



MIDWEST WIRELINE

DUAL COMP POROSITY LOG

Company American Warrior, Inc.
 Well Hubin Unit #1-15
 Field Lippoldt West
 County Hodgeman State Kansas

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Location: API #: 15-083-21984-00-00
 245' FNL & 1891' FWL
 SEC 15 TWP 23S RGE 23W
 Permanent Datum Ground Level Elevation 2318'
 Log Measured From Kelly Bushing
 Drilling Measured From Kelly Bushing
 Other Services
 DIL
 MEL
 K.B. 2329'
 D.F. N/A
 G.L. 2318'

Date	4/9/2021						
Run Number	One						
Type Log	CNL/CDL						
Depth Driller	4875'						
Depth Logger	4878'						
Bottom Logged Interval	4847'						
Top Logged Interval	3800'						
Type Fluid In Hole	Chemical						
Salinity, PPM CL	3300						
Density	9.4						
Level	Full						
Max. Rec. Temp. F	125 Deg/F						
Operating Rig Time	2 Hours						
Equipment -- Location	P-24 HAYS						
Recorded By	J. Henrickson						
Witnessed By	Kevin Timson						
Borehole Record							
Run No.	Bit	From	To	Size	Wgt.	From	To
One	12.25"	0	268'	8.625"	24#	0	268'
Two	7.875"	268'	TD				
Casing Record							

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

N/A DENOTES NOT AVAILABLE OR NON-APPLICABLE.

Jetmore Kansas
 1 East o 219 Rd, 2 South to K Rd, 2 1/2 East,
 South Into

Log Measured From: Kelly Bushing 11 Ft. Above Permanent Datum

THANK YOU FOR USING MIDWEST WIRELINE LLC
 785-625-3858

Your Midwest Wireline Crew	This Log Record Was Witnessed By
Engineer: J. Henrickson	Primary Witness: Kevin Timson
Operator:	Secondary Witness:
Operator:	Secondary Witness:
Operator:	Secondary Witness:

Log Variables

DatabaseC:\ProgramData\Warrior\Data\American_warrior_hubin_unit_1_15.db
Dataset field/well/sdtackml/pass3.1/_vars_

Top - Bottom

A	BOREID in	BOTTEMP degF	CASEOD in	CASETHCK in	FLUIDDEN g/cc	M	MATRXDEN g/cc
1	7.875	125	5.5	0	1	2	2.71
NPORSEL	PERFS	SNDERR mmho/m	SNDERRM mmho/m	SPSHIFT mV	SRFTEMP degF	SZCOR	TDEPTH ft
Limestone	No	0	0	300	65	Off	4878

Variable Description

A : Cement Factor (a)
BOREID : Borehole I.D.
BOTTEMP : Bottom Hole Temperature
CASEOD : Casing O.D.
CASETHCK : Casing Thickness
FLUIDDEN : Fluid Density
M : Cement Exp (m)
MATRXDEN : Matrix Density

NPORSEL : Neutron Porosity Curve Select
PERFS : Perforation Flag
SNDERR : Deep Sonde Error Correction
SNDERRM : Medium Sonde Error Correction
SPSHIFT : S.P. Baseline Offset
SRFTEMP : Surface Temperature
SZCOR : CN Size Cor. ?
TDEPTH : Total Depth

Sensor	Offset (ft)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb)	
GR	44.50		GR-M&W (233-M&W)	3.00	3.50	50.00	
CNLSC	41.40		CNT-M&W (207-MW)	5.50	3.50	100.00	
CNSSC	40.65						
				CDL-M&W (817-947)	8.50	4.00	250.00
LSD	32.35						
DCAL	32.33						
SSD	31.85						
				ML-PSI UDM ML (UDM-01) Stackable Microlog Tools	11.50	4.00	215.00
MCAL	20.87						
MI	20.87						
MN	20.87						
RLL3F	15.80						

RLL3 15.80

CILD 8.00

CILM 4.70

SP 0.20

DIL-PSI HIGH TEMP (952-828)

18.50

3.50

220.00

Dataset: american_warrior_hubin_unit_1_15.db: field/well/sdtackml/pass3.1
 Total length: 47.00 ft
 Total weight: 835.00 lb
 O.D.: 4.00 in



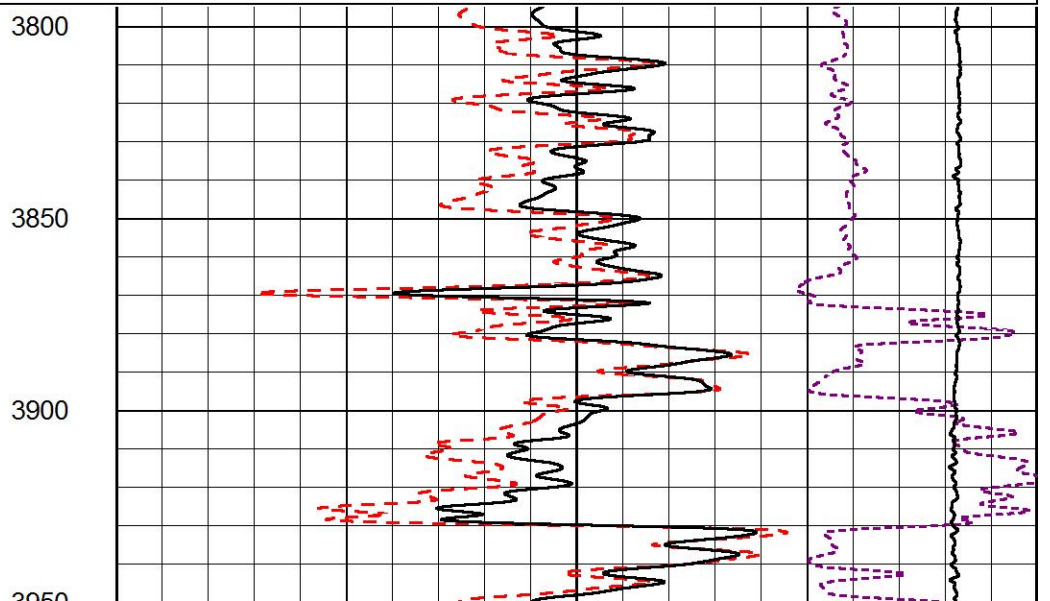
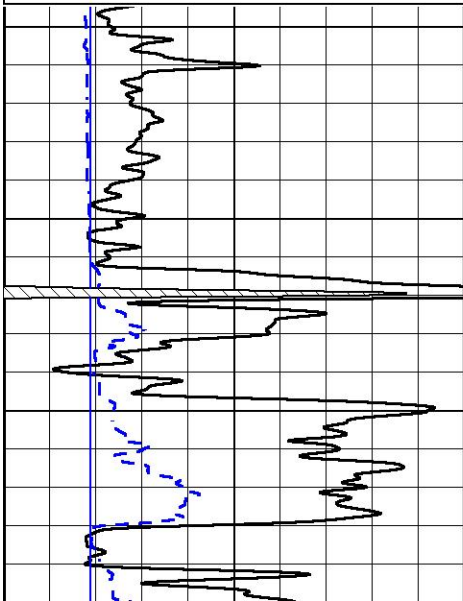
MIDWEST WIRELINE

