



**COMPLETION
& PRODUCTION
SERVICES CO.**

**DUAL
INDUCTION
LOG**

Company MAI OIL OPERATIONS, INC.
Well MILLER FARMS #2
Field BARRETT
County BARTON State KANSAS

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Well MILLER FARMS #2
Field BARRETT
County BARTON
State KANSAS

Location: API #: 15-009-2599-00-00
1625' FNL & 330' FEL
N2 - NE - SE - NE
SEC 36 TWP 16S RGE 14W
Permanent Datum GROUND LEVEL Elevation 1980
Log Measured From KELLY BUSHING 8' A.G.L.
Drilling Measured From KELLY BUSHING
Other Services
CNL/CDL
MEL
Elevation
K.B. 1988
D.F. 1986
G.L. 1980

Date	7/27/14		
Run Number	ONE		
Depth Driller	3550		
Depth Logger	3549		
Bottom Logged Interval	3547		
Top Log Interval	00		
Casing Driller	8 5/8 @ 514'		
Casing Logger	516'		
Bit Size	7.875		
Type Fluid in Hole	CHEMICAL MUD		
Density / Viscosity	9.14/2	CHLORIDES 7,300 PPM	
pH / Fluid Loss	9.5/11.6		
Source of Sample	FLOWLINE		
Rm @ Meas. Temp	0.50 @ 89F		
Rmf @ Meas. Temp	0.38 @ 89F		
Rmc @ Meas. Temp	0.60 @ 89F		
Source of Rmf / Rmc	MEASURED		
Rm @ BHT	0.40 @ 112F		
Time Circulation Stopped	2 HOURS		
Time Logger on Bottom			
Maximum Recorded Temperature	112F		
Equipment Number	3802		
Location	HAYS, KS.		
Recorded By	IAN MABB		
Witnessed By	JIM MUSGROVE		

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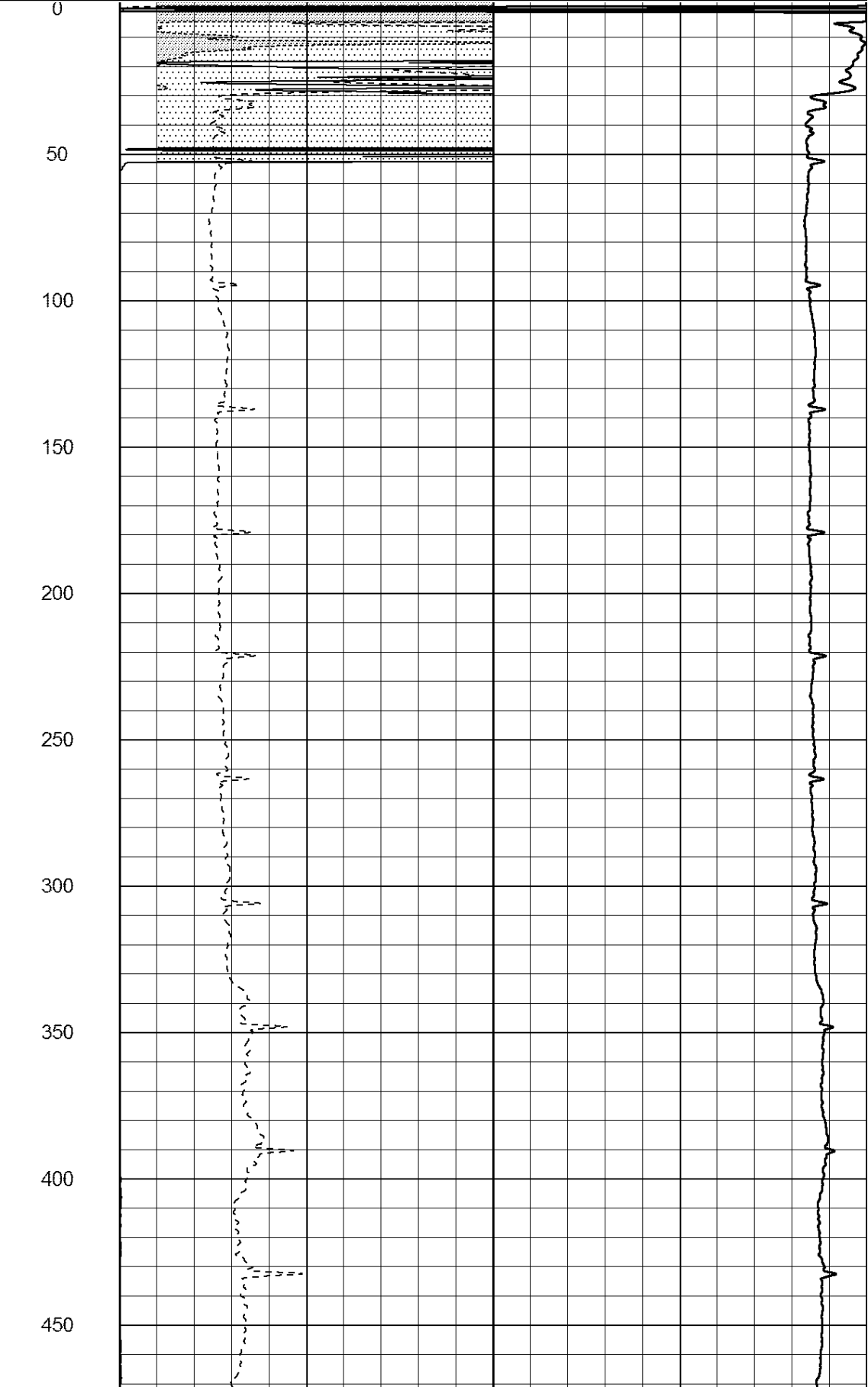
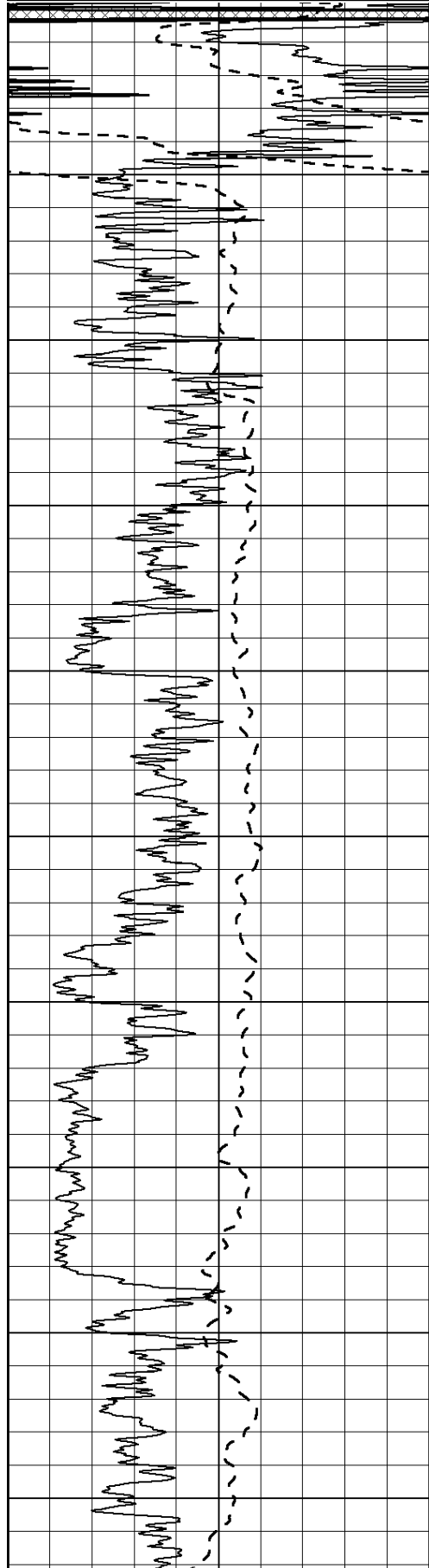
All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs,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

