NABORS
COMPLETION & PRODUCTION SERVICES CO.

COMPENSATED DENSITY / NEUTRON LOG

Company RITCHIE EXPLORATION, INC.

Well YORK UNIT #1

Field WILDCAT

County GOVE State KANSAS

Location: API # : 15-063-22116-00-00

203' FNL & 475' FWL

SEC 31 TWP 15S RGE 30W

Other Services

DIL

Elevation

K.B. 2752
D.F. 2750
G.L. 2747

Permanent Datum GROUND LEVEL Elevation 2747
Log Measured From KELLY BUSHING 5' A.G.L.
Drilling Measured From KELLY BUSHING

Company RITCHIE EXPLORATION, INC.
Well YORK UNIT #1
Field WILDCAT
County GOVE
State KANSAS

Date	7-11-13		
Run Number	ONE		
Depth Driller	4580		
Depth Logger	4582		
Bottom Logged Interval	4558		
Top Log Interval	3350		
Casing Driller	218		
Casing Logger	216		
Bit Size	7.875		
Type Fluid in Hole	CHEMICAL MUD		
Density / Viscosity	9.4 / 48		
pH / Fluid Loss	10 / 8.8		
Source of Sample	FLOWLINE		
Rm @ Meas. Temp	0.8 @ 95F		
Rmf @ Meas. Temp	0.60 @ 95F		
Rmc @ Meas. Temp	0.96 @ 95F		
Source of Rmf / Rmc	MEASURED		
Rm @ BHT	0.63 @ 121F		
Time Circulation Stopped	2 HOURS		
Time Logger on Bottom			
Maximum Recorded Temperature	121F		
Equipment Number	860		
Location	HAYS, KS.		
Recorded By	IAN MABB		
Witnessed By	TERRY MCLEOD		

<<< Fold Here >>>

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.

