Temperature Gamma Ray Casing Collar Log

Company	TEP Rocky Mountain LLC
Well	Federal RU 324-17
Field	Rulison
County	Garfield
State	Colorado

Company TEP Rocky Mountain LLC

Well Federal RU 324-17

Field Rulison

County Garfield State Colorado

Location: API # : 05-045-23746

SEC 17 TWP 7S RGE 93W

Other Services

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Elevation

K.B. 8389.6'
D.F. 8388.6'
G.L. 8365.6'

Permanent Datum	Ground Level	Elevation	8365.6'
Log Measured From	Kelly Bushing		24 FT
Drilling Measured From	Kelly Bushing		

Date	30-MAY-2018		
Run Number	One		
Depth Driller	10474 FT		
Depth Logger	10404 FT		
Bottom Logged Interval	10400 FT		
Top Log Interval	Surface		
Open Hole Size	8.750"		
Type Fluid	Fresh Water		
Density / Viscosity	8.34 lb/gal		
Max. Recorded Temp.	241°F		
Estimated Cement Top	4100 FT		
Time Well Ready	ROA		
Time Logger on Bottom	18:15		
Equipment Number	HD-0359		
Location	Grand Junction, CO		
Recorded By	A. Ellsworth		
Witnessed By	N. Burr		

	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	1136 FT
Intermediate #1	4 1/2	11.6	P-110	Surface	10425 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

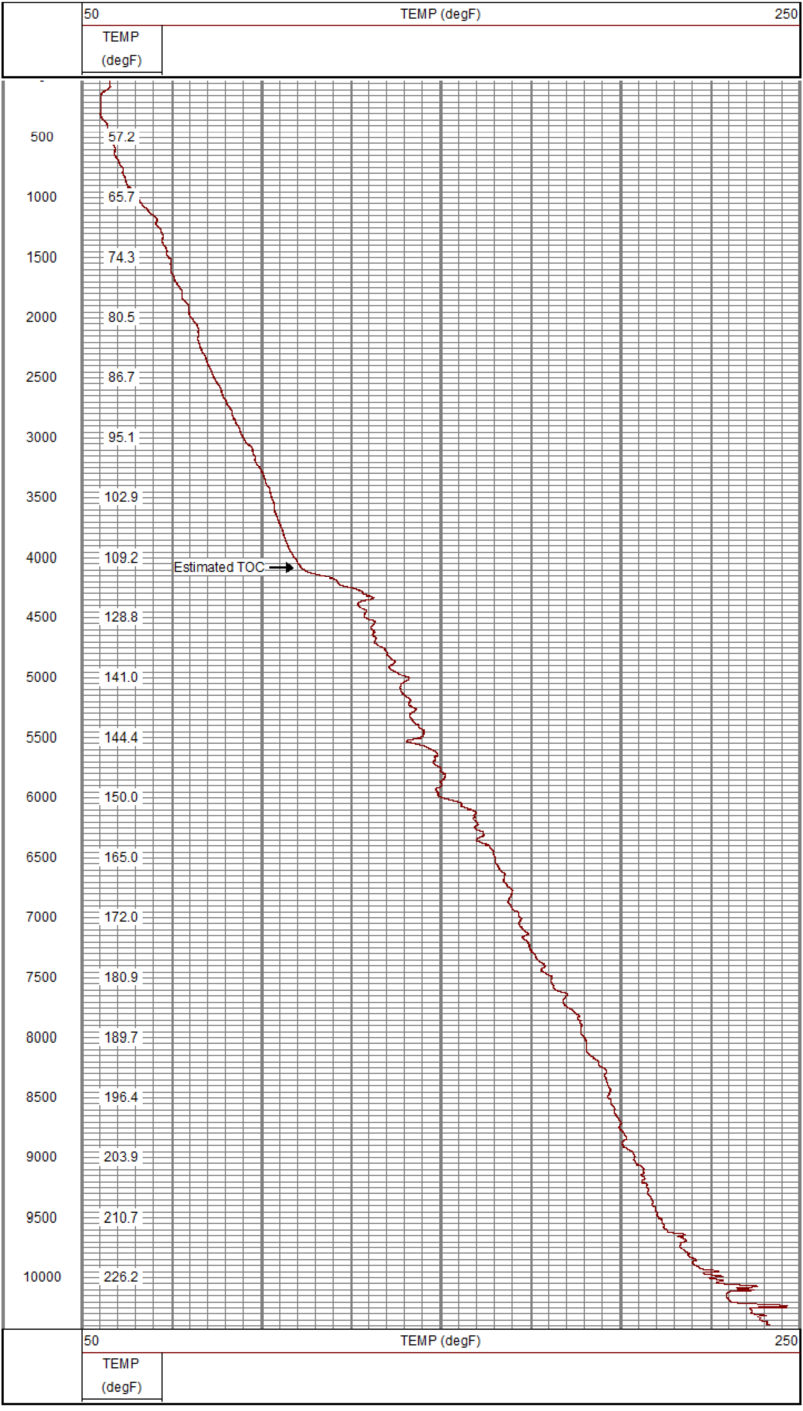
Log ran as per customer request
Depth referenced to Kelly Bushing at 24 FT
Marker Joint logged from 6484 FT to 6505 FT
Log ran from 10400 FT to Surface
Log ran with 0 PSI Surface Induced Pressure

Thank you for choosing Reliance Oilfield Services, LLC!!

