C&J ENERGY SERVICES

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

Company	PDC Energy
Well	Thistle Down 31i - 212
Field	Wattenberg
County	Weld
State	CO

Company PDC Energy
Well Thistle Down 31i - 212
Field Wattenberg
County Weld State CO

Location: API #: 05-123-45455
1399' FSL & 1357' FWL
NE / SW

Other Services

SEC 31 TWP 5N RGE 64W

Permanent Datum		Elevation 4803'	Elevation K.B. D.F. G.L. 4803'
Log Measured From			
Drilling Measured From			

Date	January 31, 2018		
Run Number	1		
Depth Driller	12,932'		
Depth Logger	7100'		
Bottom Logged Interval	7100'-0'		
Top Log Interval			
Casing Size			
Type Fluid	Water		
Max. Recorded Temp.	235°		
Estimated Cement Top			
Time Well Ready			
Time Logger On Bottom			
Unit Number			
Tool Size / ID Number	Probe 2-3/4" Radii		
Location	WCR50+49,W/I2,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.

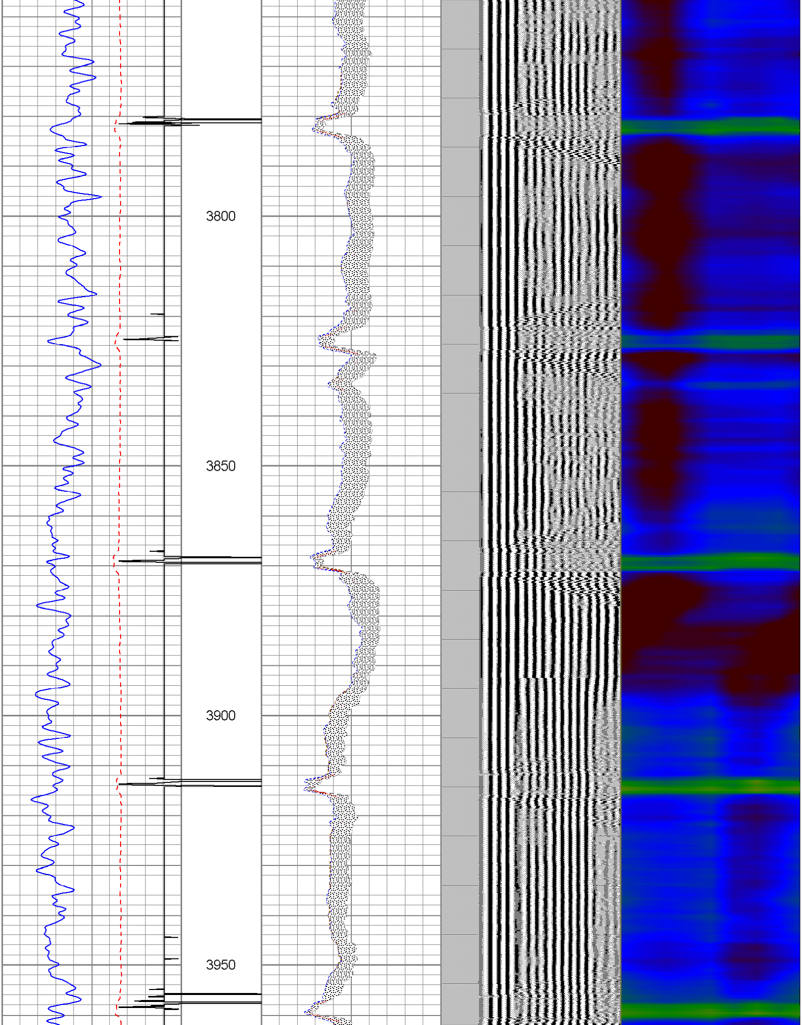
Comments

Thistle Down 10 Well Pad

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

X = Thistle Down 31i - 212

