SUPERIOR WELL SERVICES

SUPERIOR
Hays,
Kansas

DUAL INDUCTION LOG

Company	PFEIFER EXPLORATION, LLC.
Well	R & A SCHMIDT #34-1
Field	SCHMEIDLER S.E.
County	ELLIS
State	KANSAS

Company PFEIFER EXPLORATION, LLC.

Well R & A SCHMIDT #34-1

Field SCHMEIDLER S.E.

County ELLIS State KANSAS

Location: API # : 15-051-26256-0000

3927' FSL & 1353' FWL
NW - NW - SE - NW
SEC 34 TWP 12S RGE 17W

Other Services: CDL/CNL, MEL

Permanent Datum	GROUND LEVEL	Elevation 2066	Elevation: K.B. 2074
Log Measured From	KELLY BUSHING 8' A.G.L.		D.F. 2072
Drilling Measured From	KELLY BUSHING		G.L. 2066

Date	1/18/12		
Run Number	ONE		
Depth Driller	3703		
Depth Logger	3704		
Bottom Logged Interval	3702		
Top Log Interval	00		
Casing Driller	8 5/8"@221'		
Casing Logger	221		
Bit Size	7 7/8"		
Type Fluid in Hole	CHEMICAL MUD	CHLORIDES 2,400 PPM	
Density / Viscosity	8.8/52		
pH / Fluid Loss	11.5/6.8		
Source of Sample	FLOWLINE		
Rm @ Meas. Temp	.700@70F		
Rmf @ Meas. Temp	.525@70F		
Rmc @ Meas. Temp	.840@70F		
Source of Rmf / Rmc	MEASUREMENT		
Rm @ BHT	.434@113F		
Time Circulation Stopped	2 HOURS		
Time Logger on Bottom	3:30 P.M.		
Maximum Recorded Temperature	113F		
Equipment Number	4010		
Location	HAYS, KANSAS		
Recorded By	JEFF LUEBBERS		
Witnessed By	ROGER MOSES	JAY PFEIFER	

<<< Fold Here >>>

Comments

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

DIRECTIONS

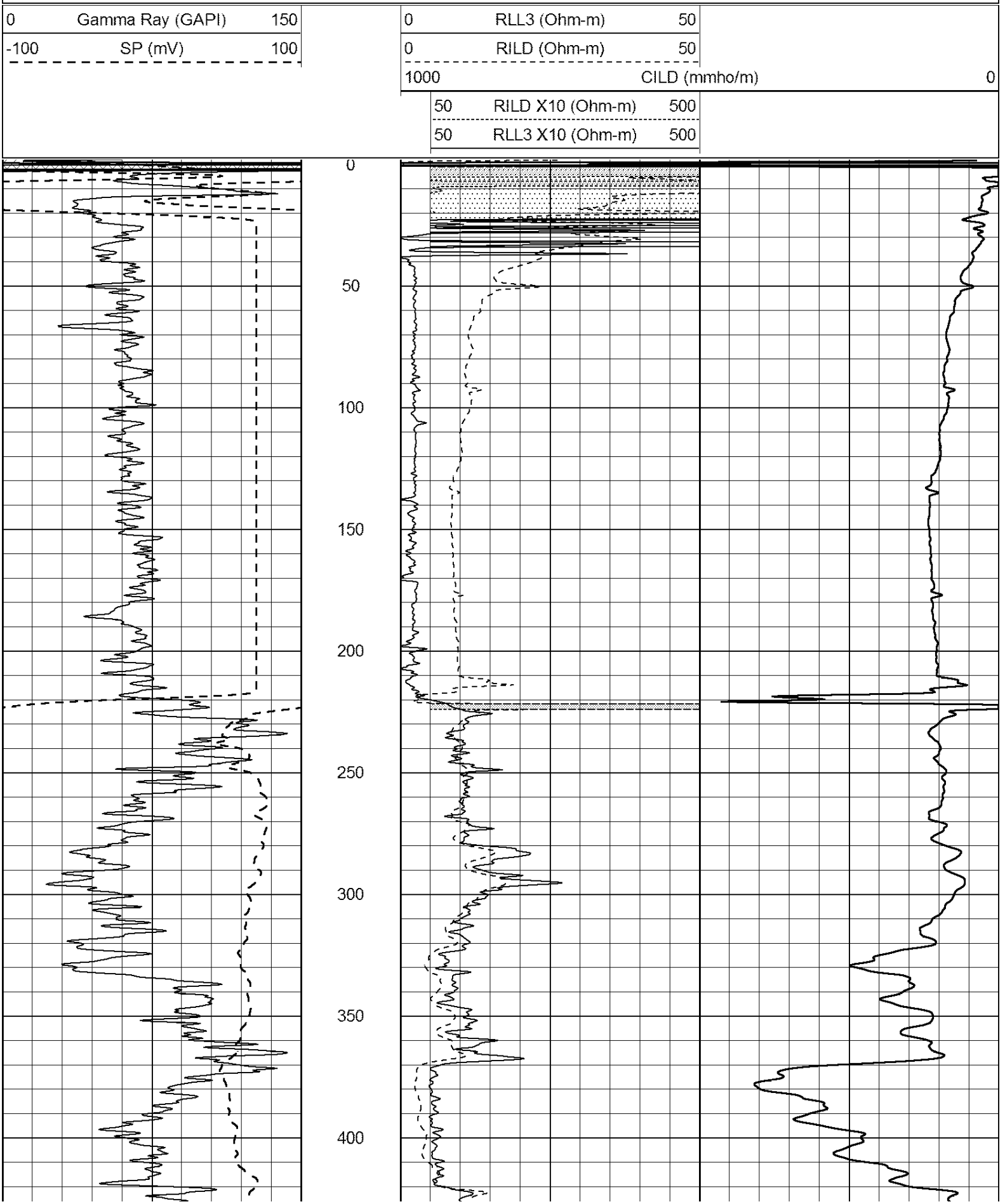
CATHERINE, KS., 1E. TO "310TH AVE.", 2 1/2N., E. INTO BETWEEN TANK BATTERIES THEN BACK NOR

