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CEMENT BOND LOG

Company	Extraction Oil and Gas, Inc
Well	Coyote Trails 33S-20-3N
Field	Wattenberg
County	Weld
State	Colorado

Company Extraction Oil and Gas, Inc
Well Coyote Trails 33S-20-3N
Field Wattenberg
County Weld State Colorado

API # : 33 123 45988
Location: SW/SE
1148 FSL
2265 FEL

Other Services

SEC: 28 TWP: 1N RGE: 68W

Elevation
K.B. 5297
D.F. 5296
G.L. 5272

Permanent Datum: Ground LEvel Elevation: 5272
Log Measured From: Kelly Bushing , 25 ft. above Permanent Datum.
Drilling Measured From: Kelly Bushing

Date	05 March 2019
Run Number	One
Plug Back T.D. Driller	----
Plug Back T.D. Logger	----
Bottom Logged Interval	8170
Top Log Interval	Surface
Type Fluid	Water
Density / Viscosity	----
Max. Recorded Temp.	242
Time Logger on Bottom	09:00
Equipment Number	GD114
Location	Casper
Recorded By	GS Yarbro
Witnessed By	MR. Torres MR. Stephens

Casing Record

Size	Weight	From	To
9 5/8	36	25	----
5 1/2	20	25	----

Tubing Record

Size	Weight	From	To

<<< 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 # : RM0319PCBW235
Your Crew Today: Enloe, Enlsey
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	170
40 % Bond	170
60 % Bond	190
80 % Bond	230
100 % Bond	1460

Comments

Estimated Top of Cement
(40% Bond Index) @ 170

Thank you for using Gyrodata
Eric Regnier: Rocky Mountain Wireline Manager EricR@Gyrodata.com

Log Variables

Databased:\warrior\data\20180305_extraction_coyete trails 33s-20-3n_cbl\20180305_extraction_co
Dataset field/well/run1/pass3.1/_vars_

Top - Bottom

BHTEMP_Src	BOREID in	BOTTEMP degF	CASEOD in	CASETHCK in	CASEWGHT lb/ft	MAXAMPL mV	MaxAPIID in
TEMP	8.5	100	5.5	0.361	20	71.9	4.923

MINAMPL mV	MinAPIID in	MINATTN db/ft	PPT usec	TDEPTH ft
2.1	4.751	0	237	0

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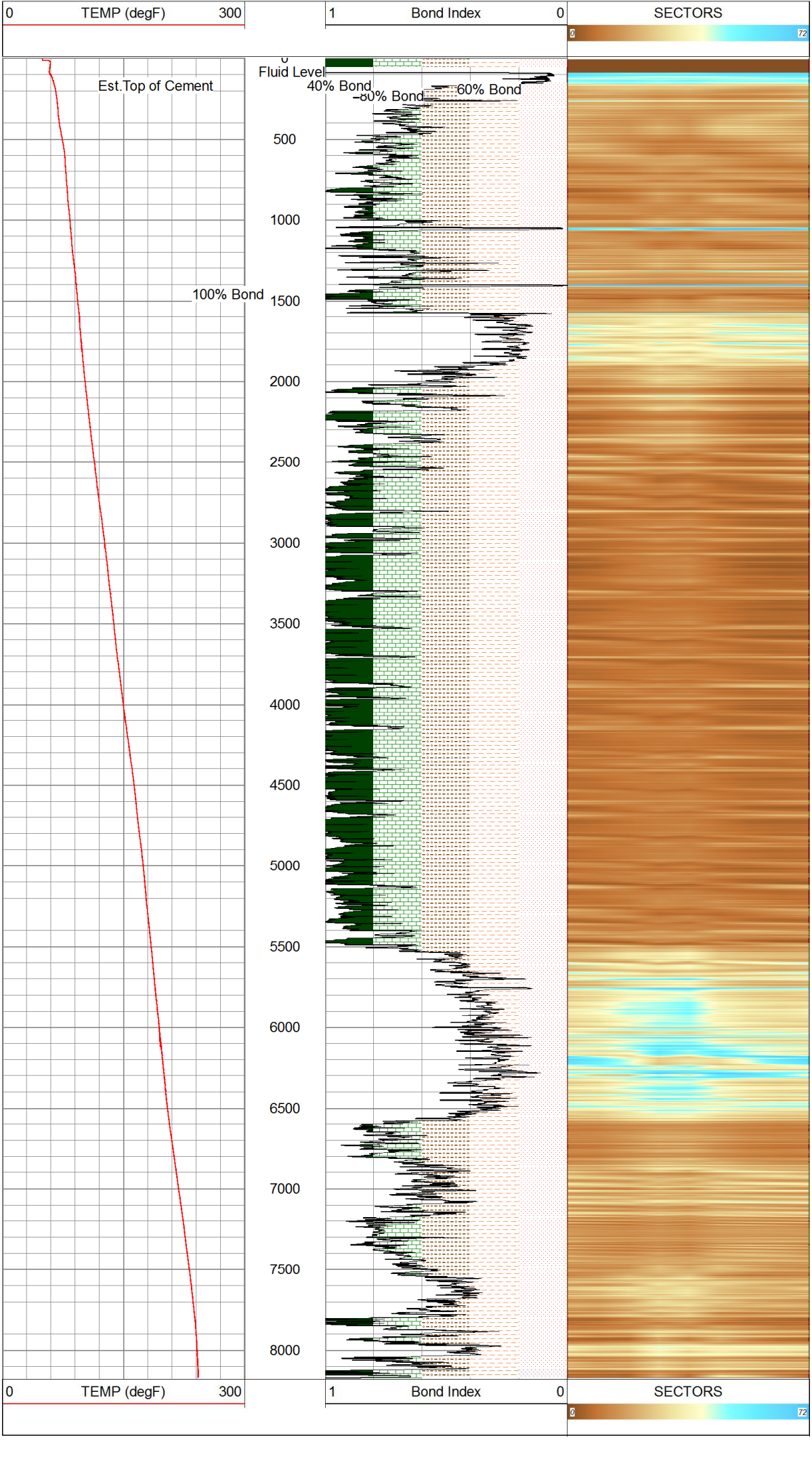
BOND INDEX

Calculated for 3000 PSI Compressive Strength Cement

Database File 20180305_extraction_coyete trails 33s-20-3n_cbl\20180305_extraction_coyete trails 33s-20-3n_cbl.db
Dataset Pathname BndIndx
Presentation Format BNDIND~1
Dataset Creation Tue Mar 05 10:51:22 2019
Charted by Depth in Feet scaled 1:7500



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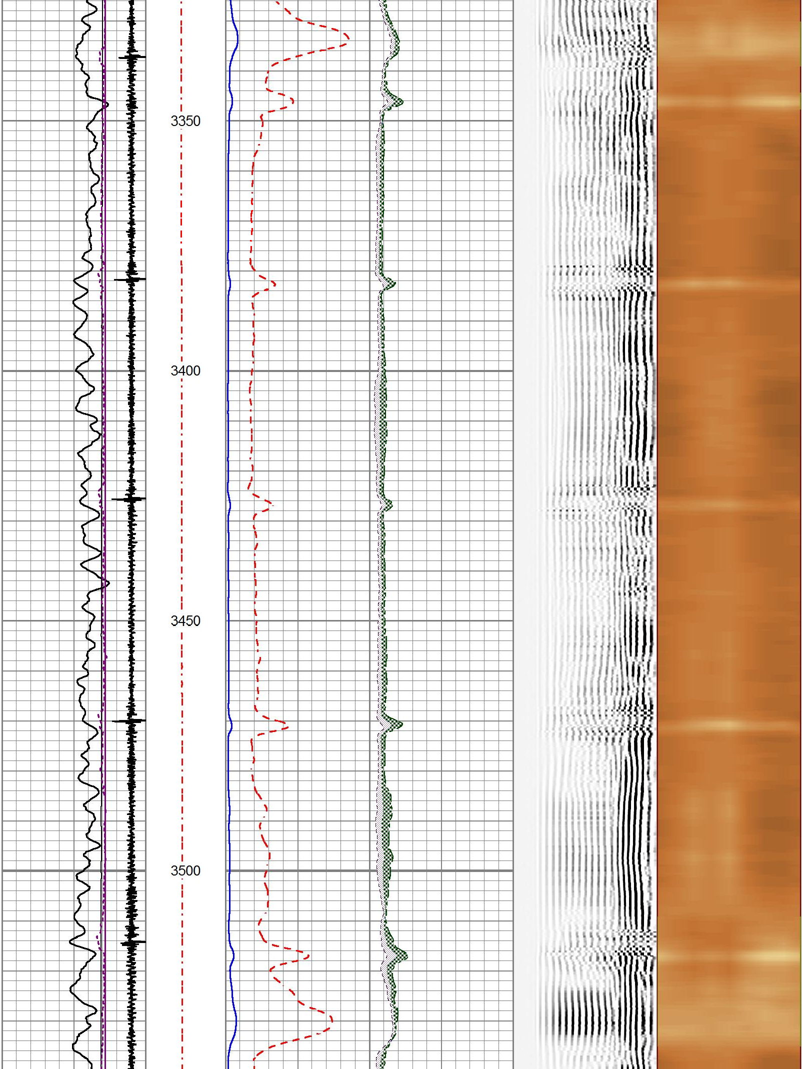
MAIN PASS - Ran with 0 PSI

