Company EXTRACTION O & G
Well THORNTON #11
Field WATTENBERG
County WELD State CO

gyrodata

CEMENT BOND LOG

Company **EXTRACTION O & G**
Well **THORNTON #11**
Field **WATTENBERG**
County **WELD** **State** **CO**

API No.: 05-123-40256-00 Serv #: 1067
Location: **1185' FSL & 331' FWL**
LAT. 40.585410
LONG. -104.810372

Sec: 8 **Twp: 7N** **Rge: 66W**

Other Services
TEMPERATURE
CCL

Permanent Datum	**GROUND LEVEL**	Elevation **5039'**	Elevation
Log Measured From	**KB** , **24'** Ft. above perm. datum		K.B. 5063' D.F. 5062' G.L. 5039'
Drilling Measured From	**KB**		

Date @ Time Logged	1-MAR-15 @ 0900 HRS	Type Fluid in Hole	FRESH WATER
Run No.	ONE	Density of Fluid	8.4 LB/GL
Depth - Driller	17279'	Fluid Level	FULL
Depth - Logger	6700'	Cement Top Est. Logged	96'
Bottom - Logged Interval	6698'	Equipment / Location	GD-114 / CASPER WY
Top - Log Interval	SURFACE	Recorded by	M. FENN
Max. Recorded Temp.	208° F	Witnessed by	L. SIEGEL

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	839'
				7"	26#	SURFACE	7210'
				4 1/2"	13.6#	6732'	17279'

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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 dated3/1/15
Cement top was estimated at 96'
Max temp on bottom was 208° F
Well logged under 900 PSI
Wireline Depth was to 6700' per company man request.
Gamma Survey to surface per procedure.

Your crew today was J.Baker, M.Stewart, G Graham.

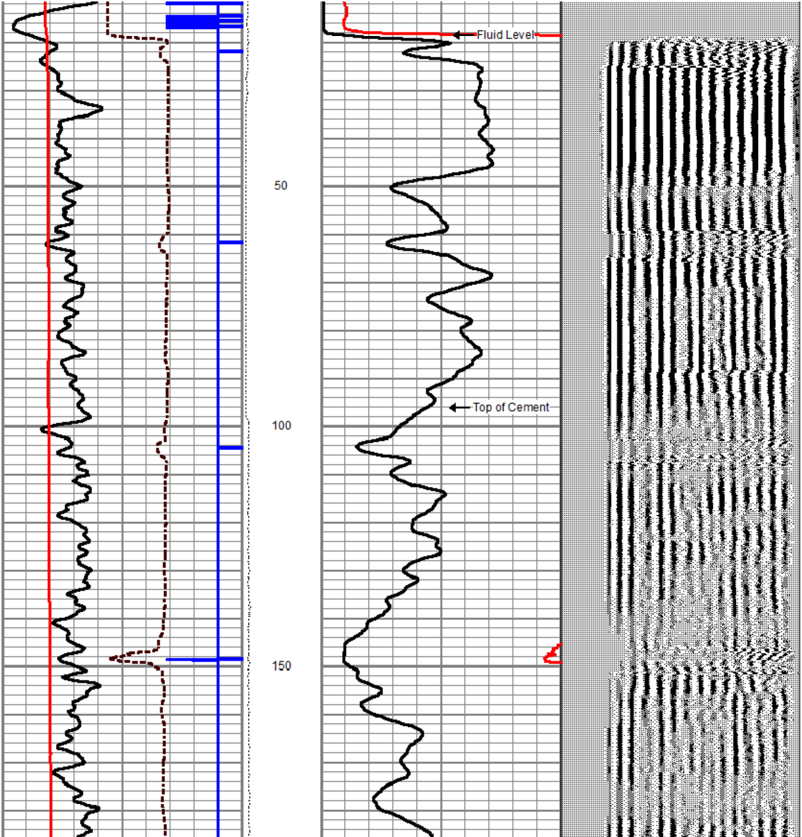
Thank you for using Gyrodata Logging Services, Casper, WY gyrodata

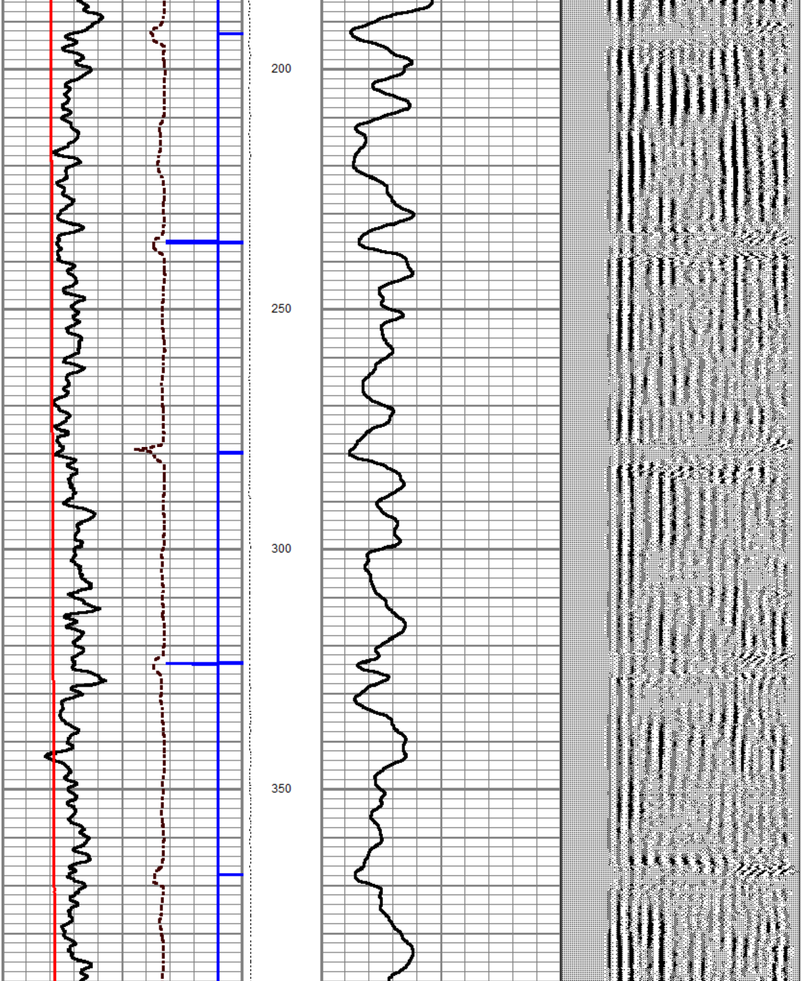
CEMENT BOND LOG PRESENTATOPN

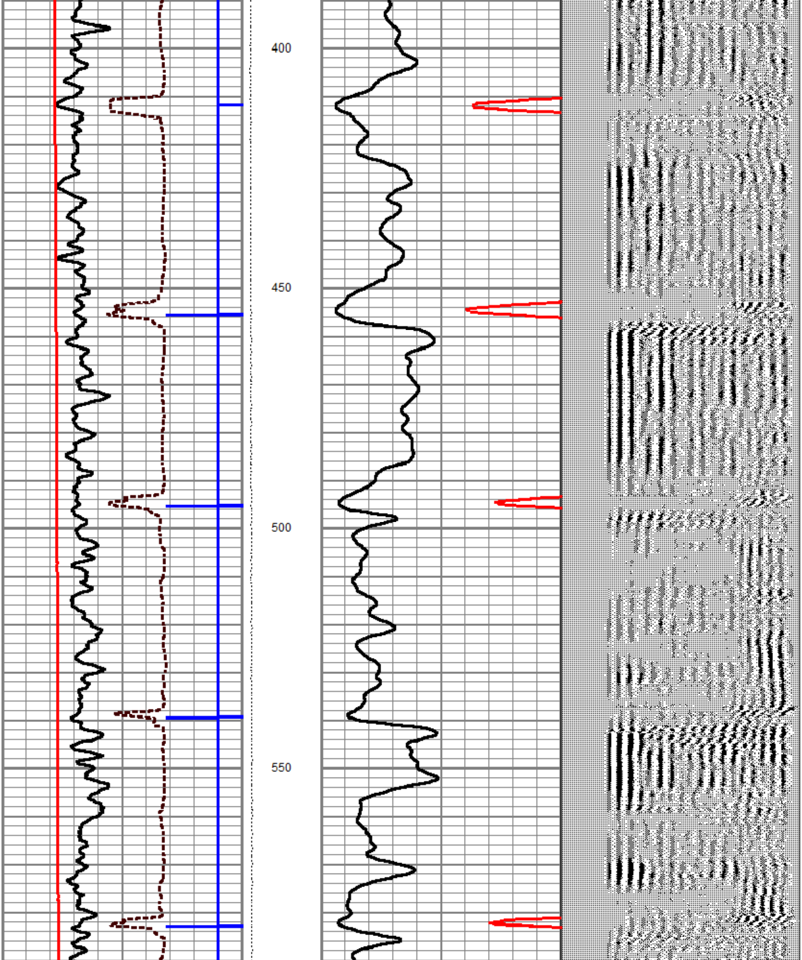
MAIN LOG SECTION / 900 PSI
5"= 100'

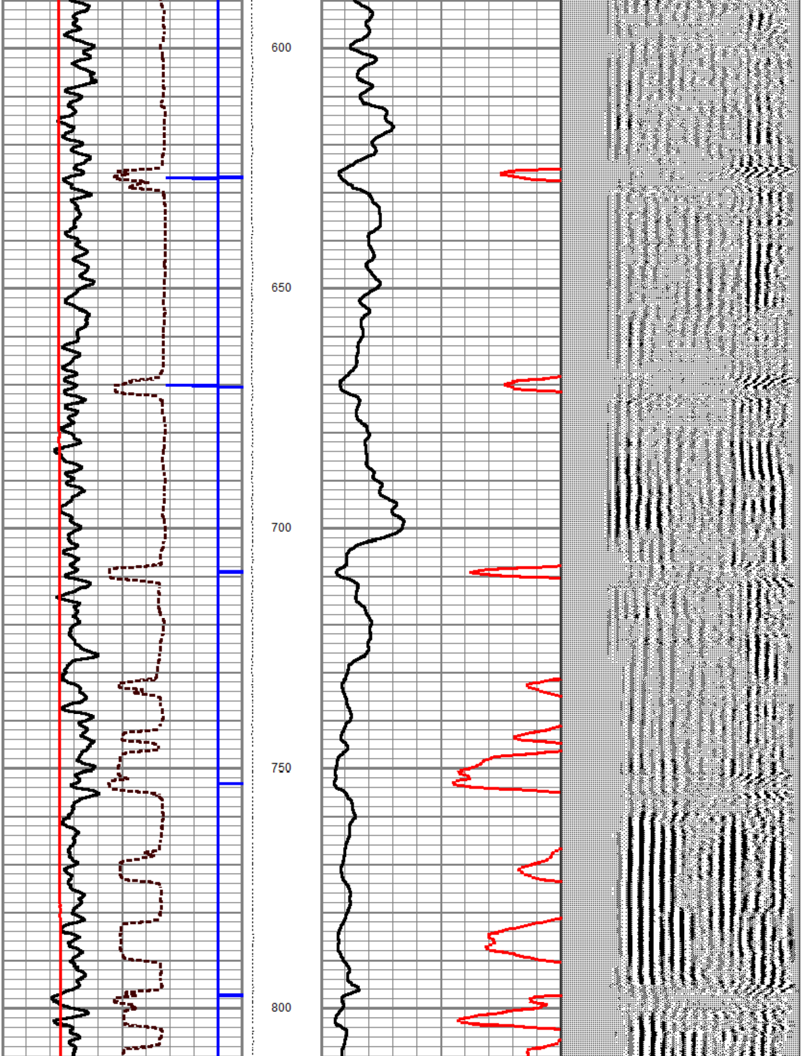
Database File	2015_extraction_thornton_11.db
Dataset Pathname	pass3.1
Presentation Format	cbl_drs
Dataset Creation	Sun Mar 01 12:19:24 2015
Charted by	Depth in Feet scaled 1:240

