PIONEER
Pioneer Energy Services

DUAL INDUCTION
COMPENSATED DENSITY
COMPENSATED NEUTRON
GAMMA RAY

Company	EXTRACTION OIL AND GAS
Well	MEADER 4
Field	WILDCAT
County	WELD
State	CO

Company EXTRACTION OIL AND GAS
Well MEADER 4
Field WILDCAT
County WELD State CO

Location: API # : 05-123-42263
SHL: 350' FSL & 2574' FWL SESW
SEC 5 TWP 11N RGE 63W

Other Services
NONE

Permanent Datum GL Elevation 5336'
Log Measured From KB
Drilling Measured From KB

Elevation
K.B. 5356'
D.F. 5356'
G.L. 5336'

Date	NOVEMBER 1, 2015
Run Number	1
Depth Driller	18250'
Depth Logger	8100'
Bottom Logged Interval	8100'
Top Log Interval	SURFACE CASING
Casing Driller	1532'
Casing Logger	1535'
Bit Size	8.75"
Type Fluid in Hole	OBM
Density / Viscosity	8.7 / 43
pH / Fluid Loss	N/A
Source of Sample	N/A
Rm @ Meas. Temp	N/A
Rmf @ Meas. Temp	N/A
Rmc @ Meas. Temp	N/A
Source of Rmf / Rmc	N/A
Rm @ BHT	N/A
Time Circulation Stopped	0100
Time Logger on Bottom	1045
Maximum Recorded Temperature	210 F
Equipment Number	52
Location	FT. MORGAN
Recorded By	SHAUN STUMP
Witnessed By	LARRY SIEGEL

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All interpretations are opinions based on inferences from electrical or other measurements and Pioneer Wireline Services, LLC cannot and does not guarantee the accuracy or correctness of any interpretation, and Pioneer Wireline Services, LLC will not 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.

Comments

ANNULAR VOLUMES CALCULATED FOR 7" CASING

SAVANNA DRILLING RIG #802

DUE TO OIL BASE MUD, NO SHALLOW GUARD / SP ON LOG
NO REPEAT PERFORMED DUE TO HOLE CONDITIONS

THANK YOU FOR USING PIONEER ENERGY SERVICES

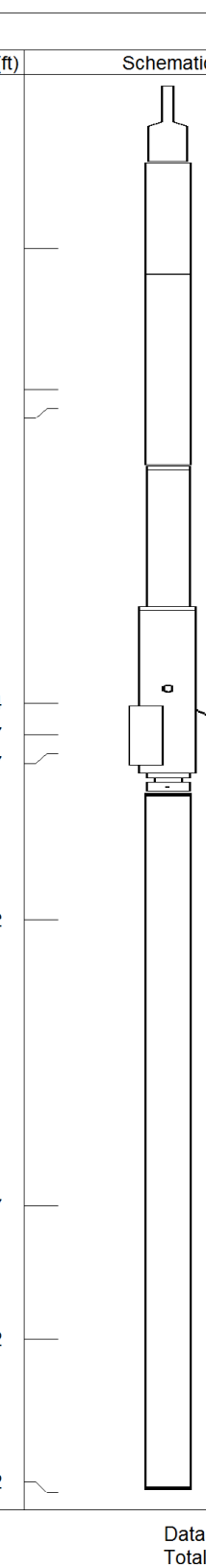
SO# 2-013900

Log Variables

DatabaseC:\ProgramData\Warrior\Data\2-013900.db
Dataset field/well/run1/pass2/_vars_

Top - Bottom

SZCOR	NPORSEL	FLUIDDEN g/cc	MATRXDEN g/cc	SPSHIFT mV	SNDERRM mmho/m	SNDERR mmho/m	SRFTEMP degF
Off	Sandstone	1	2.68	0	0	0	0
CASETHCK in	**CASEOD in**	**PERFS**	**TDEPTH ft**	**BOTTEMP degF**	**BOREID in**		
0	7	0	0	215	8.75		



Sensor	Offset (ft)	Description	Length (ft)	O.D. (in)	Weight (lb
		CHD (~0)	2.00	3.50	30.00
		GR-PSI (923)	2.92	3.50	40.00
GR	0.00				
		CNT-PSI (822)	5.00	3.50	70.00
CNLSC	3.67				
CNSSC	4.17				
		CDL-PSI (128)	8.50	5.00	285.00
DCAL	11.84				
LSD	12.67				
SSD	13.17				
RLL3	17.52				
		DIL-PSI (1010)	18.25	3.75	175.00
CILD	24.97				
CILM	28.42				
SP	32.42				

Dataset: 2-013900.db: field/well/run1/pass2
Total length: 36.67 ft
Total weight: 600.00 lb
O.D.: 5.00 in

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MAIN PASS

Database File	2-013900.db
Dataset Pathname	FINAL
Presentation Format	split
Dataset Creation	Sun Nov 01 12:32:33 2015
Charted by	Depth in Feet scaled 1:600

7 Density Caliper (in) 17	0.2 Deep Resistivity (Ohm-m) 2000	40 Density Porosity (pu) 0
0 Gamma Ray (GAPI) 200	Medium Resistivity	40 Neutron Porosity (pu) 0
TBHV (ft3) ABHV (ft3)	0.2 (Ohm-m) 2000	Corr -0.5 (g/cc) 0.5

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0 Gamma Ray (GAPI) 200	Medium Resistivity	40 Neutron Porosity (pu) 0
TBHV (ft3) ABHV (ft3)	0.2 (Ohm-m) 2000	Corr -0.5 (g/cc) 0.5

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END OF MAIN PASS

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MAIN PASS

Database File	2-013900.db
Dataset Pathname	FINAL
Presentation Format	split
Dataset Creation	Sun Nov 01 12:32:33 2015
Charted by	Depth in Feet scaled 1:240

