# Temperature
# Gamma Ray
# Casing Collar Log

RELIANCE OILFIELD SERVICES

Company TEP Rocky Mountain LLC
Well Youberg SR 22-12
Field Rulison
County Garfield
State Colorado

Company TEP Rocky Mountain LLC
Well Youberg SR 22-12
Field Rulison
County Garfield State Colorado
Location: API # : 05-045-23292
1904' FNL & 2121' FEL SWNE
SEC 12 TWP 7S RGE 94W
Other Services
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| | | | |
|---|---|---|---|
| Permanent Datum | Ground Level | Elevation 7254' | Elevation |
| Log Measured From | Kelly Bushing | 24 FT | K.B. 7278'<br>D.F. 7277'<br>G.L. 7254' |
| Drilling Measured From | Kelly Bushing | | |

| | |
|---|---|
| Date | 03-AUG-2017 |
| Run Number | One |
| Depth Driller | 9501 FT |
| Depth Logger | 9445 FT |
| Bottom Logged Interval | 9445 FT |
| Top Log Interval | Surface |
| Open Hole Size | 8.750" |
| Type Fluid | Fresh Water |
| Density / Viscosity | 8.34 lb/gal |
| Max. Recorded Temp. | 234° F |
| Estimated Cement Top | 3980 FT |
| Time Well Ready | ROA |
| Time Logger on Bottom | 09:00 |
| Equipment Number | HD-264 |
| Location | Grand Junction |
| Recorded By | A. Ellsworth |
| Witnessed By | D. Bonnette |

| Borehole Record | | | | Tubing Record | | | |
|---|---|---|---|---|---|---|---|
| Run Number | Bit | From | To | Size (in) | Weight (lb/ft) | From | To |
| | | | | | | | |

| Casing Record | Size (in) | Wgt (lb/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 | 9457 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 5601 FT to 5623 FT
Estimated Top of Cement is 3980 FT

Thank you for choosing Reliance Oilfield Services, LLC!!

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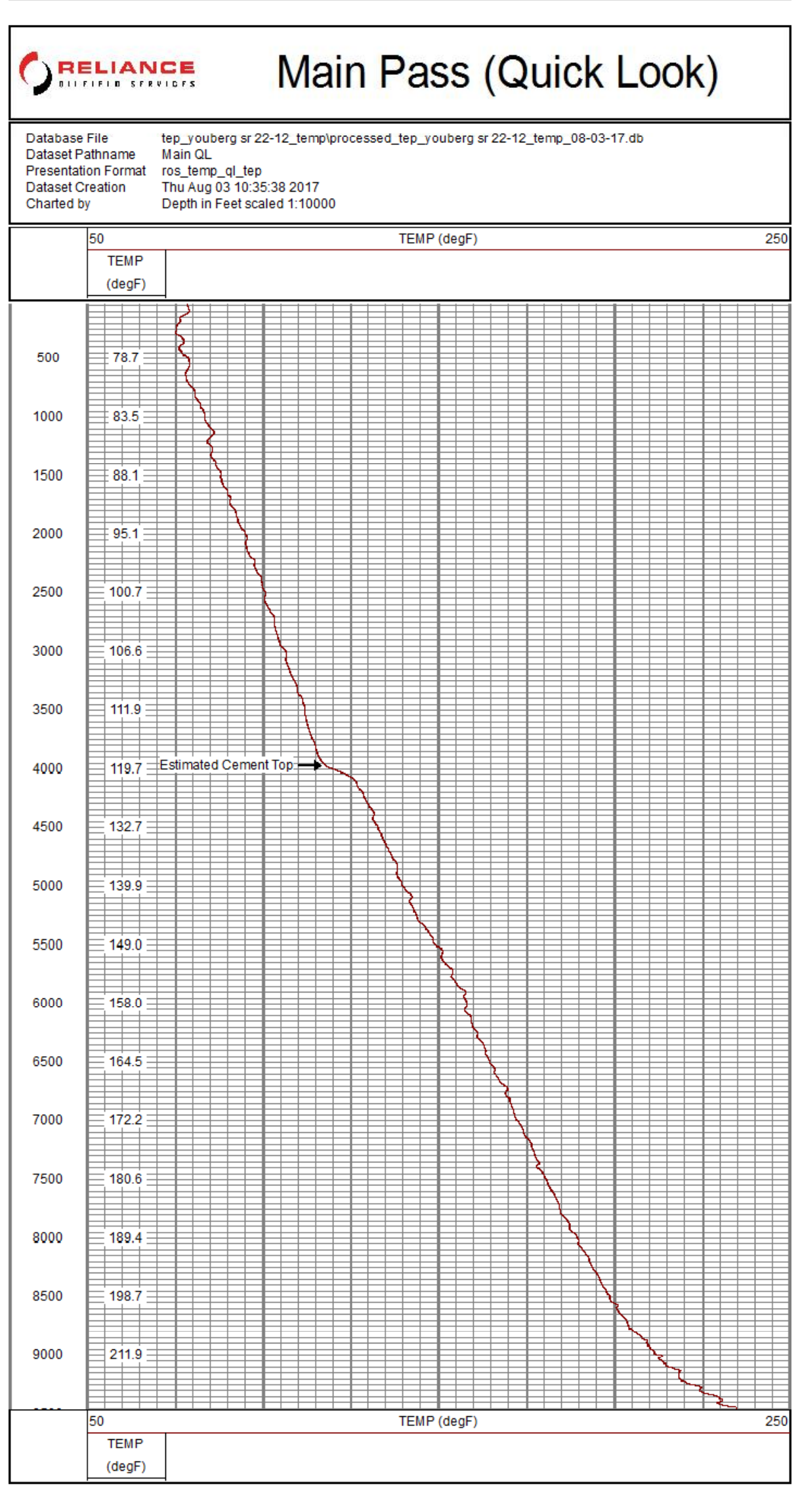
RELIANCE OILFIELD SERVICES

# Main Pass (Quick Look)

Database File tep_youberg sr 22-12_temp\processed_tep_youberg sr 22-12_temp_08-03-17.db
Dataset Pathname Main QL
Presentation Format ros_temp_ql_tep
Dataset Creation Thu Aug 03 10:35:38 2017
Charted by Depth in Feet scaled 1:10000



