Temperature
Gamma Ray
Casing Collar Log

Company	TEP Rocky Mountain LLC
Well	Federal RU 312-17
Field	Rulison
County	Garfield
State	Colorado

Company TEP Rocky Mountain LLC
Well Federal RU 312-17
Field Rulison
County Garfield State Colorado
Location: API # : 05-045-23736
SEC 17 TWP 7S RGE 93W
Other Services ---

Permanent Datum Ground Level Elevation 8365.6'
Log Measured From Kelly Bushing 24 FT
Drilling Measured From Kelly Bushing
Elevation K.B. 8389.6' D.F. 8388.6' G.L. 8365.6'

Date	06-MAR-2018
Run Number	One
Depth Driller	10872 FT
Depth Logger	10791 FT
Bottom Logged Interval	10789 FT
Top Log Interval	Surface
Open Hole Size	8.750"
Type Fluid	Fresh Water
Density / Viscosity	8.34 lb/gal
Max. Recorded Temp.	235°F
Estimated Cement Top	5147 FT
Time Well Ready	ROA
Time Logger on Bottom	10:20
Equipment Number	HD-0359
Location	Grand Junction, CO
Recorded By	Z. Fisher
Witnessed By	Bob Brown

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	32.3	H-40	Surface	1142 FT
Intermediate #1	4 1/2	11.6	P-110	Surface	10833 FT
Intermediate #2					
Liner					

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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

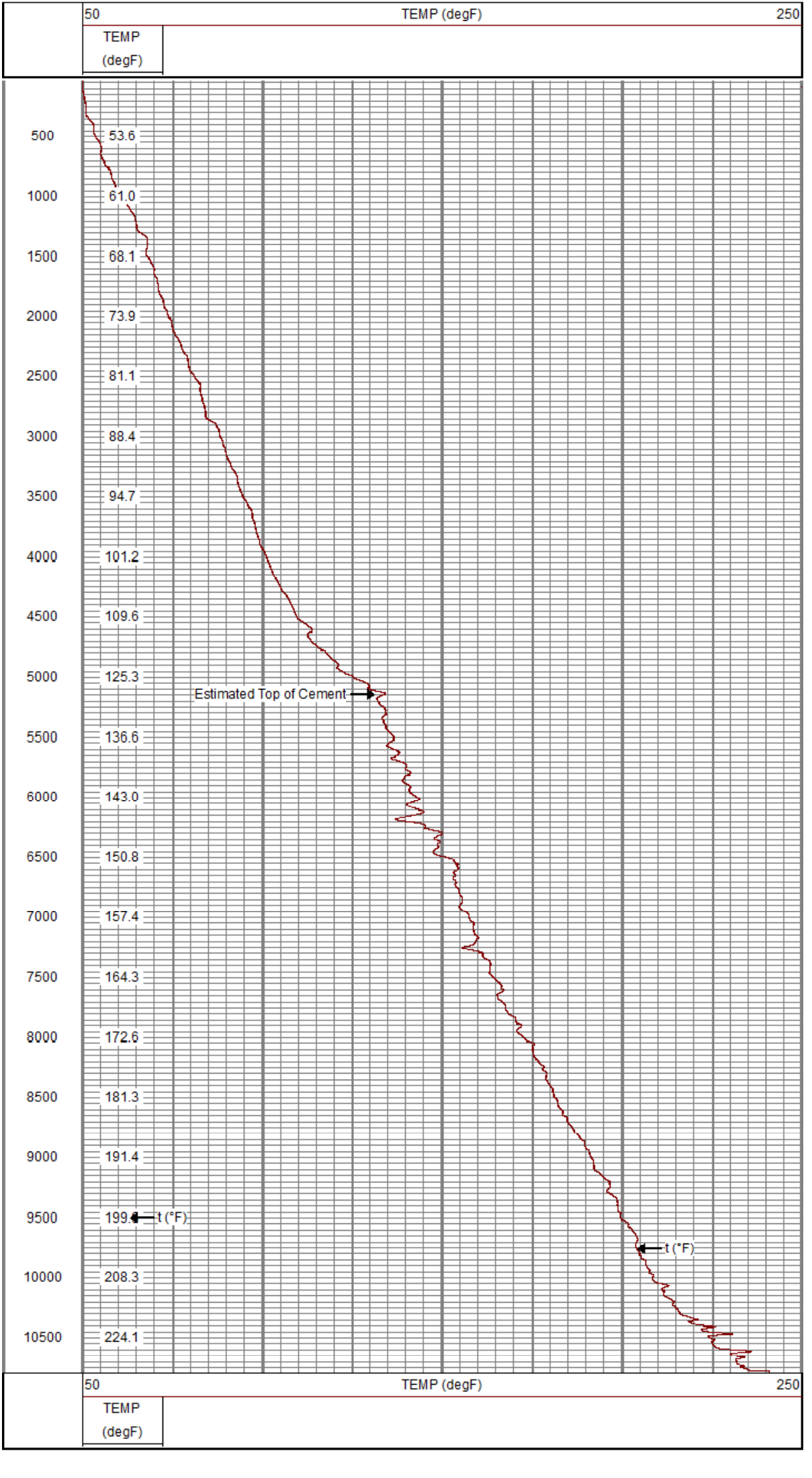
Log ran per customer request
Depth referenced to Kelly Bushing 24 FT
Marker Joint from 6706 FT to 6728 FT
Log ran from 10793 FT to Surface
Log ran with 0 PSI Surface Induced Pressure

Thank you for choosing Reliance Oilfield Services, LLC!!

Main Pass (Quick Look)

Recorded with 0 PSI Surface Induced Pressure

Database File tep\federal ru 312-17\tep_federal ru 312-17_temp_03-06-18.db
Dataset Pathname main.1
Presentation Format ros_temp_ql_tep
Dataset Creation Tue Mar 06 11:56:18 2018
Charted by Depth in Feet scaled 1:10000



