



DUAL COMP POROSITY LOG

MIDWEST WIRELINE

Company EPOC LLC

Well Eck 'A' #1

Field Hazlett

County Butler

State Kansas

Location:

API #: 15-015-24168-00-00

Other Services

SE NE SW NW
1835 FNI & 1075 FM

SEC 32 TWP 23S RGE 5E

DIL/MEL

Permanent Datum	Ground Level	Elevation	1483
Log Measured From	Kelly Bushing		
Drilling Measured From	Kelly Bushing		

Elevat	
K.B.	1489
D.F.	
G.L.	1483

Company	EPOC LLC
Well	Eck 'A' #1
Field	Hazlett
County	Butler
State	Kansas

Date	8/3/2022
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Run Number	One
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type Log	CNL/CDL

Depth Driller	2550
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Depth Logger	2547
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Bottom Logged Interval	2519
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op Logged Interval	1400
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Type Fluid In Hole	Chemical
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Salinity, PPM CL	
0	0
10	10
20	20
30	30
40	40
50	50
60	60
70	70
80	80
90	90
100	100
110	110
120	120
130	130
140	140
150	150
160	160
170	170
180	180
190	190
200	200
210	210
220	220
230	230
240	240
250	250
260	260
270	270
280	280
290	290
300	300
310	310
320	320
330	330
340	340
350	350
360	360
370	370
380	380
390	390
400	400
410	410
420	420
430	430
440	440
450	450
460	460
470	470
480	480
490	490
500	500
510	510
520	520
530	530
540	540
550	550
560	560
570	570
580	580
590	590
600	600
610	610
620	620
630	630
640	640
650	650
660	660
670	670
680	680
690	690
700	700
710	710
720	720
730	730
740	740
750	750
760	760
770	770
780	780
790	790
800	800
810	810
820	820
830	830
840	840
850	850
860	860
870	870
880	880
890	890
900	900
910	910
920	920
930	930
940	940
950	950
960	960
970	970
980	980
990	990
1000	1000

Density	9.2
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Level	Full
Low	100

max. Rec. Temp. F	102
Operating Pressure	3 Hrs

Equipment	Location
Operating rig	1 mile
	2100 ft
	24
	H

Recorded By	T Martin
Equipment -- Location	F-24 11

Witnessed By	Ray Gilbert
Recorded by	J. Mallin

Witnessed by	Ray Gilbert
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Borehole Record

Bill Stout

☐
 Casino Record

From	To
From	To

One	12.25	00	210	8.625	23	00	210
Two	7.875	210	TD				

<<< Fold Here >>>

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.

Newton, KS, ~20 E on 1st Ave to
Purity Spgs Rd, 2 S, 1/8 E, S into

Log Measured From: Kelly Bushing

6 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: T. Martin
Operator:
Operator:
Operator:

Primary Witness: Ray Gilbert
Secondary Witness: Bill Stout
Secondary Witness:
Secondary Witness:

Log Variables

DatabaseC:\ProgramData\Warrior\Data\eopc_eck a #1.db
Dataset field/well/StkMI/pass3.1/_vars_

Top - Bottom

A	BOREID	BOTTEMP	CASEOD	CASETHCK	FLUIDDEN	M	MATRXDEN
1	in	degF	in	in	g/cc	2	g/cc
	7.875	102	5.5	0	1		2.71
NPORSEL	PERFS	SNDERR	SNDERRM	SPSHIFT	SRFTEMP	SZCOR	TDEPTH
Limestone	0	mmho/m	mmho/m	mV	degF	Off	ft
		0	0	-100	80		2547

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



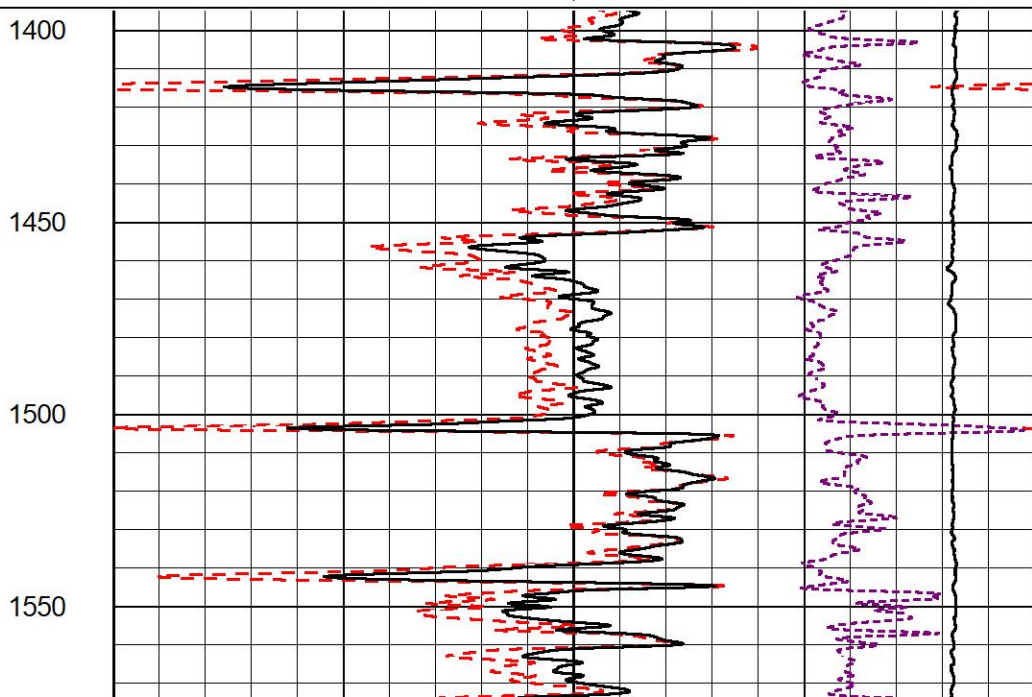
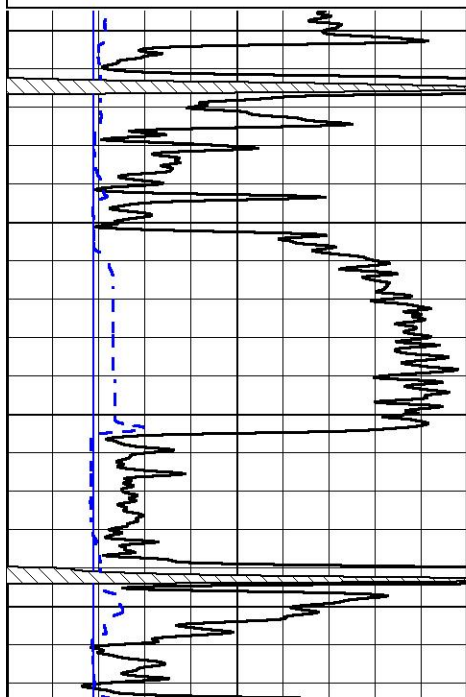
2" SCALE BULK DENSITY

