Company CARRIZO
Well SPEAKER 3-27-11-8-61
Field WILDCAT
County WELD State CO

HALLIBURTON

CEMENT BOND LOG

Company	CARRIZO
Well	SPEAKER 3-27-11-8-61
Field	WILDCAT
County	WELD
State	CO

API No.: 05-123-38331-0000 Serv #: 900950925
Location: LAT: 40.63923° LONG: -104.18806°

Other Services
N/A

Sec: 27 Twp: 8N Rge: 61W

Permanent Datum GL Elevation 4999'
Log Measured From KB , 12 Ft. above perm. datum
Drilling Measured From KB

Elevation
K.B. 5011'
D.F. 5010'
G.L. 4999'

Date @ Time Logged	9-DEC-2013	Type Fluid in Hole	FRESH WATER
Run No.	ONE	Density of Fluid	8.33
Depth - Driller	10832'	Fluid Level	SURFACE
Depth - Logger	6102'	Cement Top Est. Logged	1390'
Bottom - Logged Interval	6090'	Equipment / Location	11874896 / BRIGHTON
Top - Log Interval	94'	Recorded by	JOSHUA MCDANIEL
Max. Recorded Temp.	178	Witnessed by	PHILL LINK

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	5868'

<<< 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 @ 5868'

ESTIMATED TOP OF CEMENT @ 1390'

MAX TEMP = 178 DEG F FLUID JUST PUMPED TO BOTTOM

TENSION JUMPY DUE TO LINEWIPER FREEZING

THANK YOU FOR CHOOSING HALLIBURTON ENERGY SERVICES!

HALLIBURTON

MAIN PASS

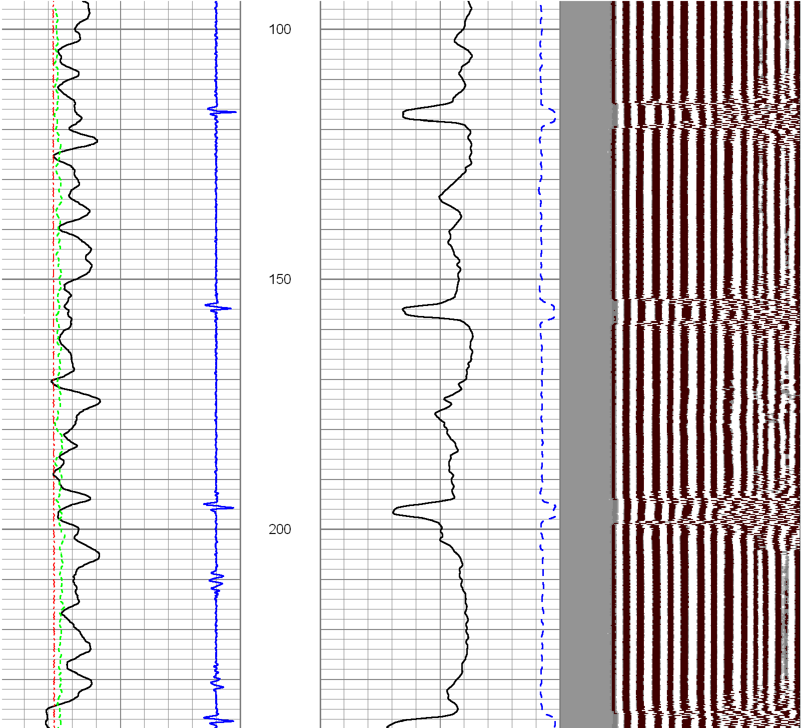
SCALE: 5"=100'

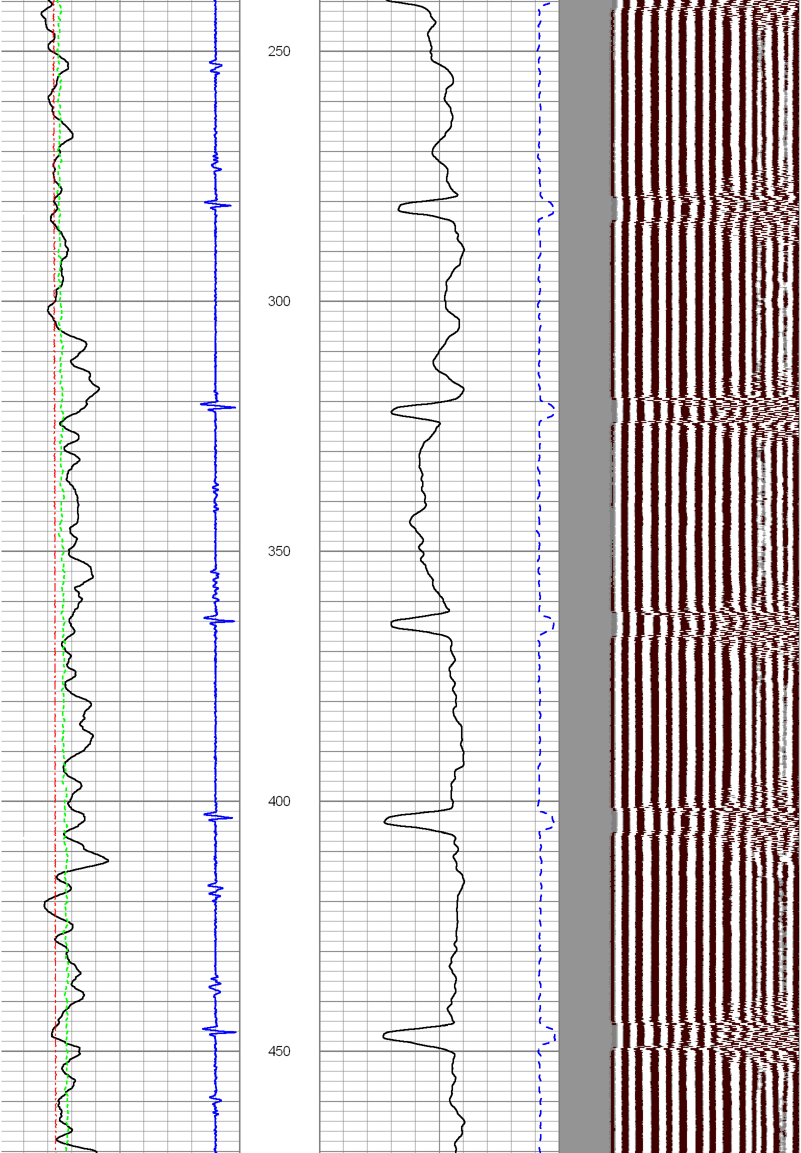
Database File:	speaker.db
Dataset Pathname:	pass29
Presentation Format:	1cbl
Dataset Creation:	Mon Dec 09 15:46:34 2013 by Log Halliburton Casedho
Charted by:	Depth in Feet scaled 1:240