Main Pass

Recorded with 0 PSI Surface Induced Pressure

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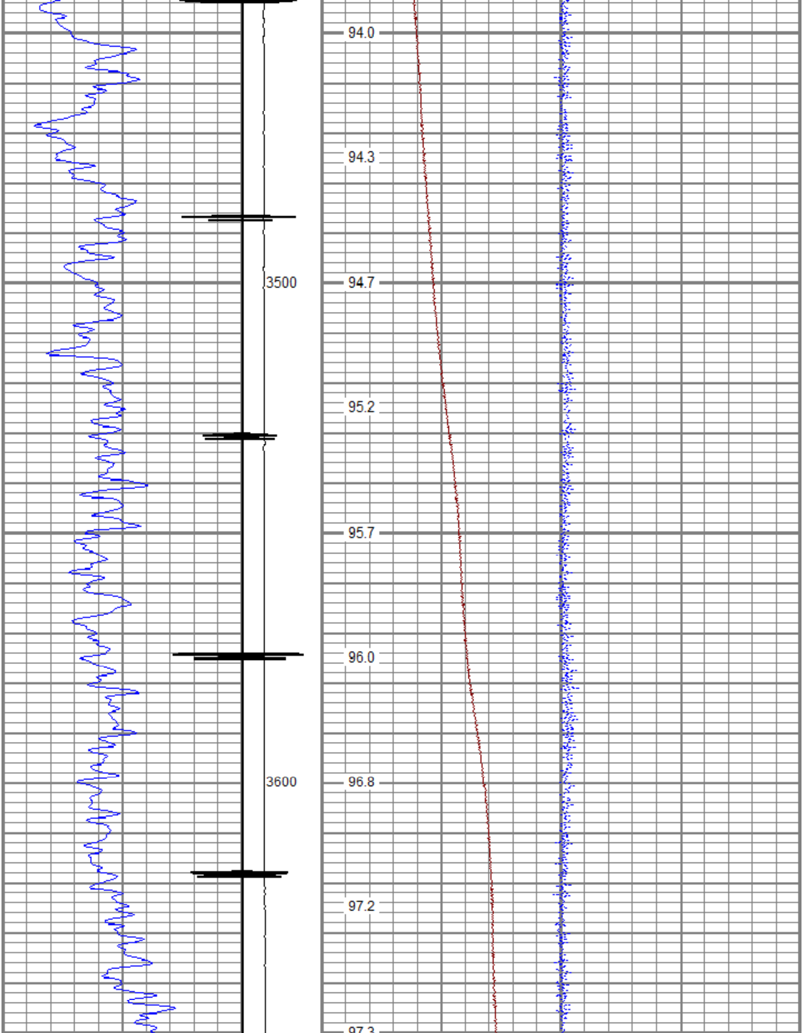
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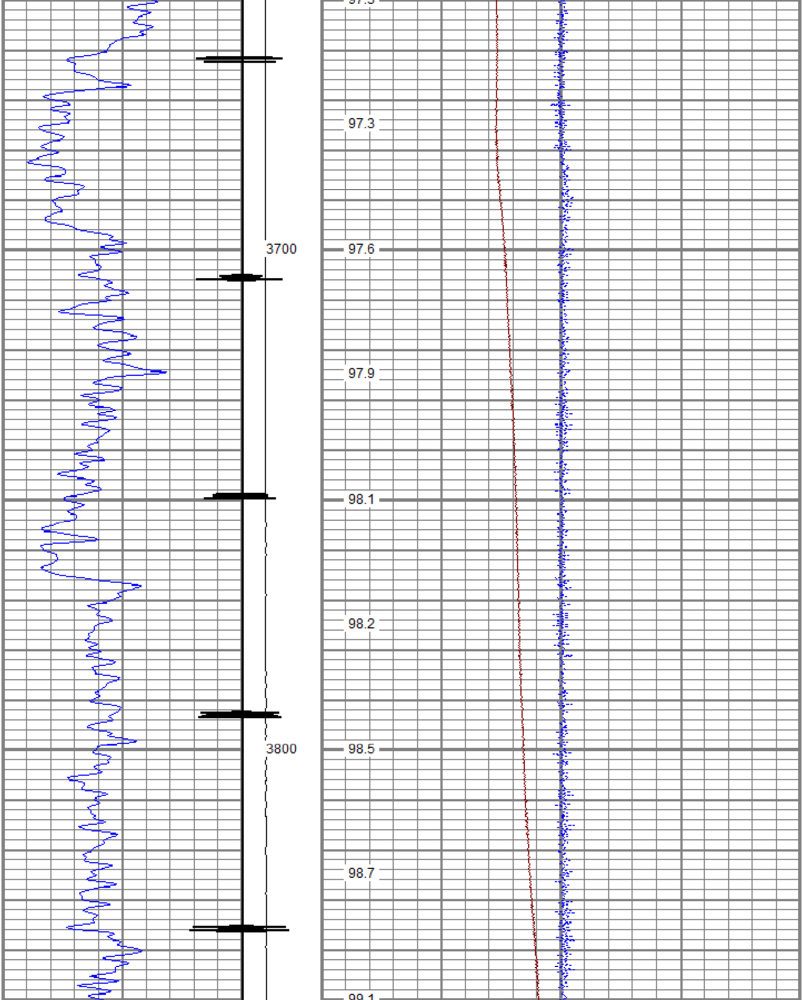
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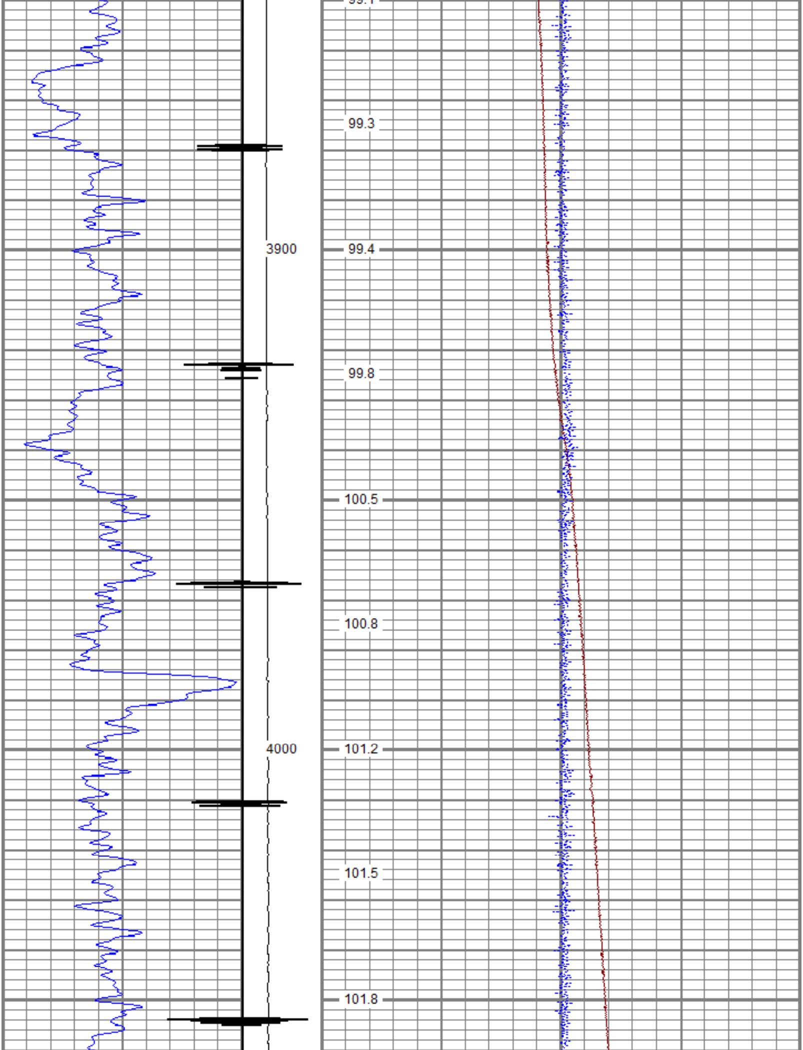
