



**SUPERIOR
Hays,
Kansas**

**COMPENSATED
DENSITY / NEUTRON
LOG**

Company	I.A. OPERATING, INC.	Company	I.A. OPERATING, INC.
Well	RUBY #24-1	Well	RUBY #24-1
Field		Field	
County	SHERIDAN	County	SHERIDAN
State	KANSAS	State	KANSAS
Location:	API # : 15-179-21301	Other Services	DIL MICRO
Permanent Datum	1180' FNL & 590' FWL	Elevation	
Log Measured From	GROUND LEVEL	K.B.	2543
Drilling Measured From	KELLY BUSHING 5' A.G.L.	D.F.	
	KELLY BUSHING	G.L.	2543
Date	5-2-12		
Run Number	ONE		
Depth Driller	3990		
Depth Logger	3990		
Bottom Logged Interval	3966		
Top Log Interval	3400		
Casing Driller	259		
Casing Logger	260		
Bit Size	7.875		
Type Fluid in Hole	CHEMICAL MUD		
Density / Viscosity	9.3 / 56		
pH / Fluid Loss	10.5 / 7.2		
Source of Sample	FLOWLINE		
Rim @ Meas. Temp	1.20 @ 92F		
Rmf @ Meas. Temp	0.90 @ 92F		
Rmc @ Meas. Temp	1.44 @ 92F		
Source of Rmf / Rmc	MEASURED		
Rim @ BHT	.960 @ 115F		
Time Circulation Stopped	2 HOURS		
Time Logger on Bottom	11:00 A.M.		
Maximum Recorded Temperature	115F		
Equipment Number	860		
Location	HAYS, KS.		
Recorded By	RUPP		
Witnessed By	RANDY KILIAN		

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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

SUPERIOR WELL SERVICES
785-628-6395
THANK YOU FOR YOUR BUSINESS
DIRECTIONS: TASCO & #24, 1/2E, S INTO.

