PRECISION ENERGY SERVICES

Compact

COMPENSATED SONIC
1:200 TVD

COMPANY	ESSO AUSTRALIA PTY LTD
WELL	BREAM A10A
FIELD	BREAM
PROVINCE/COUNTY	BASS STRAIT
COUNTRY/STATE	AUSTRALIA
LOCATION	S 38 29 58.824, E 147 46 19.976
	N 5738460.340 m, E 567336.310 m

FINAL PRINT

LSD	SEC	TWP	RGE

API Number
Permit Number

Other Services
DUAL LATEROLOG
PHOTO DENSITY
COMPENSATED NEUTRON

Permanent Datum MSL , Elevation 0.0 metres
Log Measured From RT @ 32.82m above Permanent Datum
Drilling Measured From RT

Elevations:
KB metres
DF 32.82 metres
GL -59.40 metres

Date	16-MAY-2005		
Run Number	ONE		
Depth Driller	2717.18	metres	
Depth Logger	2212.30	metres	
First Reading	2707.80	metres	
Last Reading	1836.80	metres	
Casing Driller	1836.38	metres	
Casing Logger	1836.80	metres	
Bit Size	8.50	inches	
Hole Fluid Type	KCl/POLY/GYL		
Density / Viscosity	10.10 lb/USg	30.00 cP	
PH / Fluid Loss	9.00	3.00 ml/30Min	
Sample Source	FLOWLINE		
Rm @ Measured Temp	0.134 @ 25.0	ohm-m	
Rmf @ Measured Temp	0.103 @ 25.0	ohm-m	
Rmc @ Measured Temp	0.236 @ 25.0	ohm-m	
Source Rmf / Rmc	PRESS	PRESS	
Rm @ BHT	0.053 @ 97.3	ohm-m	
Time Since Circulation	28.5 HRS		
Max Recorded Temp	104.10	deg C	
Equipment Name	CWS/CML		
Equipment / Base	1	SALE	
Recorded By	G. MCMANUS , B. MOSS		
Witnessed By	TREVOR LOBO		
CIRC STOPPED	21:00 14-MAY		

BOREHOLE RECORD

Bit Size inches	Depth From metres	Depth To metres
8.500	2258.80	3379.50

CASING RECORD

Type	Size inches	Depth From metres	Shoe Depth metres	Weight pounds/ft
K-55	13.375	0.00	921.00	54.50
L-80	9.625	0.00	2258.80	47.00

REMARKS

RIG: NABORS 453

5" SHUTTLE/MEMORY COMPACT OPERATION.
CREW: G MCMANUS , R TENCH , B MOSS , K LUCIEER.

ALL LOGS DEPTH CORRELATED TO ANADRILL GAMMA LOG.

DENSITY CALIPER CLOSED BETWEEN 2594.50m MD AND 2598.2m MD
DUE TO THE INDUCTION SONDE DETECTING A PIECE OF BRASS DEBRIS
IN THE WELL. DENSITY - NEUTRON DATA IN THIS INTERVAL WILL BE INACCURATE.

MAX. TEMPERATURE: 104.1 DEG C AT 3331.10m MD
MAX. INCLINATION: 47.28 DEG AT 2315.54m MD
MAX. DOGLEG SERVERITY: 4.68 DEG/30m AT 2775.31m MD
DEPLOYMENT ANGLE: 24 DEG

HVOL: 1620 FT^3
AVOL: 865 FT^3

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 in our price schedule.

MAIN LOG 1:200

Depth Based Data - Maximum Sampling Increment 10.0cm
Plotted on 15-AUG-2005 11:46
Filename: C:\logs\BMA_A10A\BMA_A10A_MAIN_LOG_MSS_Remake_2JUNE05.dta
Recorded on 16-MAY-2005 12:18
System Configuration Dates: Logged : Processed 23-AUG-2004: Plotted 17-JUN-2004:

