RELIANCE
OILFIELD SERVICES

Temperature
Gamma Ray
Casing Collar Log

Company	TEP Rocky Mountain LLC
Well	Youberg SR 431-12
Field	Rulison
County	Garfield
State	Colorado

Company TEP Rocky Mountain LLC
Well Youberg SR 431-12
Field Rulison
County Garfield State Colorado

Location: API # : 05-045-23306
1894' FNL & 2113' FEL SWNE
SEC 12 TWP 7S RGE 94W

Other Services

Permanent Datum	Ground Level	Elevation	7254'
Log Measured From	Kelly Bushing	24 FT	
Drilling Measured From	Kelly Bushing		

Elevation
K.B. 7278'
D.F. 7277'
G.L. 7254'

Date	24-JUL-2017		
Run Number	One		
Depth Driller	9341 FT		
Depth Logger	9258 FT		
Bottom Logged Interval	9258 FT		
Top Log Interval	Surface		
Open Hole Size	8.750"		
Type Fluid	Fresh Water		
Density / Viscosity	8.34 lb/gal		
Max. Recorded Temp.	229°F		
Estimated Cement Top	4150 FT		
Time Well Ready	ROA		
Time Logger on Bottom	01:00		
Equipment Number	HD-0359		
Location	Grand Junction		
Recorded By	J.Donnelly		
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	32.3	H-40	Surface	1100 FT
Intermediate #1	4 1/2	11.6	P-110	Surface	9354 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 as per customer request
Depth referenced to Kelly Bushing at 24 FT
Marker joint logged from 5286 FT to 5308 FT
Estimated Top of Cement is 4150 FT

Thank you for choosing Reliance Oilfield Services, LLC!!

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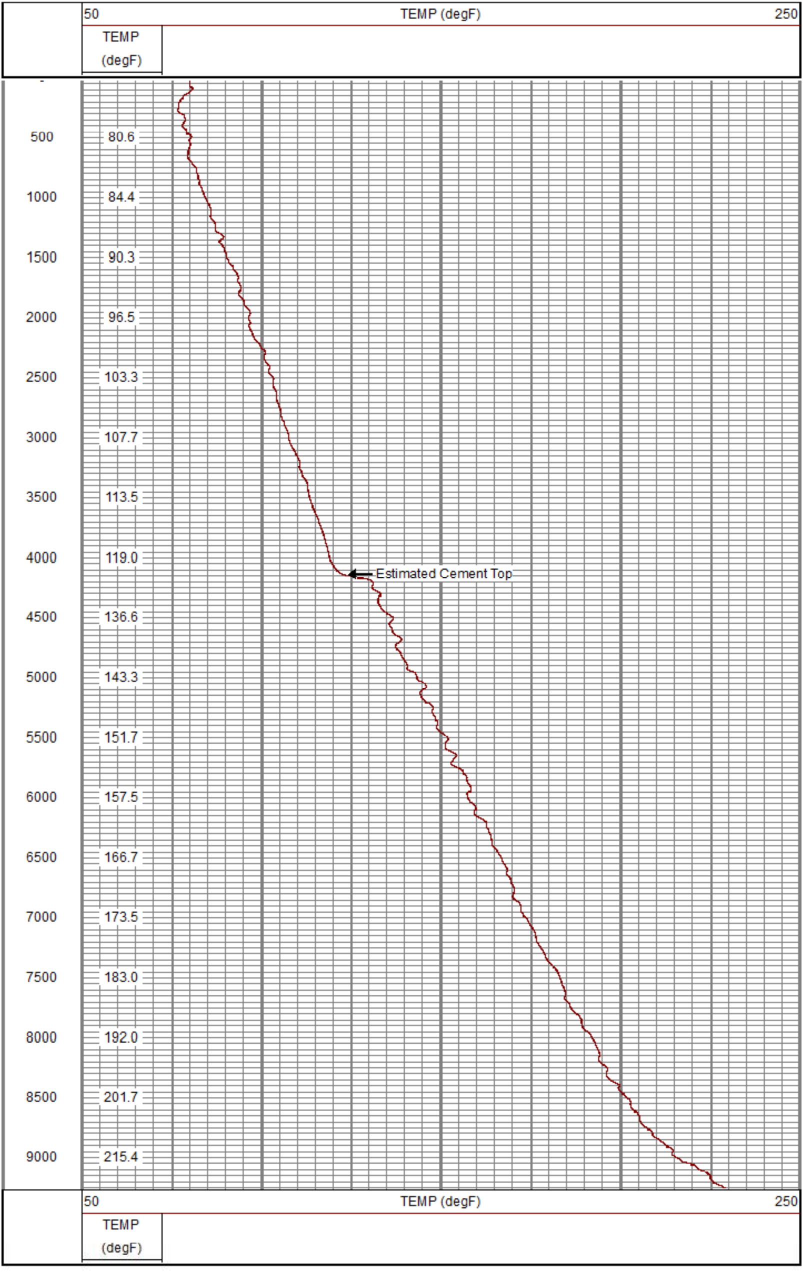
Main Pass (Quick Look)

Database File	tep_youberg sr 431-12_temp_07-24-2017\processed_tep_youberg sr 431-12_temp_07-24-17.db
Dataset Pathname	Main1.1
Presentation Format	ros_temp_ql_tep
Dataset Creation	Mon Jul 24 02:30:44 2017
Charted by	Depth in Feet scaled 1:10000