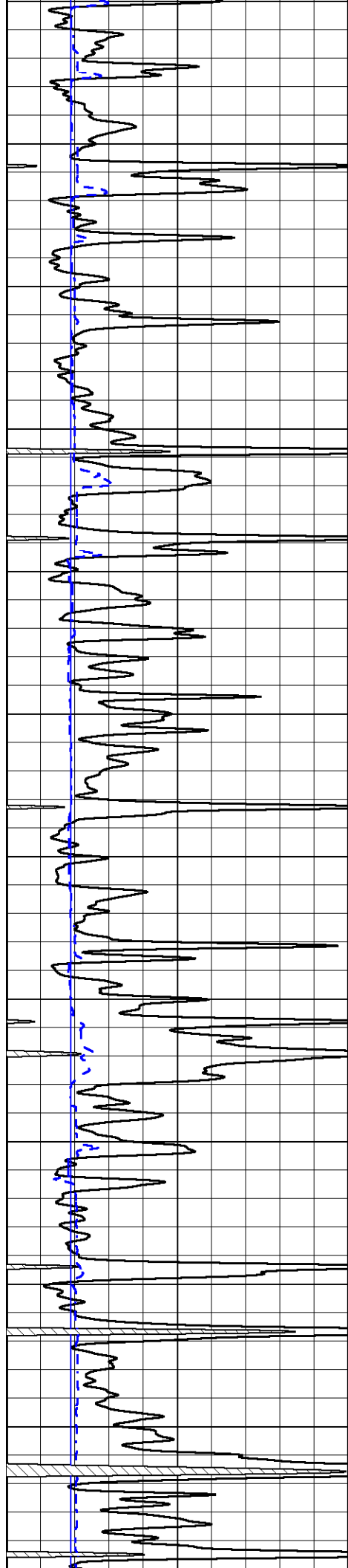
Main Pass

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 Presentation Format _cdl
 Dataset Creation Fri Apr 09 11:53:40 2021
 Charted by Depth in Feet scaled 1:600

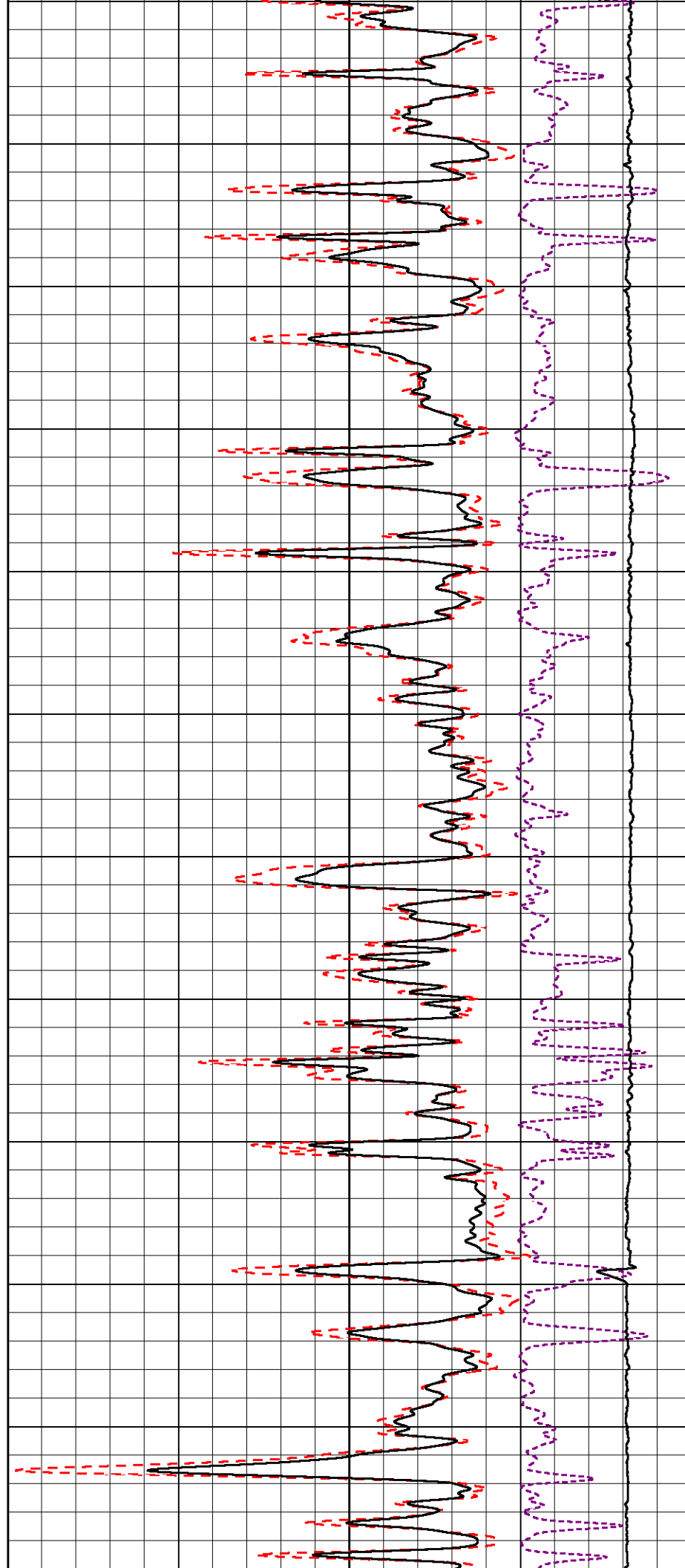
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6	DCAL (in)	16