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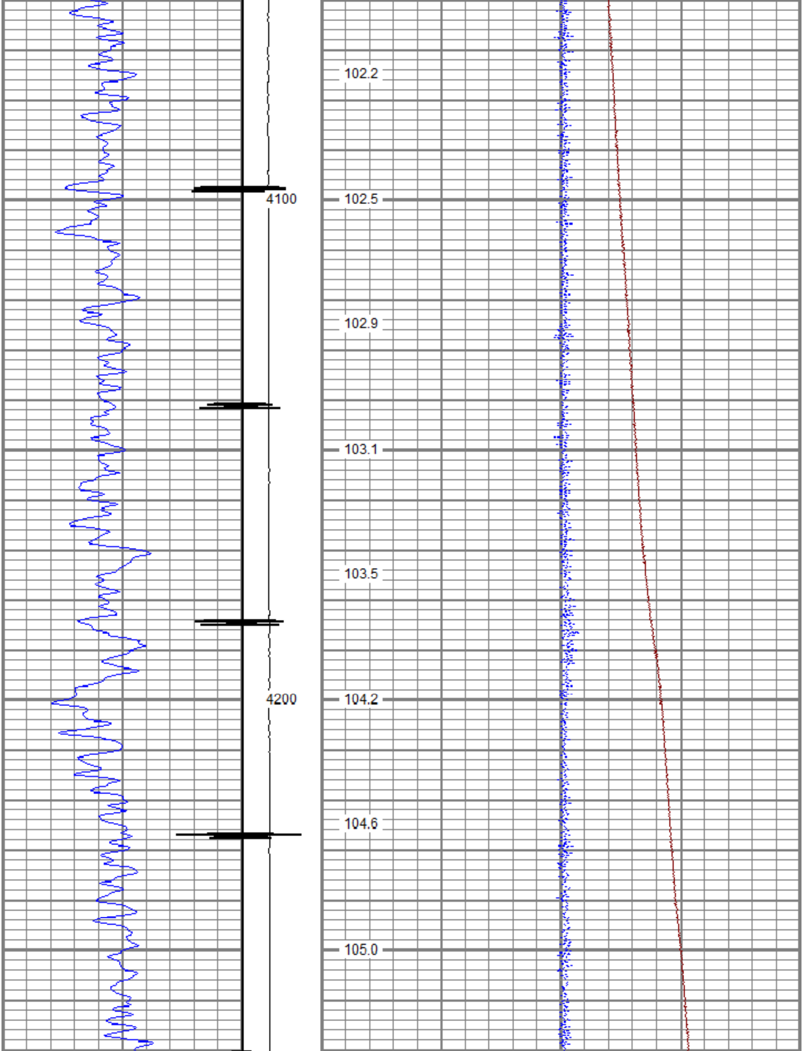
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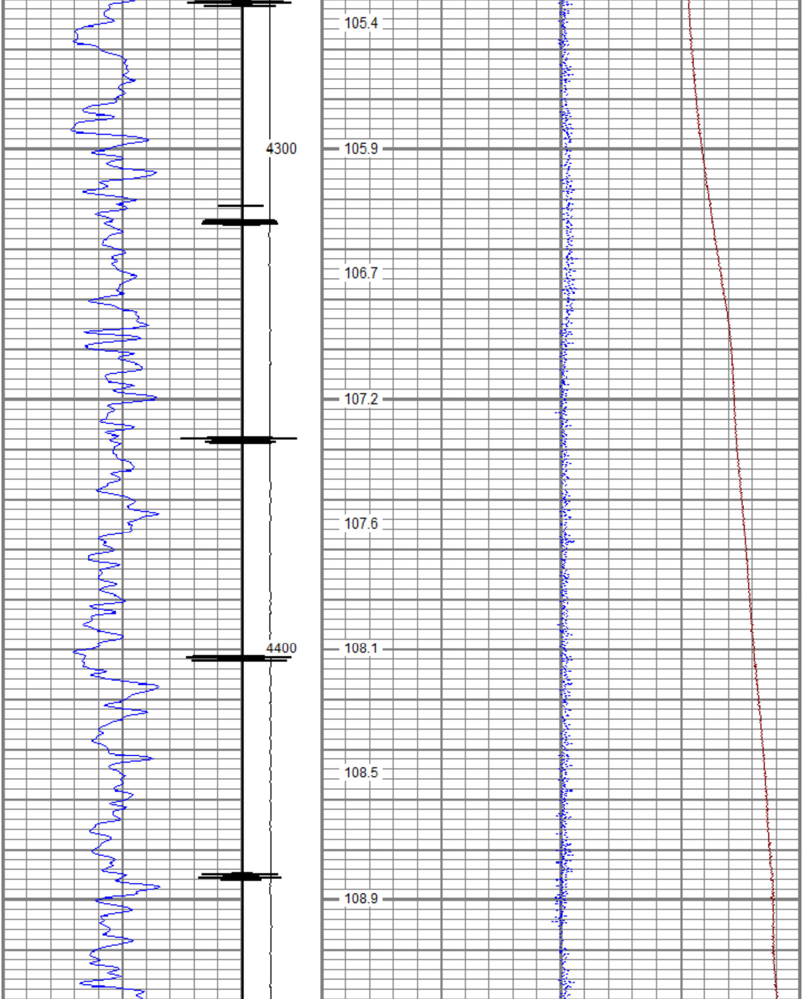
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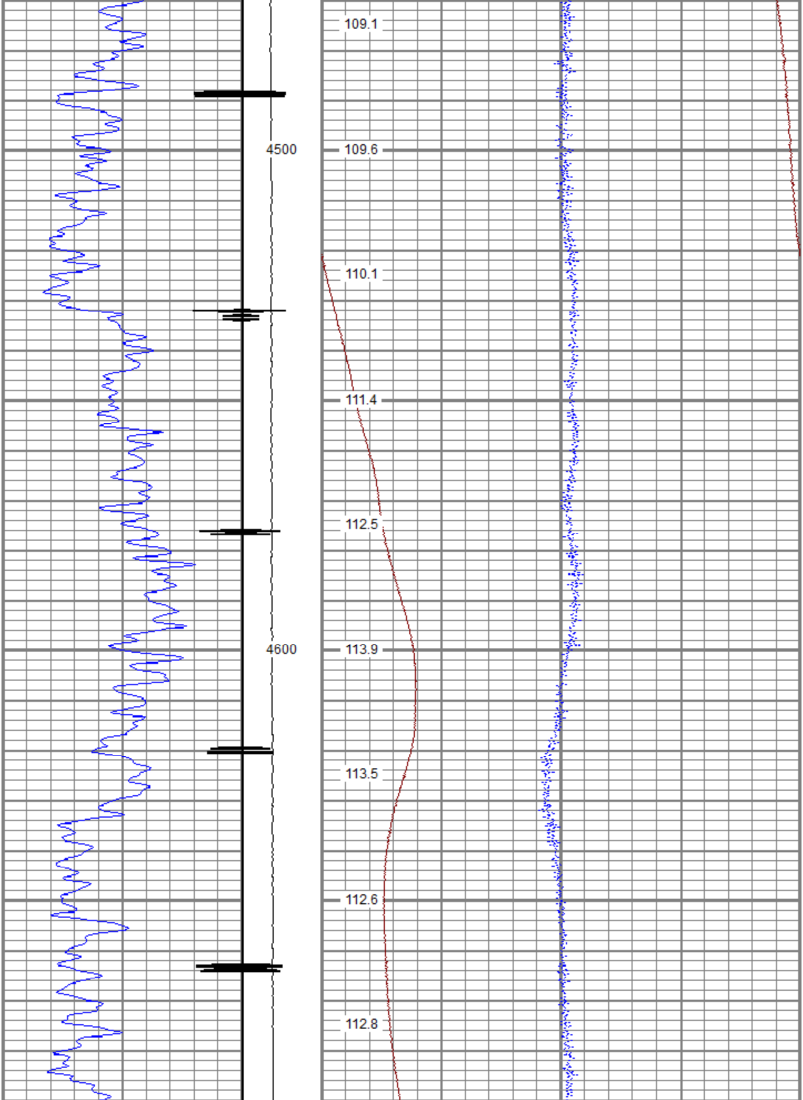
