COMPENSATED DENSITY NEUTRON LOG

Company PIONEER OPERATIONS, LLC.
Well LACY #1
Field ORONOQUE NORTHEAST
County NORTON State KS

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Field ORONOQUE NORTHEAST
County NORTON
State KS

Location: API # : 15 137 20765

1300' FSL & 1940' FEL

SEC 30 TWP 2S RGE 23W

Other Services
ML
DIL

Permanent Datum	Ground Level	Elevation 2366
Log Measured From	KB 5' AGL	
Drilling Measured From	KB	

Elevation
K.B. 2371
D.F. 2369
G.L. 2366

Date	3/6/2023		
Run Number	One		
Depth Driller	3682		
Depth Logger	3682		
Bottom Logged Interval	3662		
Top Log Interval	2900		
Casing Driller	8 5/8" @ 266		
Casing Logger	266		
Bit Size	7 7/8"		
Type Fluid in Hole	Chemical Mud		
Density / Viscosity	9.3/51		
pH / Fluid Loss	10.0/6.8		
Source of Sample	Calculated		
Rm @ Meas. Temp	1.1@60degf		
Rmf @ Meas. Temp	.83@60degf		
Rmc @ Meas. Temp	1.32@60degf		
Source of Rmf / Rmc	Calculated		
Rm @ BHT	0.59@111degf		
Time Circulation Stopped	12:00 pm		
Time Logger on Bottom	2:00 pm		
Maximum Recorded Temperature	111degf		
Equipment Number	T-605		
Location	HAYS, KS		
Recorded By	GUS PFANENSTIEL		
Witnessed By	RYAN SEIB		

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Comments

NORTON WEST TO 3W, NORTH 1 MILE, 1/2 WEST, NORTH INTO.

Thank you for using Gemini Wireline
785-625-1182

MAIN PASS

Database File	polacy#1oh.db
Dataset Pathname	pass3.1
Presentation Format	digital_kcdnl
Dataset Creation	Mon Mar 06 14:56:48 2023
Charted by	Depth in Feet scaled 1:240

0	GR (GAPI)	150
6	DCAL (in)	16
6	BOREID (in)	16

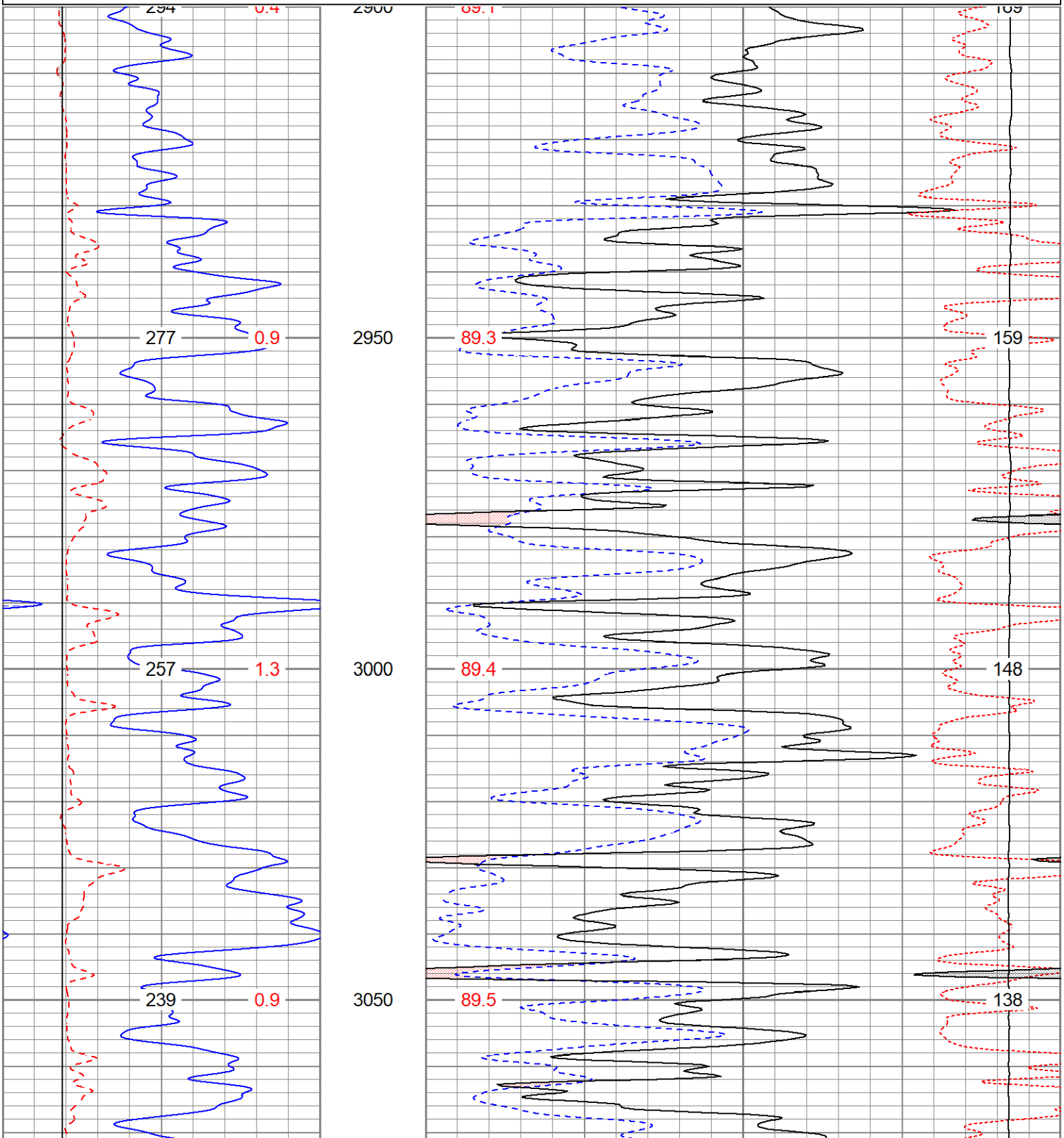
TBHV (ft3) | DEVI (deg)

