gyrodata

CEMENT BOND LOG

Company **EXTRACTION OIL & GAS**
Well **NELSON FARM #1**
Field **WATTENBERG**
County **WELED** State **CO**

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API No.: 05-123-39961 Serv #: 1287
Location: **LAT. 40.550609**
LONG. -104.906389

Sec: 28 **Twp:6N** **Rge: 67W**

Other Services
TEMPERATURE
CCL

Permanent Datum	**GROUND LEVEL**	Elevation **4975'**		Elevation
Log Measured From	**KB** , **17** Ft. above perm. datum			K.B. 4792' D.F. 4791' G.L. 4775'
Drilling Measured From	**KB**			

Date @ Time Logged	15-SEP-14 @ 1215 HRS.	Type Fluid in Hole	FRESH WATER
Run No.	ONE	Density of Fluid	8.4 #/GL
Depth - Driller	14,630'	Fluid Level	15'
Depth - Logger	7307'	Cement Top Est. Logged	580'
Bottom - Logged Interval	7295'	Equipment / Location	GD-114 / CASPER WY
Top - Log Interval	SURFACE	Recorded by	M. FENN
Max. Recorded Temp.	210° F	Witnessed by	J. GLORE

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
				9 5/8"	36#	SURFACE	816'
				7"	26#	SURFACE	7540'
				4 1/2"	13.5#	7315'	14,626'

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All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs, damages, or expenses incurred or sustained by anyone resulting from any interpretation made by any of our officers, agents or employees. These interpretations are also subject to our general terms and conditions set out in our current Price Schedule.

Comments

Cement Bond Log was the initial log ran on the well dated 9/14/2014
Cement top was estimated at 580"
Max temp on bottom was 210°F
KOP @ 6502'

Your crew today was J.Adams, B Kennicker , and S. Dovala

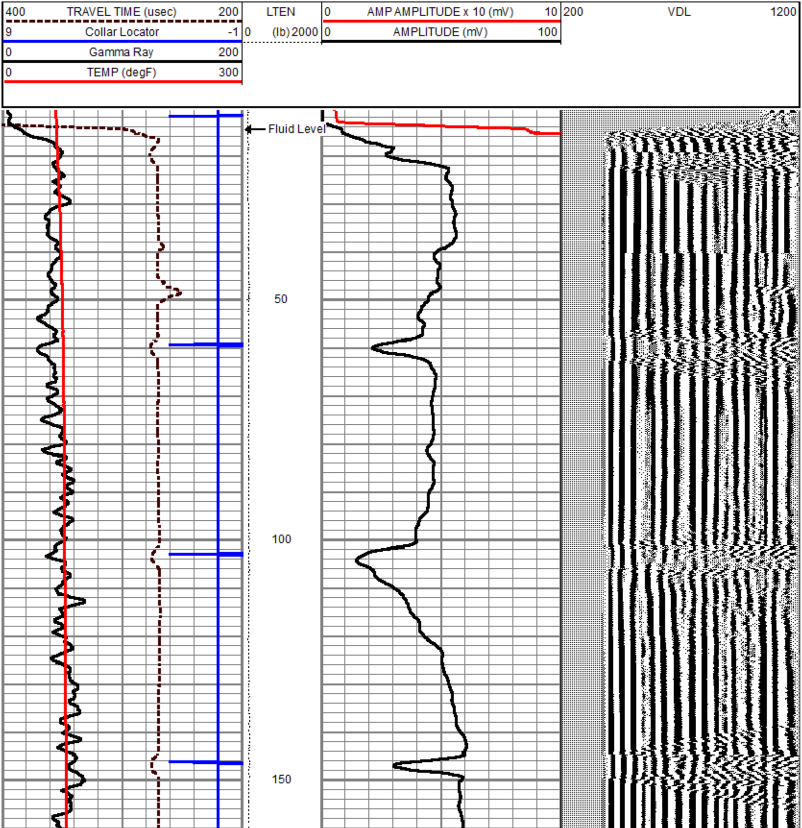
Thank you for using Gyrodata Logging Services, Casper, WY gyrodata

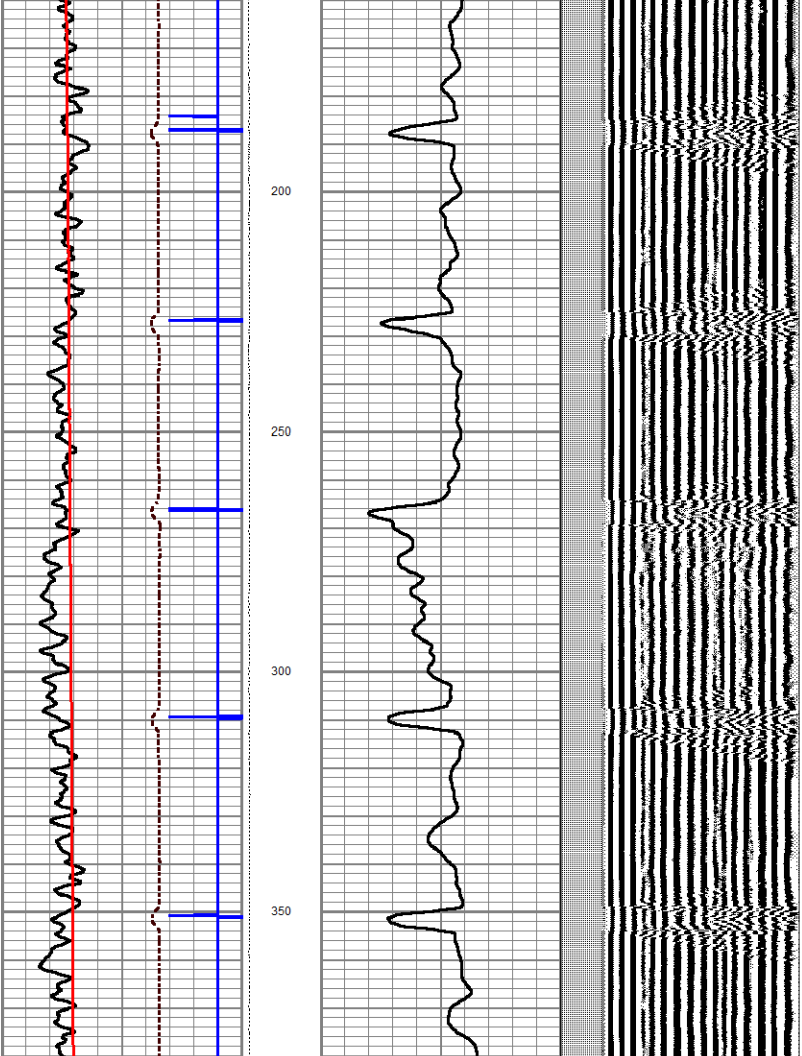
CEMENT BOND LOG PRESENTATION

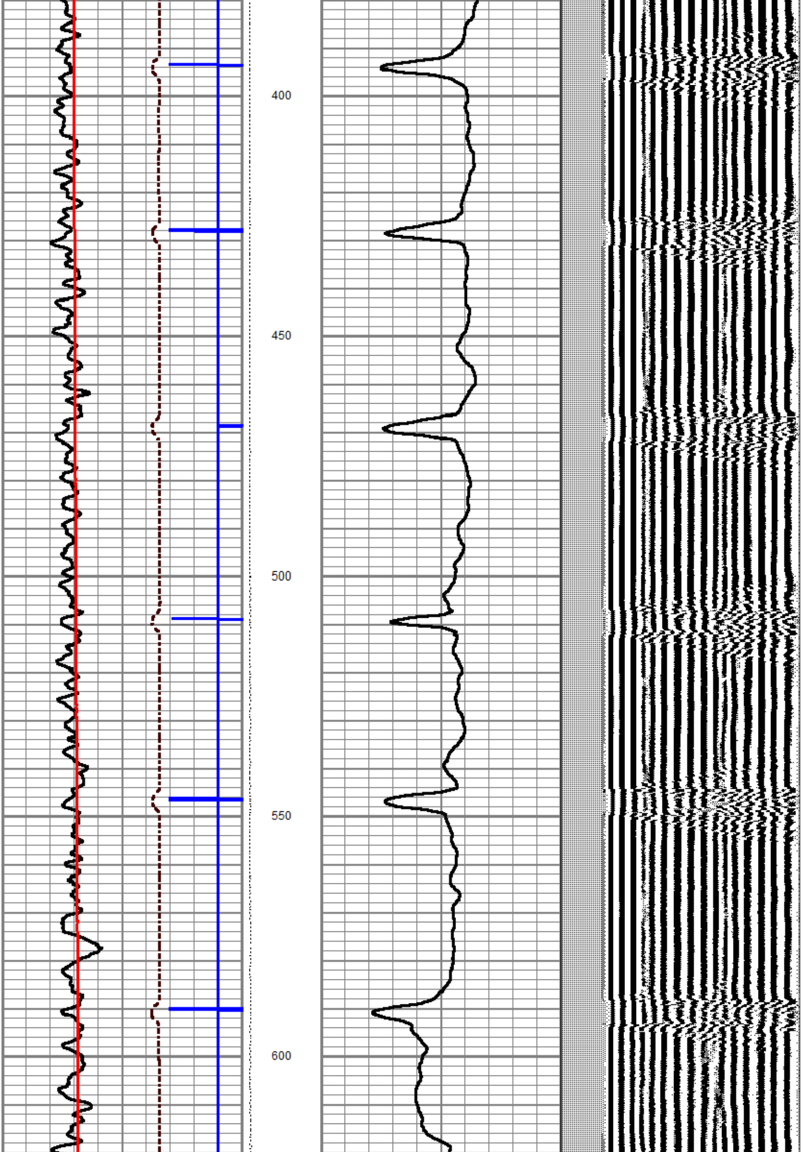
MAIN LOG SECTION/0

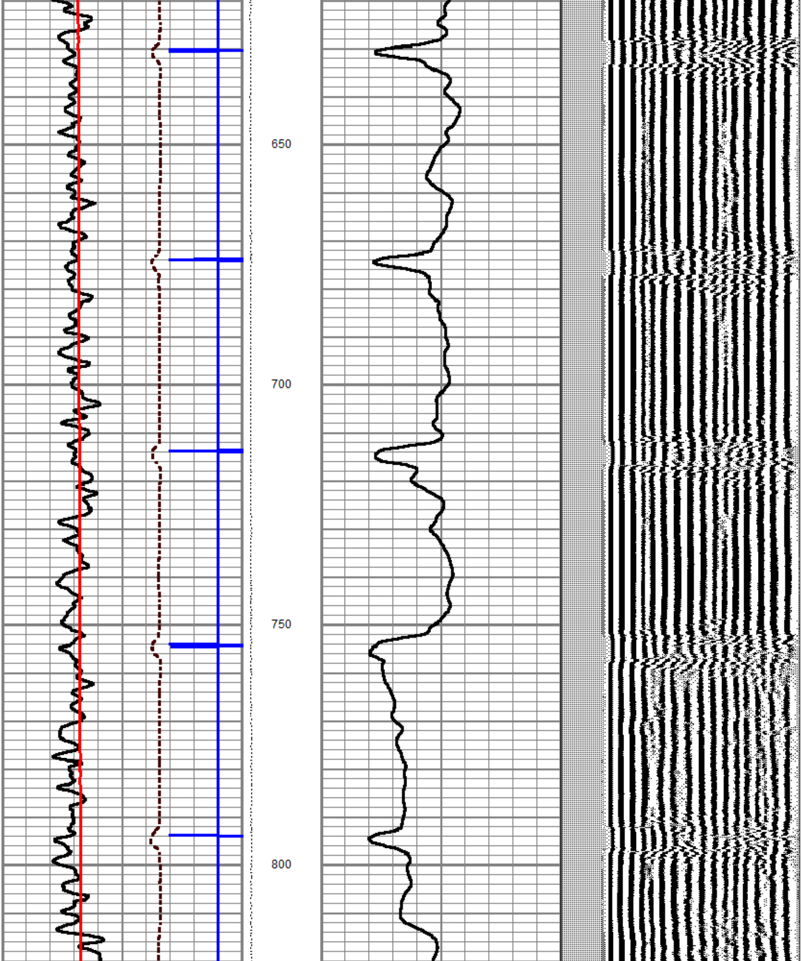
5"=100 PSI

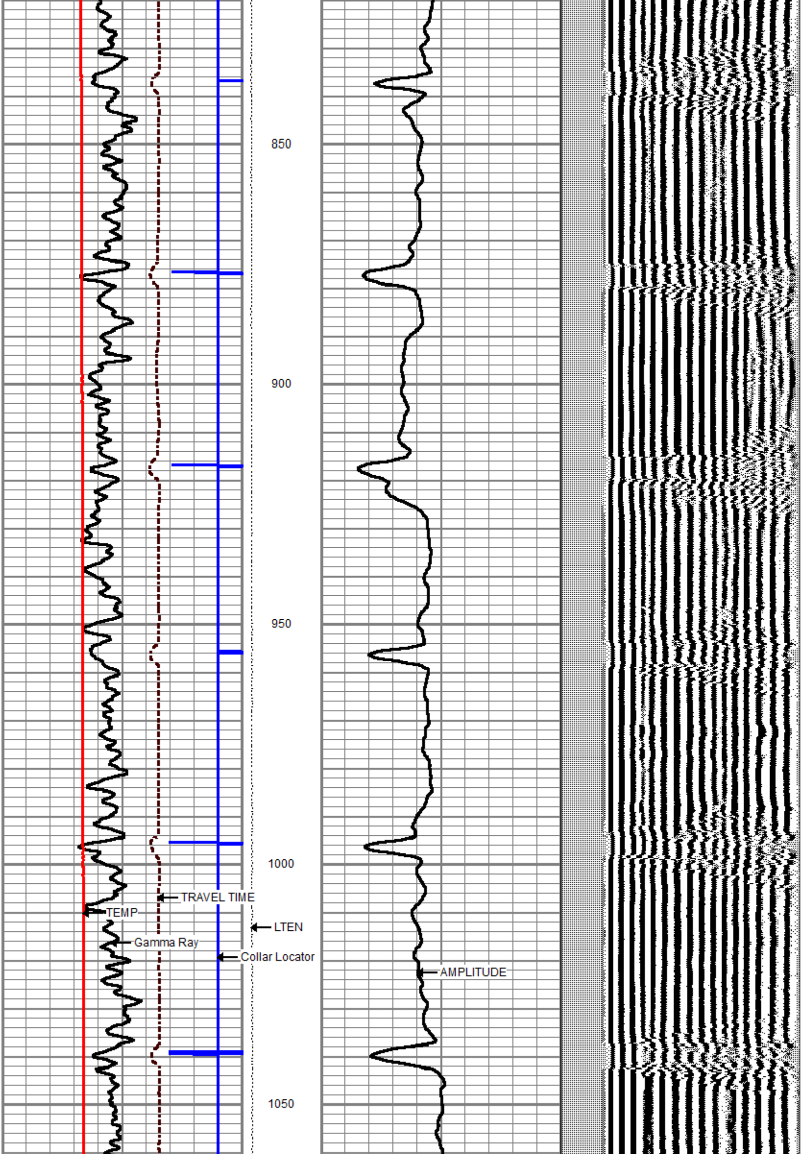
Database File	2014_extraction_nelson_farm_1.db
Dataset Pathname	pass4
Presentation Format	cbl_drs
Dataset Creation	Mon Sep 15 13:42:57 2014
Charted by	Depth in Feet scaled 1:240

