RELIANCE
OILFIELD SERVICES

Company	TEP Rocky Mountain LLC
Well	Chevron TR 624-22-597
Field	Trail Ridge
County	Garfield
State	Colorado

Radial Cement Bond
Gamma Ray
Casing Collar Log

Company TEP Rocky Mountain LLC
Well Chevron TR 624-22-597
Field Trail Ridge
County Garfield State Colorado
Location: API # : 05-045-23701
SEC 22 TWP 5S RGE 97W

Other Services
PN

Permanent Datum	Ground Level	Elevation	8134.8'
Log Measured From	Kelly Bushing	24 FT	
Drilling Measured From	Kelly Bushing		

Elevation
K.B. 8158.8'
D.F. 8157.8'
G.L. 8134.8'

Date	17-MAR-2019
Run Number	One
Depth Driller	9514 FT
Depth Logger	9476 FT
Bottom Logged Interval	9462 FT
Top Log Interval	Surface
Open Hole Size	---
Type Fluid	Water
Density / Viscosity	8.34 lb/gal
Max. Recorded Temp.	246°F
Estimated Cement Top	See Log
Time Well Ready	ROA
Time Logger on Bottom	11:00
Equipment Number	HD-0359
Location	Grand Junction, CO
Recorded By	Z. Fisher
Witnessed By	Dustin Welsh

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

Casing Record	Size (in)	Wgt (lbs/Ft)	Grade	Top	Bottom
Surface Casing	9 5/8	36	J-55	Surface	2743 FT
Intermediate #1	4 1/2	11.6	P-110	Surface	9472 FT
Intermediate #2					
Liner					

<<< Fold Here >>>

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

Log ran as per Customer request
Depth referenced to Kelly Bushing at 24 FT
Marker Joint logged from 5292-5313 FT
Log ran from 9462 FT to Surface
Recorded with 0 PSI Surface Induced Pressure

Thank you for choosing Reliance Oilfield Services, LLC!

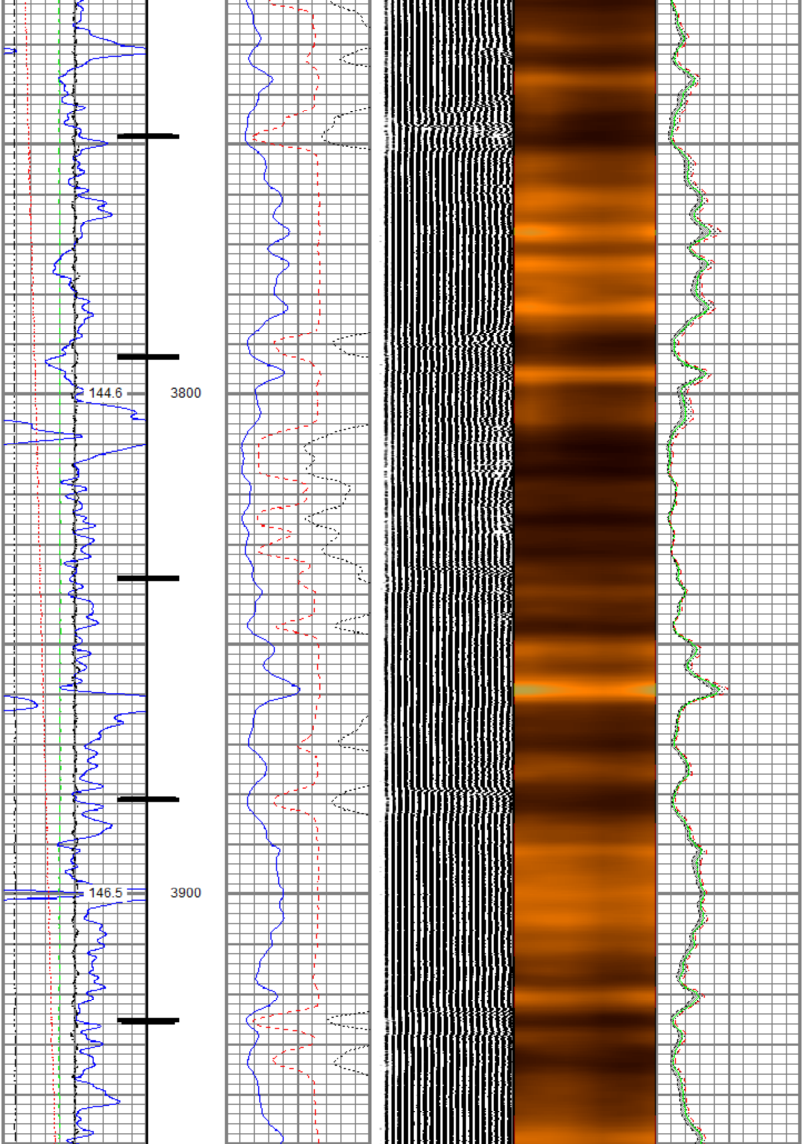
RELIANCE
OILFIELD SERVICES

Main Pass

Recorded With 0 PSI Surface Induced Pressure

Database File	tep\tep_chevron tr 624-22-597_rbl_03-17-19\tep_chevron tr 624-22-597_rbl_03-17-19.db
Dataset Pathname	main.1
Presentation Format	ros_rbt004_tep
Dataset Creation	Tue Mar 19 13:31:48 2019
Charted by	Depth in Feet scaled 1:240

