Company	Extraction Oil and Gas, Inc.
Well	Rin Vallet East N17-20-13C
Field	Wattenberg
County	Weld
State	Colorado

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CEMENT BOND LOG

Company Extraction Oil and Gas, Inc.
Well Rin Vallet East N17-20-13C
Field Wattenberg
County Weld State Colorado

API #: 05 123 47173
Location: SE/SE 200 FSL 533 FEL
Other Services

SEC: 2N TWP: 25 RGE: 68W

Elevation
K.B. 4963
D.F. 4962
G.L. 4938

Permanent Datum: Ground Level Elevation: 4938
Log Measured From: Kelly Bushing , 25 ft. above Permanent Datum.
Drilling Measured From: Kelly Bushing

Date	23 September 2018
Run Number	One
Plug Back T.D. Driller	----
Plug Back T.D. Logger	----
Bottom Logged Interval	8020
Top Log Interval	Surface
Type Fluid	Water
Density / Viscosity	----
Max. Recorded Temp.	237
Time Logger on Bottom	13:30
Equipment Number	GD114
Location	Casper, WY
Recorded By	GS Yarbro
Witnessed By	Mr. Cary

Casing Record				Tubing Record			
Size	Weight	From	To	Size	Weight	From	To
9 5/8	----	25	----				
5 1/2	----	25	----				

<<< 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 # : RM0918PCBW904
Your Crew Today: Graham, Pena
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	350
40 % Bond	350
60 % Bond	350
80 % Bond	----
100 % Bond	----

Comments

Estimated Top of Cement
(60% Bond Index) @ 350

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

Log Variables

Databased:\warrior\data\20180923_extraction_rinn valley east n17-20-13c_cbl\20180923_extractio
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			
1.9	4.751	0	235	0			

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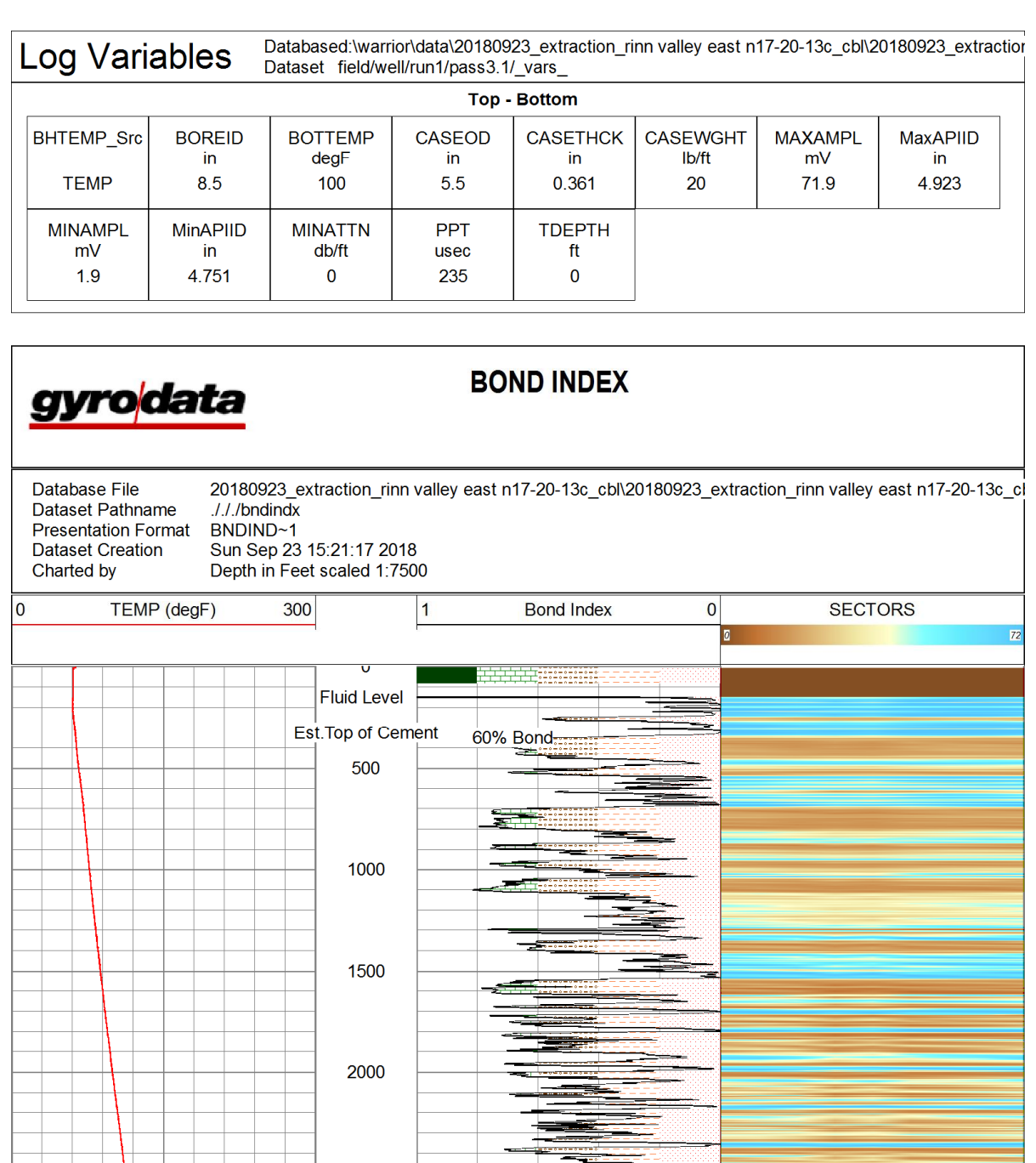
BOND INDEX

Database File 20180923_extraction_rinn valley east n17-20-13c_cbl\20180923_extraction_rinn valley east n17-20-13c_c
Dataset Pathname ./././bndindx
Presentation Format BNDIND~1
Dataset Creation Sun Sep 23 15:21:17 2018
Charted by Depth in Feet scaled 1:7500



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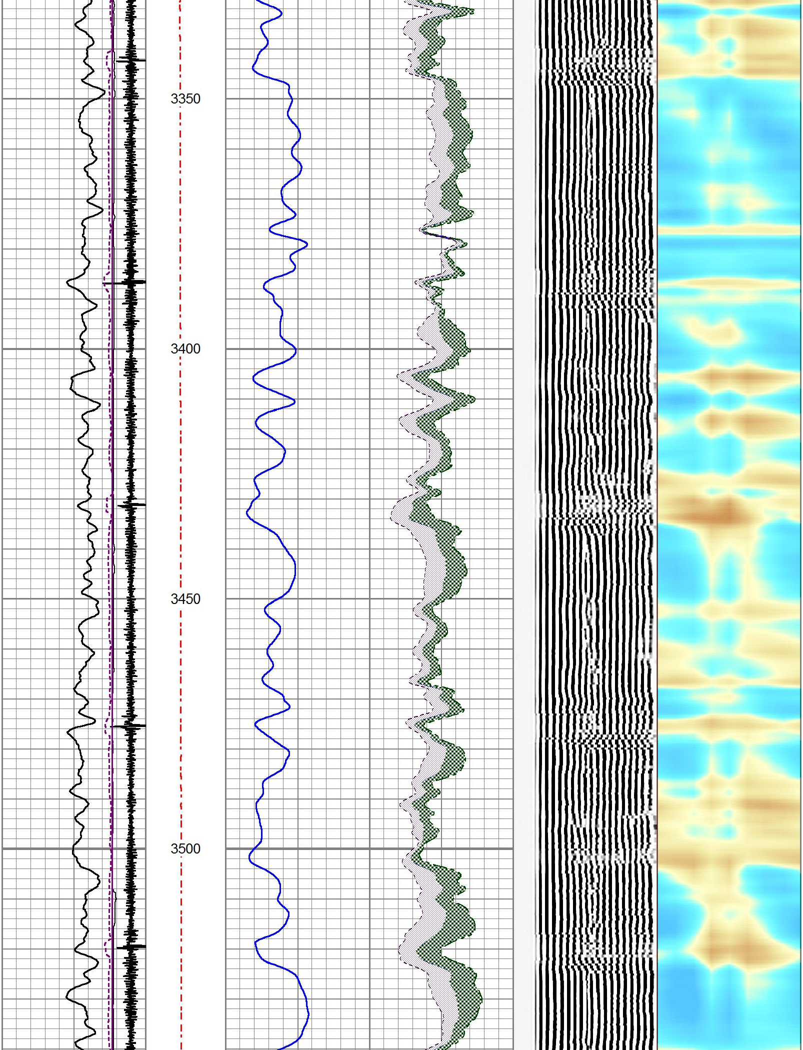
MAIN PASS - Ran with 0 PSI