5 in / 100 ft

Database File 20180305_extraction_coyete trails 33s-20-3n_cbl\20180305_extraction_coyete trails 33s-20-3n_cbl.db
Dataset Pathname pass3.1
Presentation Format rcbl_8s
Dataset Creation Tue Mar 05 10:44:19 2019
Charted by Depth in Feet scaled 1:240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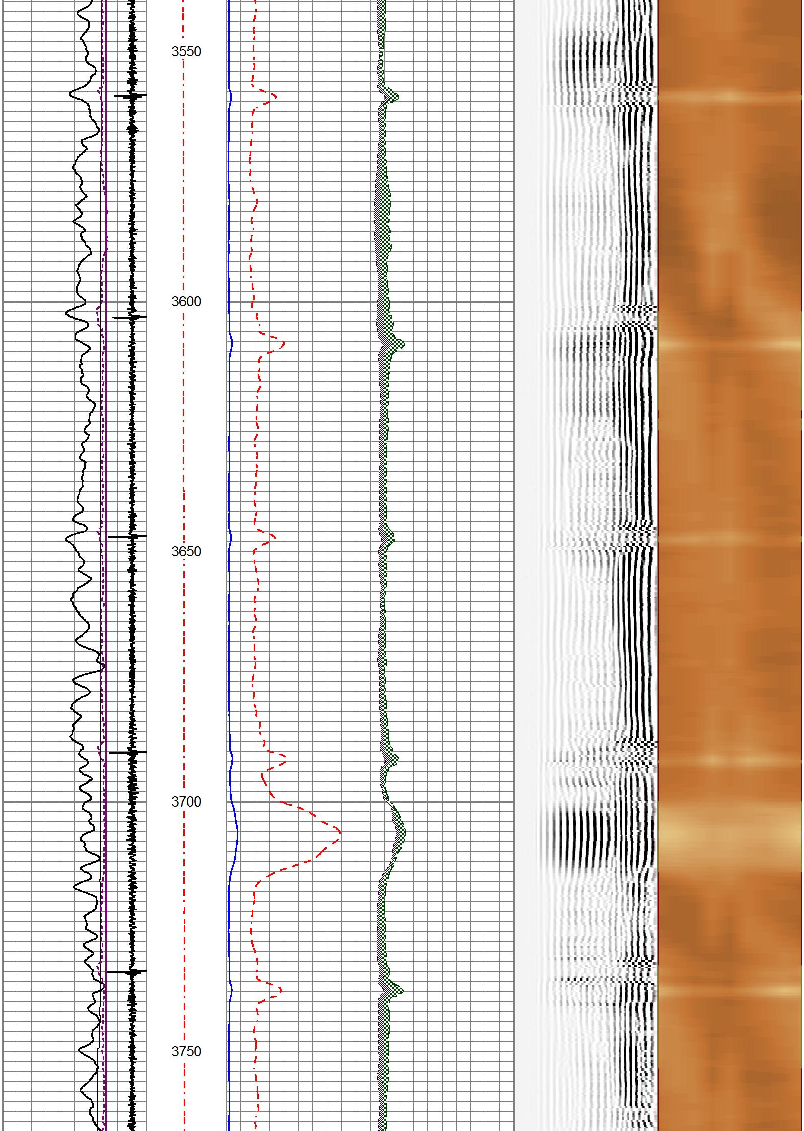
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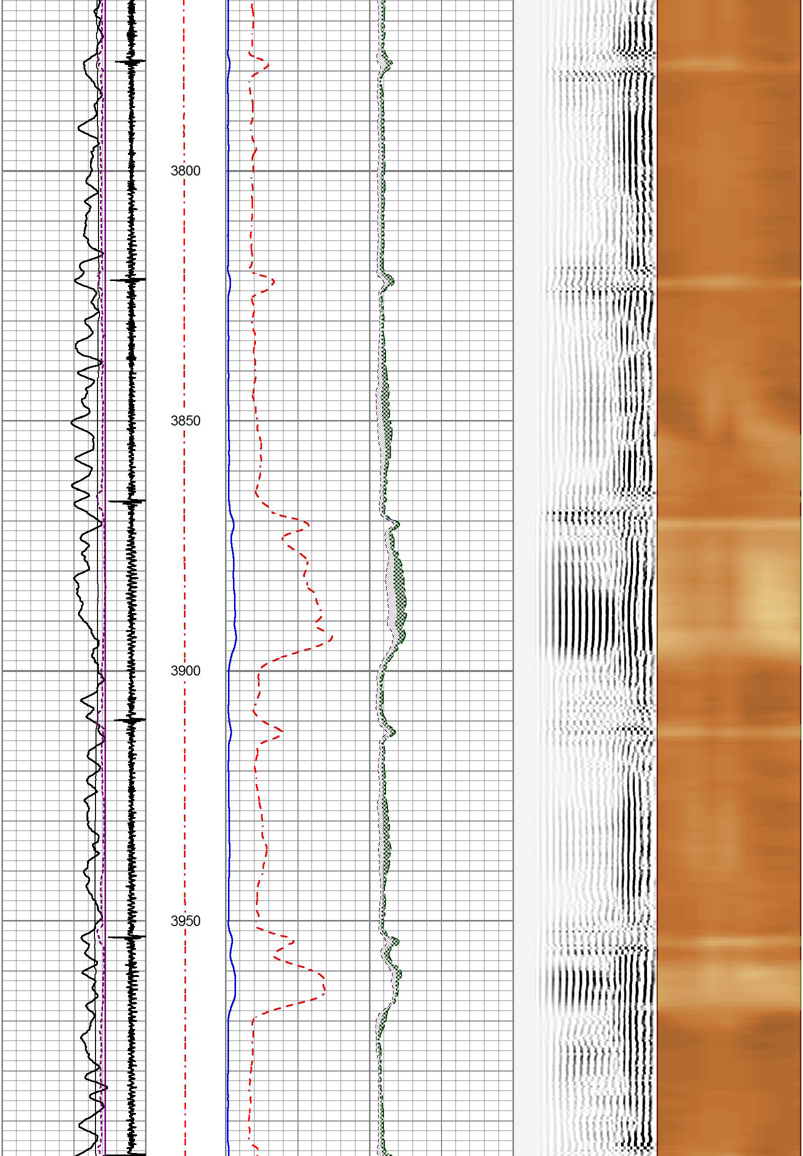
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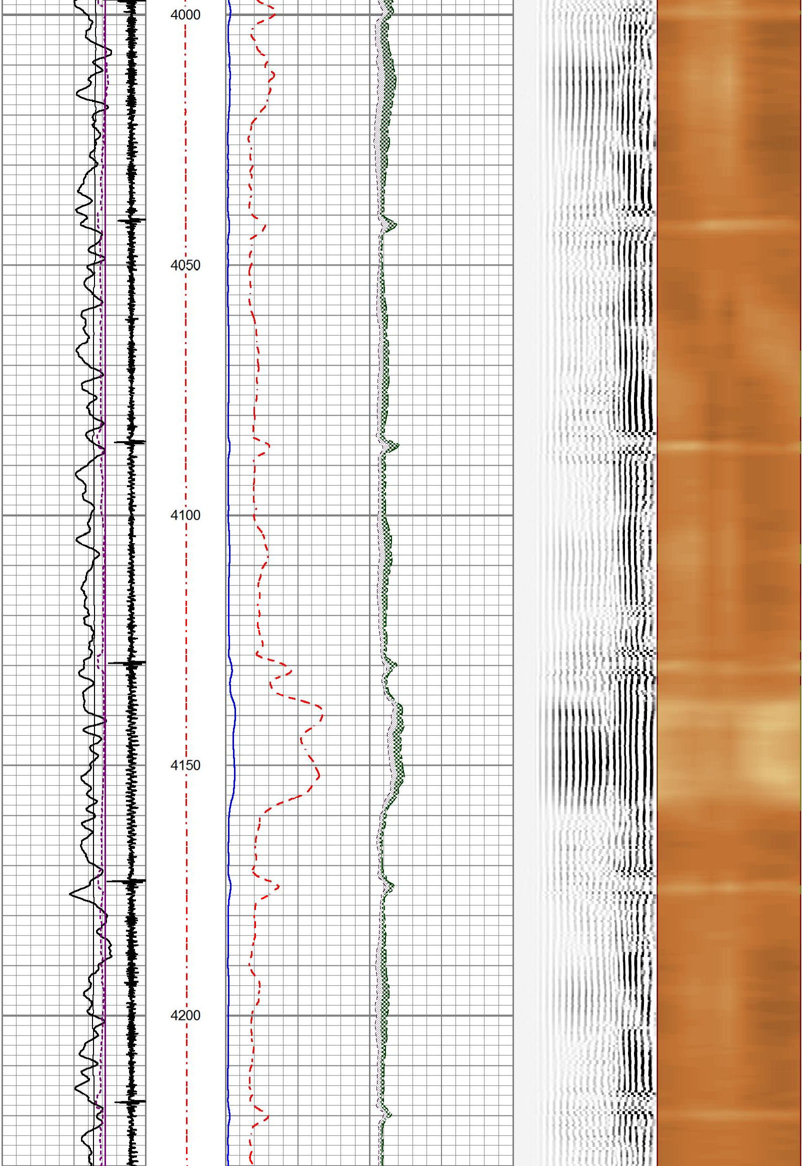
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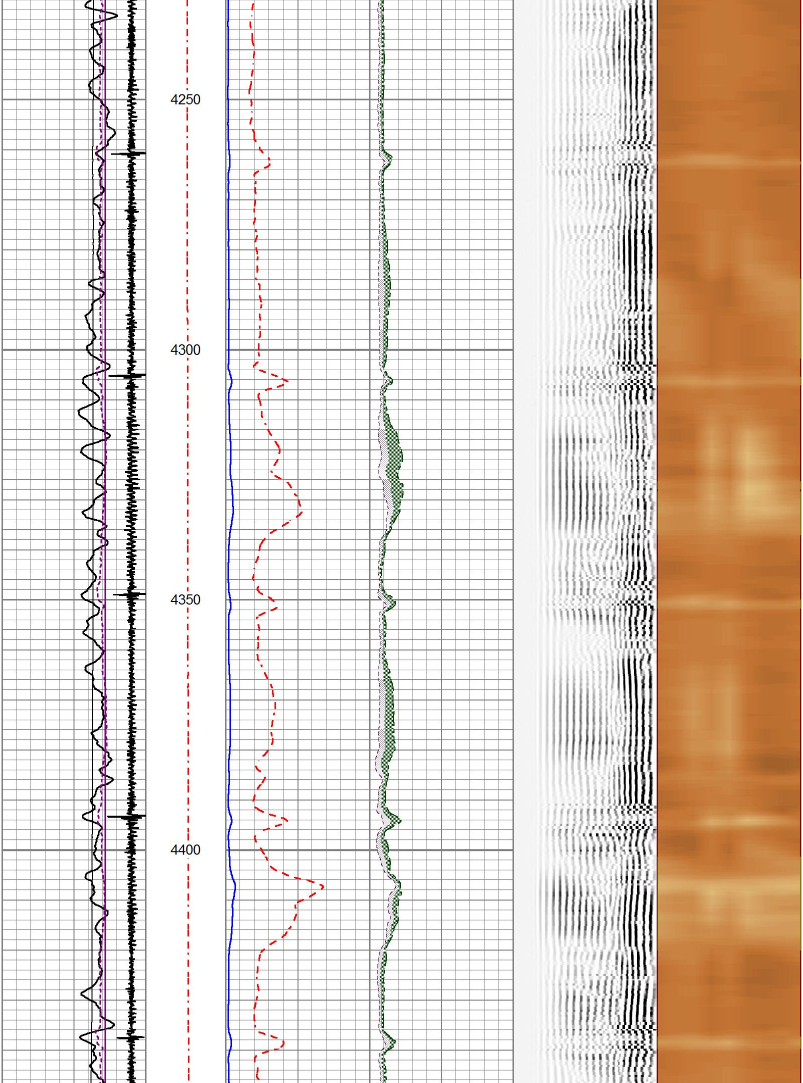
