SUPERIOR
Hays,
Kansas

DUAL INDUCTION LOG

Company MAI OIL OPERATIONS, INC.

Well LOUIE #8

Field HALL - GURNEY

County RUSSELL State KANSAS

Location: API # : 15-167-23711-0000

2310' FSL & 1575' FWL
W/2 - NW - NE - SW

SEC 34 TWP 14S RGE 14W

Other Services
CDL/CNL
MEL

Elevation
K.B. 1725
D.F. 1723
G.L. 1716

Permanent Datum GROUND LEVEL Elevation 1716
Log Measured From KELLY BUSING 9' A.G.L.
Drilling Measured From KELLY BUSHING

Company MAI OIL OPERATIONS, INC.
Well LOUIE #8
Field HALL - GURNEY
County RUSSELL
State KANSAS

Date	5/22/11		
Run Number	ONE		
Depth Driller	3225		
Depth Logger	3226		
Bottom Logged Interval	3224		
Top Log Interval	00		
Casing Driller	8 5/8"@412'		
Casing Logger	414		
Bit Size	7 7/8"		
Type Fluid in Hole	CHEMICAL MUD	CHLORIDES 6,000 PPM	
Density / Viscosity	9.3/51		
pH / Fluid Loss	10.5/9.6		
Source of Sample	FLOWLINE		
Rm @ Meas. Temp	.600@88F		
Rmf @ Meas. Temp	.450@88F		
Rmc @ Meas. Temp	.720@88F		
Source of Rmf / Rmc	MEASUREMENT		
Rm @ BHT	.484@109F		
Time Circulation Stopped	2 HOURS		
Time Logger on Bottom	3:45 A.M.		
Maximum Recorded Temperature	109F		
Equipment Number	0836		
Location	HAYS, KANSAS		
Recorded By	JEFF LUEBBERS		
Witnessed By	JOSH AUSTIN		

<<< Fold Here >>>

Comments

THANK YOU FOR USING SUPERIOR WELL SERVICE HAYS, KANSAS (785) 628-6395

DIRECTIONS

RUSSELL, KS. 6S. OF I-70 ON HWY 281 TO "WALTERS RD.", 1W., 1/2 N. TO "T", 1/4 E. INTO, FOLLOW LEASE RD, E. & N. & E. PAST 2 PUMPING UNITS

MAIN SECTION

SUPERIOR
Hays,
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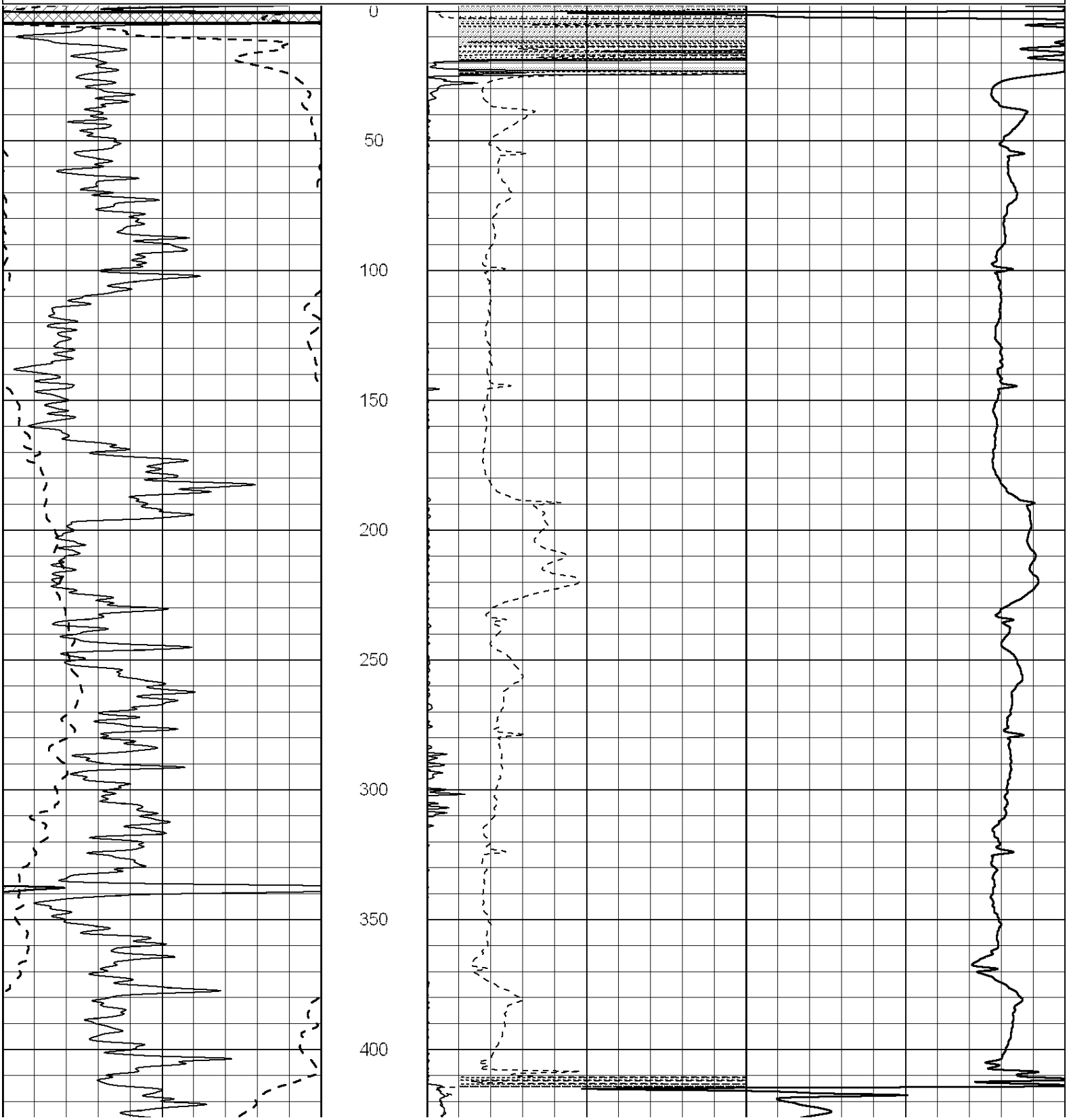
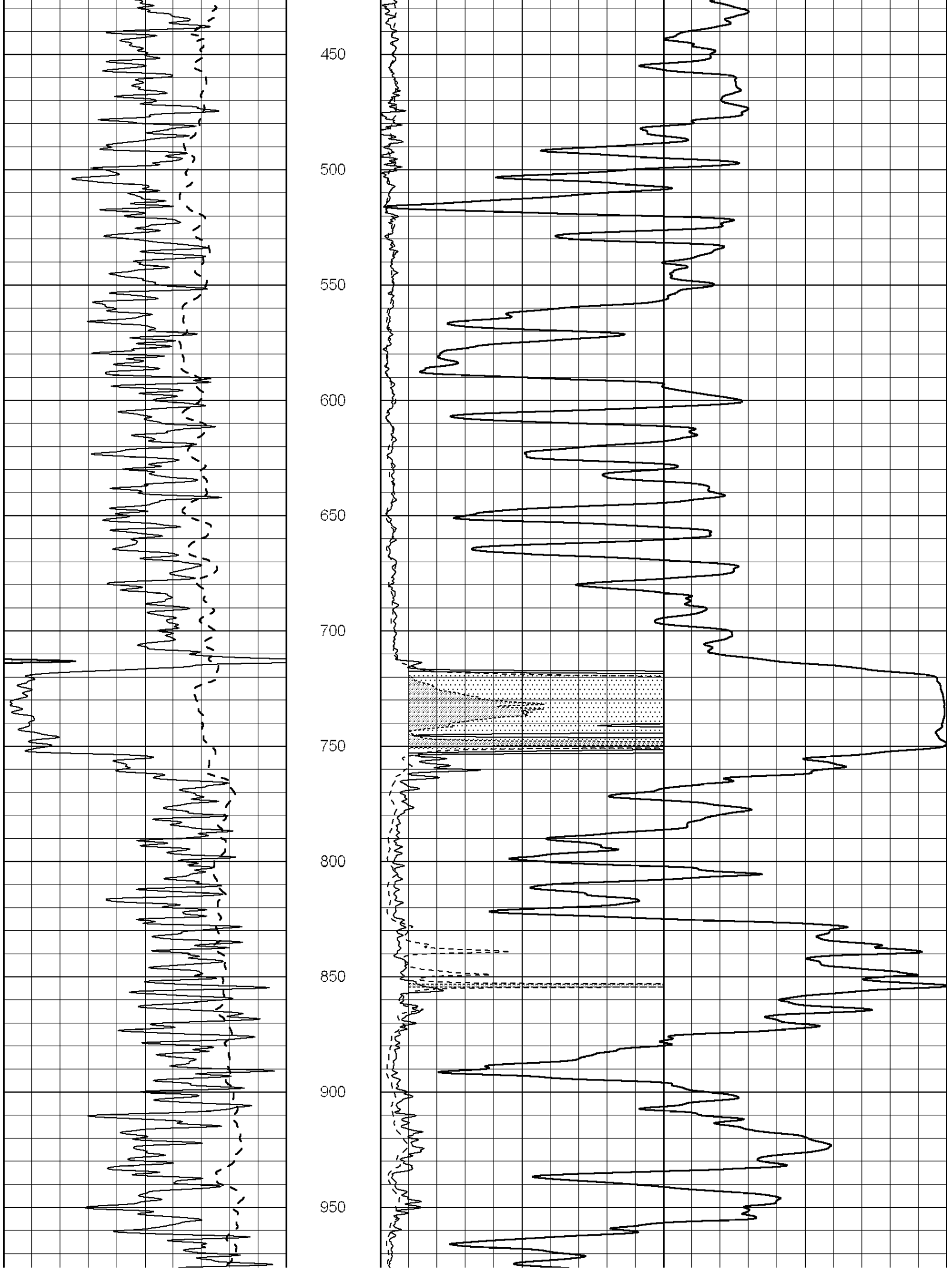
Database File:	006957ddn.db
Dataset Pathname:	pass3.11
Presentation Format:	dil2
Dataset Creation:	Sun May 22 05:16:20 2011
Charted by:	Depth in Feet scaled 1:600

