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Pioneer Energy Services

RADIAL SECTOR BOND LOG WITH GAMMA RAY

Company ENCANA OIL & GAS (USA) INC
Well SPRAGUE 3I-9H-N267
Field WATTENBERG
County WELD
State CO

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Field WATTENBERG
County WELD State CO

Location: API # : 05123392690000
SHL: 521' FSL & 1757' FWL SESW
LAT: 40.14701
LONG: -104.89834
SEC 9 TWP 2N RGE 67W

Other Services
None

Permanent Datum	GL	Elevation 4981
Log Measured From	KB	
Drilling Measured From	KB... 28.5' ABOVE GL	

Elevation
K.B. 5009.5
D.F. 5009.5
G.L. 4981

Date of Service	APRIL 26, 2015
Run Number	ONE
Depth Driller or PBTD	12900
Depth Logger	7610
Bottom Log Interval	7608
Top Log Interval	SURFACE
Open Hole Size	8+7/8"
Type Fluid	WBM
Fluid Level	70
Fluid Density	11.3 PPG
Max. Recorded Temperature	201 F
Max. Wellhead Pressure	0
Wellhead Connection	PACKOFF TO 7" LTC
Estimated Cement Top	SEE LOG
Unit Number	P75
Wireline Size	9/32"
Location	FT MORGAN, CO
Recorded By	SCHUMAN
Witnessed By	MR C. CLEMENS

	Size	Wt/Ft	Top	Bottom
Tubing Record				
Surface Casing	9+5/8"	40#	SURFACE	NA
Production Casing	7"	26#	SURFACE	7782
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

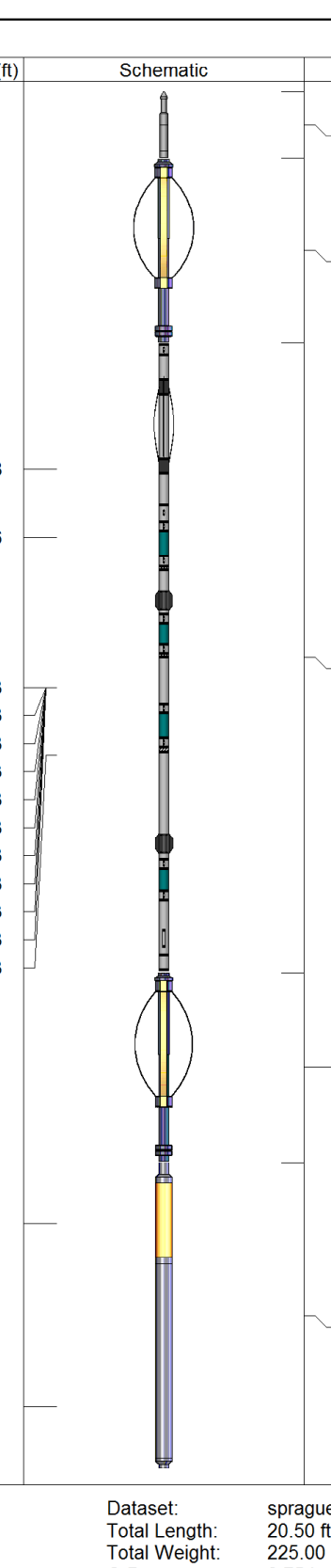
N/A DENOTES NOT AVAILABLE OR NON-APPLICABLE.

PATTERSON DRILLING RIG 272

SO# 2-280159

THANK YOU FOR USING PIONEER ENERGY SERVICES

Your Pioneer ENERGY Services Crew	Tool Data - Services	Serial Number
Engineer: SHAUN	Sector CBL	141166
Operator: GENO	GR	080538
Operator: JOHN		
Operator:		



Sensor	Offset (ft)	Description	Len (ft)	OD (in)	Wt (lb)
		STNDRD Standard Cable Head	1.00	1.69	10.00
		2.75 2 3/4" Tekco Adjustable Centralizer	2.73	2.75	25.00
IntTemp	14.88				
TEMP	13.86				
		RBT-RBT-C3 (141166_7in) Probe Radii Bond Tool with Digital Telemetry	9.40	2.75	90.00
WVF3FT	11.63				
WVFCAL	11.63				
WVFS1	11.63				
WVFS2	11.63				
WVFS3	11.63				
WVFS4	11.63				
WVFS5	11.63				
WVFS6	11.63				
WVFS7	11.63				
WVFS8	11.63				
WVF5FT	10.63				
		PTS275	2.83	2.75	
CCL	3.63				
		GR_CCL-Probe (080538) Probe Gamma CCL	4.54	2.75	100.00
GR	0.90				

Dataset: sprague 3i-9h-n267_rbl.db: field/well/rbl/pass2
Total Length: 20.50 ft
Total Weight: 225.00 lb
O.D. 2.75 in

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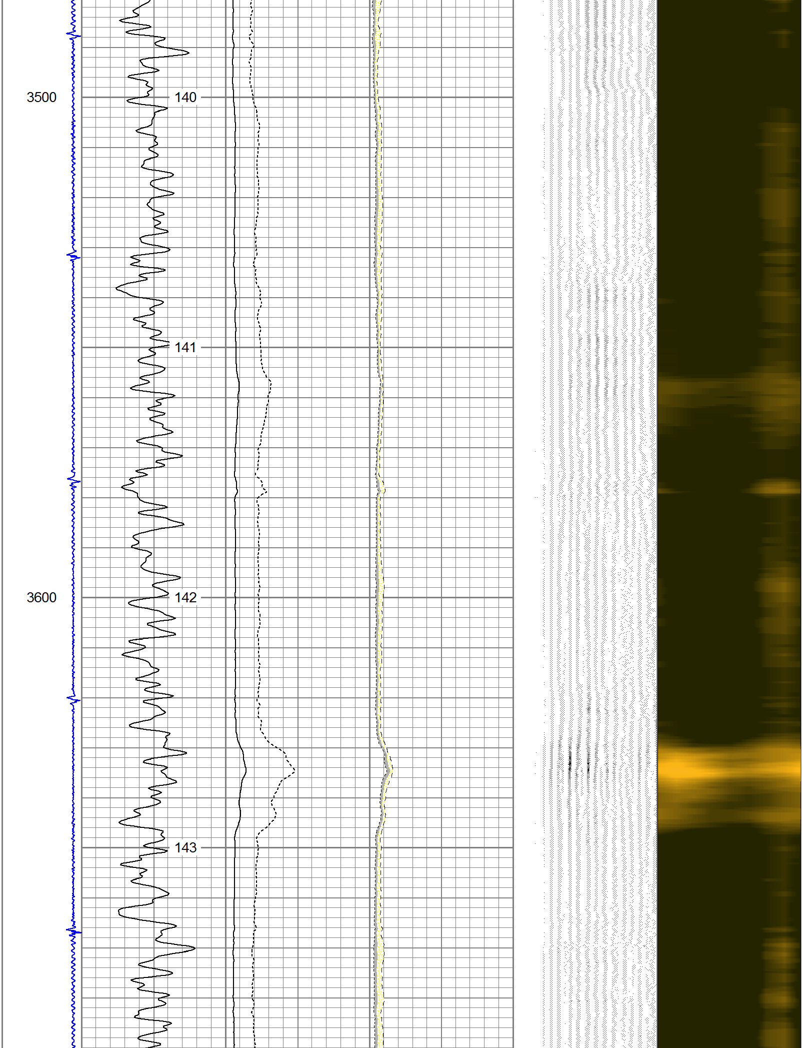
MAIN LOG