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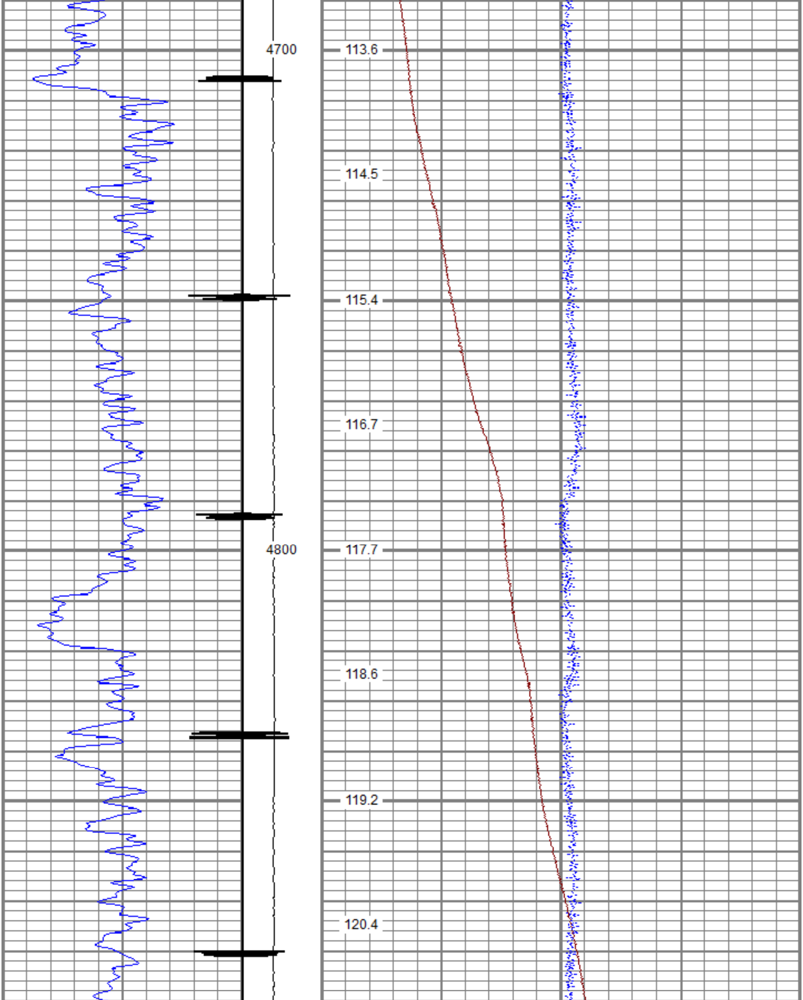
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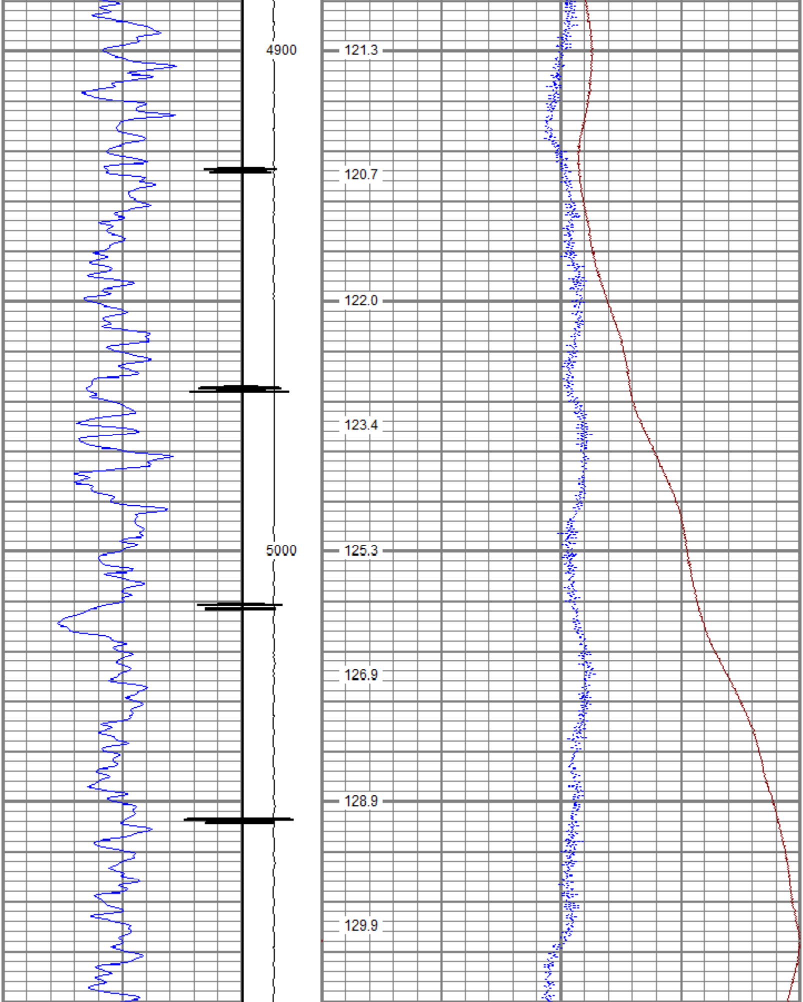
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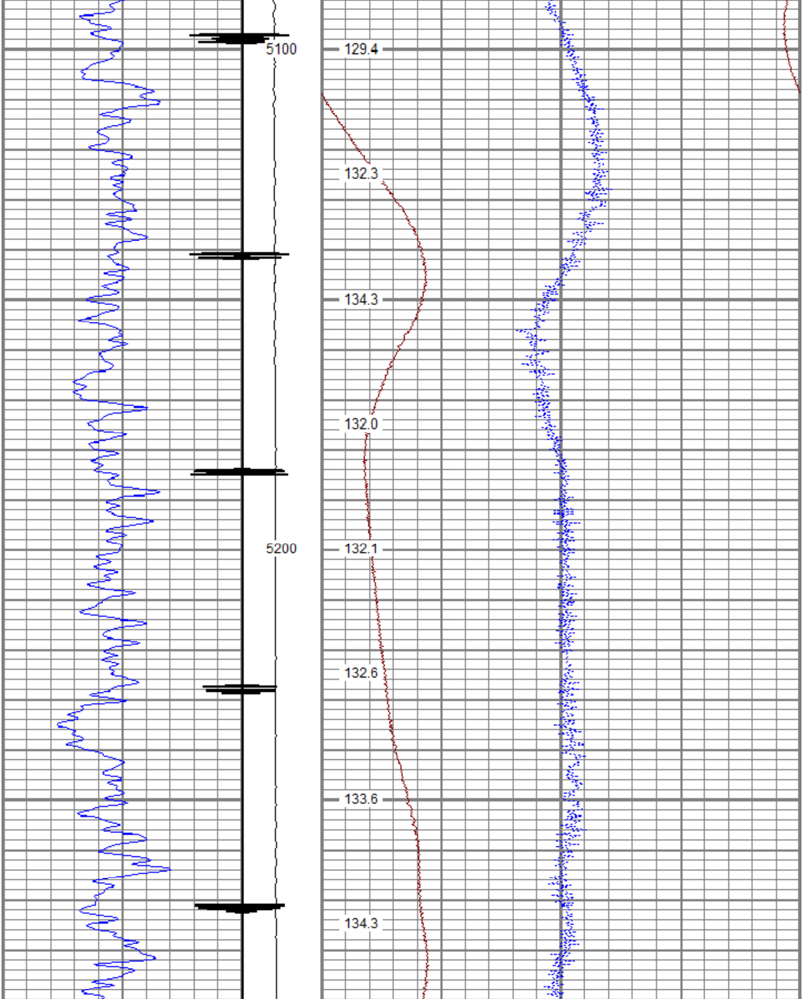
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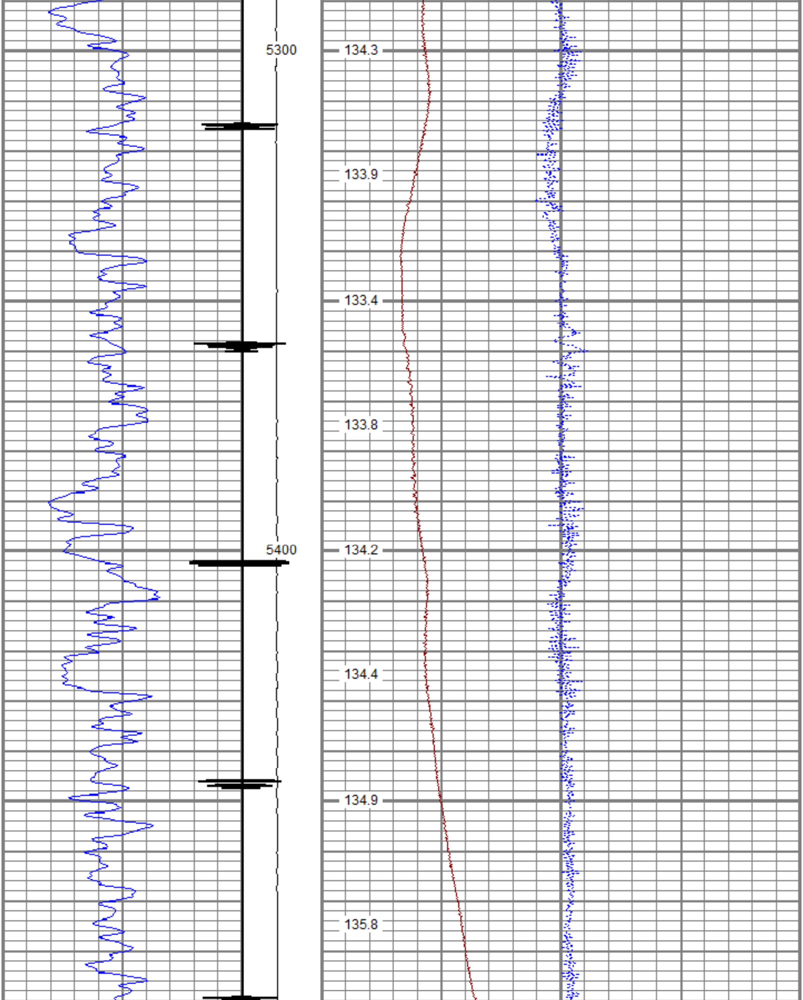