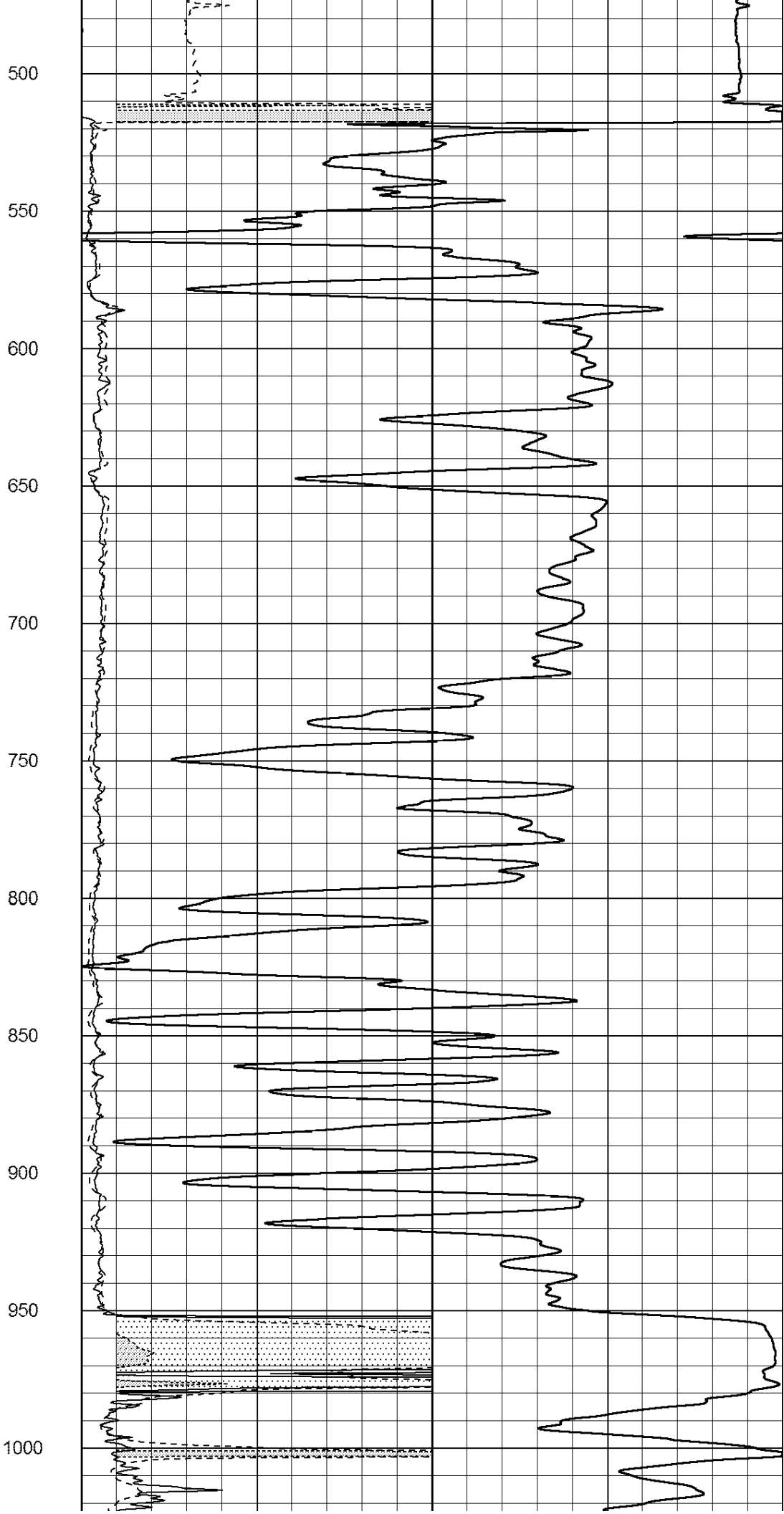
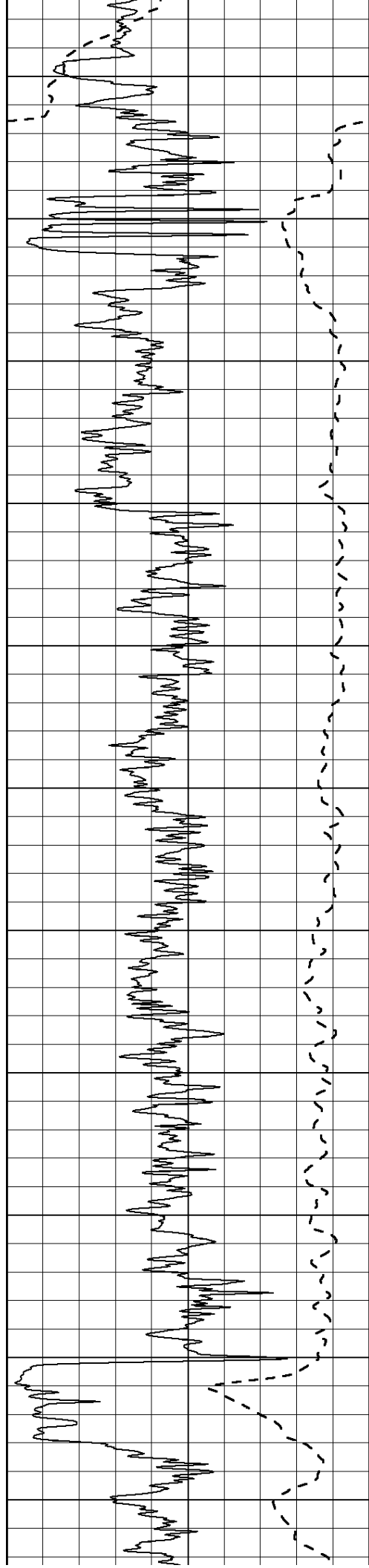
Comments

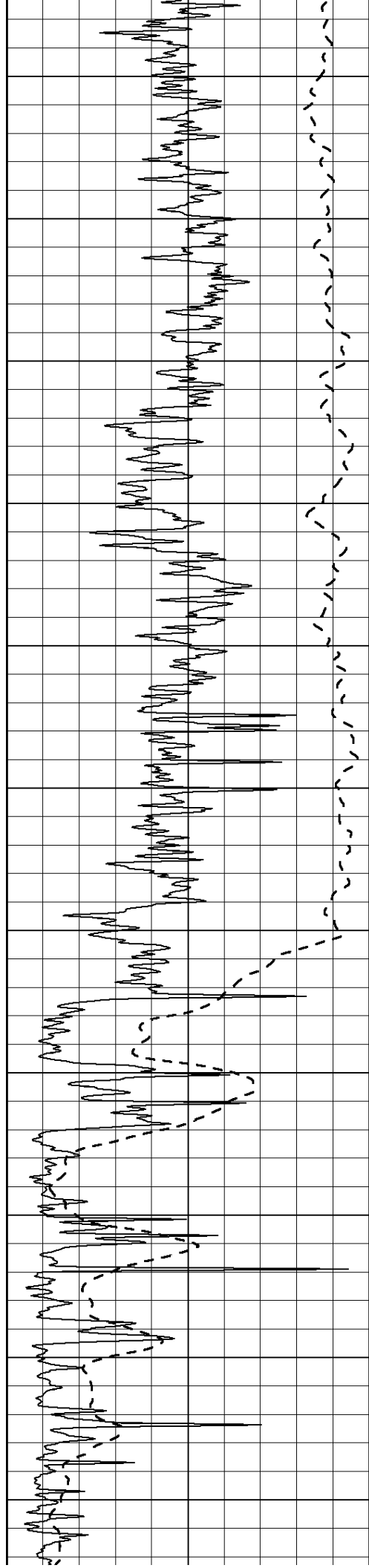
NABORS COMPLETION & PRODUCTION SERVICES CO.
785 (628 - 6395)
THANK YOU FOR YOUR BUSINESS
DIRECTIONS : SUSANK, KS. - 2 MILES WEST - SOUTH 1 1/2 MILE - WEST INTO

0	Gamma Ray (GAPI)	150
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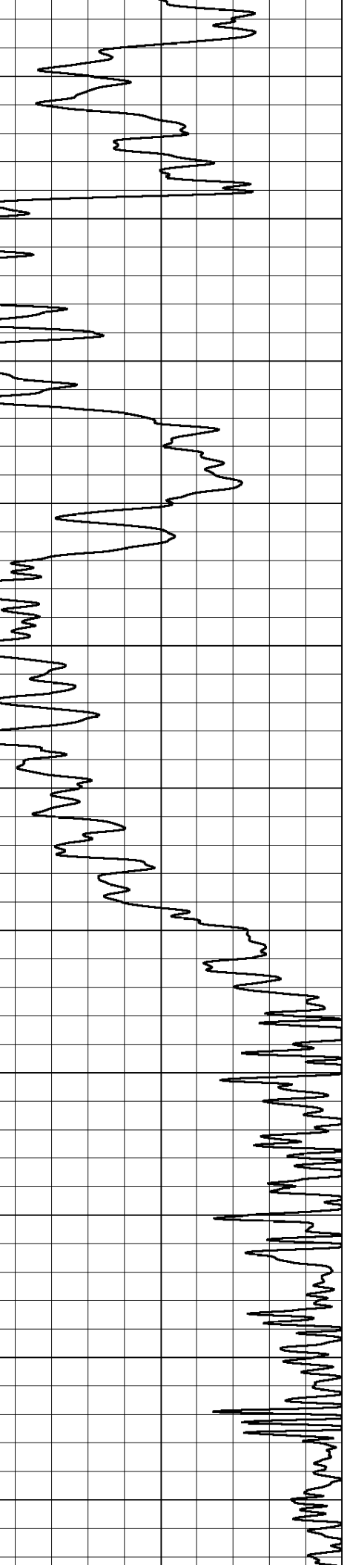
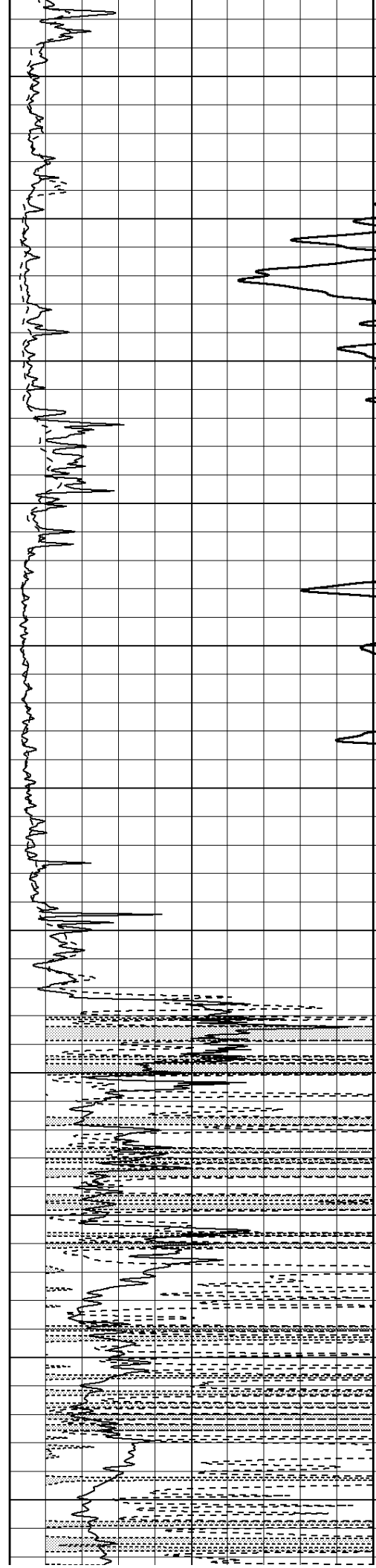
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0	Deep Induction (Ohm-m)	50
1000	CILD (mmho/m)	0
50	RILD X10 (Ohm-m)	500
50	RLL3 X10 (Ohm-m)	500

