



SUPERIOR
Hays,
Kansas

COMPENSATED
DENSITY/NEUTRON
LOG

Company BLACK DIAMOND OIL, INC.
Well STATES AG #2-36
Field POOL EXT.
County NORTON
State KANSAS

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Well STATES AG #2-36
Field POOL EXT.
County NORTON State KANSAS

Location: API # : 15-137-20577-0000
2130' FNL & 2140' FEL

Other Services
DIL/MEL

SEC 36 TWP 4S RGE 21W

Permanent Datum GROUND LEVEL Elevation 2035
Log Measured From KELLY BUSHING 8' A.G.L.
Drilling Measured From KELLY BUSHING

Elevation
K.B. 2043
D.F. 2041
G.L. 2035

Date 9/3/11

Run Number ONE

Depth Driller 3500

Depth Logger 3488

Bottom Logged Interval 3464

Top Log Interval 2700

Casing Driller 8 5/8" @ 221

Casing Logger 219

Bit Size 7 7/8

Type Fluid in Hole CHEMICAL MUD

Density / Viscosity 9.2/55

pH / Fluid Loss 10.0/8.0

Source of Sample FLOWLINE

Rim @ Meas. Temp .40 @ 85F

Rmf @ Meas. Temp .30 @ 85F

Rmc @ Meas. Temp .48 @ 85F

Source of Rmf / Rmc MEASURED

Rim @ BHT .30 @ 111F

Time Circulation Stopped 2 HOURS

Time Logger on Bottom

Maximum Recorded Temperature 111F

Equipment Number 680

Location HAYS, KS.

Recorded By JASON CAPPELLUCCI

Witnessed By KEN VEHIGE

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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
LOGAN KS. - 3 1/4 W - S. INTO