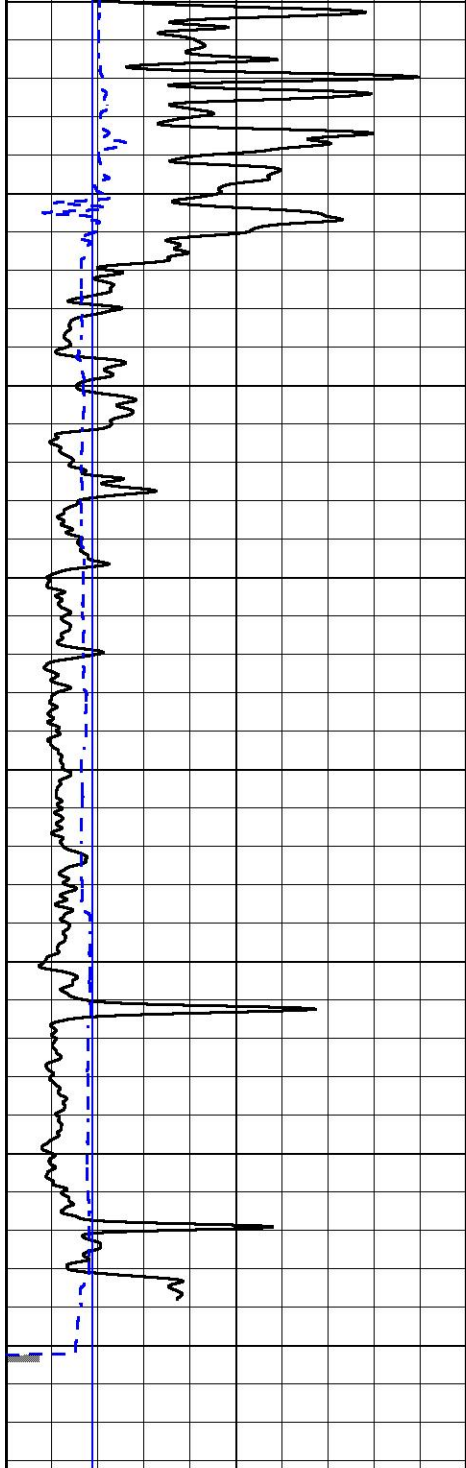
COMPENSATED DENSITY (2.65 MA)	
30	(pu) -10
BULK DENSITY (g/cc)	
2	3
LINE TENSION (lb)	
15000	0
-0.25	CORRECTION (g/cc) 0.25



