



**SUPERIOR
Hays,
Kansas**

**COMPENSATED
DENSITY/NEUTRON
LOG**

Company RITCHIE EXPLORATION, INC.
Well #2 JOSEPH
Field
County GOVE
State KANSAS

Company RITCHIE EXPLORATION, INC.
Well #2 JOSEPH
Field
County GOVE State KANSAS

Location: 335' FSL & 920' FEL
API # : 15-063-21966-0000
Other Services
DIL
Elevation
K.B. 2903
D.F. 2901
G.L. 2893

Date	2/6/12		
Run Number	ONE		
Depth Driller	4660		
Depth Logger	4664		
Bottom Logged Interval	4640		
Top Log Interval	3550		
Casing Driller	8 5/8" @ 234		
Casing Logger	NA		
Bit Size	7 7/8		
Type Fluid in Hole	CHEMICAL MUD	CHLORIDES 3600 PPM	
Density / Viscosity	9.1/66		
pH / Fluid Loss	10.0/9.6		
Source of Sample	FLOWLINE		
Rim @ Meas. Temp	.60 @ 65F		
Rmf @ Meas. Temp	.45 @ 65F		
Rmc @ Meas. Temp	.72 @ 65F		
Source of Rmf / Rmc	MEASURED		
Rim @ BHT	.31 @ 122F		
Time Circulation Stopped	2 HOURS		
Time Logger on Bottom			
Maximum Recorded Temperature	122F		
Equipment Number	680		
Location	HAYS, KS.		
Recorded By	JASON CAPPELLUCCI		
Witnessed By	TERRY MACLEOD		

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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 SUPERIOR WELL SERVICE (785) 628-6395
DIRECTIONS
OAKLEY, KS. - 16 S. TO NAVAJO RD. - 3 E. - N. INTO

