



PIONEER
Pioneer Energy Services

MICRORESISTIVITY LOG

Company BLUE GOOSE DRILLING CO., INC.
Well NEELEY "A" NO. 1
Field ALAMOTA NORTHWEST
County LANE
State KANSAS

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Location: API #: 15-101-22582-00-00

2,310' FSL & 1,650' FWL

SEC 10 TWP 18S RGE 27W

Permanent Datum GROUND LEVEL Elevation 2679'
Log Measured From KELLY BUSHING
Drilling Measured From KELLY BUSHING

Other Services
CNL/CDL
DIL
Elevation
K.B. 2689'
D.F. N/A
G.L. 2679'

Date 11/6/2016

Run Number ONE

Depth Driller 4660'

Depth Logger 4649'

Bottom Logged Interval 4648'

Top Log Interval 3600'

Casing Driller 8,625" @ 268'

Casing Logger 265'

Bit Size 7.875"

Type Fluid in Hole CHEMICAL

Salinity, ppm CL 4300

Density / Viscosity 9.0 51

pH / Fluid Loss 9.0 9.6

Source of Sample FLOWLINE

Rm @ Meas. Temp .90 @ 68

Rmt @ Meas. Temp .68 @ 68

Rmc @ Meas. Temp 1.22 @ 68

Source of Rmt / Rmc CHARTS

Rm @ BHT .50 @ 123

Operating Rig Time 2 1/2 HOURS

Max Rec. Temp. F 123

Equipment Number 108

Location COLBY

Recorded By J. LONG

Witnessed By KEN WALLACE

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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.

DIGHTON, EAST TO TURKEY RED ROAD, 1 1/2 NORTH, EAST INTO ON FARM HOUSE
SOUTH ENTRANCE, FOLLOW TRAIL EAST AND NORTH

Log Measured From: KELLY BUSHING

10 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: KEN WALLACE
Secondary Witness:
Secondary Witness:
Secondary Witness:

Top - Bottom

A	BOREID	BOTTEMP	CASEOD	CASETHCK	FLUIDDEN	M	MATRXDEN
1	in 7.875	degF 123	in 4.5	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 0	degF 58	Off	ft 4649

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 (71-914)	8.50	4.00	250.00
DCAL	28.42			ML-PSI STKBL ML (PSI-01) 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			DIL-M&W (1987)	18.50	3.50	220.00
CILD	8.00						

CILM

4.70

SP

0.20

Dataset: bluegoose_neeley_a_1.db: field/well/stackmel/pass4
 Total length: 43.08 ft
 Total weight: 685.00 lb
 O.D.: 4.00 in

