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Cement Bond Log

Company Extraction Oil and Gas
Well MLD 9
Field Wattenberg
County Weld **State** Colorado

API # : 05-123-44810
Location: NW/NW
802 FNL
576 FWL

SEC: 22 TWP: 4N RGE: 68W

Other Services

Elevation
K.B. 4901
D.F. 4900
G.L. 4876

Company	Extraction Oil and Gas
Well	MLD 9
Field	Wattenberg
County	Weld
State	Colorado

Permanent Datum: Ground Level Elevation: 4876
Log Measured From: Kelly Bushing , 25 ft. above Permanent Datum.
Drilling Measured From: Kelly Bushing

Date	26 Sept 2017
Run Number	One
Plug Back T.D. Driller	----
Plug Back T.D. Logger	-----
Bottom Logged Interval	6620
Top Log Interval	Surface
Type Fluid	Water
Density / Viscosity	----
Max. Recorded Temp.	217
Time Logger on Bottom	09:10
Equipment Number	GD114
Location	Casper
Recorded By	GS Yarbro
Witnessed By	Mr. Stephens

Casing Record				Tubing Record			
Size	Weight	From	To	Size	Weight	From	To
9 5/8	36	0	1500				
5 1/2	20	0	11644				

<<< 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.

Ticket # : RM0917WLOW654
Your Crew Today: Carpenter, Kennicker
Log Correlated to: Surface

Cement Data

Date Cemented	----
Primary / Squeeze	Primary
Type / Weight	----
Main Pass Press.	Zero
Repeat Pass Press.	Zero

Bond Index

Index %	Est Top Depth
20 % Bond	340
40 % Bond	340
60 % Bond	1378
80 % Bond	3358
100 % Bond	6430

Comments

Estimated Top of Cement
(40% Bond Index) @ 340

Thank you for using Gyrodata

Eric Regnier: Rocky Mountain Wireline Manager EricR@Gyrodata.com

Log Variables

Databased:\warrior\data\2017-09-25_extrac_mld9_cbl\2017-09-25_extrac_mld9_cbl.db
Dataset field/well/run1/pass3/_vars_

Top - Bottom

BHTEMP_Src TEMP	BOREID in 8.5	BOTTEMP degF 100	CASEOD in 5.5	CASETHCK in 0.361	CASEWGHT lb/ft 20	MAXAMPL mV 71.9	MaxAPIID in 4.923
MaxAPIWall in 0.361	MINAMPL mV 1.9	MinAPIID in 4.751	MINATTN db/ft 0	PPT usec 239			

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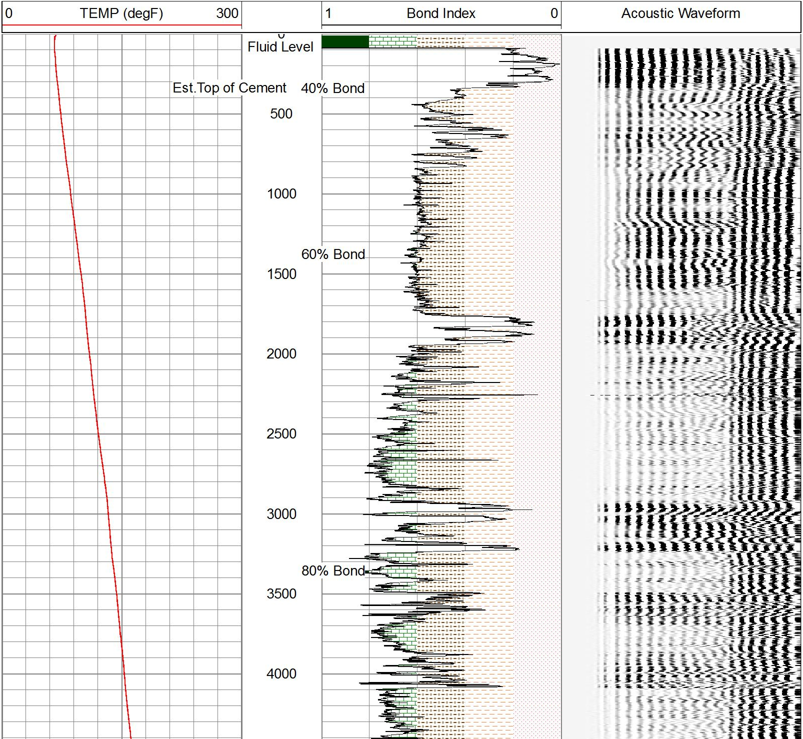
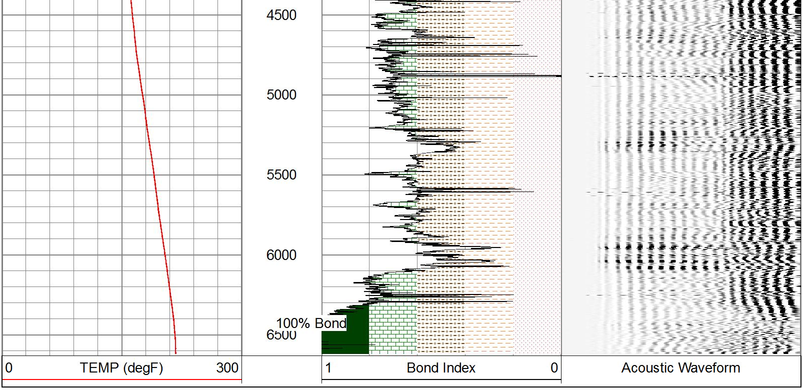
BOND INDEX

Database File	2017-09-25_extrac_mld9_cbl\2017-09-25_extrac_mld9_cbl.db
Dataset Pathname	././bndindx
Presentation Format	BONDIN~3
Dataset Creation	Tue Sep 26 10:26:34 2017
Charted by	Depth in Feet scaled 1:7500





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MAIN PASS - Ran with 0 PSI

5 in / 100 ft

Database File	2017-09-25_extrac_mld9_cbl\2017-09-25_extrac_mld9_cbl.db
Dataset Pathname	pass3
Presentation Format	rcbl_8s
Dataset Creation	Tue Sep 26 09:14:16 2017
Charted by	Depth in Feet scaled 1:240

CCL - Analog
Gamma
0 (GAPI) 200
300(Line Tens (lb) 0
Predicted TT
TT
+[10 usec]-

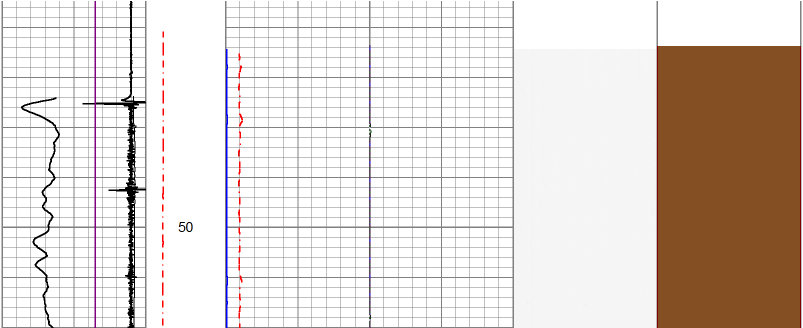
np - Analog C
(degF)
0 300

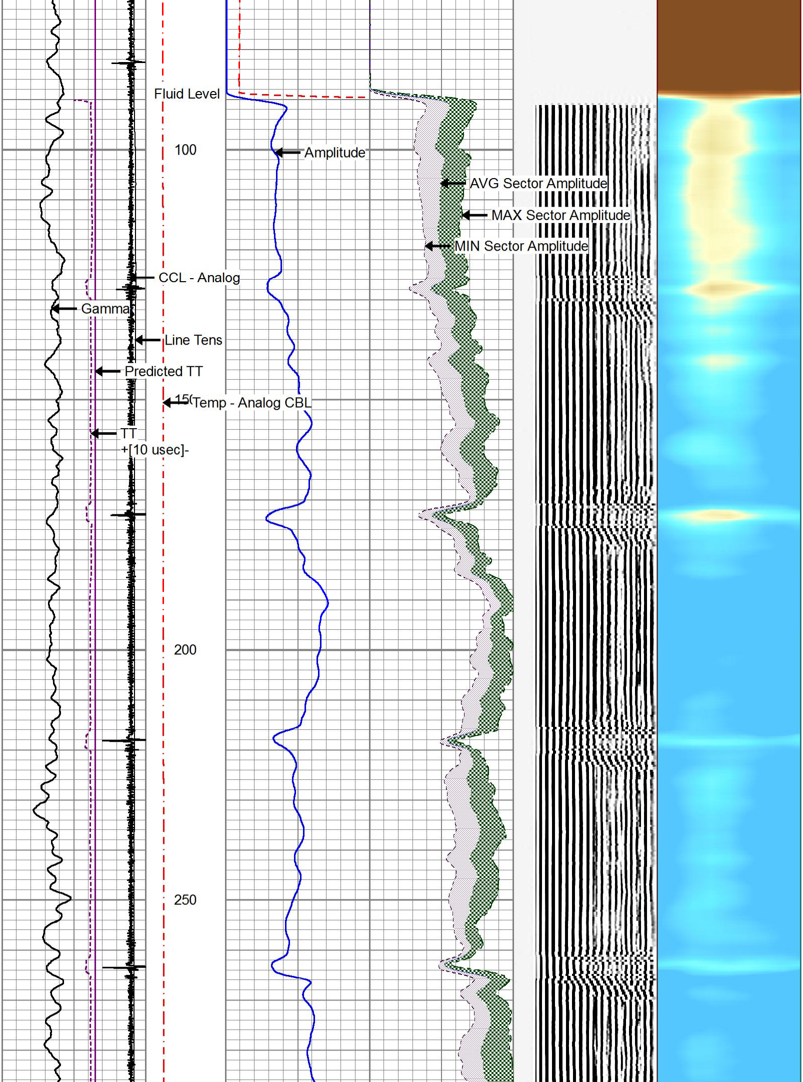
0 Amplitude (mV)100
Amplitude x10
0 (mV) 10

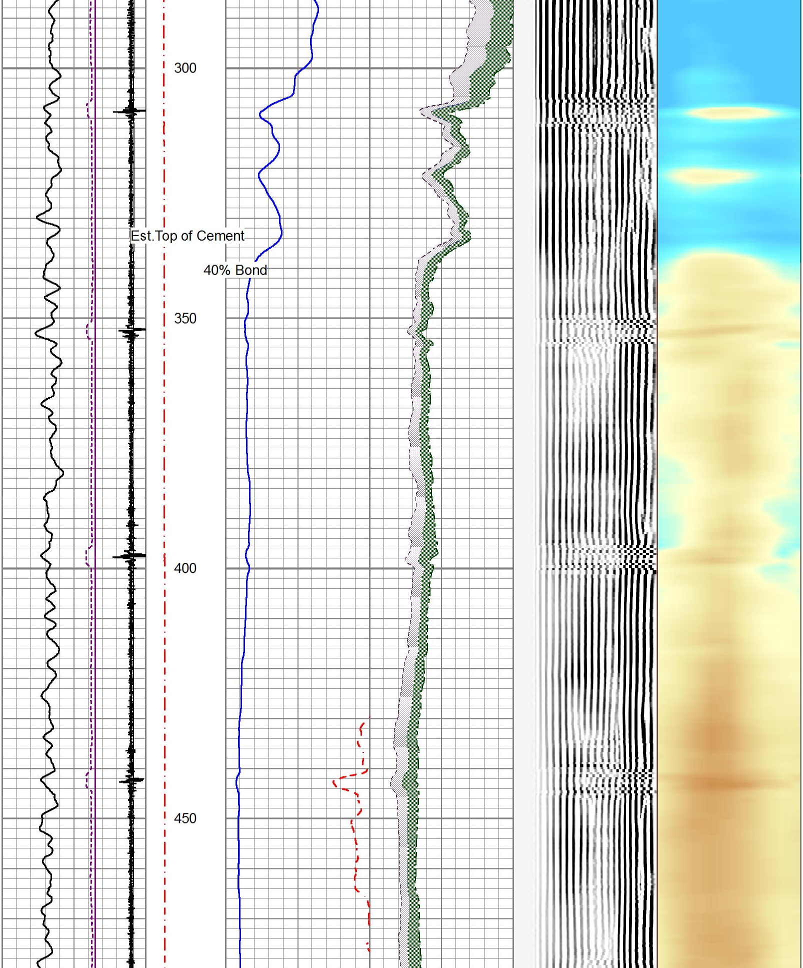
AVG Sector Amplitude
0 100
MAX Sector Amplitude
0 100
MIN Sector Amplitude
0 100

