



PIONEER

Pioneer Energy Services

DUAL COMP POROSITY LOG

Company **JOHN O FARMER, INC.**
Well **MCALLISTER UNIT #1**
Field **WALDO NORTHWEST**
County **RUSSELL** State **KANSAS**

Location: API #: 15-167-24084-00-00

Other Services

125' FNL & 2750' FWL
SEC 17 TWP 12S RGE 13W

DIL
MEL

Permanent Datum GROUND LEVEL Elevation 1757'
Log Measured From KELLY BUSHING
Drilling Measured From KELLY BUSHING

Elevation
K.B. 1765'
D.F. N/A
G.L. 1757'

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Date 11/12/2018

Run Number ONE

Type Log CNL/CDL

Depth Driller 3155'

Depth Logger 3155'

Bottom Logged Interval 3126'

Top Logged Interval 2600'

Type Fluid In Hole CHEMICAL

Salinity, PPM CL 6000

Density 9.0

Level FULL

Max. Rec. Temp. F 108 DEG/F

Operating Rig Time 3 HOURS

Equipment -- Location 108 HAYS

Recorded By J. HENRICKSON

Witnessed By JASON ALM

Borehole Record

Casing Record

Run No.	Bit	From	To	Size	Wgt.	From	To
ONE	12.25"	0	221'	8.625"	23#	0	221'
TWO	7.875"	221'	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.

RUSSELL KANSAS
SOUTH TO LAND ROAD, NORTH AND EAST TO BEATTY ROAD,
3/4 EAST, SOUTH 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: J. HENRICKSON
Operator:
Operator:
Operator:

This Log Record Was Witnessed By

Primary Witness: JASON ALM
Secondary Witness:
Secondary Witness:
Secondary Witness:

Top - Bottom

A	BOREID	BOTTEMP	CASEOD	CASETHCK	FLUIDDEN	M	MATRXDEN
1	in 7.875	degF 108	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 -30	degF 27	Off	ft 3155

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 DCAL SSD	28.43 28.42 27.93			CDL-M&W (817-947)	8.50	4.00	250.00
MCAL MI MN	19.83 19.83 19.83			ML-PSI STKBL ML (PSI-01) 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: john_o_farmer_mcallister_unit_1.db: field/well/stack/pass3.1
Total length: 43.08 ft
Total weight: 685.00 lb
O.D.: 4.00 in