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Main Pass

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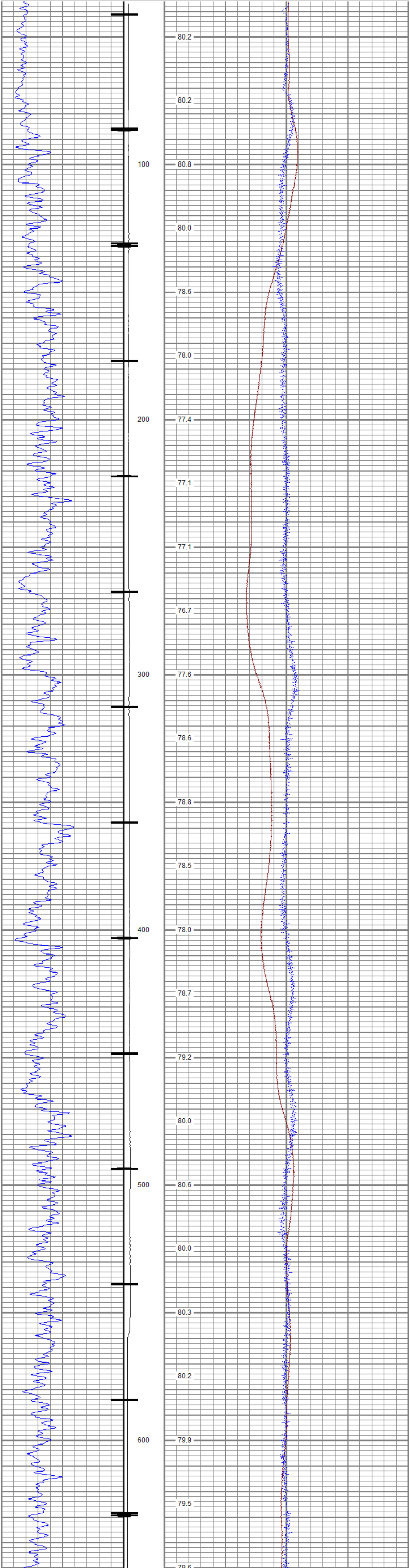
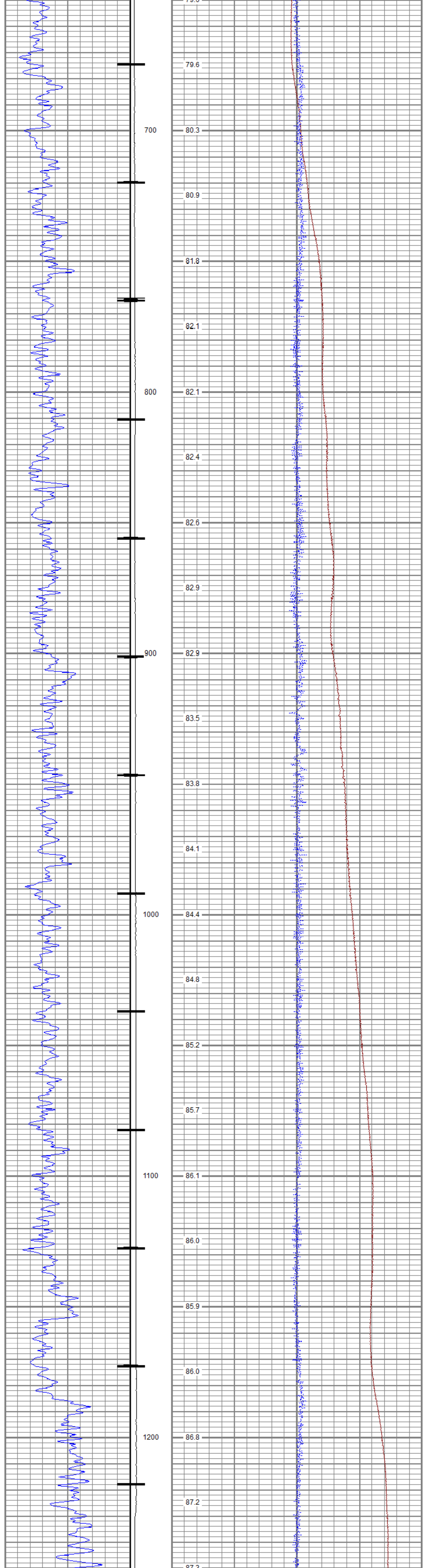
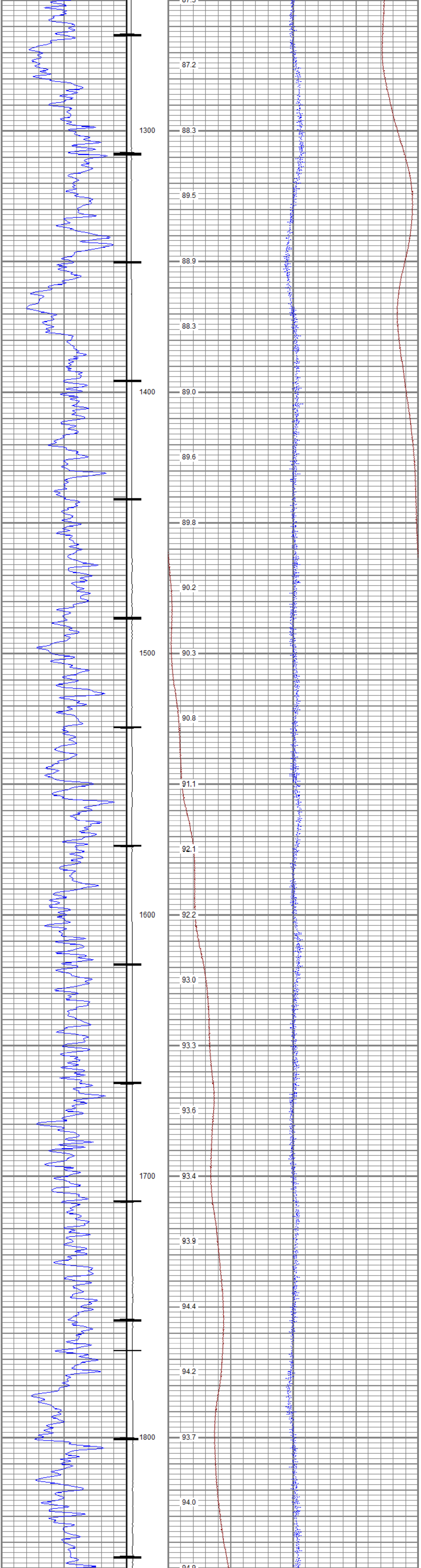
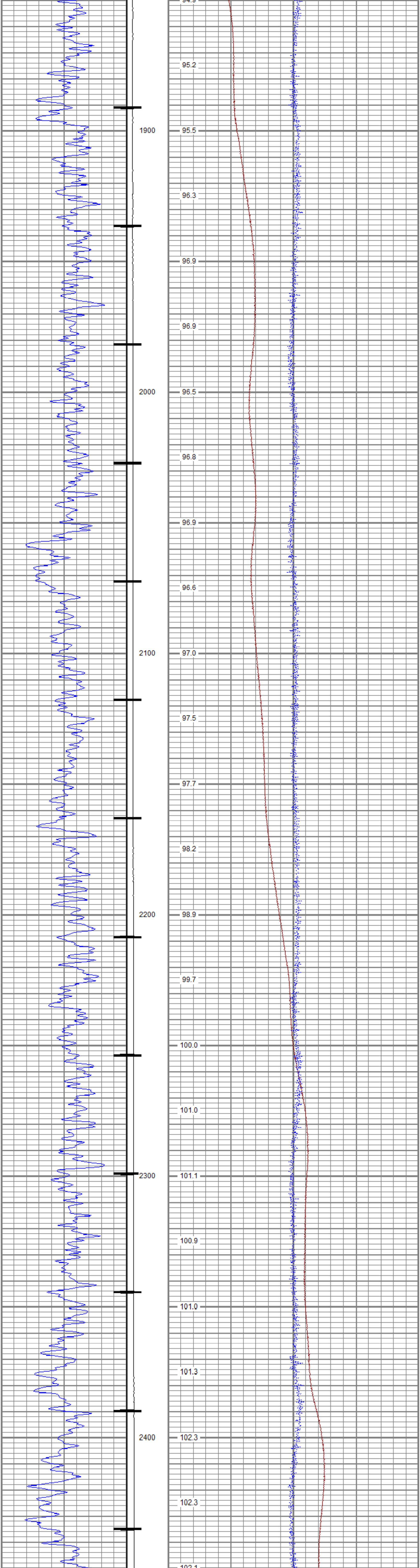
Dataset Pathname	Main1
Presentation Format	ros_temp_tep
Dataset Creation	Mon Jul 24 00:56:45 2017
Charted by	Depth in Feet scaled 1:240

