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Pioneer Energy Services

RADIAL SECTOR BOND LOG WITH GAMMA RAY

Company ENCANA OIL & GAS (USA) INC.
Well DRIETH 1E-6H-A368
Field WATTENBERG
County WELD
State CO

Company	**ENCANA OIL & GAS (USA) INC.**
Well	**DRIETH 1E-6H-A368**
Field	**WATTENBERG**
County	**WELD** State **CO**

Location: API #: 05123375890000
SHL: 716' FNL & 434' FEL
NENE
SEC 6 TWP 3N RGE 68W

Other Services
None

Permanent Datum GL Elevation 5087
Log Measured From KB
Drilling Measured From KB

Elevation
K.B. 5100
D.F. 5100
G.L. 5087

Date of Service	SEPTEMBER 1, 2014
Run Number	ONE
Depth Driller or PBTD	11493
Depth Logger	7562
Bottom Log Interval	7558
Top Log Interval	SURFACE
Open Hole Size	8+3/4"
Type Fluid	WBM
Fluid Level	60
Fluid Density	10.4 / 39
Max. Recorded Temperature	NA
Max. Wellhead Pressure	0
Wellhead Connection	NA
Estimated Cement Top	750
Unit Number	1
Wireline Size	9/32"
Location	FT MORGAN, CO
Recorded By	SCHUMAN
Witnessed By	MR. BILL LAFORCE

	Size	Wt/Ft	Top	Bottom
Tubing Record				
Surface Casing	9+5/8"	40	Surface	835
Production Casing	7"	26	Surface	7638
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.

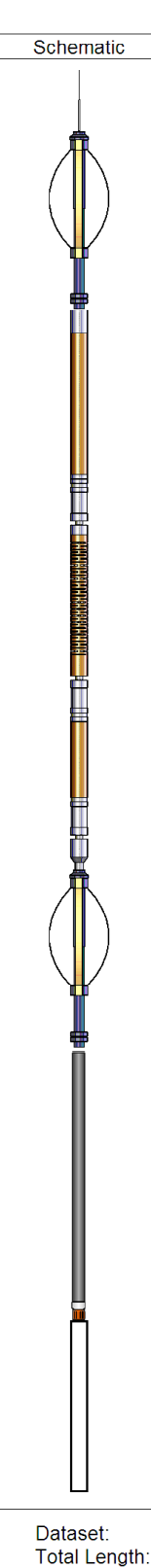
Comments

N/A DENOTES NOT AVAILABLE OR NON-APPLICABLE.
Ensign Drilling Rig 135

SO# 2-280027

THANK YOU FOR USING PIONEER ENERGY SERVICES

Your Pioneer ENERGY Services Crew	Tool Data - Services	Serial Number
Engineer: Shaun Operator: Angelo L Operator: Chad M Operator:	Sector CBL	111205

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	14.23 14.23 14.23 14.23 14.23 14.23 14.23 14.23 14.23 14.23 13.15		RBT-Probe (Base) Probe Radii Bond Tool with Digital Telemetry	8.92	2.75	90.00
			PTS275	2.83	2.75	
CCL	6.37					
			GR-Probe (275) Probe 2.75" 4 Channel Pulse	4.33	2.75	30.00
GR	3.63					
			2.75 2 3/4" Tekco Adjustable Centralizer	2.73	2.75	25.00

Dataset: drieth 1e-6h-a368.db: field/well/run1/pass1
Total Length: 22.65 ft
Total Weight: 155.00 lb
O.D. 2.75 in

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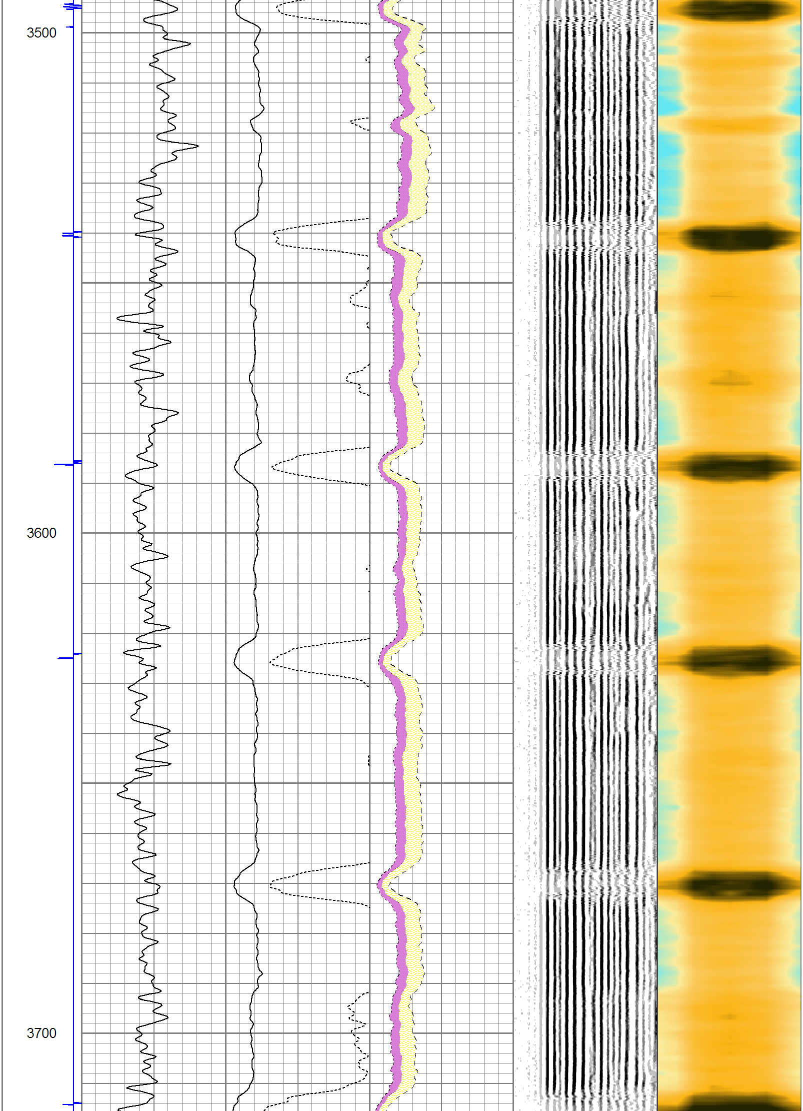
Main Pass

Logged with 0 PSI applied at surface

Database File: drieth 1e-6h-a368.db
Dataset Pathname: pass2
Presentation Format: scbl02
Dataset Creation: Mon Sep 01 05:35:50 2014 by Log SCH 120126
Charted by: Depth in Feet scaled 1:240

