MIDWEST WIRELINE

DUAL COMPENSATED POROSITY

Company Satchell Creek Petroleum LLC
Well Worcester A #1-34
Field Last Hope Northeast
County Graham State Kansas

Location: NE SE SW SE
465 FSL & 1560 FEL
SEC 34 TWP 6S RGE 22W

API # : 15-065-24269-00-00

Other Services
DIL
MEL/BHCS

Elevation
K.B. 2252
D.F.
G.L. 2245

Date	7/27/2023
Run Number	One
Type Log	CNL/CDL
Depth Driller	3860
Depth Logger	3852
Bottom Logged Interval	3831
Top Logged Interval	3000
Type Fluid In Hole	Chemical
Salinity, PPM CL	2100
Density	9.5
Level	Full
Max. Rec. Temp. F	115
Operating Rig Time	3.5 Hours
Equipment -- Location	P-24 Hays
Recorded By	T. Martin
Witnessed By	Sean Deenihan

Permanent Datum Ground Level Elevation 2245
Log Measured From Kelly Bushing
Drilling Measured From Kelly Bushing

Borehole Record

Run No.	Bit	From	To
One	12.25	00	220
Two	7.875	220	TD

Casing Record

Size	Wgt.	From	To
8.625	23	00	220

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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.

Hill City, KS, 3 E to Rd 310,
7 N to Rd Y, 3/4 E, N into

Log Measured From: Kelly Bushing 7 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	Primary Witness: Sean Deenihan
Operator:	Secondary Witness:
Operator:	Secondary Witness:
Operator:	Secondary Witness:

Sensor	Offset (ft)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb

Sensor	Offset (ft)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb
GR	32.75		GR-M&W (105)	3.00	3.50	50.00
CNLSC	29.65					
CNSSC	28.90		CNT-M&W (207)	5.00	3.50	100.00
			CDL-M&W (307-11)	8.50	4.00	250.00
LSD	20.60					
DCAL	20.58					
SSD	20.10					
RLL3F	15.50					
RLL3	15.50					
			DIL-M&W (507)	18.25	3.50	220.00
CILD	8.33					
CILM	4.50					
SP	0.20					

Dataset: satchell_worcester a #1-34.db: field/well/Stack/pass3.1
Total length: 34.75 ft
Total weight: 620.00 lb
O.D.: 4.00 in

Log Variables

DatabaseC:\ProgramData\Warrior\Data\satchell_worcester a #1-34.db
Dataset field/well/Stack/pass3.1/_vars_

Top - Bottom

BOREID in	BOTTEMP degF	CASEOD in	CASETHCK in	FLUIDDEN g/cc	MATRXDEN g/cc	NPORSEL	PERFS
7.875	115	5.5	0	1	2.71	Limestone	No

SNDERR mmho/m	SNDERRM mmho/m	SPSHIFT mV	SRFTEMP degF	SZCOR	TDEPTH ft
-1.5	2	480	98	Off	3852

