



**COMPENSATED DESNITY
NEUTRON
PE/LOG**

Company	Sutherland Energy LLC	Location:	API # : 15-067-21876	Other Services
Well	MCMU #2		991' FNL & 2928' FEL	ML DIL
Field	Unnamed			
County	Grant	State	KANSAS	
Permanent Datum	SEC 3 TWP 30S RGE 35W	Ground Level	Elevation	2952'
Log Measured From	KB 13' AGL			K.B. 2965' D.F. 2964' G.L. 2952'
Drilling Measured From	KB			

Date	12/30/23
Run Number	One
Depth Driller	5450'
Depth Logger	5440'
Bottom Logged Interval	5418'
Top Log Interval	4850'
Casing Driller	8 5/8"@1706'
Casing Logger	1706'
Bit Size	7 7/8"
Type Fluid in Hole	Chemical
Density / Viscosity	9.0/48
pH / Fluid Loss	11/7.2
Source of Sample	Pit
Rm @ Meas. Temp	2.7@60degf
Rmf @ Meas. Temp	2.2@60degf
Rmc @ Meas. Temp	3.5@60degf
Source of Rmf / Rmc	Calculated
Rm @ BHT	3.5@60degf
Time Circulation Stopped	6:45 PM
Time Logger on Bottom	10:00 p.m
Maximum Recorded Temperature	118degf
Equipment Number	T-605
Location	Hays, KS.
Recorded By	COLBY DREILING
Witnessed By	Duane Sutherland

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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

37.4728106,-101.1257323

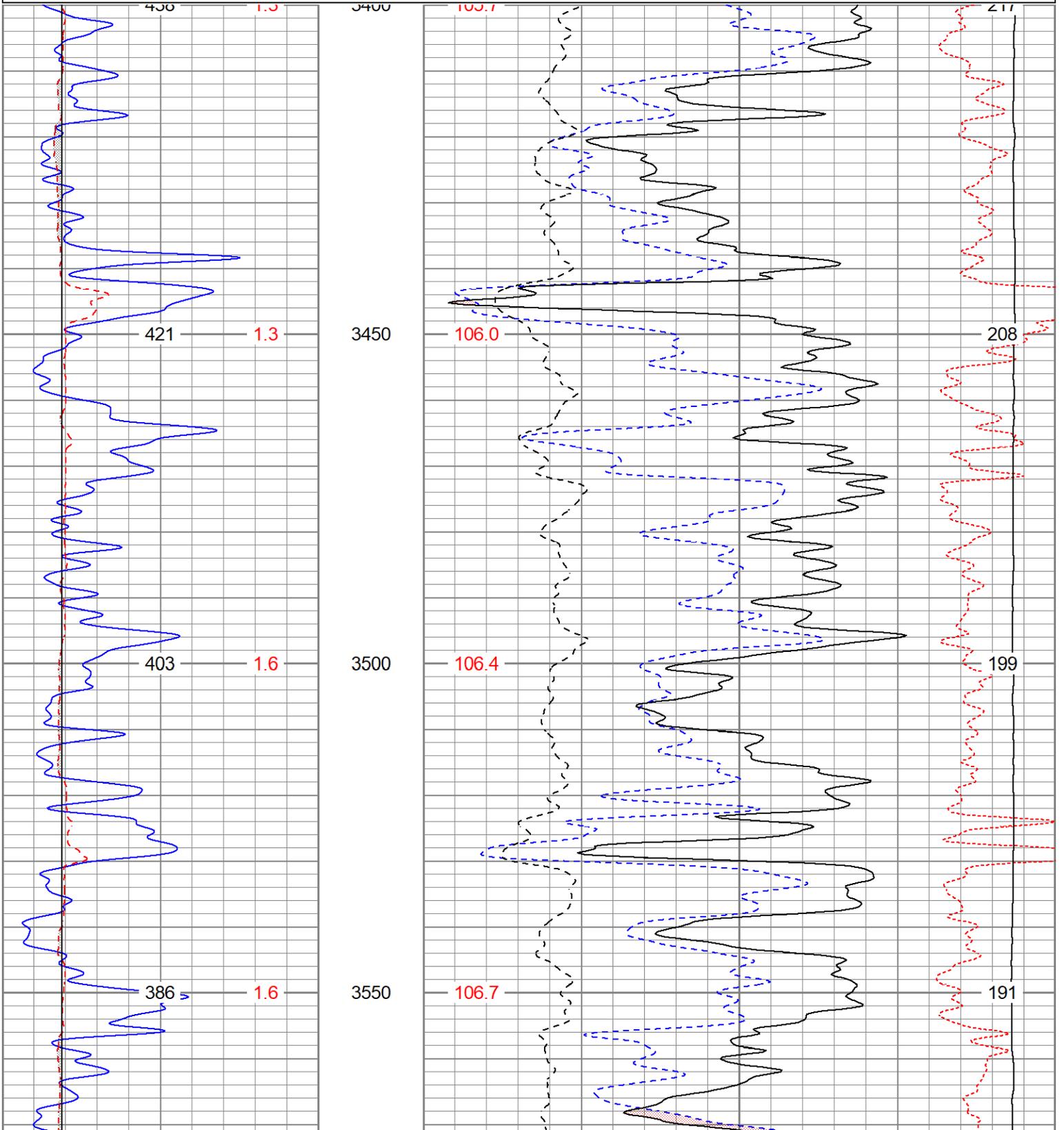
Thanks for using Gemini Wireline LLC
785-625-1182