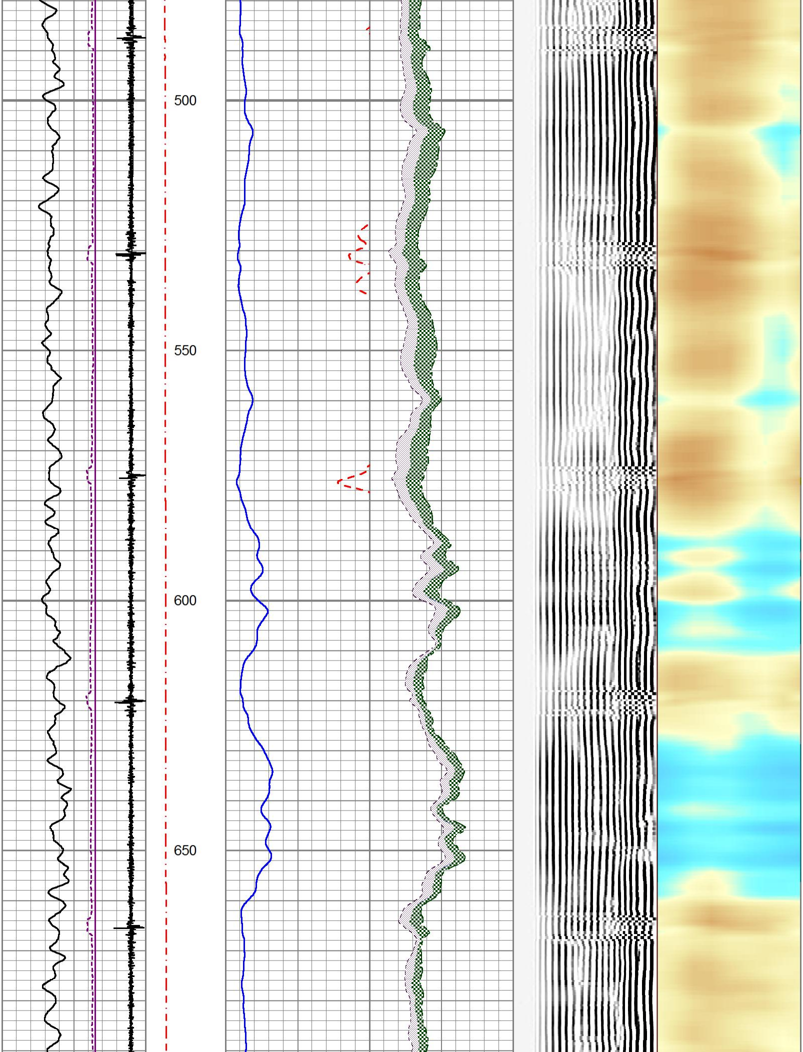
Acoustic Waveform
200 (usec) 1200

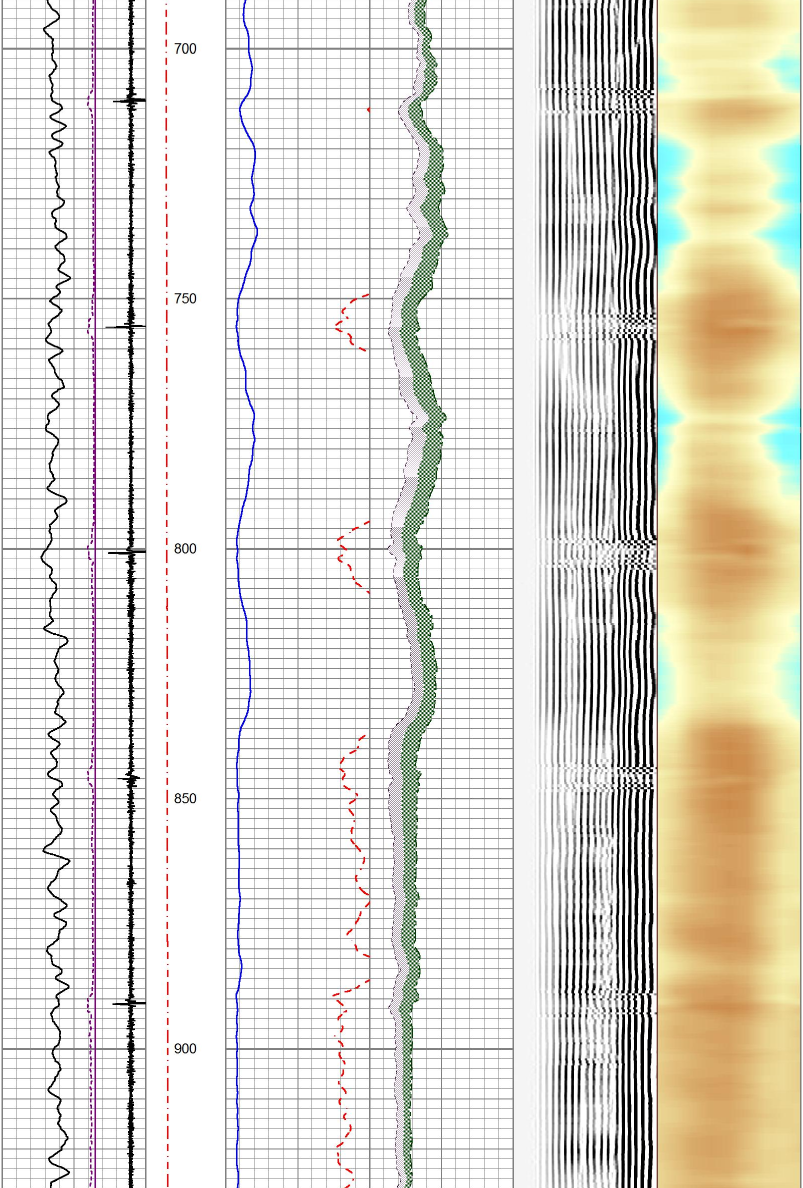
SECTORS

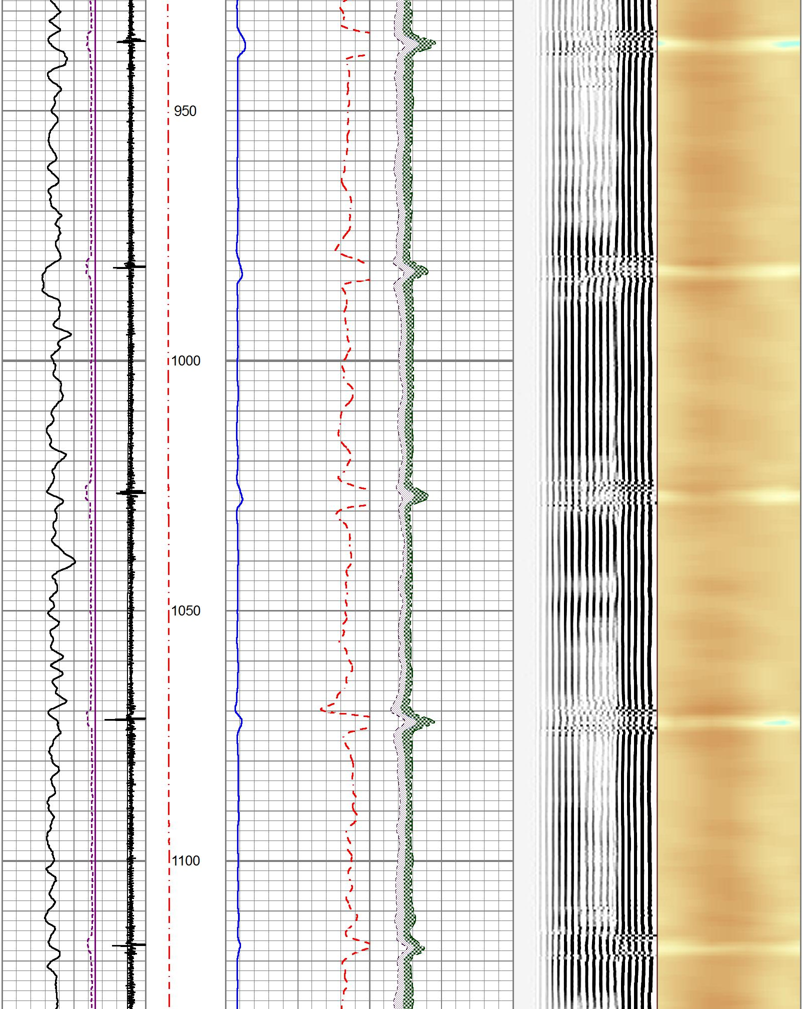


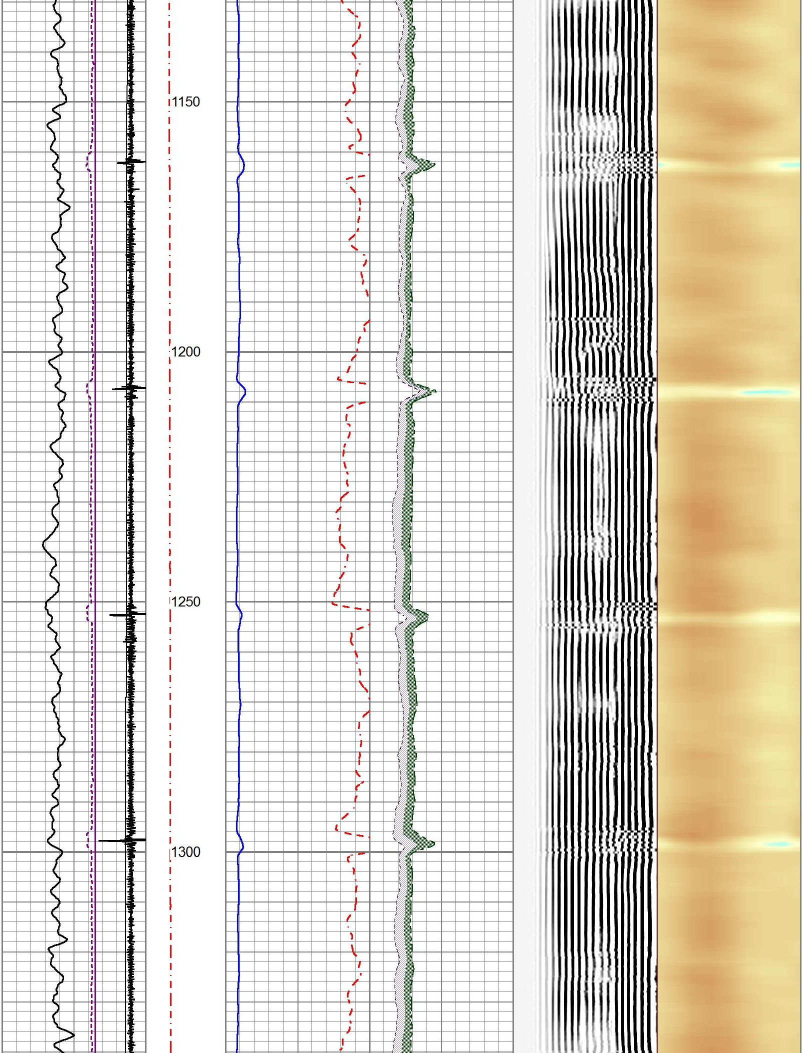


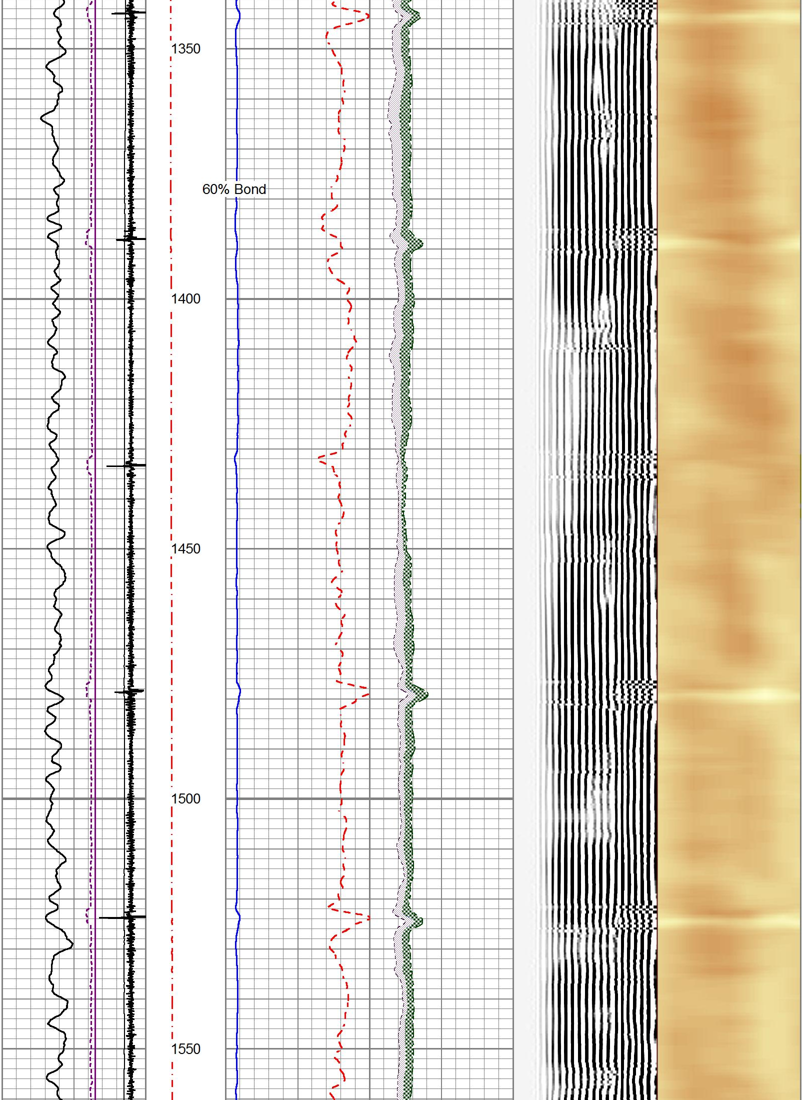


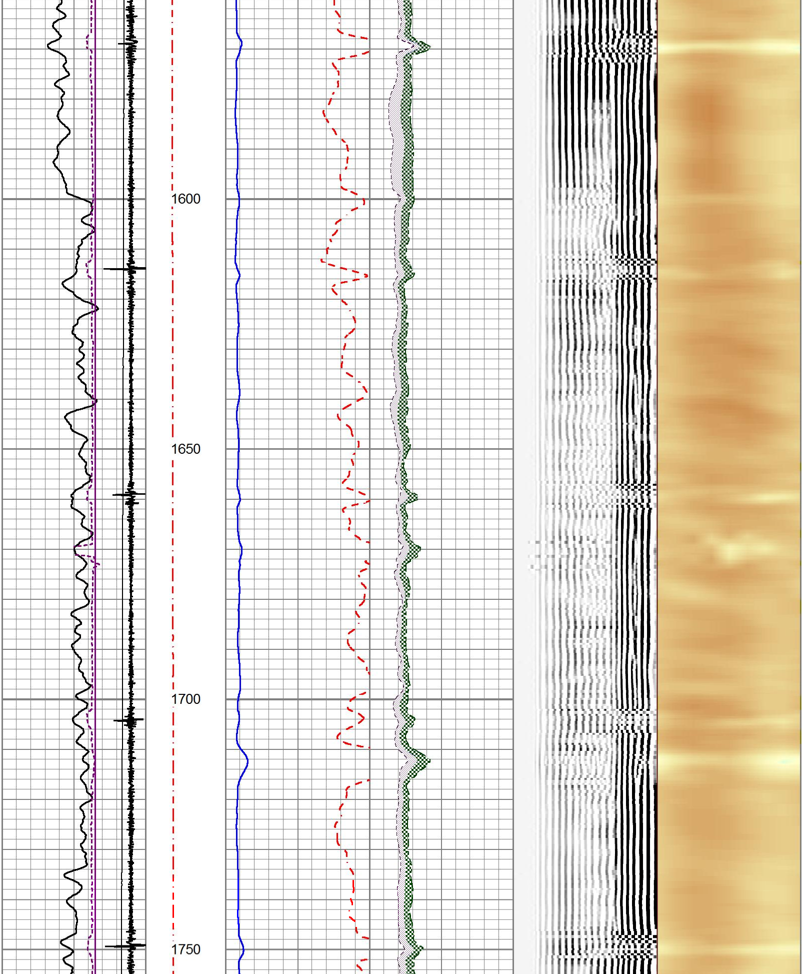


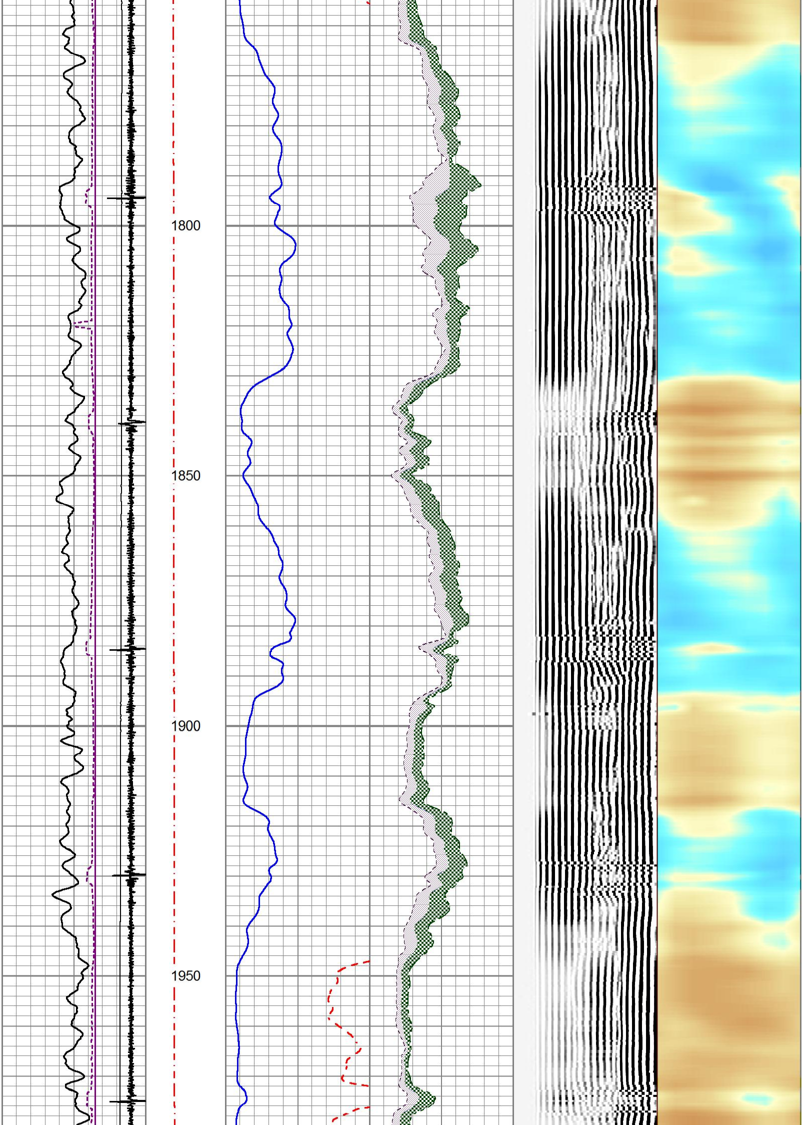


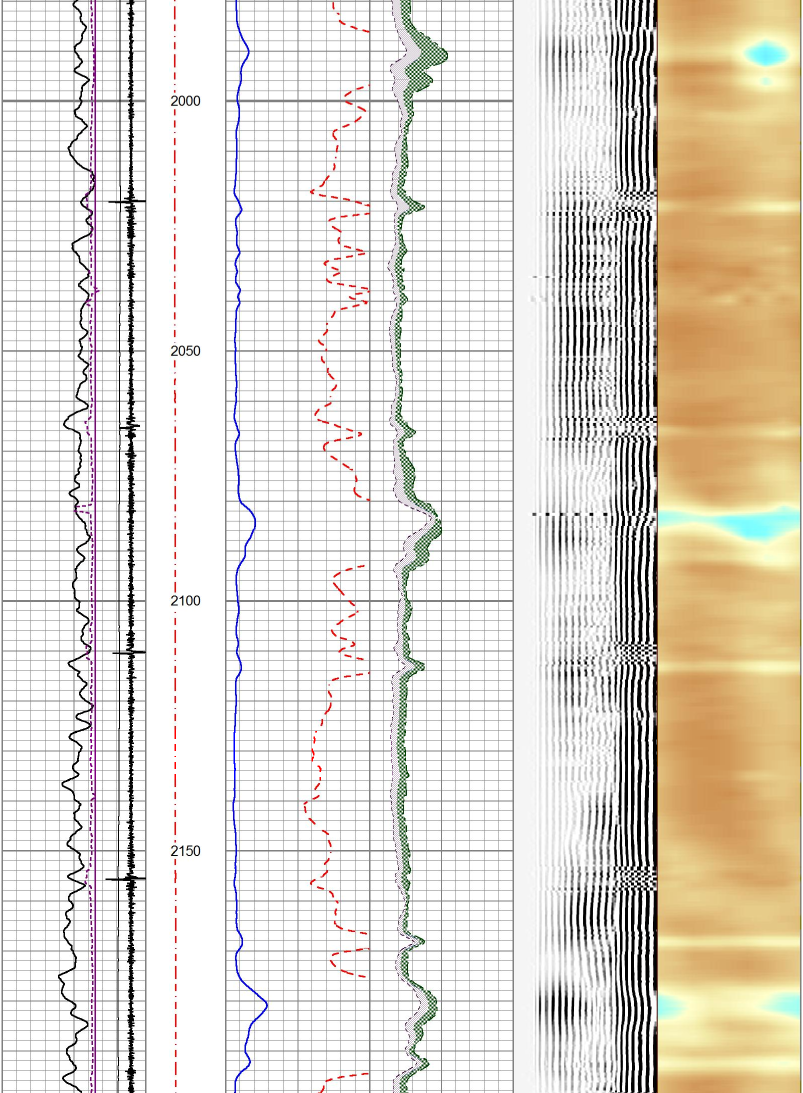


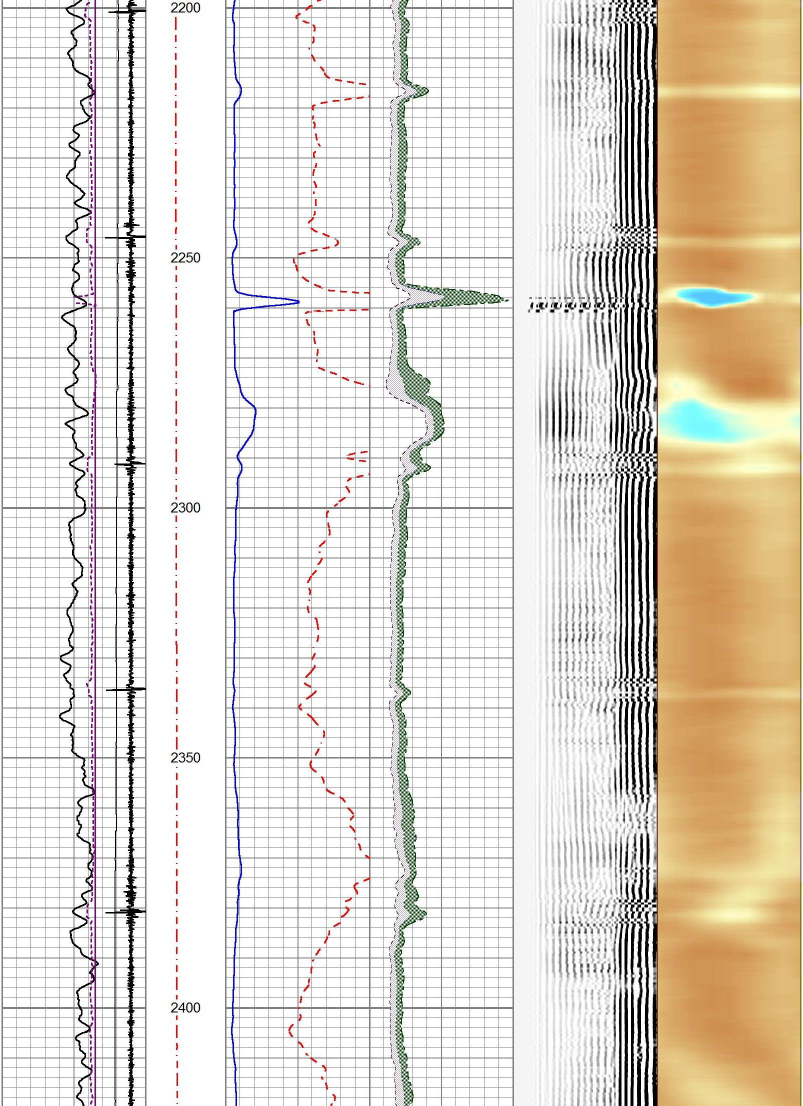


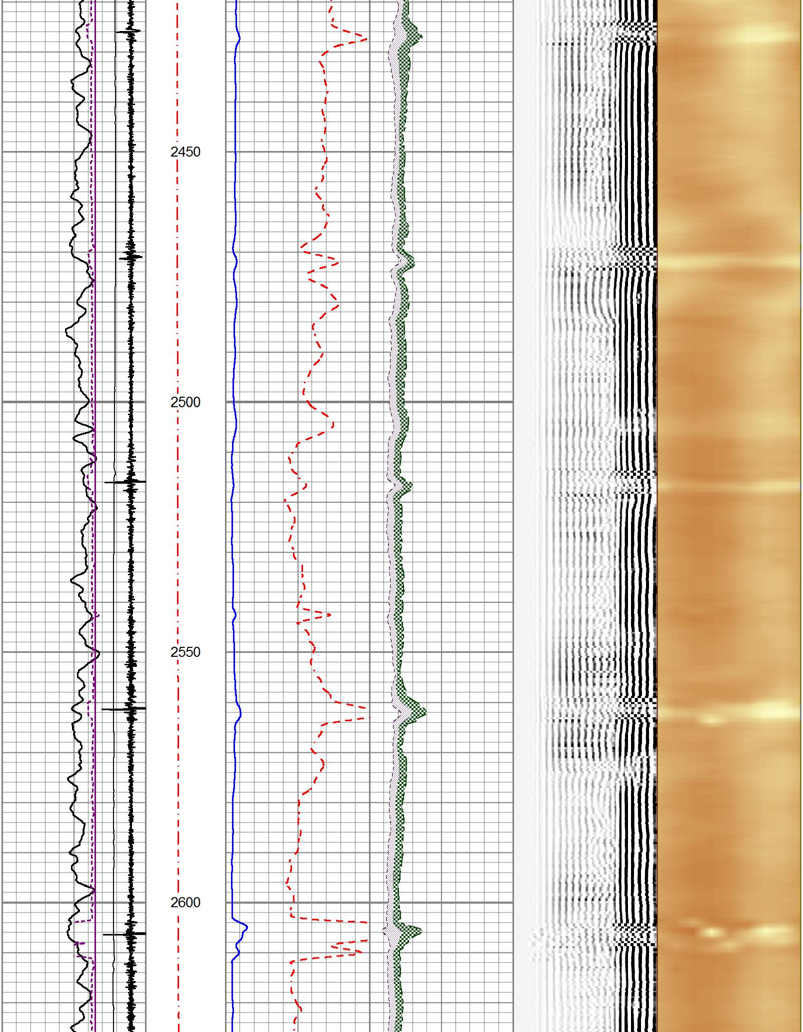


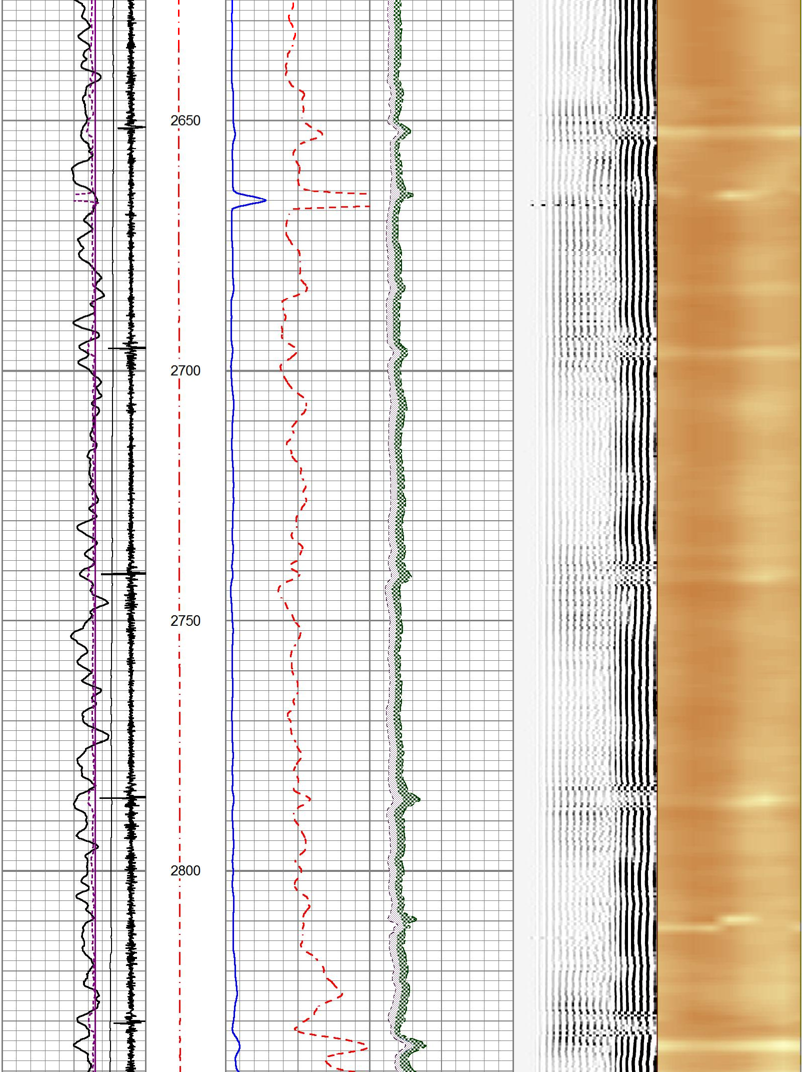


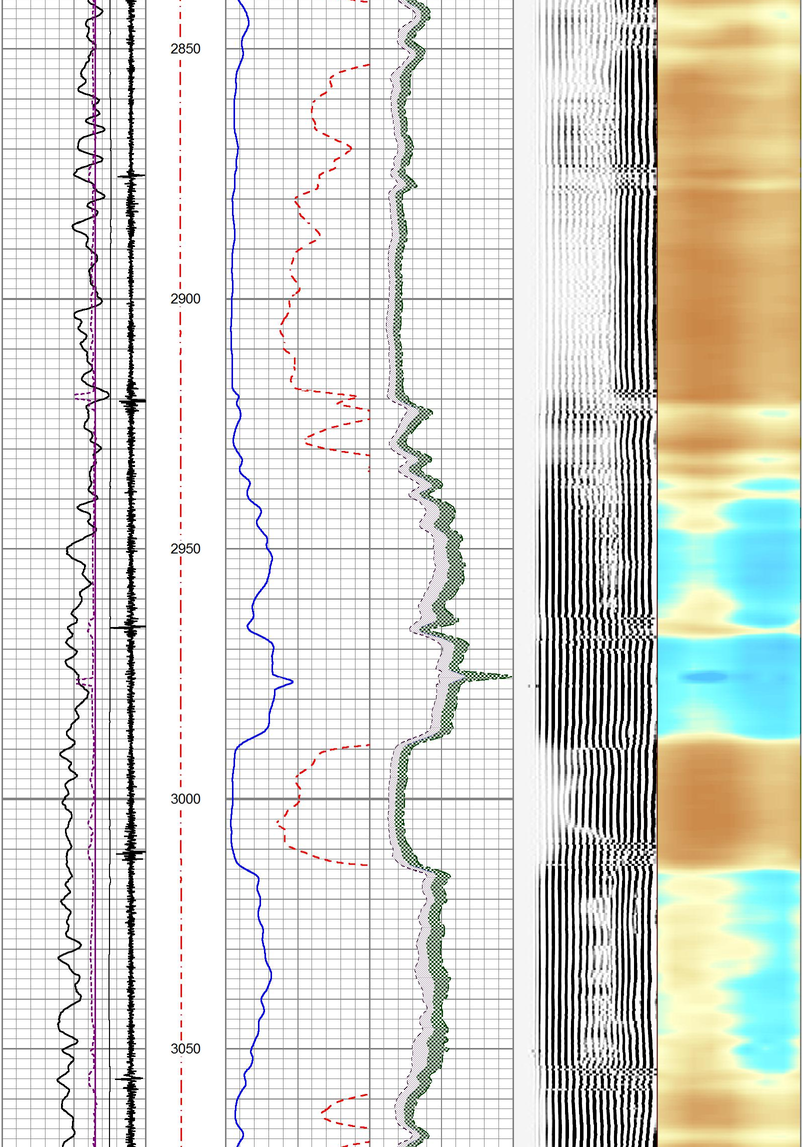


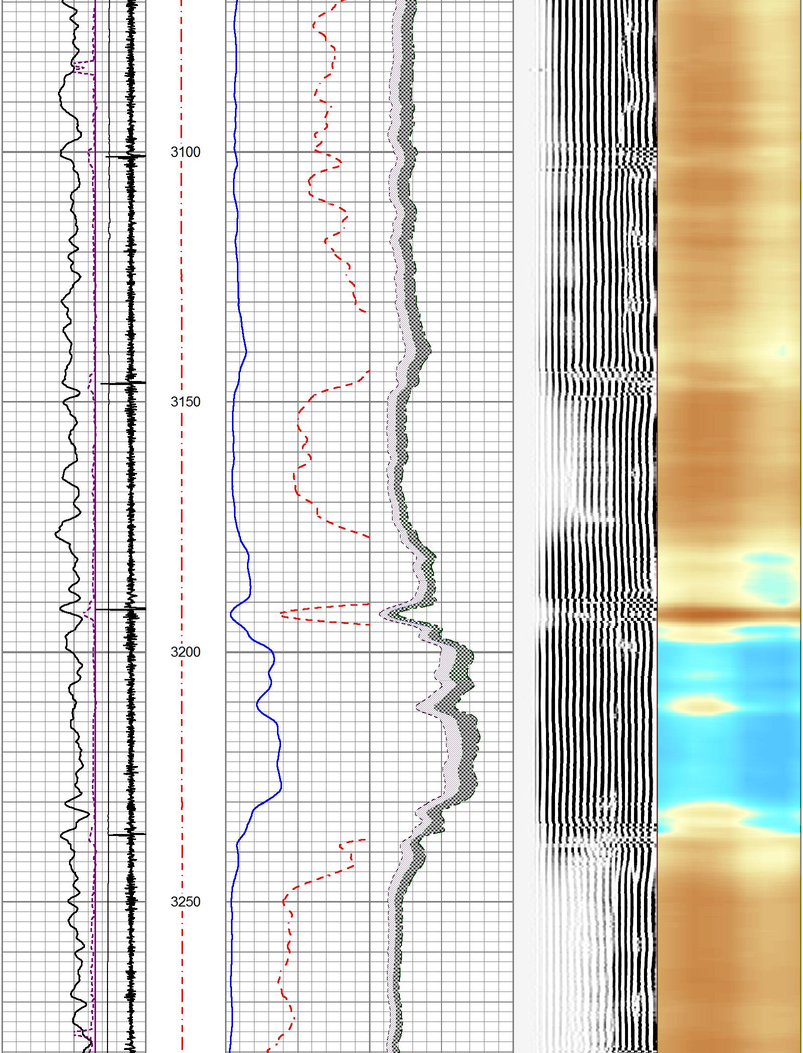


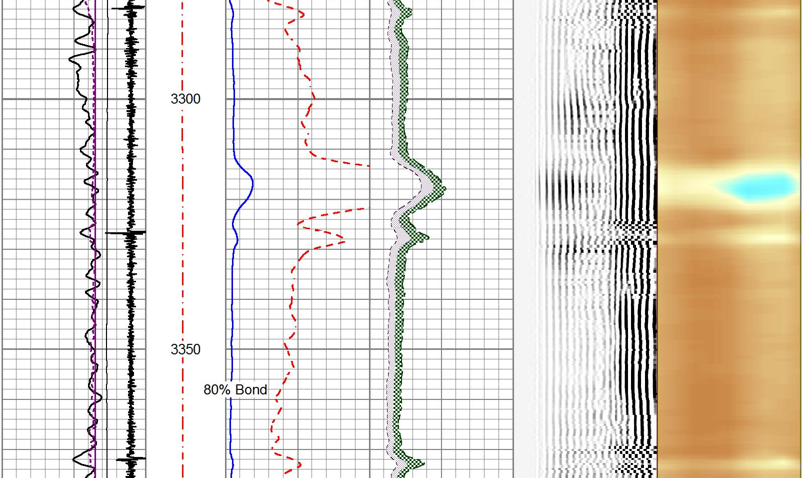


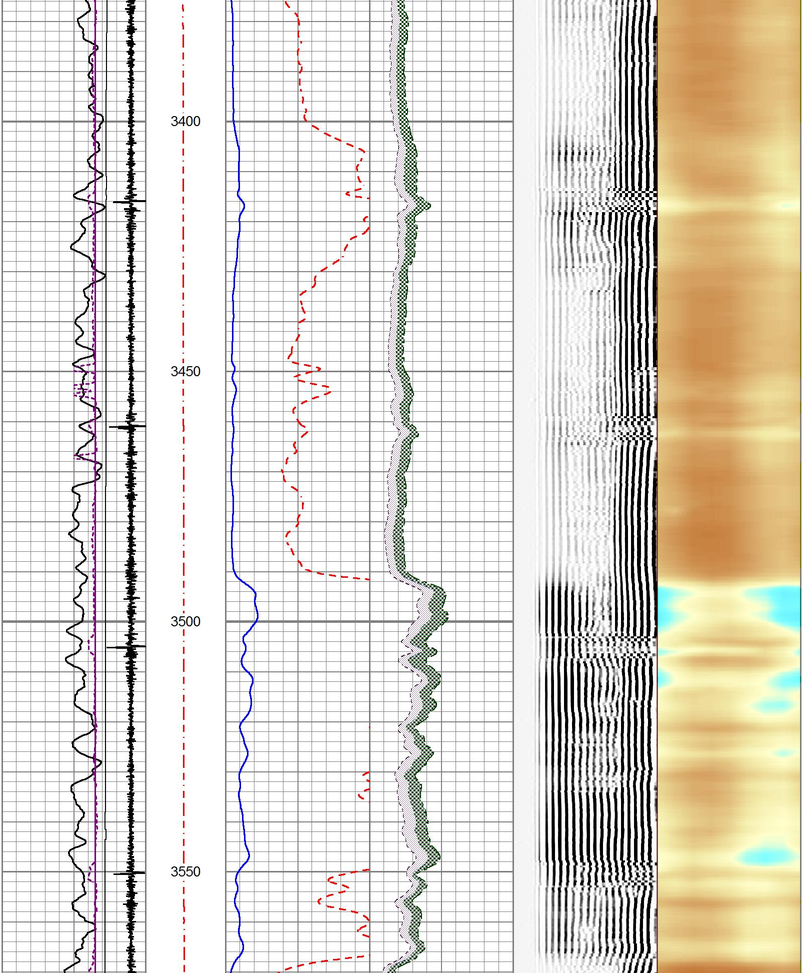


