Company Anadarko Petroleum Corporation
Well Wagner Herman GU #1
Field Wattenberg
County Weld
State Colorado

PIONEER
Pioneer Energy Services

Cement Bond Log
With VDL / CCL
And Gamma Ray

Company	Anadarko Petroleum Corporation
Well	Wagner Herman GU #1
Field	Wattenberg
County	Weld
State	Colorado

Location: API # : 05-123-08201

SWNE
SHL: 1650'FNL & 1580'FEL
SEC 25 TWP 3N RGE 68W

Other Services
None

Permanent Datum	Ground Level	Elevation	4895'
Log Measured From	Kelly Bushing	10' A.P.D.	
Drilling Measured From	Kelly Bushing		

Elevation
K.B. 4905'
D.F. 4905'
G.L. 4895'

Date	26-Mar-2014		
Run Number	One		
Depth Driller	7800'		
Depth Logger	7138'		
Bottom Logged Interval	7136'		
Top Log Interval	Surface		
Open Hole Size	7.875"		
Type Fluid	Water		
Density / Viscosity	8.34		
Max. Recorded Temp.	NR		
Estimated Cement Top	6382'		
Time Well Ready	08:00		
Time Logger on Bottom	08:30		
Equipment Number	96		
Location	Fort Morgan		
Recorded By	Bruce Miller		
Witnessed By	Mr. Rigo Cintora		

Borehole Record				Tubing Record			
Run Number	Bit	From	To	Size	Weight	From	To

Casing Record	Size	Wgt/Ft	Top	Bottom
Surface String	8.625"	24#	Surface	201'
Prot. String				
Production String	4.5"	10.5/11.6#	Surface	7800'
Liner				

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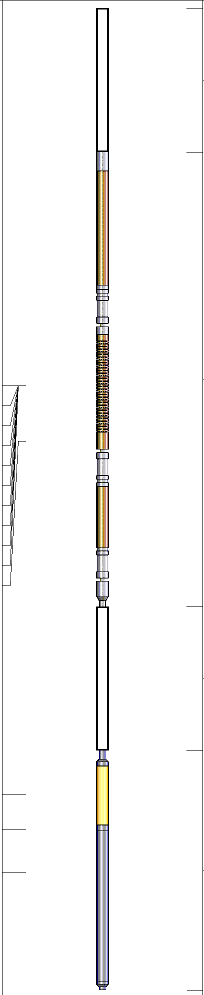
All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs, 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

Thank You For Using Pioneer Energy Services.

Log Is Correlated To Schlumberger Cement Bond Log Dated 21-Mar-1996

Possible Gas Migration From 1600' Or So To Surface. Hole Was Loaded To Surface For Log.

Sensor	Offset (ft)	Schematic	Description	Len (ft)	OD (in)	Wt (lb)
			PTS275	2.83	2.75	
WVF3FT	11.86		RBT-Probe (Base) Probe Radii Bond Tool with Digital Telemetry	8.92	2.75	90.00
WVFCAL	11.86					
WVFS1	11.86					
WVFS2	11.86					
WVFS3	11.86					
WVFS4	11.86					
WVFS5	11.86					
WVFS6	11.86					
WVFS7	11.86					
WVFS8	11.86					
WVF5FT	10.78					
			PTS275	2.83	2.75	
CCL	3.84					
TEMP	3.14					
GR	2.30		GCT-GRCCLTEMP (130608) Probe GCT	4.69	2.75	100.00

Dataset:	anadarko_2-205394.db: field/well/run1/pass2
Total Length:	19.27 ft
Total Weight:	190.00 lb
O.D.	2.75 in

PIONEER

Pioneer Energy Services

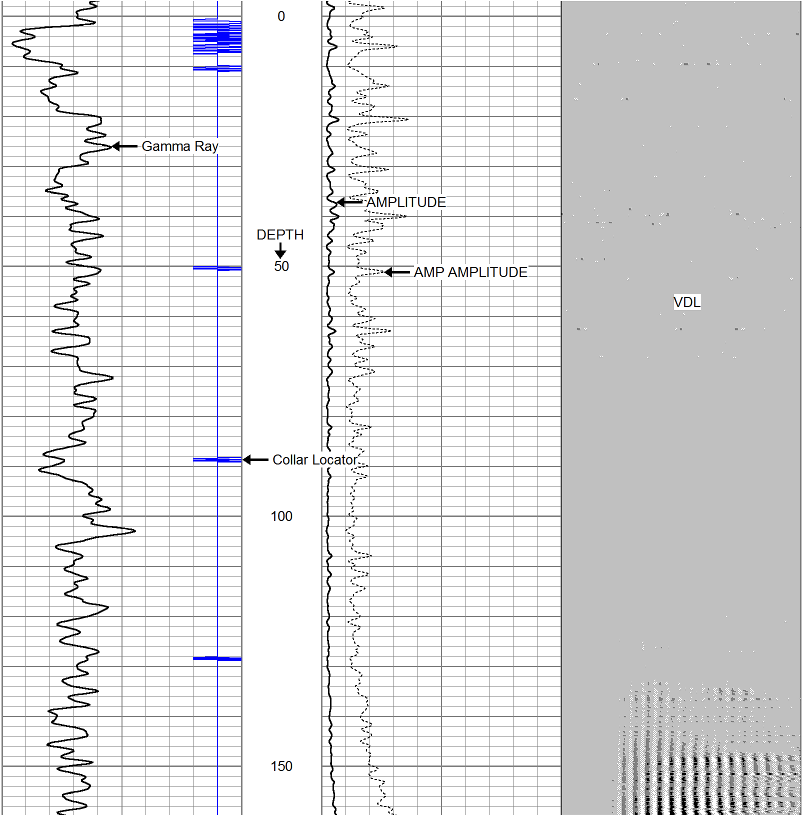
Main Pass

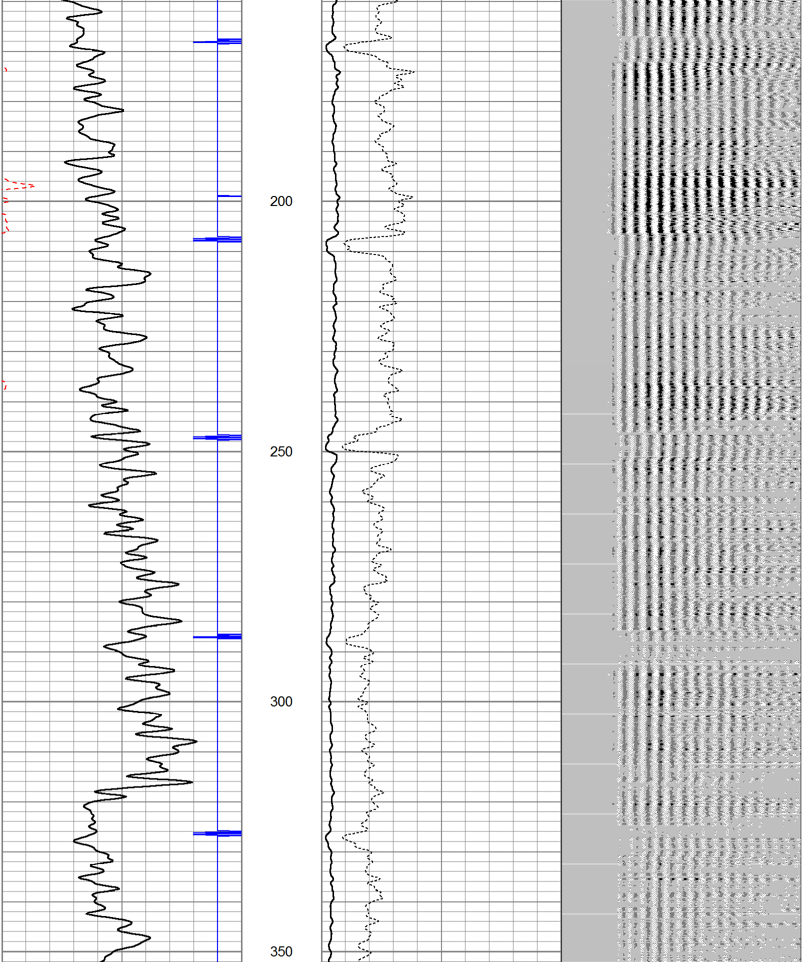
Database File: anadarko_2-205394.db
Dataset Pathname: pass2
Presentation Format: cbl_drs
Dataset Creation: Wed Mar 26 08:48:46 2014 by Log SCH 120430
Charted by: Depth in Feet scaled 1:240

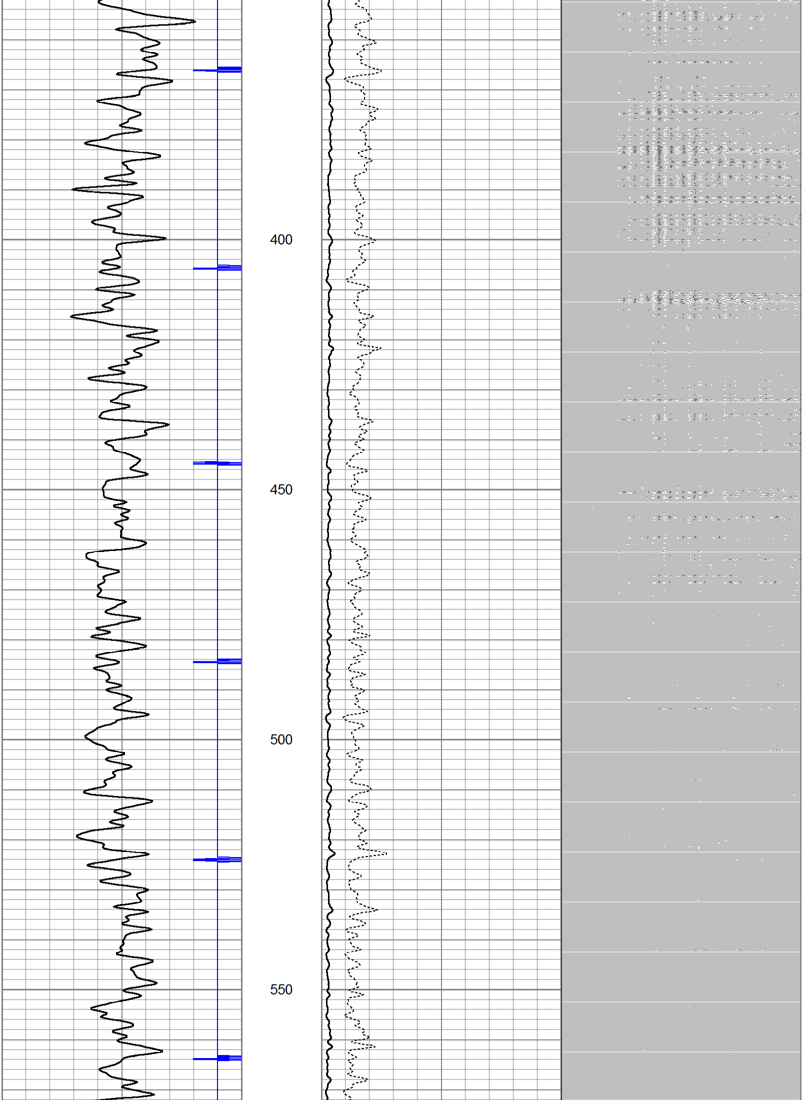
-9 Collar Locator 1
0 Gamma Ray (GAPI) 200
325 TT3FT (usec) 225

