



MICRORESISTIVITY LOG

Company MIKE KELSO OIL, INC.
Well WONDER-MUD NO. 14-1
Field THISTLE GROVE
County NESS **State** KANSAS

Company MIKE KELSO OIL, INC.
Well WONDER-MUD NO. 14-1
Field THISTLE GROVE
County NESS
State KANSAS

Location: API #: 15-135-25910-00-00
 330' FSL & 1,155' FWL
 SEC 14 TWP 17S RGE 21W
Permanent Datum GROUND LEVEL Elevation 2176'
Log Measured From KELLY BUSHING
Drilling Measured From KELLY BUSHING
Other Services CNL/CDL DIL
Elevation K.B. 2183'
D.F. N/A
G.L. 2176'

Date	5/29/2016
Run Number	ONE
Depth Driller	4234'
Depth Logger	4232'
Bottom Logged Interval	4231'
Top Log Interval	3300'
Casing Driller	8.625" @ 340'
Casing Logger	343'
Bit Size	7.875"
Type Fluid in Hole	CHEMICAL
Salinity, ppm CL	8500
Density / Viscosity	9.0 38
pH / Fluid Loss	9.0 9.8
Source of Sample	FLOWLINE
Rm @ Meas. Temp	.55 @ 64
Rmt @ Meas. Temp	.41 @ 64
Rmc @ Meas. Temp	.74 @ 64
Source of Rmf / Rmc	CHARTS
Rm @ BHT	.30 @ 118
Operating Rig Time	2 1/2 HOURS
Max Rec. Temp. F	118 DEG F.
Equipment Number	108
Location	COLBY
Recorded By	J. LONG
Witnessed By	PATRICK DEENIHAN

<<< 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.

MCCRACKEN, 2 WEST ON ELM STREET (SOUTH SIDE OF TOWN), 1 SOUTH, 7/8 WEST, NORTH INTO

Log Measured From: KELLY BUSHING 7 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:
 Operator:
 Operator: D. WALKER

This Log Record Was Witnessed By

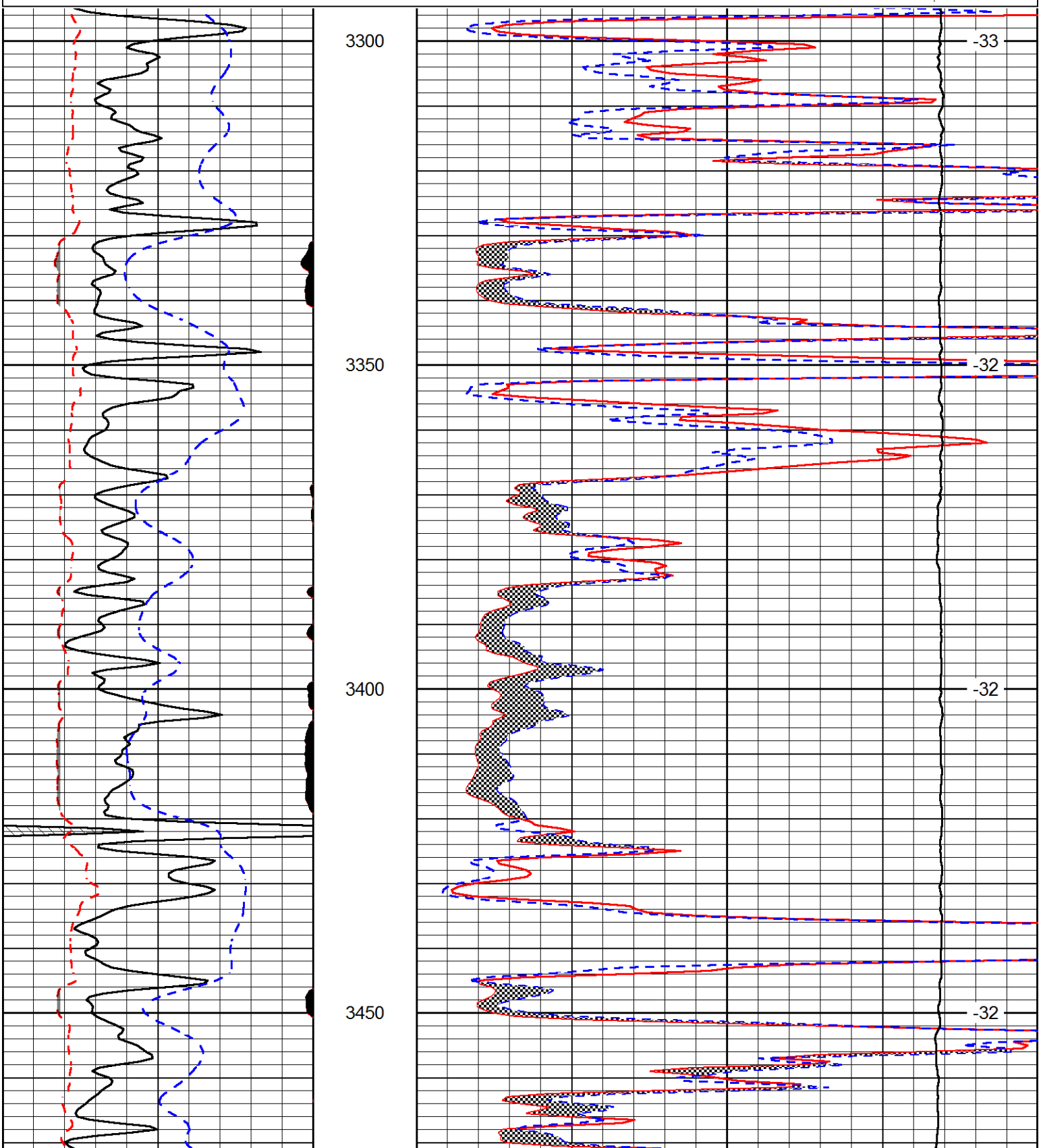
Primary Witness: PATRICK DEENIHAN
 Secondary Witness:
 Secondary Witness:
 Secondary Witness:

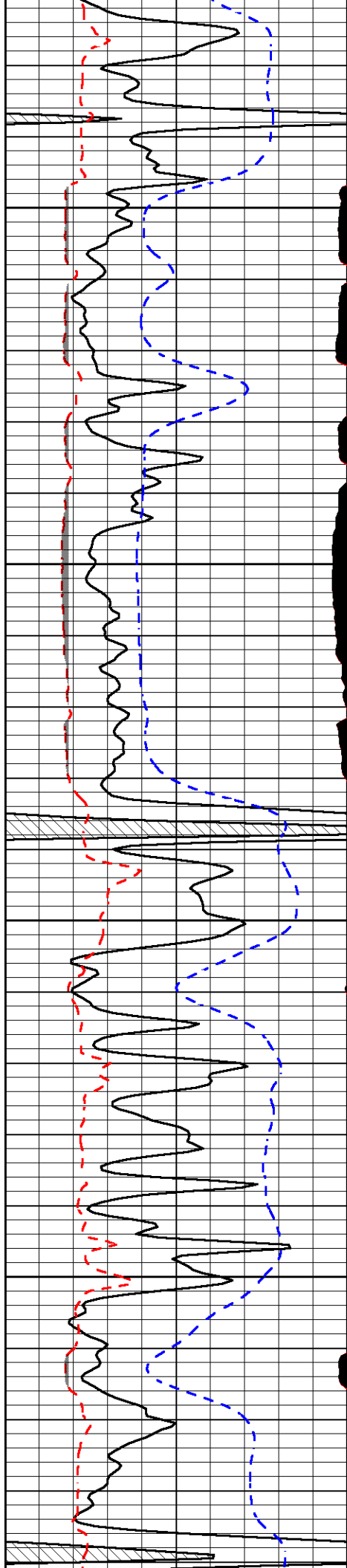
Database File mikekelsooil_wonder-mud_14-1hd.db
 Dataset Pathname DIL/mkstckml
 Presentation Format micro
 Dataset Creation Sun May 29 07:56:21 2016
 Charted by Depth in Feet scaled 1:240