-9 CCL 1	Gamma Ray 0 (GAPI) 200	3' Amplitude 0 (mV) 100 0 AMPx5 (mV) 20	0 AMPAVG 150 0 AMPMAX 150 0 AMPMIN 150	200 VDL 1200	1 SECTOR MAP 8 10 60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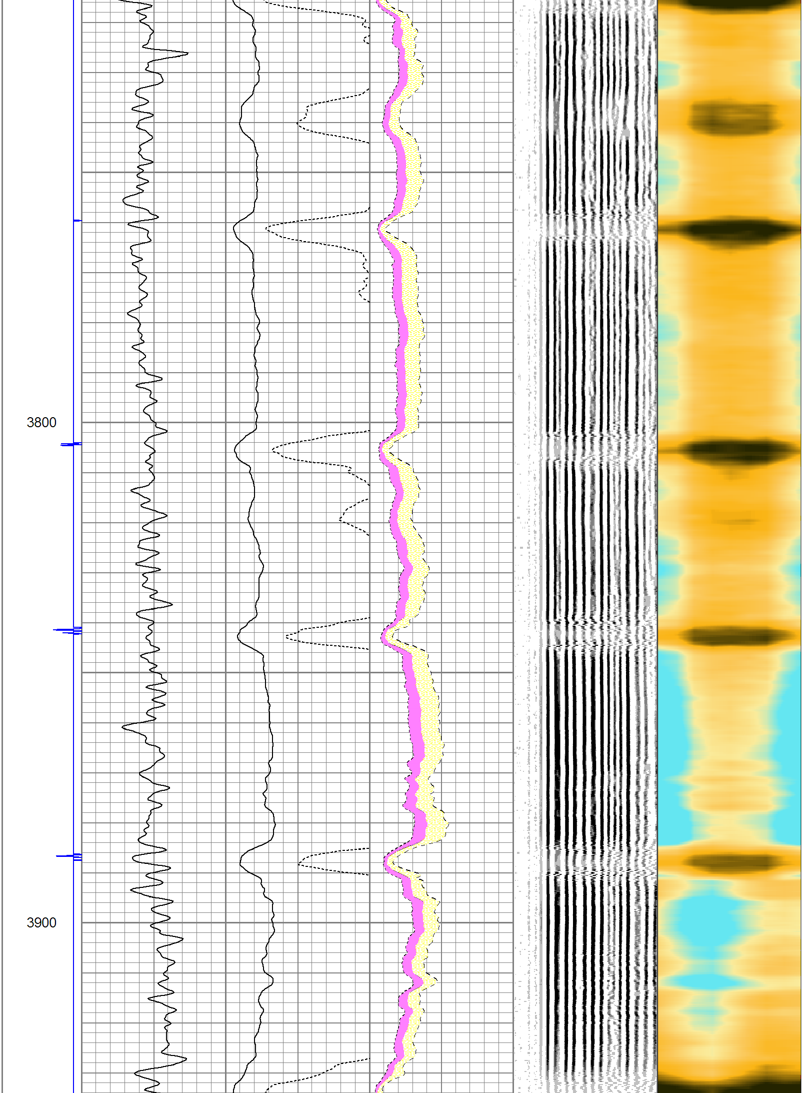
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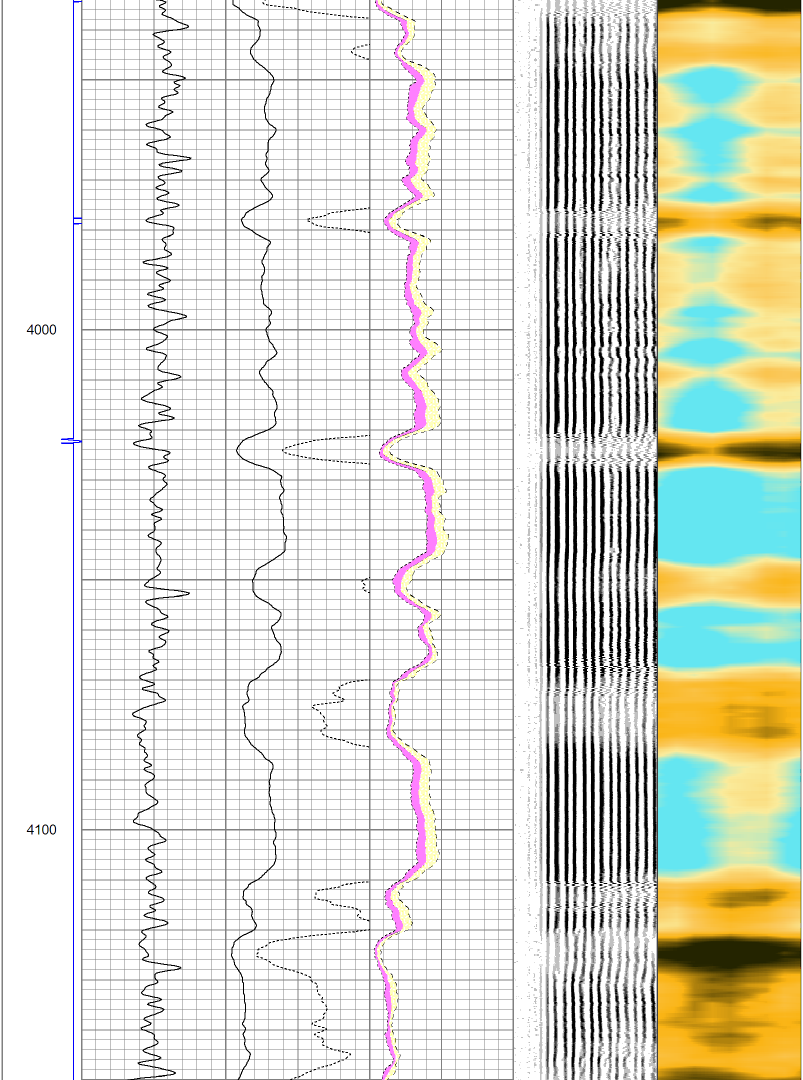