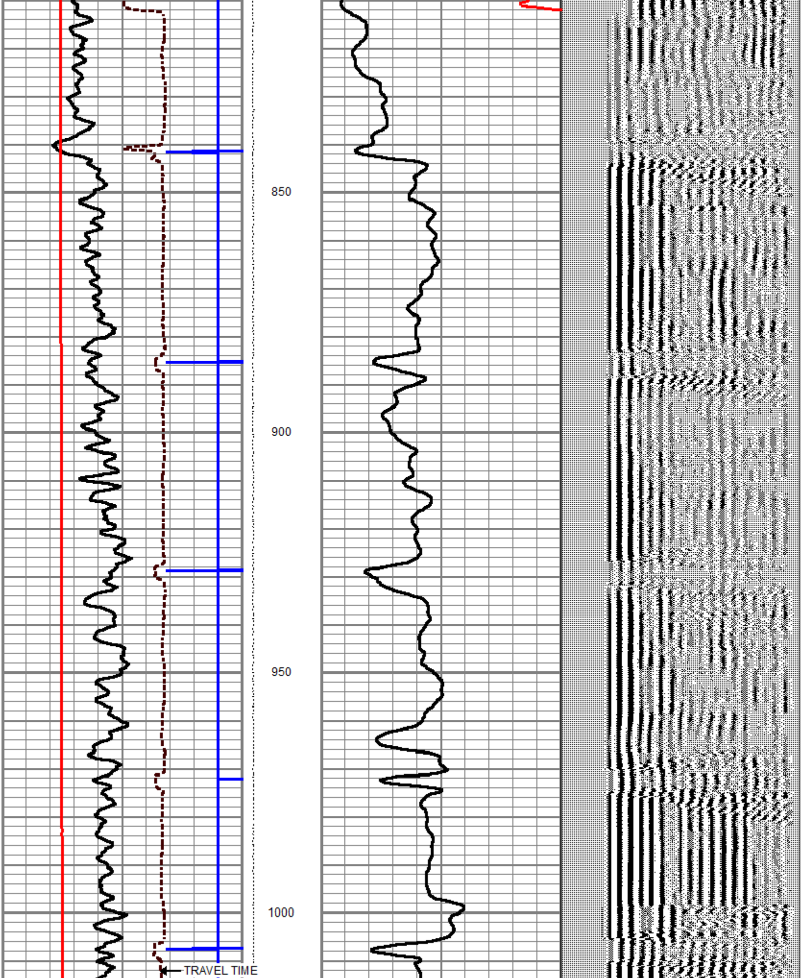
400 TRAVEL TIME (usec) 200	LTEN	0 AMP AMPLITUDE x 10 (mV) 10	200 VDL 1200
9 *Collar Locator* -1	0 (lb) 2000	0 AMPLITUDE (mV) 100	
0 Gamma Ray 200			
0 TEMP (degF) 300			

