COMPENSATED DENSITY NEUTRON LOG

Company Patterson Energy
Well BERNSTORF-JANKE #11
Field KRAFT-PRUSA
County BARTON State Kansas

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Well BERNSTORF-JANKE #11
Field KRAFT-PRUSA
County BARTON
State Kansas

Location: API # : 15 009 26349

1400' FNL & 1350' FEL

SEC 33 TWP 16S RGE 11W

Other Services
ML
DIL

Elevation
K.B. 1917
D.F. 1915
G.L. 1912

Permanent Datum	Ground Level	Elevation	1912
Log Measured From	KB 5' AGL		
Drilling Measured From	KB		

Date	5/3/22		
Run Number	One		
Depth Driller	3660'		
Depth Logger	3656		
Bottom Logged Interval	3636		
Top Log Interval	2800		
Casing Driller	8 5/8"@ 730'		
Casing Logger	730		
Bit Size	7 7/8"		
Type Fluid in Hole	Chemical		
Density / Viscosity	9.3/55		
pH / Fluid Loss	9.5/9.2		
Source of Sample	Pit		
Rm @ Meas. Temp	1.6@73degf		
Rmf @ Meas. Temp	1.2@73degf		
Rmc @ Meas. Temp	1.92@73degf		
Source of Rmf / Rmc	Calculated		
Rm @ BHT	1.12@104degf		
Time Circulation Stopped	10:00 PM		
Time Logger on Bottom	12:15 AM		
Maximum Recorded Temperature	104degf		
Equipment Number	T-605		
Location	Hays, KS.		
Recorded By	GUS PFANENSTIEL		
Witnessed By	AUSTIN KLAUS		

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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

NORTH OF CLAFLIN TO 180 RD. 1/4 WEST,
SOUTH INTO.

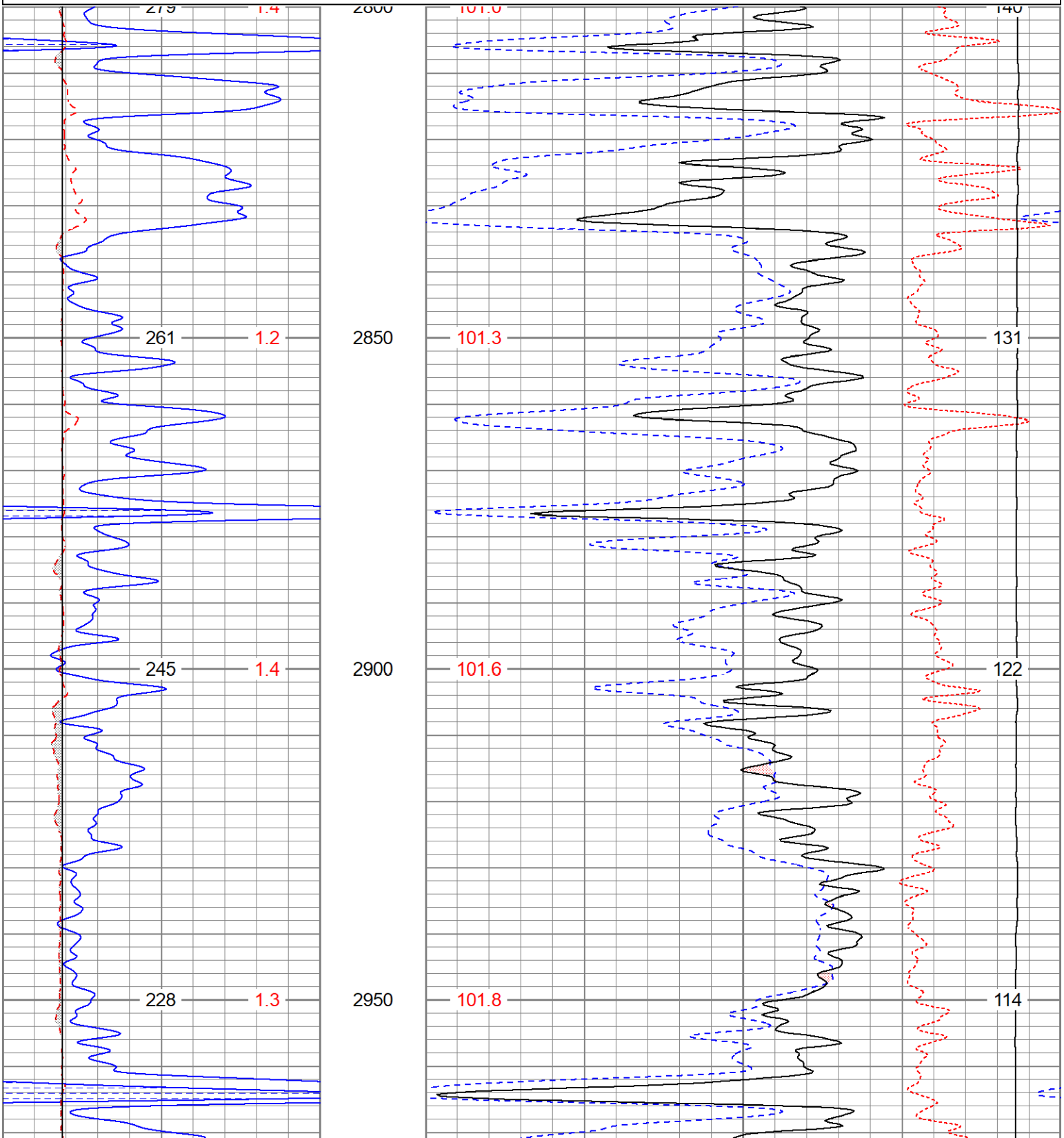
Thanks for using Gemini Wireline LLC
785-625-1182

