



**DUAL  
INDUCTION  
LOG**

Company DARRAH OIL COMPANY, LLC  
 Well BITTER C #11  
 Field TRAPP  
 County BARTON State KANSAS

Location: API #: 15-009-26343-0000  
 330' FNL & 1589' FEL  
 E2/N/E/N/W/E  
 SEC 18 TWP 16S RGE 13W  
 Permanent Datum GROUND LEVEL Elevation 1931  
 Log Measured From KELLY BUSHING 5' A.G.L  
 Drilling Measured From KELLY BUSHING  
 Other Services  
 CNL/CDL/PE  
 MEL/SON  
 Elevation  
 K.B. 1936  
 D.F. 1934  
 G.L. 1931

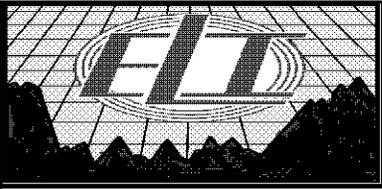
Date	4/7/22		
Run Number	ONE		
Depth Driller	3377		
Depth Logger	3376		
Bottom Logged Interval	3374		
Top Log Interval	2700		
Casing Driller	436		1
Casing Logger	436		
Bit Size	7 7/8		
Type Fluid in Hole	CHEMICAL MUD		CHLORIDES 6500 PPM
Density / Viscosity	9.1/51		
PH / Fluid Loss	9.0/8.2		
Source of Sample	FLOWLINE		
Rm @ Meas. Temp	.5@60F		
Rmt @ Meas. Temp	.38@60F		
Rmc @ Meas. Temp	.8@60F		
Source of Rmf / Rmc	MEASUREMENT		
Rm @ BHT	.27@110F		
Time Circulation Stopped	2 HOURS		
Time Logger on Bottom	////		
Maximum Recorded Temperature	110F		
Equipment Number	3802		
Location	HAYS, KANSAS		
Recorded By	TJ DREILING		
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 ELI WIRELINE SERVICES, HAYS, KS. ( 785 ) 628-6395  
 DIRECTIONS  
 -RUSSELL KANSAS SOUTH TO BARTON COUNTY LINE, SOUTH TO NW 210 RD.  
 -2 1/2 MILE EAST -SOUTH INTO

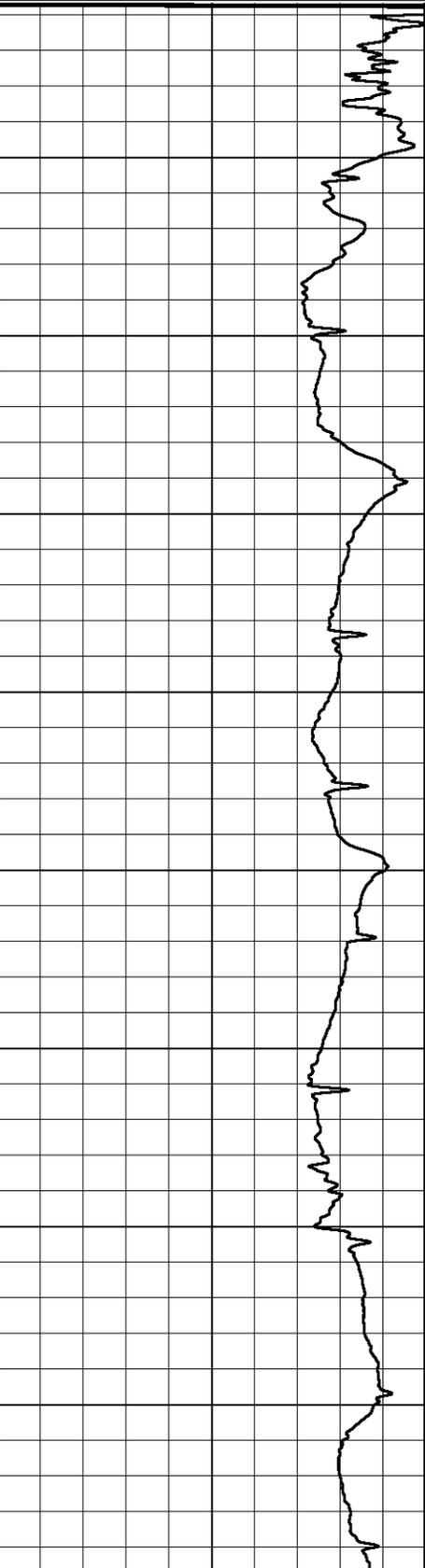
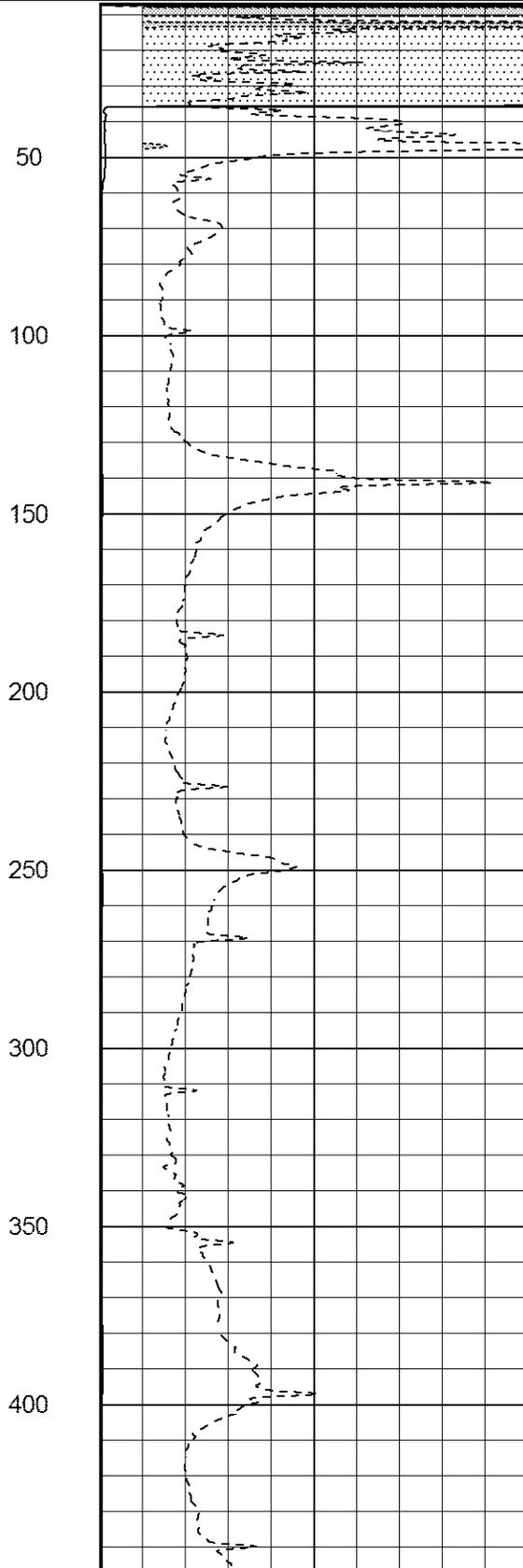
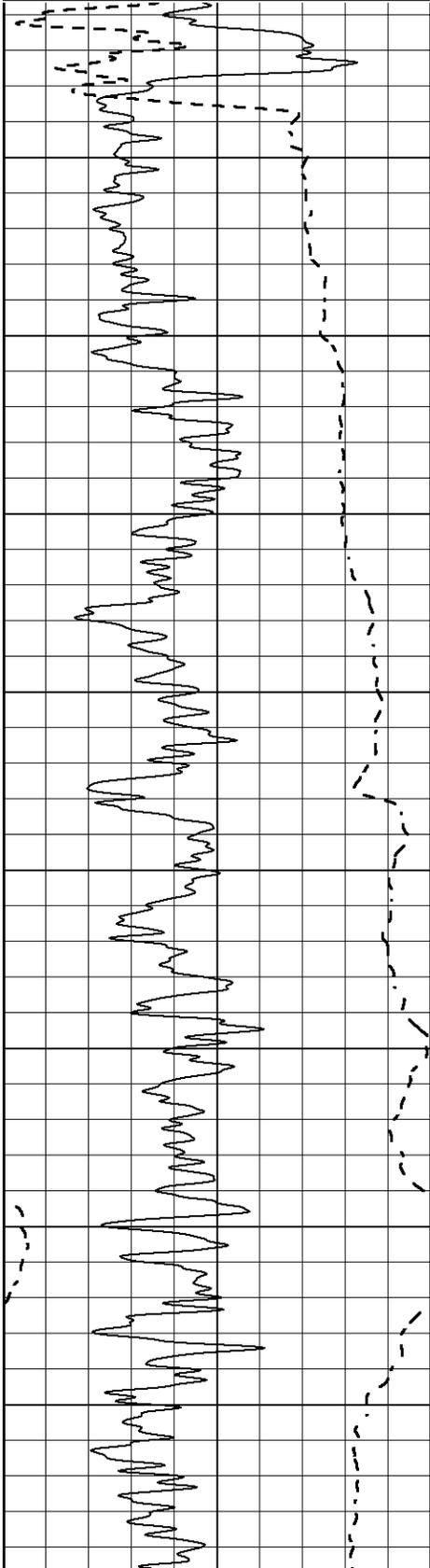