5 in / 100 ft

Database File 20180923_extraction_rinn valley east n17-20-13c_cbl\20180923_extraction_rinn valley east n17-20-13c_c
Dataset Pathname pass3.1
Presentation Format rcbl_8s
Dataset Creation Sun Sep 23 15:18:40 2018
Charted by Depth in Feet scaled 1:240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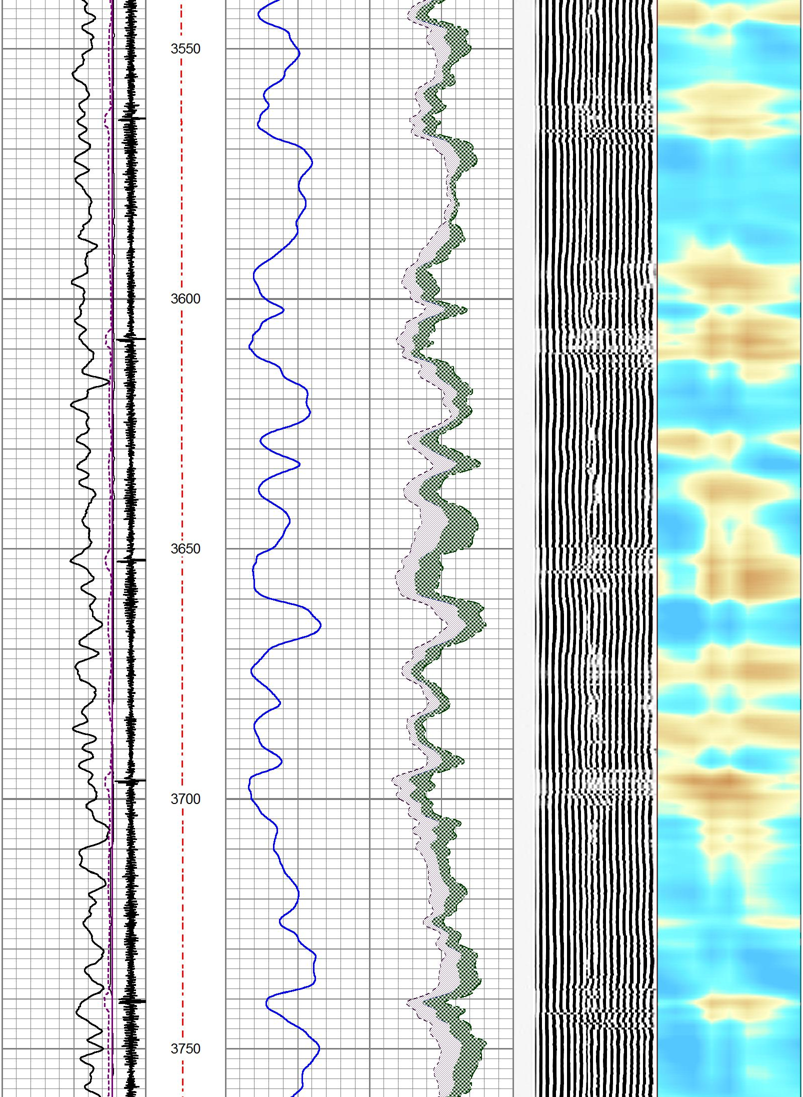
