



COMPENSATED DENSITY/NEUTRON LOG

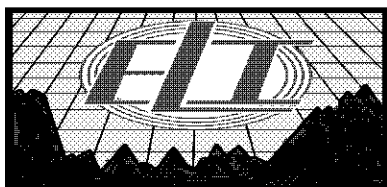
Company	H & B PETROLEUM CORPORATION	Company	H & B PETROLEUM CORPORATION
Well	WELLMAN #1	Well	WELLMAN #1
Field	RINO	Field	RINO
County	RICE	County	RICE
State	KANSAS	State	KANSAS
Location:	API # : 15-159-22841-0000 537' FSL & 1901' FWL NE-SW-SE-SW	Other Services DIL/MEL SONIC	
Permanent Datum	SEC 33 TWP 21S RGE 9W	Elevation	
Log Measured From	GROUND LEVEL	K.B. 1706	
Drilling Measured From	KELLY BUSHING 9' A.G.L KELLY BUSHING	D.F. 1704	
		G.L. 1697	
Date	4/28/17		
Run Number	ONE		
Depth Driller	3600		
Depth Logger	3698		
Bottom Logged Interval	3674		
Top Log Interval	2700		
Casing Driller	8 5/8" @ 351'		
Casing Logger	350		
Bit Size	7 7/8		
Type Fluid in Hole	CHEMICAL MUD	CHLORIDES 6000 PPM	
Density / Viscosity	9.5/48		
pH / Fluid Loss	9.5/9.6		
Source of Sample	FLOWLINE		
Rm @ Meas. Temp	0.65 @ 89F		
Rmf @ Meas. Temp	0.48 @ 89F		
Rmc @ Meas. Temp	0.78 @ 89F		
Source of Rmf / Rmc	MEASUREMENT		
Rm @ BHT	0.51 @ 112F		
Time Circulation Stopped	2 HOURS		
Time Logger on Bottom			
Maximum Recorded Temperature	112F		
Equipment Number	3802		
Location	HAYS, KANSAS		
Recorded By	JASON CAPELLUCCI		
Witnessed By	WYATT URBAN		

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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

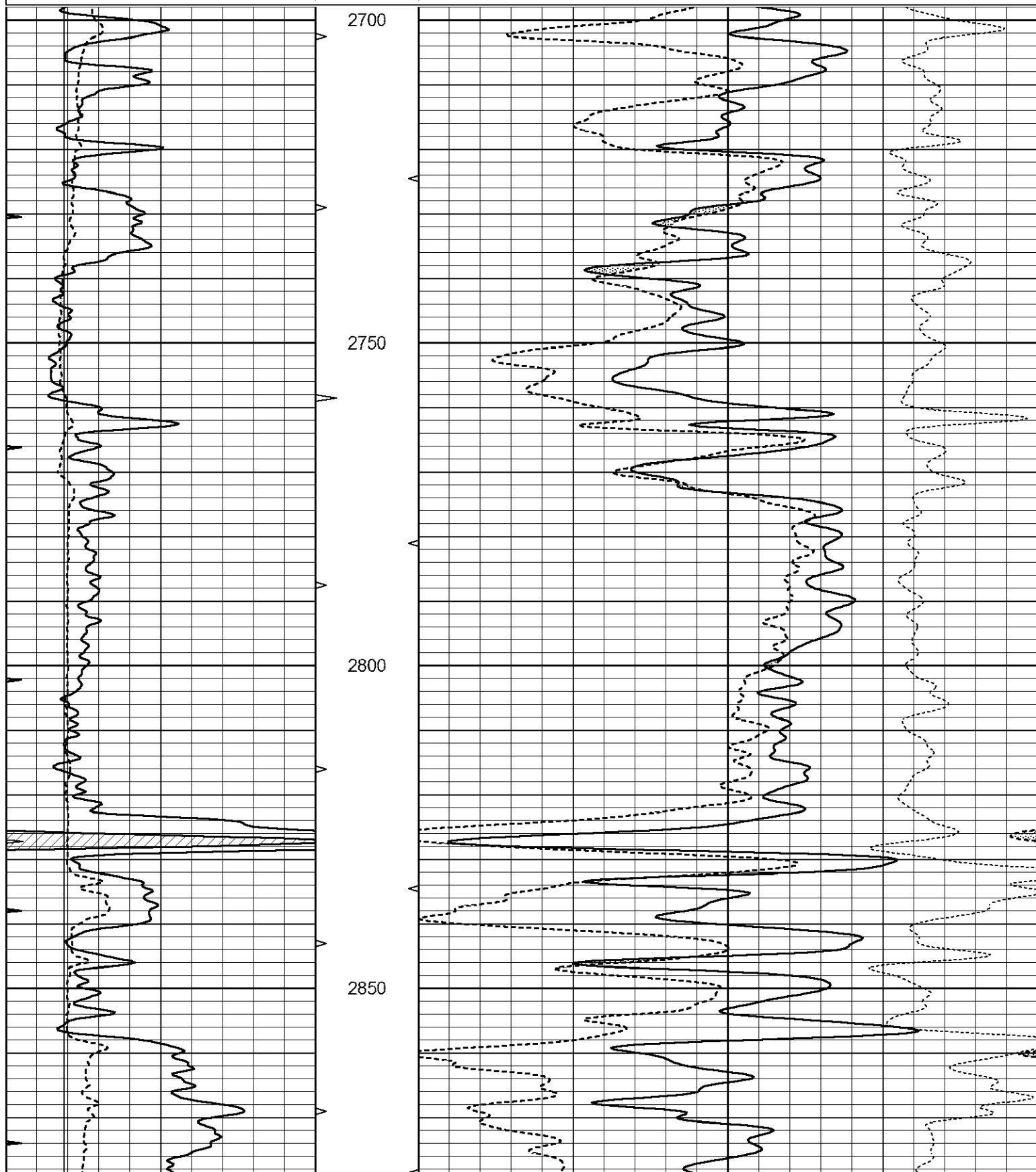
THANK YOU FOR USING ELI WIRELINE SERVICES, HAYS, KS. (785) 628-6395
DIRECTIONS
CHASE, KS. - SOUTH TO ALDEN KS. - SOUTH THRU 3 SETS OF CURVES
2 MORE SOUTH TO Y AVE. - 1/2 EAST - NORTH INTO

