



MIDWEST WIRELINE

**DUAL COMPENSATED
POROSITY W/PE**

Company M3 Helium Corporation
Well Smith C #2
Field Hugoton
County Haskell
State Kansas

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Location: API #: 15-081-22267-00-00
1320 FNL & 1320 FWL
NW
SEC 3 TWP 28S RGE 33W
Permanent Datum Ground Level Elevation 2985
Log Measured From Kelly Bushing
Drilling Measured From Kelly Bushing
Other Services
DIL/MEL
K.B. 2992
D.F.
G.L. 2985

Date	11/10/2023						
Run Number	One						
Type Log	CNL/CDL						
Depth Driller	2972						
Depth Logger	2974						
Bottom Logged Interval	2945						
Top Logged Interval	1900						
Type Fluid In Hole	Chemical						
Salinity, PPM CL	10000						
Density	8.8						
Level	Full						
Max. Rec. Temp. F	106						
Operating Rig Time	2 Hours						
Equipment -- Location	P-24 Hays						
Recorded By	T. Martin						
Witnessed By	Brad Parker						
Borehole Record							
Run No.	Bit	From	To	Size	Wgt.	From	To
One	12.25	00	717	8.625	23	00	717
Two	7.875	717	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.

Garden City, KS, S on Hwy 83
to Rd 70, 2.75 W, S into

Log Measured From: Kelly Bushing 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:	Primary Witness: Brad Parker	Secondary Witness:
Operator:	Operator:	Secondary Witness:	Secondary Witness:
Operator:		Secondary Witness:	

Operator	Offset (ft)	Schematic	Description	Length (ft)	C.D. (in)	Weight (lb)
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Sensor	Offset (ft)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb)
GR	40.75		GR-M&W (102)	3.00	3.50	50.00
CNLSC CNSSC	37.65 36.90		CNT-M&W (207)	5.00	3.50	100.00
LCAL	28.21		MWLith-STEP LITHO (704-10) Long Litho Mandrel	8.92	5.00	250.00
LLW8N	28.21		ML-PSIML (401)	7.58	4.00	65.00
LLW7N	28.21					
LLW6N	28.21					
LLW5N	28.21					
LLW4N	28.21					
LLW3N	28.21					
LLW2N	28.21					
LLW1N	28.21					
LSLOCK	27.96					
LLLOCK	27.96					
PELTMPR	27.96		DIL-M&W (507)	18.25	3.50	220.00
LSHVNG	27.96					
LLHVNG	27.96					
LSW8N	27.71					
LSW7N	27.71					
LSW6N	27.71					
LSW5N	27.71					
LSW4N	27.71					
LSW3N	27.71					
LSW2N	27.71					
LSW1N	27.71					
MCAL	19.58					
MI	19.58					
MN	19.58					
RLL3F	15.50					
RLL3	15.50					
CILD	8.33					
CILM	4.50					
SP	0.20					

Dataset: m3 helium_smith c #2.db: field/well/StkMI/pass3.1
 Total length: 42.75 ft
 Total weight: 685.00 lb
 O.D.: 5.00 in

Log Variables

DatabaseC:\ProgramData\Warrior\Data\m3 helium_smith c #2.db
 Dataset field/well/StkMI/pass3.1/_vars_

Top - Bottom

BOREID in 7.875	BOTTEMP degF 106	CASEOD in 4.5	CASETHCK in 0	FLUIDDEN g/cc 1	MATRXDEN g/cc 2.71	NPORSEL Limestone	PERFS No
SNDERR mmho/m 2	SNDERRM mmho/m 0	SPSHIFT mV 260	SRFTEMP degF 50	SZCOR Off	TDEPTH ft 2974		

Variable Description

BOREID : Borehole I.D.
 BOTTEMP : Bottom Hole Temperature
 CASEOD : Casing O.D.
 CASETHCK : Casing Thickness
 FLUIDDEN : Fluid Density
 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