LOGGED WITH 0 PSI APPLIED AT SURFACE

Database File:	sprague 3i-9h-n267_rbl.db
Dataset Pathname:	rbl/pass2.2
Presentation Format:	scbl02
Dataset Creation:	Sun Apr 26 05:02:51 2015 by Calc 7.0 B1
Charted by:	Depth in Feet scaled 1:240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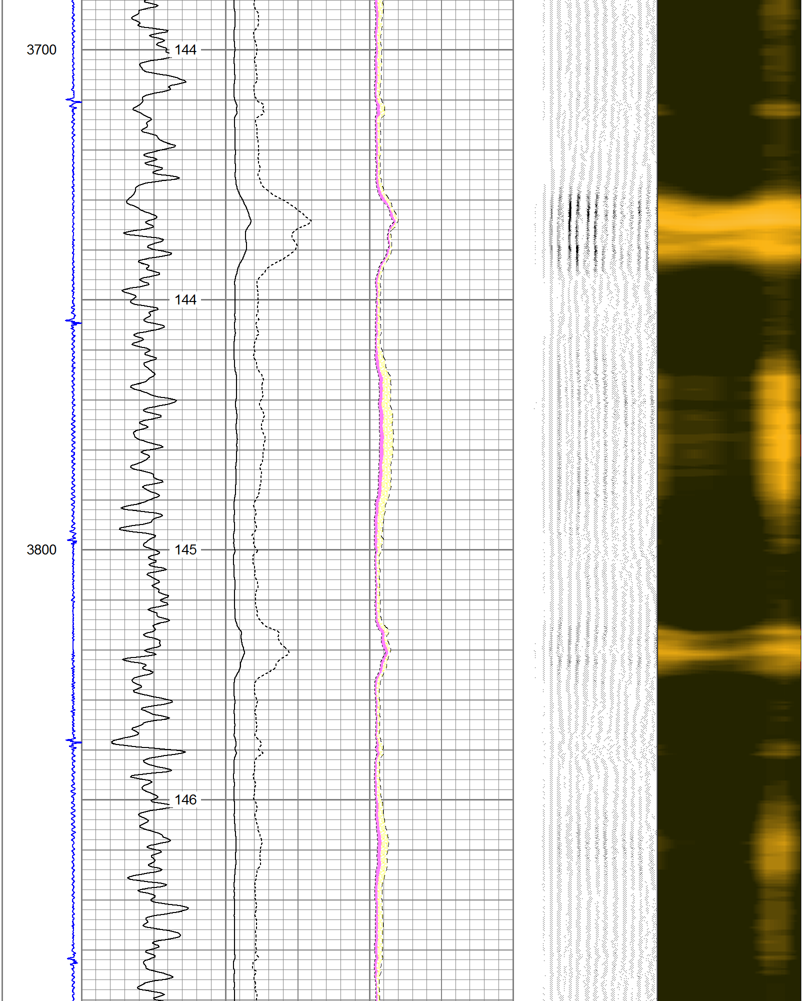
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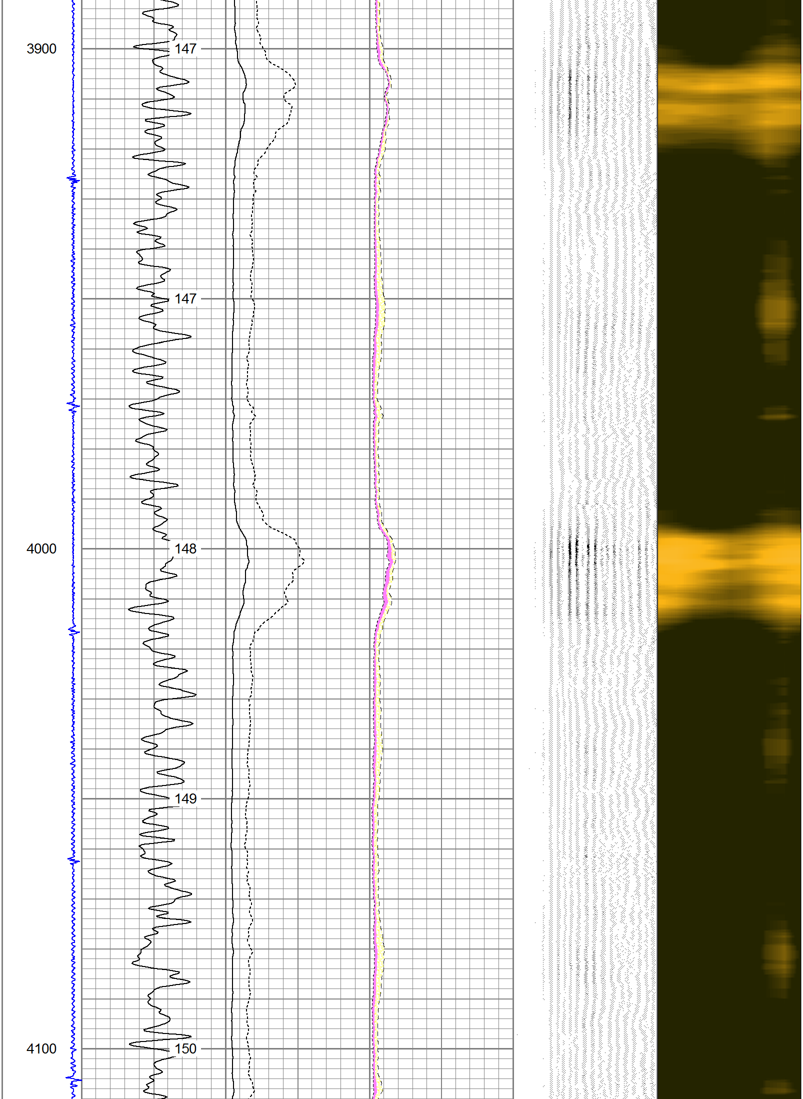