Curve	Left	Unit	Right
Gamma Ray	0	(GAPI)	200
Line Speed	-150	(ft/min)	150
Line Tension	0	(lb)	2000
Differential Temperature	-2	(degF)	2
Temperature	0	(degF)	20
CCL	10		0
3' Amplitude	0	(mV)	100
3' Amplitude x 5	0	(mV)	20
3' Travel Time	300	(usec)	200
5' Variable Density Log	200		1200
Sector Map	10		110
Average Amplitude	0		150
Mimimum Amplitude	0		150
Maximum Amplitude	0		150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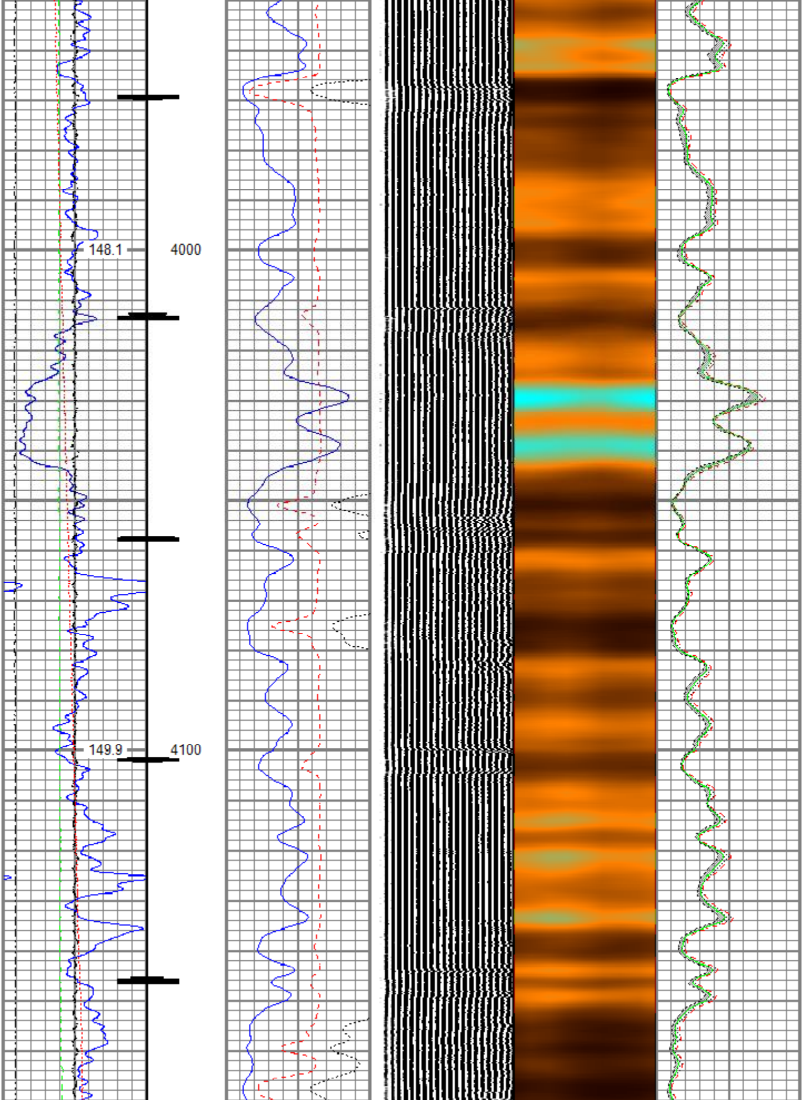