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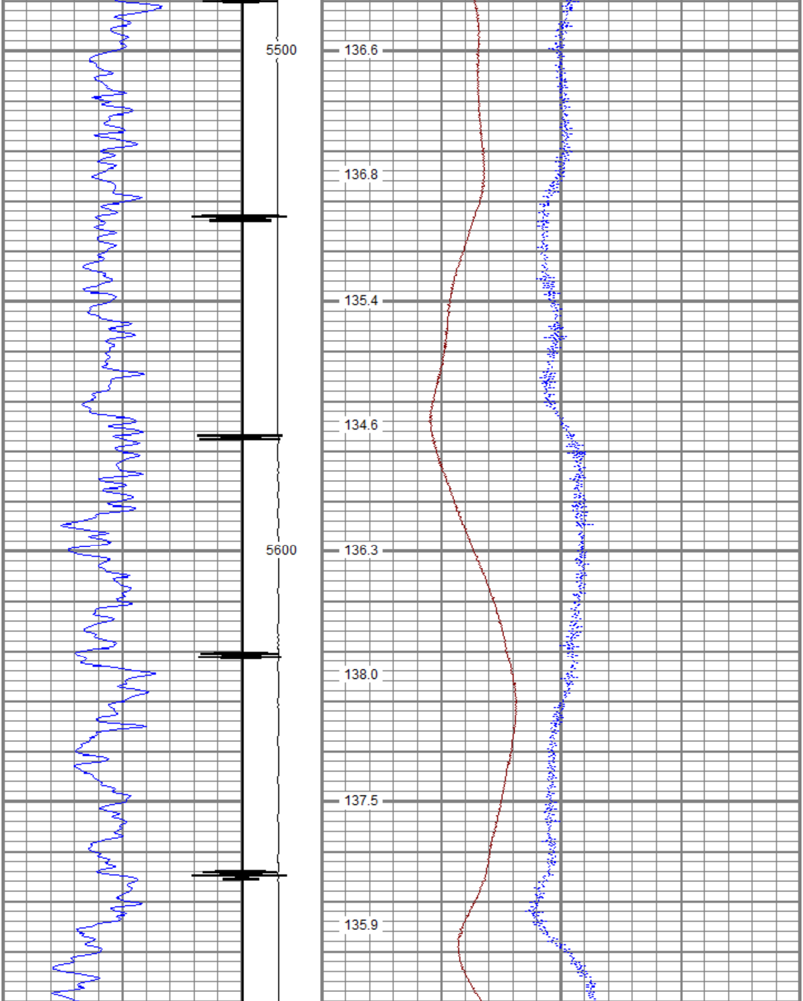
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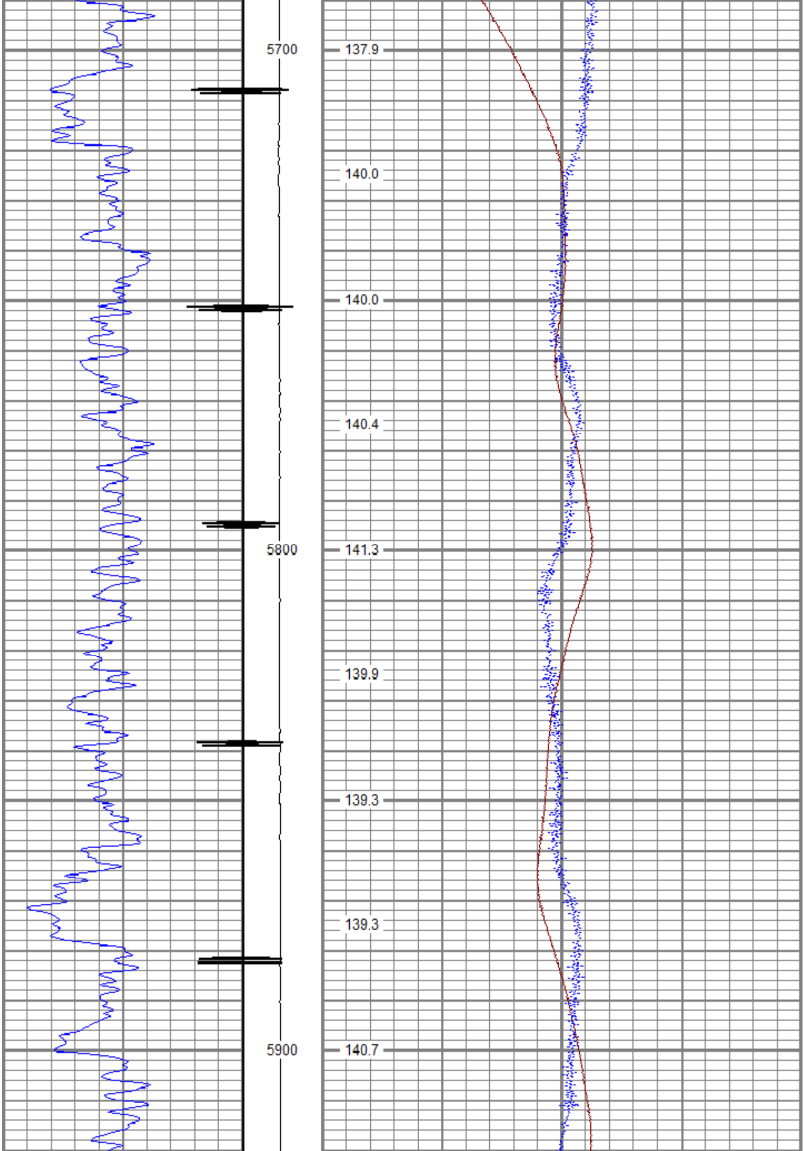
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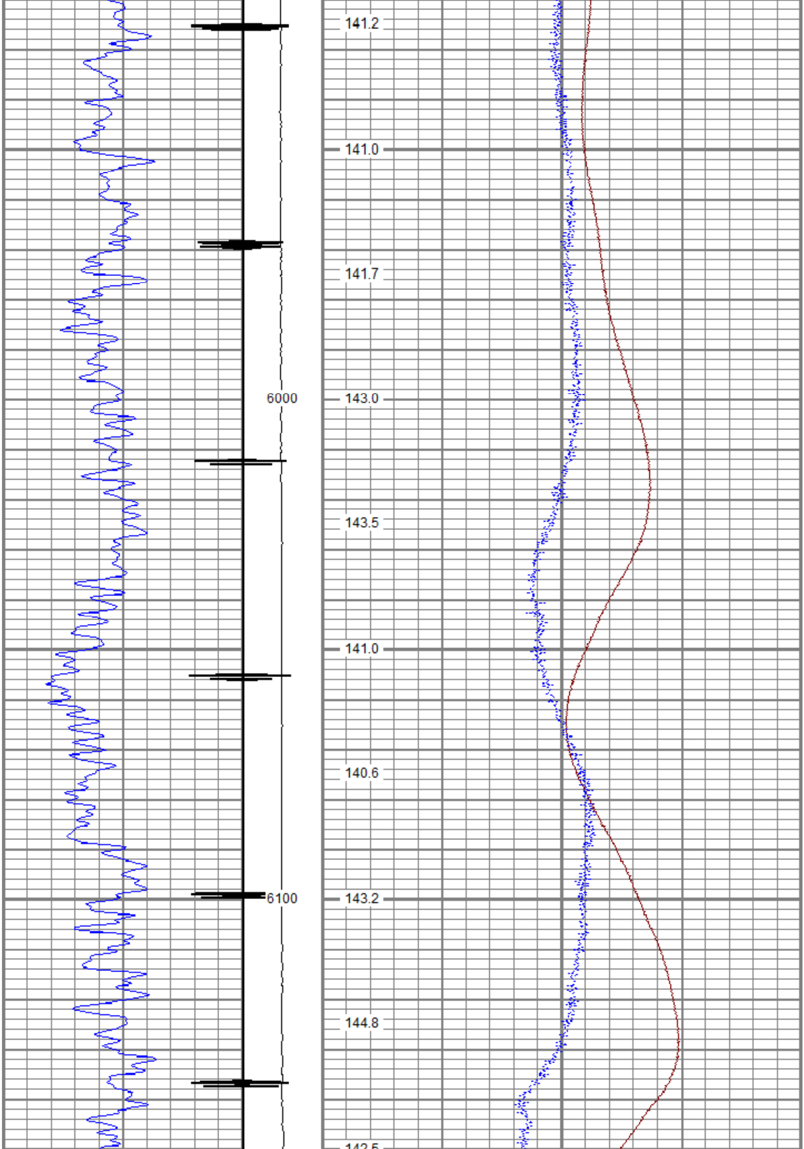