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

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

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550
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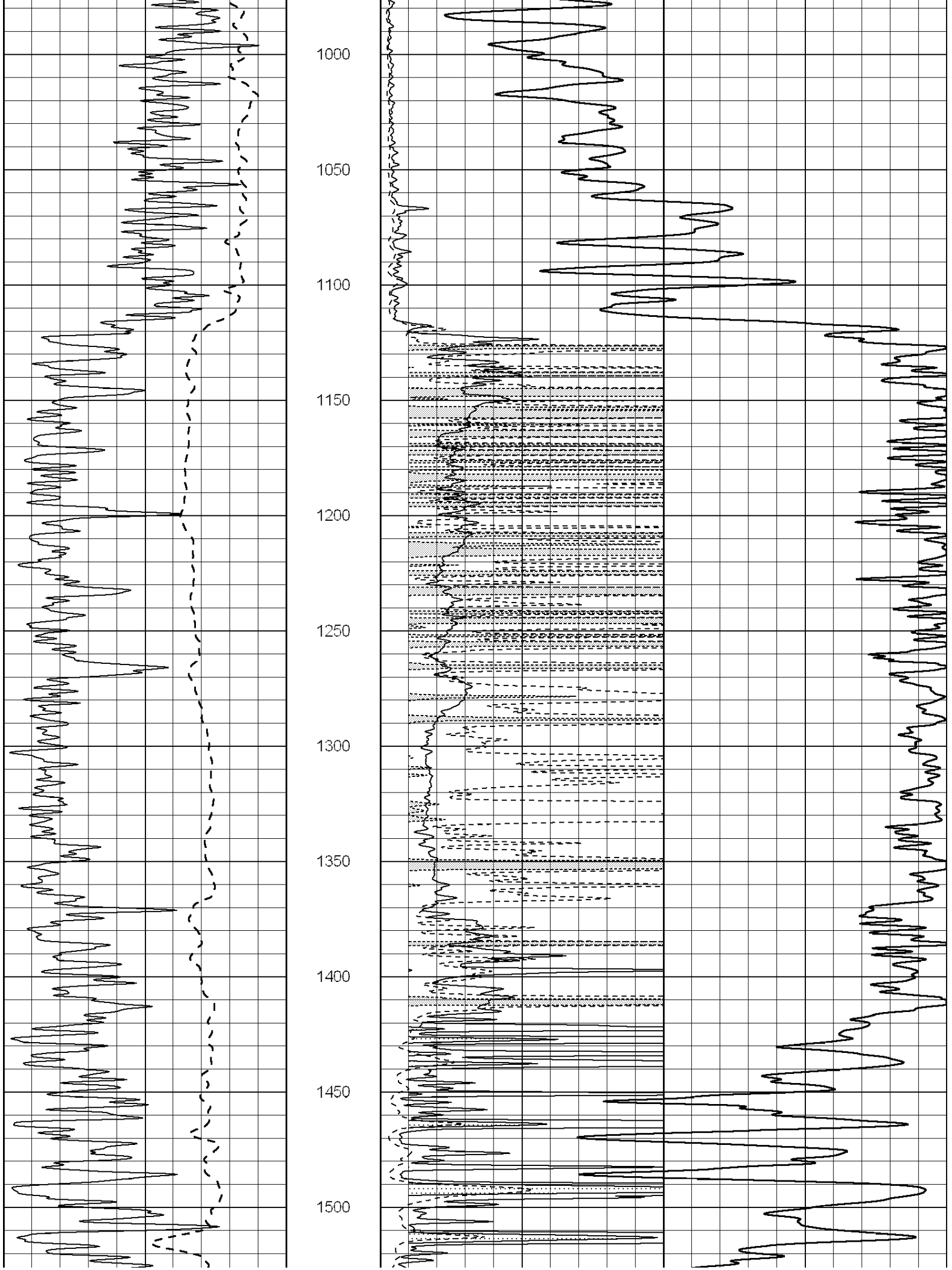
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1300
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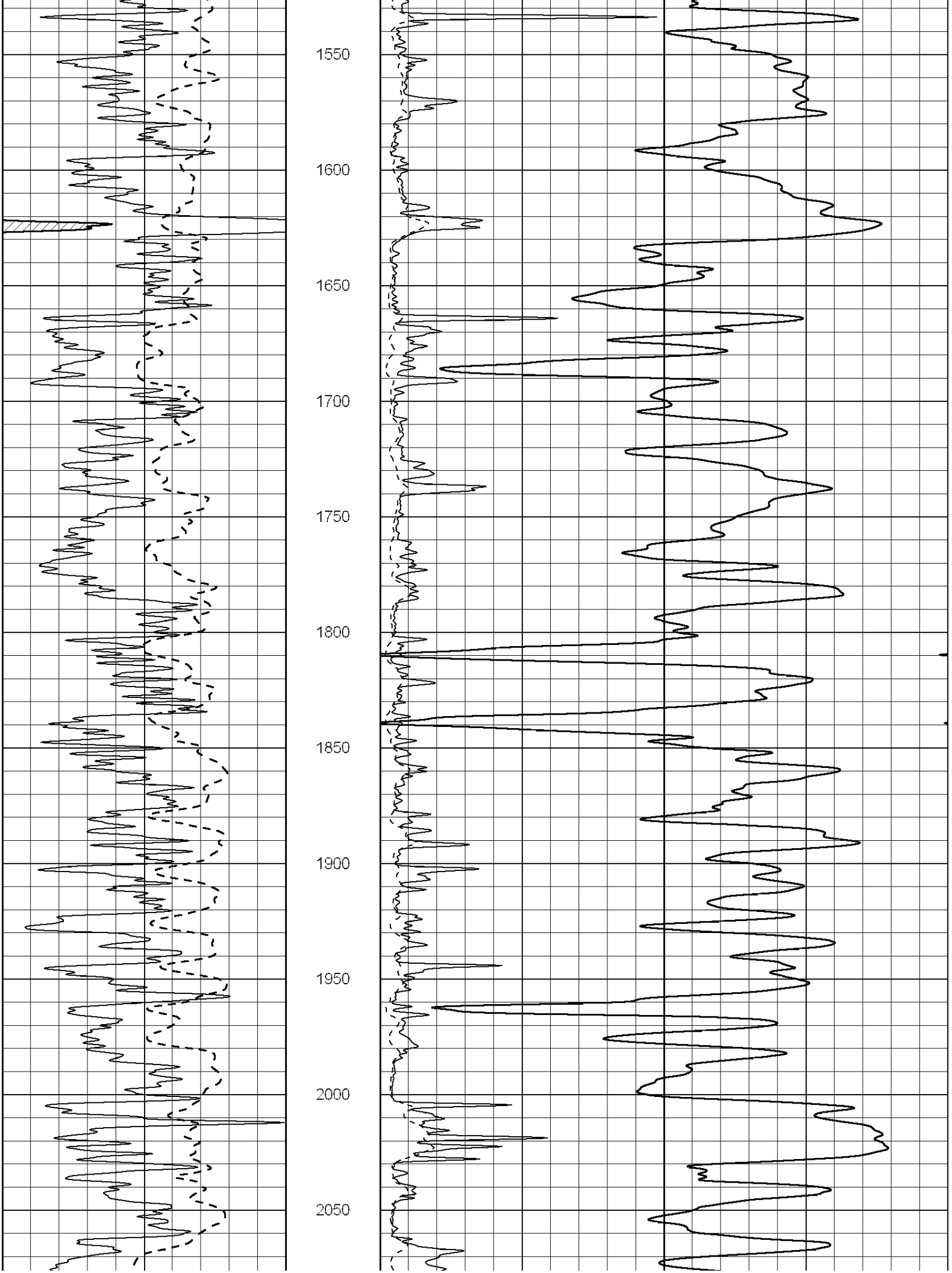
1400
1450
