Radial Cement Bond
Gamma Ray
Casing Collar Log

RELIANCE OILFIELD SERVICES

Company	TEP Rocky Mountain LLC
Well	Chevron GM 543-19
Field	Grand Valley
County	Garfield
State	Colorado

Company TEP Rocky Mountain LLC
Well Chevron GM 543-19
Field Grand Valley
County Garfield State Colorado
Location: API # : 05-045-24356
SEC 20 TWP 6S RGE 96W
Other Services: ---

			Elevation
Permanent Datum	Ground Level	Elevation 5752.1'	K.B. 5776.1'
Log Measured From	Kelly Bushing	24 FT	D.F. ---
Drilling Measured From	Kelly Bushing		G.L. 5752.1'

Date	03-FEB-2021
Run Number	One
Depth Driller	7787 FT
Depth Logger	7735 FT
Bottom Logged Interval	7723 FT
Top Log Interval	Surface
Open Hole Size	8.750"
Type Fluid	Water
Density / Viscosity	8.34 lb/gal
Max. Recorded Temp.	222°F
Estimated Cement Top	See Log
Time Well Ready	ROA
Time Logger on Bottom	7:45
Equipment Number	HD-0331
Location	Grand Junction, CO
Recorded By	Z. Fisher
Witnessed By	---

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	1040 FT
Intermediate #1	4 1/2	11.6	P-110	Surface	7745 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 4548 - 4569 FT
Recorded with 0 PSI Surface Induced Pressure

Thank you for choosing Reliance Oilfield Services, LLC!