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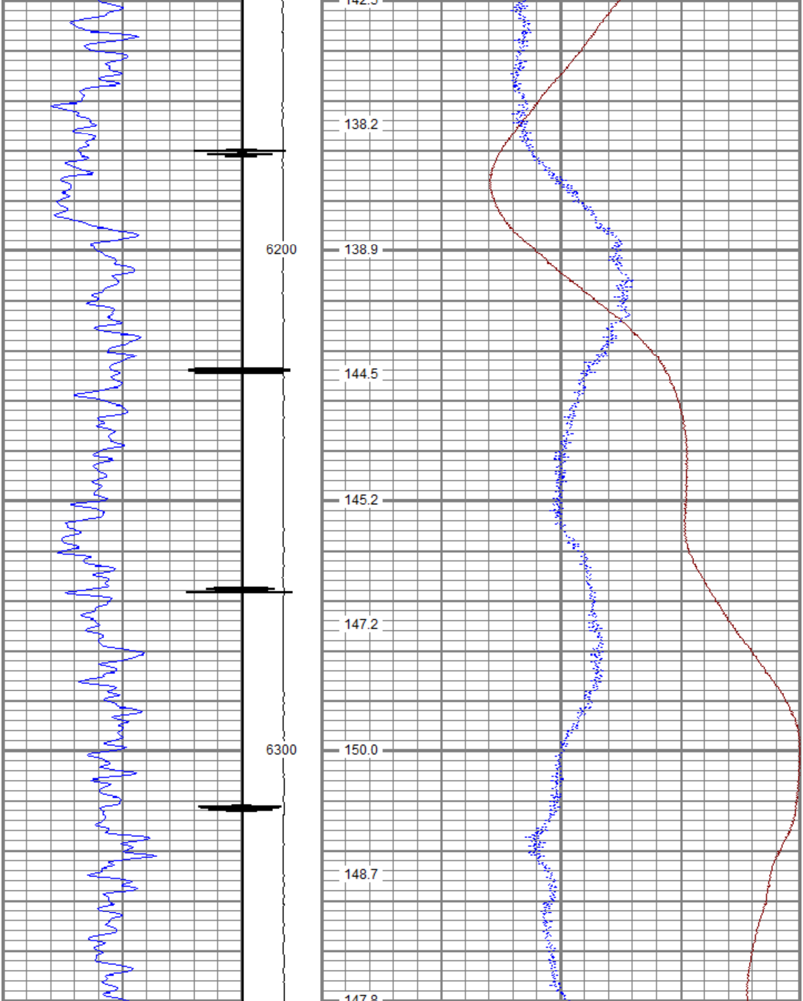
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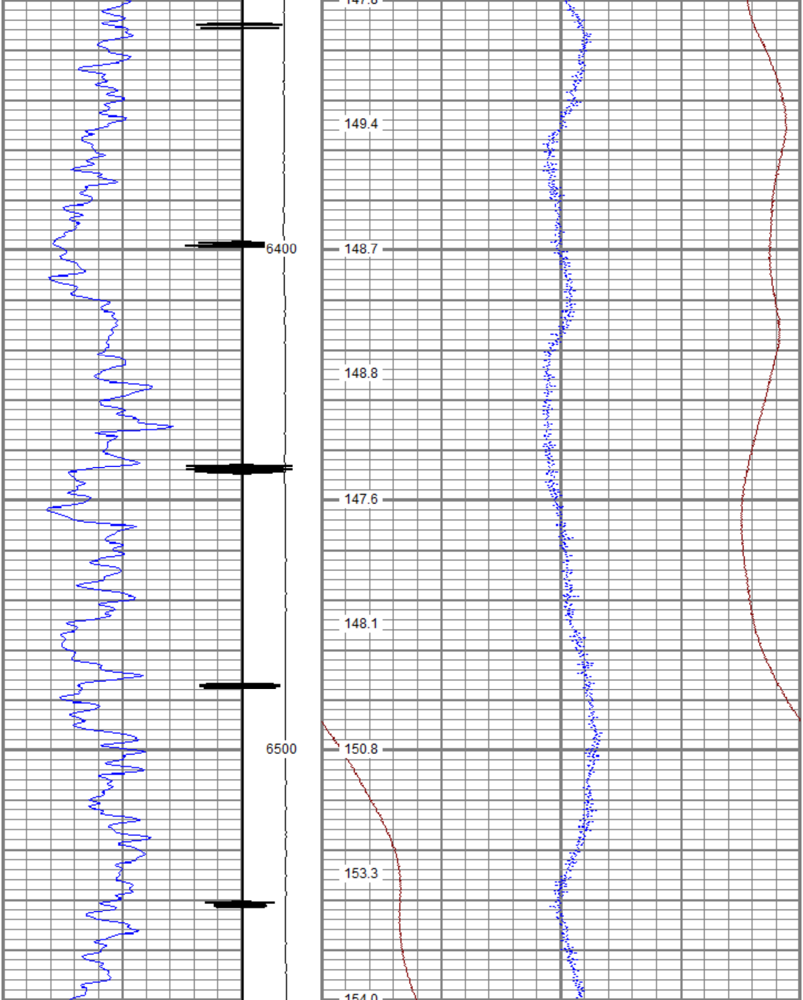
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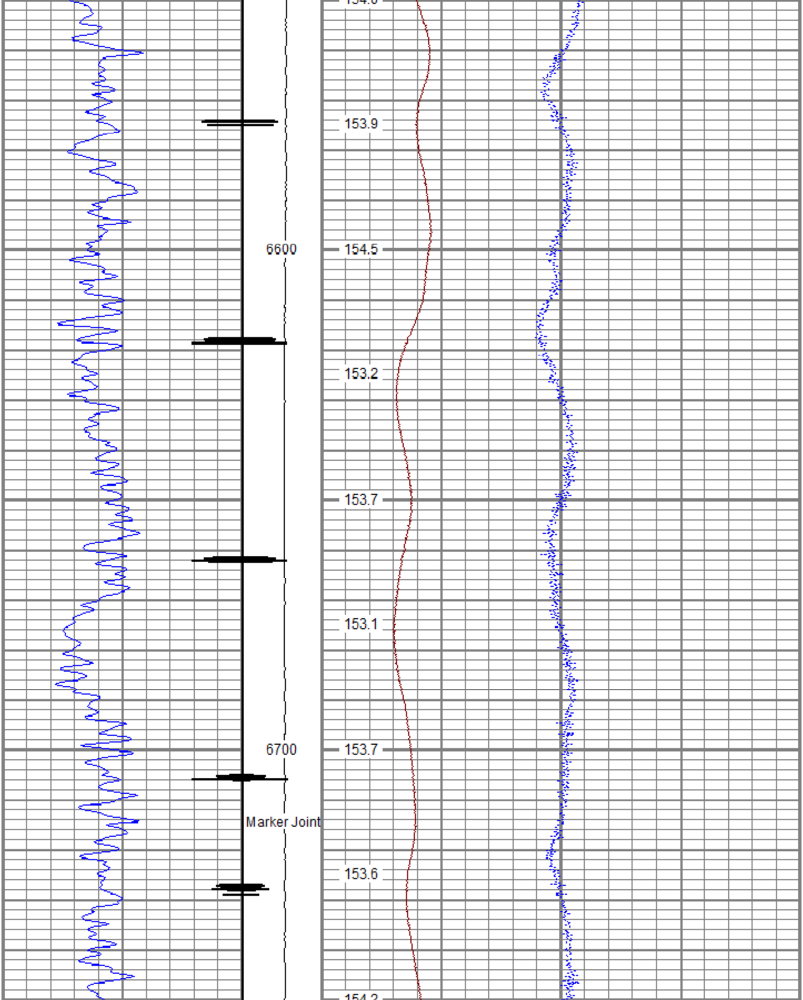
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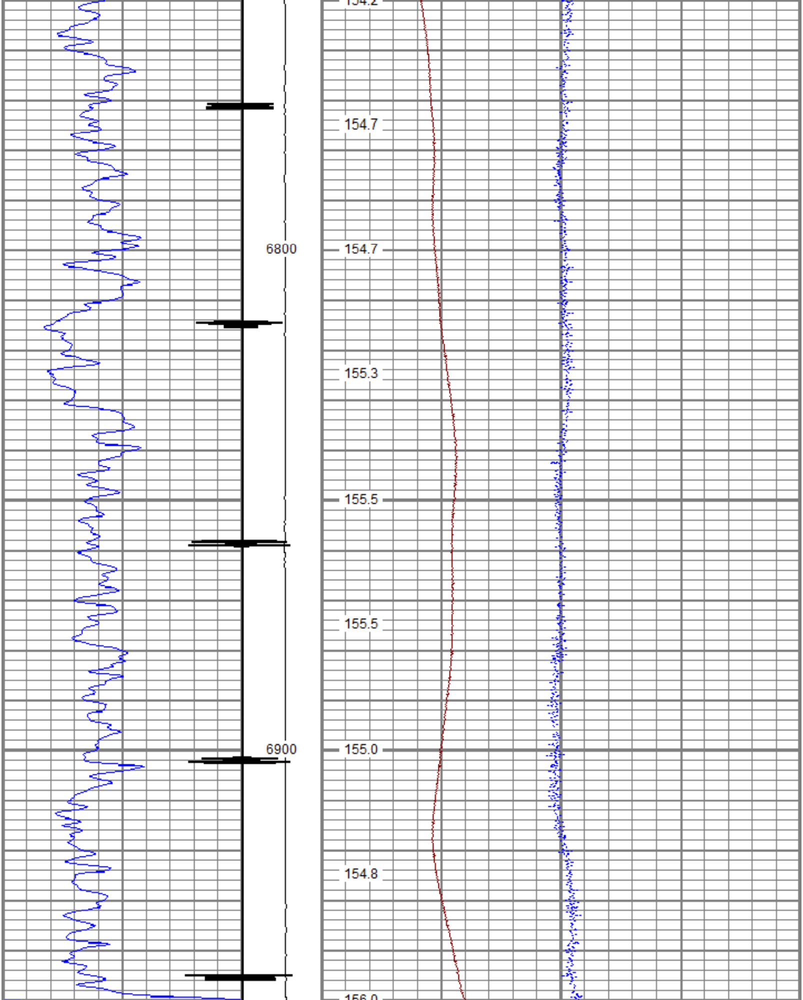