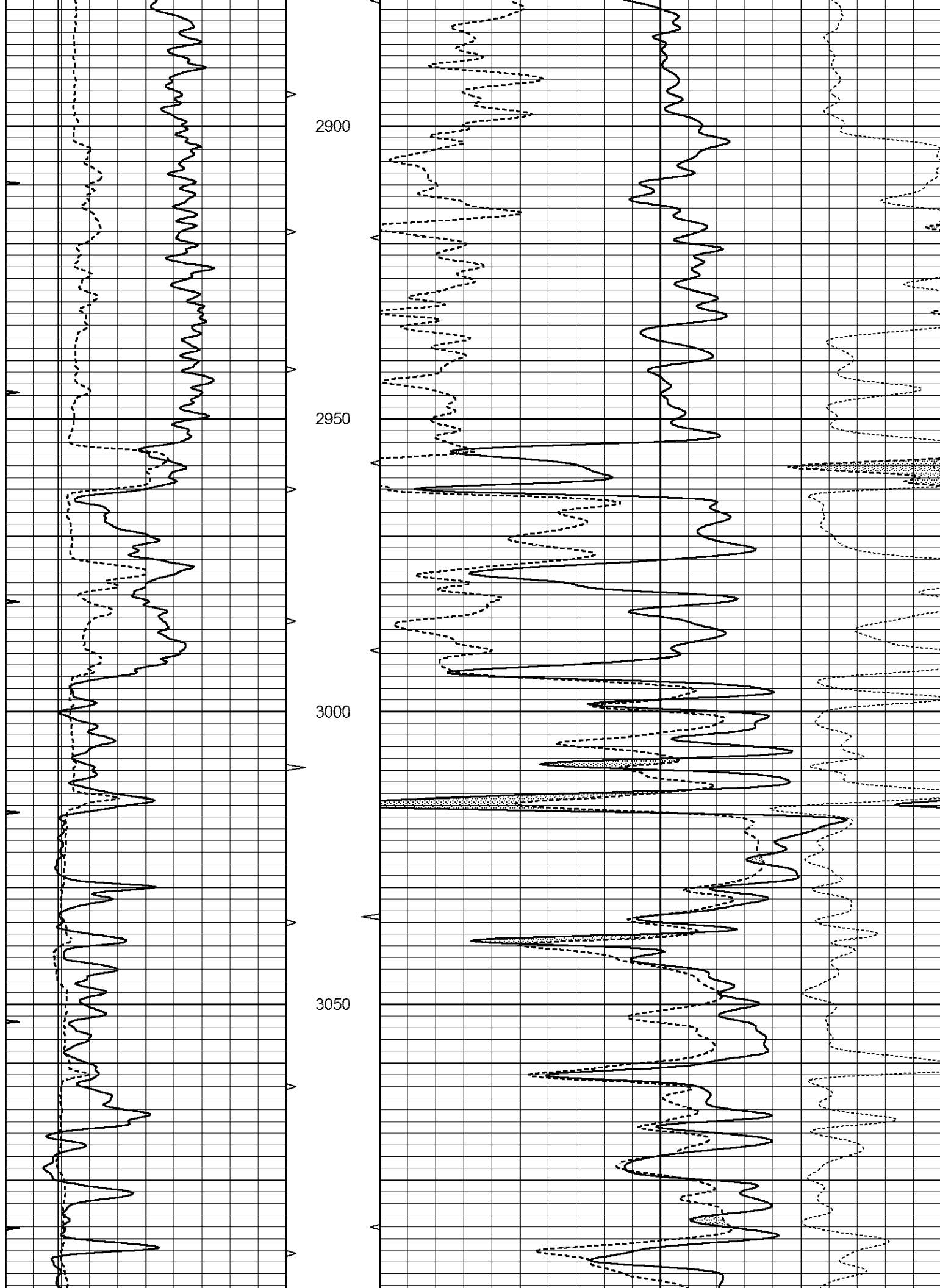


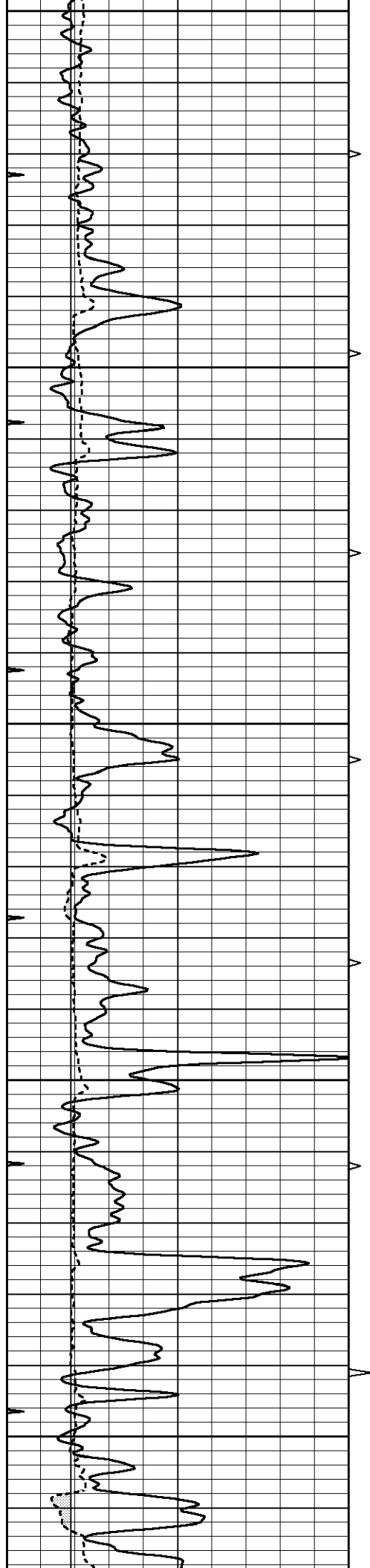
MAIN SECTION

Database File	1138ddn8.db
Dataset Pathname	pass4.1
Presentation Format	_den_neu
Dataset Creation	Fri Apr 28 14:50:23 2017
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			







