



**COMPLETION
& PRODUCTION
SERVICES CO.**

**DUAL
INDUCTION
LOG**

Company		MAI OIL OPERATIONS, INC.	
Well		SELLENS #4	
Field		TRAPP	
County		RUSSELL	
State		KANSAS	
Company		MAI OIL OPERATIONS, INC.	
Well		SELLENS #4	
Field		TRAPP	
County		RUSSELL	
State		KANSAS	
Location:		API # : 15-167-24002-0000	
Permanent Datum		GROUND LEVEL	
Log Measured From		Elevation	
Drilling Measured From		CDL/CNL	
SEC 33 TWP 15S RGE 13W		MEL	
2310' FSL & 1650' FWL		Elevation	
KELLY BUSHING 8' A.G.L.		K.B. 1911	
KELLY BUSHING		D.F. 1909	
		G.L. 1903	
Date	9/30/14		
Run Number	ONE		
Depth Driller	3400		
Depth Logger	3402		
Bottom Logged Interval	3400		
Top Log Interval	00		
Casing Driller	8 5/8" @ 514		
Casing Logger	514		
Bit Size	7 7/8"		
Type Fluid in Hole	CHEMICAL MUD	CHLORIDES 4000 PPM	
Density / Viscosity	9.2/61		
pH / Fluid Loss	9.0/8.0		
Source of Sample	FLOWLINE		
Rm @ Meas. Temp	.80 @ 75F		
Rmt @ Meas. Temp	.60 @ 75F		
Rmc @ Meas. Temp	.96 @ 75F		
Source of Rmt / Rmc	MEASUREMENT		
Rm @ BHT	.54 @ 111F		
Time Circulation Stopped	2 HOURS		
Time Logger on Bottom			
Maximum Recorded Temperature	111F		
Equipment Number	4010		
Location	HAYS, KANSAS		
Recorded By	JASON CAPPELLUCCI		
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 NABORS, HAYS, KS. (785) 628-6395
DIRECTIONS:
SUSANK, KS. - 4 NORTH TO THE T - NORTH INTO BY BLUE TANK BATTERY



MAIN SECTION

Database File:

26200ddn.db

Dataset Pathname:

pass3.3

Presentation Format:

_dil2

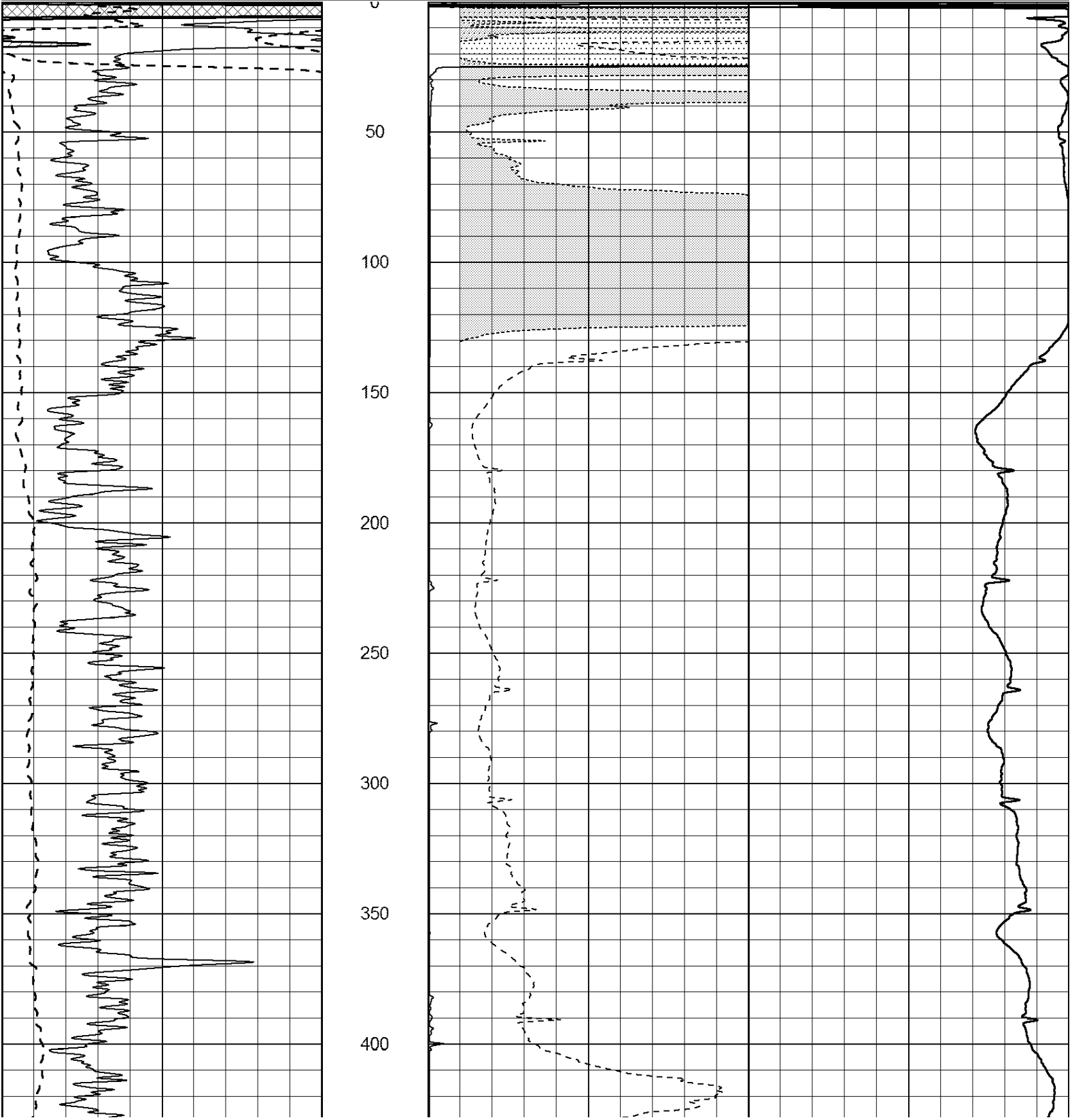
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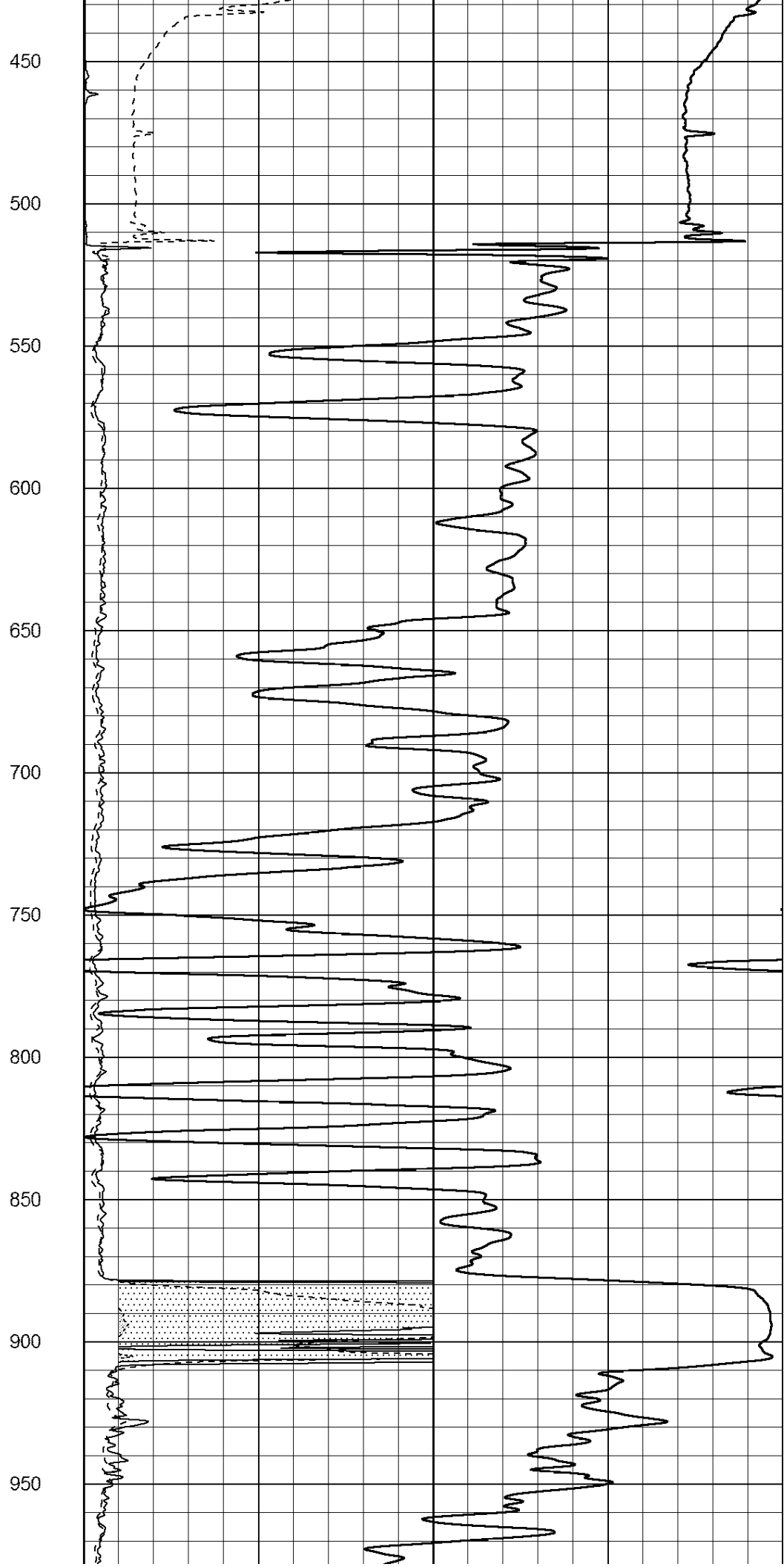
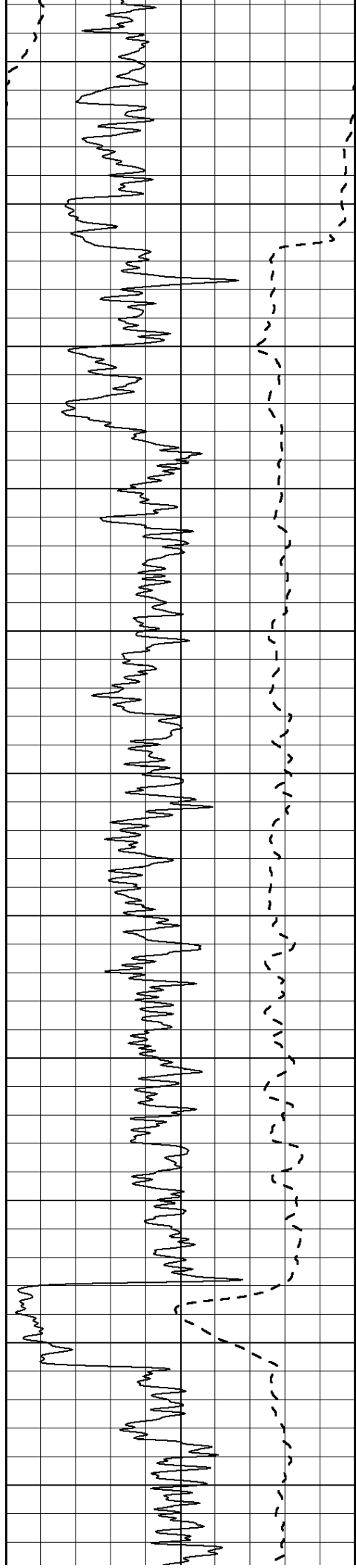
Tue Sep 30 11:41:25 2014 by Calc Open-Cased 090629