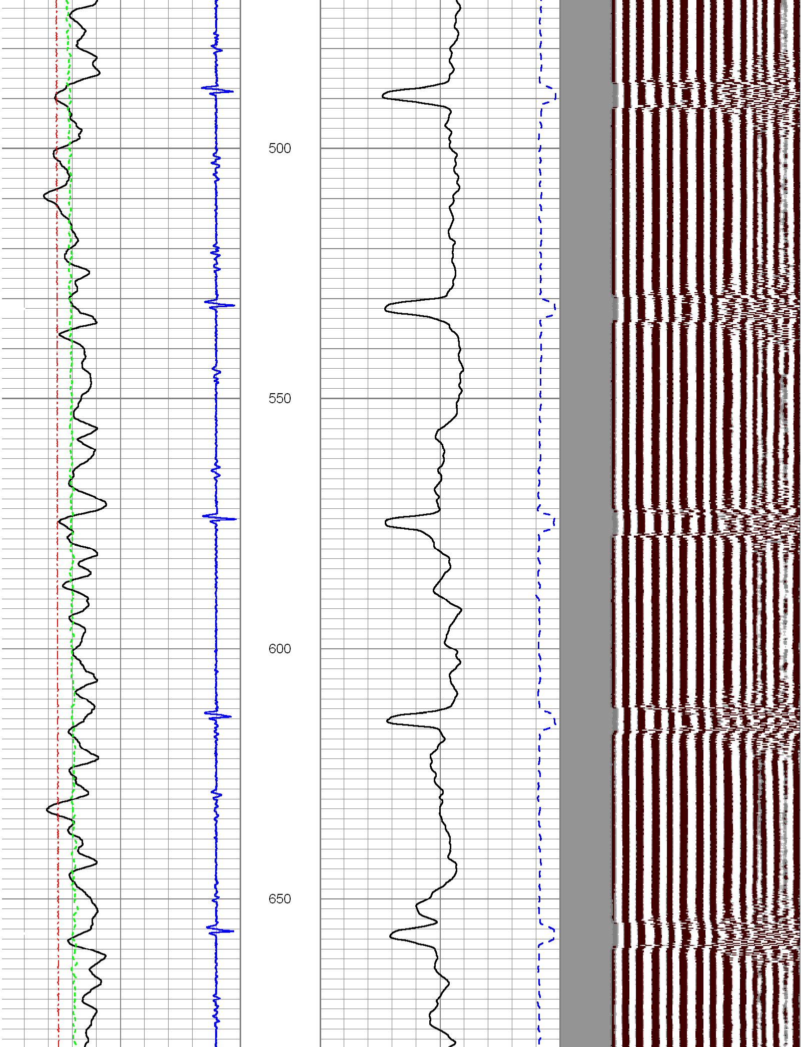
9	Collar Locator	-1
0	Gamma Ray (GAPI)	150
0	LTEN (lb)	1500
0	TEMP (degF)	300

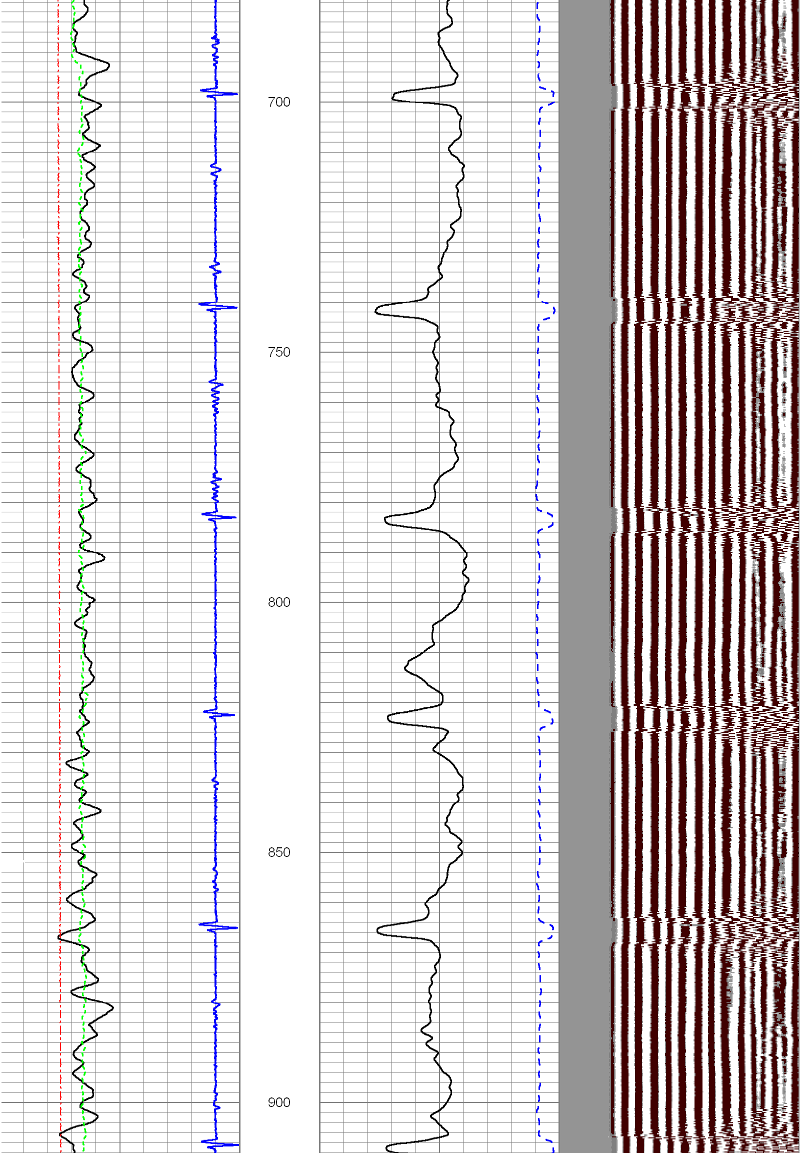
0	Amplified Amplitude (mV)	10
0	Amplitude (mV)	100
200	TRAVEL TIME (usec)	300

