



DUAL COMP POROSITY LOG

Company MIKE KELSO OIL, INC.
Well HONAS A NO.2
Field WILDCAT
County TREGO **State** KANSAS

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Location: API #: 15-195-23028-00-00
 1330' FNL & 700' FEL
 SEC 21 TWP 14S RGE 22W
Permanent Datum GROUND LEVEL Elevation 2221'
Log Measured From KELLY BUSHING
Drilling Measured From KELLY BUSHING
Other Services DIL MEL

Date	8/27/2017						
Run Number	ONE						
Type Log	CNL/CDL						
Depth Driller	4225'						
Depth Logger	4220'						
Bottom Logged Interval	4191'						
Top Logged Interval	3300'						
Type Fluid In Hole	CHEMICAL						
Salinity, PPM CL	10,500						
Density	9.7						
Level	FULL						
Max. Rec. Temp. F	118 DEG/F						
Operating Rig Time	2 1/2 HOURS						
Equipment -- Location	108 HAYS						
Recorded By	J. HENRICKSON						
Witnessed By	PAT DEENIHAN						
Borehole Record							
Run No.	Bit	From	To	Size	Wgt.	From	To
ONE	12.25"	0	250'	8.625"	23#	0	250'
TWO	7.875"	250'	TD				
Casing Record							

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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.

OGALLAH EXIT I 70
 SOUTH TO CURVE, 3 SOUTH, 1 WEST, SOUTH INTO
 (ROAD TO COVE 1 AT CEDAR BLUFF)

Log Measured From: KELLY BUSHING 7 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

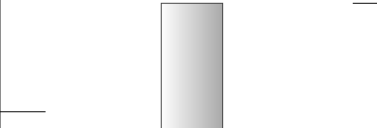
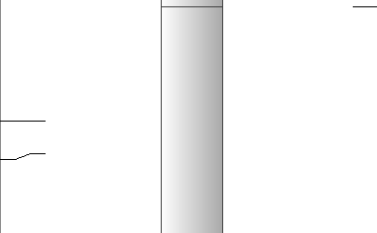
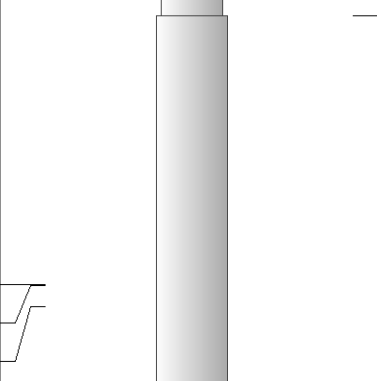
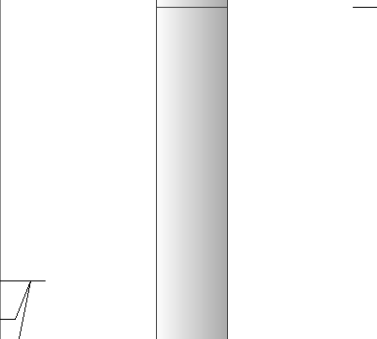
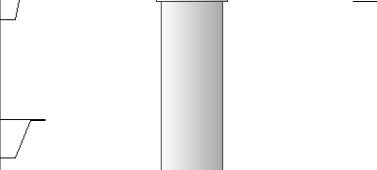
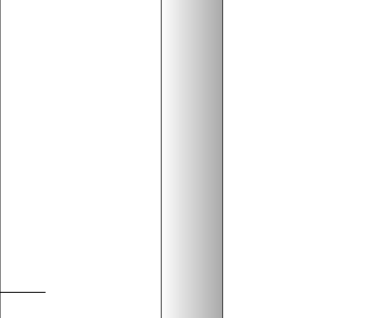
Primary Witness: PAT DEENIHAN
 Secondary Witness: MIKE KELSO
 Secondary Witness:
 Secondary Witness:

Log Variables

DatabaseC:\ProgramData\Warrior\Data\kelso_honas_a_2.db
Dataset field/well/stackml/pass3.1/_vars_

Top - Bottom

A	BOREID in	BOTTEMP degF	CASEOD in	CASETHCK in	FLUIDDEN g/cc	M	MATRXDEN g/cc
1	7.875	118	5.5	0	1	2	2.71
NPORSEL	PERFS	SNDERR mmho/m	SNDERRM mmho/m	SPSHIFT mV	SRFTEMP degF	SZCOR	TDEPTH ft
Limestone	0	0	0	-90	61	Off	4220

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 CNSSC	37.48 36.73		CNT-M&W (tk10-MW)	5.50	3.50	100.00
LSD DCAL SSD	28.43 28.42 27.93		CDL-M&W (168-986)	8.50	4.00	250.00
MCAL MI MN	19.83 19.83 19.83		ML-PSI STKBL ML (PSI-02) Stackable Microlog Tools	7.58	4.00	65.00
RLL3 RLL3F	15.80 15.79					
CILD	8.00		DIL-M&W (1987)	18.50	3.50	220.00

CILM 4.70

SP 0.20

Dataset: kelso_honas_a_2.db: field/well/stackml/pass3.1
 Total length: 43.08 ft
 Total weight: 685.00 lb
 O.D.: 4.00 in

