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Cement Bond Log

Company	Extraction Oil and Gas
Well	McGirr 6C
Field	Wattenberg
County	Larimer
State	Colorado

Company Extraction Oil and Gas
Well McGirr 6C
Field Wattenberg
County Larimer **State** Colorado

API # : 05-069-06490
Location: NE/SE
1998 FSL
409 FEL

SEC: 26 TWP: 5N RGE: 68W

Other Services

Elevation
K.B. ---
D.F. ---
G.L. 4945

Permanent Datum: Ground Level Elevation: 4945
Log Measured From: Ground Level , 0 ft. above Permanent Datum.
Drilling Measured From: ---

Date	16 August 2017		
Run Number	One		
Plug Back T.D. Driller	---		
Plug Back T.D. Logger	---		
Bottom Logged Interval	7350		
Top Log Interval	Surface		
Type Fluid	Water		
Density / Viscosity	---		
Max. Recorded Temp.	235		
Time Logger on Bottom	18:45		
Equipment Number	GD114		
Location	Casper		
Recorded By	GS Yarbro		
Witnessed By	---		

Casing Record				Tubing Record			
Size	Weight	From	To	Size	Weight	From	To
9 5/8	36	0	1500				
5 1/2	20	0	17152				

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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 # : RM0817WLOW563
Your Crew Today: Adams
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	210
40 % Bond	210
60 % Bond	600
80 % Bond	820
100 % Bond	930

Comments

Estimated Cement Top @
(40% Bond Index) 210'

Thank you for using Gyrodata

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

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Log Variables

Databased:\warrior\data\2017-08-16_extraction_mcgirr 6c_cbl\2017-08-16_extraction_mcgirr 6c_cb
Dataset field/well/run1/pass3.2/_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

MaxAPIWall in	MINAMPL mV	MinAPIID in	MINATTN db/ft	PPT usec
0.361	1.9	4.751	0	239

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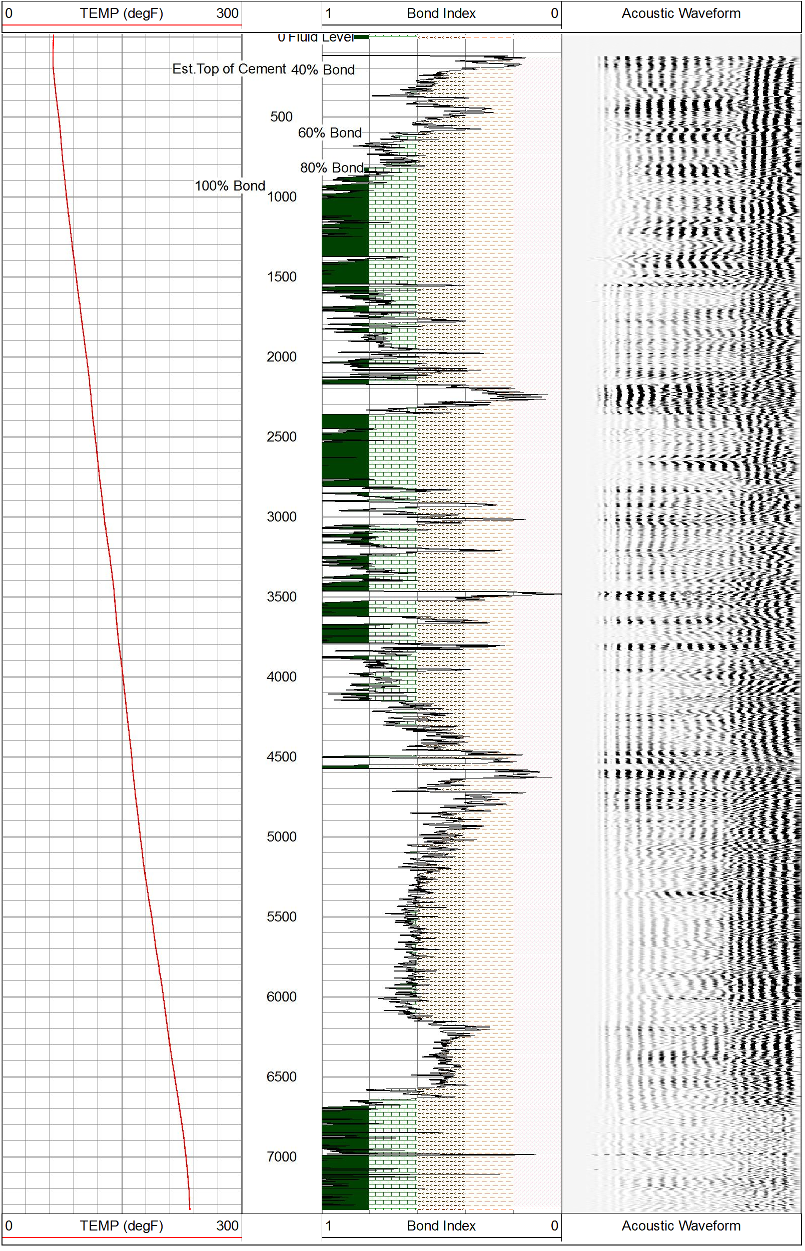
BOND INDEX

Database File	2017-08-16_extraction_mcgirr 6c_cbl\2017-08-16_extraction_mcgirr 6c_cbl.db
Dataset Pathname	./././bndindx
Presentation Format	BONDIN~3
Dataset Creation	Wed Aug 16 20:41:39 2017
Charted by	Depth in Feet scaled 1:7500



