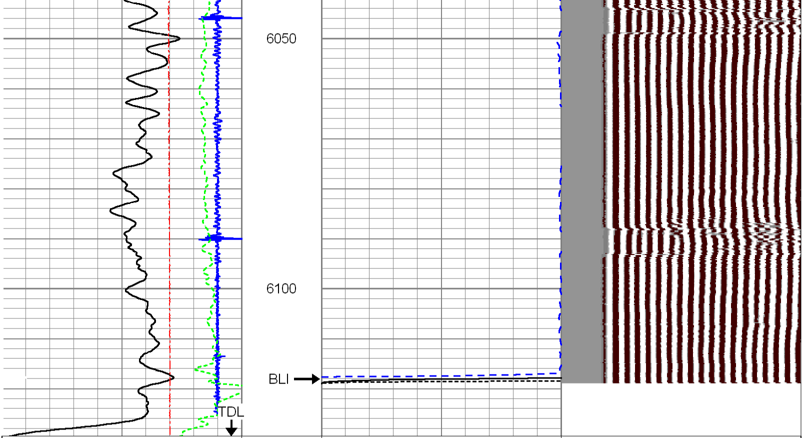












9	Collar Locator	-1
0	Gamma Ray (GAPI)	150
0	LTEN (lb)	1500
0	TEMP (degF)	300

0	Amplified Amplitude (mV)	10
0	Amplitude (mV)	100
200	TRAVEL TIME (usec)	300

200	MSG	1200

HALLIBURTON

MAIN PASS

SCALE: 5"=100'

HALLIBURTON

REPEAT PASS

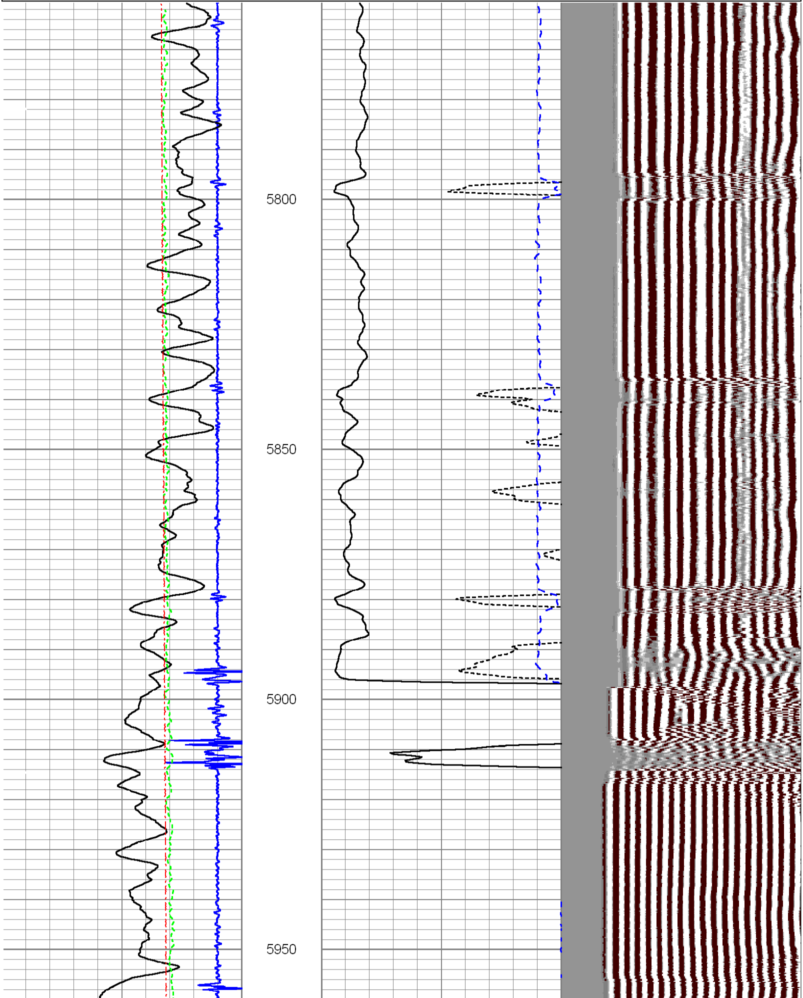
SCALE: 5"=100'

