



PIONEER
Pioneer Energy Services

DUAL COMP POROSITY LOG

Company **BEREXCO, LLC**
Well **BISAGNO NO. 1-14 OWWO**
Field **UNKNOWN**
County **NESS** State **KANSAS**

Location: API #: 15-135-24969-00-01

Other Services

1710' FNL & 2010' FEL
SEC 14 TWP 16S RGE 22W

DIL
MEL

Permanent Datum **GROUND LEVEL** Elevation **2409'**
Log Measured From **KELLY BUSHING**
Drilling Measured From **KELLY BUSHING**

Elevation
K.B. 2417'
D.F. N/A
G.L. 2409'

Company **BEREXCO, LLC**

Well **BISAGNO NO. 1-14 OWWO**

Field **UNKNOWN**

County **NESS**

State **KANSAS**

Date **4/27/17**

Run Number **ONE**

Type Log **CNL/CDL**

Depth Driller **4395'**

Depth Logger **4396'**

Bottom Logged Interval **4377'**

Top Logged Interval **3400'**

Type Fluid In Hole **CHEMICAL**

Salinity, PPM CL **3,000**

Density **8.6**

Level **FULL**

Max. Rec. Temp. F **120 DEG/F**

Operating Rig Time **2 HOURS**

Equipment -- Location **108 HAYS**

Recorded By **J. HENRICKSON**

Witnessed By **ANDREW MOORE**

Borehole Record

Casing Record

Run No. Bit From To Size Wgt. From To

ONE 12.25" 0 213' 8.625" 23# 0 213'

TWO 7.875" 213' 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.

BROWNELL KANSAS

1/2 EAST TO HWY 147, 2 NORTH, 1/2 EAST, SOUTH INTO

NO REPEAT DUE TO WASHOUTS ON BOTTOM

Log Measured From: **KELLY BUSHING** 8 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: **ANDREW MOORE**

Secondary Witness:

Secondary Witness:

Secondary Witness:

Top - Bottom

A	BOREID	BOTTEMP	CASEOD	CASETHCK	FLUIDDEN	M	MATRXDEN
1	in 7.875	degF 120	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 -410	degF 43	Off	ft 4396

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

CILM

4.70

SP

0.20

Dataset: berexco_bisagno_1_14_owwo.db: field/well/stackml/pass2.1
Total length: 43.08 ft
Total weight: 685.00 lb
O.D.: 4.00 in

