CEMENT BOND LOG

Company	EXTRACTION OIL & GAS
Well	WINDSOR LV F-14H
Field	WATTENBERG
County	WELD State CO

Company EXTRACTION OIL & GAS
Well WINDSOR LV F-14H
Field WATTENBERG
County WELD **State** CO

API No.: 05-123-38175-00 Serv #: 1006
Location: 1373' & 265' FEL
LAT. 40.490510
LONG. -104.852260

Other Services
TEMP. LOG
GAMMA SURVEY
CCL

Sec: 14 Twp:6N Rge: 67W

Permanent Datum	GROUND LEVEL	Elevation 4847'	Elevation
Log Measured From	KB , 24 Ft. above perm. datum		K.B. 4871'
Drilling Measured From	KB		D.F.
			G.L. 4847'

Date @ Time Logged	5 JAN 2015@ 1800HRS	Type Fluid in Hole	FRESH WATER
Run No.	ONE	Density of Fluid	8.4#
Depth - Driller	11822'	Fluid Level	SURFACE
Depth - Logger	6780'	Cement Top Est. Logged	1082'
Bottom - Logged Interval	6768'	Equipment / Location	GD 114 / CASPER,WY
Top - Log Interval	SURFACE	Recorded by	B.KENNICKER
Max. Recorded Temp.	217°F	Witnessed by	TROY

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	700'
				7"	26#	SURFACE	7700'
				4 1/2"	11.6#	6700'	11822'

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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 dated1/05/2015
Cement top was estimated at 1082'
Max temp on bottom was 217° F
Kick off Point was unknow to logging crew

Your crew today was J. Baker M. Stewart

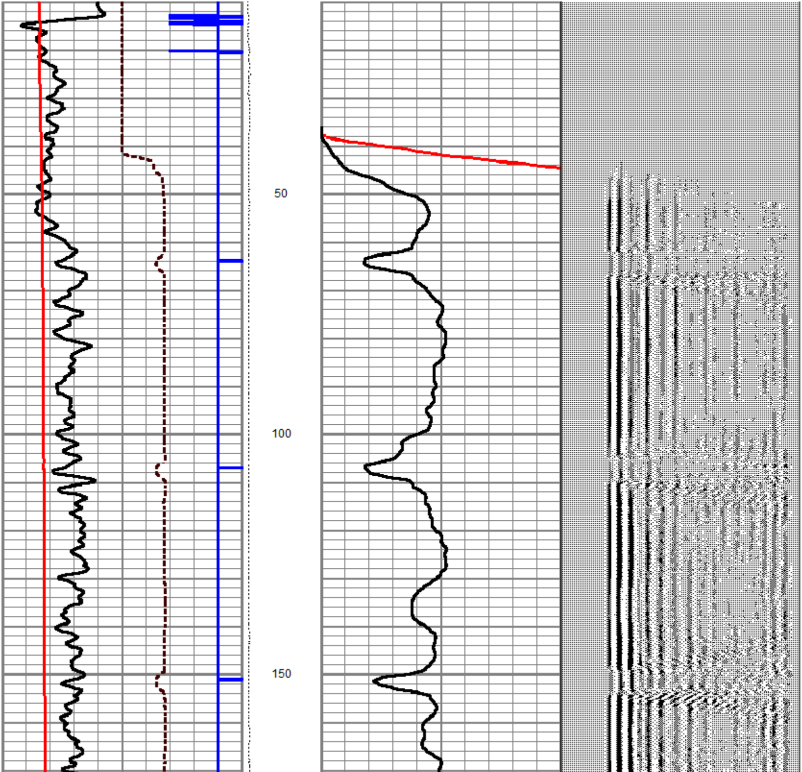
Thank you for using Gyrodata Logging Services, Casper, WY gyrodata

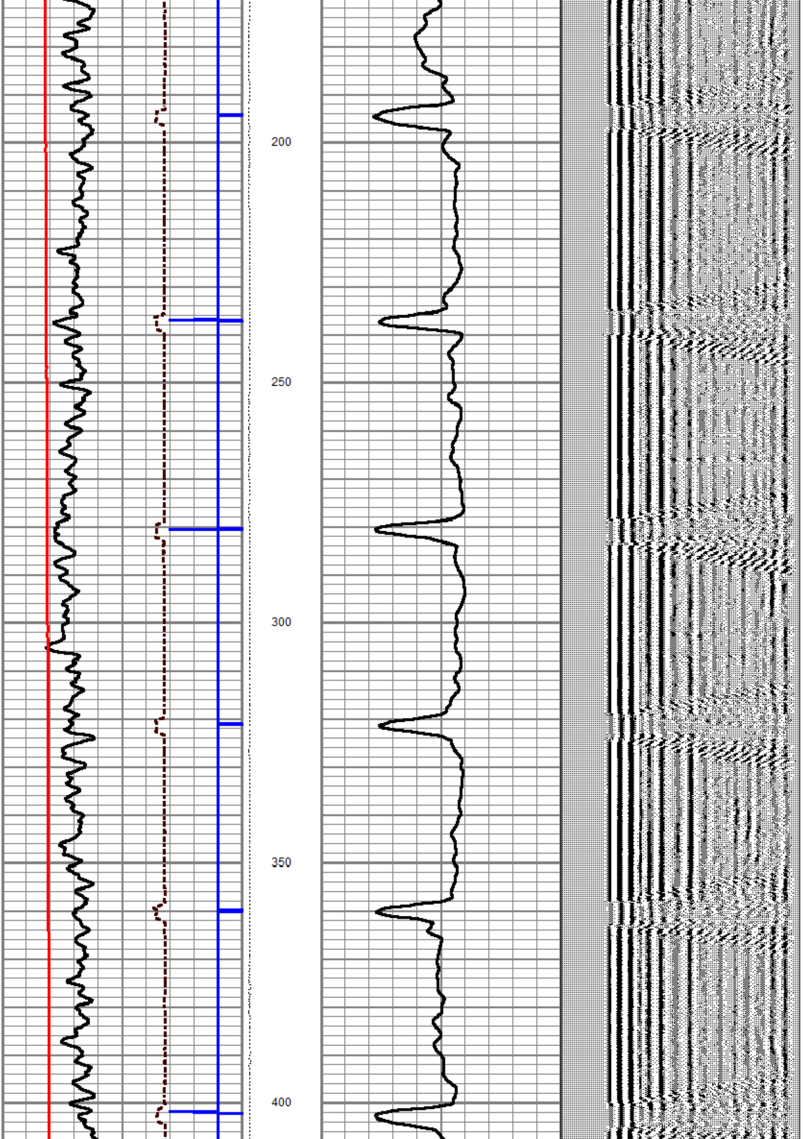
CEMENT BOND PRESENTATION

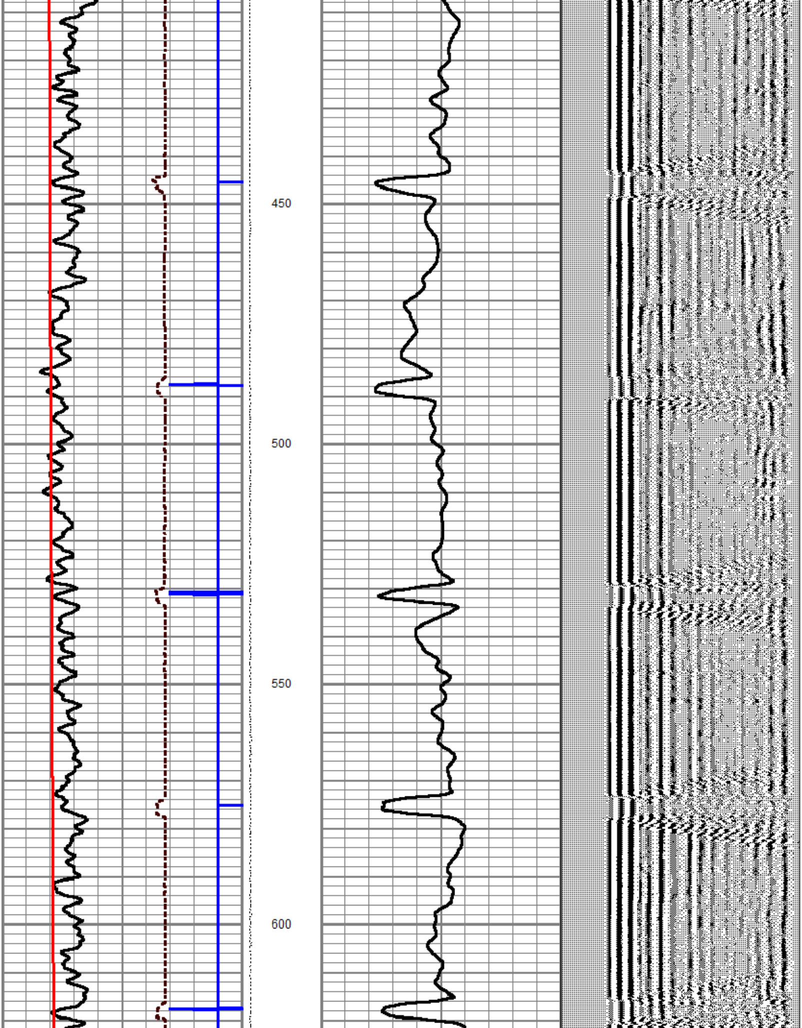
MAIN LOG SECTION / 0 PSI
5" = 100'

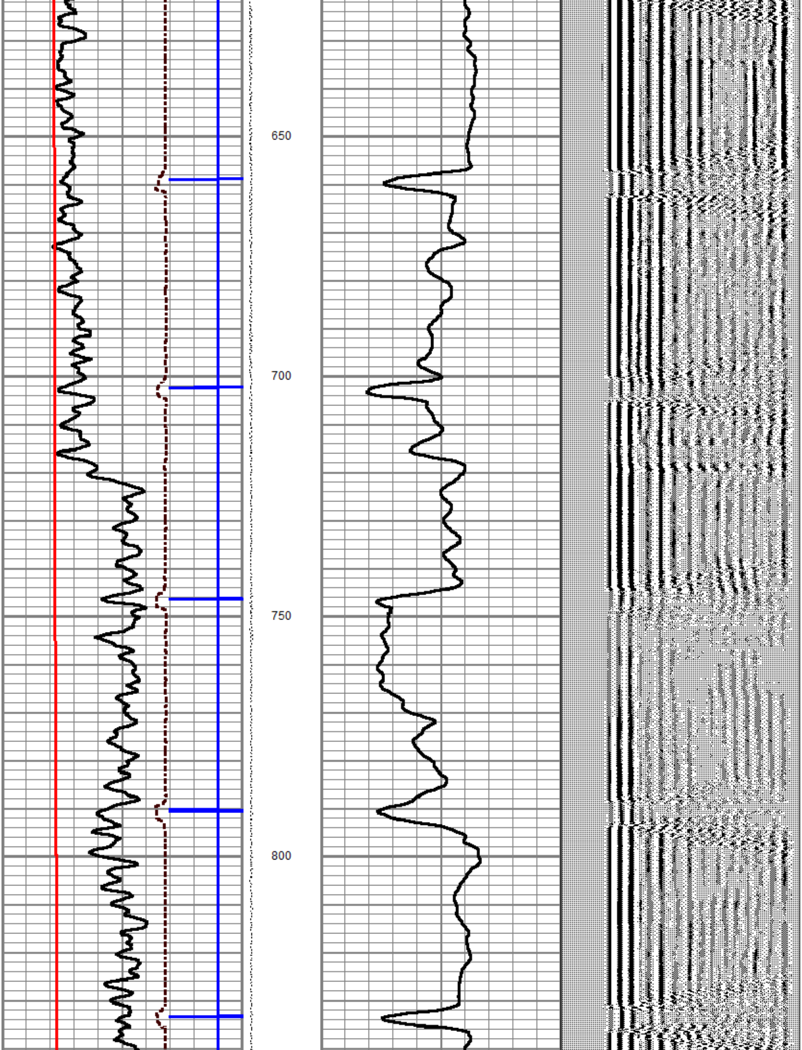
Database File	2015_extraction_windsor_lv_f_14_h.db
Dataset Pathname	pass1.4
Presentation Format	cbl_drs
Dataset Creation	Mon Jan 05 18:07:51 2015
Charted by	Depth in Feet scaled 1:240

