



**COMPLETION
& PRODUCTION
SERVICES CO.**

MICRO LOG

Company	IA OPERATING, INC.	Company	IA OPERATING, INC.
Well	ARCHER #21-2	Well	ARCHER #21-2
Field	STUDLEY WEST	Field	STUDLEY WEST
County	SHERIDAN	County	SHERIDAN
State	KANSAS	State	KANSAS
Location:	API # : 15-179-21407-00-00 NW - NW - SE - NE 1518' FNL & 1076' FEL SEC 21 TWP 8S RGE 26W	Other Services CNL/CDL DIL/SON	
Permanent Datum	GROUND LEVEL Elevation	Elevation	
Log Measured From	KELLY BUSHING 8' A.G.L	K.B. 2421 D.F. 2419 G.L. 2413	
Drilling Measured From	KELLY BUSHING		
Date	7-24-15		
Run Number	TWO		
Depth Driller	3880		
Depth Logger	3880		
Bottom Logged Interval	3864		
Top Log Interval	3250		
Casing Driller	8 5/8 @ 241'		
Casing Logger	240'		
Bit Size	7 7/8		
Type Fluid in Hole	CHEMICAL MUD	CHLORIDES 500 PPM	
Density / Viscosity	9.0/53		
pH / Fluid Loss	11.0/7.2		
Source of Sample	FLOWLINE		
Rm @ Meas. Temp	0.95 @ 94F		
Rmf @ Meas. Temp	0.71 @ 94F		
Rmc @ Meas. Temp	1.14 @ 94F		
Source of Rmf / Rmc	MEASUREMENT		
Rm @ BHT	0.78 @ 115F		
Time Circulation Stopped	2 HOURS		
Time Logger on Bottom			
Maximum Recorded Temperature	115F		
Equipment Number	3802		
Location	HAYS, KANSAS		
Recorded By	IAN MABB		
Witnessed By	JEFF LAWLER		

<<< Fold Here >>>

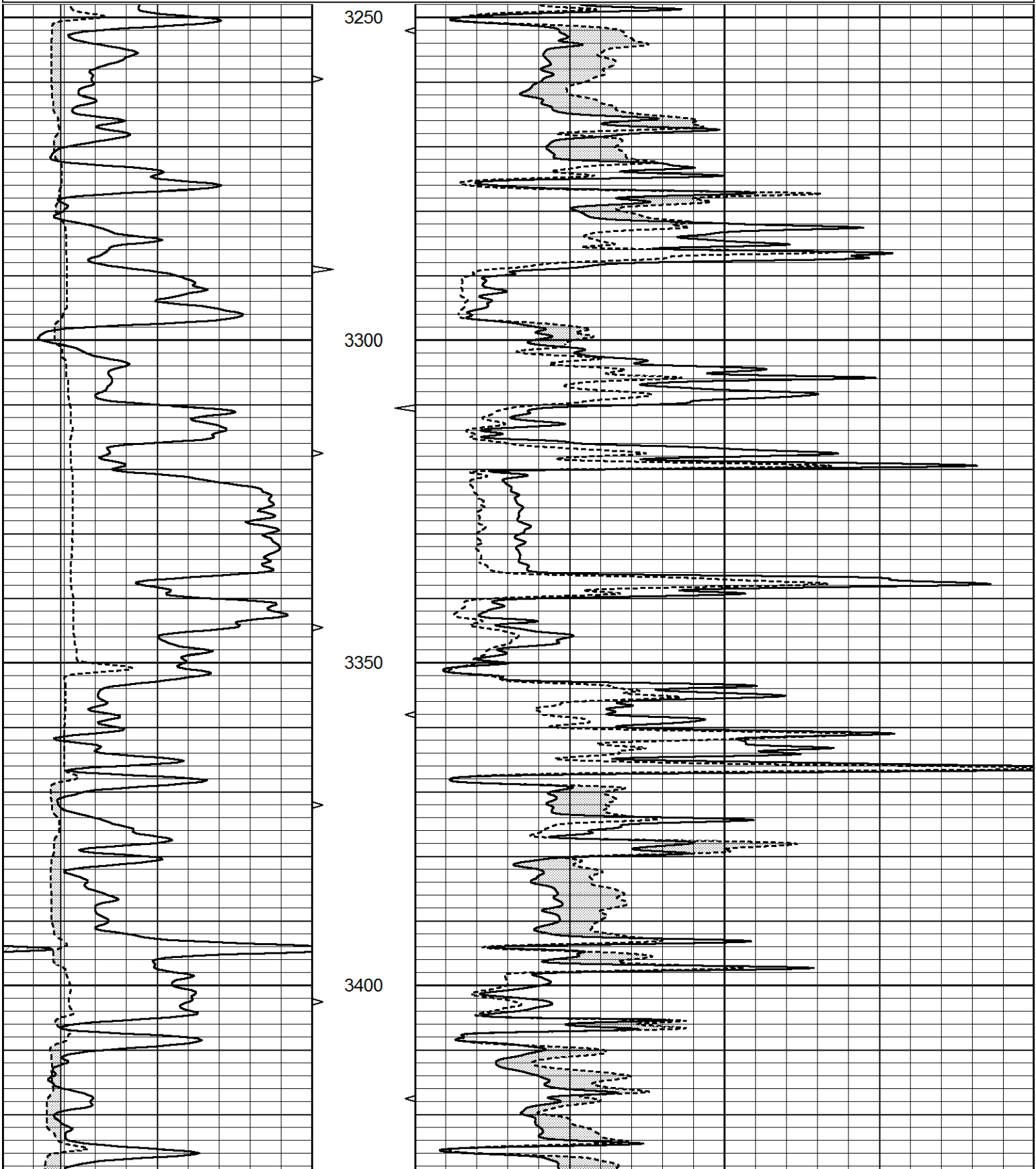
All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs, 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.