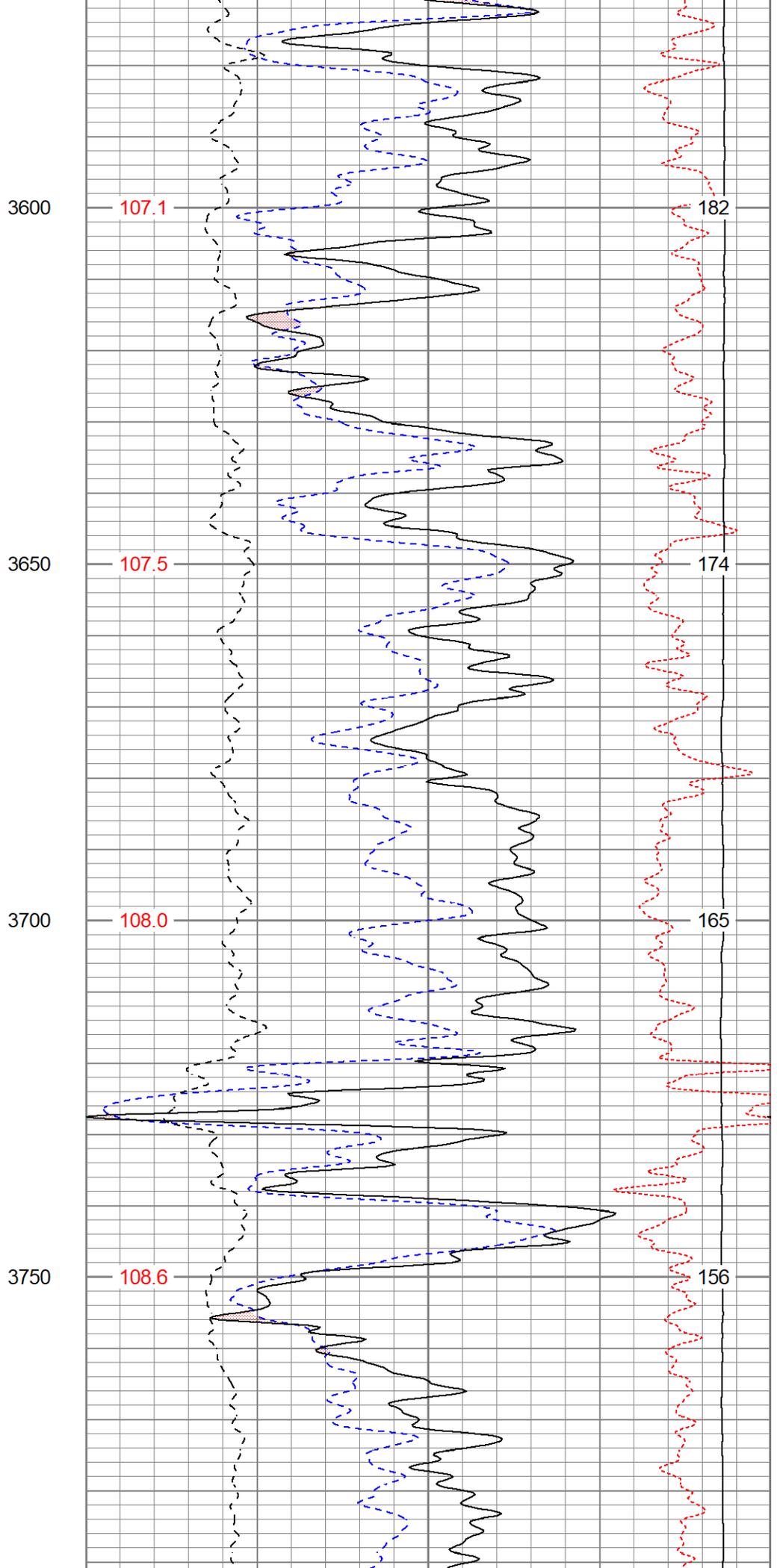
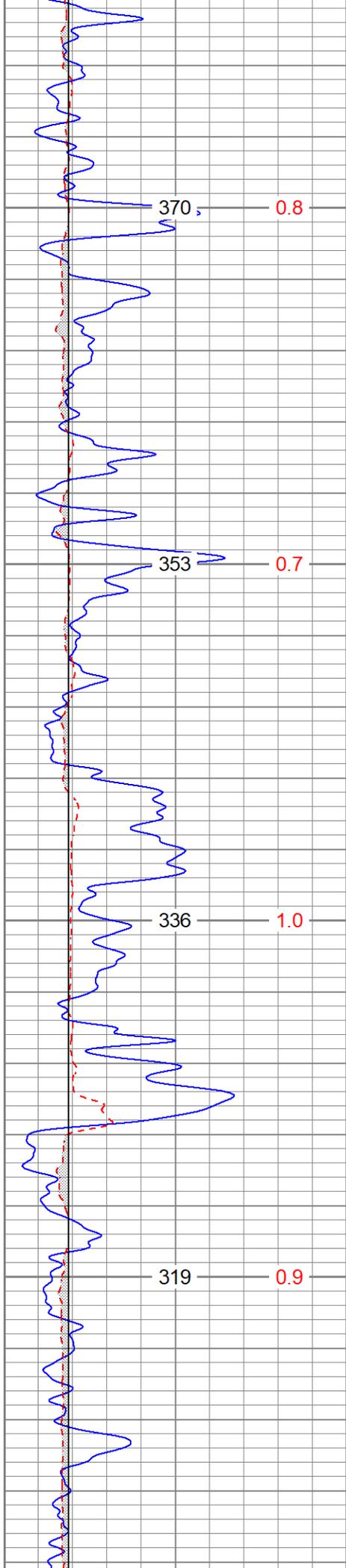