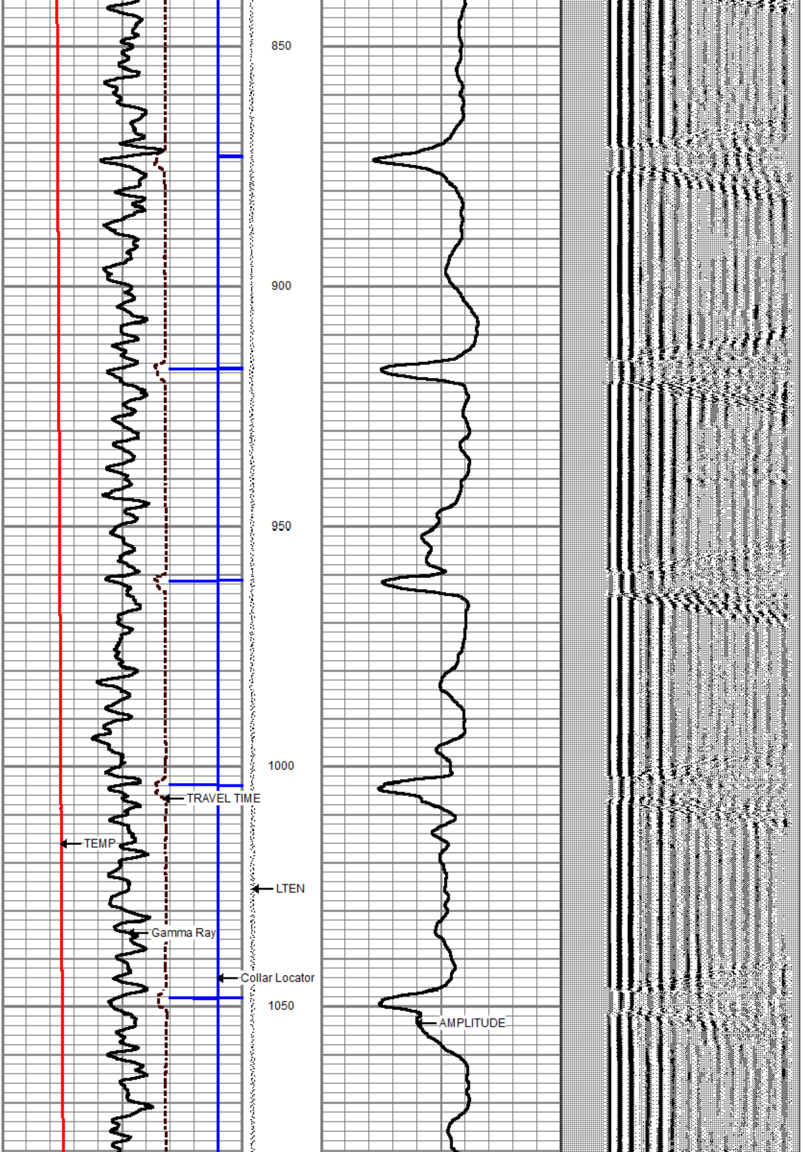
Track 1			Depth		Track 3			VDL		
400	TRAVEL TIME (usec)	200	LTEN		0	*AMP AMPLITUDE x 10 (mV)*	10	200	VDL	1200
9	*Collar Locator*	-1	0	(lb) 2000	0	*AMPLITUDE (mV)*	100			
0	Gamma Ray	200								
0	TEMP (degF)	300								

