



MICRORESISTIVITY LOG

PIONEER
Pioneer Energy Services

Company **BENNETT & SCHULTE OIL CO.**
Well **KUHLMAN #14-1**
Field **N/A**
County **BARTON**
State **KANSAS**

Company **BENNETT & SCHULTE OIL CO.**
Well **KUHLMAN #14-1**
Field **N/A**
County **BARTON** State **KANSAS**

Location: API #: 15-009-26167-00-00
1055' FSL & 2193' FEL
SEC 14 TWP 18S RGE 15W
Permanent Datum **GROUND LEVEL** Elevation **1926'**
Log Measured From **KELLY BUSHING**
Drilling Measured From **KELLY BUSHING**
Other Services
RAG
Elevation
K.B. 1932'
D.F. N/A
G.L. 1926'

Date	4/15/2017
Run Number	TWO
Depth Driller	3600'
Depth Logger	3600'
Bottom Logged Interval	3599'
Top Log Interval	2800'
Casing Driller	8.625" @ 950'
Casing Logger	948'
Bit Size	7.875"
Type Fluid in Hole	CHEMICAL
Salinity, ppm CL	4000
Density / Viscosity	9.5 52
pH / Fluid Loss	9.5 10.2
Source of Sample	FLOWLINE
Rm @ Meas. Temp	0.55 @ 80
Rmt @ Meas. Temp	0.41 @ 80
Rmc @ Meas. Temp	0.74 @ 80
Source of Rmt / Rmc	CHARTS
Rm @ BHT	0.39 @ 112
Operating Rig Time	3 HOURS
Max Rec. Temp. F	112
Equipment Number	91
Location	COLBY
Recorded By	D. SCHMIDT
Witnessed By	BOB HOPKINS

<<< 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.

OLMITZ,
2 1/2 SOUTH, 1/2 WEST,
NORTH INTO

Log Measured From: **KELLY BUSHING** 6 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: **BOB HOPKINS**
Secondary Witness:
Secondary Witness:
Secondary Witness:

Top - Bottom

SPSHIFT mV 10	AIR_HOLE? No	NPORSEL Limestone	MudWgt lb/gal 9.5	SRFTEMP degF 0	CASETHCK in 0	CASEOD in 5.5	PERFS 0
TDEPTH ft 0	BOTTEMP degF 100	BOREID in 7.875					

Sensor	Offset (ft)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb)
MCAL MI MN	1.00		ML-Armadillo (ARM001) Pengo Mandrel & Armadillo ML Electronics (2014)	5.50	3.50	100.00
	1.00					
	1.00					
	1.00					

