COMPENSATED SONIC

COMPANY	PARAMOUNT RESOURCES LTD.
WELL	PARAMOUNT ET AL CAMERON J-04
FIELD	CAMERON HILLS
PROVINCE/COUNTY	NORTH WEST TERRITORIES
COUNTRY/STATE	CANADA
LOCATION	300/J-04-60-10-117-30

FIELD PRINT

LSD	SEC	TWP	RGE	Other Services
				PHOTO DENSITY
				MICROLOG
				ARRAY INDUCTION
				DUAL SPACED NEUTRON

API Number
Permit Number 1159

Permanent Datum GROUND LEVEL, Elevation 765.20 metres
Log Measured From 4.00 M above Permanent Datum
Drilling Measured From KB

Elevations:	metres
KB	769.20
DF	
GL	765.20

Date	15-FEB-2007		
Run Number	1		
Depth Driller	1449.00	metres	
Depth Logger	1449.50	metres	
First Reading	1445.50	metre	
Last Reading	352.00	metre	
Casing Driller	430.00	metres	
Casing Logger	429.80	metres	
Bit Size	200.00	mm	
Hole Fluid Type	GELCHEM		
Density / Viscosity	1060.0 kg/M3	93.00 CP	
PH / Fluid Loss	11.00	11.00 ml/30Min	
Sample Source	FLOWLINE		
Rm @ Measured Temp	1.18 @ 25.0	ohm-m	
Rmf @ Measured Temp	1.04 @ 25.0	ohm-m	
Rmc @ Measured Temp	1.32 @ 25.0	ohm-m	
Source Rmf / Rmc	PRESS	FILTER	
Rm @ BHT	0.78 @ 48.0	ohm-m	
Time Since Circulation	6 HRS		
Max Recorded Temp	48.00	deg C	
Equipment Name	COMPACT		
Equipment / Base	13124	GPR	
Recorded By	G. SINGER		
Witnessed By	A. AHMED		
CIRC. STOP TIME	01:30-FEB-15		Last Line

BOREHOLE RECORD

Last Edited: 15-FEB-2007 05:01

Bit Size millimetres	Depth From metres	Depth To metres
311.000	0.00	430.00
200.000	430.00	1449.00

CASING RECORD

Type	Size millimetres	Depth From metres	Shoe Depth metres	Weight Kg/metre
SURFACE	219.100	0.00	430.00	35.72

REMARKS

1) SOFTWARE ISSUE: WLS 7.01.0195.
2) CUSTOMER SCALES AND LOGGED INTERVALS USED
3) TOOLS RUN: MAI, MSS, MPD, MDN, MML, ISC, MGS, MTC, MFE, MCG RUN IN COMBINATION
4) HARDWARE: MAI: TWO 25.4 MM STANDOFFS
   MSS: THREE 25.4 MM STANDOFFS
   MDN: DUAL BOWSPRING AND INTERSONIC CRANK
   MTC: SIX LEAF CENTRALIZER
5) SERVICE ORDER #: 30073028 SAP #: 4147101 # FIELD PRINTS = 3
6) RIG: PD 129

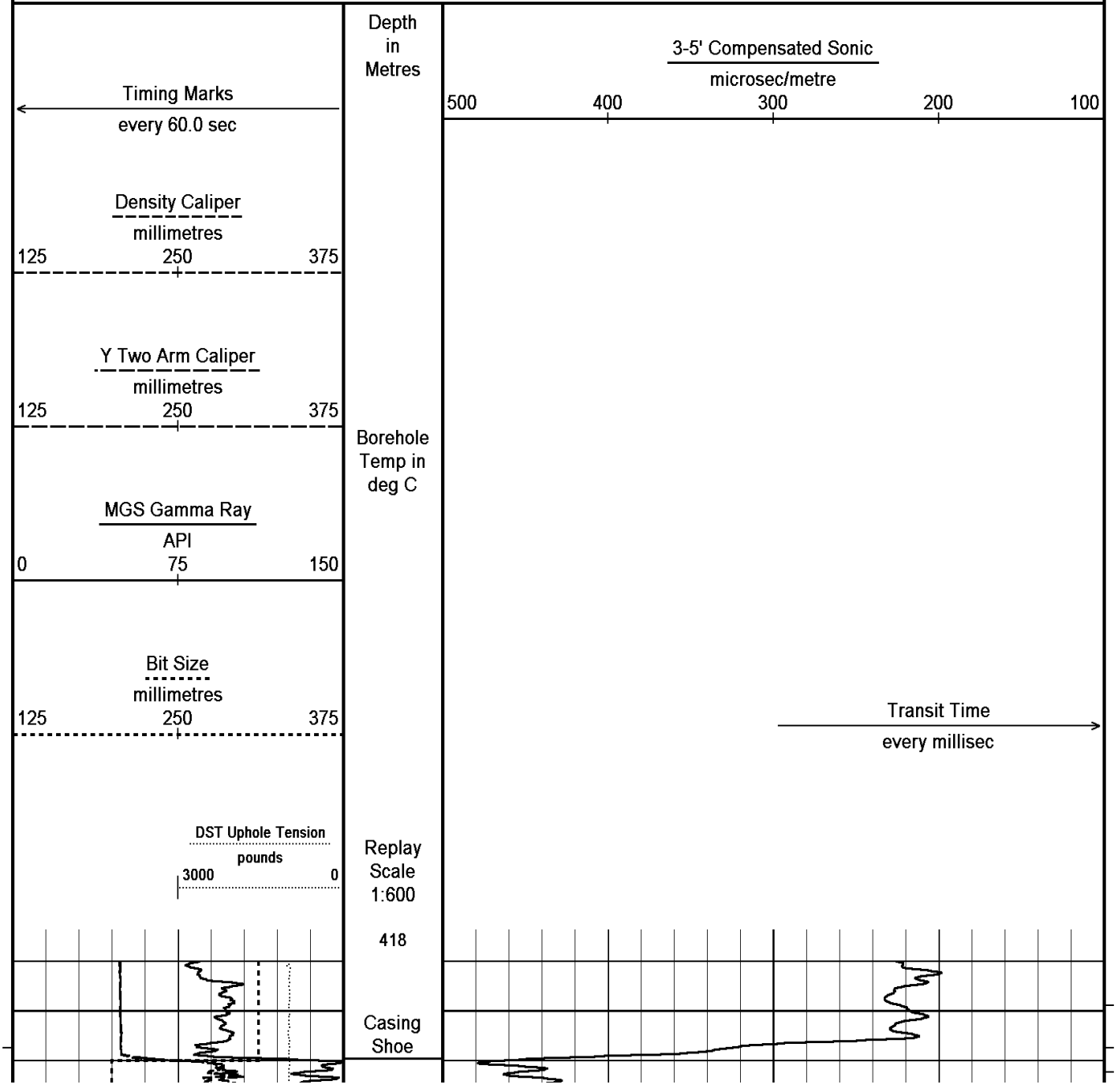
7) HOLE AND CEMENT VOLUMES CALCULATED USING DENSITY AND 2-ARM CALIPERS :
HOLE VOLUME = 37.4 CU.M.
ANNULAR VOLUME USING 139.7 MM PRODUCTION CASING = 21.8 CU.M

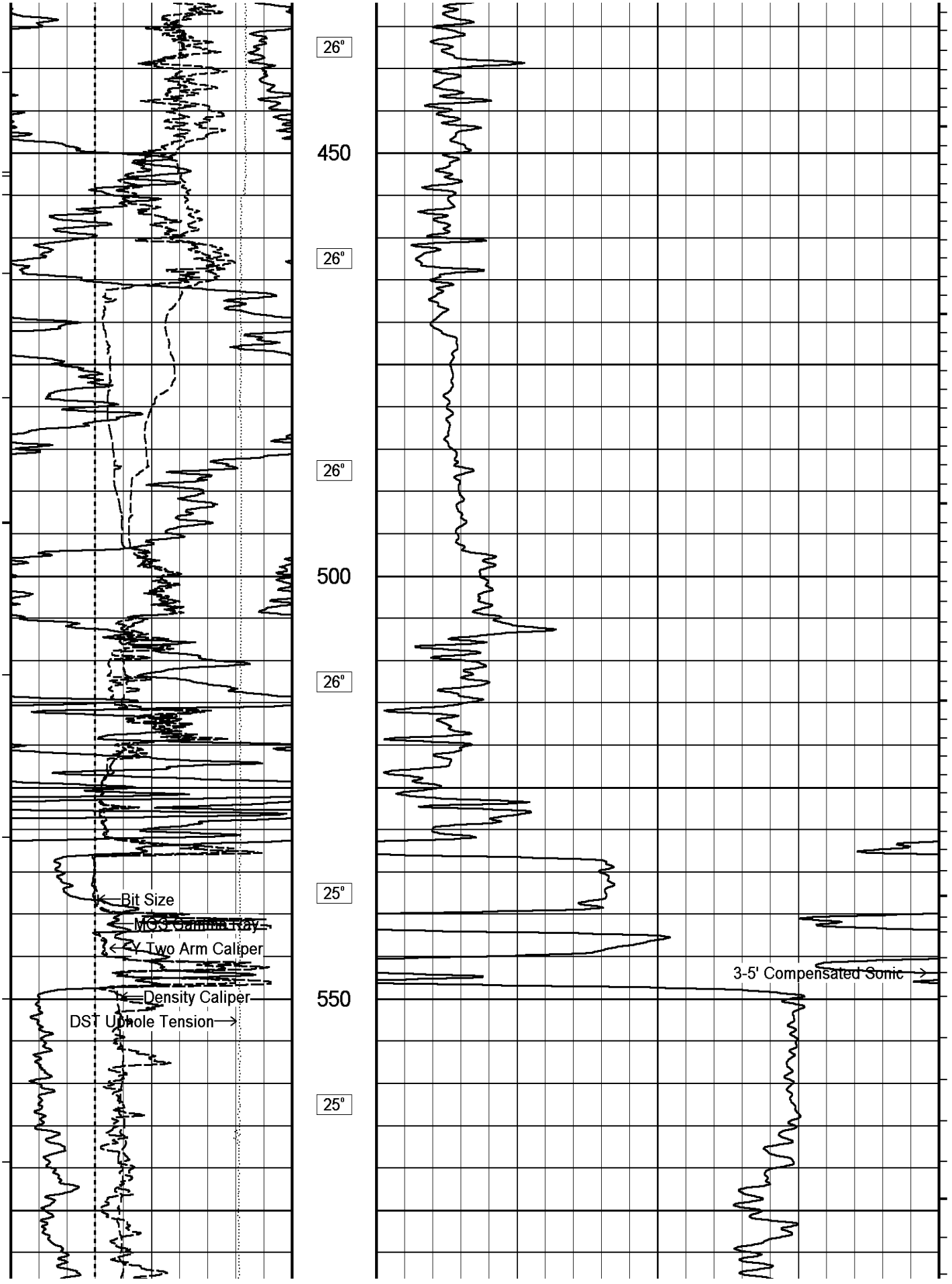
8) SONIC FREE PIPE FOUND FROM 352M - 357M

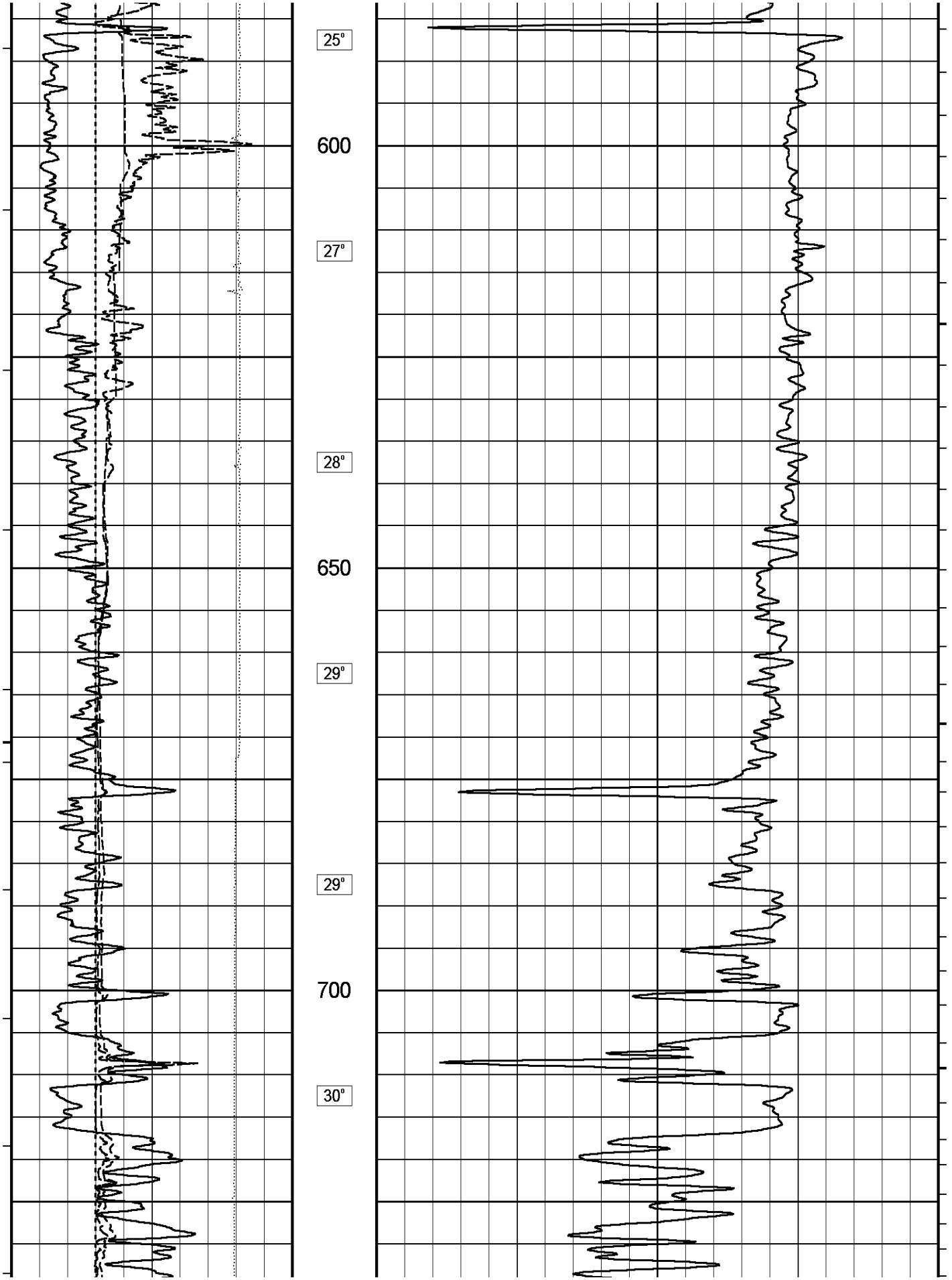
MAIN LOG 1:600

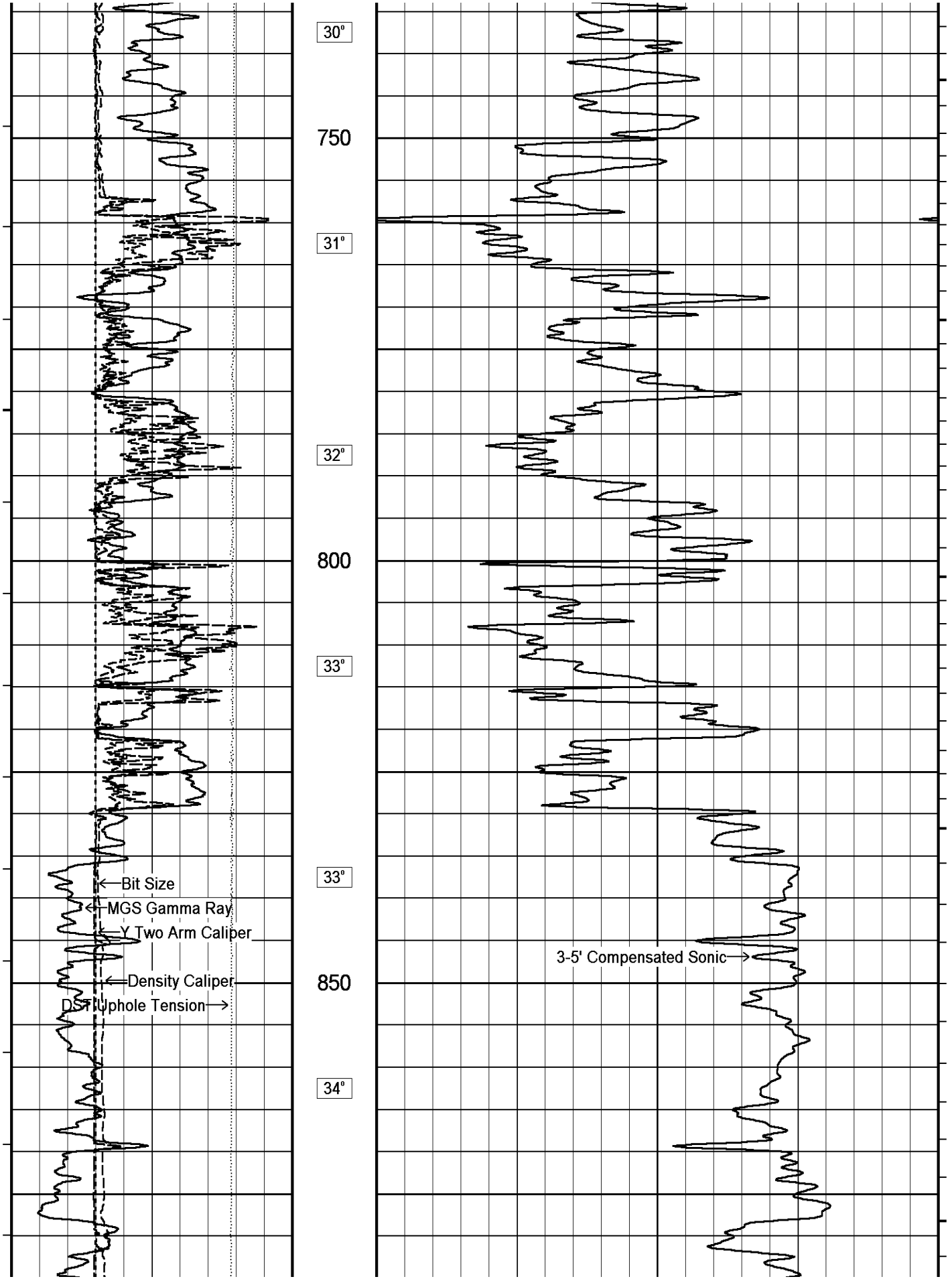
Depth Based Data - Maximum Sampling Increment 10.0cm
Filename: C:\Temp\Weatherford PreView\0\MAIN LOG.dta
System Versions: Processed with 8.00.0015 Plotted with 8.01.0091

Plotted on 12-NOV-2007 09:24
Recorded on 15-FEB-2007 08:46

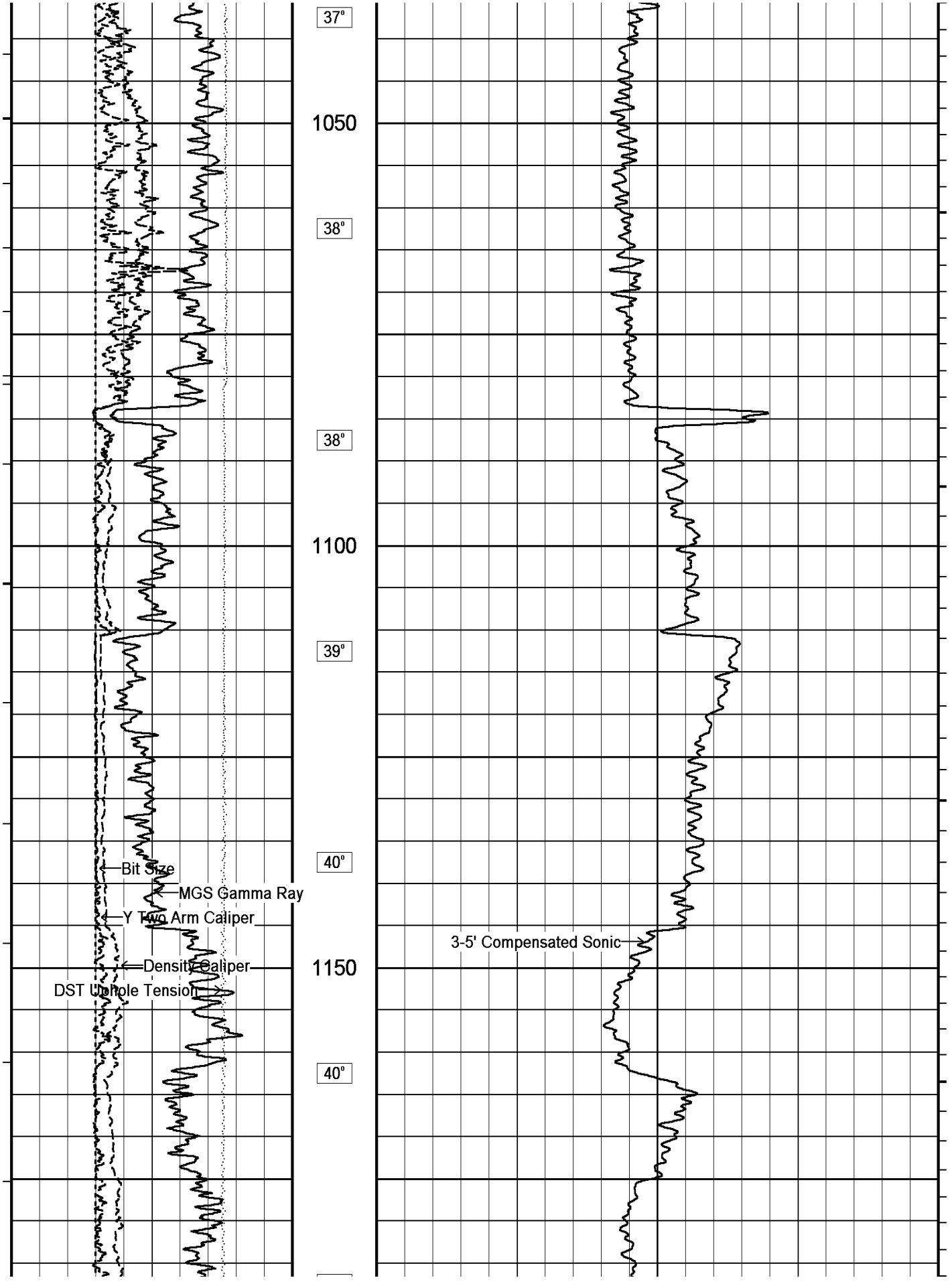


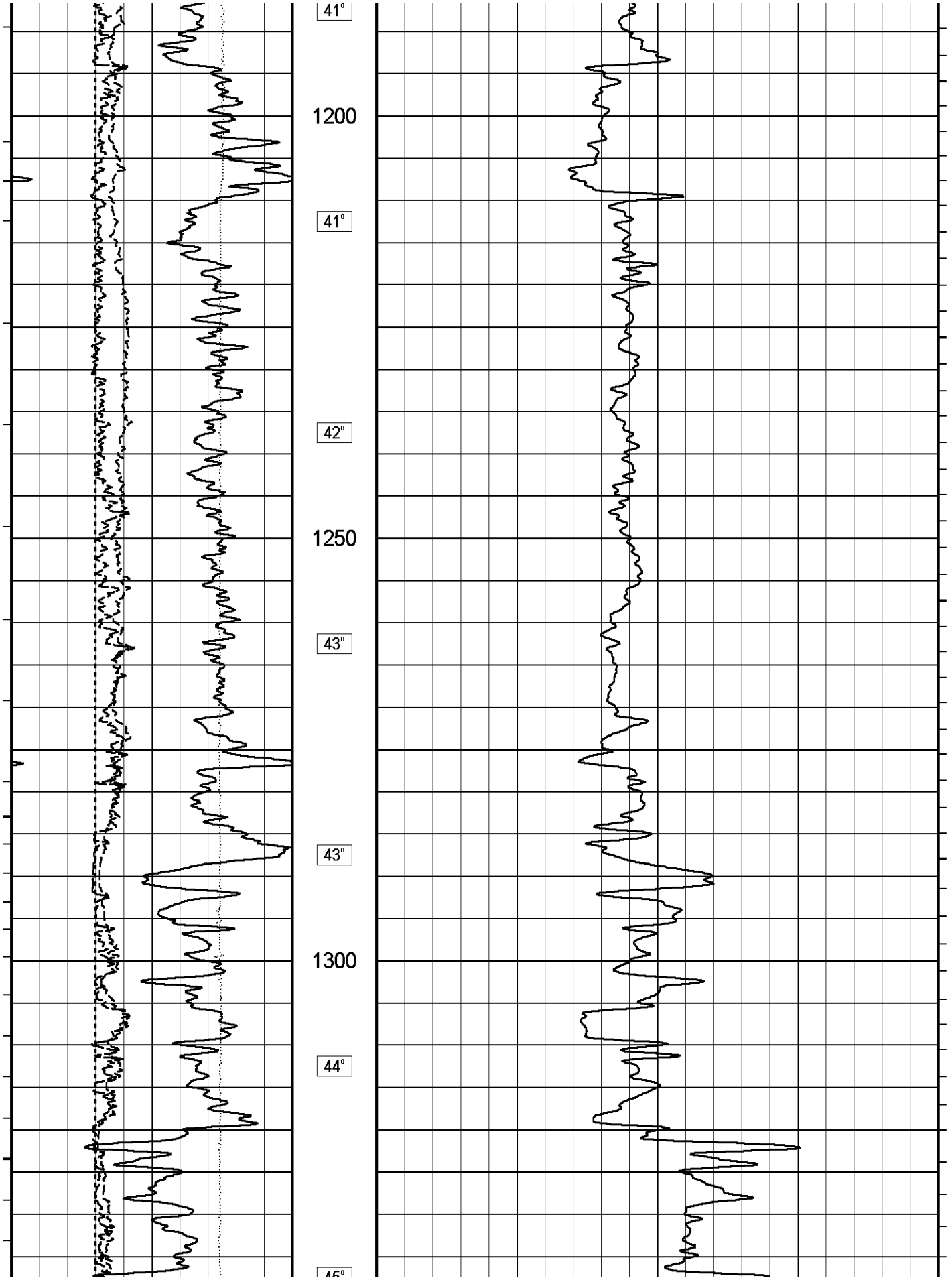

26°
450
26°
26°
500
26°
25°
Bit Size
MOS Gamma Ray
Y Two Arm Caliper
Density Caliper
DST Uphole Tension
550
25°
3-5' Compensated Sonic