Timing Marks
every 60.0 sec

Density Caliper
inches
6 11 16

Borehole Corrected Gamma
API
0 100 200
200 300 400

Bit Size
inches
6 11 16

TVD / DSC in Metres

Borehole Temp in deg C

HVI every 10 cu ft

Annular Integral every 10 cu ft

Replay Scale 1:200

3-5' Compensated Sonic
microsec/metre
500 400 300 200 100

3' Transit Time
microseconds
1100 600 100

4' Transit Time
microseconds
1100 600 100

5' Transit Time
microseconds
1100 600 100

6' Transit Time
microseconds
1100 600 100

1820 TVD

1830 TVD

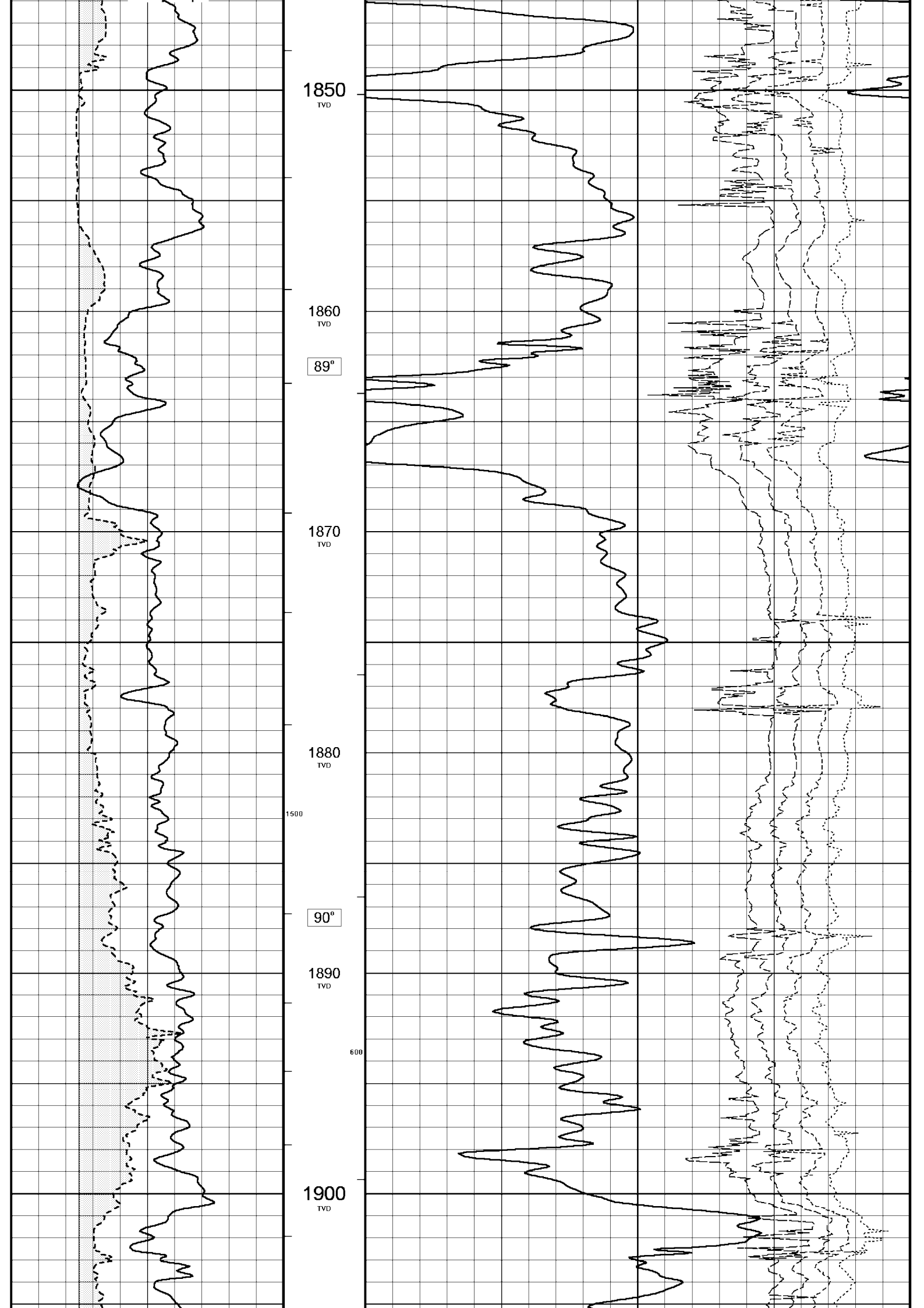
1600

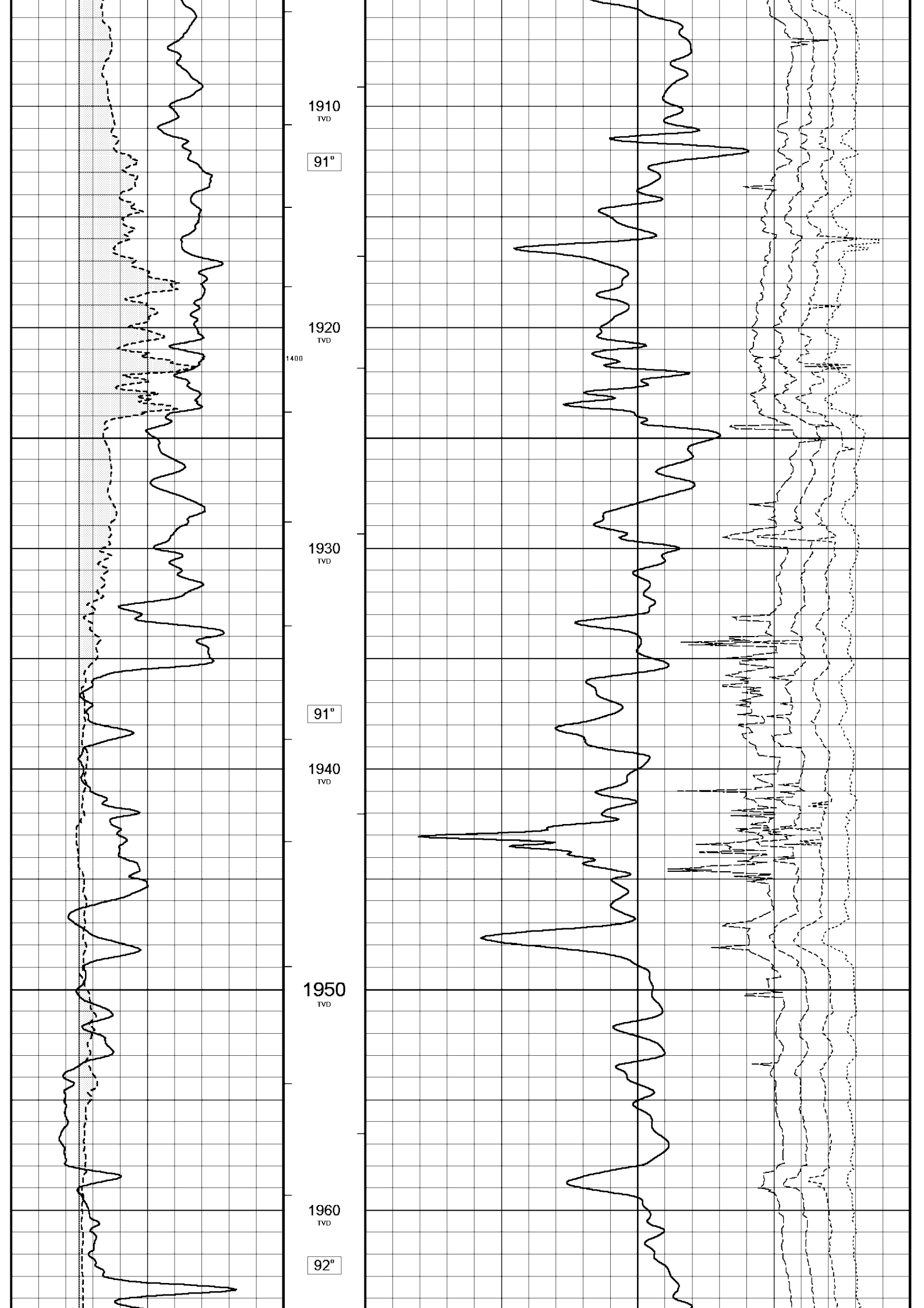
Casing Shoe

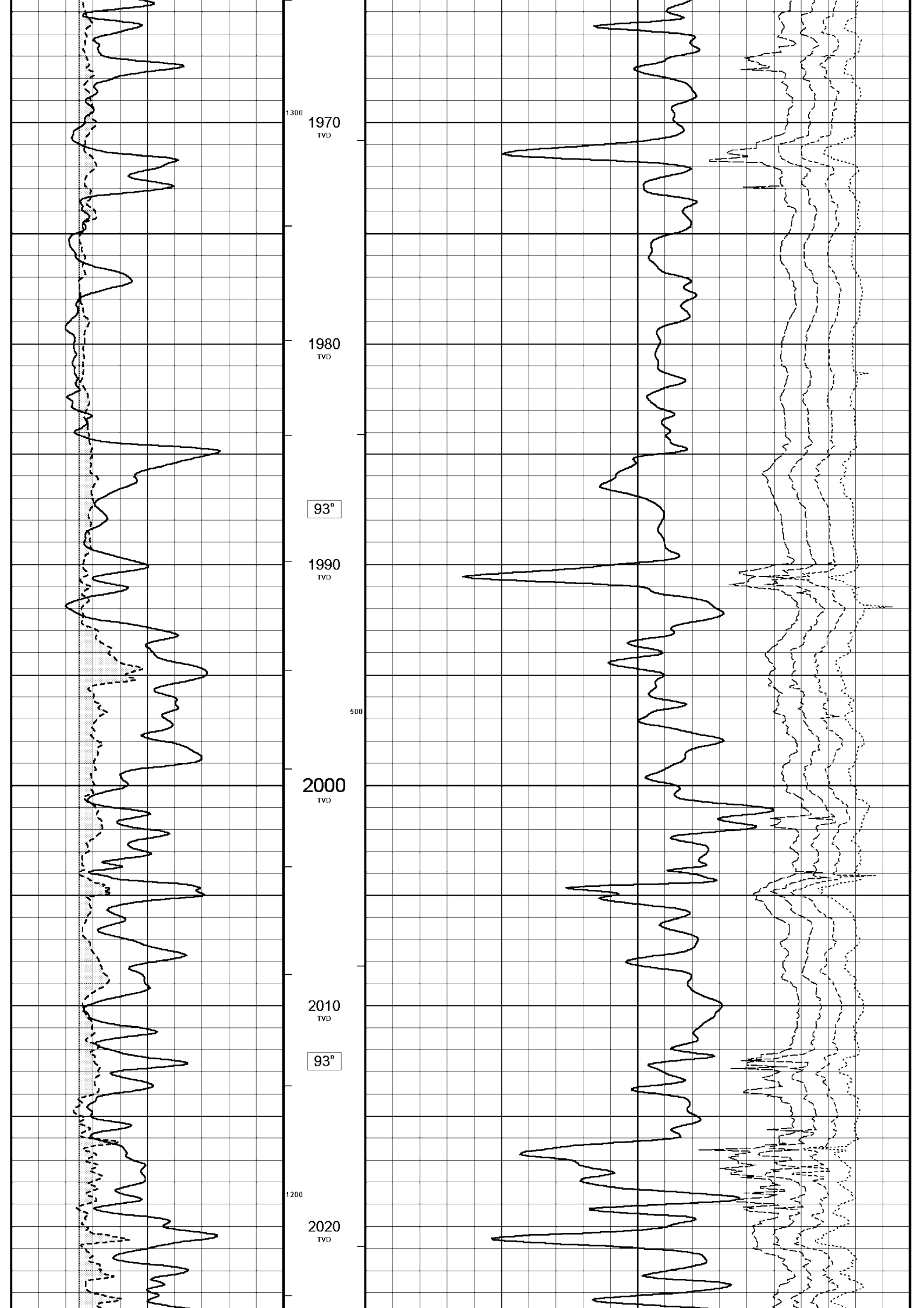
89°

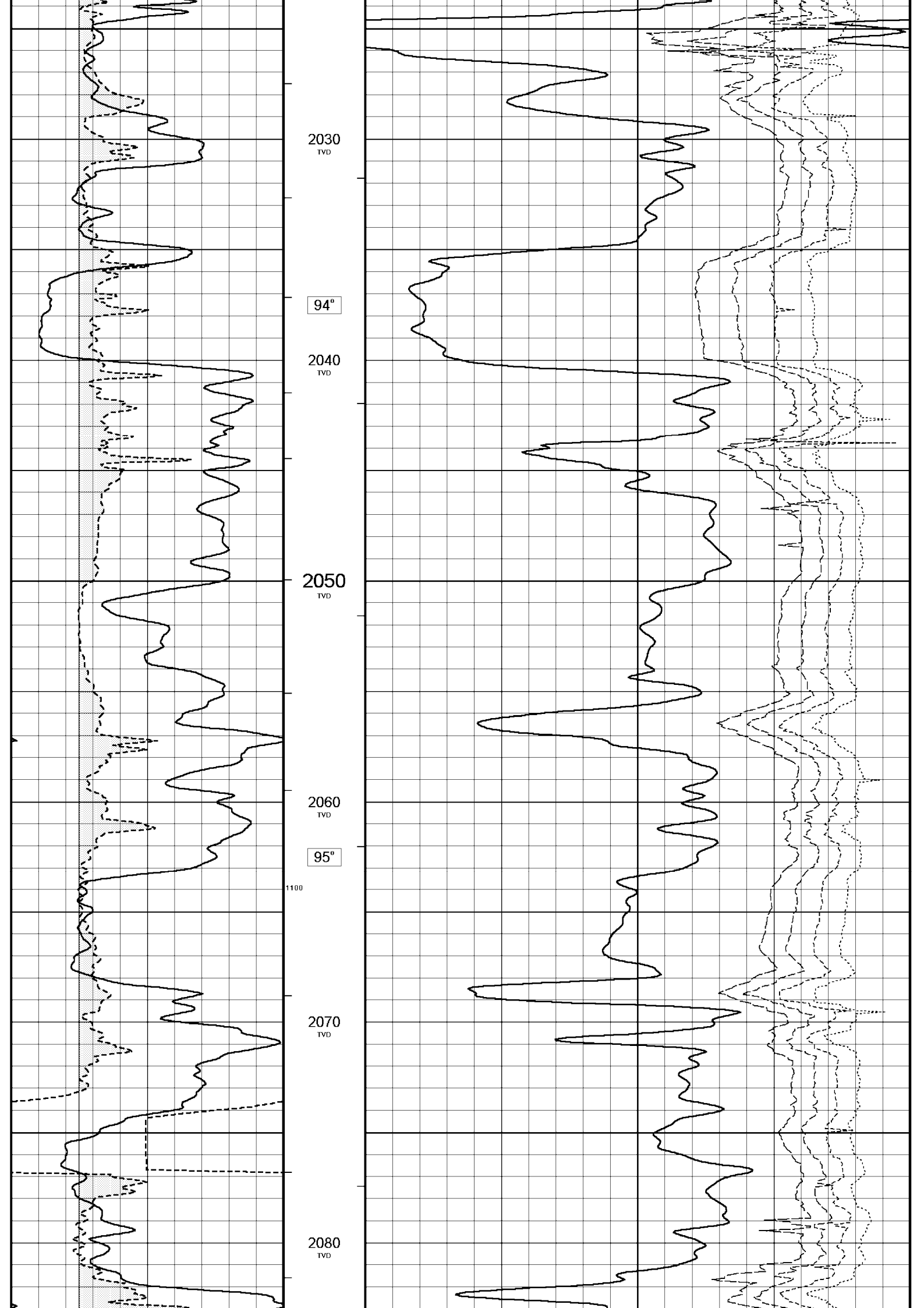
1840 TVD

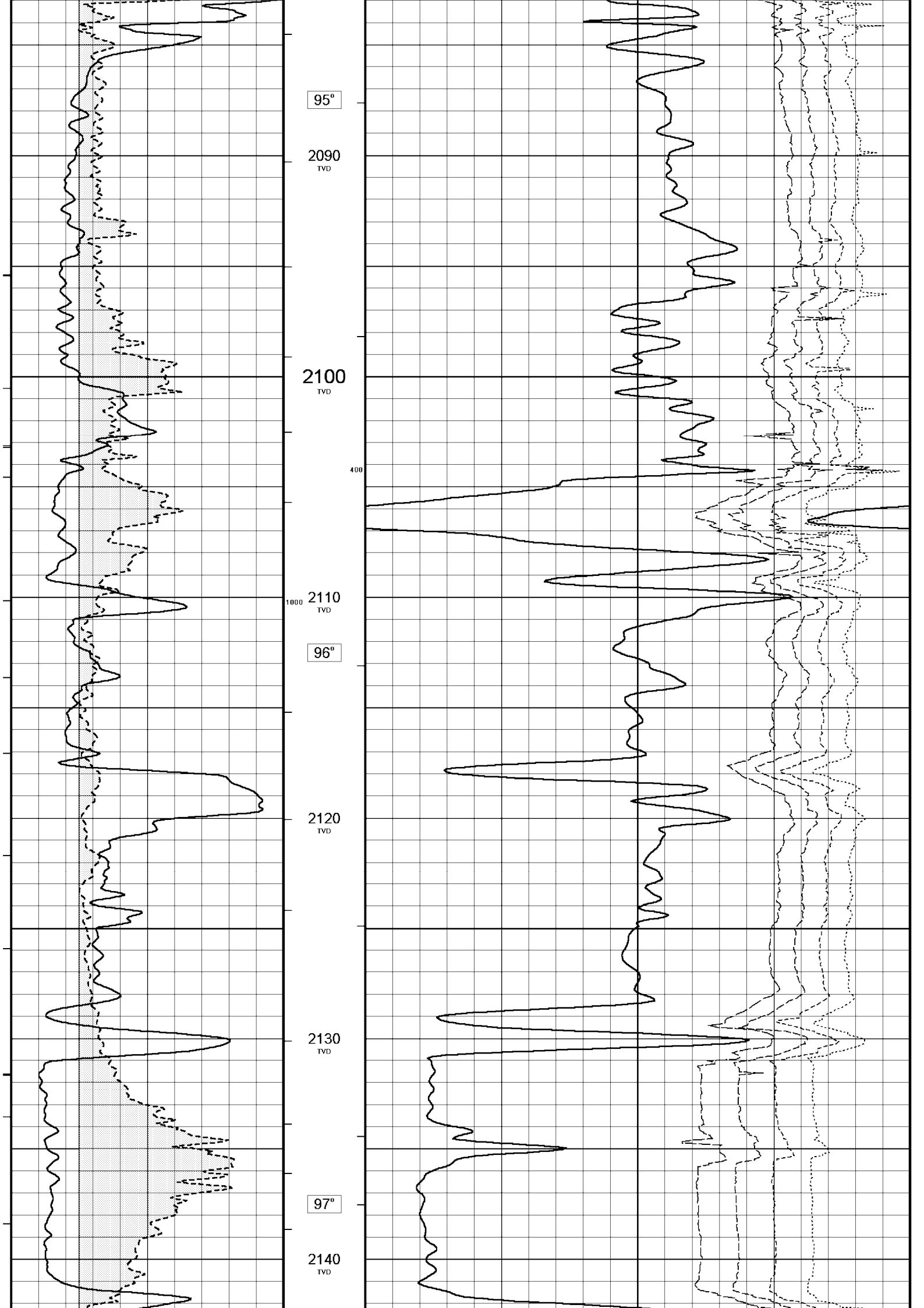
Bit Size
Borehole Corrected Gamma
Density Caliper
3-5' Compensated Sonic
6' Transit Time
5' Transit Time
4' Transit Time
3' Transit Time

