PIONEER
Pioneer Energy Services

RADIAL SECTOR BOND LOG WITH GAMMA RAY

Company ENCANA OIL & GAS (USA) INC
Well MINCH 3B-4H-L368
Field WATTENBERG
County WELD
State CO

Company	**ENCANA OIL & GAS (USA) INC**
Well	**MINCH 3B-4H-L368**
Field	**WATTENBERG**
County	**WELD** State **CO**

Location: API # : 05123394120000
SHL: 1697' FSL & 453' FWL NWSW
LAT: 40.252302
LONG: -105.016074
SEC 4 TWP 3N RGE 68W

Other Services
None

			Elevation
Permanent Datum	GL	Elevation 5077	K.B. 5107
Log Measured From	KB		D.F. 5107
Drilling Measured From	KB...30' ABOVE GL		G.L. 5077

Date of Service	FEBRUARY 3, 2015
Run Number	1
Depth Driller or PBTD	11956
Depth Logger	7550
Bottom Log Interval	7548
Top Log Interval	SURFACE
Open Hole Size	8+3/4"
Type Fluid	WBM
Fluid Level	115
Fluid Density	11.2 PPG
Max. Recorded Temperature	NA
Max. Wellhead Pressure	0
Wellhead Connection	PACKOFF TO 7" LTC
Estimated Cement Top	344
Unit Number	P-96
Wireline Size	1/4"
Location	FT. MORGAN, CO
Recorded By	SCHUMAN
Witnessed By	MR ROY HUNT

	Size	Wt/Ft	Top	Bottom
Tubing Record				
Surface Casing	9+5/8"	40#	SURFACE	876
Production Casing	7"	26#	SURFACE	7790
Liner Record	4+1/2"	13.5#	SURFACE	NA

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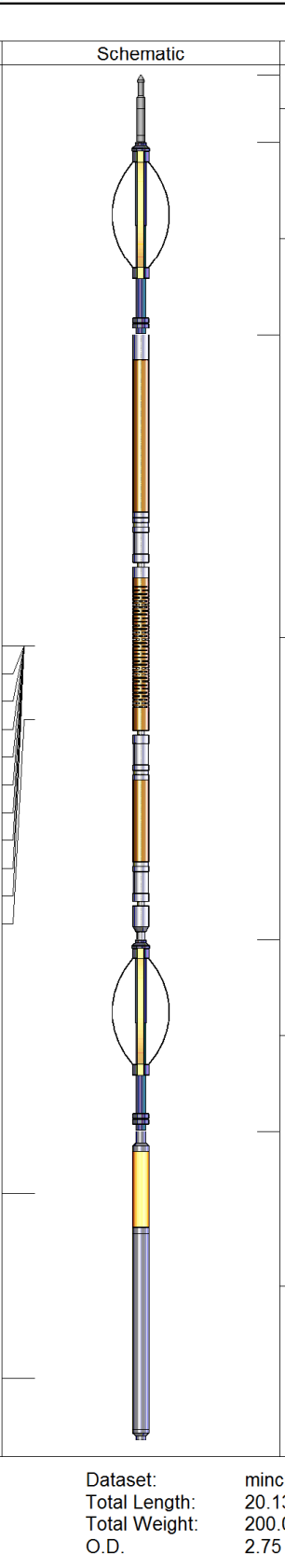
All interpretations are opinions based on inferences from electrical or other measurements and Pioneer Wireline Services, LLC cannot and does not guarantee the accuracy or correctness of any interpretation, and Pioneer Wireline Services, LLC will not be liable or responsible for any loss, costs, damages, or expenses incurred or sustained by anyone resulting from any interpretation made by any of our officers, agents or employees.

Comments
N/A DENOTES NOT AVAILABLE OR NON-APPLICABLE.
H&P DRILLING RIG 522
S.O. # 2-280122

THANK YOU FOR USING PIONEER ENERGY SERVICES

Your Pioneer ENERGY Services Crew	Tool Data - Services	Serial Number
Engineer: SHAUN	SECOTR CBL	070132
Operator: MATT	GR	110246
Operator: ANGELO		
Operator: GENO		

Sensor	Offset (ft)	Schematic	Description	Len (ft)	OD (in)	Wt (lb)
			STNDRD Standard Cable Head	1.00	1.69	10.00
			PTS275	2.83	2.75	
WVF3FT WVFCAL WVFS1 WVFS2 WVFS3 WVFS4 WVFS5 WVFS6 WVFS7 WVFS8 WVF5FT	11.71 11.71 11.71 11.71 11.71 11.71 11.71 11.71 11.71 11.71 10.63		RBT-Probe (111205_7in) Probe Radii Bond Tool with Digital Telemetry	8.92	2.75	90.00
			PTS275	2.83	2.75	
CCL	3.63					
			GR_CCL-Probe (110249) Probe Gamma CCL	4.54	2.75	100.00
GR	0.90					

Dataset: minch 3b-4h-l368_rbl.db: field/well/RBL/pass3
Total Length: 20.13 ft
Total Weight: 200.00 lb
O.D. 2.75 in

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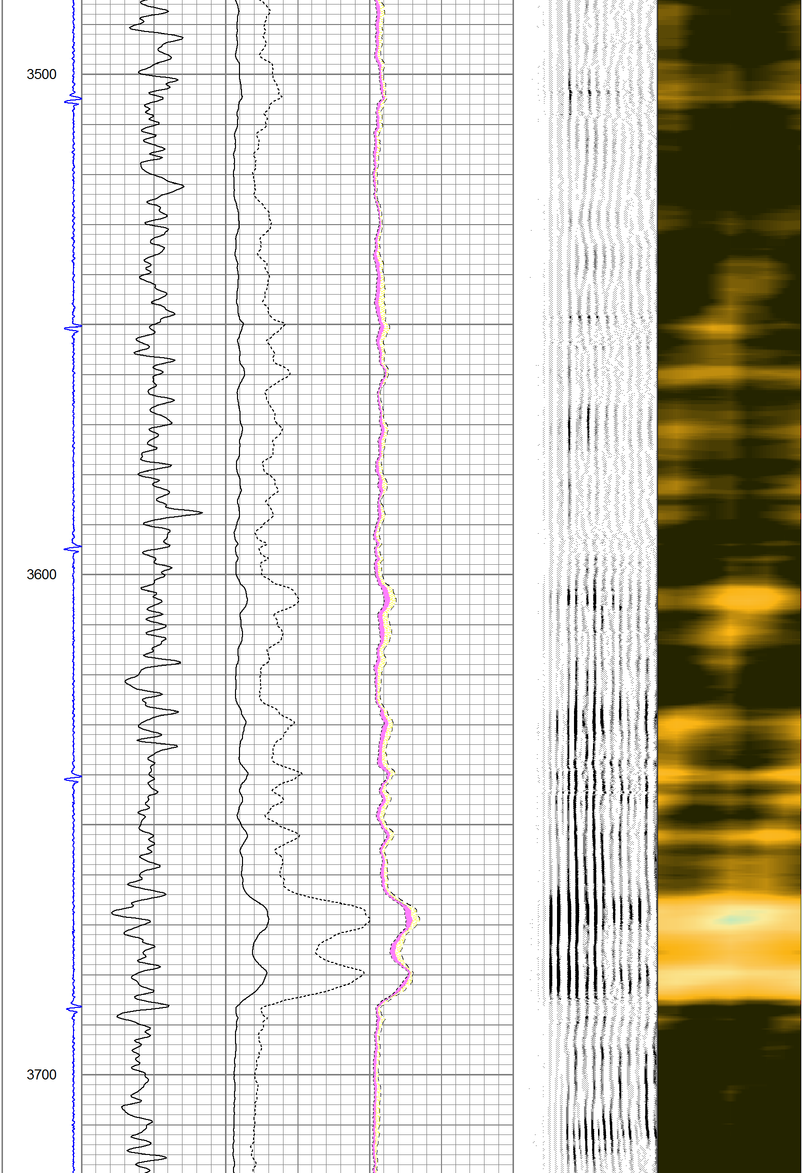
MAIN LOG