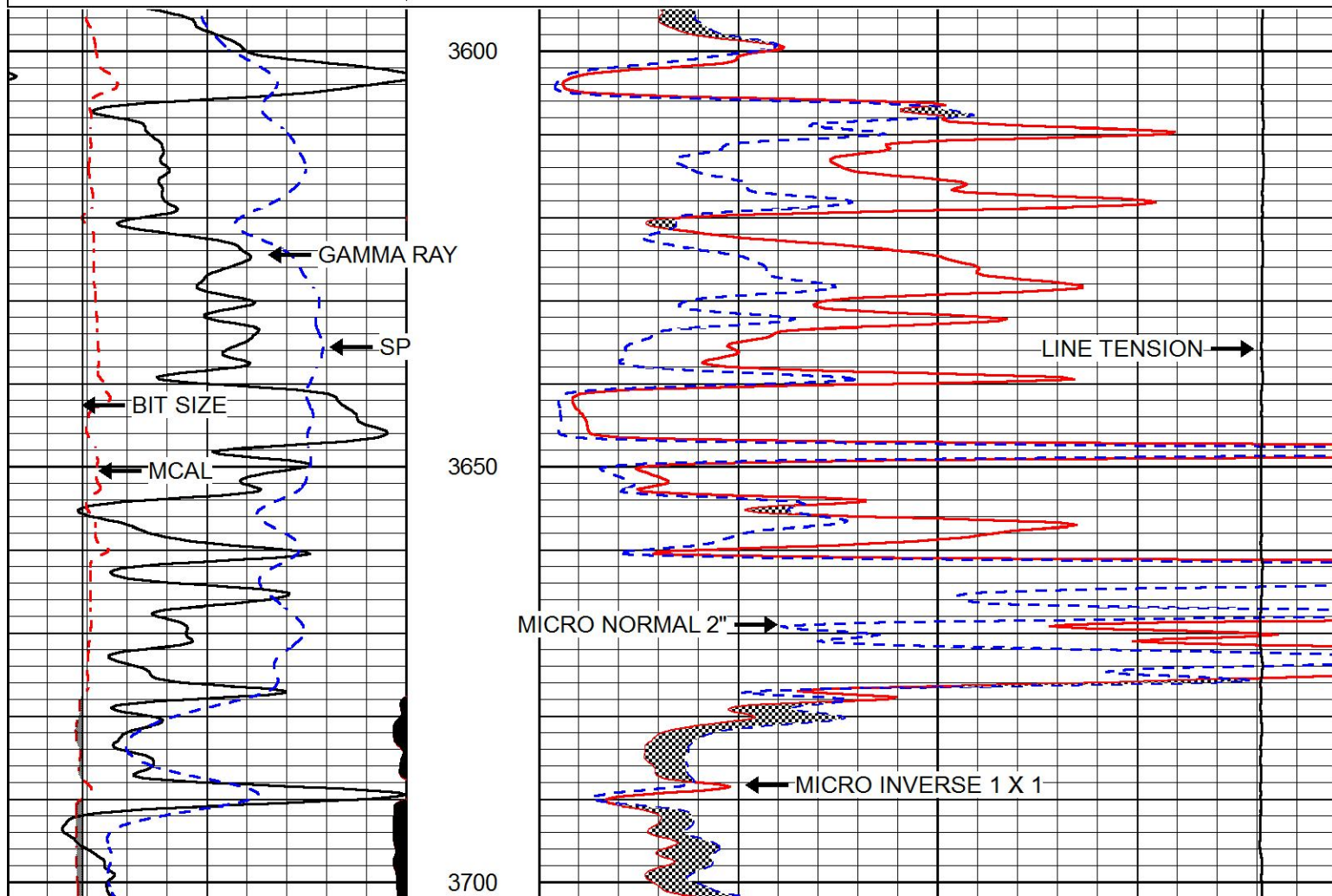


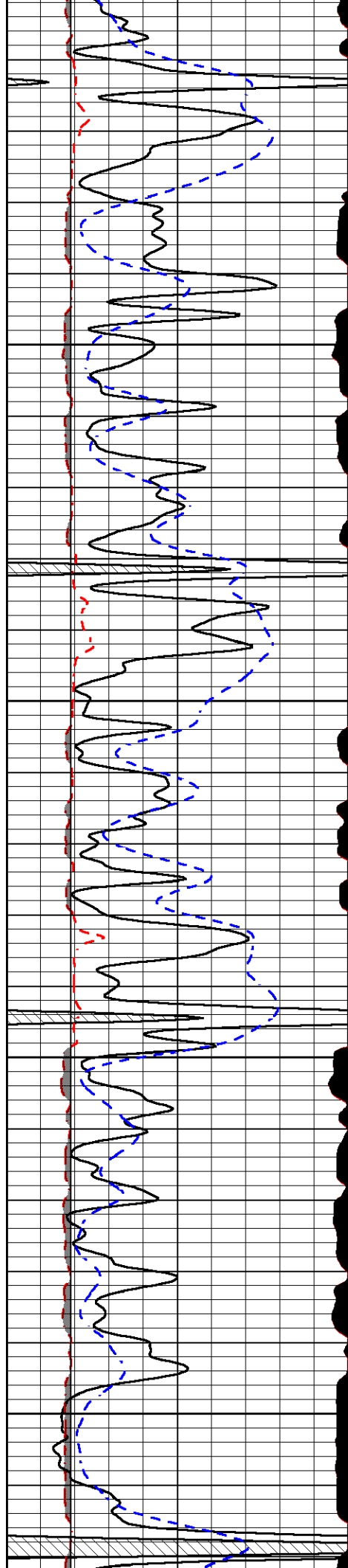
MAIN PASS

Database File bluegoose_neeley_a_1.db
 Dataset Pathname stackmel/pass4.1
 Presentation Format micro
 Dataset Creation Sun Nov 06 16:35:08 2016
 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



