



PIONEER
Pioneer Energy Services

DUAL COMP POROSITY LOG

Company **JOE GERSTNER OIL, LLC**
Well **LLG NO. 1-3**
Field **WILDCAT**
County **RUSH** State **KANSAS**

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Location: API #: 15-165-22141-00-00
390' FSL & 1,705' FEL
SEC 3 TWP 19S RGE 17W
Permanent Datum **GROUND LEVEL** Elevation **2092'**
Log Measured From **KELLY BUSHING**
Drilling Measured From **KELLY BUSHING**
Other Services
DIL
MEL
Elevation
K.B. 2097'
D.F. N/A
G.L. 2092'

Date **12/17/2016**

Run Number **ONE**
Type Log **CNL/CDL**
Depth Driller **3942'**
Depth Logger **3941'**
Bottom Logged Interval **3913'**
Top Logged Interval **3200'**
Type Fluid In Hole **CHEMICAL**
Salinity, PPM CL **13800**
Density **9.4**
Level **FULL**
Max. Rec. Temp. F **115 DEG F.**
Operating Rig Time **2 1/2 HOURS**
Equipment -- Location **108 COLBY**
Recorded By **J. LONG**
Witnessed By **ANDREW STENZEL**

Borehole Record

Casing Record

Run No.	Bit	From	To	Size	Wgt.	From	To