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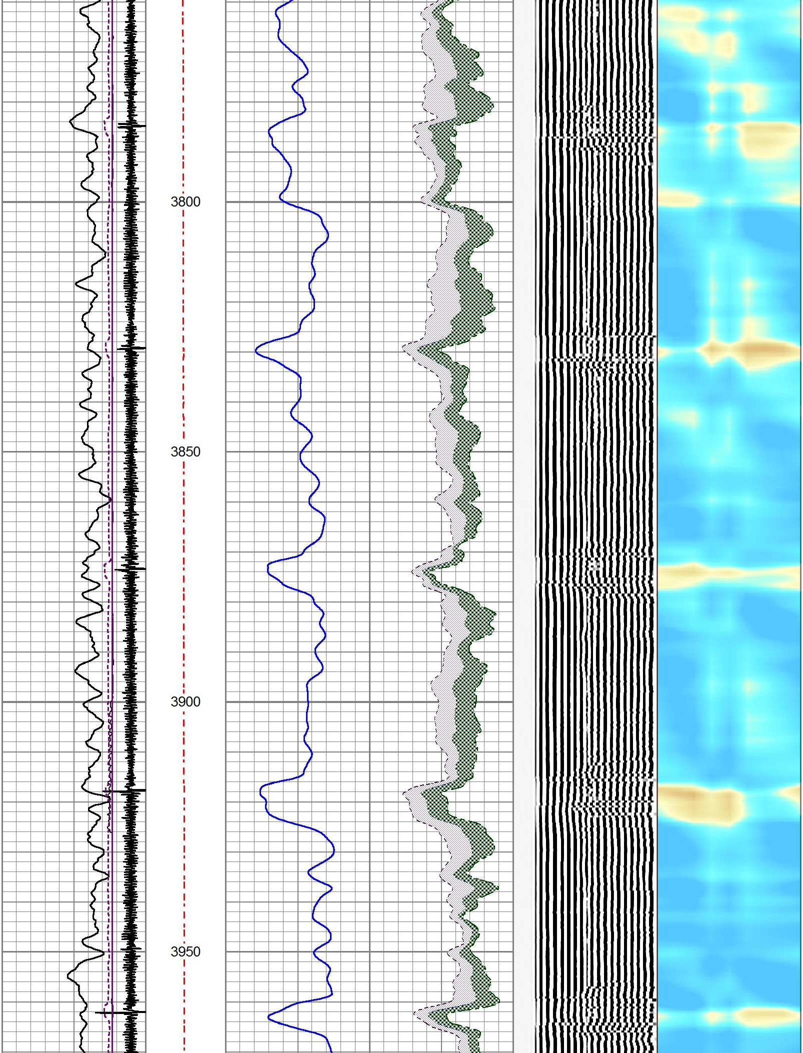
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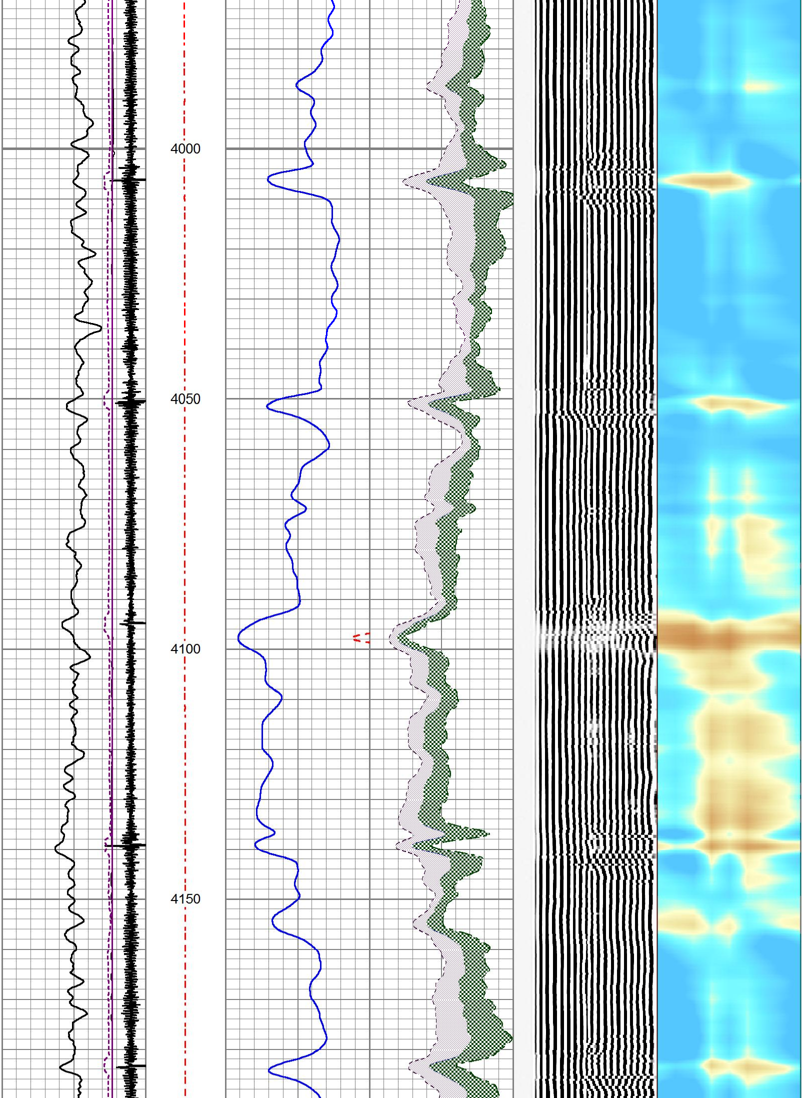
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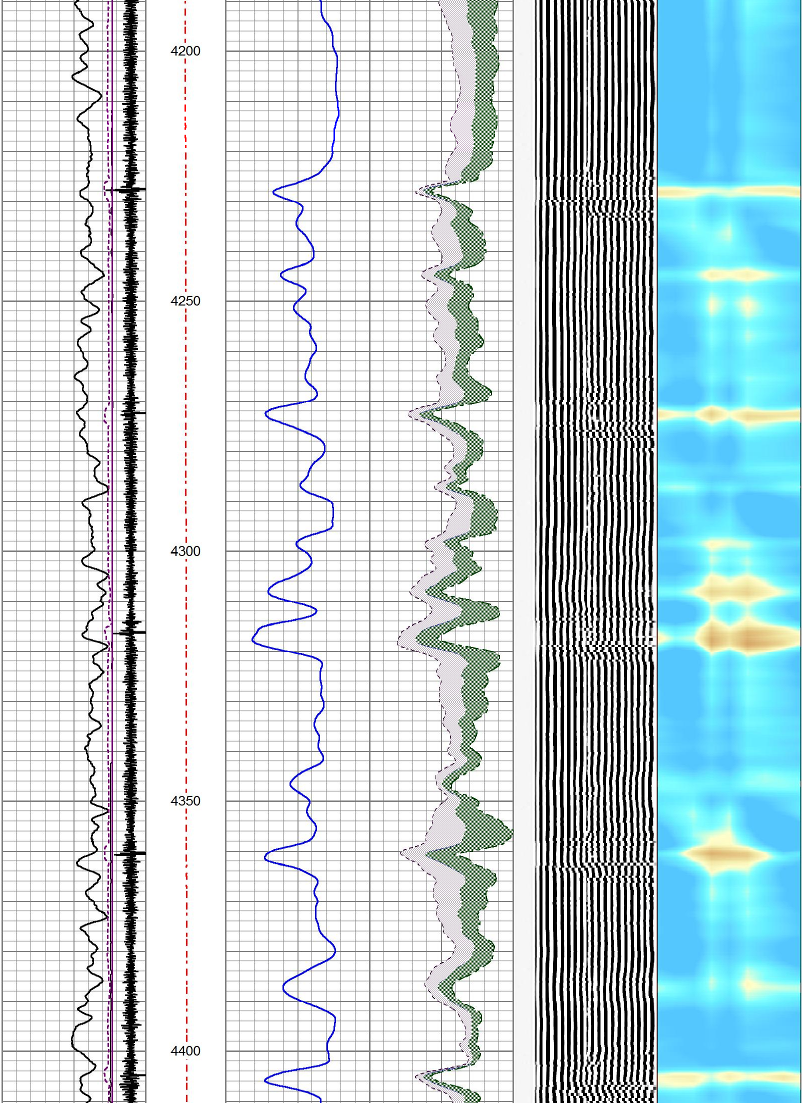
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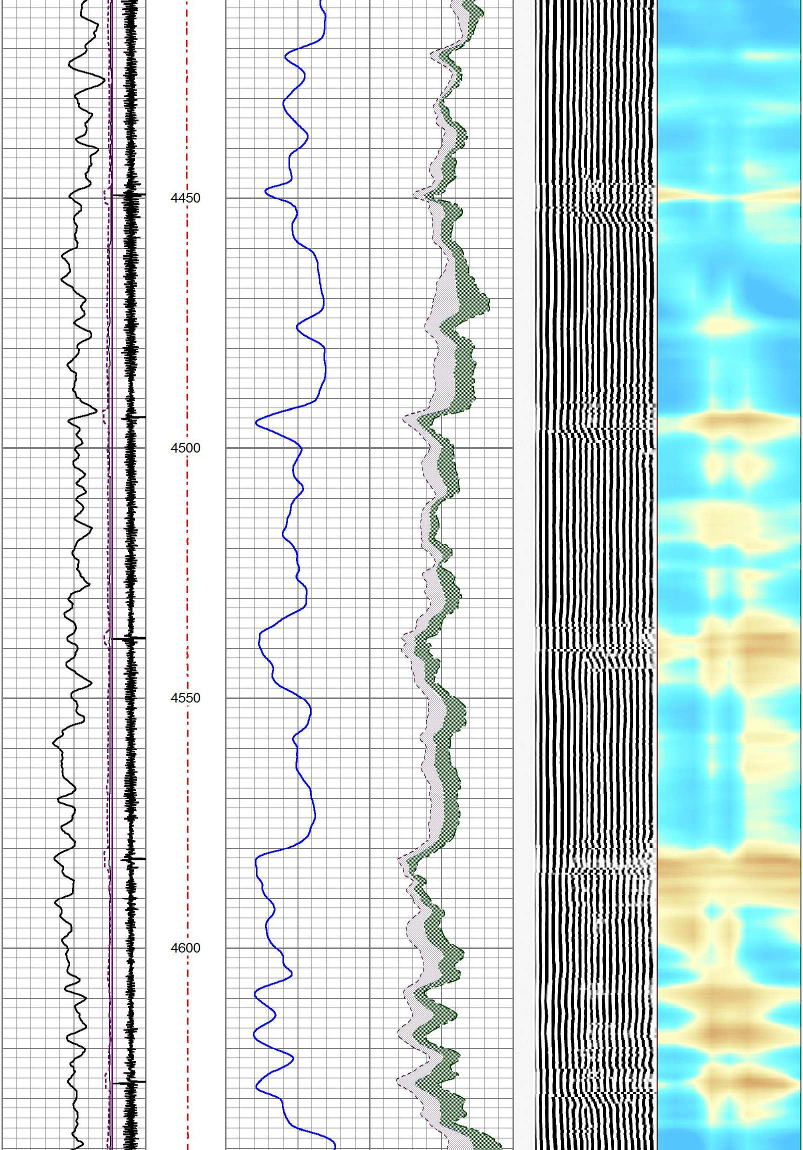
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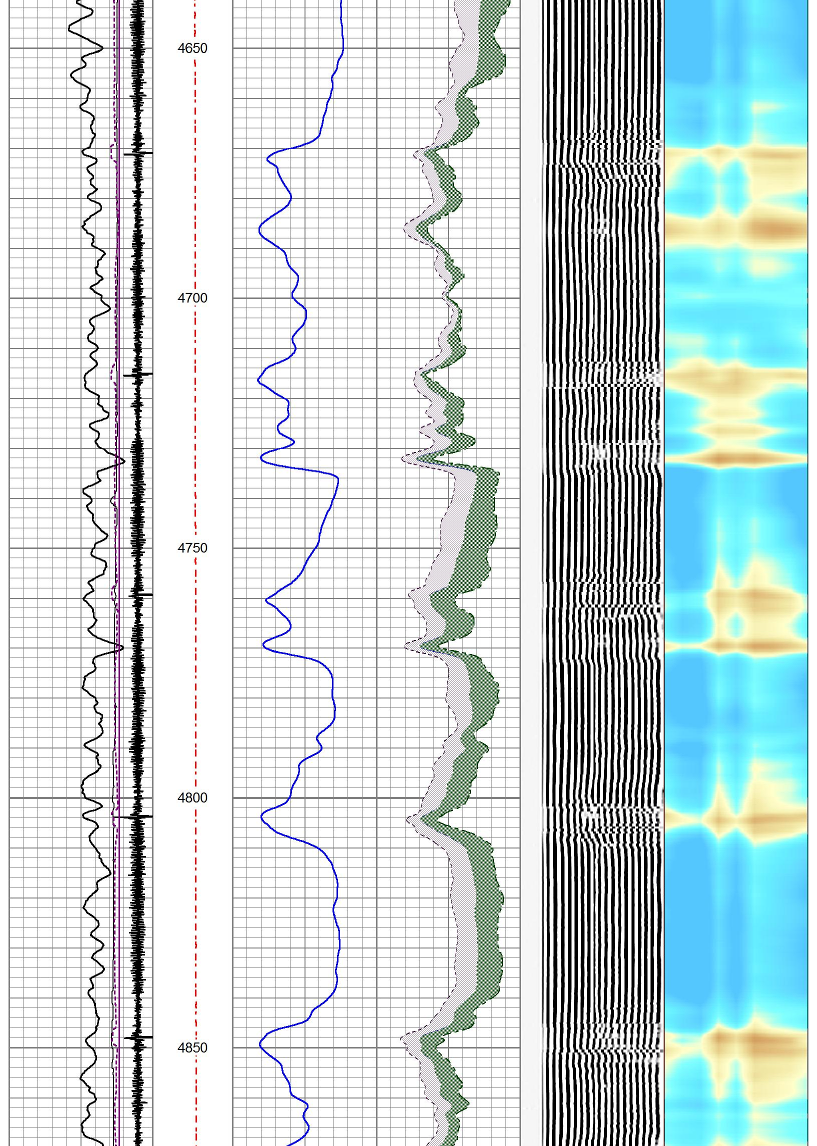