Marker Joint
153.6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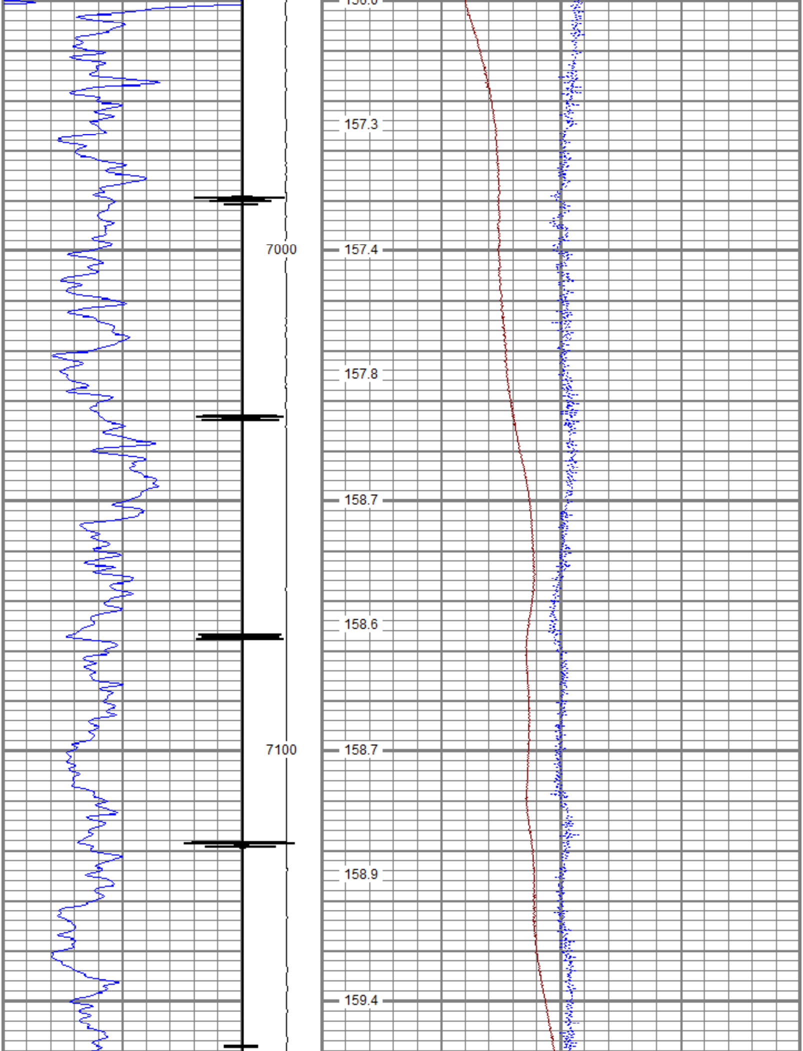
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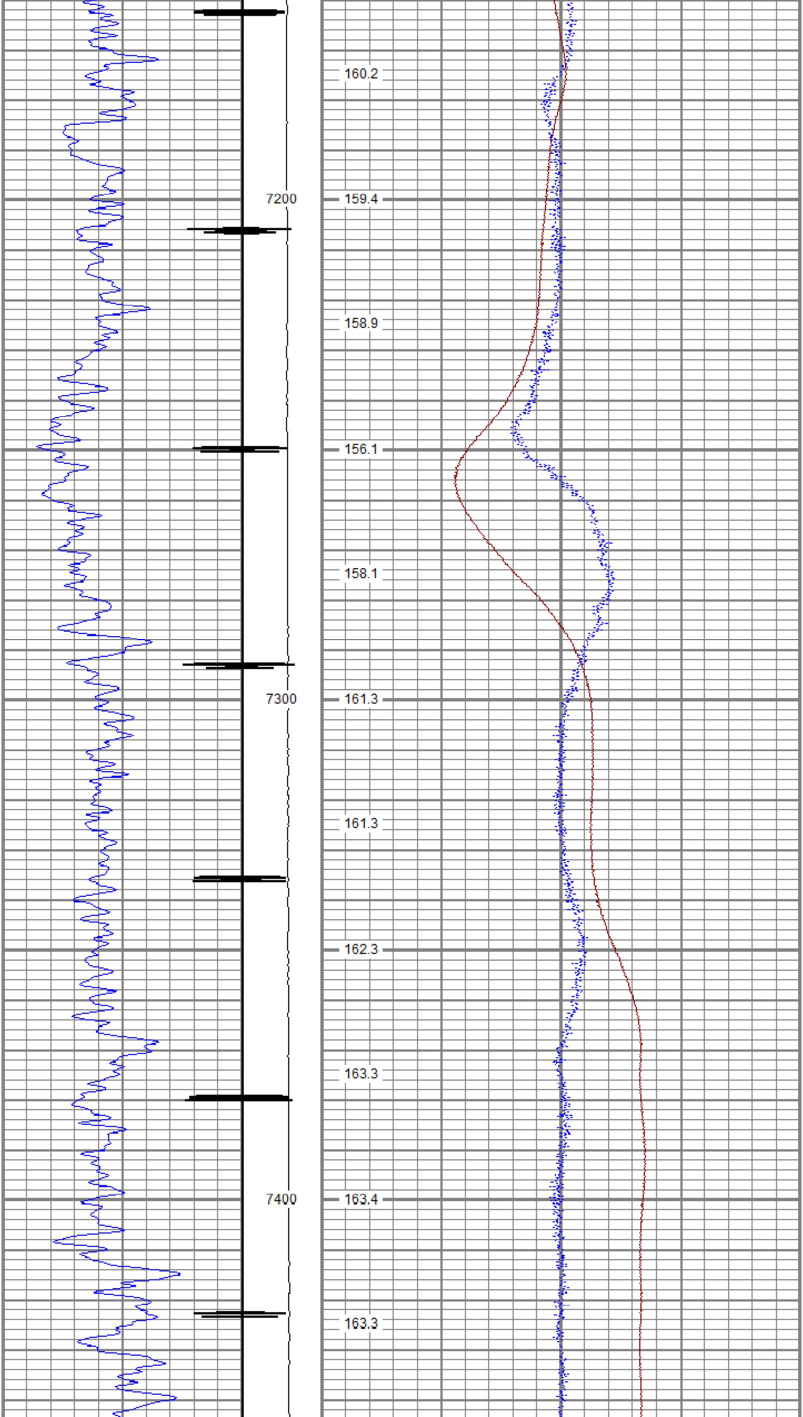
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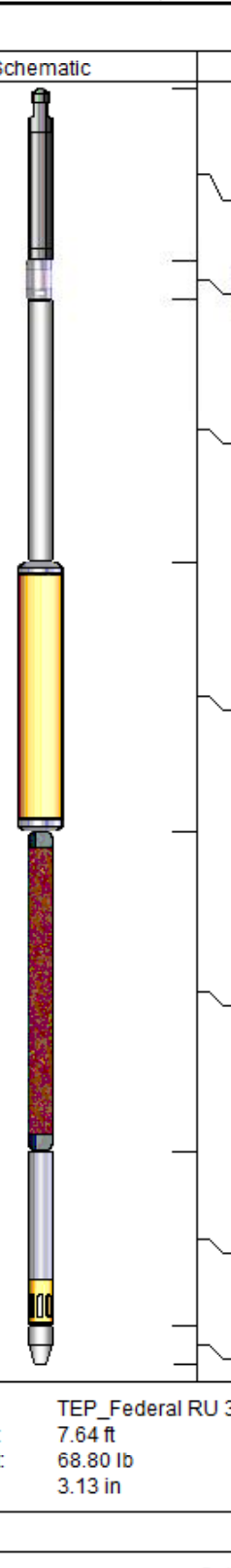
163.3