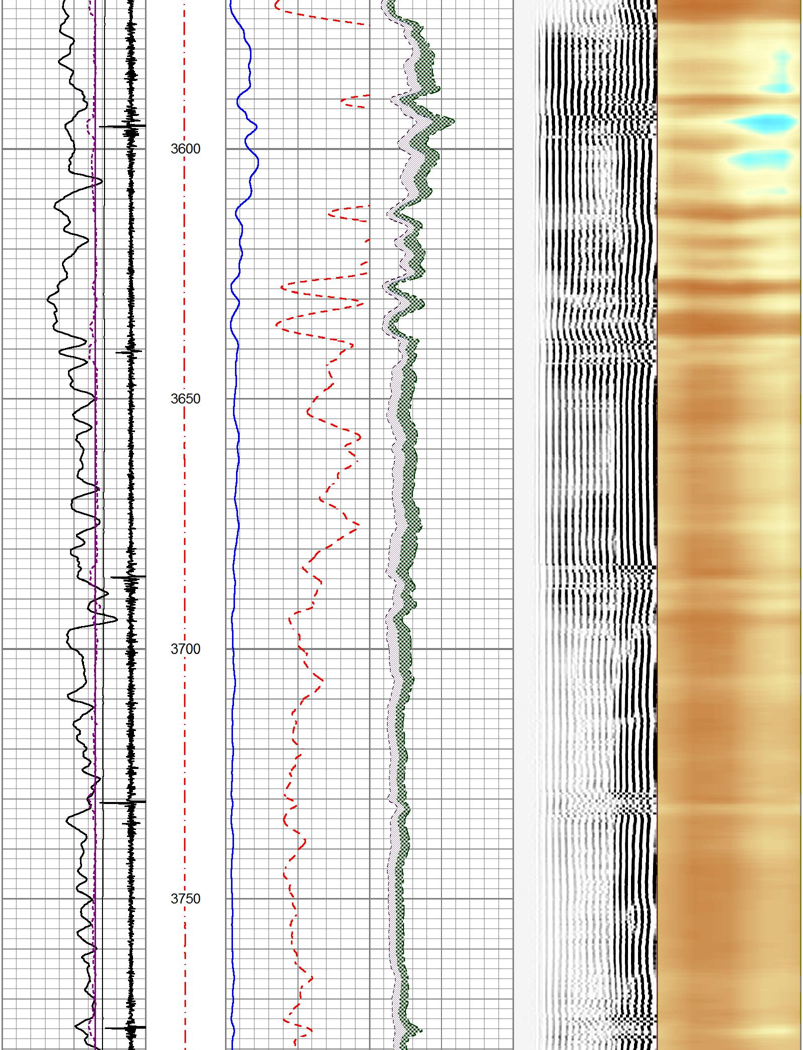


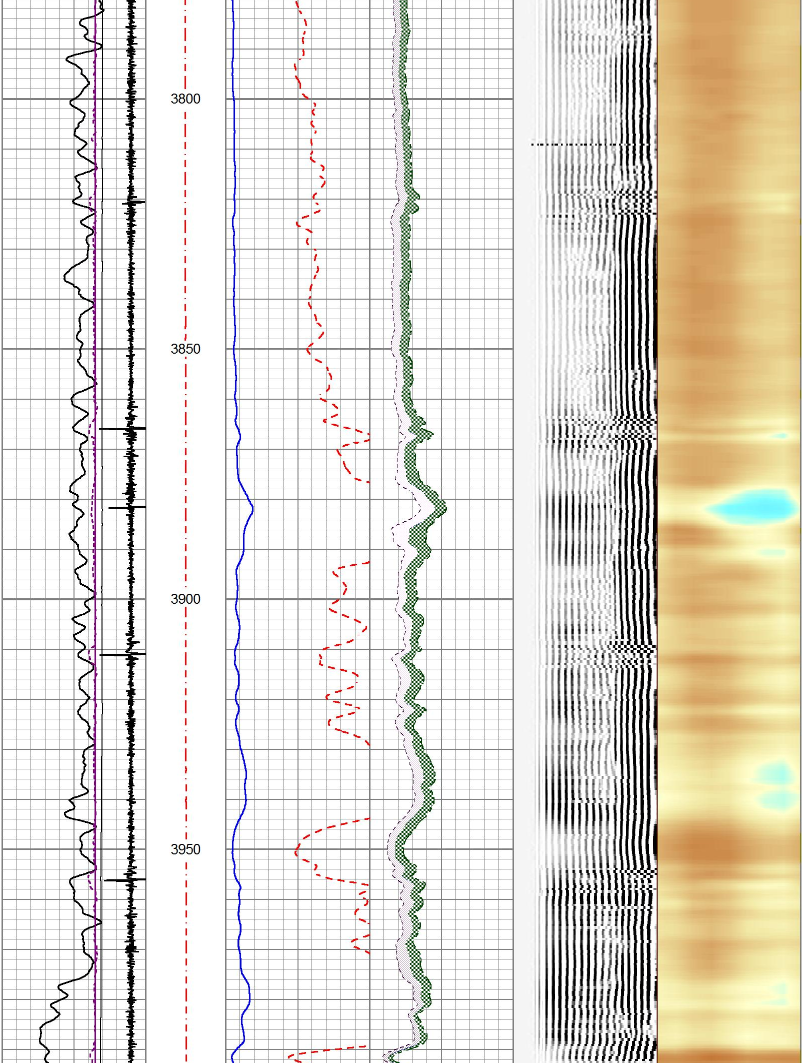


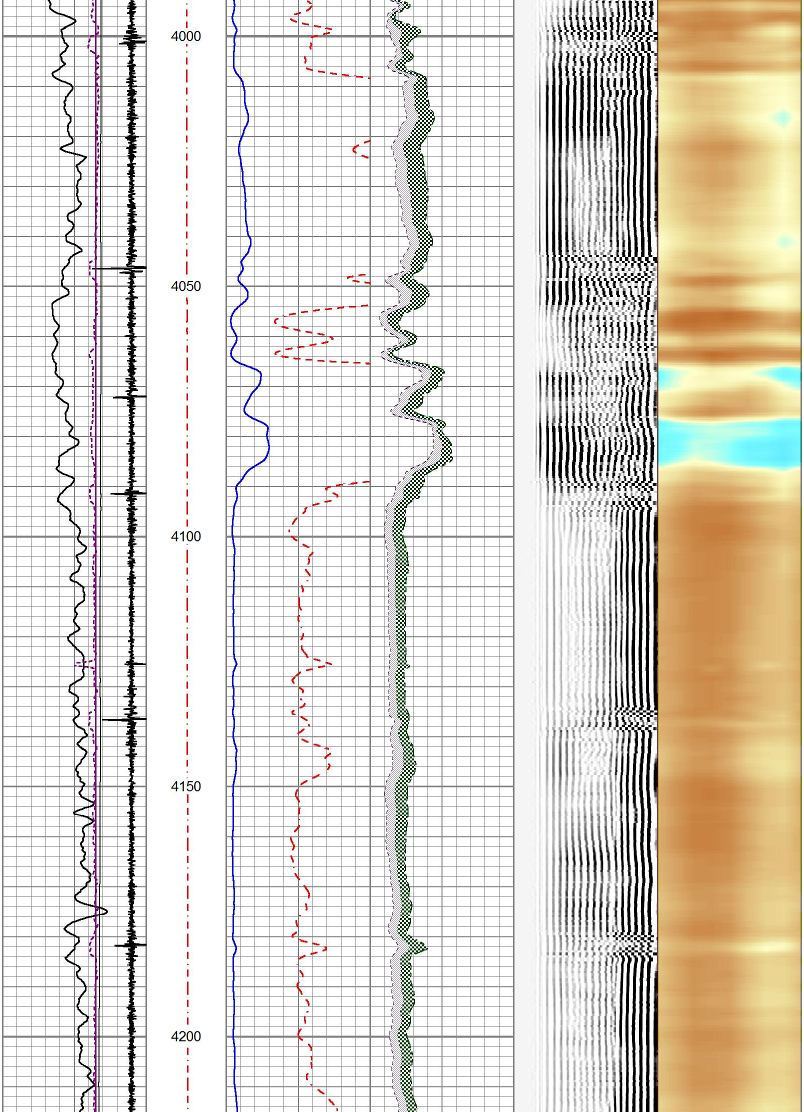


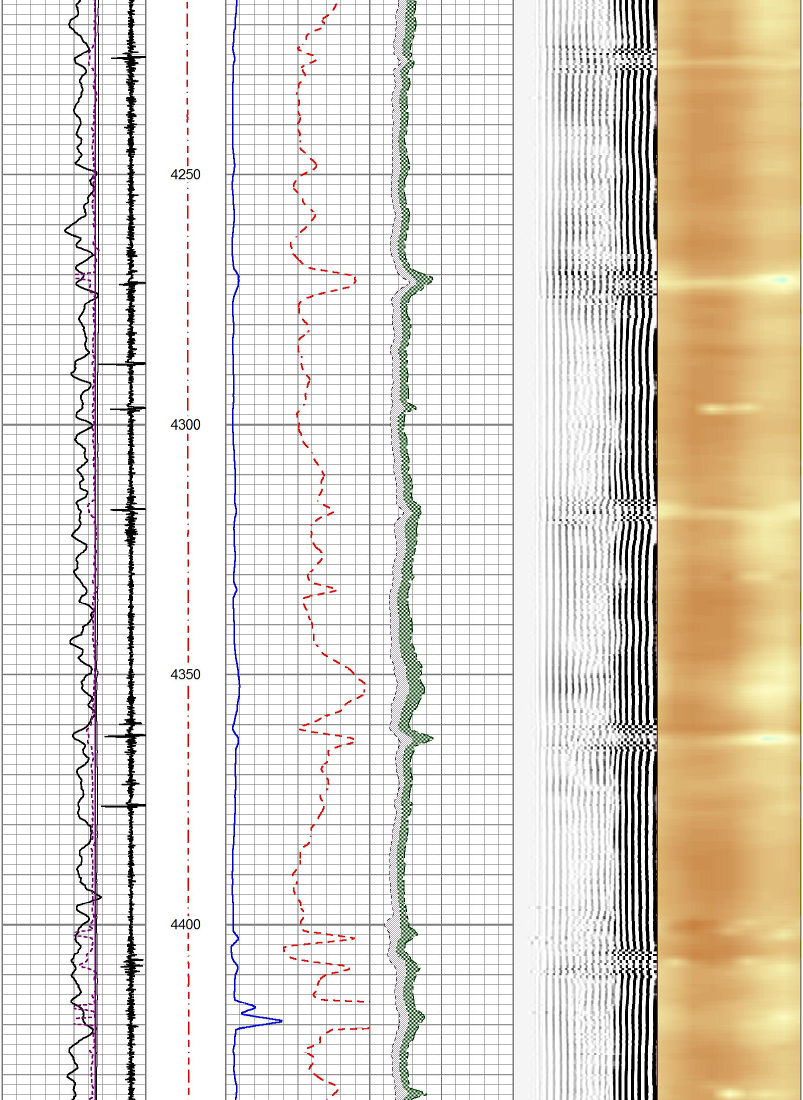


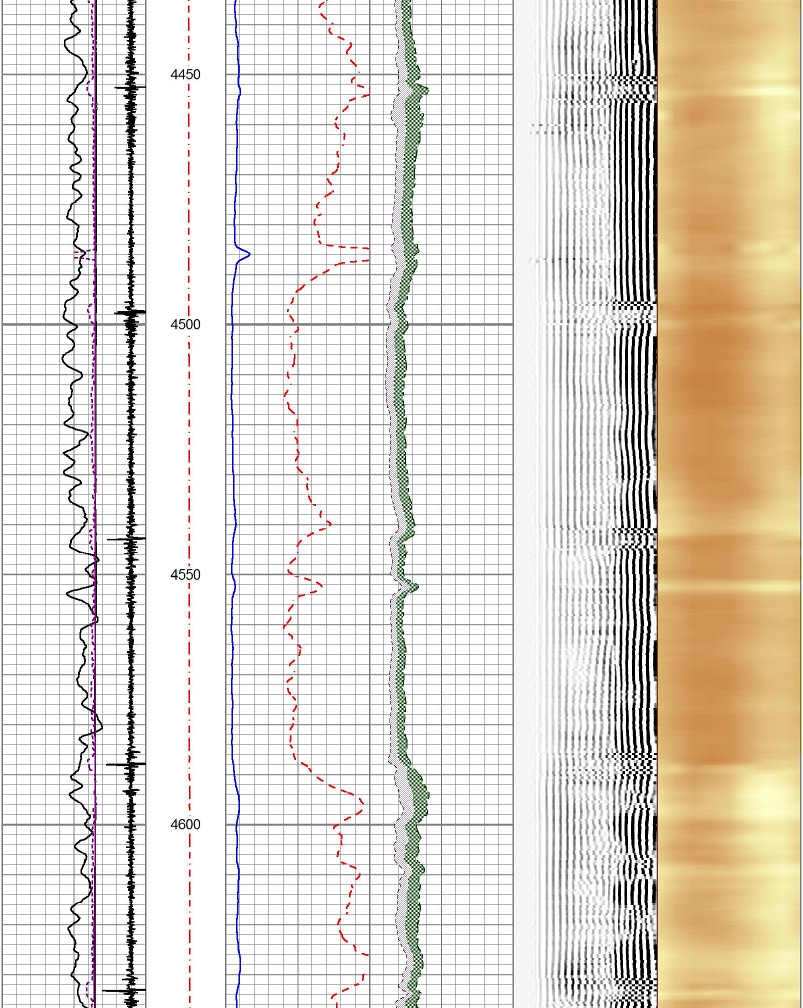


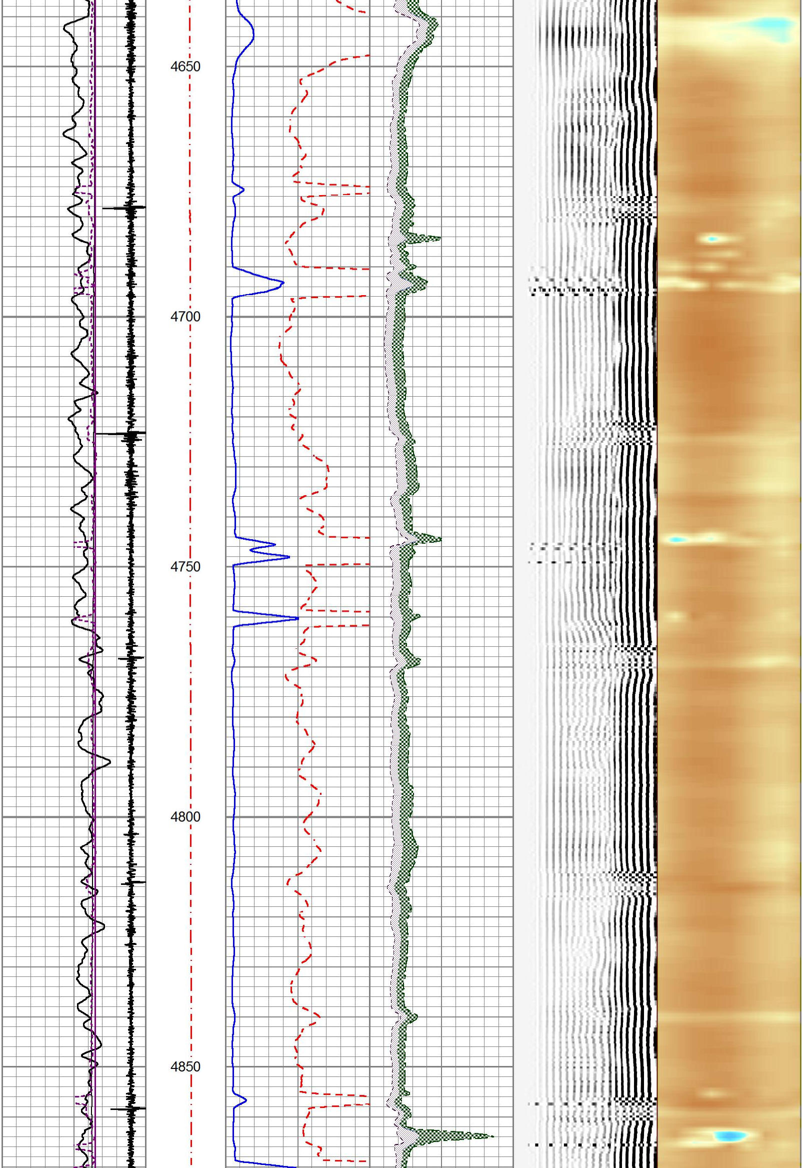


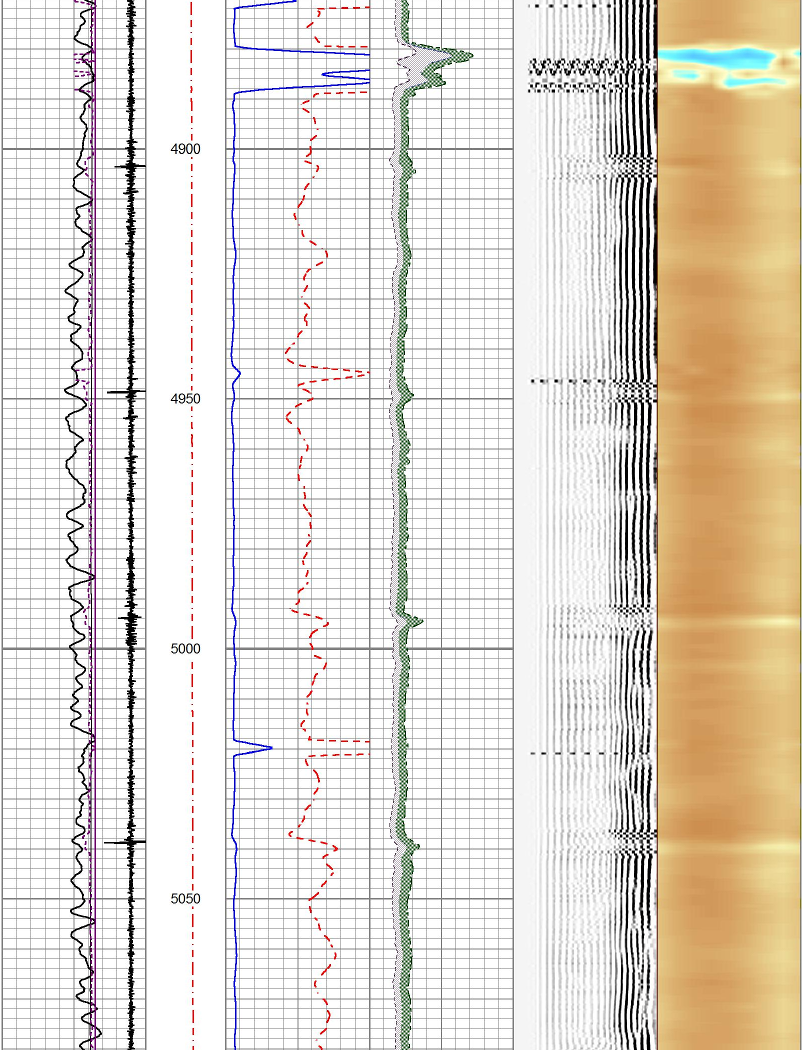


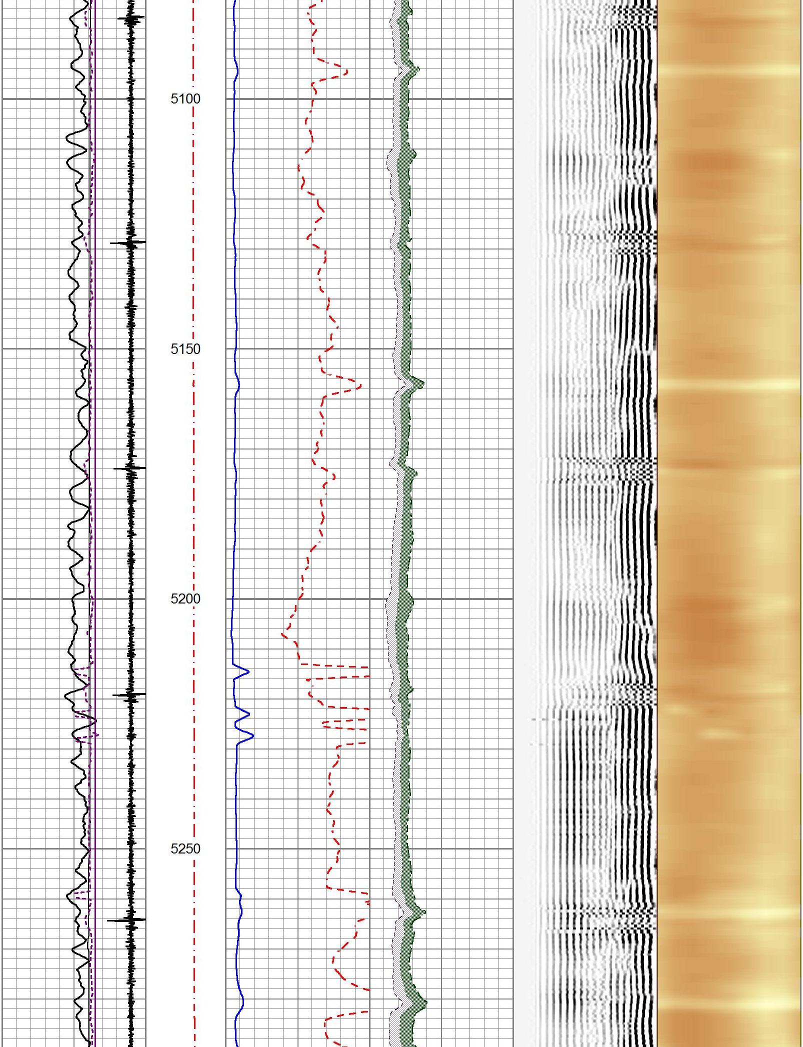


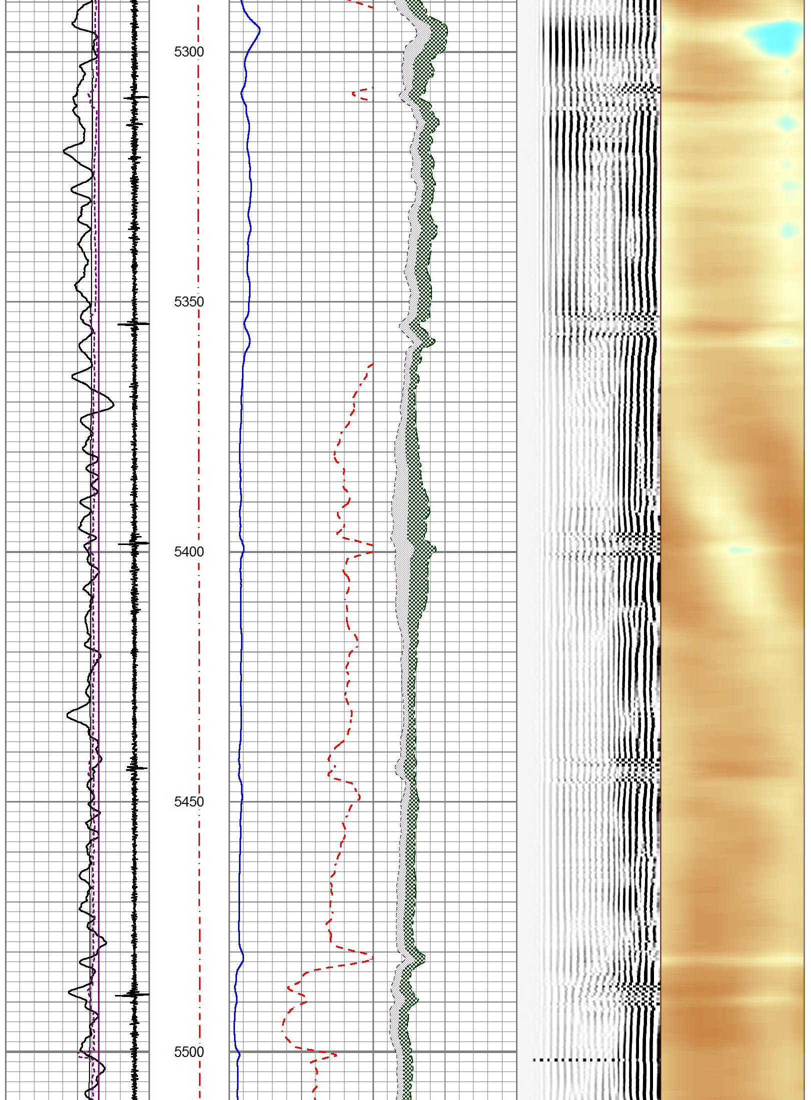


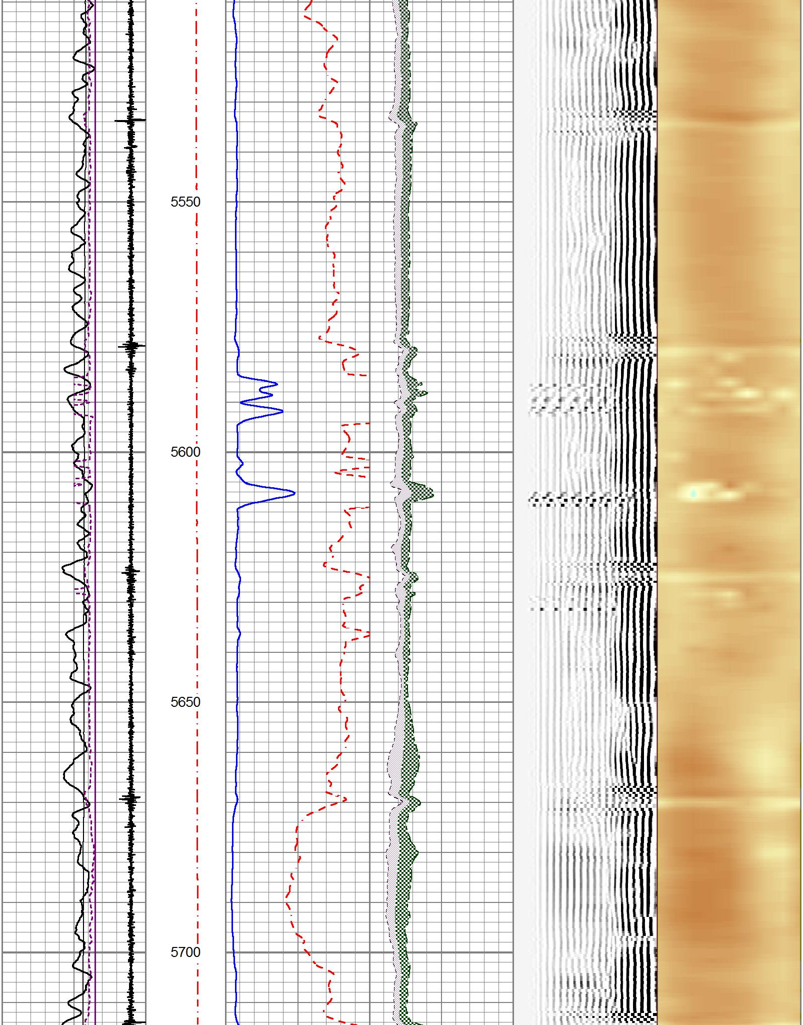


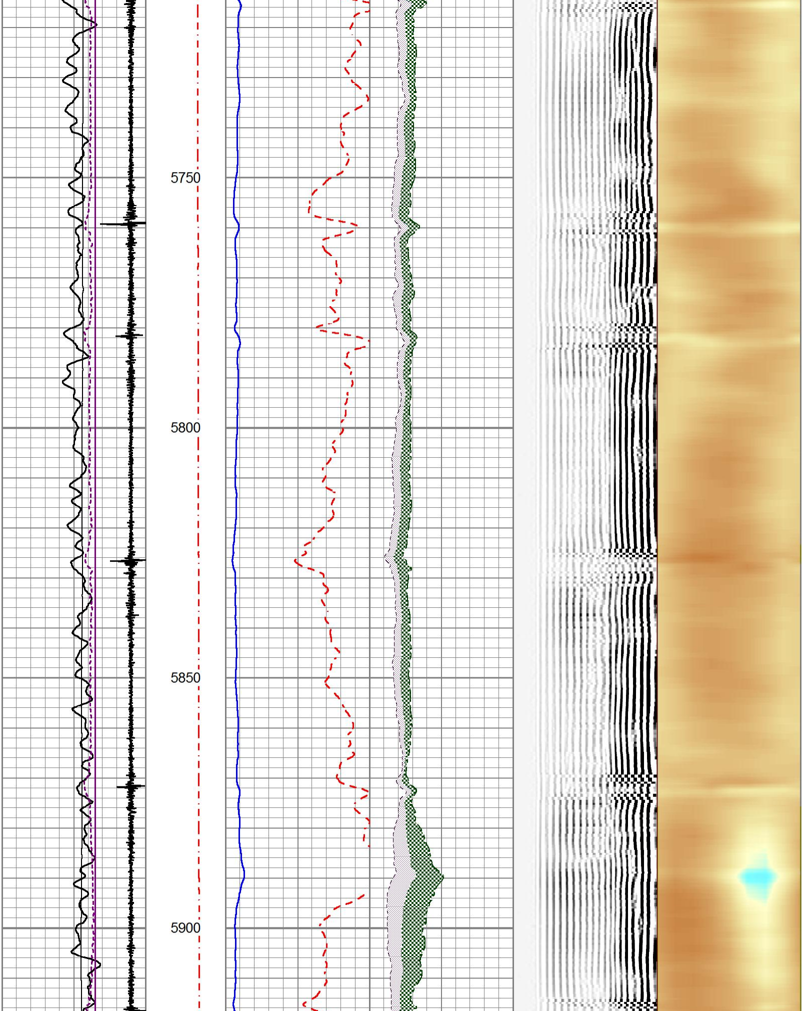


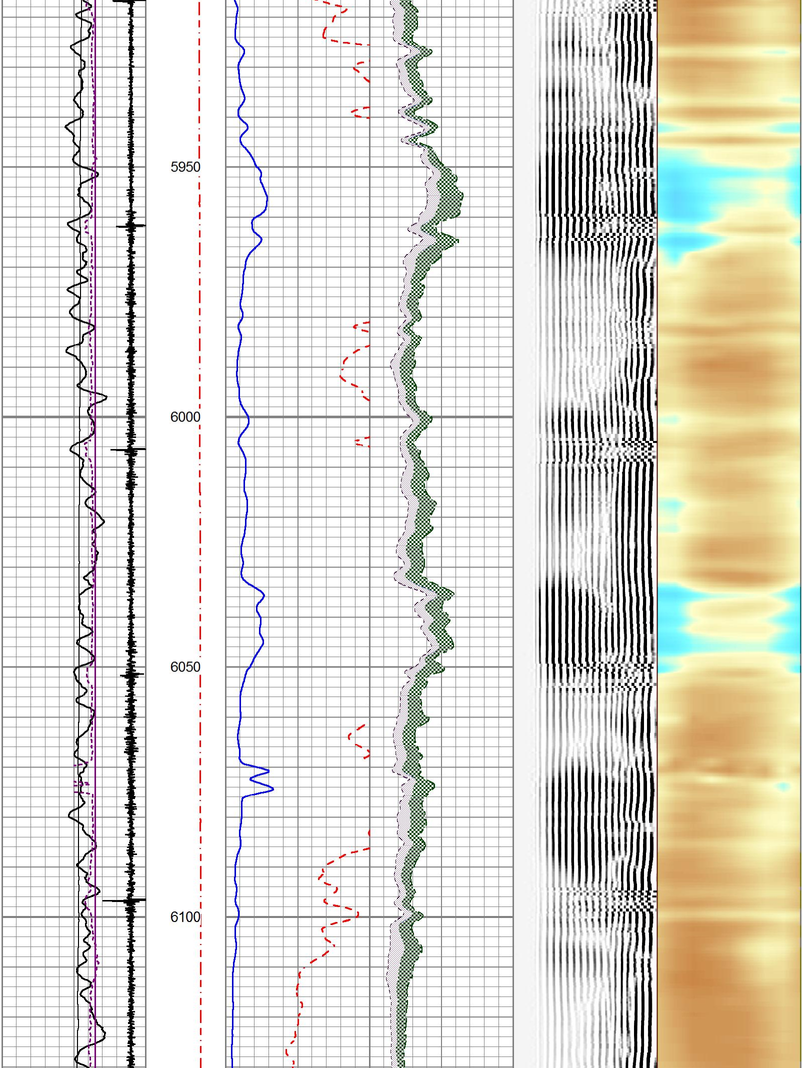


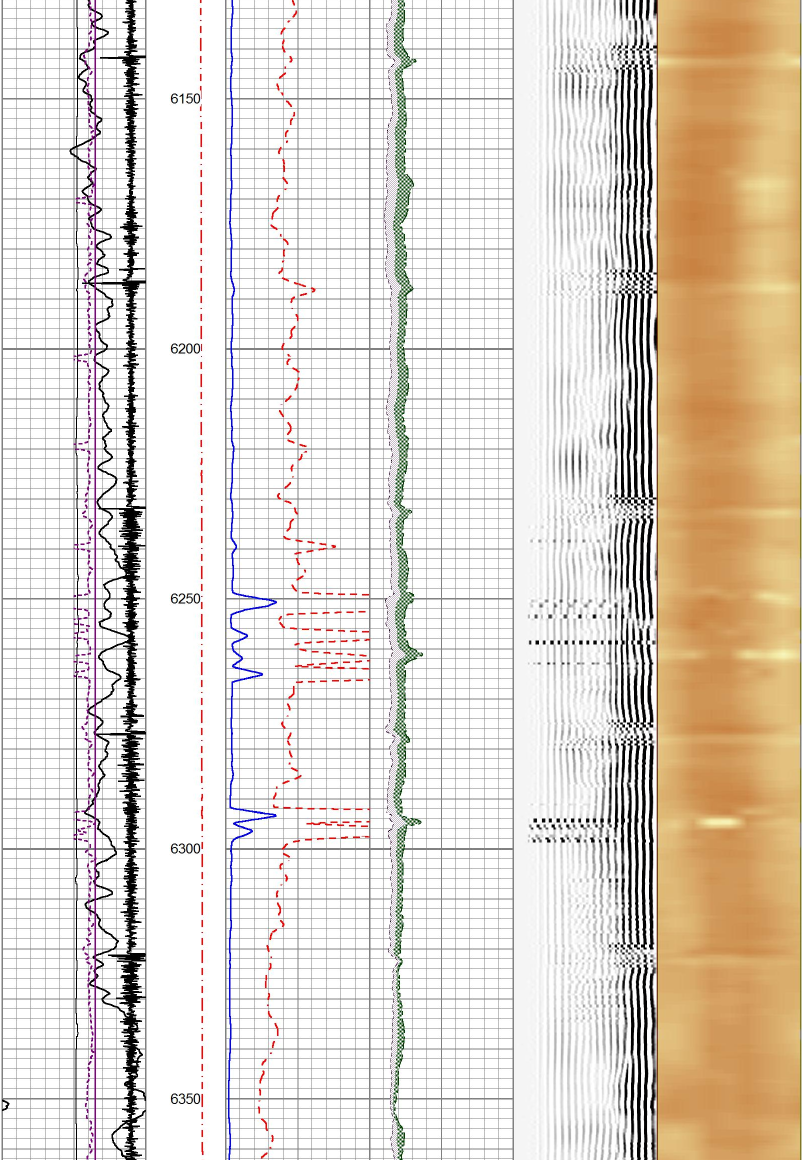


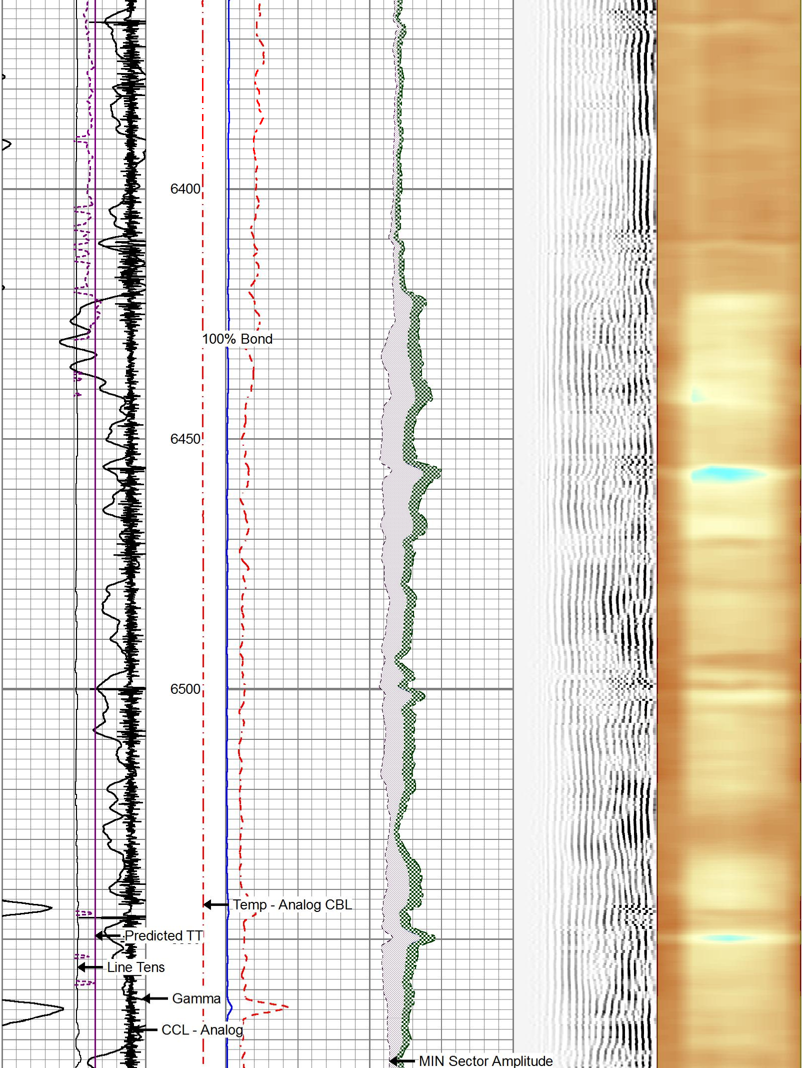


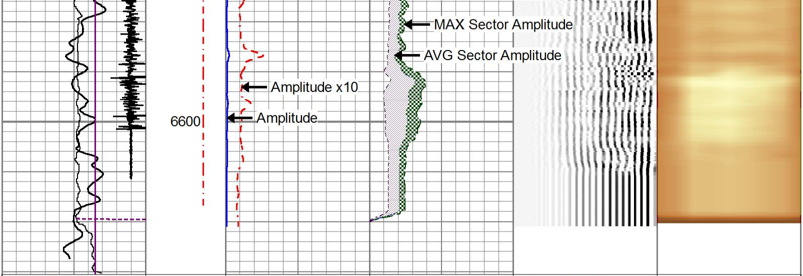