Dataset: bennet schulte_kuhlman_14-1.db: field/well/MEL/pass2

Total length: 5.50 ft

Total weight: 100.00 lb

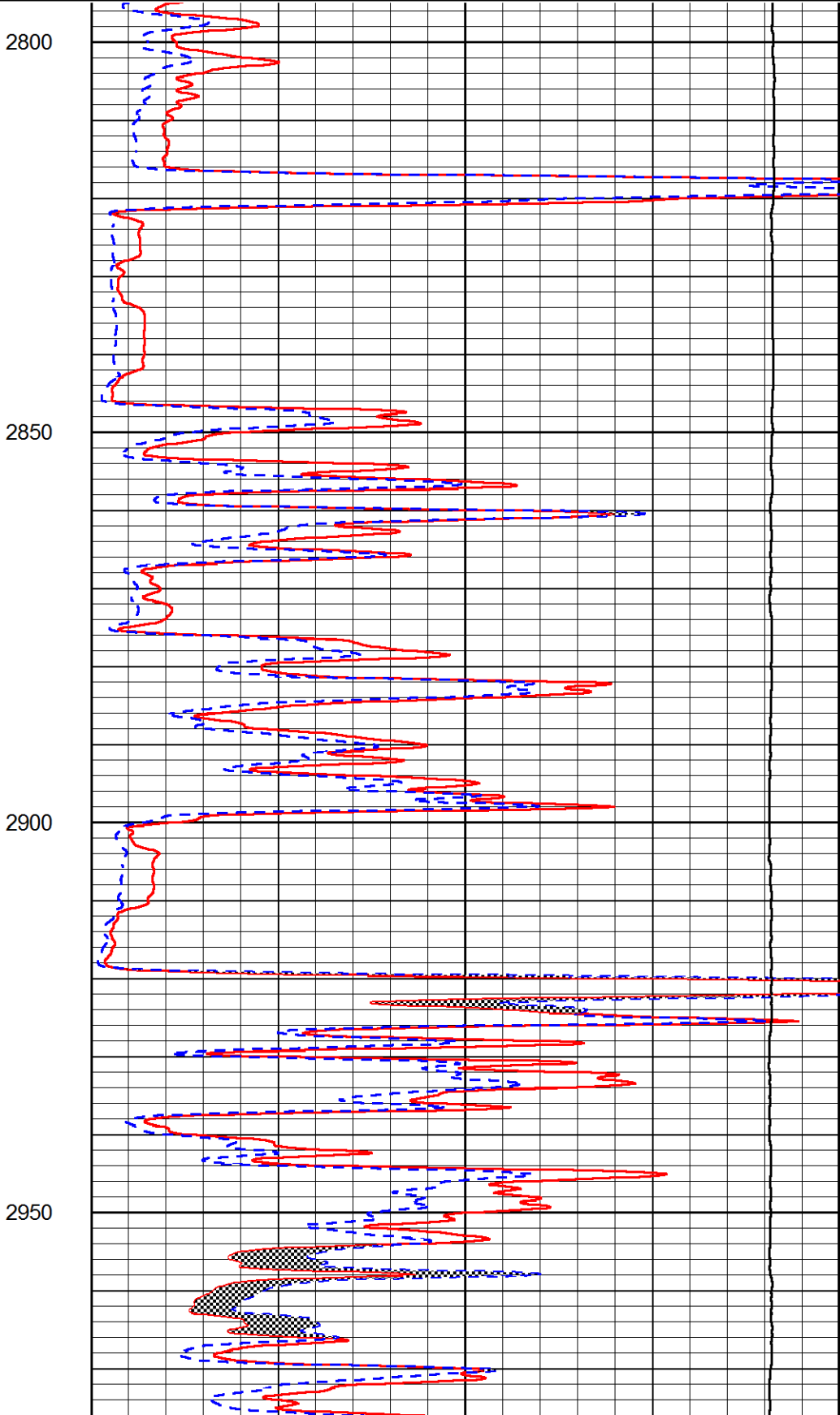
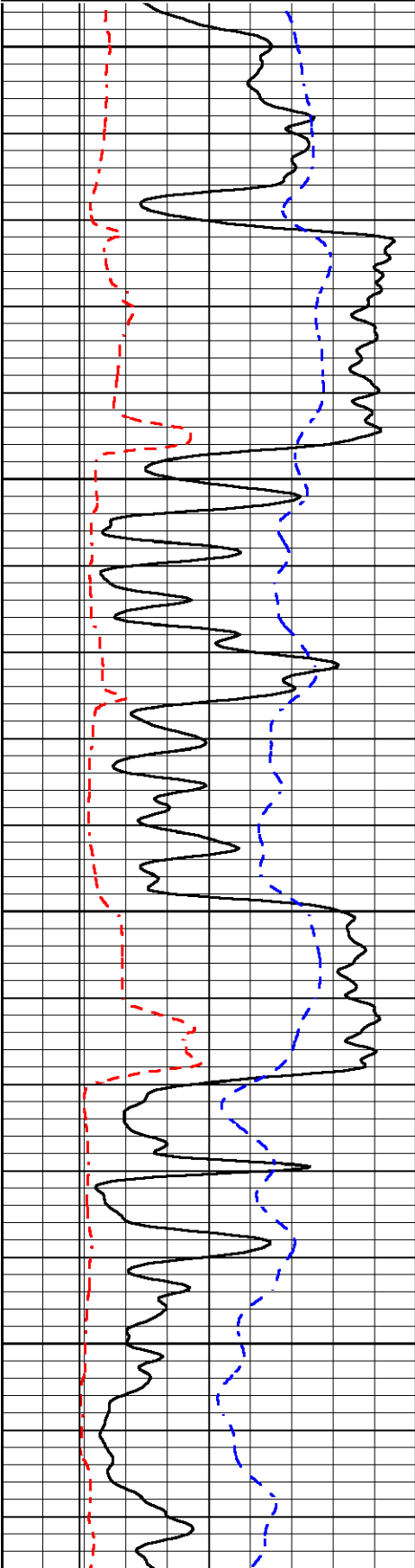
O.D.: 3.50 in