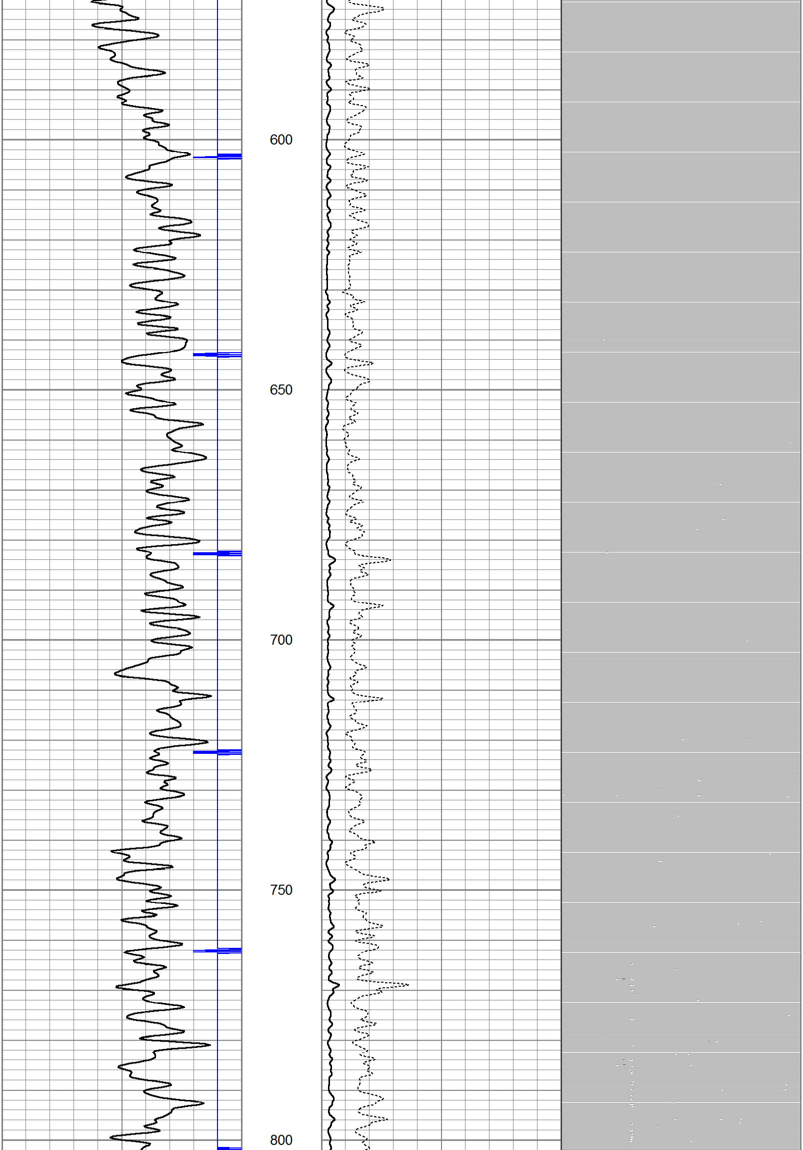
0 AMP AMPLITUDE (mV) 20
0 AMPLITUDE (mV) 100