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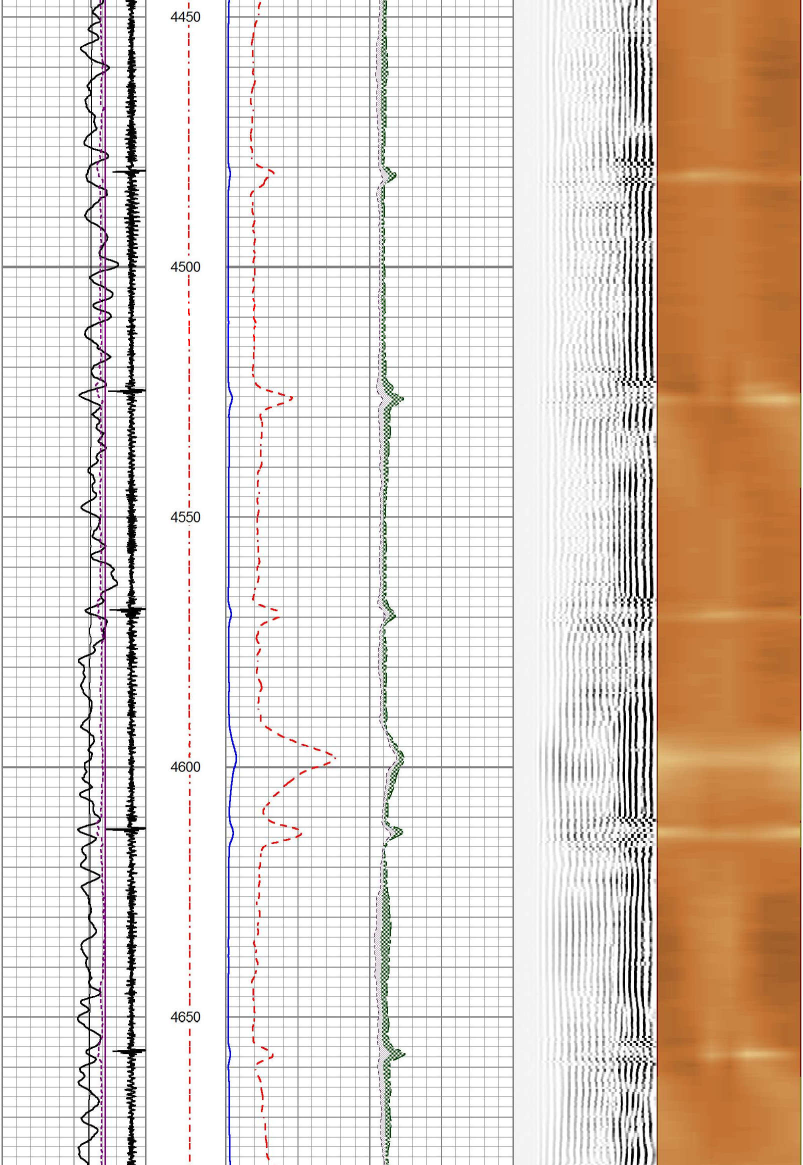
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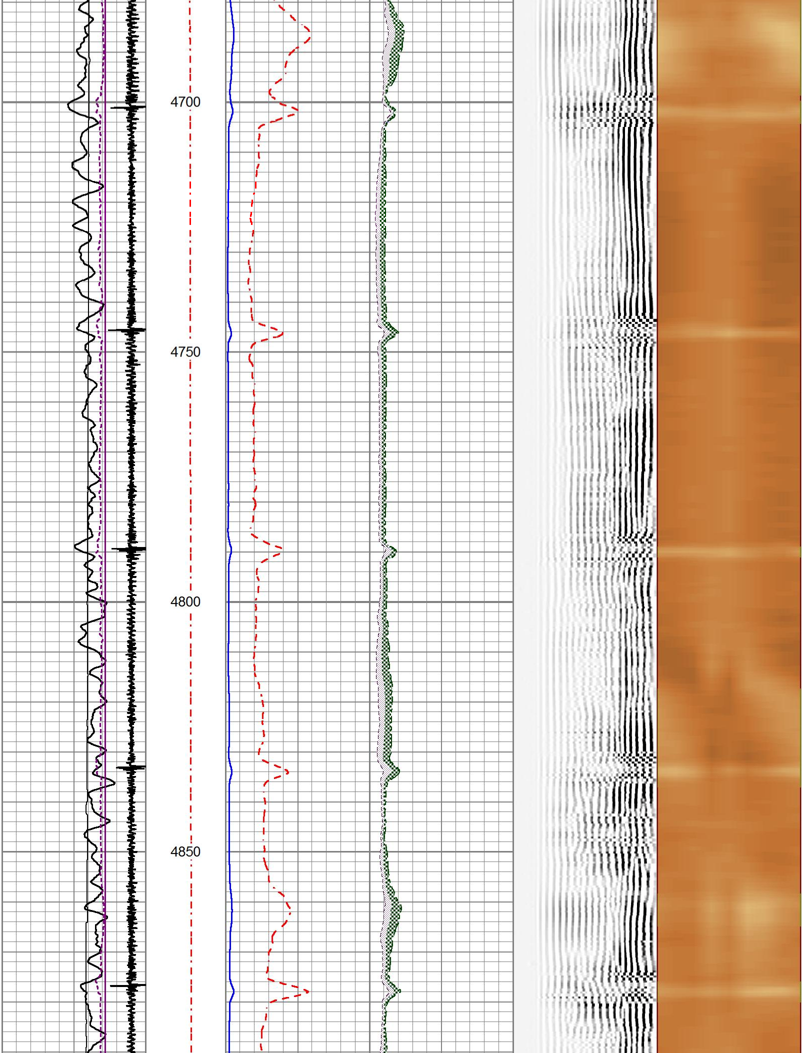
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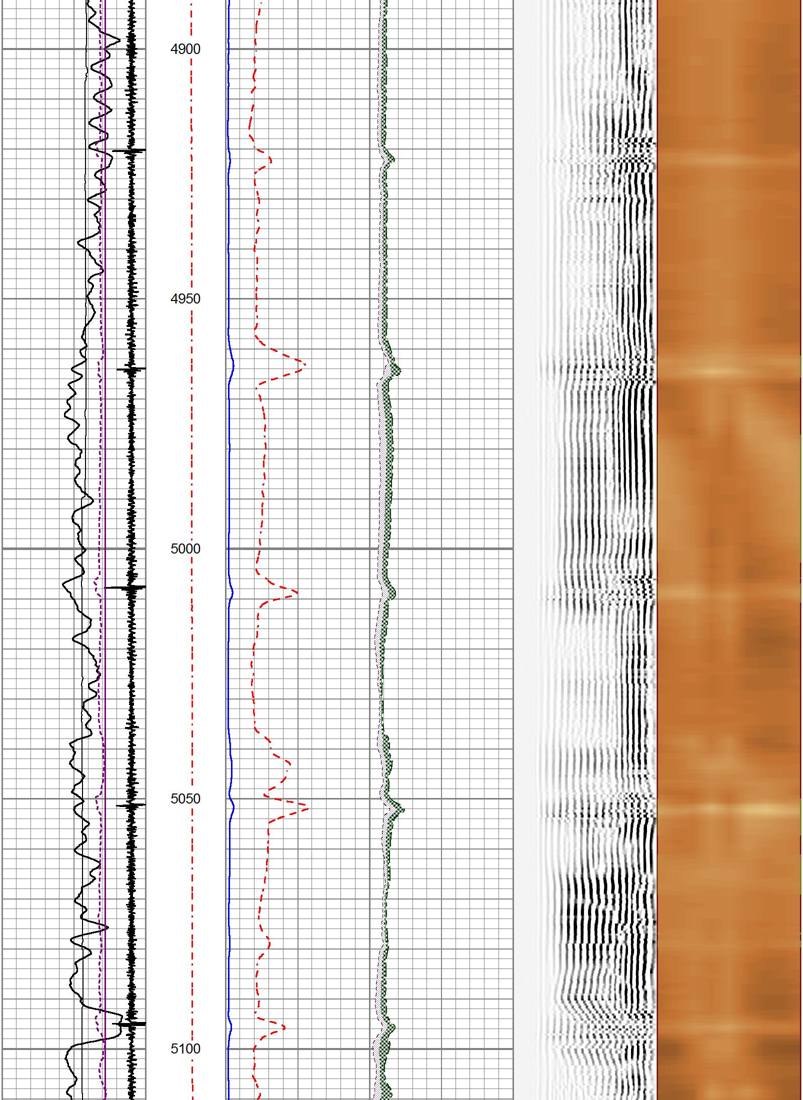