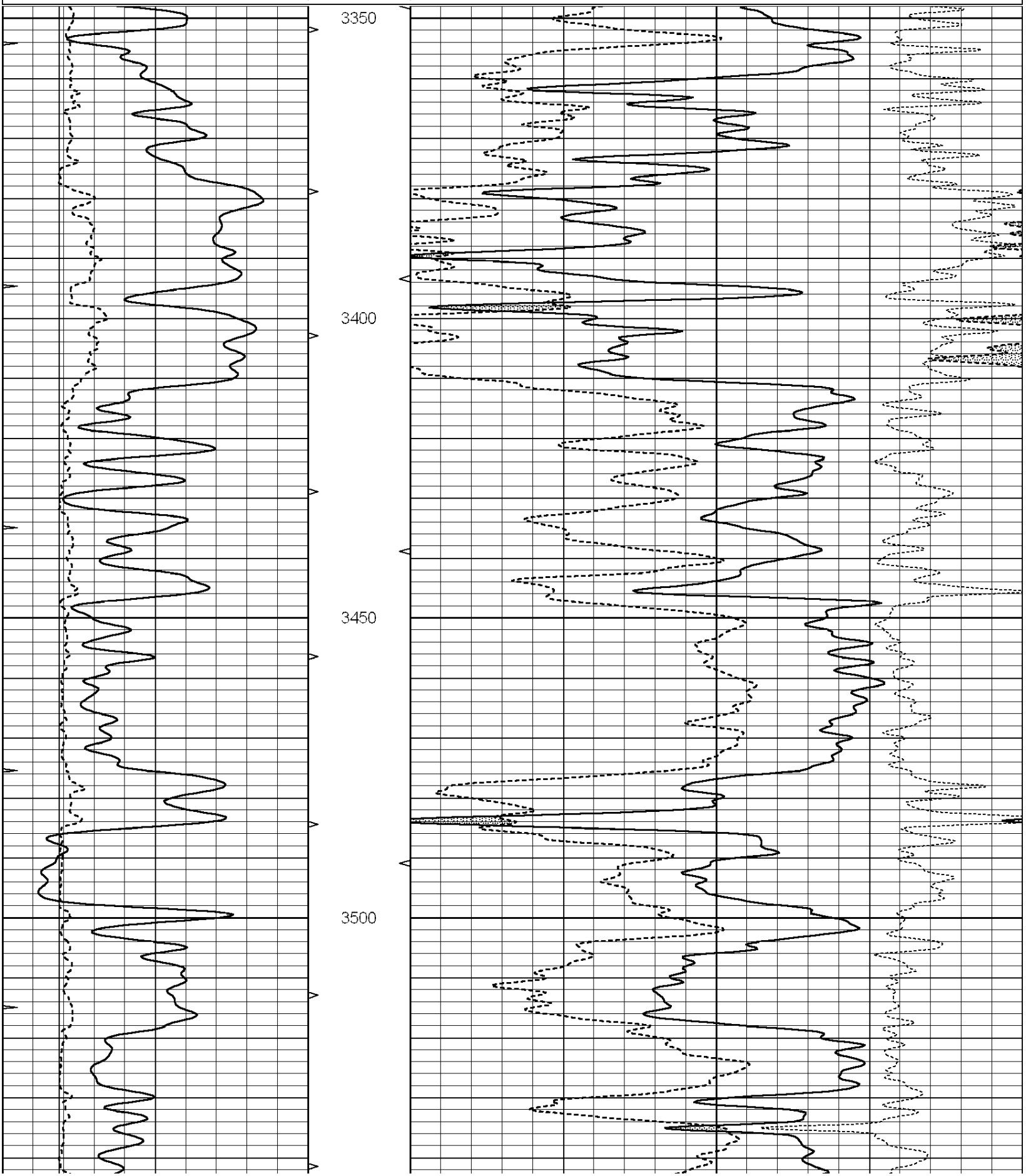
Comments

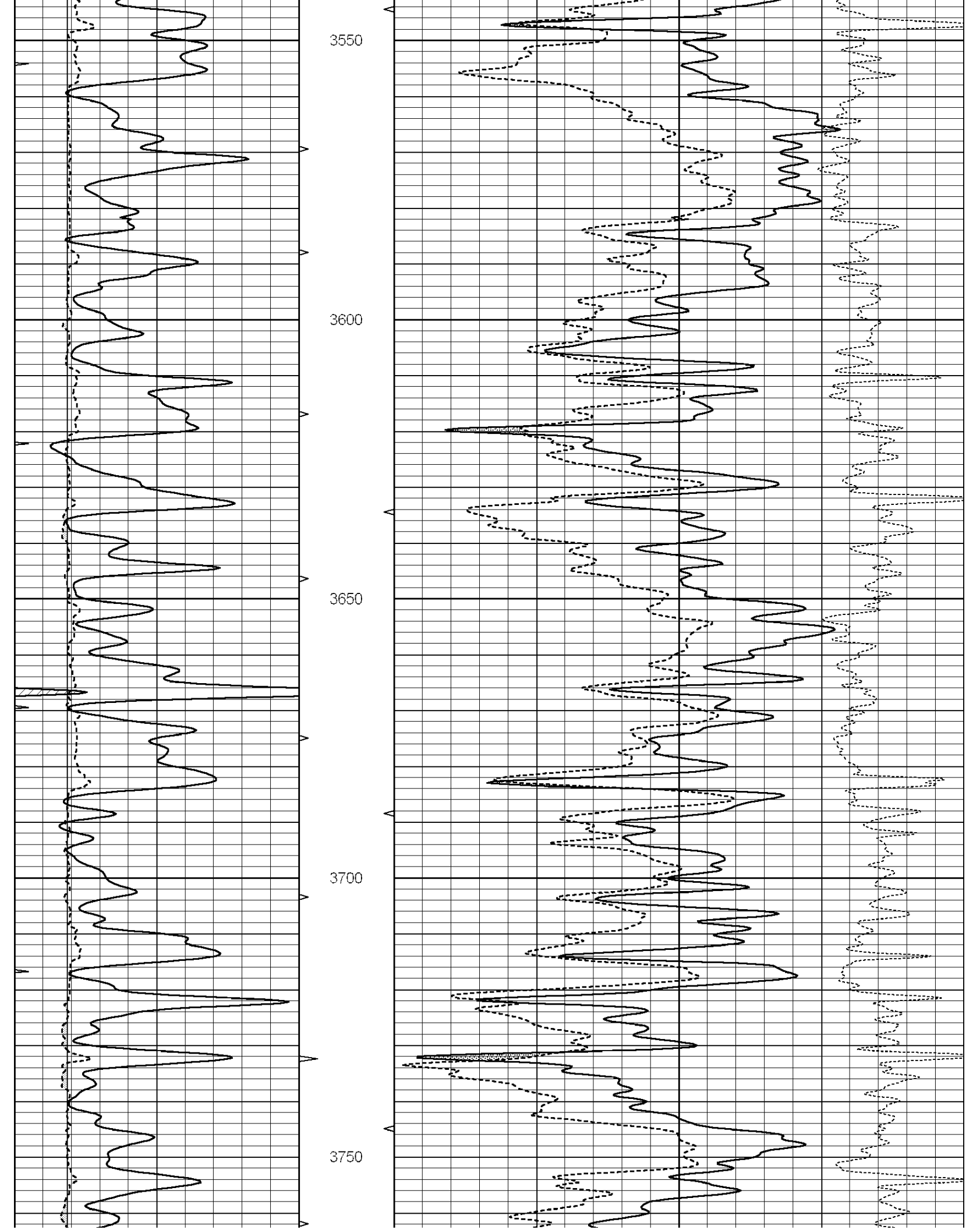
NABORS COMPLETION & PRODUCTION SERVICES
785-628-6395
THANK YOU FOR YOUR BUSINESS
DIRECTIONS: HEALY, KS. - 8 MILES WEST TO TAOS RD. - NORTH 5 MILES TO RD. 280 - 1 EAST TO UNION RD. - 1 NORTH - 2 EAST TO WILLOW RD. - NORTH 2 MILES TO THE RIG