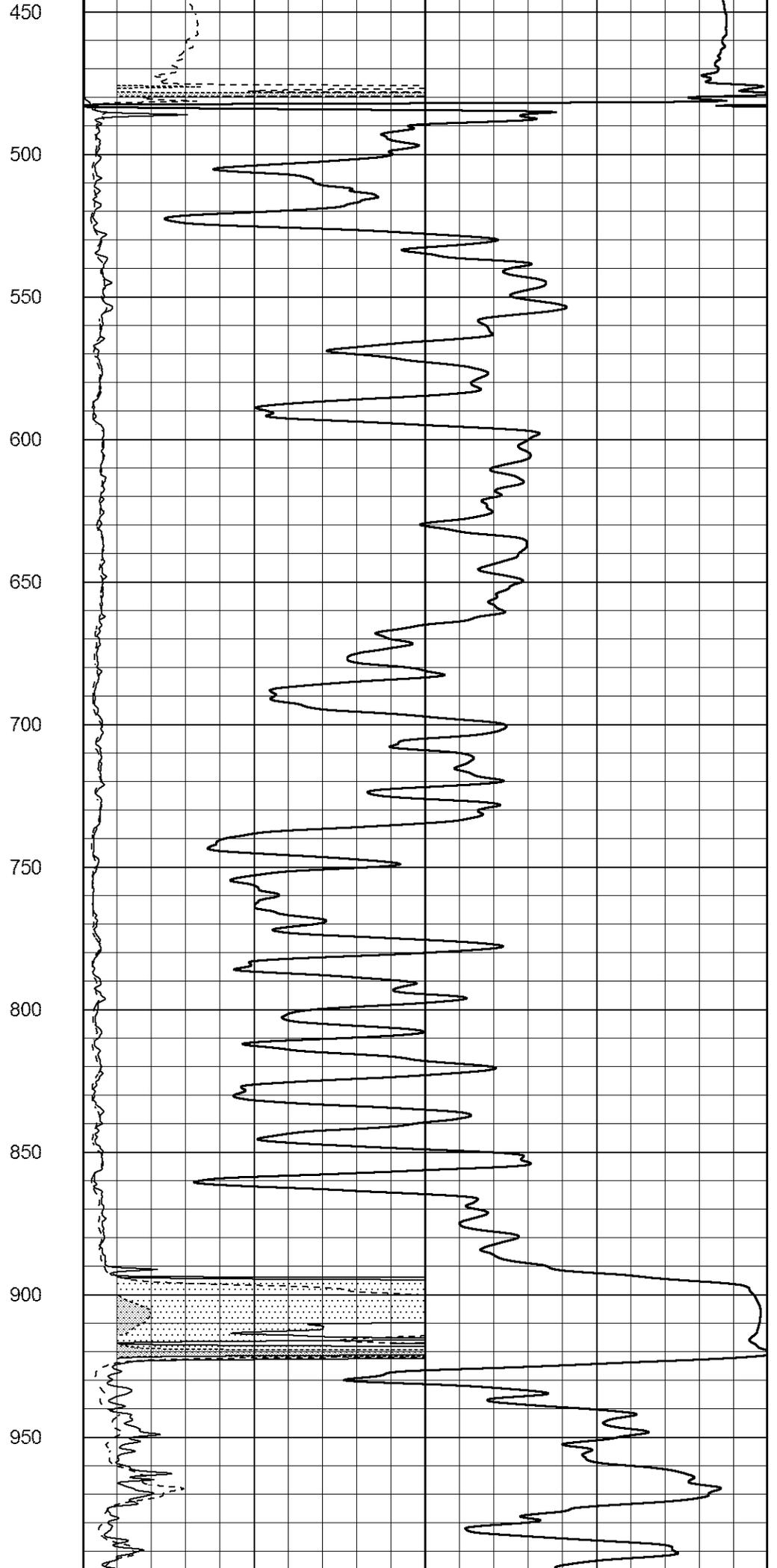
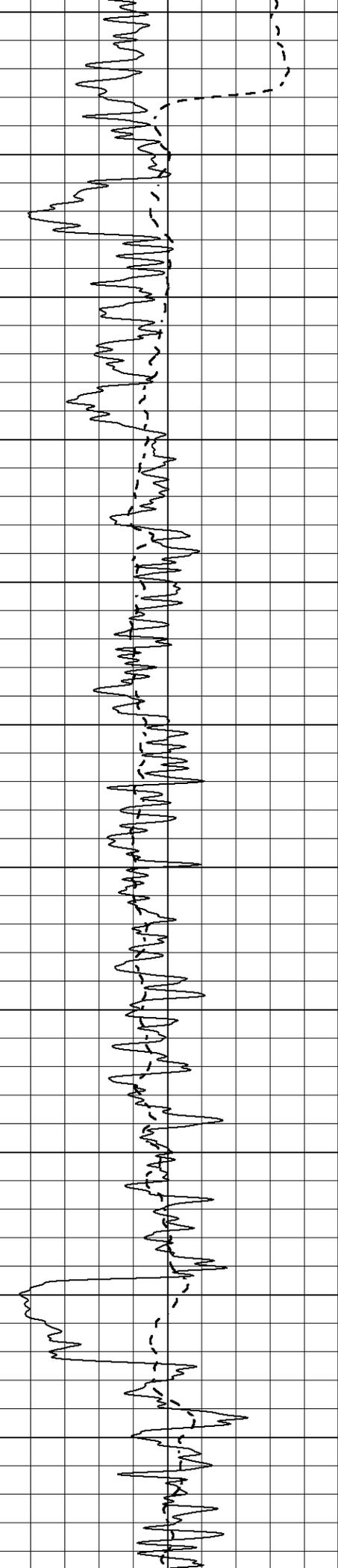
**MAIN SECTION**

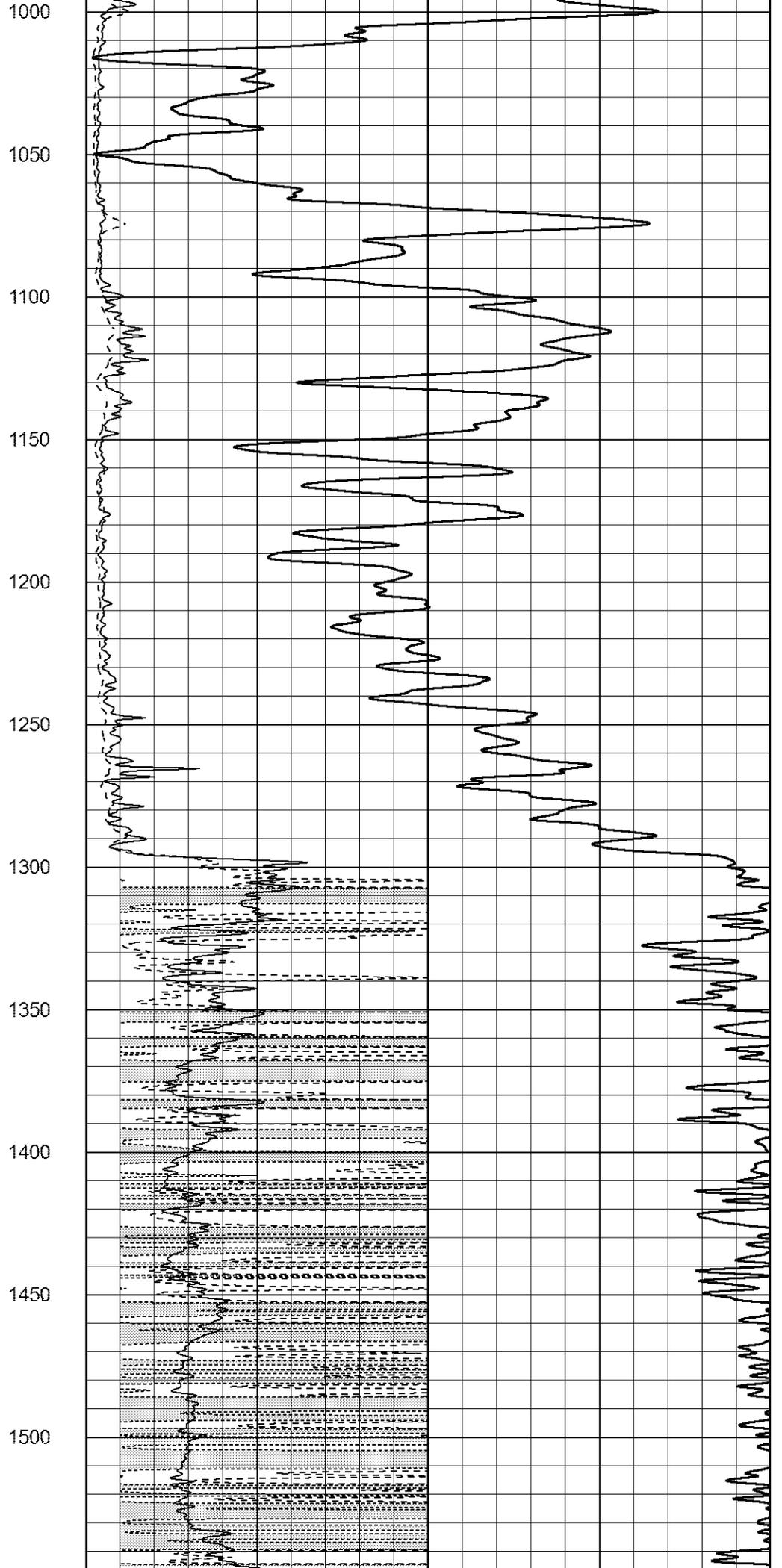
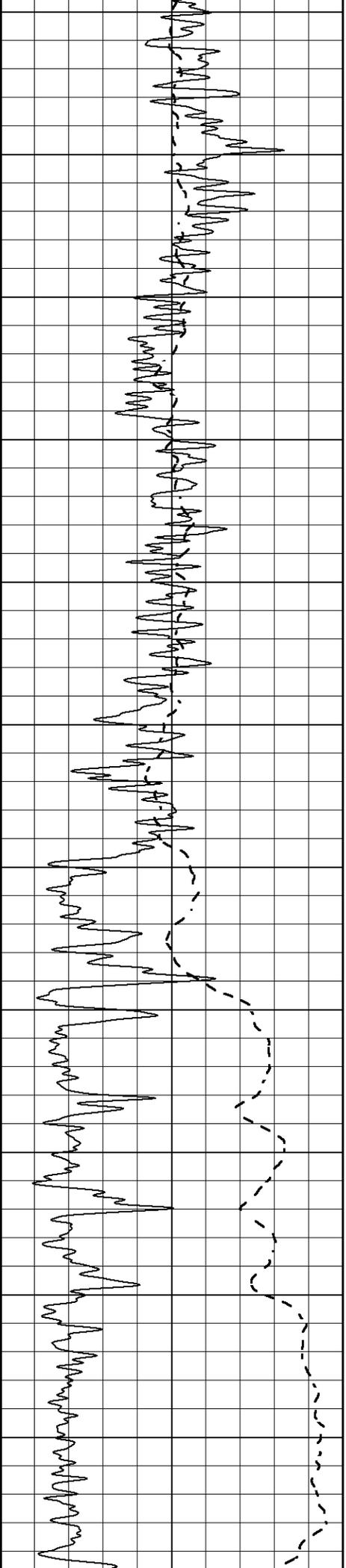
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 Presentation Format \_dil2  
 Dataset Creation Fri Apr 08 01:41:29 2022  
 Charted by Depth in Feet scaled 1:600