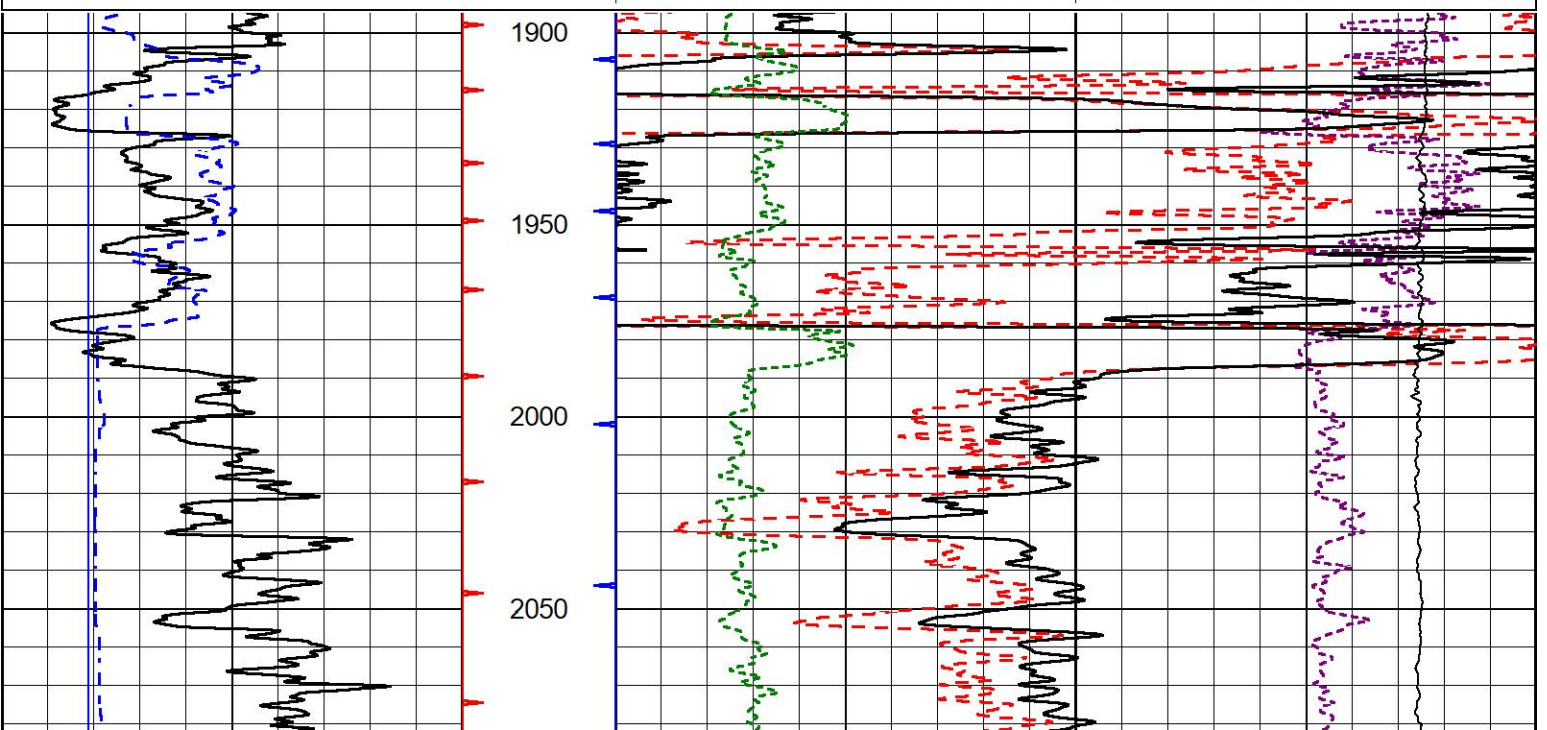
MIDWEST WIRELINE

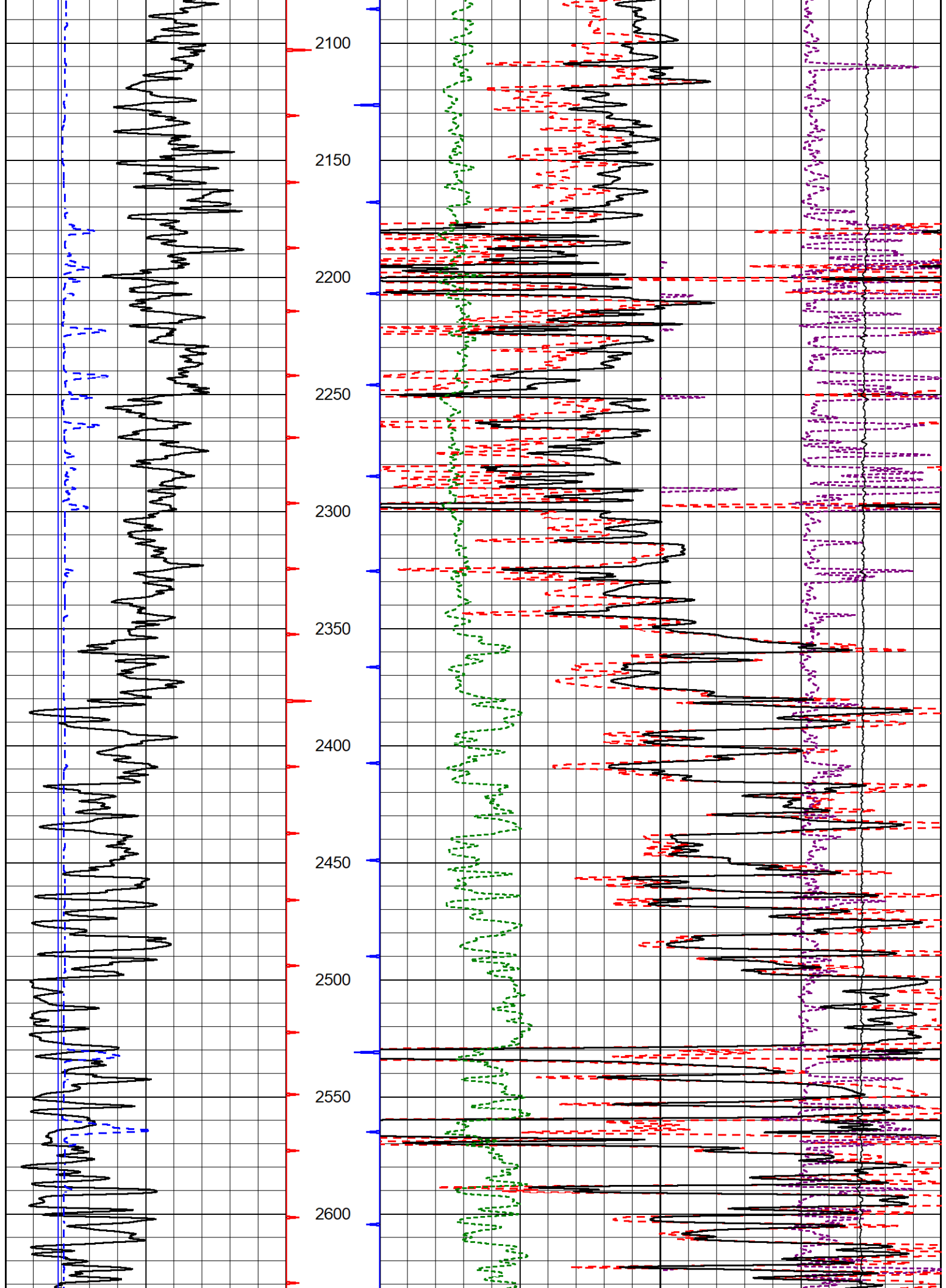
2" SCALE BULK DENSITY

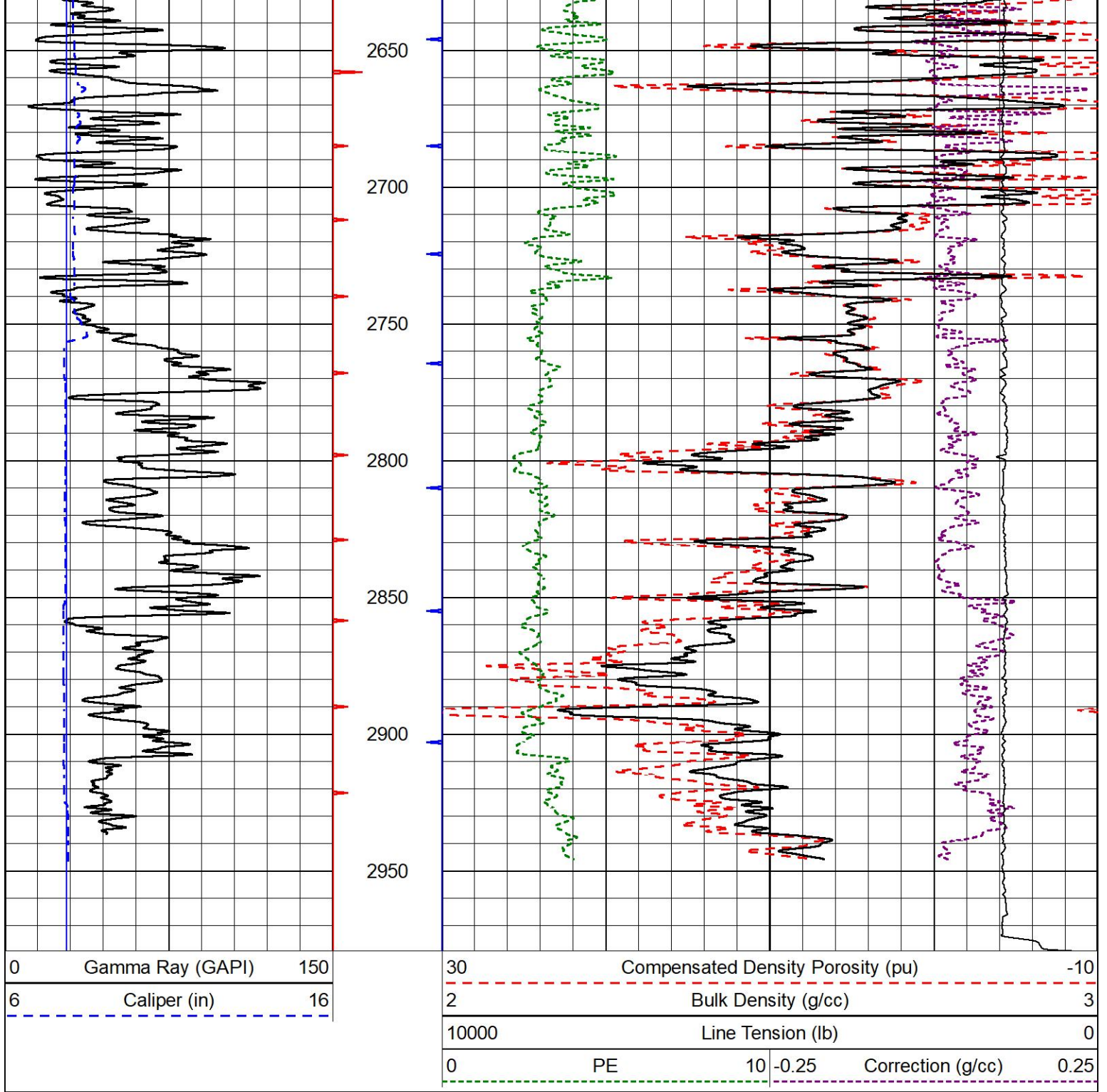
MAIN PASS

Database File m3 helium_smith c #2.db
 Dataset Pathname StkMI/pass3.3
 Presentation Format _cdlpe
 Dataset Creation Fri Nov 10 23:15:53 2023
 Charted by Depth in Feet scaled 1:600

0	Gamma Ray (GAPI)	150	30	Compensated Density Porosity (pu)	-10
6	Caliper (in)	16	2	Bulk Density (g/cc)	3
			10000	Line Tension (lb)	0
			0	PE	10 -0.25
				Correction (g/cc)	0.25