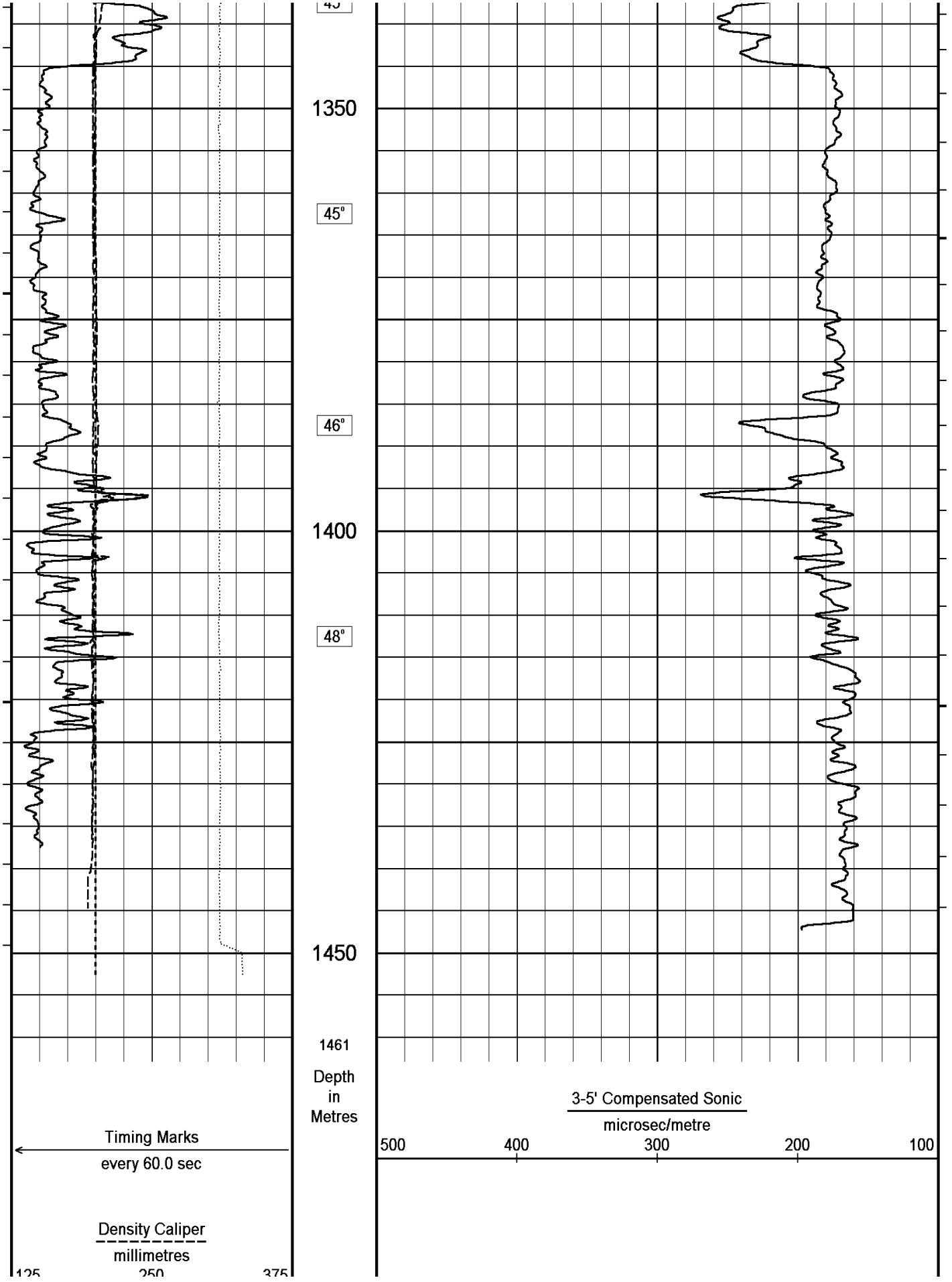

25°
600
27°
28°
650
29°
29°
700
30°

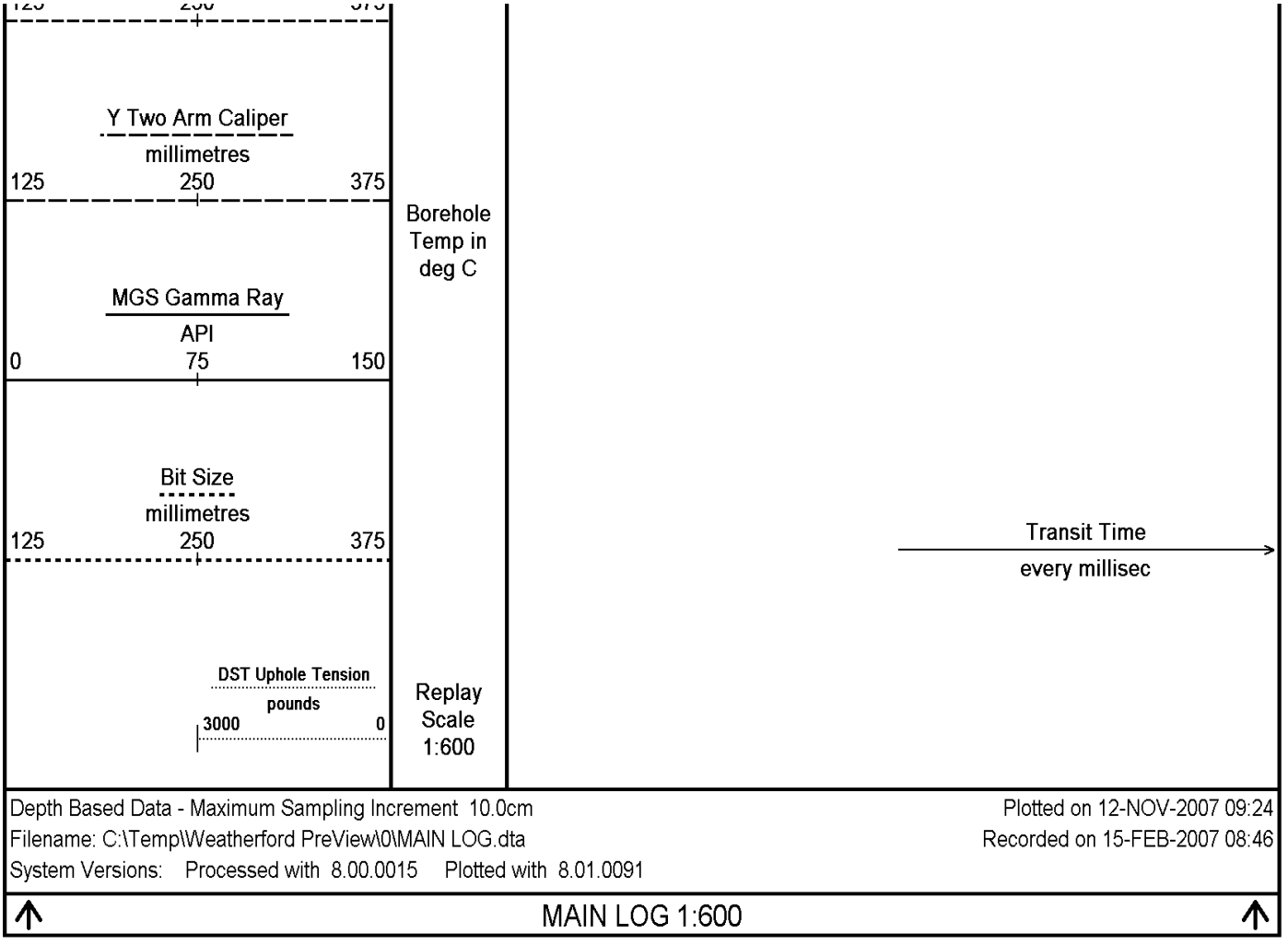

30°
750
31°
32°
800
33°
33°
850
34°
Bit Size
MGS Gamma Ray
Y Two Arm Caliper
Density Caliper
DST Uphole Tension
3-5' Compensated Sonic

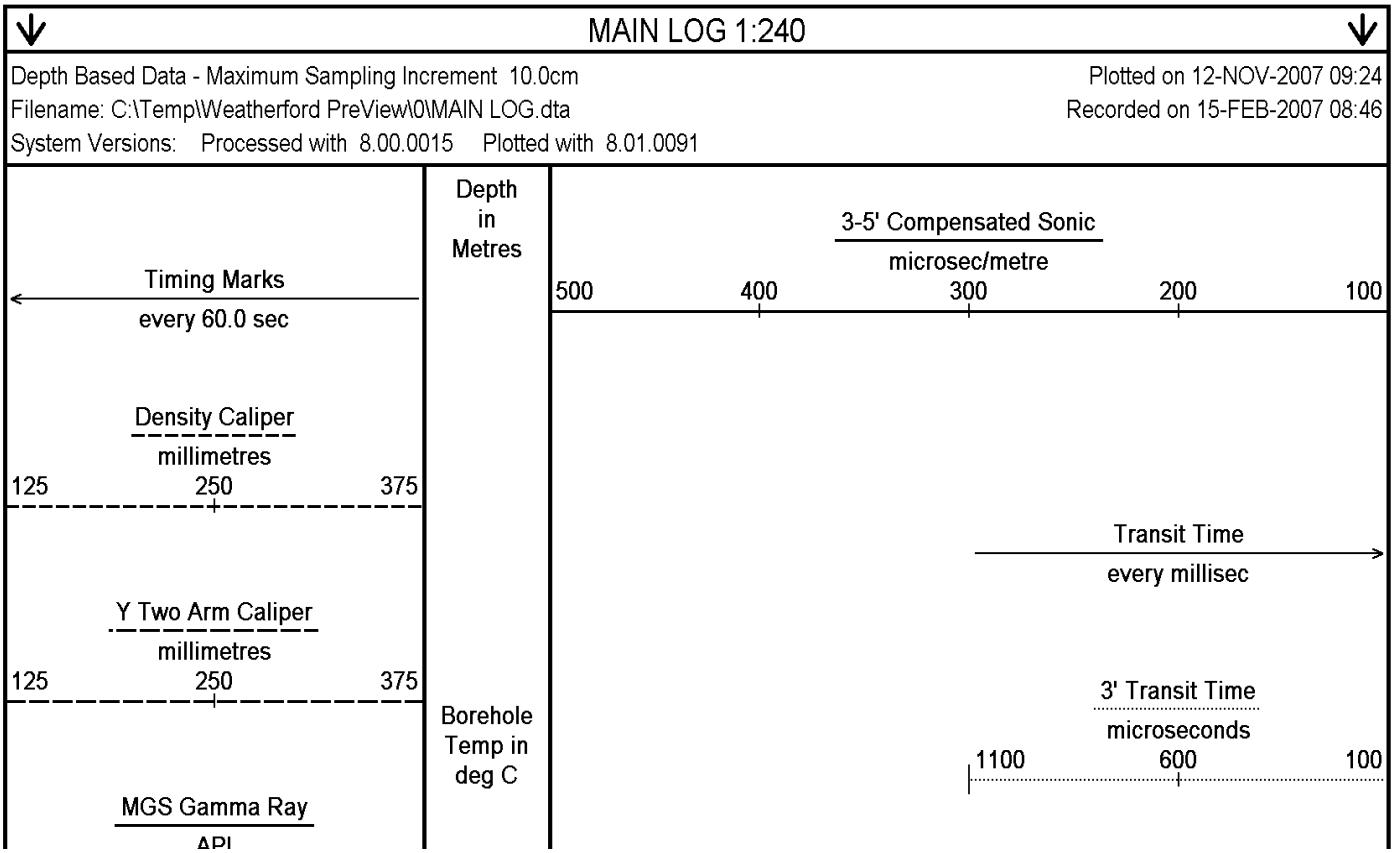
34°
900
35°
35°
950
36°
36°
1000
37°

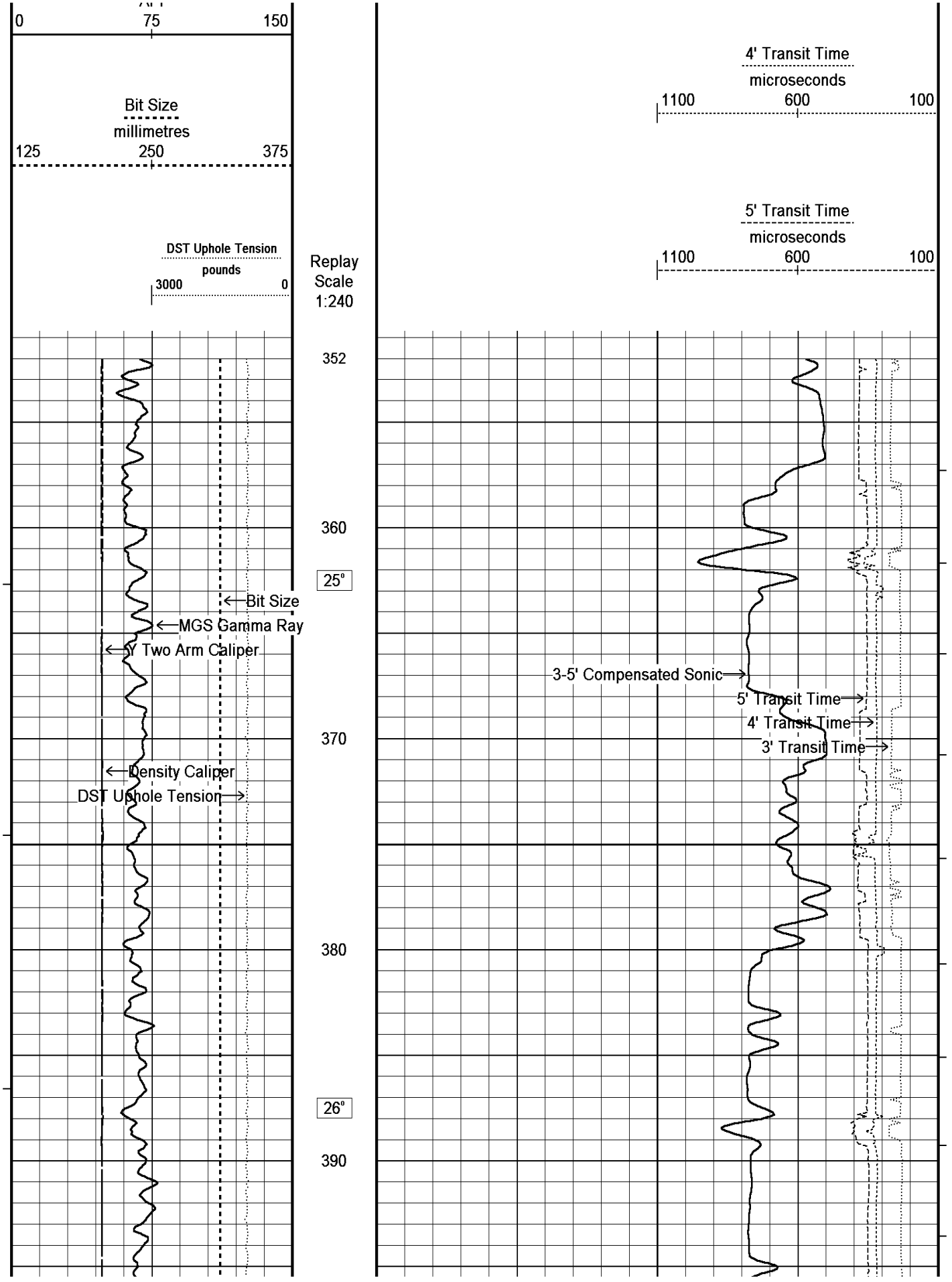

37°
1050
38°
38°
1100
39°
40°
Bit Size
MGS Gamma Ray
Y Two Arm Caliper
Density Caliper
DST Uphole Tension
1150
40°
3-5' Compensated Sonic

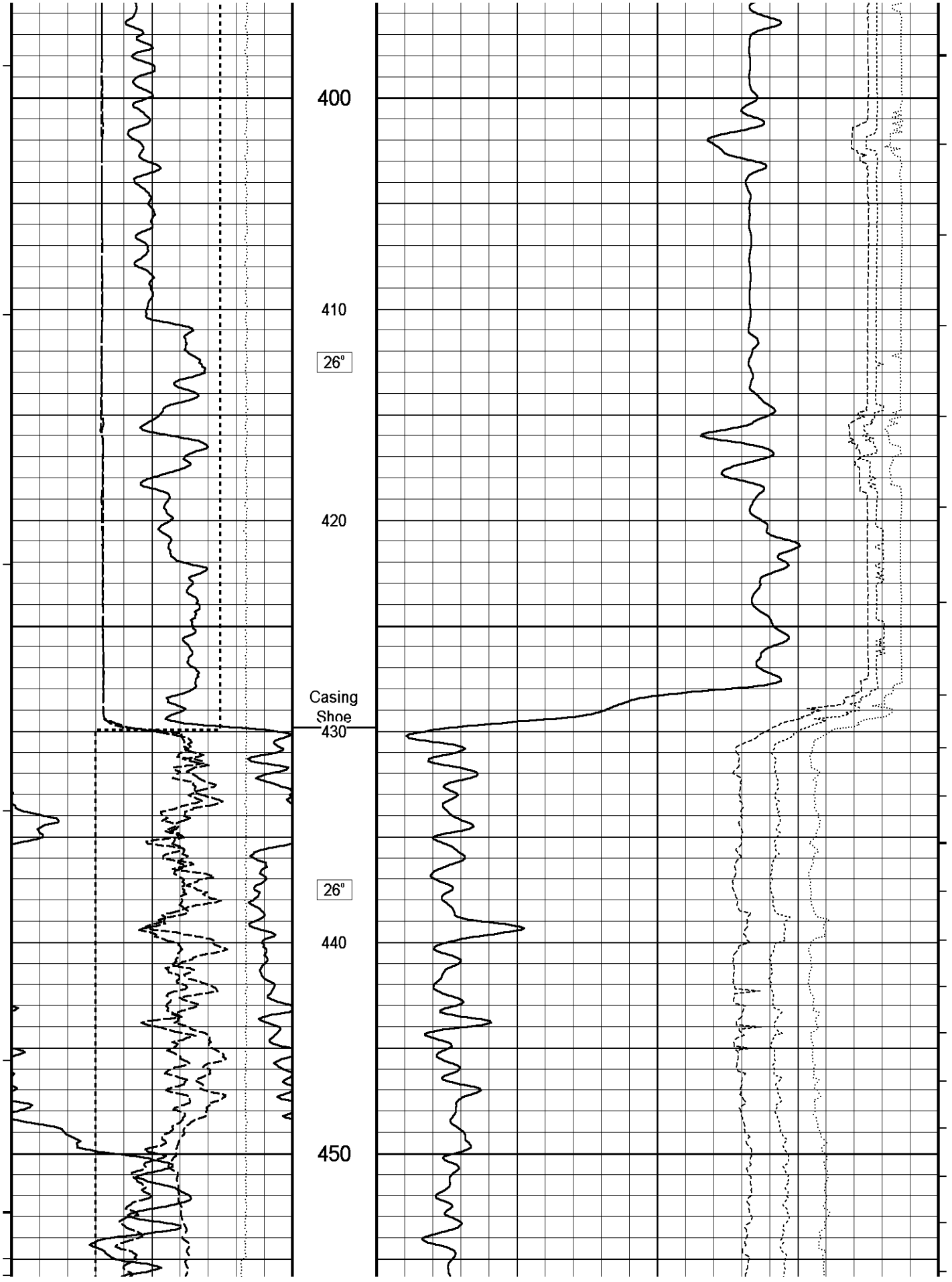

41°
1200
41°
42°
1250
43°
43°
1300
44°

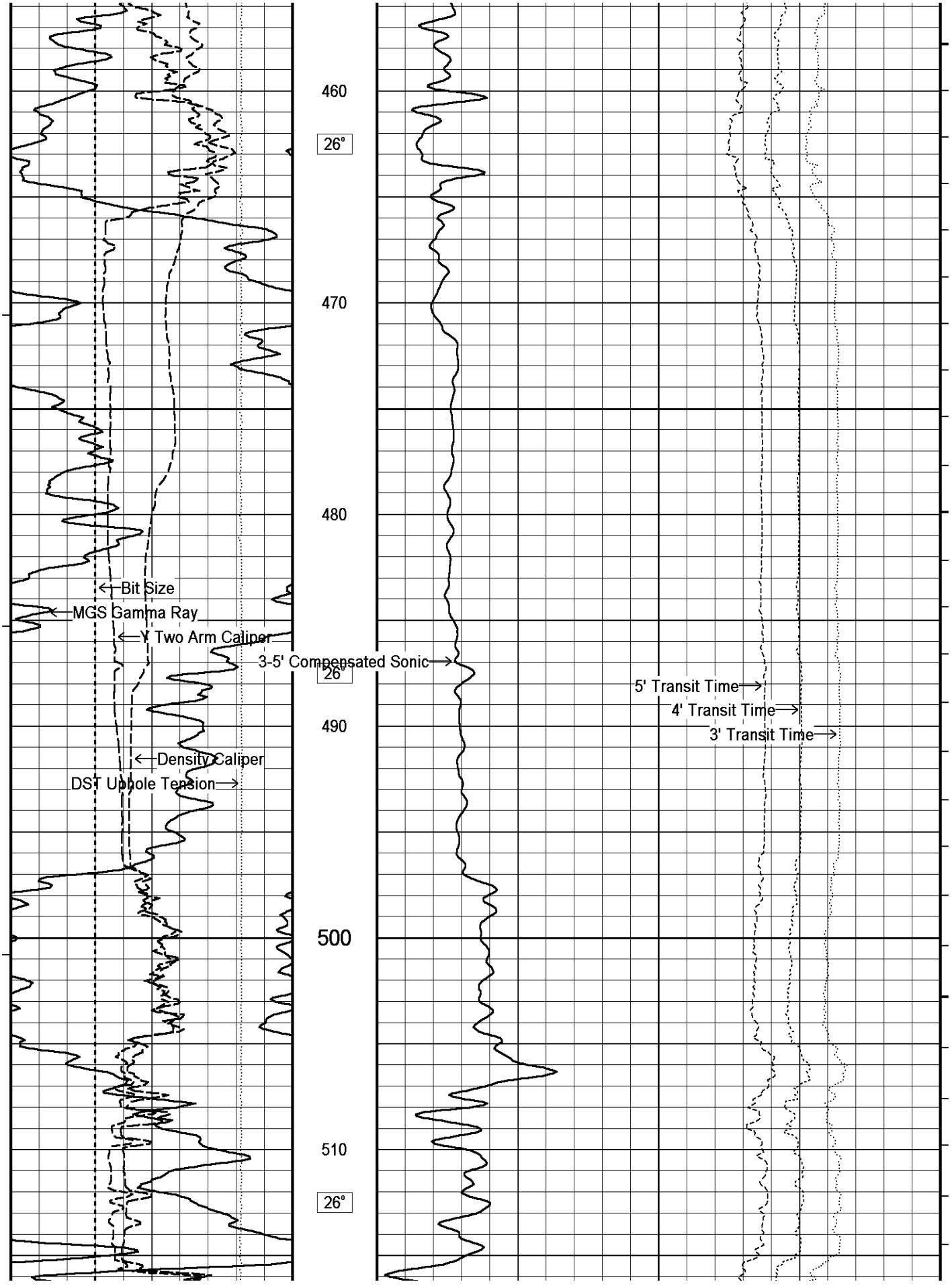

1350
45°
46°
1400
48°
1450
1461
Depth
in
Metres
Timing Marks
every 60.0 sec
Density Caliper
millimetres
125
250
375
3-5' Compensated Sonic
microsec/metre
500
400
300
200
100