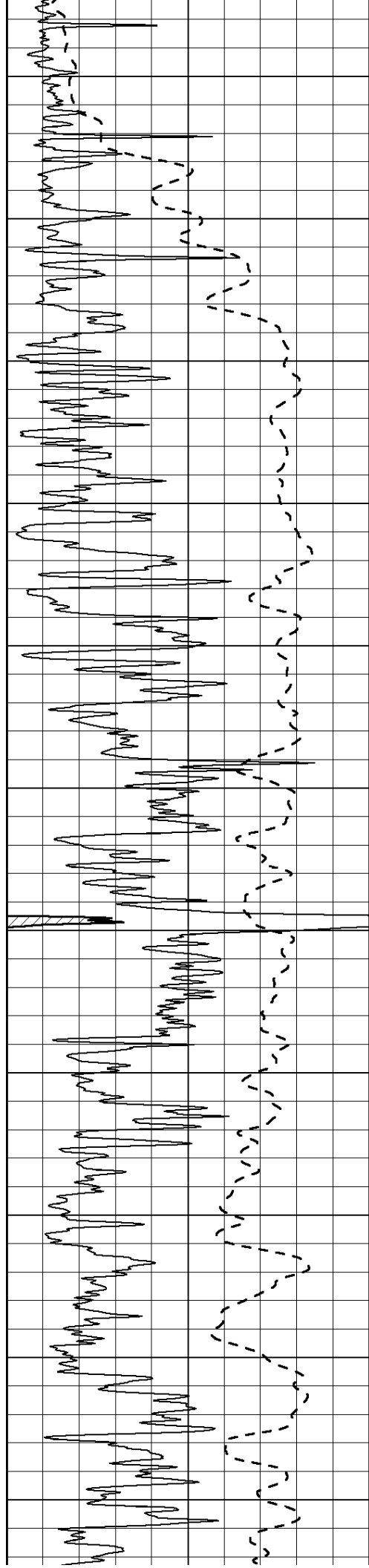




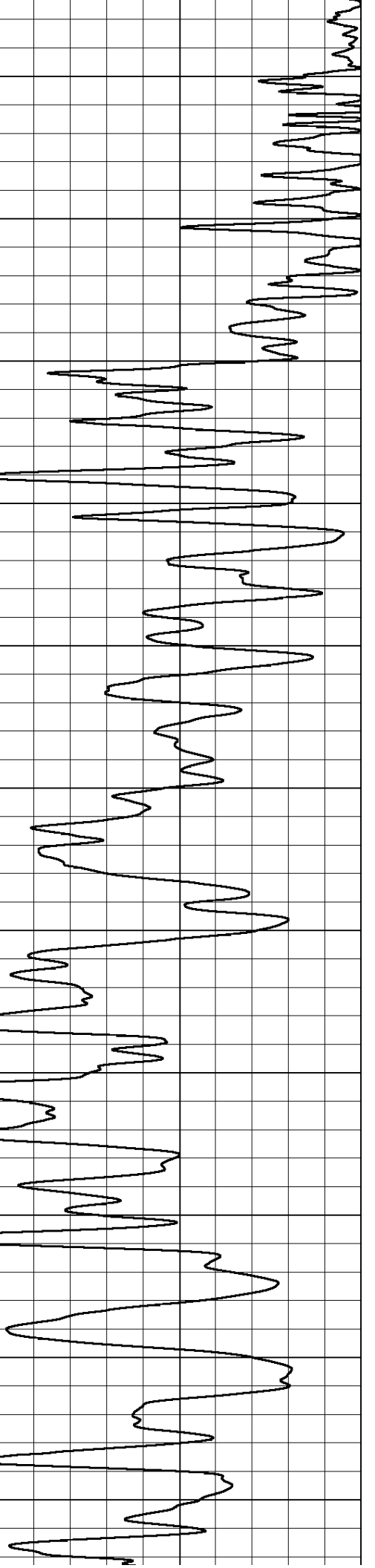
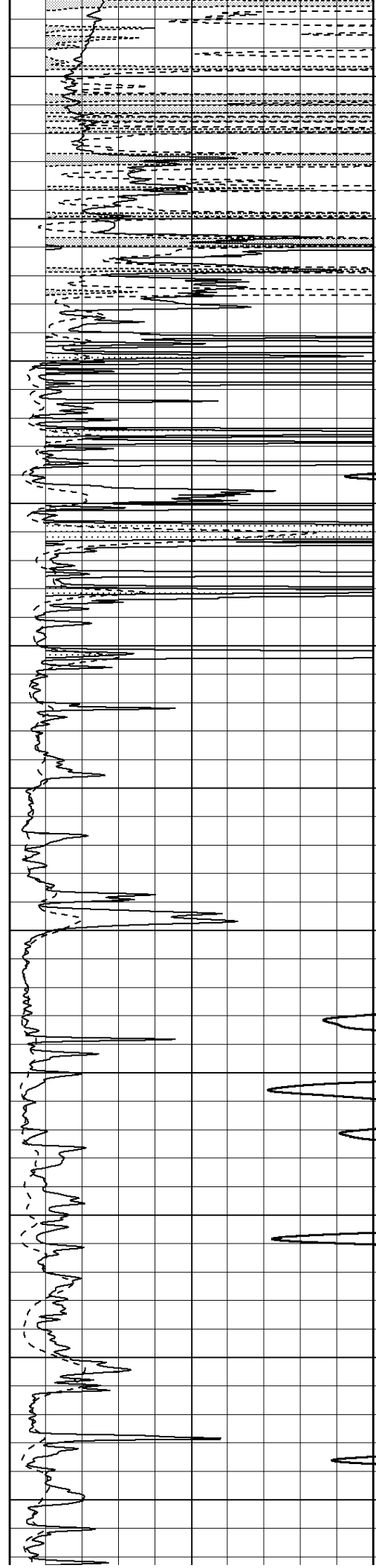


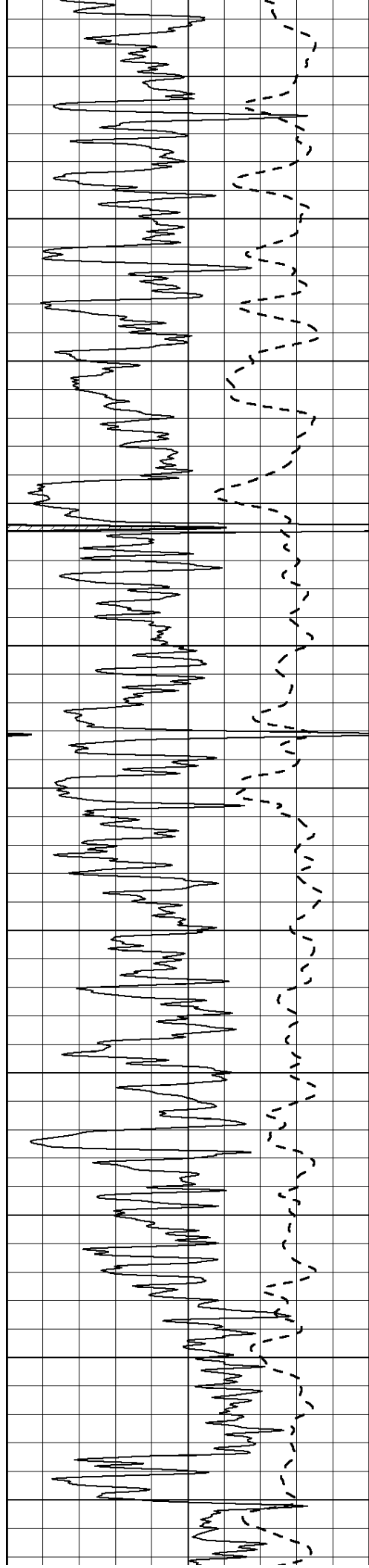
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1100
1150
1200
1250
1300
1350
1400
1450
1500
1550



