



PIONEER

Pioneer Energy Services

DUAL COMP POROSITY LOG

Company VAL ENERGY, INC.
Well SCHMADERER #1-23
Field WILDCAT
County RAWLINS State KANSAS

Location: API #: 15-153-21239-00-00

Other Services

SEC 23 TWP 4S RGE 32W
1983' FNL & 969' FEL

DIL
MEL

Permanent Datum GROUND LEVEL Elevation 2944'
Log Measured From KELLY BUSHING
Drilling Measured From KELLY BUSHING

Elevation
K.B. 2949'
D.F. N/A
G.L. 2944'

Date 9/5/2019

Run Number ONE

Type Log CNL/CDL

Depth Driller 4600'

Depth Logger 4600'

Bottom Logged Interval 4571'

Top Logged Interval 3500'

Type Fluid In Hole CHEMICAL

Salinity, PPM CL 2000

Density 9.5

Level FULL

Max. Rec. Temp. F 122 DEG/F

Operating Rig Time 2 HOURS

Equipment -- Location P-108 HAYS

Recorded By J. HENRICKSON

Witnessed By WES HANSEN

Borehole Record

Casing Record

Run No.	Bit	From	To	Size	Wgt.	From	To
ONE	12.25"	0	292'	8.625"	23#	0	292'
TWO	7.875"	292'	TD				

<<< Fold Here >>>

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

N/A DENOTES NOT AVAILABLE OR NON-APPLICABLE.

GEM KANSAS

NORTH ON 27 RD TO C RD, 1 EAST, 6 NORTH,
1 EAST, 1/4 NORTH, WEST INTO

Log Measured From: KELLY BUSHING 5 Ft. Above Permanent Datum

THANK YOU FOR USING PIONEER ENERGY SERVICES
www.pioneerenergy.com 785-625-3858

Your Pioneer Energy Services Crew

Engineer: J. HENRICKSON
Operator:
Operator:
Operator:

This Log Record Was Witnessed By

Primary Witness: WES HANSEN
Secondary Witness:
Secondary Witness:
Secondary Witness:

Top - Bottom

A	BOREID	BOTTEMP	CASEOD	CASETHCK	FLUIDDEN	M	MATRXDEN
1	in 7.875	degF 122	in 5.5	in 0	g/cc 1	2	g/cc 2.71
NPORSEL	PERFS	SNDERR	SNDERRM	SPSHIFT	SRFTEMP	SZCOR	TDEPTH
Limestone	0	mmho/m 0	mmho/m 0	mV 170	degF 0	Off	ft 4600

Sensor	Offset (ft)	Schematic		Description	Length (ft)	O.D. (in)	Weight (lb)
GR	40.58			GR-M&W (89-M&W)	3.00	3.50	50.00
CNLSC	37.48			CNT-M&W (tk10-MW)	5.50	3.50	100.00
CNSSC	36.73						
LSD DCAL SSD	28.43 28.42 27.93			CDL-M&W (979-229)	8.50	4.00	250.00
ML-PSI STKBL ML (PSI-02) Stackable Microlog Tools	7.58				7.58	4.00	65.00
MCAL	19.83						
MI	19.83						
MN	19.83						
RLL3	15.80						
RLL3F	15.79						
CILD	8.00			DIL-M&W (PSI 988)	18.50	3.50	220.00

CILM

4.70

SP

0.20

Dataset: val_schmaderer_1_23.db: field/well/stackml/pass3.1
Total length: 43.08 ft
Total weight: 685.00 lb
O.D.: 4.00 in

**PIONEER**

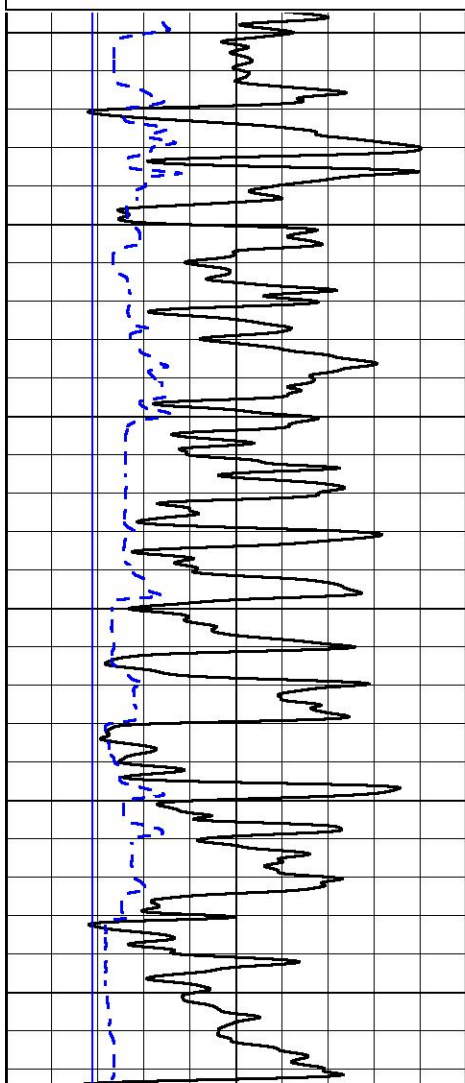
Pioneer Energy Services

MAIN PASS

Database File val_schmaderer_1_23.db
Dataset Pathname stackml/pass3.1
Presentation Format cdl
Dataset Creation Thu Sep 05 17:49:38 2019
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
15000	LINE TENSION (lb)	0



