gyrodata

CEMENT BOND LOG

Company	Extraction Oil & Gas LLC
Well	Kennedy 1C
Field	Wattenberg
County	Weld
State	Colorado

Company **Extraction Oil & Gas LLC**
Well **Kennedy 1C**
Field **Wattenberg**
County **Weld** **State** **Colorado**

API # : 05-123-40308
Location:
NE/NE
681 FNL
342 FEL

SEC: 18 TWP: 4N RGE: 68W

Other Services

Elevation
K.B. 4992
D.F. 4991
G.L. 4967

Permanent Datum: Ground Level Elevation: 4967
Log Measured From: Kelly Bushing , 25 ft. above Permanent Datum.
Drilling Measured From: Kelly Bushing

Date	28 June 2018		
Run Number	One		
Plug Back T.D. Driller	----		
Plug Back T.D. Logger	----		
Bottom Logged Interval	5957		
Top Log Interval	Surface		
Type Fluid	Water		
Density / Viscosity	----		
Max. Recorded Temp.	195°F		
Time Logger on Bottom	1855		
Equipment Number	GD 164		
Location	Casper		
Recorded By	Garrett Graham		
Witnessed By	Hans Cary		

Casing Record				Tubing Record			
Size	Weight	From	To	Size	Weight	From	To
9 5/8	36	25	1500				
5 1/2	20	25	11151				

<<< 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 # : RM0618PCBW679
Your Crew Today: Kennicker, Pena, Vasquez
Log Correlated to: Surface

Cement Data

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

Bond Index

Index %	Est Top Depth
20 % Bond	133'
40 % Bond	133'
60 % Bond	133'
80 % Bond	917'
100 % Bond	5575'

Comments

Estmated Cement Top @ 133'
(20% Bond)

Marker Joint Located @ 5057'

Thank you for using Gyrodata

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

Log Variables

Database c:\programdata\warrior\data\20180628_extraction_kennedy 1c_cbl\20180628_extraction_
Dataset field/well/run1/pass3/_vars_

Top - Bottom

BHTEMP_Src	BOREID in	BOTTEMP degF	CASEOD in	CASETHCK in	CASEWGHT lb/ft	MAXAMPL mV	MaxAPIID in
TEMP	8.5	195	5.5	0.361	20	71.9	4.923
MINAMPL mV	MinAPIID in	MINATTN db/ft	PPT usec	TDEPTH ft			
1.9	4.751	0	237	5960			

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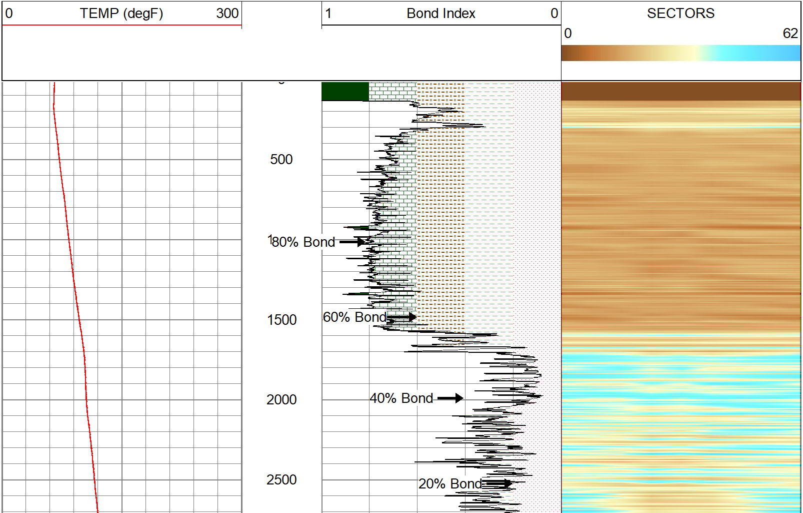
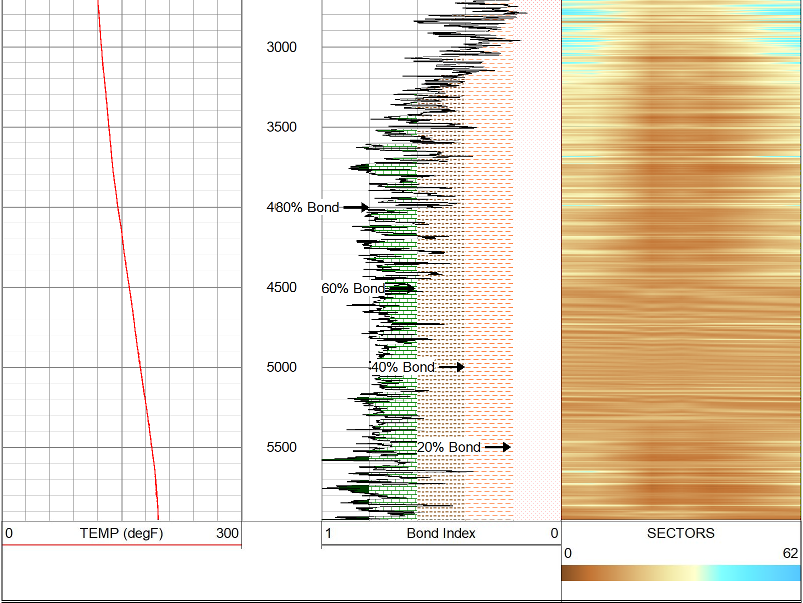
BOND INDEX

Database File	20180628_extraction_kennedy 1c_cbl\20180628_extraction_kennedy 1c_cbl.db
Dataset Pathname	Bond
Presentation Format	bndindx_msg-sec
Dataset Creation	Thu Jun 28 22:34:40 2018
Charted by	Depth in Feet scaled 1:7500





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BOND INDEX

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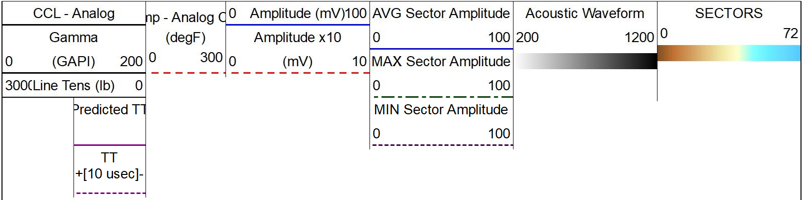
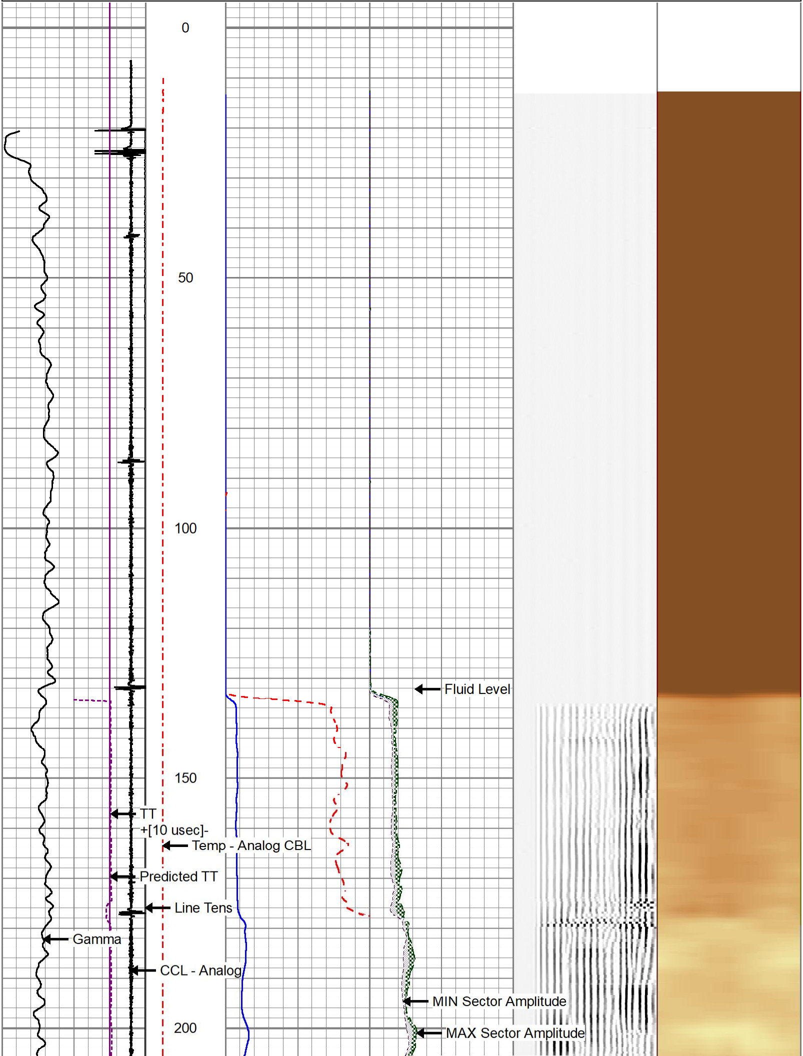
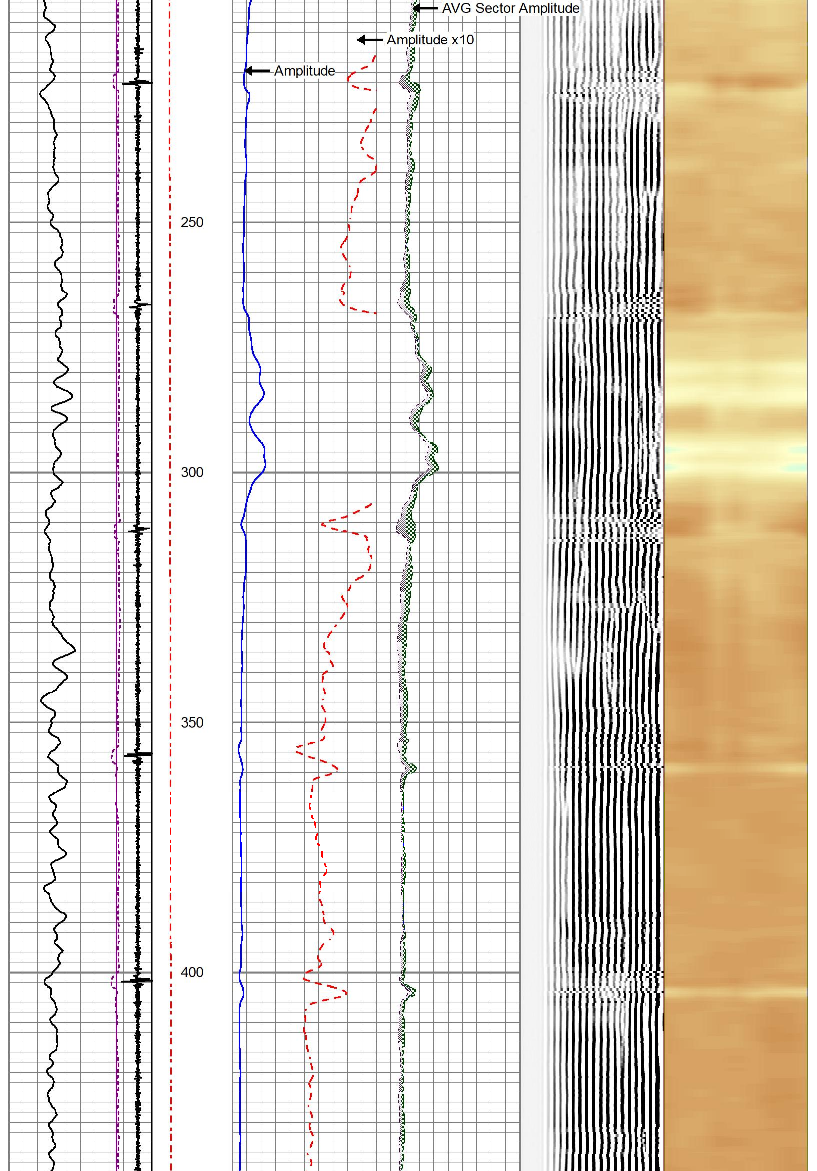
MAIN PASS - Ran with 0 PSI