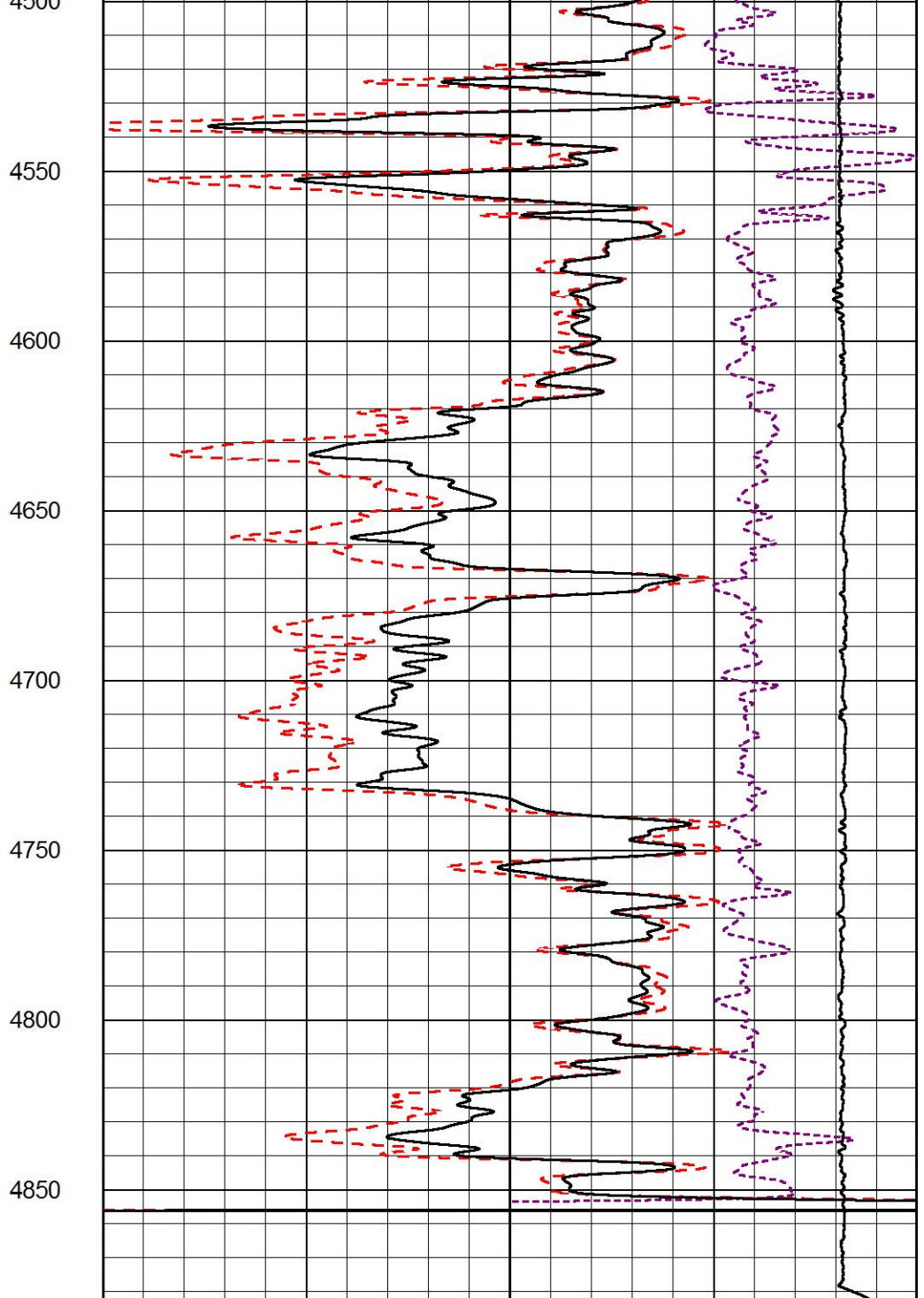


3950
4000
4050
4100
4150
4200
4250
4300
4350
4400
4450
4500





0 GAMMA RAY (GAPI) 150
 6 DCAL (in) 16



COMPENSATED DENSITY
 (2.65 MA)