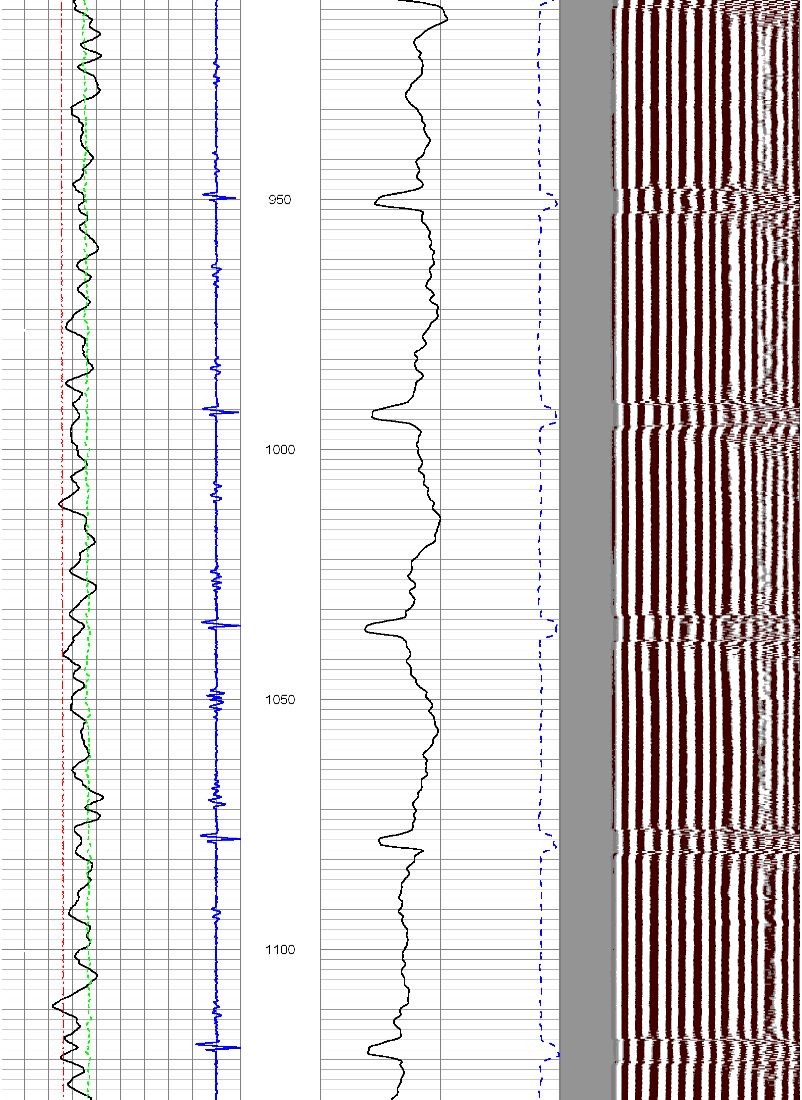
200	MSG	1200

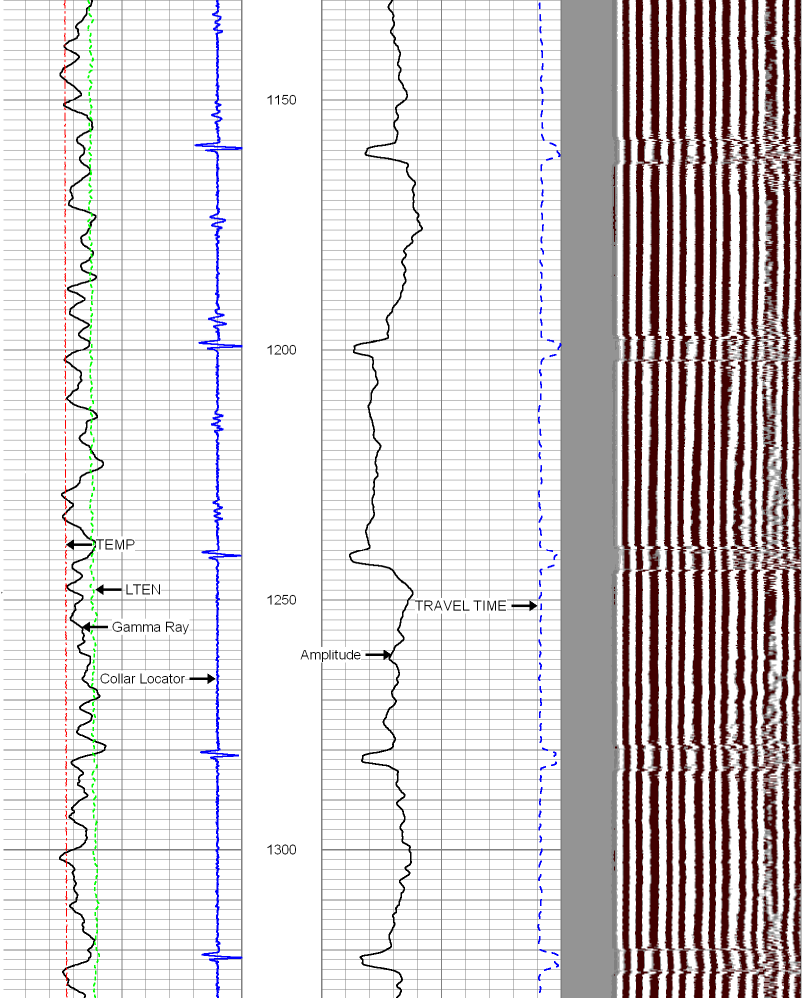


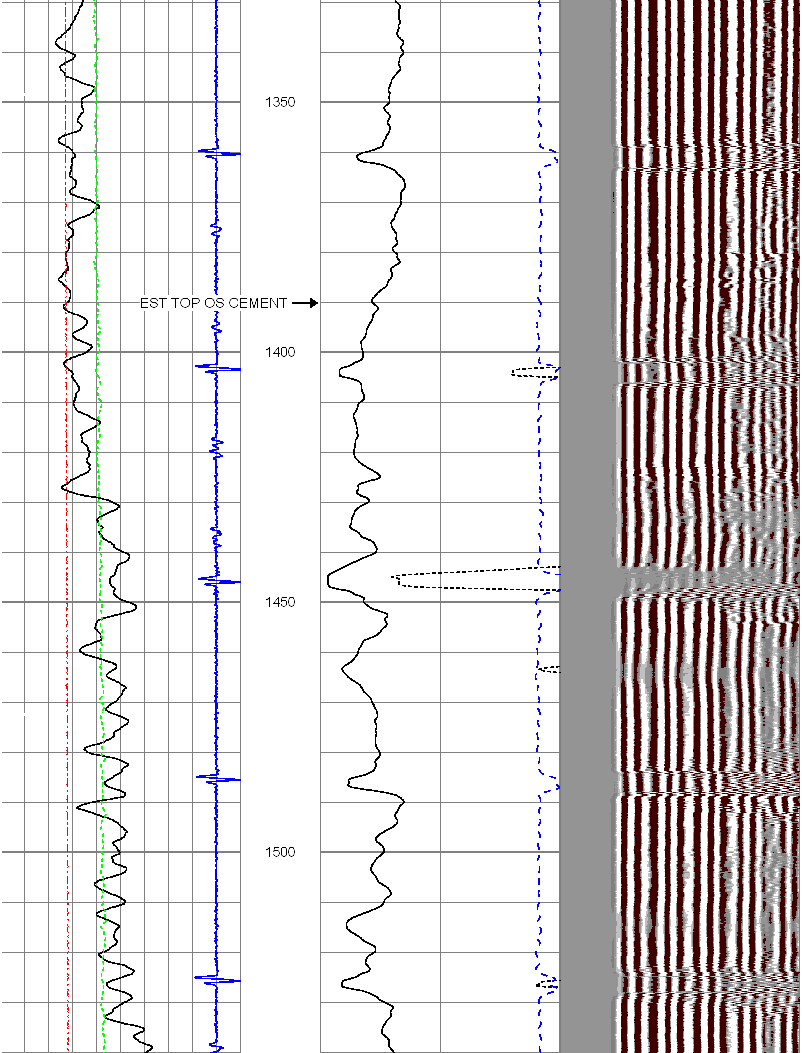


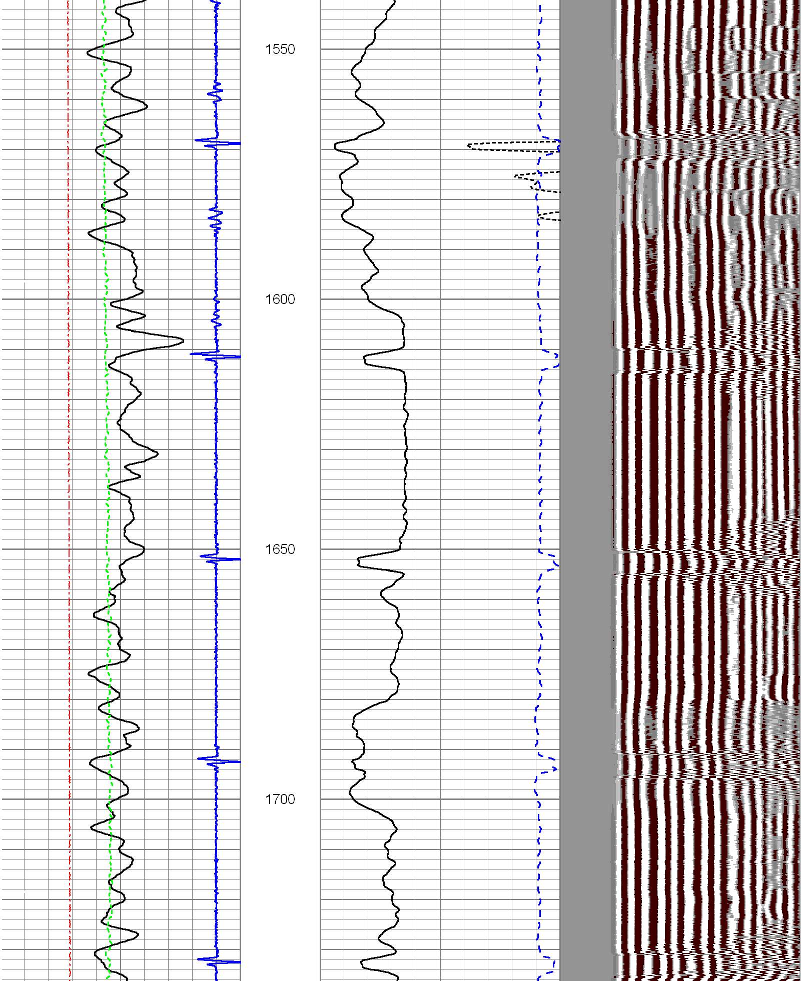


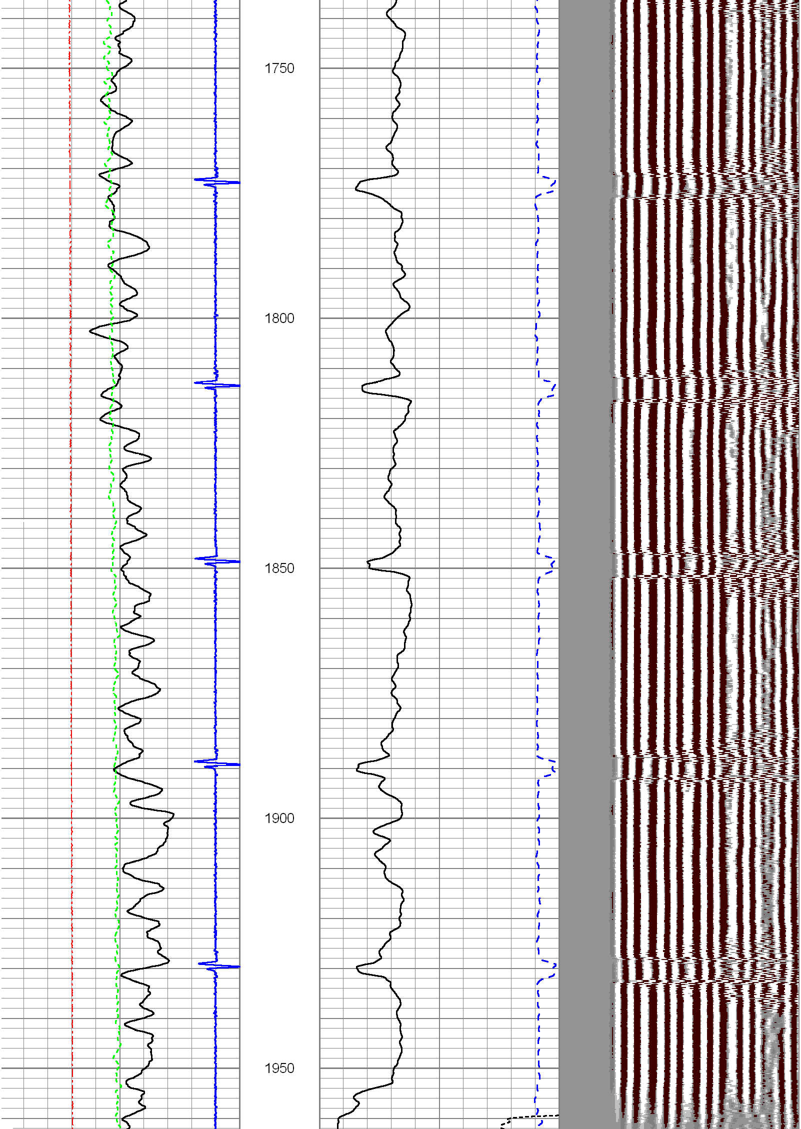


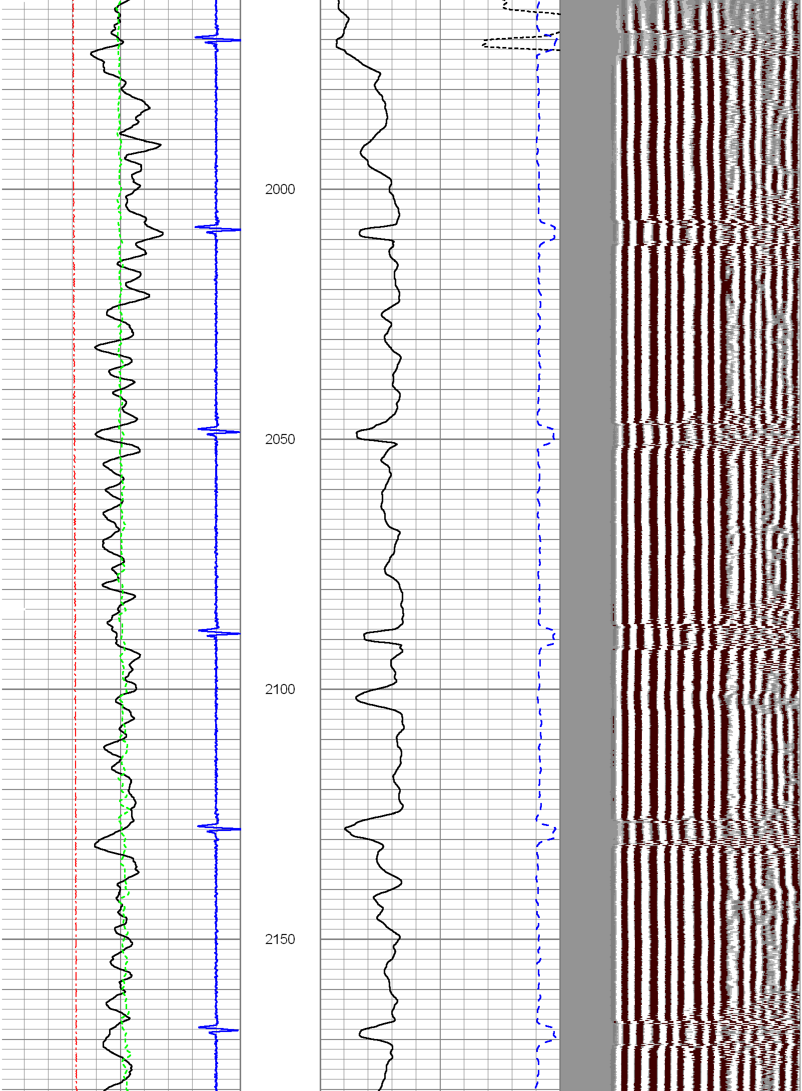


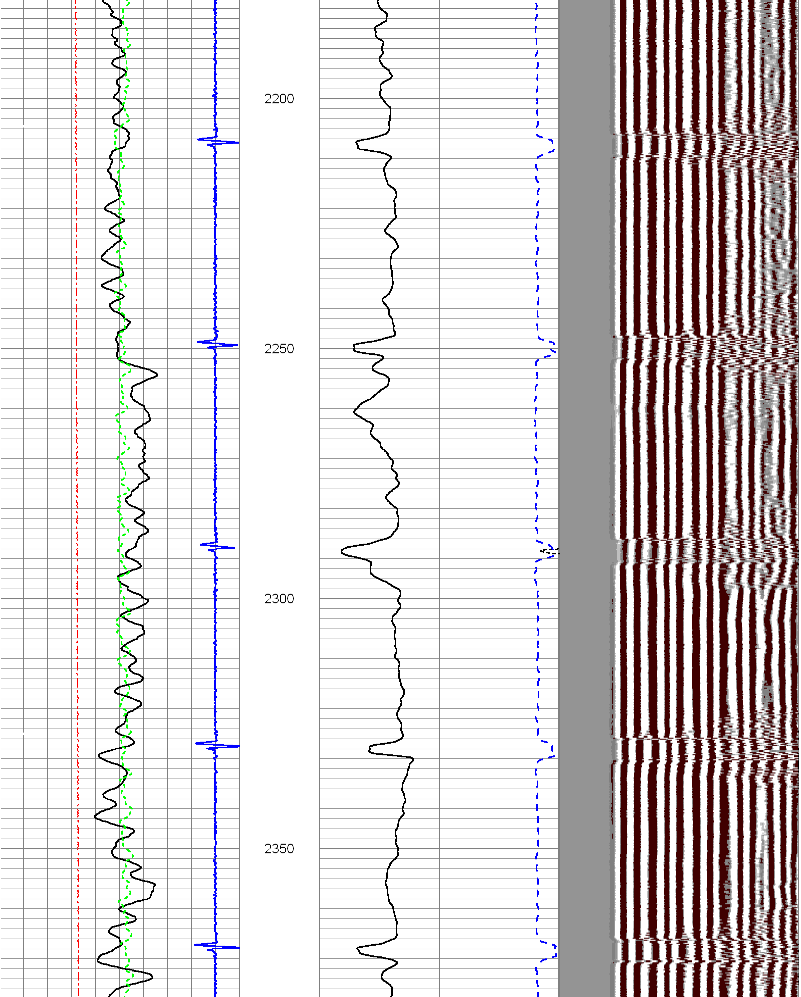


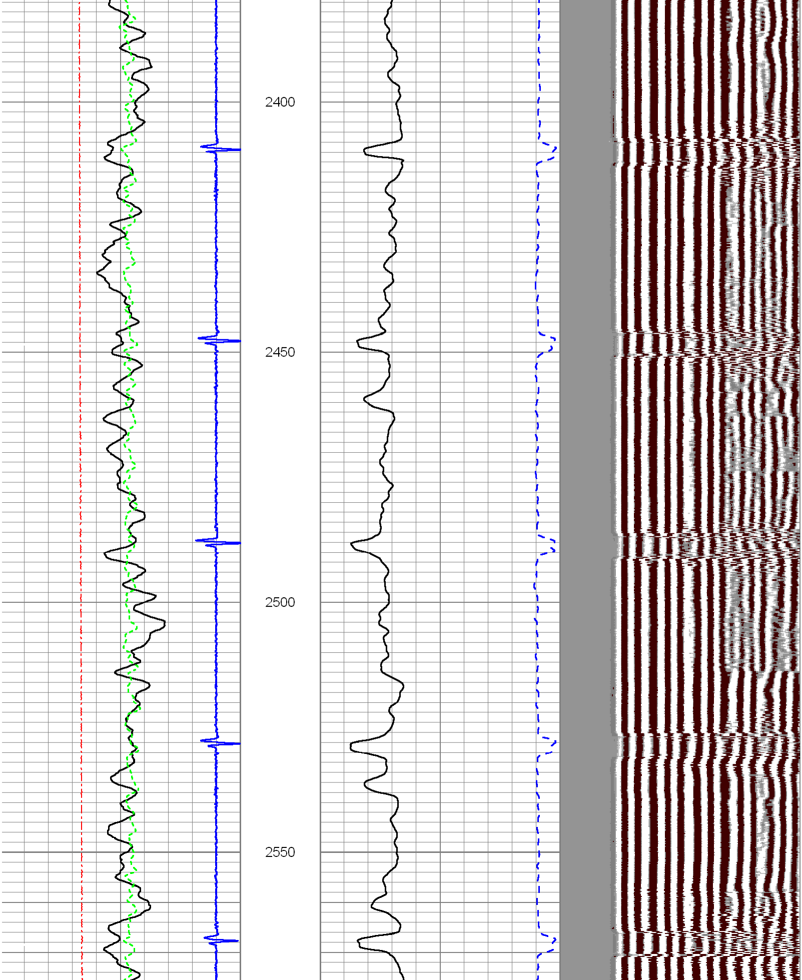


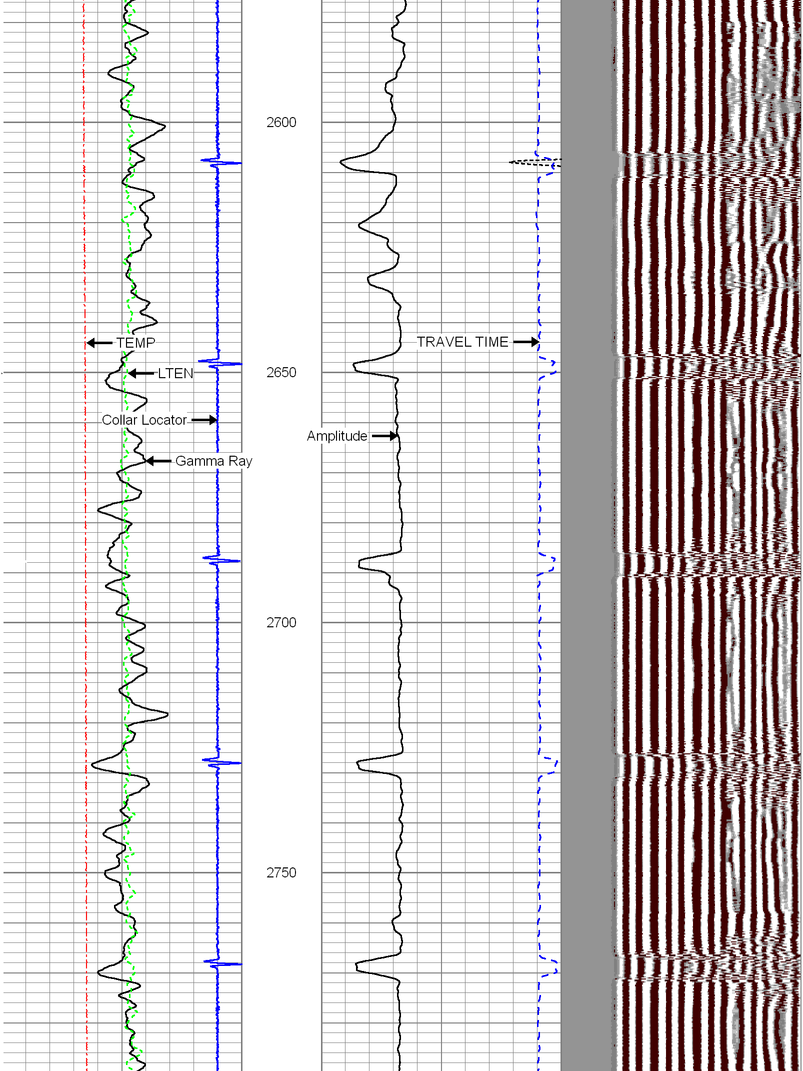


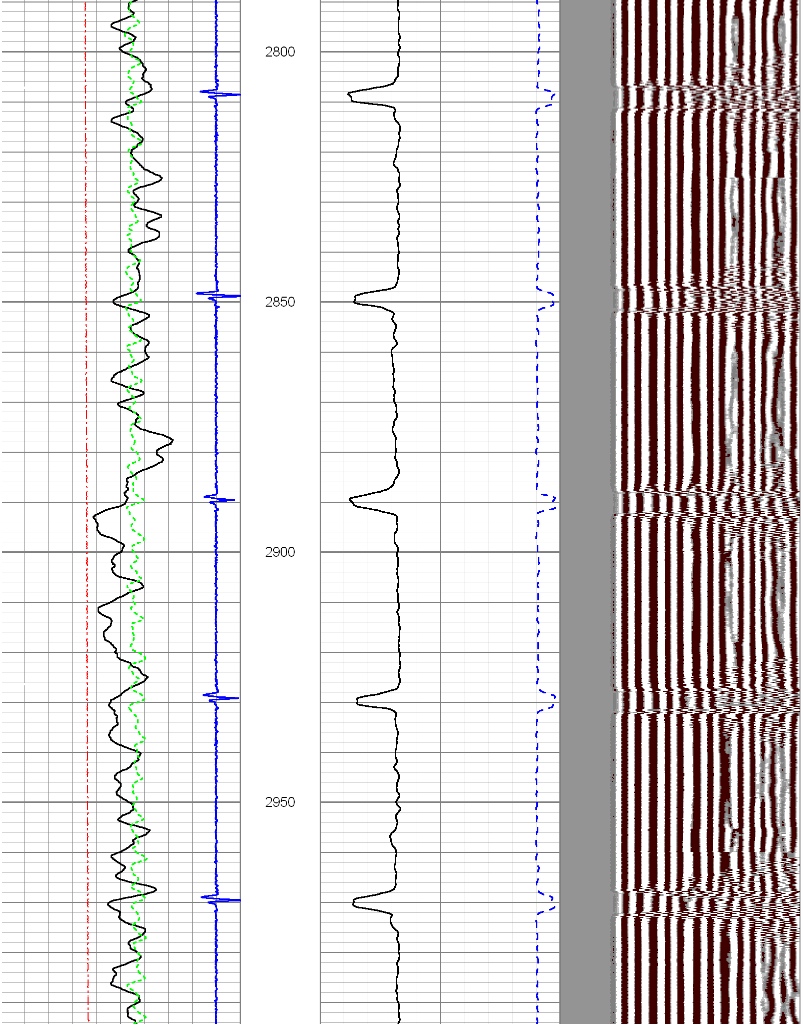