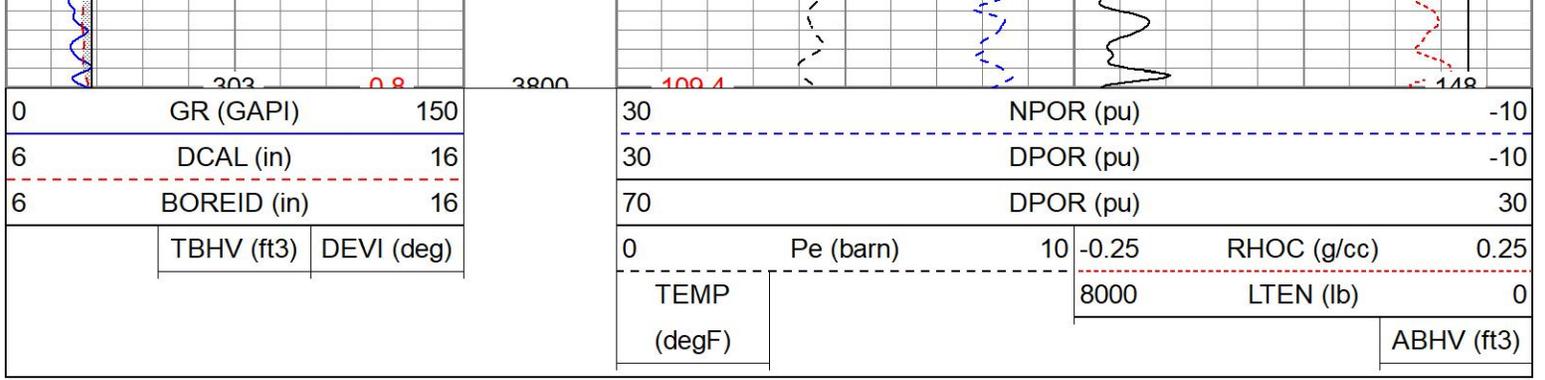
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Database File semcmu#2oh.db
 Dataset Pathname pass3.1
 Presentation Format digital_kcdnl
 Dataset Creation Sat Dec 30 23:54:33 2023
 Charted by Depth in Feet scaled 1:240

