



**COMPENSATED
DENSITY/NEUTRON
PE LOG**

Company HERMAN LOEB, LLC.
Well HBT #2-9
Field FRALICK WEST EXT.
County KIOWA
State KANSAS

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Location: API #: 15-097-21861-00-00
2674 FNL & 357 FEL
NW - NE - NE - SE
SEC 9 TWP 28S RGE 20W
Permanent Datum GROUND LEVEL Elevation 2309
Log Measured From KELLY BUSHING 13' A.G.L.
Drilling Measured From KELLY BUSHING
Other Services DIL/MEL
Elevation
K.B. 2322
D.F. 2320
G.L. 2309

Date	5/27/22
Run Number	ONE
Depth Driller	5000
Depth Logger	4999
Bottom Logged Interval	4975
Top Log Interval	4000
Casing Driller	8 5/8"@588'
Casing Logger	588
Bit Size	7 7/8
Type Fluid in Hole	CHEMICAL MUD
Density / Viscosity	9.1/55
PH / Fluid Loss	8.5/11.6
Source of Sample	FLOWLINE
Rm @ Meas. Temp	0.90@75F
Rmt @ Meas. Temp	0.68@75F
Rmc @ Meas. Temp	1.08@75F
Source of Rmf / Rmc	MEASUREMENT
Rm @ BHT	.540@125F
Time Circulation Stopped	2.5 HOURS
Time Logger on Bottom	8:00 P.M.
Maximum Recorded Temperature	125F
Equipment Number	3802
Location	HAYS, KANSAS
Recorded By	COLE ROBBERN
Witnessed By	JON CHRISTENSEN
	TJ DREILING

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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

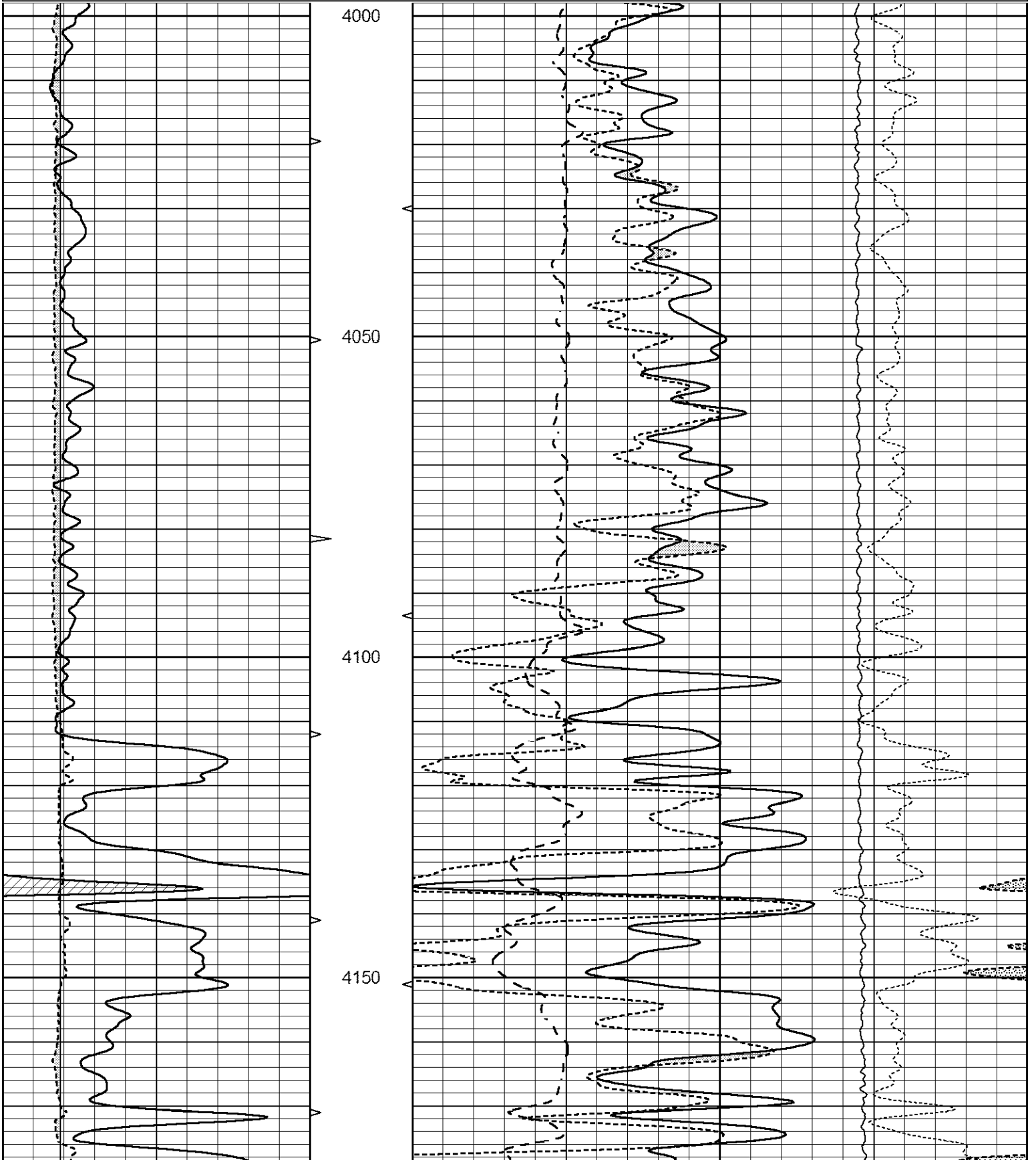
THANK YOU FOR USING ELI WIRELINE SERVICES, HAYS, KS. (785) 628-6395
DIRECTIONS
MULLINVILLE, KS. NORTH ON 10TH STREET 1.5 MILES TO 1-5 RD,
WEST 1.5 MILES TO 7TH STREET, 1 MILE NORTH, WEST INTO

