



**SUPERIOR
Hays,
Kansas**

**COMPENSATED
DENSITY / NEUTRON
PE LOG**

Company HERMAN L. LOEB, LLC.
Well PETERS "D" #3-10
Field UNICE NORTHEAST
County NESS
State KANSAS

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Location: API #: 15-135-25390
950' FSL & 1940' FWL
SEC 10 TWP 16S RGE 26W
Permanent Datum GROUND LEVEL Elevation 2621
Log Measured From KELLY BUSHING 11' A.G.L.
Drilling Measured From KELLY BUSHING
Other Services
DIL
MICRO
Elevation
K.B. 2632
D.F.
G.L. 2621

Date	6-17-12
Run Number	ONE
Depth Driller	4625
Depth Logger	4625
Bottom Logged Interval	4601
Top Log Interval	3800
Casing Driller	352
Casing Logger	350
Bit Size	7.875
Type Fluid in Hole	CHEMICAL MUD
Density / Viscosity	9.4 / 65
pH / Fluid Loss	8.5 / 7.6
Source of Sample	FLOWLINE
Rim @ Meas. Temp	1.20 @ 82F
Rmf @ Meas. Temp	0.90 @ 82F
Rmc @ Meas. Temp	1.44 @ 82F
Source of Rmf / Rmc	MEASURED
Rim @ BHT	.810 @ 121F
Time Circulation Stopped	3 HOURS
Time Logger on Bottom	10:45 A.M.
Maximum Recorded Temperature	121F
Equipment Number	860
Location	HAYS, KS.
Recorded By	RUPP
Witnessed By	JON CHRISTENSEN

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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: UTICA, W TO RD. "D", 2N, W INTO.