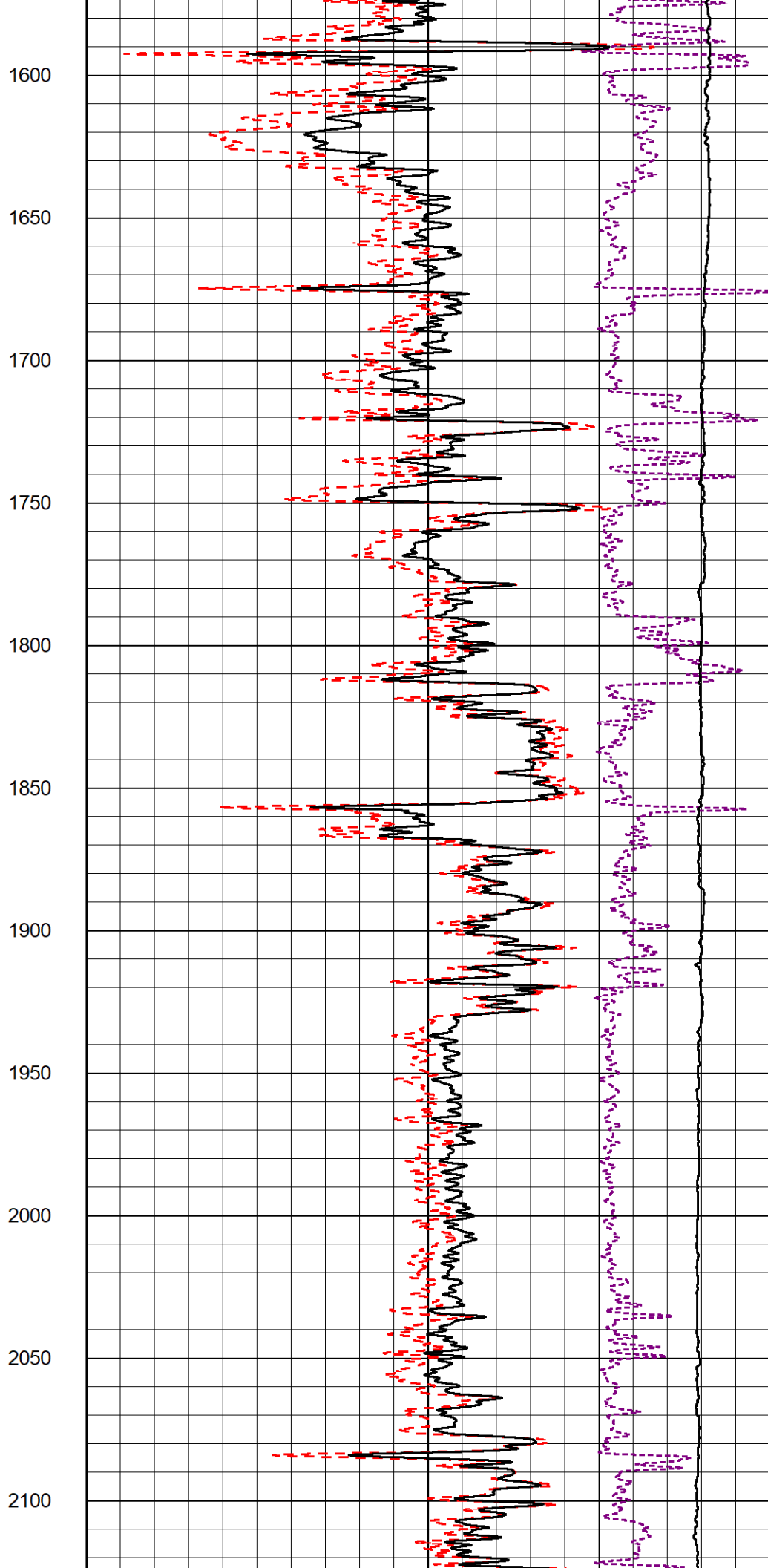
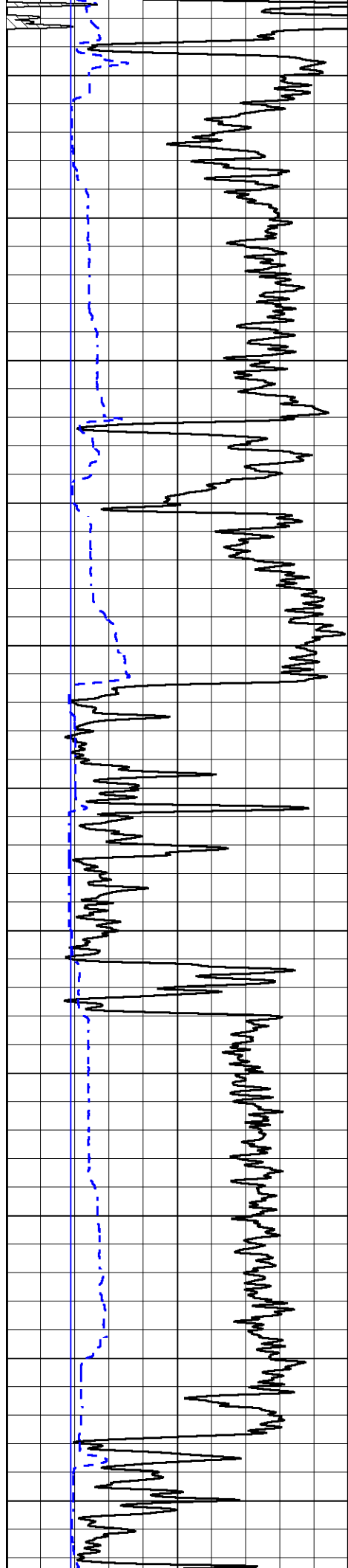
MAIN PASS

