TEMPERATURE LOG
CCL

ROCKY MOUNTAIN WIRELINE SERVICE

Company	WPX ENERGY LLC (TIGHT HOLE)		
Well	FEDERAL RU 413-6		
Field	RULISON		
County	GARFIELD	State	COLORADO
Location:	API # : 05-045-22602 LAT: 39.467082 N LONG: -107.824773 W QtrQtr: NWSW		Other Services
	SEC 6 TWP 7S RGE 93W		
Permanent Datum	G.L.	Elevation 7736'	Elevation
Log Measured From	K.B.	Ft Above PD 24'	K.B. 7760' D.F. G.L. 7985'
Drilling Measured From	K.B.		
Date	3-21-2016		
Run Number	ONE	REVISED 6-07-2016	
Depth Driller	9299'		
Present Depth Driller	N/A		
Depth Logger	9261'		
Bottom Logged Interval	9261'		
Top Log Interval	SURFACE		
Fluid Level	SURFACE		
Type Fluid	WATER		
Max. Recorded Temp.	195.5 °F		
Estimated Cement Top	5150'		
Equipment Number	216		
Location	GRAND JCT.		
Recorded By	MCBROOM		
Witnessed By	MR. OAKS		

Borehole Record			Casing Record			
Run Number	Bit	From	To	Size	Weight	From	To

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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.

WARRIOR 7.0 SOFTWARE - Comments

NOTE: LOG WAS DEPTH CORRELATED USING KB OF 24'

SHORT JOINT: 5538' TO 5560'

MAIN PASS 5" = 100'
CSG PSI = STATIC

Calibration Report

Database File: 03212016_wpx_fed ru 413-6.db
Dataset Pathname: mainpass/pass1.1
Dataset Creation: Mon Mar 21 02:29:42 2016 by Calc SCH 120430

Temperature Calibration Report

Serial Number: 10008207
Tool Model: 016
Performed: Tue Feb 16 19:12:57 2016

Point #	Reading		Reference	
1	11720.00	cps	67.12	degF
2	17822.00	cps	104.92	degF
3	29420.00	cps	176.56	degF
4	40978.00	cps	247.35	degF
5	52763.00	cps	318.38	degF
6	58614.00	cps	354.31	degF
7		cps		degF
8		cps		degF
9		cps		degF
10		cps		degF

Gamma Ray Calibration Report

Serial Number: 10007620
Tool Model: 020
Performed: Sun Jun 13 14:33:21 1993

Calibrator Value: 1.0 GAPI

Background Reading: 0.0 cps
Calibrator Reading: 1.0 cps

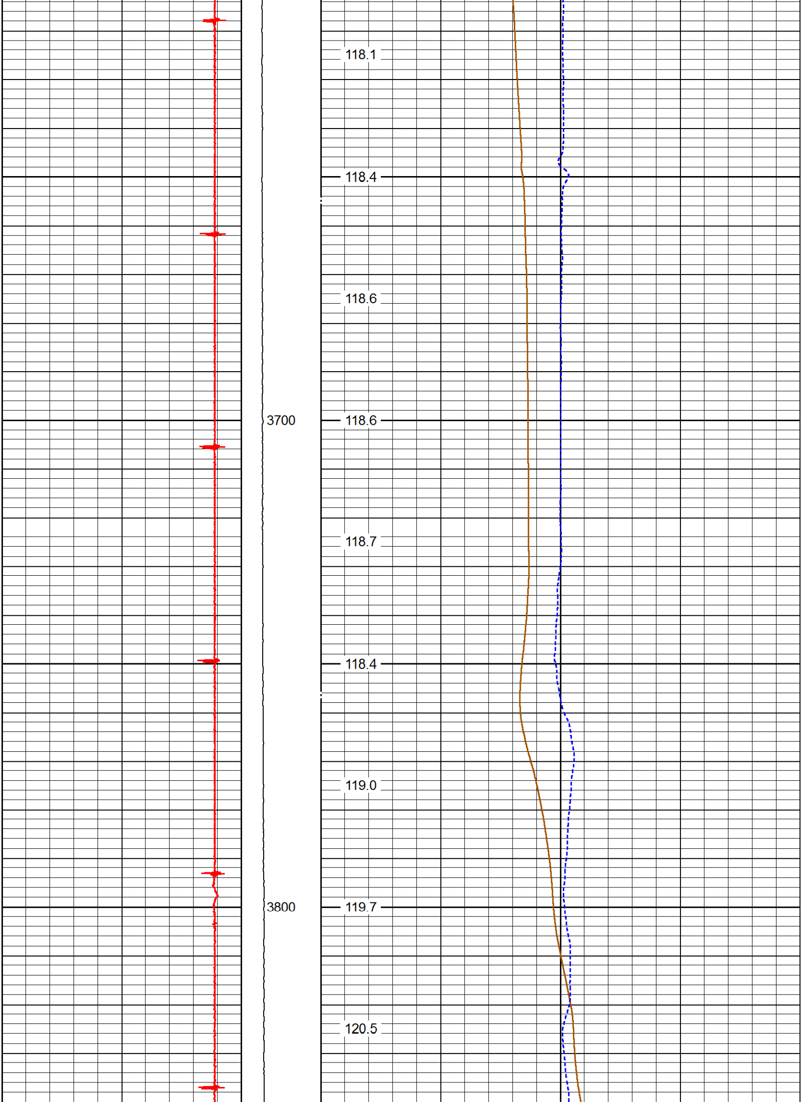
Sensitivity: 1.0000 GAPI/cps

ROCKY MOUNTAIN WIRELINE SERVICE

MAIN PASS

Database File: 03212016_wpx_fed ru 413-6.db
Dataset Pathname: mainpass/pass1
Presentation Format: rmws_tem
Dataset Creation: Mon Mar 21 00:42:20 2016 by Log SCH 120430
Charted by: Depth in Feet scaled 1:240