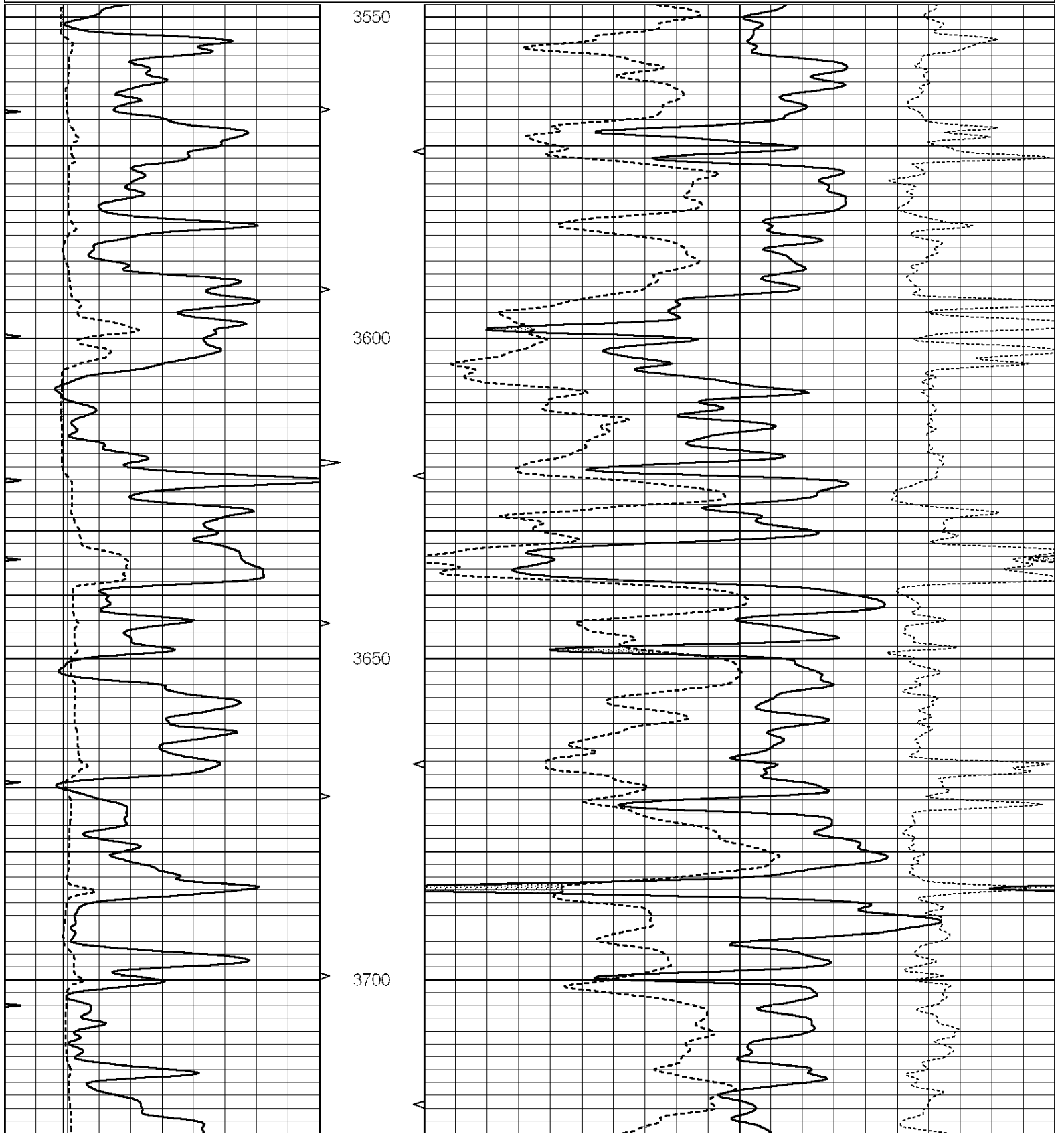


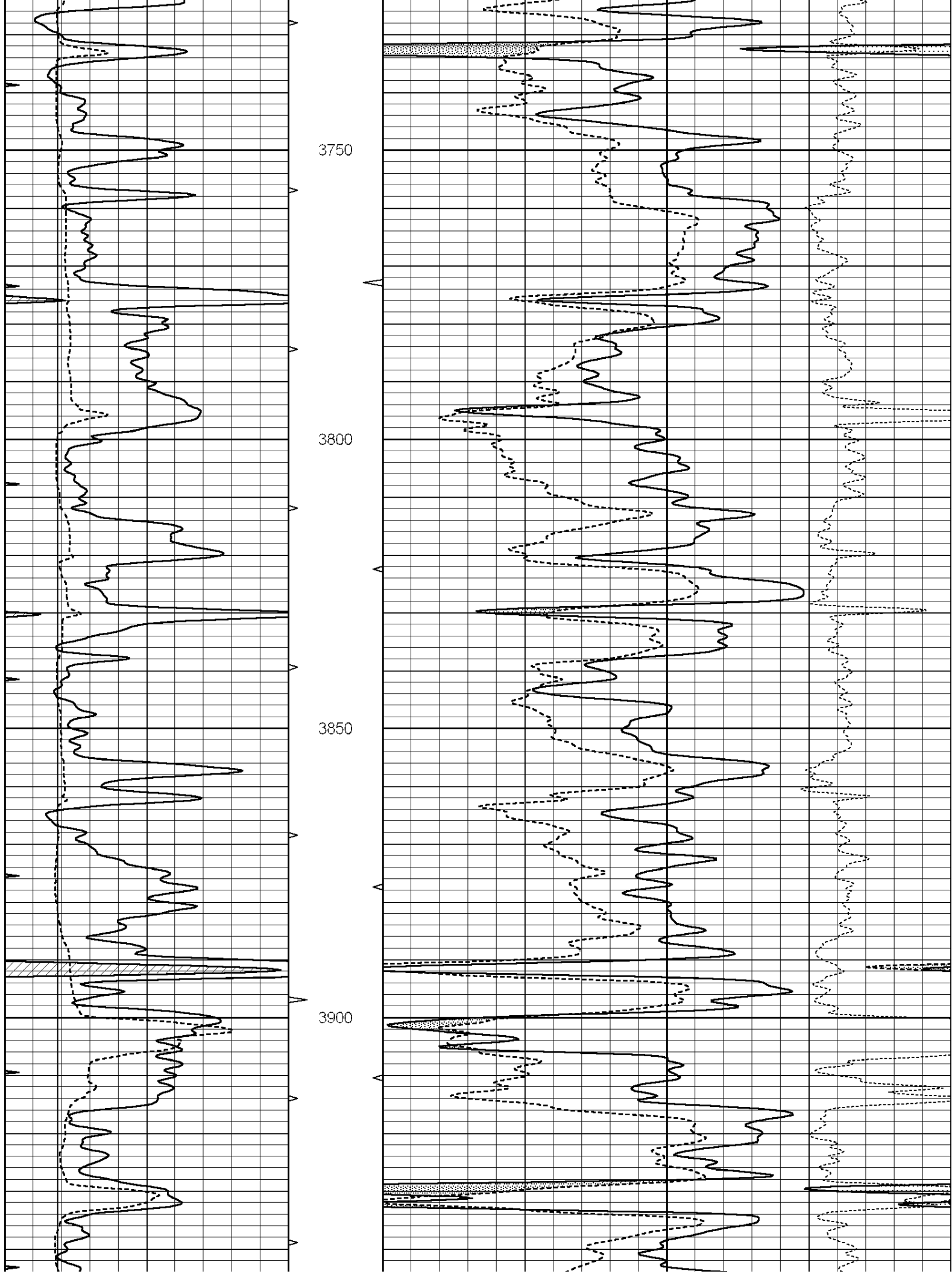