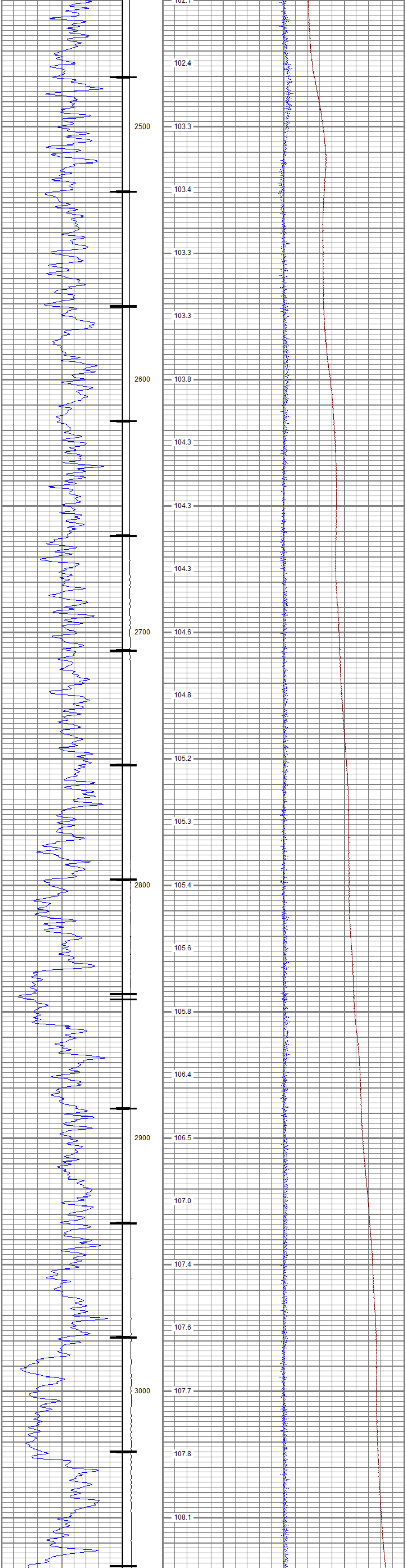
0	Gamma Ray (GAPI)	140	LTEN	50	TEMP (degF)	70
Casing Collar Locator			0 (lb2500	-1	DTMP (degF)	1
				TEMP (degF)		