3500

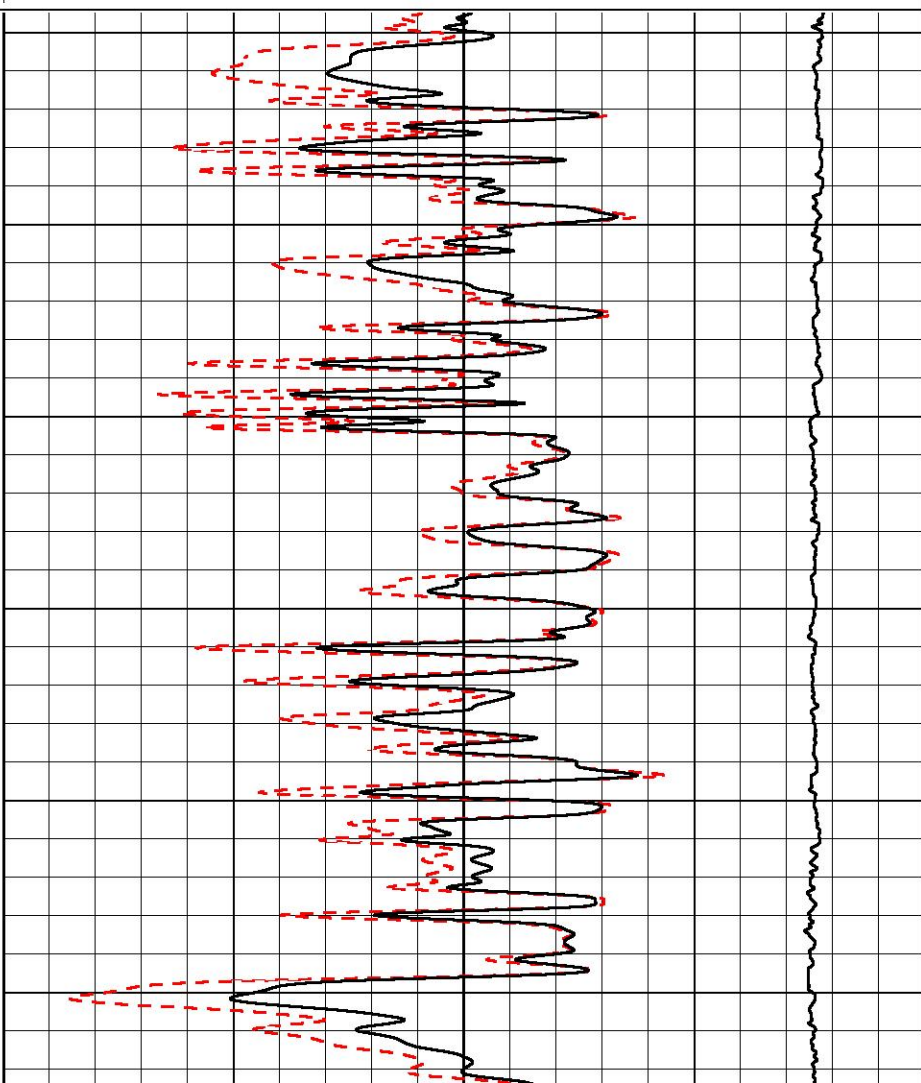
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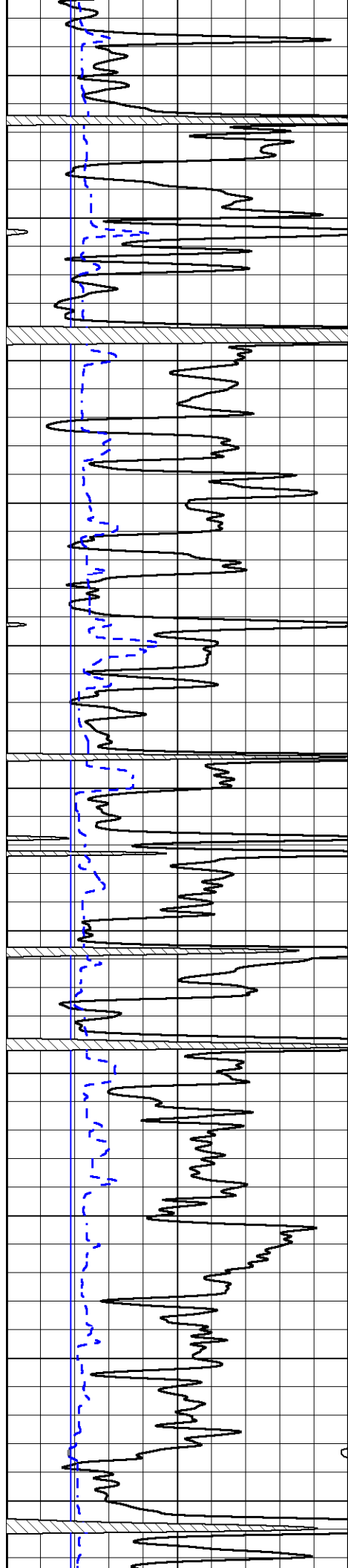
3600