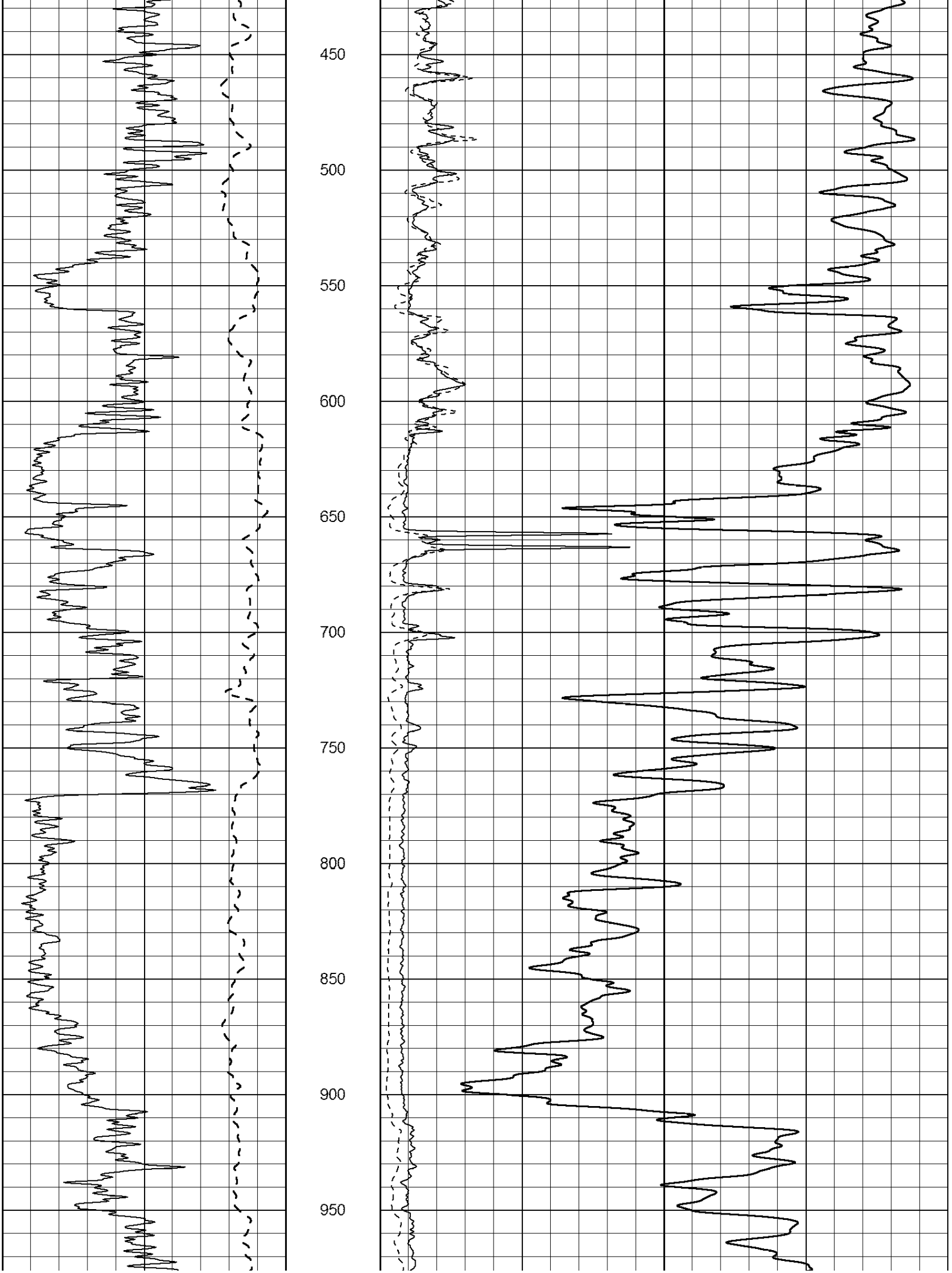
SUPERIOR WELL SERVICES

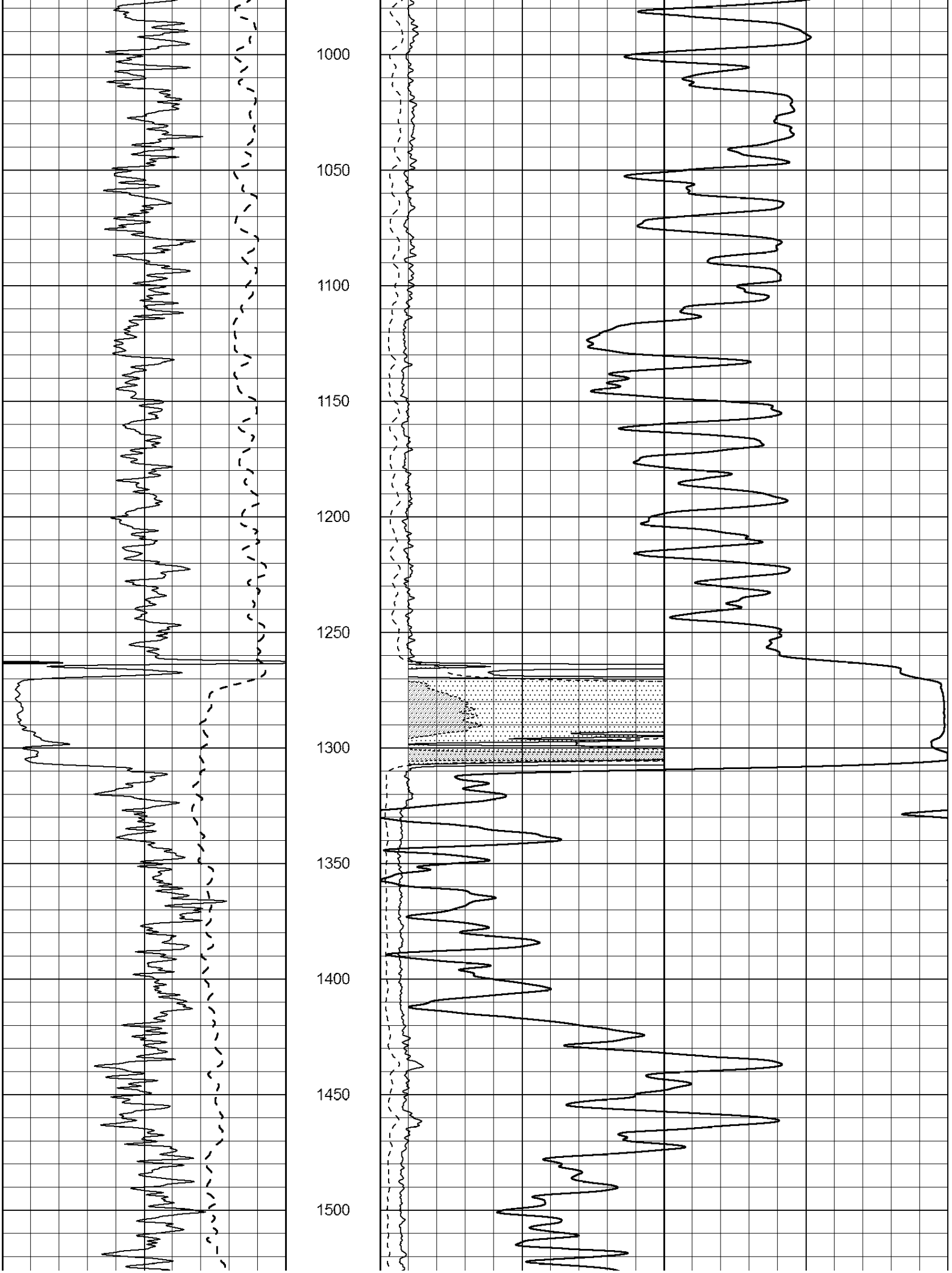
SUPERIOR
Hays,
Kansas

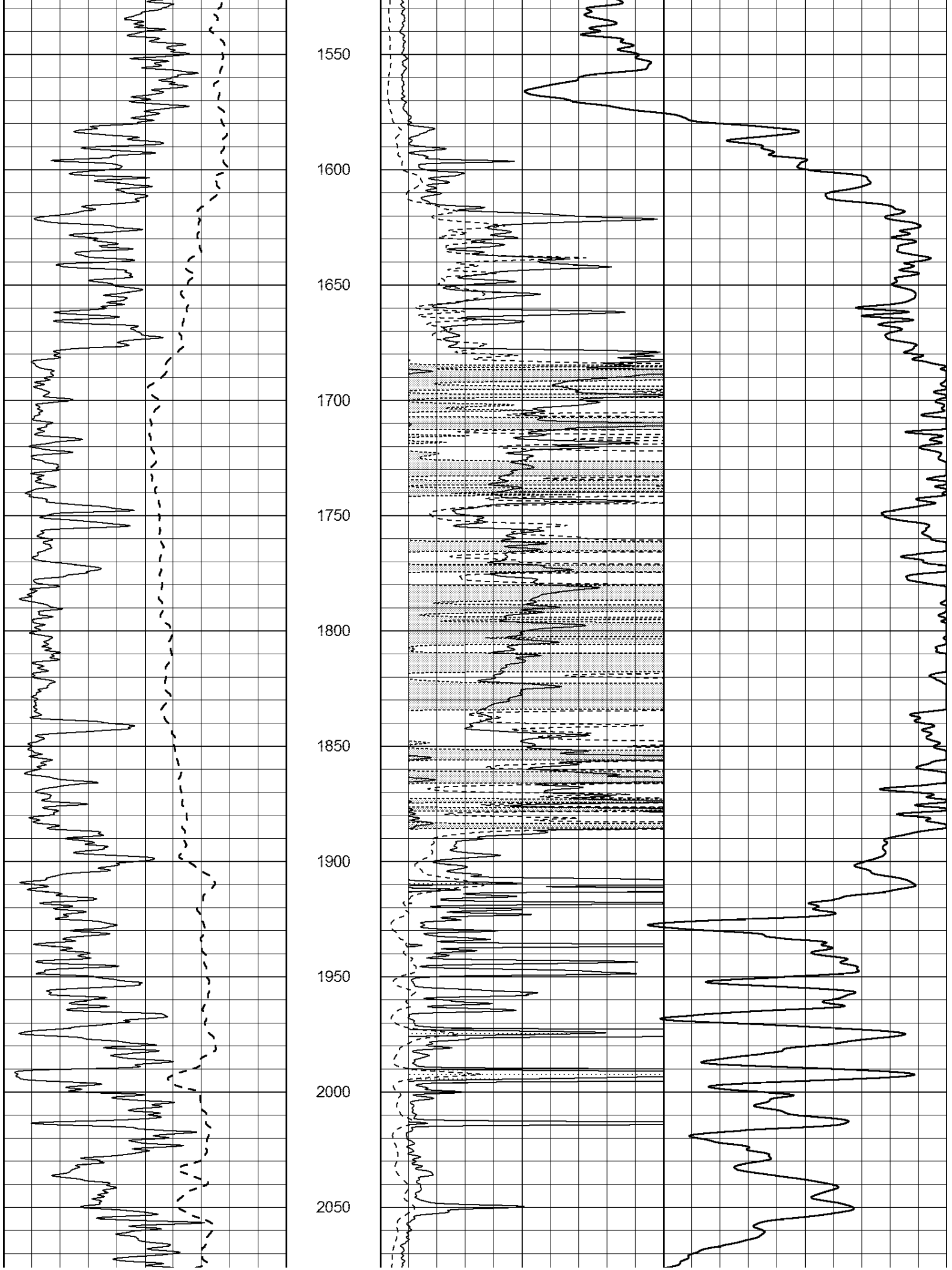
MAIN SECTION

