



**COMPLETION
& PRODUCTION
SERVICES CO.**

**DUAL
INDUCTION
LOG**

Company ANDERSON ENERGY, INC.
Well MADDEN #1
Field MADDEN WEST
County TREGO
State KANSAS

Company ANDERSON ENERGY, INC.
Well MADDEN #1
Field MADDEN WEST
County TREGO State KANSAS

Location: API # : 15-195-22904-0000
2005' FNL & 1790' FWL
SEC 17 TWP 14S RGE 21W
Permanent Datum GROUND LEVEL Elevation 2154
Log Measured From KELLY BUSHING 9' A.G.L.
Drilling Measured From KELLY BUSHING
Other Services
CDL/CNL
MEL
Elevation
K.B. 2163
D.F. 2161
G.L. 2154

Date	1/28/14
Run Number	ONE
Depth Driller	4018
Depth Logger	4021
Bottom Logged Interval	4019
Top Log Interval	00
Casing Driller	8 5/8" @ 300
Casing Logger	300
Bit Size	7 7/8"
Type Fluid in Hole	CHEMICAL MUD
Density / Viscosity	9.2/56
pH / Fluid Loss	10.5/7.2
Source of Sample	FLOWLINE
Rm @ Meas. Temp	.85 @ 55F
Rmt @ Meas. Temp	.63 @ 55F
Rmc @ Meas. Temp	1.02 @ 55F
Source of Rmf / Rmc	MEASUREMENT
Rm @ BHT	.40 @ 116F
Time Circulation Stopped	2 HOURS
Time Logger on Bottom	
Maximum Recorded Temperature	116F
Equipment Number	4010
Location	HAYS, KANSAS
Recorded By	JASON CAPPELLUCCI
Witnessed By	ROGER MARTIN

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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 NABORS, HAYS, KS. (785) 628-6395
DIRECTIONS:
OGALLAH, KS. - 10 SOUTH TO U. RD. - 3 EAST - SOUTH, EAST, & BACK WEST INTO

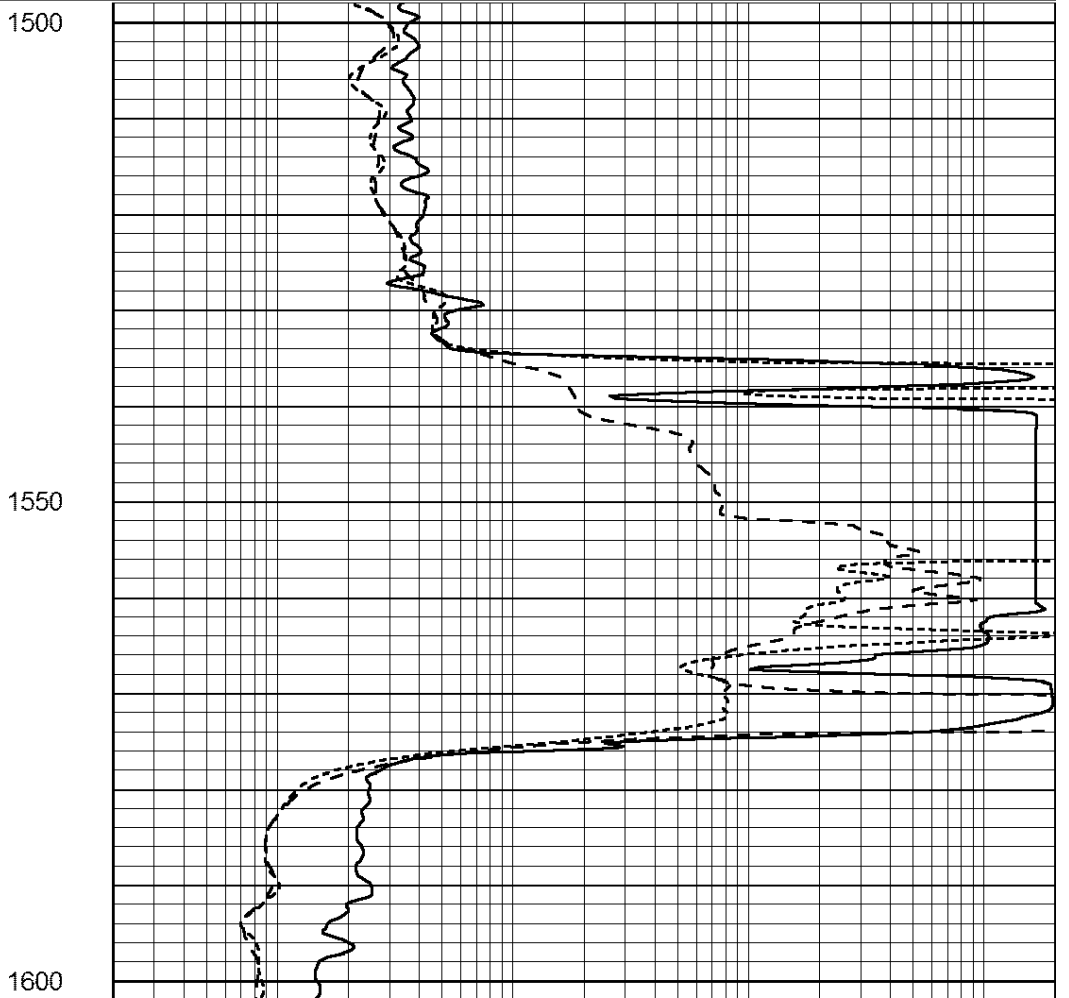
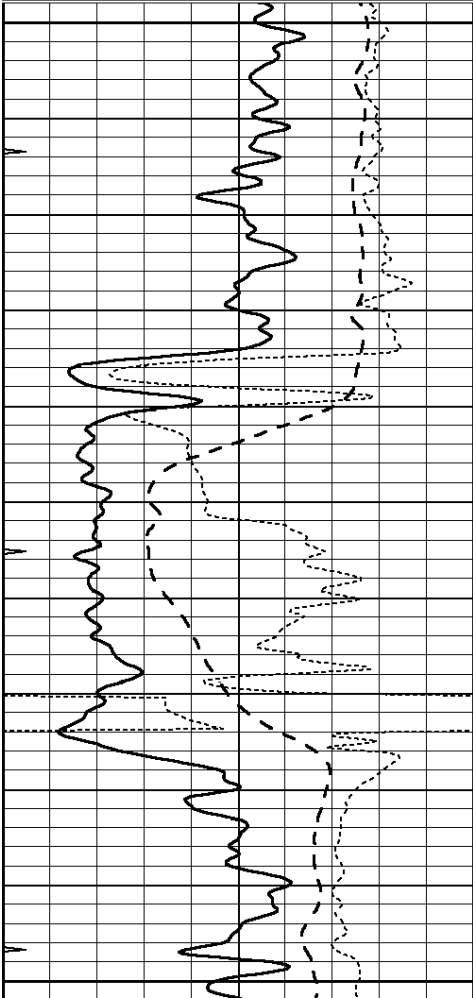