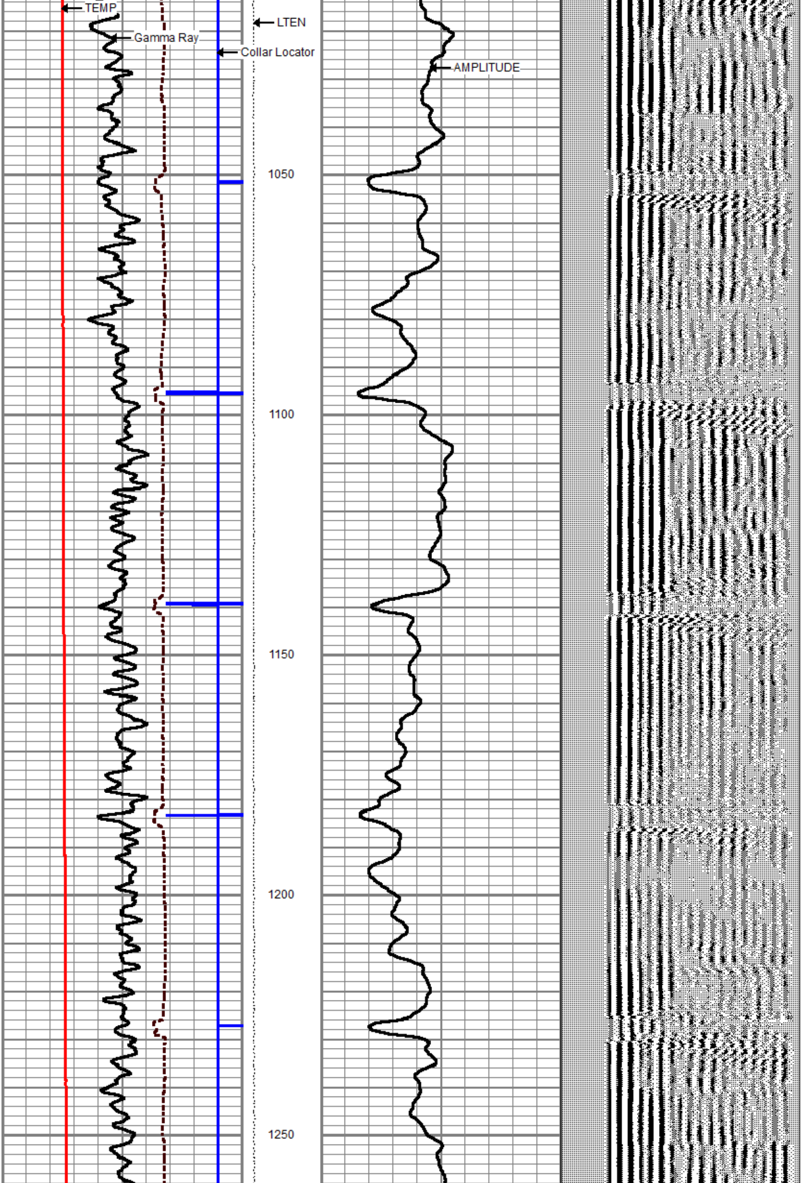


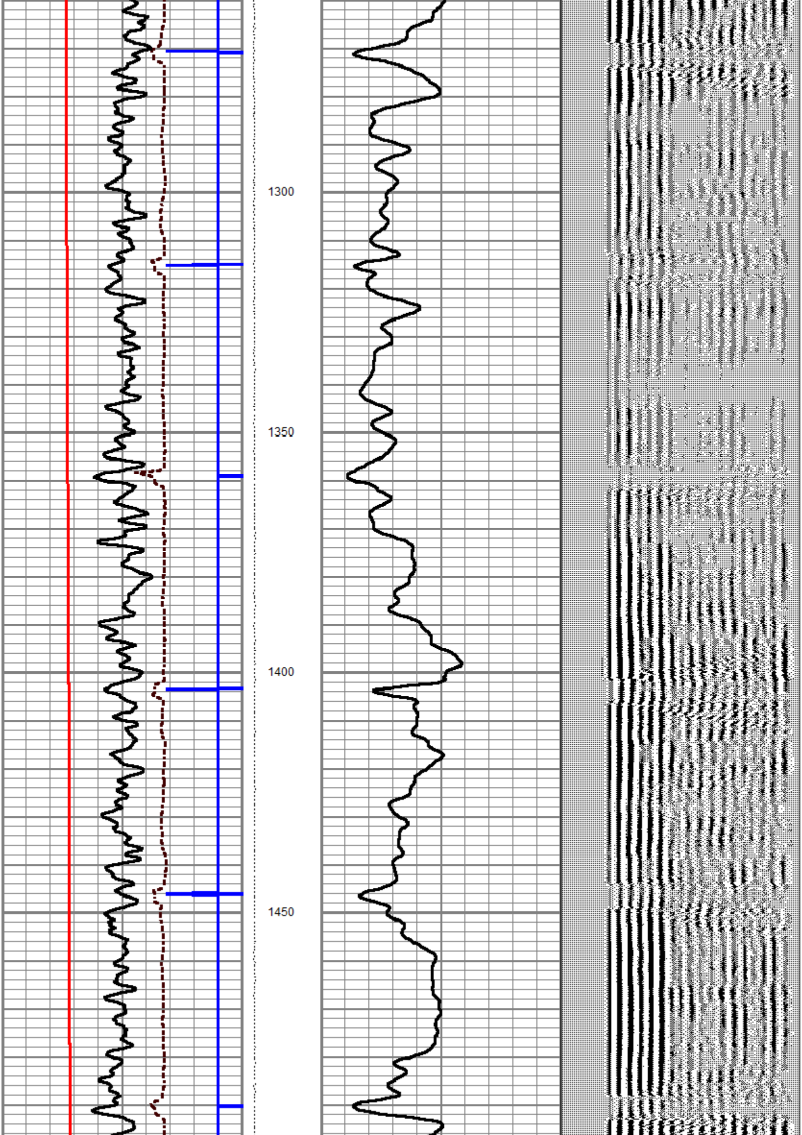


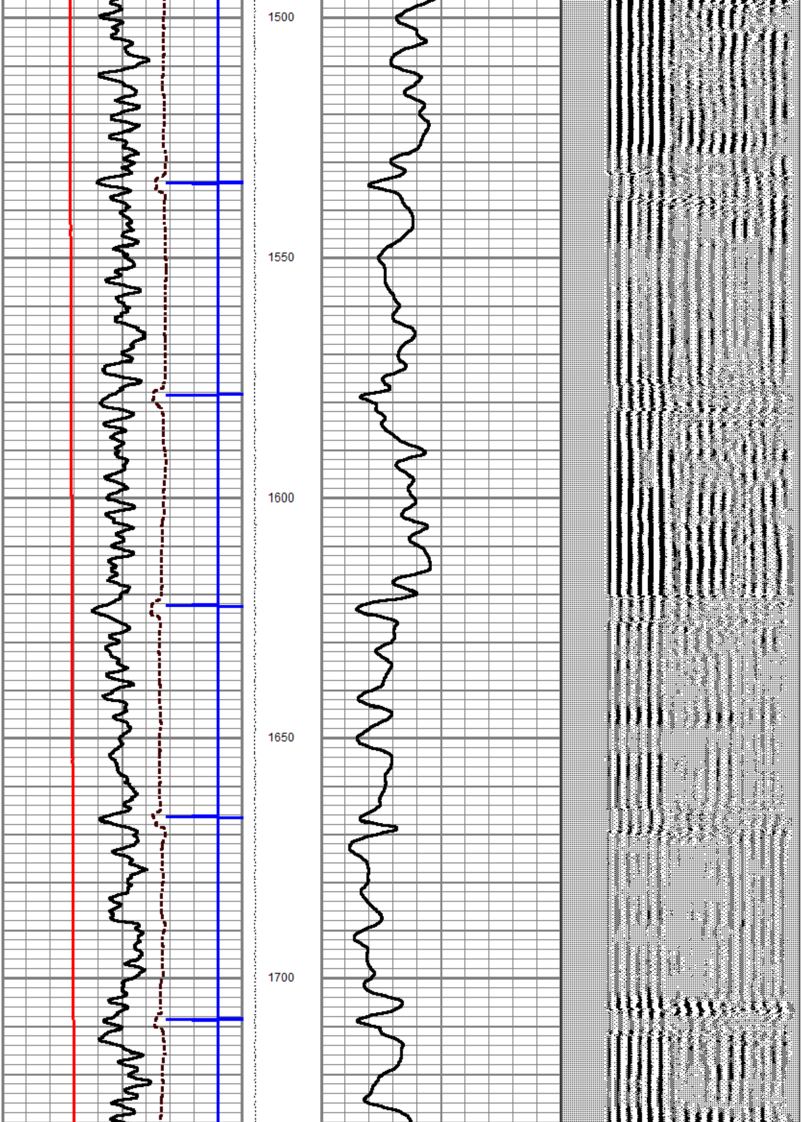


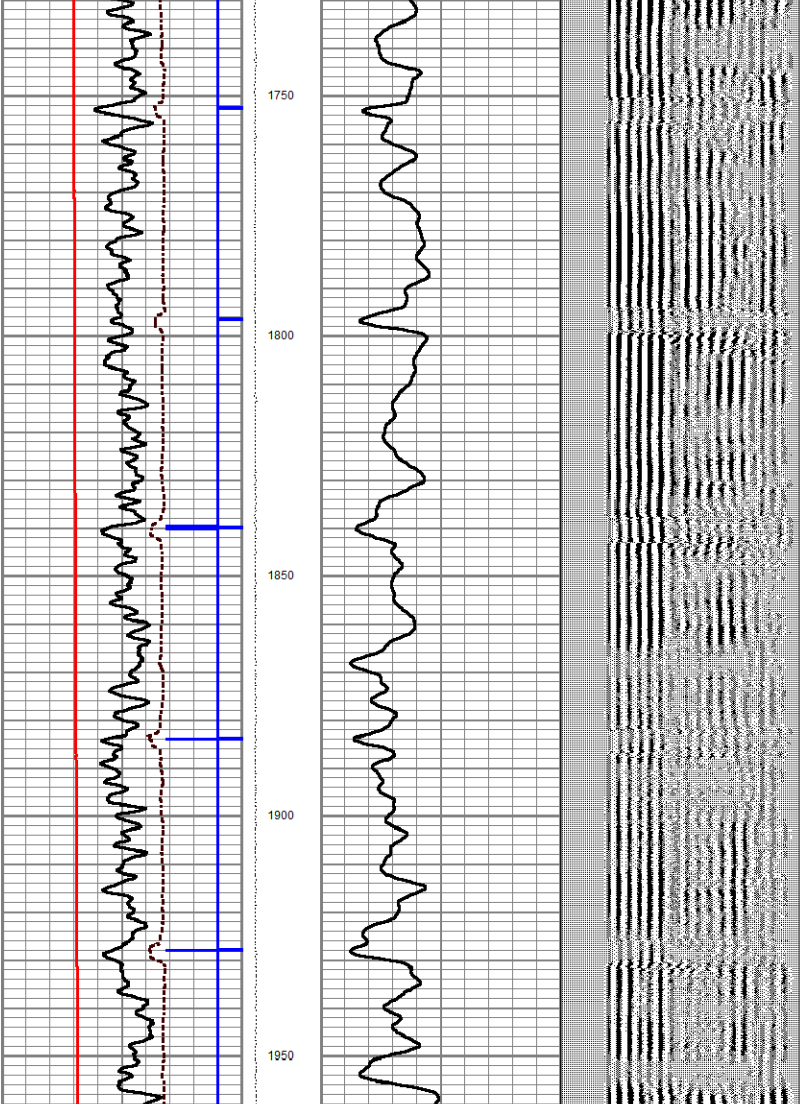


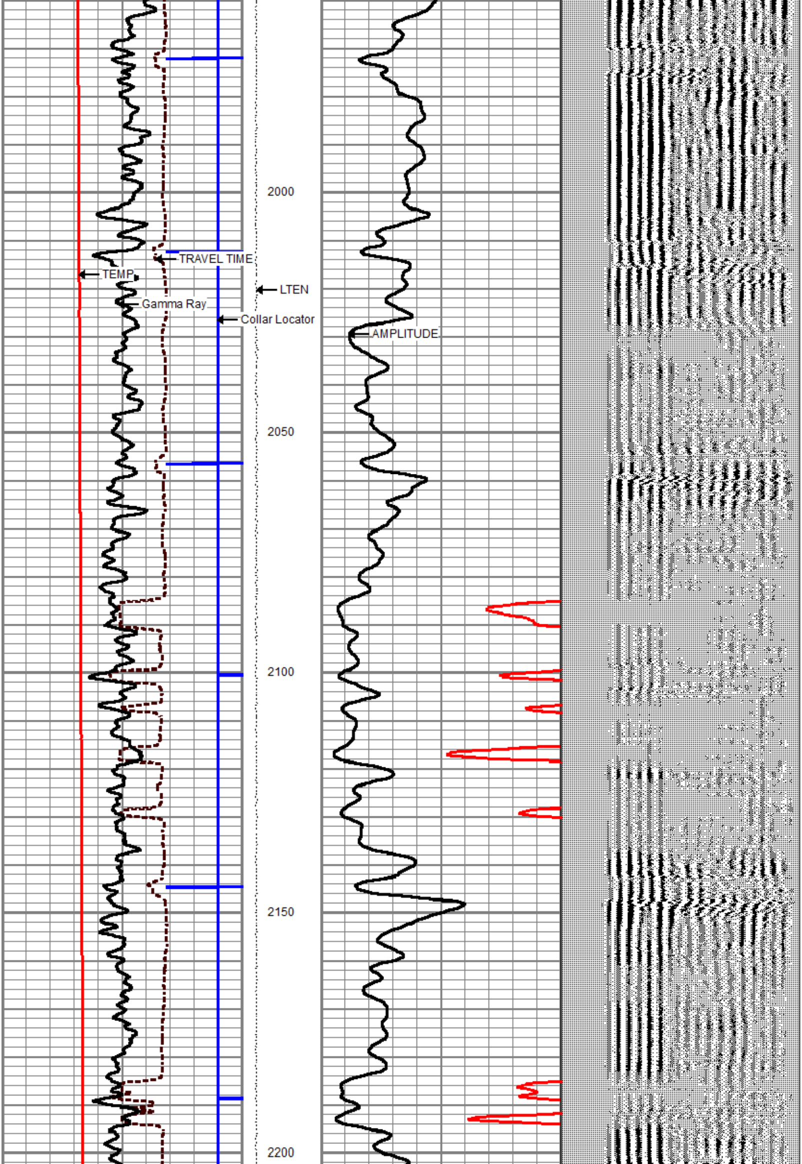


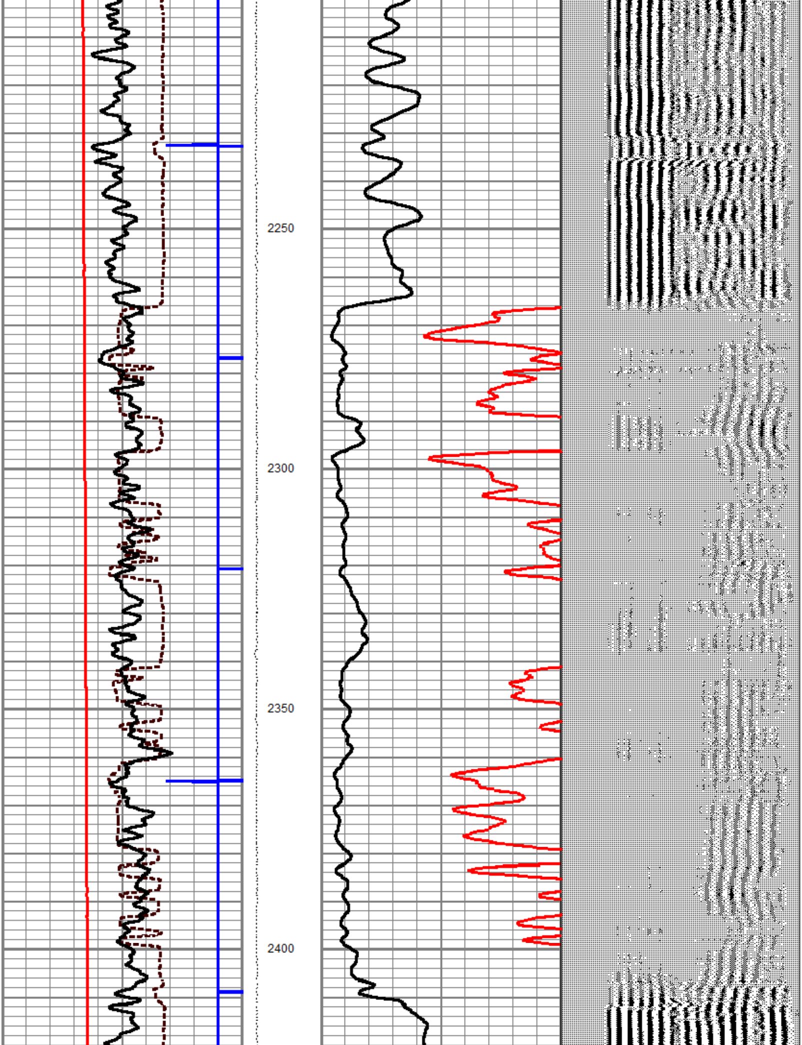


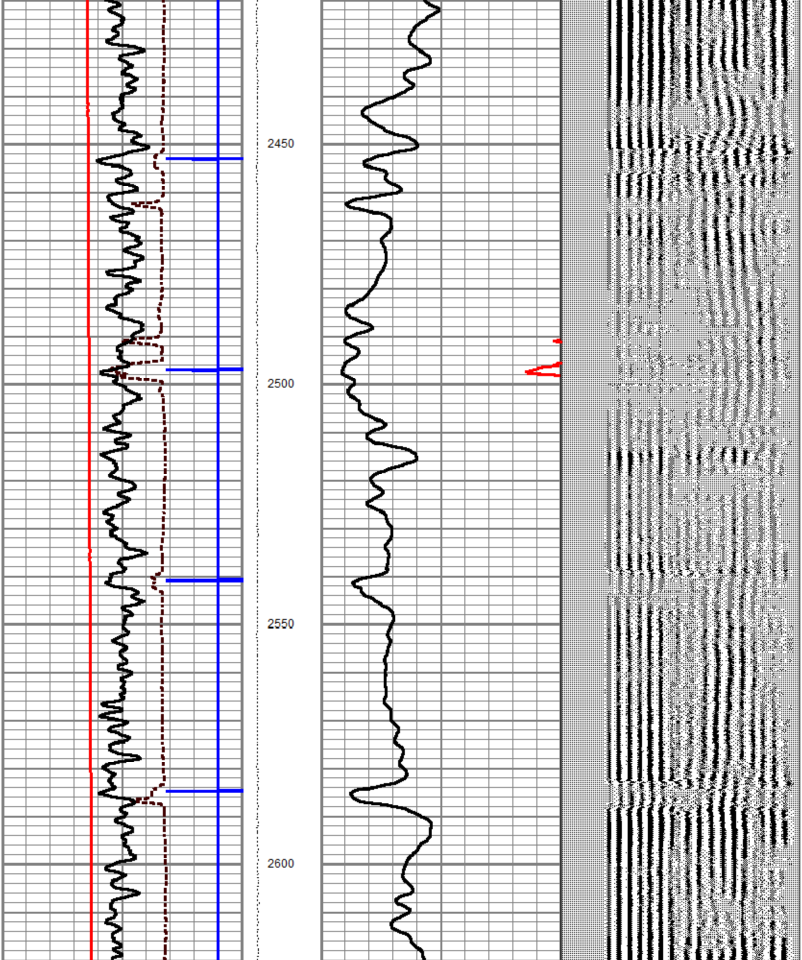


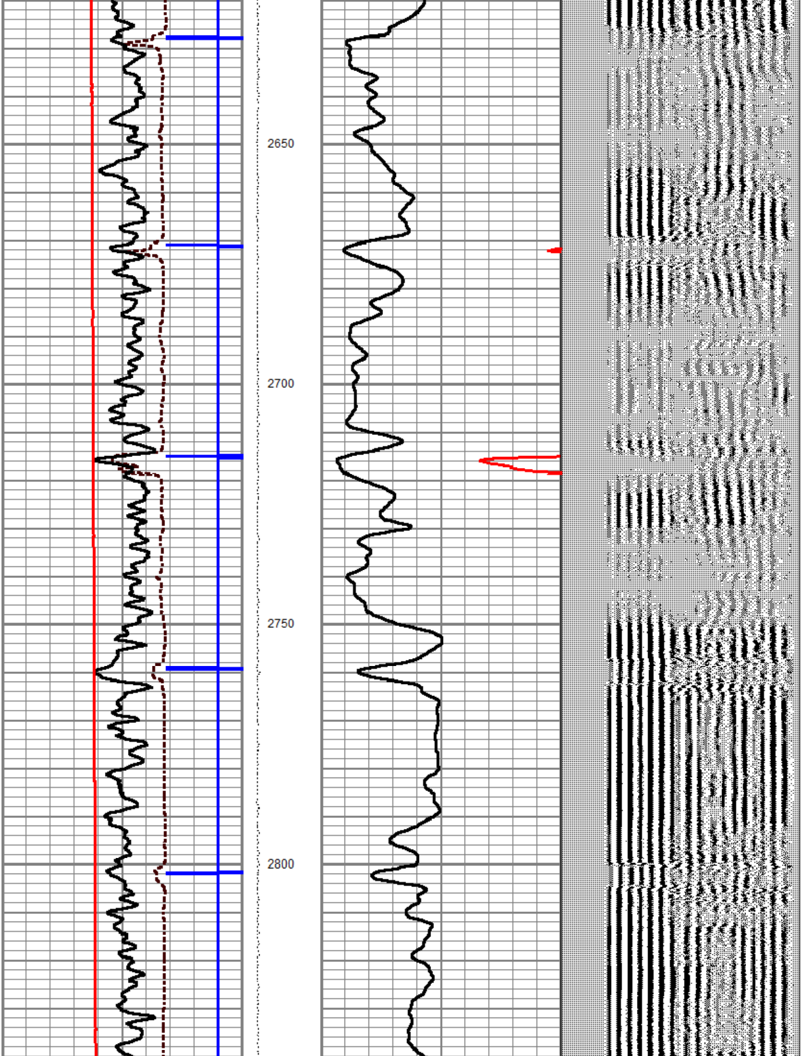


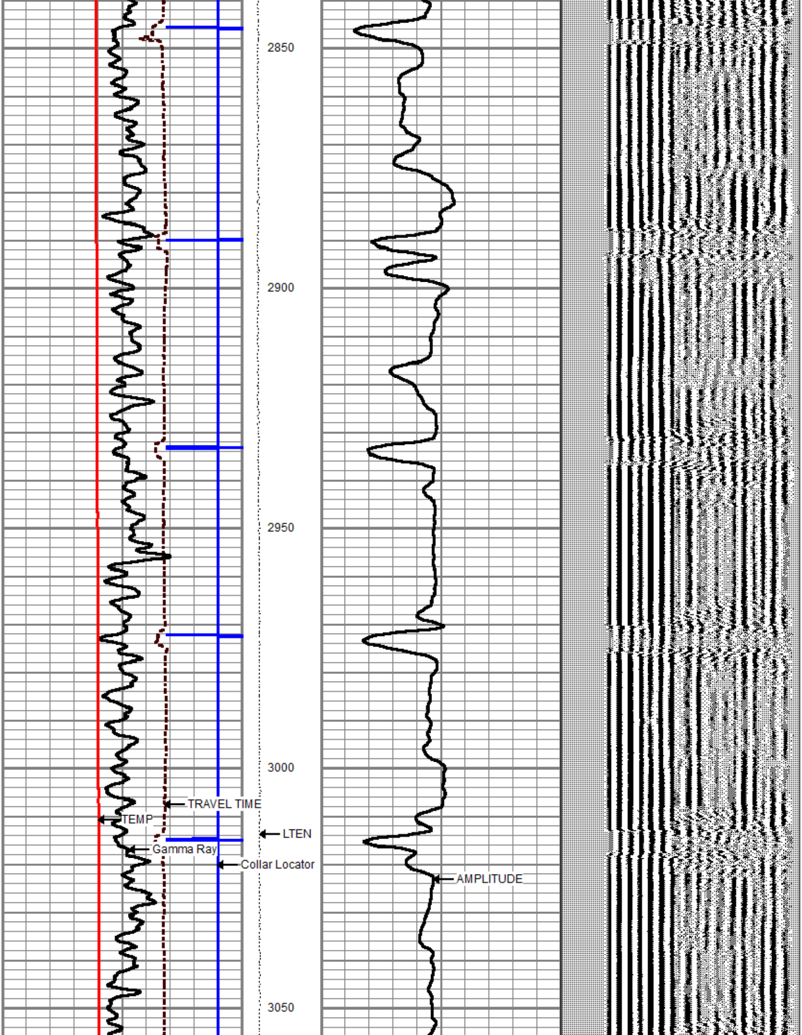


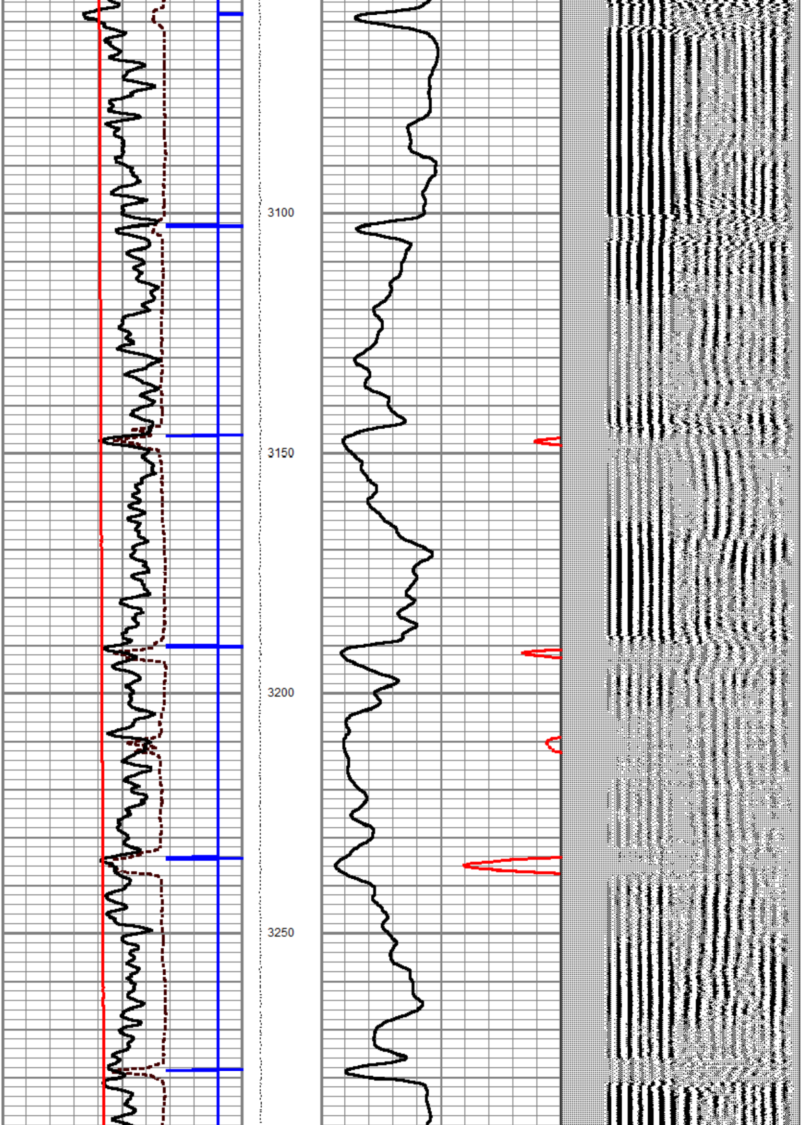


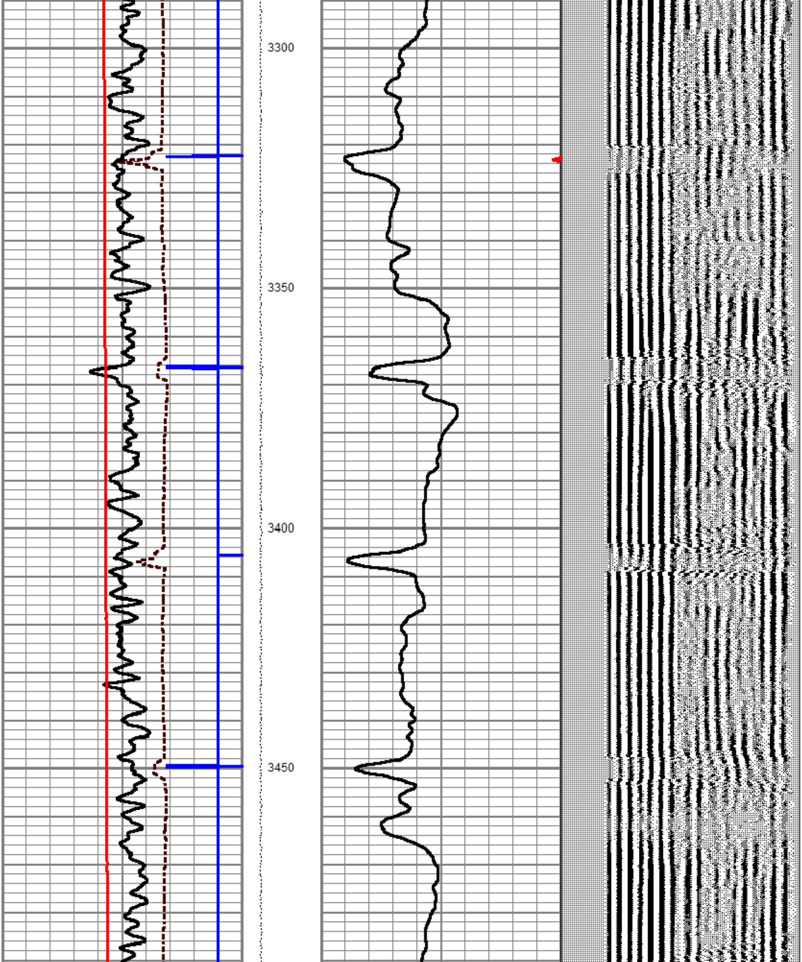


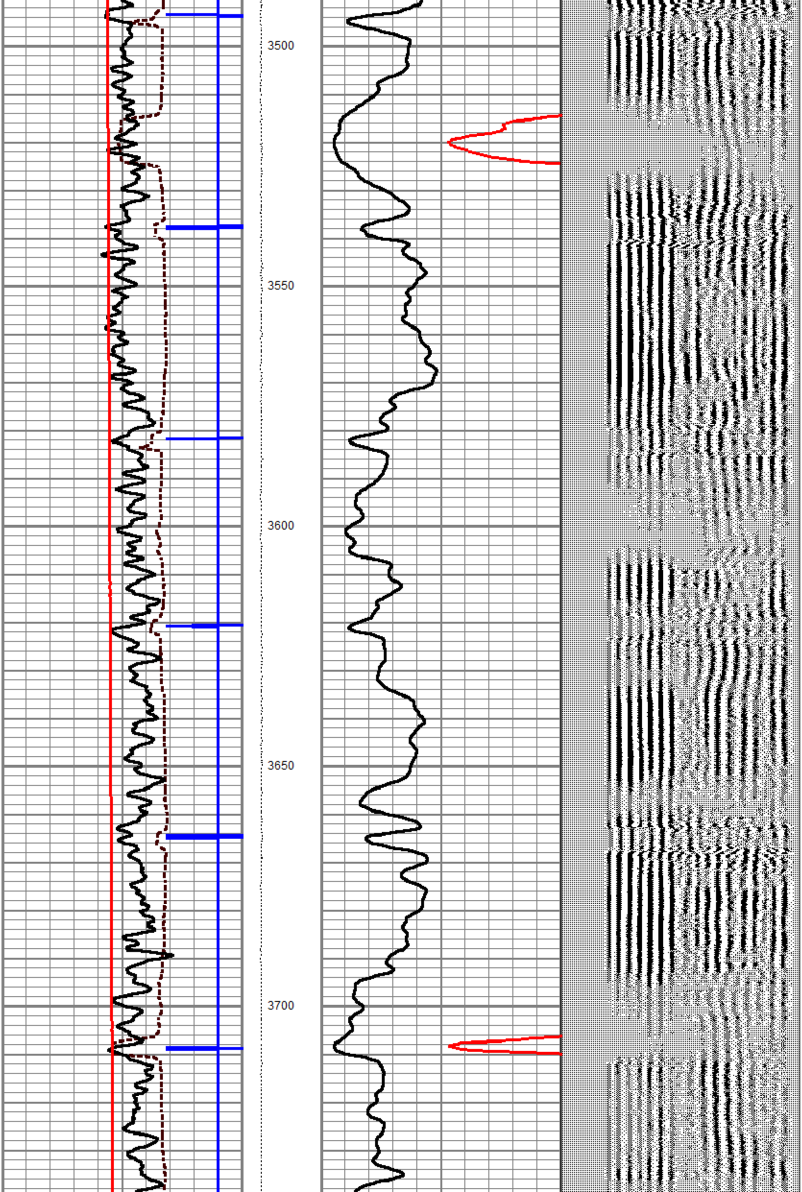


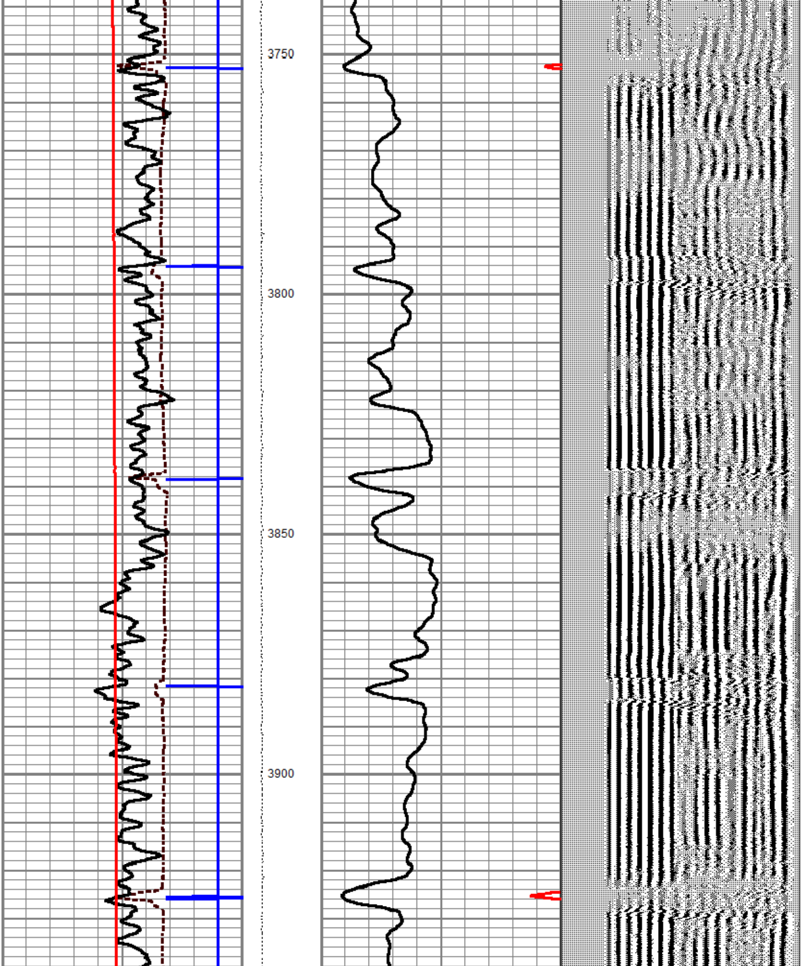


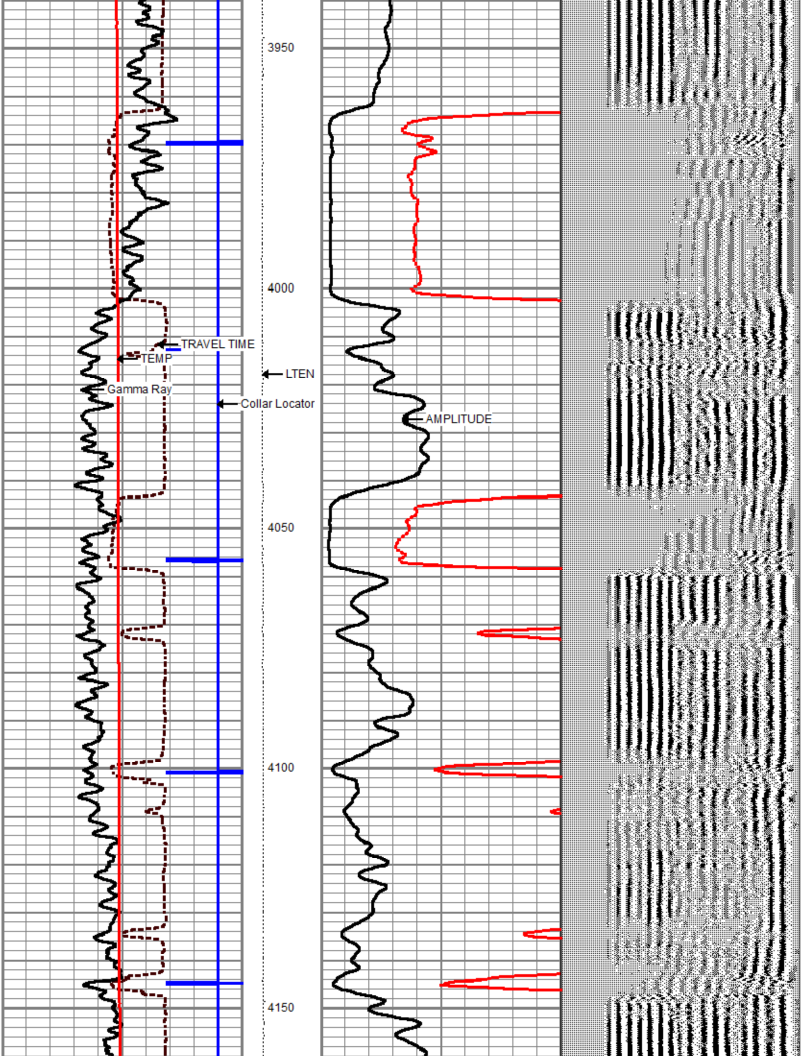


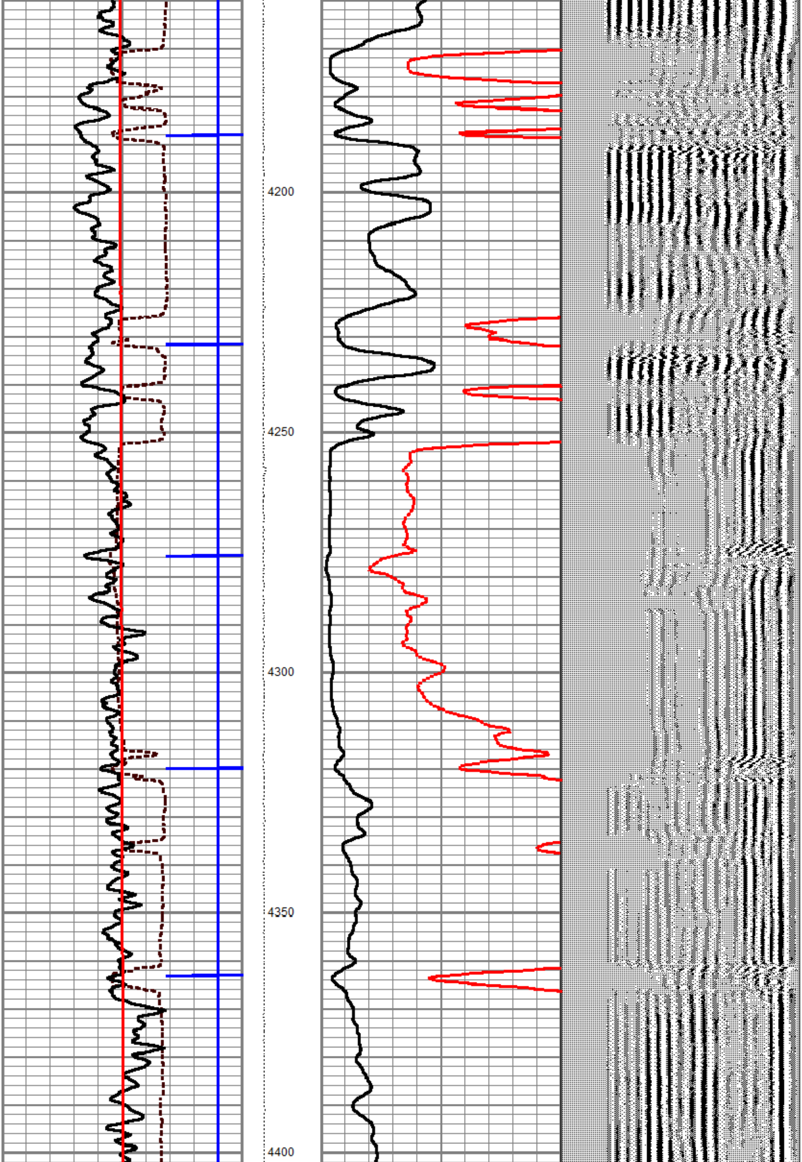


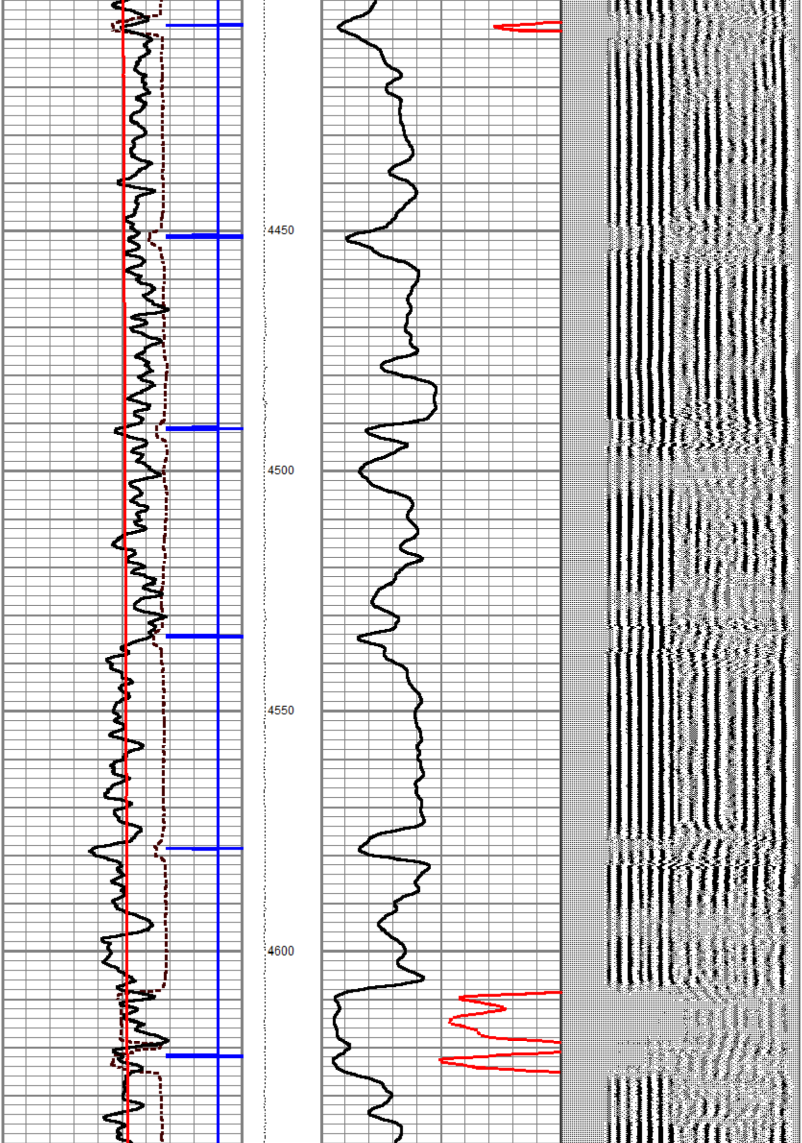


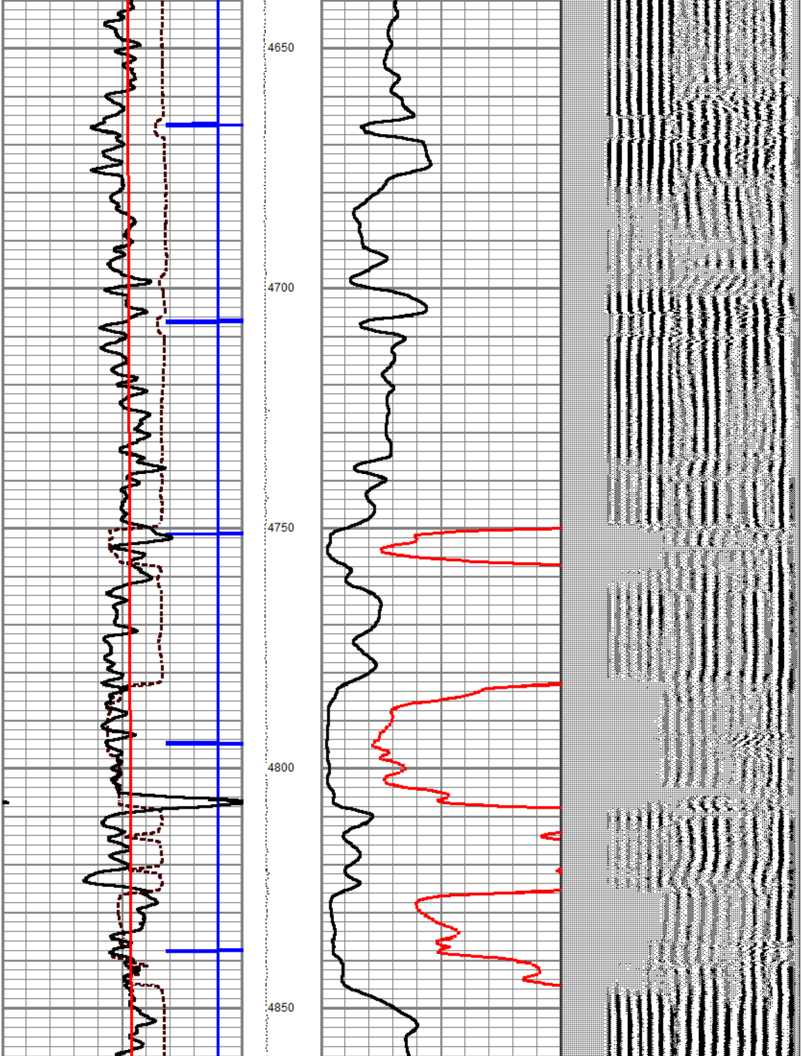


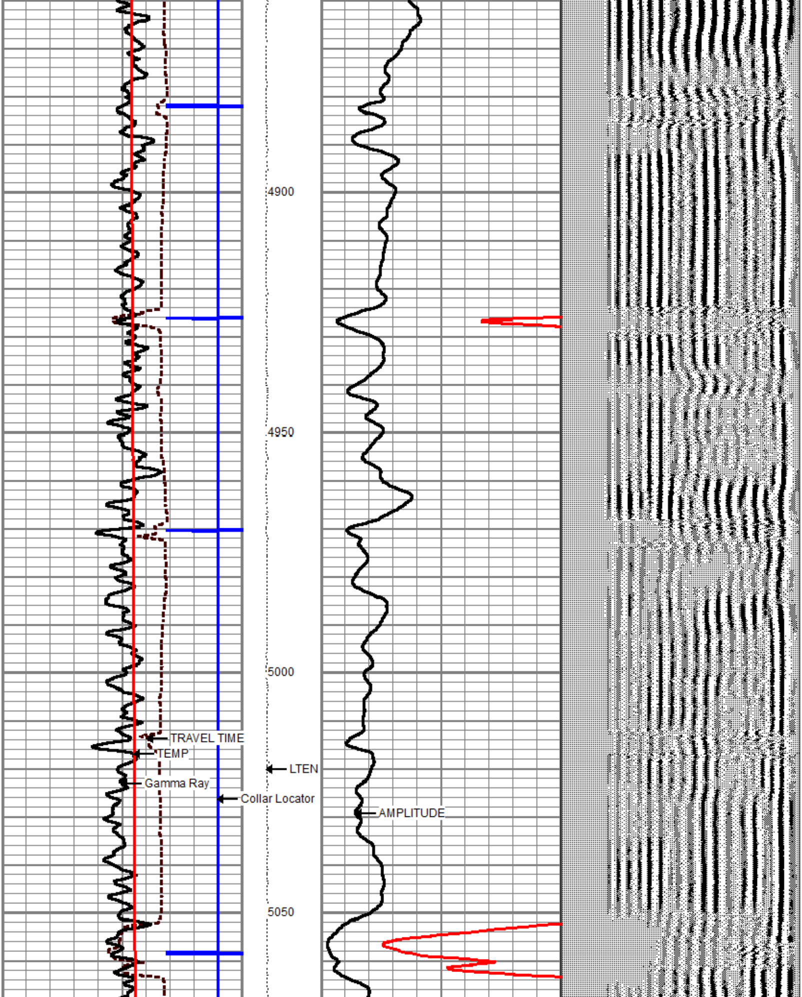