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RELIANCE OILFIELD SERVICES

# Main Pass

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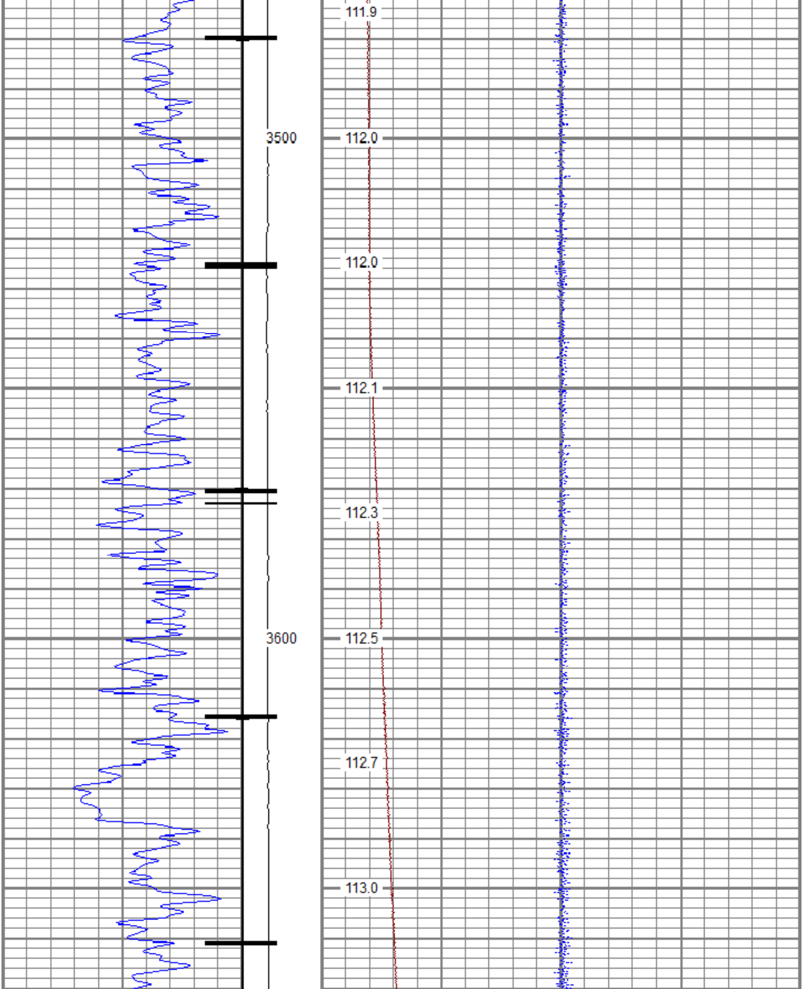
Dataset Pathname Main
Presentation Format ros_temp_tep
Dataset Creation Thu Aug 03 08:55:07 2017
Charted by Depth in Feet scaled 1:240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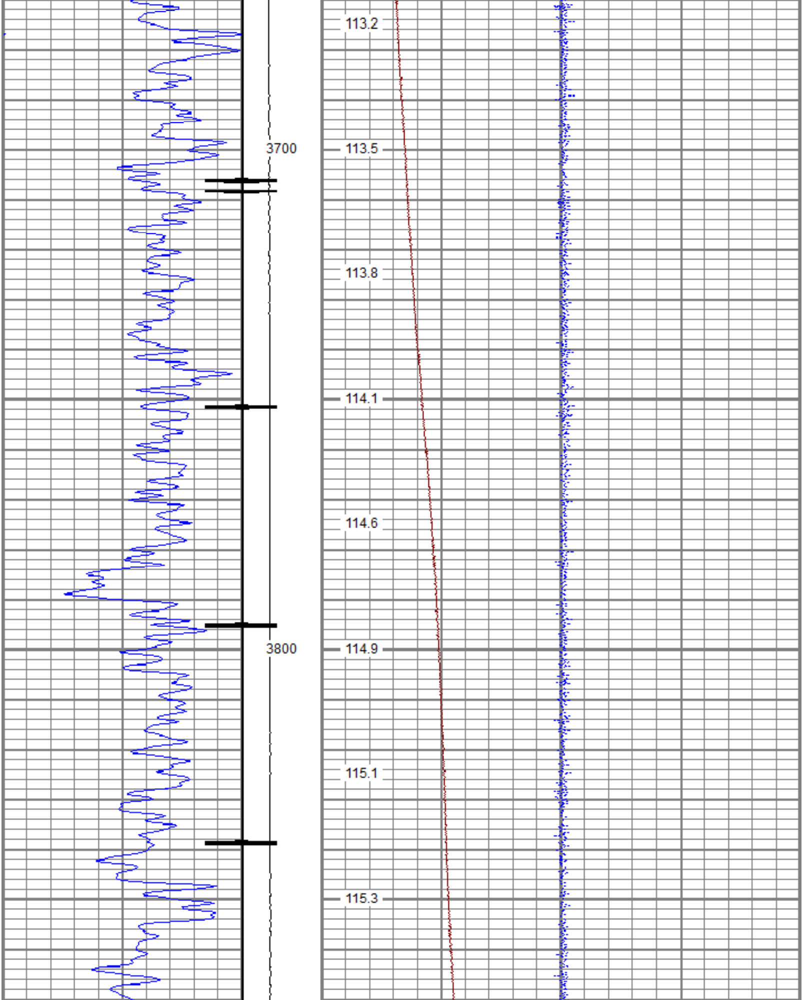
112.7
113.0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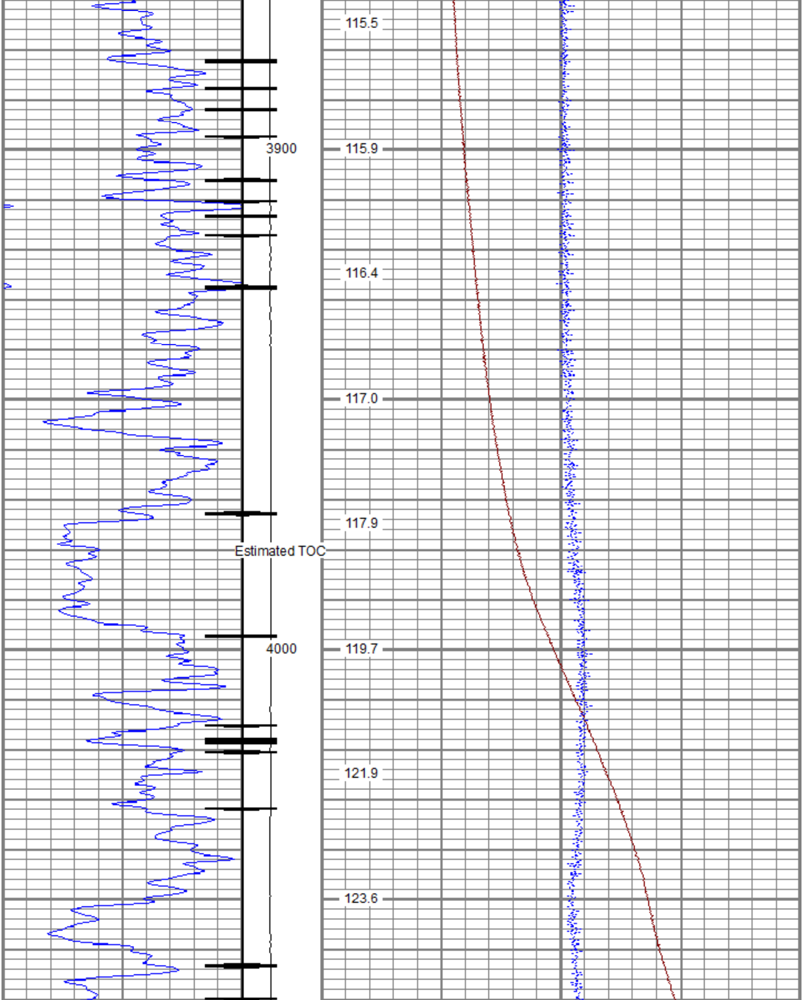
115.3