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

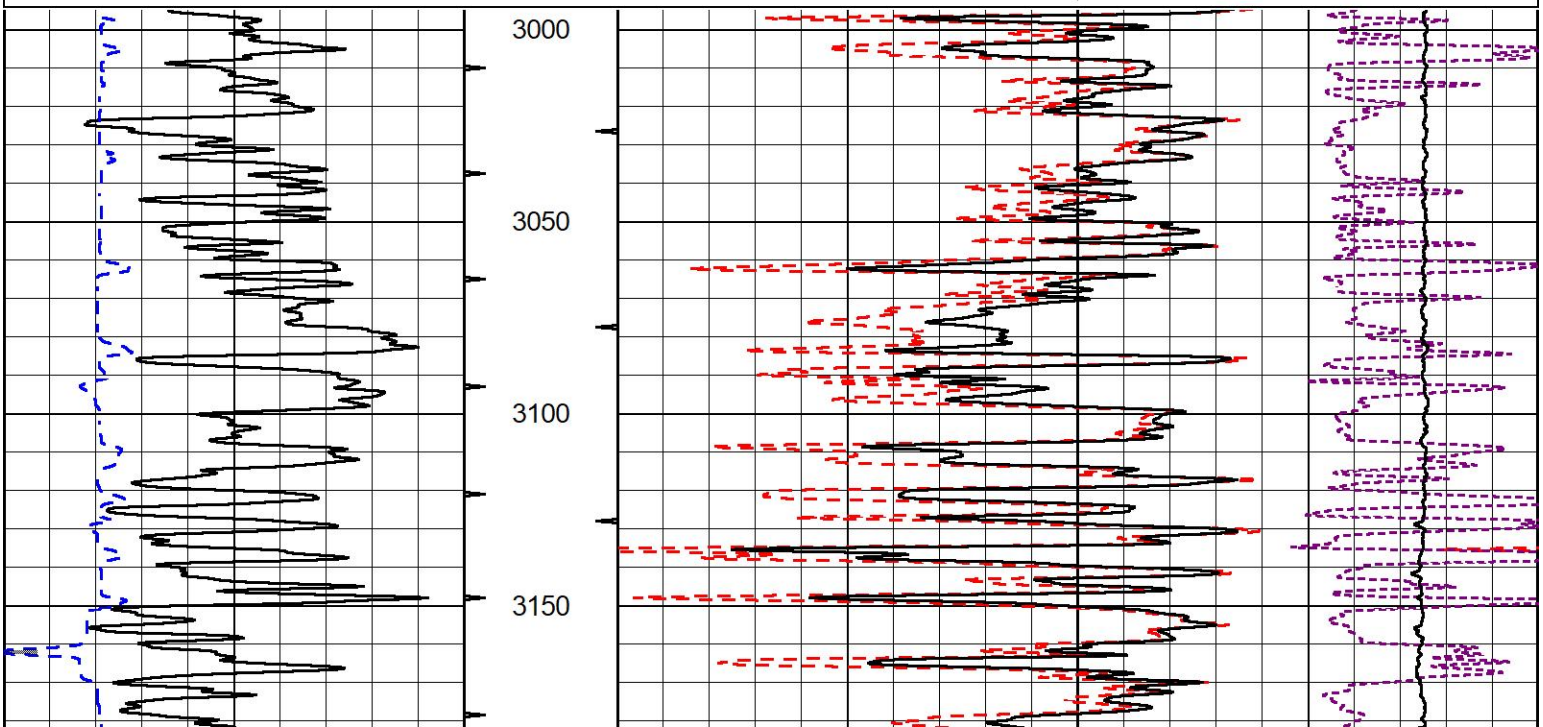
MIDWEST WIRELINE

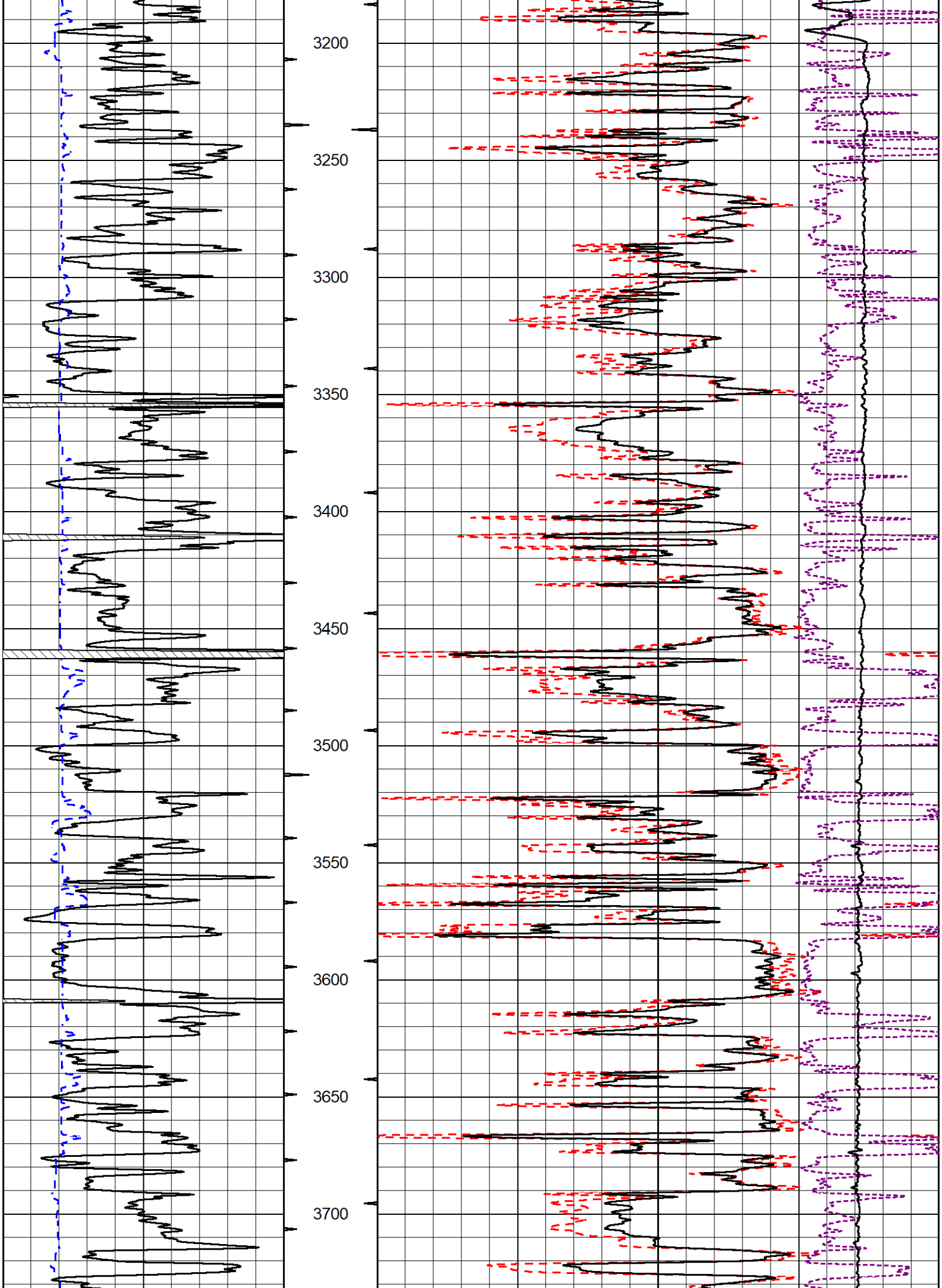
2" SCALE BULK DENSITY

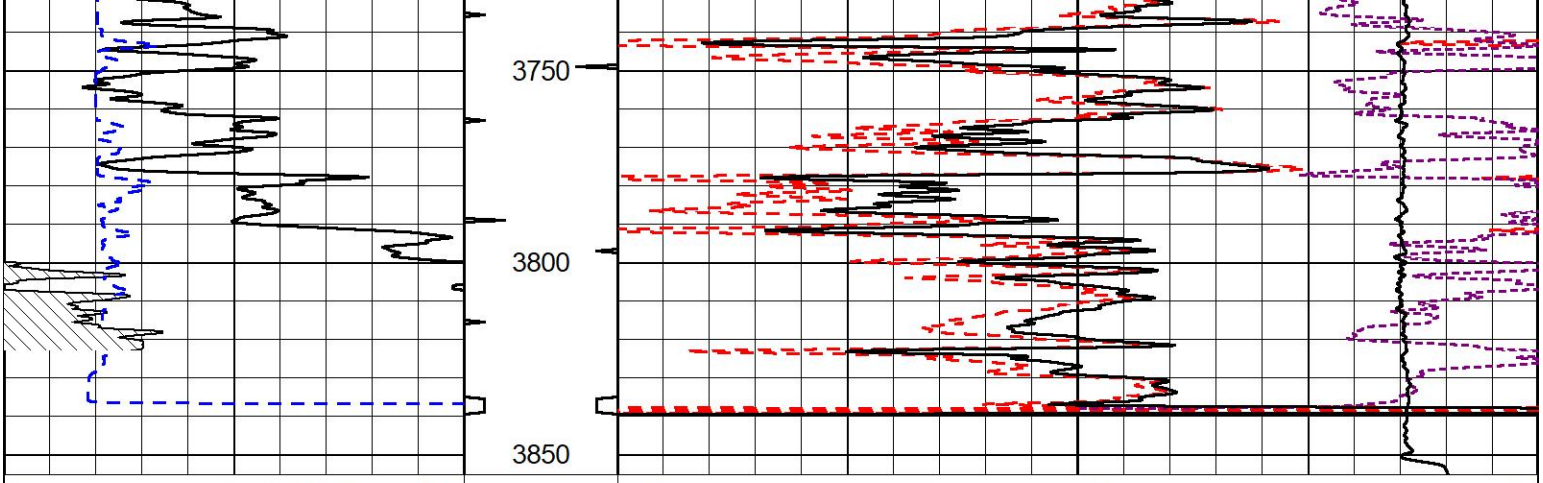
MAIN PASS

Database File	satchell_worcester a #1-34.db
Dataset Pathname	Stack/pass3.3
Presentation Format	_cdl
Dataset Creation	Thu Jul 27 14:28:14 2023
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