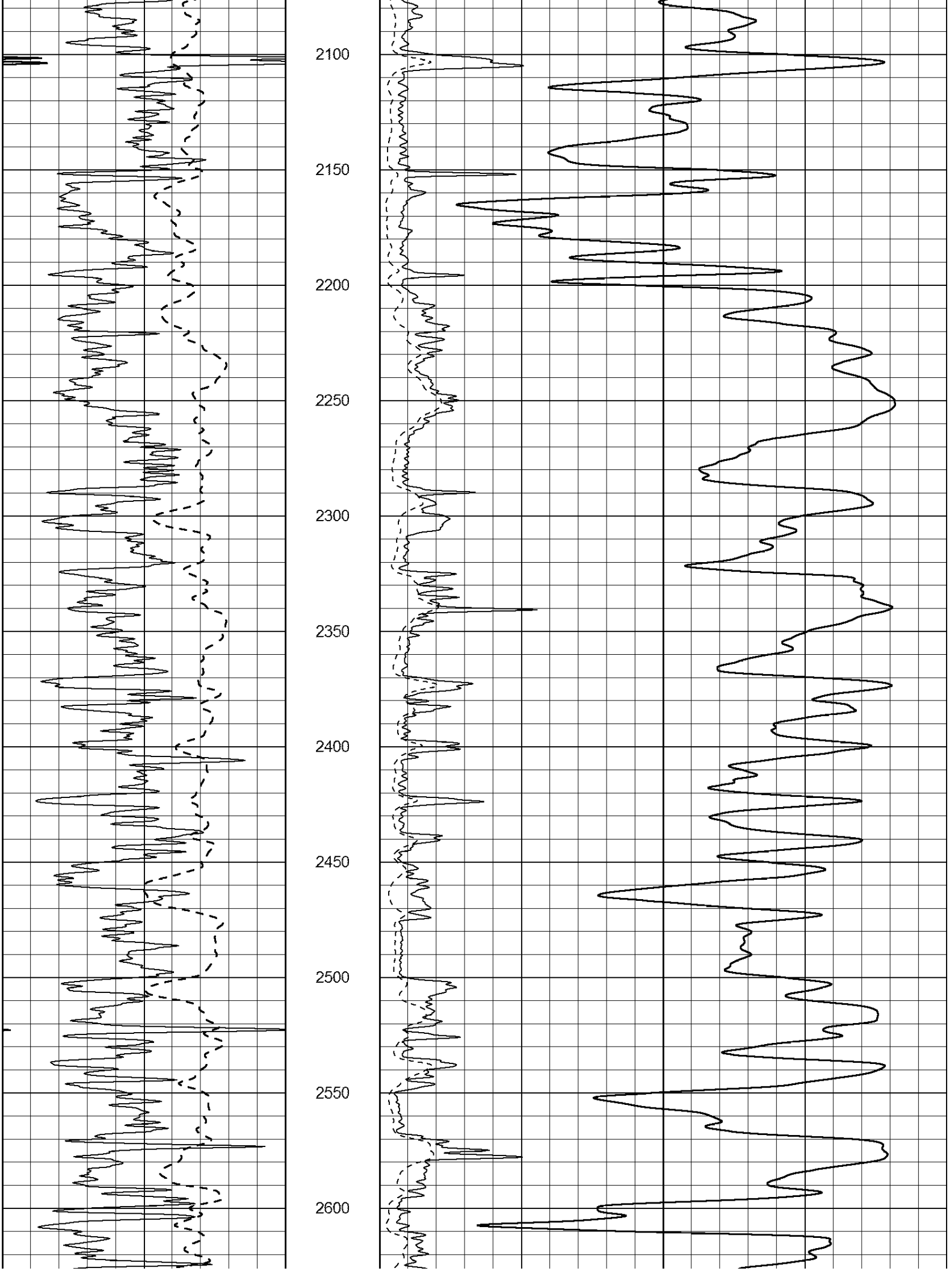
Database File:	008142ddn.db
Dataset Pathname:	pass3.9
Presentation Format:	dil2
Dataset Creation:	Wed Jan 18 17:32:58 2012
Charted by:	Depth in Feet scaled 1:600