0	CCL	20000	LTEN	70	TEMP (degF)	90
			0 (lb) 1200	-1	DTMP (degF)	1
				TEMP (degF)		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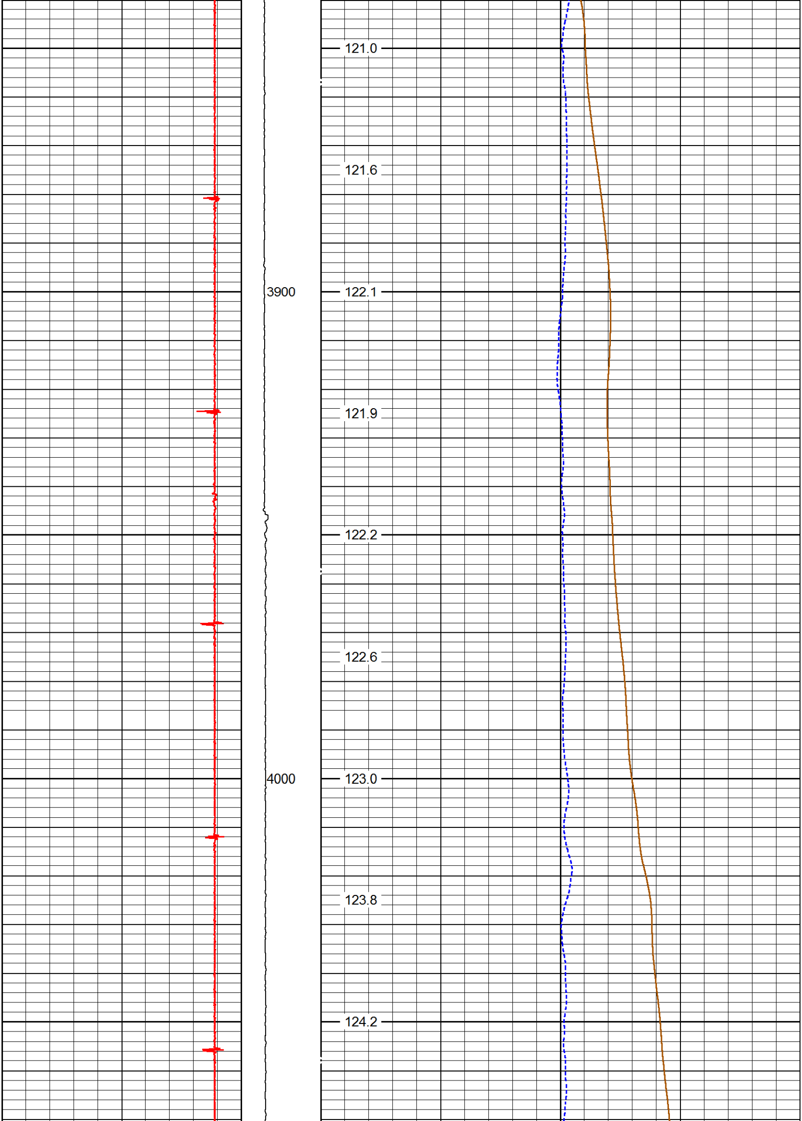
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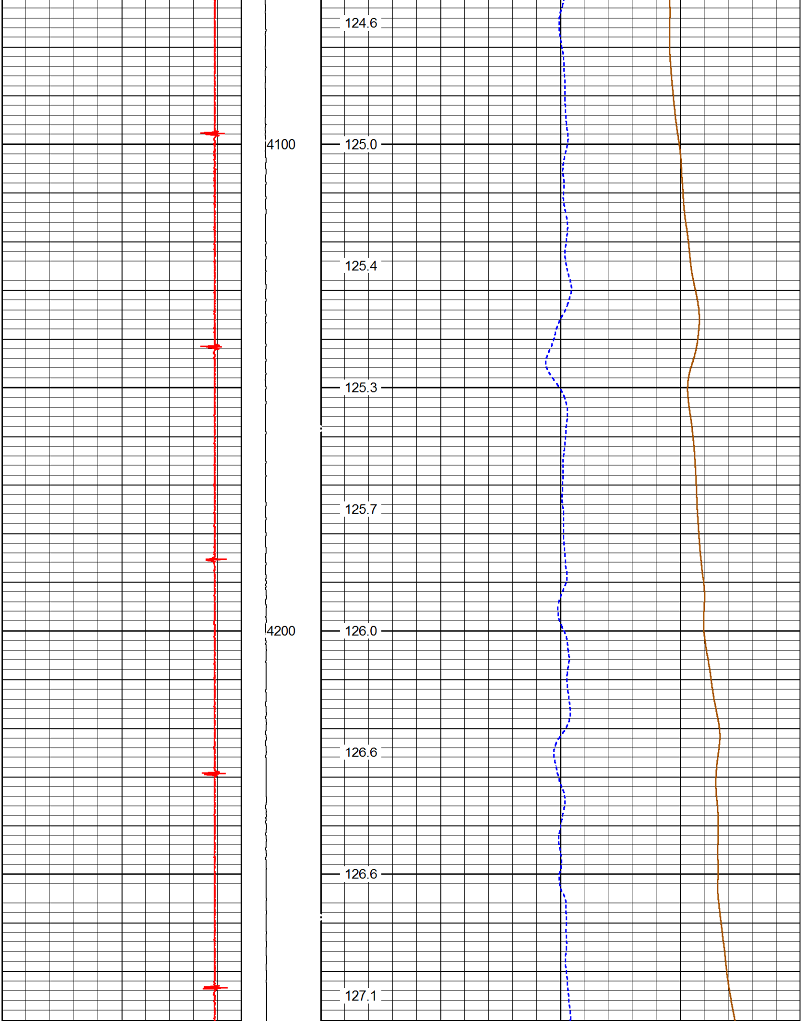