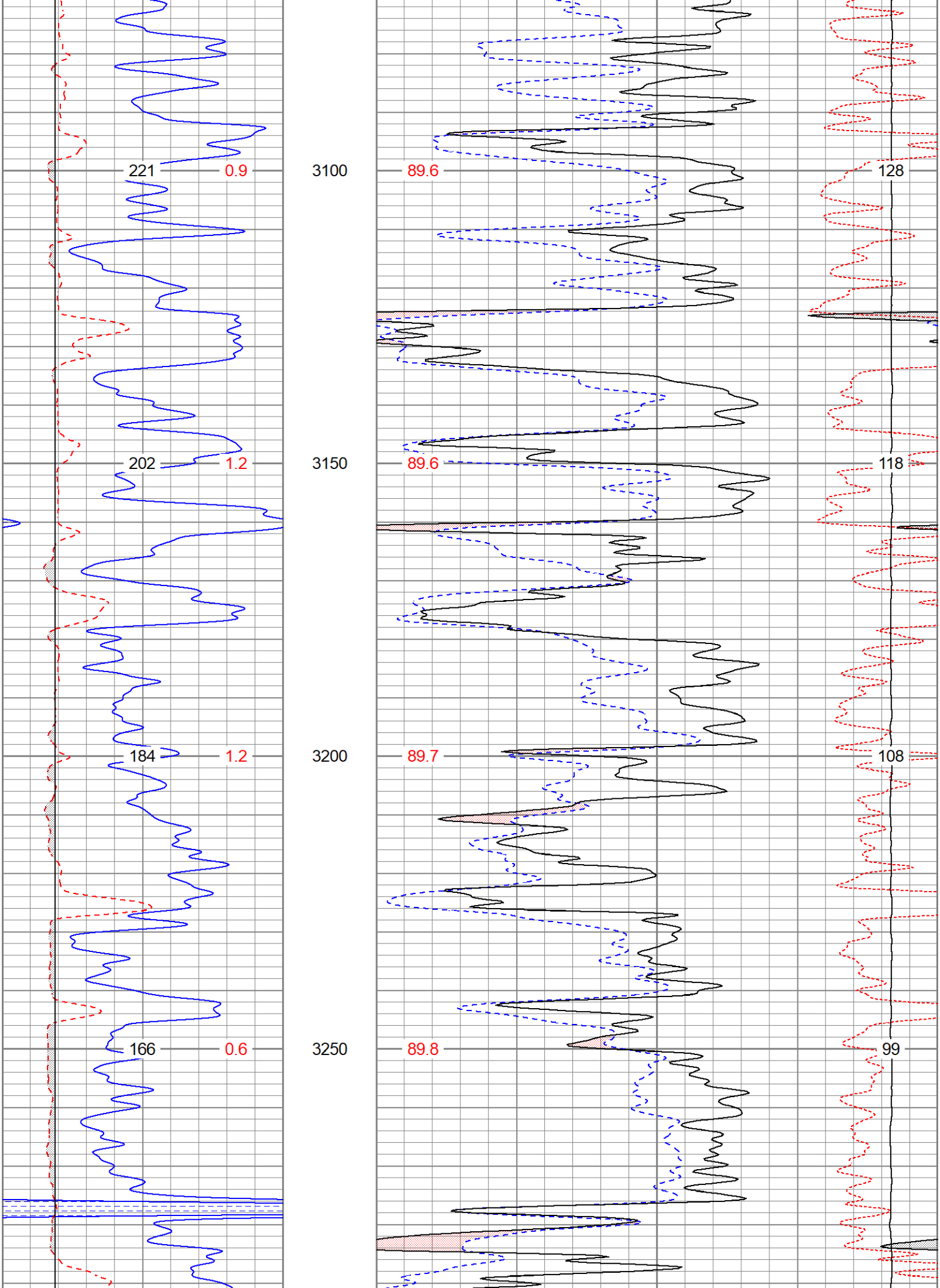
30	NPOR (pu)	-10
30	DPOR (pu)	-10
70	DPOR (pu)	30