LOGGED WITH 0 PSI APPLIED AT SURFACE

Database File: minch 3b-4h-l368_rbl.db
Dataset Pathname: RBL/pass3
Presentation Format: scbl02
Dataset Creation: Tue Feb 03 05:51:07 2015 by Log 7.0 B1
Charted by: Depth in Feet scaled 1:240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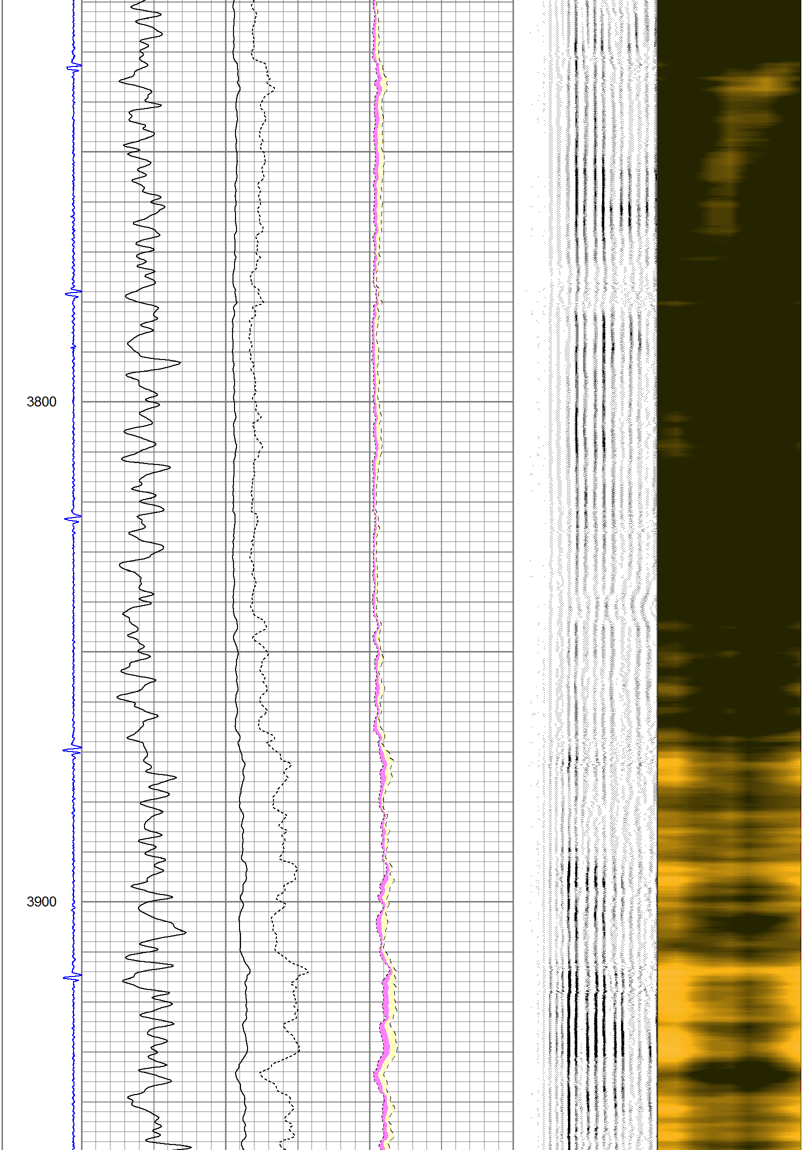
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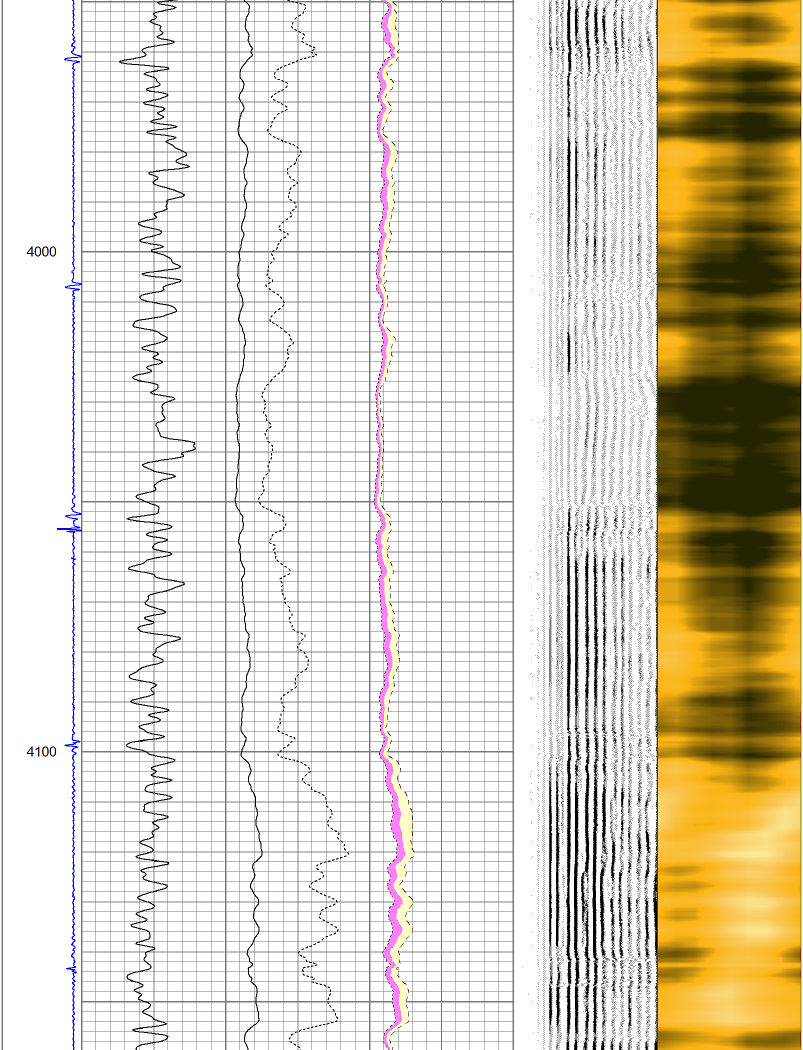