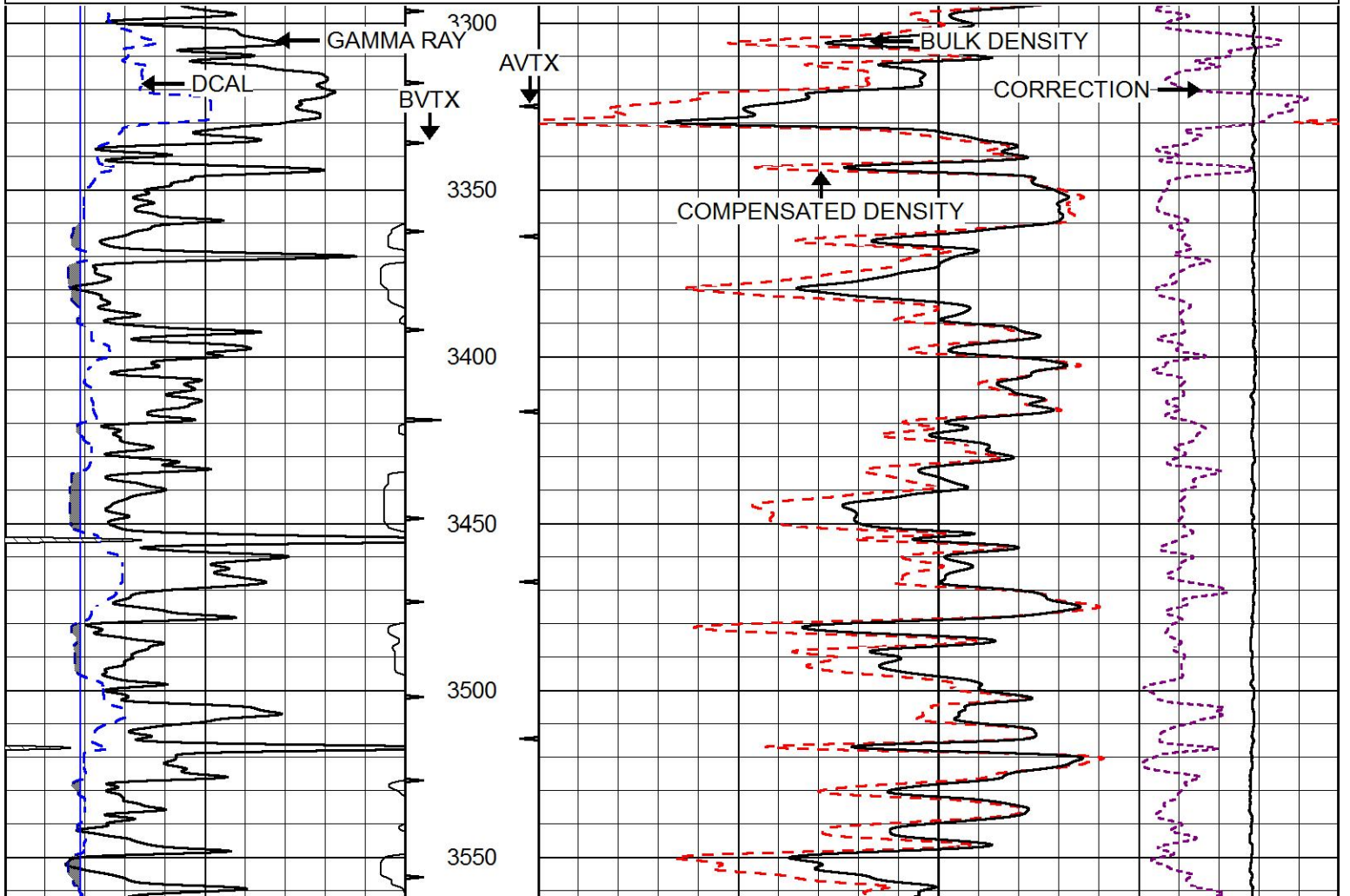


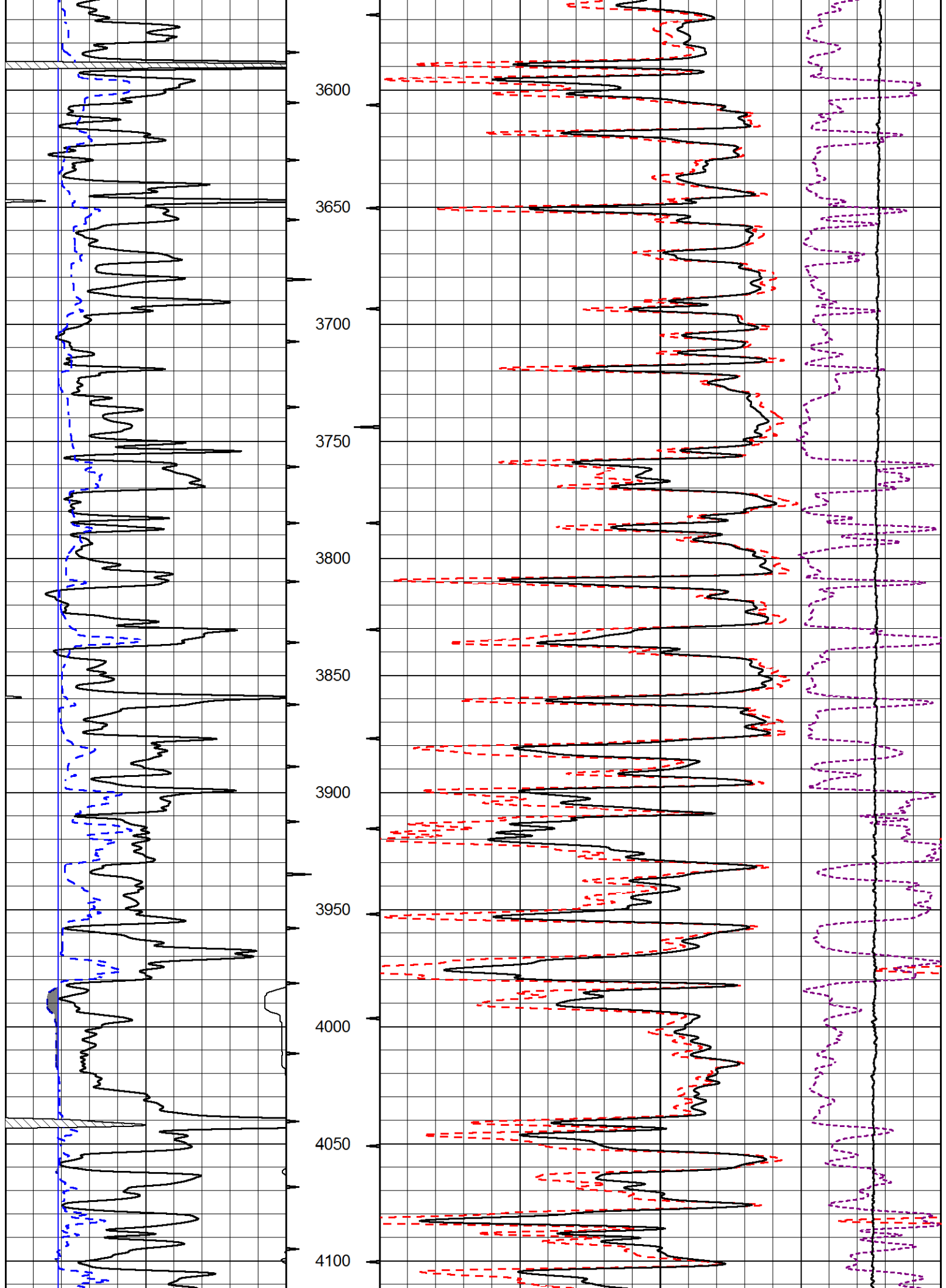
MAIN PASS

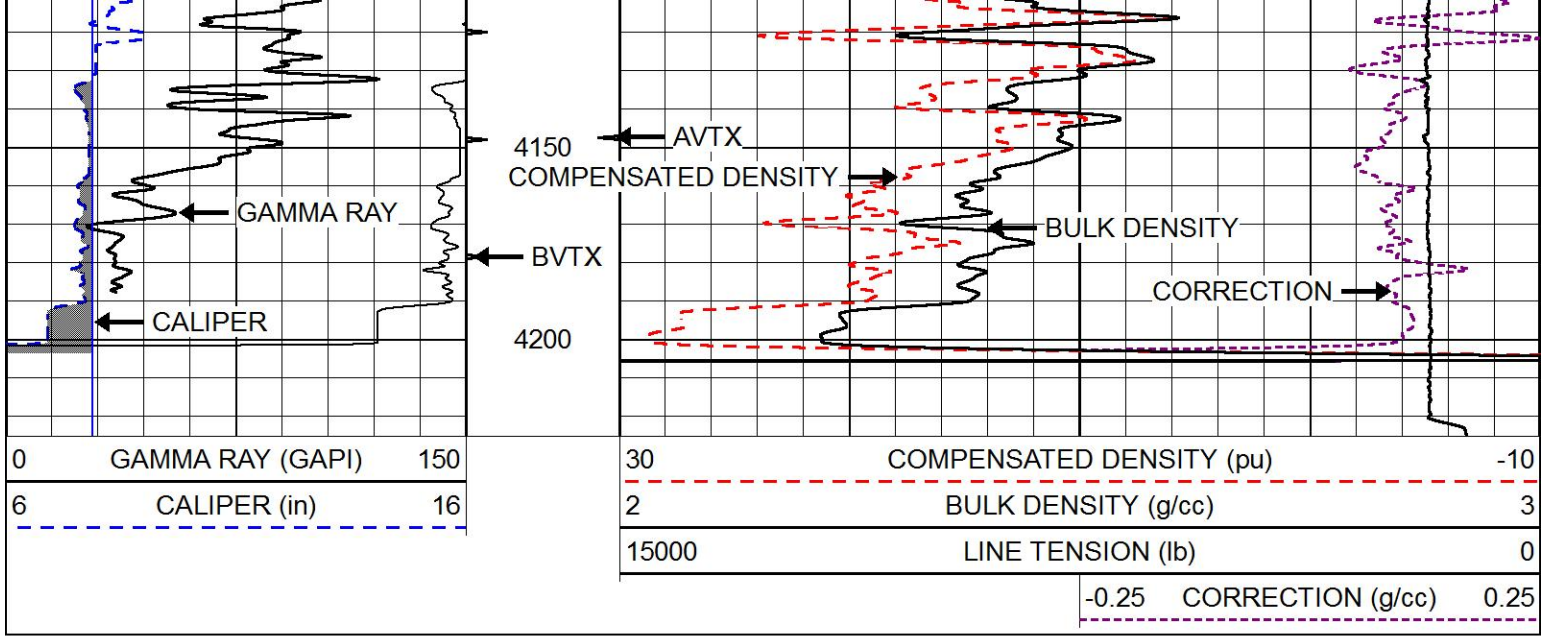
Database File: kelso_honas_a_2.db
 Dataset Pathname: stackml/pass3.1
 Presentation Format: cdl
 Dataset Creation: Sun Aug 27 05:56:23 2017
 Charted by: Depth in Feet scaled 1:600

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
-0.25	CORRECTION (g/cc)	0.25