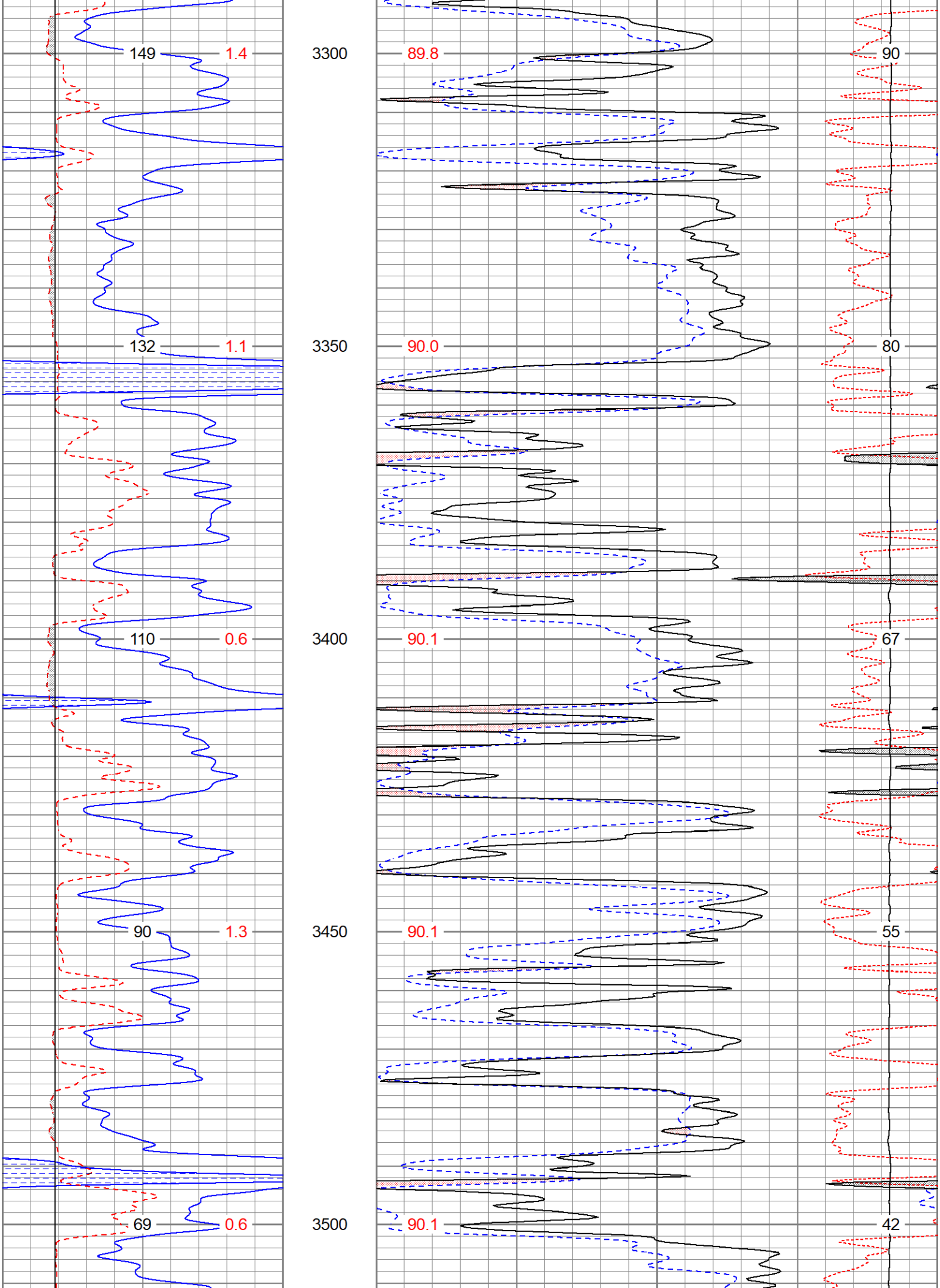
TEMP (degF)