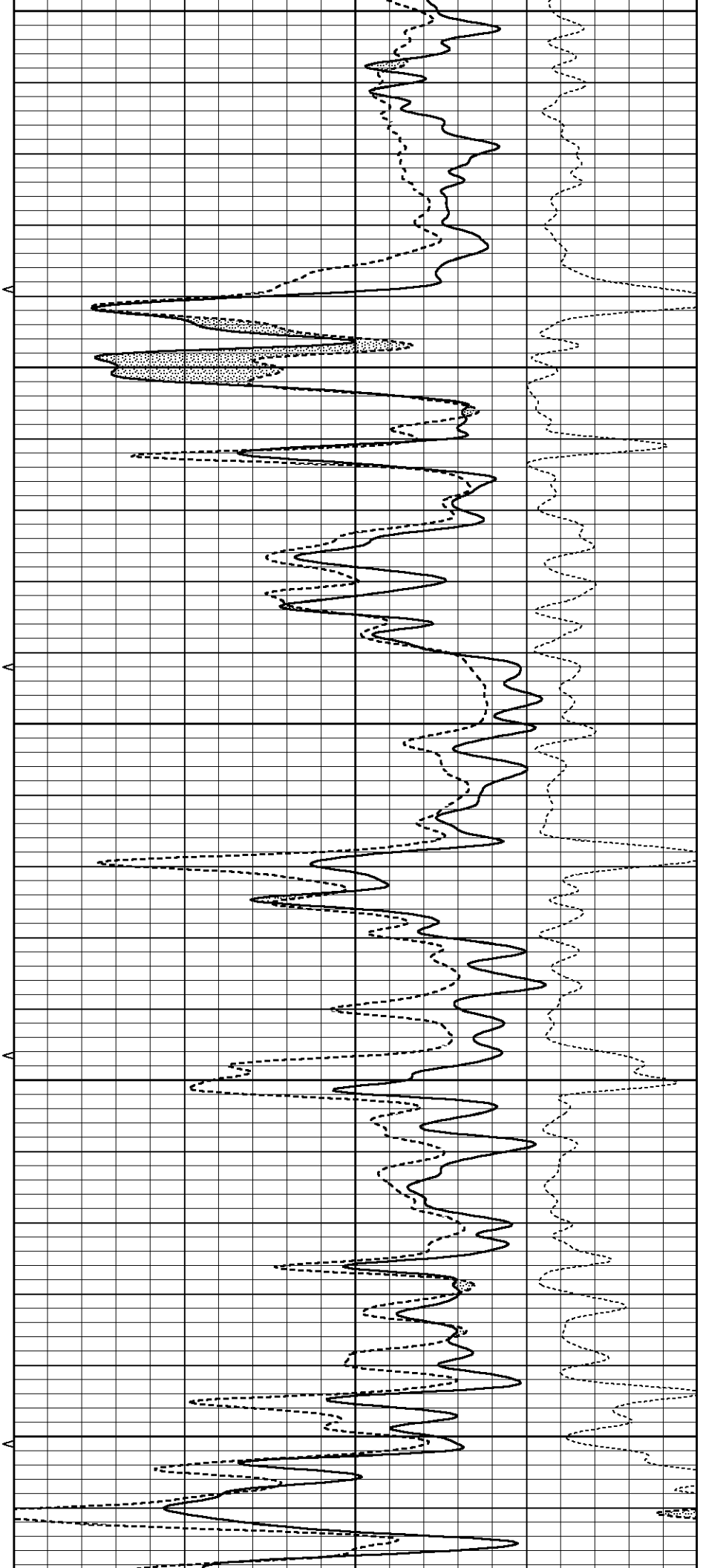
3100

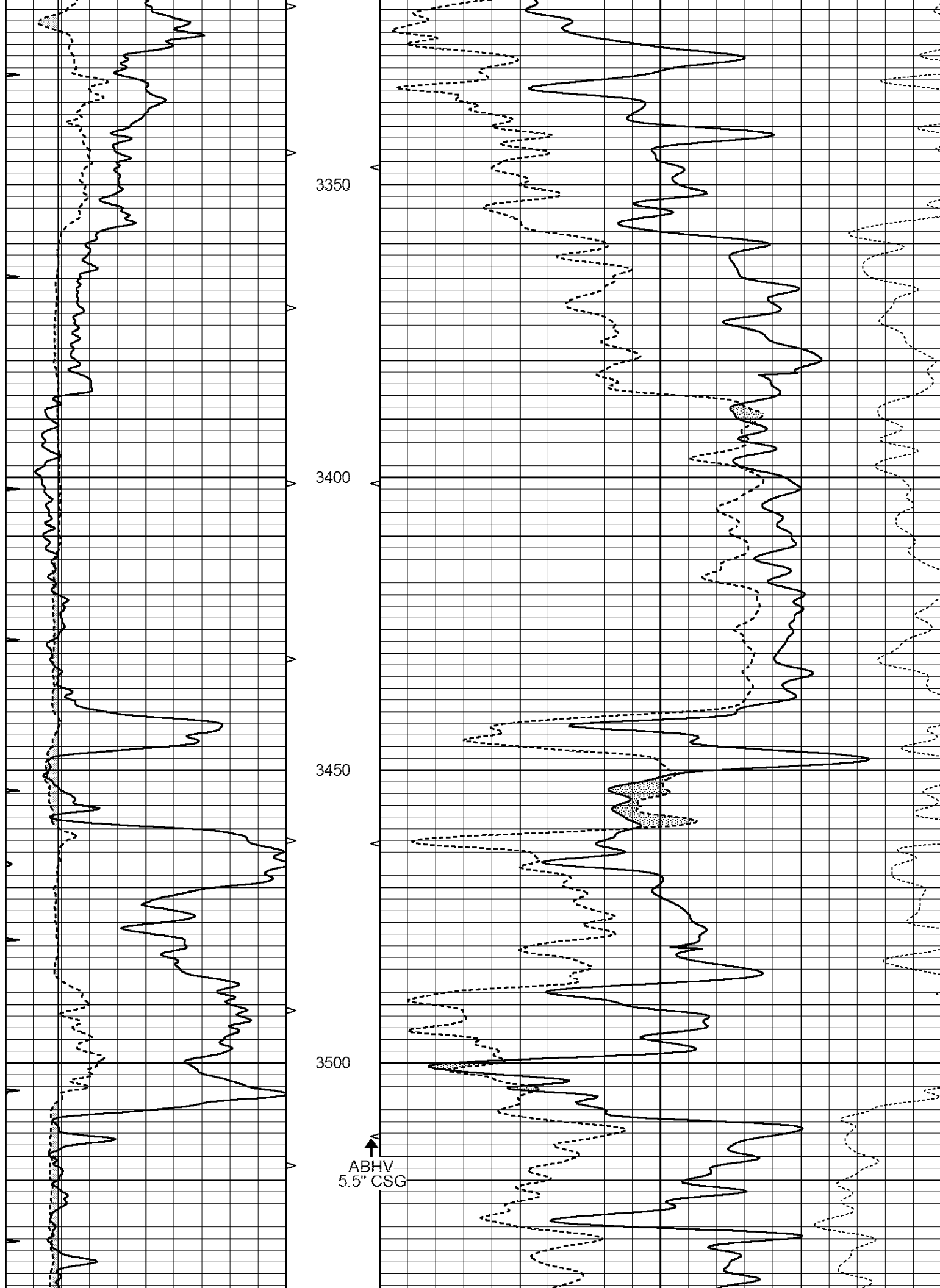