0	Gamma Ray (GAPI)	150
6	MCAL (in)	16
2.875	Mud Cake (in)	7.875
-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

LSPD
(ft/min)



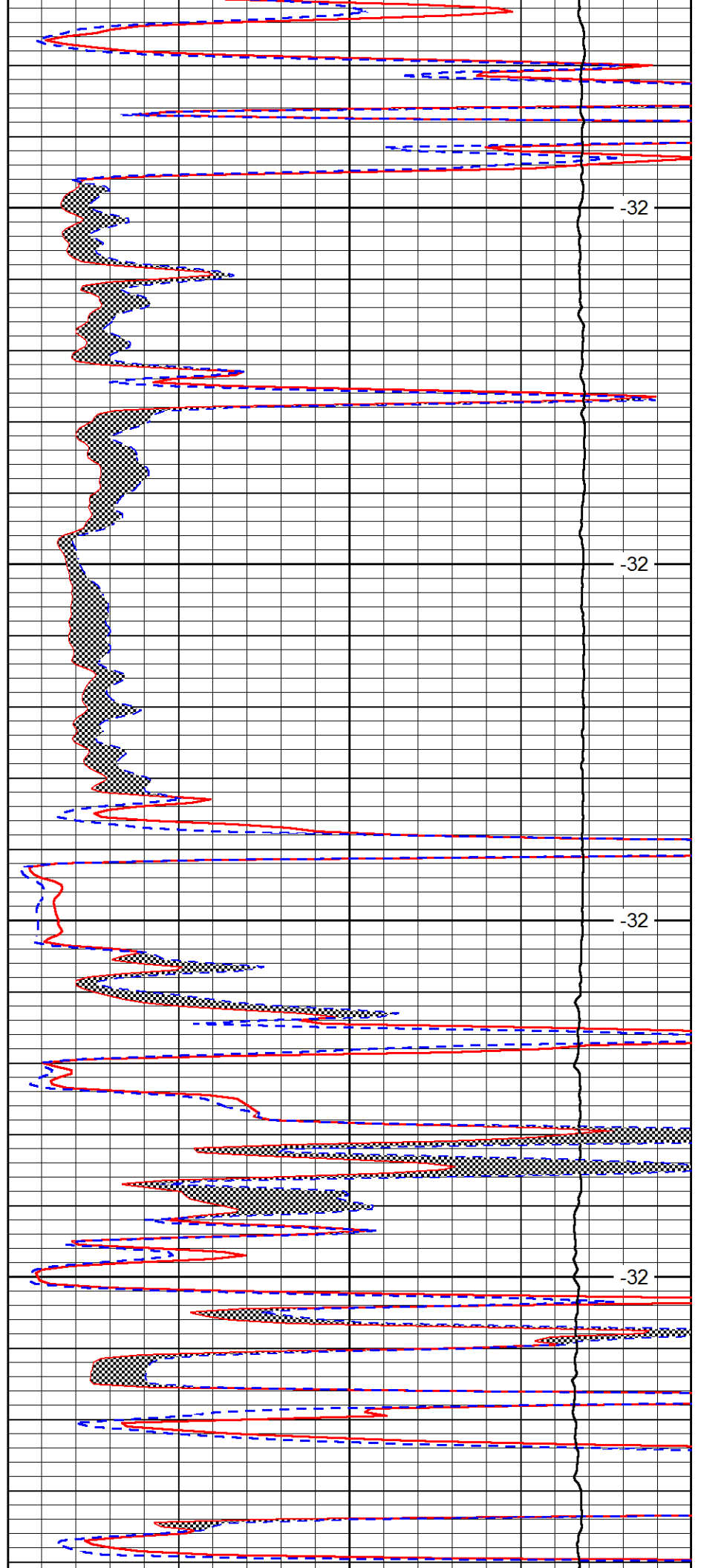


3500

3550

3600

3650

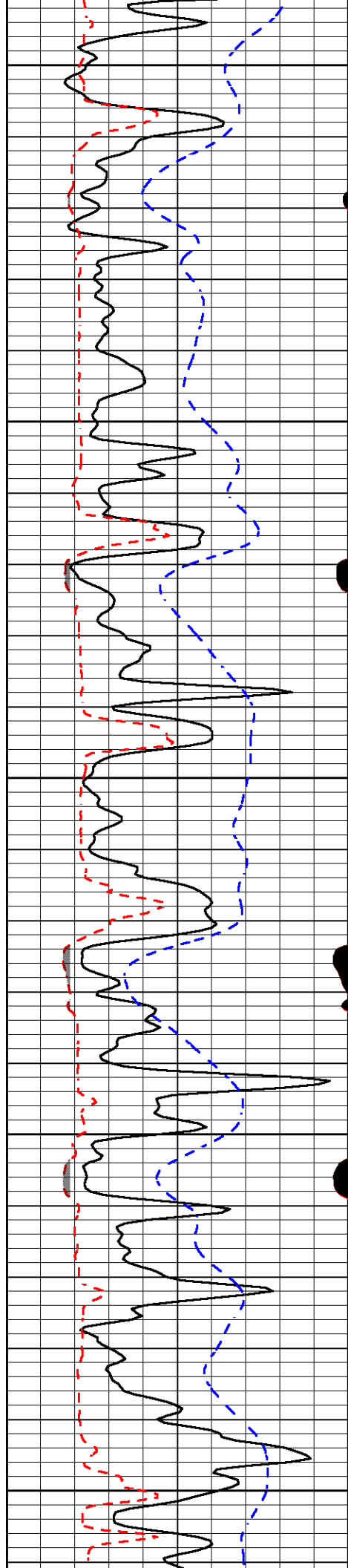


-32

-32

-32

-32