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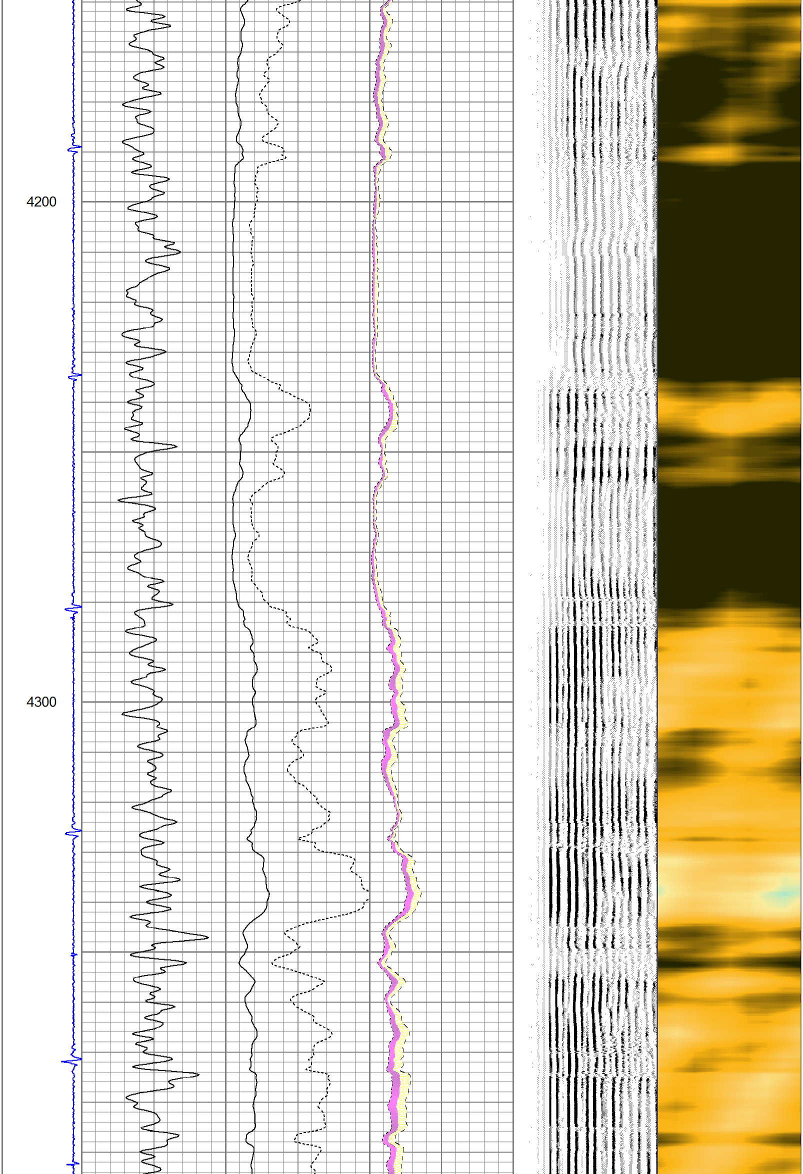
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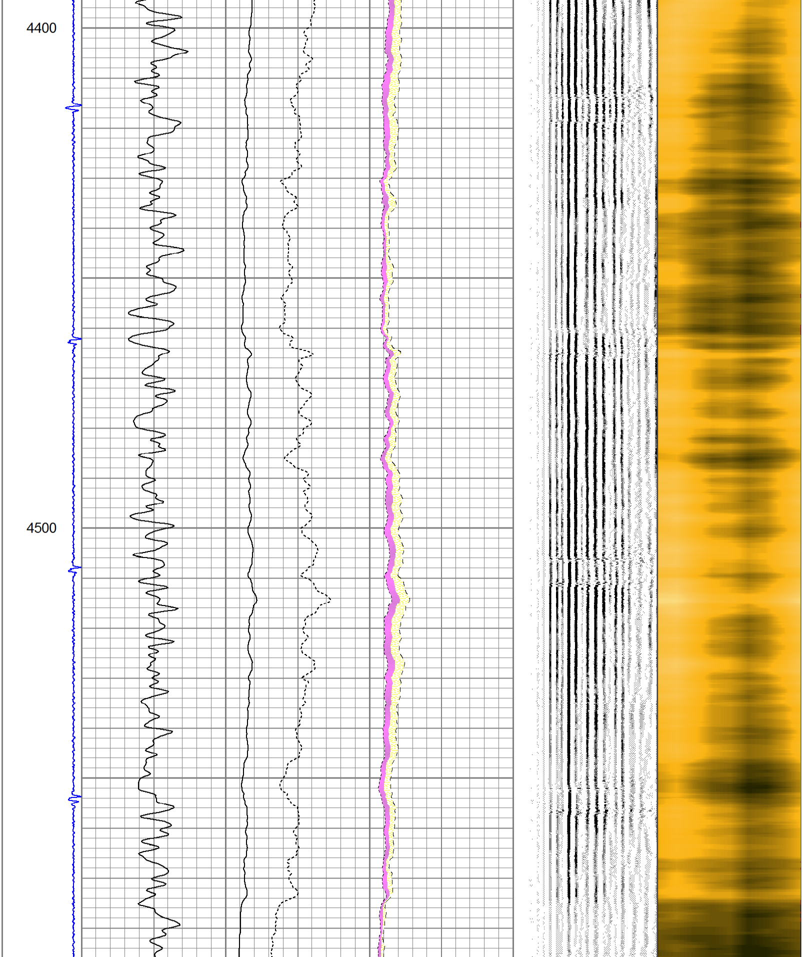
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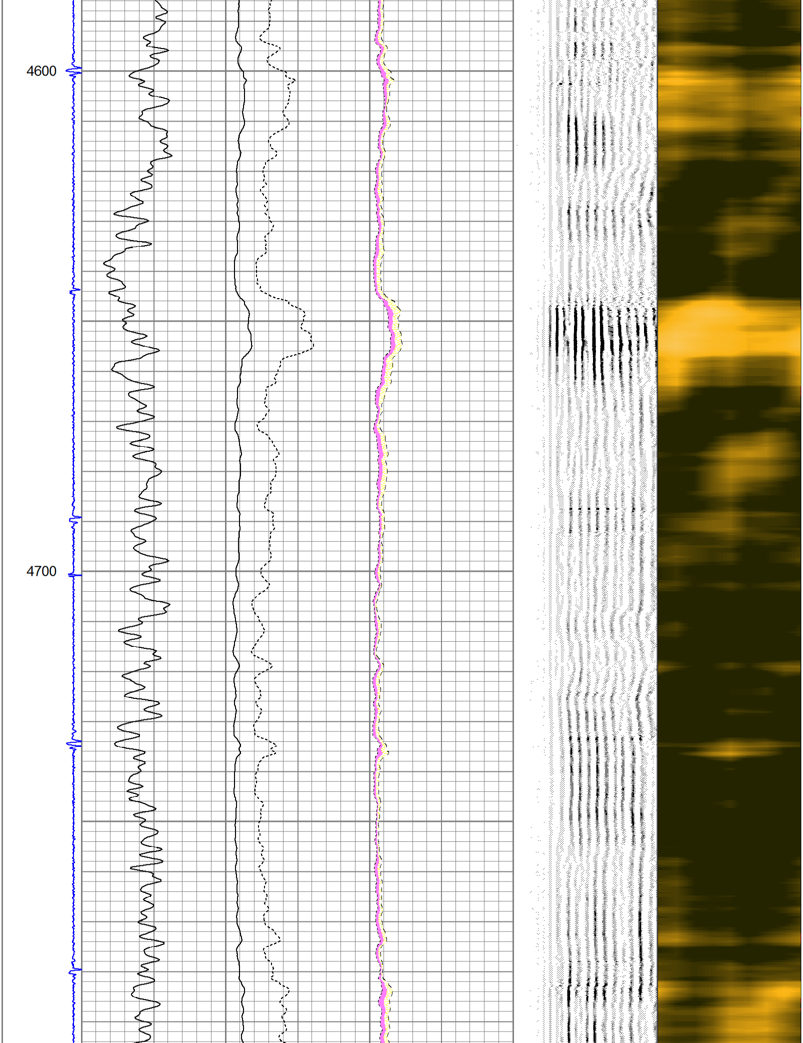
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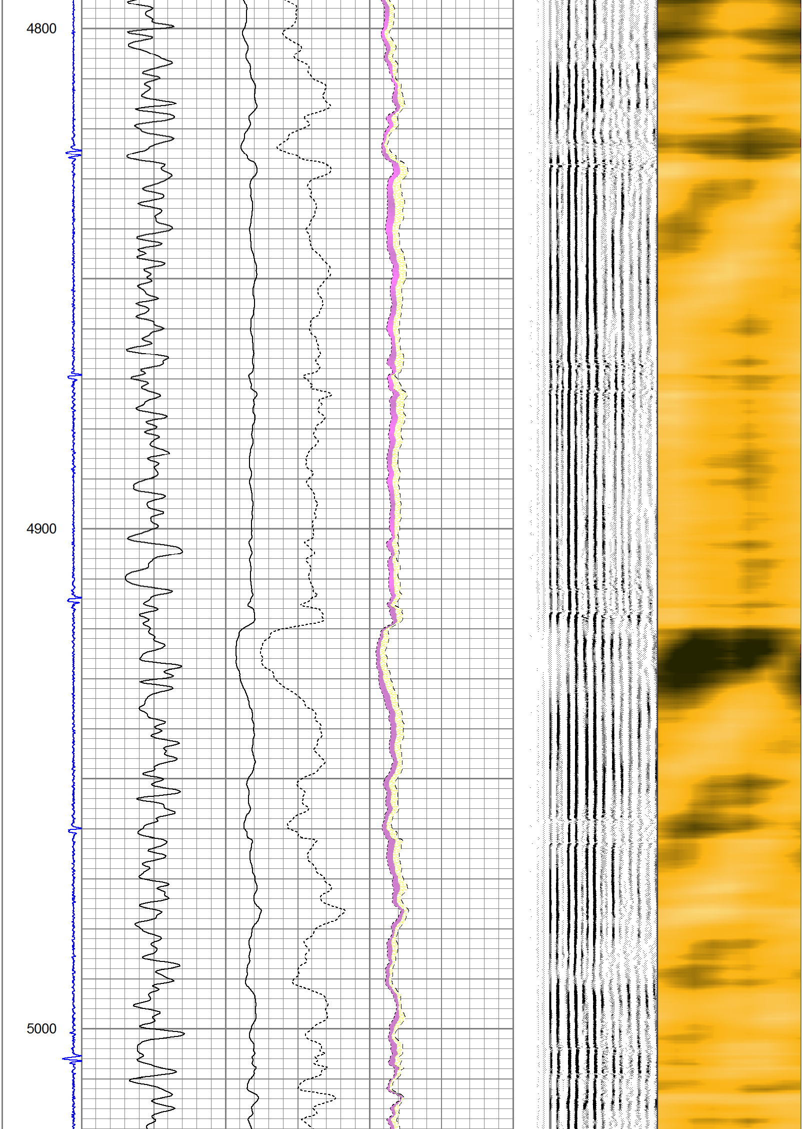