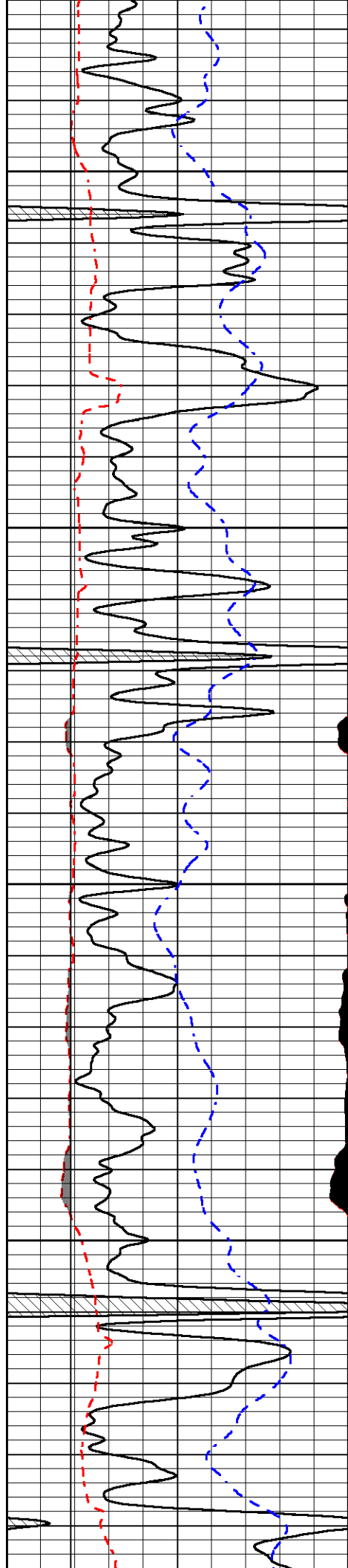


MAIN PASS

0	Gamma Ray (GAPI)	150
6	MCAL (in)	16
2.875	mcals (in)	7.875
6	Bit Size (in)	16
-200	SP (mV)	0

0	Micro Inverse 1 X 1 (Ohm-m)	40
0	Micro Normal 2" (Ohm-m)	40