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4000
Estimated TOC
115.5
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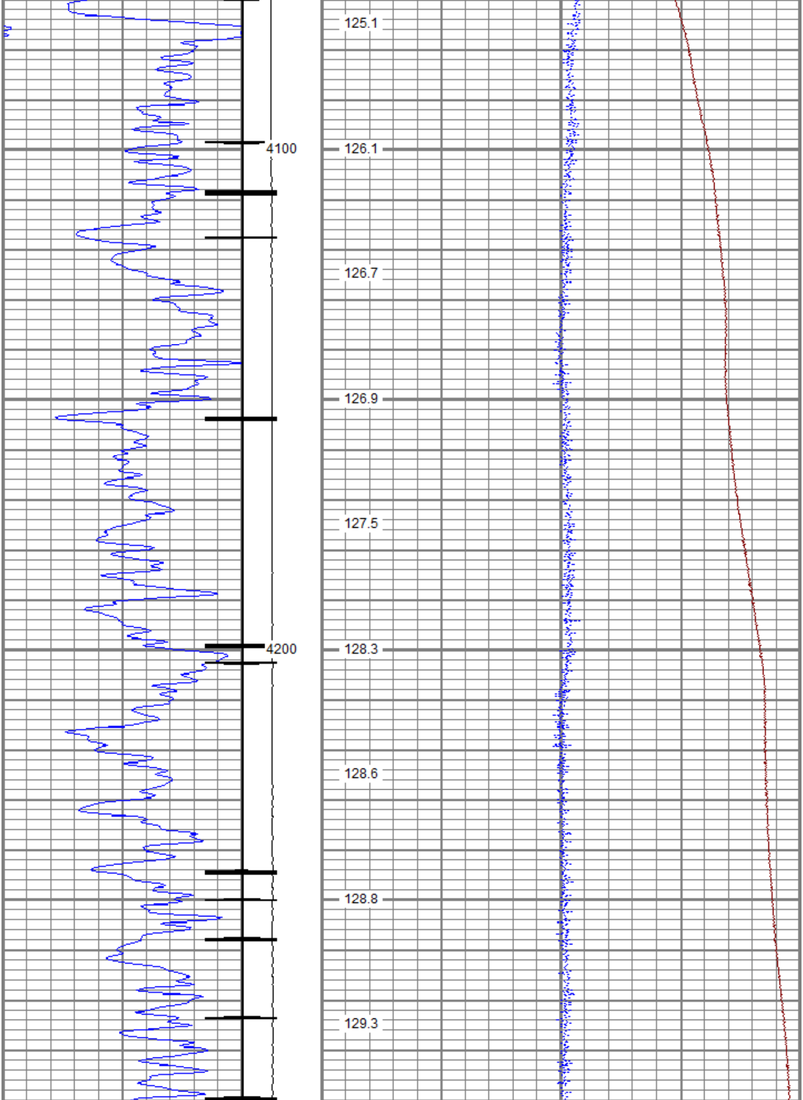
119.7
121.9
123.6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128.3
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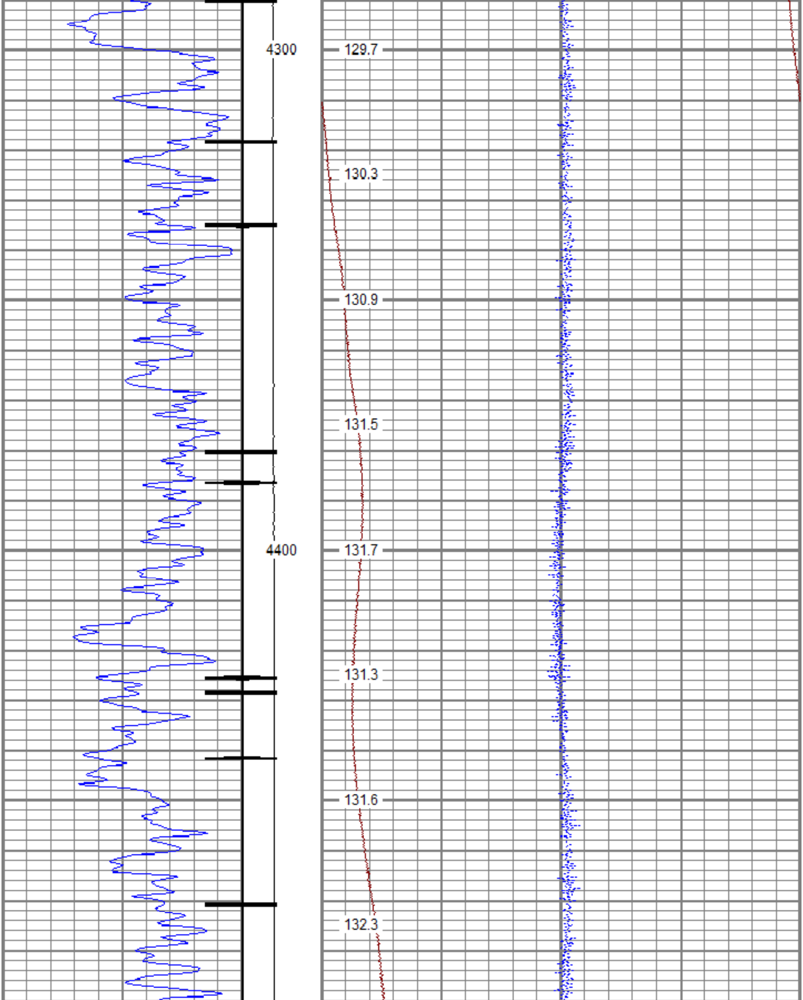
128.8
129.3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131.3
