NABORS COMPLETION & PRODUCTION SERVICES CO.

DUAL INDUCTION LOG

Company	DREILING OIL CO., INC.
Well	DREILING TRUST #2
Field	SUGARLOAF
County	ELLIS
State	KANSAS

Company DREILING OIL CO., INC.
Well DREILING TRUST #2
Field SUGARLOAF
County ELLIS State KANSAS

Location: API #: 15-051-26715-00-00
1510' FNL & 1190' FEL
NW - NW - SE - SE/4
SEC 20 TWP 13S RGE 17W

Other Services: CNL/CDL, MEL

Permanent Datum: GROUND LEVEL Elevation 2037
Log Measured From: KELLY BUSHING 8' A.G.L.
Drilling Measured From: KELLY BUSHING

Elevation: K.B. 2045, D.F. 2043, G.L. 2037

Date	8/7/14		
Run Number	ONE		
Depth Driller	3680		
Depth Logger	3682		
Bottom Logged Interval	3680		
Top Log Interval	00		
Casing Driller	8 5/8 @ 222'		
Casing Logger	223'		
Bit Size	7.875		
Type Fluid in Hole	CHEMICAL MUD		
Density / Viscosity	9.3 / 48	CHLORIDES 9,000 PPM	
pH / Fluid Loss	9.5 / 9.4		
Source of Sample	FLOWLINE		
Rm @ Meas. Temp	0.40 @ 89F		
Rmf @ Meas. Temp	0.30 @ 89F		
Rmc @ Meas. Temp	0.48 @ 89F		
Source of Rmf / Rmc	MEASURED		
Rm @ BHT	0.31 @ 113F		
Time Circulation Stopped	2 HOURS		
Time Logger on Bottom			
Maximum Recorded Temperature	113F		
Equipment Number	3802		
Location	HAYS, KS.		
Recorded By	IAN MABB		
Witnessed By	ROGER FISHER		

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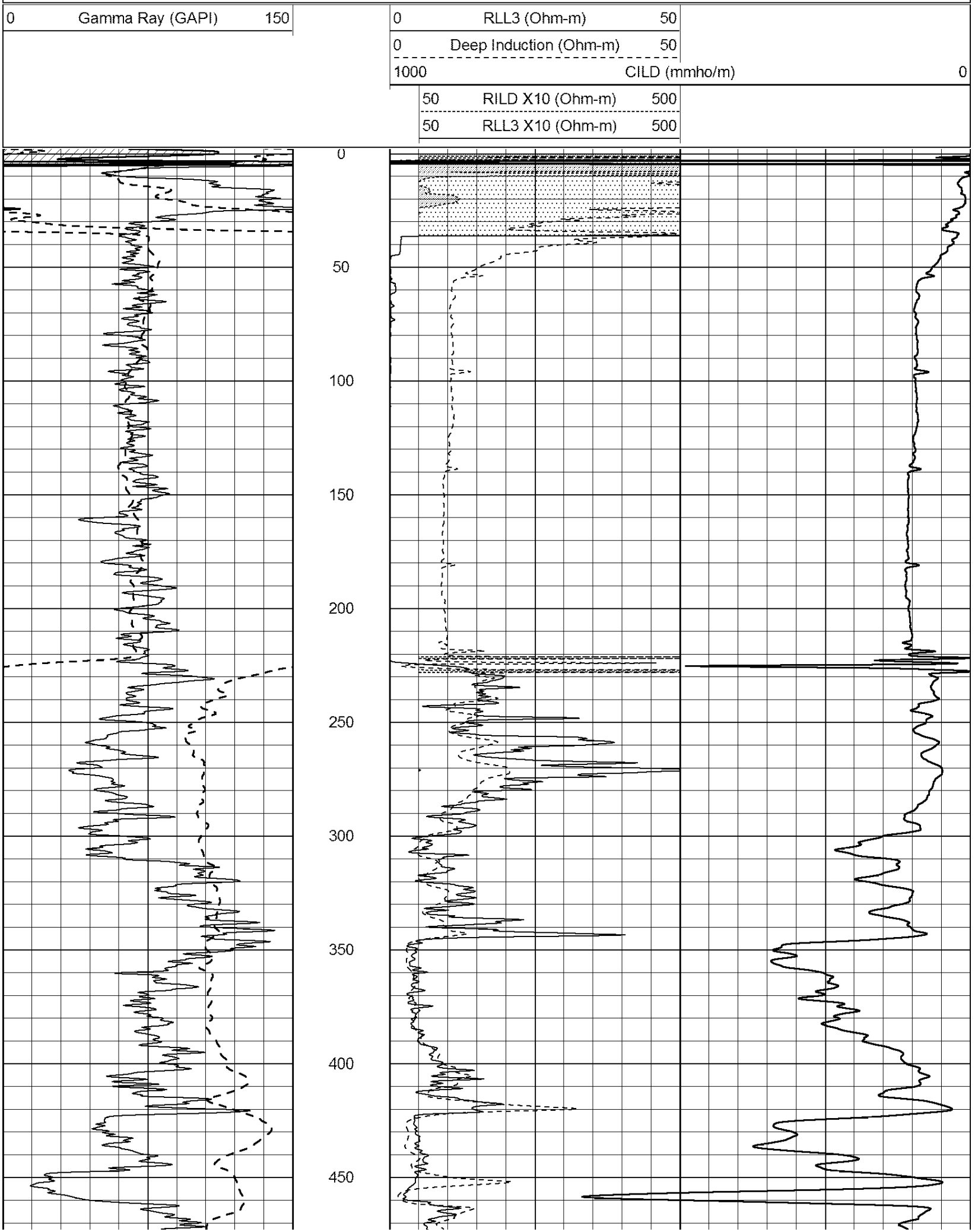
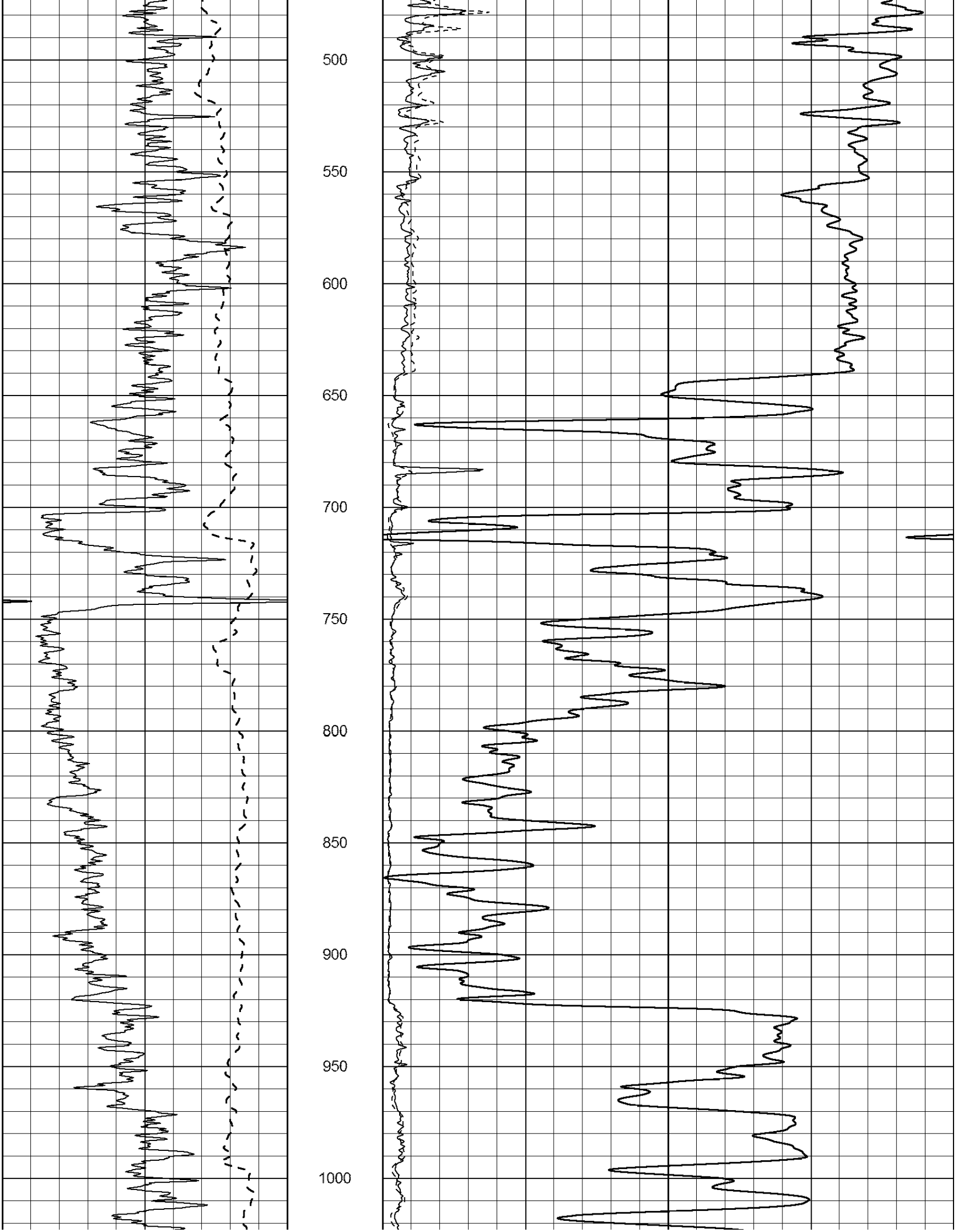
Comments

