



PIONEER
Pioneer Energy Services

MICRORESISTIVITY 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

CNL/CDL
DIL

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'

Date	4/27/17		
Run Number	ONE		
Depth Driller	4395'		
Depth Logger	4396'		
Bottom Logged Interval	4395'		
Top Log Interval	3400'		
Casing Driller	8.625" @ 213'		
Casing Logger	215'		
Bit Size	7.875"		
Type Fluid in Hole	CHEMICAL		
Salinity, ppm CL	3,000		
Density / Viscosity	8.6 60		
pH / Fluid Loss	10.5 7.2		
Source of Sample	FLOWLINE		
Rm @ Meas. Temp	.85 @ 53		
Rmt @ Meas. Temp	.64 @ 53		
Rmc @ Meas. Temp	1.15 @ 53		
Source of Rmt / Rmc	CHARTS		
Rm @ BHT	.38 @ 120		
Operating Rig Time	2 HOURS		
Max Rec. Temp. F	120 DEGF		
Equipment Number	108		
Location	HAYS		
Recorded By	J. HENRICKSON		
Witnessed By	ANDREW MOORE		

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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.pioneerres.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**

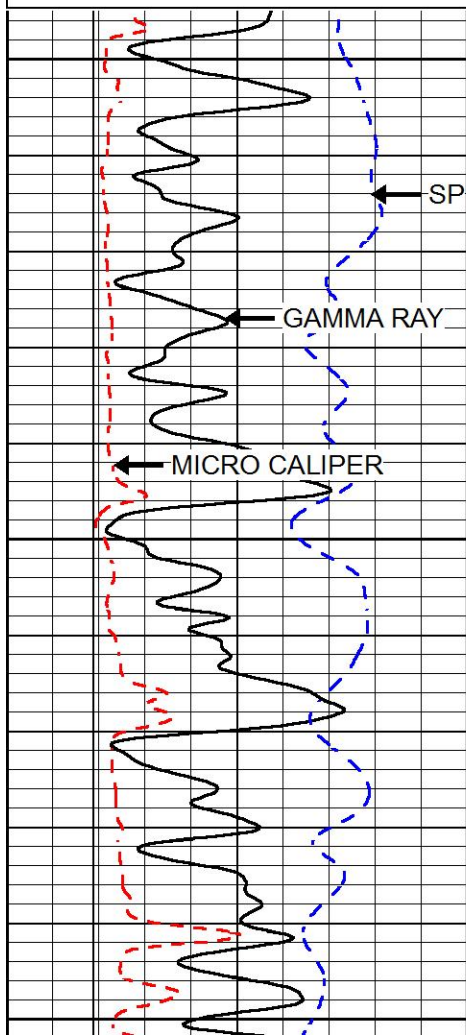
Pioneer Energy Services

MAIN PASS

Database File berexco_bisagno_1_14_owwo.db
Dataset Pathname stackml/pass2.1
Presentation Format micro
Dataset Creation Thu Apr 27 05:43:37 2017
Charted by Depth in Feet scaled 1:240