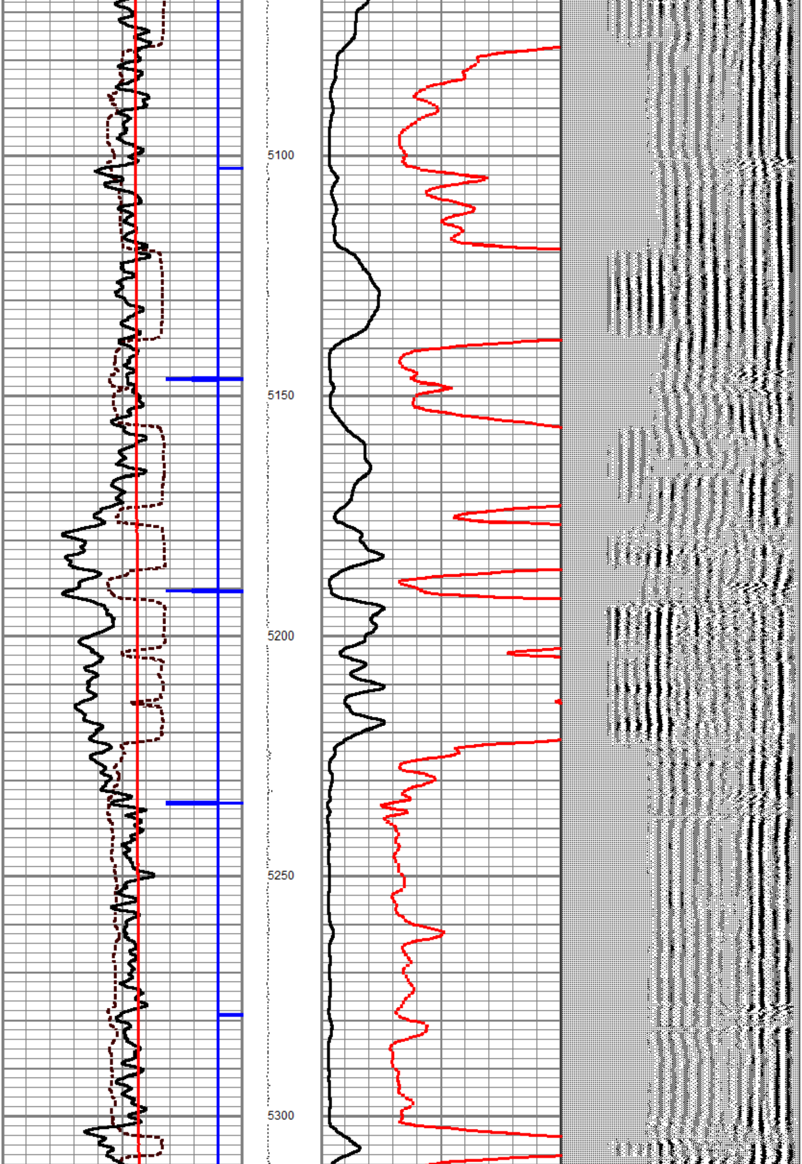


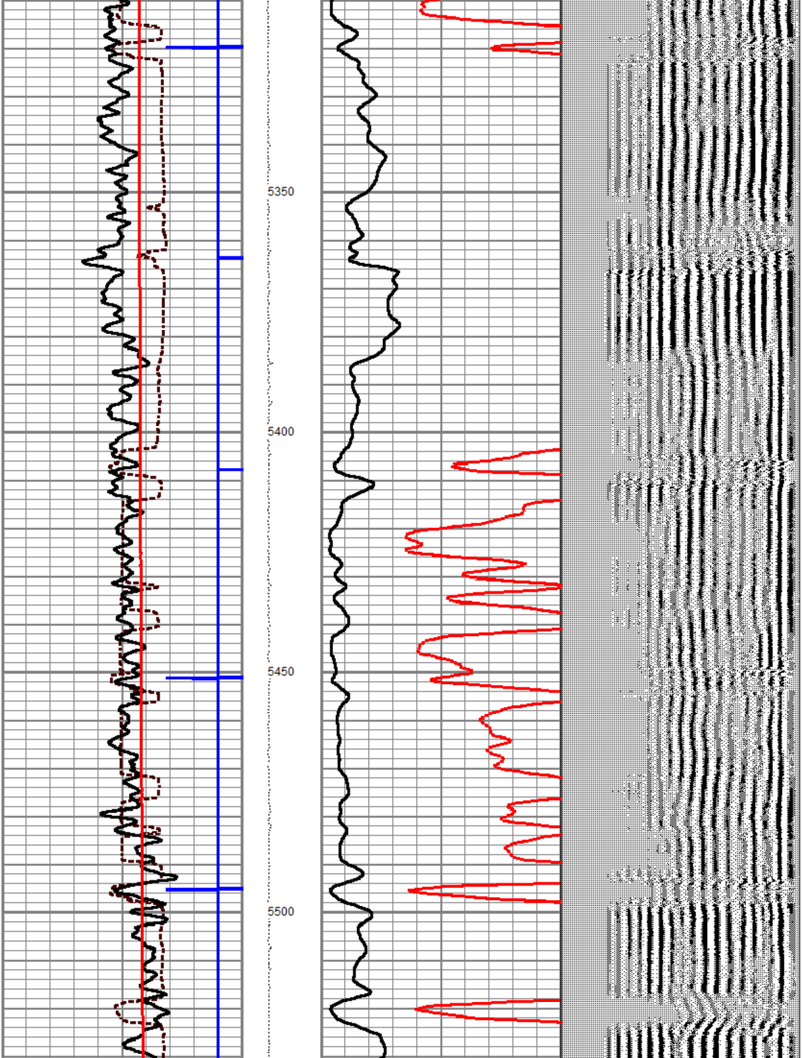


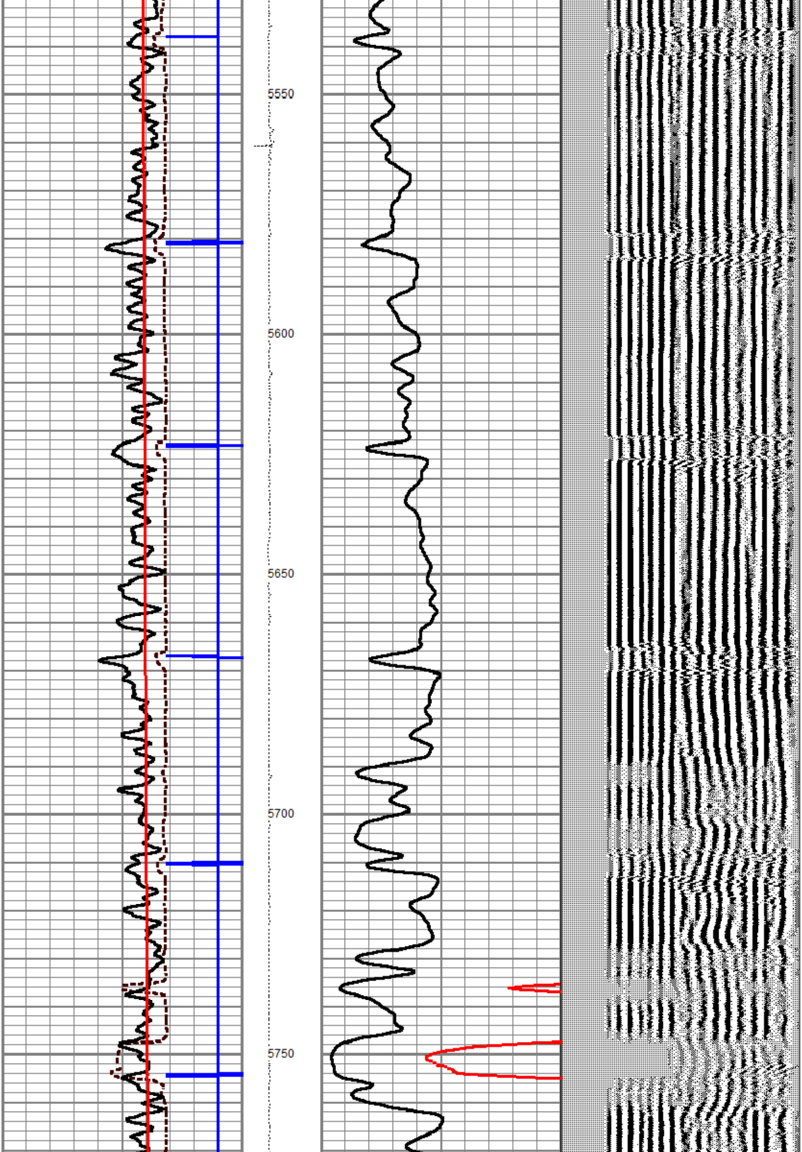


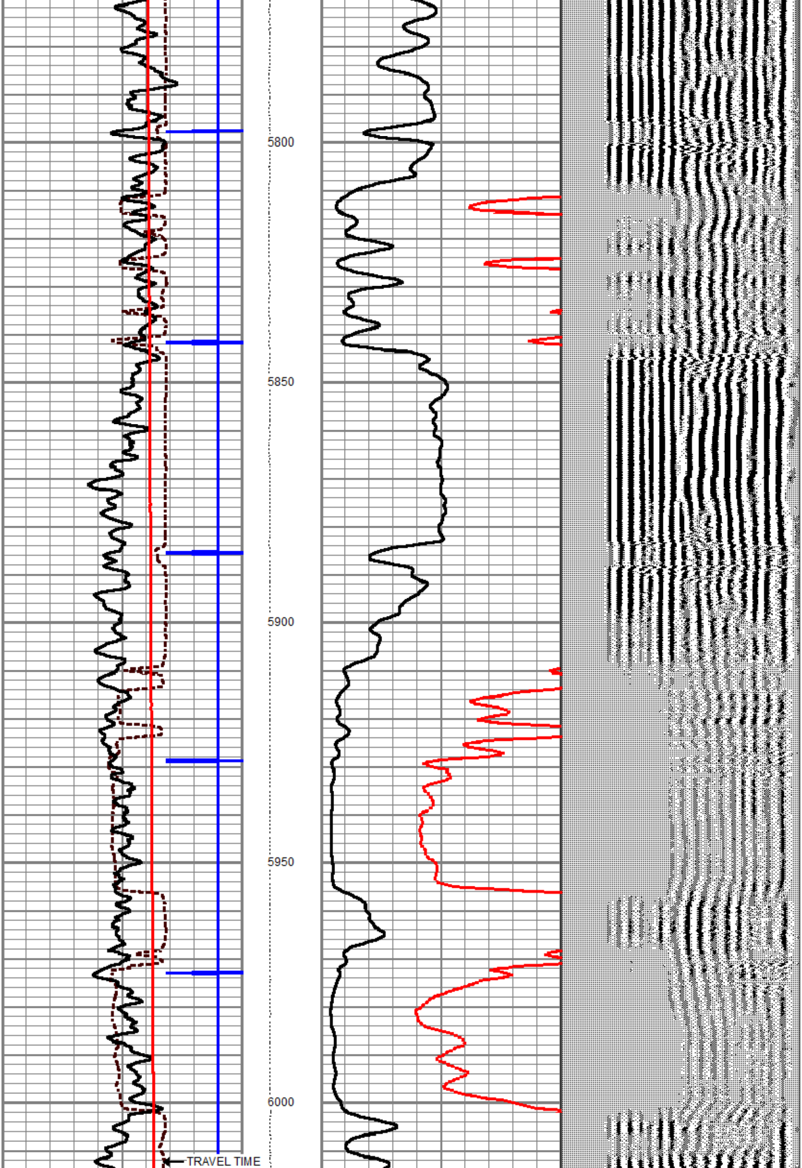


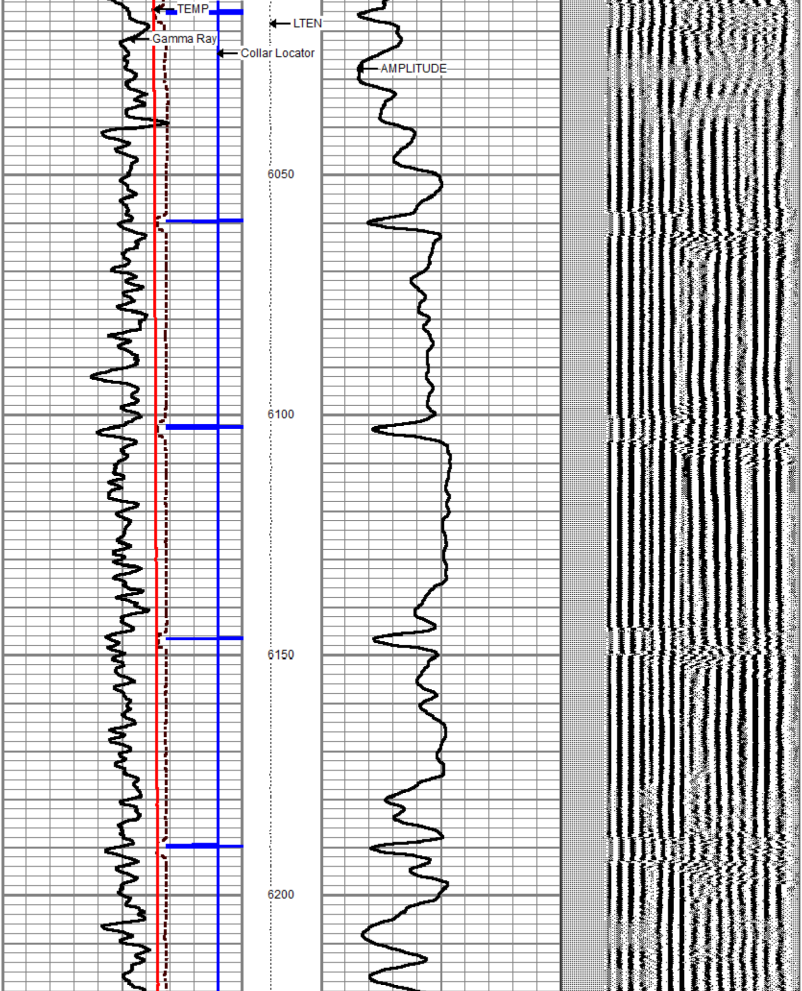


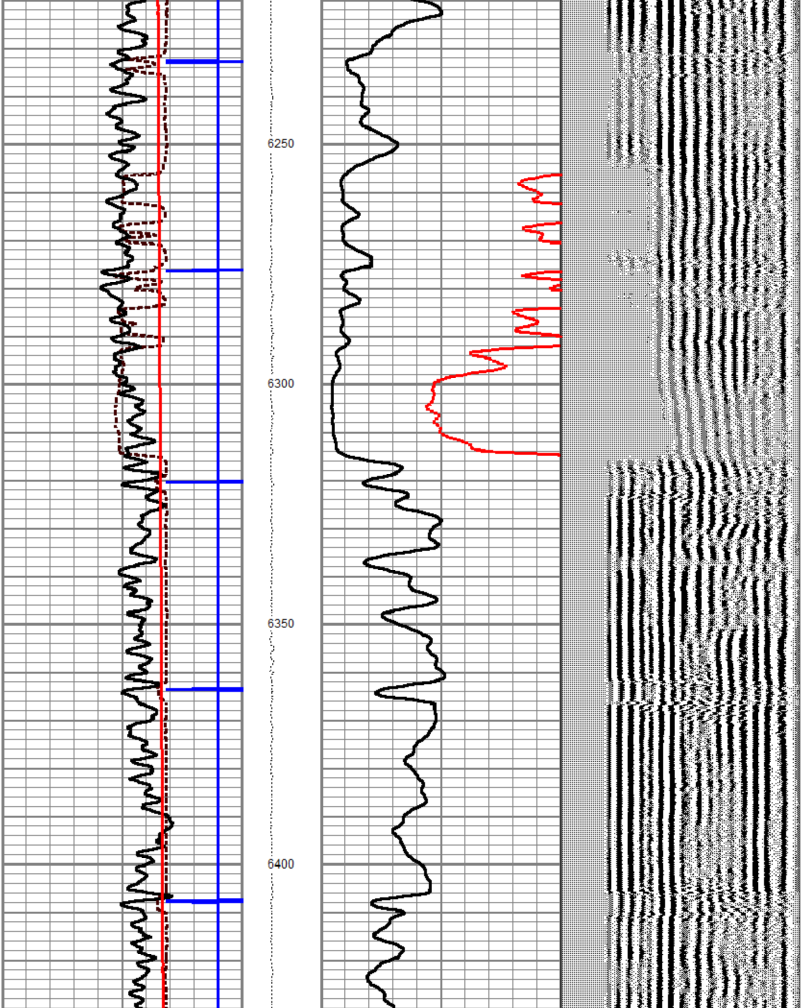


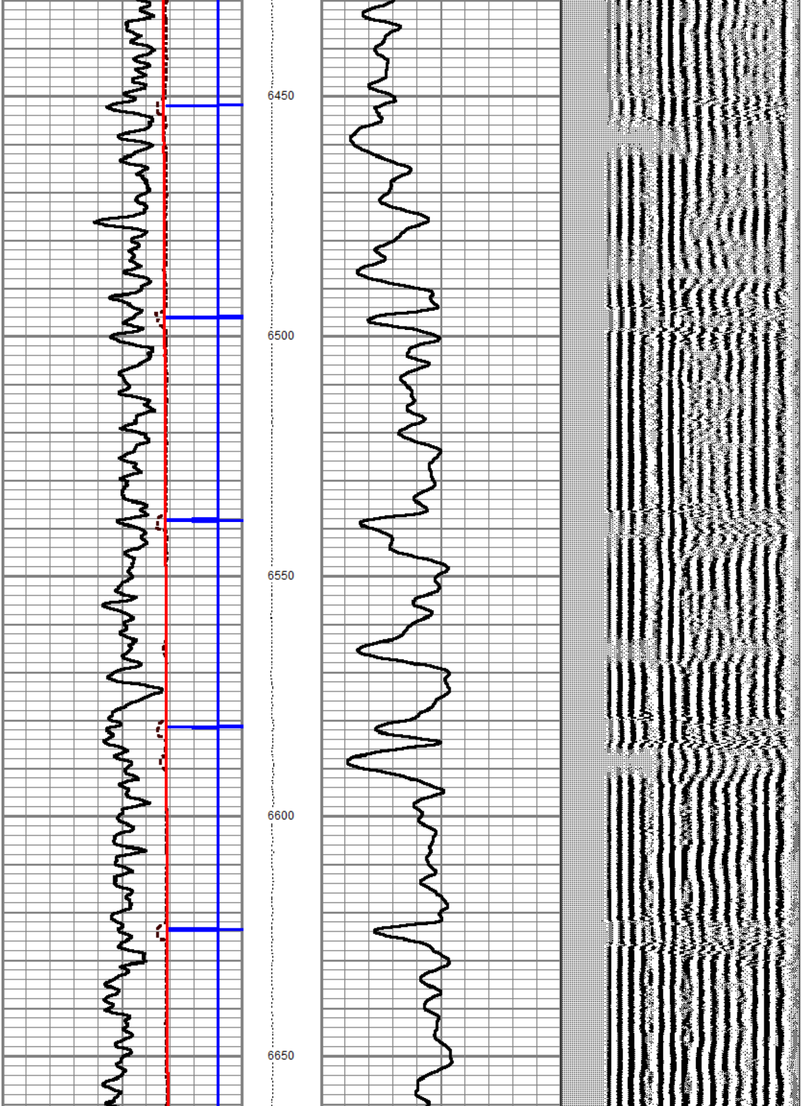


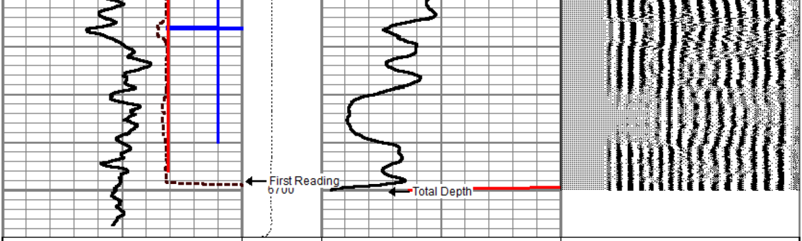












400 TRAVEL TIME (usec) 200	LTEN	0 AMP AMPLITUDE x 10 (mV) 10	200 VDL 1200
9 *Collar Locator* -1	0 (lb) 2000	0 AMPLITUDE (mV) 100	
0 Gamma Ray 200			
0 TEMP (degF) 300			

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CEMENT BOND LOG PRESENTATOPN

MAIN LOG SECTION / 900 PSI

5"= 100'

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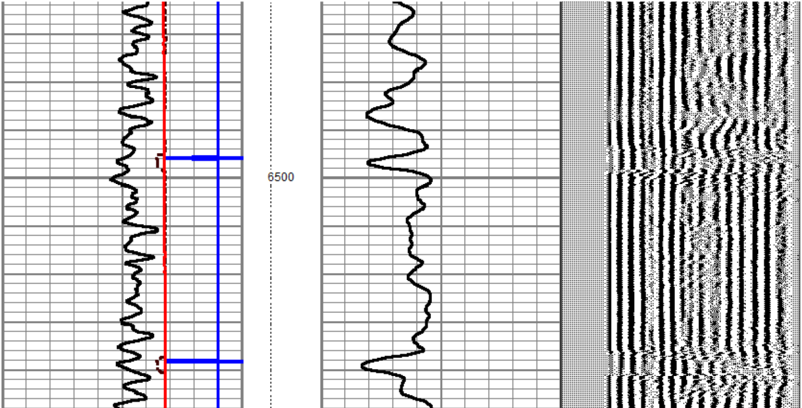
CEMENT BOND LOG PRESENTATION

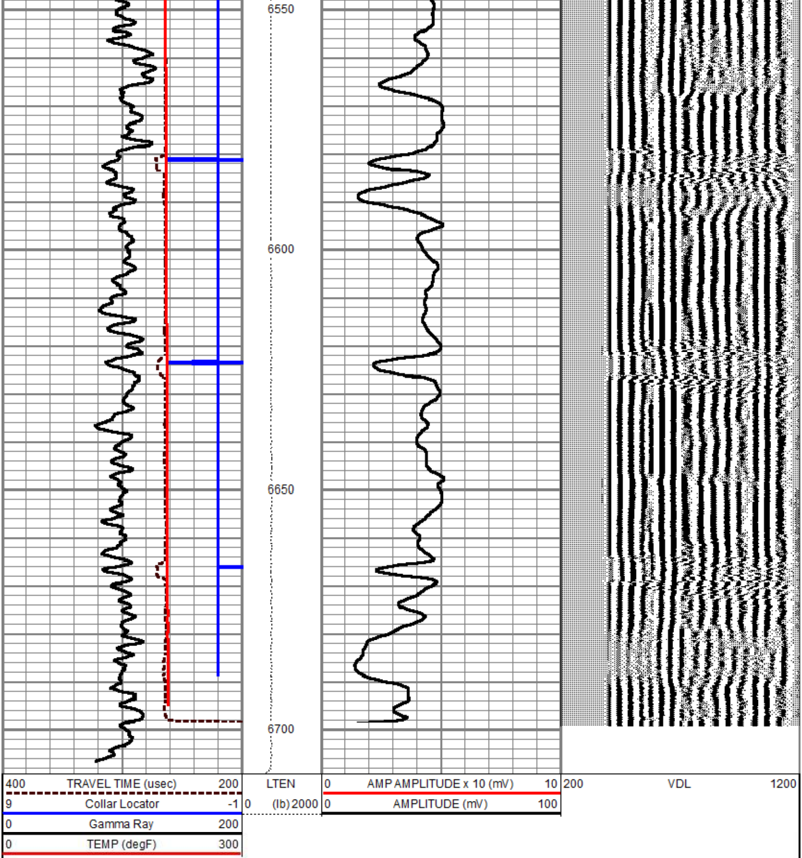
