



Microresistivity Log

Pioneer Energy Services

API No.

15-065-24,020-00-00

Company Culbreath Oil & Gas Company, Inc.

Well Toll #1-9

Field

County Graham

State

Kansas

Location

2,600' FNL & 1,980' FWL

Sec: 9

Twp: 8S

Rge: 25W

Elevation

Permanent Datum Ground Level

Log Measured From Kelly Bushing

Drilling Measured From Kelly Bushing

10 Ft. Above Perm. Datum

K.B. 2416
D.F. 2406
G.L. 2406

Date

4/6/2014

Run Number

Two

Depth Driller

3950

Depth Logger

3950

Bottom Logged Interval

3949

Top Log Interval

3400

Casing Driller

8.625 @ 261

Casing Logger

262

Bit Size

7.875

Type Fluid in Hole

Chemical

Salinity, ppm CL

1800

Density / Viscosity

9.1 62

pH / Fluid Loss

11.5 6.4

Source of Sample

Flowline

Rm @ Meas. Temp

.95 @ 70

Rmf @ Meas. Temp

.71 @ 70

Rmc @ Meas. Temp

1.28 @ 70

Source of Rmf / Rmc

Charts

Rm @ BHT

.58 @ 116

Operating Rig Time

5 Hours

Max Rec. Temp. F

116

Equipment Number

108

Location

Hays

Recorded By

J. Long

Witnessed By

Steve Murphy

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All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, 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. These interpretations are also subject to our general terms and conditions set out in our current Price Schedule.

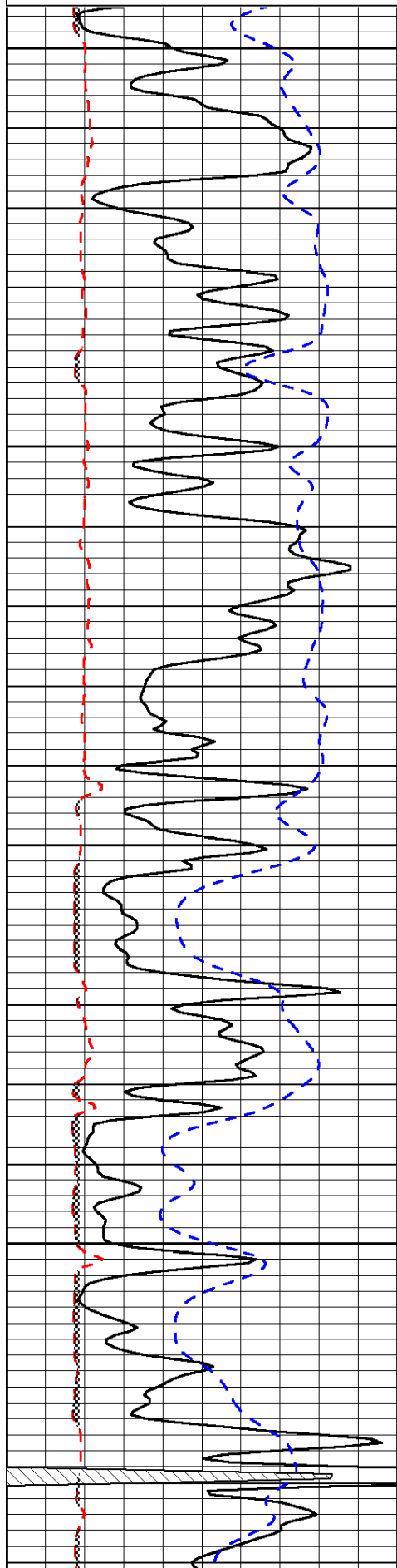
Comments

Thank you for using Pioneer Energy Services
www.pioneerres.com
785 625 3858

Hill City, 14 West (Antelope Lake Road), 1/2 North, 100 Yards West,
West & South Into