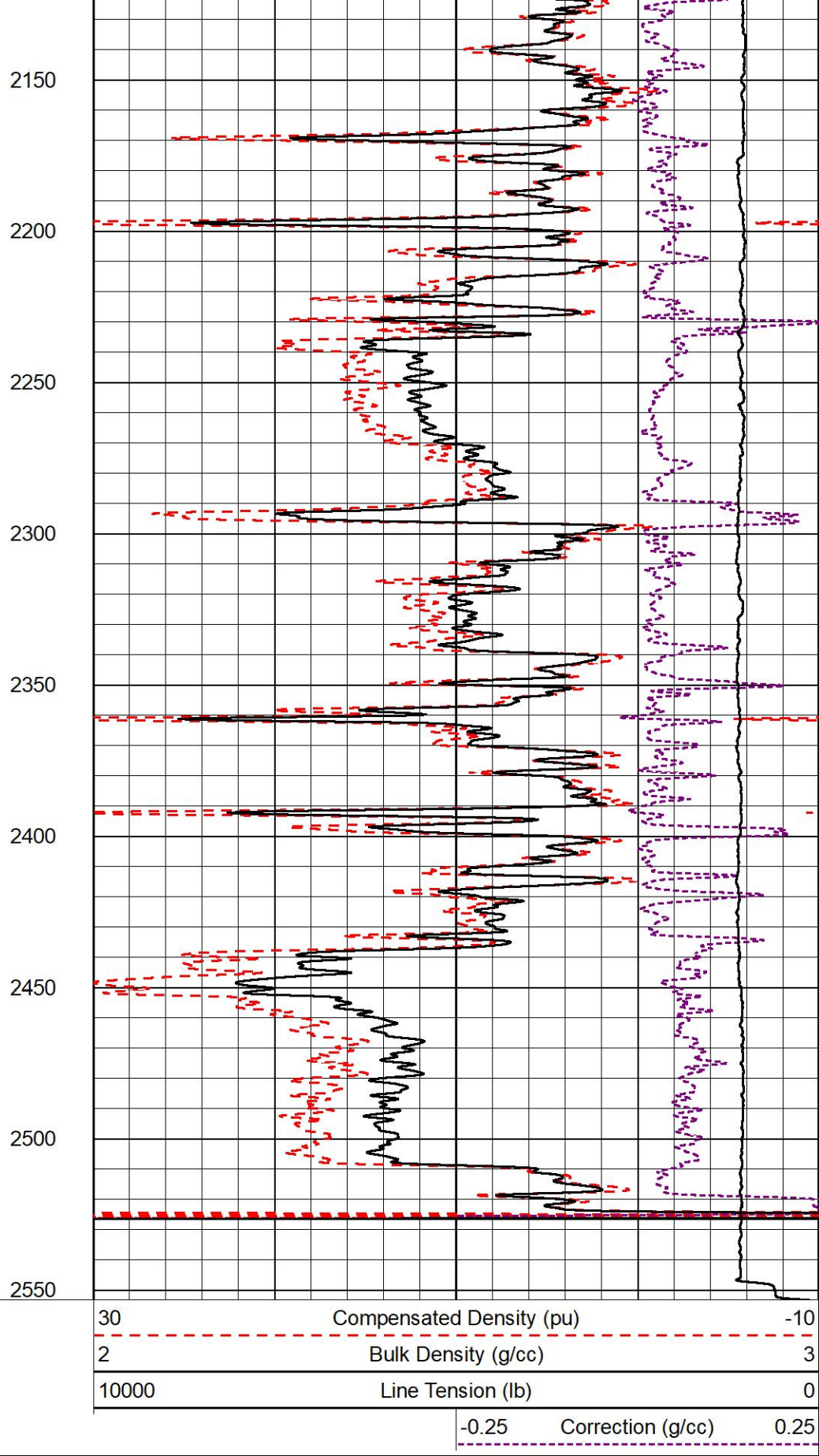
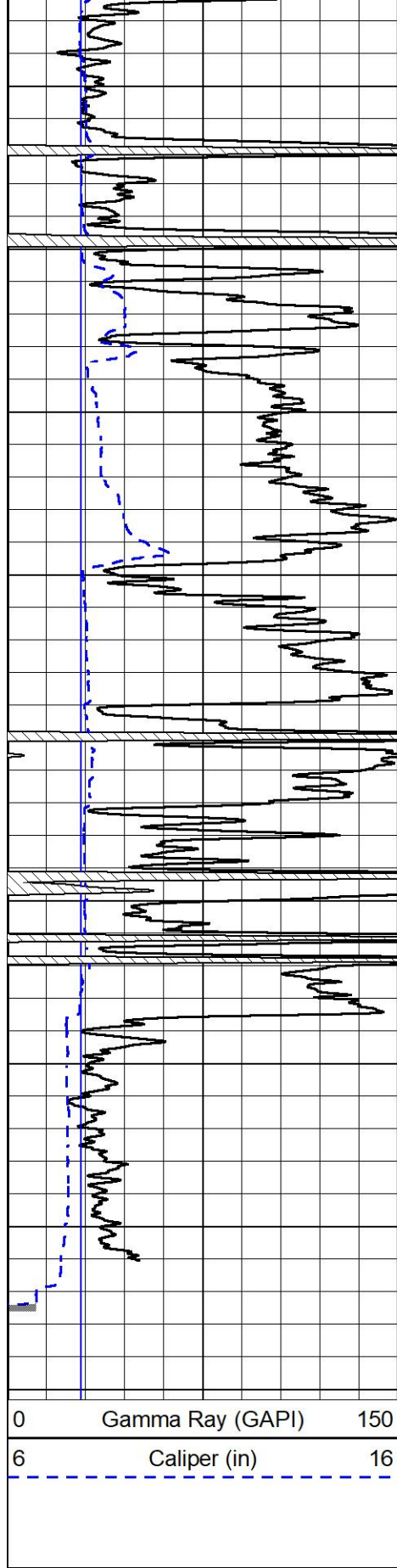
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Dataset Pathname StkMI/pass3.3
Presentation Format _cdl
Dataset Creation Wed Aug 03 12:25:20 2022
Charted by Depth in Feet scaled 1:600