ANHYDRITE

Database File: 23884ddn.db
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 Presentation Format: _dil
 Dataset Creation: Tue Jan 28 20:19:11 2014 by Calc Open-Cased 090629
 Charted by: Depth in Feet scaled 1:240

0	GAMMA RAY (GAPI)	150
-100	SP (mV)	100
-250	Rxo/Rt	50
0	MINMK	20

0.2	SHALLOW GUARD (Ohm-m)	2000
0.2	DEEP INDUCTION (Ohm-m)	2000
0.2	MEDIUM INDUCTION (Ohm-m)	2000



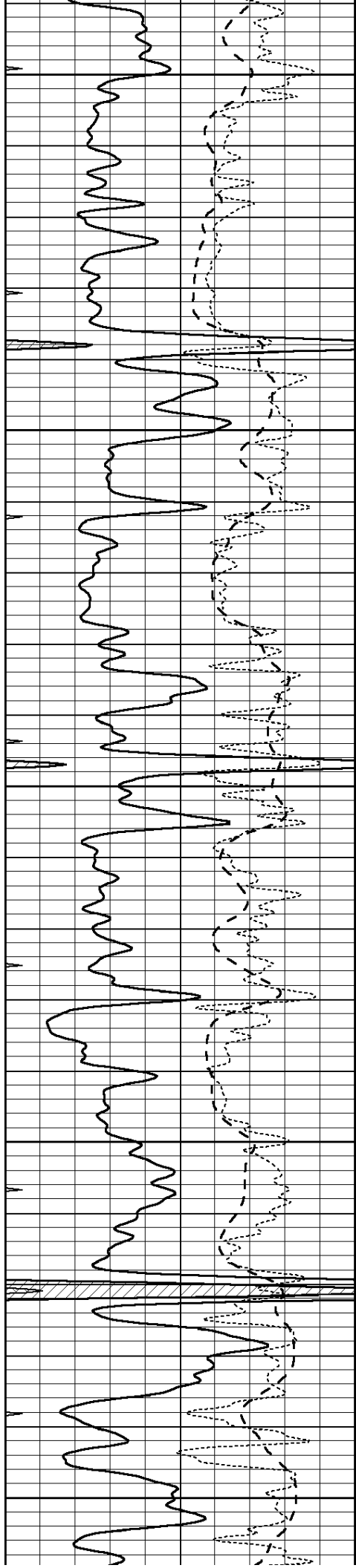
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-100	SP (mV)	100
-250	Rxo/Rt	50
0	MINMK	20