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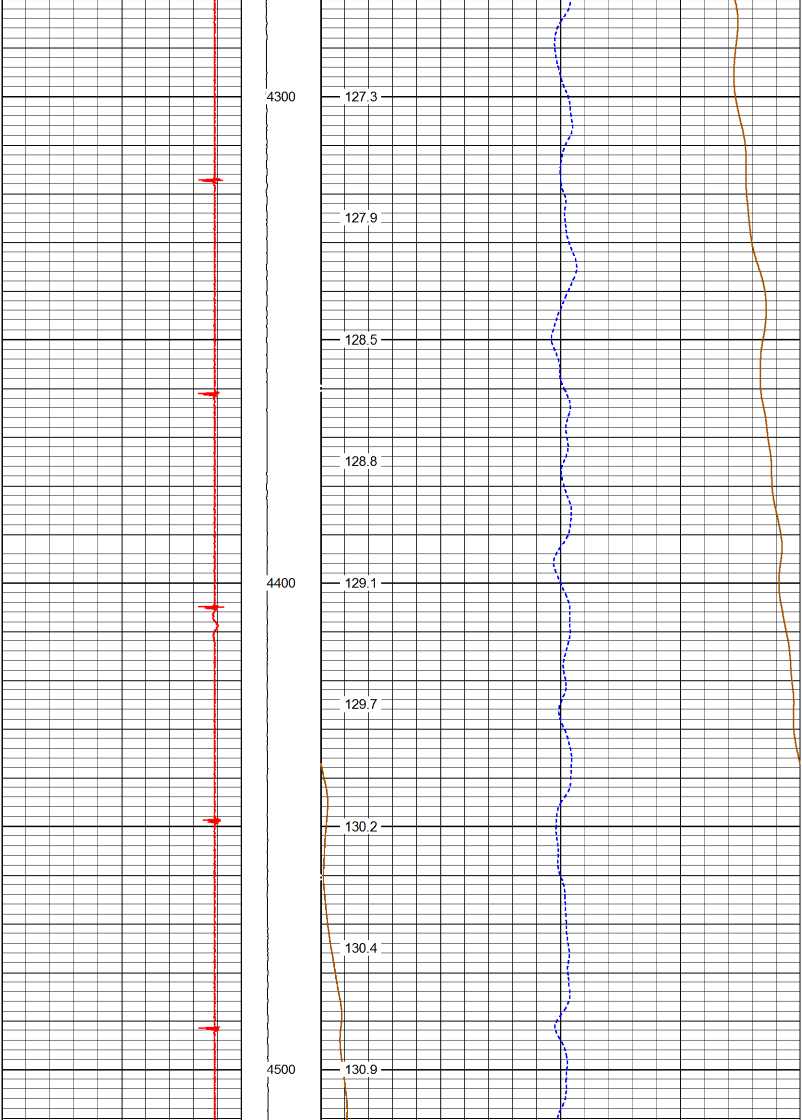
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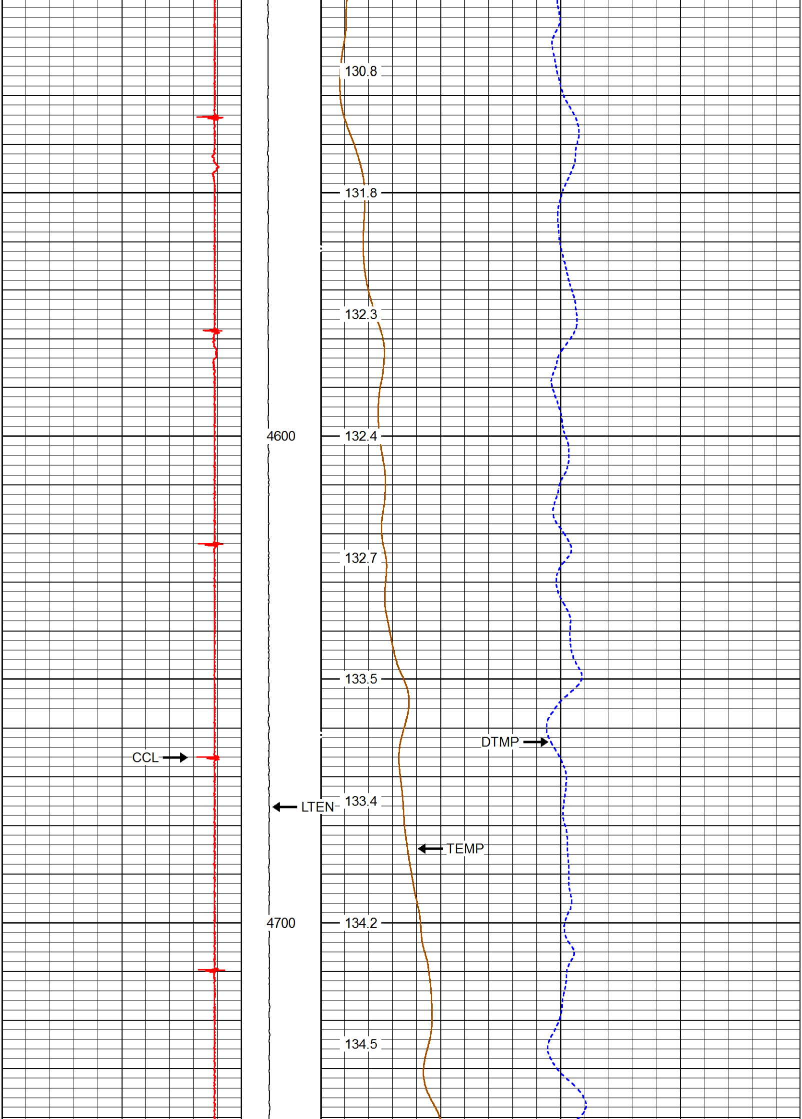
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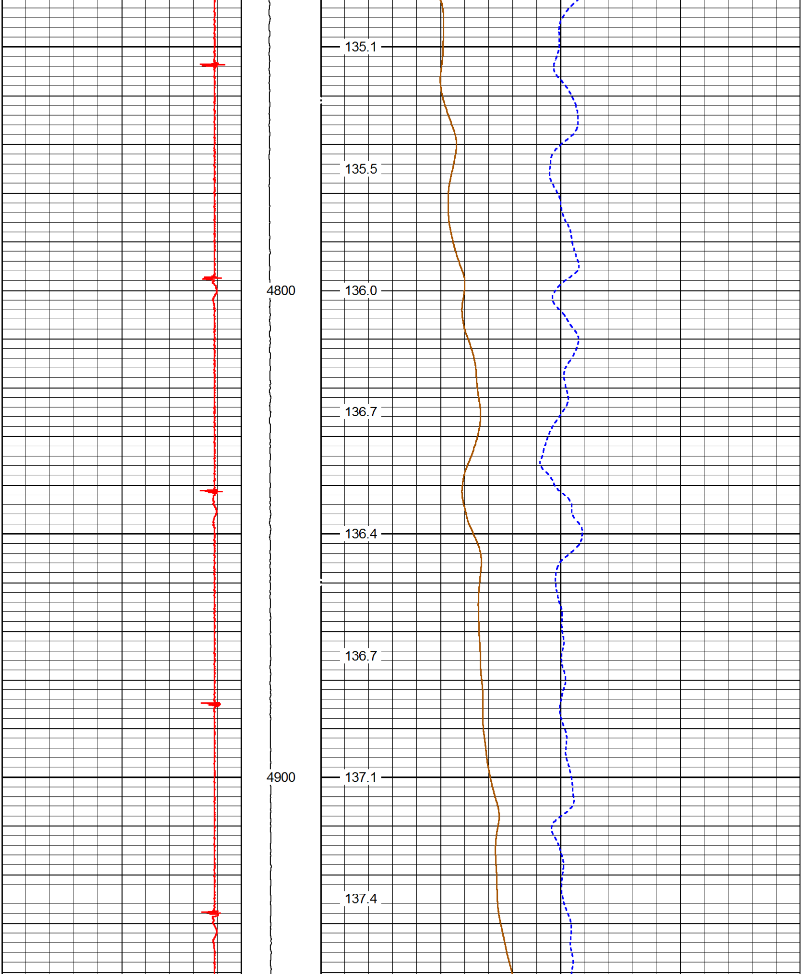