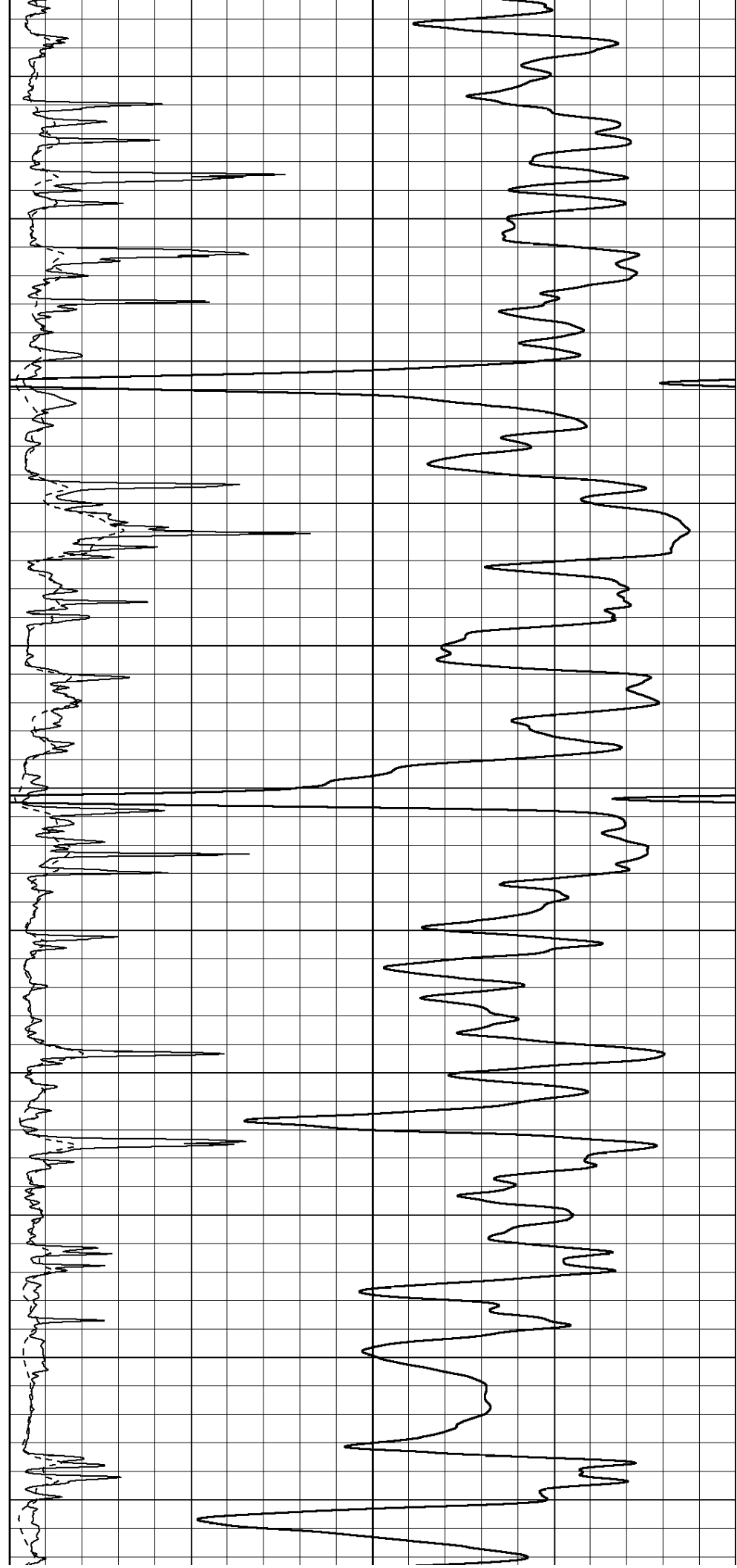


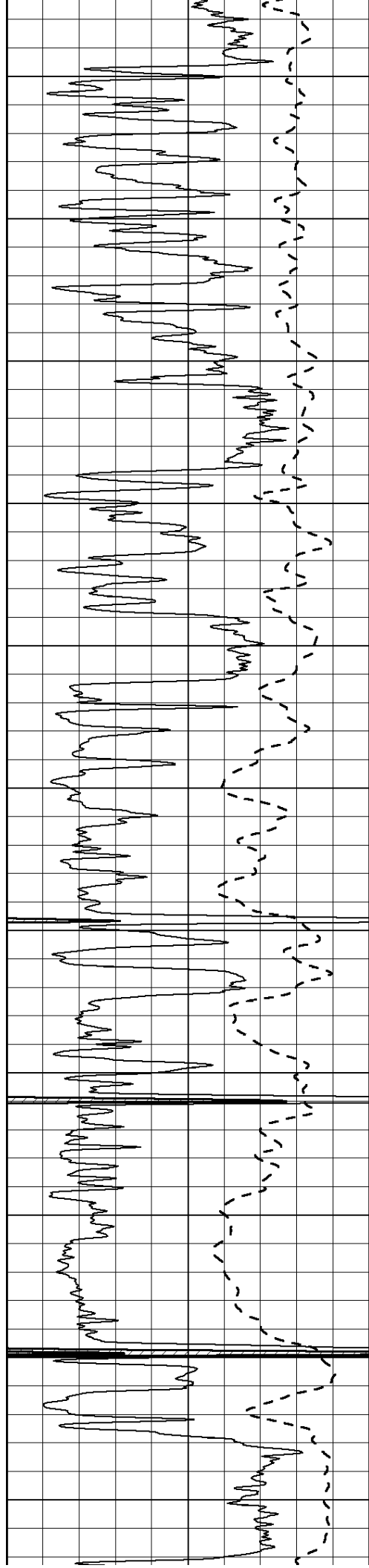
1600
1650
1700
1750
1800
1850
1900
1950
2000
2050
2100





2150
2200
2250
2300
2350
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2550
2600
2650