3200
3250
3300
3350
3400
3450
3500
3550
3600
3650
3700

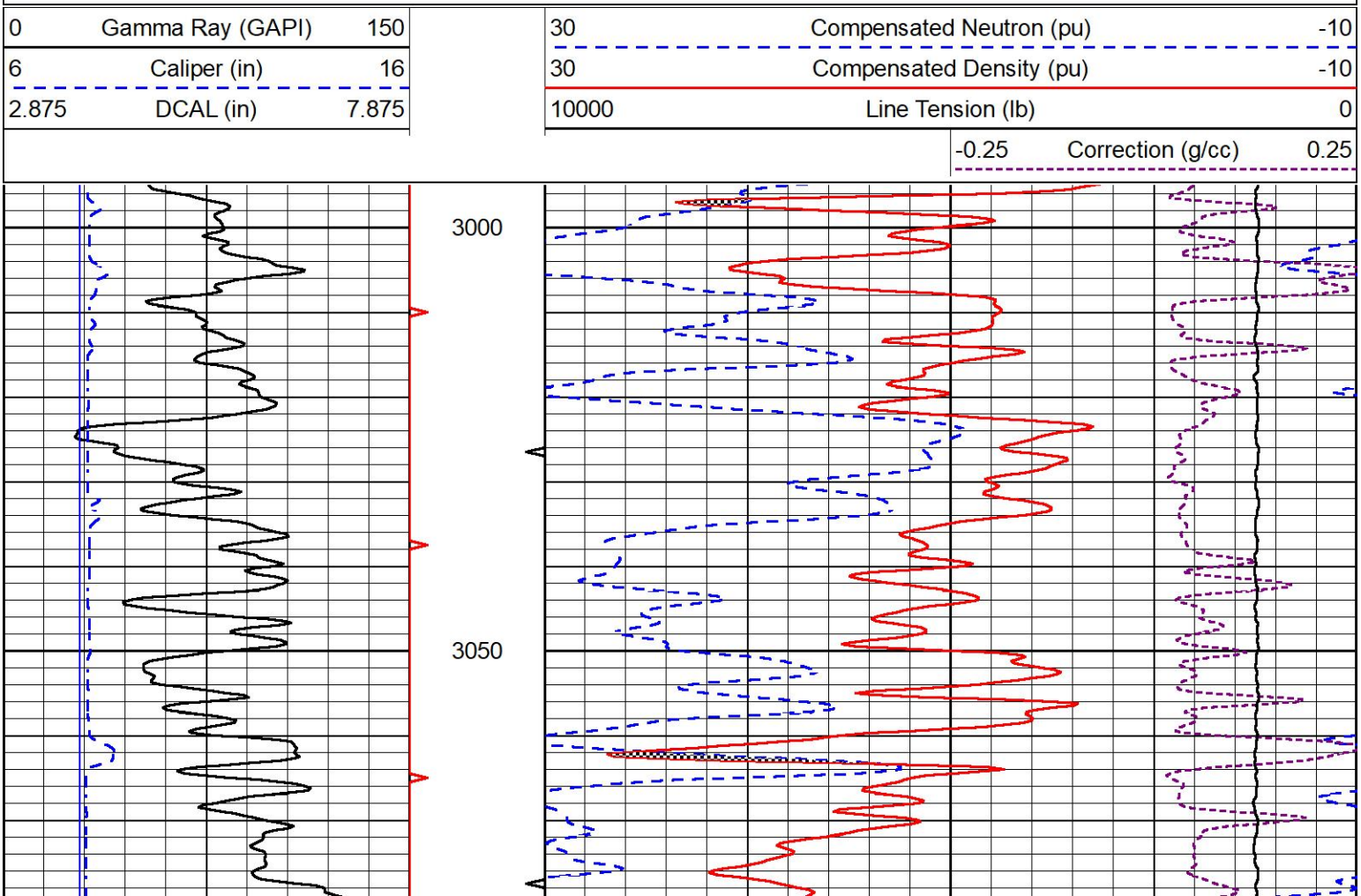


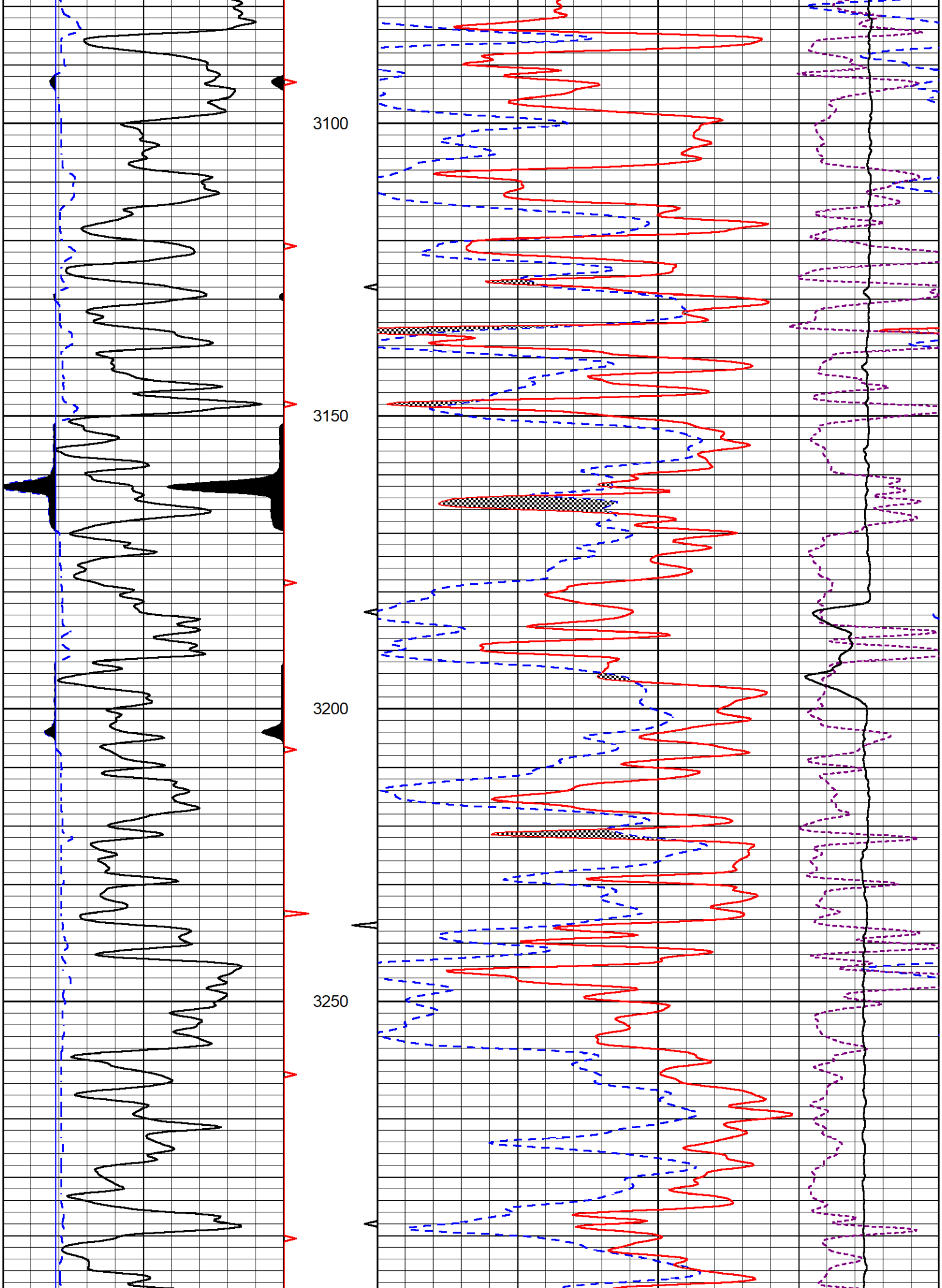
