Radial Bond
Gamma Ray
CCL, Temp

Company PDC Energy
Well Stugart 20N
Field Wattenberg
County Weld
State Colorado

Company	PDC Energy
Well	Stugart 20N
Field	Wattenberg
County	Weld
State	Colorado

Location: API # : 05-123-51260

2121' FNL & 2044' FWL

SEC 20 TWP 5N RGE 66W

Permanent Datum	GL	Elevation
Log Measured From	KB	
Drilling Measured From	KB	

Other Services

None

Elevation

K.B.
D.F.
G.L.

Date	10-MAR-23		
Run Number	One		
Depth Driller	15164'		
Depth Logger	7768'		
Bottom Logged Interval	7765'		
Top Log Interval	Surface		
Open Hole Size	8.5		
Type Fluid	Water		
Density / Viscosity	8.33		
Max. Recorded Temp.	245°F		
Estimated Cement Top	See log		
Time Well Ready	ROA		
Time Logger on Bottom	12:20		
Equipment Number	303		
Location	Greeley, CO		
Recorded By	C. Walsh	G. Lueck	CAS3122023
Witnessed By	Lee Damon		

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

Casing Record	Size	Wgt/Ft	Top	Bottom
Surface String	9.625"	36#	Surface	1720'
Prot. String				
Production String	5.5"	20#	Surface	15157'
Liner				

Final Print

<<< 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.

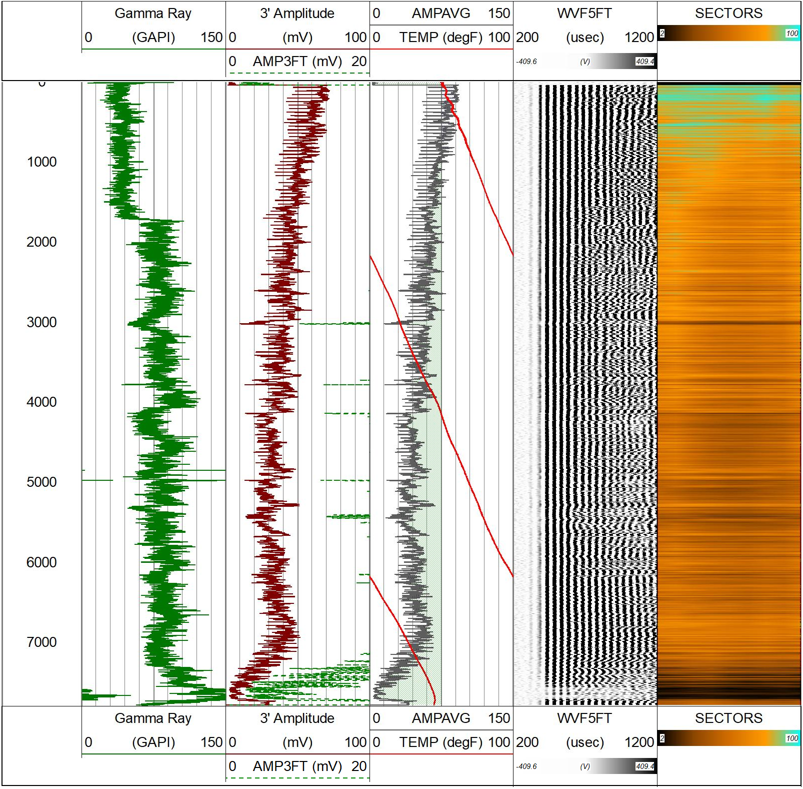
Comments

Log ran at Customer Request
Correlated to Marker Joint 6922.5' to 6932.5'

Thank You For Choosing GO Wireline!

Main Pass

Database File	pdc_stugart_20n_rcbl_31023.db
Dataset Pathname	pass4.1
Presentation Format	rbl_1inch_2020
Dataset Creation	Fri Mar 10 13:41:50 2023
Charted by	Depth in Feet scaled 1:15000



GO WIRELINE LLC

Main Pass

Database File	pdc_stugart_20n_rcbl_31023.db
Dataset Pathname	pass4.1
Presentation Format	rbl_all_8_2020_t
Dataset Creation	Fri Mar 10 13:41:50 2023
Charted by	Depth in Feet scaled 1:240

LTEN
0 (lb 1000

LSPD
(ft/min)
500 -500

0 CCL 100

3' Travel Time
400 (usec) 200

Casing Collar Locator

GAMMA RAY
0 (GAPI) 200

3' Amplitude
0 (mV) 100

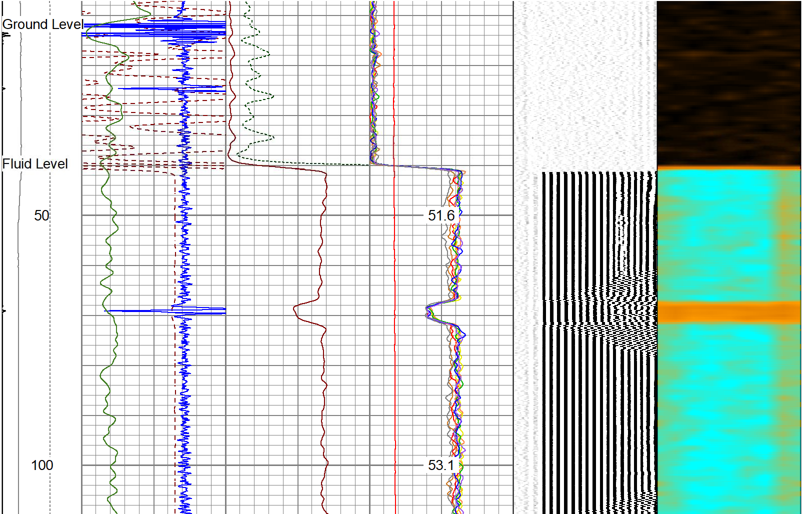
3 'Amplified Amplitude
0 (mV) 20

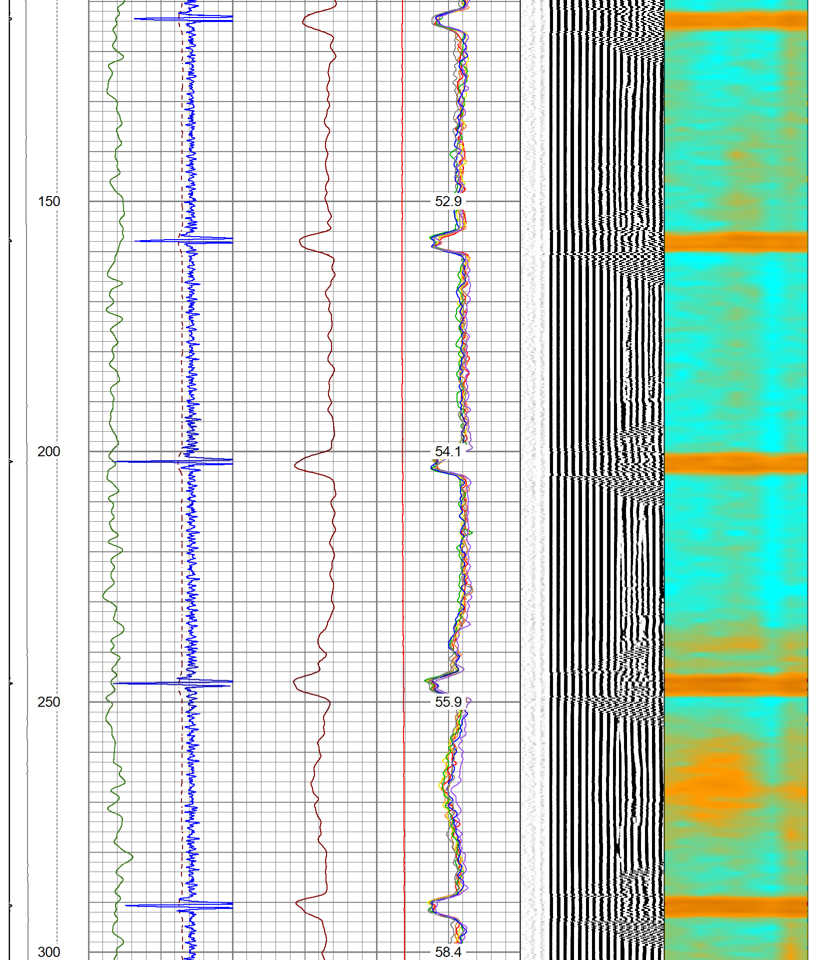
0 AMPS1 150
0 AMPS2 150
0 AMPS3 150
0 AMPS4 150
0 AMPS5 150
0 AMPS6 150
0 AMPS7 150
0 AMPS8 150
0 TEMP (degF) 300

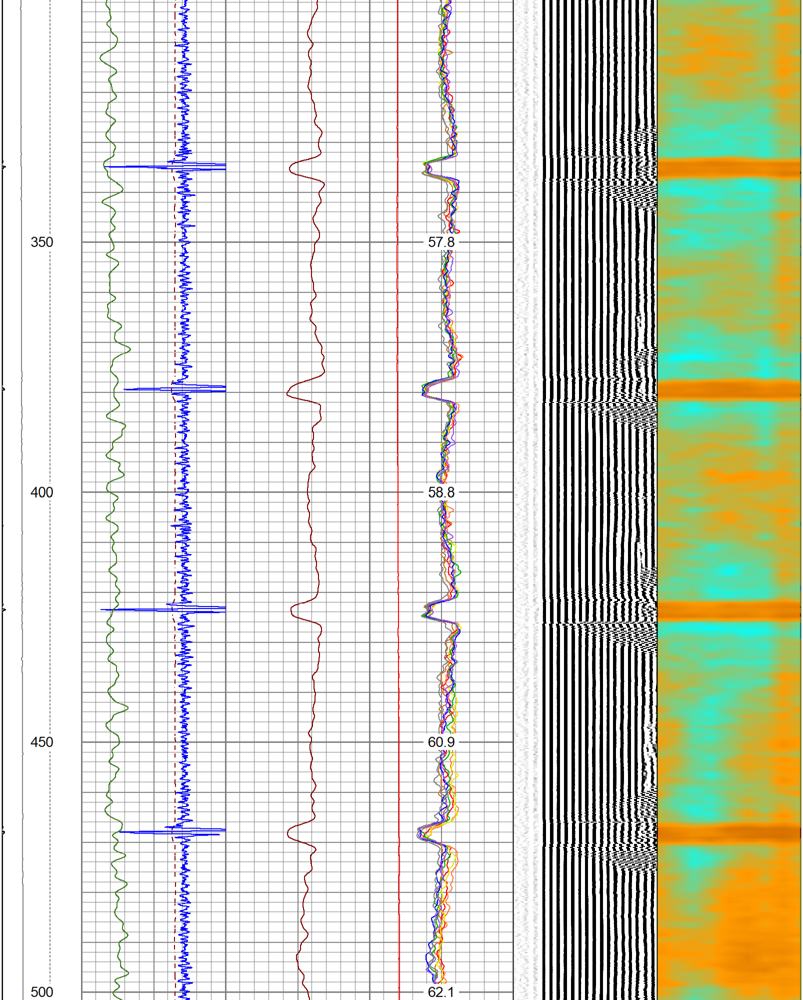
TEMP
(degF)

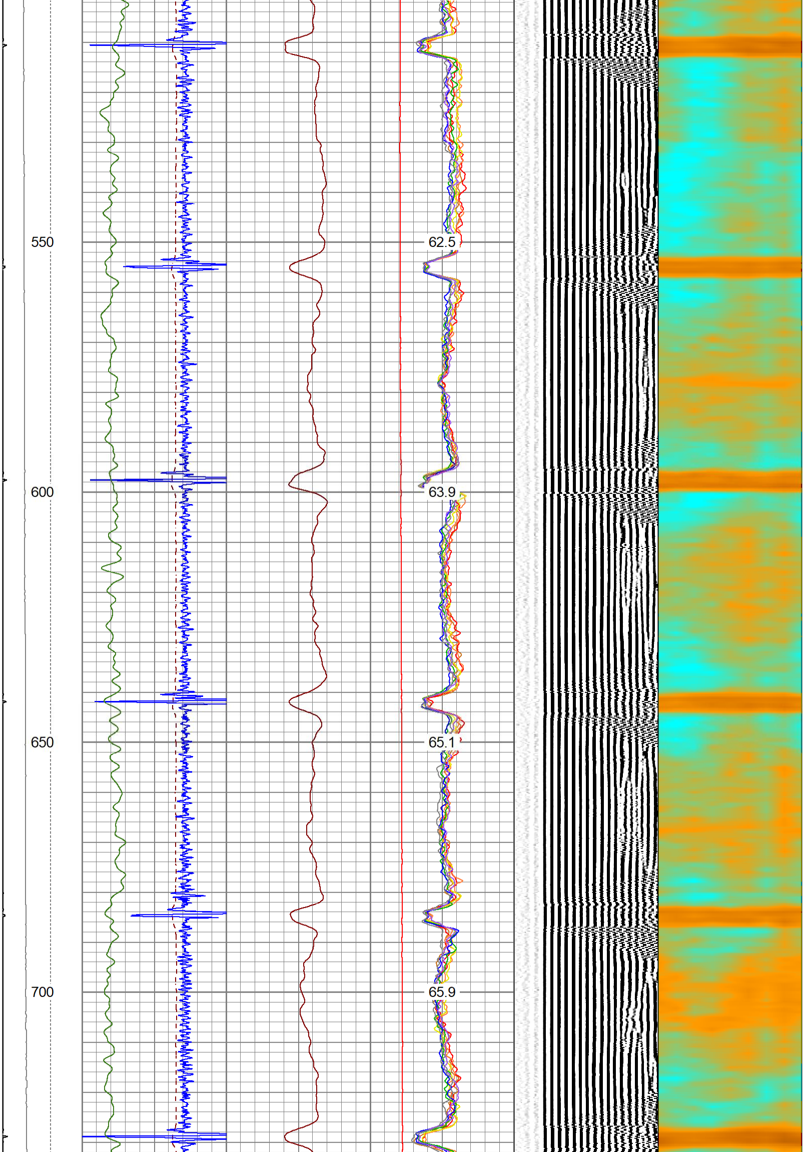
5' Variable Density
200 (usec) 1200
-409.6 (V) 409.4