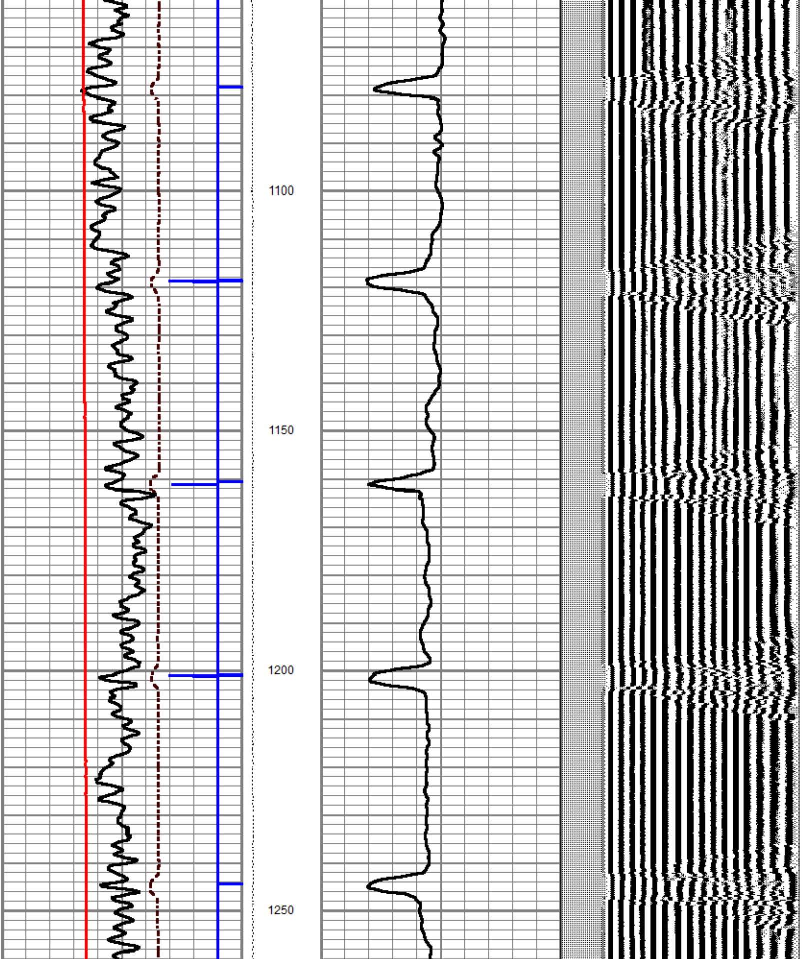


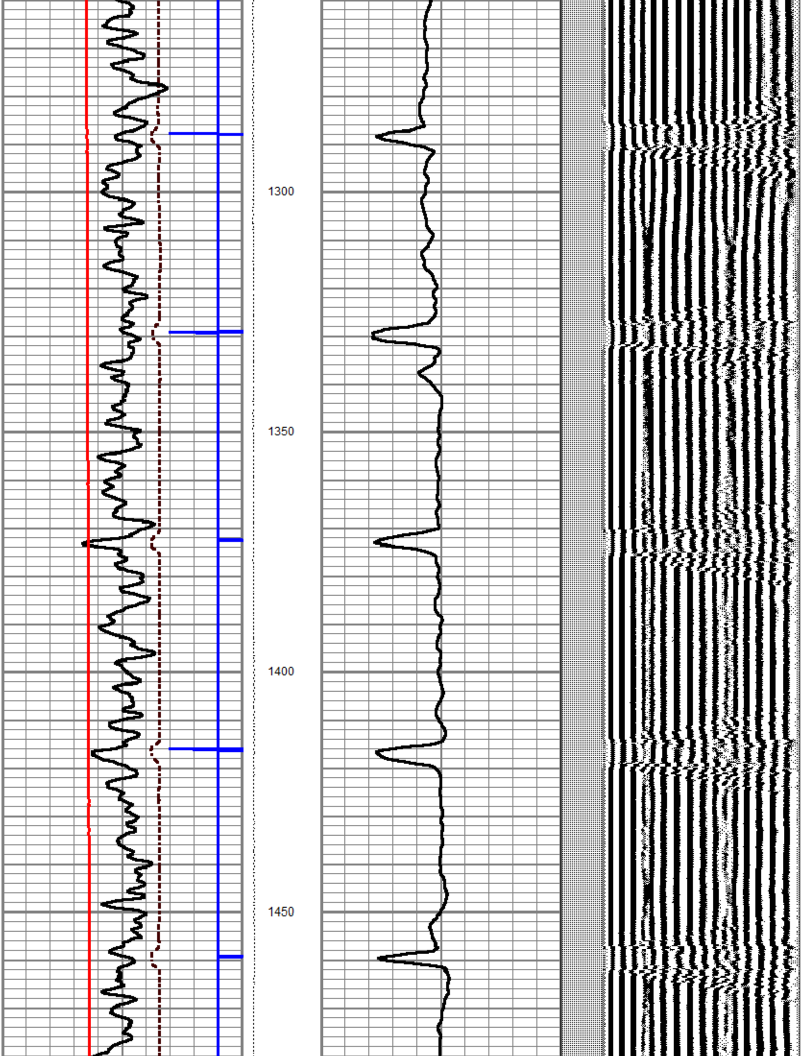


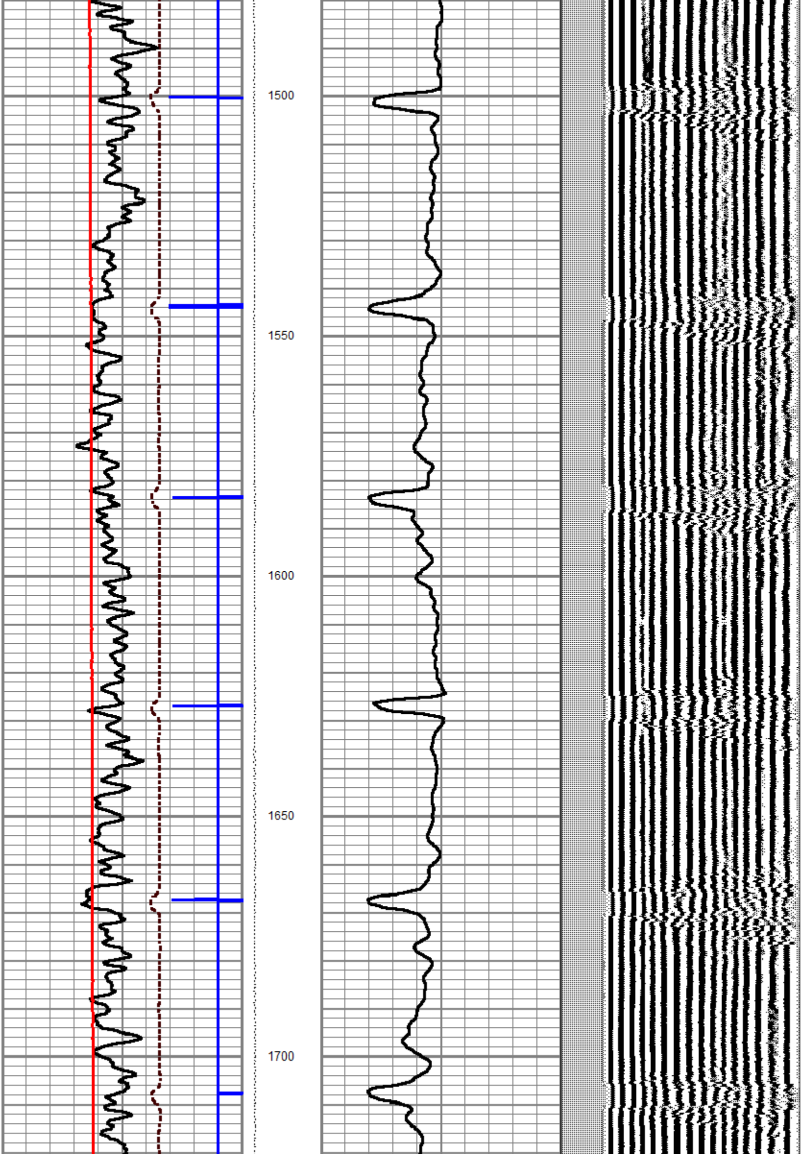


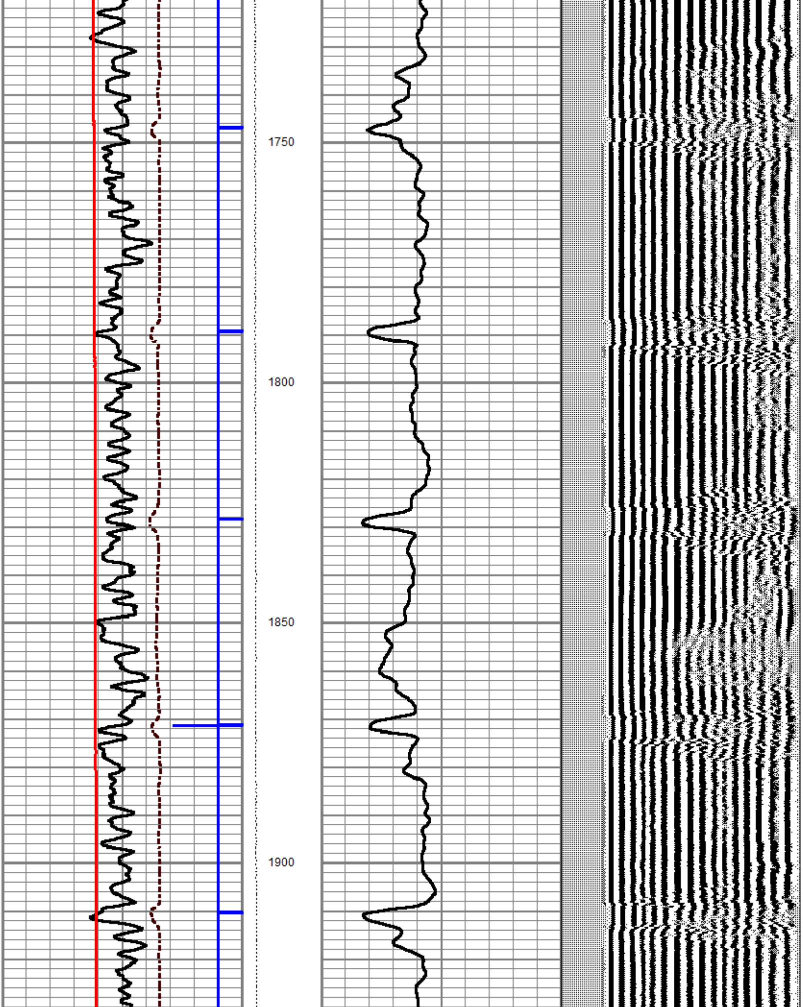


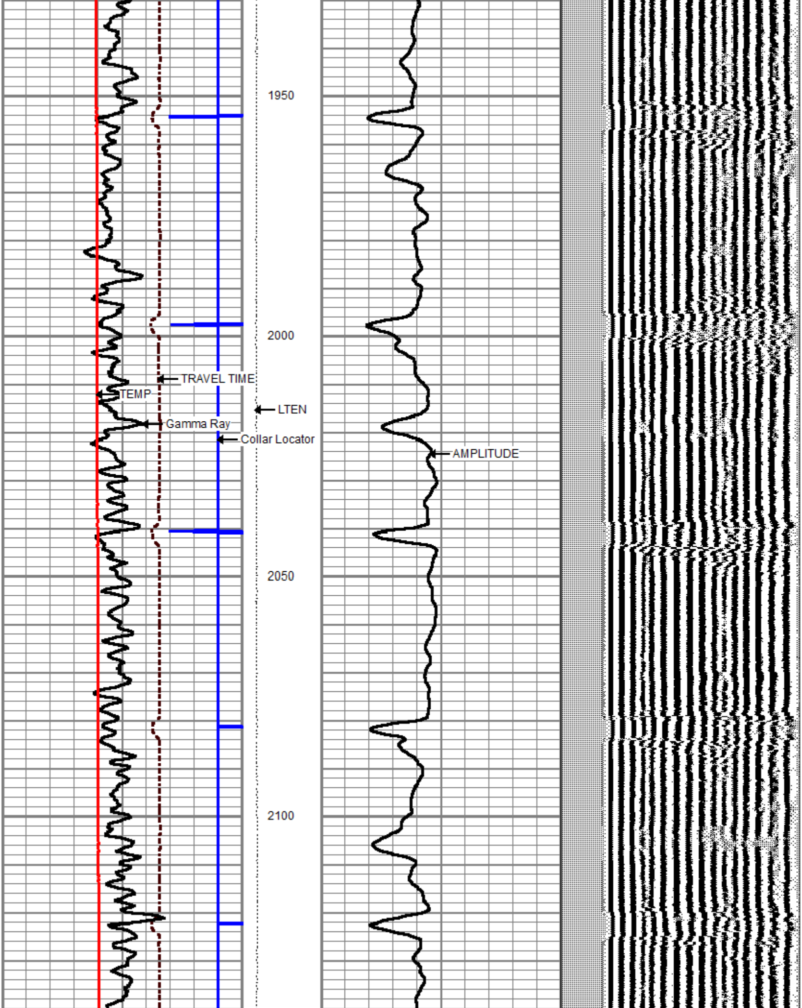


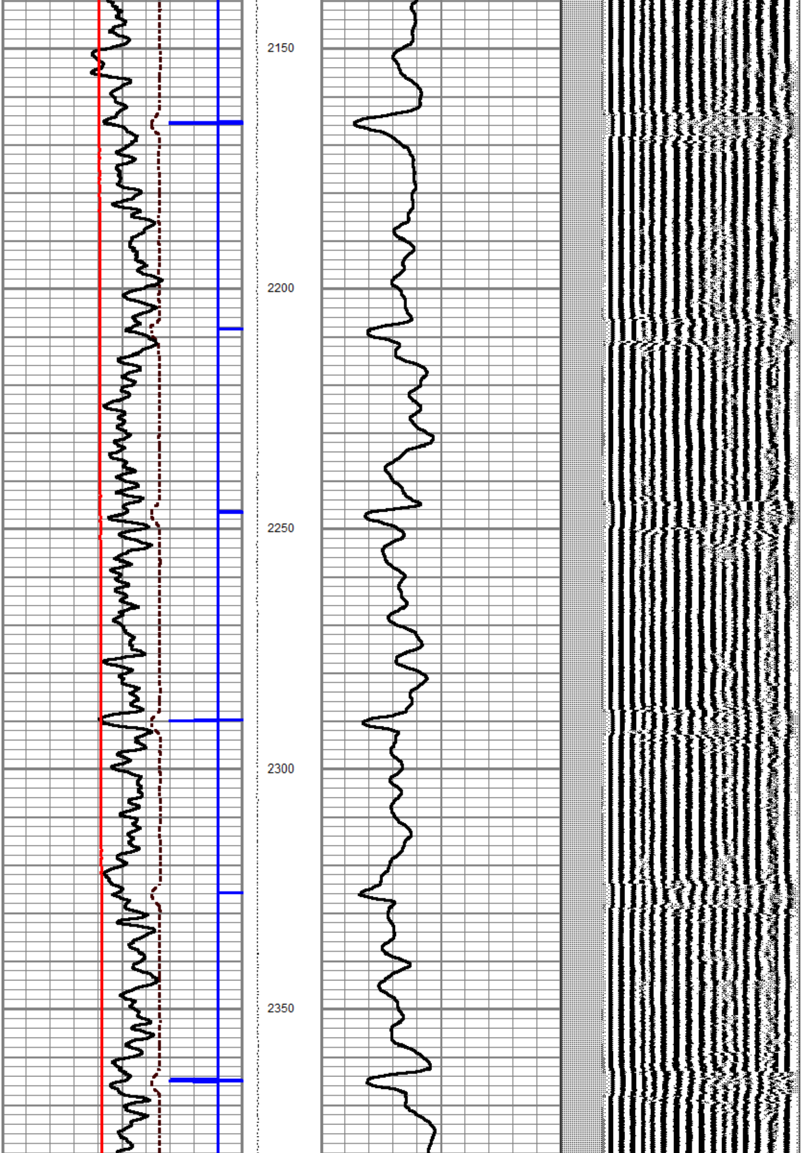