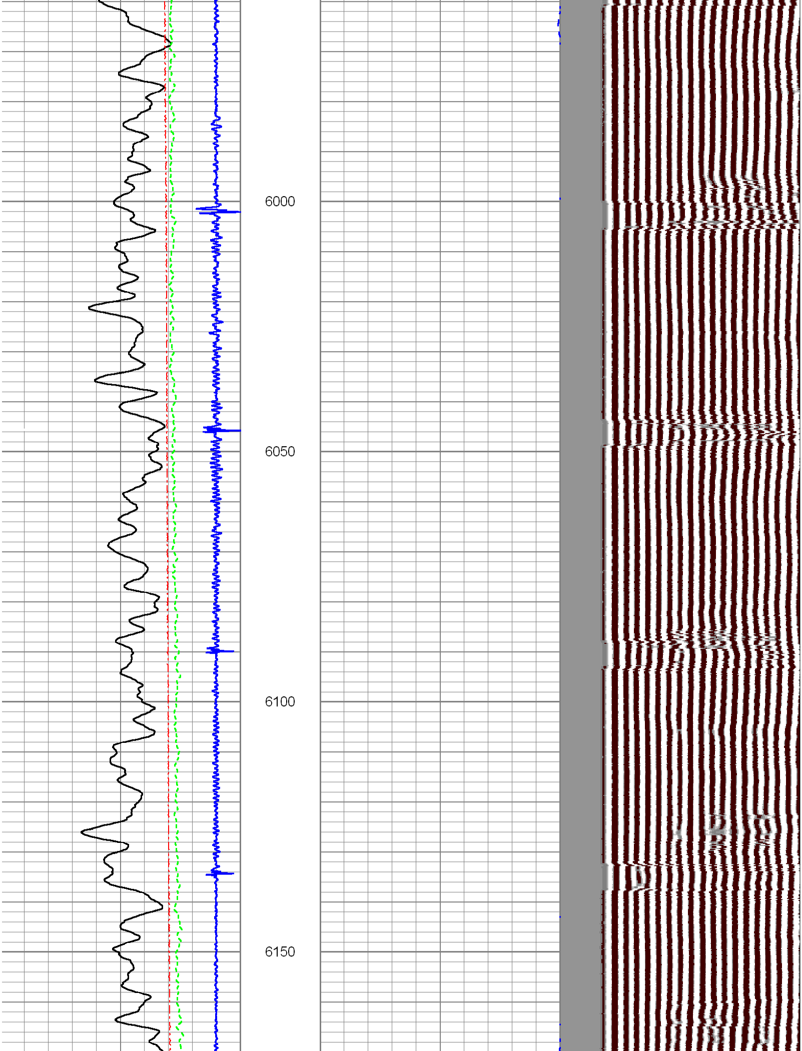
Database File: speaker.db
Dataset Pathname: pass10
Presentation Format: 1cbl
Dataset Creation: Thu Dec 05 11:00:14 2013 by Log Halliburton Casedho
Charted by: Depth in Feet scaled 1:240

