



PIONEER

Pioneer Energy Services

DUAL COMP POROSITY LOG

Company **RJM COMPANY**
Well **FURY FARMS #1**
Field **UNKNOWN**
County **BARTON** State **KANSAS**

Location: API #: 15-009-26153-00-00

Other Services

SEC 13 TWP 19S RGE 13W
1460' FNL & 560' FWL

DIL/MEL
BHCS

Permanent Datum GROUND LEVEL Elevation 1890'
Log Measured From KELLY BUSHING
Drilling Measured From KELLY BUSHING

Elevation
K.B. 1898'
D.F. N/A
G.L. 1890'

Date 10/6/2016

Run Number ONE

Type Log CNL/CDL

Depth Driller 3490'

Depth Logger 3492'

Bottom Logged Interval 3471'

Top Logged Interval 2700'

Type Fluid In Hole CHEMICAL

Salinity, PPM CL 6000

Density 9.4

Level FULL

Max. Rec. Temp. F 111

Operating Rig Time 5 HOURS

Equipment -- Location 91 COLBY

Recorded By D. SCHMIDT

Witnessed By WYATT URBAN

Borehole Record

Casing Record

Run No.

Bit

From

To

Size

Wgt.

From

To

ONE

12.25"

0'

320'

TD

8.625"

23#

0'

320'

TWO

7.875"

320'

TD

8.625"

23#

0'

<<< 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.

GREAT BEND,
NORTH ON HWY 281 TO 30 RD,
2 1/2 EAST TO 30 AVE, 1/2 SOUTH,
EAST INTO

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

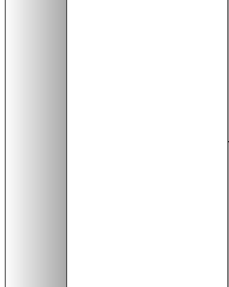
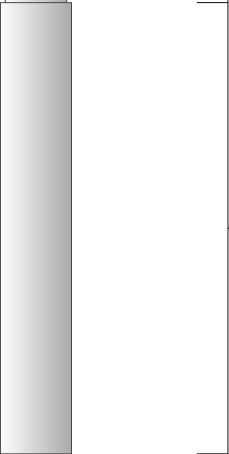
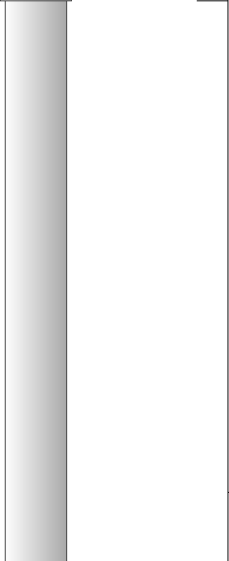
Engineer: D. SCHMIDT
Operator:
Operator:
Operator:

This Log Record Was Witnessed By

Primary Witness: WYATT URBAN
Secondary Witness:
Secondary Witness:
Secondary Witness:

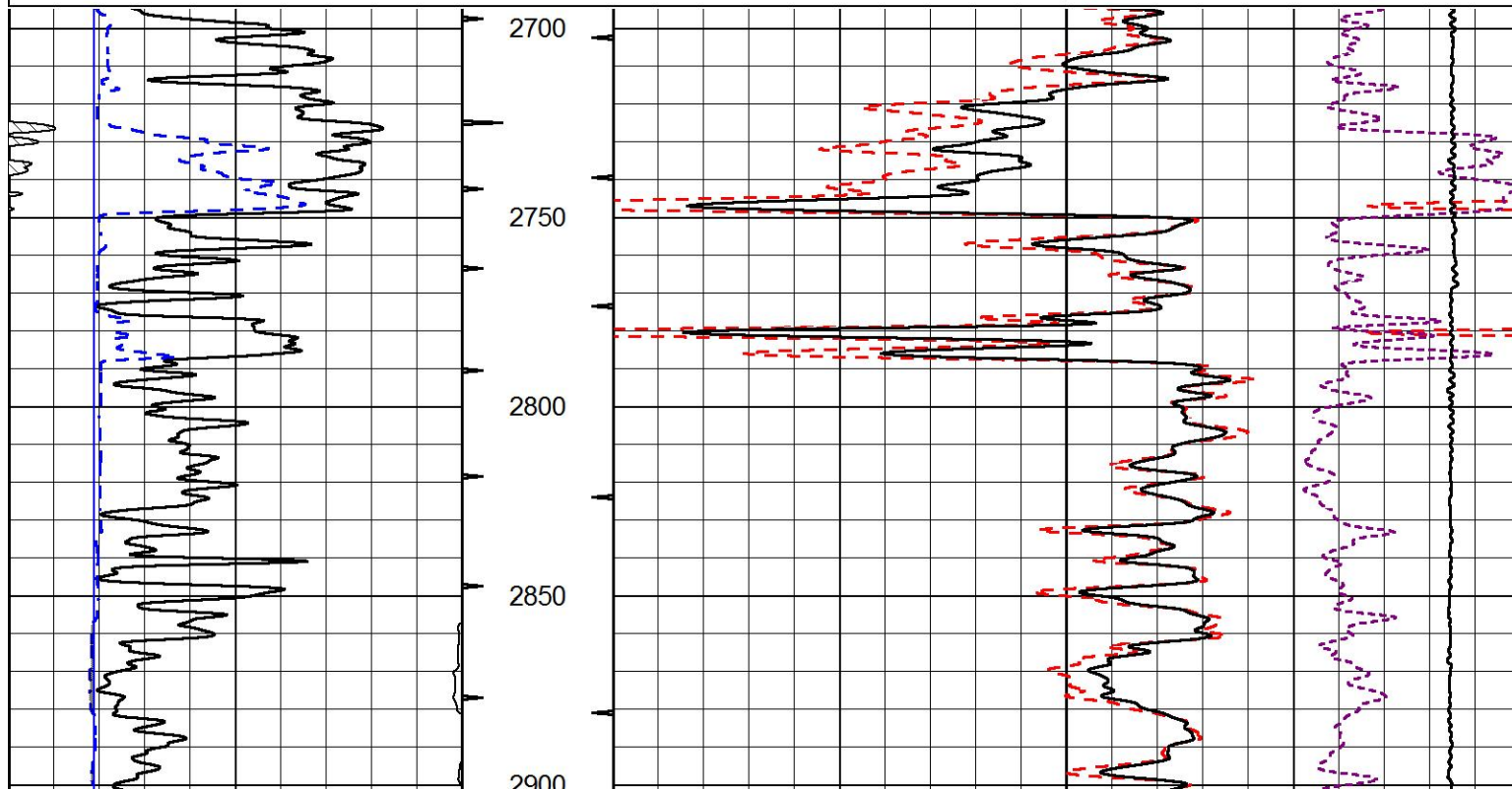
Top - Bottom

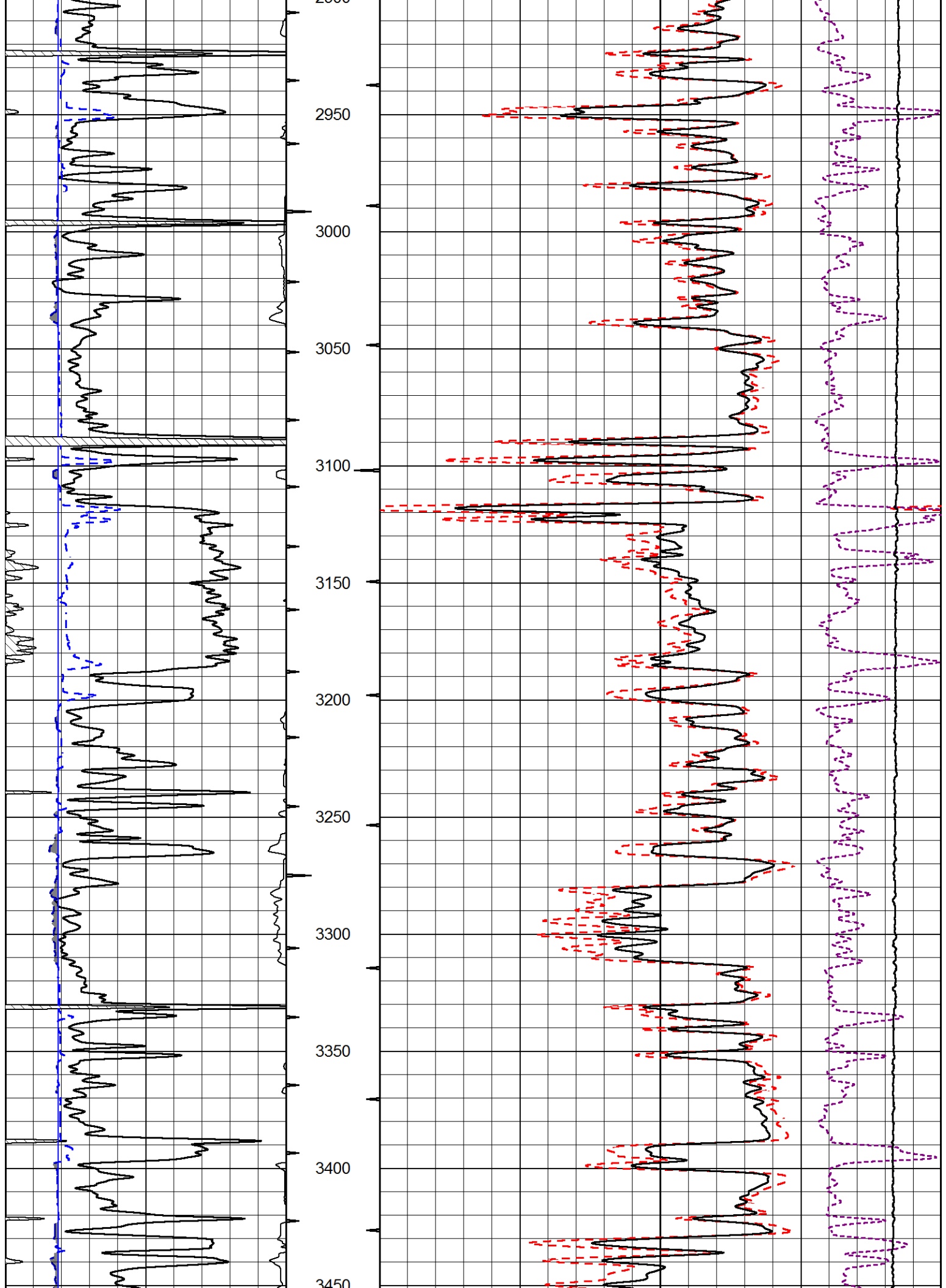
M	A	SZCOR	NPORSEL	FLUIDDEN g/cc	MATRXDEN g/cc	SPSHIFT mV	SNDERRM mmho/m
2	1	Off	Limestone	1	2.71	-138	0
SNDERR mmho/m	SRFTEMP degF	CASETHCK in	CASEOD in	PERFS	TDEPTH ft	BOTTEMP degF	BOREID in
0	68	0	5.5	0	3491	111	7.875