NABORS COMPLETION & PRODUCTION SERVICES CO.
785 (628 - 6395)
THANK YOU FOR YOUR BUSINESS
DIRECTIONS : HAYS, KS. - EAST ON I-70 TO TOULON AVE. - NORTH 2 1/2 MILES EAST INTO

Database File:	24721ddn.db
Dataset Pathname:	pass3.4
Presentation Format:	_dil2
Dataset Creation:	Thu Aug 07 22:29:11 2014 by Calc Open-Cased 090629

Charted by: Depth in Feet scaled 1:600

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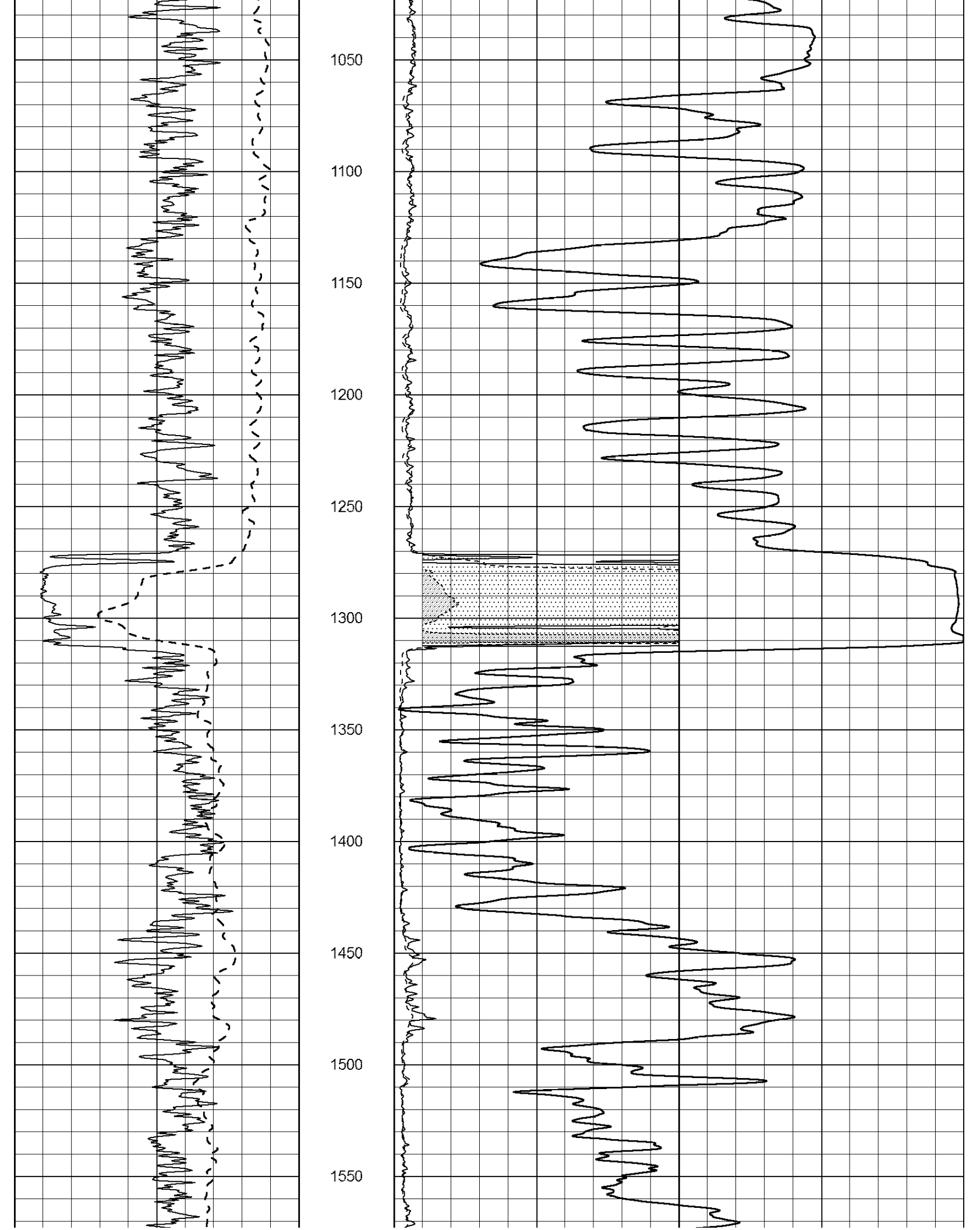
550
600
650
700
750
800
850
900
950
1000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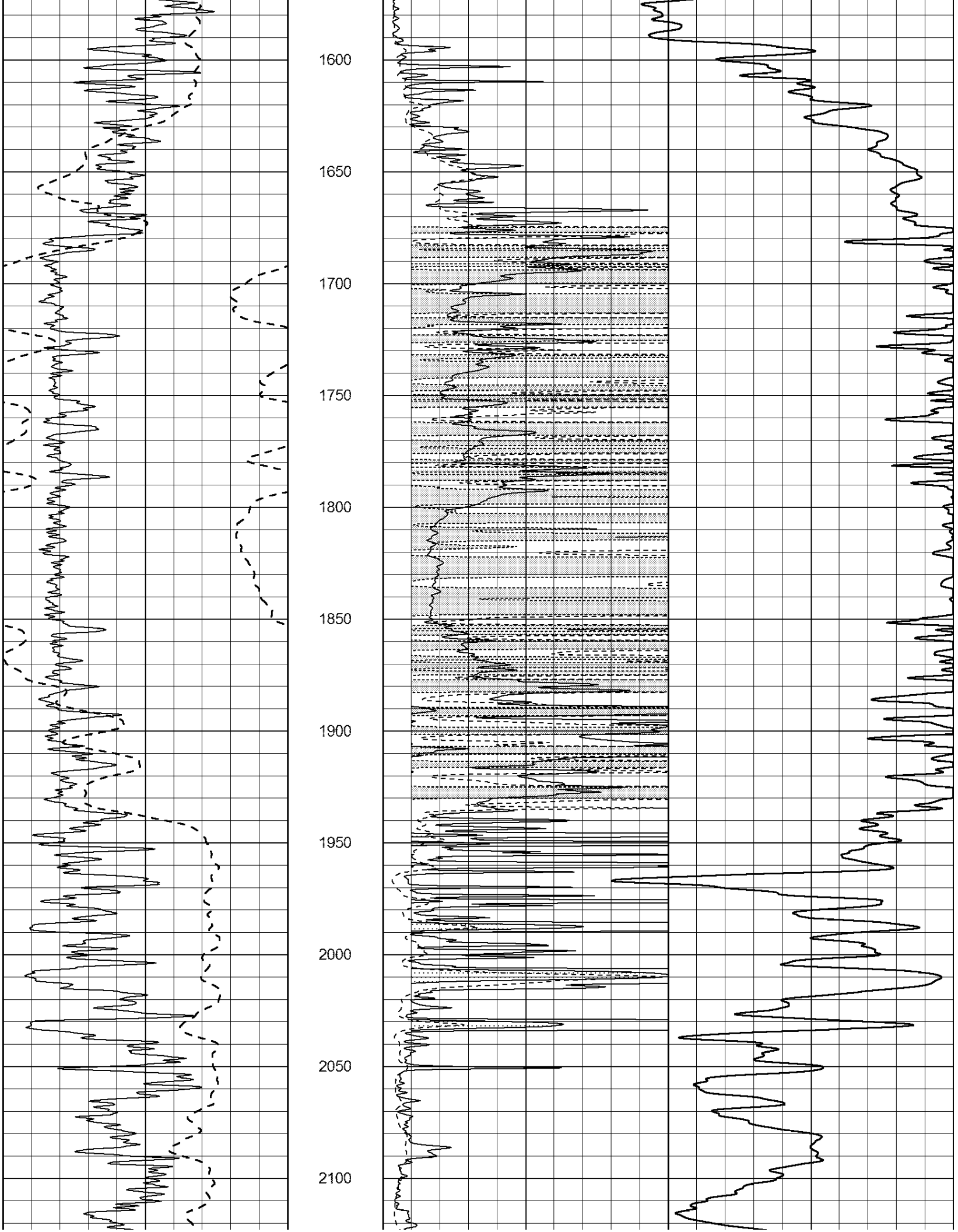
1300
1350
1400
1450
1500
1550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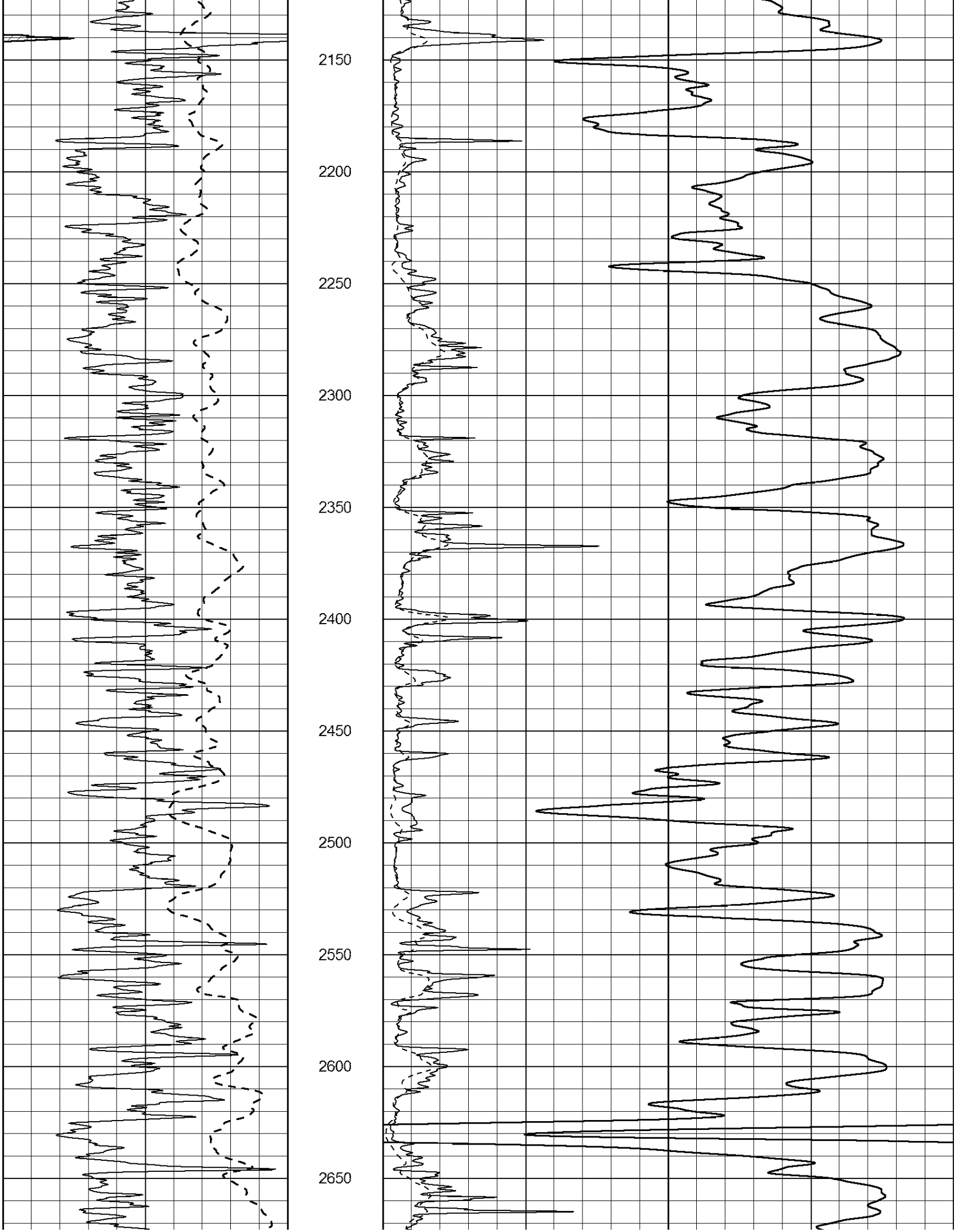
1700
1750