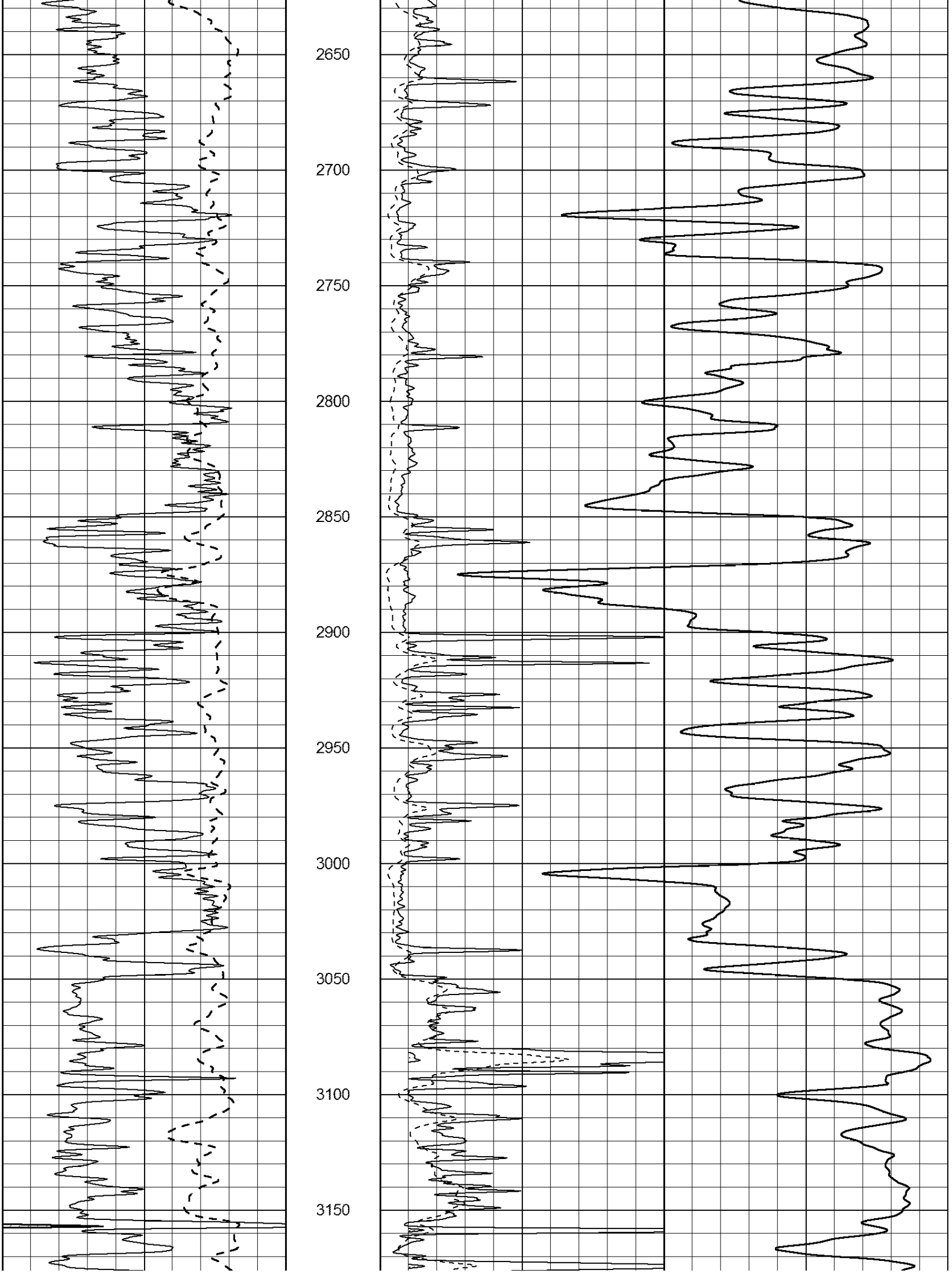


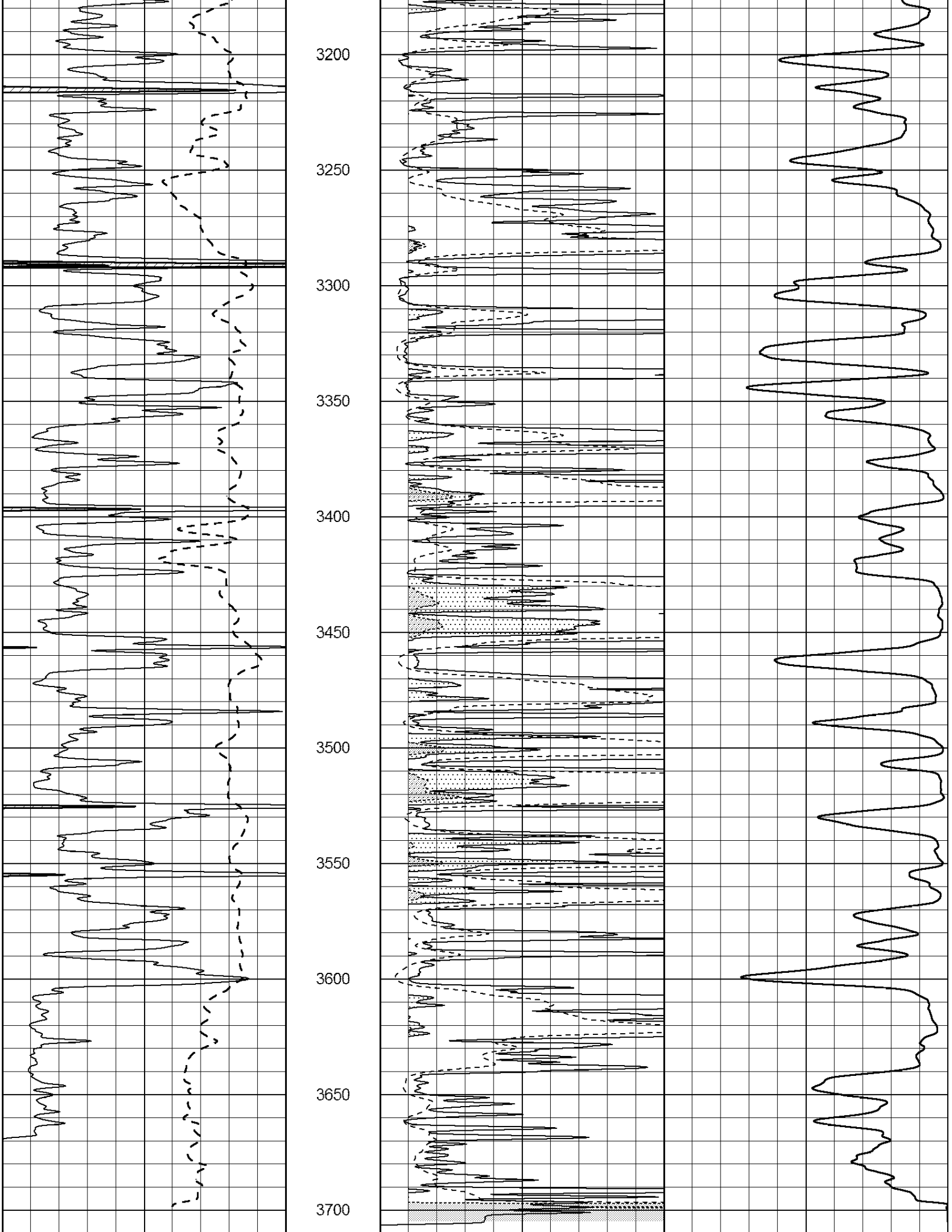

450
500
550
600
650
700
750
800
850
900
950


1000
1050
1100
1150
1200
1250
1300
1350
1400
1450
1500


1550
1600
1650
1700
1750
1800
1850
1900
1950
2000
2050


2100
2150
2200
2250
2300
2350
2400
2450
2500
2550
2600


2650
2700
2750
2800
2850
2900
2950
3000
3050
3100
3150


3200
3250
3300
3350
3400
3450
3500
3550
3600
3650
3700
0