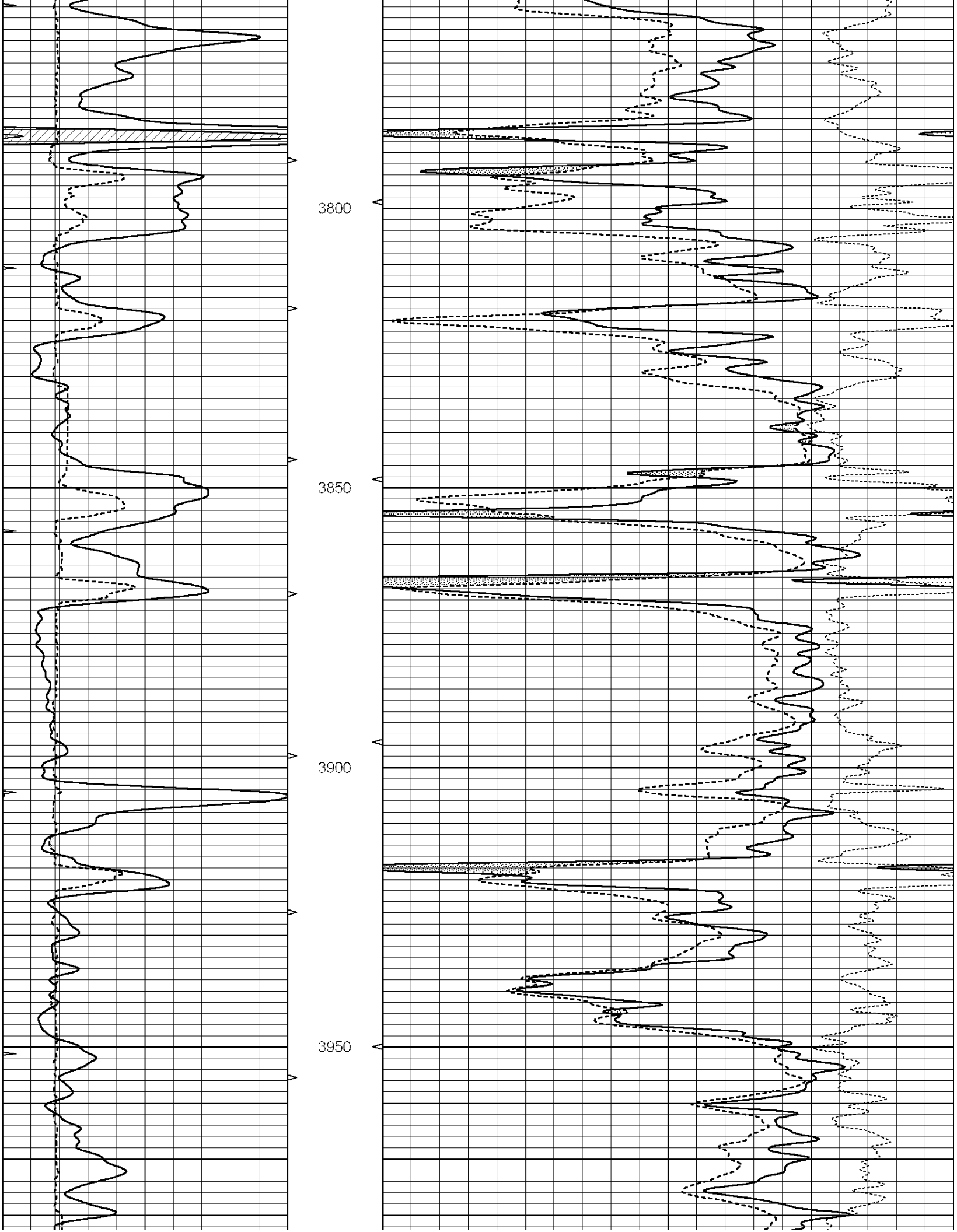
Database File: 011360ddn.db
Dataset Pathname: pass7.1.1
Presentation Format: _den_neu
Dataset Creation: Fri Jul 12 03:28:15 2013