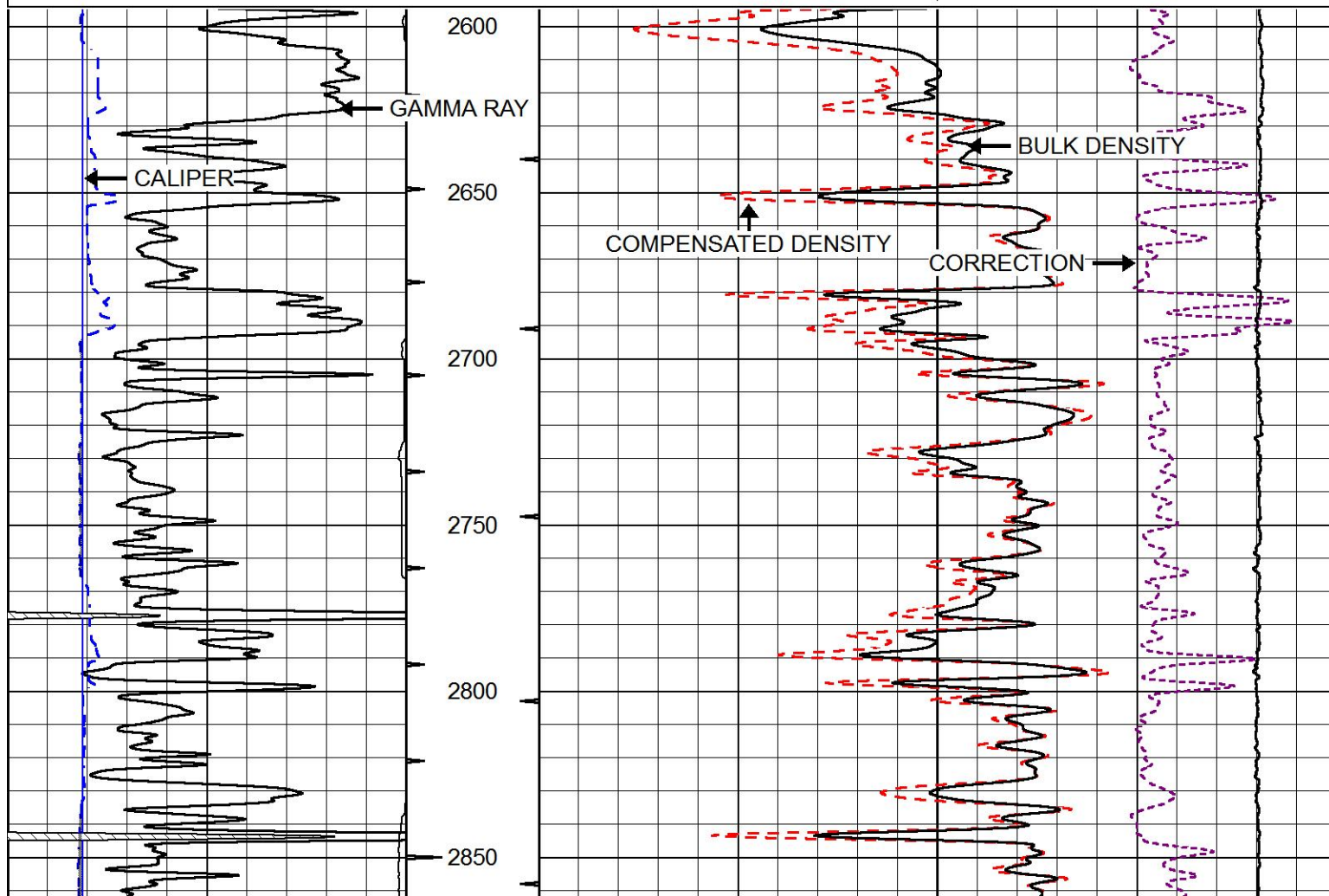


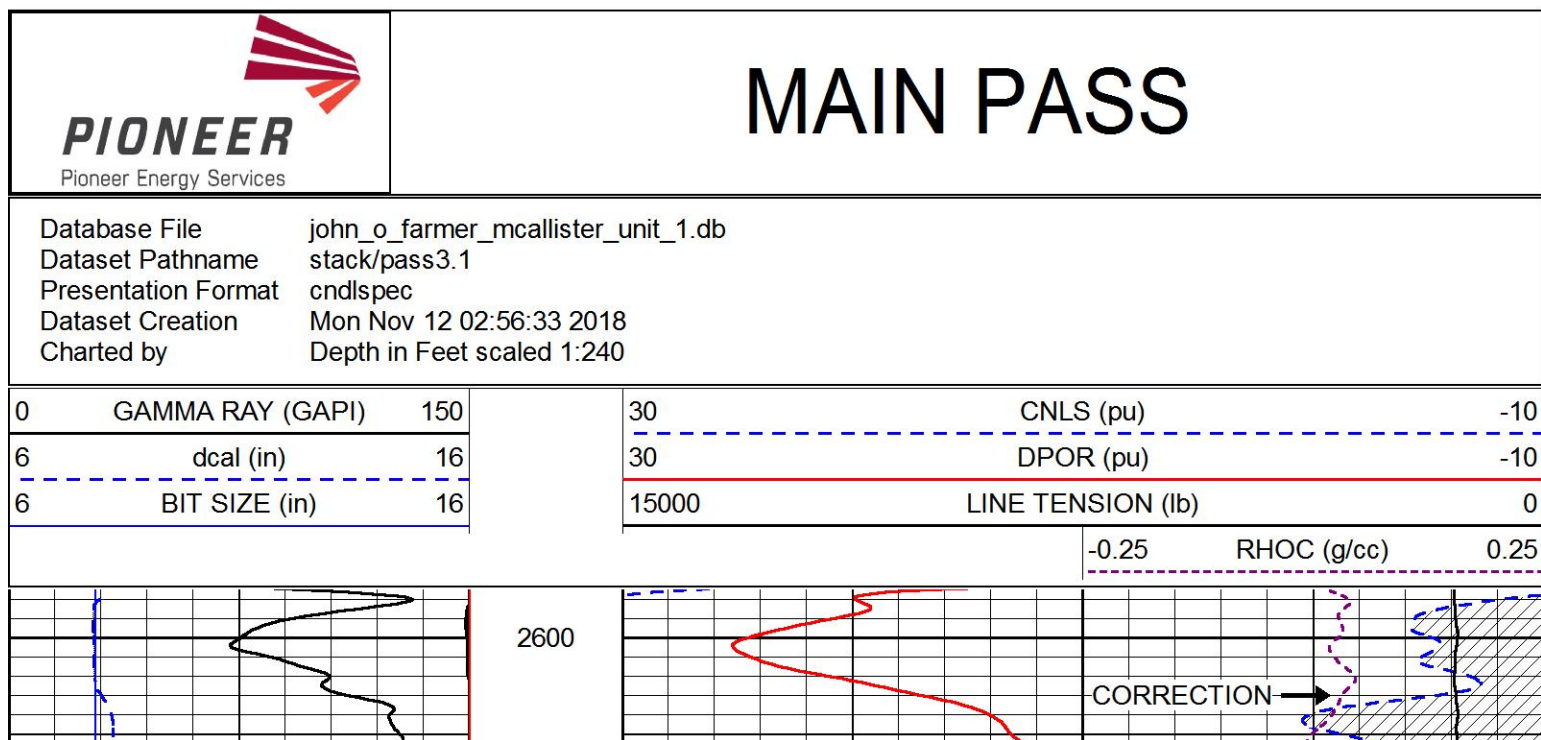