MIDWEST WIRELINE

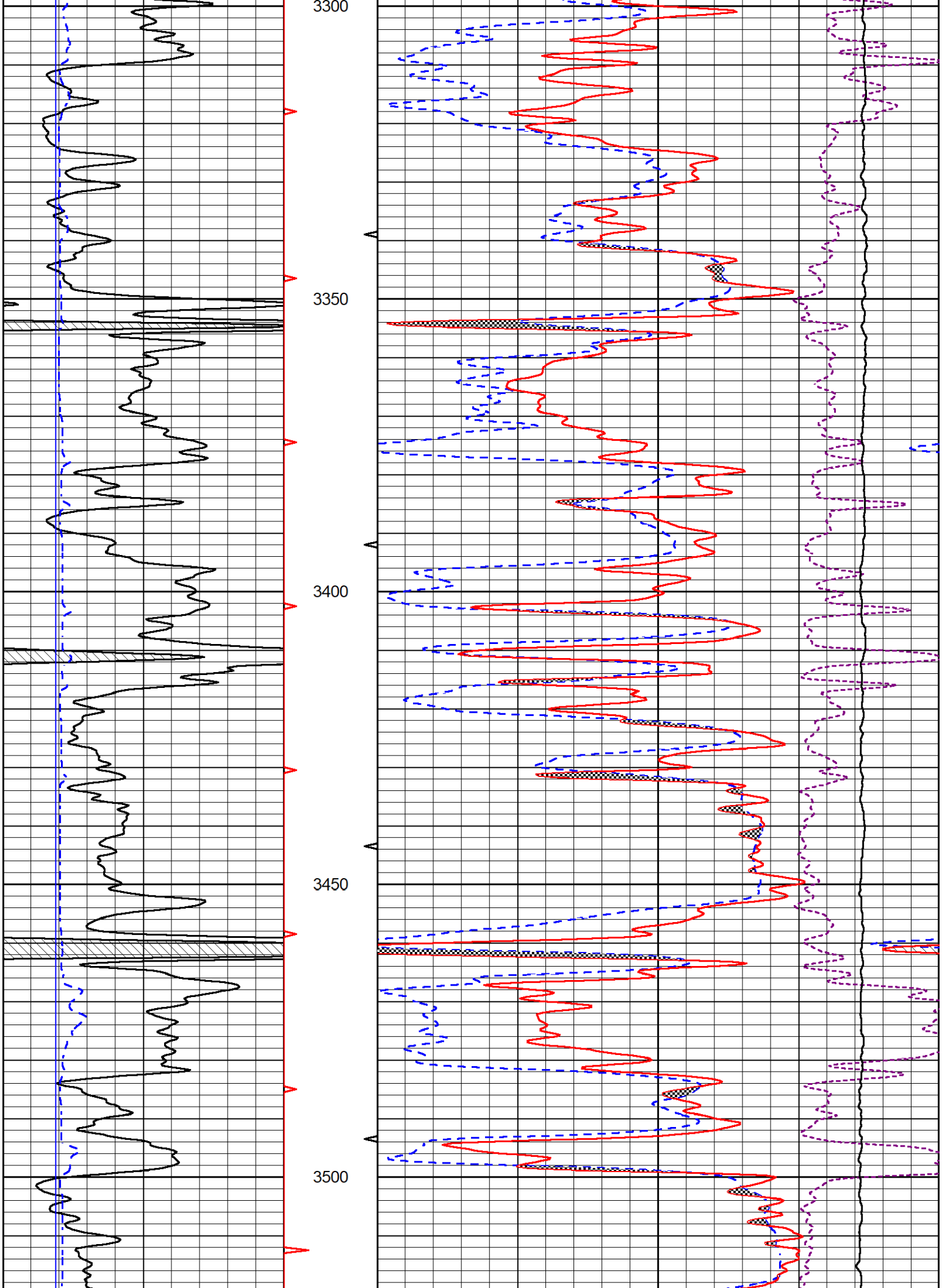
DETAIL SECTION

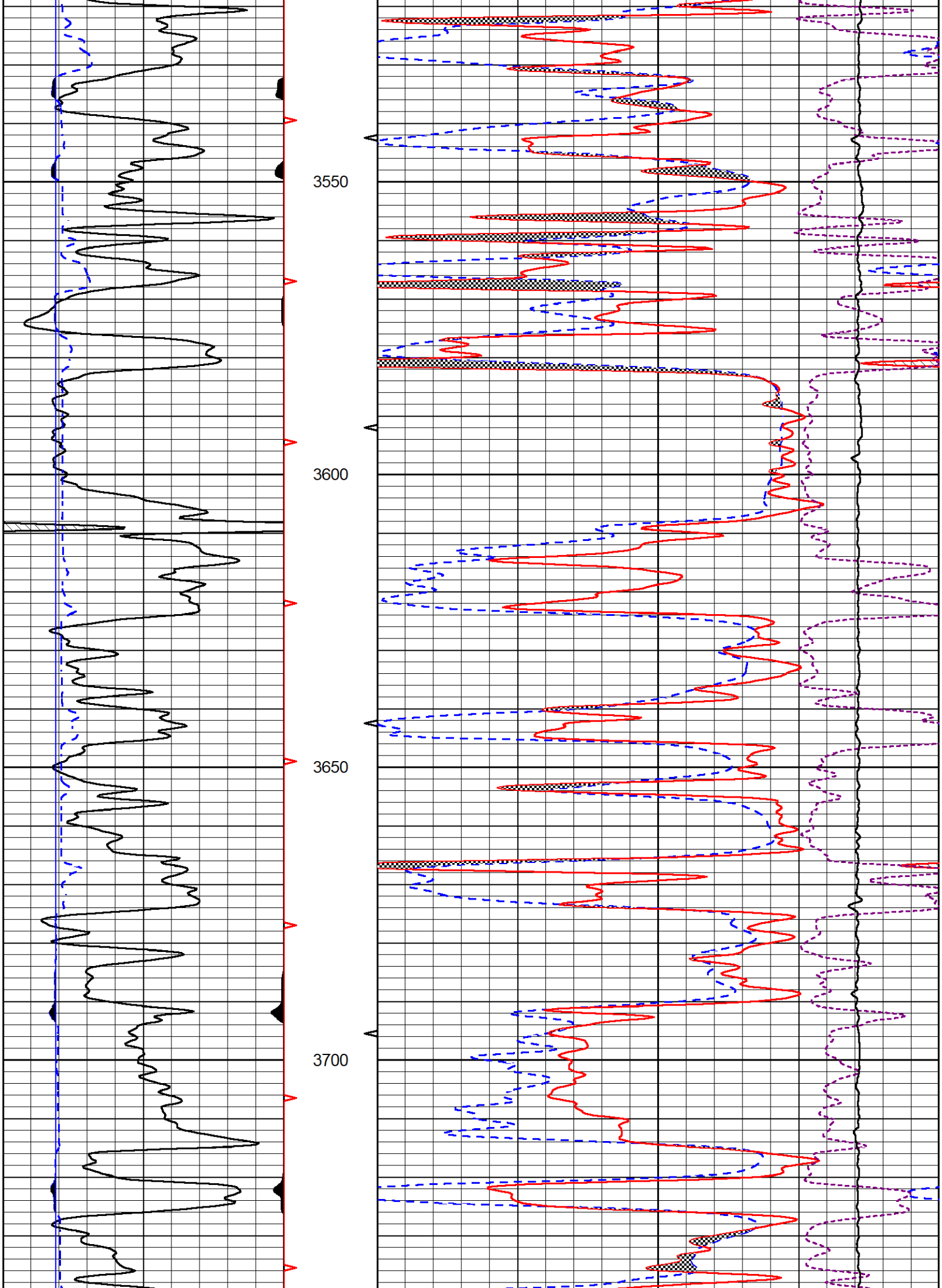