1800
1850
1900
1950
2000
2050
2100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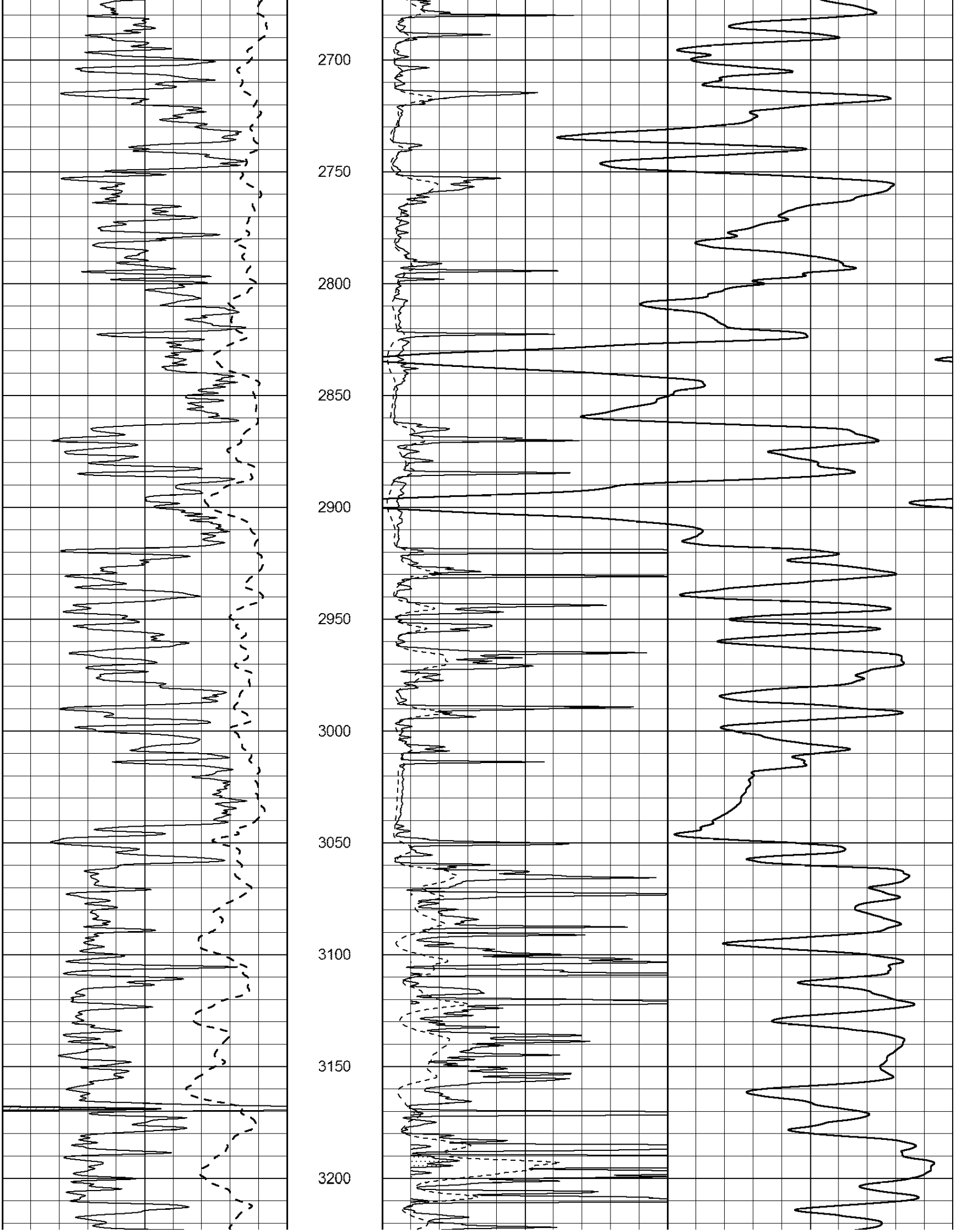
2250
2300
2350
2400
2450
2500
2550
2600
2650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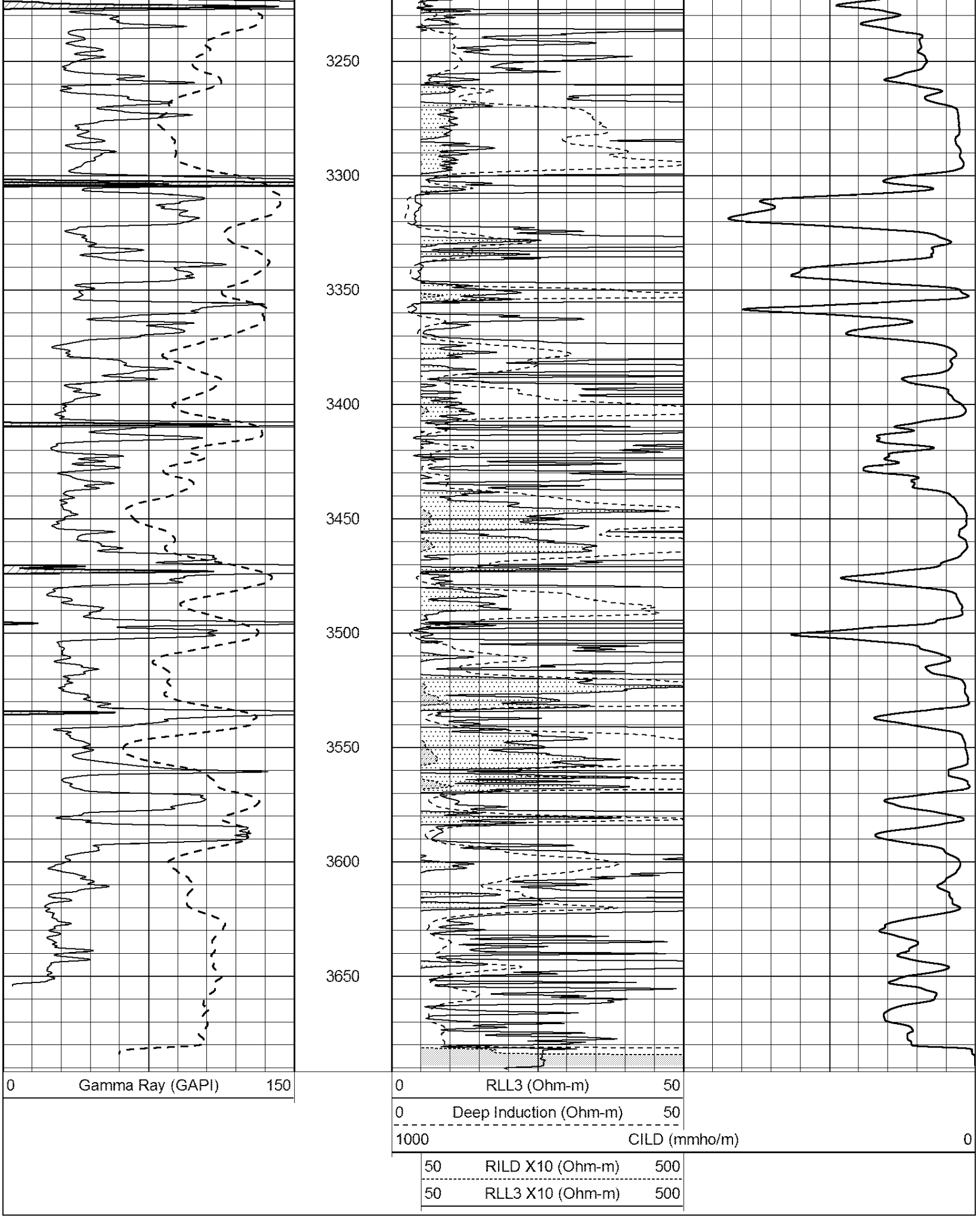
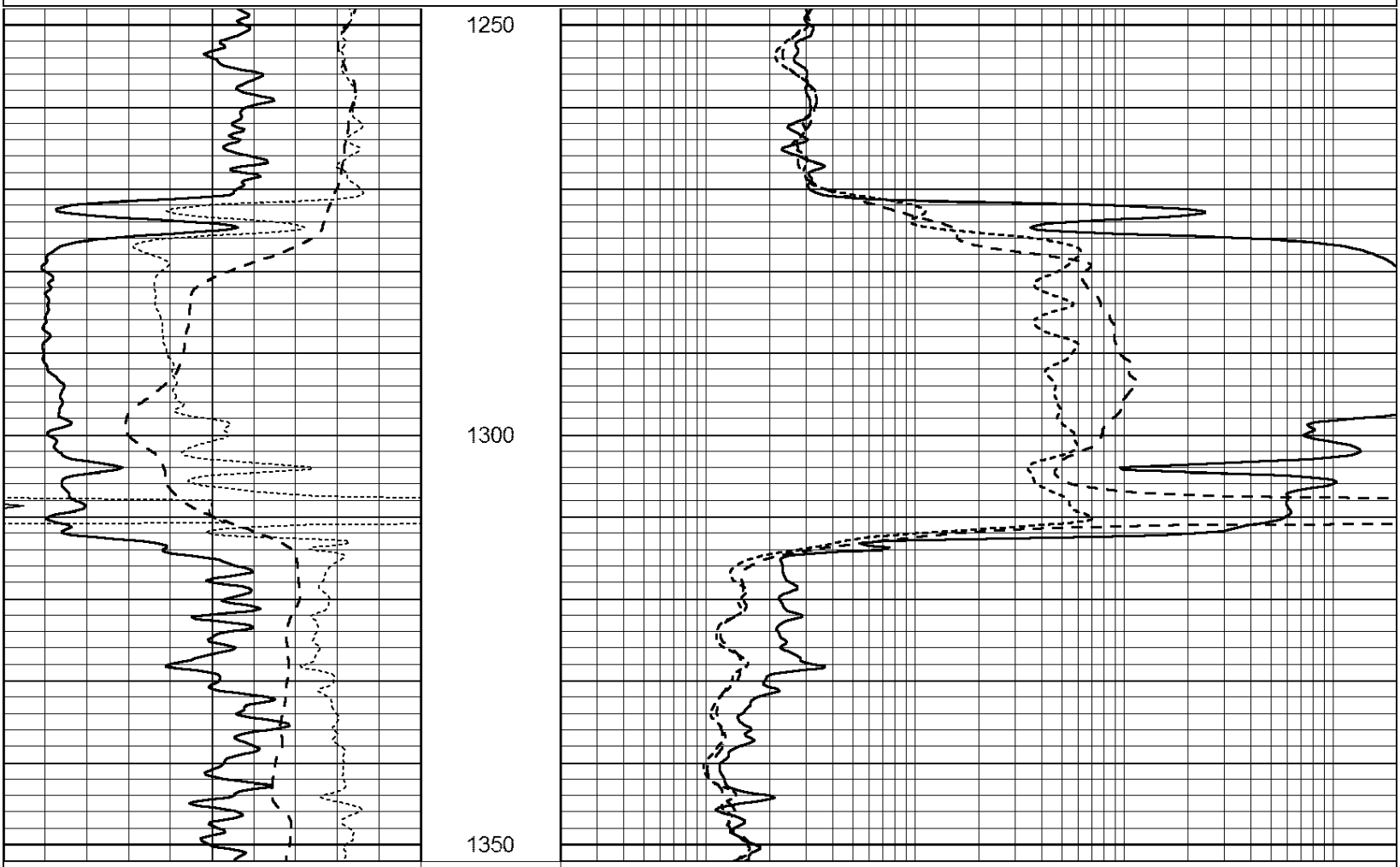
2750
2800
2850
2900
2950
3000
3050
3100
3150
3200