PIONEER

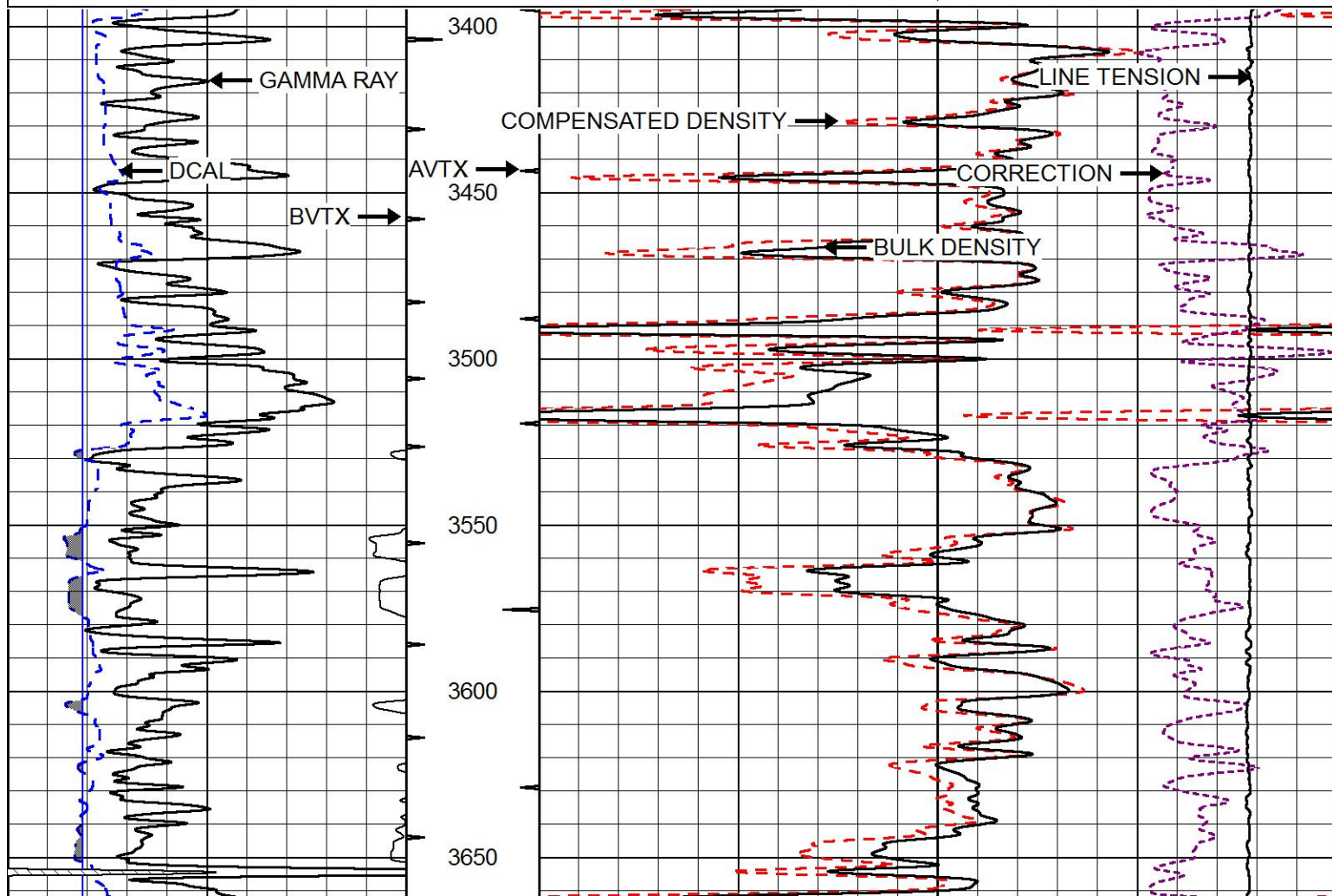
Pioneer Energy Services

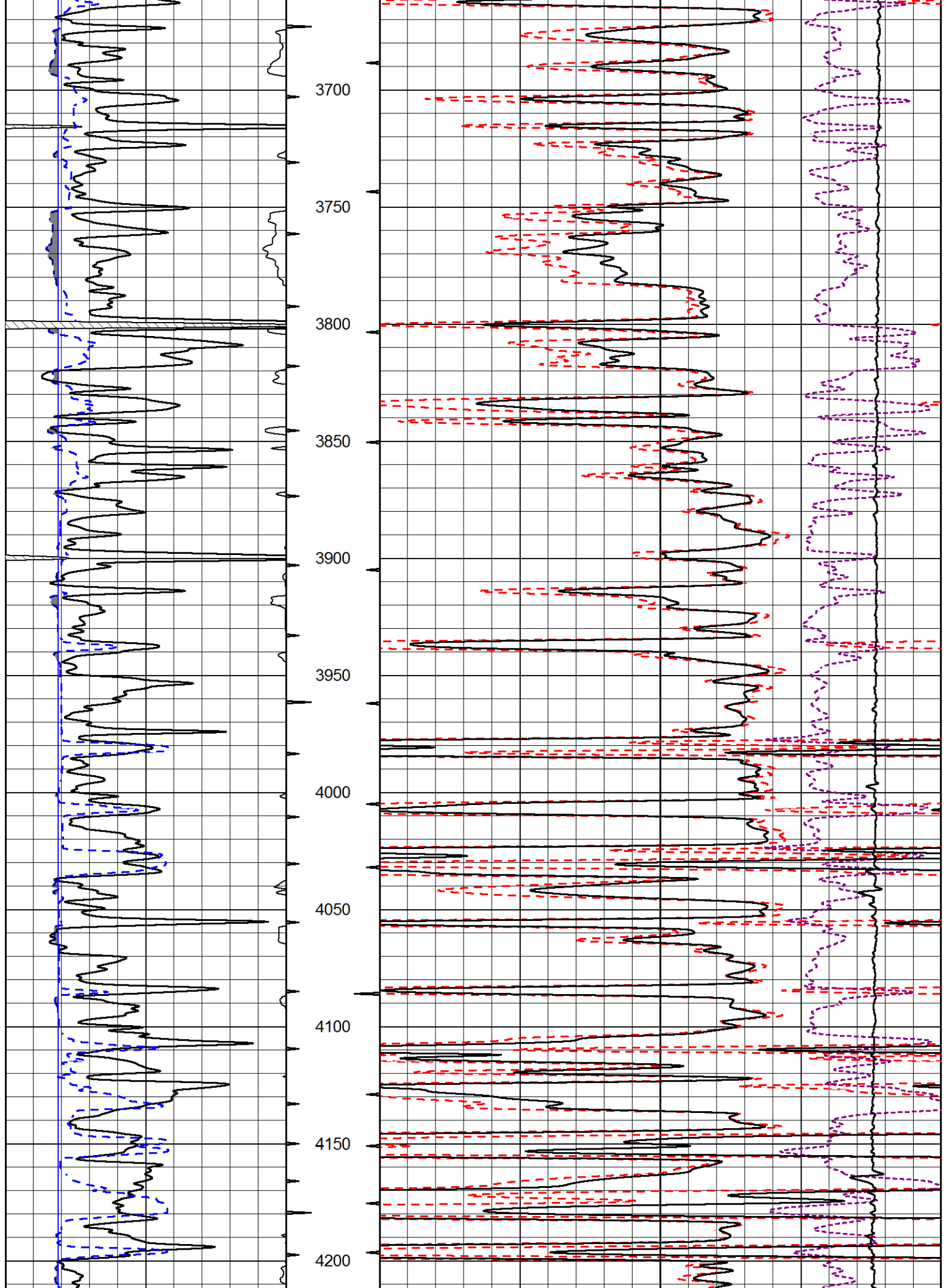
MAIN PASS

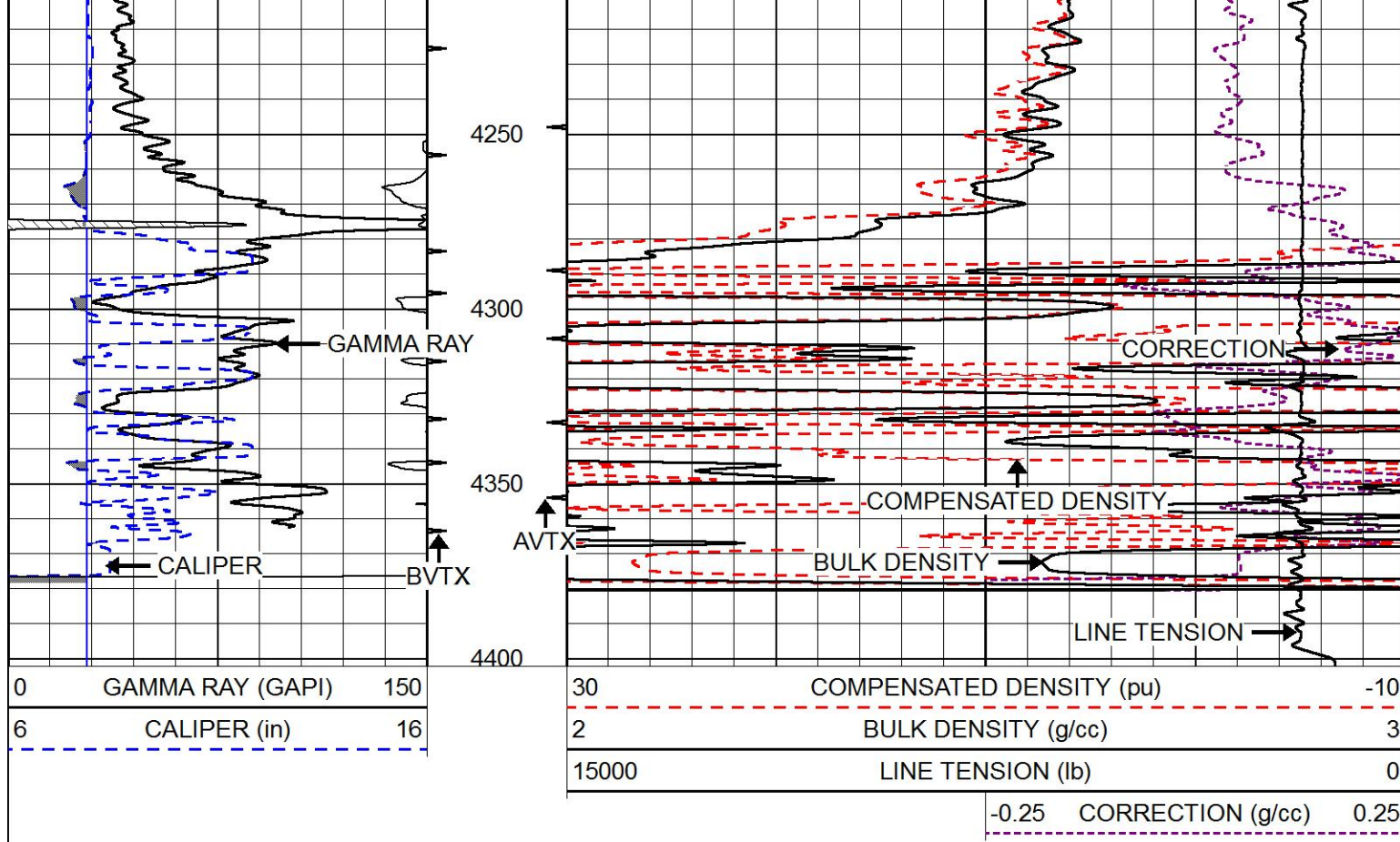
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Dataset Pathname stackml/pass2.1
Presentation Format cdl
Dataset Creation Thu Apr 27 05:43:37 2017
Charted by Depth in Feet scaled 1:600