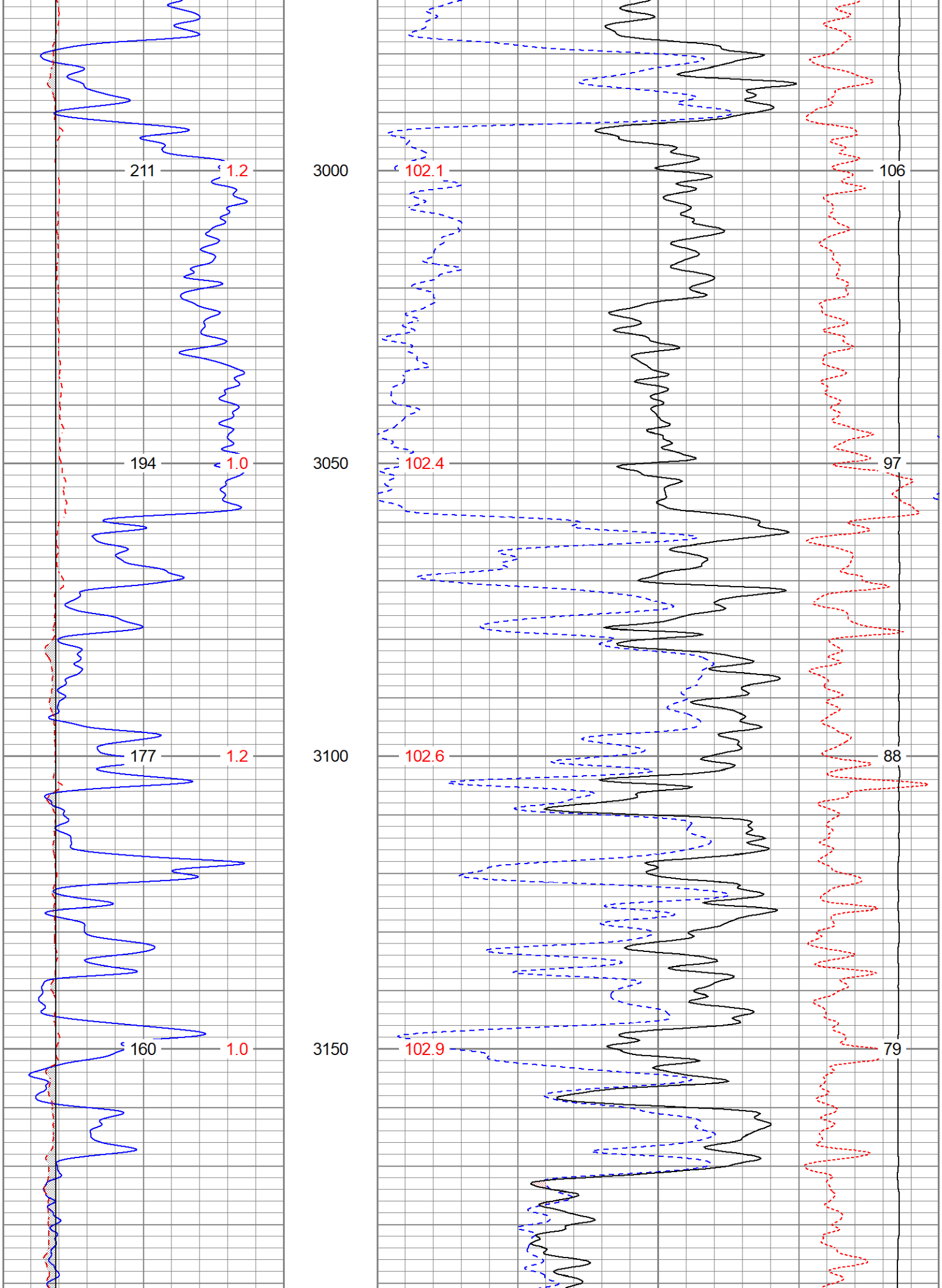
MAIN PASS

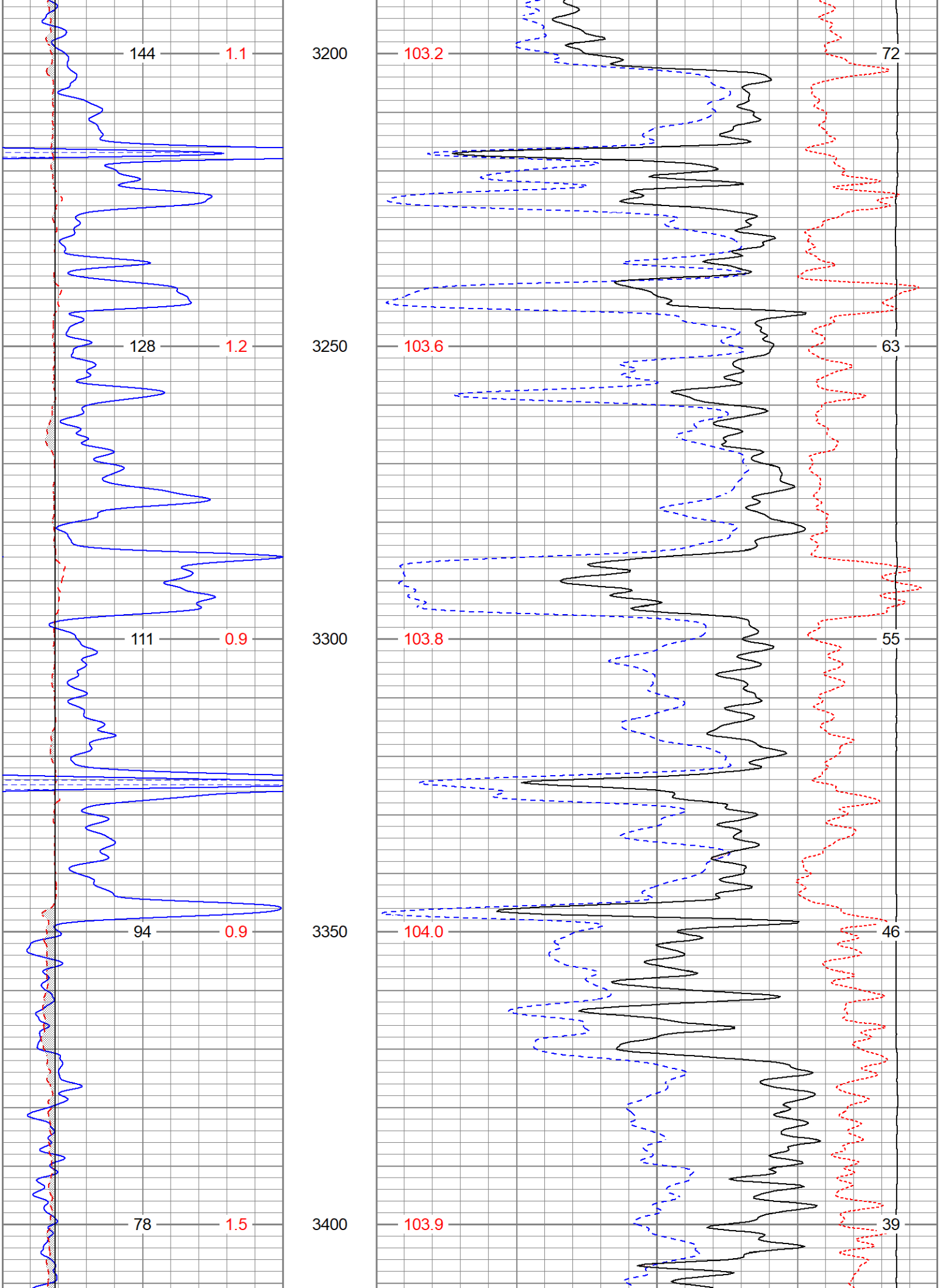
Database File	pebernstorf-janke#11oh.db
Dataset Pathname	pass3.1
Presentation Format	digital_kcdnl
Dataset Creation	Wed May 04 01:29:35 2022
Charted by	Depth in Feet scaled 1:240

