Company	GREATWESTERN OIL & GAS
Well	SCHNEIDER HD 11-142HC
Field	WATTENBERG
County	WELD
State	COLO Country USA

KLX Energy Services

GAMMA RAY CCL
CEMENT BOND VDL
TEMP

Company	GREATWESTERN OIL & GAS
Well	SCHNEIDER HD 11-142HC
Field	WATTENBERG
County	WELD
State	COLO Country USA

Location: API #: 05-123-46409

LAT: 40.324283

LONG:104.826431

SEC TWP RGE

Other Services

Permanent Datum	GL	Elevation	4734
Log Measured From	KB 20'		
Drilling Measured From	KB		

Elevation
K.B. 4754
D.F.
G.L. 4734

Date	JUNE-8-2018		
Run Number	ONE		
Depth Driller	17814		
Depth Logger	7630		
Bottom Logged Interval	7620		
Top Log Interval	SURFACE		
Open Hole Size	8.5		
Type Fluid	WATER		
Density / Viscosity	8.34 PPG		
Max. Recorded Temp.	252		
Estimated Cement Top			
Time Well Ready	ROA		
Time Logger on Bottom	12:00		
Equipment Number	32		
Location	STERLING,CO		
Recorded By	KYLE GIRDLER		
Witnessed By	MICHAEL LINDSEY		

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

Casing Record	Size	Wgt/Ft	Top	Bottom
Surface String	9 5/8		0	1572
Prot. String	5.5	17	0	17814
Production String				
Liner				

<<< Fold Here >>>

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 CHOOSING KLX ENERGY SERVICES
KOP 4210
30 DEGREES 5193
30 DEGREES 7160
60 DEGREES 7518
90 DEGREES 8144
CORRELATED TO MARKER JOINT 7146-7156
BRADENHEAD PRESSURE 0 PSI
MAIN PASS LOGGED UNDER 1500 PSI

MAIN LOG PASS
LOGGED UNDER 1500 PSI INDUCED PRESSURE

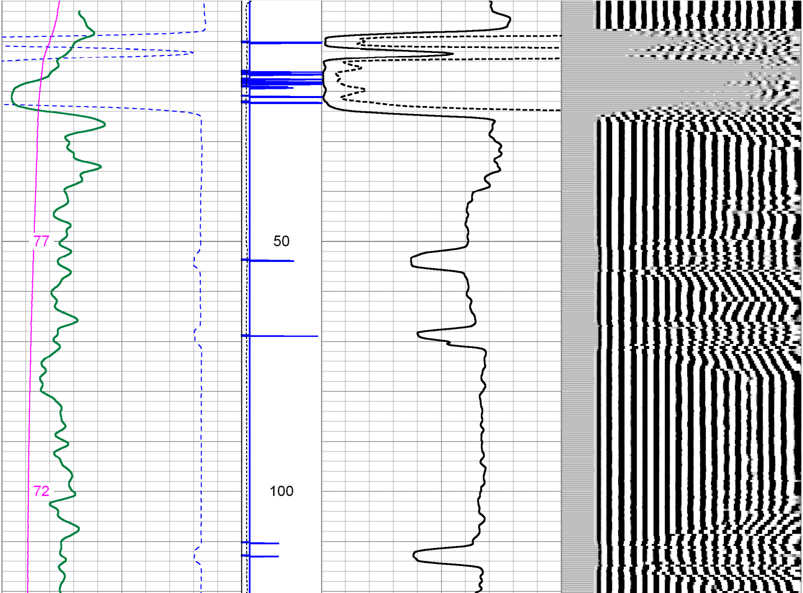
Database File:	schneider hd 11-142hc.db
Dataset Pathname:	pass24
Presentation Format:	tecko_gw
Dataset Creation:	Fri Jun 08 15:20:33 2018 by Log 7.0 B1
Charted by:	Depth in Feet scaled 1:240

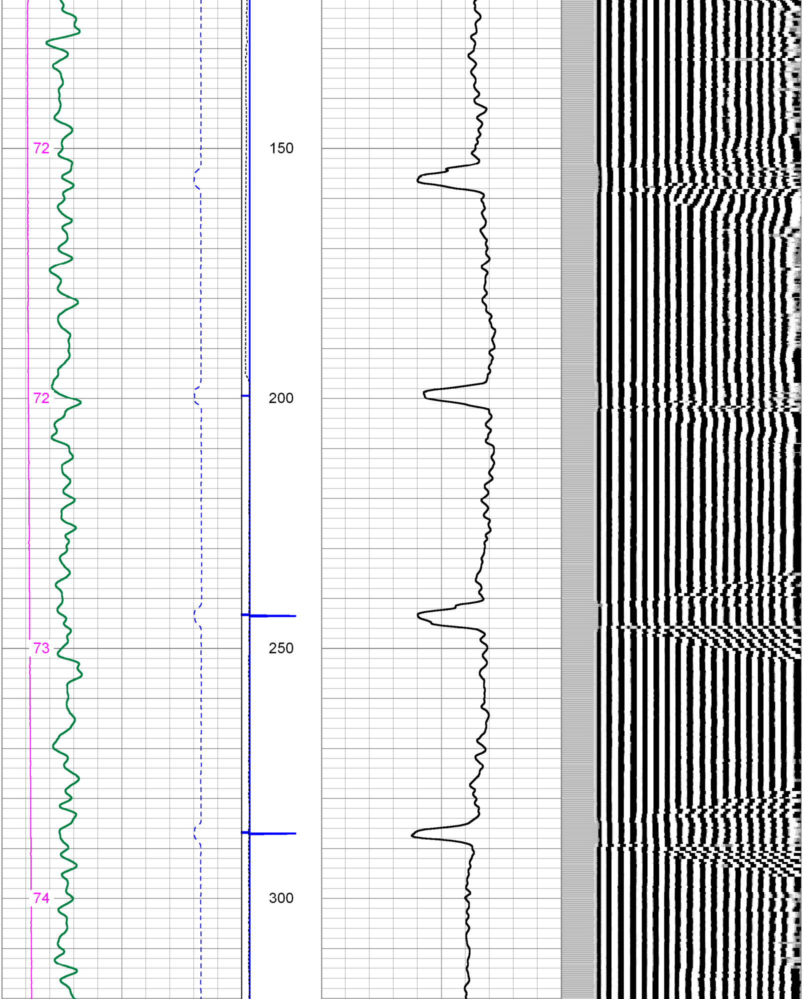
400 TRAVEL TIME (usec) 200
0 Gamma Ray (GAPI) 150
0 Line Speed (ft/min) 100
50 TEMP (degF) 250
TEMP (degF)

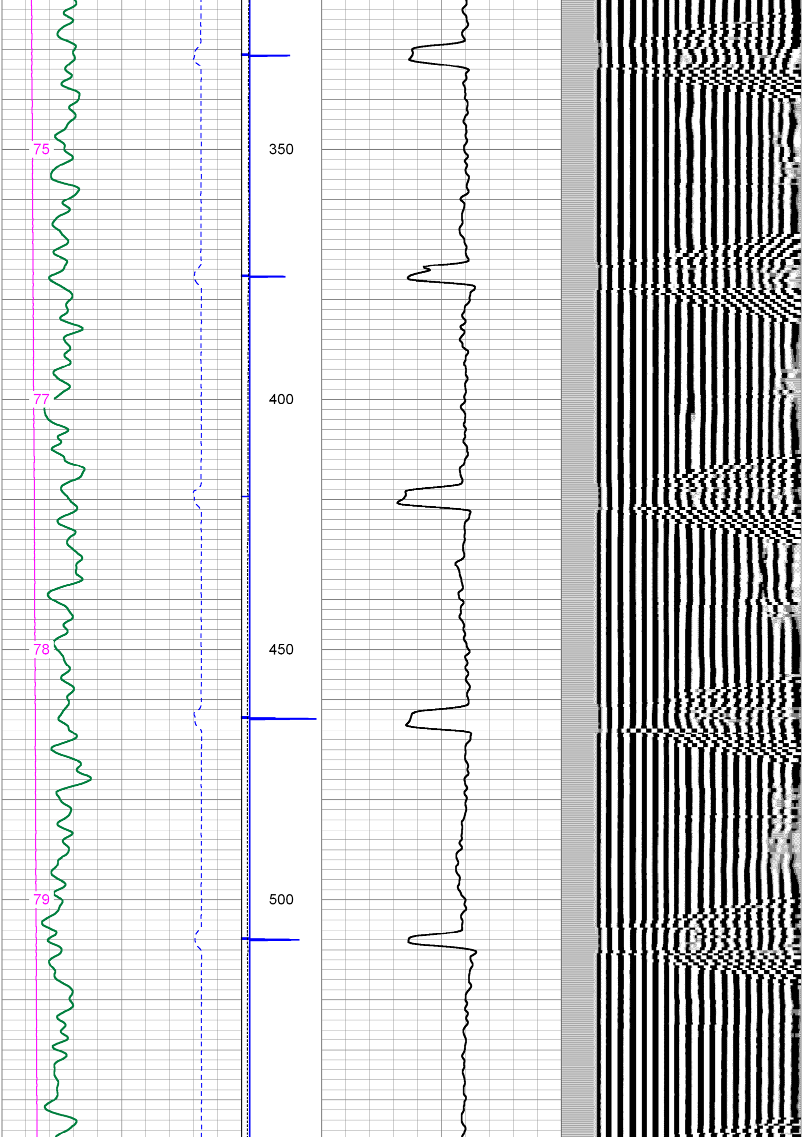
Collar Locato
-1 9
LTEN (lb)
0 2500

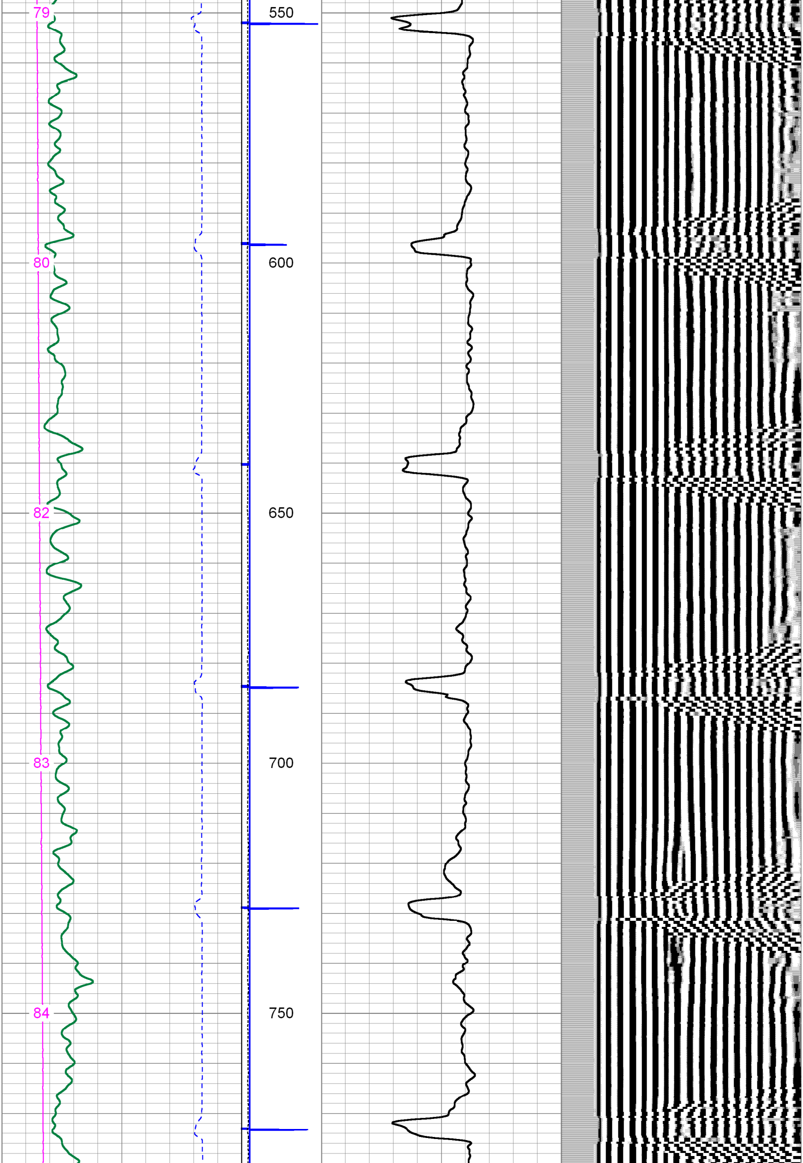
0 AMP AMPLITUDE (mV) 10
0 AMPLITUDE (mV) 100