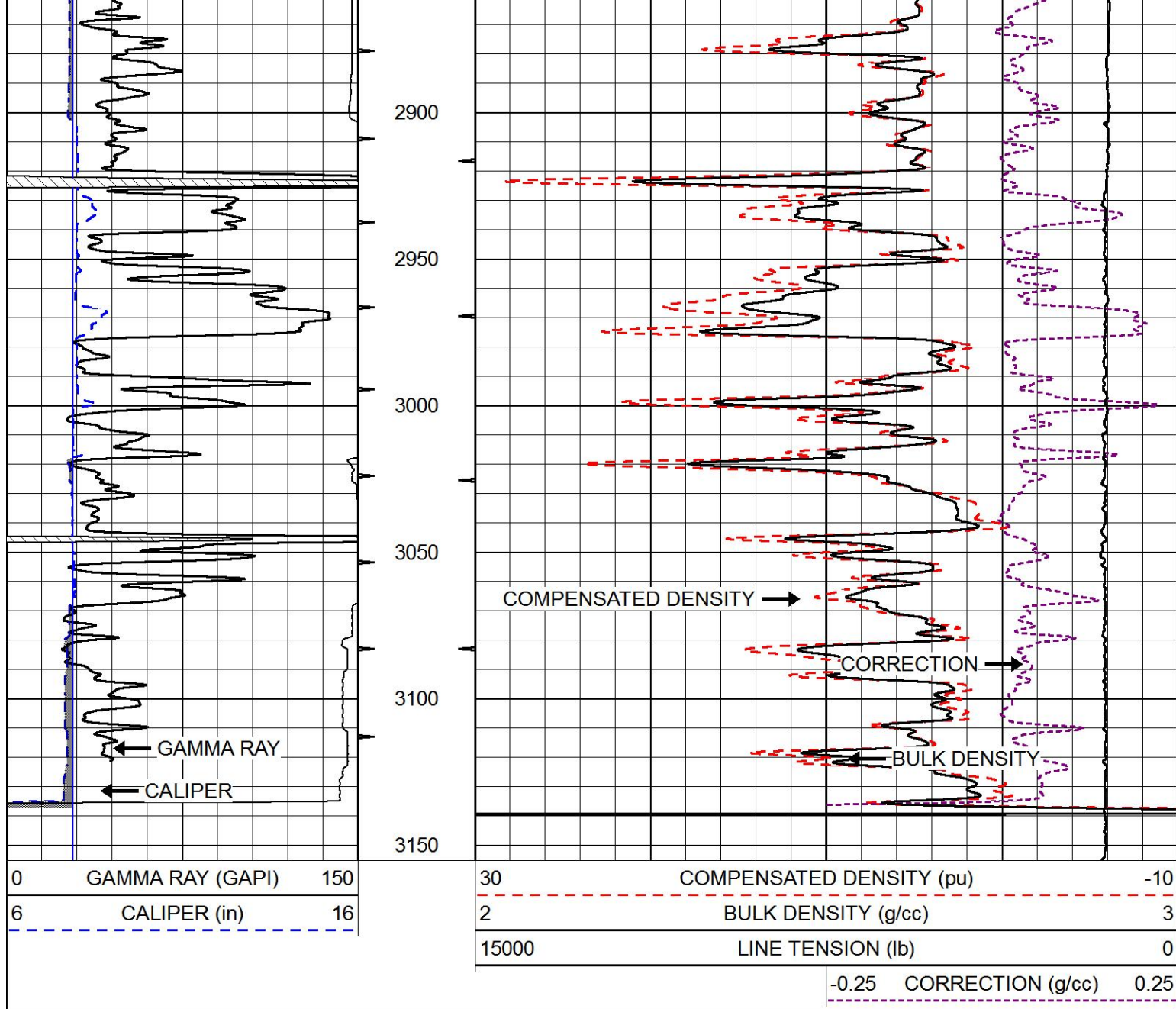
MAIN PASS