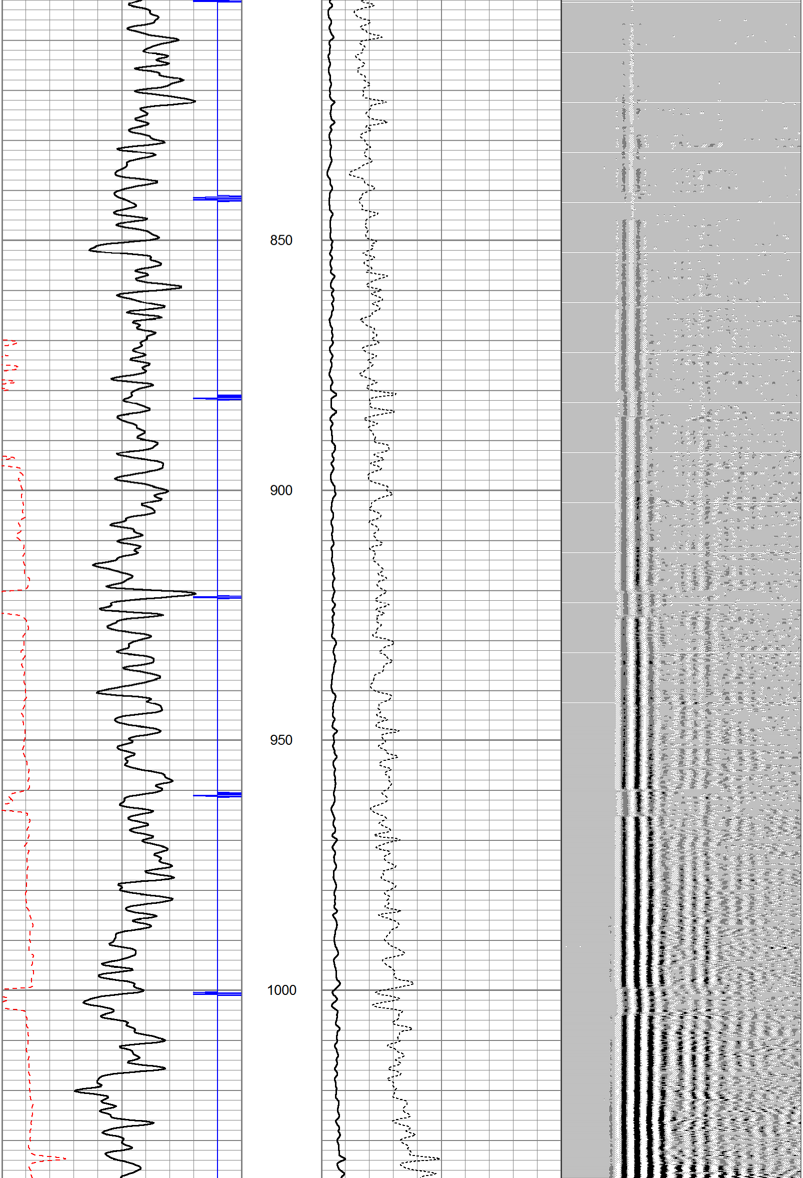
200 VDL 1200

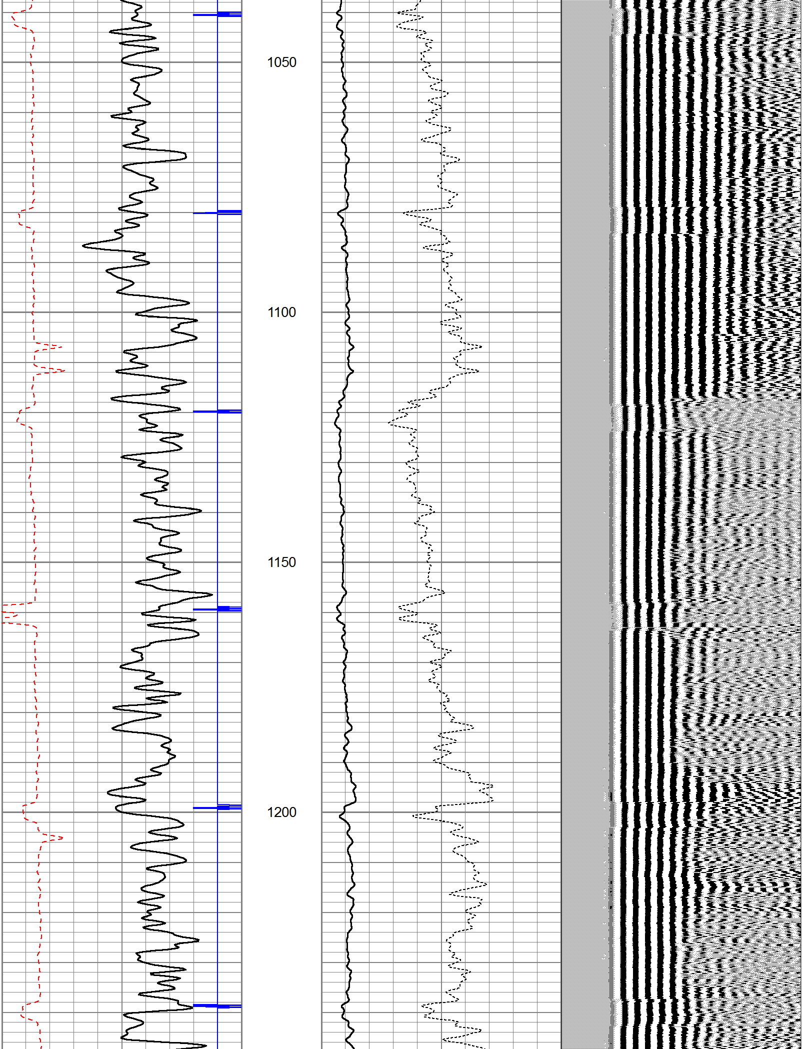


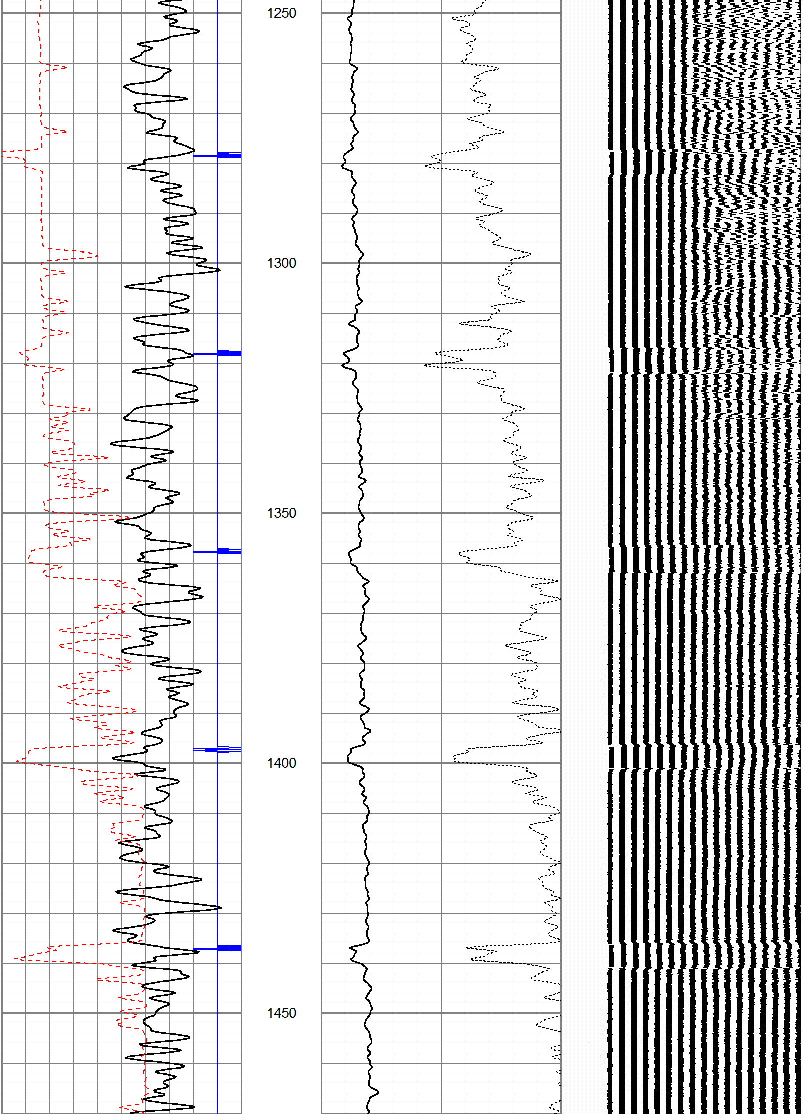


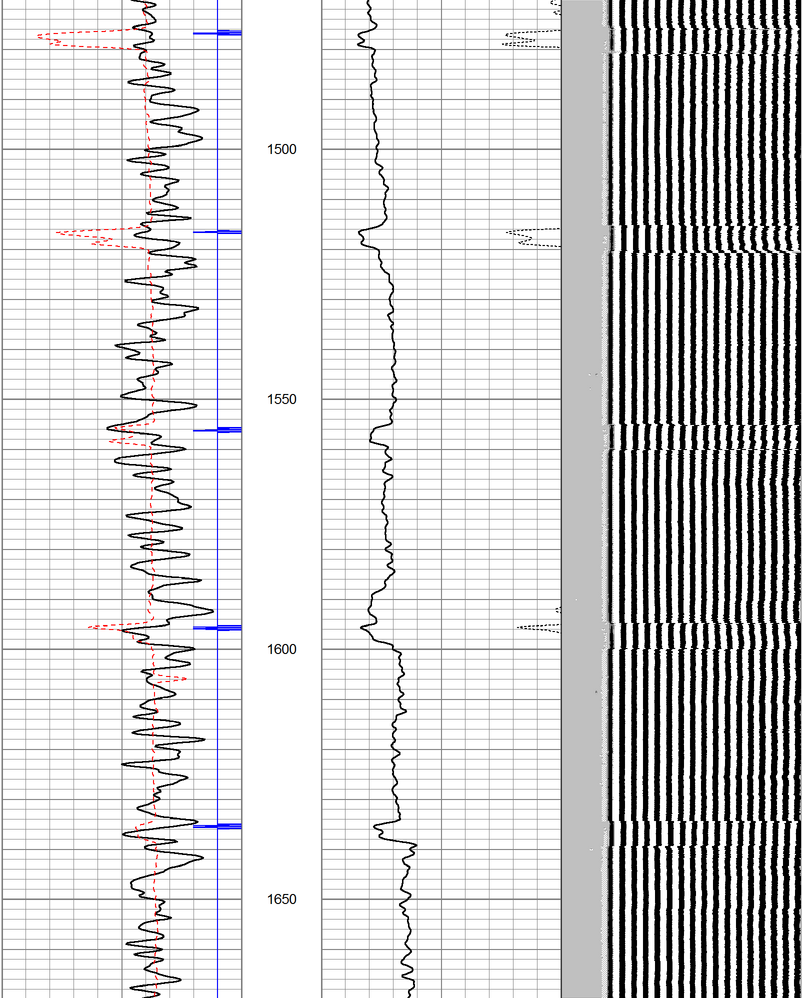


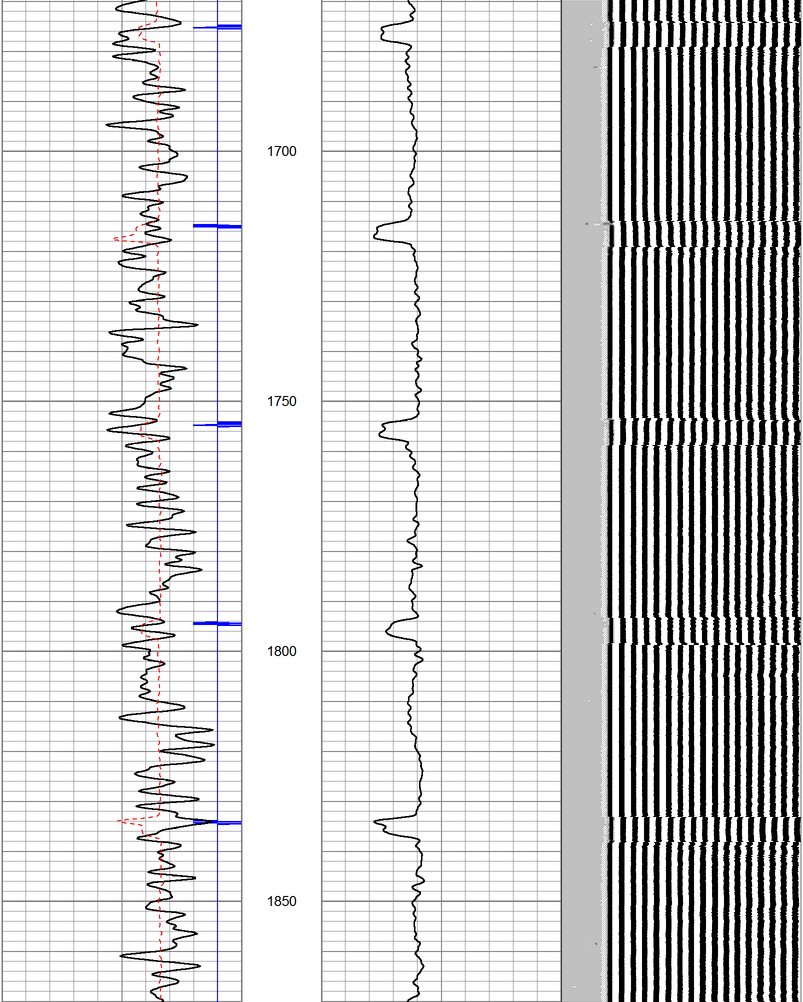


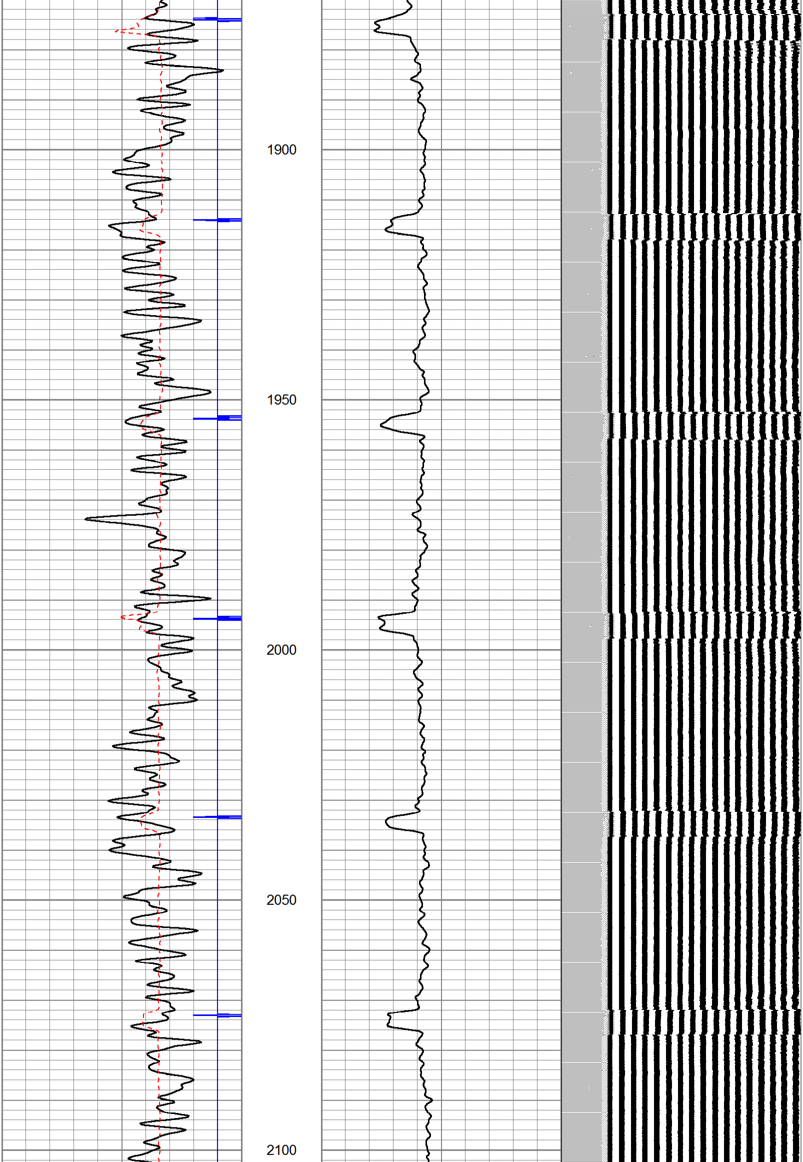


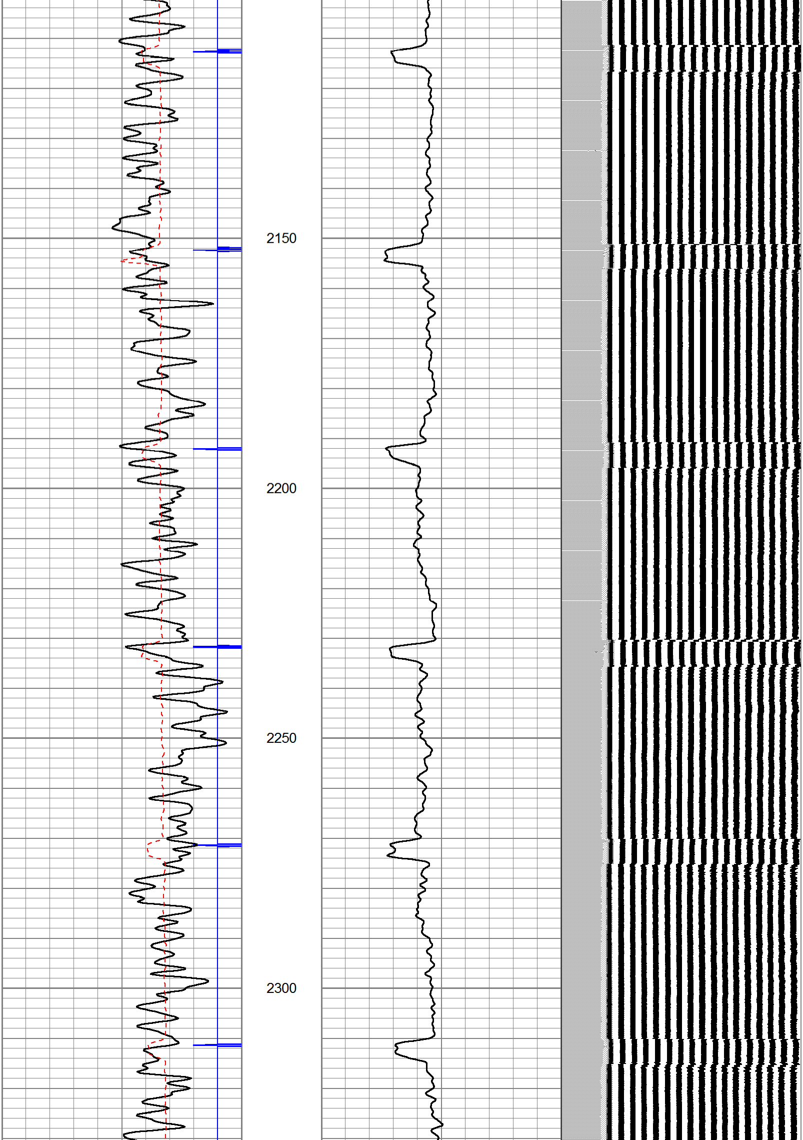


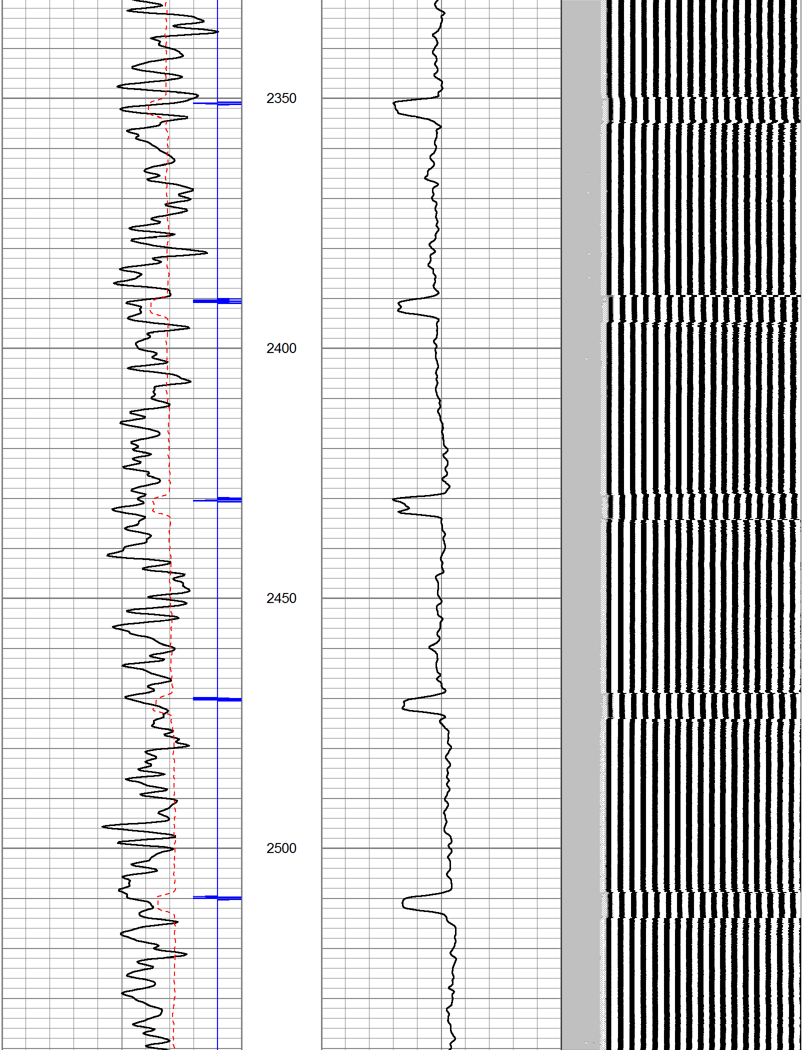


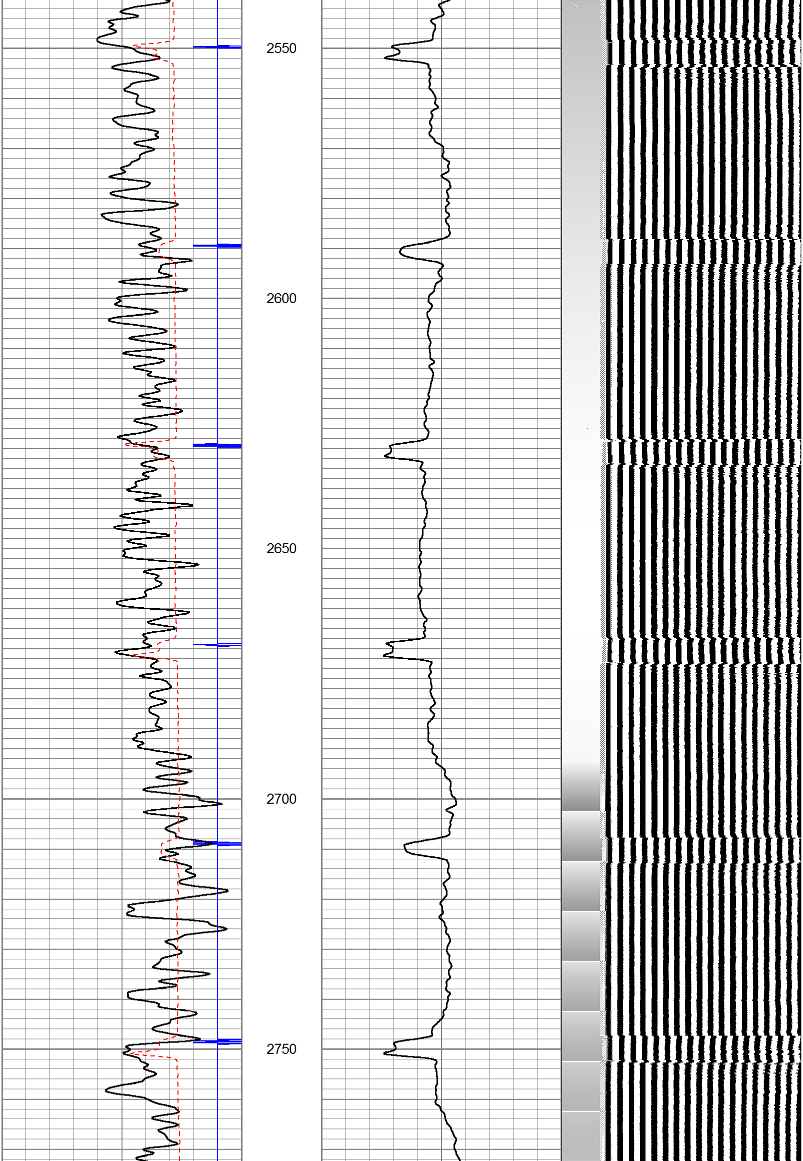


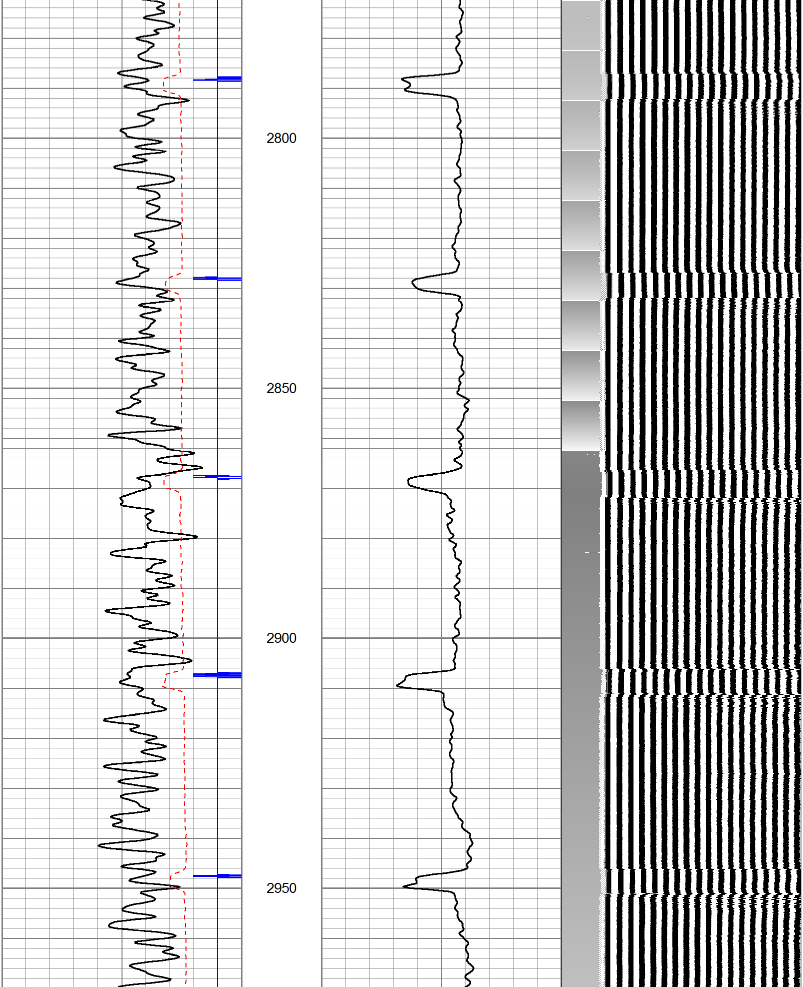


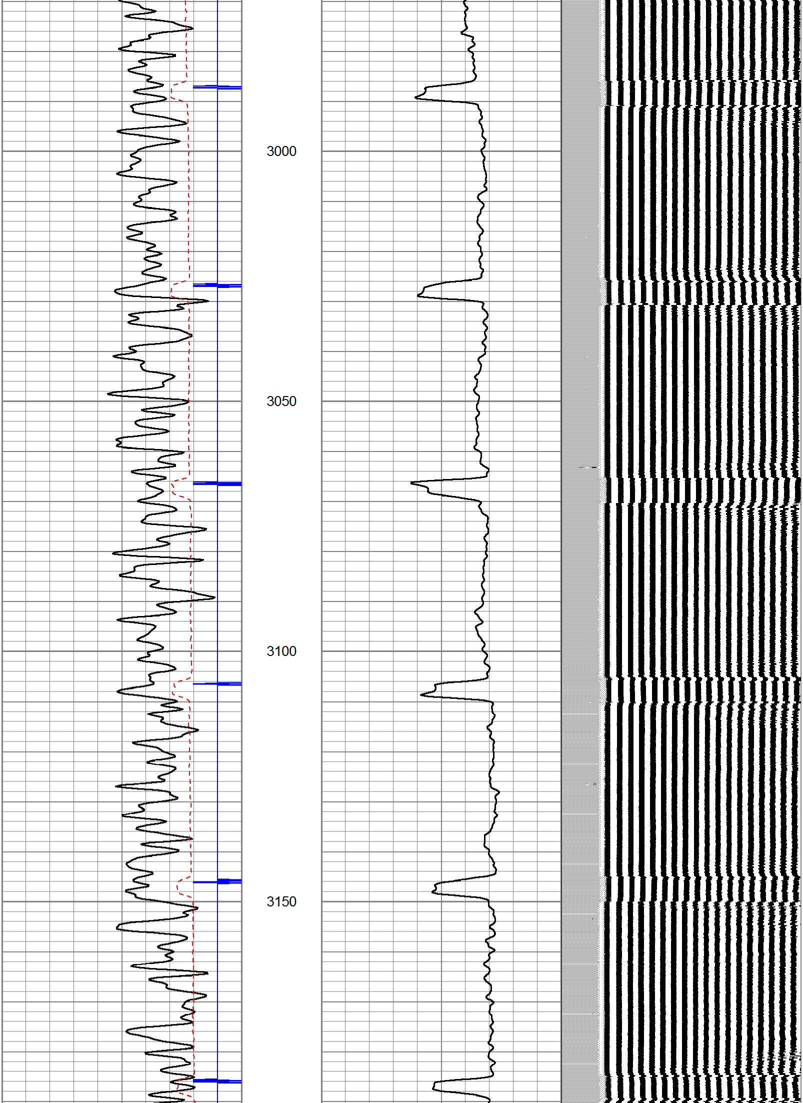


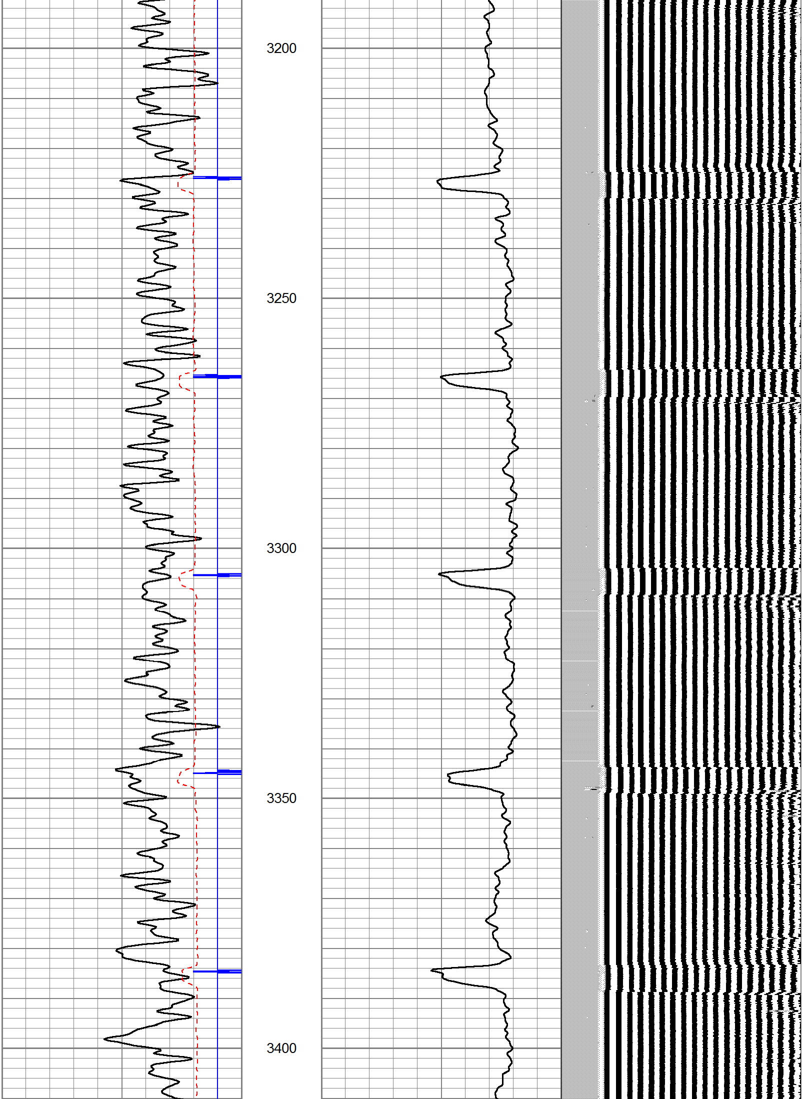


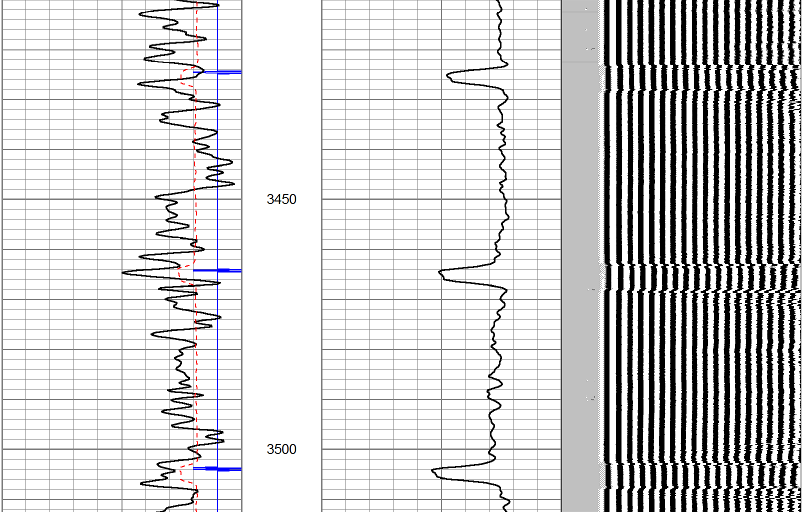