10000	Line Weight (lb)	0



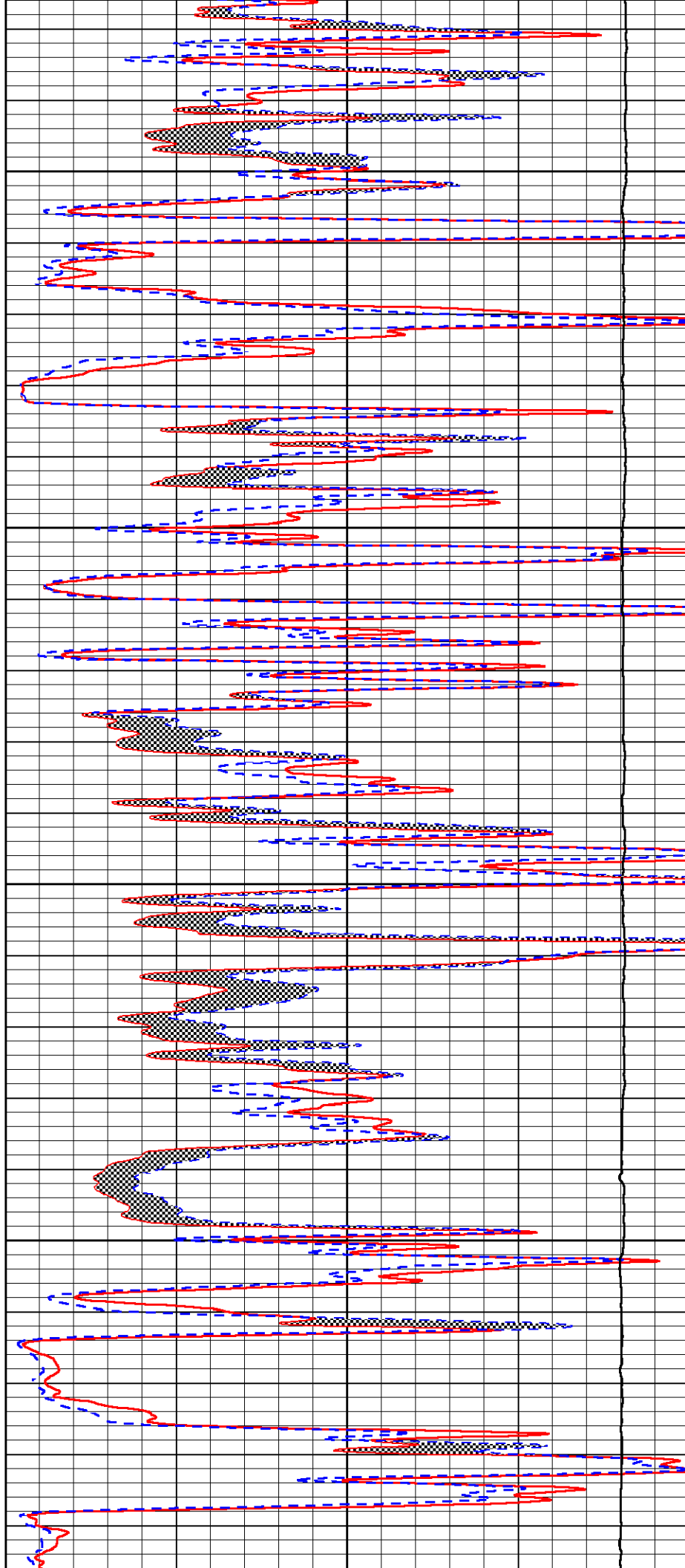


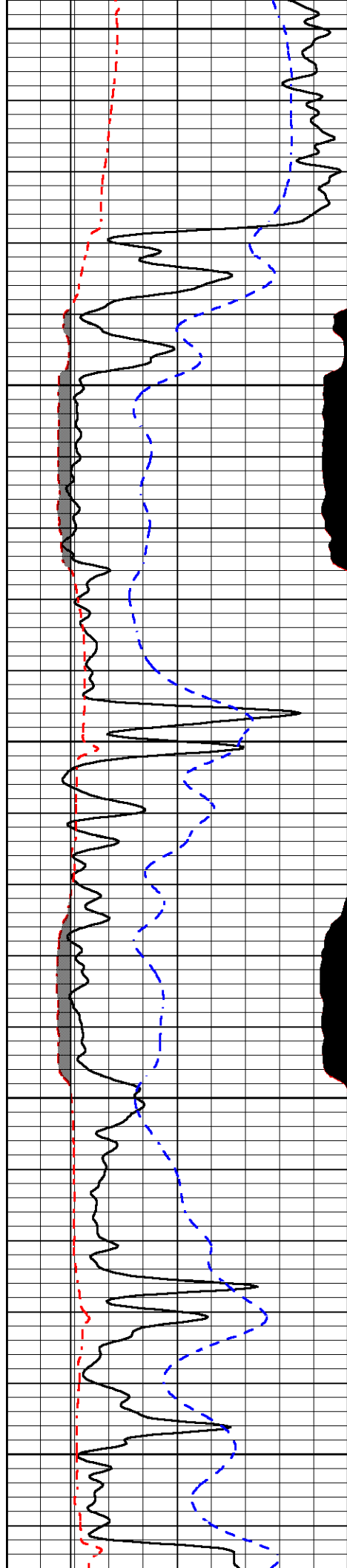
3000

3050

3100

3150





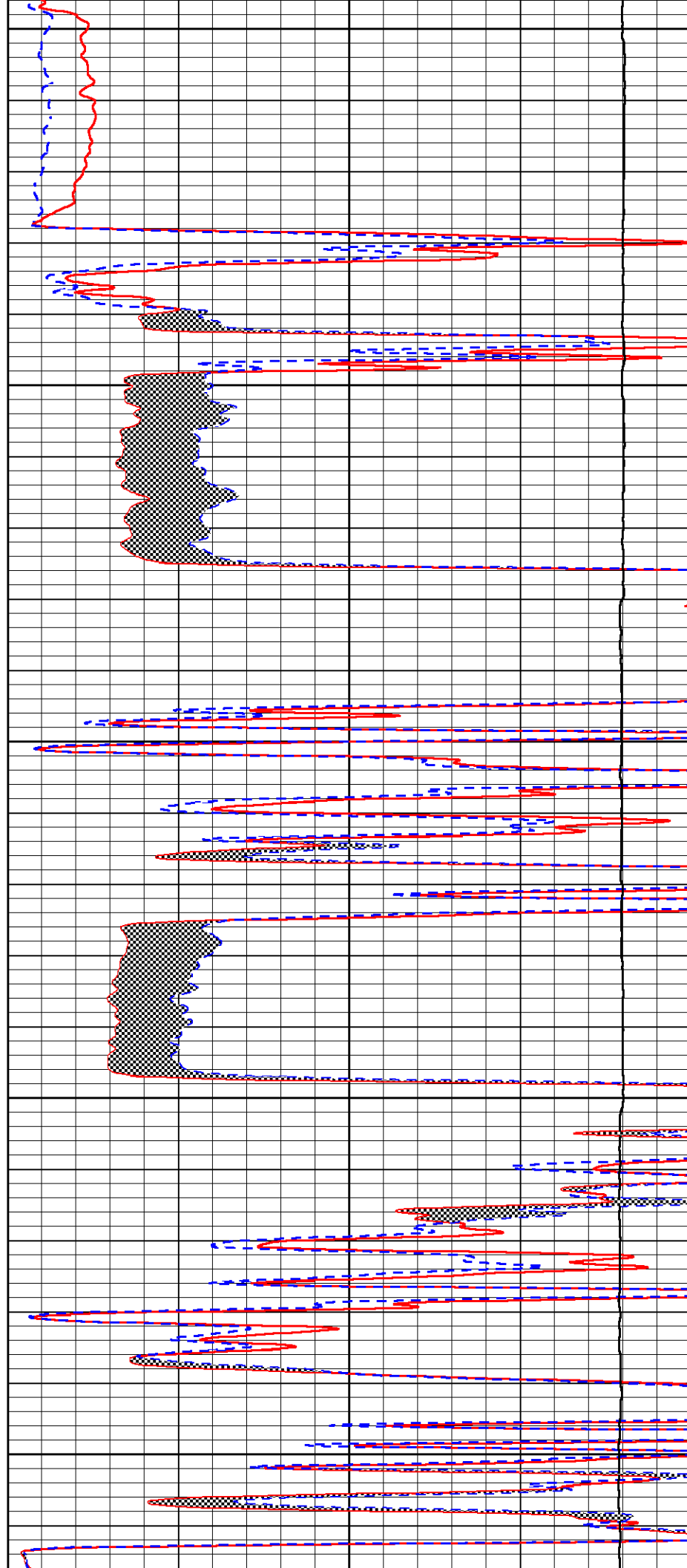
3200