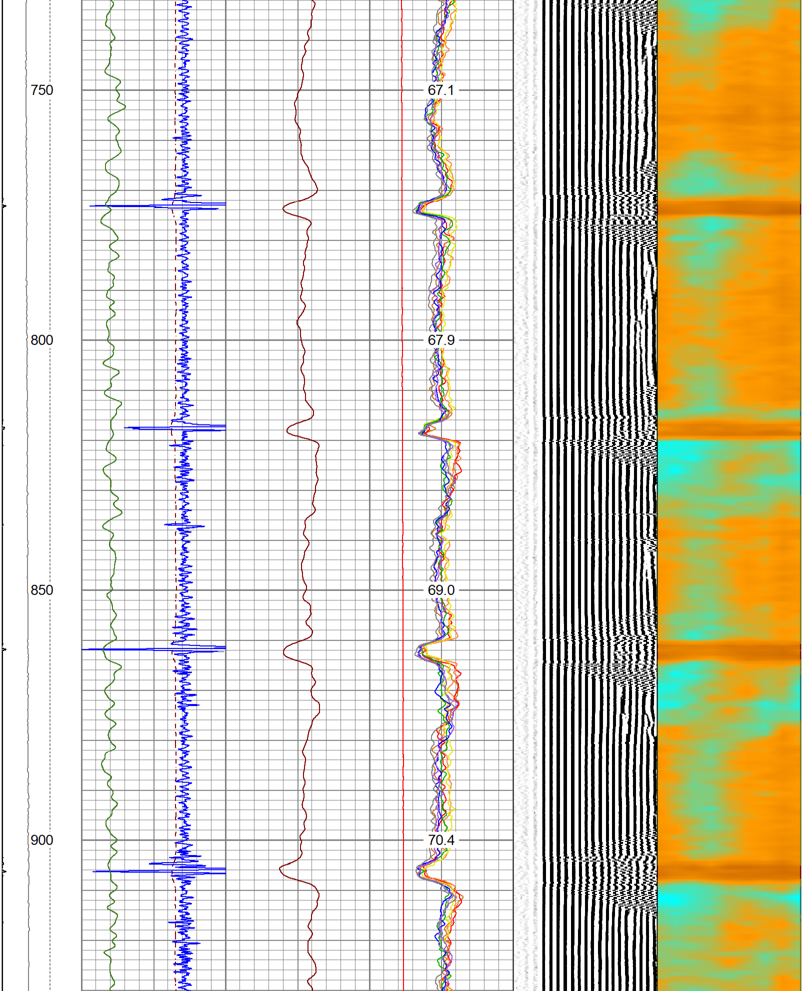
1 Sector Map 8
0 95

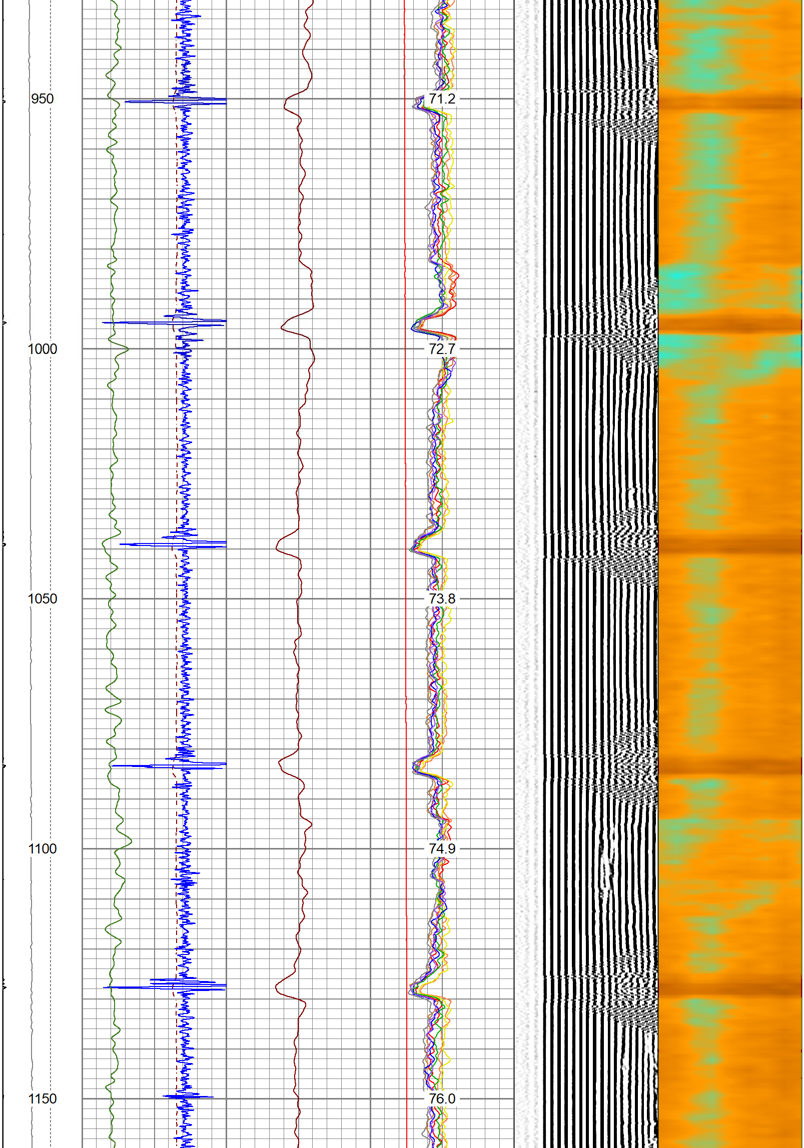


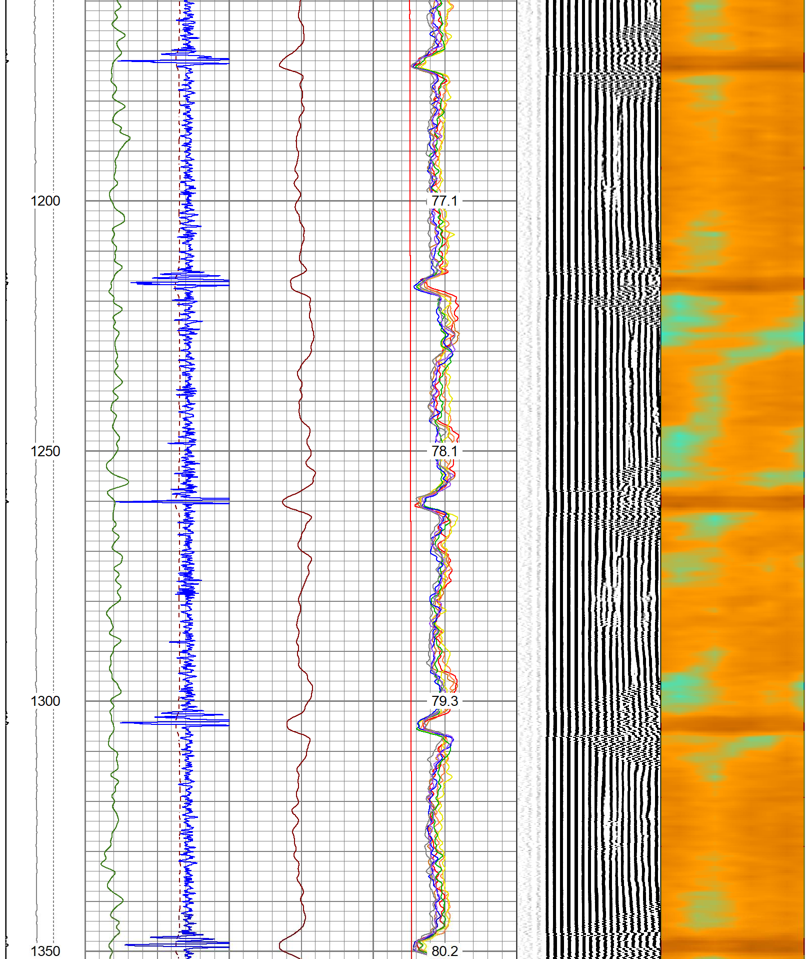


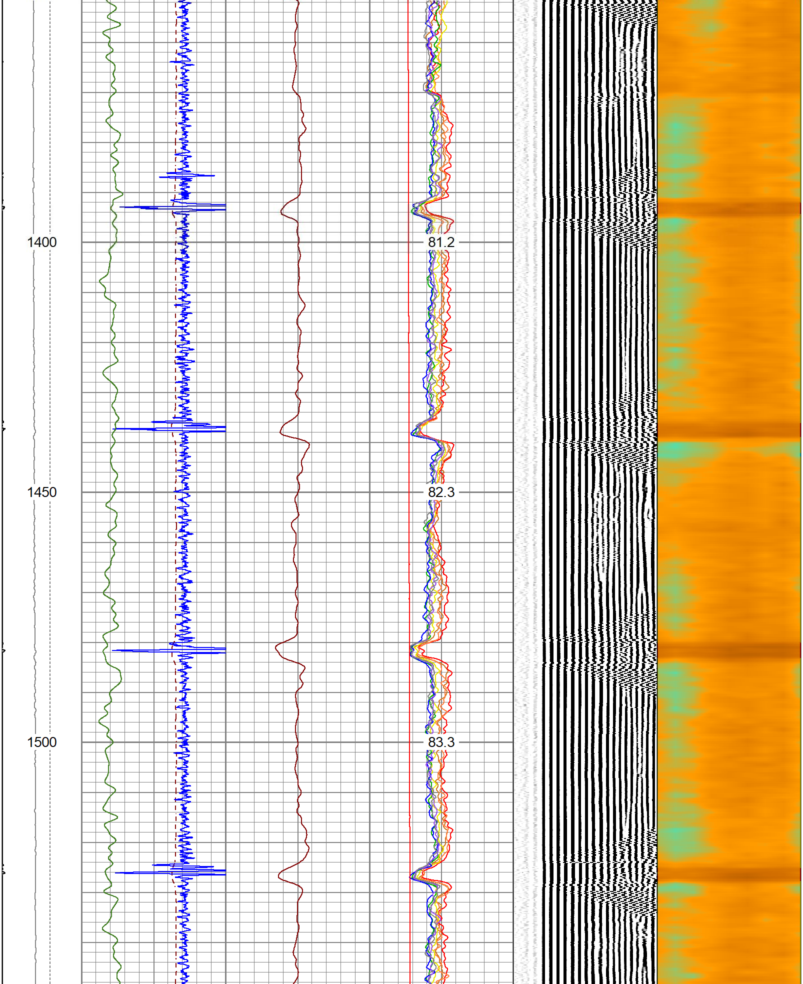


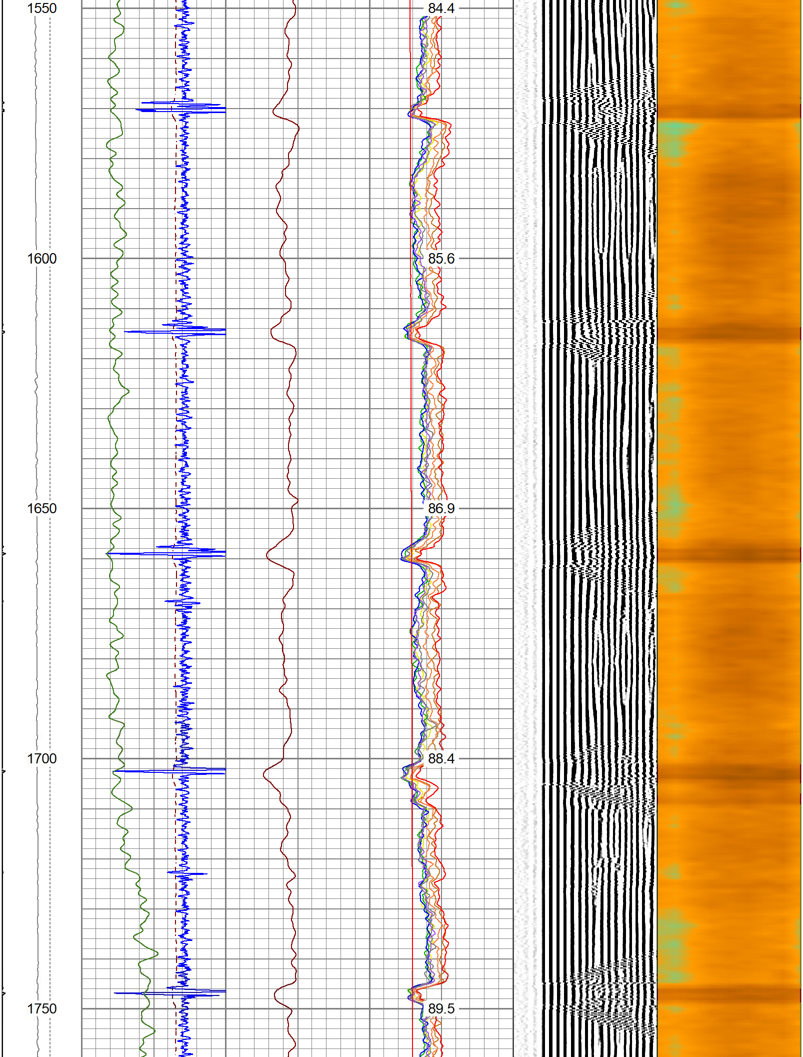


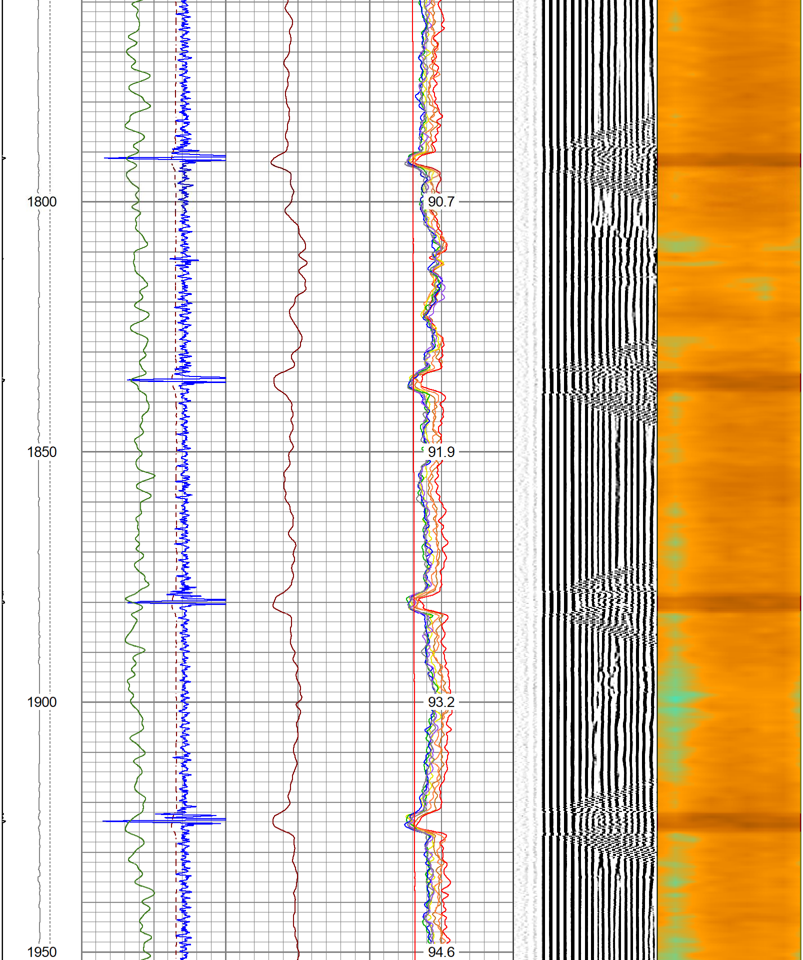


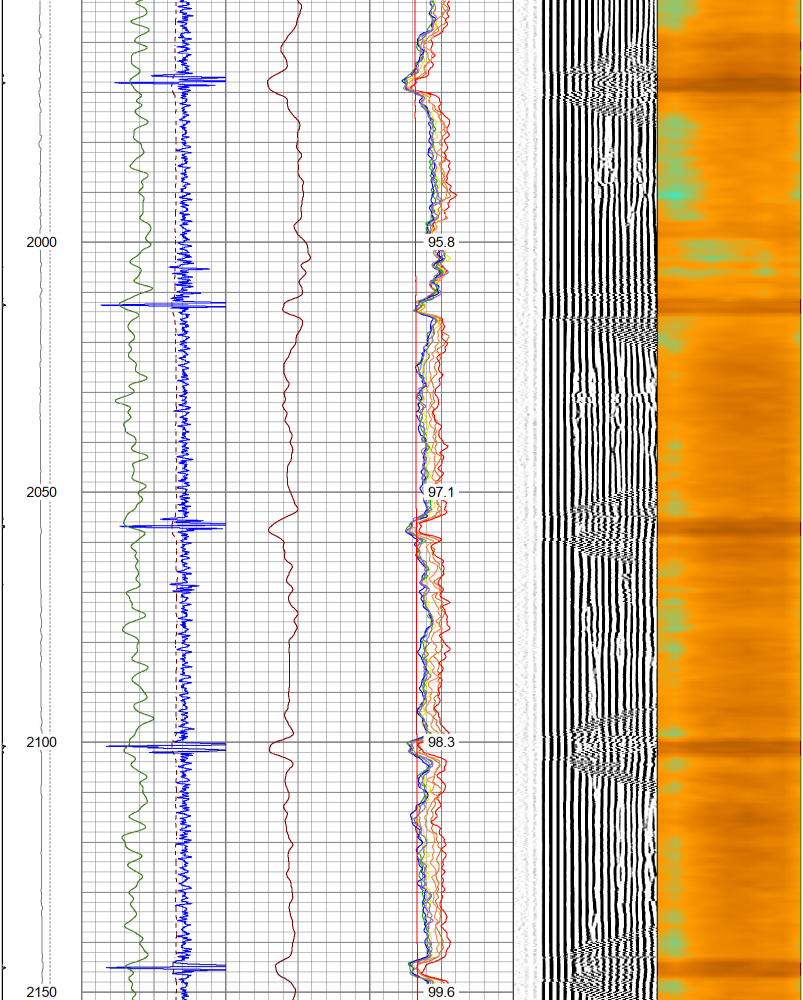


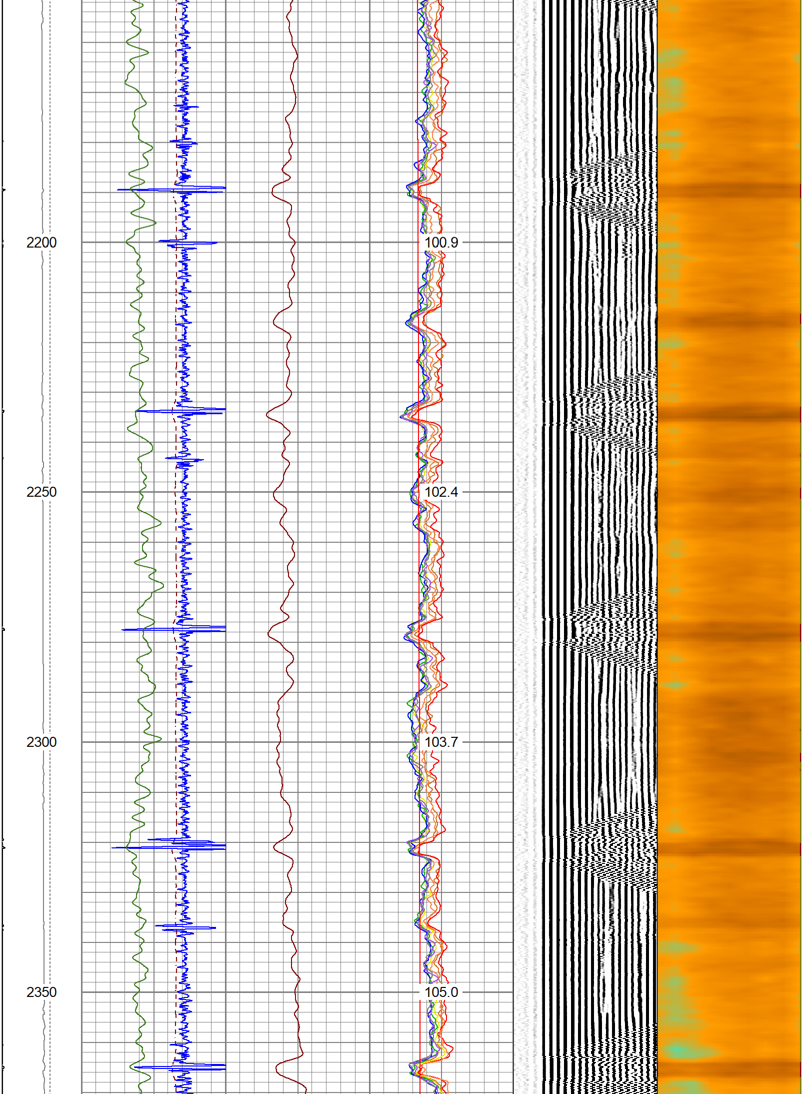


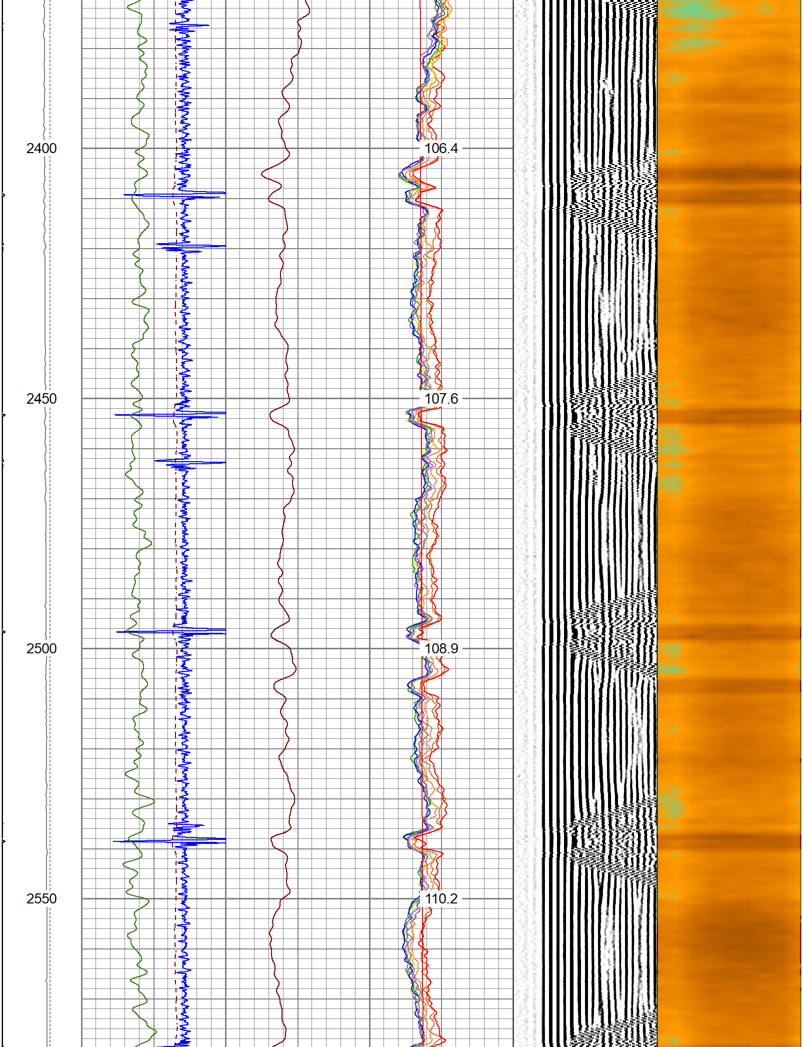


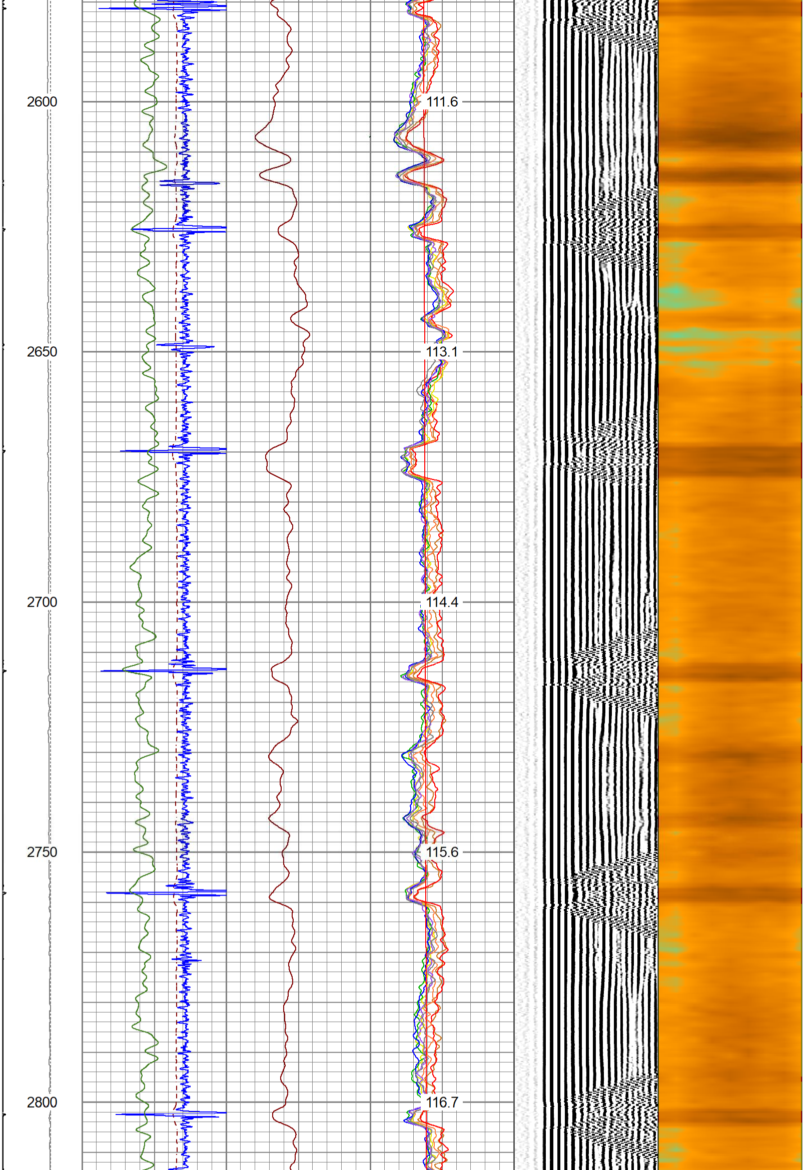


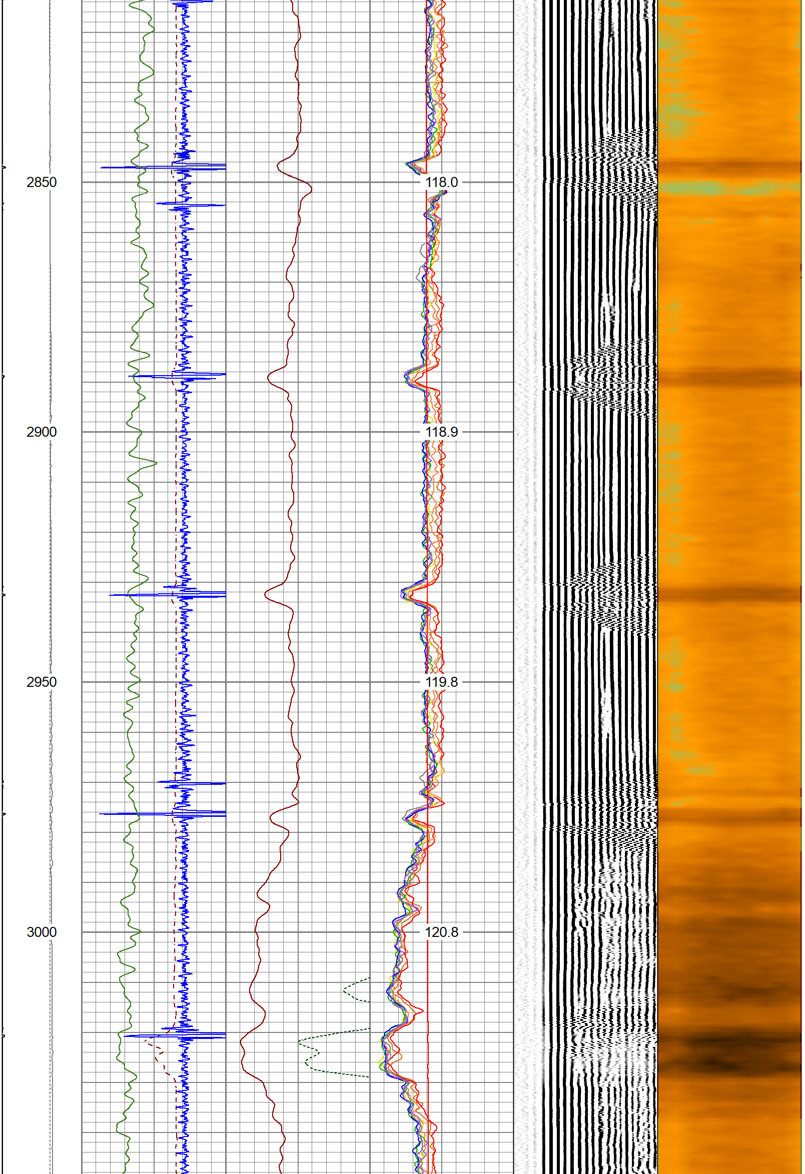


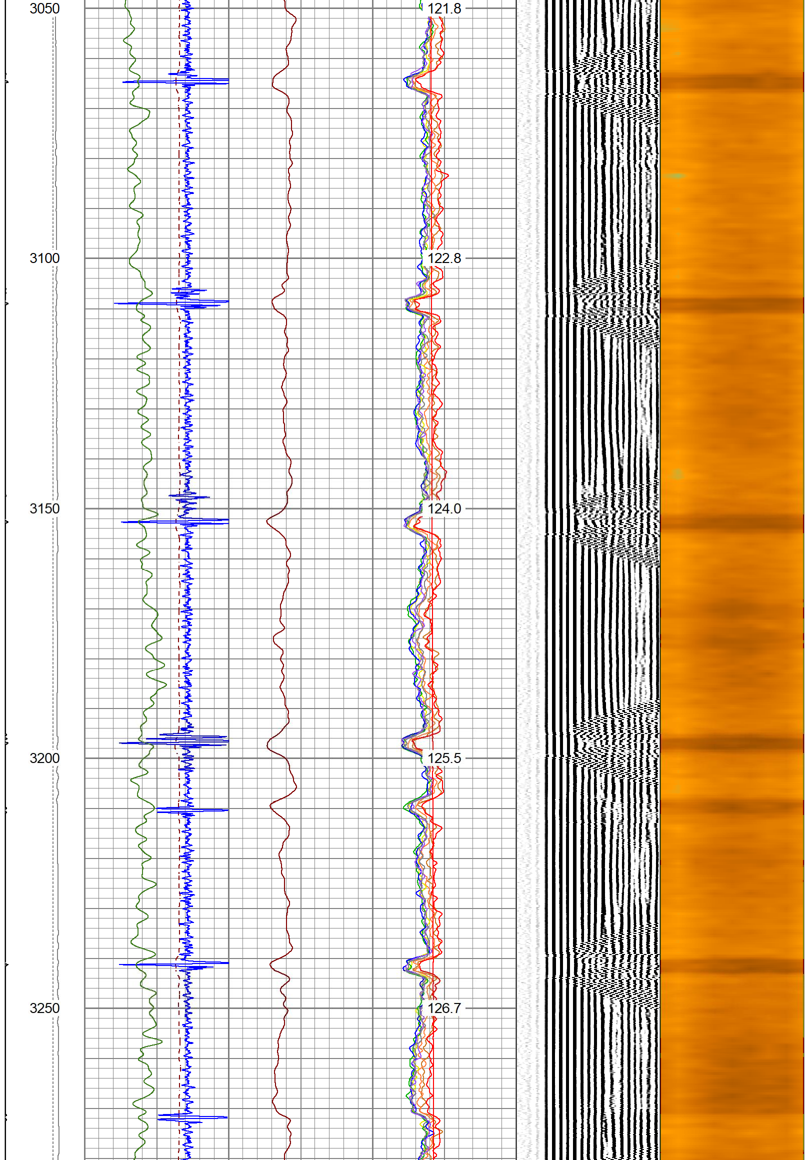


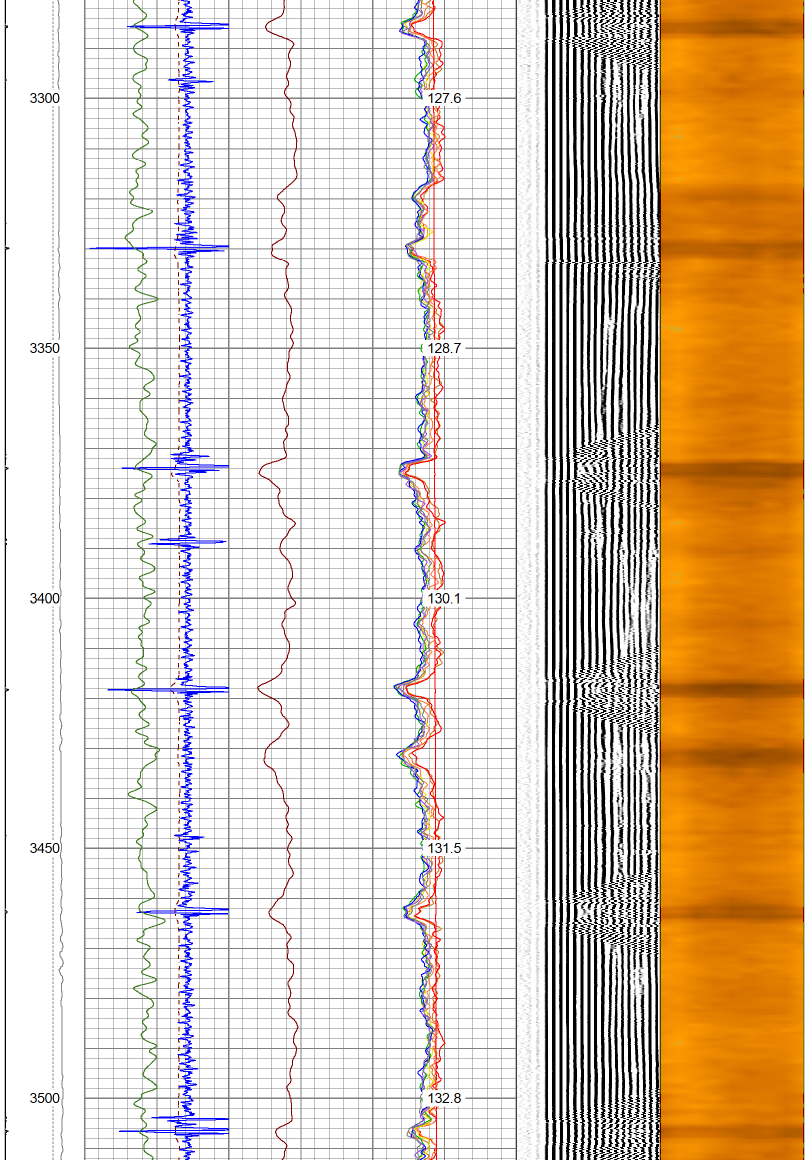