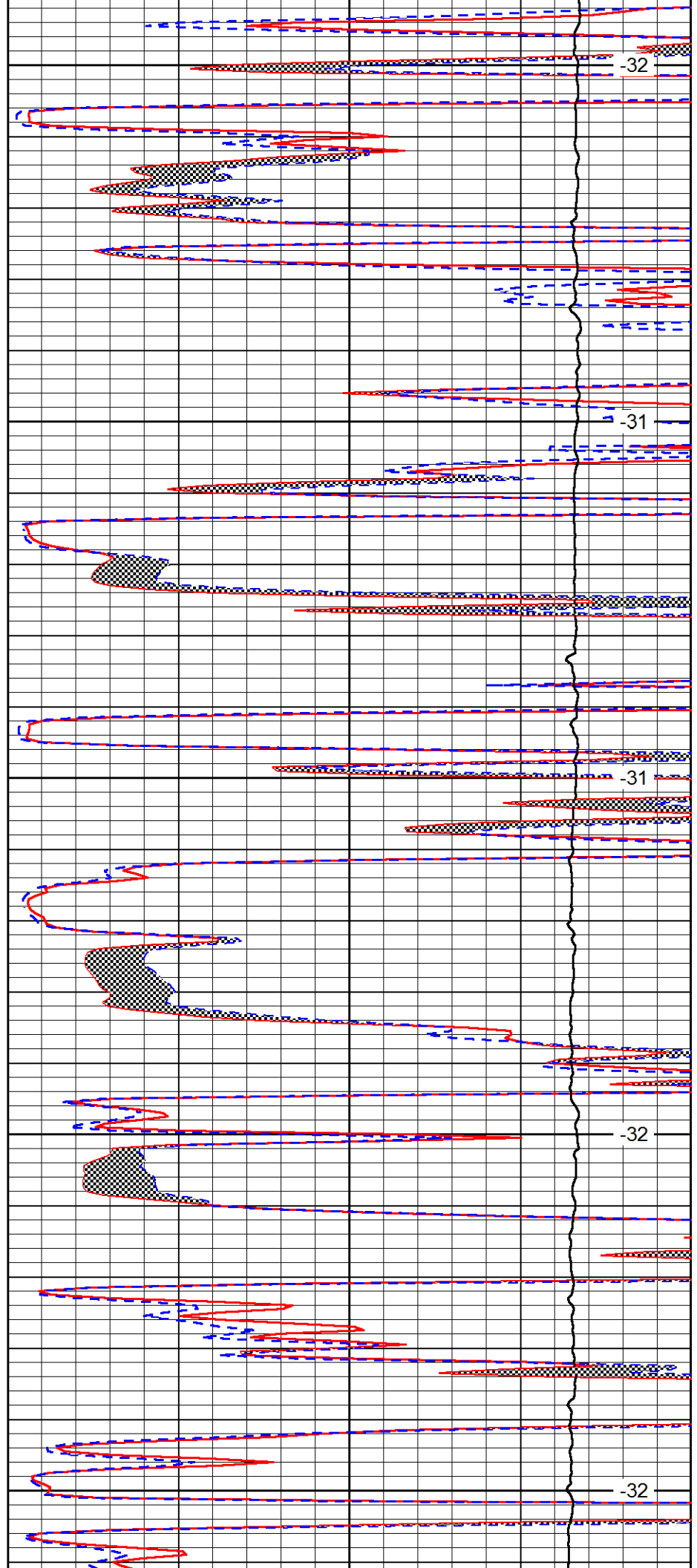
3700

3750

3800

3850

3900



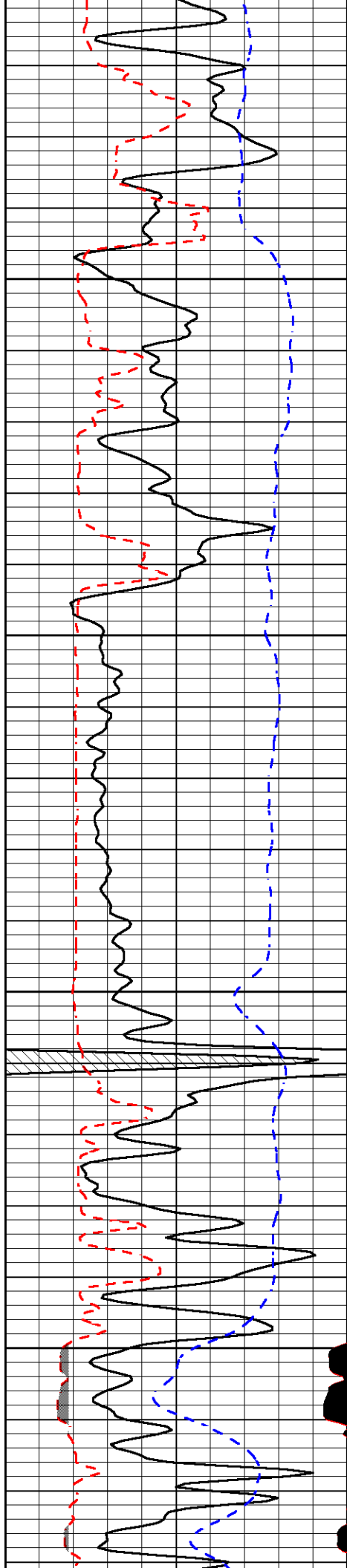
-32

-31

-31

-32

-32