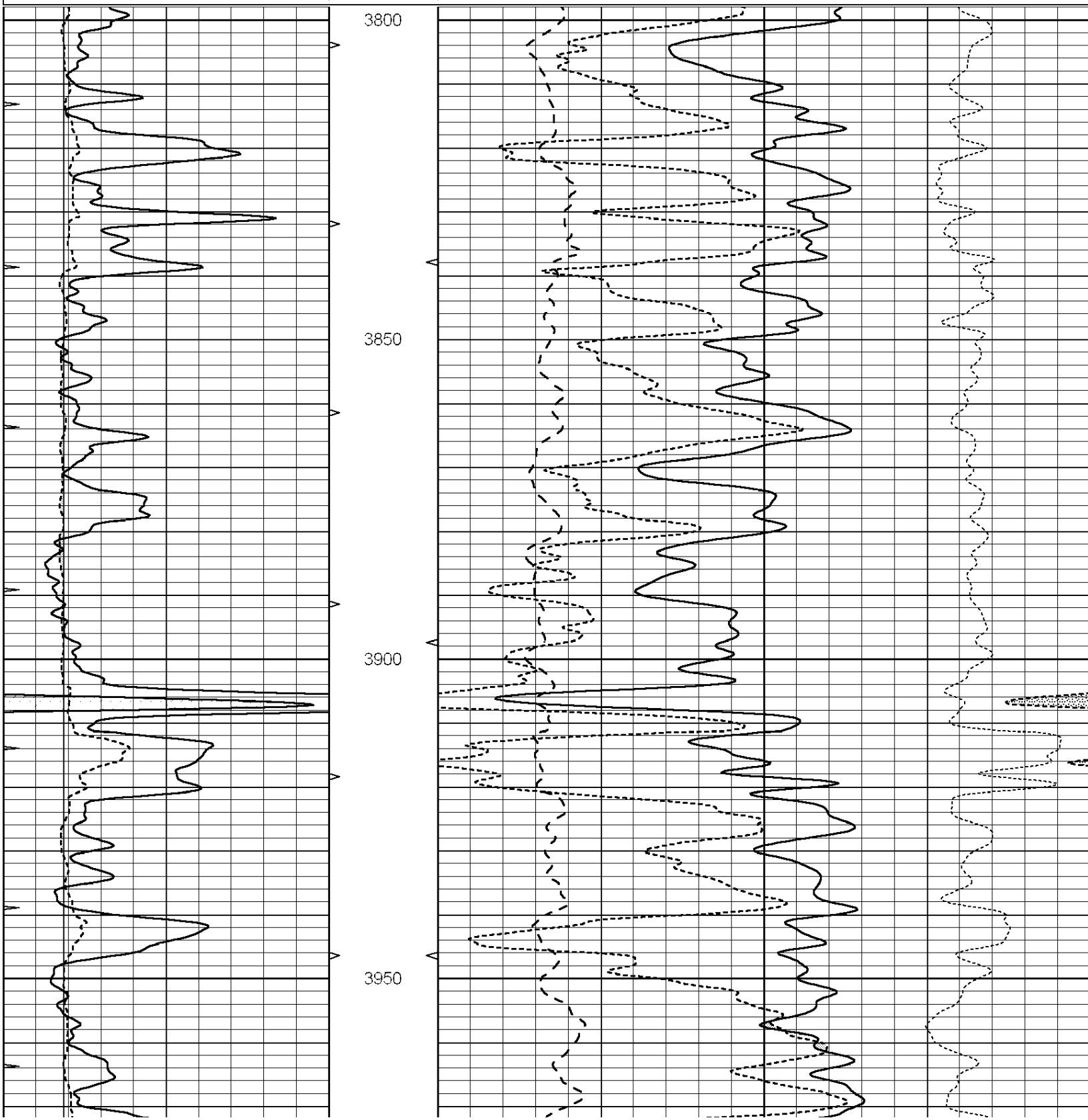


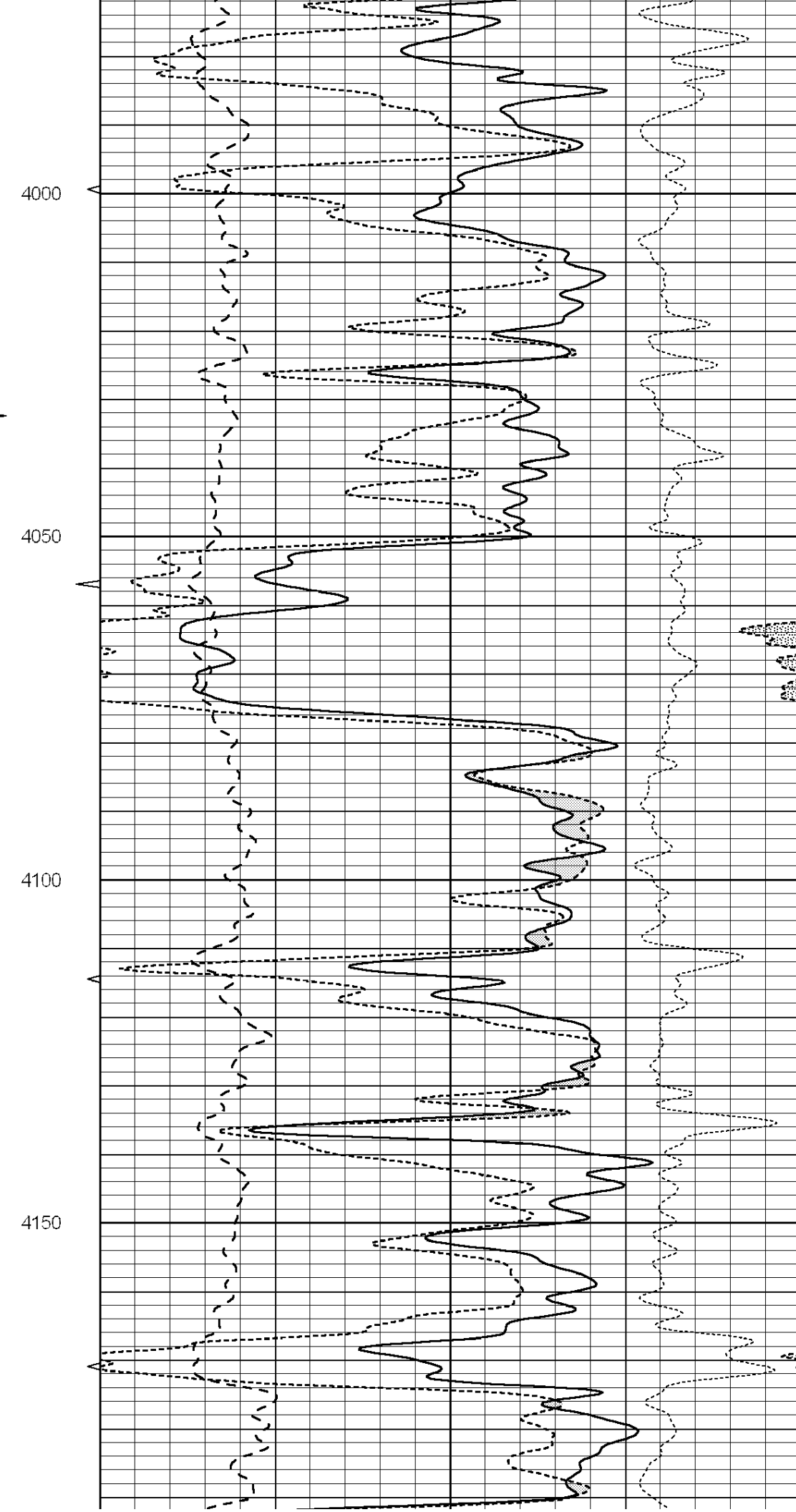