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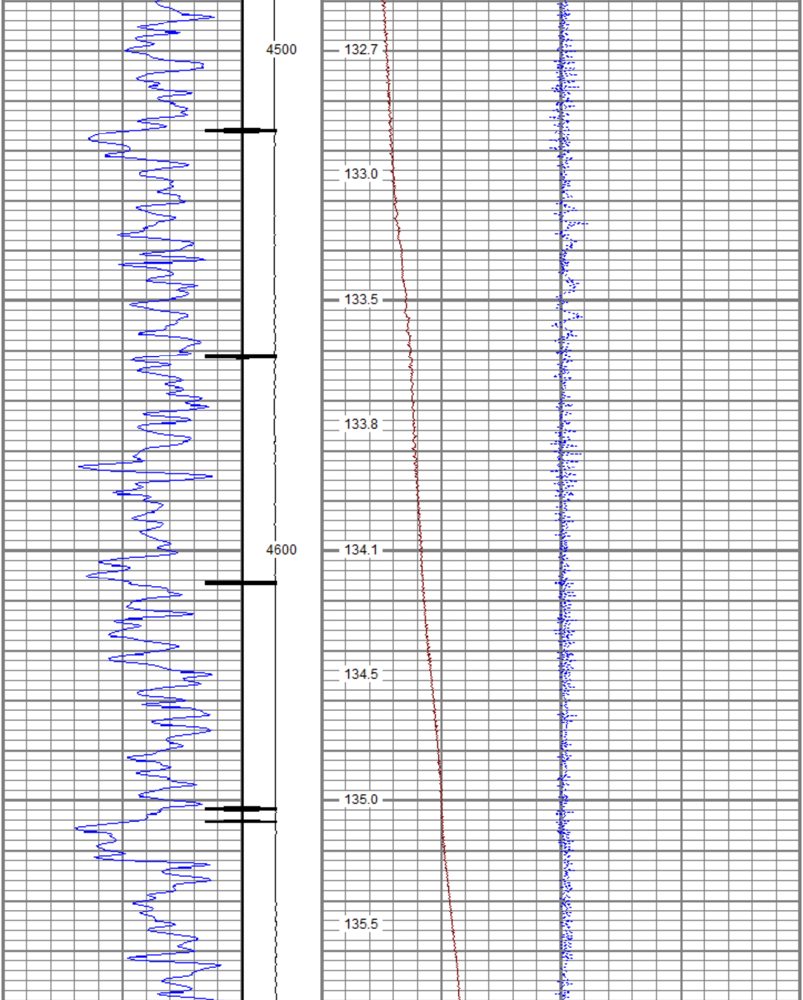
132.3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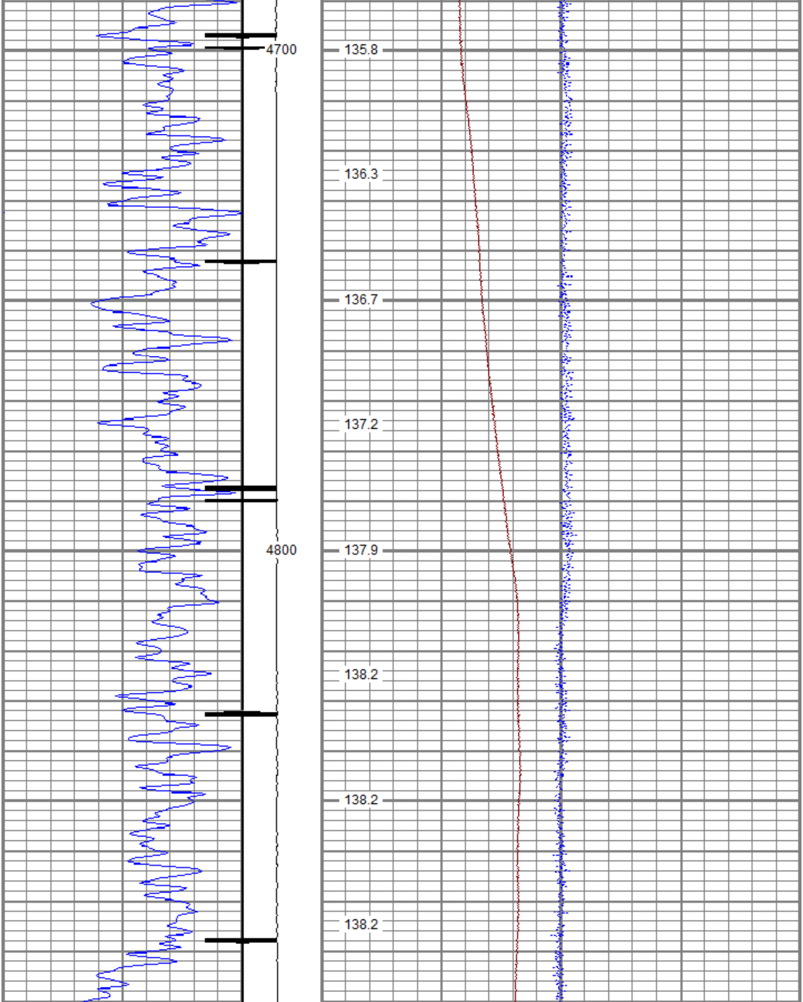
135.5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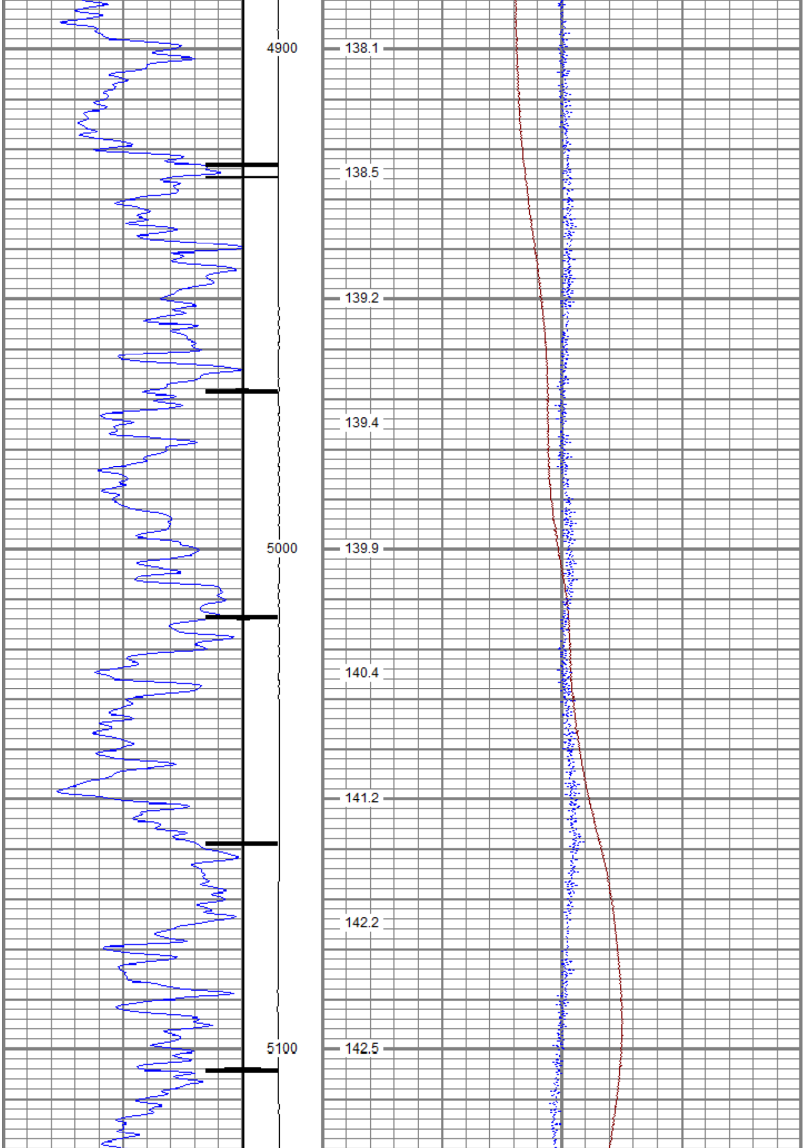
138.2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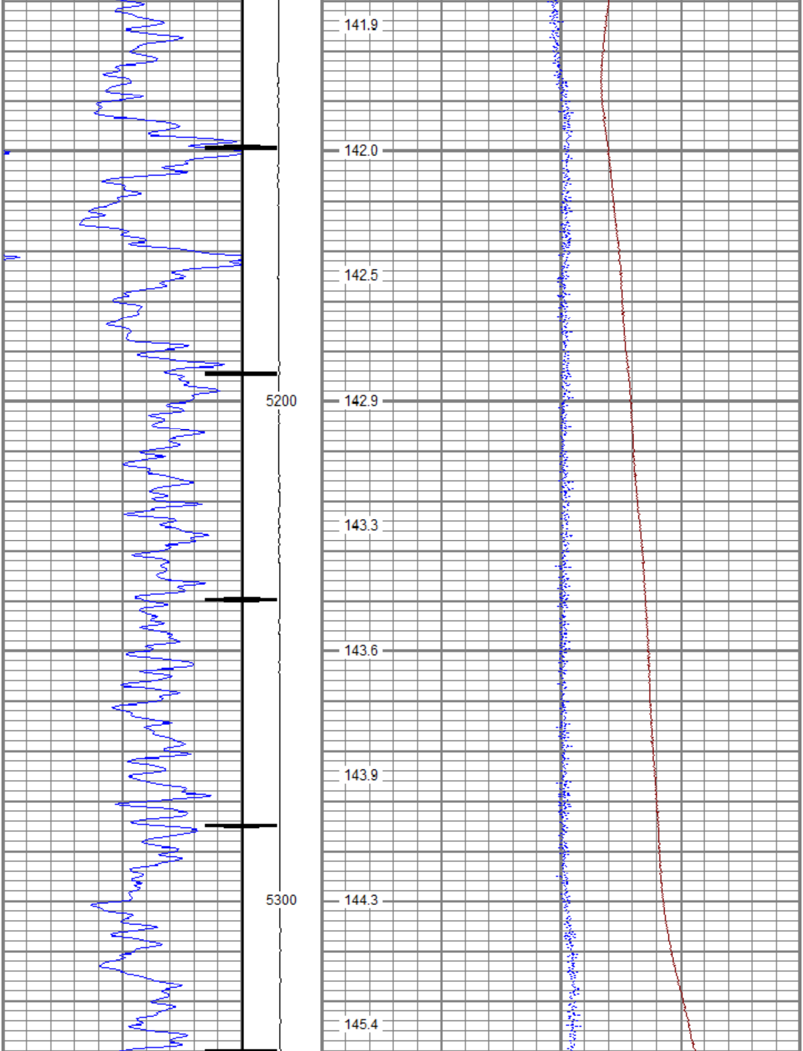