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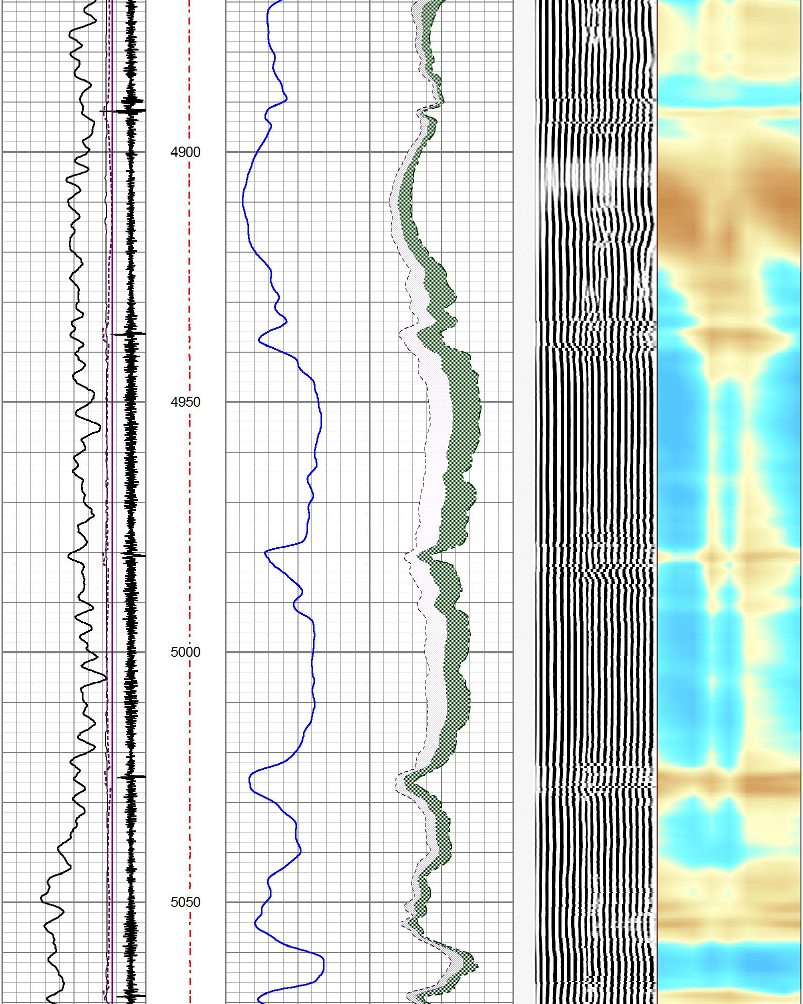
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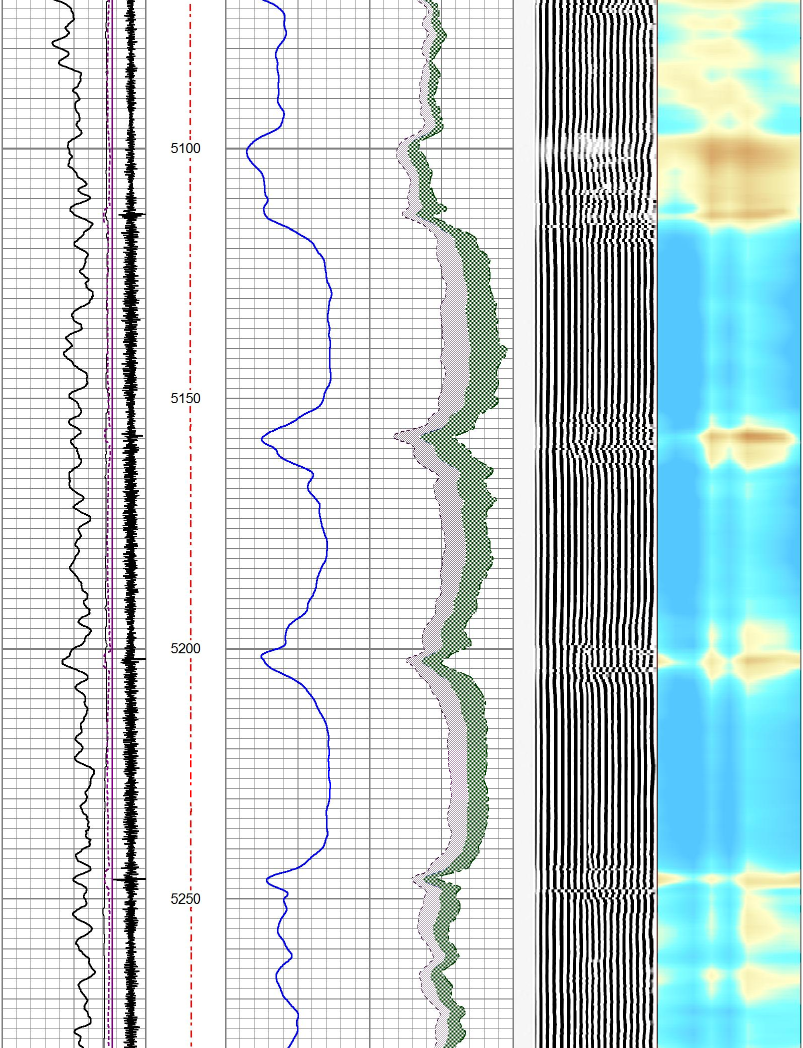
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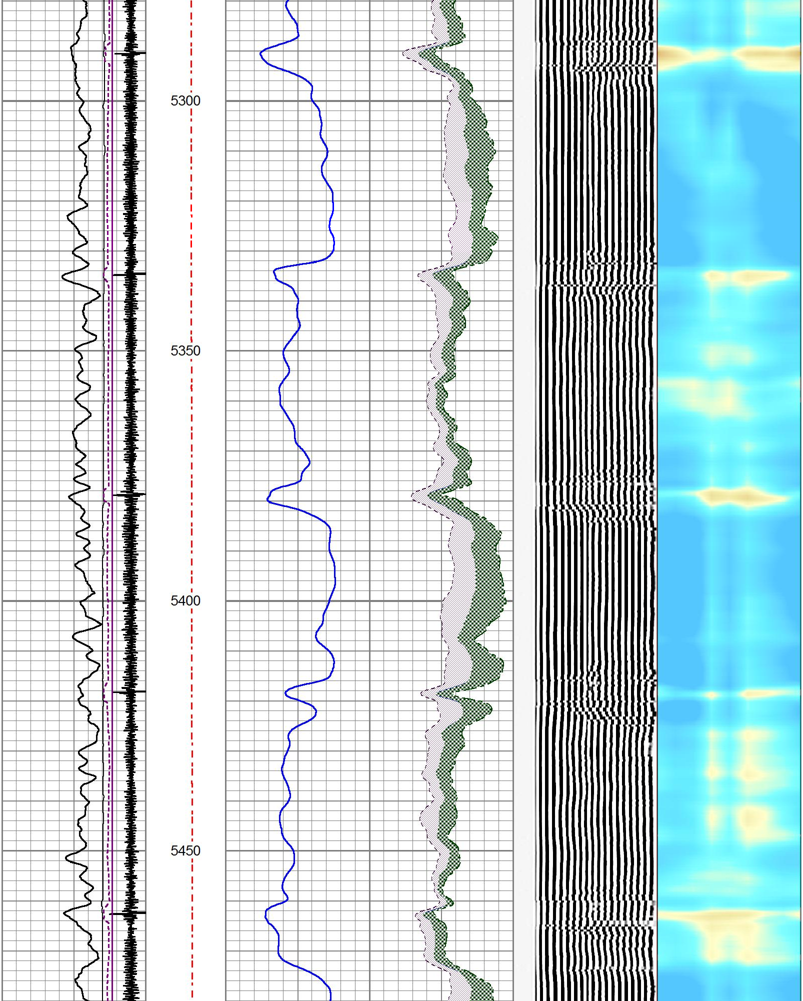
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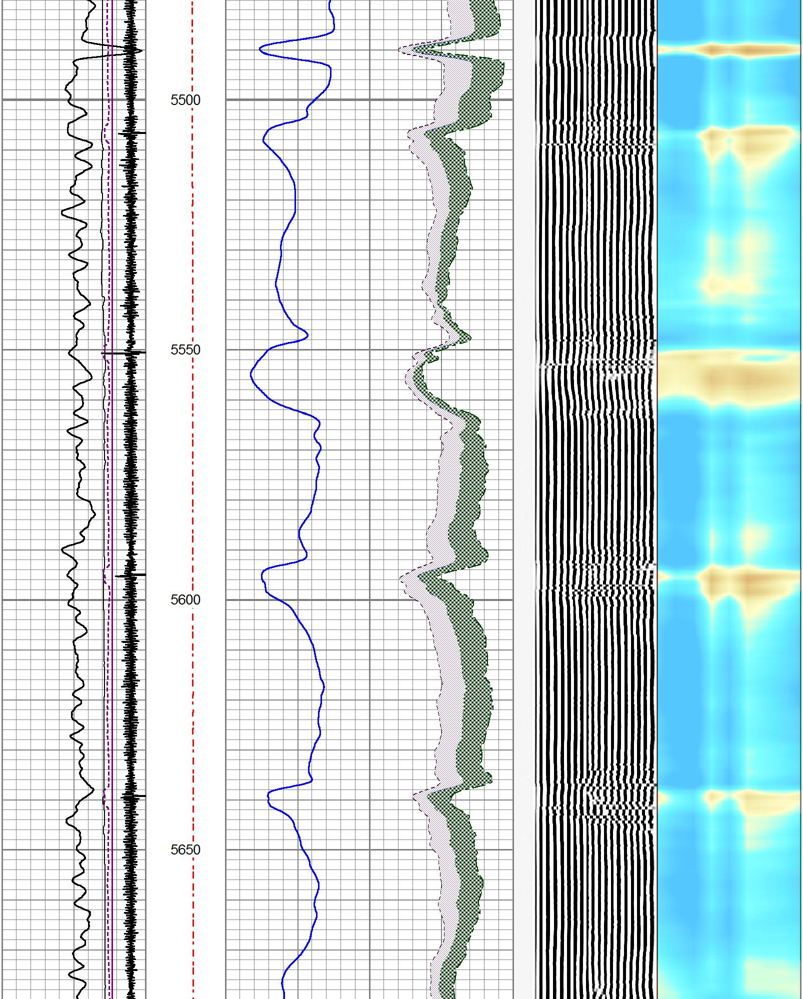