CCL - Analog Gamma 0 (GAPI) 200 300(Line Tens (lb) 0 Predicted TT TT +[10 usec]-	np - Analog C (degF) 0 300	0 Amplitude (mV) 100 Amplitude x10 0 (mV) 10	AVG Sector Amplitude 0 100 MAX Sector Amplitude 0 100 MIN Sector Amplitude 0 100	Acoustic Waveform 200 (usec) 1200	SECTORS

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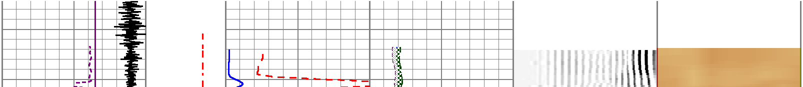
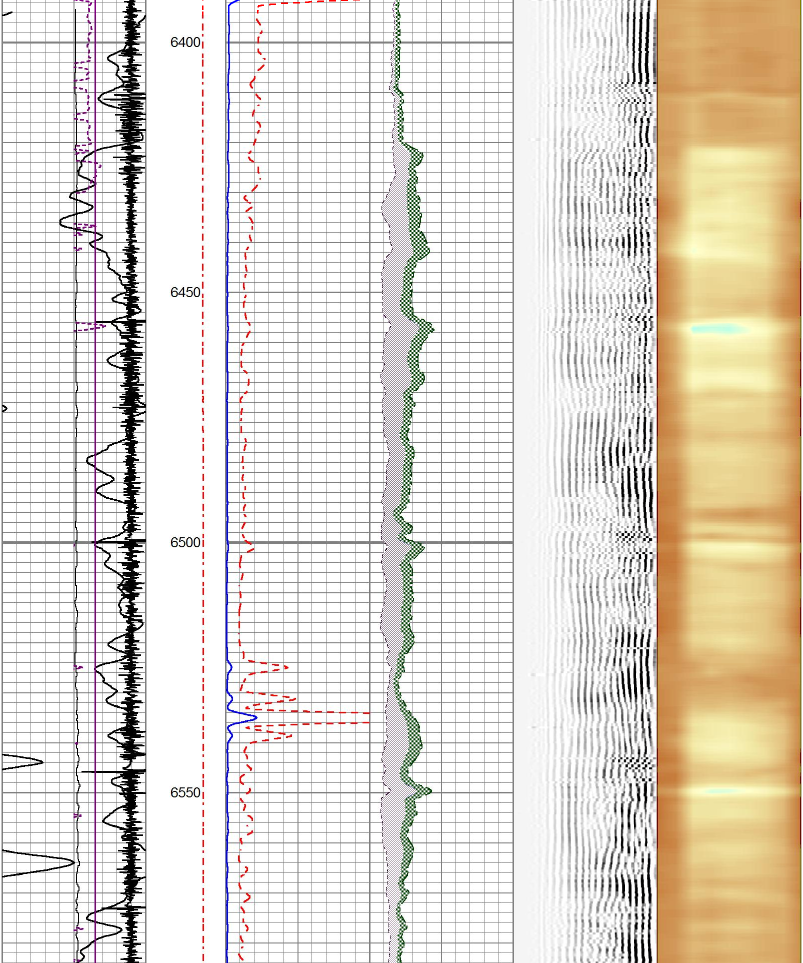
REPEAT PASS - Ran with 0 PSI

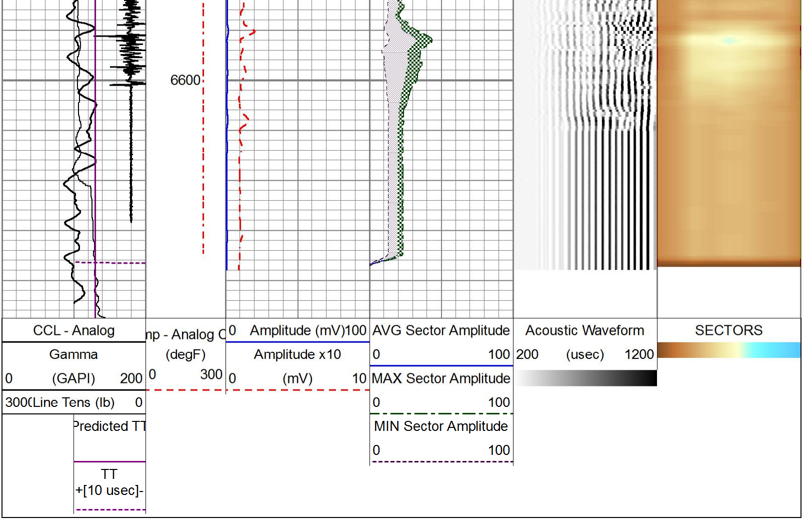
5 in / 100 ft

Database File	2017-09-25_extrac_mld9_cbl\2017-09-25_extrac_mld9_cbl.db
Dataset Pathname	pass2
Presentation Format	rcbl_8s
Dataset Creation	Tue Sep 26 09:10:02 2017
Charted by	Depth in Feet scaled 1:240