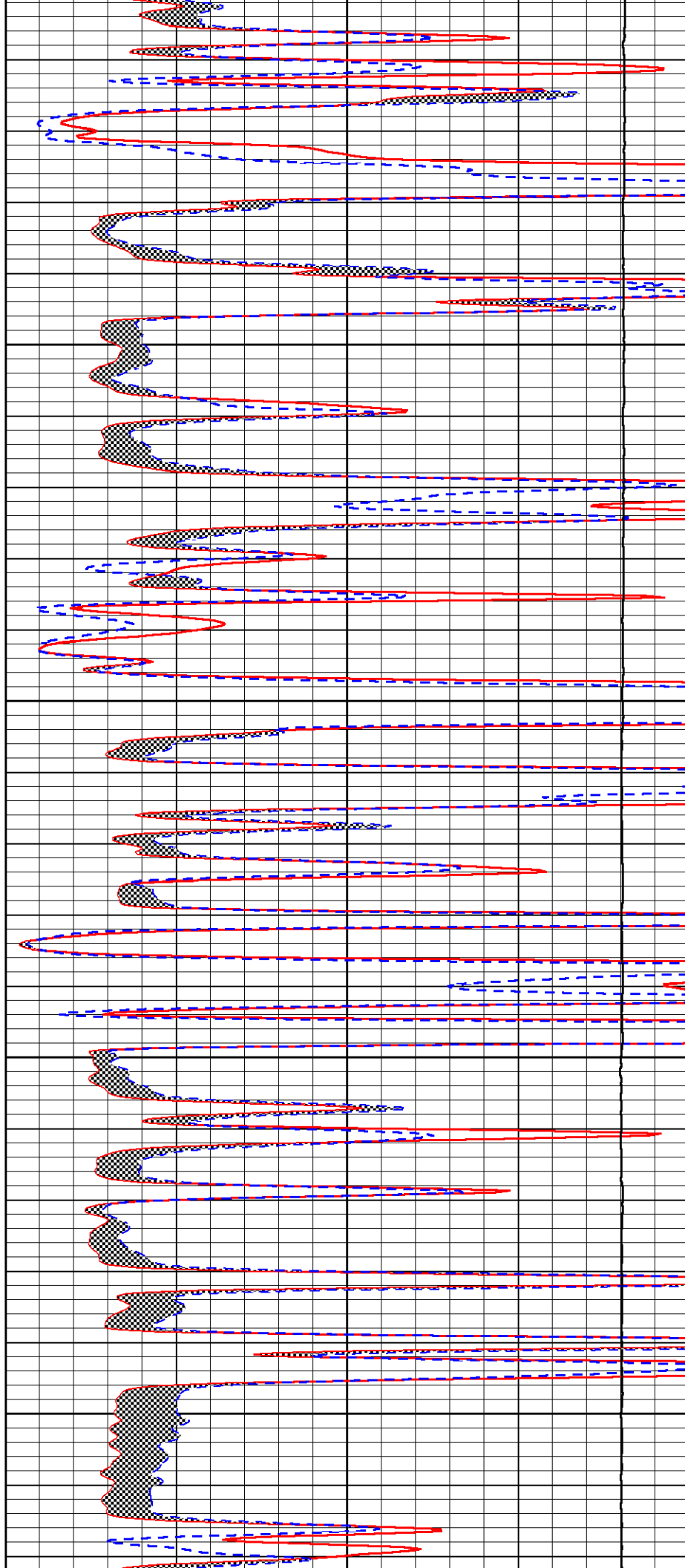


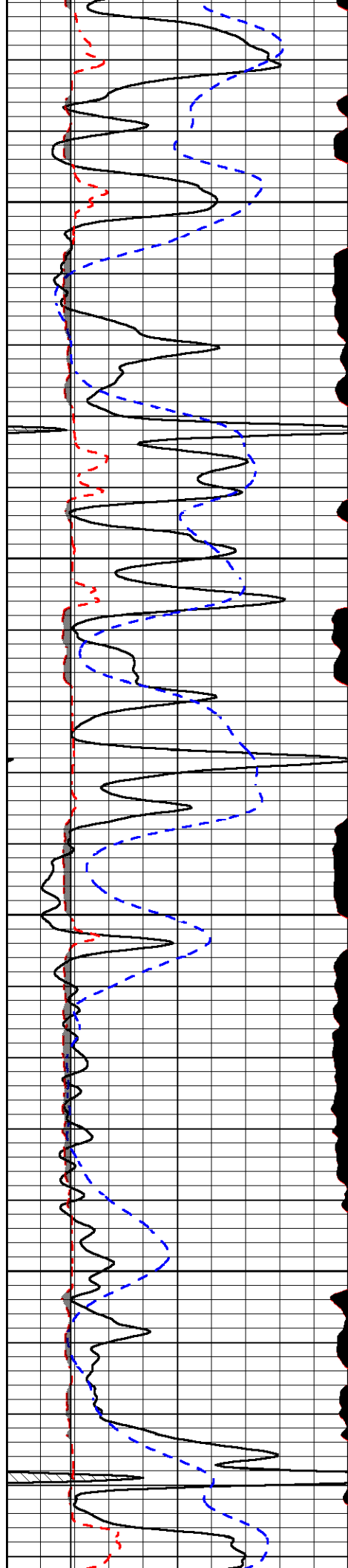
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3800