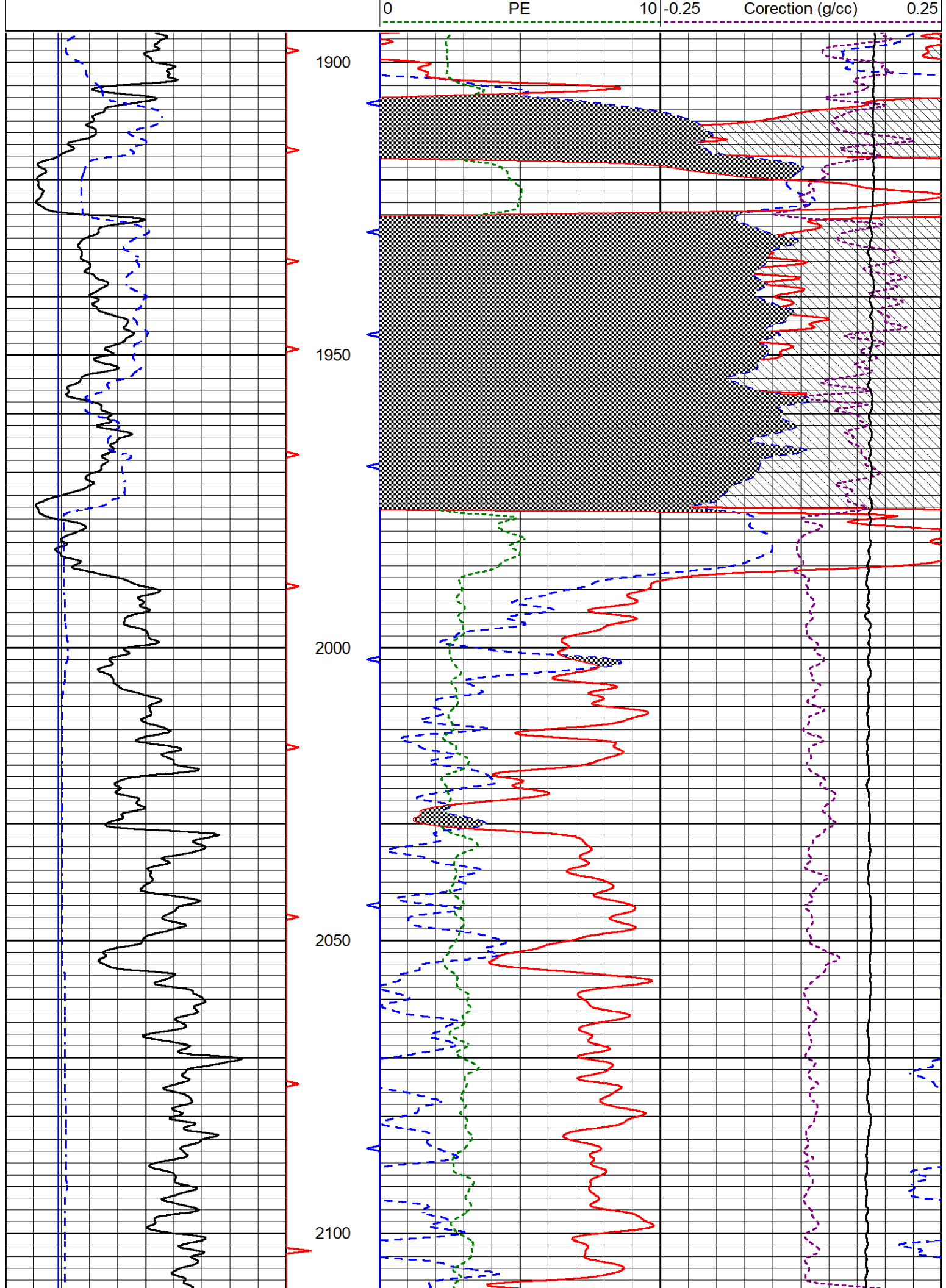


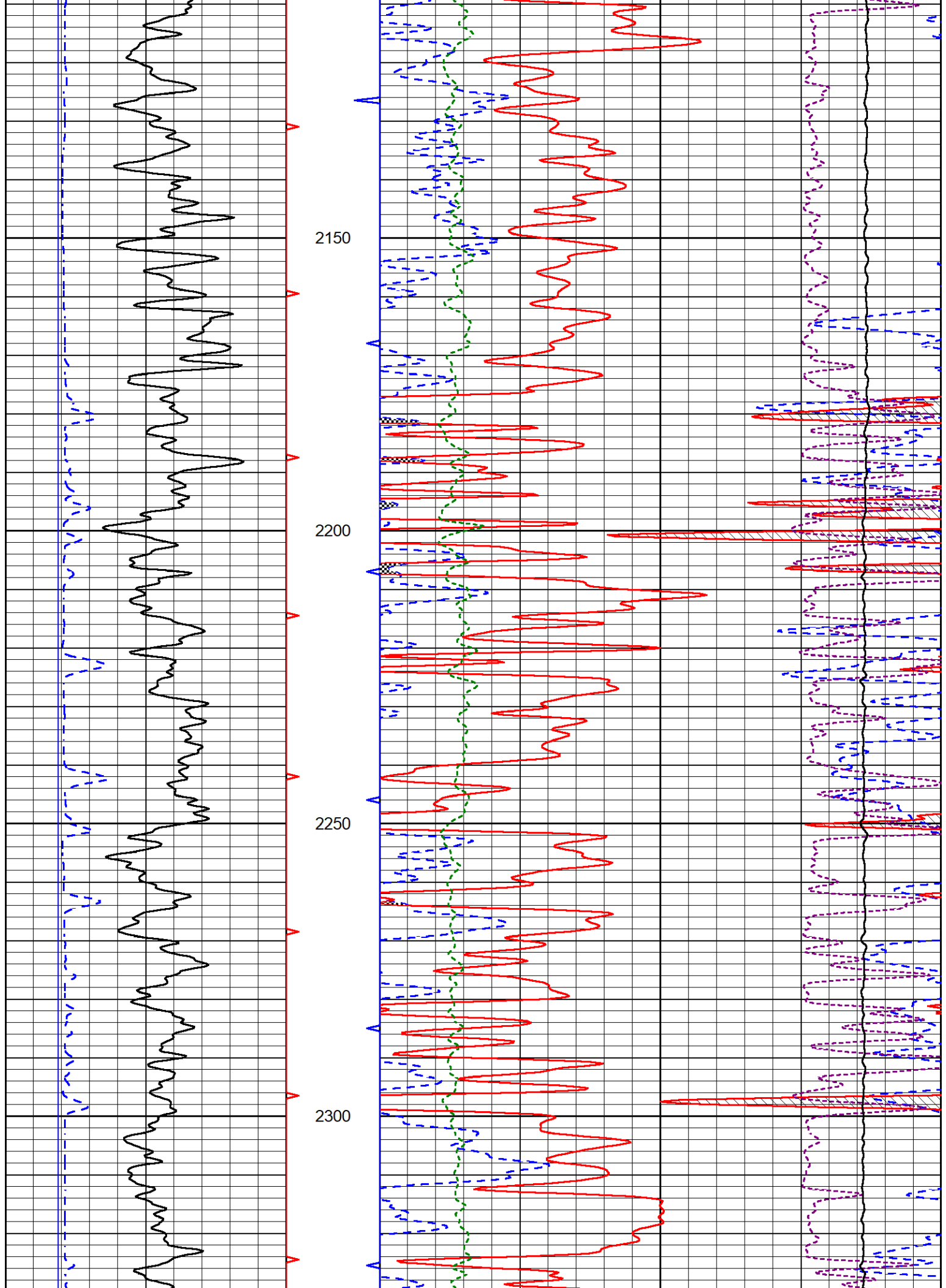