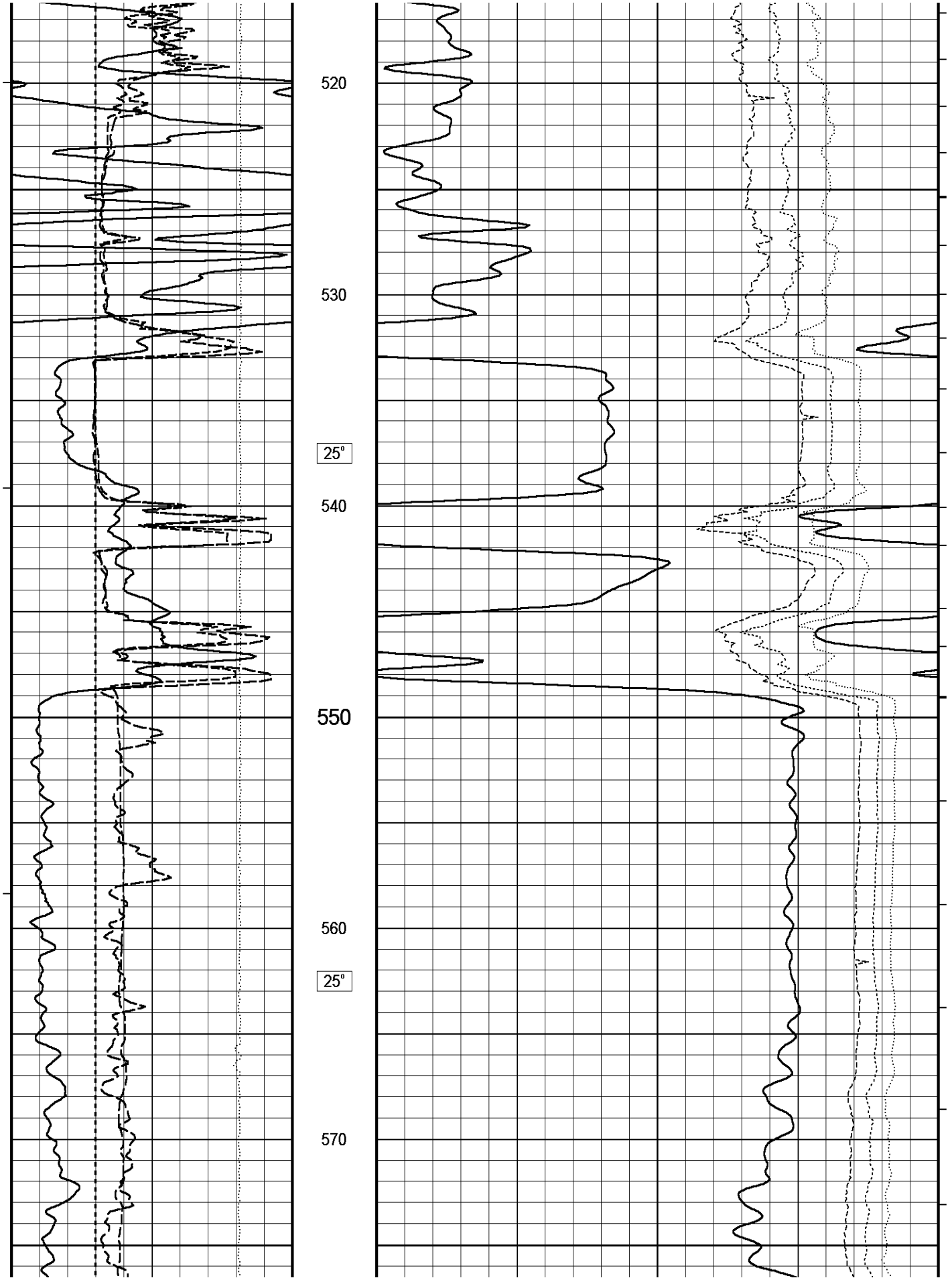

Y Two Arm Caliper
millimetres
125
250
375
Borehole Temp in deg C
MGS Gamma Ray
API
0
75
150
Bit Size
millimetres
125
250
375
Transit Time
every millisec
DST Uphole Tension
pounds
3000
0
Replay Scale 1:600
Depth Based Data - Maximum Sampling Increment 10.0cm
Plotted on 12-NOV-2007 09:24
Filename: C:\Temp\Weatherford PreView\0\MAIN LOG.dta
Recorded on 15-FEB-2007 08:46
System Versions: Processed with 8.00.0015 Plotted with 8.01.0091
MAIN LOG 1:600

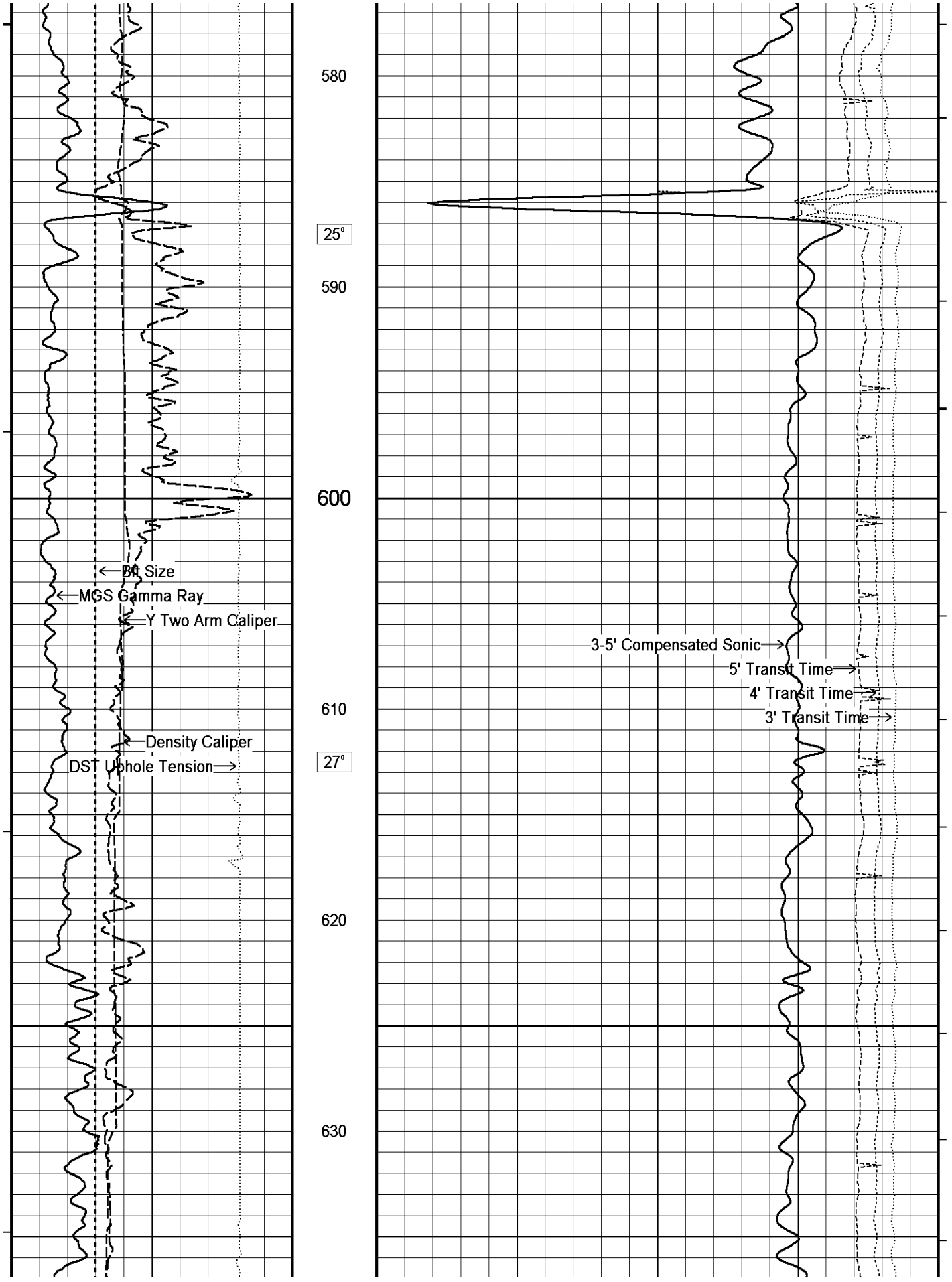

MAIN LOG 1:240
Depth Based Data - Maximum Sampling Increment 10.0cm
Plotted on 12-NOV-2007 09:24
Filename: C:\Temp\Weatherford PreView\0\MAIN LOG.dta
Recorded on 15-FEB-2007 08:46
System Versions: Processed with 8.00.0015 Plotted with 8.01.0091
Depth in Metres
Timing Marks
every 60.0 sec
3-5' Compensated Sonic
microsec/metre
500
400
300
200
100
Density Caliper
millimetres
125
250
375
Transit Time
every millisec
Y Two Arm Caliper
millimetres
125
250
375
3' Transit Time
microseconds
1100
600
100
Borehole Temp in deg C
MGS Gamma Ray
API

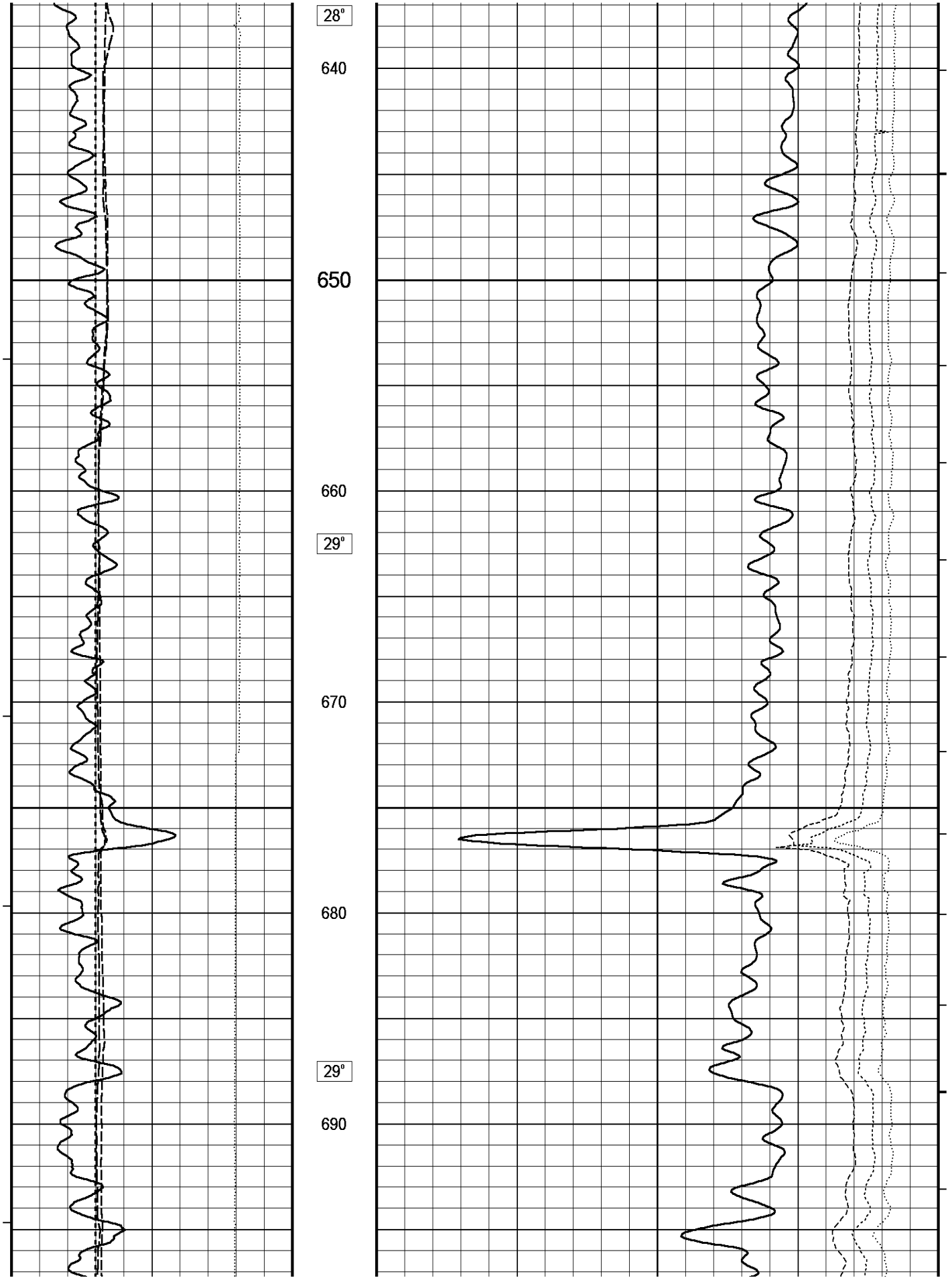

0
75
150
Bit Size
millimetres
125
250
375
DST Uphole Tension
pounds
3000
0
Replay
Scale
1:240
4' Transit Time
microseconds
1100
600
100
5' Transit Time
microseconds
1100
600
100
352
360
25°
370
380
26°
390
←Bit Size
←MGS Gamma Ray
←Y Two Arm Caliper
←Density Caliper
DST Uphole Tension→
3-5' Compensated Sonic→
5' Transit Time→
4' Transit Time→
3' Transit Time→

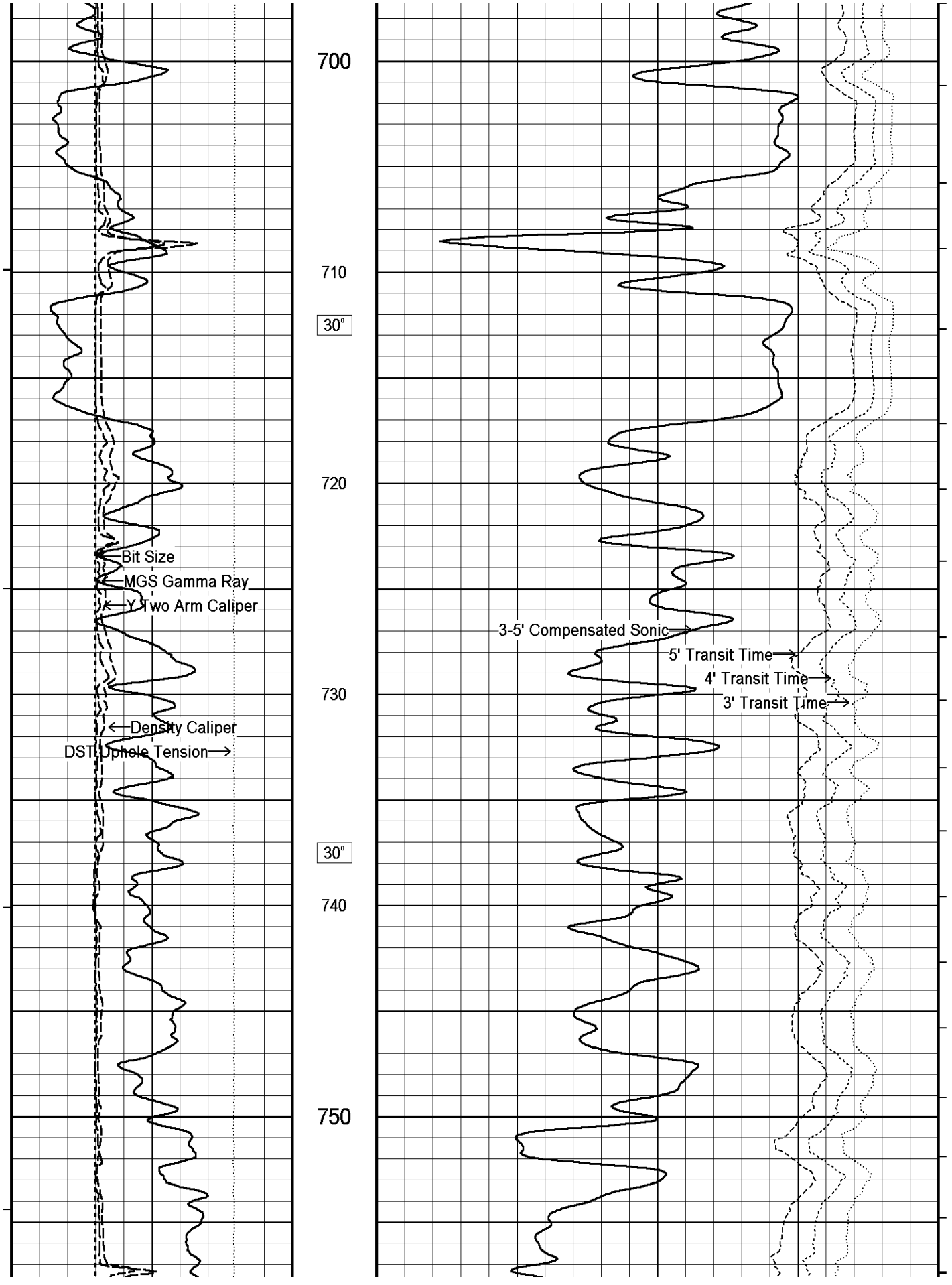

400
410
26°
420
Casing
Shoe
430
26°
440
450

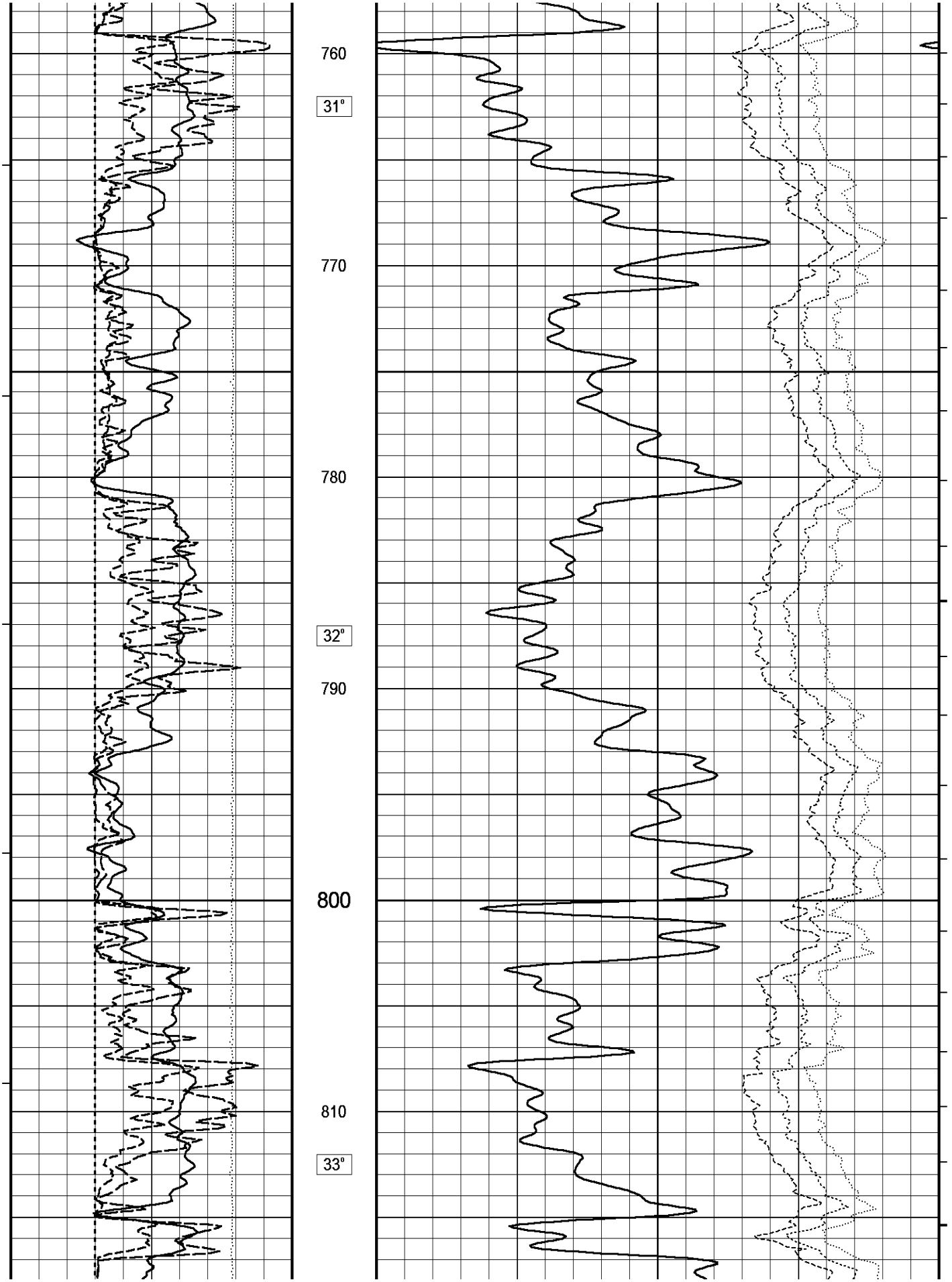

460
26"
470
480
Bit Size
MGS Gamma Ray
Y Two Arm Caliper
3-5' Compensated Sonic
26"
490
Density Caliper
DST Uphole Tension
5' Transit Time
4' Transit Time
3' Transit Time
500
510
26"

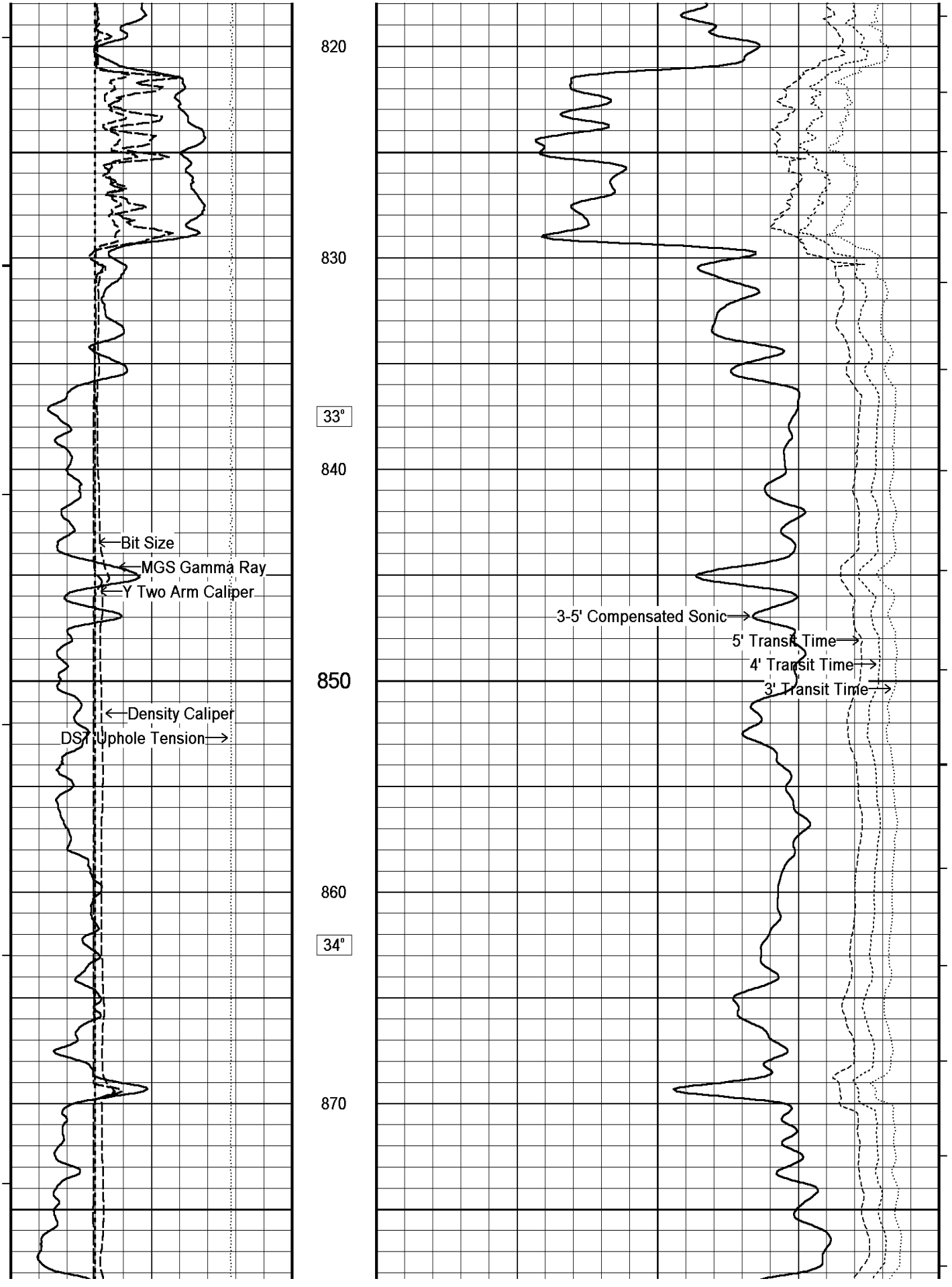

520
530
25°
540
550
560
25°
570

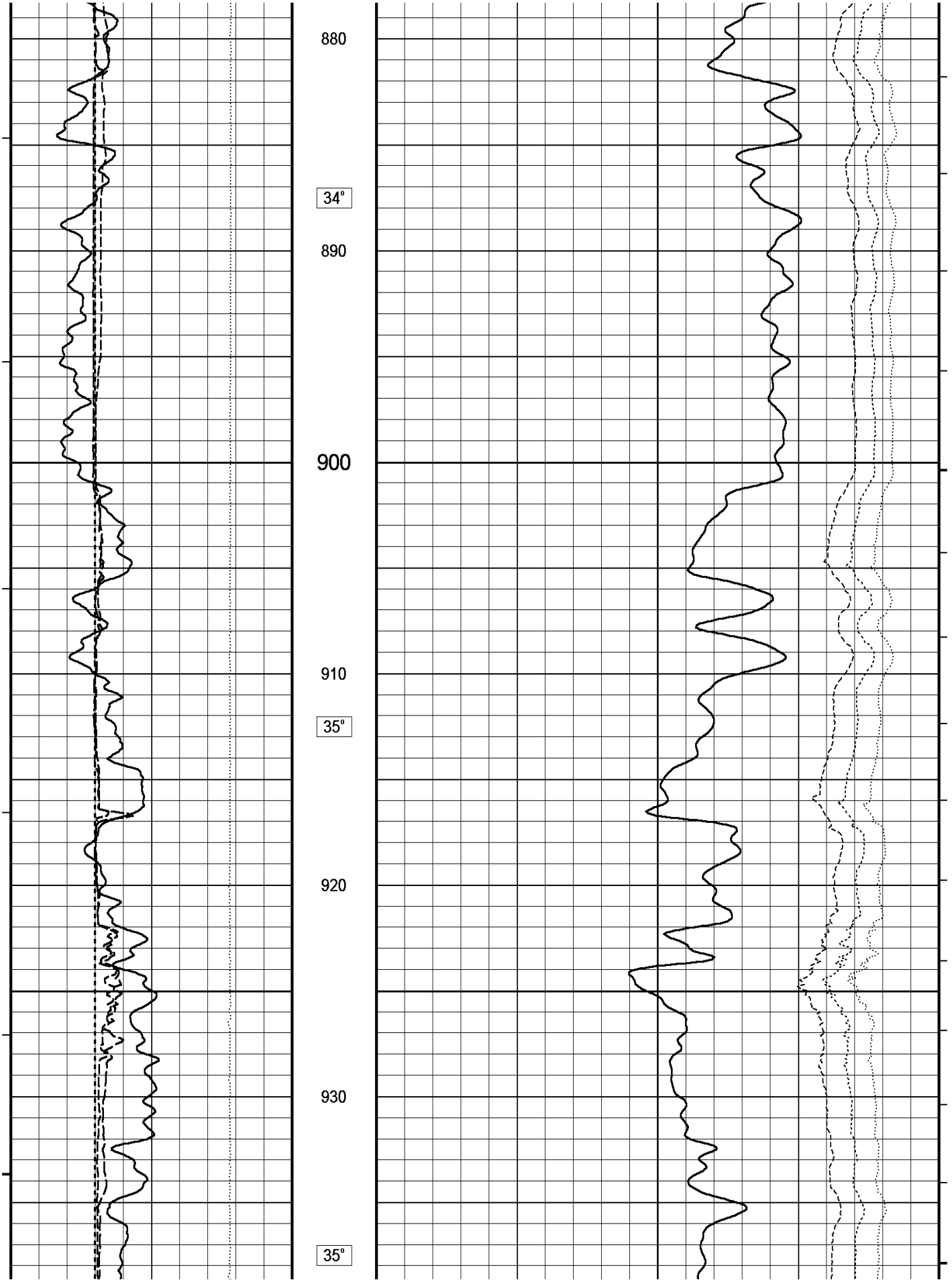

580
25°
590
600
610
27°
620
630
Bit Size
MCS Gamma Ray
Y Two Arm Caliper
Density Caliper
DST Uphole Tension
3-5' Compensated Sonic
5' Transit Time
4' Transit Time
3' Transit Time