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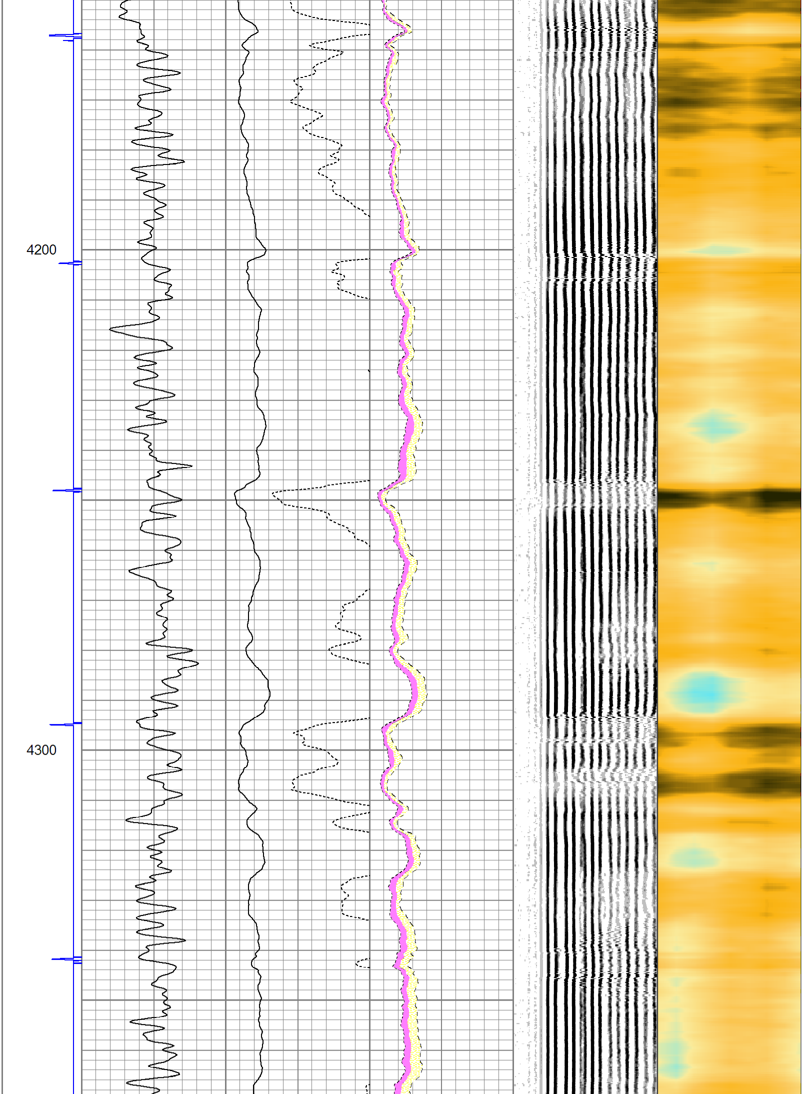
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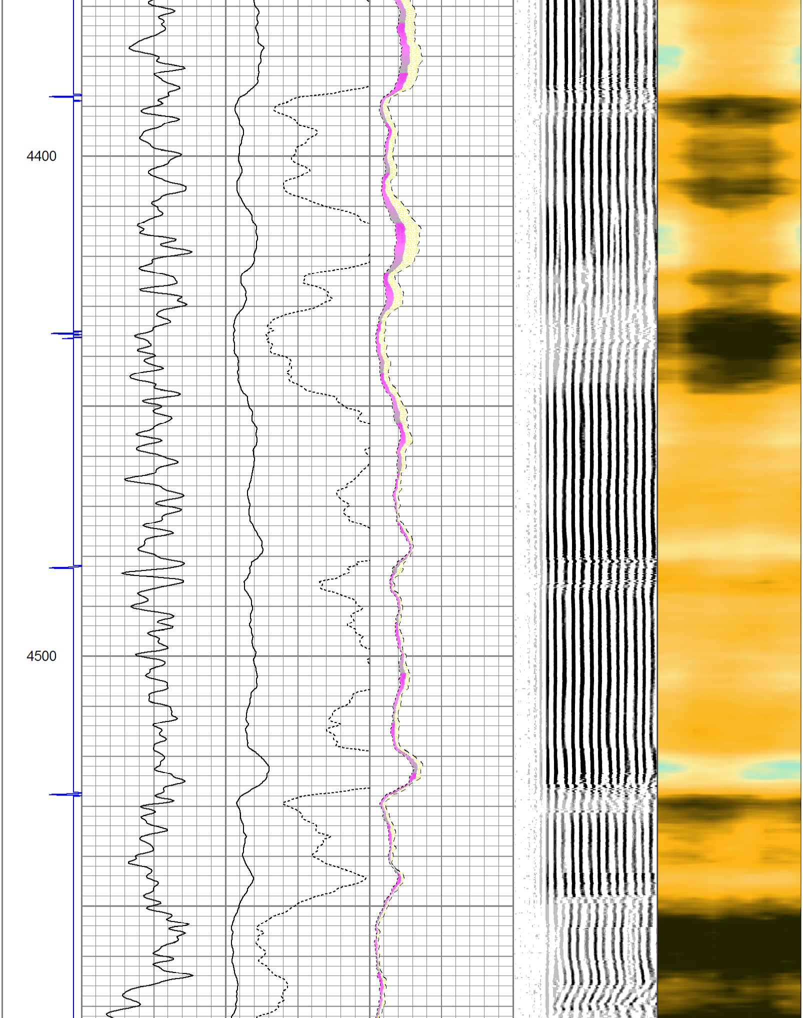
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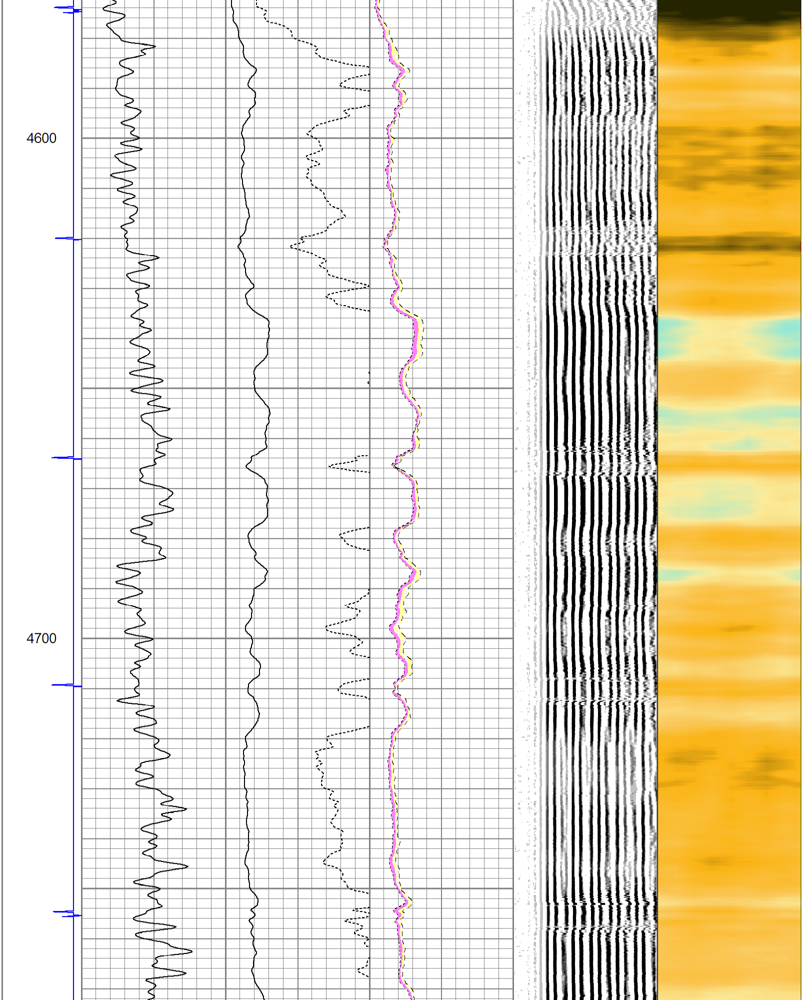