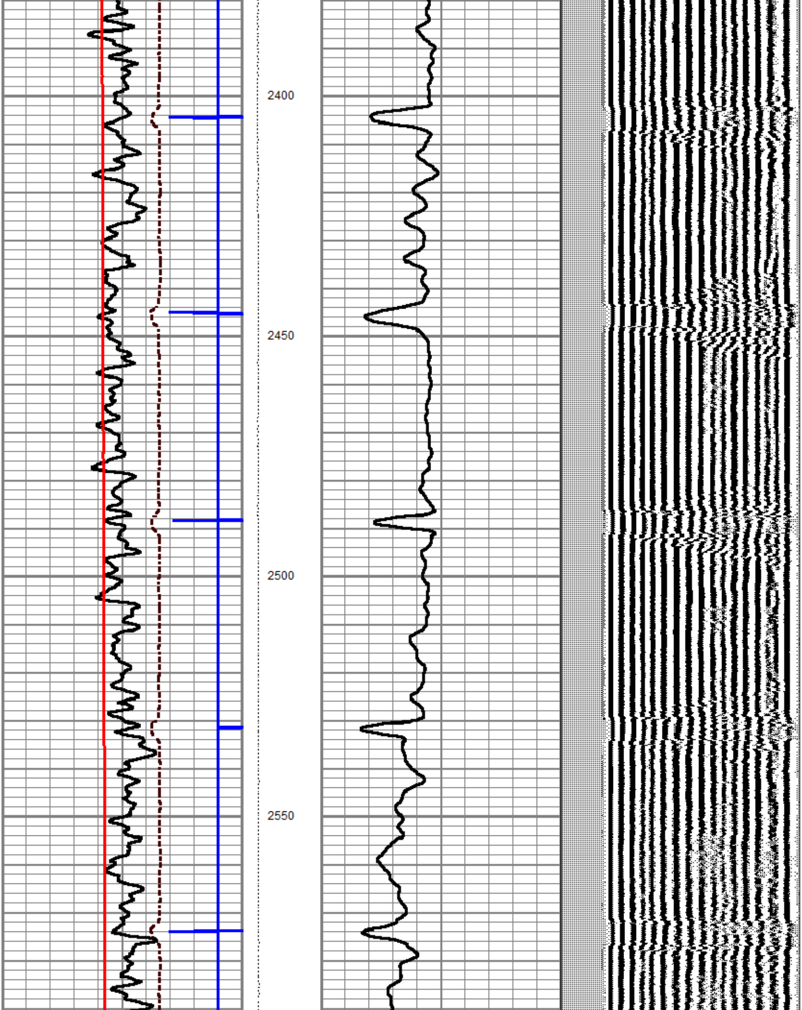


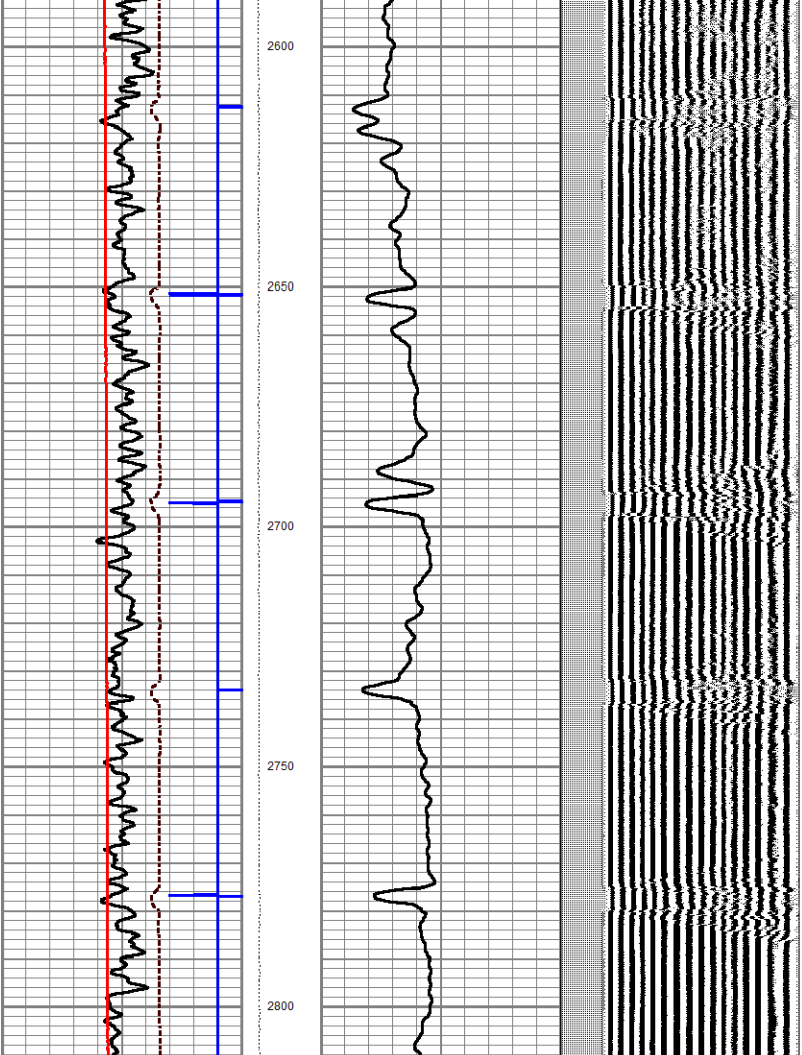


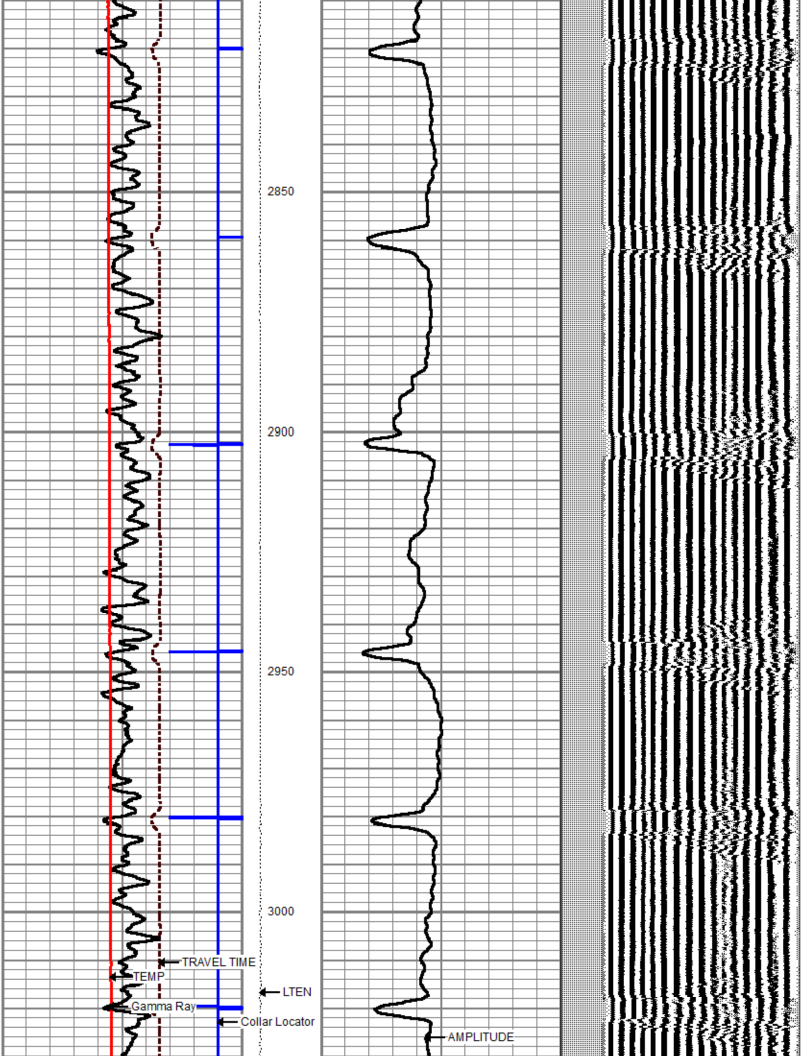


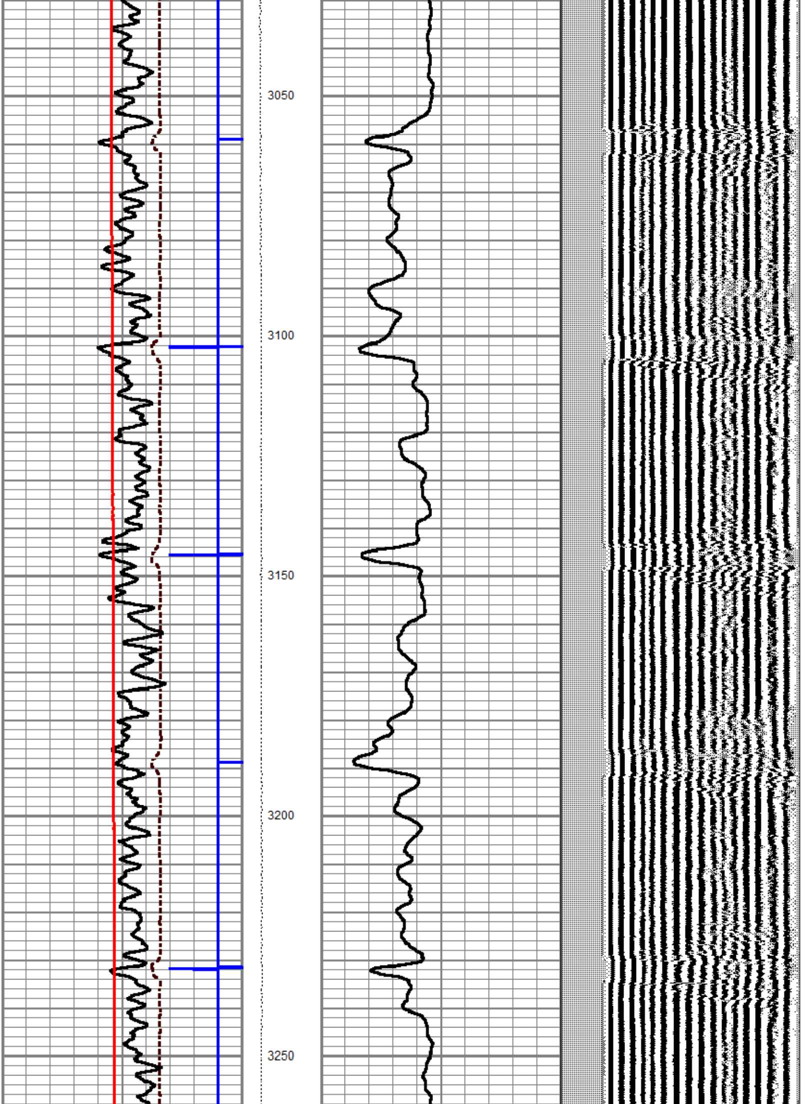


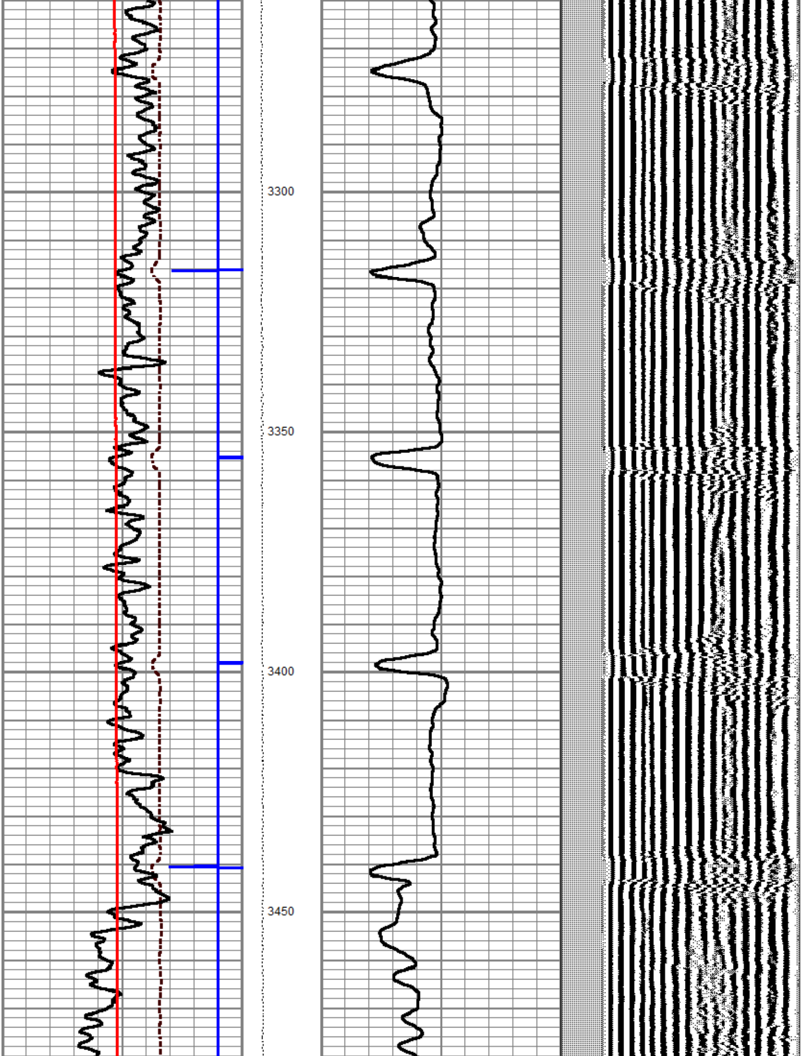


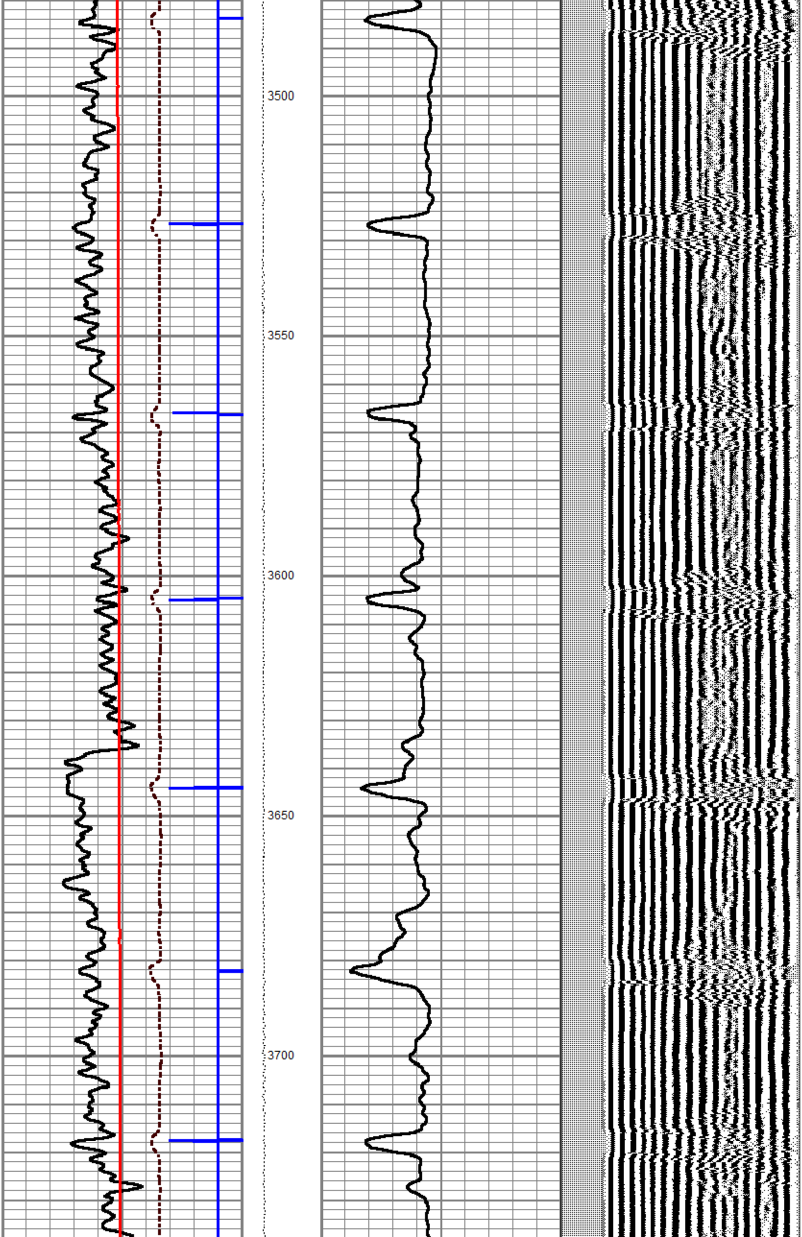