30 (pu) -10

2 BULK DENSITY (g/cc) 3

15000 LINE TENSION (lb) 0

-0.25 CORRECTION (g/cc) 0.25



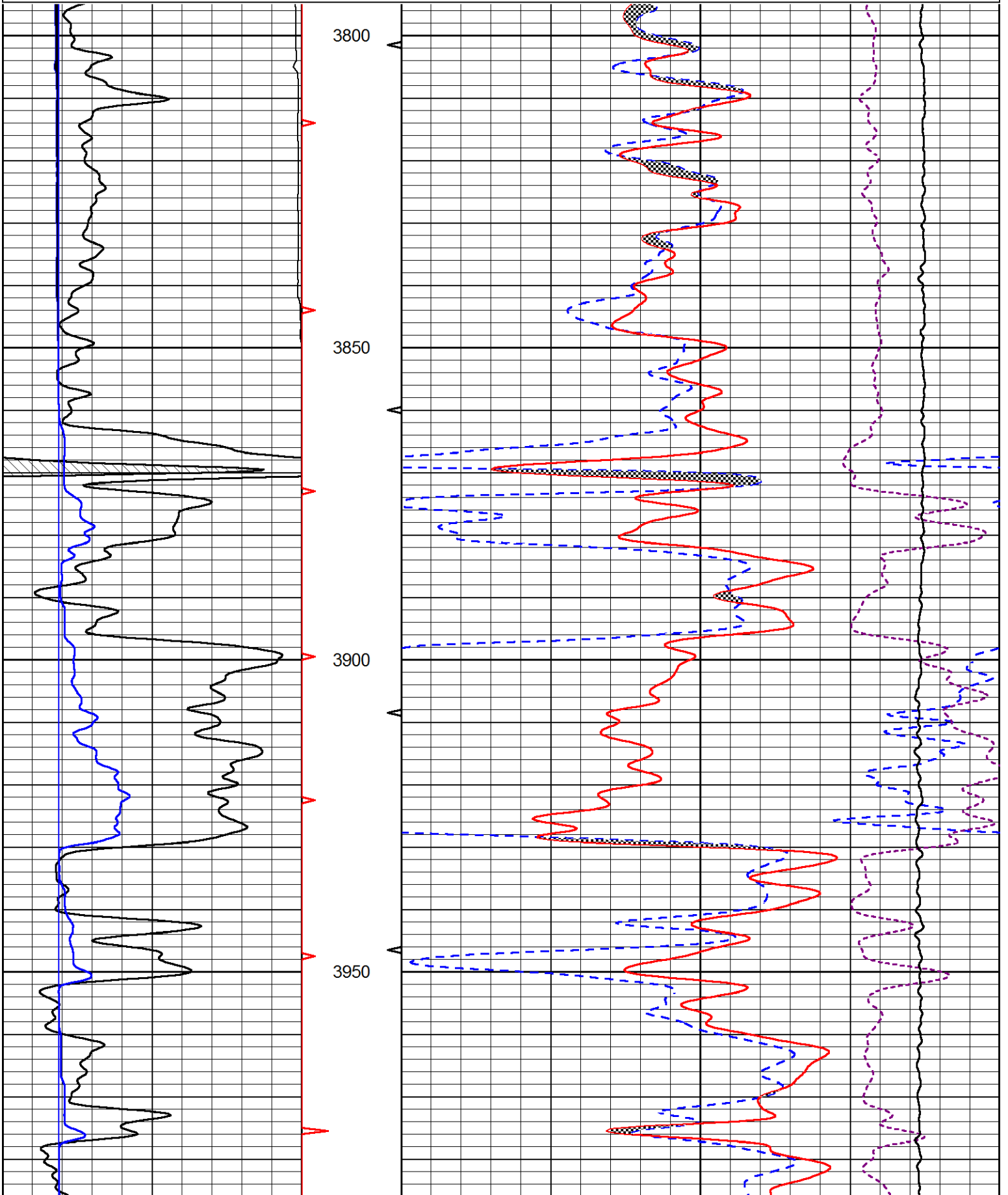
MIDWEST WIRELINE

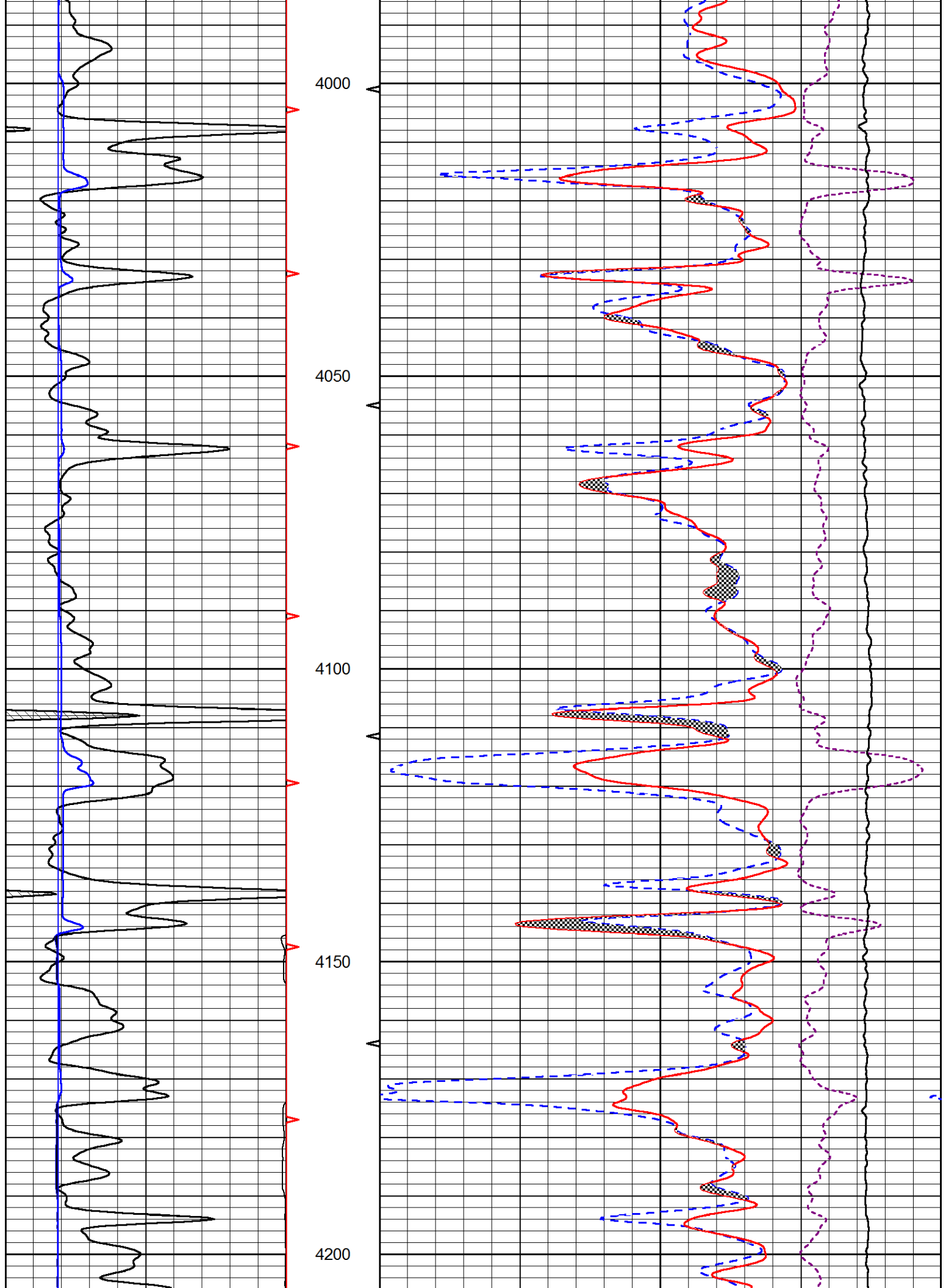
Main Pass

