PIONEER
Pioneer Energy Services

COMPENSATED DENSITY COMPENSATED NEUTRON GAMMA RAY

Company	Wiepking-Fullerton Energy LLC
Well	Big Wampum #3
Field	Wildcat
County	Lincoln
State	Colorado

Company Wiepking-Fullerton Energy LLC
Well Big Wampum #3
Field Wildcat
County Lincoln State Colorado

Location: API # : 05 073 06576 0000
760' FNL & 660' FEL NENE
SEC 23 TWP 10S RGE 56W

Other Services
Dual Induction

Permanent Datum GL Elevation 5329
Log Measured From KB
Drilling Measured From KB

Elevation
K.B. 5342
D.F. 5341
G.L. 5329

Date	August 26, 2014		
Run Number	1		
Depth Driller	8100		
Depth Logger	8090		
Bottom Logged Interval	8070		
Top Log Interval	Casing		
Casing Driller	348		
Casing Logger	348		
Bit Size	7-7/8"		
Type Fluid in Hole	Chem Gel		
Density / Viscosity	9.0 / 47		
pH / Fluid Loss	10.0 /		
Source of Sample	Flowline		
Rm @ Meas. Temp	1.97 @ 70 F		
Rmf @ Meas. Temp	1.58 @ 70 F		
Rmc @ Meas. Temp	2.26 @ 70 F		
Source of Rmf / Rmc	Measure / Calc		
Rm @ BHT	0.69 @ 199 F		
Time Circulation Stopped	2000 8/25		
Time Logger on Bottom	0330		
Maximum Recorded Temperature	199 F		
Equipment Number	49		
Location	Ft. Morgan, CO		
Recorded By	Tracy Crane		
Witnessed By	Gregg Smith		

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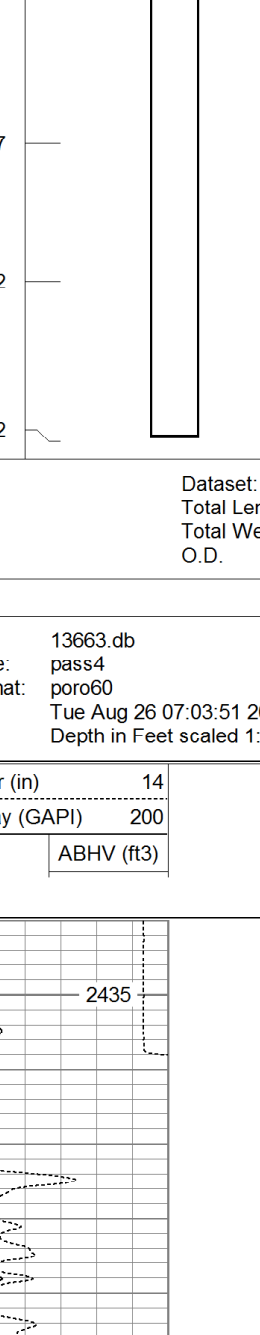
All interpretations are opinions based on inferences from electrical or other measurements and Pioneer Wireline Services, LLC cannot and does not guarantee the accuracy or correctness of any interpretation, and Pioneer Wireline Services, LLC will not be liable or responsible for any loss, costs, damages, or expenses incurred or sustained by anyone resulting from any interpretation made by any of our officers, agents or employees.

Comments

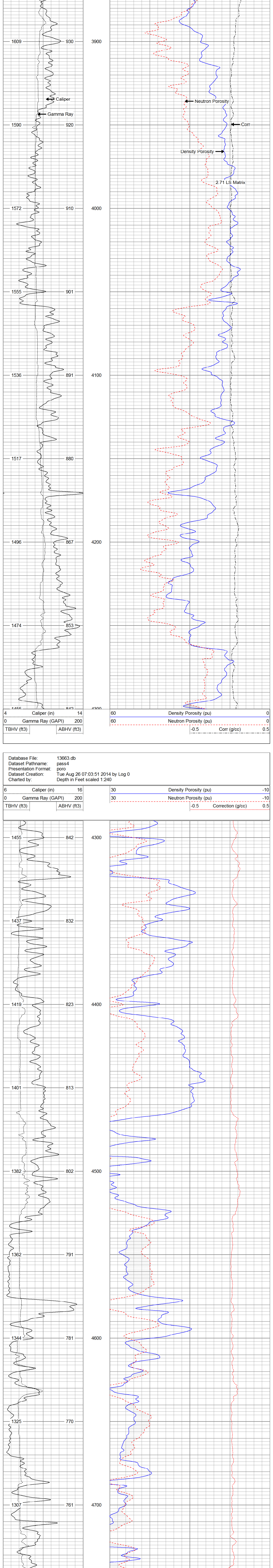
Annular volume calculated for 5.5" casing
Murfin Drilling Rig 25
Thank you for using Pioneer Energy Services



Sensor	Offset (ft)	Description	Len (ft)	OD (in)	Wt (lb)
		CHD (~0)	2.00	3.50	30.00
GR	0.00	GR-PSI (923)	2.92	3.50	40.00
CNLSC	-3.67				
CNSSC	-4.17	CNT-PSI (826)	5.00	3.50	70.00
DCAL	-11.84	CDL-PSI (128)	8.50	5.00	285.00
LSD	-12.67				
SSD	-13.17				
RLL3	-17.52				
CILD	-24.97	DIL-PSI (1011)	18.25	3.75	175.00
CILM	-28.42				
SP	-32.42				

Dataset: 13663.db: field/well/run1/pass4
Total Length: 36.67 ft
Total Weight: 600.00 lb
O.D. 5.00 in

Database File: 13663.db
Dataset Pathname: pass4
Presentation Format: poro60
Dataset Creation: Tue Aug 26 07:03:51 2014 by Log 0
Charted by: Depth in Feet scaled 1:240



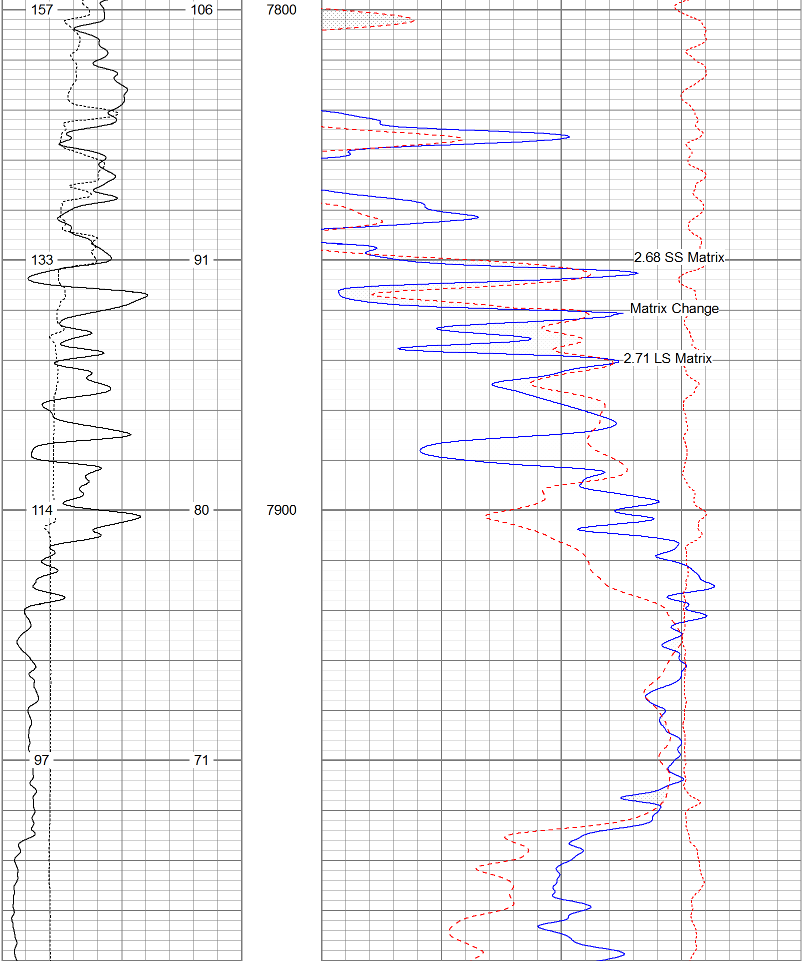
4	Caliper (in)	14
0	Gamma Ray (GAPI)	200
TBHV (ft3)		ABHV (ft3)

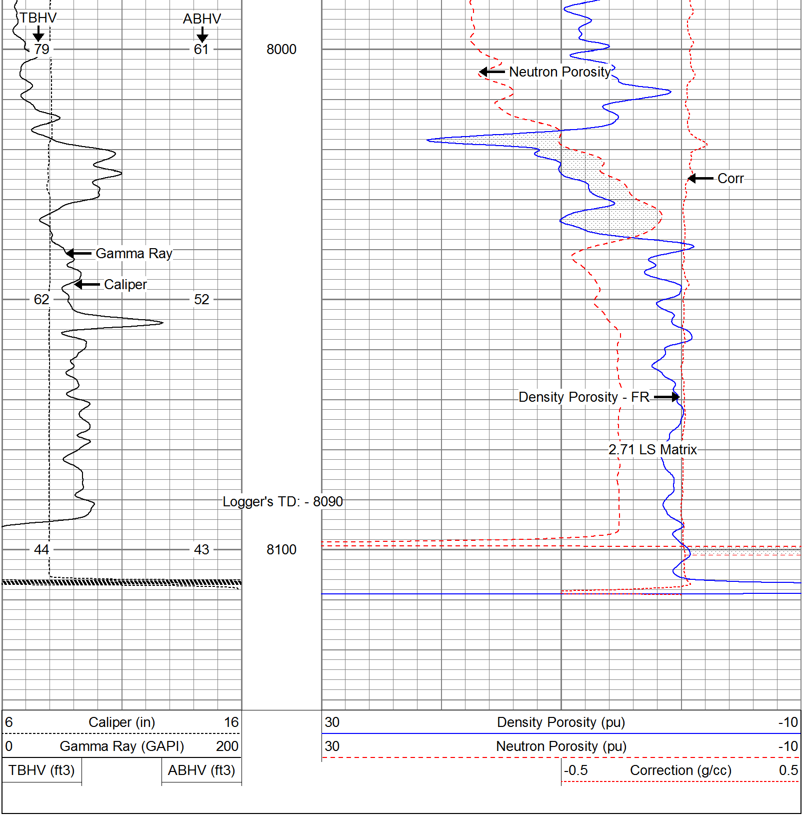
60	Density Porosity (pu)	0
60	Neutron Porosity (pu)	0
-0.5	Corr (g/cc)	0.5

Database File: 13663.db
Dataset Pathname: pass4
Presentation Format: poro
Dataset Creation: Tue Aug 26 07:03:51 2014 by Log 0
Charted by: Depth in Feet scaled 1:240

6	Caliper (in)	16
0	Gamma Ray (GAPI)	200
TBHV (ft3)		ABHV (ft3)

30	Density Porosity (pu)	-10
30	Neutron Porosity (pu)	-10
-0.5	Correction (g/cc)	0.5





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Dataset Pathname:	pass3.1
Presentation Format:	poro
Dataset Creation:	Tue Aug 26 06:58:16 2014 by Calc 0
Charted by:	Depth in Feet scaled 1:240