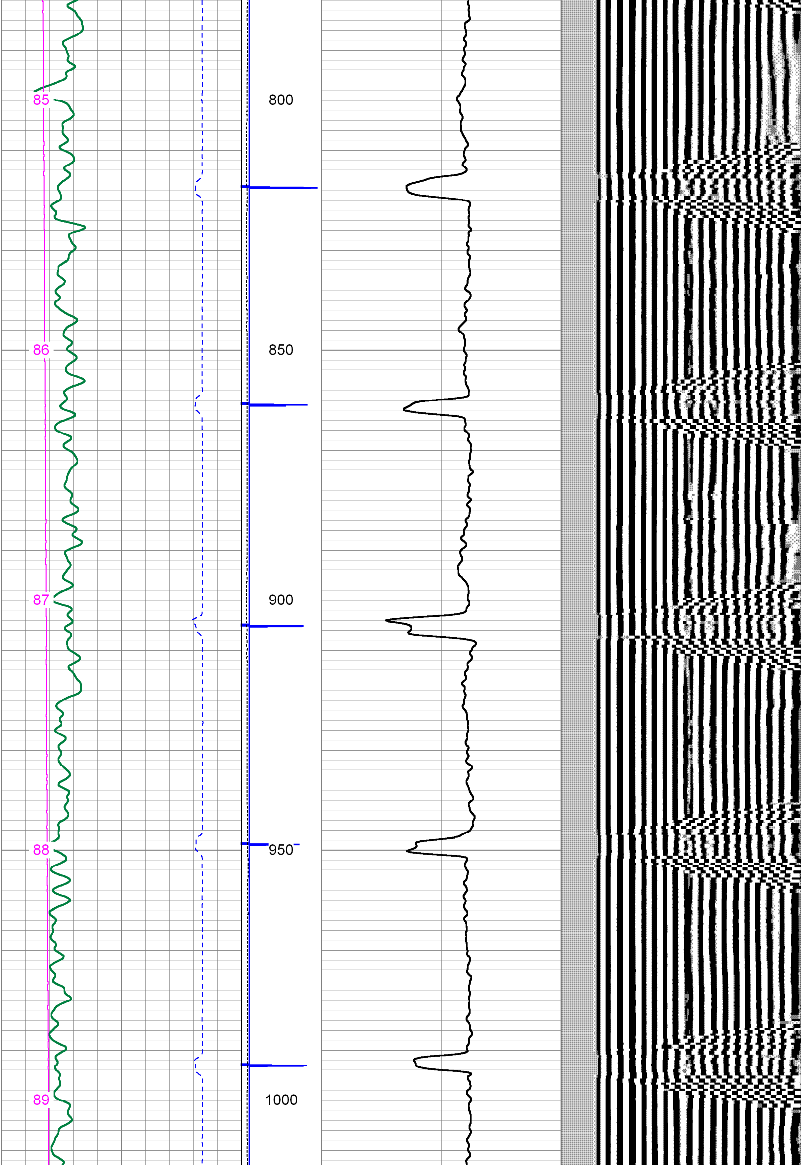
200 VDL 1200

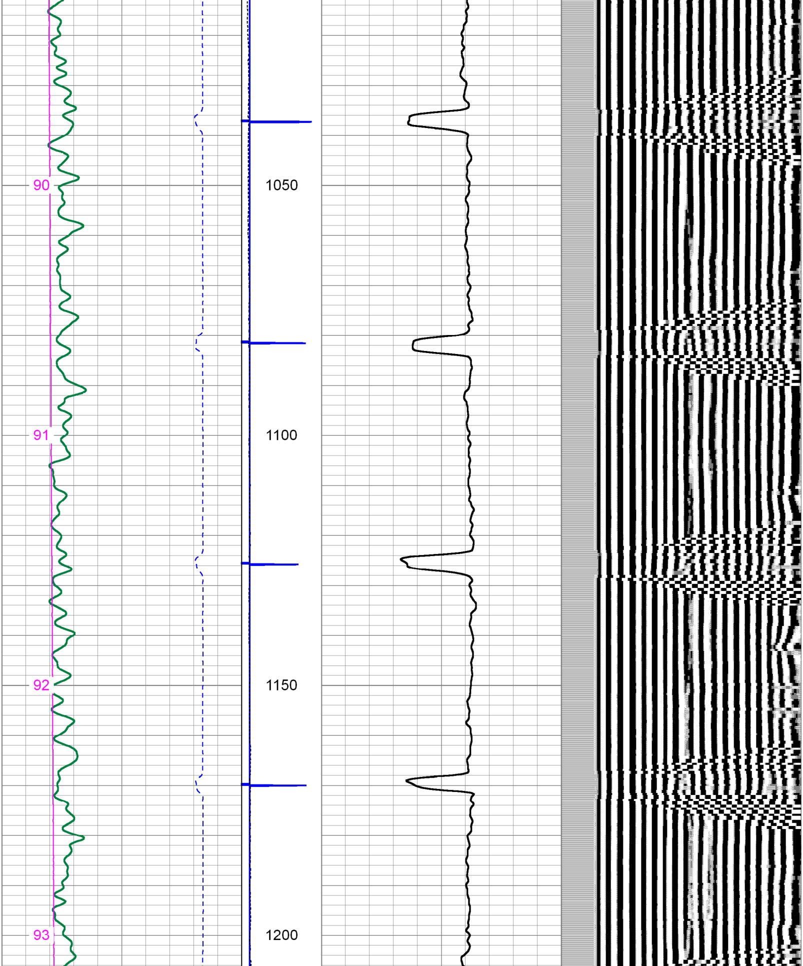


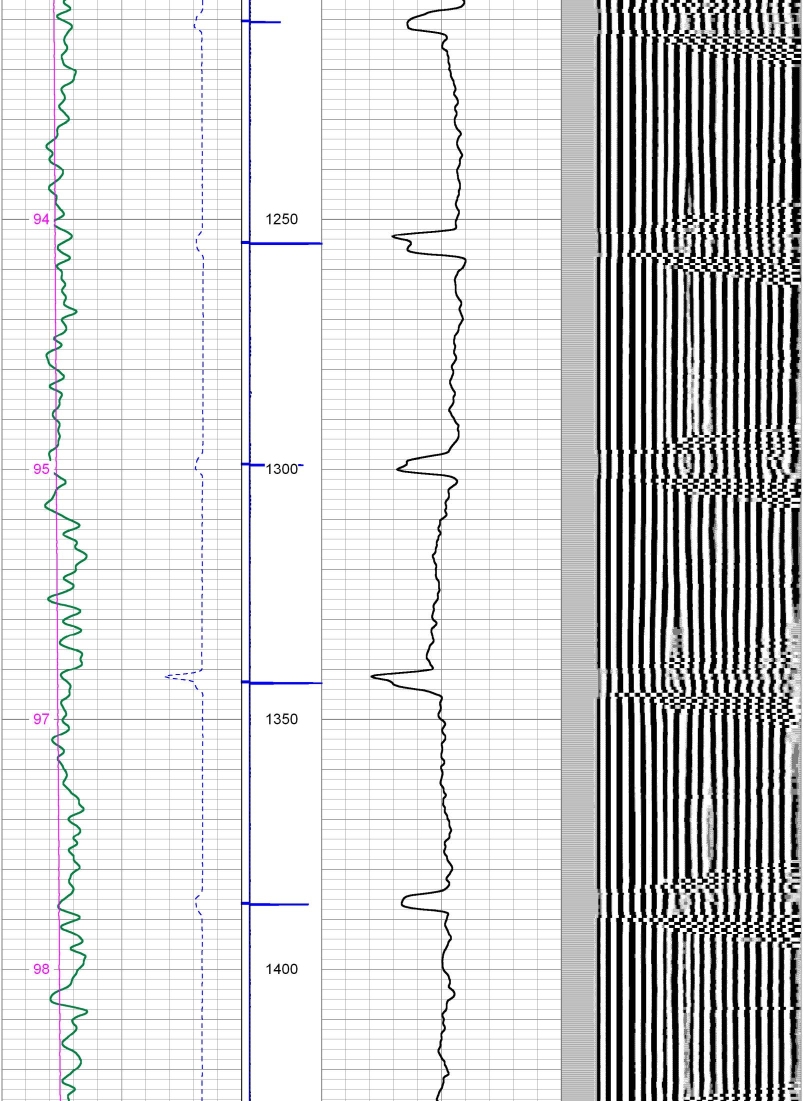


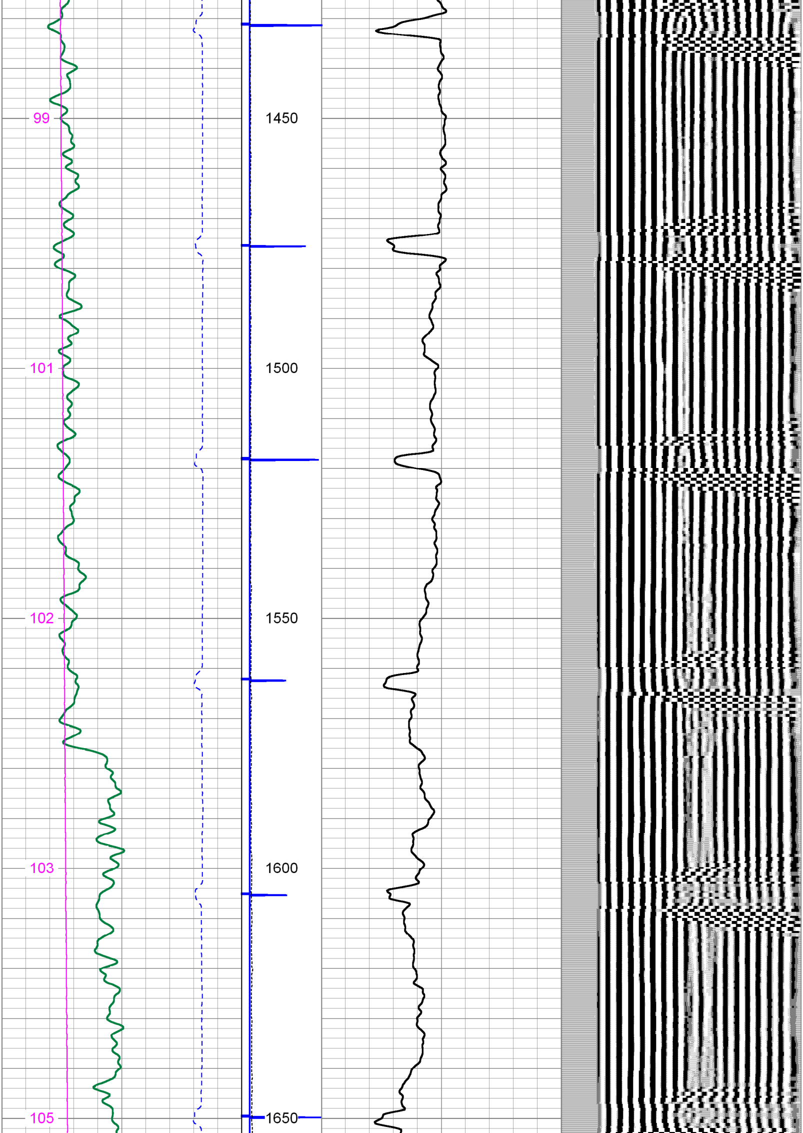


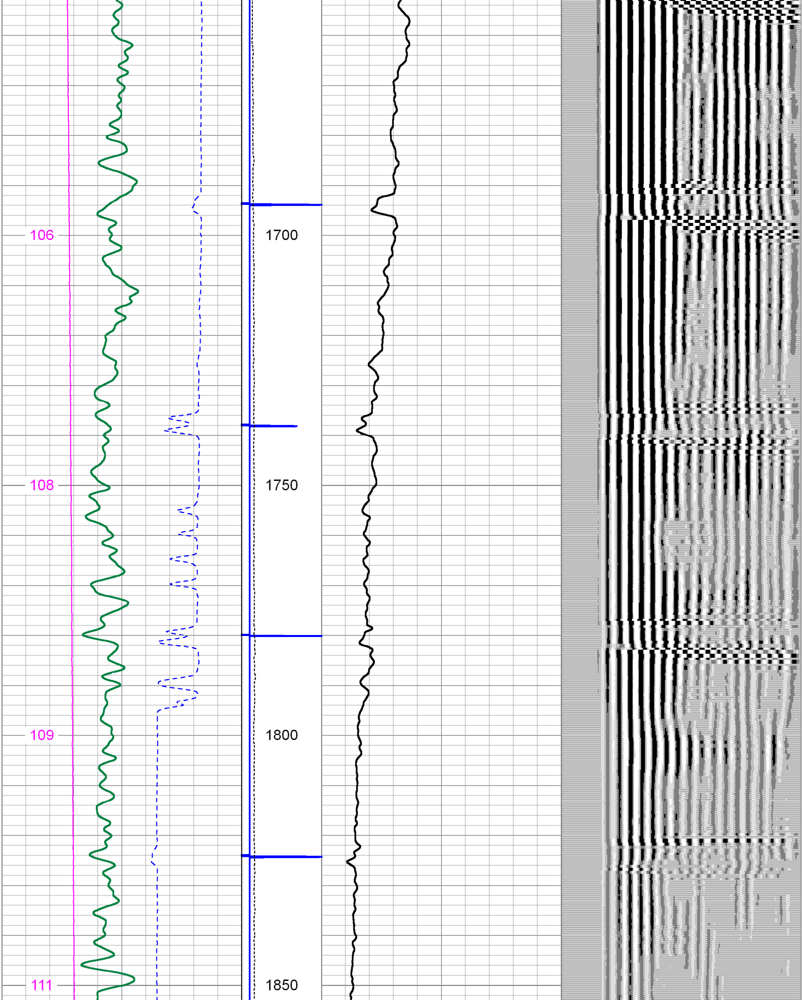


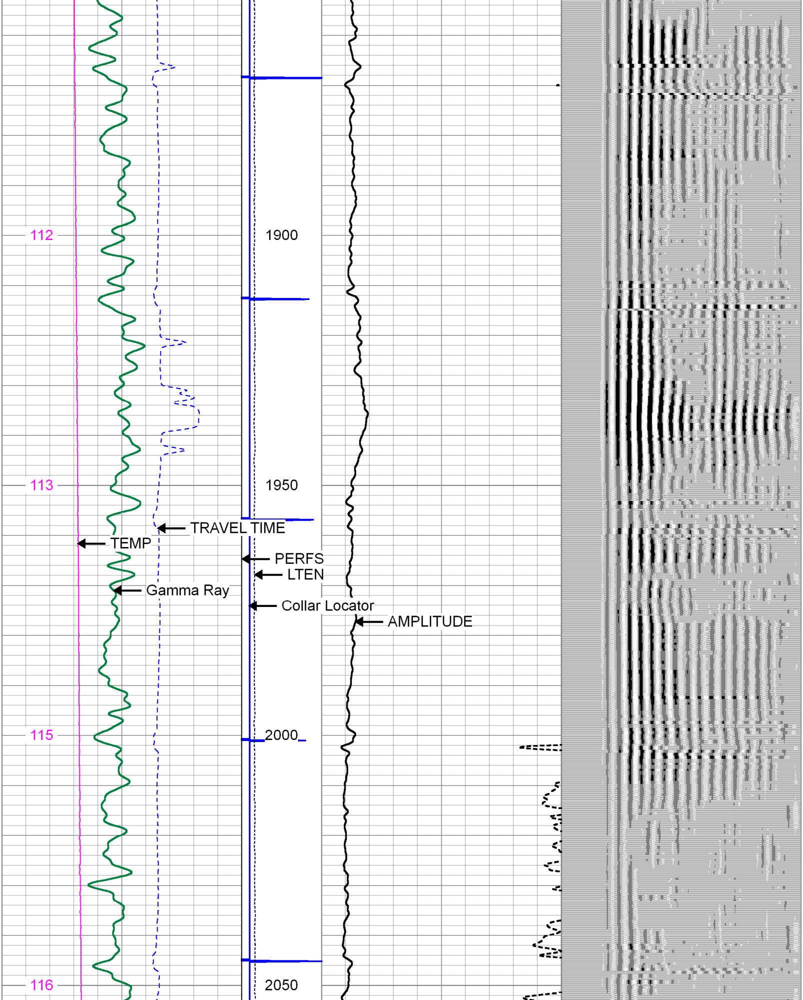


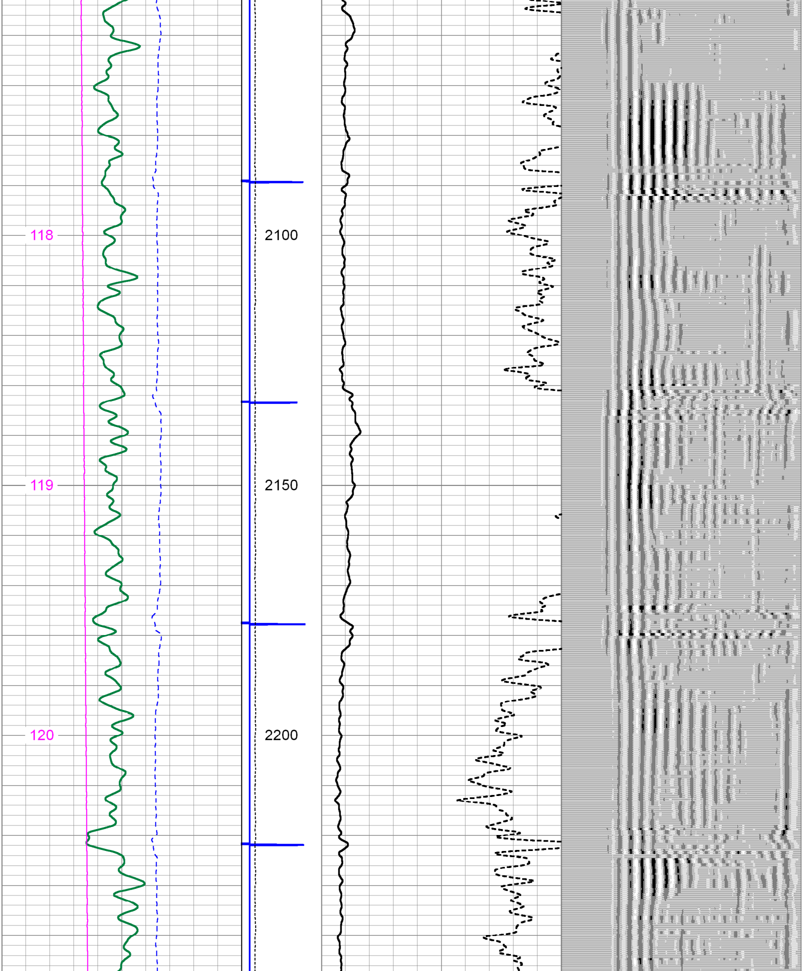


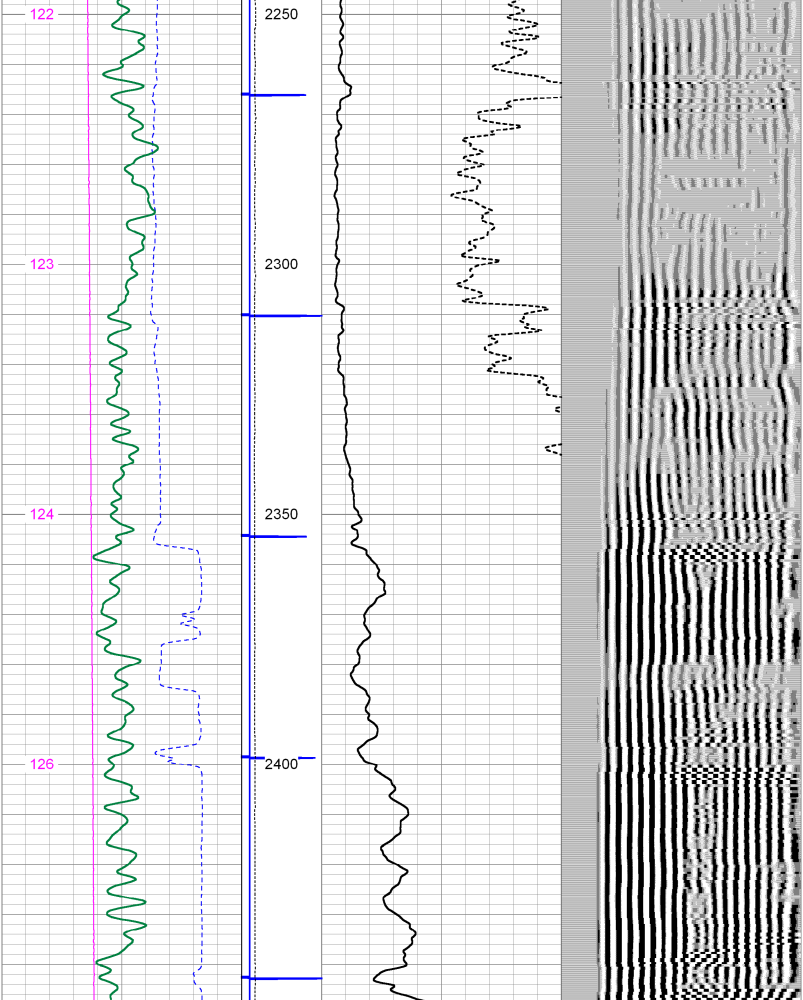


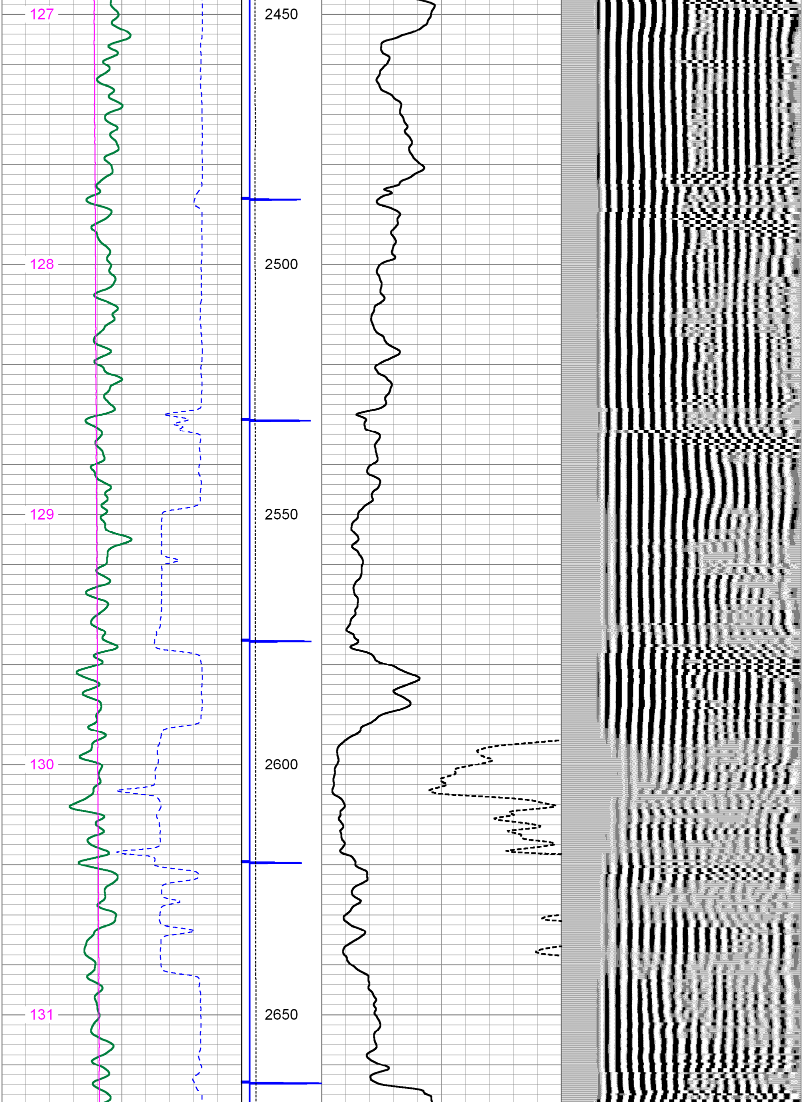


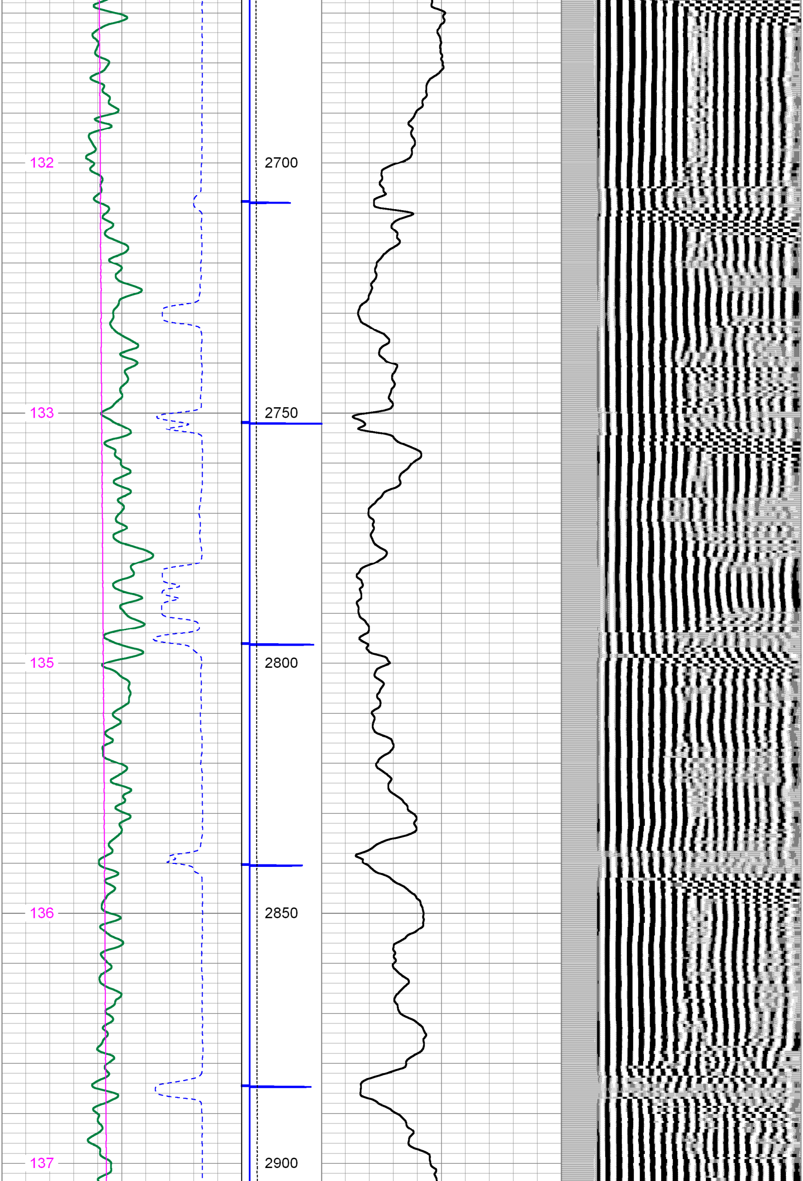


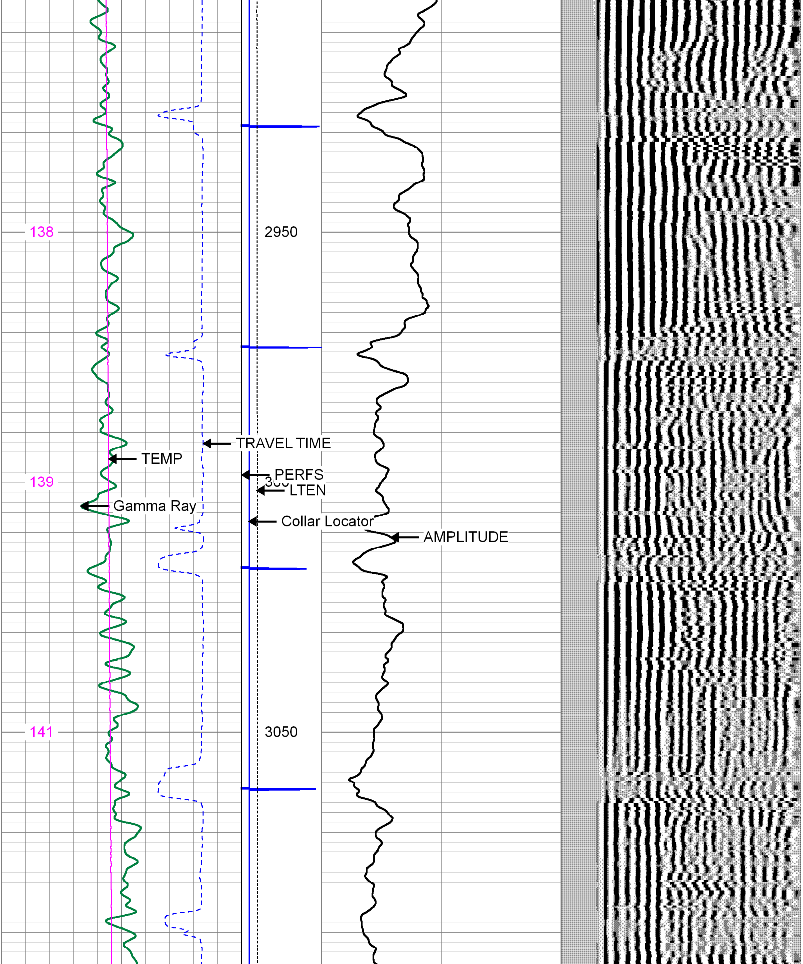


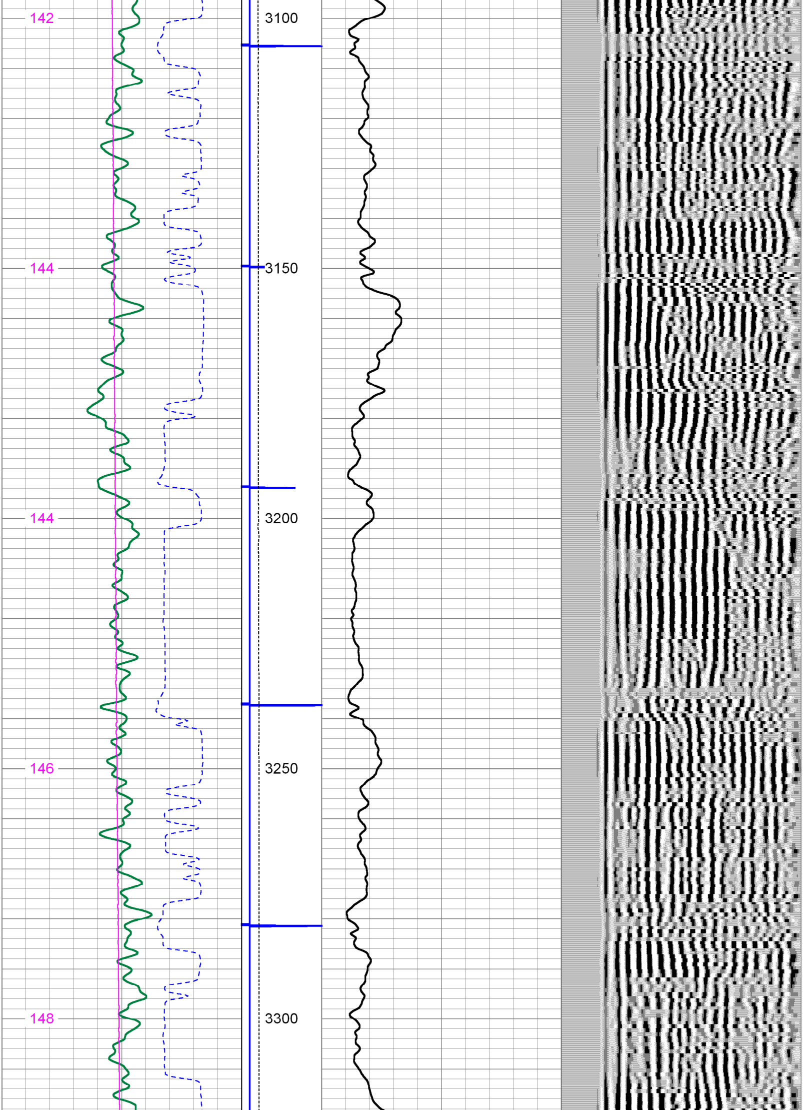


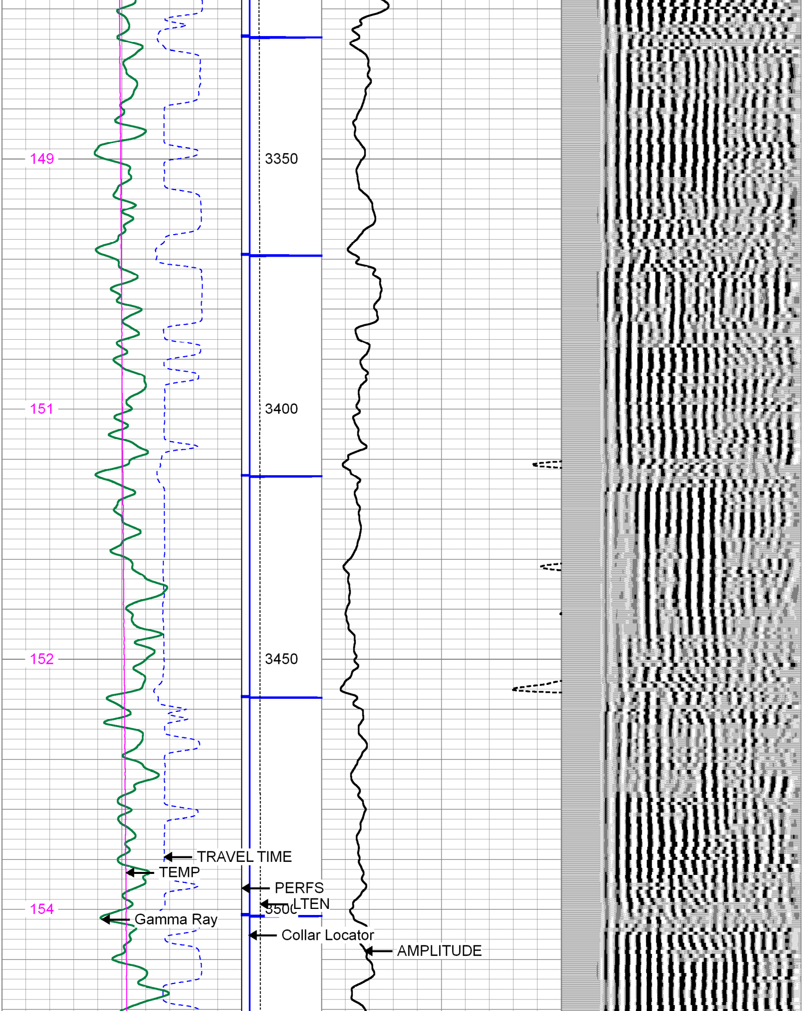


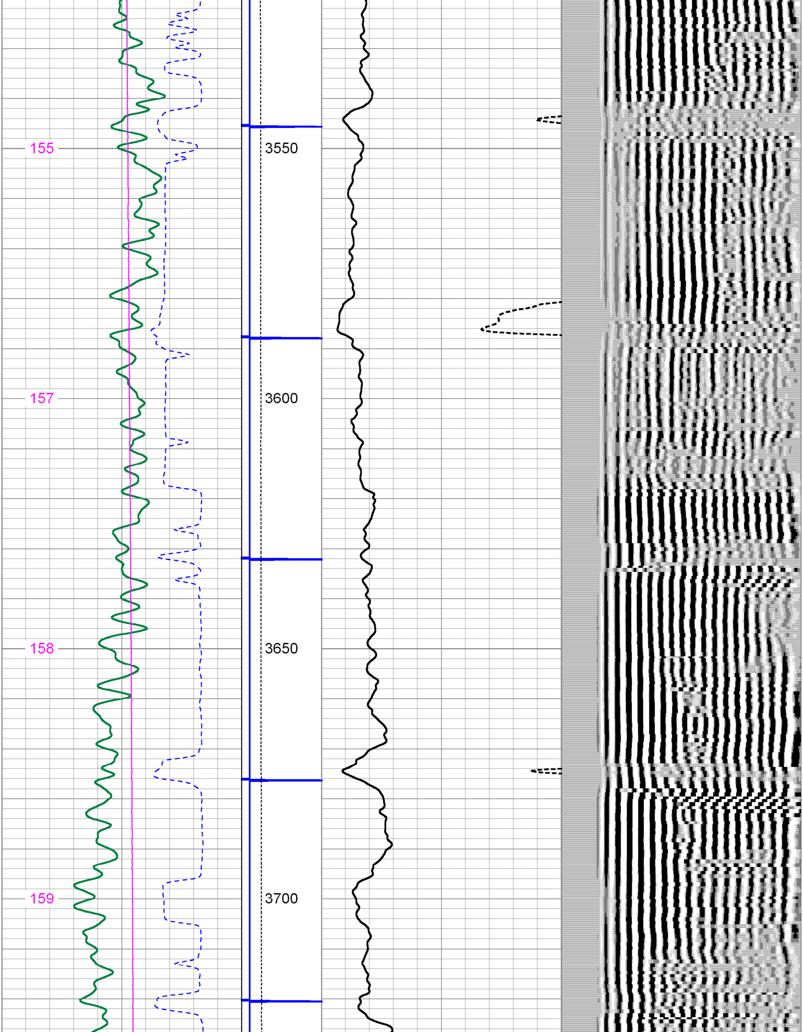


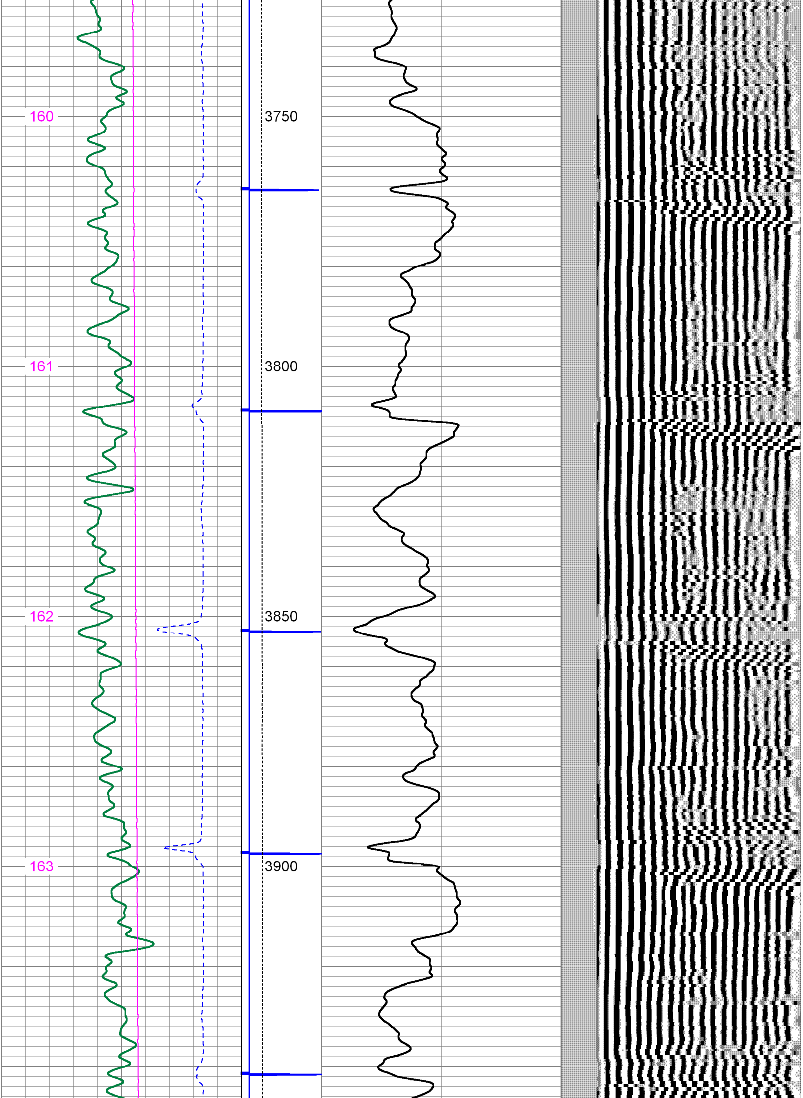


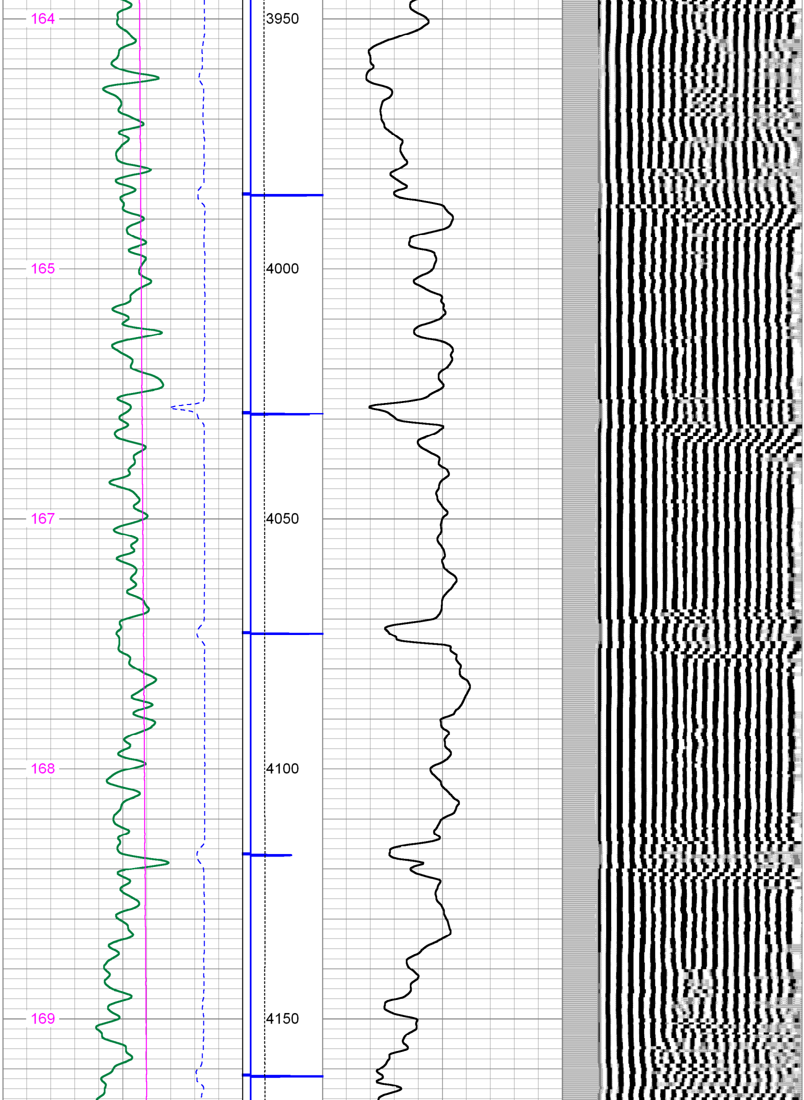


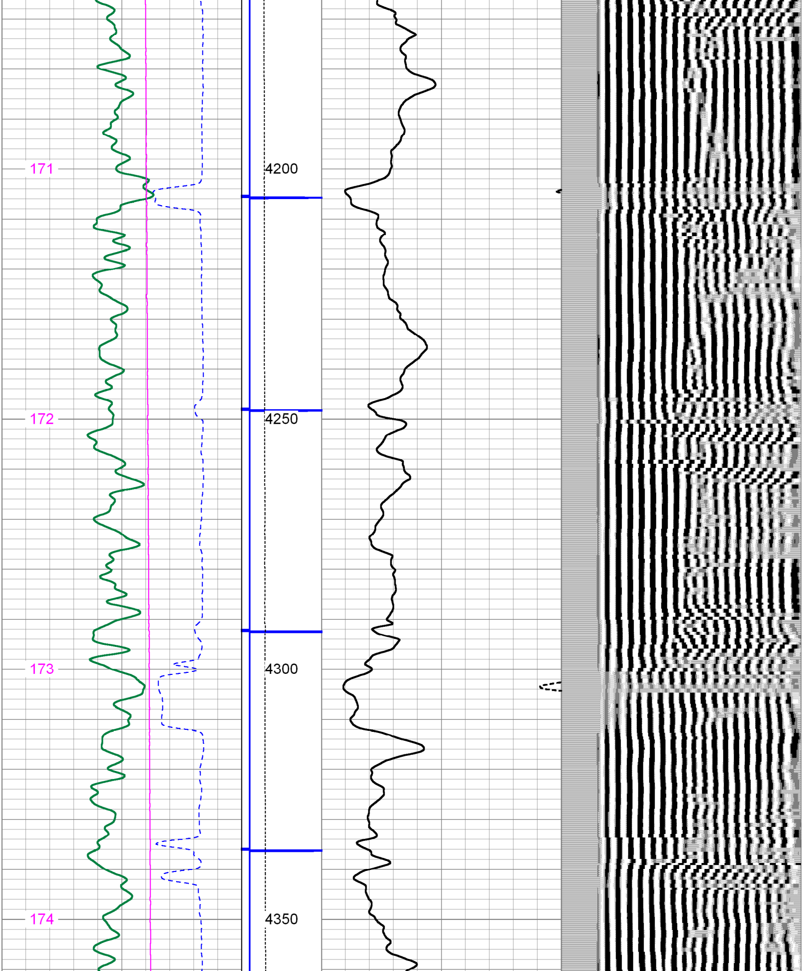