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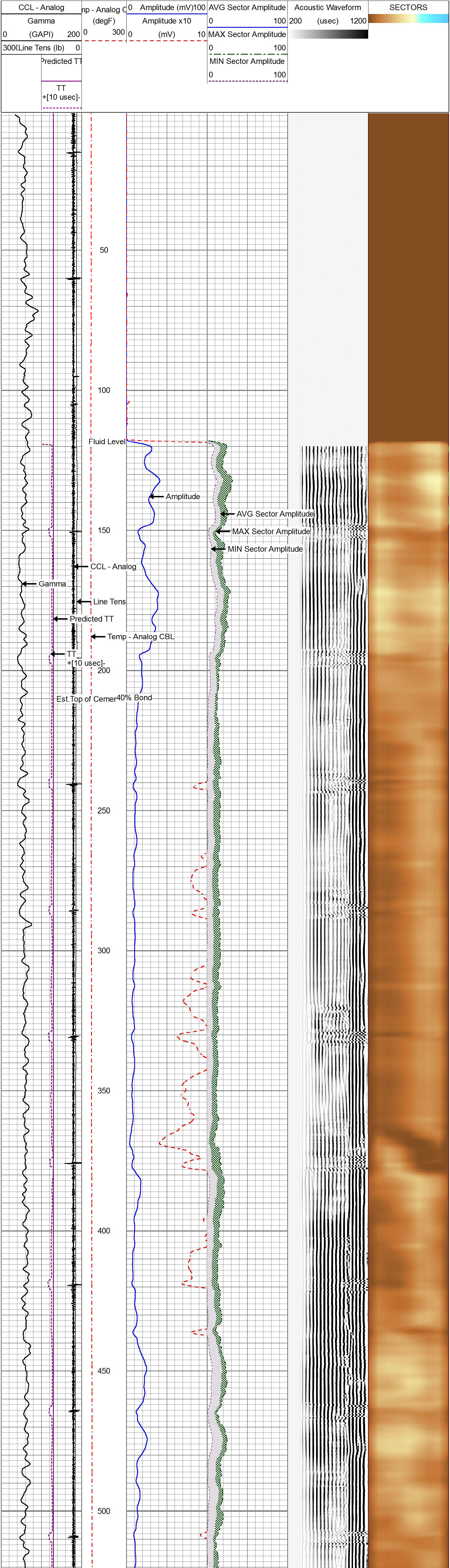
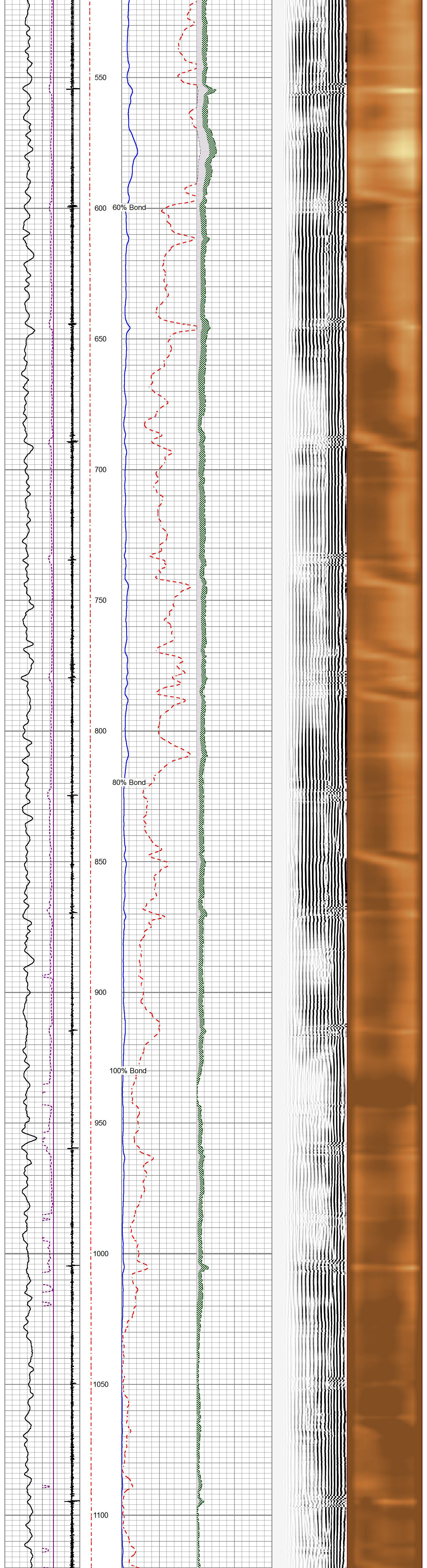
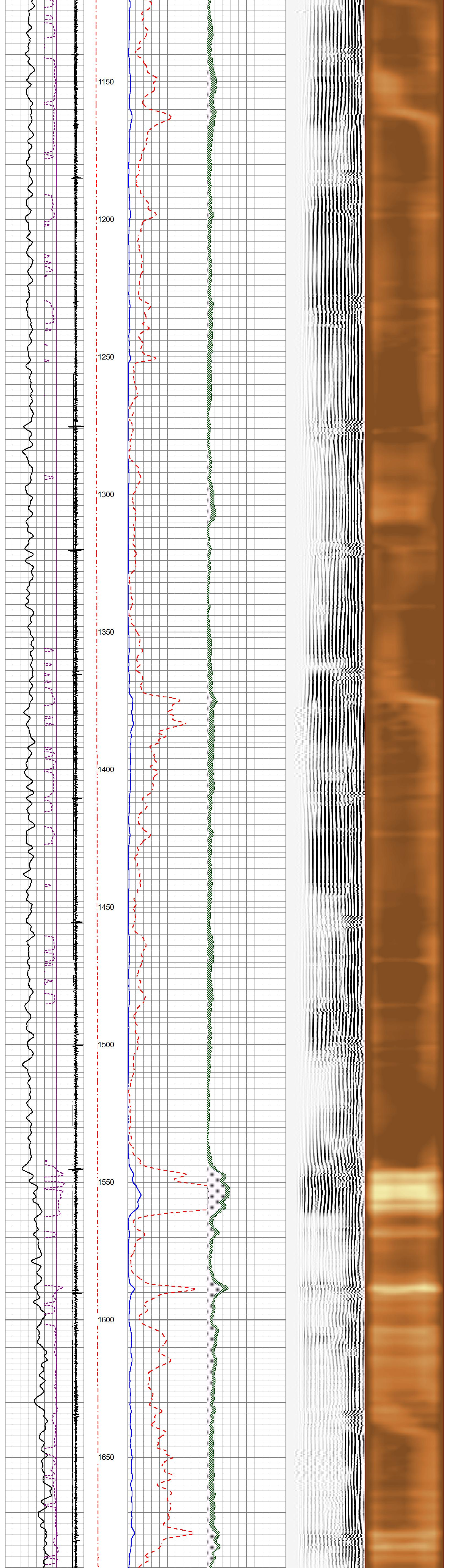
MAIN PASS - Ran with 0 PSI