Gamma Ray (GAPI)
150
0
RLL3 (Ohm-m)
50

-100	SP (mV)	100

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

SUPERIOR WELL SERVICES

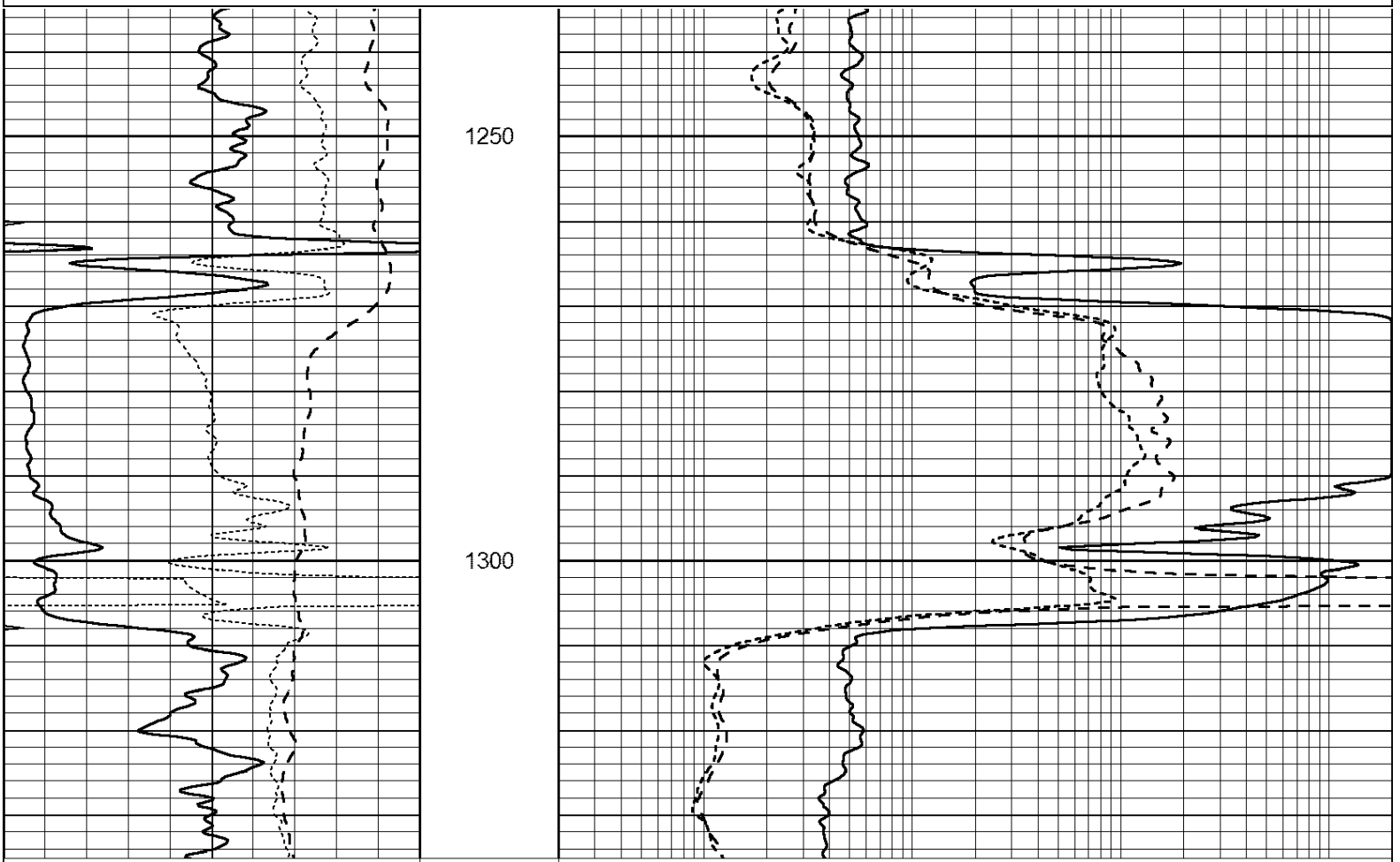
SUPERIOR
Hays,
Kansas

ANHYDRITE

Database File: 008142ddn.db
Dataset Pathname: pass3.8
Presentation Format: dil
Dataset Creation: Wed Jan 18 16:51:10 2012 by Calc Open-Cased 110302
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