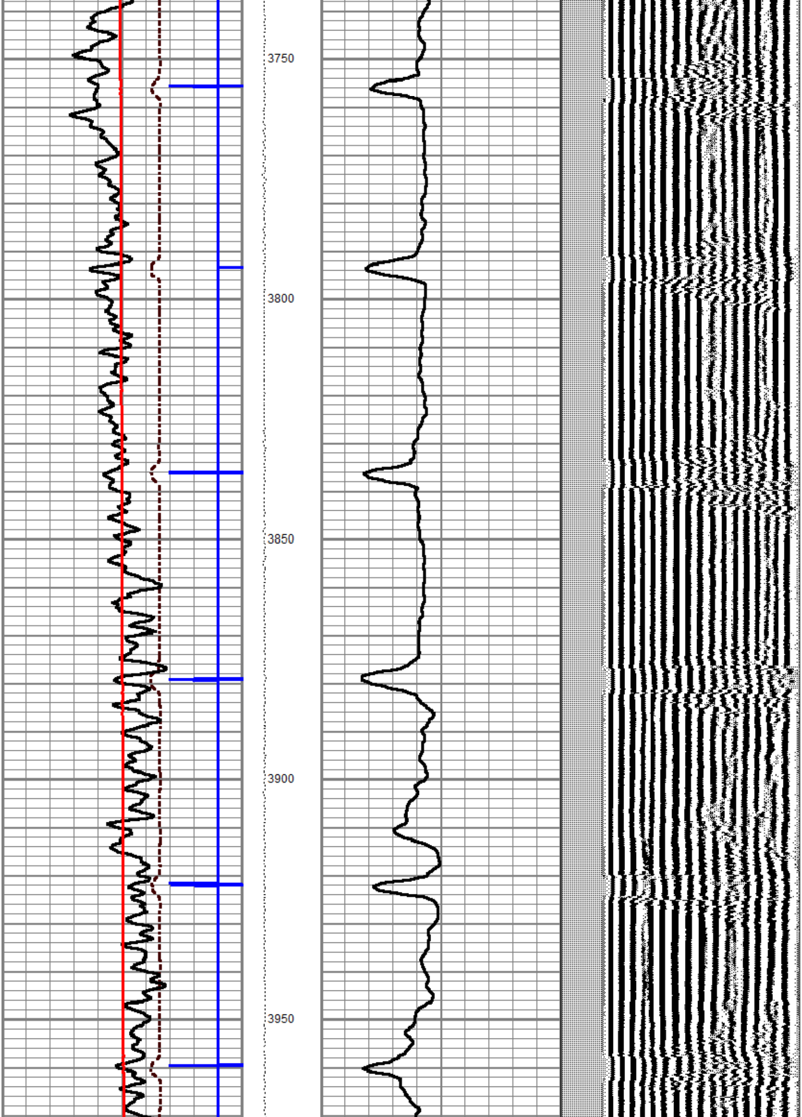


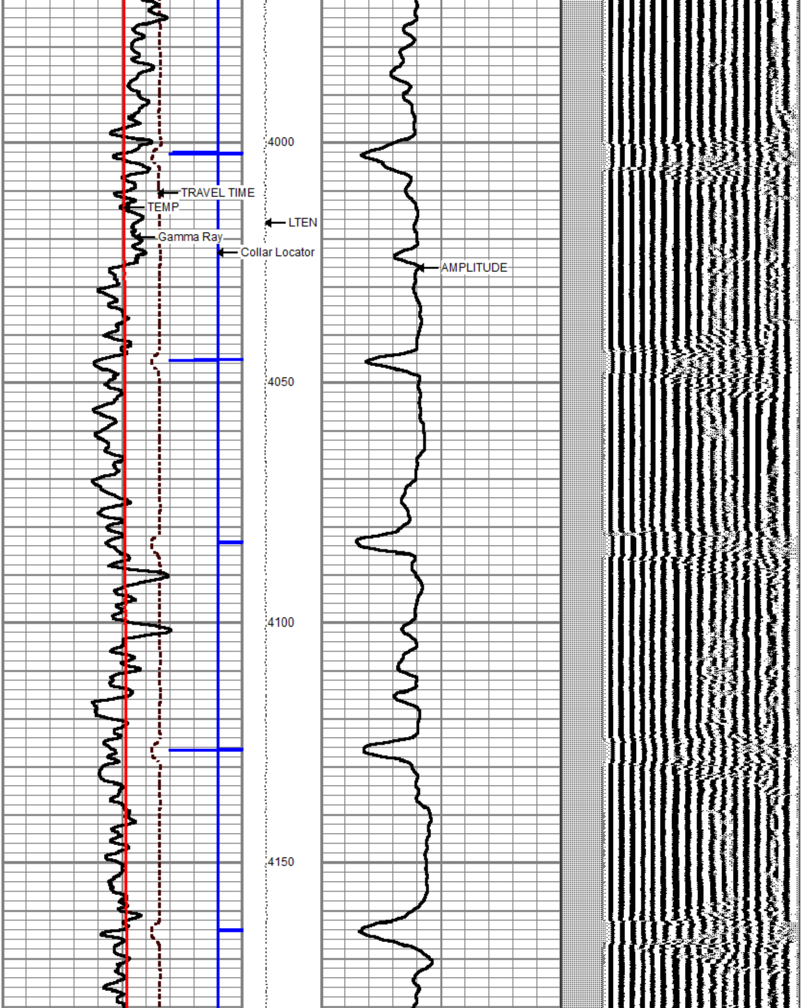


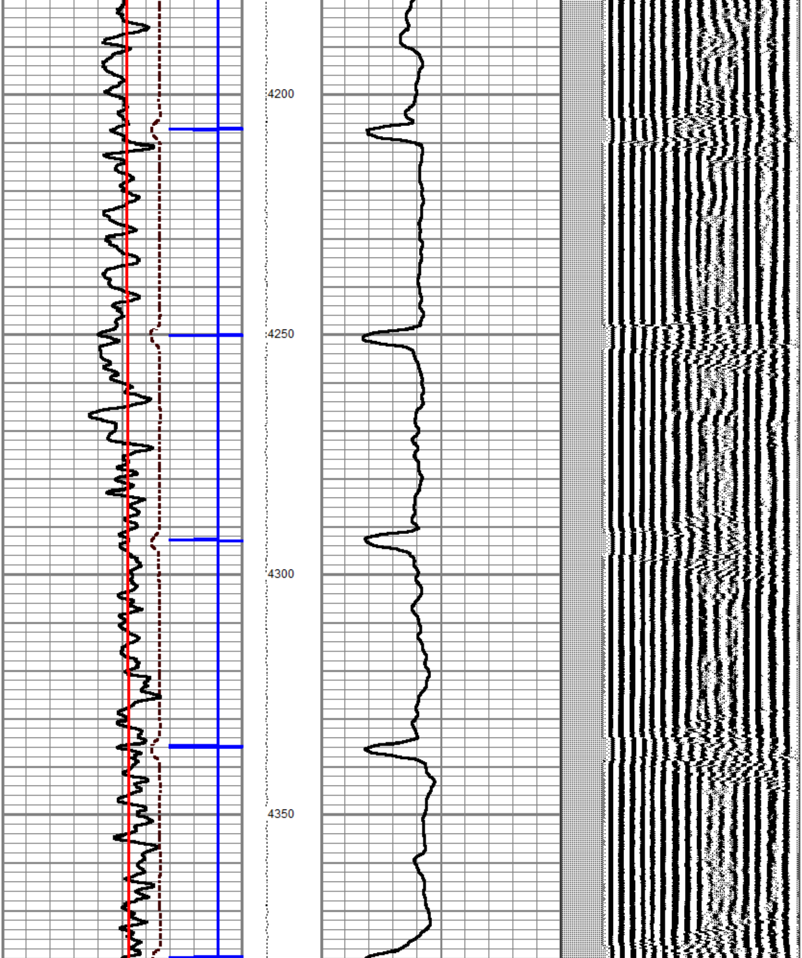


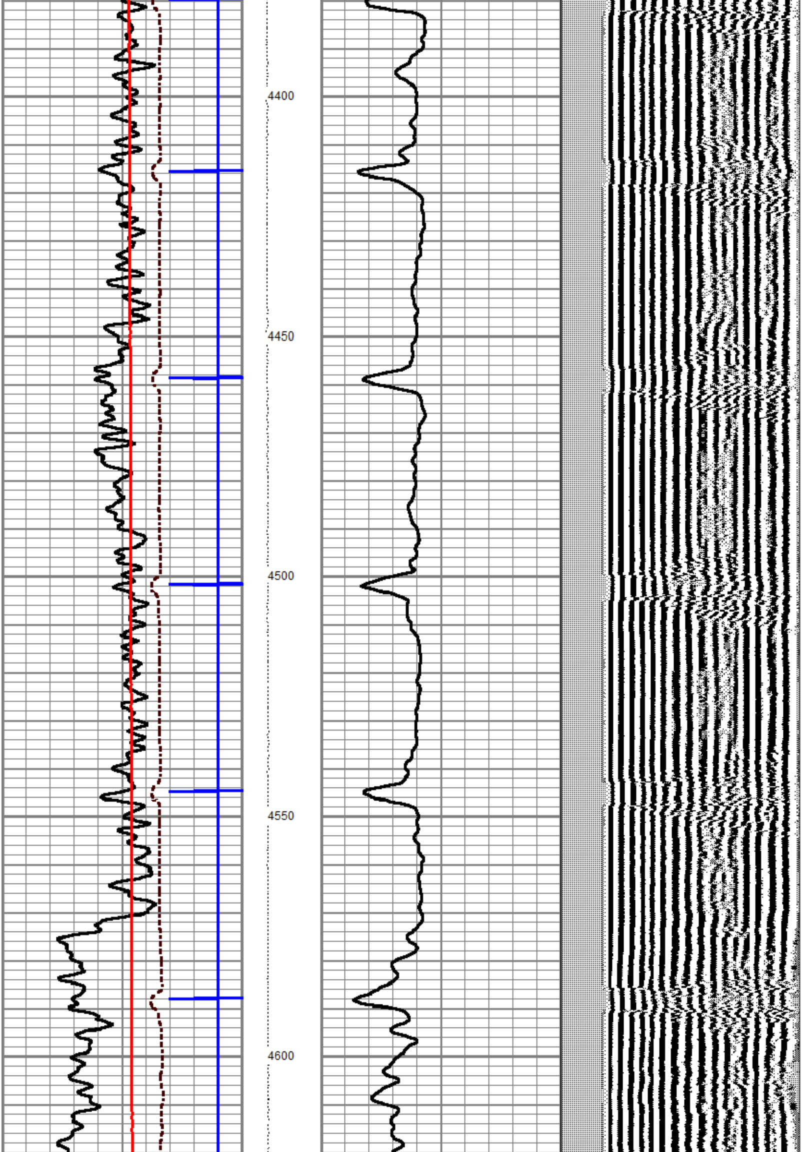


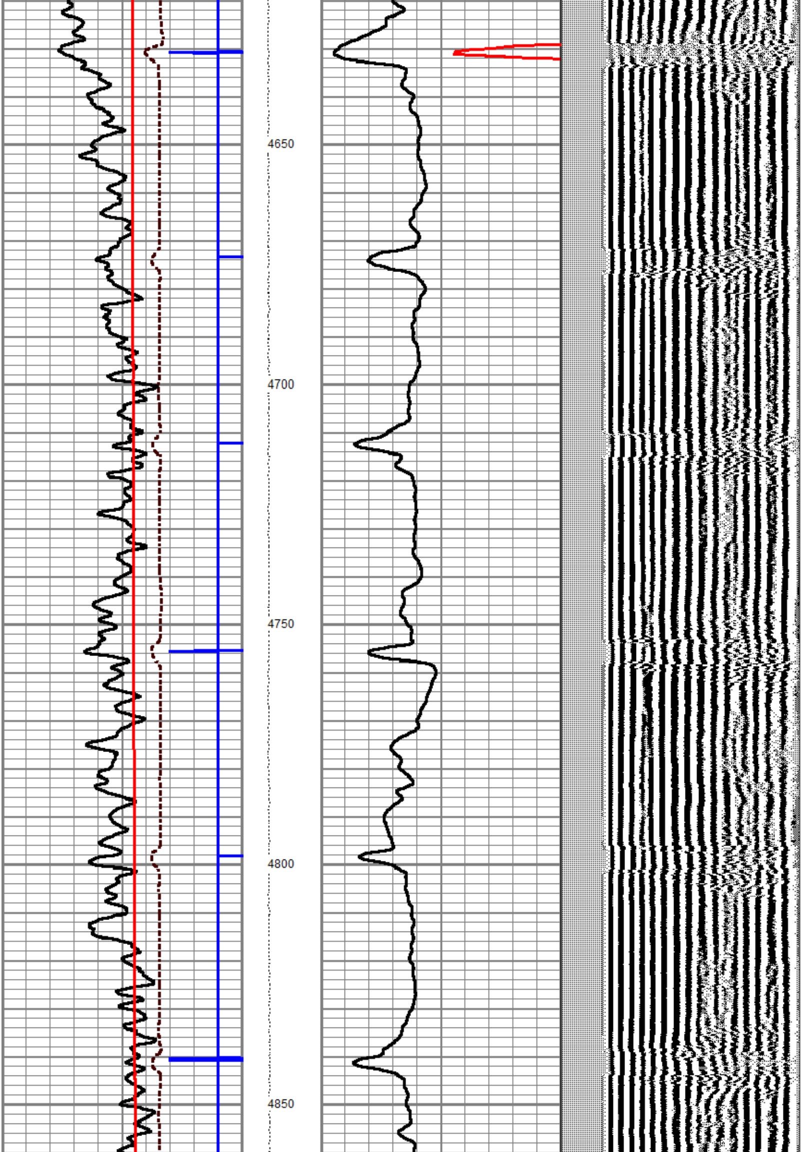


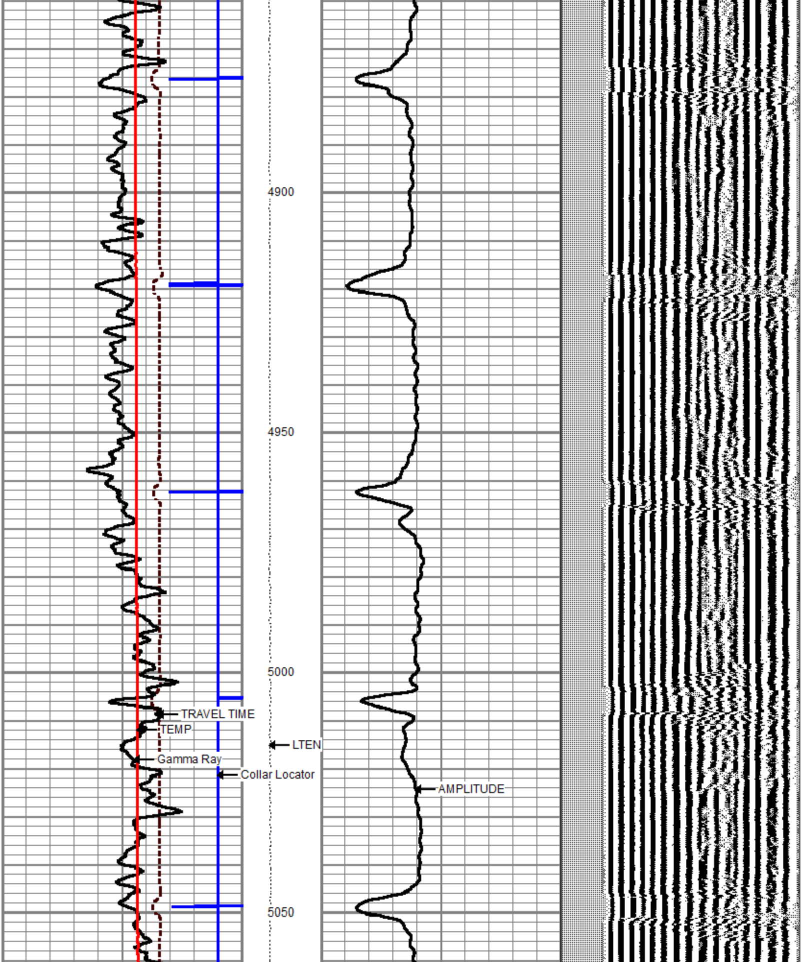