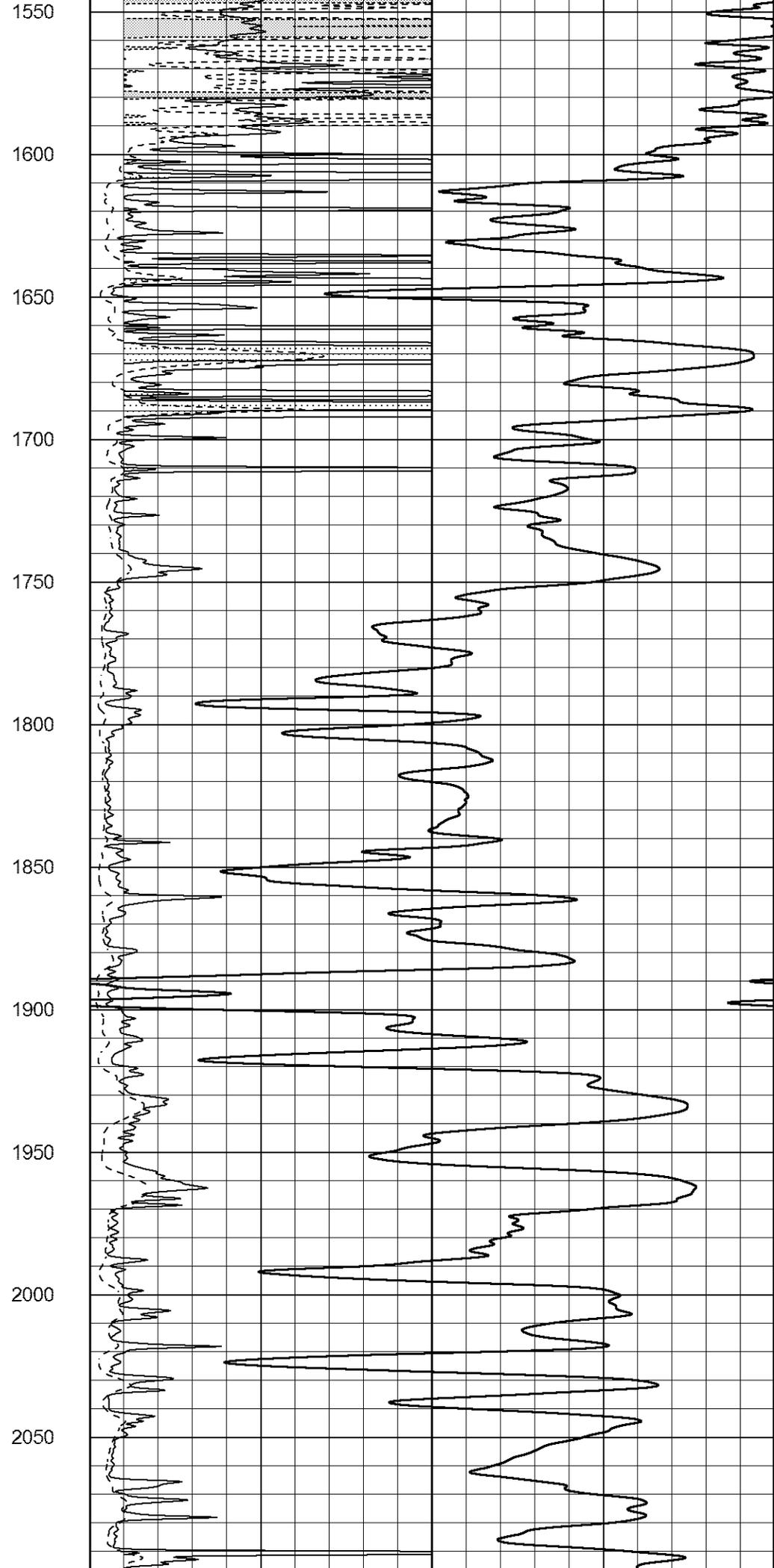
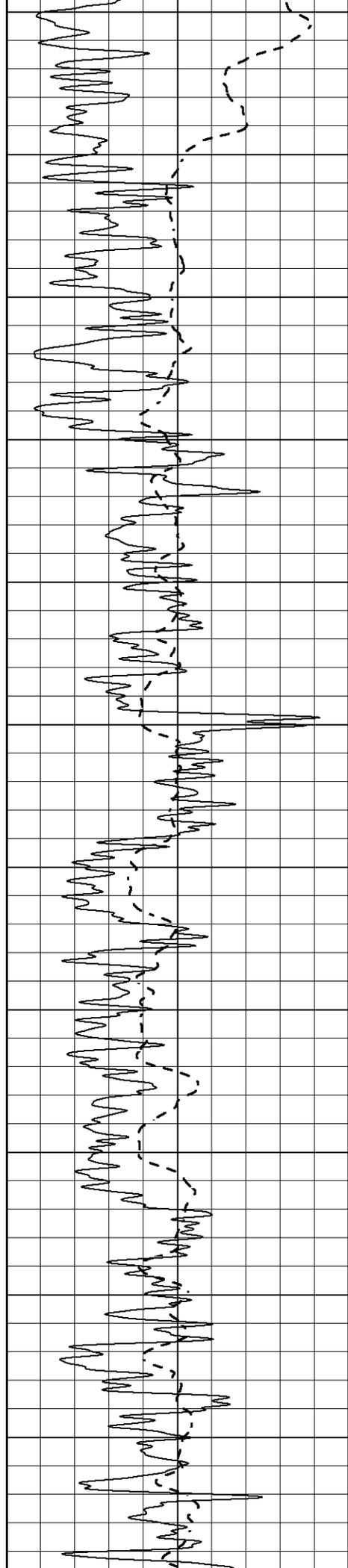
0 Gamma Ray (GAPI) 150  
 -100 SP (mV) 100

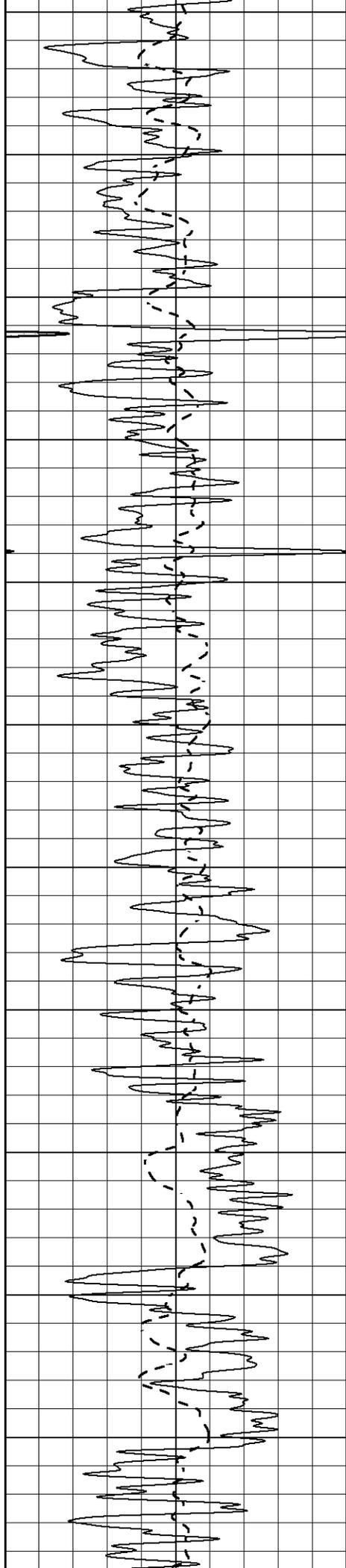
1000 CILD (mmho/m) 0  
 0 RLL3 (Ohm-m) 50  
 0 Deep Induction (Ohm-m) 50  
 50 RILD X10 (Ohm-m) 500  
 50 RLL3 X10 (Ohm-m) 500