2700

2750

2800

2850

2900

2950

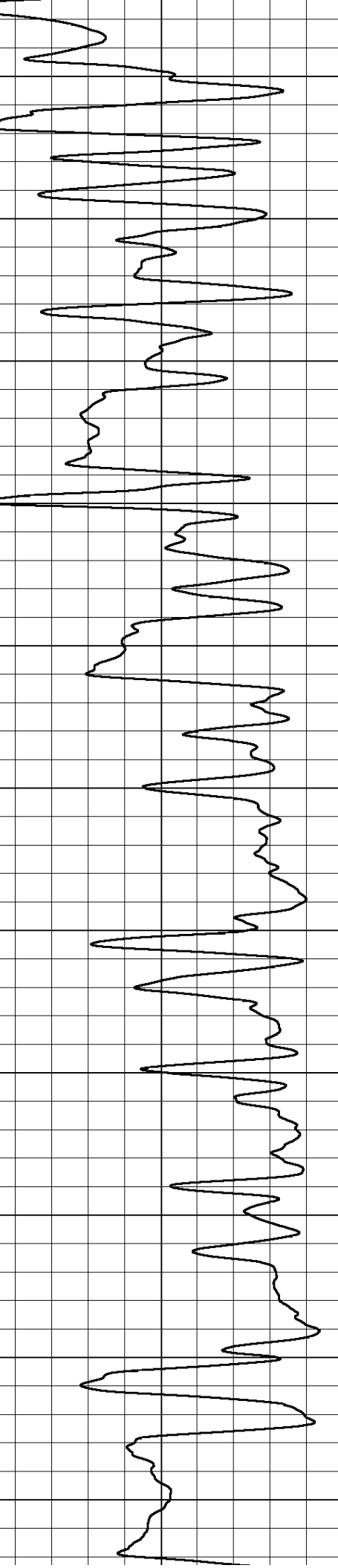
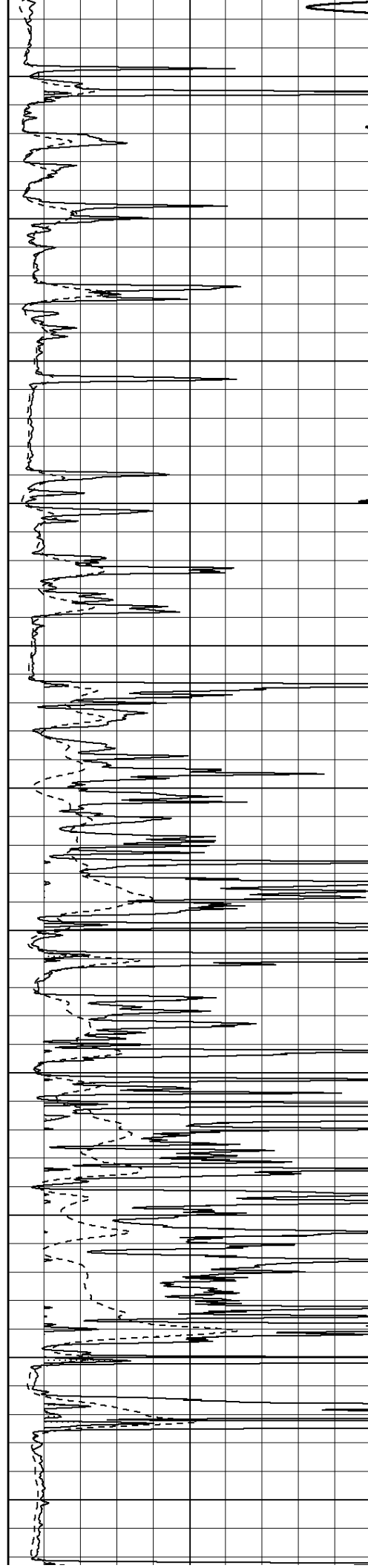
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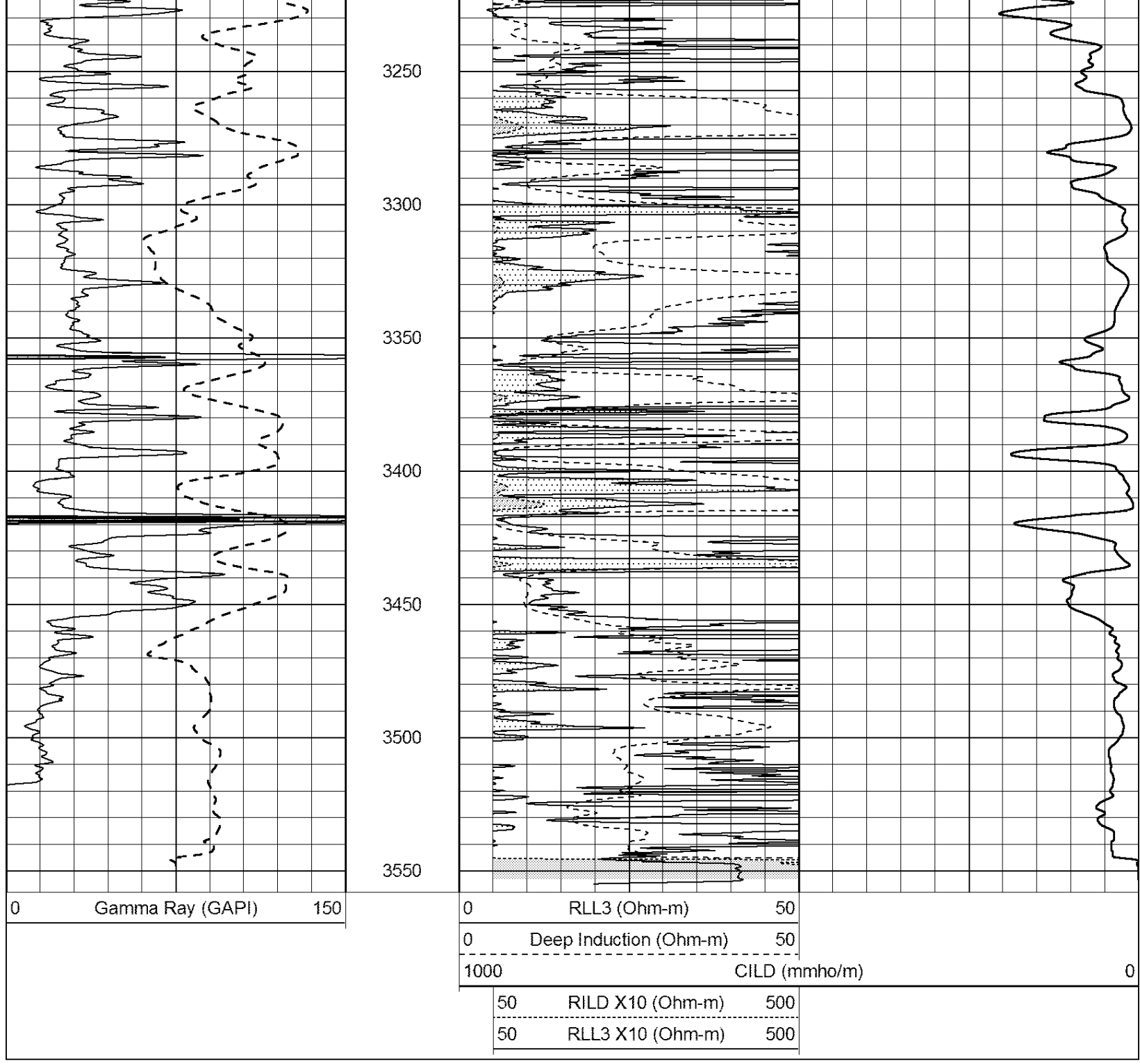
3050

3100

3150

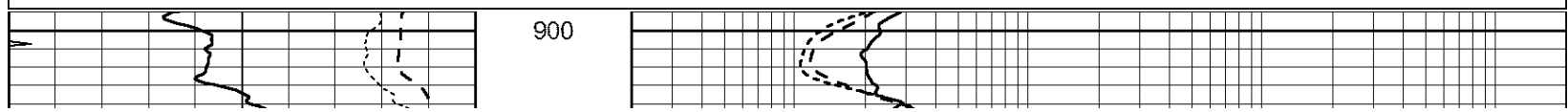
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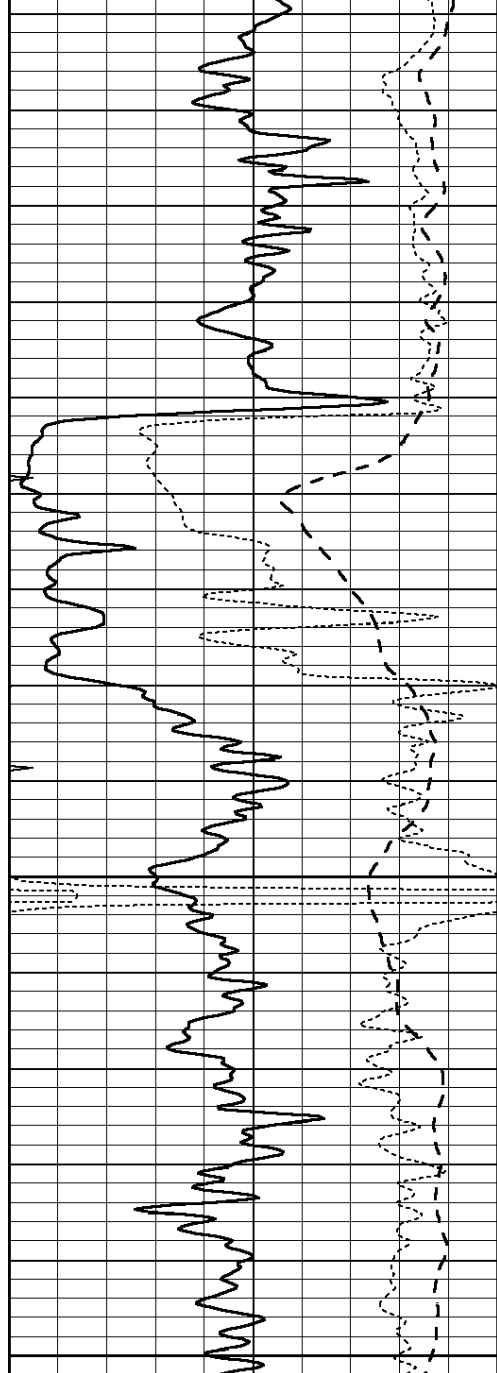




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 Dataset Pathname: pass3.4
 Presentation Format: _dil
 Dataset Creation: Sun Jul 27 18:40:58 2014
 Charted by: Depth in Feet scaled 1:240