Main Pass (Quick Look)

Recorded with 0 PSI Surface Induced Pressure

Database File	tep_federal ru 324-17_temp_05-30-18\processed_tep_federal ru 324-17_temp_05-30-18.db
Dataset Pathname	mainql
Presentation Format	ros_temp_ql_tep
Dataset Creation	Wed May 30 20:43:04 2018
Charted by	Depth in Feet scaled 1:10000

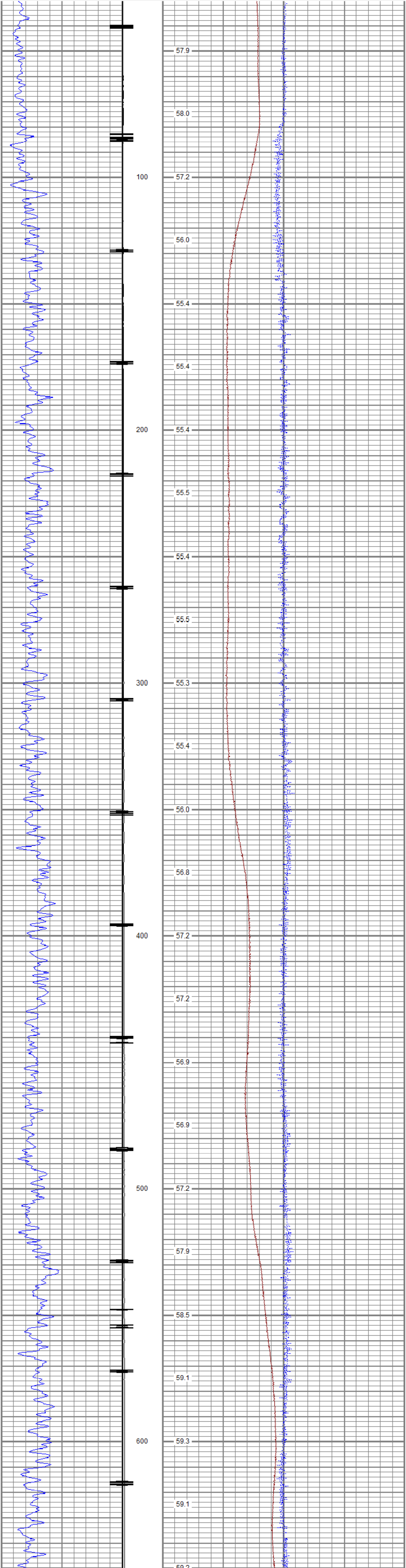


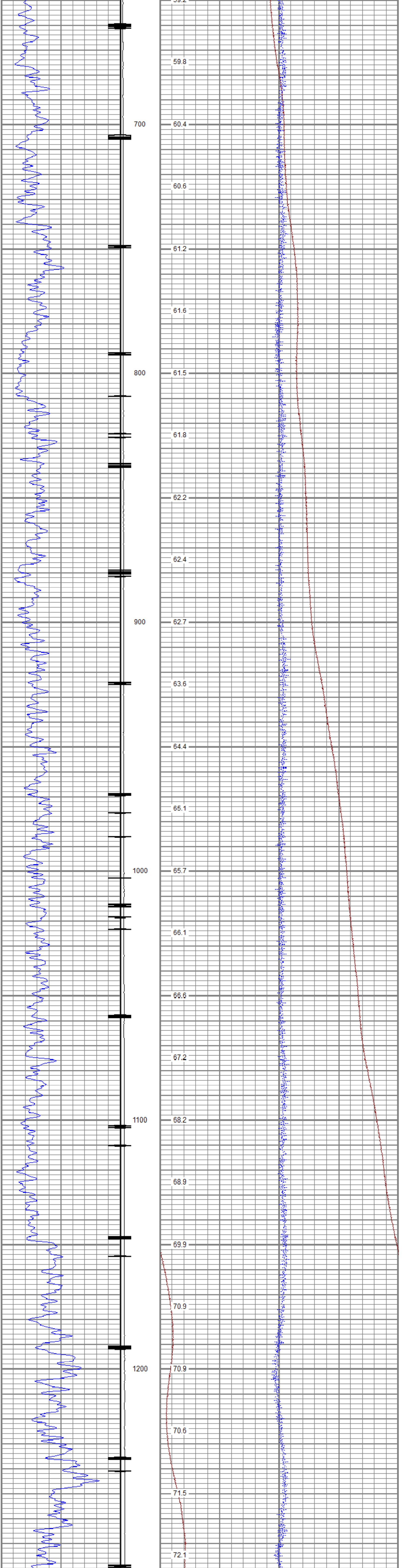
Main Pass

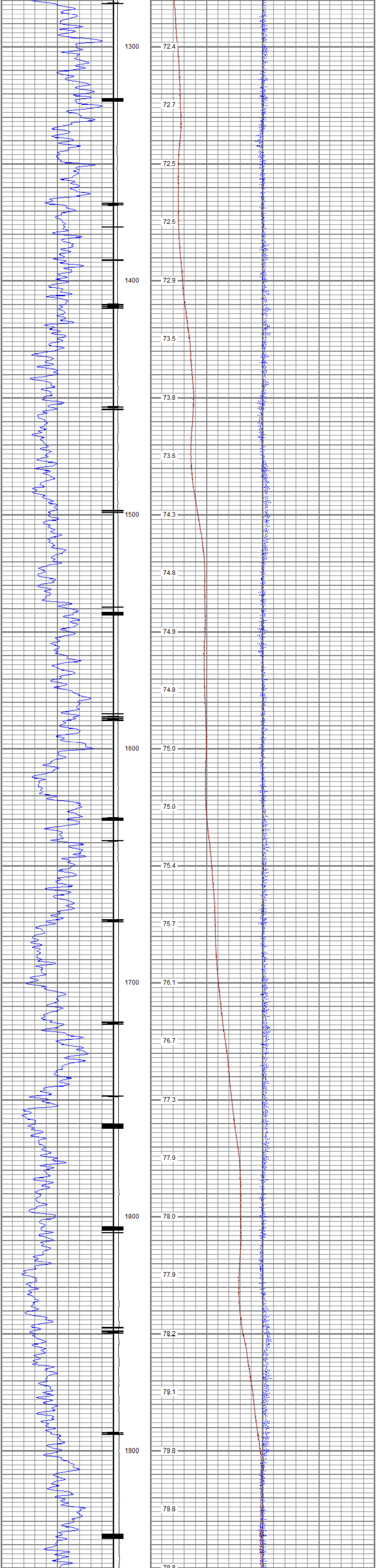
Recorded with 0 PSI Surface Induced Pressure