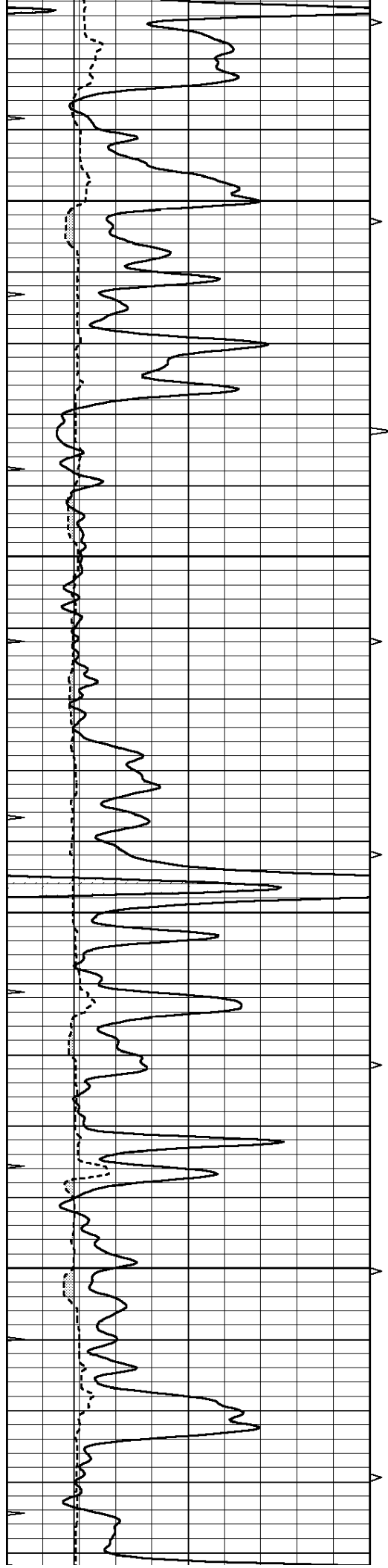