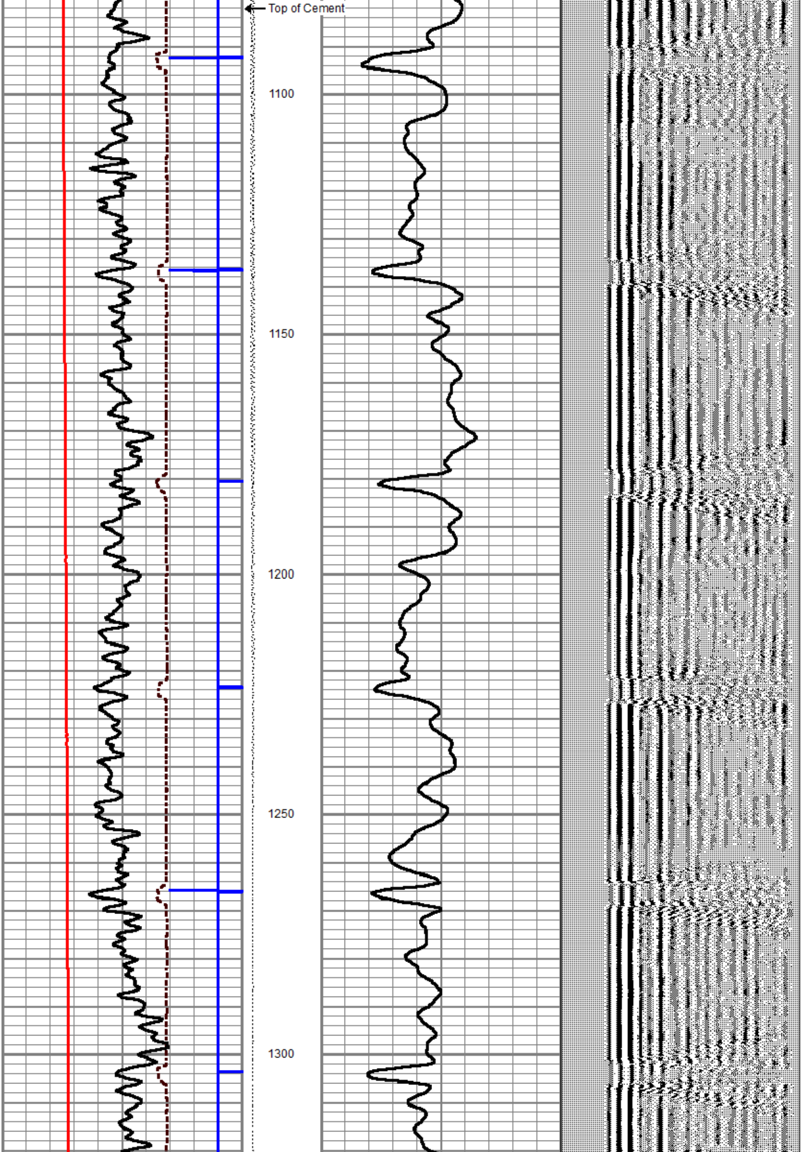


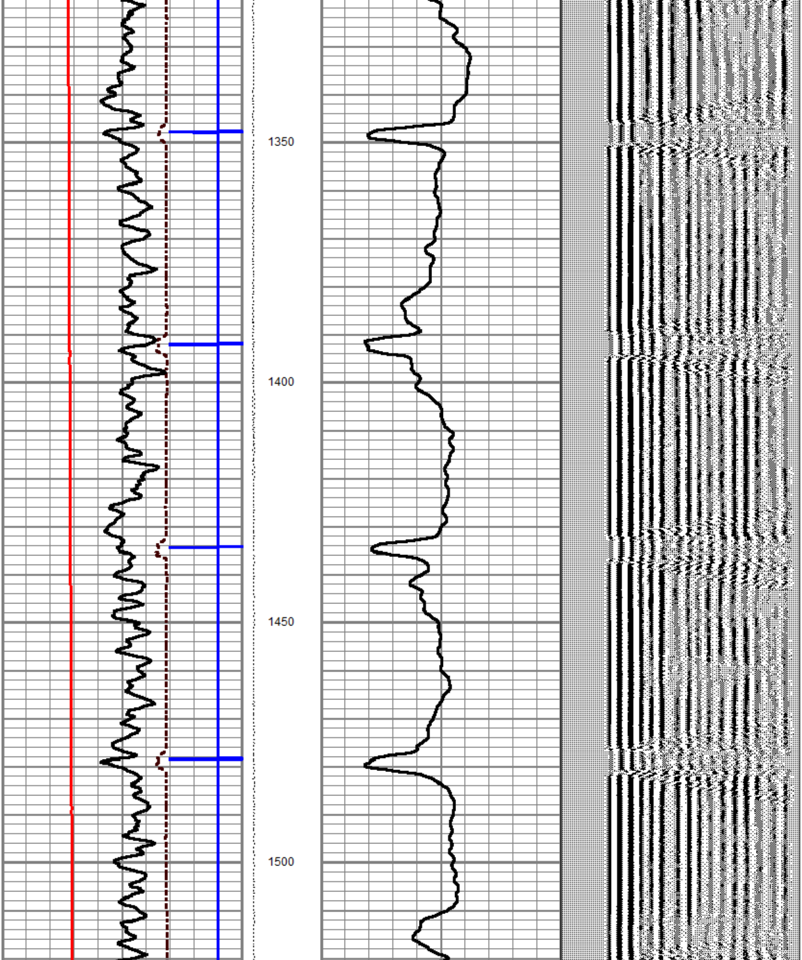


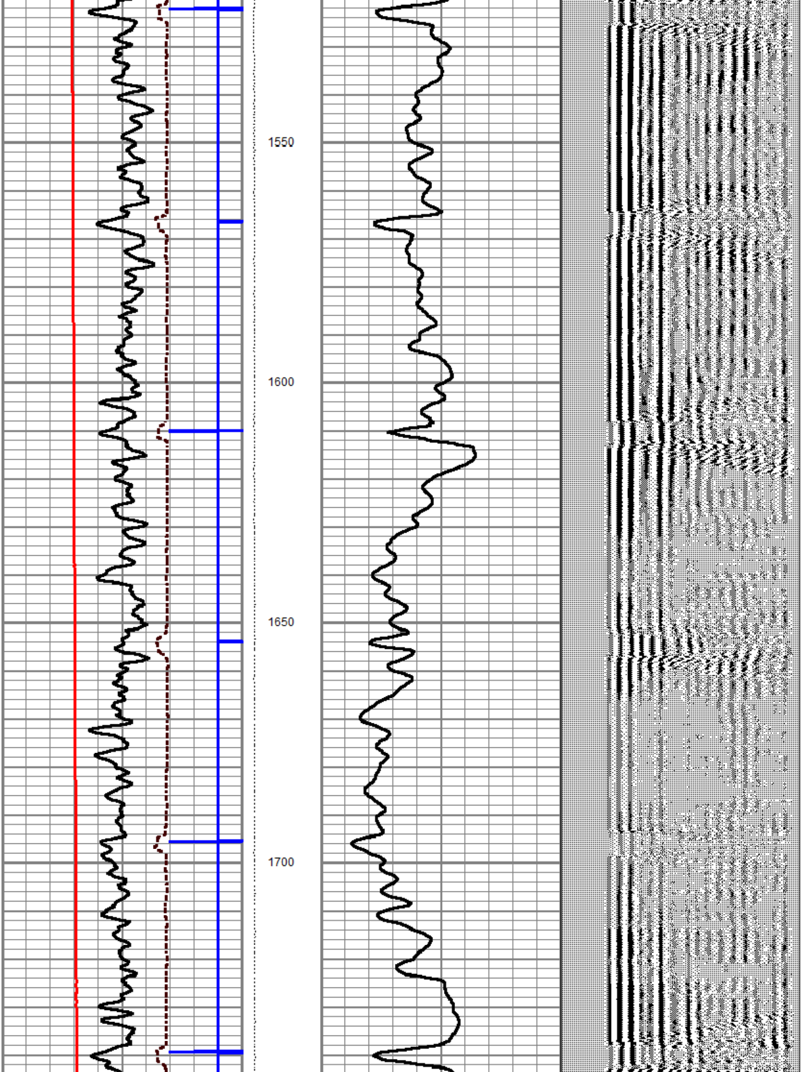


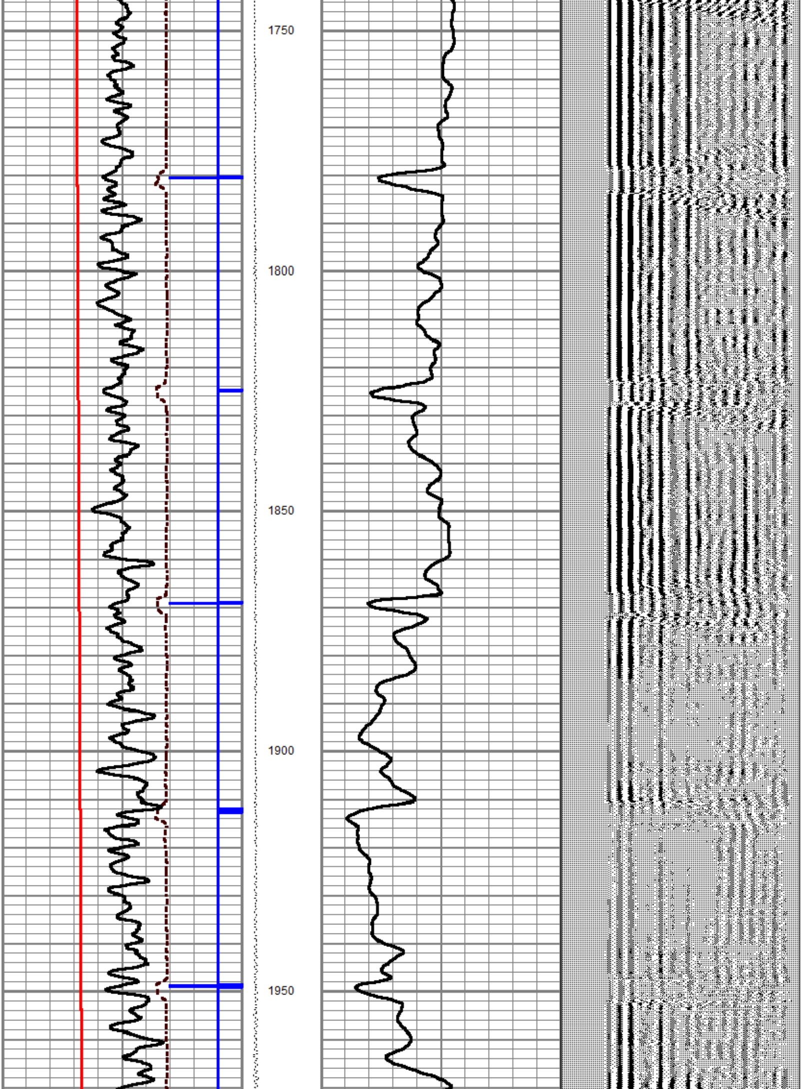


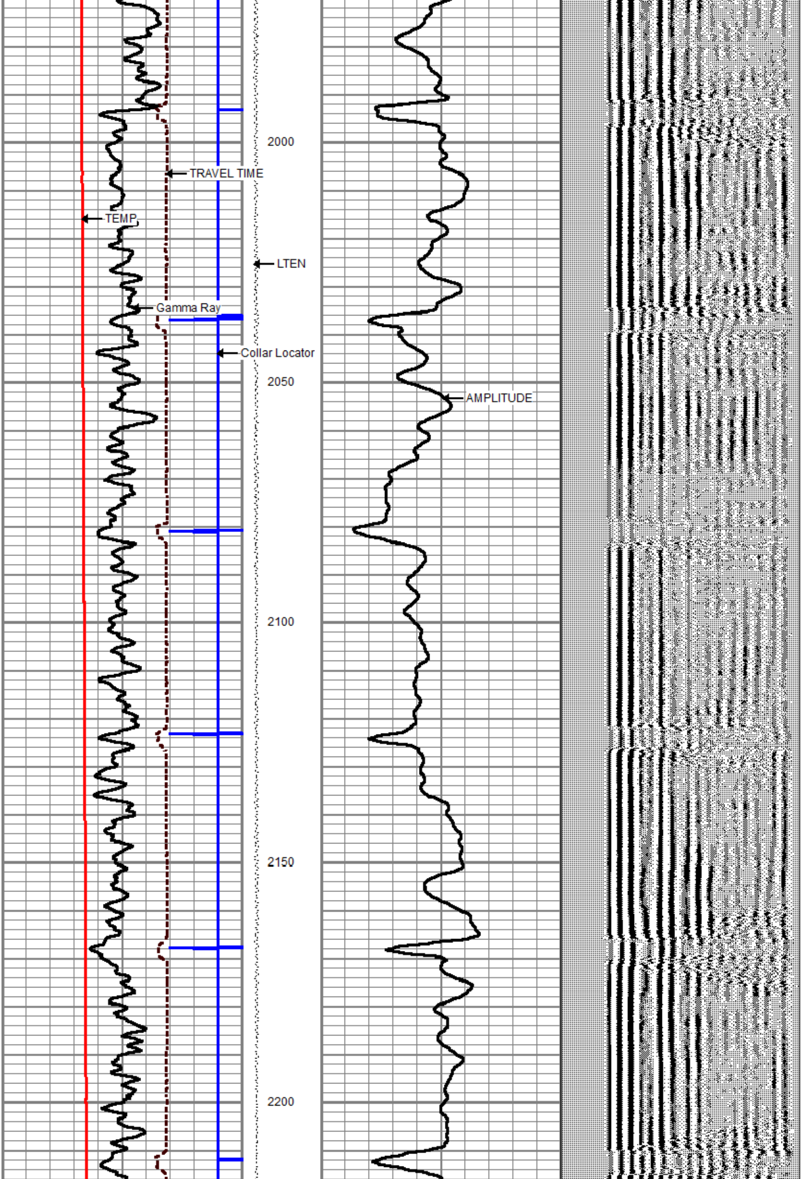


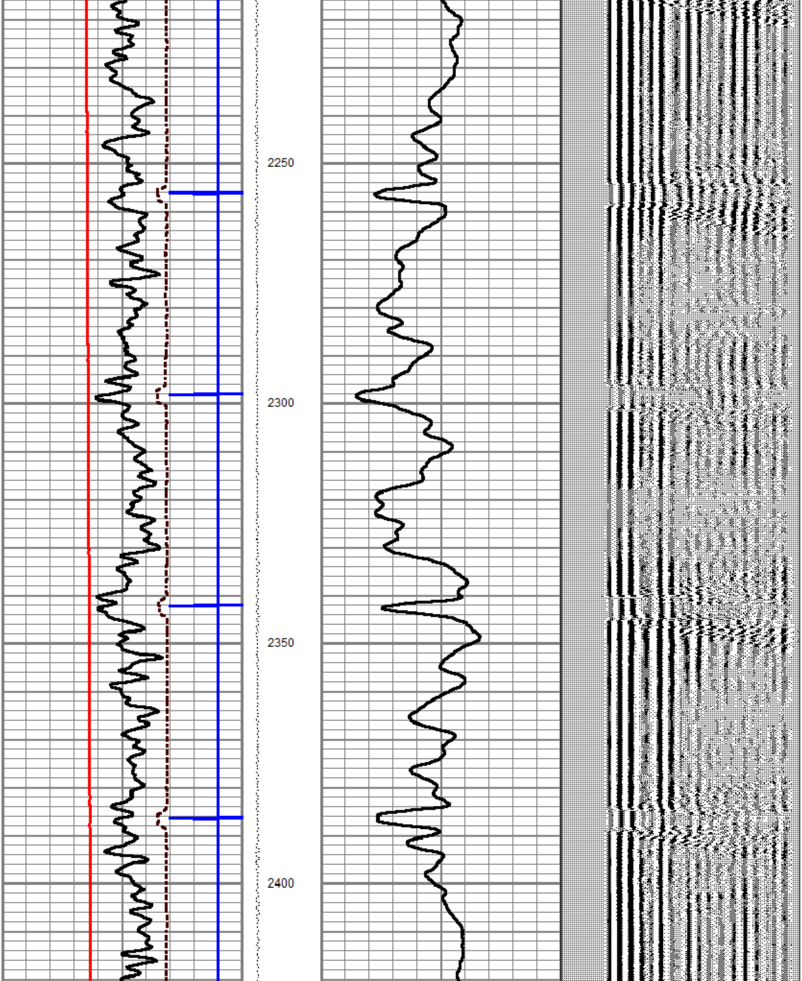