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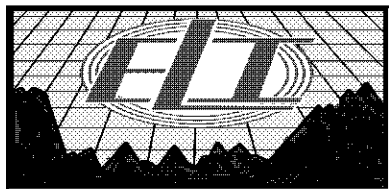
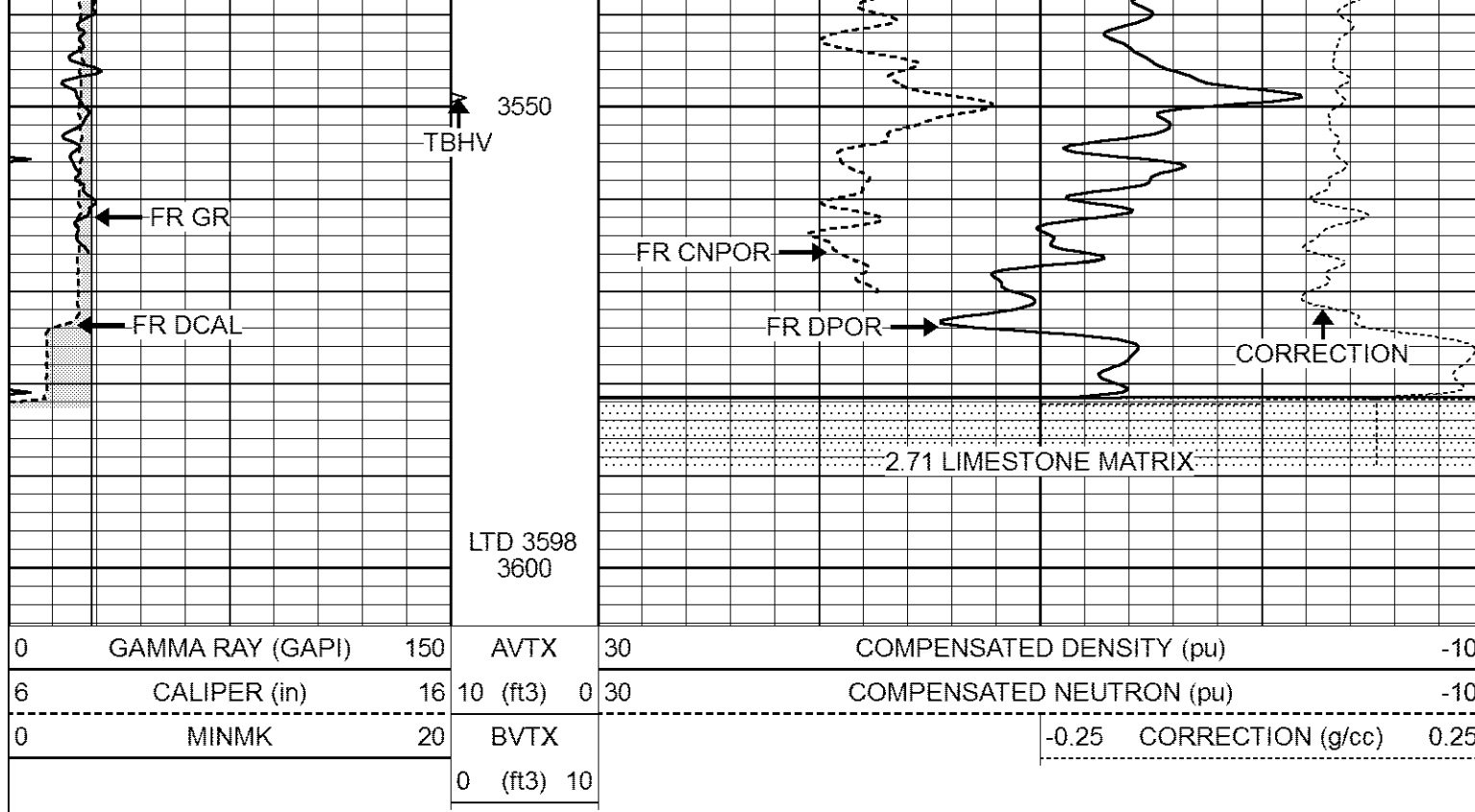
3200

