



**SUPERIOR
Hays,
Kansas**

**COMPENSATED
DENSITY / NEUTRON
LOG**

Company	RITCHIE EXPLORATION, INC.		
Well	VAN EATON 10B #1		
Field	WILDCAT		
County	GOVE	State	KANSAS
Location:	API # : 15-063-21949-0000		Other Services
660' FNL & 1690' FWL W/2 - NE - NW		DIL	
SEC 10 TWP 12S RGE 31W		Elevation	
Permanent Datum	GROUND LEVEL	Elevation	2954
Log Measured From	KELLY BUSHING 10' A.G.L.	D.F.	2962
Drilling Measured From	KELLY BUSHING	G.L.	2954
Date	11-10-11		
Run Number	ONE		
Depth Driller	4740		
Depth Logger	4742		
Bottom Logged Interval	4718		
Top Log Interval	3600		
Casing Driller	221		
Casing Logger	220		
Bit Size	7.875		
Type Fluid in Hole	CHEMICAL MUD	CHLORIDES: 3000 ppm	
Density / Viscosity	9.3 / 67		
pH / Fluid Loss	10.0 / 9.6		
Source of Sample	FLOWLINE		
Rim @ Meas. Temp	1.20 @ 63F		
Rmf @ Meas. Temp	0.90 @ 63F		
Rmc @ Meas. Temp	1.44 @ 63F		
Source of Rmf / Rmc	MEASURED		
Rim @ BHT	0.61 @ 123F		
Time Circulation Stopped	3 HOURS		
Time Logger on Bottom			
Maximum Recorded Temperature	123F		
Equipment Number	860		
Location	HAYS, KS.		
Recorded By	JEFF GRONEWEG		
Witnessed By	MAX LOVELY		