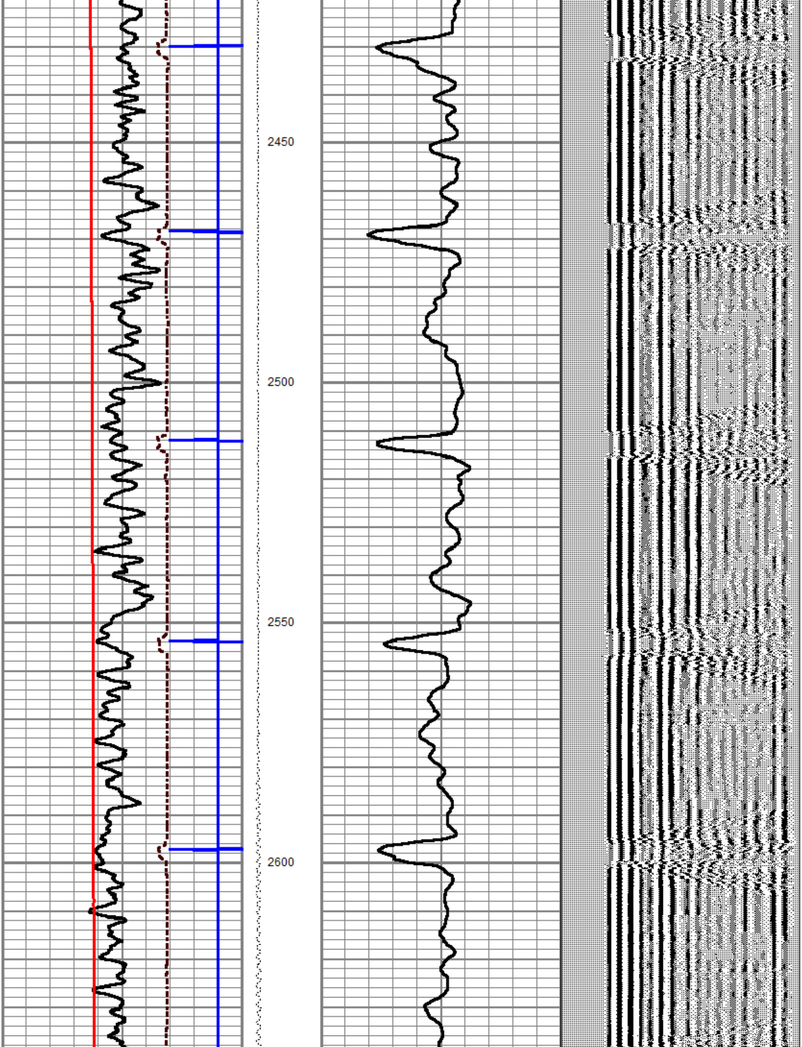


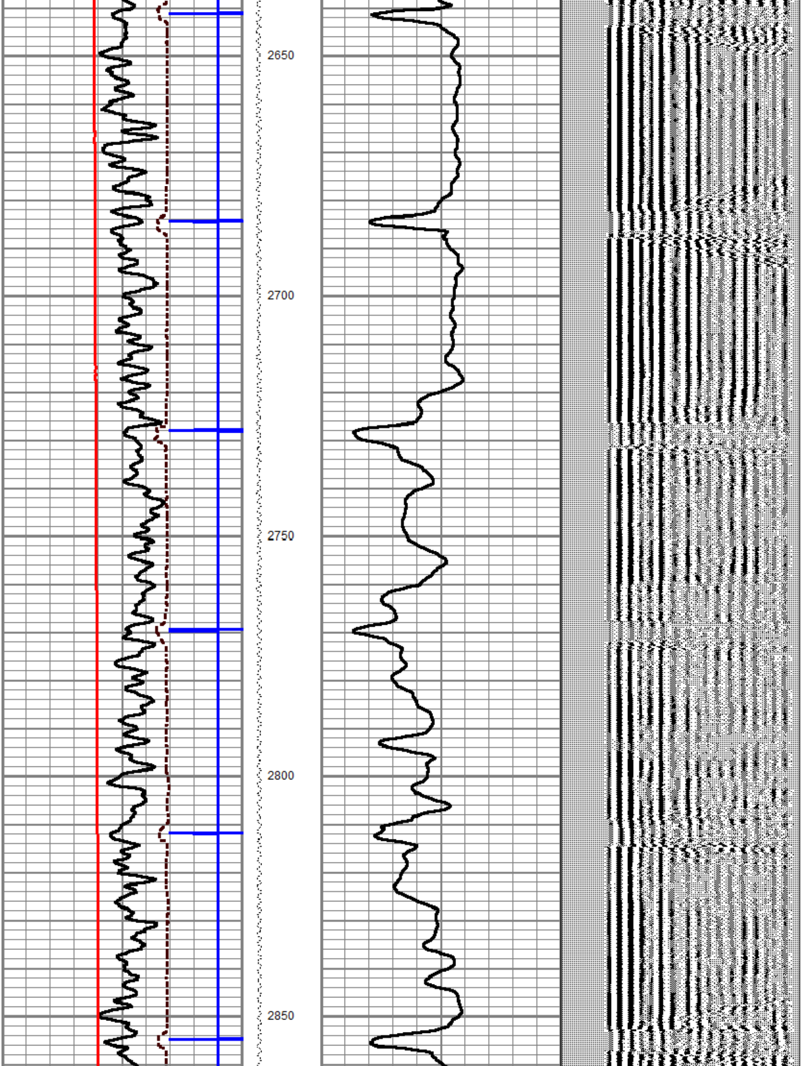


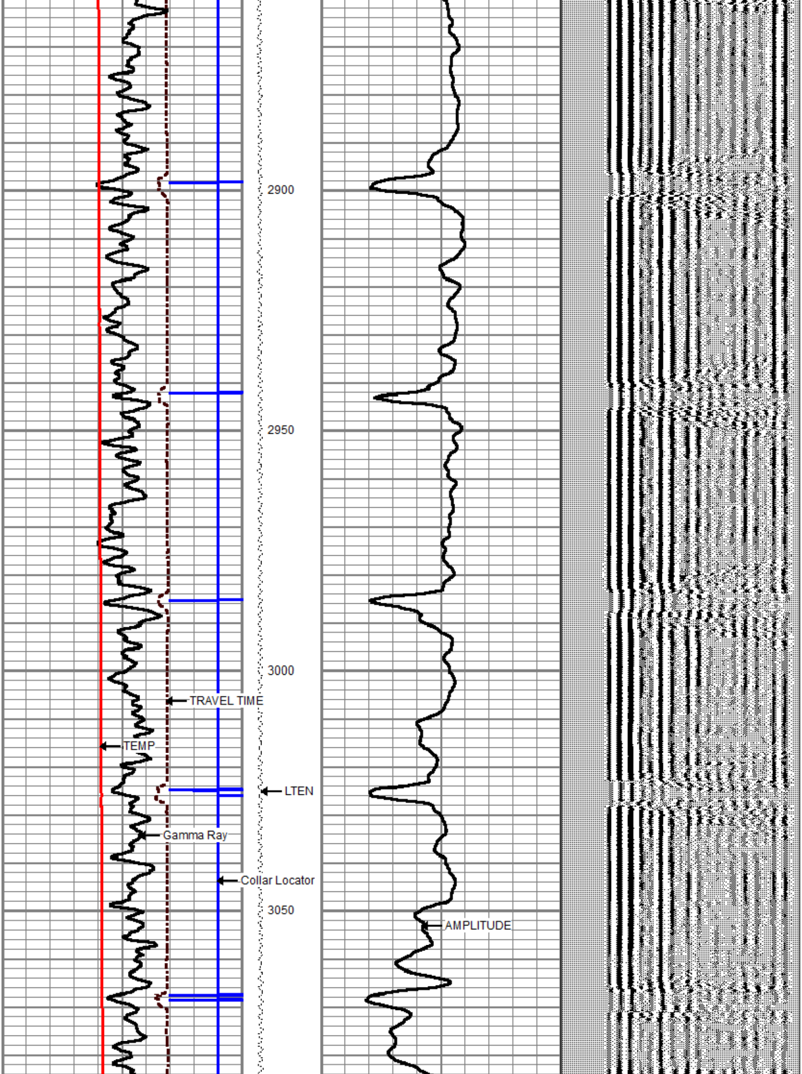


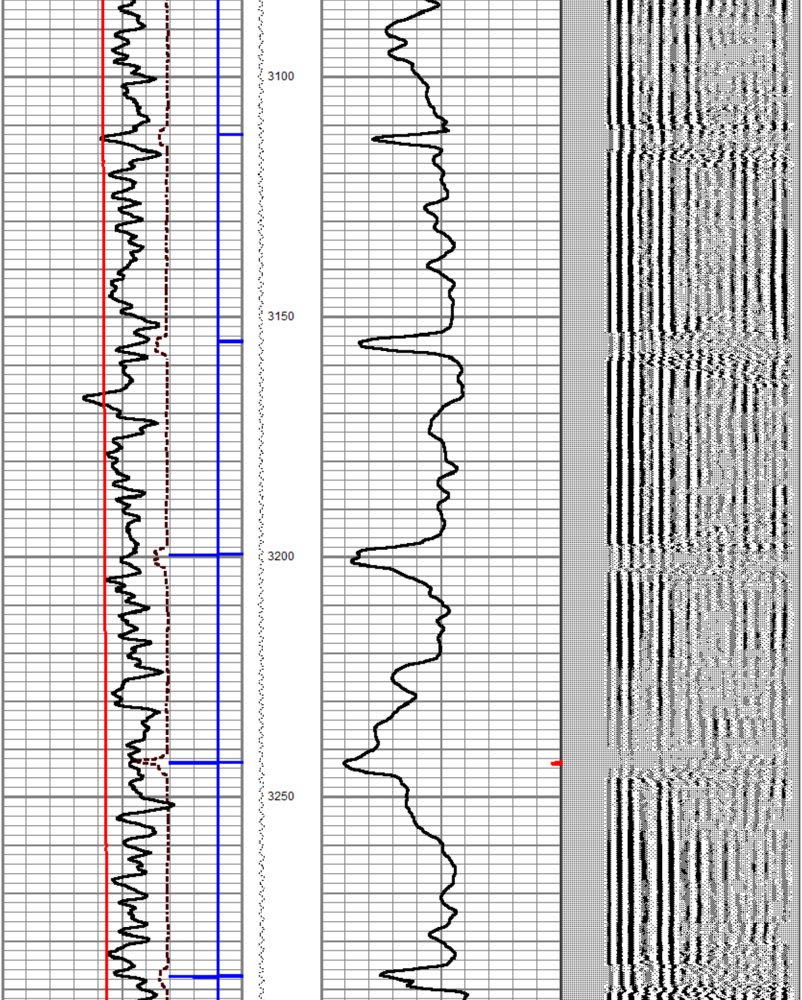


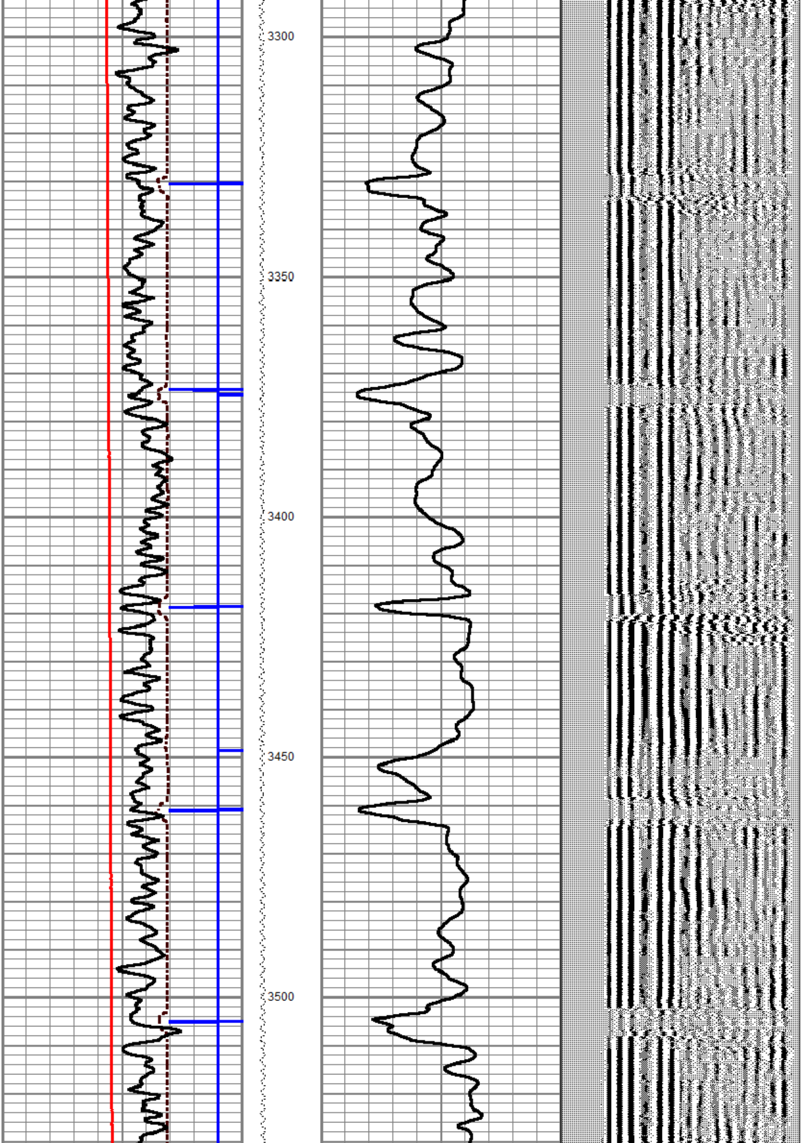