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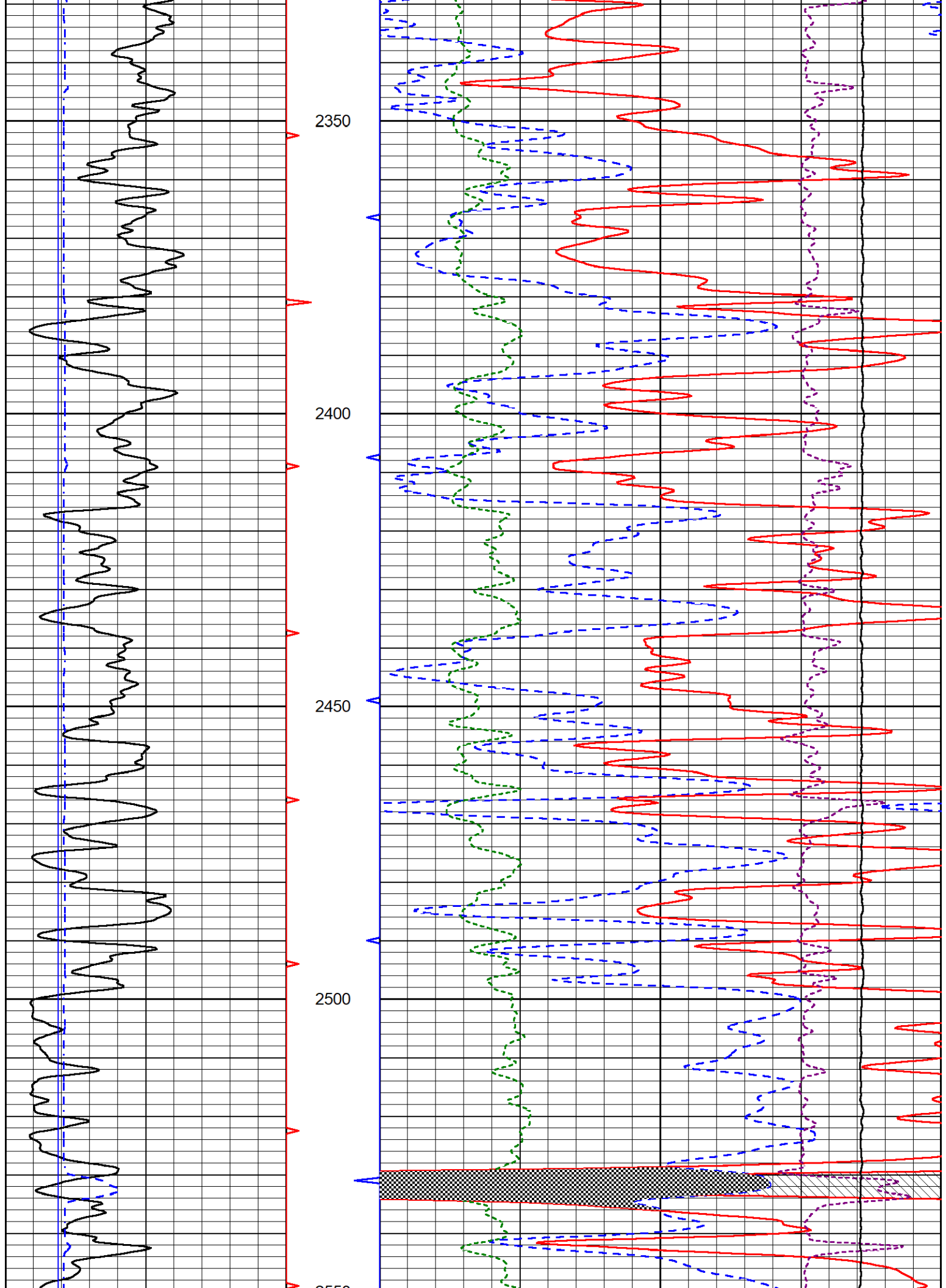
MAIN PASS