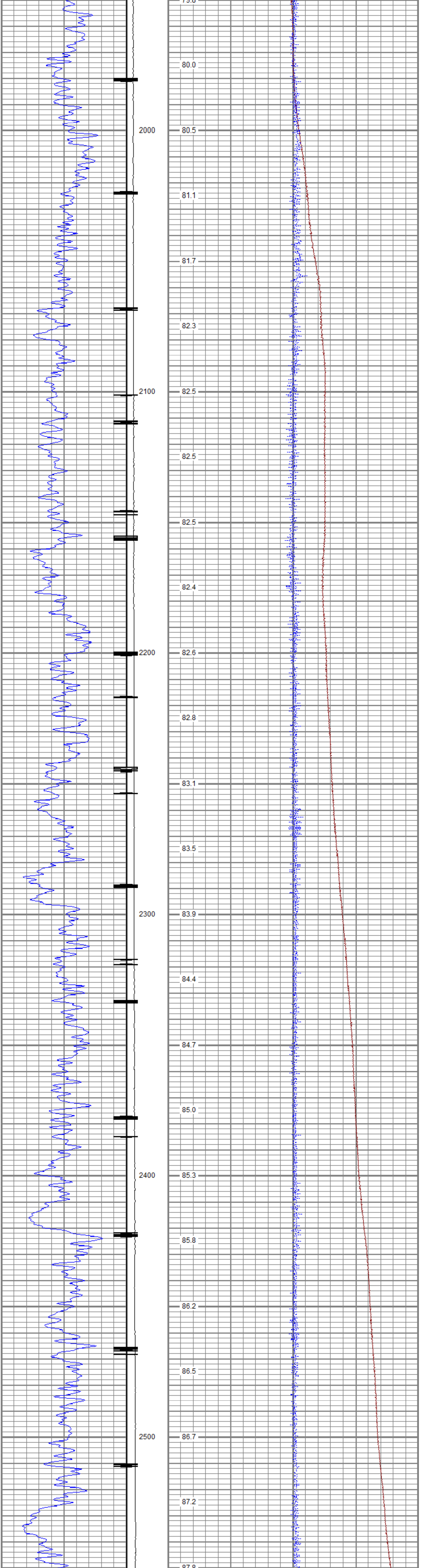
Database File	tep_federal ru 324-17_temp_05-30-18\processed_tep_federal ru 324-17_temp_05-30-18.db
Dataset Pathname	main
Presentation Format	ros_temp_tep
Dataset Creation	Wed May 30 19:14:18 2018
Charted by	Depth in Feet scaled 1:240

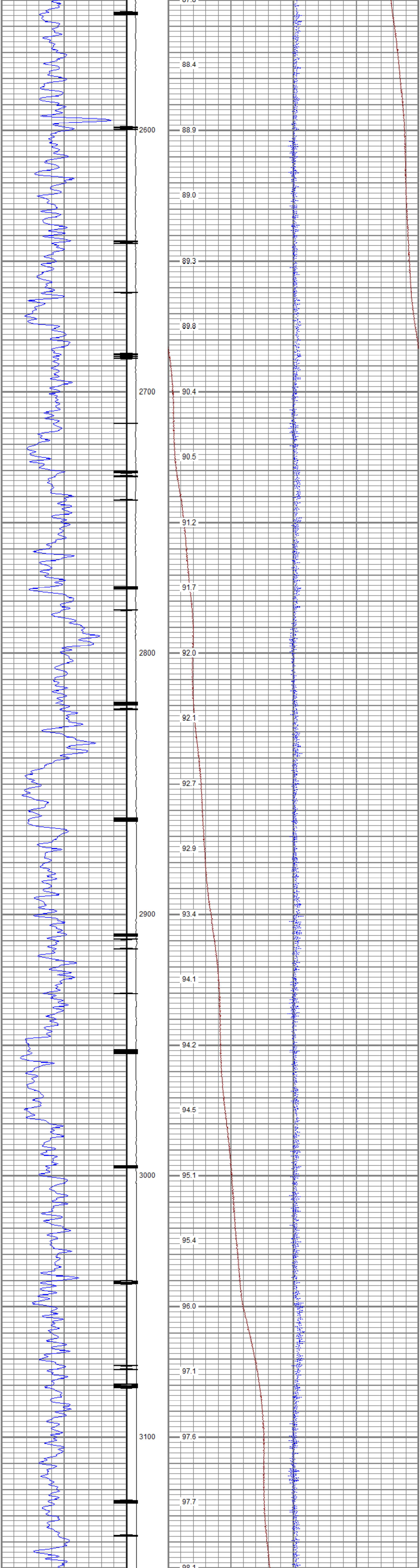
0 Gamma Ray (GAPI) 120	LTEN	50 TEMP (degF) 70
Casing Collar Locator	0 (lb2000	-1 DTMP (degF) 1
		TEMP (degF)