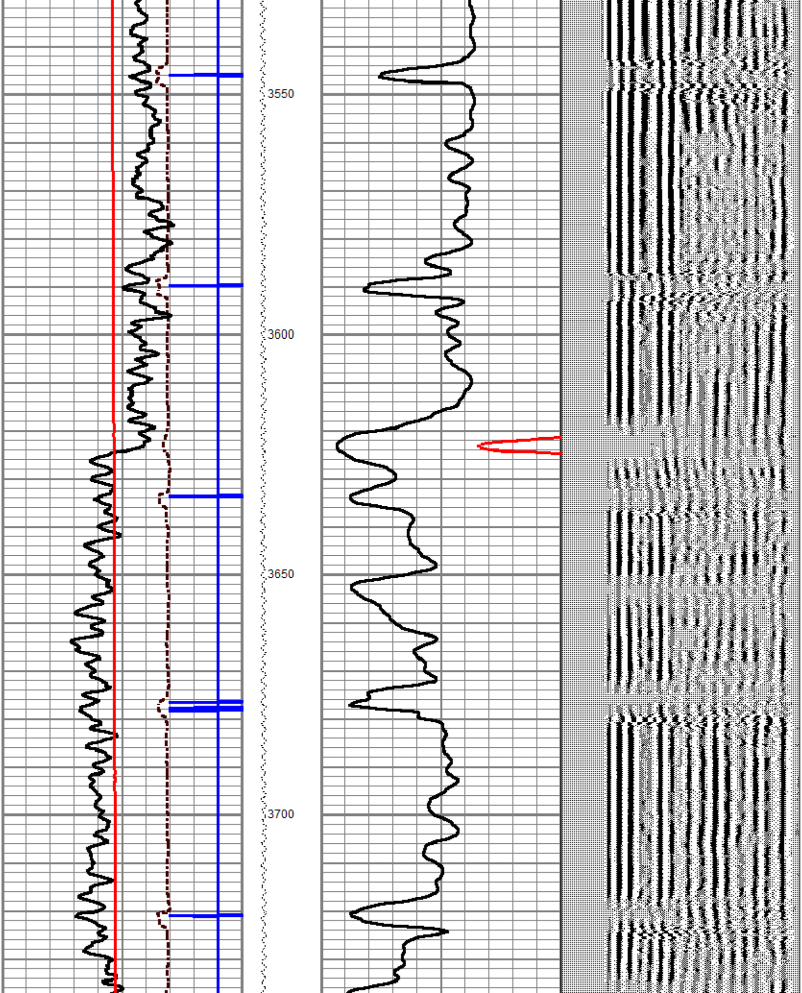


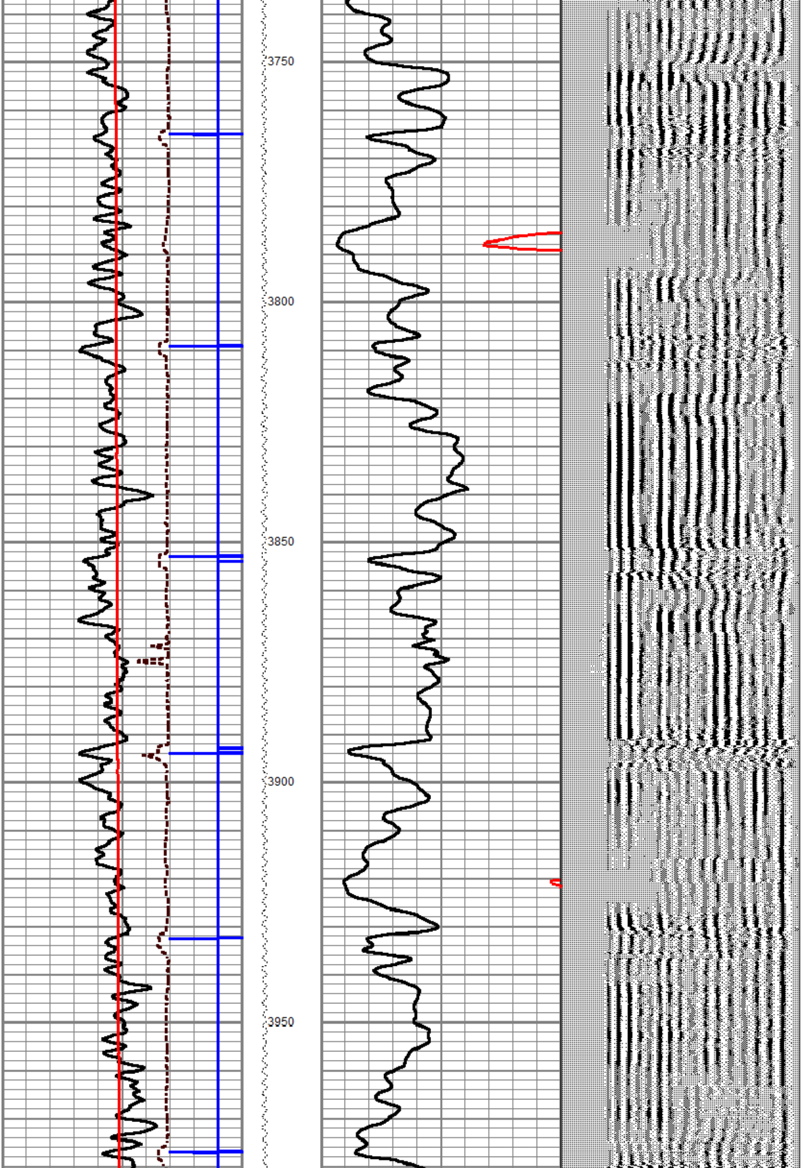


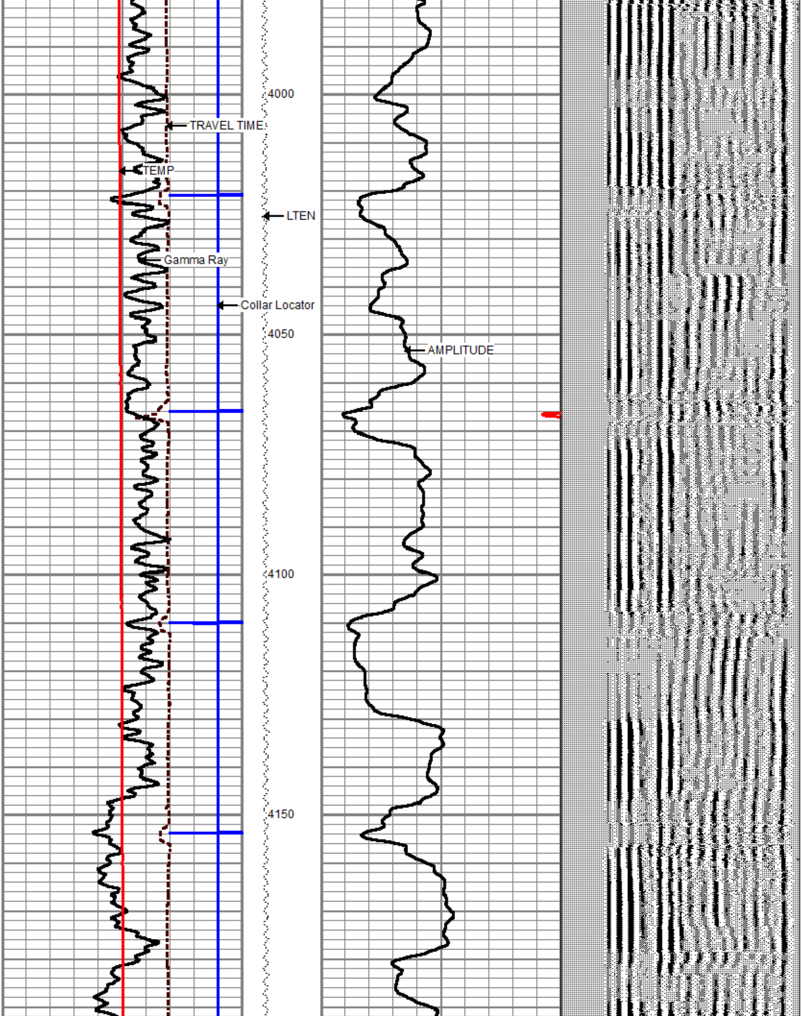


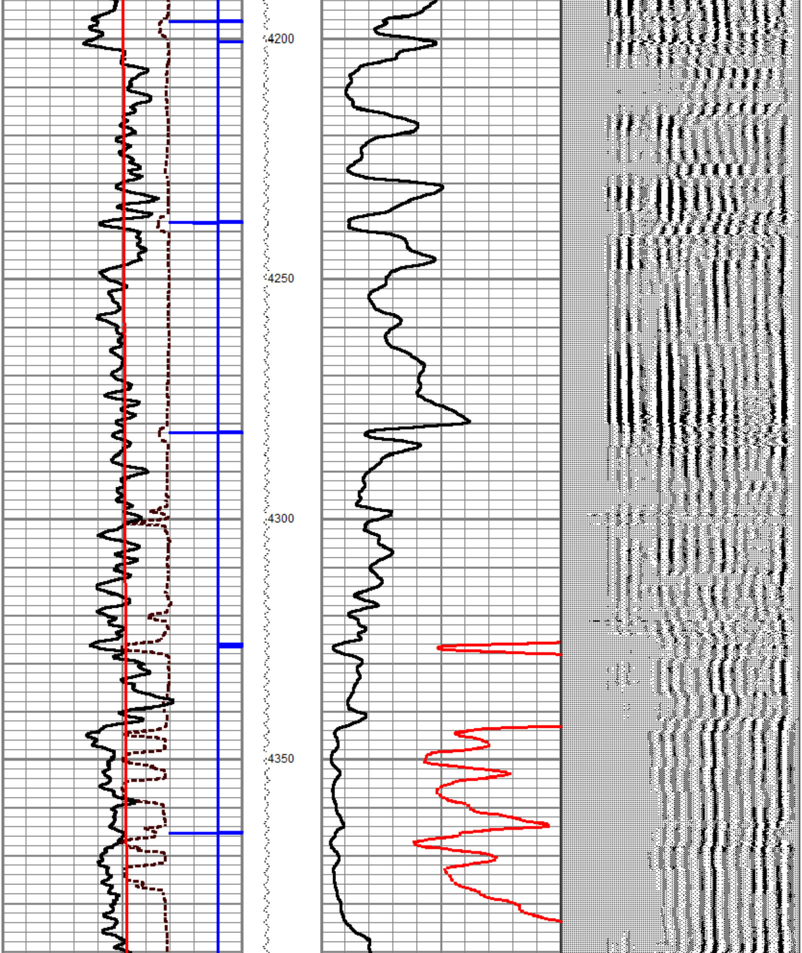


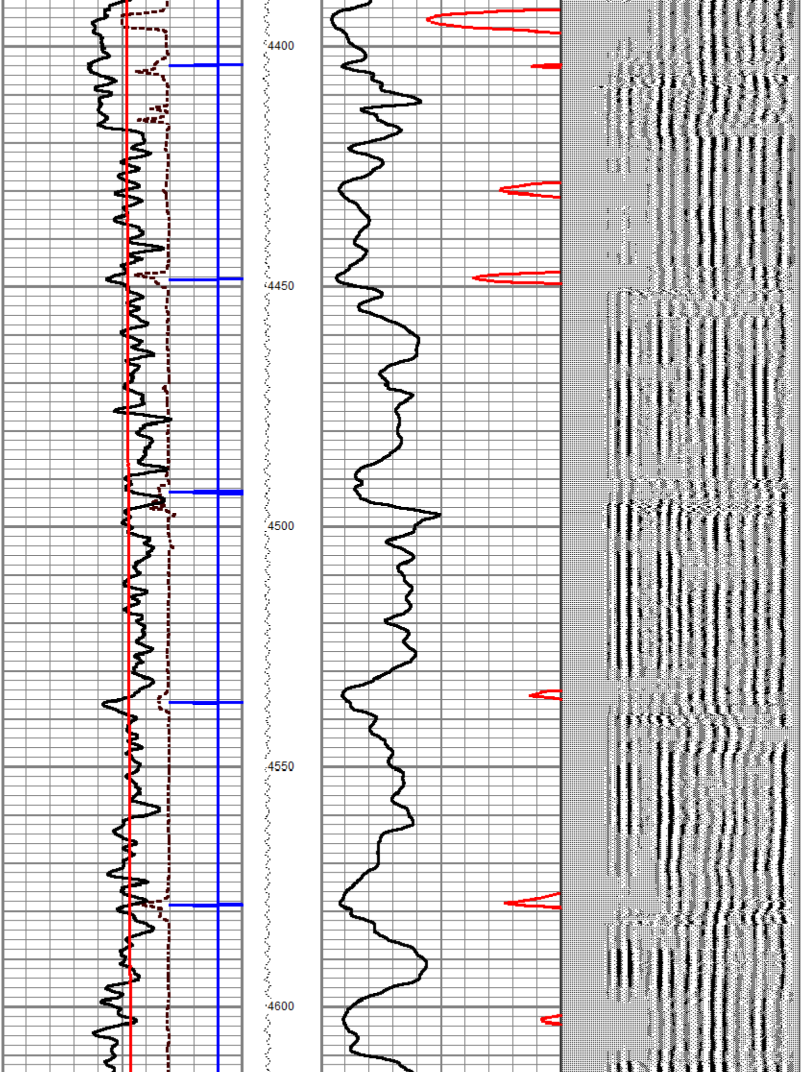


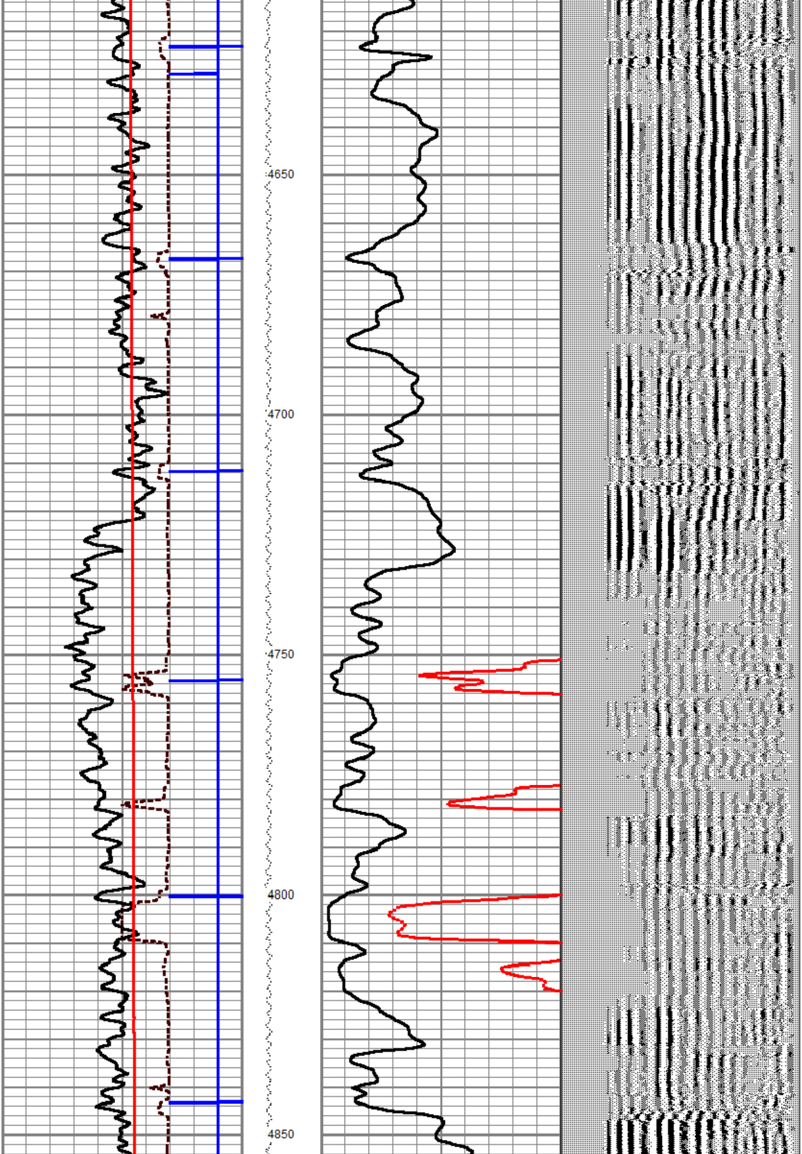