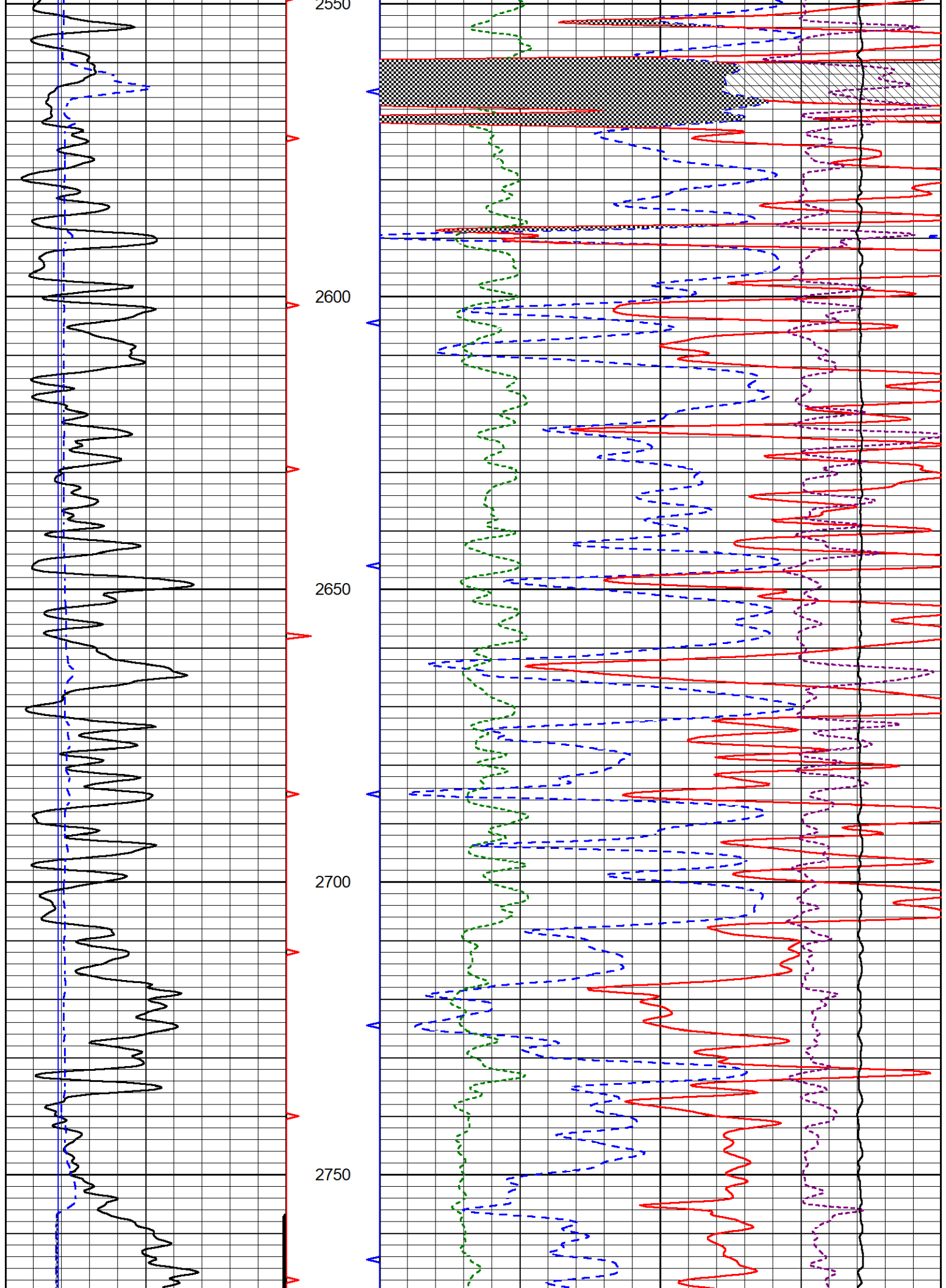
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 Dataset Pathname StkMI/pass3.1
 Presentation Format _CNDLS~4
 Dataset Creation Fri Nov 10 23:33:19 2023
 Charted by Depth in Feet scaled 1:240