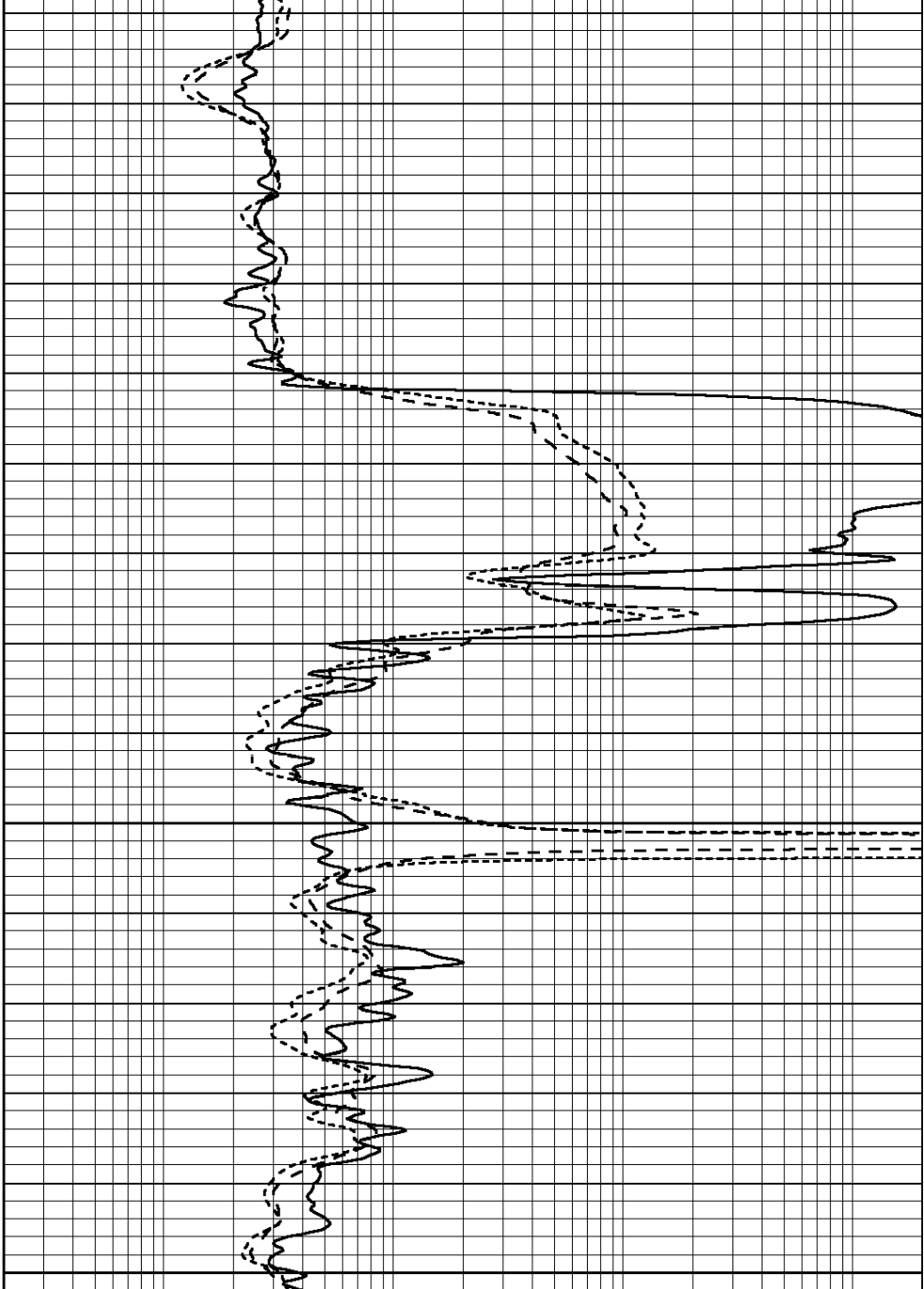
0	GAMMA RAY (GAPI)	150	0.2	RLL3 (Ohm-m)	2000
-100	SP (mV)	100	0.2	DEEP INDUCTION (Ohm-m)	2000
-250	RxoRt	50	0.2	MEDIUM INDUCTION (Ohm-m)	2000
0	MINMK	20			





950
1000
1050

0	GAMMA RAY (GAPI)	150
-100	SP (mV)	100
-250	RxoRt	50
0	MINMK	20

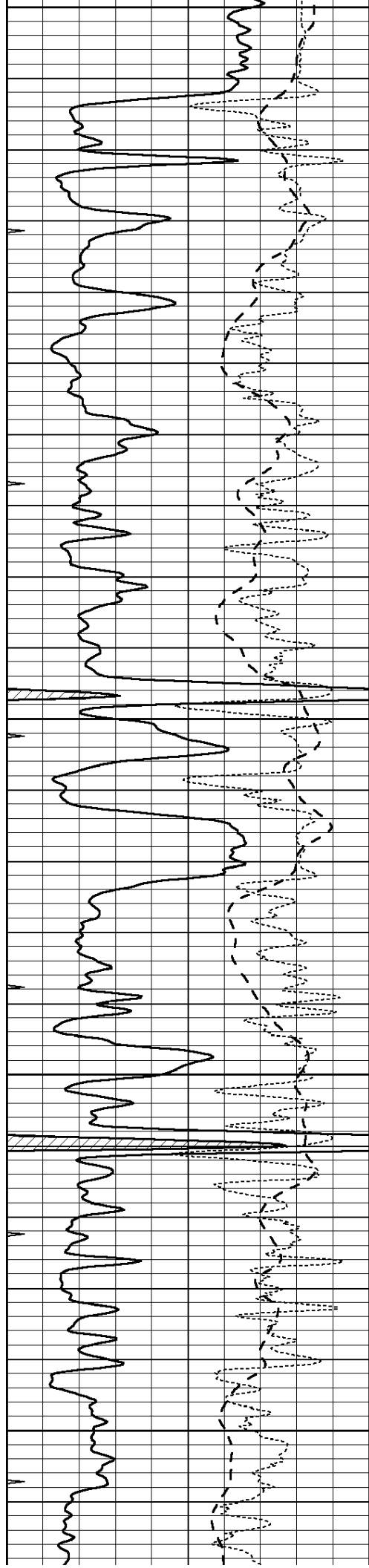


0.2	RLL3 (Ohm-m)	2000
0.2	DEEP INDUCTION (Ohm-m)	2000
0.2	MEDIUM INDUCTION (Ohm-m)	2000

Database File: 24713ddn.db
 Dataset Pathname: pass3.2
 Presentation Format: _dil
 Dataset Creation: Sun Jul 27 17:34:18 2014 by Calc Open-Cased 090629
 Charted by: Depth in Feet scaled 1:240