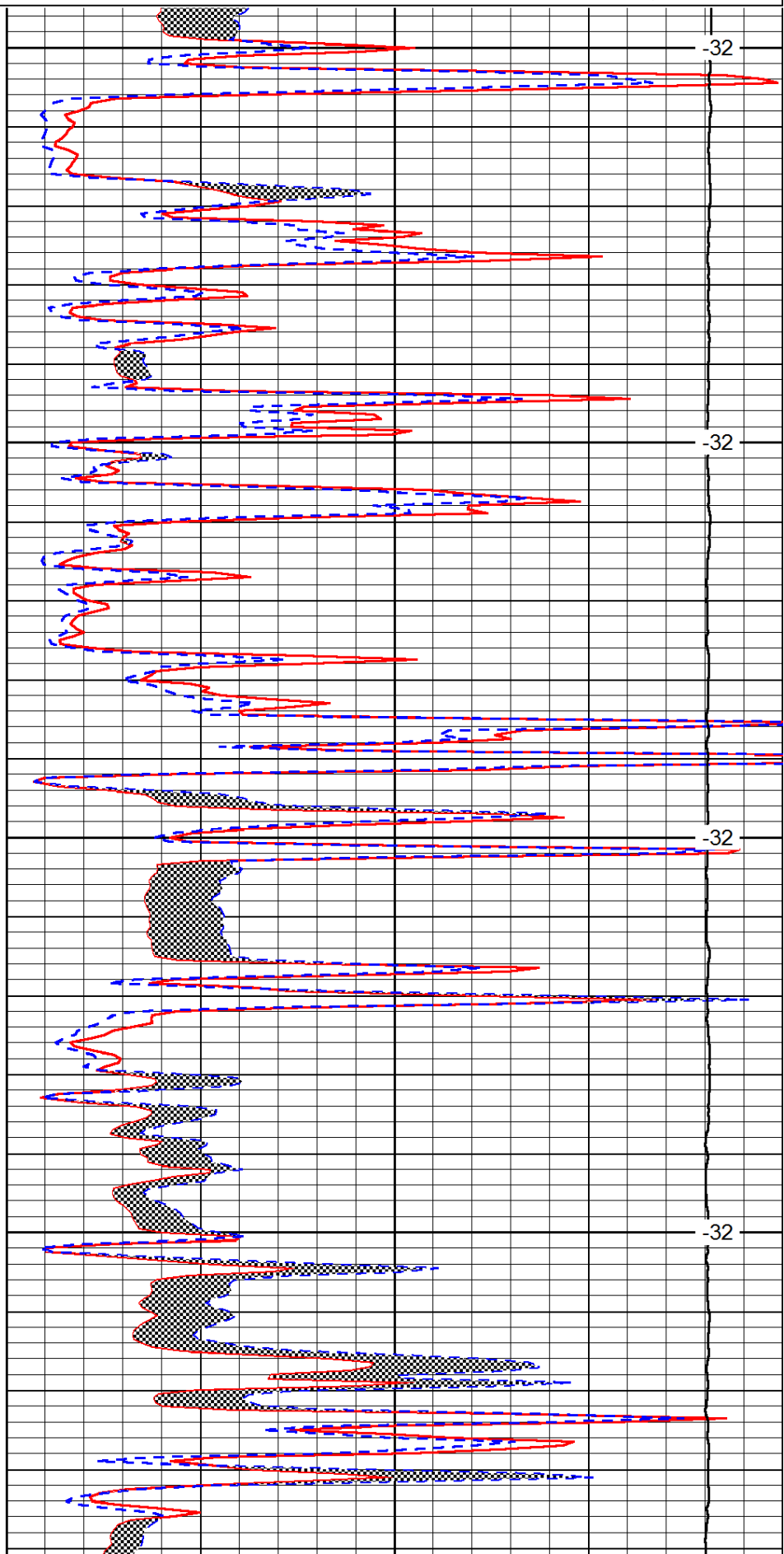
Database File: c:\warrior\data\culbreath_toll # 1-9\culbreath_toll_1-9hd.db
Dataset Pathname: dil/culstck
Presentation Format: micro
Dataset Creation: Sun Apr 06 04:42:02 2014
Charted by: Depth in Feet scaled 1:240