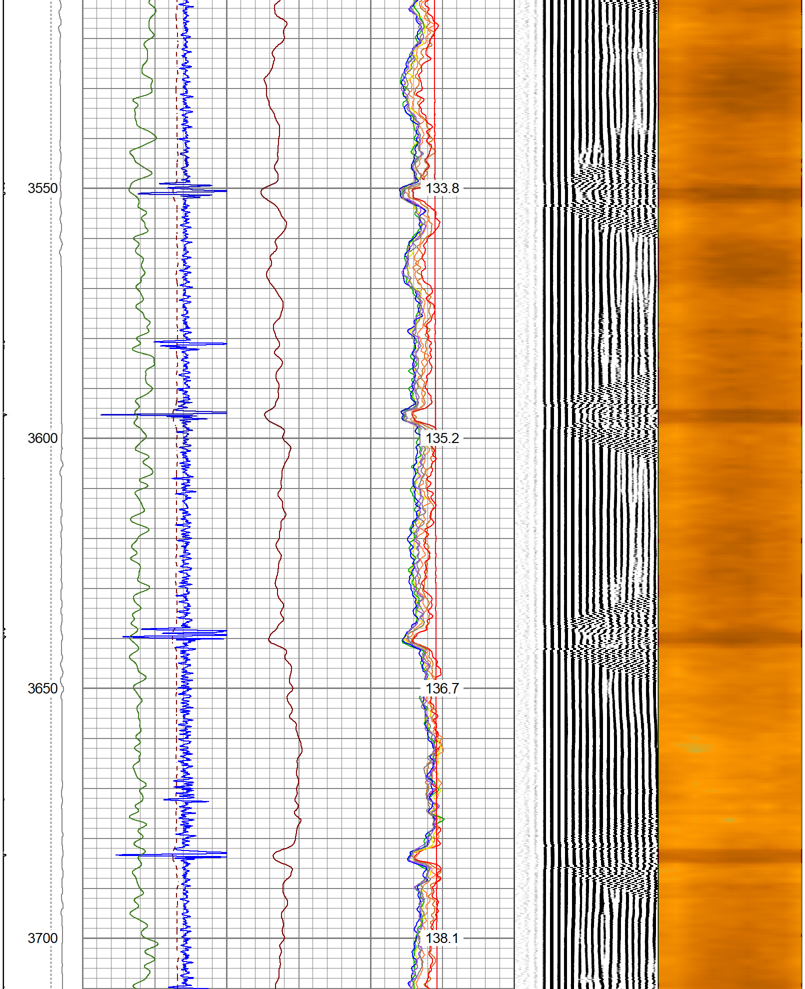








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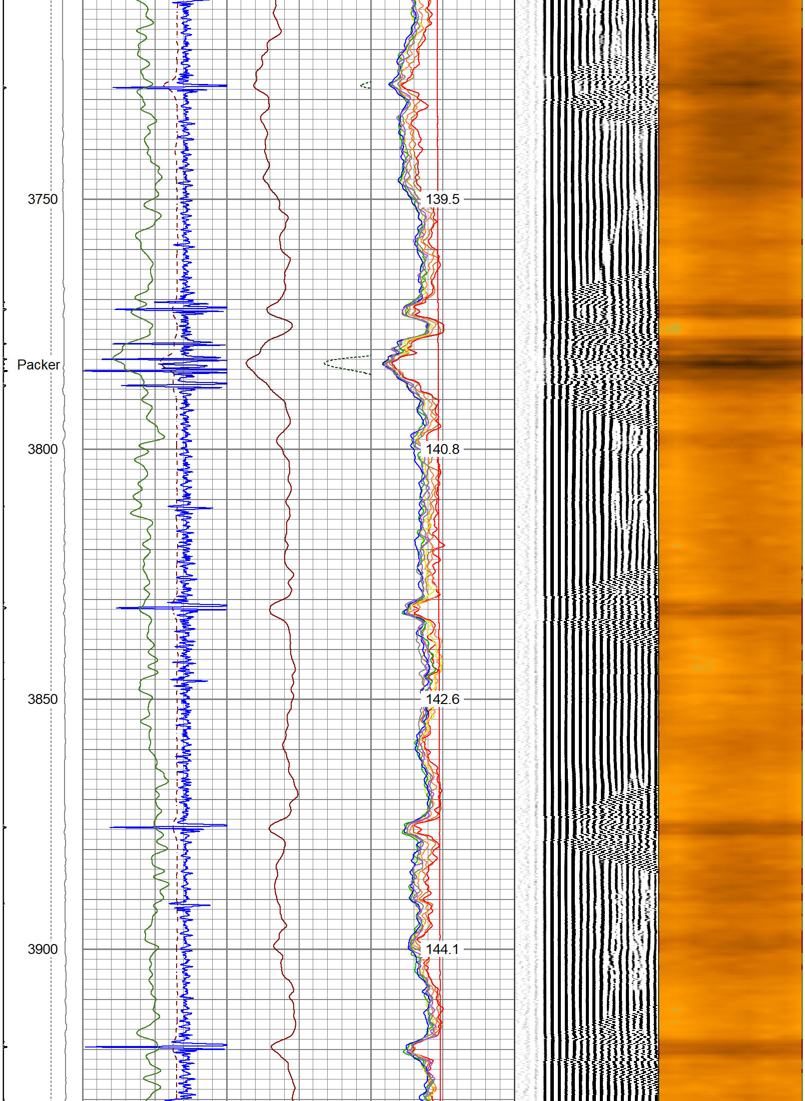
133.8
3600
135.2
3650
136.7
3700
138.1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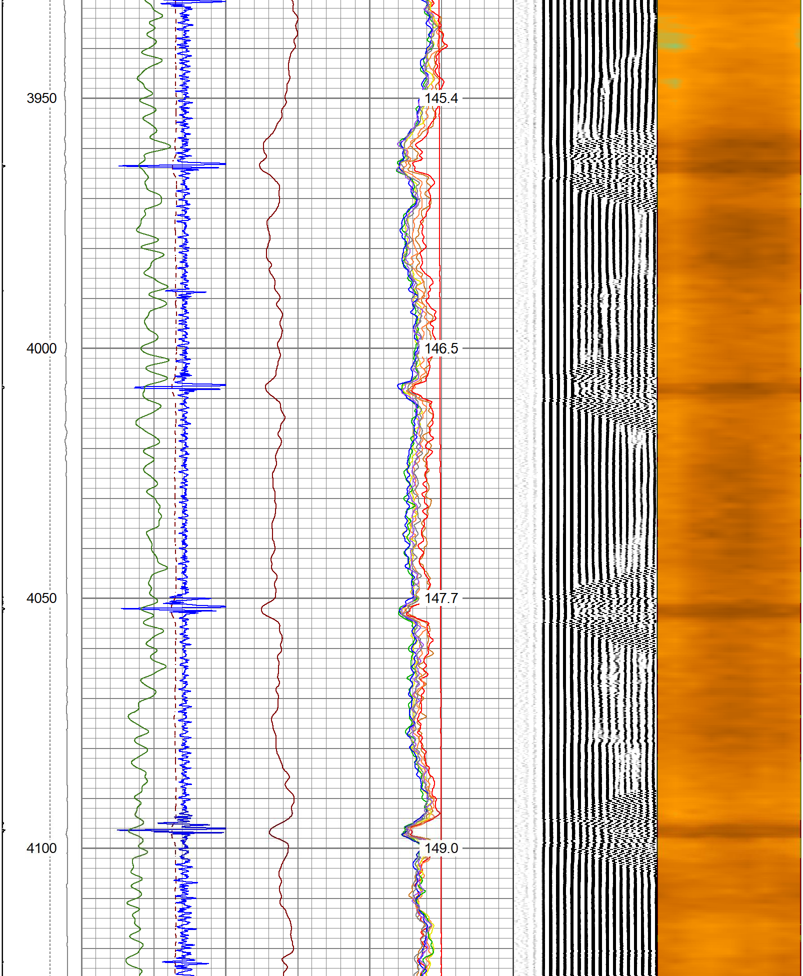
Packer
3800
3850
3900
139.5
140.8
142.6
144.1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4000
146.5
4050
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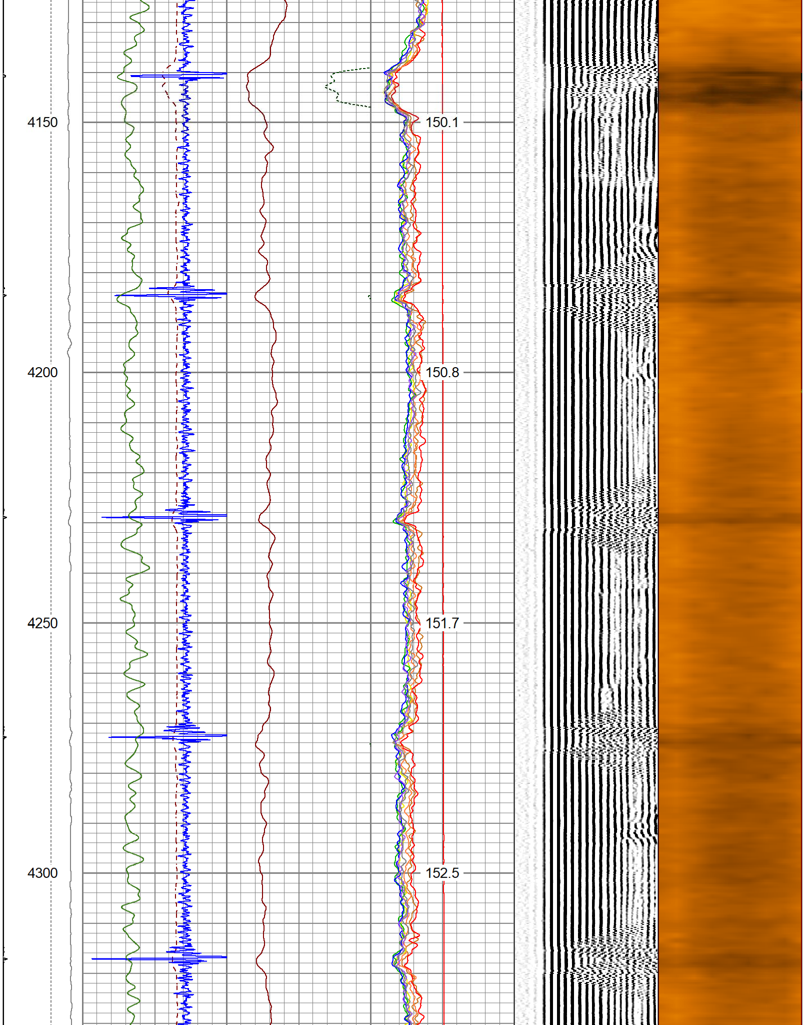
149.0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150.8