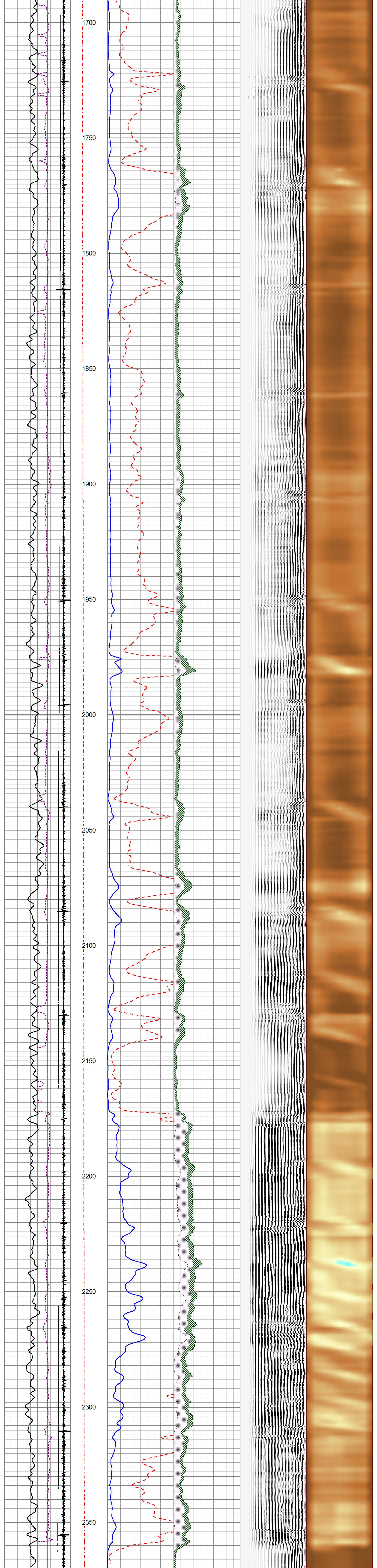
5 in / 100 ft

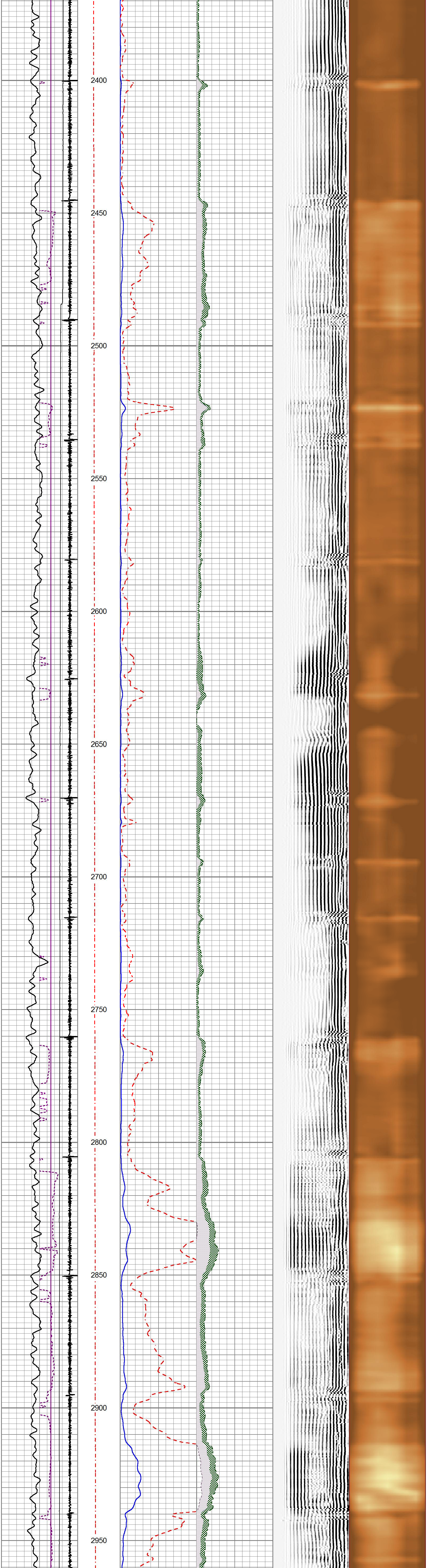
Database File	2017-08-16_extraction_mcgirr 6c_cbl\2017-08-16_extraction_mcgirr 6c_cbl.db
Dataset Pathname	pass3.2
Presentation Format	rcbl_8s
Dataset Creation	Wed Aug 16 20:28:06 2017
Charted by	Depth in Feet scaled 1:240