0	Gamma Ray (GAPI)	150
6	Caliper (in)	16

30	Compensated Density (pu)	-10
2	Bulk Density (g/cc)	3
10000	Line Tension (lb)	0
-0.25	Correction (g/cc)	0.25





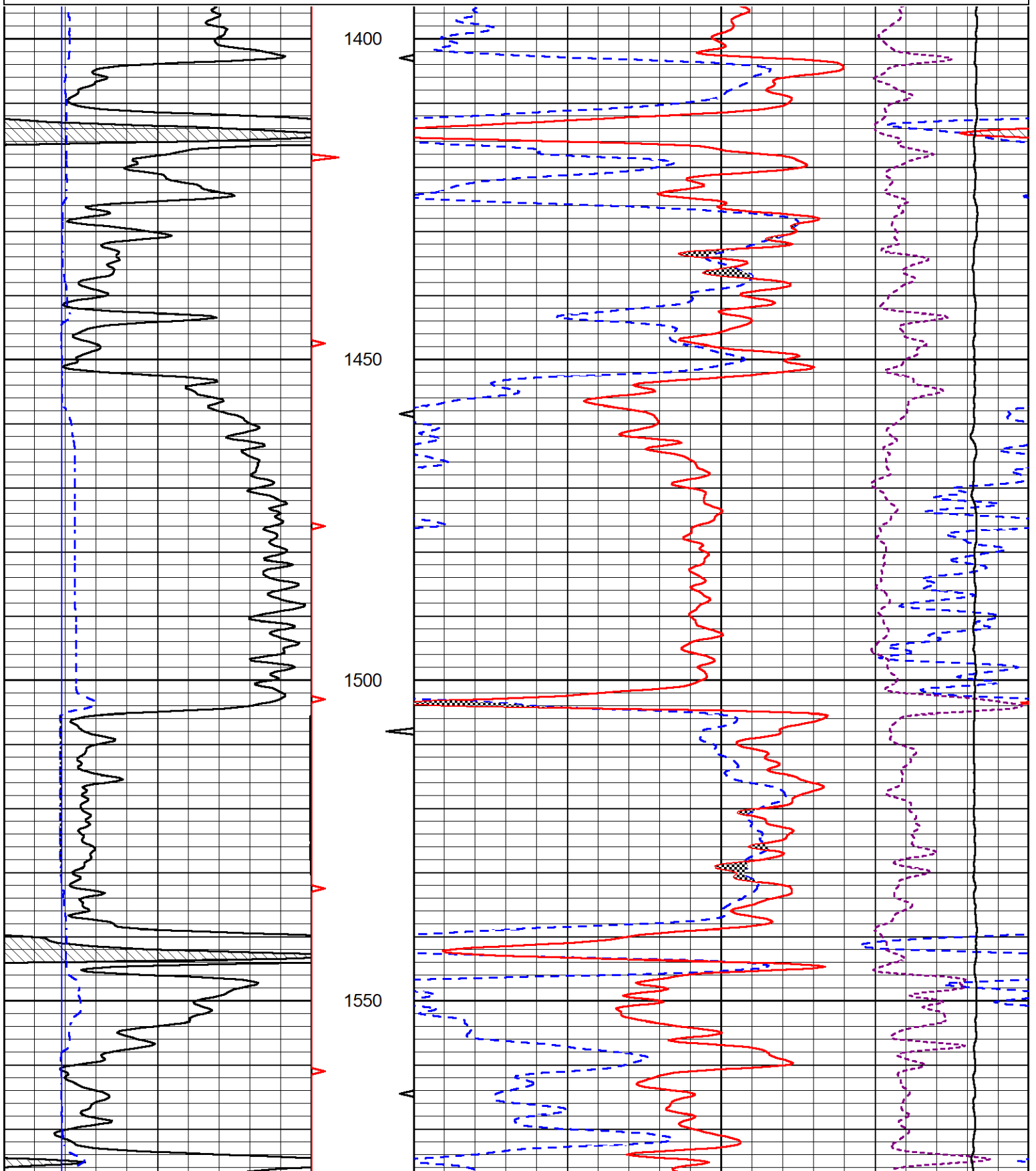


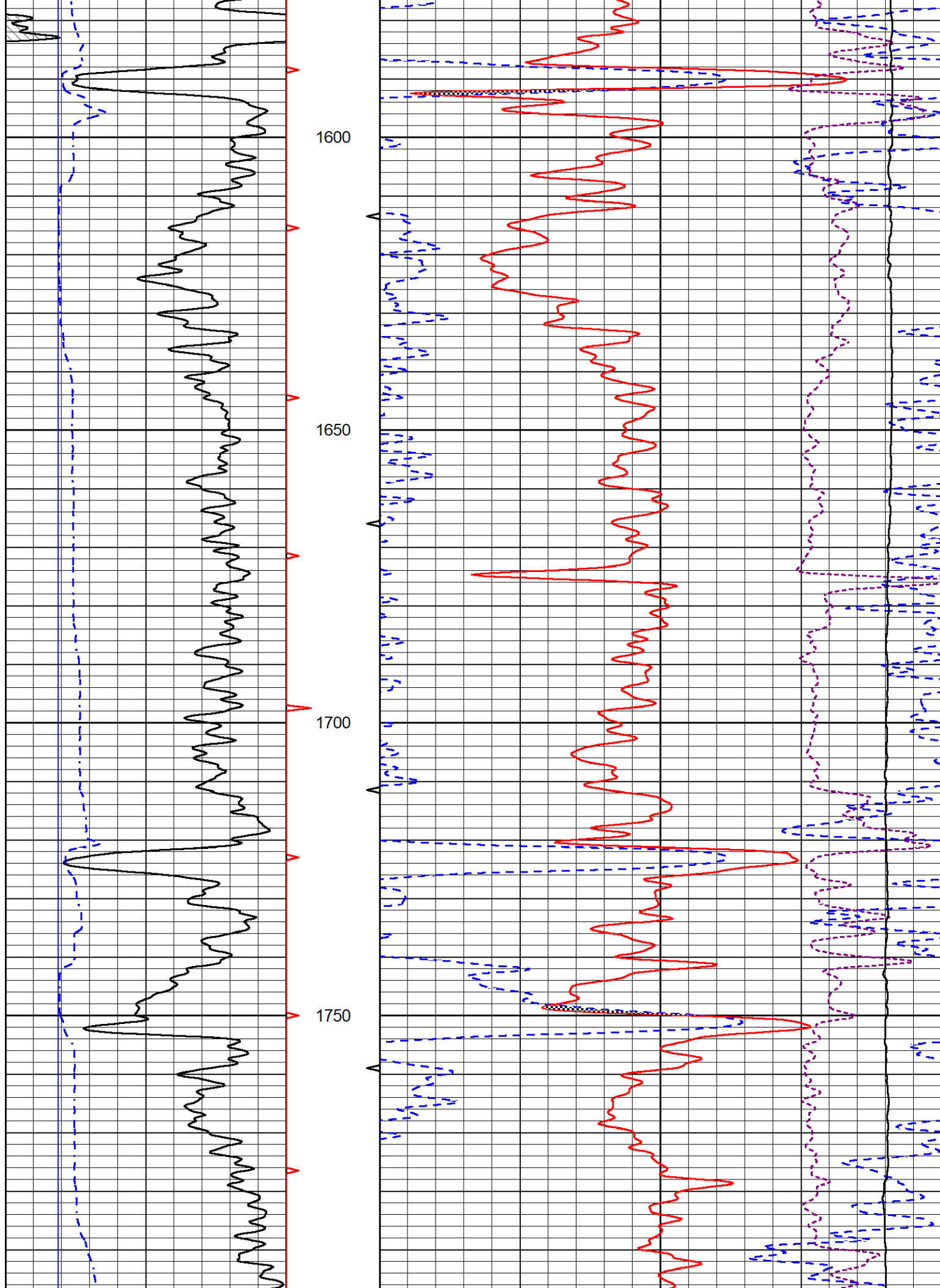
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