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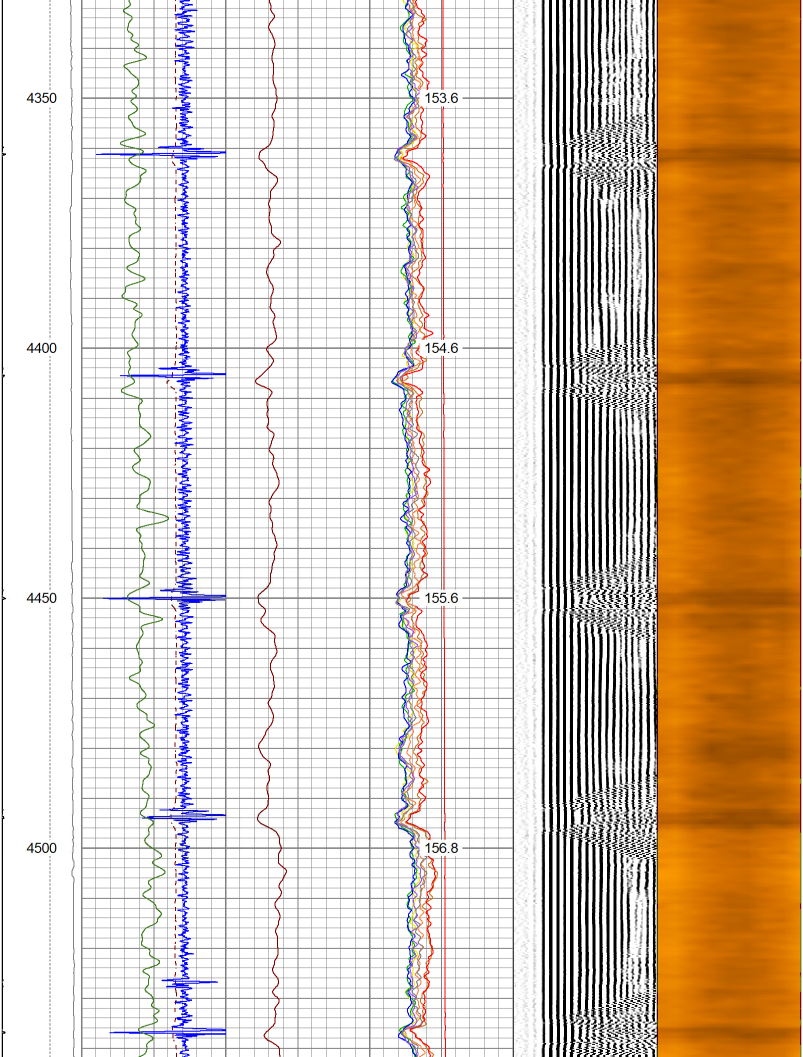
151.7
4300
152.5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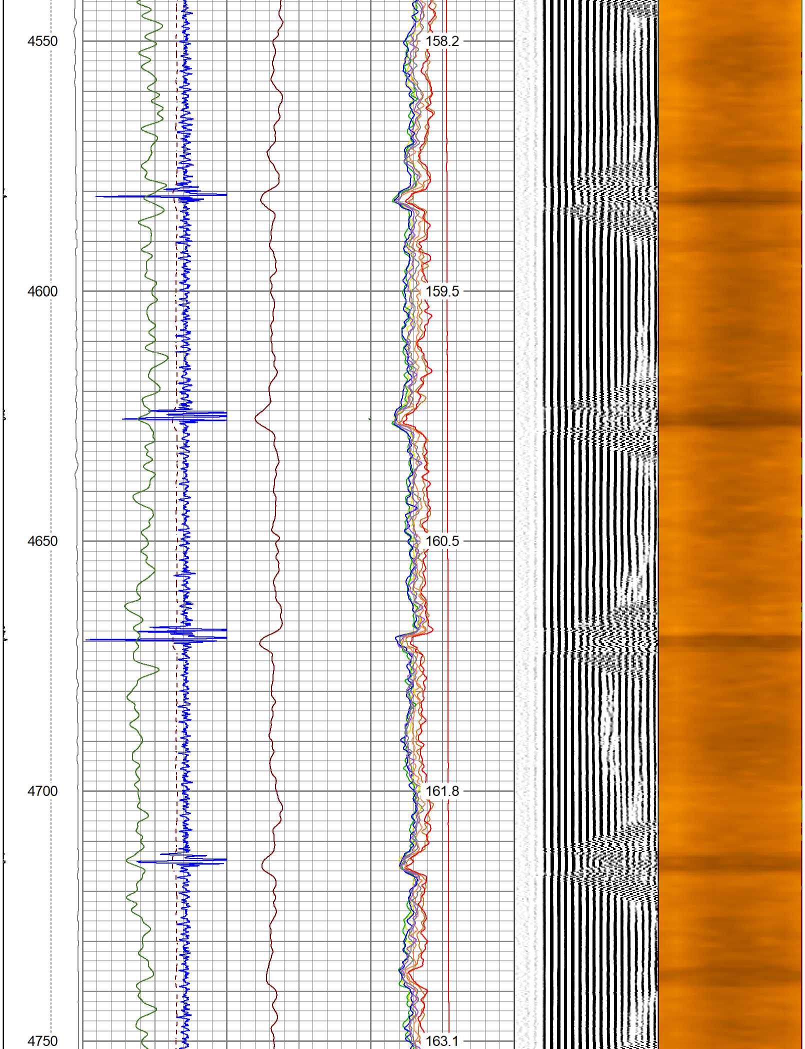
4400
154.6
4450
155.6
4500
156.8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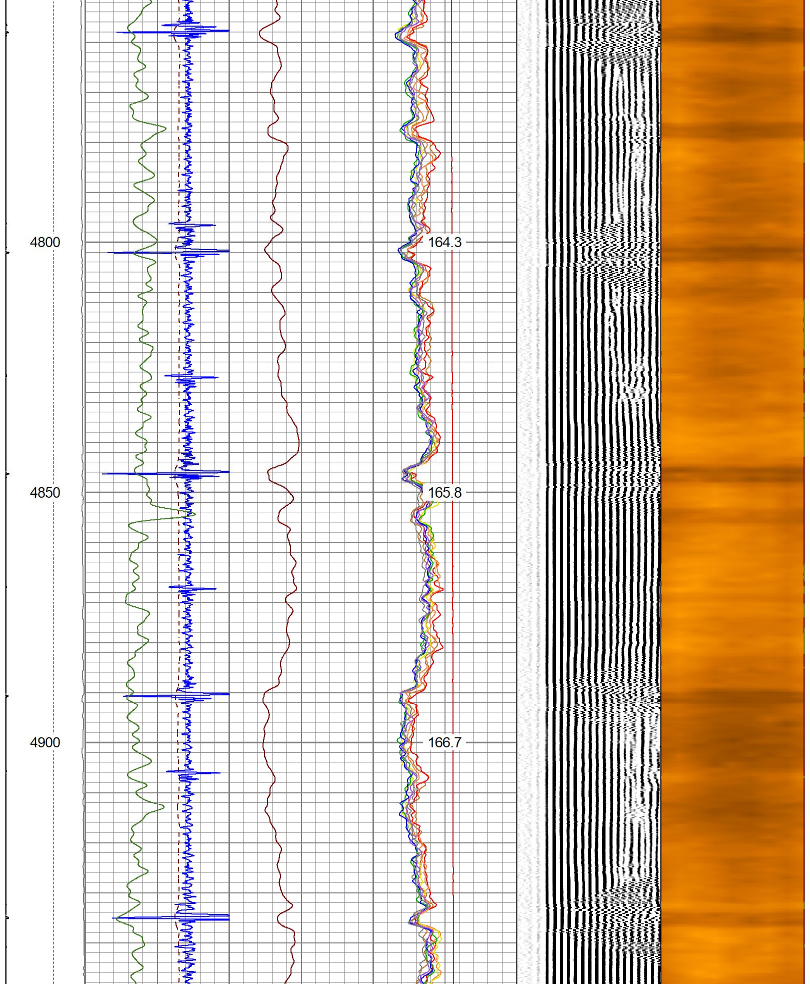
4650
160.5
4700
161.8
4750
163.1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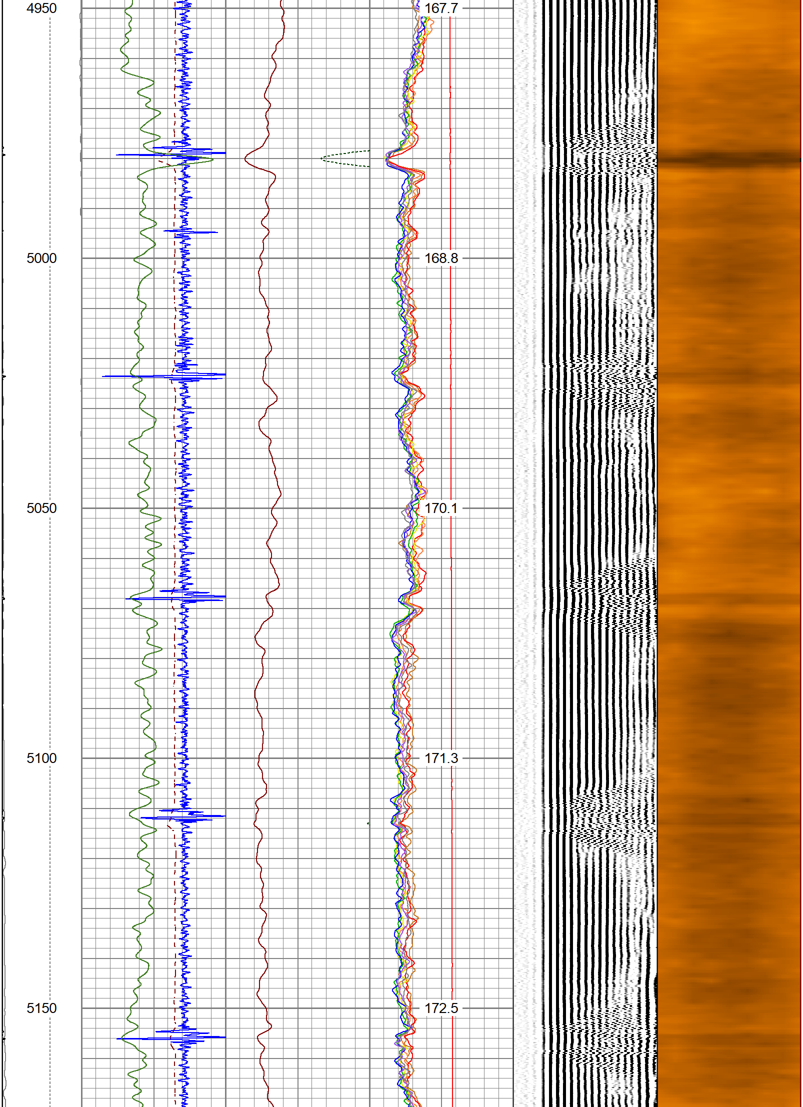
4900
166.7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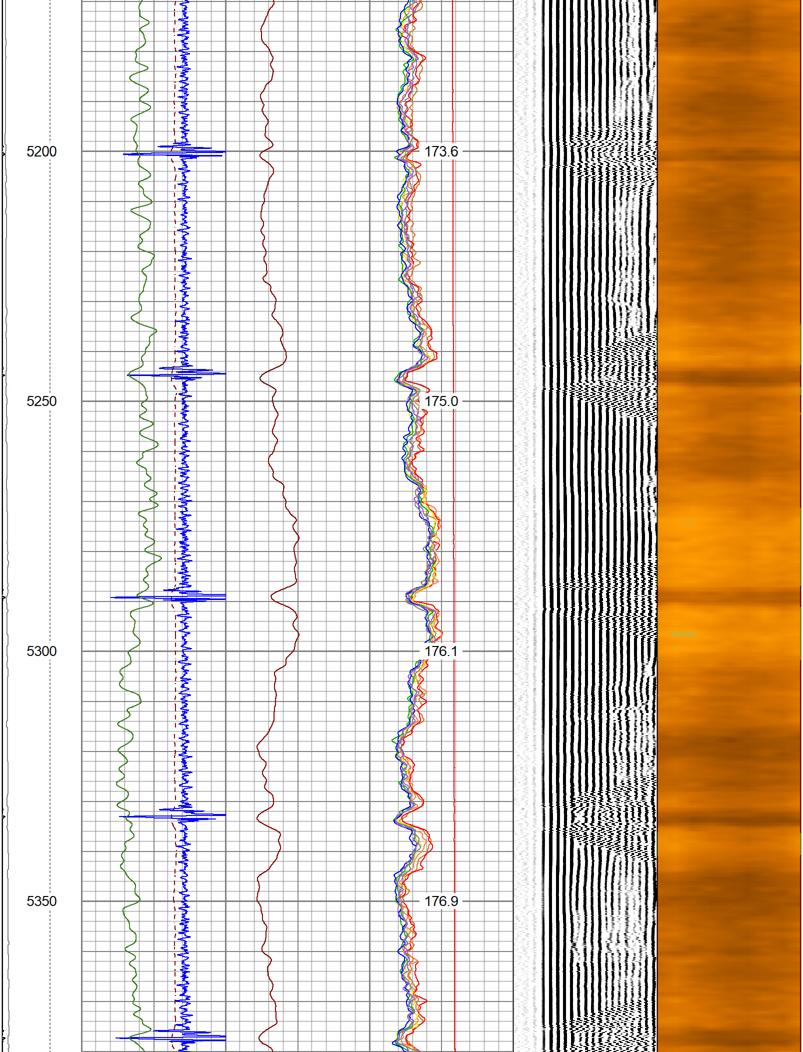