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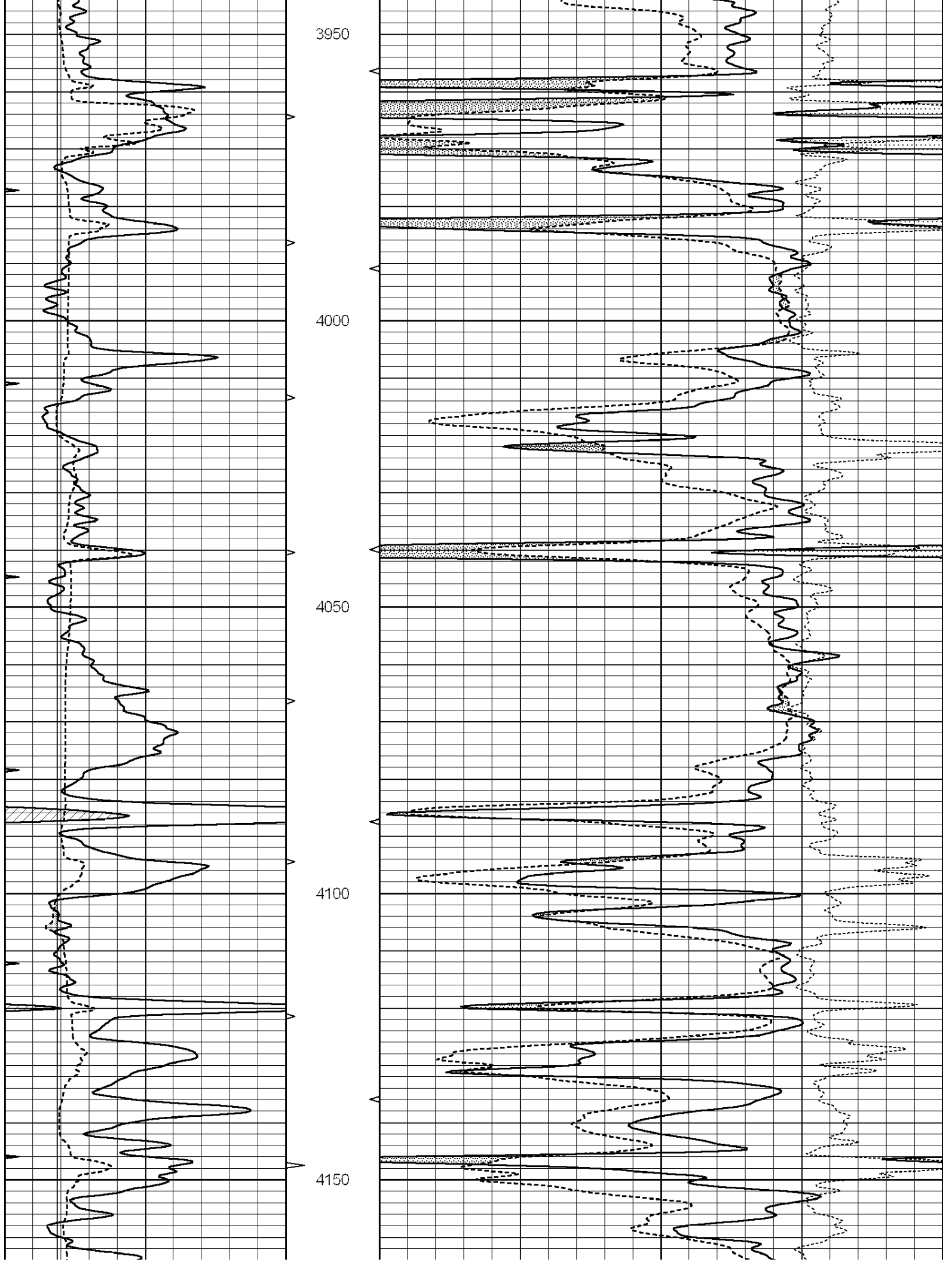
MAIN SECTION