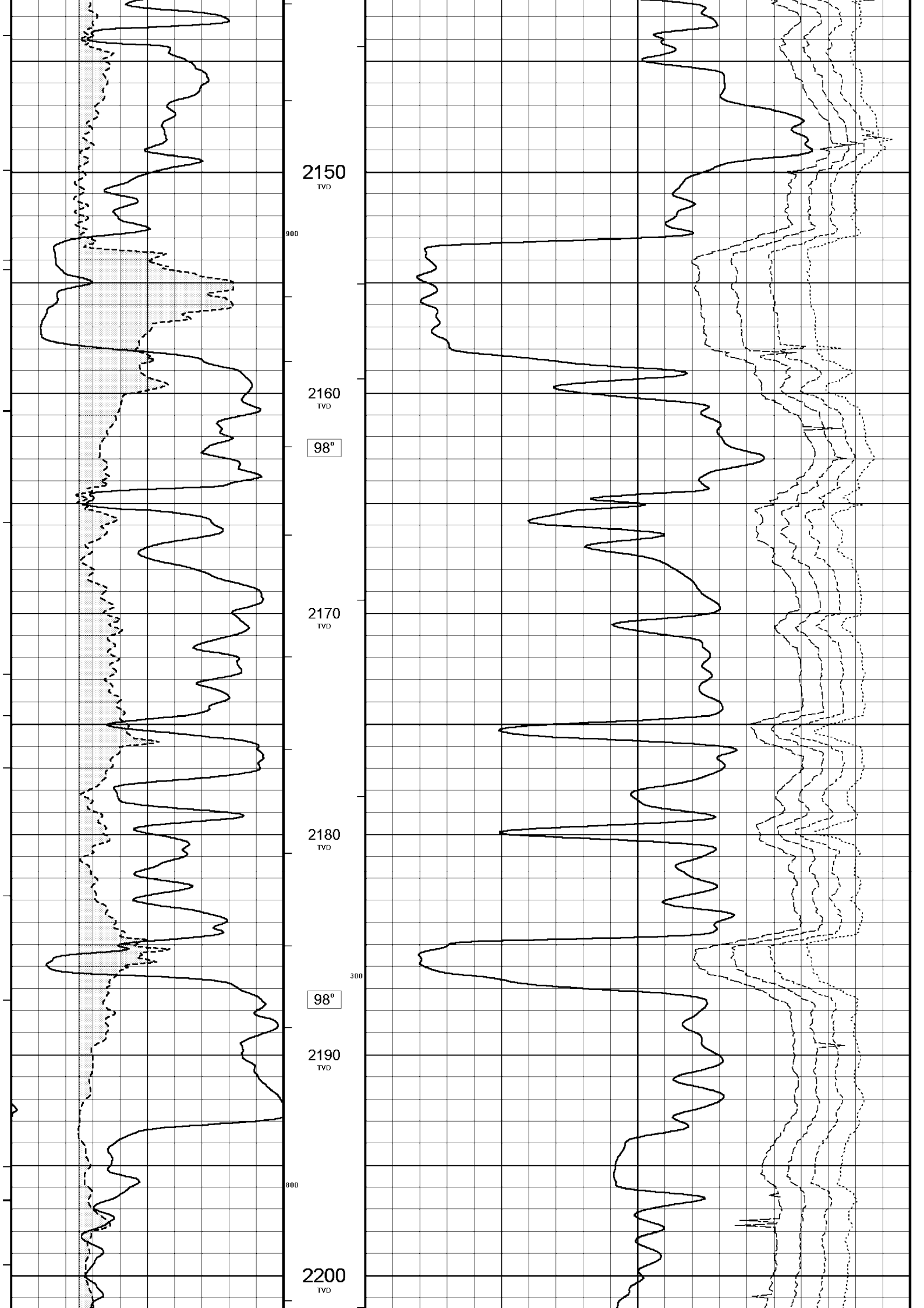

1850
TVD
1860
TVD
89°
1870
TVD
1880
TVD
1500
90°
1890
TVD
600
1900
TVD

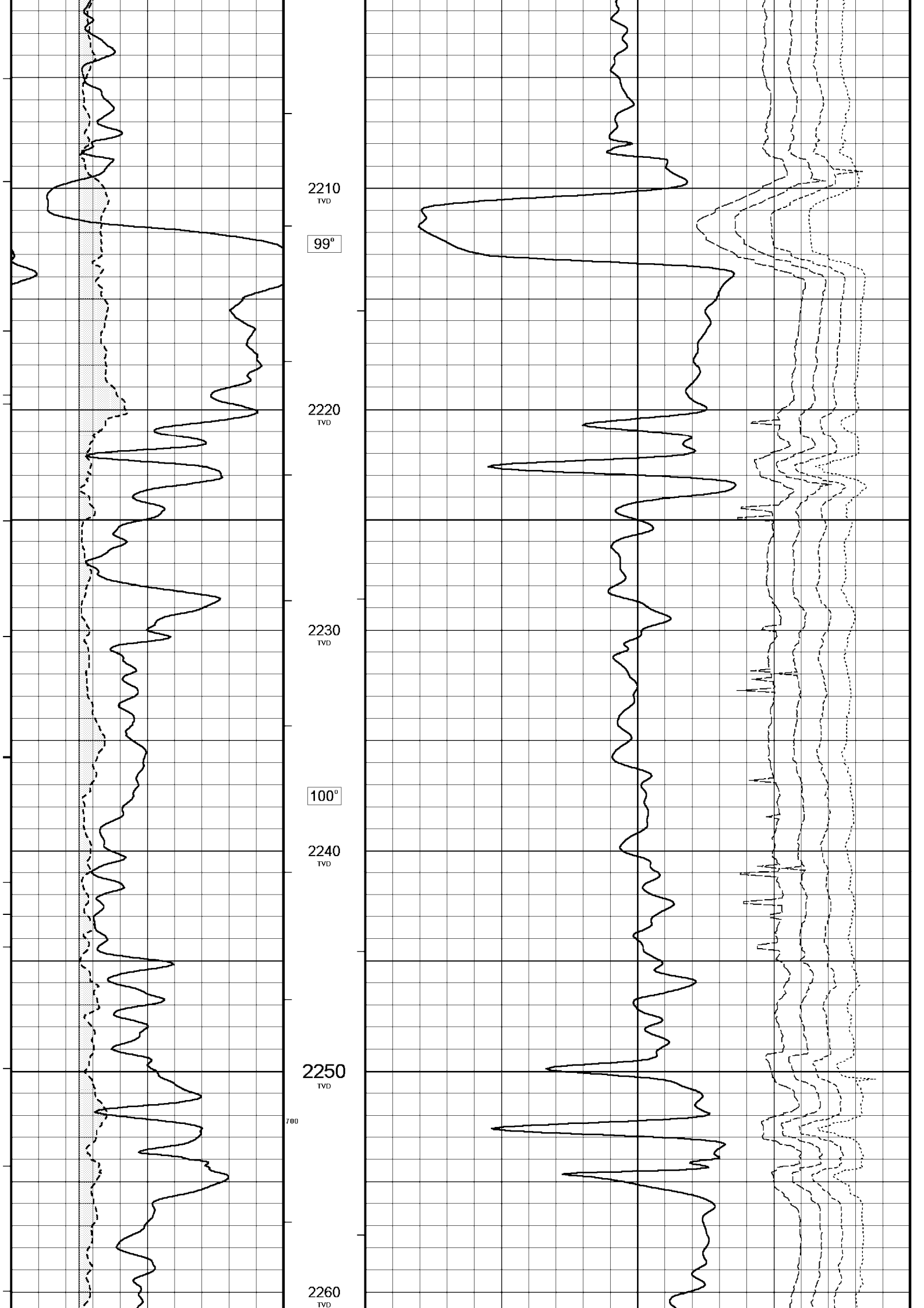

1910
TVD
91°
1920
TVD
1400
1930
TVD
91°
1940
TVD
1950
TVD
1960
TVD
92°

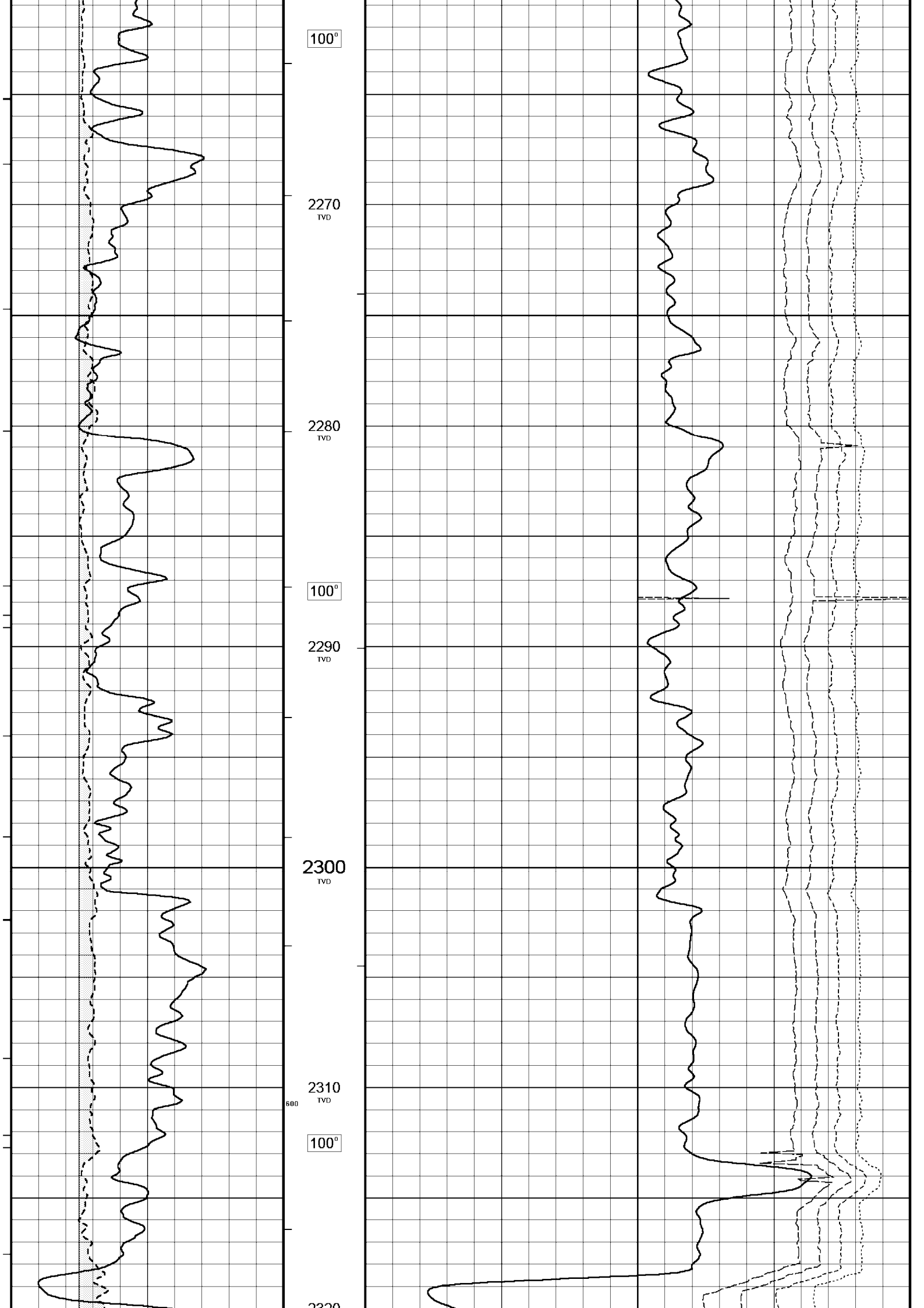

1300
1970
TVD
1980
TVD
93°
1990
TVD
500
2000
TVD
2010
TVD
93°
1200
2020
TVD

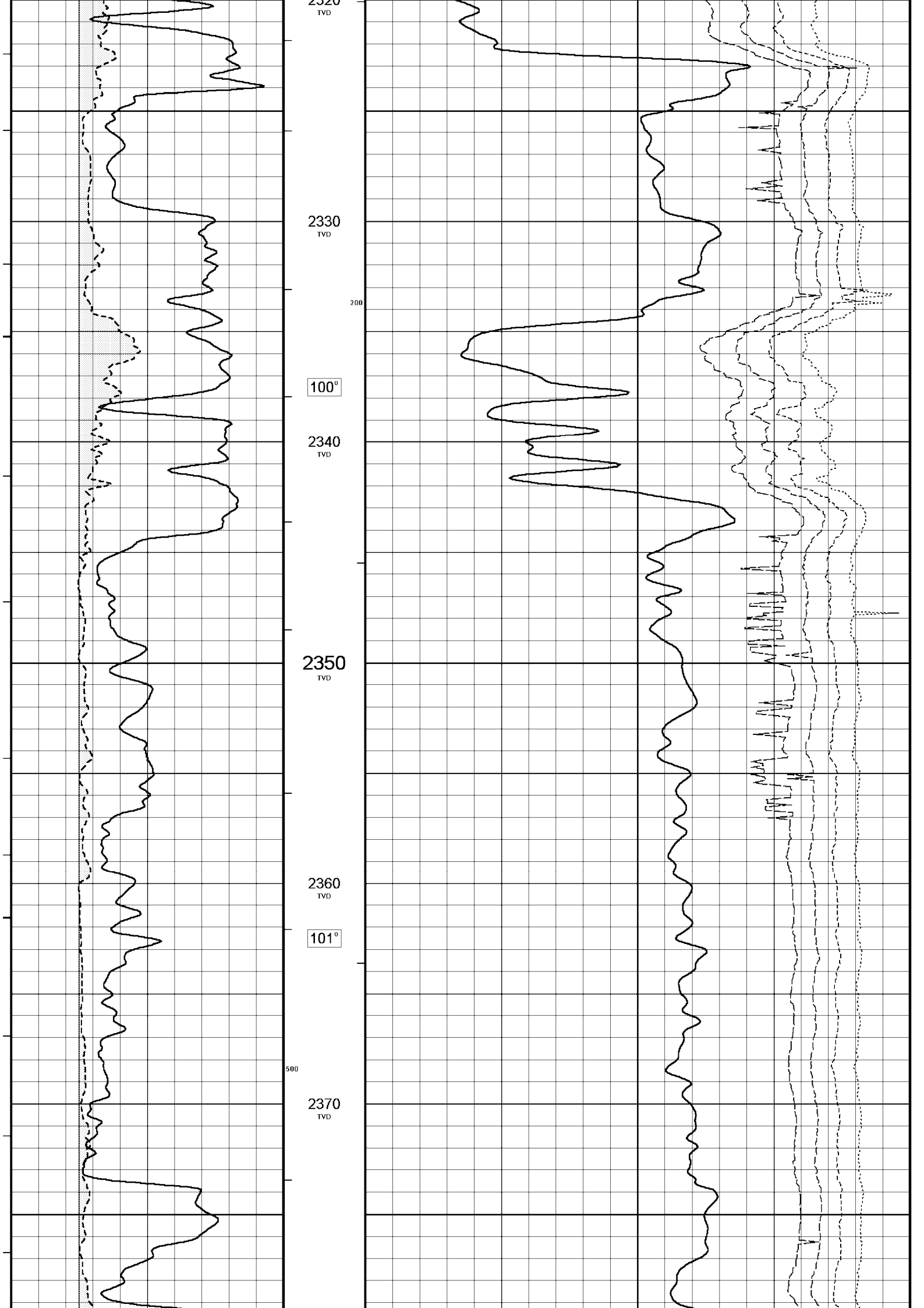

2030
TVD
94°
2040
TVD
2050
TVD
2060
TVD
95°
1100
2070
TVD
2080
TVD

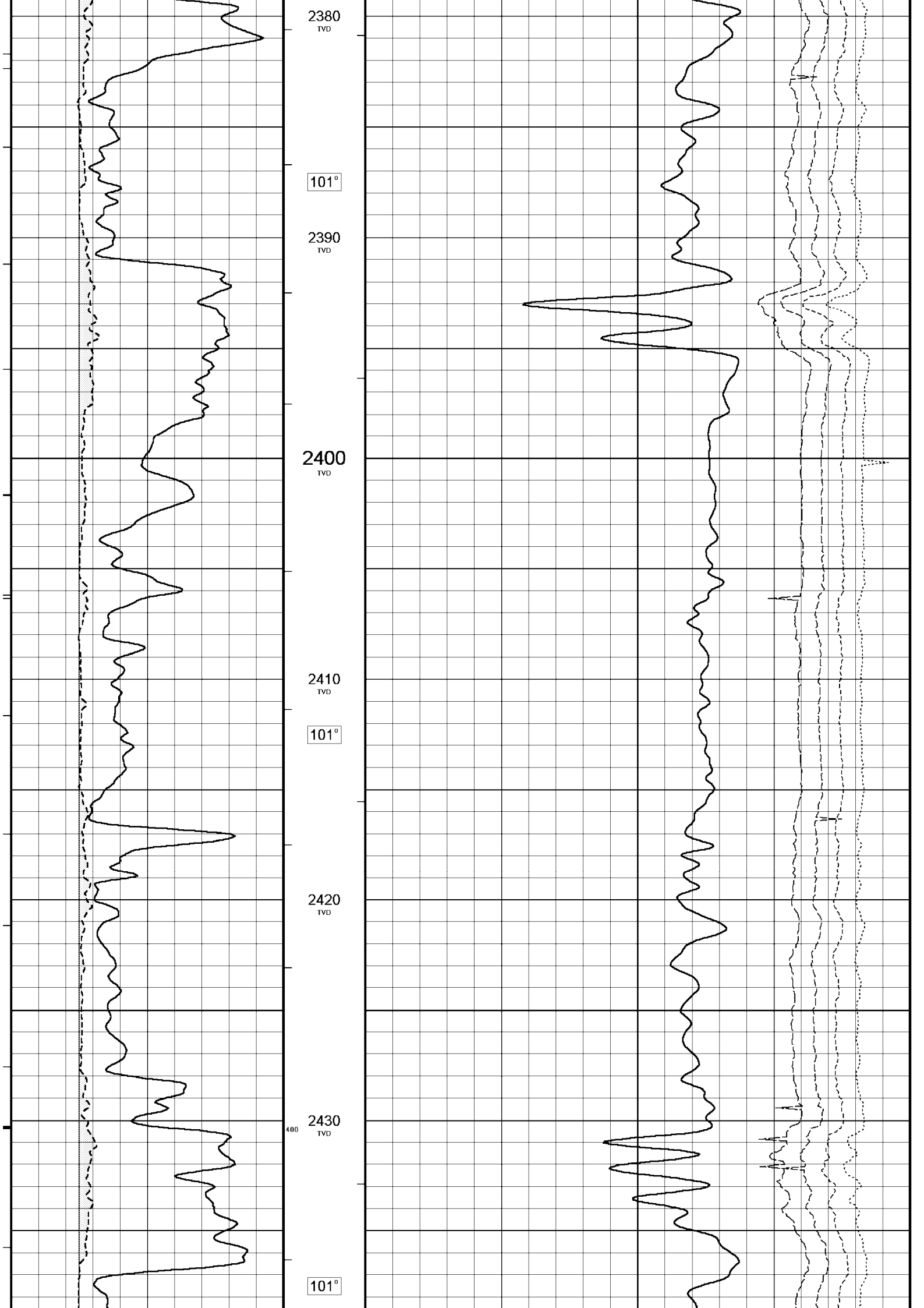

95°
2090
TVD
2100
TVD
400
1000
2110
TVD
96°
2120
TVD
2130
TVD
97°
2140
TVD

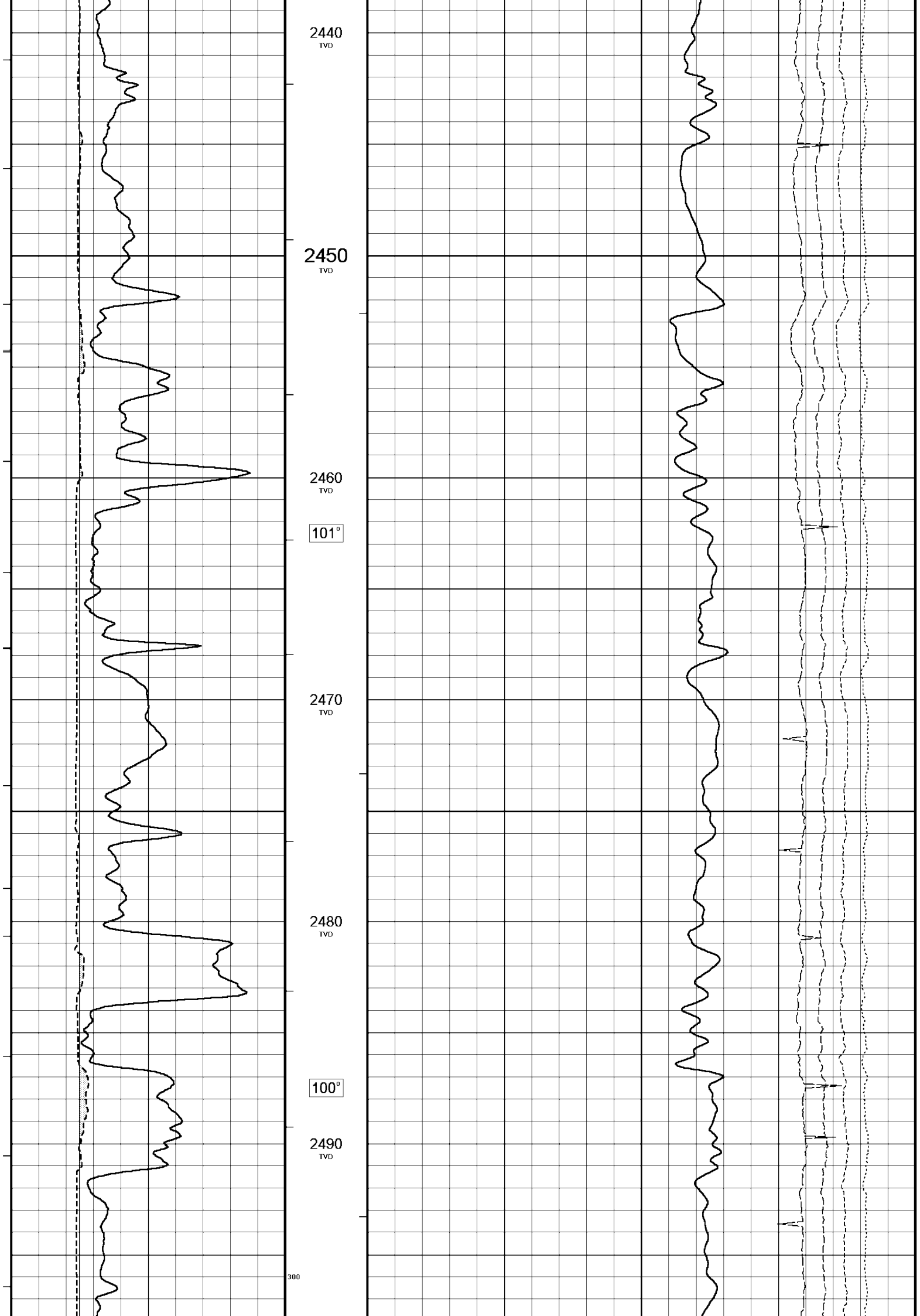

2150
TVD
900
2160
TVD
98°
2170
TVD
2180
TVD
300
98°
2190
TVD
800
2200
TVD

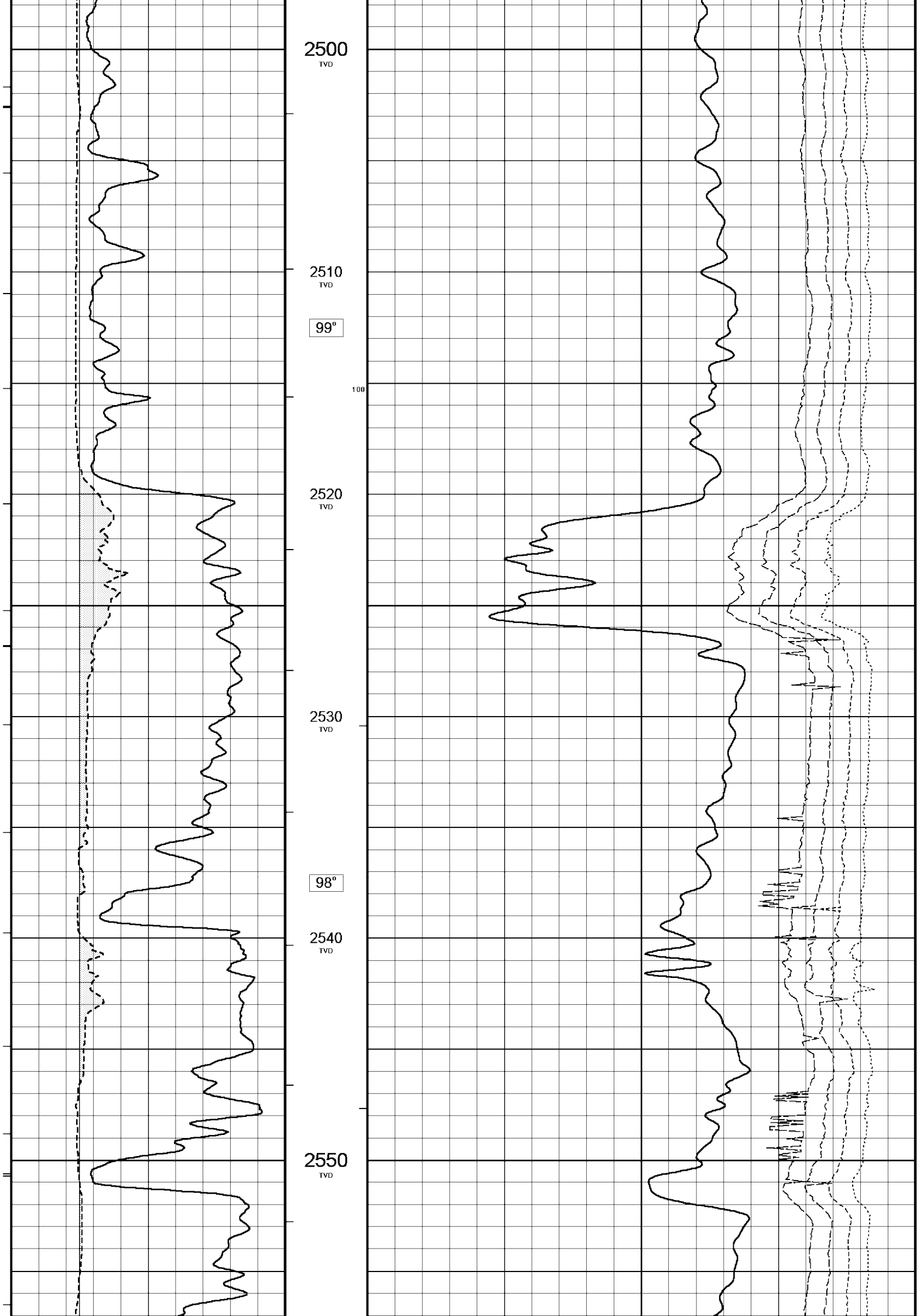