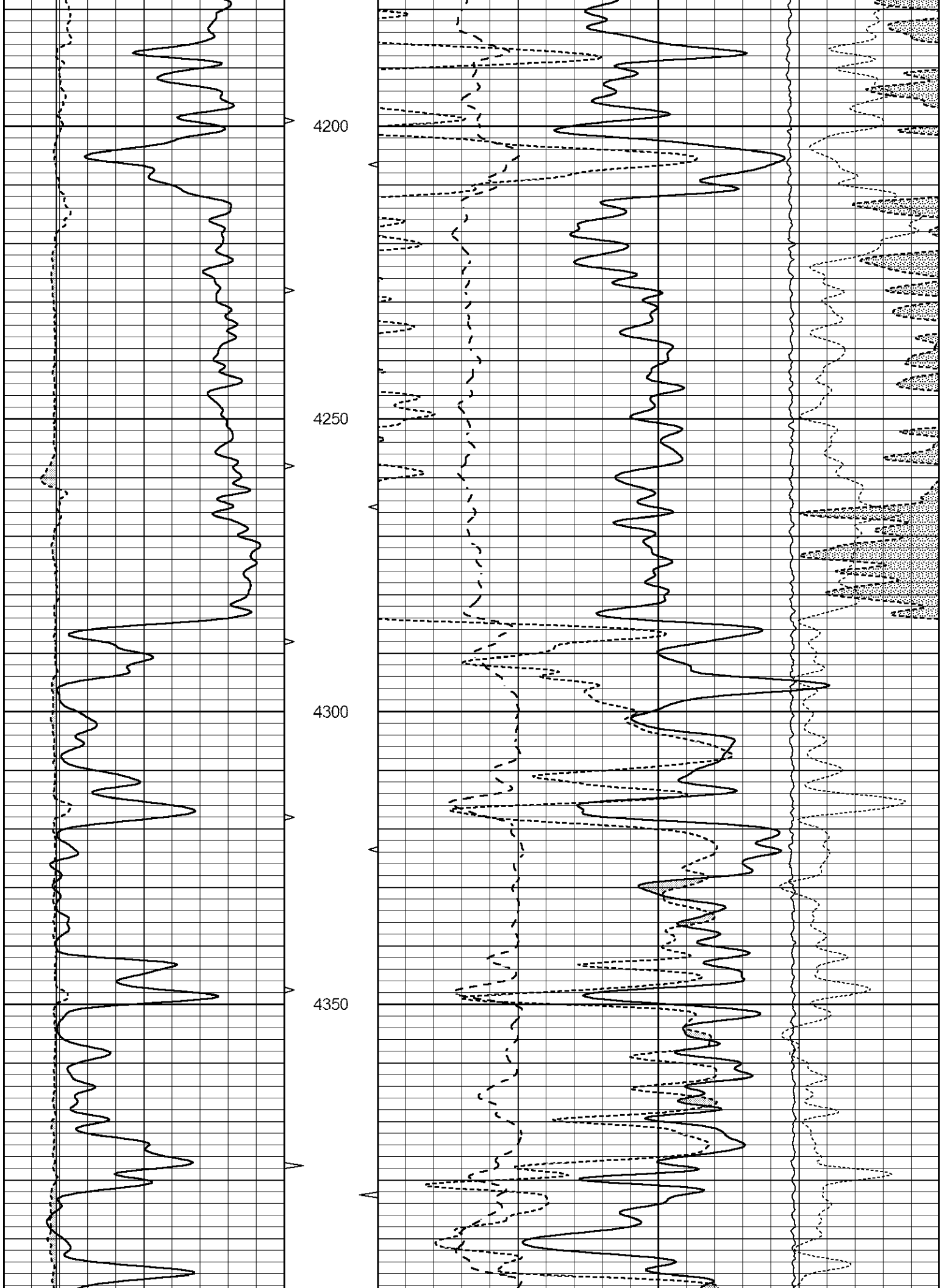


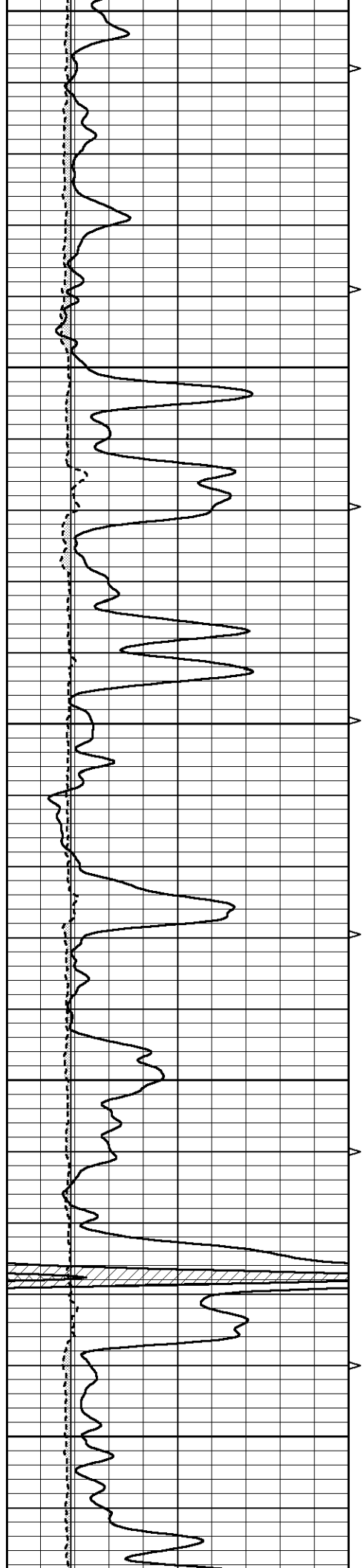
MAIN SECTION

Database File 6535pe.db
 Dataset Pathname pass3.1M
 Presentation Format ldt_neu
 Dataset Creation Fri May 27 21:31:56 2022
 Charted by Depth in Feet scaled 1:240

