SUPERIOR WELL SERVICES

SUPERIOR
Hays,
Kansas

COMPENSATED DENSITY/NEUTRON LOG

Company	DOWNING-NELSON OIL CO., INC.
Well	PLAFF-TOEDMAN #1-24
Field	WILDCAT
County	NESS
State	KANSAS

Company DOWNING-NELSON OIL COMPANY, INC.

Well PLAFF-TOEDMAN #1-24

Field WILDCAT

County NESS State KANSAS

Location: API # : 15-135-25217-0000

490' FNL & 2610' FEL
SE - NE - NE - NW

SEC 24 TWP 16S RGE 23W

Other Services
DIL/MEL

Permanent Datum	GROUND LEVEL	Elevation 2439	Elevation
Log Measured From	KELLY BUSHING 8' A.G.L.		K.B. 2447
Drilling Measured From	KELLY BUSHING		D.F. 2445
			G.L. 2439

Date	2-24-11		
Run Number	ONE		
Depth Driller	4550		
Depth Logger	4552		
Bottom Logged Interval	4528		
Top Log Interval	3700		
Casing Driller	8 5/8" @ 223'		
Casing Logger	223'		
Bit Size	7 7/8		
Type Fluid in Hole	CHEMICAL MUD	CHLORIDES 4000 PPM	
Density / Viscosity	9.5/57		
pH / Fluid Loss	8.0/10.4		
Source of Sample	FLOWLINE		
Rm @ Meas. Temp	1.00 @ 56F		
Rmf @ Meas. Temp	0.75 @ 56F		
Rmc @ Meas. Temp	1.20 @ 56F		
Source of Rmf / Rmc	MEASURED		
Rm @ BHT	0.46 @ 121F		
Time Circulation Stopped	2 HOURS		
Time Logger on Bottom			
Maximum Recorded Temperature	121F		
Equipment Number	680		
Location	HAYS, KS.		
Recorded By	JEFF GRONEWEG		
Witnessed By	MARK DOWNING		

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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.