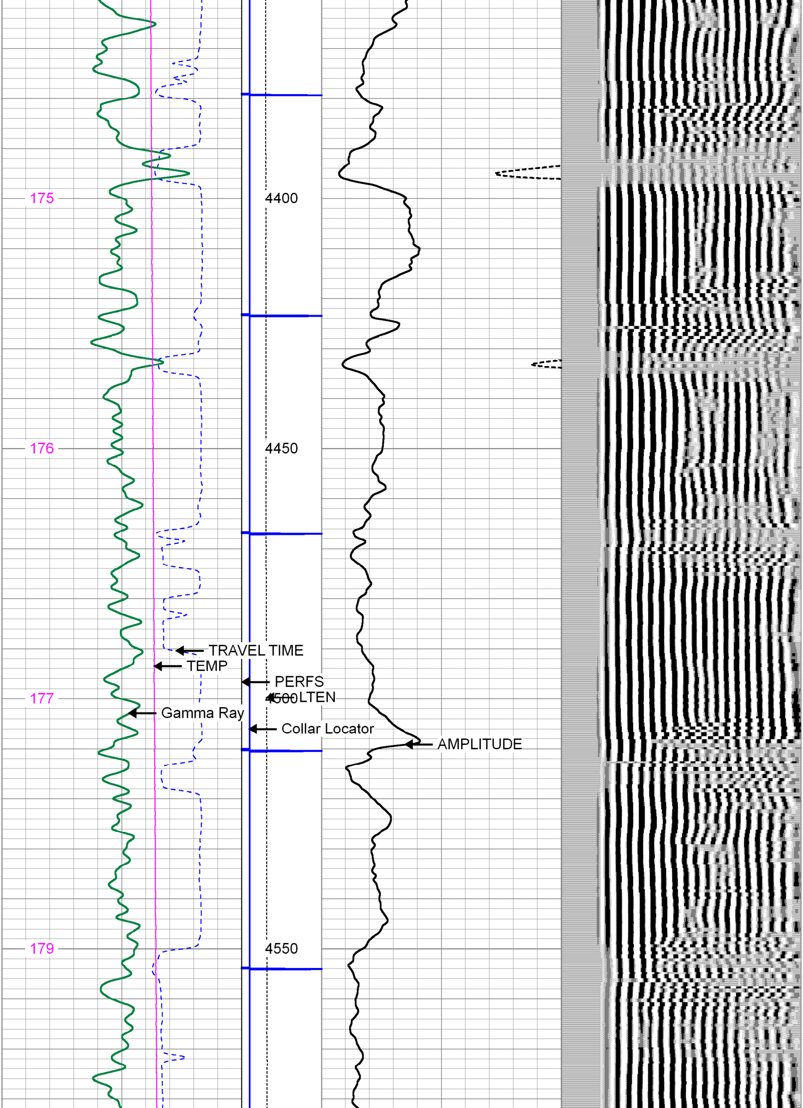


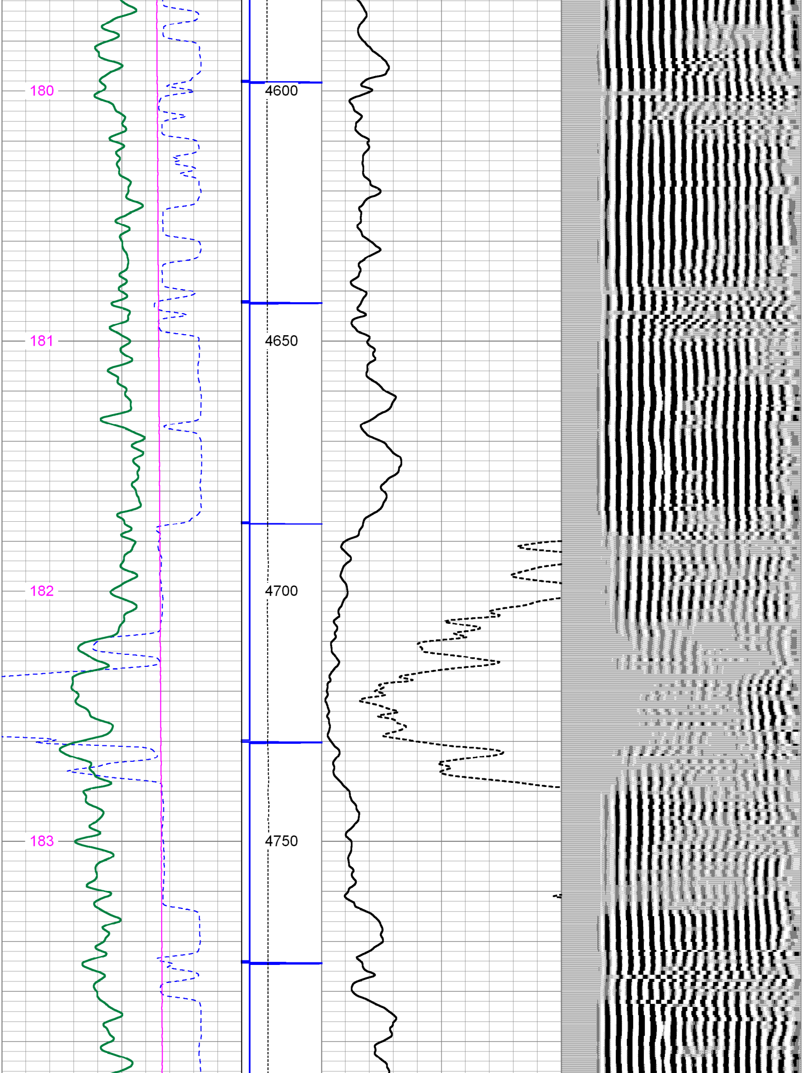


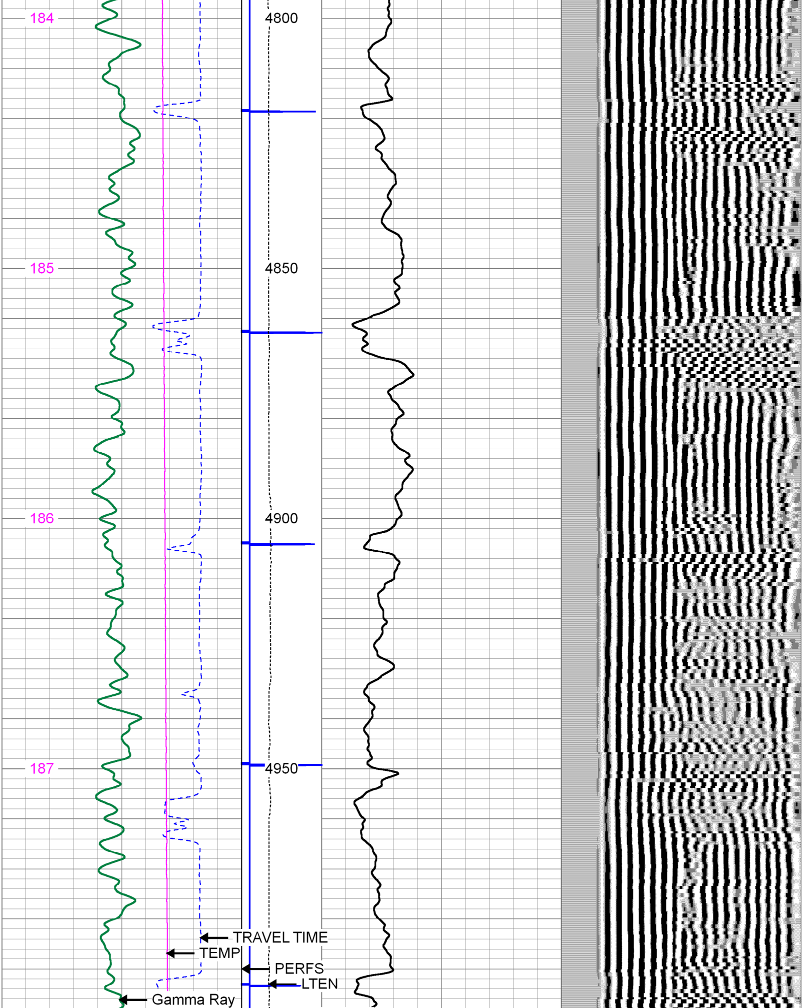


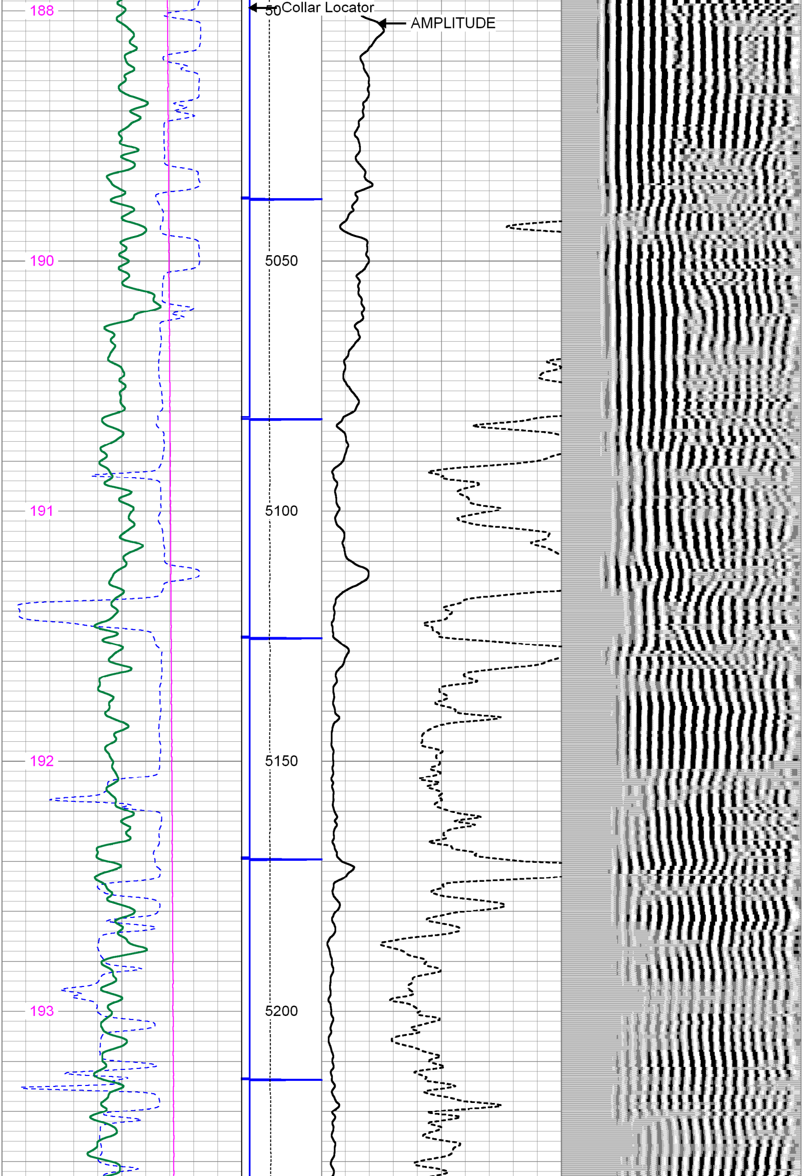


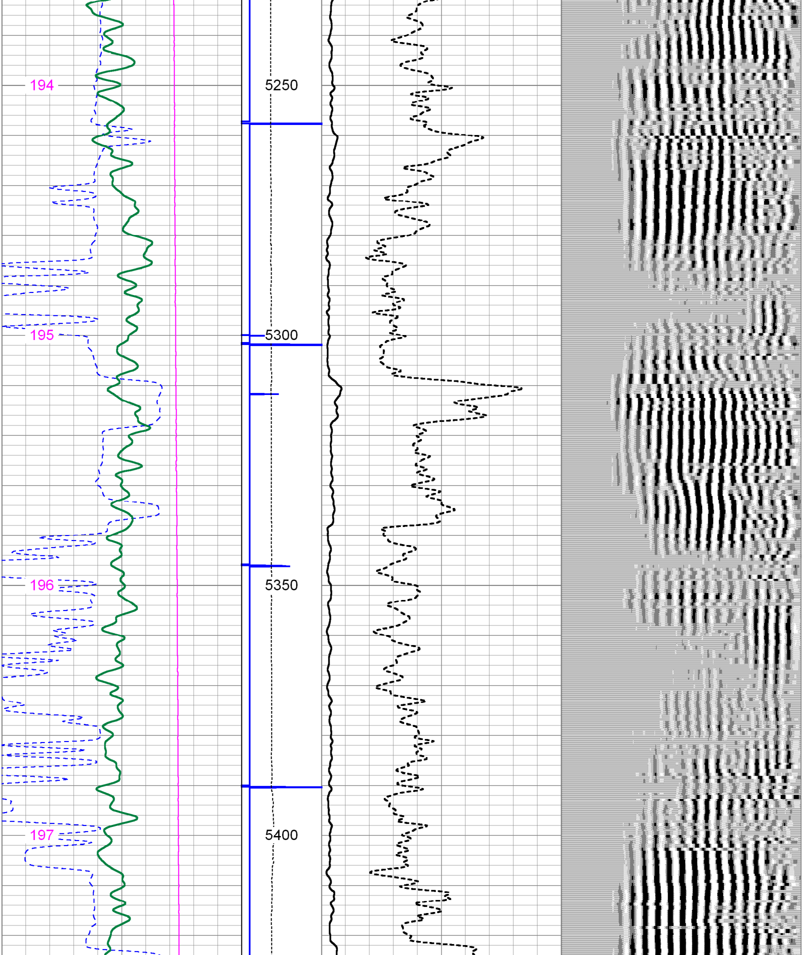


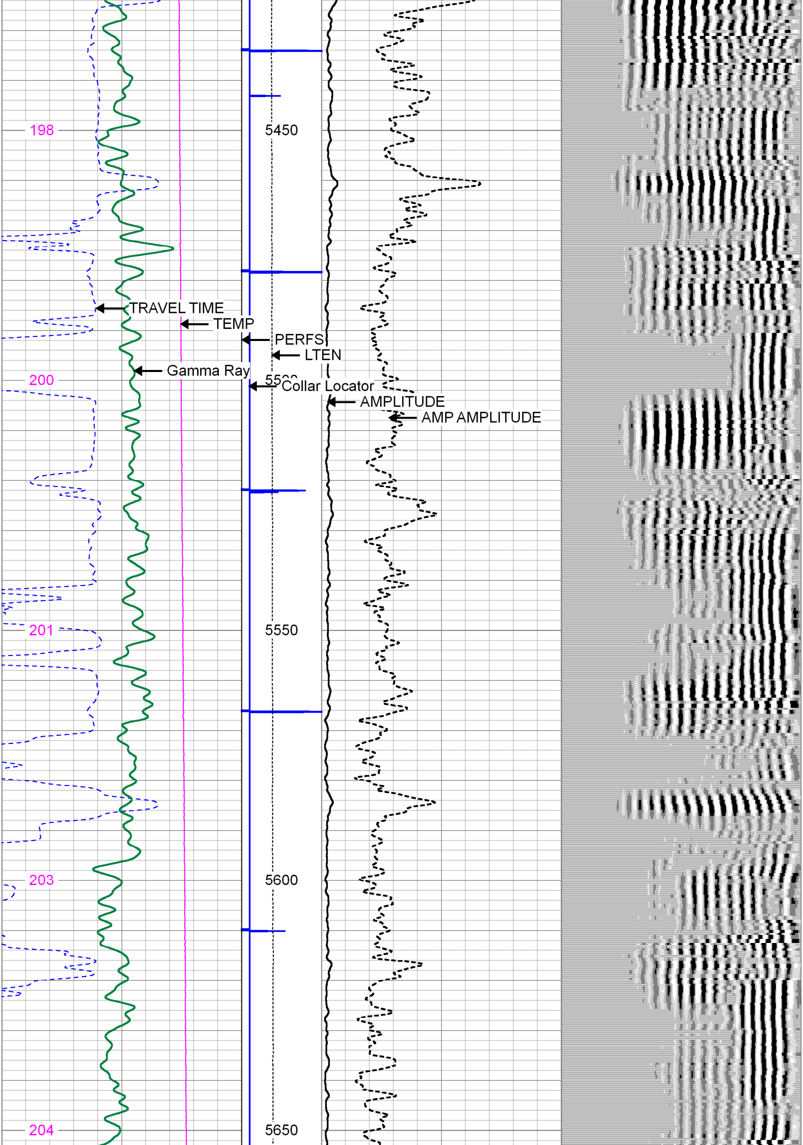


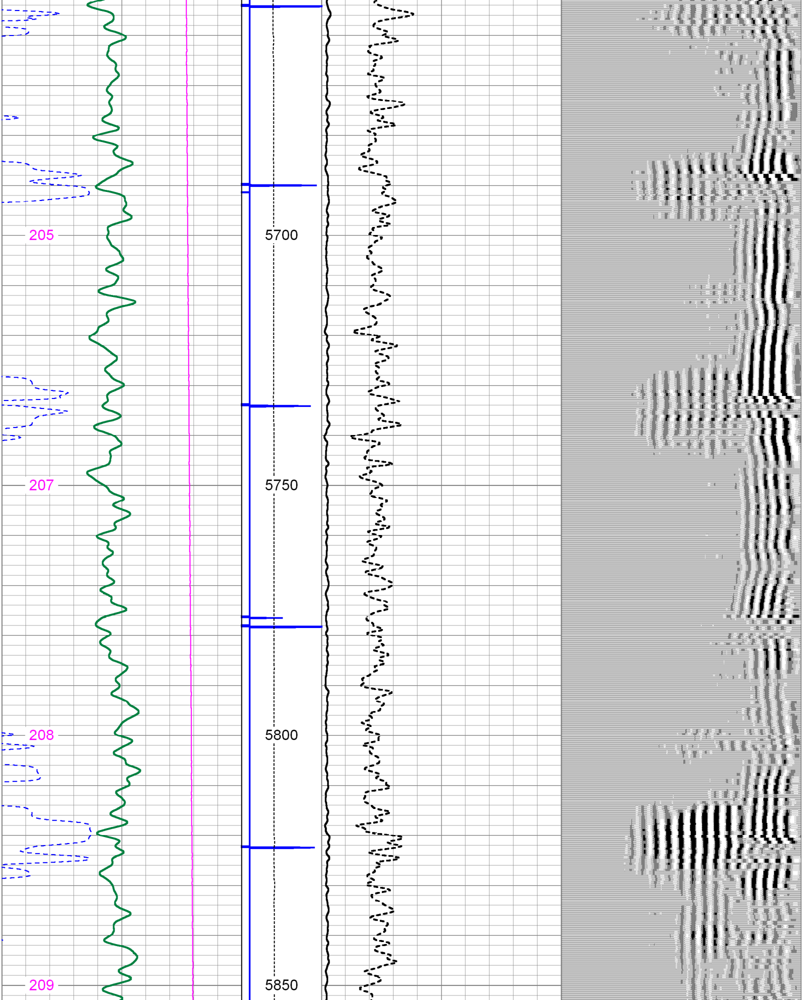


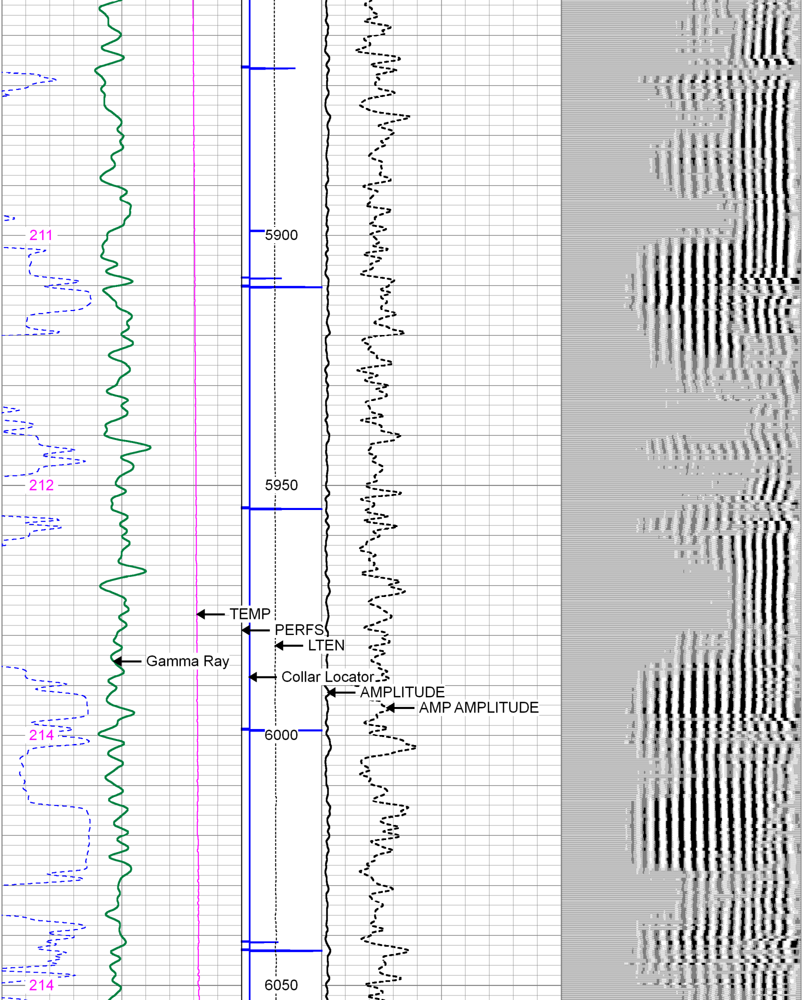


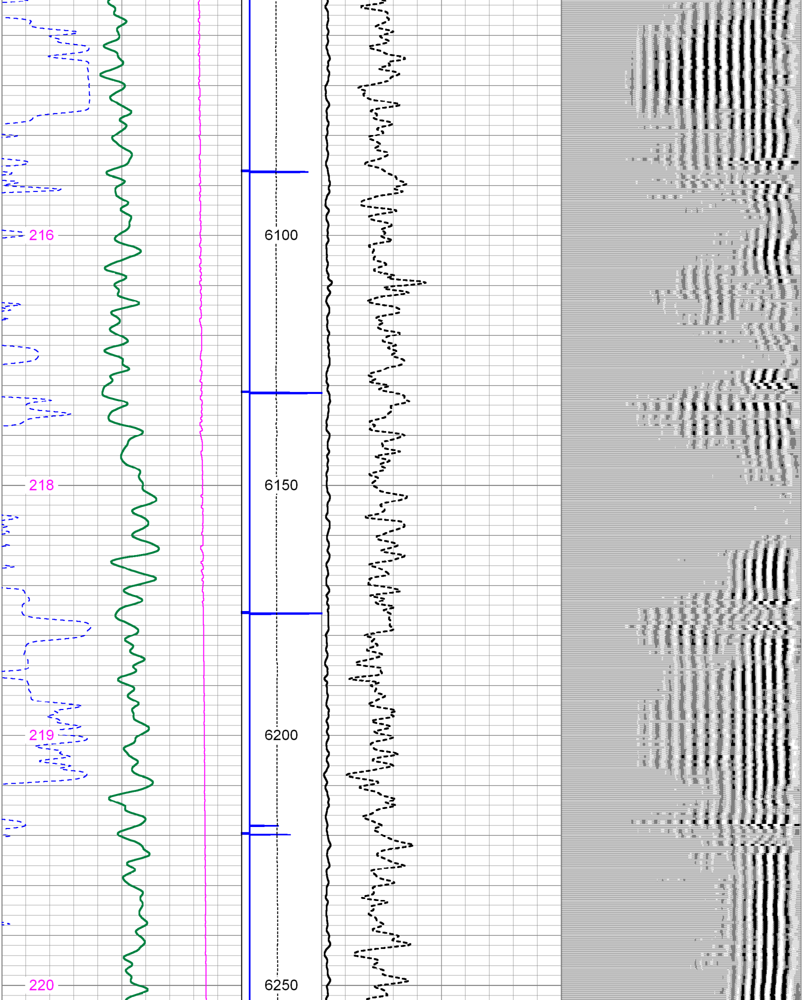


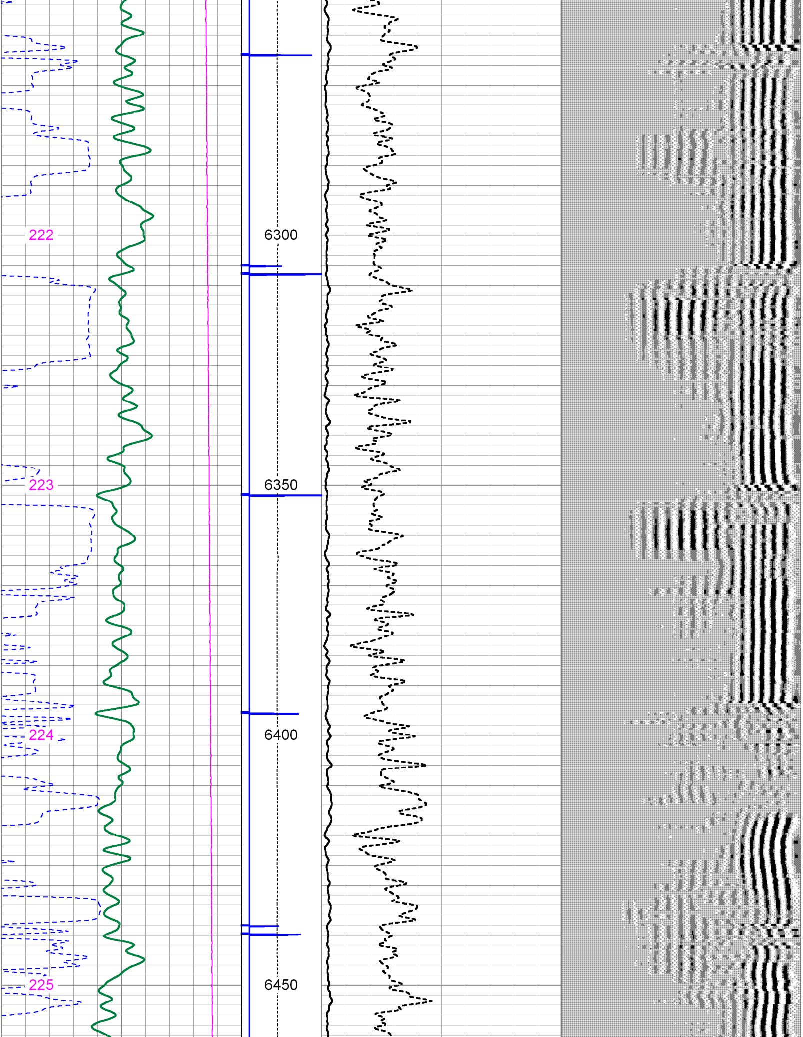


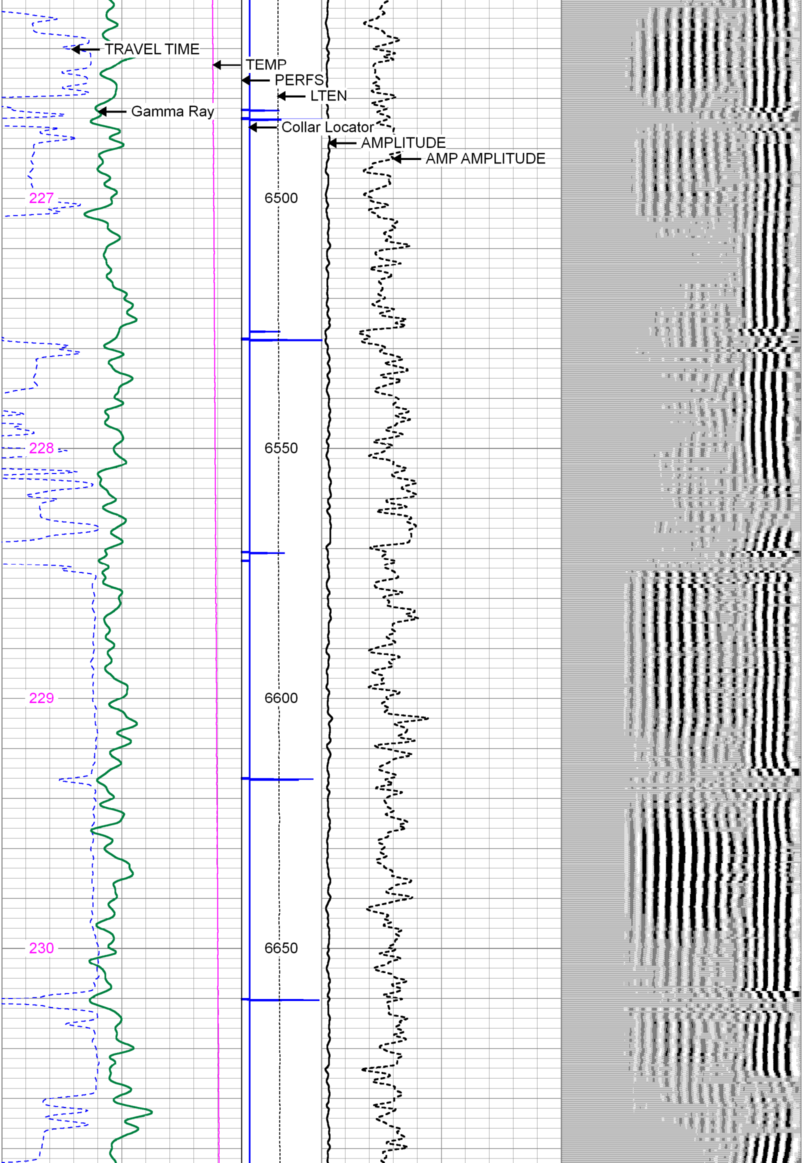


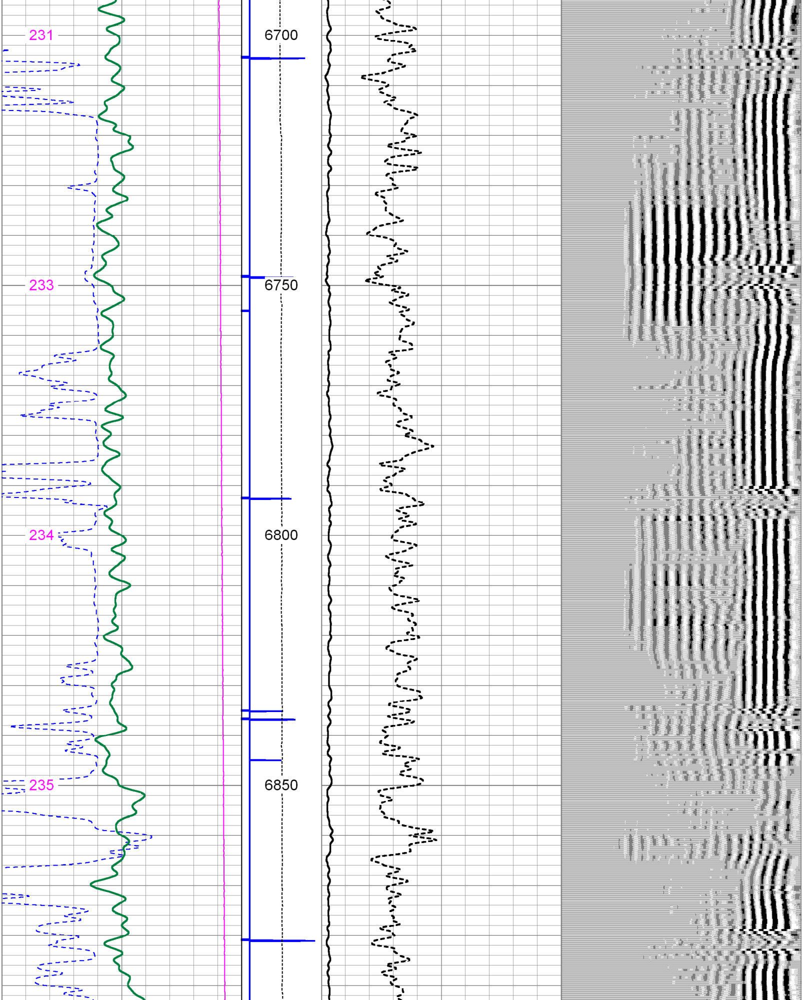


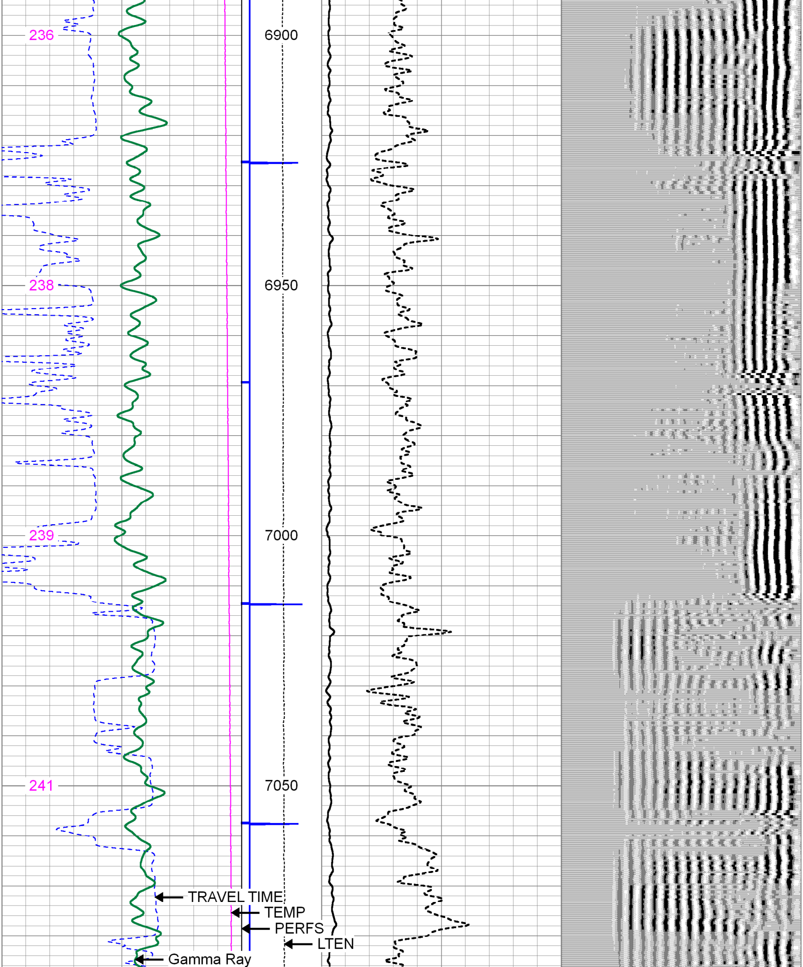


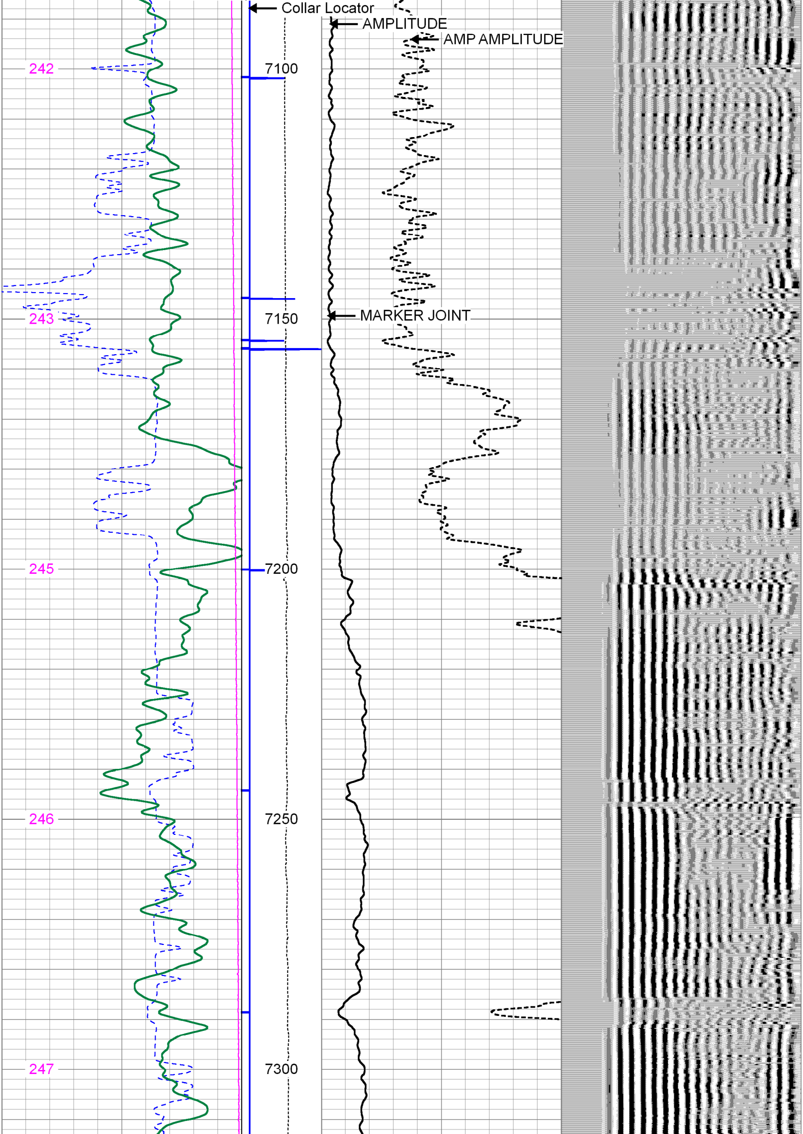


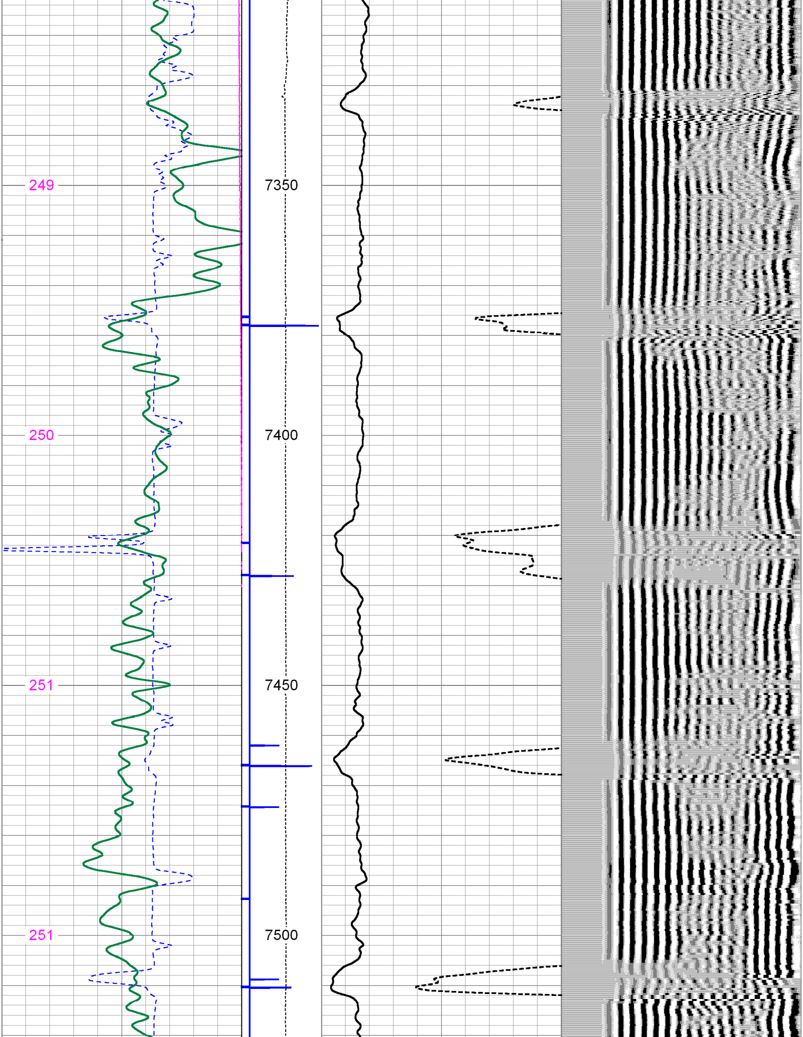


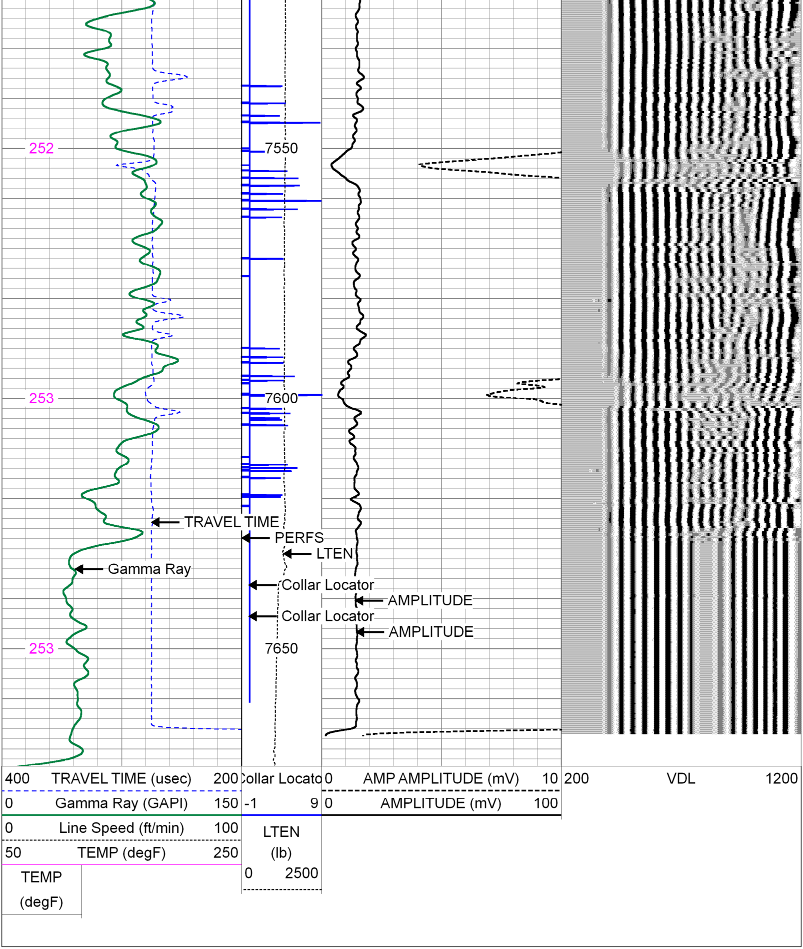










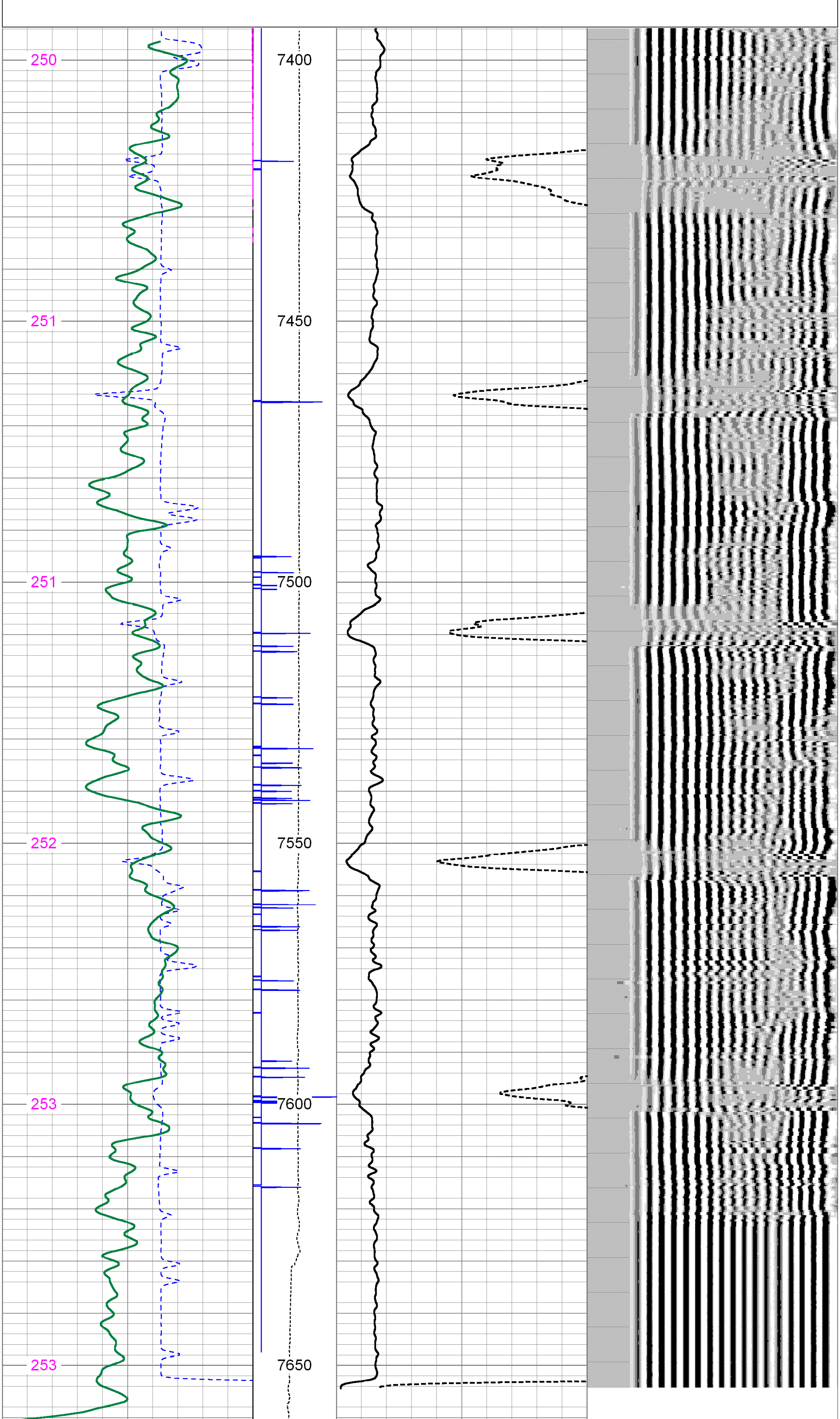


200' REPEAT PASS LOGGED UNDER 0 INDUCED PSI