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

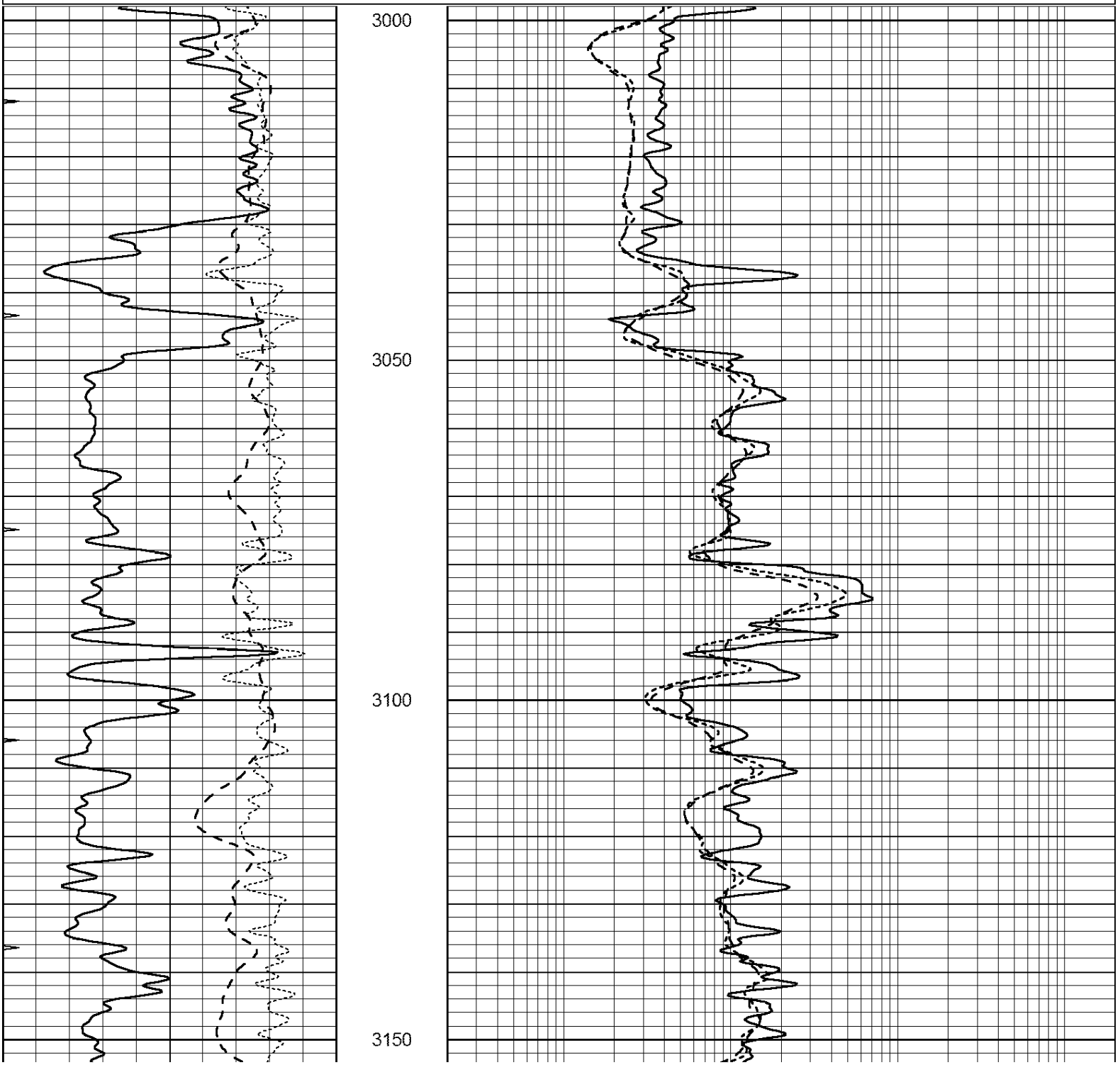
SUPERIOR
Hays,
Kansas

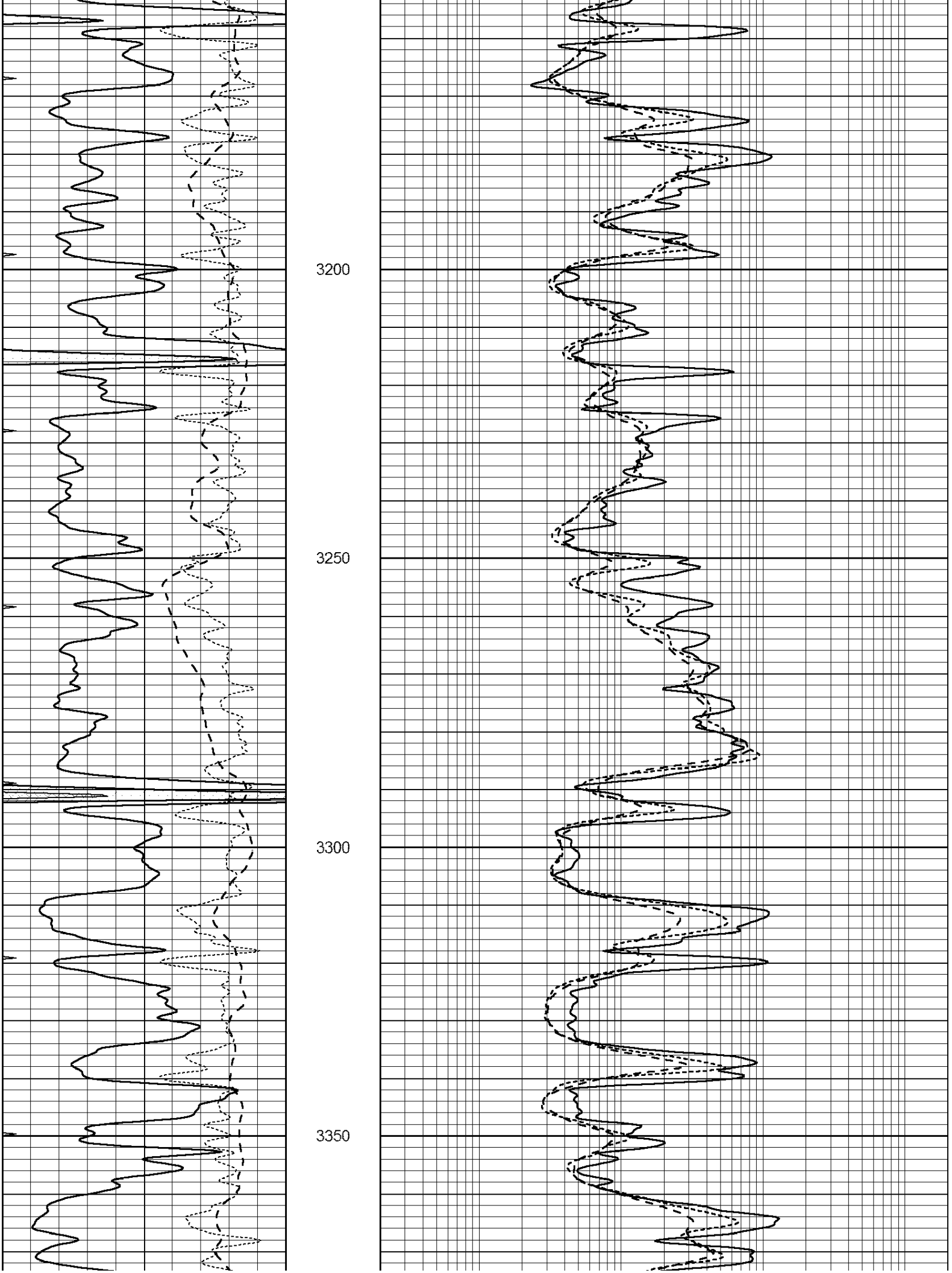
MAIN SECTION

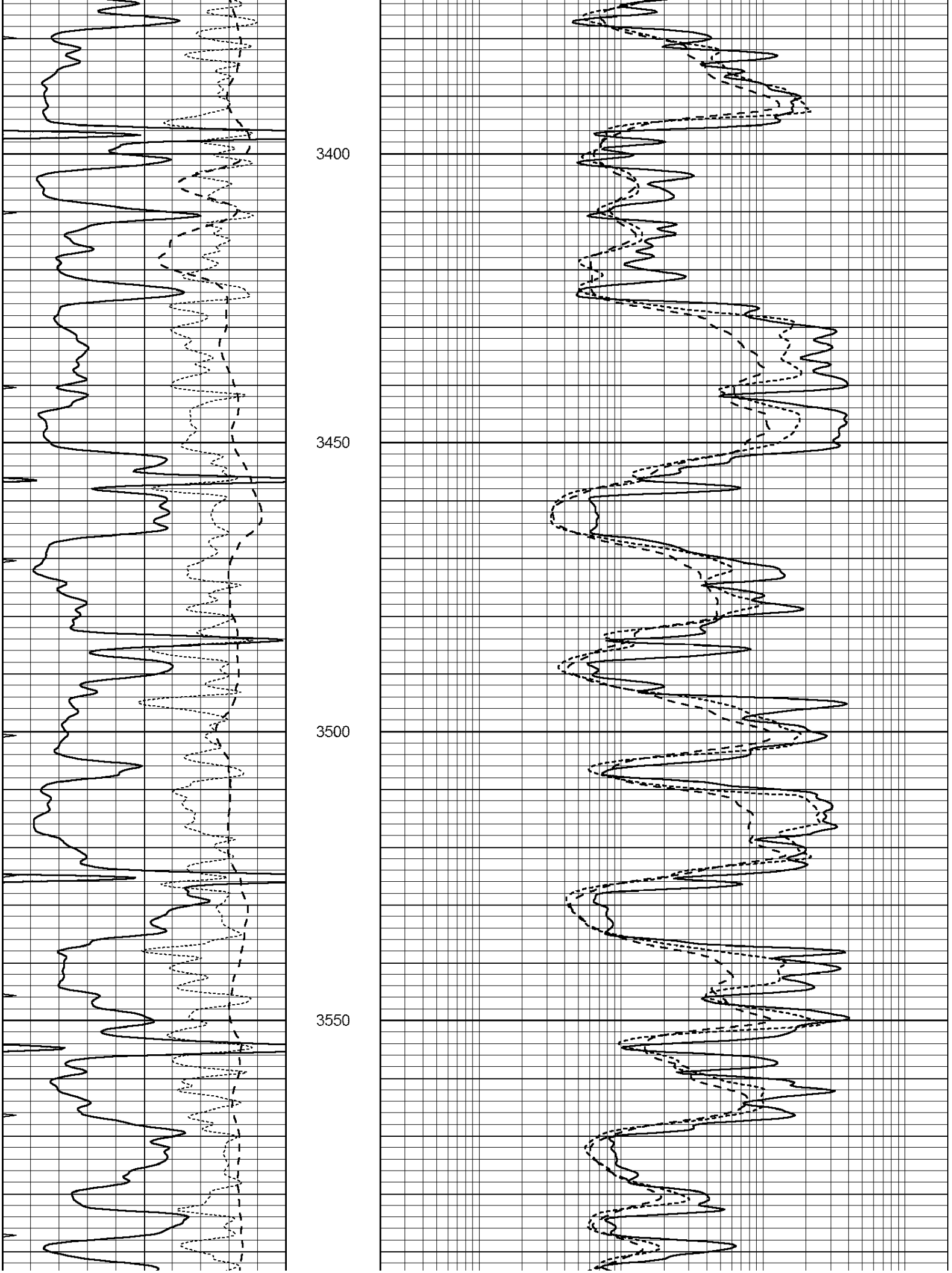
Database File:	008142ddn.db