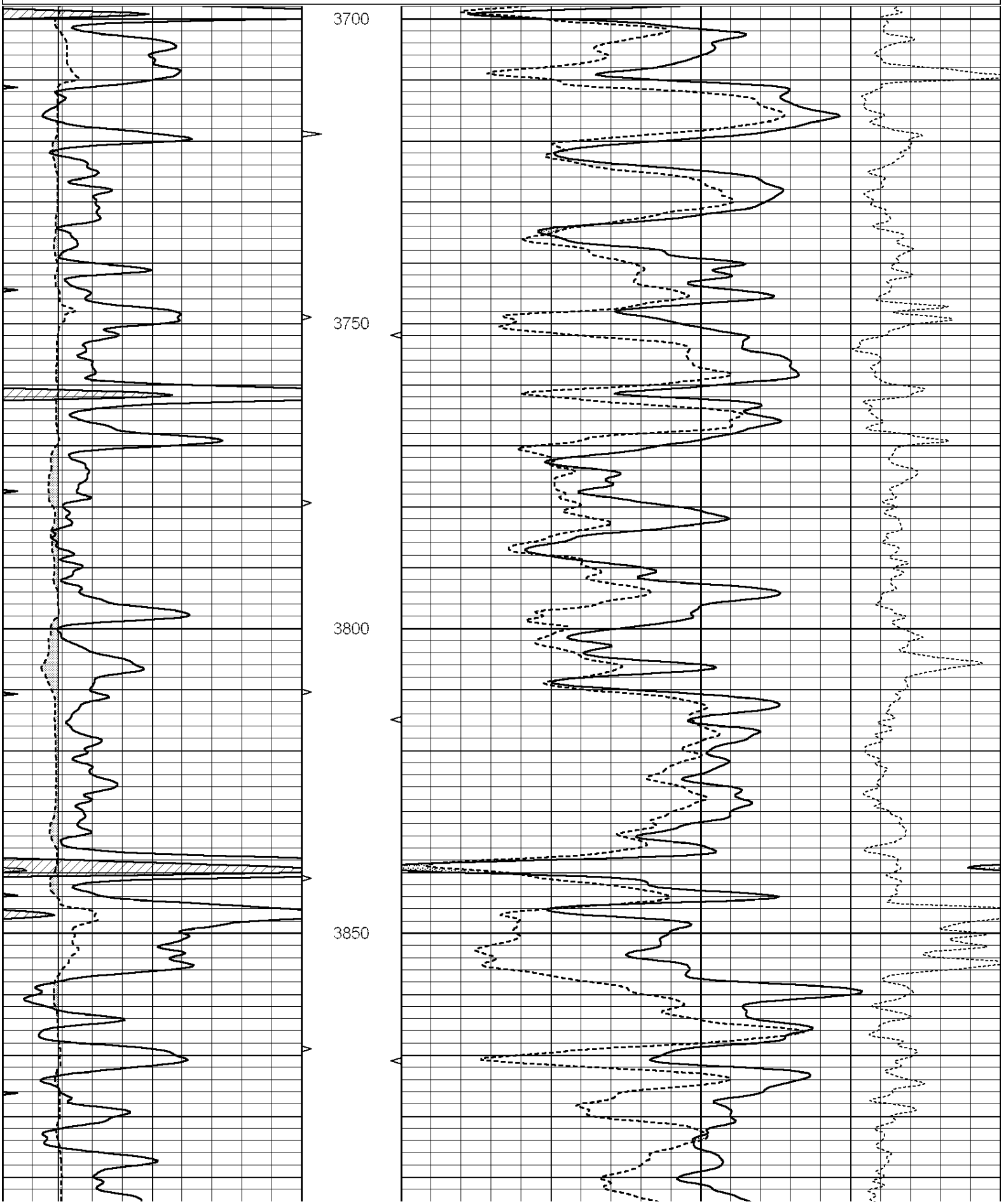
Comments

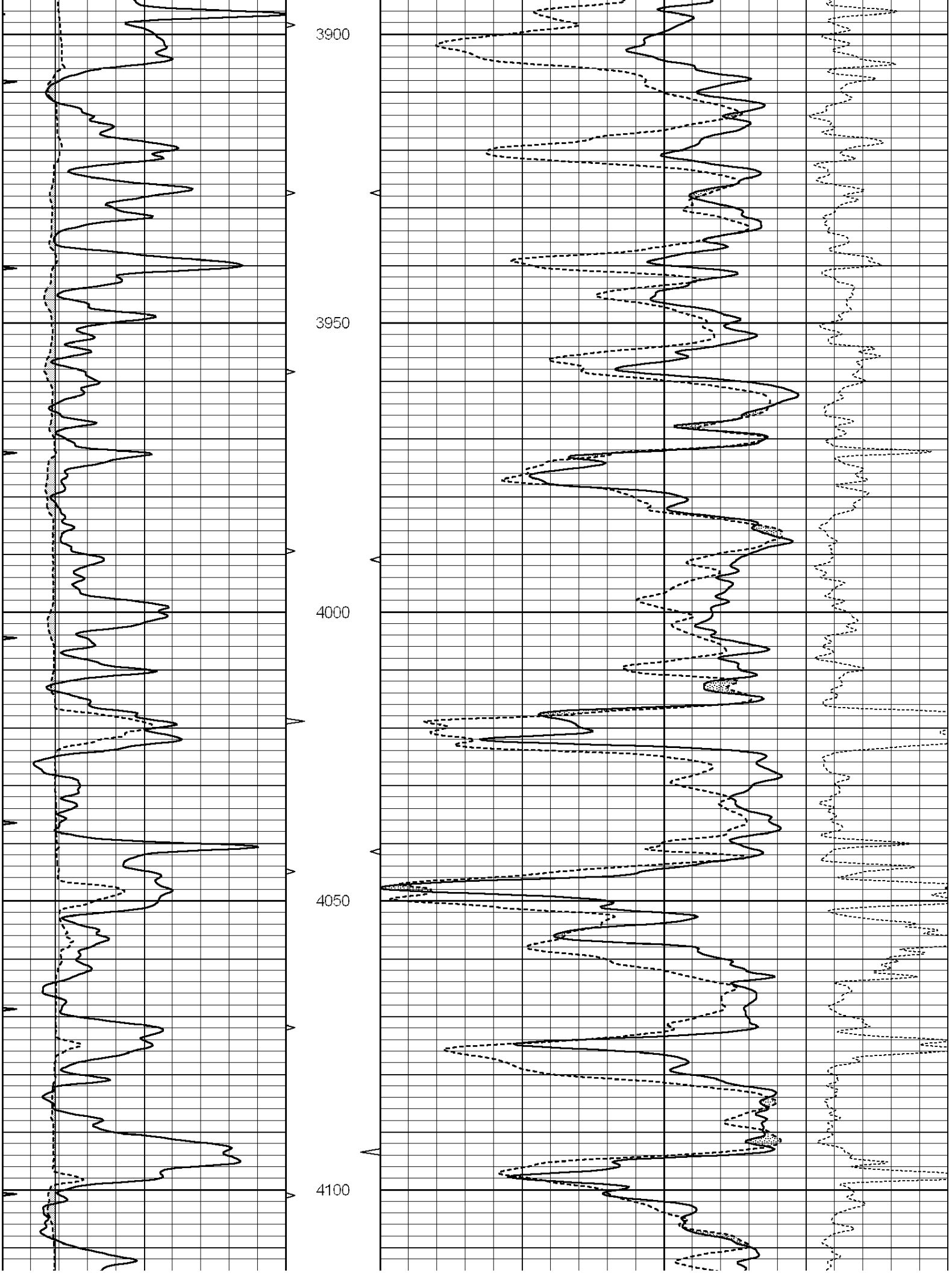
THANK YOU FOR USING SUPERIOR WELL SERVICE (785) 628-6395
DIRECTIONS
BROWNELL, KS - 3 MILES WEST TO X RD - 1 MILE NORTH - WEST INTO