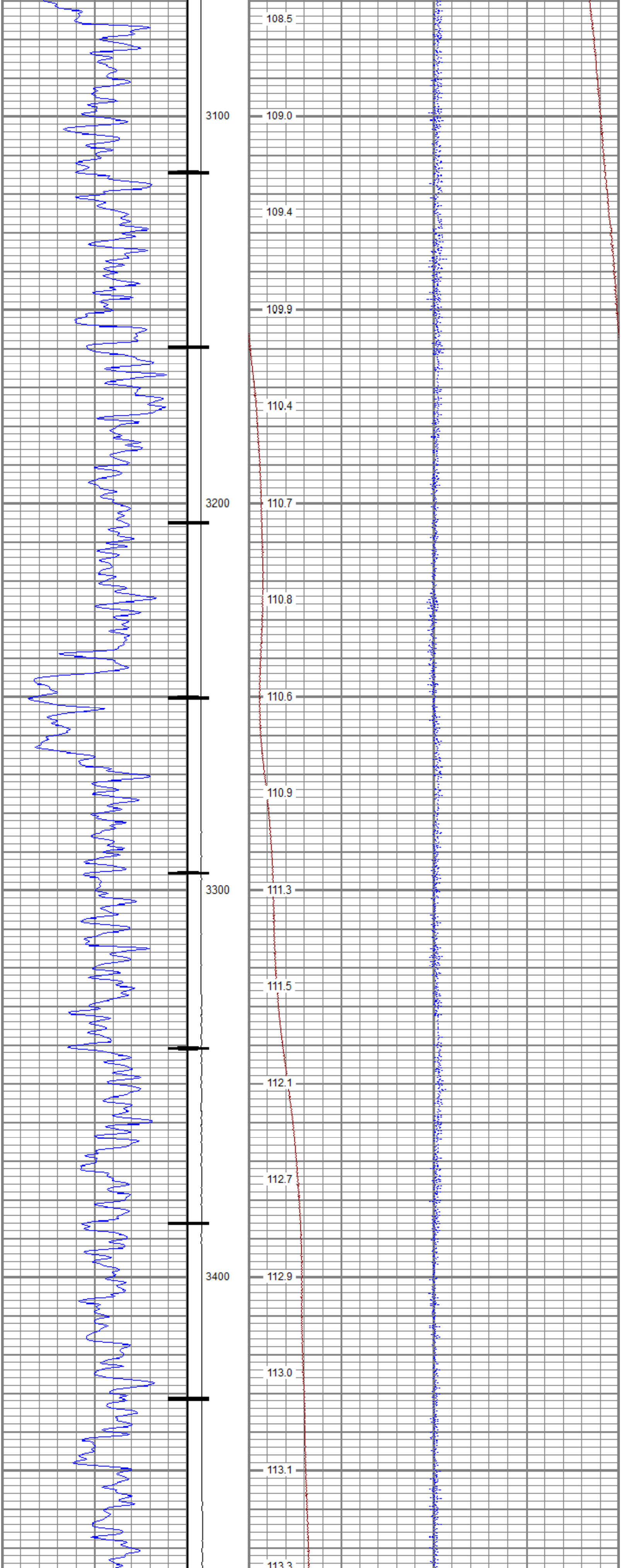


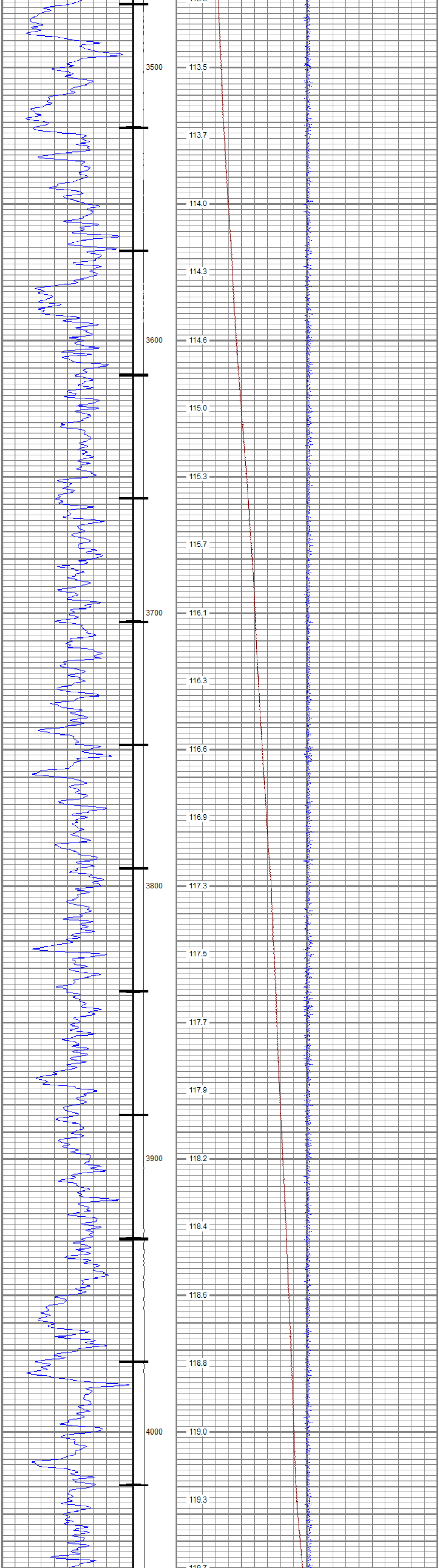








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114.0
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3600
114.6
115.0
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116.6
116.9
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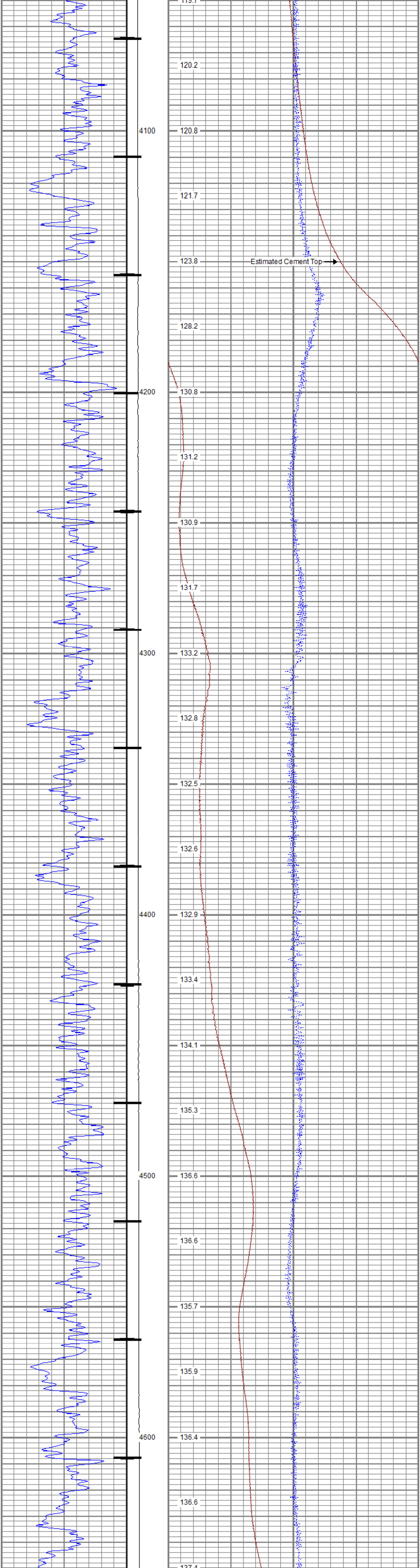
118.4
118.6
118.8
4000
119.0
119.3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120.2
4100
120.8
121.7
123.8
