Company PDC Energy
Well Thistle Down 31H - 302
Field Wattenberg
County Weld
State CO

C&J ENERGY SERVICES

GAMMA RAY C.C.L. CEMENT BOND V.D.L.

Company PDC Energy
Well Thistle Down 31H - 302
Field Wattenberg
County Weld State CO

Location: API #: 05-123-45258
1444' FSL & 1357' FWL
NE / SW
SEC 31 TWP 5N RGE 64W

Other Services

Permanent Datum
Log Measured From
Drilling Measured From
Elevation 4804'

Elevation
K.B.
D.F.
G.L. 4804'

Date	January 31, 2018
Run Number	1
Depth Driller	12,919'
Depth Logger	7100'
Bottom Logged Interval	7100'-0'
Top Log Interval	
Casing Size	
Type Fluid	Water
Max. Recorded Temp.	239°
Estimated Cement Top	
Time Well Ready	
Time Logger On Bottom	
Unit Number	
Tool Size / ID Number	Probe 2-3/4" Radii
Location	WCR50+49,W1/2,N
Recorded By	Meisner
Witnessed By	Gardella

Borehole Record			Tubing Record			
Run Number	Bit	From	To	Size	Weight	From	To

Casing Record	Size	Wgt/Ft	Top	Bottom
Surface String				
Prot. String				
Production String	5.5"			
Liner				

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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.

Comments

Thistle Down 10 Well Pad

<NORTH> O O O O O X O O O O <SOUTH>

X = Thistle Down 31H - 302

Database File: pdct31h302.db
Dataset Pathname: pass2
Presentation Format: sector2
Dataset Creation: Thu Jan 31 14:54:02 2019 by Log 7.0 B1
Charted by: Depth in Feet scaled 1:240

0 GR (GAPI) 110 | 5 CCL 5.5 | 0 AMPMAX 100 | 200 WVF5FT 1200 | 1 Sector Map 8
400 TT3FT (usec) 200 | 0 AMPAVG 100
-50 CCL 5 | 0 AMPMIN 100
0 AMP3FT (mV) 100

0 GR (GAPI) 110 | 5 CCL 5.5 | 0 AMPMAX 100 | 200 WVF5FT 1200 | 1 Sector Map 8
400 TT3FT (usec) 200 | 0 AMPAVG 100
-50 CCL 5 | 0 AMPMIN 100
0 AMP3FT (mV) 100

Database File: pdct31h302.db
Dataset Pathname: pass1
Presentation Format: sector2
Dataset Creation: Thu Jan 31 14:18:21 2019 by Log 7.0 B1
Charted by: Depth in Feet scaled 1:240

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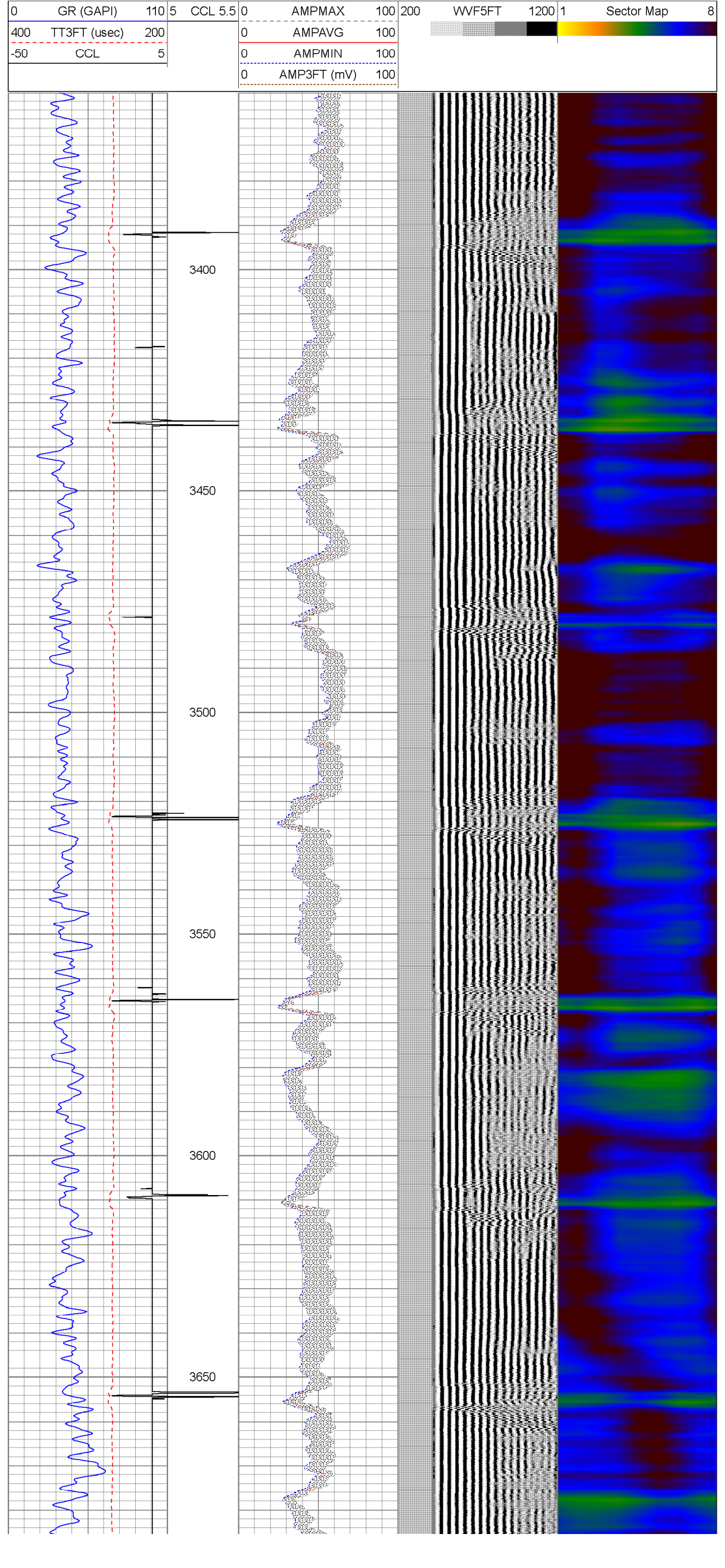
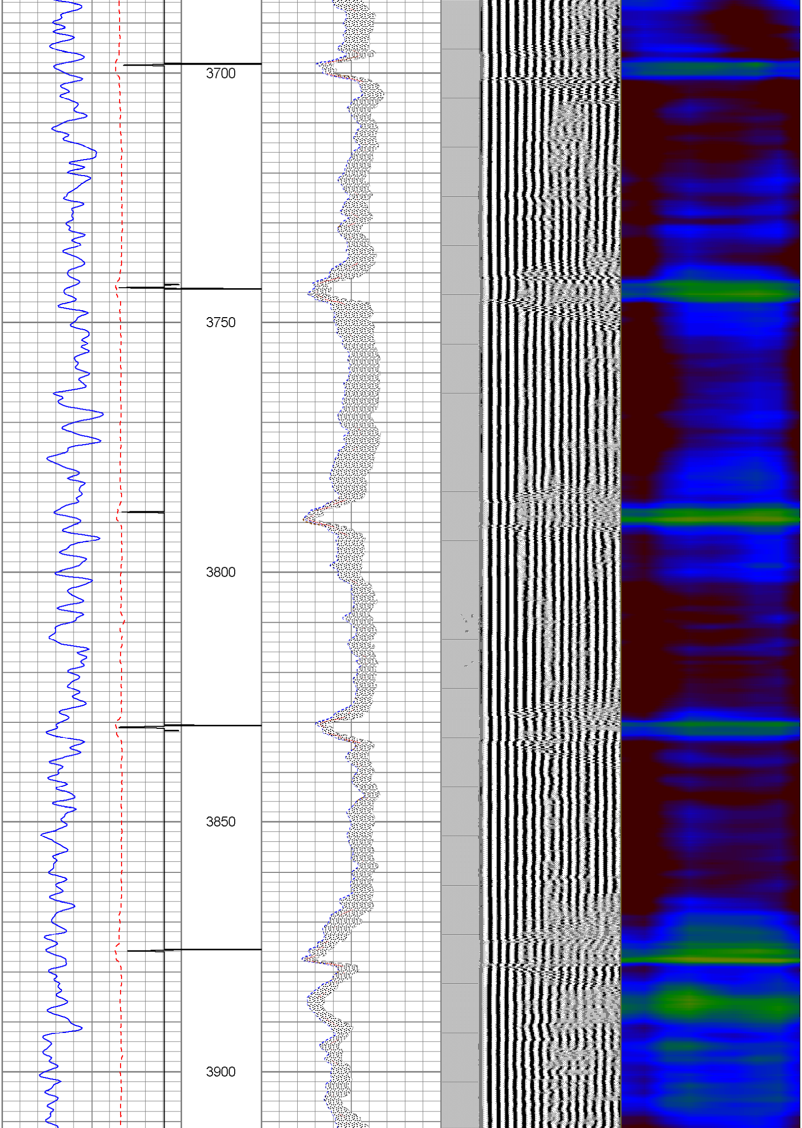
400 TT3FT (usec) 200 | 0 AMPAVG 100
-50 CCL 5 | 0 AMPMIN 100
0 AMP3FT (mV) 100