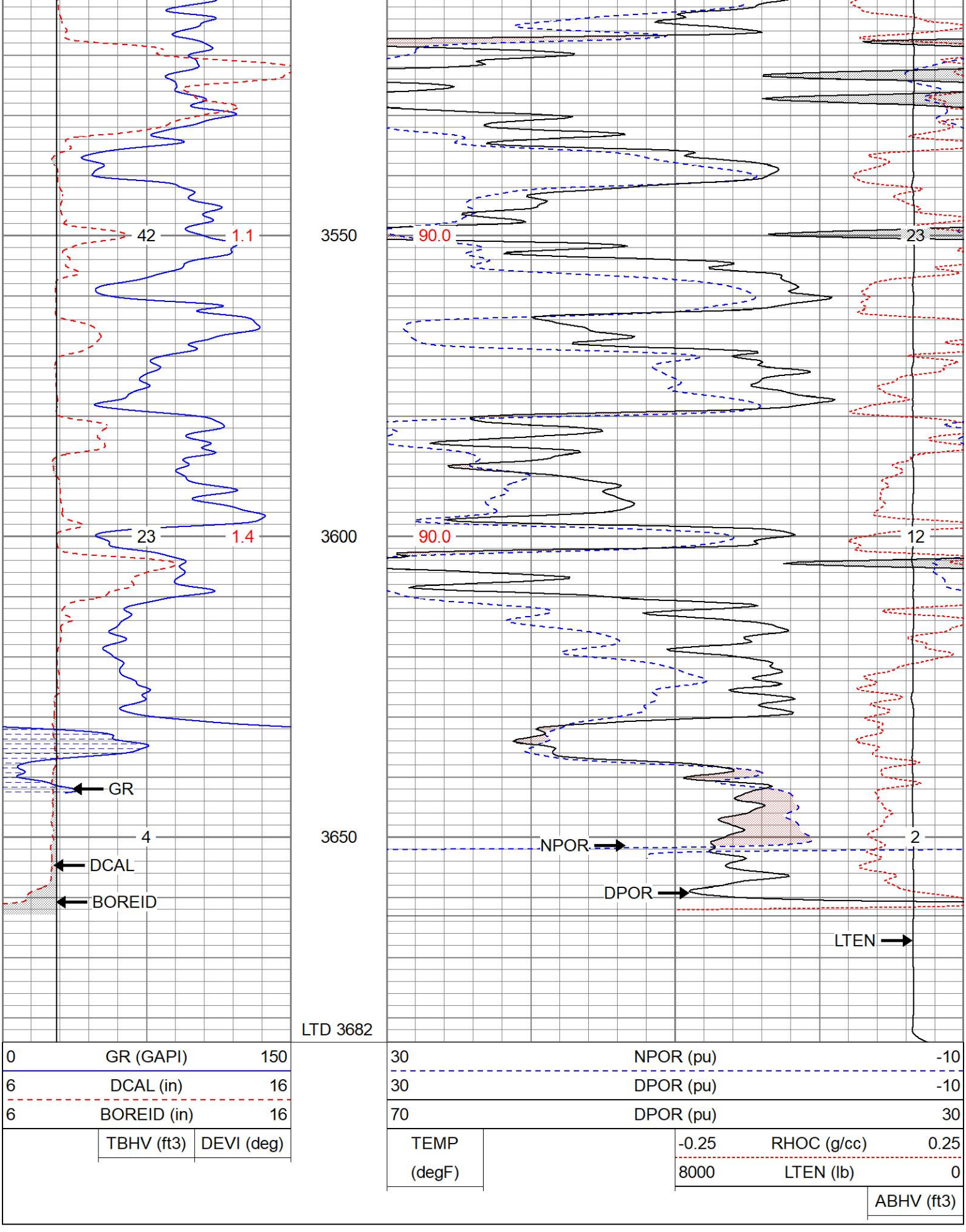
-0.25	RHOC (g/cc)	0.25
8000	LTEN (lb)	0

ABHV (ft3)




221
0.9
3100
89.6
128
202
1.2
3150
89.6
118
184
1.2
3200
89.7
108
166
0.6
3250
89.8
99


149
1.4
3300
89.8
90
132
1.1
3350
90.0
80
110
0.6
3400
90.1
67
90
1.3
3450
90.1
55
69
0.6
3500
90.1
42



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)	