Database File:	pdct31i212.db
Dataset Pathname:	pass1
Presentation Format:	sector2
Dataset Creation:	Thu Jan 31 09:48:36 2019 by Log 7.0 B1
Charted by:	Depth in Feet scaled 1:240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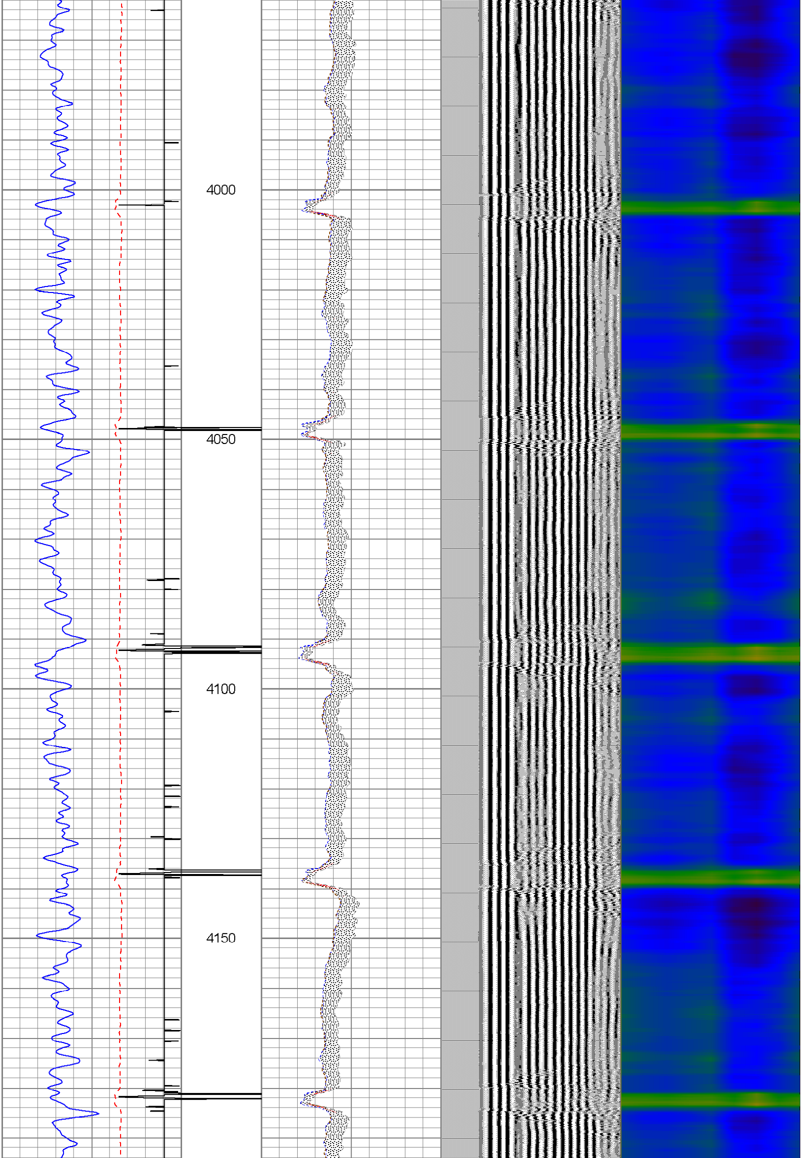
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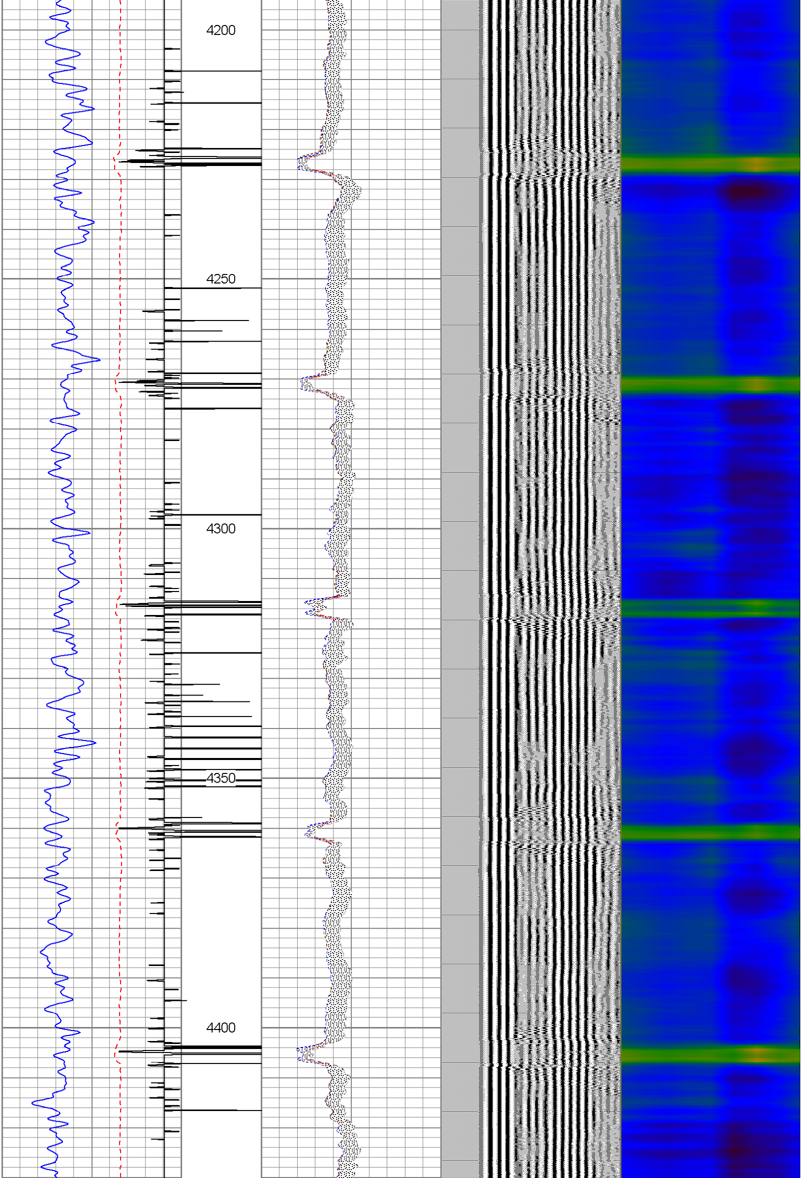