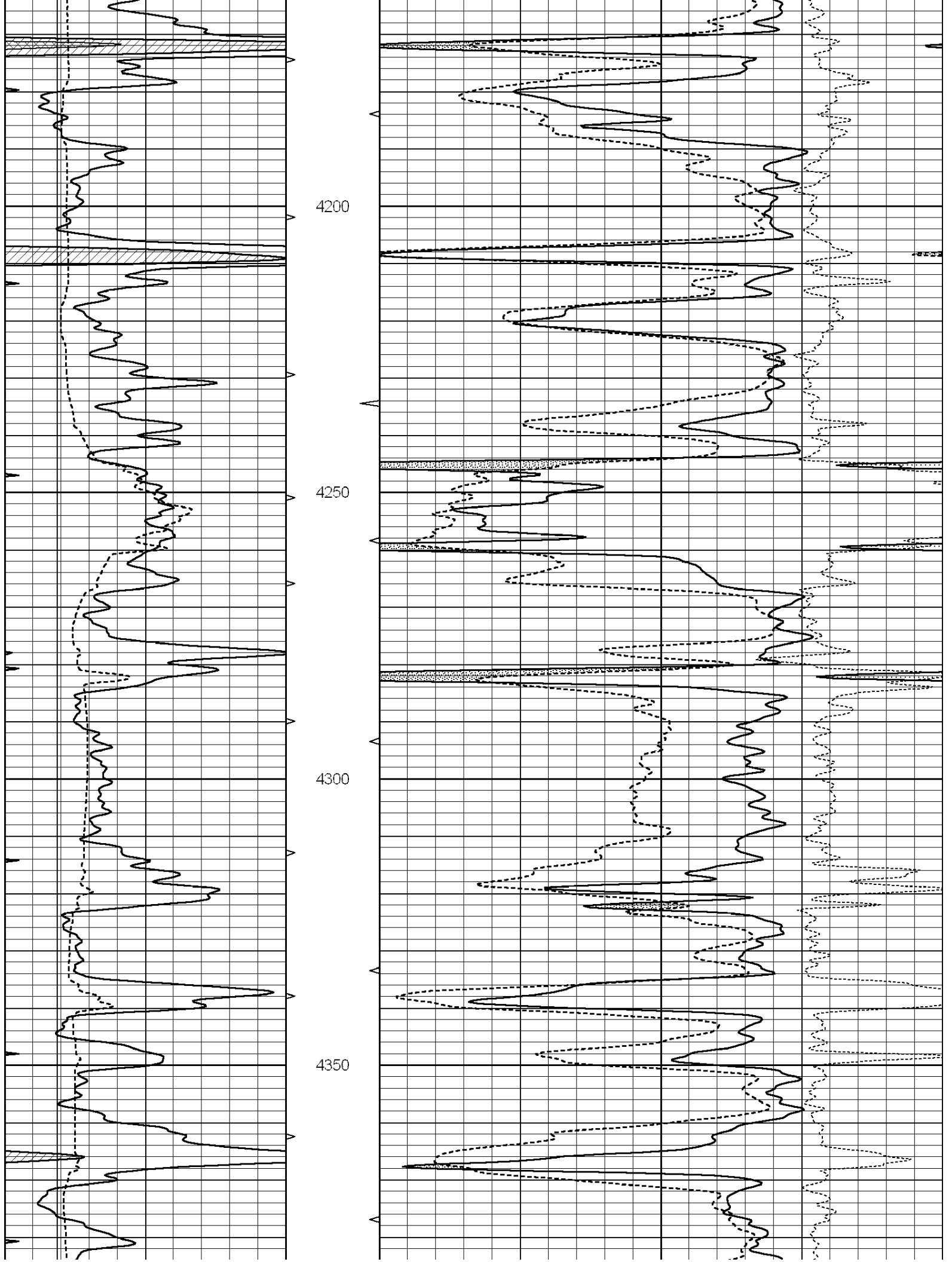
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 Dataset Creation: Mon Feb 06 03:22:23 2012 by Calc Open-Cased 090629
 Charted by: Depth in Feet scaled 1:240