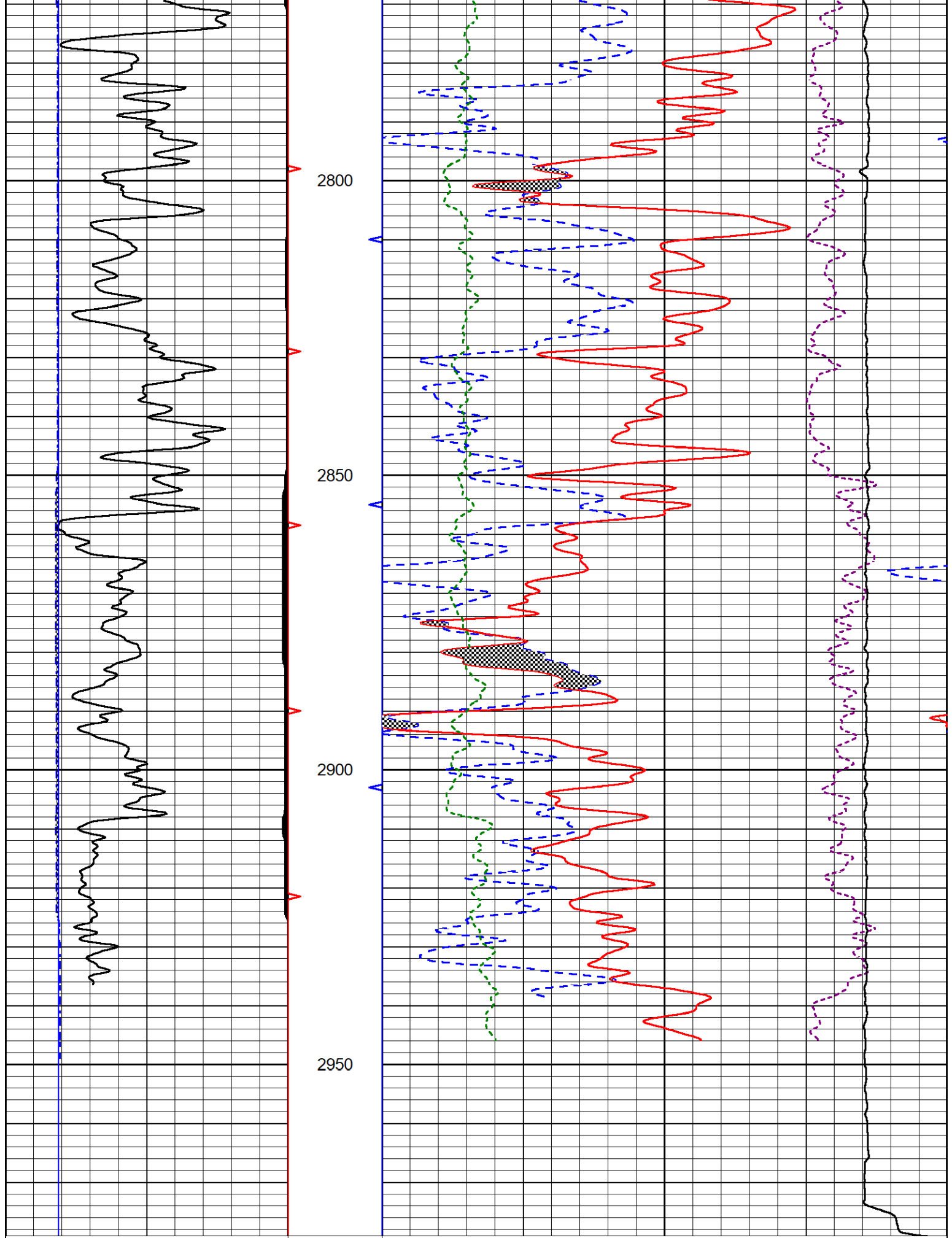












0 Gamma Ray (GAPI) 150
 6 Caliper (in) 16

30 CNPOR (pu) -10
 30 Compensated Density Porosity (pu) -10

10000	Line Tension (lb)		0
0	PE	10	-0.25
		Corection (g/cc)	0.25



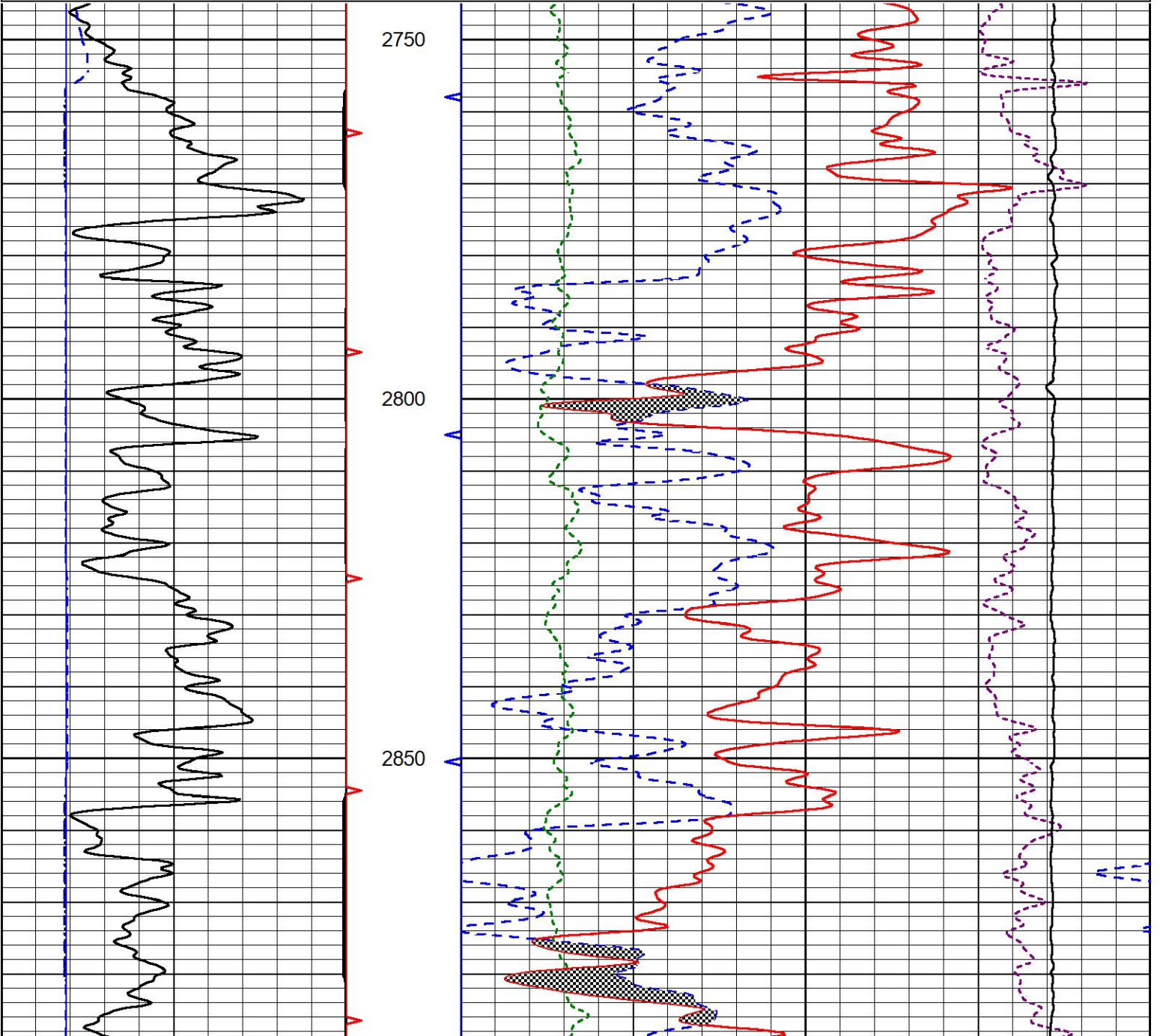
MIDWEST WIRELINE

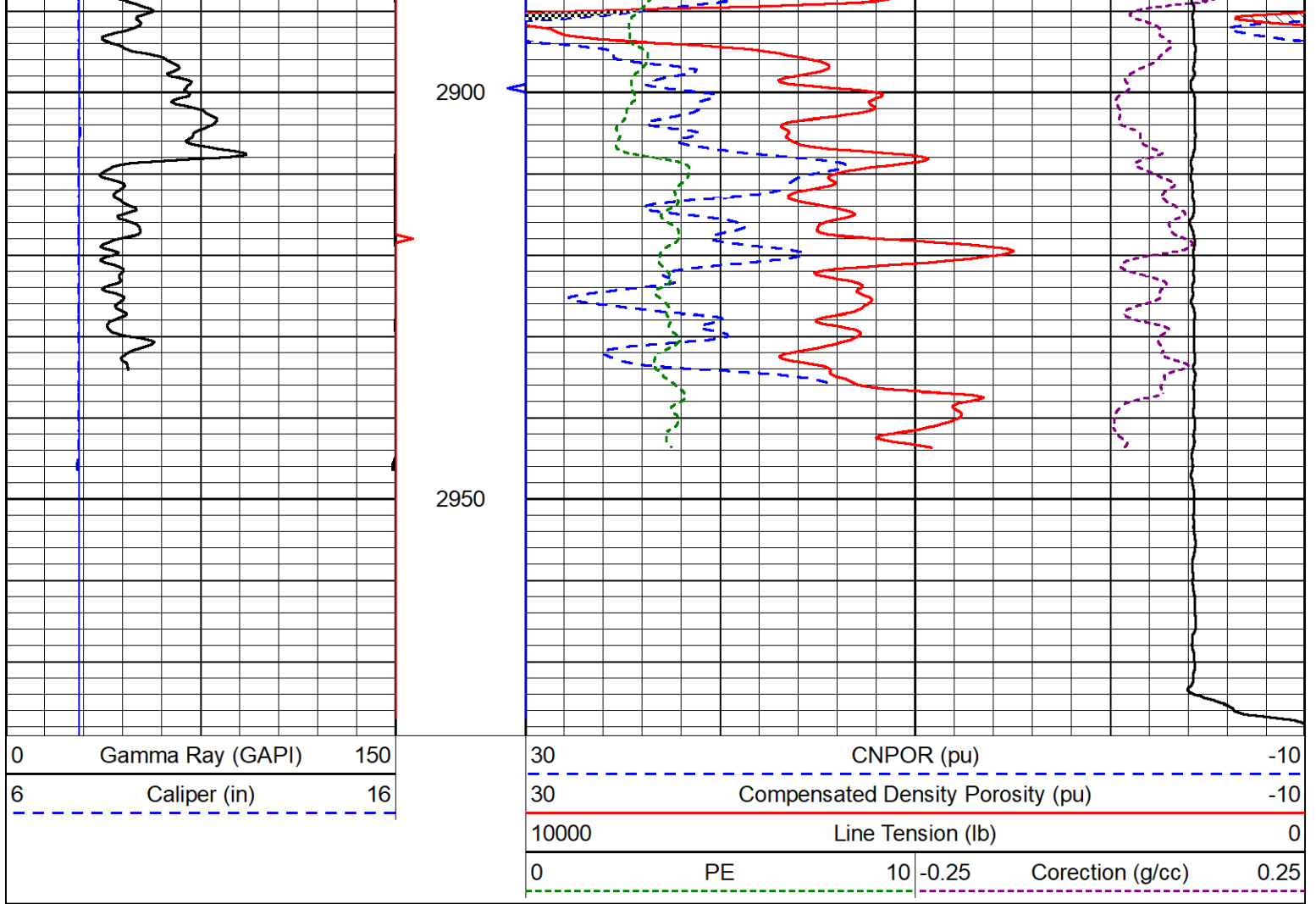
REPEAT SECTION

REPEAT PASS

Database File m3 helium_smith c #2.db
 Dataset Pathname StkMI/pass2.1
 Presentation Format _CNDLS~4
 Dataset Creation Fri Nov 10 23:08:03 2023
 Charted by Depth in Feet scaled 1:240

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





Calibration Report

Database File m3 helium_smith c #2.db
 Dataset Pathname StkMI/pass3.1
 Dataset Creation Fri Nov 10 23:33:19 2023

Dual Induction Calibration Report

Serial-Model: 507-M&W
 Surface Cal Performed:

Loop:	Readings		References			Results	
	Air	Loop	Air	Loop	mmho/m	m	b
Deep	68.570	638.100	0.000	255.800	mmho/m	0.500	-37.000
Medium	184.288	716.191	0.000	255.800	mmho/m	0.450	-79.000

Microlog Calibration Report

Serial-Model: 401-PSIML
 Performed: Mon Sep 25 22:02:56 2023

	Readings		References			Results	
	Zero	Cal	Zero	Cal		m	b
Normal	0.0000	1.0000	0.0000	1.0000	Ohm-m	26500.0000	-0.3000
Inverse	0.0000	1.0000	0.0000	1.0000	Ohm-m	22500.0000	-0.0500
Caliper	1.0052	1.0858	5.0000	16.5000	in	142.7190	-138.8600

LITHODENSITY Calibration Report

Serial Number: 704-10
 Tool Model: STEP LITHO
 Performed: Wed Oct 11 14:52:04 2023

Source:

	Win1	Win2	Win3	Win4	Win5	Win6	Win7	Win8	
Background:									
SS:	52	56	202	260	22	71	45	1	cps
LS:	82	93	356	462	52	144	94	3	cps
Aluminum:									