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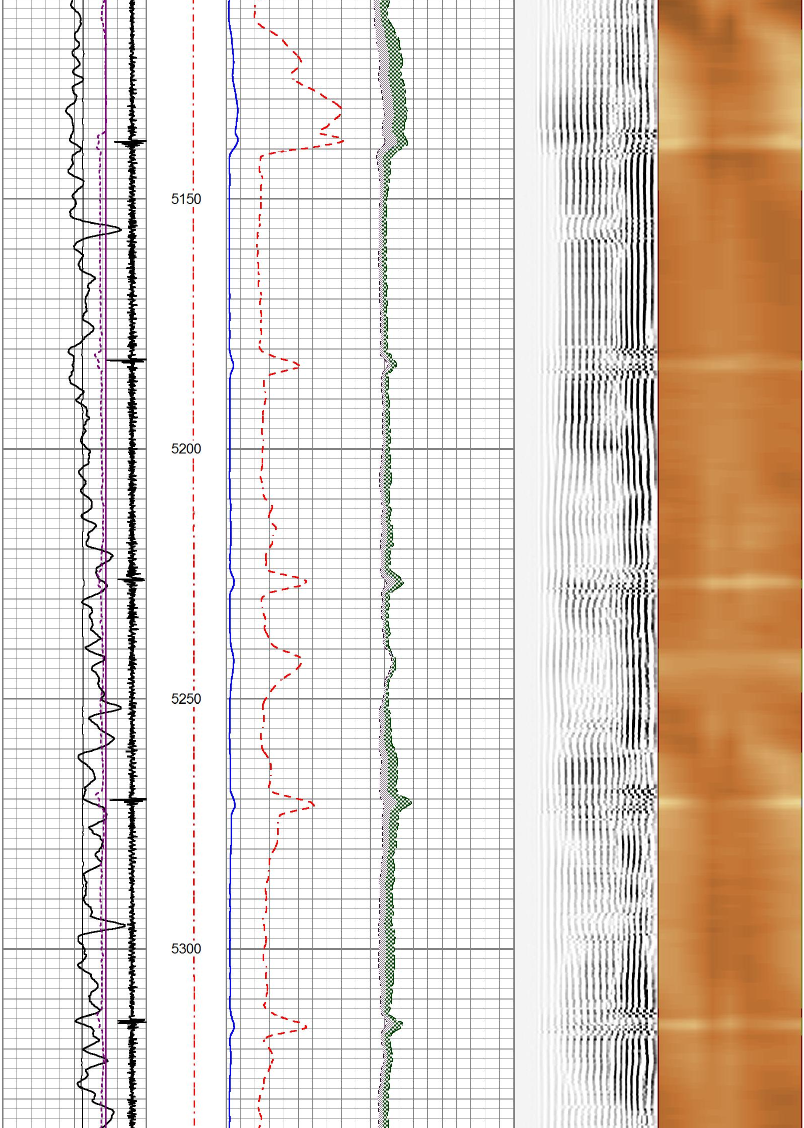
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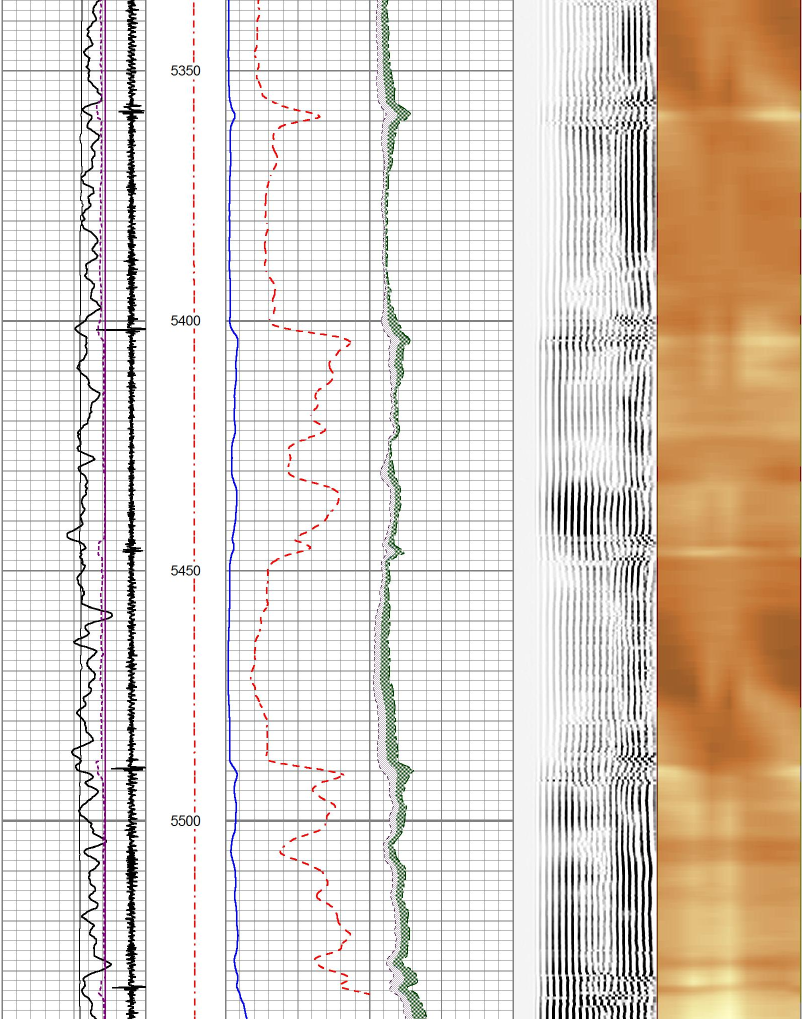
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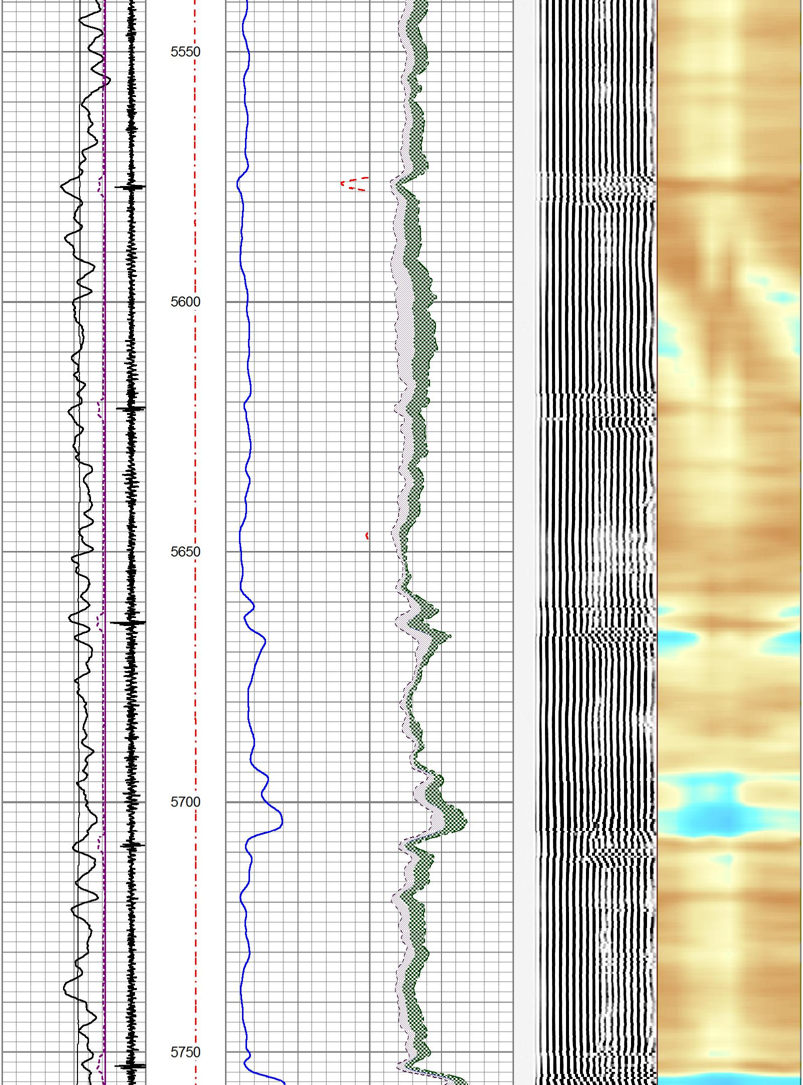
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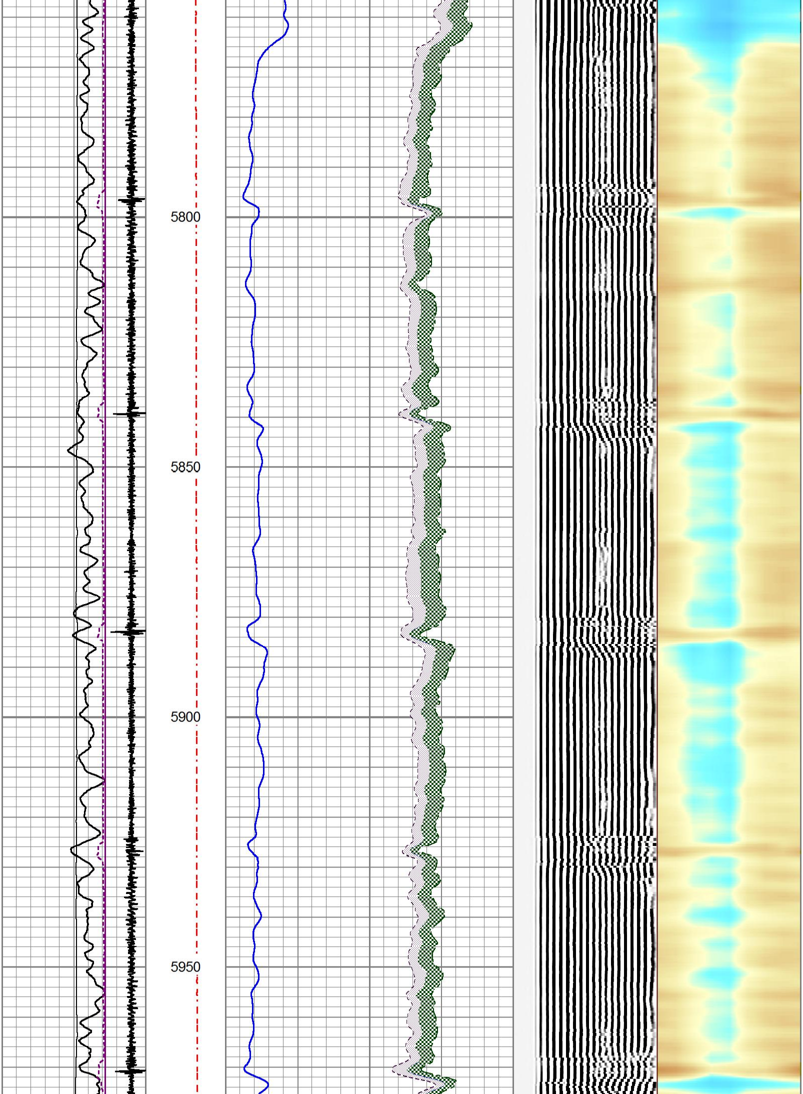