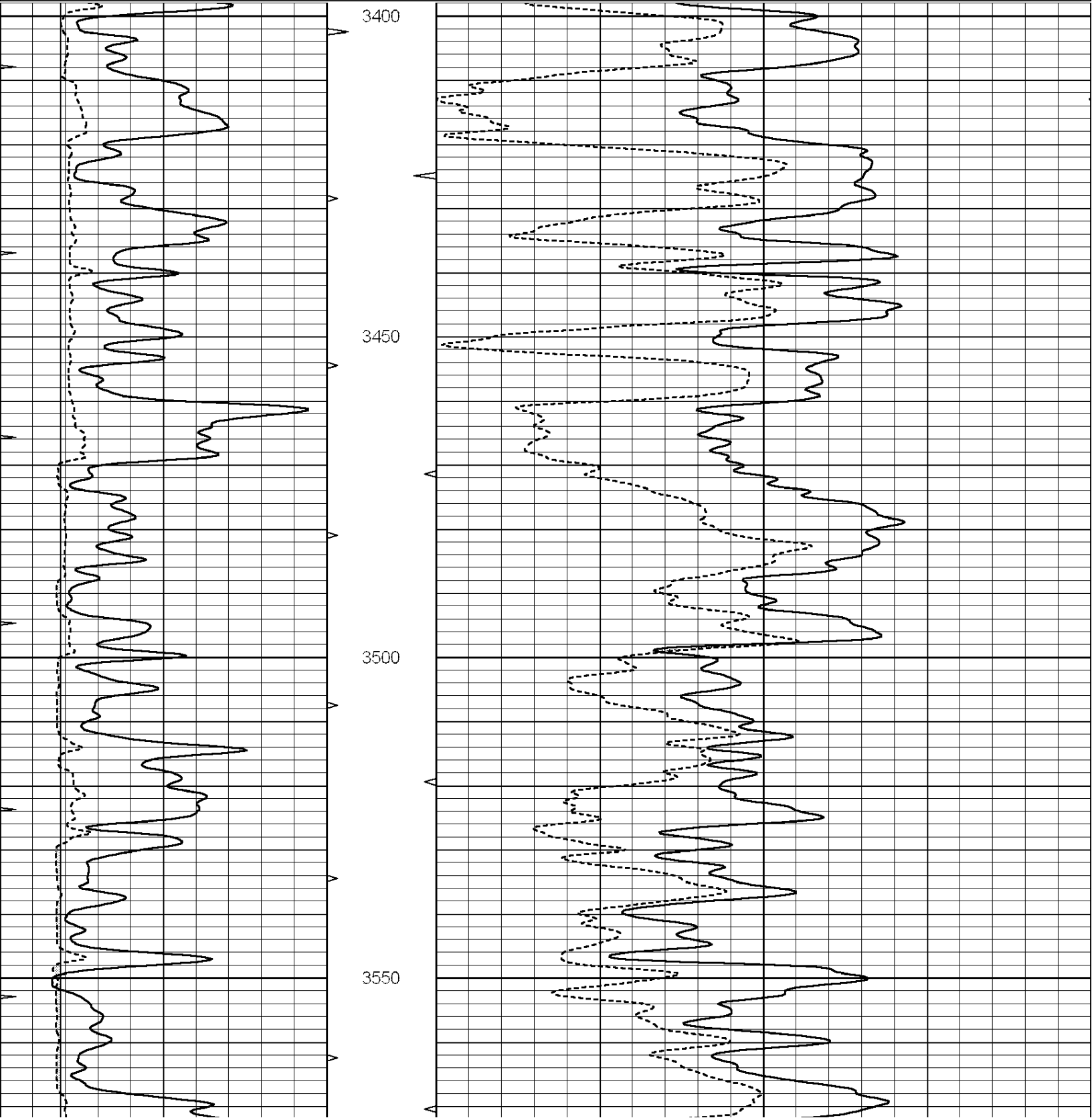


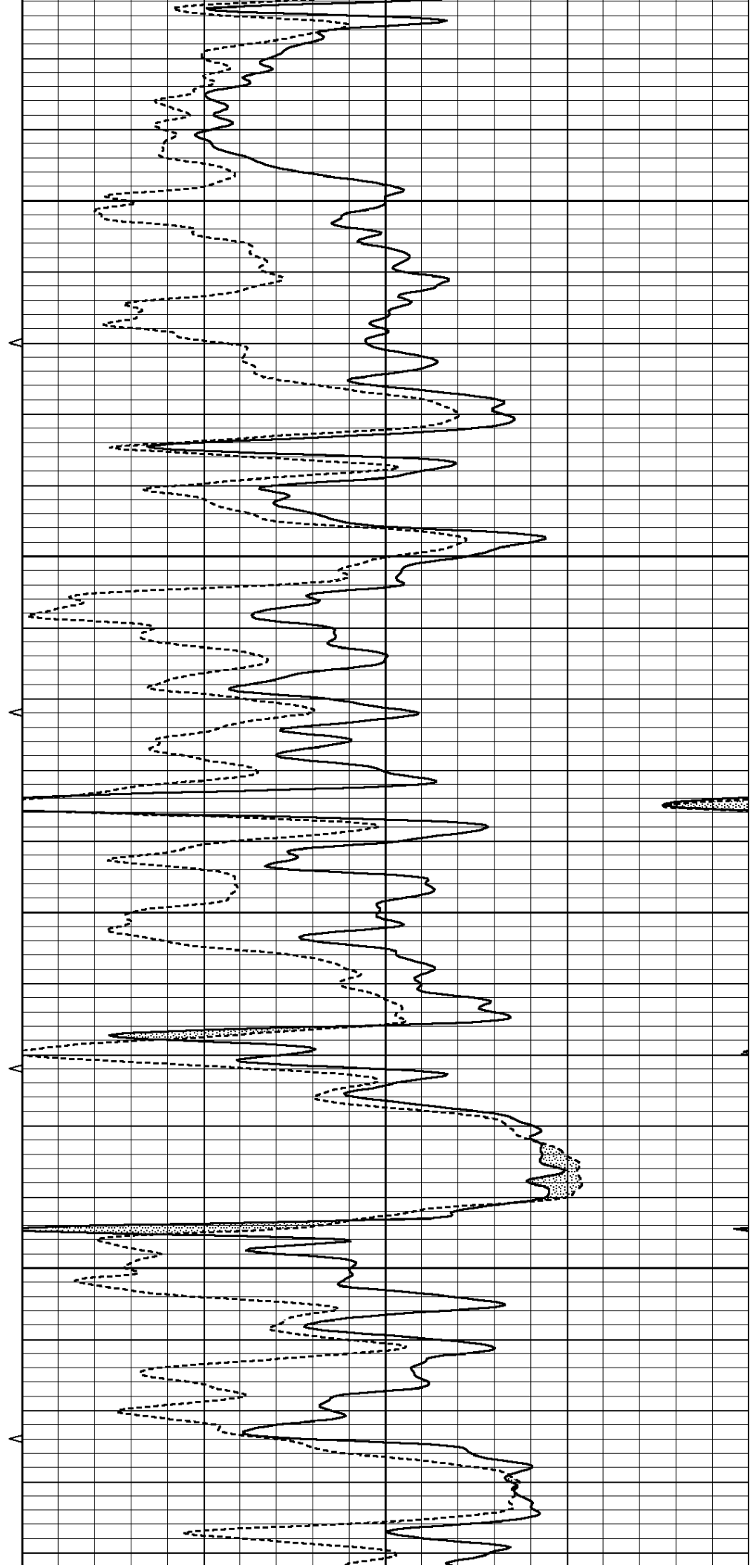