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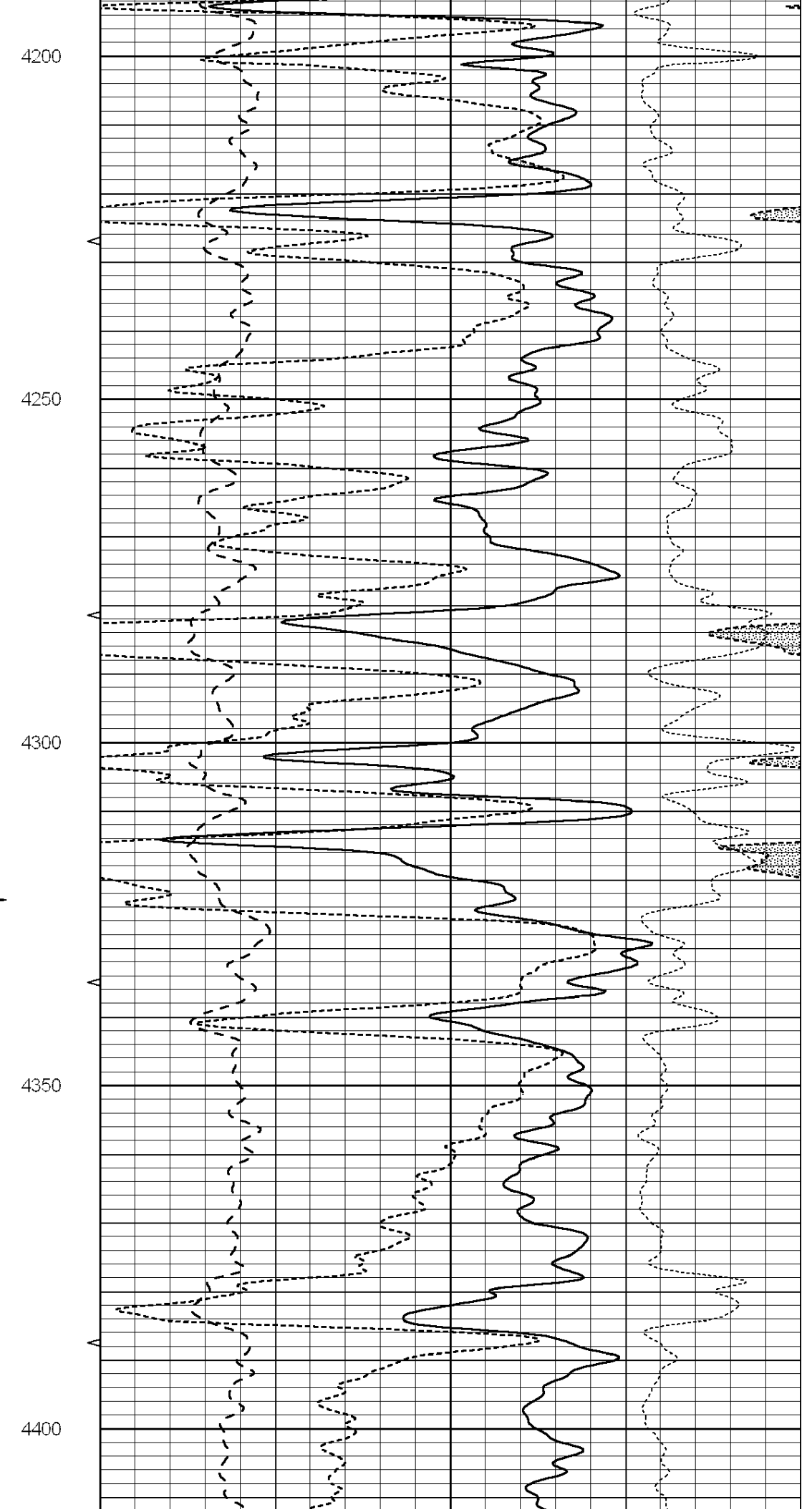