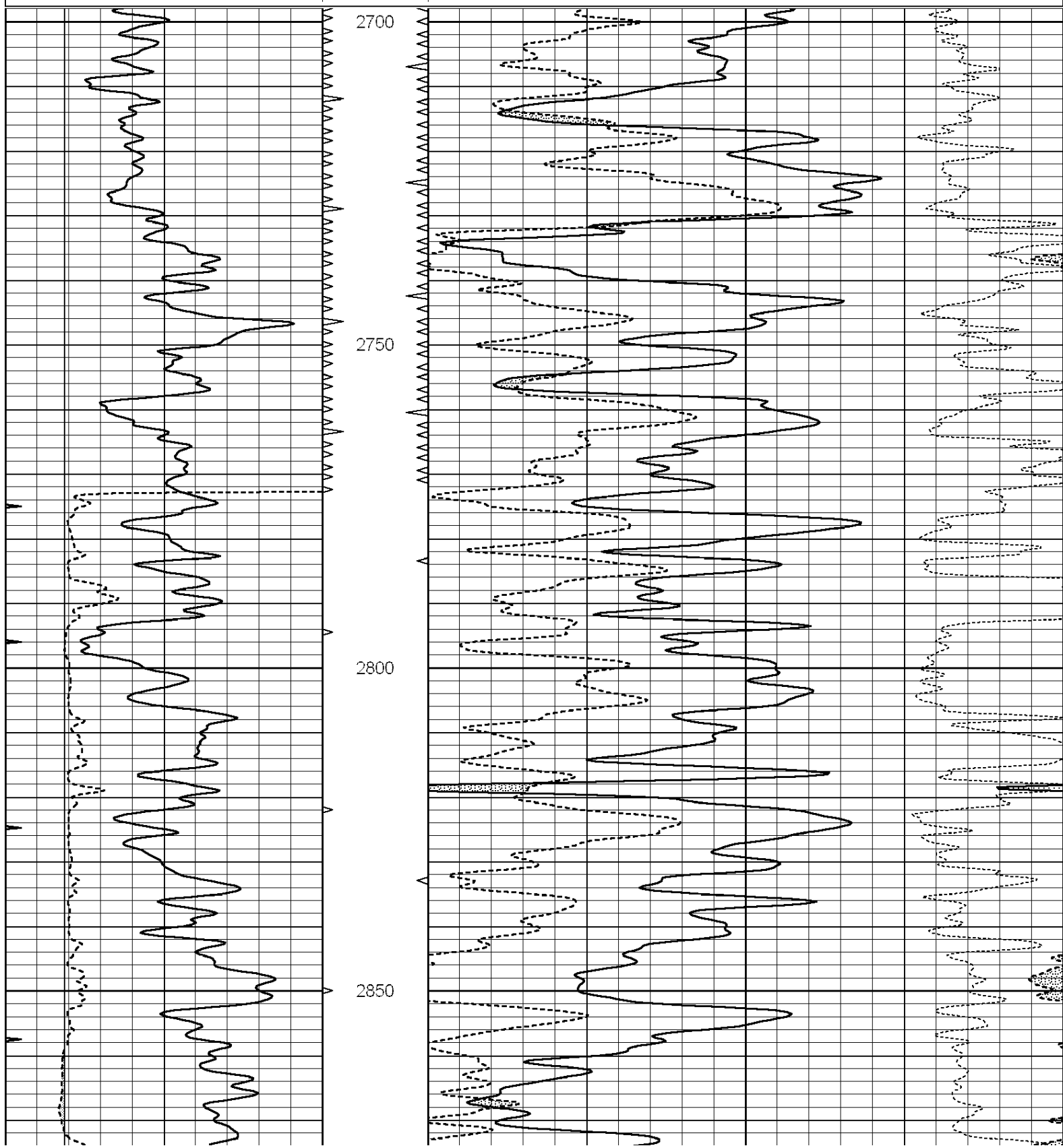


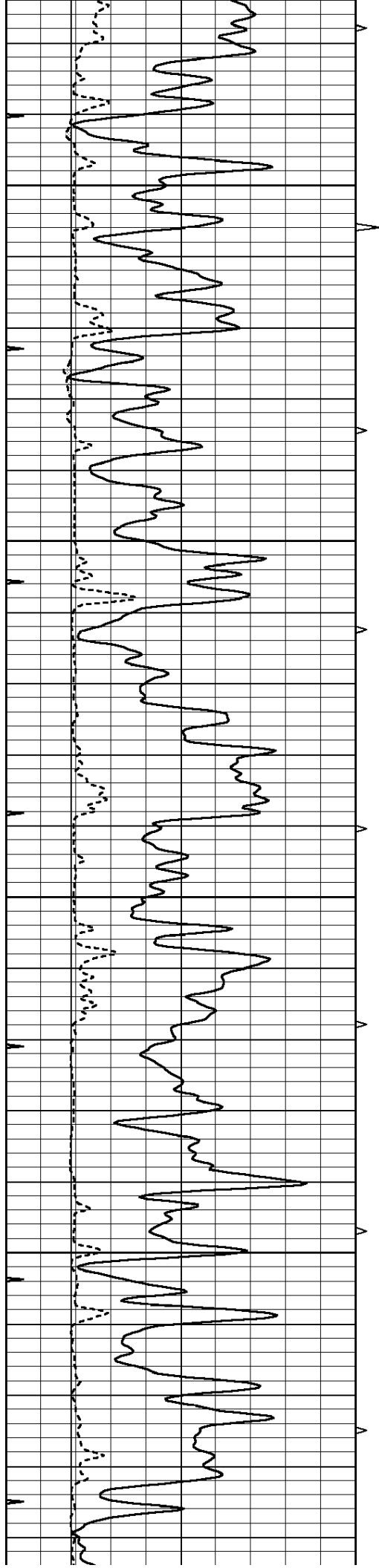
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MAIN SECTION

Database File: 007704ddn.db
Dataset Pathname: pass3.1
Presentation Format: _den_neu
Dataset Creation: Sat Sep 03 03:01:46 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		