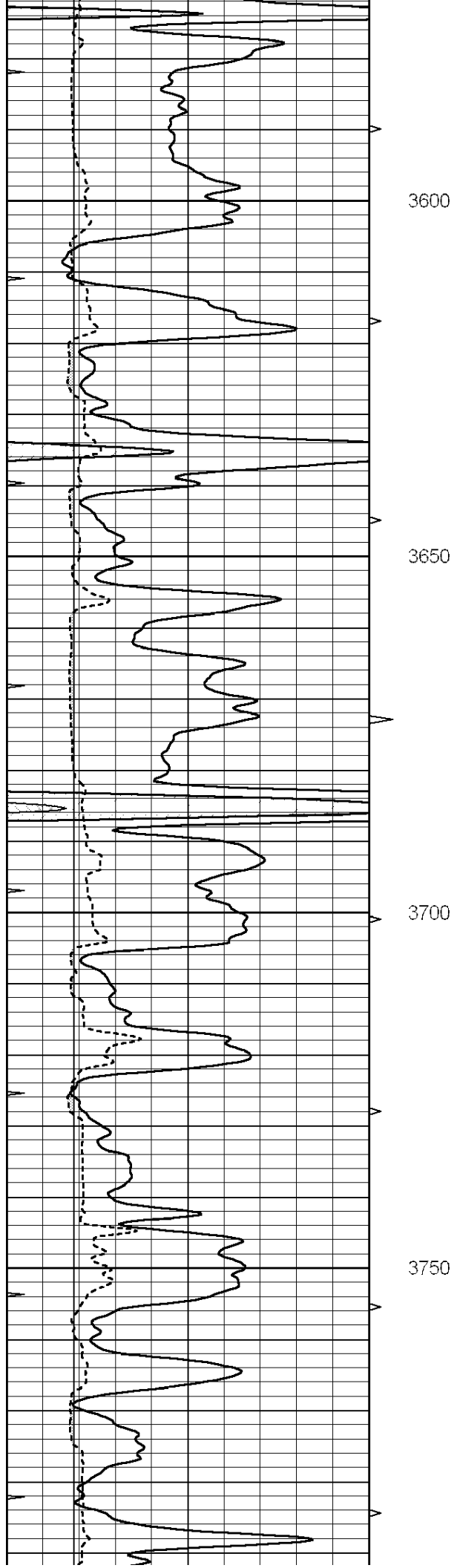
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