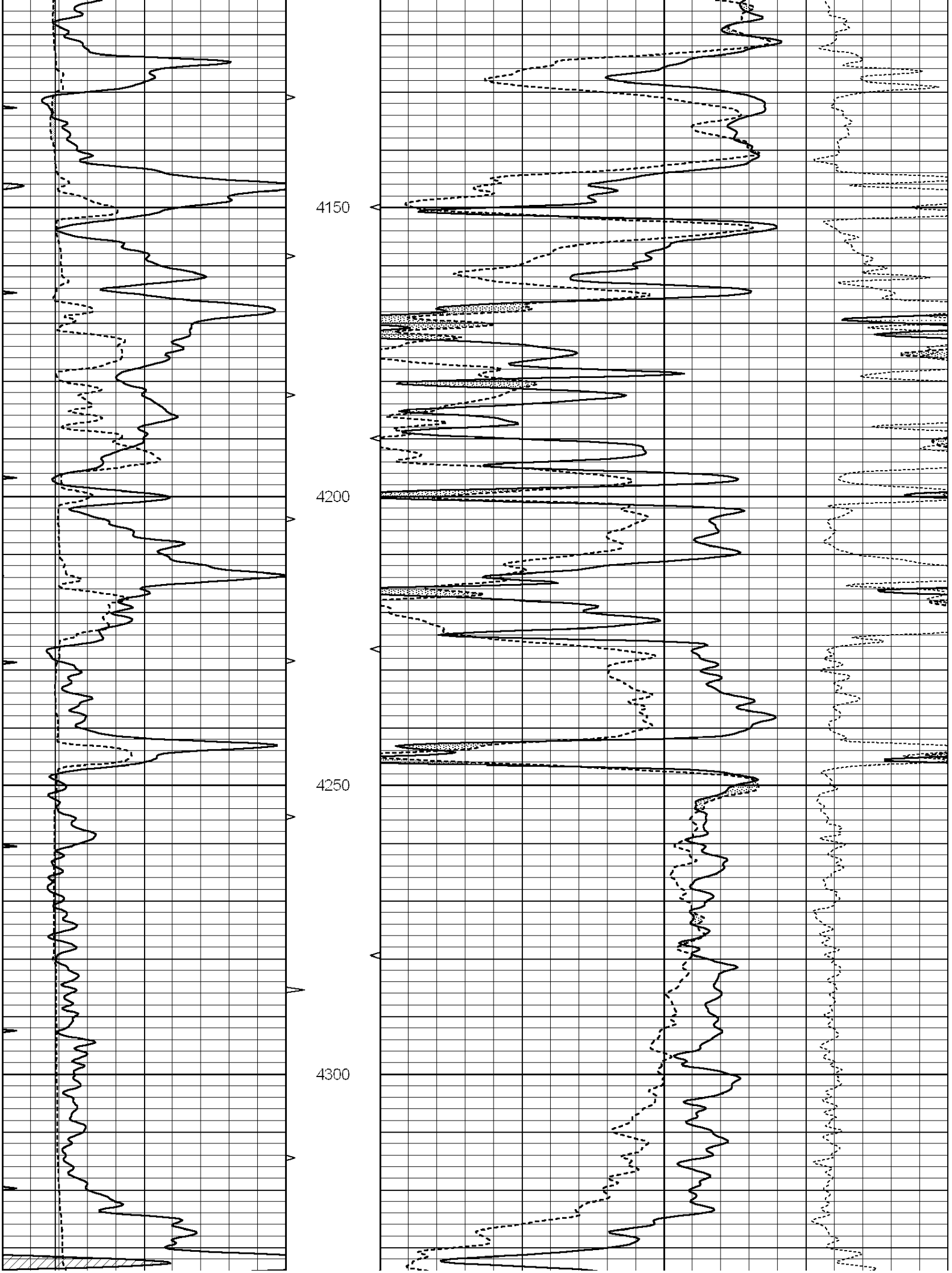
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Dataset Creation:	Wed Feb 23 23:07:19 2011 by Calc Open-Cased 090629
Charted by:	Depth in Feet scaled 1:240