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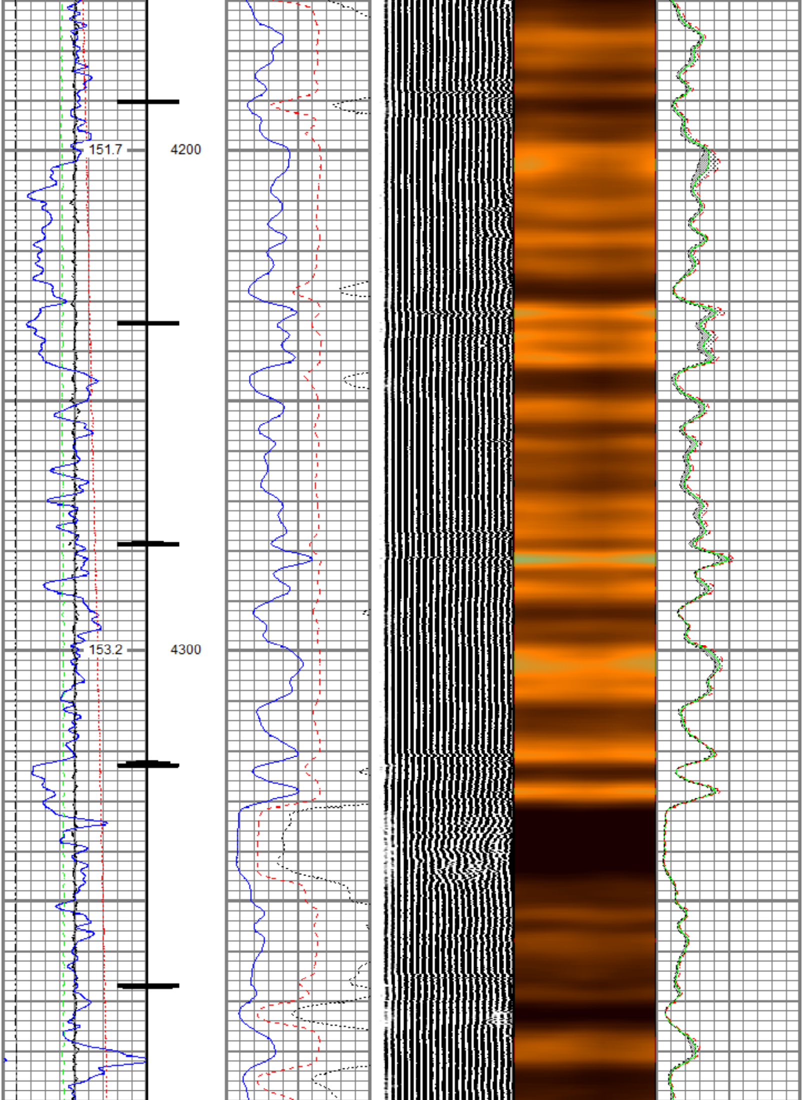
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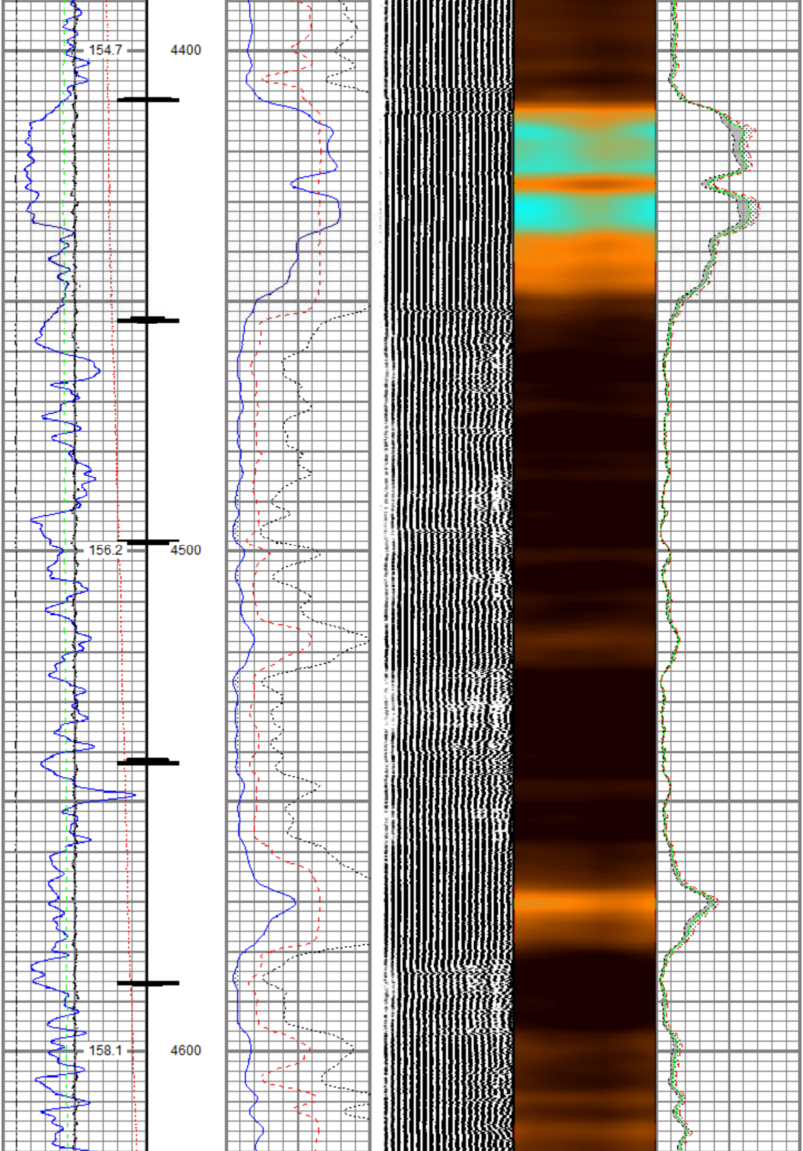
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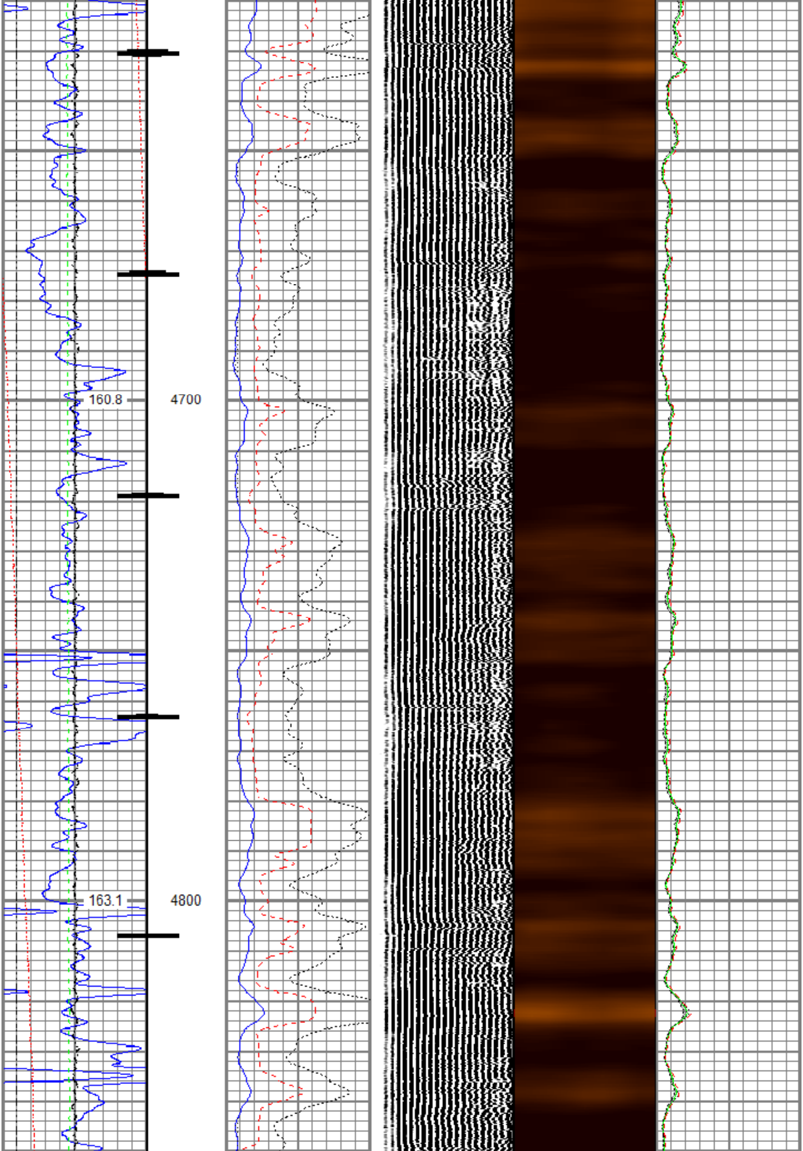
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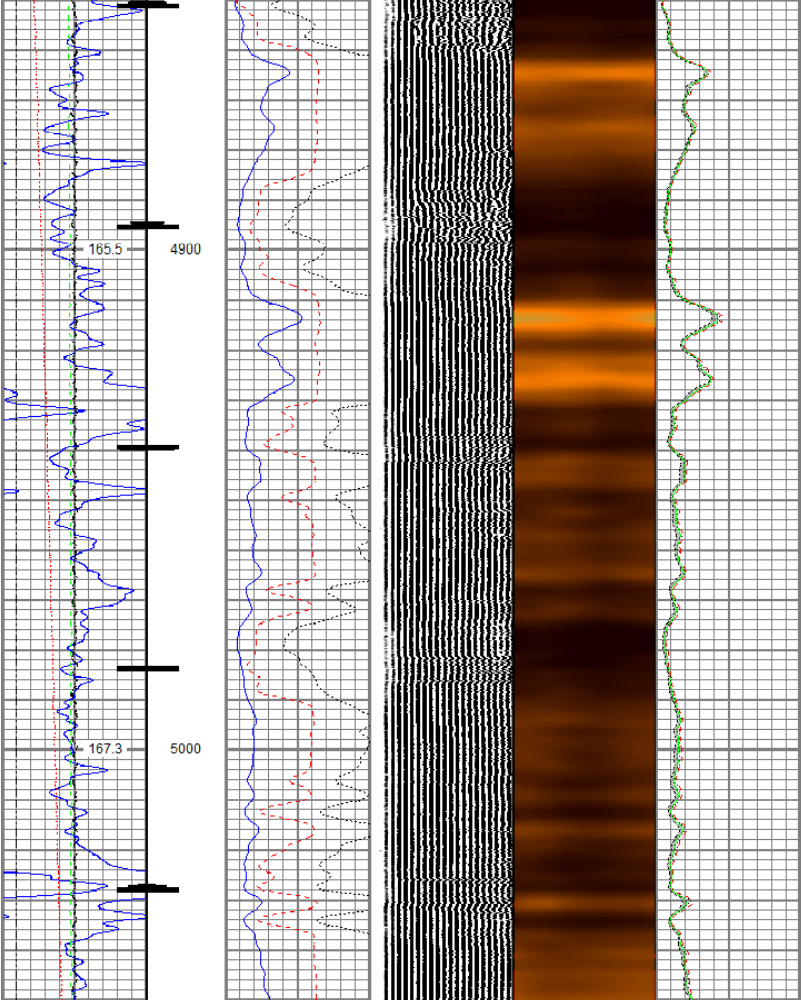
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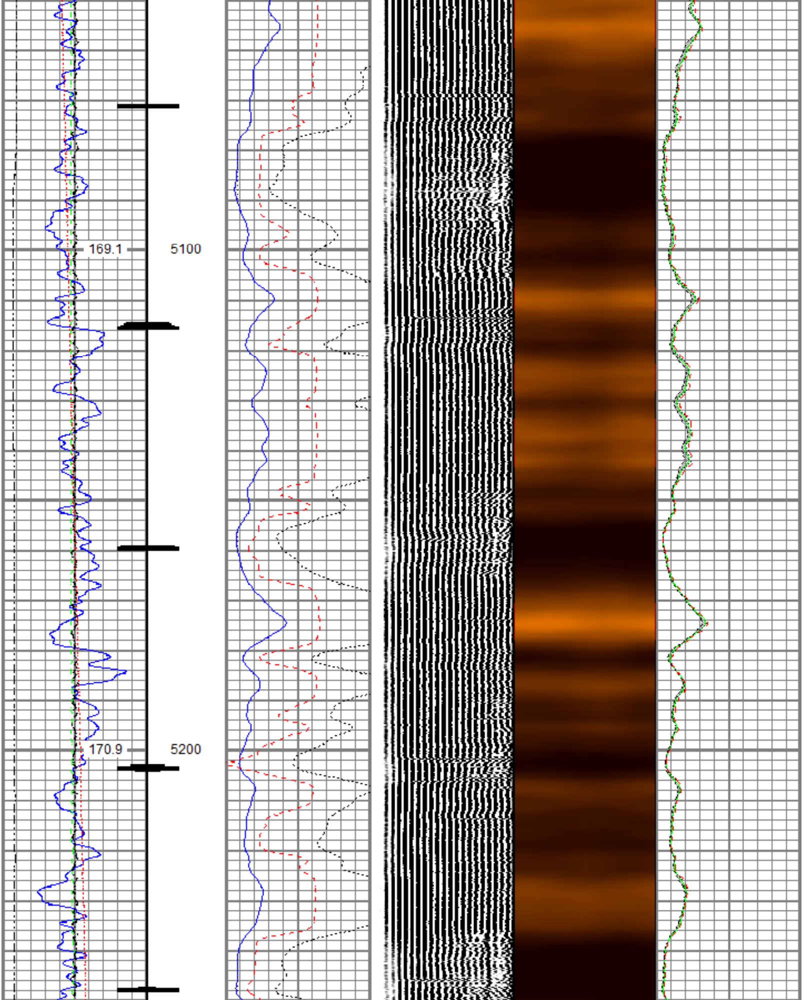