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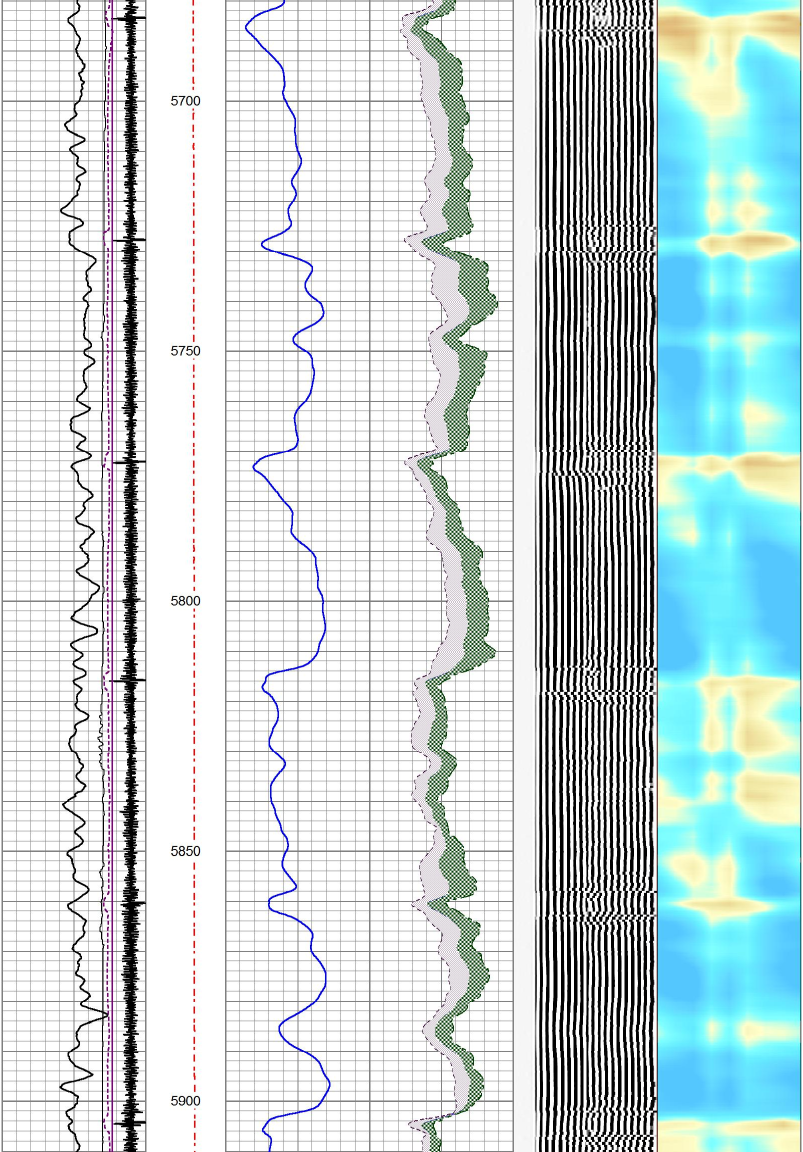
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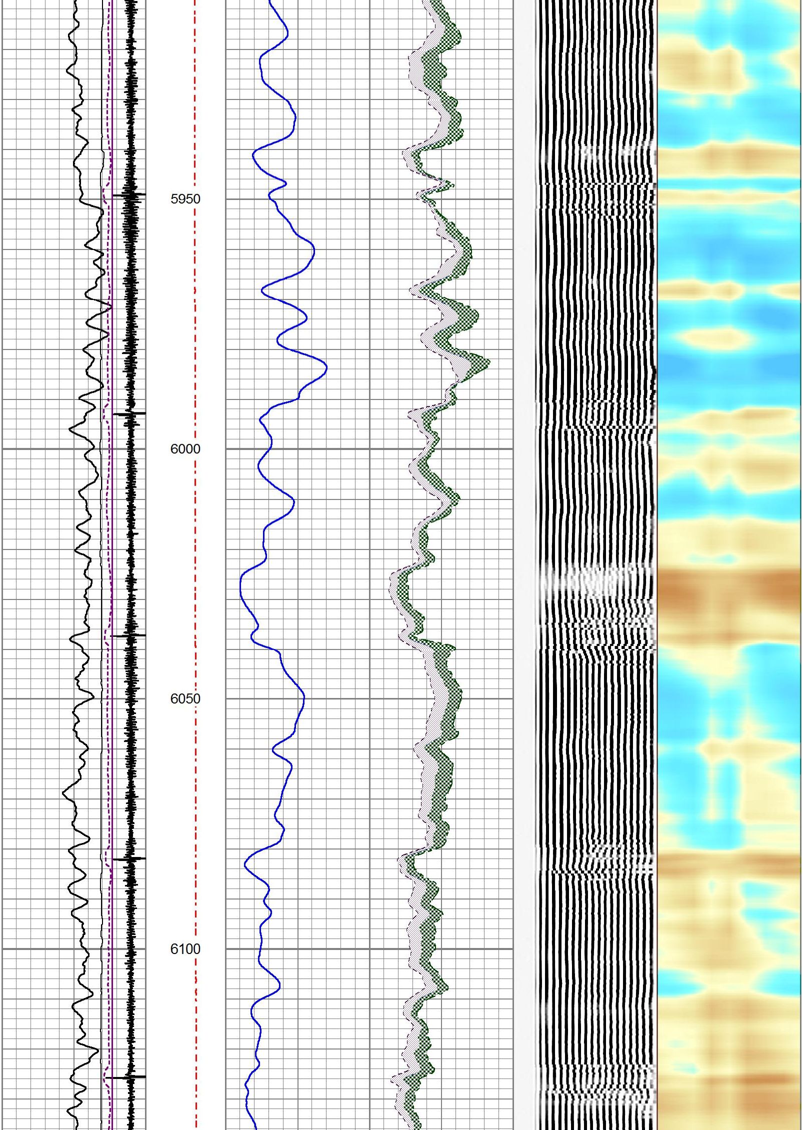
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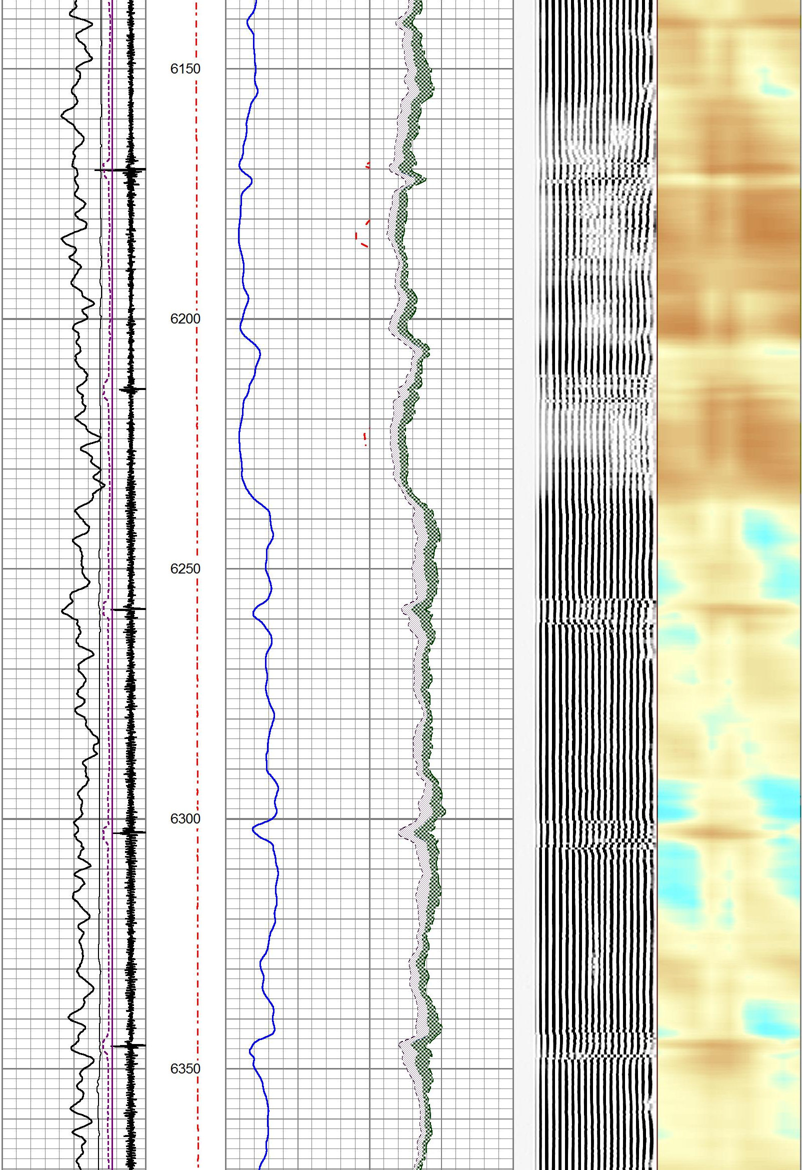
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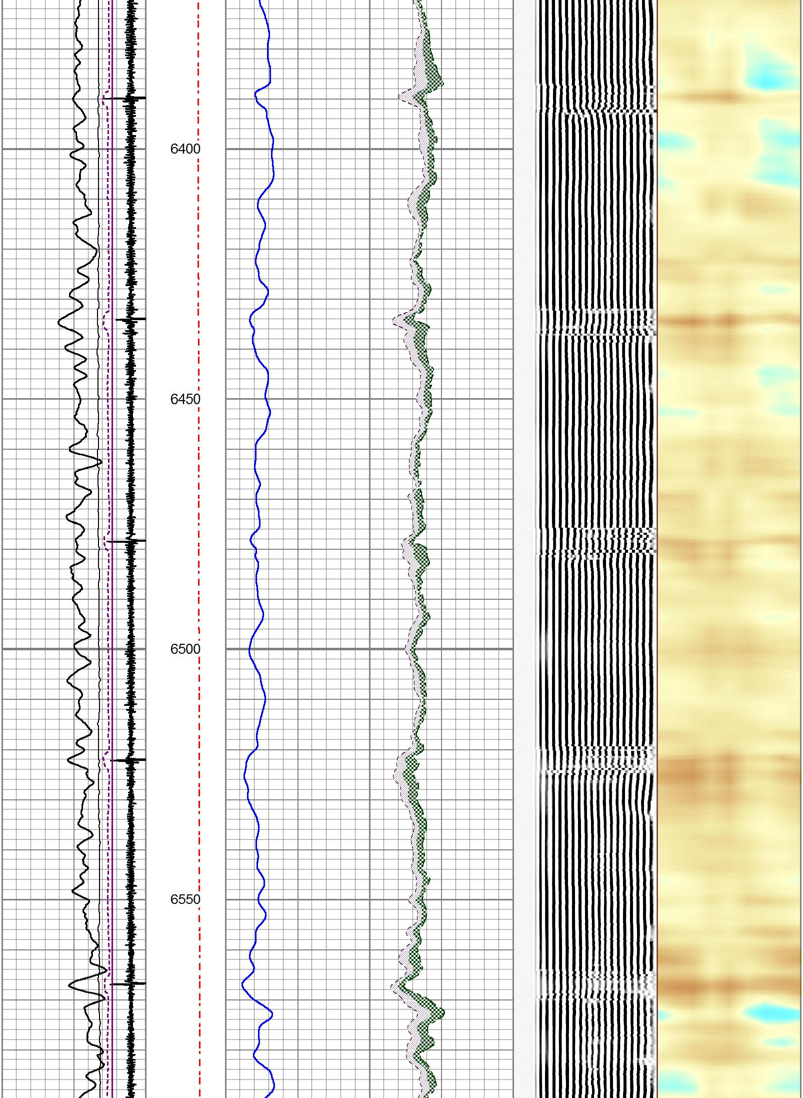