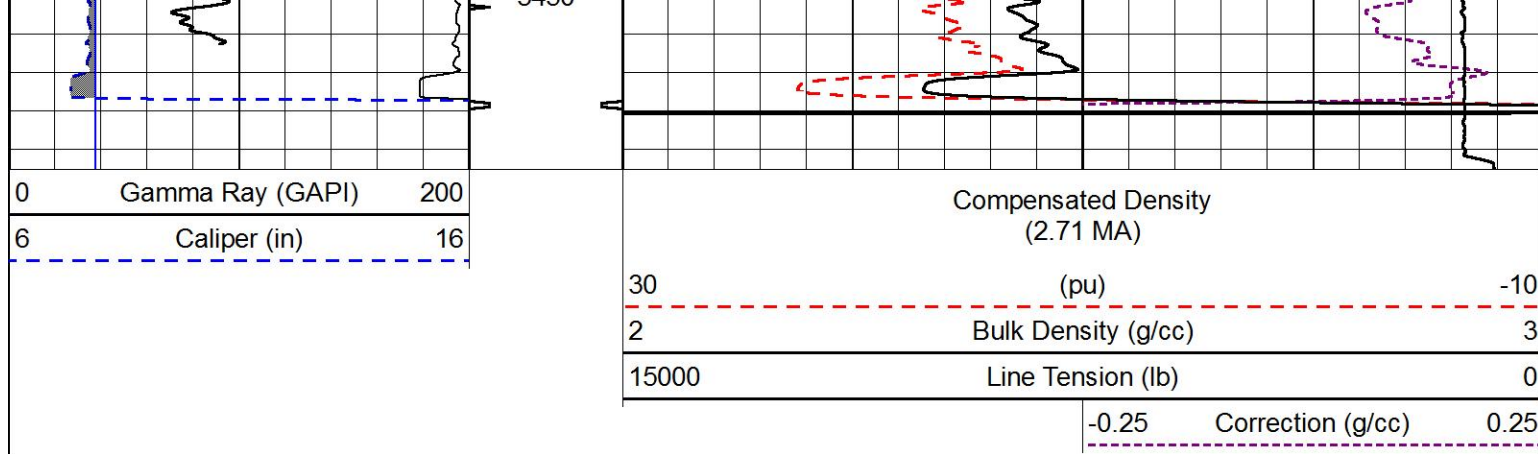
Sensor	Offset (ft)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb)
GR	33.00		GR-M&W (89)	3.00	3.50	50.00
CNLSC CNSSC	29.90 29.15		CNT-M&W (207-MW)	5.50	3.50	100.00
LSD DCAL SSD	20.85 20.83 20.35		CDL-M&W (90-1031)	8.50	4.00	250.00
RLL3F RLL3	15.80 15.80		DIL-M&W (PSI 13)	18.50	3.50	220.00
CILD	8.00					

CILM	4.70								
SP	0.20								
Dataset: rjm_fury farms_1.db: field/well/STACK/pass3.6 Total length: 35.50 ft Total weight: 620.00 lb O.D.: 4.00 in									

			MAIN PASS						
Database File	rjm_fury farms_1.db								
Dataset Pathname	STACK/pass3.6								
Presentation Format	cdl								
Dataset Creation	Thu Oct 06 06:54:13 2016								
Charted by	Depth in Feet scaled 1:600								
0	Gamma Ray (GAPI)	200							
6	Caliper (in)	16							
			Compensated Density (2.71 MA)						
			30 (pu) -10						
			2 Bulk Density (g/cc) 3						
			15000 Line Tension (lb) 0						
			-0.25 Correction (g/cc) 0.25						