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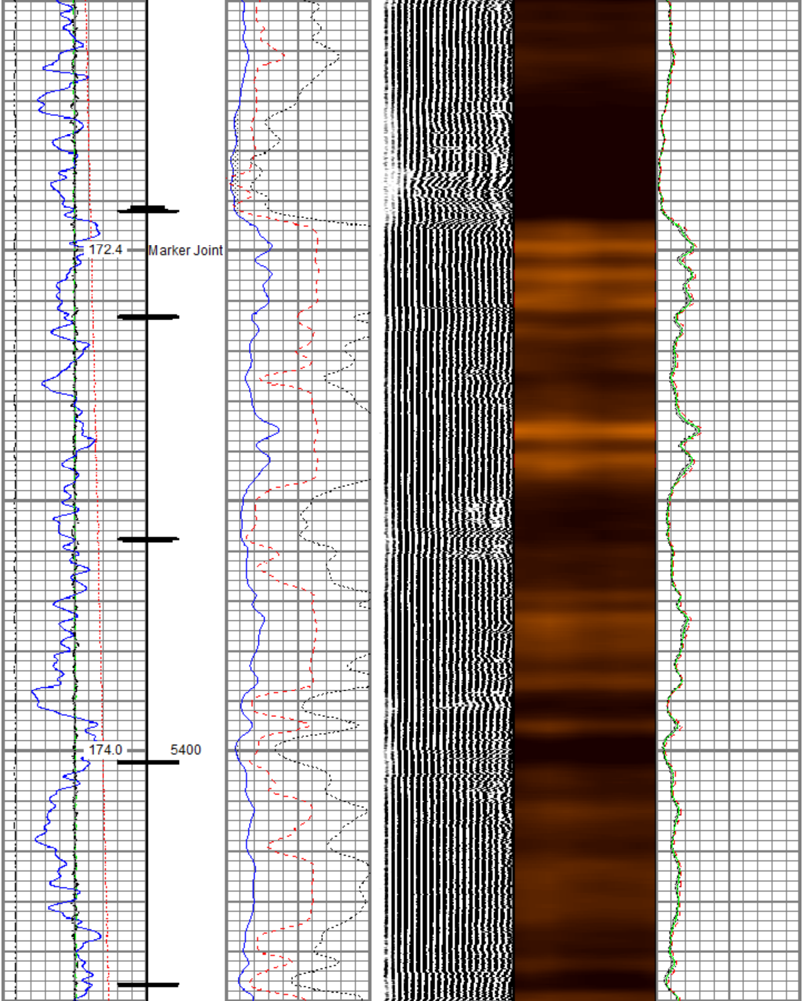
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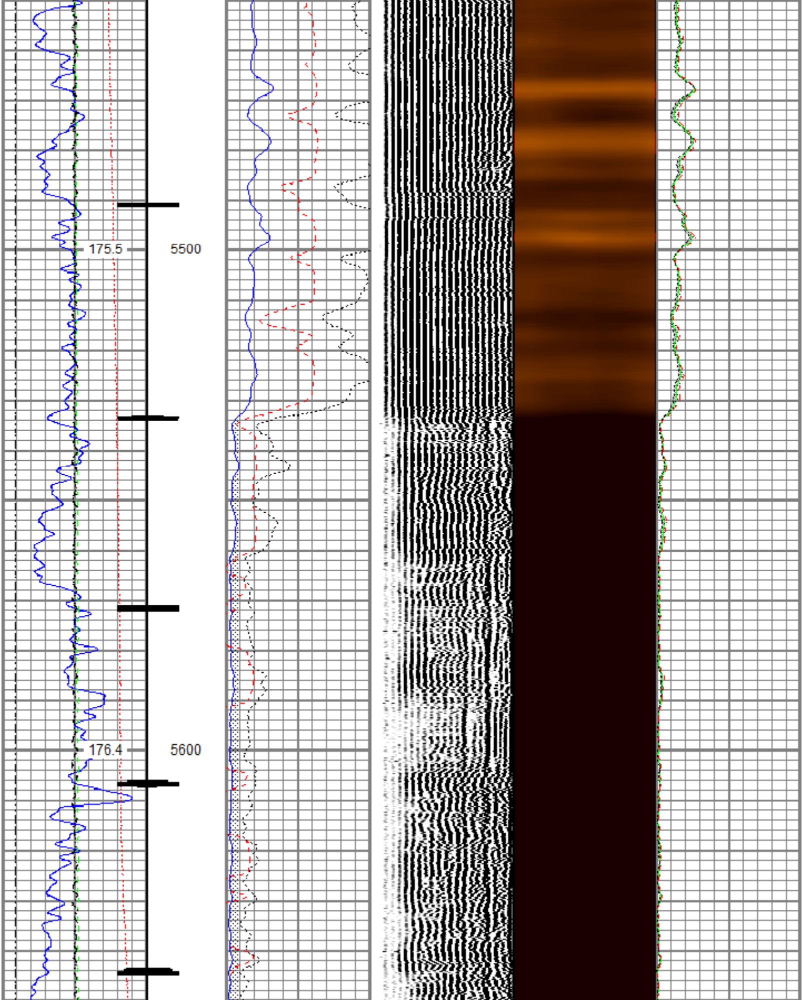
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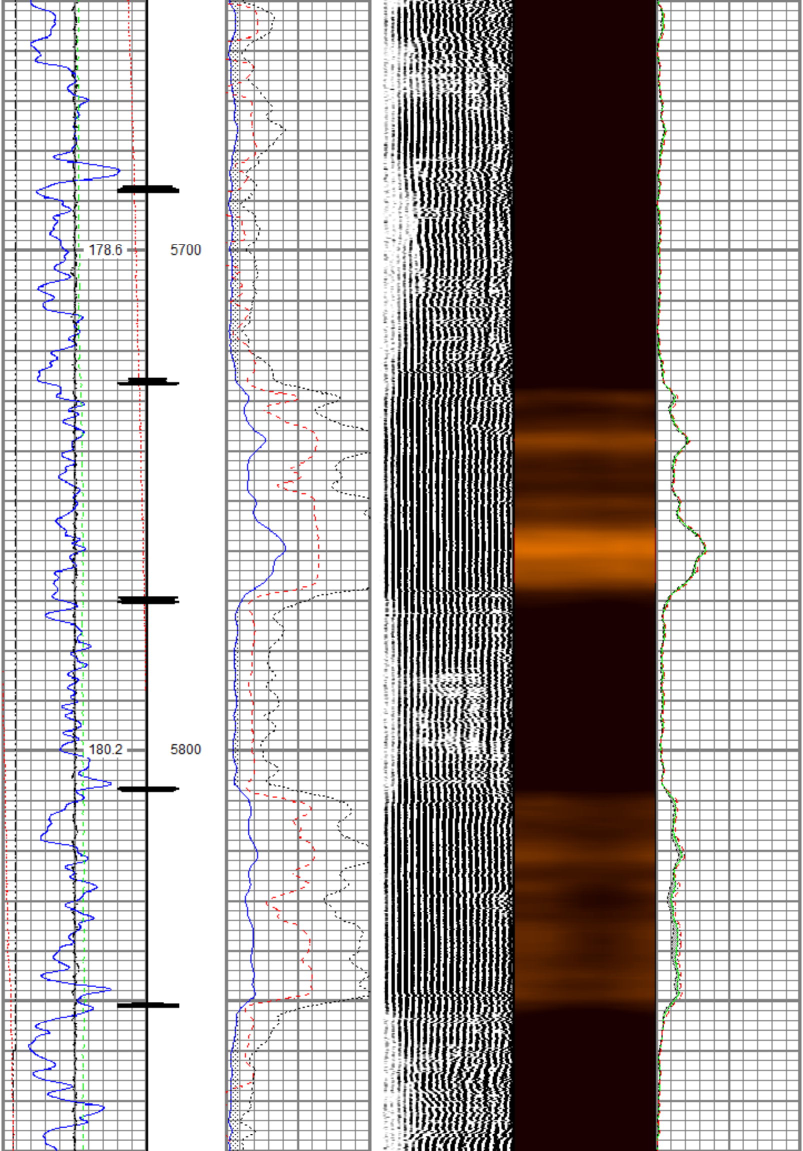
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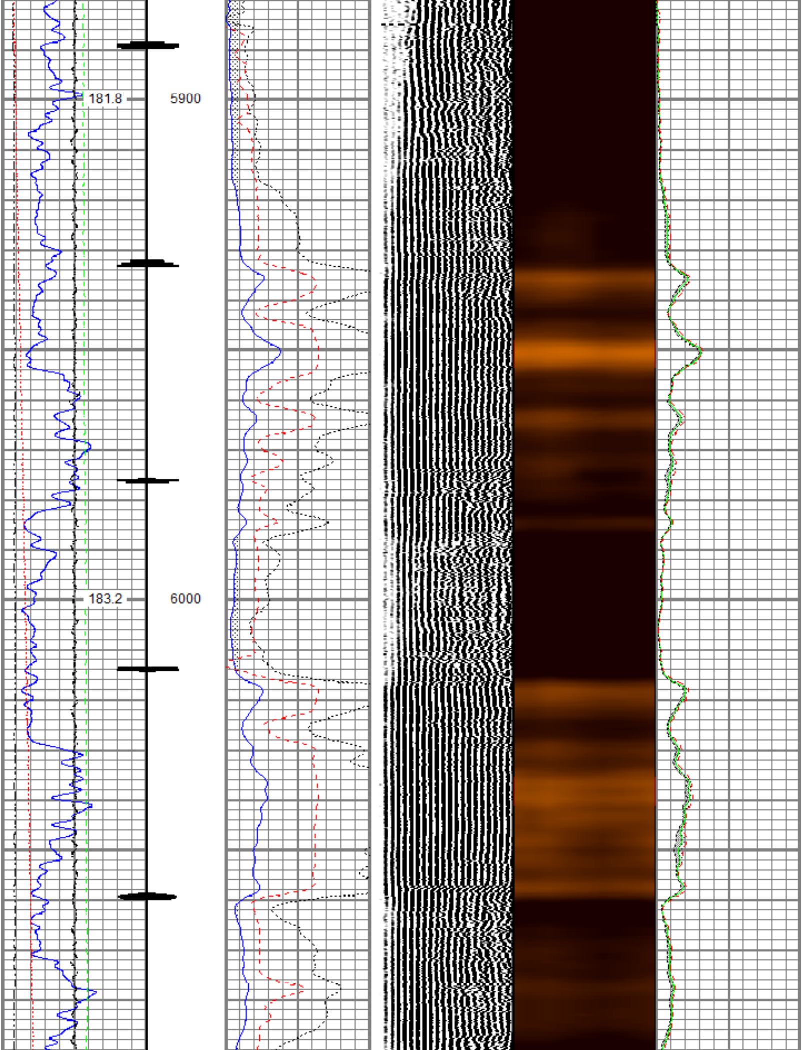
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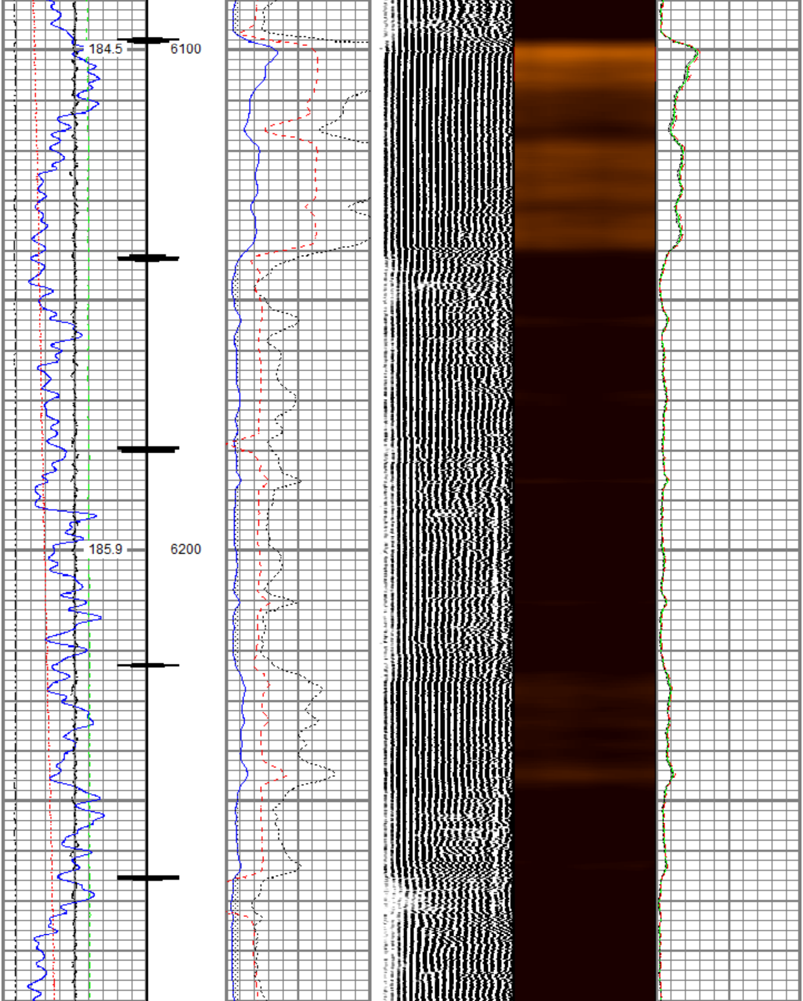