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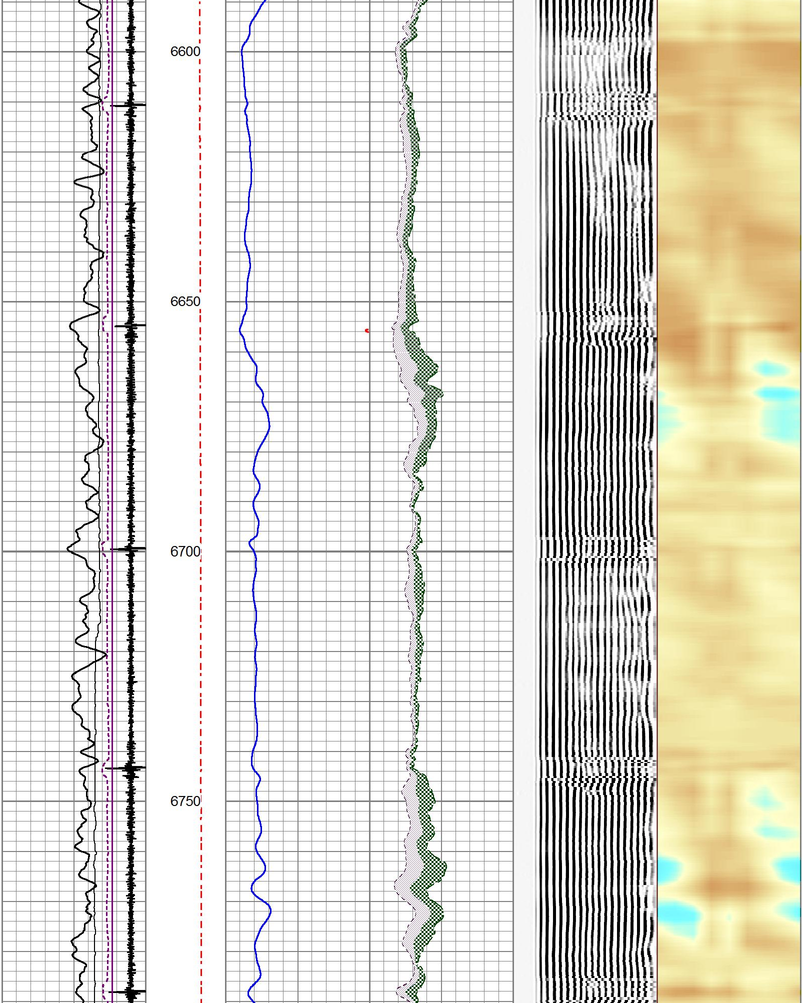
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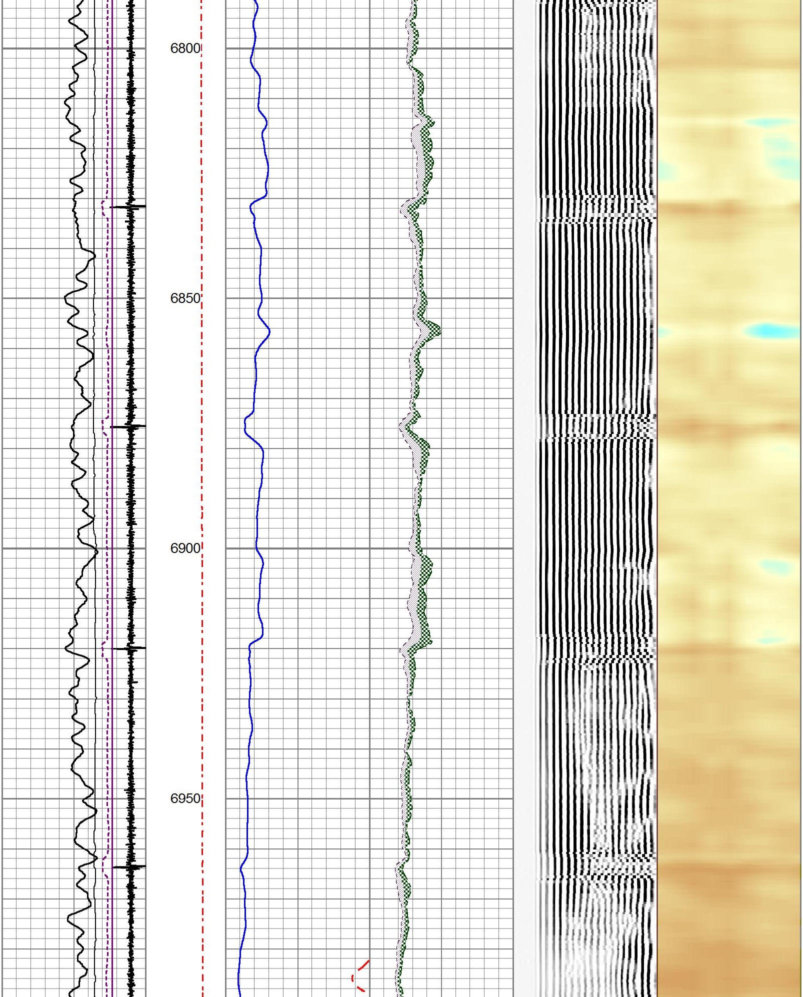
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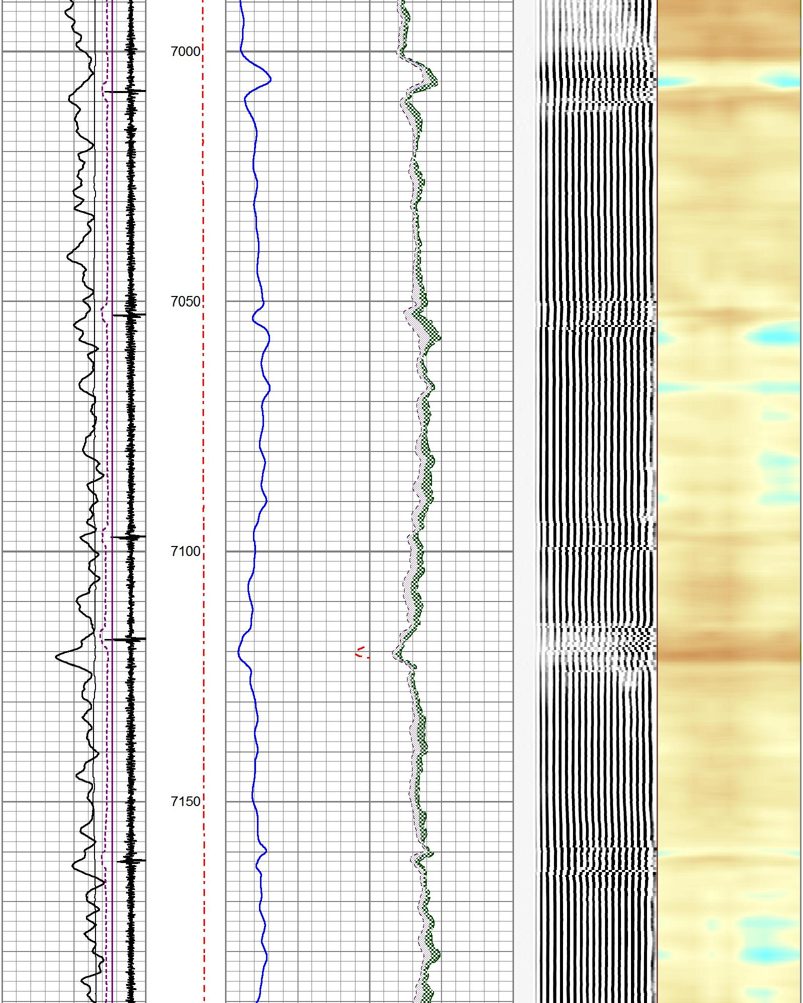
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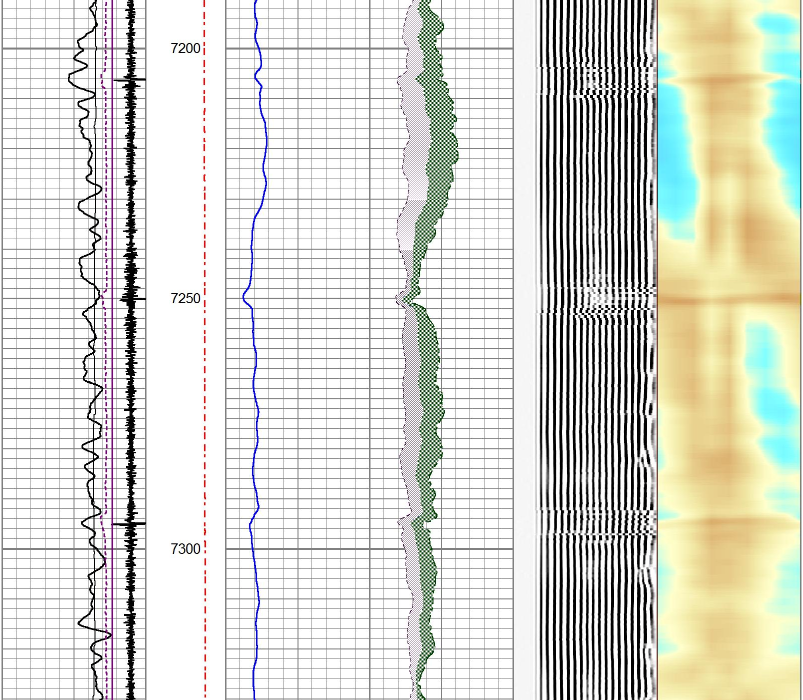
7200
7250
7300