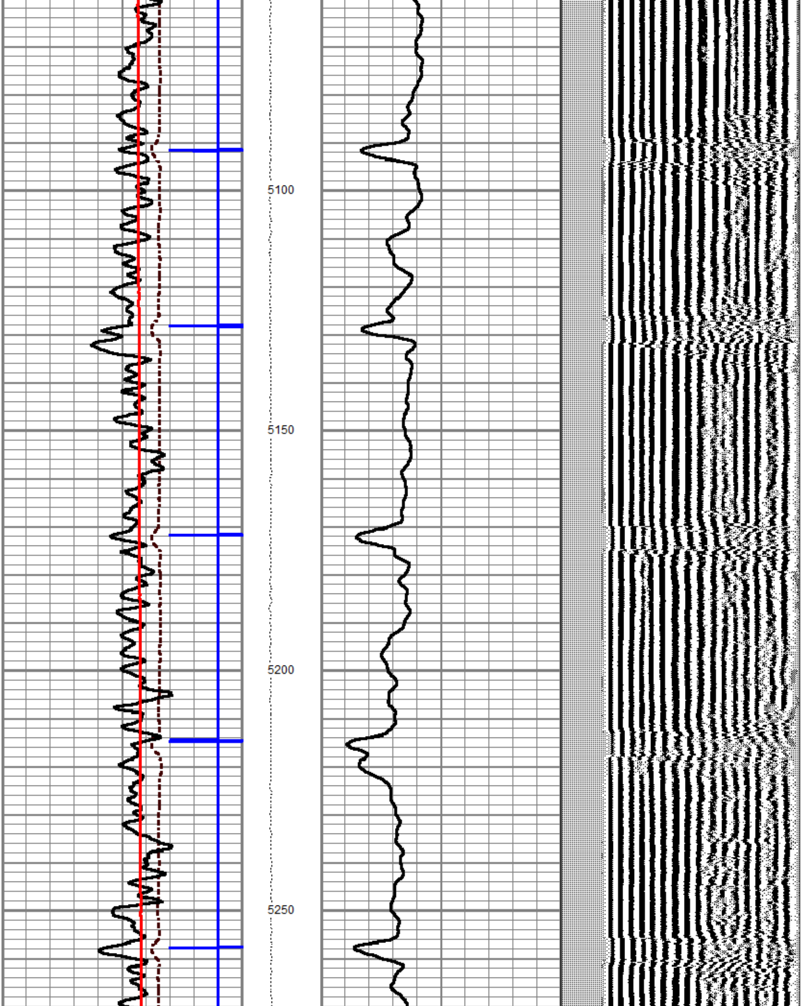


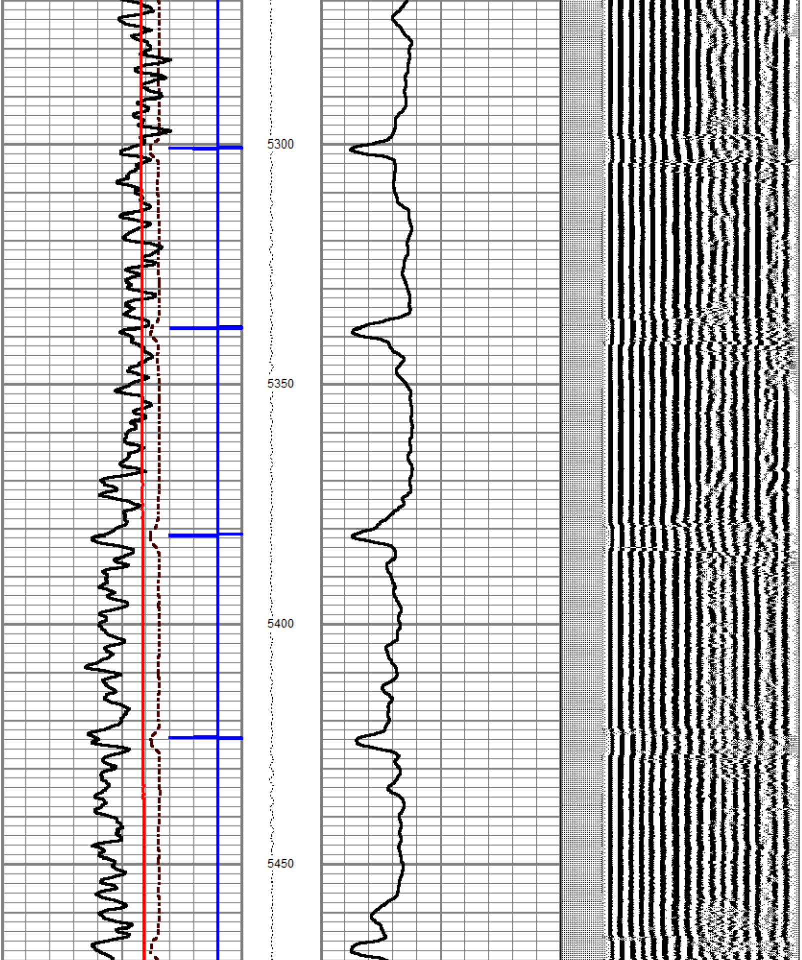


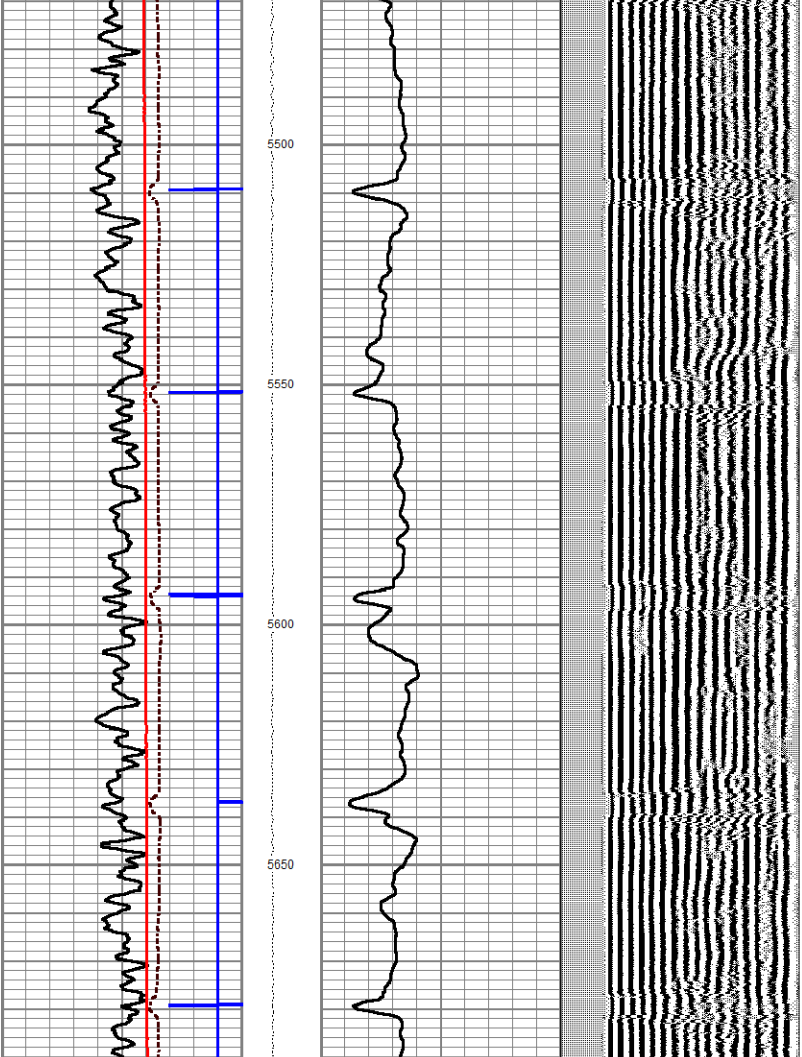


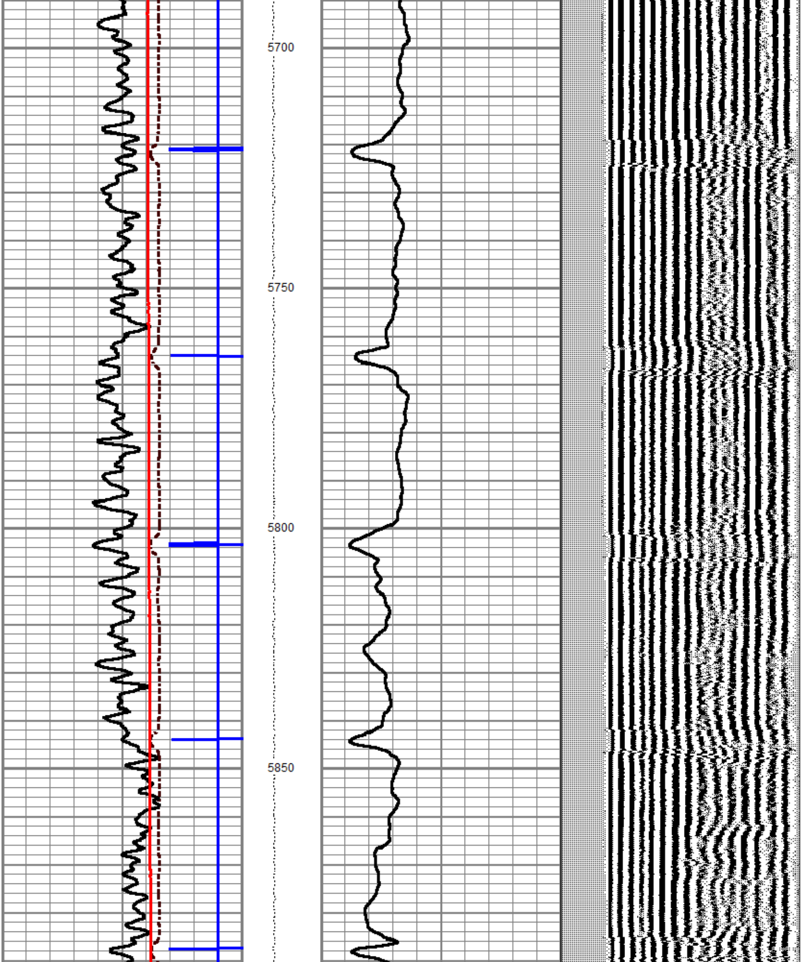


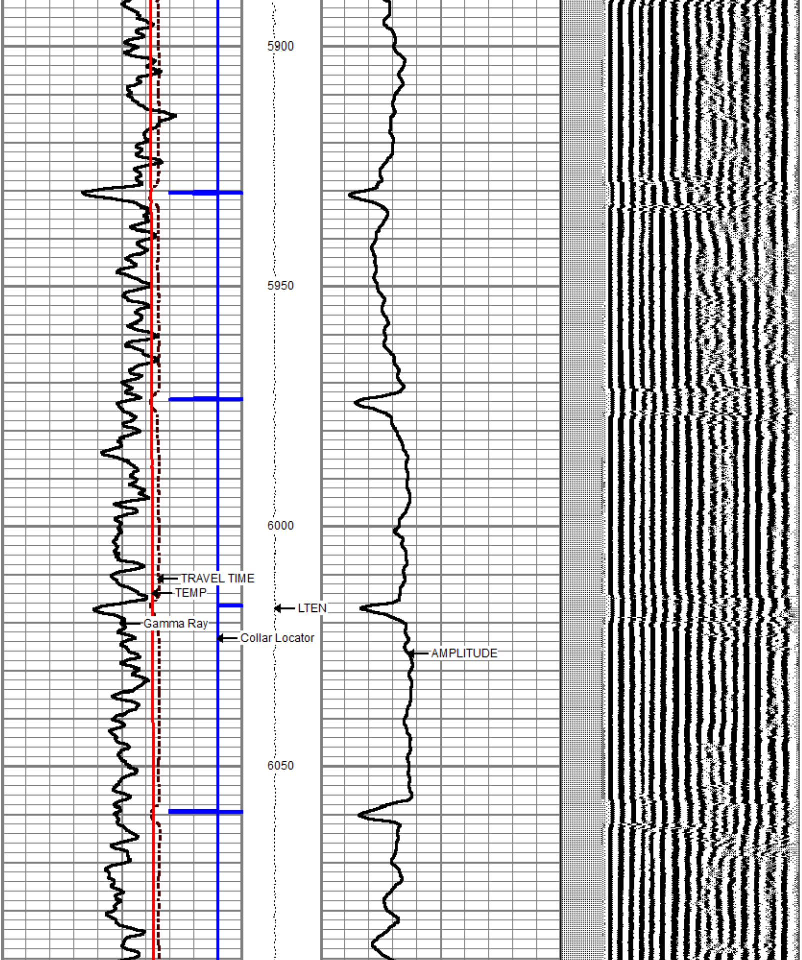