3250
3300
3350
3400
3450
3500
3550
3600
3650
0 Gamma Ray (GAPI) 150
0 RLL3 (Ohm-m) 50
0 Deep Induction (Ohm-m) 50
1000 CILD (mmho/m) 0
50 RILD X10 (Ohm-m) 500
50 RLL3 X10 (Ohm-m) 500

Database File: 24721ddn.db
Dataset Pathname: pass3.4
Presentation Format: _dil
Dataset Creation: Thu Aug 07 22:29:11 2014 by Calc Open-Cased 090629
Charted by: Depth in Feet scaled 1:240

0	GAMMA RAY (GAPI)	150
-100	SP (mV)	100
-250	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



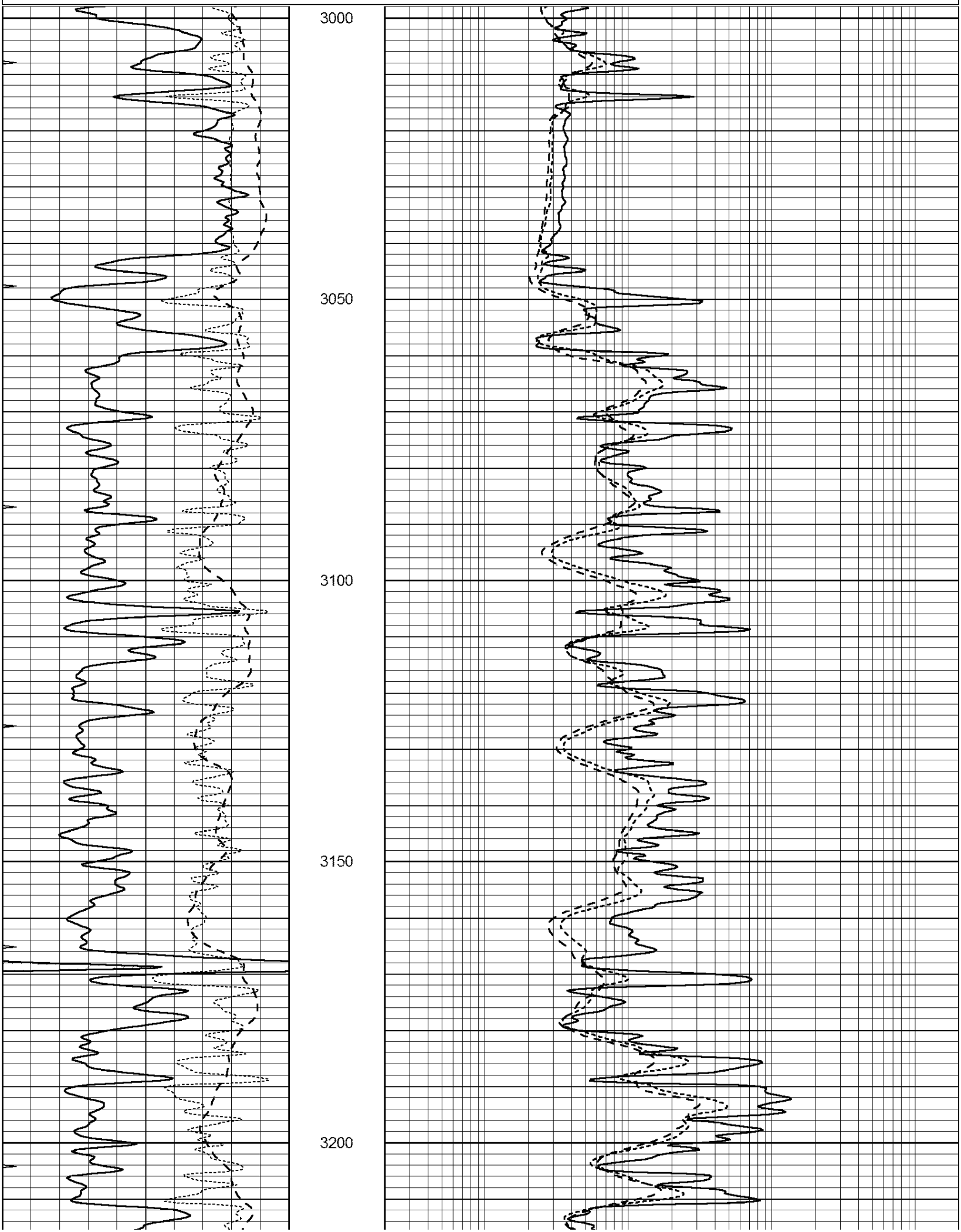
0	GAMMA RAY (GAPI)	150
-100	SP (mV)	100
-250	RxoRt	50
0	MINMK	20