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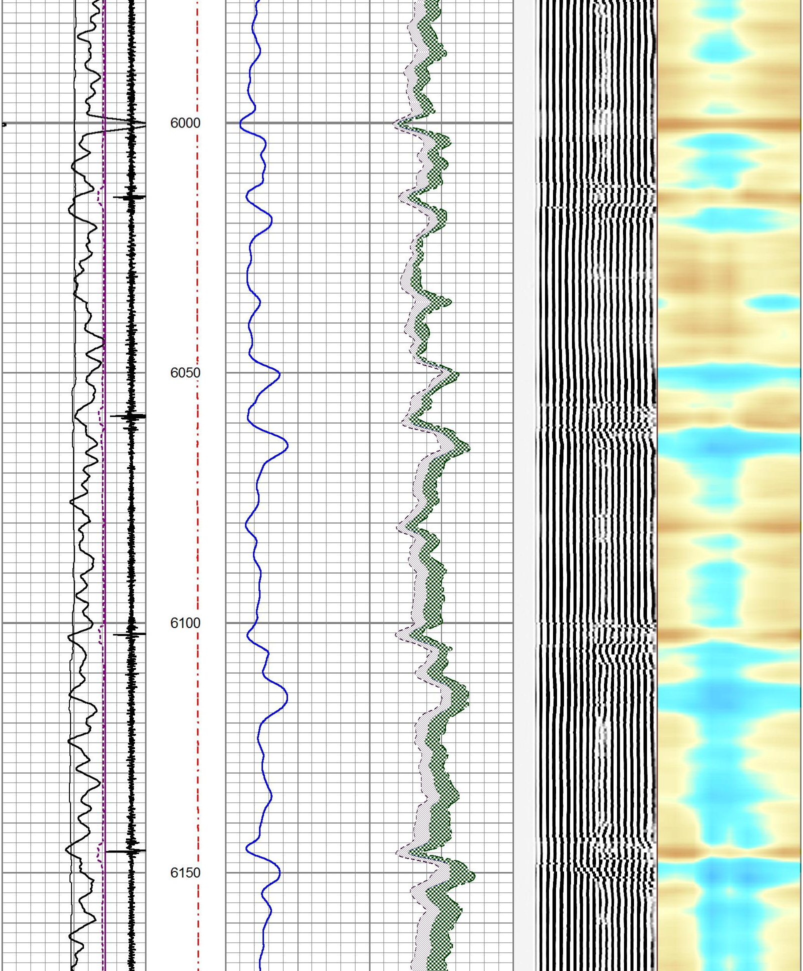
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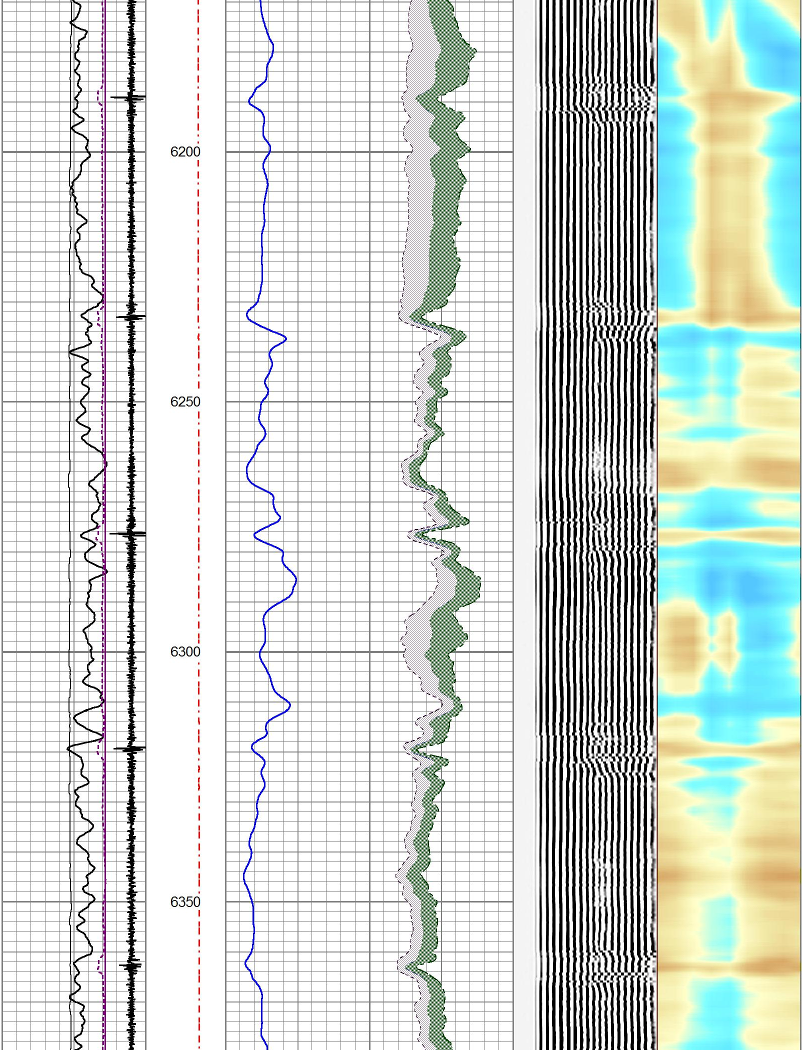
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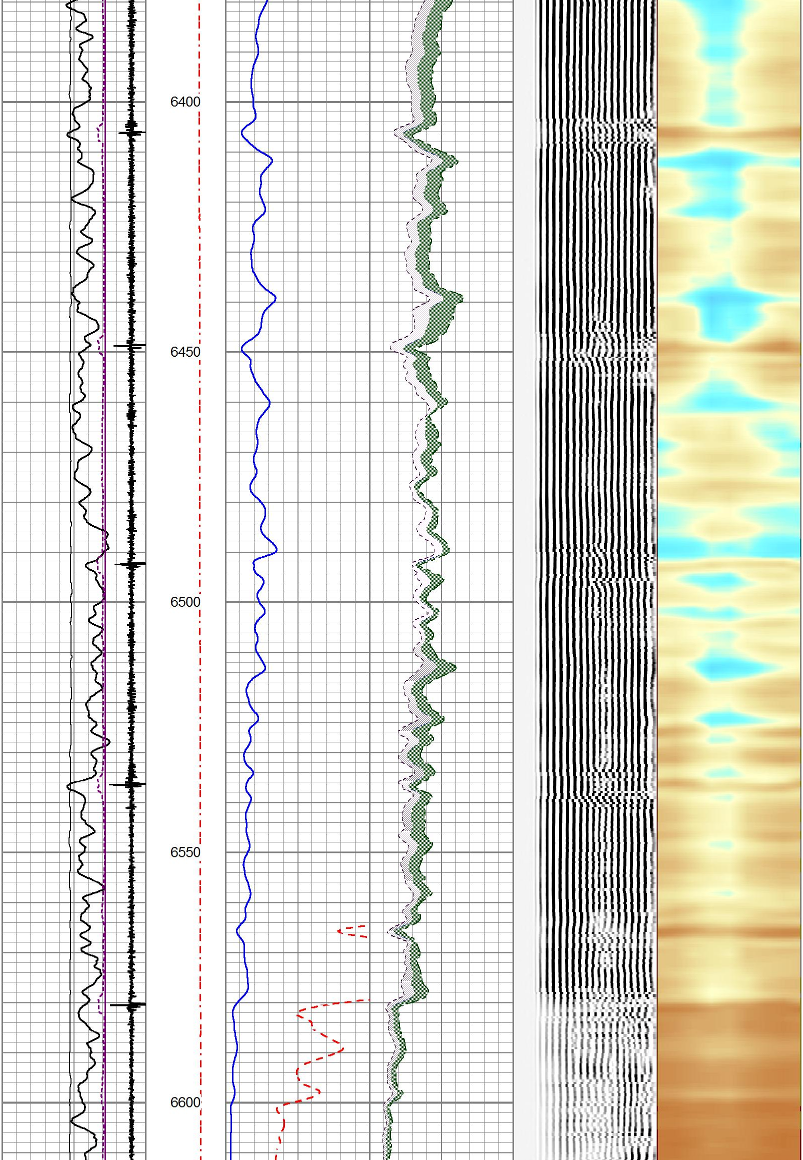