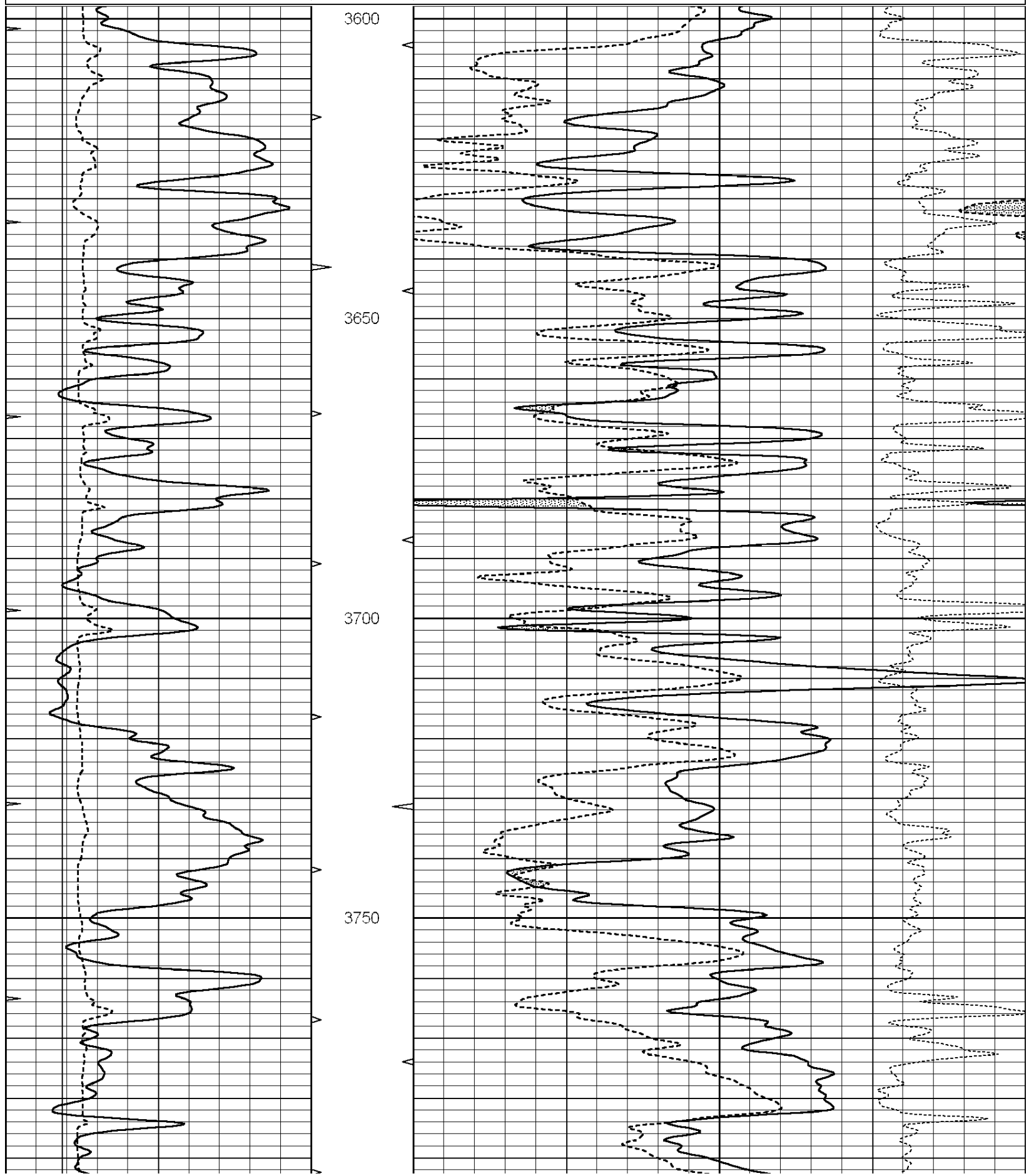
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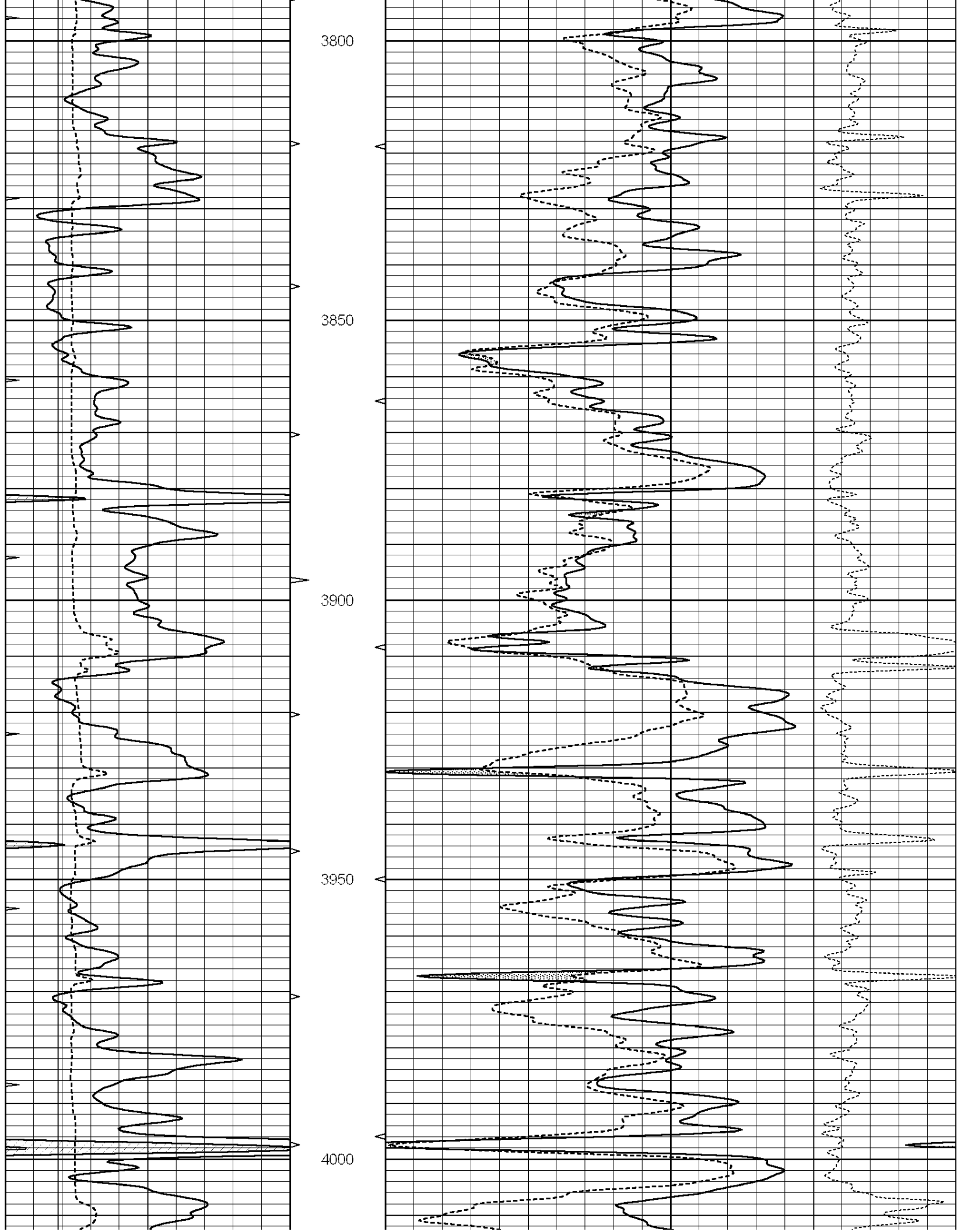
All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs, 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.