0	GAMMA RAY (GAPI)	150
-100	SP (mV)	100
-250	RxoRt	50
0	MINMK	20

0.2	RLL3 (Ohm-m)	2000
0.2	DEEP INDUCTION (Ohm-m)	2000
0.2	MEDIUM INDUCTION (Ohm-m)	2000



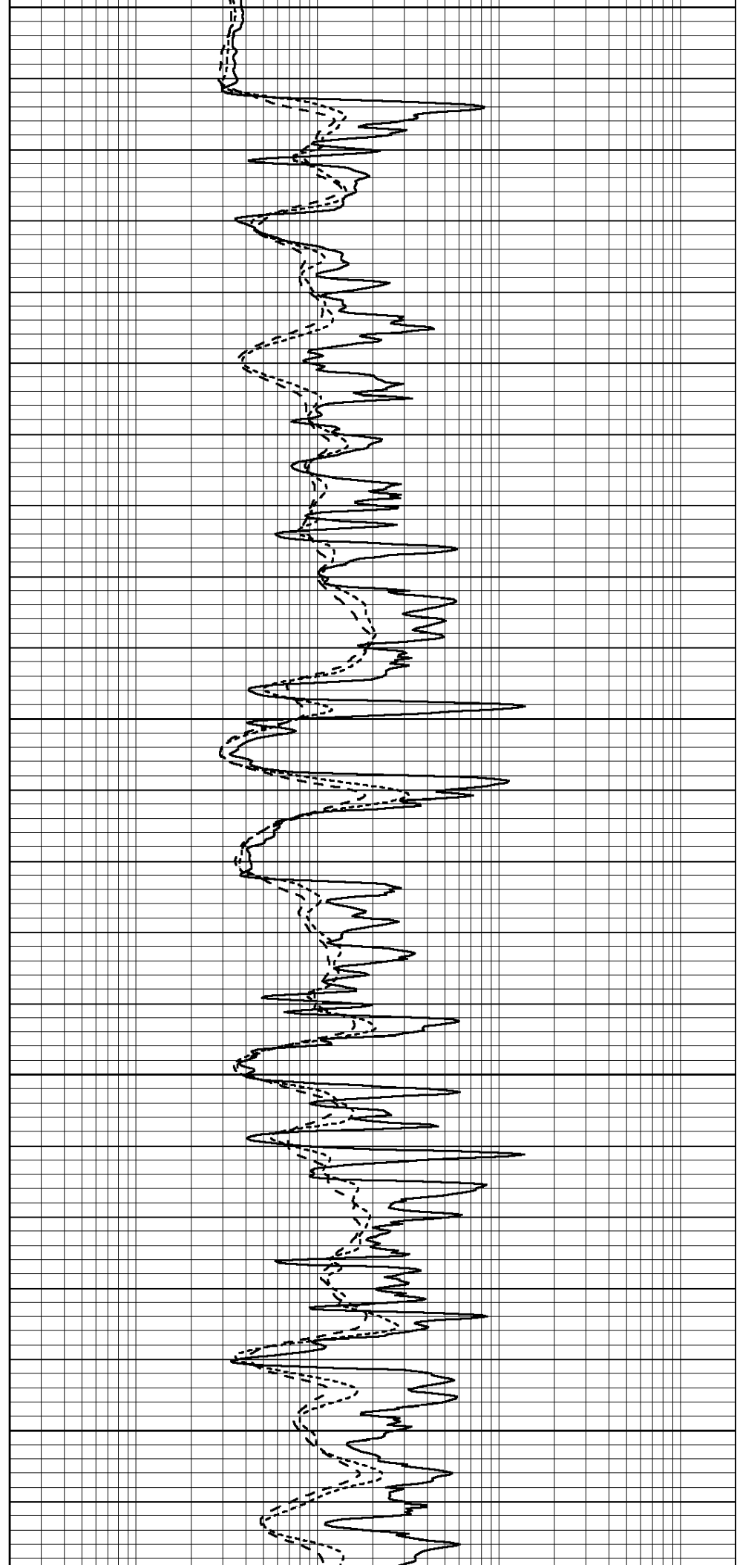
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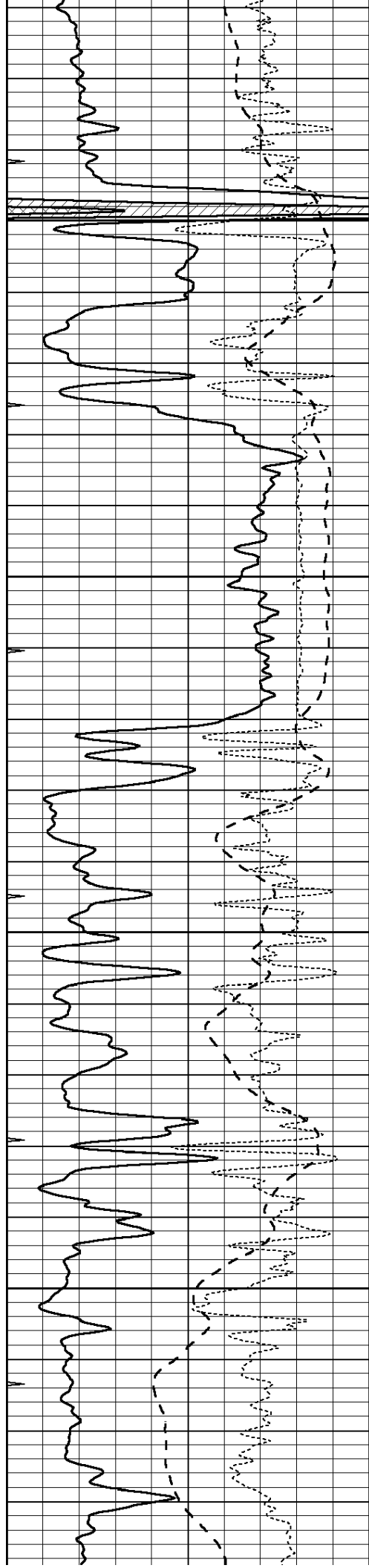
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3000