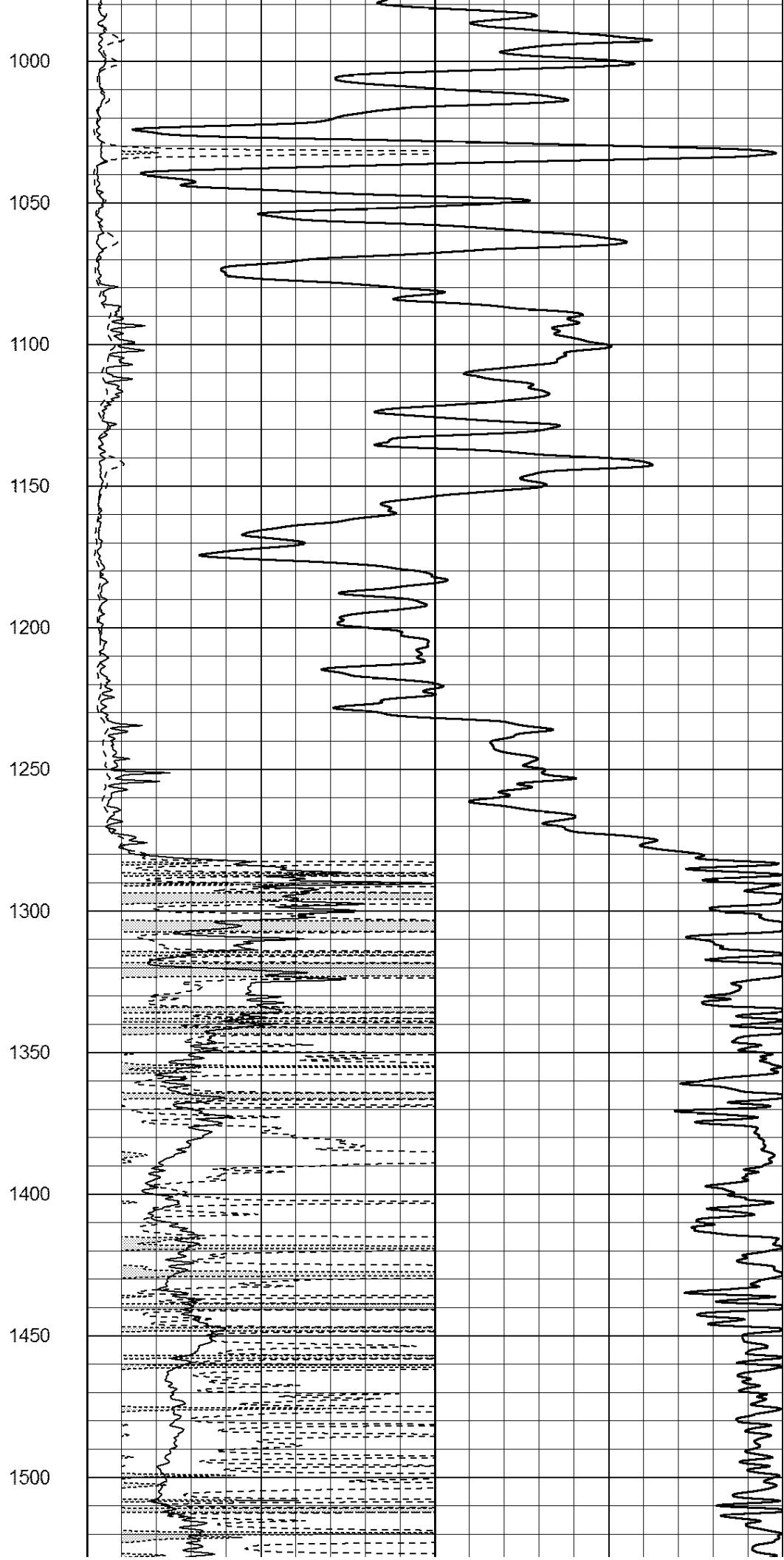
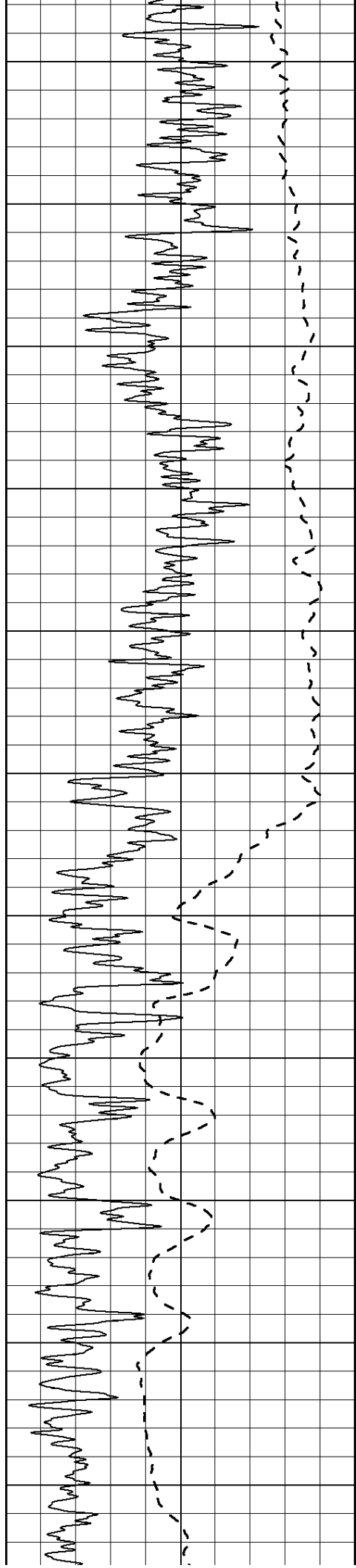
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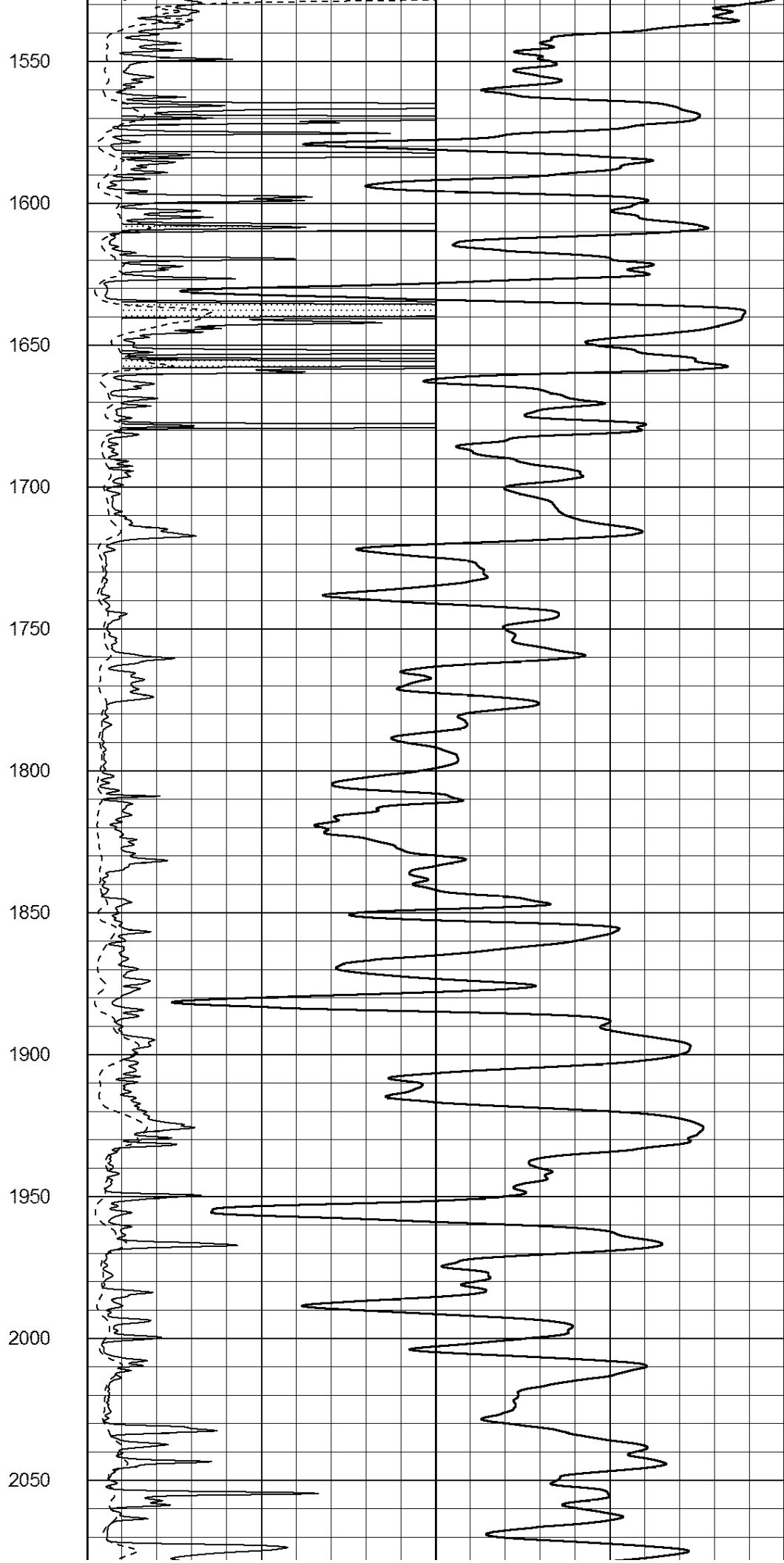
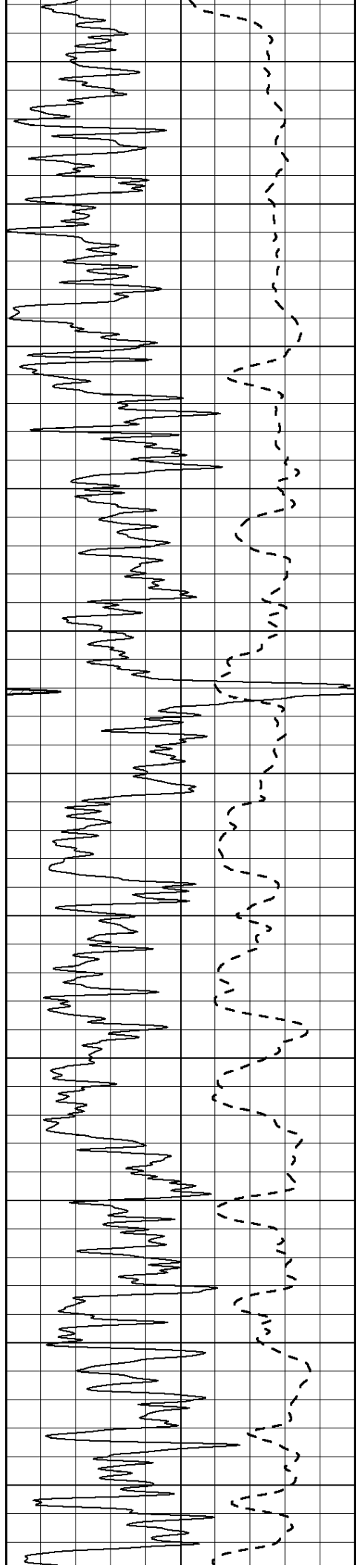
Depth in Feet scaled 1:600