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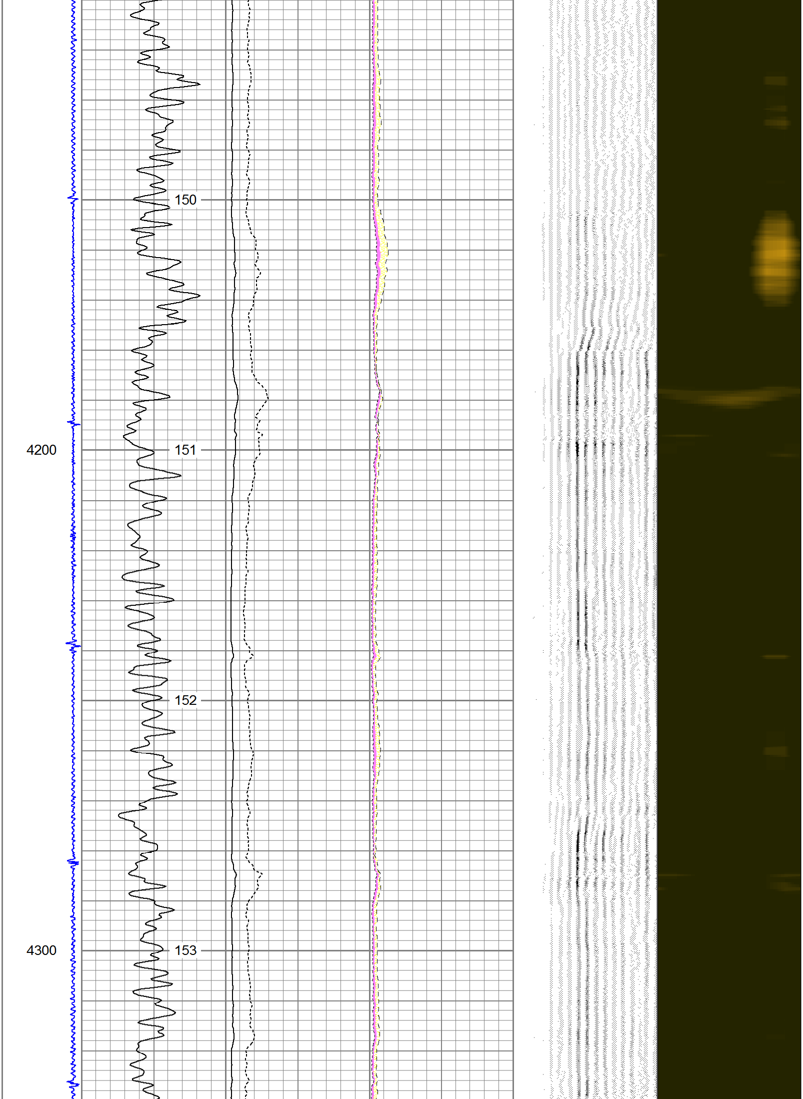
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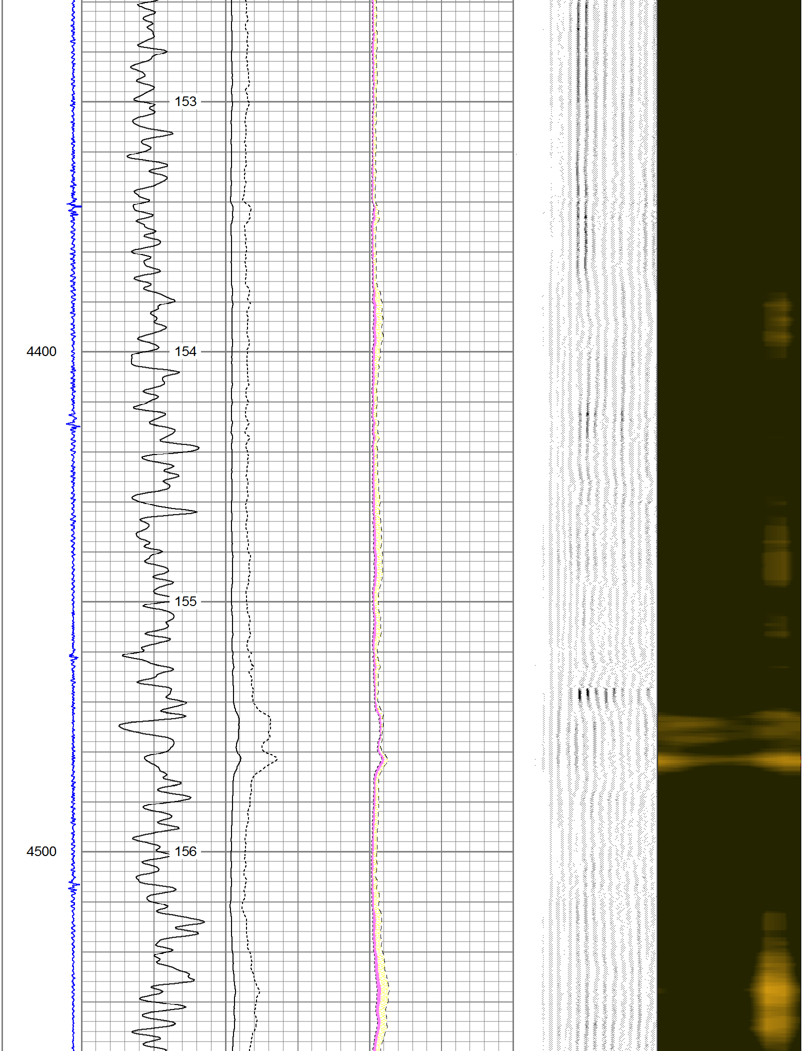
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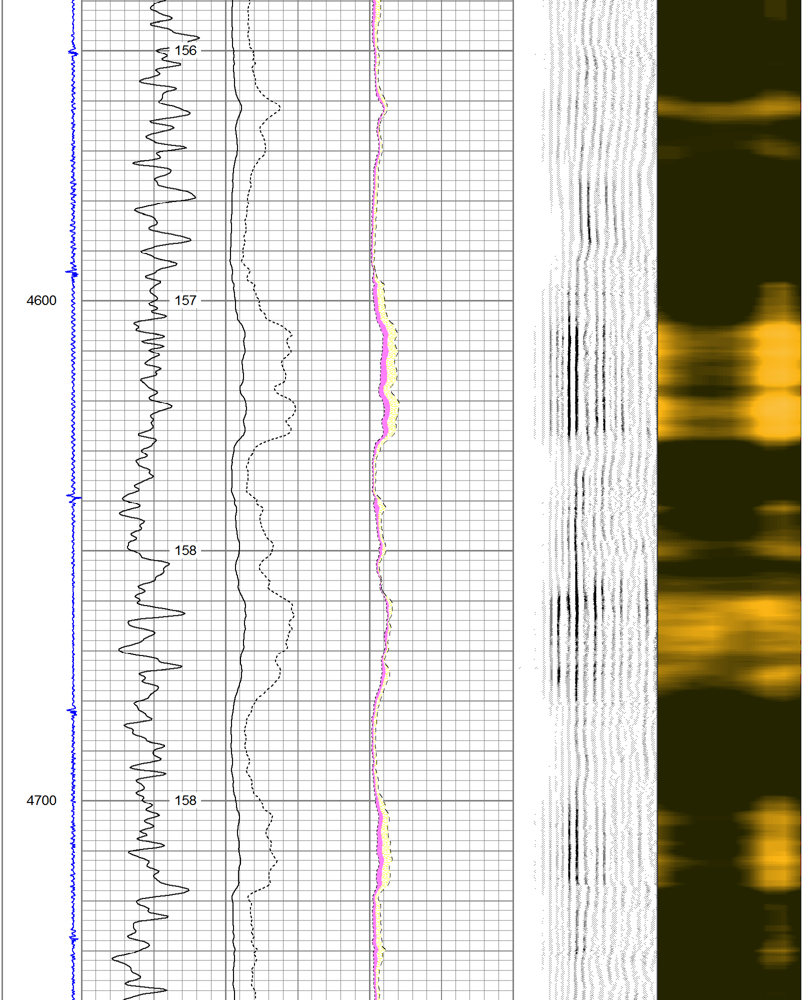
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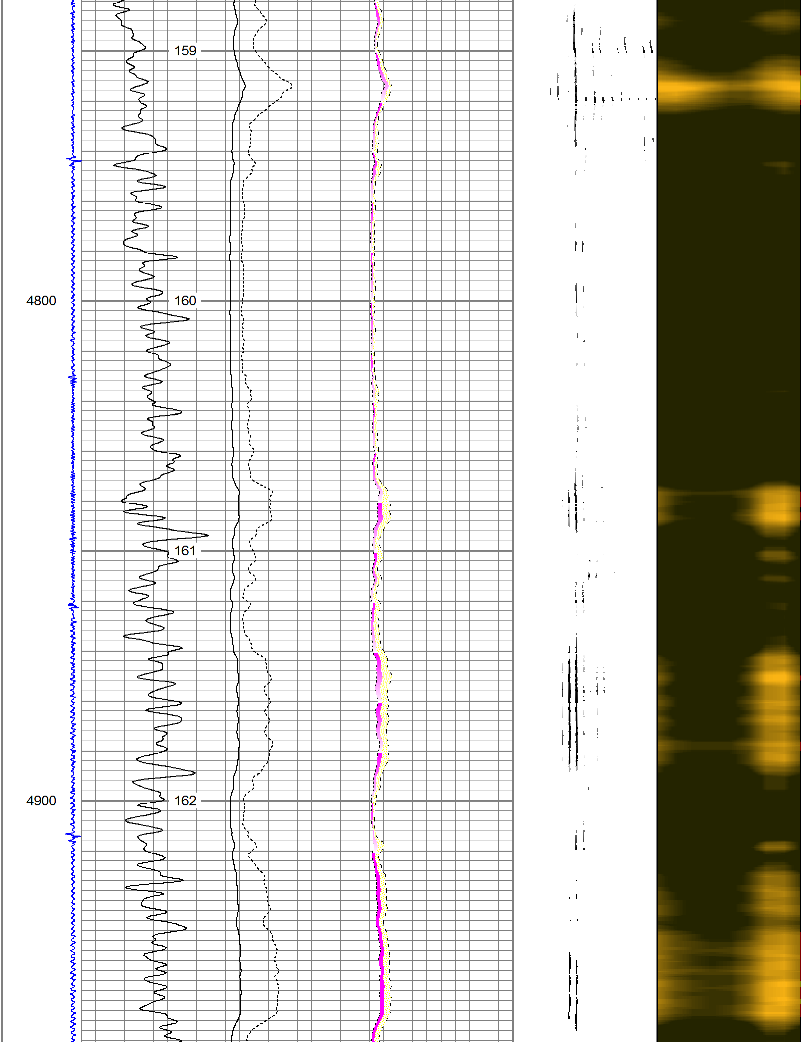