0	GAMMA RAY (GAPI)	150
6	MICRO CALIPER (in)	16
6	BIT SIZE (in)	16
-200	SP (mV)	0

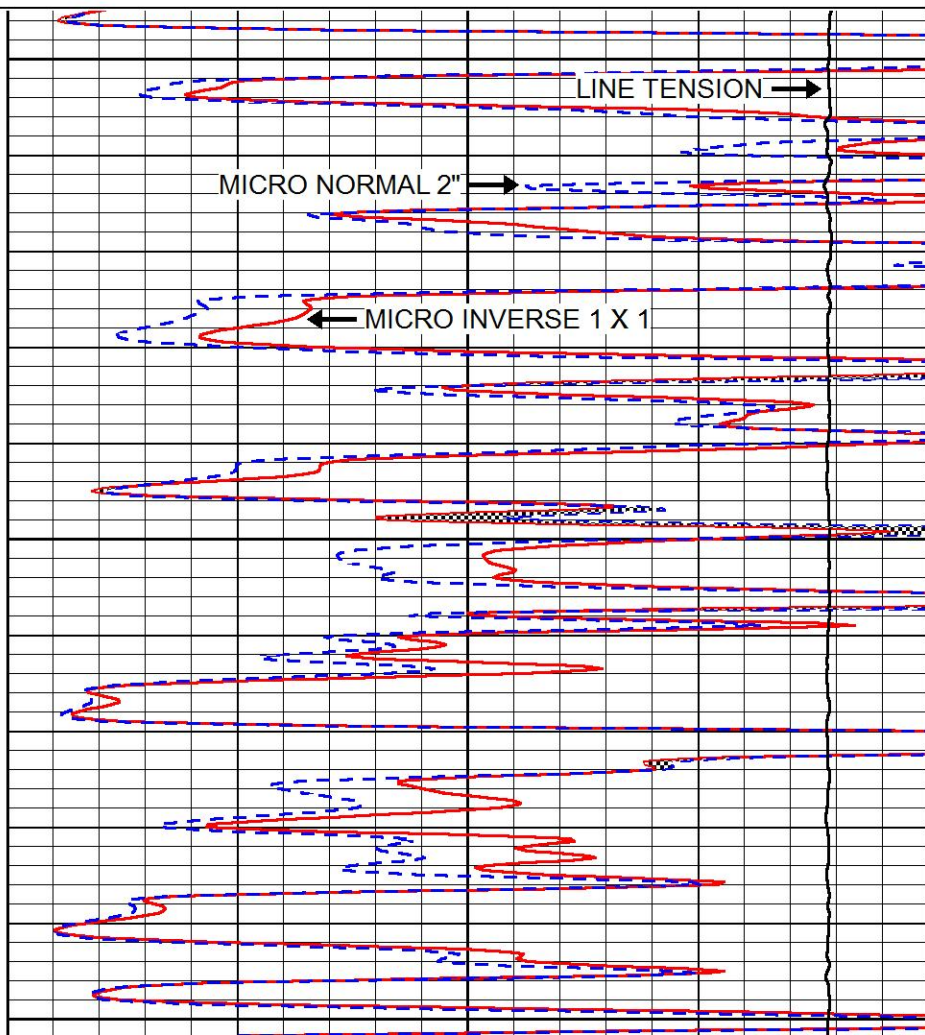
0	MICRO INVERSE 1 X 1 (Ohm-m)	40
0	MICRO NORMAL 2" (Ohm-m)	40
15000	LINE TENSION (lb)	0