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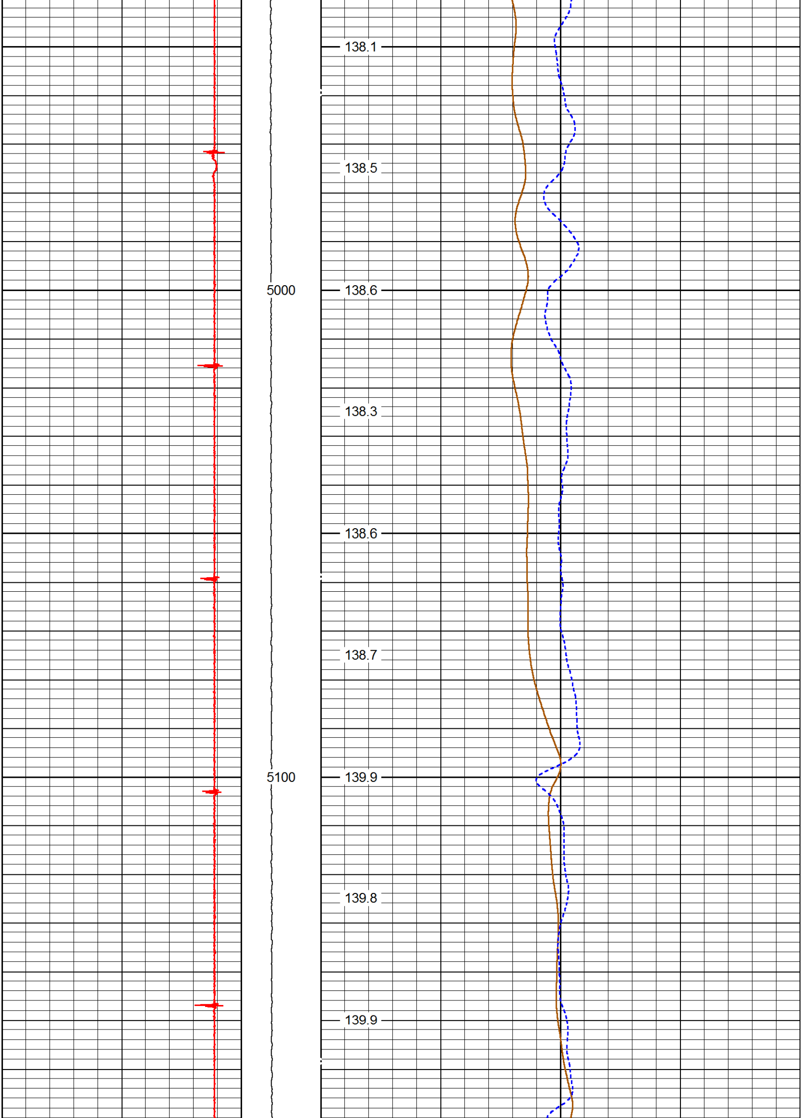
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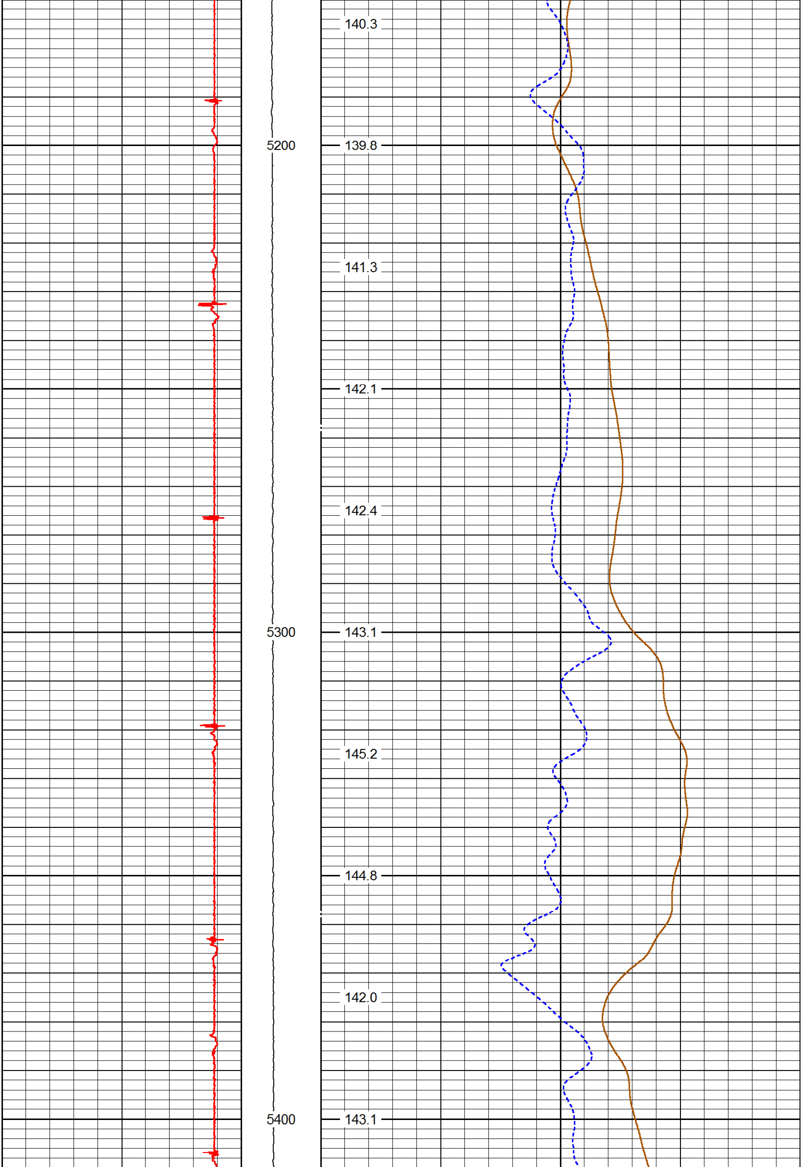
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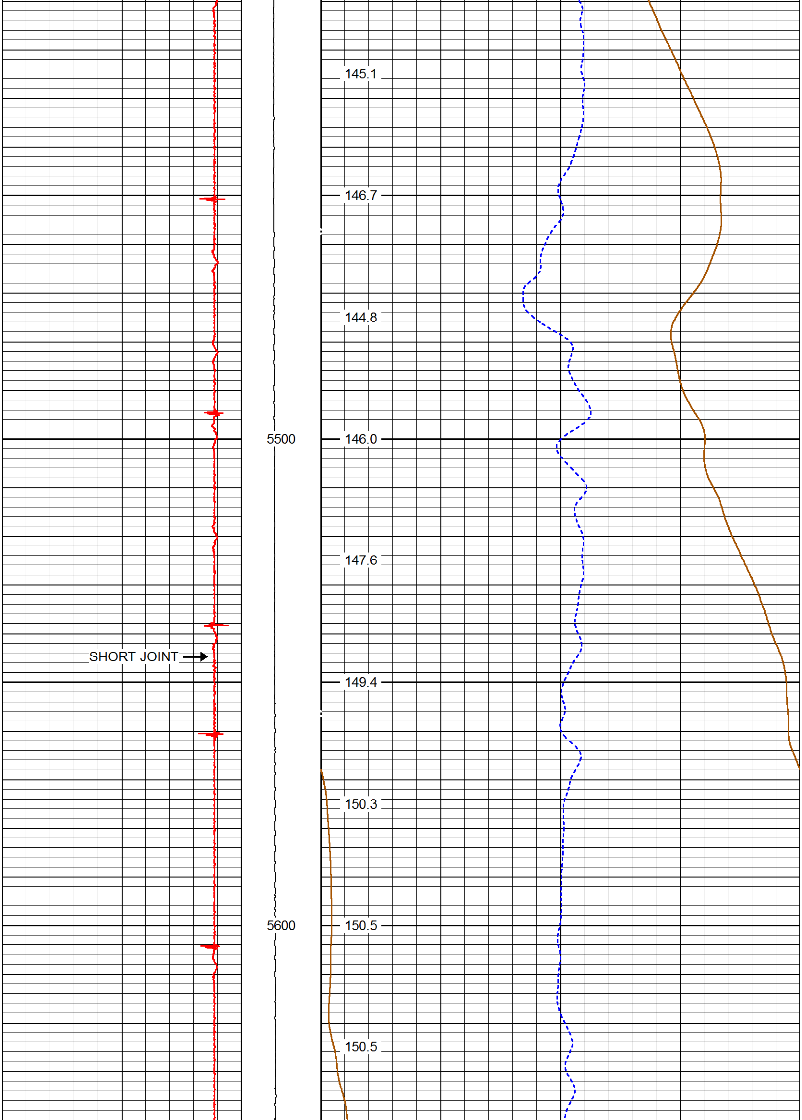