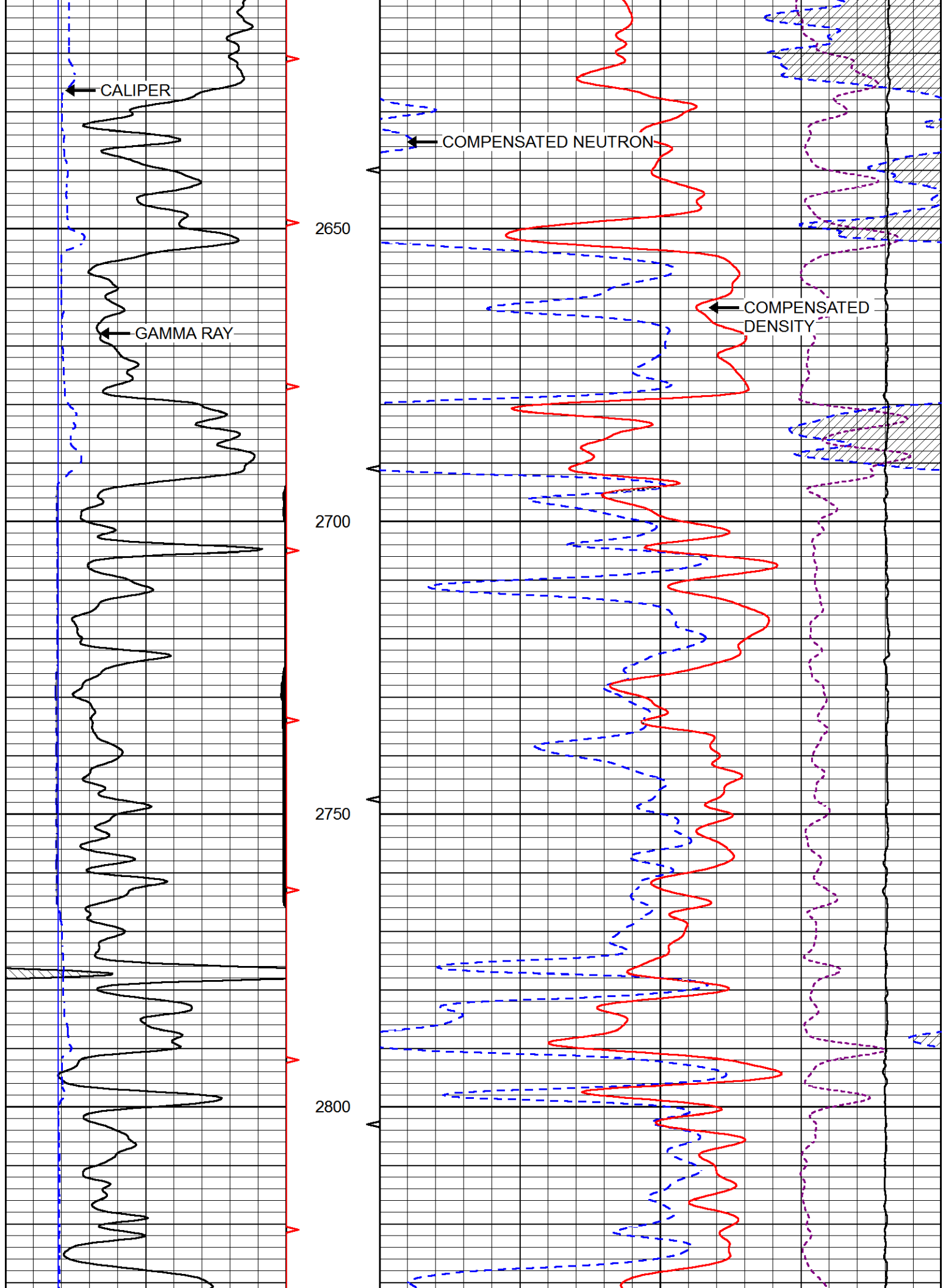
Database File john_o_farmer_mcallister_unit_1.db
Dataset Pathname stack/pass3.1
Presentation Format cdl
Dataset Creation Mon Nov 12 02:56:33 2018
Charted by Depth in Feet scaled 1:600