0	GR (GAPI)	150	30	NPOR (pu)	-10
6	DCAL (in)	16	30	DPOR (pu)	-10
6	BOREID (in)	16	70	DPOR (pu)	30
	TBHV (ft3)	DEVI (deg)	0	Pe (barn)	10
			0	RHOC (g/cc)	0.25
			TEMP (degF)	8000	LTEN (lb)
					0
					ABHV (ft3)

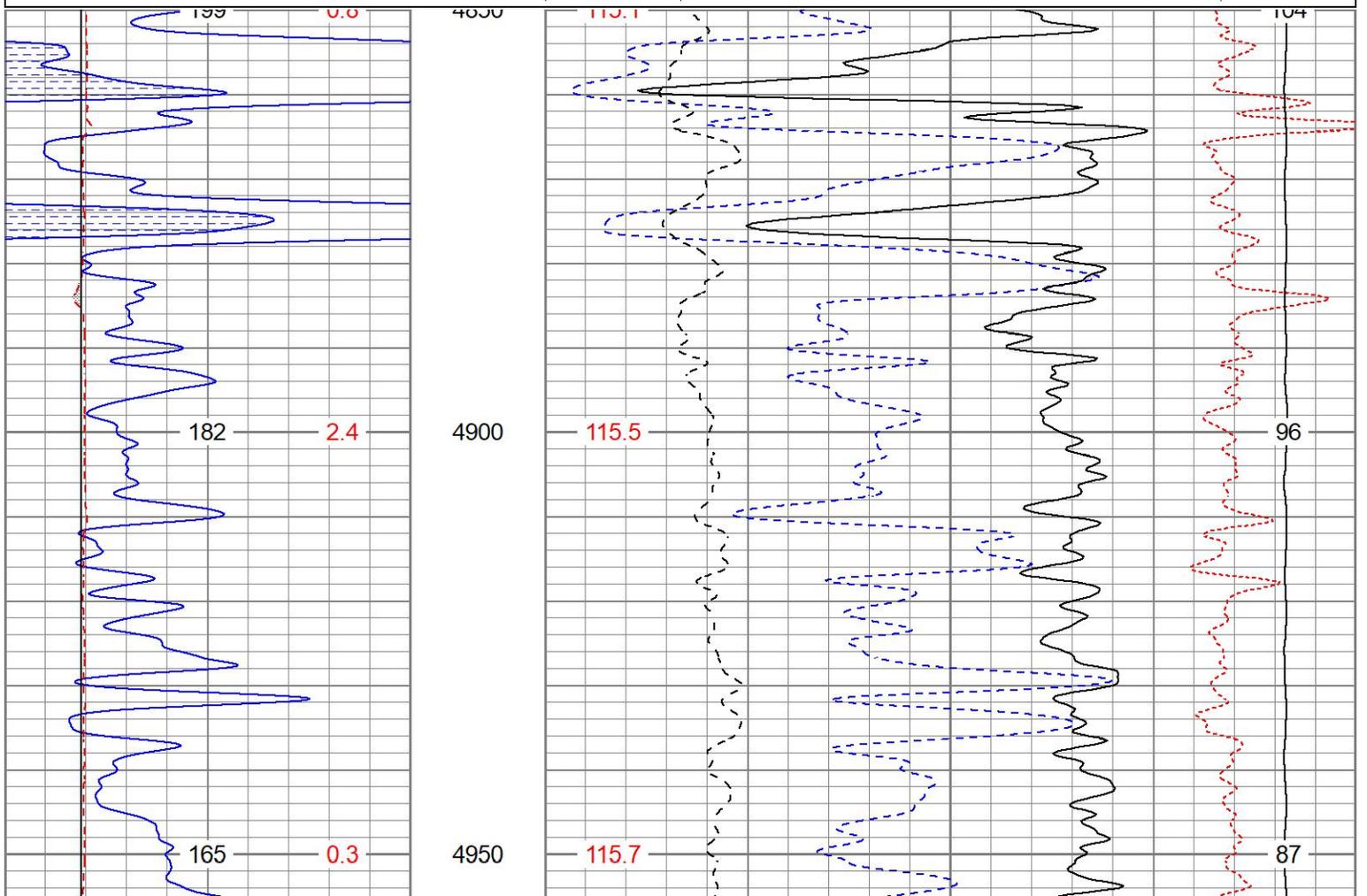
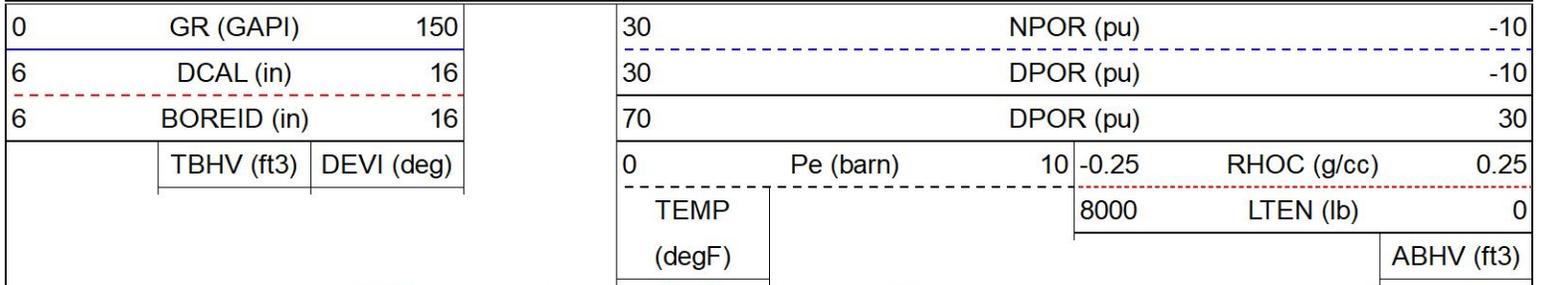