GEMINI

REPEAT SECTION

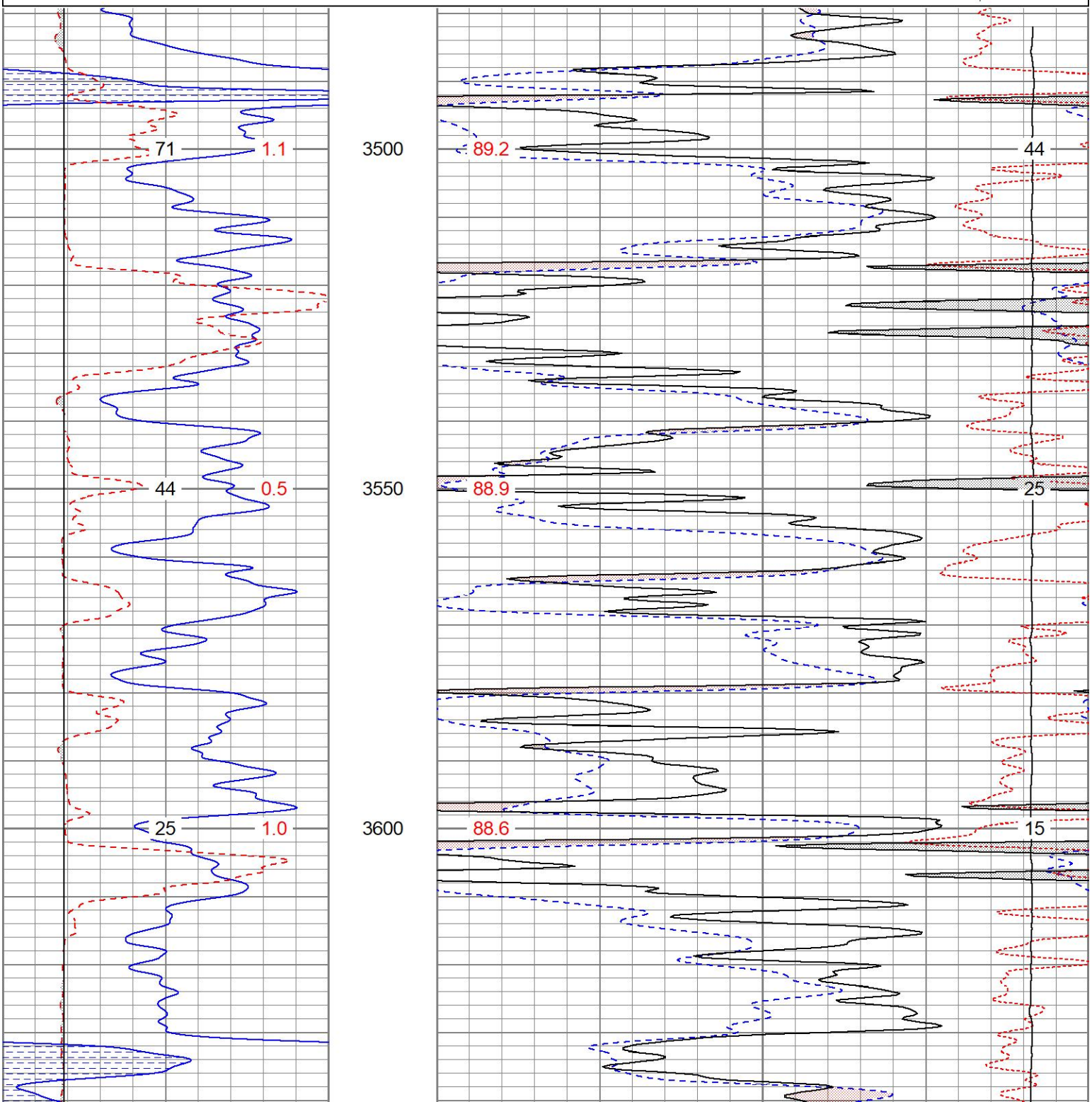
GEMINI WIRELINE

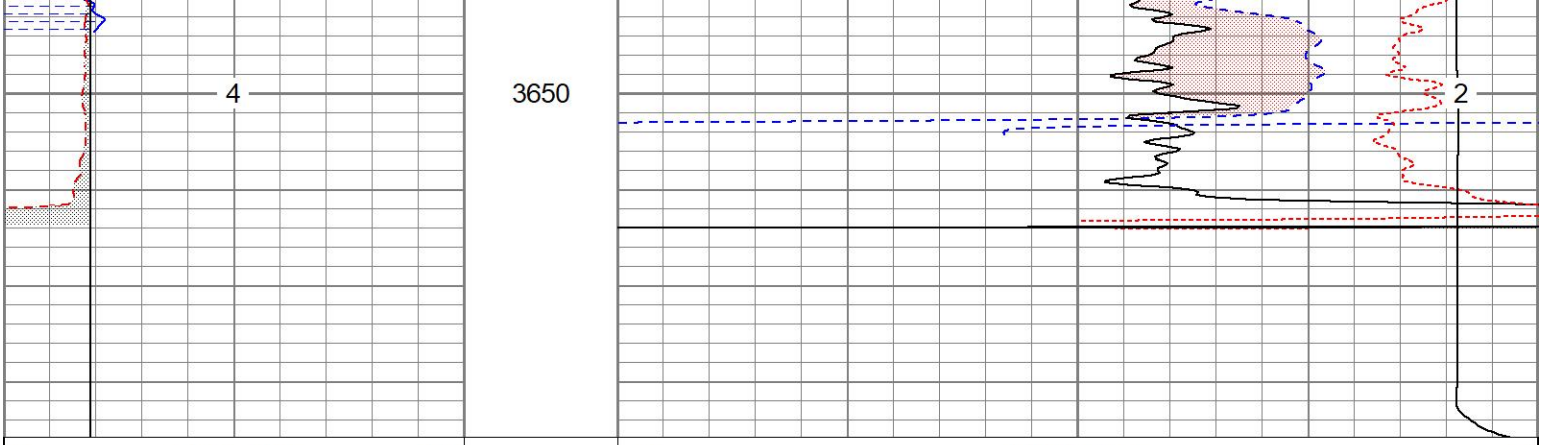
REPEAT SECTION

Database File	polacy#1oh.db
Dataset Pathname	pass2
Presentation Format	digital_kcdnl
Dataset Creation	Mon Mar 06 13:55:22 2023
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)	