Sensor	Offset (ft)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb)
			Titan CHD-16875 GO Titan 1-11/16" Assembled Electric Cable Head w/ 1" Fishing Neck	1.03	1.69	5.40
			Titan ADPTR-200 GOB GOB Titan 2" Electric GO Box to GO Box Adapter	0.23	2.00	5.00
			UW XTU-002 (10012277) Crossover Ultrawire Toolbus to Ultralink	1.58	1.69	6.50
CCL	3.70		UW CCL-028 (10026417) 3-1/8" Ultrawire Casing Collar Locator	1.61	3.13	36.00
GR	1.76		UW PGR-020 (10019371) Production Gamma Ray	1.92	1.69	9.50
TEMP	0.37		UW PRT-016 (10025093) Platinum Resistance Thermometer	1.04	1.69	5.20
TSTAMP	0.00		UW BUL-006 (031422) Sondex Ultrawire Bullnose Terminator Sub	0.22	1.69	1.20

Dataset: TEP_Federal RU 312-17_TEMP_03-06-18.db: field/well/run1/main
Total length: 7.64 ft
Total weight: 68.80 lb
O.D.: 3.13 in

Calibration Report

Database File C:\ProgramData\Warrior\Data\TEP\Federal RU 312-17\TEP_Federal RU 312-17_TEMP_03-06-18.db
Dataset Pathname main
Dataset Creation Tue Mar 06 10:19:24 2018

Temperature Calibration Report

Serial Number: 10025093
Tool Model: 016
Performed: Sun Nov 12 14:20:23 2017

Point #	Reading		Reference	
1	13006.00	cps	68.00	degF
2	18181.00	cps	104.00	degF
3	29634.00	cps	176.00	degF
4	41077.00	cps	248.00	degF
5	52560.00	cps	320.00	degF
6	58409.00	cps	356.00	degF
7		cps		degF
8		cps		degF
9		cps		degF
10		cps		degF

Gamma Ray Calibration Report

Serial Number: 10019371
Tool Model: 020
Performed: Sun Nov 12 06:37:04 2017

Calibrator Value: 637.0 GAPI

Background Reading: 78.8 cps
Calibrator Reading: 1069.9 cps

Sensitivity: 0.6427 GAPI/cps

RELIANCE
OILFIELD SERVICES

Company	TEP Rocky Mountain LLC
Well	Federal RU 312-17
Field	Rulison
County	Garfield
State	Colorado