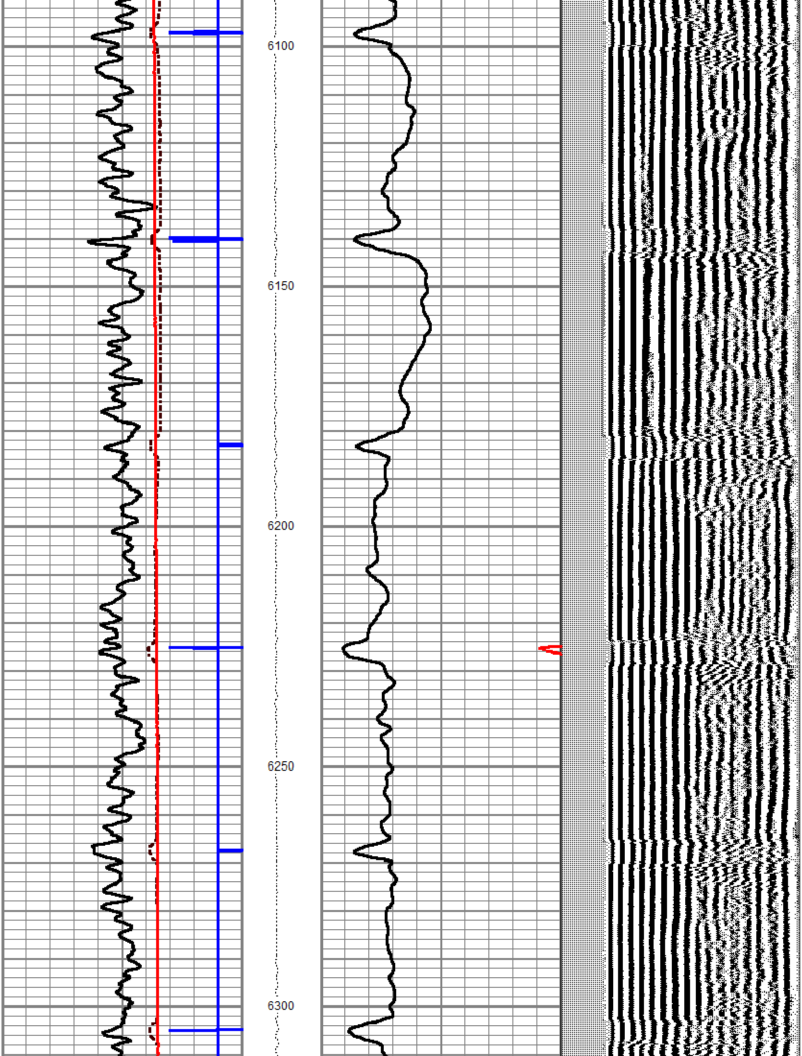


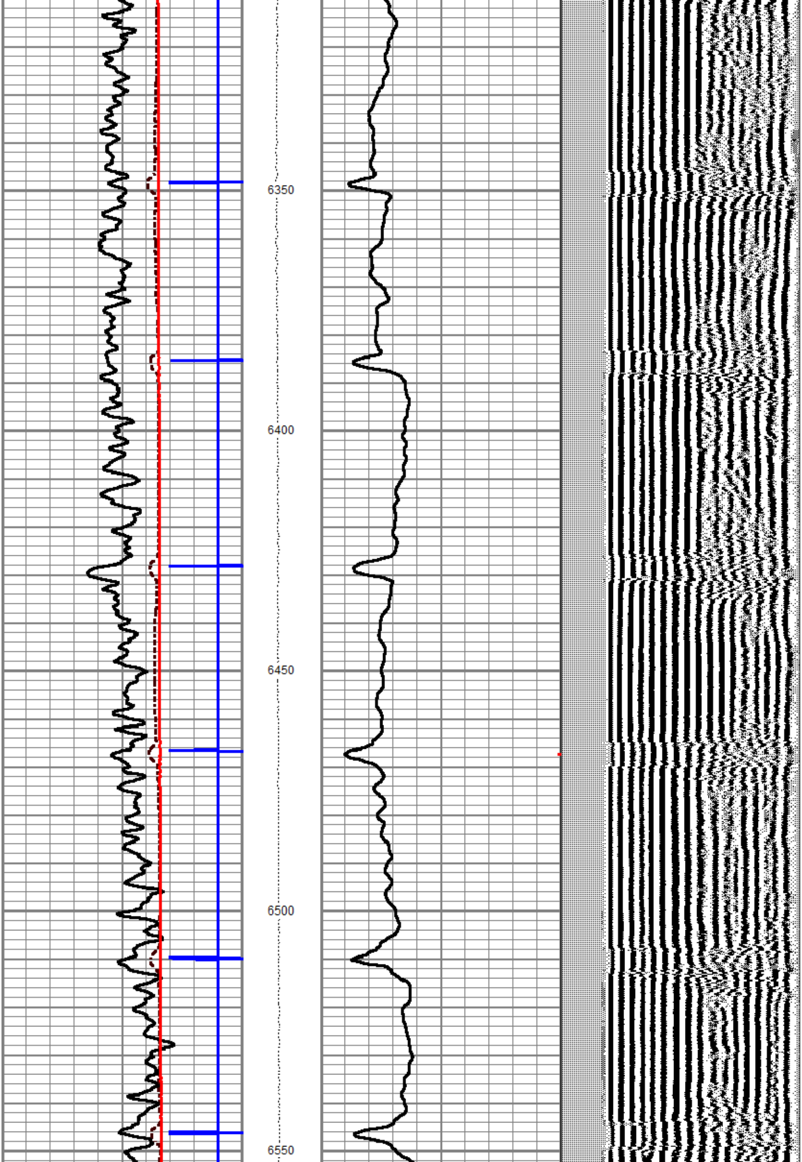


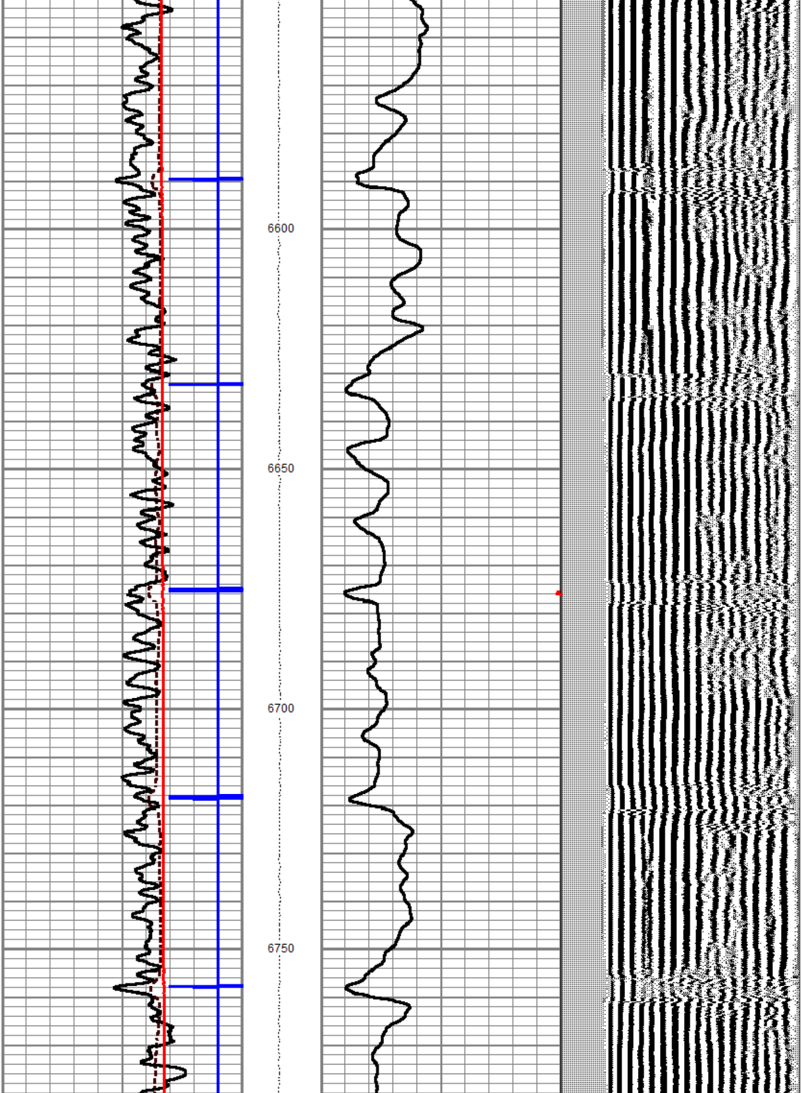


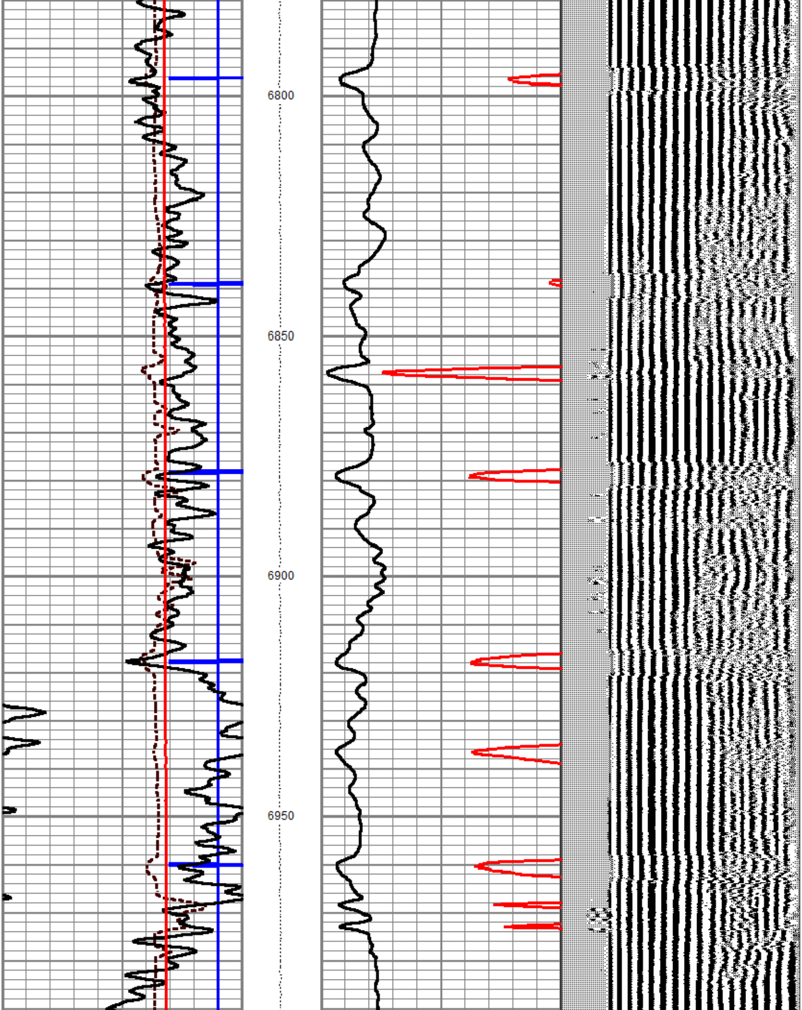


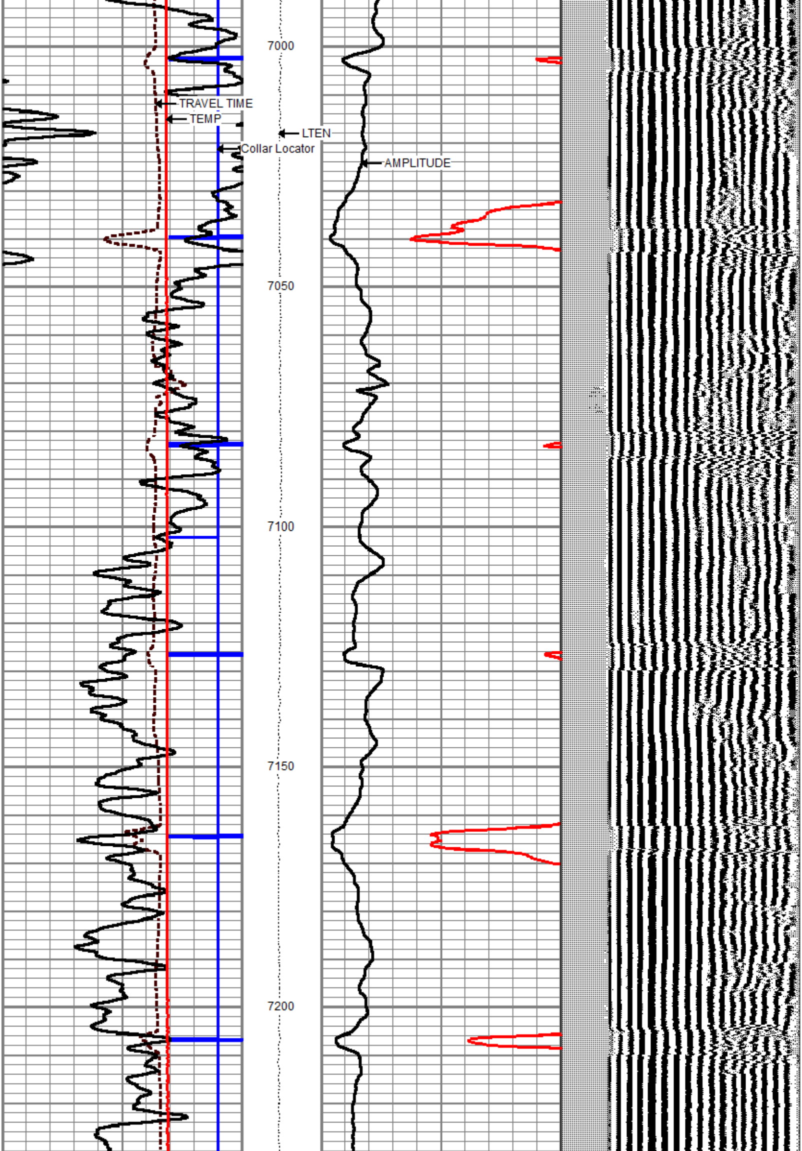


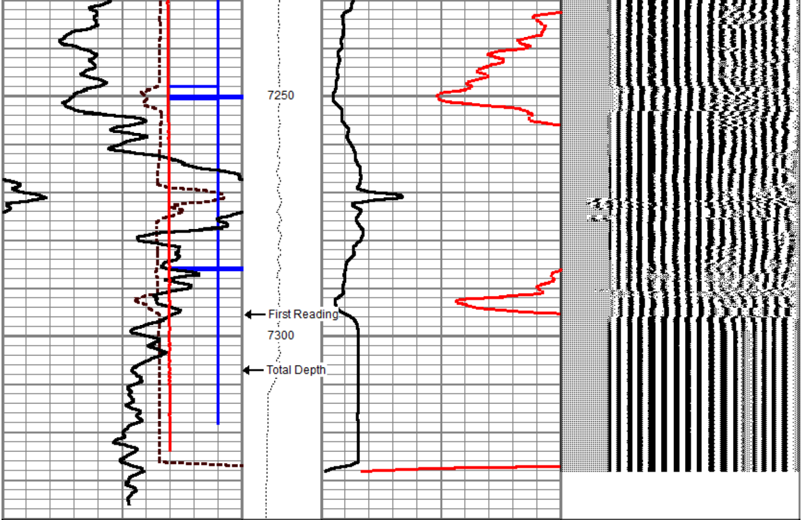












400 TRAVEL TIME (usec) 200	LTEN	0 AMP AMPLITUDE x 10 (mV) 10	200 VDL 1200
9 Collar Locator -1	0 (lb) 2000	0 AMPLITUDE (mV) 100	
0 Gamma Ray 200			
0 TEMP (degF) 300			

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CEMENT BOND LOG PRESENTATION