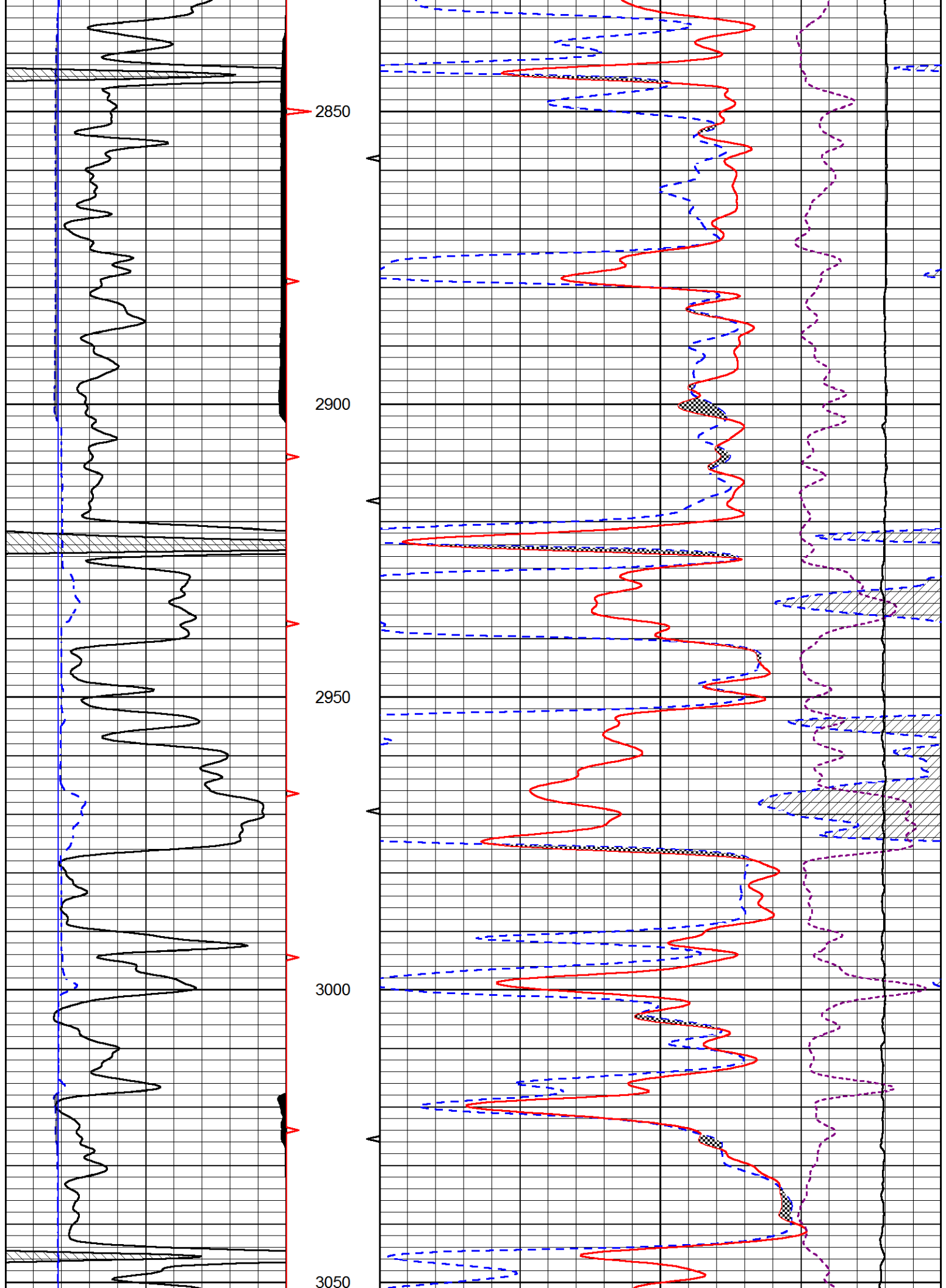
0 GAMMA RAY (GAPI) 150
6 CALIPER (in) 16