CCL - Analog Gamma 0 (GAPI) 200 300(Line Tens (lb) 0 Predicted TT TT +[10 usec]-	np - Analog C (degF) 0 300	0 Amplitude (mV) 100 Amplitude x10 0 (mV) 10	AVG Sector Amplitude 0 100 MAX Sector Amplitude 0 100 MIN Sector Amplitude 0 100	Acoustic Waveform 200 (usec) 1200	SECTORS







Calibration Report

Database File	d:\warrior\data\2017-09-25_extrac_mld9_cbl\2017-09-25_extrac_mld9_cbl.db
Dataset Pathname	pass3
Dataset Creation	Tue Sep 26 09:14:16 2017

Gamma Ray Calibration Report

Serial Number:	ISHV2-03	
Tool Model:	2 3/4" TekCo	
Performed:	Tue Dec 13 00:23:06 2016	
Calibrator Value:	194.0	GAPI
Background Reading:	58.9	cps
Calibrator Reading:	300.8	cps
Sensitivity:	0.8020	GAPI/cps

Segmented Cement Bond Log Calibration Report

Serial Number:	IPPO2-01	
Tool Model:	2 3/4" RIB Analog	
Calibration Casing Diameter:	5.500	in
Calibration Depth:	0.000	ft

Master Calibration, performed (Derived):

	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3'	0.002	1.170	1.000	72.000	60.787	0.899
CAL	0.000	0.750				
5'	0.003	1.780	1.000	72.000	39.955	0.897
SUM						
S1	0.022	1.225	0.000	72.000	59.854	-1.311
S2	0.024	1.151	0.000	72.000	63.897	-1.514
S3	0.027	1.094	0.000	72.000	67.462	-1.801
S4	0.027	0.941	0.000	72.000	78.814	-2.129
S5	0.025	0.908	0.000	72.000	81.599	-2.074
S6	0.023	0.920	0.000	72.000	80.232	-1.823
S7	0.022	1.053	0.000	72.000	69.873	-1.553
S8	0.026	1.163	0.000	72.000	63.359	-1.656