2100

2150

2200

2250

2300

2350

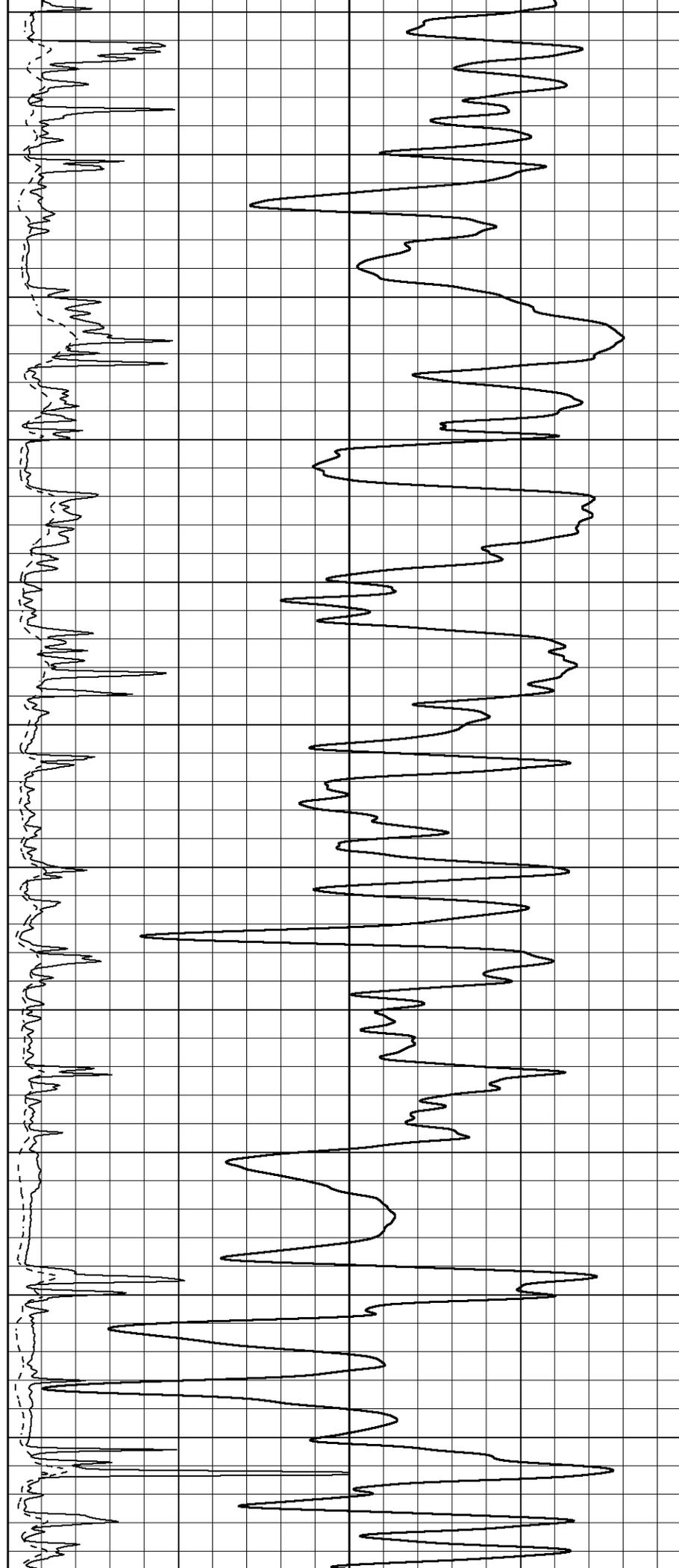
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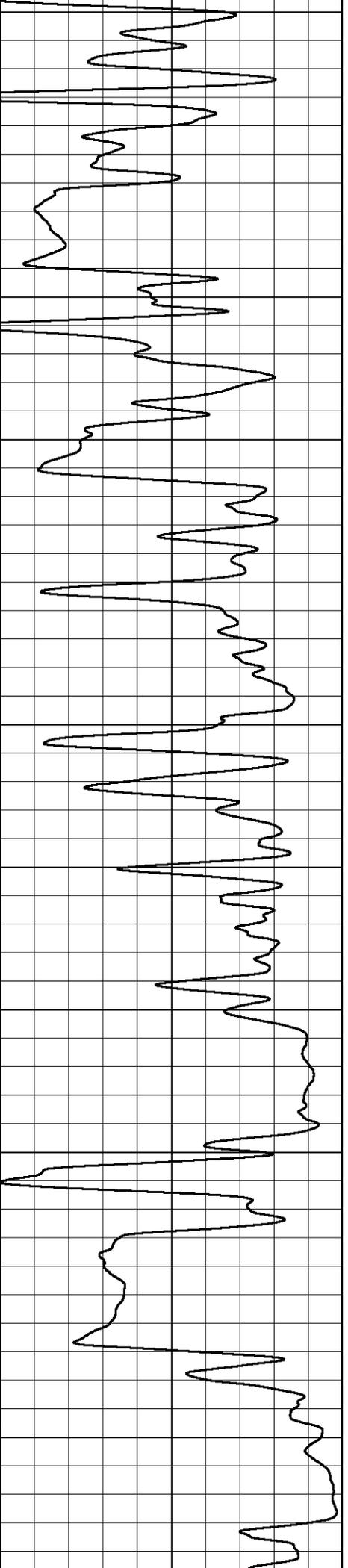
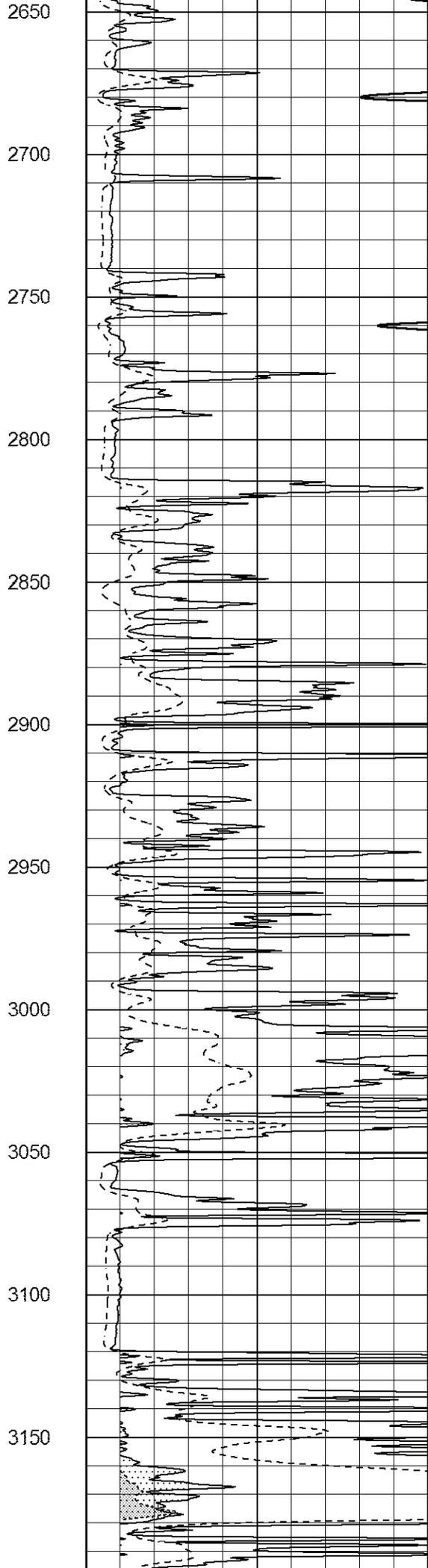
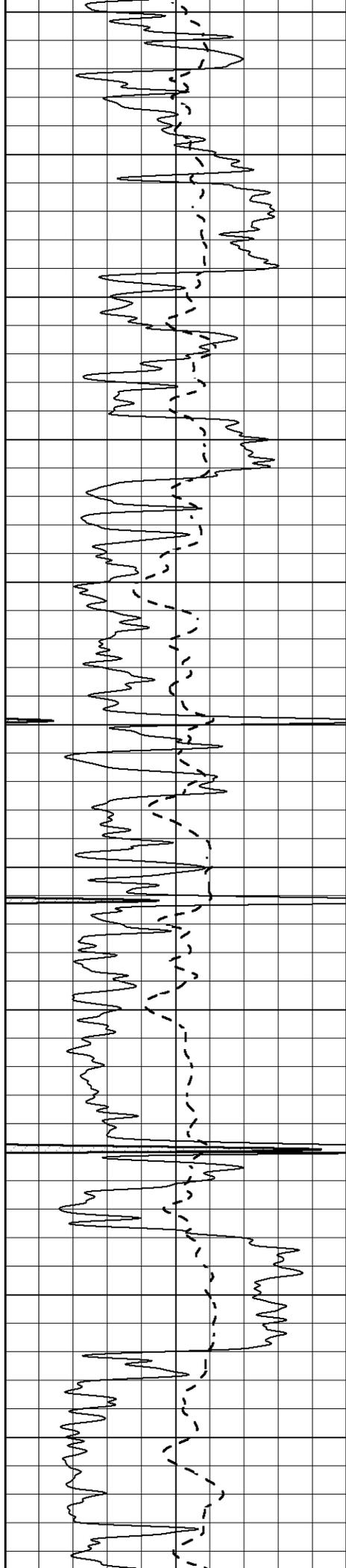
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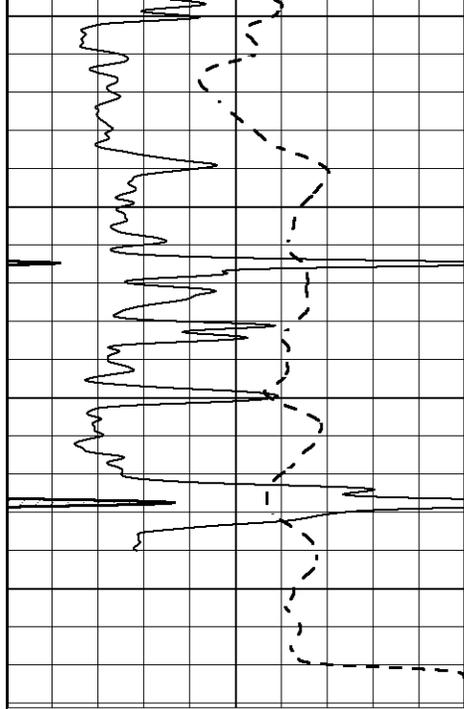
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2550