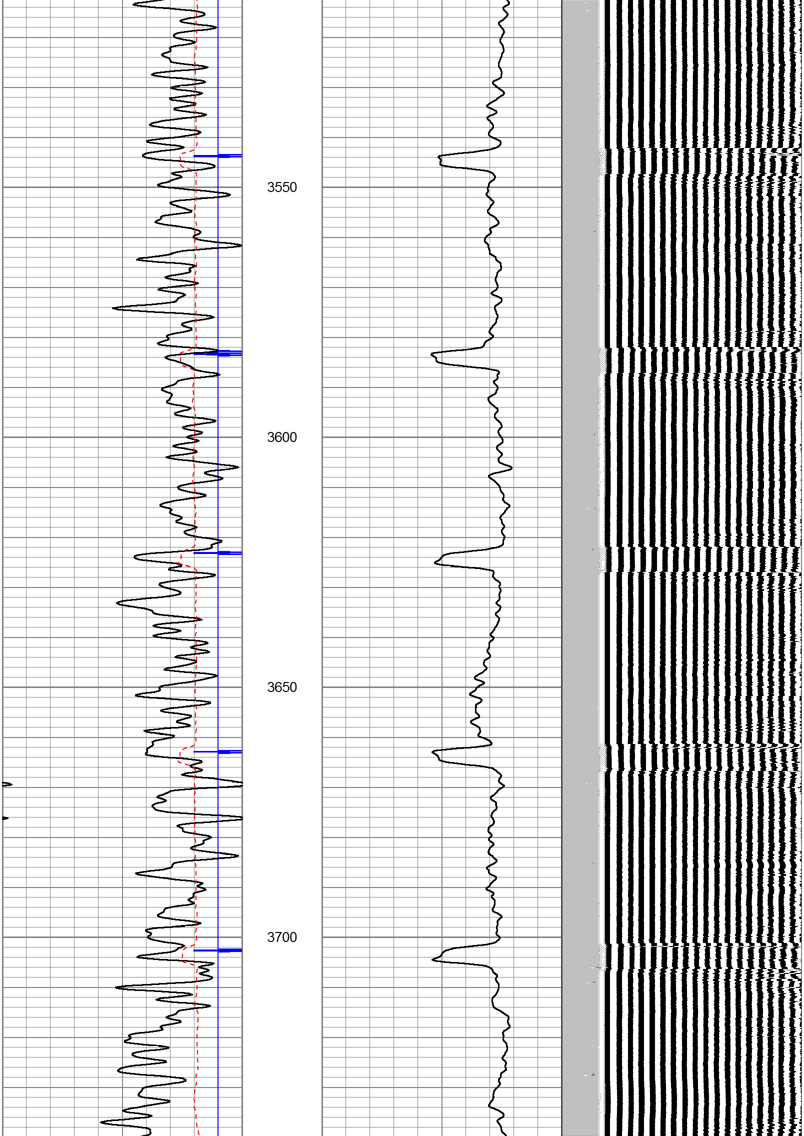


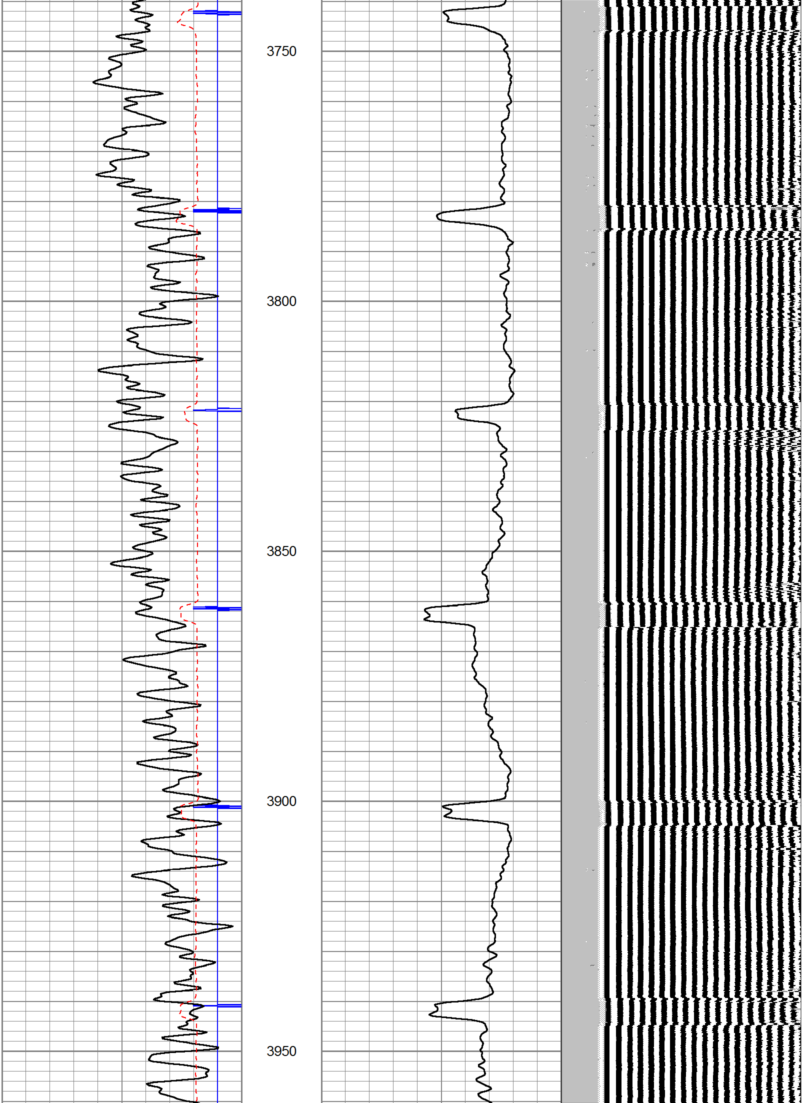


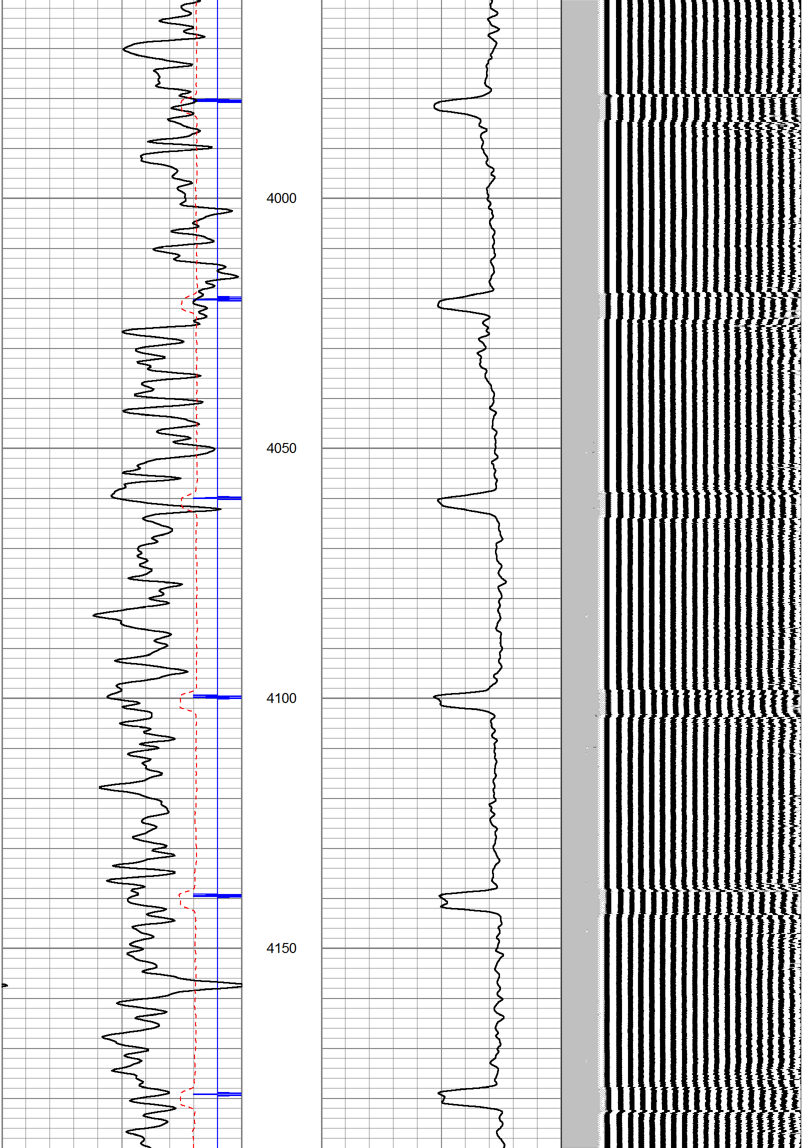


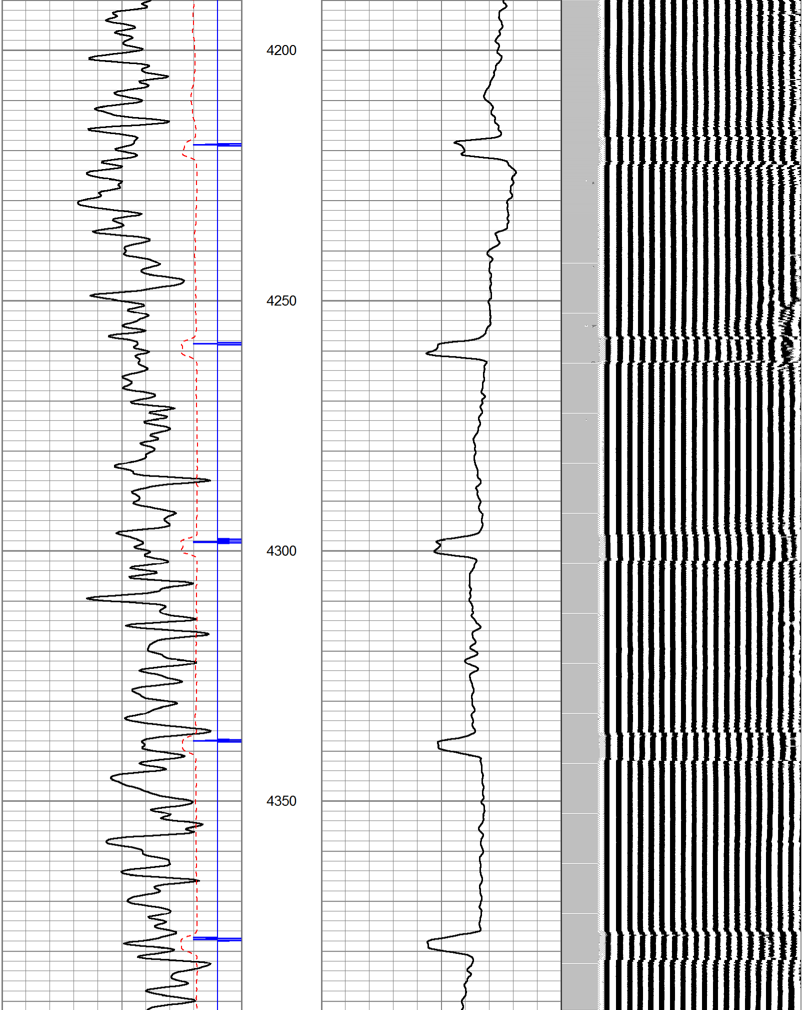


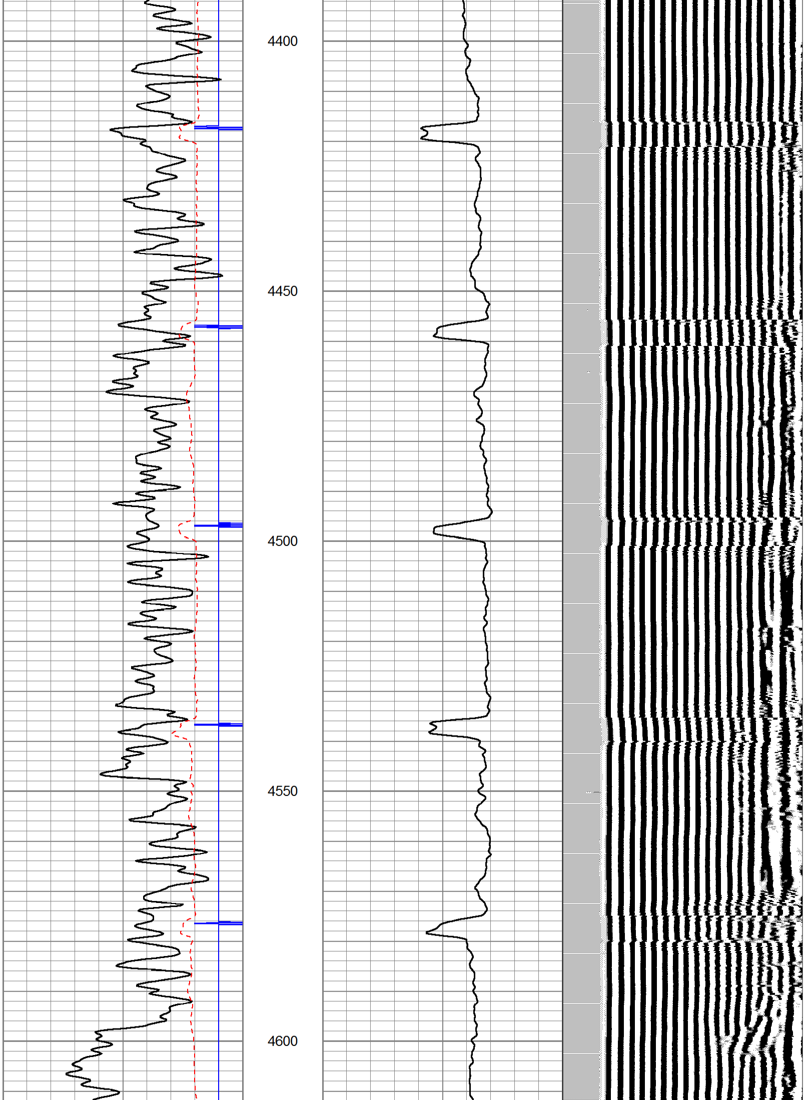


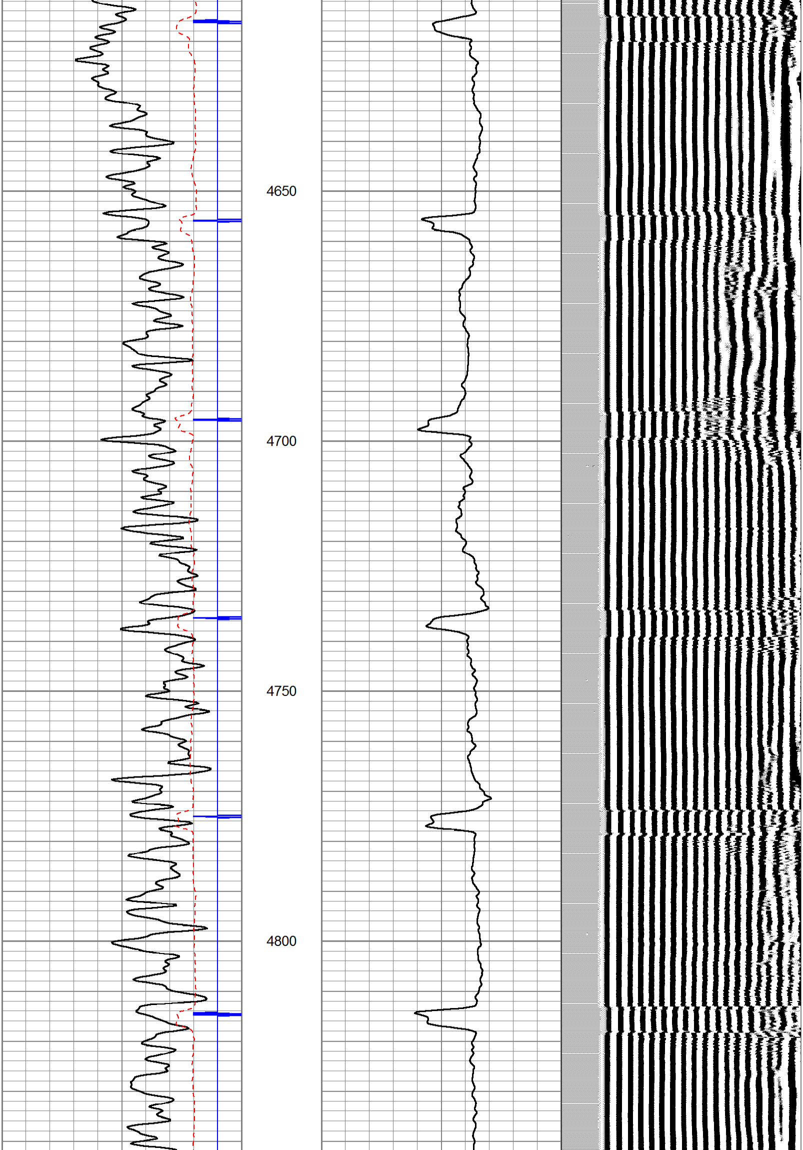


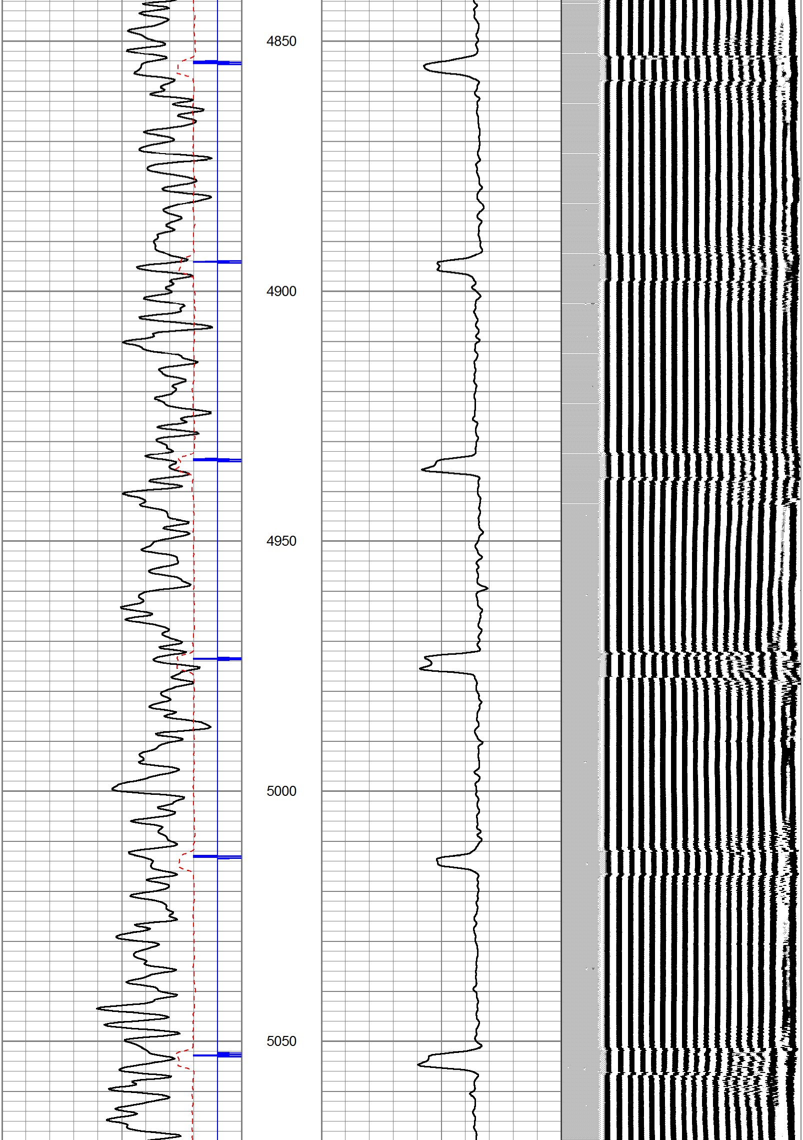


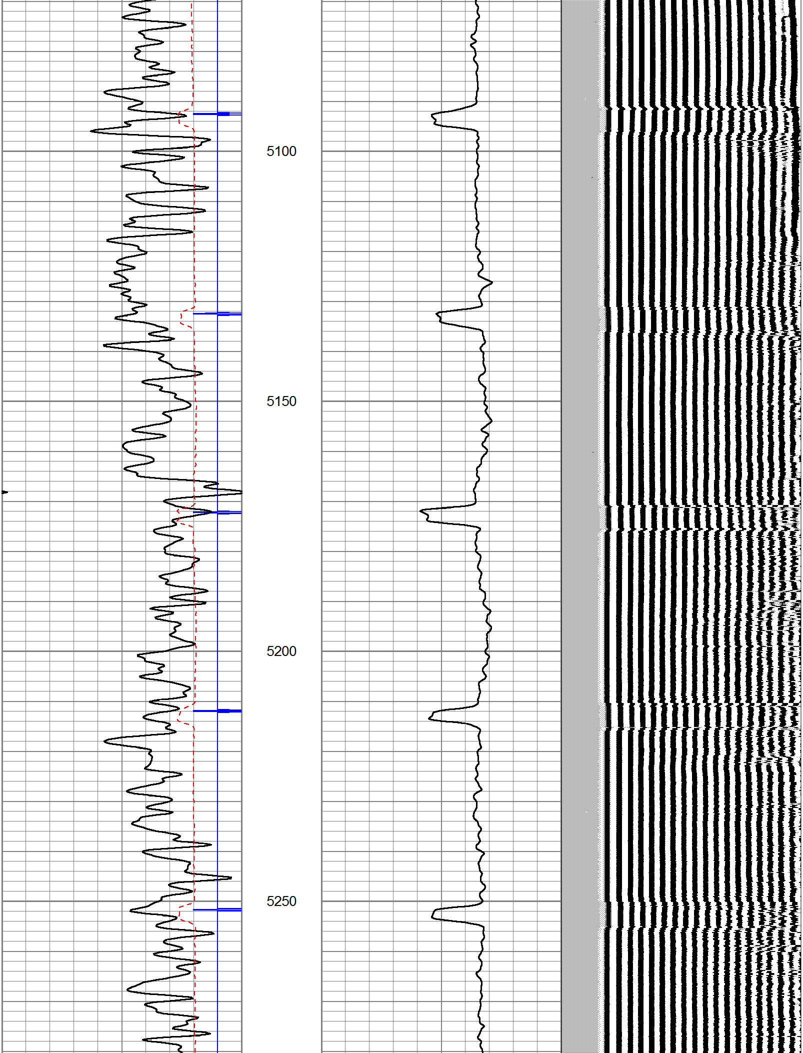


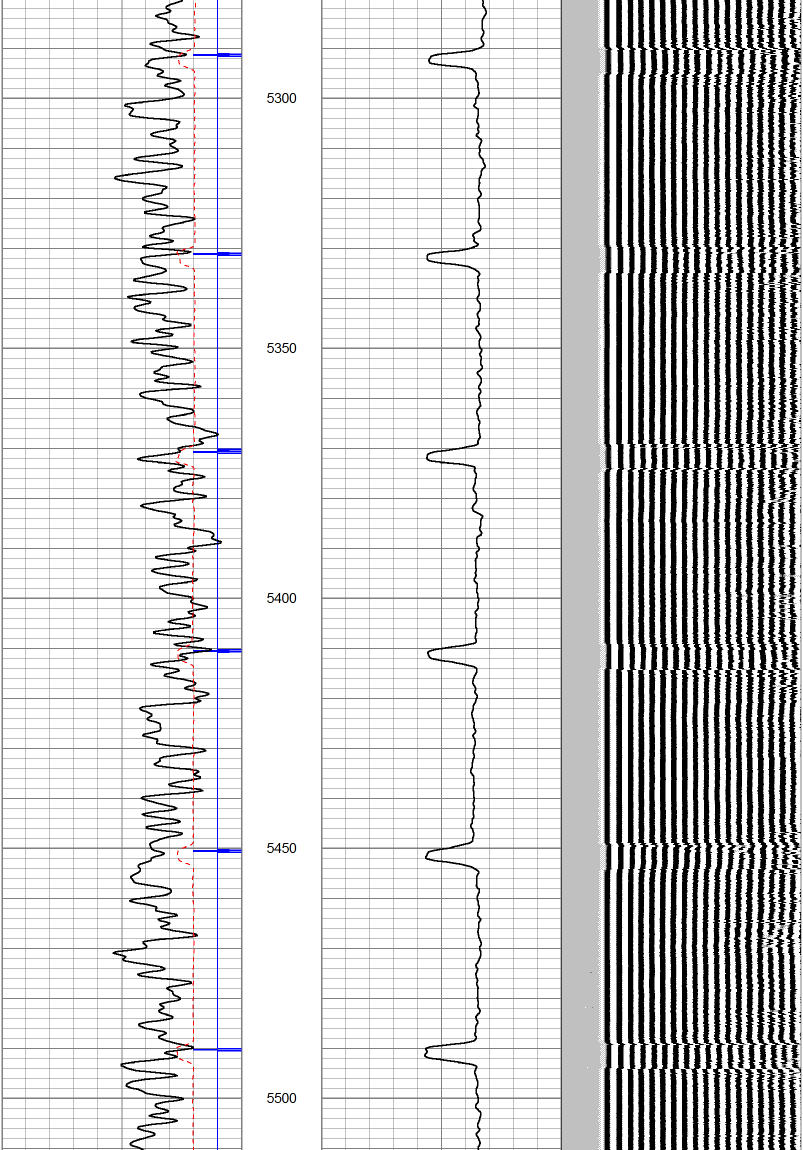


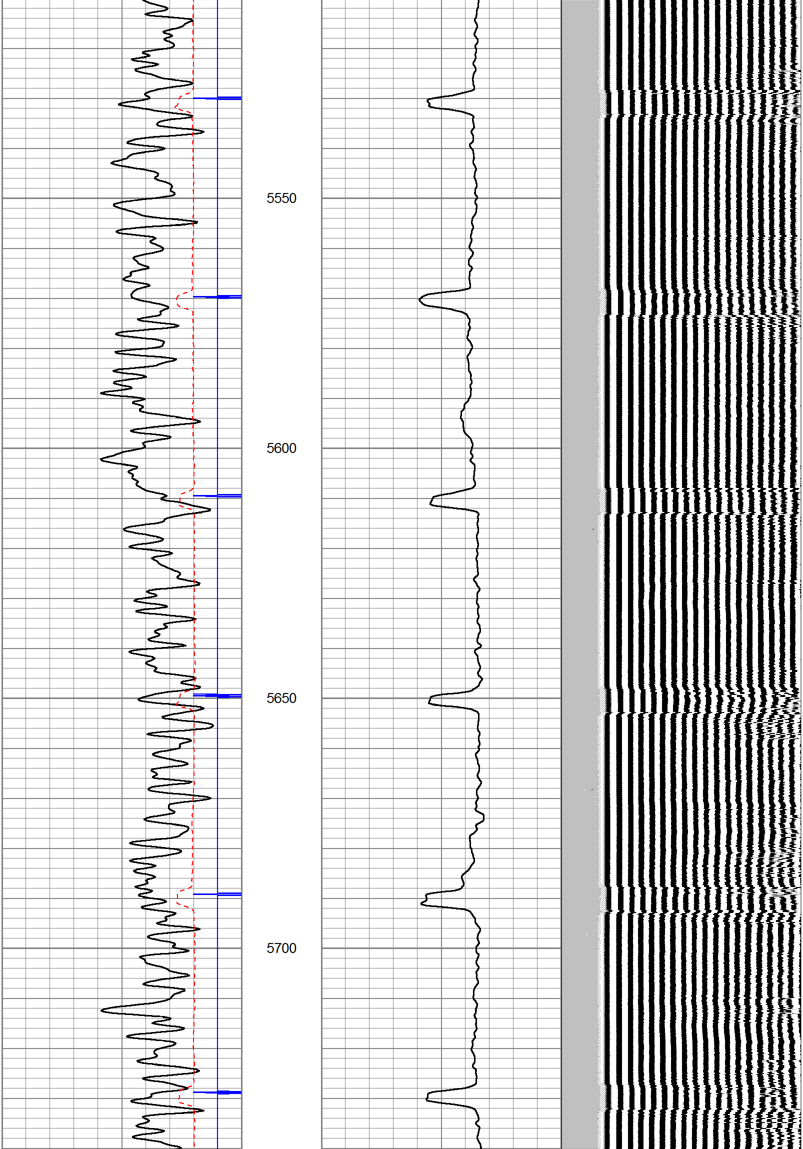


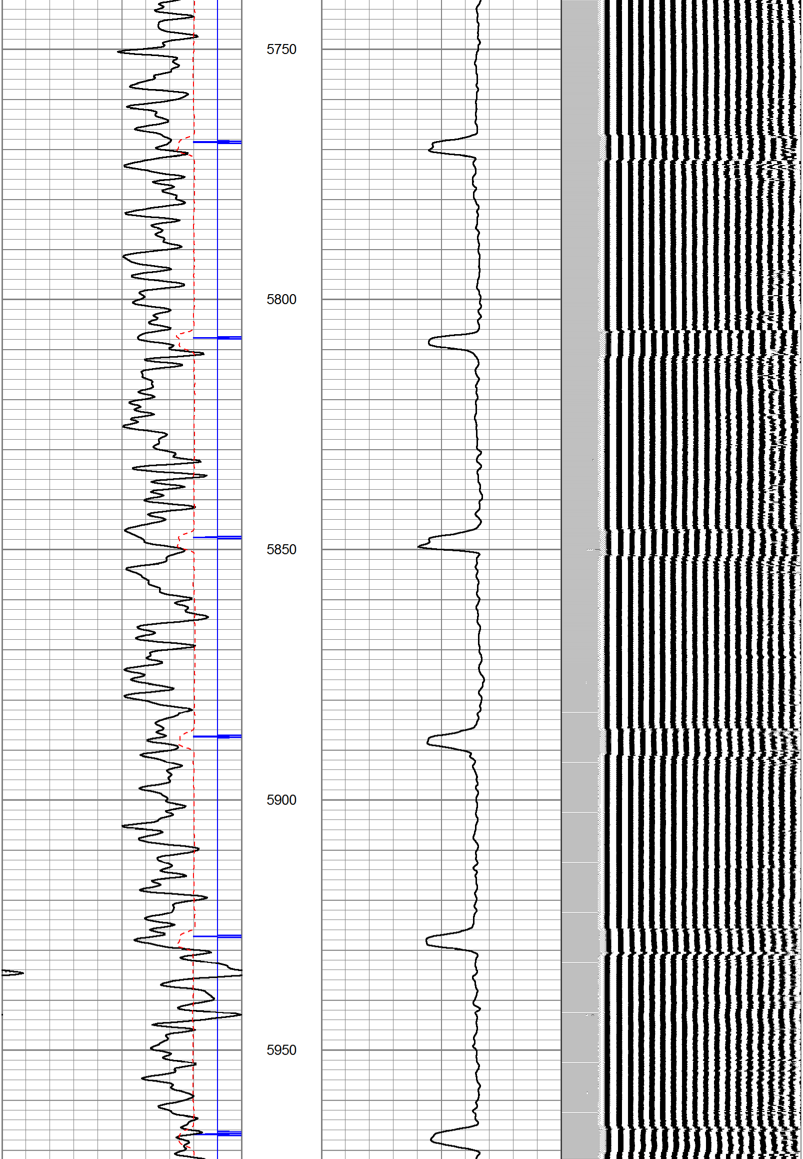


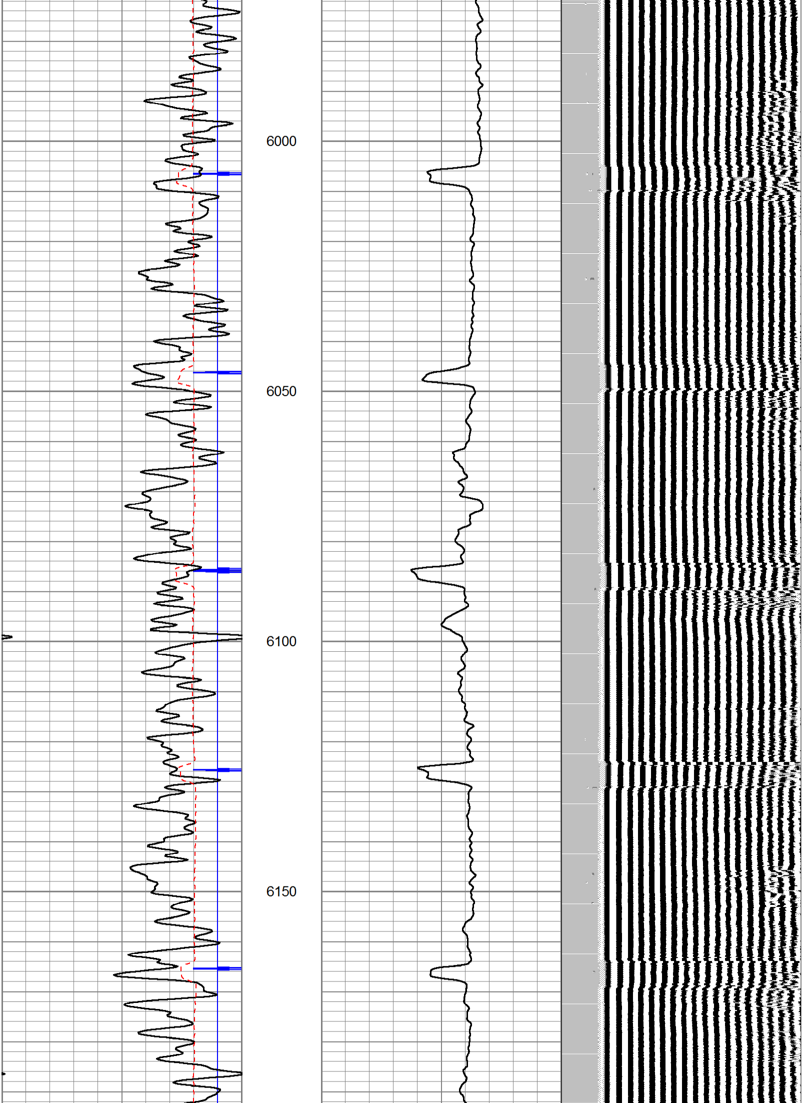


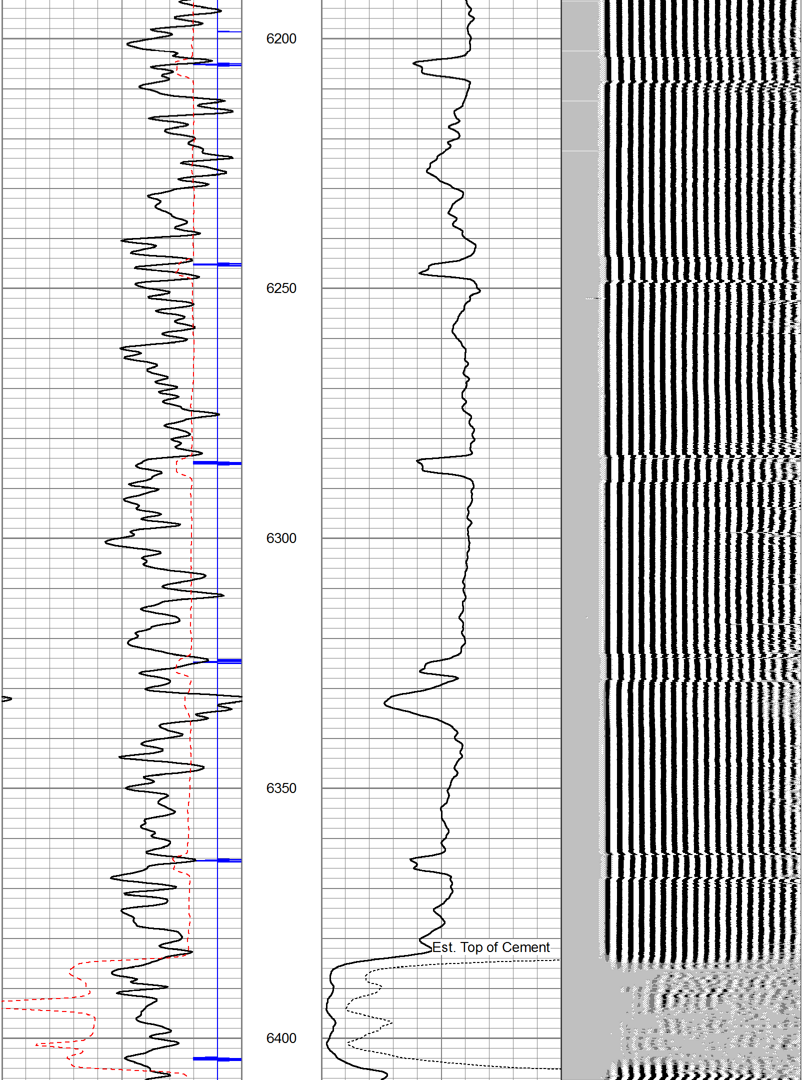