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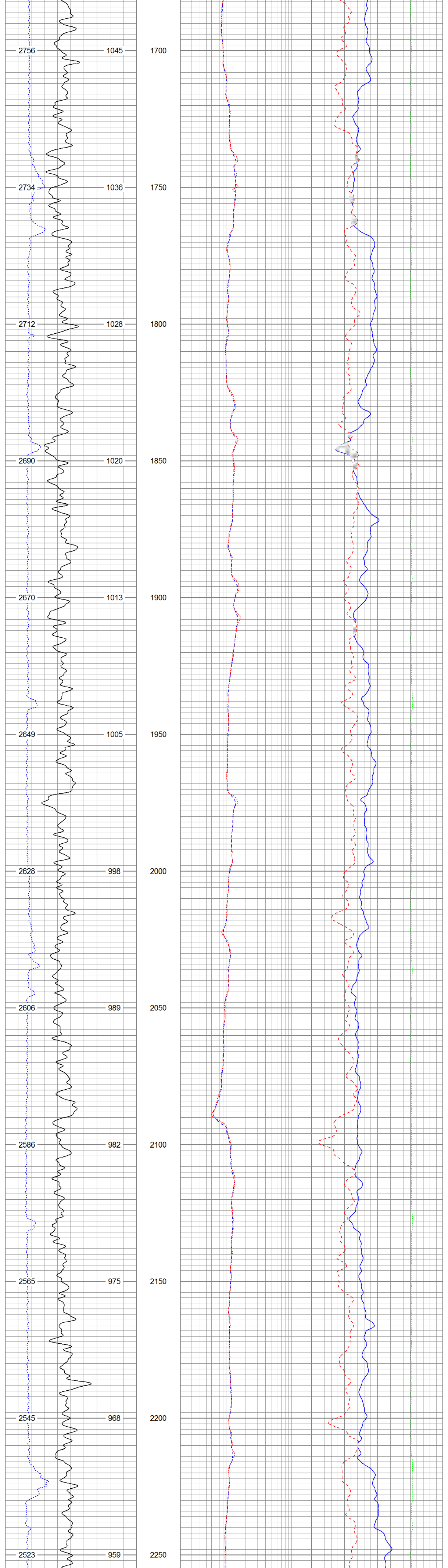
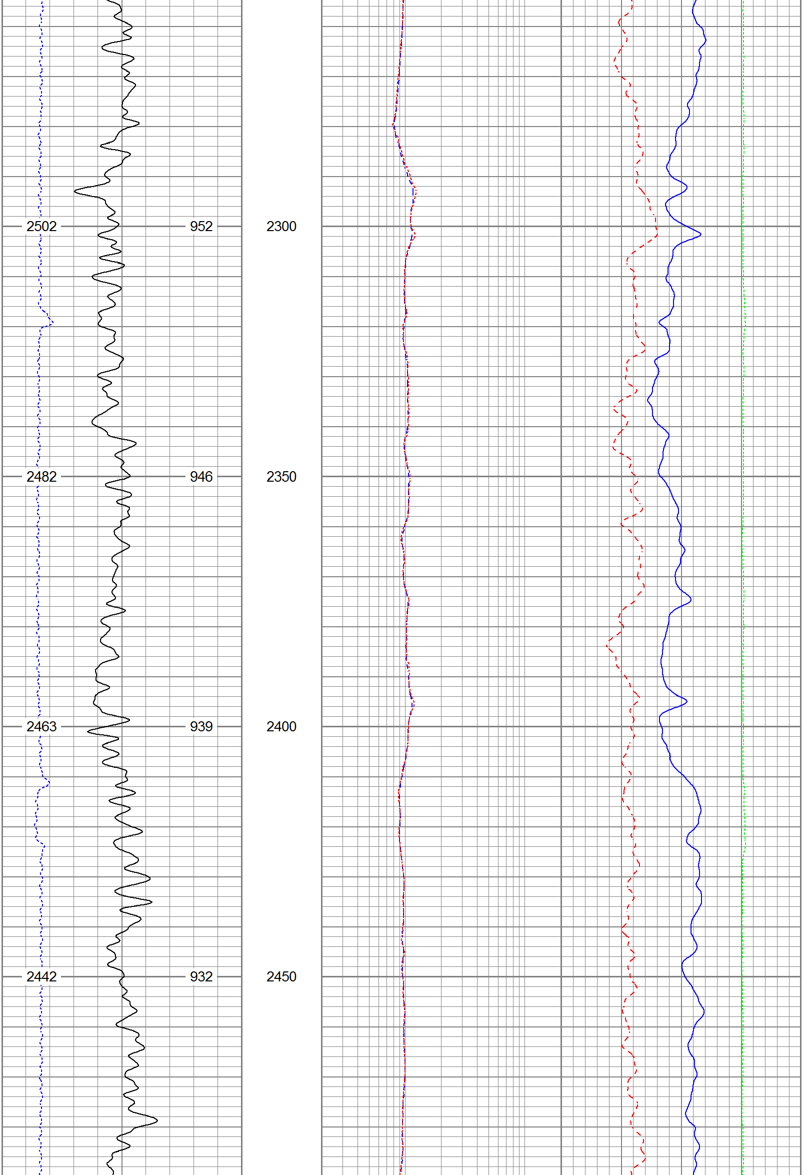
0 Gamma Ray (GAPI) 200	Medium Resistivity	40 Neutron Porosity (pu) 0
TBHV (ft3) ABHV (ft3)	0.2 (Ohm-m) 2000	Corr -0.5 (g/cc) 0.5