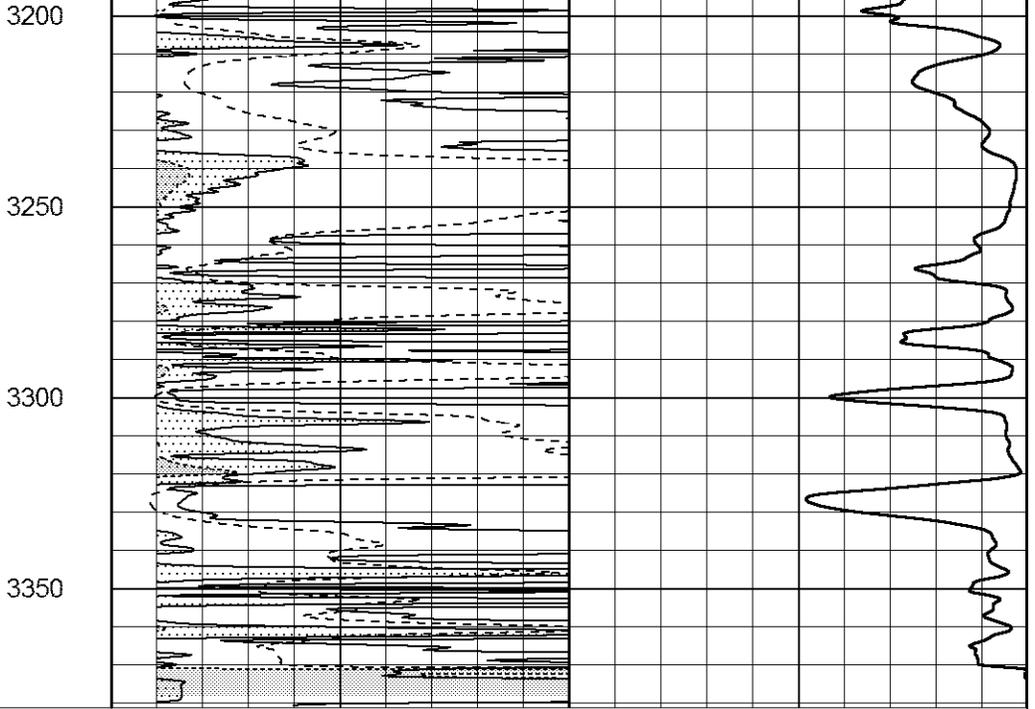
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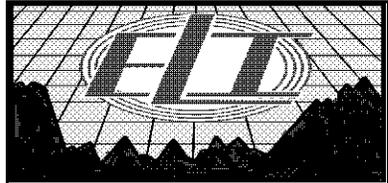




0	Gamma Ray (GAPI)	150
-100	SP (mV)	100



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

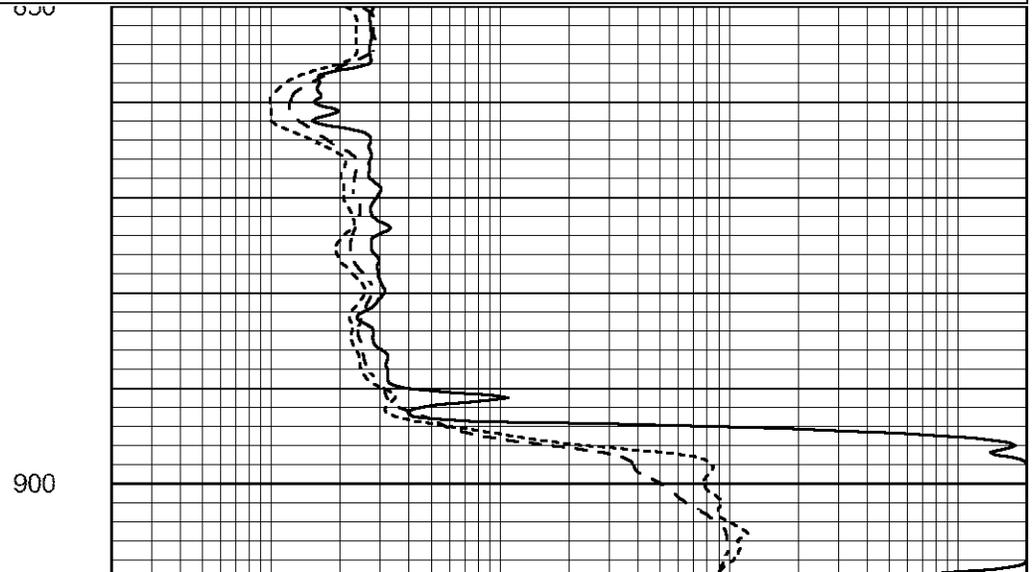
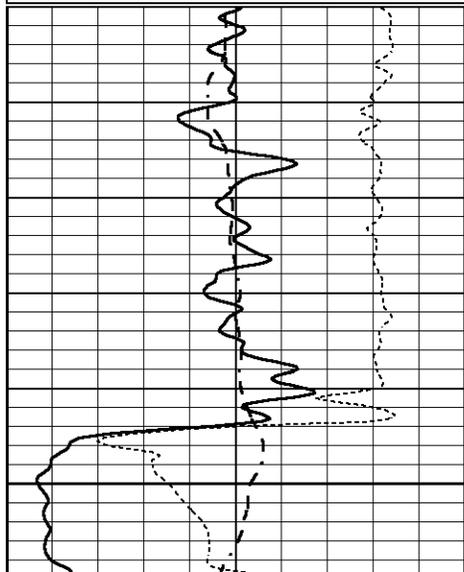


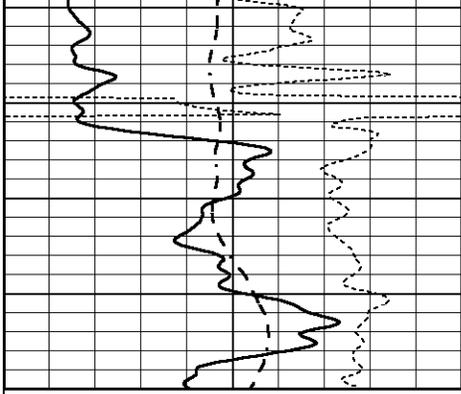
# ANHYDRITE

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 Presentation Format \_dil  
 Dataset Creation Fri Apr 08 01:29:26 2022  
 Charted by Depth in Feet scaled 1:240

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

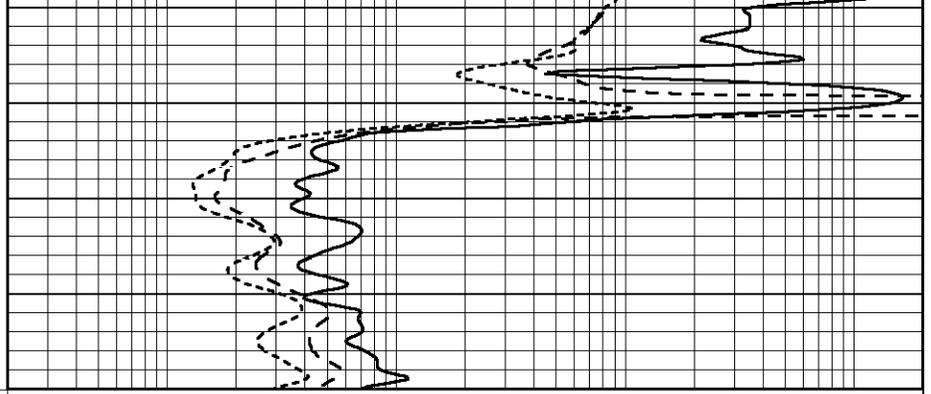
0.2	SHALLOW GUARD (Ohm-m)	2000
0.2	MEDIUM INDUCTION (Ohm-m)	2000
0.2	DEEP INDUCTION (Ohm-m)	2000