0.2	SHALLOW GUARD (Ohm-m)	2000
0.2	DEEP INDUCTION (Ohm-m)	2000
0.2	MEDIUM INDUCTION (Ohm-m)	2000



MAIN SECTION

Database File: 23884ddn.db
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 Presentation Format: _dil
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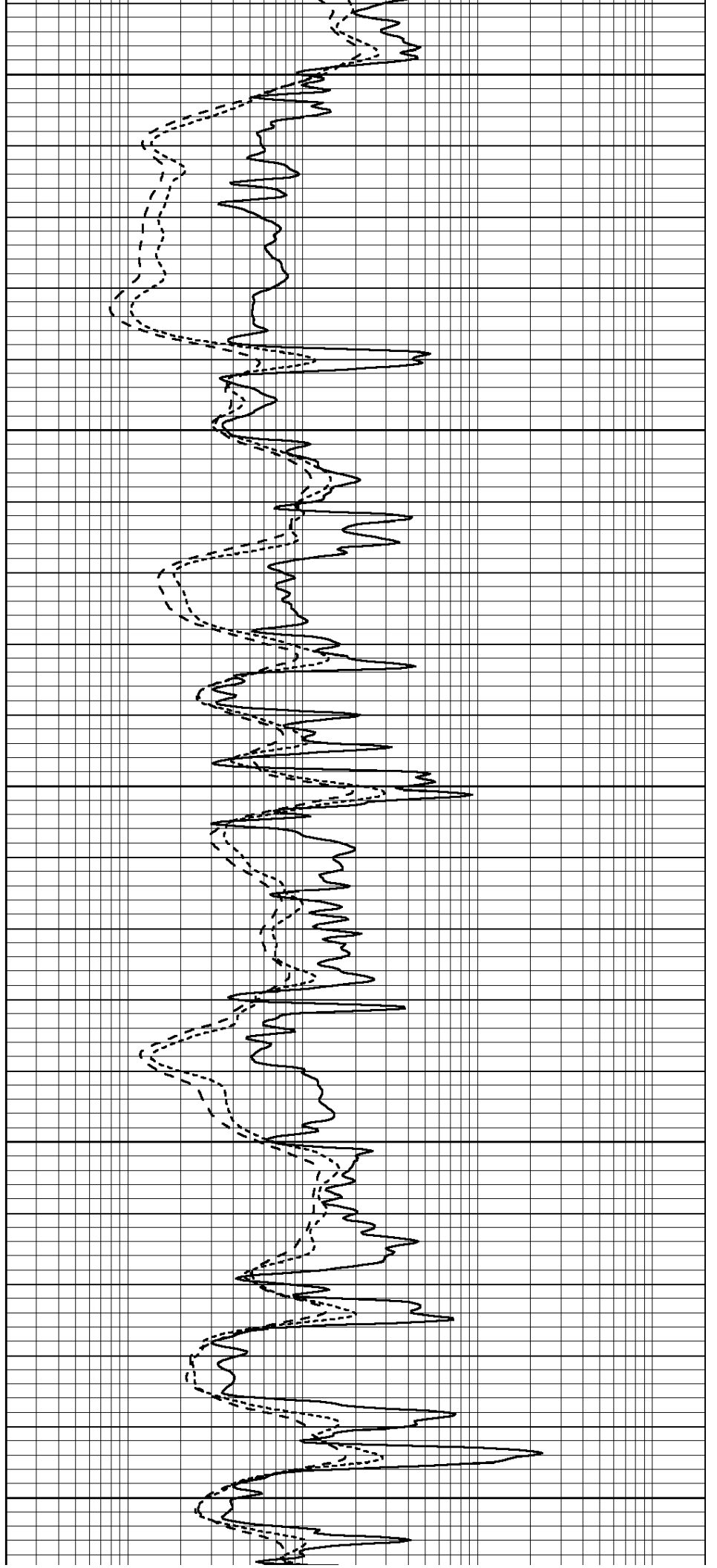
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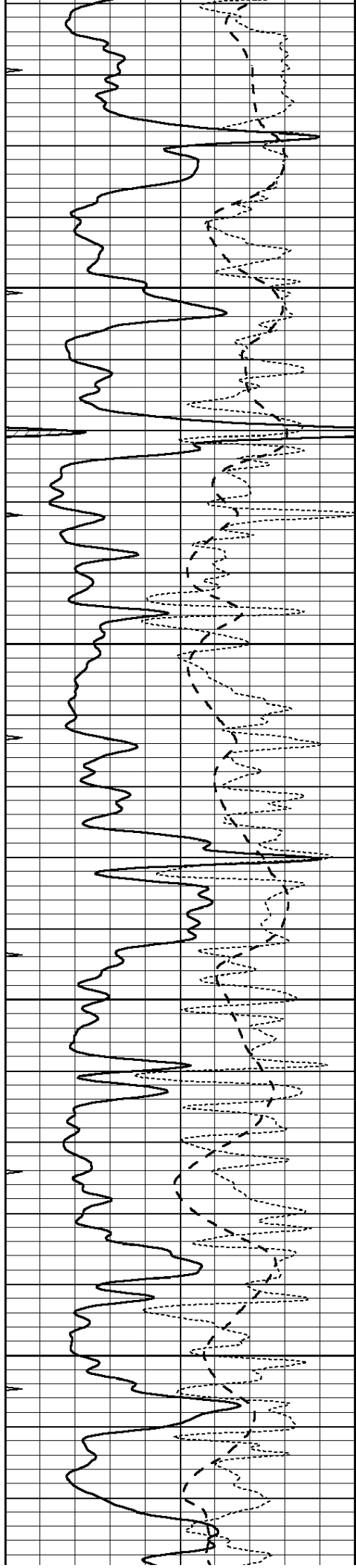
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3450