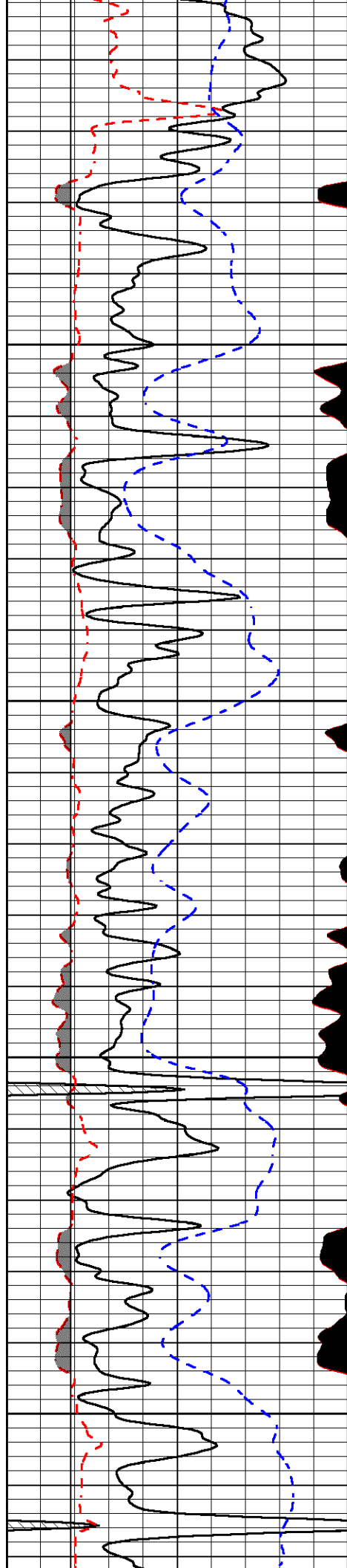


3400

3450

3500



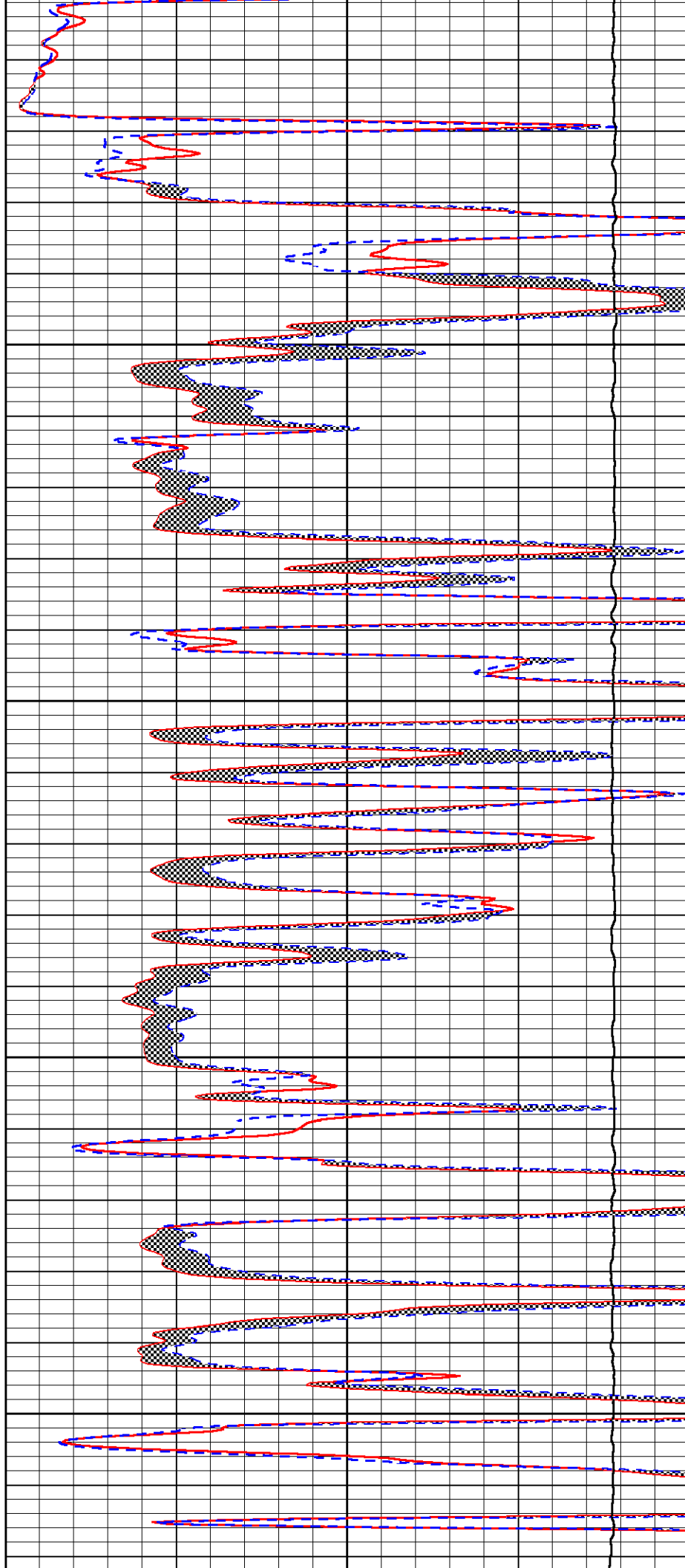