ONE	12.25"	00'	1135'	8.625"	23#	00'	1135'
TWO	7.875"	1135'	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.

RUSH CENTER, 7 EAST TO 320 ROAD, 3 SOUTH, 1/2 WEST, NORTH AND EAST 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. LONG**
Operator: **C. PFEIFER**
Operator:
Operator:

This Log Record Was Witnessed By

Primary Witness: **ANDREW STENZEL**
Secondary Witness:
Secondary Witness:
Secondary Witness:

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DatabaseC:\ProgramData\Warrior\Data\joegerstneroil_lig_1-3.db
Dataset field/well/stackmel/pass3.1/ vars
```

Top - Bottom

A	BOREID in	BOTTEMP degF	CASEOD in	CASETHCK in	FLUIDDEN g/cc	M	MATRXDEN g/cc
1	7.875	115	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	-235	6	Off	3941

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 (71-914)	8.50	4.00	250.00
			ML-PSI STKBL ML (PSI-01) Stackable Microlog Tools	7.58	4.00	65.00
MCAL MI MN	19.83 19.83 19.83					
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: joegerstneroil_llg_1-3.db: field/well/stackmel/pass3
Total length: 43.08 ft
Total weight: 685.00 lb
O.D.: 4.00 in

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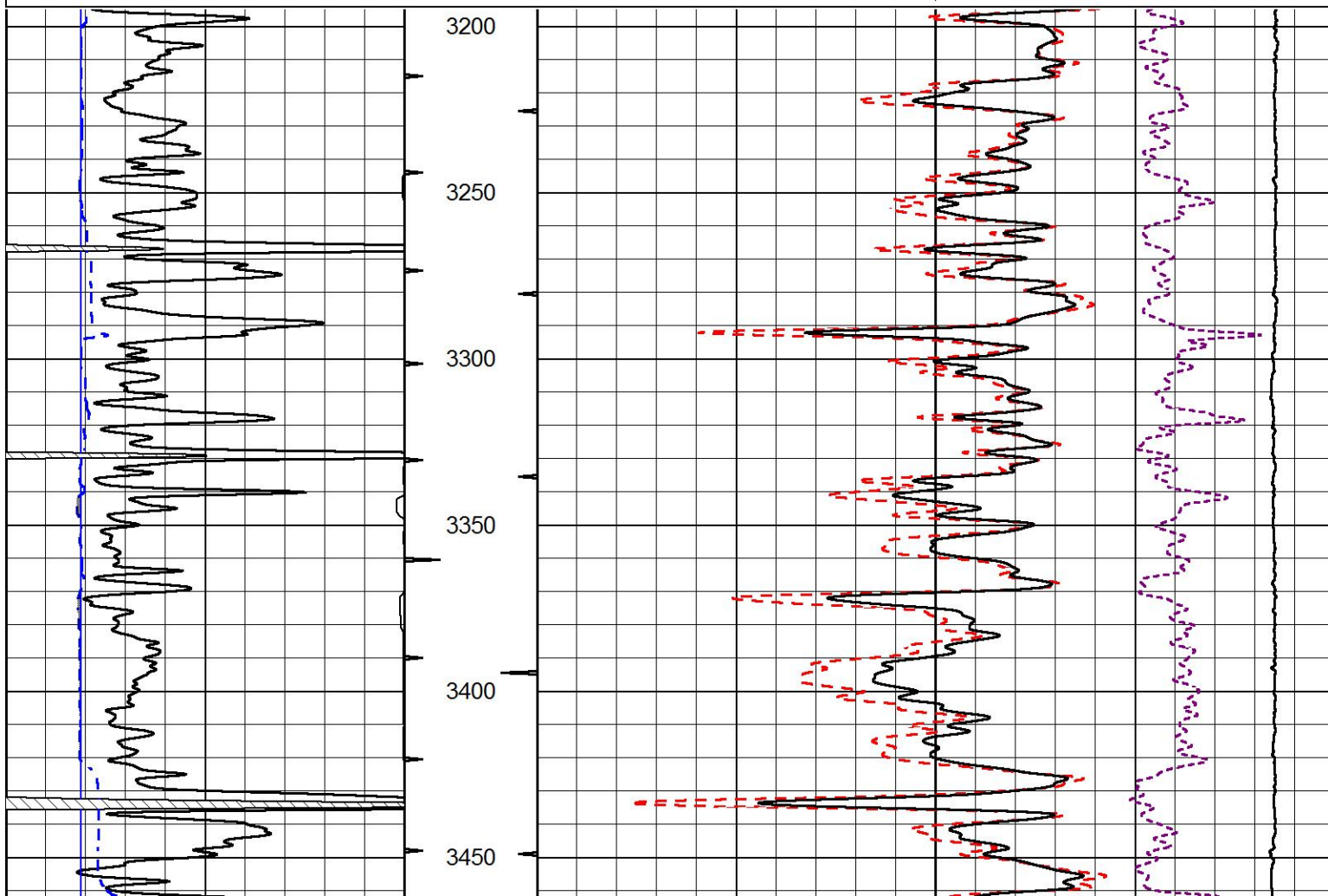
2" SCALE BULK DENSITY

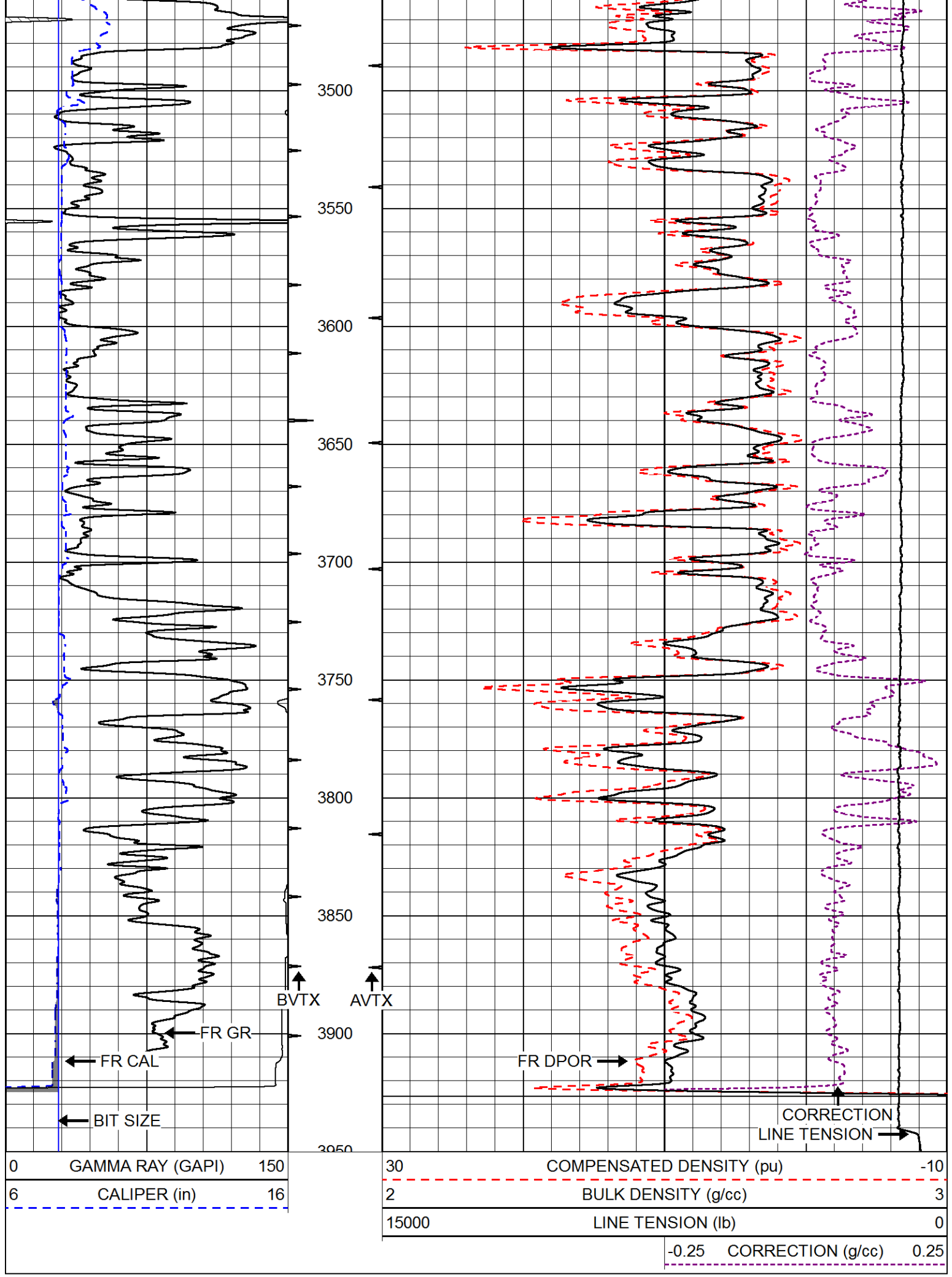
MAIN PASS

Database File joegerstneroil_llg_1-3.db
Dataset Pathname stackmel/pass3.3
Presentation Format cdl
Dataset Creation Sat Dec 17 13:19:41 2016
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