REPEAT LOG SECTION / 0 PSI

5"=100'

Database File	2015_extraction_thornton_11.db
Dataset Pathname	pass2
Presentation Format	cbl_drs
Dataset Creation	Sun Mar 01 09:49:25 2015
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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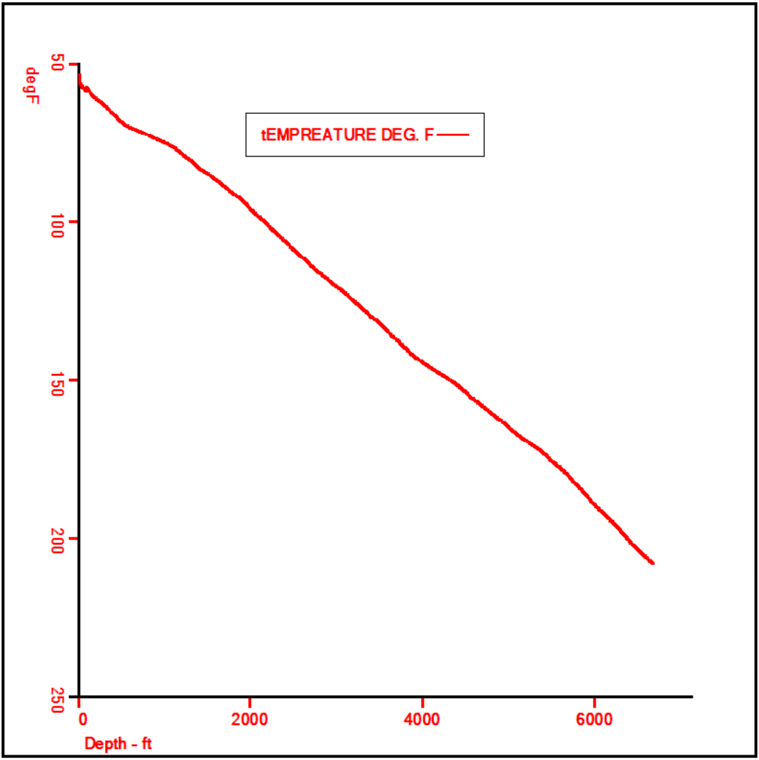
CEMENT BOND LOG PRESENTATION

REPEAT LOG SECTION / 0 PSI

5"=100'



Log Variables

Database C:\ProgramData\Warrior\Data\2015_extraction_thornton_11.db
Dataset field/well/run1/pass3.1

Top - Bottom

BHTEMP_Src	PPT usec	CASEWGHT lb/ft	MAXAMPL mV	MINAMPL mV	MINATTN db/ft	SRFTEMP degF	CASEOD in	PERFS	TDEPTH ft
1	0	26	0	62	1.7	0	7	0	6710

BOTTEMP degF	BOREID in
208	7.875

Calibration Report

Database File	2015_extraction_thornton_11.db
Dataset Pathname	pass3.1