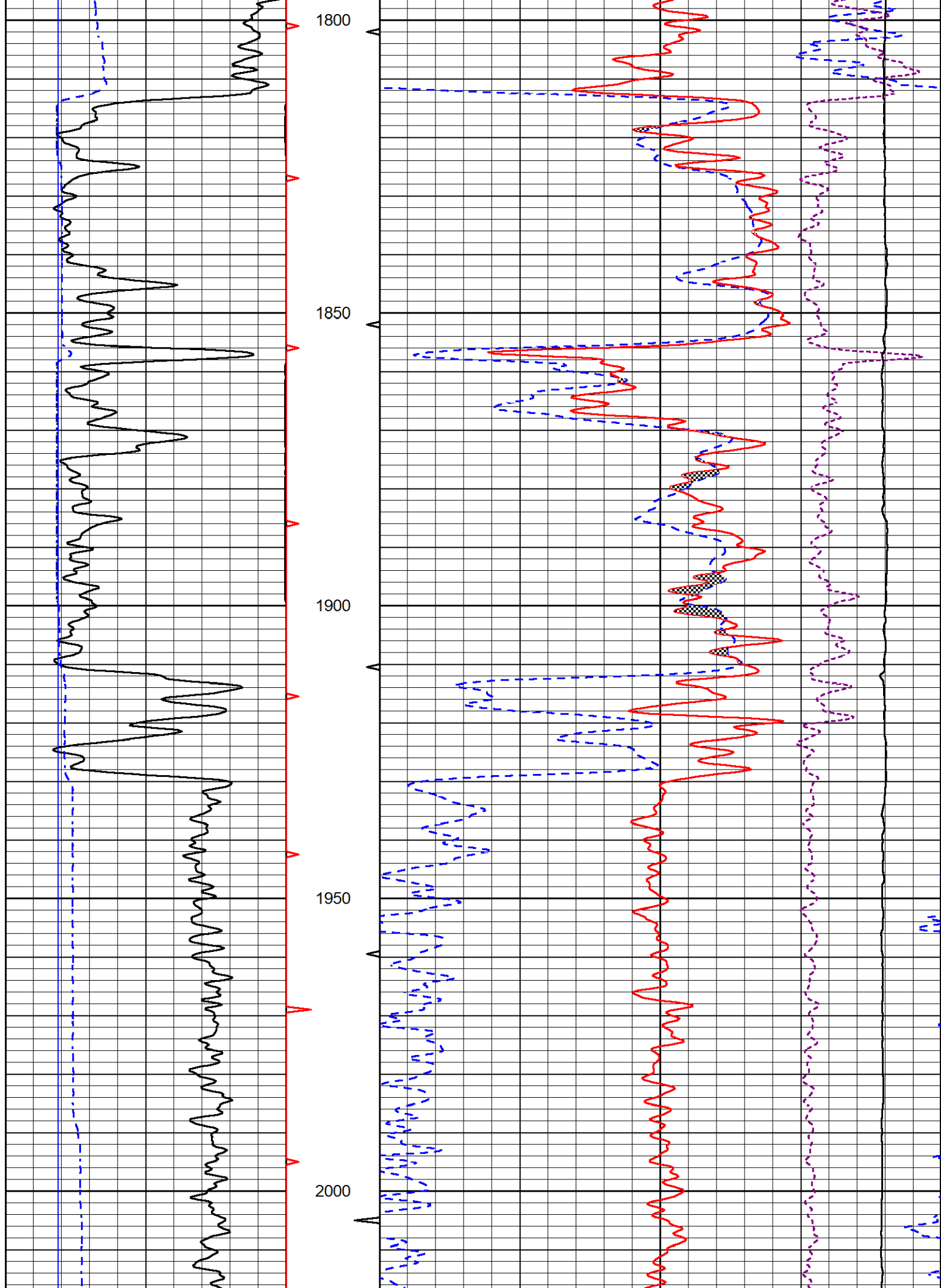
MAIN PASS

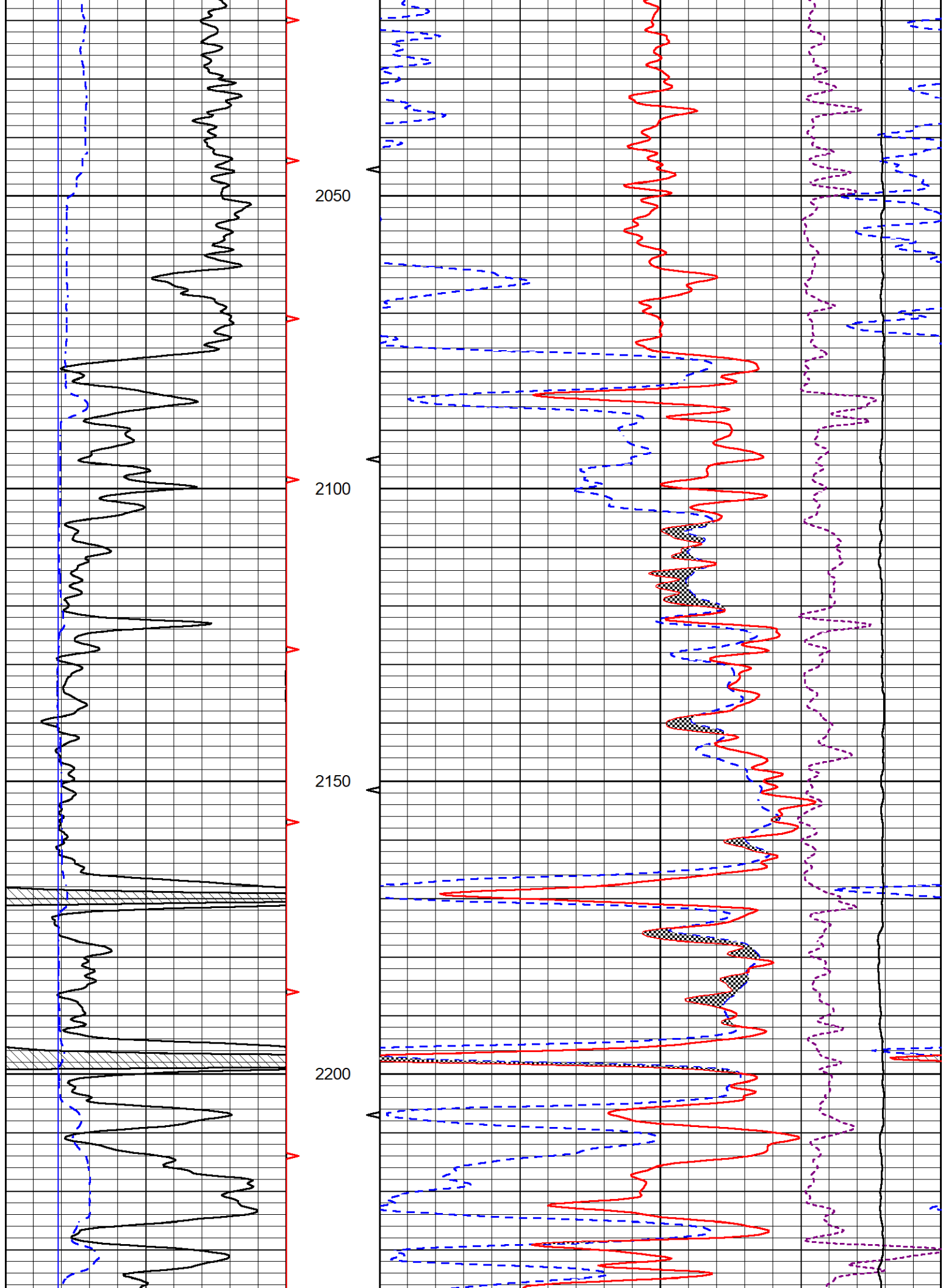
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Dataset Pathname StkMI/pass3.1
Presentation Format _CNDLS~1
Dataset Creation Wed Aug 03 12:46:21 2022
Charted by Depth in Feet scaled 1:240