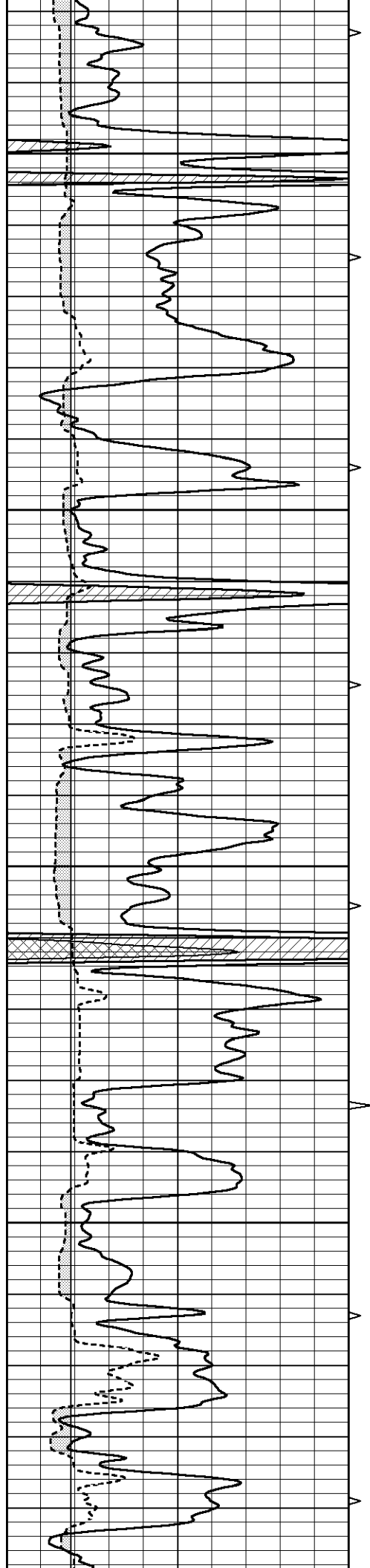
Comments

THANK YOU FOR USING NABORS, HAYS, KS. (785) 628-6395
DIRECTIONS : STUDLEY, KS. - WEST TO 90 E - SOUTH 1/4 MILE FOLLOW EAST - AT THE FORK
VEER LEFT AND FOLLOW THROUGH THE CATTLE GUARD - KEEP VEERING LEFT FOR ABOUT 2
MILES TO THE RIG

Database File	26601ddn8.db
Dataset Pathname	pass6.1
Presentation Format	_micro
Dataset Creation	Fri Jul 24 21:42:22 2015
Charted by	Depth in Feet scaled 1:240

0	GAMMA RAY (GAPI)	150	ABHV	0	MEL1.5 (Ohm-m)	40
6	CALIPER (in)	16	10 (ft3)	0 0	MEL2.0 (Ohm-m)	40
			TBHV			
			0 (ft3)	10		