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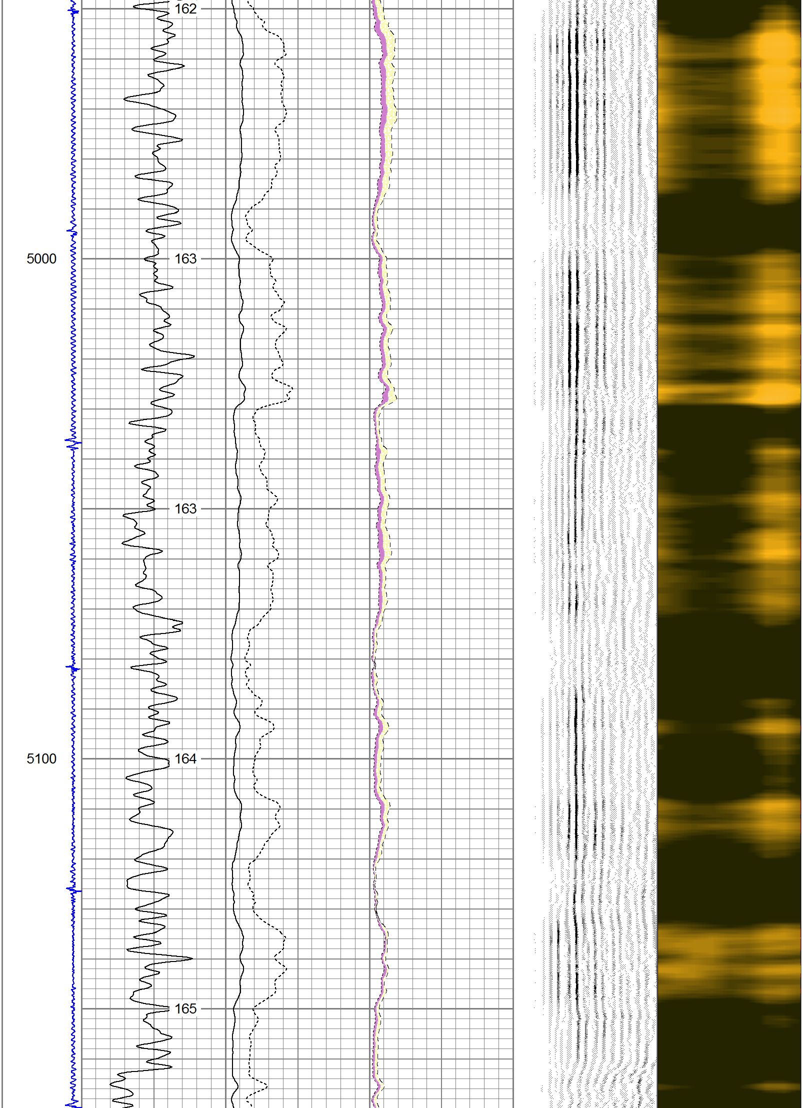
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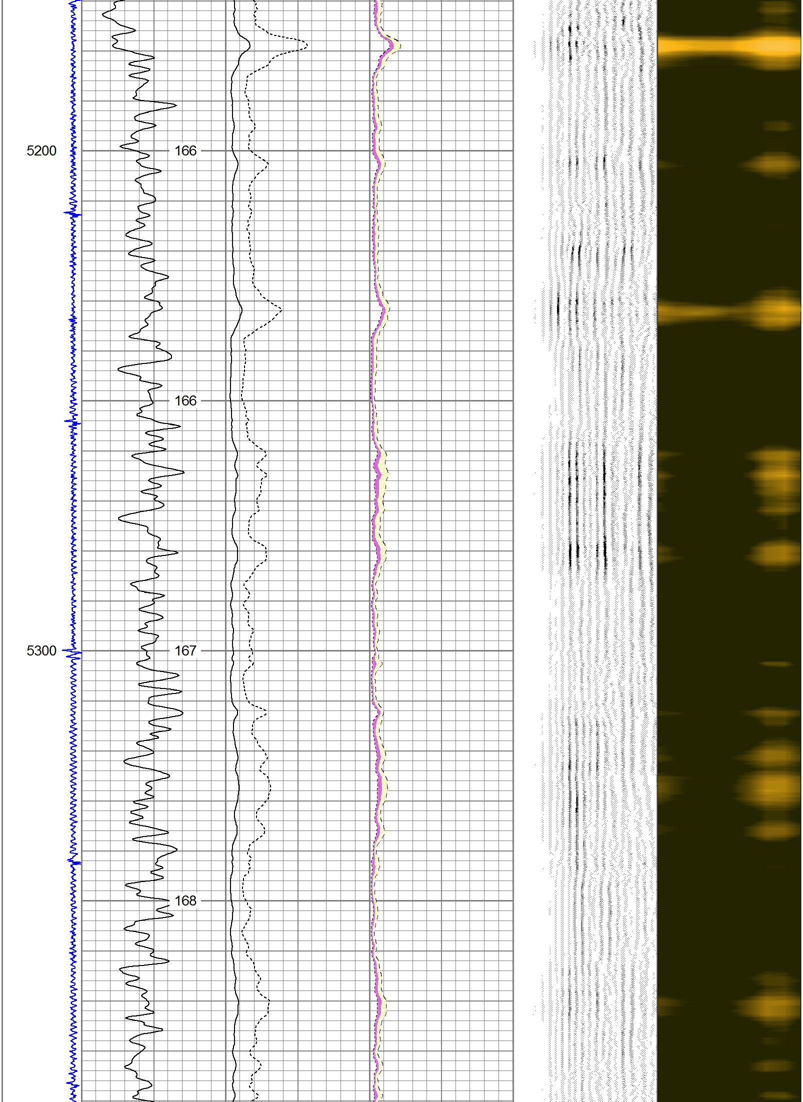
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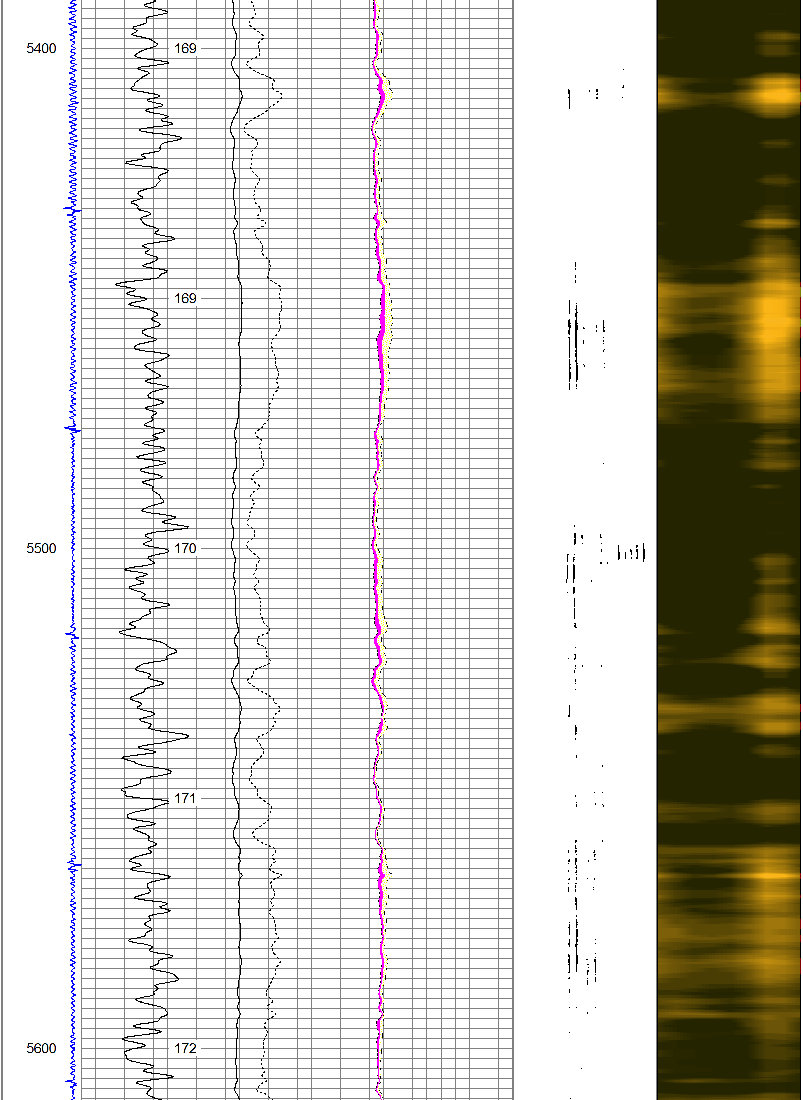
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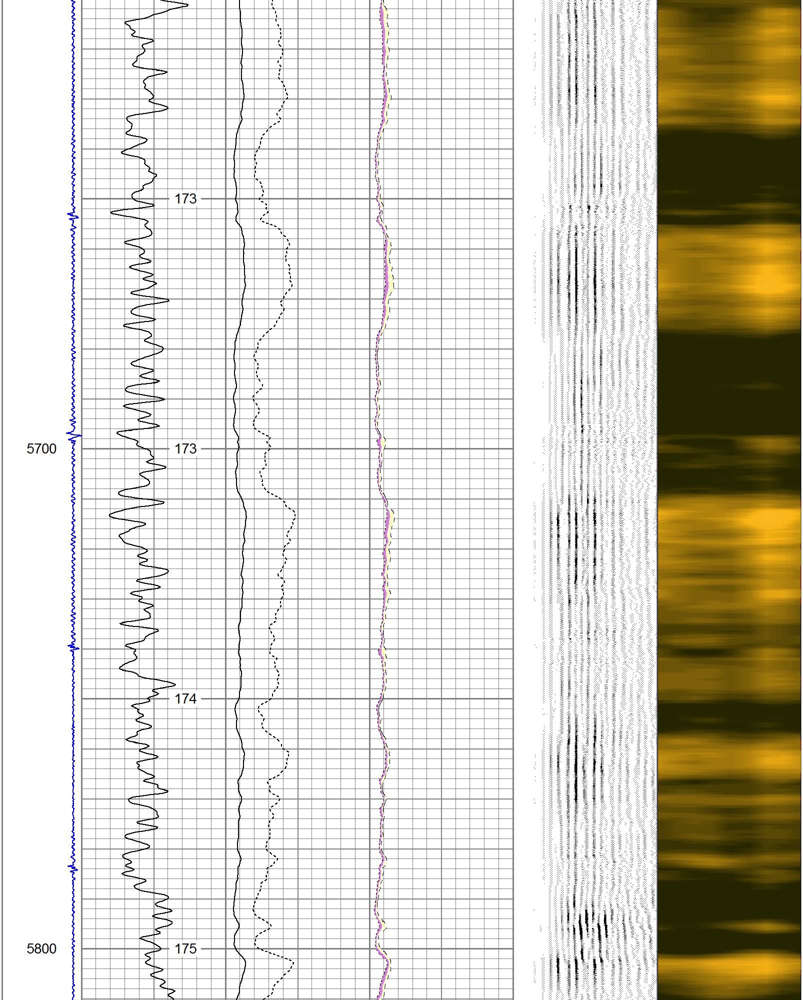