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

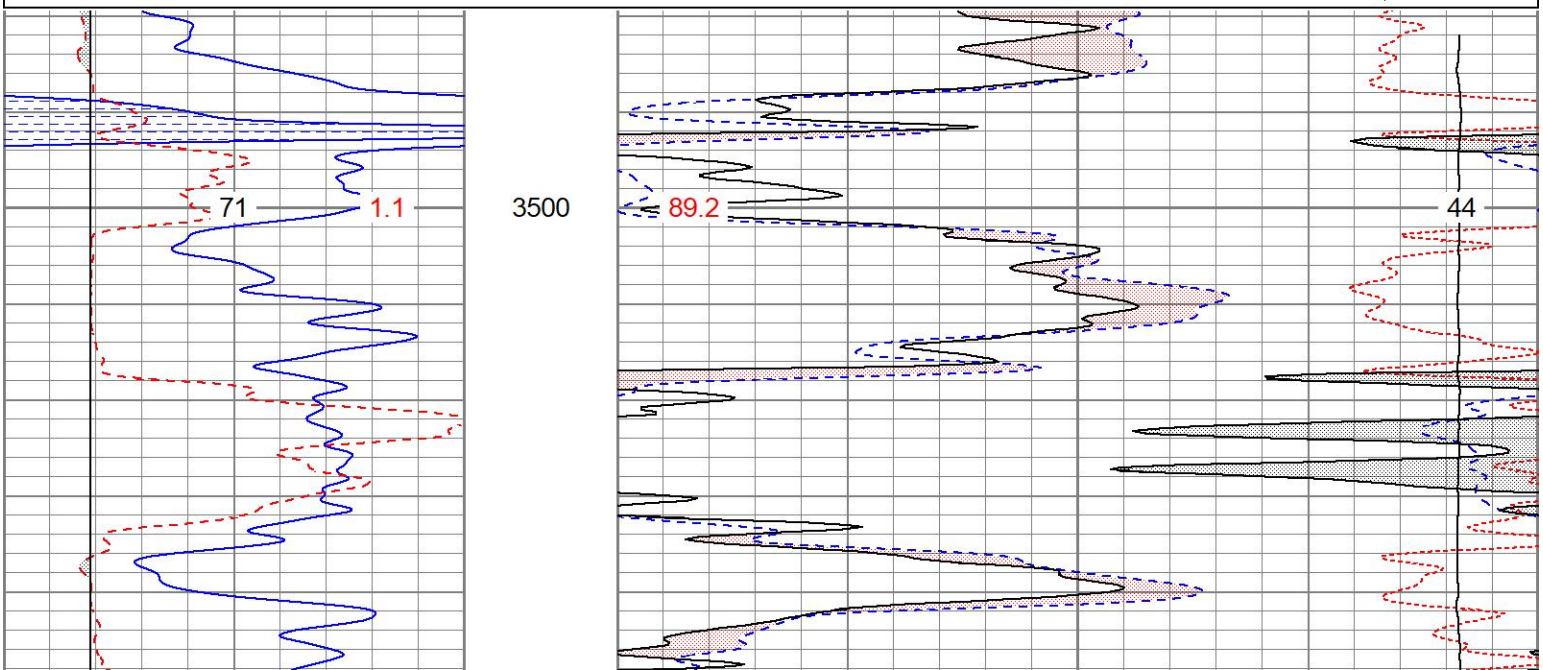
30	NPOR (pu)	-10
30	DPOR (pu)	-10
70	DPOR (pu)	30
TEMP (degF)	-0.25 RHOC (g/cc)	0.25
	8000 LTEN (lb)	0
	ABHV (ft3)	