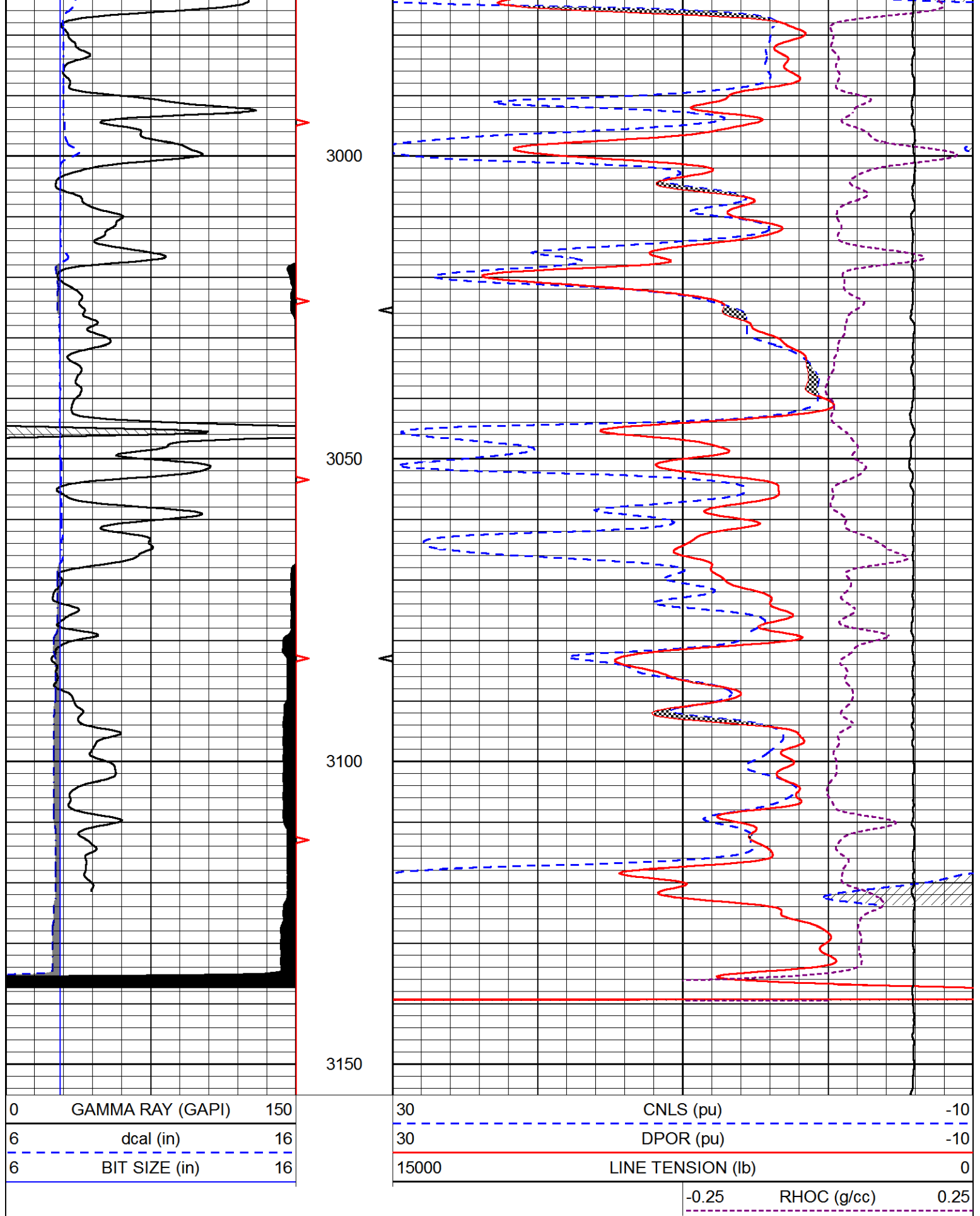
30 COMPENSATED DENSITY (pu) -10
2 BULK DENSITY (g/cc) 3
15000 LINE TENSION (lb) 0
-0.25 CORRECTION (g/cc) 0.25