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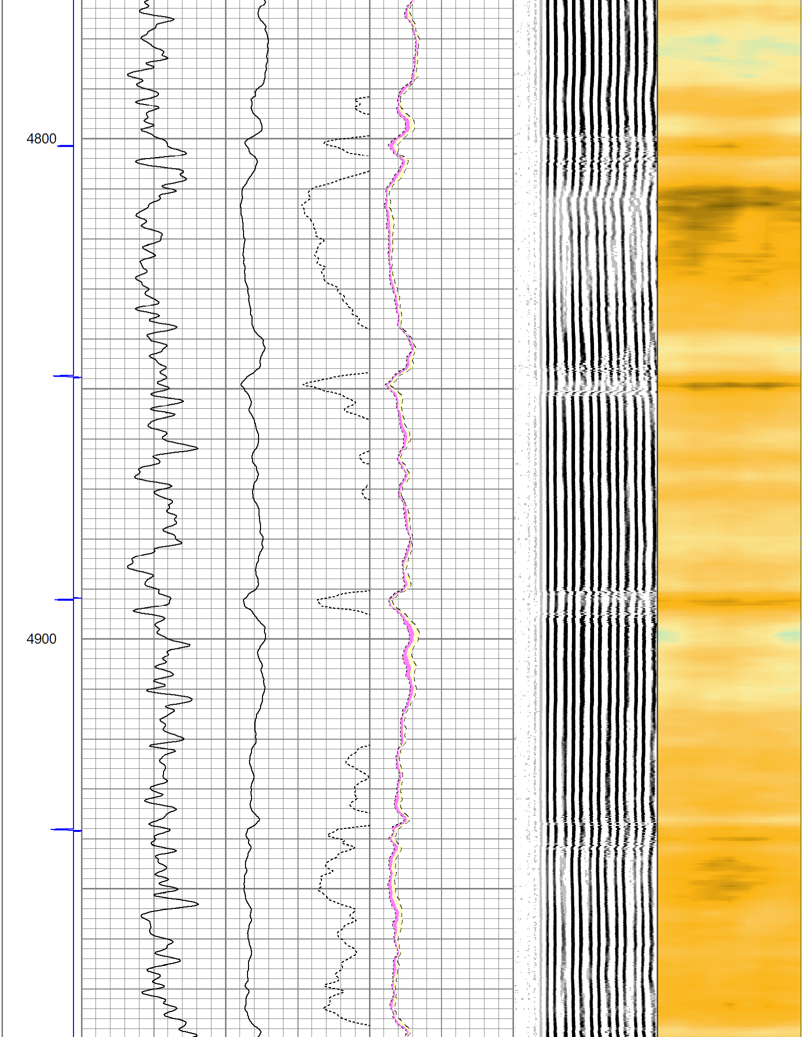
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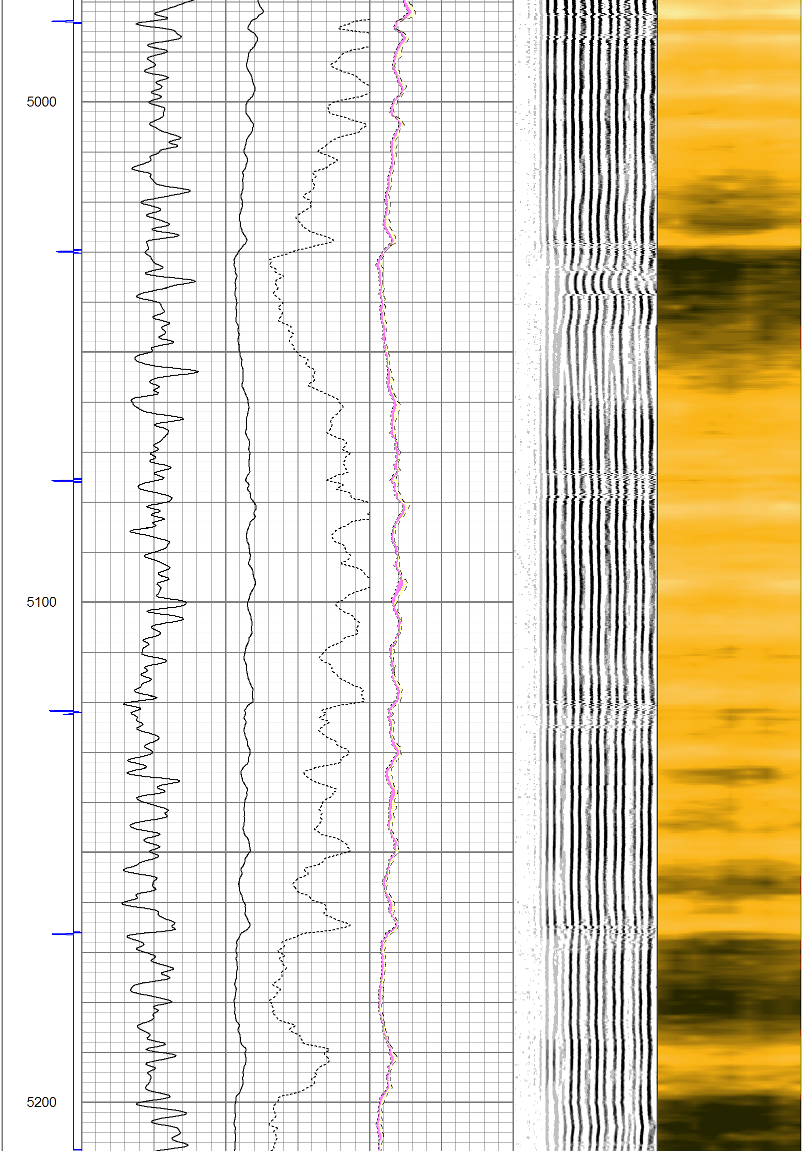
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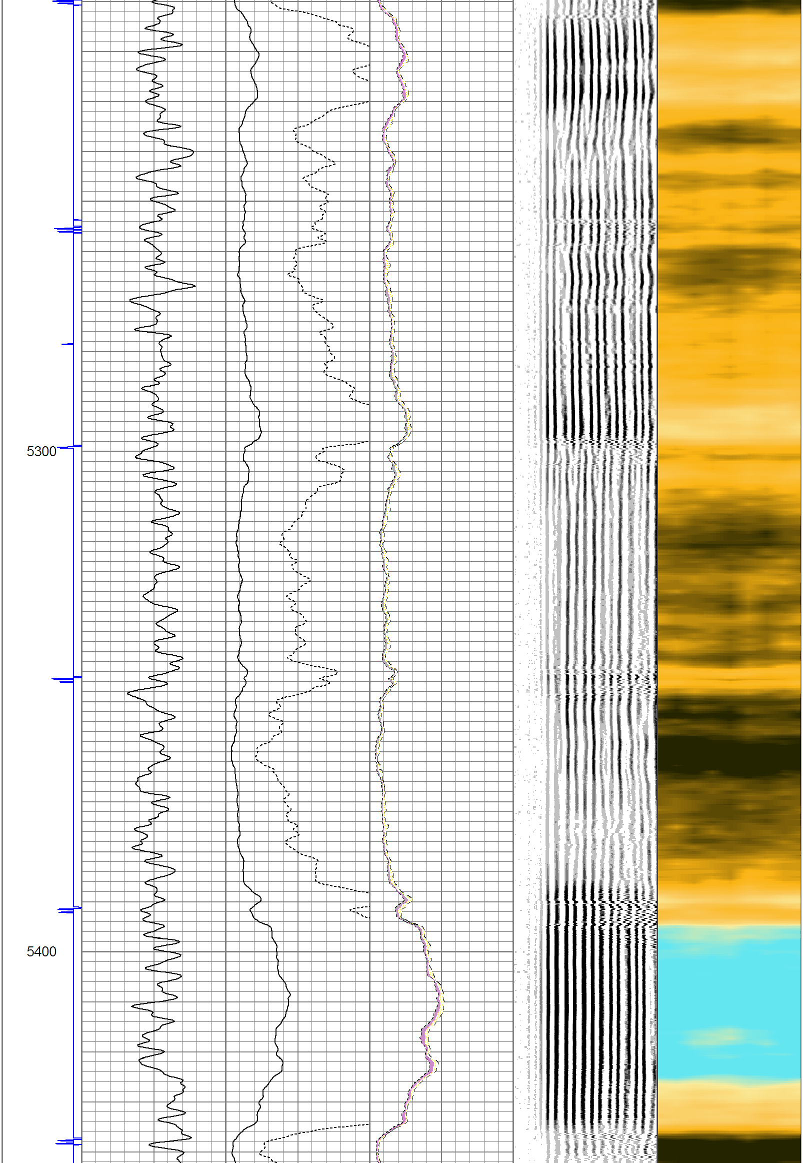
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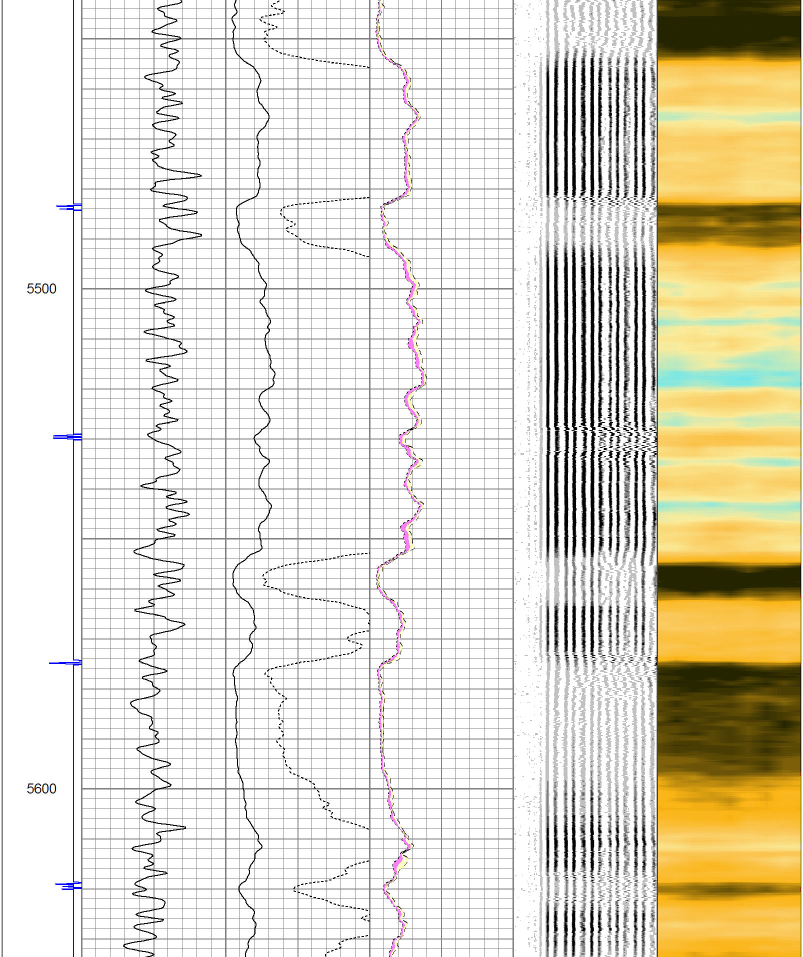