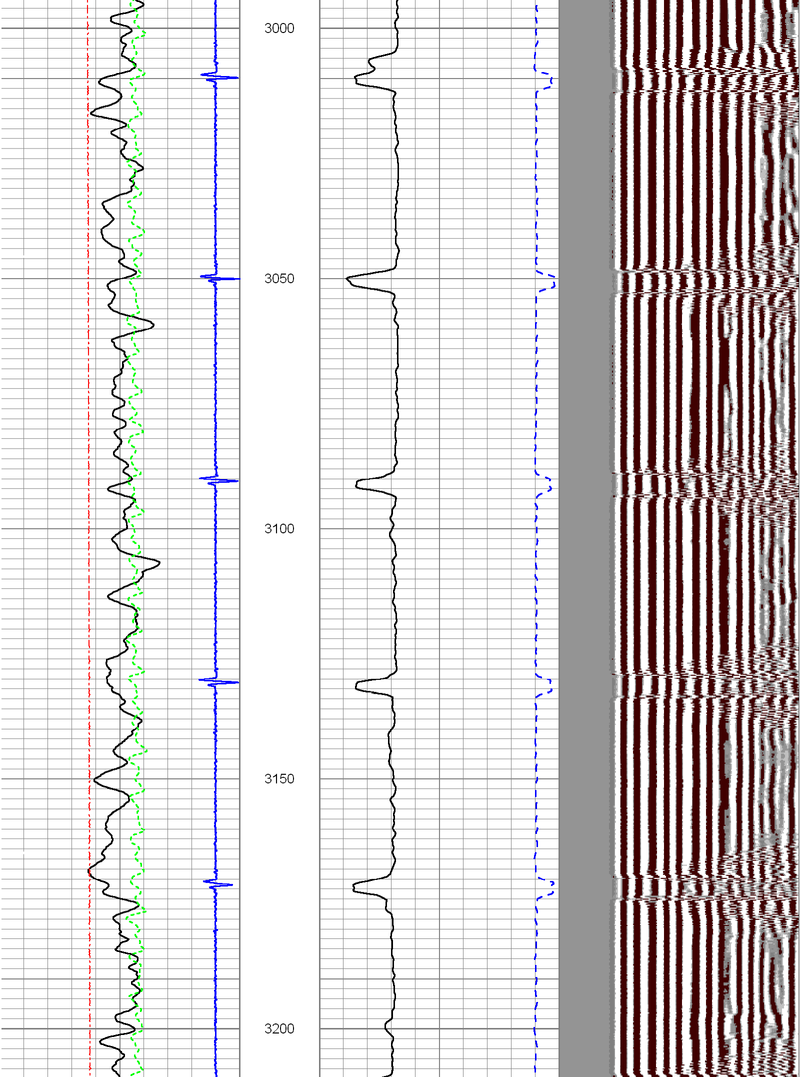


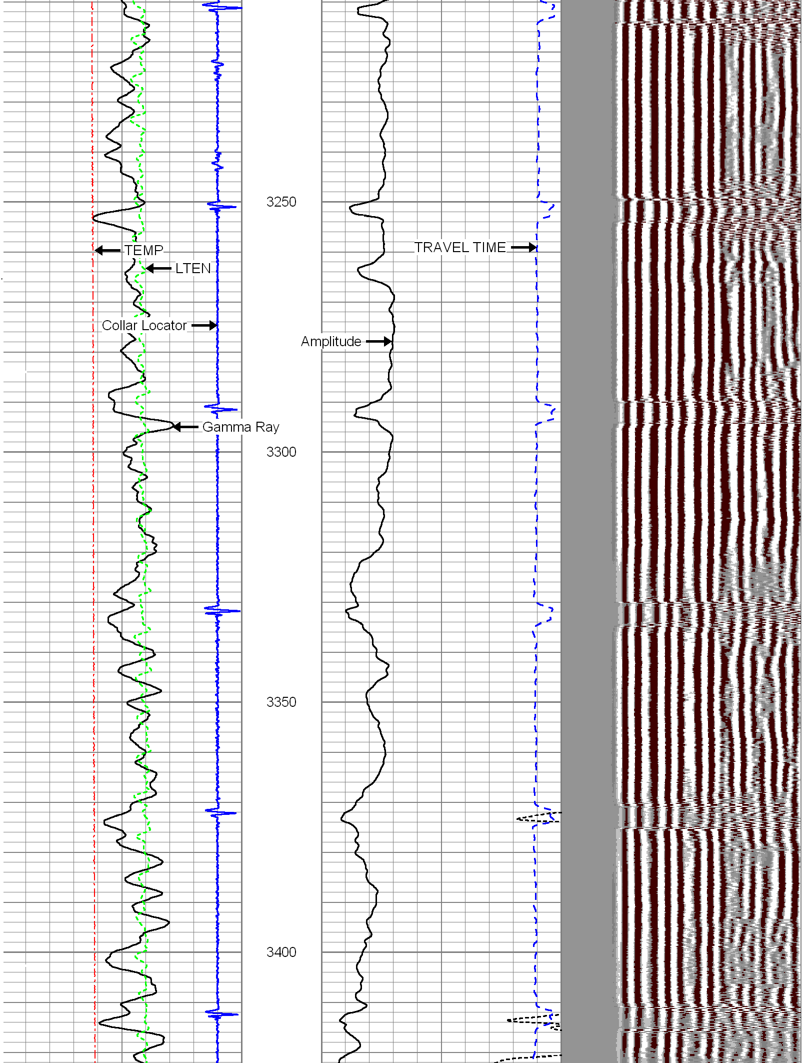


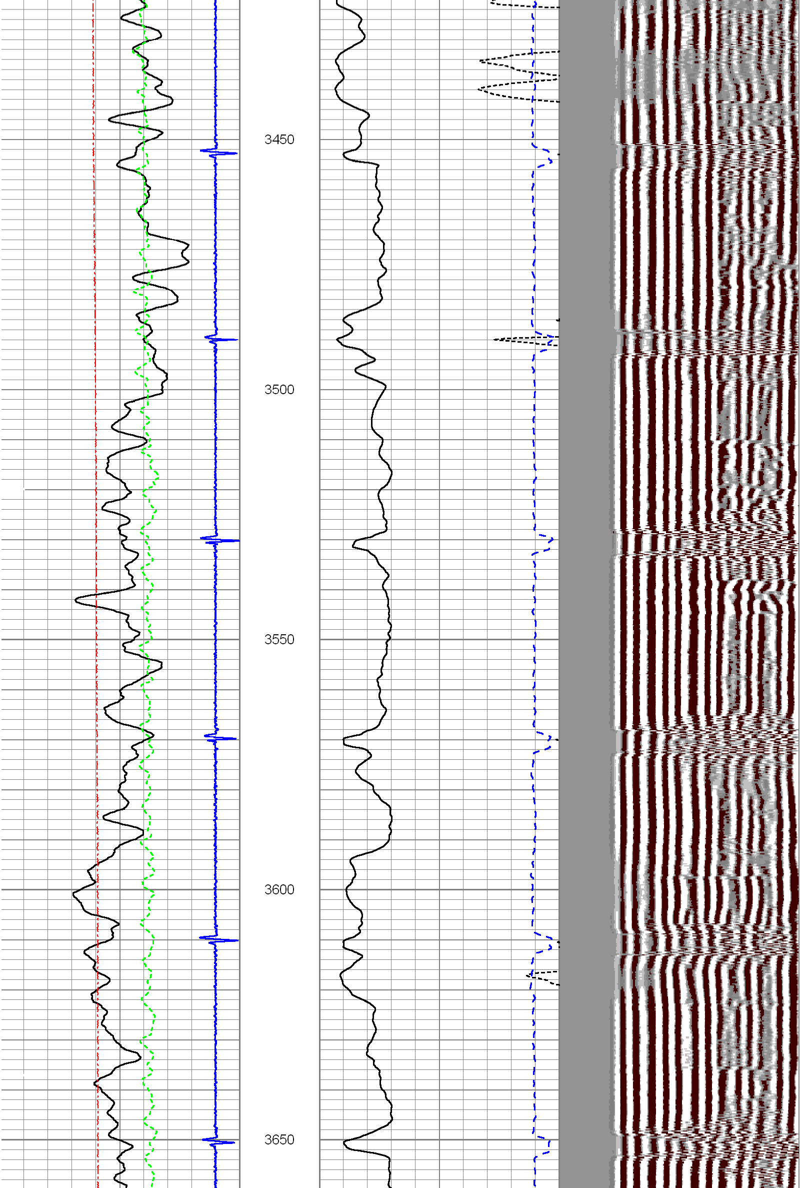


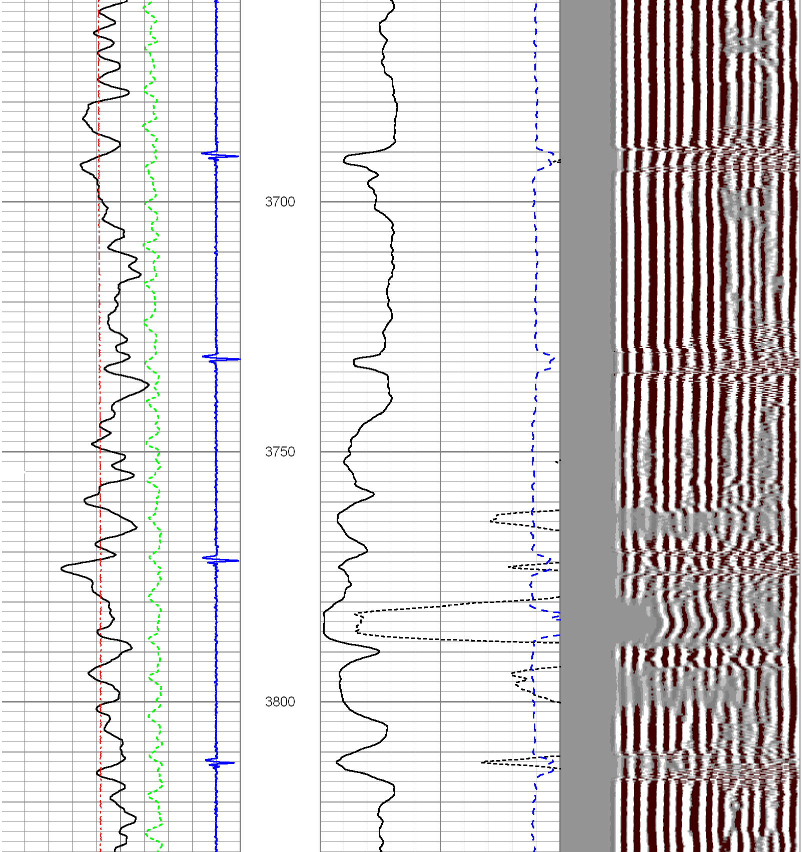












9	Collar Locator	-1	0	Amplified Amplitude (mV)	10	200	MSG	1200
0	Gamma Ray (GAPI)	150	0	Amplitude (mV)	100			
0	LTEN (lb)	1500	200	TRAVEL TIME (usec)	300			
0	TEMP (degF)	300						

HALLIBURTON

MAIN PASS

SCALE: 5"=100'

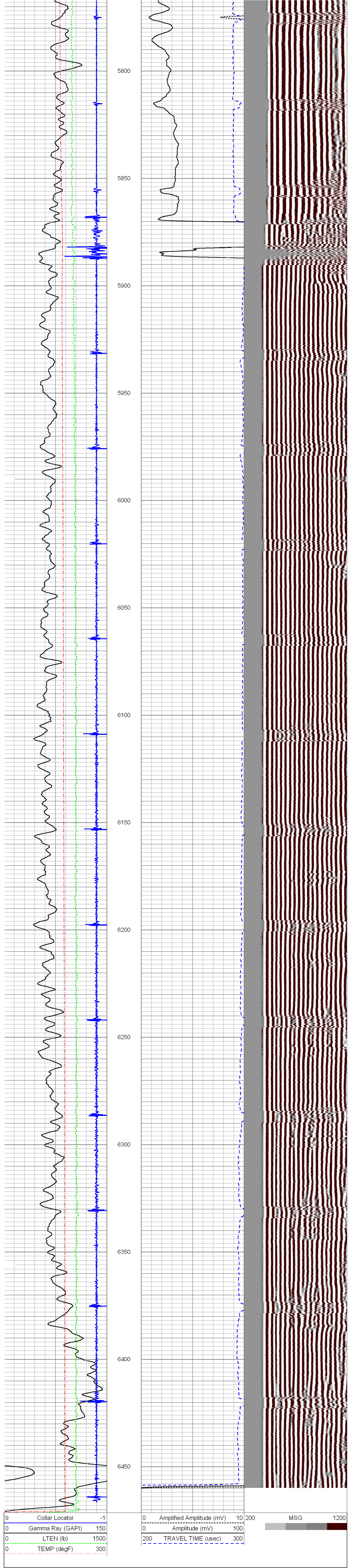