Estimated Cement Top
128.2
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130.8
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131.7
4300
133.2
132.8
132.5
132.6
4400
132.9
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136.4
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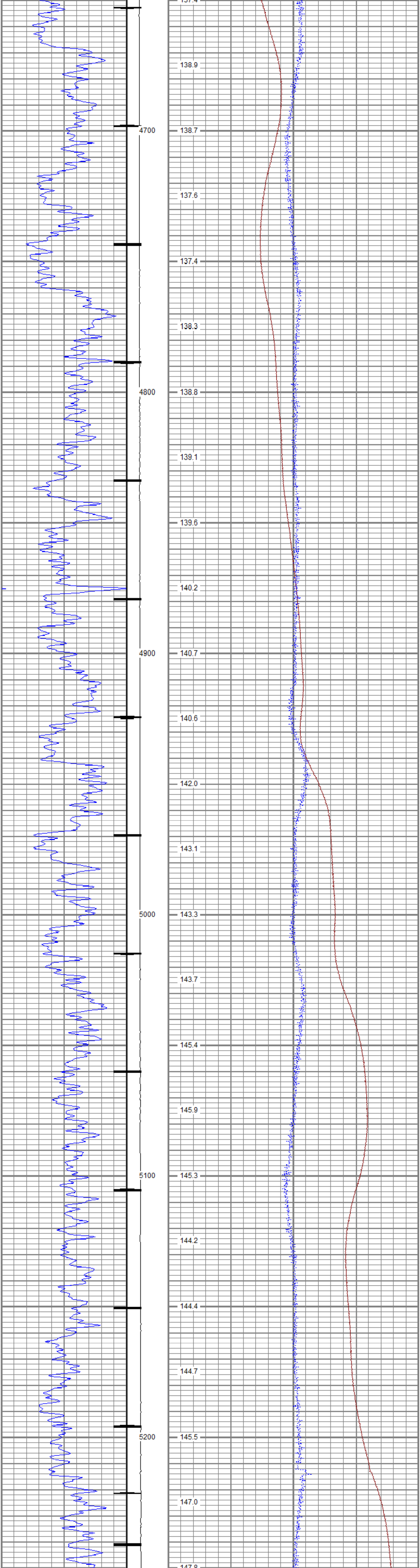
137.4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140.6
142.0
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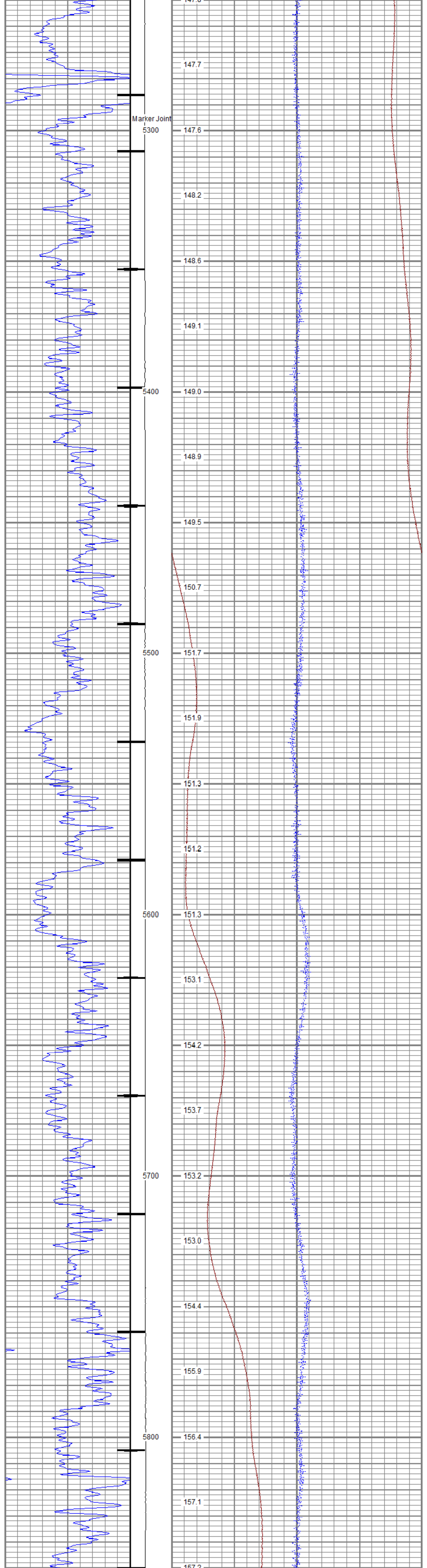
147.0