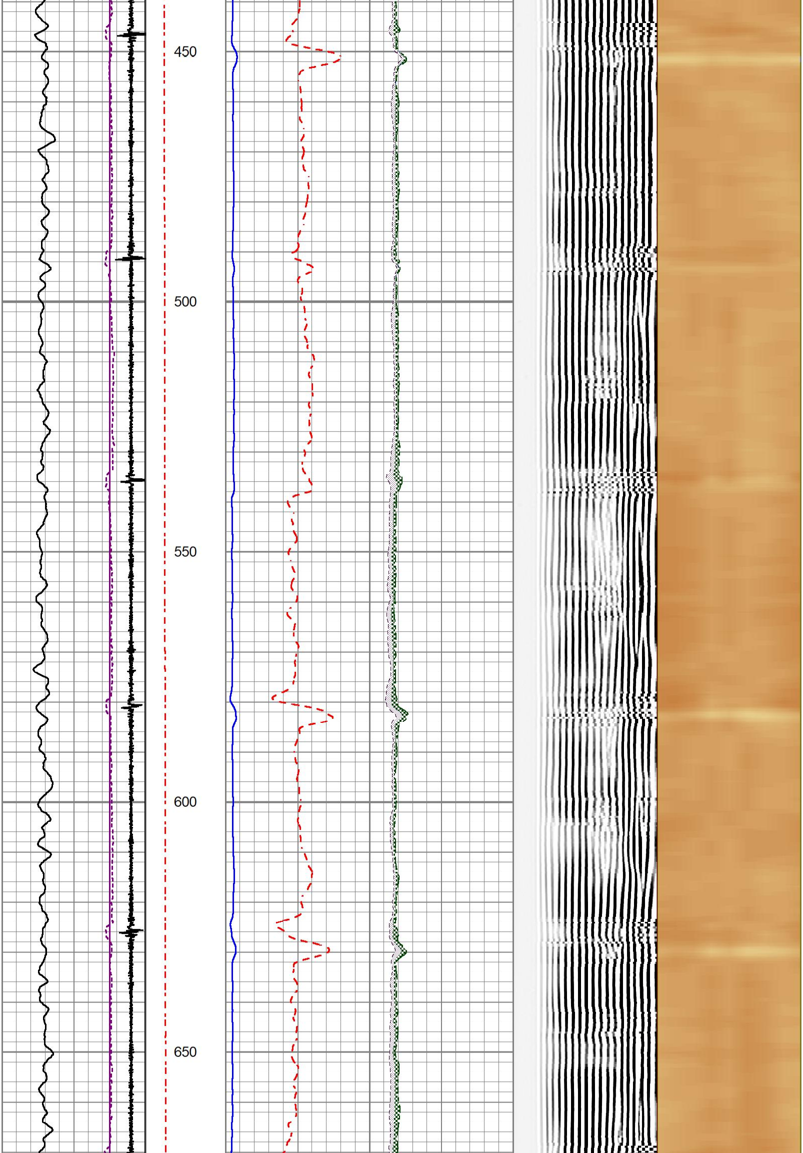
5 in / 100 ft

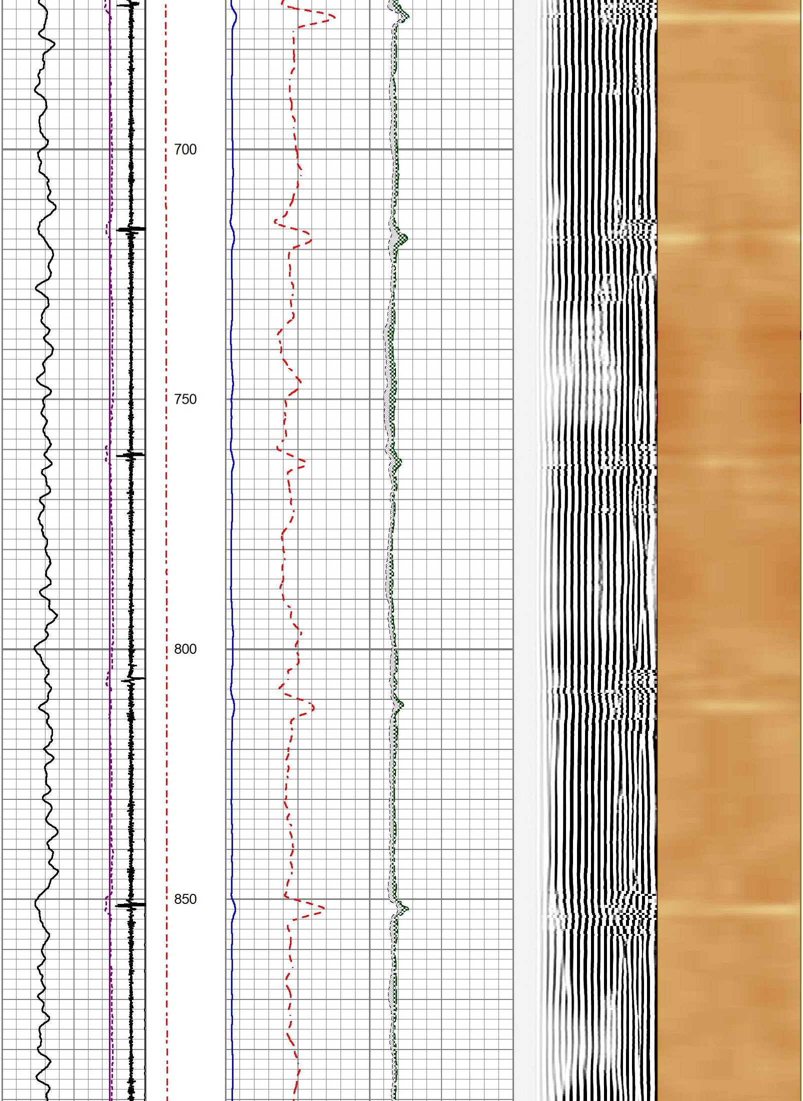
Database File	20180628_extraction_kennedy 1c_cbl\20180628_extraction_kennedy 1c_cbl.db
Dataset Pathname	pass3
Presentation Format	rcbl_8s
Dataset Creation	Thu Jun 28 18:49:27 2018
Charted by	Depth in Feet scaled 1:240