3650

3700

3750





3800

3850

3900

3950

4000

4050

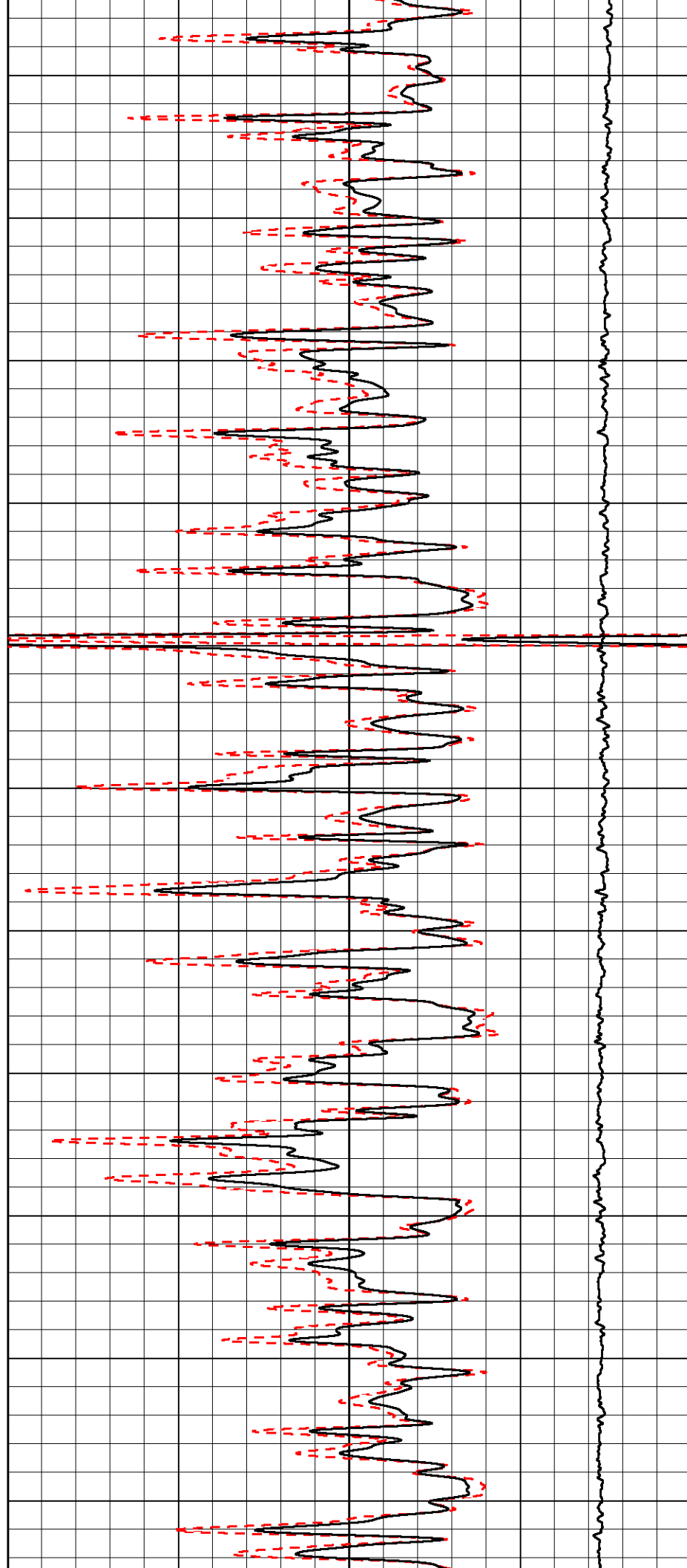
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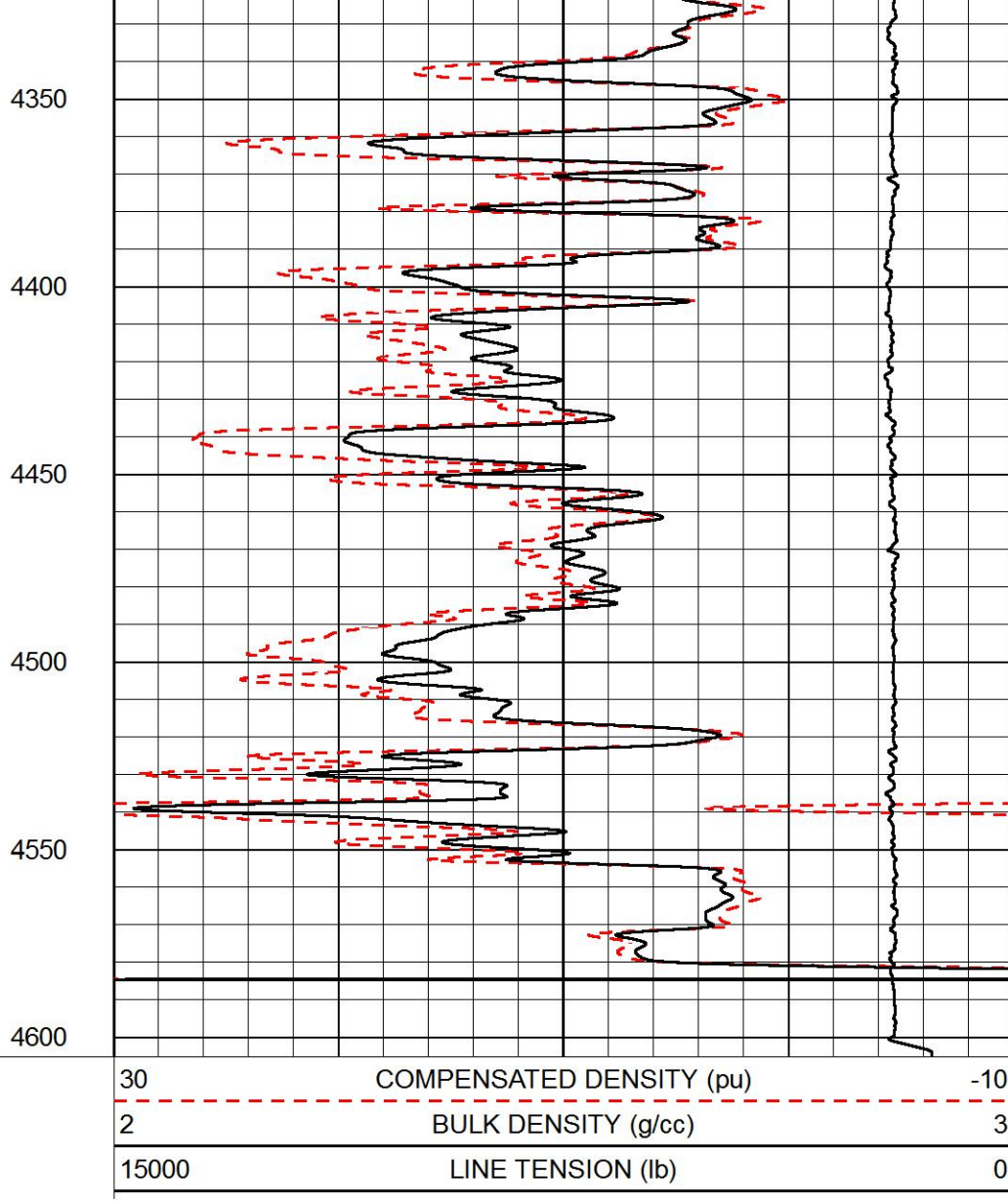
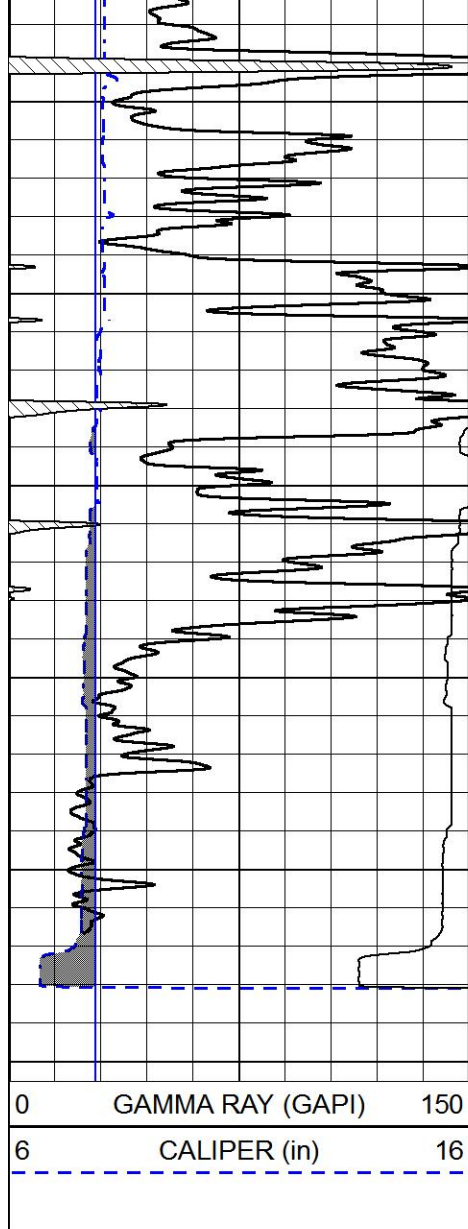
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4200