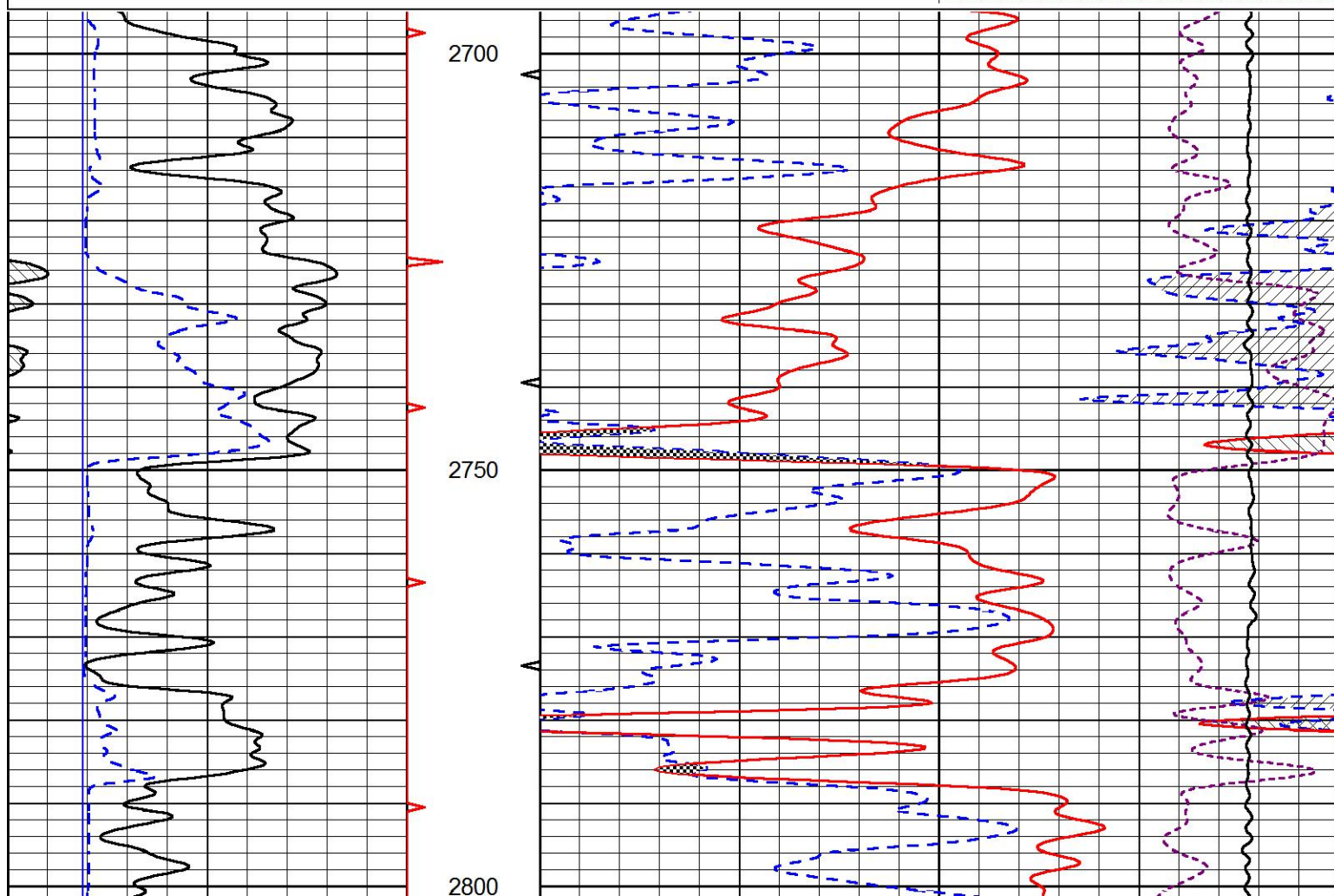
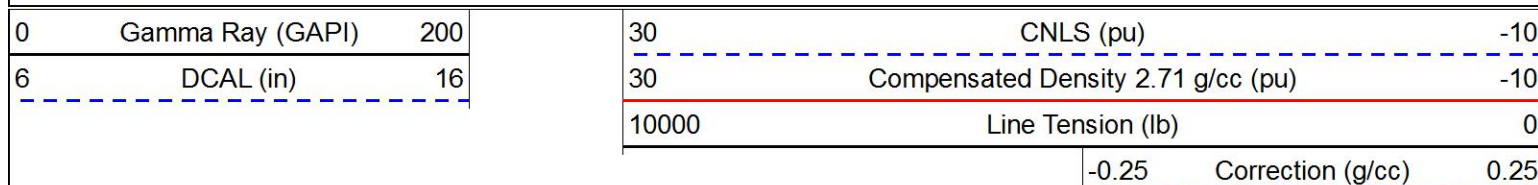