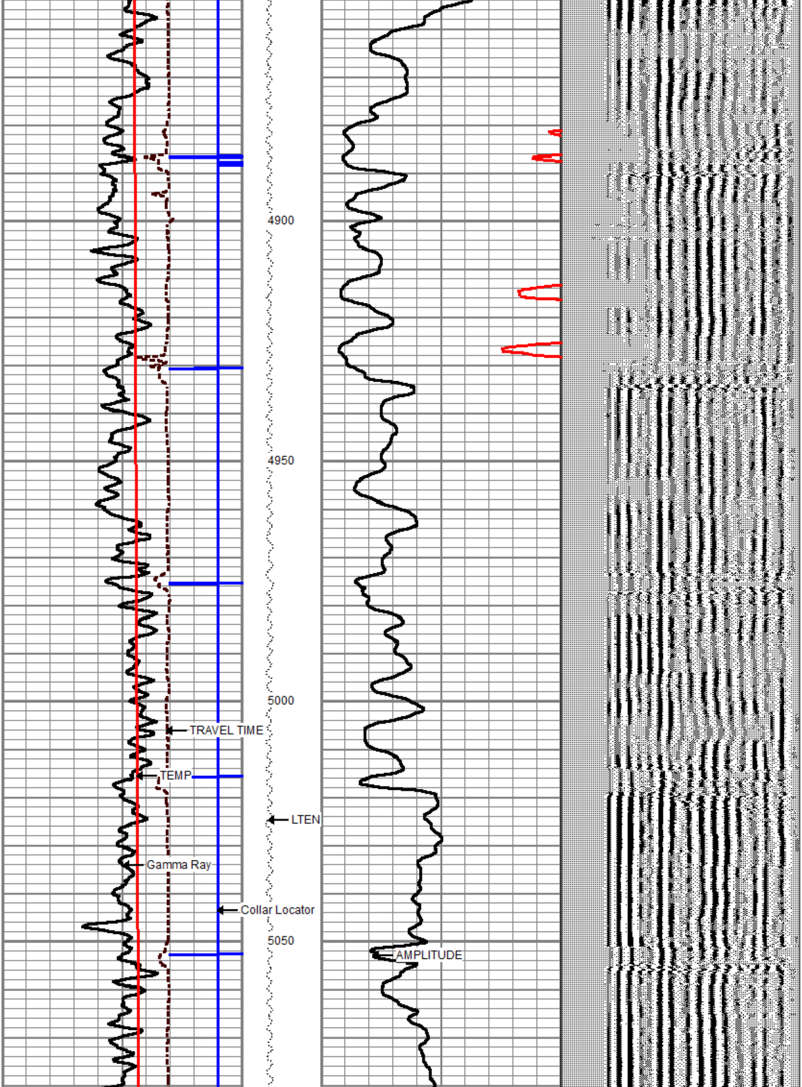


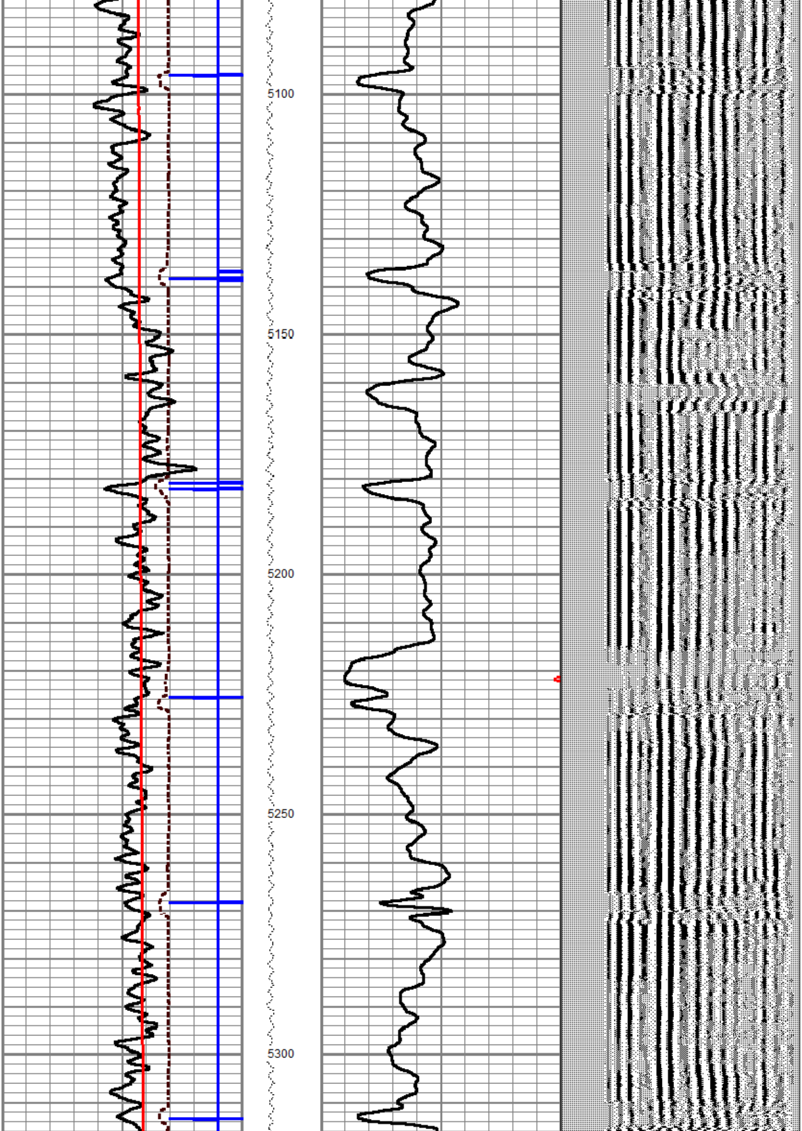


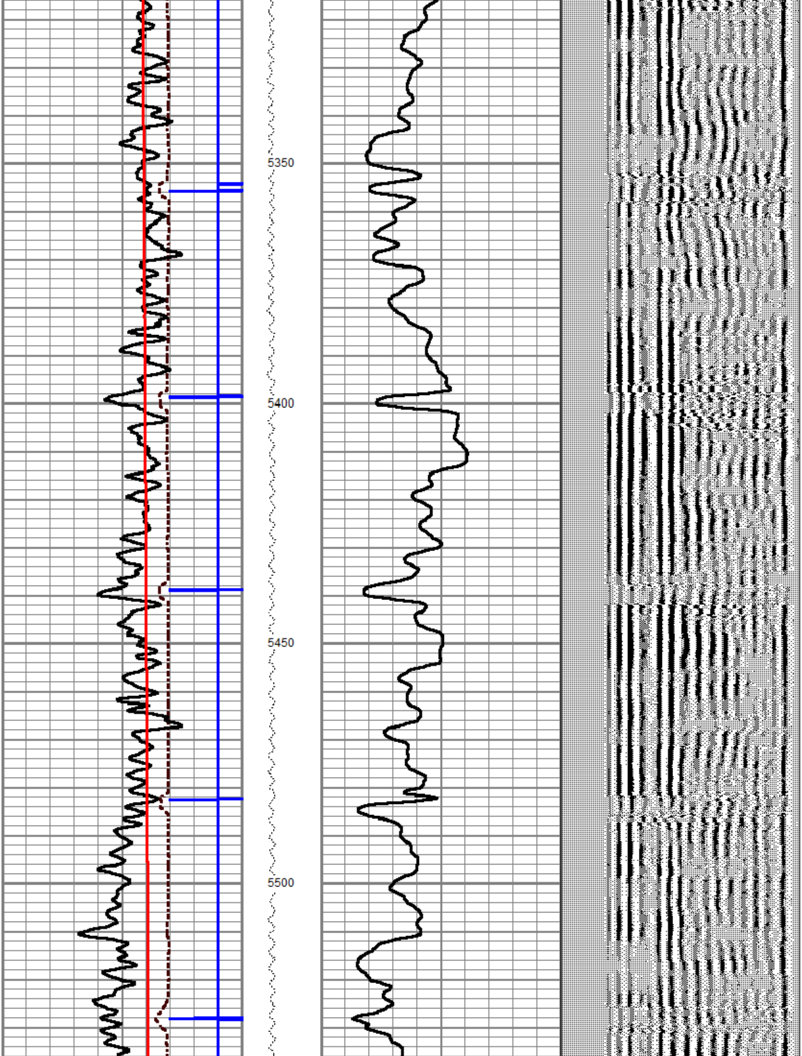


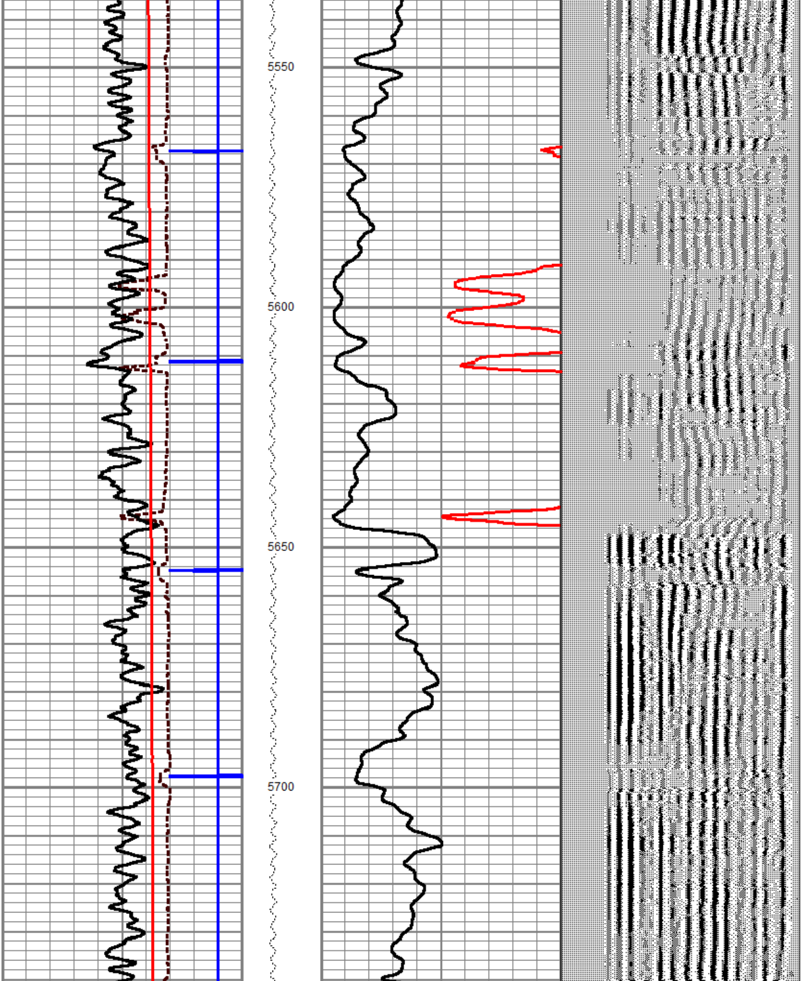


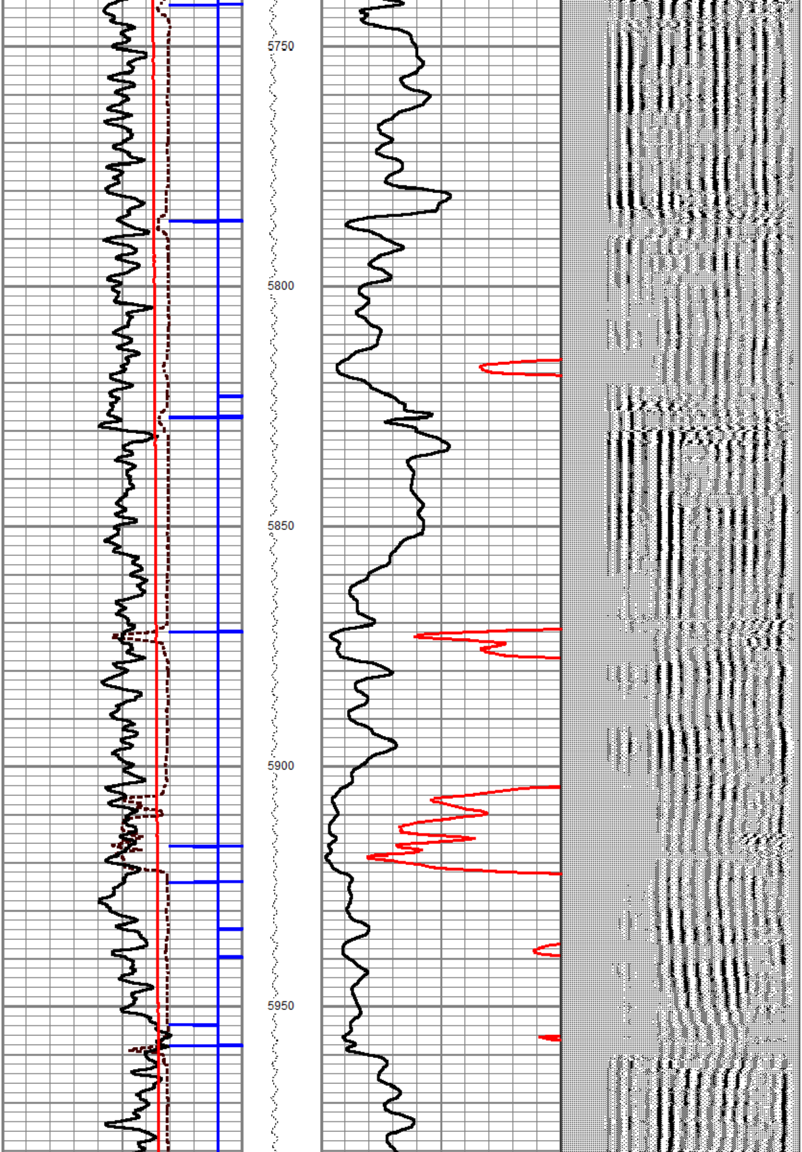


