



**COMPLETION
& PRODUCTION
SERVICES CO.**

**COMPENSATED
DENSITY / NEUTRON
LOG**

Company RITCHIE EXPLORATION, INC.
Well MENDENHALL 7C #1
Field WILDCAT
County GOVE State KANSAS

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Field WILDCAT
County GOVE
State KANSAS

Location: API #: 15-063-22193-00-00
1310' FSL & 1585' FWL
W2 - E2 - SW
SEC 7 TWP 13S RGE 28W
Permanent Datum GROUND LEVEL Elevation 2712
Log Measured From KELLY BUSHING 5' A.G.L.
Drilling Measured From KELLY BUSHING
Other Services
DIL
Elevation
K.B. 2717
D.F. 2715
G.L. 2712

Date	4-6-14		
Run Number	ONE		
Depth Driller	4612		
Depth Logger	4614		
Bottom Logged Interval	4590		
Top Log Interval	3350		
Casing Driller	8 5/8 @ 218'		
Casing Logger	217'		
Bit Size	7.875		
Type Fluid in Hole	CHEMICAL MUD	CHLORIDES 3.200	
Density / Viscosity	9.4 / 54		
pH / Fluid Loss	10.0 / 8.0		
Source of Sample	FLOWLINE		
Rim @ Meas. Temp	1.10 @ 85F		
Rmf @ Meas. Temp	0.83 @ 85F		
Rmc @ Meas. Temp	1.32 @ 85F		
Source of Rmf / Rmc	MEASURED		
Rim @ BHT	0.77 @ 122F		
Time Circulation Stopped	2 HOURS		
Time Logger on Bottom			
Maximum Recorded Temperature	122F		
Equipment Number	860		
Location	HAYS, KS.		
Recorded By	IAN MABB		
Witnessed By	MAX LOVELLY		