3500



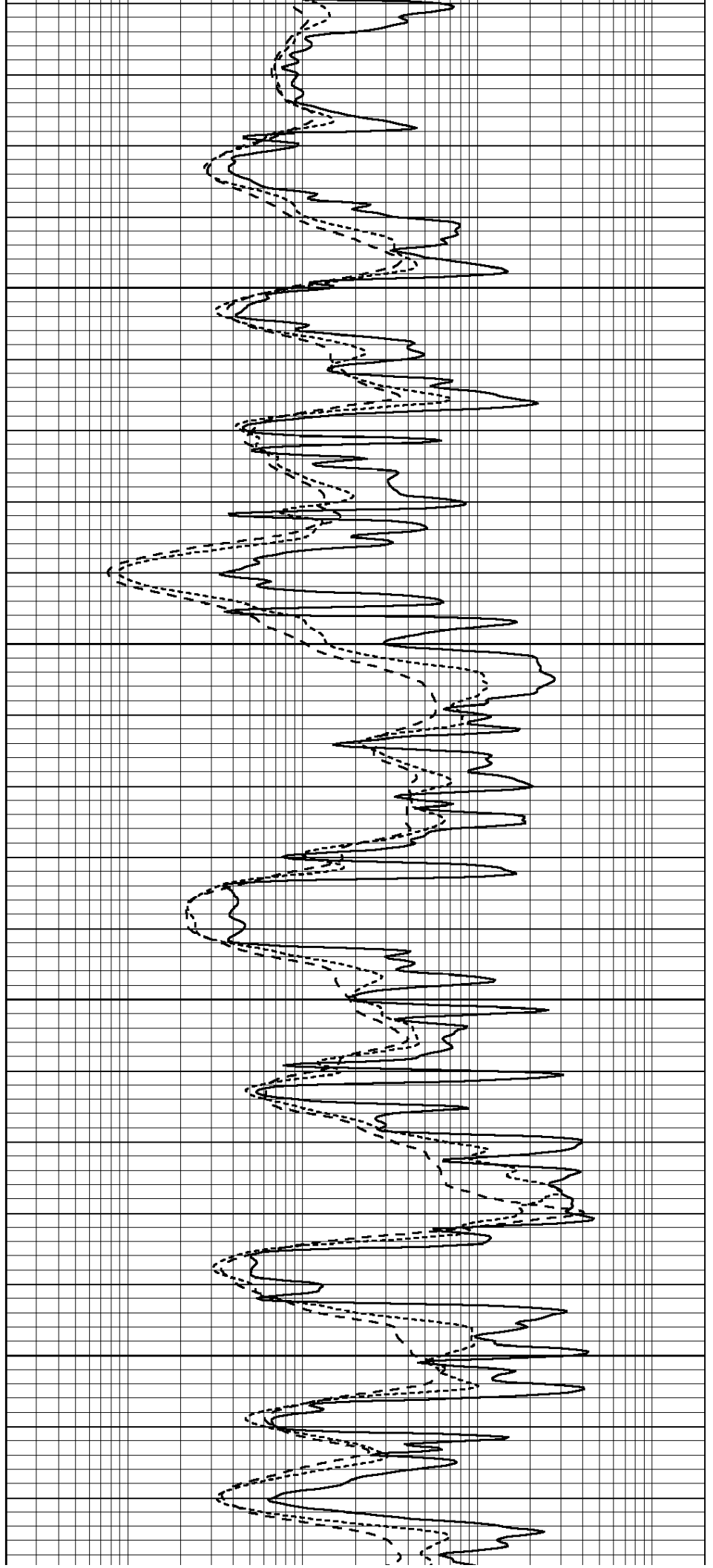


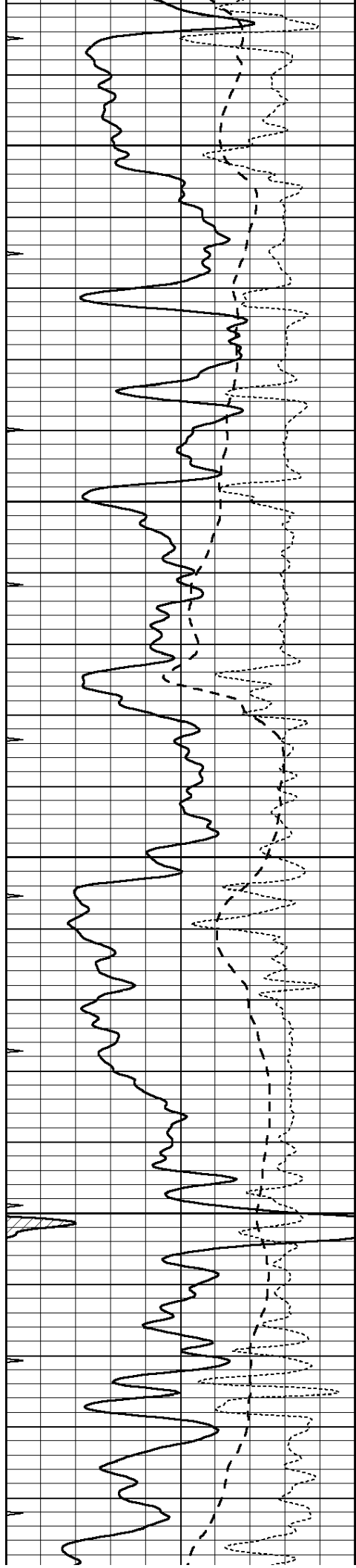
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3600