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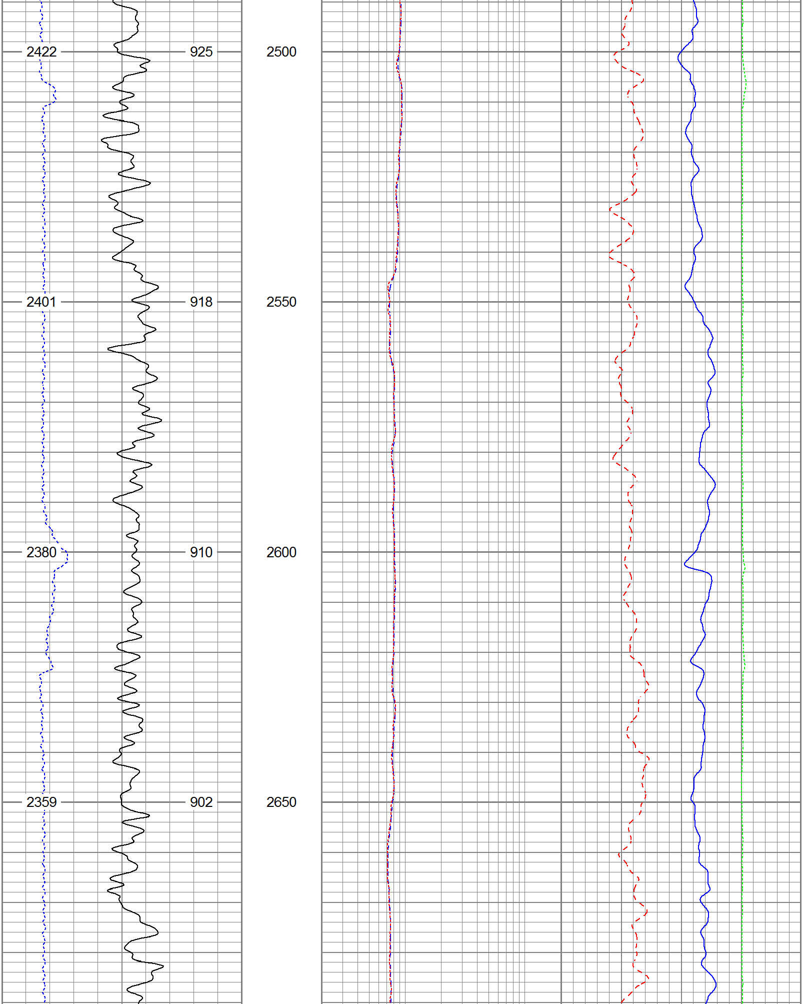
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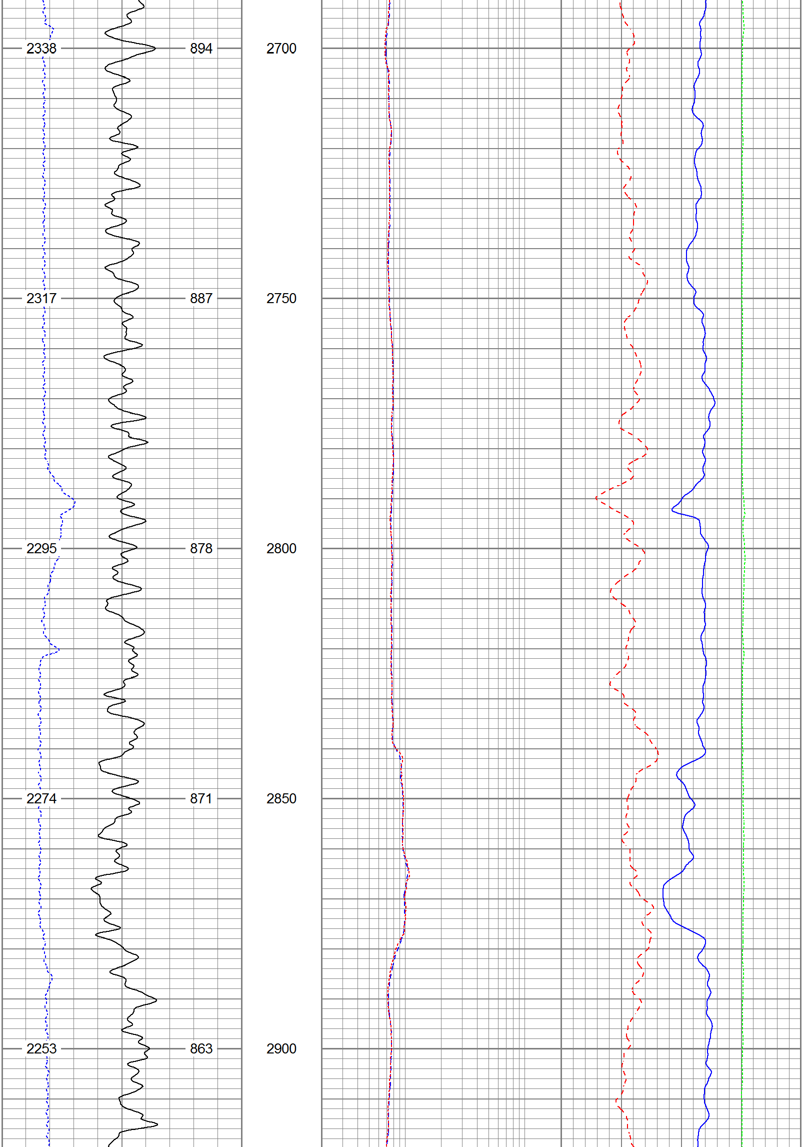
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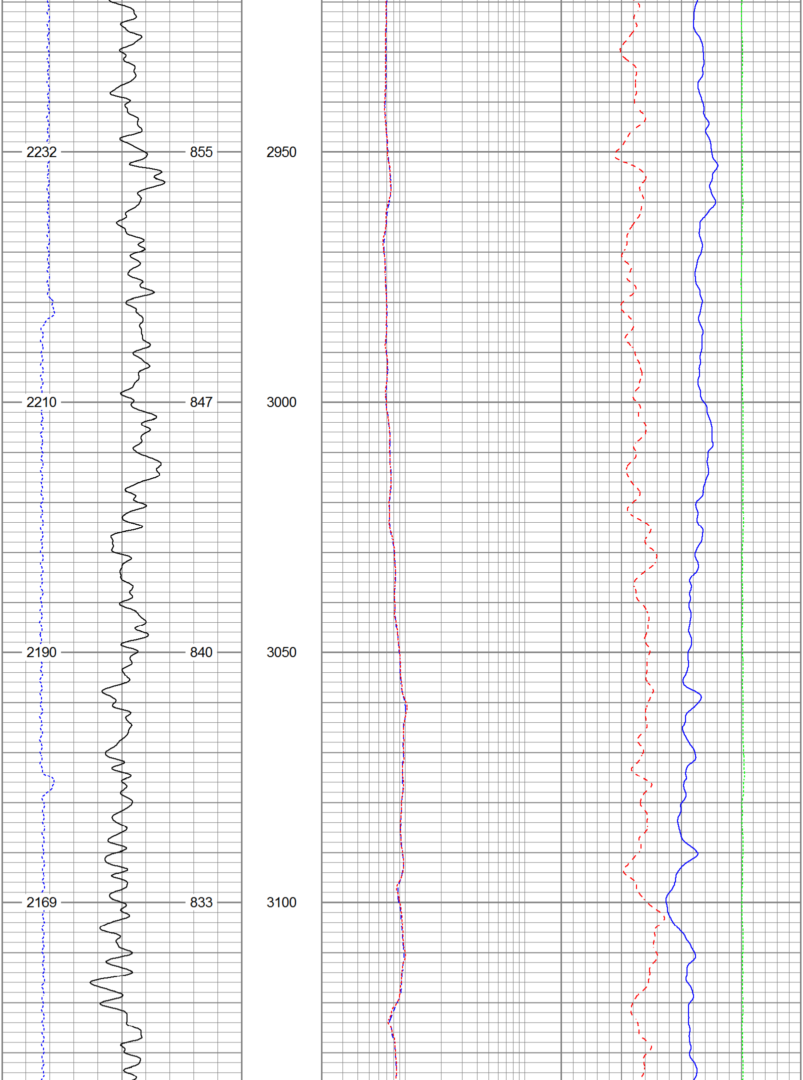
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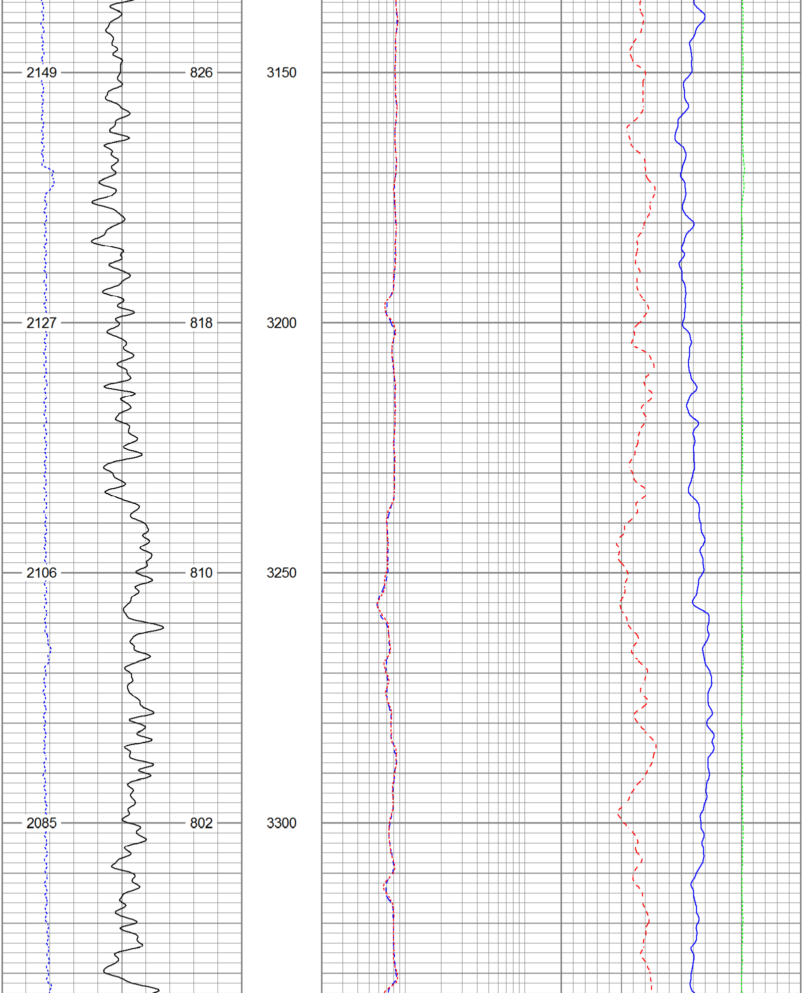