4250

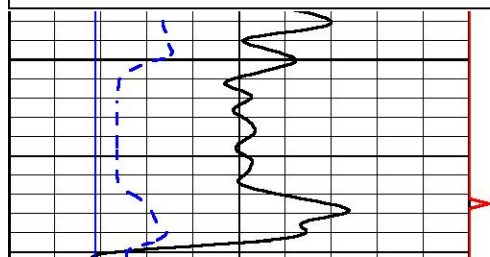
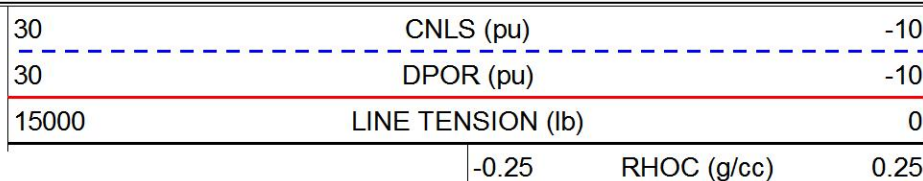
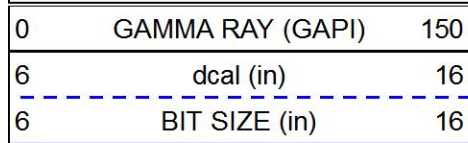
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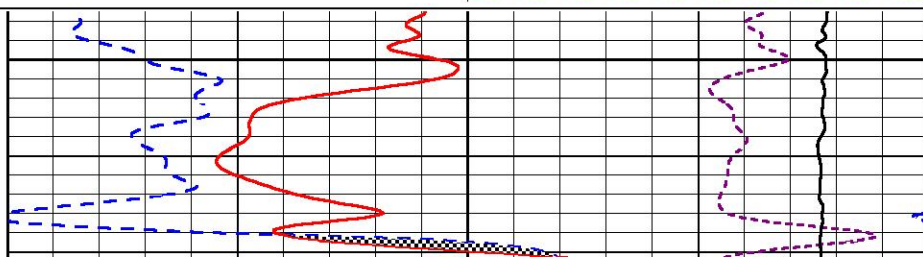