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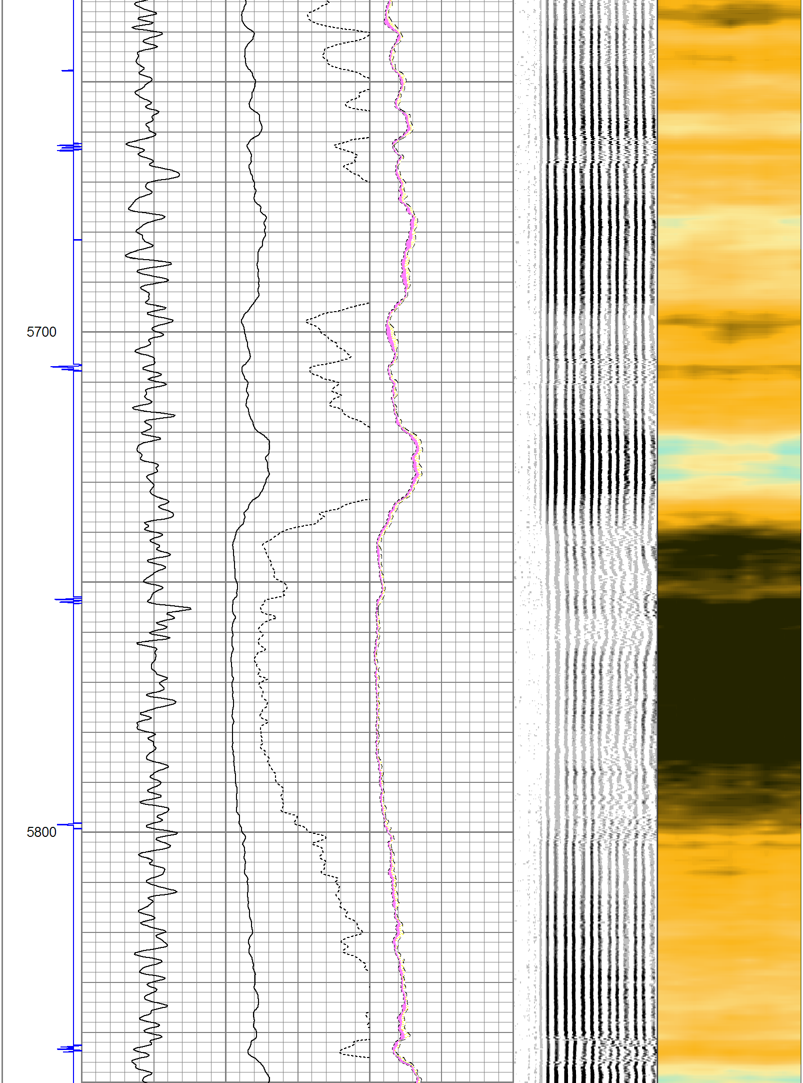
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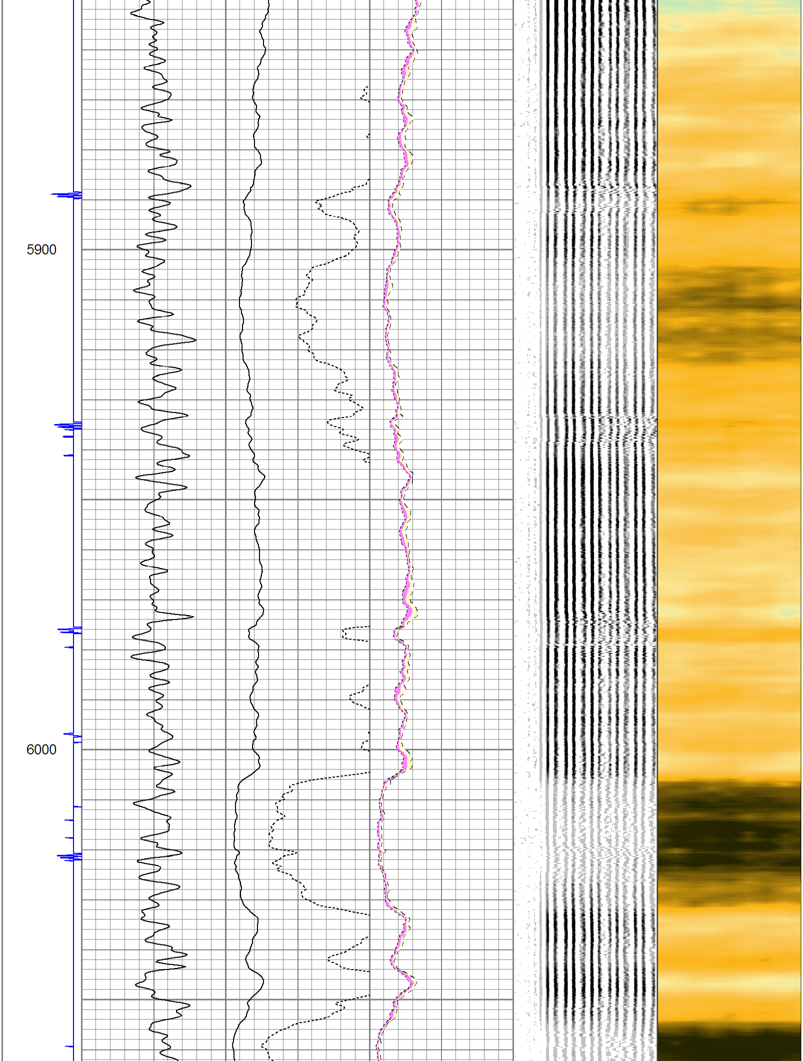
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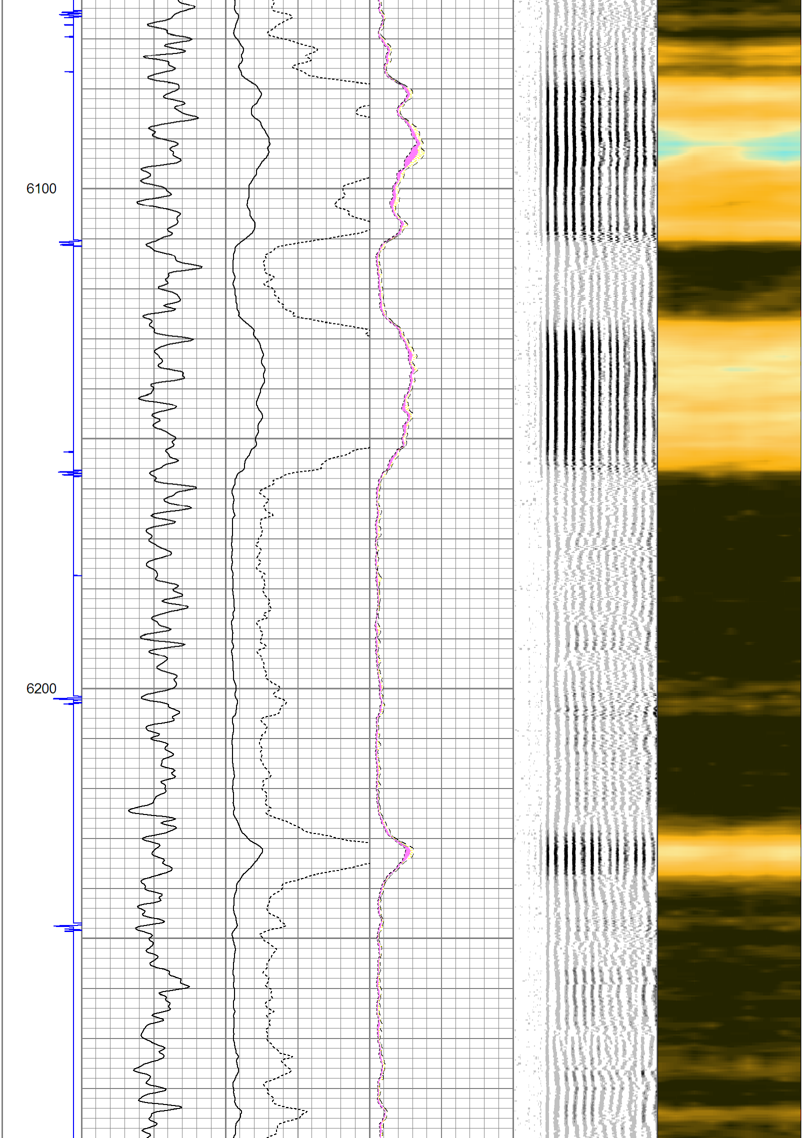