6 Caliper (in) 16

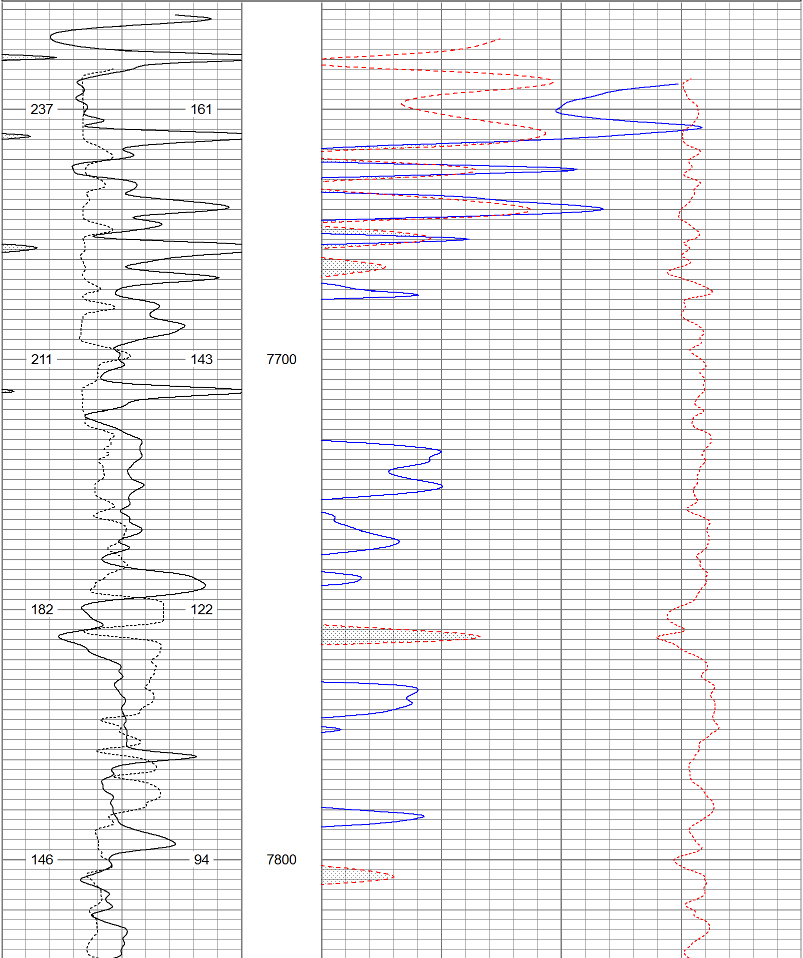
0 Gamma Ray (GAPI) 200

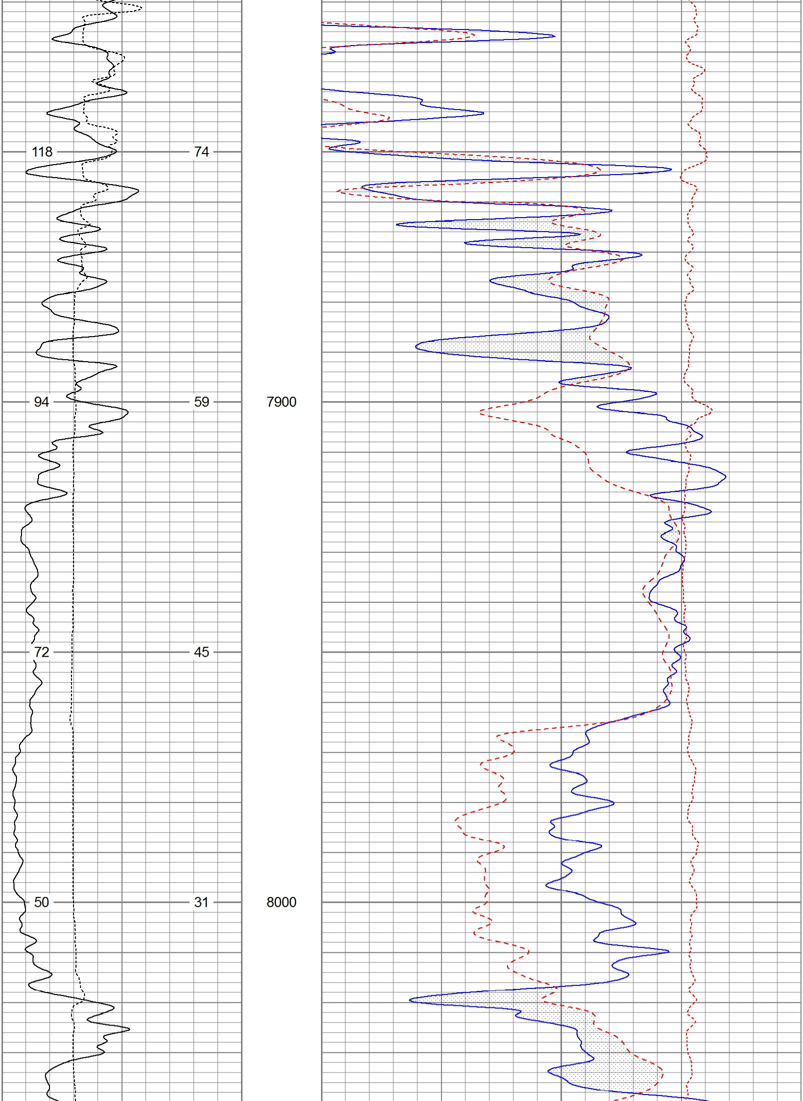
TBHV (ft3) ABHV (ft3)

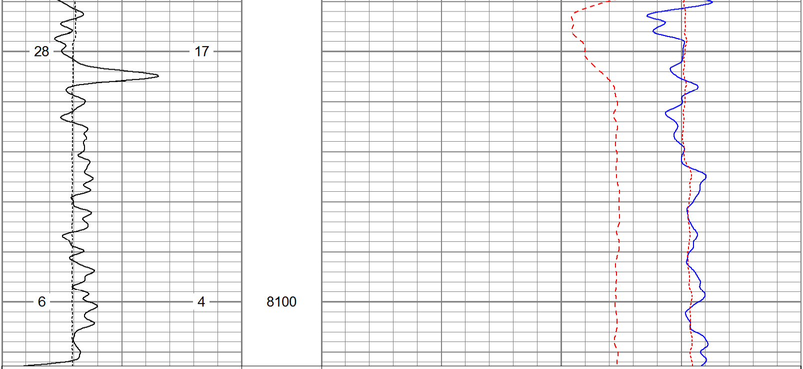
30 Density Porosity (pu) -10

30 Neutron Porosity (pu) -10

-0.5 Correction (g/cc) 0.5







6 Caliper (in) 16

0 Gamma Ray (GAPI) 200

TBHV (ft3) ABHV (ft3)

30 Density Porosity (pu) -10

30 Neutron Porosity (pu) -10

-0.5 Correction (g/cc) 0.5

Database File:	13663.db
Dataset Pathname:	pass4
Presentation Format:	cdl
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Charted by:	Depth in Feet scaled 1:240