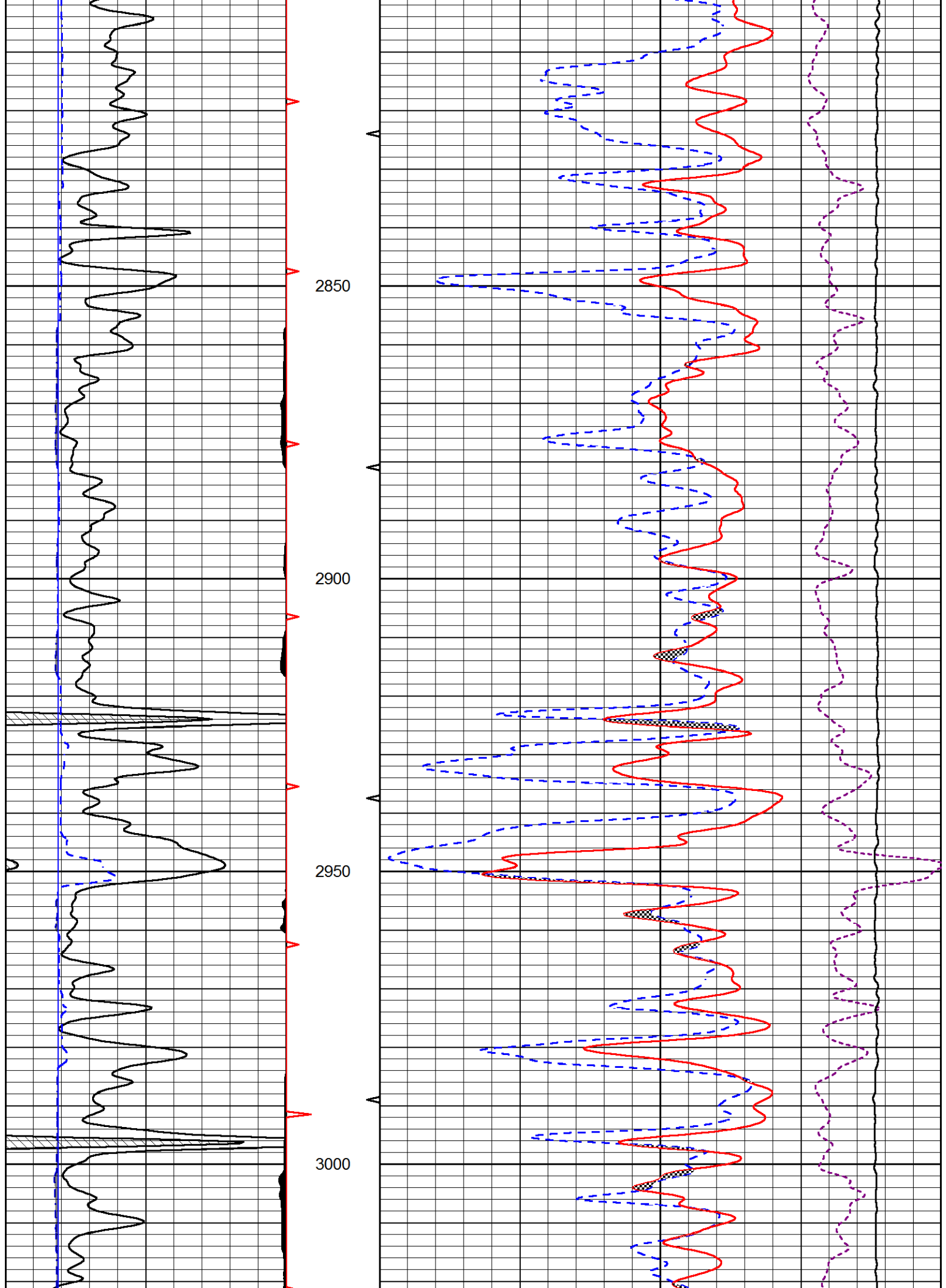


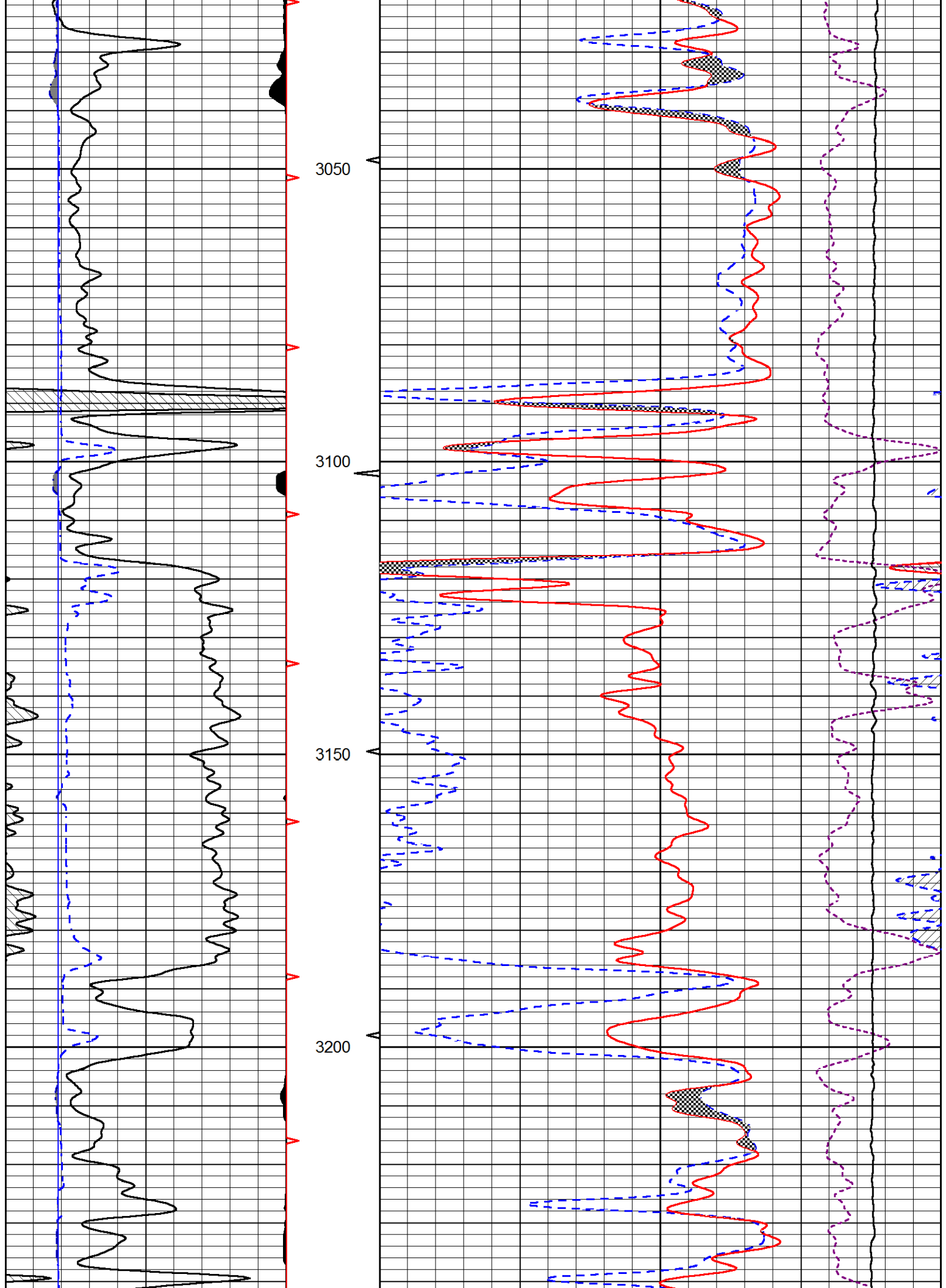


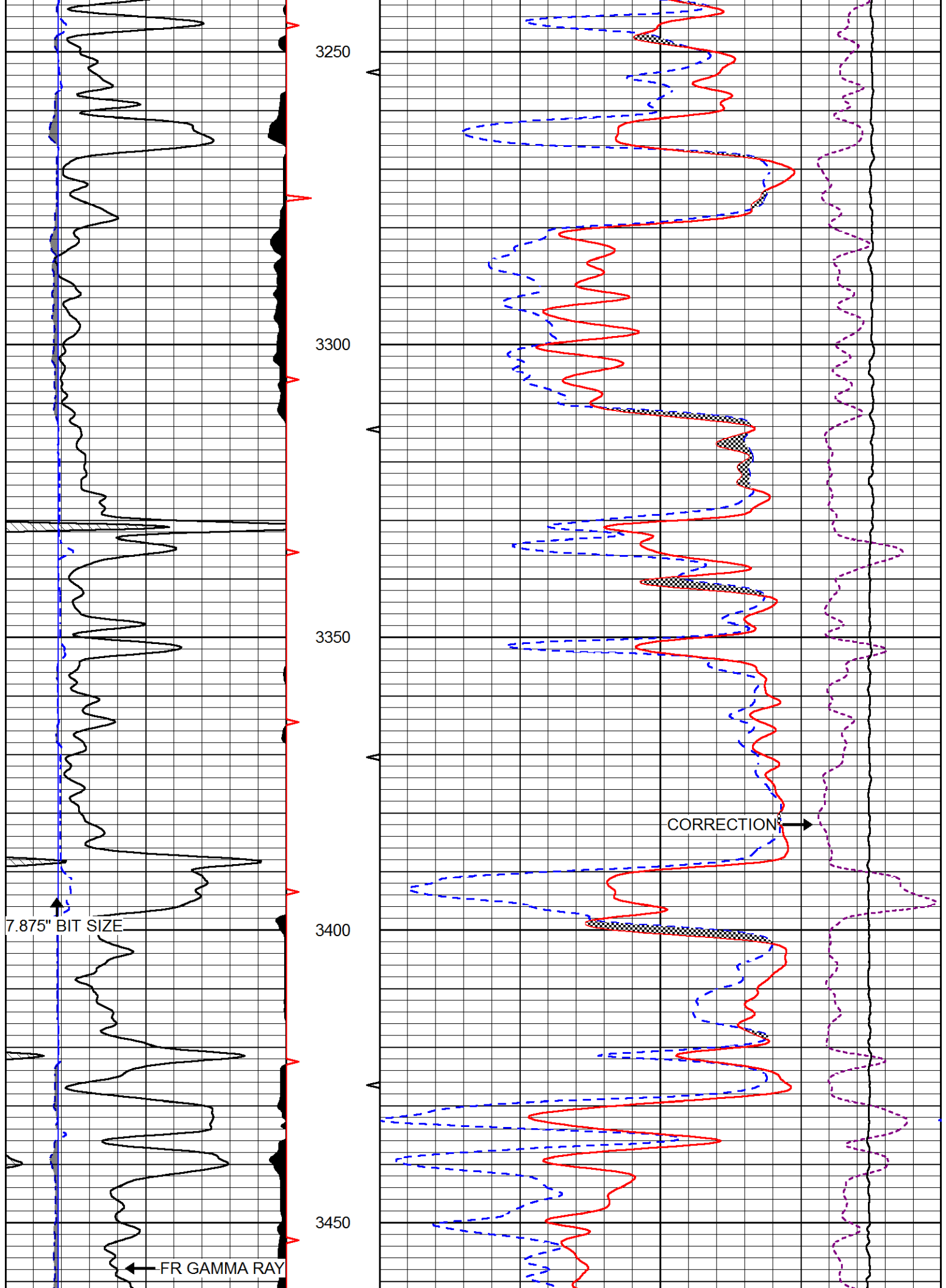
MAIN PASS

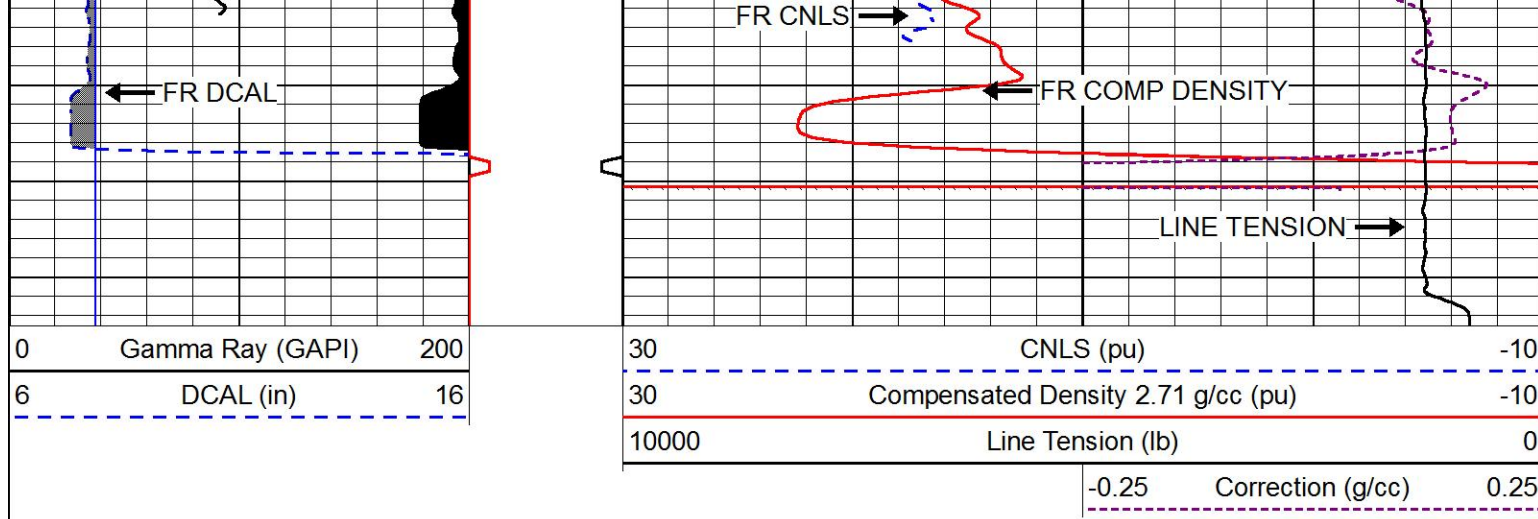
Database File rjm_fury farms_1.db
 Dataset Pathname STACK/pass3.6
 Presentation Format cndlspec
 Dataset Creation Thu Oct 06 06:54:13 2016
 Charted by Depth in Feet scaled 1:240