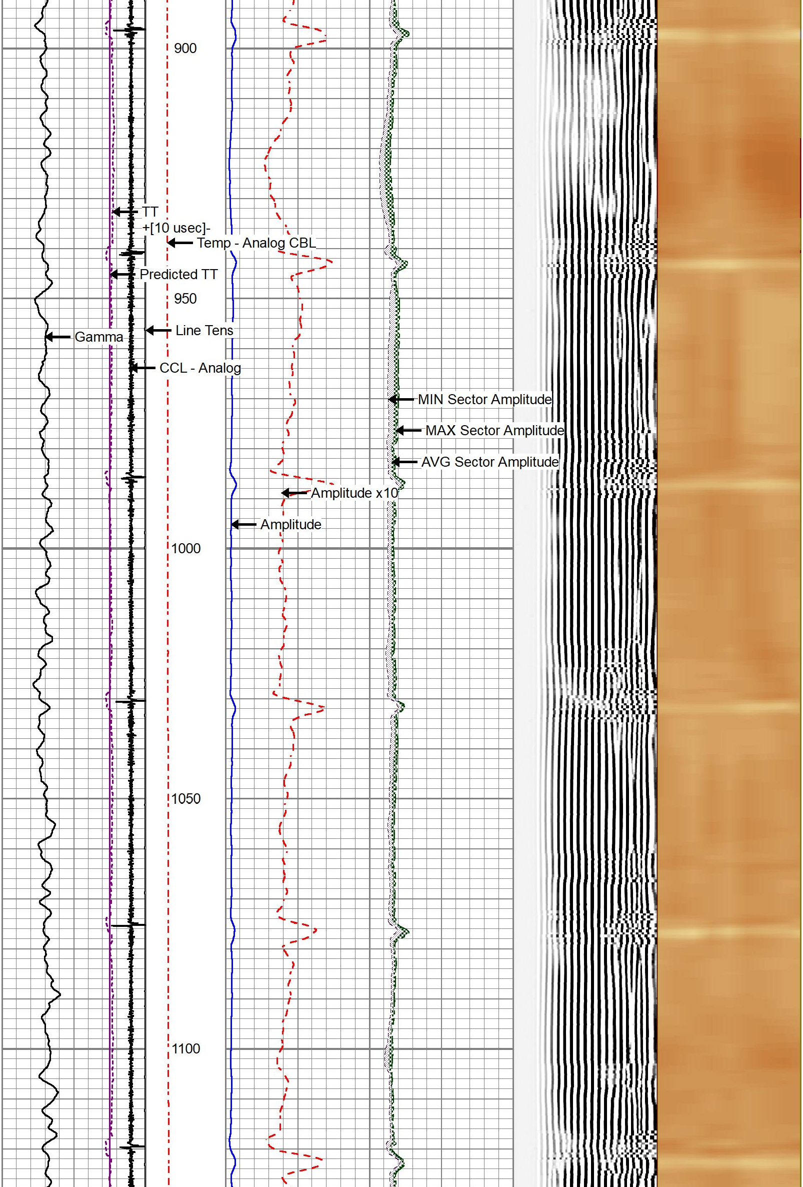


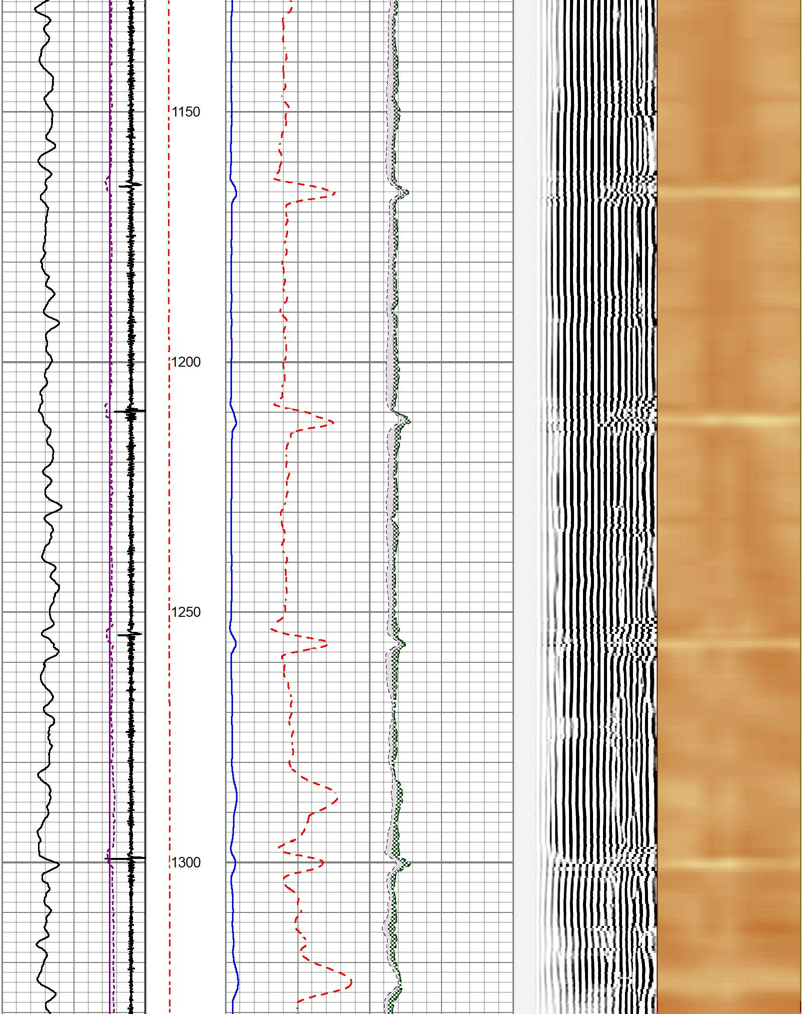


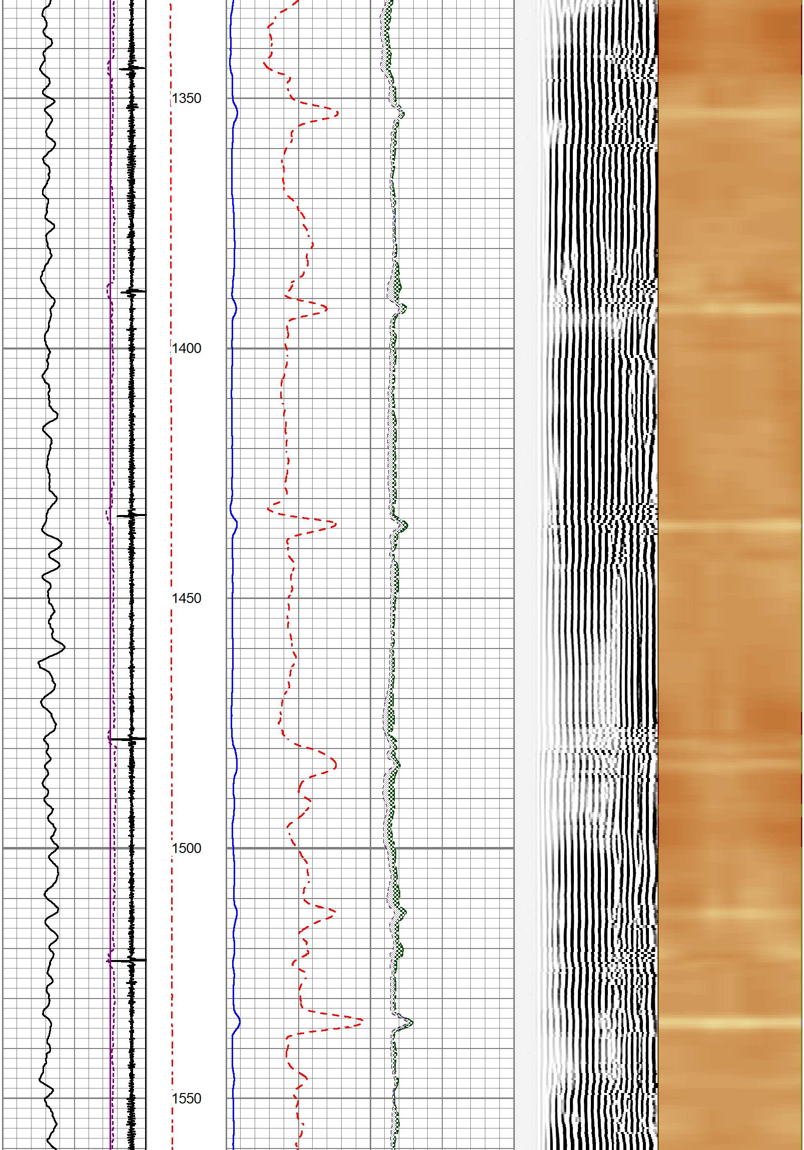


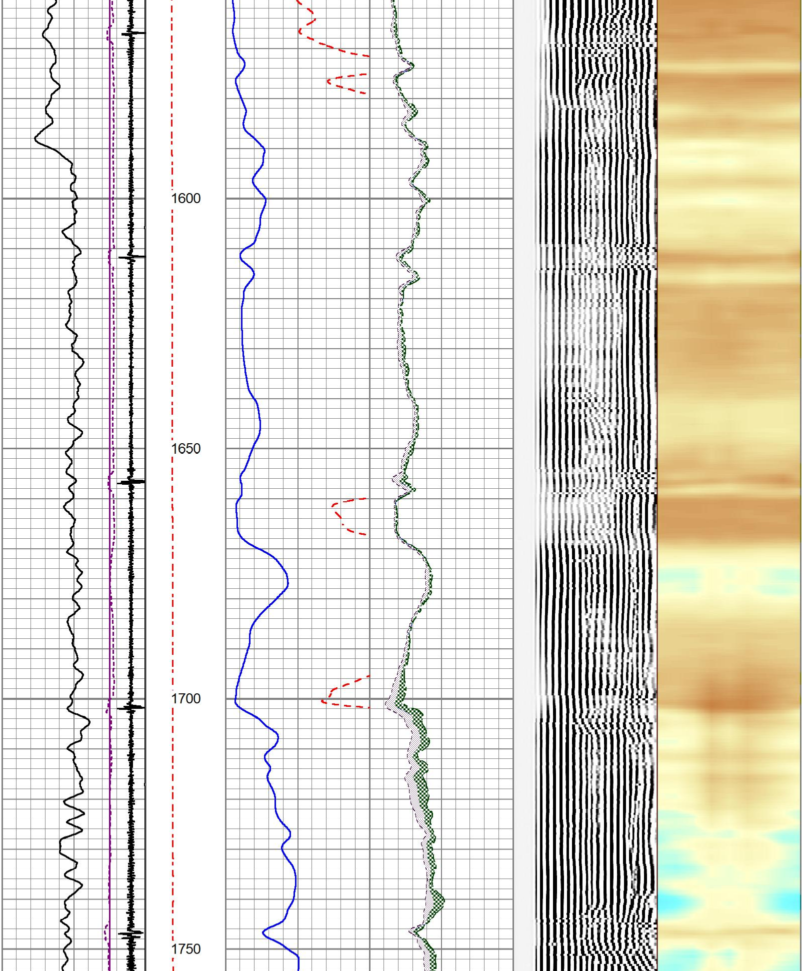


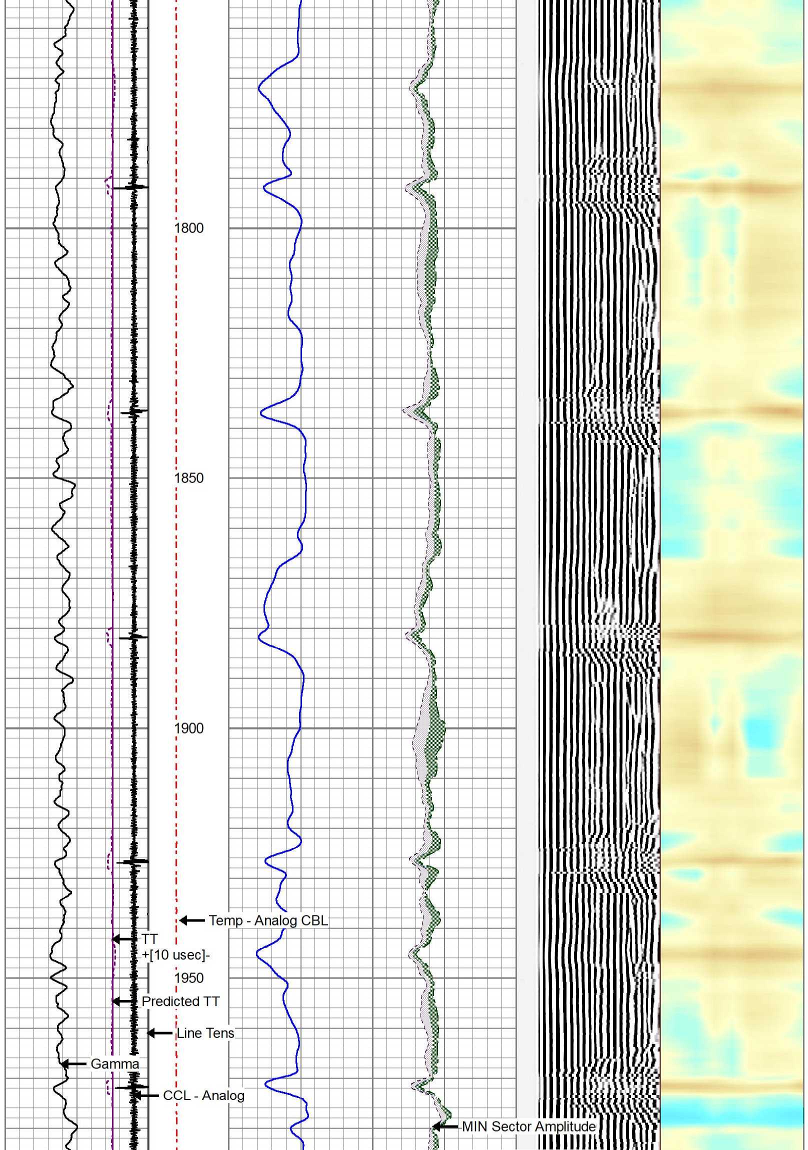


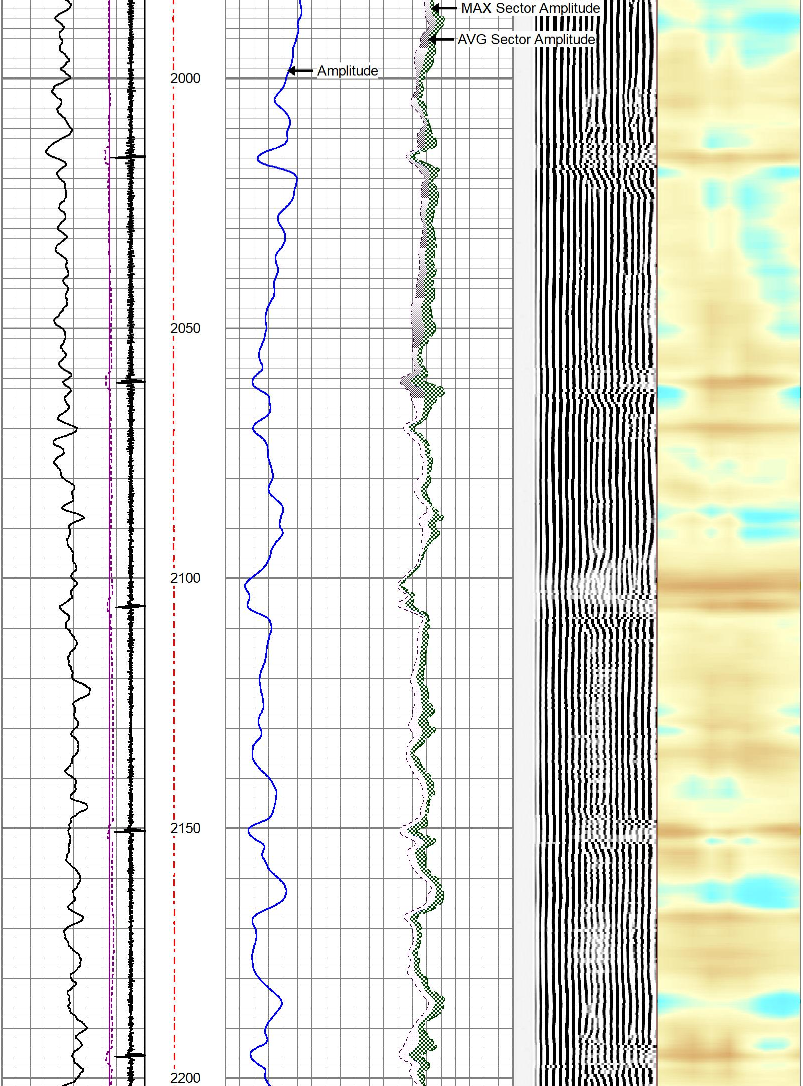


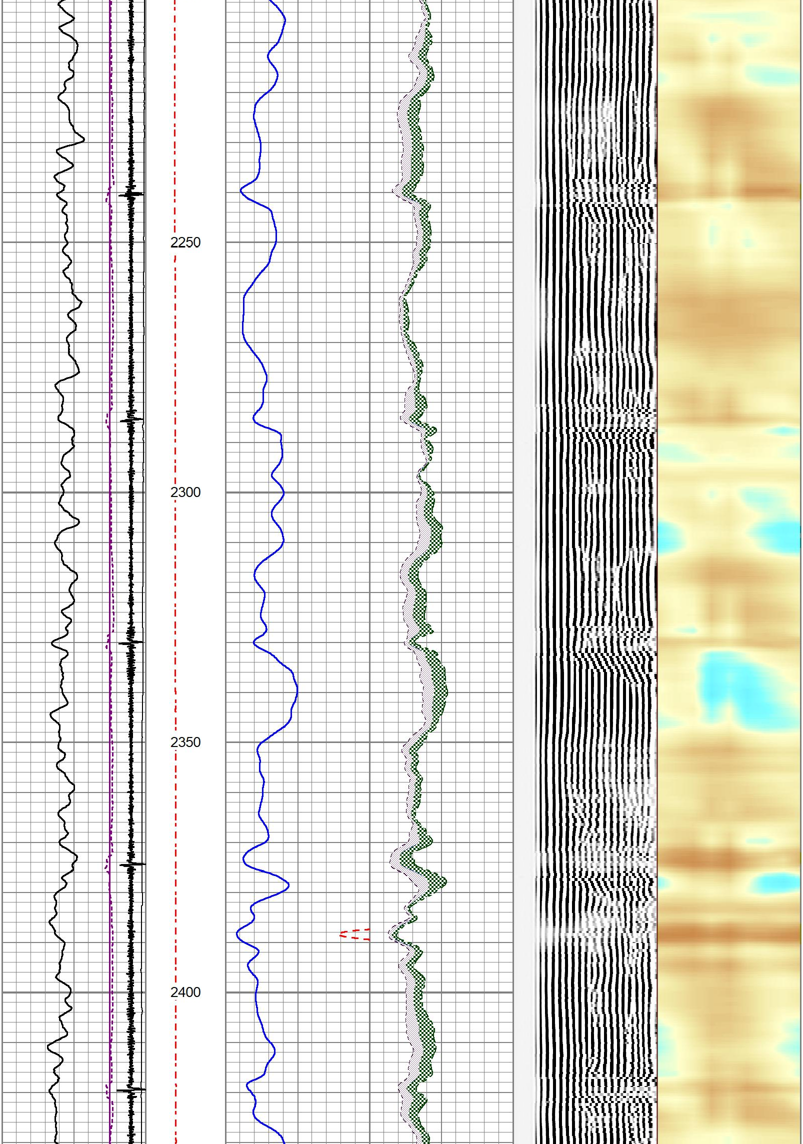


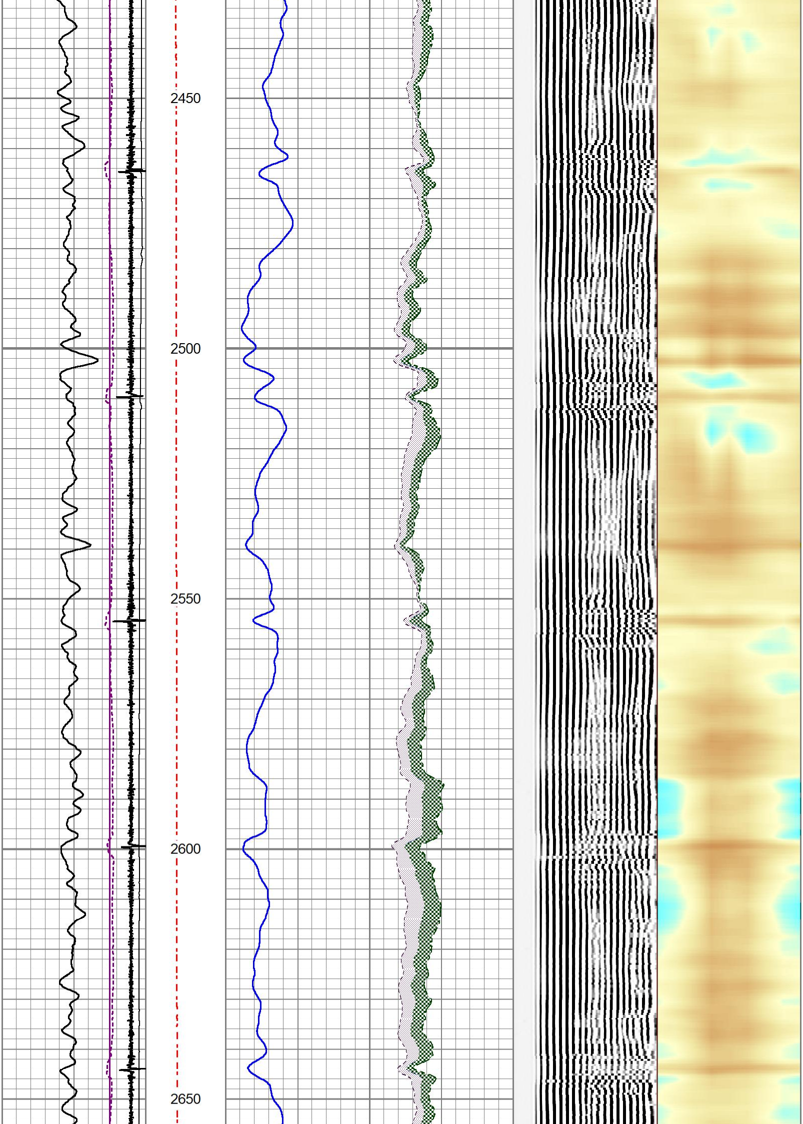


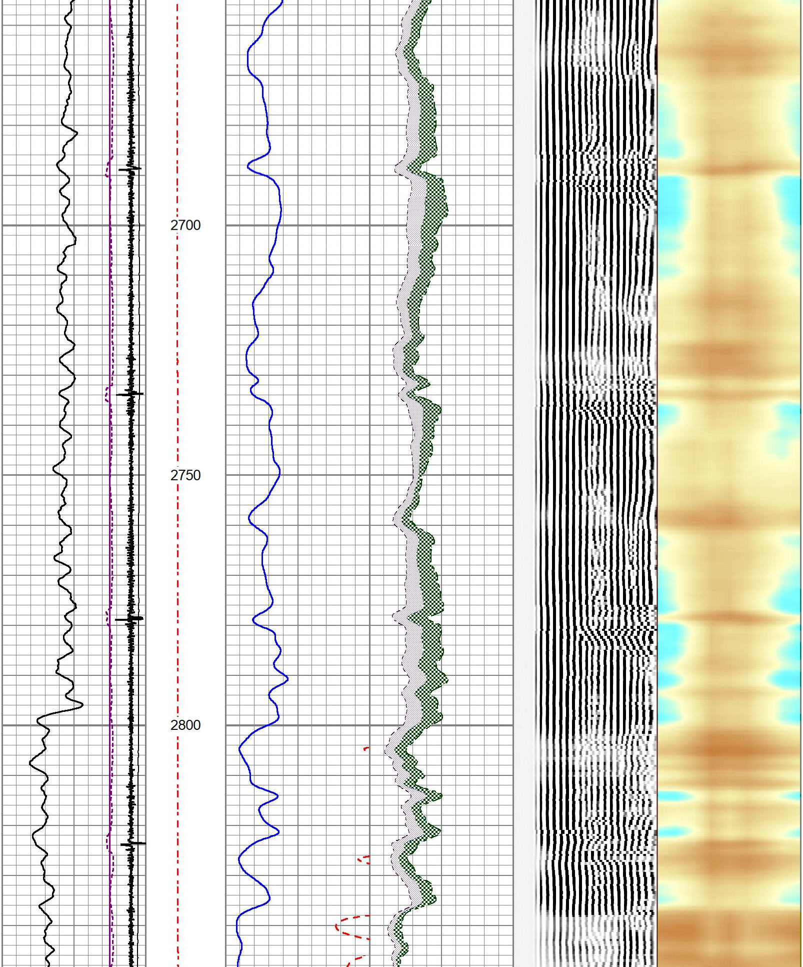


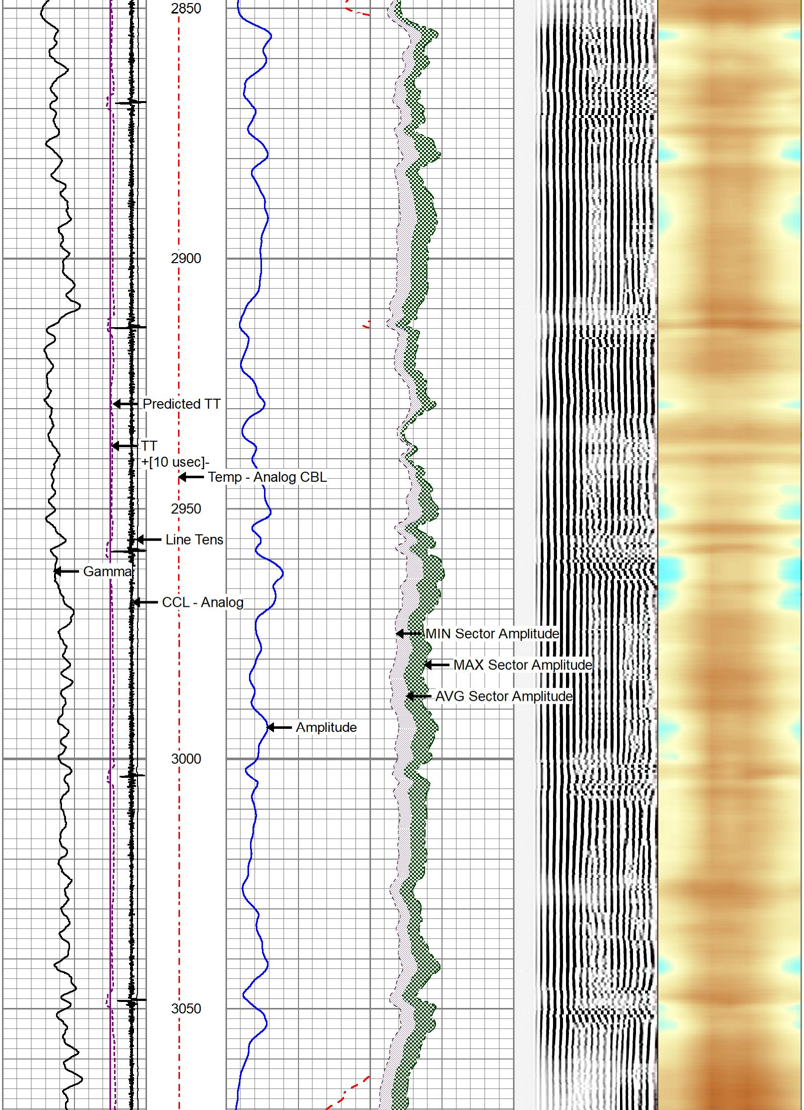


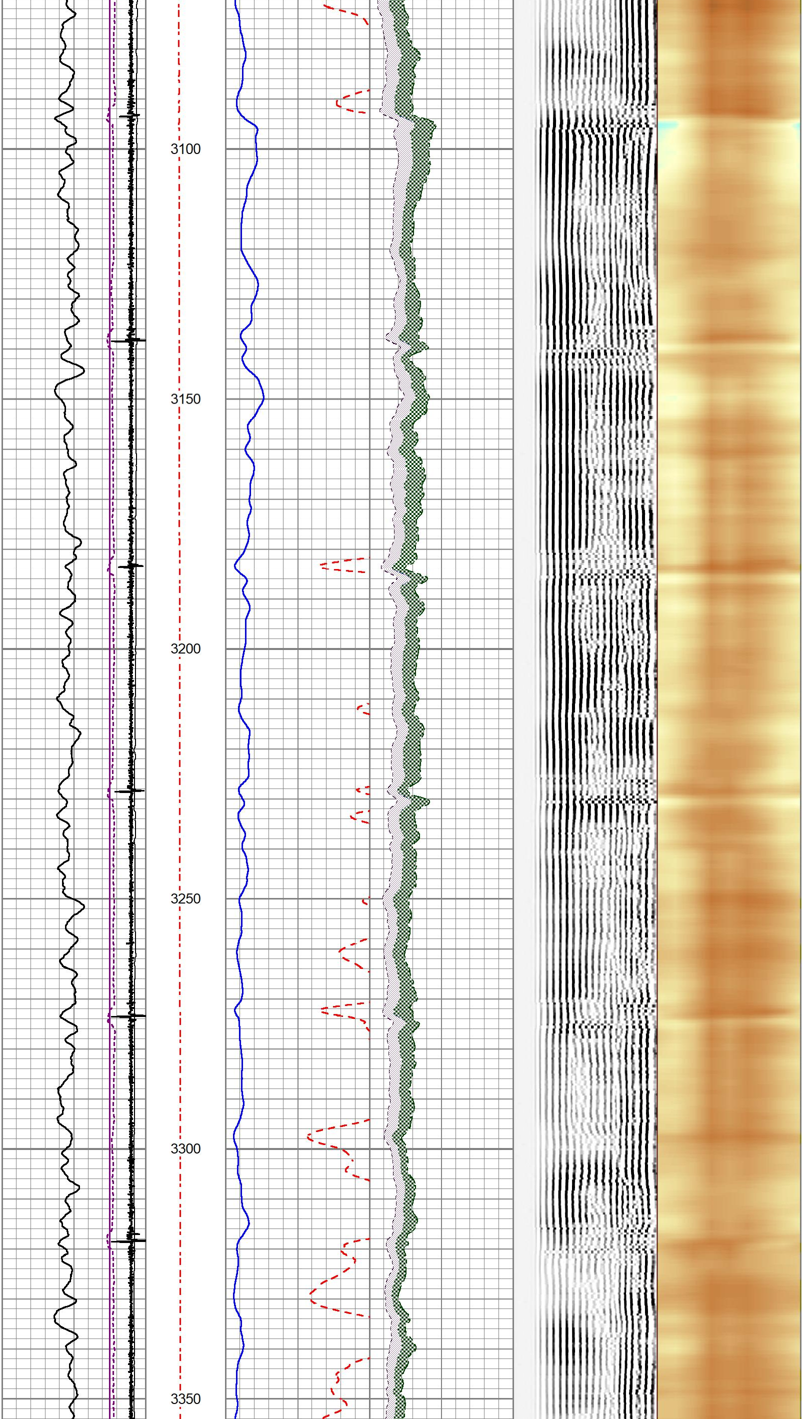


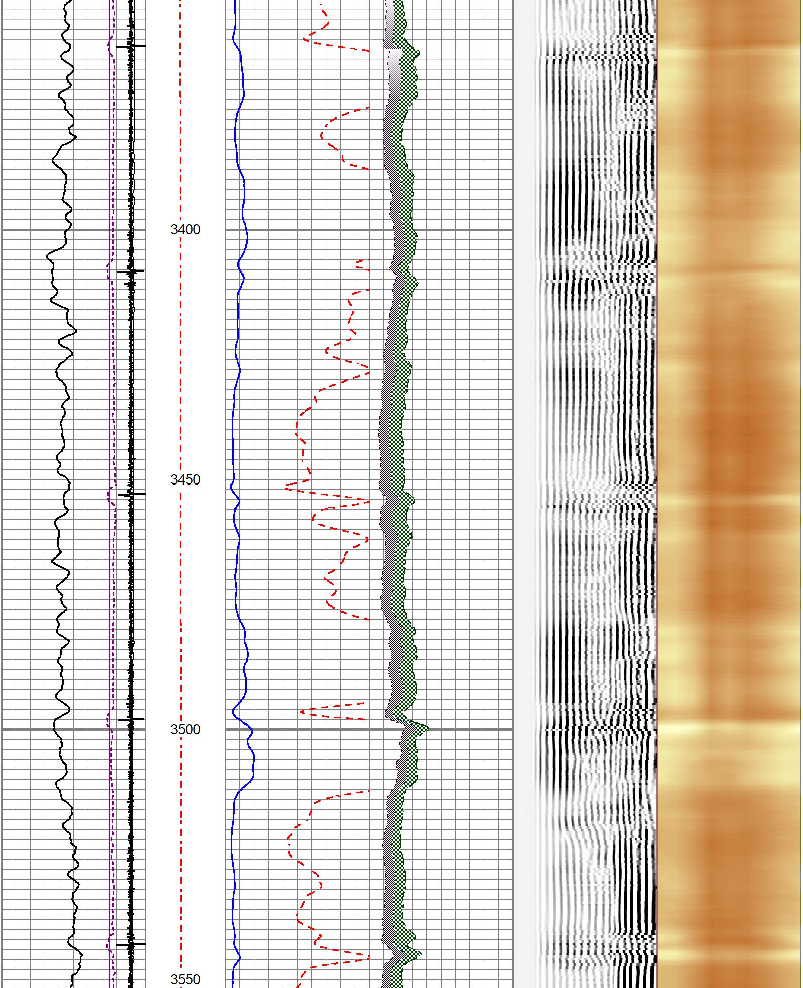


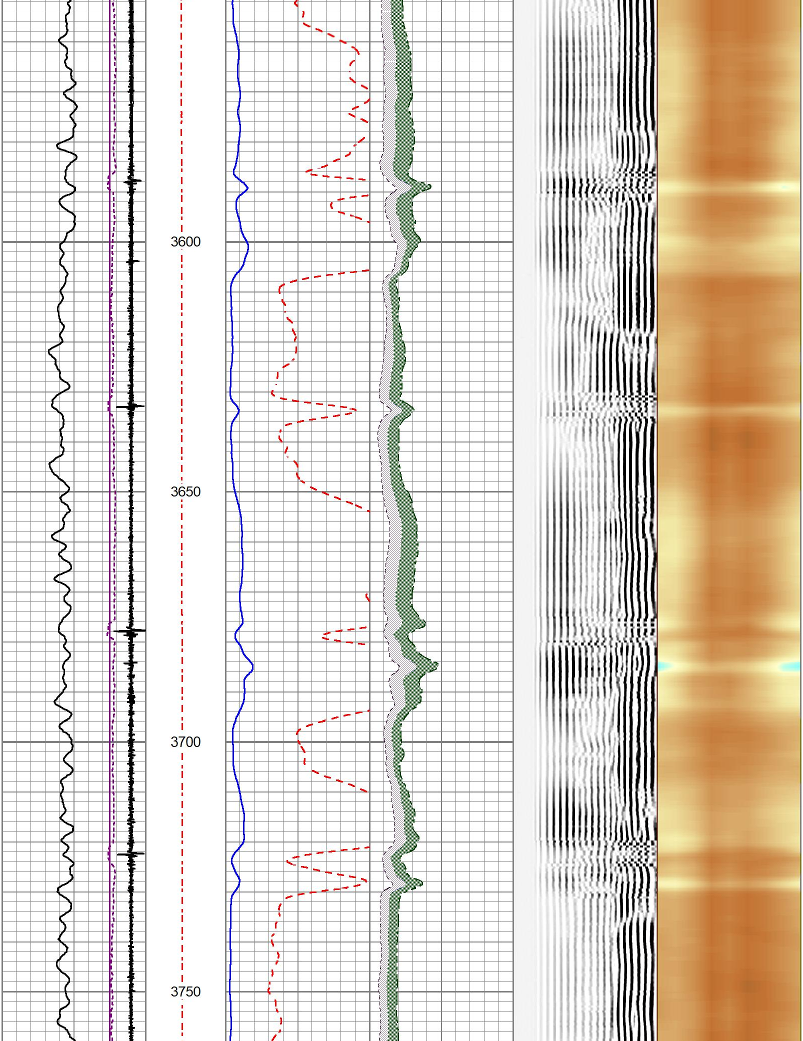


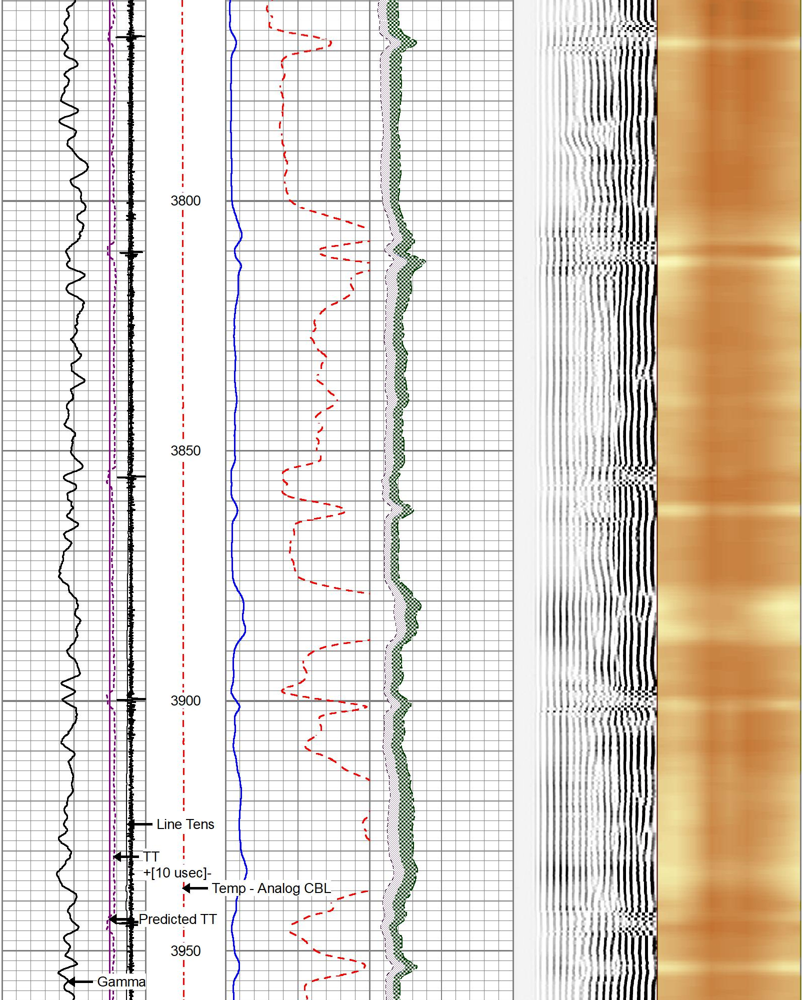


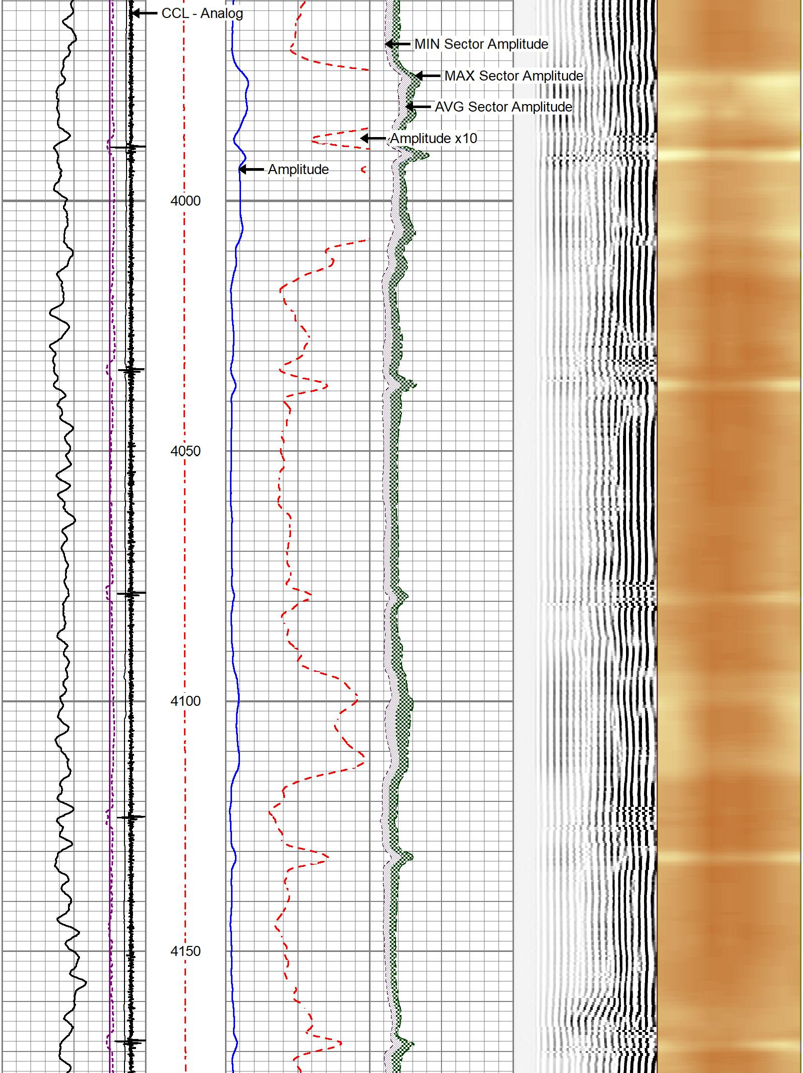


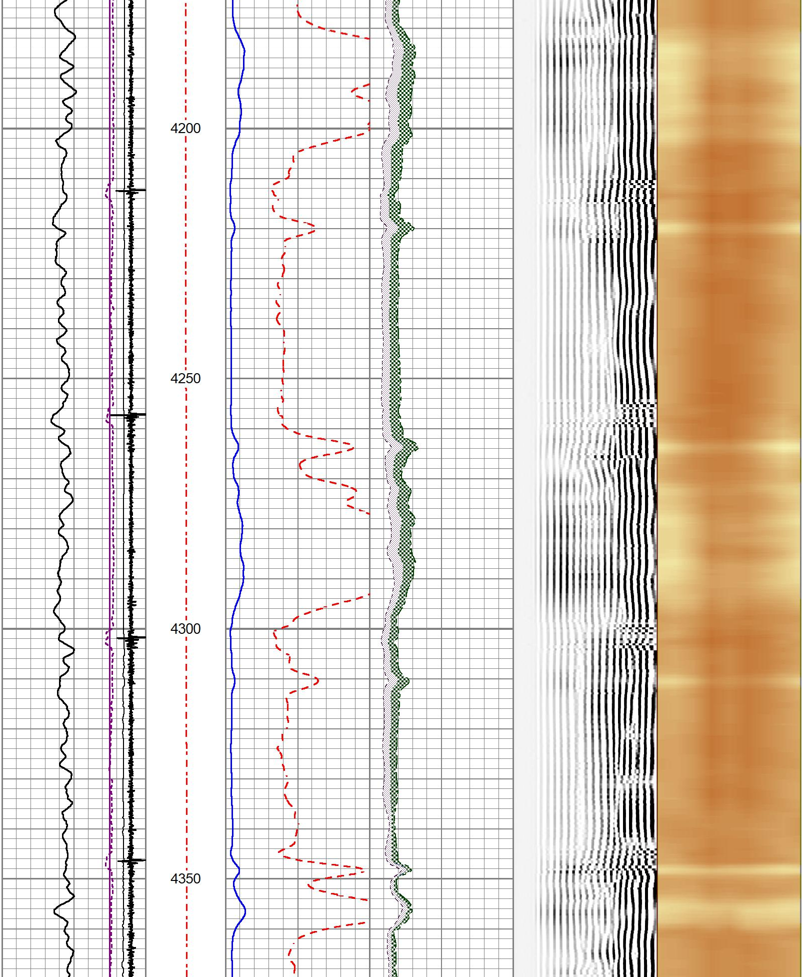


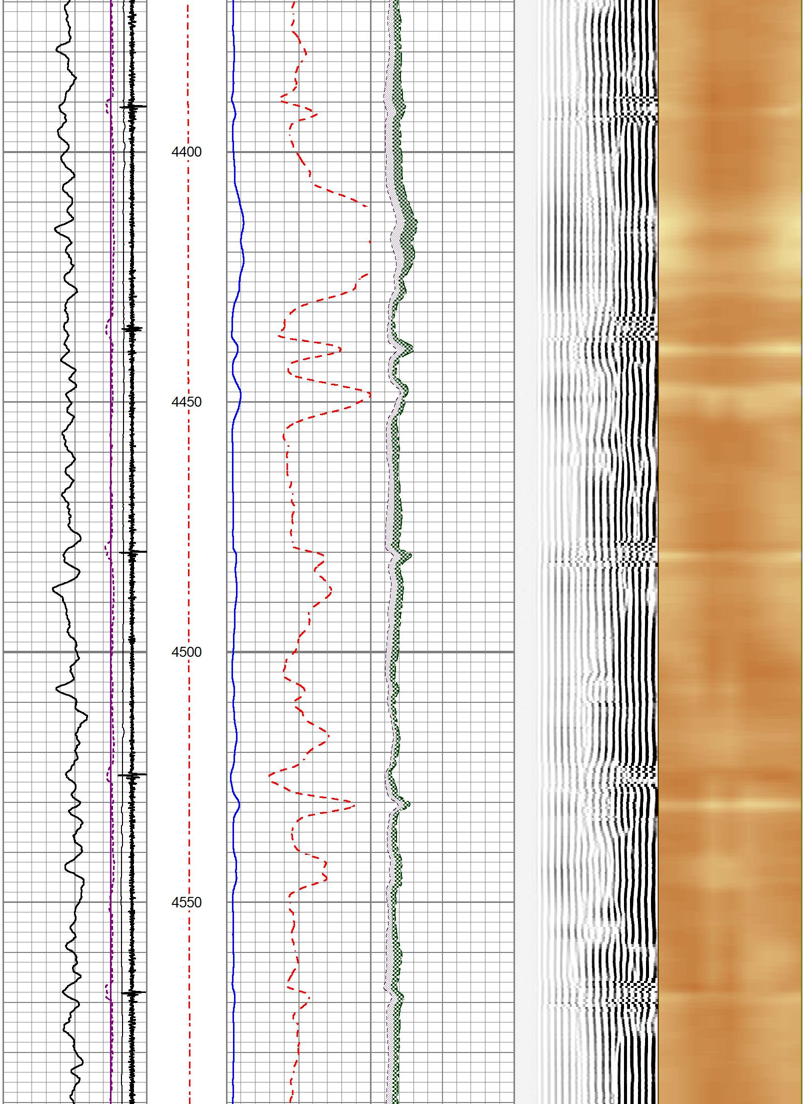