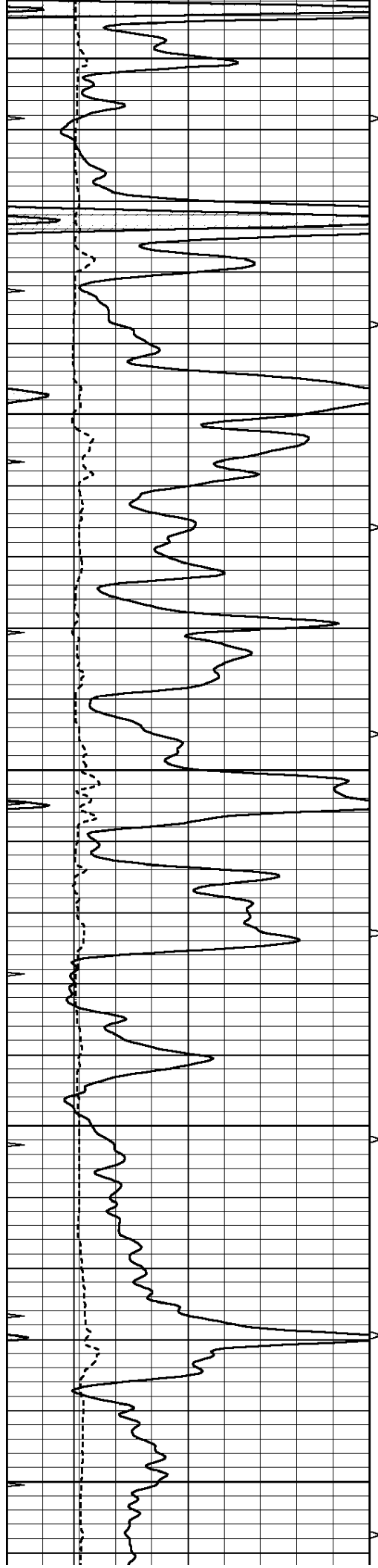
MAIN SECTION