Charted by: Depth in Feet scaled 1:2.15		
0	Gamma Ray	150
6	Micro Log Caliper (GAPI)	16
-200	SP (mV)	0

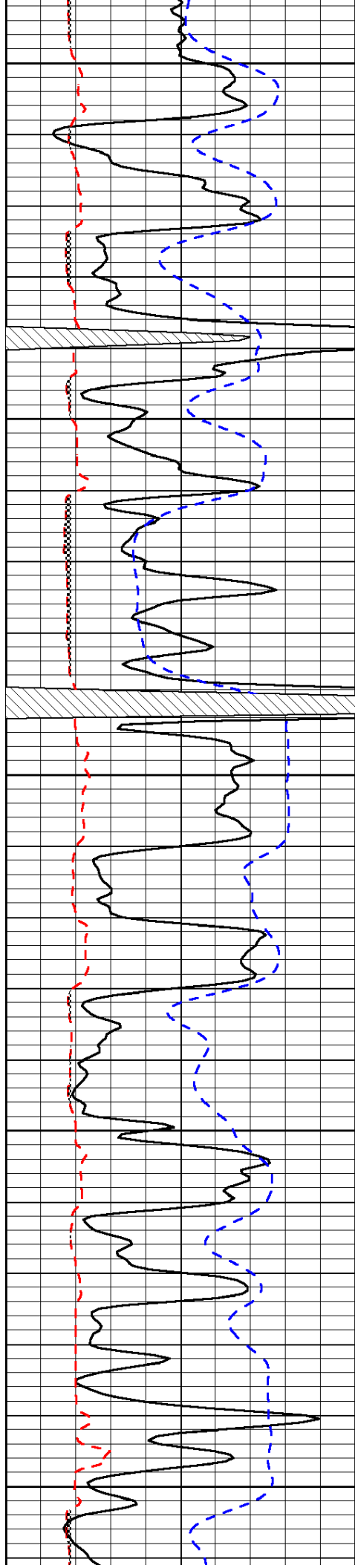


3400