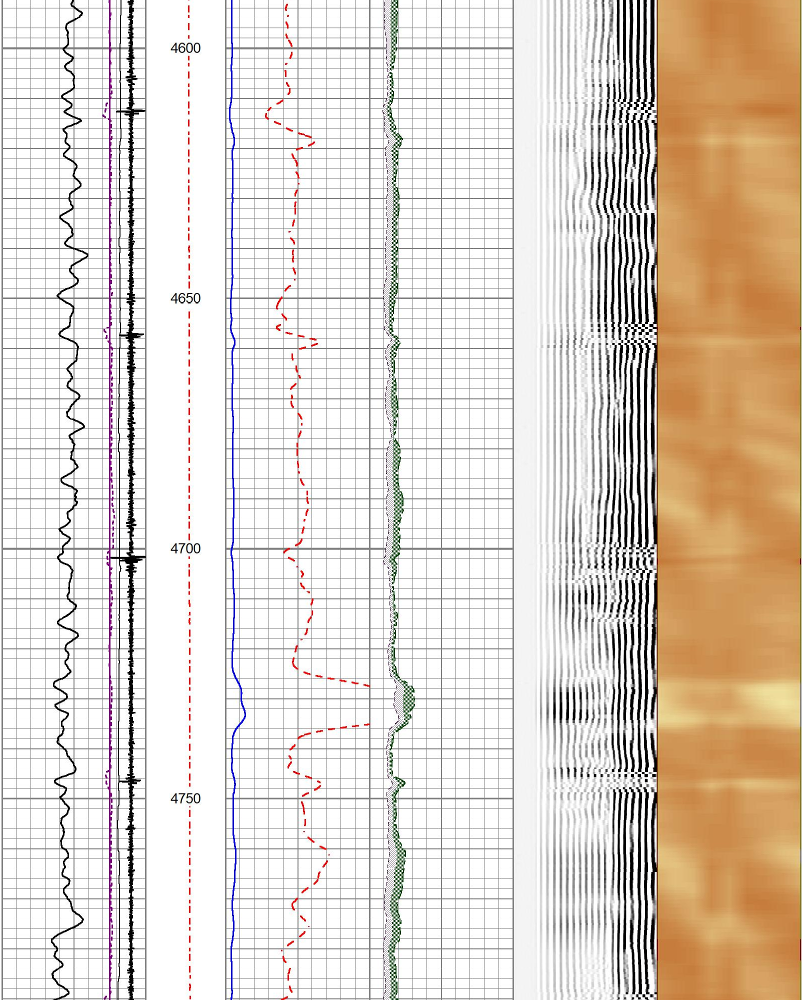


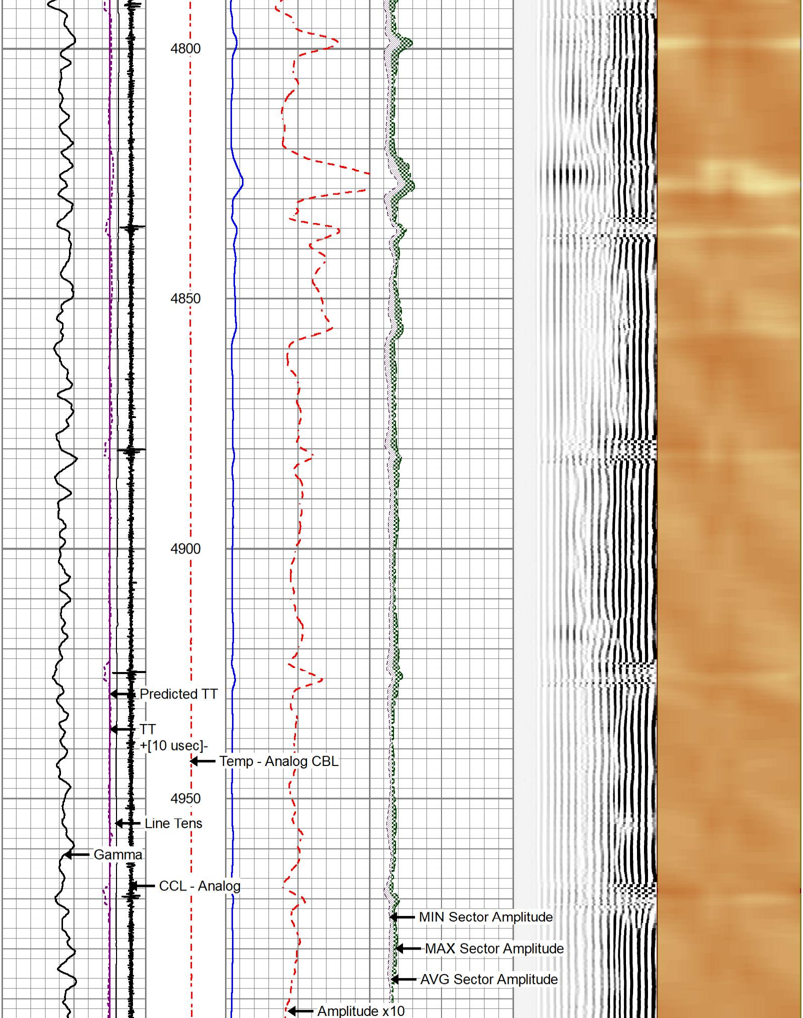


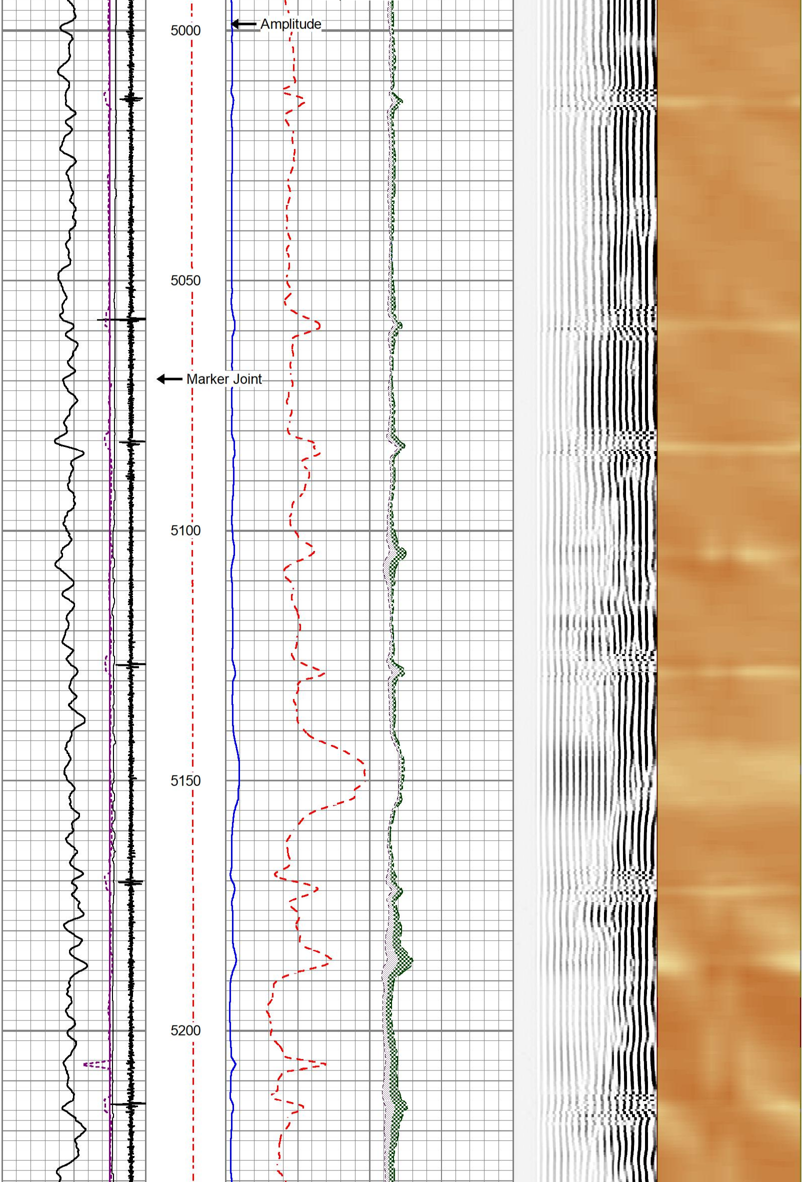


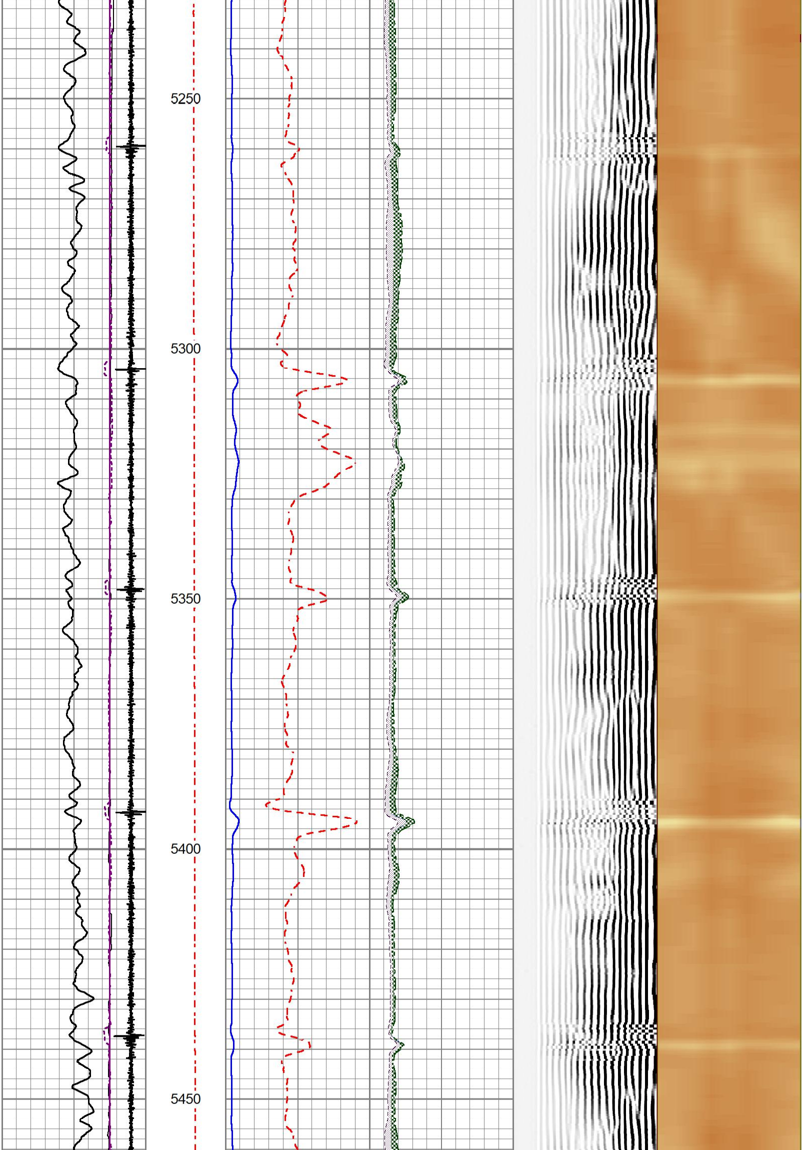


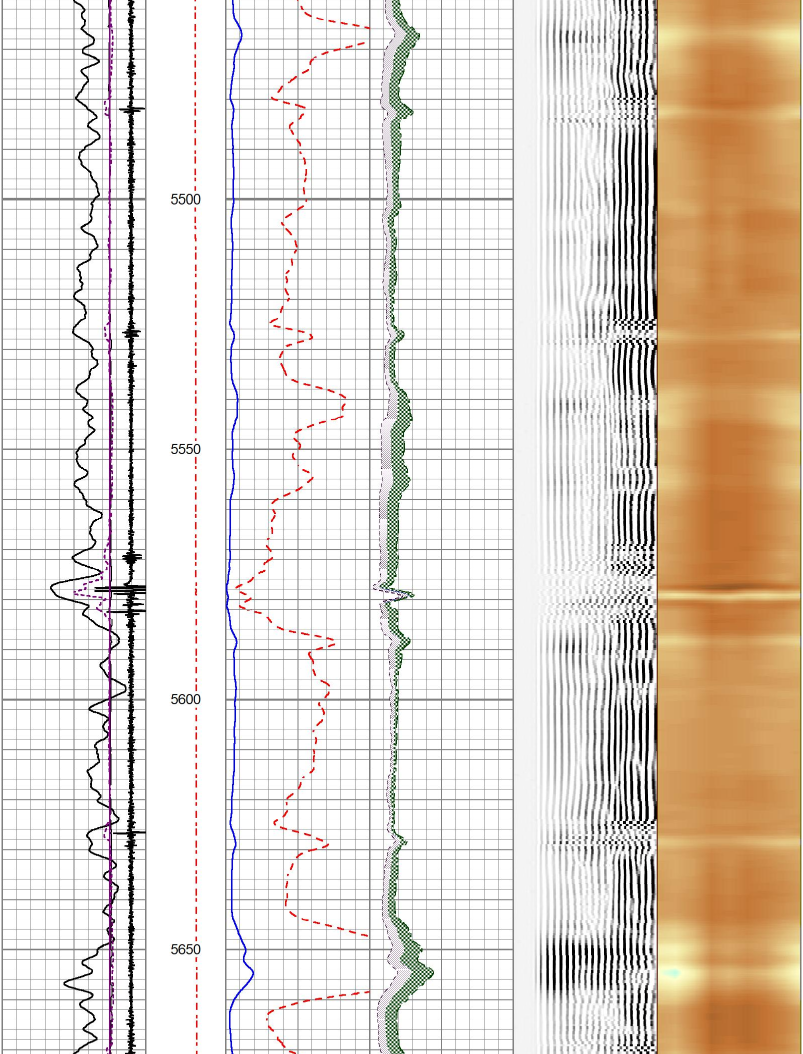


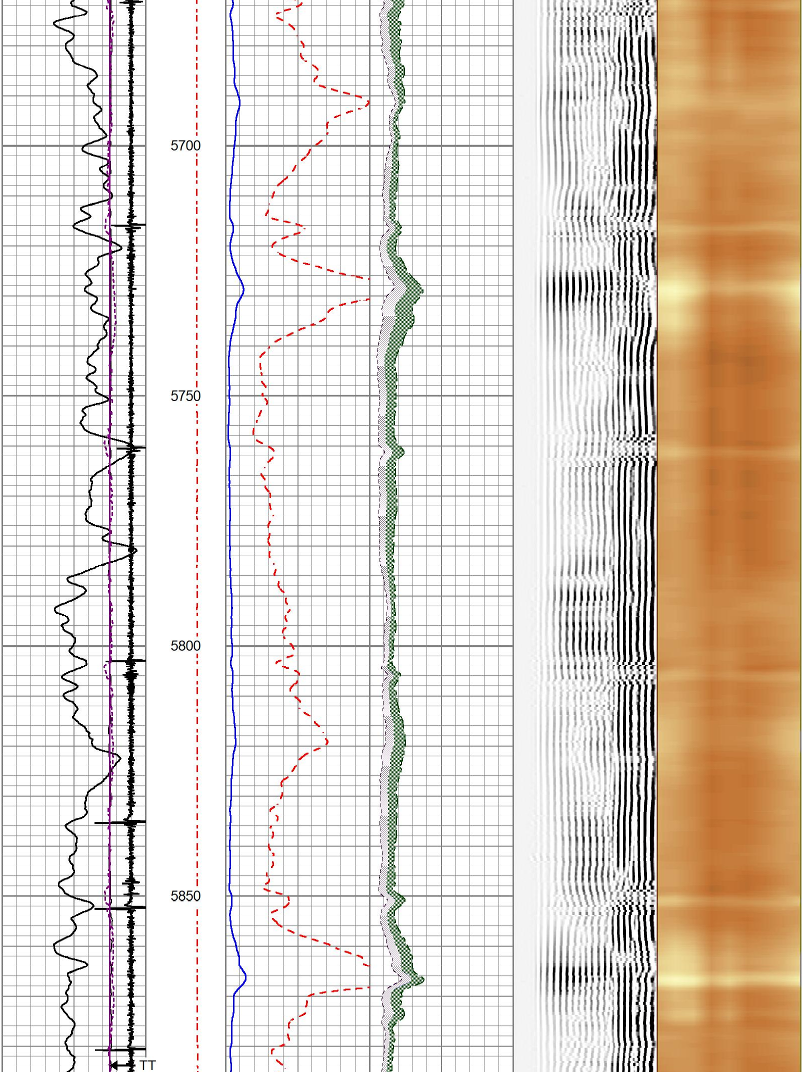


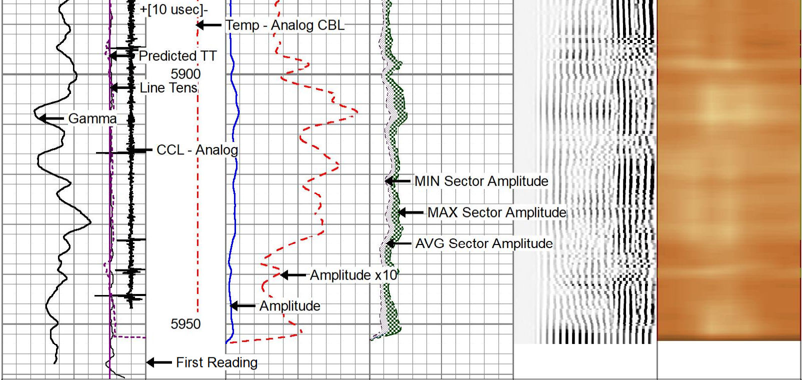












CCL - Analog Gamma 0 (GAPI) 200 300(Line Tens (lb) 0 Predicted TT TT +[10 usec]-	np - Analog C (degF) 0 300	0 Amplitude (mV)100 Amplitude x10 0 (mV) 10	AVG Sector Amplitude 0 100 MAX Sector Amplitude 0 100 MIN Sector Amplitude 0 100	Acoustic Waveform 200 1200	SECTORS 0 72

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MAIN PASS - Ran with 0 PSI

5 in / 100 ft

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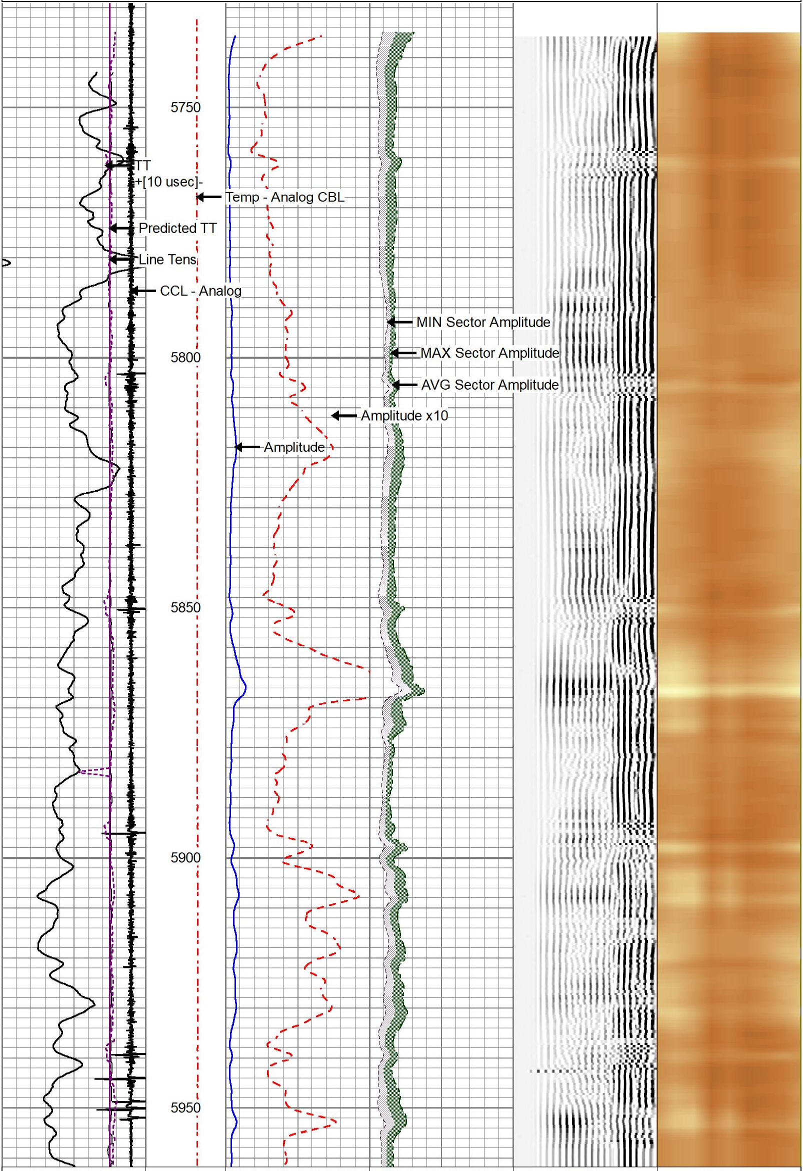