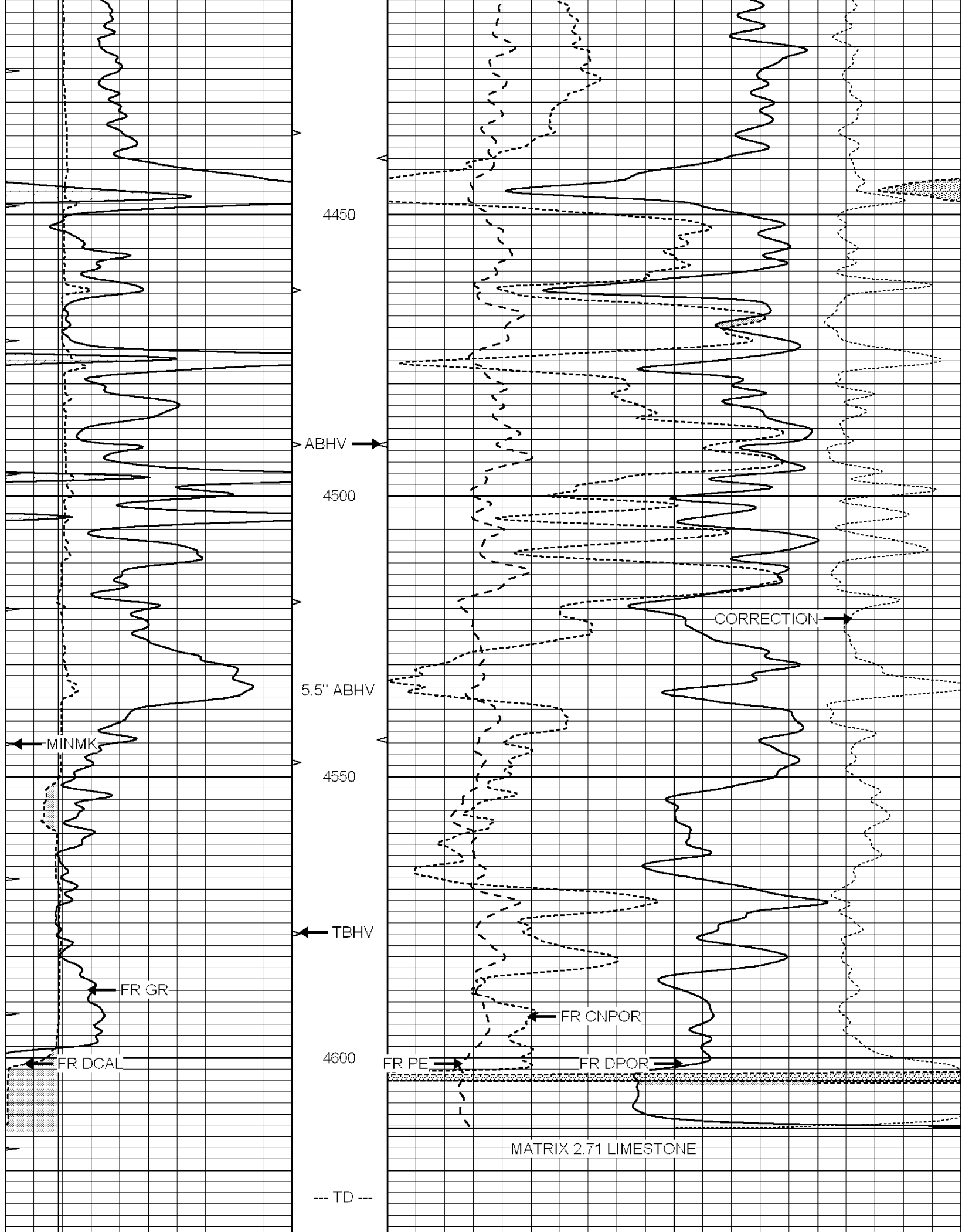
Database File: 008791pdn.db
 Dataset Pathname: pass3.A
 Presentation Format: ldt_neu
 Dataset Creation: Sun Jun 17 12:18:31 2012
 Charted by: Depth in Feet scaled 1:240