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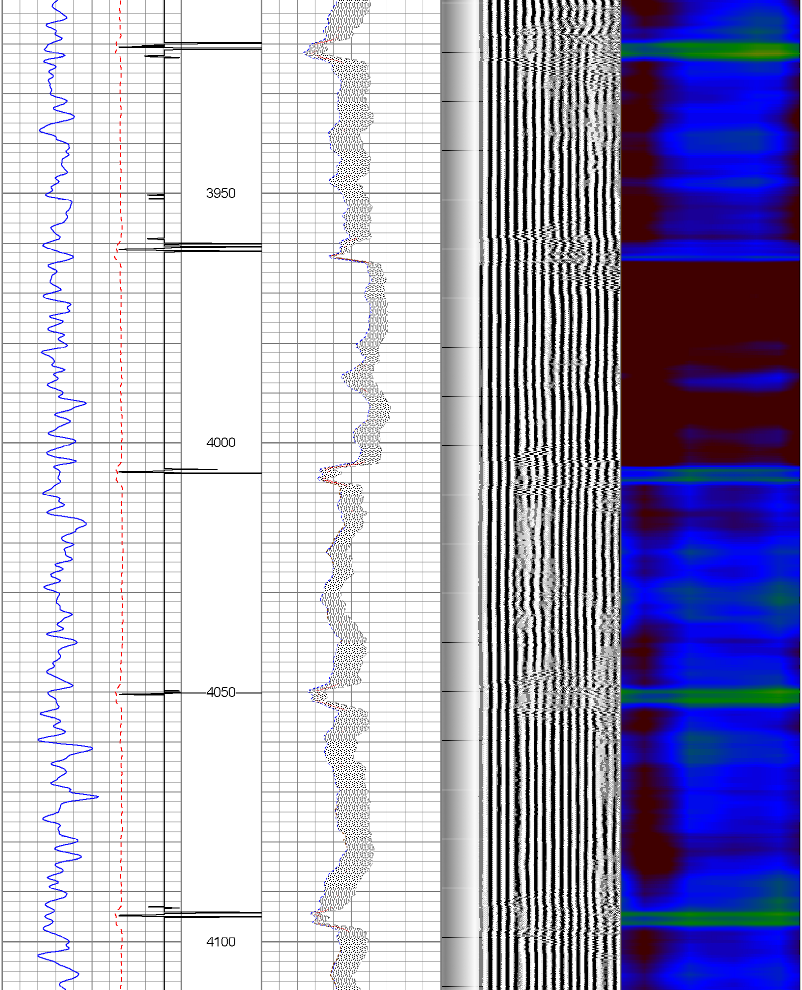
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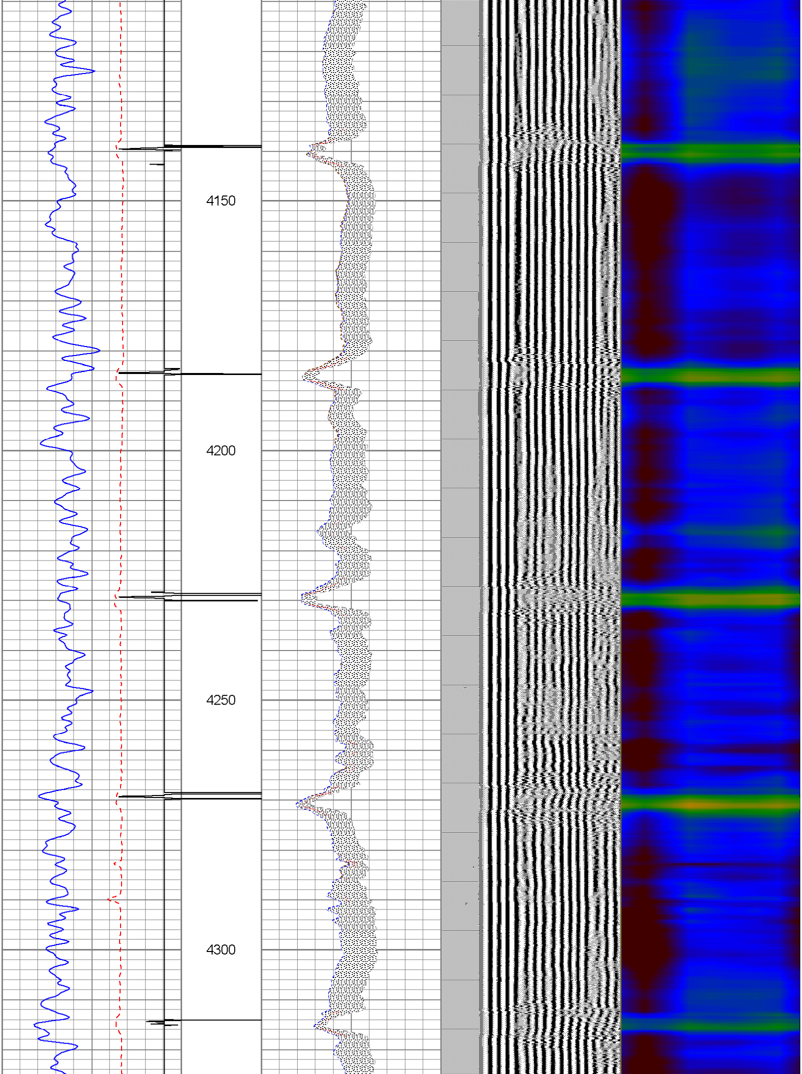