Marker Joint
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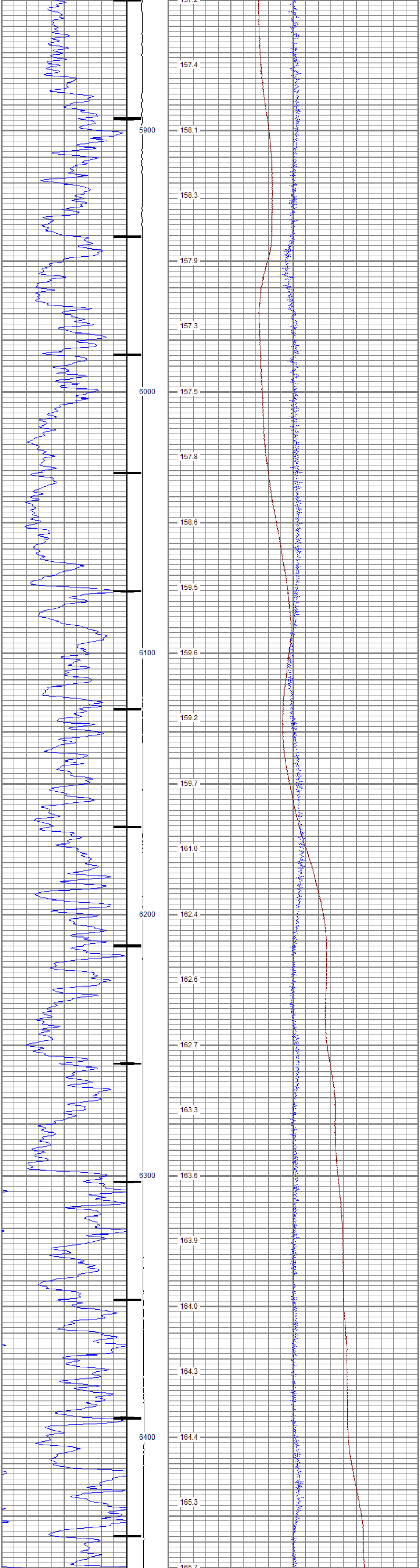
157.1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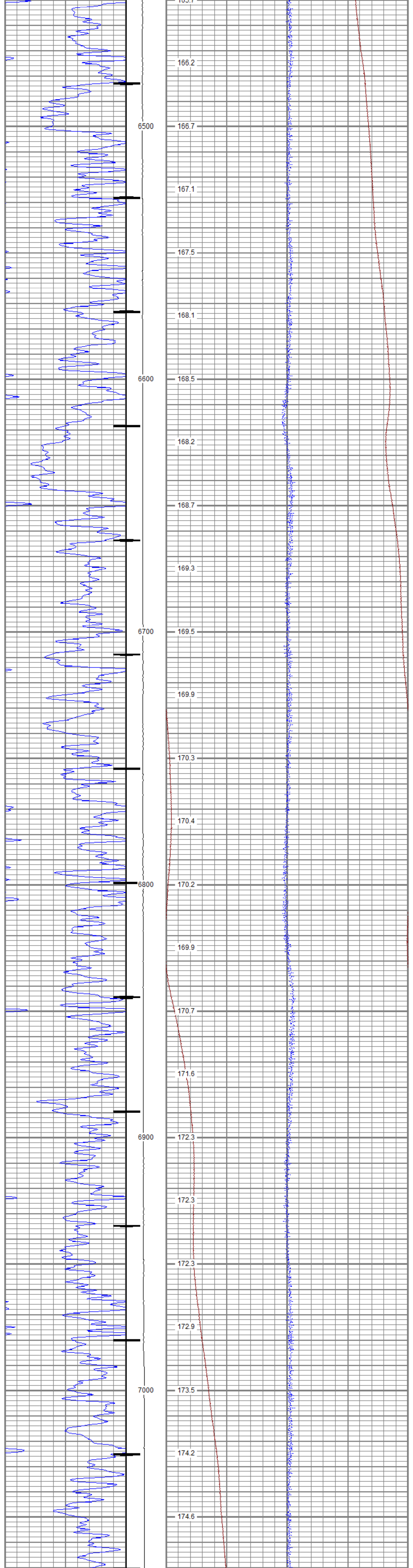