3850

3900



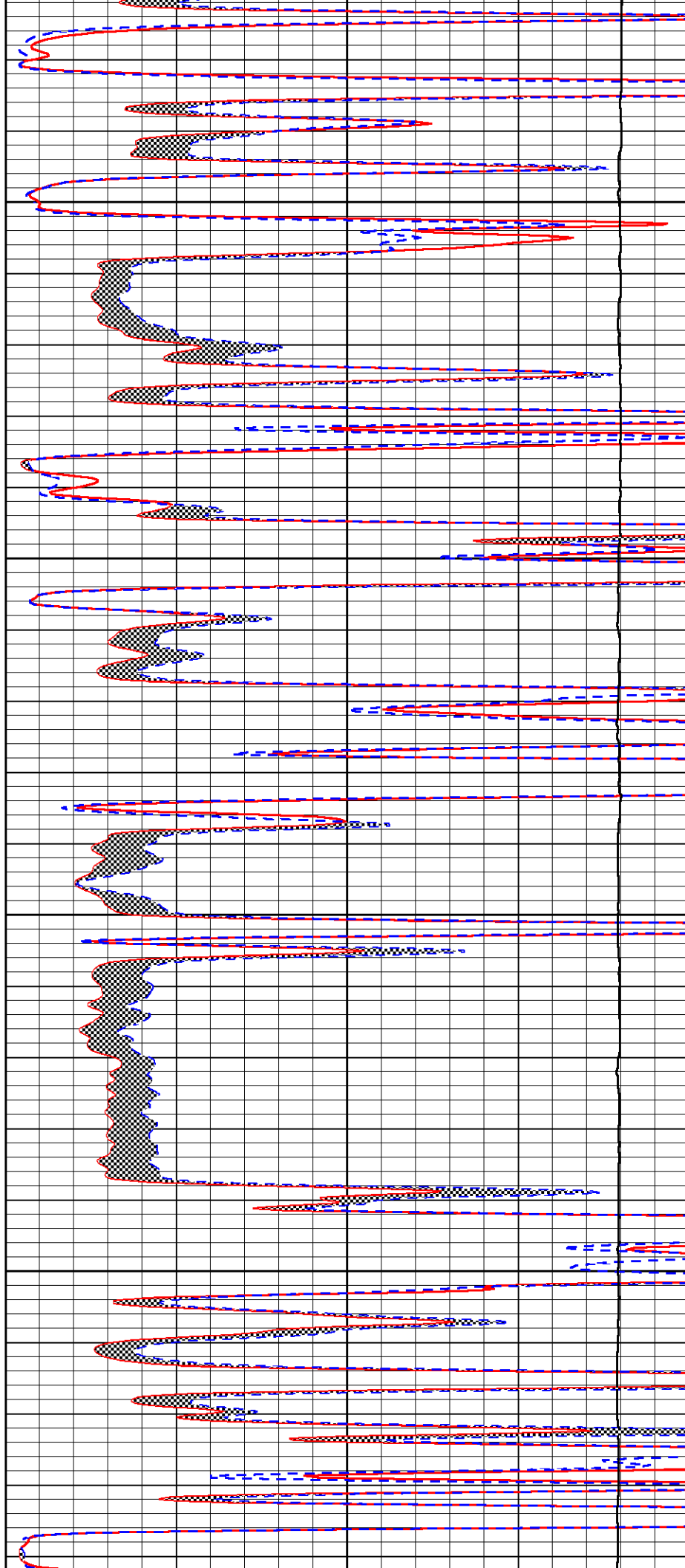


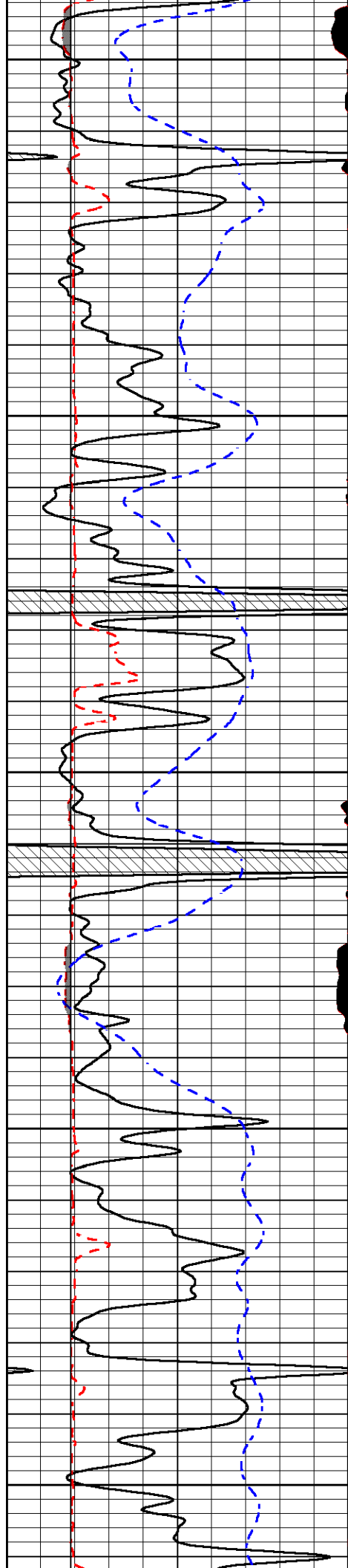
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4000

4050

4100