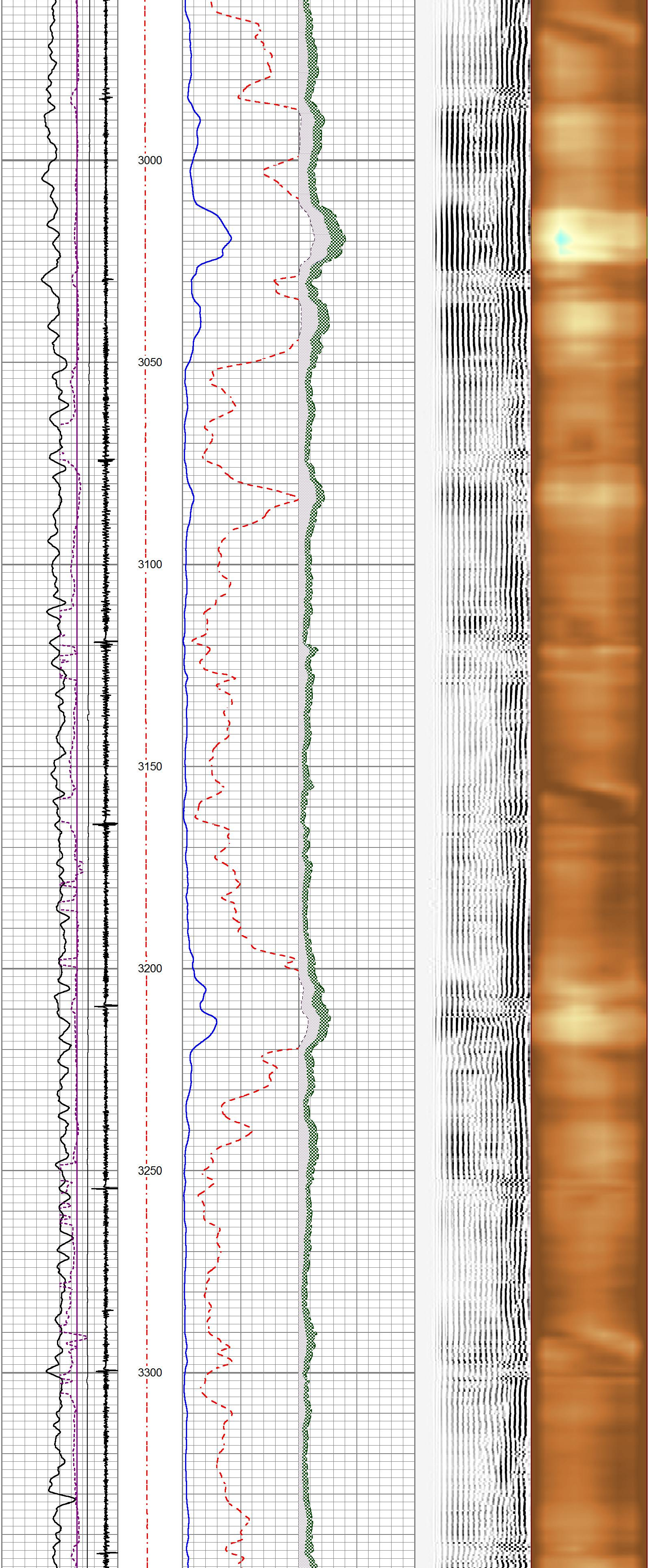


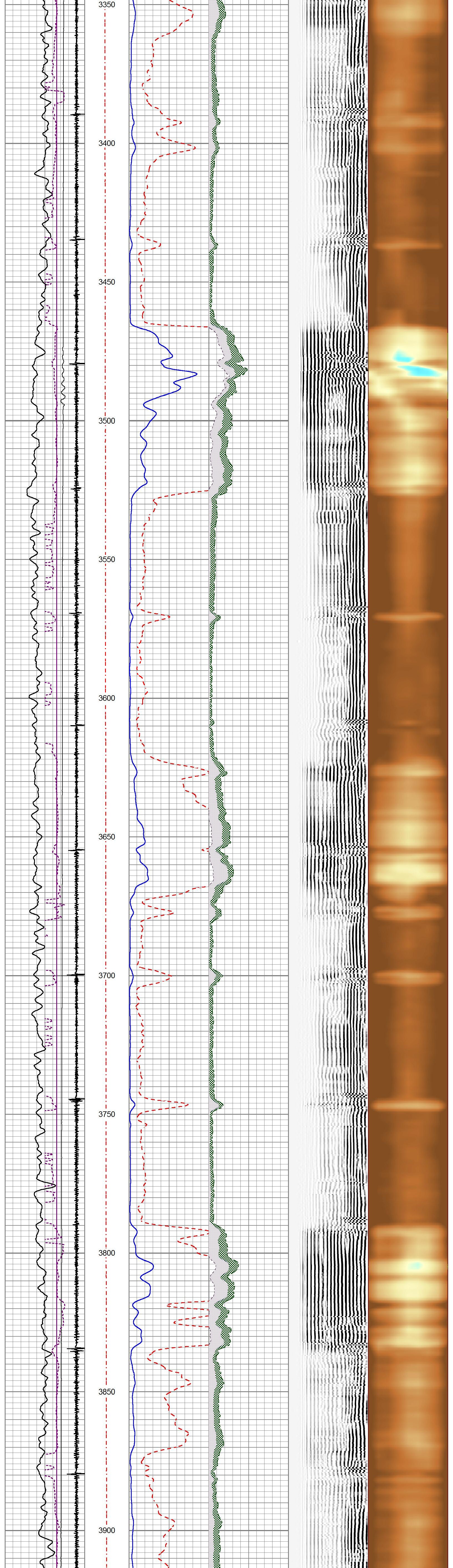








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3650
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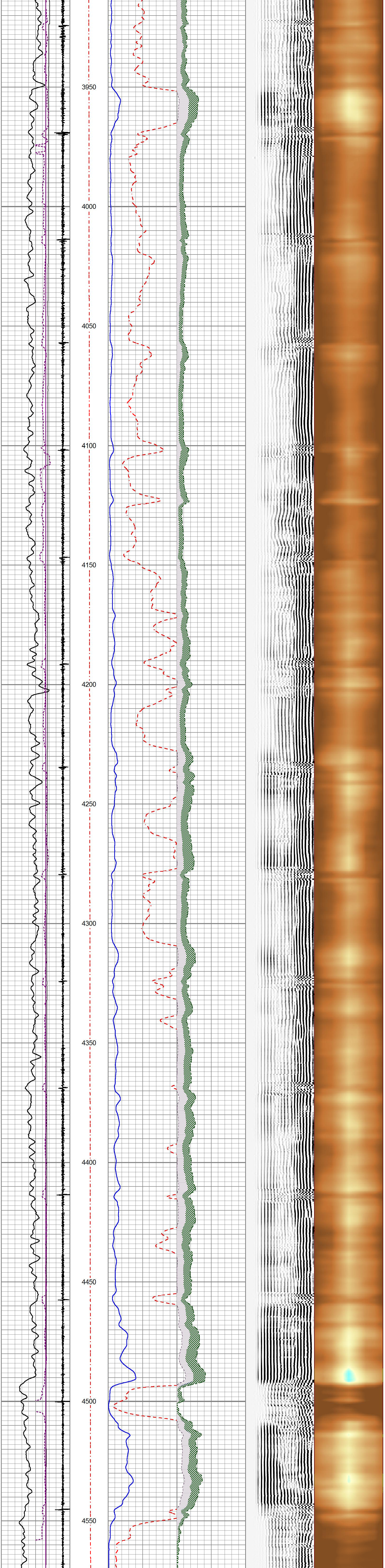
3800
3850