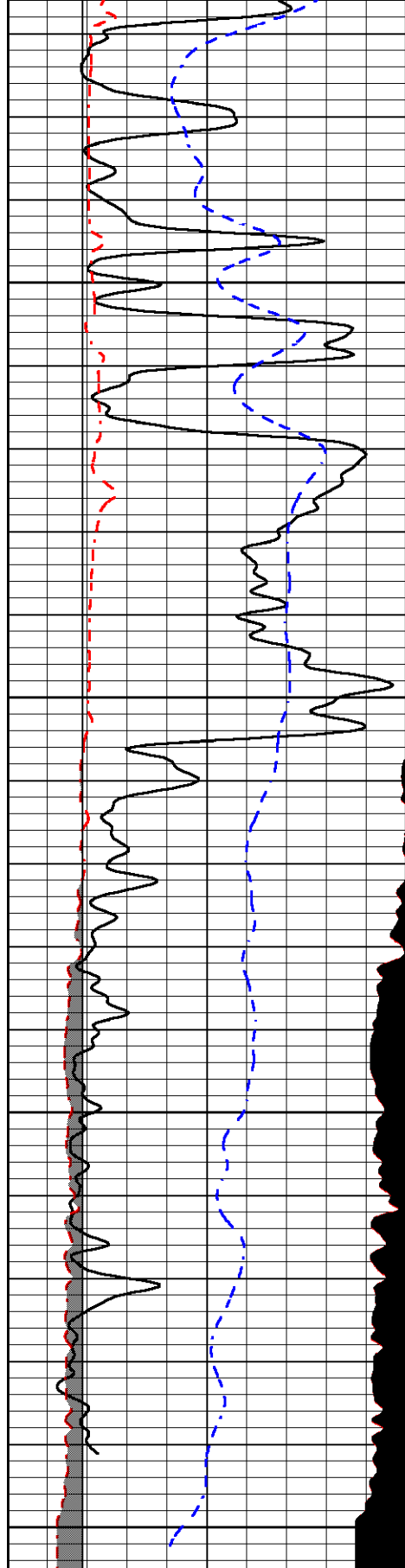
3250

3300

3350

3400





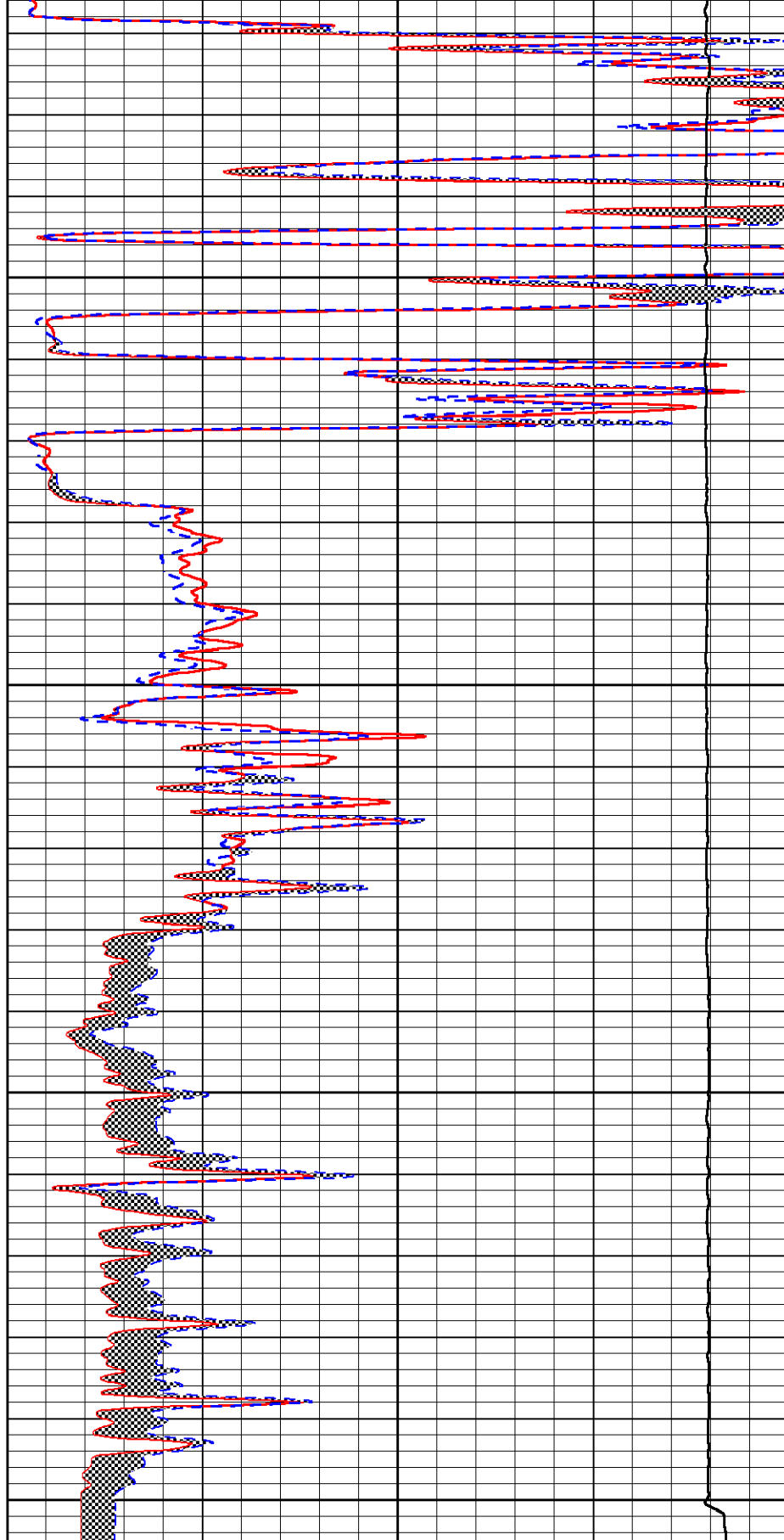
0	Gamma Ray (GAPI)	150
6	MCAL (in)	16
2.875	mcal (in)	7.875
6	Bit Size (in)	16
-200	SP (mV)	0