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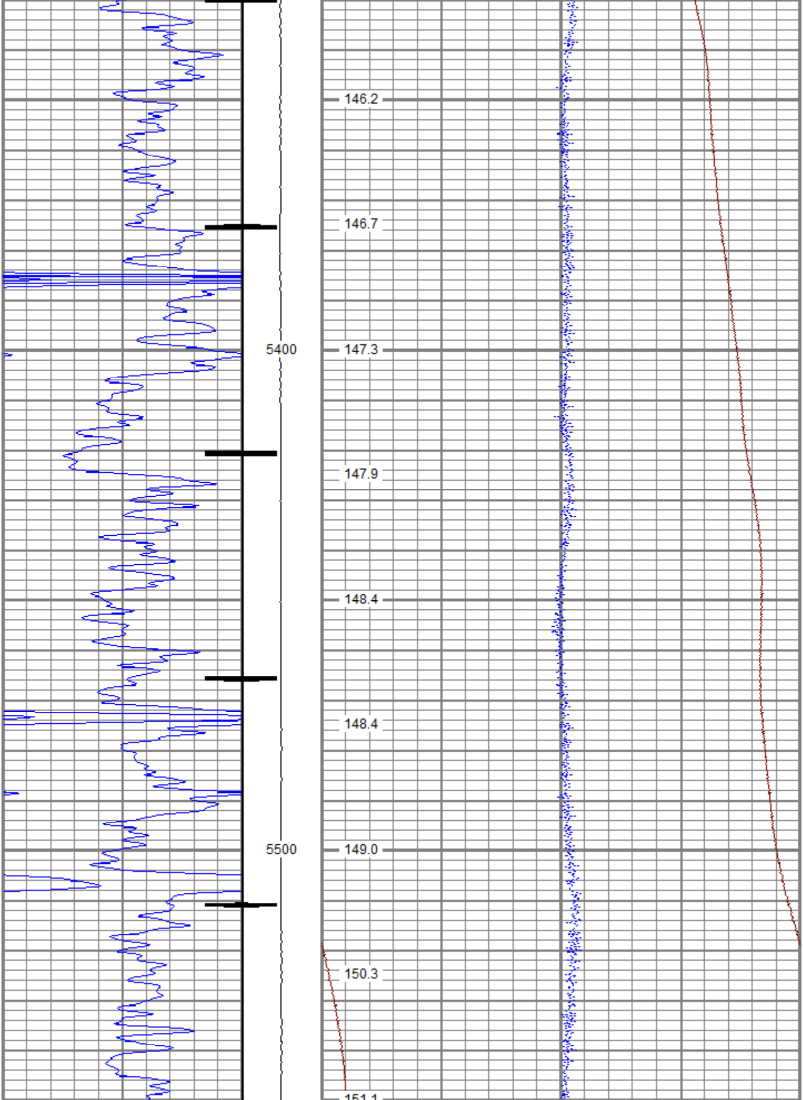
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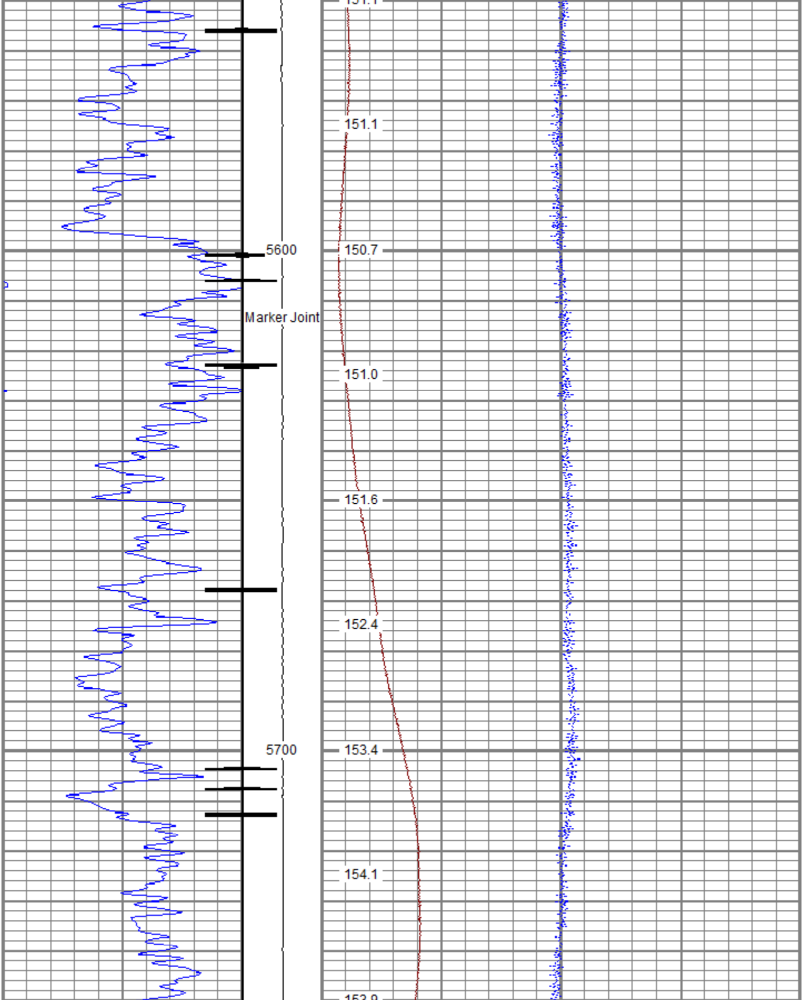
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Marker Joint
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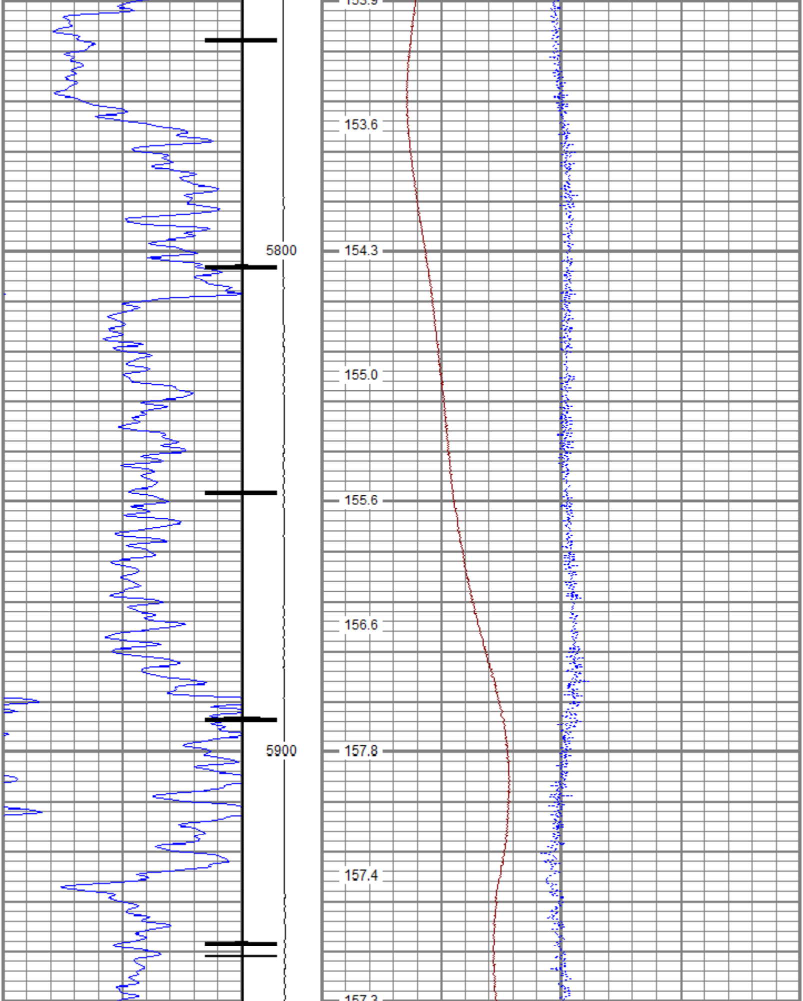