3250

3300



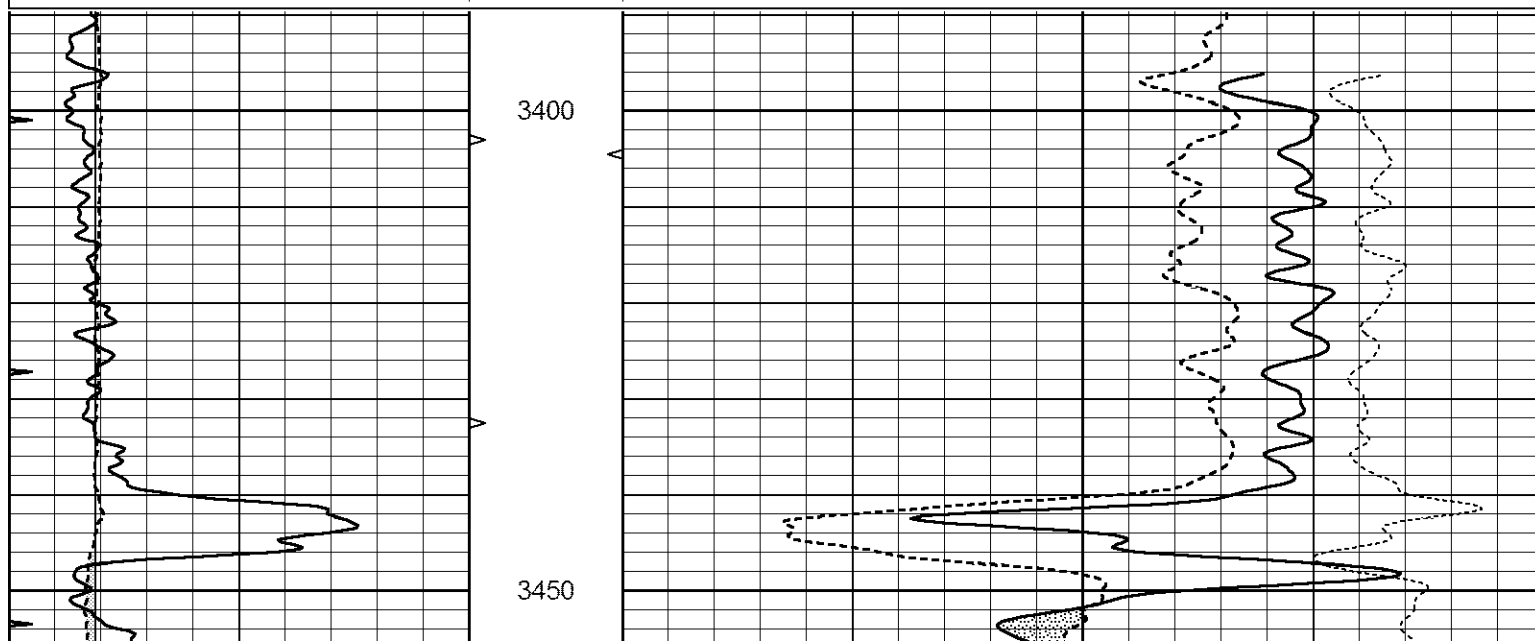


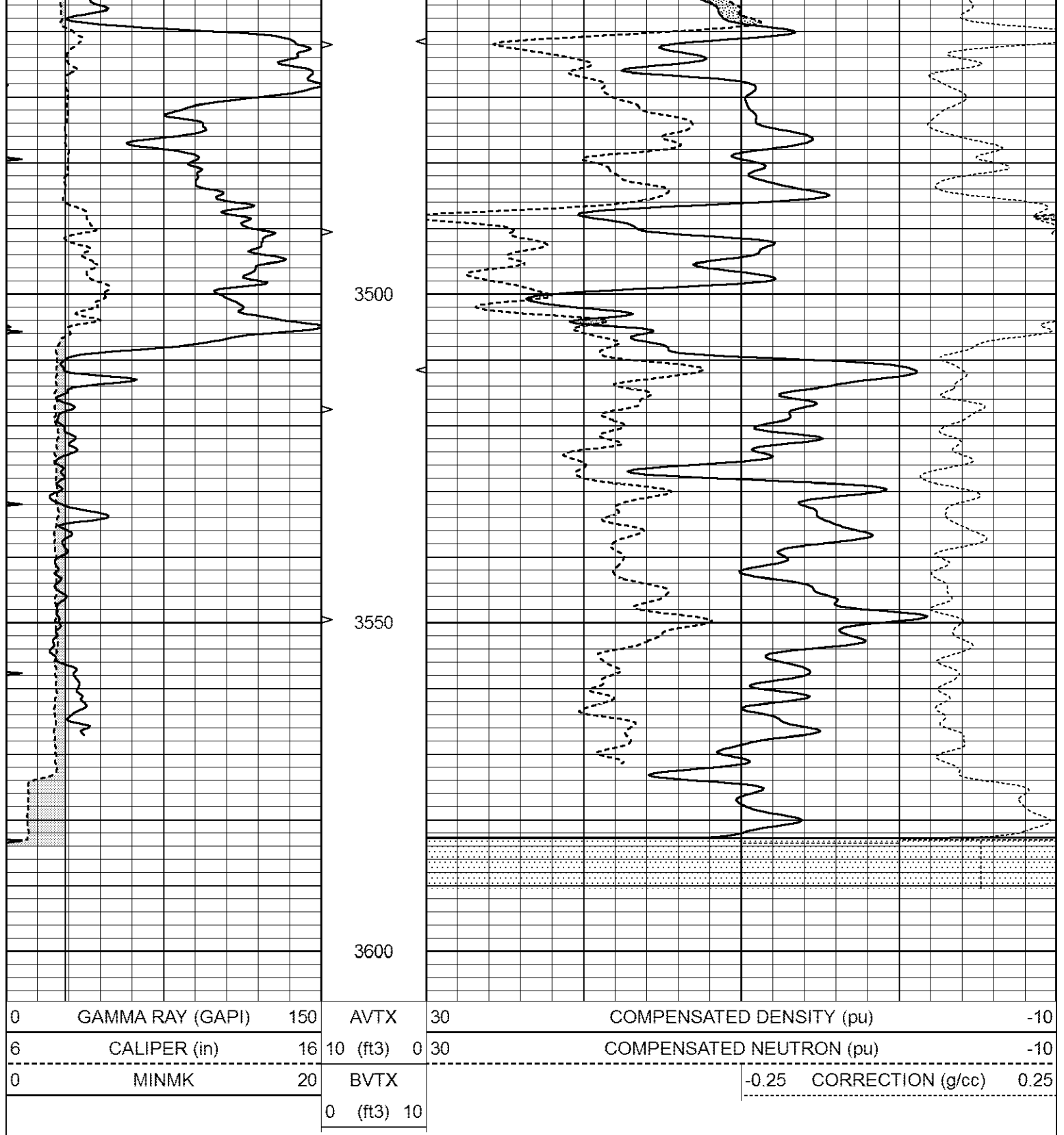


REPEAT SECTION

Database File 1138ddn8.db
 Dataset Pathname pass3.1
 Presentation Format _den_neu
 Dataset Creation Fri Apr 28 14:43:04 2017
 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 1138ddn8.db
Dataset Pathname pass3.1
Dataset Creation Fri Apr 28 14:43:04 2017