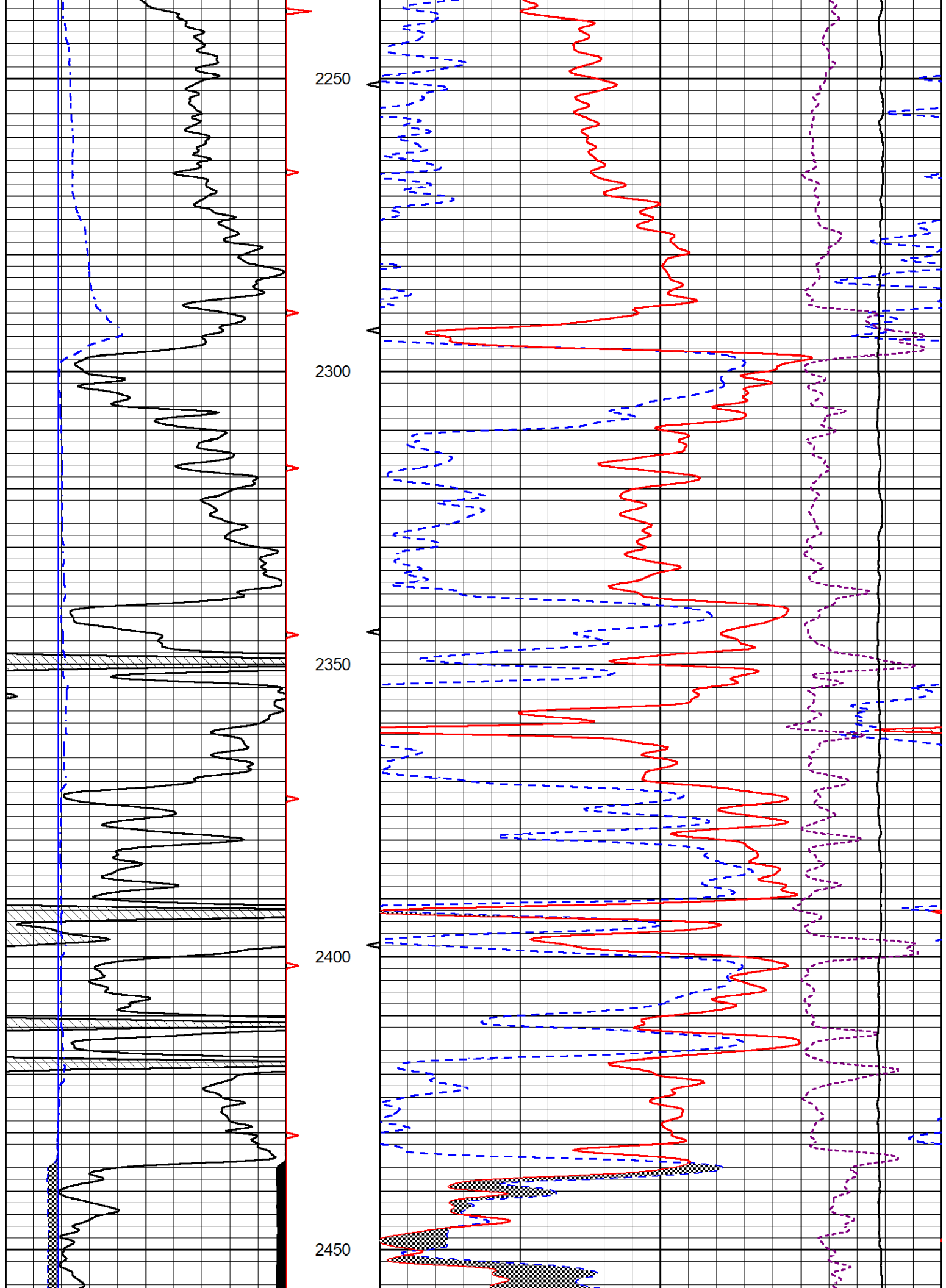
0	Gamma Ray (GAPI)	150	30	Compensated Neutron (pu)	-10
6	Caliper (in)	16	30	Compensated Density (pu)	-10
			10000	Line Tension (lb)	0
				-0.25	Correction (g/cc) 0.25