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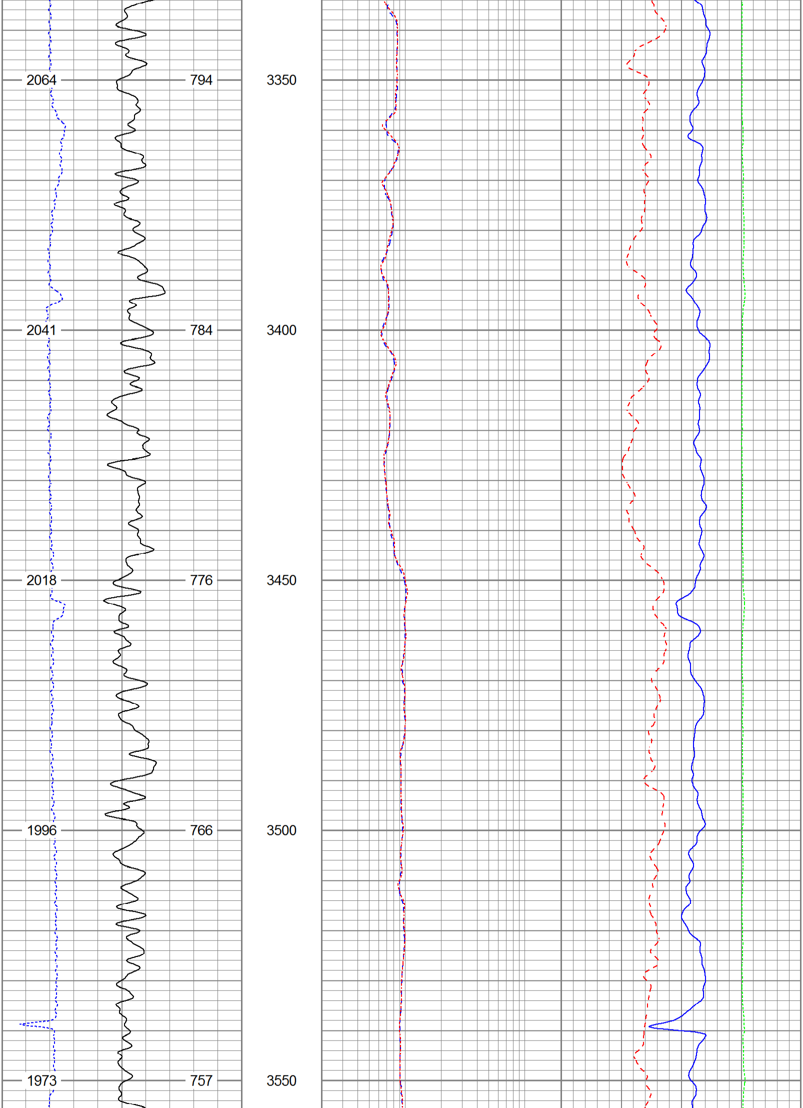
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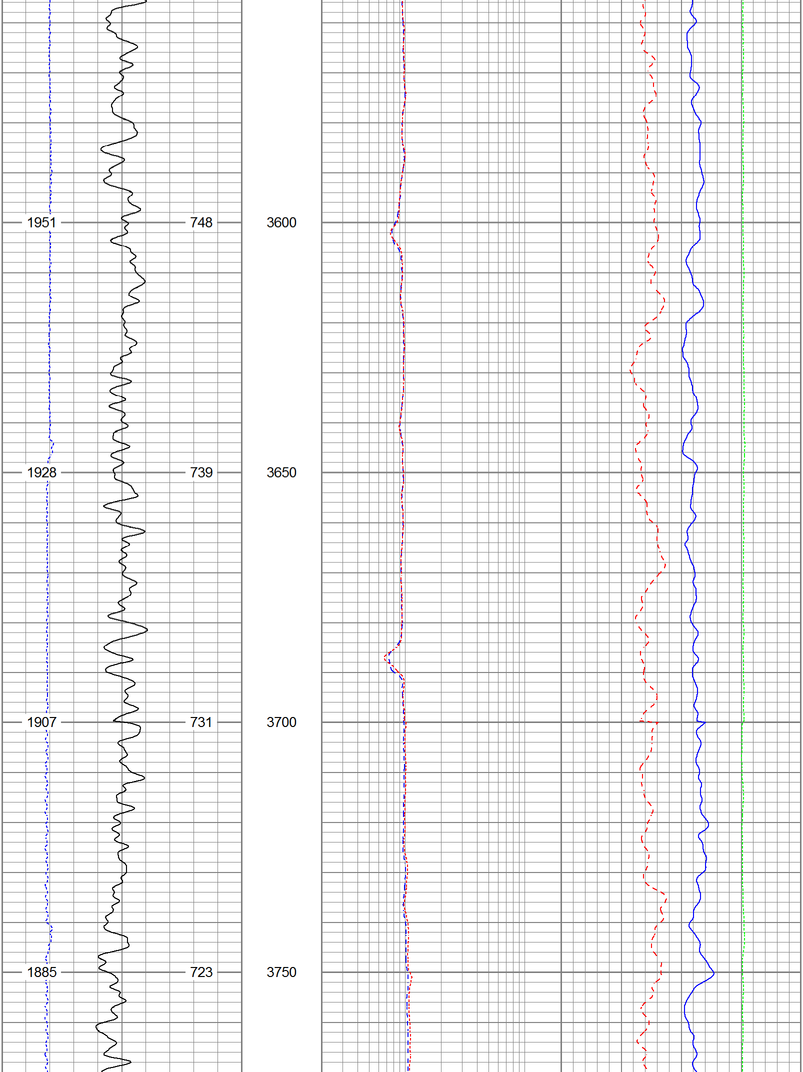
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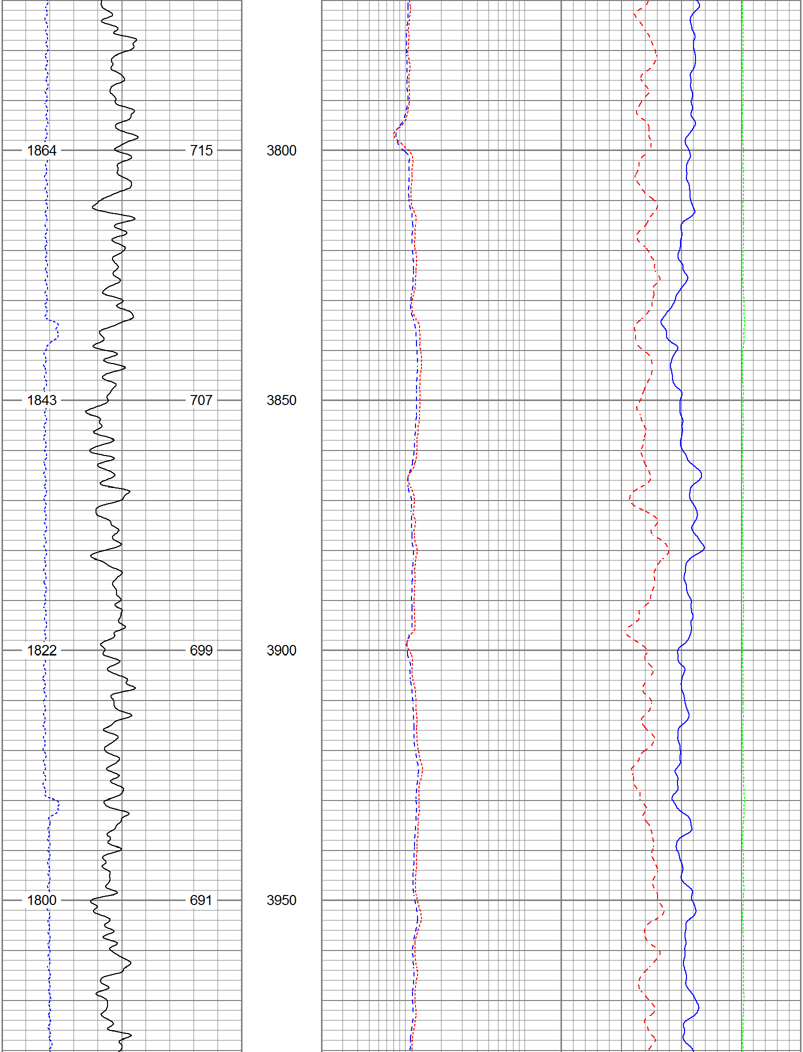
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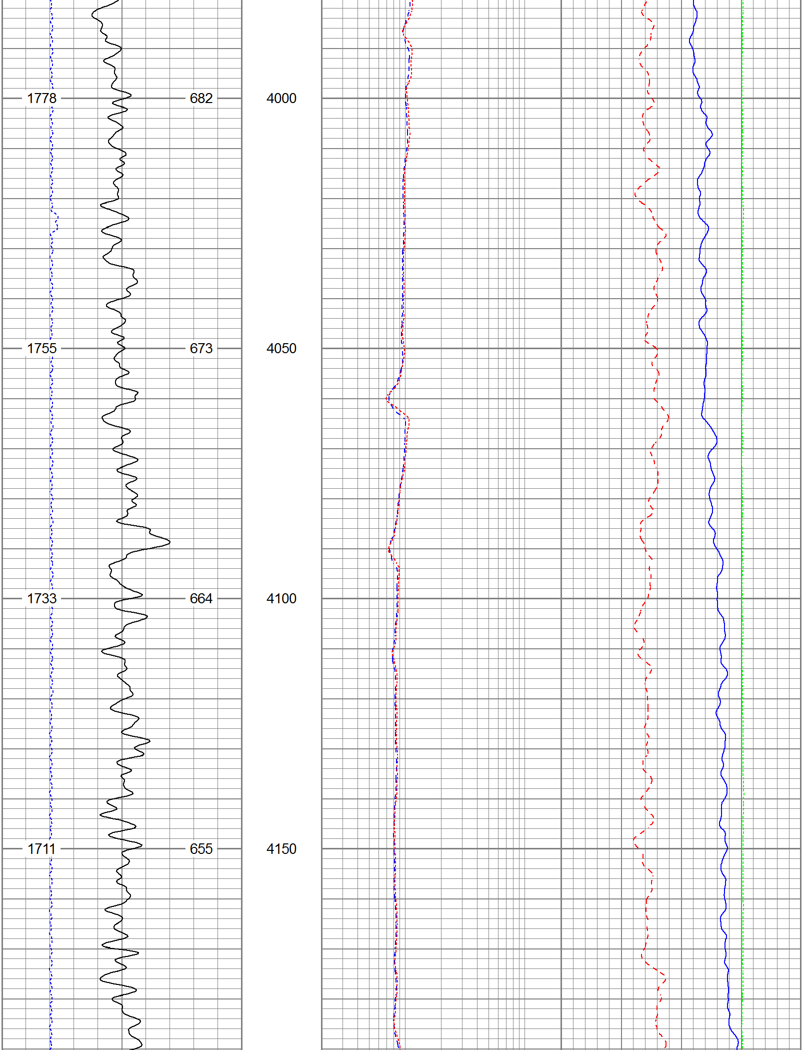