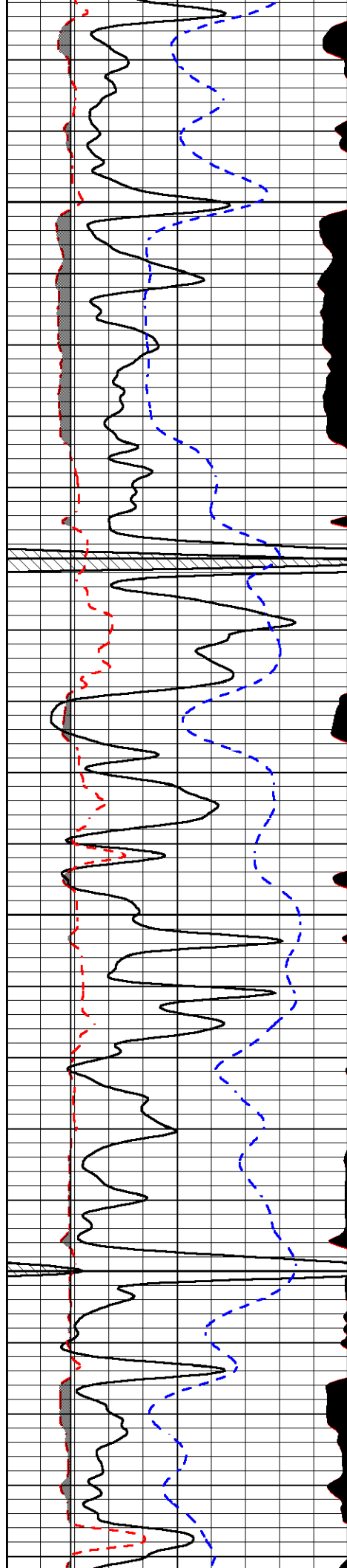
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3600