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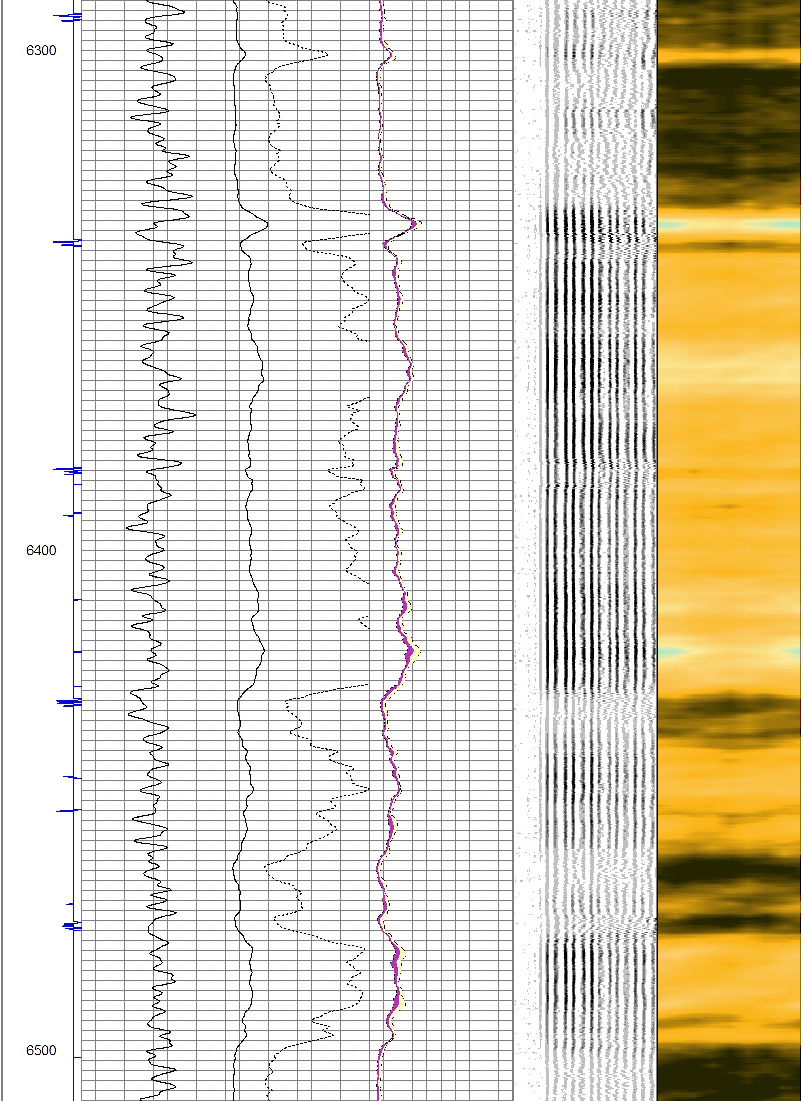
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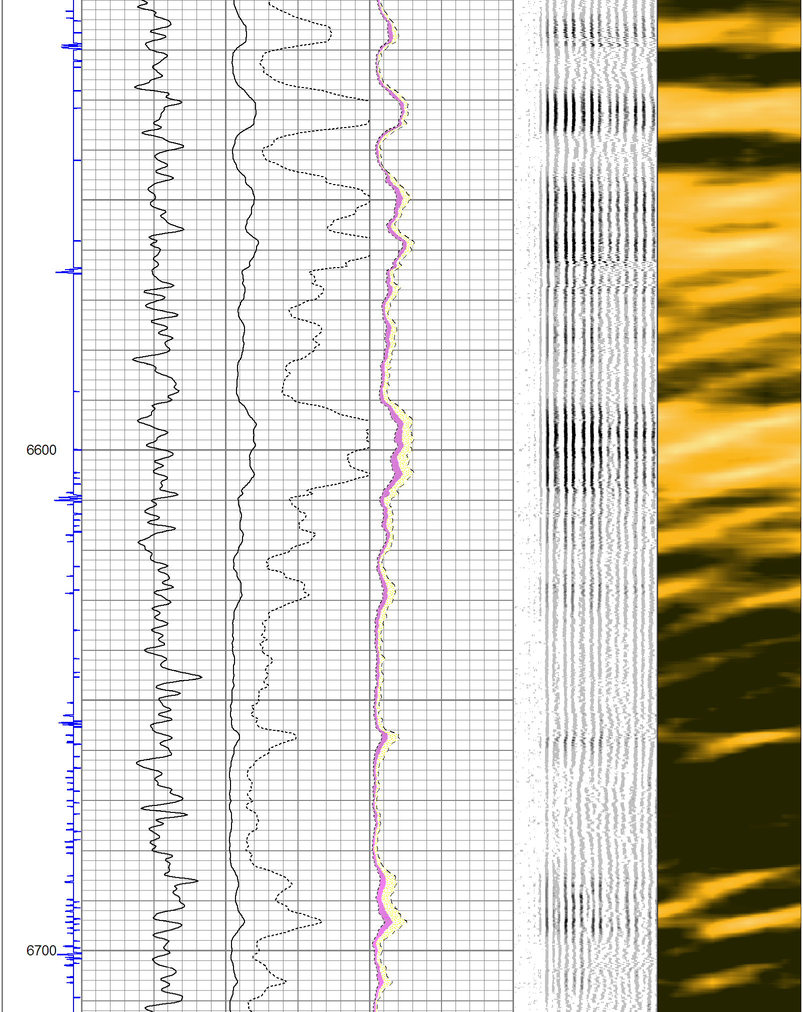
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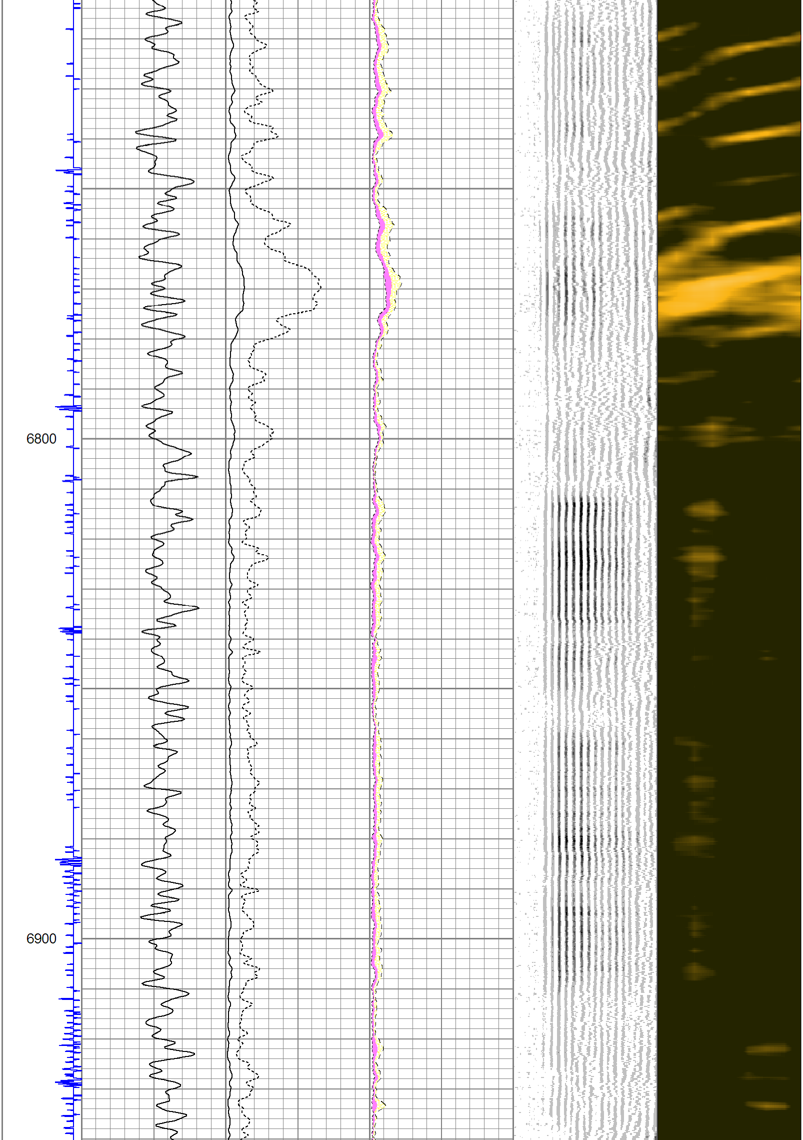
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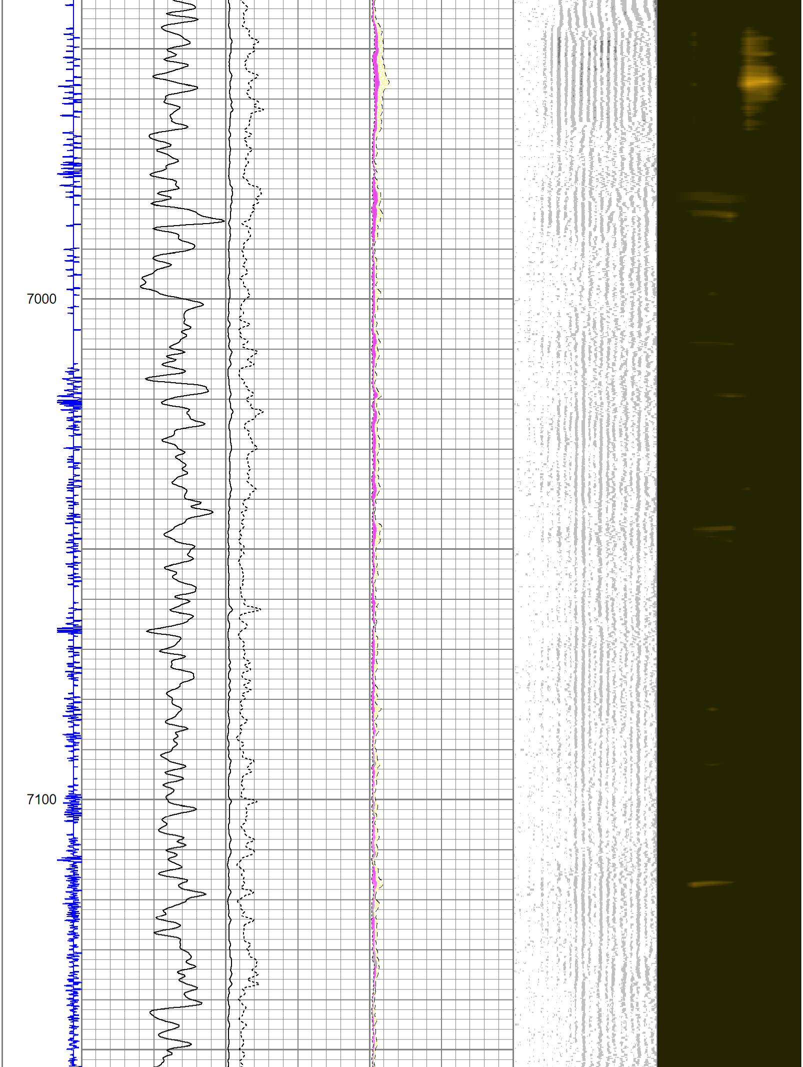