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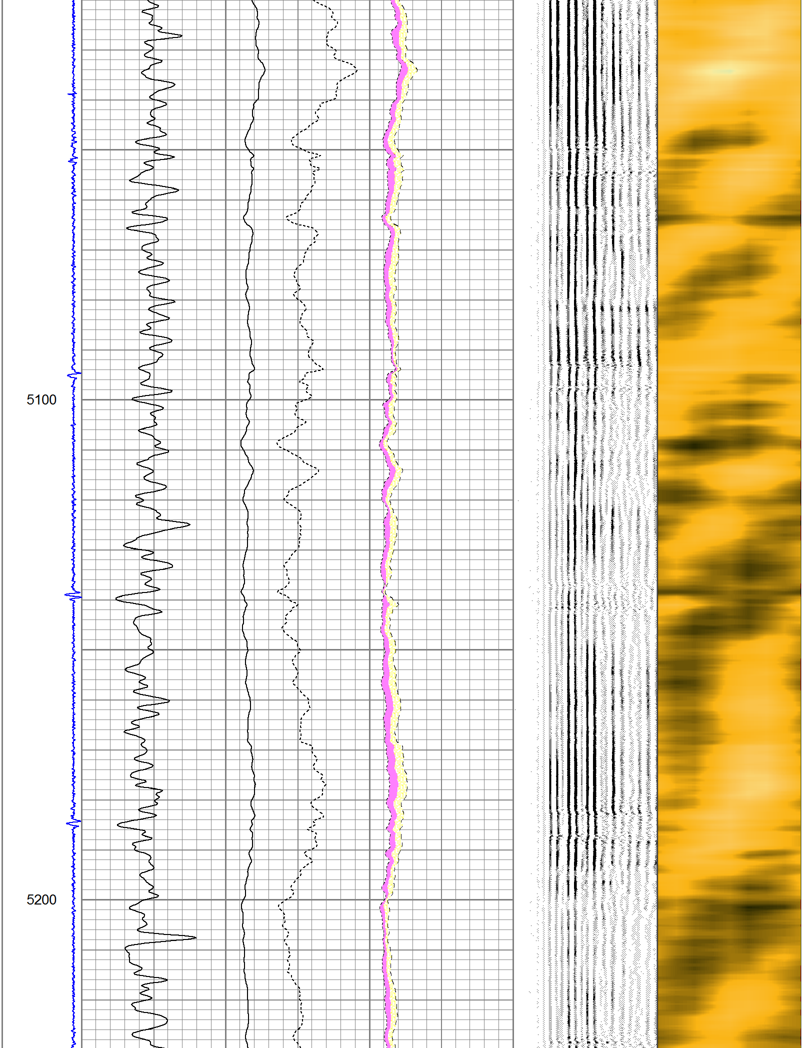
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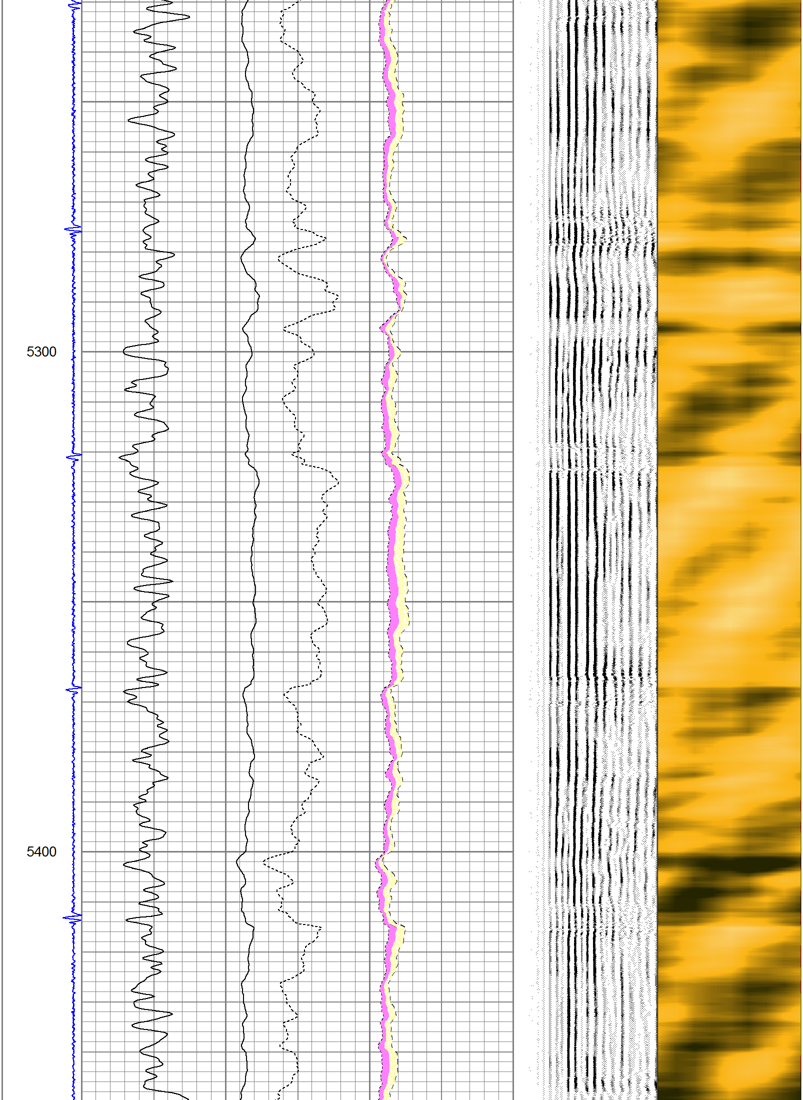
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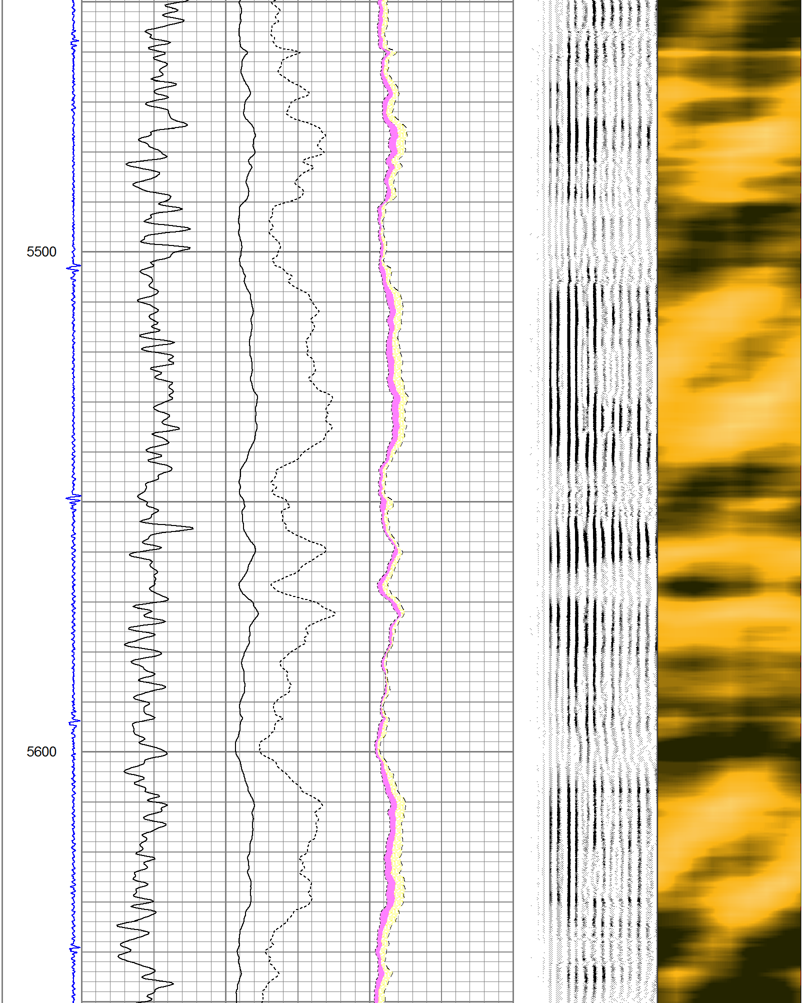
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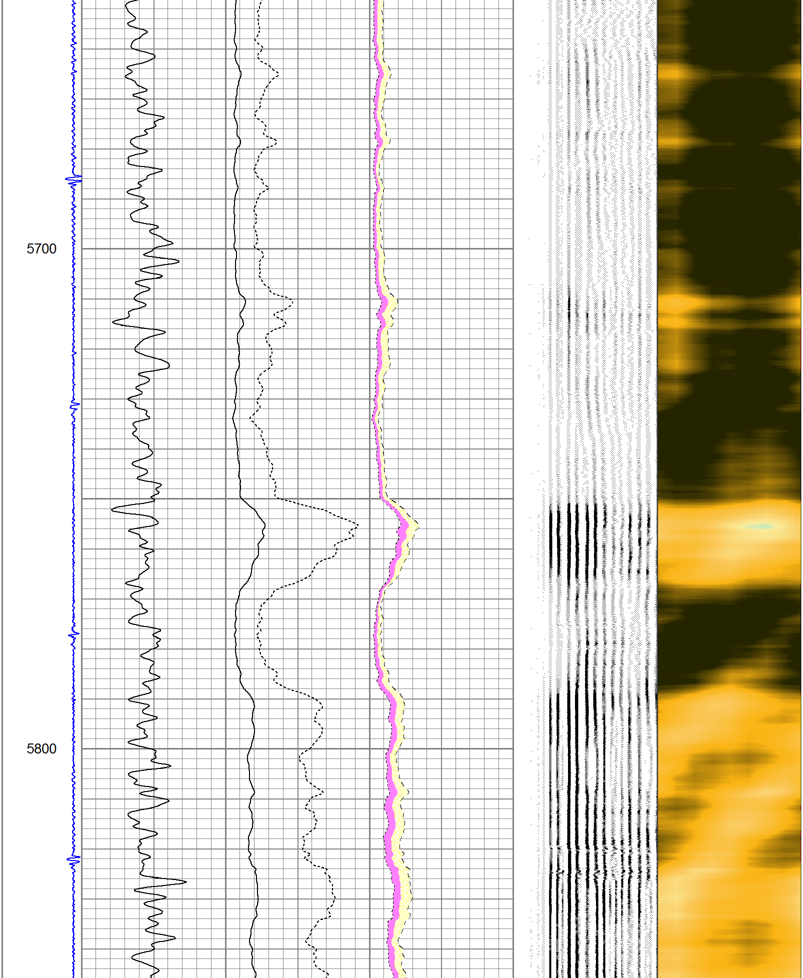