MAIN PASS

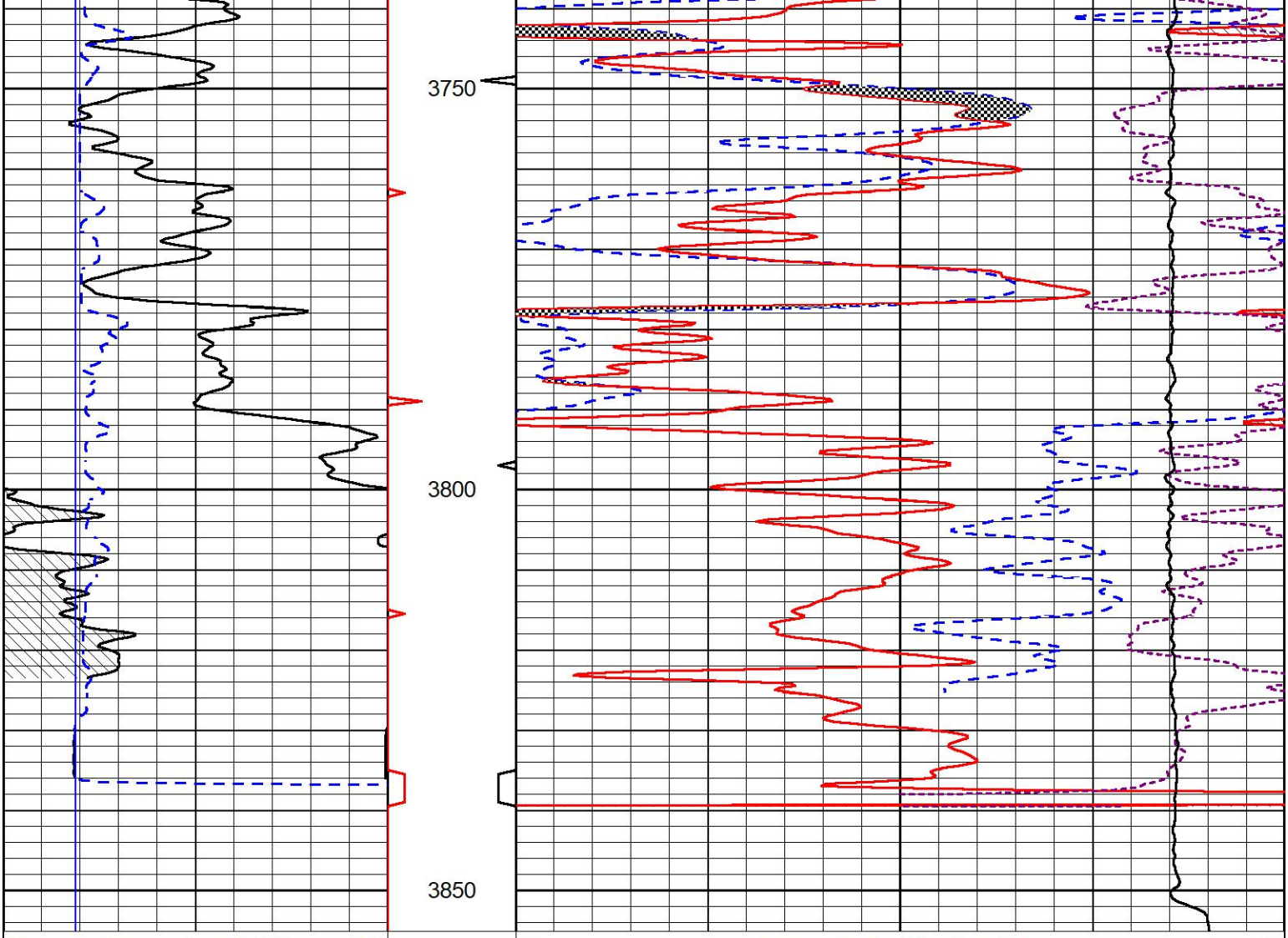
Database File	satchell_worcester a #1-34.db
Dataset Pathname	Stack/pass3.1
Presentation Format	_CNDLS~1
Dataset Creation	Thu Jul 27 15:03:48 2023
Charted by	Depth in Feet scaled 1:240