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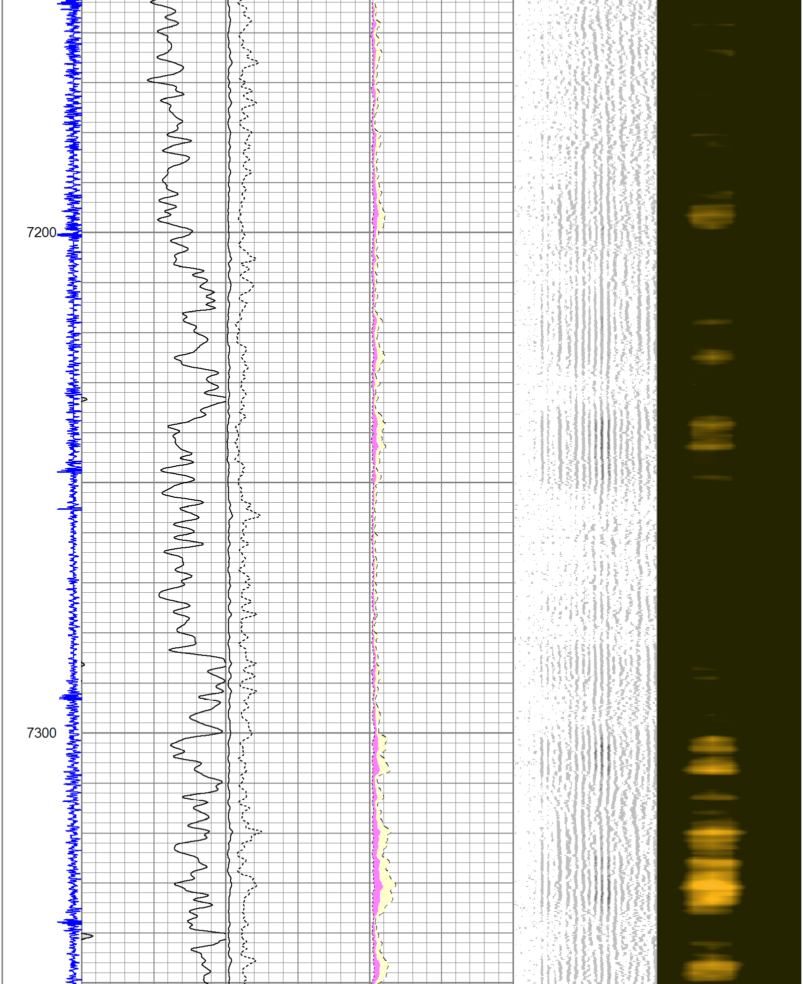
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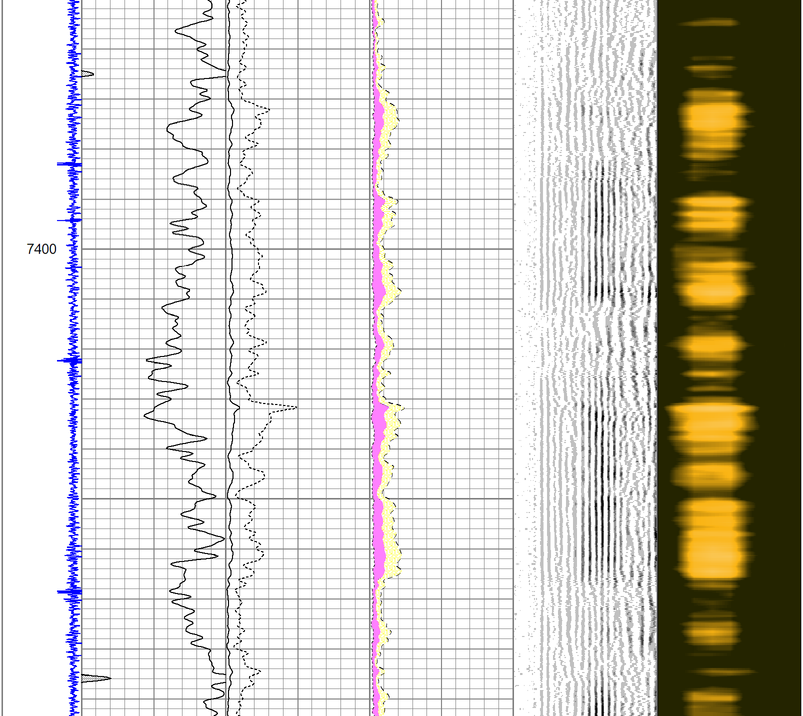
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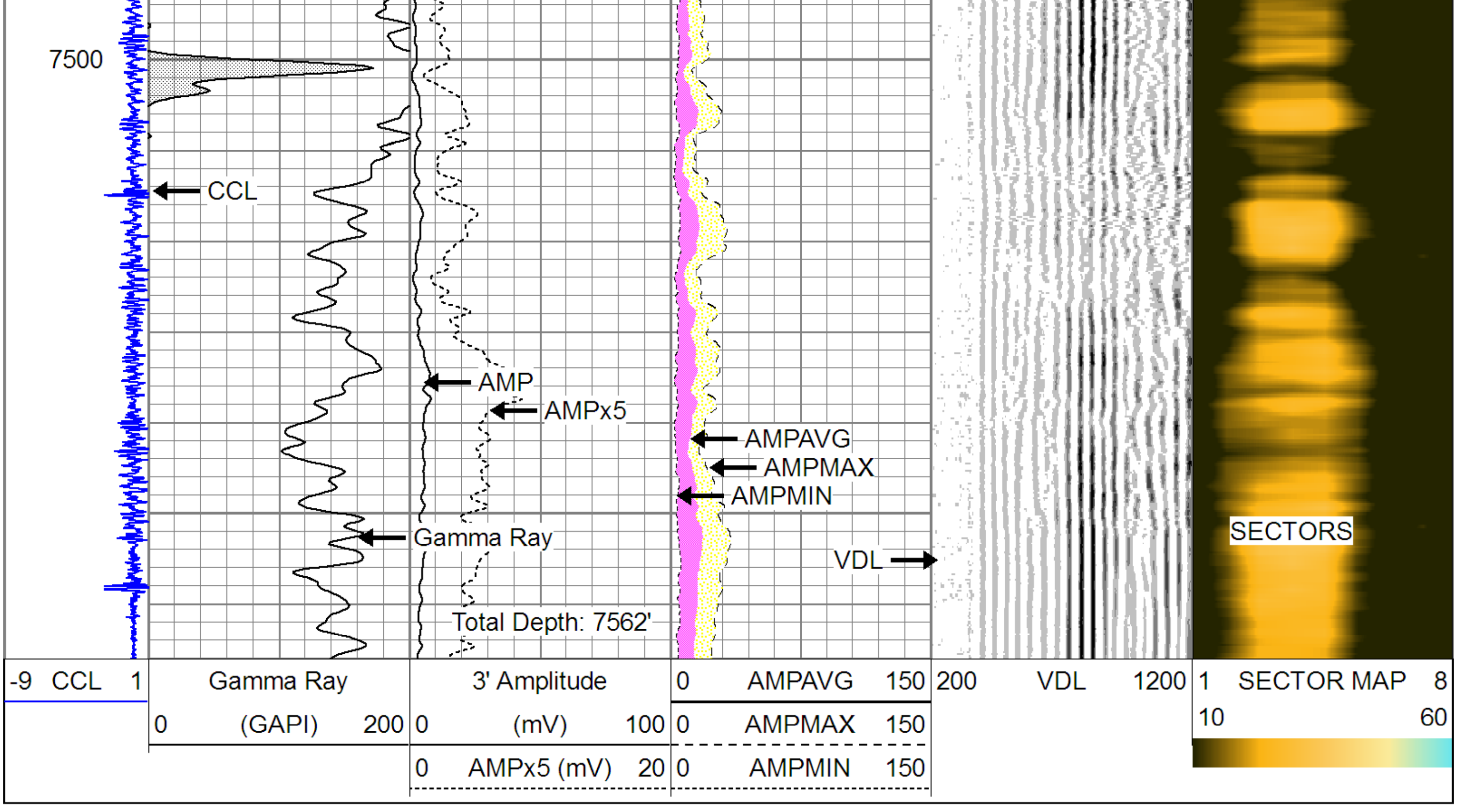