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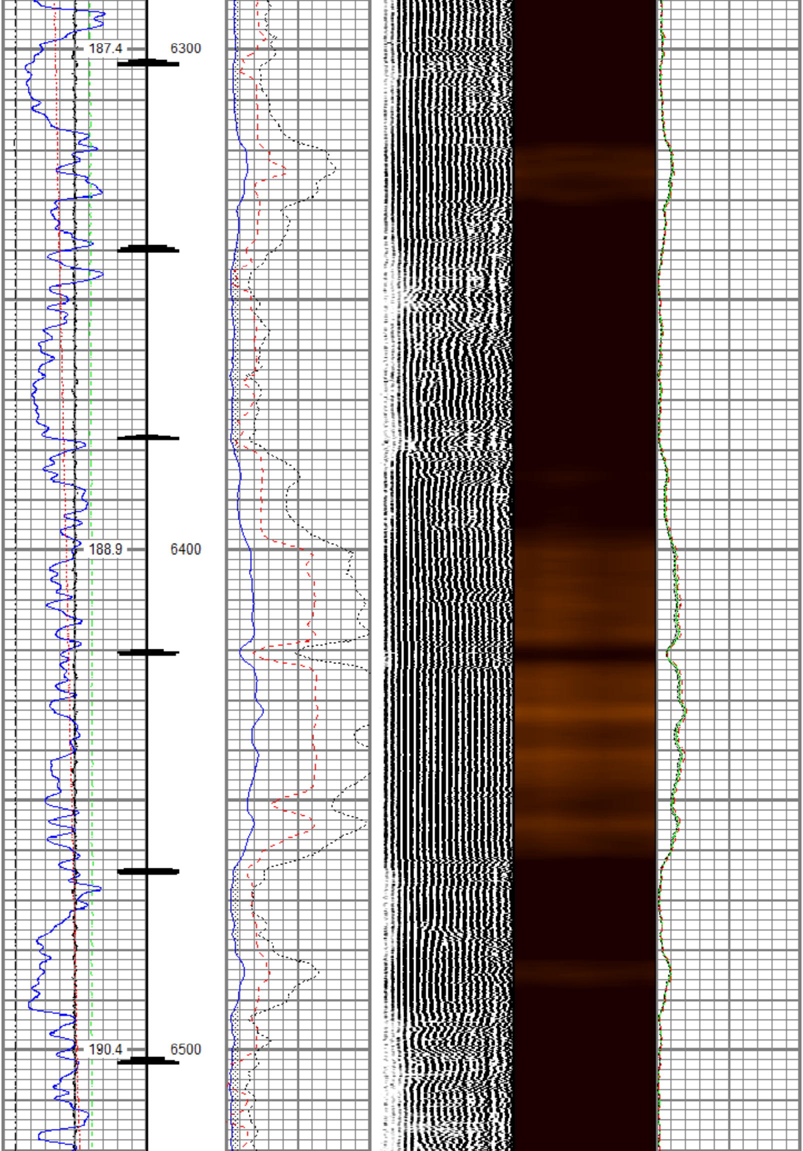
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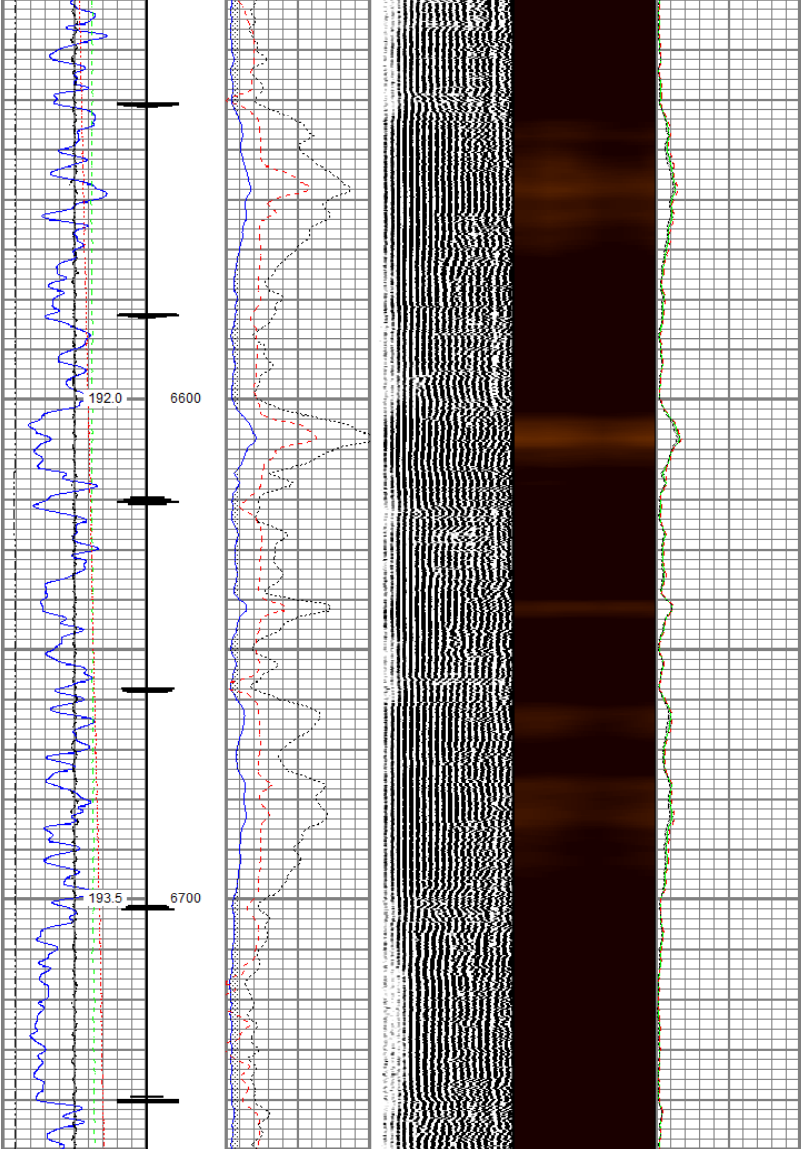
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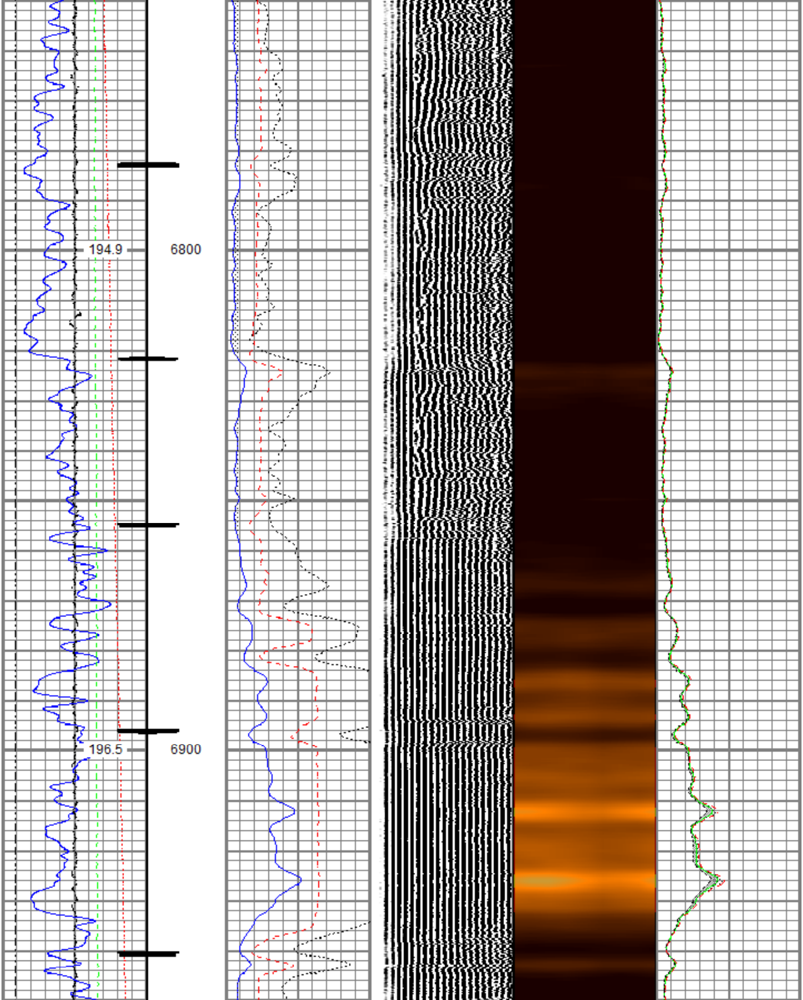
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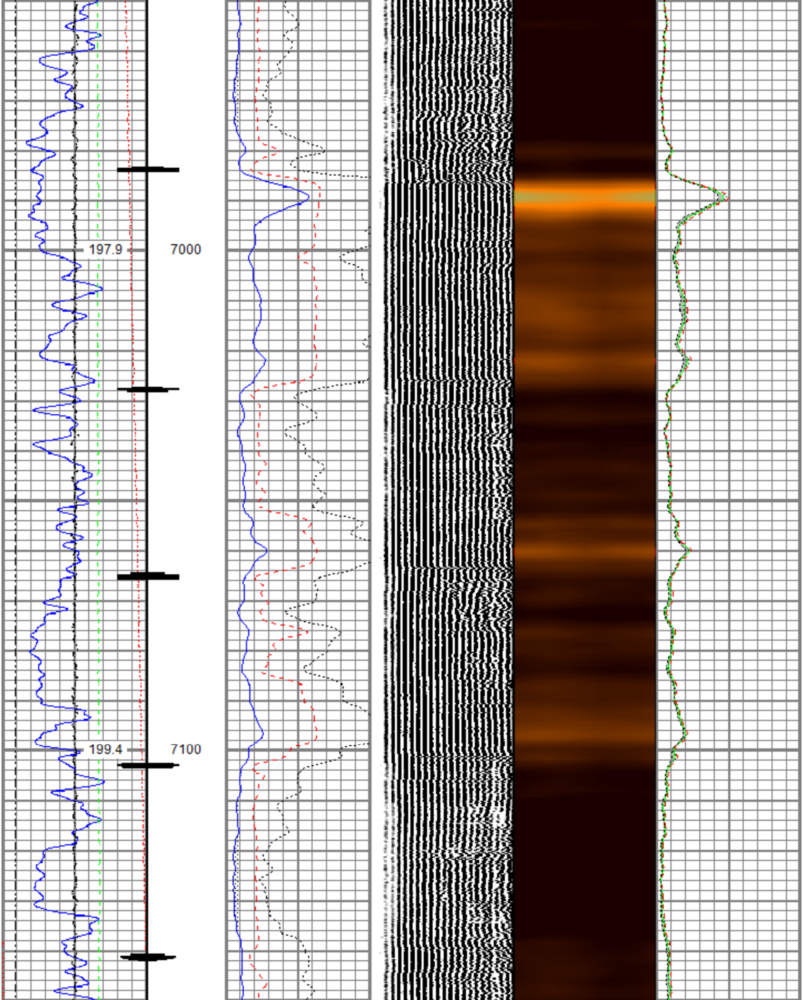
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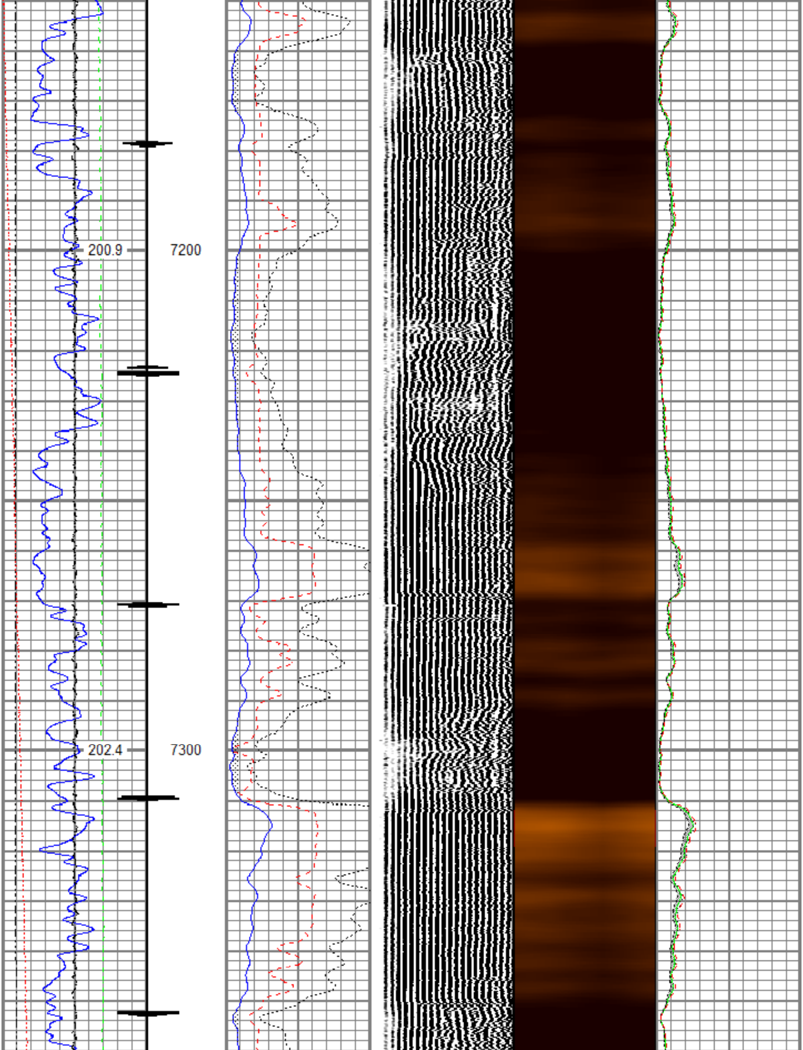