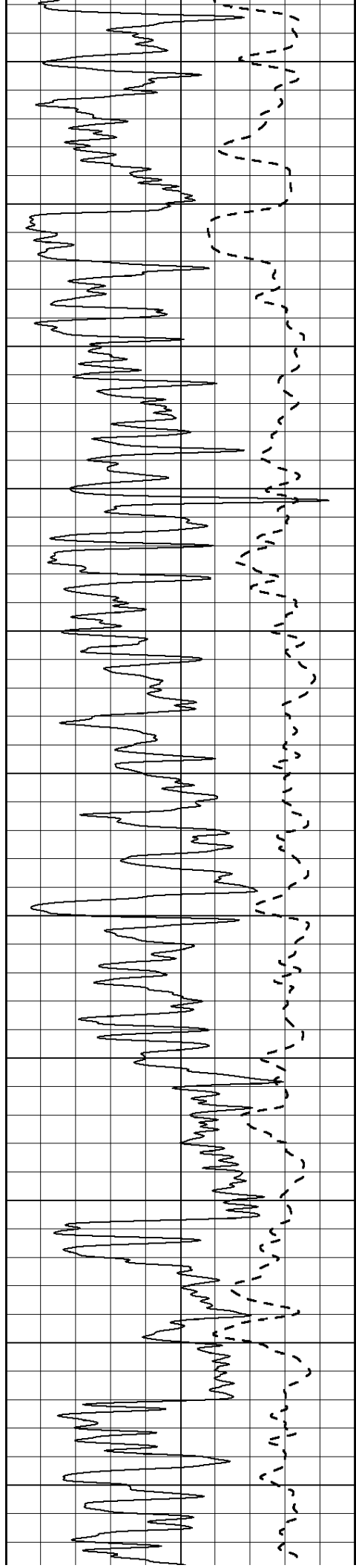
0	Gamma Ray (GAPI)	150	0	RLL3 (Ohm-m)	50
-100	SP (mV)	100	0	RILD (Ohm-m)	50
-----			1000		
			CILD (mmho/m)		
			50	RILD X10 (Ohm-m)	500
			50	RLL3 X10 (Ohm-m)	500











2100

2150

2200

2250

2300

2350

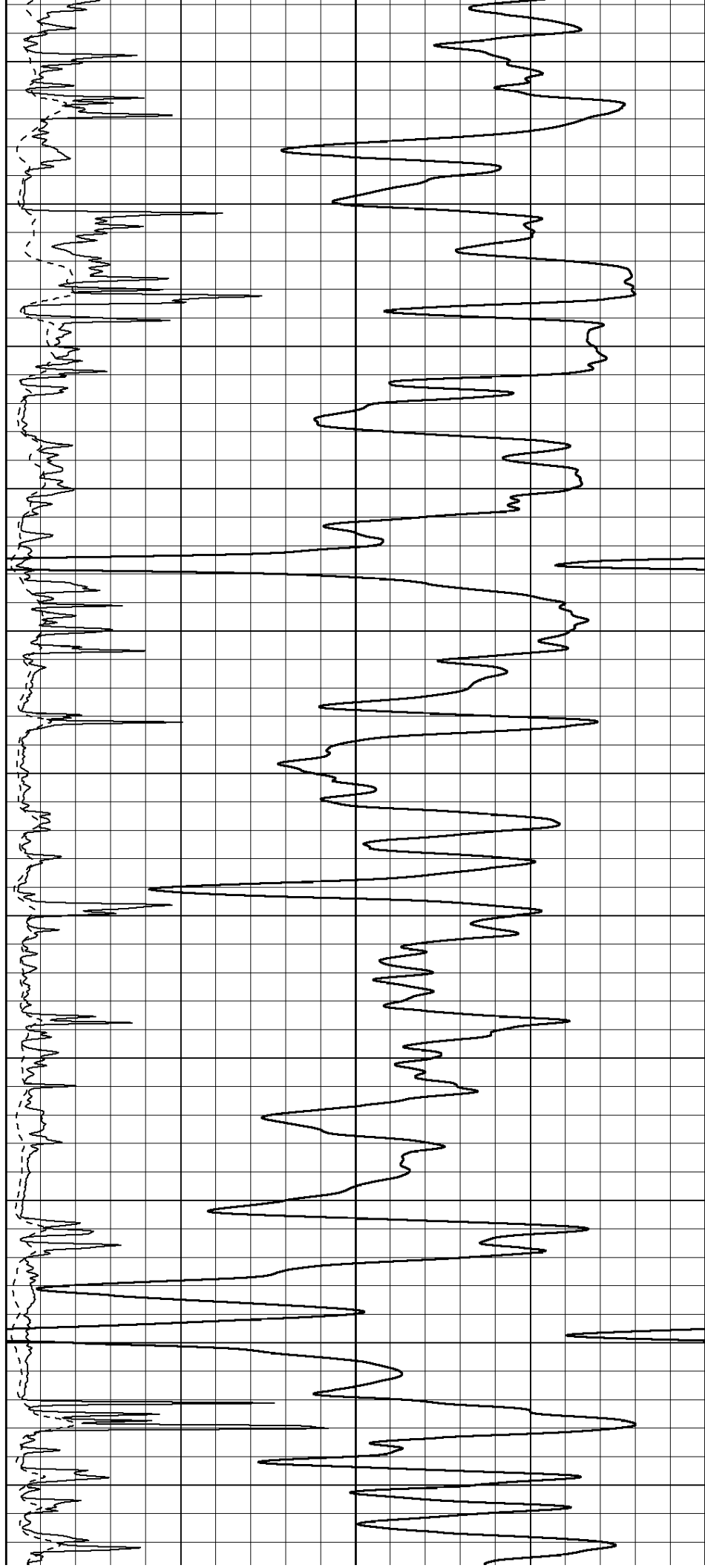
2400

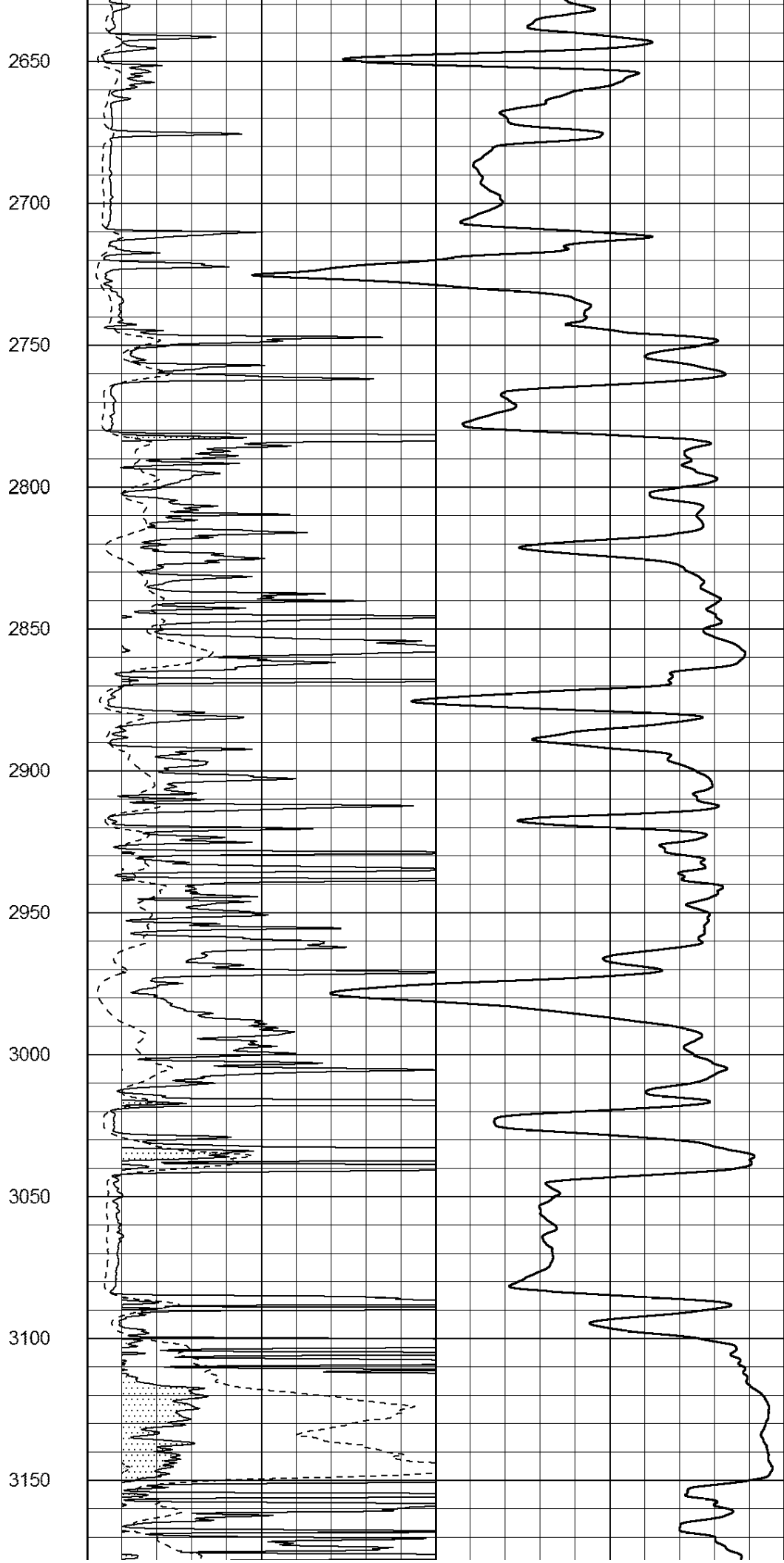
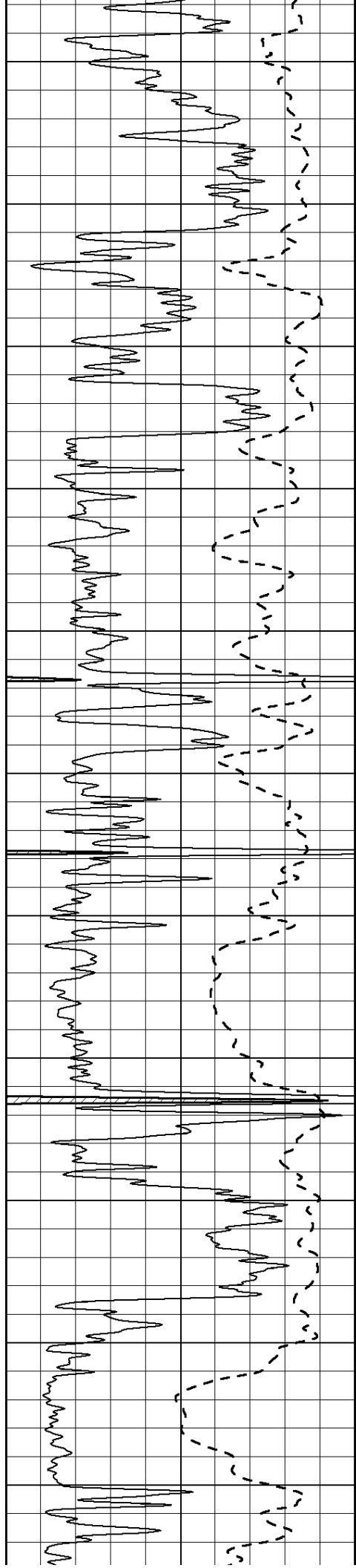
2450