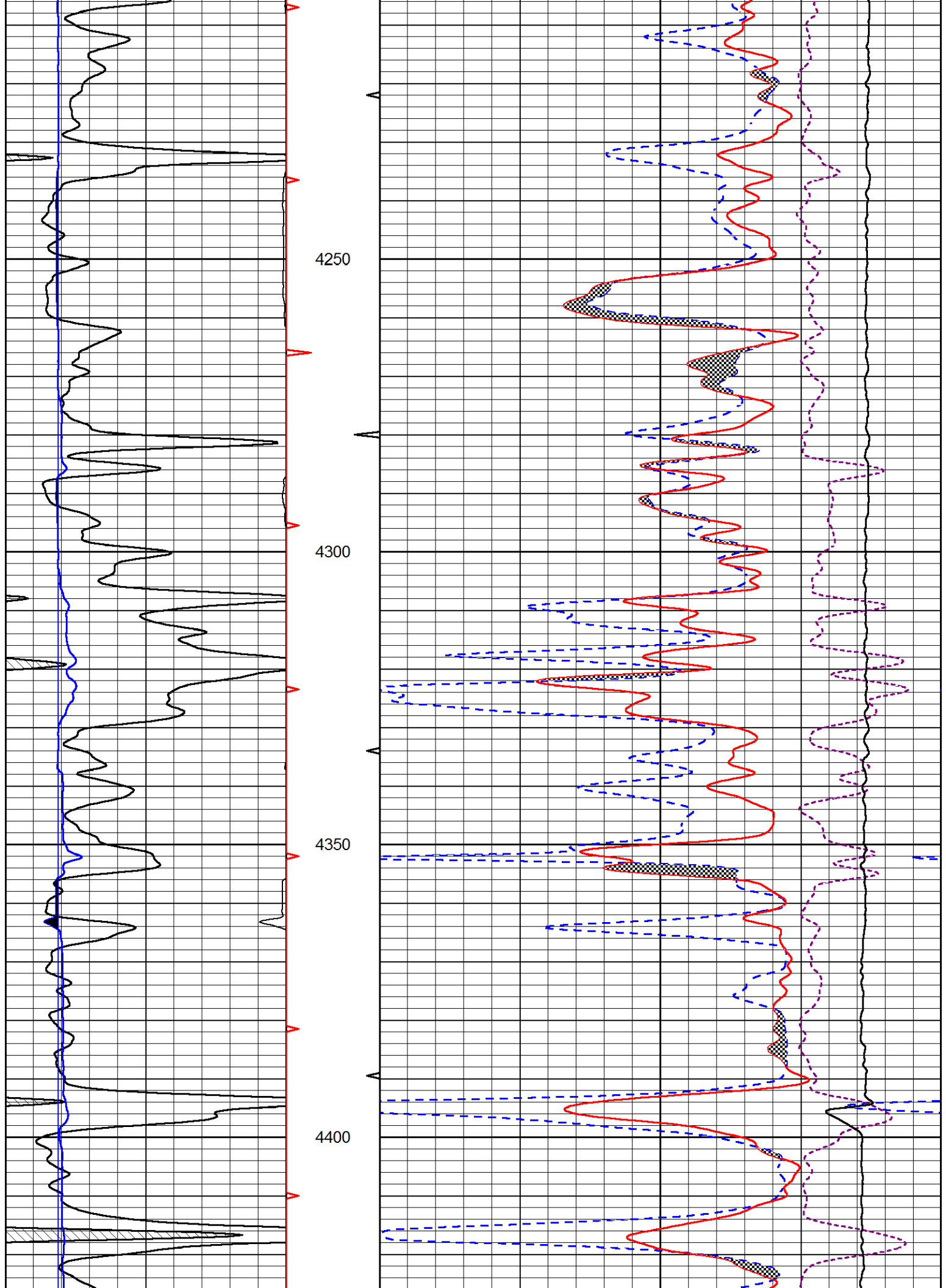
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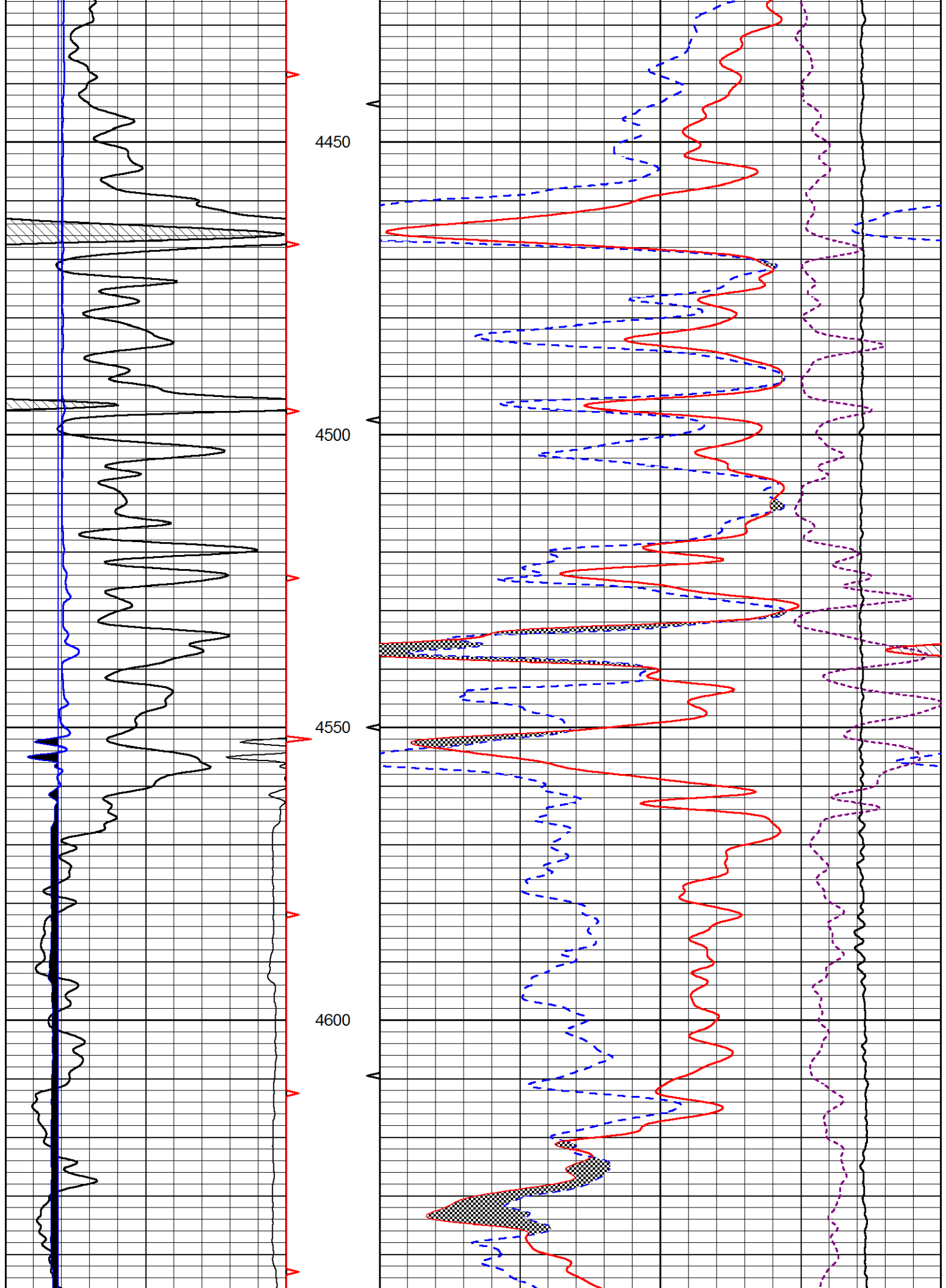
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6	DCAL (in)	16