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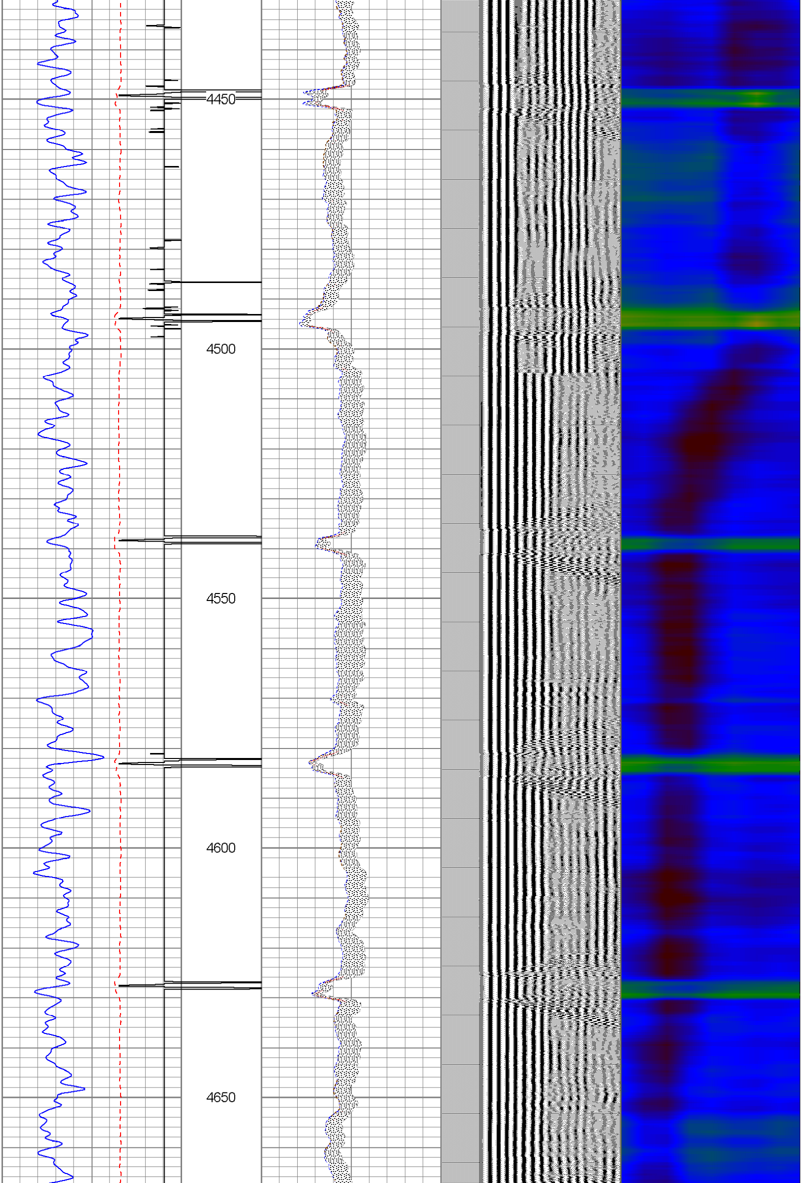
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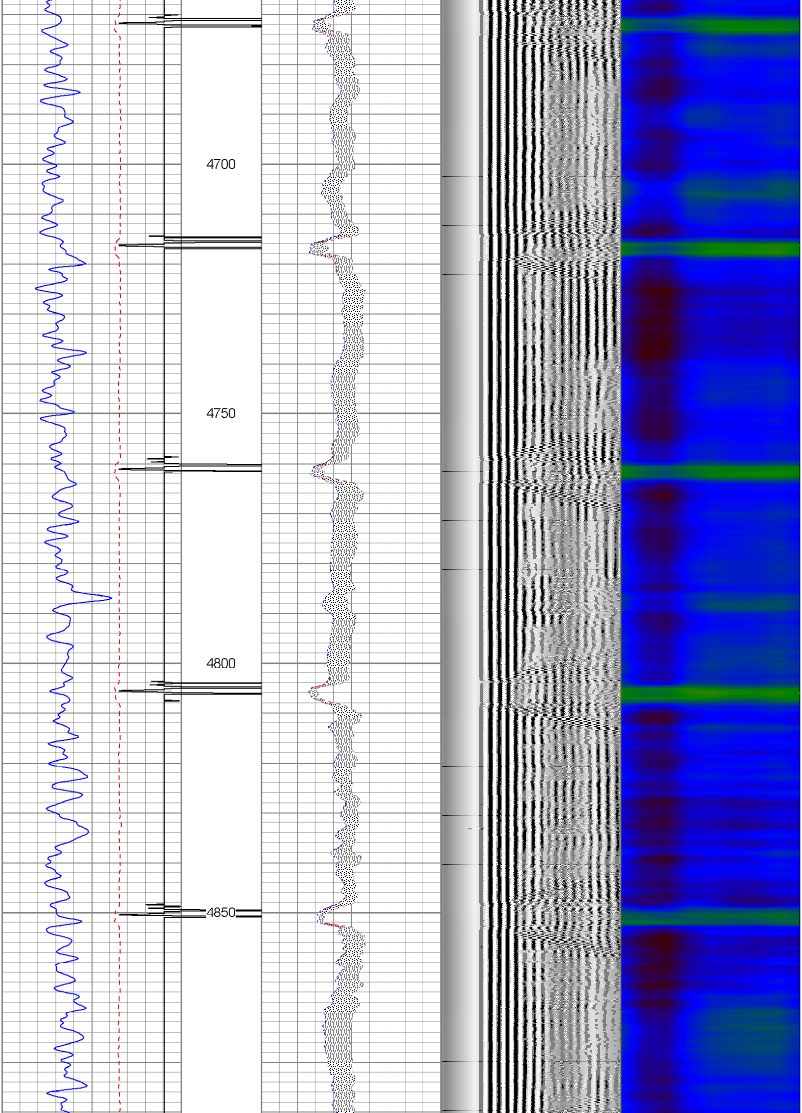
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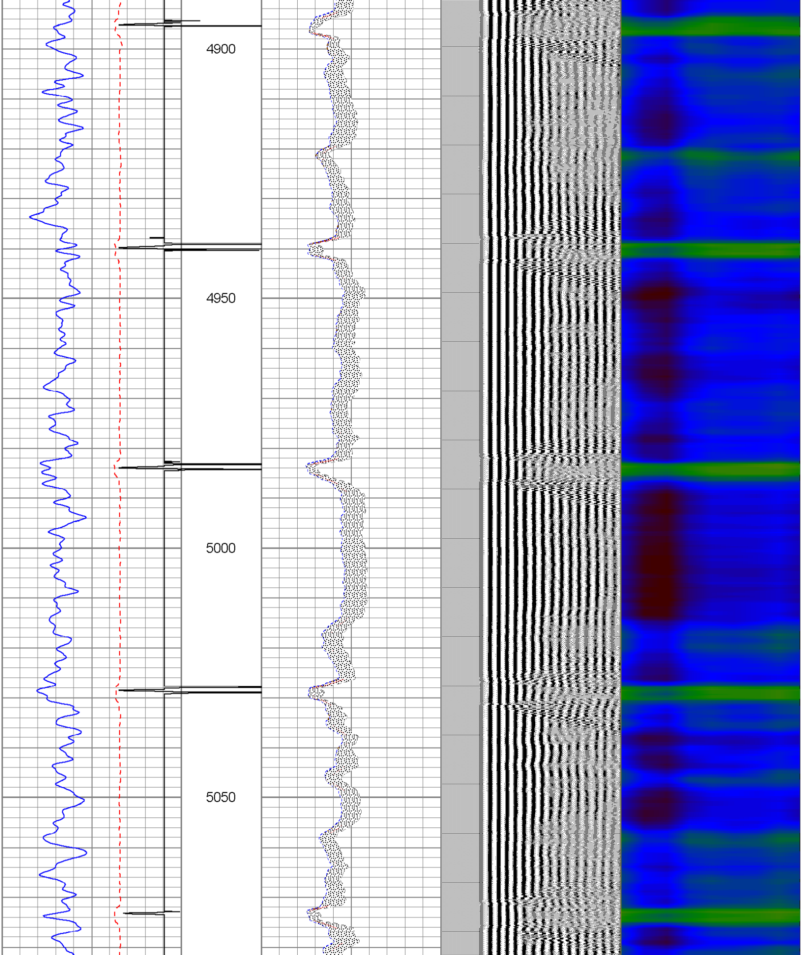