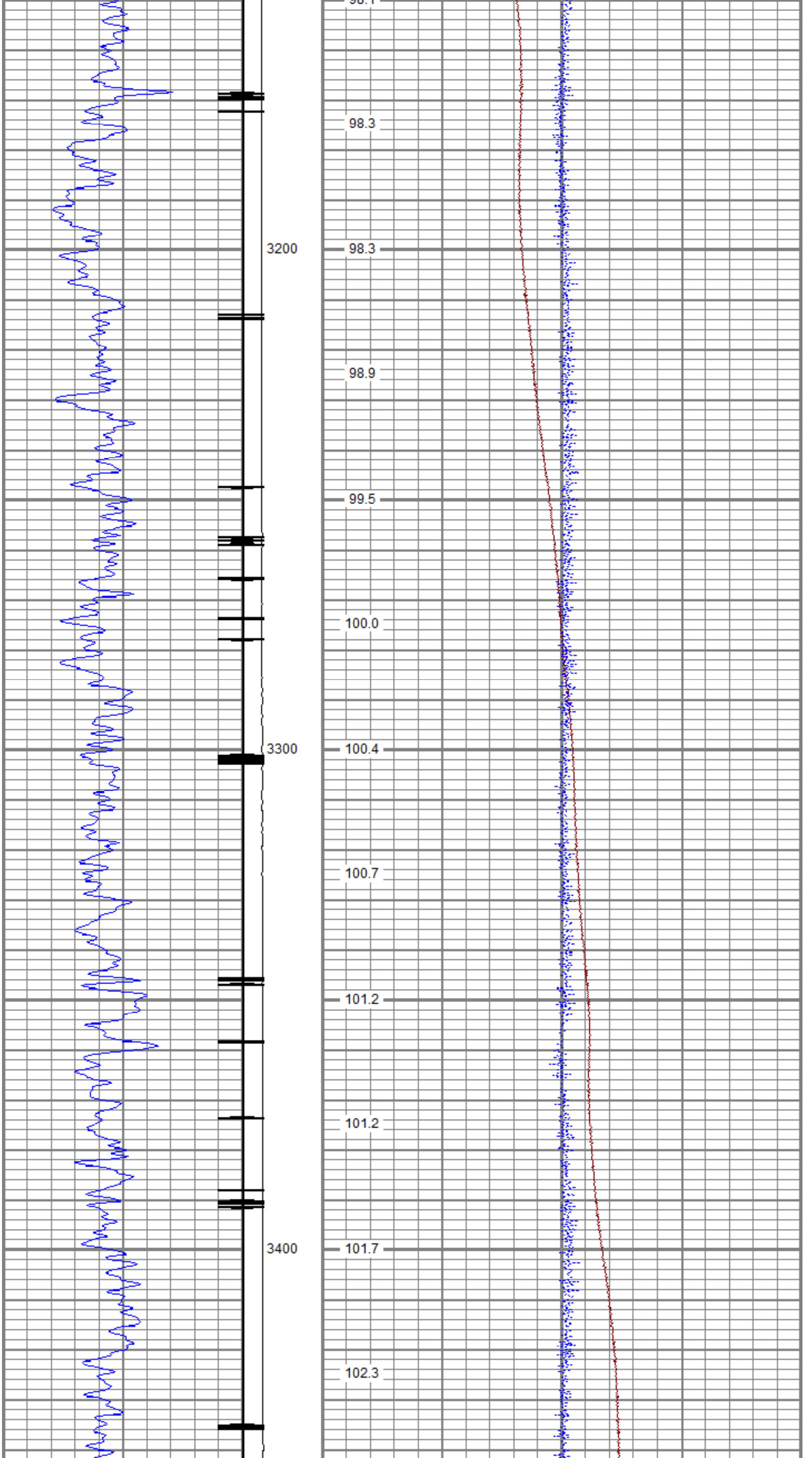


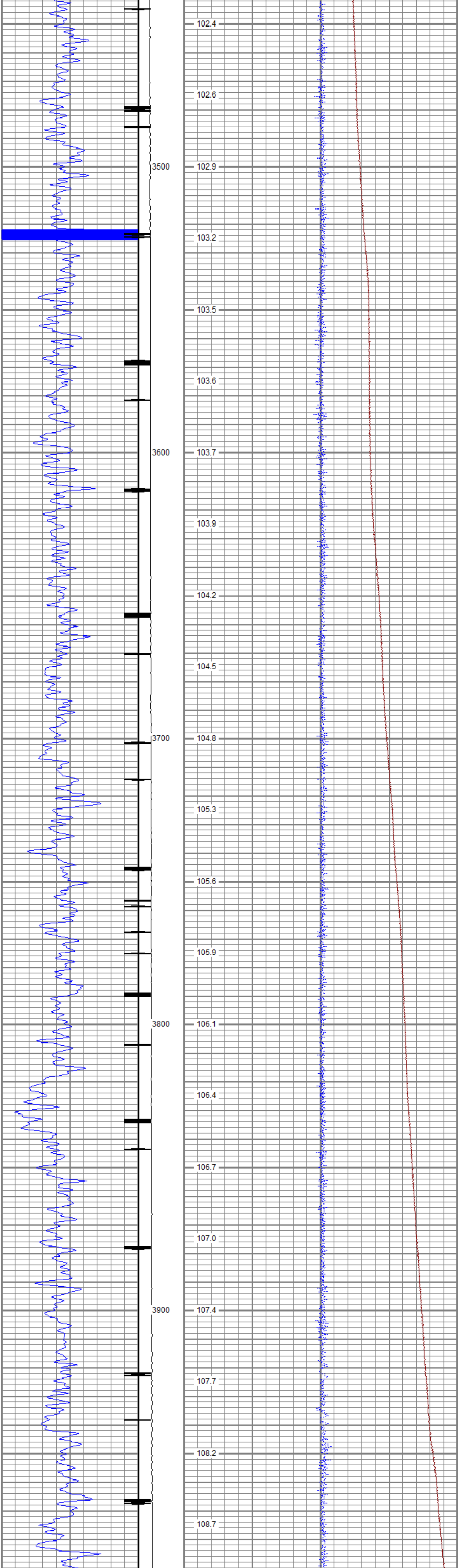








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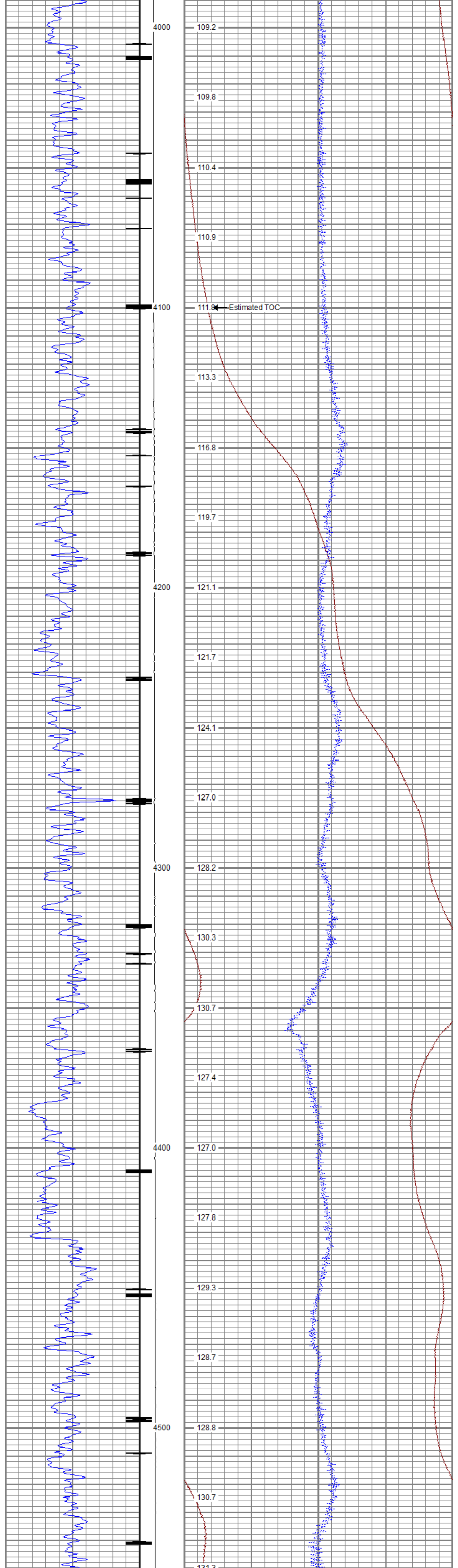
102.6
3500
102.9
103.2
103.5
103.6
3600
103.7
103.9
104.2
104.5
3700
104.8
105.3
105.6
105.9
3800
106.1
106.4
106.7
107.0
3900
107.4
107.7
108.2
108.7