Calibration Report

Database File:	drieth 1e-6h-a368.db
Dataset Pathname:	pass1
Dataset Creation:	Mon Sep 01 05:01:46 2014 by Log SCH 120126

Gamma Ray Calibration Report

Type / Serial: Probe / 275

SHOP CALIBRATION	Sat Aug 30 06:36:10 2014				
	Counts/Sec.	Gain	Offset	Jig	Units
Background	35.0				cps
Calibrator	160.0				cps
		1.0000			GAPI/cps
PRIMARY VERIFICATION					
Background	0.0				cps
Calibrator	0.0				cps
Difference				0.0	GAPI
BEFORE SURVEY VERIFICATION					
Background	0.0				cps
Calibrator	0.0				cps
Difference				0.0	GAPI
AFTER SURVEY VERIFICATION					
Background	0.0				cps
Calibrator	0.0				cps
Difference				0.0	GAPI

Segmented Cement Bond Log Calibration Report

Serial Number:	Base	
Tool Model:	Probe	
Calibration Casing Diameter:	7.000	in
Calibration Depth:	0.000	ft

Master Calibration, performed Mon Sep 01 04:51:19 2014:

	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3'	0.000	0.768	-0.020	62.165	75.000	-0.300
CAL	0.000	0.754				
5'	0.000	0.679	-0.020	62.165	91.642	-0.020
SUM						
S1	0.000	0.753	0.000	100.000	132.724	0.000
S2	0.000	0.768	0.000	100.000	130.263	0.000
S3	0.000	0.767	0.000	100.000	130.417	0.000
S4	0.000	0.756	0.000	100.000	132.274	0.000
S5	0.000	0.745	0.000	100.000	134.273	0.000
S6	0.000	0.732	0.000	100.000	136.581	0.000
S7	0.000	0.734	0.000	100.000	136.277	0.000
S8	0.000	0.721	0.000	100.000	138.770	0.000

Internal Reference Calibration, performed Fri Aug 22 11:58:10 2014:

	Raw (v)		Calibrated (v)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
CAL	0.000	0.000	0.000	0.754	1.000	0.000

Air Zero Calibration, performed Sat Aug 30 06:29:19 2014:

	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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County	WELD
State	CO