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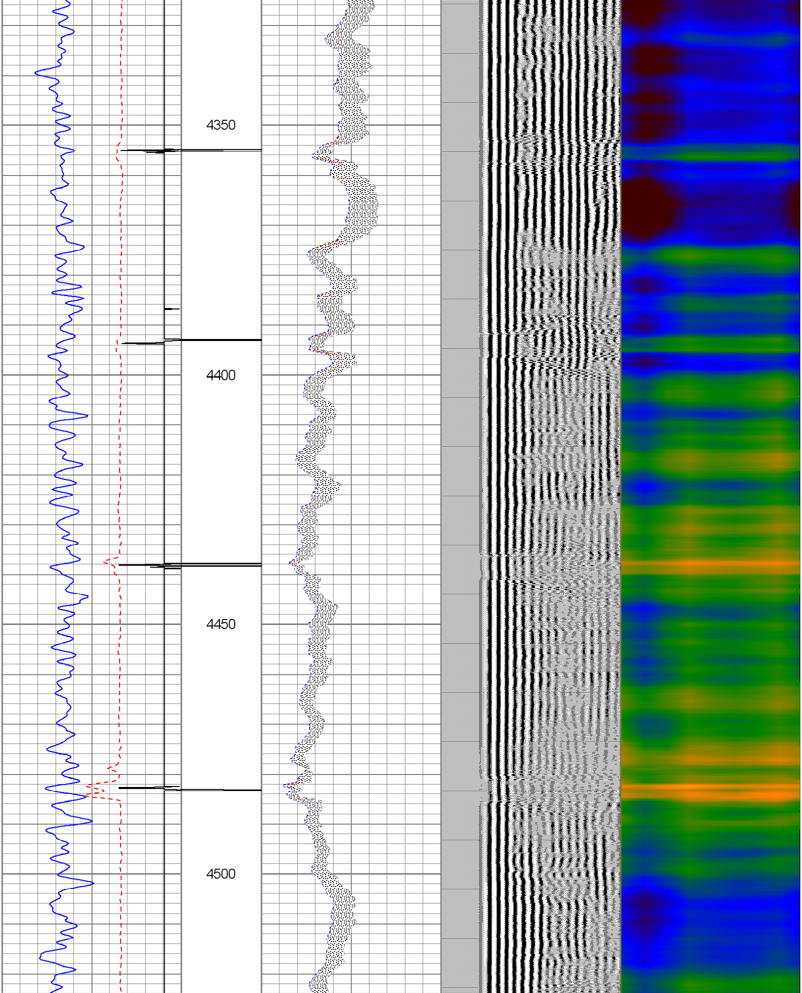
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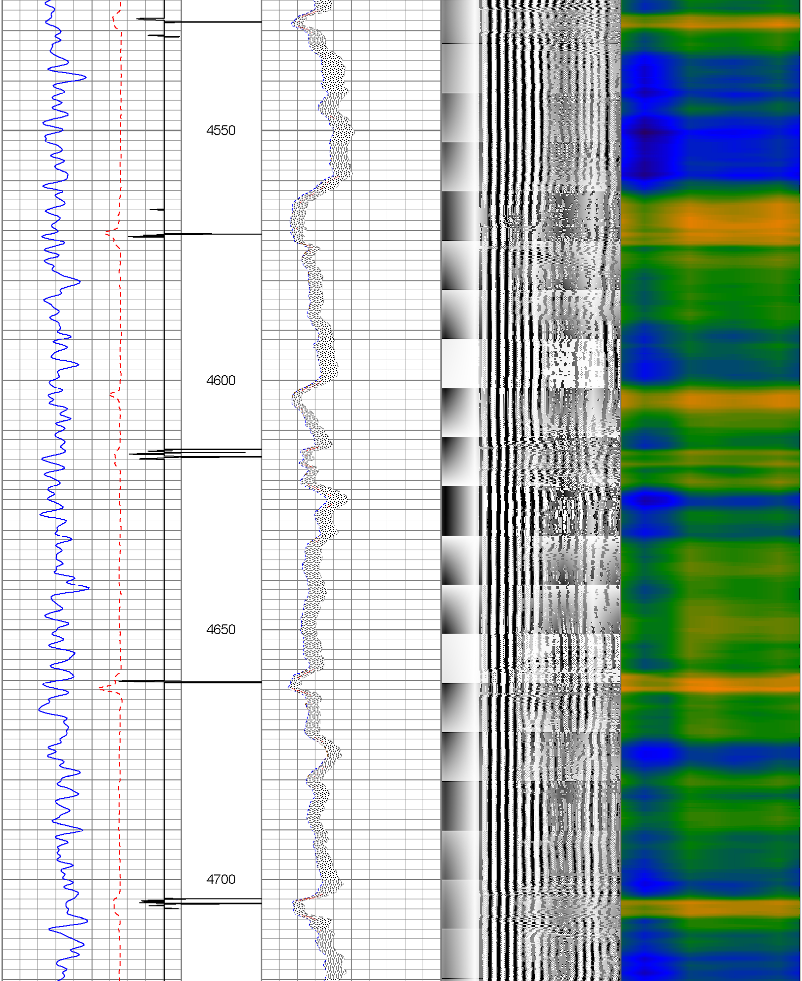
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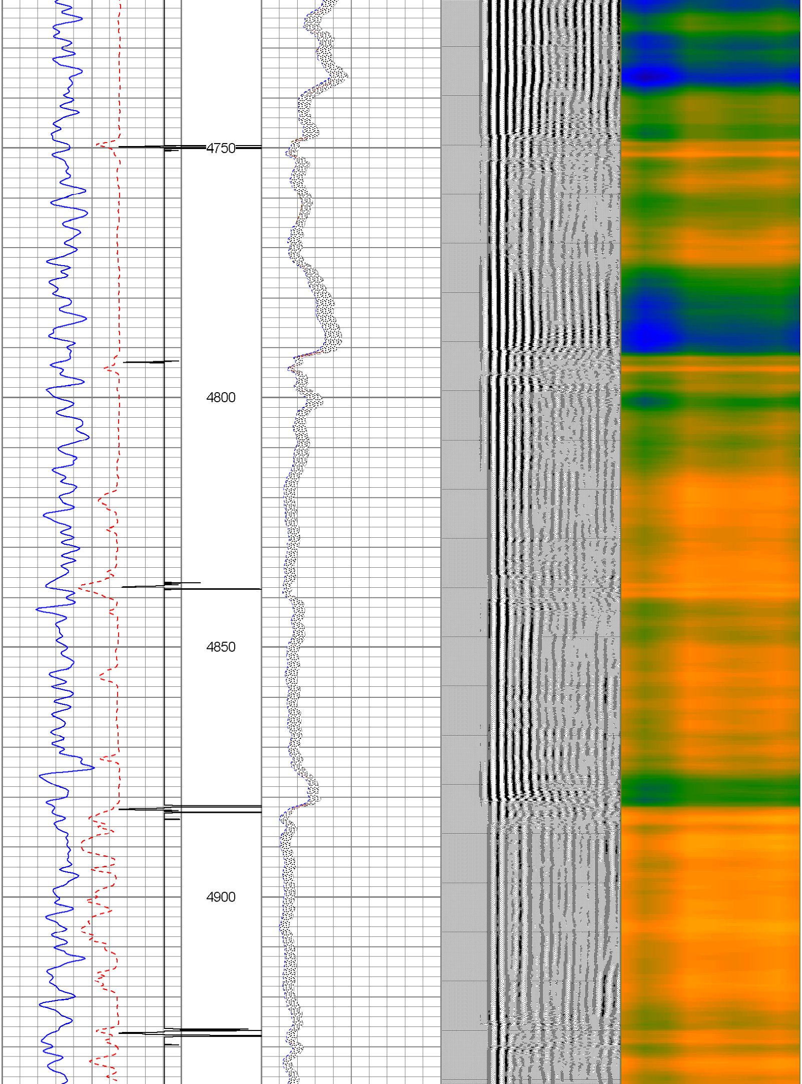