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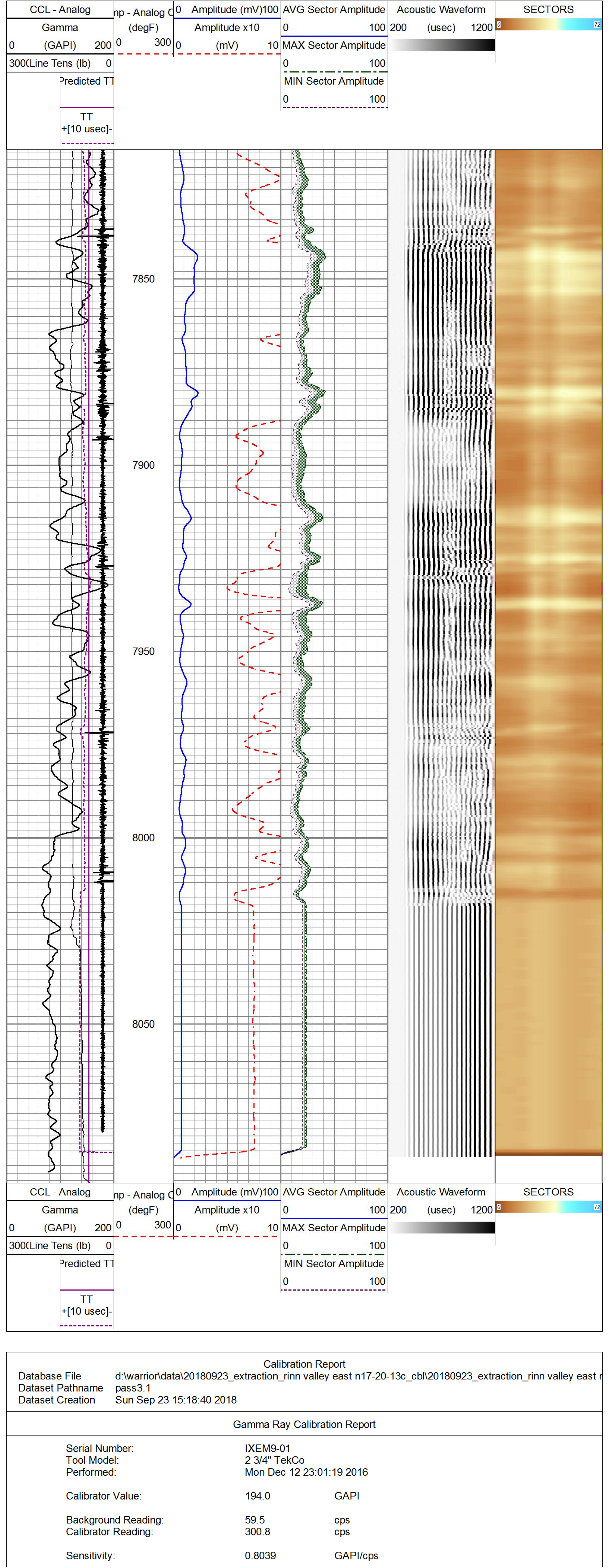
REPEAT PASS - Ran with 0 PSI