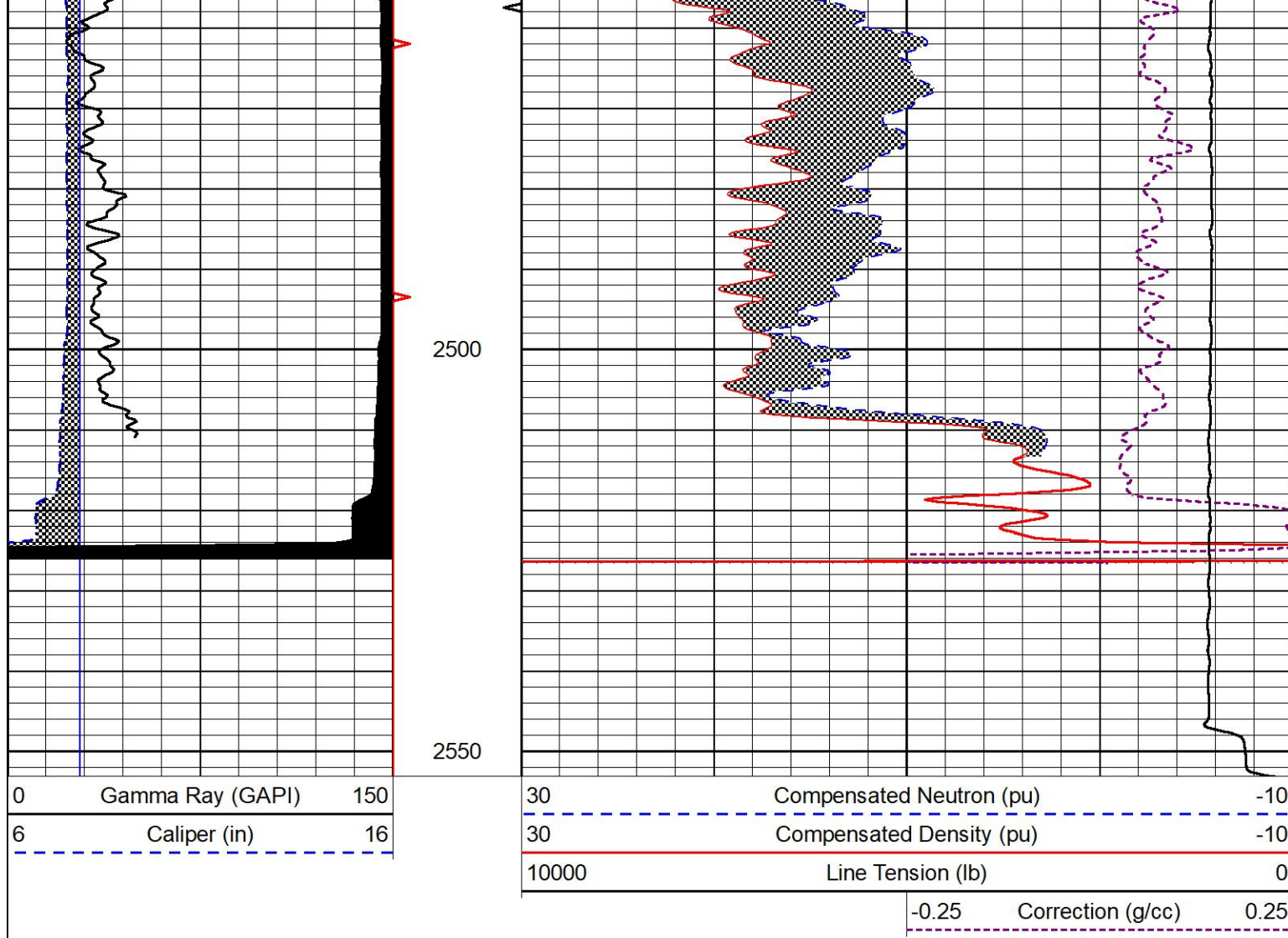










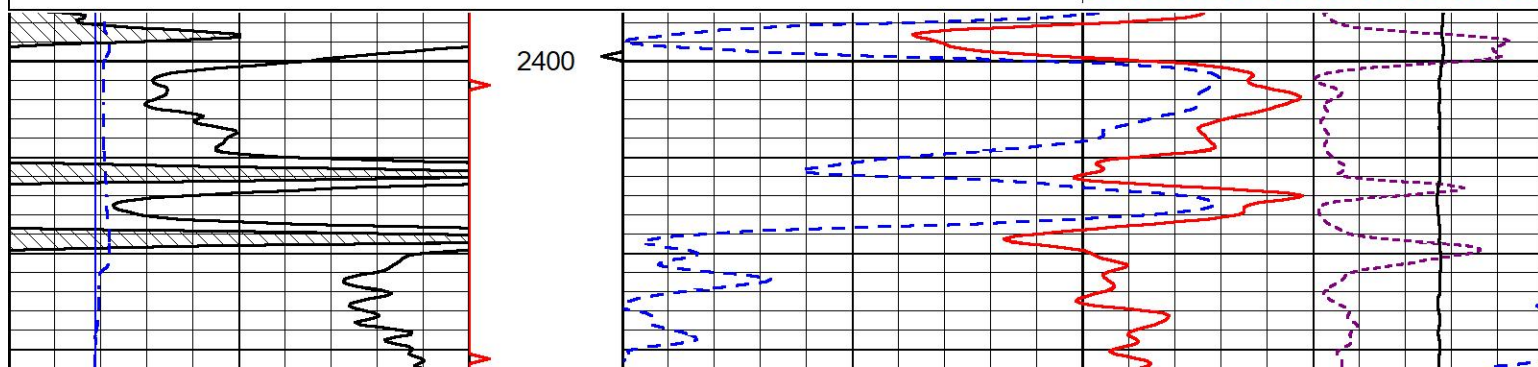
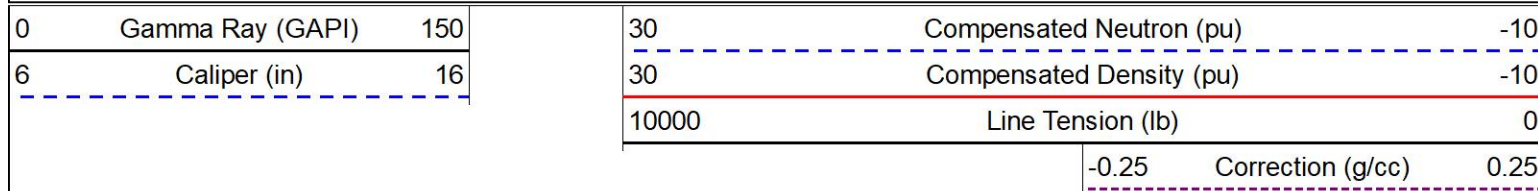