4000
109.2
109.8
110.4
110.9
4100
111.8
Estimated TOC
113.3
116.8
119.7
4200
121.1
121.7
124.1
127.0
4300
128.2
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130.7
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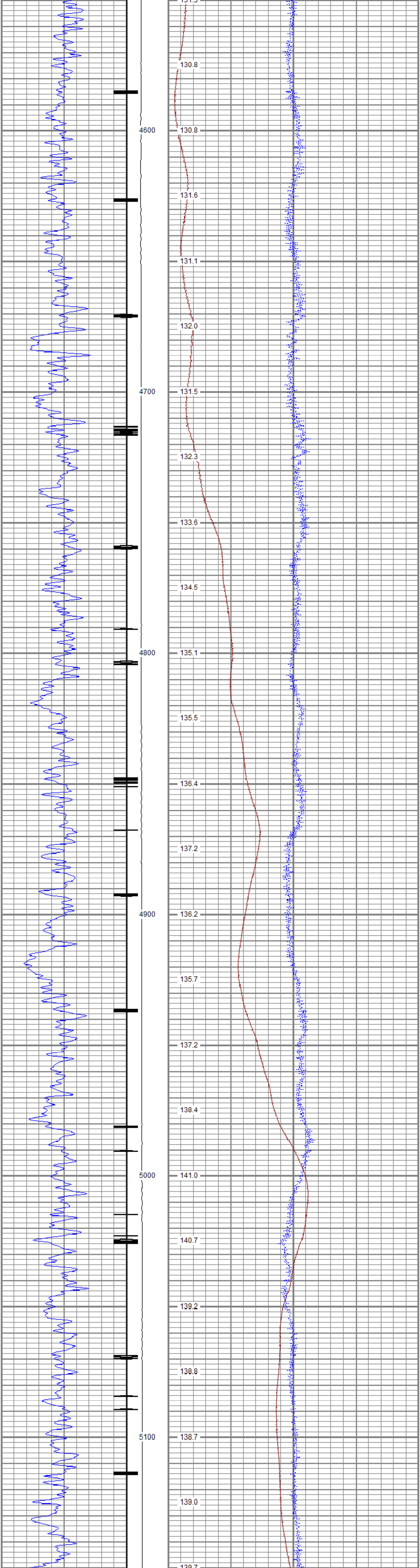
128.8
130.7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132.0
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135.1
135.5
136.4
137.2
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137.2