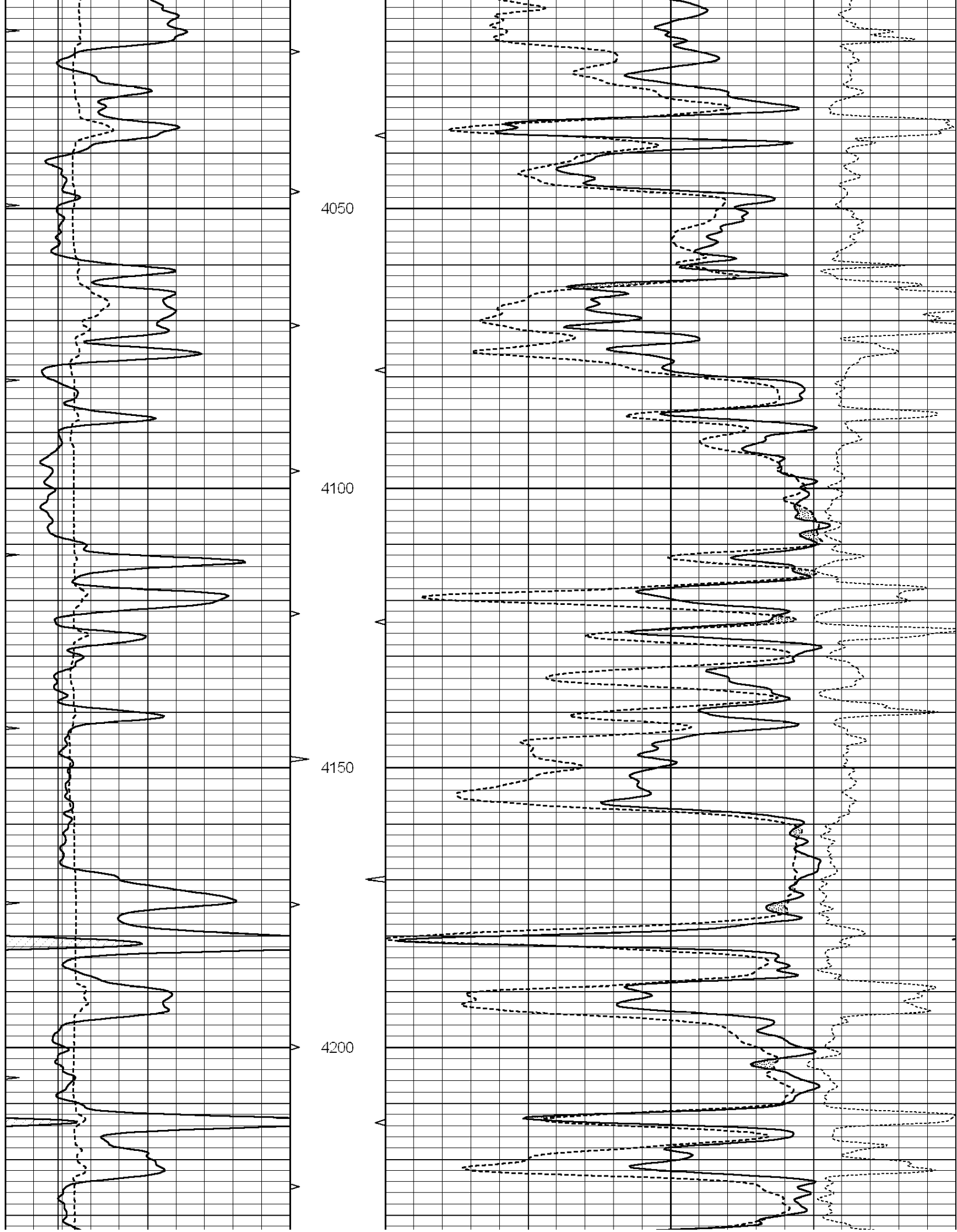
Comments

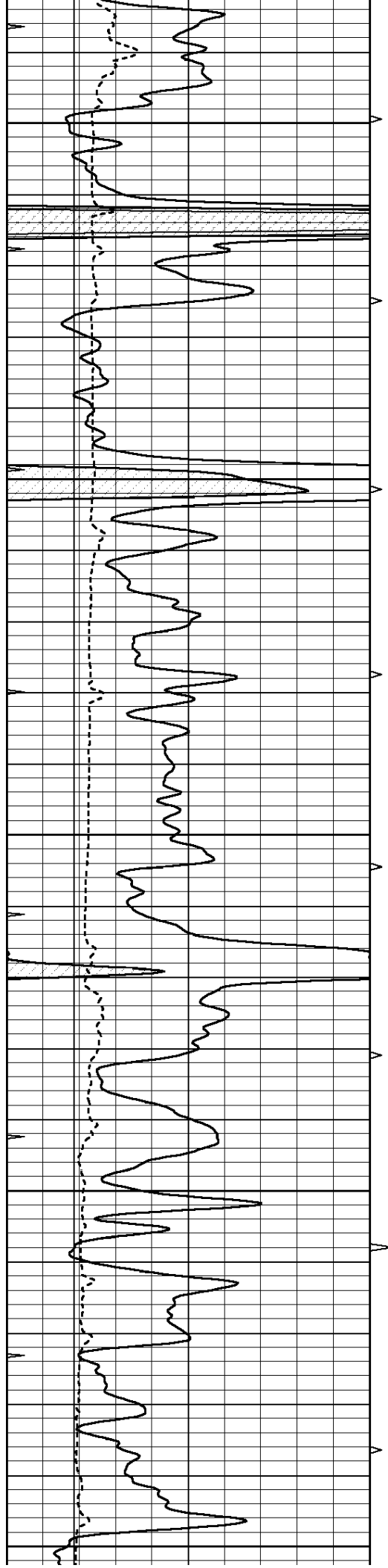
SUPERIOR WELL SERVICES
785-628-6395
THANK YOU FOR YOUR BUSINESS
DIRECTIONS: I-70 & CAMPUS RD EXIT - 5 1/2 MILES SOUTH TO RD X
1/2 MILE WEST - SOUTH AND WEST INTO

0	GAMMA RAY (GAPI)	150	ABHV	30	COMPENSATED DENSITY (pu)	-10