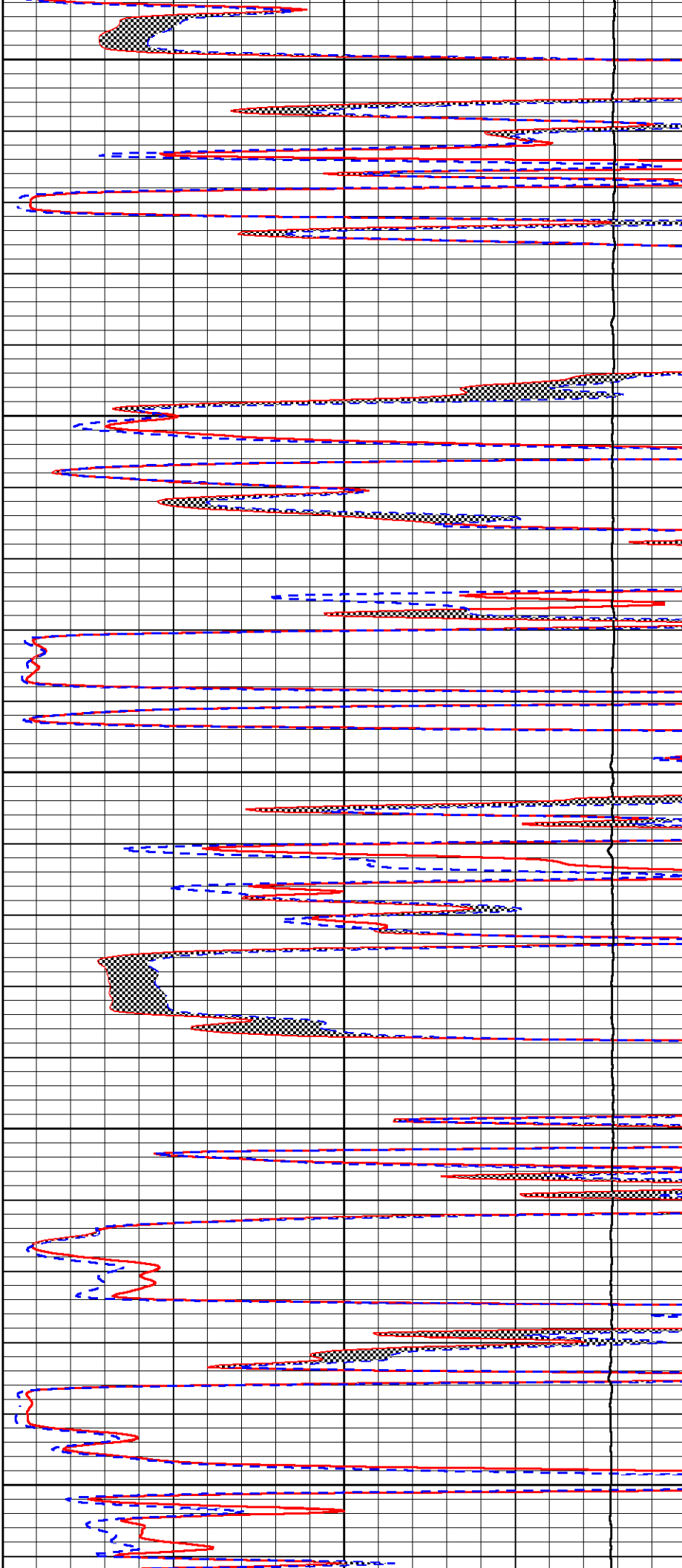
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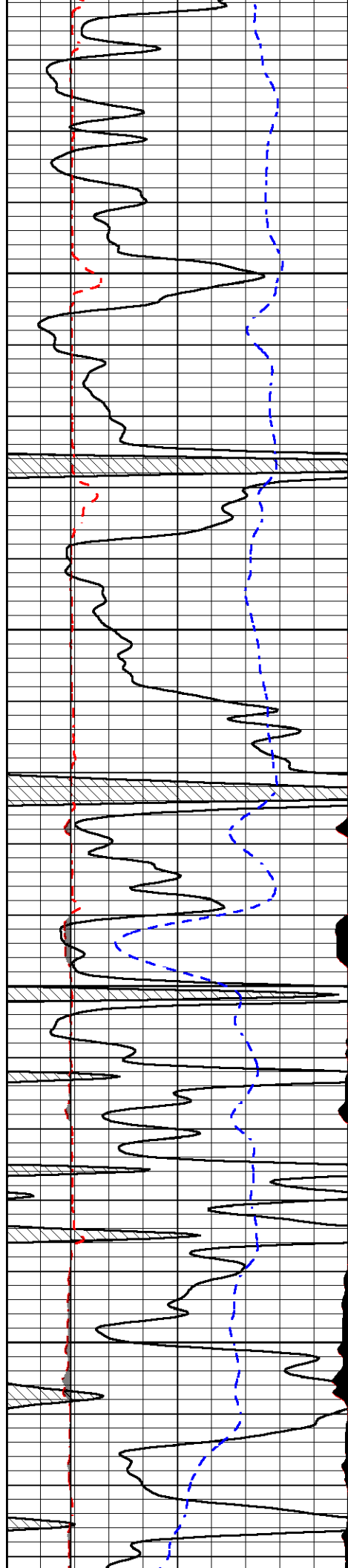
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4250