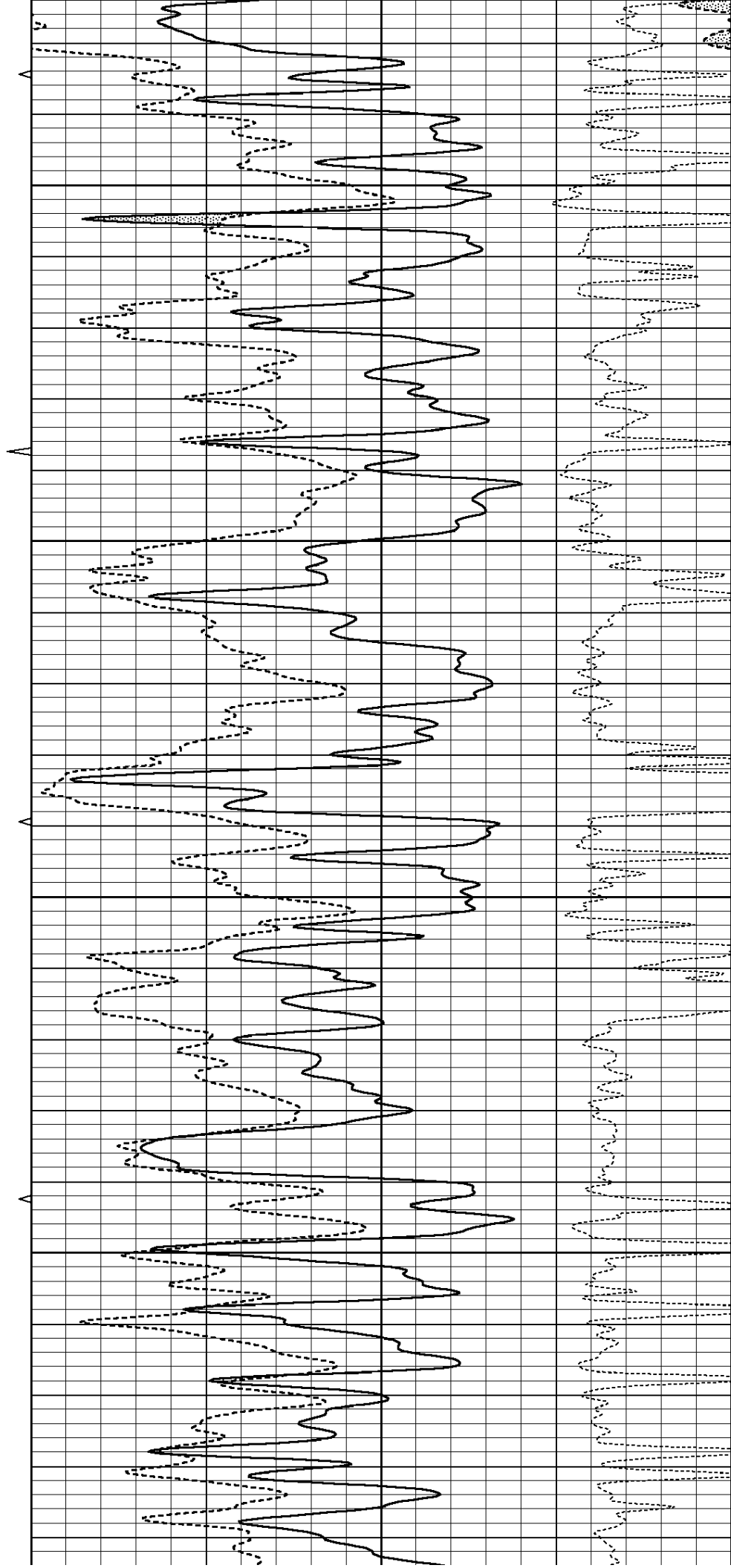


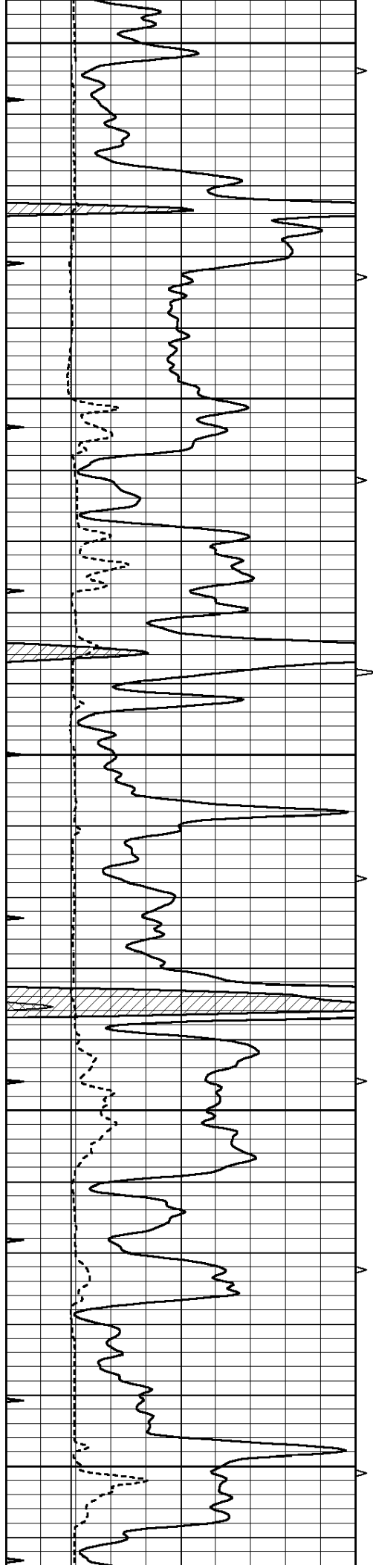
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2950