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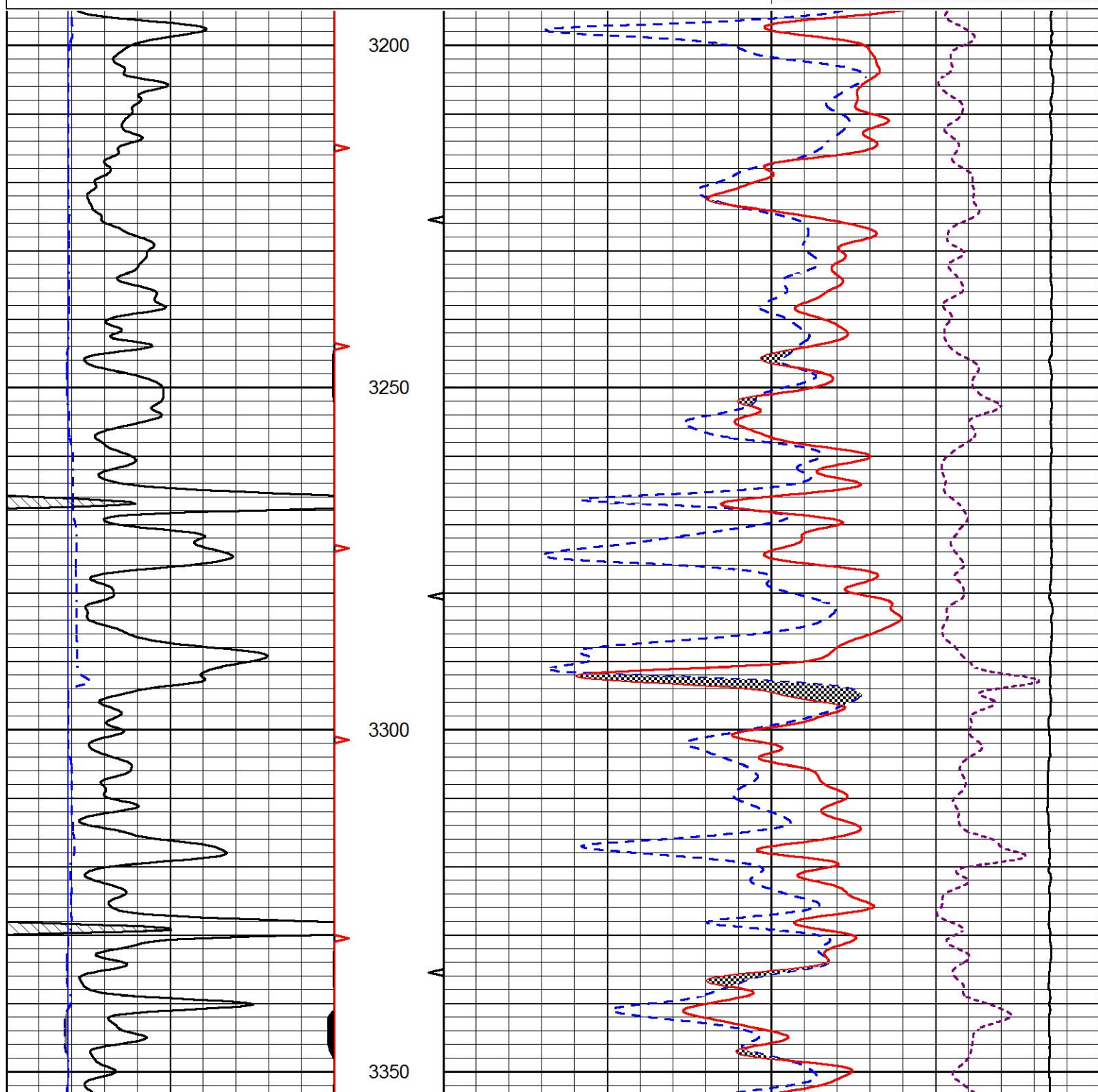
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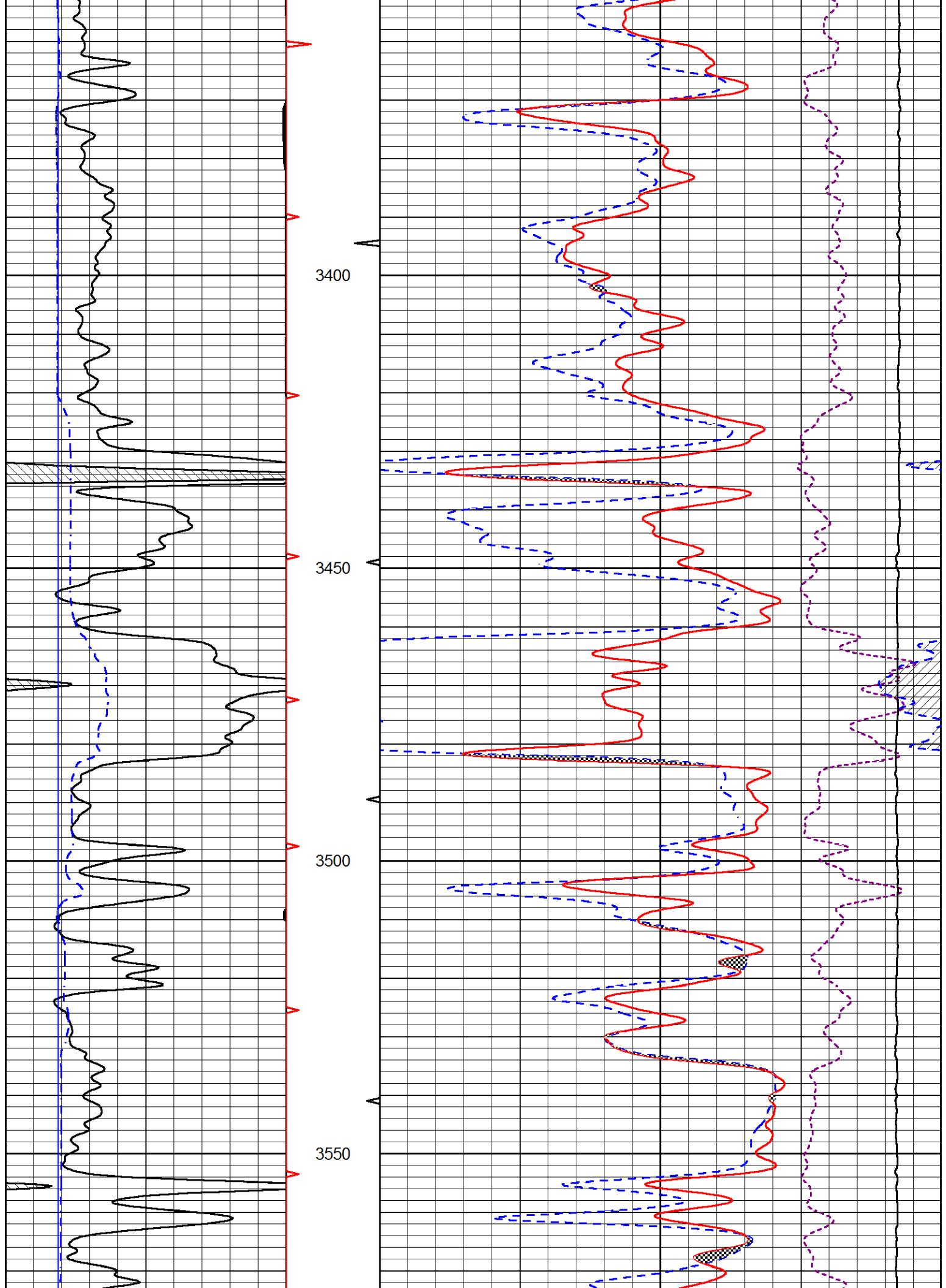
MAIN PASS

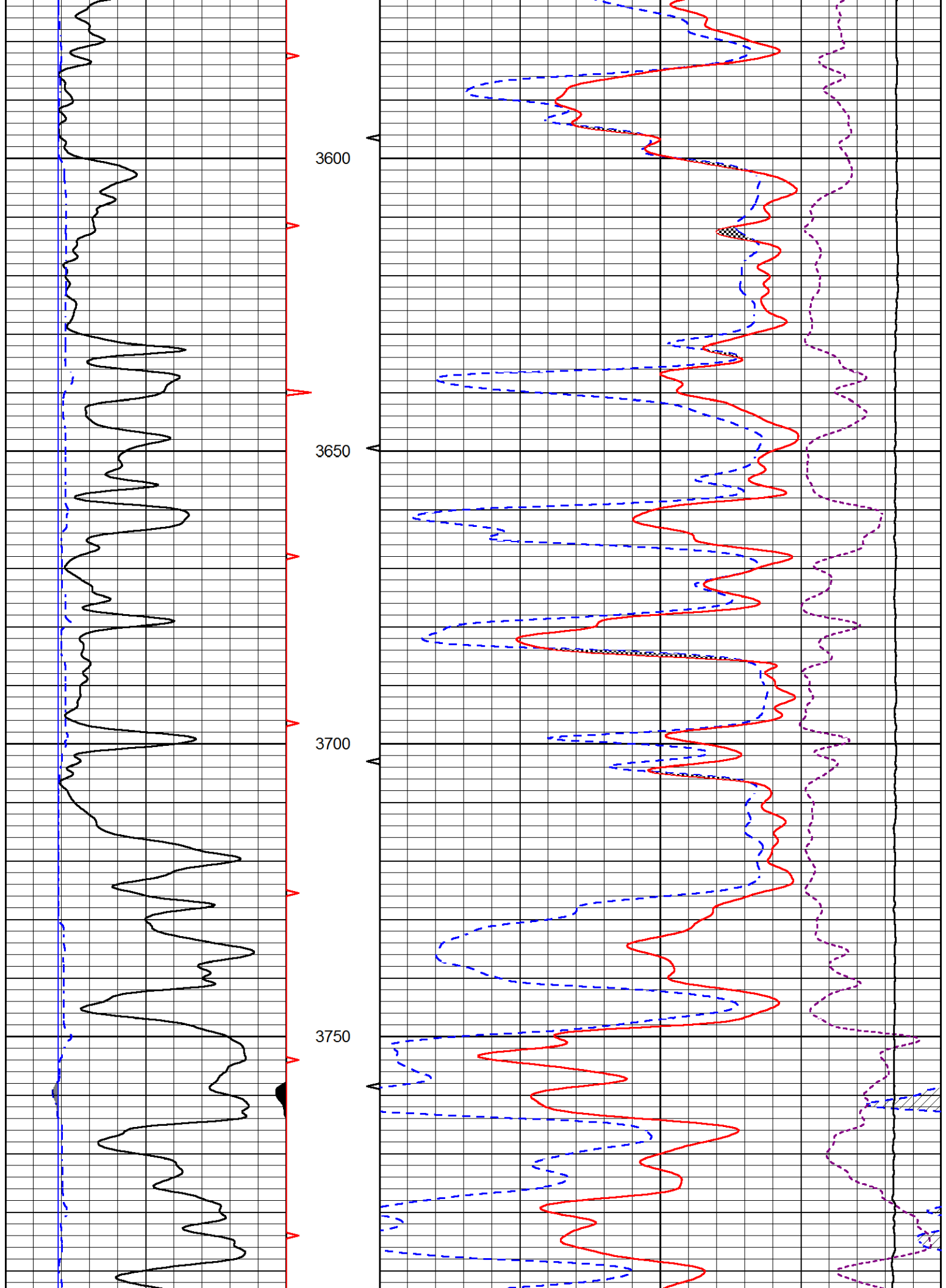
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Dataset Pathname stackmel/pass3.1
Presentation Format cndlspec
Dataset Creation Sat Dec 17 13:19:21 2016
Charted by Depth in Feet scaled 1:240

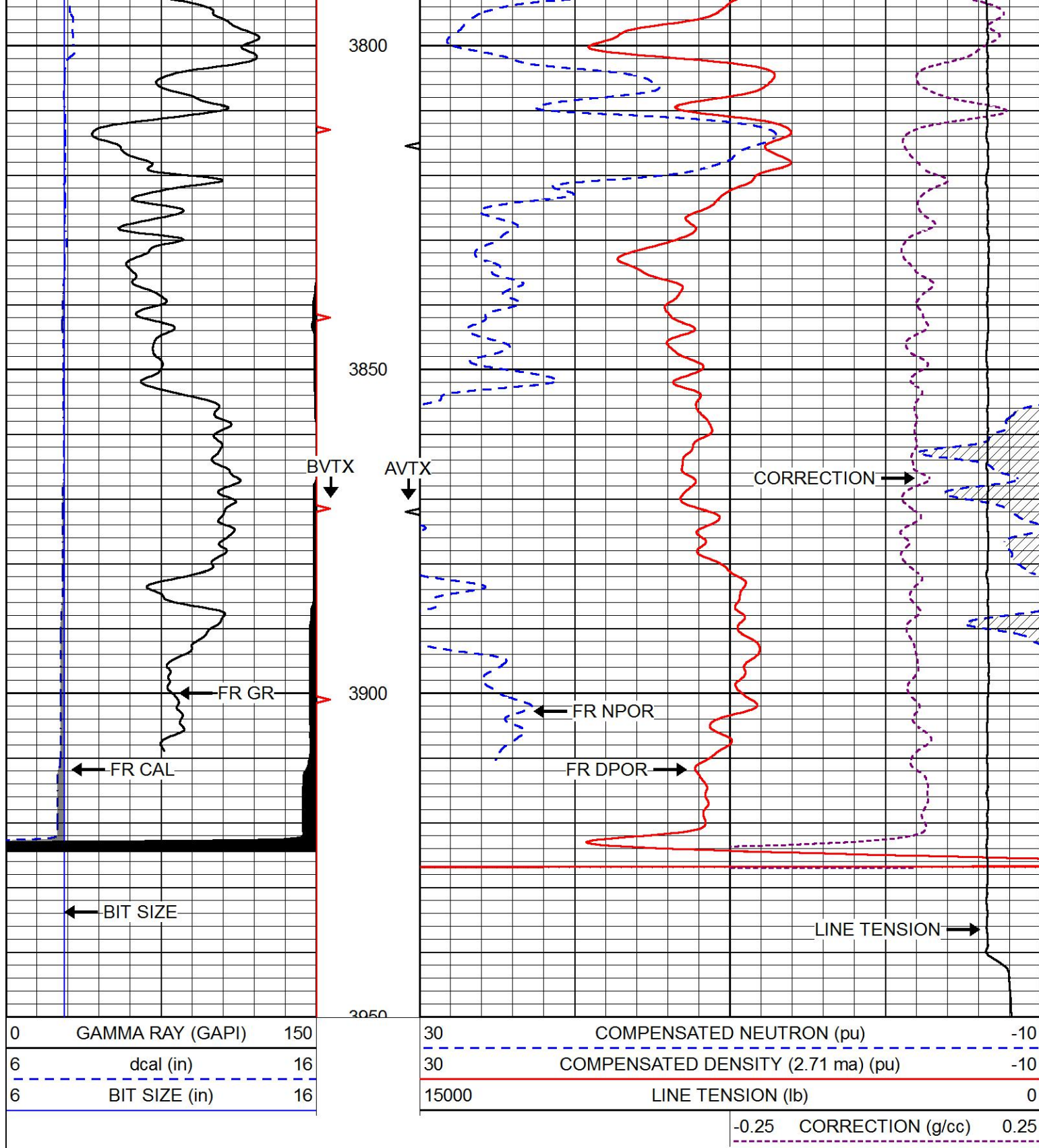
0	GAMMA RAY (GAPI)	150