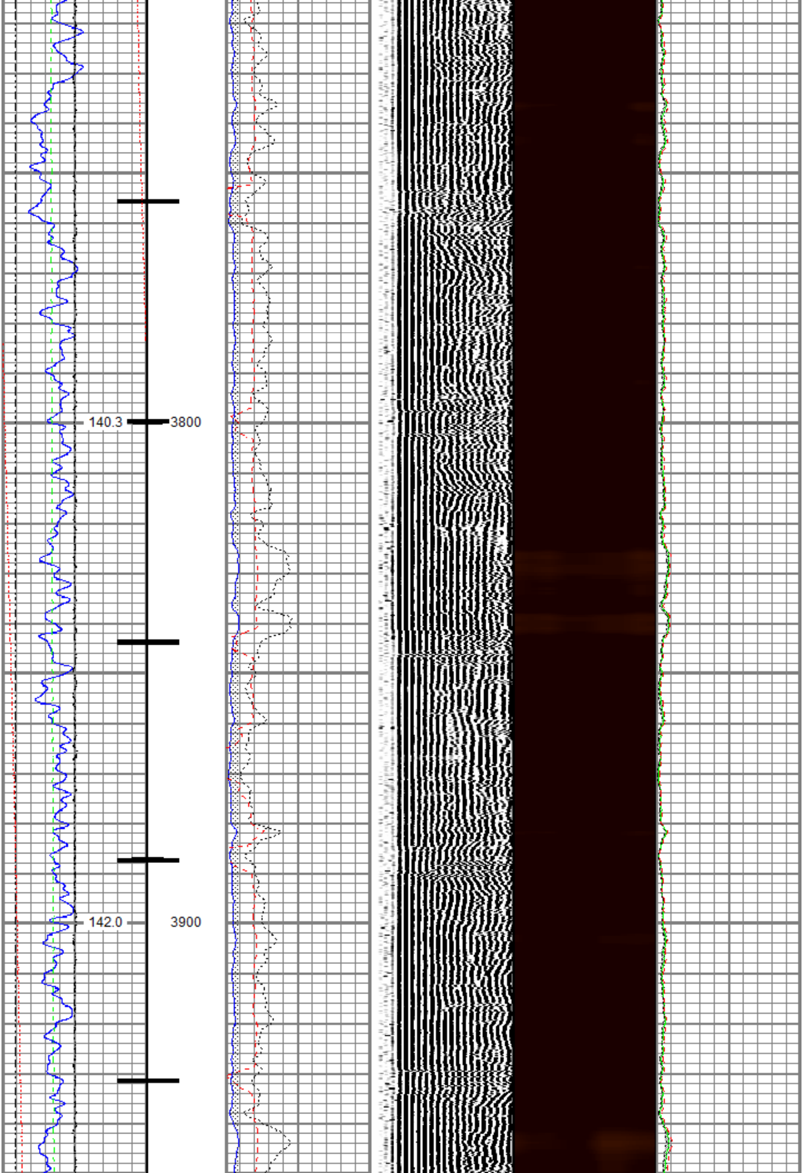
RELIANCE OILFIELD SERVICES

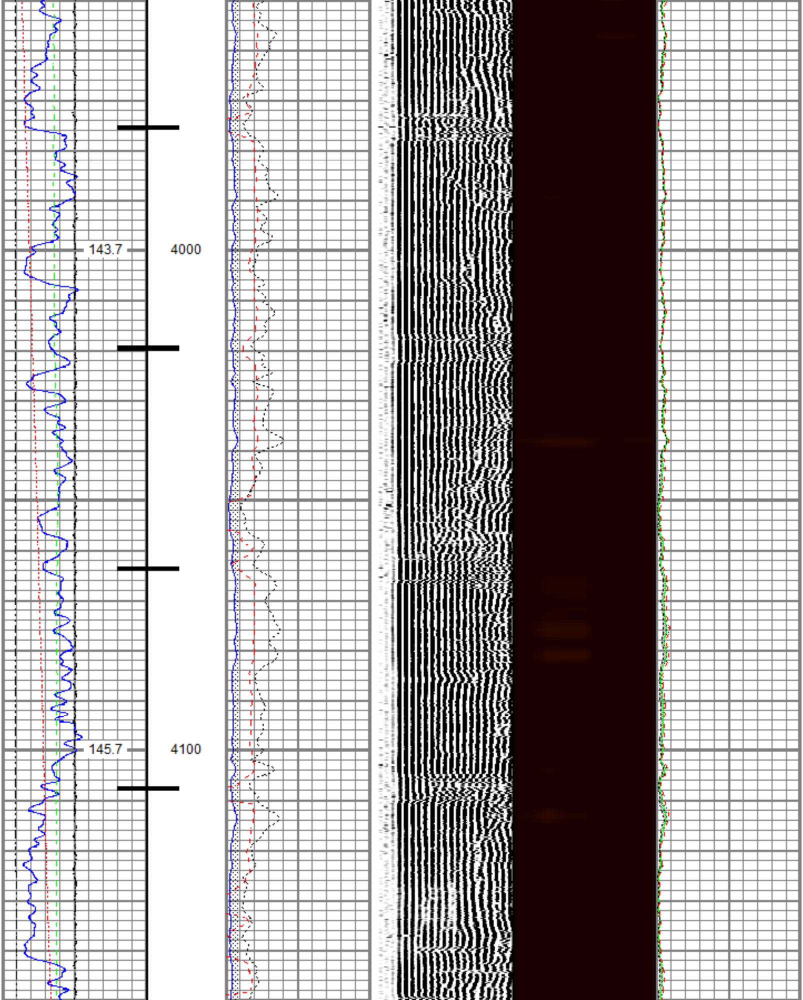
Main Pass

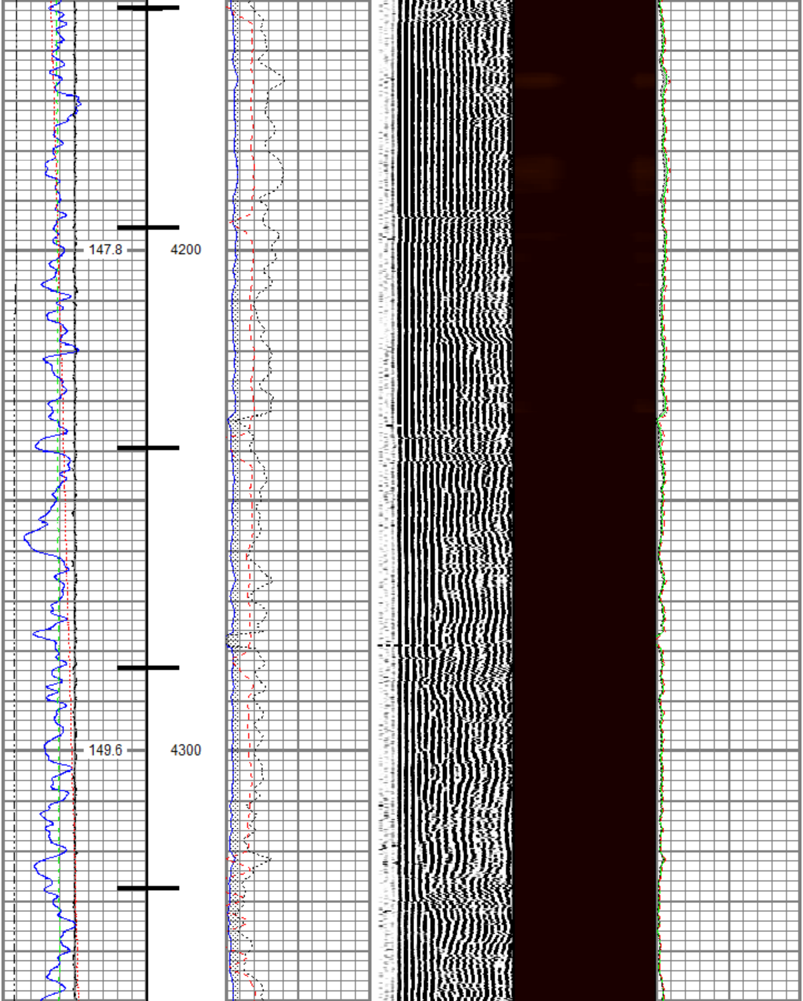
Recorded With 0 PSI Surface Induced Pressure

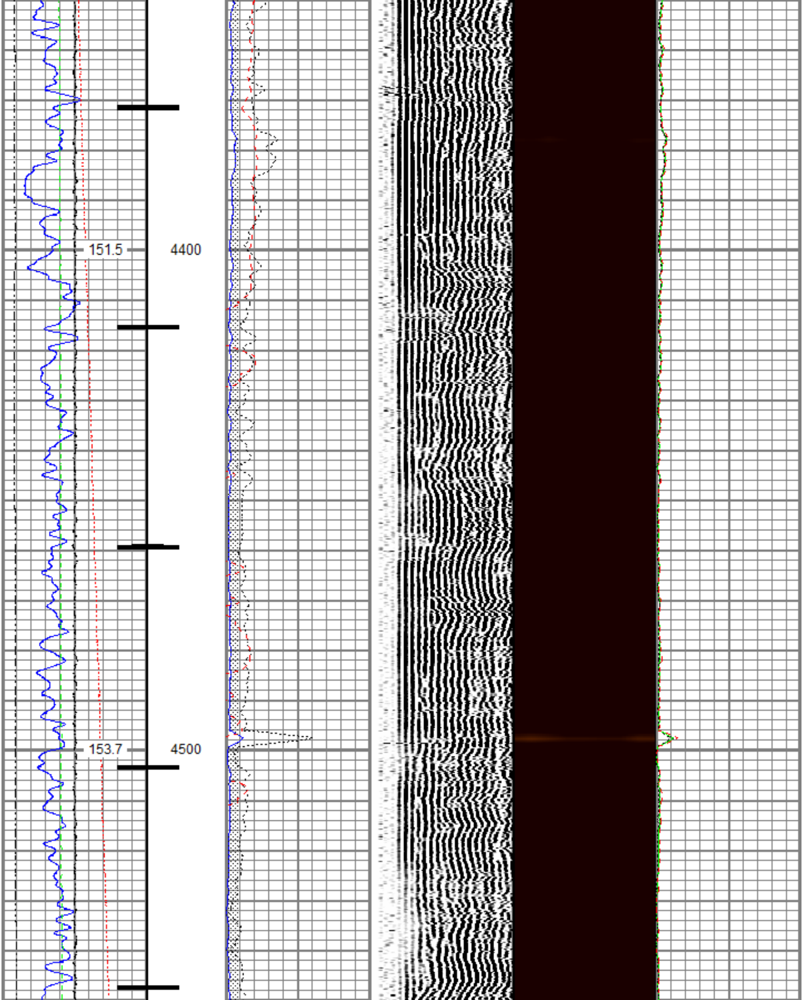
Database File	tep\tep_chevron gm 543-19_rbl_02-03-21\tep_chevron gm 543-19_rbl_02-03-21.db
Dataset Pathname	main.3
Presentation Format	ros_radii_tep
Dataset Creation	Fri Feb 05 15:37:46 2021
Charted by	Depth in Feet scaled 1:240

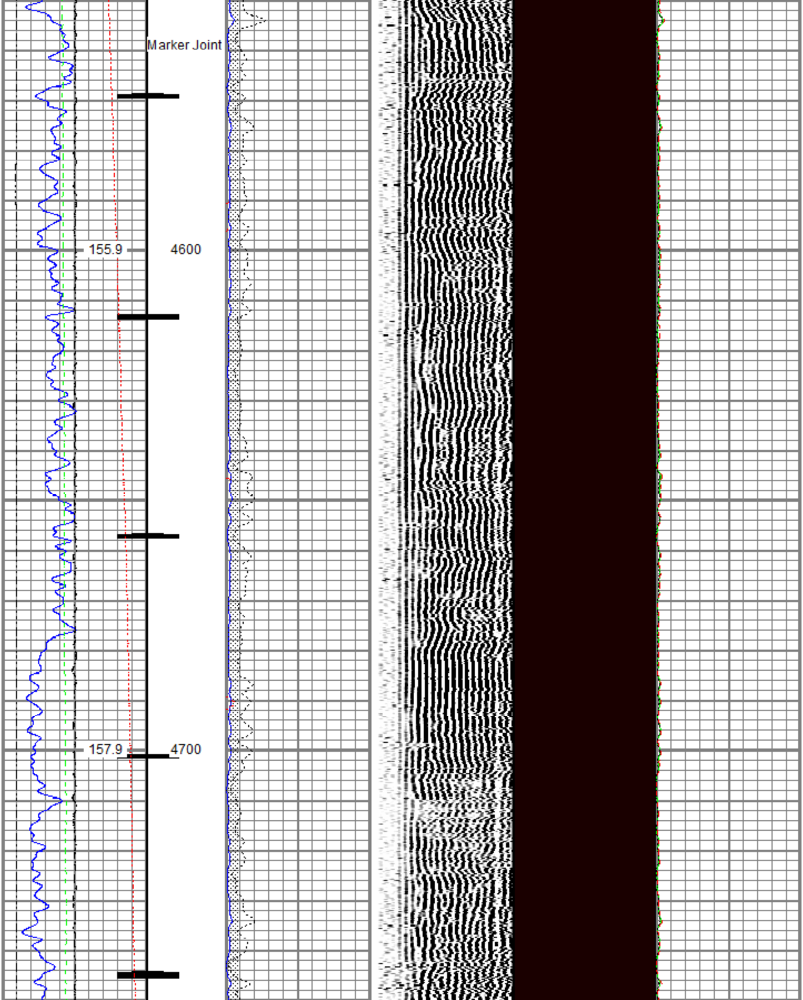
Track 1	Track 3	Track 4	Track 5	Track 6
Gamma Ray 0 (GAPI) 200	3' Amplitude 0 (mV) 100	5' Variable Density Log 200 (usec) 1200	Sector Map	Average Amplitude 0 150
Casing Collar Locator	3' Amplitude x 5 0 (mV) 20			Mimimum Amplitude 0 150
Line Speed -150 (ft/min) 150	3' Travel Time 300 (usec) 200			Maximum Amplitude 0 150
Line Tension 0 (lb) 2000				
Differential Temperature -2 (degF) 2				
Temperature 0 (degF) 20				