3650

3700





3750

3800

3850

3900

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0.005

0.010

0.015

0.020

0.025

0.030

0.035

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0.075

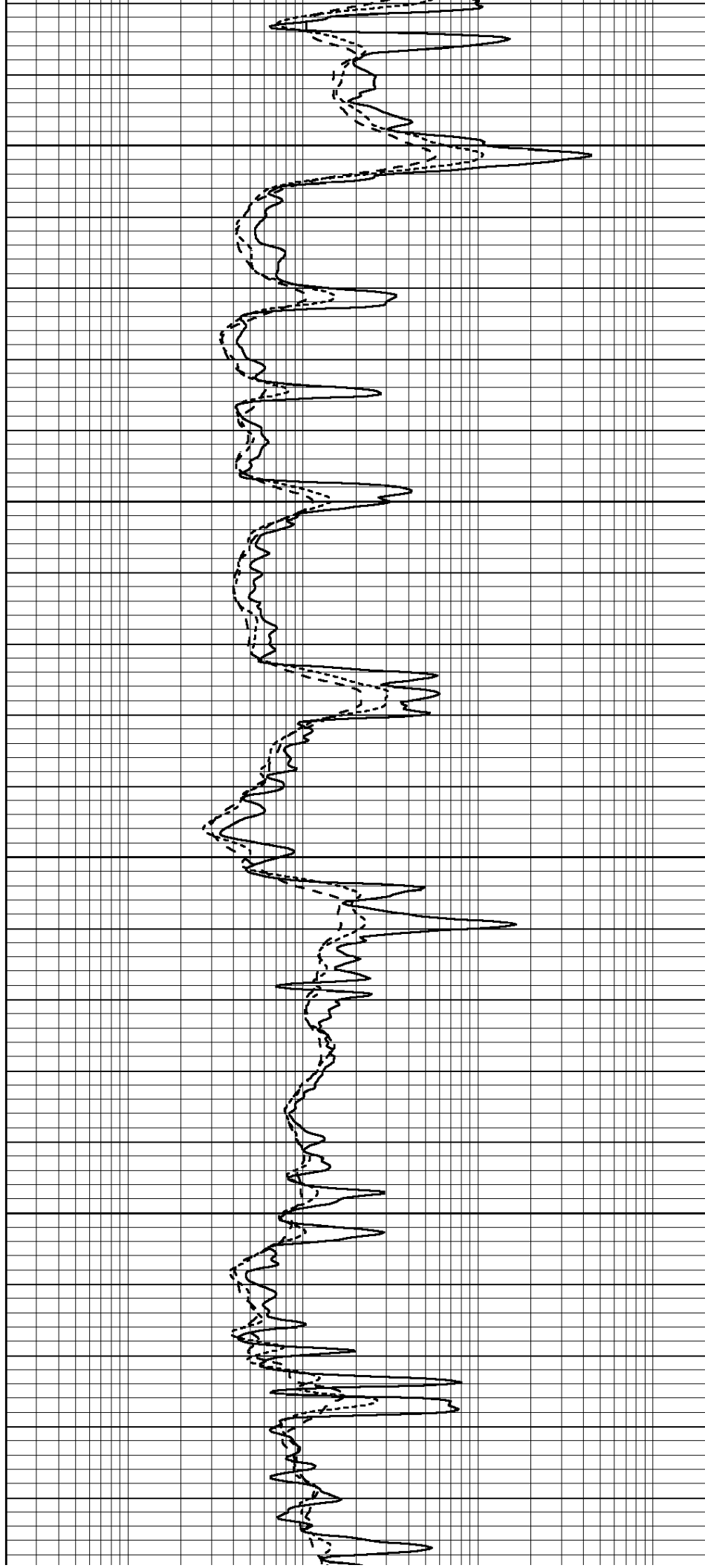
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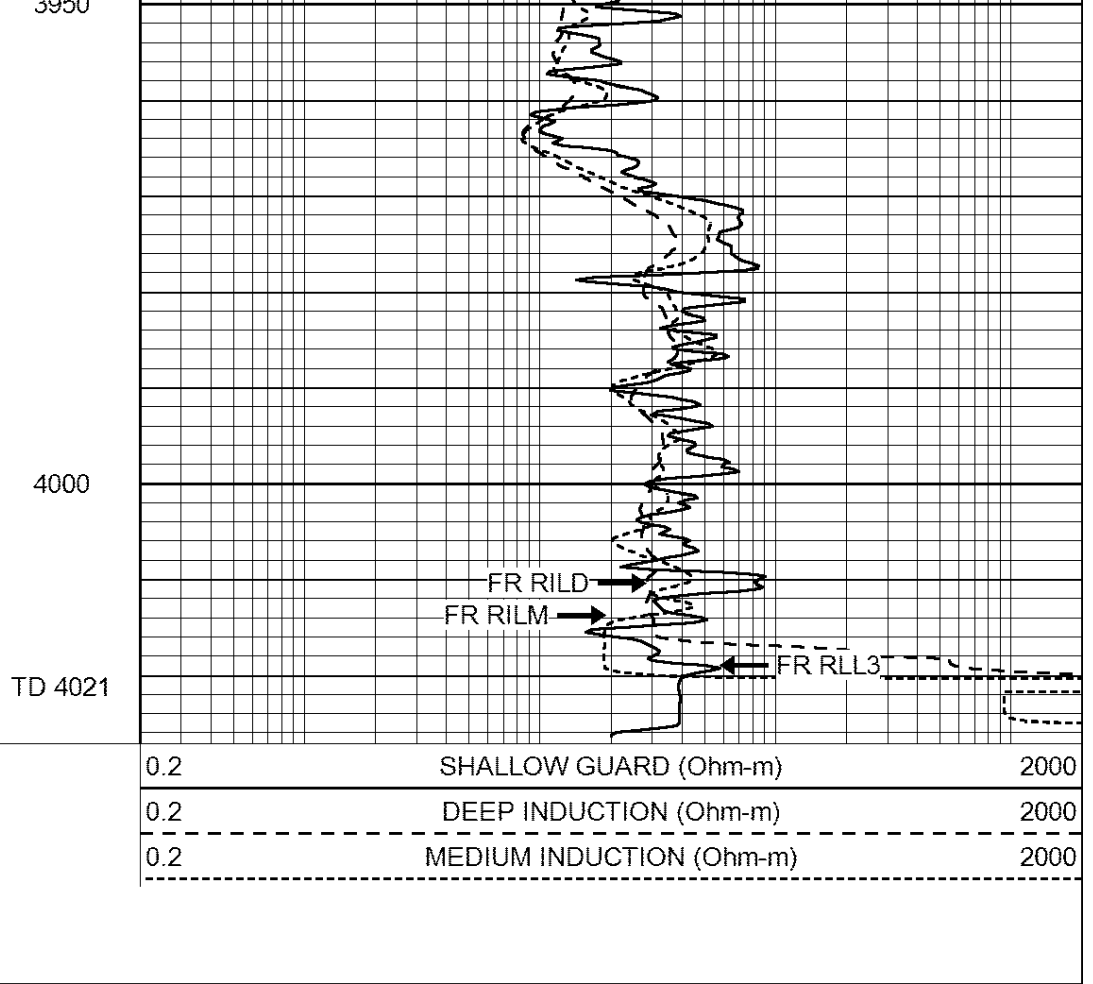
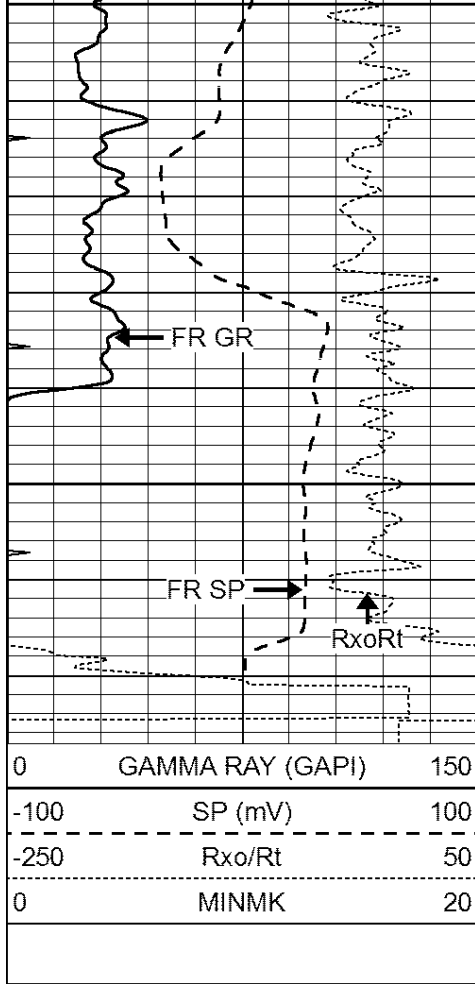
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0.090