Dataset Pathname:	pass3.9
Presentation Format:	dil
Dataset Creation:	Wed Jan 18 17:32:58 2012
Charted by:	Depth in Feet scaled 1:240

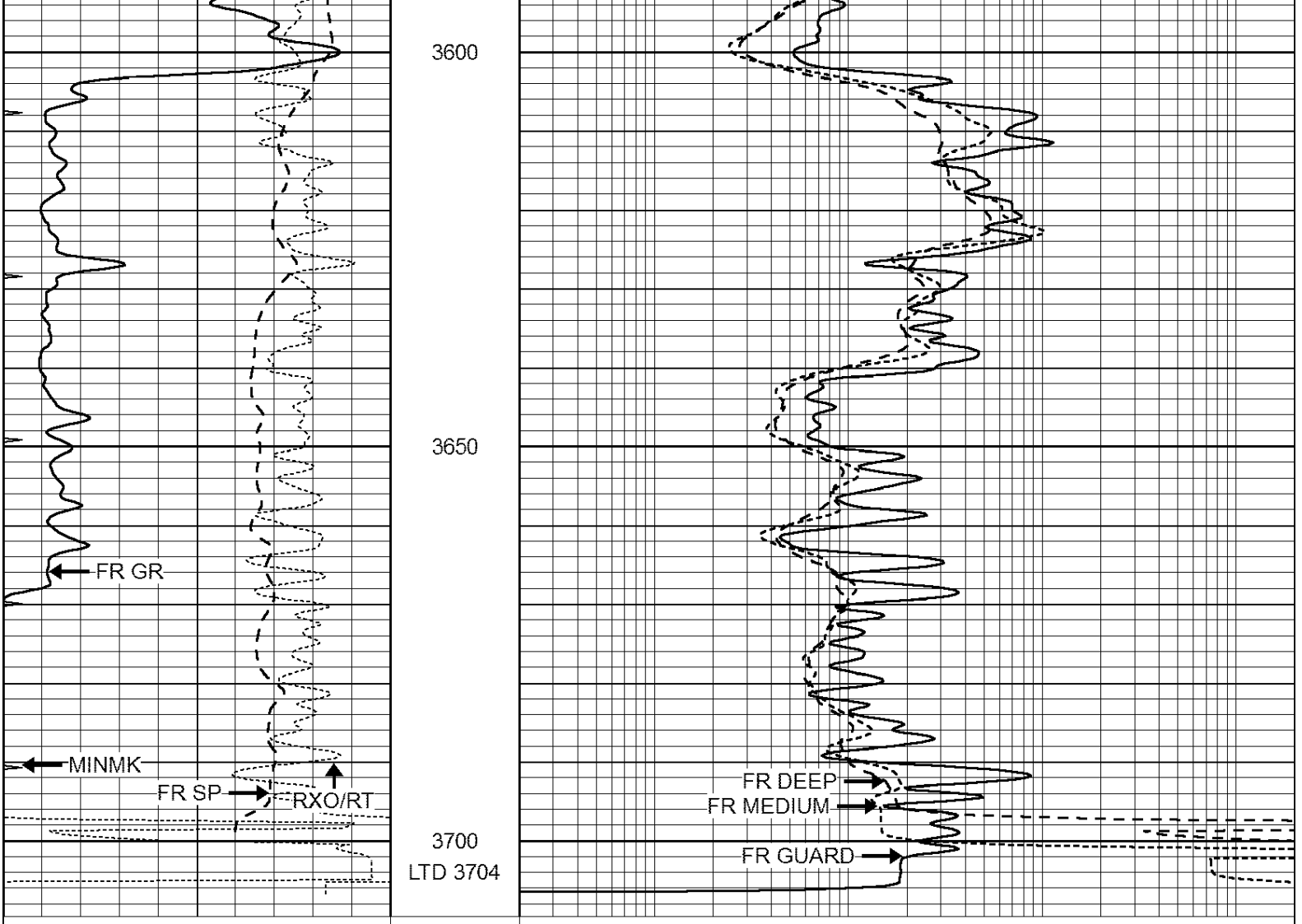
0	GAMMA RAY (GAPI)	150
-100	SP (mV)	100
-250	Rxo/Rt	50
0	MINMK	20