Energy Services

Database File: schneider hd 11-142hc.db
Dataset Pathname: pass22
Presentation Format: tecko_gw
Dataset Creation: Fri Jun 08 15:15:31 2018 by Log 7.0 B1
Charted by: Depth in Feet scaled 1:240

400 TRAVEL TIME (usec) 200	Collar Locato	0 AMP AMPLITUDE (mV) 10	200 VDL 1200
0 Gamma Ray (GAPI) 150	-1 9	0 AMPLITUDE (mV) 100	
0 Line Speed (ft/min) 100	LTEN (lb) 0 2500		
50 TEMP (degF) 250			
TEMP (degF)			



400 TRAVEL TIME (usec) 200	Collar Locato	0 AMP AMPLITUDE (mV) 10	200 VDL 1200
0 Gamma Ray (GAPI) 150	-1 9	0 AMPLITUDE (mV) 100	
0 Line Speed (ft/min) 100	LTEN (lb) 0 2500		
50 TEMP (degF) 250			
TEMP (degF)			

KLX
Energy Services

REPEAT PASS
LOGGED UNDER 0 INDUCED PSI

Database File: schneider hd 11-142hc.db
Dataset Pathname: pass26
Presentation Format: tecko_gw
Dataset Creation: Fri Jun 08 17:01:16 2018 by Log 7.0 B1
Charted by: Depth in Feet scaled 1:240

400 TRAVEL TIME (usec) 200	Collar Locato	0 AMP AMPLITUDE (mV) 10	200 VDL 1200
0 Gamma Ray (GAPI) 150	-1 9	0 AMPLITUDE (mV) 100	
0 Line Speed (ft/min) 100	LTEN (lb) 0 2500		
50 TEMP (degF) 250			
TEMP (degF)			

400 TRAVEL TIME (usec) 200	Collar Locato	0 AMP AMPLITUDE (mV) 10	200 VDL 1200
0 Gamma Ray (GAPI) 150	-1 9	0 AMPLITUDE (mV) 100	
0 Line Speed (ft/min) 100	LTEN (lb) 0 2500		
50 TEMP (degF) 250			
TEMP (degF)			

Calibration Report

Database File: schneider hd 11-142hc.db
Dataset Pathname: pass26
Dataset Creation: Fri Jun 08 17:01:16 2018 by Log 7.0 B1

Gamma Ray Calibration Report

Serial Number:	234	