REPEAT PASS - Ran with 0 PSI

5 in / 100 ft

Database File	20180628_extraction_kennedy 1c_cbl\20180628_extraction_kennedy 1c_cbl.db
Dataset Pathname	pass2
Presentation Format	rcbl_8s
Dataset Creation	Thu Jun 28 18:44:05 2018
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 1200	SECTORS 0 72



CCL - Analog	np - Analog C	0 Amplitude (mV) 100	AVG Sector Amplitude	Acoustic Waveform	SECTORS
Gamma	(degF)	Amplitude x10	0 100	200 1200	0 72
0 (GAPI) 200	0 300	0 (mV) 10	MAX Sector Amplitude		
300(Line Tens (lb) 0			0 100		
Predicted TT			MIN Sector Amplitude		
			0 100		
TT +[10 usec]-					

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REPEAT PASS - Ran with 0 PSI

5 in / 100 ft

Calibration Report

Database File	c:\programdata\warrior\data\20180628_extraction_kennedy 1c_cbl\20180628_extraction_kennedy 1c_cbl.d
Dataset Pathname	pass3
Dataset Creation	Thu Jun 28 18:49:27 2018

Gamma Ray Calibration Report

Serial Number:	IXEM9-02	
Tool Model:	2 3/4" TekCo	
Performed:	Tue Dec 13 00:09:12 2016	
Calibrator Value:	194.0	GAPI
Background Reading:	65.6	cps
Calibrator Reading:	360.4	cps
Sensitivity:	0.6580	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'	0.013	1.360	0.000	72.000	53.423	-0.670
CAL	0.000	0.750				
5'	0.009	1.726	0.000	72.000	41.933	-0.363
SUM						
S1	0.015	1.326	0.000	72.000	54.958	-0.847
S2	0.016	1.442	0.000	72.000	50.505	-0.814
S3	0.017	1.592	0.000	72.000	45.715	-0.777
S4	0.017	1.686	0.000	72.000	43.154	-0.739