3900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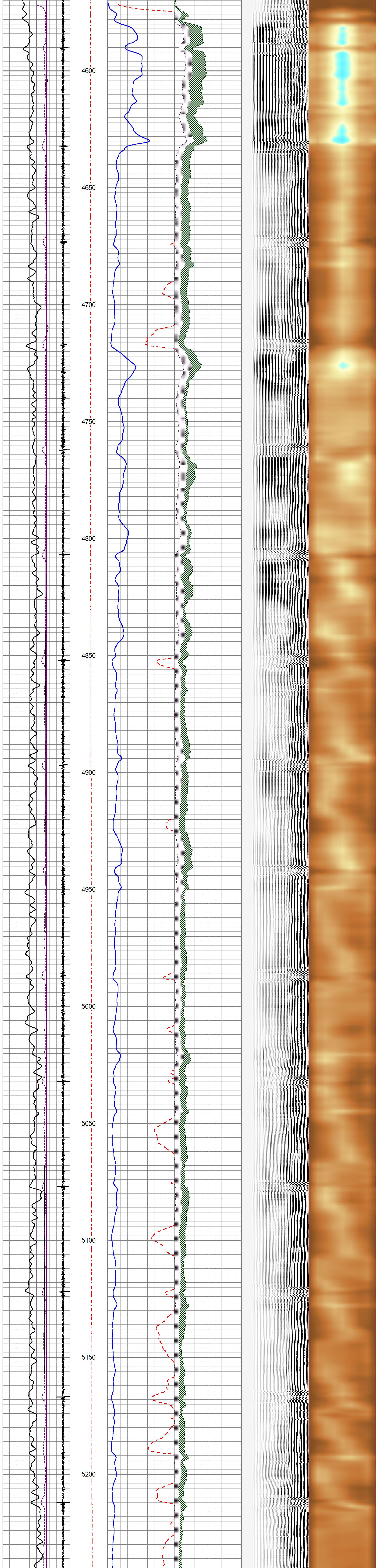
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5000
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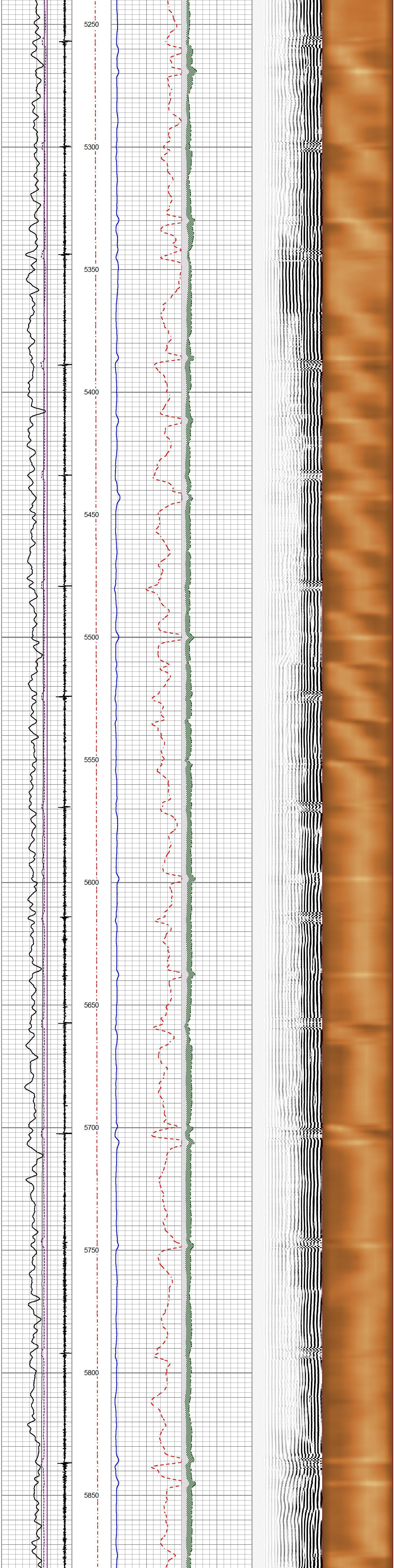
5100
5150