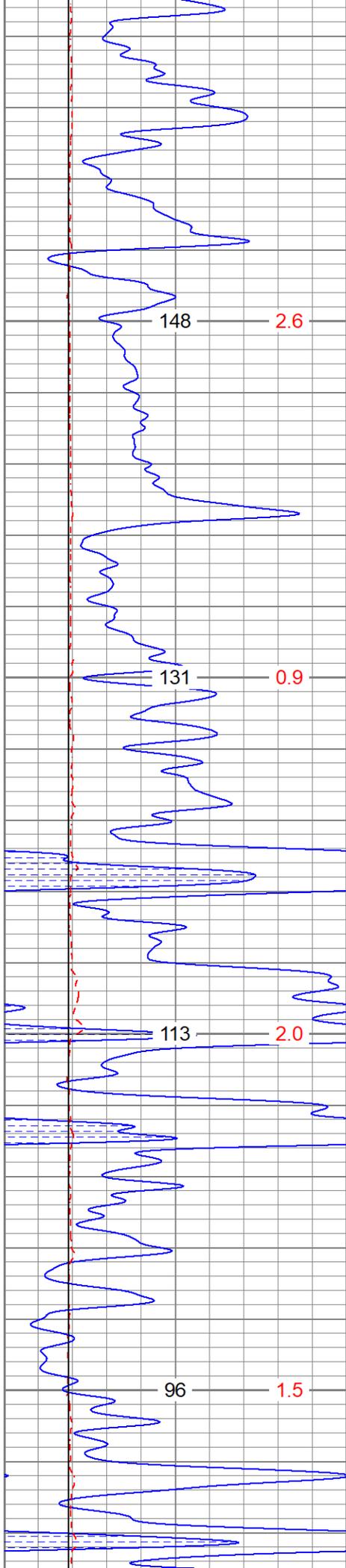




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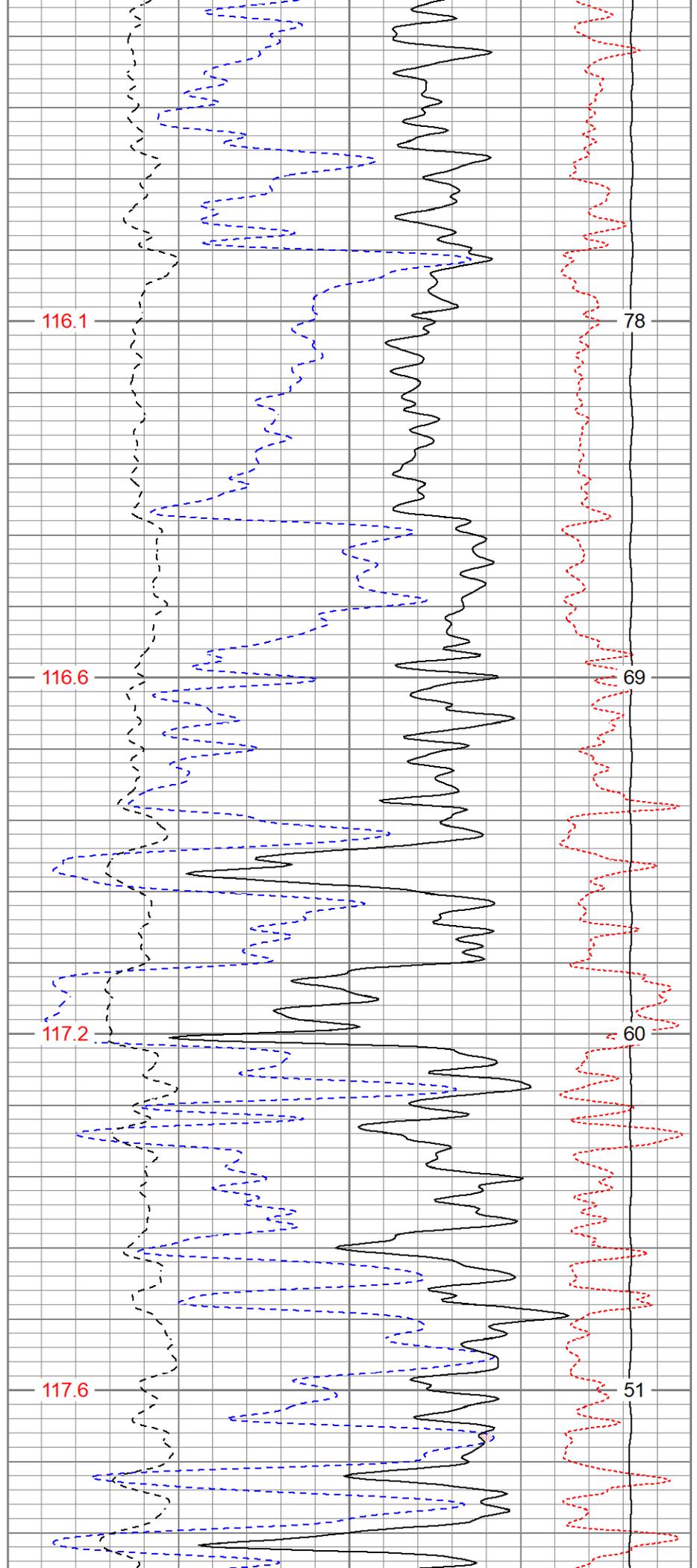