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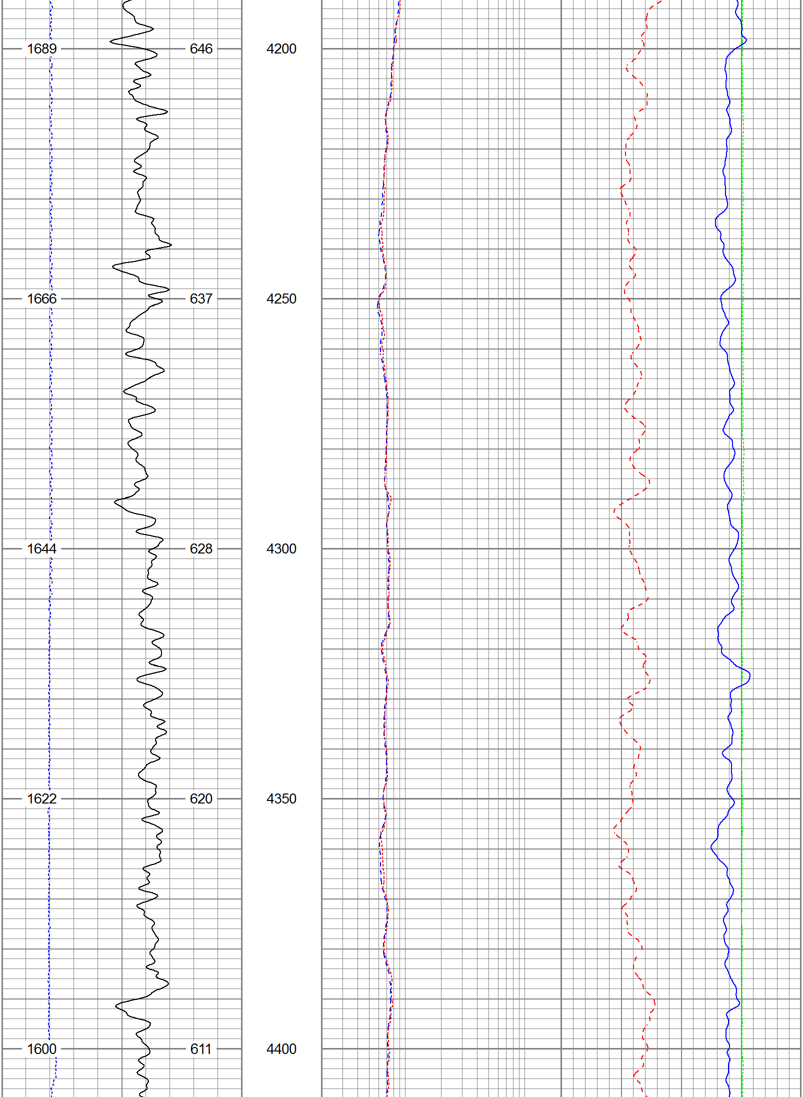
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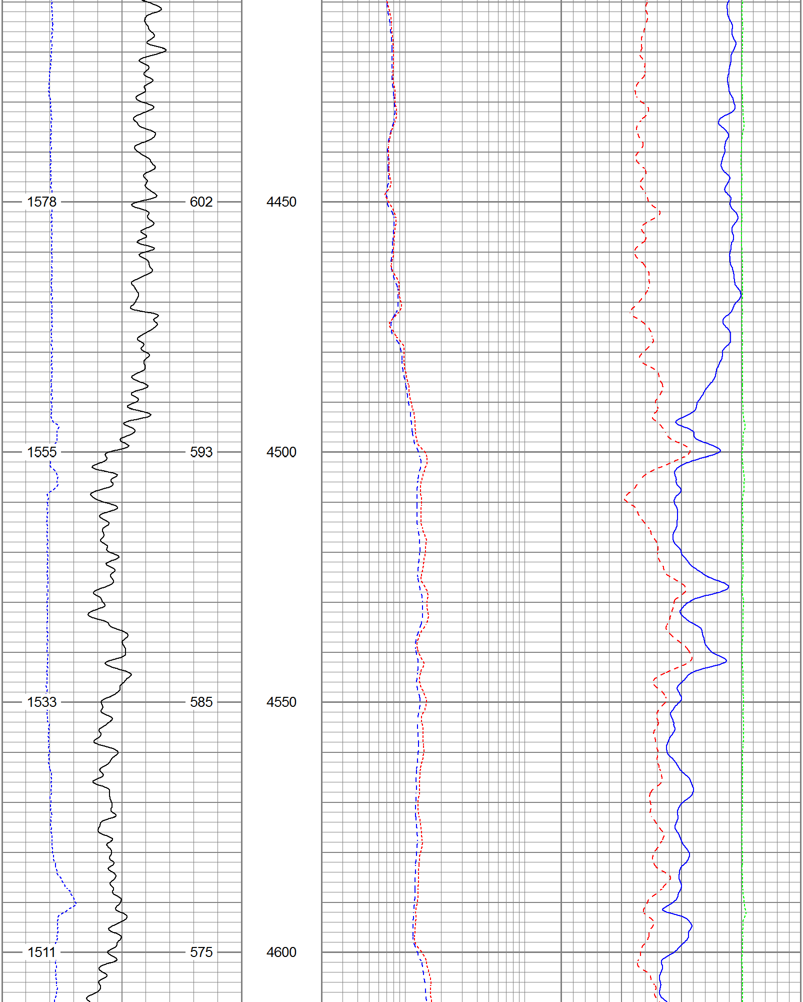
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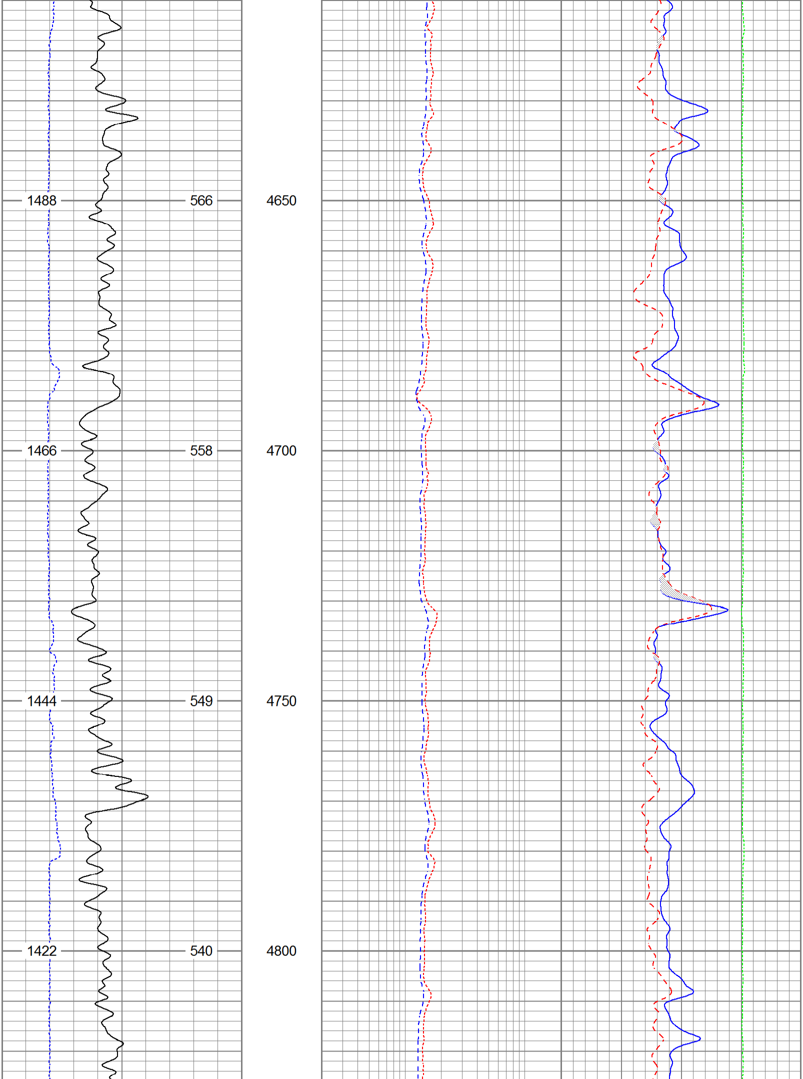