5200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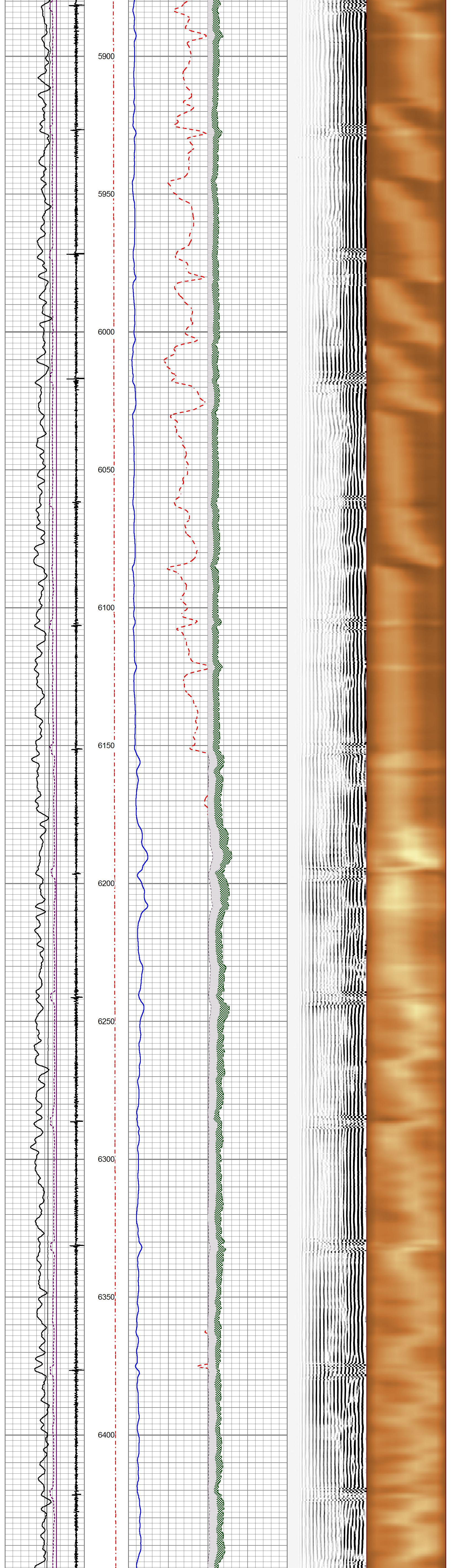
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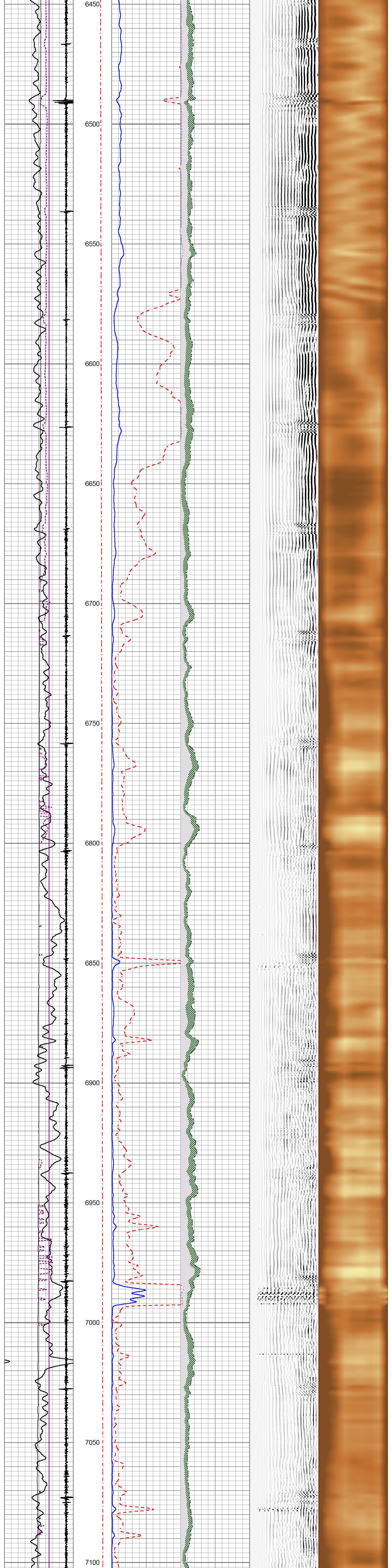
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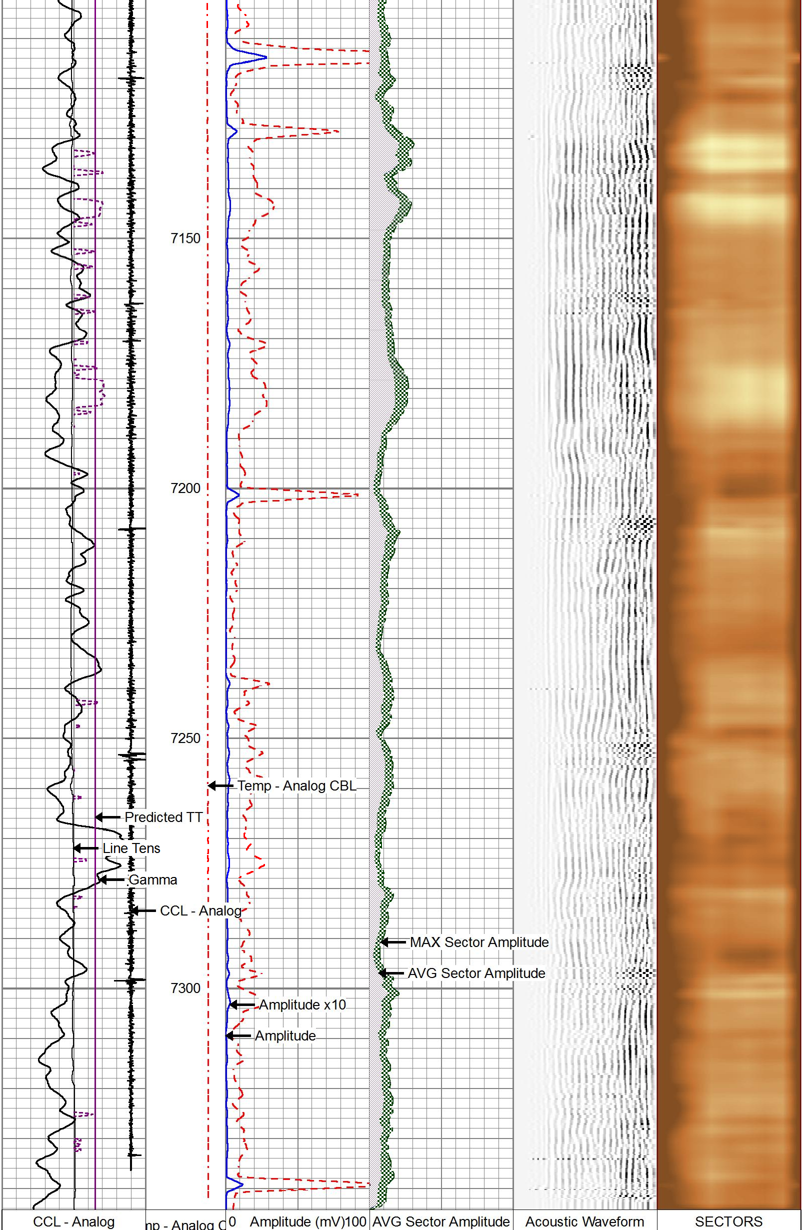
7150
7200
7250
7300
Temp - Analog CBL
Predicted TT
Line Tens
Gamma
CCL - Analog
MAX Sector Amplitude
AVG Sector Amplitude
Amplitude x10
Amplitude
CCL - Analog
np - Analog C
0
Amplitude (mV)100
AVG Sector Amplitude
Acoustic Waveform
SECTORS