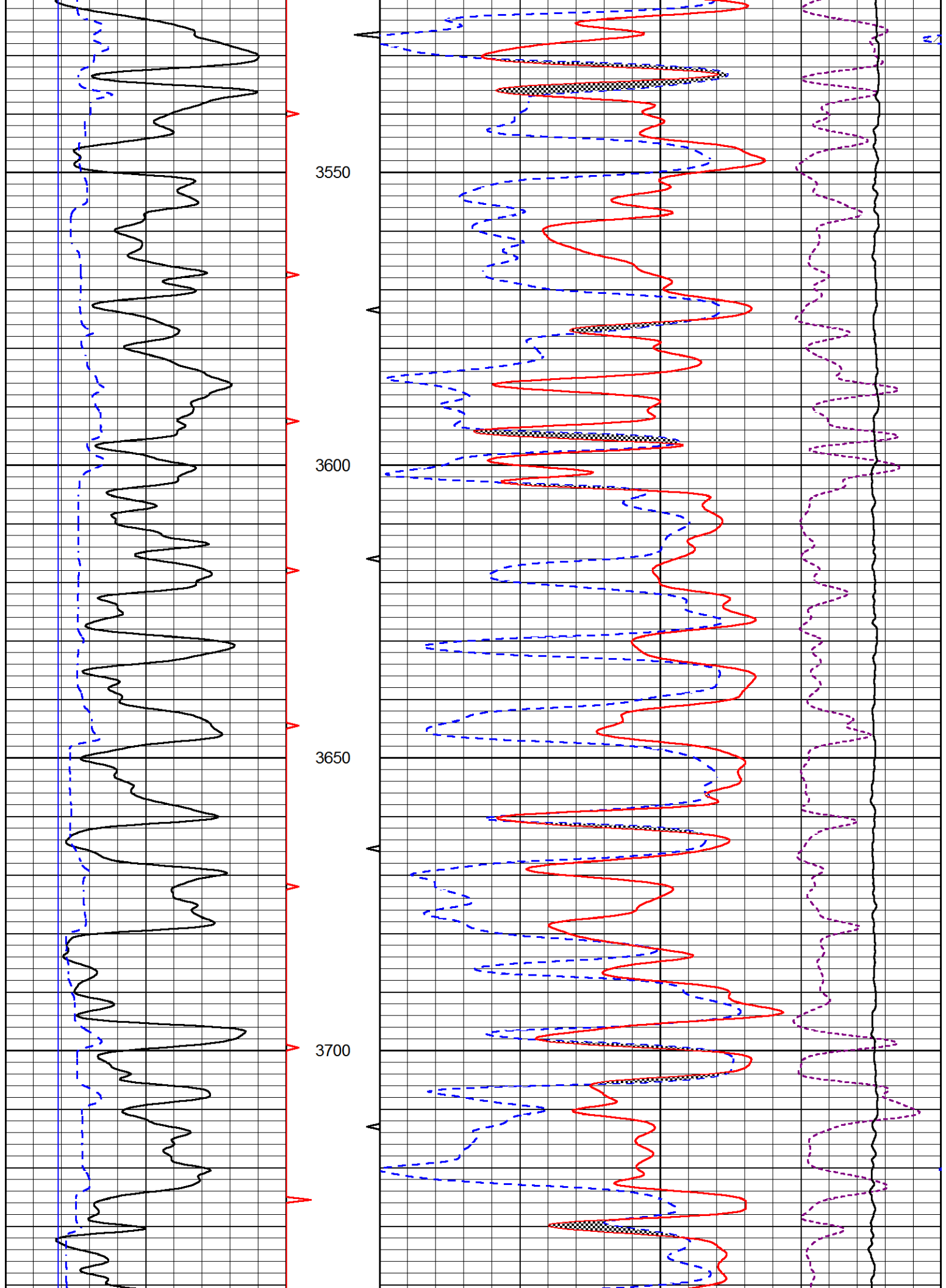
MAIN PASS

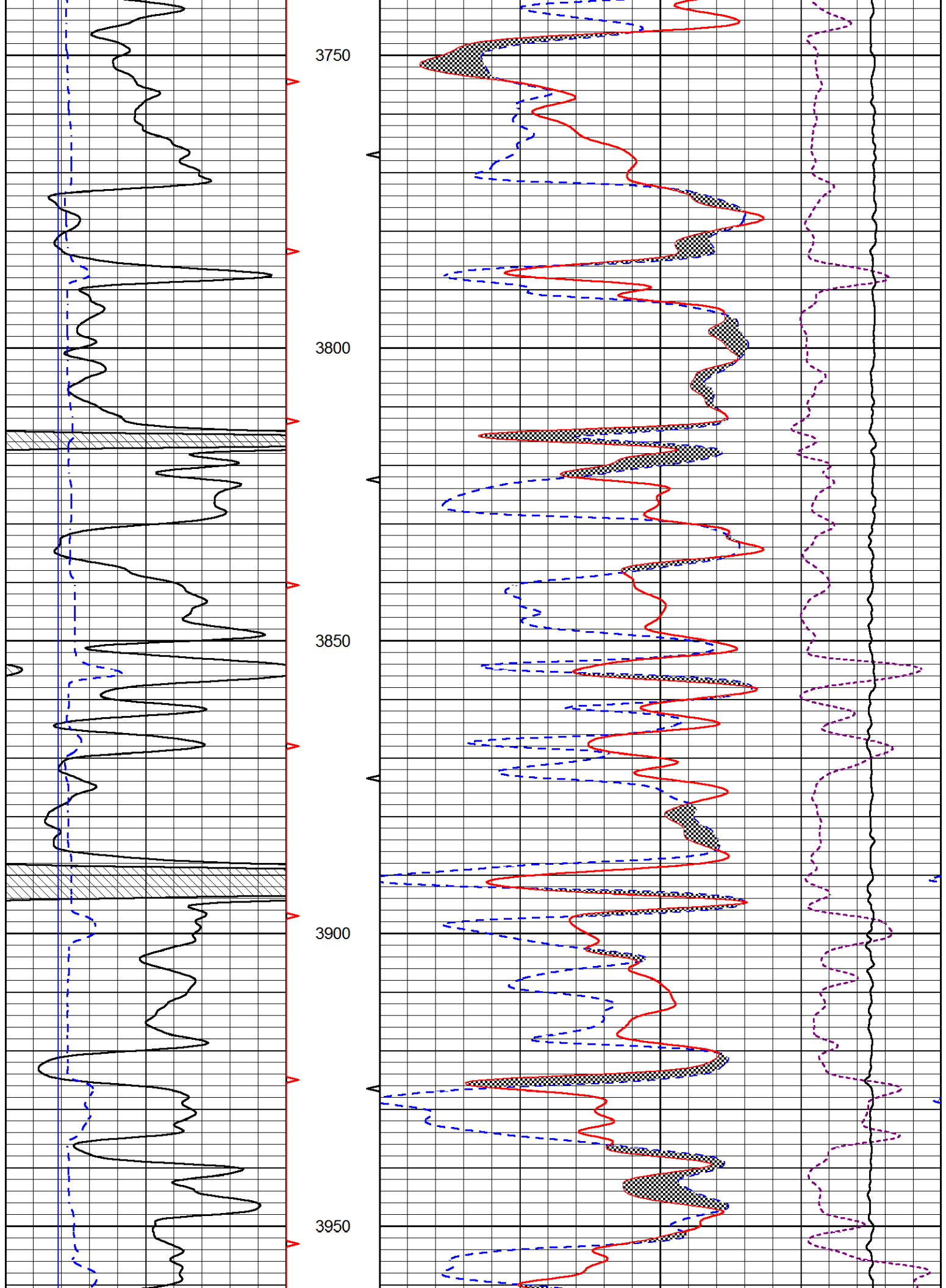
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 Presentation Format cndlspec
 Dataset Creation Thu Sep 05 17:49:38 2019
 Charted by Depth in Feet scaled 1:240