172.5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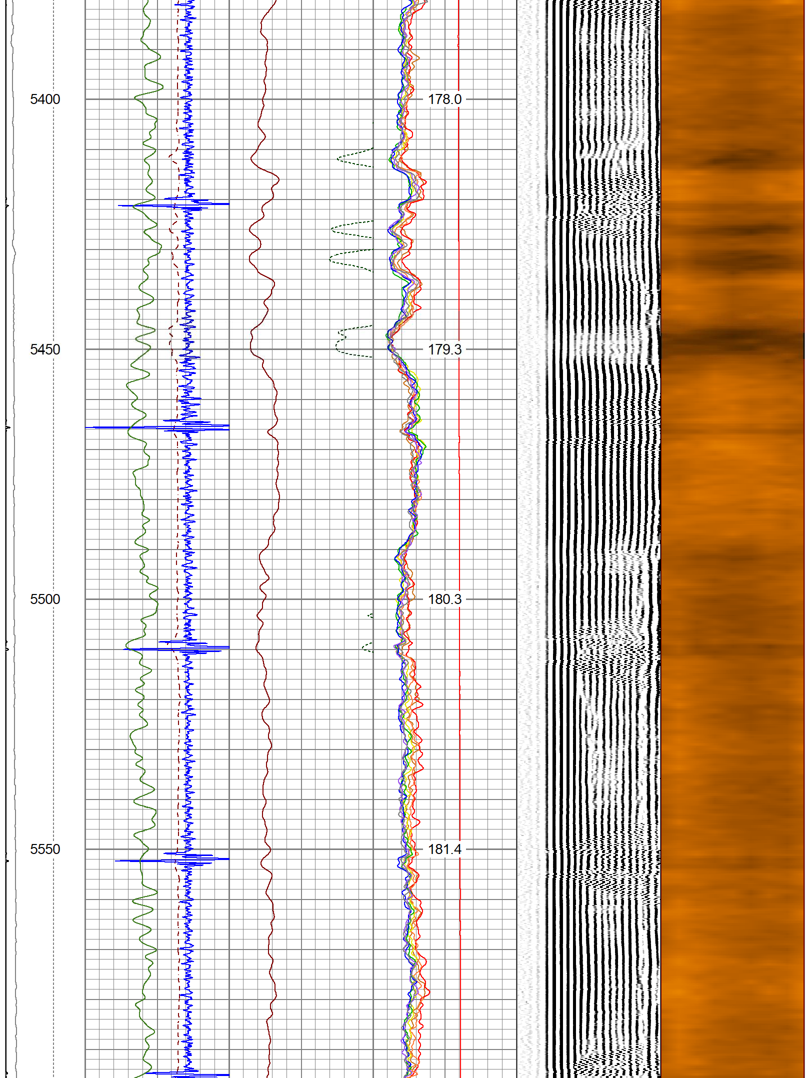
176.9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179.3
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180.3
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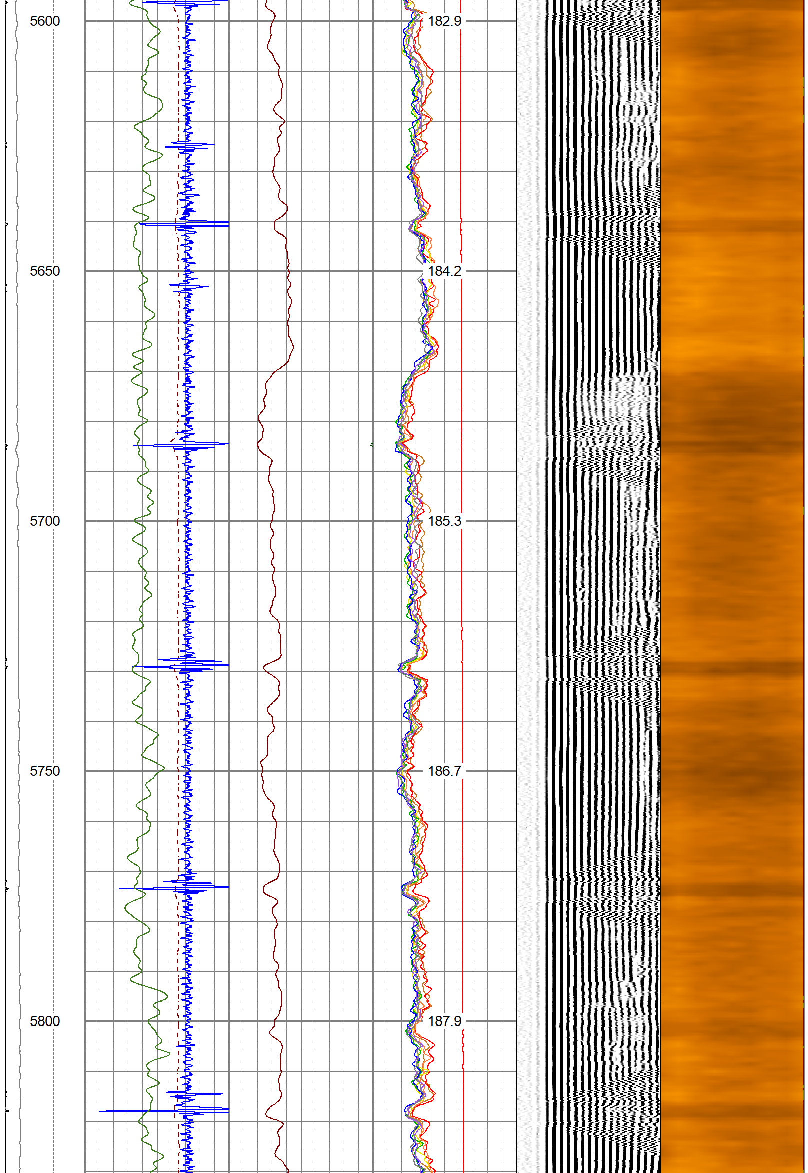
181.4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186.7
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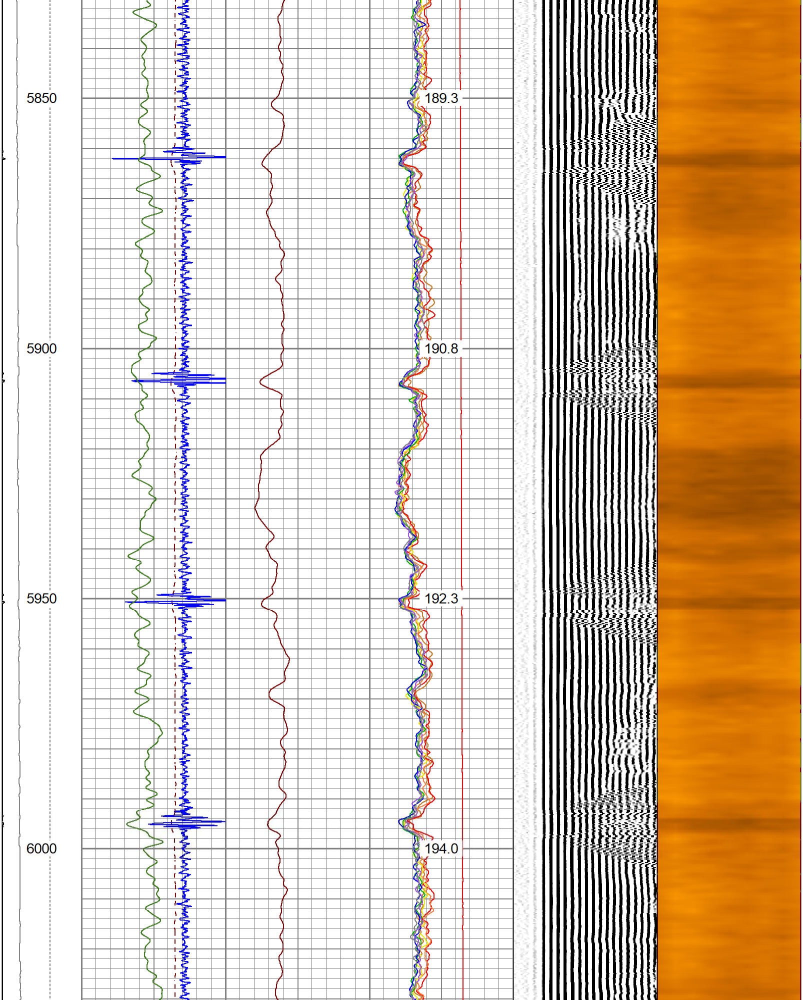
187.9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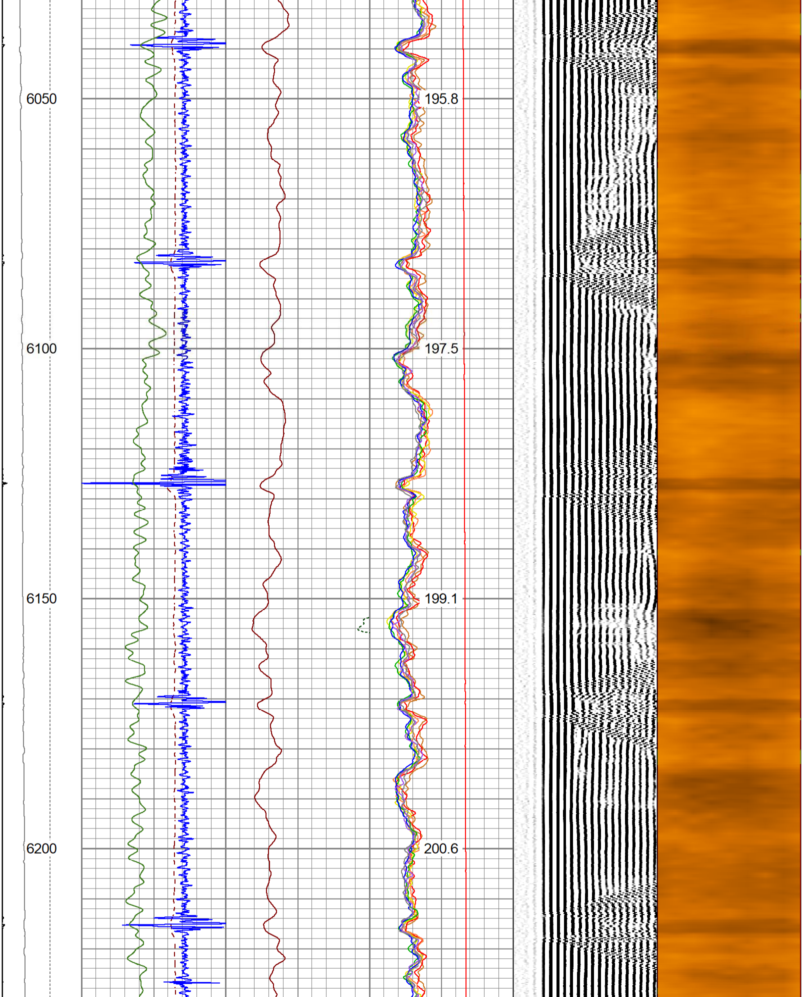
5950
192.3
6000
194.0