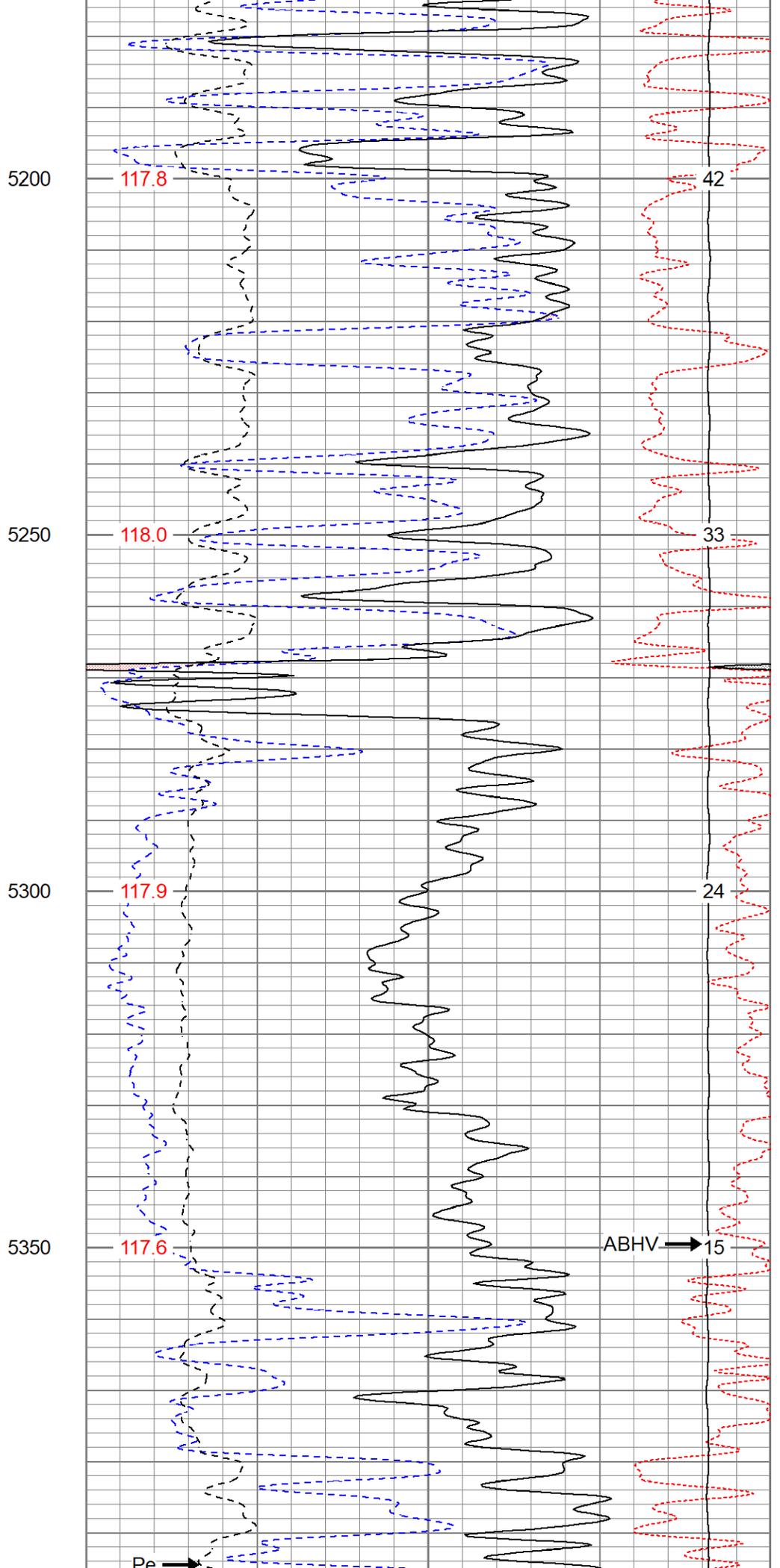
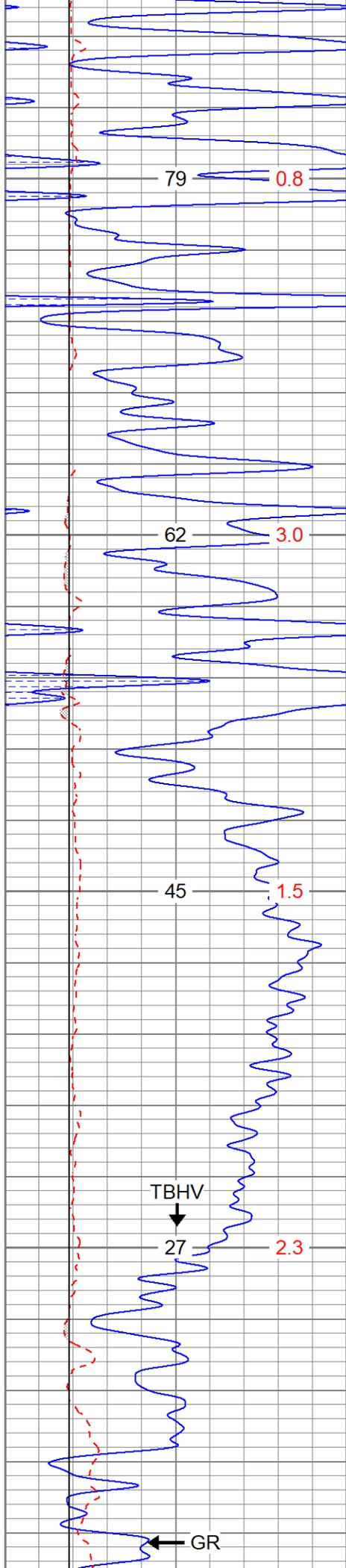
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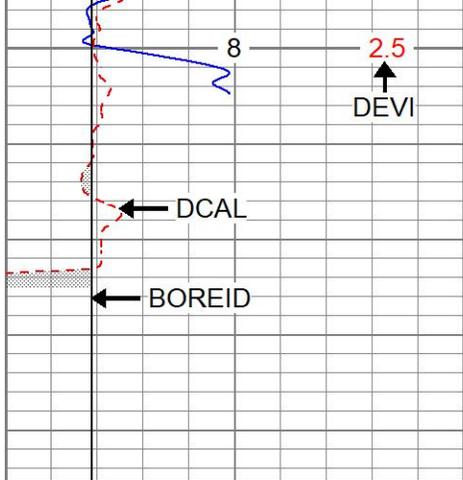
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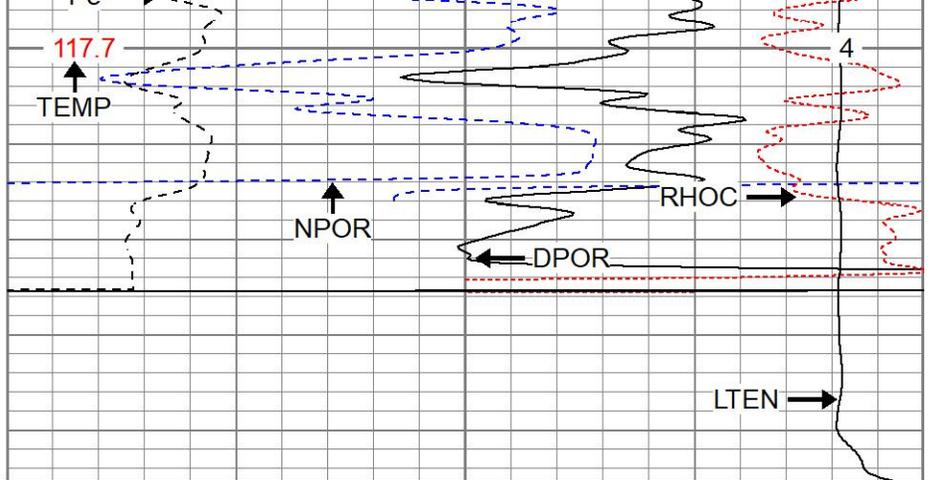
5150