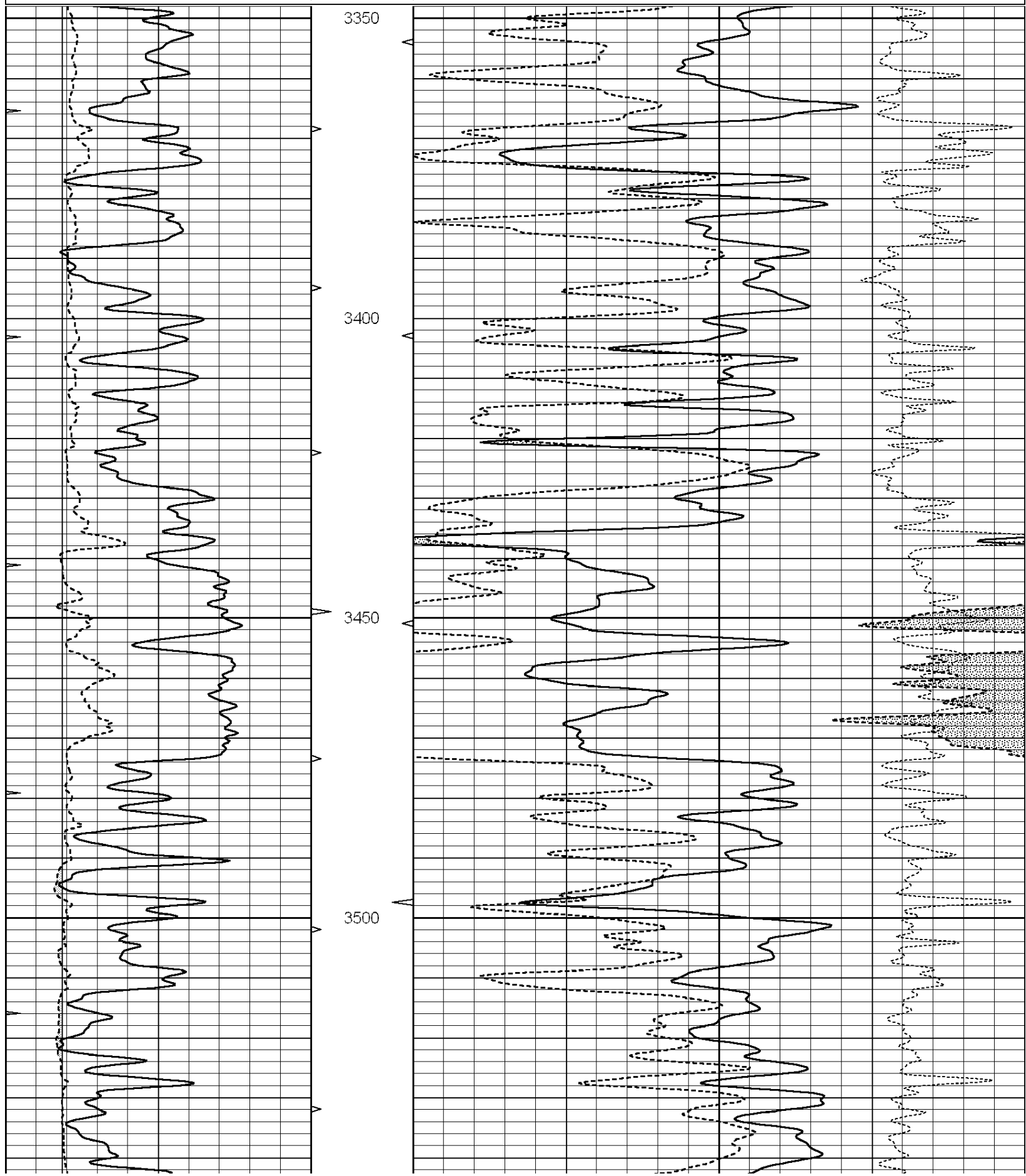
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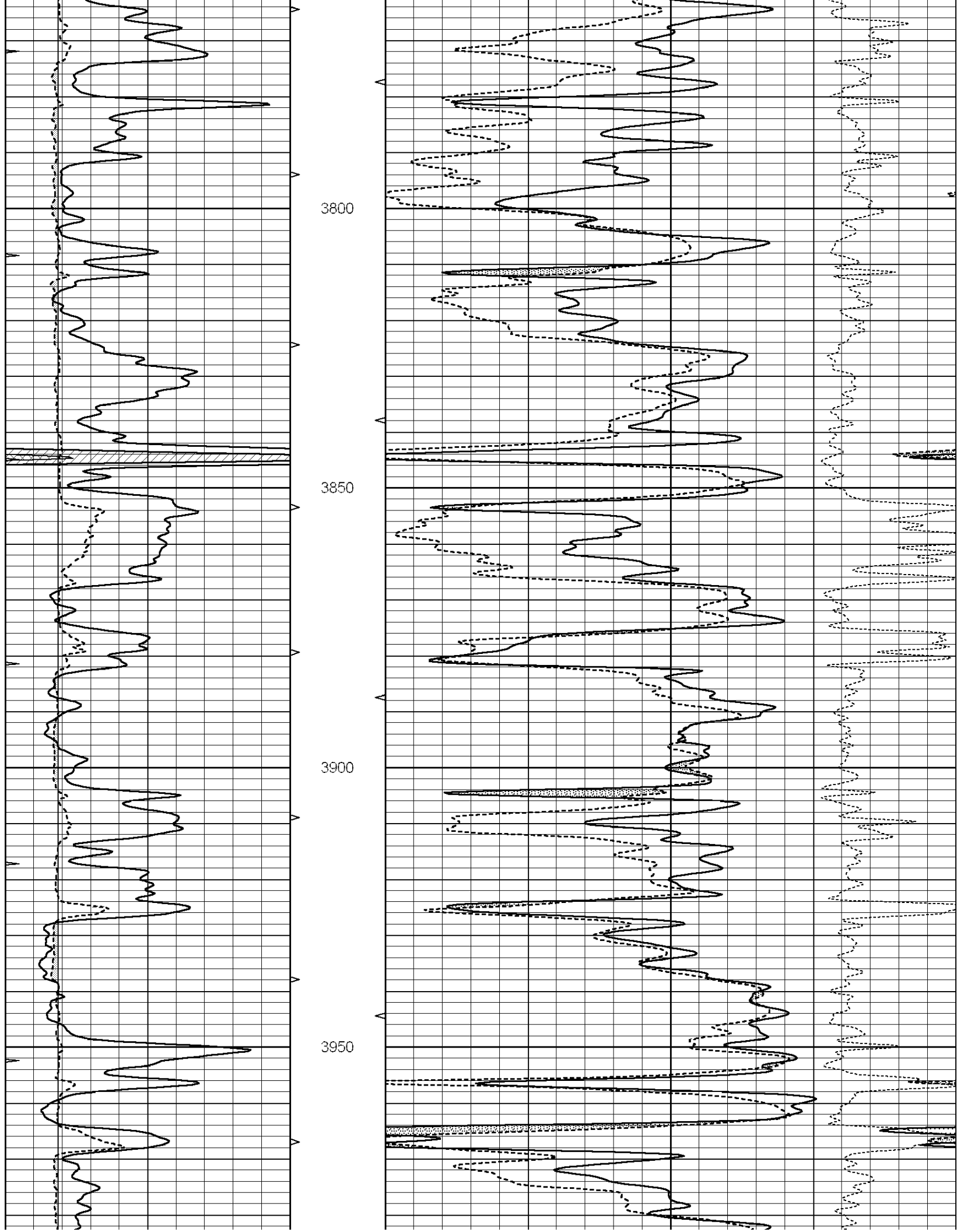
All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs,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