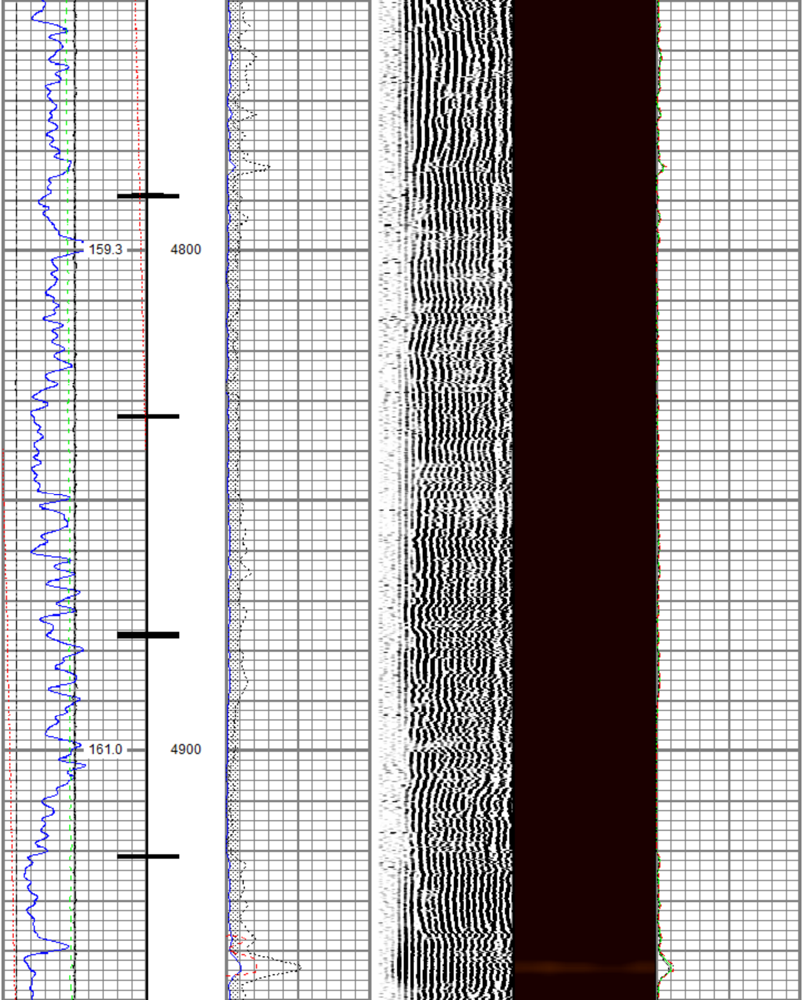

140.3
3800
142.0
3900

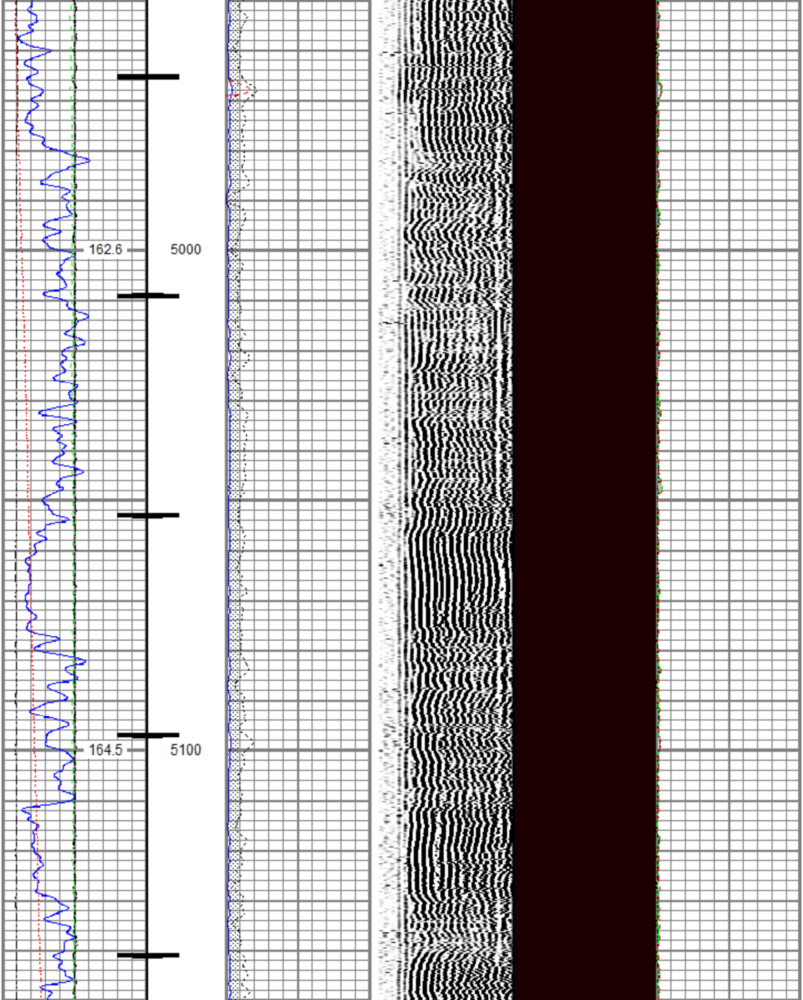

143.7
4000
145.7
4100

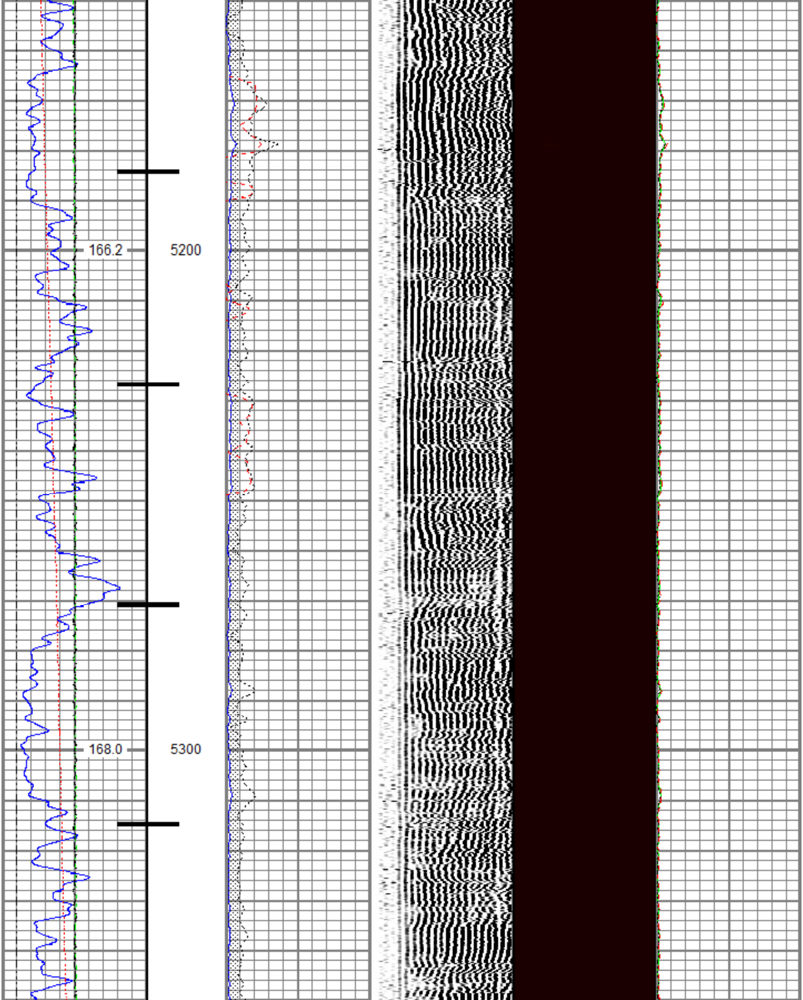

147.8
4200
149.6
4300

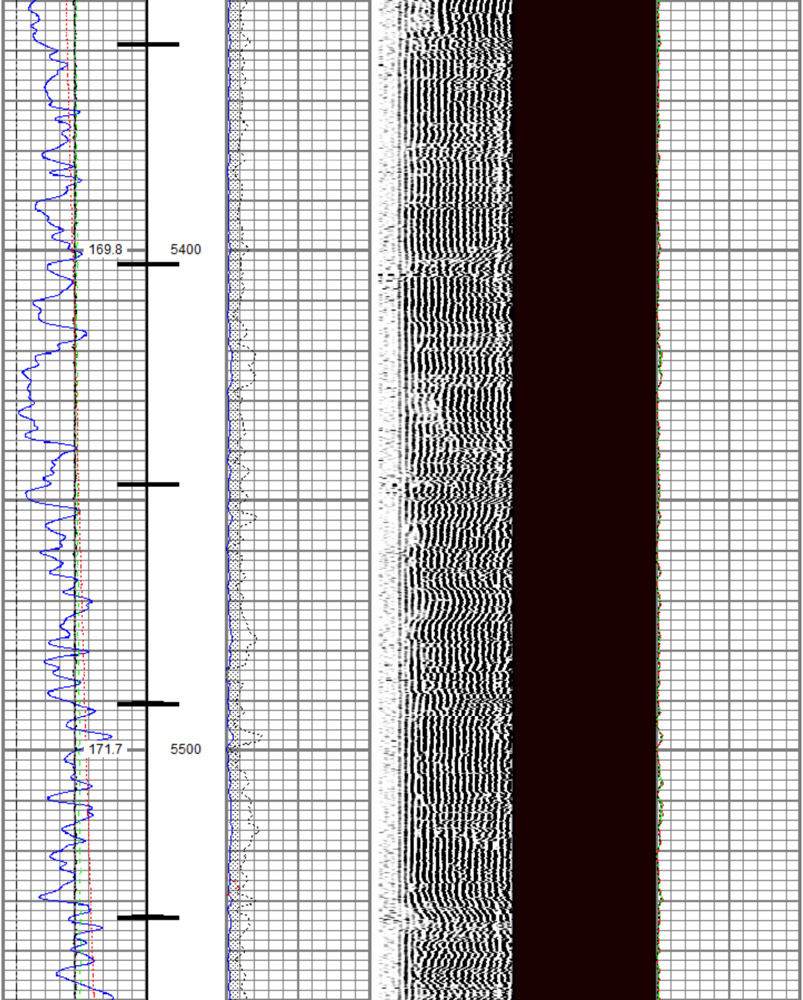

151.5