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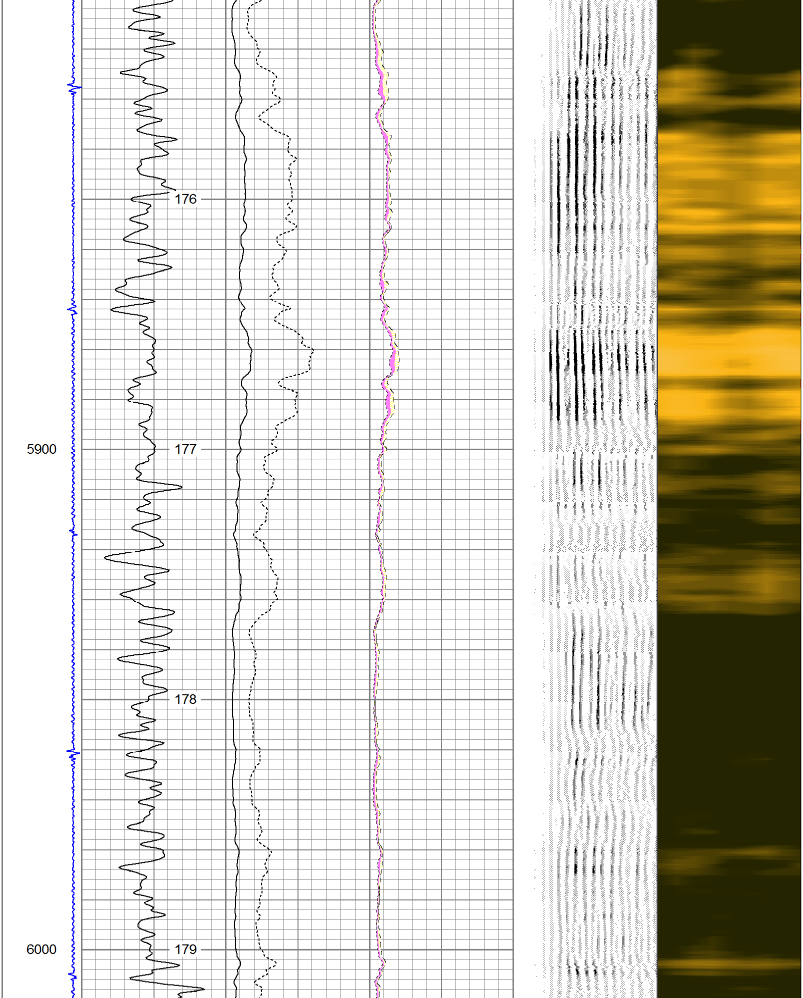
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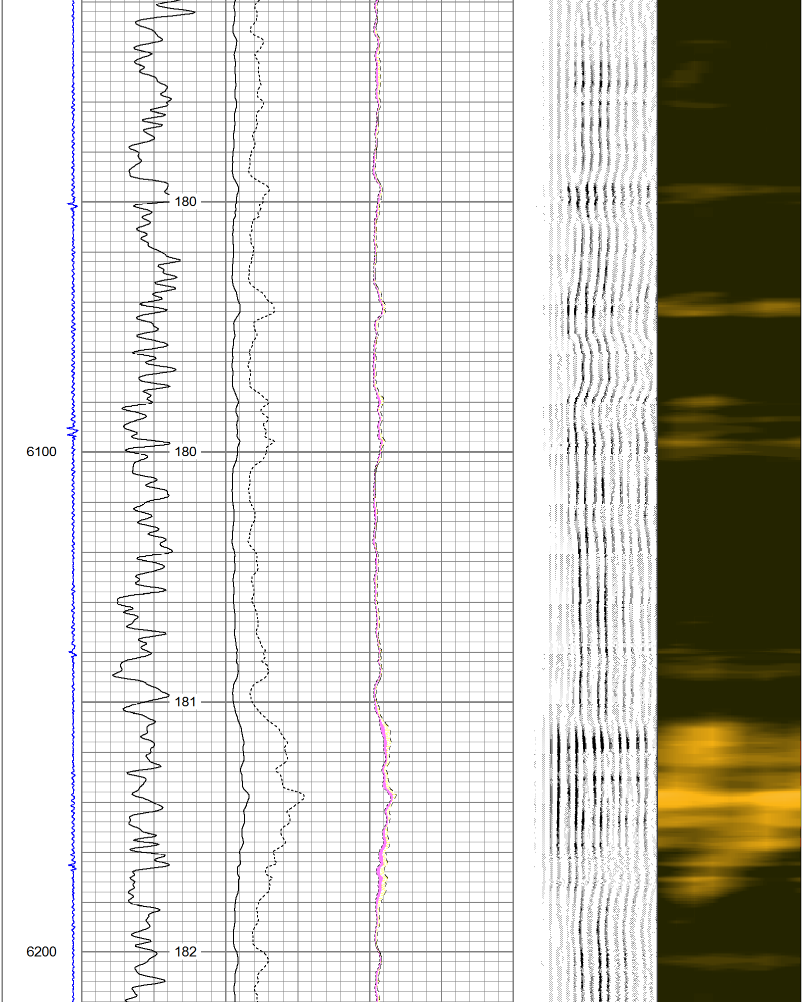
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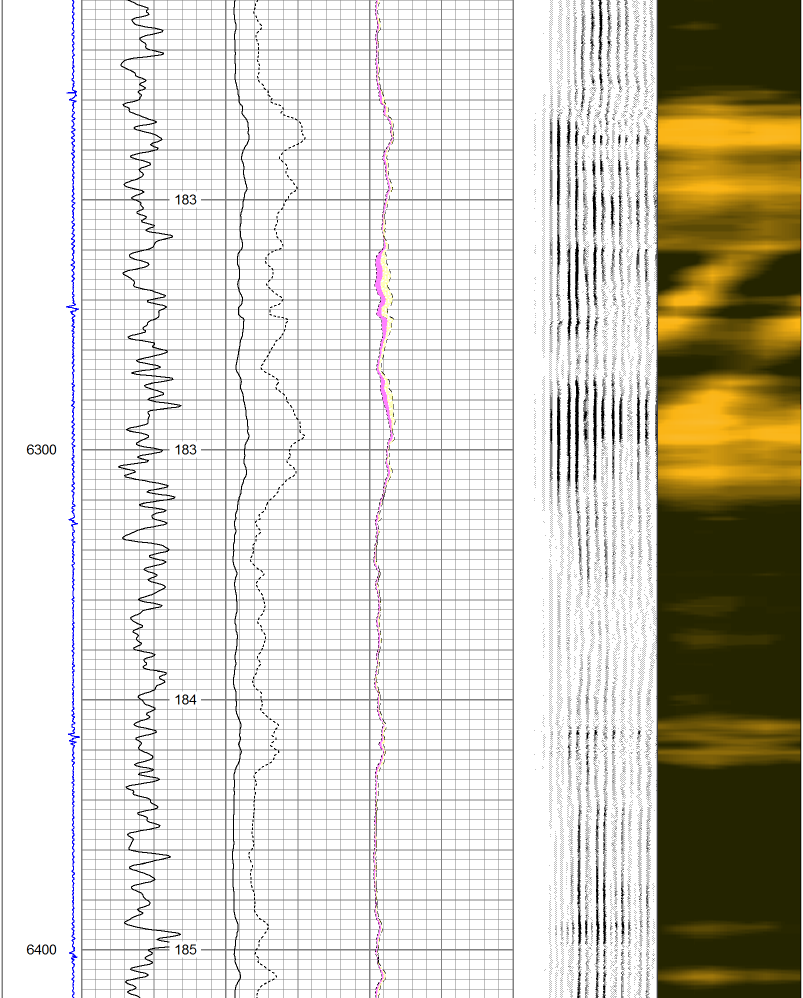
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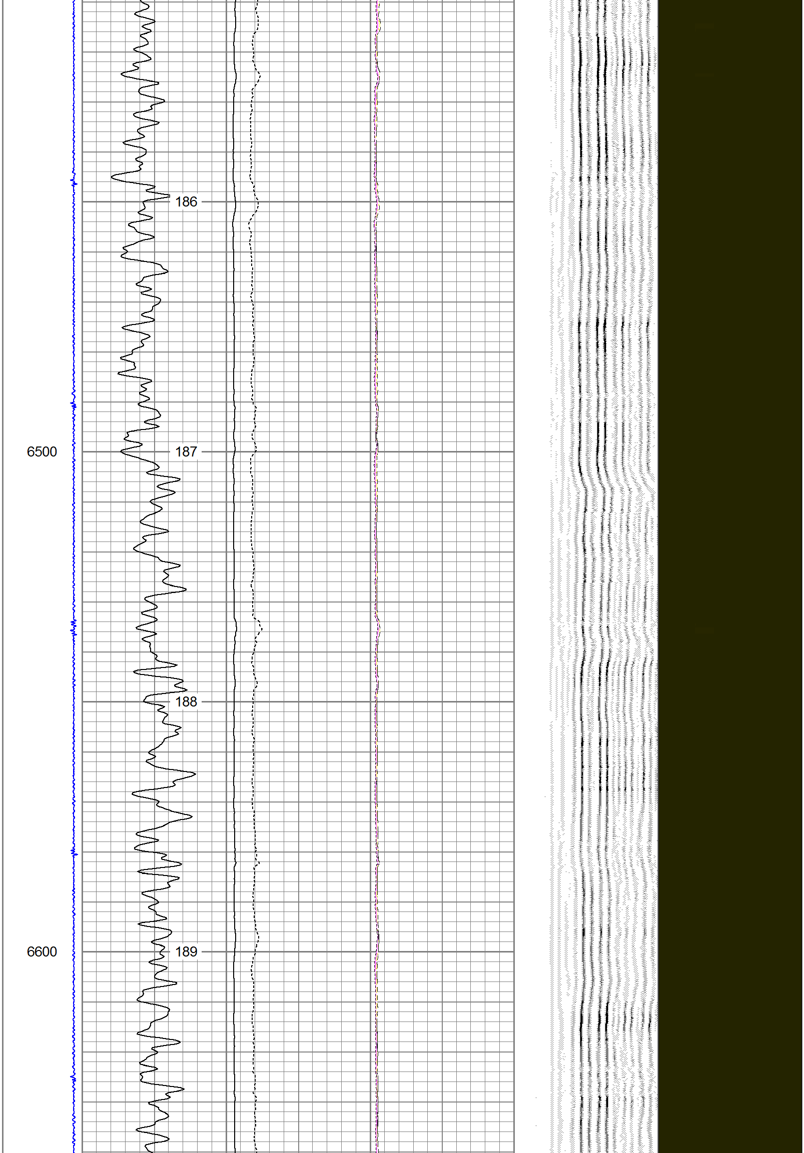
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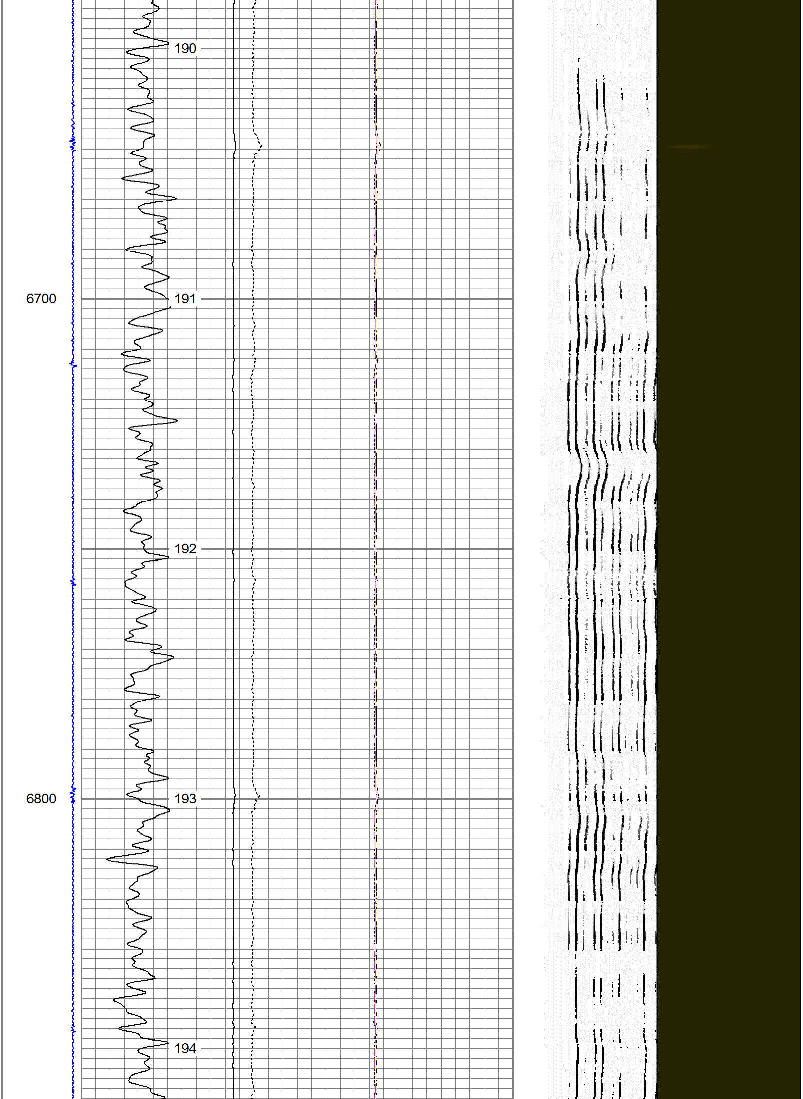