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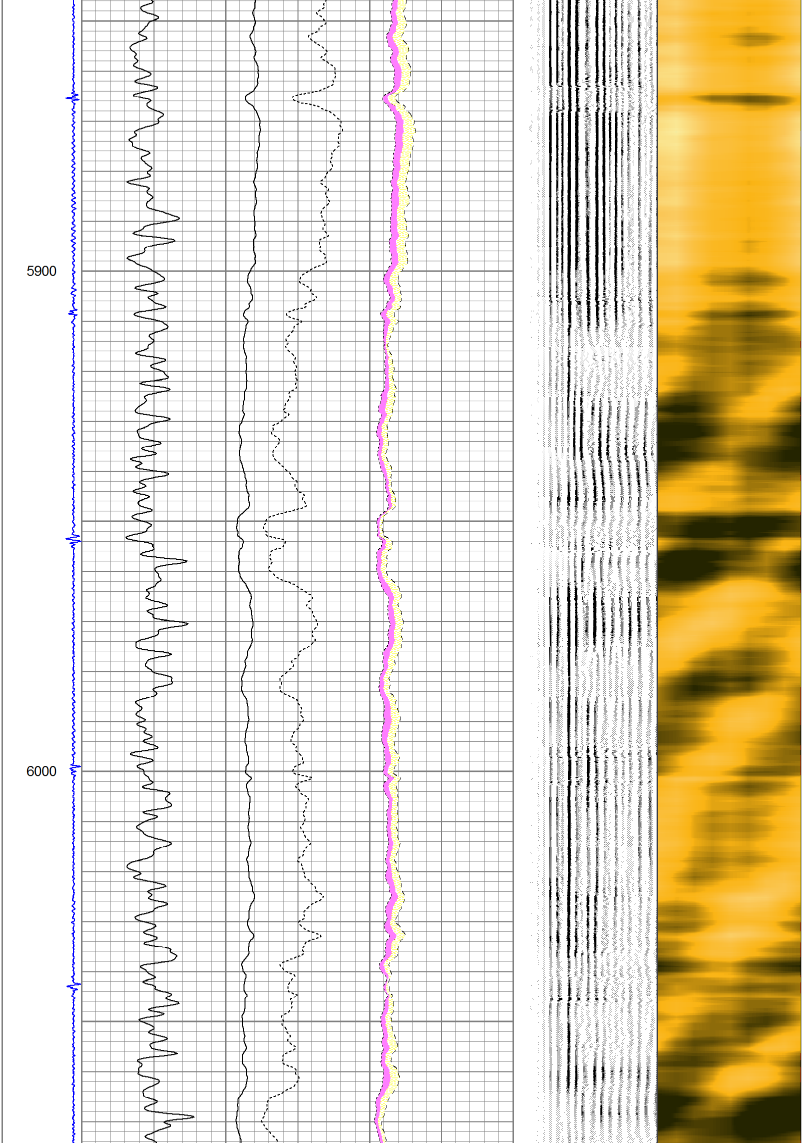
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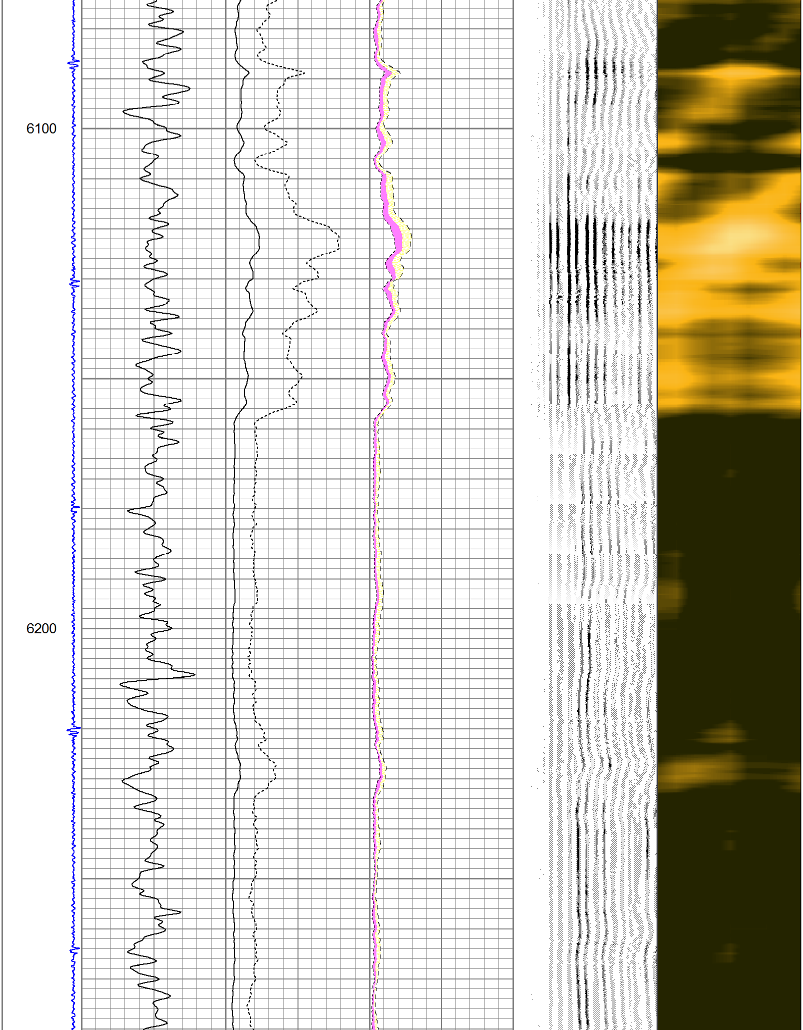
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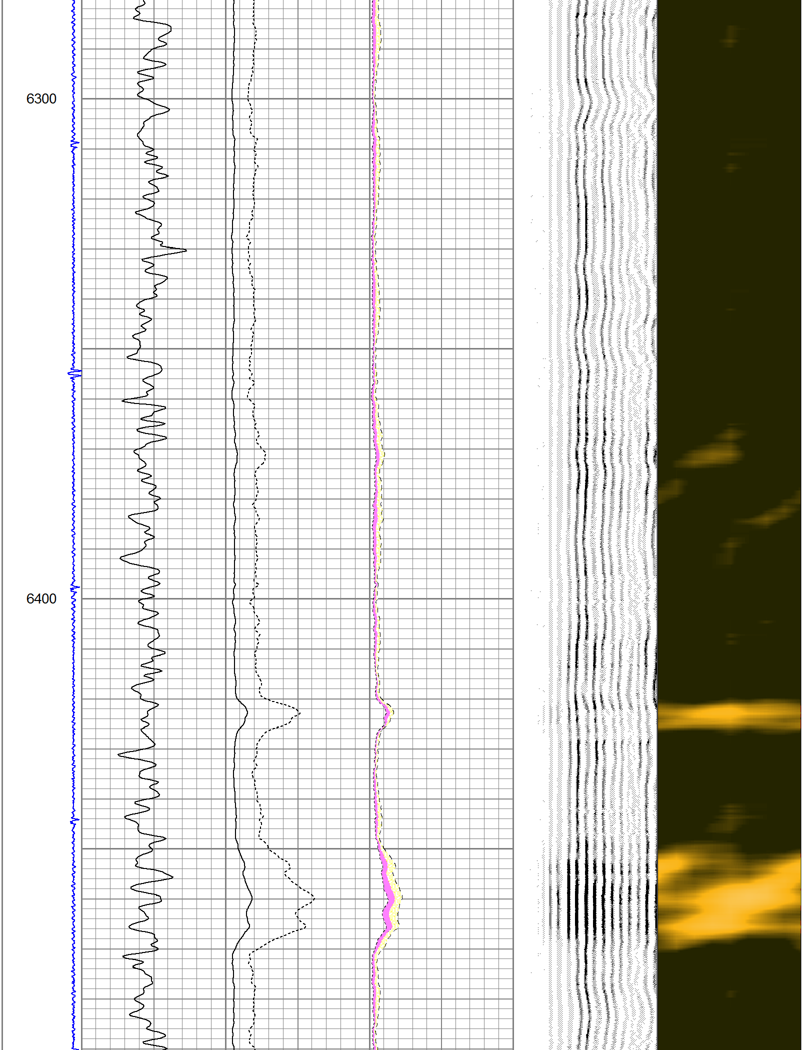
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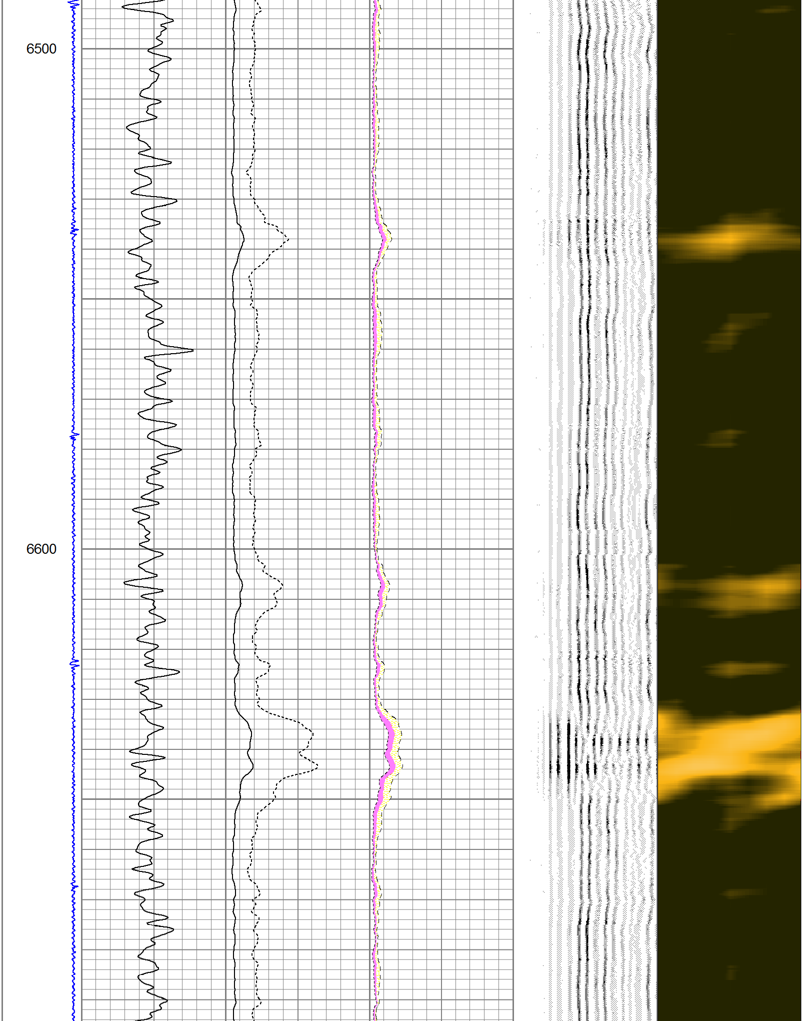
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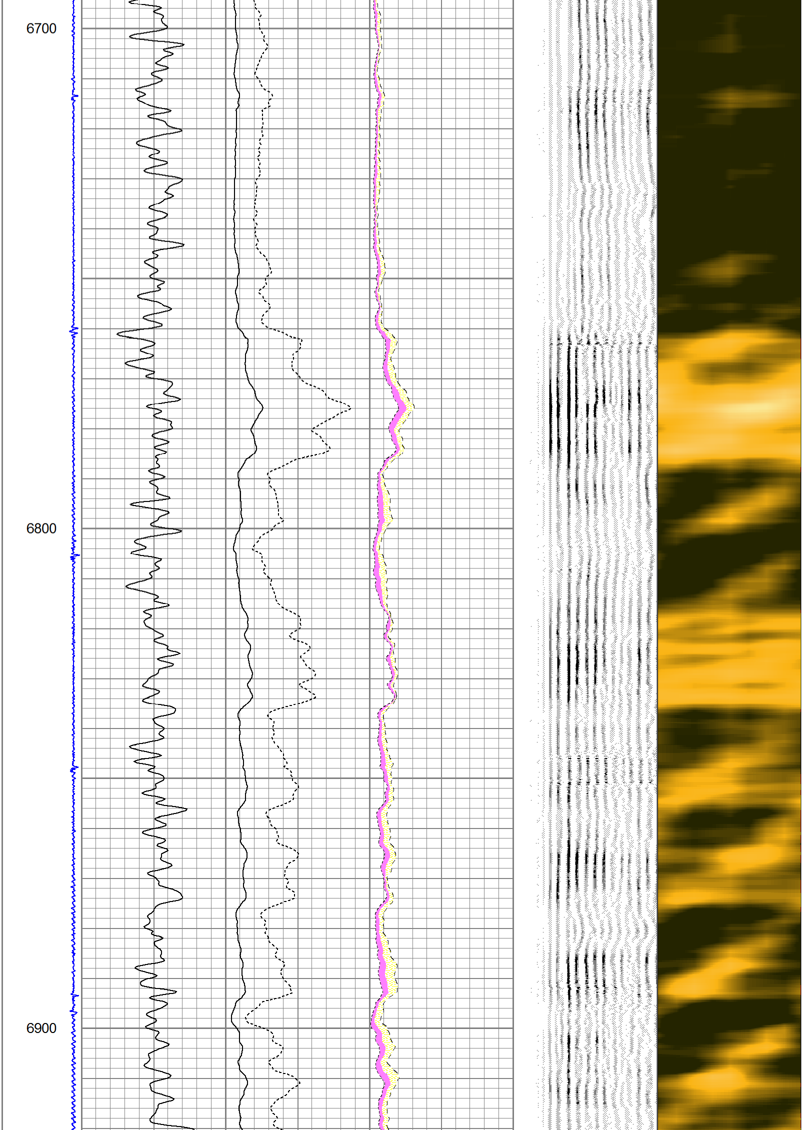