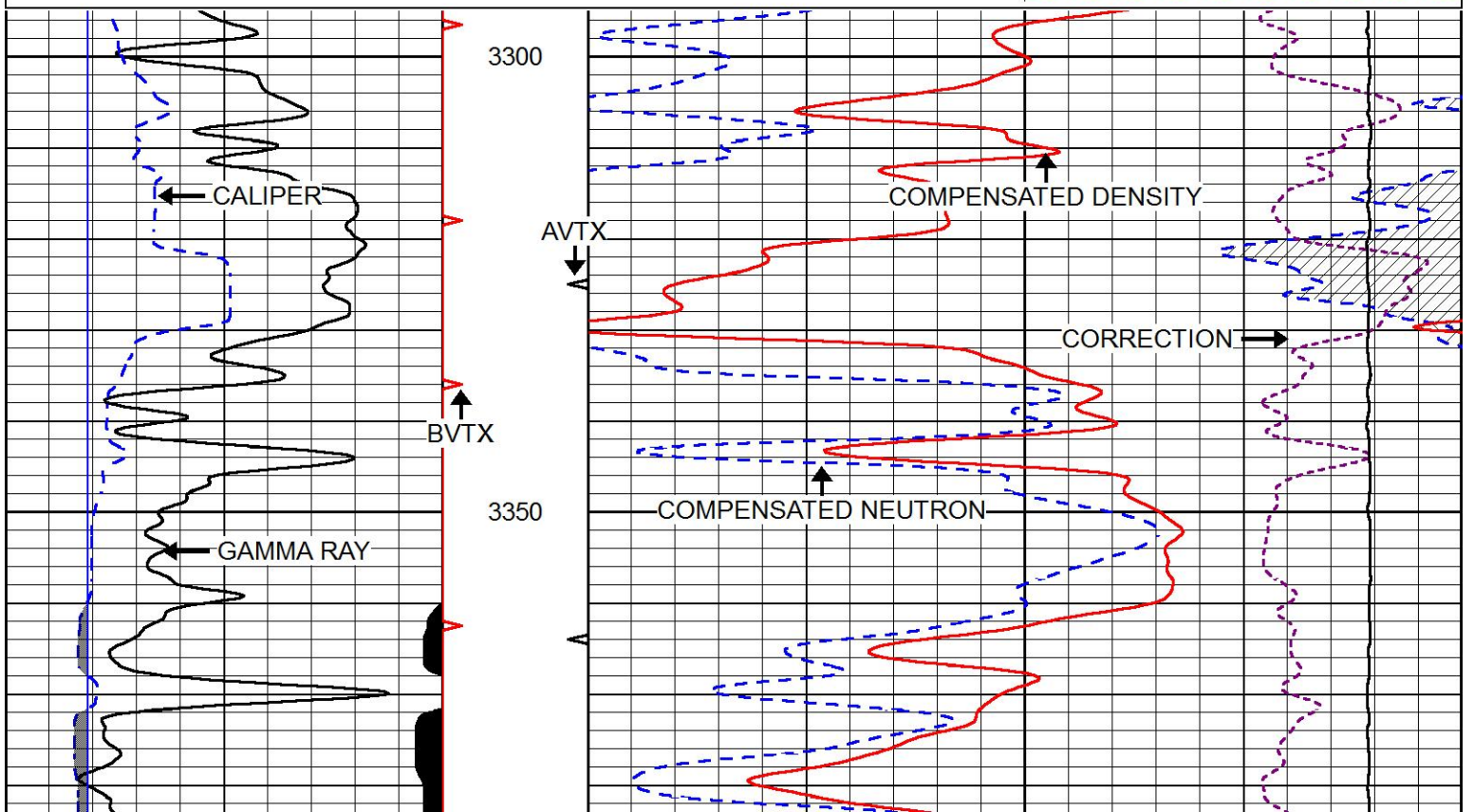
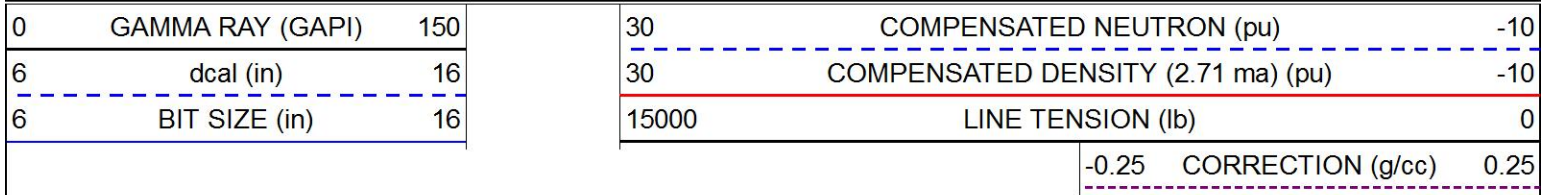