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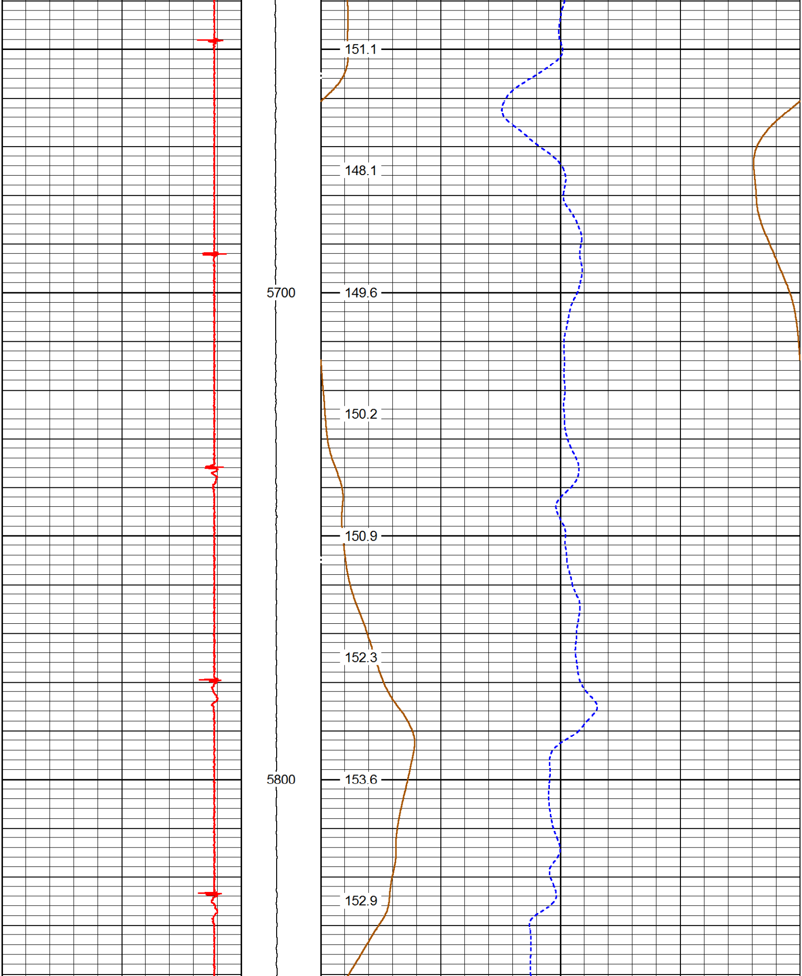
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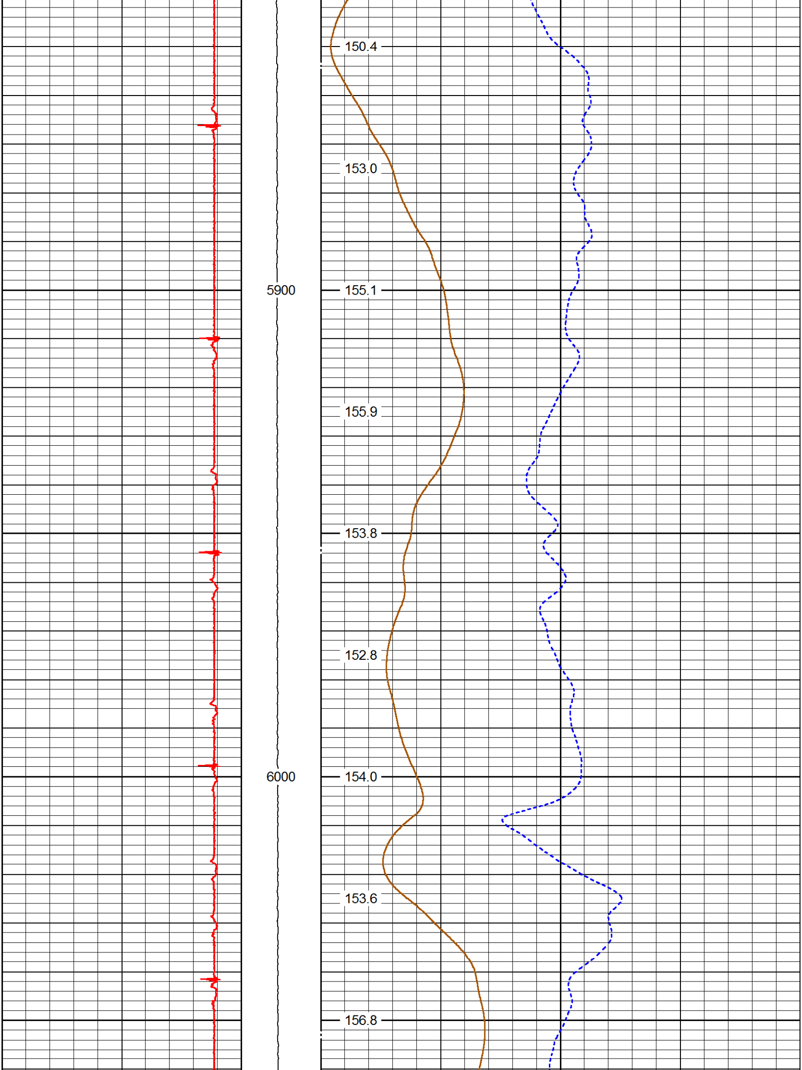
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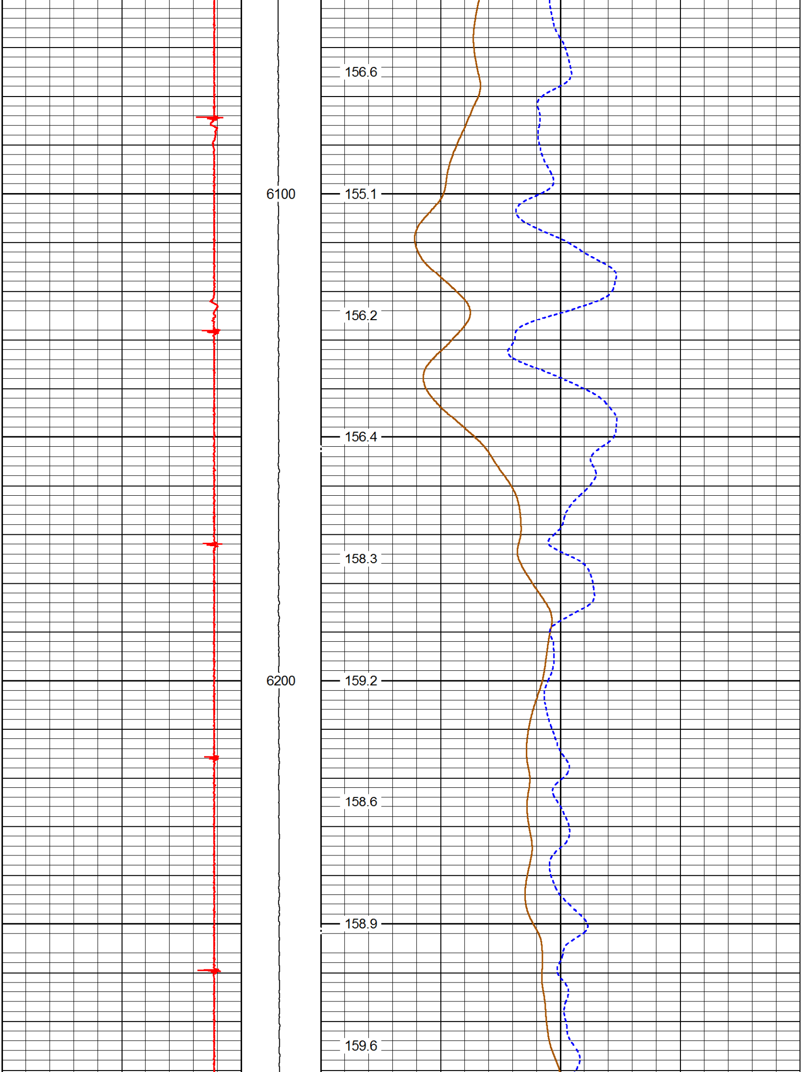