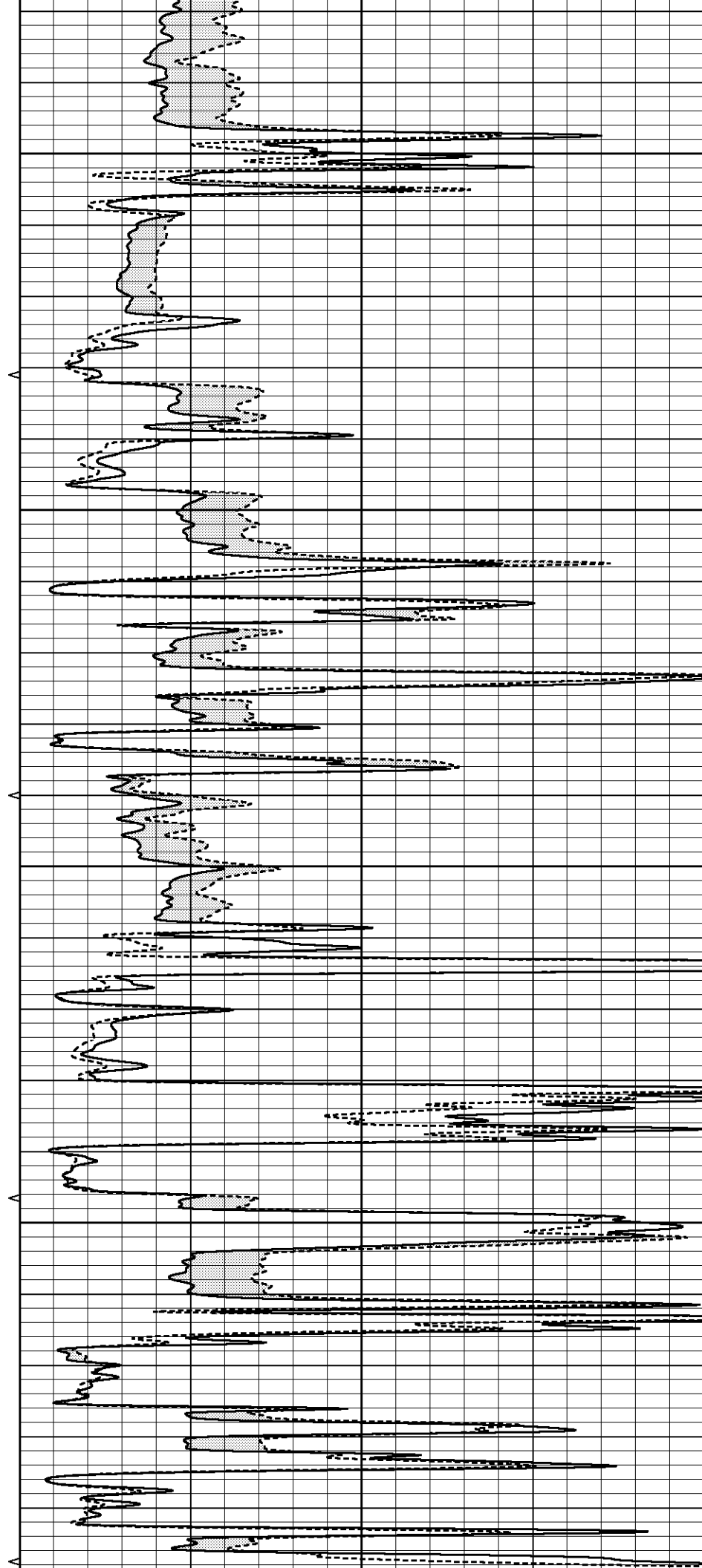


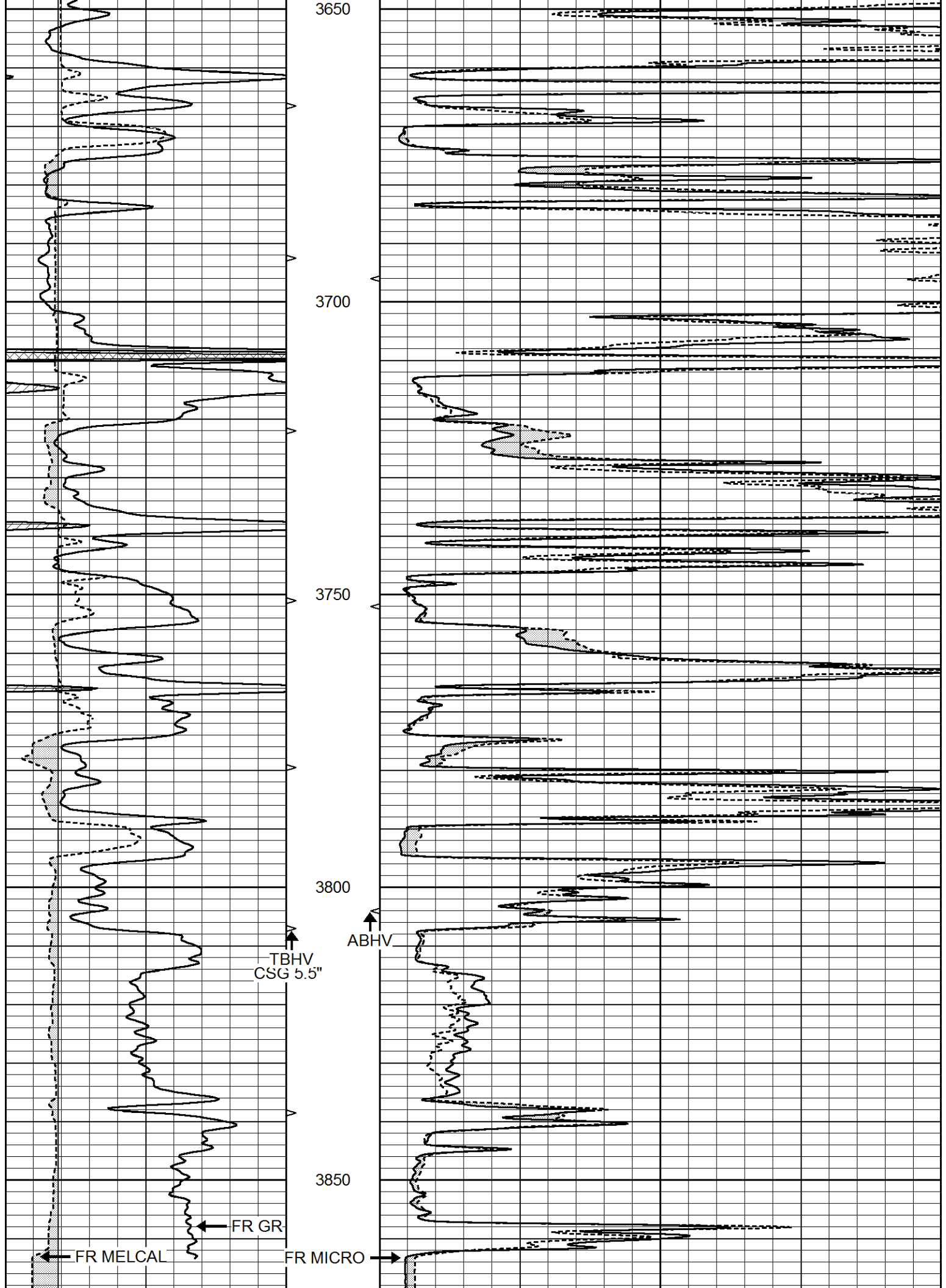
3450

3500