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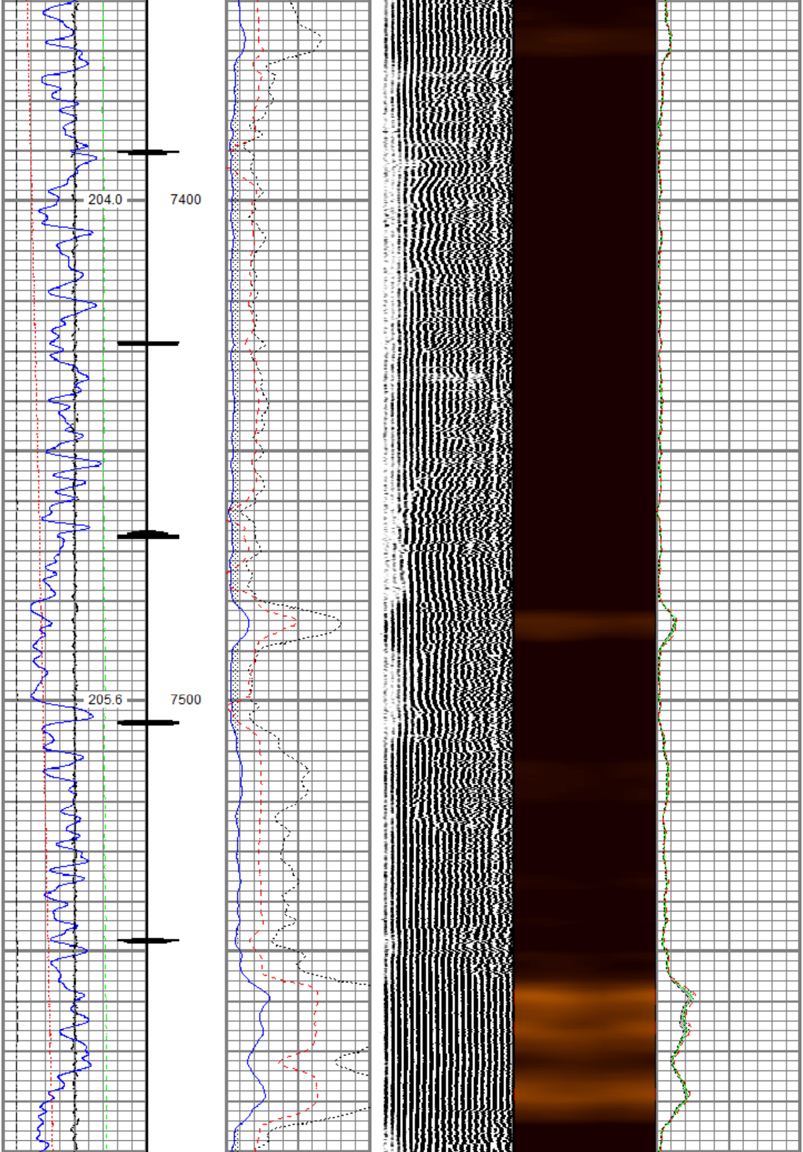
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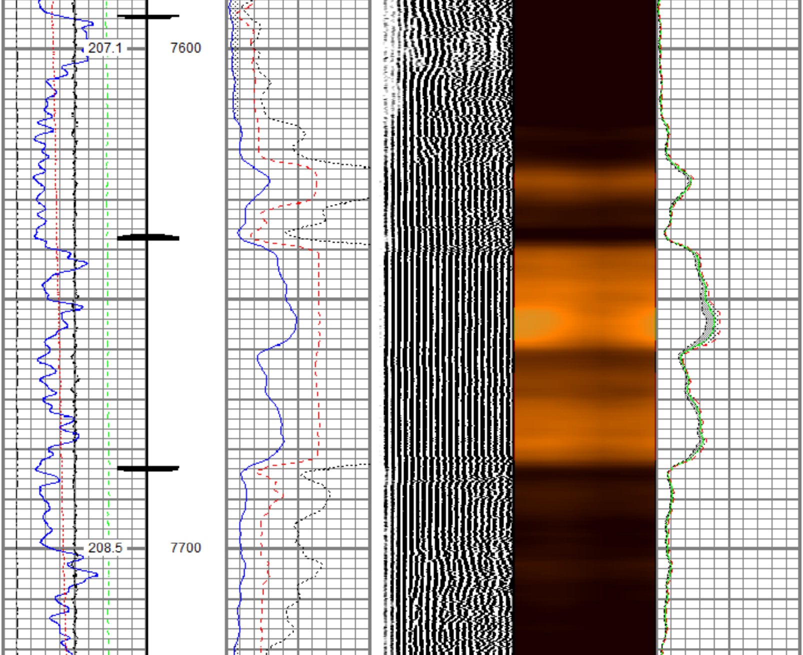
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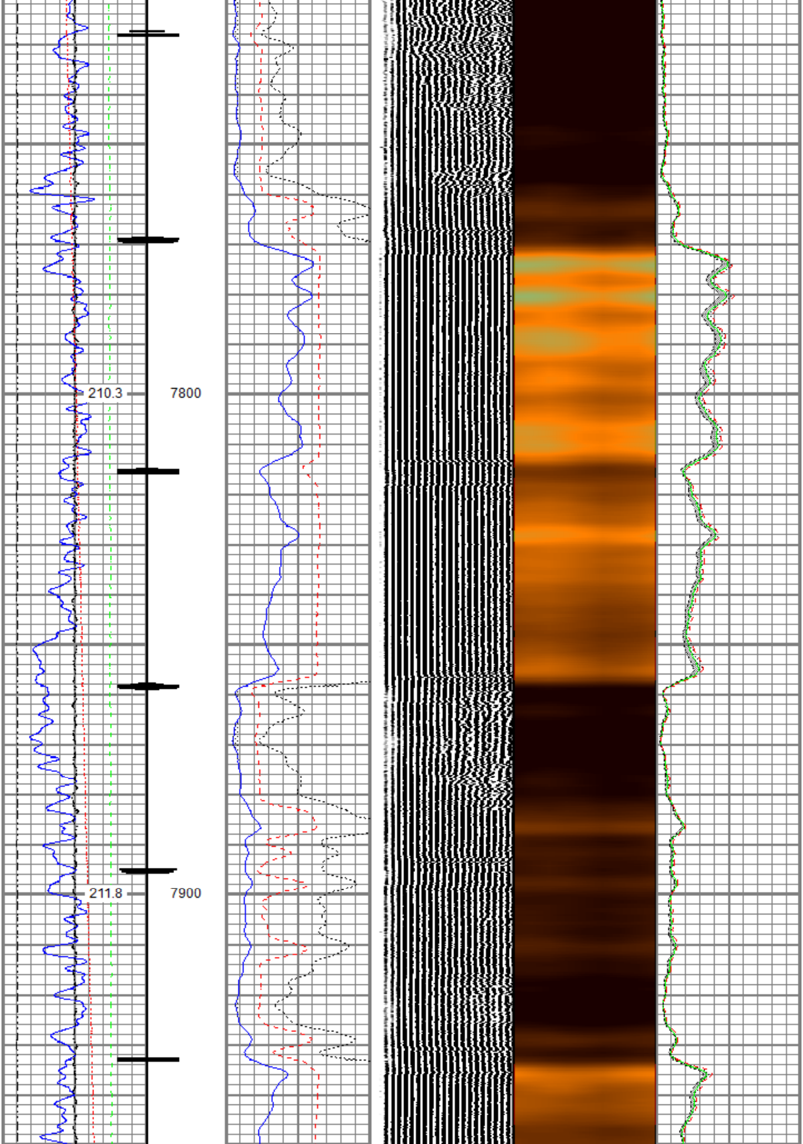
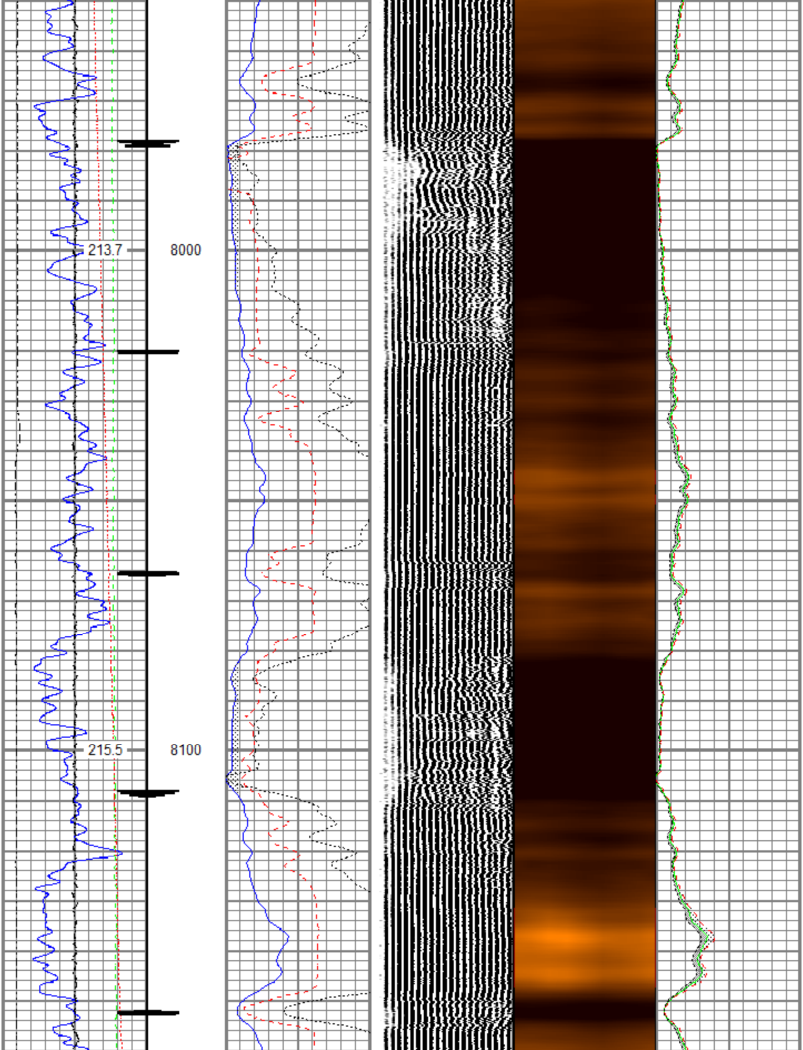
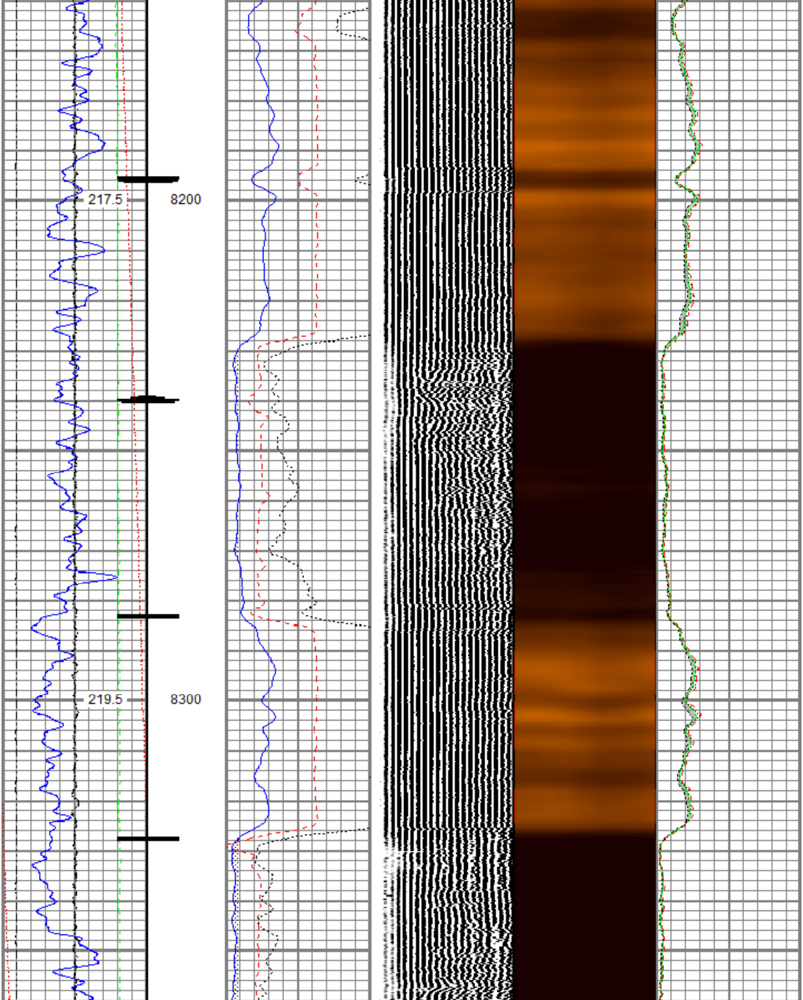
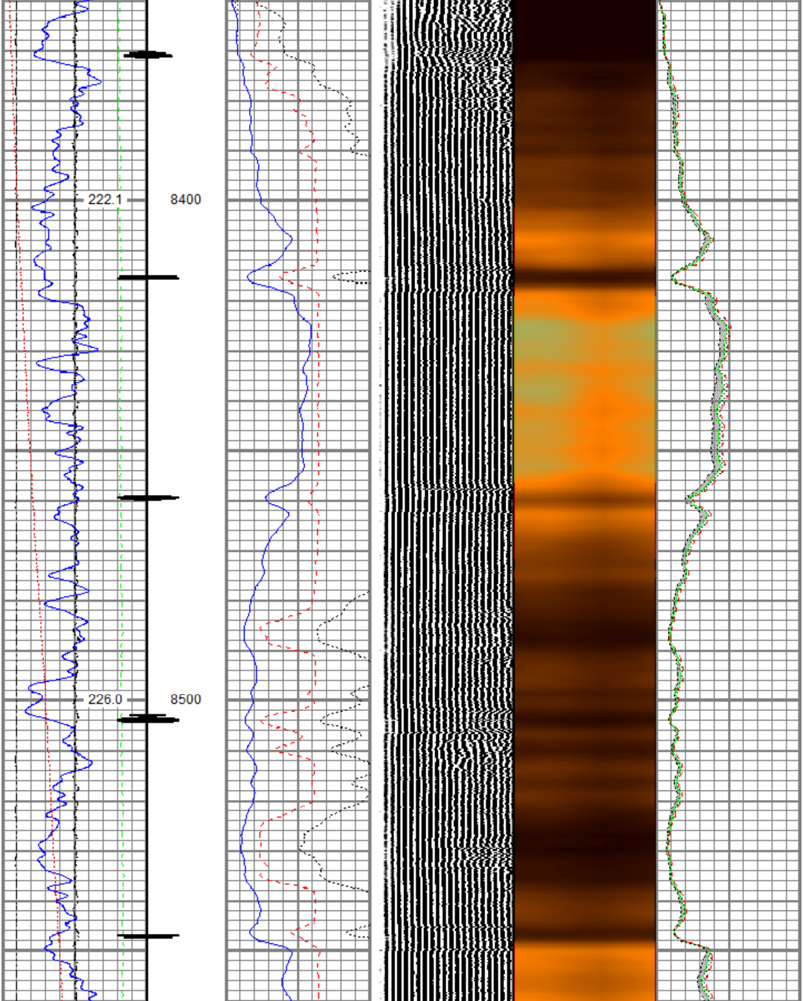
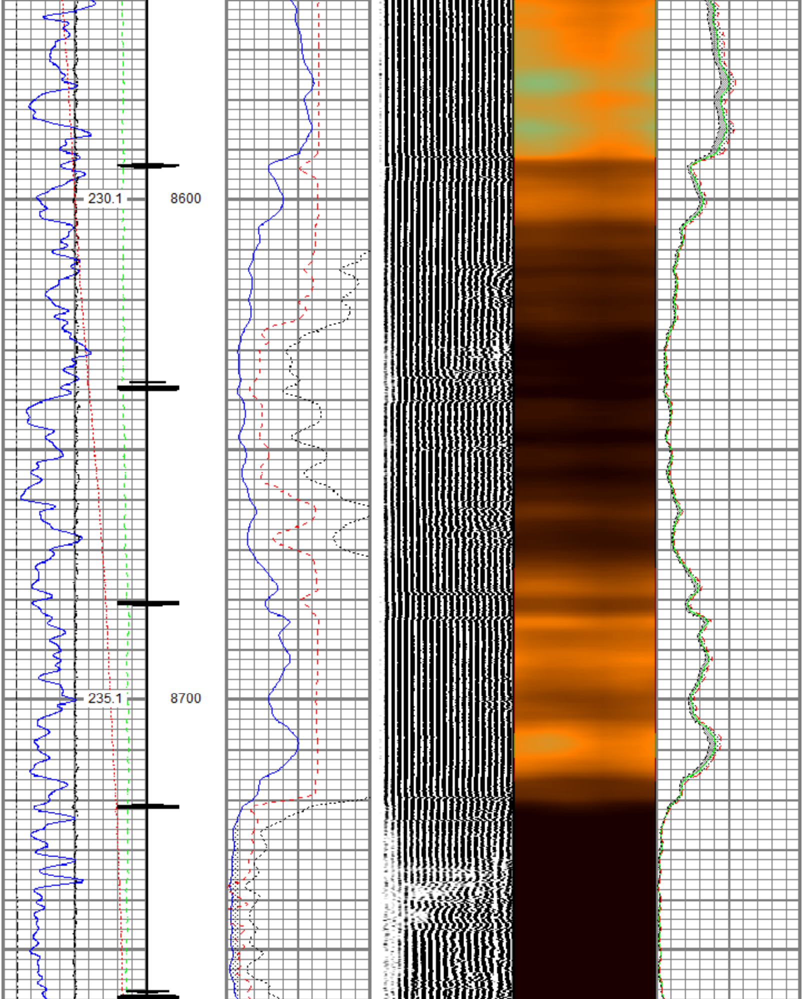
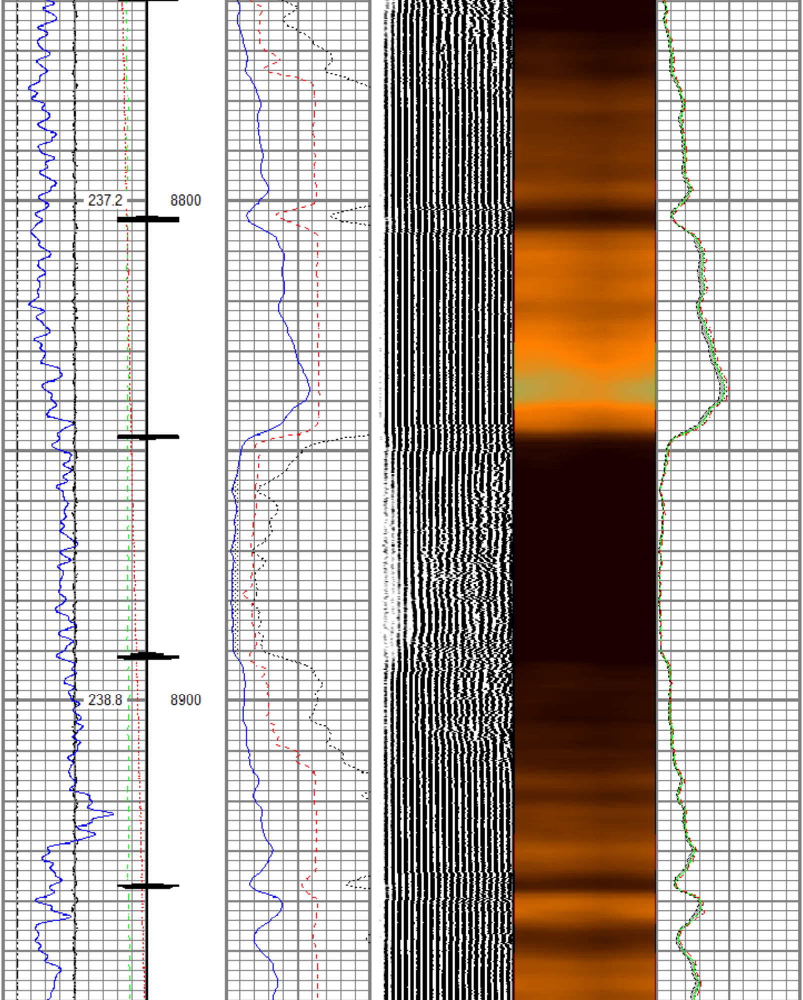