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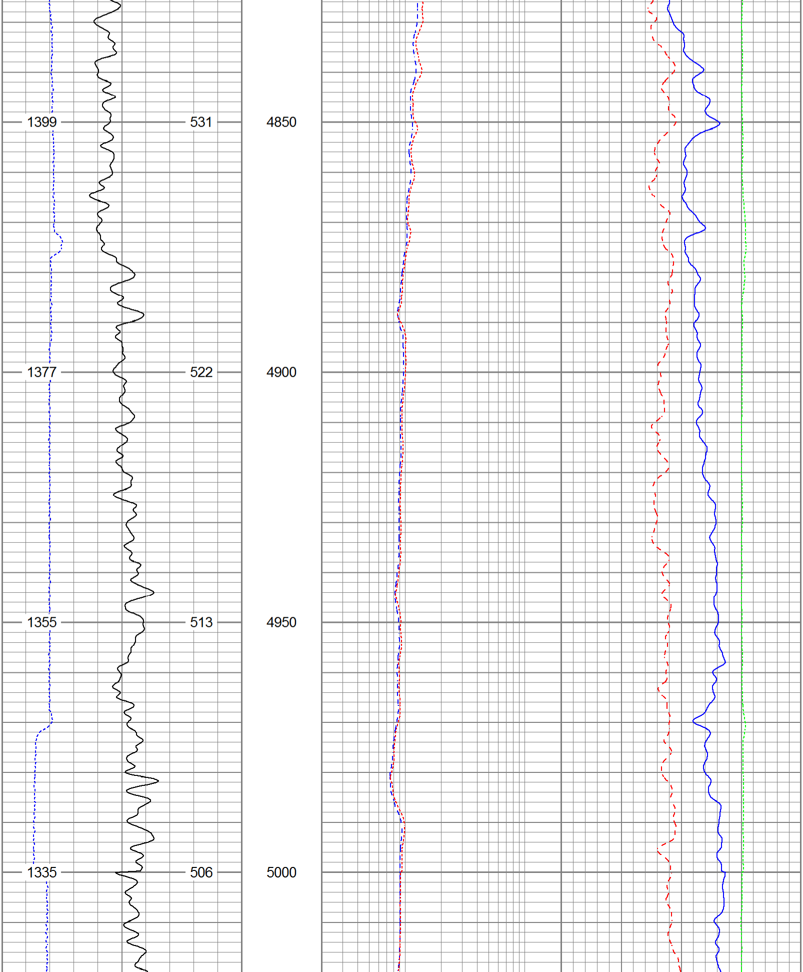
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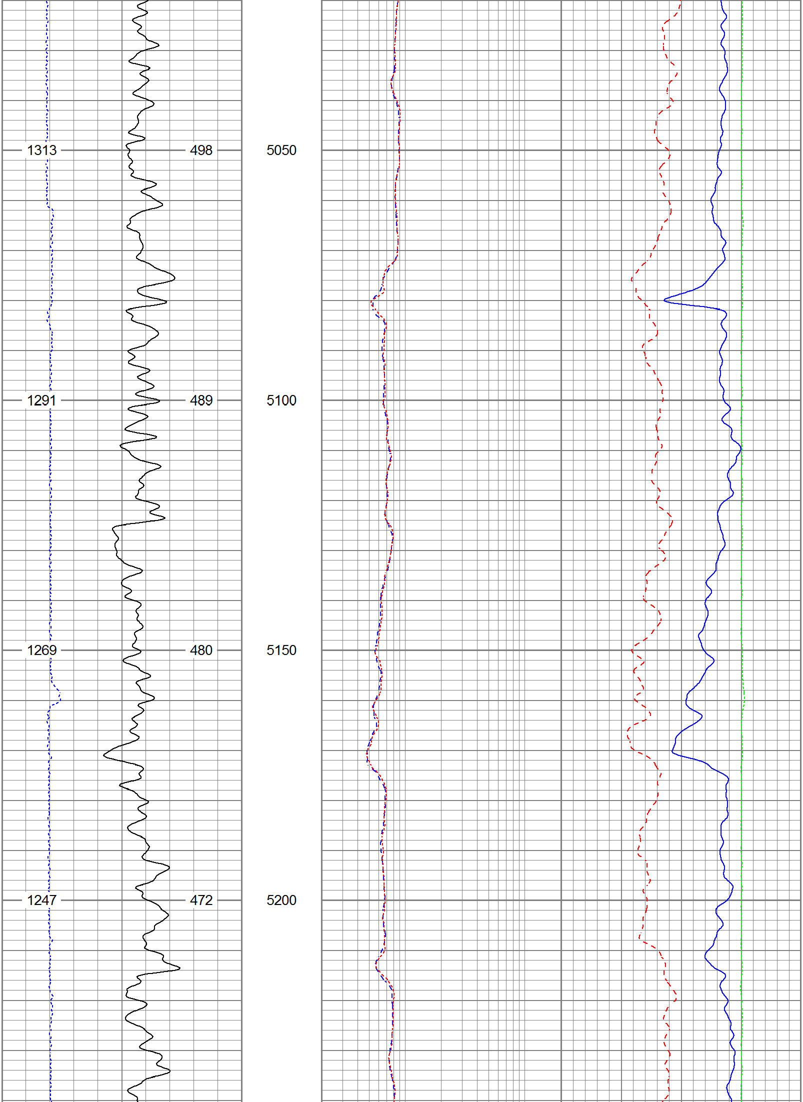
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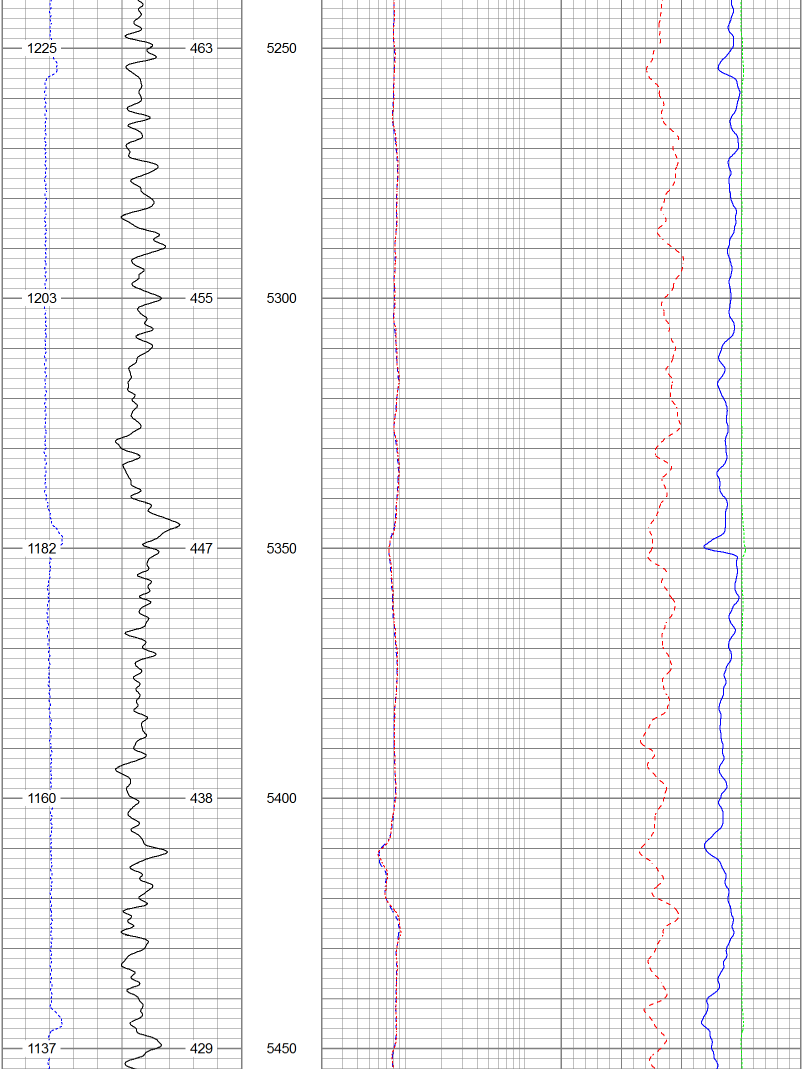
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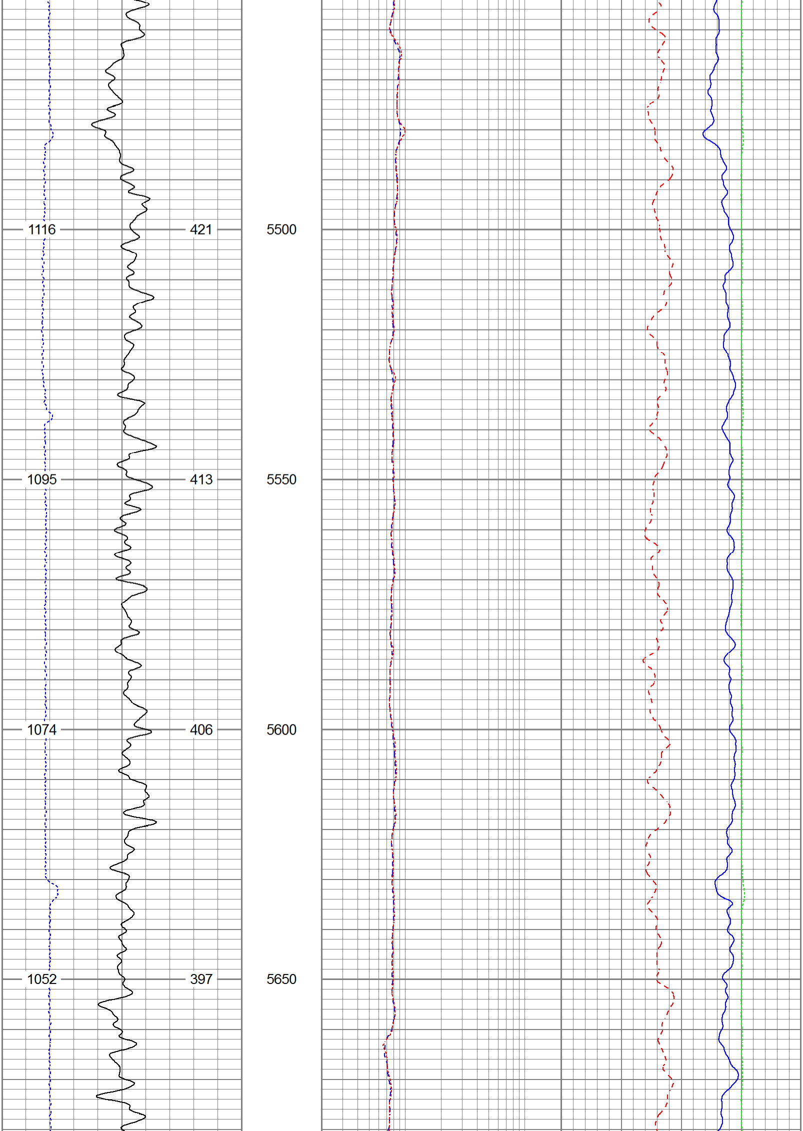