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

(degF)
0 300

Amplitude x10
0 (mV) 10

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

200 (usec) 1200

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REPEAT PASS - Ran with 0 PSI

5 in / 100 ft

Database File	2017-08-16_extraction_mcgirr 6c_cbl\2017-08-16_extraction_mcgirr 6c_cbl.db
Dataset Pathname	pass2.1
Presentation Format	rcbl_8s
Dataset Creation	Wed Aug 16 20:29:48 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]-

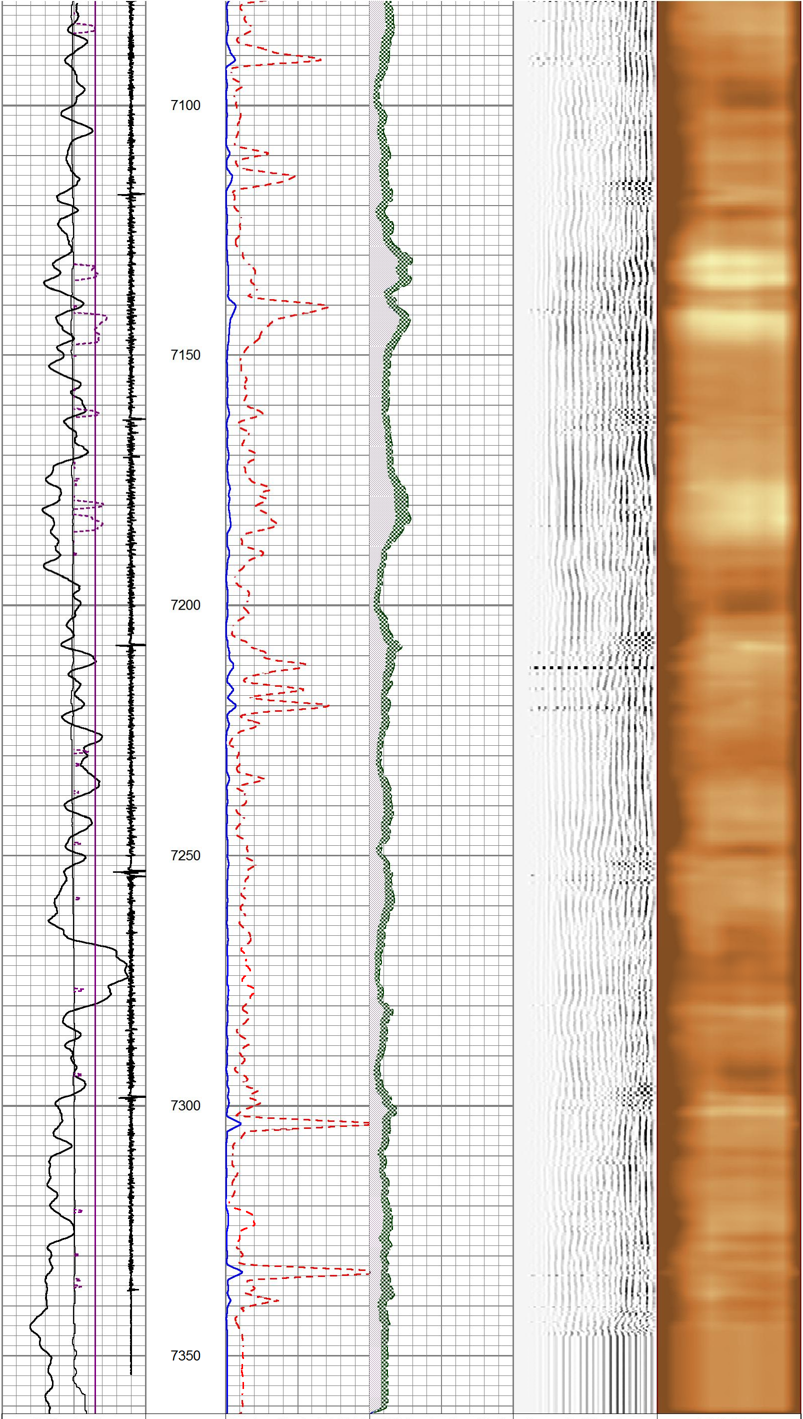
np - Analog C
(degF)
0 300

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

Calibration Report

Database File	d:\warrior\data\2017-08-16_extraction_mcgirr 6c_cbl\2017-08-16_extraction_mcgirr 6c_cbl.db
Dataset Pathname	pass3.2
Dataset Creation	Wed Aug 16 20:28:06 2017

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:	400.353	ft

Master Calibration, performed (Derived):

	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3'	-0.003	0.712	0.000	71.921	100.564	0.345
CAL	-0.008	0.565				
5'	-0.005	0.709	0.000	71.921	100.679	0.517
SUM						
S1	0.009	0.652	-2.000	71.921	114.867	-3.019
S2	0.011	0.625	-2.000	71.921	120.432	-3.354
S3	0.015	0.711	-2.000	71.921	106.244	-3.574
S4	0.017	0.768	-2.000	71.921	98.482	-3.689
S5	0.015	0.848	-2.000	71.921	88.734	-3.340
S6	0.011	0.853	-2.000	71.921	87.859	-2.992
S7	0.009	0.820	-2.000	71.921	91.168	-2.851
S8	0.011	0.735	-2.000	71.921	102.073	-3.109

Internal Reference Calibration, performed Sun Aug 13 11:03:31 2017:

	Raw (v)		Calibrated (v)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
CAL	0.000	0.000	-0.008	0.565	1.000	0.000

Air Zero Calibration, performed Mon Dec 12 13:09:14 2016:

	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

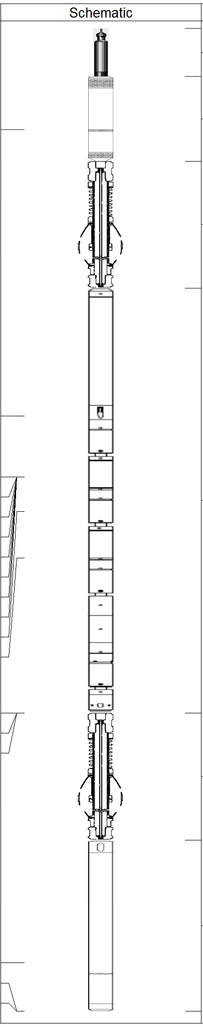
Serial Number:	IPPO2-01
Tool Model:	2 3/4" RIB Analog
Performed:	Fri Aug 26 11:07:15 2016

	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)
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

Schematic



Description	Length (ft)	O.D. (in)	Weight (lb
CableHead-TitanConeType2	1.03	1.44	3.60
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 (IXEM9-02) 400 Deg. Gamma Ray	3.68	2.75	47.00

Dataset:	2017-08-16_extraction_mcgirr 6c_cbl.db: field/well/run1/pass3.2
Total length:	21.13 ft
Total weight:	235.60 lb
O.D.:	2.75 in

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Company	Extraction Oil and Gas
Well	McGirr 6C
Field	Wattenberg
County	Larimer
State	Colorado
Country	U.S.A.