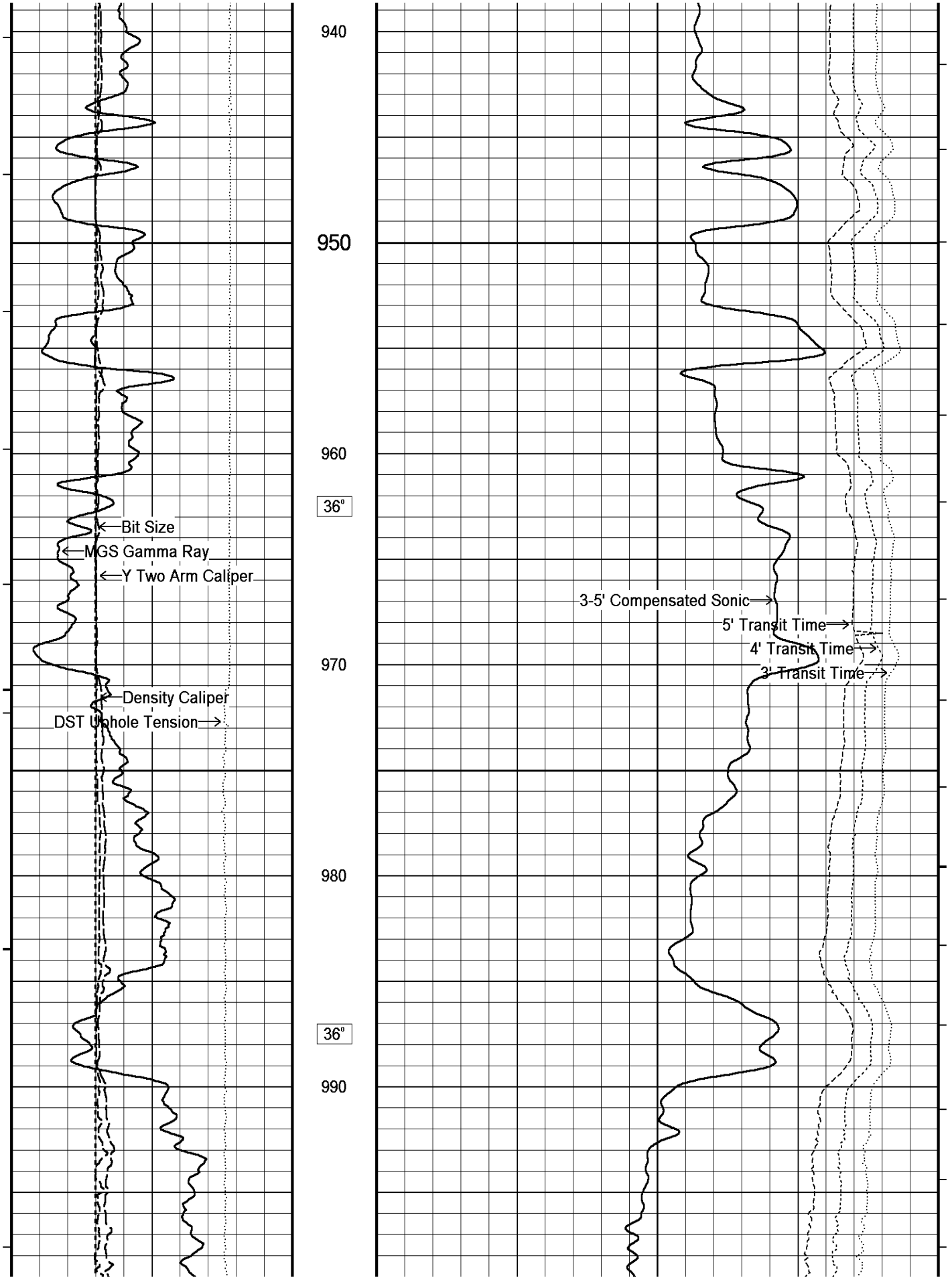

28°
640
650
660
29°
670
680
29°
690

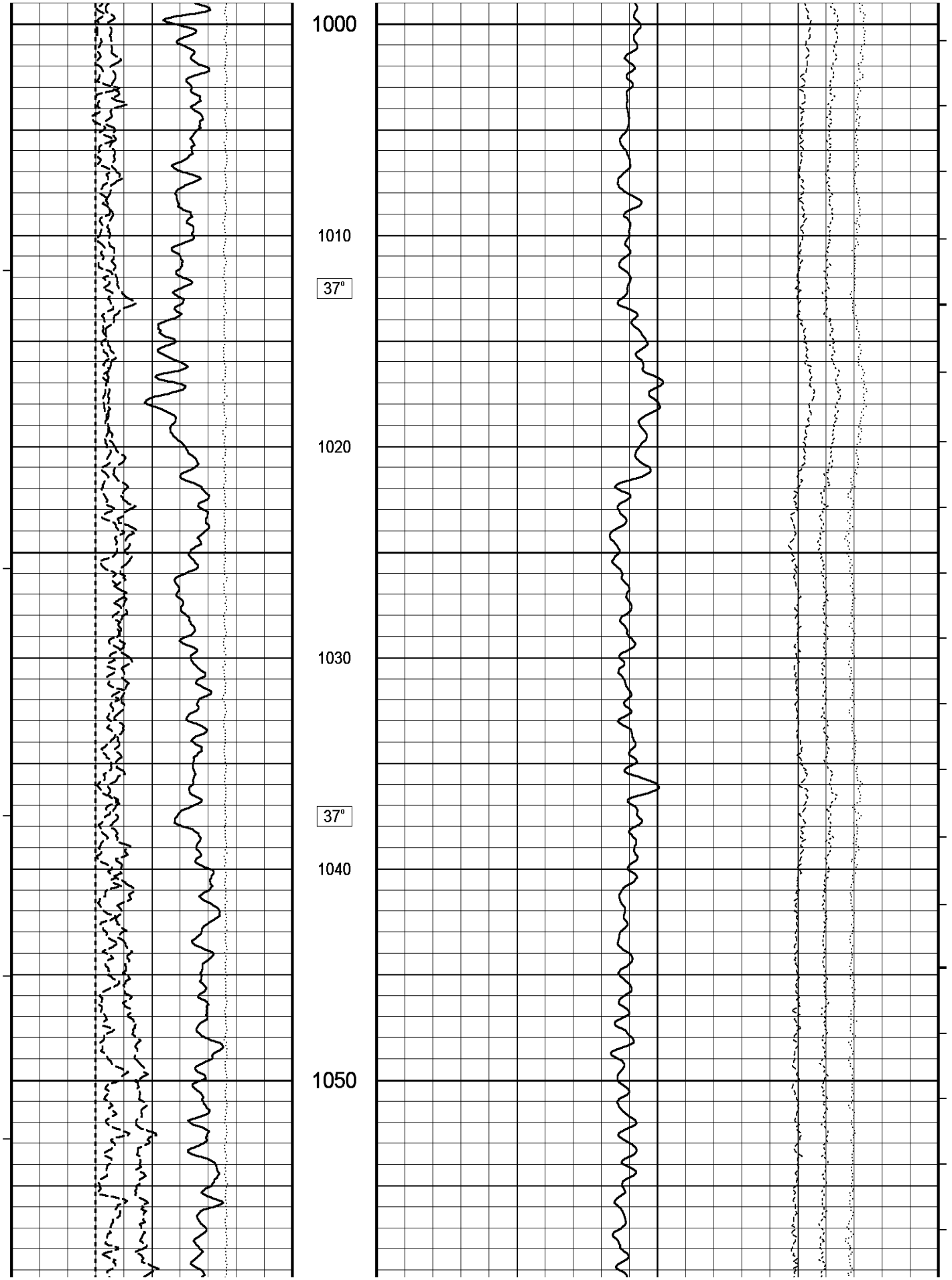

700
710
30°
720
730
30°
740
750
Bit Size
MGS Gamma Ray
Two Arm Caliper
Density Caliper
DST Uphole Tension
3-5' Compensated Sonic
5' Transit Time
4' Transit Time
3' Transit Time

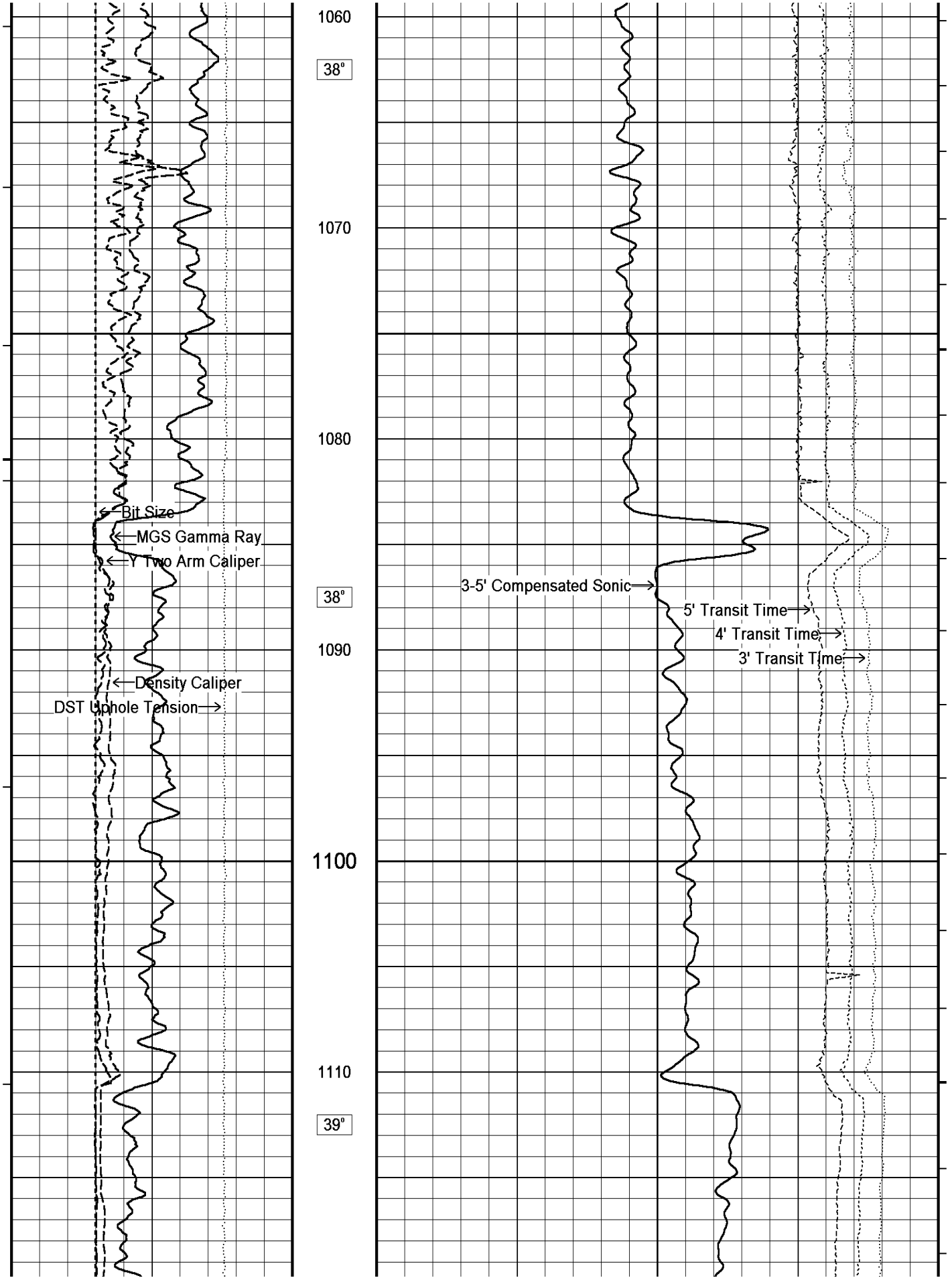

760
31°
770
780
32°
790
800
810
33°

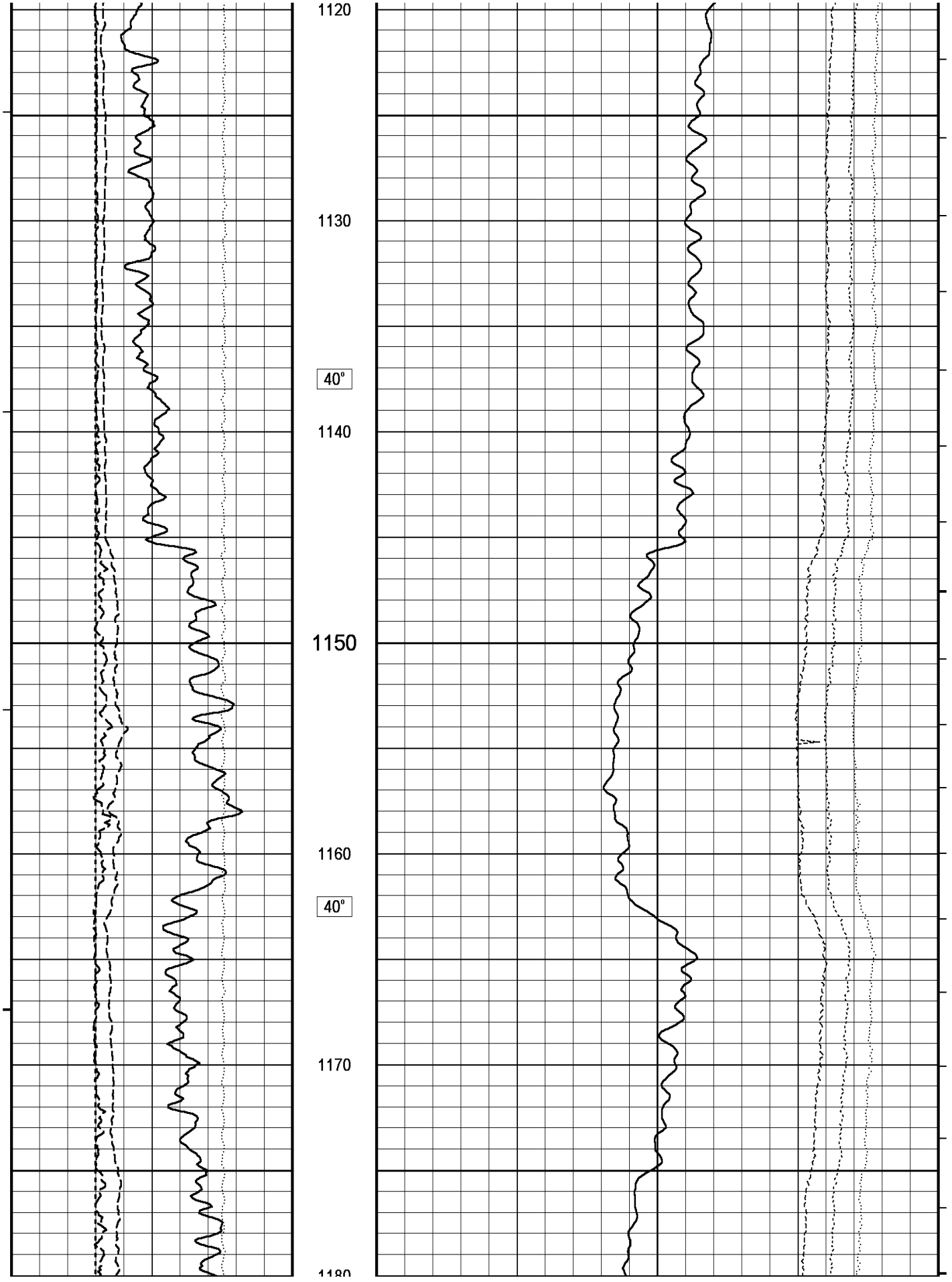

820
830
33°
840
850
860
34°
870
Bit Size
MGS Gamma Ray
Y Two Arm Caliper
Density Caliper
DSI Uphole Tension
3-5' Compensated Sonic
5' Transit Time
4' Transit Time
3' Transit Time

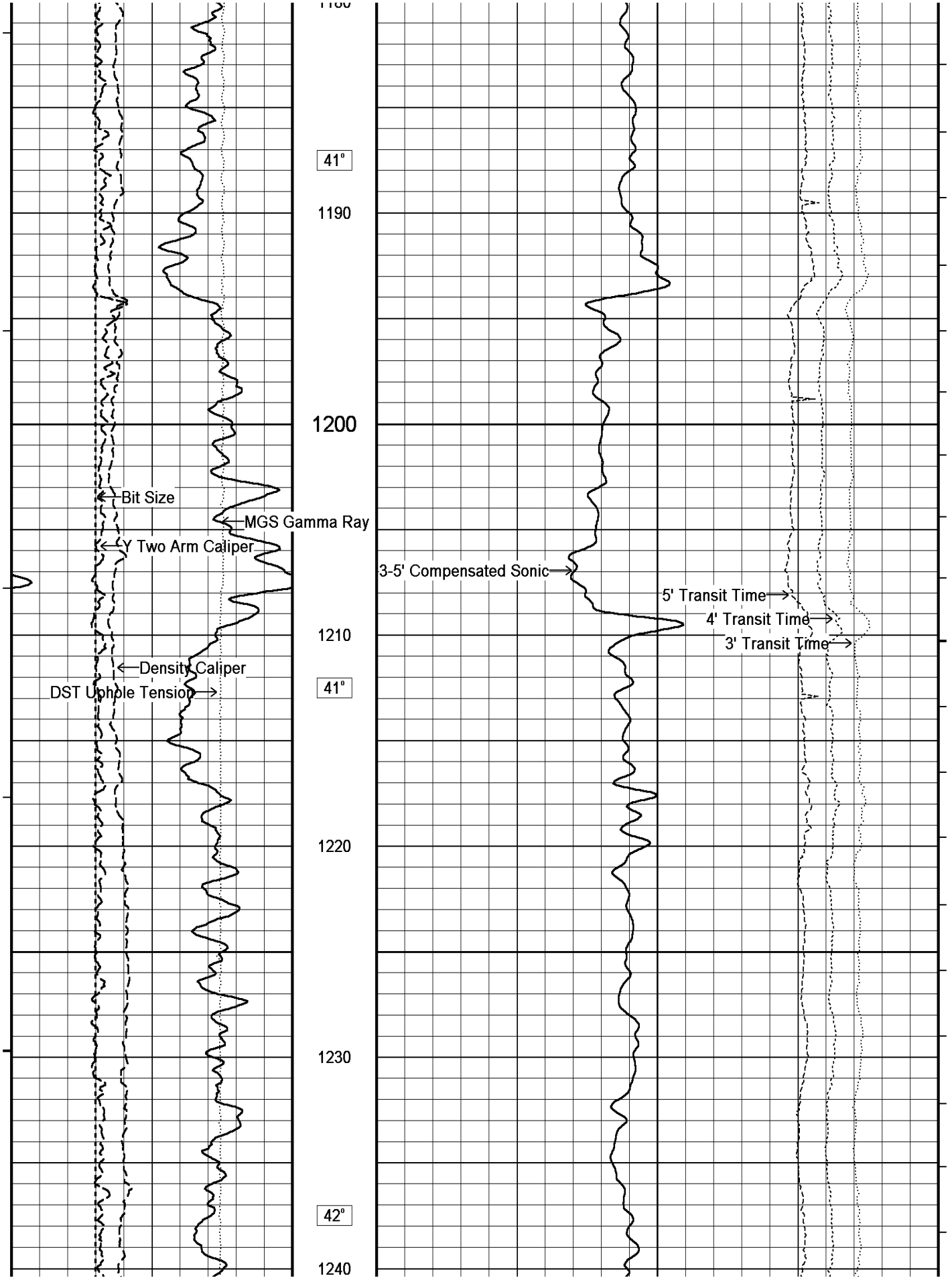

880
34°
890
900
910
35°
920
930
35°

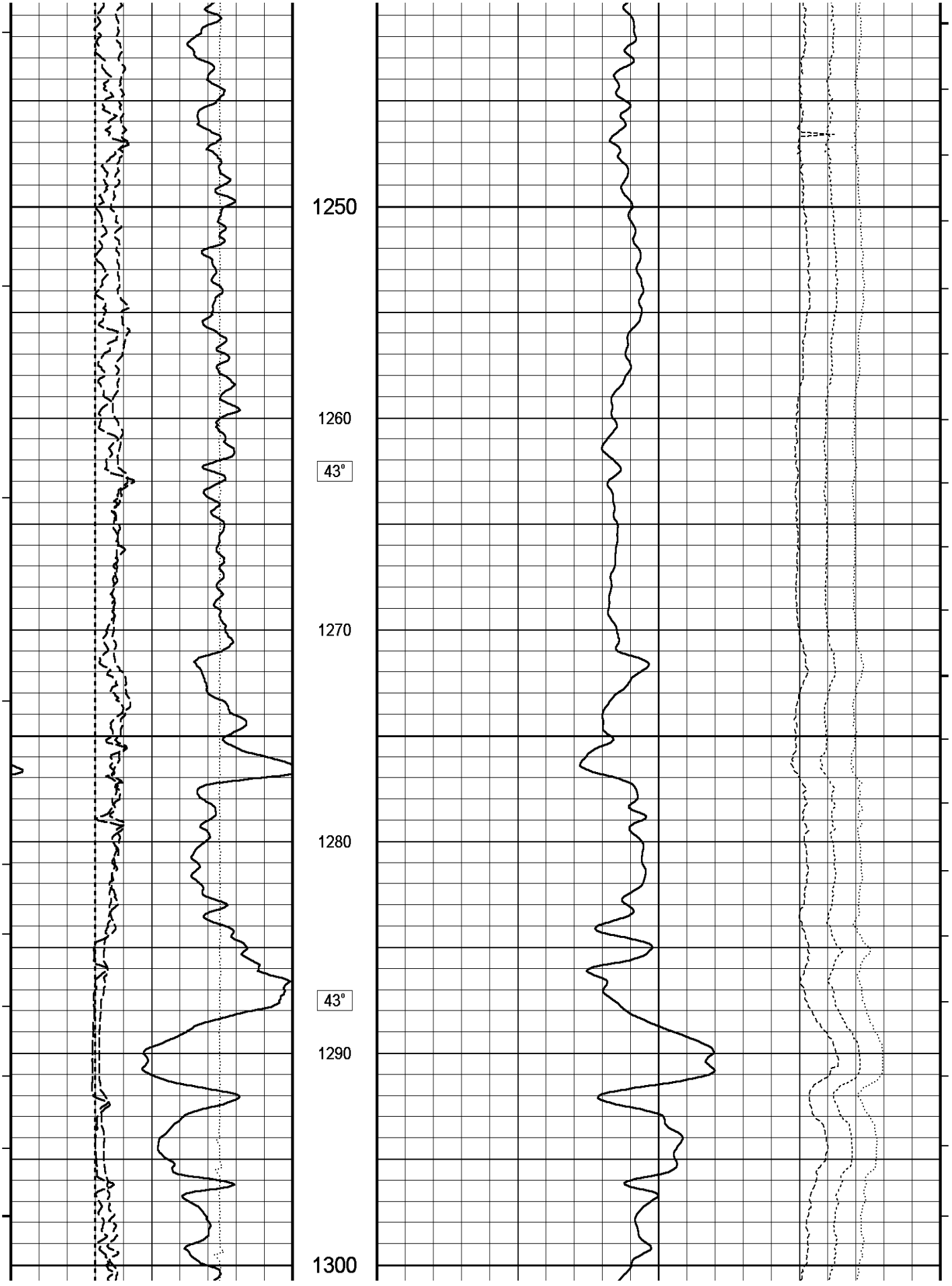

940
950
960
36°
970
980
36°
990
←Bit Size
←MGS Gamma Ray
←Y Two Arm Caliper
←Density Caliper
DST Uphole Tension→
3-5' Compensated Sonic→
5' Transit Time→
4' Transit Time→
3' Transit Time→