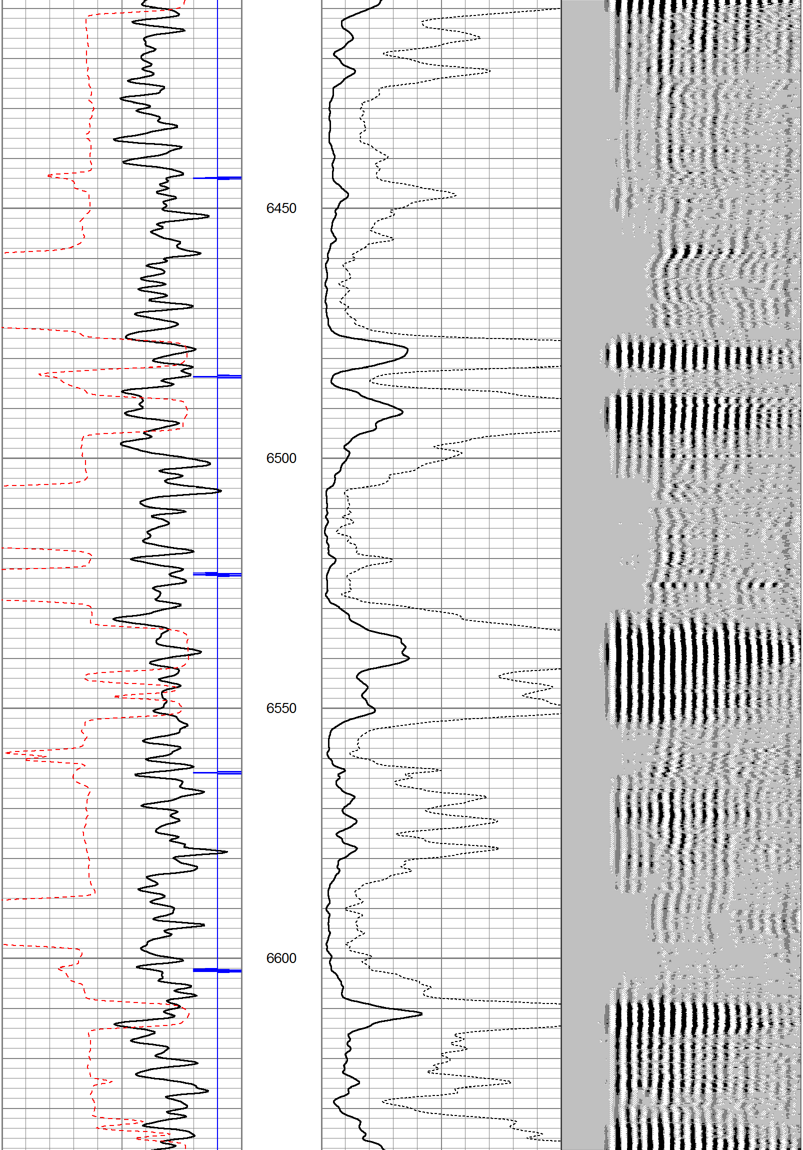


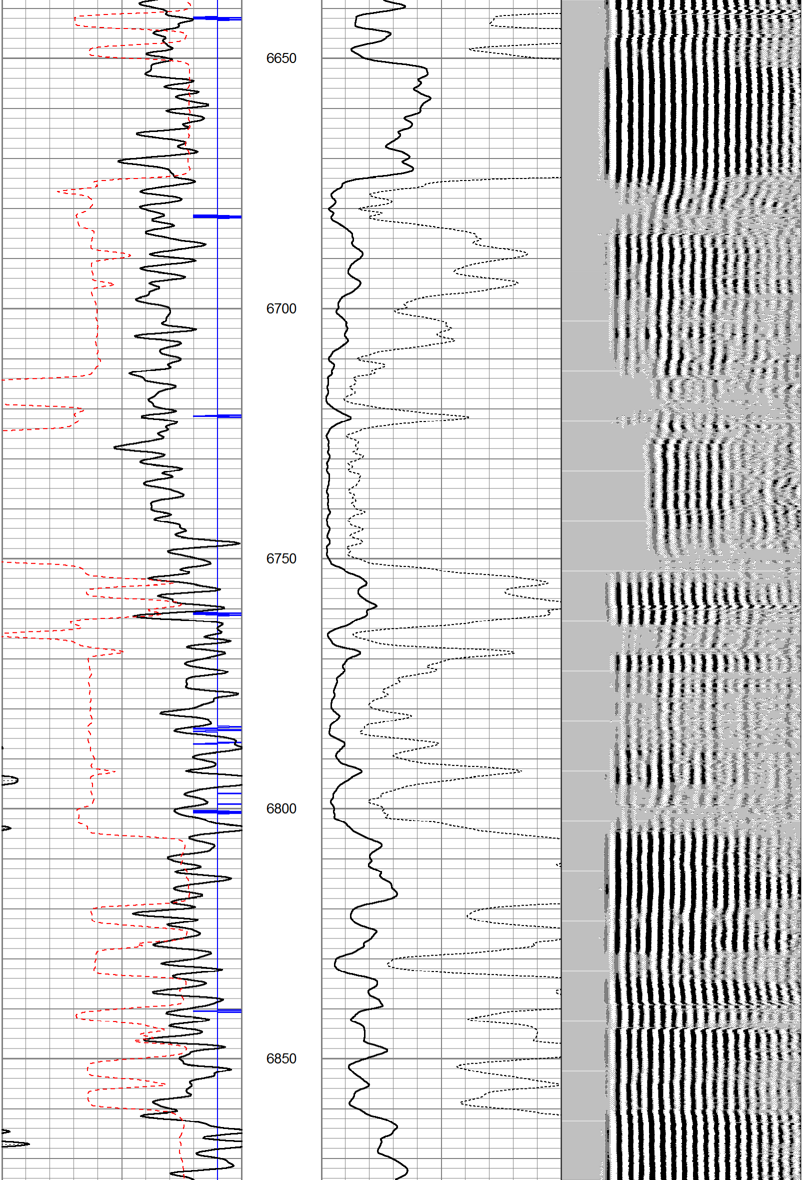


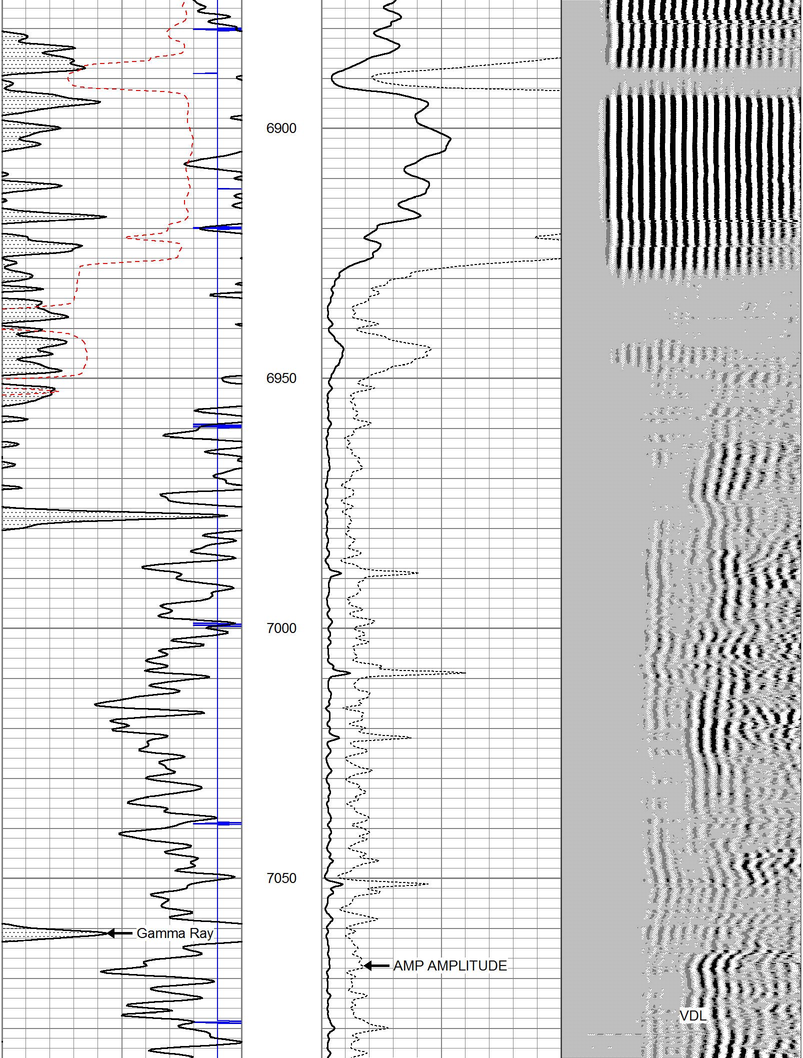


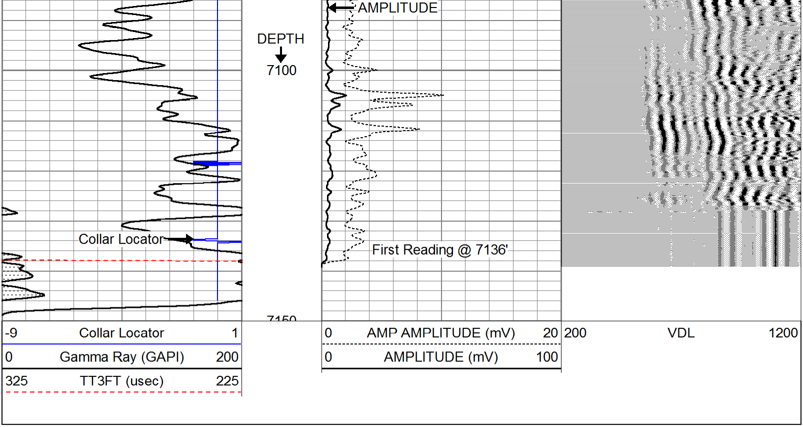












Calibration Report

Database File: anadarko_2-205394.db
Dataset Pathname: pass2
Dataset Creation: Wed Mar 26 08:48:46 2014 by Log SCH 120430

Gamma Ray Calibration Report

Serial Number: 130608
Tool Model: GRCCLTEMP
Performed: Sun Jun 13 14:33:21 1993

Calibrator Value: 1.0 GAPI

Background Reading: 0.0 cps
Calibrator Reading: 1.0 cps

Sensitivity: 1.0000 GAPI/cps