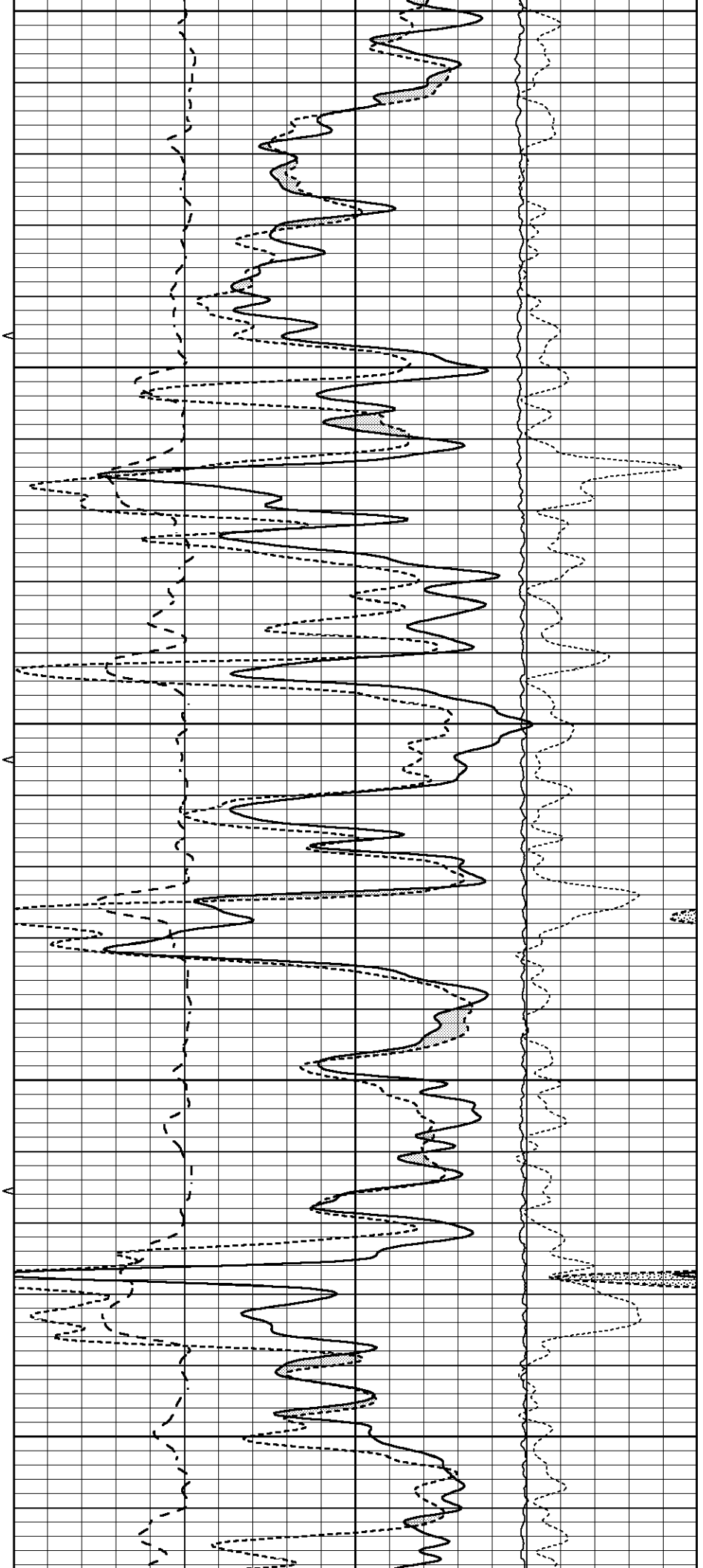
0	GAMMA RAY (GAPI)	150	ABHV	30	COMPENSATED DENSITY (pu)		-10
6	CALIPER (in)	16	10 (ft3)	0	COMPENSATED NEUTRON (pu)		-10
			TBHV	0	PE	10	0
			0 (ft3)	10	LTEN (lb)		5000
					-0.25	CORRECTION (g/cc)	0.25