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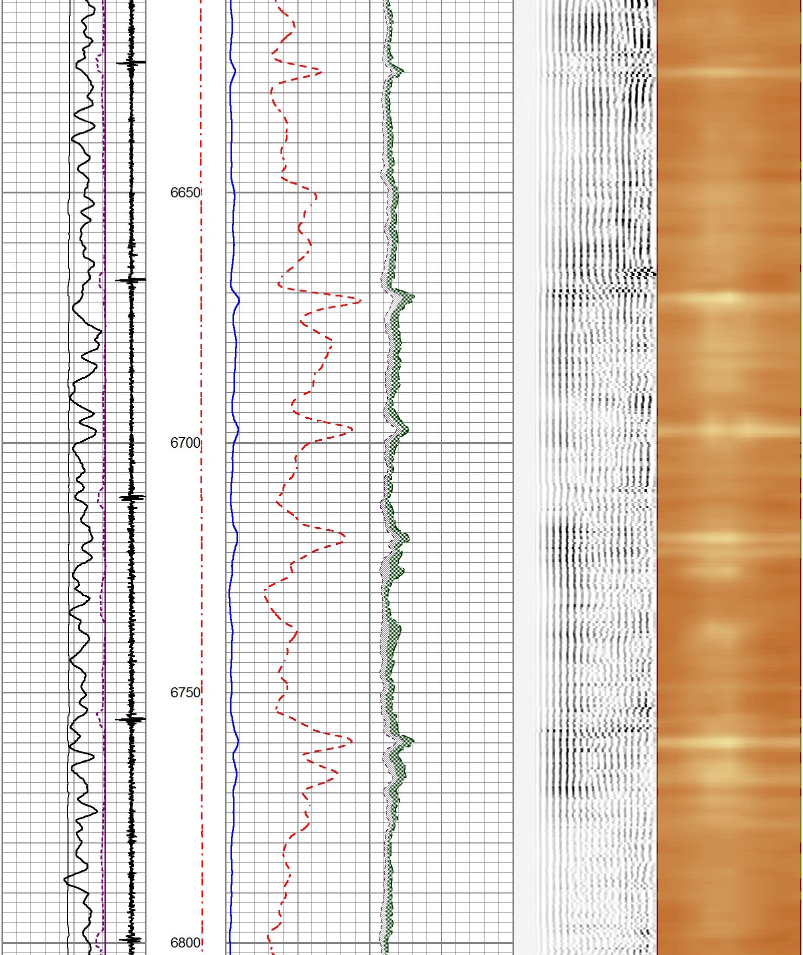
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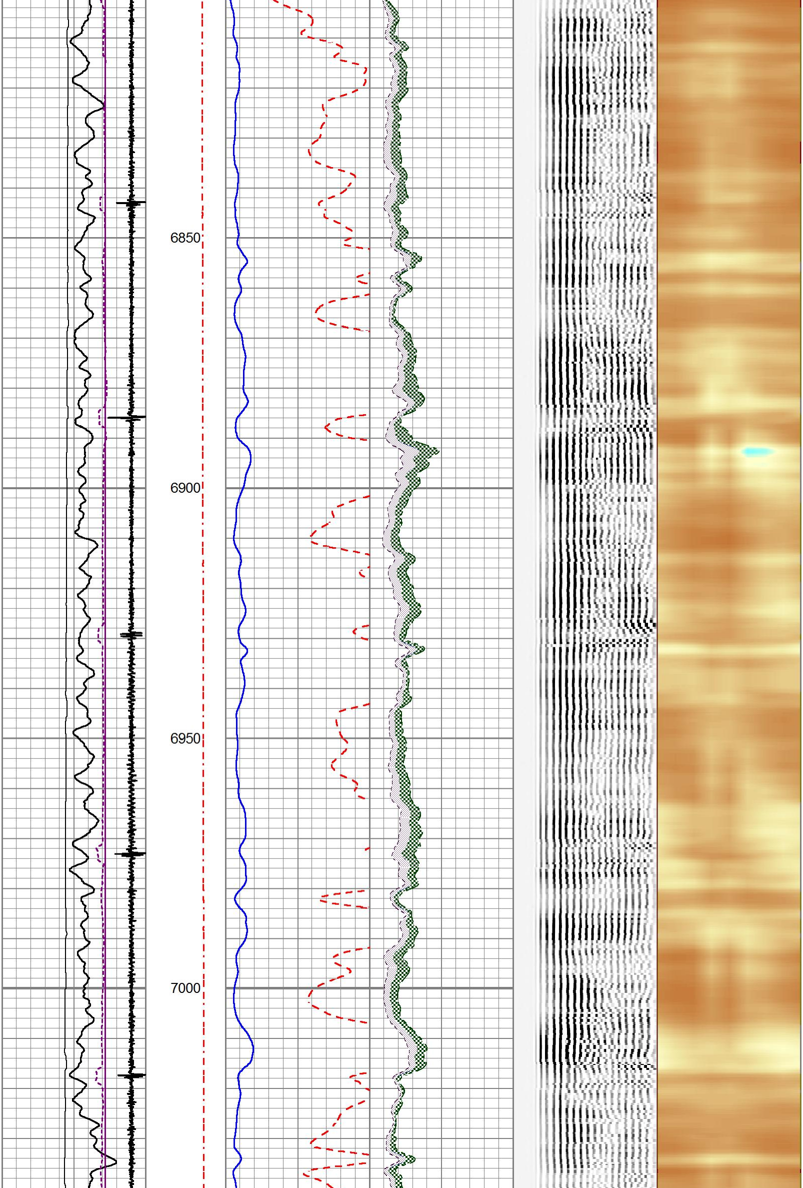
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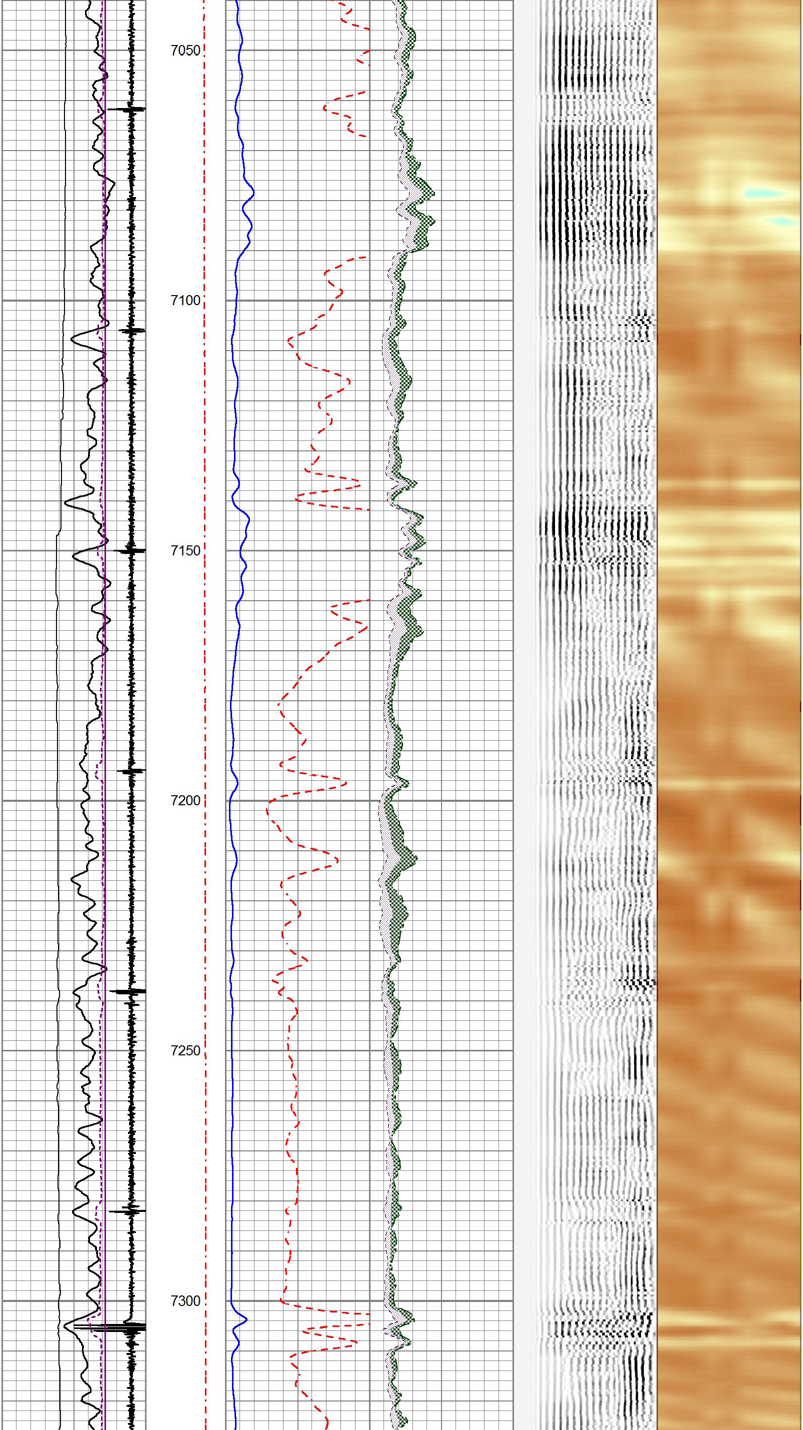
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7100
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7300