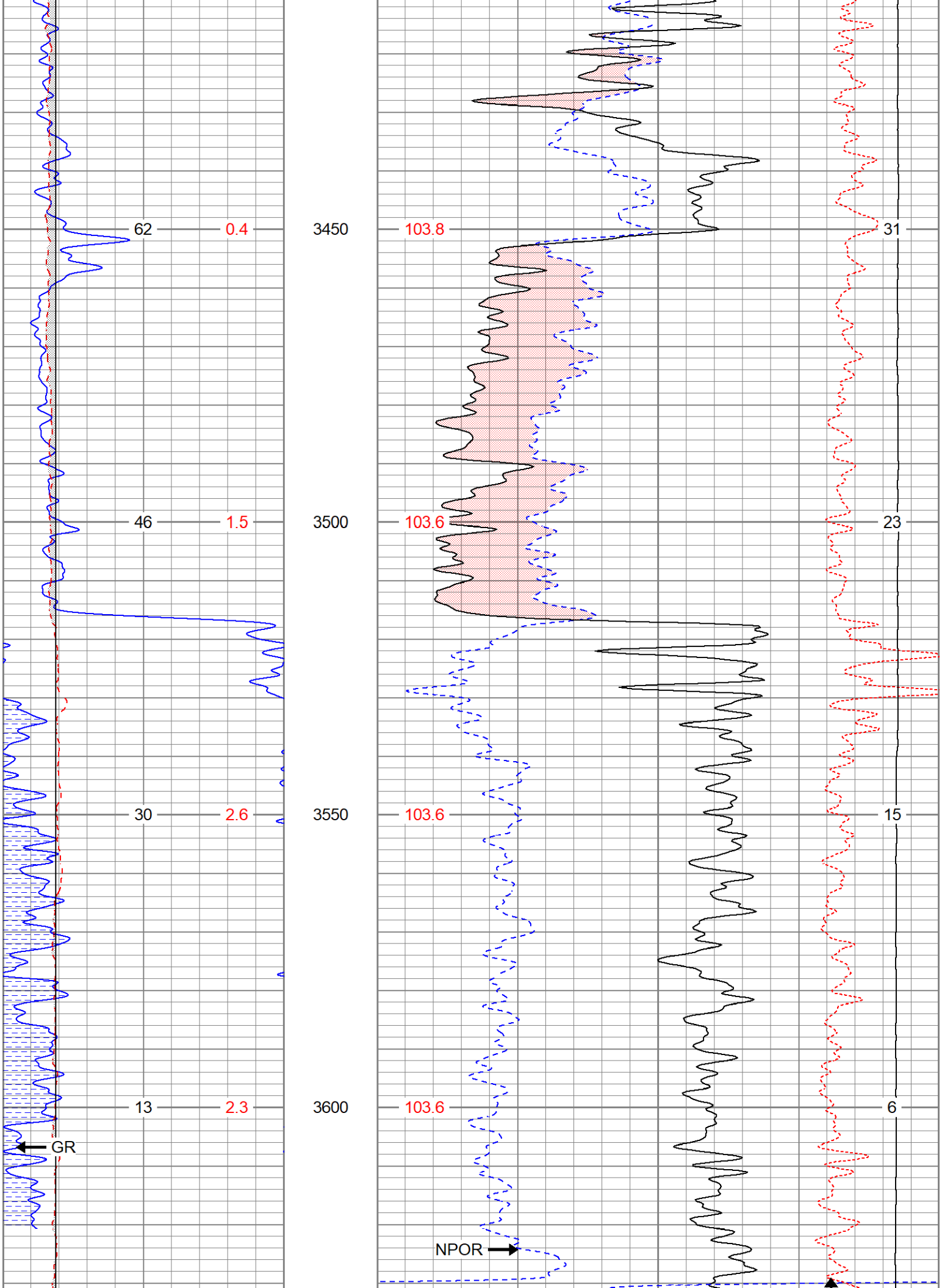
0	GR (GAPI)	150
6	DCAL (in)	16
6	BOREID (in)	16
	TBHV (ft3) / DEVI (deg)	

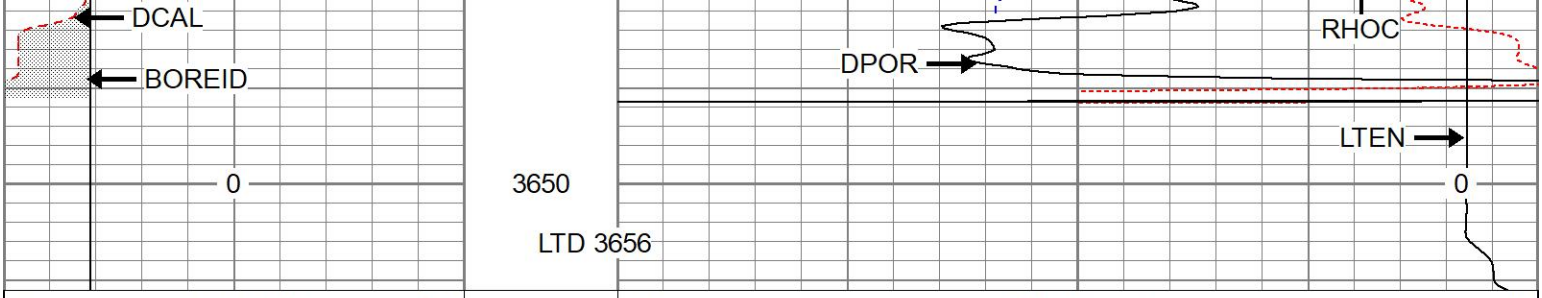
30	NPOR (pu)	-10
30	DPOR (pu)	-10
70	DPOR (pu)	30
TEMP (degF)		
-0.25	RHOC (g/cc)	0.25
8000	LTEN (lb)	0
	ABHV (ft3)	