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



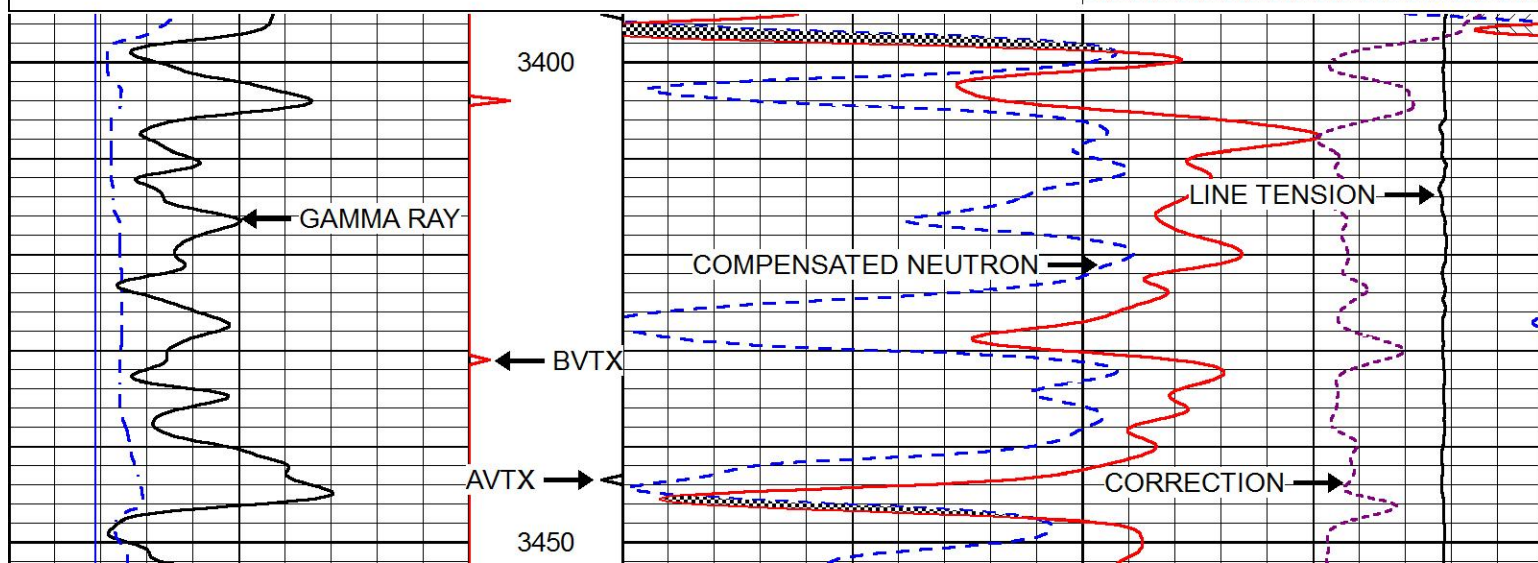


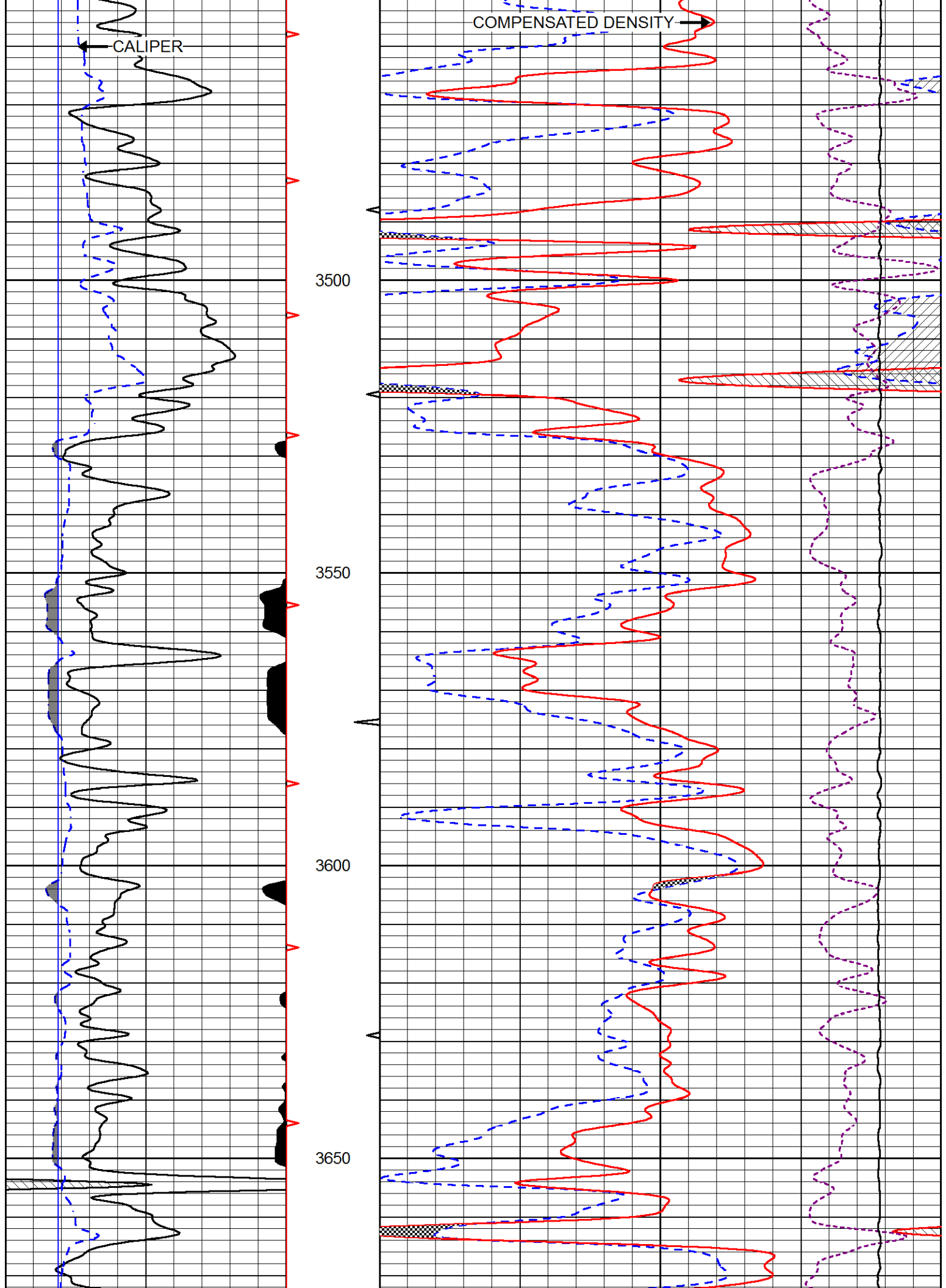