4400
153.7
4500

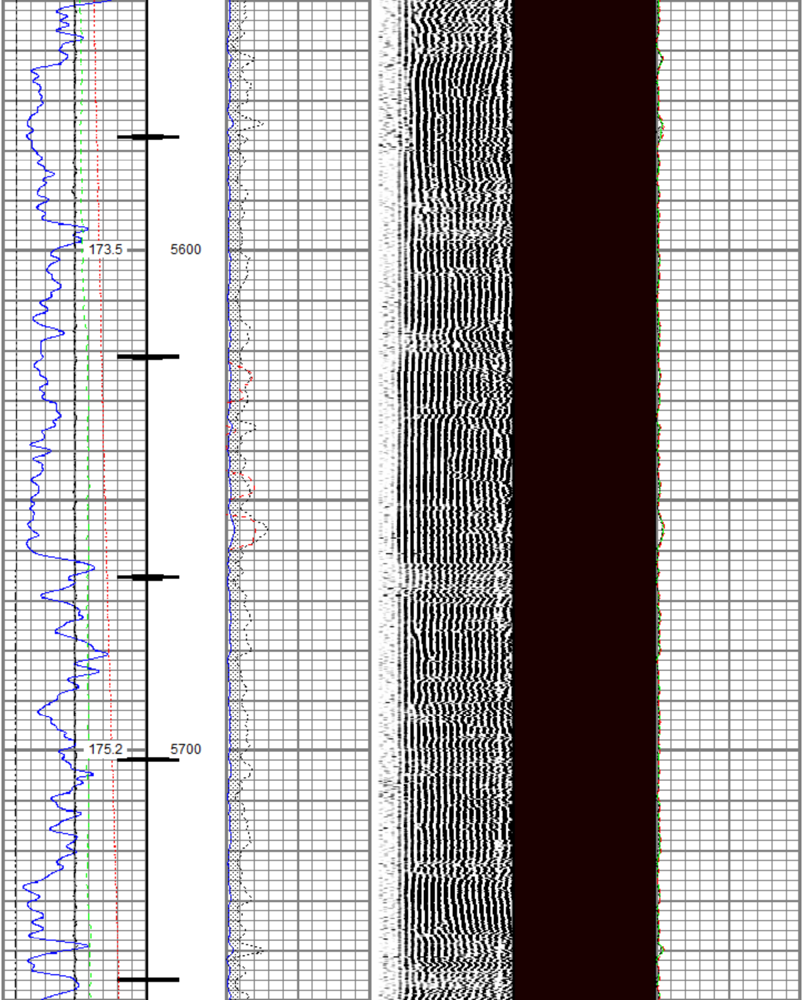

Marker Joint
155.9
4600
157.9
4700

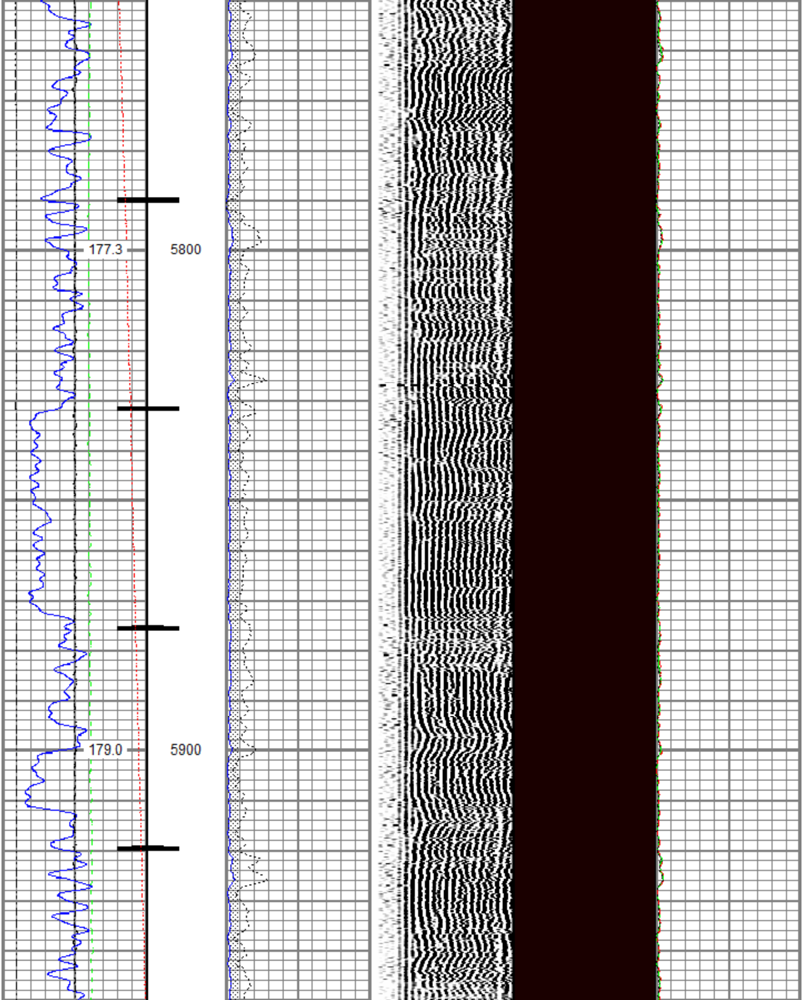

159.3
4800
161.0
4900


162.6
5000
164.5
5100

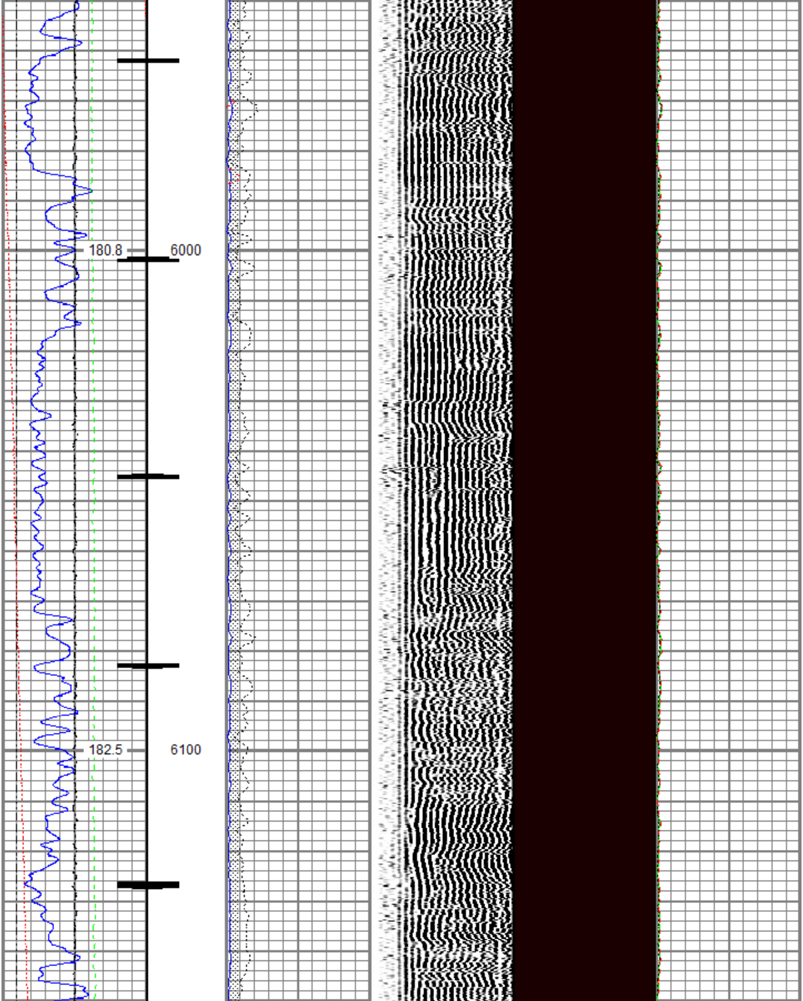

166.2
5200
168.0