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

950



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

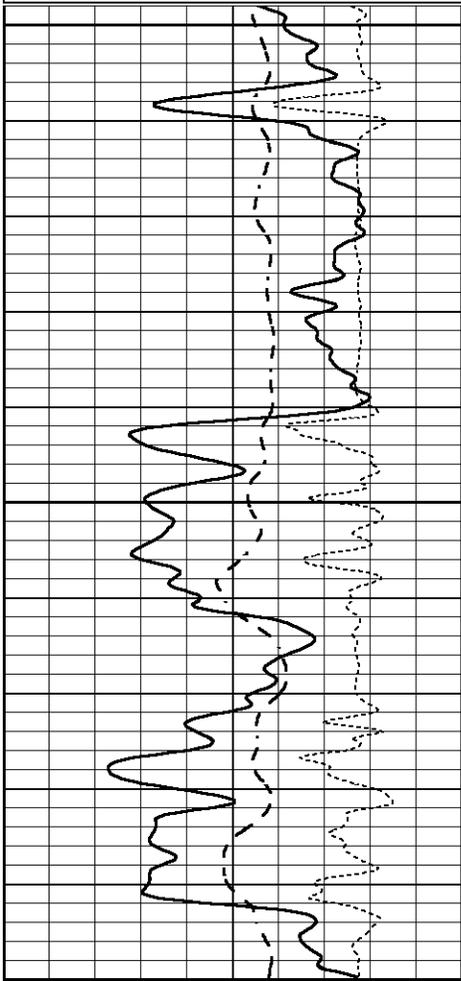


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 Dataset Pathname pass3.1  
 Presentation Format \_dil  
 Dataset Creation Fri Apr 08 01:17:25 2022  
 Charted by Depth in Feet scaled 1:240

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

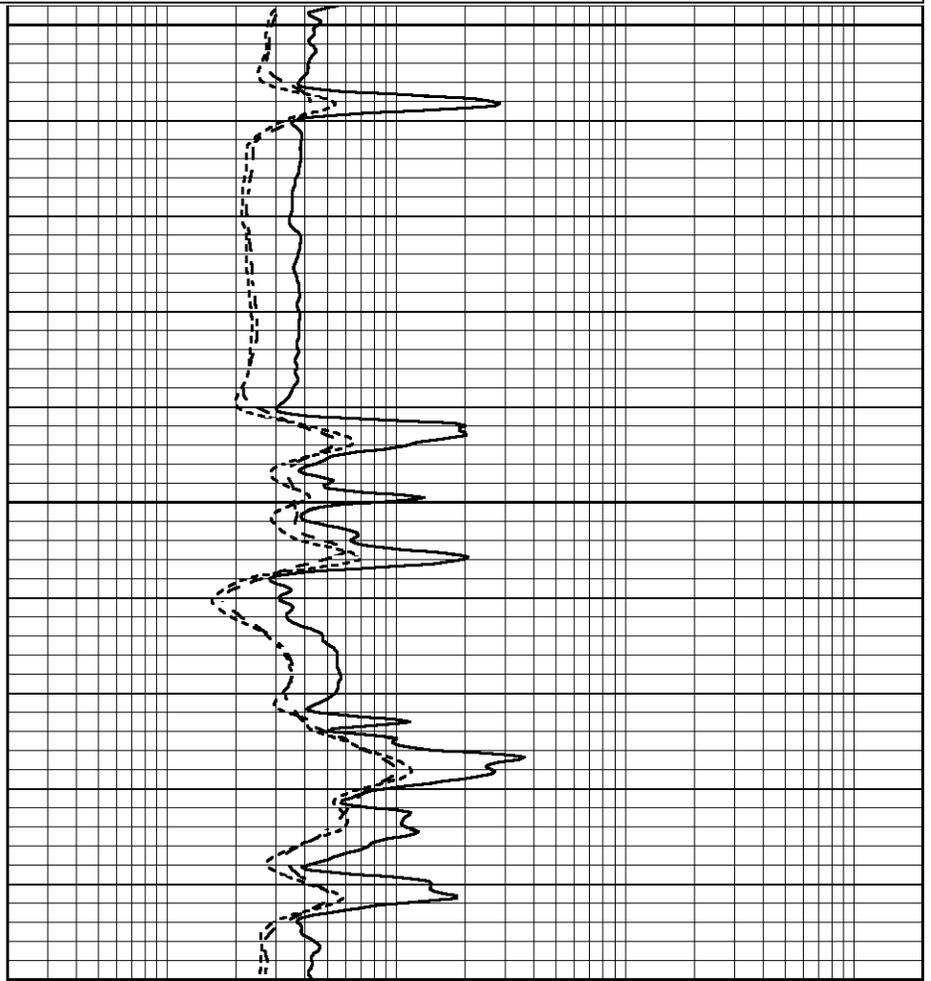
0.2	SHALLOW GUARD (Ohm-m)	2000
0.2	MEDIUM INDUCTION (Ohm-m)	2000
0.2	DEEP INDUCTION (Ohm-m)	2000

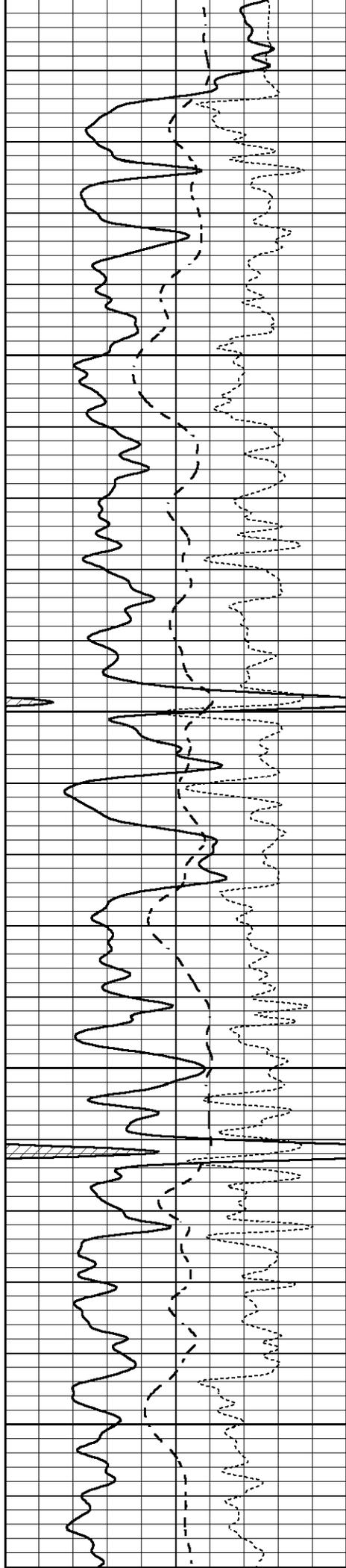


2700

2750

2800





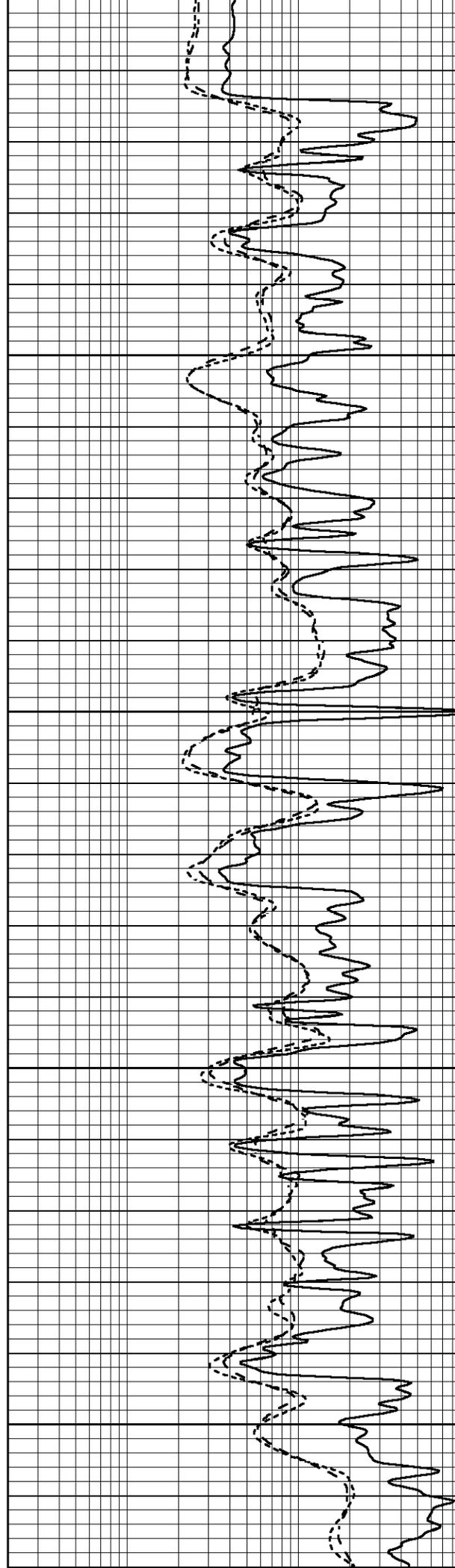
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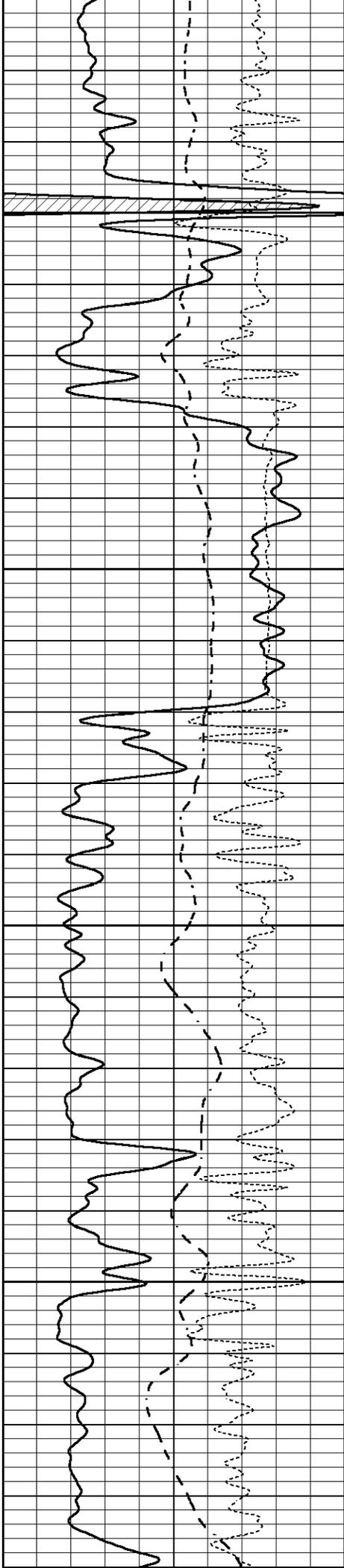
2850