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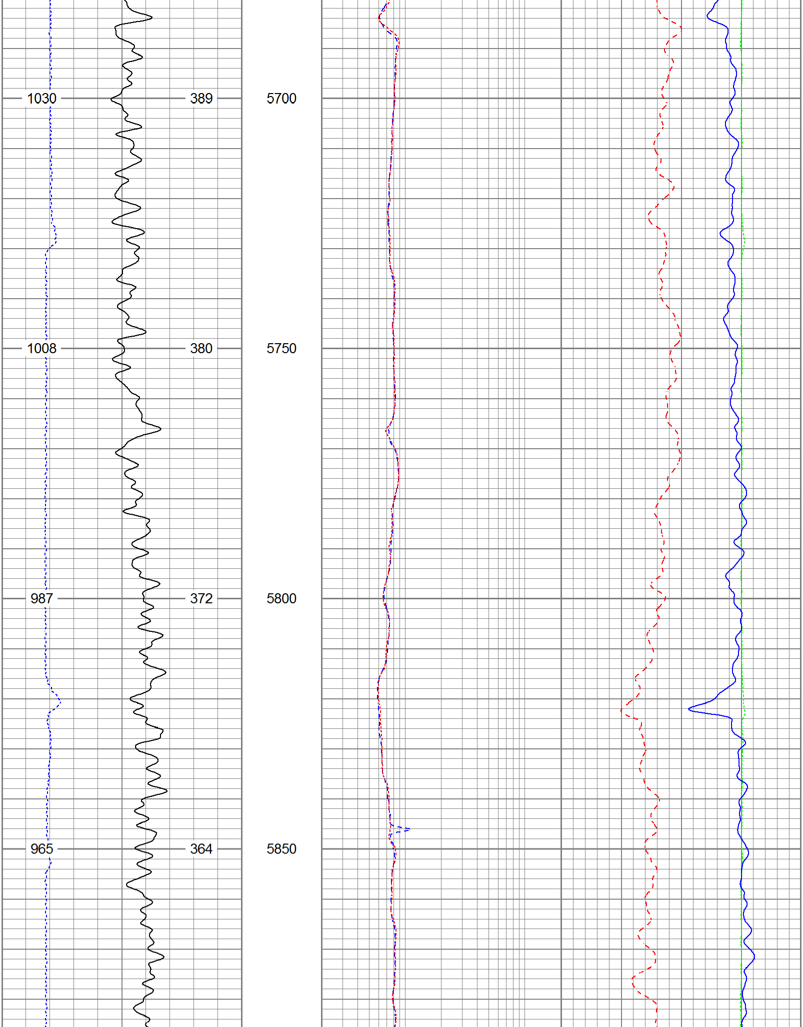
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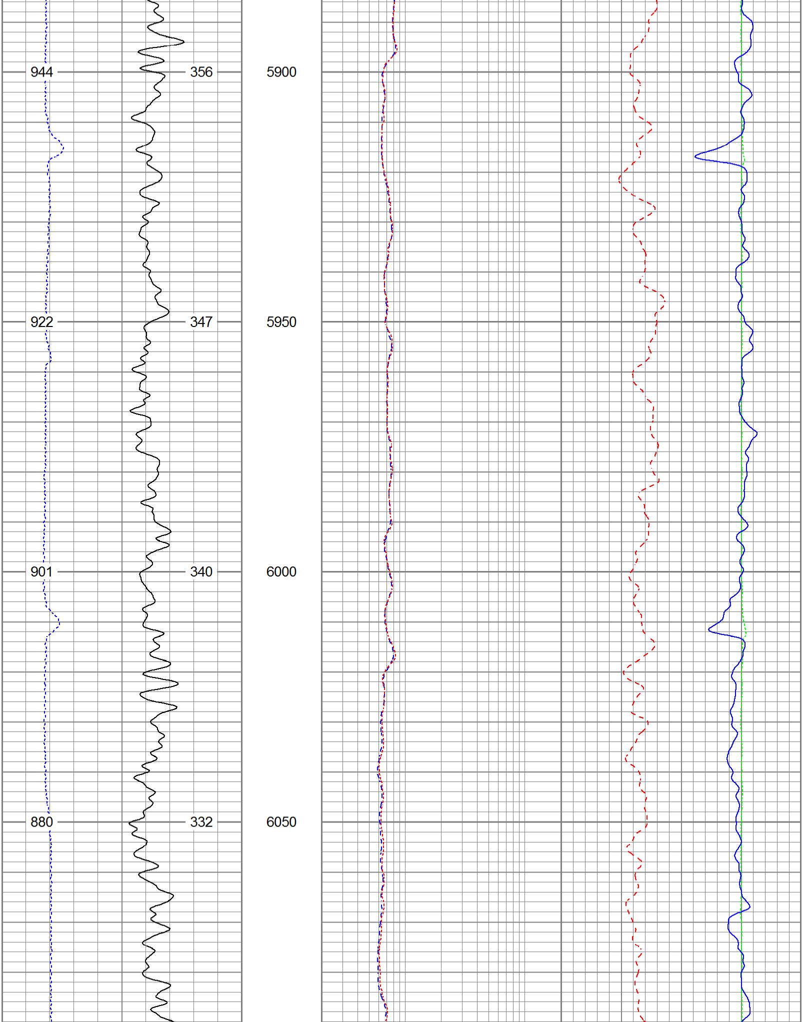
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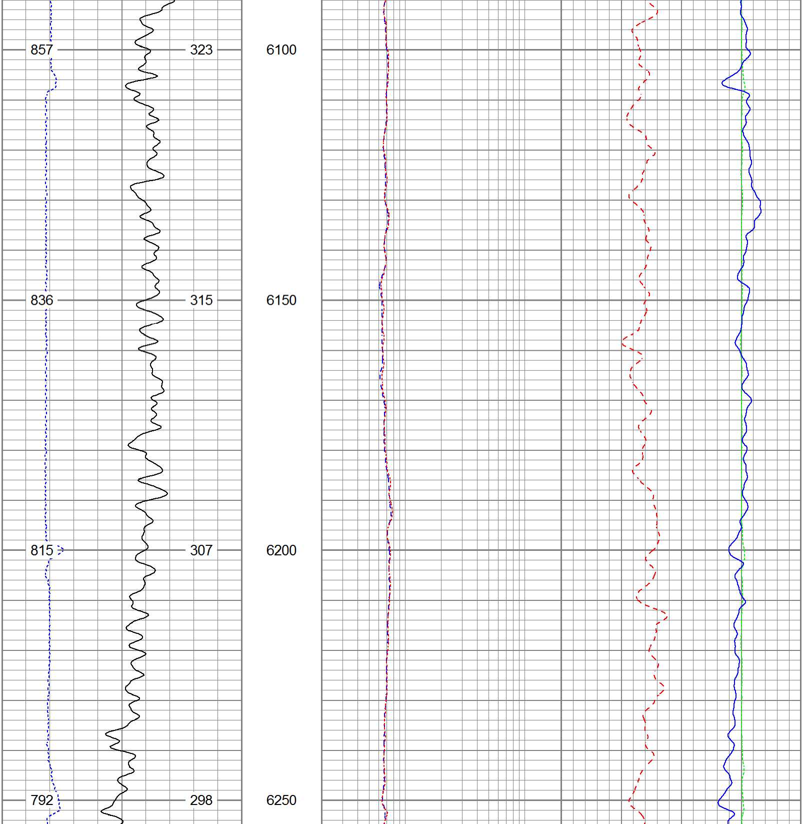
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END OF MAIN PASS