5300

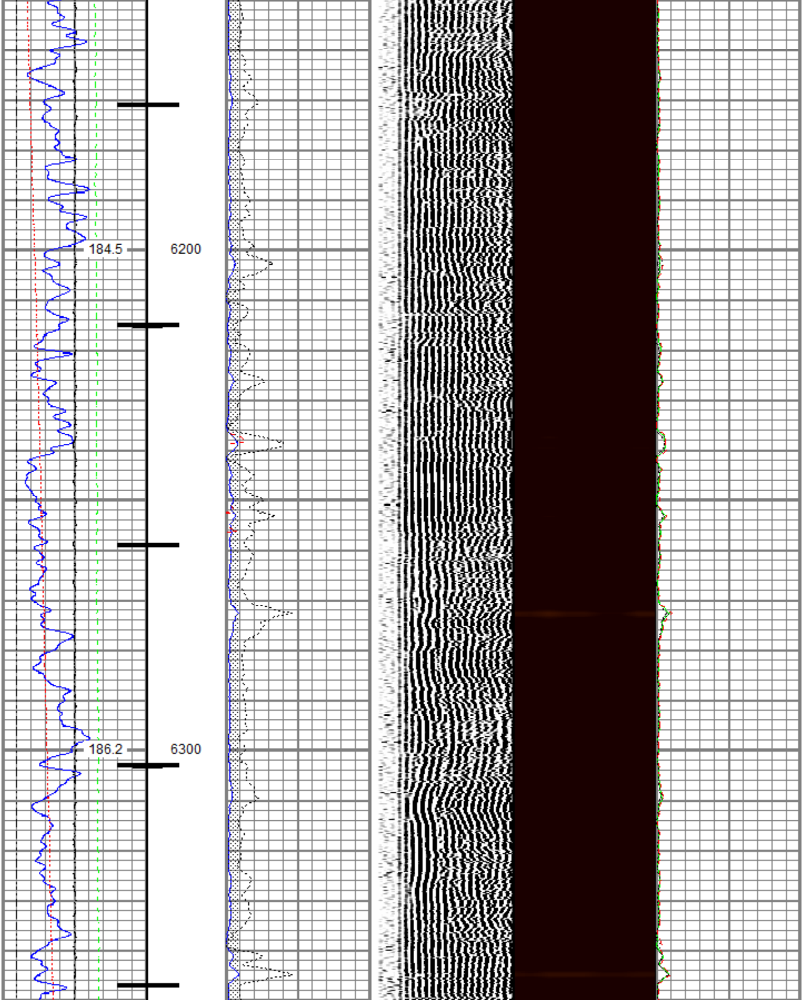

169.8
5400
171.7
5500

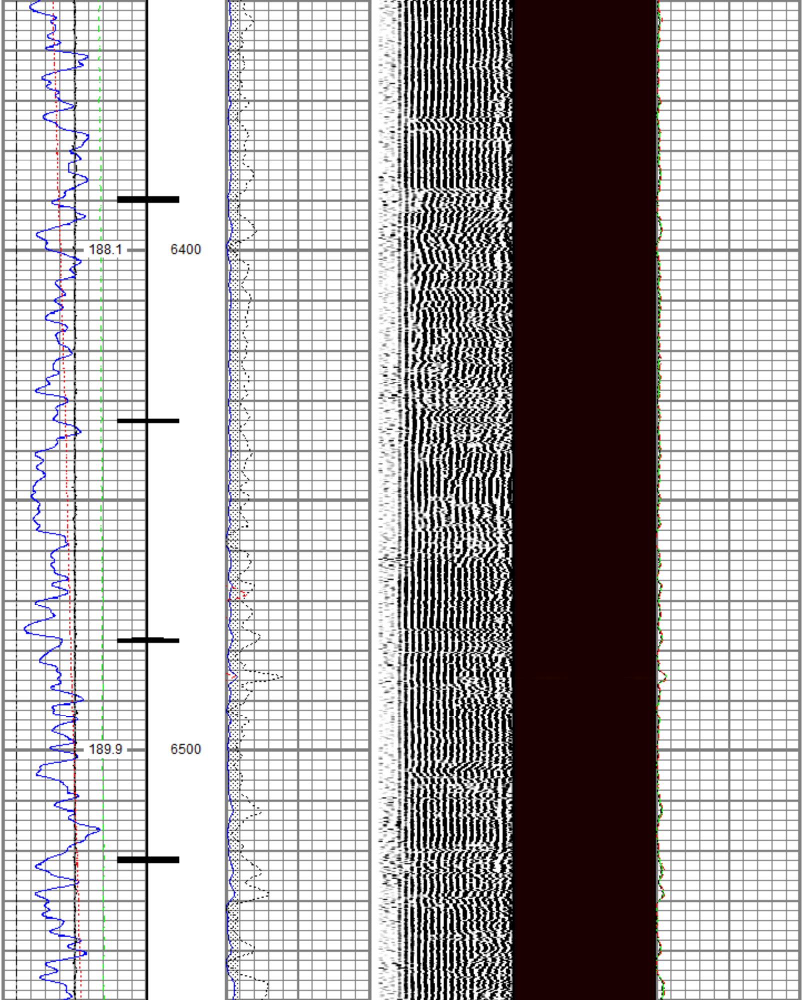

173.5
5600
175.2
5700

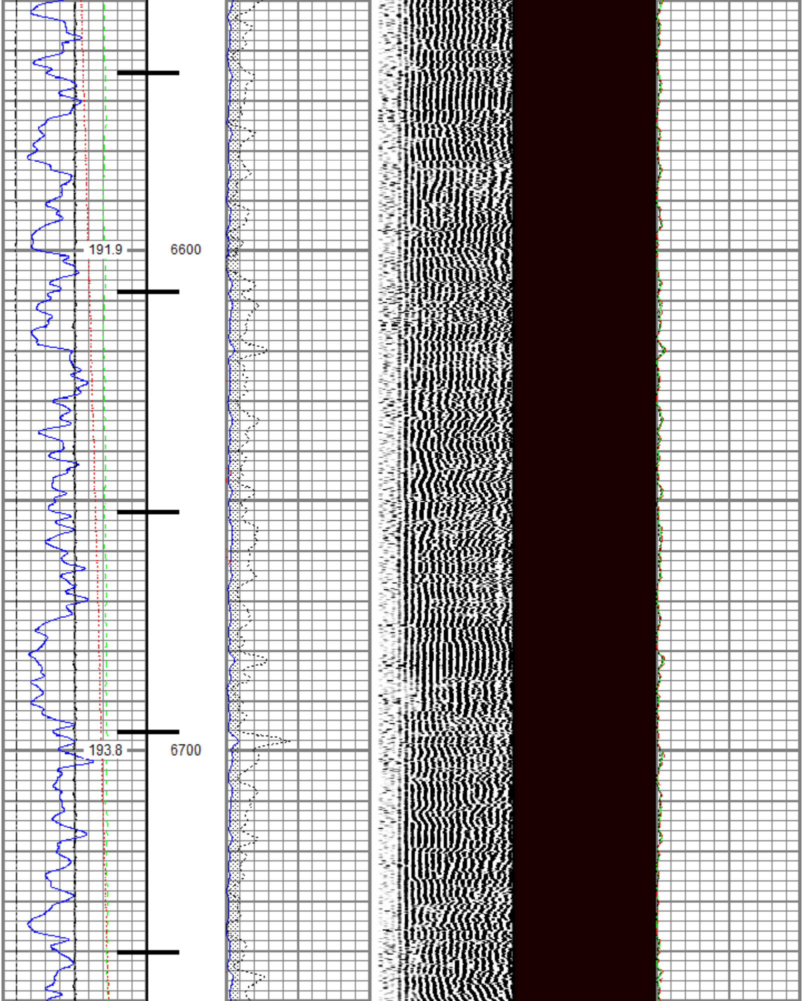


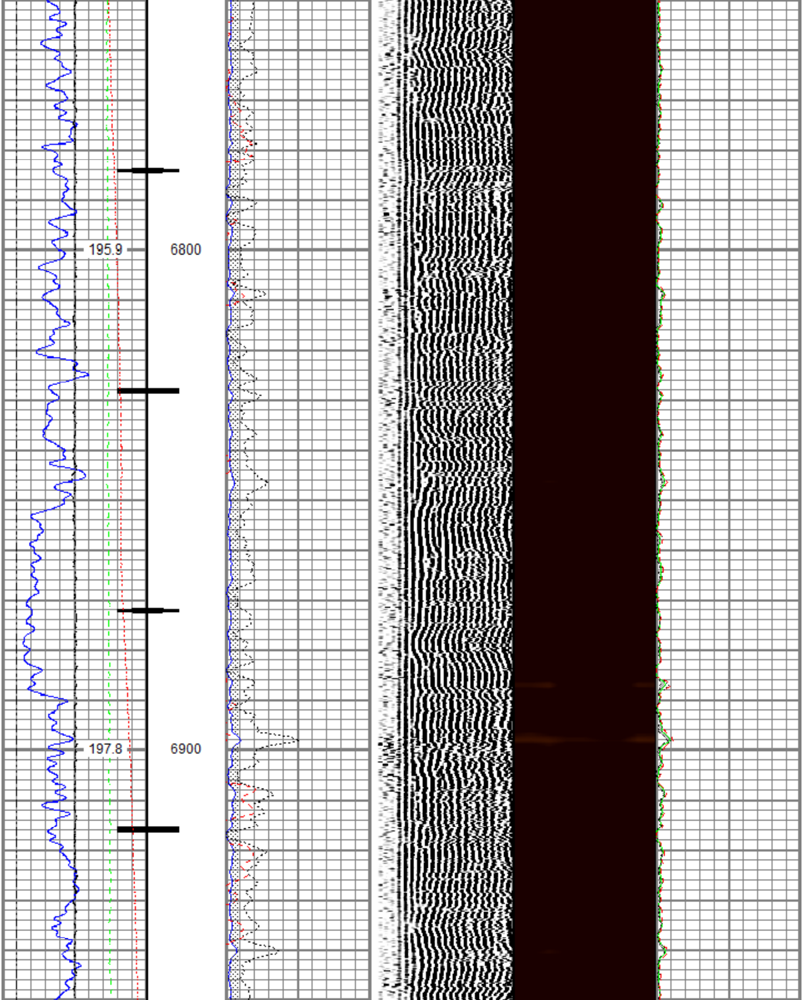
177.3
5800
179.0
5900