6	CALIPER (in)	16	10 (ft3) 0	30	COMPENSATED NEUTRON (pu)	-10
0	MINMK	20	TBHV		-0.25 CORRECTION (g/cc)	0.25
			0 (ft3) 10			









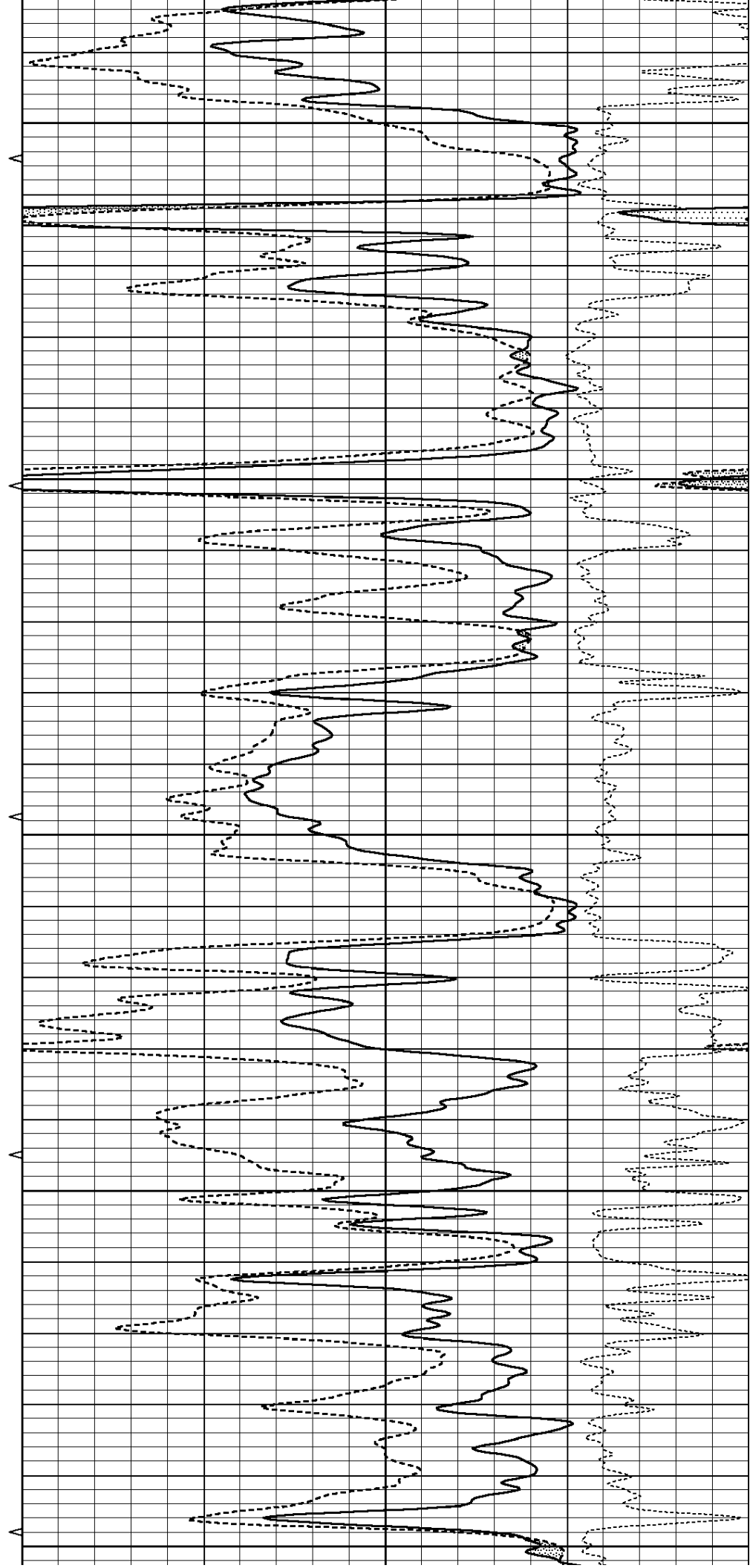
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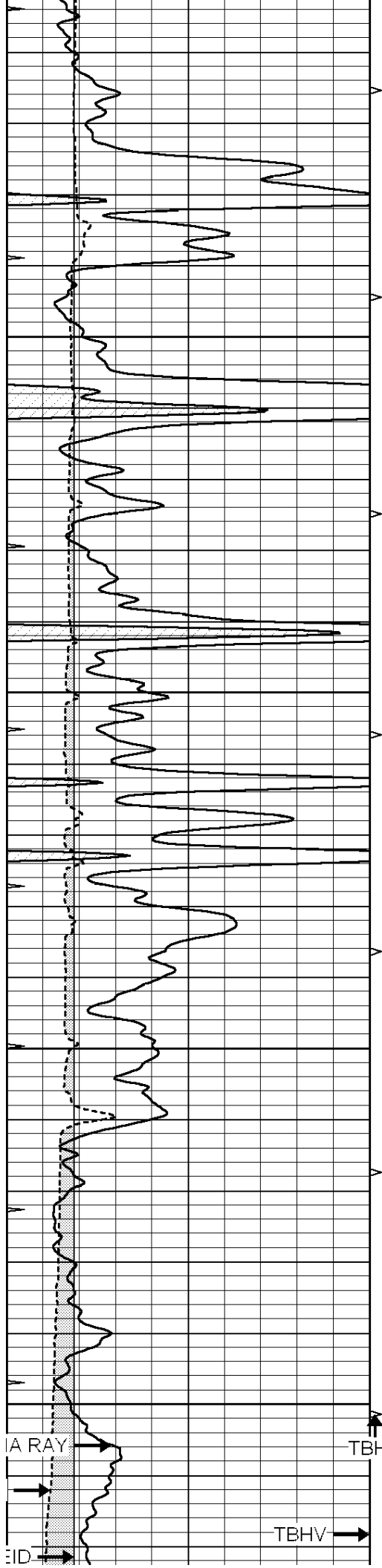
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4350