4300

4350



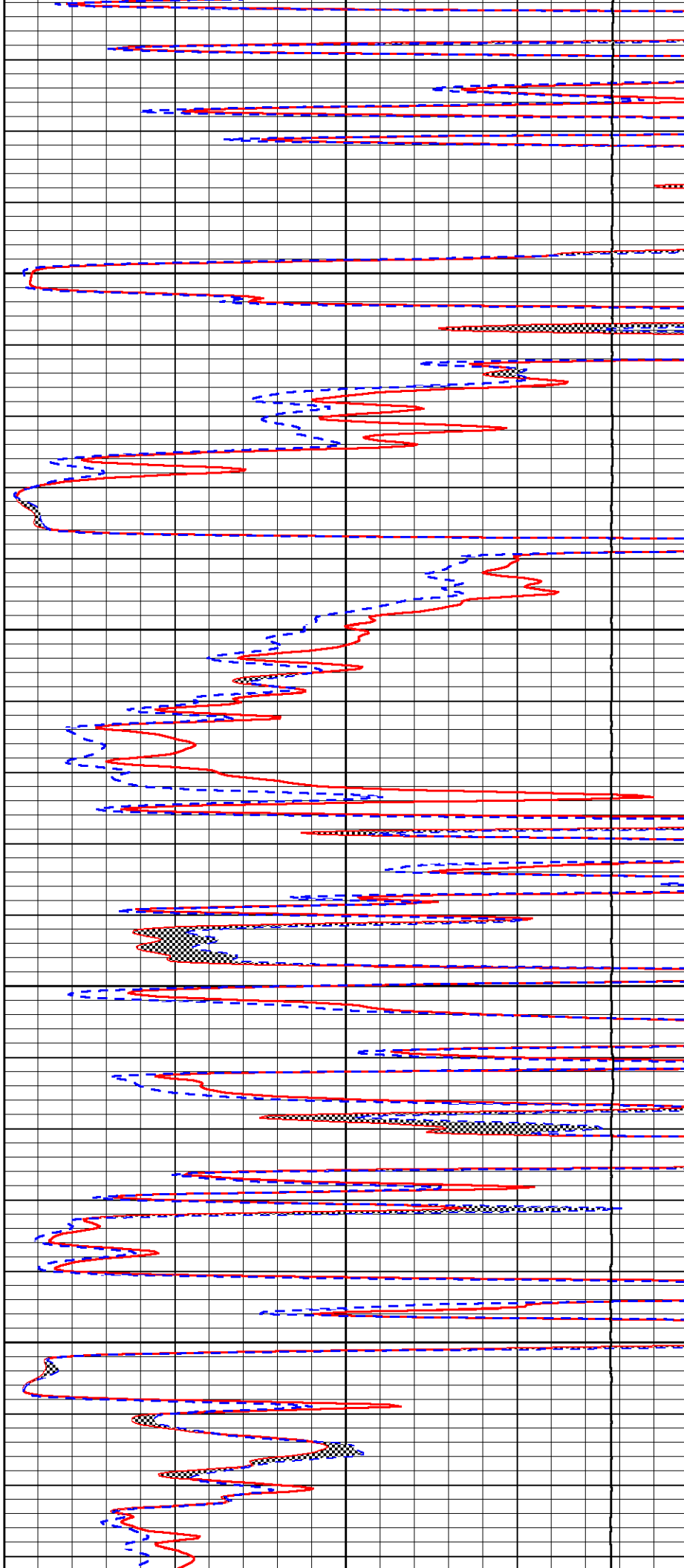


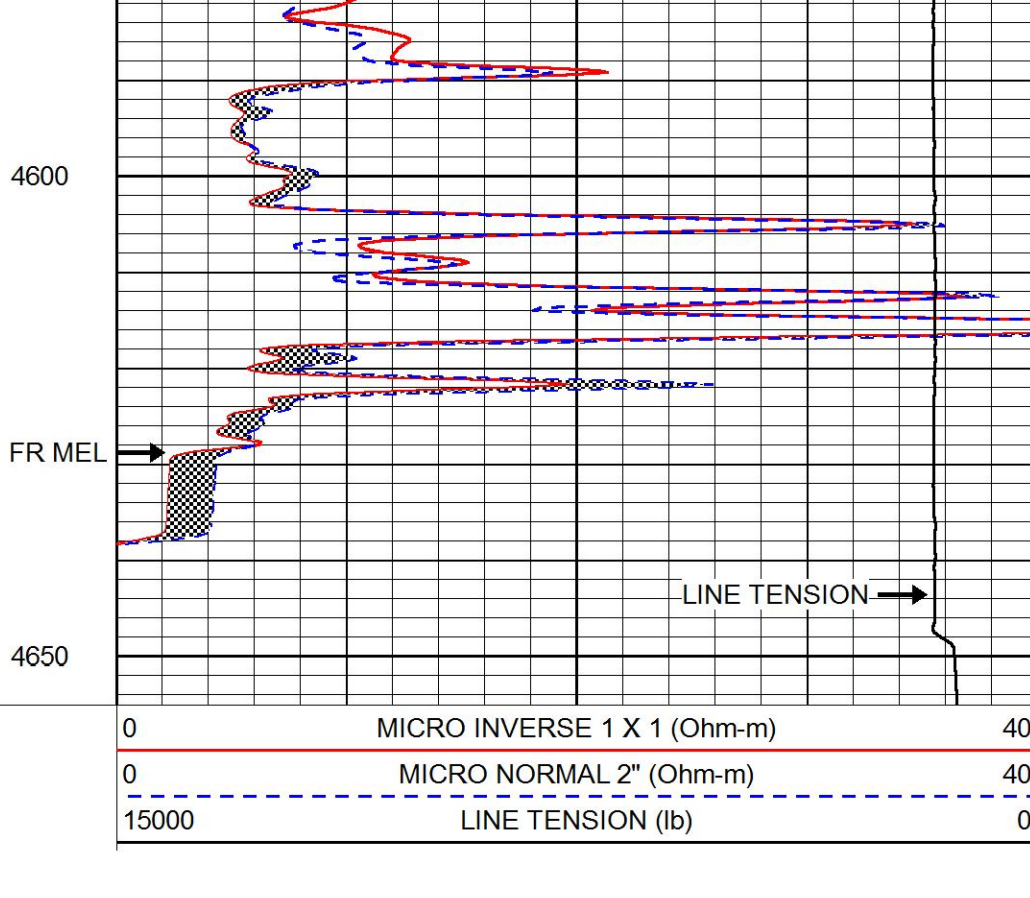
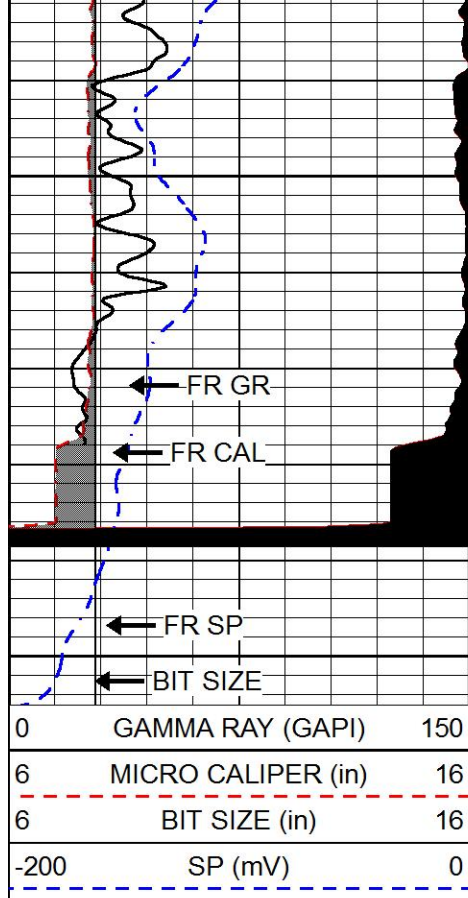
4400