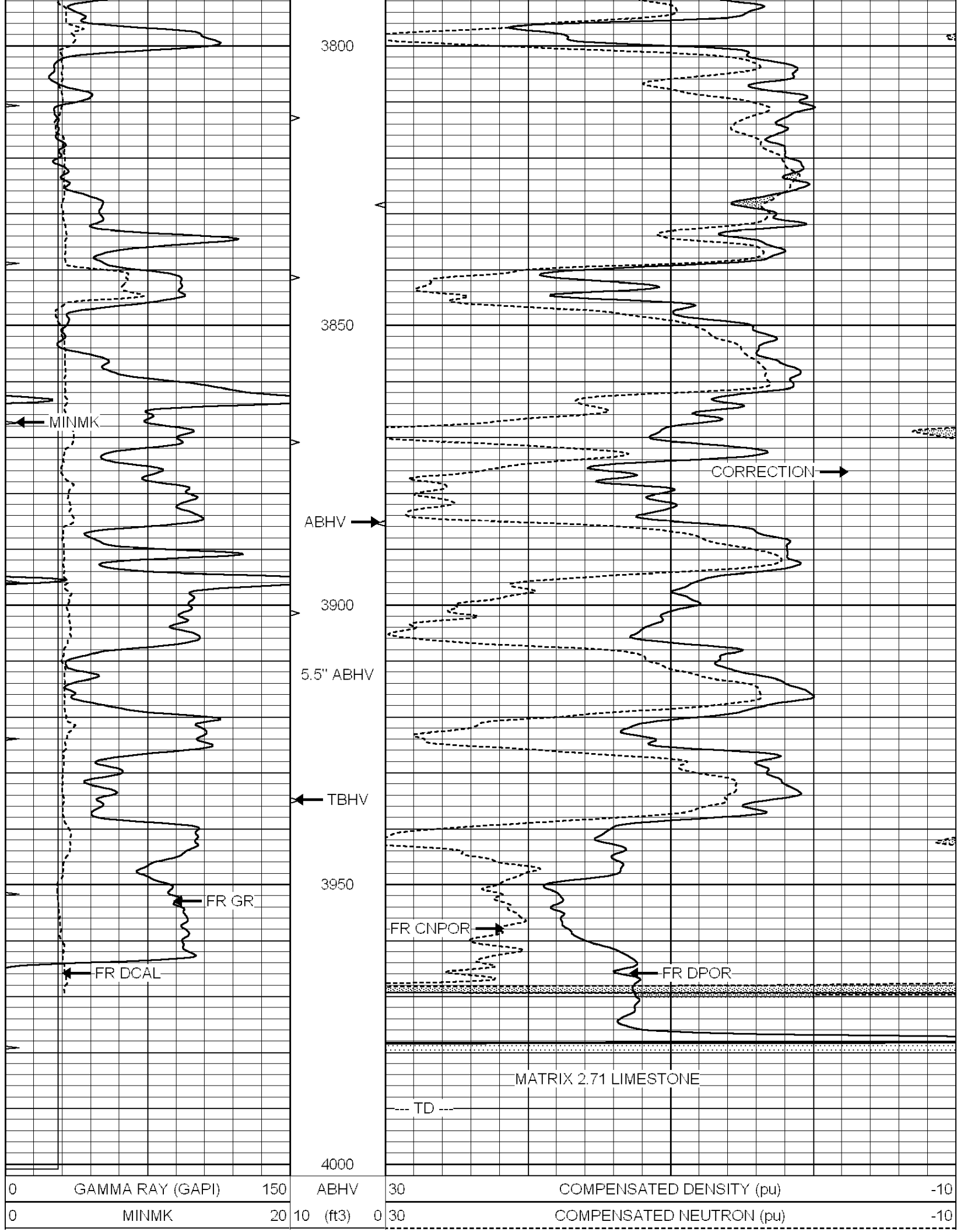
MAIN SECTION