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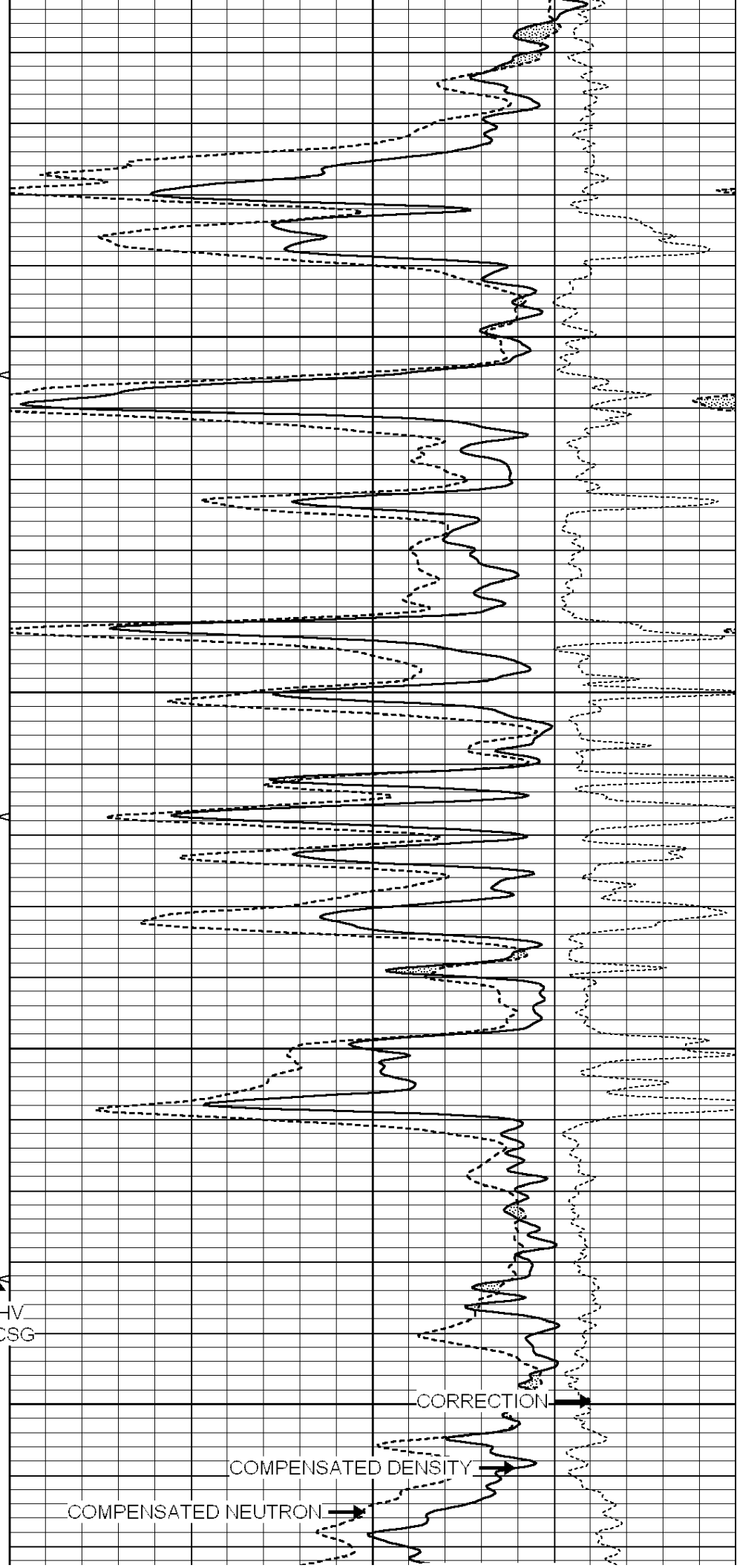
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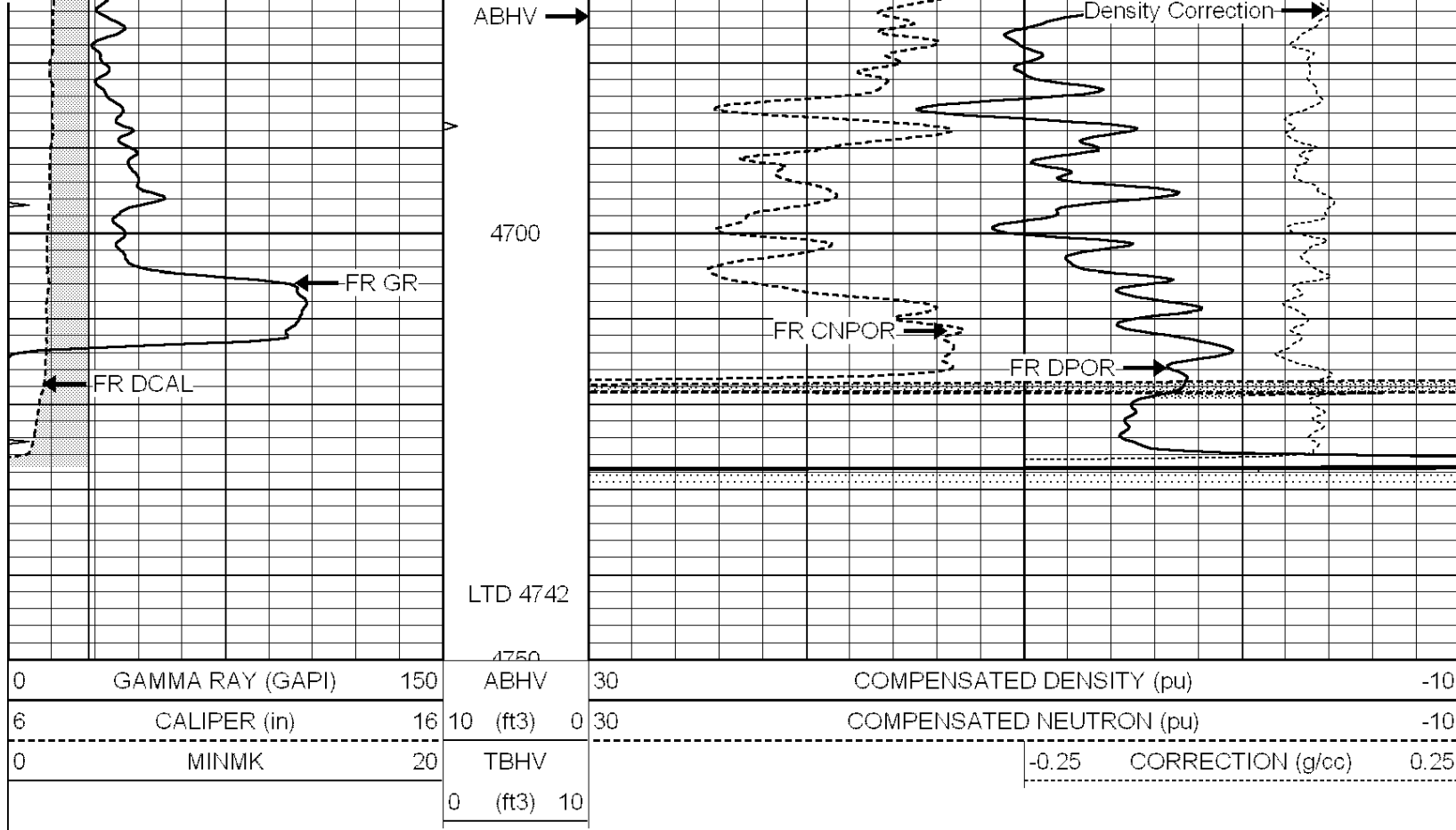
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ABHV
5.5" CSG