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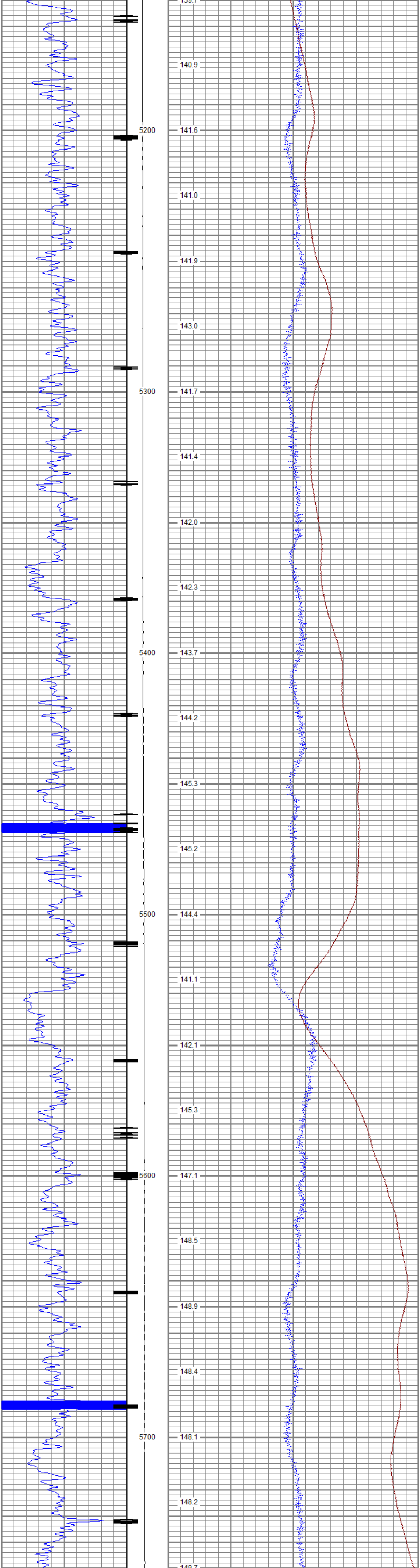
139.0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144.2
145.3
145.2
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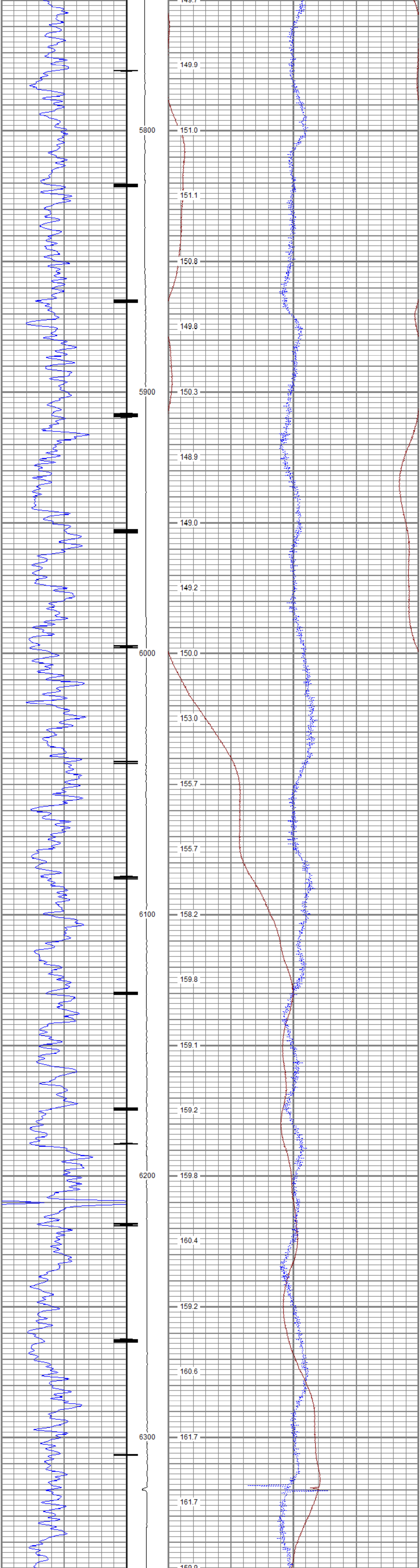
5700
148.1
148.2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153.0
155.7
155.7
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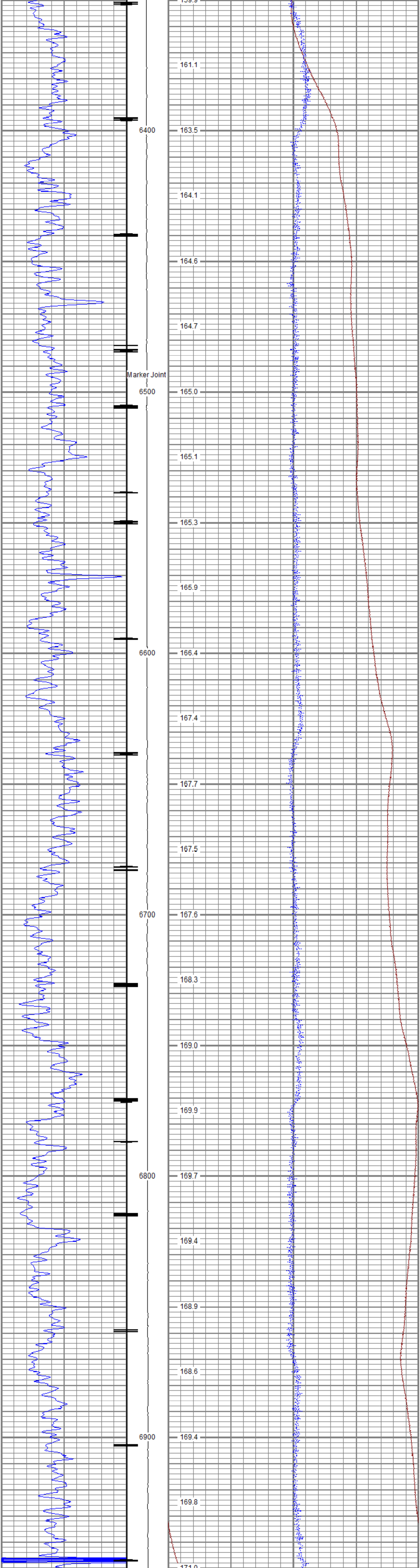
161.7
161.7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163.5
164.1
164.6
164.7
Marker Joint