Database File: 009110ddn.db
 Dataset Pathname: pass3.2
 Presentation Format: den_neu
 Dataset Creation: Wed May 02 13:44:04 2012
 Charted by: Depth in Feet scaled 1:240

0	GAMMA RAY (GAPI)	150	ABHV	30	COMPENSATED DENSITY (pu)	-10
0	MINMK	20	10 (ft3) 0	30	COMPENSATED NEUTRON (pu)	-10
6	MELCAL (in)	16	TBHV			
			0 (ft3) 10			







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		0	(ft3) 10



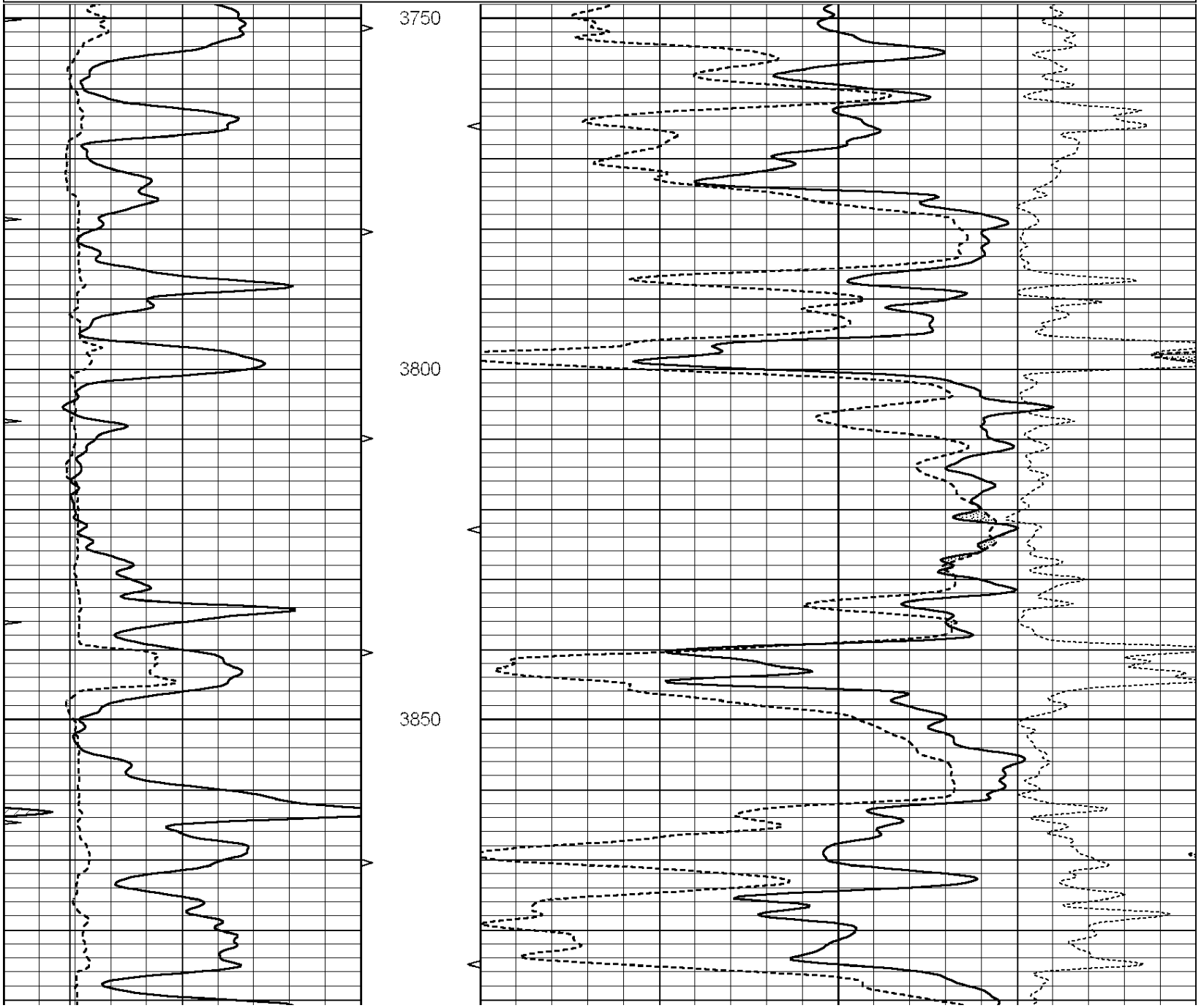
SUPERIOR

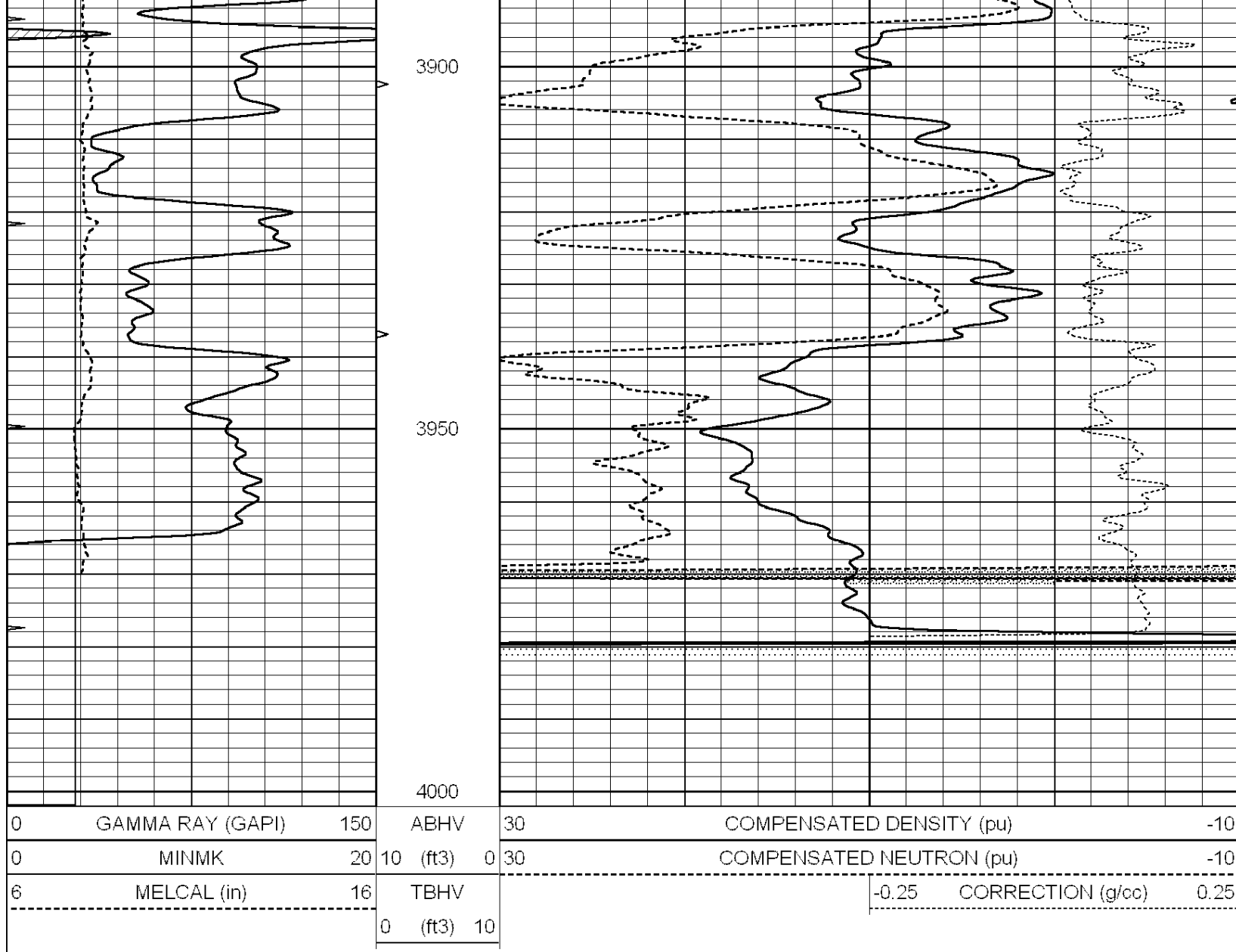
Hays,
Kansas

REPEAT SECTION

Database File:	009110ddn.db
Dataset Pathname:	pass2.2
Presentation Format:	den_neu
Dataset Creation:	Wed May 02 13:47:04 2012
Charted by:	Depth in Feet scaled 1:240

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





Calibration Report

Database File: 009110ddn.db
 Dataset Pathname: pass3.2
 Dataset Creation: Wed May 02 13:44:04 2012

Dual Induction Calibration Report

Serial-Model: PROBE9-DILG
 Surface Cal Performed: Mon Apr 30 23:18:26 2012
 Downhole Cal Performed: Mon Jul 28 12:02:56 2008
 After Survey Verification Performed: Mon Jul 28 12:02:56 2008

Surface Calibration

Loop:	Readings			References			Results	
	Air	Loop		Air	Loop		m	b
Deep	-0.014	0.629	V	0.000	400.000	mmho/m	550.000	-15.000
Medium	0.039	0.728	V	0.000	464.000	mmho/m	540.000	-18.000
Internal:	Zero			Cal			m	
	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		3970.000	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:	GEAR1-GEARHART
Source / Verifier:	147 / 147
Master Calibration Performed:	Mon Apr 30 23:17:51 2012

Master Calibration						
	Density			Far Detector		Near Detector
Magnesium	1.710	g/cc		1243.76	629.14	cps
Aluminum	2.580	g/cc		282.16	435.01	cps
Spine Angle = 76.03			Density/Spine Ratio = 0.569			
	Size			Reading		
Small Ring	10.10	in		3.50	V	
Large Ring	16.00	in		5.30	V	

Compensated Neutron Calibration Report

Serial Number:	NUE_2I
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:	Wed May 02 11:32:19 2012	
Calibrator Value:	1.0	GAPI
Background Reading:	0.0	cps
Calibrator Reading:	1.0	cps
Sensitivity:	0.7000	GAPI/cps