4450

4500

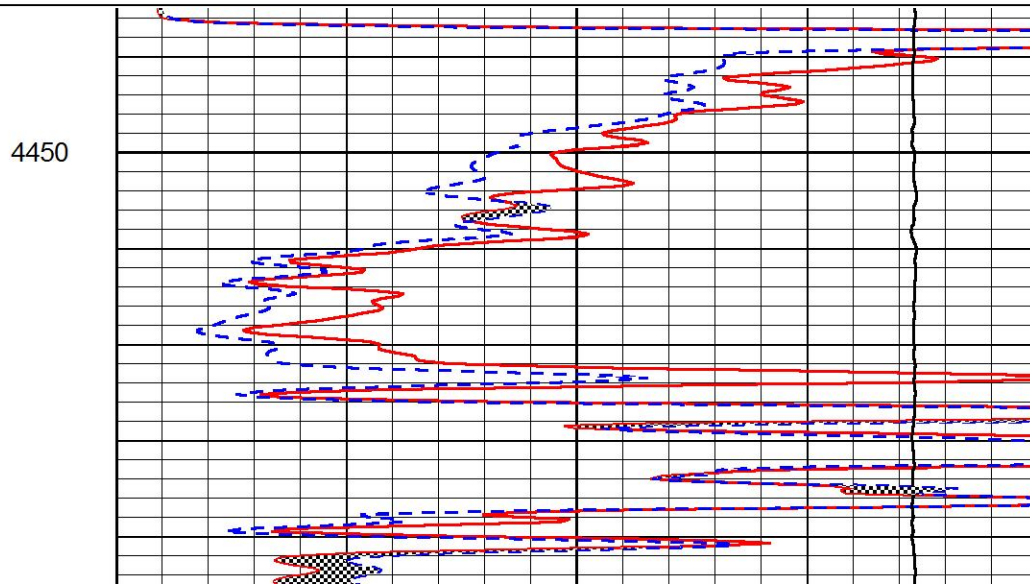
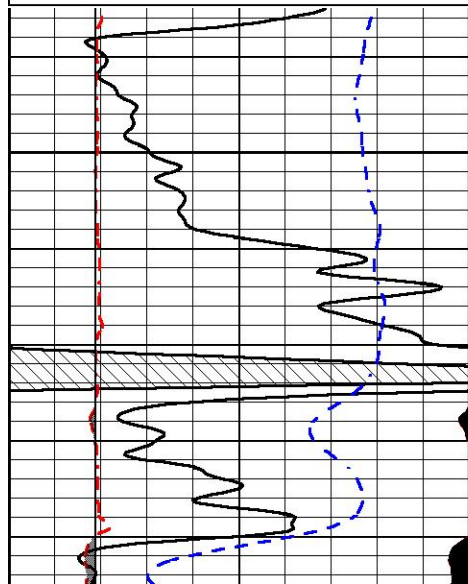
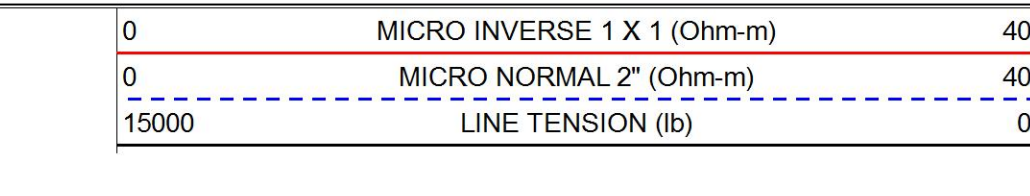
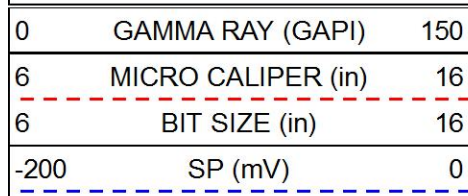
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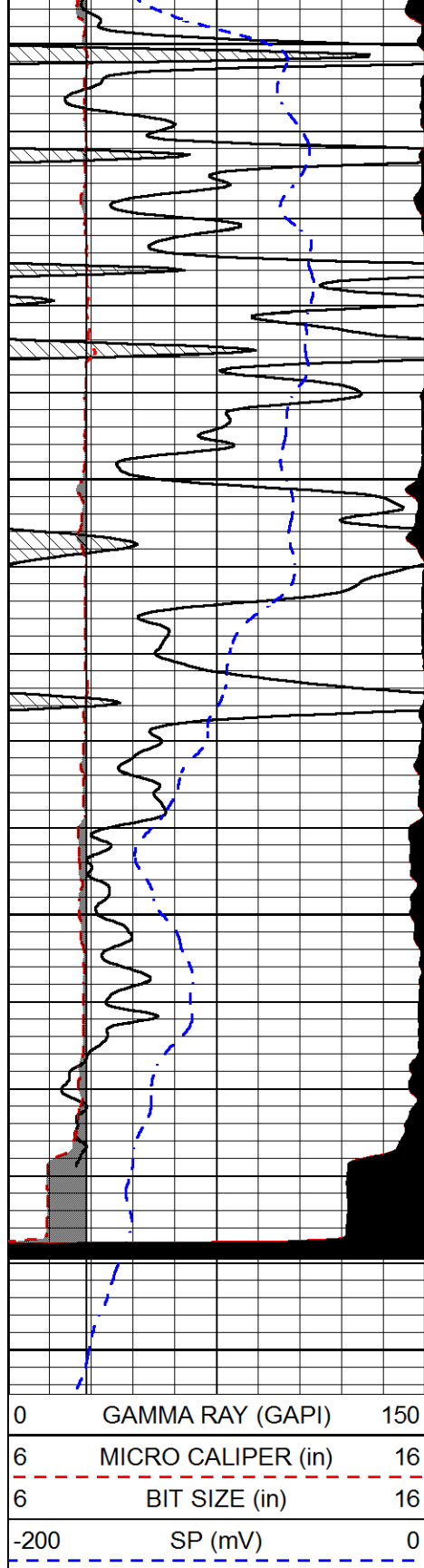