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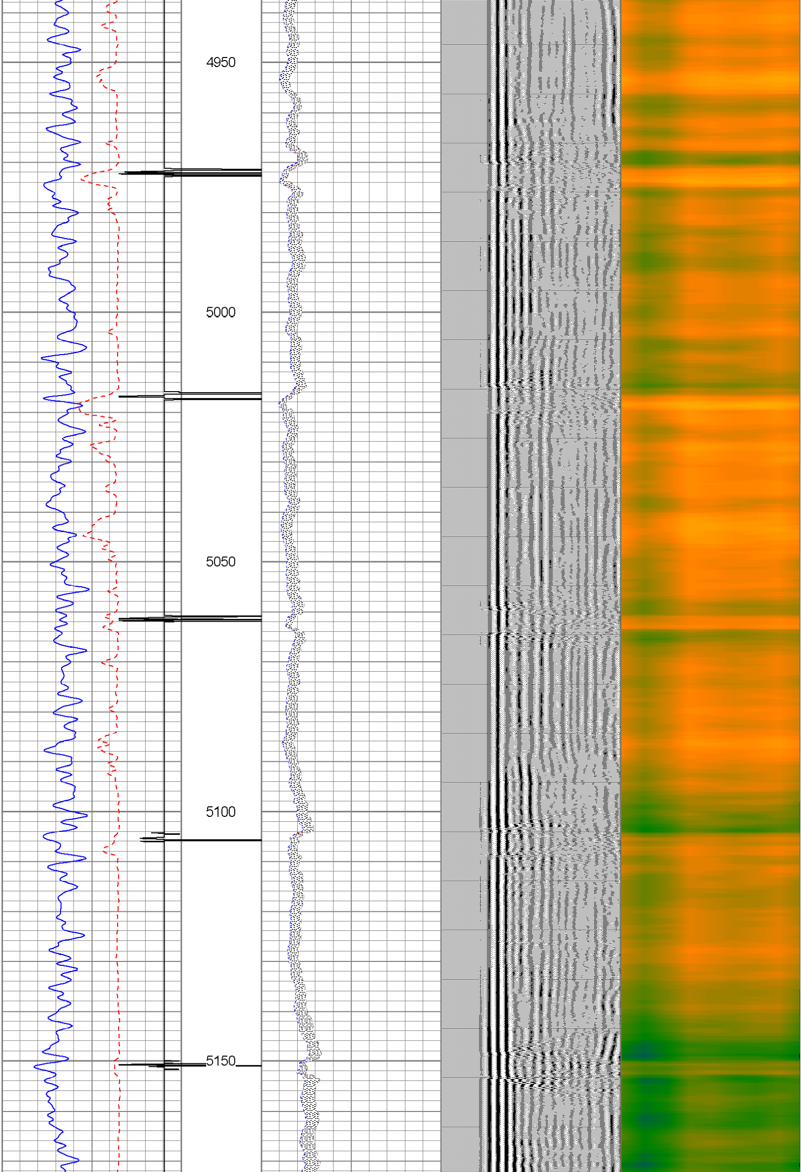
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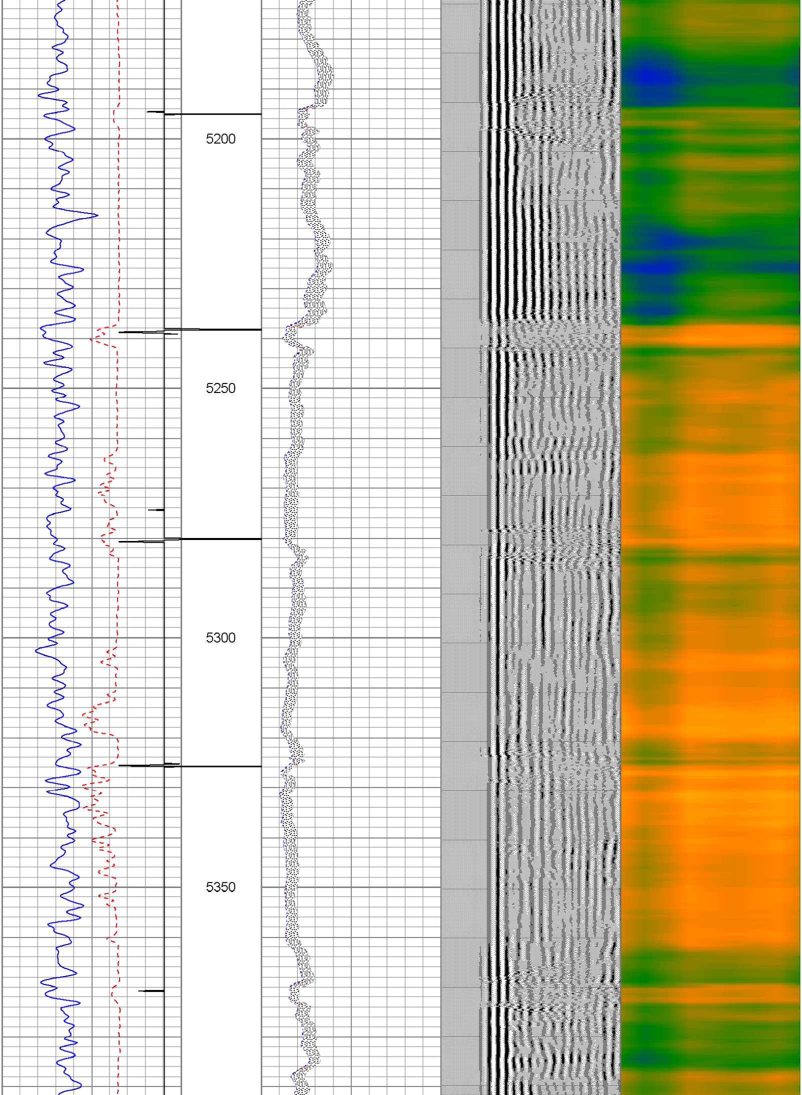