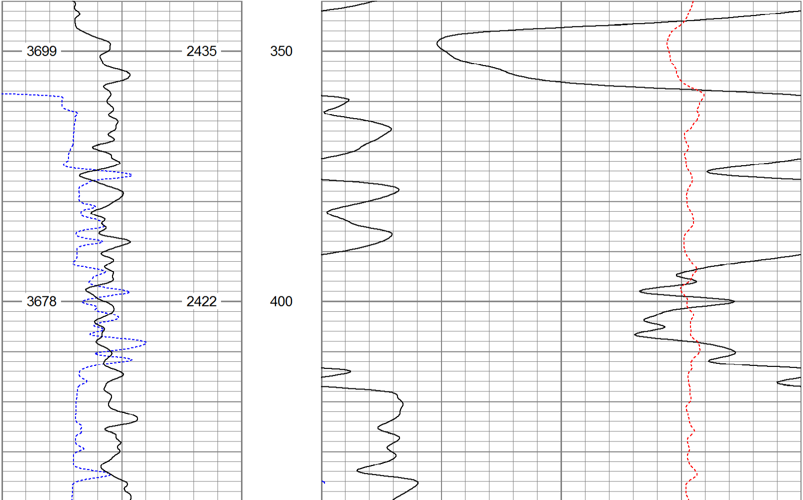
6 Caliper (in) 16

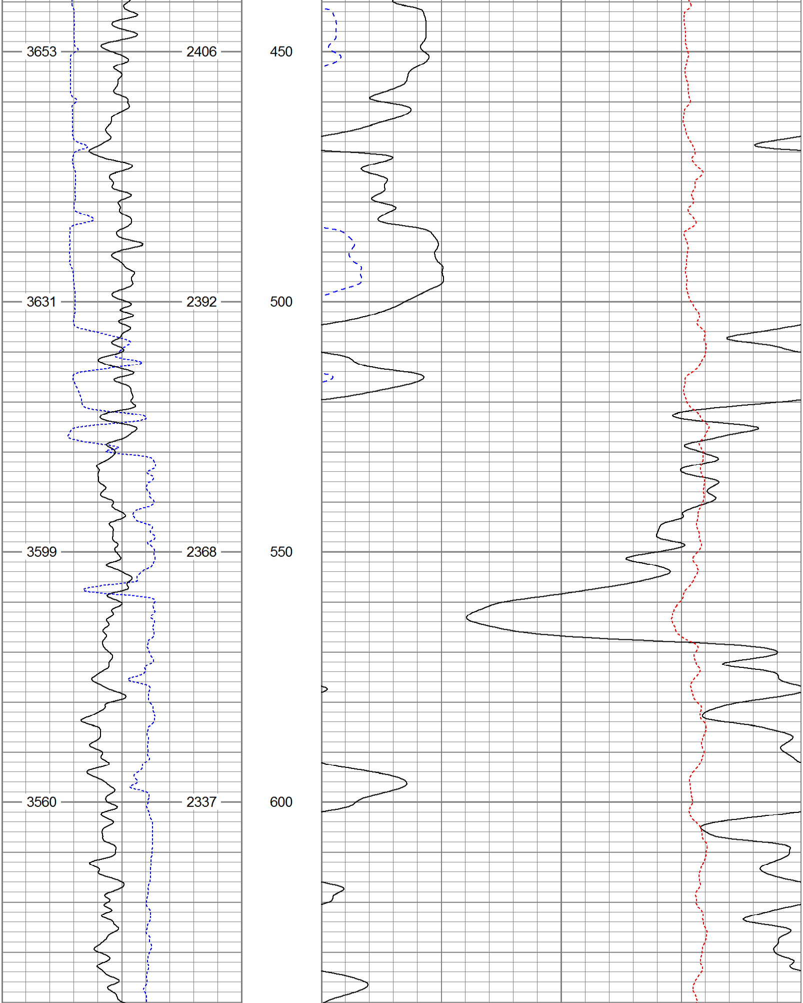
0 Gamma Ray (GAPI) 200

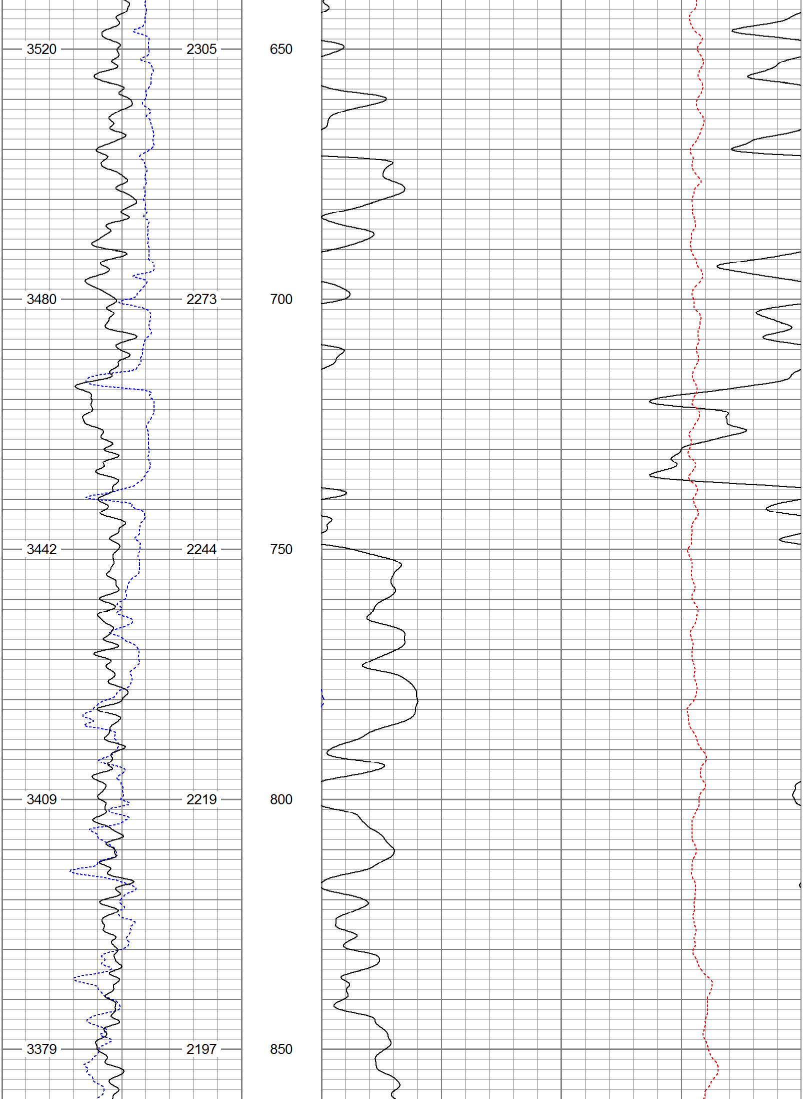
2 Bulk Density (g/cc) 3

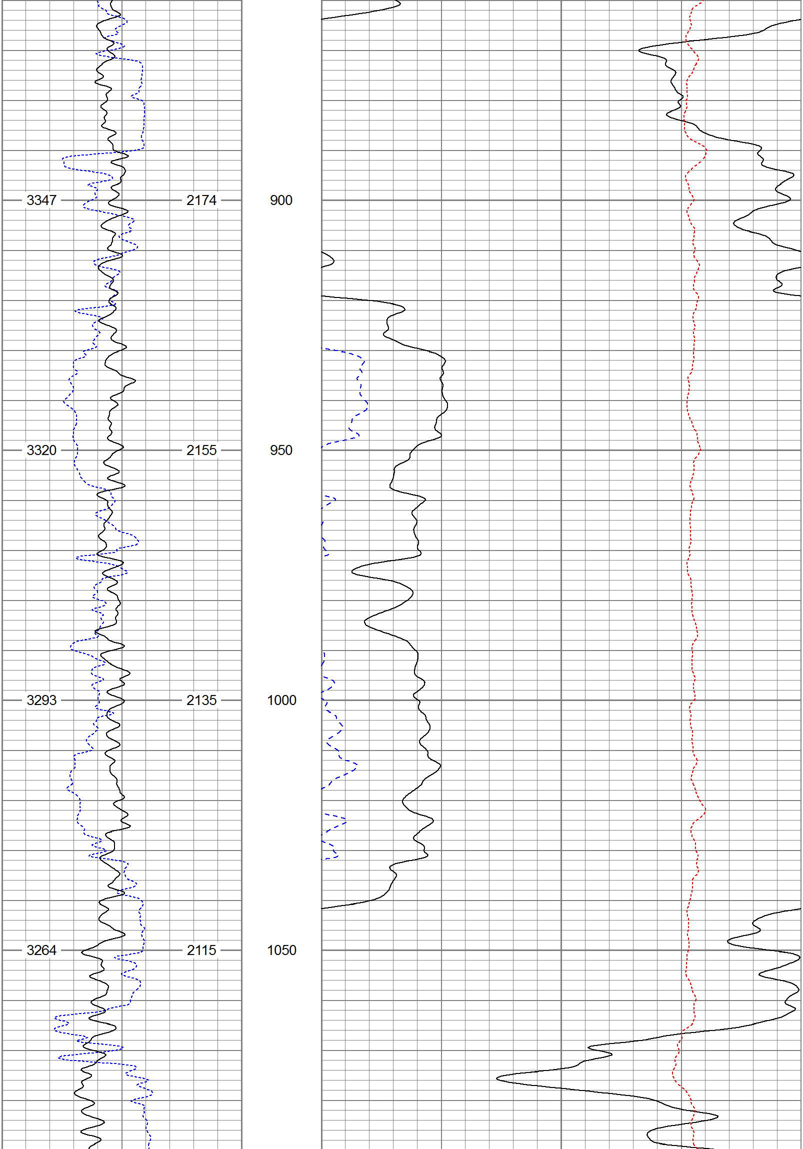
30 Density Porosity (pu) -10

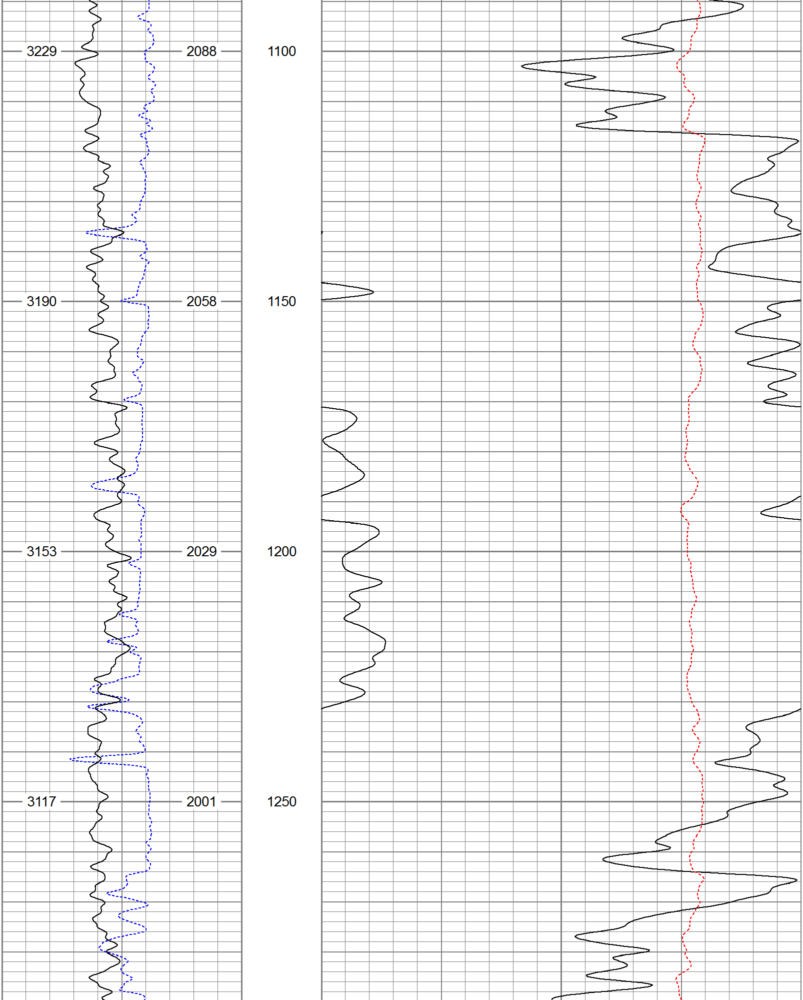
-0.5 Correction (g/cc) 0.5

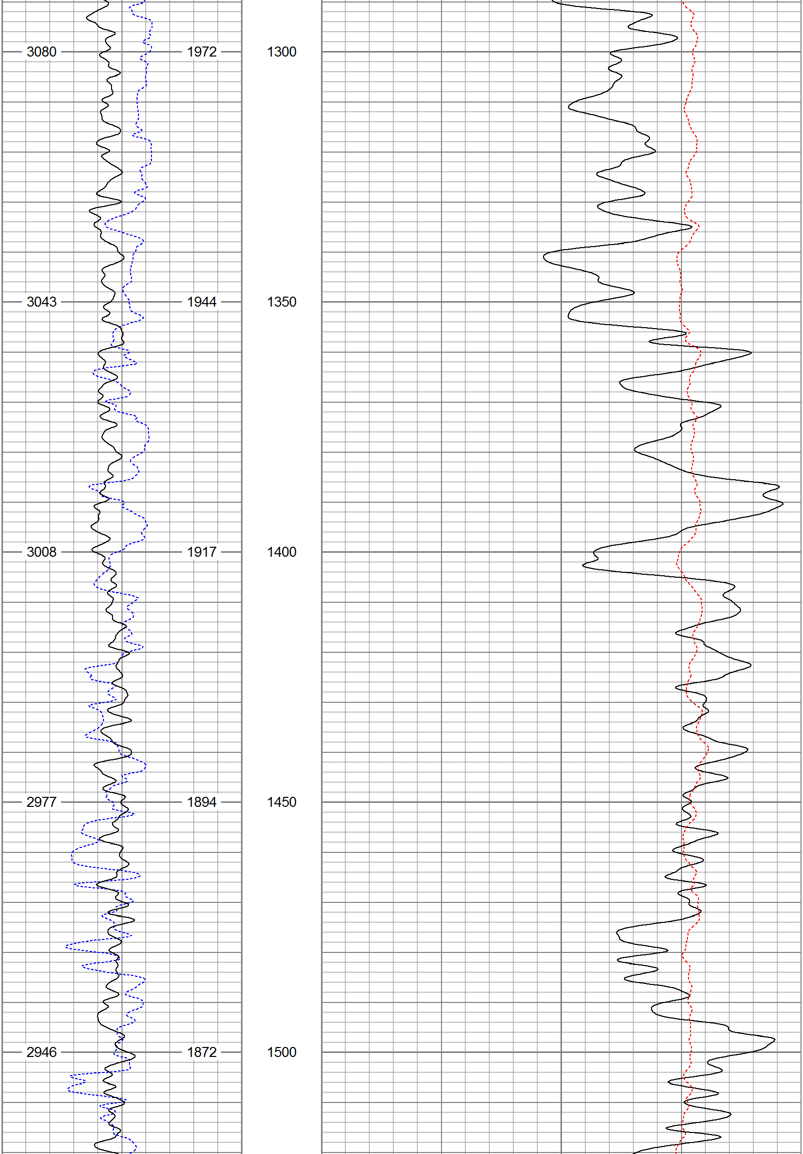


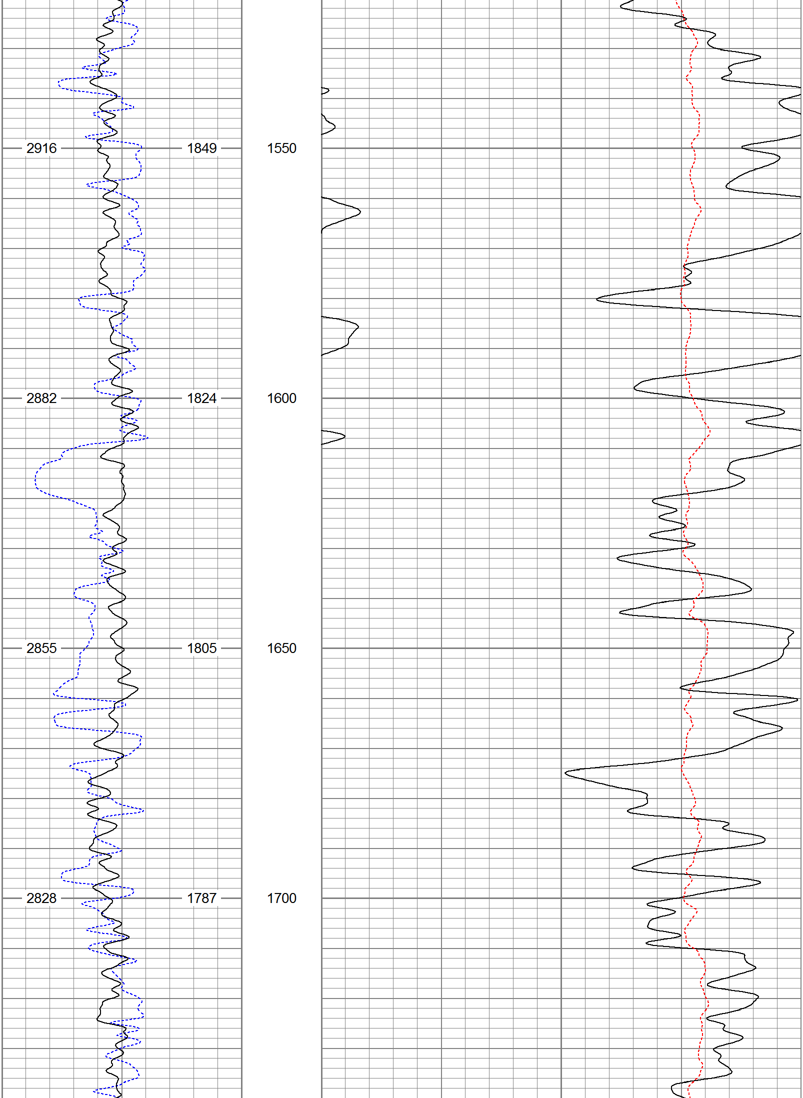


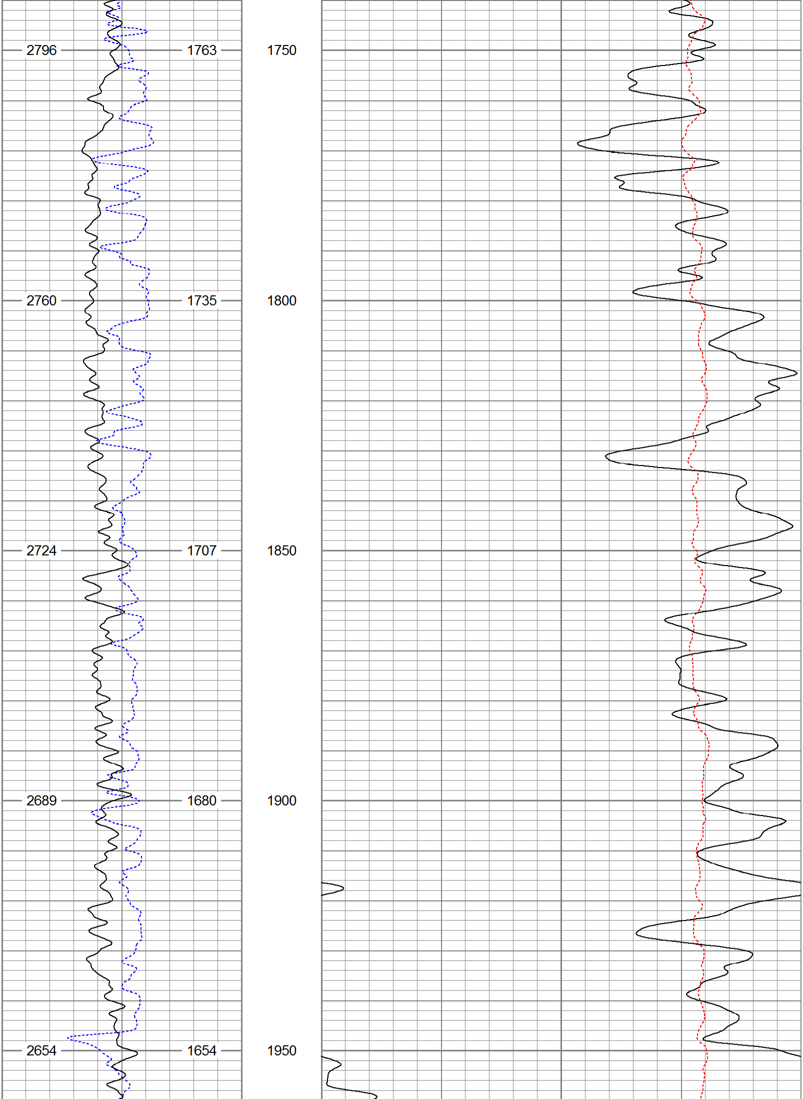


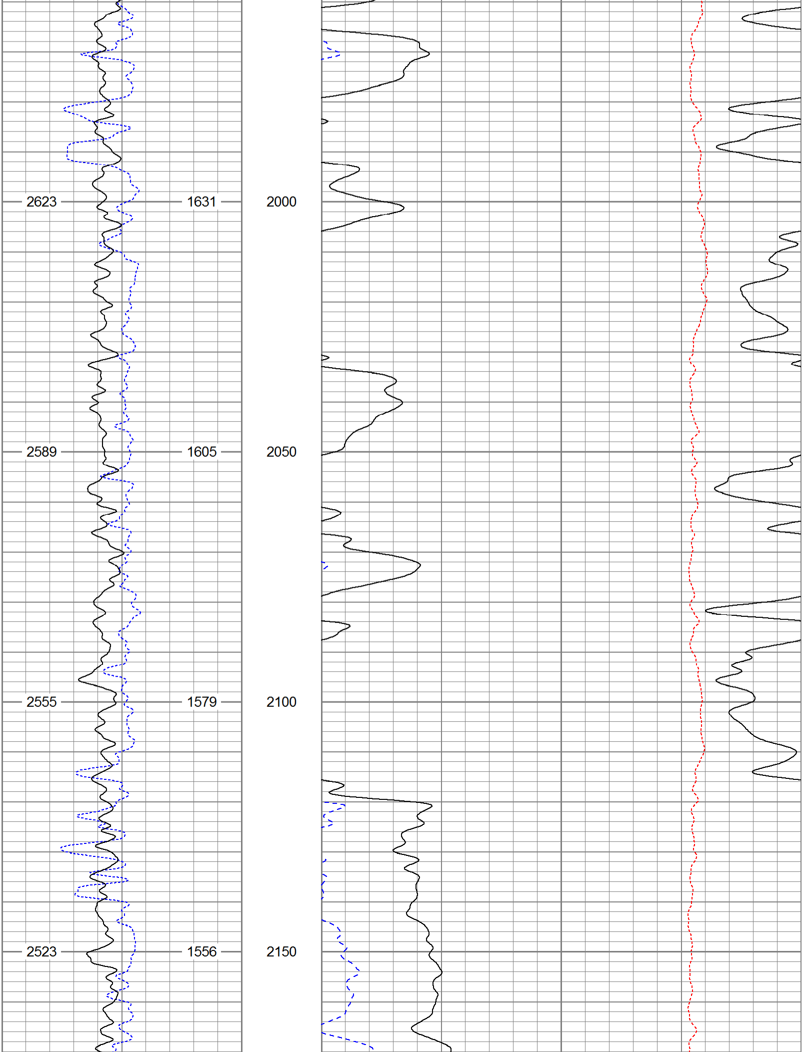