Dual Induction Calibration Report

Serial-Model: FW1410-55-Probe
Surface Cal Performed: Thu Mar 12 09:27:11 2015
Downhole Cal Performed: Thu Mar 12 09:29:20 2015
After Survey Verification Performed: Thu Mar 12 09:29:20 2015

Surface Calibration				Readings		References		Results	
Loop:	Air	Loop		Air	Loop		m	b	
Deep	0.011	0.656	V	1.000	400.000	mmho/m	618.595	-5.524	
Medium	-0.000	0.731	V	1.000	464.000	mmho/m	632.856	1.197	
Internal:	Zero	Cal		Zero	Cal		m	b	
Deep	0.007	0.649	V	0.000	400.000	mmho/m	623.784	-4.595	
Medium	0.004	0.743	V	0.000	464.000	mmho/m	627.284	-2.251	

Downhole Calibration								
			Readings		References		Results	
			Zero	Cal	Zero	Cal	m'	b'
Deep	-0.824	395.917	mmho/m	-0.976	397.550	mmho/m	1.004	-0.149
Medium	3.565	471.327	mmho/m	3.468	471.590	mmho/m	1.001	-0.099
LL3		7.503	V		1500.000	Ohm-m		
		0.001	V		20.000	Ohm-m		
		-7.481	V		3745.000	mmho-m		

After Survey Verification			Readings		Targets		Results	
	Zero	Cal		Zero	Cal		m'	b'
Deep	0.000	0.000	mmho/m	-0.824	395.917	mmho/m	1.000	0.000
Medium	0.000	0.000	mmho/m	3.565	471.327	mmho/m	1.000	0.000
LL3		0.000	Ohm-m		1500.000	Ohm-m		
		0.000	Ohm-m		20.000	Ohm-m		
		0.000	mmho-m		3745.000	mmho-m		

Litho Density Calibration Report													
Serial: 140704													
Model: V4_10P													
Source Number: 74GBq-19													

Master Calibration							Performed: Wed Feb 11 18:53:41 2015						
		Background		Aluminum		Magnesium							
Window 1		613.01		6027.40		27508.60		cps					
Window 2		48.21		1424.77		7132.66		cps					
Window 4		266.48		1373.19		5767.15		cps					
Window 5		622.07		10090.30		18937.90		cps					
Window 6		49.07		1682.84		3271.18		cps					
Window 8		298.04		3248.38		5980.58		cps					
Bulk Density		-		2.6020		1.6830		g/cc					
Pe		-		3.0000		2.5070		b/e					
LS Alpha:		: -1.8451		SS Alpha:		: -0.7542		LS CPE:		: 1.0882			
LS Beta:		: 138648.8473		SS Beta:		: 21960.9250		SS CPE:		: 1.5181			

Before Survey Background Counts Verification							Performed: Wed Dec 31 18:00:00 1969						
Window 1		0.00		cps									
Window 2		0.00		cps									
Window 4		0.00		cps									
Window 5		0.00		cps									
Window 6		0.00		cps									
Window 8		0.00		cps									

After Survey Background Counts Verification				Performed: Wed Dec 31 18:00:00 1969	
Window 1	0.00	cps			
Window 2	0.00	cps			
Window 4	0.00	cps			
Window 5	0.00	cps			
Window 6	0.00	cps			
Window 8	0.00	cps			

Lithodensity Caliper Calibration				Performed: Wed Feb 11 18:53:41 2015	
Results	Readings	References (in)			
Low	High	Low	High	Gain	Offset
5123.0	9461.6	8.5	14.0	0.0	1.4

Before Survey Caliper Verification		Performed:	
	Reference	Reading	
	_____	_____	
Caliper (in)			

After Survey Caliper Verification		Performed:	
	Reference	Reading	
	_____	_____	
Caliper (in)			

Compensated Neutron Calibration Report

Serial Number:	080621PMC
Tool Model:	NABORS

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:	070558	
Tool Model:	Probe1	
Performed:	Wed Jun 29 08:29:10 2016	
Calibrator Value:	1.0	GAPI
Background Reading:	0.0	cps
Calibrator Reading:	1.0	cps
Sensitivity:	0.3000	GAPI/cps