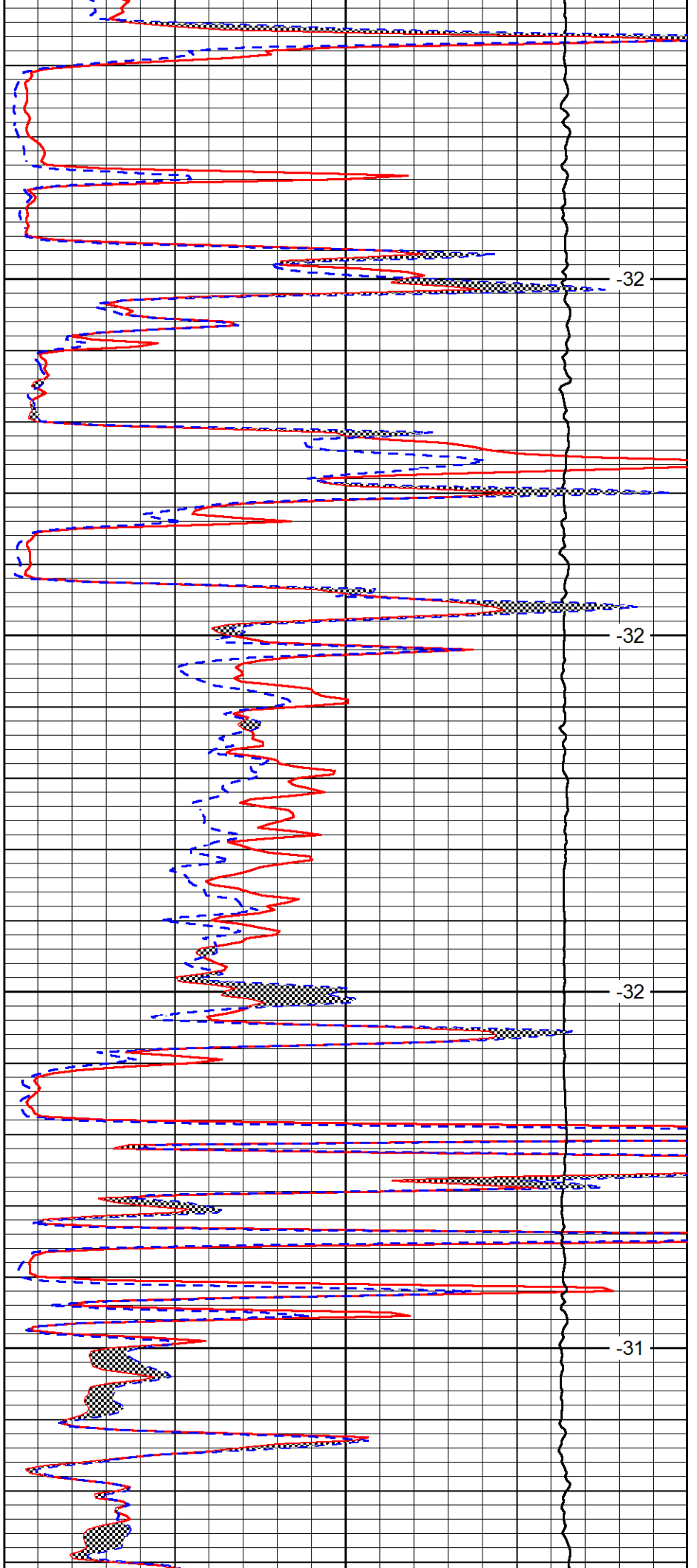


3950

4000

4050

4100

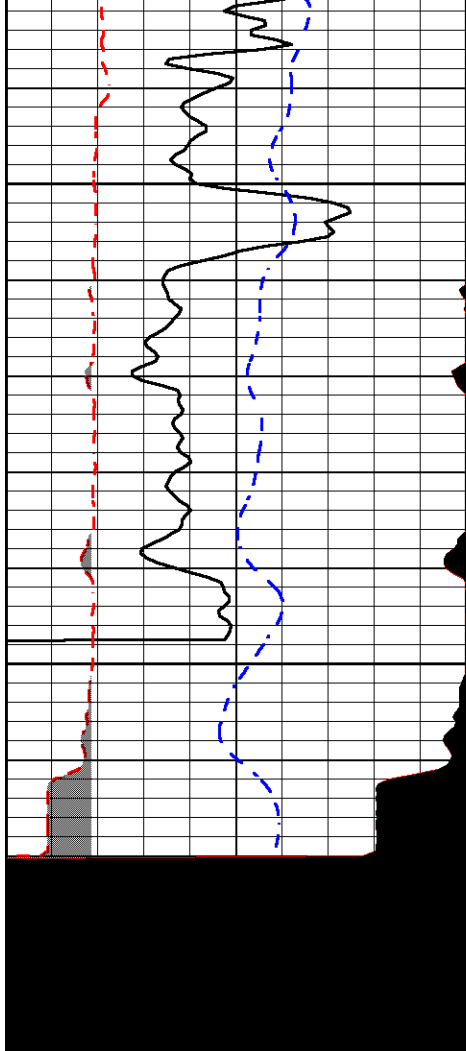


-32

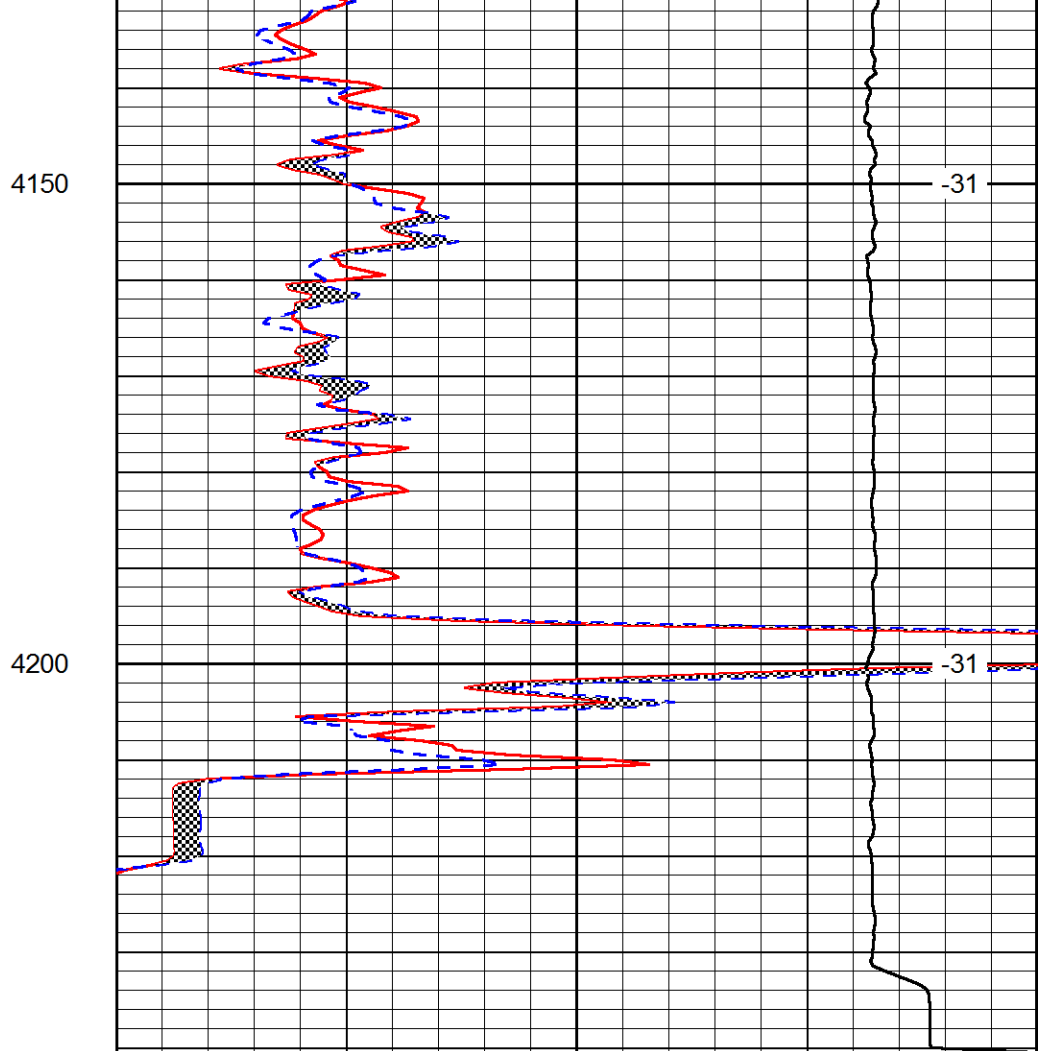
-32

-32

-31



0	Gamma Ray (GAPI)	150
6	MCAL (in)	16
2.875	Mud Cake (in)	7.875
-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

LSPD
(ft/min)