2900

2950

3000



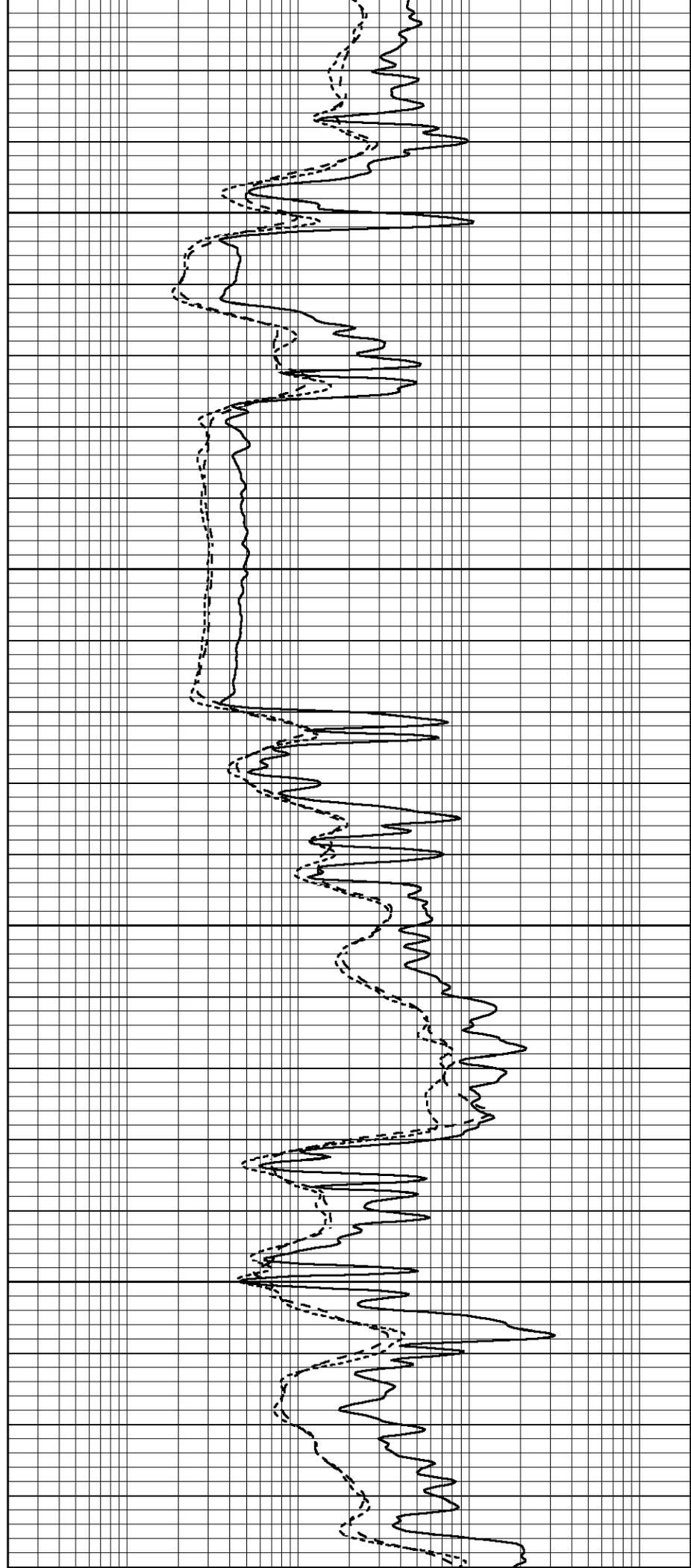


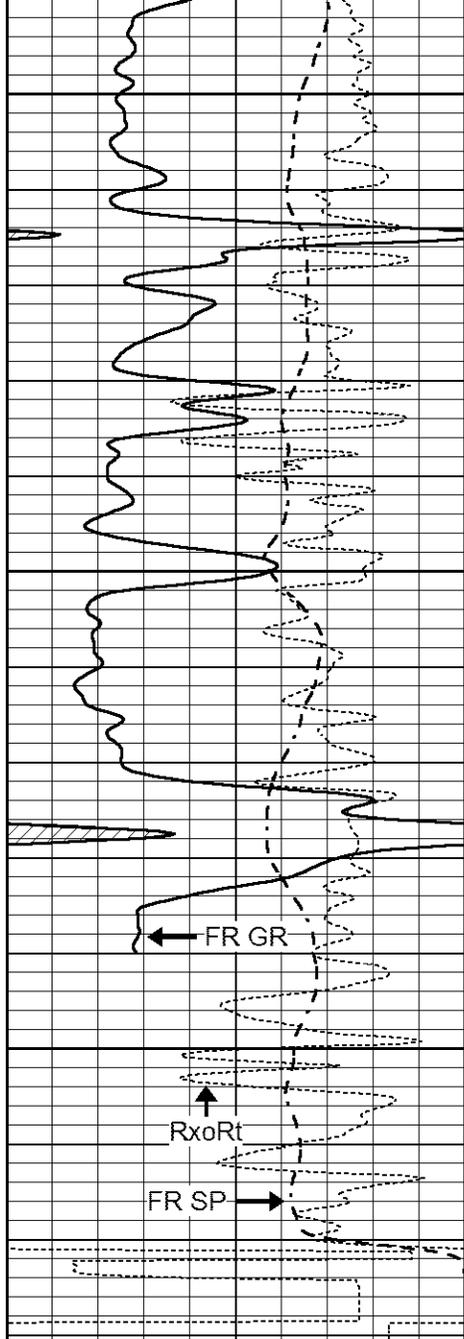
3050

3100

3150

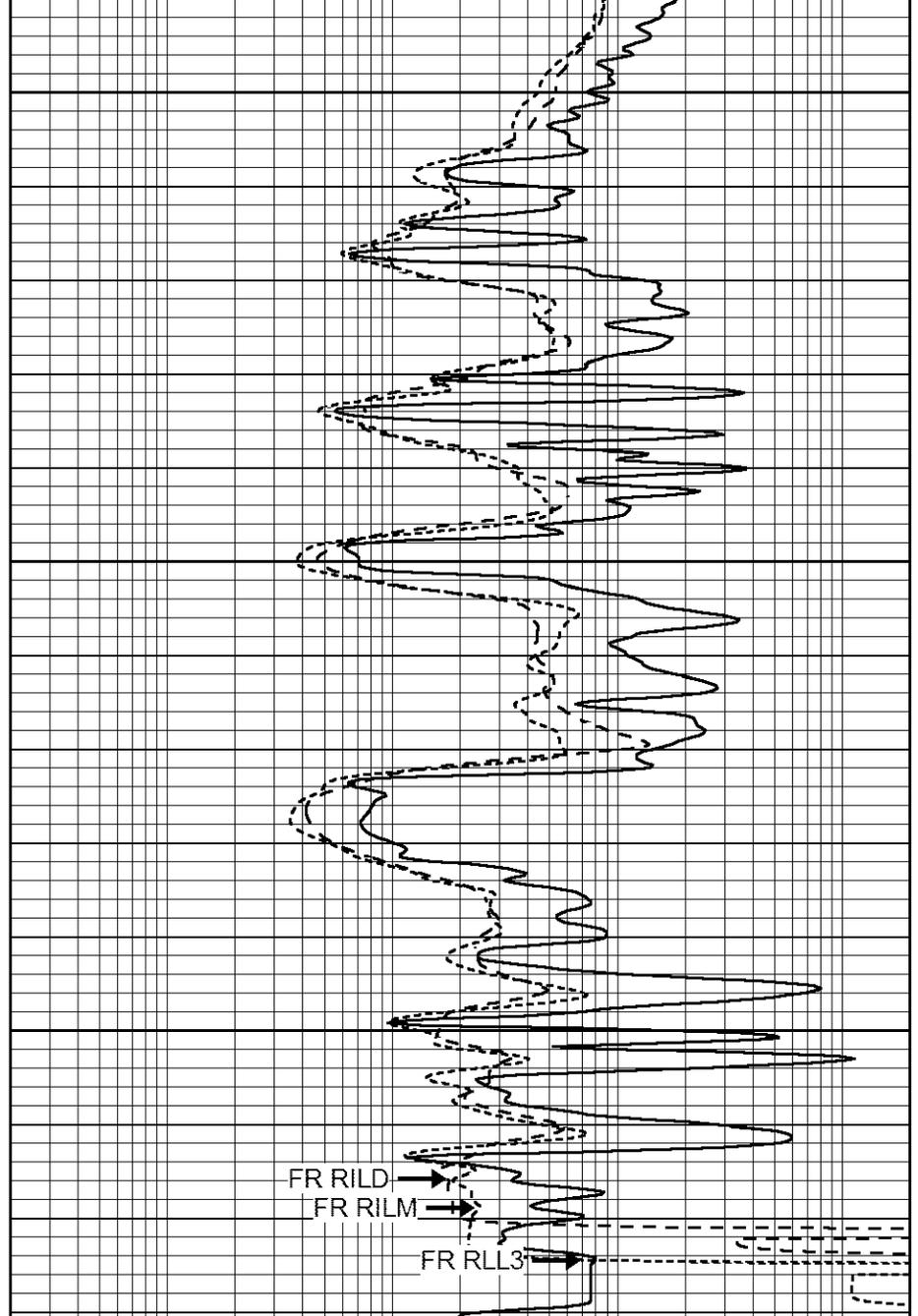
3200





3250  
3300  
3350  
LTD 3376

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



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

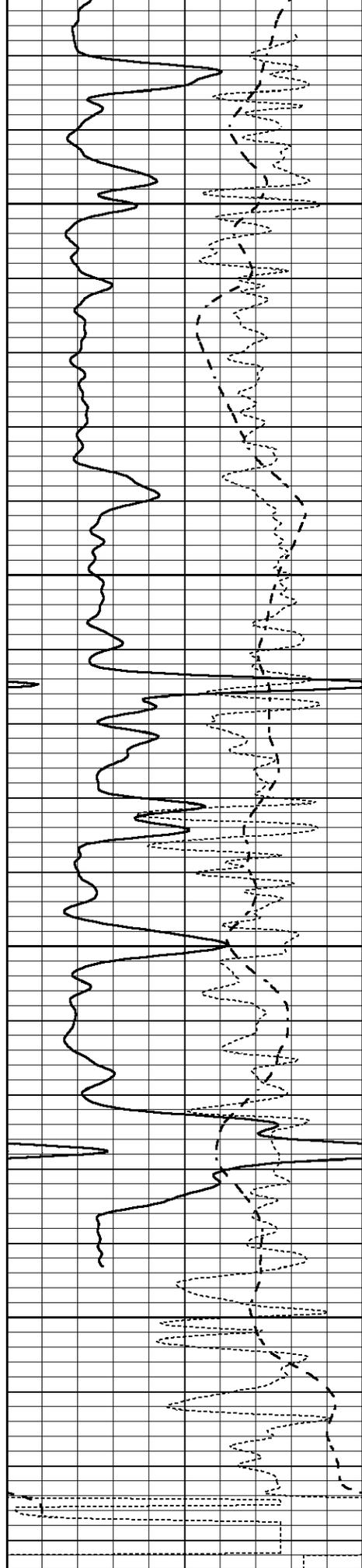


# REPEAT SECTION

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 Presentation Format \_dil  
 Dataset Creation Fri Apr 08 01:10:12 2022  
 Charted by Depth in Feet scaled 1:240

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

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



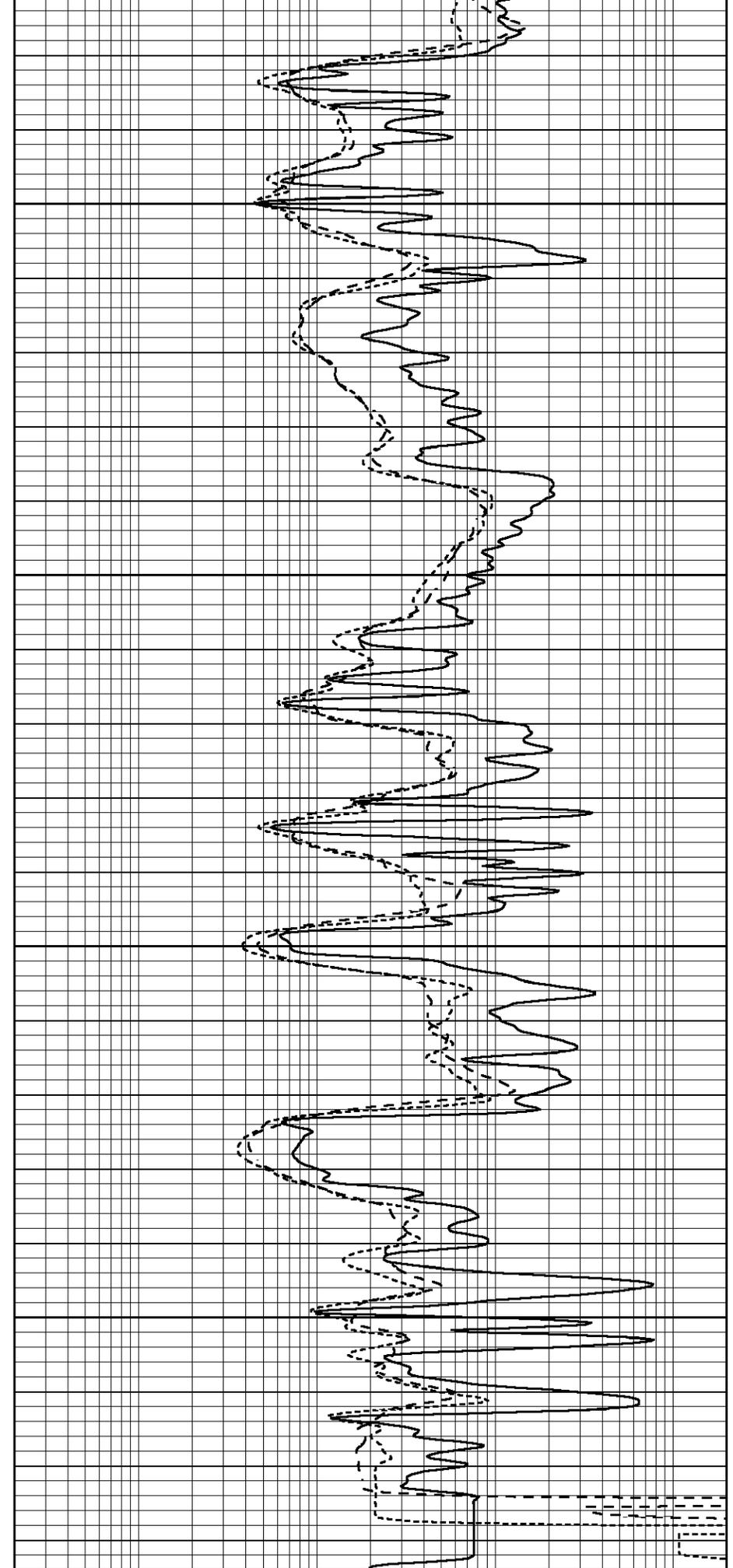
3200

3250

3300

3350

0 GAMMA RAY (GAPI) 150  
 -100 SP (mV) 100



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

Calibration Report

Database File 6385pe.db  
 Dataset Pathname pass3.3  
 Dataset Creation Fri Apr 08 01:41:29 2022

Dual Induction Calibration Report

Serial-Model: FW1410-55-Probe  
 Surface Cal Performed: Sat Jan 29 11:57:42 2022  
 Downhole Cal Performed: Tue Feb 19 11:44:24 2019  
 After Survey Verification Performed: Tue Feb 19 11:44:27 2019

Surface Calibration

Loop:	Readings				References			Results	
	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: Fri Feb 18 15:41:27 2022

	Background	Aluminum	Magnesium	
Window 1	515.75	5443.58	23734.91	cps
Window 2	41.45	1226.32	5757.32	cps
Window 4	224.78	1223.03	5315.97	cps
Window 5	549.25	7983.61	15349.73	cps
Window 6	43.12	1271.88	2496.98	cps
Window 8	261.02	2595.65	4928.92	cps



## Gamma Ray Calibration Report

Serial Number:	7	
Tool Model:	Probe1	
Performed:	Tue Jan 19 17:50:08 2021	
Calibrator Value:	1.0	GAPI
Background Reading:	0.0	cps
Calibrator Reading:	1.0	cps
Sensitivity:	0.5300	GAPI/cps