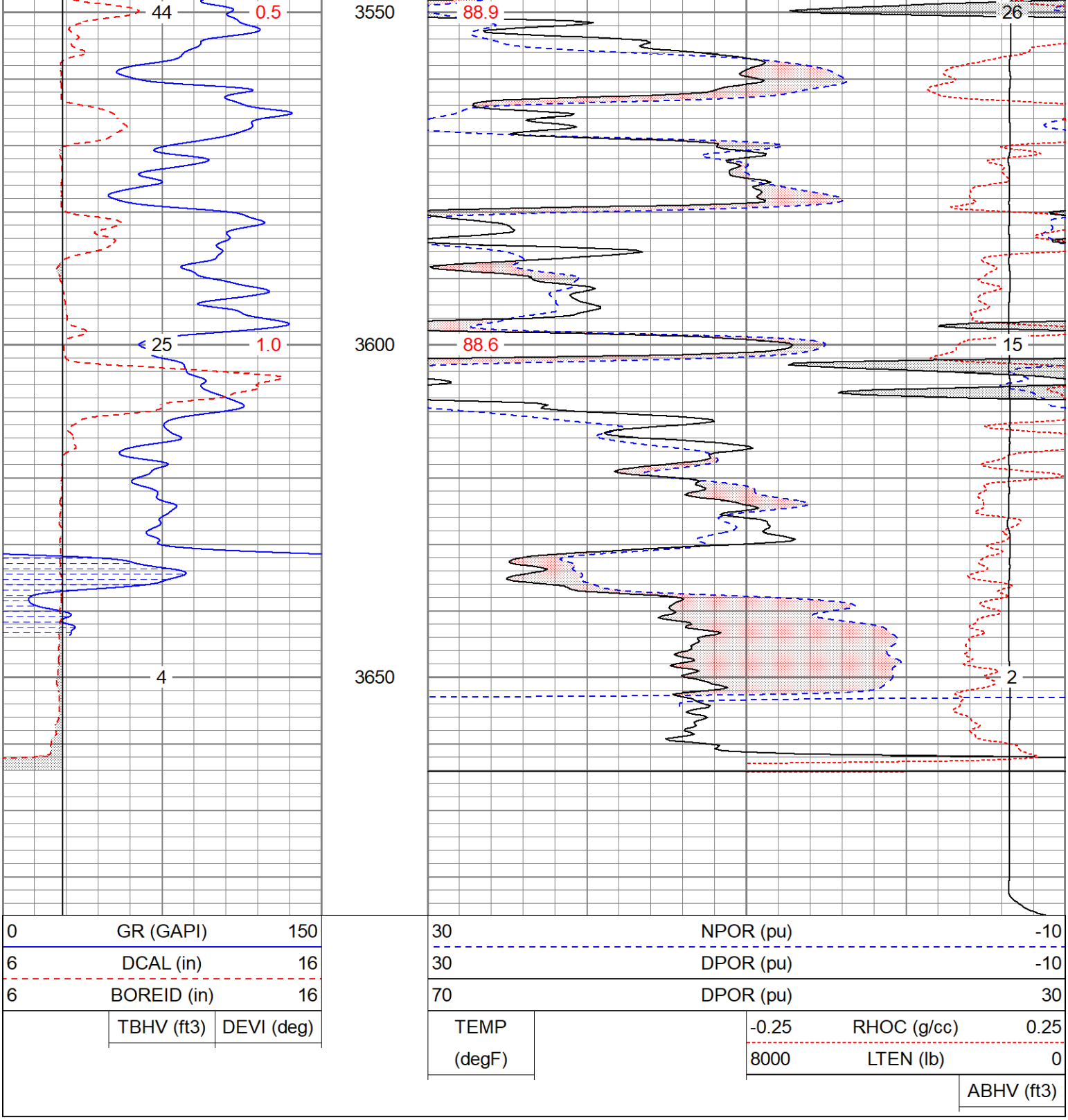
DOLOMITE MATRIX 2.85

Database File	polacy#1oh.db
Dataset Pathname	pass2DOLRP
Presentation Format	digital_kcdnl
Dataset Creation	Mon Mar 06 15:06:55 2023
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	polacy#1oh.db
Dataset Pathname	pass2
Dataset Creation	Mon Mar 06 13:55:22 2023

Dual Induction Calibration Report

Serial-Model:	5375-G
Surface Cal Performed:	Wed May 5 19:18:35 2021
Downhole Cal Performed:	Wed May 5 19:19:37 2021
After Survey Verification Performed:	Wed May 5 19:19:37 2021

Surface Calibration

	Readings			References			Results	
Loop:	Air	Loop		Air	Loop		m	b
Deep	0.001	0.643	V	0.000	350.000	mmho/m	545.845	-0.739
Medium	0.006	0.727	V	0.000	400.000	mmho/m	554.957	-3.517
Internal:	Zero	Cal		Zero	Cal		m	b
Deep	0.001	0.642	V	0.000	350.000	mmho/m	545.941	-0.743
Medium	0.006	0.727	V	0.000	550.000	mmho/m	762.787	-4.700

Downhole Calibration

	Readings			References			Results	
Internal:	Zero	Cal		Zero	Cal		m	b
Deep	0.127	350.109	mmho/m	0.003	349.942	mmho/m	1.000	-0.123
Medium	0.122	400.202	mmho/m	-0.097	400.049	mmho/m	1.000	-0.219
Shallow	2.429	0.012	V	500.000	2.000	Ohm-m	205.985	0.227

After Survey Verification

	Readings			Targets			Results	
Internal:	Zero	Cal		Zero	Cal		m'	b'
Deep	0.000	0.000	mmho/m	0.127	350.109	mmho/m	1.000	-0.123
Medium	0.000	0.000	mmho/m	0.122	400.202	mmho/m	1.000	-0.219
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 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 Jun 15 11:53:49 2022	
Calibrator Value:	1.0	GAPI
Background Reading:	0.0	cps
Calibrator Reading:	1.0	cps
Sensitivity:	1.1000	GAPI/cps