3450
3500
3550

0	Micro Inverse 1 X 1	40
0	Micro Normal 2"	40
15000	Line Weight	0



LSPD



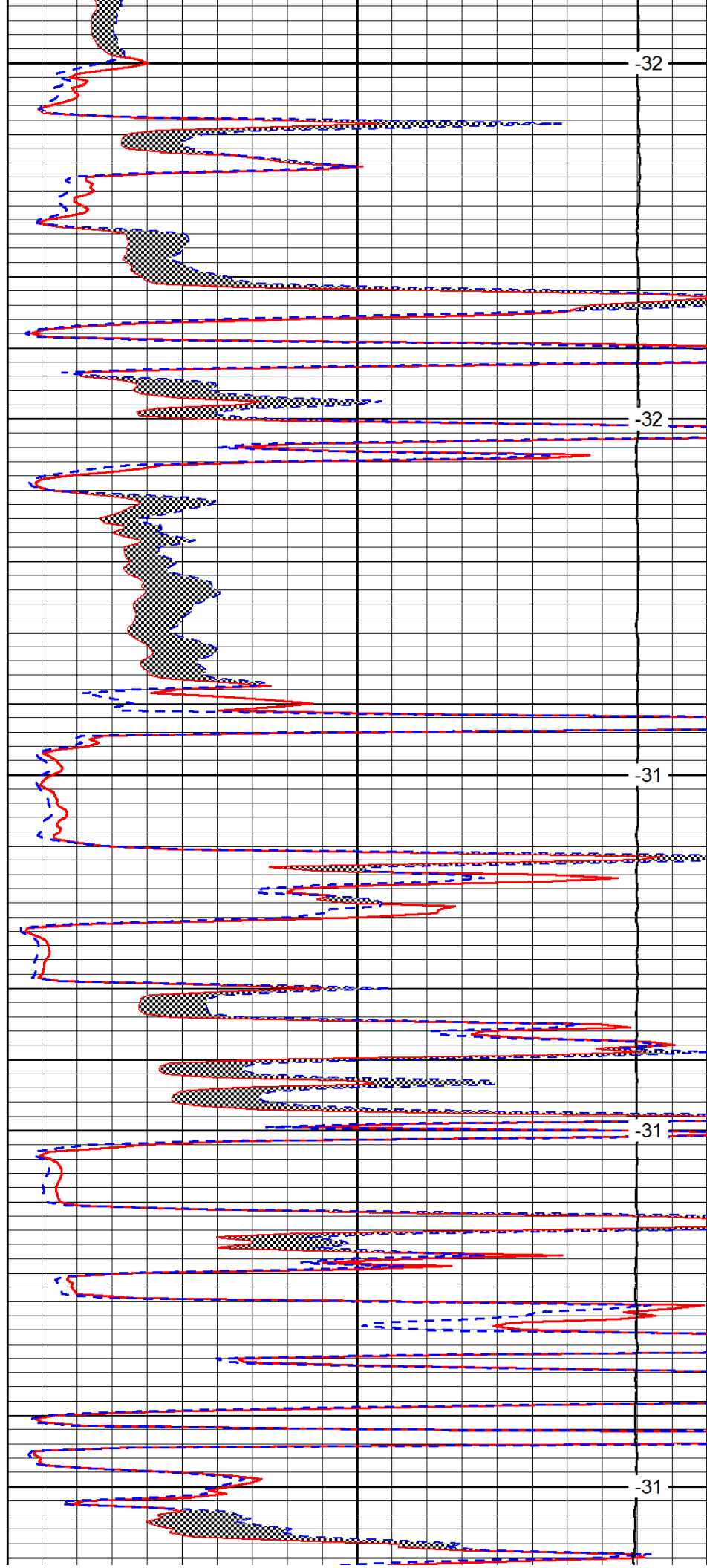
3600

3650

3700