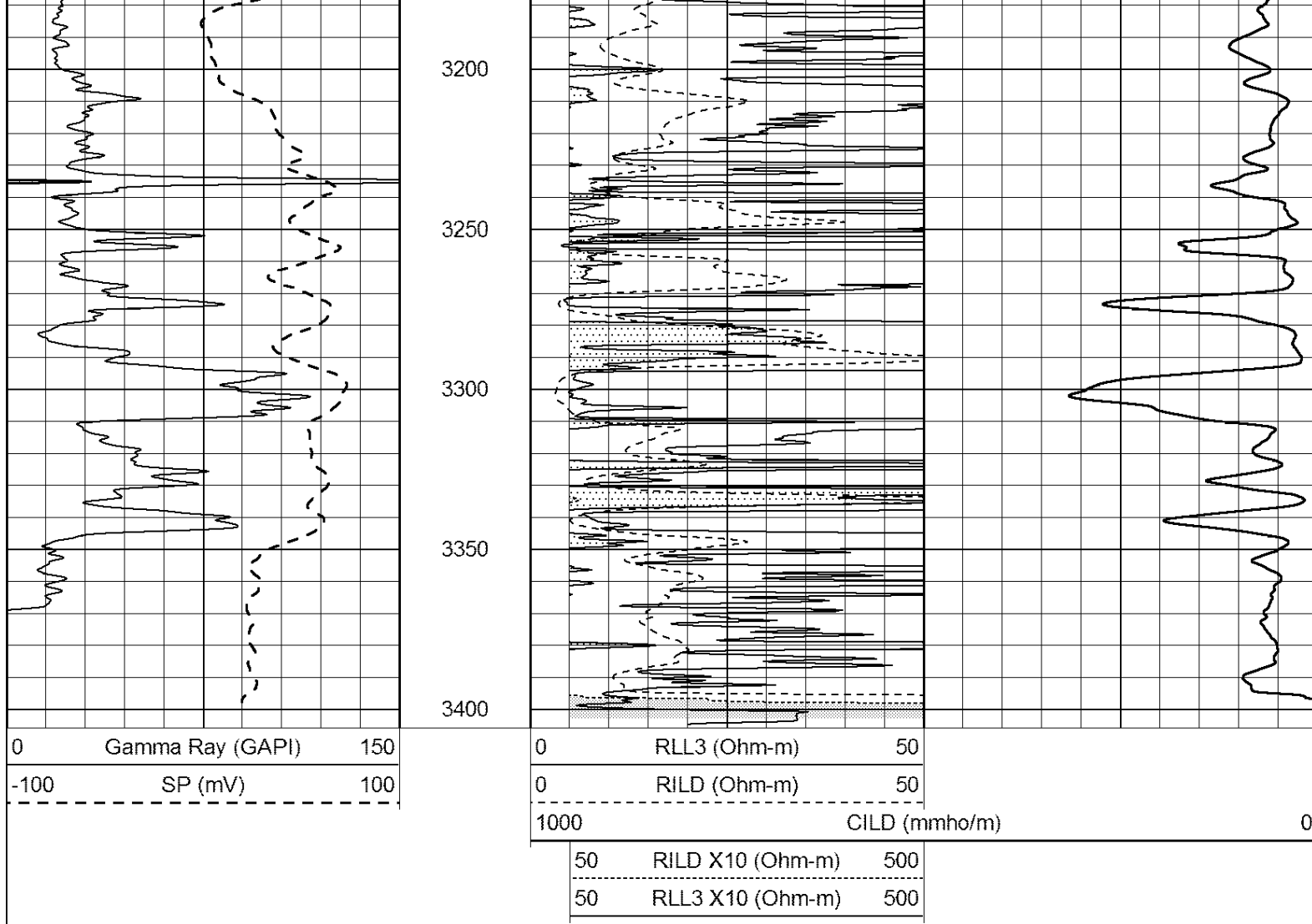
2500

2550

2600





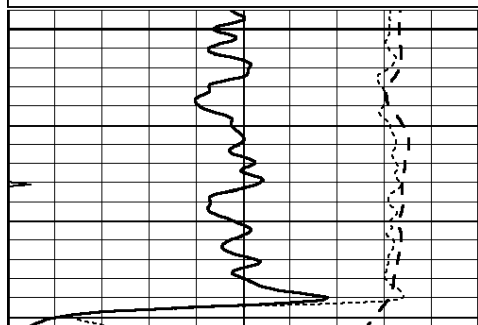


ANHYDRITE

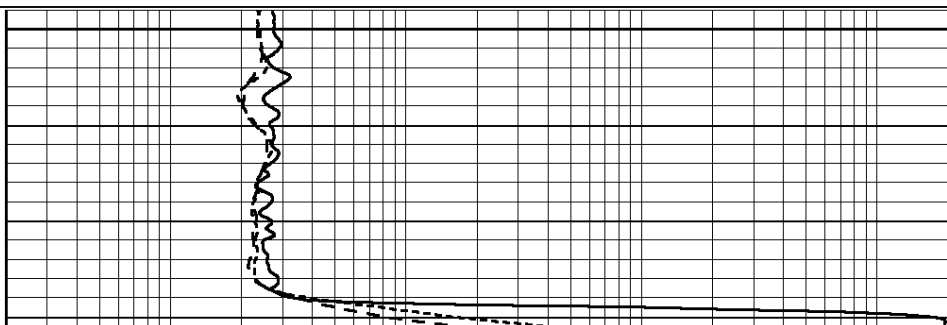
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 Presentation Format: _dil
 Dataset Creation: Tue Sep 30 11:15:57 2014 by Calc Open-Cased 090629
 Charted by: Depth in Feet scaled 1:240

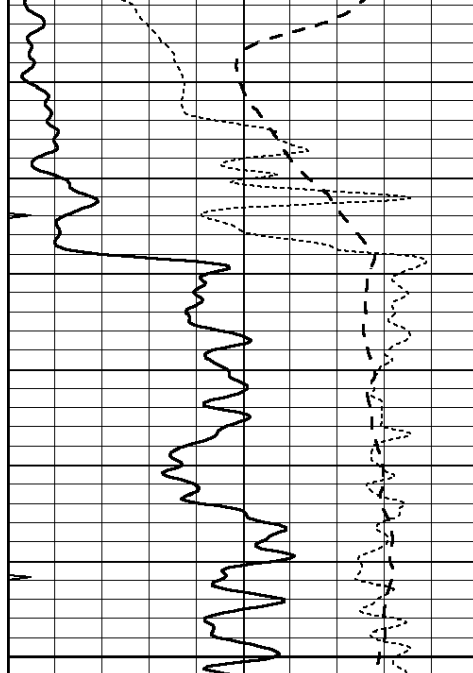
0	GAMMA RAY (GAPI)	150
-100	SP (mV)	100
-250	Rxo/Rt	50
0	MINMK	20