TBHV

TBHV



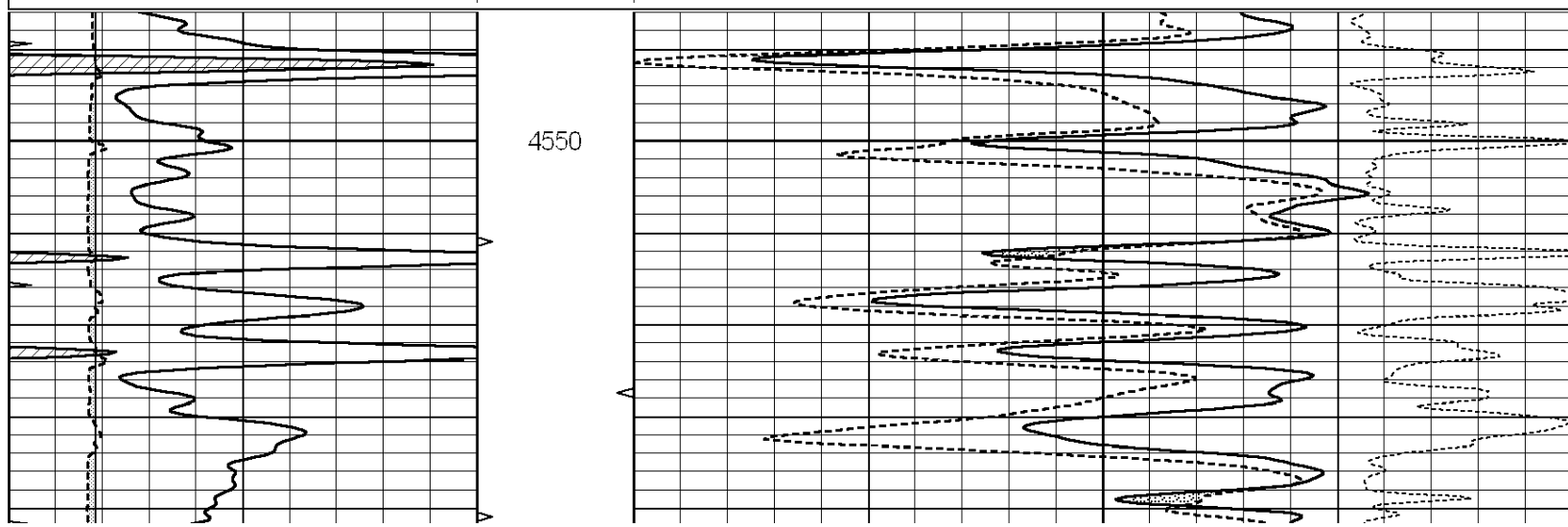


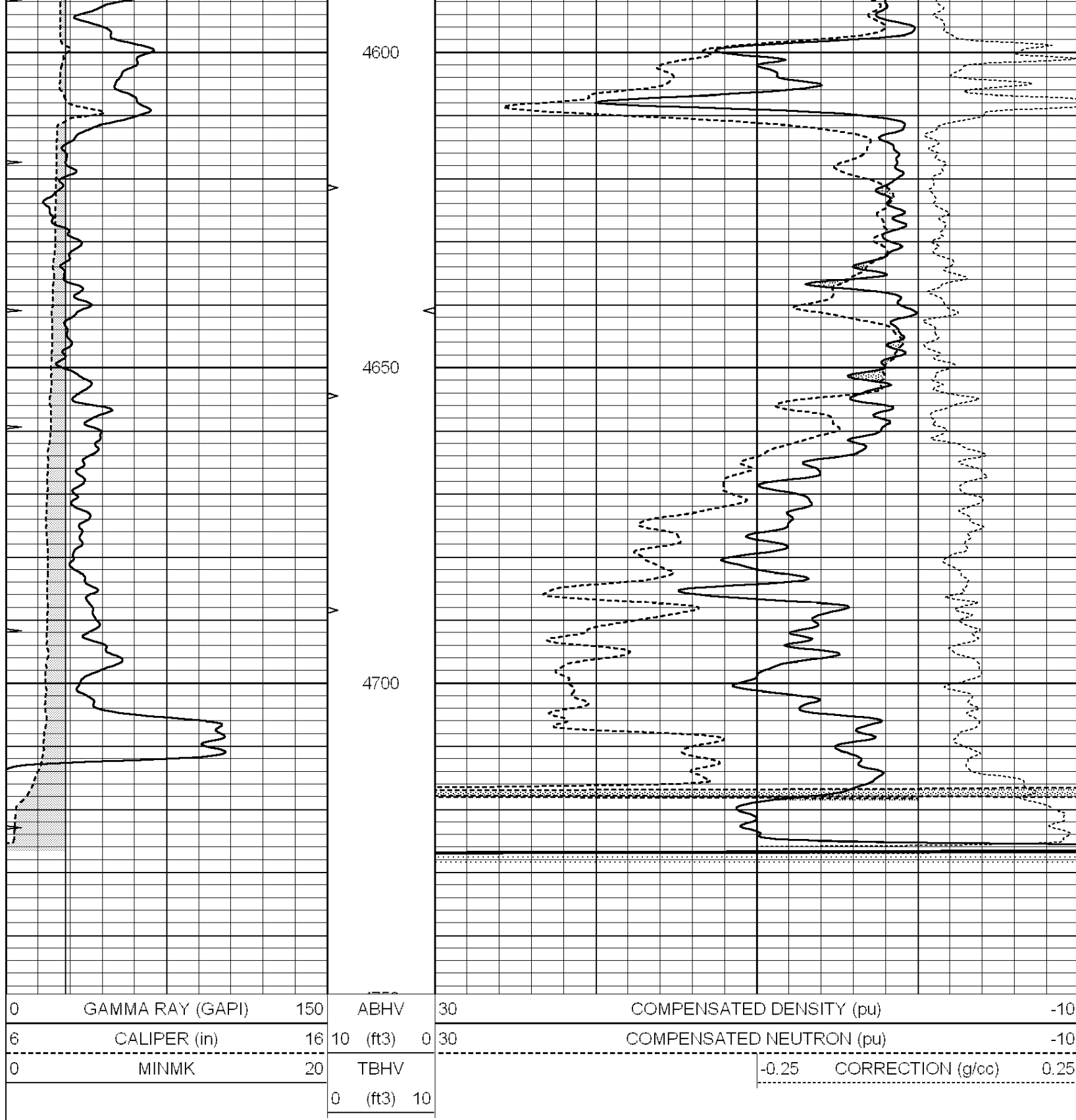
SUPERIOR
Hays,
Kansas

REPEAT SECTION

Database File: 008006ddn.db
 Dataset Pathname: pass2.3
 Presentation Format: den_neu
 Dataset Creation: Thu Nov 10 21:49:14 2011 by Calc Open-Cased 090629
 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	30	COMPENSATED NEUTRON (pu)	-10
0	MINMK	20	TBHV	-0.25	CORRECTION (g/cc)	0.25
			0 (ft3) 10			





Calibration Report

Database File: 008006ddn.db
 Dataset Pathname: pass3.4
 Dataset Creation: Thu Nov 10 20:54:06 2011 by Calc Open-Cased 090629

Dual Induction Calibration Report

Serial-Model: DIL5-GEAR
 Performed: Thu Nov 10 00:41:13 2011

Readings

References

Results

Loop:	Air	Loop		Air	Loop		m	b
Deep	0.004	0.654	V	0.000	400.000	mmho/m	530.000	-18.000
Medium	-0.005	0.737	V	0.000	462.500	mmho/m	550.000	-13.000
Internal:	Zero	Cal		Zero	Cal		m	b