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

Database File: 24721ddn.db
Dataset Pathname: pass3.3
Presentation Format: _dil
Dataset Creation: Thu Aug 07 21:57:58 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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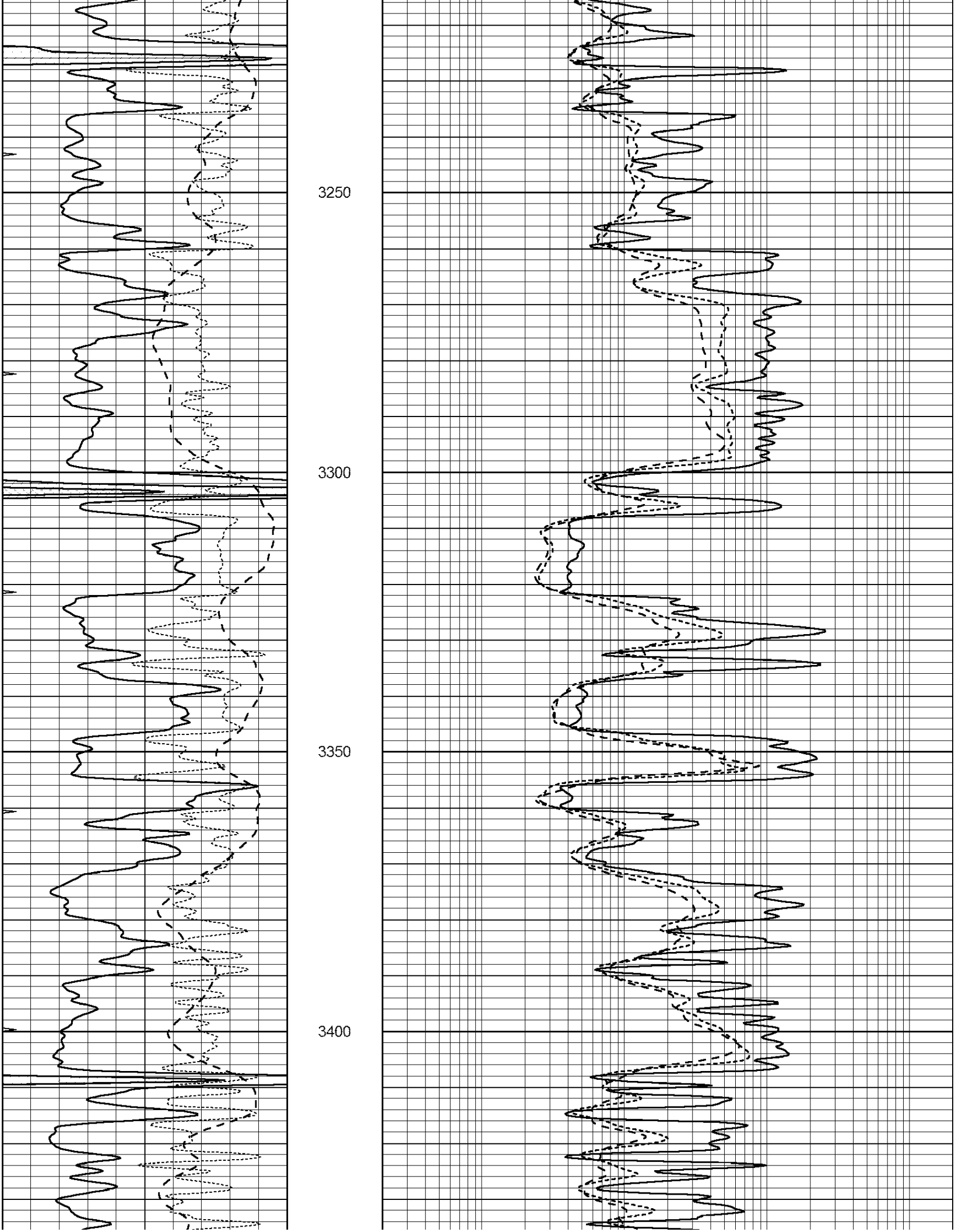
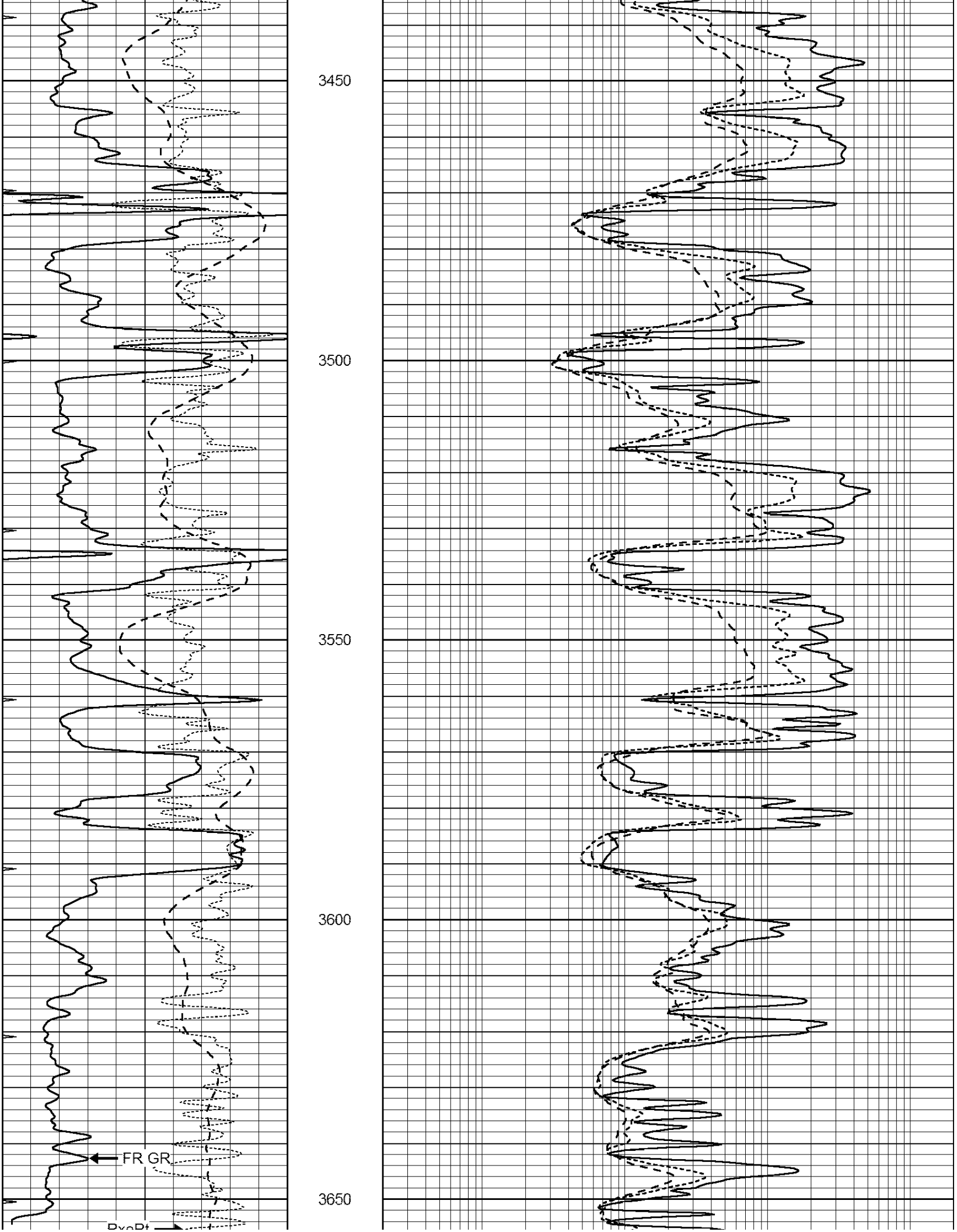
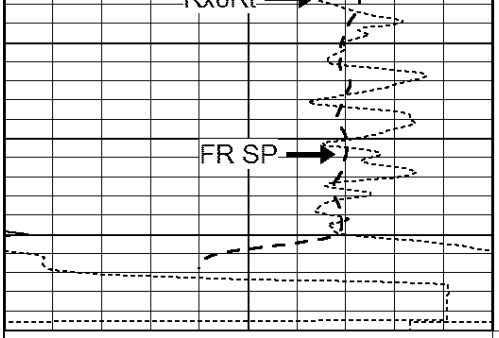
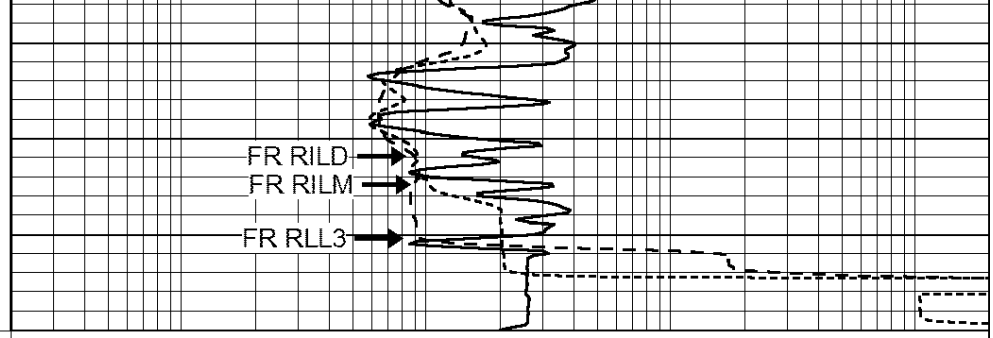
3050
3100
3150
3200