1500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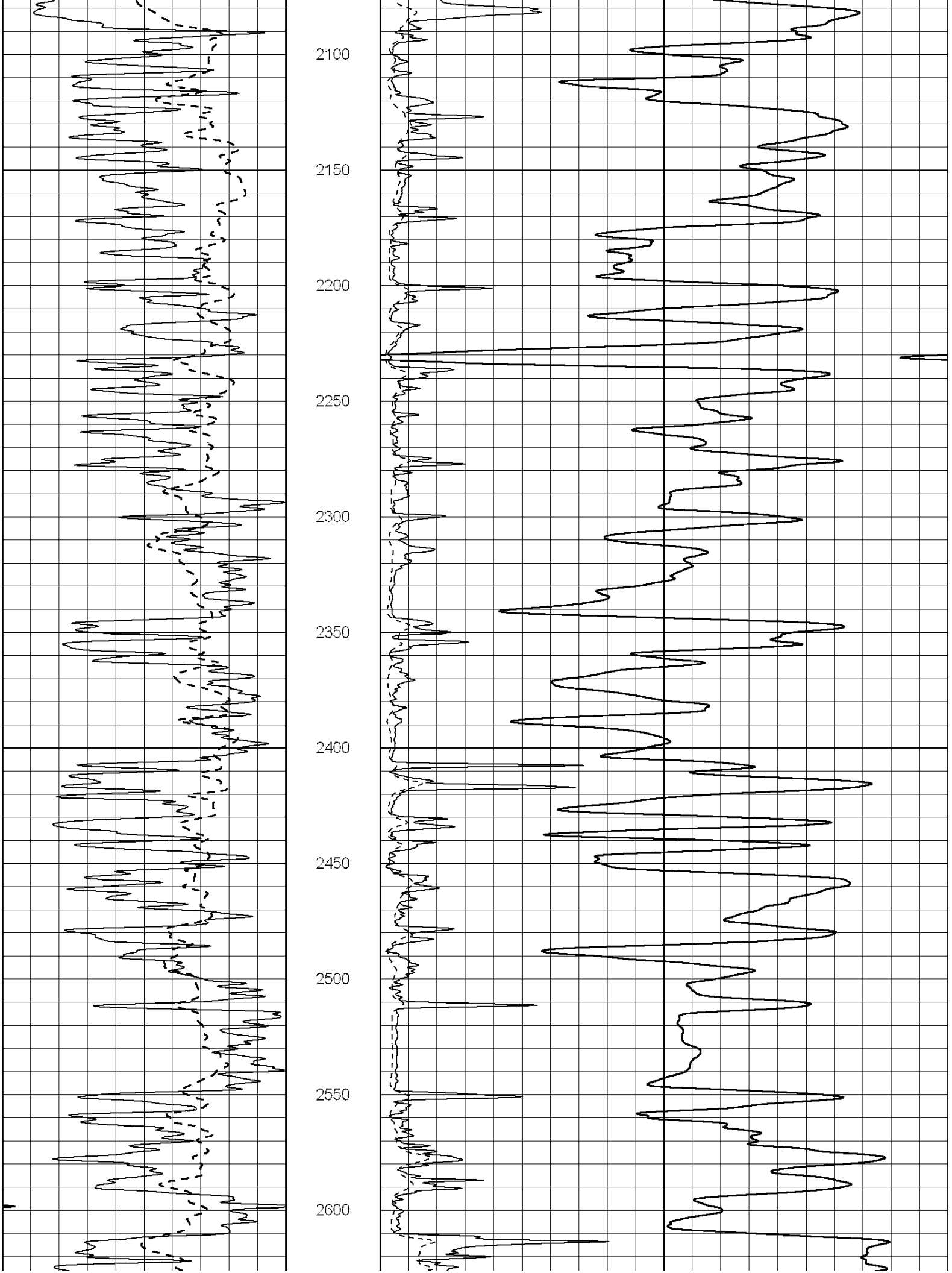
1800
1850
1900
1950
2000
2050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2200
2250
2300
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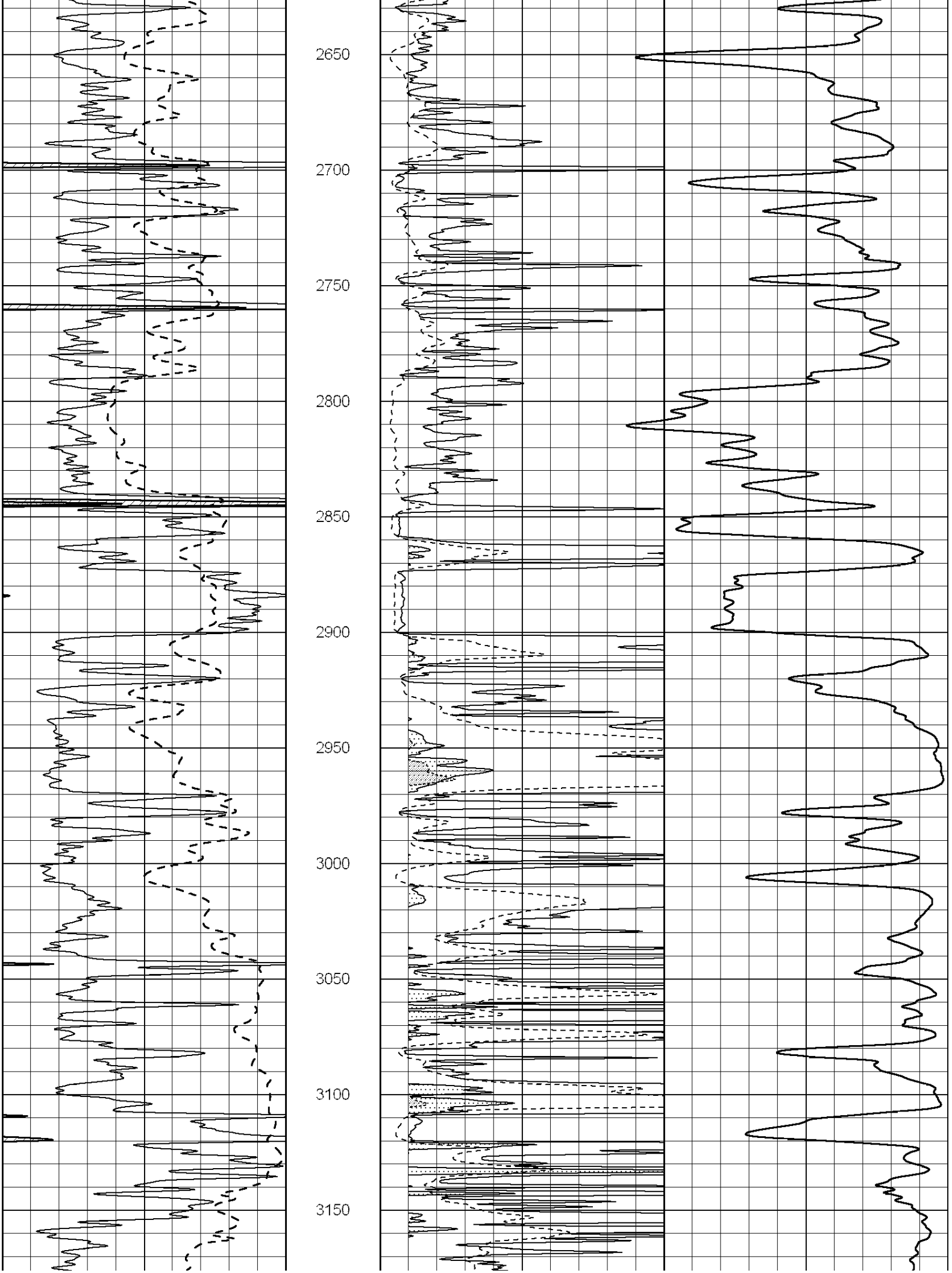
2400
2450
2500
2550
2600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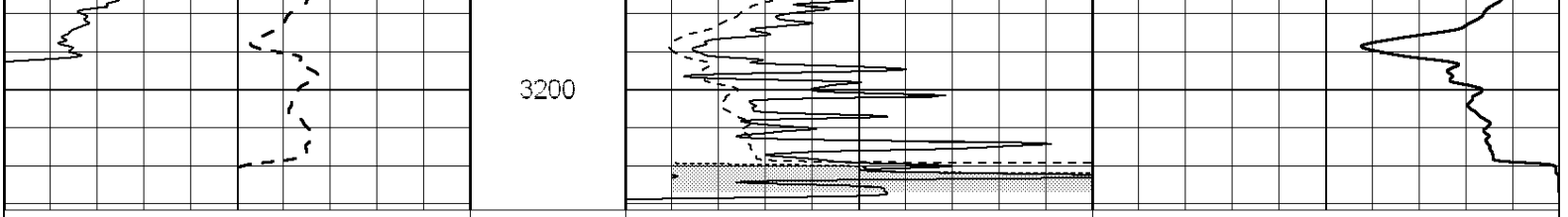
2900
2950
3000
3050
3100
3150