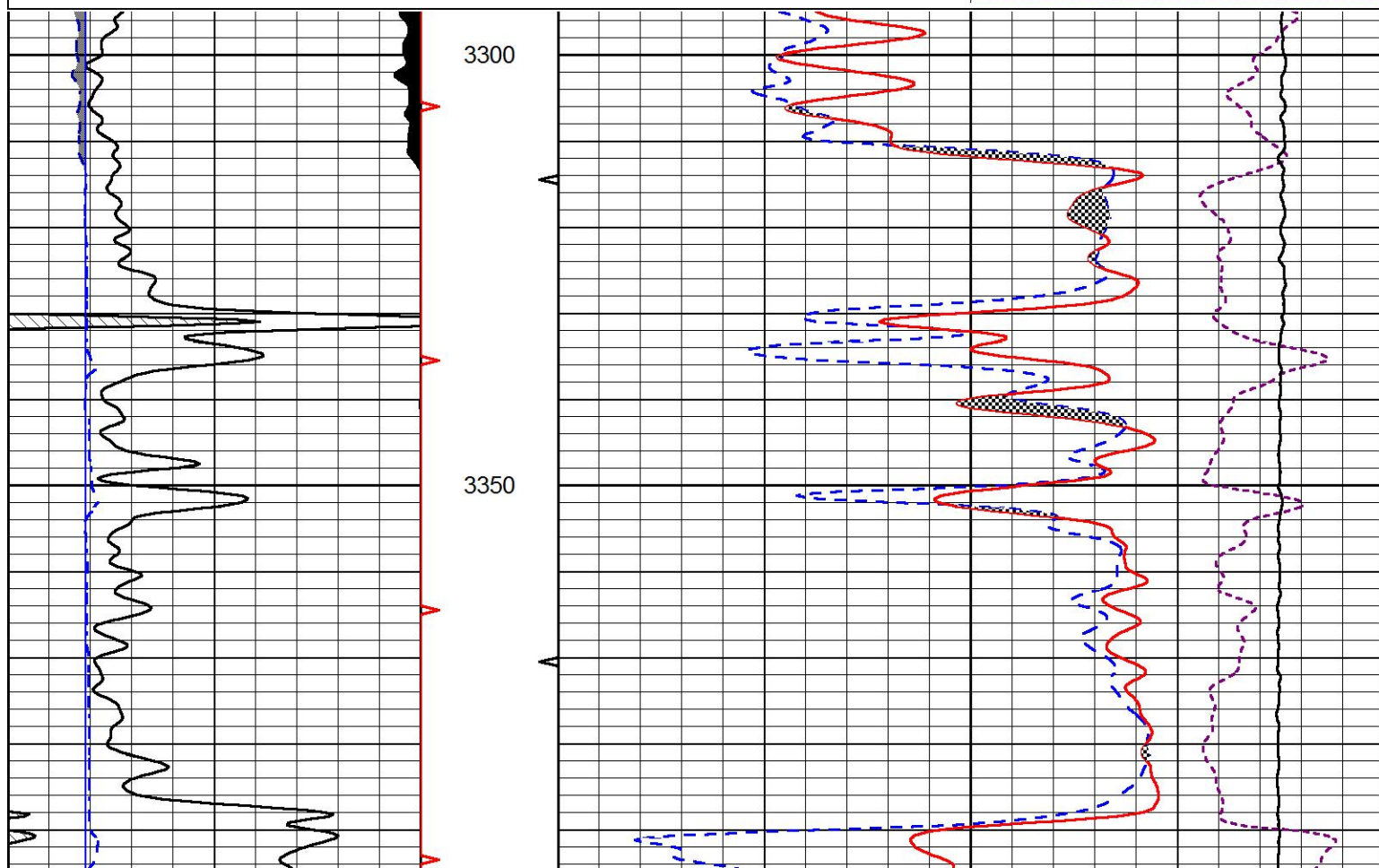
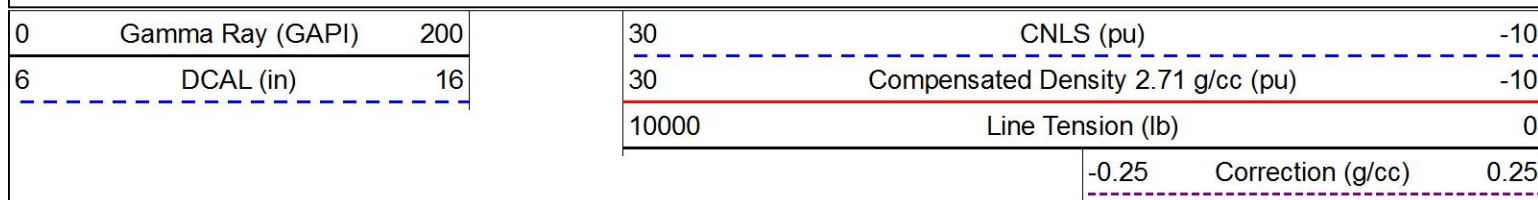