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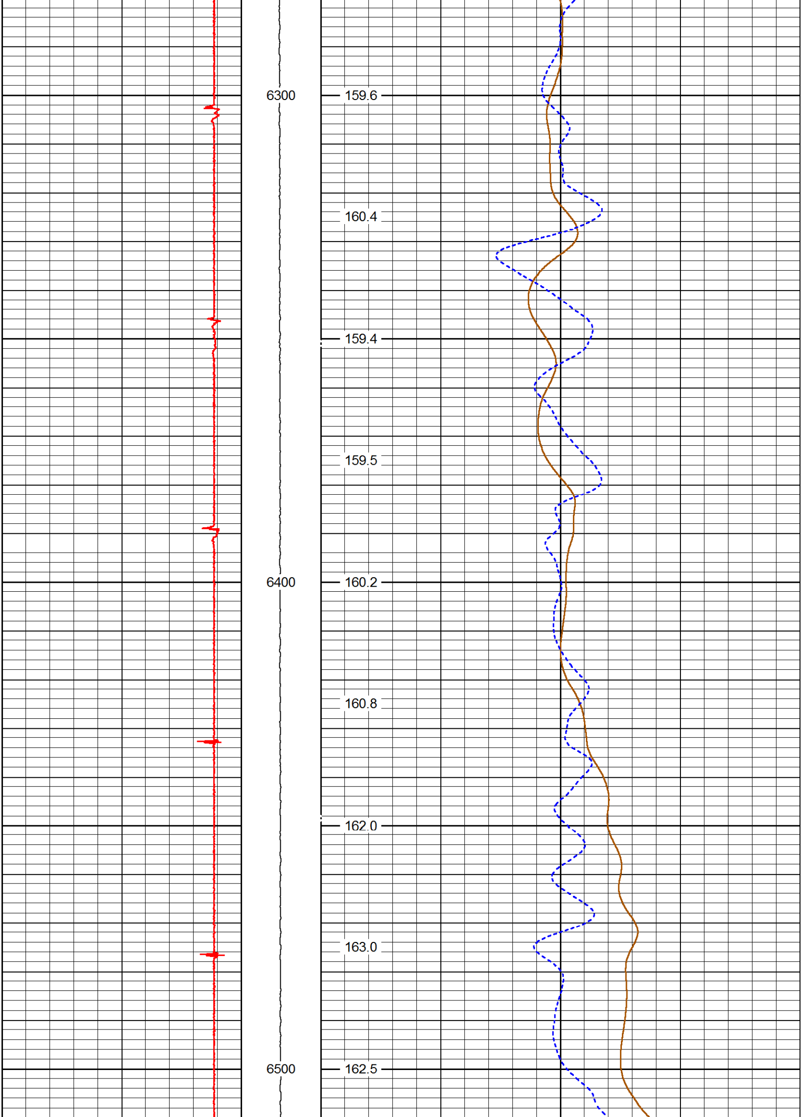
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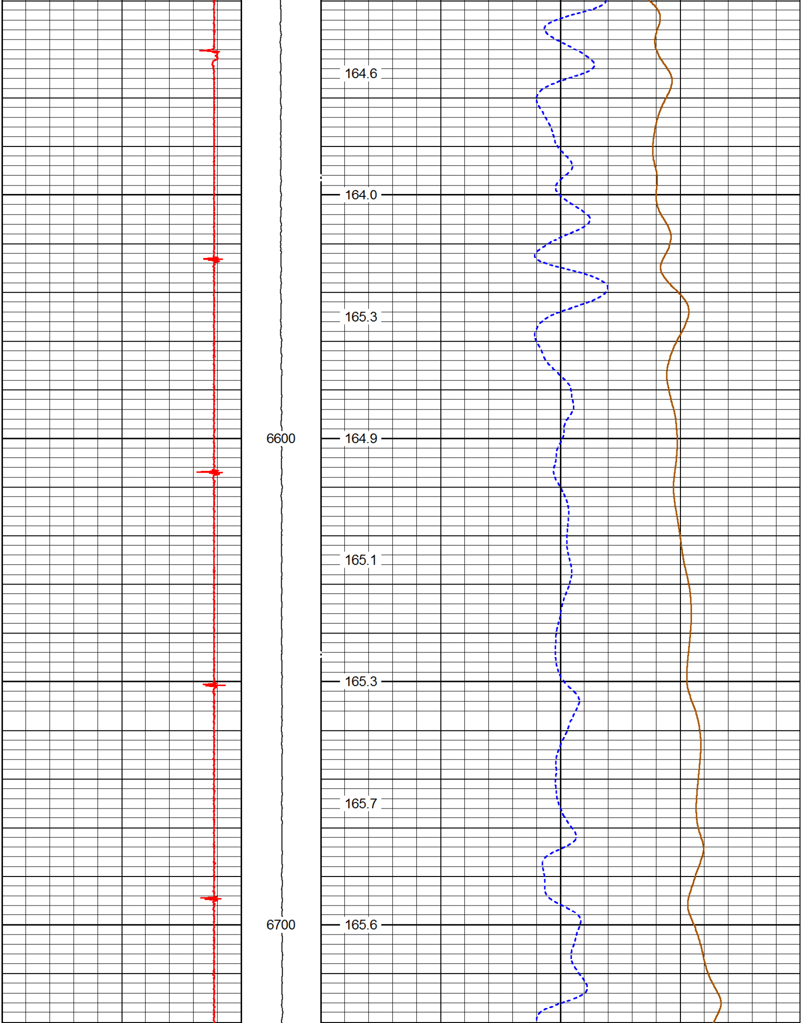
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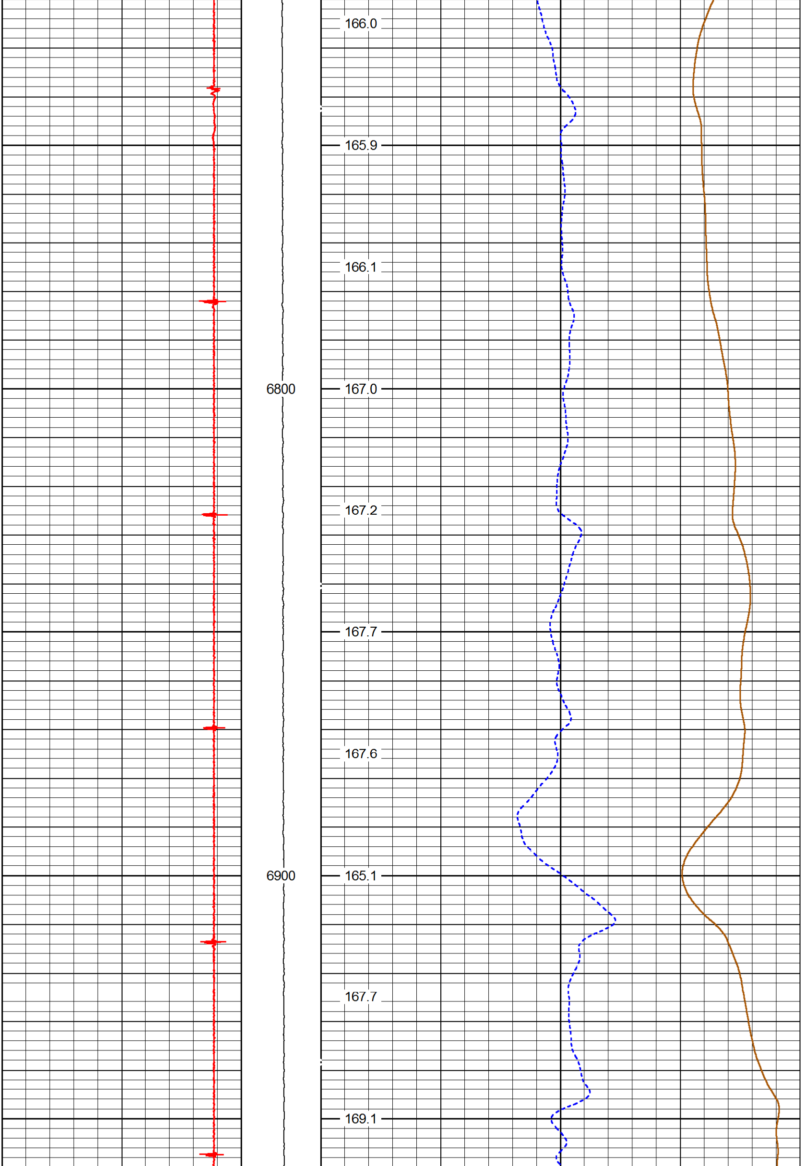
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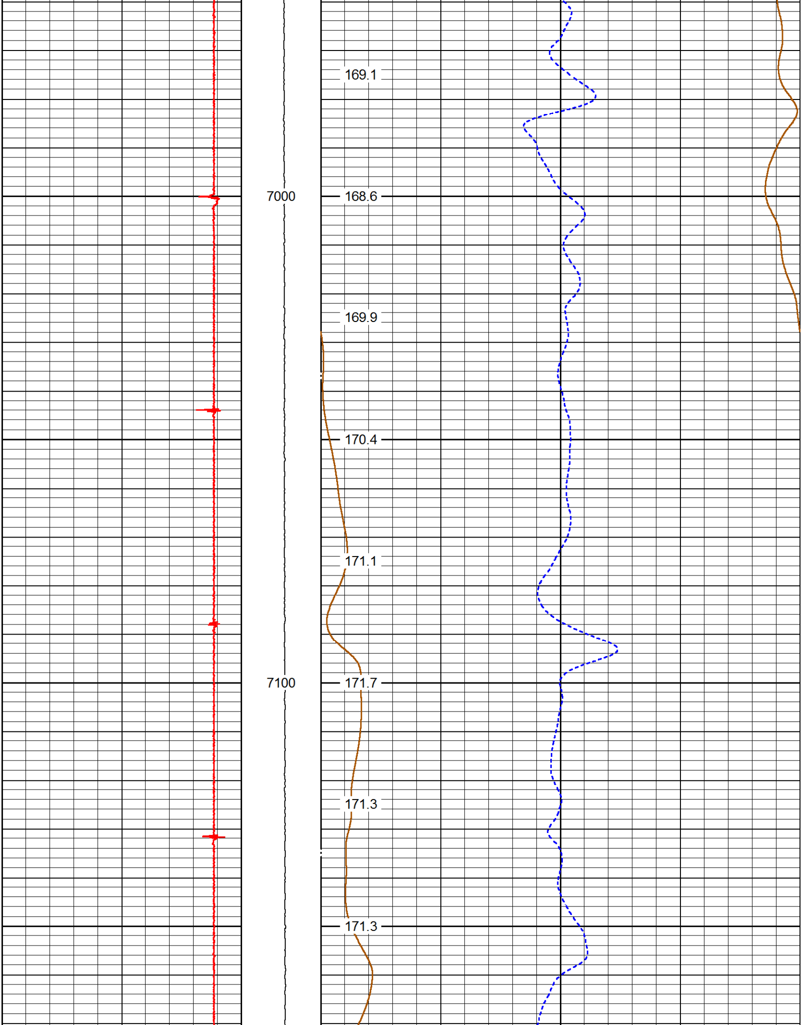