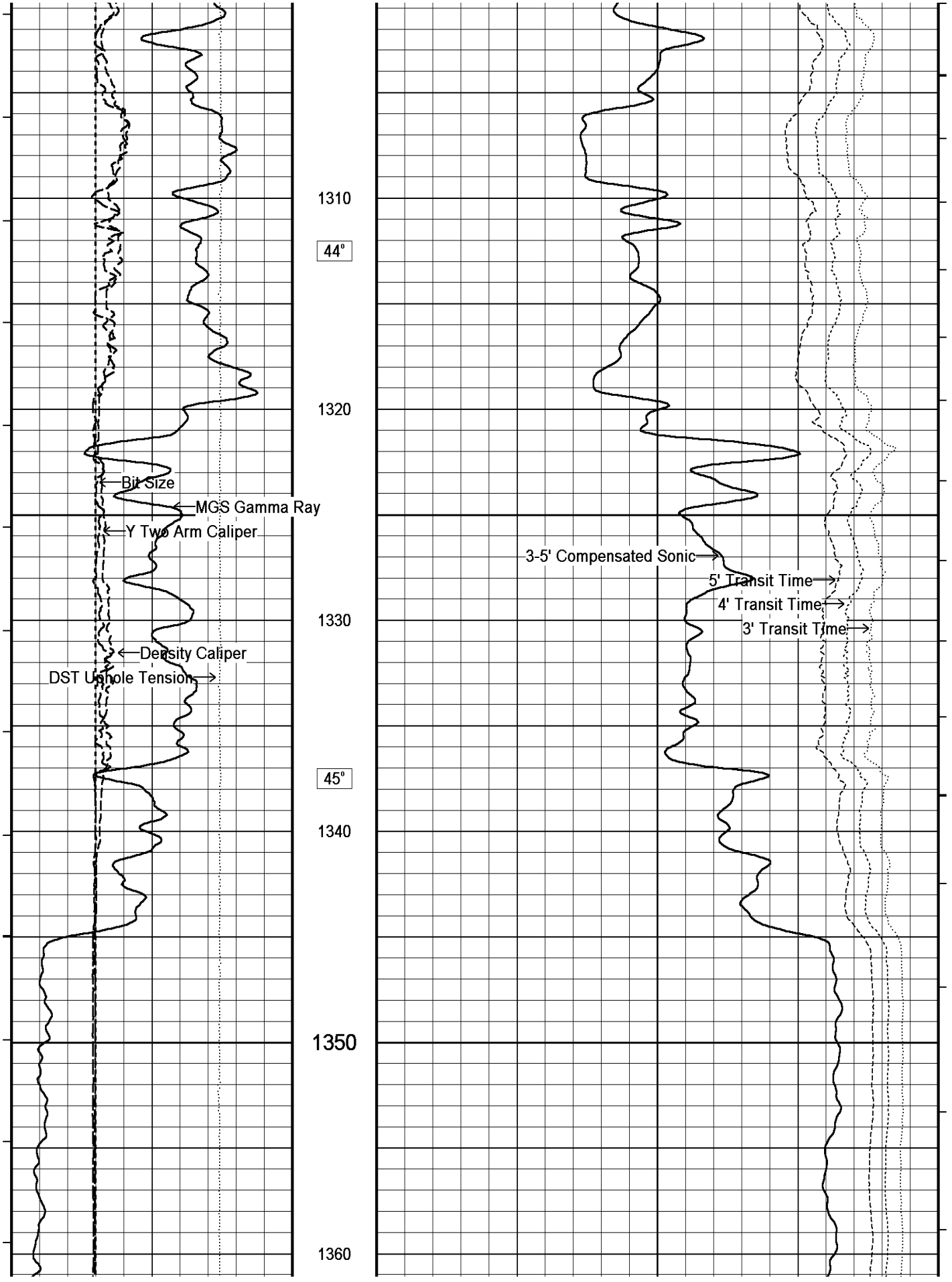

1000
1010
37°
1020
1030
37°
1040
1050

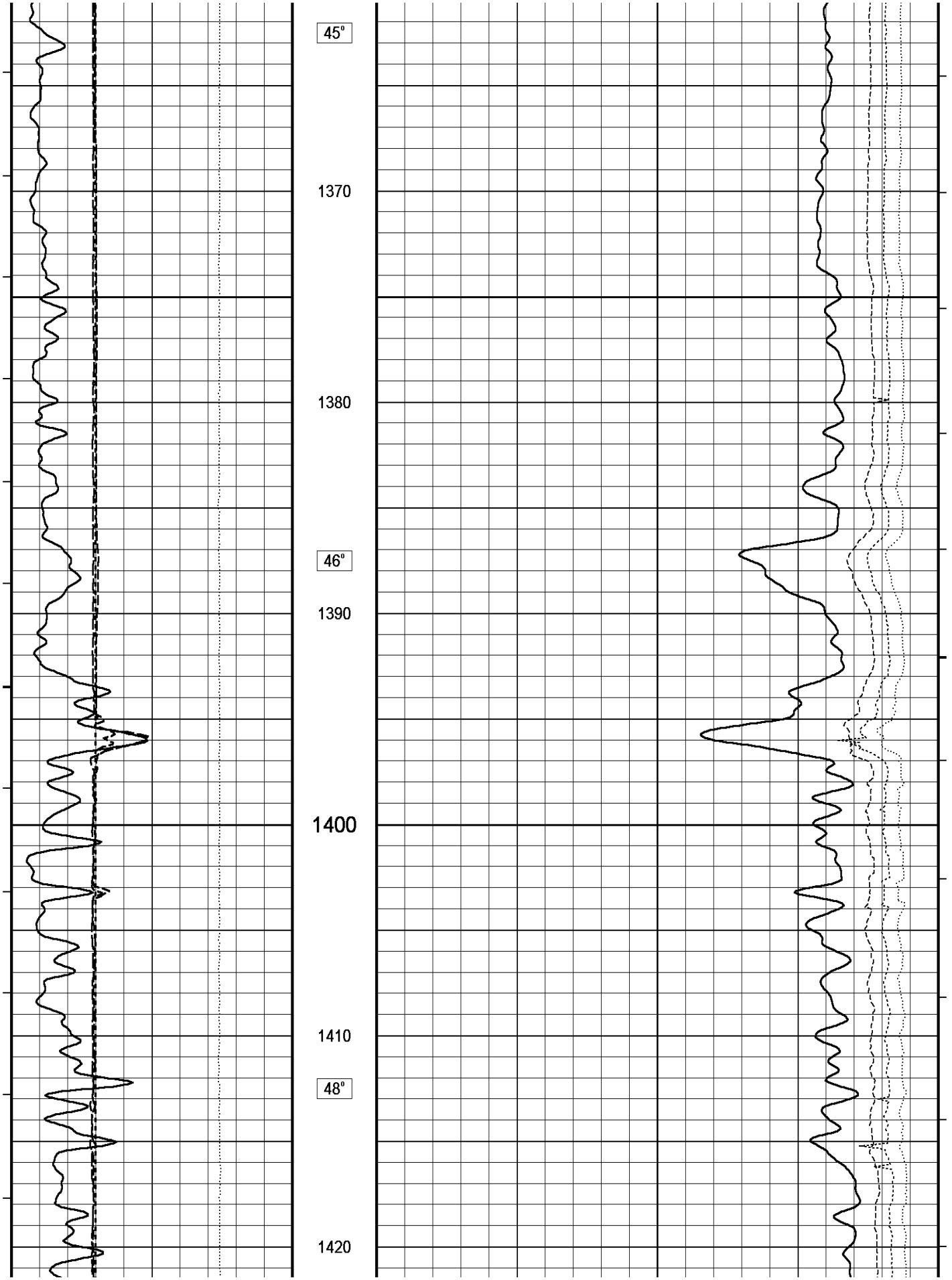

1060
38°
1070
1080
Bit Size
MGS Gamma Ray
Y Two Arm Caliper
38°
1090
Density Caliper
DST Uphole Tension
1100
1110
39°
3-5' Compensated Sonic
5' Transit Time
4' Transit Time
3' Transit Time

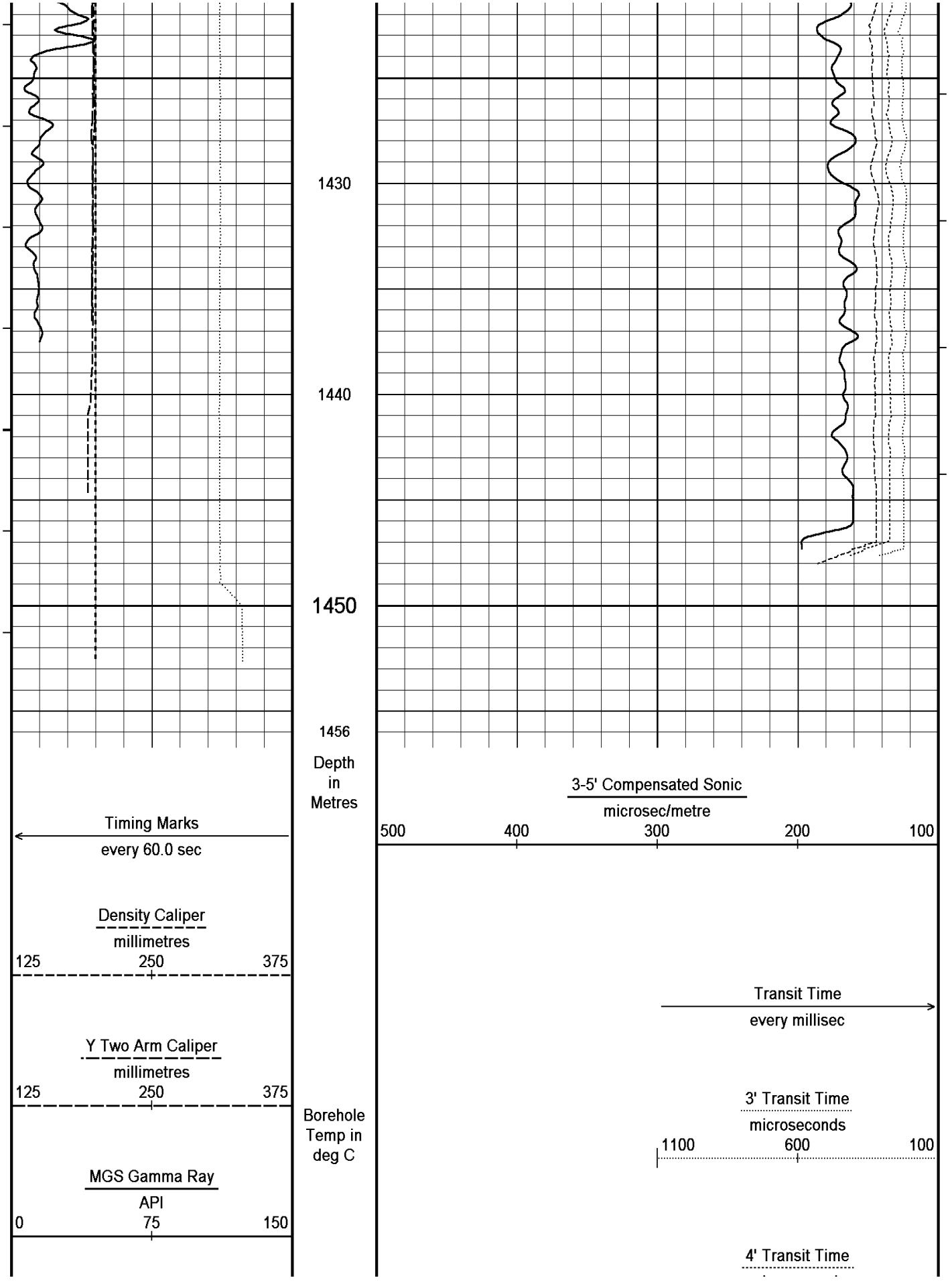

1120
1130
40°
1140
1150
1160
40°
1170
1180

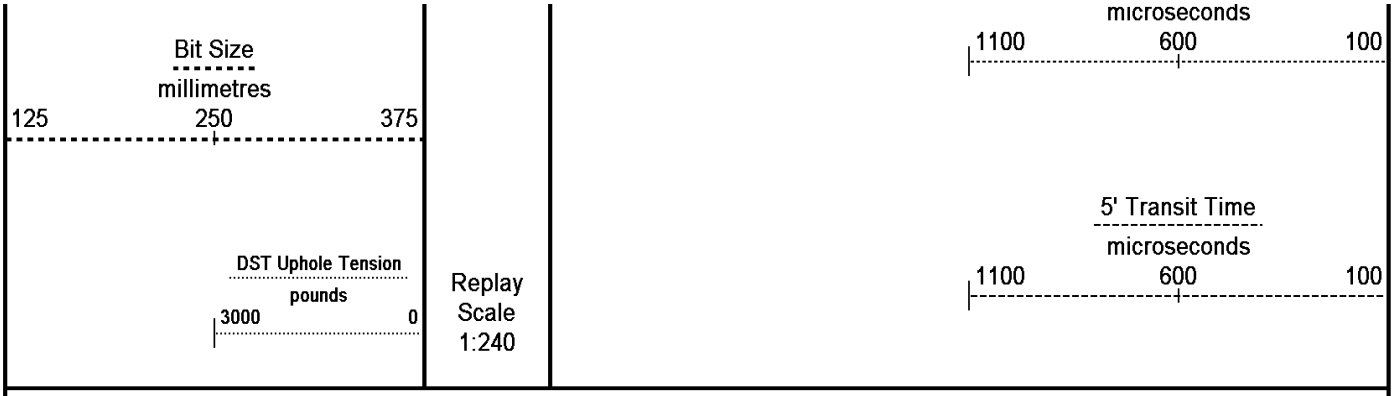

41°
1190
1200
Bit Size
MGS Gamma Ray
Y Two Arm Caliper
3-5' Compensated Sonic
5' Transit Time
4' Transit Time
3' Transit Time
1210
Density Caliper
DST Uphole Tension
41°
1220
1230
42°
1240


1250
1260
43°
1270
1280
43°
1290
1300


1310
44°
1320
Bit Size
MGS Gamma Ray
Y Two Arm Caliper
3-5' Compensated Sonic
5' Transit Time
4' Transit Time
3' Transit Time
1330
Density Caliper
DST Uphole Tension
45°
1340
1350
1360


45°
1370
1380
46°
1390
1400
1410
48°
1420


1430
1440
1450
1456
Depth in Metres
Timing Marks
every 60.0 sec
Density Caliper
millimetres
125
250
375
Y Two Arm Caliper
millimetres
125
250
375
Borehole Temp in deg C
MGS Gamma Ray
API
0
75
150
3-5' Compensated Sonic
microsec/metre
500
400
300
200
100
Transit Time
every millisec
3' Transit Time
microseconds
1100
600
100
4' Transit Time

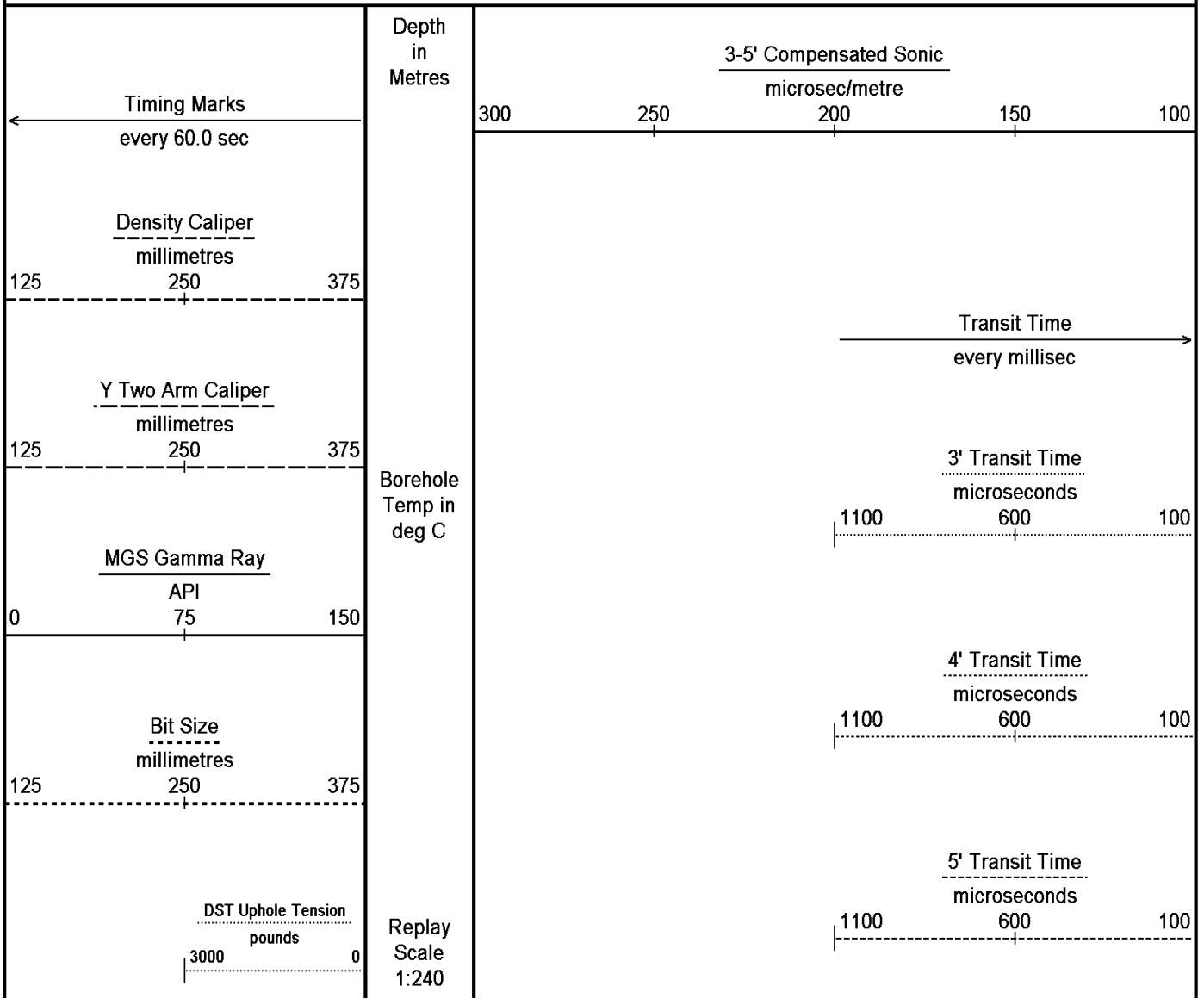


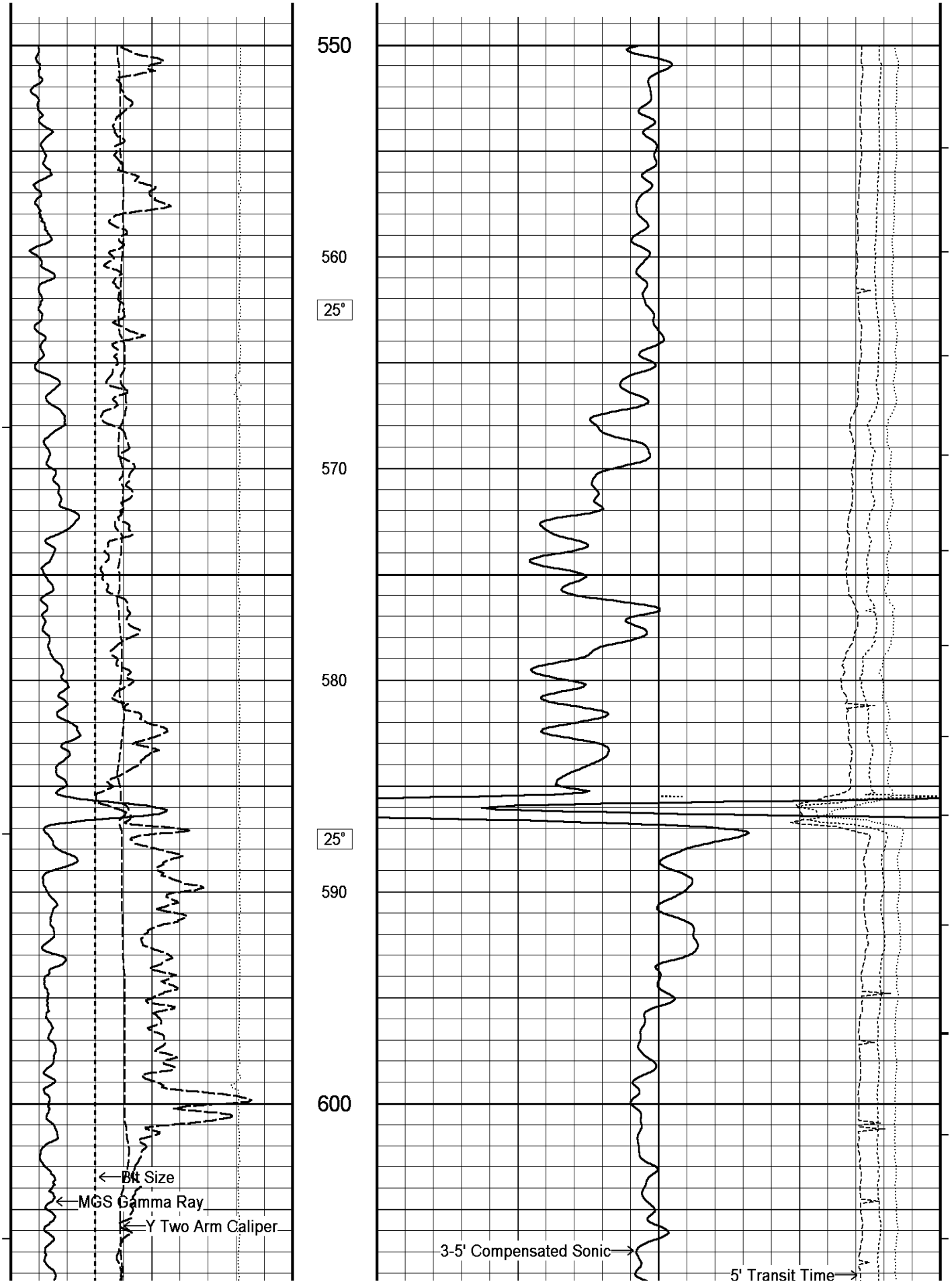
Depth Based Data - Maximum Sampling Increment 10.0cm — Plotted on 12-NOV-2007 09:24
Filename: C:\Temp\Weatherford PreView\0\MAIN LOG.dta — Recorded on 15-FEB-2007 08:46
System Versions: Processed with 8.00.0015 Plotted with 8.01.0091