165.3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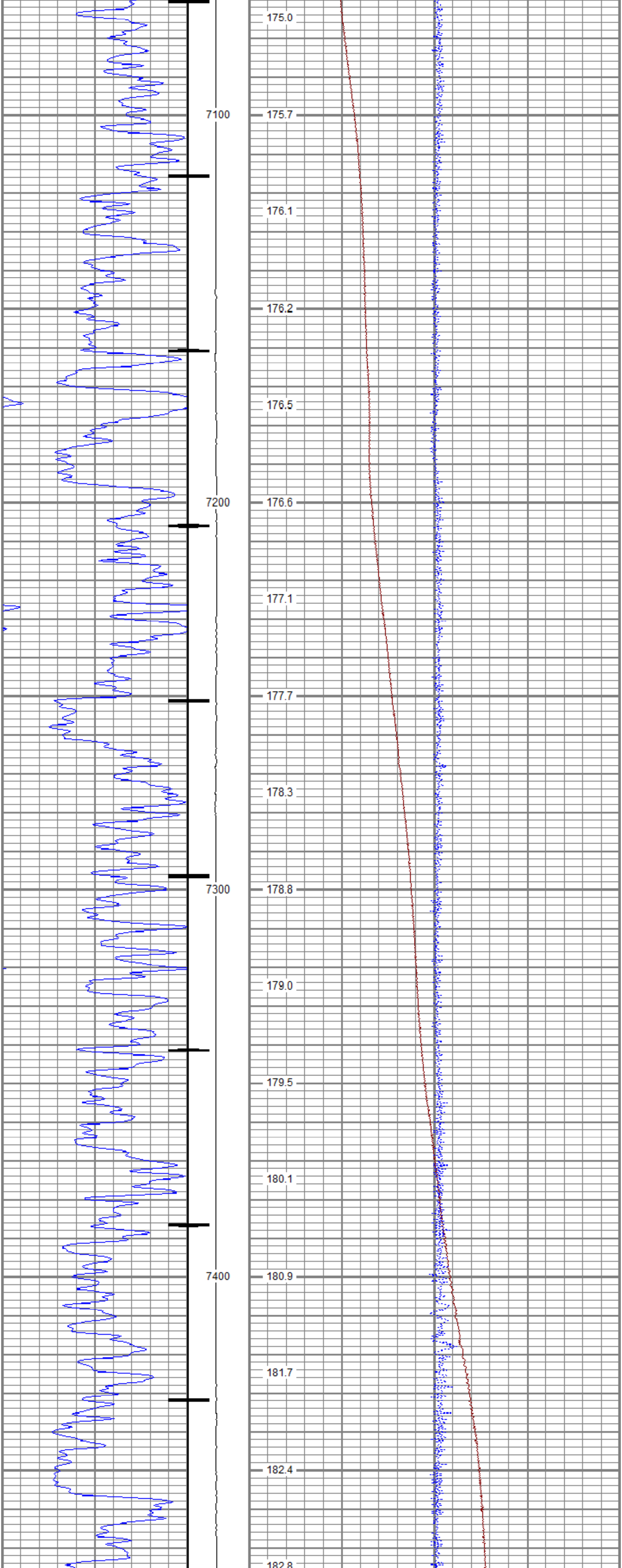
174.6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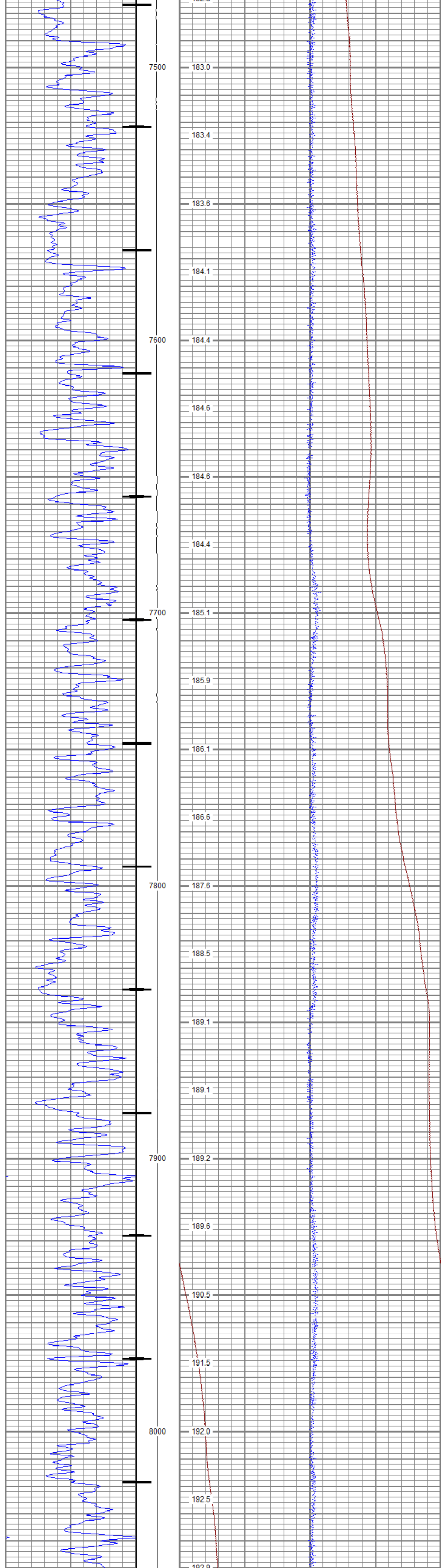