3000

3050





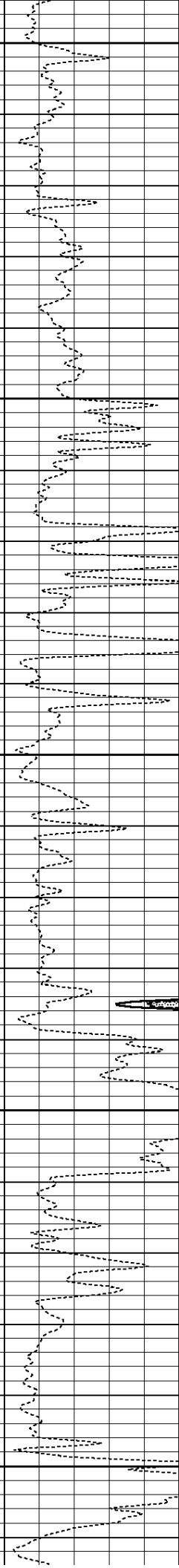
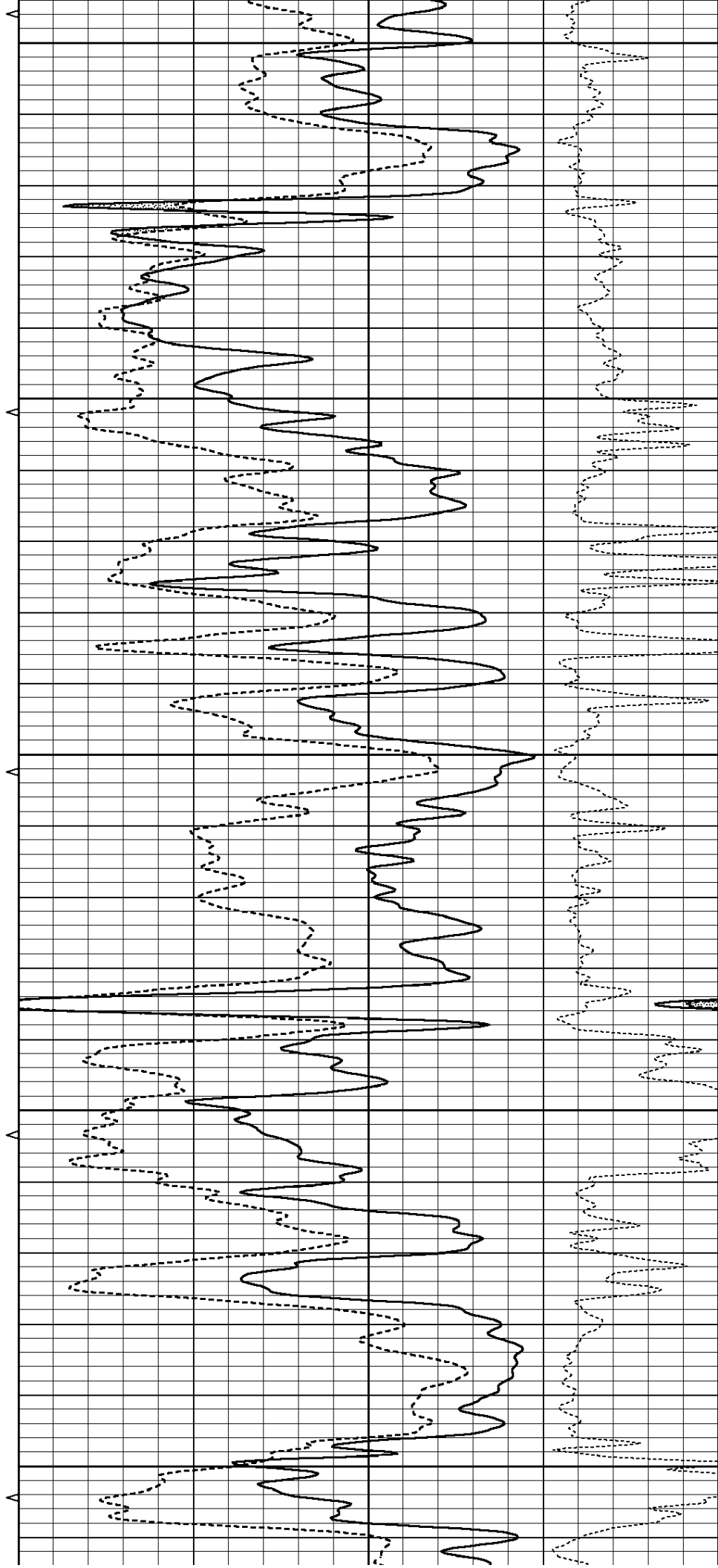
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