SS:	868	1009	2312	2012	39	73	47	2	cps
LS:	1063	1847	3324	1556	63	146	95	6	cps
Magnesium:									
SS:	1458	1686	3853	2923	42	73	48	3	cps
LS:	4604	7631	13124	4967	100	134	94	14	cps
Aluminum+Iron:									
SS:	538	708	1910	1720	37	73	47	1	cps
LS:	619	1309	2817	1400	60	147	97	5	cps

	Density Actual	Calibrated		PE Actual	Calibrated	Quality
Background:						
SS:						0.225
LS:						0.208
Aluminum:						
SS:	2.6000	2.6000	g/cc			0.210
LS:	2.6000	2.6000	g/cc			0.210
Magnesium:						
SS:	1.6800	1.6800	g/cc	2.5700	2.5700	0.207
LS:	1.6800	1.6800	g/cc	2.5700	2.5700	0.173
Aluminum+Iron:						
SS:					6.1800	0.215
LS:					6.1800	0.205

Before Survey									
Performed:	Wed Feb 9	13:15:42	2022						
SS:	0	0	0	0	0	0	0	0	cps
LS:	1370	1580	3705	3037	48	80	50	4	cps
After Survey									
Performed:	Wed Feb 9	13:16:02	2022						
SS:	0	0	0	0	0	0	0	0	cps
LS:	1400	1600	3800	3100	60	100	70	6	cps

Caliper:	Reference:	Reading:
Small Ring:	6.0 in	0.2
Large Ring:	15.0 in	0.8
Gain:	16.161	
Offset:	1.130	

Compensated Neutron Calibration Report

Serial Number: 207
 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 Long Space	cps cps	pu	pu
2)	Short Space Long Space	cps cps	pu	
3)	Short Space Long Space	cps cps	pu	

POST-SURVEY VERIFICATION

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

Gamma Ray Calibration Report

Serial Number: 102
 Tool Model: M&W
 Performed: Mon Sep 25 22:02:33 2023

Calibrator Value: 1.0 GAPI

Background Reading: 0.0 cps
 Calibrator Reading: 1.0 cps

Sensitivity: 0.5250 GAPI/cps



MIDWEST WIRELINE

Company M3 Helium Corporation
 Well Smith C #2
 Field Hugoton
 County Haskell
 State Kansas