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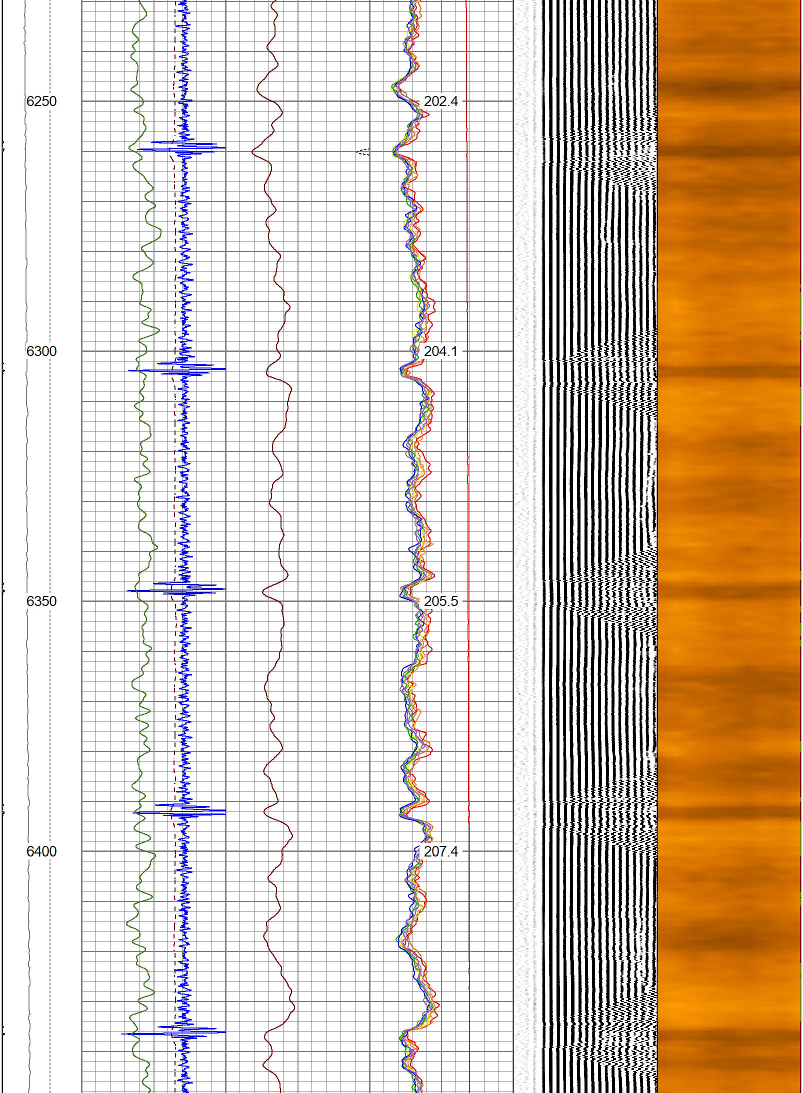
199.1
6200
200.6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204.1
6350
205.5
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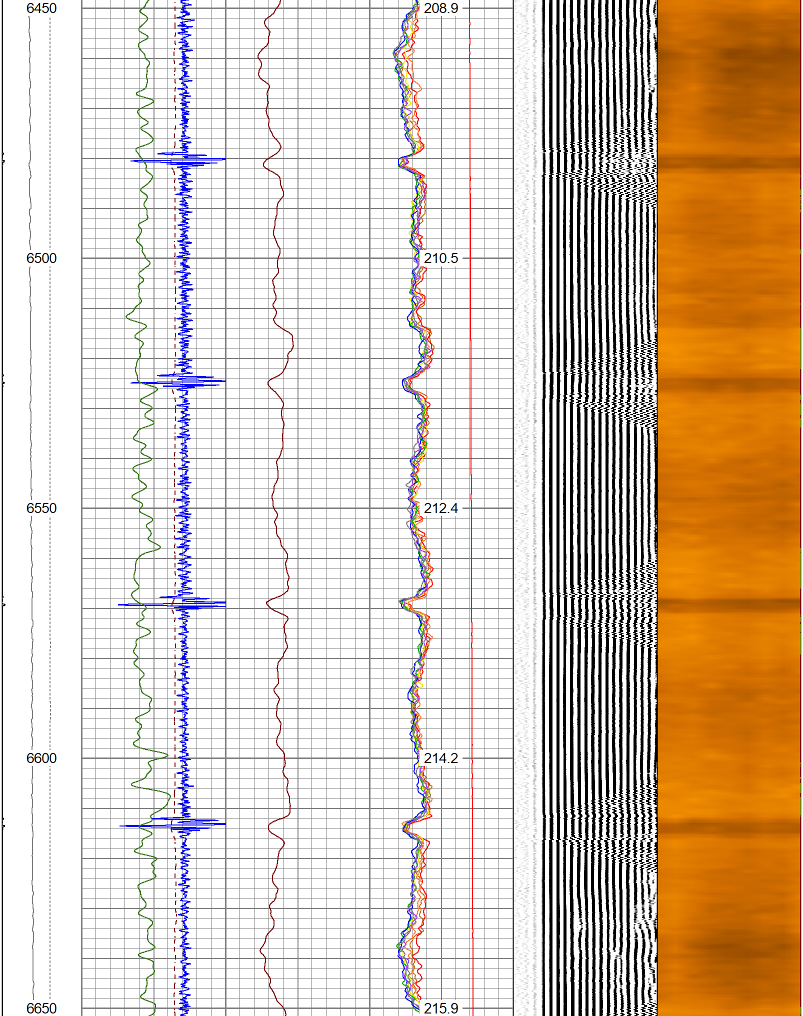
207.4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214.2
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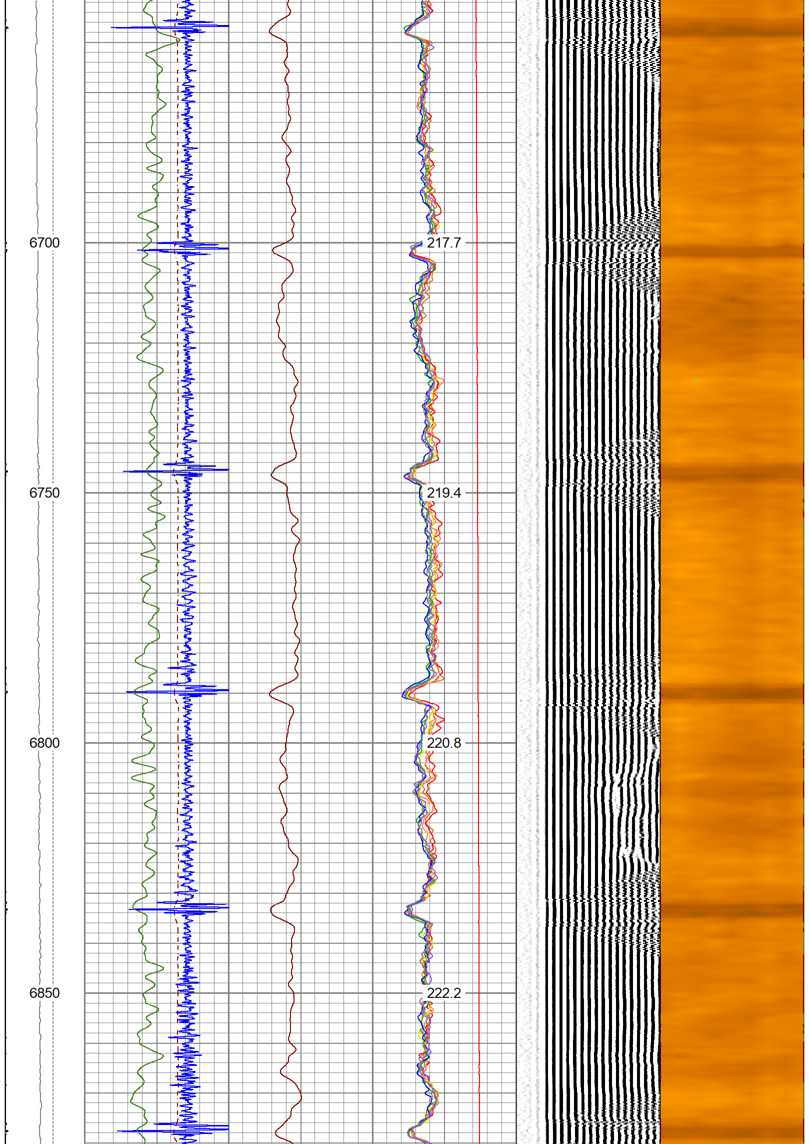
215.9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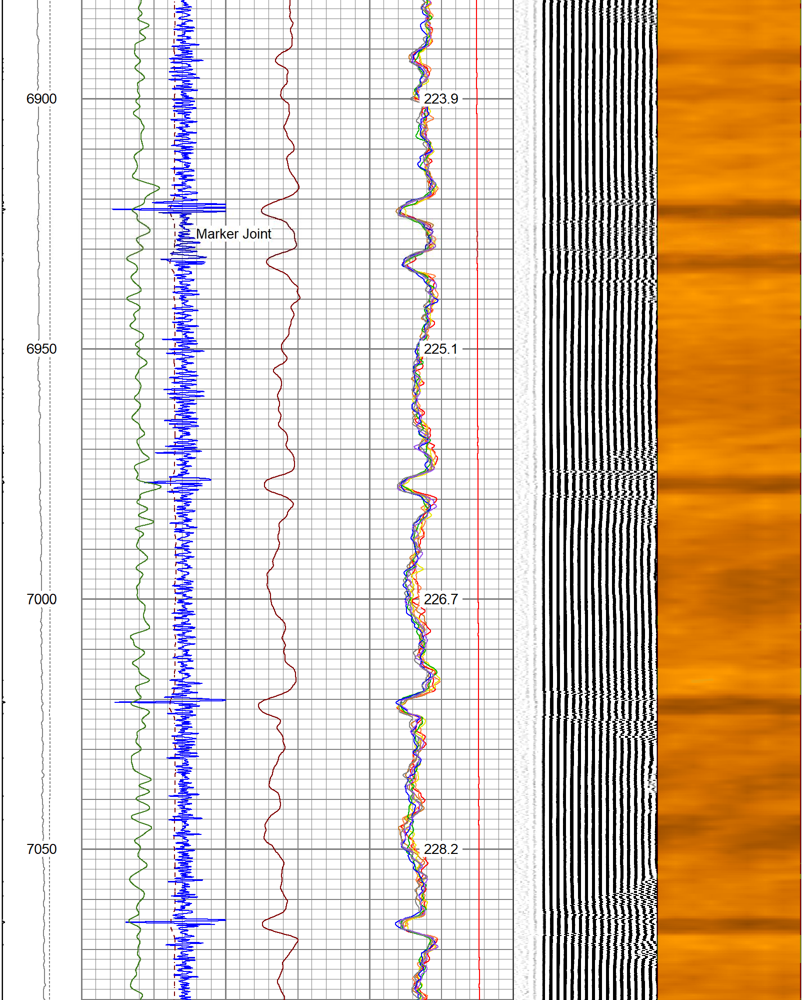
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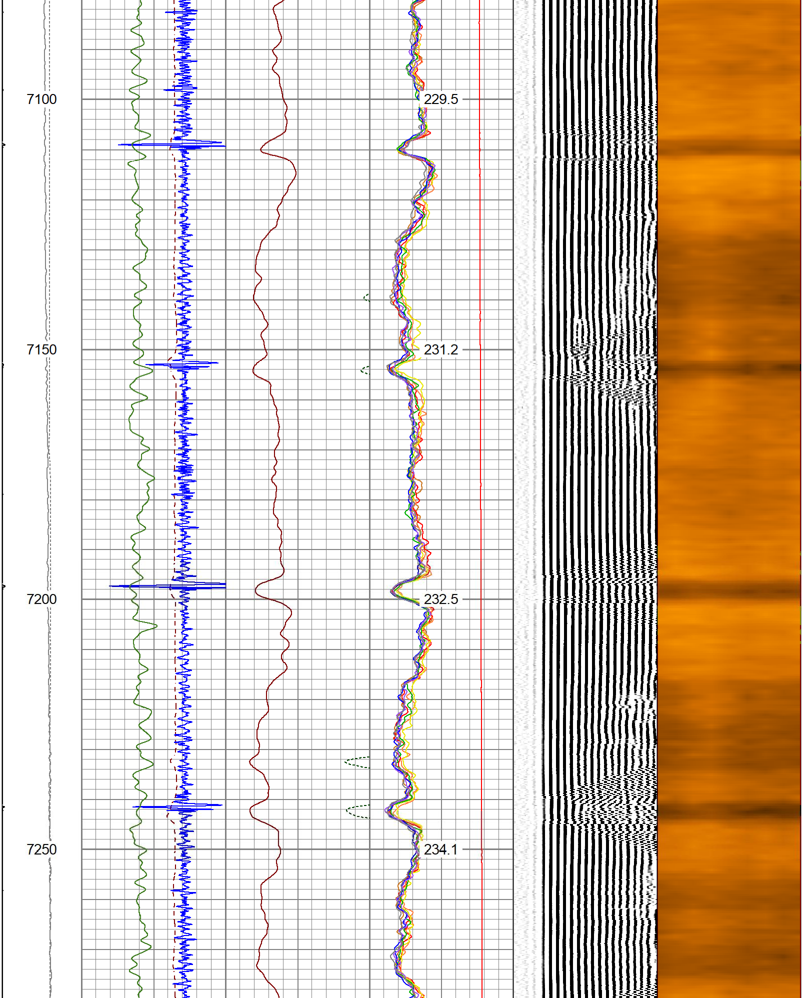
225.1
7000
226.7
7050
228.2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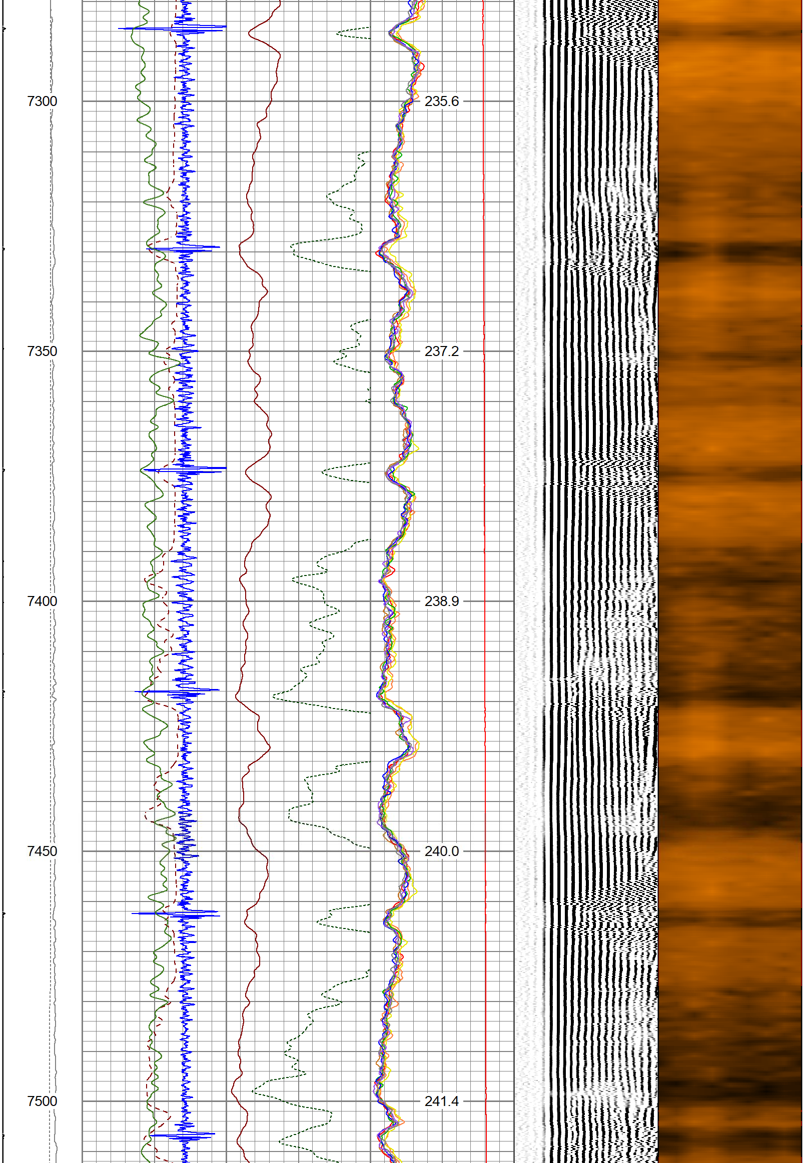
7150
231.2
7200
232.5
7250
234.1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7500
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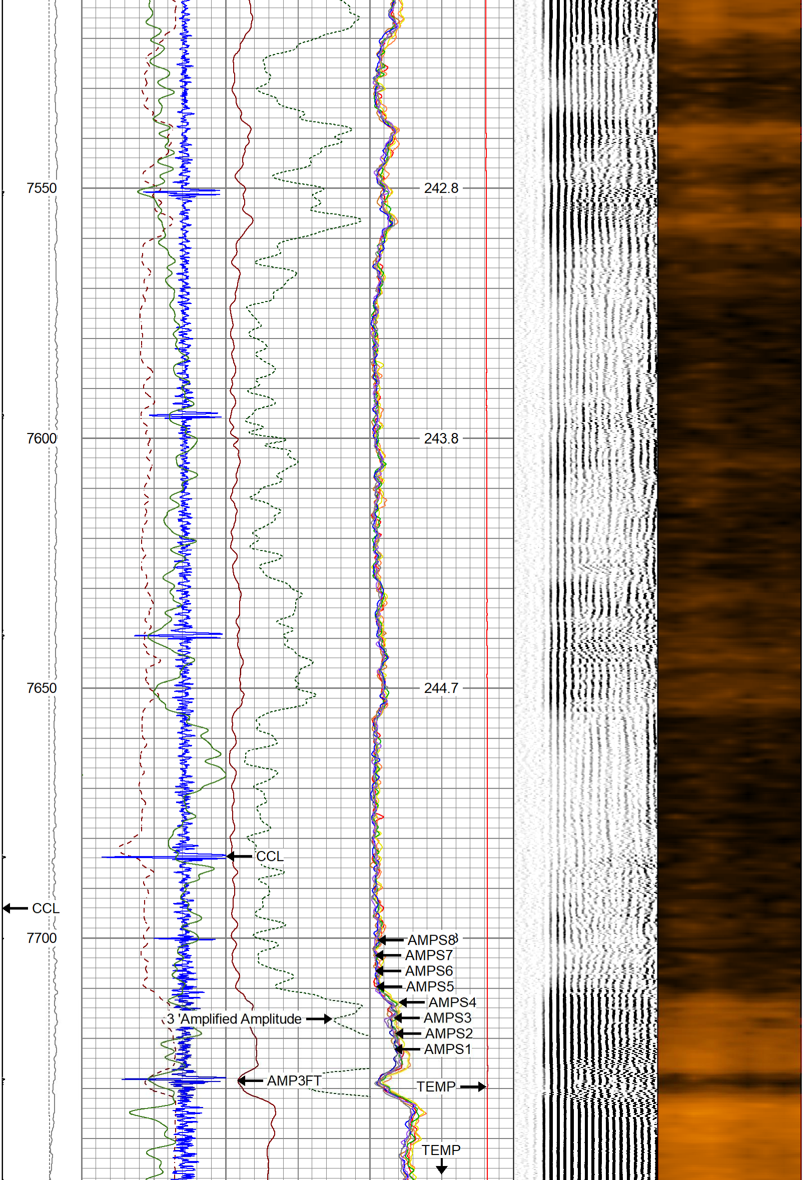
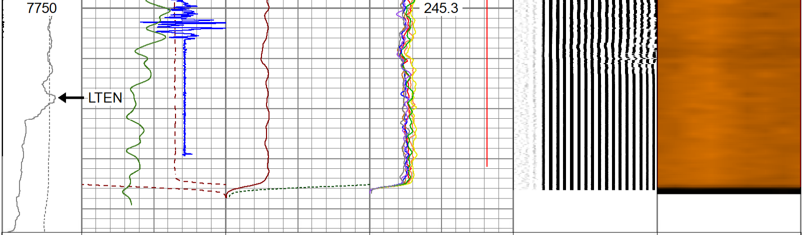