211
1.2
3000
102.1
106
194
1.0
3050
102.4
97
177
1.2
3100
102.6
88
160
1.0
3150
102.9
79


144
1.1
3200
103.2
72
128
1.2
3250
103.6
63
111
0.9
3300
103.8
55
94
0.9
3350
104.0
46
78
1.5
3400
103.9
39


62
0.4
3450
103.8
31
46
1.5
3500
103.6
23
30
2.6
3550
103.6
15
13
2.3
3600
103.6
6
GR
NPOR



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

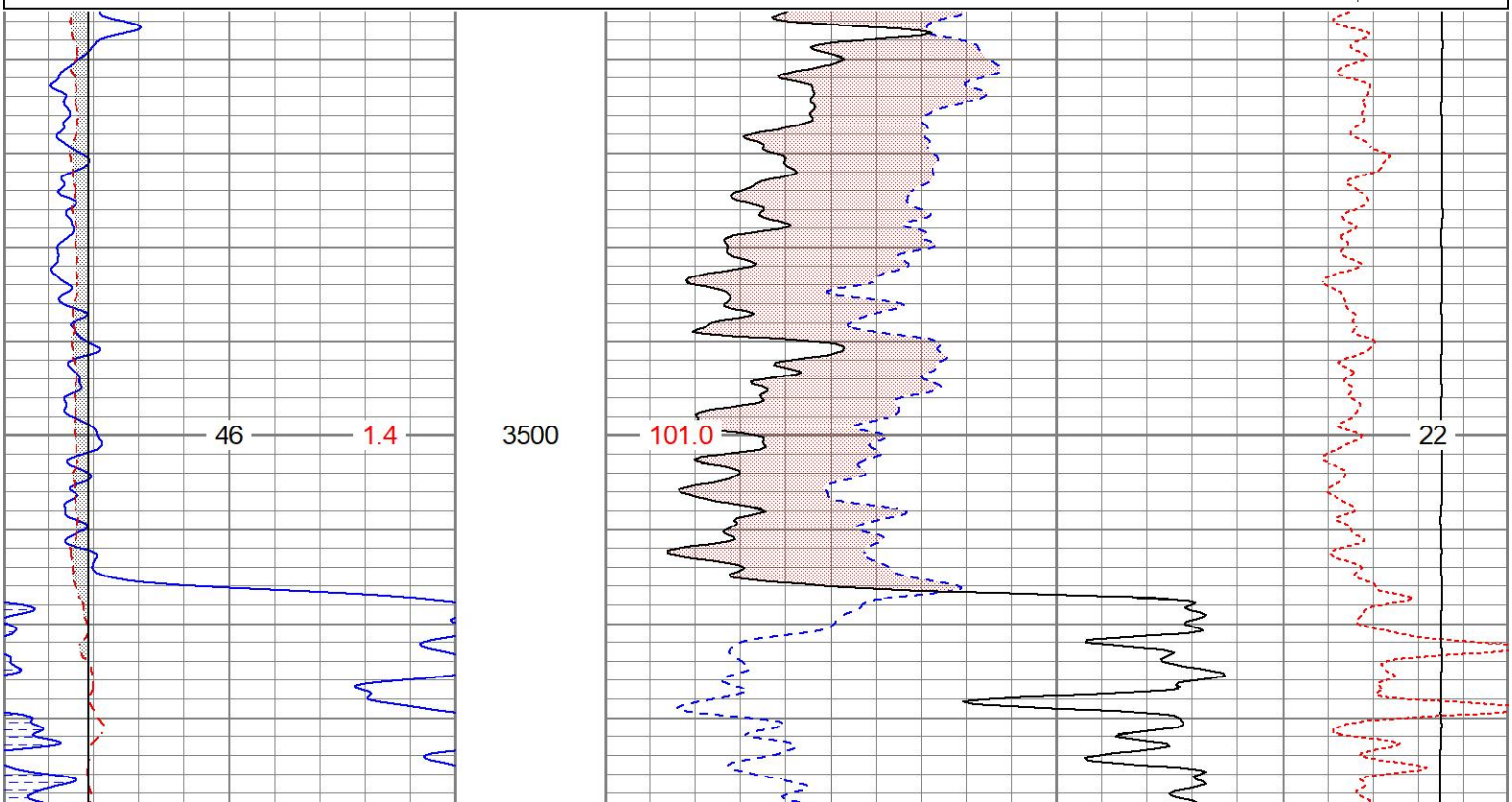
30	NPOR (pu)	-10
30	DPOR (pu)	-10
70	DPOR (pu)	30
TEMP (degF)	-0.25 RHOC (g/cc)	0.25
	8000 LTEN (lb)	0
		ABHV (ft3)