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165.3
165.9
6600
166.4
167.4
167.7
167.5
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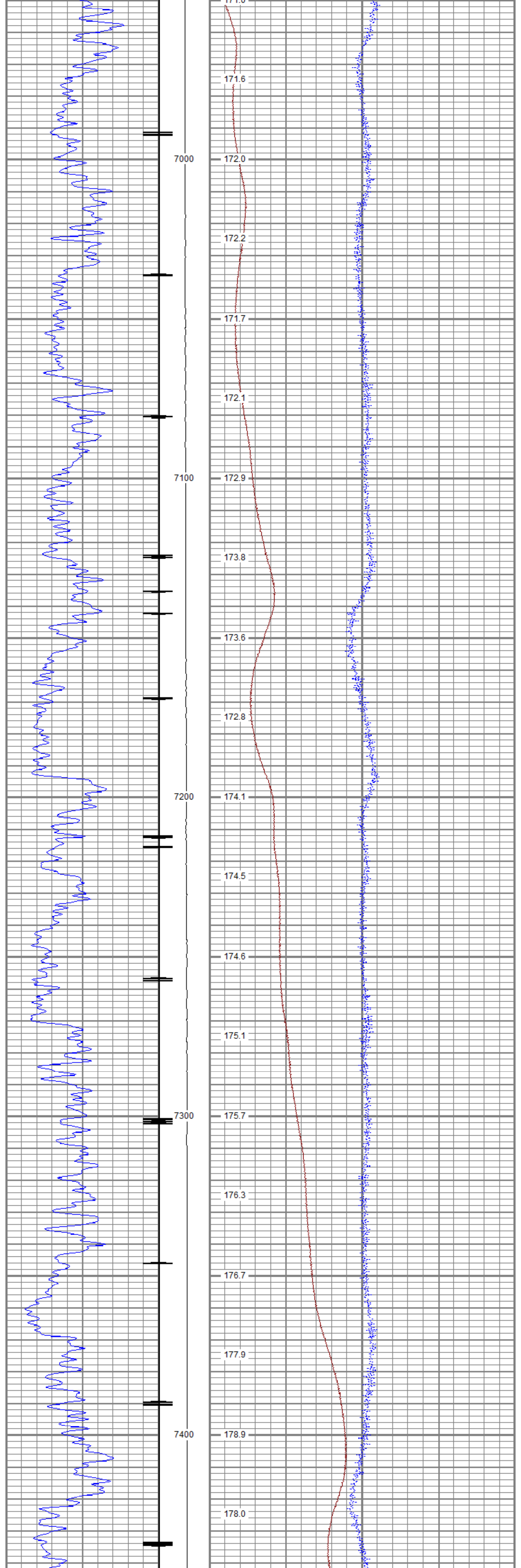
169.8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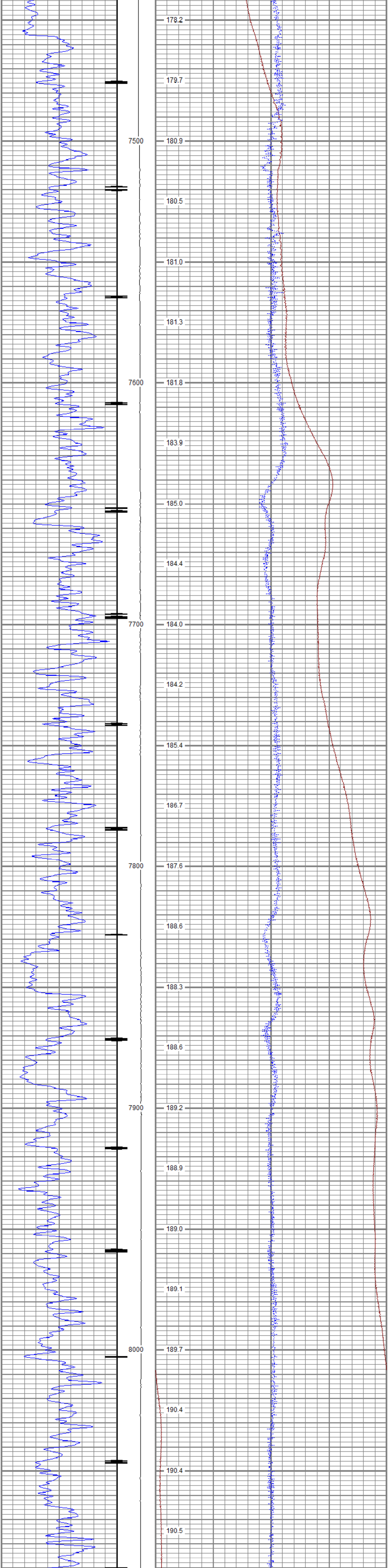
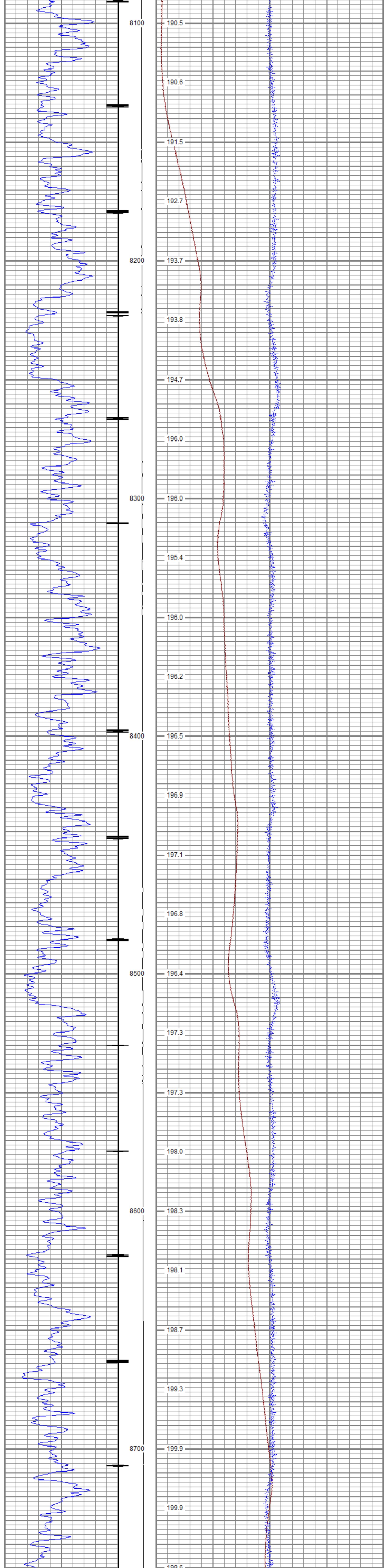
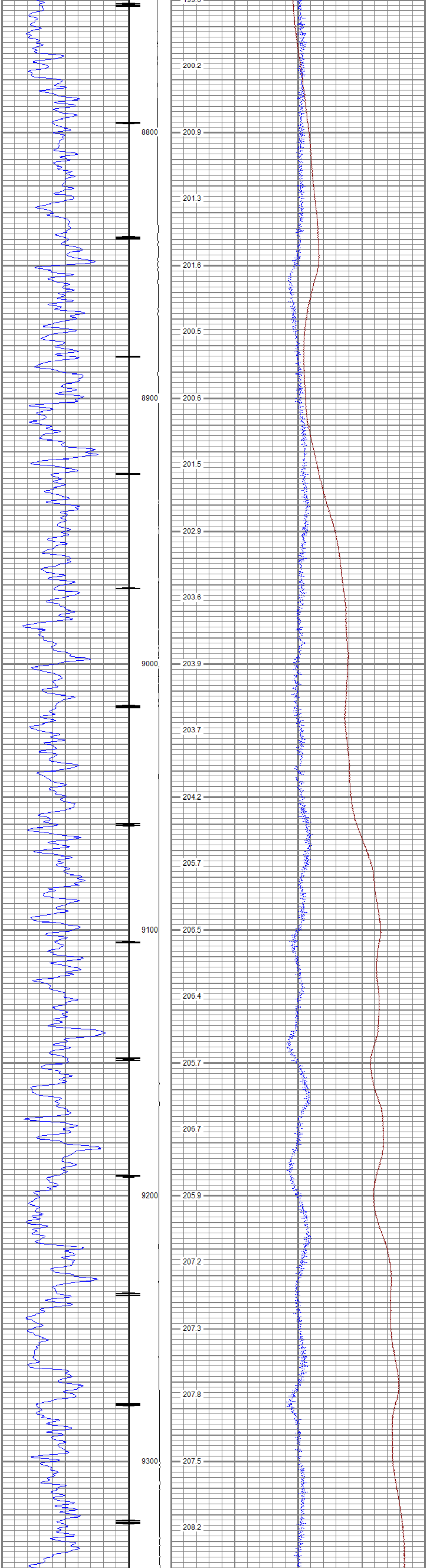
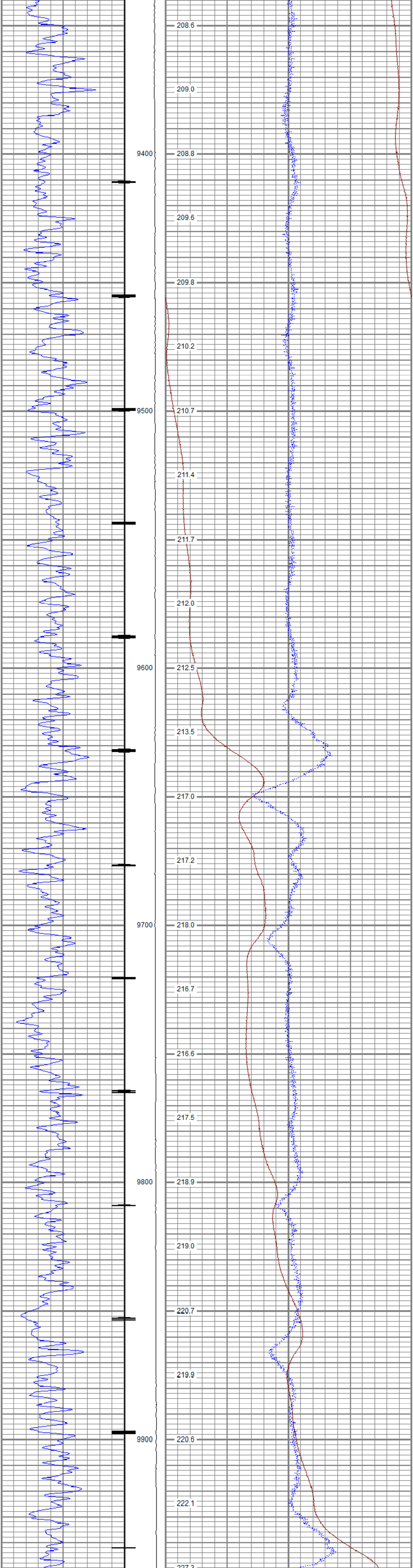
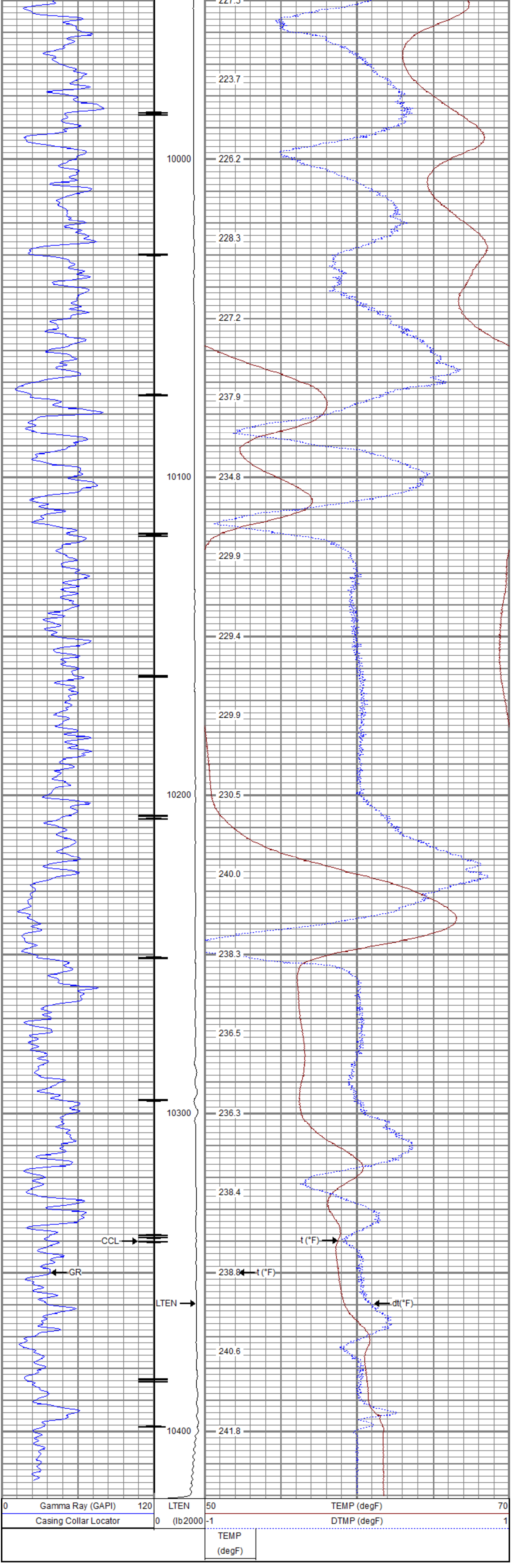
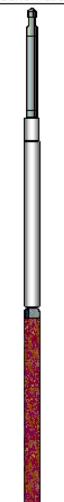