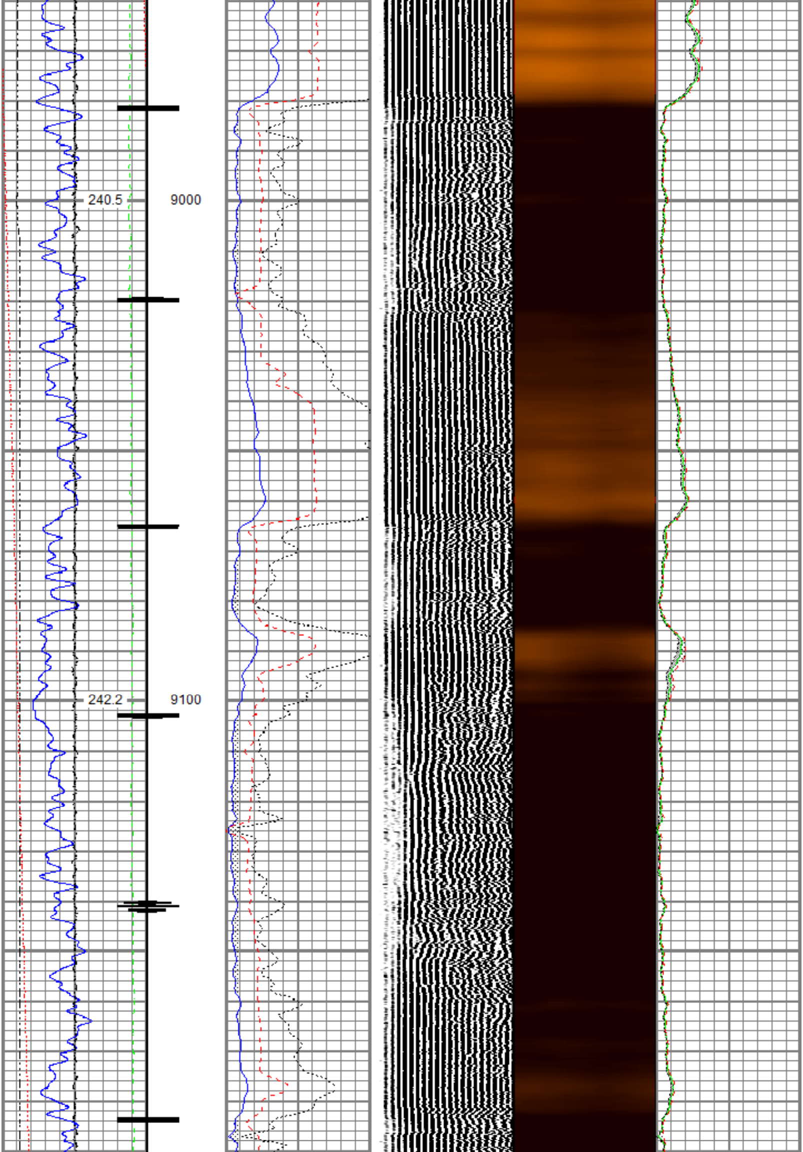


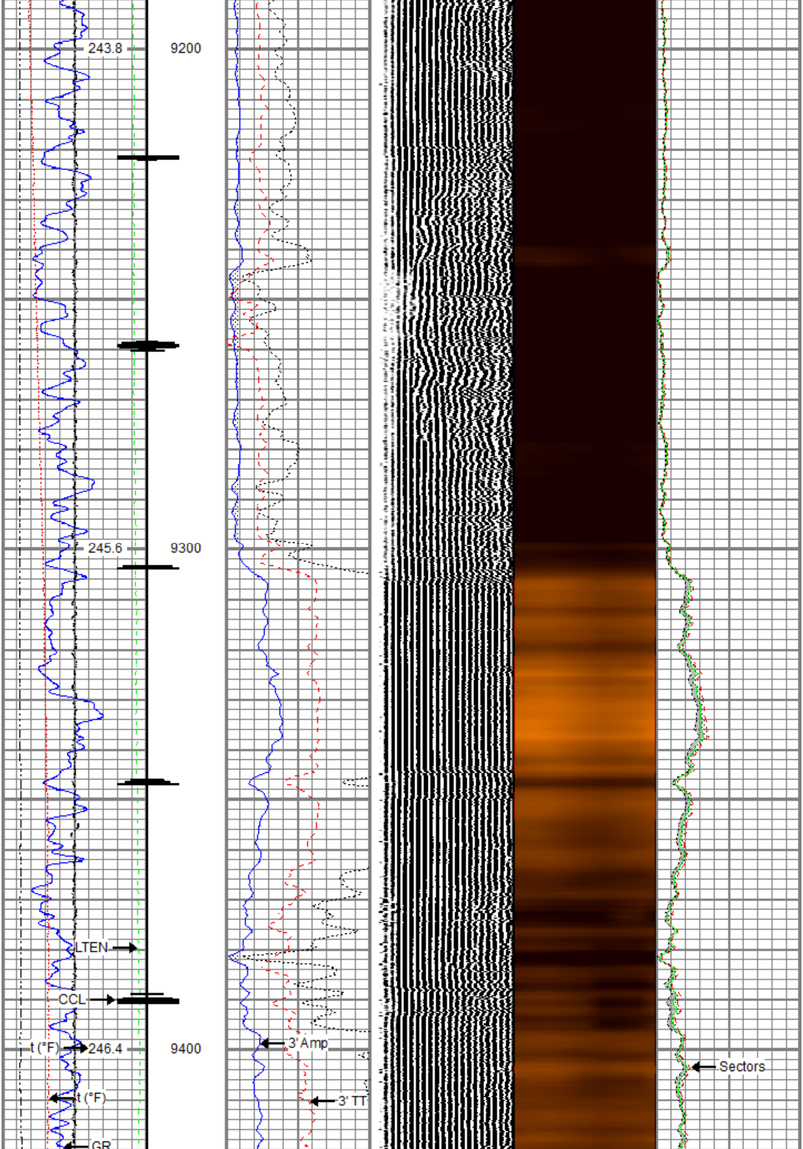


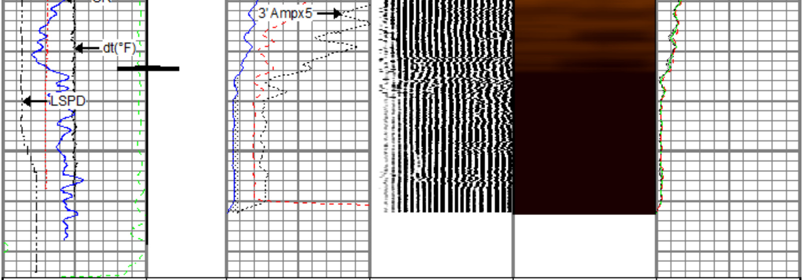












Gamma Ray	3' Amplitude	5' Variable Density Log	Sector Map	Average Amplitude
0 (GAPI) 200	0 (mV) 100	200 1200	10 110	0 150
Line Speed	3' Amplitude x 5			Mimimum Amplitude
-150 (ft/min) 150	0 (mV) 20			0 150
Line Tension	3' Travel Time			Maximum Amplitude
0 (lb) 2000	300 (usec) 200			0 150
Differential Temperature				
-2 (degF) 2				
Temperature				
0 (degF) 20				
10 CCL 0				