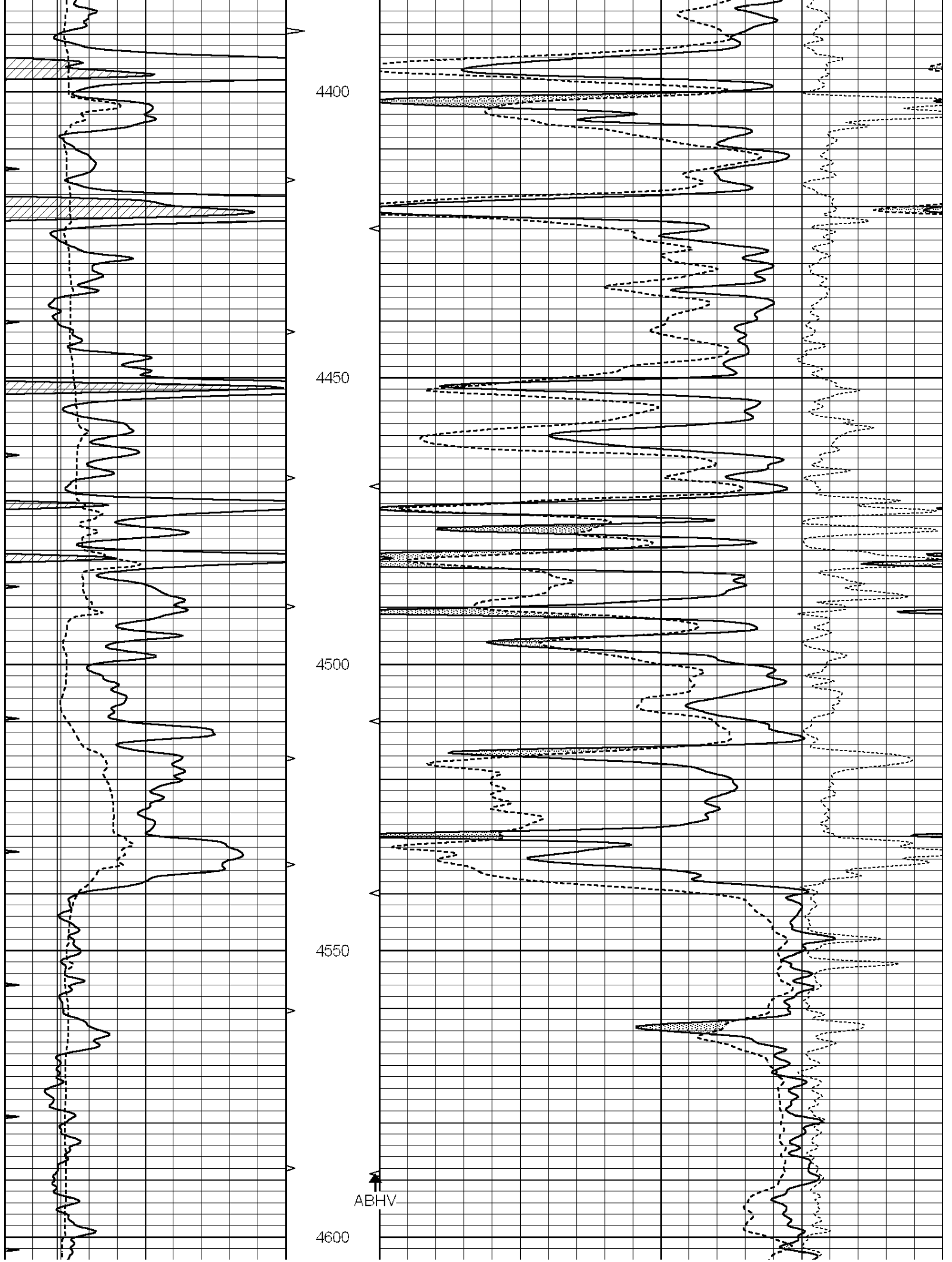
0	GAMMA RAY (GAPI)	150	AVTX	30	COMPENSATED DENSITY (pu)	-10
6	CALIPER (in)	16	10 (ft3)	0 30	COMPENSATED NEUTRON (pu)	-10
0	MINMK	20	BVTX		-0.25 CORRECTION (g/cc)	0.25
			0 (ft3)	10		