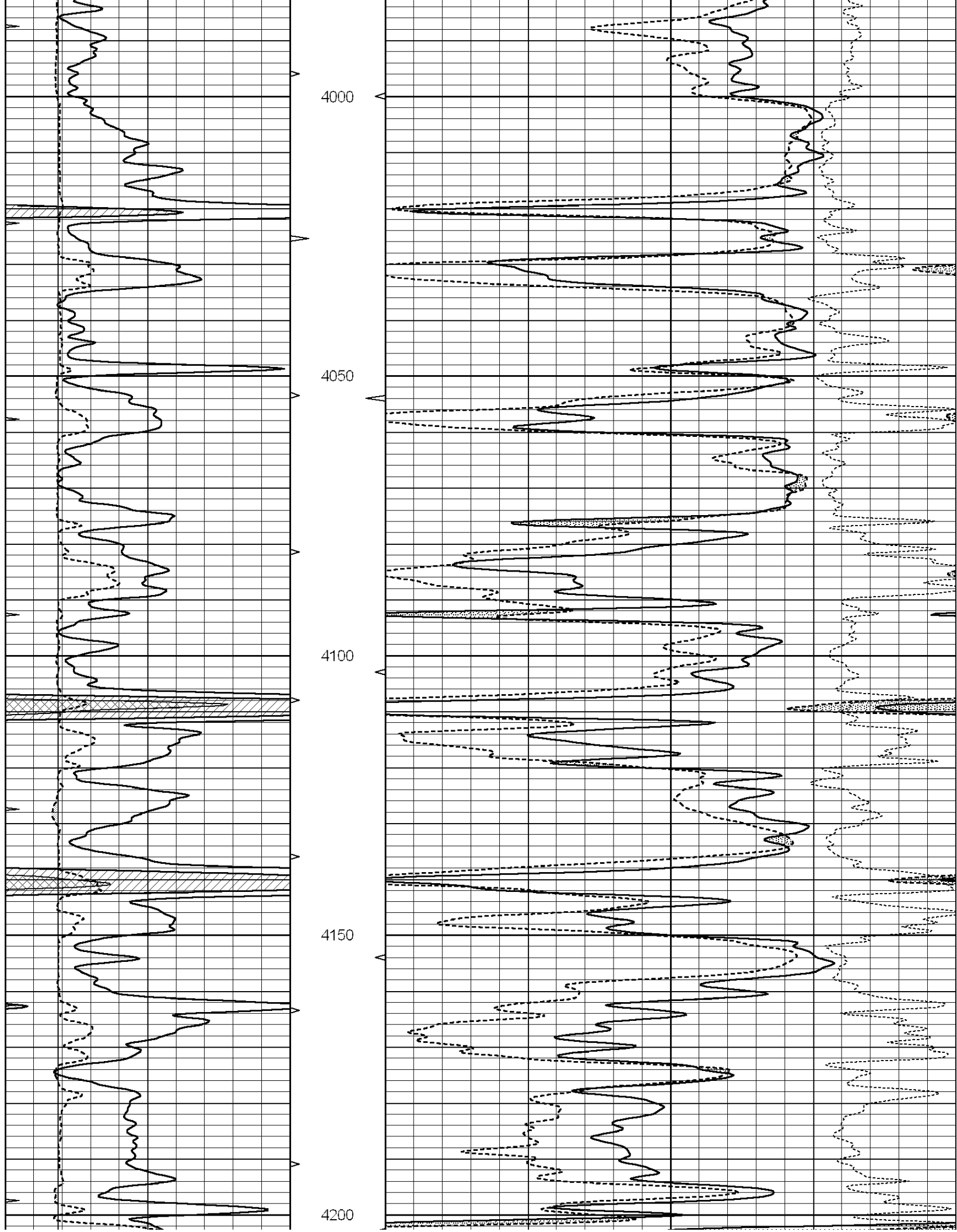
Comments

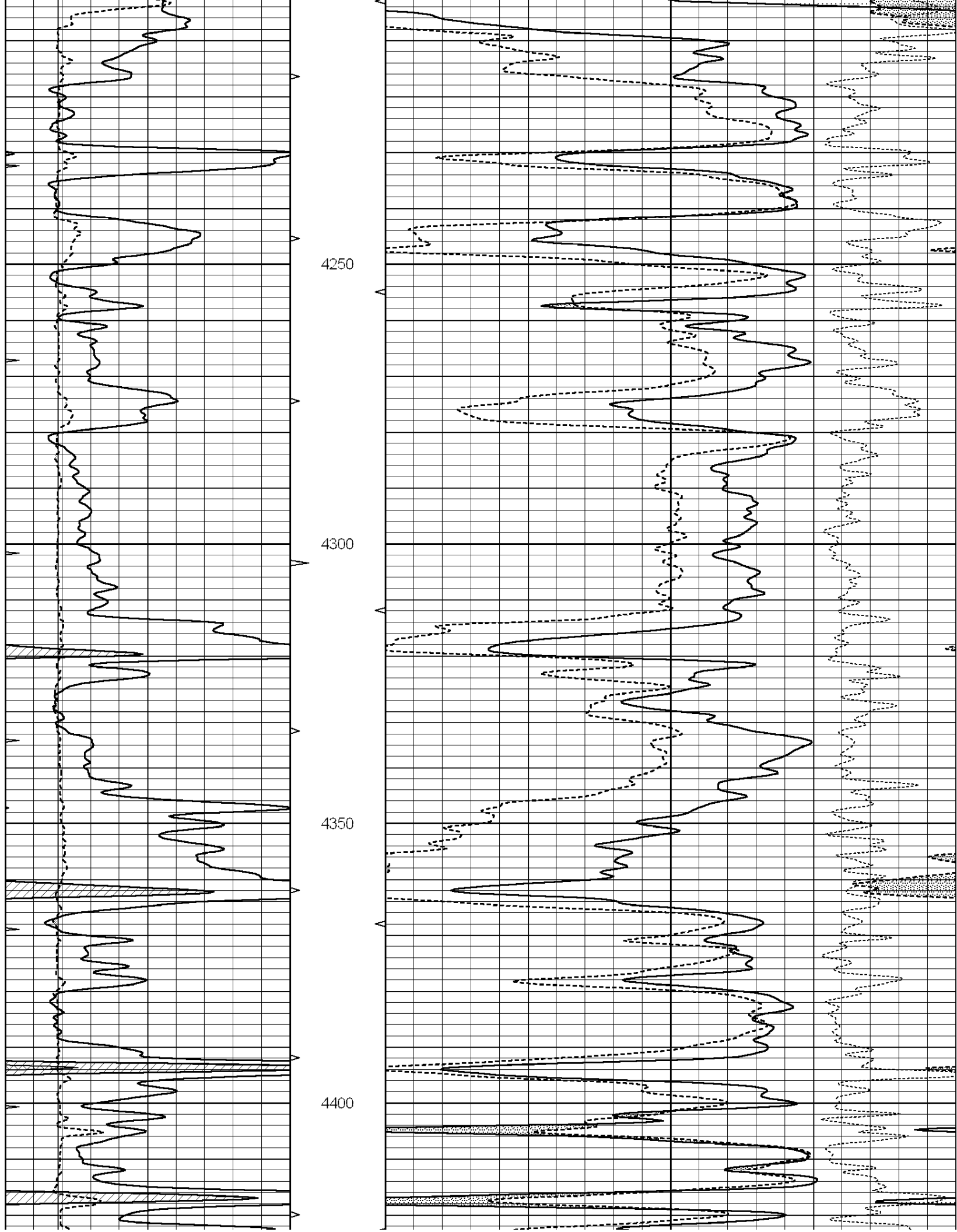
NABORS COMPLETION & PRODUCTION SERVICES
785-628-6395
THANK YOU FOR YOUR BUSINESS
DIRECTIONS: GOVE, KS. 1 MILES SOUTH TO RD. R - EAST 1/2 - SOUTH 3/4 - EAST INTO