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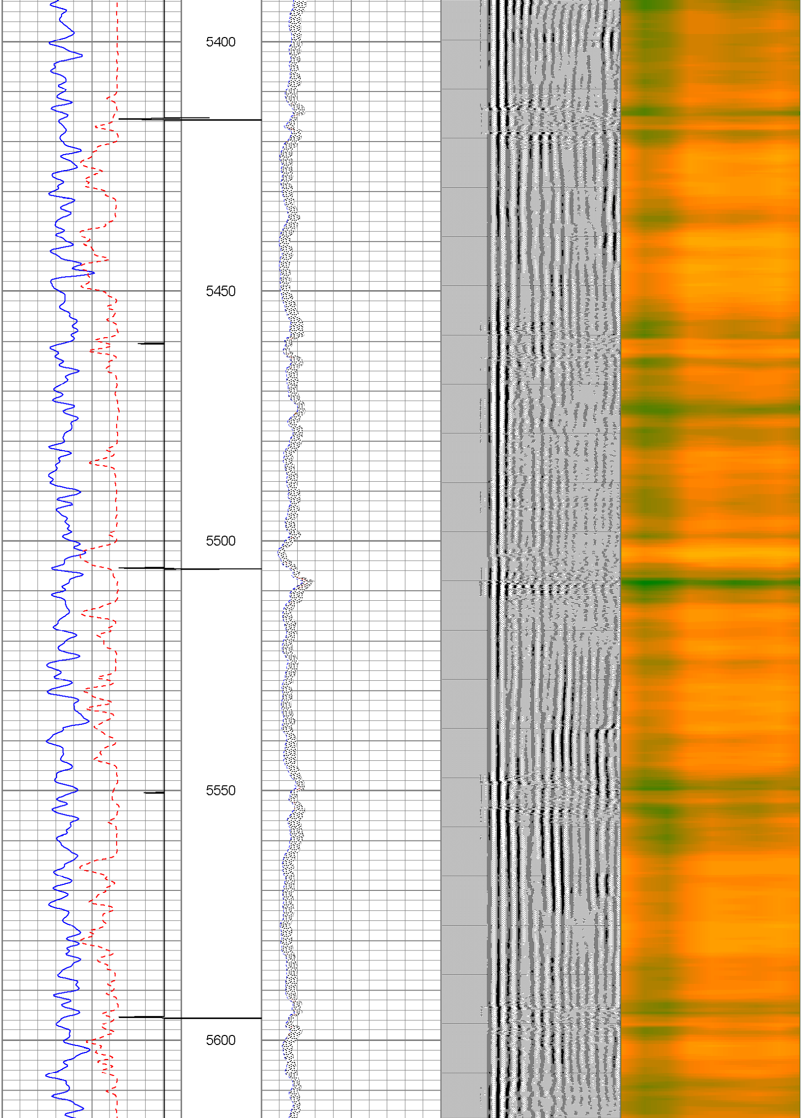
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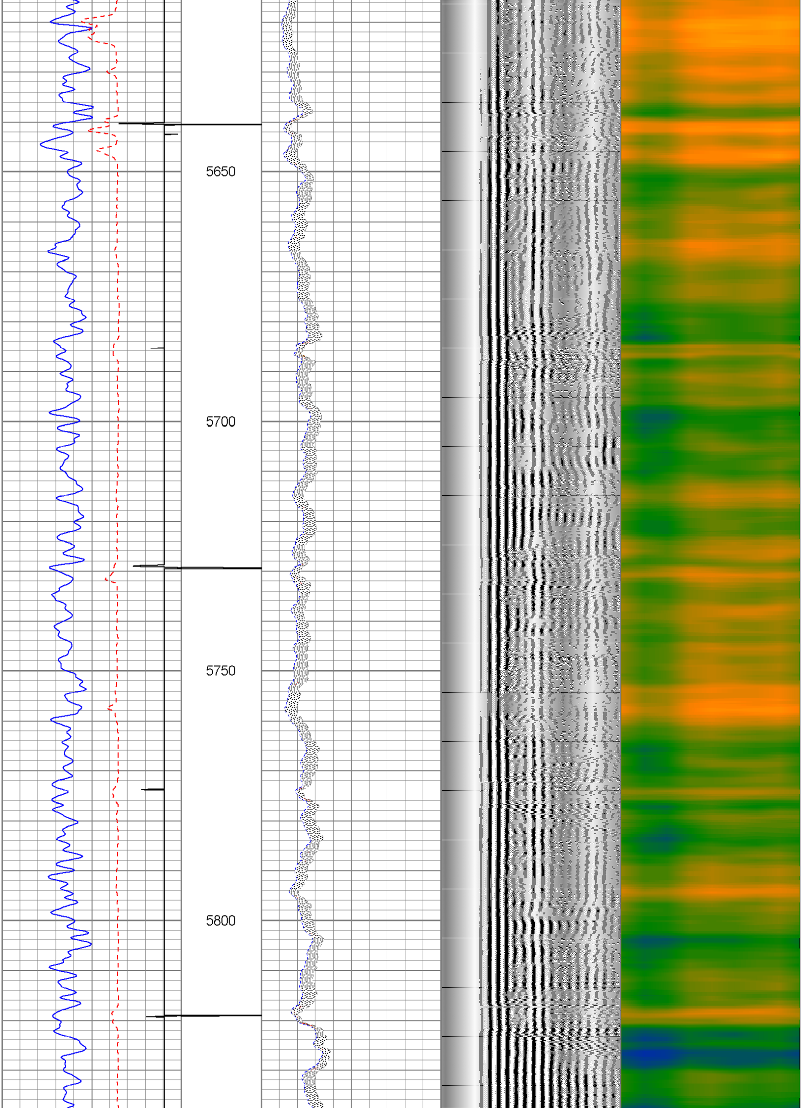