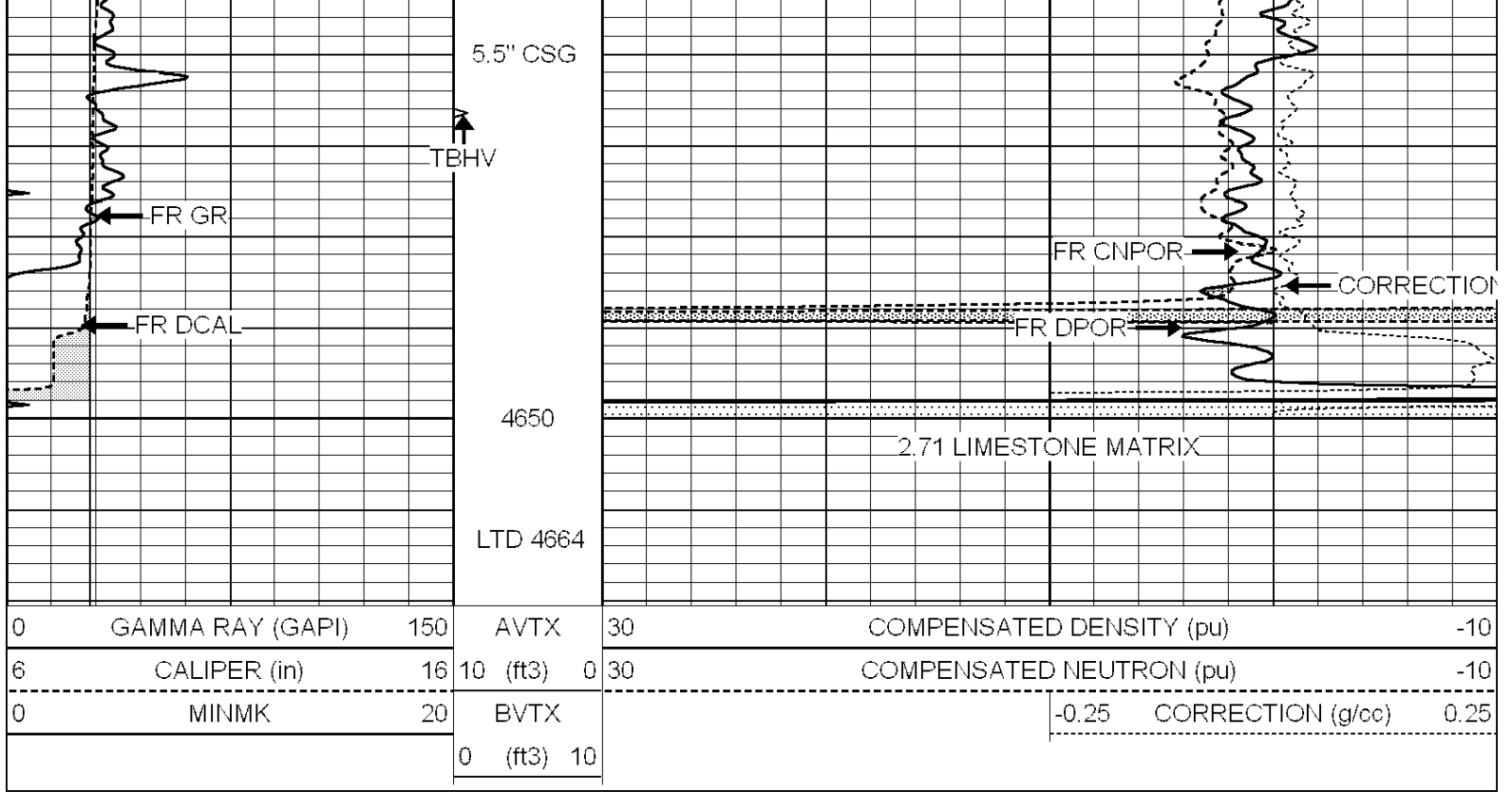










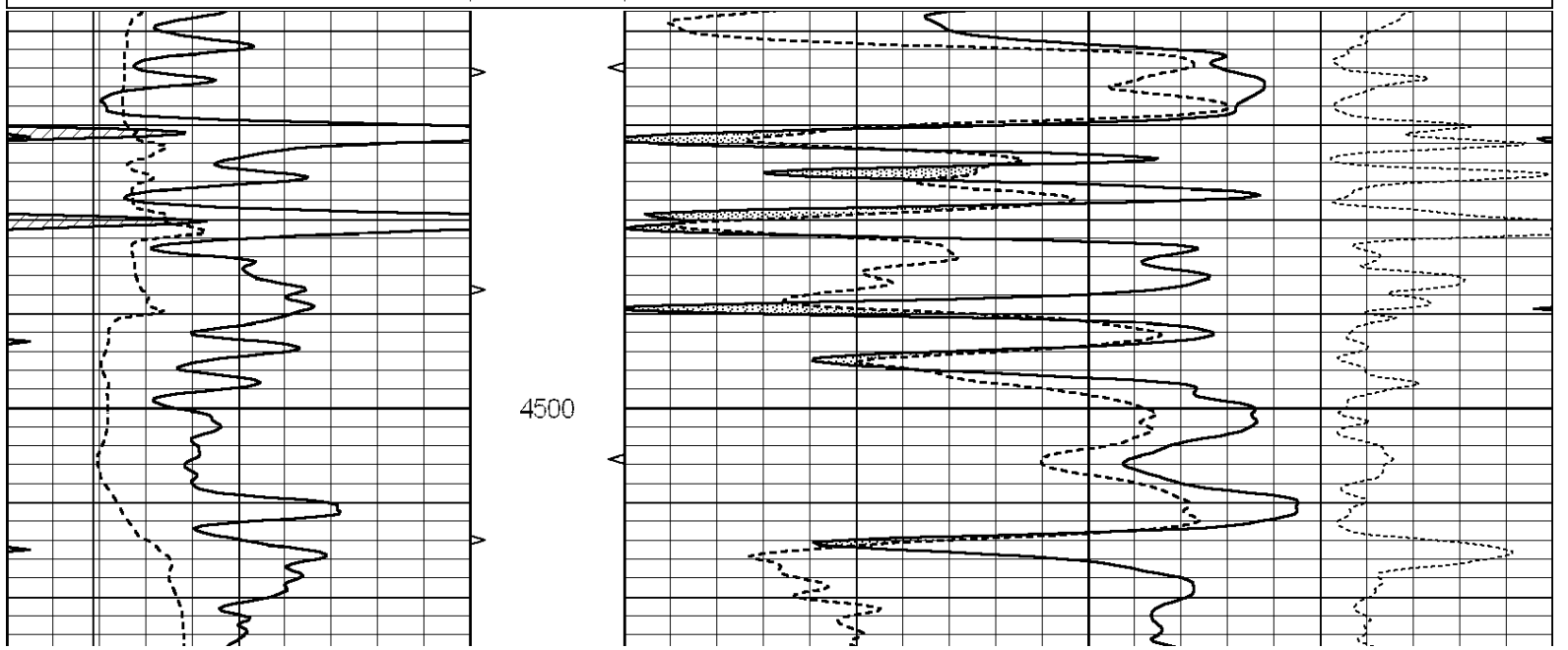