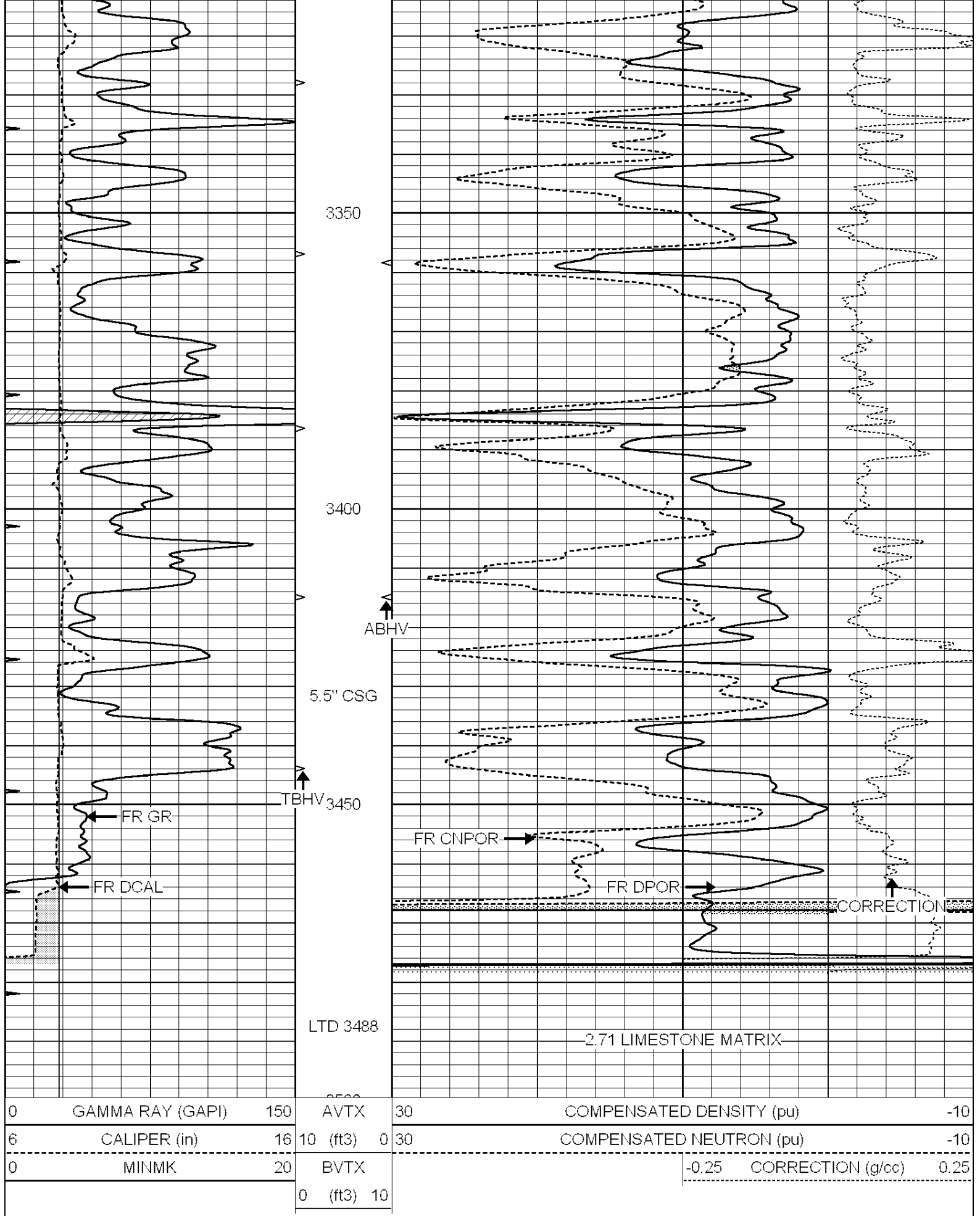
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3200