3550

3600





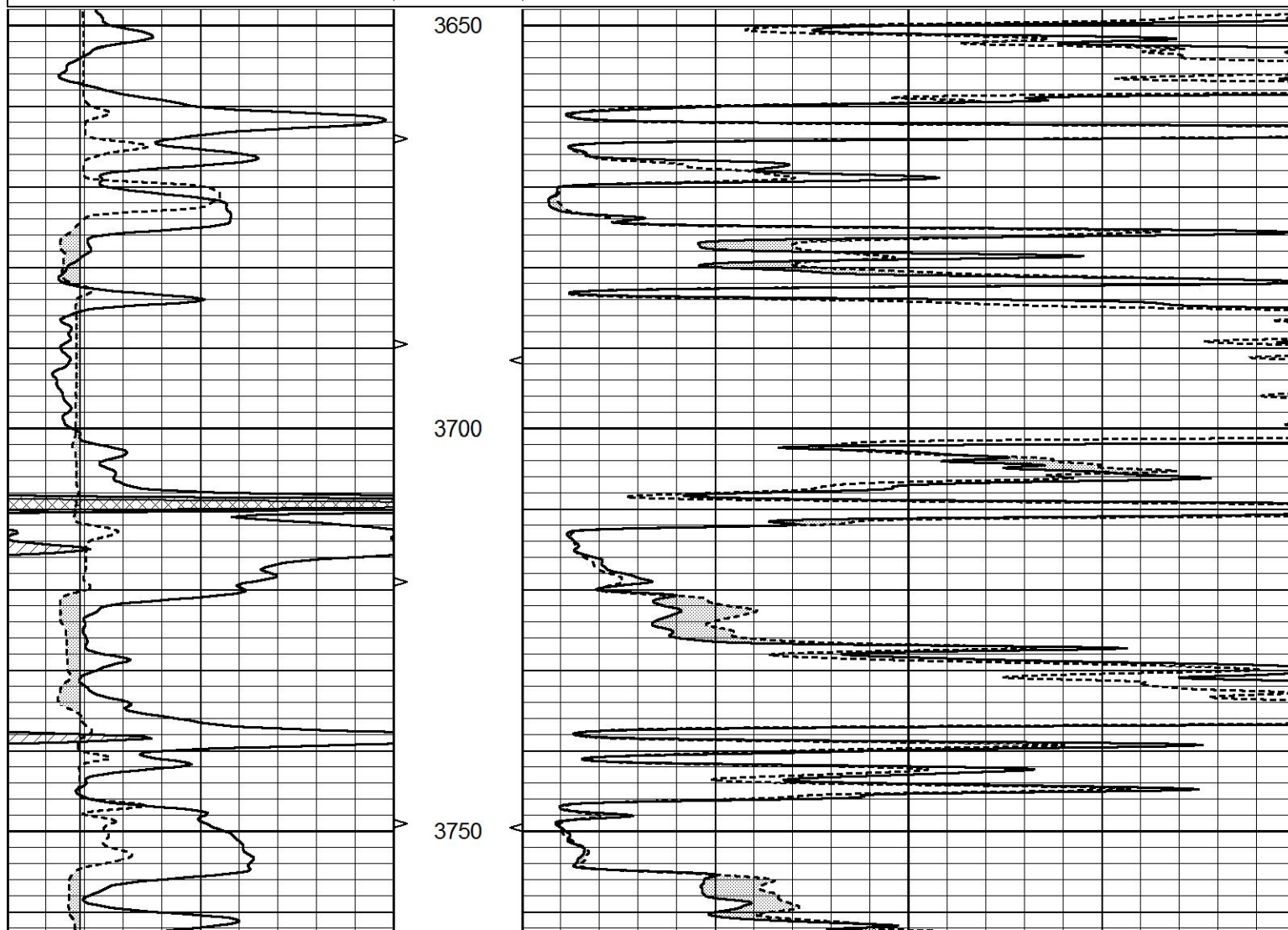
			LTD 3880			
0	GAMMA RAY (GAPI)	150	ABHV	0	MEL1.5 (Ohm-m)	40
6	CALIPER (in)	16	10 (ft3) 0	0	MEL2.0 (Ohm-m)	40
			TBHV			
			0 (ft3) 10			