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



850

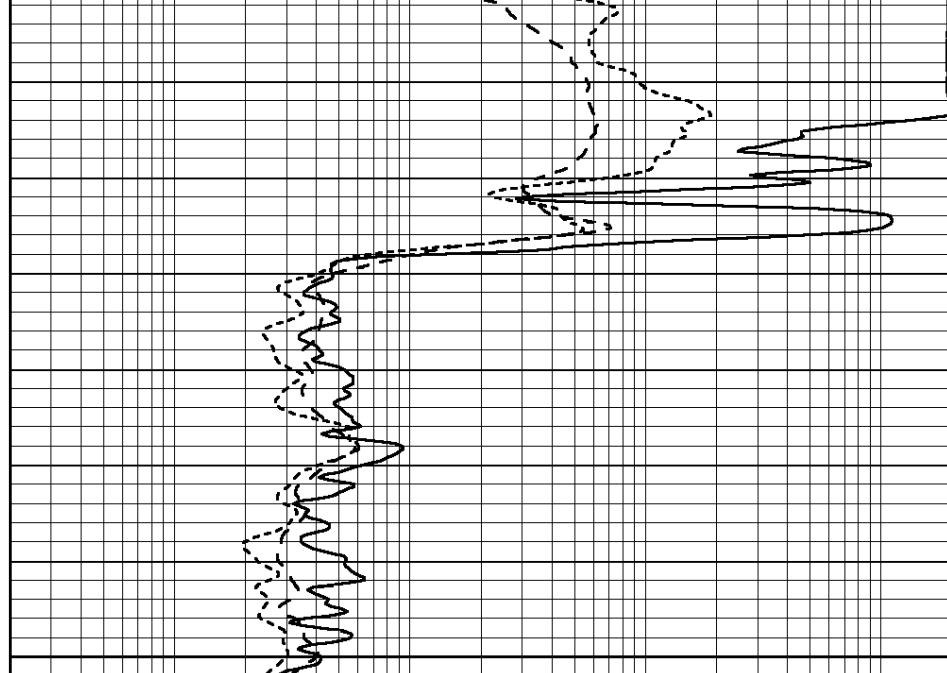




900

950

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

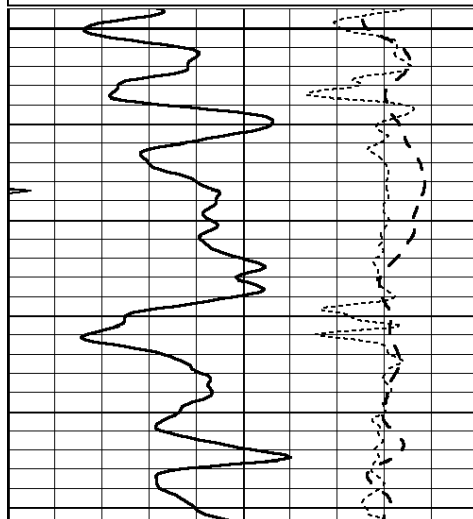


MAIN SECTION

Database File: 26200ddn.db
 Dataset Pathname: pass3.1
 Presentation Format: _dil
 Dataset Creation: Tue Sep 30 11:01:21 2014 by Calc Open-Cased 090629
 Charted by: Depth in Feet scaled 1:240

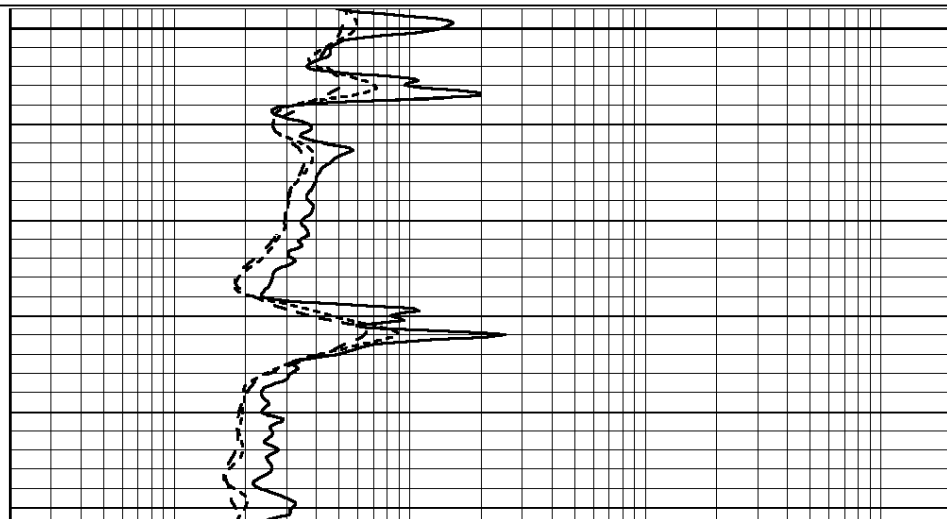
0	GAMMA RAY (GAPI)	150
-100	SP (mV)	100
-250	Rxo/Rt	50
0	MINMK	20

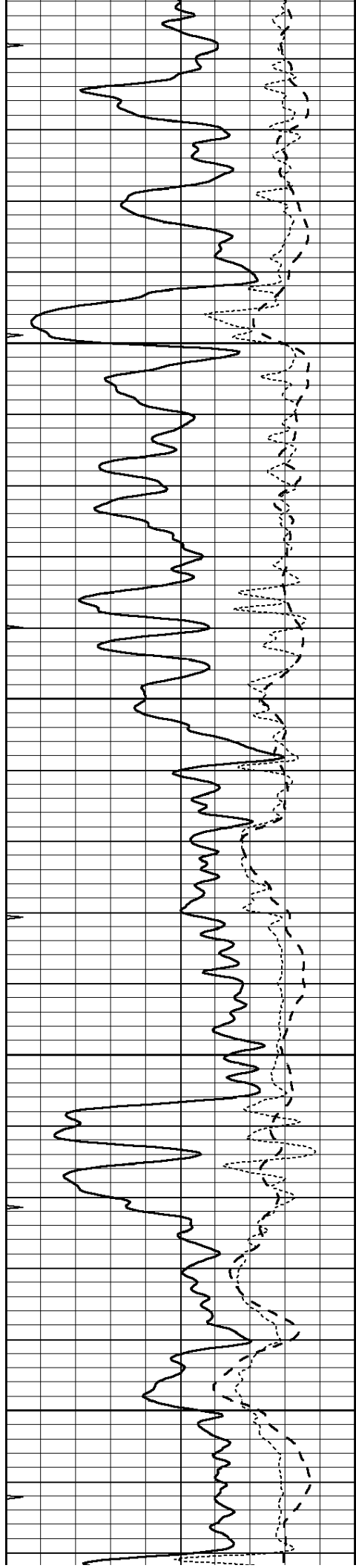
0.2	SHALLOW GUARD (Ohm-m)	2000
0.2	DEEP INDUCTION (Ohm-m)	2000
0.2	MEDIUM INDUCTION (Ohm-m)	2000