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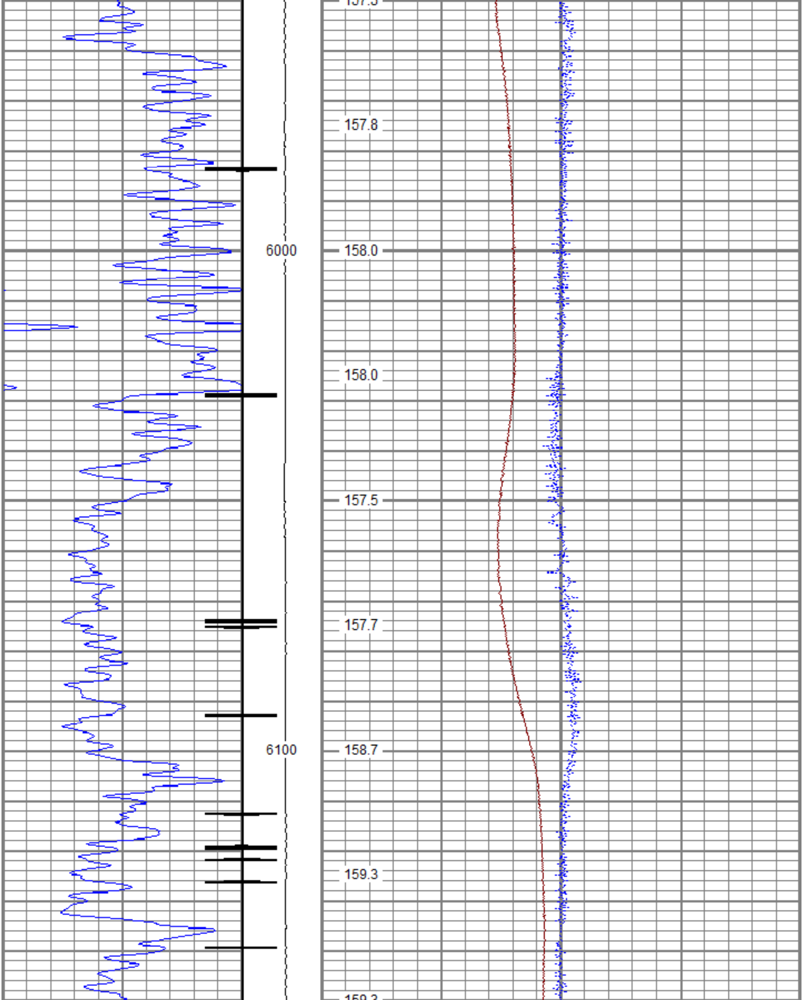
157.3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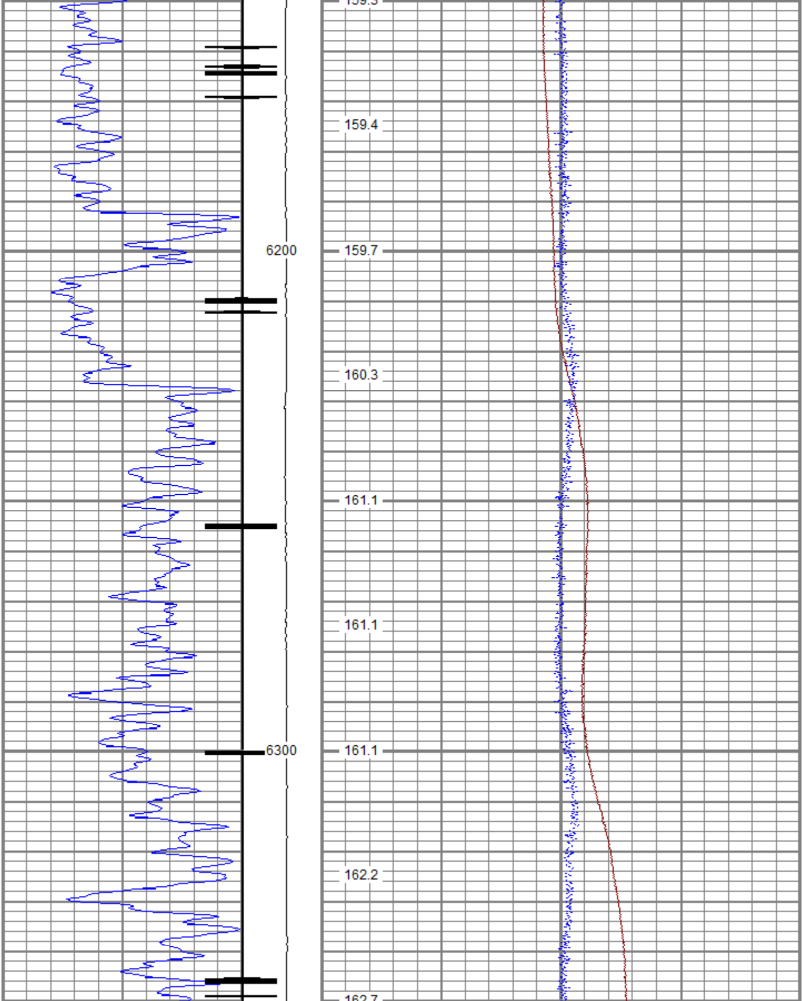
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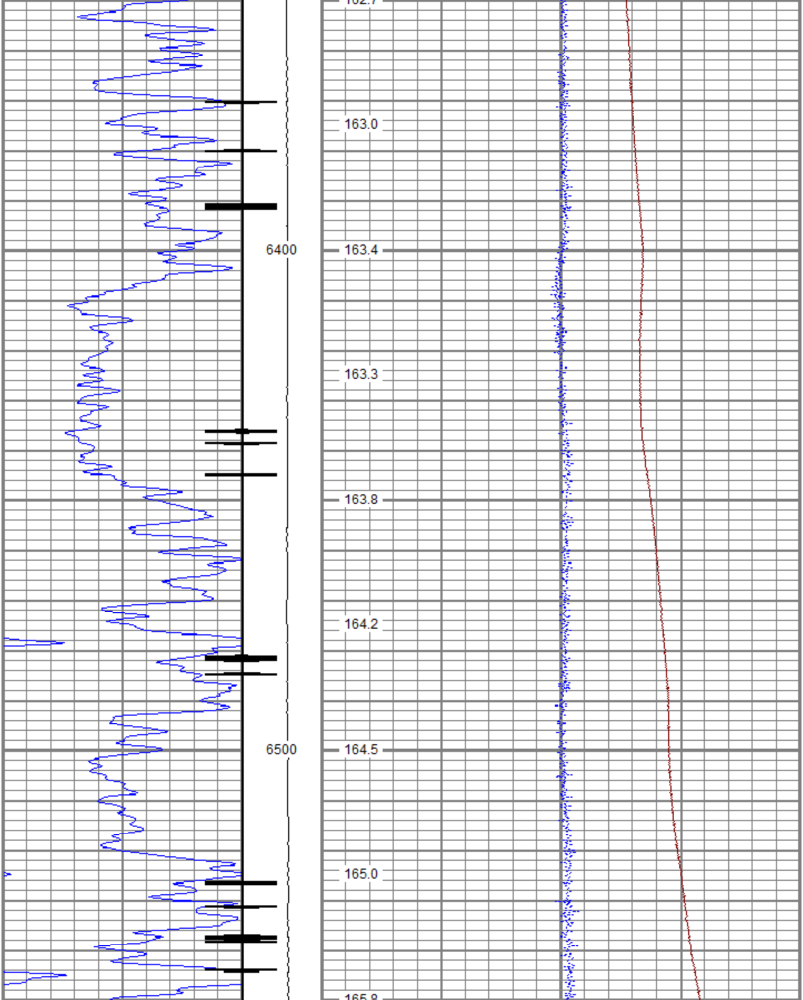
162.2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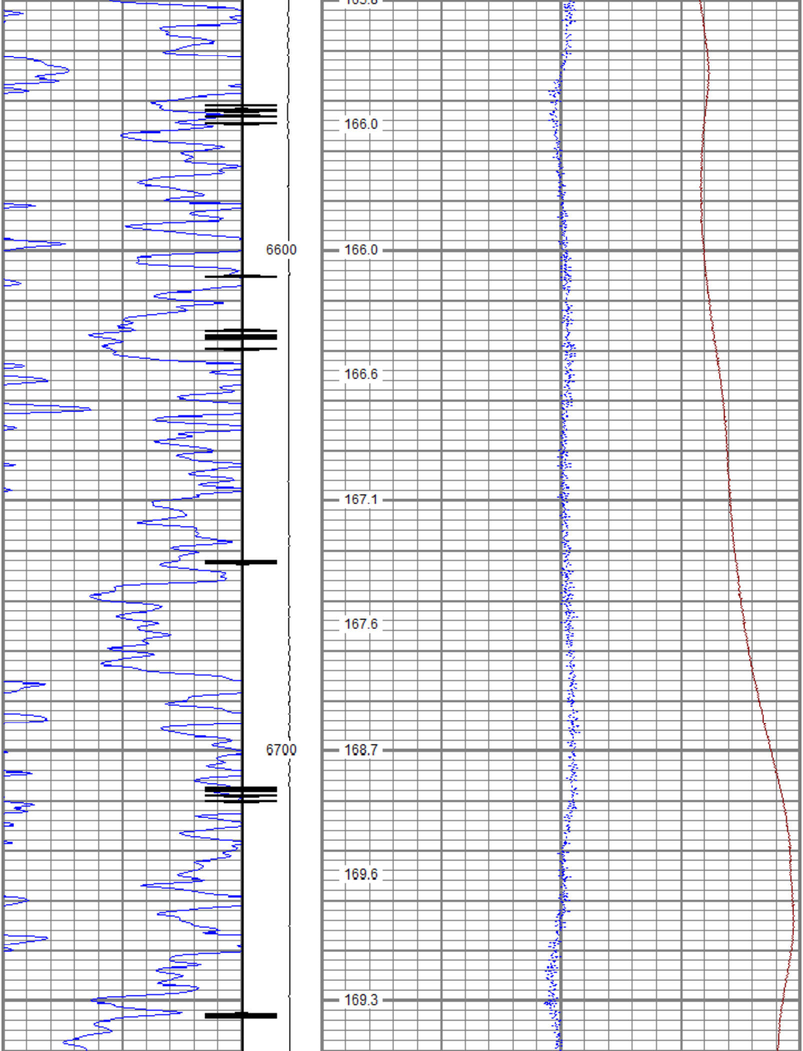