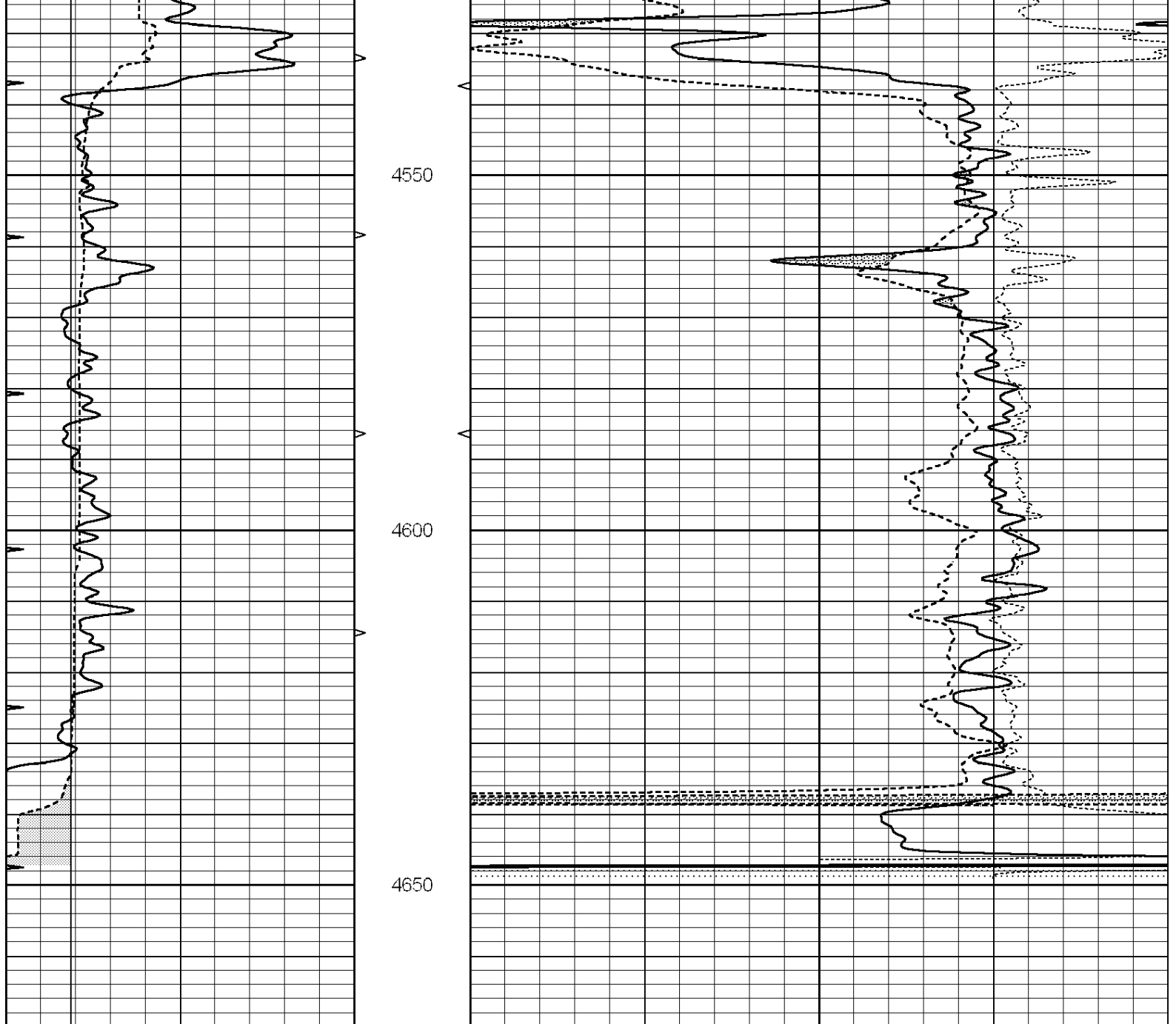
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Kansas