Tool Model:	TEKCO	
Performed:	Sat May 19 14:14:45 2018	
Calibrator Value:	1.0	GAPI
Background Reading:	0.0	cps
Calibrator Reading:	1.0	cps
Sensitivity:	0.5000	GAPI/cps

Segmented Cement Bond Log Calibration Report

Serial Number:	1234	
Tool Model:	275RIB	
Calibration Casing Diameter:	5.500	in
Calibration Depth:	190.758	ft

Master Calibration, performed Fri Jun 08 14:37:22 2018:

	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3'	0.000	1.416	1.700	71.921	49.586	1.700
CAL	0.000	1.603				
5'	0.000	2.012	1.700	71.921	34.897	1.700
SUM						
S1	0.000	1.939	0.000	100.000	51.579	0.000
S2	0.000	2.087	0.000	100.000	47.913	0.000
S3	0.000	2.203	0.000	100.000	45.392	0.000
S4	0.000	2.260	0.000	100.000	44.248	0.000
S5	0.000	2.178	0.000	100.000	45.910	0.000
S6	0.000	2.054	0.000	100.000	48.678	0.000
S7	0.000	1.968	0.000	100.000	50.817	0.000
S8	0.000	2.004	0.000	100.000	49.912	0.000

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

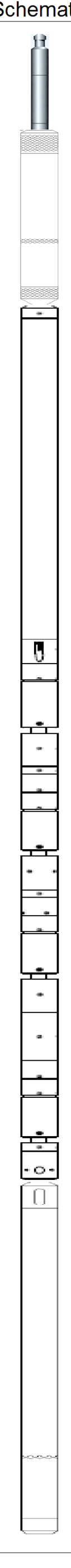
	Raw (v)		Calibrated (v)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
CAL	0.000	0.000	0.000	1.603	1.000	0.000

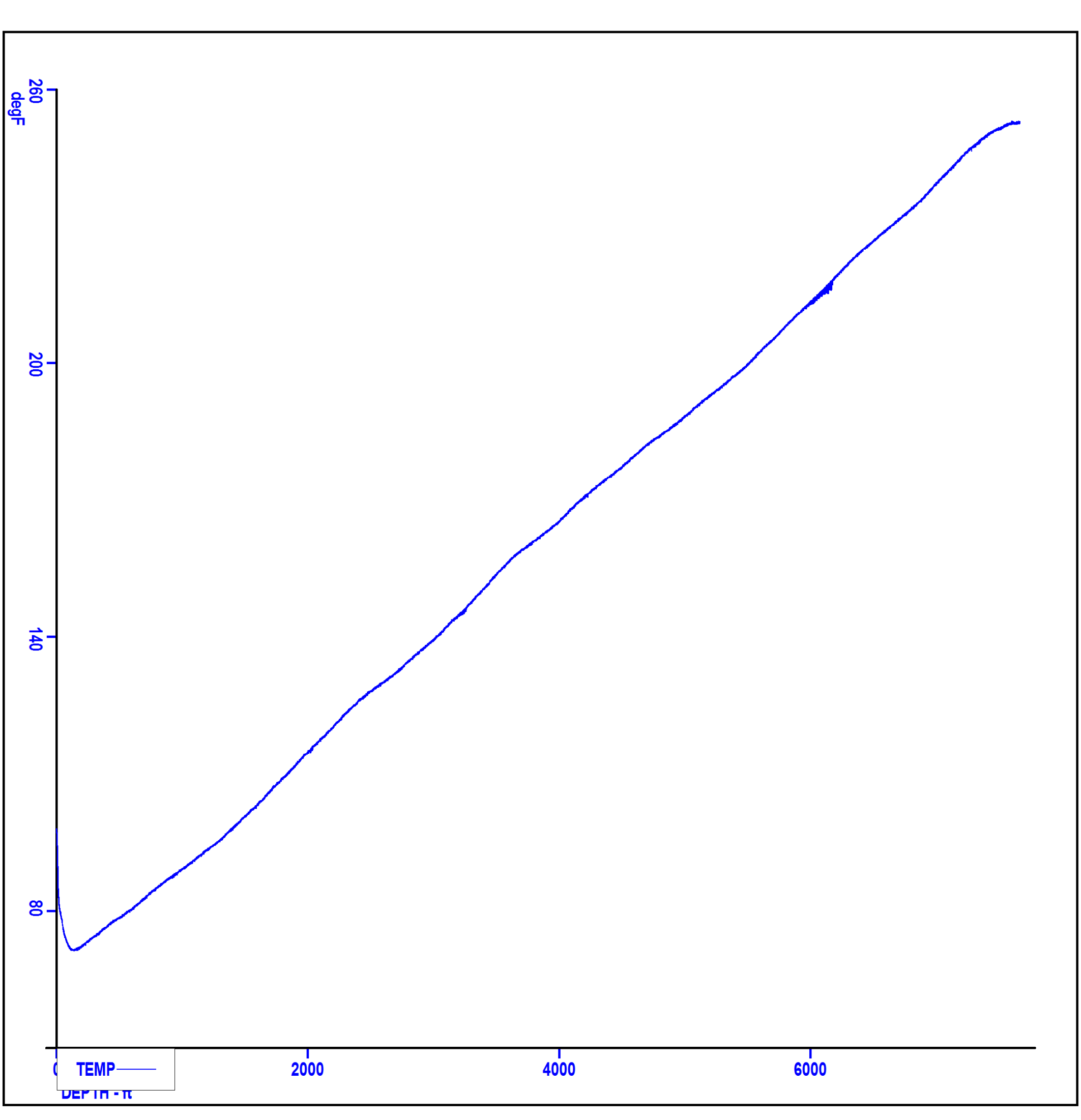
Air Zero Calibration, performed Mon Sep 11 12:40:00 2006:

	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:	1234	
Tool Model:	275RIB	
Performed:	Sat May 19 13:13:43 2018	
	Reference	Reading
Low Reference:	75.00 degF	300.00 usec
High Reference:	400.00 degF	1282.00 usec
Gain:	0.33	
Offset:	0.00	
Delta Spacing	1	

Sensor	Offset (ft)	Schematic	Description	Len (ft)	OD (in)	Wt (lb)
			CHD-STNDRD (GOI) Standard Cable Head	1.00	1.69	10.00
CCL	13.48		CCL-275tekco (2.75TEKCO) Tekco 2 3/4" 450 Deg. F Rare Earth Magnets	1.83	2.75	33.00
TEMP	10.04					
WVFS1	8.75					
WVFS2	8.75					
WVFS3	8.75		275CTEKSECWTWSLCANS-275RIB (2 3/4" (R.I.B.) TOOL 3FT, 5FT and 8EA RIB SIGNALS 400 DEG "F" @20K PSI With Sliding Cans For Pressure Ballance	1239.13	2.75	102.00
WVFS4	8.75					
WVFS5	8.75					
WVFS6	8.75					
WVFS7	8.75					
WVFS8	8.75					
WVF3FT	8.00					
WVFCAL	8.00					
WVFSYNC	8.00					
WVF5FT	7.00					
WVFTEMP	3.67					
			GR-TEKCO (234) 2.75 HIGH TEMP LOGGING GR	3.67	2.75	25.00
GR	1.06					

Dataset: schneider hd 11-142hc.db: field/well/run1/pass26
Total Length: 15.63 ft
Total Weight: 170.00 lb
O.D.: 2.75 in