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









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6	CALIPER (in)	16	10 (ft3) 0	30	COMPENSATED NEUTRON (pu)		-10
0	MINMK	20	TBHV	0	PE	10 -0.25	CORRECTION (g/cc) 0.25
			0 (ft3) 10				

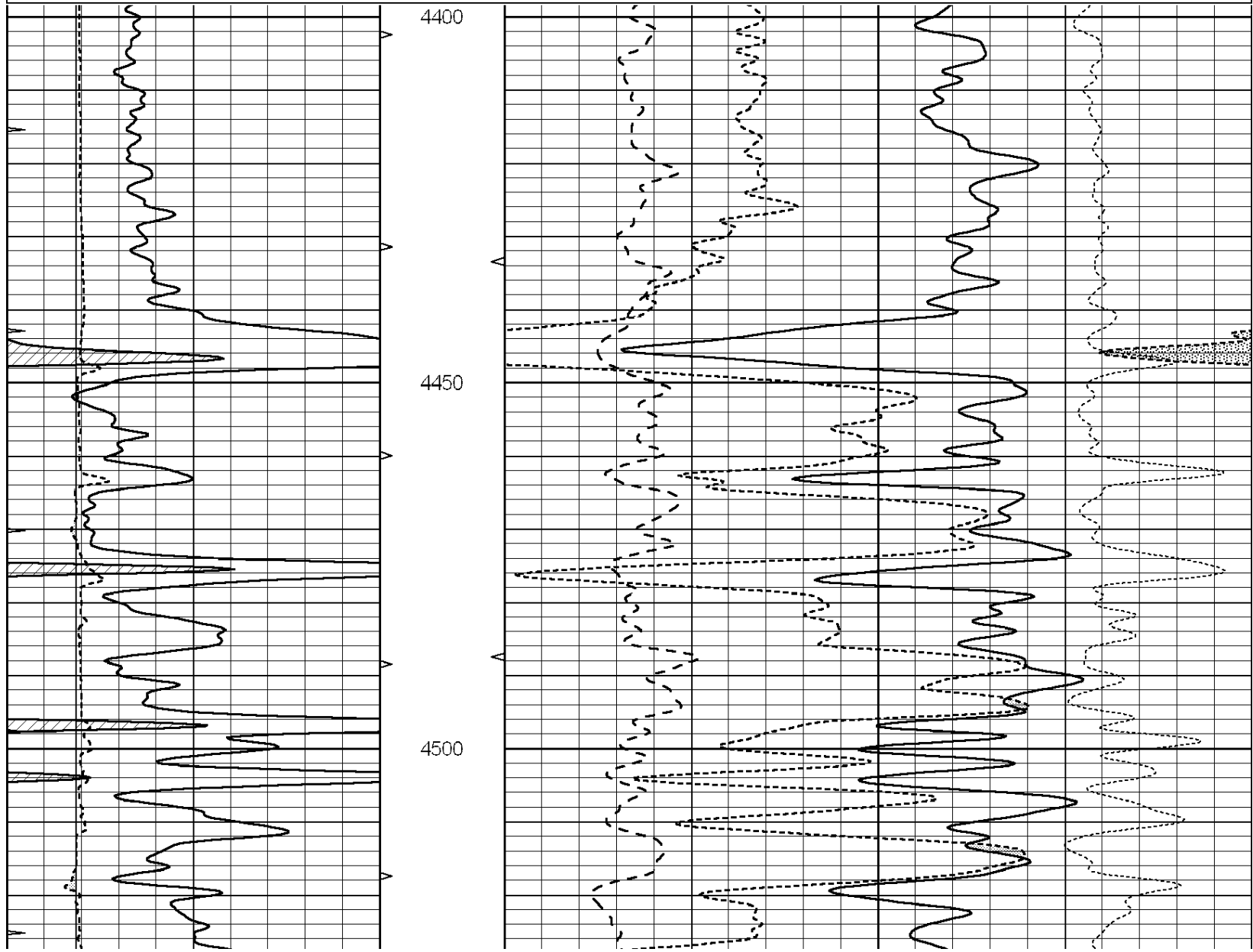


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REPEAT SECTION

Database File: 008791pdm.db
 Dataset Pathname: pass2.1A
 Presentation Format: ldt_neu
 Dataset Creation: Sun Jun 17 10:59:57 2012 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	PE	10 -0.25	CORRECTION (g/cc) 0.25
			0 (ft3) 10				



	Zero	Cal		Zero	Cal		m'	b'
Deep	0.000	0.000	mmho/m	14.508	388.384	mmho/m	1.000	0.000
Medium	0.000	0.000	mmho/m	166.367	504.400	mmho/m	1.000	0.000
LL3		7.500	V		1400.000	Ohm-m		
		0.000	V		20.000	Ohm-m		
		-7.200	V		3970.000	mmho-m		

After Survey Verification								
	Readings			Targets			Results	
	Zero	Cal		Zero	Cal		m'	b'
Deep	0.000	0.000	mmho/m	0.000	0.000	mmho/m	0.000	0.000
Medium	0.000	0.000	mmho/m	0.000	0.000	mmho/m	0.000	0.000
LL3		1.000	Ohm-m		1.000	Ohm-m		
		0.000	Ohm-m		0.000	Ohm-m		
		1.000	mmho-m		1.000	mmho-m		

Litho Density Calibration Report
 Serial: 002 Model: PRB
 Performed Mon Apr 02 17:56:53 2012

Litho Density Calibration								
	Background		Magnesium		Aluminum		Sandstone	
Window 1	872.3		7266.3		2292.6		7931.5	cps
Window 2	822.9		5957.5		1958.0		6389.6	cps
Window 3	670.4		3219.9		1211.9		3388.2	cps
Window 4	201.6		201.1		202.3		204.6	cps
Long Space	0.0		5134.6		1135.0		5566.6	cps
Short Space	1.1		994.2		674.4		1059.2	cps
Rho			1.7100		2.5960		1.3800	g/cc
Pe					2.5700		1.5500	
Rib Angle	: 45.6		Rib Slope	: 1.020	Density/Spine Ratio			: 0.569
Spine Angle	: 75.6		Spine Slope	: 3.888	Spine Intercept			: -18.3

Caliper		
	Readings	Reference
Low Ref	3.8	8.7
High Ref	4.9	12.0
	Gain: 2.9	Offset: -2.4

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:	Sun Jun 17 10:55:59 2012		
Calibrator Value:	1.0	GAPI	
Background Reading:	0.0	cps	
Calibrator Reading:	1.0	cps	

Sensitivity:

0.7500

GAPI/cps