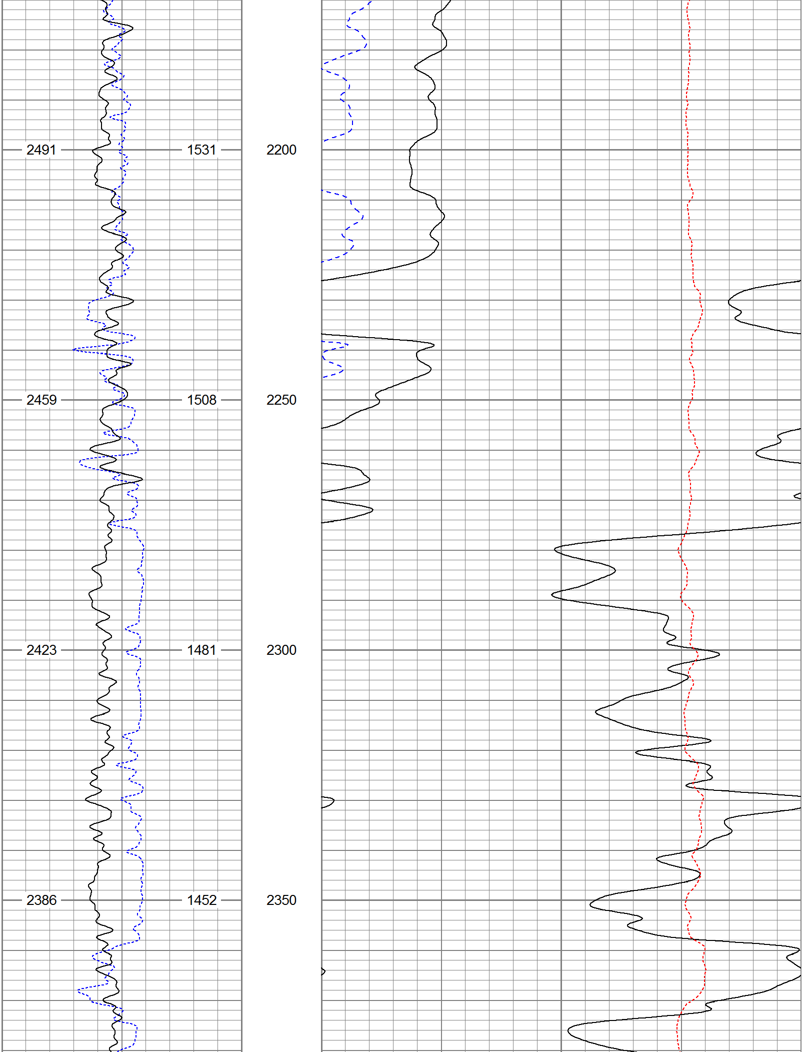


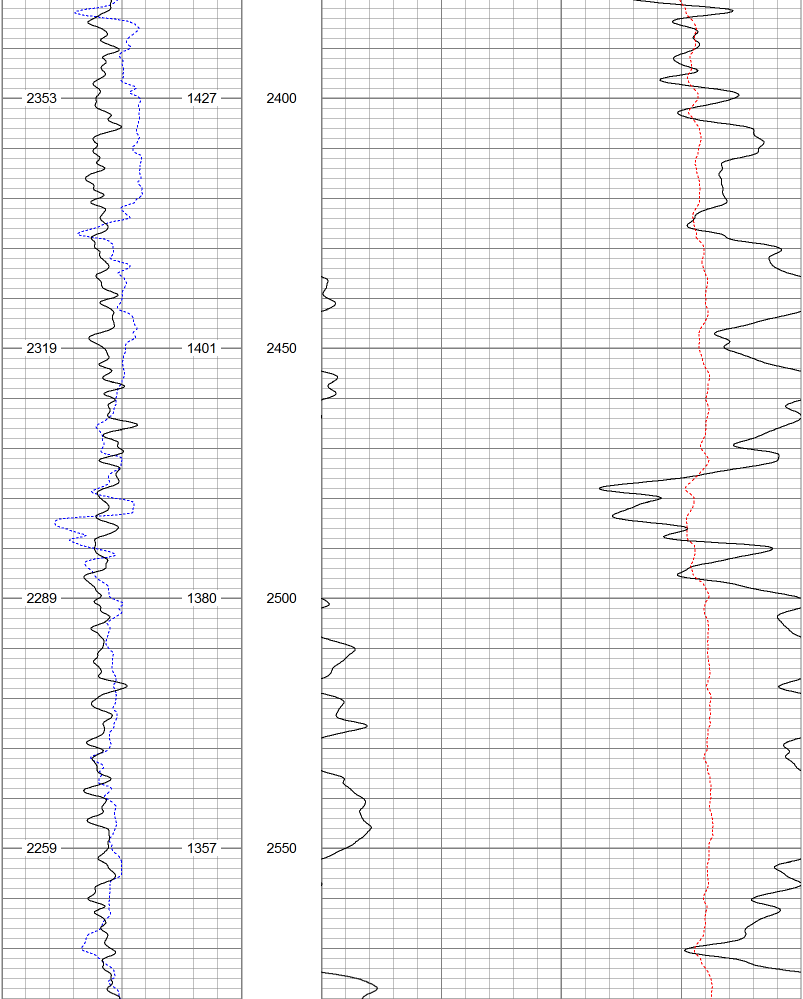


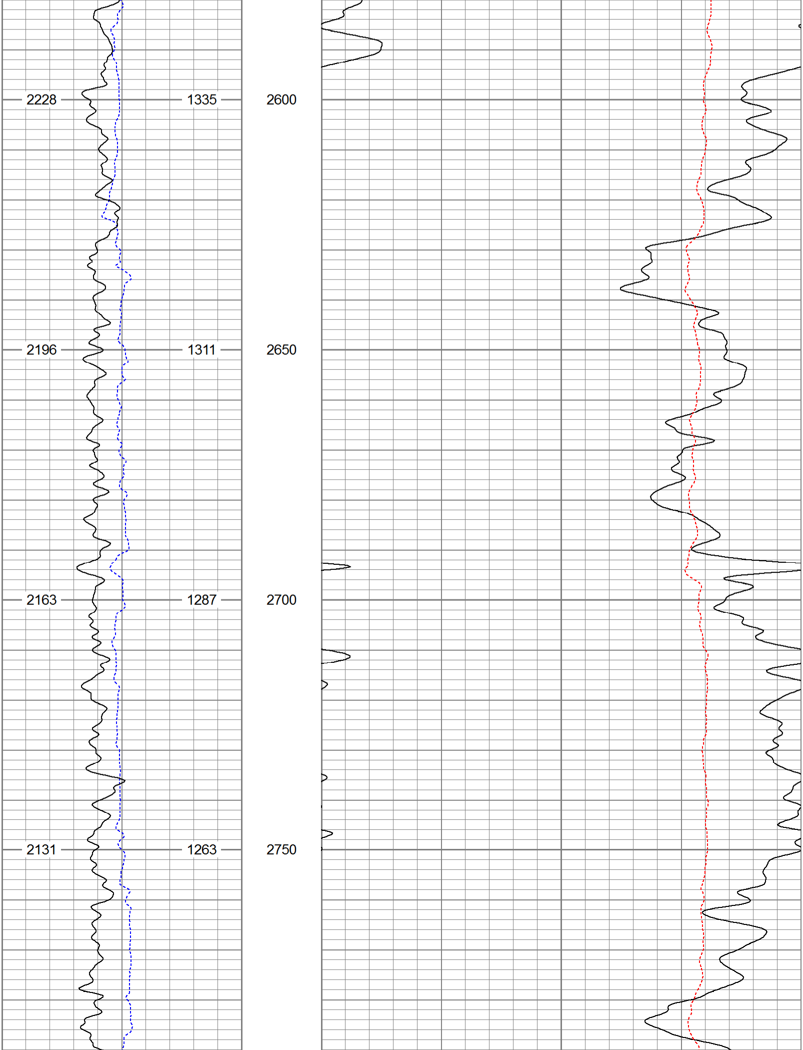


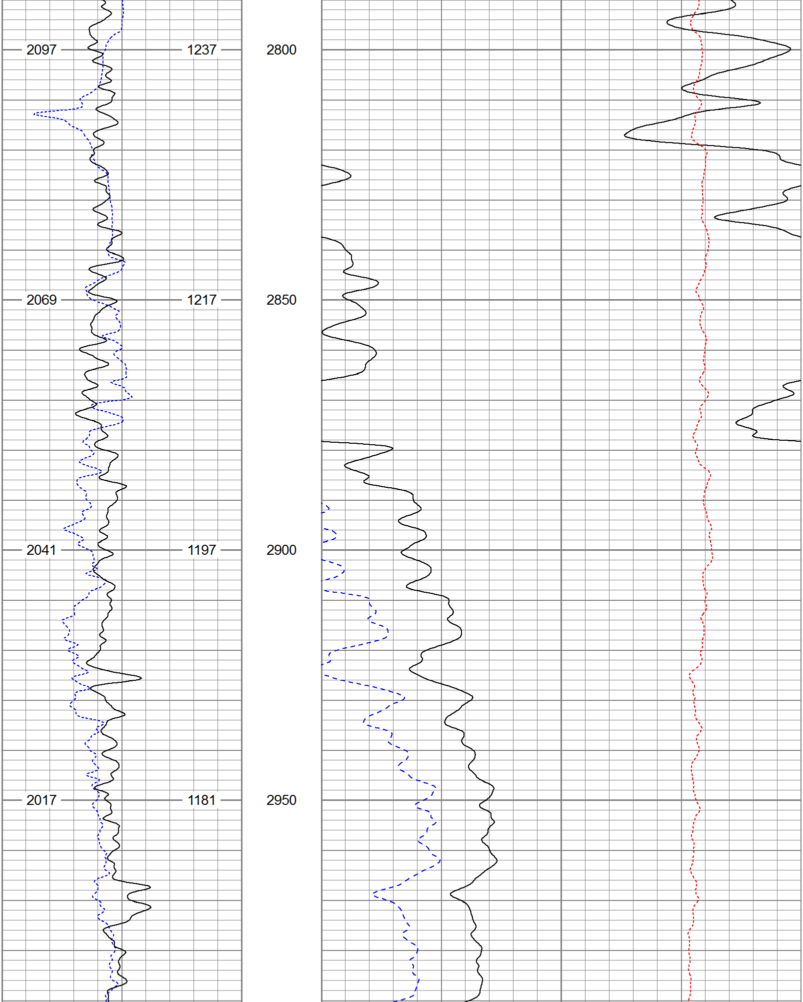


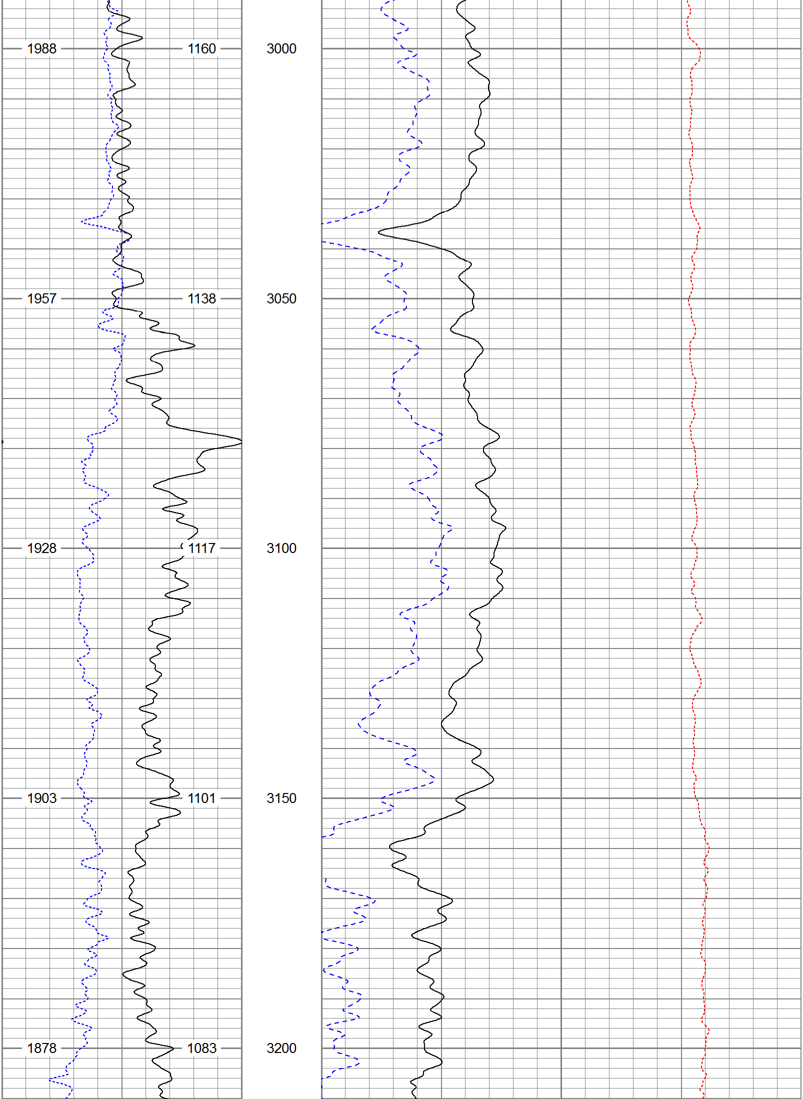


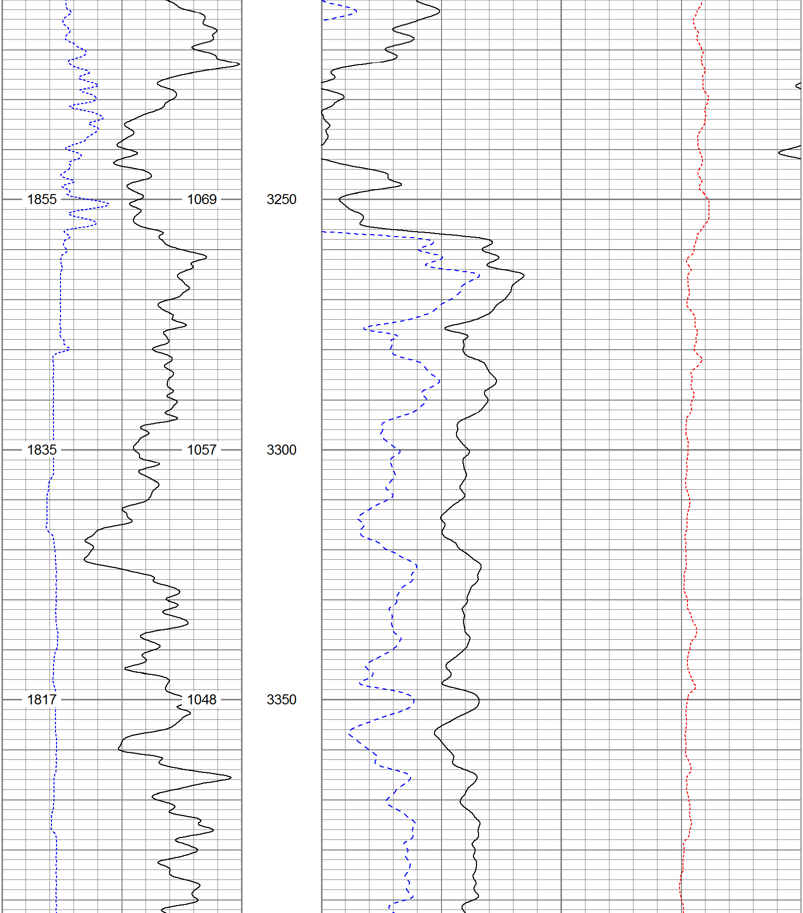


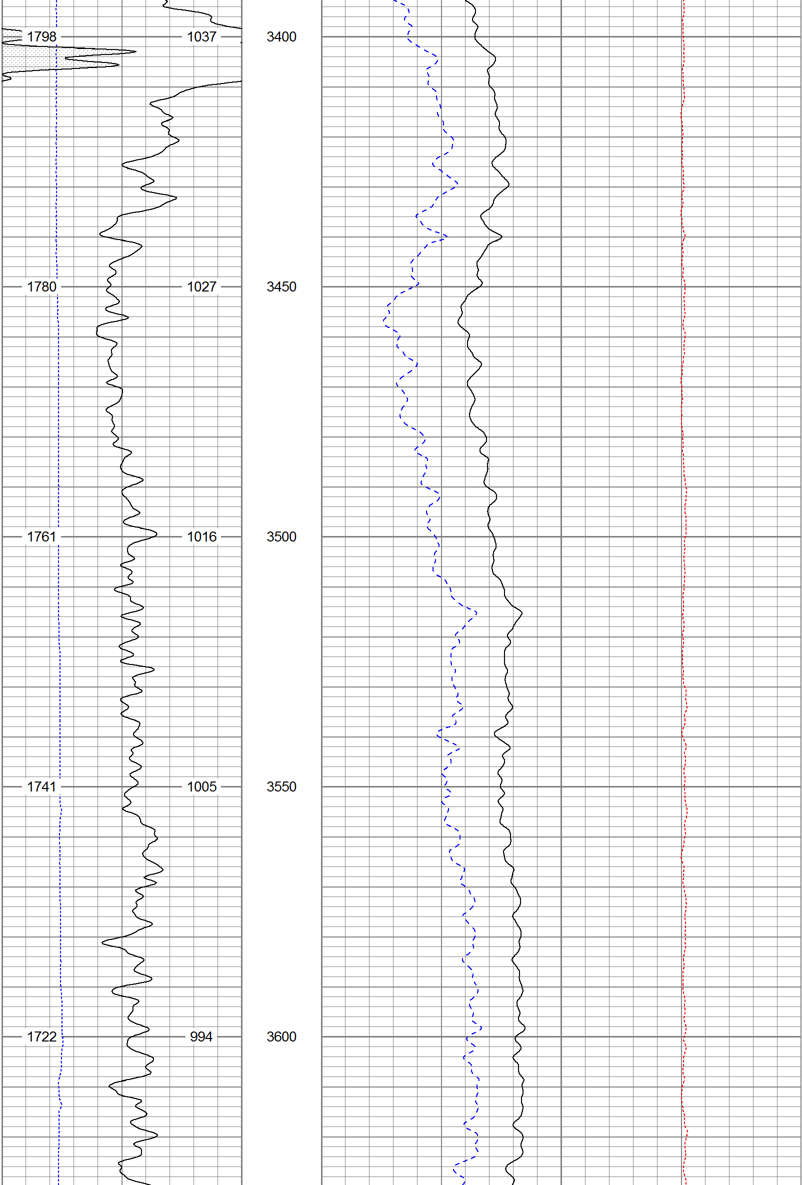








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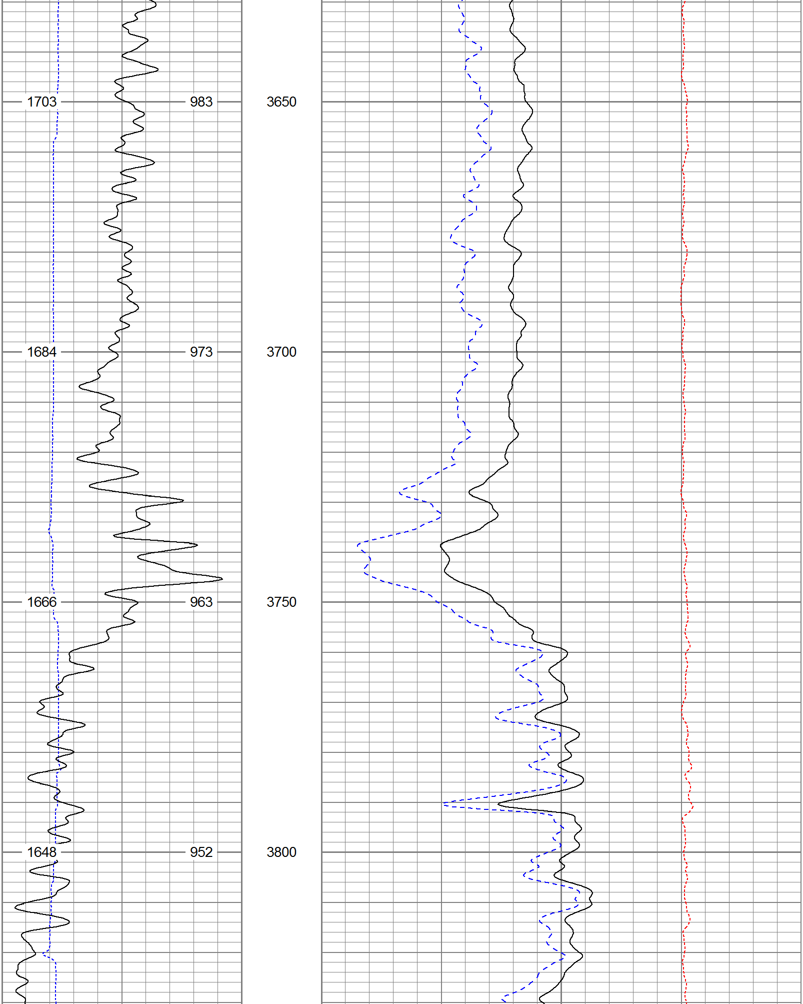
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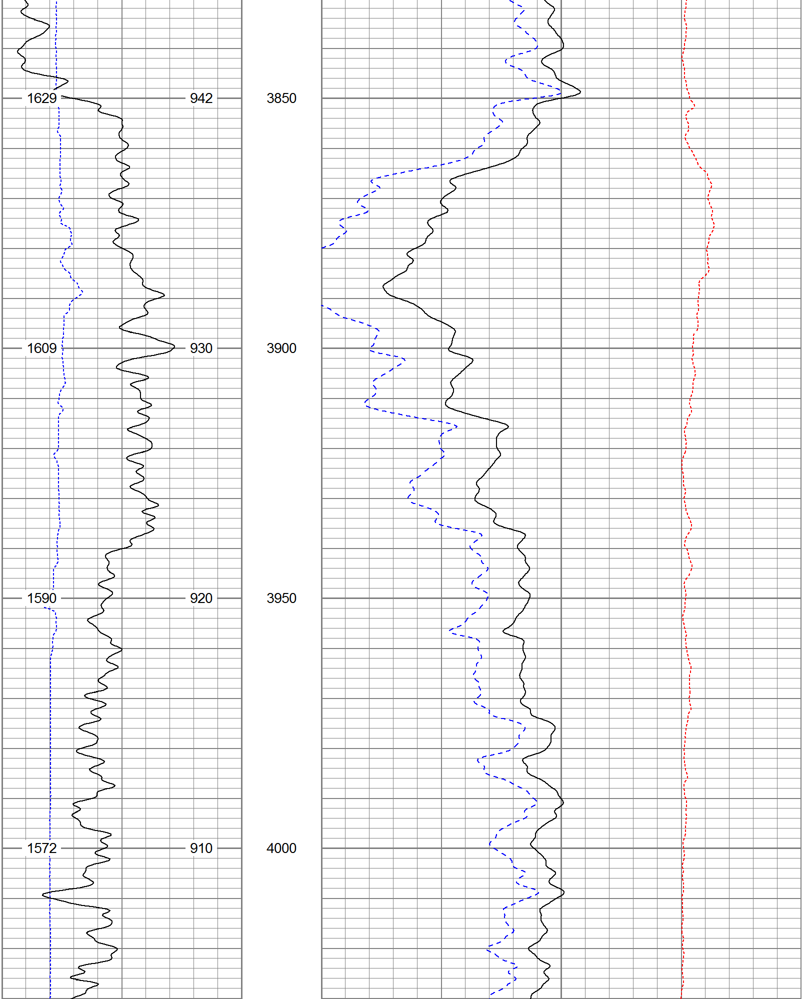