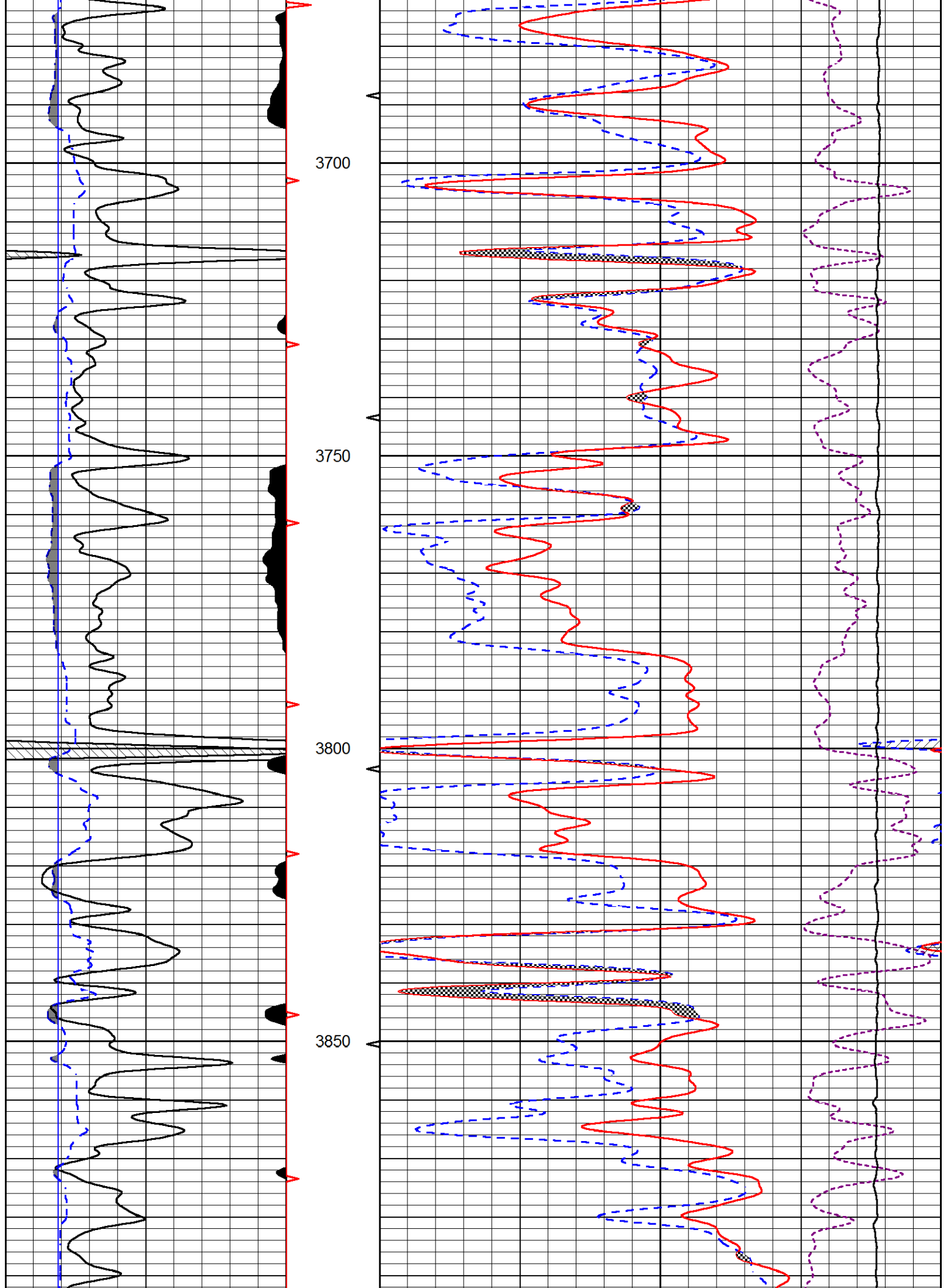
MAIN PASS

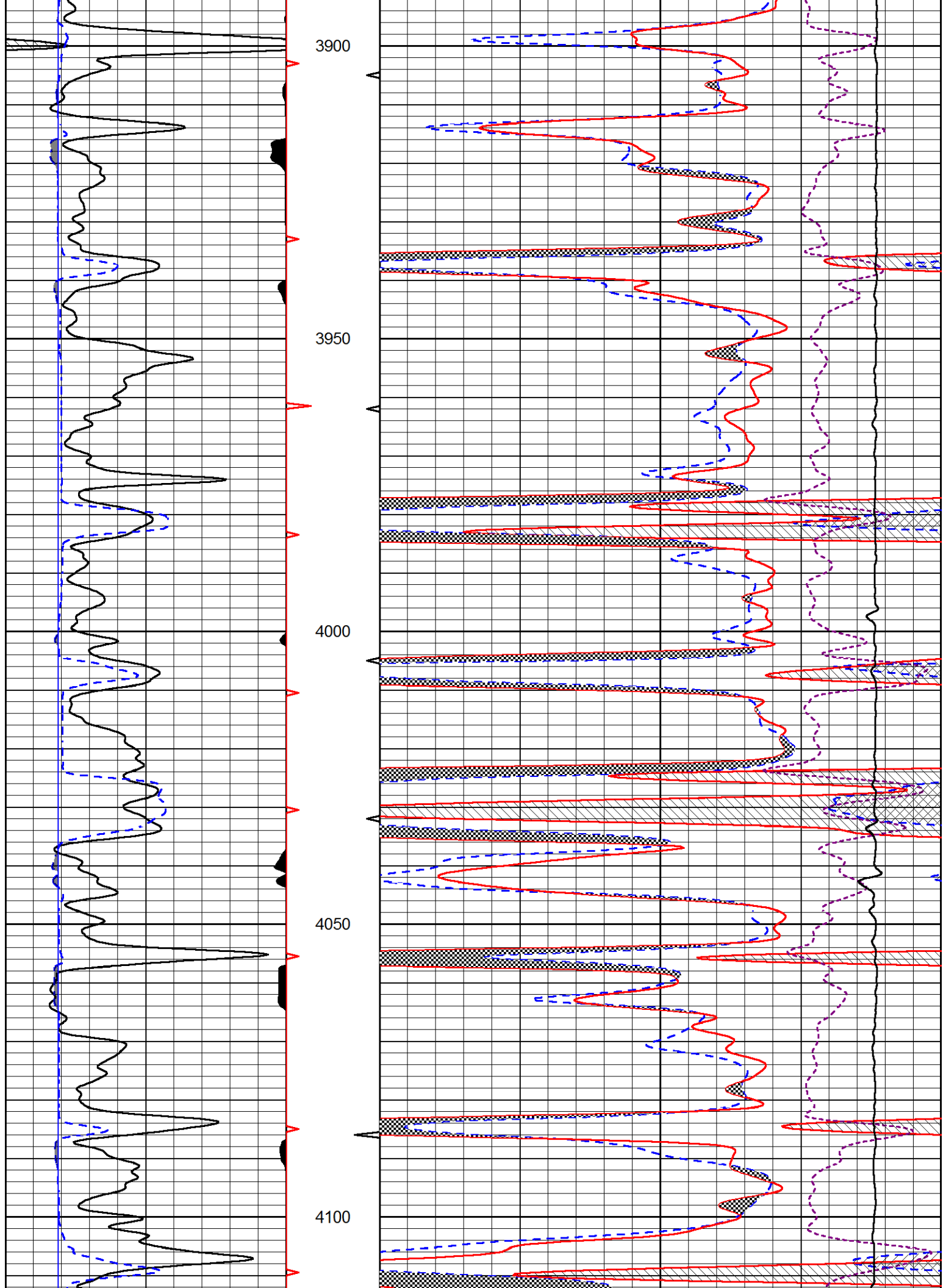