3050

3100



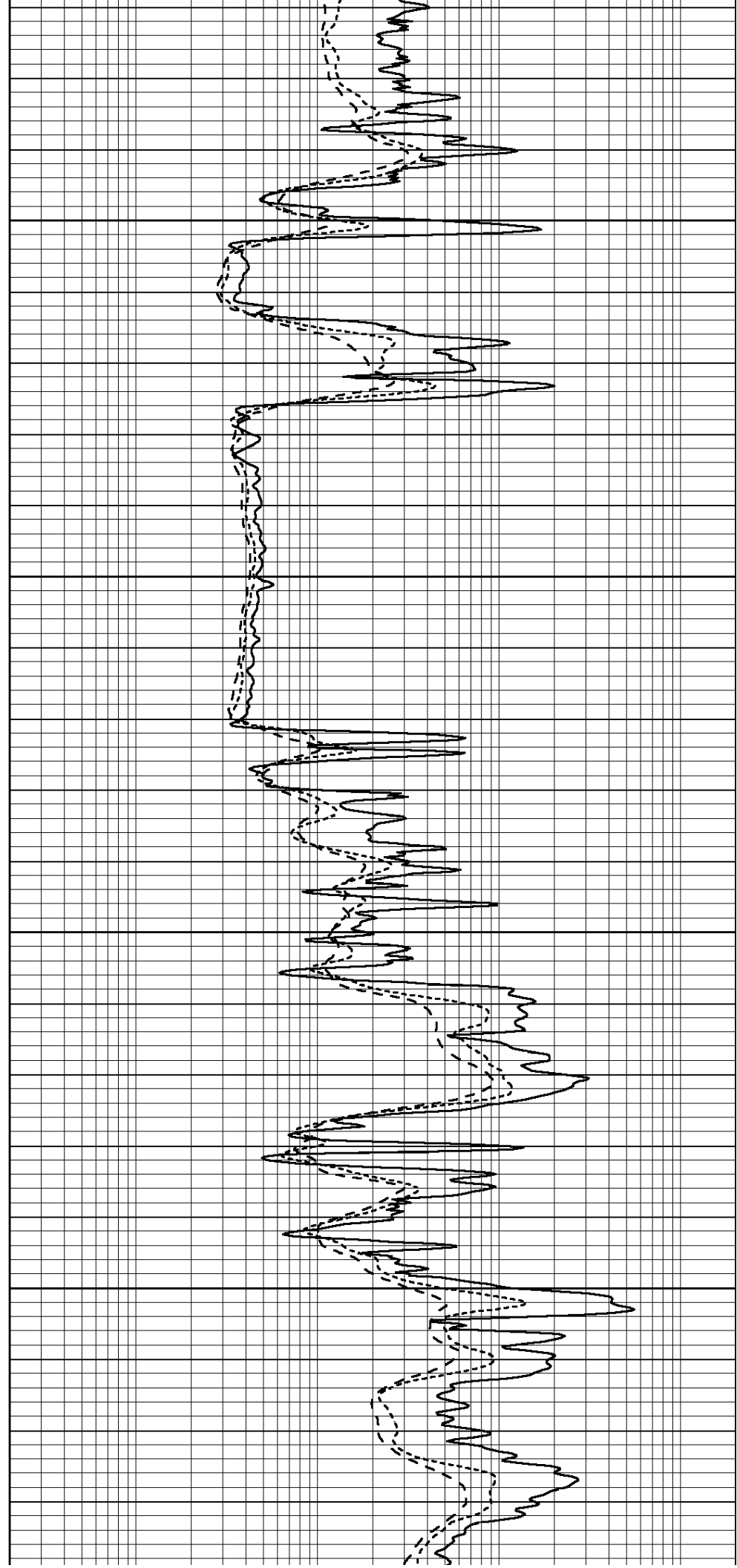


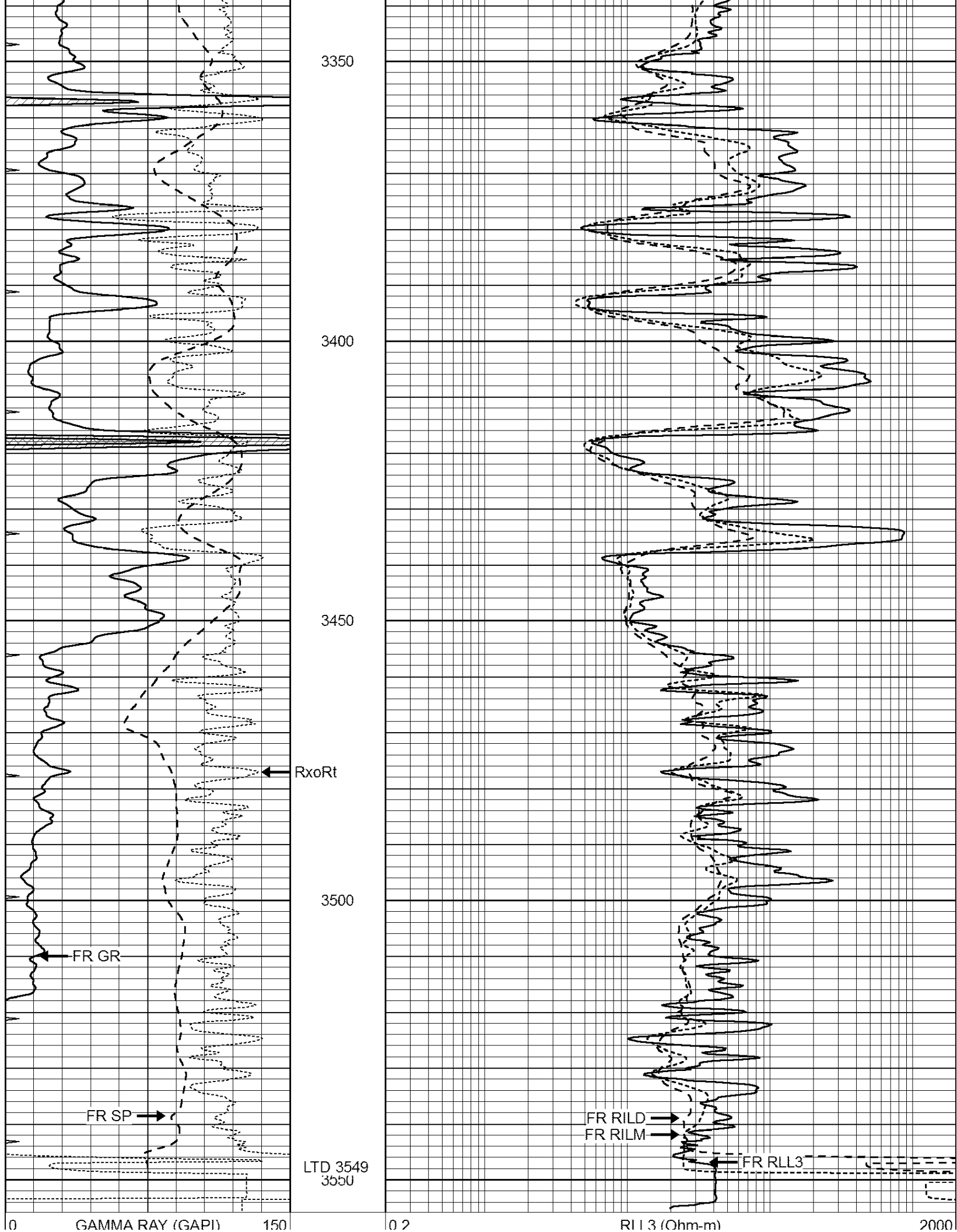
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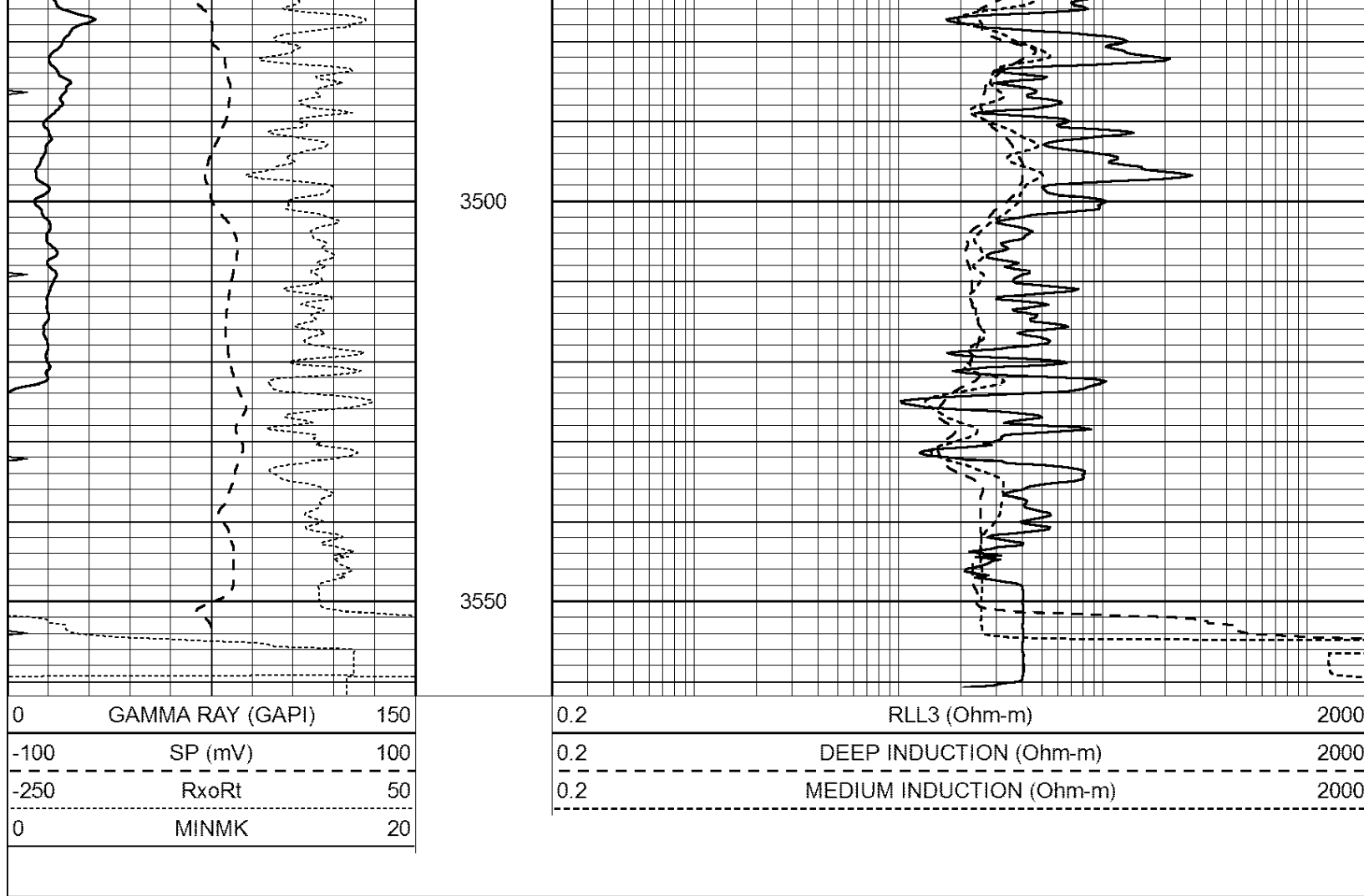
3200

3250

3300







Calibration Report

Database File: 24713ddn.db
 Dataset Pathname: pass3.4
 Dataset Creation: Sun Jul 27 18:40:58 2014

Dual Induction Calibration Report

Serial-Model: PROBE7-DILG
 Surface Cal Performed: Thu Aug 29 12:01:20 2013
 Downhole Cal Performed: Sat Jan 19 19:51:38 2013
 After Survey Verification Performed: Sat Jan 19 19:51:38 2013

Surface Calibration

Loop:	Readings			References			Results	
	Air	Loop	V	Air	Loop	mmho/m	m	b
Deep	0.793	0.790	V	0.000	400.000	mmho/m	500.000	20.000
Medium	0.992	1.002	V	0.000	464.000	mmho/m	520.000	-24.000
Internal:	Zero	Cal		Zero	Cal		m	b
Deep	0.041	0.642	V	0.000	400.000	mmho/m	664.874	-27.011
Medium	0.035	0.802	V	0.000	464.000	mmho/m	604.936	-21.367

Downhole Calibration

	Readings			References			Results	
	Zero	Cal	mmho/m	Zero	Cal	mmho/m	m'	b'
Deep	135384.000	27094.500	mmho/m	135400.000	27082.400	mmho/m	1.000	-19.259
Medium	-47330.100	-9381.740	mmho/m	-47327.100	-9389.280	mmho/m	1.000	-10.154

LL3	7.322	V	1400.000	Ohm-m
	0.038	V	20.000	Ohm-m
	-7.273	V	4000.000	mmho-m

After Survey Verification								
	Readings			Targets			Results	
	Zero	Cal		Zero	Cal		m'	b'
Deep	0.000	0.000	mmho/m	135384.000	27094.500	mmho/m	1.000	0.000
Medium	0.000	0.000	mmho/m	-47330.100	-9381.740	mmho/m	1.000	0.000
LL3		0.000	Ohm-m		1400.000	Ohm-m		
		0.000	Ohm-m		20.000	Ohm-m		
		0.000	mmho-m		4000.000	mmho-m		

Compensated Density Calibration Report

Serial-Model:	GEAR5-GEARHART
Source / Verifier:	147 / 147
Master Calibration Performed:	Fri Jul 04 19:27:51 2014
Before Survey Verification Performed:	
After Survey Verification Performed:	

Master Calibration						
	Density		Far Detector		Near Detector	
	Magnesium	1.710	g/cc	943.83	576.01	cps
Aluminum	2.590	g/cc	212.01	399.19	cps	
Spine Angle = 76.20			Density/Spine Ratio = 0.572			
	Size		Reading			
Small Ring	8.40	in	1.64	V		
Large Ring	14.00	in	2.93	V		

Before Survey Verification						
	Target		Measured			
			g/cc			
		g/cc				g/cc
		g/cc				g/cc

After Survey Verification						
	Target		Measured			
			g/cc			
		g/cc				g/cc
		g/cc				g/cc

Compensated Neutron Calibration Report

Serial Number:	080620
Tool Model:	Probe

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		

Short Space
Long Space

cps
cps

pu
pu

pu

Gamma Ray Calibration Report

Serial Number:	46001	
Tool Model:	Probe1	
Performed:	Sun Jul 27 16:50:31 2014	
Calibrator Value:	1.0	GAPI
Background Reading:	0.0	cps
Calibrator Reading:	1.0	cps
Sensitivity:	0.2300	GAPI/cps