3650

3700



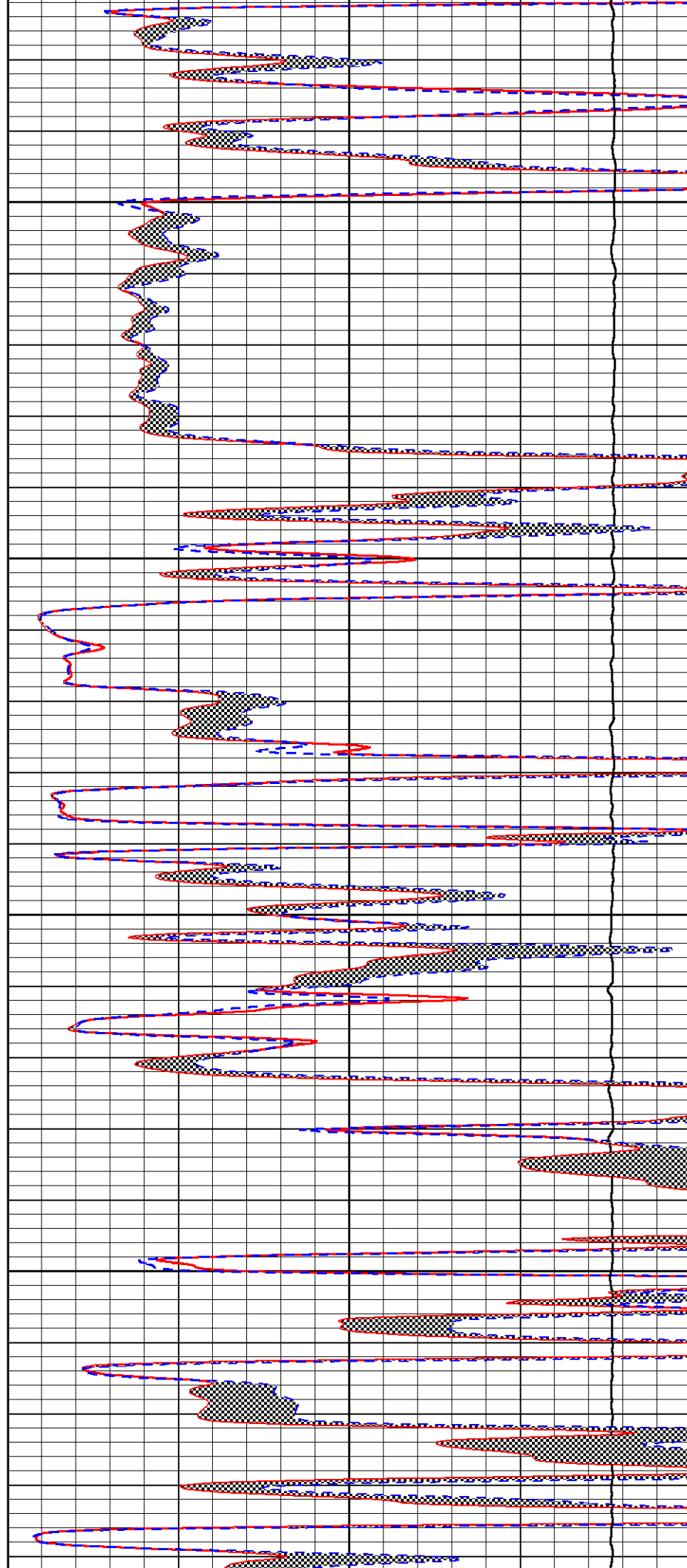


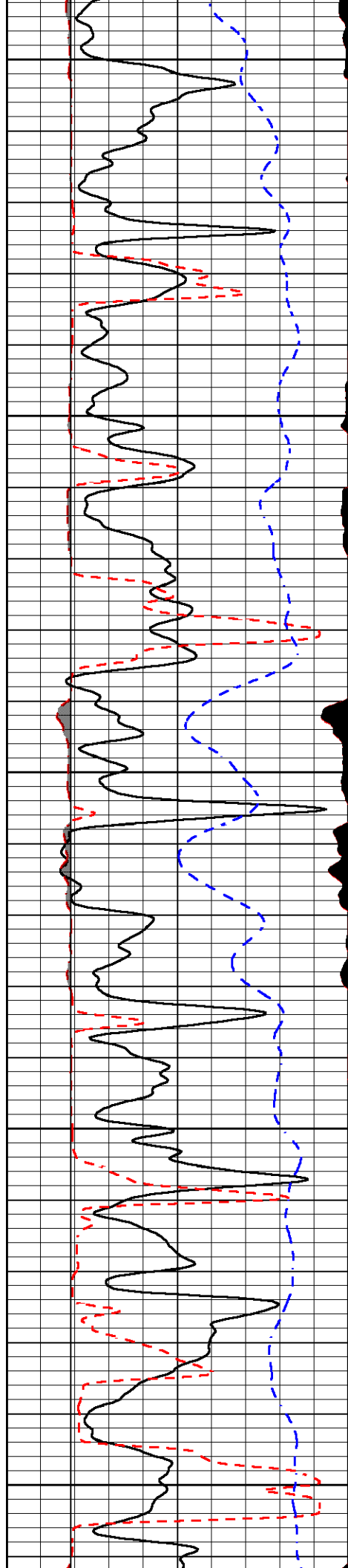
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3800