Internal Reference Calibration, performed Fri Aug 25 16:15:12 2017:

	Raw (v)		Calibrated (v)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
CAL	0.000	0.750	0.000	0.750	1.000	0.000

Air Zero Calibration, performed Fri Aug 25 16:15:12 2017:

	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

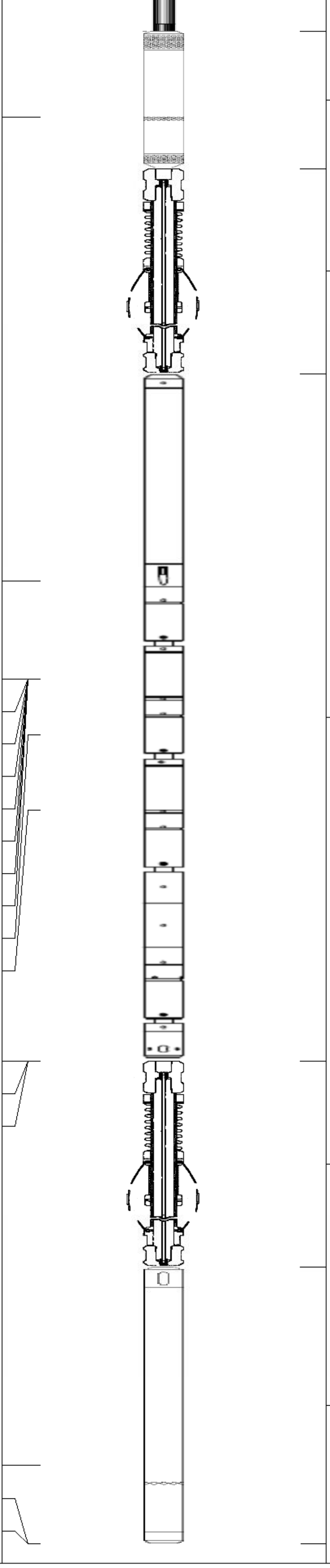
Serial Number: IPPO2-01
Tool Model: 2 3/4" RIB Analog
Performed: Fri Aug 26 11:07:15 2016

	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
			CableHead-TitanConeType2	1.03	1.44	3.60

CCL	18.96
TEMP	12.78
WVFS8	11.49
WVFS7	11.49
WVFS6	11.49
WVFS5	11.49
WVFS4	11.49
WVFS3	11.49
WVFS2	11.49
WVFS1	11.49
WVF3FT	10.74
WVF5FT	9.74
WVFSYNC	6.41
WVFTEMP	6.41
WVFCAL	6.41
GR	1.04
LOCTIM	0.00
UTCTIM	0.00



CCL_Log-2 3/4" TekCo (IPSN7-03) 450 Deg. CCL	1.83	2.75	33.00
TekCo-275_Tekco 2 3/4" Tekco Adjustable SPRING Centralizer	2.73	2.75	25.00
RBTA-2 3/4" RIB Analog (IPPO2-01) Radial Incremented Bond Tool with Temp	9.13	2.75	102.00
TekCo-275_Tekco 2 3/4" Tekco Adjustable SPRING Centralizer	2.73	2.75	25.00
GR_Log-2 3/4" TekCo (ISHV2-03) 400 Deg. Gamma Ray	3.68	2.75	47.00

Dataset: 2017-09-25_extrac_mld9_cbl.db: field/well/run1/pass2
Total length: 21.13 ft
Total weight: 235.60 lb
O.D.: 2.75 in

gyrodata

Company Extraction Oil and Gas
Well MLD 9
Field Wattenberg
County Weld
State Colorado
Country U.S.A.