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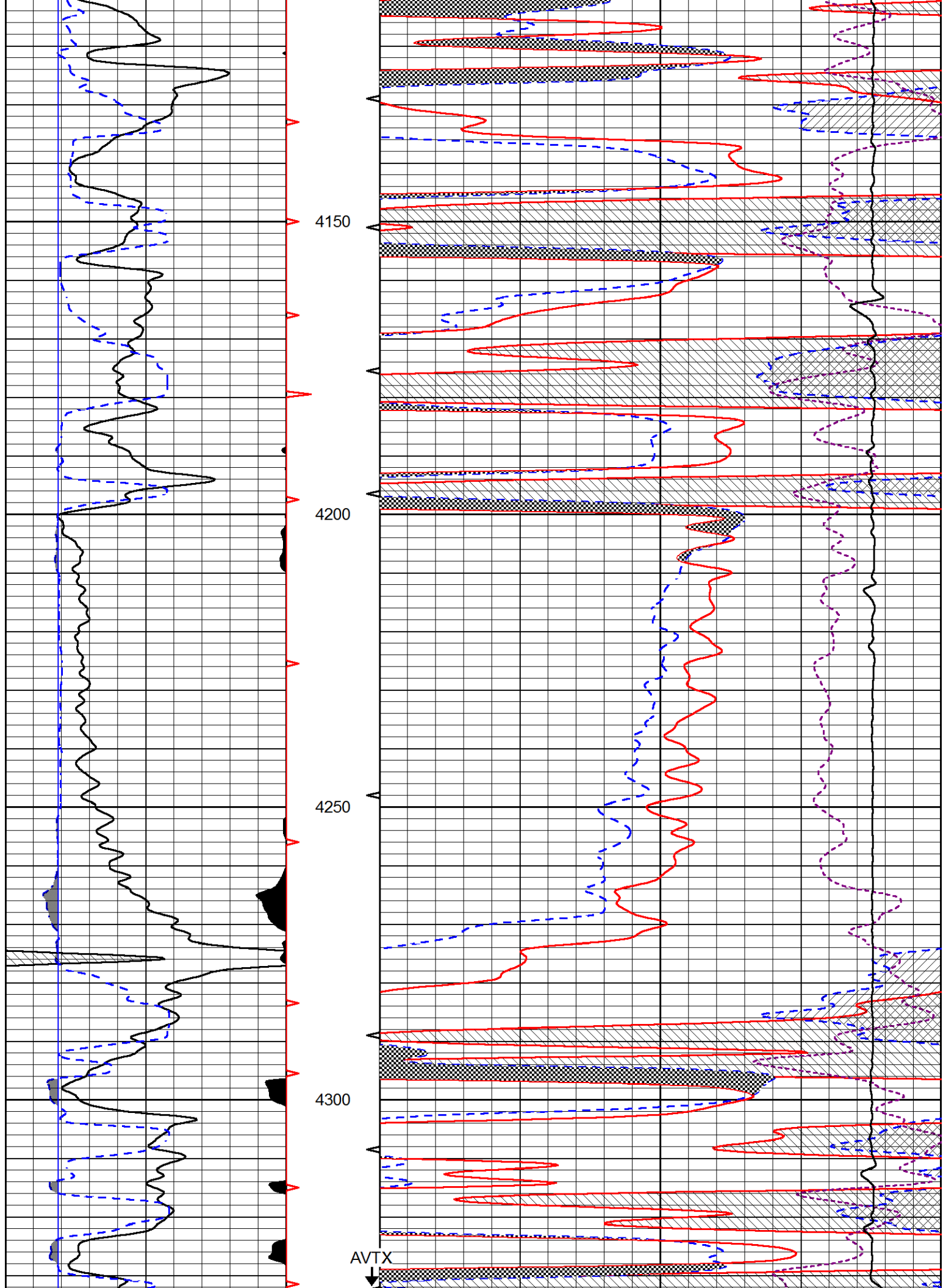
0	GAMMA RAY (GAPI)	150	30	COMPENSATED NEUTRON (pu)	-10
6	dcal (in)	16	30	COMPENSATED DENSITY (2.71 ma) (pu)	-10
6	BIT SIZE (in)	16	15000	LINE TENSION (lb)	0
			-0.25	CORRECTION (g/cc)	0.25