SUPERIOR WELL SERVICES

SUPERIOR
Hays,
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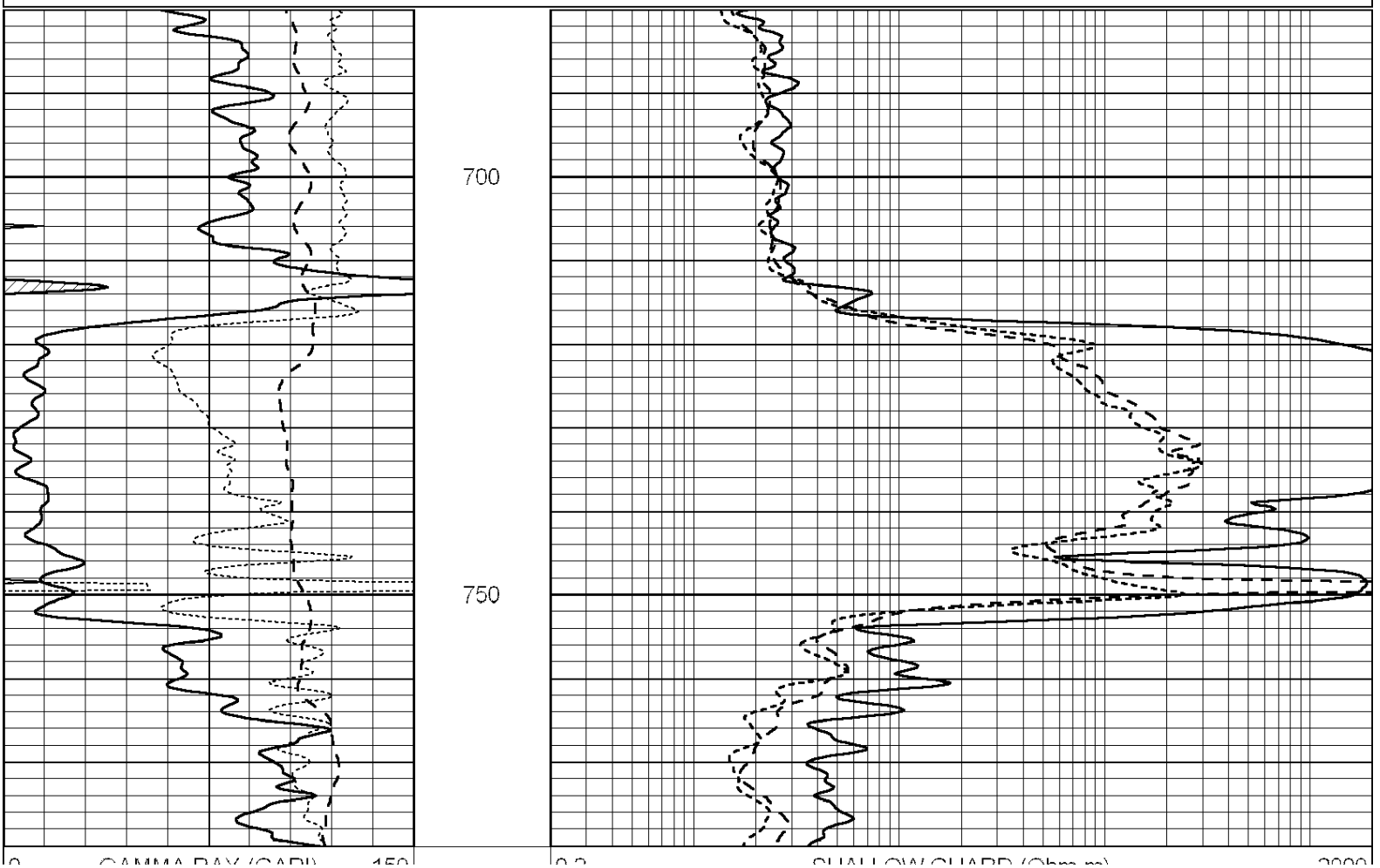
ANHYDRITE

Database File:	006957ddn.db
Dataset Pathname:	pass3.12
Presentation Format:	dil
Dataset Creation:	Sun May 22 05:19:02 2011
Charted by:	Depth in Feet scaled 1:240