CCL | np - Analog C | 0 Amplitude (mV)100 | AVG Sector Amplitude | Acoustic Waveform | SECTORS

Gamma | (degF) | Amplitude x10 | 0 100 | 200 (usec) 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

TT +[10 usec]- | 0 100

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REPEAT PASS - Ran with 0 PSI

5 in / 100 ft

Database File	20180305_extraction_coyete trails 33s-20-3n_cbl\20180305_extraction_coyete trails 33s-20-3n_cbl.db
Dataset Pathname	pass2.1
Presentation Format	rcbl_8s
Dataset Creation	Tue Mar 05 10:48:57 2019
Charted by	Depth in Feet scaled 1:240

CCL | np - Analog C | 0 Amplitude (mV)100 | AVG Sector Amplitude | Acoustic Waveform | SECTORS

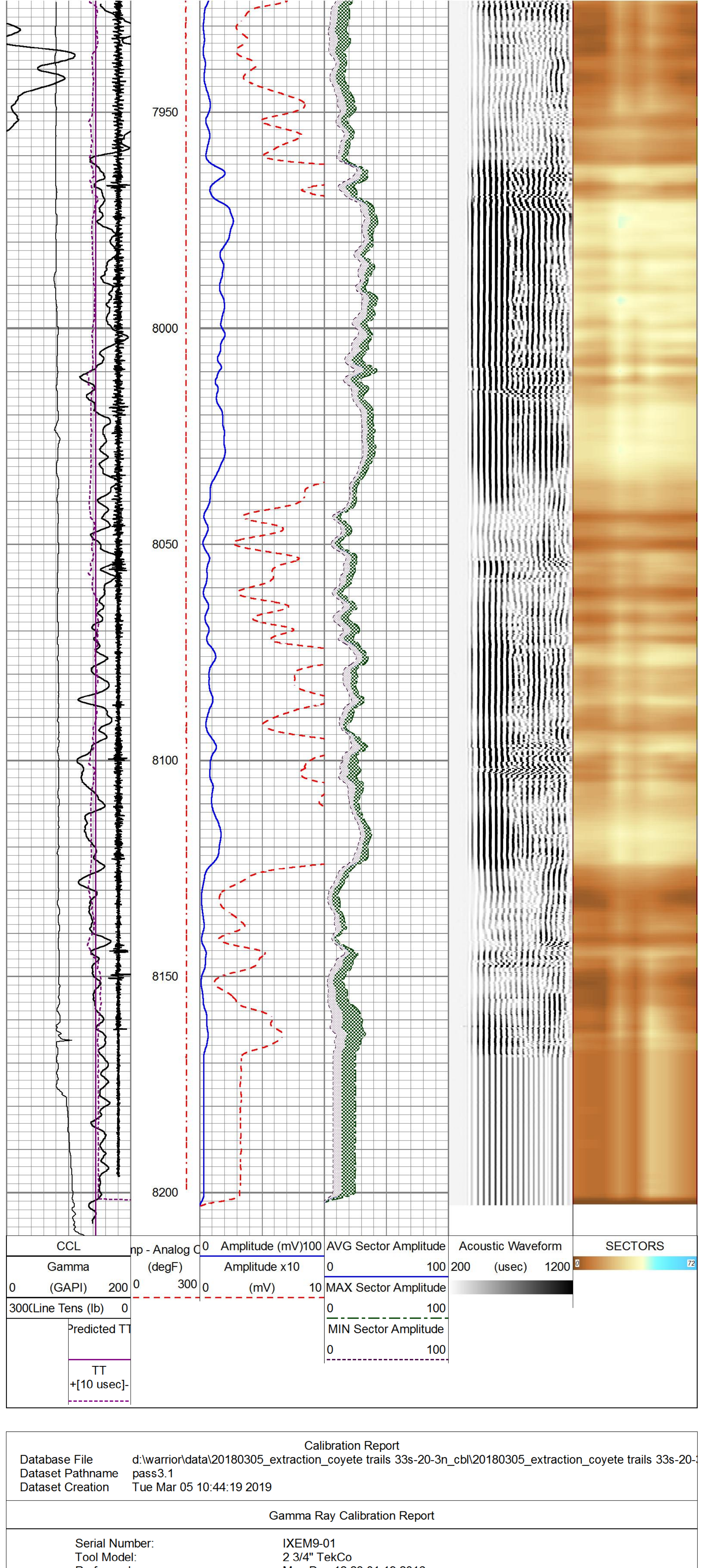
Gamma | (degF) | Amplitude x10 | 0 100 | 200 (usec) 1200 | 0 72

0 (GAPI) 200 | 0 300 | 0 (mV) 10 | MAX Sector Amplitude

300(Line Tens (lb) 0 | 0 100

Predicted TT | MIN Sector Amplitude

TT +[10 usec]- | 0 100



CCL | np - Analog C | 0 Amplitude (mV)100 | AVG Sector Amplitude | Acoustic Waveform | SECTORS

Gamma | (degF) | Amplitude x10 | 0 100 | 200 (usec) 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

TT +[10 usec]- | 0 100

Calibration Report

Database File	d:\warrior\data\20180305_extraction_coyete trails 33s-20-3n_cbl\20180305_extraction_coyete trails 33s-20-
Dataset Pathname	pass3.1
Dataset Creation	Tue Mar 05 10:44:19 2019

Gamma Ray Calibration Report

Serial Number:	IXEM9-01	
Tool Model:	2 3/4" TekCo	
Performed:	Mon Dec 12 23:01:19 2016	
Calibrator Value:	194.0	GAPI
Background Reading:	59.5	cps
Calibrator Reading:	300.8	cps
Sensitivity:	0.8039	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	1.593	0.000	72.000	45.259	-0.106
CAL	0.000	0.750				
5'	0.002	1.877	0.000	72.000	38.385	-0.064
SUM						
S1	0.020	1.405	0.000	72.000	52.005	-1.063
S2	0.018	1.568	0.000	72.000	46.443	-0.823
S3	0.020	1.789	0.000	72.000	40.686	-0.799
S4	0.025	1.768	0.000	72.000	41.289	-1.016
S5	0.025	1.880	0.000	72.000	38.829	-0.983
S6	0.022	1.488	0.000	72.000	49.117	-1.090
S7	0.024	1.356	0.000	72.000	54.090	-1.319
S8	0.024	1.283	0.000	72.000	57.170	-1.362

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

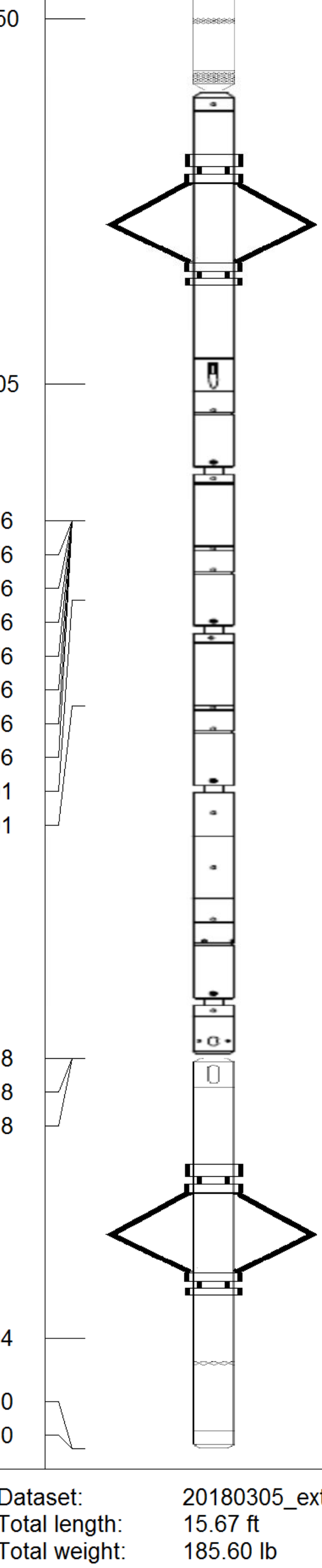
	Raw (v)	Calibrated (v)	Results
	Zero	Zero	Offset
3'	0.000	0.000	0.000
5'	0.000	0.000	0.000
SUM			
S1	0.000	0.000	0.000
S2	0.000	0.000	0.000
S3	0.000	0.000	0.000
S4	0.000	0.000	0.000
S5	0.000	0.000	0.000
S6	0.000	0.000	0.000
S7	0.000	0.000	0.000
S8	0.000	0.000	0.000

Temperature Calibration Report

Serial Number:	IPPO2-01	
Tool Model:	2 3/4" RIB Analog	
Performed:	Fri Aug 26 10:07:15 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 (IS2T1-09)	1.83	2.75	33.00
			Antelope-Overbody	1.25	2.75	
TEMP	10.05					
WVFS8	8.76					
WVFS7	8.76					
WVFS6	8.76		RBTA-2 3/4" RIB Analog (IPPO2-01)	9.13	2.75	102.00
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					
			Antelope-Overbody	1.25	2.75	
GR	1.04		GR_Log-2 3/4" TekCo (IXEM9-01)	3.68	2.75	47.00
LOCTIM	0.00					
UTCTIM	0.00					

Dataset:	20180305_extraction_coyete trails 33s-20-3n_cbl.db: field/well/run1/pass3.1
Total length:	15.67 ft
Total weight:	185.60 lb
O.D.:	2.75 in

gyrodata

Company	Extraction Oil and Gas, Inc		
Well	Coyote Trails 33S-20-3N		
Field	Wattenberg		
County	Weld		
State	Colorado	Country	U.S.A.