3250
3300
3350
3400


3450
3500
3550
3600
3650
FR GR
RxoRt





LTD 3682

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

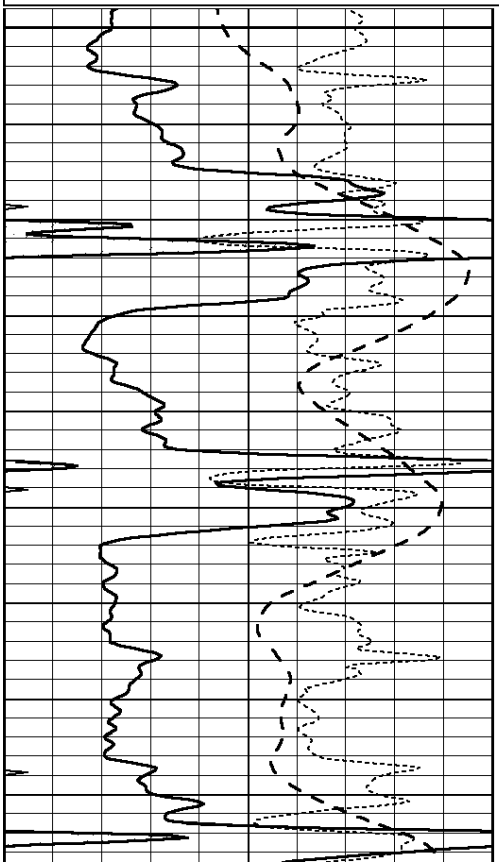
NABORS
COMPLETION & PRODUCTION SERVICES CO.

REPEAT SECTION

Database File: 24721ddn.db
Dataset Pathname: pass2.1
Presentation Format: _dil
Dataset Creation: Thu Aug 07 21:32:20 2014 by Calc Open-Cased 090629
Charted by: Depth in Feet scaled 1:240