0	GAMMA RAY (GAPI)	150
-100	SP (mV)	100
-250	Rxo/Rt	50
0	MINMK	10

0.2	SHALLOW GUARD (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	Rxo/Rt	50
0	MINMK	10

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

SUPERIOR WELL SERVICES

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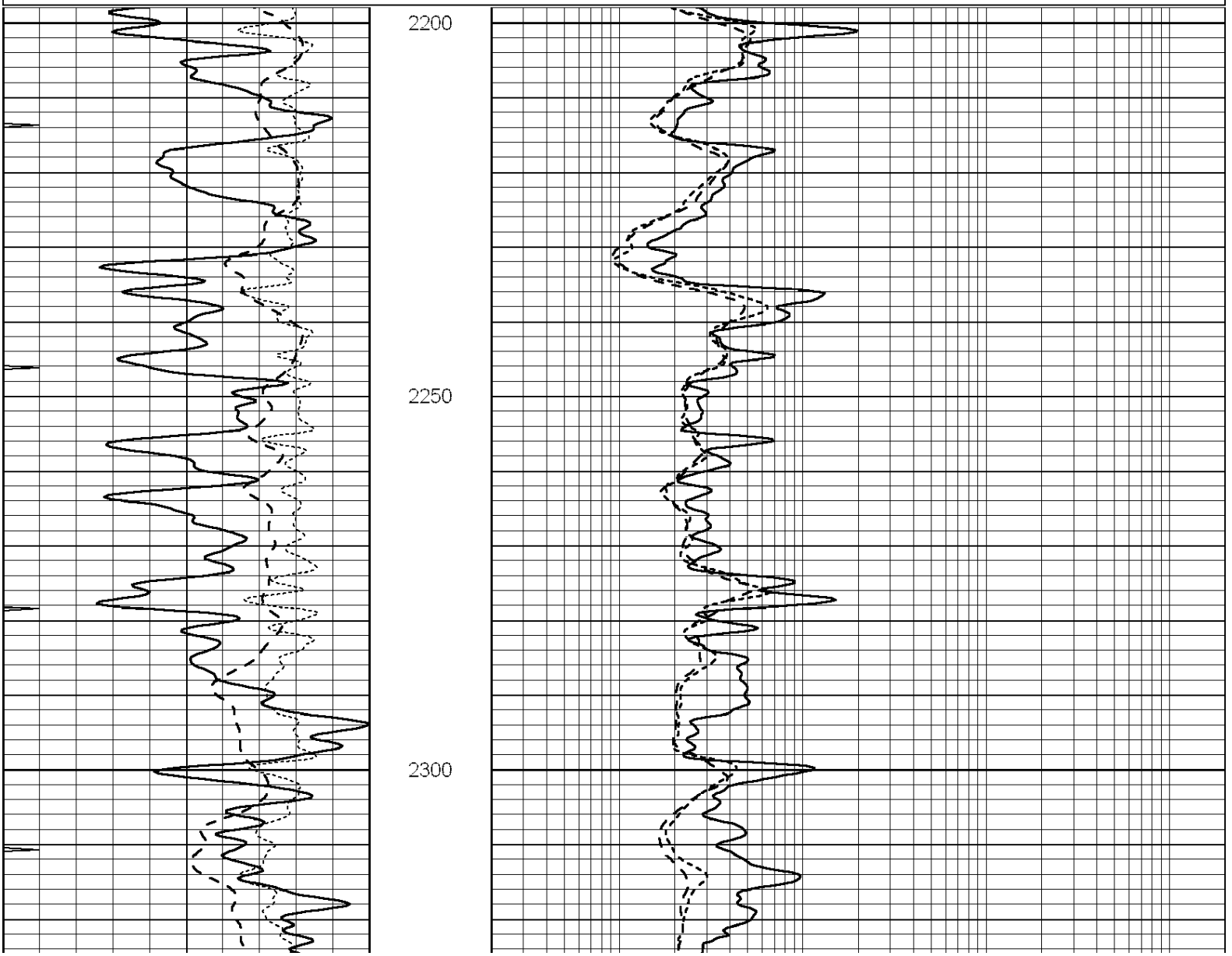
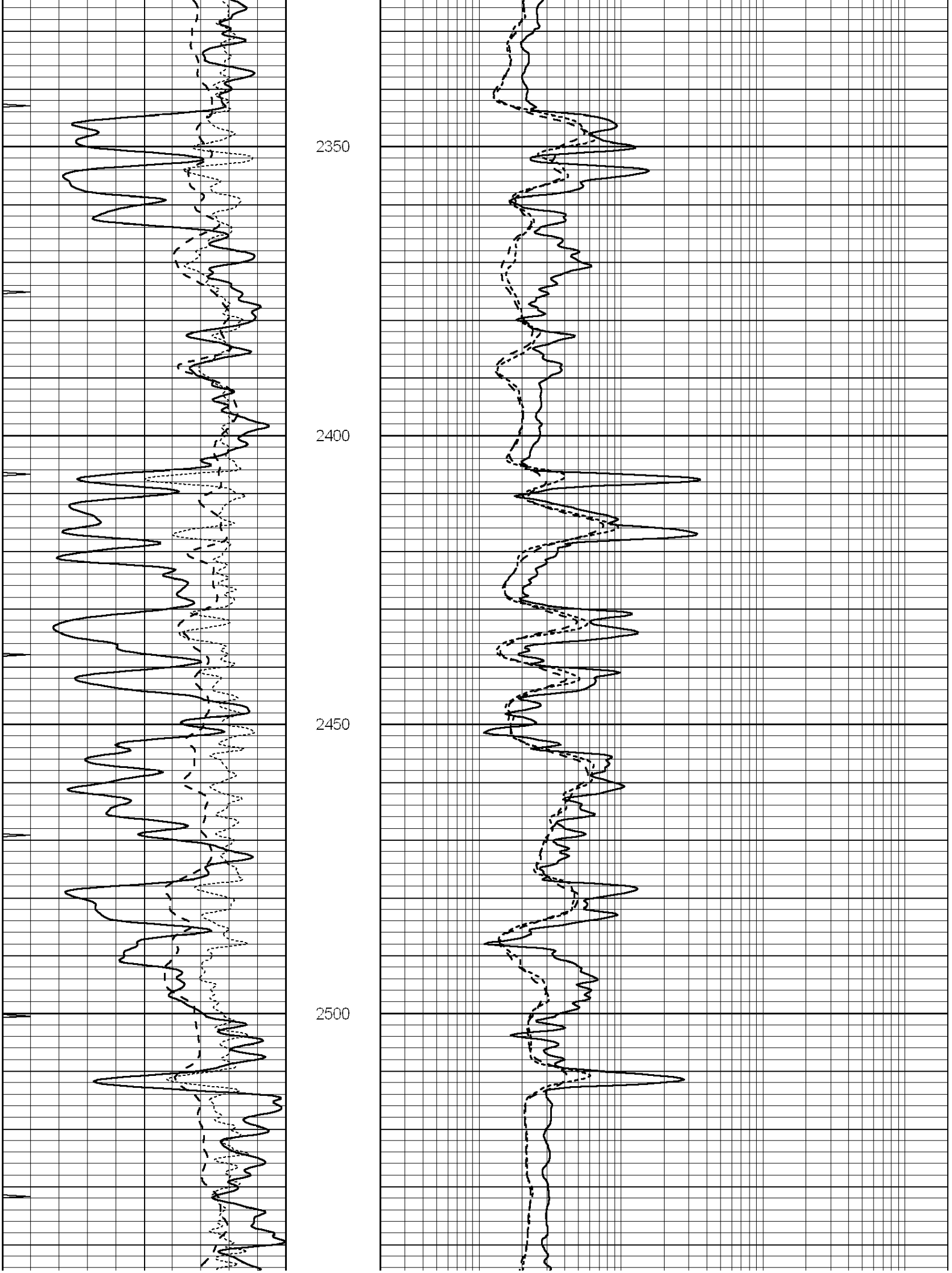
MAIN SECTION

Database File:	006957ddn.db
Dataset Pathname:	pass3.11
Presentation Format:	dil
Dataset Creation:	Sun May 22 05:16:20 2011
Charted by:	Depth in Feet scaled 1:240