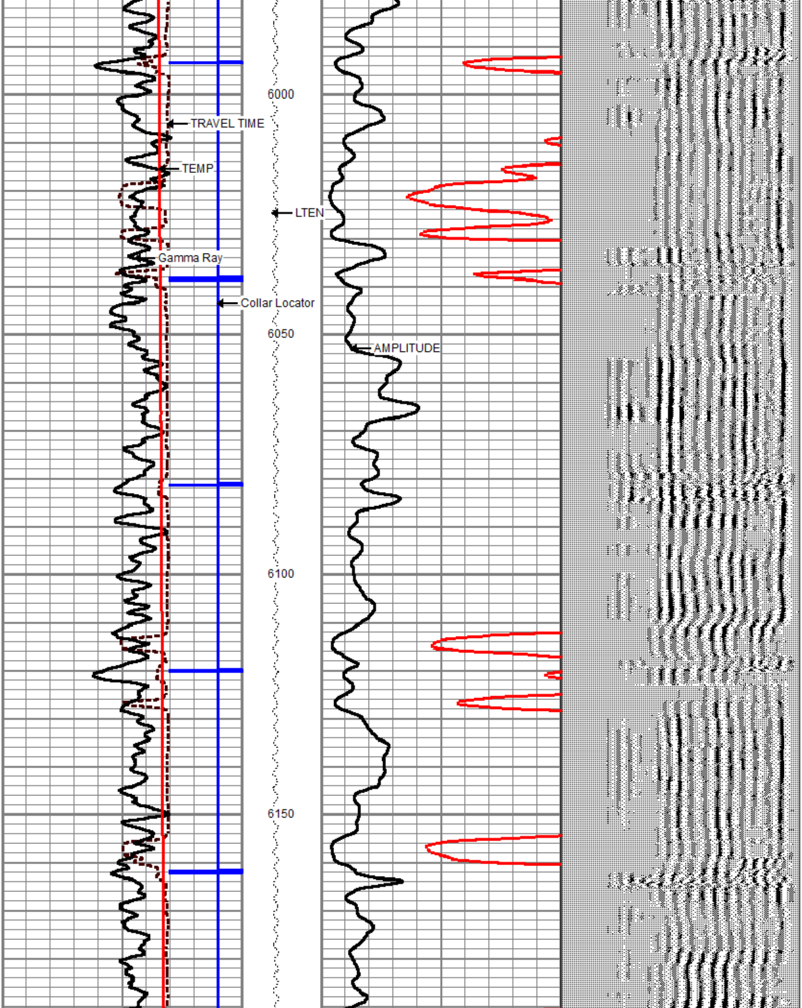


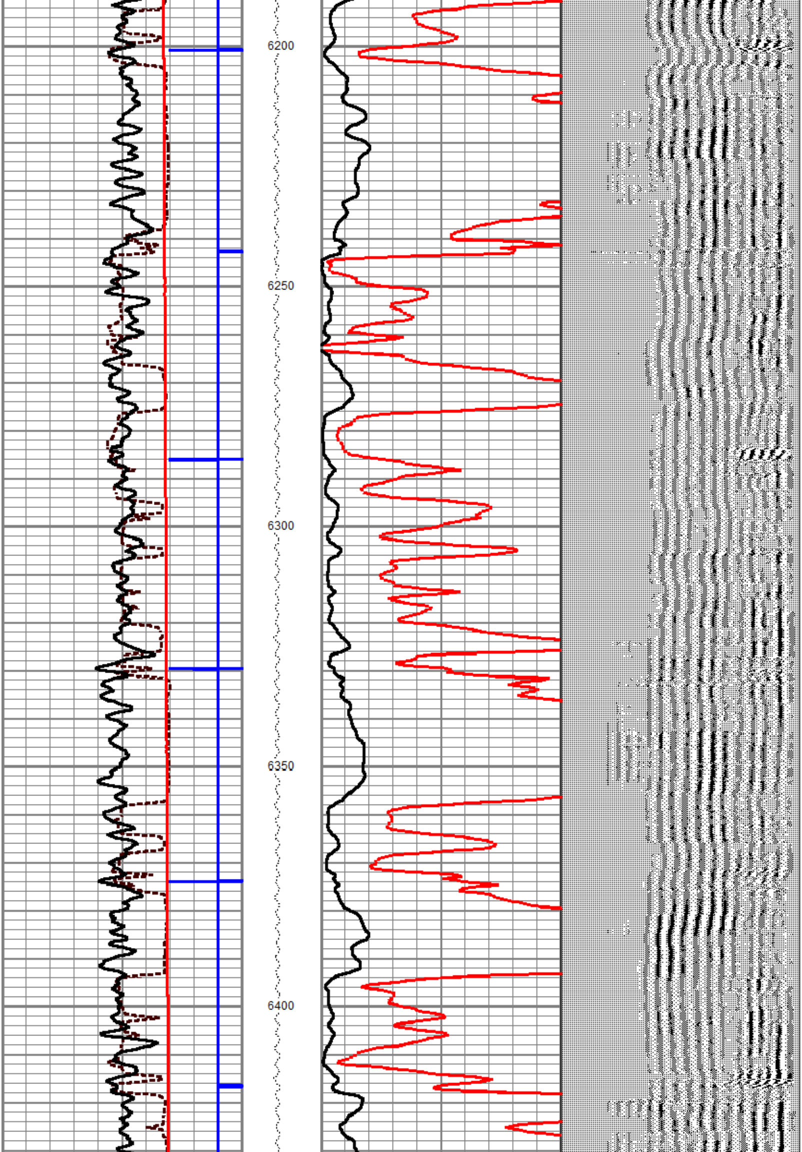


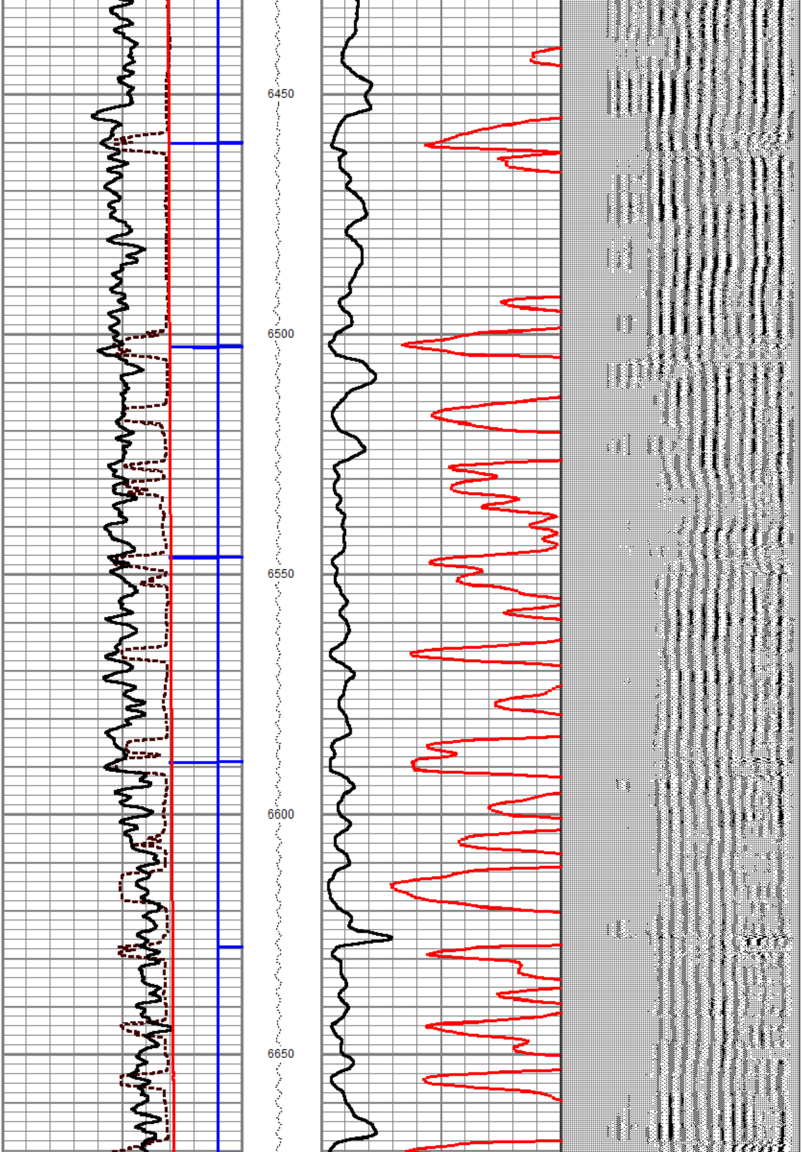


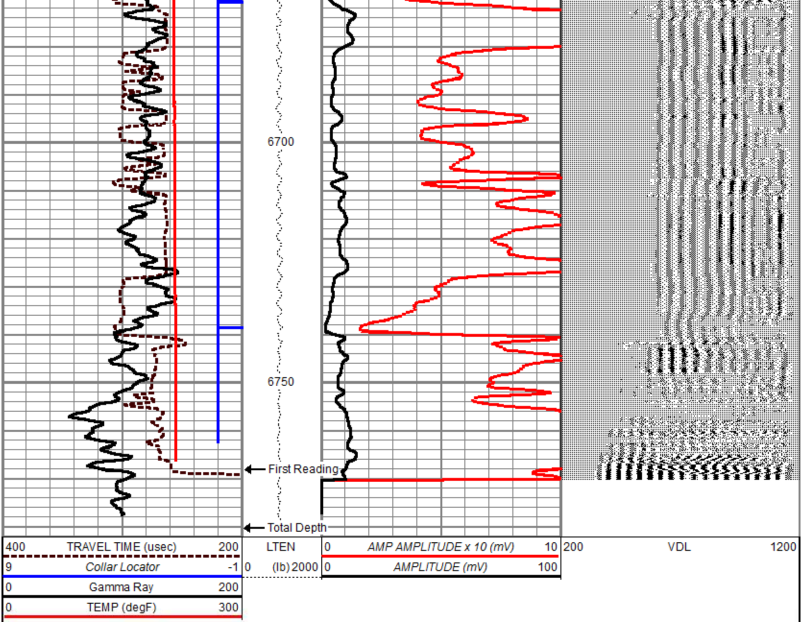












gyrodata

CEMENT BOND PRESENTATION

MAIN LOG SECTION / 0 PSI

5" = 100'