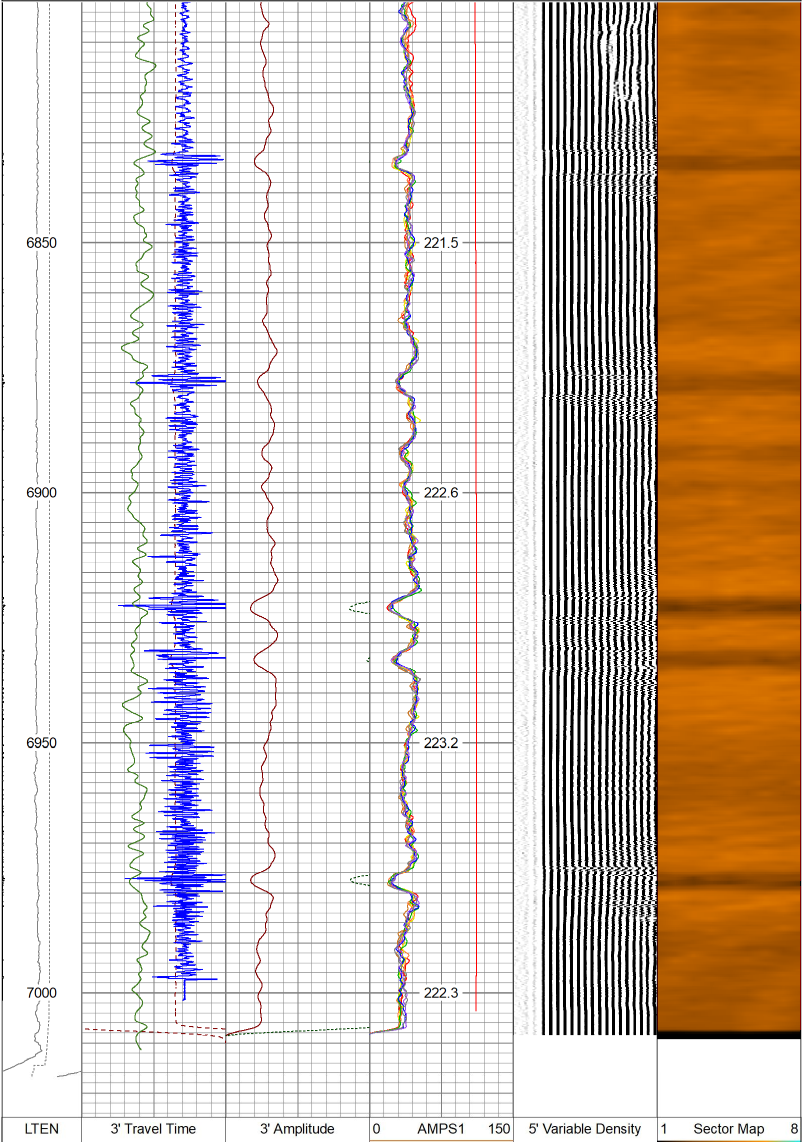
LTEN	3' Travel Time	3' Amplitude	0 AMPS1 150	5' Variable Density	1 Sector Map 8
0 (lb 1000	400 (usec) 200	0 (mV) 100	0 AMPS2 150	200 (usec) 1200	0 95
LSPD	Casing Collar Locator	3 'Amplified Amplitude	0 AMPS3 150	-409.6 (V) 409.4	
(ft/min)	GAMMA RAY	0 (mV) 20	0 AMPS4 150		
500 -500	0 (GAPI) 200		0 AMPS5 150		
0 CCL 100			0 AMPS6 150		
			0 AMPS7 150		
			0 AMPS8 150		
			0 TEMP (degF) 300		
			TEMP (degF)		