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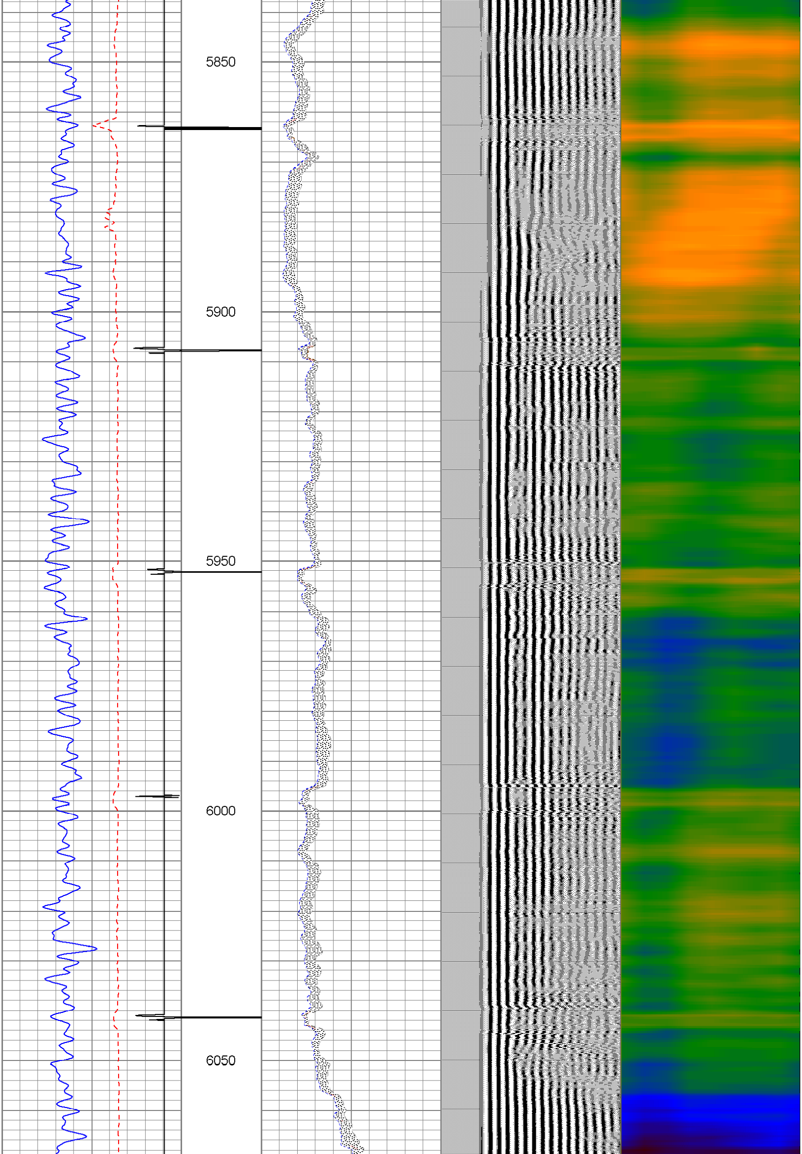
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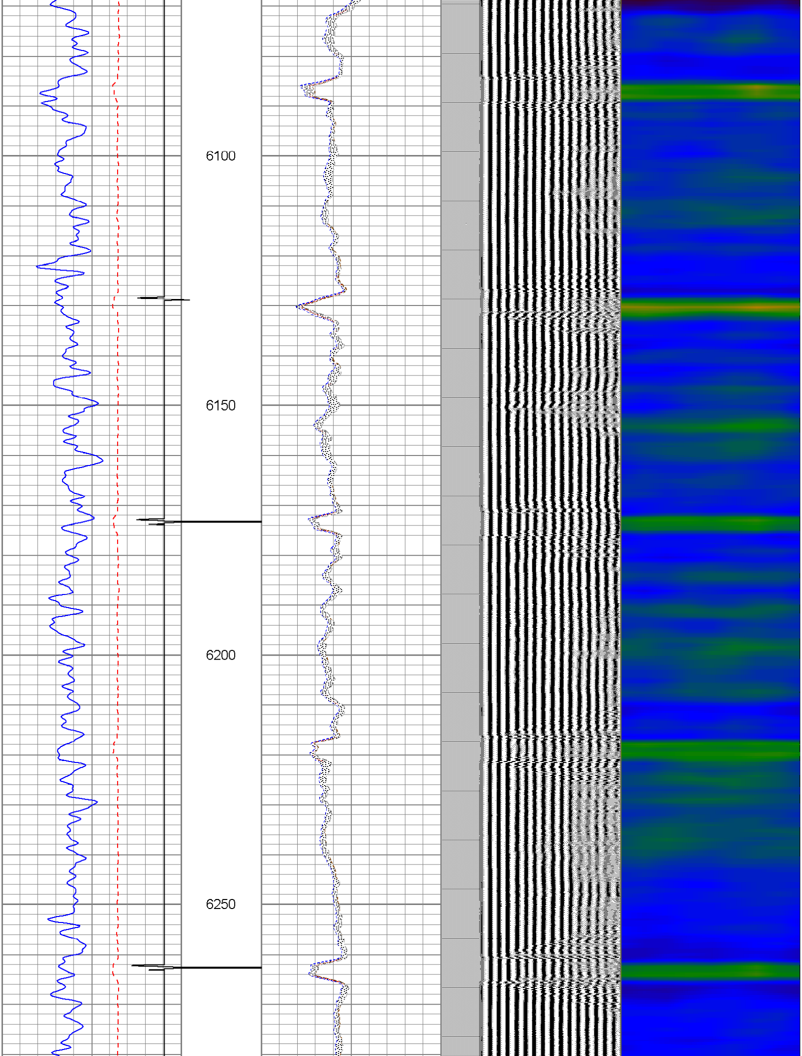
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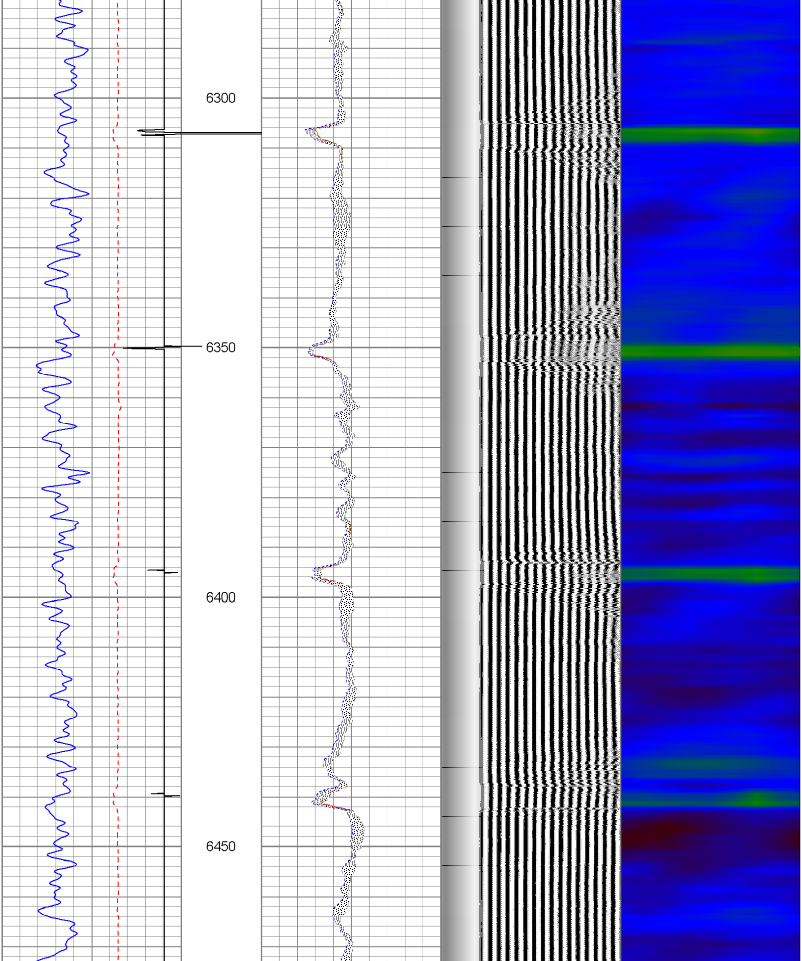