0.095

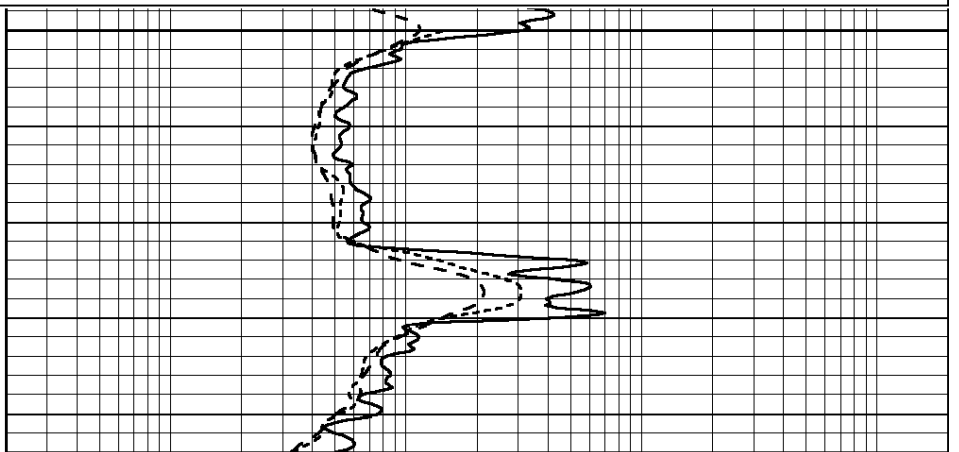
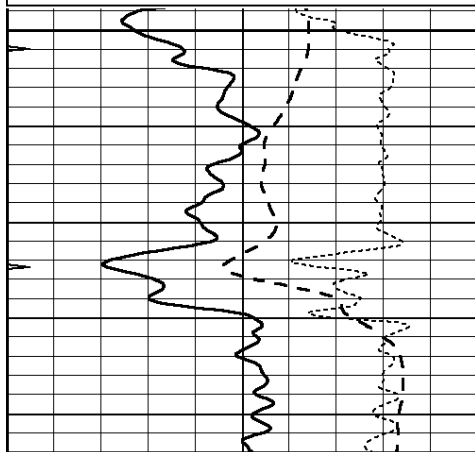
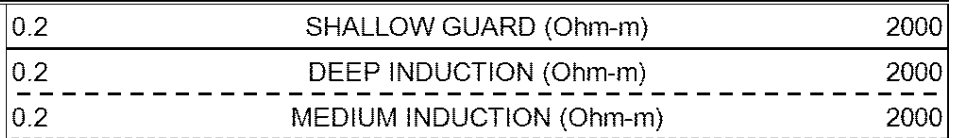
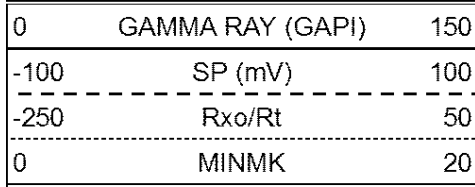
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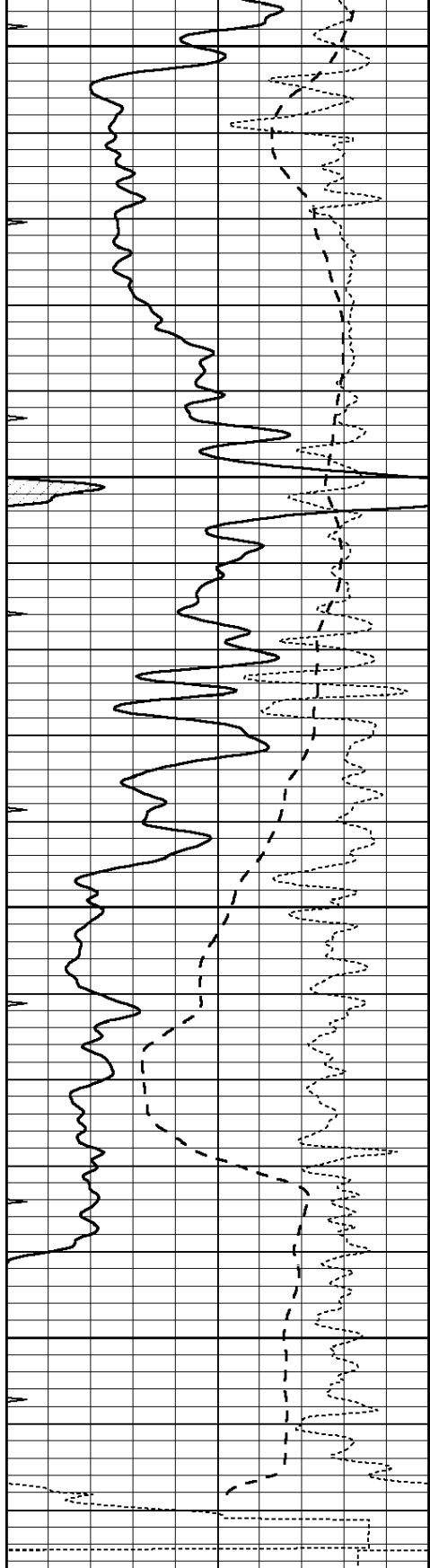




REPEAT SECTION

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 Presentation Format: _dil
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 Charted by: Depth in Feet scaled 1:240