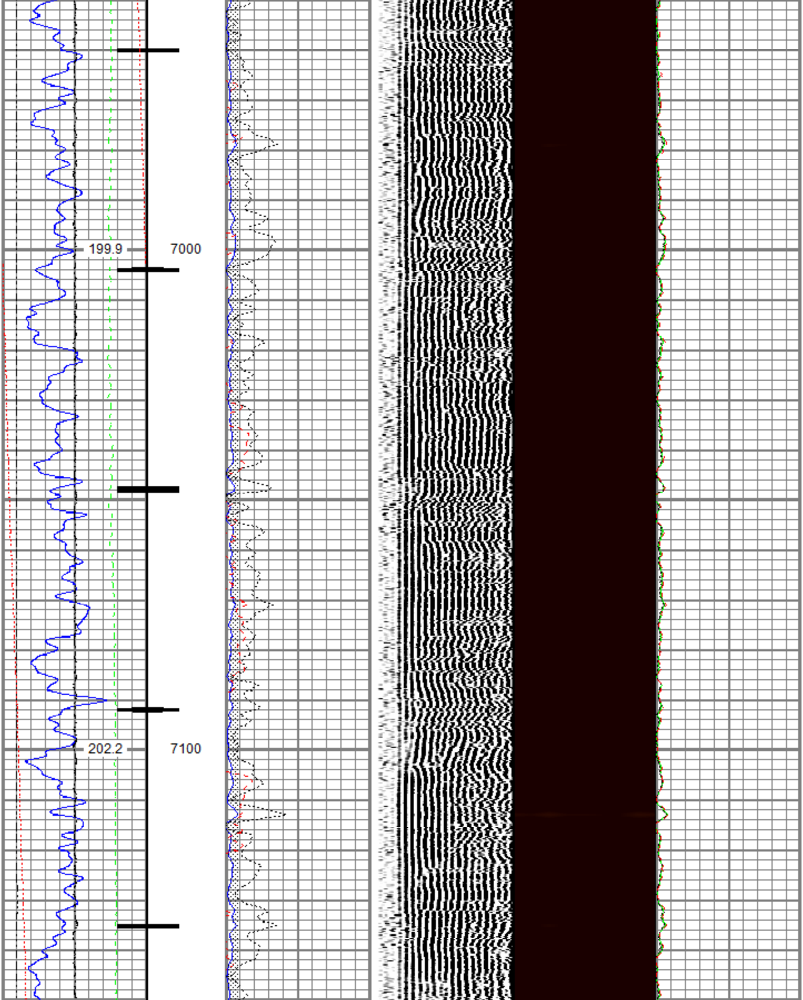

180.8
6000
182.5
6100

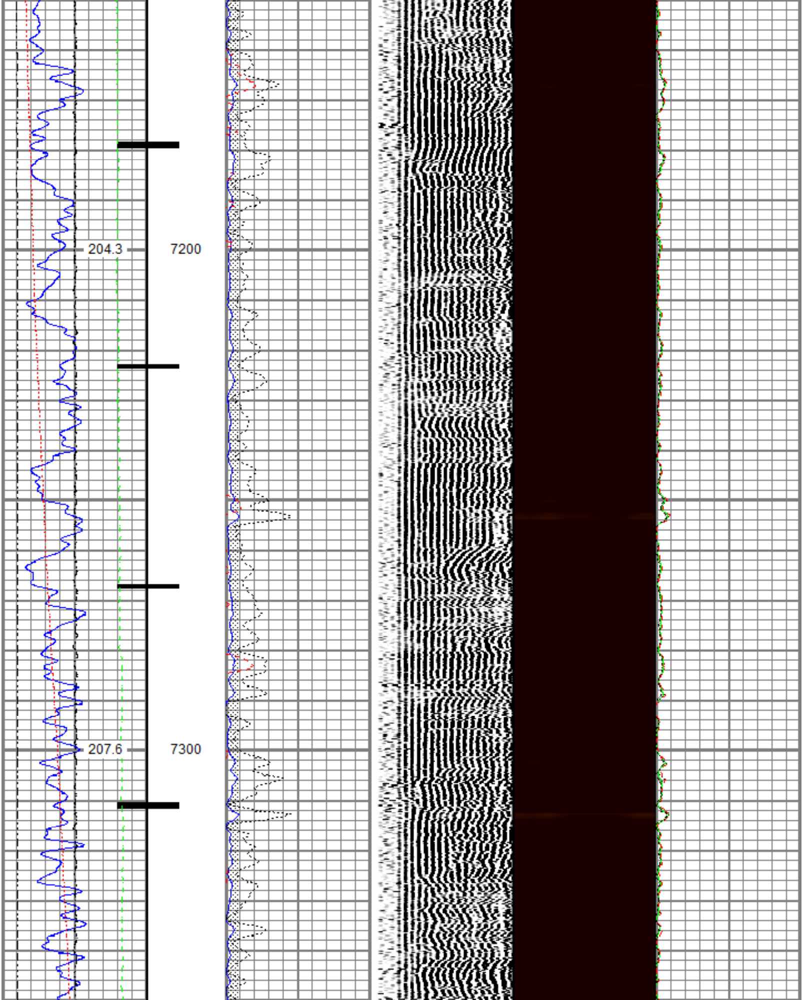

184.5
6200
186.2
6300

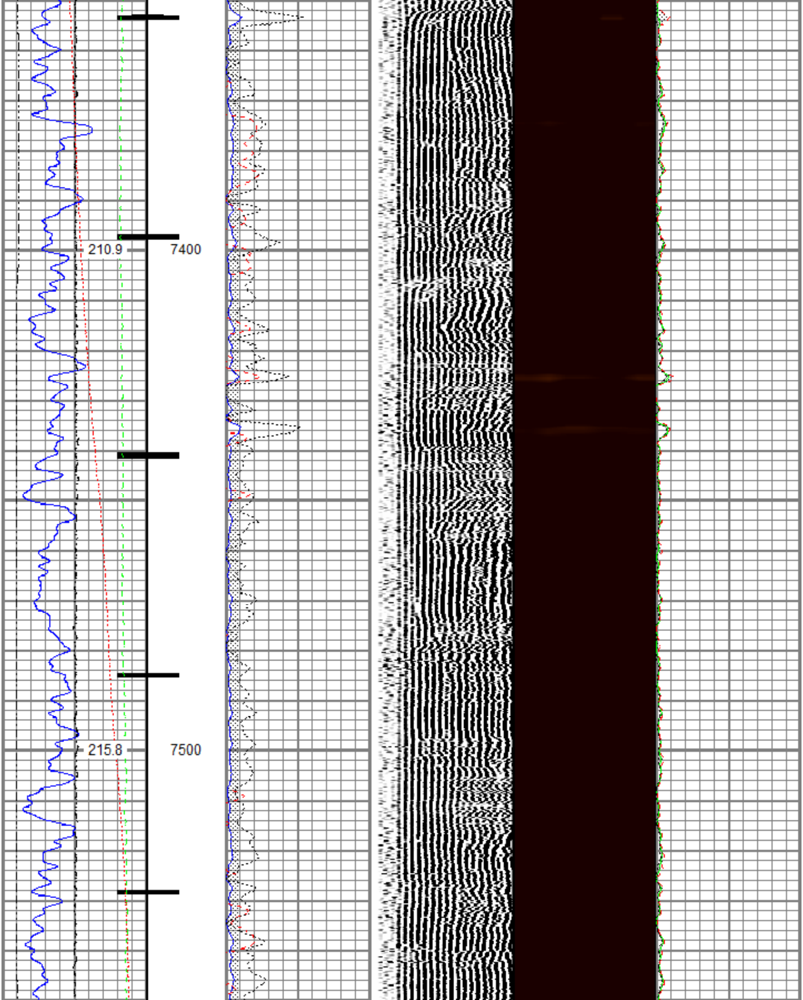

188.1
6400
189.9
6500

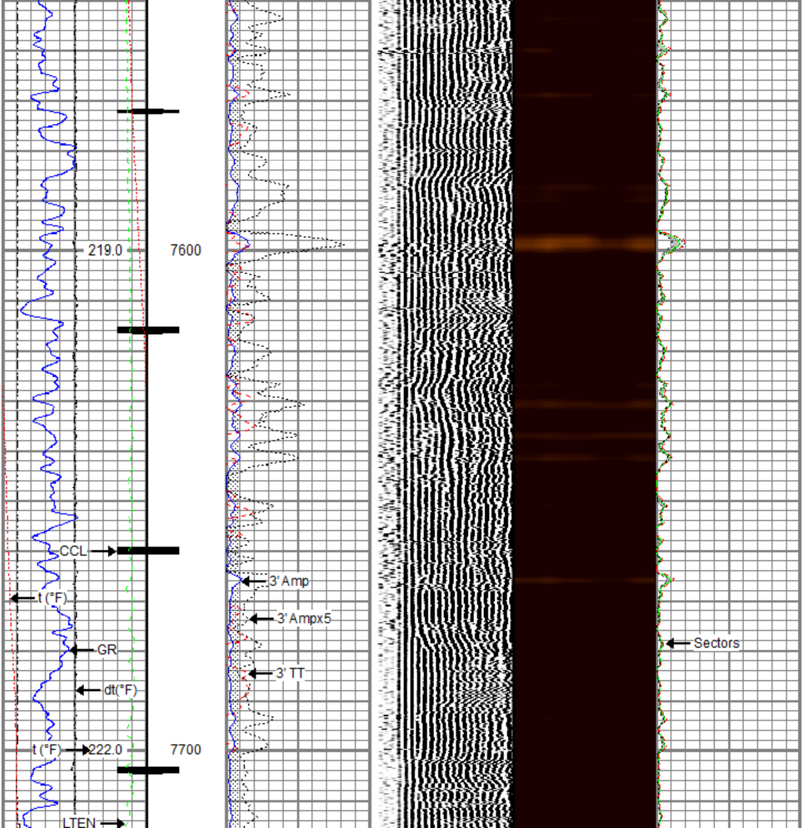

191.9