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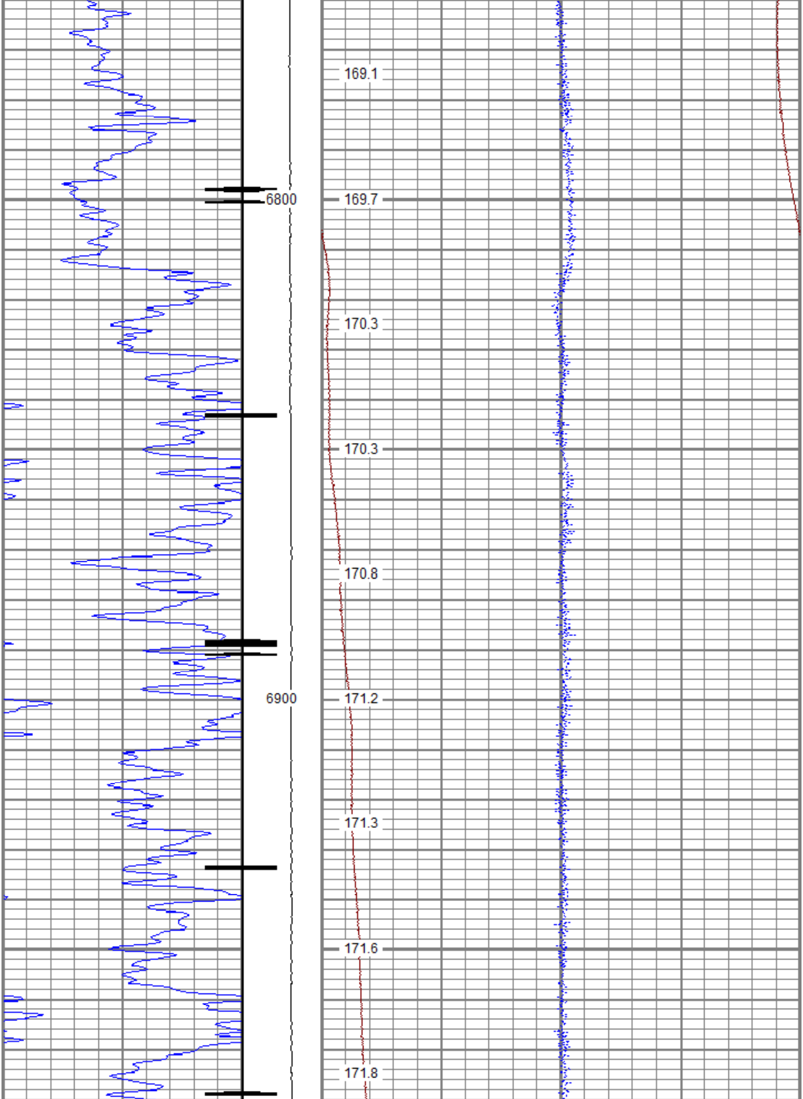
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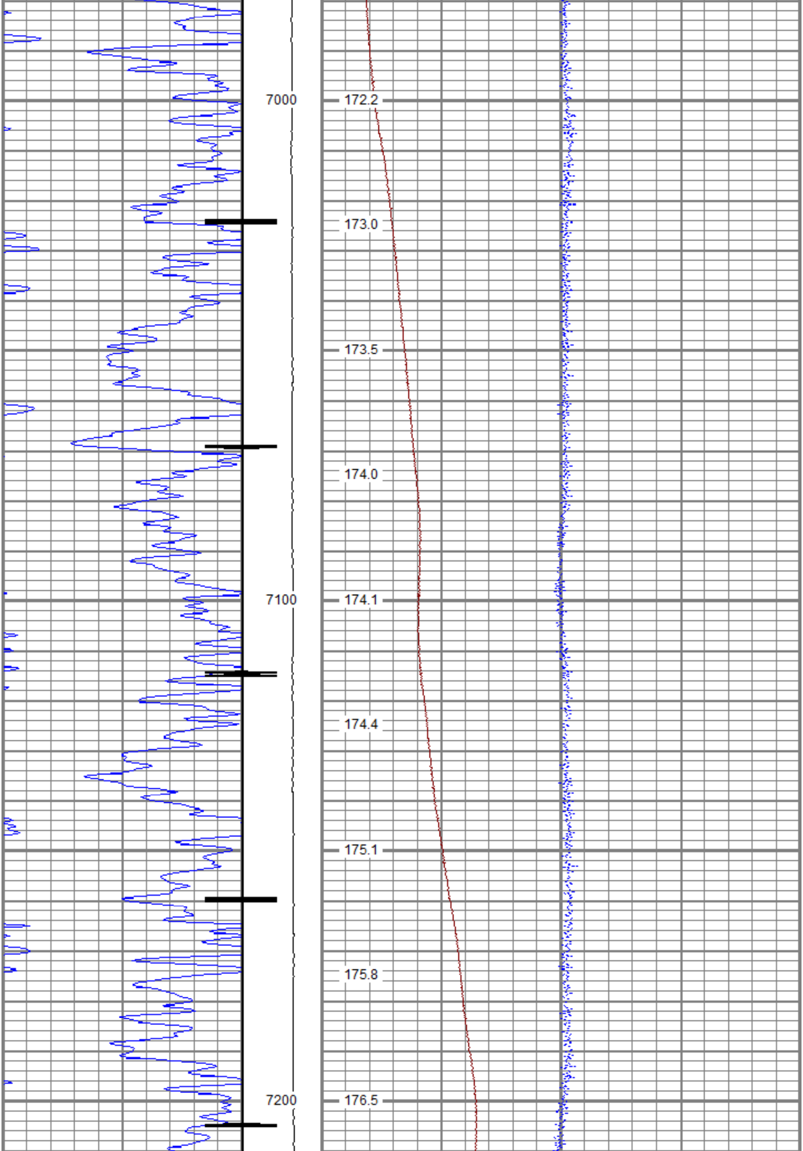
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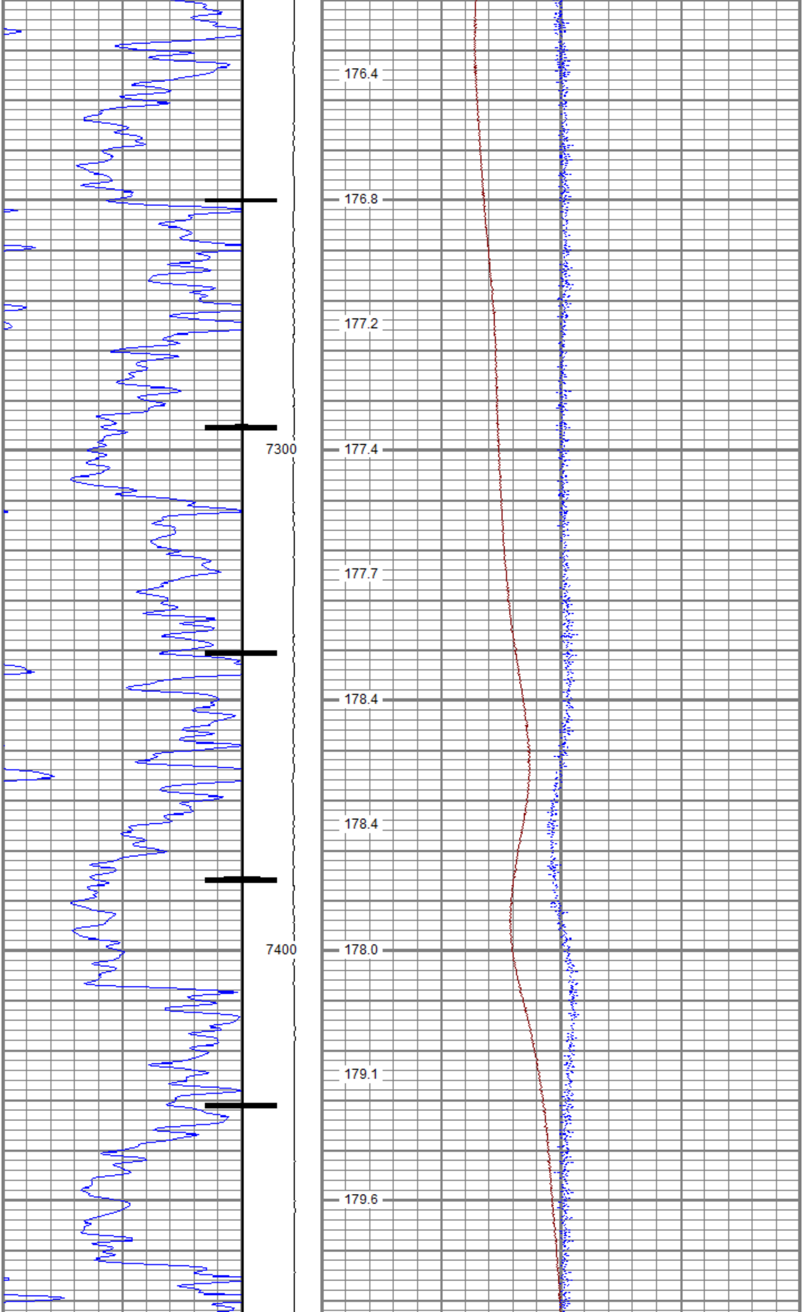
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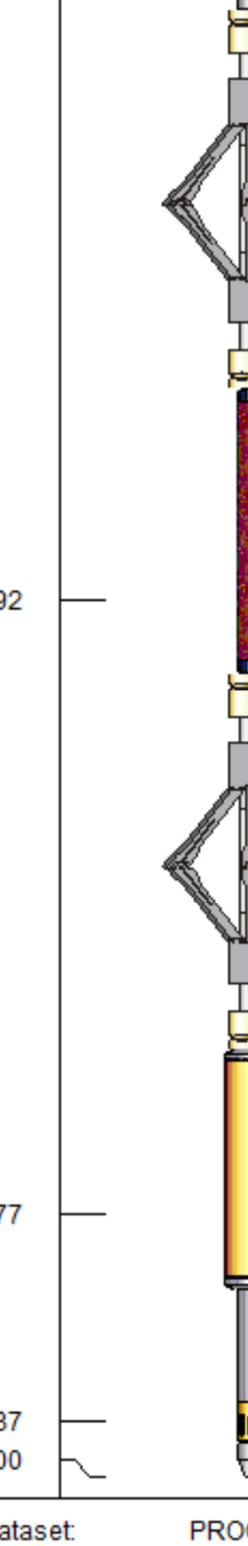
179.6