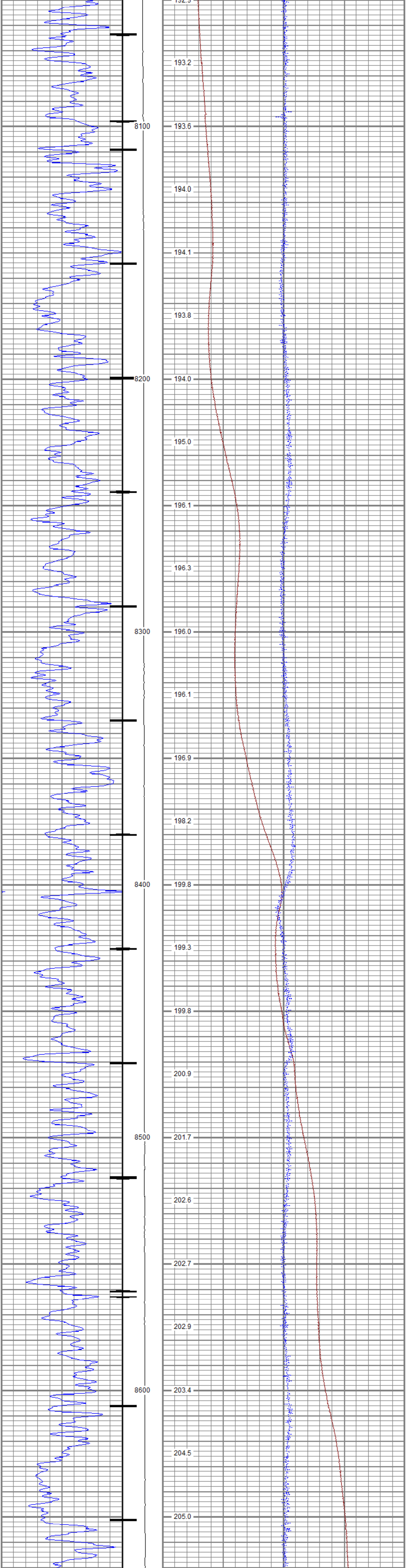

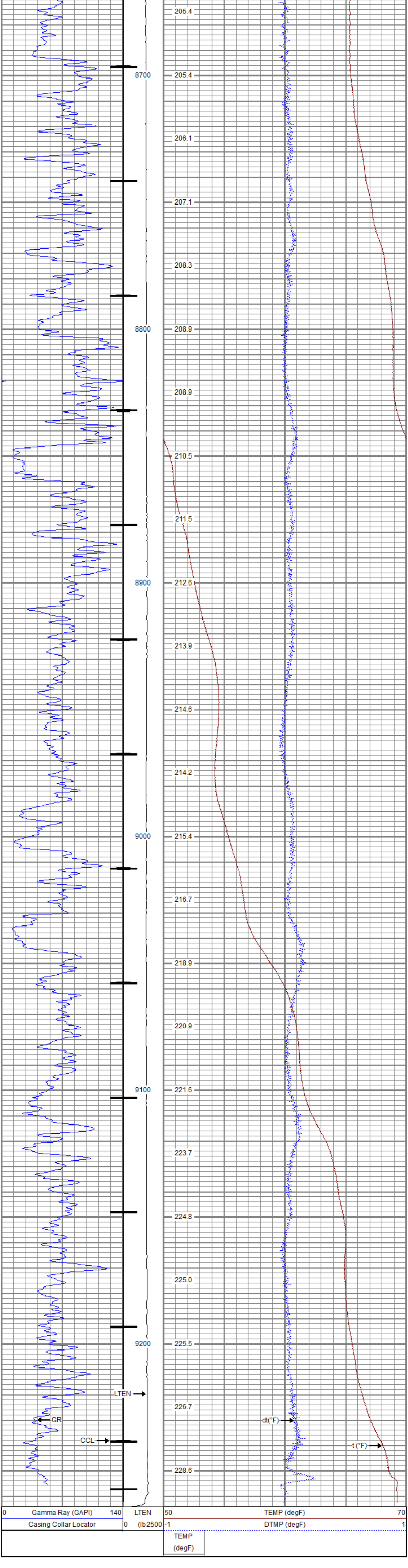

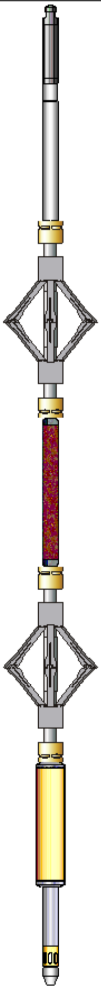

Sensor	Offset (ft)	Description	Length (ft)	O.D. (in)	Weight (lb)
		Titan_Electric_Cable_Heads-Titan_1-11/1 Electric Cable Head with 1" Fishing Neck	1.03	1.69	5.40
		UW_AGS-UW_AGS_001 (219135) Sondex Adapter - GO Box to Sondex Pin	0.21	1.69	1.00
		UW_XTU-UW_XTU_002 (211461) Crossover Ultrawire Toolbus to Ultralink	1.58	1.69	6.50
		DSS_RAC-RAC_5-Arm 5 Arm 2-3/4" Roller Centralizer	2.55	2.75	32.00
		UW_PGR-UW_PGR_020 (10013902) Production Gamma Ray	1.92	1.69	9.50
GR	5.92				
		DSS_RAC-RAC_5-Arm 5 Arm 2-3/4" Roller Centralizer	2.55	2.75	32.00
		UW_CCL-UW_CCL_028 (10026421) 3-1/8" Ultrawire Casing Collar Locator	1.61	3.13	36.00
CCL	1.77				
TEMP	0.37				
HVOLTX	0.00				
ITEMPX	0.00	UW_PRT-PRT_016 (10025093) Platinum Resistance Thermometer	1.04	1.69	5.20
TSTAMP	0.00	UW_BUL-UW_BUL_006 (10019730) Sondex Ultrawire Bullnose Terminator	0.22	1.69	1.20

Dataset:	processed_tep_youberg sr 431-12_temp_07-24-17.db: field/well/run1/Main1
Total length:	12.71 ft
Total weight:	128.80 lb
O.D.:	3.13 in

Calibration Report

Database File	c:\programdata\warrior\data\tep_youberg sr 431-12_temp_07-24-2017\processed_tep_youberg sr 431-12_te
Dataset Pathname	Main1
Dataset Creation	Mon Jul 24 00:56:45 2017

Temperature Calibration Report

Serial Number: 10025093
Tool Model: PRT_016
Performed: Sun Oct 11 12:31:14 2015

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:	10013902	
Tool Model:	UW_PGR_020	
Performed:	(Not Performed)	
Calibrator Value:	1.0	GAPI
Background Reading:	0.0	cps
Calibrator Reading:	1.0	cps
Sensitivity:	1.0000	GAPI/cps

RELIANCE
OILFIELD SERVICES

Company	TEP Rocky Mountain LLC
Well	Youberg SR 431-12
Field	Rulison
County	Garfield
State	Colorado