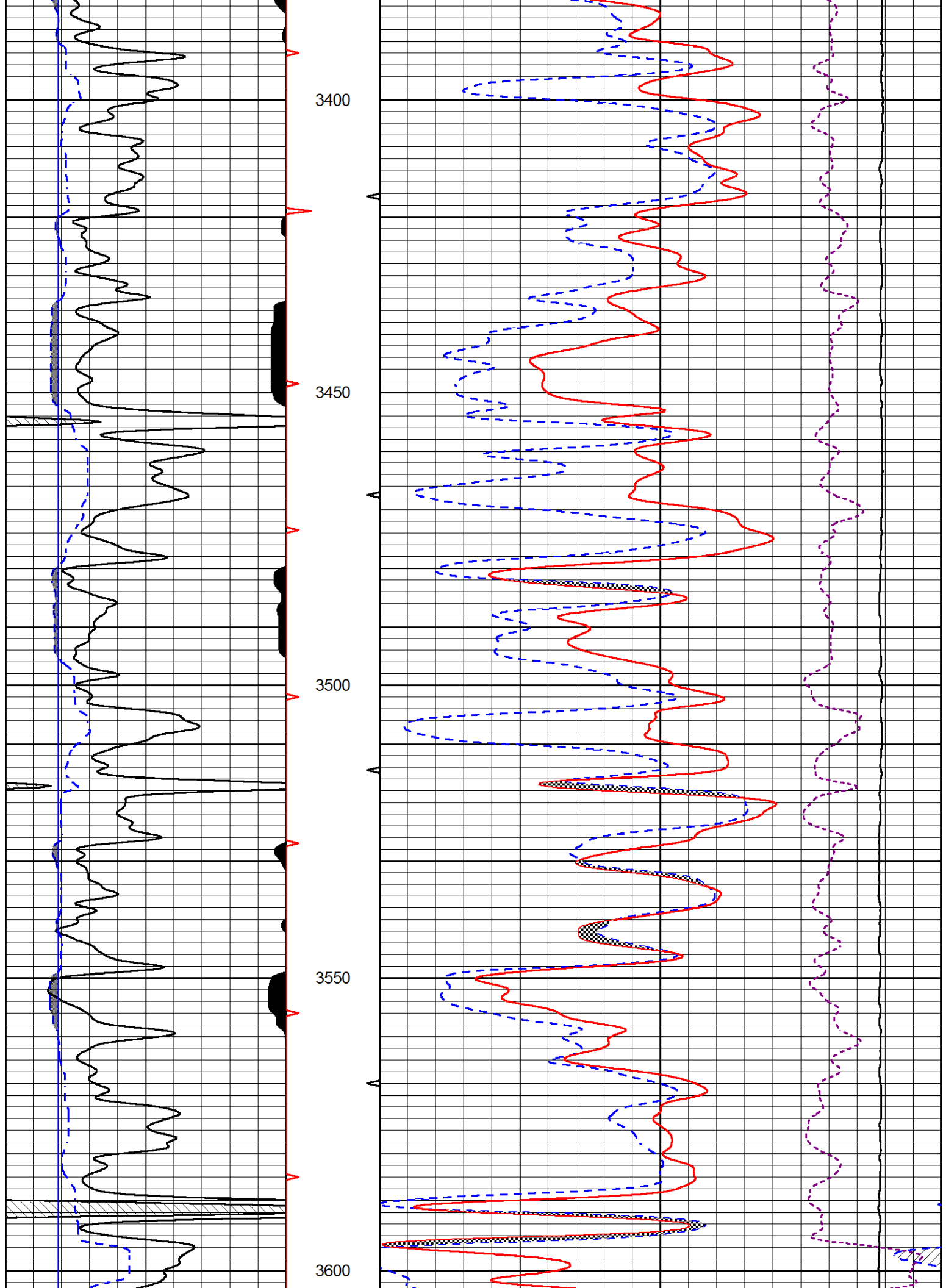


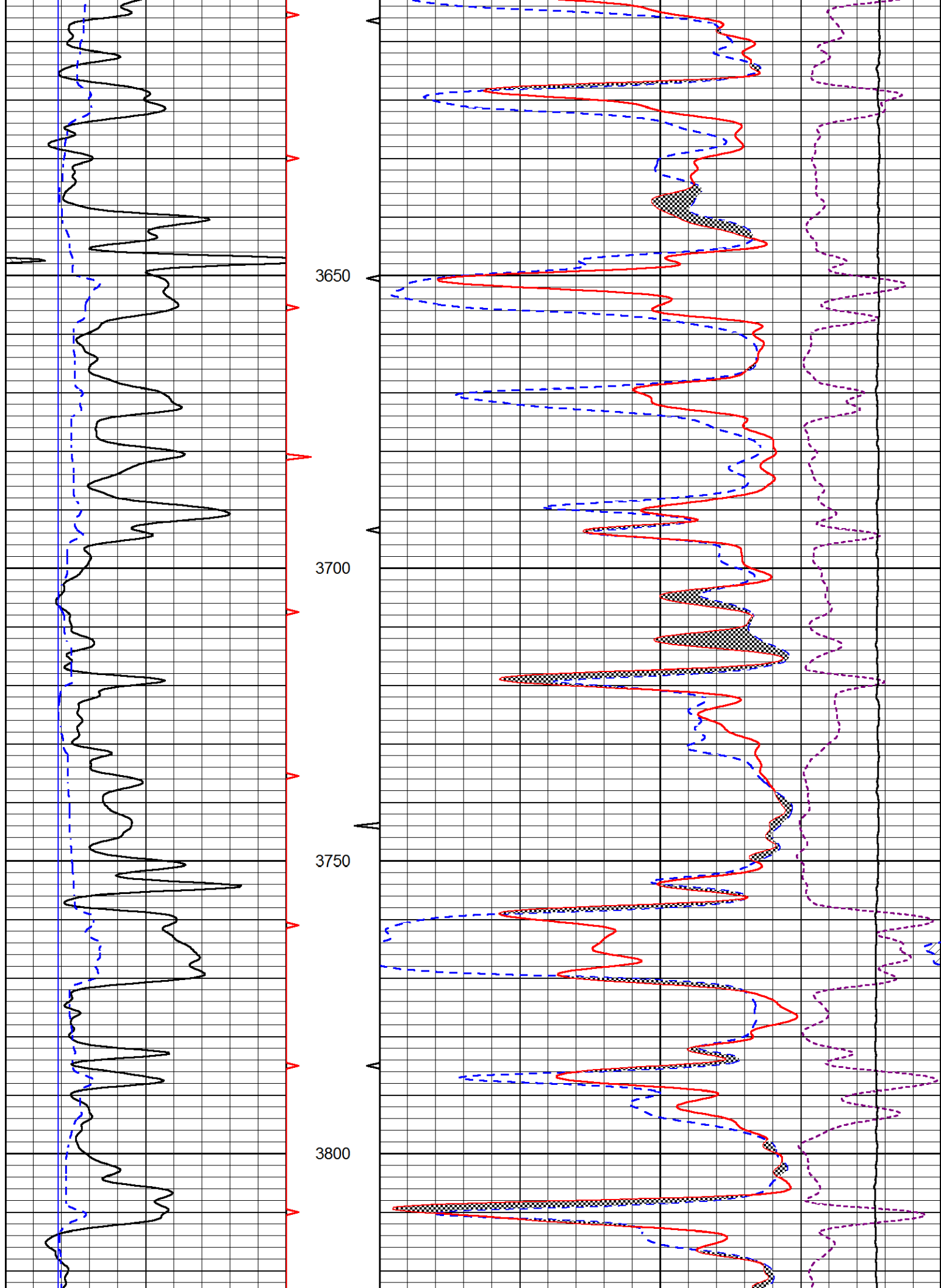


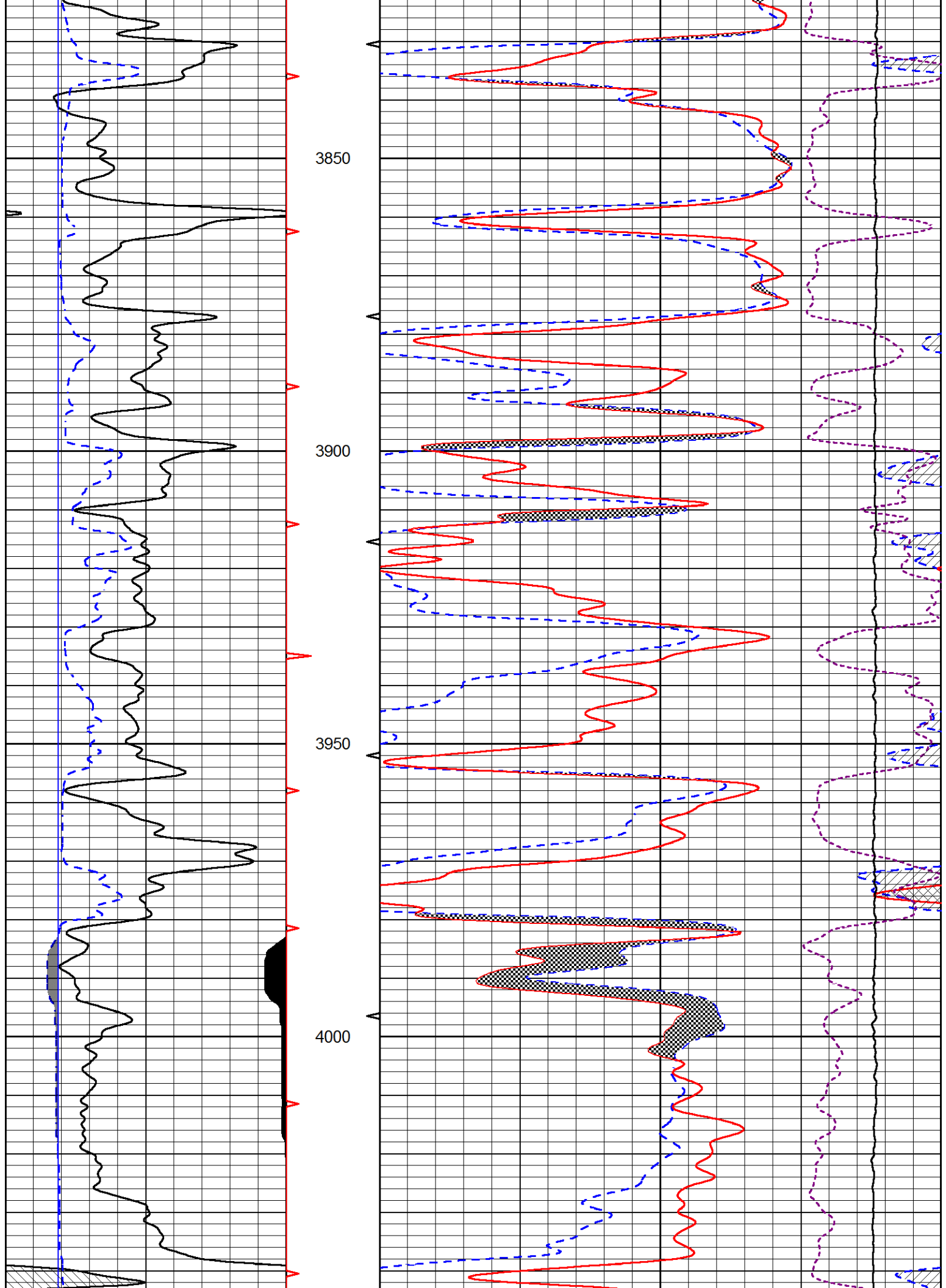
MAIN PASS

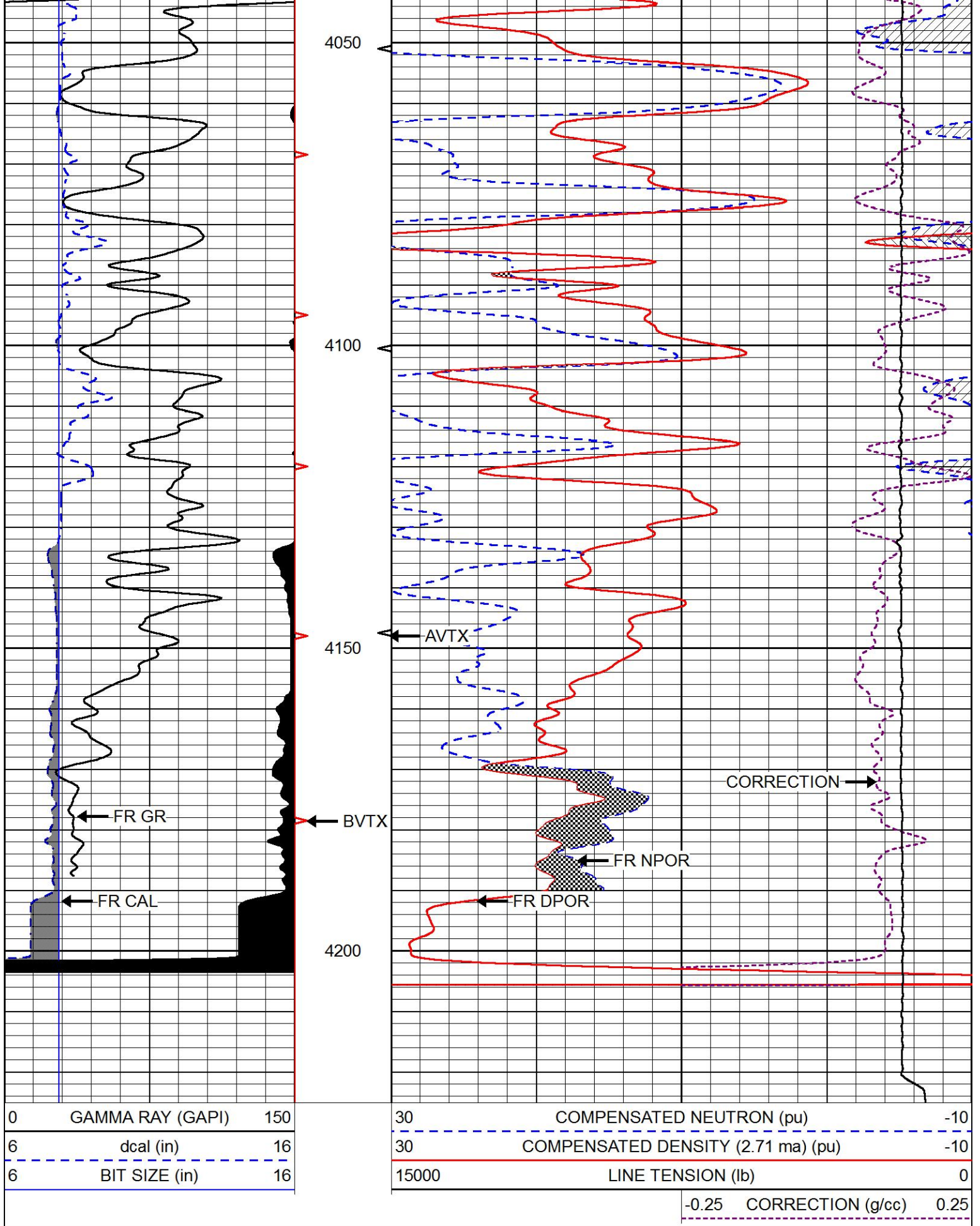
Database File kelso_honas_a_2.db
 Dataset Pathname stackml/pass3.1
 Presentation Format cndlspec
 Dataset Creation Sun Aug 27 05:56:23 2017
 Charted by Depth in Feet scaled 1:240