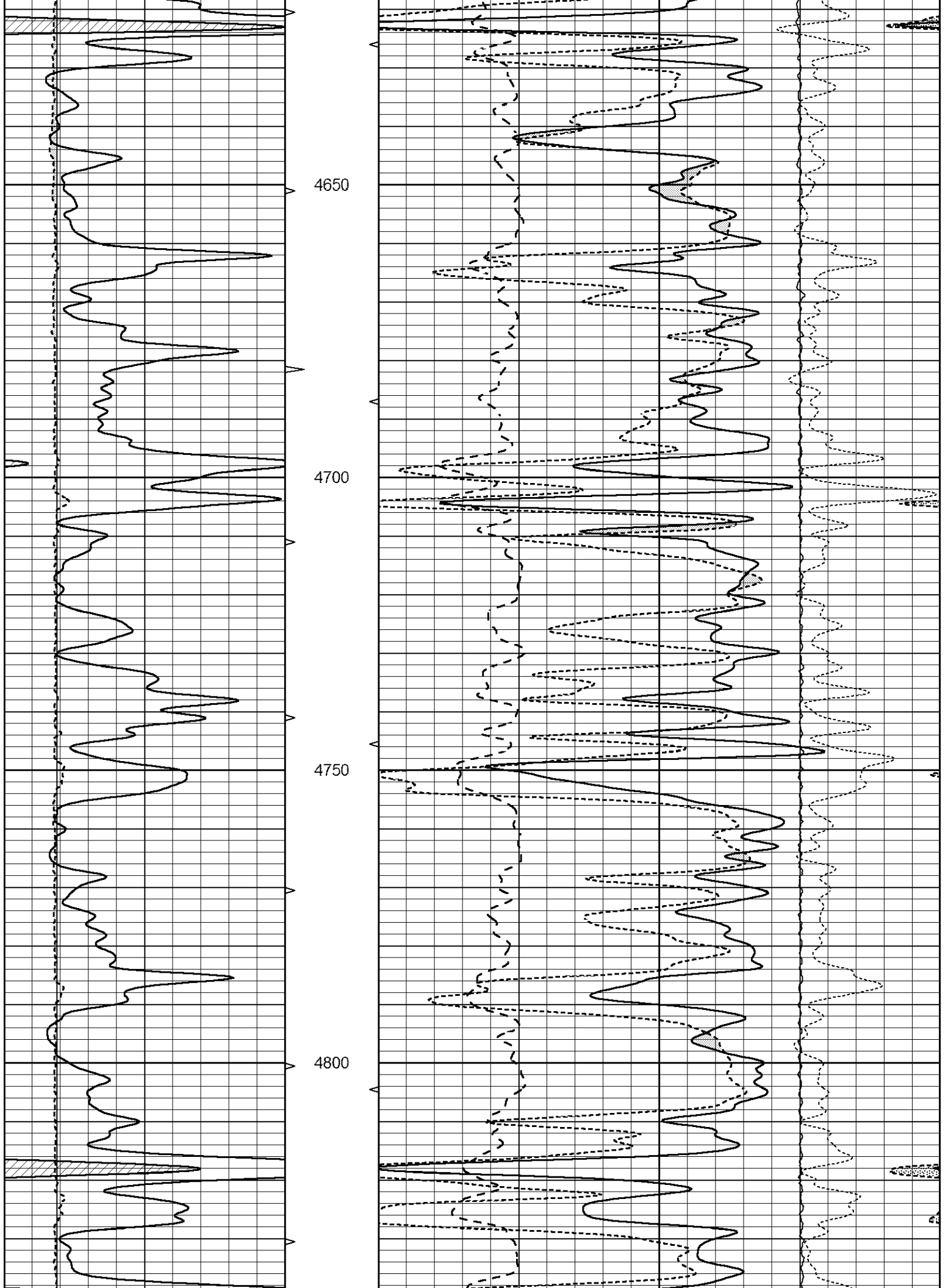


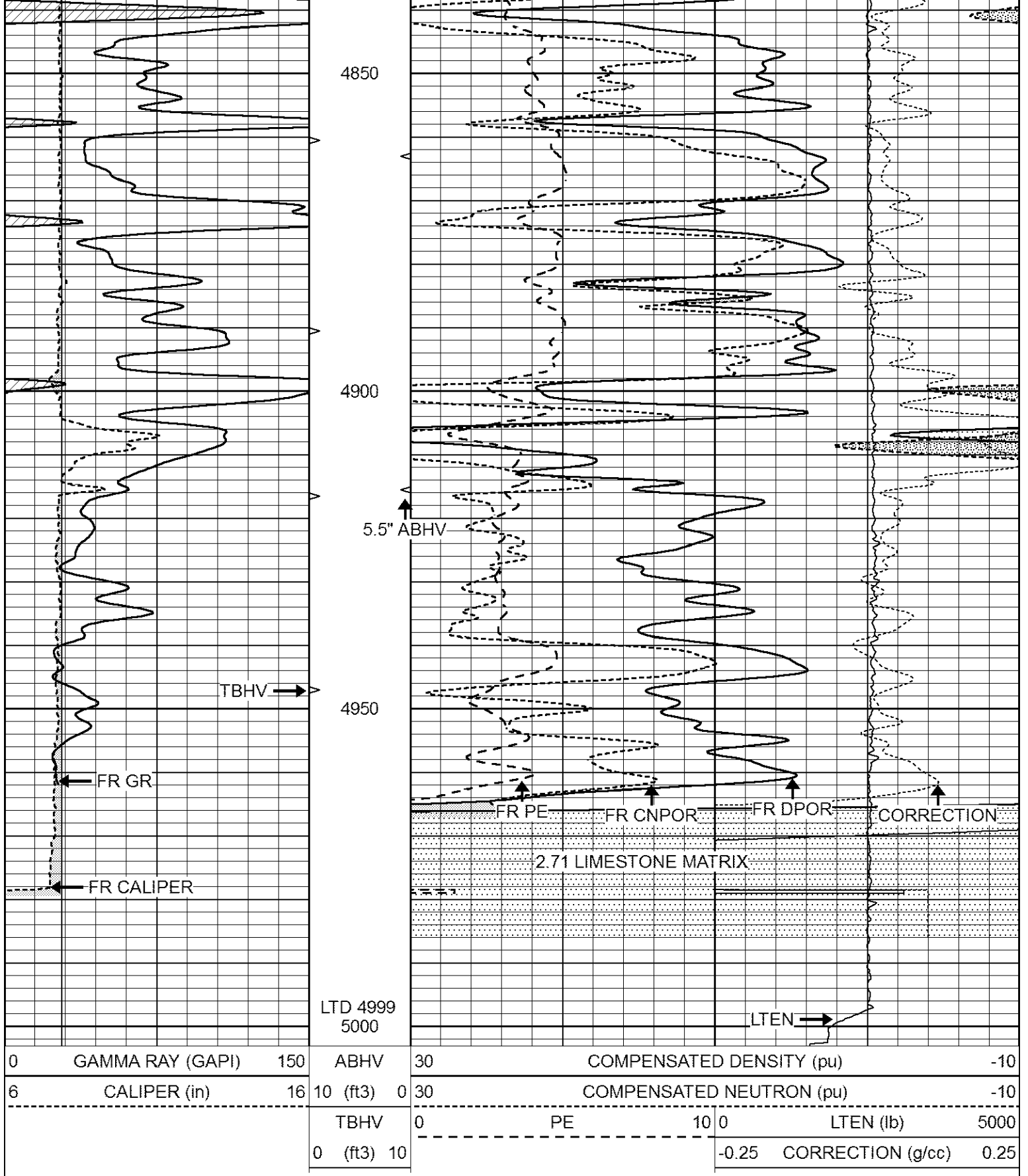




4400
4450
4500
4550
4600

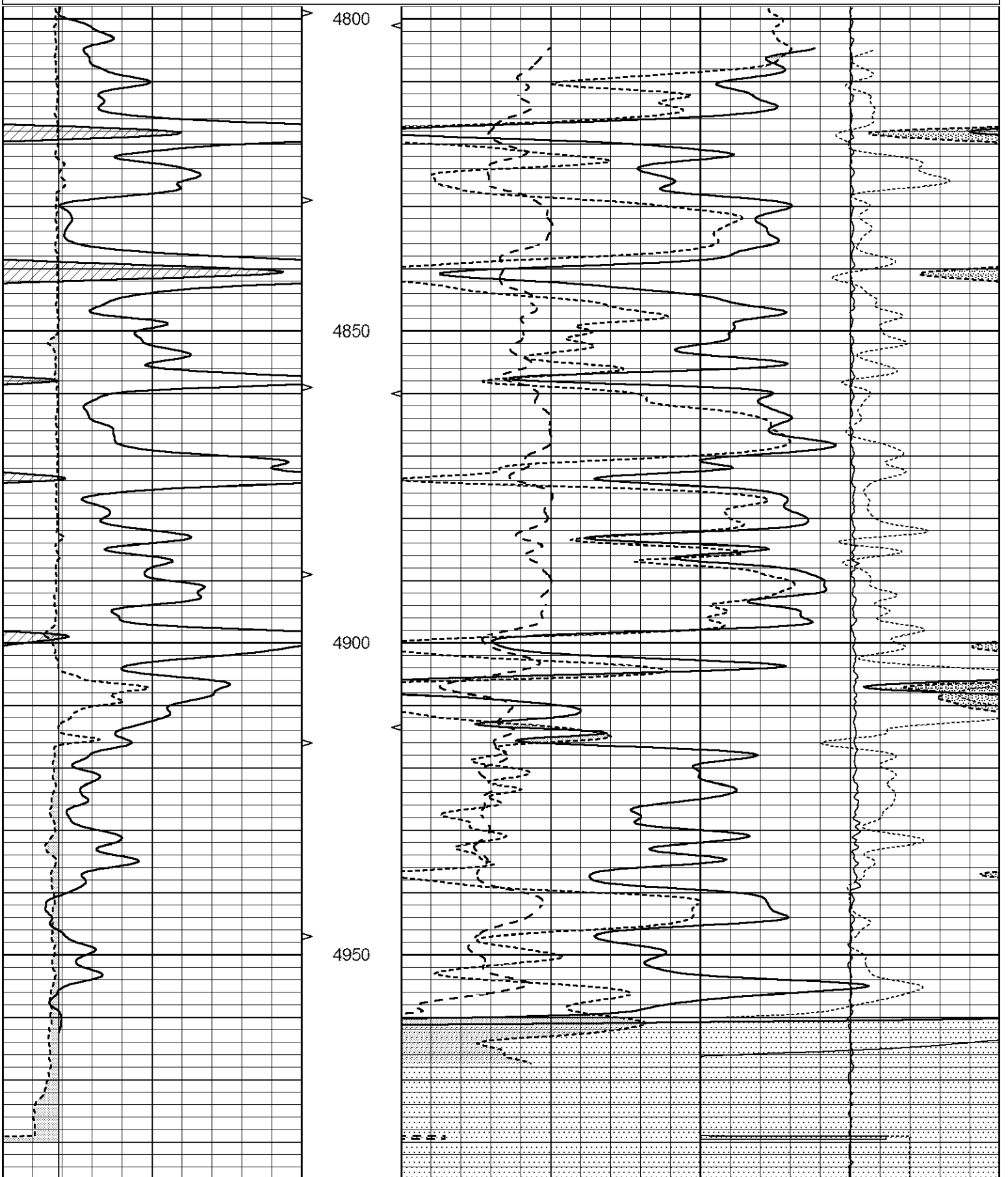






REPEAT SECTION

0	GAMMA RAY (GAPI)	150	ABHV	30	COMPENSATED DENSITY (pu)		-10		
6	CALIPER (in)	16	10 (ft3)	0	30	COMPENSATED NEUTRON (pu)		-10	
			TBHV	0	PE	10	LTEN (lb)	5000	
			0 (ft3)	10			-0.25	CORRECTION (g/cc)	0.25



	Background	Aluminum	Magnesium	
Window 1	511.07	5437.36	23664.68	cps
Window 2	40.76	1220.39	5745.34	cps
Window 4	223.73	1233.64	5301.27	cps
Window 5	531.57	7878.13	15405.81	cps
Window 6	48.52	1245.17	2497.97	cps
Window 8	246.02	2578.14	4974.07	cps
Bulk Density	-	2.6020	1.6830	g/cc
Pe	-	3.0000	2.5070	b/e