Deep	0.006	0.655	V	0.000	400.000	mmho/m	615.668	-3.483
Medium	0.010	0.747	V	0.000	462.500	mmho/m	627.607	-6.064

Compensated Density Calibration Report

Serial-Model: GEAR1-GEARHART
 Source / Verifier: 147 / 147
 Master Calibration Performed: Thu Nov 10 00:27:48 2011

Master Calibration

	Density		Far Detector	Near Detector	
Magnesium	1.710	g/cc	1243.76	629.14	cps
Aluminum	2.590	g/cc	282.16	435.01	cps
Spine Angle = 76.03			Density/Spine Ratio = 0.576		
	Size		Reading		
Small Ring	8.30	in	3.15	V	
Large Ring	13.00	in	4.72	V	

Compensated Neutron Calibration Report

Serial Number: NUE_2I
 Tool Model: G

CALIBRATION

Detector	Readings	Target	Normalization
Short Space	1.00 cps	1.00 cps	1.0000
Long Space	1.00 cps	1.00 cps	1.0000

Gamma Ray Calibration Report

Serial Number: GR5
 Tool Model: OPEN
 Performed: Thu Nov 10 00:55:11 2011
 Calibrator Value: 1.0 GAPI
 Background Reading: 0.0 cps
 Calibrator Reading: 1.0 cps
 Sensitivity: 0.6500 GAPI/cps