0	GAMMA RAY (GAPI)	150
-100	SP (mV)	100
-250	Rxo/Rt	50
0	MINMK	10

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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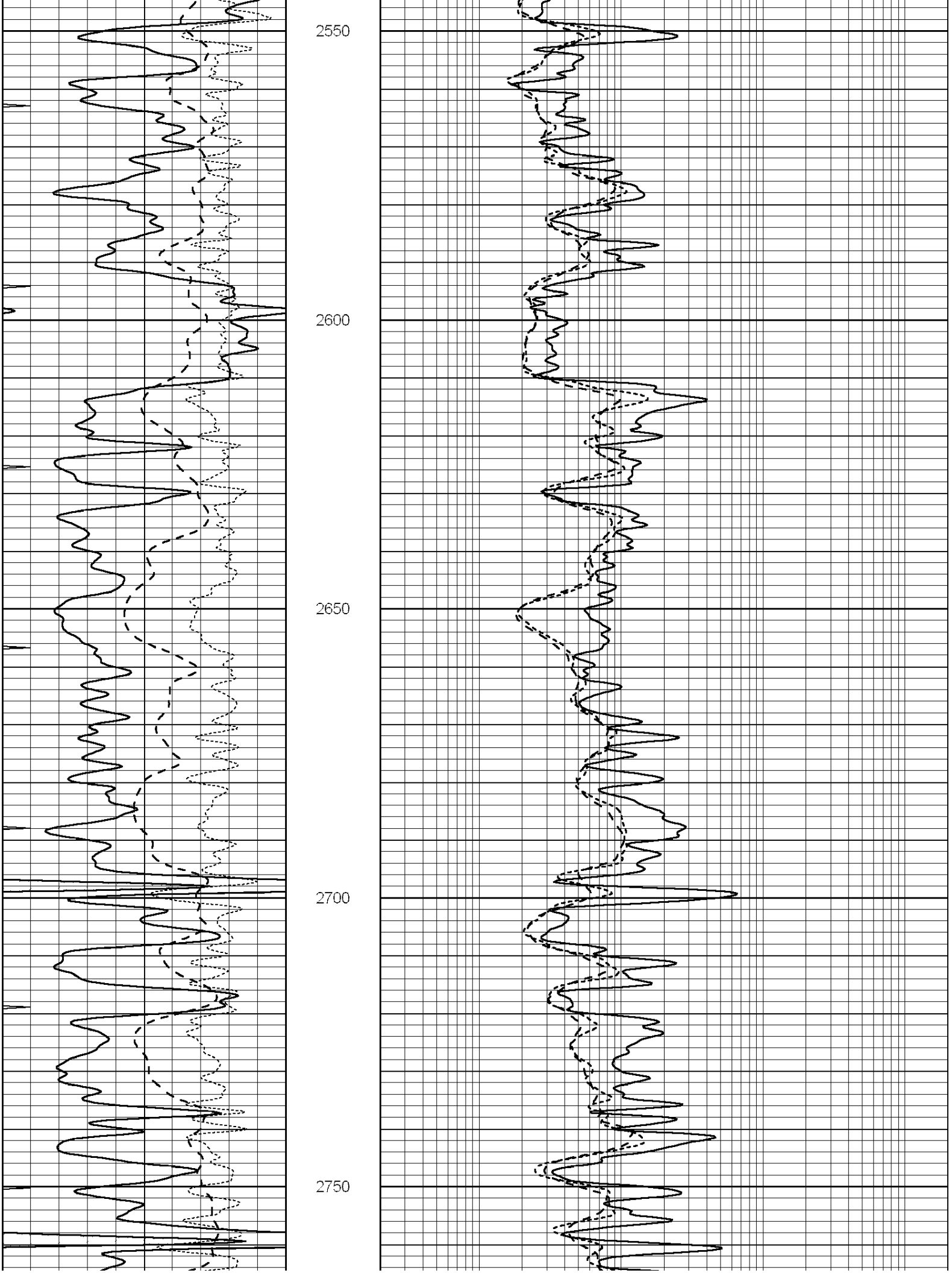
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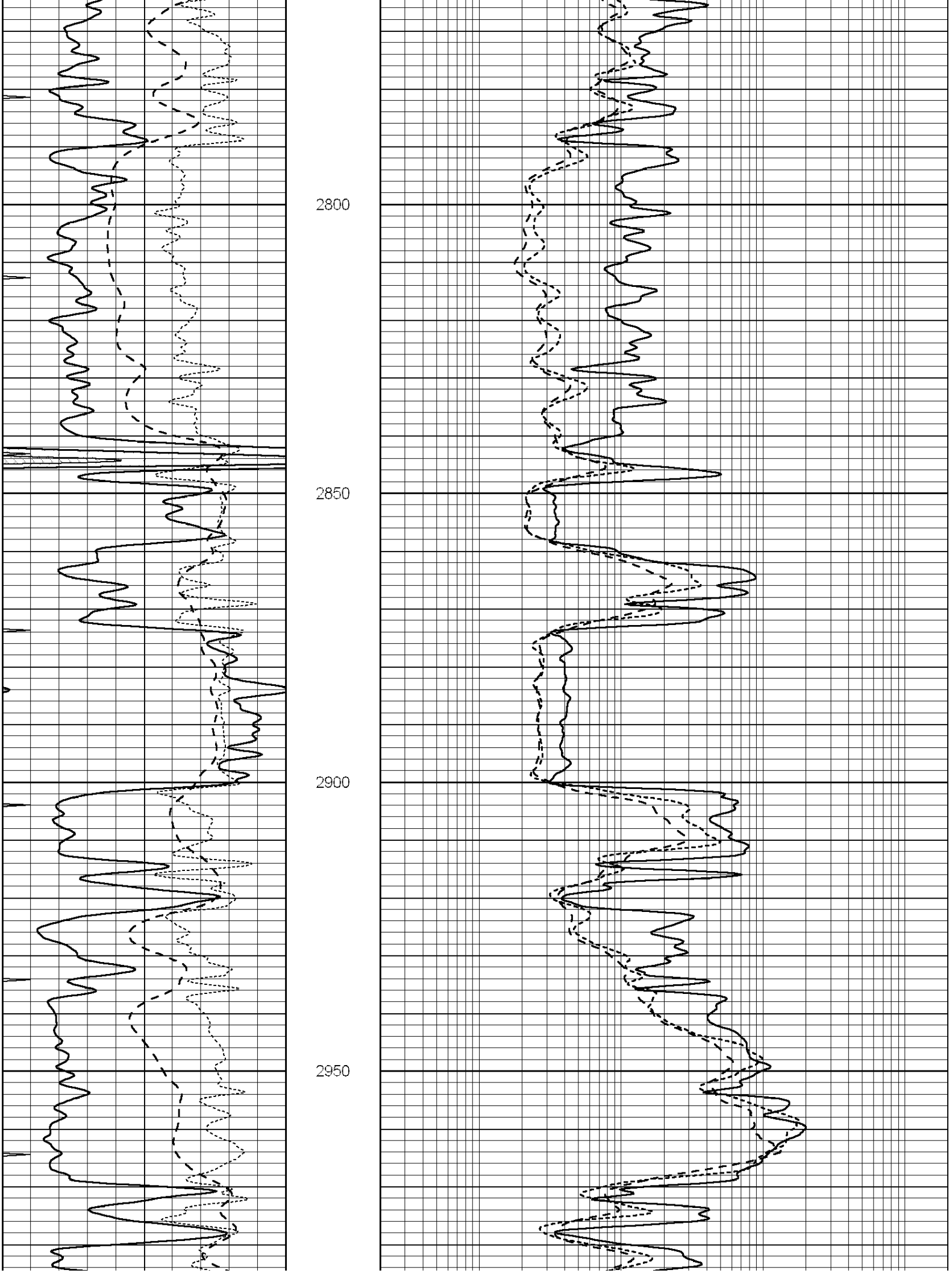
2600