2210
TVD
99°
2220
TVD
2230
TVD
100°
2240
TVD
2250
TVD
700
2260
TVD

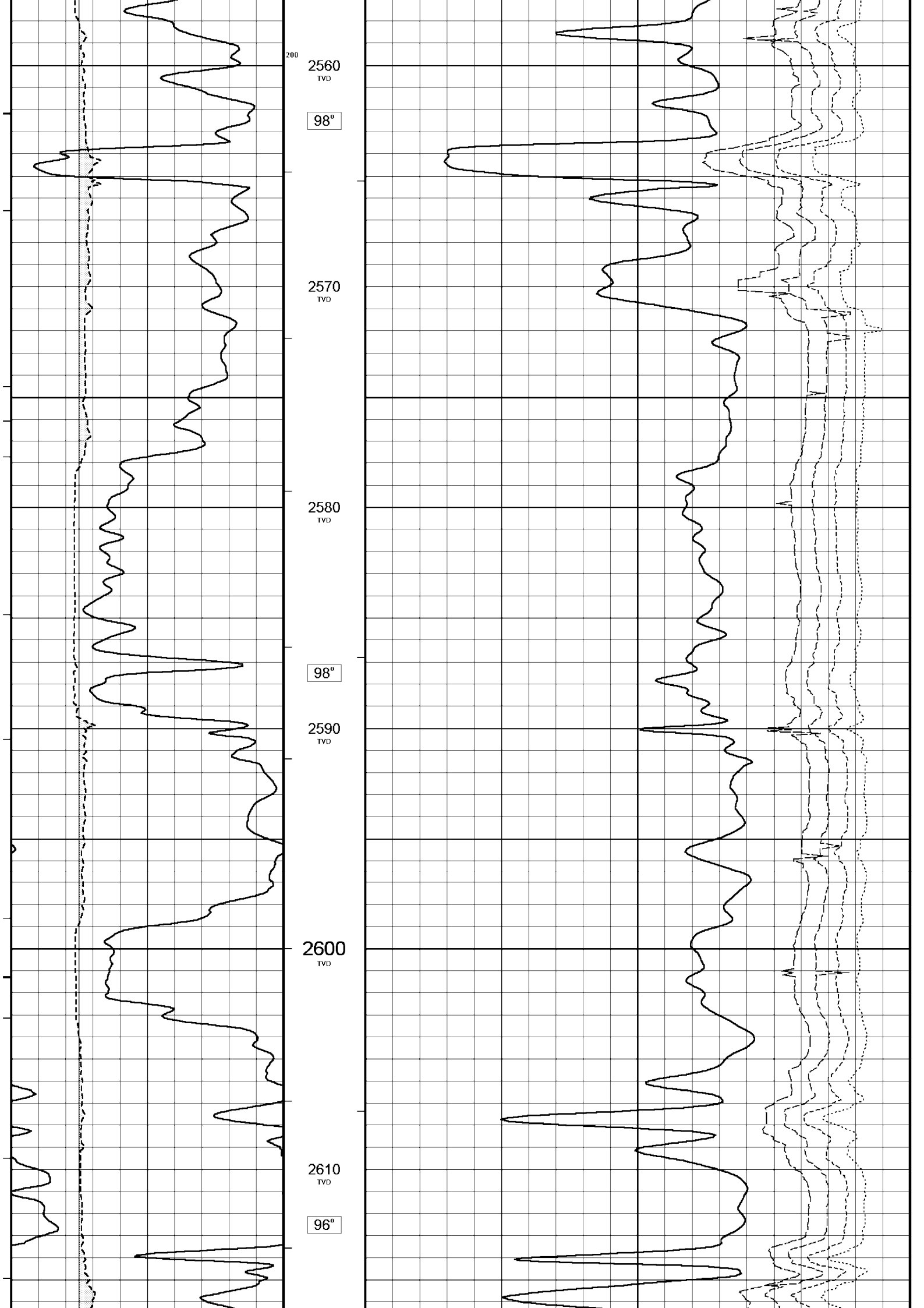

100°
2270
TVD
2280
TVD
100°
2290
TVD
2300
TVD
2310
TVD
600
100°

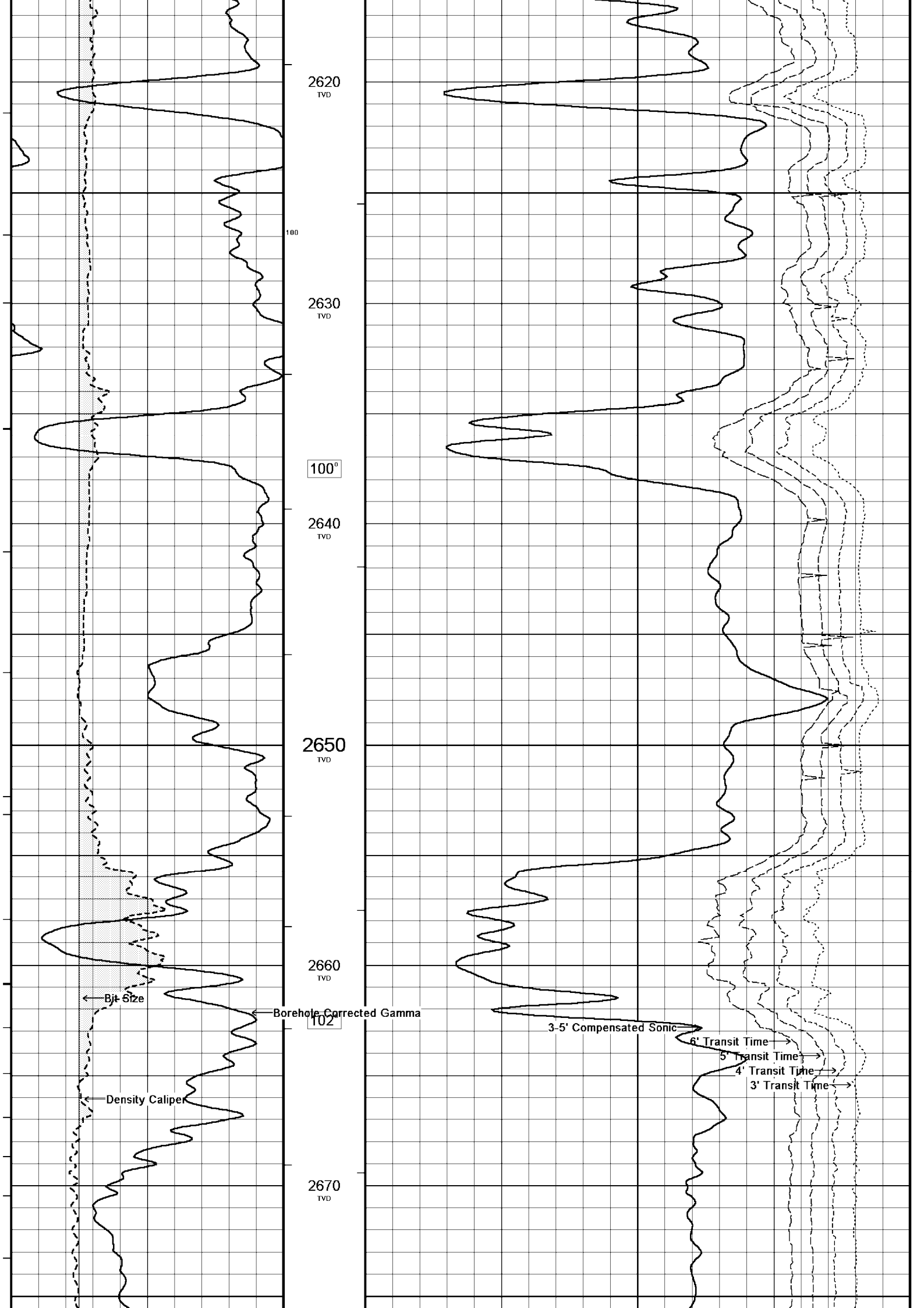

2320
TVD
2330
TVD
200
100°
2340
TVD
2350
TVD
2360
TVD
101°
500
2370
TVD

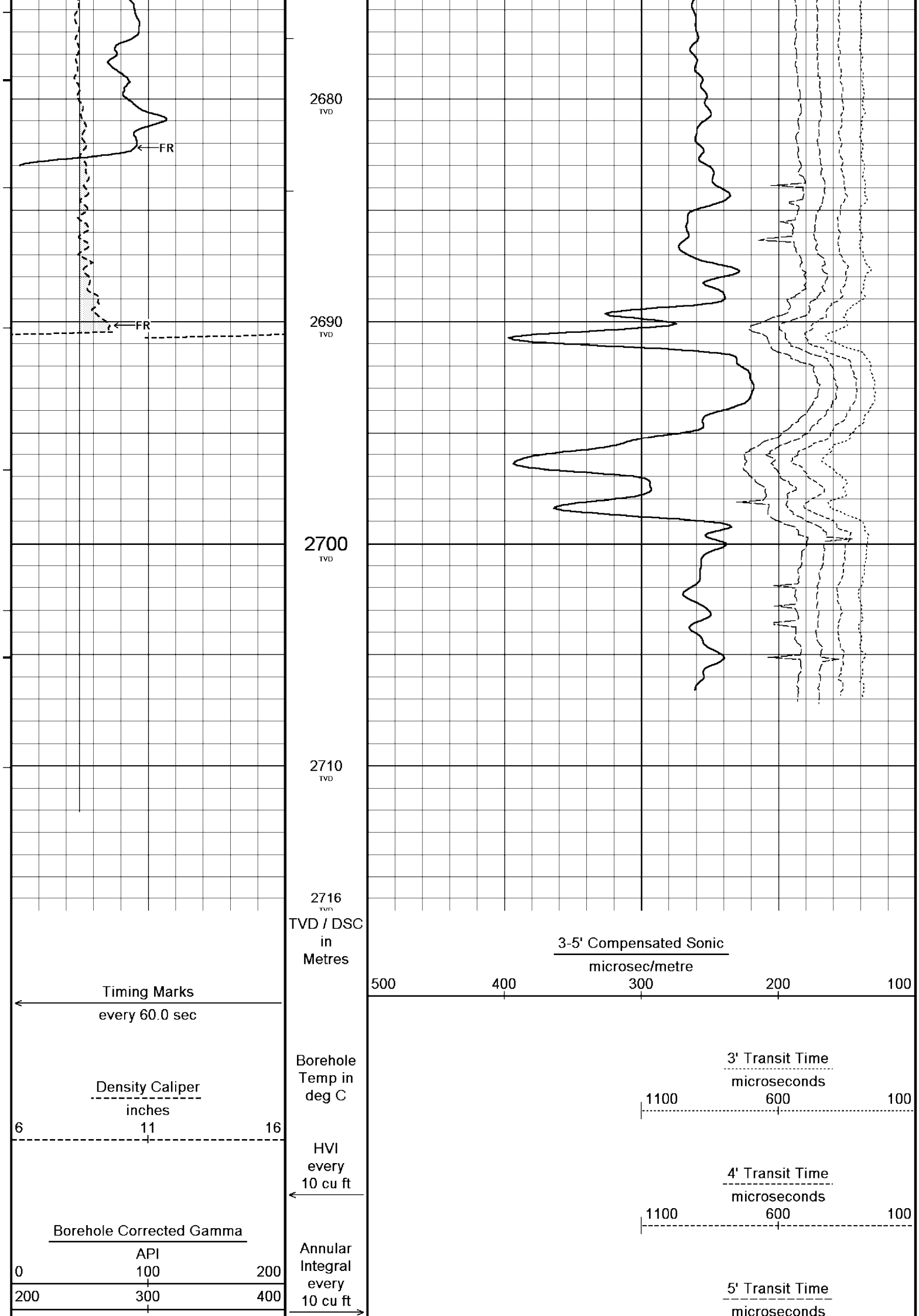

2380
TVD
101°
2390
TVD
2400
TVD
2410
TVD
101°
2420
TVD
2430
TVD
400
101°


2440
TVD
2450
TVD
2460
TVD
101°
2470
TVD
2480
TVD
100°
2490
TVD
300


2500
TVD
2510
TVD
99°
100
2520
TVD
2530
TVD
98°
2540
TVD
2550
TVD


200
2560
TVD
98°
2570
TVD
2580
TVD
98°
2590
TVD
2600
TVD
2610
TVD
96°


2620
TVD
100
2630
TVD
100°
2640
TVD
2650
TVD
2660
TVD
102
2670
TVD
Bit Size
Borehole Corrected Gamma