Dataset Creation	Sun Mar 01 12:19:24 2015

Gamma Ray Calibration Report

Serial Number:	234GR-IPCD9-02	
Tool Model:	GR-Tek-Co	
Performed:	Tue Feb 25 16:32:03 2014	
Calibrator Value:	120.0	
Background Reading:	100.8	cps
Calibrator Reading:	244.7	cps
Sensitivity:	0.8337	/cps

Segmented Cement Bond Log Calibration Report

Serial Number:	234RIBT-IT4B1-01-FIELD-12-3-14	
Tool Model:	275 H/T RIB with I/E Temp	
Calibration Casing Diameter:	5.500	in
Calibration Depth:	963.892	ft

Master Calibration, performed Sun Mar 01 12:19:21 2015:

	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3'	-0.000	0.371	2.000	71.921	188.221	2.028
CAL	0.000	0.283				
5'	-0.015	0.573	2.000	71.921	118.837	3.838
SUM						
S1	-0.003	0.416	0.000	100.000	238.234	0.803
S2	-0.007	0.497	0.000	100.000	198.523	1.375
S3	-0.008	0.441	0.000	100.000	222.833	1.764
S4	-0.012	0.404	0.000	100.000	240.372	2.826
S5	-0.013	0.433	0.000	100.000	224.246	2.917
S6	-0.018	0.462	0.000	100.000	208.348	3.777
S7	-0.016	0.540	0.000	100.000	179.817	2.914
S8	-0.012	0.533	0.000	100.000	183.482	2.180

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

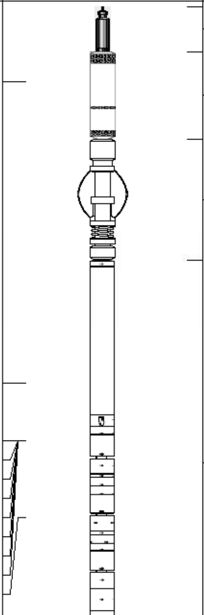
	Raw (v)		Calibrated (v)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
CAL	0.000	0.000	0.000	0.283	1.000	0.000

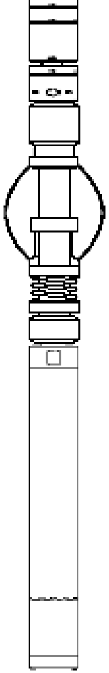
Air Zero Calibration, performed Wed Dec 31 17:00:00 1969:

	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-FIELD-12-3-14		
Tool Model:	275 H/T RIB with I/E Temp		
Performed:	Wed Dec 03 07:38:31 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)	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	19.56		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
TEMP	12.77					
WVFS8	11.48					
WVFS7	11.48		275 H/T RIB with I/E Temp (234RIBT-IT4B1-01-D-12-3- Tekco 2.75" 450 Deg. F RIB with I/E Temp	9.13	2.75	102.00
WVFS6	11.48					
WVFS5	11.48					
WVFS4	11.48					
WVFS3	11.48					
WVFS2	11.48					
WVFS1	11.48					
WVF5FT	9.73					



WVFSYNC WVFTEMP WVFCAL	6.40 6.40 6.40				
		2.75 2 3/4" Tekco Adjustable Centralizer	2.73	2.75	25.00
GR	1.04	GR-GR-Tek-Co (234GR-IPCD9-02) Tekco 2 3/4" 400 Deg. F Logging Gamma Ray	3.67	2.75	40.00

Dataset:	2015_extraction_thornton_11.db: field/well/run1/pass3.1
Total length:	21.25 ft
Total weight:	215.60 lb
O.D.:	2.75 in

Company	EXTRACTION O & G		
Well	THORNTON #11		
Field	WATTENBERG		
County	WELD		
State	CO	Country	usa