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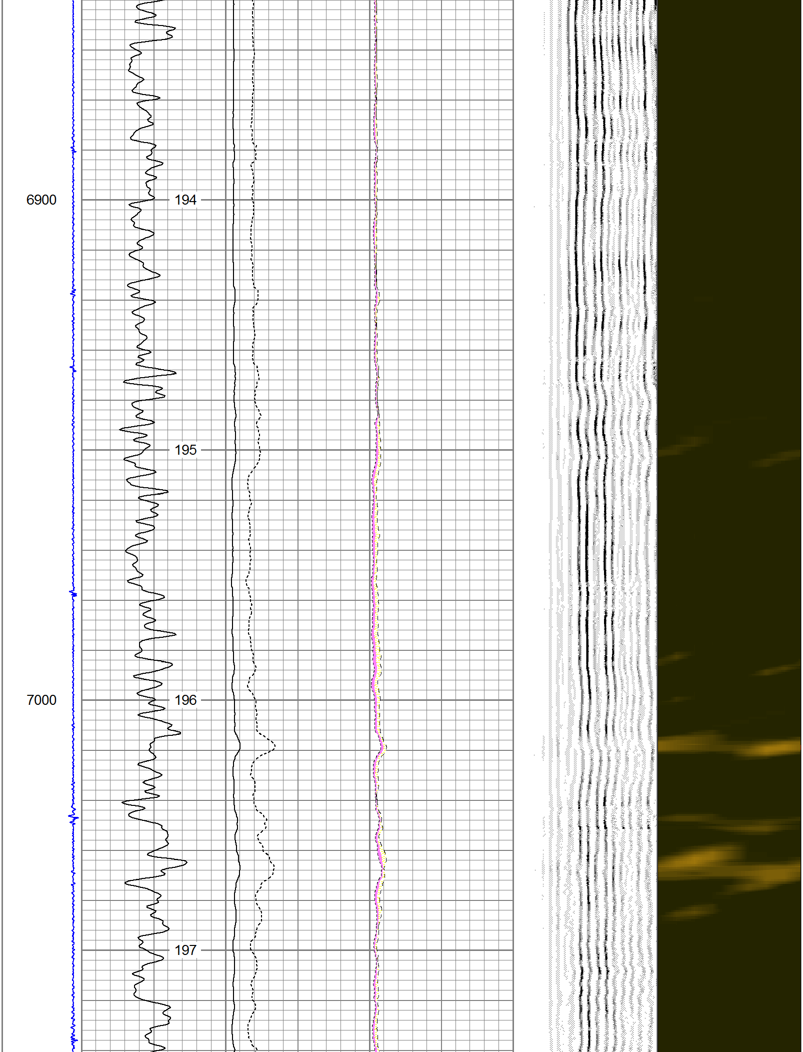
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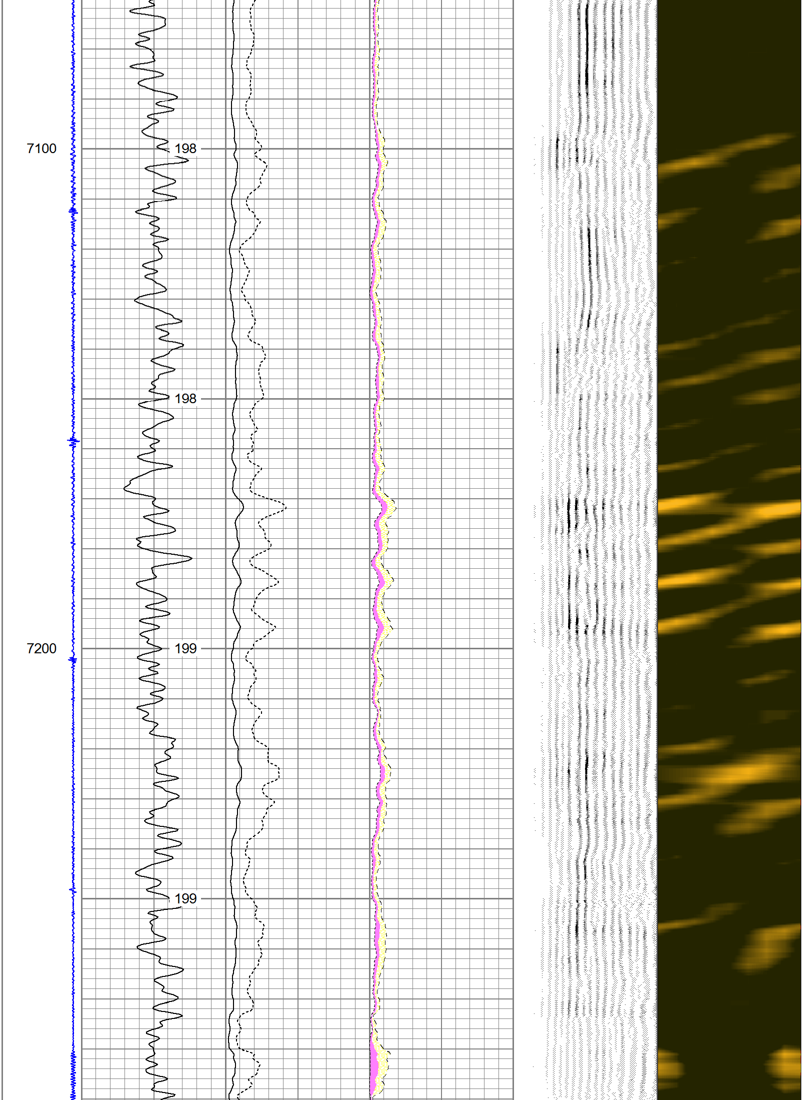
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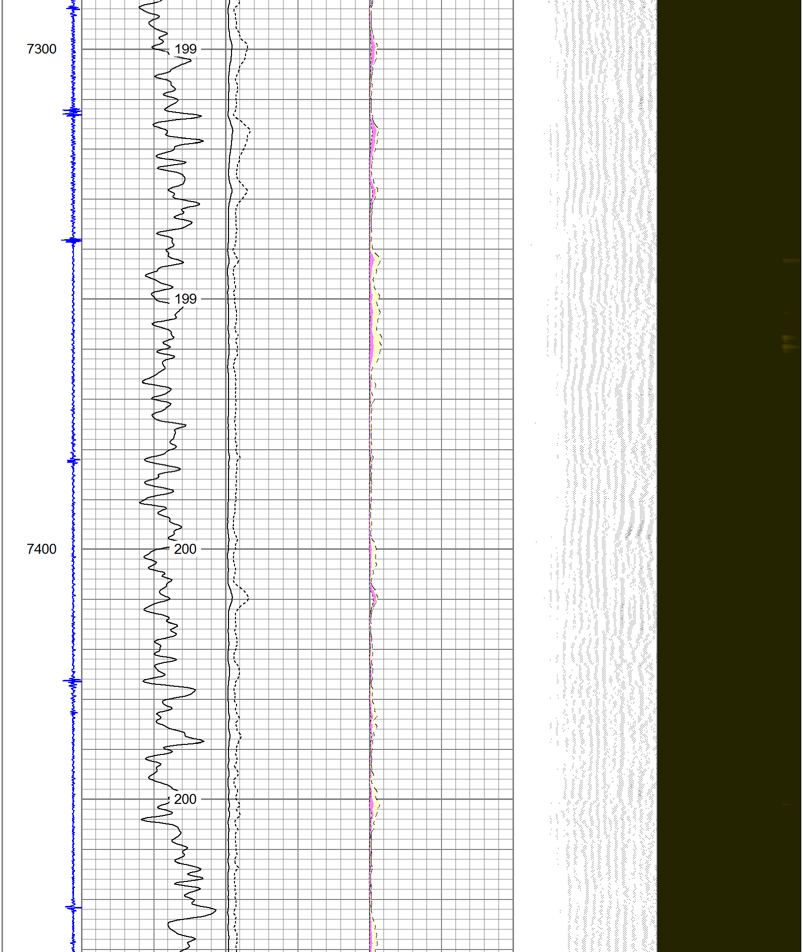
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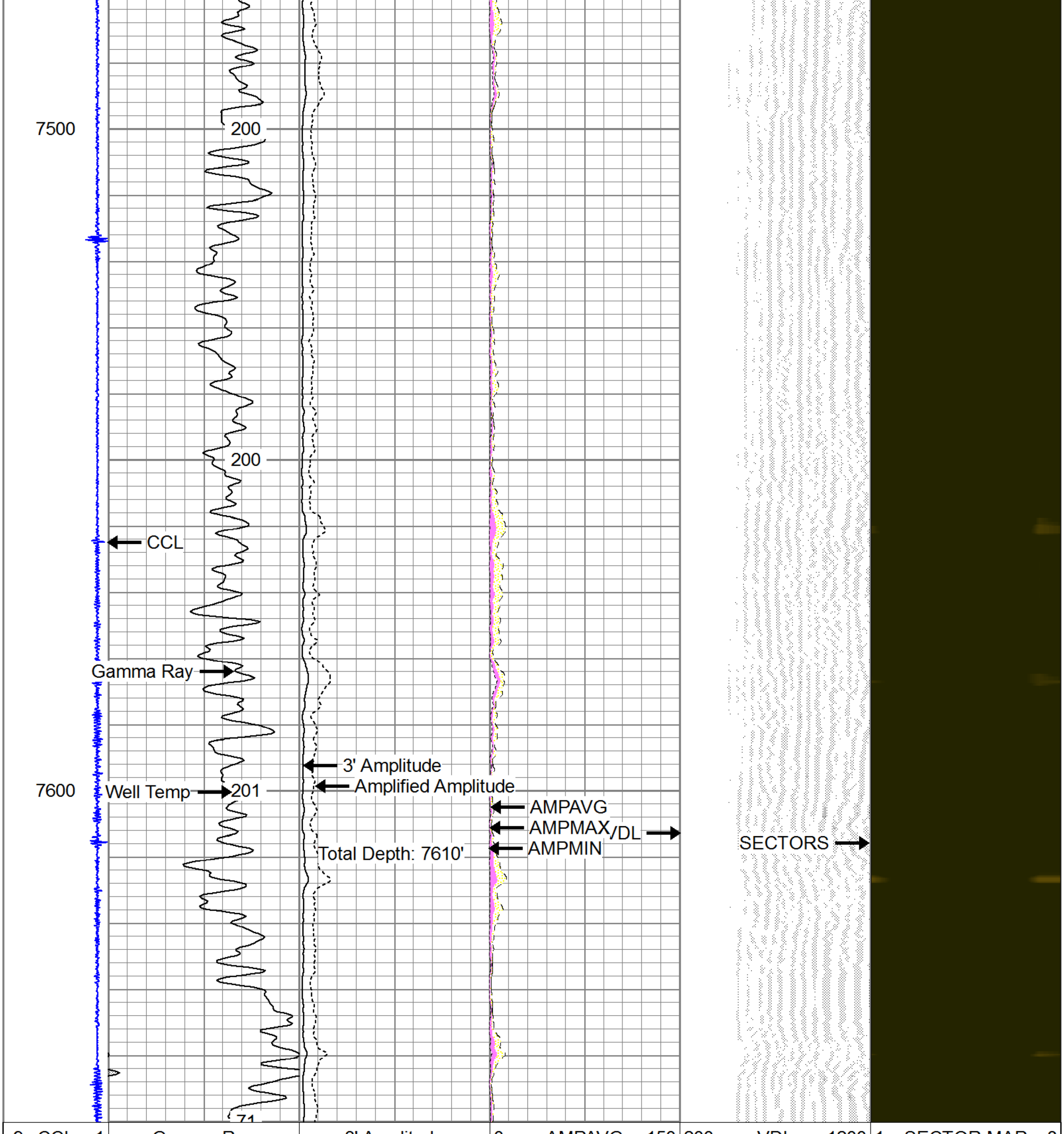