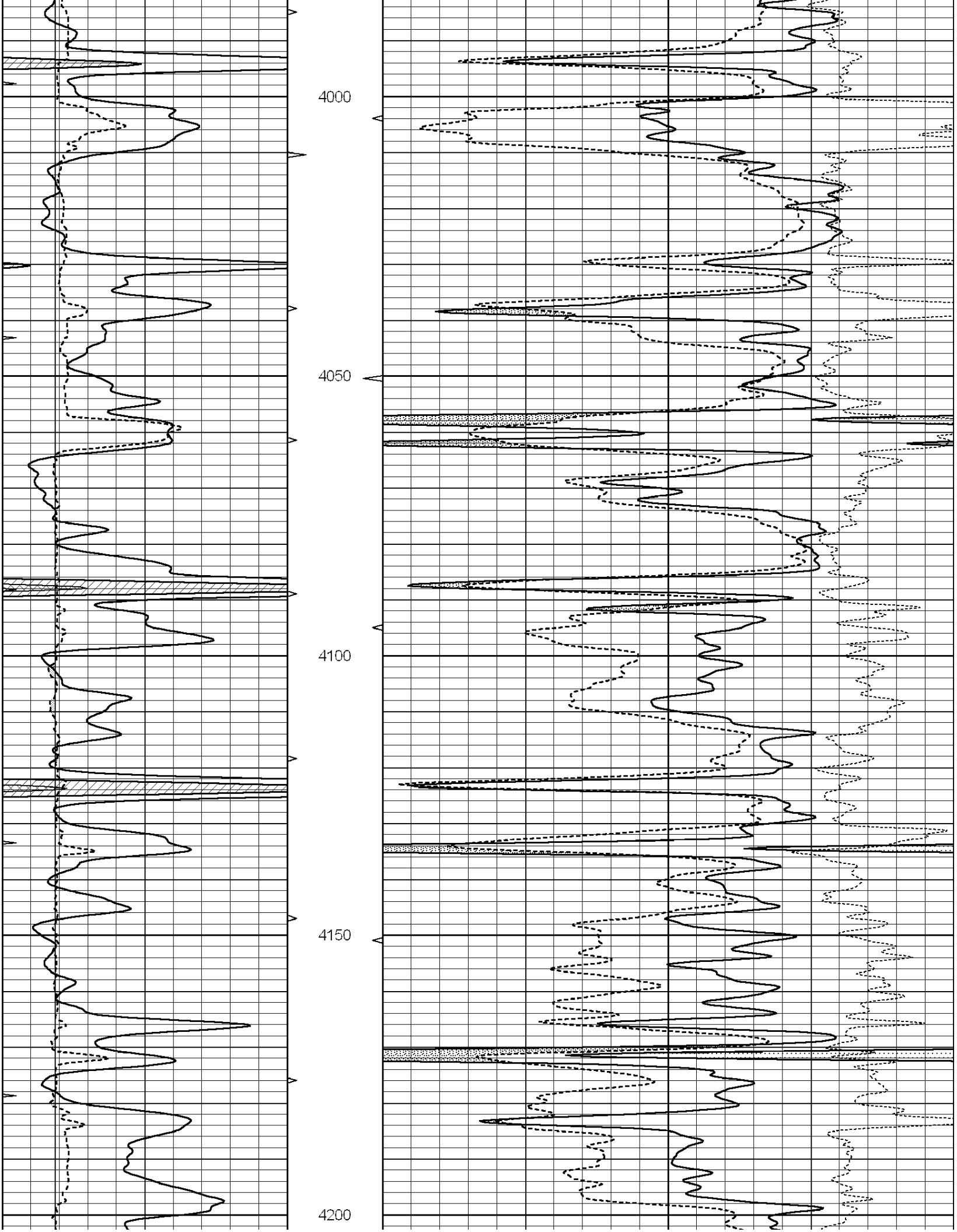
Charted by: Depth in Feet scaled 1:240

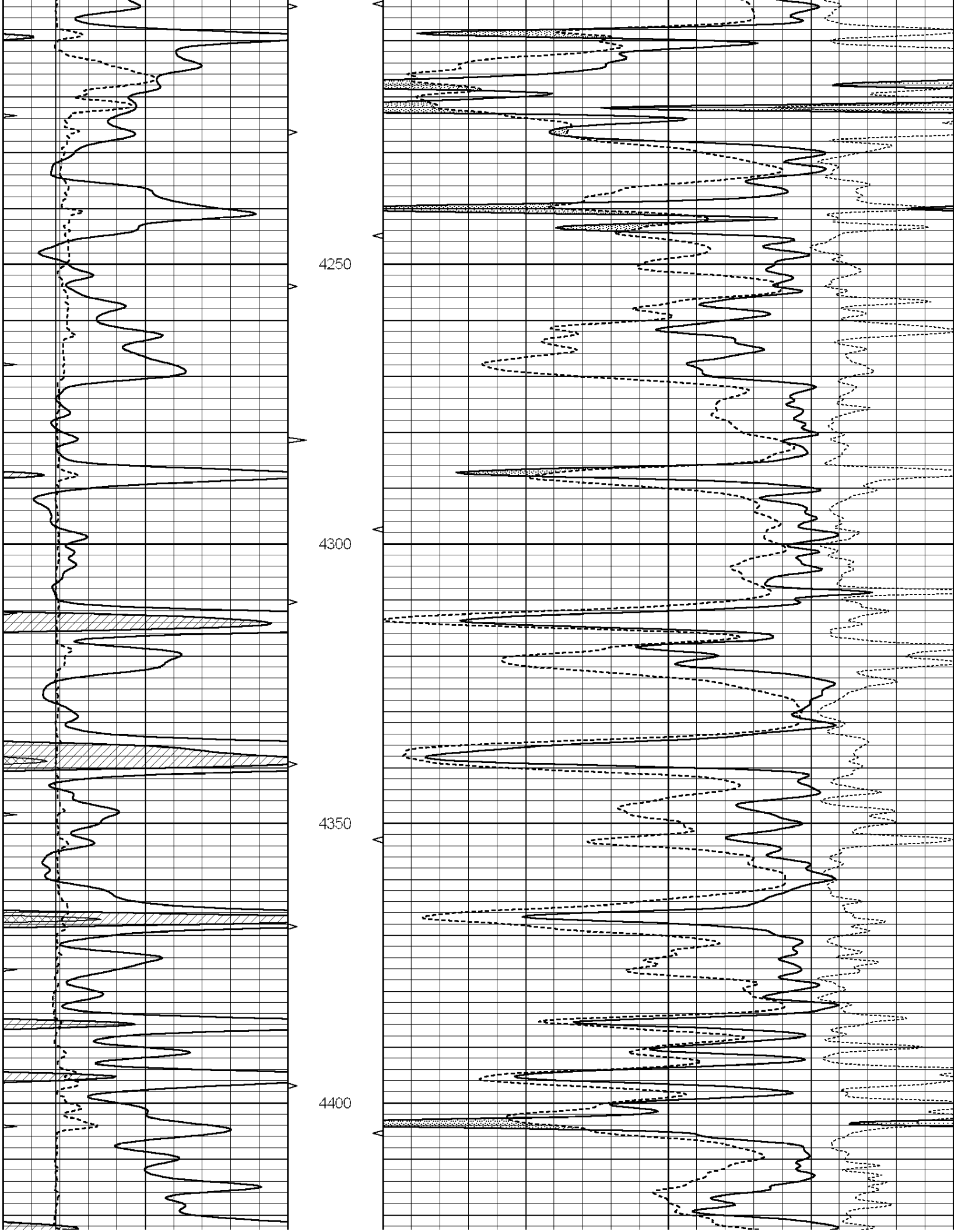
0 GAMMA RAY (GAPI) 150	ABHV	30 COMPENSATED DENSITY (pu) -10
6 CALIPER (in) 16	10 (ft3) 0	30 COMPENSATED NEUTRON (pu) -10
0 MINMK 20	TBHV	-0.25 CORRECTION (g/cc) 0.25
	0 (ft3) 10	