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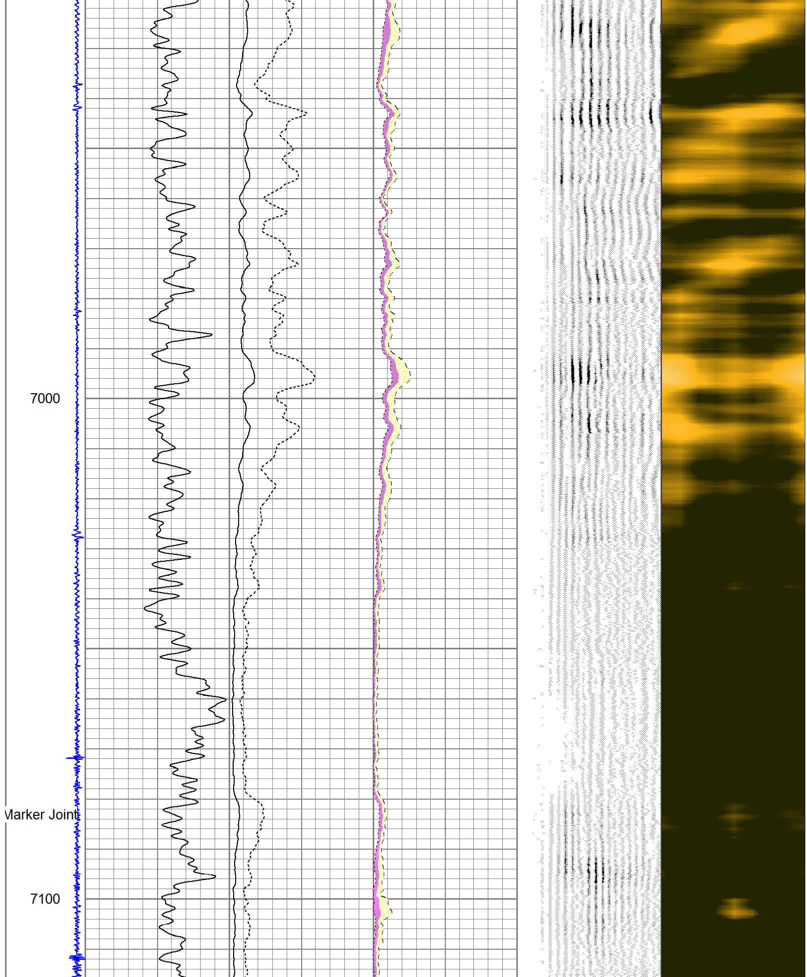
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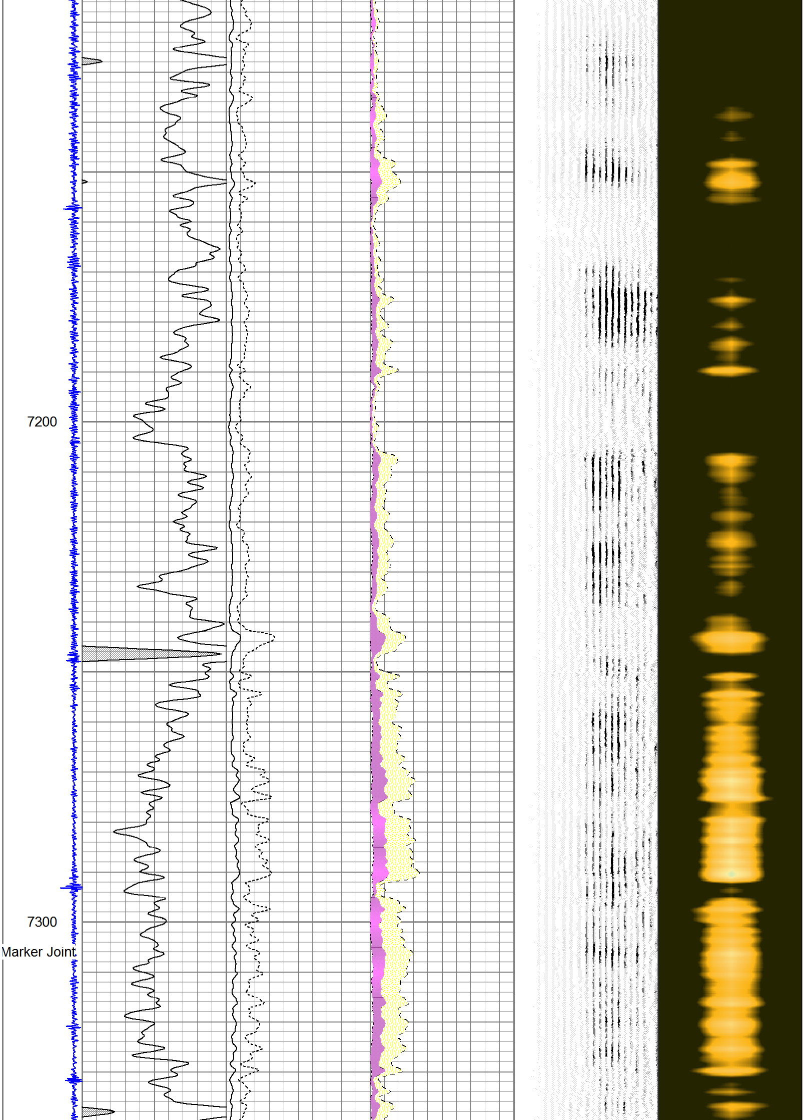
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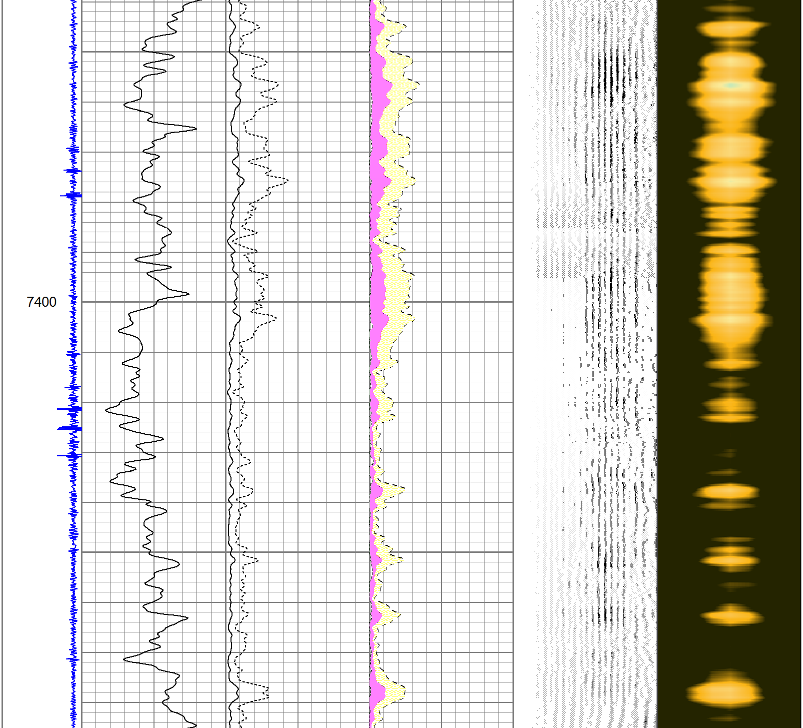
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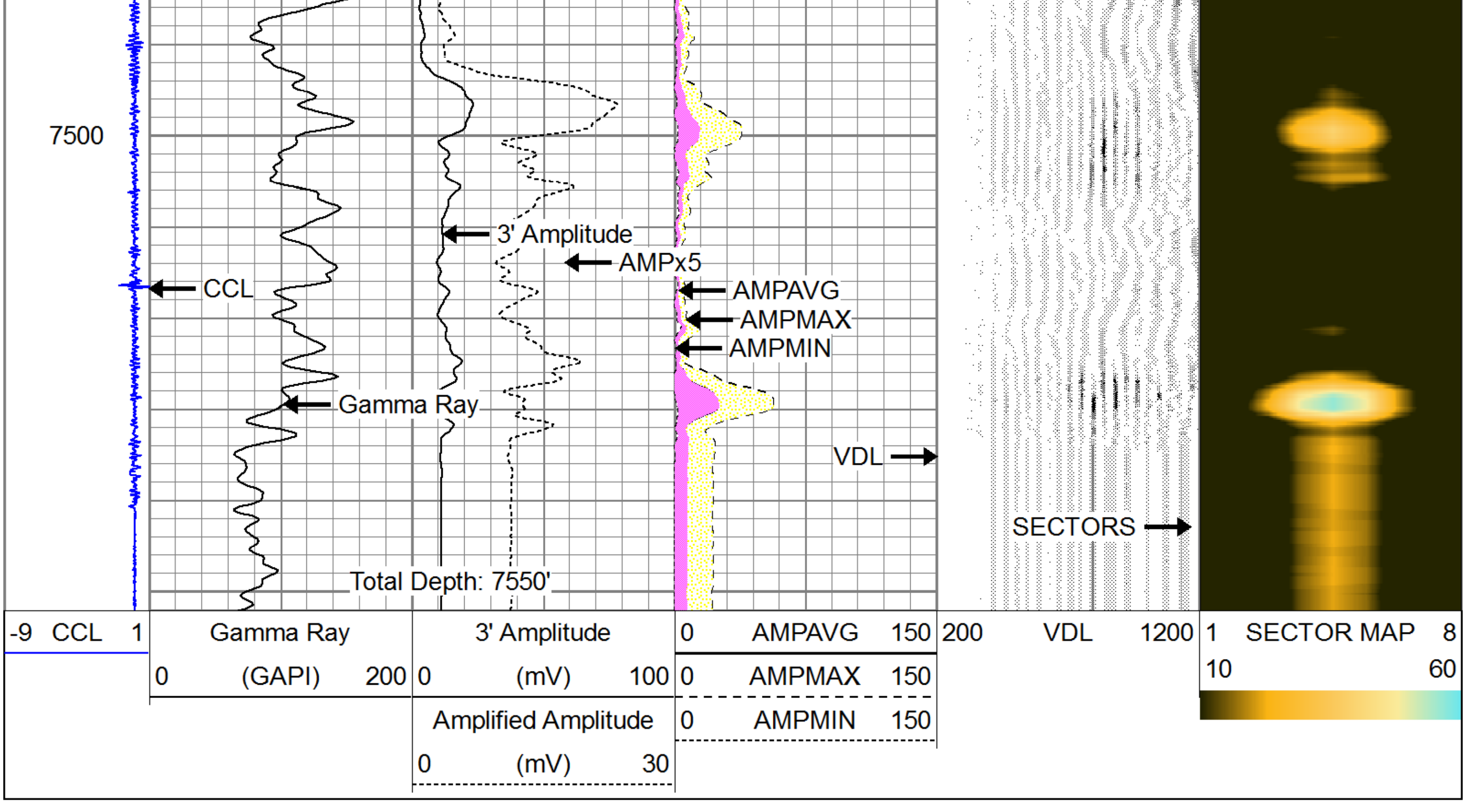