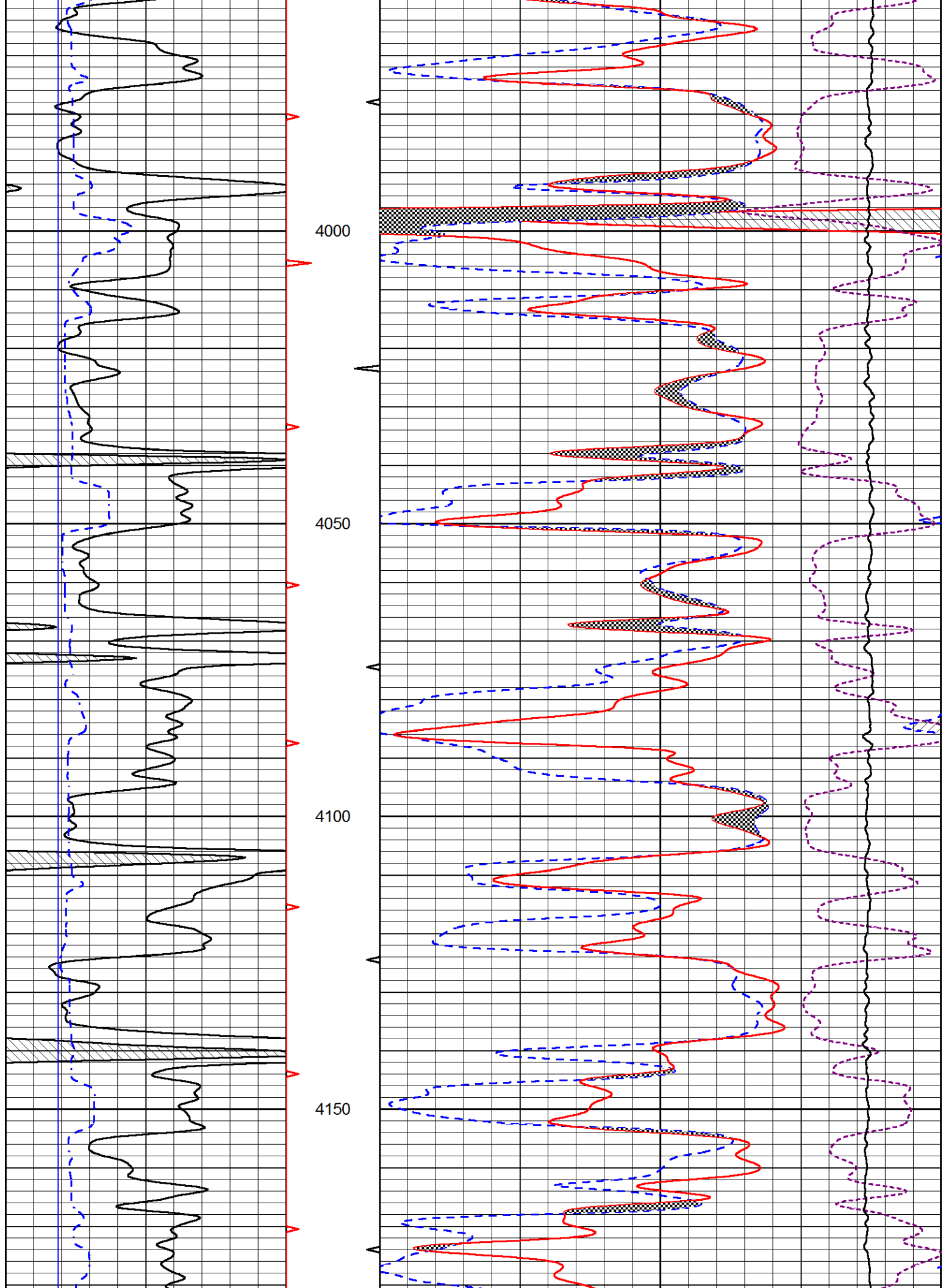


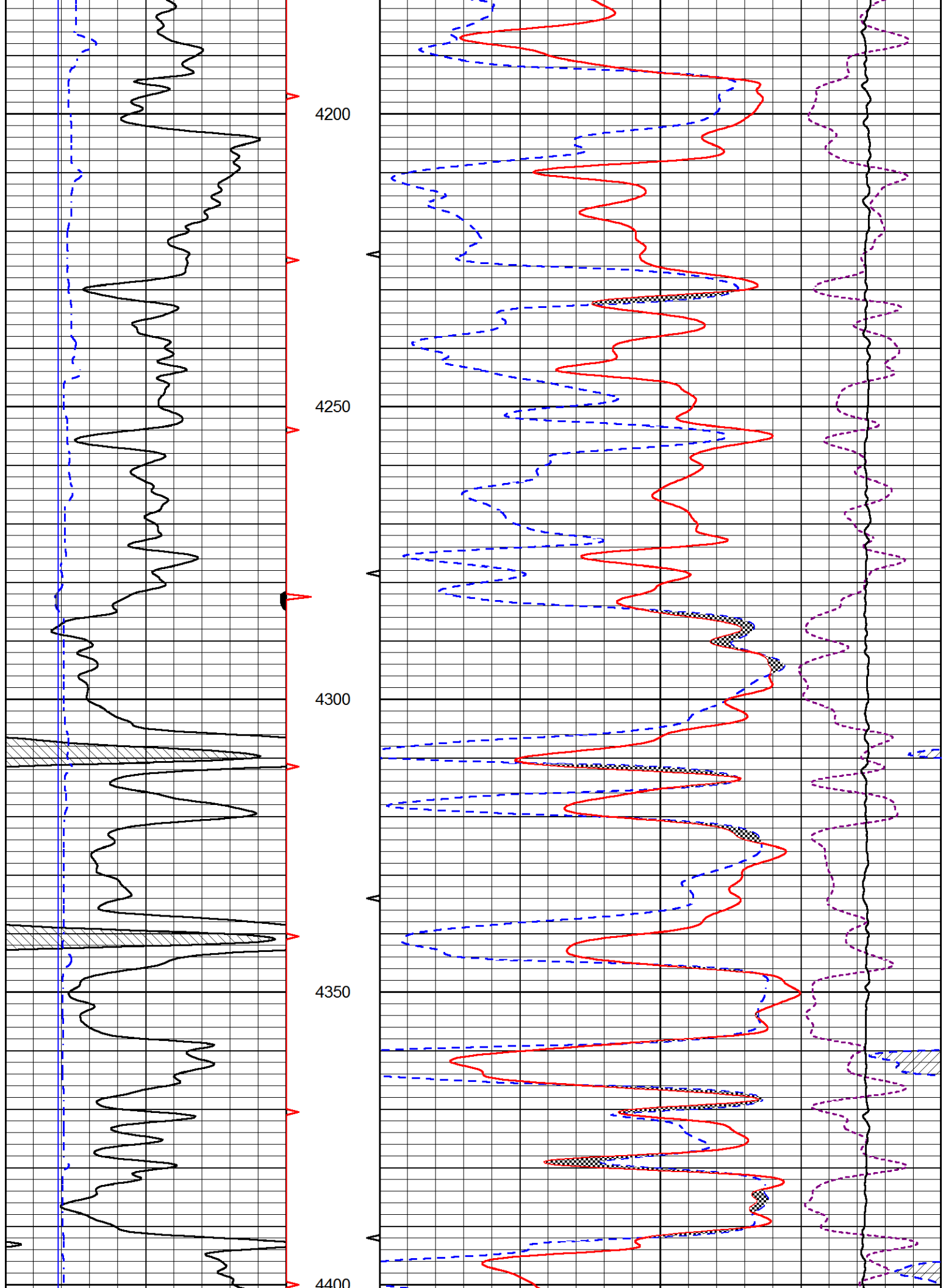
3500

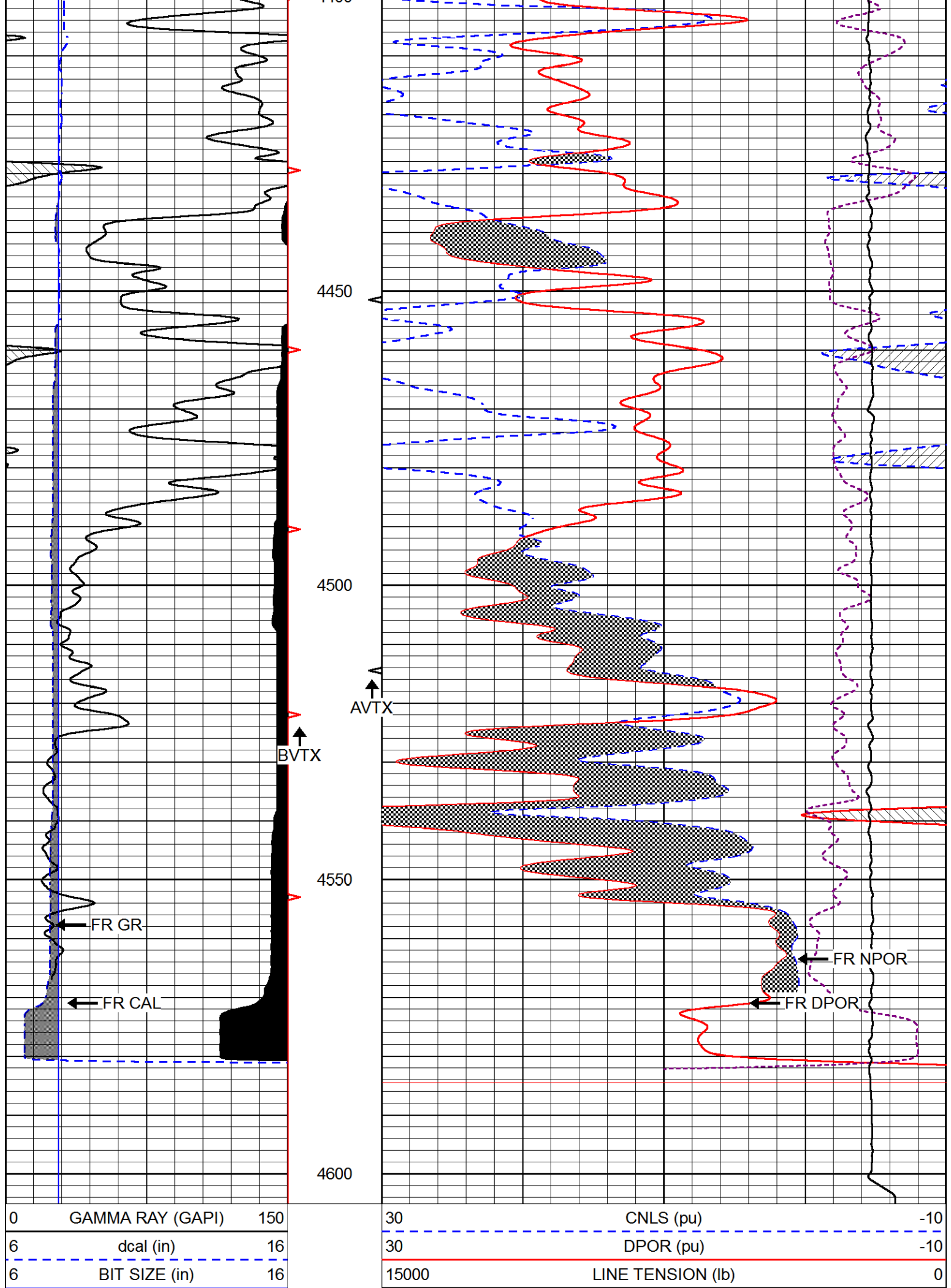














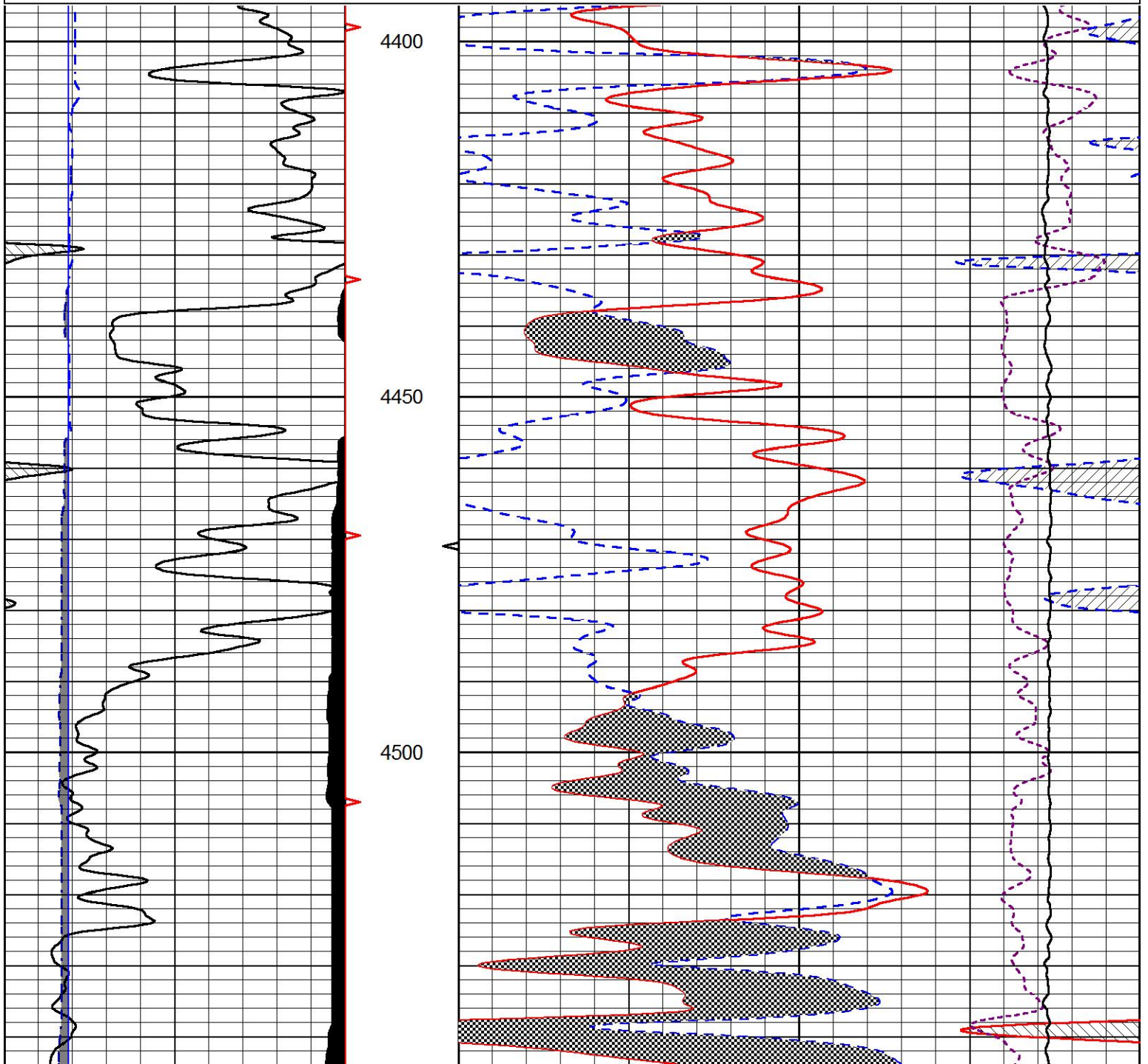
REPEAT SECTION

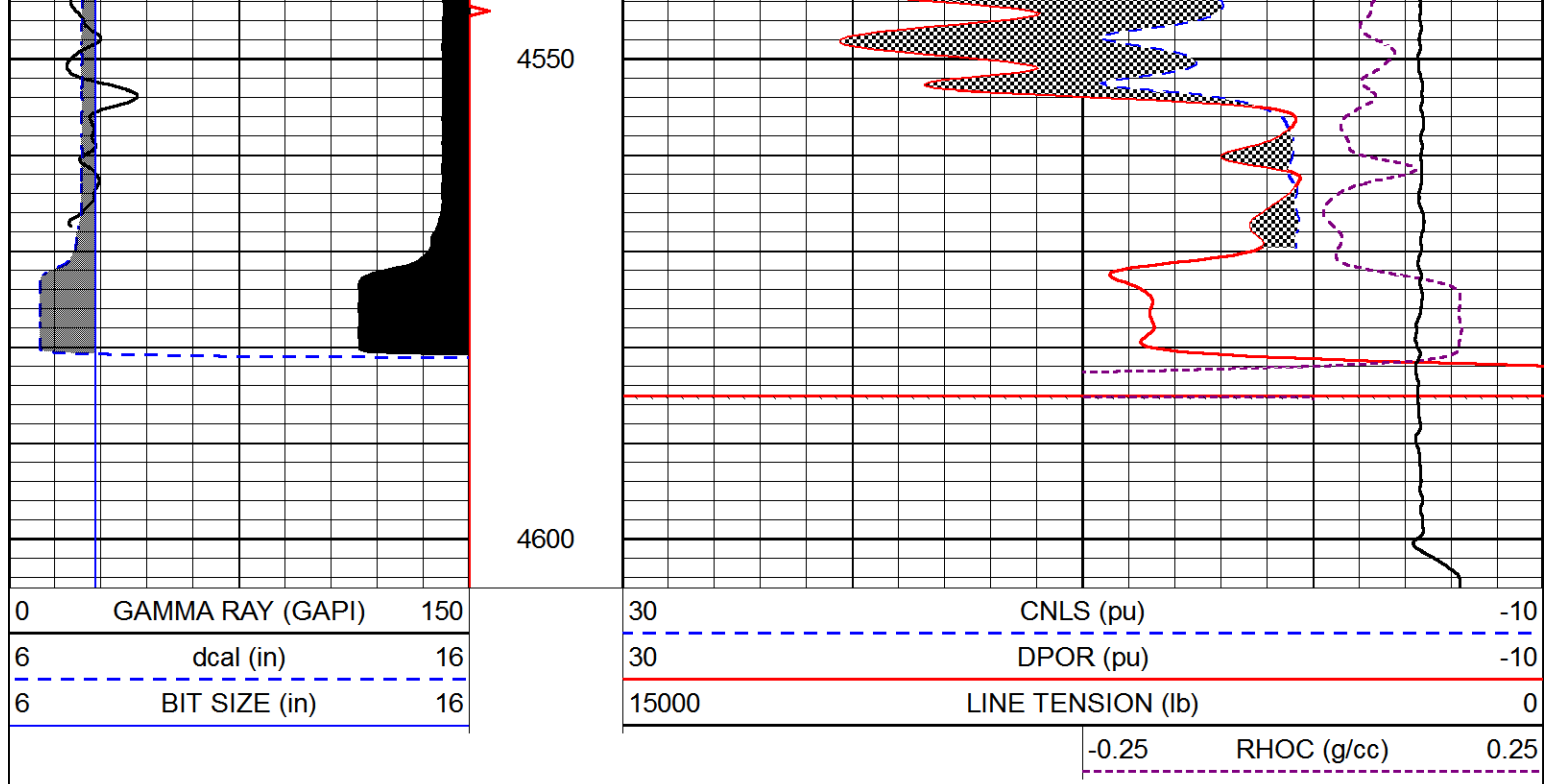
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Dataset Pathname stackml/pass2.1
Presentation Format cndlspec
Dataset Creation Thu Sep 05 17:49:52 2019
Charted by Depth in Feet scaled 1:240

0	GAMMA RAY (GAPI)	150
6	dcal (in)	16
6	BIT SIZE (in)	16

30	CNLS (pu)	-10
30	DPOR (pu)	-10
15000	LINE TENSION (lb)	0

-0.25 RHOC (g/cc) 0.25





Calibration Report

Database File val_schmaderer_1_23.db
 Dataset Pathname stackml/pass3.1
 Dataset Creation Thu Sep 05 17:49:38 2019

Dual Induction Calibration Report