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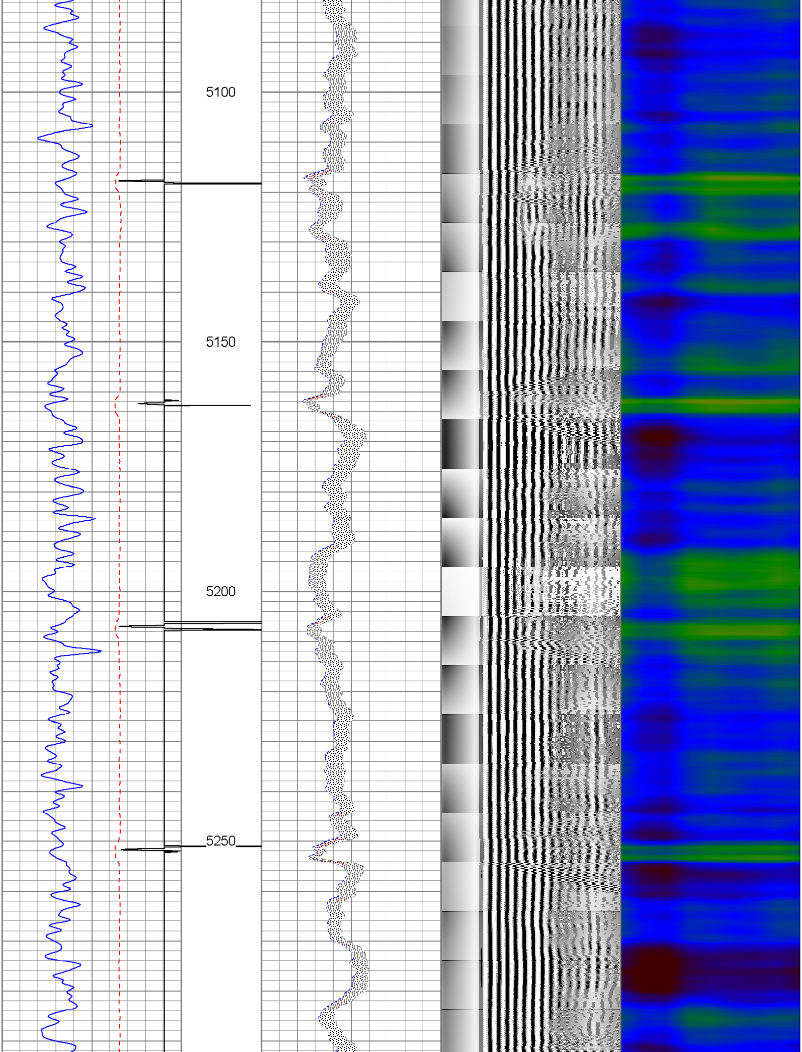
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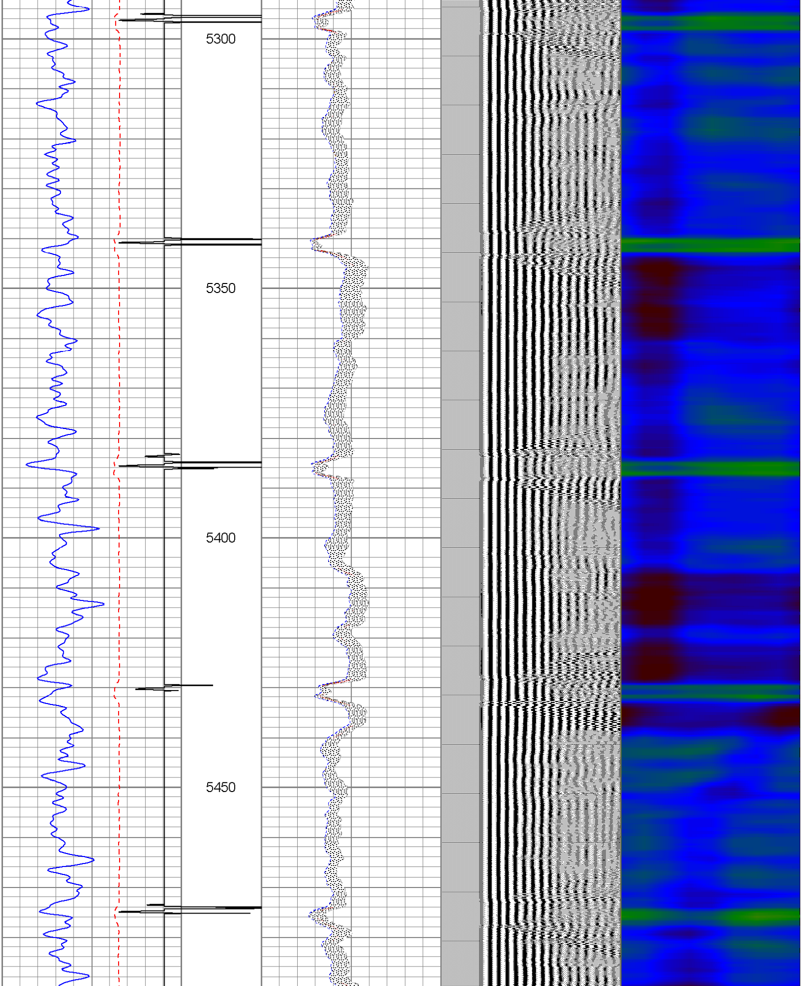
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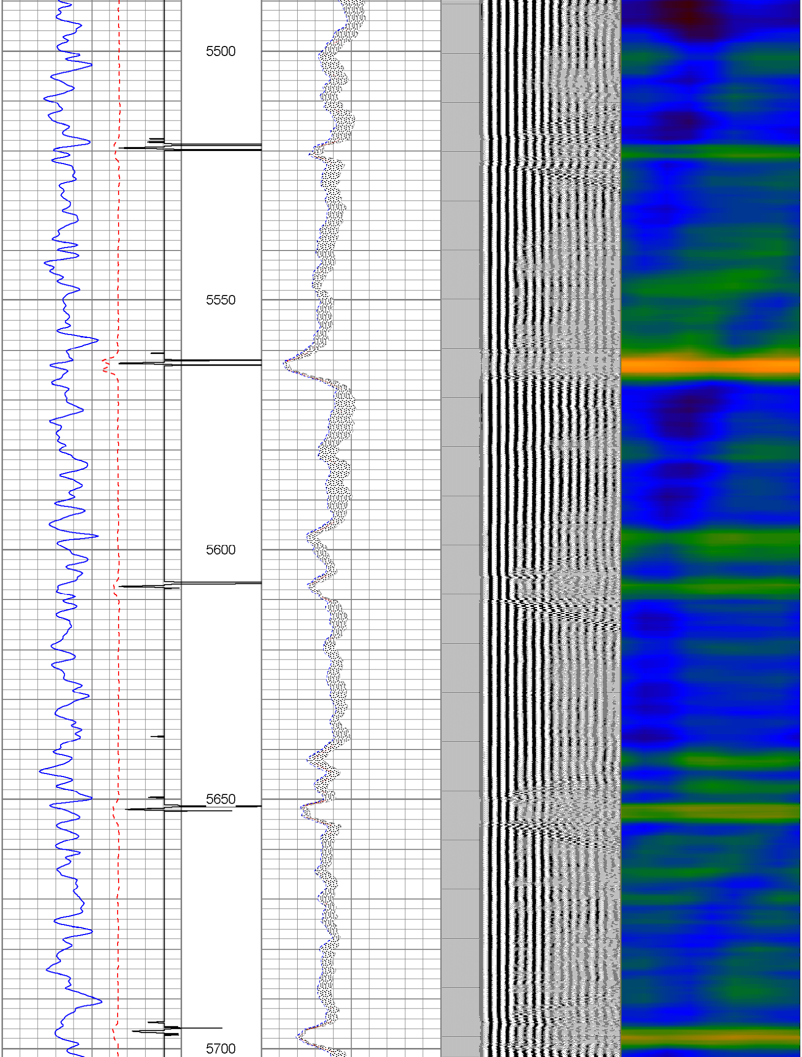
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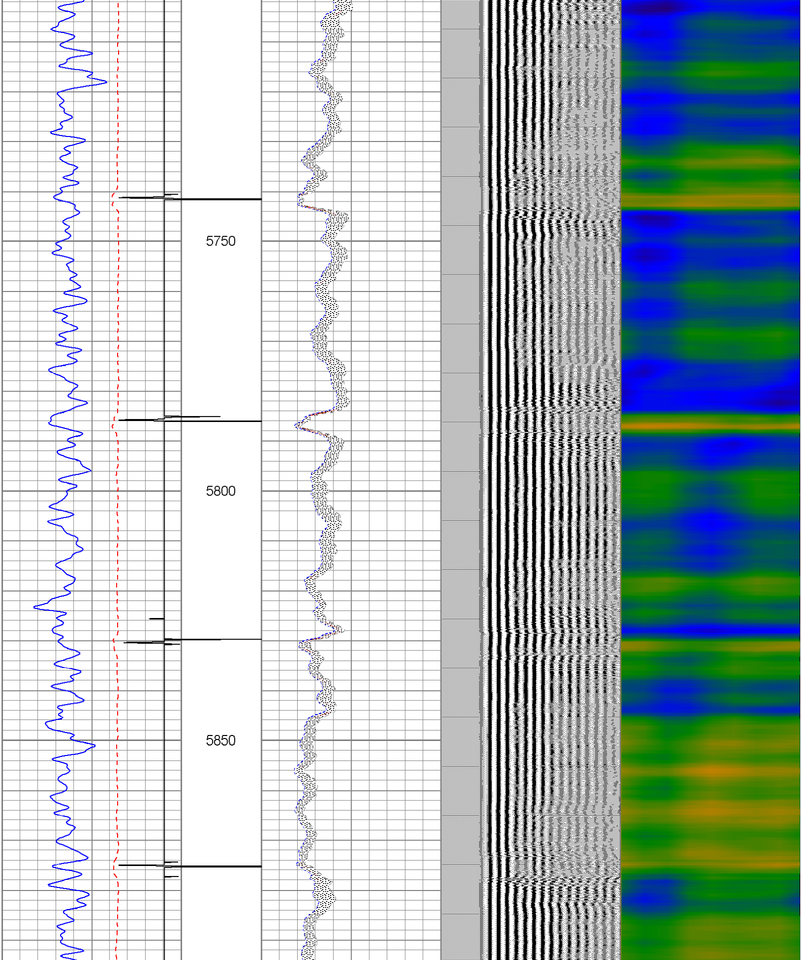