REPEAT SECTION

Database File: 008536ddn.db
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 Presentation Format: _den_neu
 Dataset Creation: Mon Feb 06 03:20:20 2012 by Calc Open-Cased 090629
 Charted by: Depth in Feet scaled 1:240

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





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

Calibration Report

Database File: 008536ddn.db
 Dataset Pathname: pass2.1
 Dataset Creation: Mon Feb 06 03:20:20 2012 by Calc Open-Cased 090629

Dual Induction Calibration Report

Serial-Model: PROBE8-DILG
 Surface Cal Performed: Fri Aug 01 06:33:19 2008
 Downhole Cal Performed: Mon Jul 28 11:08:27 2008
 After Survey Verification Performed: Mon Jul 28 11:08:27 2008

Surface Calibration

Readings

References

Results

Loop:	Air	Loop		Air	Loop		m	b
Deep	0.015	0.648	V	0.000	400.000	mmho/m	632.616	-9.730
Medium	0.029	0.796	V	0.000	464.000	mmho/m	605.049	-17.680
Internal:	Zero	Cal		Zero	Cal		m	b
Deep	0.017	0.657	V	0.000	400.000	mmho/m	625.153	-10.619
Medium	0.016	0.757	V	0.000	464.000	mmho/m	625.992	-9.739

Downhole Calibration								
	Readings			References			Results	
	Zero	Cal		Zero	Cal		m'	b'
Deep	0.000	0.000	mmho/m	2.011	405.777	mmho/m	1.000	0.000
Medium	0.000	0.000	mmho/m	7.590	503.393	mmho/m	1.000	0.000
LL3		7.500	V		1500.000	Ohm-m		
		0.000	V		20.000	Ohm-m		
		-7.200	V		3800.000	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		

Compensated Density Calibration Report

Serial-Model:	GEAR4-GEARHART
Source / Verifier:	143 / 143
Master Calibration Performed:	Fri Jan 06 21:06:59 2012

Master Calibration						
	Density			Far Detector	Near Detector	
Magnesium	1.710	g/cc		1015.91	497.51	cps
Aluminum	2.580	g/cc		227.67	350.20	cps
	Spine Angle = 76.79			Density/Spine Ratio = 0.566		
	Size			Reading		
Small Ring	8.00	in		2.25	V	
Large Ring	14.00	in		4.37	V	

Compensated Neutron Calibration Report

Serial Number:	6I
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:	#8
Tool Model:	OPEN
Performed:	Mon Jun 13 16:56:43 2011

Calibrator Value:	150.0	GAPI
Background Reading:	0.0	cps
Calibrator Reading:	175.0	cps
Sensitivity:	0.8371	GAPI/cps