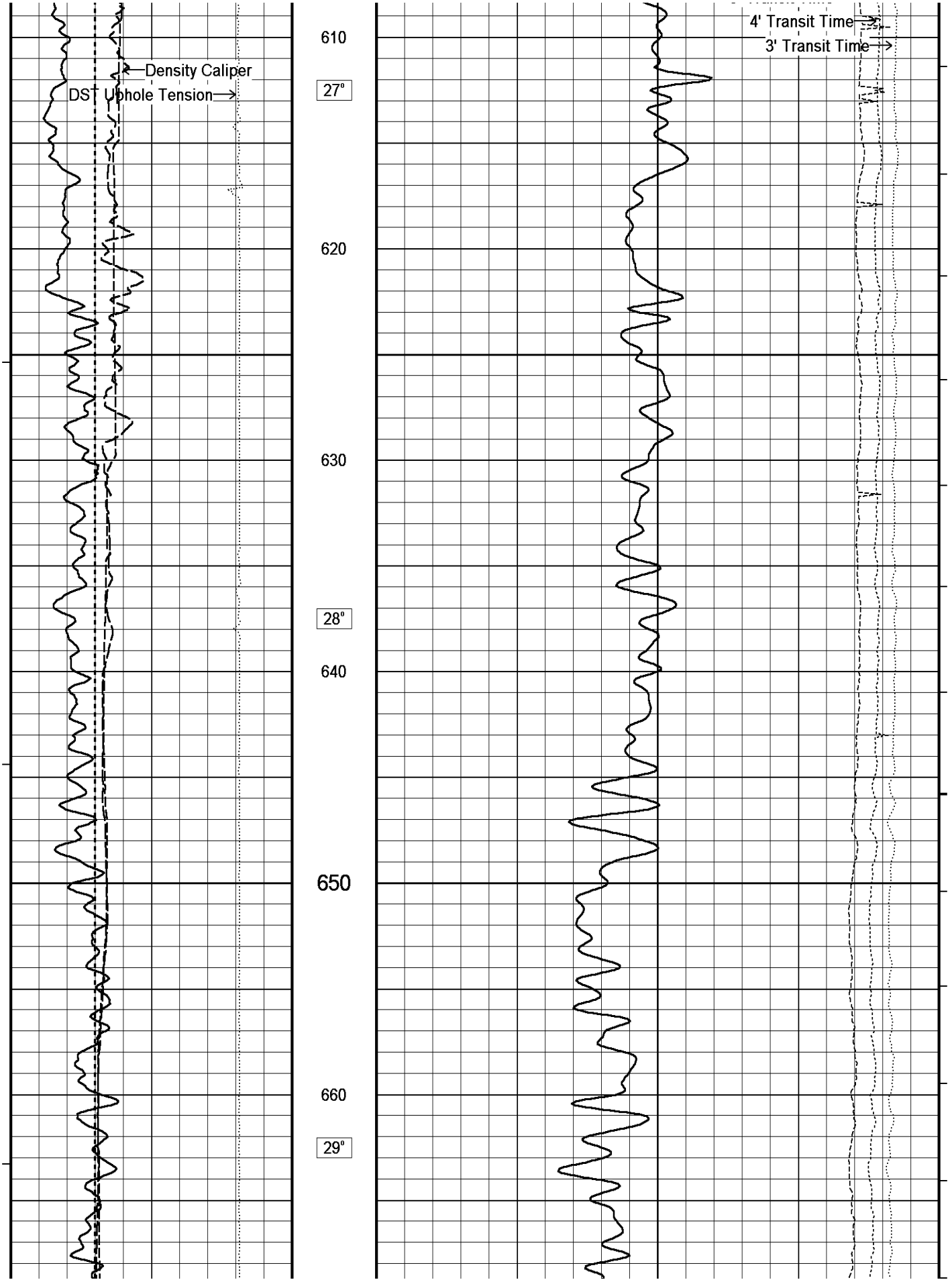
MAIN LOG 1:240

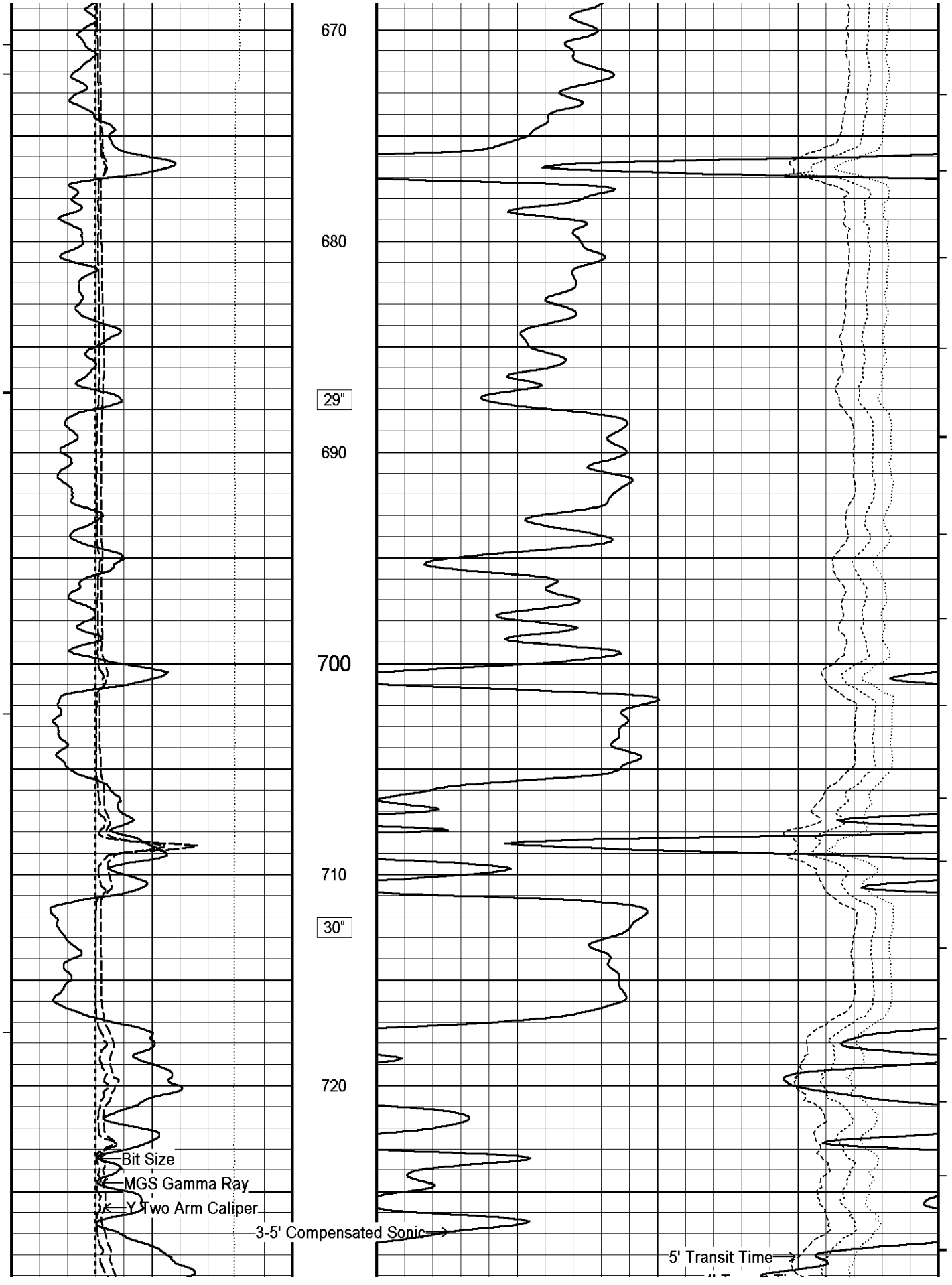
MAIN LOG 1:240

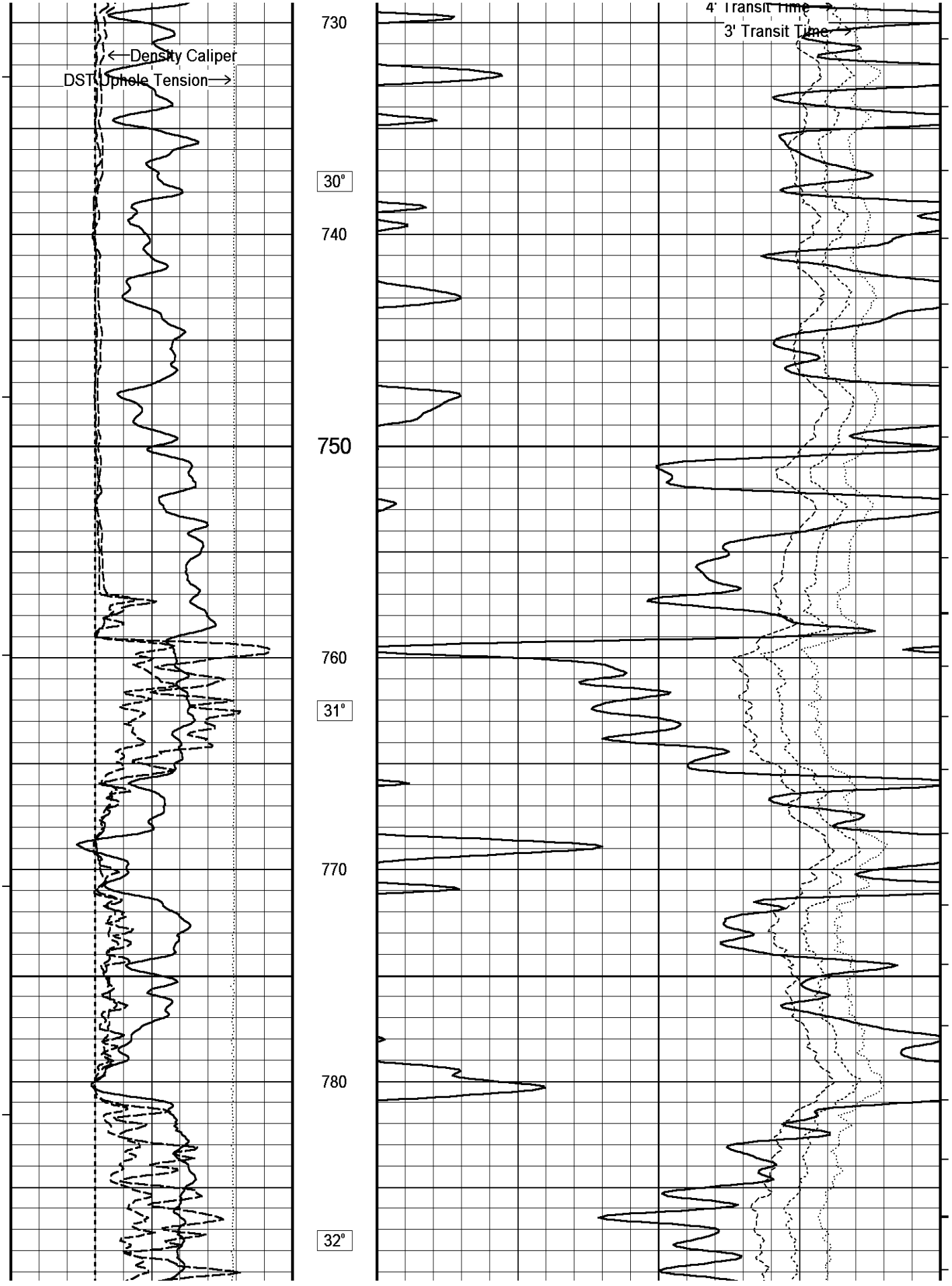
Depth Based Data - Maximum Sampling Increment 10.0cm — Plotted on 12-NOV-2007 09:24
Filename: C:\Temp\Weatherford PreView\0\MAIN LOG.dta — Recorded on 15-FEB-2007 08:46
System Versions: Processed with 8.00.0015 Plotted with 8.01.0091

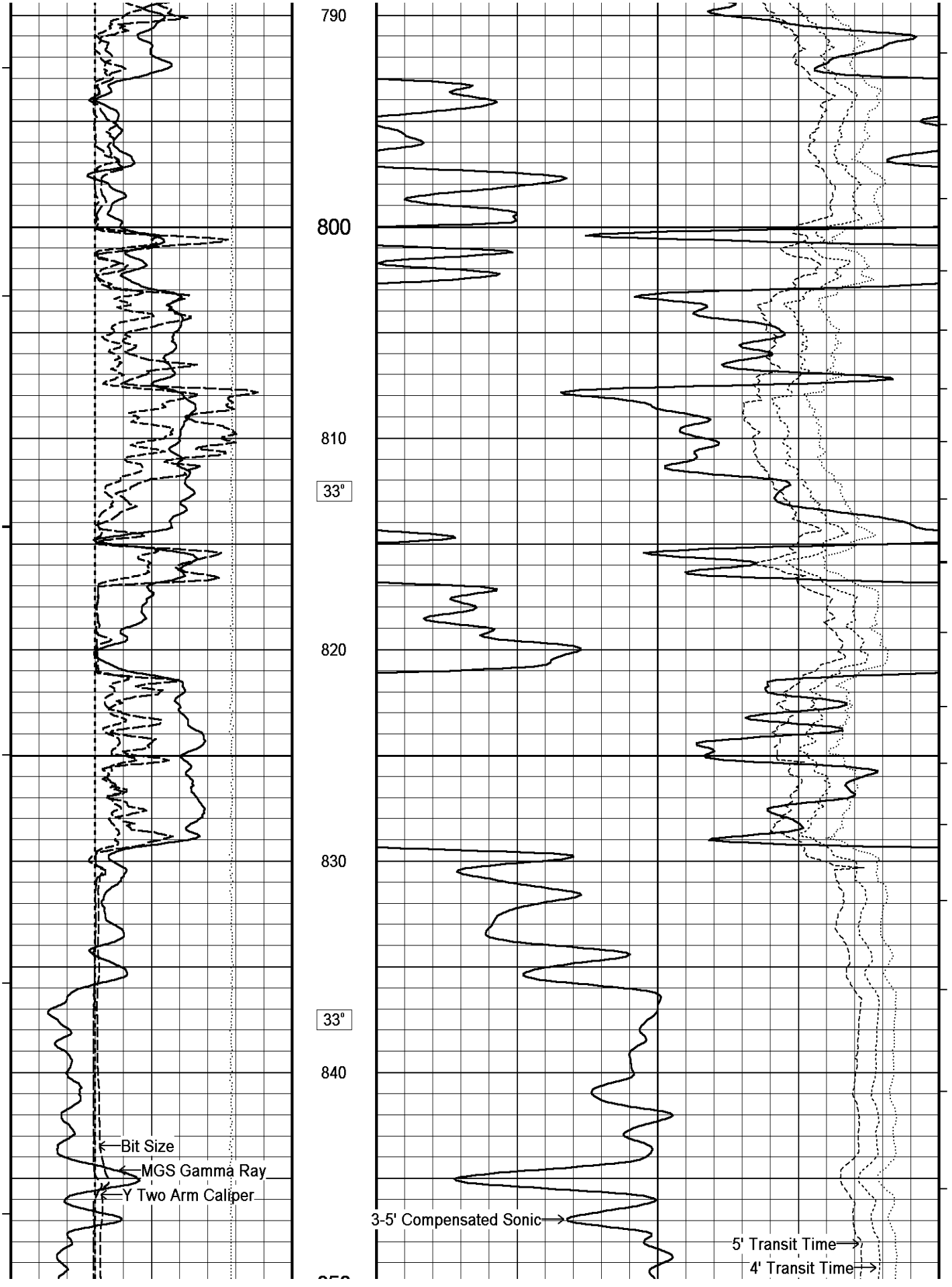


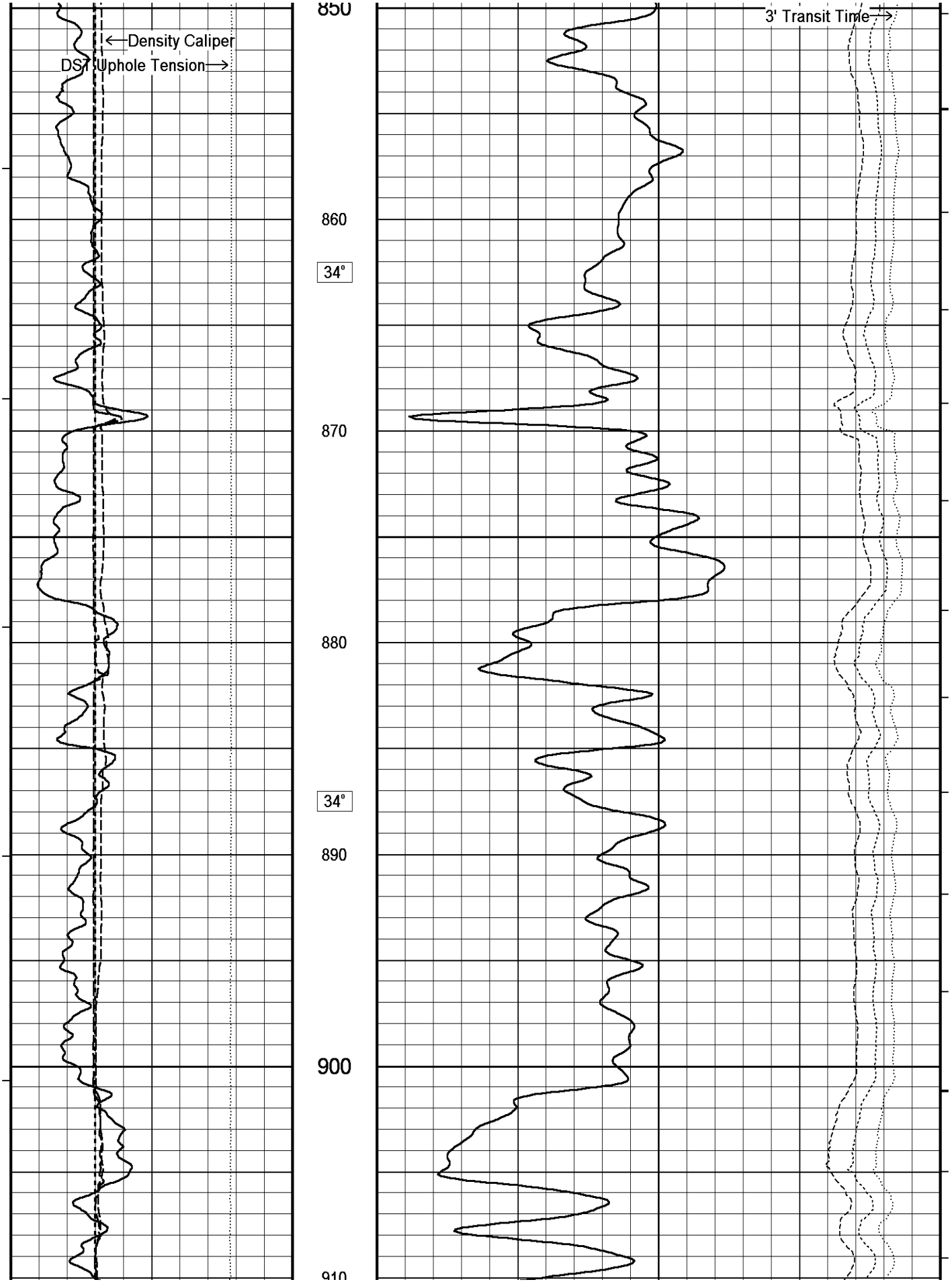

550
560
25°
570
580
25°
590
600
Bit Size
MGS Gamma Ray
Y Two Arm Caliper
3-5' Compensated Sonic
5' Transit Time

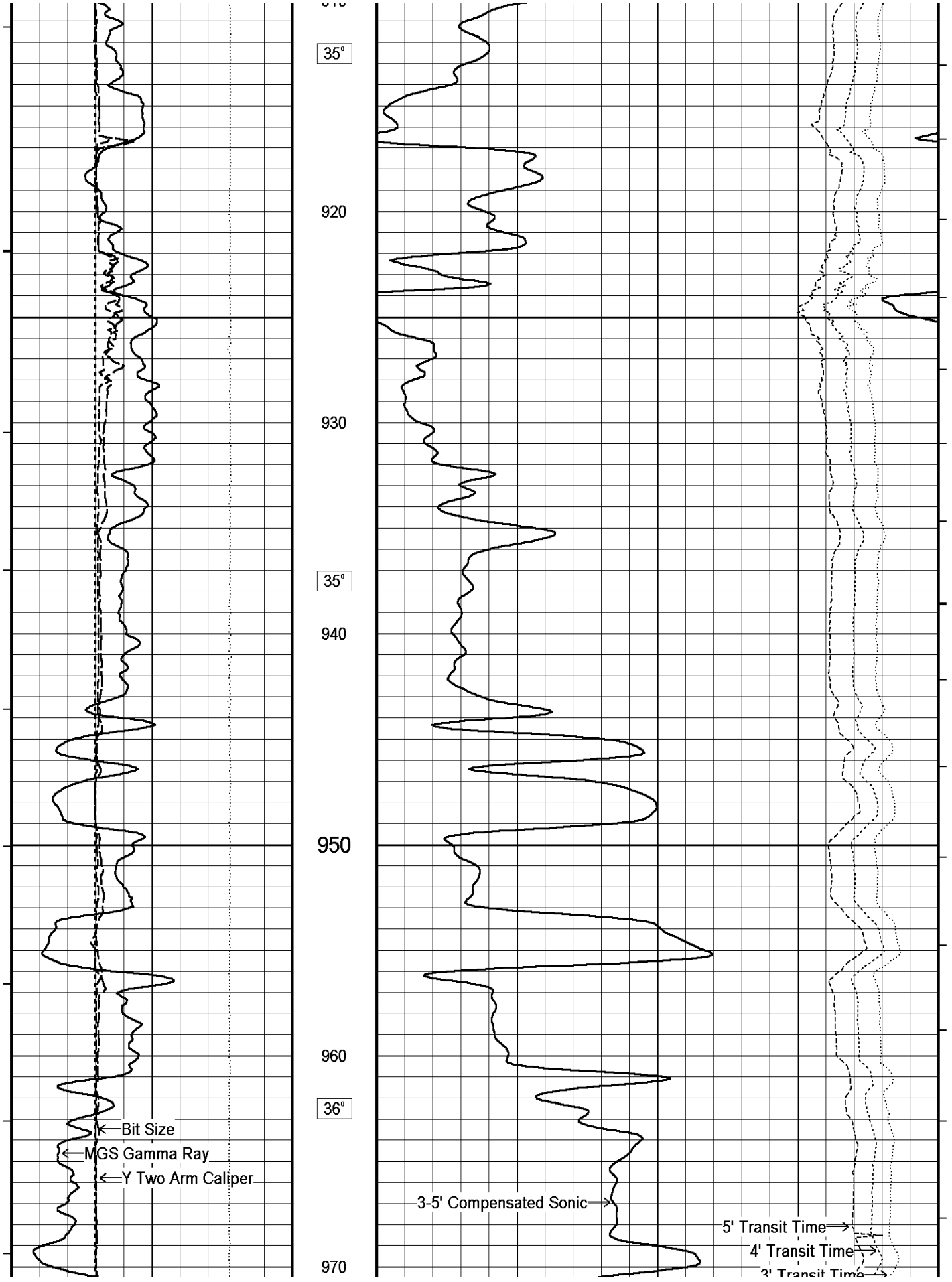

Density Caliper
DST Uphole Tension
4' Transit Time
3' Transit Time
610
27°
620
630
28°
640
650
660
29°

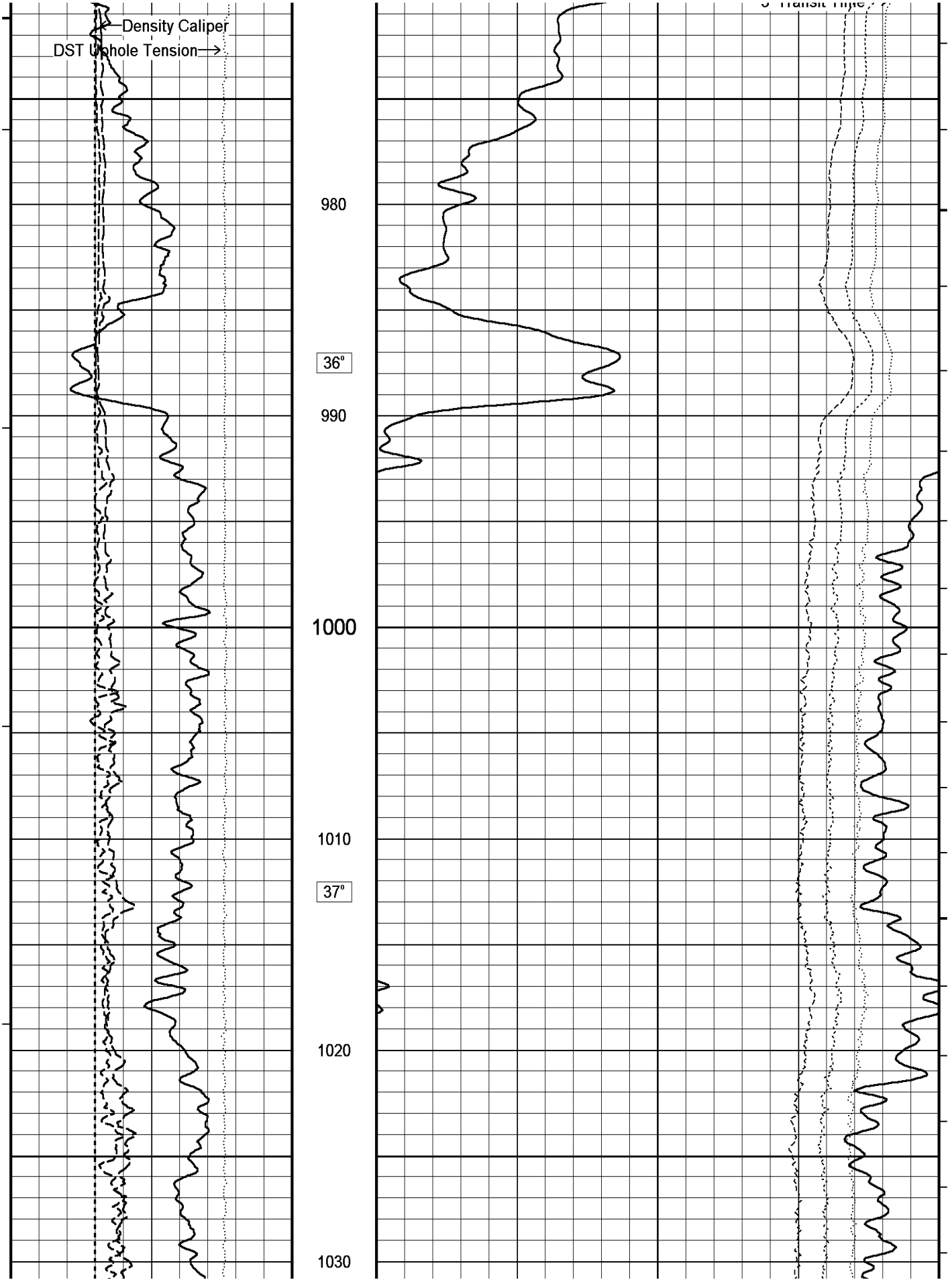

670
680
29°
690
700
710
30°
720
Bit Size
MGS Gamma Ray
Two Arm Caliper
3-5' Compensated Sonic
5' Transit Time