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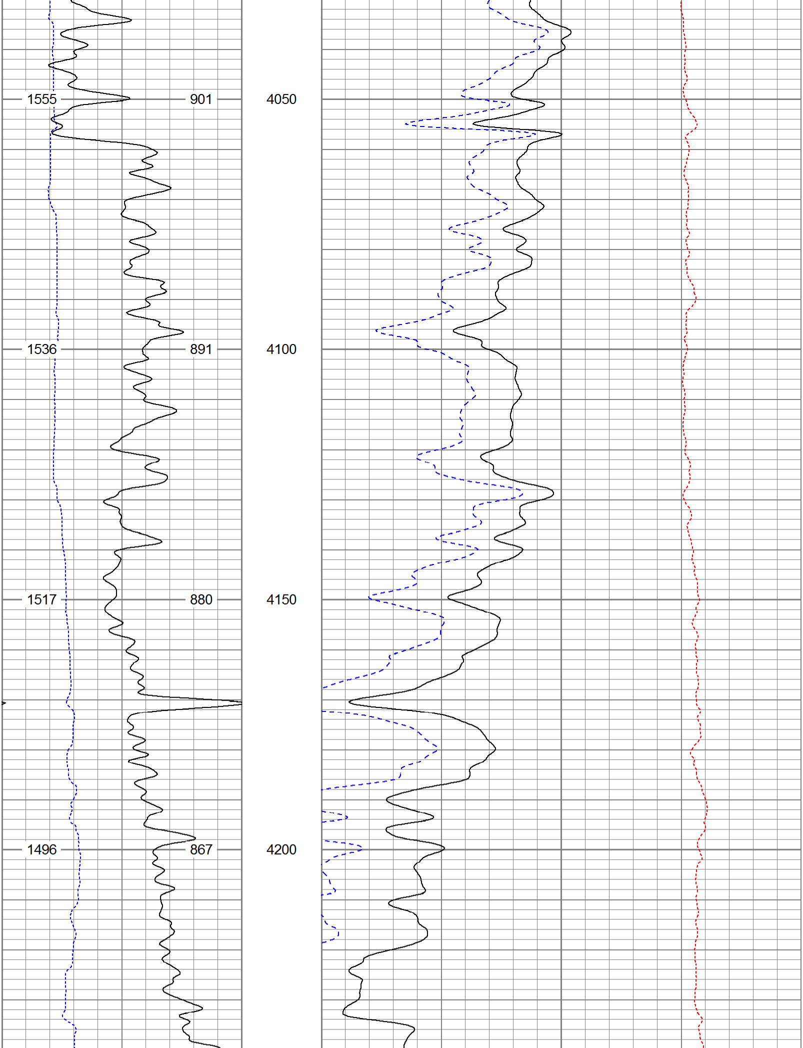
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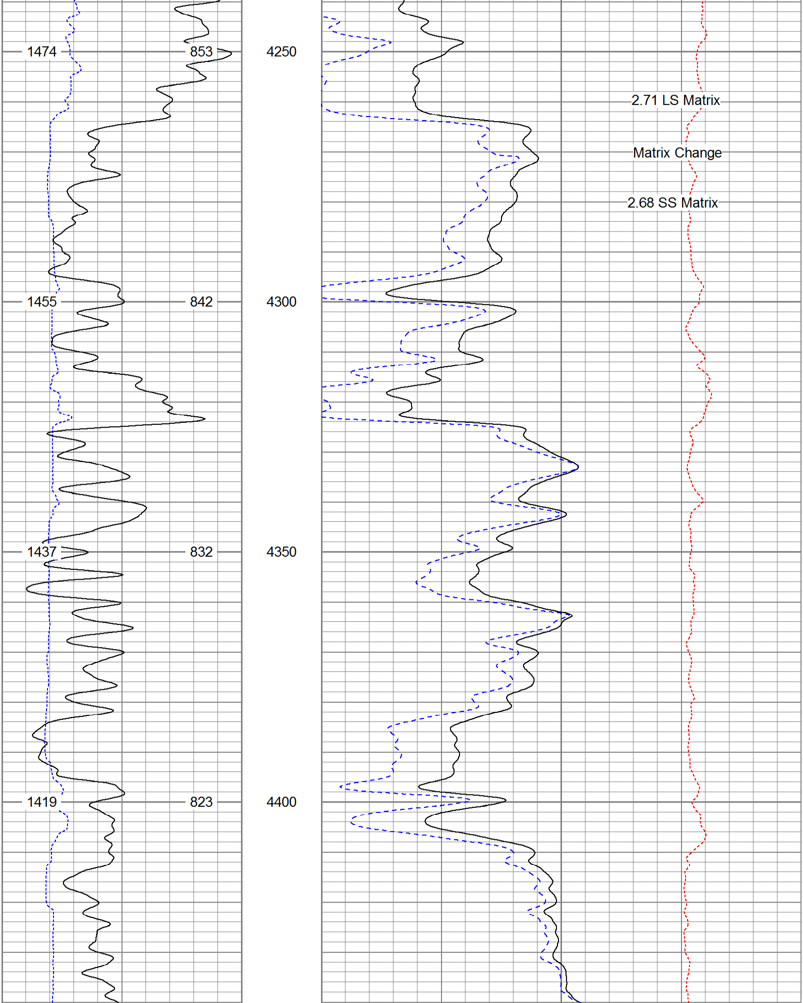
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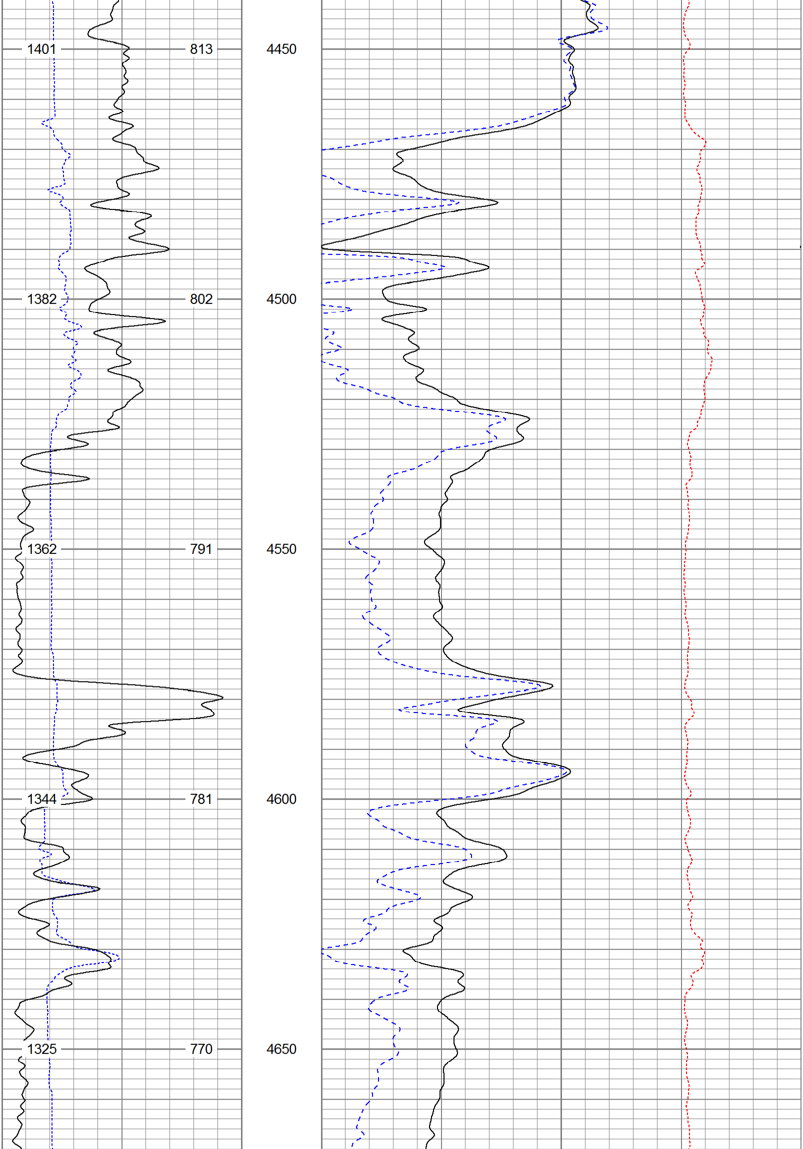
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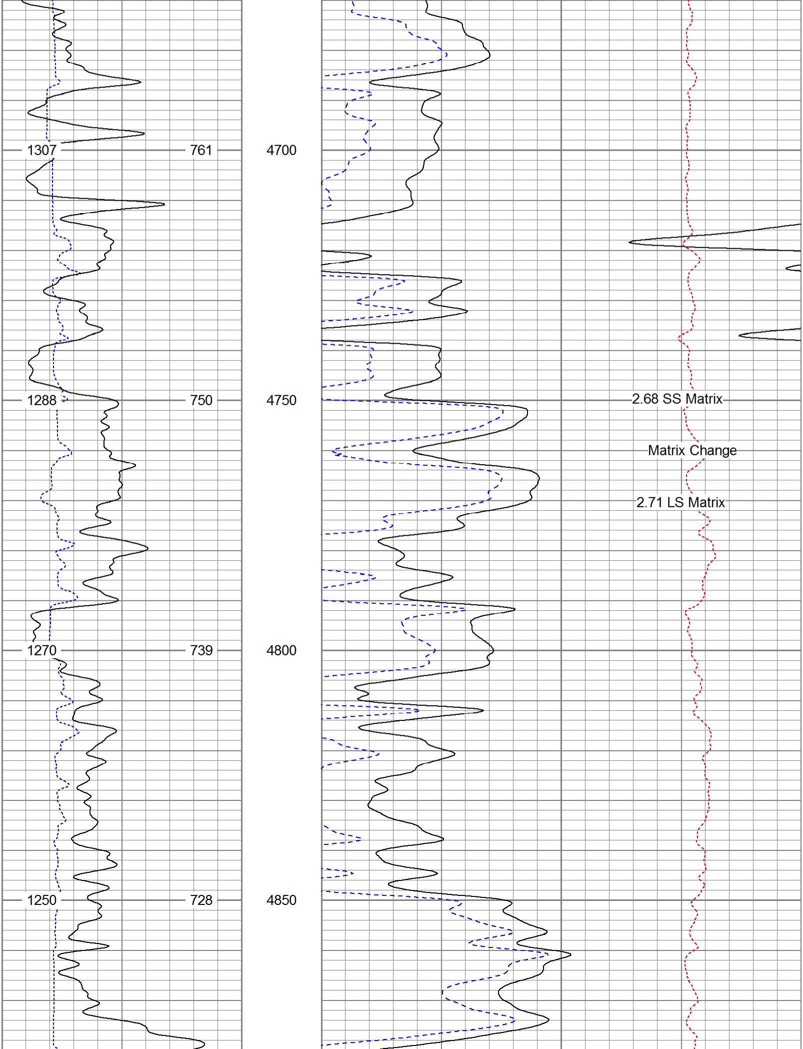
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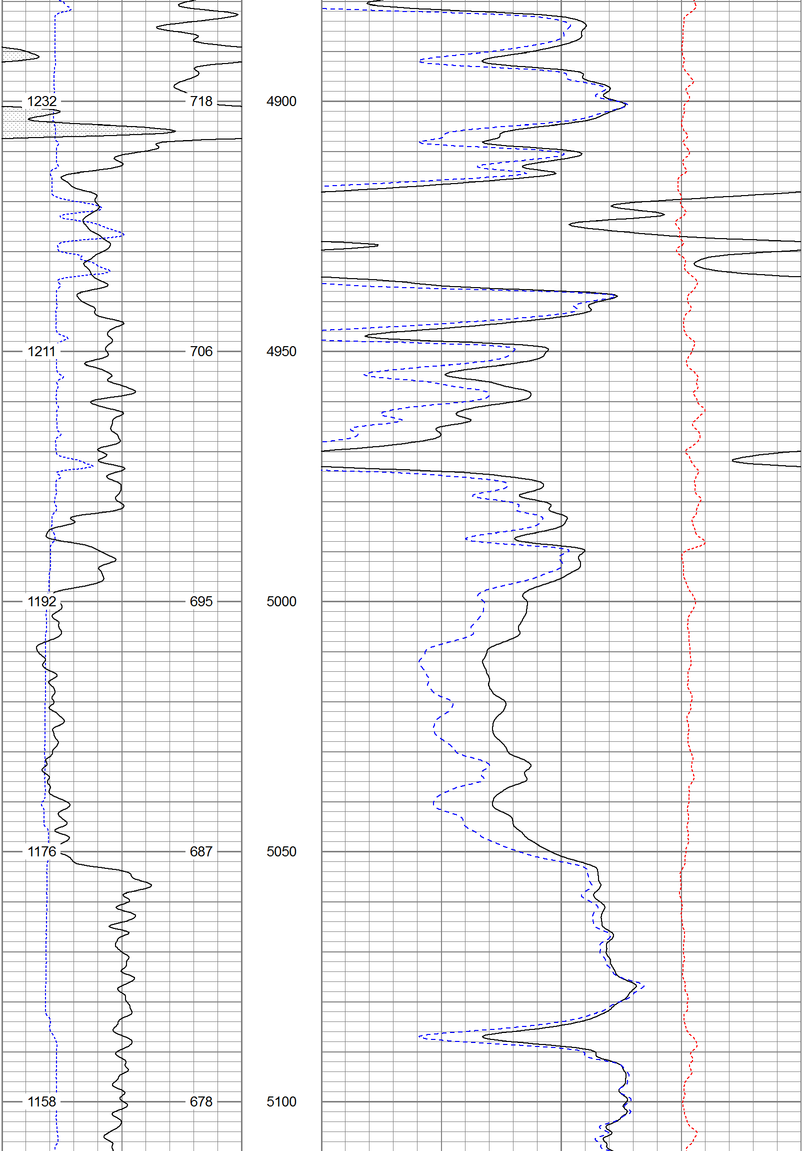
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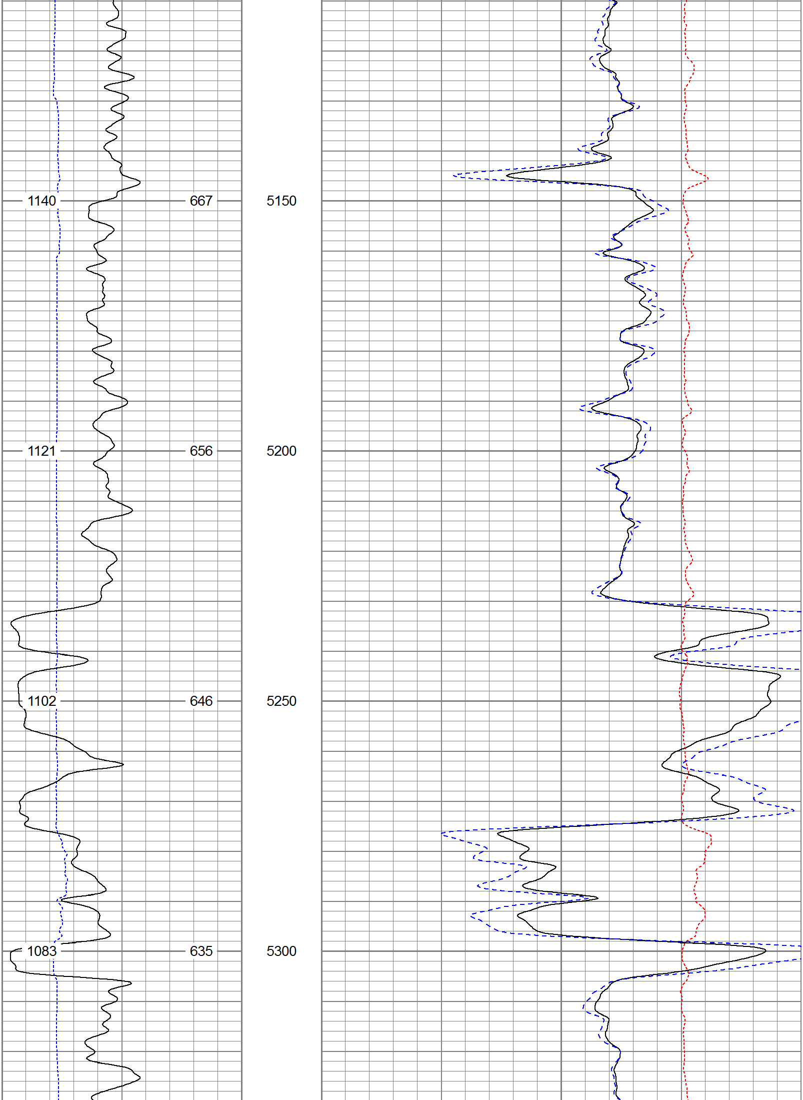