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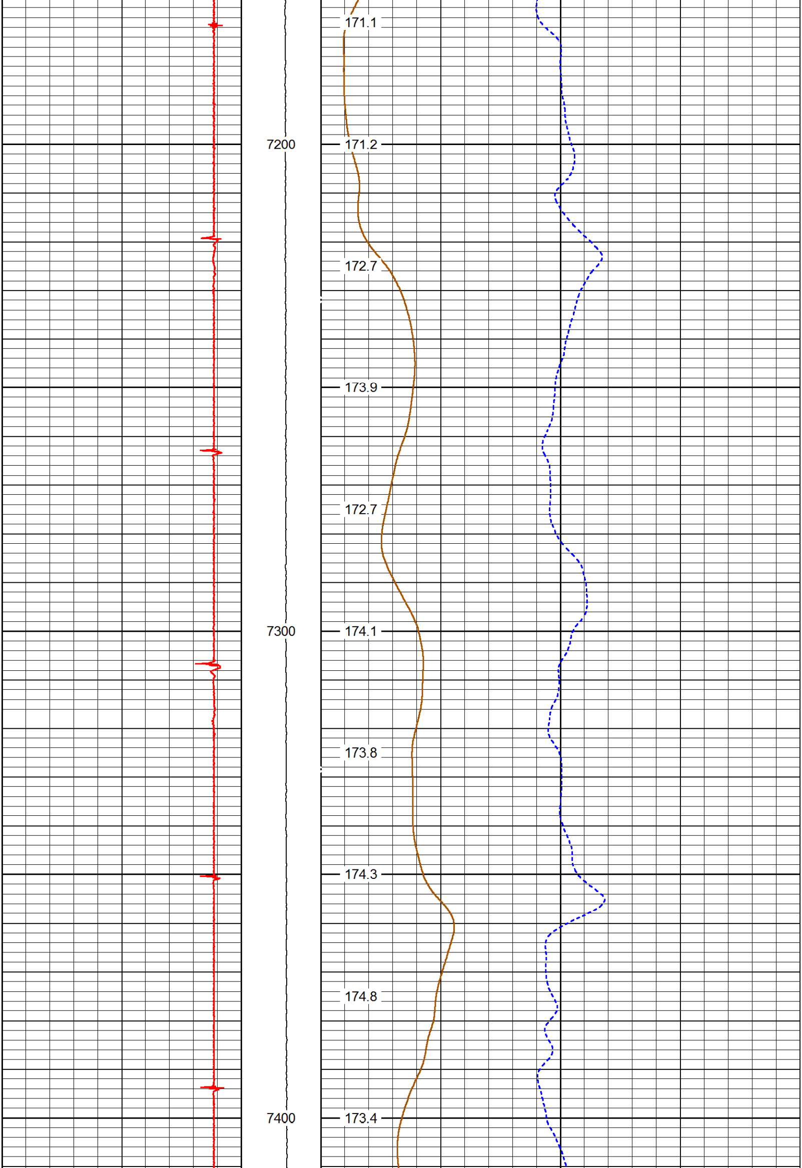
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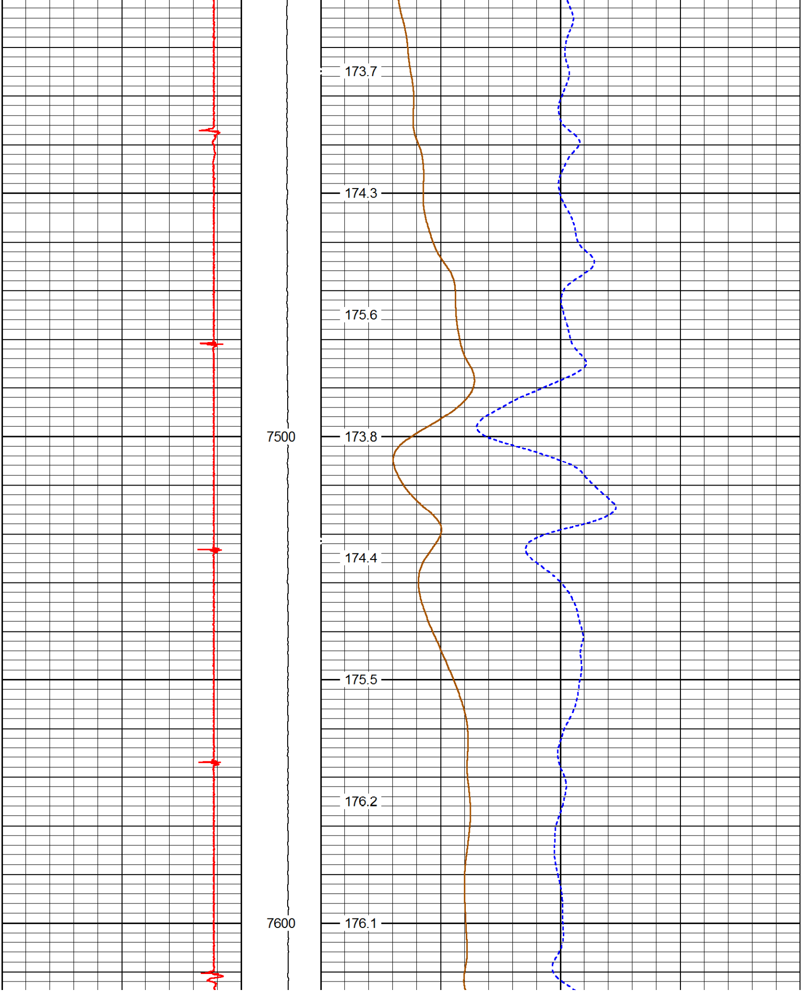
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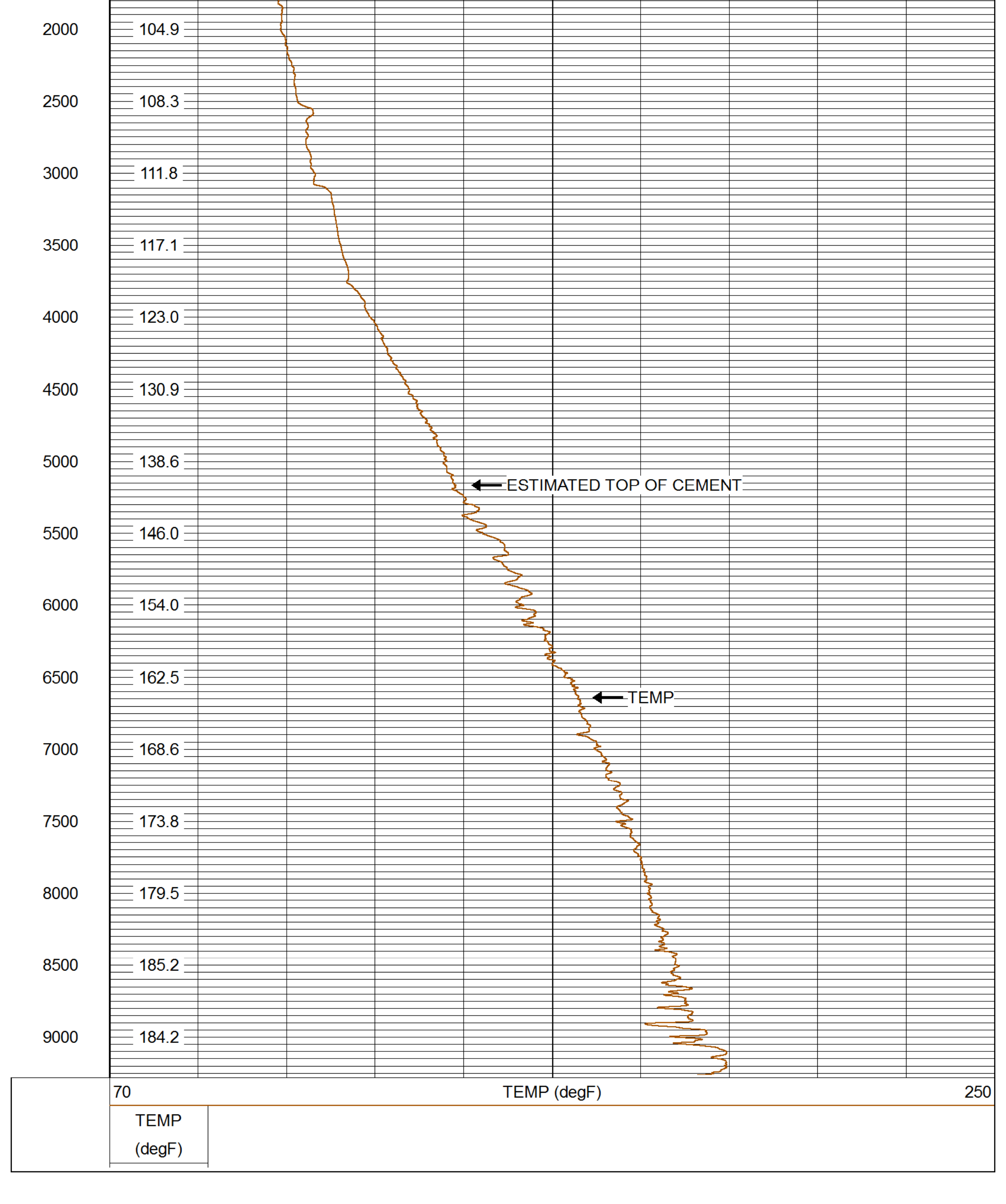
RMWS
ROCKY MOUNTAIN WIRELINE SERVICE