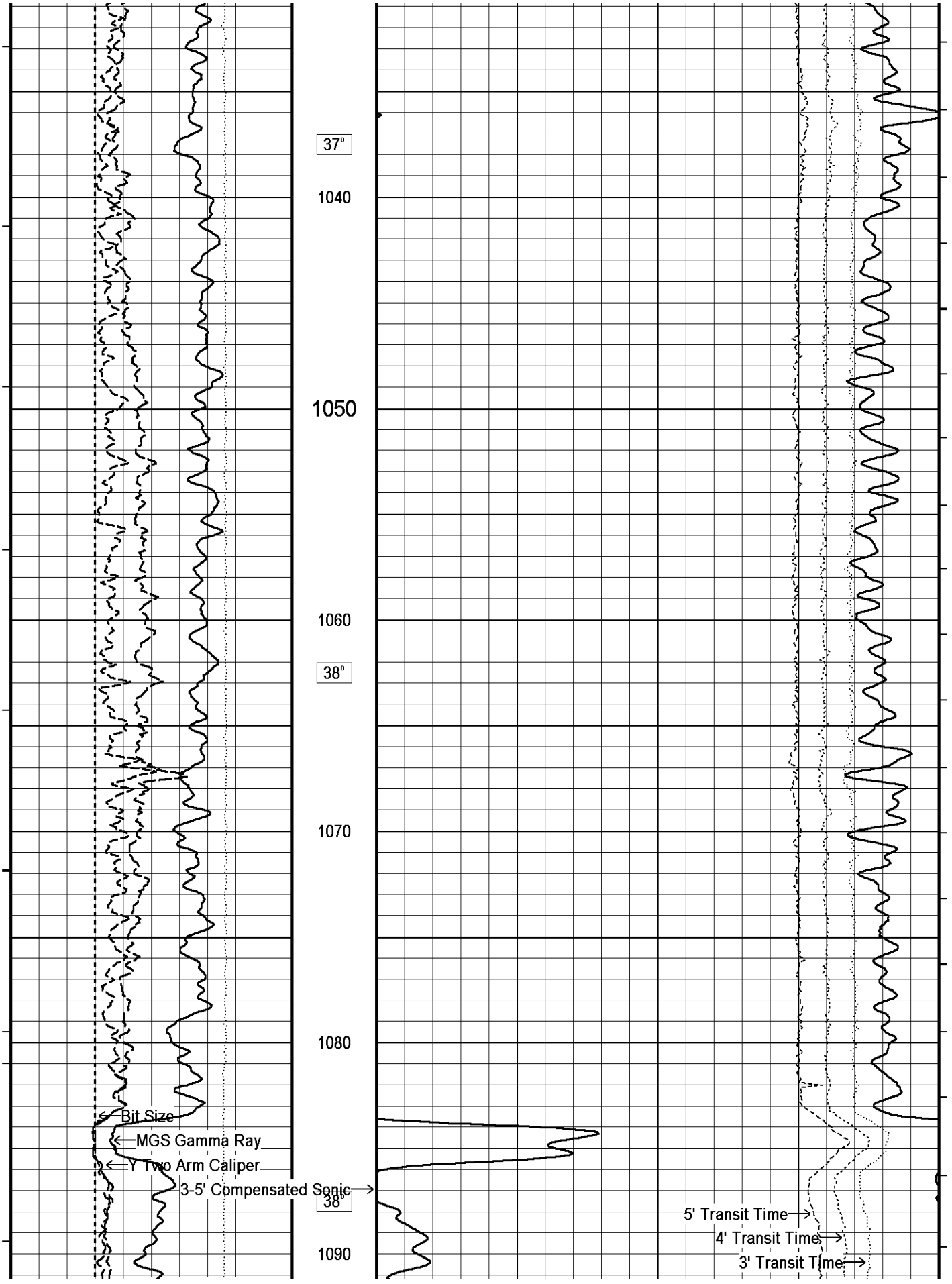

←Density Caliper
DST Uphole Tension→
730
30°
740
750
760
31°
770
780
32°
4' Transit Time →
3' Transit Time →

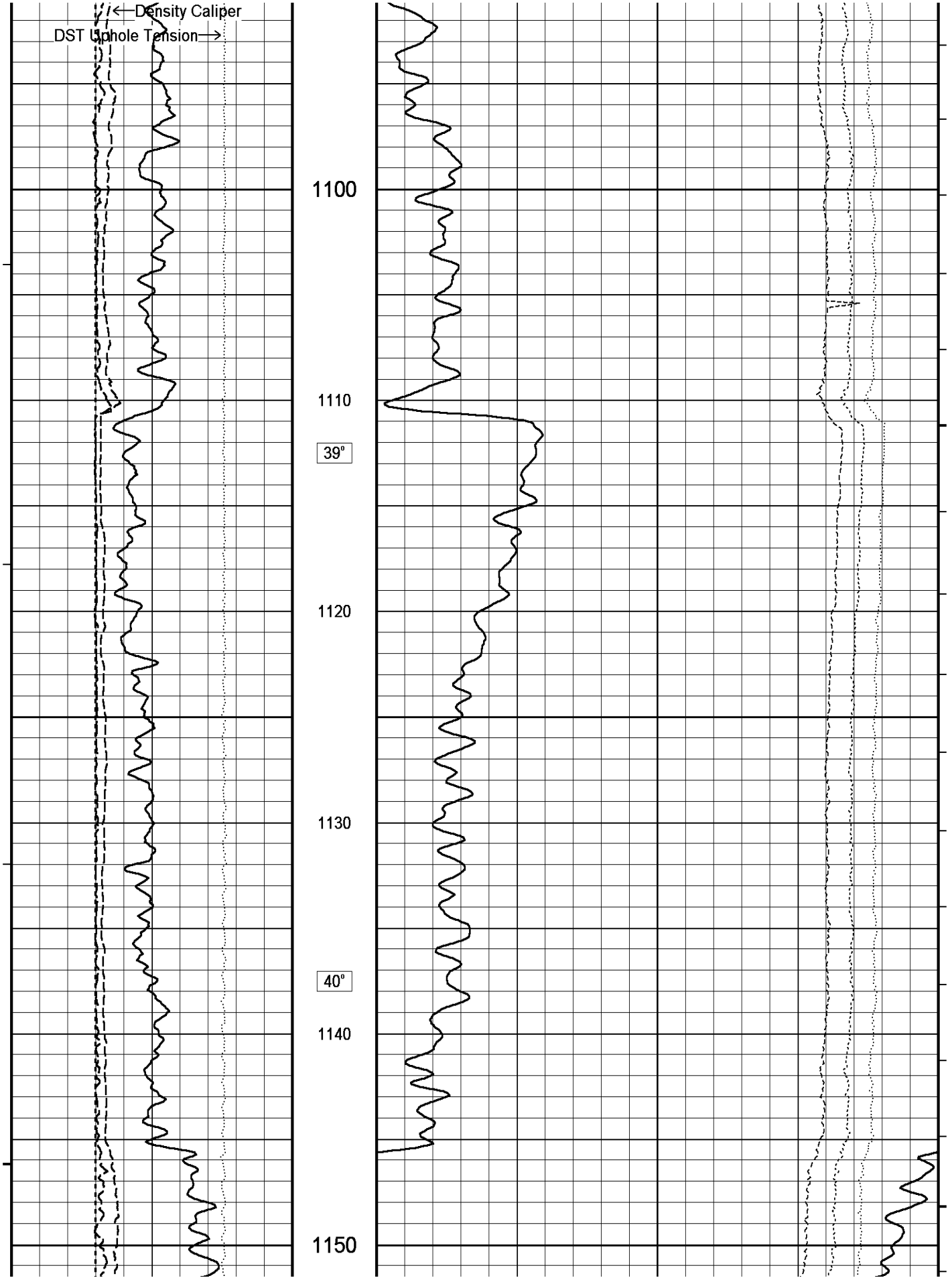

790
800
810
33°
820
830
33°
840
Bit Size
MGS Gamma Ray
Y Two Arm Caliper
3-5' Compensated Sonic
5' Transit Time
4' Transit Time

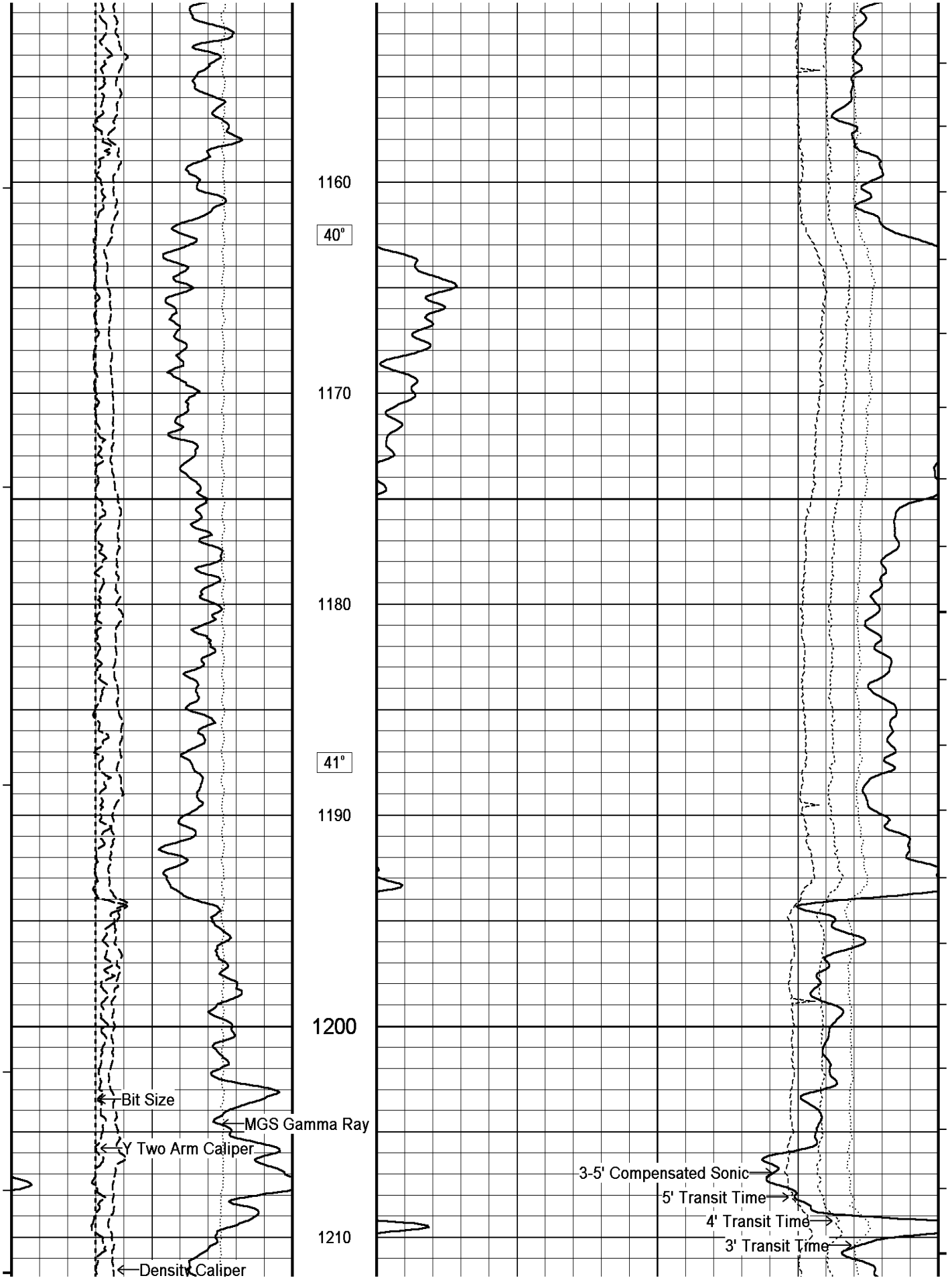

←Density Caliper
DS7 Uphole Tension→
850
860
34°
870
880
34°
890
900
910
3' Transit Time→

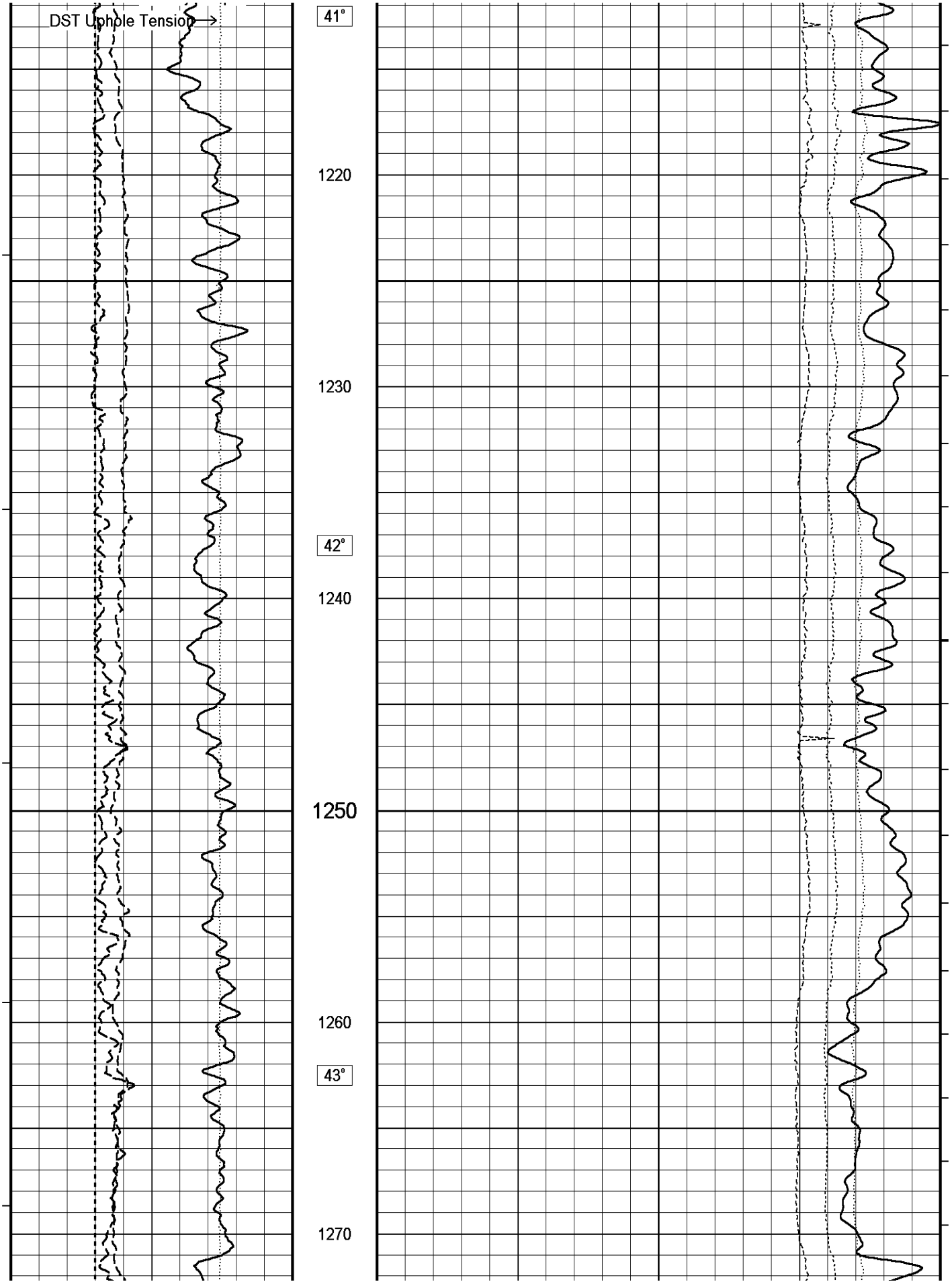

35°
920
930
35°
940
950
960
36°
970
←Bit Size
←MGS Gamma Ray
←Y Two Arm Caliper
3-5' Compensated Sonic→
5' Transit Time→
4' Transit Time→
3' Transit Time→

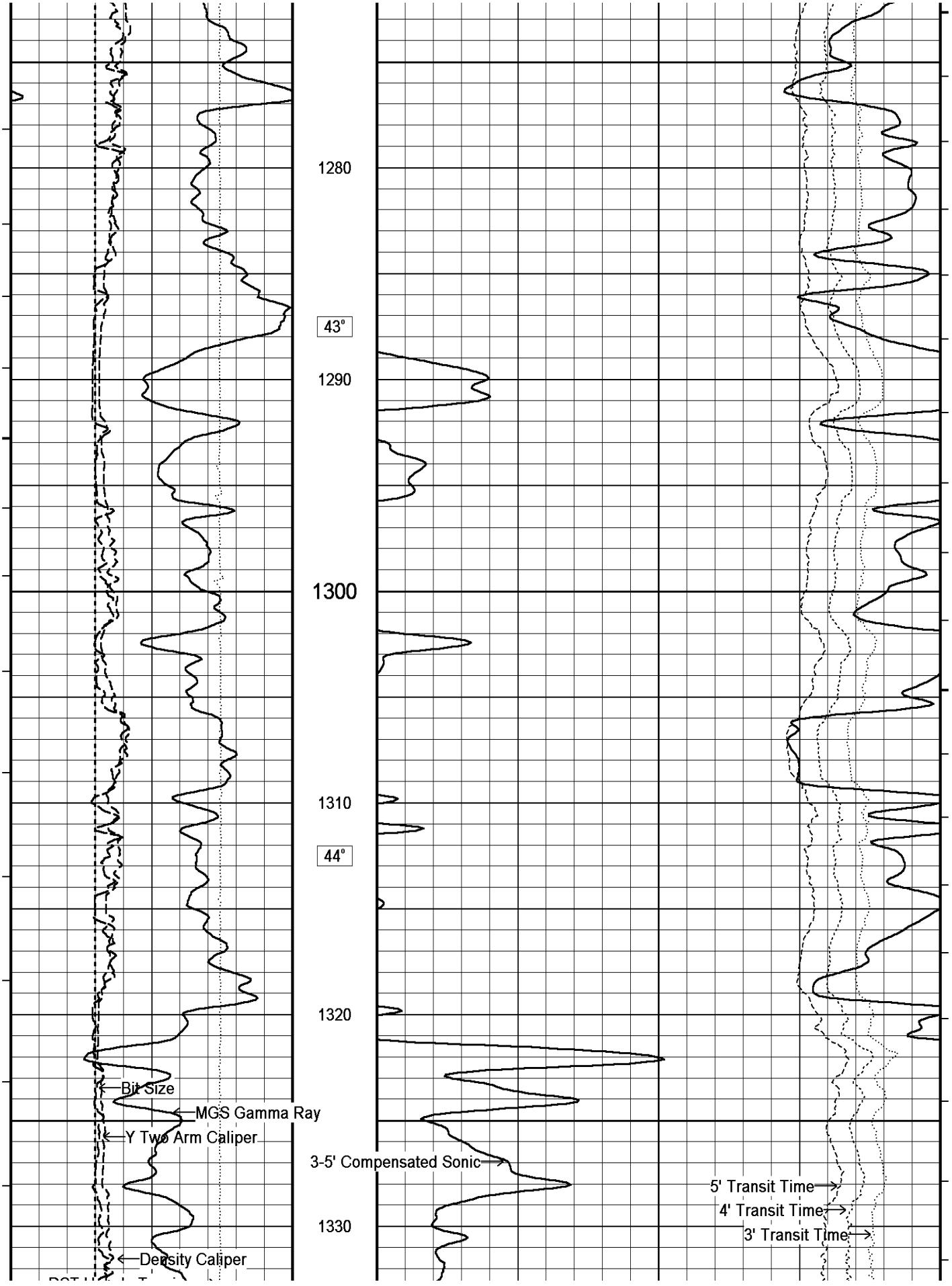

Density Caliper
DST Uphole Tension
980
36°
990
1000
1010
37°
1020
1030

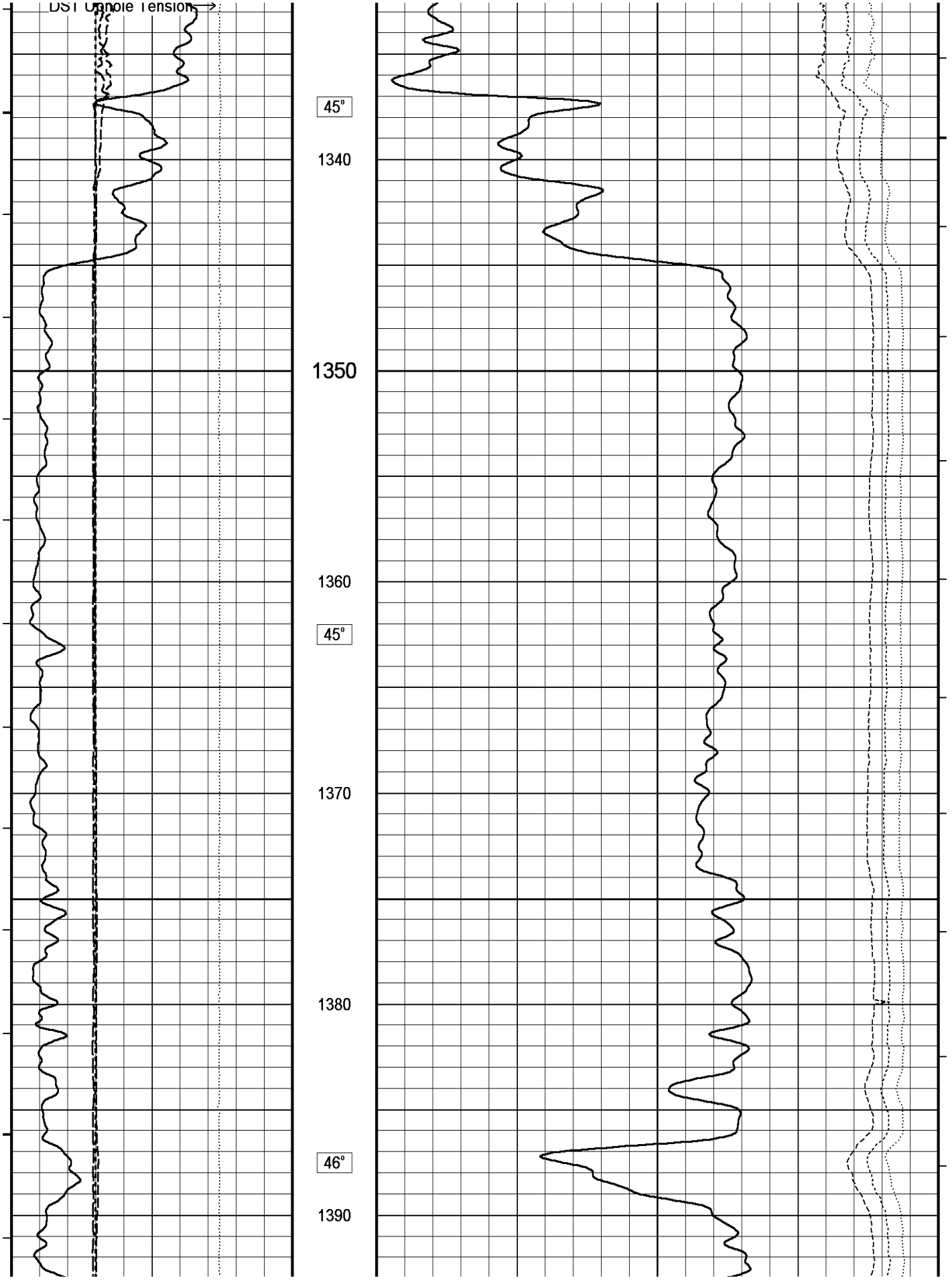

37°
1040
1050
1060
38°
1070
1080
Bit Size
MGS Gamma Ray
Y Two Arm Caliper
3-5' Compensated Sonic
38°
1090
5' Transit Time
4' Transit Time
3' Transit Time