2300

2350



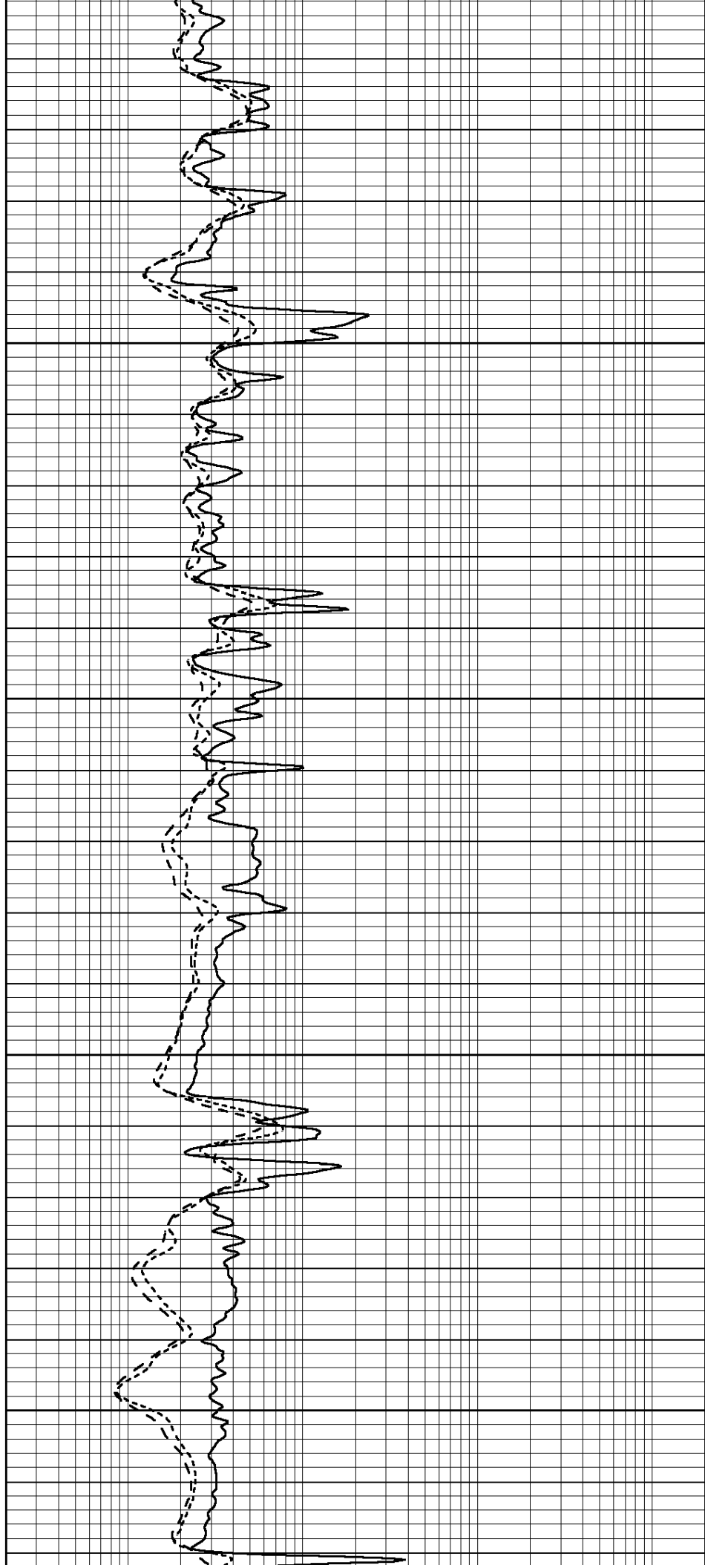


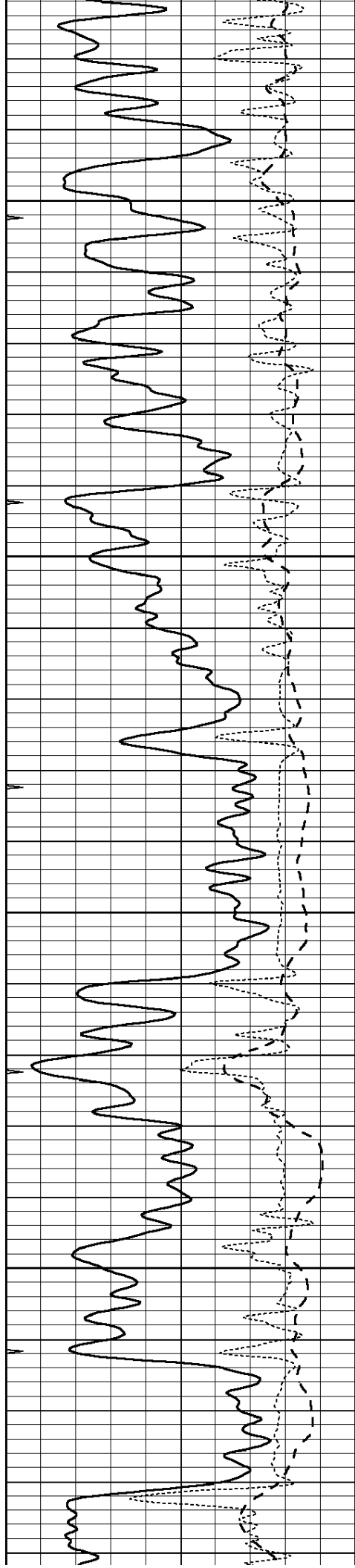
2400

2450

2500

2550



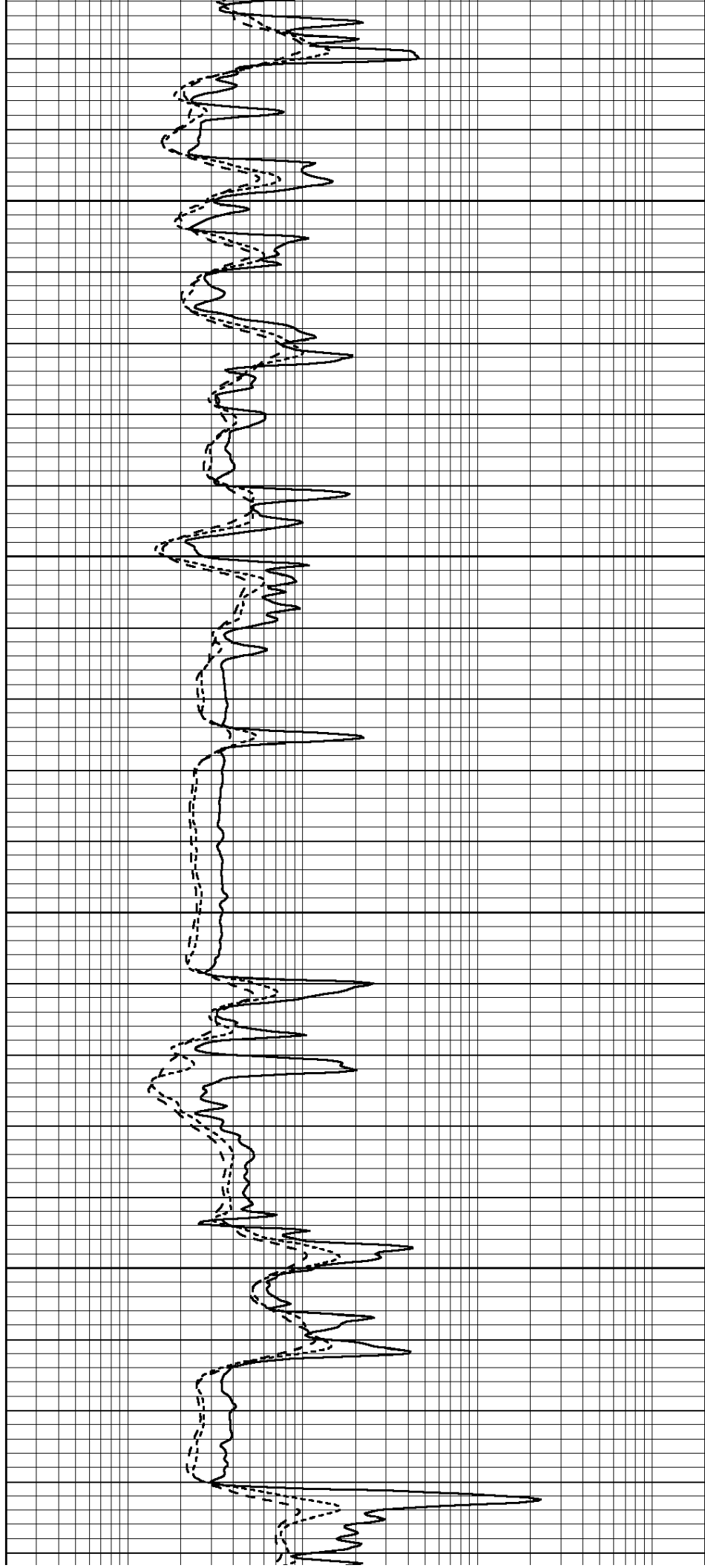


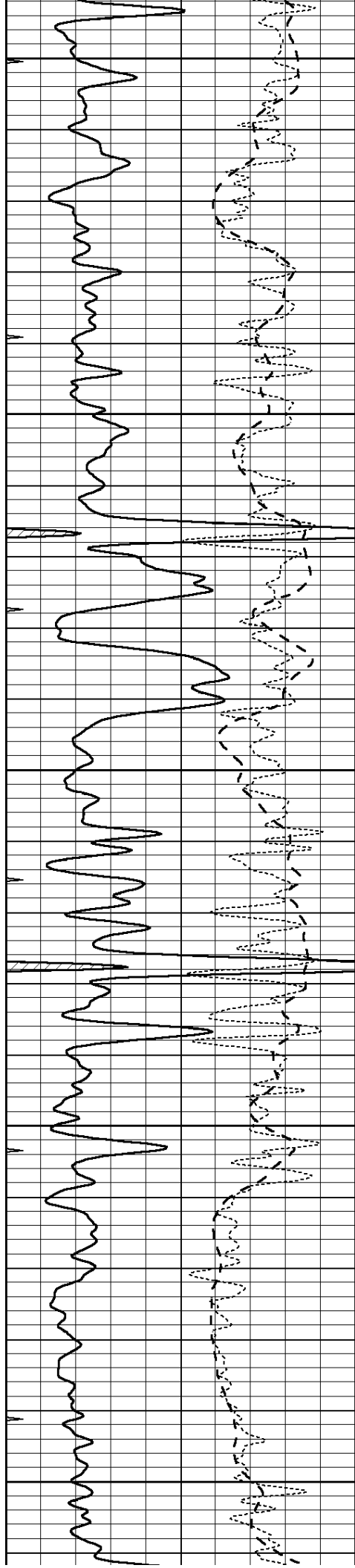
2600

2650

2700

2750





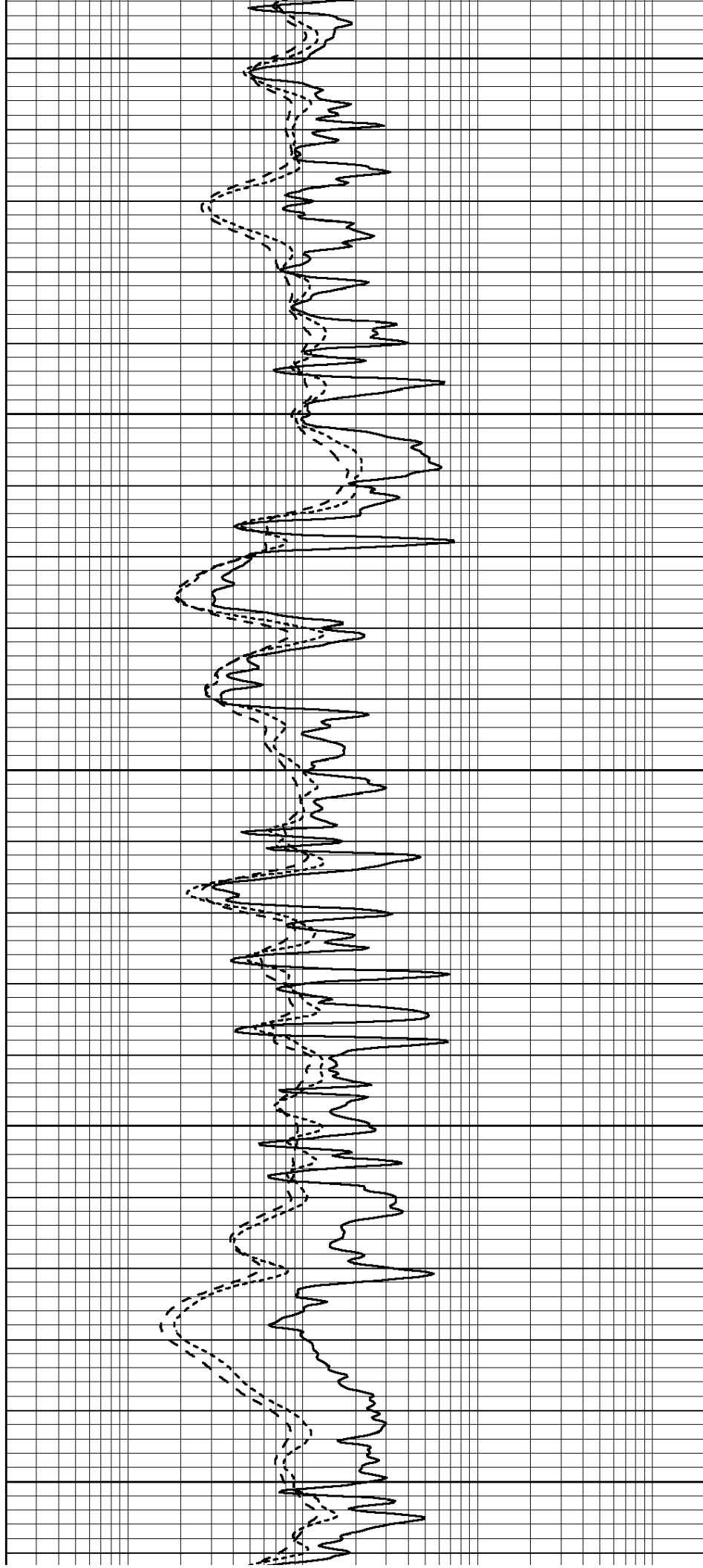
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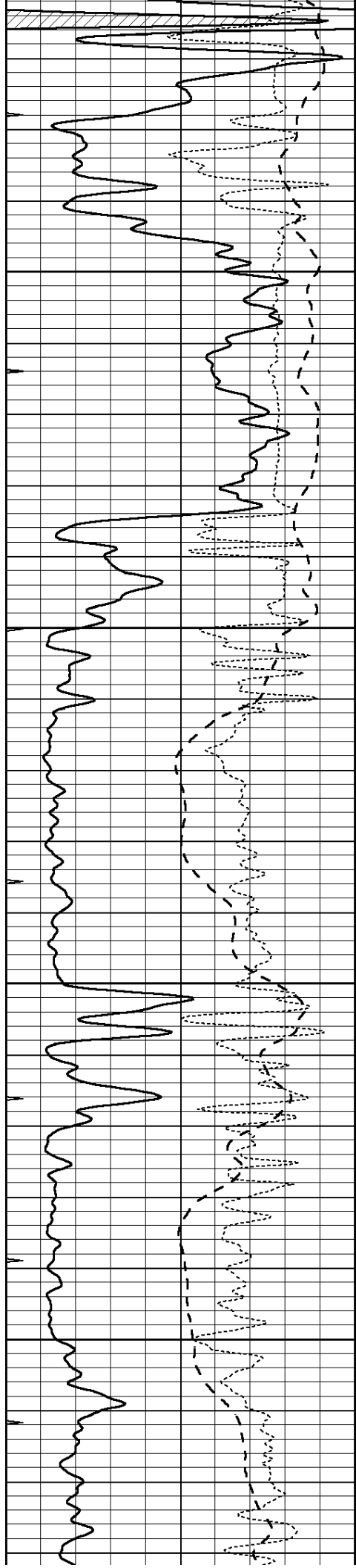
2850