HALLIBURTON

REPEAT PASS

SCALE: 5"=100'

Database File: speaker.db
Dataset Pathname: pass27
Presentation Format: 1cbl
Dataset Creation: Mon Dec 09 15:38:01 2013 by Log Halliburton Casedho
Charted by: Depth in Feet scaled 1:240

9	Collar Locator	-1	0	Amplified Amplitude (mV)	10	200	MSG	1200
0	Gamma Ray (GAPI)	150	0	Amplitude (mV)	100			
0	LTEN (lb)	1500	200	TRAVEL TIME (usec)	300			
0	TEMP (degF)	300						



9	Collar Locator	-1	0	Amplified Amplitude (mV)	10	200	MSG	1200
0	Gamma Ray (GAPI)	150	0	Amplitude (mV)	100			
0	LTEN (lb)	1500	200	TRAVEL TIME (usec)	300			
0	TEMP (degF)	300						

HALLIBURTON

REPEAT PASS

SCALE: 5"=100'

Log Variables

Database:C:\Warrior\Data\speaker.db
Dataset: field/well/run1/pass29

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: pass29
Dataset Creation: Mon Dec 09 15:46:34 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

	Counts/Sec.	Gain	Offset	Jig	Units
SHOP CALIBRATION	Mon Dec 09 09:07:58 2013				
Background	71.5				cps
Calibrator	326.6				cps
		0.9448			GAPI/cps
PRIMARY VERIFICATION	Mon Dec 09 09:17:39 2013				
Background	66.9				cps
Calibrator	307.2				cps
Difference				240.2	GAPI
BEFORE SURVEY VERIFICATION	Mon Dec 09 14:43:36 2013				
Background	49.0				cps
Calibrator	225.9				cps
Difference				177.0	GAPI
AFTER SURVEY VERIFICATION					
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