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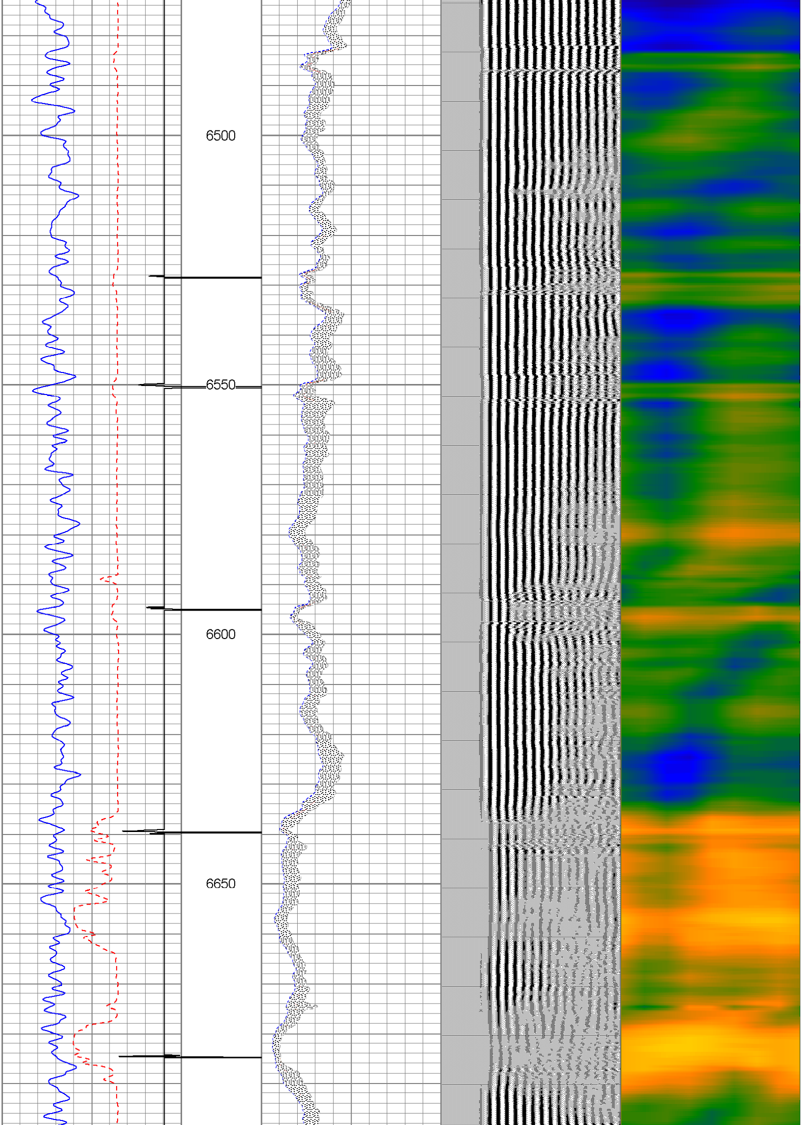
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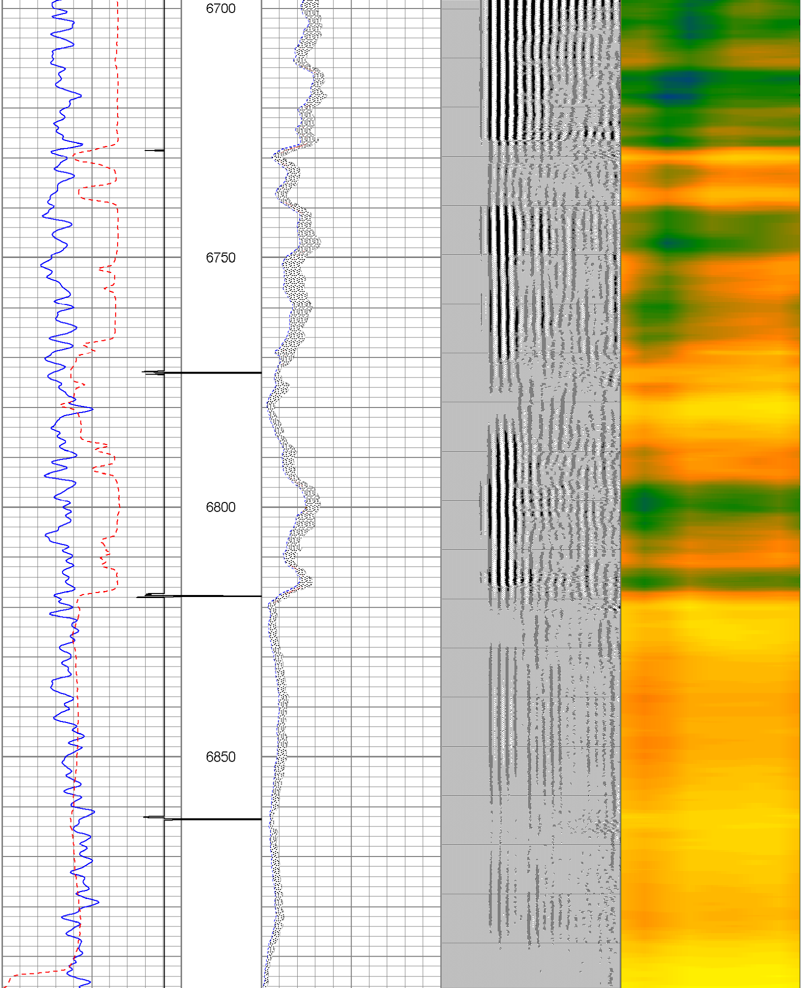