3750

3800



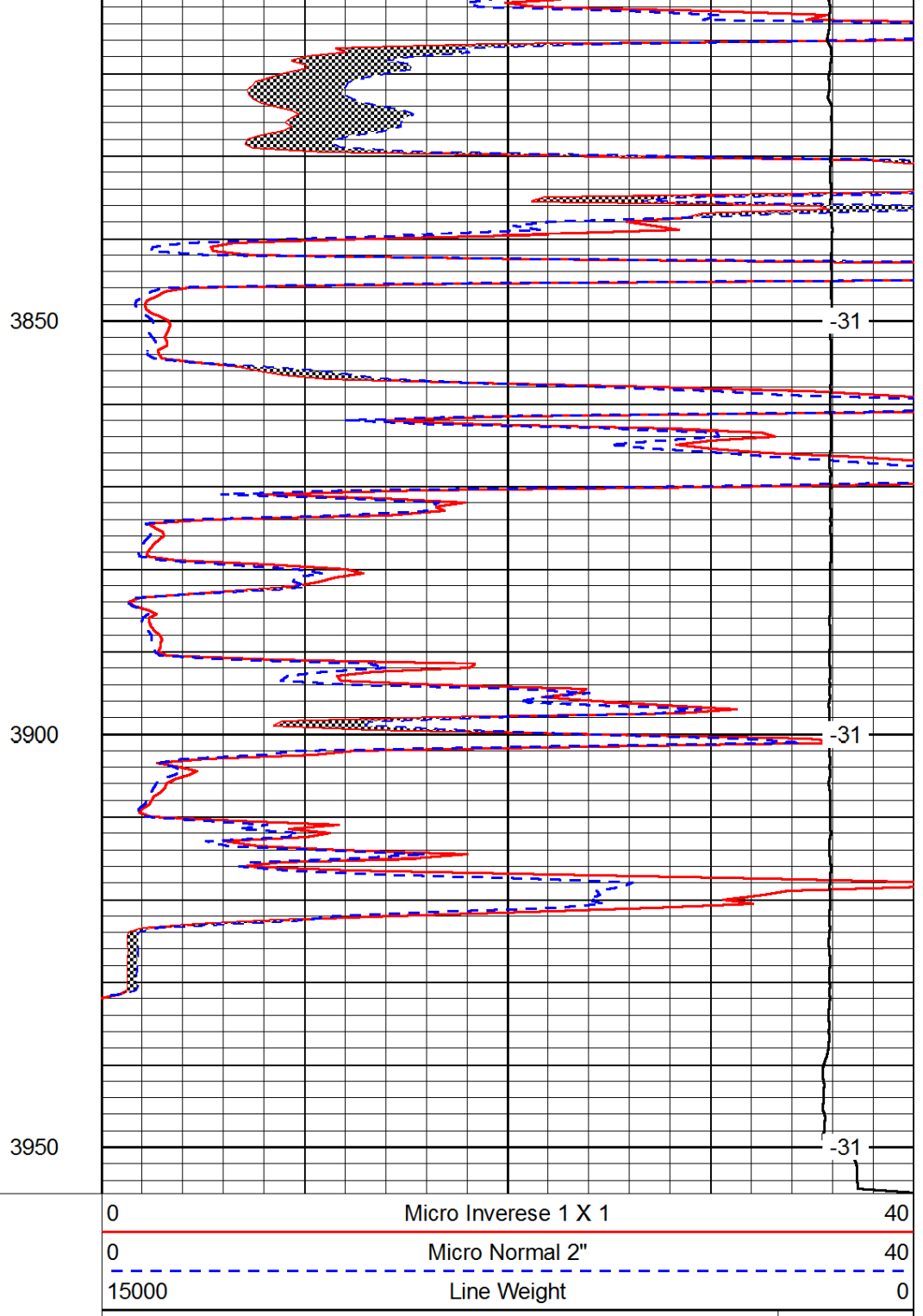
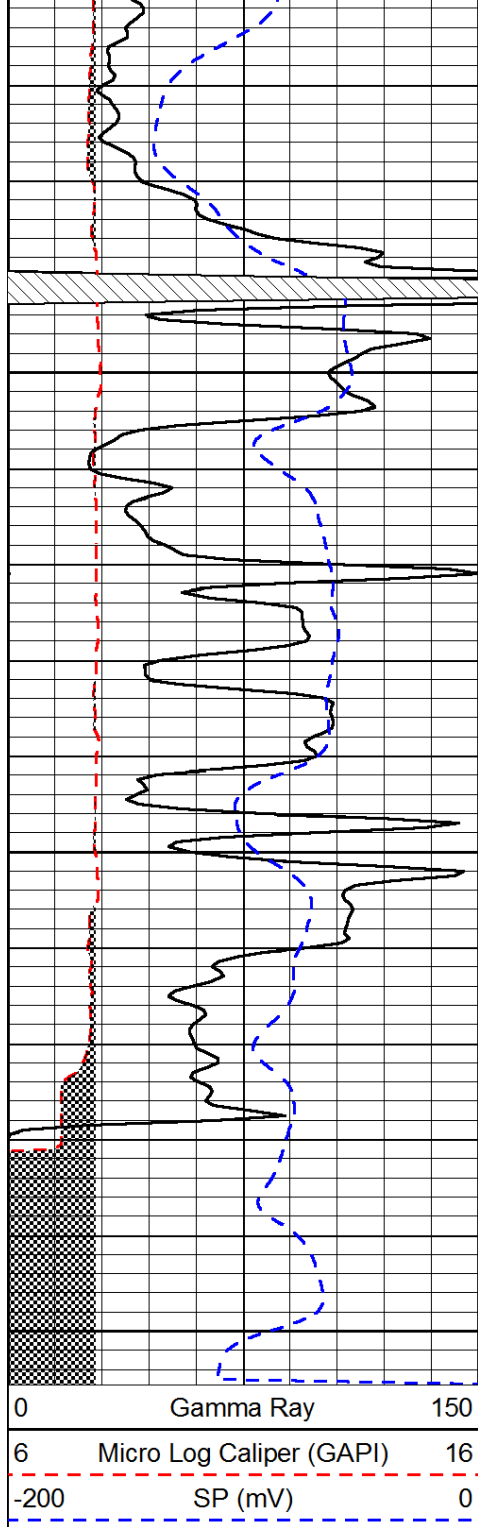
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LSPD