3450

3500

3550

3600



0	Micro Inverse 1 X 1 (Ohm-m)	40
0	Micro Normal 2" (Ohm-m)	40
10000	Line Weight (lb)	0

PIONEER

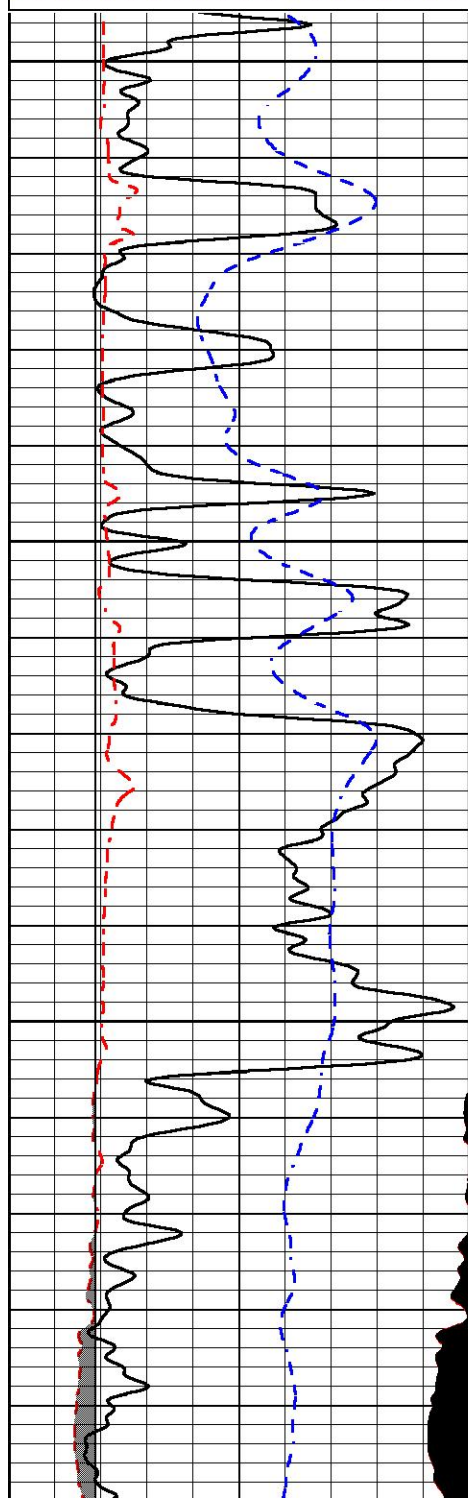
Pioneer Energy Services

REPEAT SECTION

Database File bennet schulte_kuhlman_14-1.db
Dataset Pathname RAG/pass2.1
Presentation Format micro
Dataset Creation Sat Apr 15 16:33:40 2017
Charted by Depth in Feet scaled 1:240