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


3400
3450
3500
3550



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

SUPERIOR WELL SERVICES

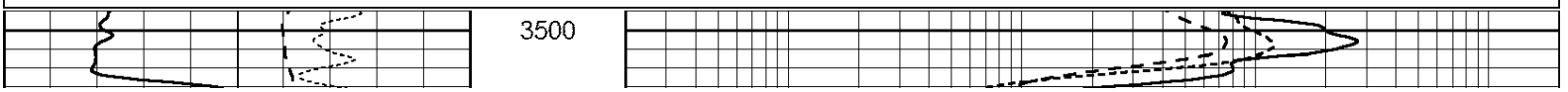
SUPERIOR
Hays,
Kansas

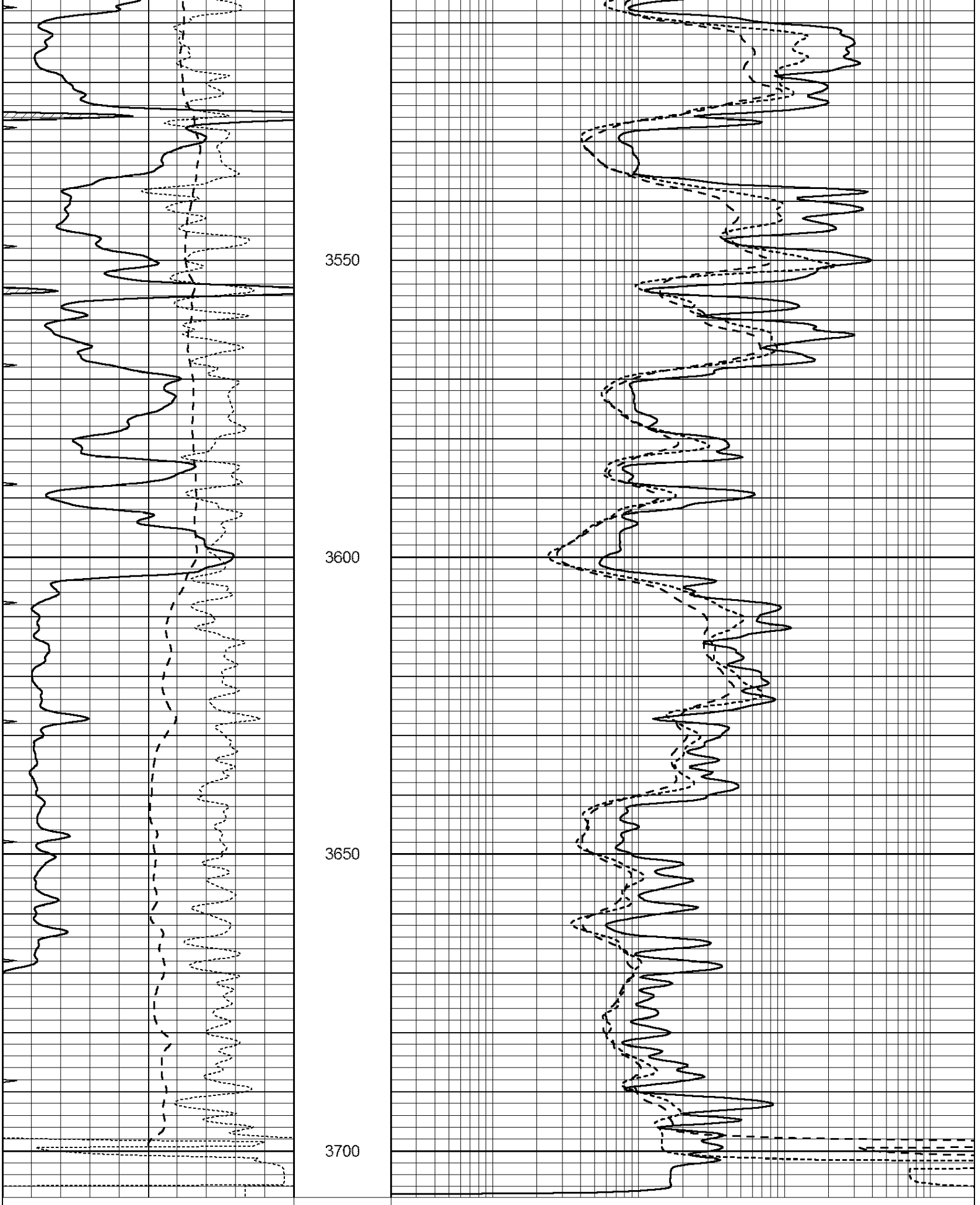
REPEAT SECTION

Database File:	008142ddn.db
Dataset Pathname:	pass2.6
Presentation Format:	dil
Dataset Creation:	Wed Jan 18 17:34:20 2012 by Calc Open-Cased 110302
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





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

Calibration Report

Database File: 008142ddn.db
Dataset Pathname: pass3.9
Dataset Creation: Wed Jan 18 17:32:58 2012

Dual Induction Calibration Report

Serial-Model: DIL4-GEAR
Performed: Wed Jan 18 15:39:02 2012

	Readings			References			Results	
Loop:	Air	Loop		Air	Loop		m	b
Deep	0.008	0.666	V	0.000	400.000	mmho/m	570.000	-5.000
Medium	-0.003	0.769	V	0.000	462.500	mmho/m	560.000	-3.500
Internal:	Zero	Cal		Zero	Cal		m	b
Deep	0.013	0.651	V	0.000	400.000	mmho/m	627.541	-8.365
Medium	0.020	0.754	V	0.000	462.500	mmho/m	630.311	-12.549

Litho Density Calibration Report

Serial: 004N Model: PRB
Performed Tue Sep 08 13:49:55 2009

Litho Density Calibration

	Background	Magnesium	Aluminum	Sandstone	
Window 1	1535.8	11161.3	3721.6	12498.8	cps
Window 2	1402.6	9435.7	3219.7	10417.7	cps
Window 3	1077.6	4422.0	1779.2	4753.4	cps
Window 4	337.3	342.8	337.4	343.7	cps
Long Space	0.0	8033.1	1817.0	9015.1	cps
Short Space	1.2	1671.8	1138.1	1813.0	cps
Rho		1.7100	2.5900	1.3800	g/cc
Pe			2.5700	1.5500	

Rib Angle	: 45.5	Rib Slope	: 1.017	Density/Spine Ratio	: 0.573
Spine Angle	: 75.5	Spine Slope	: 3.865	Spine Intercept	: -19.7

Caliper

	Readings	Reference
Low Ref	2.6	6.9
High Ref	4.3	15.0
	Gain: 4.8	Offset: -5.5

Compensated Neutron Calibration Report

Serial Number: 070808
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:	070559	
Tool Model:	OPEN_GR	
Performed:	Wed Jan 18 15:38:46 2012	
Calibrator Value:	1.0	GAPI
Background Reading:	0.0	cps
Calibrator Reading:	1.0	cps
Sensitivity:	0.2800	GAPI/cps