REPEAT SECTION

Database File bluegoose_neeley_a_1.db
 Dataset Pathname stackmel/pass3.1
 Presentation Format micro
 Dataset Creation Sun Nov 06 16:34:37 2016
 Charted by Depth in Feet scaled 1:240



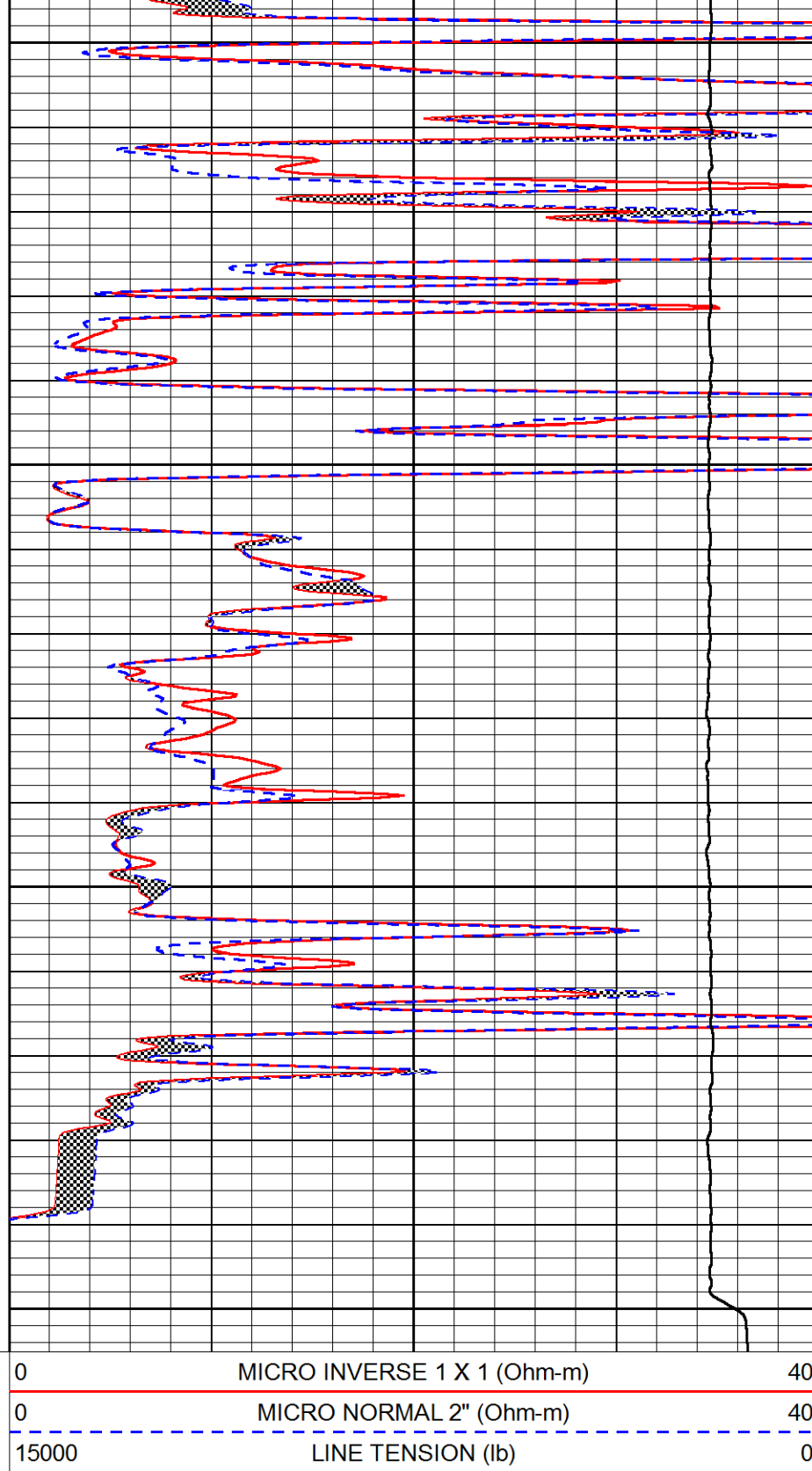


4500

4550

4600

4650



Calibration Report

Database File bluegoose_neeley_a_1.db
 Dataset Pathname stackmel/pass3
 Dataset Creation Sun Nov 06 14:27:41 2016

Dual Induction Calibration Report

Serial-Model: 1987-M&W
 Calibration Performed: Tue Aug 30 16:23:58 2016

Loop:	Readings		References			Results	
	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

Compensated Density Calibration Report

Serial-Model: 71-914-M&W
 Source / Verifier: /
 Master Calibration Performed: Fri Oct 07 08:39:26 2016

Master Calibration

	Density		Far Detector	Near Detector	
Magnesium	1.755	g/cc	4314.49	5307.52	cps
Aluminum	2.675	g/cc	822.19	3456.36	cps
Spine Angle = 75.49			Density/Spine Ratio = 0.537		
	Size		Reading		
Small Ring	4.00	in	1.16		
Large Ring	14.00	in	1.57		

Compensated Neutron Calibration Report

Serial Number: tk10-MW
 Tool Model: M&W
 Calibration Performed: Sat Oct 1 10:01:53 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: Fri Sep 30 22:06:47 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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