MAIN PASS (QUICK LOOK)

Database File: 03212016_wpx_fed ru 413-6.db
Dataset Pathname: mainpass/pass1.1
Presentation Format: rmtemp_q
Dataset Creation: Mon Mar 21 02:29:42 2016 by Calc SCH 120430
Charted by: Depth in Feet scaled 1:10000



Sensor	Offset (ft)	Schematic	Description	Len (ft)	OD (in)	Wt (lb)
			CHD-AES (000001) Cable Head	1.04	1.69	2.00
			XTU-002 (10006455) Crossover Ultrawire Toolbus To Ultralink	1.58	1.69	6.50
CCL	3.70		CCL-028 (1037) CCL UW 3 1/8" SONDEX	1.61	3.13	36.00
GR	1.76		PGR-020 (10007620) Production Gamma Ray	1.93	1.69	9.50
TEMP TSTAMP ITEMPX HVOLTX	0.37 0.00 0.00 0.00		PRT-016 (10008207) Platinum Resistance Thermometer	1.04	1.69	6.00
			BUL-006 (212965) Bullnose Terminator	0.22	1.69	1.20

Dataset: 03212016_wpx_fed ru 413-6.db: field/well/mainpass/pass1.1
Total Length: 7.42 ft
Total Weight: 61.20 lb
O.D.: 3.13 in

RMWS
ROCKY MOUNTAIN WIRELINE SERVICE

Company	WPX ENERGY LLC (TIGHT HOLE)
Well	FEDERAL RU 413-6
Field	RULISON
County	GARFIELD
State	COLORADO