3250

3300



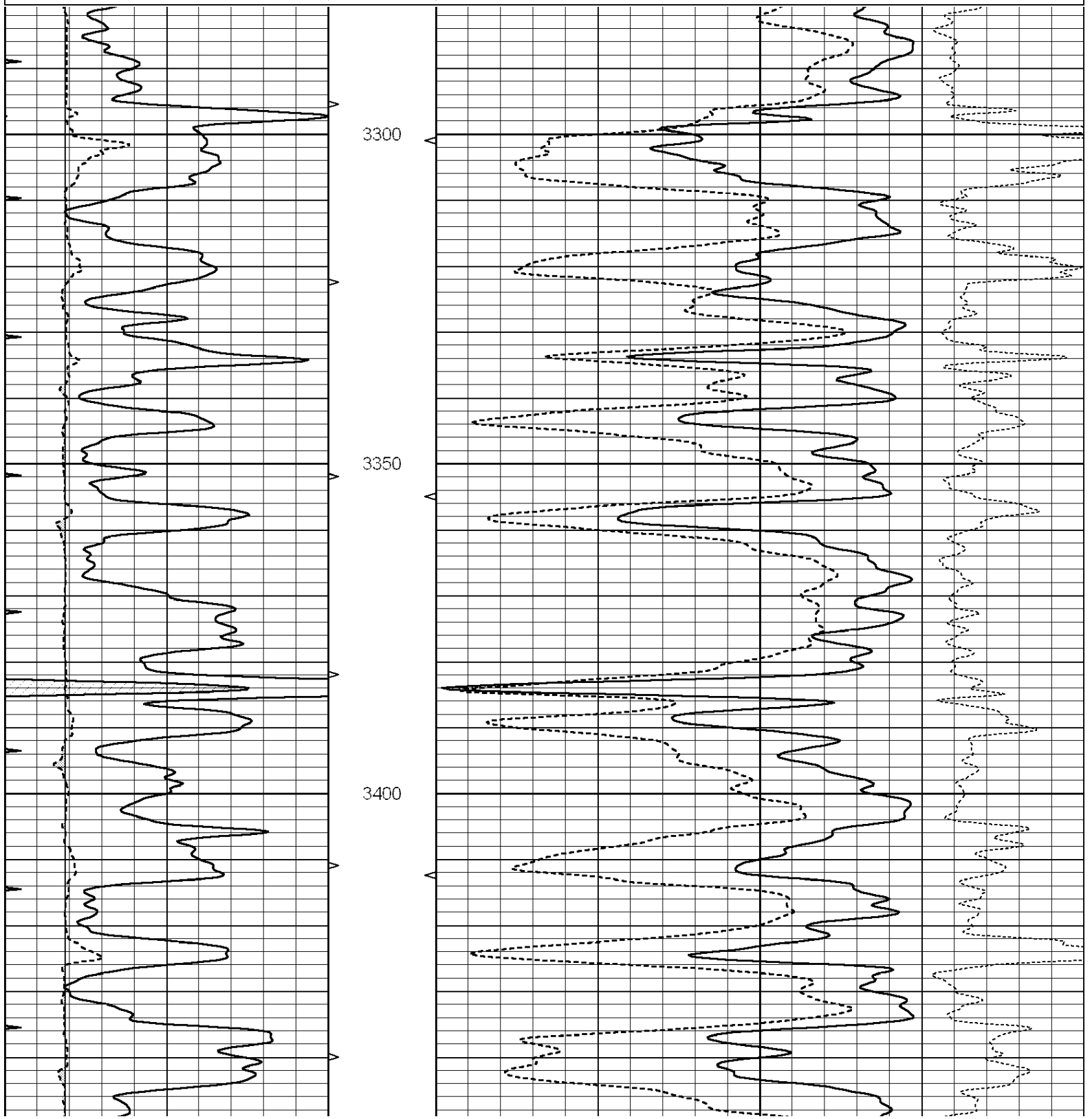


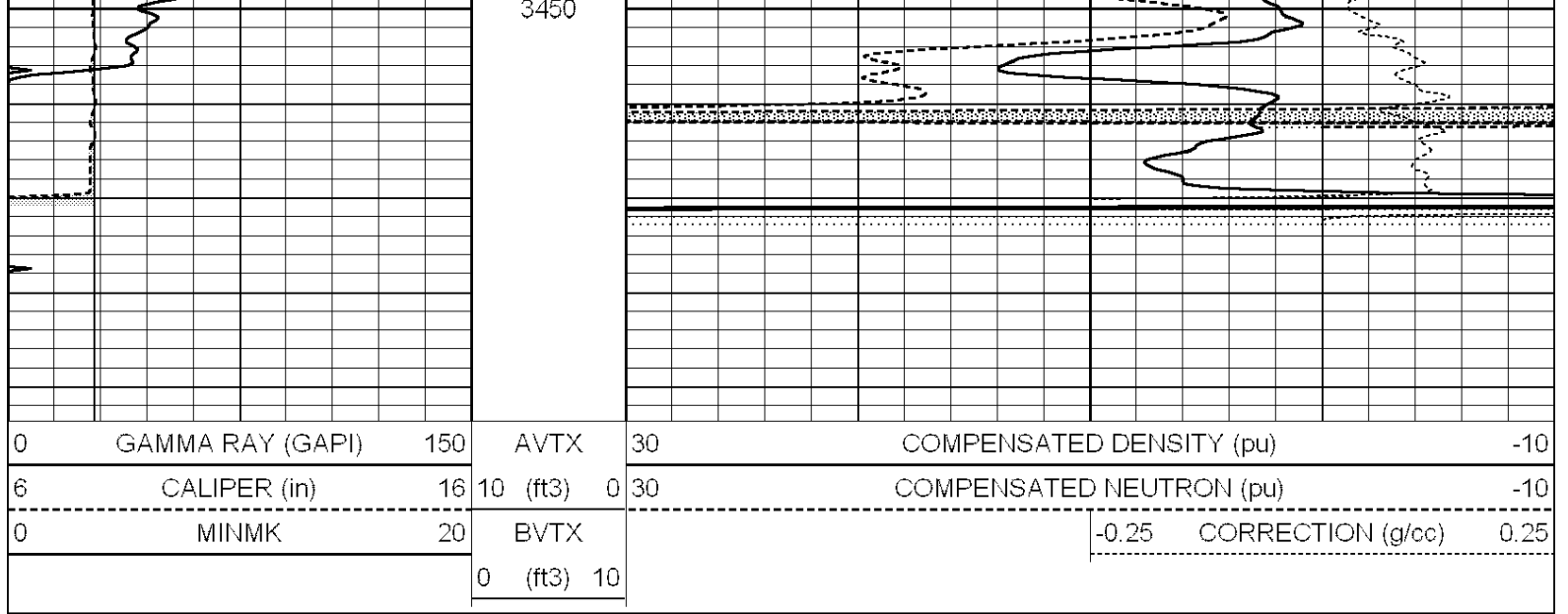


REPEAT SECTION

Database File: 007704ddn.db
Dataset Pathname: pass2.1
Presentation Format: _den_neu
Dataset Creation: Sat Sep 03 03:05:45 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: 007704ddn.db
Dataset Pathname: pass2.1
Dataset Creation: Sat Sep 03 03:05:45 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:	Sat Jul 16 17:35:04 2011

Master Calibration

	Density		Far Detector	Near Detector	
Magnesium	1.710	g/cc	1015.91	497.51	cps
Aluminum	2.600	g/cc	227.67	350.20	cps
Spine Angle = 76.79			Density/Spine Ratio = 0.579		
	Size		Reading		
Small Ring	8.00	in	2.55	V	
Large Ring	14.00	in	4.36	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