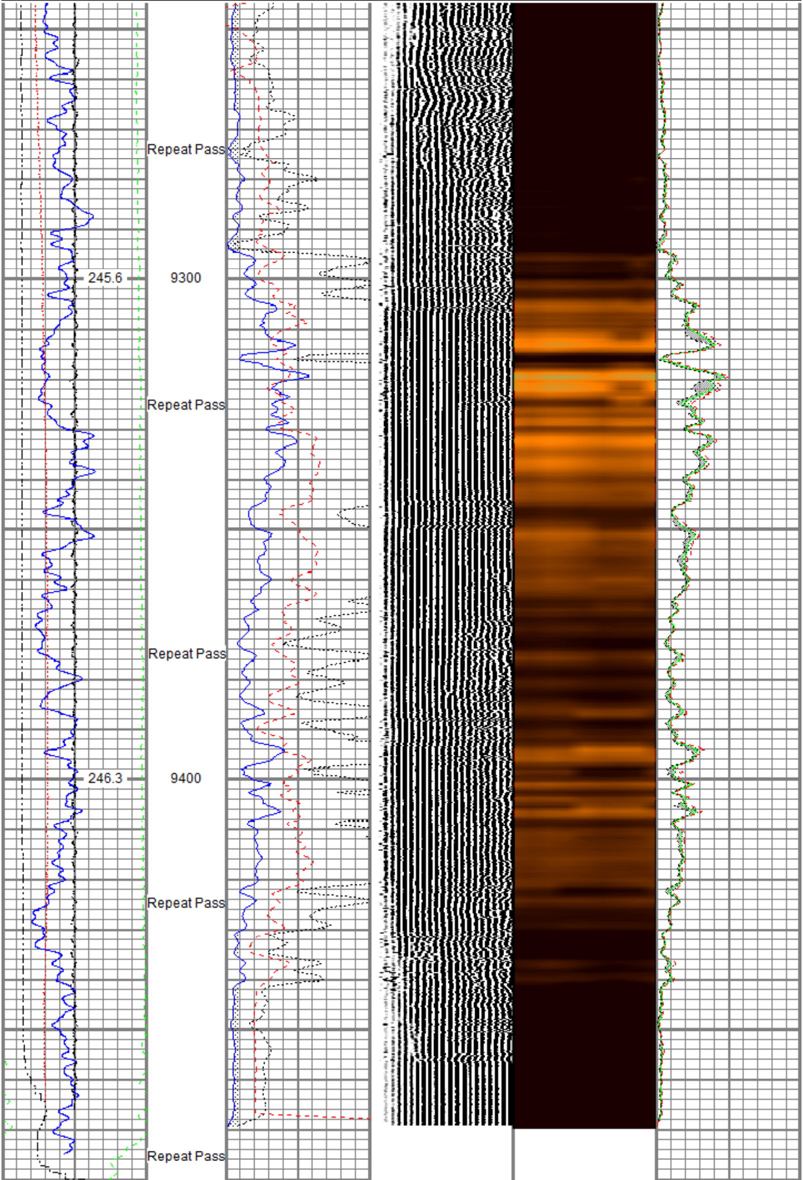
RELIANCE
OILFIELD SERVICES

Repeat Pass

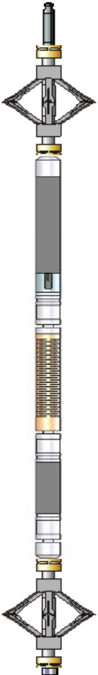
Recorded With 0 PSI Surface Induced Pressure

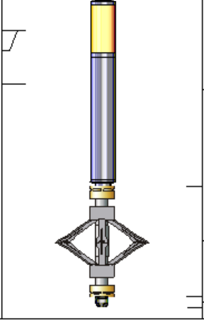
Database File	tep\tep_chevron tr 624-22-597_rbl_03-17-19\tep_chevron tr 624-22-597_rbl_03-17-19.db
Dataset Pathname	repeat.2
Presentation Format	ros_rbt004_tep
Dataset Creation	Tue Mar 19 13:34:51 2019
Charted by	Depth in Feet scaled 1:240

Gamma Ray	3' Amplitude	5' Variable Density Log	Sector Map	Average Amplitude
0 (GAPI) 200	0 (mV) 100	200 1200	10 110	0 150
Line Speed	3' Amplitude x 5			Mimimum Amplitude
-150 (ft/min) 150	0 (mV) 20			0 150
Line Tension	3' Travel Time			Maximum Amplitude
0 (lb) 2000	300 (usec) 200			0 150
Differential Temperature				
-2 (degF) 2				
Temperature				
0 (degF) 20				



Gamma Ray		3' Amplitude	5' Variable Density Log	Sector Map	Average Amplitude
0 (GAPI) 200		0 (mV) 100	200 1200	10 110	0 150
Line Speed		3' Amplitude x 5			Mimimum Amplitude
-150 (ft/min) 150		0 (mV) 20			0 150
Line Tension		3' Travel Time			Maximum Amplitude
0 (lb) 2000		300 (usec) 200			0 150
Differential Temperature					
-2 (degF) 2					
Temperature					
0 (degF) 20					

Sensor	Offset (ft)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb
			Titan CHD-14375 GO Titan 1-7/16" Assembled Electric Cable Head w/ 1" Fishing Neck	1.03	1.44	3.60
			DSS RAC-2750 5A GO DSS 2-3/4" Roller 5 Arm Centralizer w/ GO Ends	2.55	2.75	32.00
TEMP	16.33					
			Probe Radii-2750 RBT (FW1307-063) Probe 2-3/4" Radial Cement Bond Tool with Integral Temperature Sub	9.39	2.75	105.00
WVFS8	14.10					
WVFS7	14.10					
WVFS6	14.10					
WVFS5	14.10					
WVFS4	14.10					
WVFS3	14.10					
WVFS2	14.10					
WVFS1	14.10					
WVFCAL	14.10					
WVF3FT	14.10					
WVF5FT	13.10					
			DSS RAC-2750 5A GO DSS 2-3/4" Roller 5 Arm Centralizer w/ GO Ends	2.55	2.75	32.00



CCL$2	6.42				
CCL$1	6.42				
GR	5.18	Probe GR-CCL-2750 GOB (FW1307-038) Probe 2-3/4" rev.2 Digital Scintillation Gamma Ray/CCL Combined	4.51	2.75	55.00
		DSS RAC-2750 5A GO DSS 2-3/4" Roller 5 Arm Centralizer w/ GO Ends	2.55	2.75	32.00
		GO BN-14375 GO 1 7/16" Bull Nose with Go Box Top	0.25	1.44	1.00

Dataset: tep_chevron tr 624-22-597_rbl_03-17-19.db: field/well/run1/main.1
Total length: 22.82 ft
Total weight: 260.60 lb
O.D.: 2.75 in

Calibration Report

Database File c:\programdata\warrior\data\tep\tep_chevron tr 624-22-597_rbl_03-17-19\tep_chevron tr 624-22-597_rbl_03-
Dataset Pathname main.1
Dataset Creation Tue Mar 19 13:31:48 2019

Gamma Ray Calibration Report

Serial Number:	FW1307-038	
Tool Model:	2750 GOB	
Performed:	Sun Nov 12 12:44:12 2017	
Calibrator Value:	637.0	GAPI
Background Reading:	113.2	cps
Calibrator Reading:	1022.4	cps
Sensitivity:	0.7007	GAPI/cps

Segmented Cement Bond Log Calibration Report

Serial Number:	FW1307-063	
Tool Model:	2750 RBT	
Calibration Casing Diameter:	4.500	in
Calibration Depth:	30.895	ft

Master Calibration, performed (Derived):

	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3'	-0.004	0.708	0.800	81.196	112.924	1.237
CAL	-0.006	0.755				
5'	0.009	0.621	0.800	81.196	131.303	-0.370
SUM						
S1	-0.003	0.753	0.000	100.000	132.203	0.411
S2	-0.003	0.705	0.000	100.000	141.232	0.478
S3	-0.004	0.647	0.000	100.000	153.820	0.546
S4	-0.004	0.636	0.000	100.000	156.263	0.555
S5	-0.004	0.675	0.000	100.000	147.252	0.586
S6	-0.003	0.712	0.000	100.000	139.785	0.460
S7	-0.003	0.730	0.000	100.000	136.403	0.366
S8	-0.004	0.761	0.000	100.000	130.803	0.480

Internal Reference Calibration, performed (Not Performed):

	Raw (v)		Calibrated (v)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
CAL	0.000	0.000	-0.006	0.755	1.000	0.000

Air Zero Calibration, performed Sun Mar 17 09:57:06 2019:

	Raw (v)	Calibrated (v)	Results
	Zero	Zero	Offset
3'	-0.002	0.000	-0.000
5'	0.009	0.000	0.001
SUM			
S1	-0.002	0.000	-0.000
S2	-0.002	0.000	-0.000
S3	-0.003	0.000	-0.000
S4	-0.002	0.000	-0.000
S5	-0.002	0.000	-0.000
S6	-0.002	0.000	-0.001
S7	-0.002	0.000	-0.001
S8	-0.002	0.000	-0.000

Temperature Calibration Report

Serial Number:	FW1307-063
Tool Model:	2750 RBT
Performed:	Sun Nov 12 13:45:43 2017

	Reference	Reading
Low Reference:	100.00 degF	113.84 degF
High Reference:	350.00 degF	420.89 degF

Gain:	0.81
Offset:	7.31
Delta Spacing	1

RELIANCE
OILFIELD SERVICES

Company	TEP Rocky Mountain LLC
Well	Chevron TR 624-22-597
Field	Trail Ridge
County	Garfield
State	Colorado