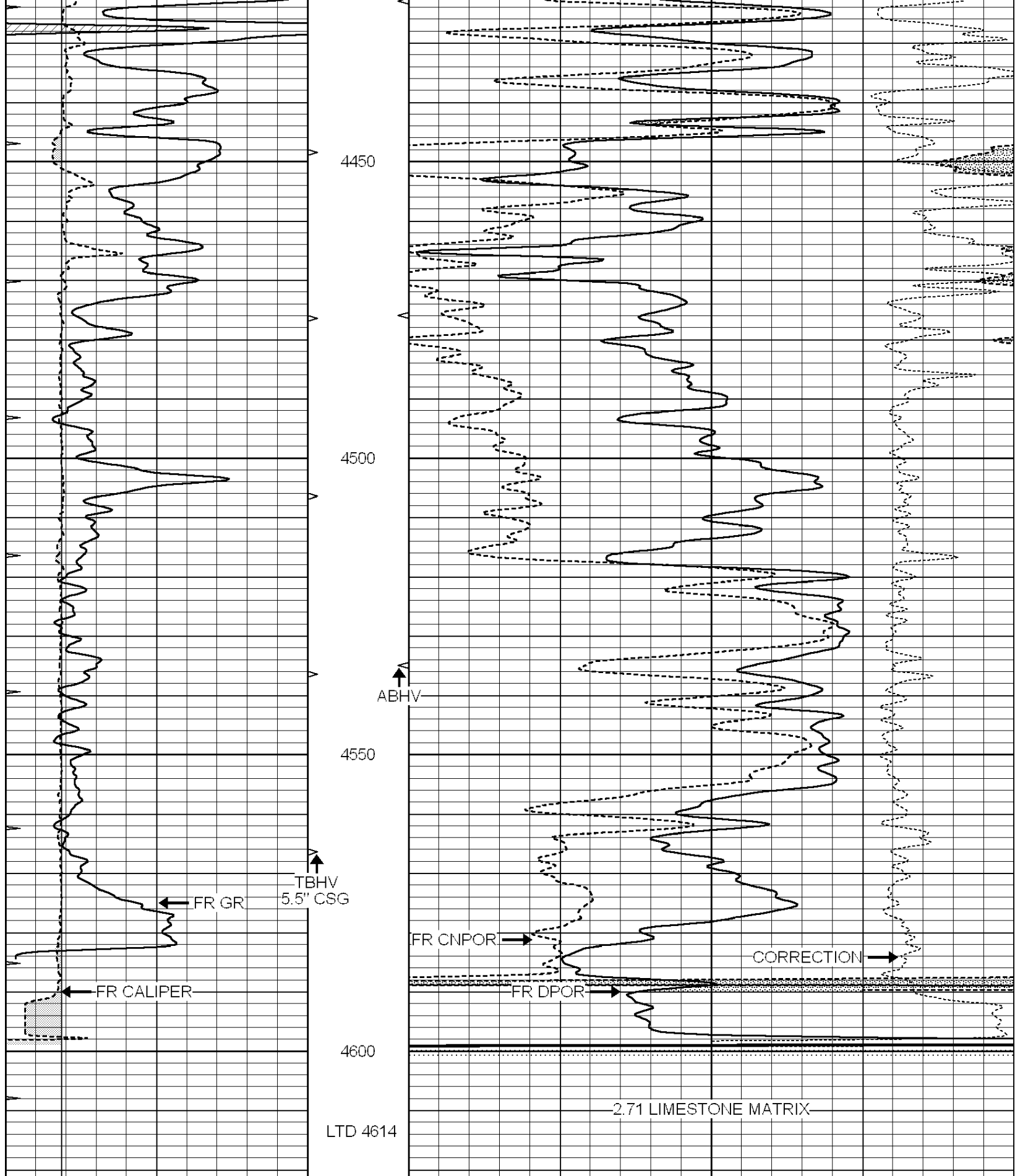
0	GAMMA RAY (GAPI)	150	ABHV	30	COMPENSATED DENSITY (pu)	-10
6	CALIPER (in)	16	10 (ft3)	0 30	COMPENSATED NEUTRON (pu)	-10
0	MINMK	20	TBHV		-0.25 CORRECTION (g/cc)	0.25
			0 (ft3)	10		