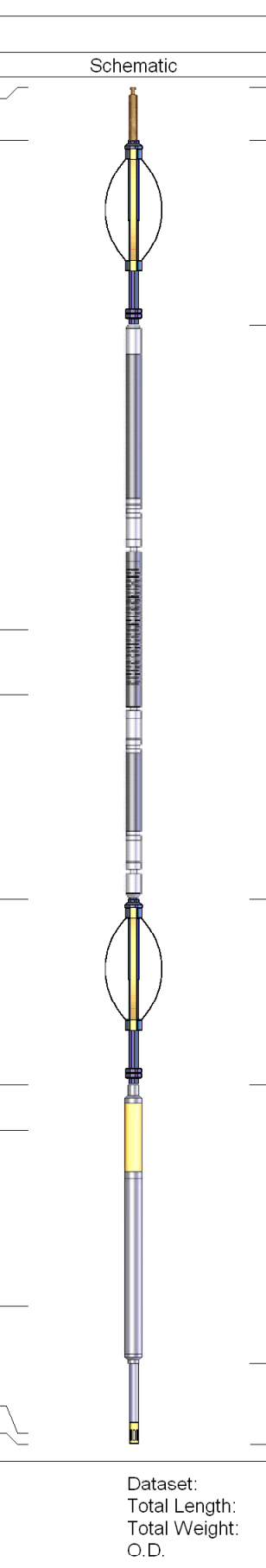
Depth: 166.135 ft
Casing Diameter: 5.5 in

	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: pass29
Dataset Creation: Mon Dec 09 15:46:34 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/pass29
Total Length: 21.09 ft
Total Weight: 173.00 lb
O.D. 2.75 in

Company	CARRIZO		
Well	SPEAKER 3-27-11-8-61		
Field	WILDCAT		
County	WELD	State	CO

HALLIBURTON

CEMENT BOND
LOG