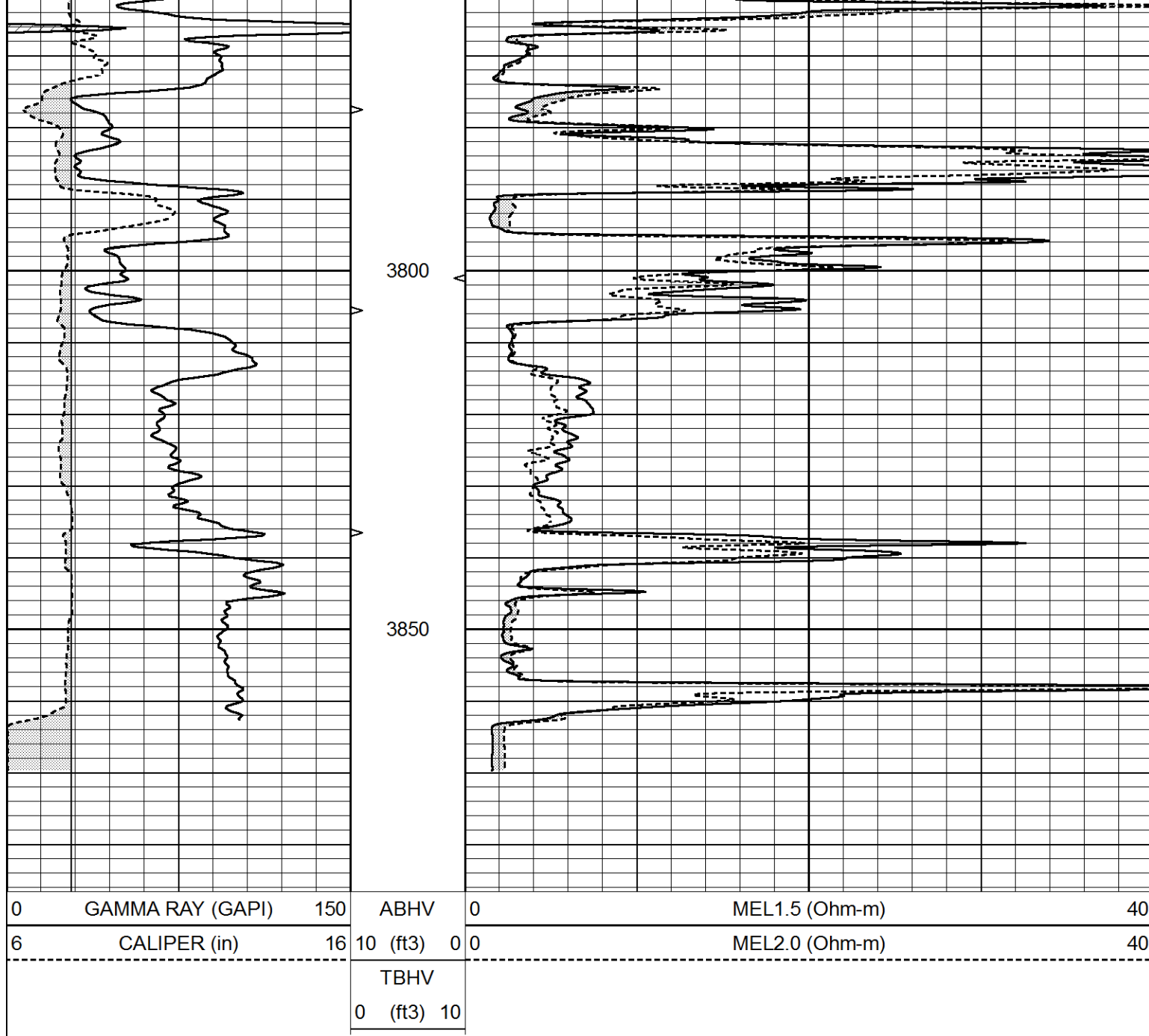


REPEAT SECTION

Database File 26601ddn8.db
 Dataset Pathname pass5.1
 Presentation Format _micro
 Dataset Creation Fri Jul 24 21:45:55 2015
 Charted by Depth in Feet scaled 1:240

0	GAMMA RAY (GAPI)	150	ABHV	0	MEL1.5 (Ohm-m)	40
6	CALIPER (in)	16	10 (ft3) 0	0	MEL2.0 (Ohm-m)	40
			TBHV			
			0 (ft3) 10			





Calibration Report			
Database File	26601ddn8.db		
Dataset Pathname	pass6.1		
Dataset Creation	Fri Jul 24 21:42:22 2015		
MICRO_USR Calibration Report			
Serial Number:	070910		
Tool Model:	ProbeL		
Performed:	Sat Jul 11 14:49:49 2015		
Caliper Calibration:	Gain=7.041	Offset=3.300	
References	Low Cal	High Cal	
Readings	8.000	14.000	
	0.779	1.631	
1.5" Calibration:	Gain=25.000	Offset=-0.067	
References	Low Cal	High Cal	
	0.000	20.000	

Readings	0.004	1.335
2" Calibration:	Gain=35.000	Offset=-0.079
References	Low Cal	High Cal
Readings	0.000	20.000
	0.004	1.029

Microlog Calibration Report

Serial-Model: Performed:	070910-ProbeL (Not Performed)
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	Readings			References			Results	
	Zero	Cal		Zero	Cal		m	b
Normal	0.0000	1.0000	V	0.0000	1.0000	Ohm-m	1.0000	0.0000
Inverse	0.0000	1.0000	V	0.0000	1.0000	Ohm-m	1.0000	0.0000
Caliper	0.0000	1.0000	V	0.0000	1.0000	in	1.0000	0.0000

Gamma Ray Calibration Report

Serial Number:	7	
Tool Model:	Probe1	
Performed:	Thu Jan 01 09:43:47 2015	
Calibrator Value:	1.0	GAPI
Background Reading:	0.0	cps
Calibrator Reading:	1.0	cps
Sensitivity:	0.5000	GAPI/cps