6	dcal (in)	16
6	BIT SIZE (in)	16

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









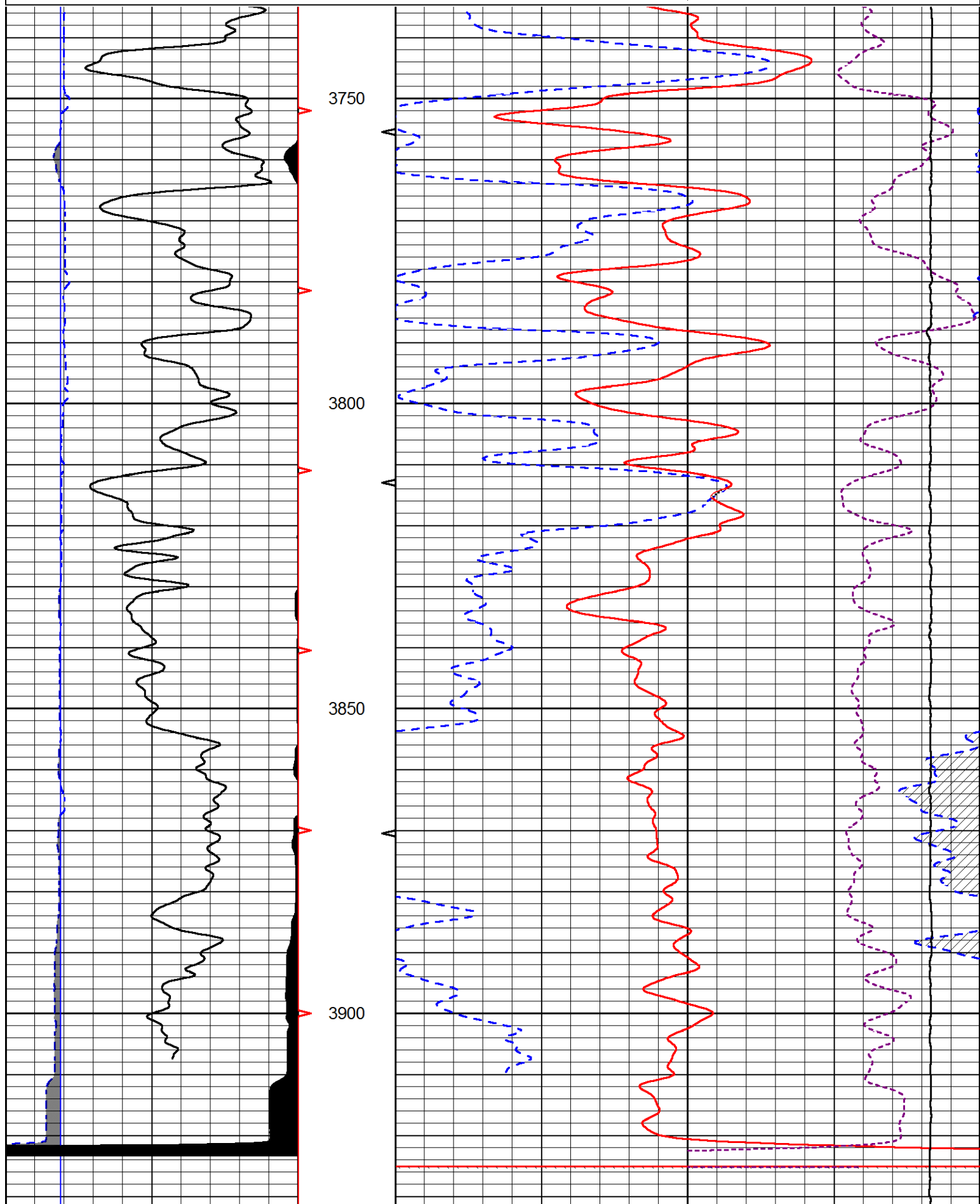
REPEAT SECTION

Database File joegerstneroil_llg_1-3.db
 Dataset Pathname stackmel/pass2.1
 Presentation Format cndlspec
 Dataset Creation Sat Dec 17 13:10:38 2016
 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
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Compensated Neutron Calibration Report					
		Serial Number:		tk10-MW	
		Tool Model:		M&W	
		Calibration Performed:		Wed Nov 16 11:21:36 2016	
Detector		Readings		Target	
Short Space		6240.00 cps		1000.00 cps	
Long Space		460.00 cps		1000.00 cps	
				Normalization	
				1.6025	
				1.9500	

Gamma Ray Calibration Report

Serial Number:	89-M&W	
Tool Model:	M&W	
Calibration Performed:	Thu Nov 17 21:13:32 2016	
Calibrator Value:	1000.0	GAPI
Background Reading:	0.0	cps
Calibrator Reading:	6.2	cps
Sensitivity:	0.5200	GAPI/cps



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