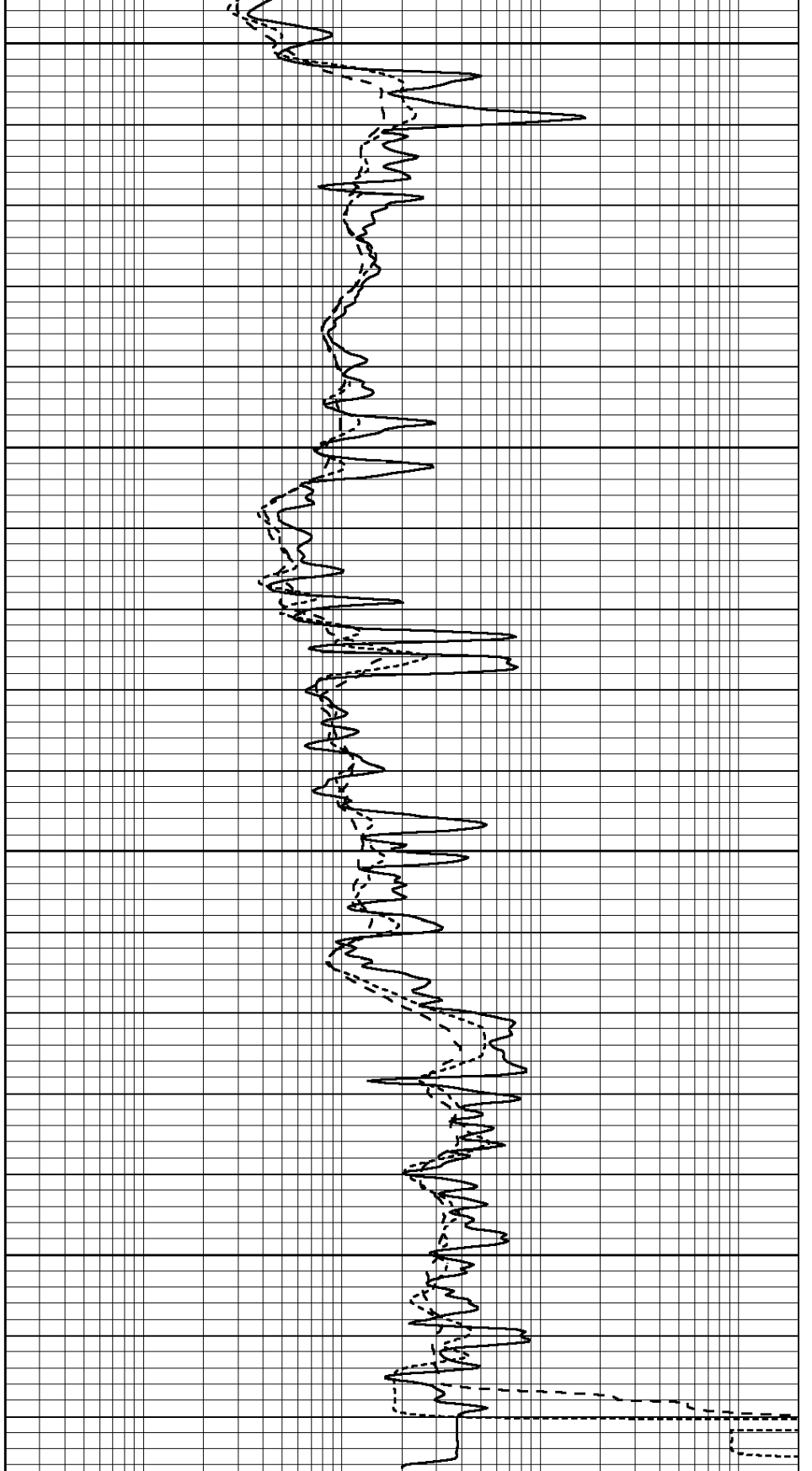
0	GAMMA RAY (GAPI)	150
-100	SP (mV)	100
-250	Rxo/Rt	50
0	MINMK	20

3850

3900

3950

4000



0.2	SHALLOW GUARD (Ohm-m)	2000
0.2	DEEP INDUCTION (Ohm-m)	2000
0.2	MEDIUM INDUCTION (Ohm-m)	2000

Dual Induction Calibration Report

Serial-Model: PROBE8-DILG
 Surface Cal Performed: Fri Aug 01 06:33:19 2008
 Downhole Cal Performed: Mon Jul 28 11:08:27 2008
 After Survey Verification Performed: Mon Jul 28 11:08:27 2008

Surface Calibration

Loop:	Readings			References			Results	
	Air	Loop		Air	Loop		m	b
Deep	0.015	0.648	V	0.000	400.000	mmho/m	632.616	-9.730
Medium	0.029	0.796	V	0.000	464.000	mmho/m	605.049	-17.680
Internal:	Zero	Cal		Zero	Cal		m	b
Deep	0.017	0.657	V	0.000	400.000	mmho/m	625.153	-10.619
Medium	0.016	0.757	V	0.000	464.000	mmho/m	625.992	-9.739

Downhole Calibration

	Readings			References			Results	
	Zero	Cal		Zero	Cal		m'	b'
Deep	0.000	0.000	mmho/m	2.011	405.777	mmho/m	1.000	0.000
Medium	0.000	0.000	mmho/m	7.590	503.393	mmho/m	1.000	0.000
LL3		7.500	V		1500.000	Ohm-m		
		0.000	V		20.000	Ohm-m		
		-7.200	V		3800.000	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: Wed Sep 18 03:03:09 2013
 Before Survey Verification Performed:
 After Survey Verification Performed:

Master Calibration

	Density		Far Detector	Near Detector	
Magnesium	1.710	g/cc	1075.98	532.39	cps
Aluminum	2.560	g/cc	286.51	422.88	cps
Spine Angle = 80.13			Density/Spine Ratio = 0.633		
	Size		Reading		
Small Ring	8.00	in	3.21	V	
Large Ring	14.00	in	5.46	V	

Before Survey Verification

	<u>Target</u>		<u>Measured</u>	
		g/cc g/cc g/cc		g/cc g/cc g/cc

After Survey Verification				
	<u>Target</u>		<u>Measured</u>	
		g/cc g/cc g/cc		g/cc g/cc g/cc

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

PRE-SURVEY VERIFICATION						
	Detector	Readings		Measured		Target
1)	Short Space		cps			
	Long Space		cps	pu		pu
2)	Short Space		cps			
	Long Space		cps	pu		
3)	Short Space		cps			
	Long Space		cps	pu		

POST-SURVEY VERIFICATION						
	Detector	Readings		Measured		Target
1)	Short Space		cps			
	Long Space		cps	pu		pu
2)	Short Space		cps			
	Long Space		cps	pu		pu
3)	Short Space		cps			
	Long Space		cps	pu		pu

Gamma Ray Calibration Report

Serial Number:	GR6	
Tool Model:	OPEN	
Performed:	Fri Nov 29 08:34:37 2013	
Calibrator Value:	150.0	GAPI
Background Reading:	0.0	cps
Calibrator Reading:	276.0	cps
Sensitivity:	0.6035	GAPI/cps