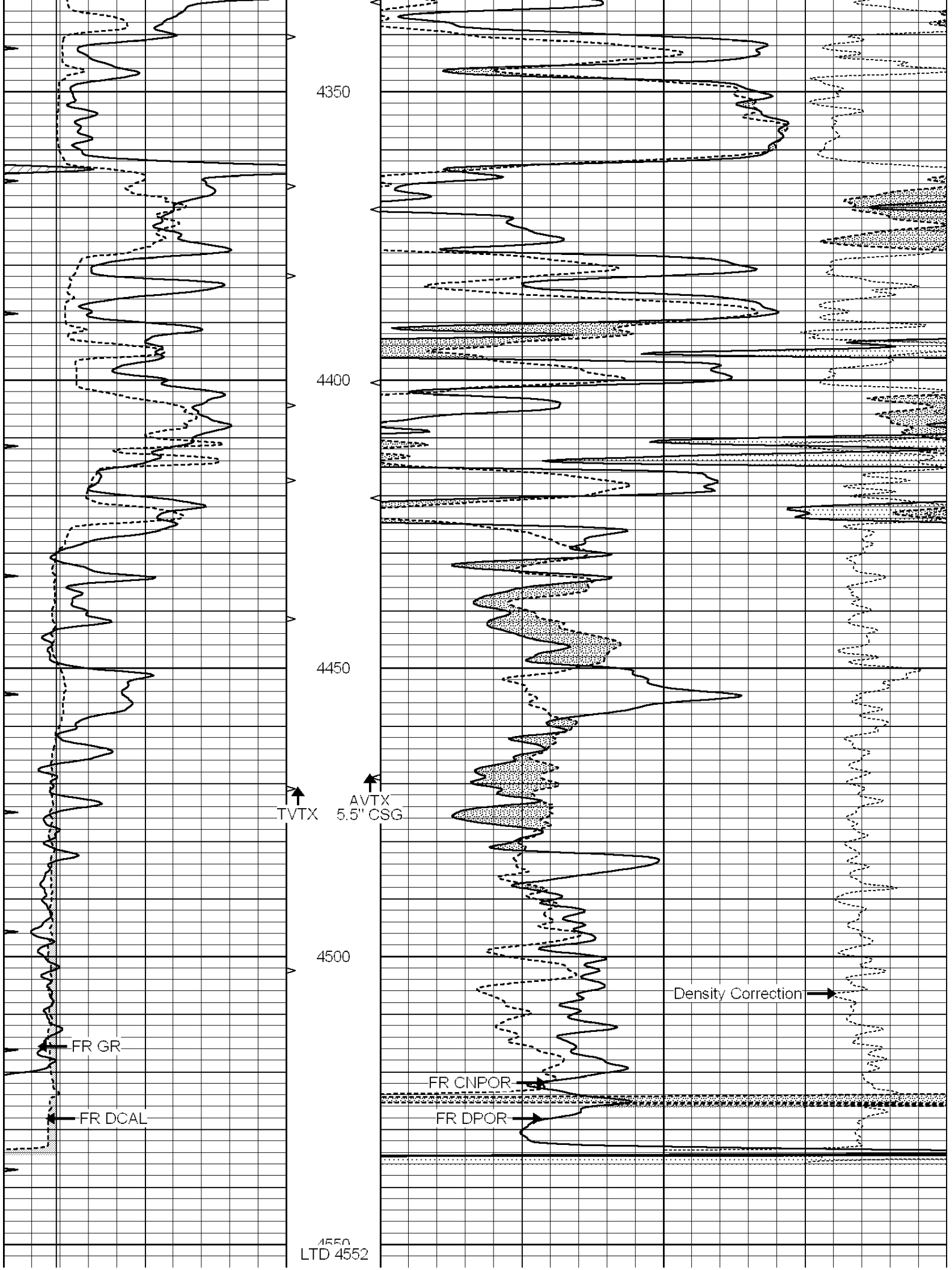
Shared by: Depth in Feet scaled 1:240

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				




3900
3950
4000
4050
4100


4150
4200
4250
4300


4350
4400
4450
TVTX
AVTX
5.5" CSG
4500
Density Correction
FR GR
FR CNPOR
FR DCAL
FR DPOR
LTD 4552