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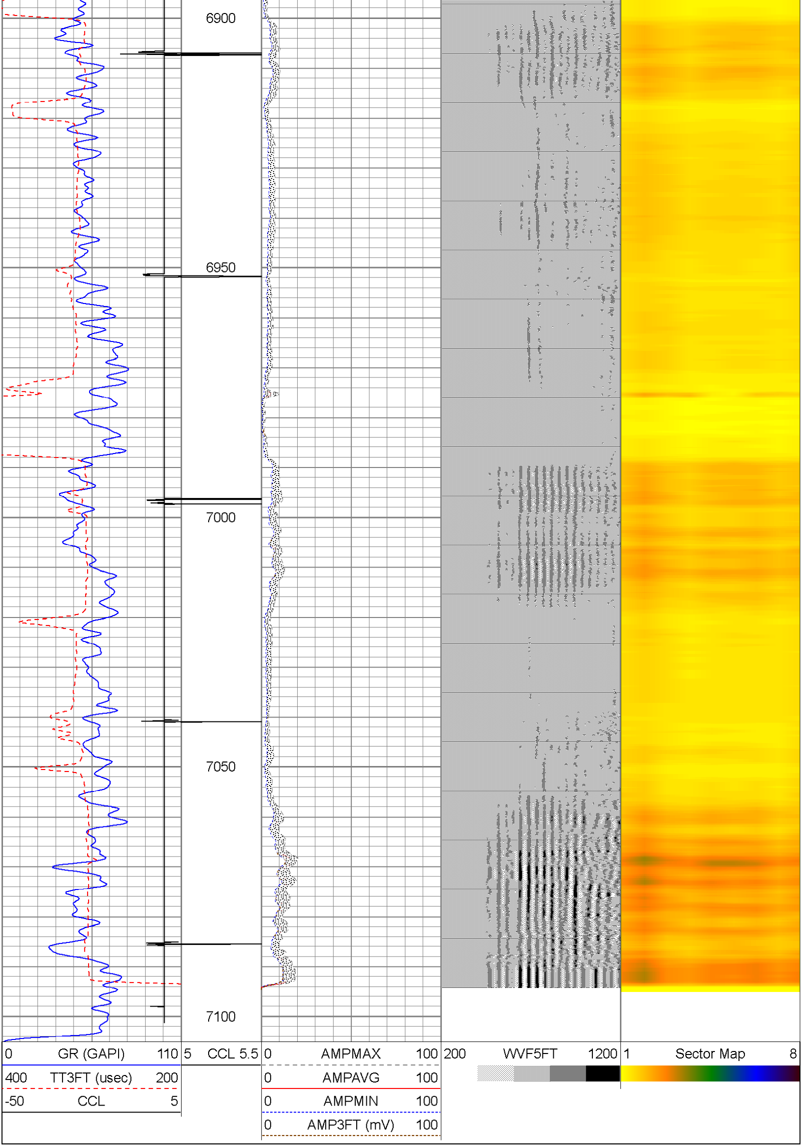
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400 TT3FT (usec) 200
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