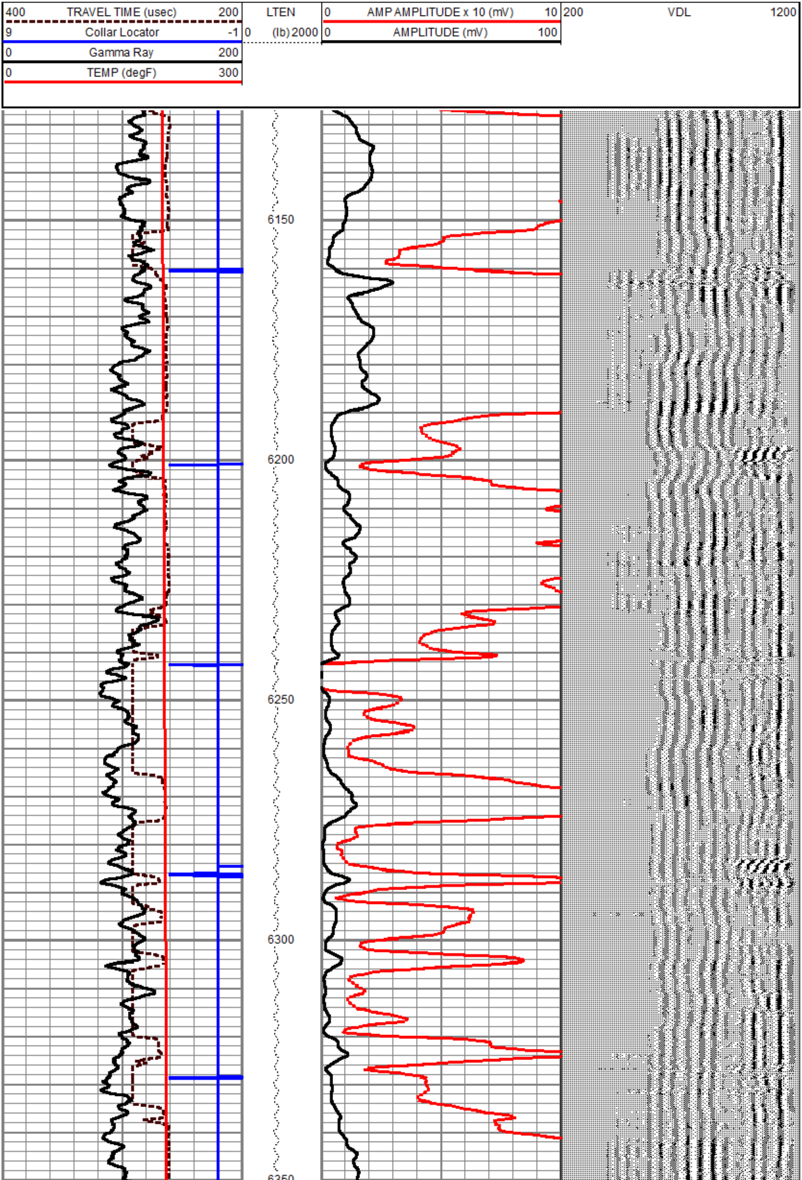
gyrodata

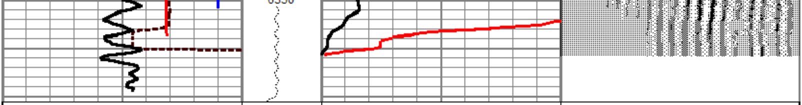
CEMENT BOND PRESENTATION

REPEAT LOG SECTION / 0 PSI

5" = 100'

Database File	2015_extraction_windsor_lv_f_14_h.db
Dataset Pathname	pass1.2
Presentation Format	cbl_drs
Dataset Creation	Mon Jan 05 17:53:59 2015
Charted by	Depth in Feet scaled 1:240



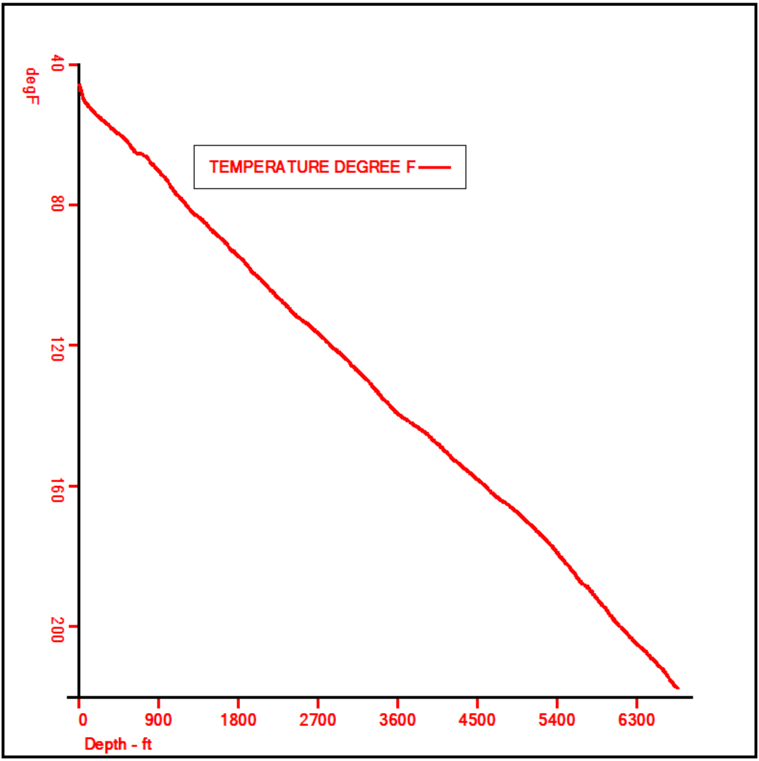


400 TRAVEL TIME (usec) 200	LTEN	0 AMP AMPLITUDE x 10 (mV) 10	200 VDL 1200
9 Collar Locator -1	0 (lb) 2000	0 AMPLITUDE (mV) 100	
0 Gamma Ray 200			
0 TEMP (degF) 300			

gyrodata

CEMENT BOND PRESENTATION

REPEAT LOG SECTION / 0 PSI
5" = 100'



Log Variables

Database C:\ProgramData\Warrior\Data\2015_extraction_windsor_lv_f_14_h.db
Dataset field/well/run1/pass1.4

Top - Bottom

BHTEMP_Src	PPT	CASEWGHT	MAXAMPL	MINAMPL	MINATTN	SRFTEMP	CASEOD	PERFS	TDEPTH
	usec	lb/ft	mV	mV	db/ft	degF	in		ft
1	0	26	62	1	0.8	0	7	0	0

BOTTEMP	BOREID
degF	in
250	7.875

Calibration Report

Database File 2015_extraction_windsor_lv_f_14_h.db
Dataset Pathname pass1.4
Dataset Creation Mon Jan 05 18:07:51 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: ISF06-04-10-10-2014
Tool Model: 275 H/T RIB with I/E Temp

Calibration Casing Diameter: 7.000 in
Calibration Depth: 757.733 ft

Master Calibration, performed Mon Jan 05 16:49:57 2015:

	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3'	0.000	0.249	0.000	62.165	249.648	0.000
CAL	0.000	0.294				
5'	0.000	0.404	0.000	62.165	153.719	0.000
SUM						
S1	0.000	0.151	0.000	100.000	662.998	0.000
S2	0.000	0.148	0.000	100.000	673.407	0.000
S3	0.000	0.159	0.000	100.000	629.573	0.000
S4	0.000	0.186	0.000	100.000	538.841	0.000
S5	0.000	0.192	0.000	100.000	519.797	0.000
S6	0.000	0.205	0.000	100.000	488.987	0.000
S7	0.000	0.189	0.000	100.000	529.541	0.000
S8	0.000	0.173	0.000	100.000	576.942	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	0.294	1.000	0.000

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

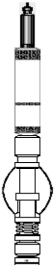
	Raw (v)	Calibrated (v)	Results
	Zero	Zero	Offset
3'	0.000	0.000	0.000
5'	0.000	0.000	0.000
SUM			
S1	0.000	0.000	0.000
S2	0.000	0.000	0.000
S3	0.000	0.000	0.000
S4	0.000	0.000	0.000
S5	0.000	0.000	0.000
S6	0.000	0.000	0.000
S7	0.000	0.000	0.000
S8	0.000	0.000	0.000

Temperature Calibration Report

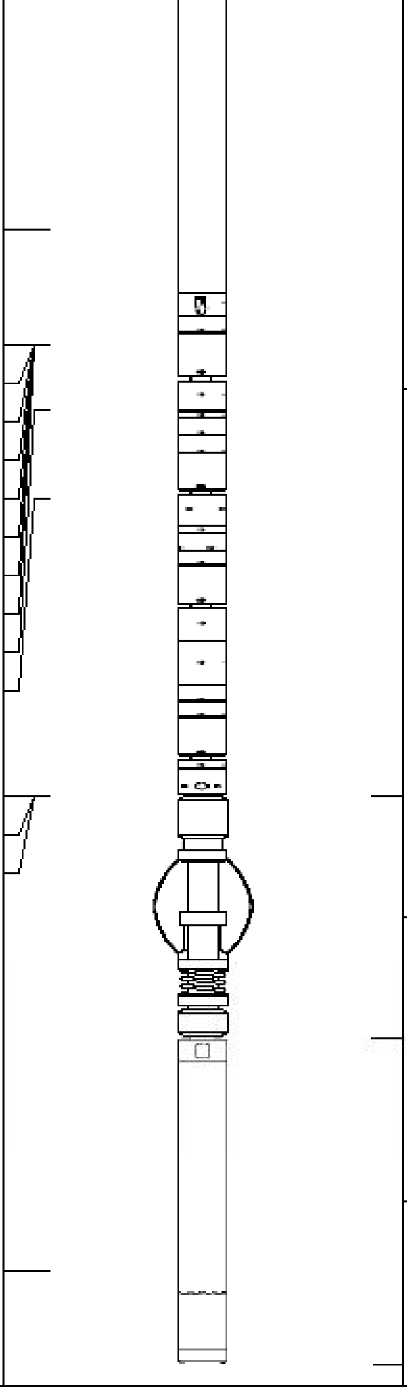
Serial Number:	ISF06-04-10-10-2014
Tool Model:	275 H/T RIB with I/E Temp
Performed:	Mon Jan 05 14:44:41 2015

	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-IS2T1-08) 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
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



275 H/T RIB with I/E Temp (ISF06-04-10-10-20 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 (234GR-IPCD9-02) Tekco 2 3/4" 400 Deg. F Logging Gamma Ray	3.67	2.75	40.00

Dataset:	2015_extraction_windsor_lv_f_14_h.db: field/well/run1/pass1.4
Total length:	21.25 ft
Total weight:	215.60 lb
O.D.:	2.75 in

gyrodata

Company	**EXTRACTION OIL & GAS**		
Well	**WINDSOR LV F-14H**		
Field	**WATTENBERG**		
County	**WELD**		
State	**CO**	**Country**	**USA**