Temperature Calibration Report

Serial Number: 130608
Tool Model: GRCCLTEMP
Performed: Thu Aug 15 08:56:46 2013

	Reference	Reading
Low Reference:	100.00 degF	6509.65degF
High Reference:	350.00 degF	27350.70degF

Gain: 0.01
Offset: 21.91
Delta Spacing 1

Segmented Cement Bond Log Calibration Report

Serial Number: Base
Tool Model: Probe

Calibration Casing Diameter: 4.500 in
Calibration Depth: 4243.722 ft

Master Calibration, performed Wed Mar 26 08:45:01 2014:

	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3'	0.020	0.801	2.000	81.196	101.424	-0.018
CAL	0.963	0.973				
5'	0.024	0.626	2.000	81.196	131.549	-1.167
SUM						
S1	0.019	0.804	5.000	95.000	114.595	2.868
S2	0.030	0.842	5.000	95.000	110.789	1.727
S3	0.042	0.853	5.000	95.000	110.961	0.331
S4	0.042	0.828	5.000	95.000	114.597	0.157
S5	0.031	0.785	5.000	95.000	119.239	1.357
S6	0.025	0.769	5.000	95.000	120.887	2.022
S7	0.025	0.757	5.000	95.000	122.919	1.969
S8	0.025	0.777	5.000	95.000	119.692	2.028

Internal Reference Calibration, performed Wed Aug 21 12:08:58 2013:

	Raw (v)		Calibrated (v)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
CAL	0.000	0.000	0.963	0.973	1.000	0.000

Air Zero Calibration, performed Sun Mar 23 11:47:36 2014:

	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

Log Variables

Database:C:\Warrior\Data\anadarko_2-205394.db
Dataset: field/well/run1/pass2

Top - Bottom

PPT usec	CASEWGHT lb/ft	MAXAMPL mV	MINAMPL mV	MINATTN db/ft	CASEOD in	PERFS	TDEPTH ft
0	11.6	82	1	0.08	4.5	0	8000

BOTTEMP degF	BOREID in
220	7.875

PIO

Pioneer E

NEER

nergy Services

Company	Anadarko Pet
Well	Wagner Herm
Field	Wattenberg
County	Weld
State	Colorado

roleum Corporation

an GU #1