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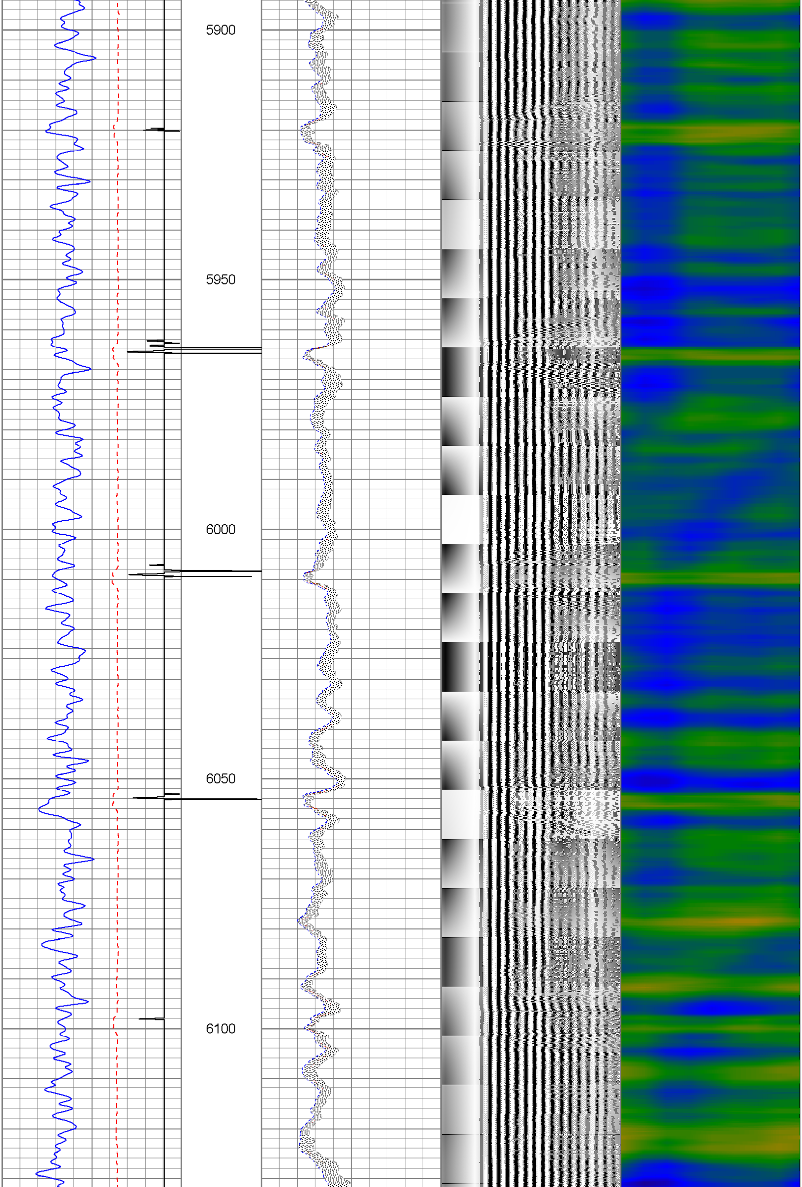
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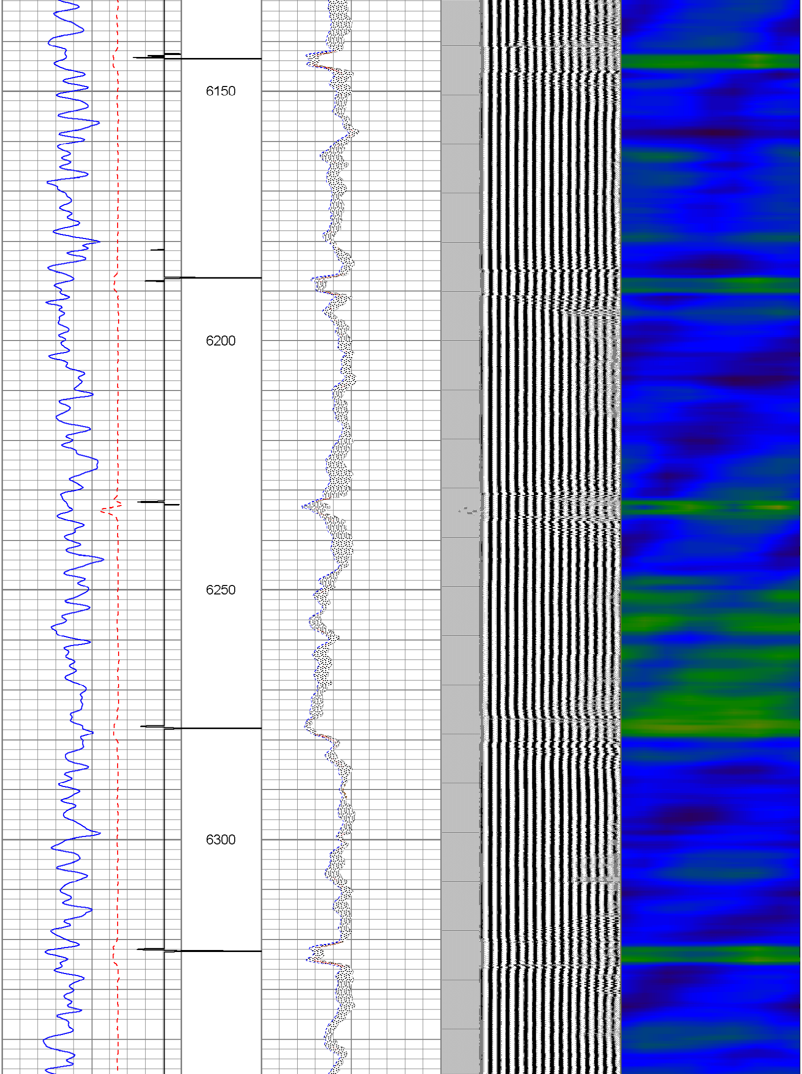
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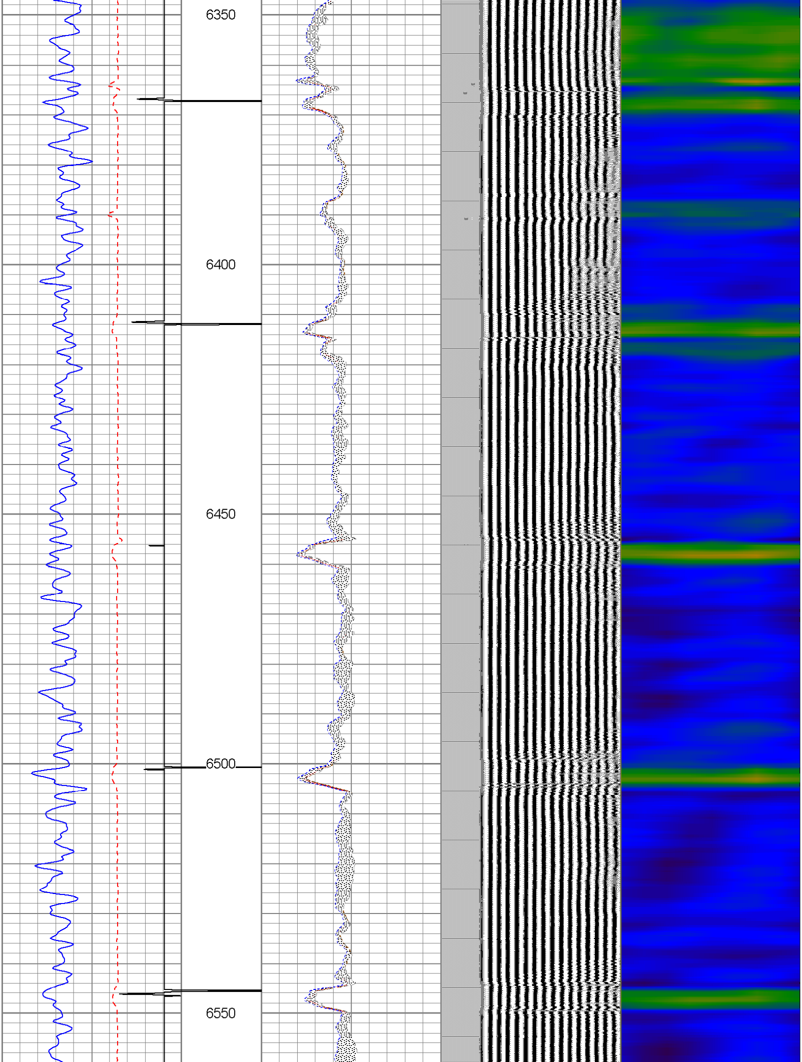