5400



0	GR (GAPI)	150
6	DCAL (in)	16
6	BOREID (in)	16
	TBHV (ft3)	DEVI (deg)

30	NPOR (pu)	-10		
30	DPOR (pu)	-10		
70	DPOR (pu)	30		
0	Pe (barn)	10 -0.25	RHOC (g/cc)	0.25
TEMP (degF)	8000	LTEN (lb)	0	ABHV (ft3)

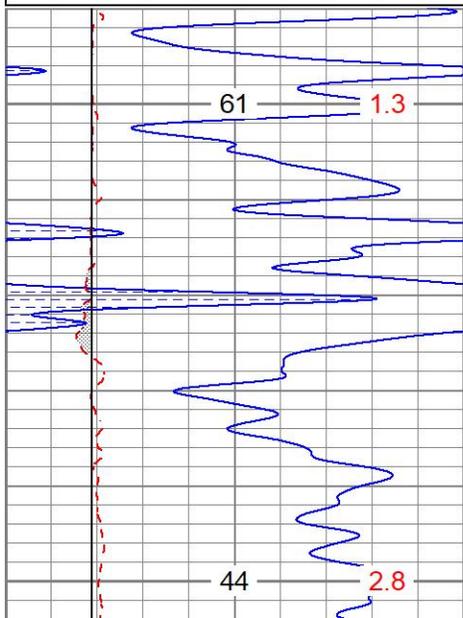


REPEAT SECTION

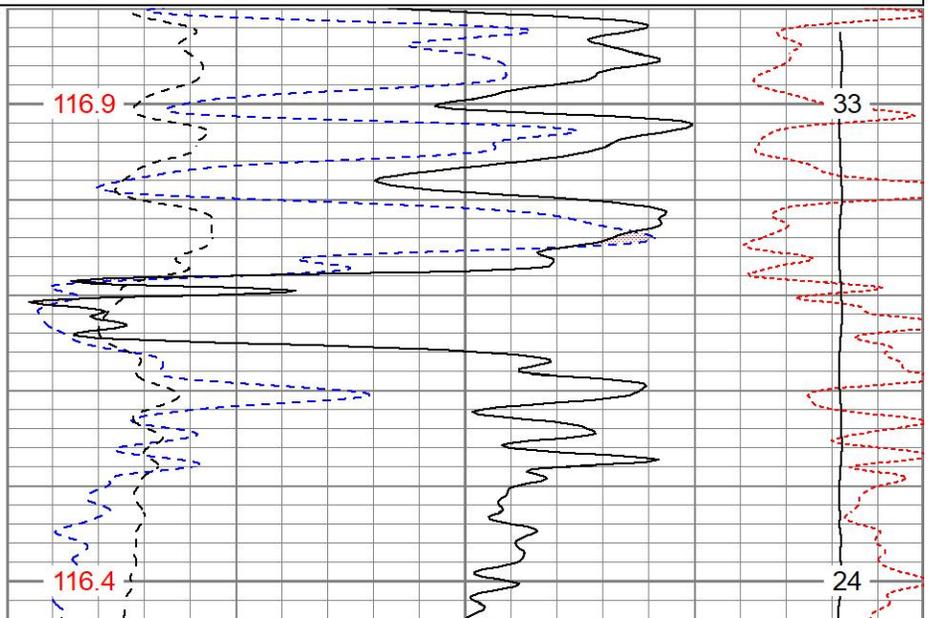
Database File semcmu#2oh.db
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 Presentation Format digital_kcdnl
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 Charted by Depth in Feet scaled 1:240

0	GR (GAPI)	150
6	DCAL (in)	16
6	BOREID (in)	16
	TBHV (ft3)	DEVI (deg)

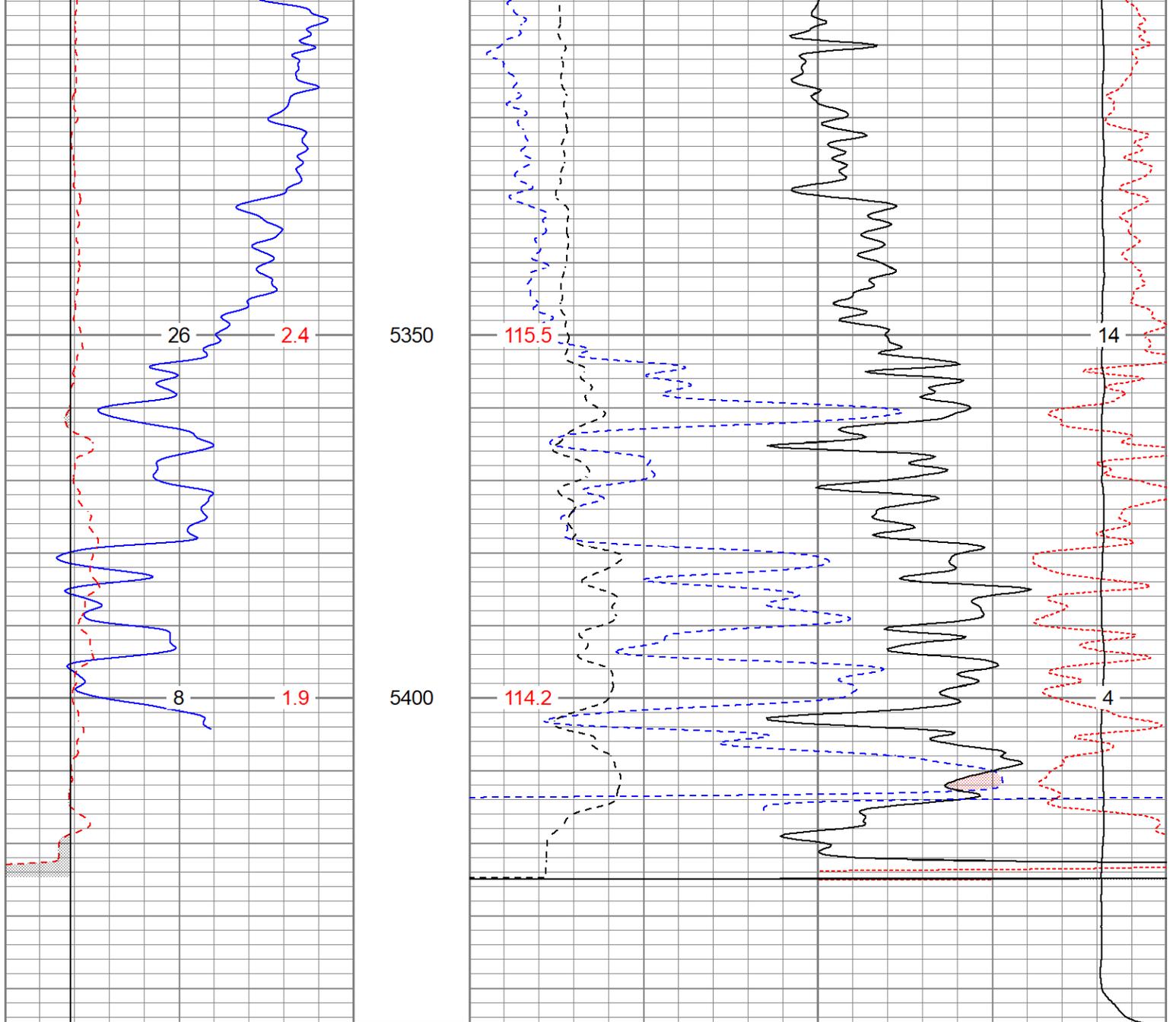
30	NPOR (pu)	-10		
30	DPOR (pu)	-10		
70	DPOR (pu)	30		
0	Pe (barn)	10 -0.25	RHOC (g/cc)	0.25
TEMP (degF)	8000	LTEN (lb)	0	ABHV (ft3)