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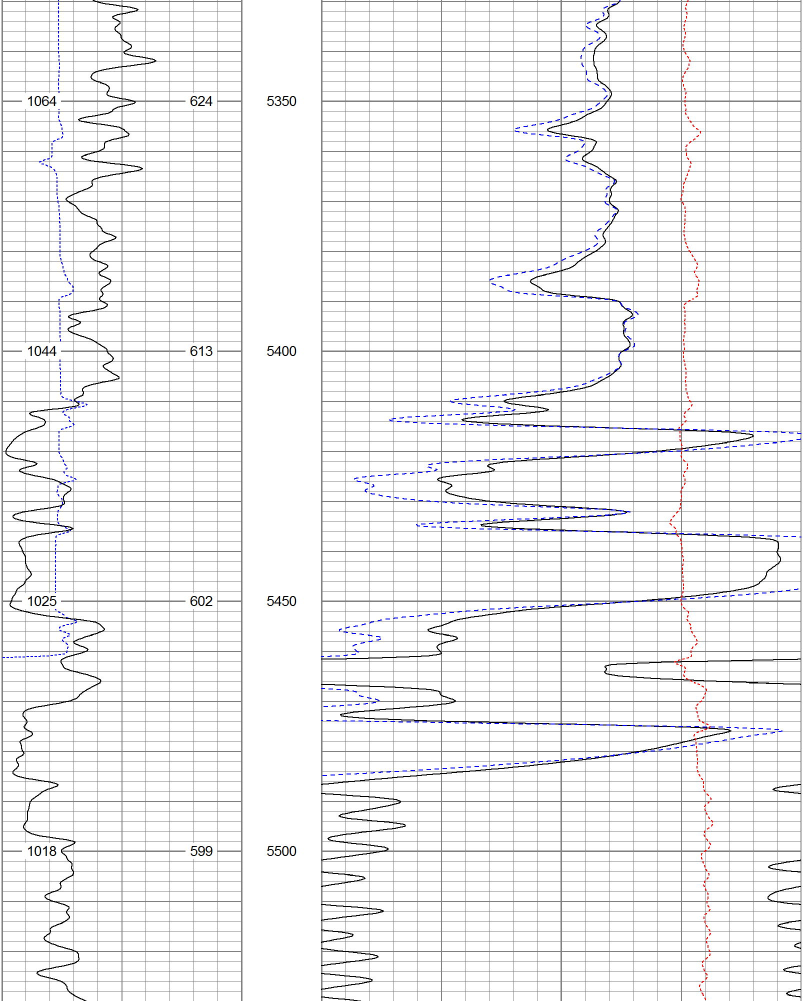
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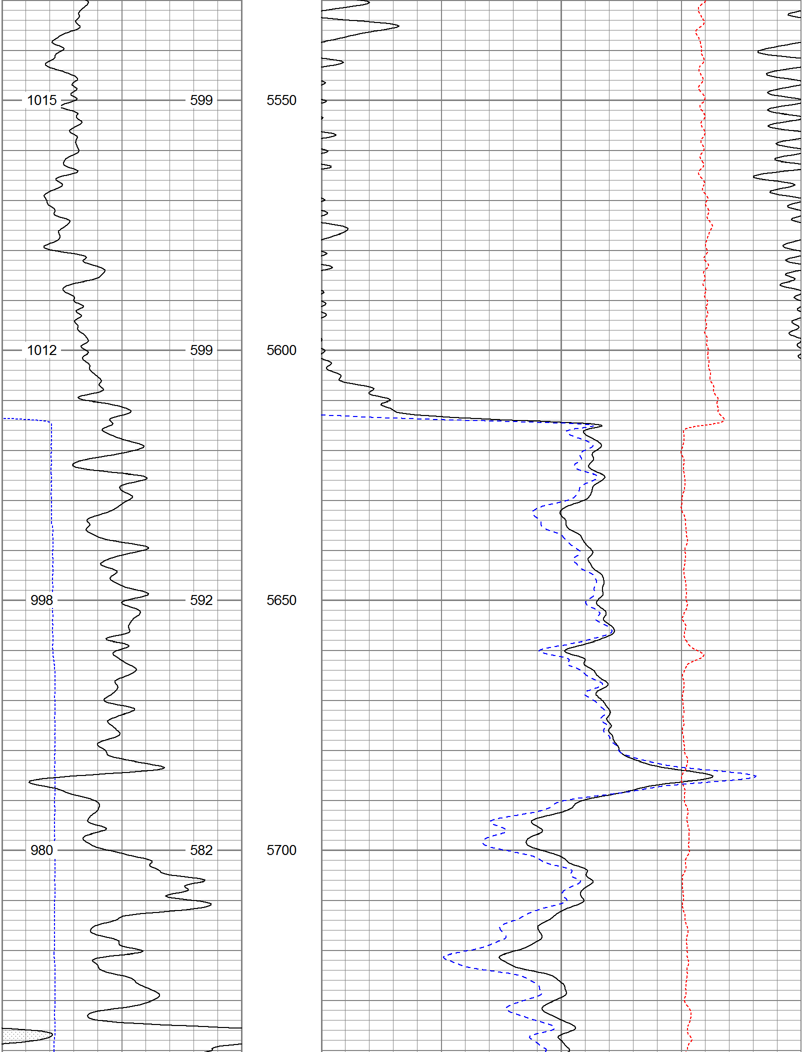
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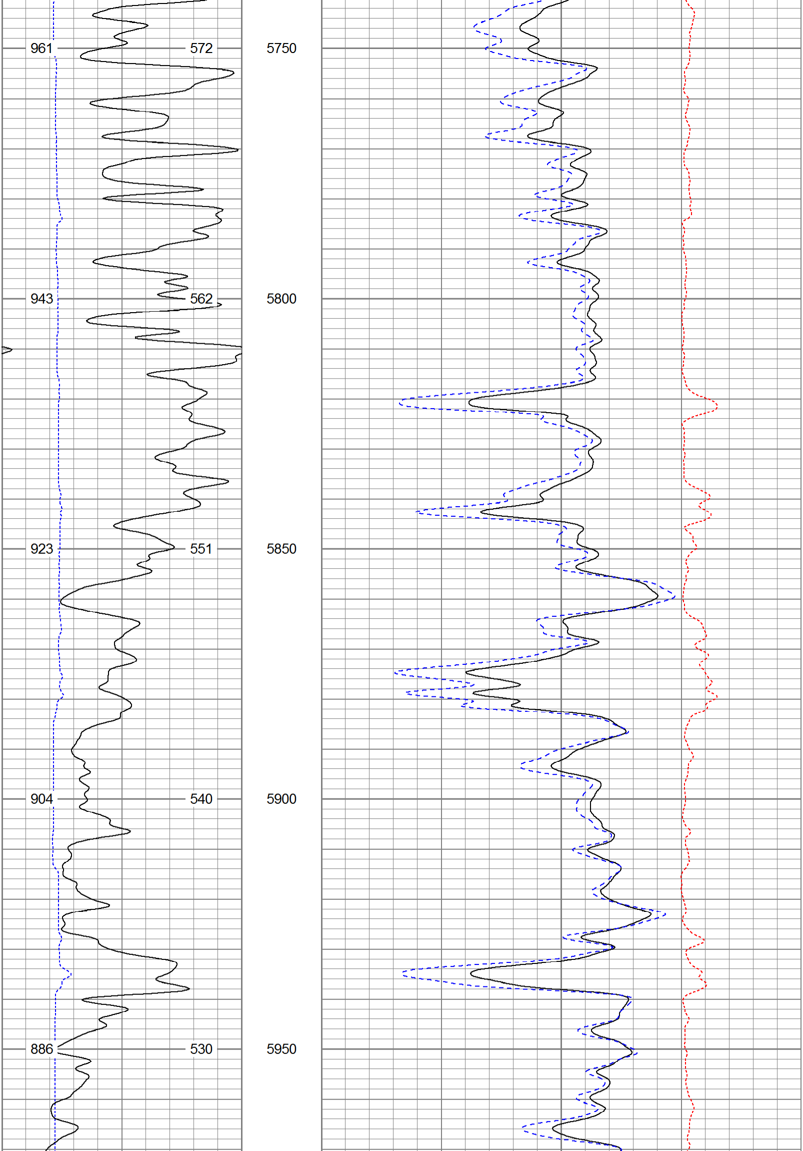
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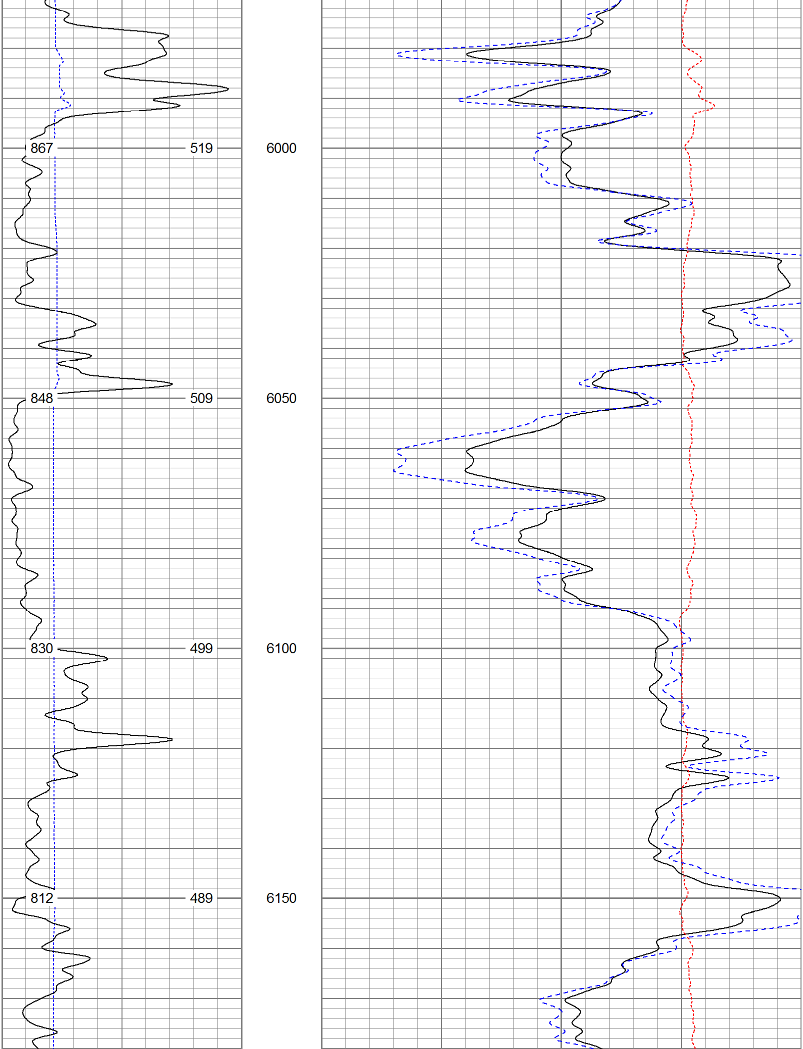
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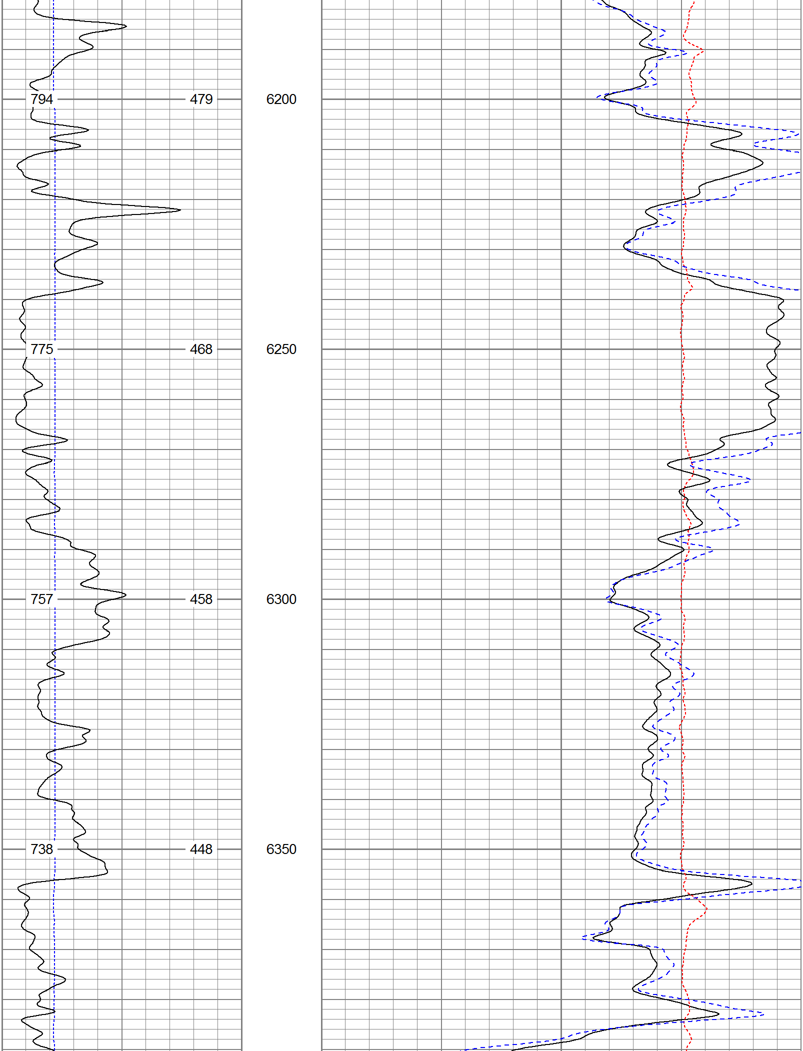