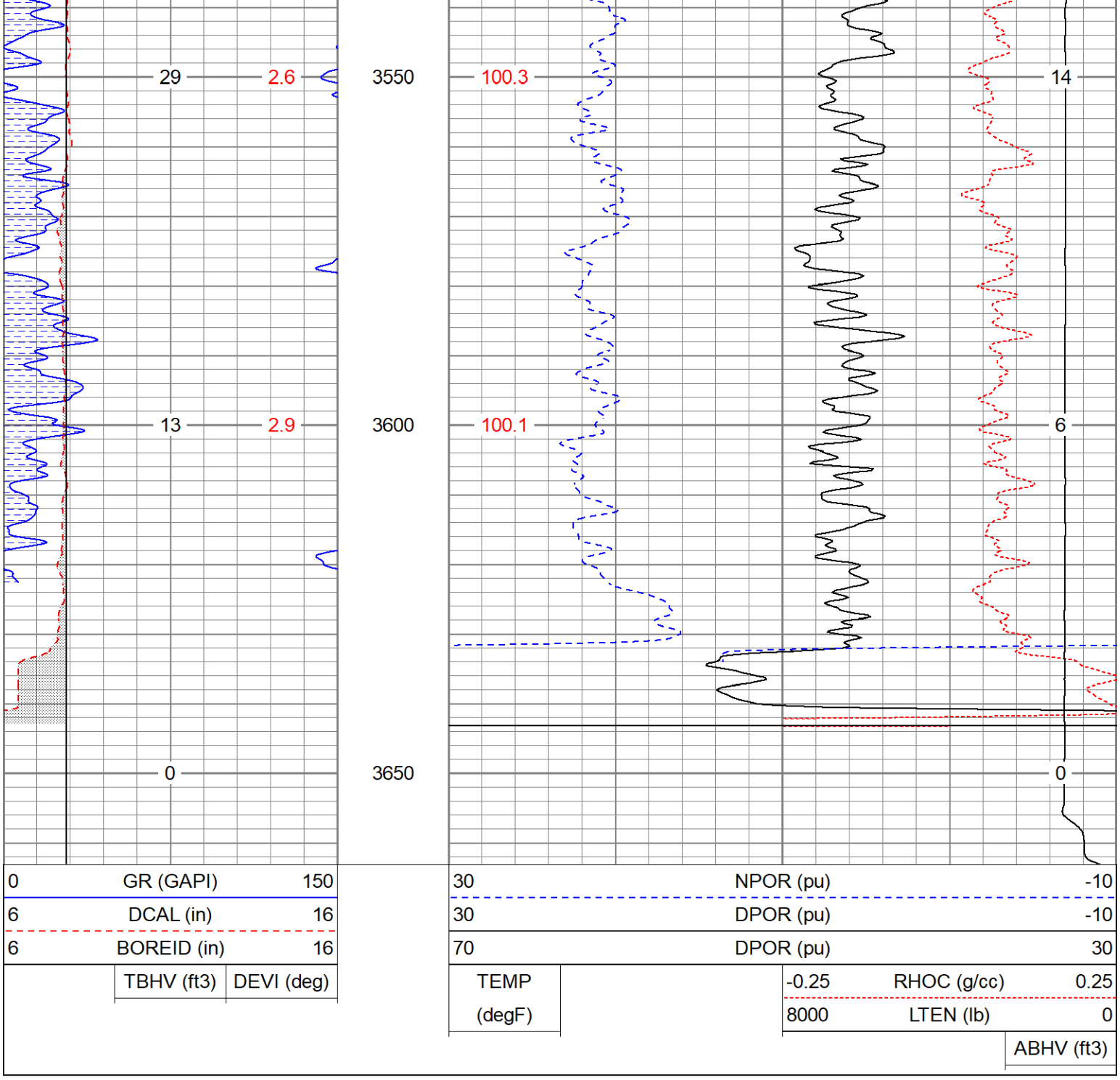
REPEAT SECTION

Database File	pebernstorf-janke#11oh.db
Dataset Pathname	pass2.1
Presentation Format	digital_kcdnl
Dataset Creation	Wed May 04 00:54:42 2022
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
TEMP (degF)	-0.25 RHOC (g/cc)	0.25
	8000 LTEN (lb)	0
		ABHV (ft3)





Calibration Report

Database File	pebernstorf-janke#11oh.db
Dataset Pathname	pass2.1
Dataset Creation	Wed May 04 00:54:42 2022

Dual Induction Calibration Report

Serial-Model:	1842-ADM
Surface Cal Performed:	Mon Sep 20 22:00:42 2021
Downhole Cal Performed:	Mon Sep 20 22:00:24 2021
After Survey Verification Performed:	Mon Sep 20 22:05:52 2021

Surface Calibration

	Readings		References		Results	
Loop:	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

	Readings			References			Results	
Internal:	Zero	Cal		Zero	Cal		m	b
Deep	-0.219	349.905	mmho/m	-0.343	349.810	mmho/m	1.000	-3.124
Medium	-0.118	399.722	mmho/m	-0.226	399.745	mmho/m	1.000	-3.108