GO WIRELINE LLC

Repeat Pass

Database File	pdc_stugart_20n_rcbl_31023.db
Dataset Pathname	pass2
Presentation Format	rbl_all_8_2020_t
Dataset Creation	Fri Mar 10 12:13:58 2023
Charted by	Depth in Feet scaled 1:240

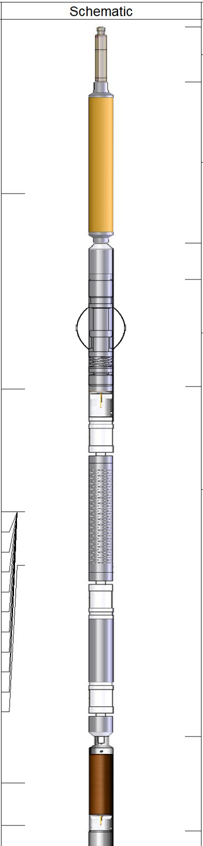
LTEN	3' Travel Time	3' Amplitude	0 AMPS1 150	5' Variable Density	1 Sector Map 8
0 (lb 1000	400 (usec) 200	0 (mV) 100	0 AMPS2 150	200 (usec) 1200	0 95
LSPD	Casing Collar Locator	3 'Amplified Amplitude	0 AMPS3 150	-409.6 (V) 409.4	
(ft/min)	GAMMA RAY	0 (mV) 20	0 AMPS4 150		
500 -500	0 (GAPI) 200		0 AMPS5 150		
0 CCL 100			0 AMPS6 150		
			0 AMPS7 150		
			0 AMPS8 150		
			0 TEMP (degF) 300		
			TEMP (degF)		



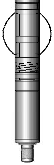
0 (lb 1000	400 (usec) 200	0 (mV) 100	0 AMPS2 150	200 (usec) 1200	0 95
LSPD (ft/min) 500 -500	Casing Collar Locator	3 'Amplified Amplitude	0 AMPS3 150	-409.6 (V) 409.4	
	GAMMA RAY	0 (mV) 20	0 AMPS4 150		
	0 (GAPI) 200		0 AMPS5 150		
0 CCL 100			0 AMPS6 150		
			0 AMPS7 150		
			0 AMPS8 150		
			0 TEMP (degF) 300		
			TEMP (degF)		

Sensor	Offset (ft)
CCL	15.21
TEMP	11.57
WVFS8	9.27
WVFS7	9.27
WVFS6	9.27
WVFS5	9.27
WVFS4	9.27
WVFS3	9.27
WVFS2	9.27
WVFS1	9.27
WVFCAL	9.27
WVF3FT	9.27
WVF5FT	8.27
DCCL	4.21
GCT_TEMP	3.42

Schematic



Description	Length (ft)	O.D. (in)	Weight (lb
Cable Head-Titan_144 1 7/16" Titan Cable Head	1.03	1.44	2.00
PROBE-CCL-ANALOG-CCL-A (Probe-CCL-A1) Probe 2 3/4" Logging CCL	3.00	2.75	10.00
CENT-overbody	2.00	4.50	3.00
PROBE-RBT-DIGITAL-RBL-DCT (130373) Probe 2 3/4" Radii Bond with Temp-Corrosion Package	9.21	2.75	105.00

GR	2.83		PROBE-GR/CCL-DIGITAL-275 Probe GCT (2107026) Probe 2 3/4" Gamma Ray/Temp/CCL 6 Pin	4.75	2.75	60.00
			CENT-overbody	2.00	4.50	3.00
			Bullnose-PROBE Probe Go Pin Pressure Cap	0.33	1.38	1.00

Dataset: pdc_stugart_20n_rcbl_31023.db: field/well/run1/pass4.1
Total length: 18.32 ft
Total weight: 187.00 lb
O.D.: 4.50 in

Calibration Report

Database File pdc_stugart_20n_rcbl_31023.db
Dataset Pathname pass4.1
Dataset Creation Fri Mar 10 13:41:50 2023

Gamma Ray Calibration Report

Serial Number: 2107026
Tool Model: 275 Probe GCT
Performed: Thu Jun 23 12:16:30 2022

Calibrator Value: 200.0 GAPI

Background Reading: 43.9 cps
Calibrator Reading: 269.1 cps

Sensitivity: 0.8881 GAPI/cps

Segmented Cement Bond Log Calibration Report

Serial Number: 130373
Tool Model: RBL-DCT

Calibration Casing Diameter: 5.500 in
Calibration Depth: 285.483 ft

Master Calibration, performed (Derived):

	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3'	0.000	0.684	0.500	71.921	104.381	0.498
CAL	0.032	1.009				
5'	0.000	0.656	0.500	71.921	108.812	0.499
SUM						
S1	0.000	0.708	0.000	100.000	141.219	-0.004
S2	0.000	0.716	0.000	100.000	139.617	-0.003
S3	0.000	0.717	0.000	100.000	139.565	-0.004
S4	0.000	0.740	0.000	100.000	135.213	-0.004
S5	0.000	0.777	0.000	100.000	128.643	-0.003
S6	0.000	0.774	0.000	100.000	129.204	-0.003
S7	0.000	0.735	0.000	100.000	136.057	-0.003
S8	-0.013	0.769	0.000	100.000	127.914	1.614

Air Zero Calibration, performed Fri Mar 10 07:20:25 2023:

	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: 130373
Tool Model: RBL-DCT
Performed: Fri Mar 10 10:04:46 2023

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

Gain: 0.90
Offset: 0.00
Delta Spacing 1

Company	PDC Energy
Well	Stugart 20N
Field	Wattenberg
County	Weld
State	Colorado