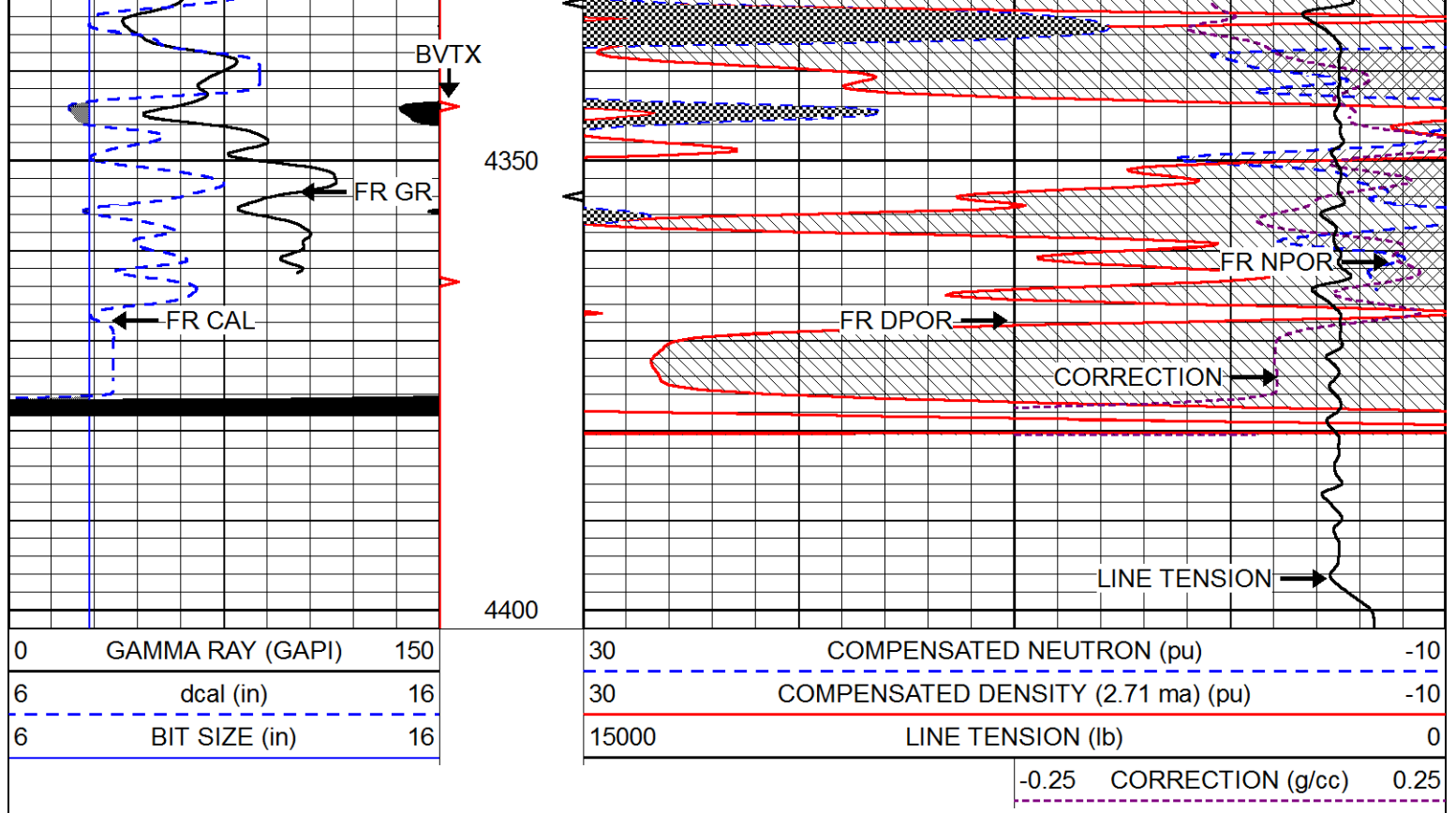












Calibration Report							
Database File	berexco_bisagno_1_14_owwo.db						
Dataset Pathname	stackml/pass2.1						
Dataset Creation	Thu Apr 27 05:43:37 2017						
Dual Induction Calibration Report							
Serial-Model:		1987-M&W					
Calibration Performed:		Tue Apr 11 16:07:38 2017					
Loop:	Readings		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 Nov 18 10:06:25 2016					
	Readings		References			Results	
	Zero	Cal	Zero	Cal		m	b
Normal	0.0031	0.0043	0.0000	10.0000	Ohm-m	19000.0000	0.0000
Inverse	0.0000	0.0013	0.0000	10.0000	Ohm-m	22000.0000	0.0000
Caliper	1.0020	1.0834	5.5000	16.5000	in	135.1560	-131.6000
Compensated Density Calibration Report							
Serial-Model:		168-986-M&W					
Source / Verifier:		/					
Master Calibration Performed:		Tue Apr 11 16:07:47 2017					

Master Calibration

	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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