Shallow	2.536	0.025	V	500.000	2.000	Ohm-m	180.330	-1.504

After Survey Verification

	Readings			Targets			Results	
Internal:	Zero	Cal		Zero	Cal		m'	b'
Deep	0.000	0.000	mmho/m	-0.219	349.905	mmho/m	1.000	-3.124
Medium	0.000	0.000	mmho/m	-0.118	399.722	mmho/m	1.000	-3.108
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 Oct 20 08:37:42 2020

Master Calibration

	Density		Far Detector	Near Detector	
Magnesium	1.670	g/cc	6640.15	4353.97	cps
Aluminium	2.640	g/cc	1651.98	2729.31	cps
Aluminium+Sleeve	2.640	g/cc	1651.98	2729.31	cps

Spine Angle = 71.44 Density/Spine Ratio = 0.661

	PE		NLITH	NHARD	
Magnesium	1.900	barn	1410.00	1000.00	cps
Aluminium	2.400	barn	1101.00	918.50	cps
Aluminium+Sleeve	5.000	barn	656.00	951.00	cps

M = 0.448 B = -0.112 R = 0.999

	Size		Reading	
Small Ring	8.30	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:	Wed May 5 19:21:08 2021	
Calibrator Value:	1.0	GAPI
Background Reading:	0.0	cps
Calibrator Reading:	1.0	cps
Sensitivity:	1.0000	GAPI/cps