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			

LTD 4614

2.71 LIMESTONE MATRIX

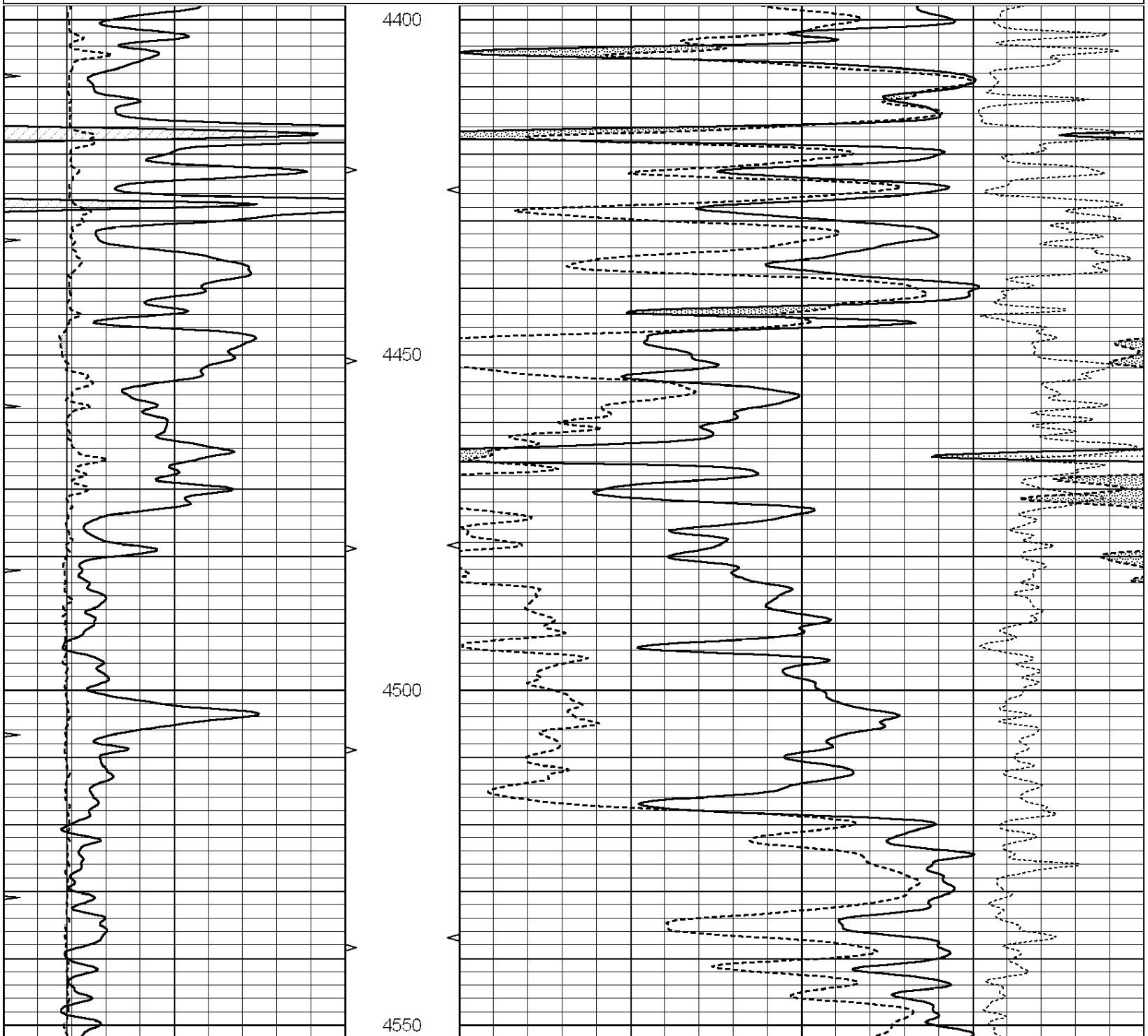


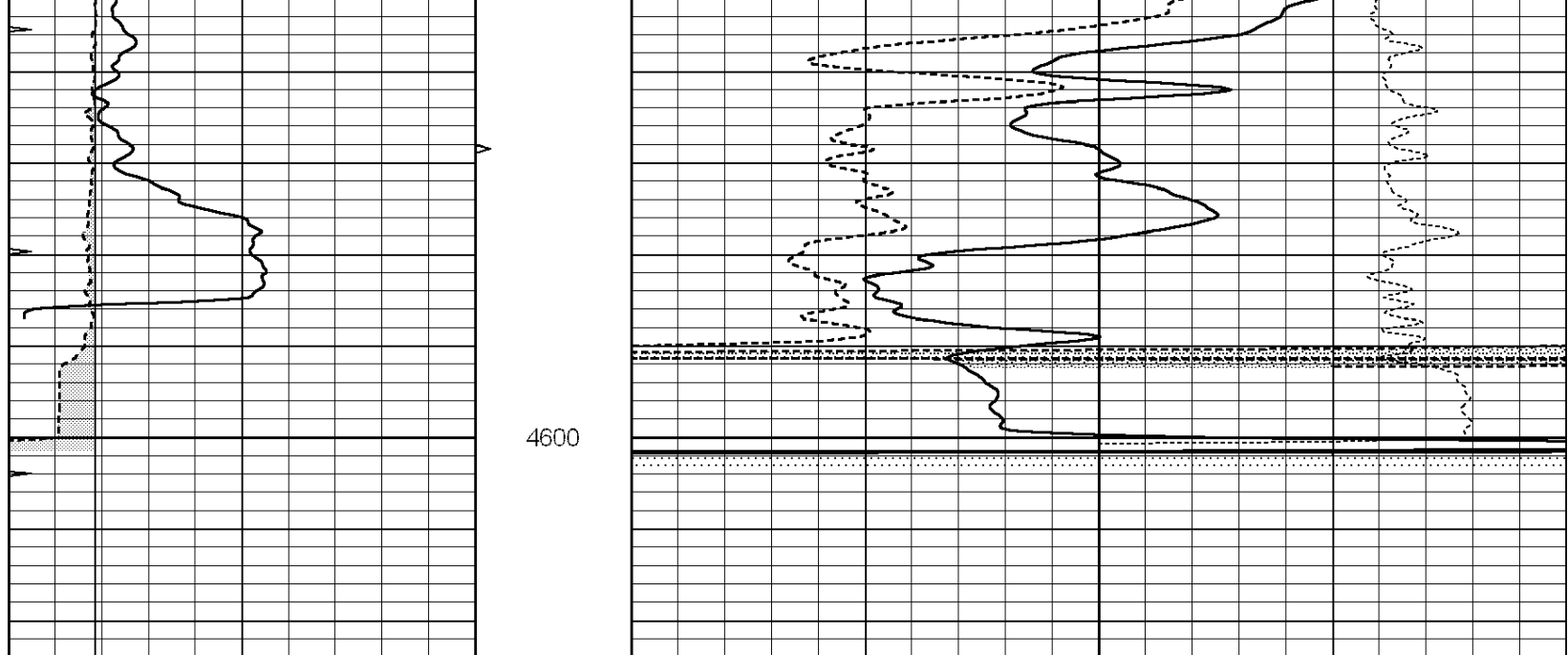
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REPEAT SECTION

Database File: 24132ddn.db
 Dataset Pathname: pass2.2
 Presentation Format: _den_neu
 Dataset Creation: Sun Apr 06 11:05:34 2014 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: 24132ddn.db
 Dataset Pathname: pass3.2
 Dataset Creation: Sun Apr 06 11:49:18 2014 by Calc Open-Cased 090629

Dual Induction Calibration Report

Serial-Model: DIL3-GEAR
 Performed: Tue Apr 01 19:32:51 2014

Loop:	Readings			References			Results	
	Air	Loop		Air	Loop		m	b
Deep	0.011	0.656	V	0.000	400.000	mmho/m	500.000	5.000
Medium	0.013	0.740	V	0.000	462.500	mmho/m	540.000	-2.000
Internal:	Zero	Cal		Zero	Cal		m	b
Deep	0.002	0.645	V	0.000	400.000	mmho/m	560.000	-1.071
Medium	0.007	0.740	V	0.000	462.500	mmho/m	540.000	-4.000

Compensated Density Calibration Report

Serial-Model: GEAR1-GEARHART
 Source / Verifier: 147 / 147
 Master Calibration Performed: Tue Apr 01 19:31:33 2014

Master Calibration

	Density		Far Detector	Near Detector	
Magnesium	1.710	g/cc	1211.27	625.92	cps
Aluminum	2.590	g/cc	267.11	413.26	cps

Spine Angle = 74.64

Density/Spine Ratio = 0.561

Size

Reading

Small Ring	8.20	in	5.18	V
Large Ring	14.00	in	8.18	V

Compensated Neutron Calibration Report

Serial Number: 080620
 Tool Model: Probe

PRE-SURVEY VERIFICATION

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: Tue Apr 01 19:11:08 2014

Calibrator Value: 1.0 GAPI

Background Reading: 0.0 cps
 Calibrator Reading: 1.0 cps

Sensitivity: 0.4500 GAPI/cps