5 in / 100 ft

Database File	20180923_extraction_rinn valley east n17-20-13c_cbl\20180923_extraction_rinn valley east n17-20-13c_cl
Dataset Pathname	pass2.1
Presentation Format	rcbl_8s
Dataset Creation	Sun Sep 23 15:20:31 2018
Charted by	Depth in Feet scaled 1:240



Calibration Report

Database File	d:\warrior\data\20180923_extraction_rinn valley east n17-20-13c_cbl\20180923_extraction_rinn valley east n
Dataset Pathname	pass3.1
Dataset Creation	Sun Sep 23 15:18:40 2018

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'	-0.009	1.375	0.000	72.000	52.026	0.480
CAL	0.000	0.750				
5'	-0.006	1.860	0.000	72.000	38.585	0.248
SUM						
S1	0.016	1.201	0.000	72.000	60.760	-0.990
S2	0.016	1.256	0.000	72.000	58.104	-0.951
S3	0.019	1.479	0.000	72.000	49.306	-0.948
S4	0.020	1.756	0.000	72.000	41.489	-0.848
S5	0.020	1.703	0.000	72.000	42.786	-0.858
S6	0.022	1.532	0.000	72.000	47.662	-1.034
S7	0.021	1.289	0.000	72.000	56.771	-1.198
S8	0.018	1.158	0.000	72.000	63.164	-1.160

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

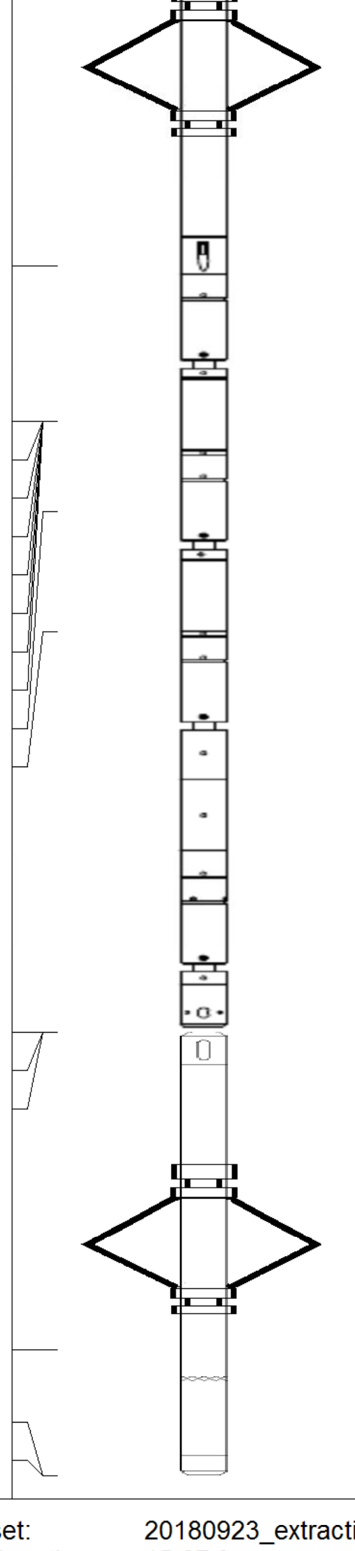
	Raw (v)		Calibrated (v)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
CAL	0.000	0.750	0.000	0.750	1.000	0.000

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					
WVFS5	8.76		RBTA-2 3/4" RIB Analog (IPPO2-01)	9.13	2.75	102.00
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_Log-2 3/4" TekCo (IXEM9-01)	3.68	2.75	47.00
GR	1.04					
LOCTIM	0.00					
UTCTIM	0.00					

Dataset:	20180923_extraction_rinn valley east n17-20-13c_cbl.db: field/well/run1/pass3.1
Total length:	15.67 ft
Total weight:	185.60 lb
O.D.:	2.75 in

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Company	Extraction Oil and Gas, Inc.		
Well	Rin Vallet East N17-20-13C		
Field	Wattenberg		
County	Weld		
State	Colorado	Country	U.S.A.