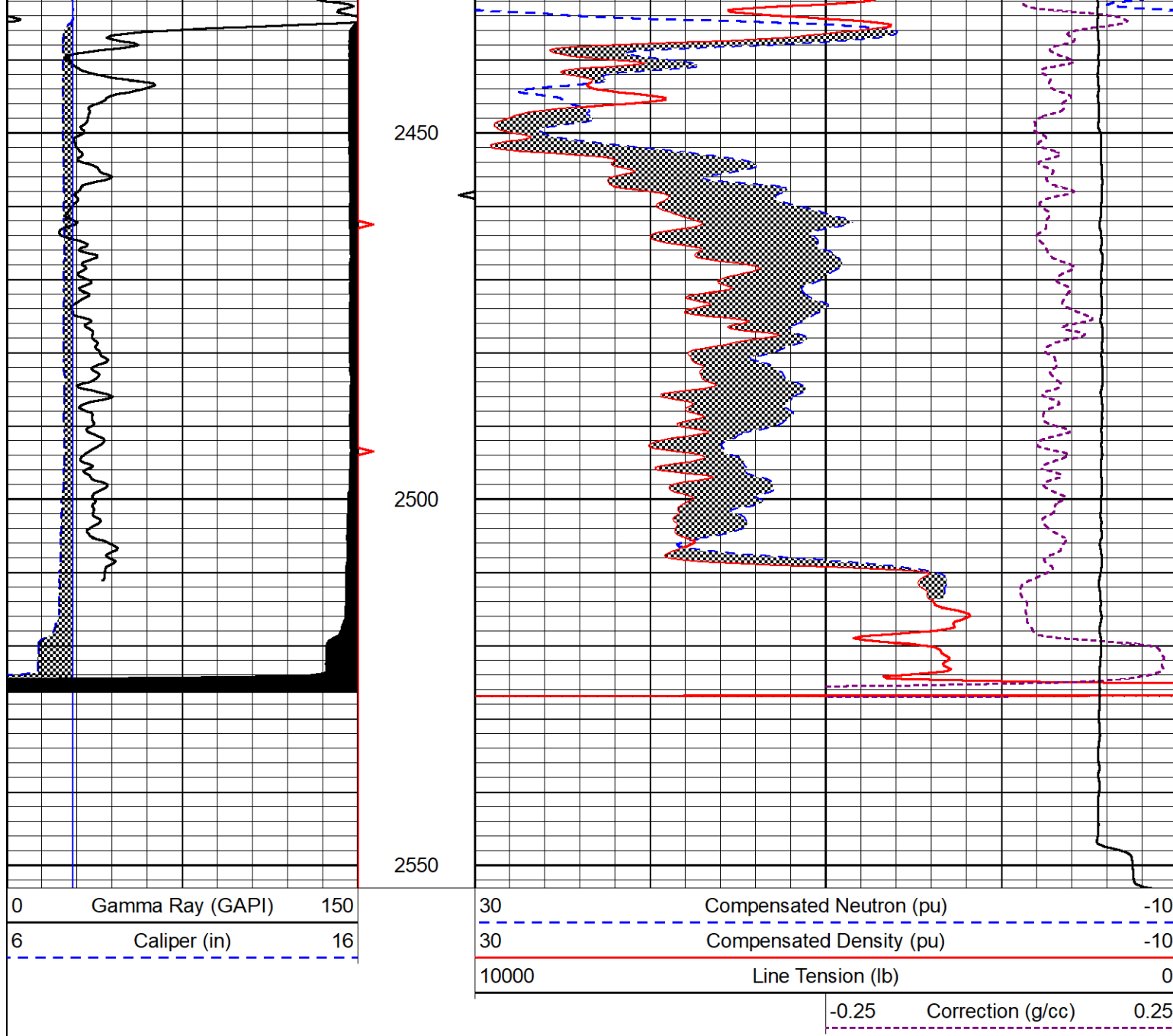
MIDWEST WIRELINE

REPEAT SECTION

REPEAT PASS

Database File eopc_eck a #1.db
 Dataset Pathname StkMI/pass2.1
 Presentation Format _CNDLS~1
 Dataset Creation Wed Aug 03 12:18:06 2022
 Charted by Depth in Feet scaled 1:240





Calibration Report

Database File eopc_eck a #1.db
 Dataset Pathname StkMI/pass3.1
 Dataset Creation Wed Aug 03 12:46:21 2022

Dual Induction Calibration Report

Serial-Model: 507-M&W
 Surface Cal Performed: Tue Jul 19 06:59:10 2022

Loop:	Readings		References			Results	
	Air	Loop	Air	Loop		m	b
Deep	82.972	482.449	0.000	255.800	mmho/m	0.590	-35.130
Medium	120.285	668.174	0.000	255.800	mmho/m	0.517	-61.500

Microlog Calibration Report

Serial-Model: 402-PSIML

Performed:

Sun Jul 17 13:11:21 2022

	Readings		References			Results	
	Zero	Cal	Zero	Cal		m	b
Normal	0.0000	1.0000	0.0000	1.0000	Ohm-m	10000.0000	0.0000
Inverse	0.0000	1.0000	0.0000	1.0000	Ohm-m	12000.0000	-0.3000
Caliper	1.0052	1.0858	5.0000	16.5000	in	65.0000	-59.8000

Compensated Density Calibration Report

Serial-Model: 302-02-M&W
Source #: 20762B
Master Calibration Performed: Wed Jun 22 01:19:51 2022

Master Calibration

	Density			Far Detector	Near Detector	
Magnesium	1.755	g/cc		4422.04	6163.44	cps
Aluminum	2.665	g/cc		835.14	3912.91	cps
Spine Angle = 74.75			Density/Spine Ratio = 0.527			
	Size			Reading		
Small Ring	8.00	in		0.53		
Large Ring	30.00	in		0.60		

Compensated Neutron Calibration Report

Serial Number: 207-MW
Tool Model: M&W

CALIBRATION

Detector	Readings		Target		Normalization
Short Space	6240.00	cps	1000.00	cps	1.6025
Long Space	460.00	cps	1000.00	cps	1.9500

PRE-SURVEY VERIFICATION

	Detector	Readings		Measured	Target
1)	Short Space		cps		
	Long Space		cps	pu	pu
2)	Short Space		cps		
	Long Space		cps	pu	
3)	Short Space		cps		
	Long Space		cps	pu	

POST-SURVEY VERIFICATION

	Detector	Readings		Measured	Target
1)	Short Space		cps		
	Long Space		cps	pu	pu
2)	Short Space		cps		
	Long Space		cps	pu	pu
3)	Short Space		cps		

5)	Short Space	cps	pu	pu
	Long Space	cps		
Gamma Ray Calibration Report				
Serial Number:		106		
Tool Model:		M&W		
Performed:		Fri Dec 3 15:10:46 2021		
Calibrator Value:		500.0	GAPI	
Background Reading:		24.0	cps	
Calibrator Reading:		637.0	cps	
Sensitivity:		0.5500	GAPI/cps	

	Company	EPOC LLC
	Well	Eck 'A' #1
	Field	Hazlett
	County	Butler
	State	Kansas