LS Alpha: : -1.8413 SS Alpha: : -0.8034 LS CPE: : 1.1579
 LS Beta: : 124864.8423 SS Beta: : 19537.1506 SS CPE: : 1.6371

Before Survey Background Counts Verification

Performed: Wed Dec 31 18:00:00 1969

Window 1	0.00	cps
Window 2	0.00	cps
Window 4	0.00	cps
Window 5	0.00	cps
Window 6	0.00	cps
Window 8	0.00	cps

After Survey Background Counts Verification

Performed: Wed Dec 31 18:00:00 1969

Window 1	0.00	cps
Window 2	0.00	cps
Window 4	0.00	cps
Window 5	0.00	cps
Window 6	0.00	cps
Window 8	0.00	cps

Lithodensity Caliper Calibration

Performed: Mon May 23 14:22:47 2022

Results		Readings		References (in)		Gain	Offset
Low	High	Low	High				
8210.8	12139.3	7.0	14.0			0.0	-7.5

Before Survey Caliper Verification

Performed:

	Reference	Reading
Caliper (in)	_____	_____

After Survey Caliper Verification

Performed:

	Reference	Reading
Caliper (in)	_____	_____

Compensated Neutron Calibration Report

Serial Number: 080621PMC
 Tool Model: NABORS

PRE-SURVEY VERIFICATION

Detector	Readings	Measured	Target
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Detector	Readings	Measured	Target
Short Space	cps		
Long Space	cps	pu	pu

POST-SURVEY VERIFICATION

Detector	Readings	Measured	Target
Short Space	cps		
Long Space	cps	pu	pu

Gamma Ray Calibration Report

Serial Number:	7	
Tool Model:	Probe1	
Performed:	Thu May 26 08:56:46 2022	
Calibrator Value:	1.0	GAPI
Background Reading:	0.0	cps
Calibrator Reading:	1.0	cps
Sensitivity:	0.5500	GAPI/cps