2900

2950

3000



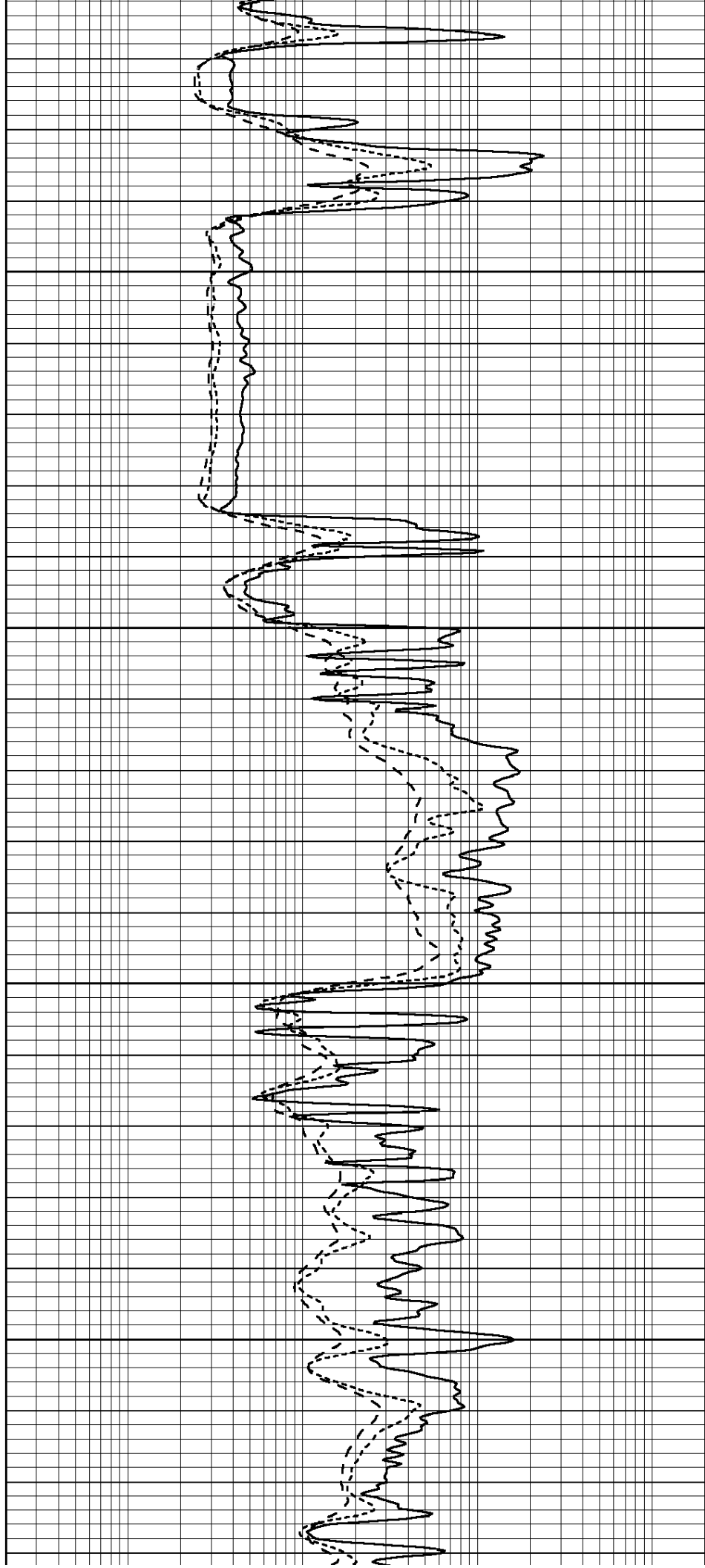


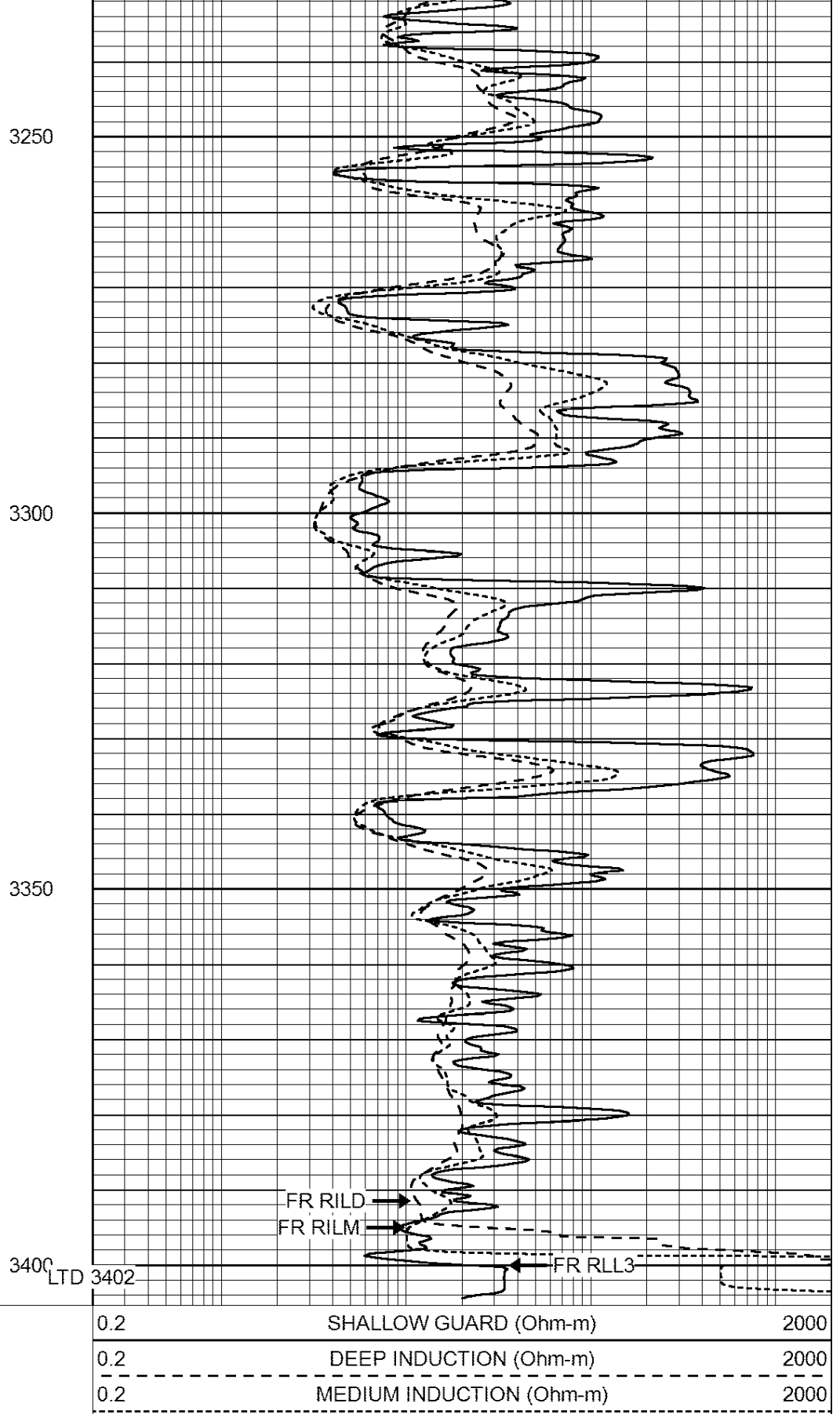
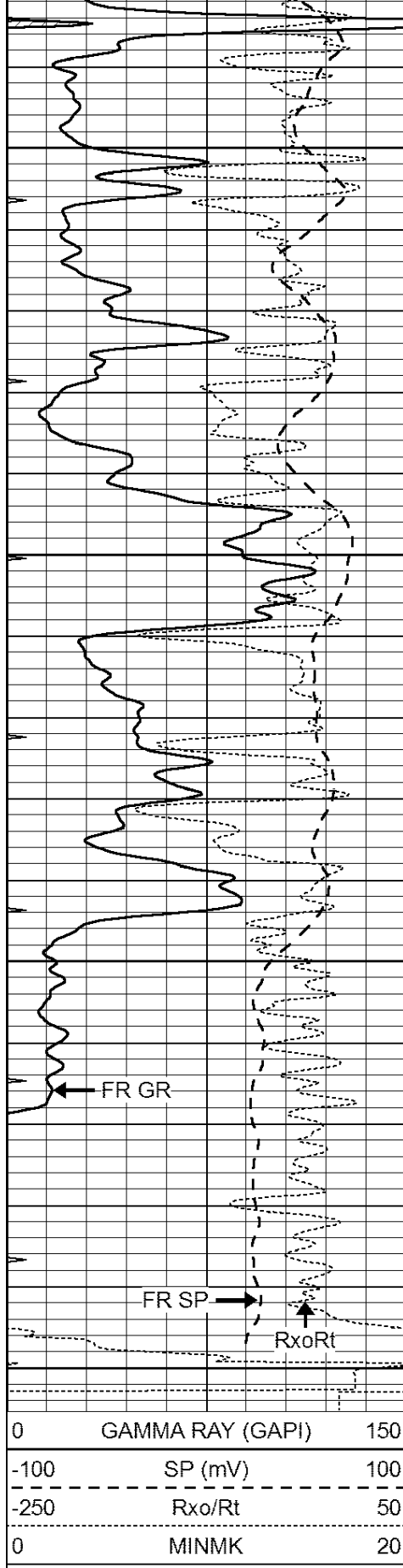
3050

3100

3150

3200





Database File:

26200ddn.db

Dataset Pathname:

pass2.1

Presentation Format:

_dil

Dataset Creation:

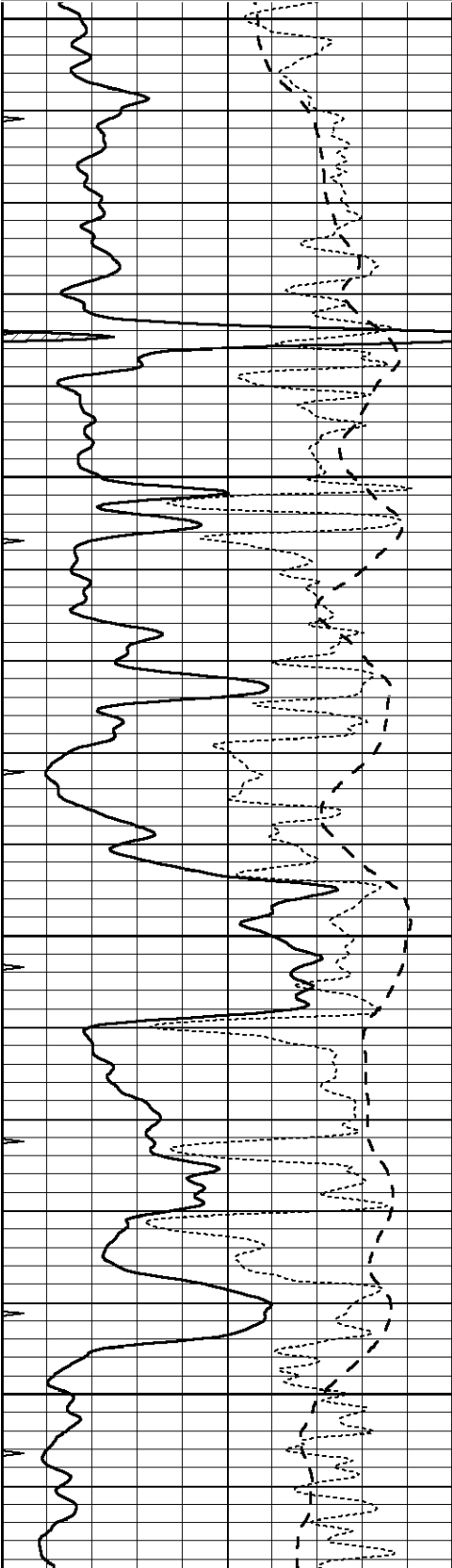
Tue Sep 30 10:51:32 2014 by Calc Open-Cased 090629

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

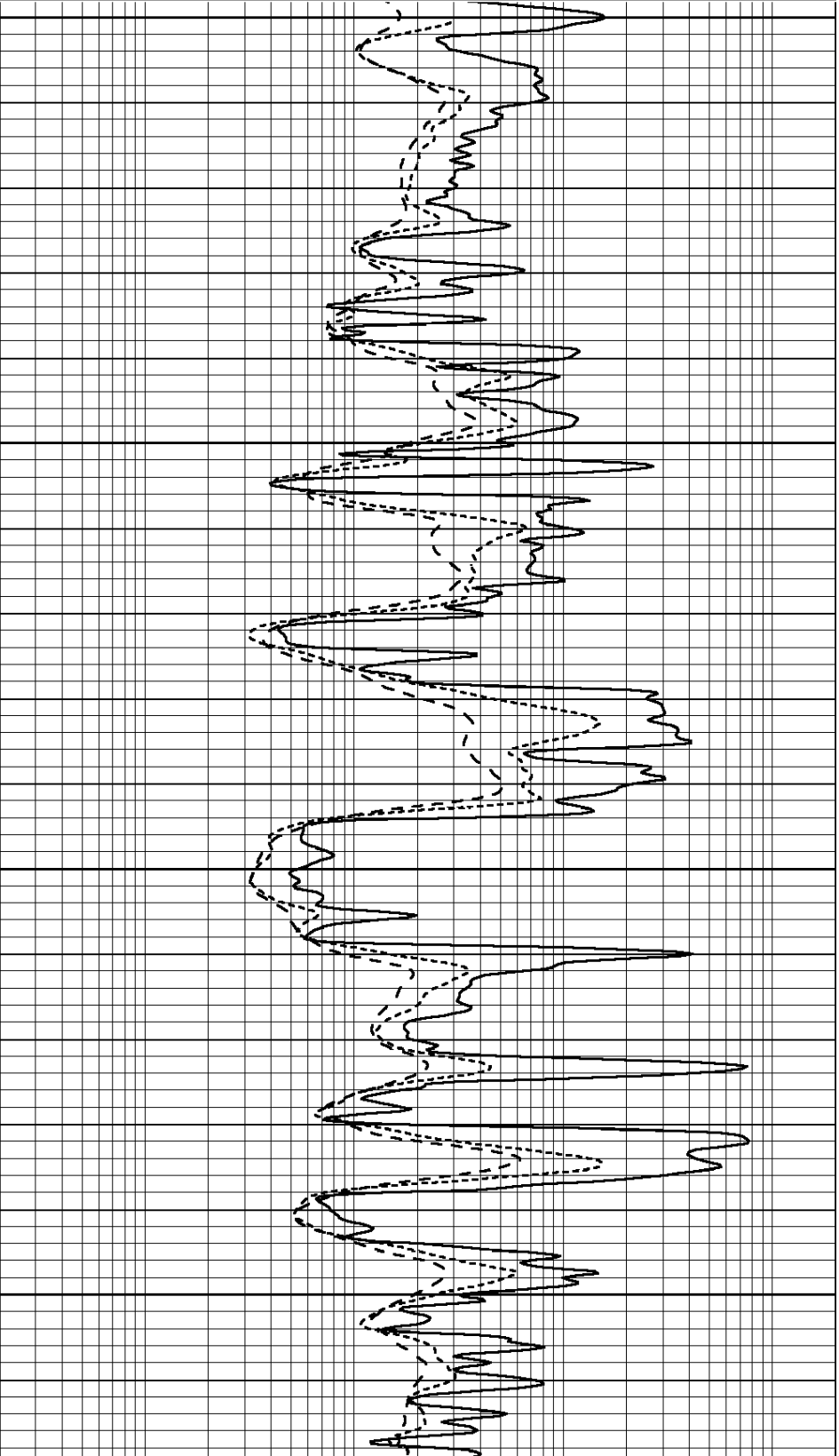


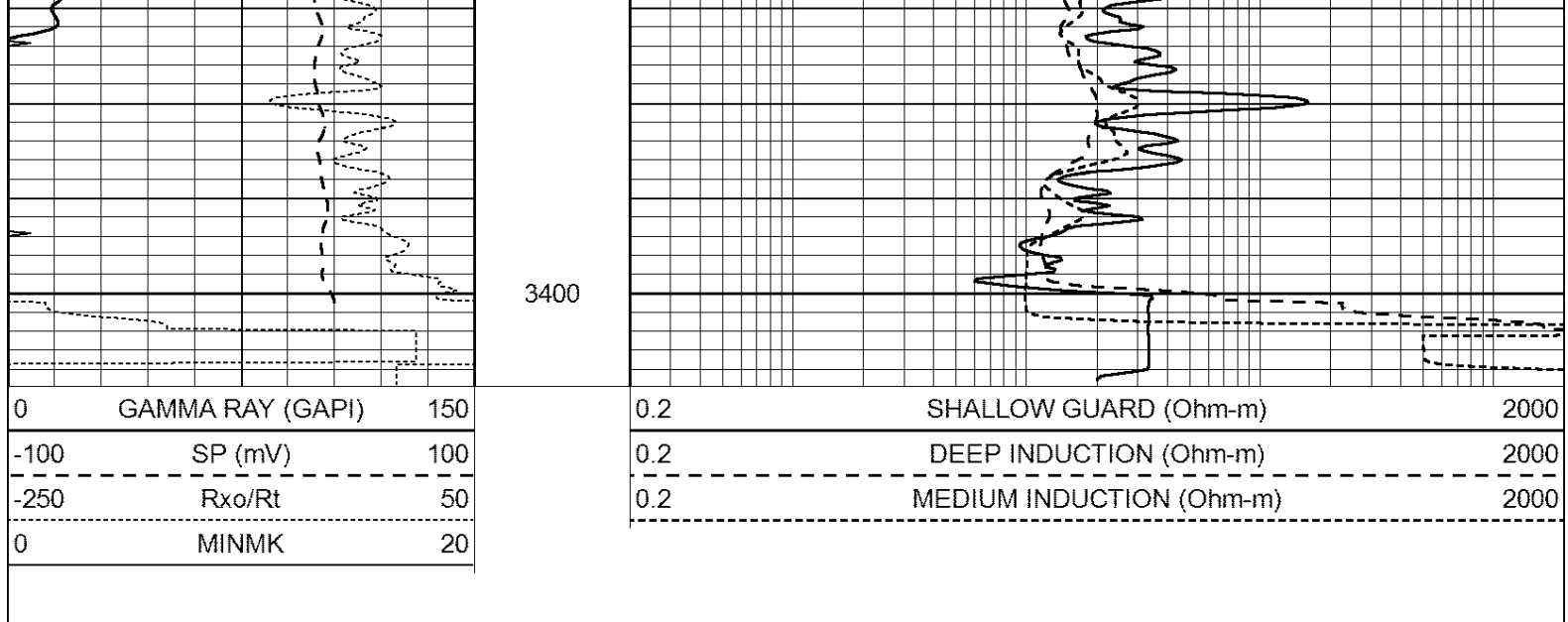
3200

3250

3300

3350





Calibration Report								
Database File:		26200ddn.db						
Dataset Pathname:		pass2.1						
Dataset Creation:		Tue Sep 30 10:51:32 2014 by Calc Open-Cased 090629						
Dual Induction Calibration Report								
Serial-Model:			PROBE8-DILG					
Surface Cal Performed:			Sun Aug 17 08:09:53 2014					
Downhole Cal Performed:			Mon Jul 28 11:08:27 2008					
After Survey Verification Performed:			Mon Jul 28 11:08:27 2008					
Surface Calibration								
		Readings		References			Results	
Loop:	Air	Loop		Air	Loop		m	b
Deep	0.015	0.648	V	0.000	400.000	mmho/m	620.000	-2.000
Medium	0.029	0.796	V	0.000	464.000	mmho/m	590.000	-16.000
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:	GEAR3-GEARHART
Source / Verifier:	143 / 143
Master Calibration Performed:	Sun Aug 17 08:09:42 2014
Before Survey Verification Performed:	
After Survey Verification Performed:	

Master Calibration

	Density		Far Detector	Near Detector	
Magnesium	1.710	g/cc	935.36	501.55	cps
Aluminum	2.580	g/cc	209.32	357.01	cps
Spine Angle = 77.21			Density/Spine Ratio = 0.567		
	Size		Reading		
Small Ring	8.00	in	4.29	V	
Large Ring	14.00	in	6.24	V	

Before Survey Verification

Target	Measured
g/cc	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	g/cc

Compensated Neutron Calibration Report

Serial Number:	6l
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 Long Space	cps cps	pu	pu
3)	Short Space Long Space	cps cps	pu	pu
Gamma Ray Calibration Report				
Serial Number: Tool Model: Performed: Calibrator Value: Background Reading: Calibrator Reading: Sensitivity: GR6 OPEN Sun Aug 17 15:23:09 2014 150.0 0.0 276.0 0.7000 GAPI cps cps GAPI/cps				