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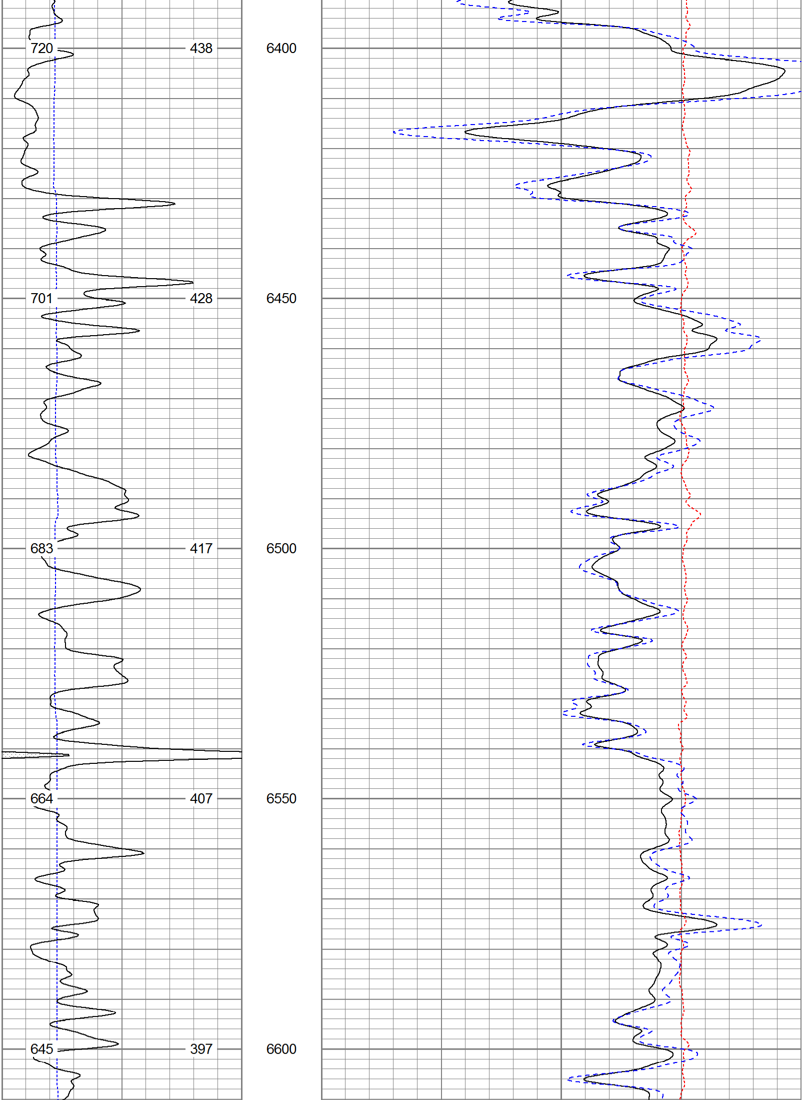
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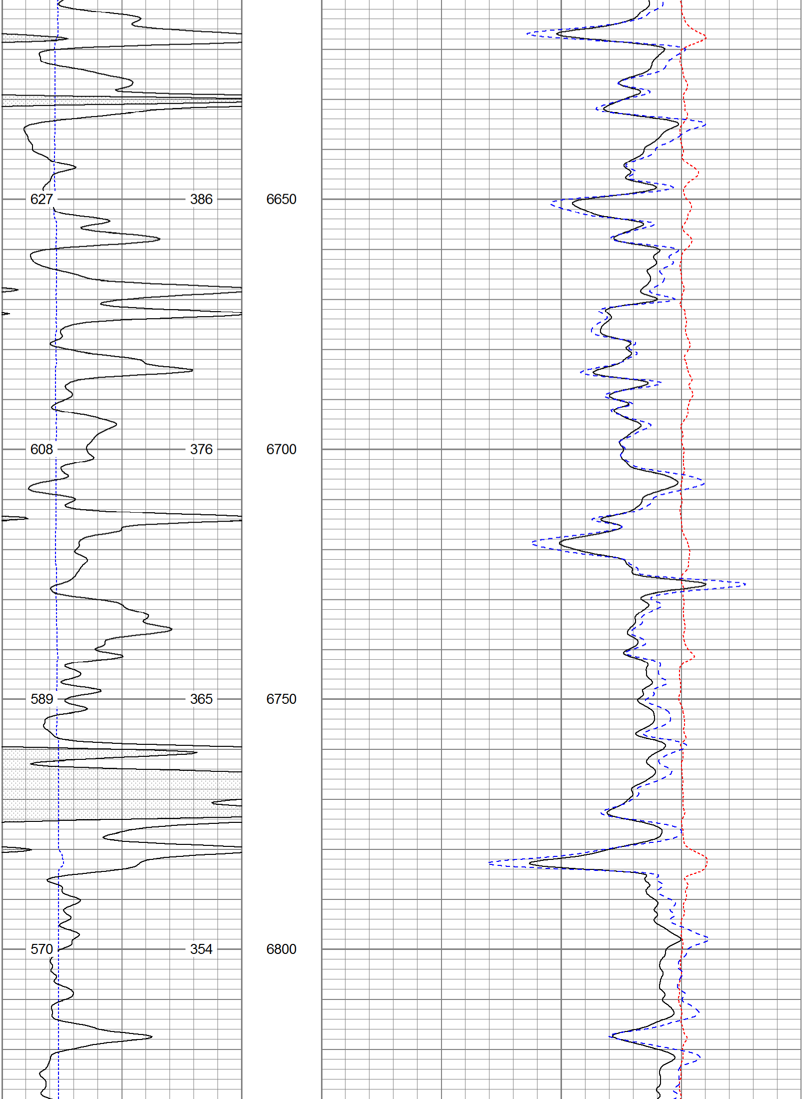
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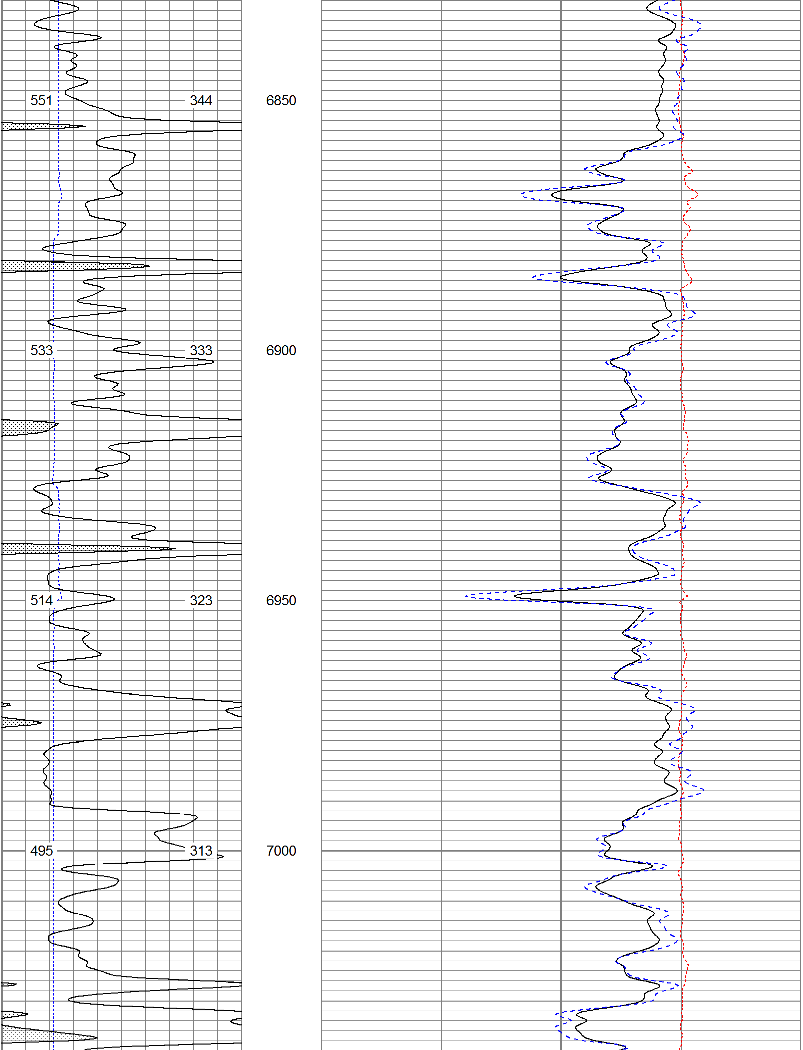
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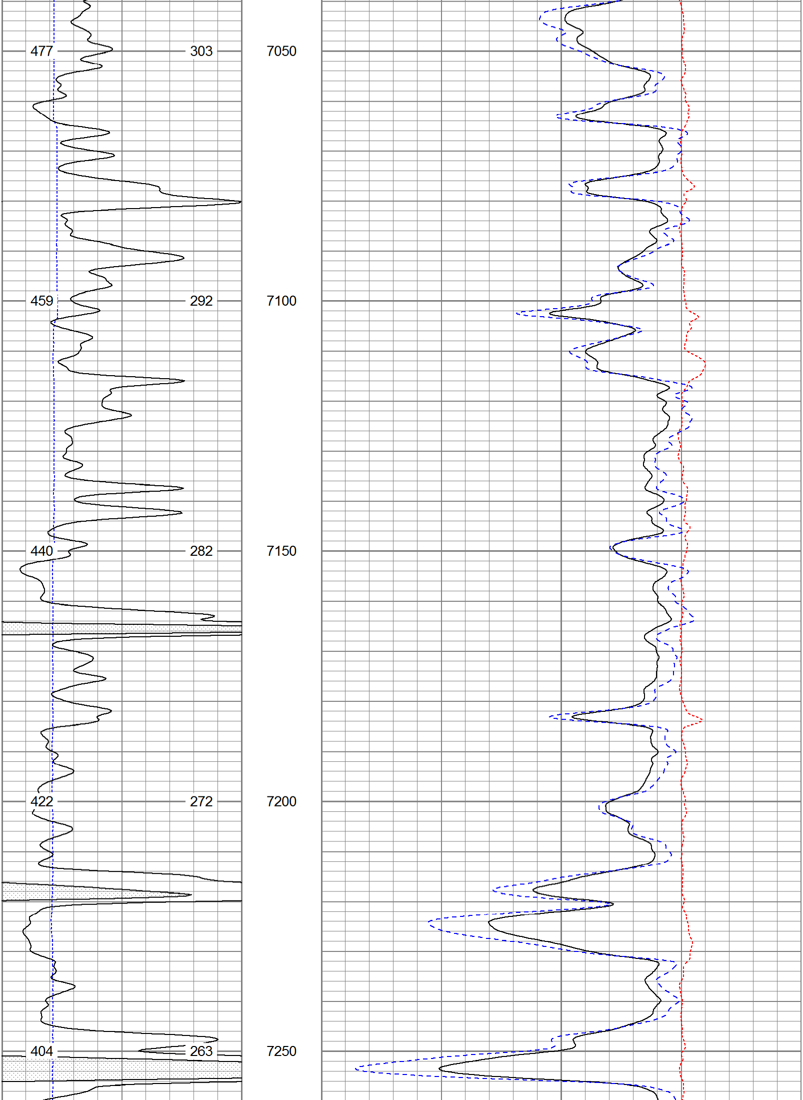
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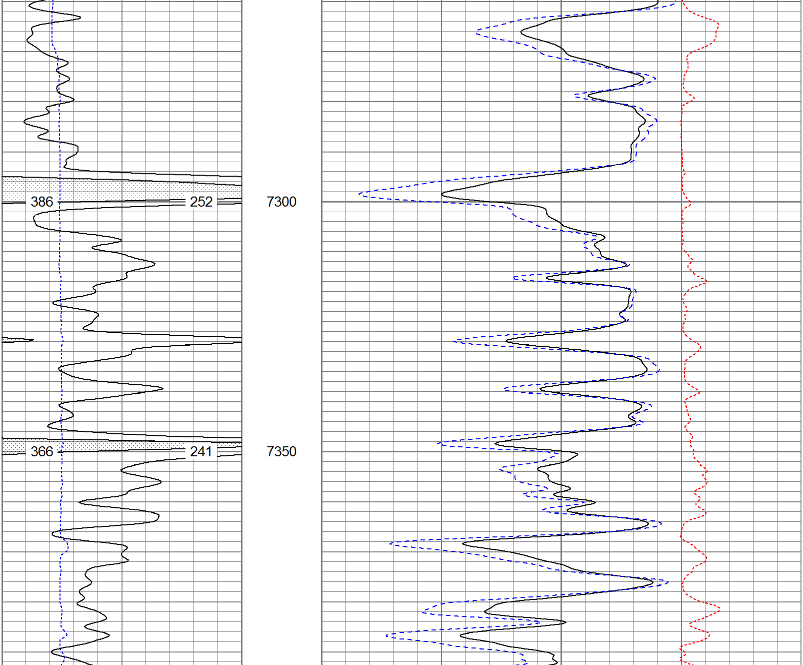
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Calibration Report