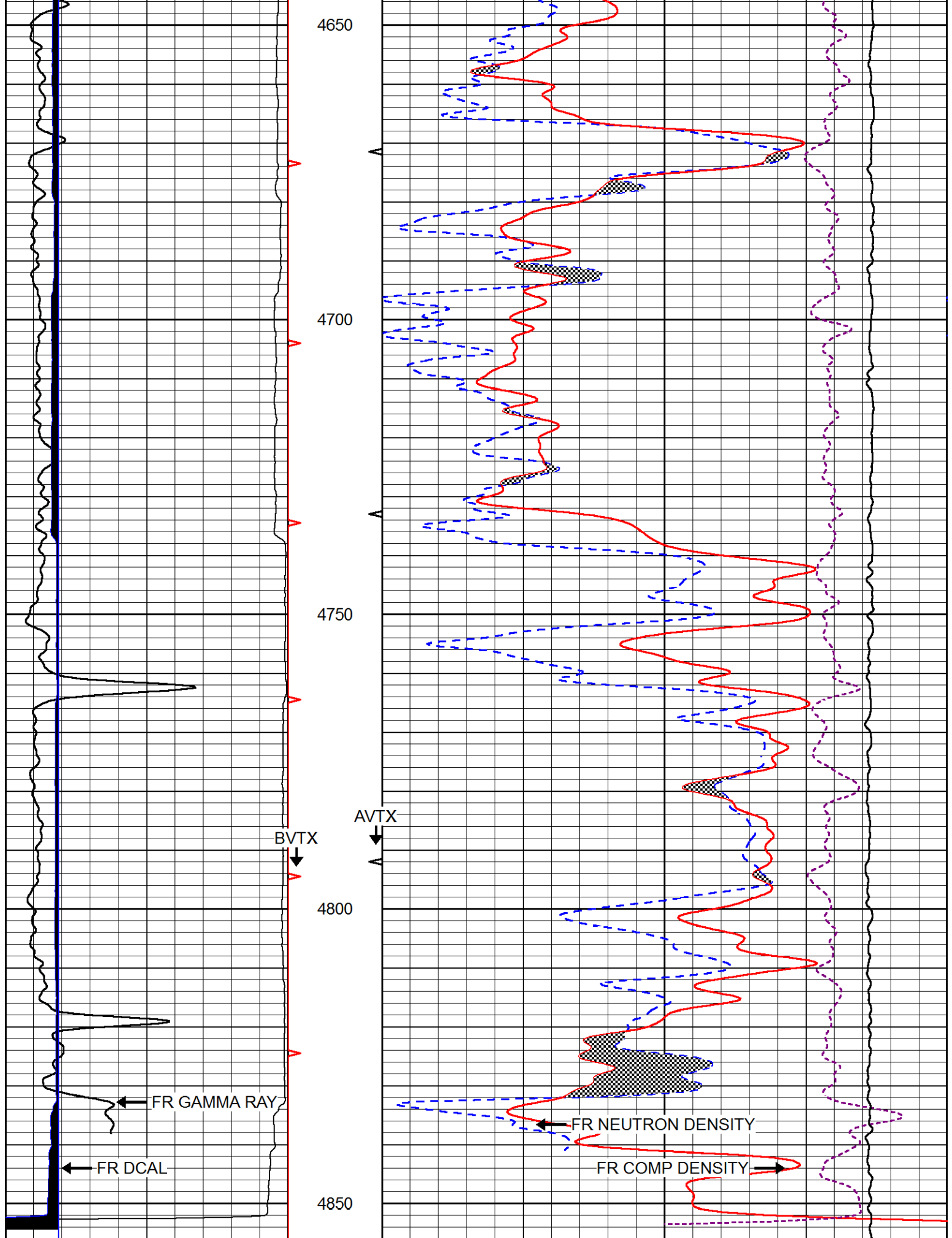
30	CNPOR (pu)	-10
30	DPOR (pu)	-10
10000	LINE TENSION (lb)	0
-0.25	CORRECTION (g/cc)	0.25











0	GAMMA RAY (GAPI)	150	30	CNPOR (pu)	-10
6	DCAL (in)	16	30	DPOR (pu)	-10
			10000	LINE TENSION (lb)	0
				-0.25 CORRECTION (g/cc)	0.25