6600
193.8
6700

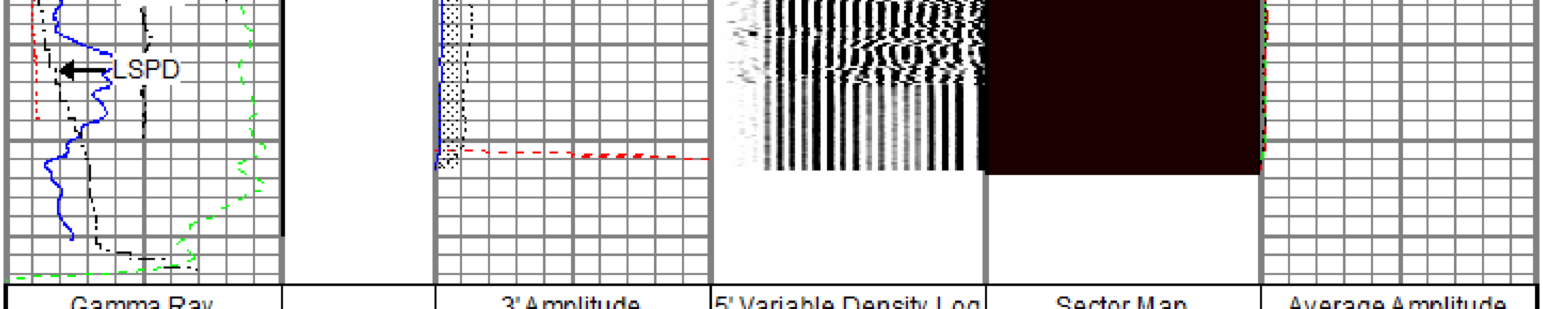

195.9
6800
197.8
6900


199.9
7000
202.2
7100


204.3
7200
207.6
7300


210.9
7400
215.8
7500


219.0
7600
CCL
t (°F)
GR
dt(°F)
t (°F)
222.0
7700
LTEN
3' Amp
3' Ampx5
3' TT
Sectors