2650
2700
2750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2850
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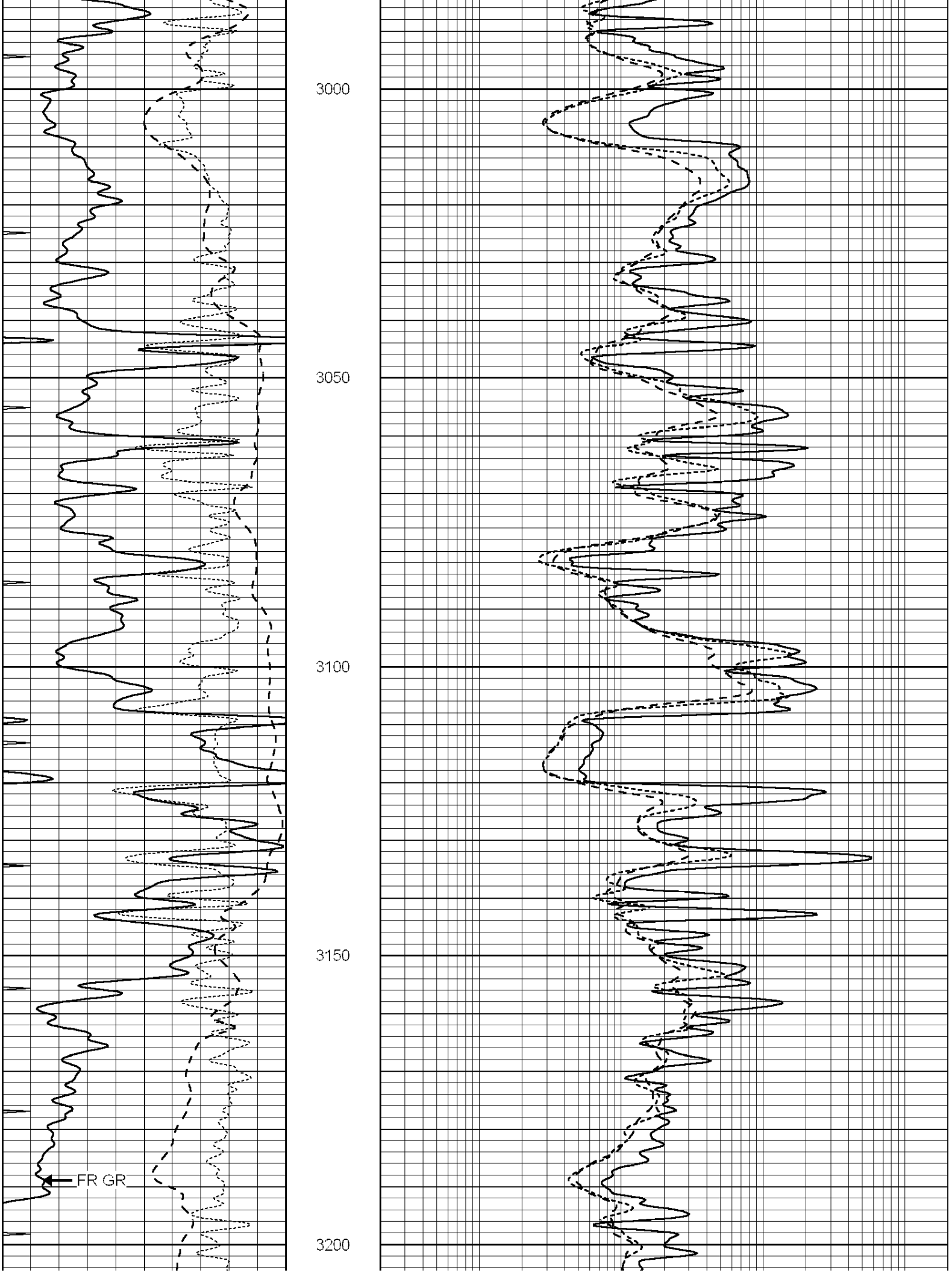
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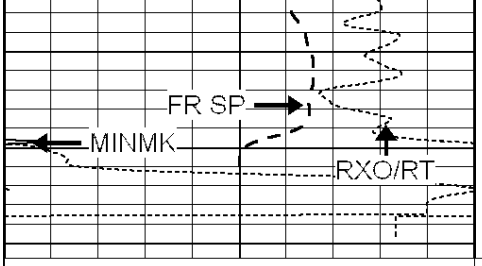
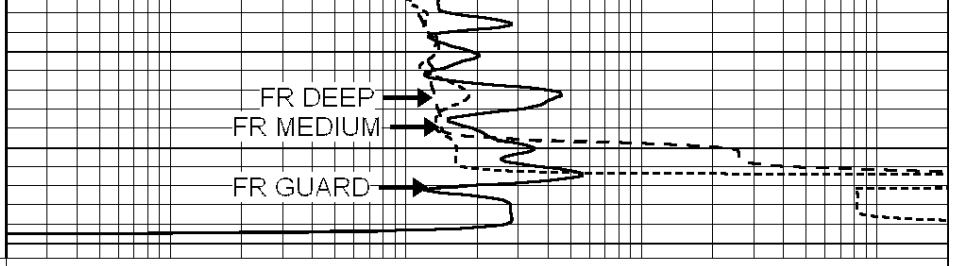
FR GR