-9 CCL 1	Gamma Ray	3' Amplitude	0 AMPAVG 150	200 VDL 1200	1 SECTOR MAP 8
	0 (GAPI) 200	0 (mV) 100	0 AMPMAX 150		10 60
	TT3FT	Amplified Amplitude	0 AMPMIN 150		
	310 (usec) 210	0 (mV) 30			
	Well Temp (degF)				

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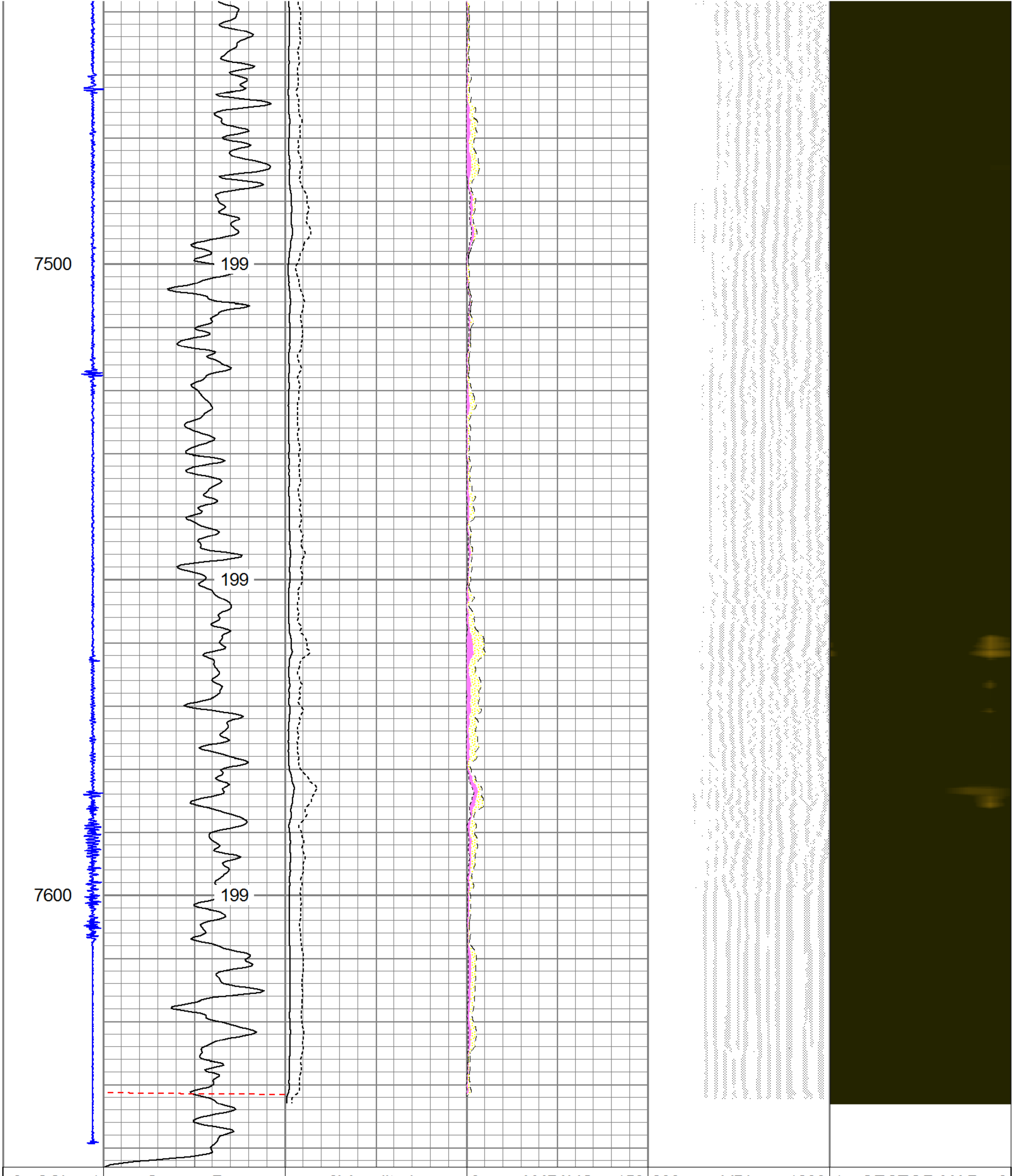
REPEAT SECTION