Calibration Report

Database File	2-013900.db
Dataset Pathname	pass2
Dataset Creation	Sun Nov 01 10:24:48 2015

Dual Induction Calibration Report

Serial-Model:	1010-PSI
Surface Cal Performed:	

	Readings		References			Results	
Loop:	Air	Loop	Air	Loop		m	b
Deep	0.000	1.000	0.000	1.000	mmho/m	0.550	-33.000
Medium	0.000	1.000	0.000	1.000	mmho/m	0.440	-27.000

Compensated Density Calibration Report

Serial-Model:	128-PSI
Source / Verifier:	4400 / PSI
Master Calibration Performed:	Sun Nov 01 10:35:42 2015
Before Survey Verification Performed:	
After Survey Verification Performed:	

Master Calibration

	Density		Far Detector	Near Detector	
Magnesium	1.750	g/cc	5784.40	2839.01	cps
Aluminum	2.690	g/cc	1063.58	1798.21	cps

Spine Angle = 74.91

Density/Spine Ratio = 0.536

	Size		Reading
Small Ring	4.00	in	1.18
Large Ring	13.00	in	1.03

Compensated Neutron Calibration Report

Serial Number:	822
Tool Model:	PSI

CALIBRATION

Detector	Readings		Target		Normalization
Short Space	1.00	cps	1.00	cps	1.9000
Long Space	1.00	cps	1.00	cps	2.2900

Gamma Ray Calibration Report

Serial Number:	923	
Tool Model:	PSI	
Performed:	Sun Nov 01 10:10:47 2015	
Calibrator Value:	1.0	GAPI
Background Reading:	0.0	cps
Calibrator Reading:	1.0	cps
Sensitivity:	0.6200	GAPI/cps

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Well	MEADER 4
Field	WILDCAT
County	WELD
State	CO