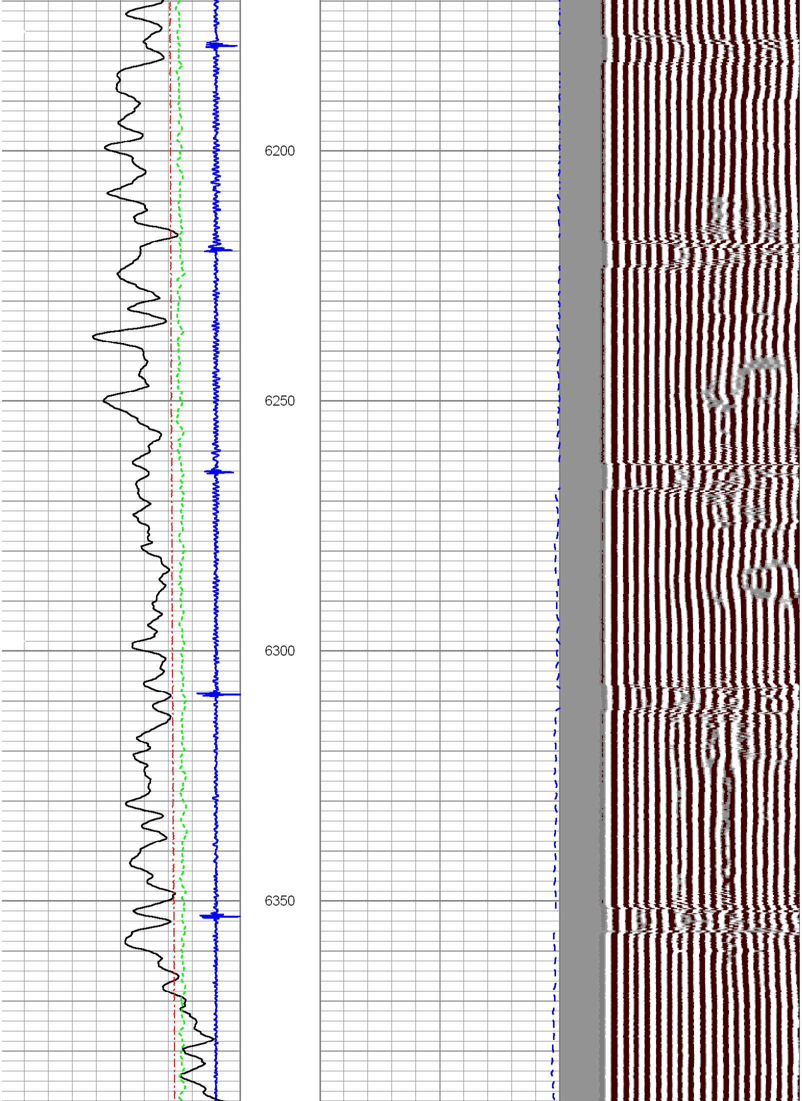
9	Collar Locator	-1
0	Gamma Ray (GAPI)	150
0	LTEN (lb)	1500
0	TEMP (degF)	300

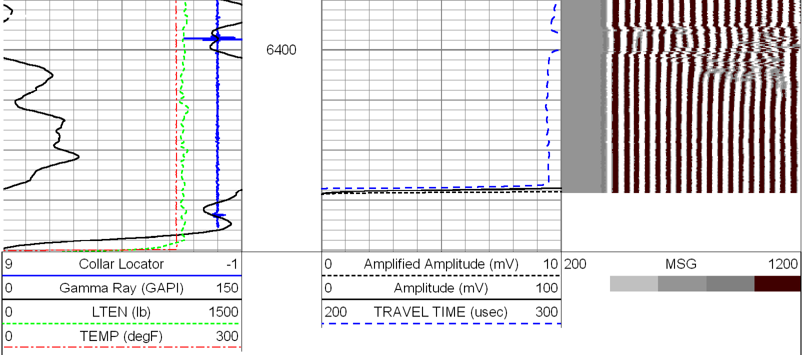
0	Amplified Amplitude (mV)	10
0	Amplitude (mV)	100
200	TRAVEL TIME (usec)	300

200	MSG	1200









HALLIBURTON

REPEAT PASS

SCALE: 5"=100'