Database File: 13663.db
Dataset Pathname: pass2
Dataset Creation: Tue Aug 26 06:12:28 2014 by Log 0

Dual Induction Calibration Report

Serial-Model: 1011-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	0.510	-28.000
Medium	0.000	1.000	0.000	1.000	mmho/m	0.440	-28.000

Compensated Density Calibration Report

Serial-Model: 128-PSI
Source / Verifier: 4400 / PSI
Master Calibration Performed: Wed Jul 02 08:14:00 2014
Before Survey Verification Performed:
After Survey Verification Performed:

Master Calibration

	Density		Far Detector	Near Detector	
Magnesium	1.750	g/cc	6051.14	2934.47	cps
Aluminum	2.690	g/cc	1088.83	1765.21	cps

Spine Angle = 73.49
Density/Spine Ratio = 0.525

	Size		Reading
Small Ring	4.50	in	1.18
Large Ring	13.50	in	1.03

Compensated Neutron Calibration Report

Serial Number: 826
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	2.0900

Gamma Ray Calibration Report

Serial Number: 923
Tool Model: PSI
Performed: Fri Aug 22 23:09:02 2014

Calibrator Value: 1.0 GAPI

Background Reading: 0.0 cps
Calibrator Reading: 1.0 cps

Sensitivity: 0.6000 GAPI/cps

Log Variables

Database:C:\Warrior\Data\13663.db
Dataset: field/well/run1/pass4

Top - 4270.00 ft

SZCOR	NPORSEL	FLUIDDEN g/cc	MATRXDEN g/cc	SPSHIFT mV	SNDERRM mmho/m	SNDERR mmho/m	SRFTEMP degF
Off	Limestone	1	2.71	0	0	0	0

CASEOD in	PERFS	TDEPTH ft	BOTTEMP degF	BOREID in
5.5	0	0	190	7.875

4270.00 ft - 4760.00 ft

NPORSEL	MATRXDEN g/cc
Sandstone	2.68

4760.00 ft - 7620.00 ft

NPORSEL	MATRXDEN g/cc
Limestone	2.71

7620.00 ft - 7860.00 ft

NPORSEL	MATRXDEN g/cc
Sandstone	2.68

7860.00 ft - Bottom

NPORSEL	MATRXDEN g/cc
Limestone	2.71