3850

3900





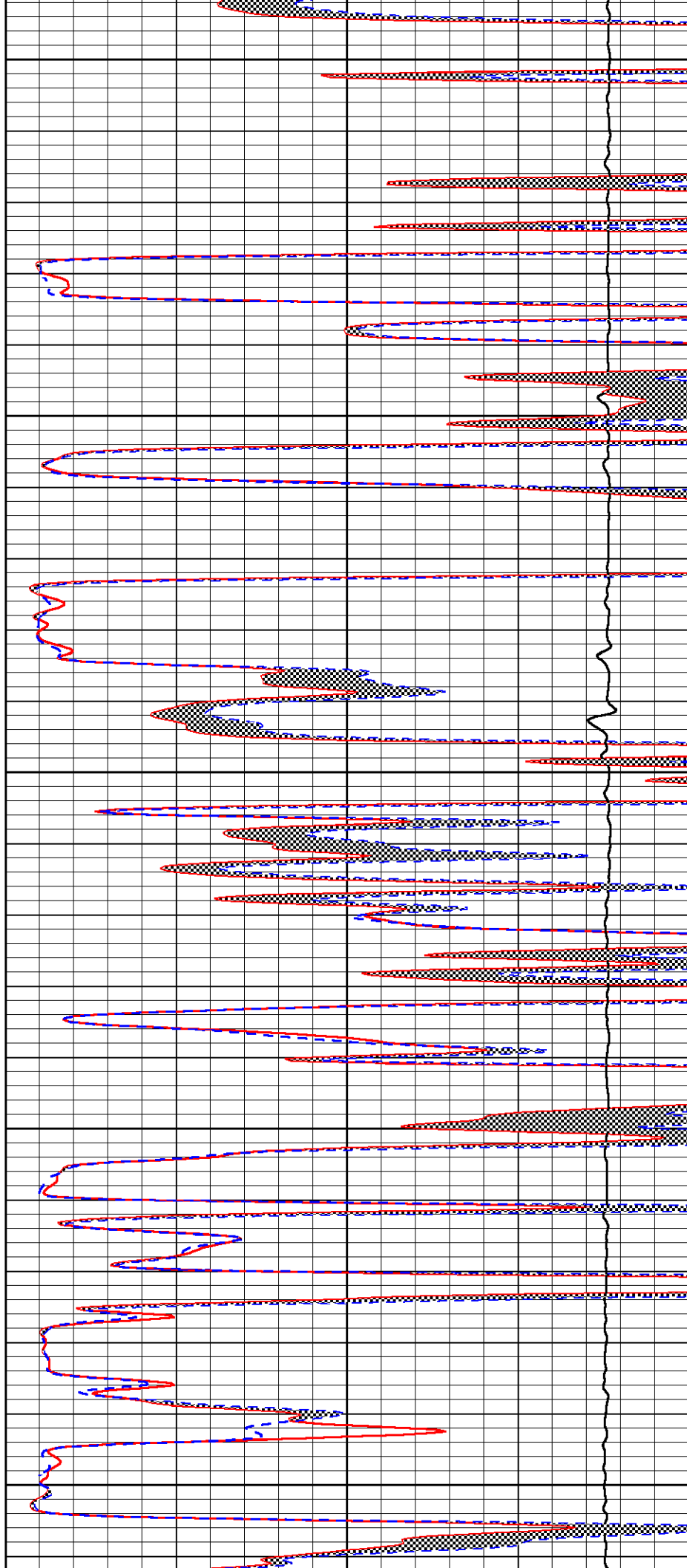
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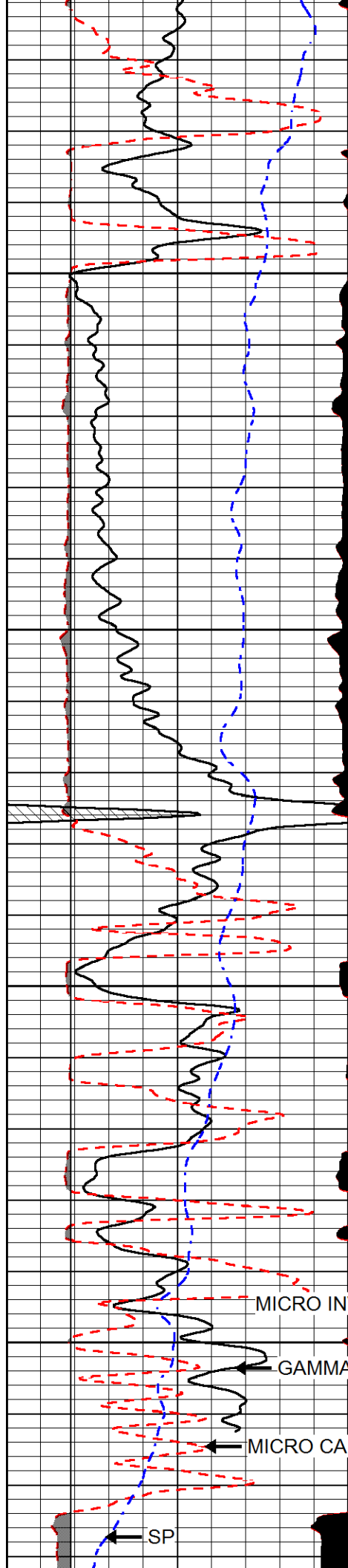
4000