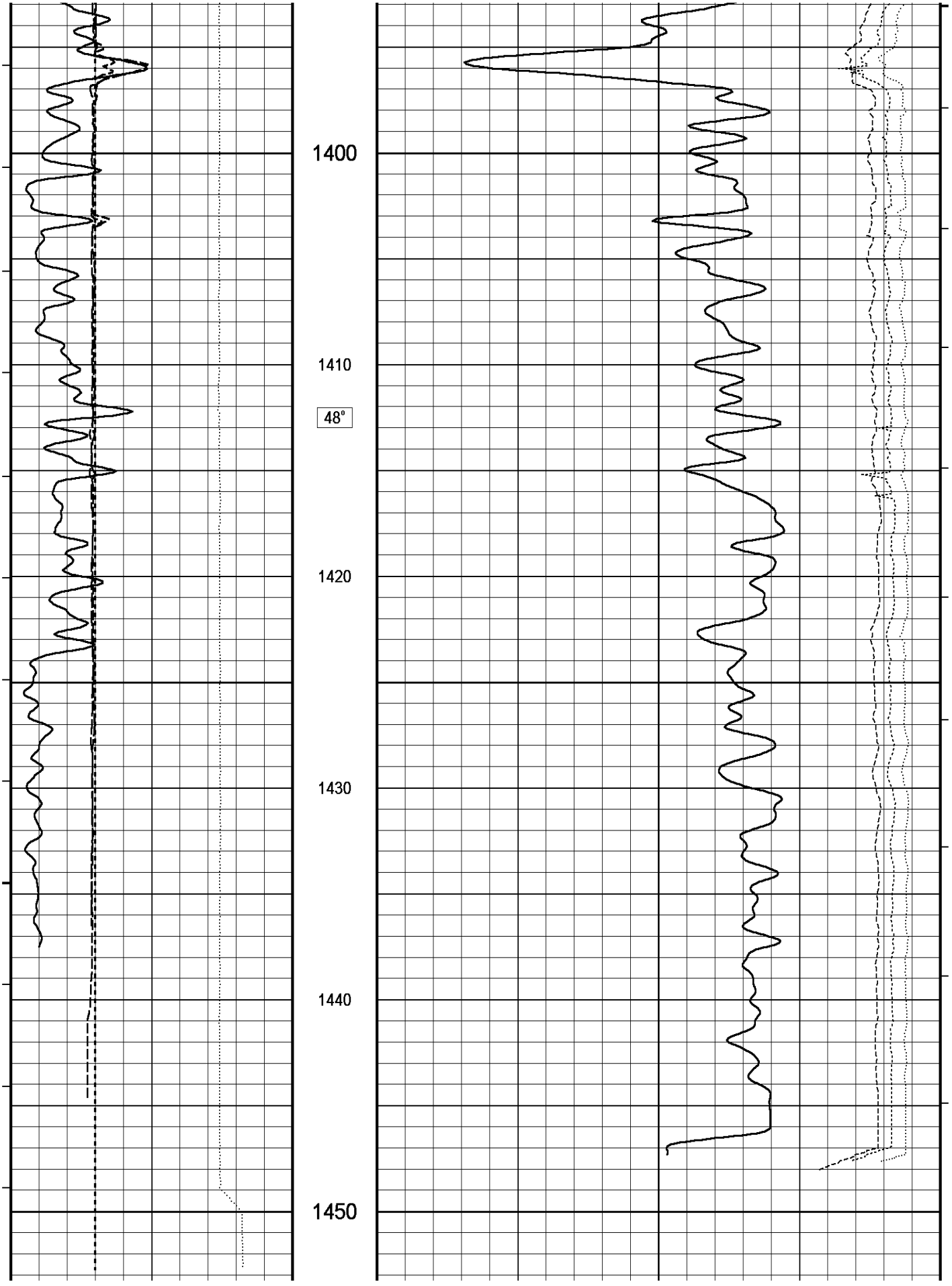

←Density Caliper
DST Uphole Tension→
1100
1110
39°
1120
1130
40°
1140
1150

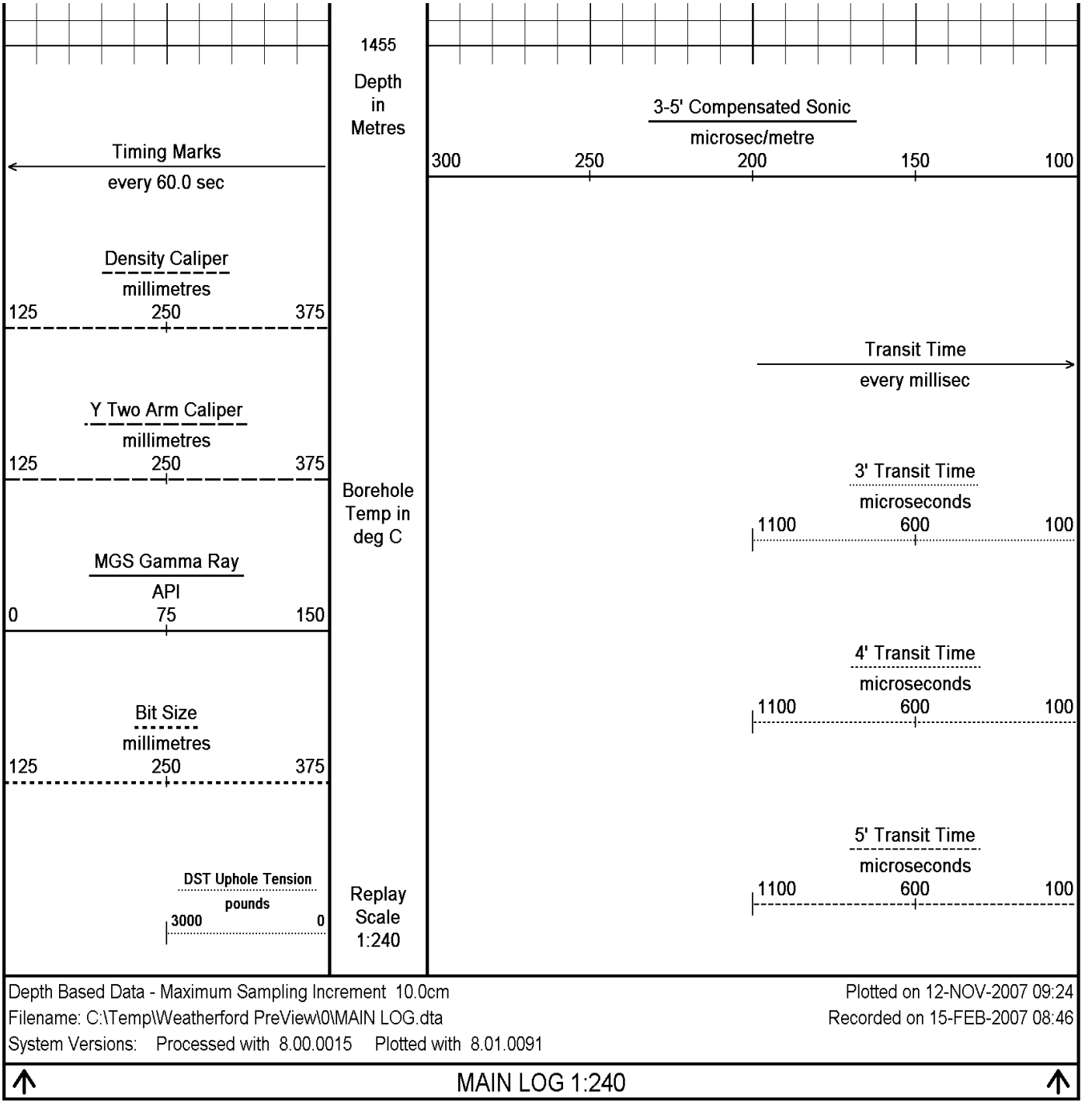

1160
40°
1170
1180
41°
1190
1200
1210
Bit Size
MGS Gamma Ray
Y Two Arm Caliper
Density Caliper
3-5' Compensated Sonic
5' Transit Time
4' Transit Time
3' Transit Time


DST Uphole Tension
41°
1220
1230
42°
1240
1250
1260
43°
1270


1280
43°
1290
1300
1310
44°
1320
1330
Bit Size
MGS Gamma Ray
Y Two Arm Caliper
3-5' Compensated Sonic
Density Caliper
5' Transit Time
4' Transit Time
3' Transit Time


DST Cable Tension
45°
1340
1350
1360
45°
1370
1380
46°
1390


1400
1410
48°
1420
1430
1440
1450

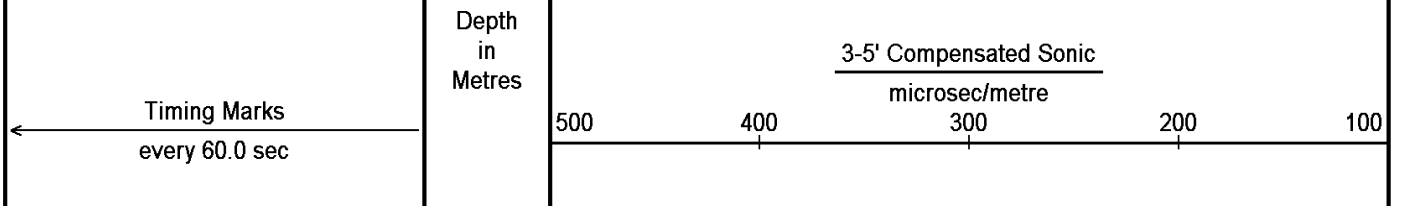


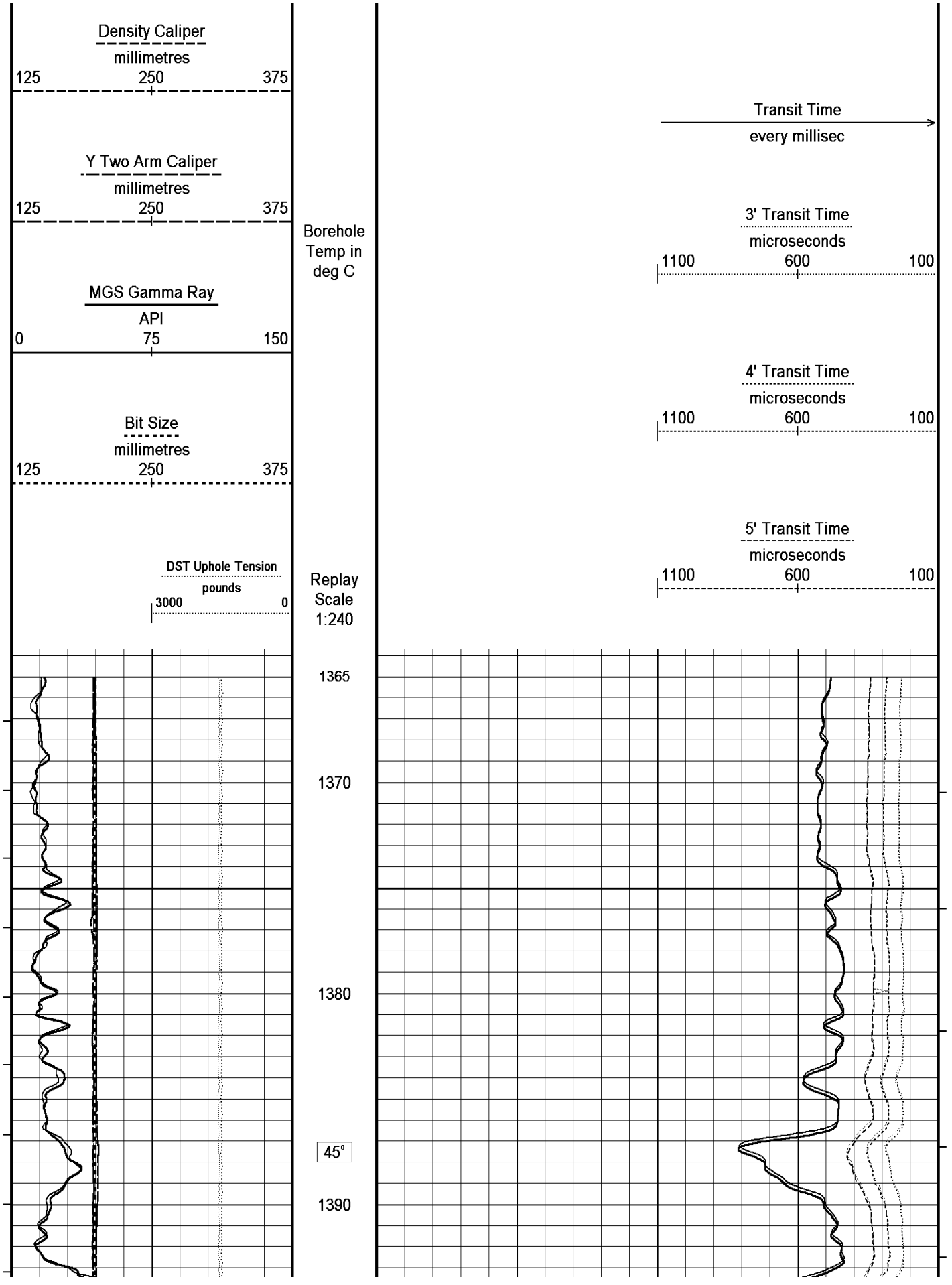
Depth Based Data - Maximum Sampling Increment 10.0cm — Plotted on 12-NOV-2007 09:24
Filename: C:\Temp\Weatherford PreView\0\MAIN LOG.dta — Recorded on 15-FEB-2007 08:46
System Versions: Processed with 8.00.0015 Plotted with 8.01.0091

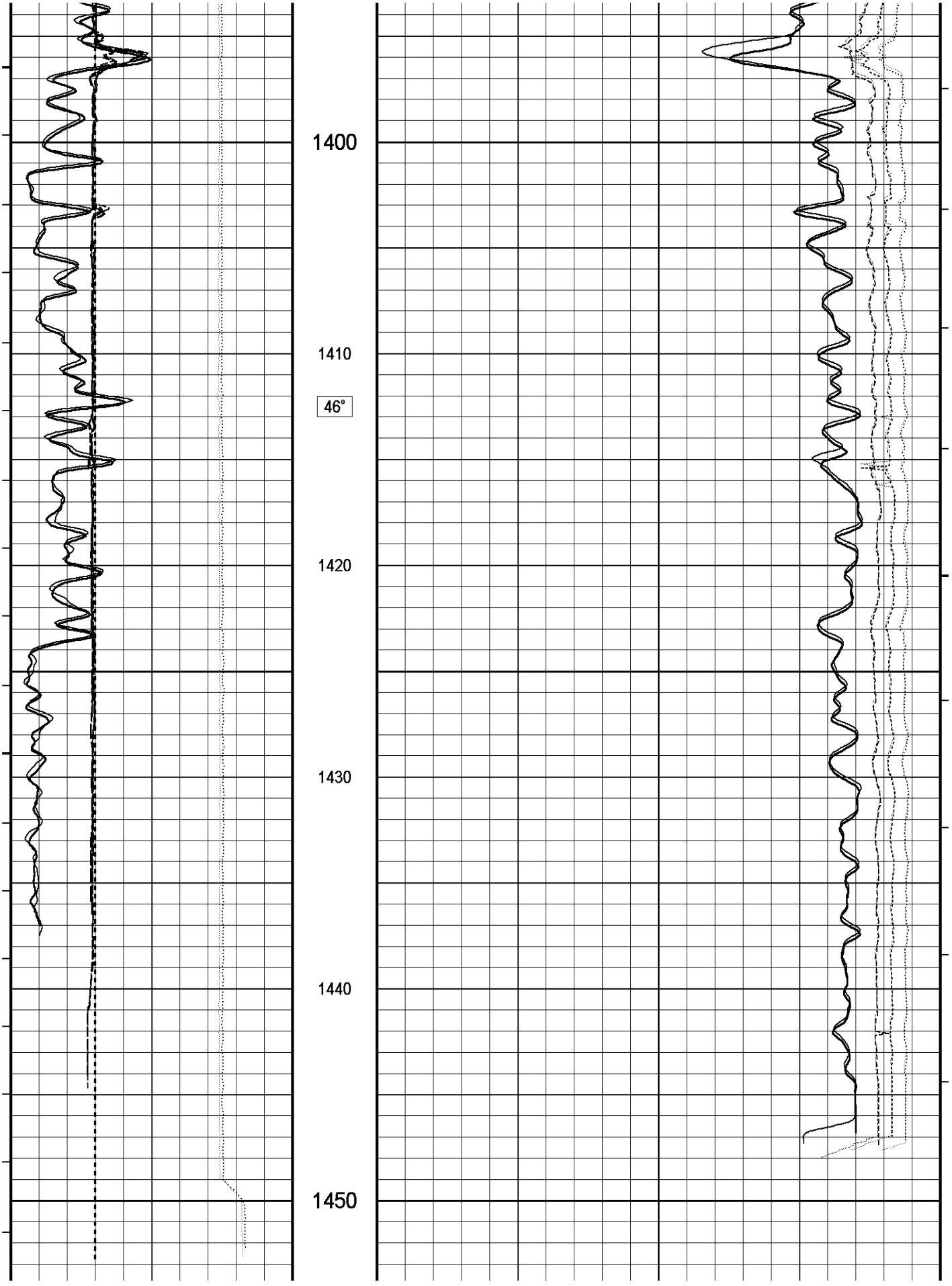
MAIN LOG 1:240

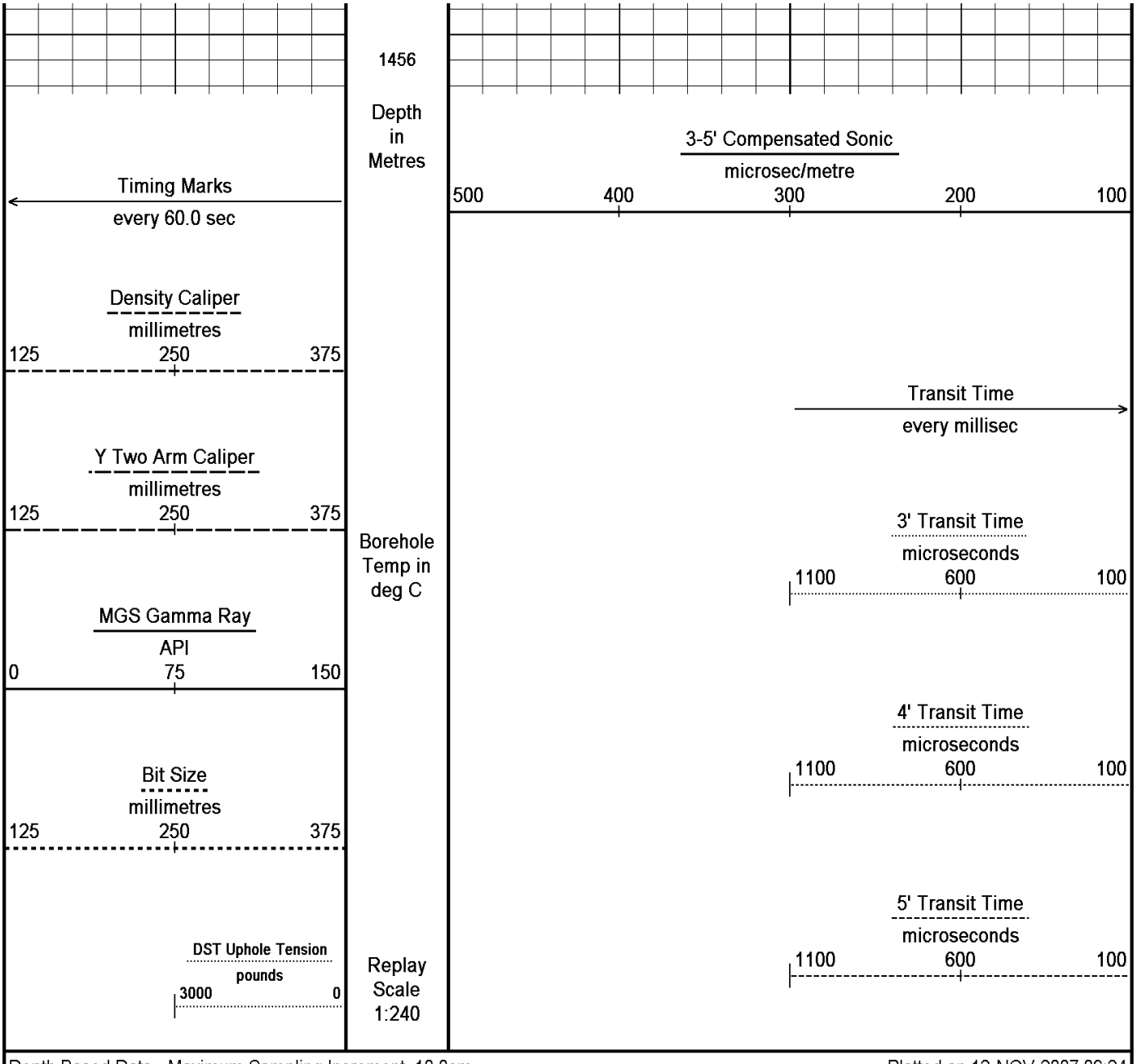
REPEAT SECTION
MAIN LOG 1:240

Depth Based Data - Maximum Sampling Increment 10.0cm — Plotted on 12-NOV-2007 09:24
Filename: C:\Temp\Weatherford PreView\0\REPEAT.dta — Recorded on 15-FEB-2007 07:26
Filename: C:\Temp\Weatherford PreView\0\MAIN LOG.dta — Recorded on 15-FEB-2007 08:46
System Versions: Logged with 7.01.0195 Processed with 8.00.0015 Plotted with 8.01.0091




Density Caliper
millimetres
125
250
375
Y Two Arm Caliper
millimetres
125
250
375
MGS Gamma Ray
API
0
75
150
Bit Size
millimetres
125
250
375
DST Uphole Tension
pounds
3000
0
Borehole Temp in deg C
Replay Scale 1:240
Transit Time
every millisec
3' Transit Time
microseconds
1100
600
100
4' Transit Time
microseconds
1100
600
100
5' Transit Time
microseconds
1100
600
100
1365
1370
1380
45°
1390


1400
1410
46°
1420
1430
1440
1450



Depth Based Data - Maximum Sampling Increment 10.0cm
Plotted on 12-NOV-2007 09:24
Filename: C:\Temp\Weatherford PreView\0\REPEAT.dta
Recorded on 15-FEB-2007 07:26
Filename: C:\Temp\Weatherford PreView\0\MAIN LOG.dta
Recorded on 15-FEB-2007 08:46
System Versions: Logged with 7.01.0195 Processed with 8.00.0015 Plotted with 8.01.0091

REPEAT SECTION
MAIN LOG 1:240

BEFORE SURVEY CALIBRATION

C:\Temp\Weatherford PreView\0\REPEAT.dta

General Constants All 000

Last Edited on 15-FEB-2007,06:48

General Parameters		
Mud Resistivity	1.180	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	Y Two Arm Caliper	
Annular Volume Diameter	139.700	mm
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 159

Field Calibration on 28-NOV-2006,15:40

	Measured	Calibrated(Deg C)
Lower	10.00	10.00
Upper	50.00	50.00

High Resolution Temperature Constants MCG 159

Last Edited on 28-NOV-2006,15:40

Pre-filter Length	11

Caliper Calibration MTC 006

Base Calibration on 25-JAN-2007,18:14
Field Calibration on 10-FEB-2007,20:21

Base Calibration

Reading No	Measured	Calibrator Size (mm)
1	14734	110.00
2	17539	162.00
3	20248	212.00
4	22990	262.00
5	25897	311.00
6	N/A	N/A

Field Calibration

Measured Caliper (mm)	Actual Caliper (mm)
208.70	205.70

Gamma Calibration MGS 010

Field Calibration on 7-FEB-2007,09:09

	Measured	Calibrated (API)
Background	48	31
Calibrator (Gross)	1256	825
Calibrator (Net)	1208	794

Gamma Constants MGS 010

Last Edited on 15-FEB-2007,06:48

Gamma Calibrator Number	grcc075	
Mud Density	1060.00	kg/m3
Caliper Source for Processing	Density Caliper	
Tool Position	Centred	
Concentration of KCl	0.00	kppm

Caliper Calibration MPD 036

Base Calibration on 23-JAN-2007 04:20
Field Calibration on 7-FEB-2007,11:28

Base Calibration

Reading No	Measured	Calibrator Size (mm)
1	18576	110.00
2	28032	162.00
3	37841	212.00
4	48080	262.00
5	57920	311.00
6	N/A	N/A

Field Calibration

Measured Caliper (mm)	Actual Caliper (mm)

Measured Caliper (mm)	166.10
Actual Caliper (mm)	166.10

Sonic Constants MSS 060

Last Edited on 7-FEB-2007,10:50

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
Hunt-Raymer Constant	83.13	micro-sec/ft

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	

Down Hole Fixed Gate Parameters

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

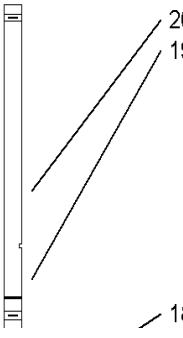
Full Waveform Parameters

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:\Temp\Weatherford PreView\0\REPEAT.dta

Compact Gamma
MCG 159 Length: 2.65 m Weight: 63.9 lb



20.78 m GRGC - Gamma Ray
19.90 m CGXT - MCG External Temperature

Compact Focussed Electric

18.79 m FEFE - Shallow FE

MFE 17 Length: 1.84 m Weight: 48.5 lb

Compact Two Arm Caliper
MTC 6 Length: 2.17 m Weight: 61.7 lb

16.33 m CLYC - Y Two Arm Caliper

Compact Short Gamma
MGS 10 Length: 1.04 m Weight: 24.3 lb

15.46 m GRGM - MGS Gamma Ray

Compact InterSonde Crank
ISC 159 Length: 0.70 m Weight: 24.3 lb

Compact Micro-log
MML 15 Length: 2.43 m Weight: 81.6 lb

12.10 m MINV - Micro-inverse
12.10 m MNRL - Micro-normal
12.10 m MLTC - MML Caliper

Compact Neutron
MDN 144 Length: 1.53 m Weight: 50.7 lb

10.64 m NPRL - Limestone Neutron Por.

Compact Density/Caliper
MPD 36 Length: 2.92 m Weight: 90.4 lb

8.06 m AVOL - Annular Volume
8.06 m HVOL - Hole Volume
8.06 m CLDC - Density Caliper
7.85 m DPRL - Limestone Density Por.
7.85 m DCOR - Density Correction
7.83 m PDPE - PE

Compact Sonic
MSS 60 Length: 3.82 m Weight: 72.8 lb

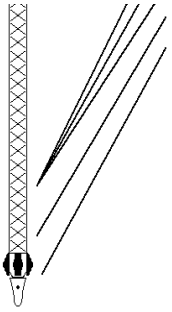
3.95 m TR21 - 3' Transit Time
3.95 m TR11 - 4' Transit Time
3.95 m TR22 - 5' Transit Time
3.95 m DT34 - 3-4' Compensated Sonic
3.95 m DT35 - 3-5' Compensated Sonic
3.95 m TR12 - 6' Transit Time

Compact Induction
MAI 72 Length: 3.29 m Weight: 48.5 lb

0.79 m VEC0 - Shallow Induction
0.79 m RILM - Medium Induction
0.79 m RILD - Deep Induction

Compact Hole Finder

HFS 1	Length: 0.24 m	Weight: 2.2 lb
Total	Length: 22.63 m	Weight: 568.8 lb



0.07 m Tool Zero

SPCG - Spontaneous Potential (0.28m from bottom)

All measurements relative to tool zero.

COMPANY	PARAMOUNT RESOURCES LTD.
WELL	PARAMOUNT ET AL CAMERON J-04
FIELD	CAMERON HILLS
PROVINCE/COUNTY	NORTH WEST TERRITORIES
COUNTRY/STATE	CANADA

Elevation Kelly Bushing	769.20	metres	First Reading	1445.50	metre
Elevation Drill Floor		metres	Depth Driller	1449.00	metres
Elevation Ground Level	765.20	metres	Depth Logger	1449.50	metres

Weatherford®

COMPENSATED SONIC