Log Variables

Database:D:\Warrior_data\speaker.db
Dataset: field/well/run1/pass23

Top - Bottom

CMTTKCOR	CSTKCOR	SZCOR	CASED?	LTH	CMNTTHCK in	CASETHCK in	PPT usec
Off	Off	Off	Yes	Limestone	0	0	287
MAXAMPL mV	MINAMPL mV	MINATTN db/ft	CASEOD in	PERFS	TDEPTH ft	BOTTEMP degF	BITSIZE in
62	0	0.8	7	0	0	226	7.875

Calibration Report

Database File: speaker.db
Dataset Pathname: pass12
Dataset Creation: Thu Dec 05 11:09:55 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

Thu Dec 05 10:43:32 2013

	Counts/Sec.	Gain	Offset	Jig	Units
Background	54.3				cps
Calibrator	258.0				cps
		1.1836			GAPI/cps

PRIMARY VERIFICATION

Thu Dec 05 10:48:53 2013

	Counts/Sec.	Gain	Offset	Jig	Units
Background	68.1				cps
Calibrator	305.5				cps
Difference				237.3	GAPI

BEFORE SURVEY VERIFICATION

Thu Dec 05 10:54:51 2013

	Counts/Sec.	Gain	Offset	Jig	Units
Background	69.1				cps
Calibrator	321.7				cps
Difference				252.6	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: Thu Dec 05 11:32:43 2013

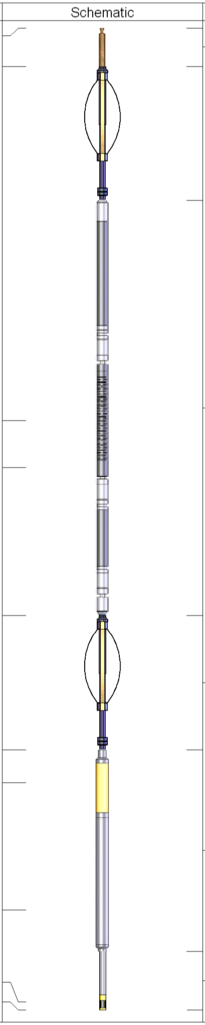
Depth: 166.135 ft
Casing Diameter: 5.5 in

	3' Spacing	5' Spacing	
Signal Zero:	0.25	0.25	mV
Calibrated Amplitude:	62	62	mV
Reading at Signal Zero:	0.00800781	0.00456543	V
Reading in Free Pipe:	0.673413	0.657471	V
Gain:	92.8006	94.5773	
Offset:	-0.49313	-0.181786	

Sensor Report

Database File: speaker.db
Dataset Pathname: pass23
Dataset Creation: Thu Dec 05 14:38:07 2013 by Log Halliburton Casedho

Sensor Name	Offset (ft)
WVF3	12.65
WVF5	11.65
CCL	4.89
GR	2.15
TEMP	0.17
LLMTEN	0
Telemetry	0

Sensor	Offset (ft)	Schematic	Description	Len (ft)	OD (in)	Wt (lb)
STNDCH	21.09		1_CABLEHEAD 1"OD CABLE HEAD	0.83	1.00	3.00
CENT	20.26					
			Probe_275 Probe 2 3/4 Centralizer	2.88	2.75	35.00
WVF3	12.65		CBL-Probe (275) Probe 2.75" Dual Receiver Bond	8.92	2.75	60.00
WVF5	11.65					
CENT	8.46					
			Probe_275 Probe 2 3/4 Centralizer	2.88	2.75	35.00
GR	5.58					
CCL	4.89					
			GR-Probe (275) Probe 2.75" 4 Channel Pulse	4.33	2.75	30.00
GR	2.15					
TEMP	0.17		TEMP-Titan (Tit1.3_02) Titan Temp 1.3875	1.25	1.39	10.00
LLMTEN	0.00					

Dataset: speaker.db: field/well/run1/pass23
Total Length: 21.09 ft
Total Weight: 173.00 lb
O.D. 2.75 in

Company	CARRIZO
Well	SPEAKER 2-27-11-8-61
Field	WILDCAT
County	WELD
State	CO

HALLIBURTON

CEMENT BOND
LOG