LOGGED WITH 0 PSI APPLIED AT SURFACE

Database File: sprague 3i-9h-n267_rbl.db
Dataset Pathname: rbl/pass1
Presentation Format: scbl02
Dataset Creation: Sun Apr 26 03:10:35 2015 by Log 7.0 B1
Charted by: Depth in Feet scaled 1:240

-9 CCL 1	Gamma Ray	3' Amplitude	0 AMPAVG 150	200 VDL 1200	1 SECTOR MAP 8
	0 (GAPI) 200	0 (mV) 100	0 AMPMAX 150		10 60
	TT3FT	Amplified Amplitude	0 AMPMIN 150		
	310 (usec) 210	0 (mV) 30			
	Well Temp (degF)				



-9 CCL 1	Gamma Ray	3' Amplitude	0 AMPAVG 150	200 VDL 1200	1 SECTOR MAP 8
	0 (GAPI) 200	0 (mV) 100	0 AMPMAX 150		10 60
	TT3FT	Amplified Amplitude	0 AMPMIN 150		
	310 (usec) 210	0 (mV) 30			
	Well Temp (degF)				

Calibration Report

Database File: sprague 3i-9h-n267_rbl.db
Dataset Pathname: rbl/pass1
Dataset Creation: Sun Apr 26 03:10:35 2015 by Log 7.0 B1

Gamma Ray Calibration Report

Serial Number: 080538
Tool Model: Probe
Performed: Fri Apr 24 06:59:08 2015

Calibrator Value: 1.0 GAPI

Background Reading: 0.0 cps
Calibrator Reading: 1.0 cps

Sensitivity: 1.6500 GAPI/cps

Segmented Cement Bond Log Calibration Report

Serial Number: 141166_7in
Tool Model: RBT-C3

Calibration Casing Diameter: 7.000 in
Calibration Depth: 1978.408 ft

Master Calibration, performed Fri Apr 24 09:46:22 2015:

	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3'	0.013	0.742	1.500	71.900	66.000	0.270
CAL	0.012	0.733				
5'	0.013	0.747	1.500	71.900	95.916	0.259
SUM						
S1	0.009	0.737	0.000	100.000	137.367	-1.279
S2	0.013	0.741	0.000	100.000	137.399	-1.776
S3	0.013	0.739	0.000	100.000	137.600	-1.747
S4	0.012	0.740	0.000	100.000	137.484	-1.677
S5	0.012	0.738	0.000	100.000	137.827	-1.686
S6	0.013	0.740	0.000	100.000	137.510	-1.806
S7	0.012	0.738	0.000	100.000	137.773	-1.697
S8	0.012	0.738	0.000	100.000	137.905	-1.710

Internal Reference Calibration, performed Fri Apr 24 09:49:01 2015:

	Raw (v)		Calibrated (v)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
CAL	0.000	0.000	0.012	0.733	1.000	0.000

Air Zero Calibration, performed Sat Apr 25 07:24:56 2015:

	Raw (v)	Calibrated (v)	Results
	Zero	Zero	Offset
3'	0.015	0.000	-0.002
5'	0.017	0.000	-0.004
SUM			
S1	0.011	0.000	-0.002
S2	0.014	0.000	-0.001
S3	0.014	0.000	-0.001
S4	0.014	0.000	-0.001
S5	0.014	0.000	-0.002
S6	0.014	0.000	-0.001
S7	0.014	0.000	-0.002
S8	0.013	0.000	-0.001

Temperature Calibration Report

Serial Number: 141166_7in
Tool Model: RBT-C3
Performed: Thu Jan 29 22:39:37 2015

	Reference	Reading
Low Reference:	0.00 degF	0.00 degF
High Reference:	1.00 degF	1.00 degF

Gain: 0.82
Offset: 15.00
Delta Spacing 1

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Company	ENCANA OIL & GAS (USA) INC		
Well	SPRAGUE 3I-9H-N267		
Field	WATTENBERG		
County	WELD		
State	CO	Country	USA