4050

4100

4150





4200

4250

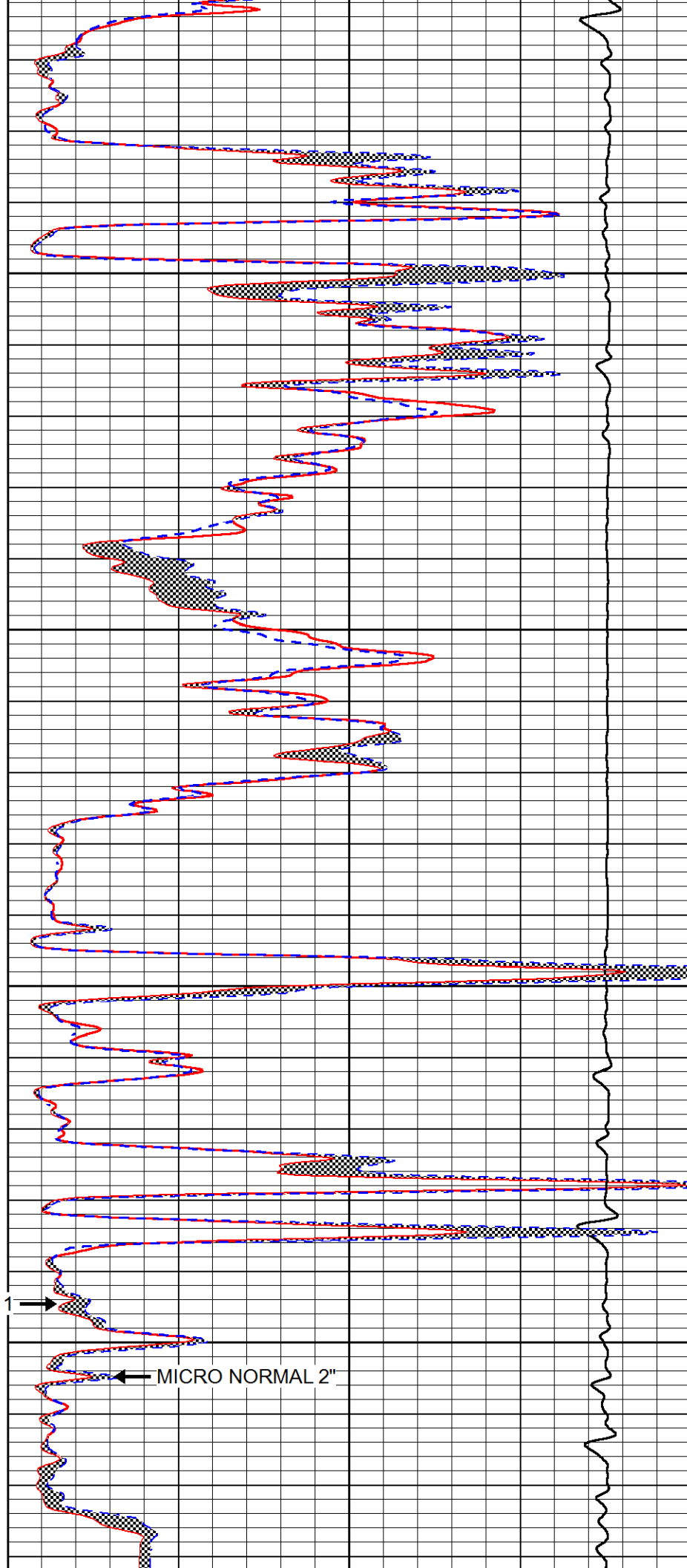
4300

MICRO INVERSE 1 X 1

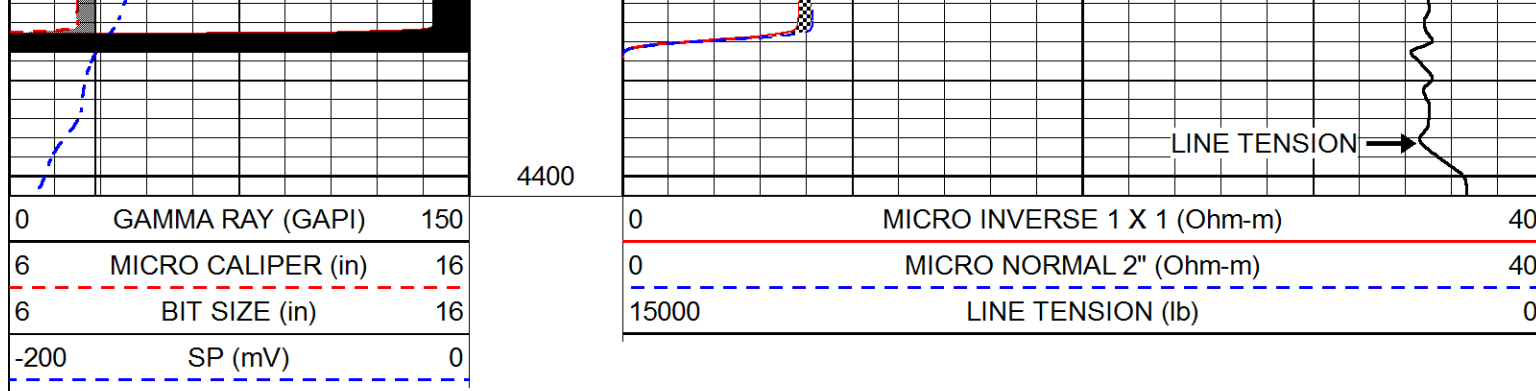
GAMMA RAY

MICRO CALIPER

SP



MICRO NORMAL 2"



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

		Readings		References			Results	
Loop:		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		

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



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