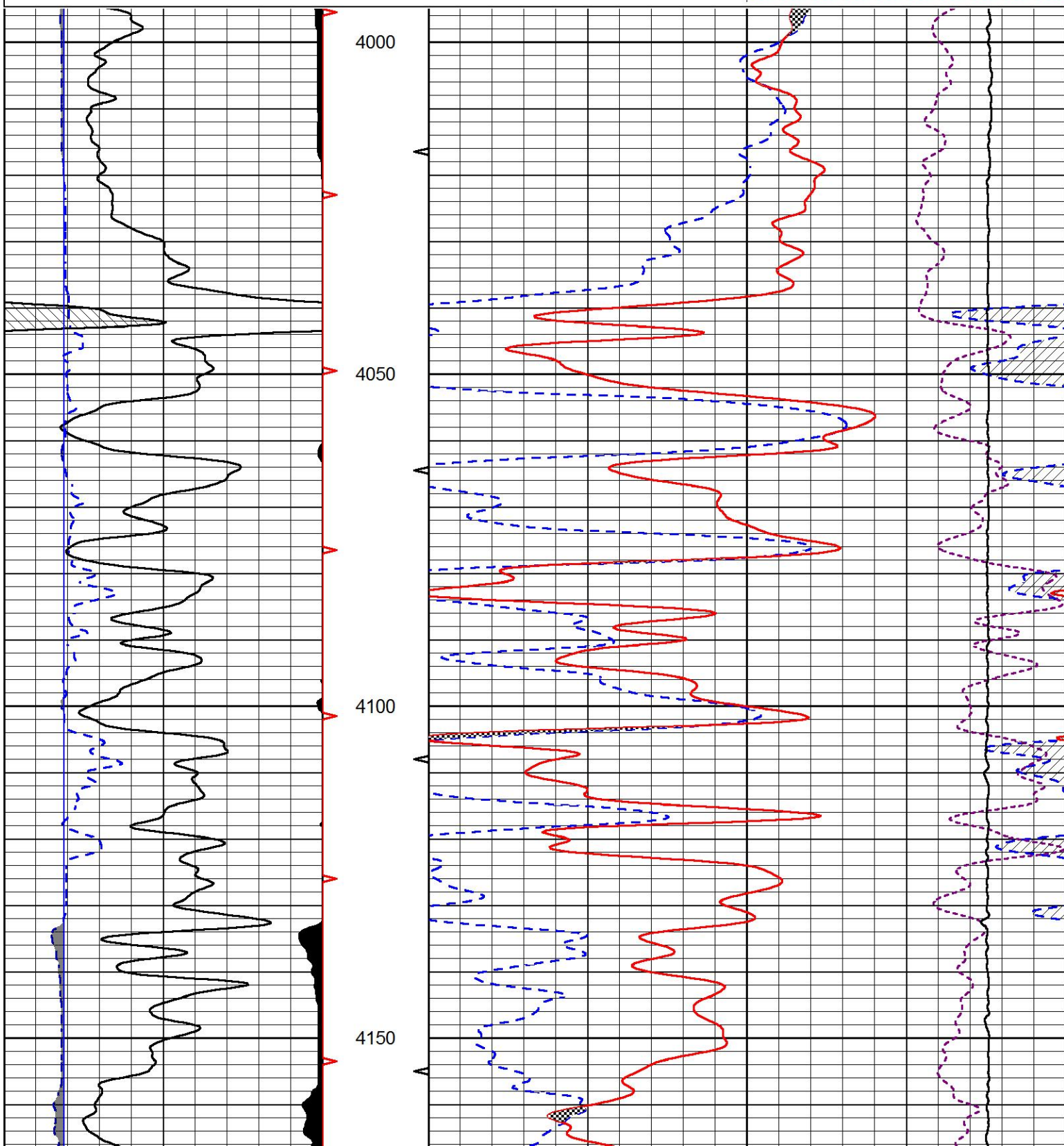


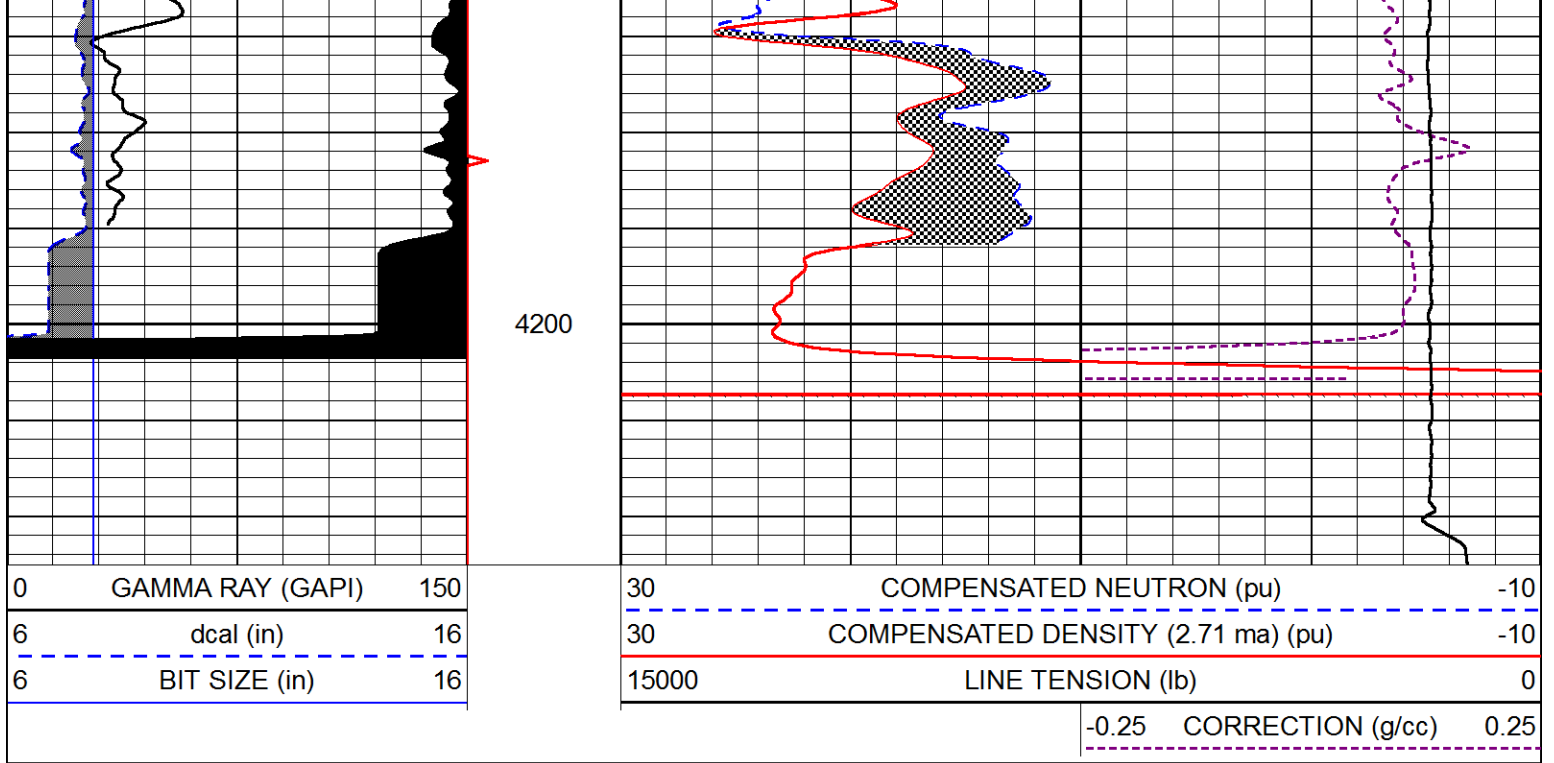
REPEAT SECTION

Database File kelso_honas_a_2.db
 Dataset Pathname stackml/pass2.1
 Presentation Format cndlspec
 Dataset Creation Sun Aug 27 05:57:24 2017
 Charted by Depth in Feet scaled 1:240

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

30	COMPENSATED NEUTRON (pu)	-10
30	COMPENSATED DENSITY (2.71 ma) (pu)	-10
15000	LINE TENSION (lb)	0
-0.25	CORRECTION (g/cc)	0.25





Calibration Report

Database File kelso_honas_a_2.db
 Dataset Pathname stackml/pass3.1
 Dataset Creation Sun Aug 27 05:56:23 2017

Dual Induction Calibration Report

Serial-Model: 1987-M&W
 Calibration Performed: Tue Apr 11 16:07:38 2017

Loop:	Readings		References			Results	
	Air	Loop	Air	Loop		Gain	Offset
Deep	178.615	710.235	0.000	255.800	mmho/m	0.530	-36.500
Medium	161.982	1441.110	0.000	255.800	mmho/m	0.440	-110.500

Microlog Calibration Report

Serial-Model: PSI-02-PSI STKBL ML
 Performed: Fri Jun 23 00:25:19 2017

	Readings		References			Results	
	Zero	Cal	Zero	Cal		m	b
Normal	0.0031	0.0043	0.0000	10.0000	Ohm-m	18000.0000	0.0000
Inverse	0.0000	0.0013	0.0000	10.0000	Ohm-m	20000.0000	0.0000
Caliper	1.0020	1.0834	5.5000	16.5000	in	135.1560	-131.4500

Compensated Density Calibration Report

Serial-Model: 168-986-M&W
 Source / Verifier: /
 Master Calibration Performed: Tue Apr 11 16:07:47 2017

	Density		Far Detector	Near Detector	
Magnesium	1.755	g/cc	4691.86	4818.19	cps
Aluminum	2.675	g/cc	859.57	3020.22	cps
Spine Angle = 74.61			Density/Spine Ratio = 0.523		
	Size		Reading		
Small Ring	4.00	in	1.03		
Large Ring	14.00	in	1.23		

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 16:08:01 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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