3100
3150
3200
3250


3300
3350
3400
3450
3500


3550
3600
3650
3700

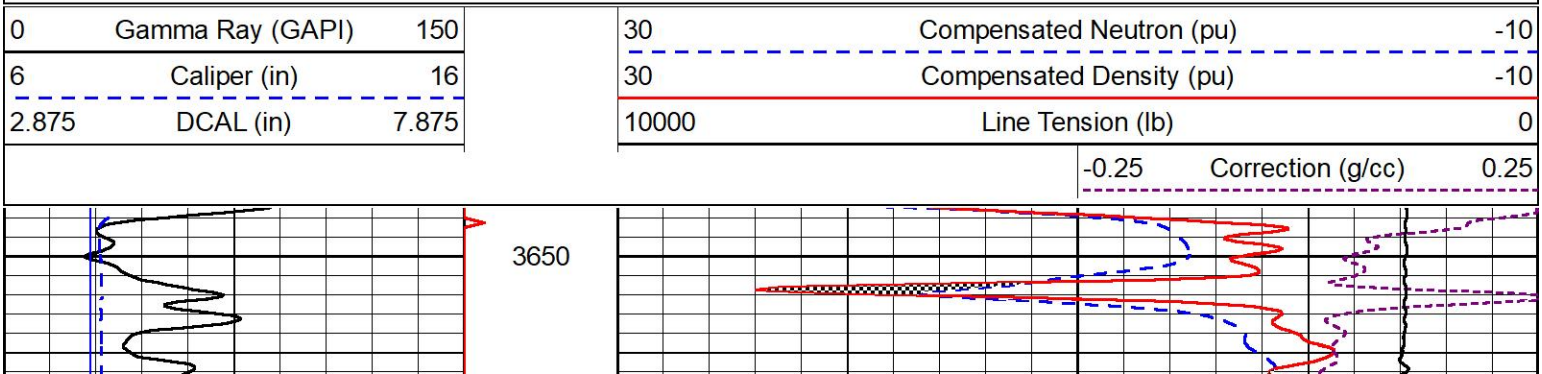


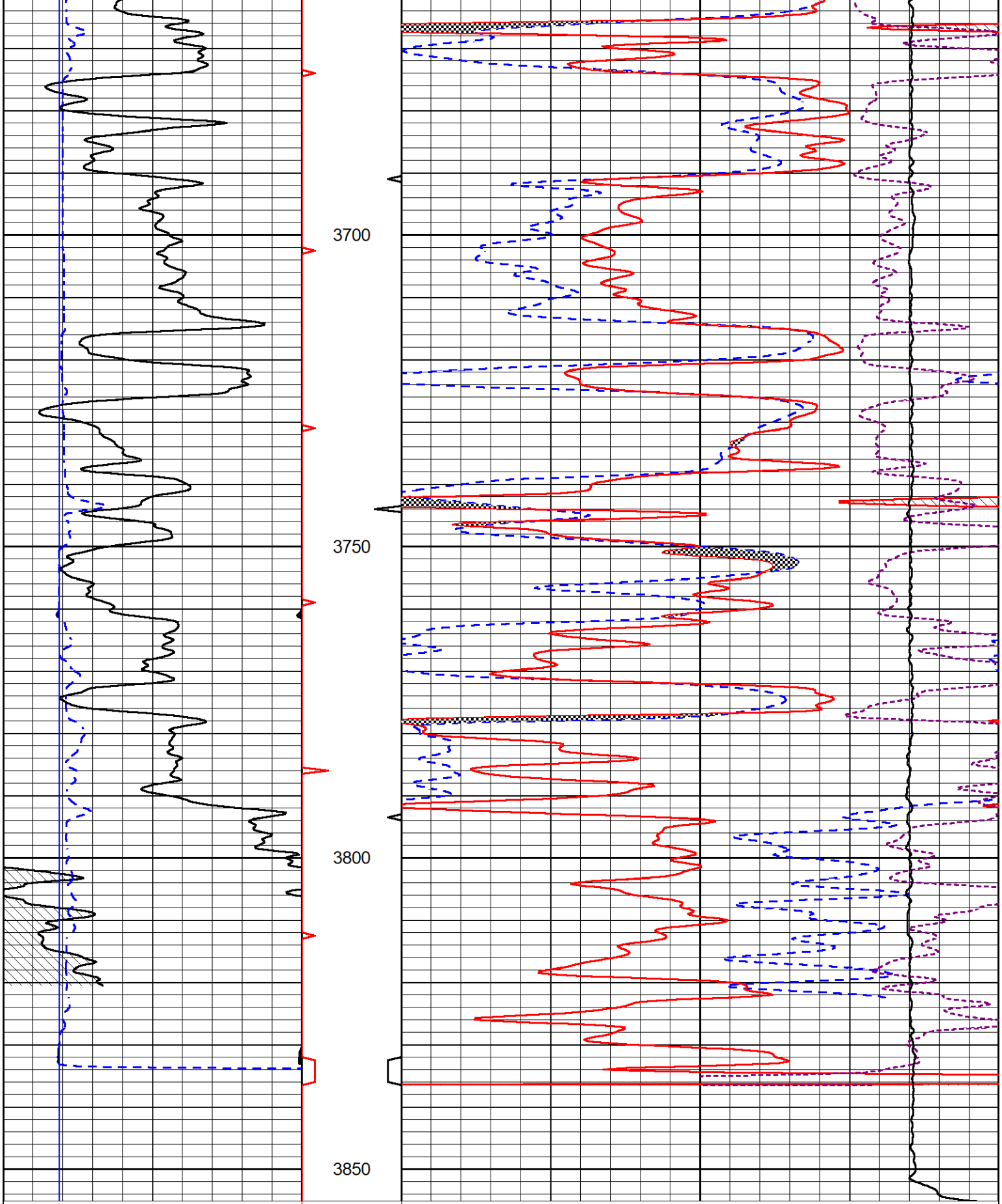
MIDWEST WIRELINE

REPEAT SECTION

REPEAT PASS

Database File	satchell_worcester a #1-34.db
Dataset Pathname	Stack/pass2.1
Presentation Format	_CNDLS~1
Dataset Creation	Thu Jul 27 14:23:48 2023
Charted by	Depth in Feet scaled 1:240




3700
3750
3800
3850
0 Gamma Ray (GAPI) 150
6 Caliper (in) 16
2.875 DCAL (in) 7.875
30 Compensated Neutron (pu) -10
30 Compensated Density (pu) -10
10000 Line Tension (lb) 0
-0.25 Correction (g/cc) 0.25

Calibration Report

Database File	satchell_worcester a #1-34.db
Dataset Pathname	Stack/pass3.1
Dataset Creation	Thu Jul 27 15:03:48 2023

Dual Induction Calibration Report

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

	Readings		References			Results	
Loop:	Air	Loop	Air	Loop		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	0.470	-84.000

Compensated Density Calibration Report

Serial-Model:	307-11-M&W
Source / Verifier:	20762B / 2ci
Master Calibration Performed:	Tue Jun 6 21:48:20 2023
Before Survey Verification Performed:	
After Survey Verification Performed:	

Master Calibration

	Density		Far Detector	Near Detector	
Magnesium	1.755	g/cc	3689.70	4749.82	cps
Aluminum	2.600	g/cc	822.19	3221.38	cps

Spine Angle = 75.50

Density/Spine Ratio = 0.545

	Size		Reading
Small Ring	6.00	in	1.16
Large Ring	18.00	in	1.01

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

Gamma Ray Calibration Report

Serial Number:	105	
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:	0.6000	GAPI/cps

MIDWEST WIRELINE

Company	Satchell Creek Petroleum LLC
Well	Worcester A #1-34
Field	Last Hope Northeast
County	Graham
State	Kansas