5250



5300



0	GR (GAPI)	150	30	NPOR (pu)	-10
6	DCAL (in)	16	30	DPOR (pu)	-10
6	BOREID (in)	16	70	DPOR (pu)	30
	TBHV (ft3)	DEVI (deg)	0	Pe (barn)	10
			8000	RHOC (g/cc)	0.25
				LTEN (lb)	0
					ABHV (ft3)

Calibration Report

Database File semcmu#2oh.db
 Dataset Pathname pass3.1
 Dataset Creation Sat Dec 30 23:54:33 2023

Dual Induction Calibration Report

Serial-Model: 1842-ADM
 Surface Cal Performed: Mon Sep 20 22:00:42 2021
 Downhole Cal Performed: Thu Sep 14 13:06:48 2023
 After Survey Verification Performed: Thu Sep 14 13:02:29 2023

Loop:	Readings			References			Results	
	Air	Loop		Air	Loop		m	b
Deep	0.018	0.672	V	0.000	350.000	mmho/m	535.475	-9.896
Medium	0.003	0.769	V	0.000	400.000	mmho/m	522.607	-1.745
Internal:	Zero	Cal		Zero	Cal		m	b
Deep	0.018	0.672	V	0.000	350.000	mmho/m	535.240	-9.549
Medium	0.003	0.768	V	0.000	550.000	mmho/m	718.637	-2.088

Downhole Calibration								
Internal:	Readings			References			Results	
	Zero	Cal		Zero	Cal		m	b
Deep	-0.210	349.810	mmho/m	-0.343	349.810	mmho/m	1.000	-0.133
Medium	6.952	396.760	mmho/m	-0.226	399.745	mmho/m	1.026	-7.360
Shallow	2.495	0.026	V	500.000	2.000	Ohm-m	201.711	-3.319

After Survey Verification								
Internal:	Readings			Targets			Results	
	Zero	Cal		Zero	Cal		m'	b'
Deep	0.000	0.000	mmho/m	32.030	5.643	mmho/m	1.000	-0.133
Medium	0.000	0.000	mmho/m	6.952	396.760	mmho/m	1.026	-7.360
Shallow	0.000	0.000	Ohm-m	500.000	2.000	Ohm-m	1.000	0.000

Admyr Lithodensity Calibration Report

Serial-Model:	1C-C
Source:	Blue2
Master Calibration Performed:	Tue Aug 30 10:20:37 2022

Master Calibration						
	Density		Far Detector	Near Detector		
Magnesium	1.670	g/cc	6362.49	3546.71	cps	
Aluminium	2.640	g/cc	1733.54	2362.69	cps	
Aluminium+Sleeve	2.617	g/cc	1657.01	2197.69	cps	
Spine Angle = 72.65			Density/Spine Ratio = 0.712			
	PE		NLITH	NHARD		
Magnesium	2.000	barn	2520.00	1620.00	cps	
Aluminium	3.000	barn	1926.00	1699.00	cps	
Aluminium+Sleeve	5.000	barn	915.00	1230.00	cps	
M = 0.370			B = -0.079	R = 0.999		
	Size		Reading			
Small Ring	8.00	in	8.61	V		
Large Ring	14.30	in	12.40	V		

Neutron Calibration Report

Serial Number:	AD5139
Tool Model:	ADMY5139
Performed:	(Not Performed)

Calibrator Value: 1 NAPI
 Calibrator Reading: 1 cps
 Sensitivity: 1 NAPI/cps

Temperature Calibration Report

Serial Number: WithMC
 Tool Model: WMC
 Performed: Fri Apr 19 12:15:04 2019

	Reference	Reading
Low Reference:	0.00 degF	0.00 degF
High Reference:	1.00 degF	1.00 degF
Gain:	1.00	
Offset:	0.00	
Delta Spacing	1	

Inclinometer Calibration Report

Performed: Wed May 5 19:20:48 2021

	Low Read.	High Read.	Low Ref.	High Ref.	
X Accelerometer	205.00	1843.00	-1.00	1.00	gee
Y Accelerometer	205.00	1843.00	-1.00	1.00	gee
Z Accelerometer					gee

Gamma Ray Calibration Report

Serial Number: WithMC
 Tool Model: WMC
 Performed: Sat Nov 11 16:49:39 2023

Calibrator Value: 1.0 GAPI

Background Reading: 0.0 cps
 Calibrator Reading: 1.0 cps

Sensitivity: 1.0000 GAPI/cps

Sensor	Offset (ft)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb)	
GR	38.31		CHD-STD	0.50	1.69	1.00	
ACCY	37.15		ADT-WMC (WithMC)	4.58	3.50	120.00	
ACCX	37.15		Admyr Telemetry With Mudcell				
SSTAT	36.73						
PSTAT	35.90						
ASTAT	35.90						
GRD	35.06		NEU-ADMY5139 (AD5139)	5.65	3.50	50.00	
TEMP	35.06		Admyer NEU DIGITAL				
NEU	31.03						
LSTAT	21.88						
LS_HV	21.86						
LS8	21.86						
				ADT11 LITH-C (1C)	0.20	3.50	240.00

LS7	21.86		ADVENTUS (18) Real Time Litho Tool	9.29	3.50	240.00
LS6	21.86					
LS5	21.86					
NHARD	21.86					
LSD	21.86					
LS2	21.86					
NLITH	21.86					
LSV	21.61					
DCAL	21.61					
SS_HV	21.27					
SSV	21.27					
SS8	21.27		DIL-ADM (1842) Dual Induction	19.71	4.00	300.00
SS7	21.27					
SS6	21.27					
SS5	21.27					
SS4	21.27					
SSD	21.27					
SS2	21.27					
SS1	21.27					
SP	10.60					
CILD	10.60					
CILM	6.89	Dataset:	semcmu#2oh.db: field/well/run1/pass3.1			
RLL3	1.70	Total length:	39.73 ft			
TR_Mon	0.00	Total weight:	711.00 lb			
		O.D.:	4.00 in			