0	Gamma Ray (GAPI)	150
6	MCAL (in)	16
2.875	mcals (in)	7.875
6	Bit Size (in)	16
-200	SP (mV)	0

0	Micro Inverse 1 X 1 (Ohm-m)	40
0	Micro Normal 2" (Ohm-m)	40
10000	Line Weight (lb)	0

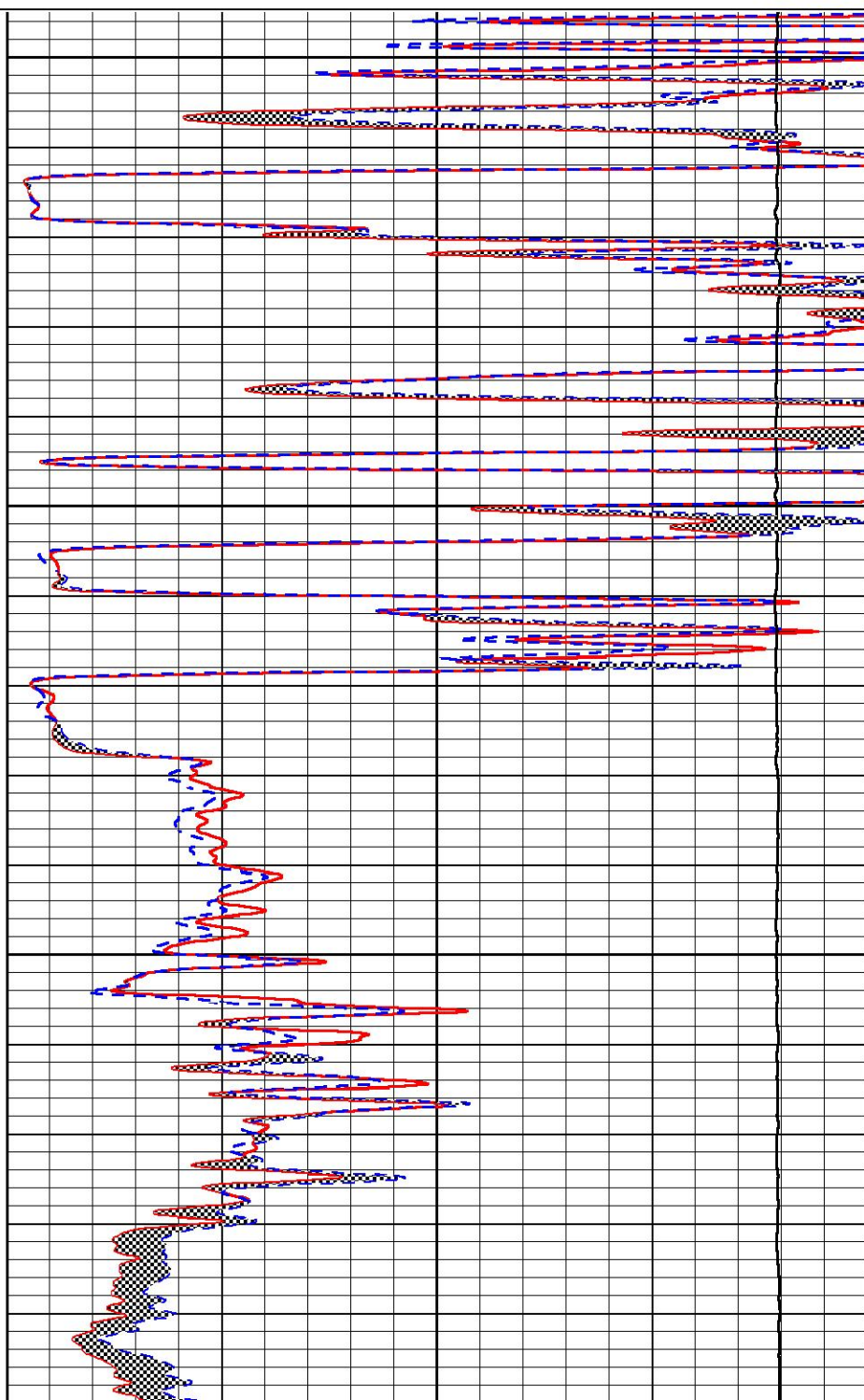


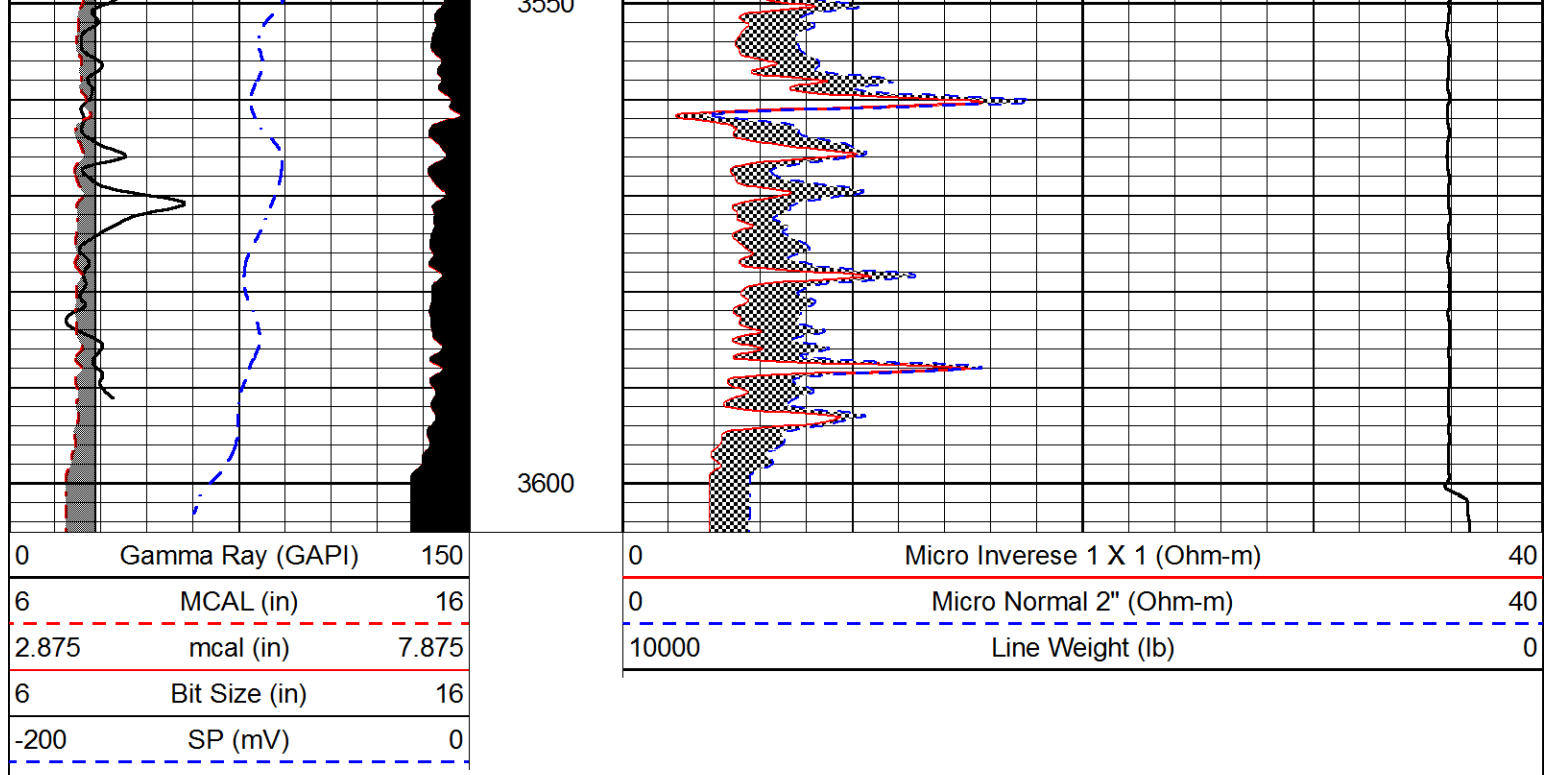
3400

3450

3500

3550





Calibration Report				
Database File	bennet schulte_kuhlman_14-1.db			
Dataset Pathname	RAG/pass3.4			
Dataset Creation	Sat Apr 15 16:32:28 2017			
Sidewall Neutron Calibration Report				
Serial Number:		SP162-87		
Tool Model:		M&W-SP		
SWN Calibration		Mon Aug 08 12:41:49 2016		
Readings	Target	Normalization		
2566.42 cps	1085.00 cps	0.5300		
Caliper Calibration		Mon Aug 08 12:41:49 2016		
Readings	Reference	Gain	Offset	
0.86	4.00	-24.00	21.38	
0.26	14.00			
Gamma Ray Calibration Report				
Serial Number:		89		
Tool Model:		M&W		
Calibration Performed:		Fri Mar 31 18:42:32 2017		
Calibrator Value:		1.0	GAPI	
Background Reading:		0.0	cps	
Calibrator Reading:		1.0	cps	
Sensitivity:		0.6000	GAPI/cps	

Calibration Report				
Database File	bennet schulte_kuhlman_14-1.db			
Dataset Pathname	MEL/pass2			
Dataset Creation	Sat Apr 15 17:14:10 2017			

Microlog Calibration Report

Serial-Model:
Performed:ARM001-Armadillo
Sat Apr 08 14:33:28 2017

Readings

References

Results

Zero

Cal

Zero

Cal

m

b

Normal	0.0127	0.6730	V	0.0000	10.0000	Ohm-m	21.5000	-1.8000
Inverse	0.0029	0.8729	V	0.0000	10.0000	Ohm-m	18.0000	-1.0000
Caliper	1.1319	8.2966	V	6.0000	19.0000	in	3.0000	1.0000



Company	BENNETT & SCHULTE OIL CO.
Well	KUHLMAN #14-1
Field	N/A
County	BARTON
State	KANSAS