Sensor	Offset (ft)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb)
			Titan CHD-14375 GO Titan 1-7/16" Assembled Electric Cable Head w/ 1" Fishing Neck	1.03	1.44	3.60
			UW AGS-001 (211461) Sondex Adapter - GO Box to Sondex Pin	0.21	1.69	1.00
			UW XTU-002 (10012277) Crossover Ultrawire Toolbus to Ultralink	1.58	1.69	6.50
GR	3.37		UW PGR-020 (10019072) Production Gamma Ray	1.92	1.69	9.50
CCL	1.77		UW CCL-028 (10024821) 3-1/8" Ultrawire Casing Collar Locator	1.61	3.13	36.00
TEMP	0.37		UW PRT-016 (10025100) Platinum Resistance Thermometer	1.04	1.69	5.20
TSTAMP	0.00		UW BUL-006 (10019616) Sondex Ultrawire Bullnose Terminator Sub	0.22	1.69	1.20

Dataset:	PROCESSED_TEP_Federal RU 324-17_Temp_05-30-18.db: field/well/run1/mainql
Total length:	7.62 ft
Total weight:	63.00 lb
O.D.:	3.13 in

Calibration Report

Database File	C:\ProgramData\Warrior\Data\TEP_Federal RU 324-17_Temp_05-30-18\PROCESSED_TEP_Federal RU 32
Dataset Pathname	mainql
Dataset Creation	Wed May 30 20:43:04 2018

Temperature Calibration Report

Serial Number: 10025100
Tool Model: 016
Performed: Sun Nov 12 13:30:03 2017

Point #	Reading		Reference	
1	13249.00	cps	68.00	degF
2	18454.00	cps	104.00	degF
3	29735.00	cps	176.00	degF
4	41457.00	cps	248.00	degF
5	52851.00	cps	320.00	degF
6	59128.00	cps	356.00	degF
7		cps		degF
8		cps		degF
9		cps		degF
10		cps		degF

Gamma Ray Calibration Report

Serial Number:	10019072	
Tool Model:	020	
Performed:	Sun Nov 12 05:37:04 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 324-17
Field	Rulison
County	Garfield
State	Colorado