Density Caliper
3-5' Compensated Sonic
6' Transit Time
5' Transit Time
4' Transit Time
3' Transit Time


FR
FR
2680
TVD
2690
TVD
2700
TVD
2710
TVD
2716
TVD
TVD / DSC
in
Metres
3-5' Compensated Sonic
microsec/metre
500
400
300
200
100
Timing Marks
every 60.0 sec
Borehole
Temp in
deg C
3' Transit Time
microseconds
1100
600
100
Density Caliper
inches
6
11
16
HVI
every
10 cu ft
4' Transit Time
microseconds
1100
600
100
Borehole Corrected Gamma
API
0
100
200
Annular
Integral
every
10 cu ft
200
300
400
5' Transit Time
microseconds

Depth Based Data - Maximum Sampling Increment 10.0cm — Plotted on 15-AUG-2005 11:46
Filename: C:\logs\BMA_A10A\BMA_A10A_MAIN_LOG_MSS_Remake_2JUNE05.dta — Recorded on 16-MAY-2005 12:18
System Configuration Dates: Logged : Processed 23-AUG-2004: Plotted 17-JUN-2004:

MAIN LOG 1:200

BEFORE SURVEY CALIBRATION

C:\logs\BMA_A10A\BMA_A10A_MAIN_LOG_MSS_Remake_2JUNE05.dta

General Constants All 000

General Parameters

Mud Resistivity	0.134	ohm-metres
Mud Resistivity Temperature	25.000	degrees C
Water Level	0.000	metres
Density/Neutron Processing	Wet Hole	

Hole/Annular Volume and Differential Caliper Parameters

HVOL Caliper 1	Density Caliper	
HVOL Caliper 2	Density Caliper	
Annular Volume Diameter	7.000	inches
Caliper for Differential Caliper	Density Caliper	

Rwa Parameters

Porosity used	Base Density Porosity	
Resistivity used	Deep Induction	
RWA Constant A	0.610	
RWA Constant M	2.150	