LTD 3226



0	GAMMA RAY (GAPI)	150
-100	SP (mV)	100
-250	Rxo/Rt	50
0	MINMK	10

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

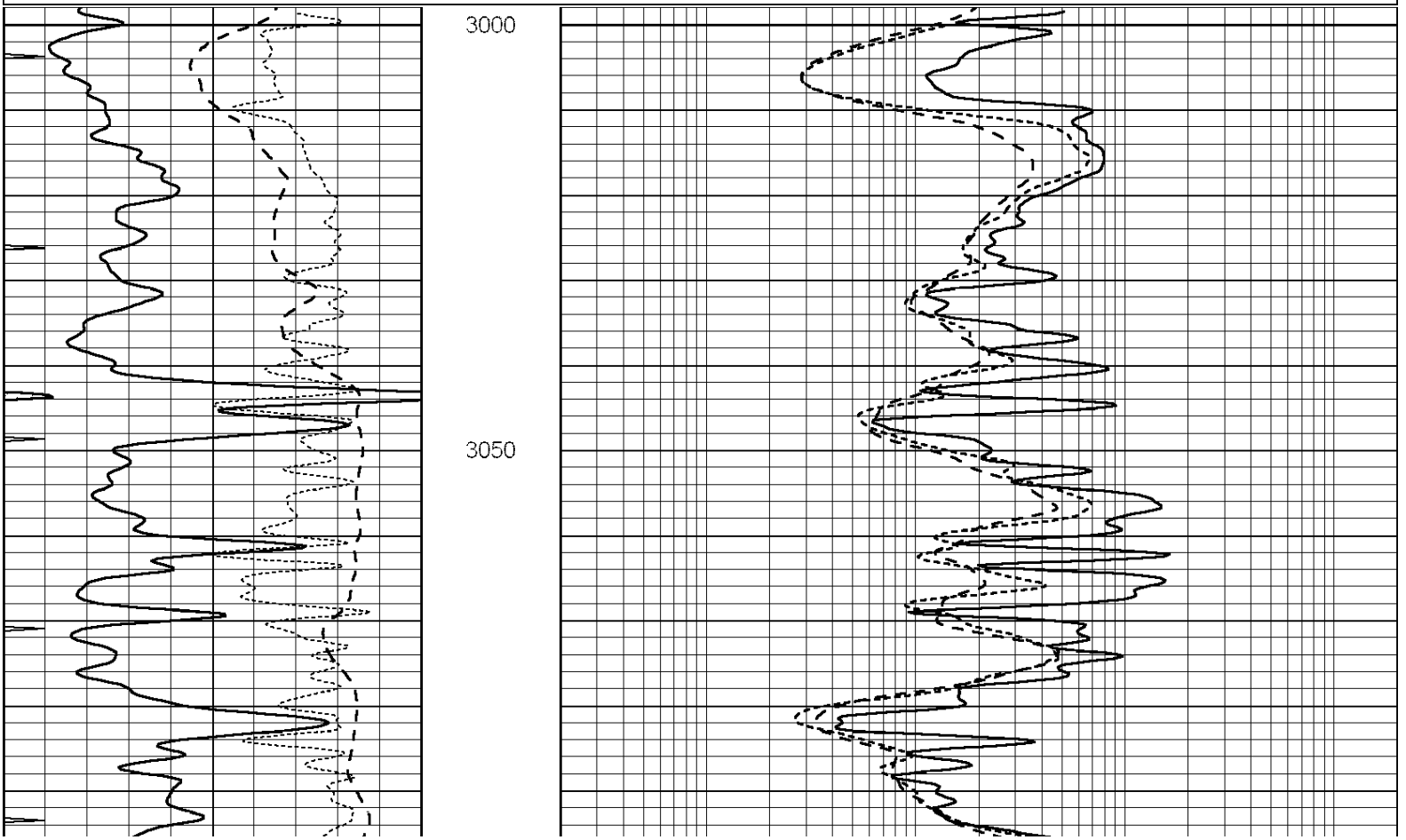
SUPERIOR
Hays,
Kansas

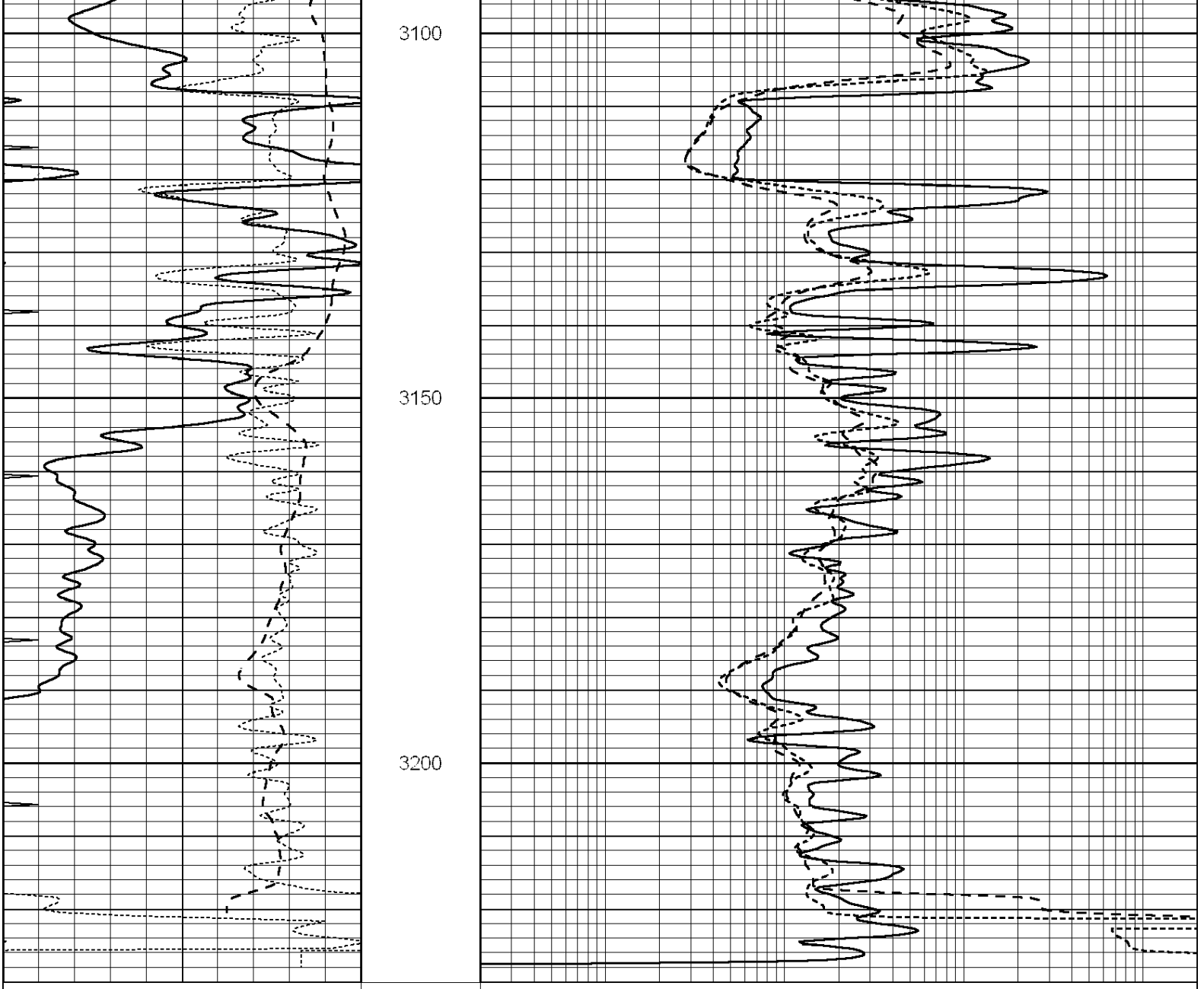
REPEAT SECTION

Database File:	006957ddn.db
Dataset Pathname:	pass2.7
Presentation Format:	dil
Dataset Creation:	Sun May 22 05:46:38 2011 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	10

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





Calibration Report

Database File: 006957ddn.db
Dataset Pathname: pass3.11
Dataset Creation: Sun May 22 05:16:20 2011

Dual Induction Calibration Report

Serial-Model: DIL3-GEAR
Performed: Sat May 14 19:28:43 2011

	Readings			References			Results	
Loop:	Air	Loop		Air	Loop		m	b
Deep	0.011	0.656	V	0.000	400.000	mmho/m	640.000	0.000
Medium	0.013	0.740	V	0.000	462.500	mmho/m	700.000	-14.000

Internal:	Zero	Cal		Zero	Cal		m	b
Deep	0.002	0.645	V	0.000	400.000	mmho/m	622.059	-1.071
Medium	0.007	0.740	V	0.000	462.500	mmho/m	631.393	-4.555

Litho Density Calibration Report

Serial: 003N Model: PRB
Performed Tue Sep 08 14:14:44 2009

Litho Density Calibration

	Background	Magnesium	Aluminum	Sandstone	
Window 1	2042.6	12312.8	4225.8	13758.4	cps
Window 2	1855.8	10134.7	3624.2	11113.1	cps
Window 3	1639.4	6760.2	2716.3	7260.3	cps
Window 4	466.4	469.2	466.1	476.5	cps
Long Space	0.0	8278.9	1768.4	9257.4	cps
Short Space	2.2	2377.3	1544.1	2574.2	cps
Rho		1.7100	2.5900	1.3800	g/cc
Pe			2.5700	1.5500	

Rib Angle	: 44.4	Rib Slope	: 0.979	Density/Spine Ratio	: 0.549
Spine Angle	: 74.4	Spine Slope	: 3.577	Spine Intercept	: -18.8

Caliper

	Readings	Reference
Low Ref	2.1	6.9
High Ref	4.4	14.0

Gain: 3.1 Offset: 0.5

Compensated Neutron Calibration Report

Serial Number: NEU_4I
Tool Model: G

CALIBRATION

Detector	Readings		Target		Normalization
Short Space	996.00	cps	1000.00	cps	1.0000
Long Space	977.00	cps	1000.00	cps	1.0000

Gamma Ray Calibration Report

Serial Number: GR4
Tool Model: OPEN
Performed: Sun May 22 03:02:25 2011

Calibrator Value: 200.0 GAPI

Background Reading: 0.0 cps
Calibrator Reading: 189.0 cps

Sensitivity: 1.5000 GAPI/cps