MAIN LOG SECTION/0
5"=100 PSI

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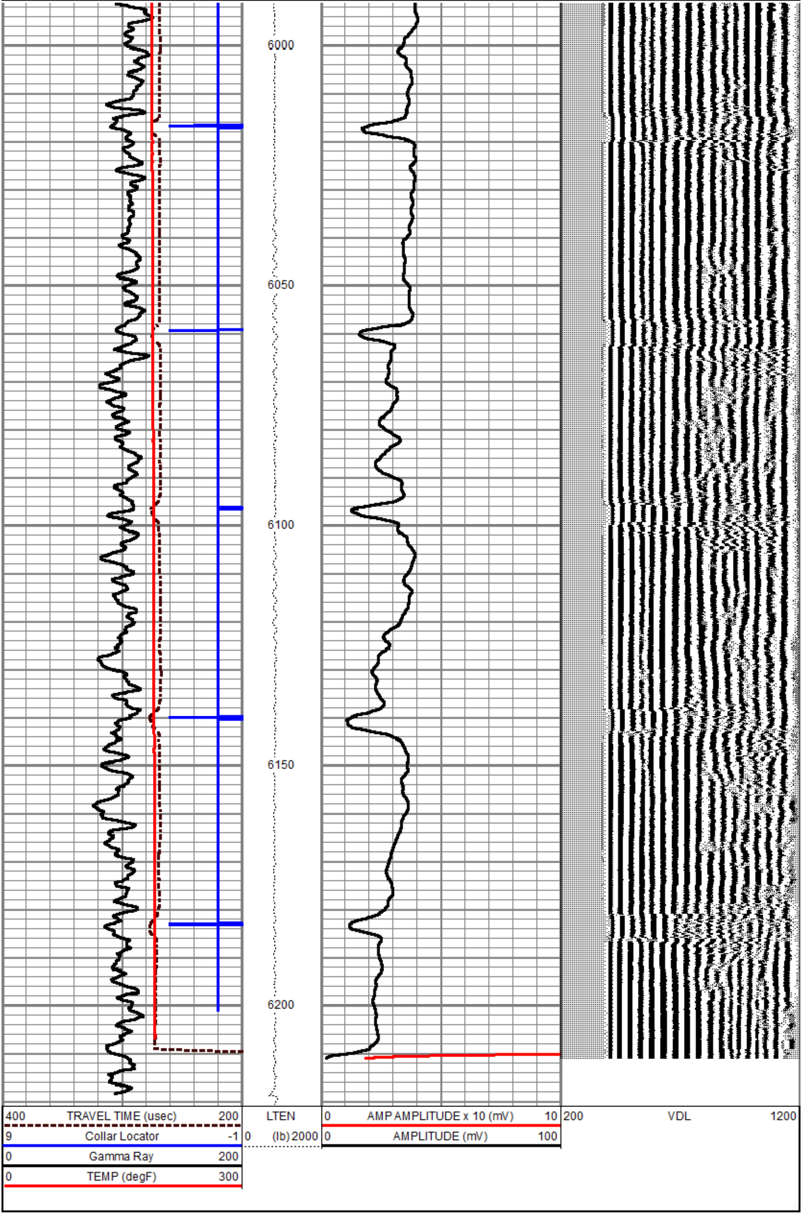
CEMENT BOND LOG PRESENTATION

REPEAT LOG SECTION/ 0 PSI
5'=100'

Database File	2014_extraction_nelson_farm_1.db
Dataset Pathname	pass2
Presentation Format	cbl_drs
Dataset Creation	Mon Sep 15 13:23:11 2014
Charted by	Depth in Feet scaled 1:240

400 TRAVEL TIME (usec) 200	LTEN	0 AMP AMPLITUDE x 10 (mV) 10	200 VDL 1200
9 Collar Locator -1	0 (lb) 2000	0 AMPLITUDE (mV) 100	
0 Gamma Ray 200			
0 TEMP (degF) 300			



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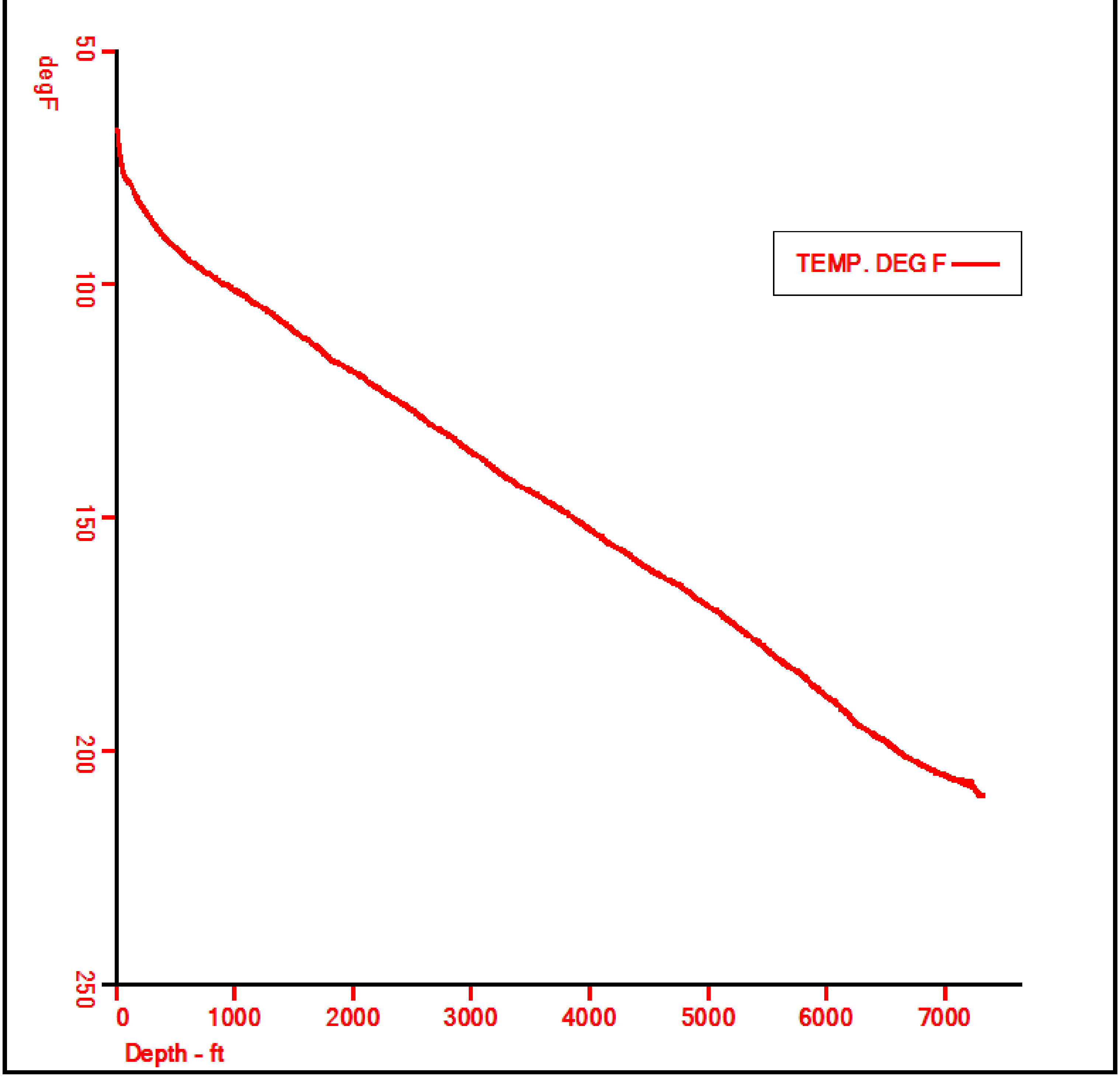
CEMENT BOND LOG PRESENTATION

REPEAT LOG SECTION/ 0 PSI
5'=100'



Log Variables

Database C:\ProgramData\Warrior\Data\2014_extraction_nelson_farm_1.db
Dataset field/well/run1/pass4

Top - 7315.00 ft

CASEWGHT lb/ft	CASEOD in
26	7

7315.00 ft - Bottom

BHTEMP_Src	PPT usec	CASEWGHT lb/ft	MAXAMPL mV	MINAMPL mV	MINATTN db/ft	SRFTEMP degF	CASEOD in	PERFS	TDEPTH ft
1	0	13.5	0	1	0.8	0	4.5	0	0

BOTTEMP degF	BOREID in
100	7.875

Calibration Report

Database File	2014_extraction_nelson_farm_1.db
Dataset Pathname	pass4
Dataset Creation	Mon Sep 15 13:42:57 2014

Gamma Ray Calibration Report

Serial Number:	234GR4-IPCD9-01	
Tool Model:	GR-Tek-Co	
Performed:	Thu Mar 13 23:43:39 2014	
Calibrator Value:	120.0	
Background Reading:	104.4	cps
Calibrator Reading:	258.9	cps
Sensitivity:	0.8769	/cps

Segmented Cement Bond Log Calibration Report

Serial Number:	234RIBT-IT4B1-01 QEP	
Tool Model:	275 H/T RIB with I/E Temp	
Calibration Casing Diameter:	7.000	in
Calibration Depth:	1077.108	ft

Master Calibration, performed Sun Sep 14 08:32:18 2014:

	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3'	0.000	1.021	1.000	62.165	59.883	1.000
CAL	0.000	0.807				
5'	0.000	1.478	1.000	62.165	41.376	1.000
SUM						
S1	0.000	0.963	0.000	100.000	103.836	0.000
S2	0.000	1.056	0.000	100.000	94.658	0.000
S3	0.000	0.911	0.000	100.000	109.793	0.000
S4	0.000	0.800	0.000	100.000	124.987	0.000
S5	0.000	0.696	0.000	100.000	143.772	0.000
S6	0.000	0.688	0.000	100.000	145.455	0.000
S7	0.000	0.759	0.000	100.000	131.838	0.000
S8	0.000	0.884	0.000	100.000	113.129	0.000

Internal Reference Calibration, performed Wed Dec 31 17:00:00 1969:

	Raw (v)		Calibrated (v)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
CAL	0.000	0.000	0.000	0.807	1.000	0.000

Air Zero Calibration, performed Wed Dec 31 17:00:00 1969:

	Raw (v)	Calibrated (v)	Results
	Zero	Zero	Offset
3'	0.000	0.000	0.000
5'	0.000	0.000	0.000
SUM			
S1	0.000	0.000	0.000
S2	0.000	0.000	0.000
S3	0.000	0.000	0.000
S4	0.000	0.000	0.000
S5	0.000	0.000	0.000
S6	0.000	0.000	0.000
S7	0.000	0.000	0.000
S8	0.000	0.000	0.000

Temperature Calibration Report

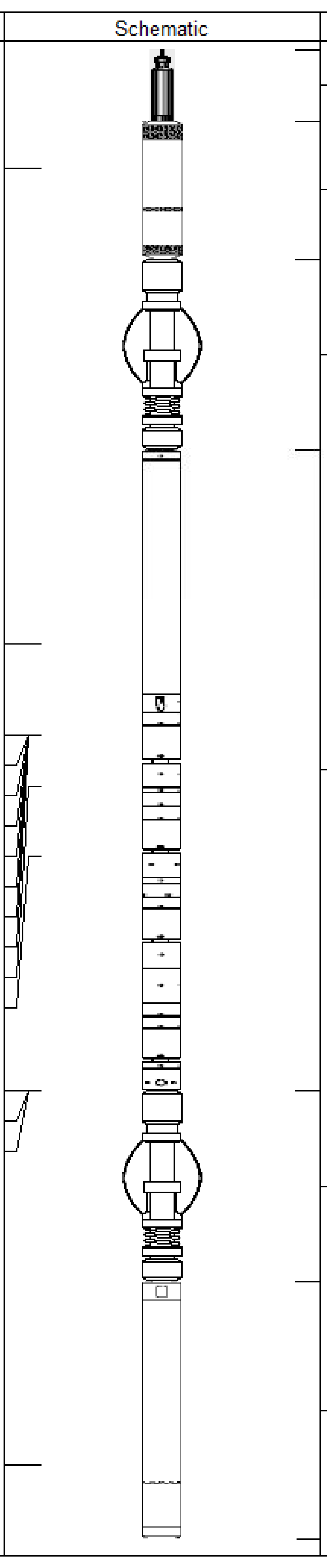
Serial Number:	234RIBT-IT4B1-01 QEP	
Tool Model:	275 H/T RIB with I/E Temp	
Performed:	Mon Apr 28 08:18:45 2014	

	Reference		Reading	
Low Reference:	0.00	degF	0.00	usec
High Reference:	1.00	degF	1.00	usec

Gain:	0.33
Offset:	0.00
Delta Spacing	1

Sensor	Offset (ft)
CCL	19.56
TEMP	12.77
WVFS8	11.48
WVFS7	11.48
WVFS6	11.48
WVFS5	11.48
WVFS4	11.48
WVFS3	11.48
WVFS2	11.48
WVFS1	11.48
WVF3FT	10.73
WVF5FT	9.73
WVFSYNC	6.40
WVFTEMP	6.40
WVFCAL	6.40
GR	1.04

Schematic



Description	Length (ft)	O.D. (in)	Weight (lb)
TitanConeType2 Cable Head 1 7/16 Cone Type II	1.03	1.44	3.60
CCL-275tekco (234CCL-1PSN7-002) 2 3/4" 450 Deg. "F" TekCo CCL Earth Mag	1.96	2.75	20.00
2.75 2 3/4" Tekco Adjustable Centralizer	2.73	2.75	25.00
275 H/T RIB with I/E Temp (234RIBT-IT4B1-01 Tekco 2.75" 450 Deg. F RIB with I/E Temp	9.13)	2.75	102.00
2.75 2 3/4" Tekco Adjustable Centralizer	2.73	2.75	25.00
GR-GR-Tek-Co (234GR4-IPCD9-01) Tekco 2 3/4" 400 Deg. F Logging Gamma Ray	3.67	2.75	40.00

Dataset:	2014_extraction_nelson_farm_1.db: field/well/run1/pass4
Total length:	21.25 ft
Total weight:	215.60 lb
O.D.:	2.75 in

gyrodata

Company	EXTRACTION OIL & GAS
Well	NELSON FARM #1
Field	WATTENBERG
County	WELED
State	CO
Country	USA