| Sensor | Offset (ft) | Description | Length (ft) | O.D. (in) | Weight (lb) |
|---|---|---|---|---|---|
| | | Titan_Electric_Cable_Heads-Titan_1-11/1<br>Electric Cable Head with 1" Fishing Neck | 1.03 | 1.69 | 5.40 |
| | | UW_AGS-UW_AGS_001 (219135)<br>Sondex Adapter - GO Box to Sondex Pin | 0.21 | 1.69 | 1.00 |
| | | UW_XTU-UW_XTU_002 (10012277)<br>Crossover Ultrawire Toolbus to Ultralink | 1.58 | 1.69 | 6.50 |
| | | UW_PRC-DSS_RAC<br>5 Arm 2-3/4" Roller Centralizer | 2.55 | 2.75 | 32.00 |
| GR | 5.92 | UW_PGR-UW_PGR_020 (10019371)<br>Production Gamma Ray | 1.92 | 1.69 | 9.50 |
| | | UW_PRC-DSS_RAC<br>5 Arm 2-3/4" Roller Centralizer | 2.55 | 2.75 | 32.00 |
| CCL | 1.77 | UW_CCL-UW_CCL_028 (10025621)<br>3-1/8" Ultrawire Casing Collar Locator | 1.61 | 3.13 | 36.00 |
| TEMP | 0.37 | UW_PRT-PRT_016 (10025093)<br>Platinum Resistance Thermometer | 1.04 | 1.69 | 5.20 |
| TSTAMP | 0.00 | UW_BUL-UW_BUL_006 (10019730)<br>Sondex Ultrawire Bullnose Terminator | 0.22 | 1.69 | 1.20 |

Dataset: PROCESSED_TEP_Youberg SR 22-12_TEMP_08-03-17.db: field/well/run1/Main
Total length: 12.71 ft
Total weight: 128.80 lb
O.D.: 3.13 in

## Calibration Report

Database File D:\WarriorData\TEP_Youberg SR 22-12_TEMP\PROCESSED_TEP_Youberg SR 22-12_TEMP_08-03-17.db
Dataset Pathname Main
Dataset Creation Thu Aug 03 08:55:07 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: 10019371
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 22-12 |
| Field | Rulison |
| County | Garfield |
| State | Colorado |