Calibration Report

Database File john_o_farmer_mcallister_unit_1.db
Dataset Pathname stack/pass3.1
Dataset Creation Mon Nov 12 02:56:33 2018

Dual Induction Calibration Report

Serial-Model: 1987-M&W
 Calibration Performed: Thu Aug 09 22:42:18 2018

Loop:	Readings		References			Results	
	Air	Loop	Air	Loop		Gain	Offset
Deep	178.615	710.235	0.000	255.800	mmho/m	0.550	-36.500
Medium	161.982	1441.110	0.000	255.800	mmho/m	0.400	-110.500

Microlog Calibration Report

Serial-Model: PSI-01-PSI STKBL ML
 Performed: Thu Mar 31 18:14:32 2016

	Readings		References			Results	
	Zero	Cal	Zero	Cal		m	b
Normal	0.0000	1.0000	0.0000	1.0000	Ohm-m	33500.0000	-1.0000
Inverse	0.0000	1.0000	0.0000	1.0000	Ohm-m	31500.0000	-1.0000
Caliper	1.0001	1.1397	6.5000	18.5000	in	86.0000	-82.4800

Compensated Density Calibration Report

Serial-Model: 817-947-M&W
 Source / Verifier: /
 Master Calibration Performed: Thu Nov 08 10:59:41 2018

Master Calibration

	Density			Far Detector		Near Detector	
Magnesium	1.755	g/cc		5524.90		5328.23	cps
Aluminum	2.675	g/cc		1020.59		3369.54	cps
Spine Angle = 74.82				Density/Spine Ratio = 0.526			
	Size			Reading			
Small Ring	4.00	in		1.02			
Large Ring	14.00	in		1.15			

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 17:08:01 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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