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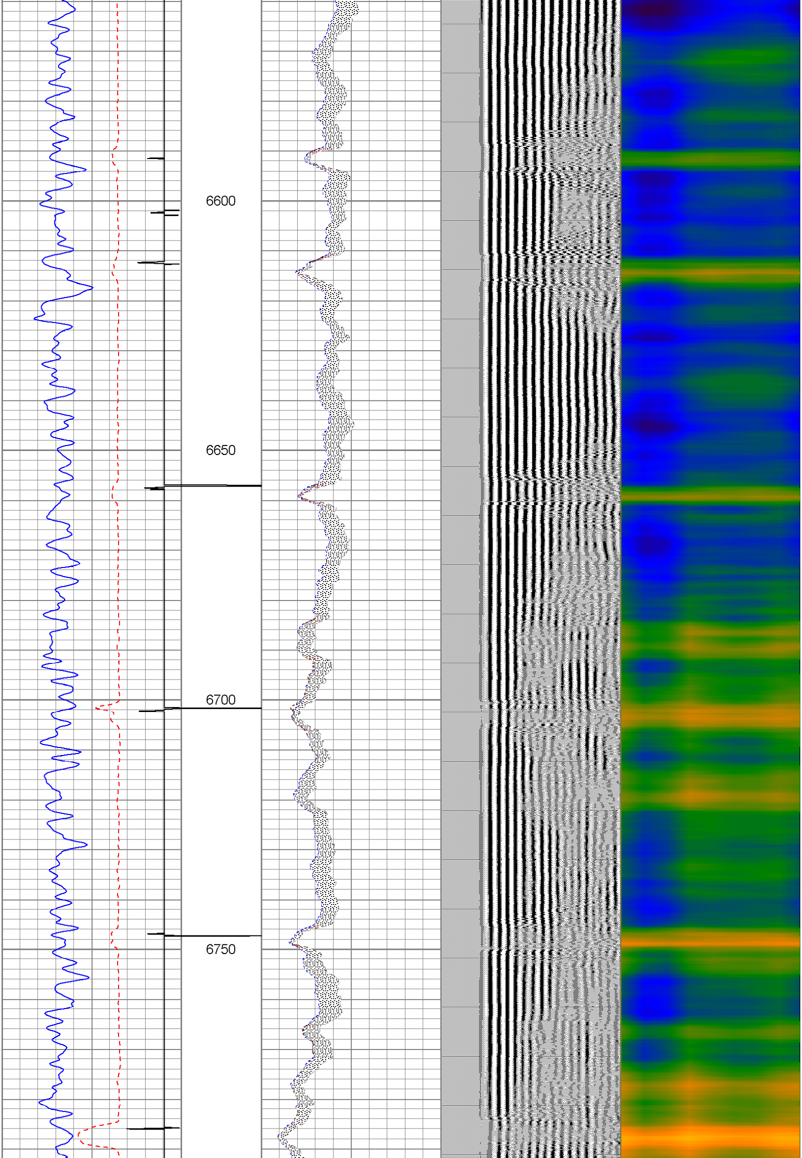
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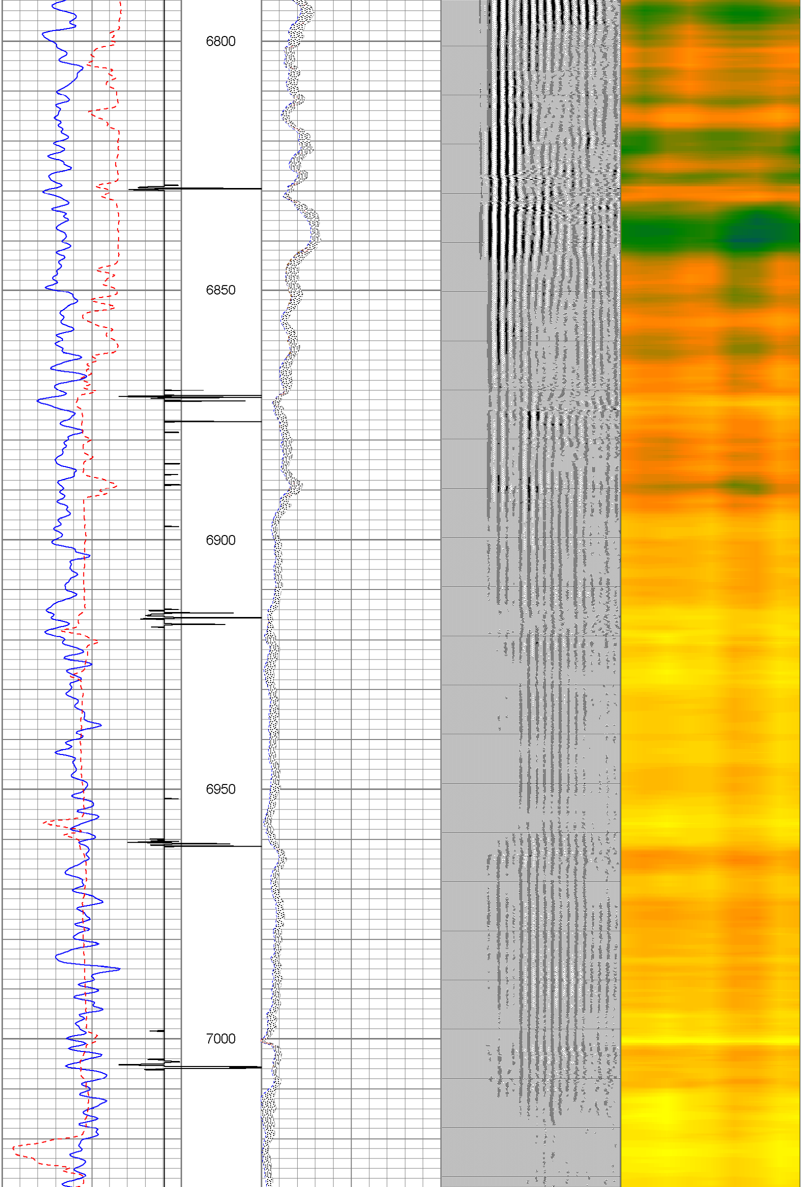
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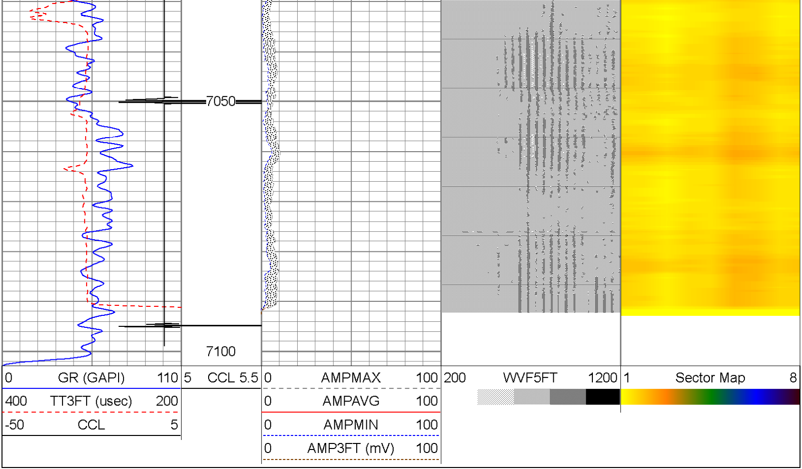
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200 WVF5FT 1200
1 Sector Map 8