Serial-Model: PSI 988-M&W
 Calibration Performed: Tue Nov 20 10:50:19 2018

Loop:	Readings		References			Results	
	Air	Loop	Air	Loop		Gain	Offset
Deep	178.615	710.235	0.000	255.800	mmho/m	0.525	-44.000
Medium	161.982	1441.110	0.000	255.800	mmho/m	0.380	-17.000

Microlog Calibration Report

Serial-Model: PSI-02-PSI STKBL ML
 Performed: Sat Apr 07 12:01:20 2018

	Readings		References			Results	
	Zero	Cal	Zero	Cal		m	b
Normal	0.0031	0.0043	0.0000	10.0000	Ohm-m	18000.0000	-1.4000
Inverse	0.0000	0.0013	0.0000	10.0000	Ohm-m	12000.0000	0.0000
Caliper	1.0020	1.0834	5.5000	16.5000	in	135.1560	-131.2000

Compensated Density Calibration Report

Serial-Model: 979-229-M&W
 Source / Verifier: 21170B /
 Master Calibration Performed: Tue Jul 23 10:17:03 2019

Master Calibration

	Density		Far Detector	Near Detector	
Magnesium	1.755	g/cc	7680.82	9959.08	cps
Aluminum	2.690	g/cc	1424.07	6427.19	cps
Spine Angle = 75.43			Density/Spine Ratio = 0.537		
	Size		Reading		
Small Ring	4.00	in	1.15		
Large Ring	16.00	in	1.03		

Compensated Neutron Calibration Report

Serial Number: tk10-MW
Tool Model: M&W
Calibration Performed: Wed Nov 16 11:21:36 2016

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

Gamma Ray Calibration Report

Serial Number: 89-M&W
Tool Model: M&W
Calibration Performed: Tue Apr 11 17:08:01 2017

Calibrator Value: 1000.0 GAPI

Background Reading: 0.0 cps
Calibrator Reading: 6.2 cps

Sensitivity: 0.5200 GAPI/cps



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