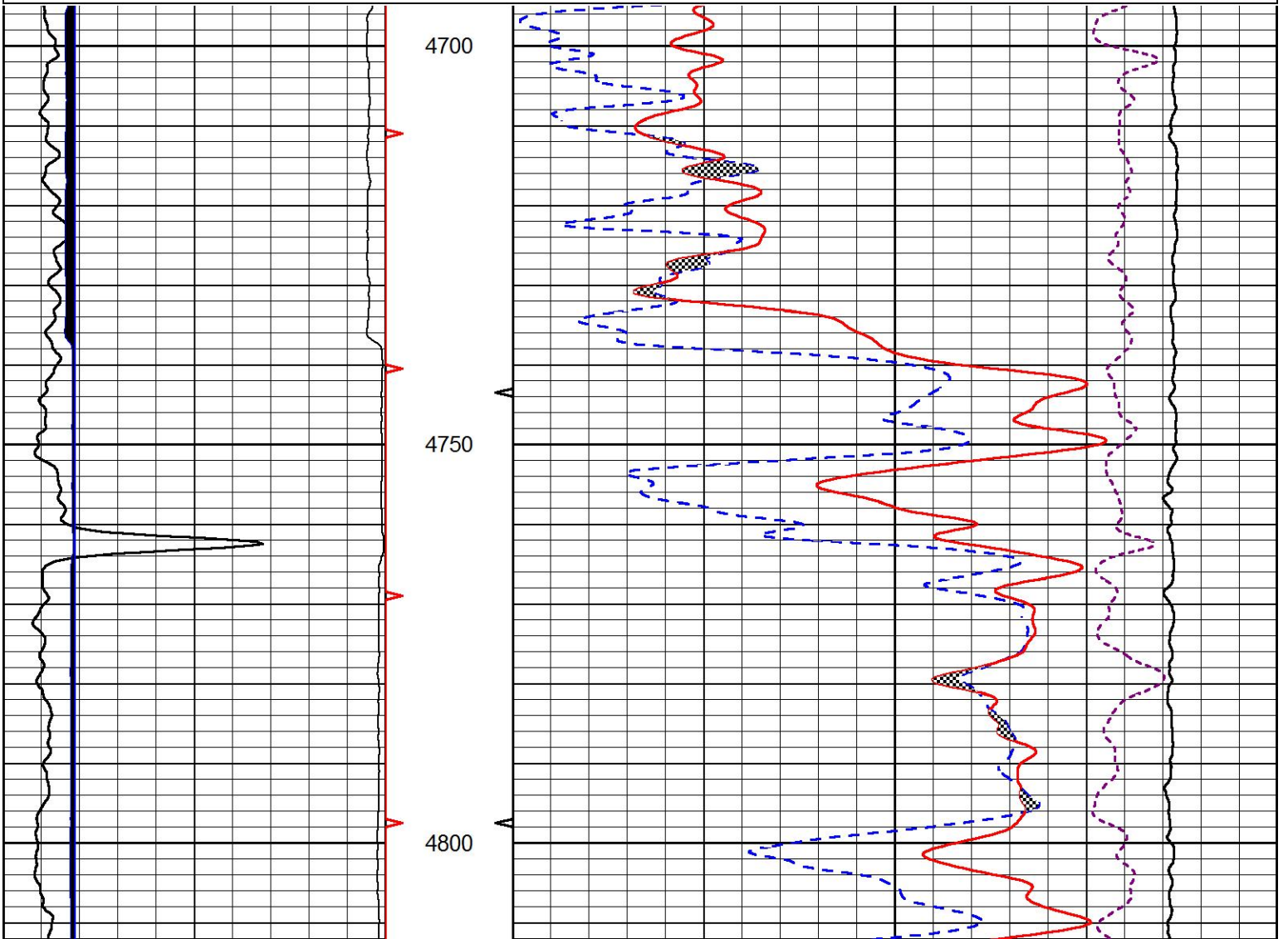


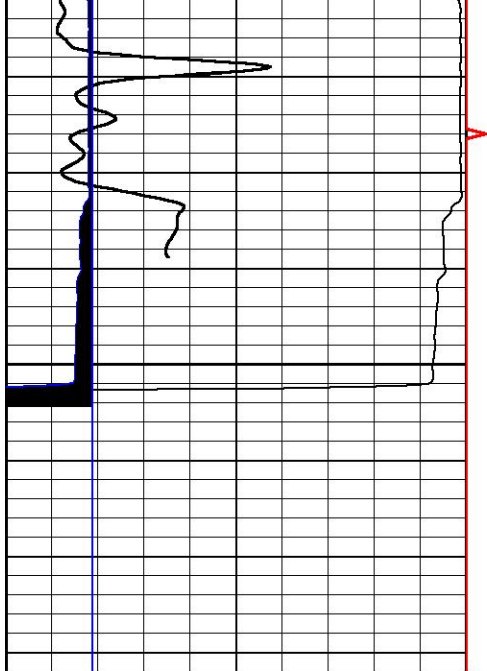
MIDWEST WIRELINE

Repeat Section

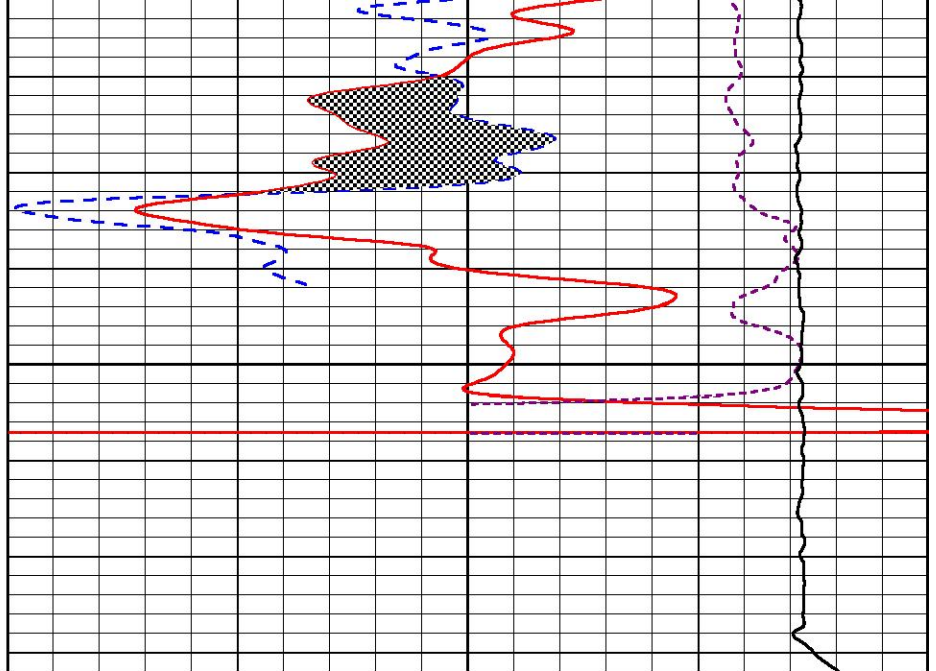
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 Dataset Creation Fri Apr 09 11:09:59 2021
 Charted by Depth in Feet scaled 1:240

0	GAMMA RAY (GAPI)	150	30	CNPOR (pu)	-10
6	DCAL (in)	16	30	DPOR (pu)	-10
			10000	LINE TENSION (lb)	0
				-0.25 CORRECTION (g/cc)	0.25





4850



0	GAMMA RAY (GAPI)	150
6	DCAL (in)	16

30	CNPOR (pu)	-10
30	DPOR (pu)	-10
10000	LINE TENSION (lb)	0
-0.25	CORRECTION (g/cc)	0.25



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