High Resolution Temperature Calibration MCG 098

Field Calibration on 8-MAY-2005,02:39

	Measured	Calibrated(Deg C)
Lower	0.00	0.00
Upper	100.00	100.00

High Resolution Temperature Constants MCG 098

Pre-filter Length	11

Gamma Calibration MCG 098

Field Calibration on 8-MAY-2005 02:39

	Measured	Calibrated (API)
Background	9	6
Calibrator (Gross)	1373	915
Calibrator (Net)	1364	909

Gamma Constants MCG 098

Gamma Calibrator Number	060	
Mud Density	1.21	gm/cc
Caliper Source for Processing	Density Caliper	
Tool Position	Eccentred	
Concentration of KCl	0.00	kppm

Caliper Calibration MPD 083

Base Calibration on 29-APR-2005 11:31
Field Calibration on 8-MAY-2005 02:30

Base Calibration

Reading No	Measured	Calibrator Size (in)
1	13428	4.01
2	21585	5.99
3	30000	7.98
4	38511	9.94
5	47824	12.01
6	N/A	N/A

Field Calibration

Field Calibration

Measured Caliper (in)	Actual Caliper (in)
8.03	7.98

Sonic Constants MSS 066

Maximum Boundary Contrast	328.08	micro-sec/m
Fluid Transit Time	620.08	micro-sec/m
Limestone Transit Time	155.84	micro-sec/m
Sandstone Transit Time	182.09	micro-sec/m
Dolomite Transit Time	142.72	micro-sec/m
Sonic used for Porosities	3-5' Compensated Sonic	
Correction for Sonde Skew	Applied	
Cycle Stretch Algorithm	Applied	
MN3FT	N/A	micro-sec
MX3FT	N/A	micro-sec

Fixed Gate Parameters

Start Time (micro-sec)	End Time (micro-sec)	Discriminator (mV)	N/A
N/A	N/A	N/A	
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	

Down Hole Fixed Gate Parameters

Gate Start	N/A	micro-sec
Gate Width	N/A	micro-sec
Initial Discriminator Level	0.0000	mVolts

Full Waveform Parameters

Use 3' Waveform to derive TR	N/A	
Use 4' Waveform to derive TR	N/A	
Use 5' Waveform to derive TR	N/A	
Use 6' Waveform to derive TR	N/A	
3' Waveform Discriminator Level	N/A	mV
4' Waveform Discriminator Level	N/A	mV
5' Waveform Discriminator Level	N/A	mV
6' Waveform Discriminator Level	N/A	mV
3' Waveform Filter	N/A	
4' Waveform Filter	N/A	
5' Waveform Filter	N/A	
6' Waveform Filter	N/A	
Semblance Level	N/A	
Semblance Window Width	N/A	micro-sec
Sonic 1 Despiker	N/A	N/A
Sonic 2 Despiker	N/A	N/A

DOWNHOLE EQUIPMENT

C:\logs\BMA_A10A\BMA_A10A_MAIN_LOG_MSS_Remake_2JUNE05.dta

Compact Swivel Head Adaptor F
SHA 71 Length: 0.83 m Weight: 26.5 lb

Compact Knuckle Joint
SKJ 100 Length: 0.66 m Weight: 24.3 lb

Compact Battery Sub.
MBS 99 Length: 4.41 m Weight: 90.4 lb

Compact Inline Standoff B
MIS 73 Length: 0.65 m Weight: 15.4 lb

Compact Stiff Bridle Electrode Sub.
MBE 18 Length: 3.76 m Weight: 94.8 lb

Compact Inline Standoff B
MIS 139 Length: 0.65 m Weight: 15.4 lb

Compact Stiff Bridle Electrode Sub.
MBE 19 Length: 3.76 m Weight: 94.8 lb

Compact Inline Standoff B
MIS 136 Length: 0.65 m Weight: 15.4 lb

MBE 21 - THIRD BRIDLE
MLK 111 Length: 3.76 m Weight: 88.2 lb

Compact Gamma
MCG 98 Length: 2.65 m Weight: 63.9 lb

32.22 m GGCE - Borehole Corrected Gamma
31.33 m CGXT - MCG External Temperature

Compact Memory Sub A.C
MMS 38 Length: 0.95 m Weight: 30.9 lb

Compact Knuckle Joint
SKJ 46 Length: 0.66 m Weight: 24.3 lb

Compact Swivel Head Adaptor F
SHA 64 Length: 0.83 m Weight: 26.5 lb

Compact Inline Bowspring A
MIS 94 Length: 1.74 m Weight: 33.1 lb

Compact Neutron
MDN 85 Length: 1.53 m Weight: 50.7 lb

Compact Density/Caliper
MPD 83 Length: 2.92 m Weight: 90.4 lb

23.48 m AVOL - Annular Volume
23.48 m HVOL - Hole Volume
23.48 m CLDC - Density Caliper

Compact Inline Bowspring A
MIS 24 Length: 1.74 m Weight: 33.1 lb

Compact Swivel Head Adaptor
SHA 28 Length: 0.83 m Weight: 26.5 lb

Compact Knuckle Joint
SKJ 110 Length: 0.66 m Weight: 24.3 lb

Compact Inline Standoff B
MIS 140 Length: 0.65 m Weight: 15.4 lb

Compact Upper Guard Sub.
MUG 20 Length: 2.74 m Weight: 68.3 lb

Compact Inline Standoff B
MIS 129 Length: 0.65 m Weight: 15.4 lb

Compact Laterolog Electrode Sub.
MLE 16 Length: 3.76 m Weight: 92.6 lb

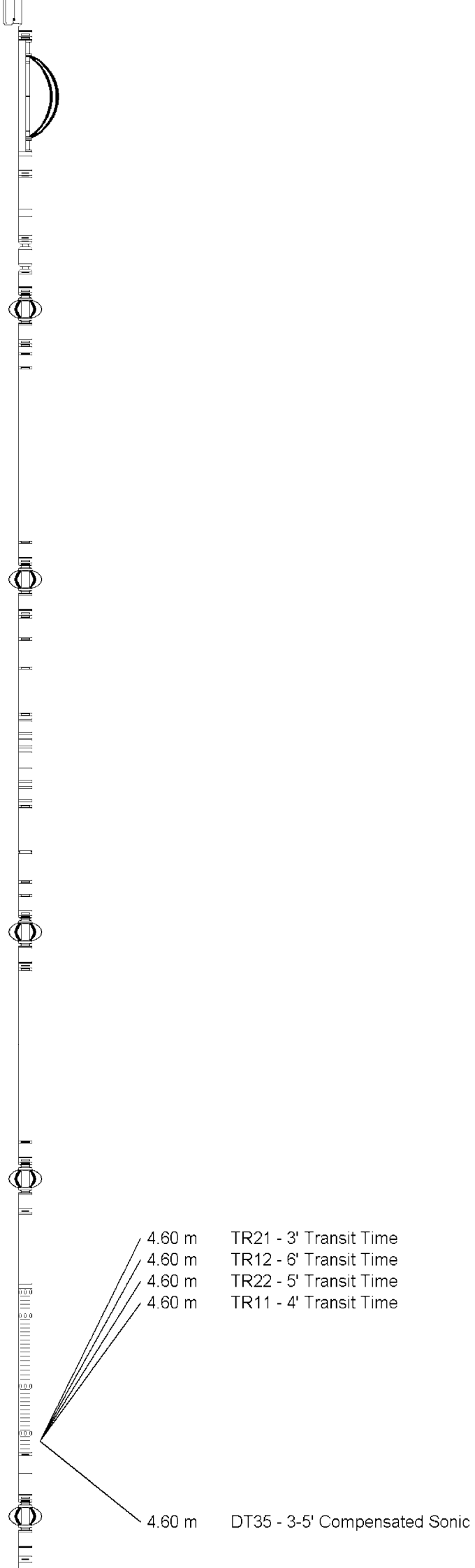
Compact Inline Standoff B
MIS 127 Length: 0.65 m Weight: 15.4 lb

Compact Lower Guard Sub.
MLG 7 Length: 2.44 m Weight: 55.1 lb

Compact Inline Standoff B
MIS 133 Length: 0.65 m Weight: 15.4 lb

Compact Sonic
MSS 66 Length: 3.82 m Weight: 72.8 lb

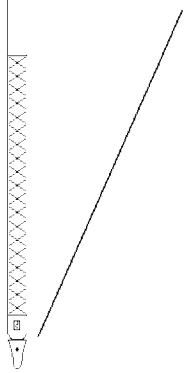
Compact Inline Standoff B
MIS 128 Length: 0.65 m Weight: 15.4 lb



Compact Induction
MAI 39 Length: 3.29 m Weight: 48.5 lb

Pressure Bung + Hole Finder
HFS 3 Length: 0.40 m Weight: 6.6 lb

Total Length: 53.36 m Weight: 1289.7 lb



All measurements relative to tool zero.

COMPANY	ESSO AUSTRALIA PTY LTD
WELL	BREAM A10A
FIELD	BREAM
PROVINCE/COUNTY	BASS STRAIT
COUNTRY/STATE	AUSTRALIA

Elevation Kelly Bushing		metres	First Reading	2707.80	metres
Elevation Drill Floor	32.82	metres	Depth Driller	2717.18	metres
Elevation Ground Level	-59.40	metres	Depth Logger	2212.30	metres

PRECISION ENERGY SERVICES
Compact

COMPENSATED SONIC
1:200 TVD