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			

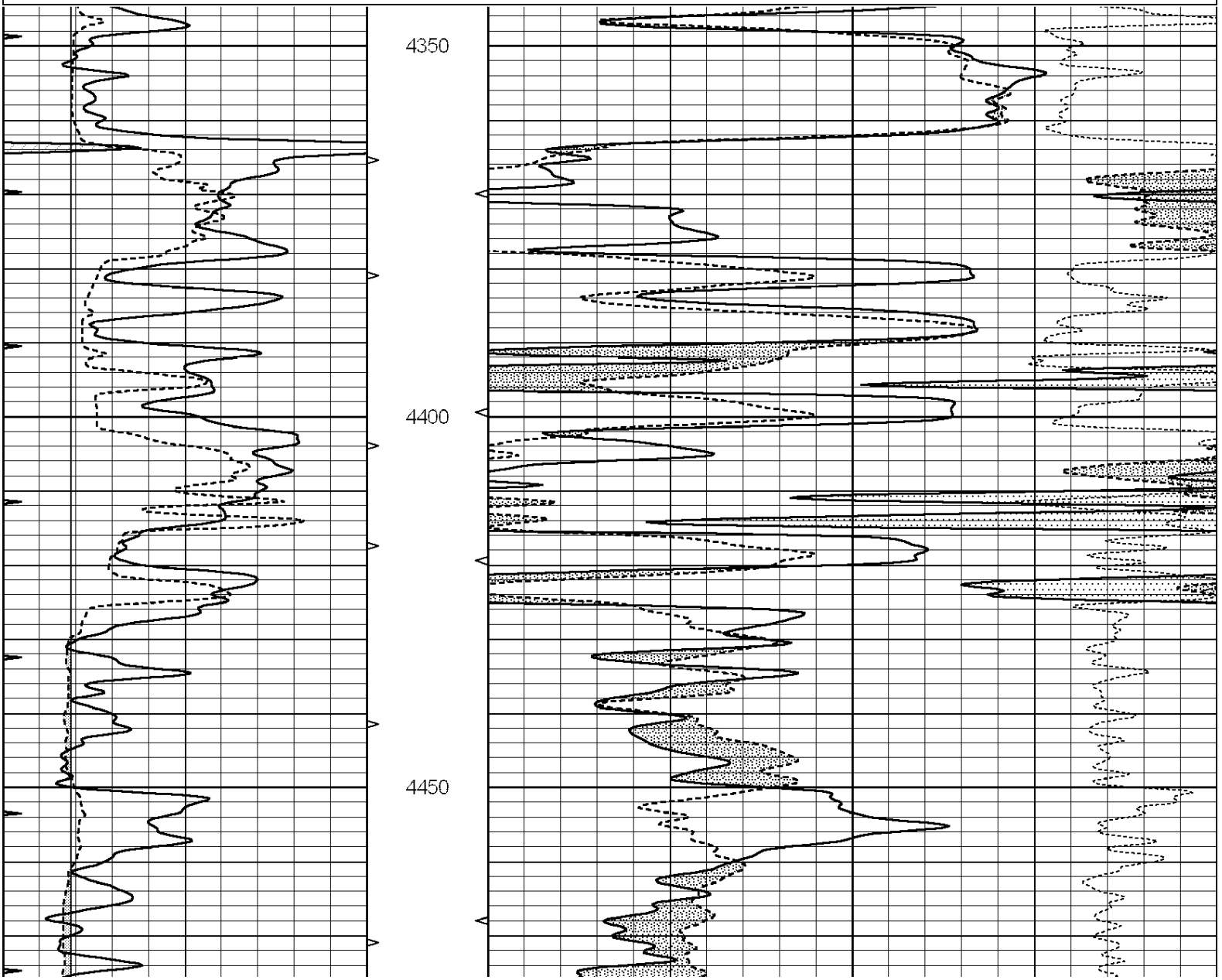
SUPERIOR WELL SERVICES

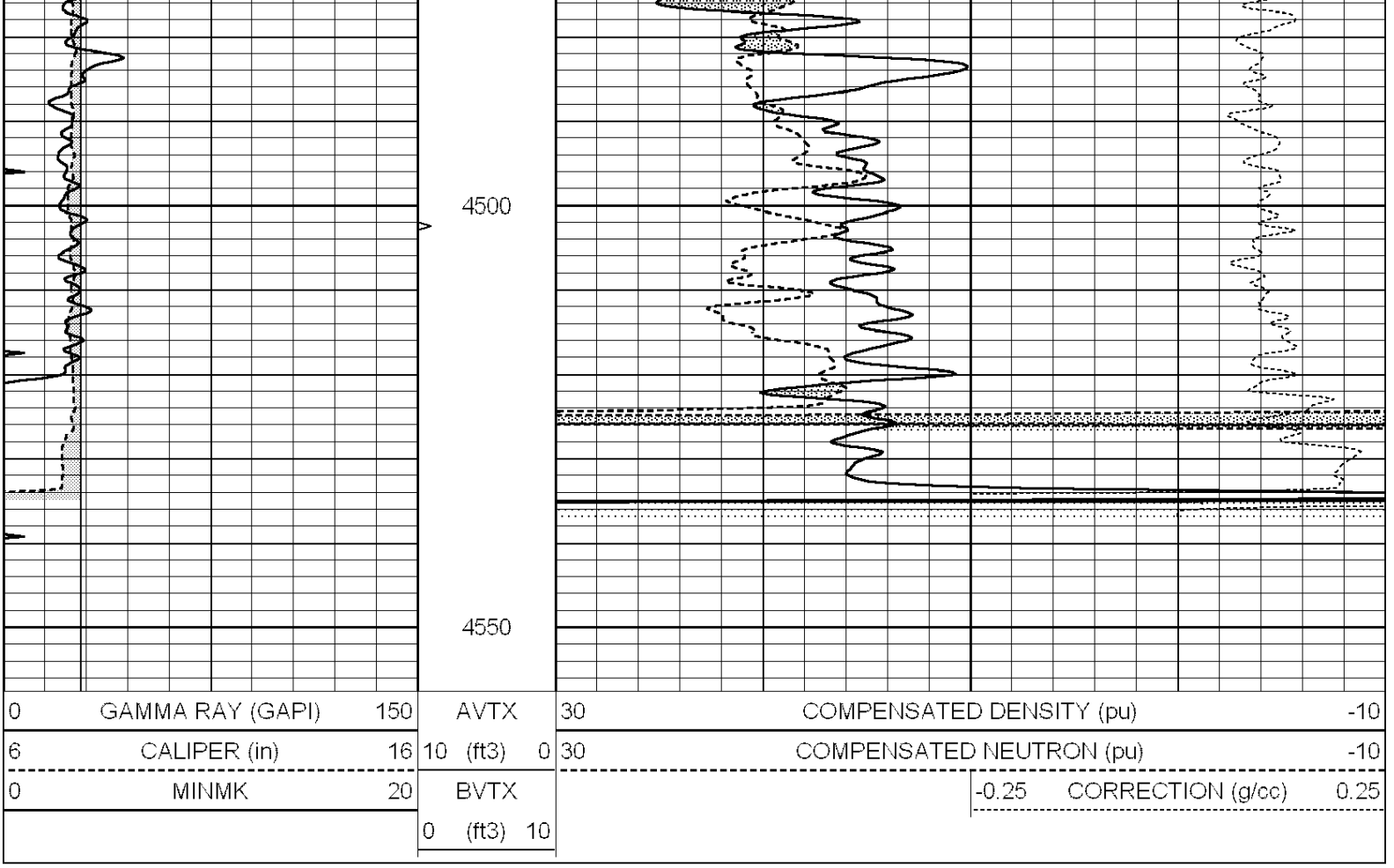
SUPERIOR
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Kansas

REPEAT SECTION

Database File: 006699ddn.db
Dataset Pathname: pass3.1
Presentation Format: _den_neu
Dataset Creation: Wed Feb 23 23:10:58 2011 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			





Calibration Report

Database File: 006699ddn.db
Dataset Pathname: pass4.2
Dataset Creation: Wed Feb 23 23:07:19 2011 by Calc Open-Cased 090629

Dual Induction Calibration Report

Serial-Model:	PROBE7-DILG
Surface Cal Performed:	Wed Jul 30 06:14:24 2008
Downhole Cal Performed:	Mon Jul 28 12:02:56 2008
After Survey Verification Performed:	Mon Jul 28 12:02:56 2008

Surface Calibration

	Readings			References			Results	
Loop:	Air	Loop		Air	Loop		m	b
Deep	-0.014	0.629	V	0.000	400.000	mmho/m	621.923	8.759
Medium	0.039	0.728	V	0.000	464.000	mmho/m	673.322	-26.058
Internal:	Zero	Cal		Zero	Cal		m	b
Deep	0.011	0.610	V	0.000	400.000	mmho/m	667.135	-7.256
Medium	0.005	0.712	V	0.000	464.000	mmho/m	655.677	-3.102

Downhole Calibration

	Readings			References			Results	
	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		4000.000	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: Wed Jan 26 17:58:17 2011

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	2.50	V
Large Ring	14.00	in	4.70	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: Fri Feb 18 03:07:29 2011

Calibrator Value: 150.0 GAPI

Background Reading: 0.0 cps
Calibrator Reading: 175.0 cps

Sensitivity: 0.8971 GAPI/cps