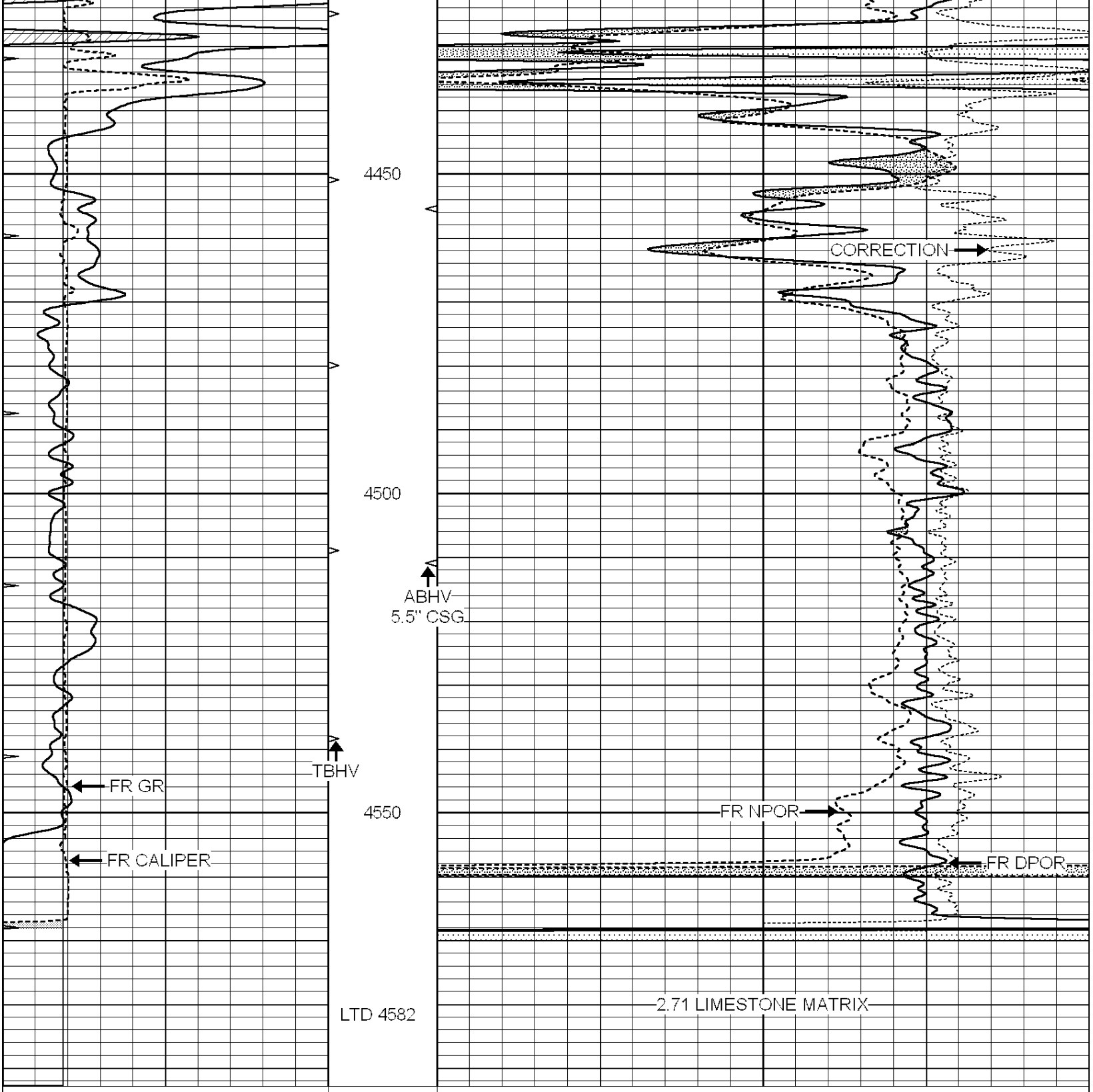



3550
3600
3650
3700
3750


3800
3850
3900
3950


4000
4050
4100
4150
4200


4250
4300
4350
4400



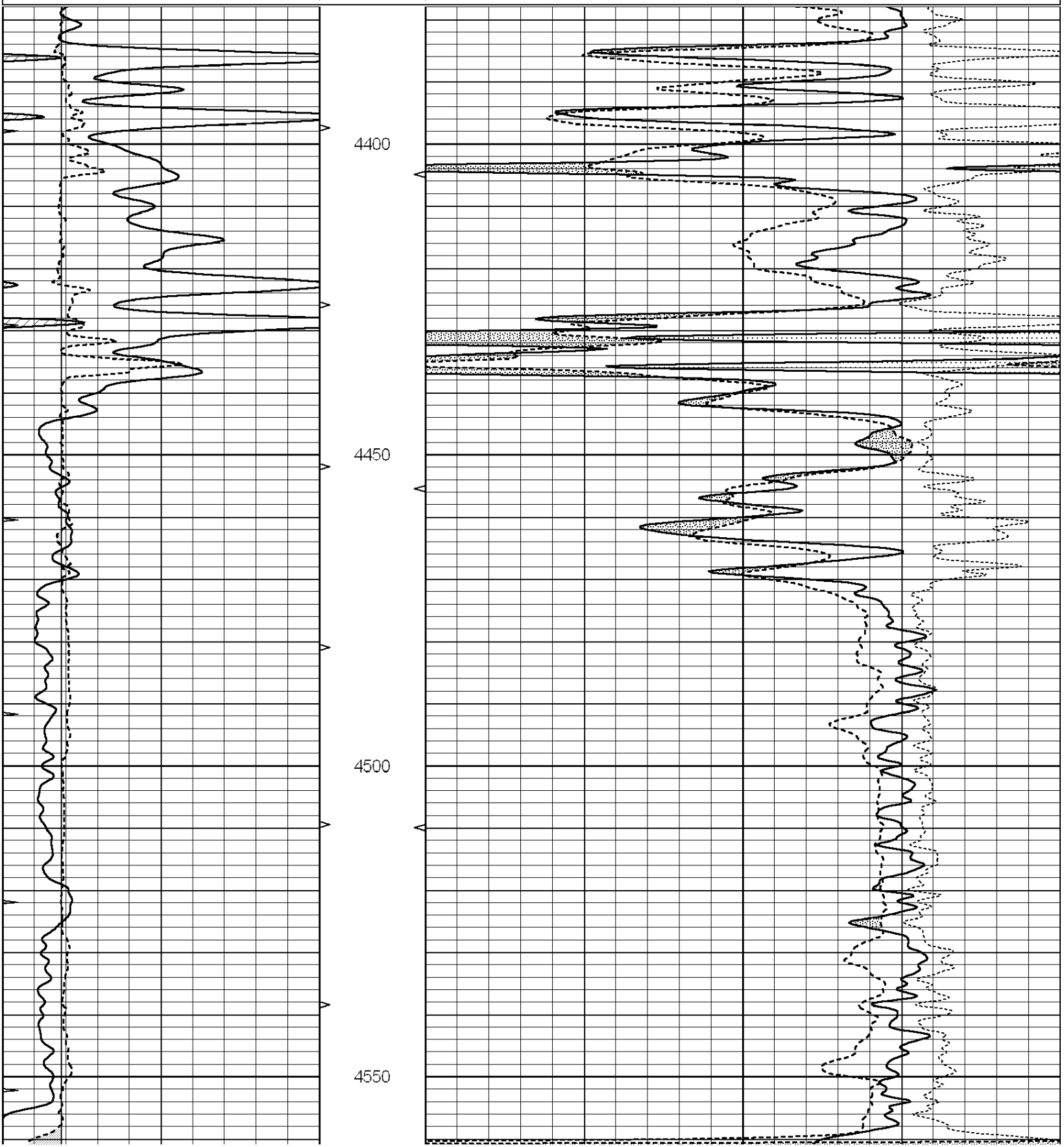
NABORS
COMPLETION & PRODUCTION SERVICES CO.