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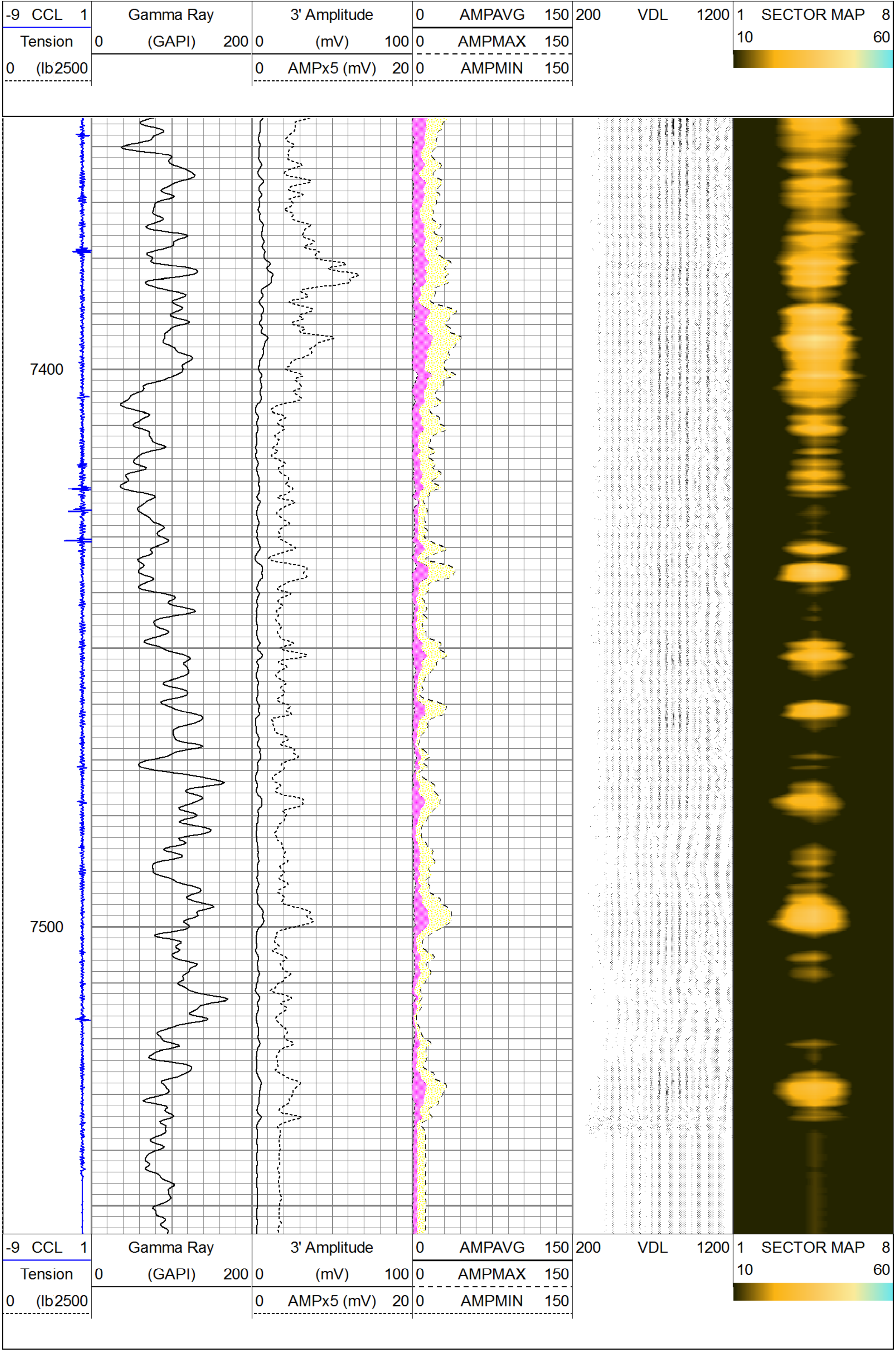
REPEAT SECTION