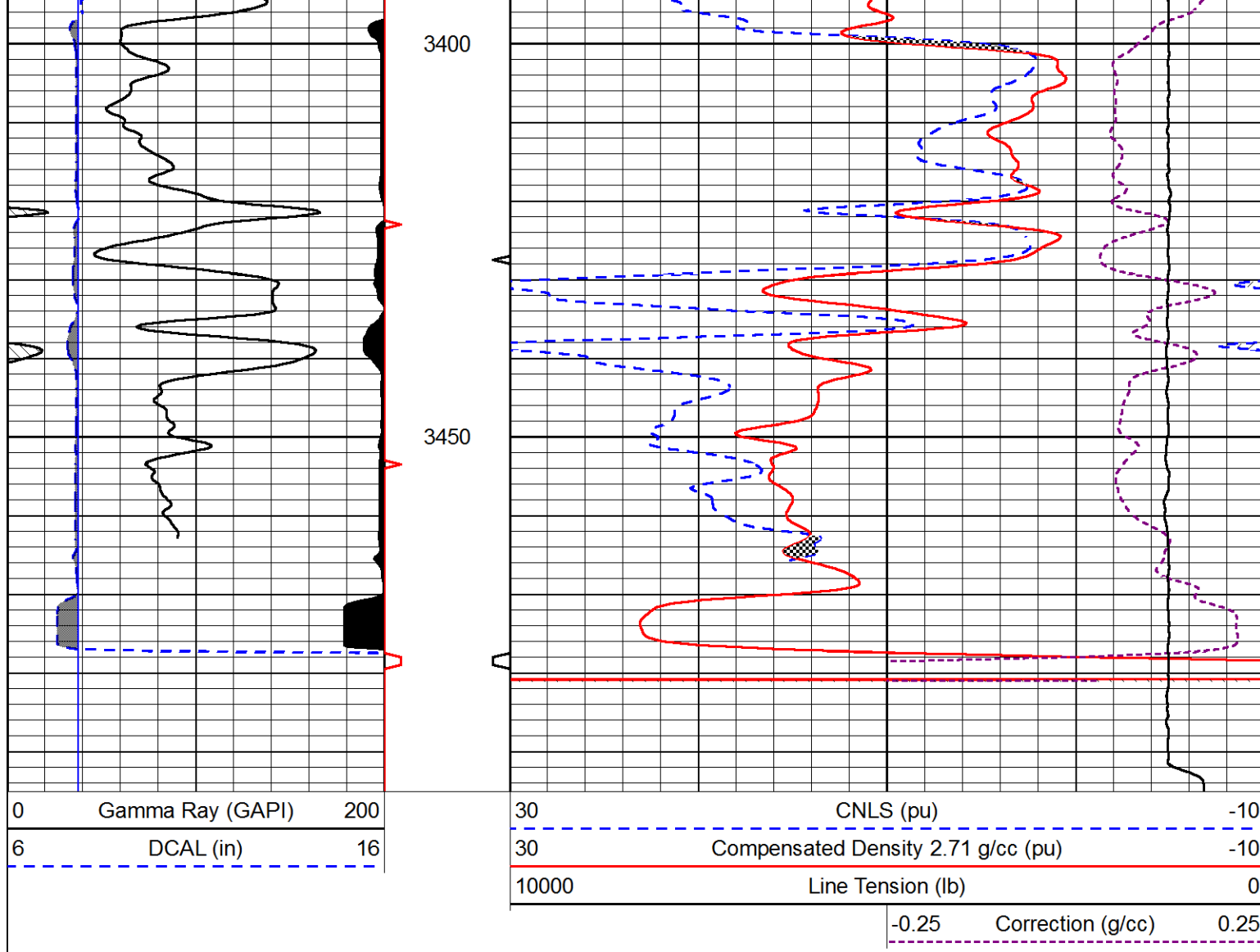




REPEAT SECTION

Database File: rjm_fury farms_1.db
 Dataset Pathname: STACK/pass2.3
 Presentation Format: cndlspec
 Dataset Creation: Thu Oct 06 06:58:44 2016
 Charted by: Depth in Feet scaled 1:240





Calibration Report

Database File rjm_fury farms_1.db
 Dataset Pathname STACK/pass3.6
 Dataset Creation Thu Oct 06 06:54:13 2016

Dual Induction Calibration Report

Serial-Model: PSI 13-M&W
 Calibration Performed: Thu Oct 06 06:17:37 2016

Loop:	Readings		References			Results	
	Air	Loop	Air	Loop		Gain	Offset
Deep	166.796	835.089	0.000	255.800	mmho/m	0.430	-29.000
Medium	142.009	1348.560	0.000	255.800	mmho/m	0.370	-29.000

Compensated Density Calibration Report

Serial-Model: 90-1031-M&W
 Source / Verifier: 16955B / 2ci
 Master Calibration Performed: Thu Sep 29 18:47:07 2016

Master Calibration

	Density			Far Detector		Near Detector
Magnesium	1.755	g/cc		5174.18		6425.27 cps
Aluminum	2.665	g/cc		963.17		4037.42 cps
Spine Angle = 74.55			Density/Spine Ratio = 0.522			
	Size			Reading		
Small Ring	6.00	in		1.83		
Large Ring	16.00	in		1.48		

Compensated Neutron Calibration Report
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Serial Number:	207-MW
Tool Model:	M&W
Calibration Performed:	Wed Sep 28 10:30:30 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	
Tool Model:	M&W	
Calibration Performed:	Thu Sep 29 18:47:18 2016	
Calibrator Value:	1.0	GAPI
Background Reading:	0.0	cps
Calibrator Reading:	1.0	cps
Sensitivity:	0.6500	GAPI/cps

	Company	RJM COMPANY
	Well	FURY FARMS #1
	Field	UNKNOWN
	County	BARTON
	State	KANSAS