S5	0.018	1.689	0.000	72.000	43.085	-0.758
S6	0.015	1.479	0.000	72.000	49.162	-0.725
S7	0.013	1.294	0.000	72.000	56.226	-0.744
S8	0.014	1.219	0.000	72.000	59.752	-0.811

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:

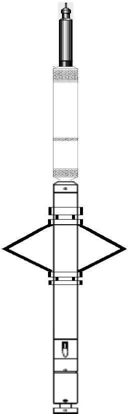
	Raw (v)	Calibrated (v)	Results
	Zero	Zero	Offset
3'	0.000	0.000	0.000
5'	0.000	0.000	0.000
SUM			
S1	0.000	0.000	0.000
S2	0.000	0.000	0.000
S3	0.000	0.000	0.000
S4	0.000	0.000	0.000
S5	0.000	0.000	0.000
S6	0.000	0.000	0.000
S7	0.000	0.000	0.000
S8	0.000	0.000	0.000

Temperature Calibration Report

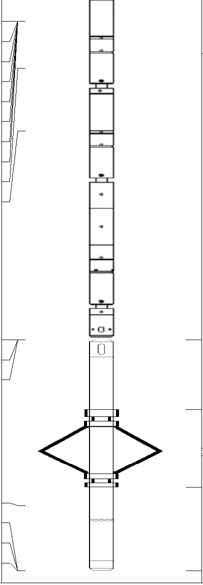
Serial Number:	IPPO2-01
Tool Model:	2 3/4" RIB Analog
Performed:	Fri Aug 26 11:07:15 2016

	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	13.50		CCL_Log-2 3/4" TekCo (IPSN7-03)	1.83	2.75	33.00
			Antelope-Overbody	1.25	2.75	
TEMP	10.05					

WVFS8	8.76
WVFS7	8.76
WVFS6	8.76
WVFS5	8.76
WVFS4	8.76
WVFS3	8.76
WVFS2	8.76
WVFS1	8.76
WVF3FT	8.01
WVF5FT	7.01
WVFSYNC	3.68
WVFTEMP	3.68
WVFCAL	3.68
GR	1.04
LOCTIM	0.00
UTCTIM	0.00
PMON	0.00



RBTA-2 3/4" RIB Analog (IPPO2-01)	9.13	2.75	102.00
Antelope-Overbody	1.25	2.75	
GR_Log-2 3/4" TekCo (IXEM9-02)	3.68	2.75	47.00

Dataset:	20180628_extraction_kennedy 1c_cbl.db: field/well/run1/pass3
Total length:	15.67 ft
Total weight:	185.60 lb
O.D.:	2.75 in

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Company	Extraction Oil & Gas LLC
Well	Kennedy 1C
Field	Wattenberg
County	Weld
State	Colorado
Country	U.S.A.