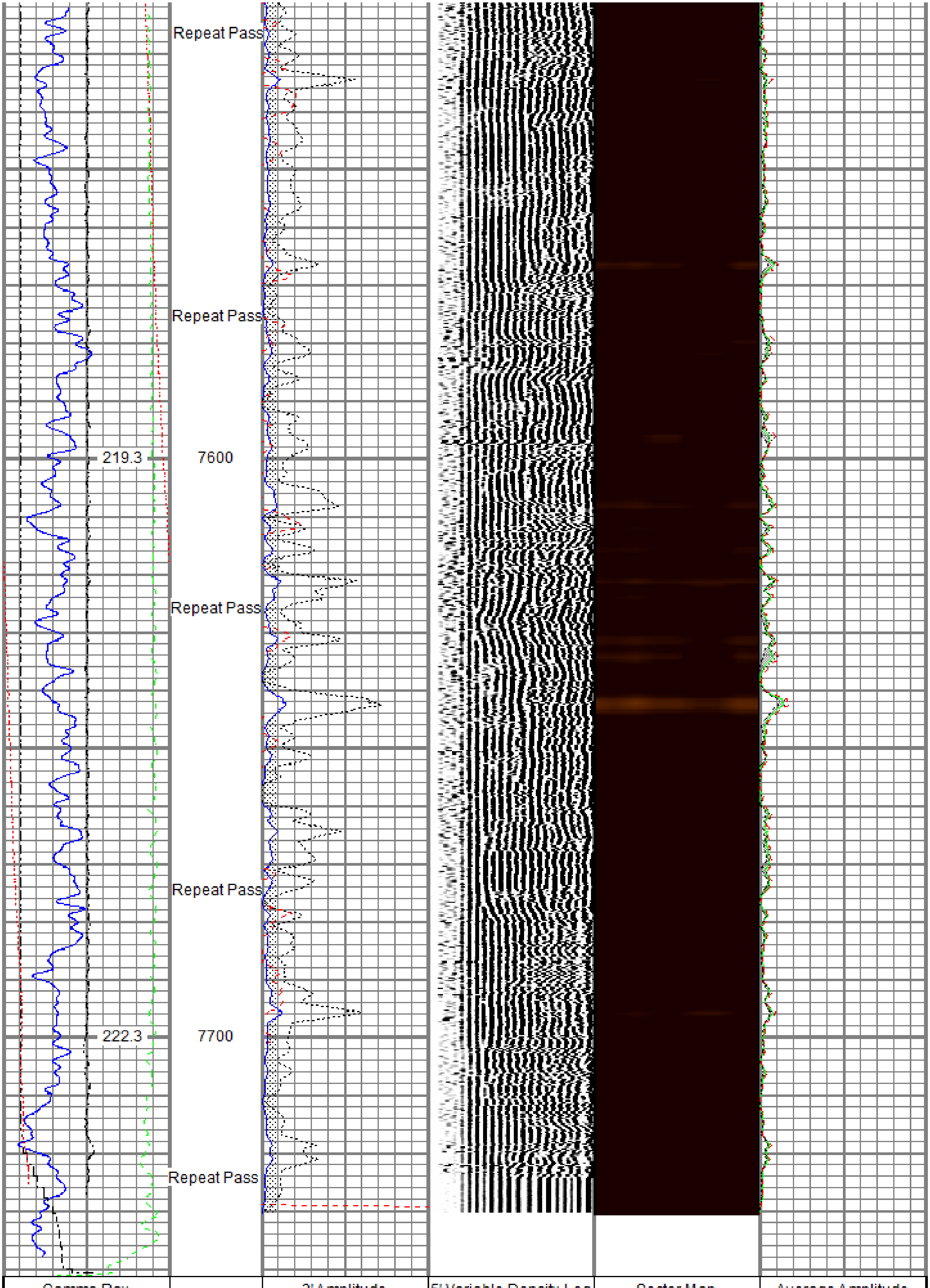
Gamma Ray	3' Amplitude	5' Variable Density Log	Sector Map	Average Amplitude
0 (GAPI) 200	0 (mV) 100	200 (usec) 1200		0 150
Casing Collar Locator	3' Amplitude x 5			Mimimum Amplitude
Line Speed	0 (mV) 20			0 150
-150 (ft/min) 150	3' Travel Time			Maximum Amplitude
Line Tension	300 (usec) 200			0 150
0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

Repeat Pass

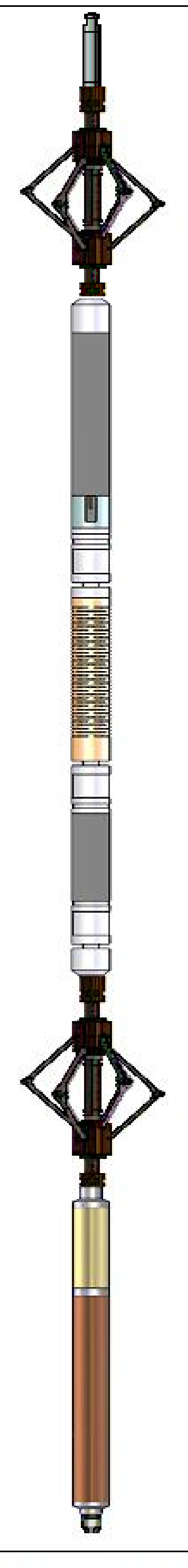
Recorded With 0 PSI Surface Induced Pressure

Database File	tep\tep_chevron gm 543-19_rbl_02-03-21\tep_chevron gm 543-19_rbl_02-03-21.db
Dataset Pathname	repeat.2
Presentation Format	ros_radii_tep
Dataset Creation	Fri Feb 05 15:43:20 2021
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 (usec) 1200		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 (usec) 1200		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 with 1" Fishing Neck	1.03	1.44	3.60
			BTA-MUD BTA 2-3/4" Roller 6 Arm Centralizer with Reversible Ends	2.92	2.72	25.00
TEMP	14.19					
WVFS8 WVFS6 WVFS5 WVFS7 WVFS4 WVFS3 WVFS2 WVFS1 WVFCAL WVF3FT WVF5FT	11.96 11.96 11.96 11.96 11.96 11.96 11.96 11.96 11.96 11.96 10.96		Probe Radii-2750 RBT (ROFS-RBT-0001) Probe 2-3/4" Radial Cement Bond Tool with Integral Temperature Sub	9.39	2.75	105.00
			BTA-MUD BTA 2-3/4" Roller 6 Arm Centralizer with Reversible Ends	2.92	2.72	25.00
CCL	3.88		Probe GR-CCL ANL-2750 A (FW1305-083) Probe 2.75" Analog 4 Channel Pulse Gamma Ray/CCL Combined	4.54	2.75	55.00
GR	1.14					
			GO BN-14375 GO 1-7/16" Bull Nose with Go Box Top	0.25	1.44	1.00

Dataset: tep_chevron gm 543-19_rbl_02-03-21.db: field/well/run1/main.3
Total length: 21.05 ft
Total weight: 214.60 lb
O.D.: 2.75 in

Calibration Report

Database File	c:\programdata\warrior\data\tep\tep_chevron gm 543-19_rbl_02-03-21\tep_chevron gm 543-19_rbl_02-03-2
Dataset Pathname	main.3
Dataset Creation	Fri Feb 05 15:37:46 2021

Gamma Ray Calibration Report

Serial Number:	FW1305-083	
Tool Model:	2750 A	
Performed:	Sun Nov 12 05:37:57 2017	
Calibrator Value:	637.0	GAPI
Background Reading:	95.7	cps
Calibrator Reading:	982.0	cps
Sensitivity:	0.7188	GAPI/cps

Segmented Cement Bond Log Calibration Report

Serial Number:	ROFS-RBT-0001	
Tool Model:	2750 RBT	
Calibration Casing Diameter:	4.500	in
Calibration Depth:	30.987	ft

Master Calibration, performed (Derived):

	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3'	0.006	0.652	0.800	81.196	124.425	0.105
CAL	0.003	0.767				
5'	0.007	0.645	0.800	81.196	125.879	-0.029
SUM						
S1	0.006	0.729	0.000	100.000	138.373	-0.825
S2	0.006	0.704	0.000	100.000	143.270	-0.899
S3	0.006	0.729	0.000	100.000	138.254	-0.851
S4	0.006	0.688	0.000	100.000	146.728	-0.928
S5	0.006	0.688	0.000	100.000	146.728	-0.928
S6	0.006	0.675	0.000	100.000	149.567	-0.897
S7	0.006	0.675	0.000	100.000	149.567	-0.897
S8	0.006	0.706	0.000	100.000	142.901	-0.820

Internal Reference Calibration, performed (Not Performed):

	Raw (v)		Calibrated (v)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
CAL	0.000	0.000	0.003	0.767	1.000	0.000

Air Zero Calibration, performed Tue Feb 2 10:16:50 2021:

	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

Temperature Calibration Report

Serial Number:	ROFS-RBT-0001	
Tool Model:	2750 RBT	
Performed:	Mon Oct 1 11:32:12 2018	
	Reference	Reading
Low Reference:	100.00 degF	112.12 degF
High Reference:	350.00 degF	415.62 degF
Gain:	0.82	
Offset:	7.65	
Delta Spacing	1	

Company	TEP Rocky Mountain LLC
Well	Chevron GM 543-19
Field	Grand Valley
County	Garfield
State	Colorado