LOGGED WITH 0 PSI APPLIED AT SURFACE

Database File:	minch 3b-4h-l368_rbl.db
Dataset Pathname:	RBL/pass2
Presentation Format:	scbl02
Dataset Creation:	Tue Feb 03 05:29:31 2015 by Log 7.0 B1
Charted by:	Depth in Feet scaled 1:240



Calibration Report

Database File:	minch 3b-4h-l368_rbl.db
Dataset Pathname:	RBL/pass1
Dataset Creation:	Tue Feb 03 05:22:40 2015 by Log 7.0 B1

Gamma Ray Calibration Report

Serial Number:	110249	
Tool Model:	Probe	
Performed:	Fri Jan 30 14:58:47 2015	
Calibrator Value:	1.0	GAPI
Background Reading:	0.0	cps
Calibrator Reading:	1.0	cps
Sensitivity:	0.9000	GAPI/cps

Segmented Cement Bond Log Calibration Report

Serial Number:	111205	
Tool Model:	Probe275	
Calibration Casing Diameter:	7.000	in
Calibration Depth:	1000.000	ft

Master Calibration, performed Fri Jan 23 10:29:18 2015:

	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3'	0.000	0.990	0.000	62.001	80.000	0.700
CAL	0.000	1.006				
5'	0.000	0.913	0.000	62.000	78.739	0.000
SUM						
S1	0.000	0.981	0.000	100.000	101.973	0.000
S2	0.000	0.993	0.000	100.000	100.687	0.000
S3	0.000	0.996	0.000	100.000	100.444	0.000
S4	0.000	1.013	0.000	100.000	98.744	0.000
S5	0.000	1.034	0.000	100.000	96.721	0.000
S6	0.000	1.033	0.000	100.000	96.790	0.000
S7	0.000	1.029	0.000	100.000	97.143	0.000
S8	0.000	0.986	0.000	100.000	101.400	0.000

Internal Reference Calibration, performed Fri Jan 23 10:14:58 2015:

	Raw (v)		Calibrated (v)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
CAL	0.000	0.000	0.000	1.006	1.000	0.000

Air Zero Calibration, performed Fri Jan 23 10:17:20 2015:

	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

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Company	ENCANA OIL & GAS (USA) INC		
Well	MINCH 3B-4H-L368		
Field	WATTENBERG		
County	WELD		
State	CO	Country	USA