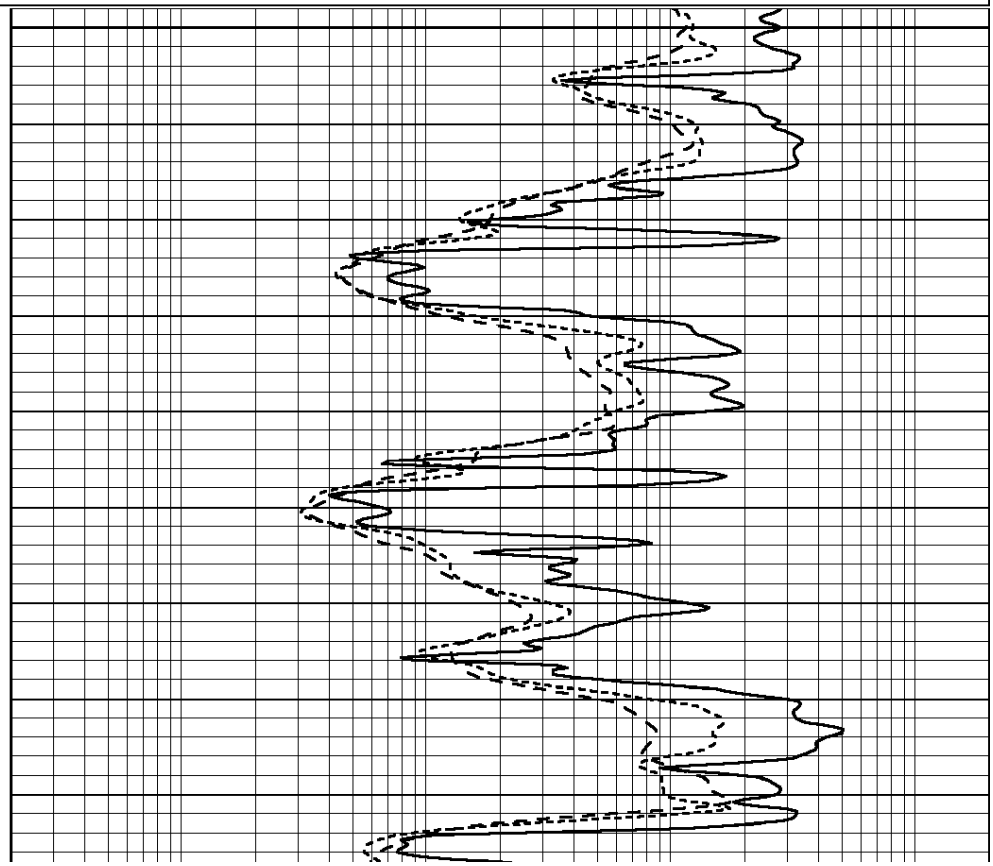
0	GAMMA RAY (GAPI)	150
-100	SP (mV)	100
-250	RxoRt	50
0	MINMK	20

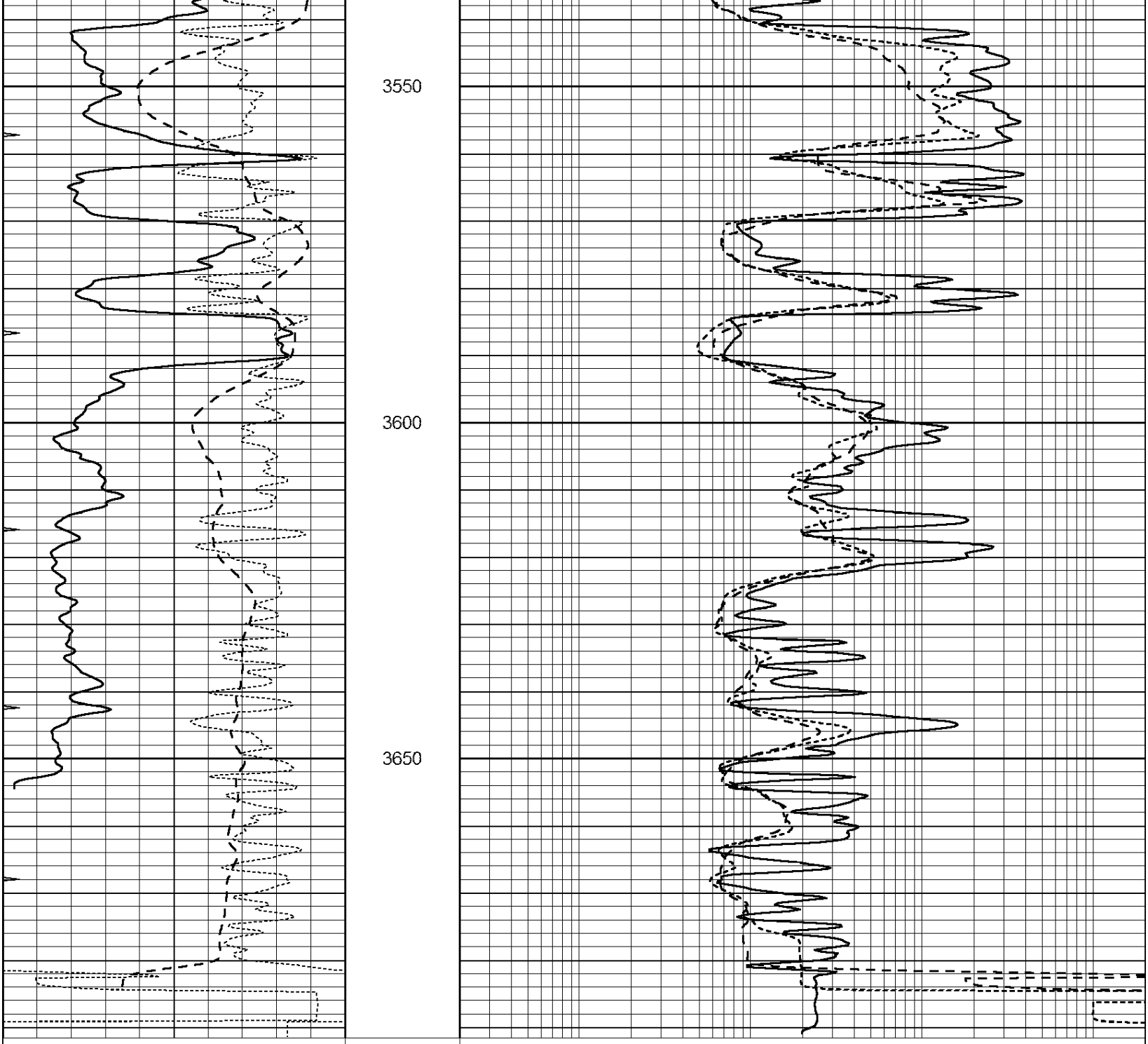
0.2	RLL3 (Ohm-m)	2000
0.2	DEEP INDUCTION (Ohm-m)	2000
0.2	MEDIUM INDUCTION (Ohm-m)	2000



3450

3500





Calibration Report

Database File: 24721ddn.db
Dataset Pathname: pass3.4
Dataset Creation: Thu Aug 07 22:29:11 2014 by Calc Open-Cased 090629

Dual Induction Calibration Report

Serial-Model:	PROBE7-DILG
Surface Cal Performed:	Sat Aug 02 01:54:49 2014
Downhole Cal Performed:	Sat Jan 19 19:51:38 2013
After Survey Verification Performed:	Sat Jan 19 19:51:38 2013

After Survey Verification Performed: Sat Jan 19 19:51:56 2013

Surface Calibration

	Readings			References			Results	
Loop:	Air	Loop		Air	Loop		m	b
Deep	0.793	0.790	V	0.000	400.000	mmho/m	550.000	14.000
Medium	0.992	1.002	V	0.000	464.000	mmho/m	580.000	-32.000
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		Zero	Cal		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: Sat Aug 02 01:49:41 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	2.610	g/cc	212.01	399.19	cps

Spine Angle = 76.20 Density/Spine Ratio = 0.585

	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		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:	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		
Long Space	cps	pu	pu

Gamma Ray Calibration Report

Serial Number:	46001	
Tool Model:	Probe1	
Performed:	Sat Aug 02 01:56:52 2014	
Calibrator Value:	1.0	GAPI
Background Reading:	0.0	cps
Calibrator Reading:	1.0	cps
Sensitivity:	0.2600	GAPI/cps