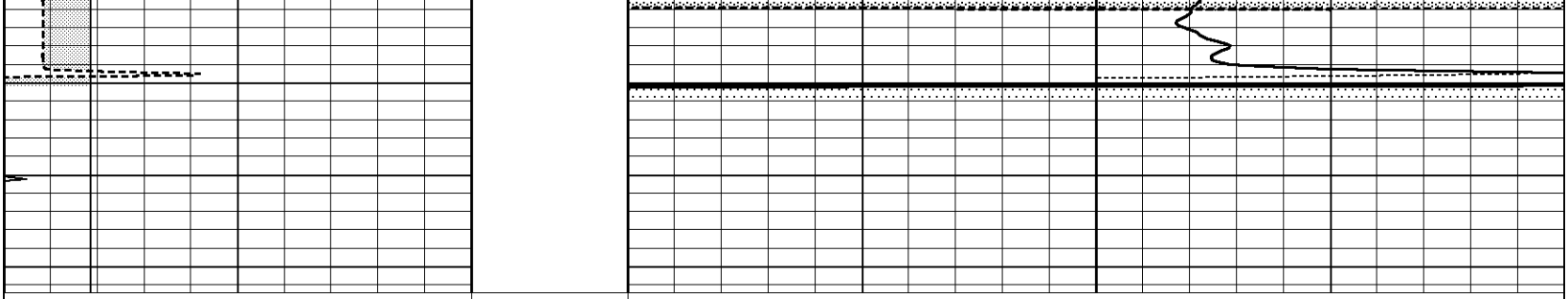
REPEAT SECTION

Database File: 011360ddp.db

Database File: 011366ddn.db
Dataset Pathname: pass4.1
Presentation Format: _den_neu
Dataset Creation: Fri Jul 12 02:27:08 2013 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		





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: 011360ddn.db
Dataset Pathname: pass7.1.1
Dataset Creation: Fri Jul 12 03:28:15 2013

Dual Induction Calibration Report

Serial-Model:	PROBE7-DILG
Surface Cal Performed:	Mon Jul 01 07:10:41 2013
Downhole Cal Performed:	Sat Jan 19 19:51:38 2013
After Survey Verification Performed:	Sat Jan 19 19:51:38 2013

Surface Calibration

	Readings			References			Results	
Loop:	Air	Loop		Air	Loop		m	b
Deep	0.793	0.790	V	0.000	400.000	mmho/m	620.000	22.000
Medium	0.992	1.002	V	0.000	464.000	mmho/m	660.000	-30.000
Internal:	Zero	Cal		Zero	Cal		m	b
Deep	0.041	0.642	V	0.000	400.000	mmho/m	664.874	-27.011
Medium	0.035	0.802	V	0.000	464.000	mmho/m	604.936	-21.367

Downhole Calibration

	Readings			References			Results	
	Zero	Cal		Zero	Cal		m'	b'
Deep	135384.000	27094.500	mmho/m	135400.000	27082.400	mmho/m	1.000	-19.259
Medium	-47330.100	-9381.740	mmho/m	-47327.100	-9389.280	mmho/m	1.000	-10.154
LL3		7.322	V		1400.000	Ohm-m		
		0.038	V		20.000	Ohm-m		
		-7.273	V		4000.000	mmho-m		

After Survey Verification

	Readings			Targets			Results	
	Zero	Cal		Zero	Cal		m'	b'
Deep	0.000	0.000	mmho/m	135384.000	27094.500	mmho/m	1.000	0.000
Medium	0.000	0.000	mmho/m	-47330.100	-9381.740	mmho/m	1.000	0.000
LL3		0.000	Ohm-m		1400.000	Ohm-m		
		0.000	Ohm-m		20.000	Ohm-m		
		0.000	mmho-m		4000.000	mmho-m		

Compensated Density Calibration Report

Serial-Model:	GEAR2-GEARHART
Source / Verifier:	147 / 147

Master Calibration Performed: Mon Jul 01 05:43:11 2013

Master Calibration

	Density		Far Detector	Near Detector	
Magnesium	1.710	g/cc	923.76	475.45	cps
Aluminum	2.600	g/cc	205.31	331.69	cps

Spine Angle = 76.54 Density/Spine Ratio = 0.576

	Size		Reading	
Small Ring	8.40	in	5.48	V
Large Ring	14.00	in	7.58	V

Compensated Neutron Calibration Report

Serial Number: NEU_4I
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: Mon Jul 01 05:22:08 2013

Calibrator Value: 1.0 GAPI

Background Reading: 0.0 cps
Calibrator Reading: 1.0 cps

Sensitivity: 0.9000 GAPI/cps