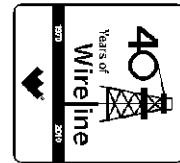




Weatherford

**COMPENSATED SONIC
WITH INTEGRATED TRANSIT TIME**

MULL DRILLING COMPANY, INC.
BLEUMER # 1-13
WILDCAT
GRAY COUNTY
U.S.A. / KANSAS
2112' FNL & 778' FWL
SW/4 NW/4



SEC	TWP	RGE	Other Services	SGS	Elevations:
13	26S	30W	MPD/MDN		KB 2785.00
API Number	15-069-20371		MA/MFE		DF 2783.00
Permit Number			MML		GL 2772.00
Permanent Datum G.L., Elevation 2772 feet					
Log Measured From KB					
Drilling Measured From K.B.					

Date	07-MAY-2012	
Run Number	ONE	
Depth Driller	6200.00	feet
Depth Logger	6193.00	feet
First Reading	6180.00	feet
Last Reading	462.00	feet
Casing Driller	464.00	feet
Casing Logger	462.00	feet
Bit Size	7.875	inches
Hole Fluid Type	CHEMICAL	
Density / Viscosity	9.40 lb/USg	57.00 CP
PH / Fluid Loss	8.50	8.00 ml/30Min
Sample Source	FLOWLINE	
Rm @ Measured Temp	0.87 @ 70.0	ohm-m
Rmf @ Measured Temp	0.70 @ 70.0	ohm-m
Rmc @ Measured Temp	1.04 @ 70.0	ohm-m
Source Rmf / Rmc	CALC	CALC
Rm @ BHT	0.49 @129.0	ohm-m
Time Since Circulation	5 HOURS	
Max Recorded Temp	130.00	deg F
Equipment Name	COMPACT	
Equipment / Base	13096	LIB
Recorded By	A. GIAMBALVO	
Witnessed By	PAUL GERLACH	
S.O. / JOB #	3534535	LB12-115

BOREHOLE RECORD

Last Edited: 07-MAY-2012 07:55

Bit Size inches	Depth From feet	Depth To feet
7.875	462.00	6193.00

CASING RECORD

Type	Size inches	Depth From feet	Shoe Depth feet	Weight pounds/ft
SURFACE	8.625	13.00	462.00	24.00

REMARKS

Tools Ran: MCG, SGS, MML, MDN, MPD, SKJ, MFE, MSS, MAI.
 Hardware Used: MDN Dual Eccentralizer used. MPD 8 inch profile plate used. MFE, MSS and MAI 0.5 inch standoffs used.
 2.71 g/cc Limestone Density Matrix used to calculate porosity.
 Sonic porosity calculated using a Limestone scale (47.5 usec/ft).
 All intervals logged and scaled per customer's request.
 Annular volume with 5 inch production casing from TD to Surface Casing = 1468 cu. ft.
 Total hole volume from TD to Surface Casing = 2248 cu. ft.
 Service order: #3534535
 Rig: Duke # 9
 Engineer: A. Giambalvo
 Operator(s): J. LaPoint, N. Adame

All interpretations are opinions based on inferences from electrical or other measurements and we cannot, and do not, guarantee the accuracy or correctness of any interpretations, and we shall not, except in the case of gross or wilful negligence on our part, be liable or responsible for 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.



5 INCH MAIN



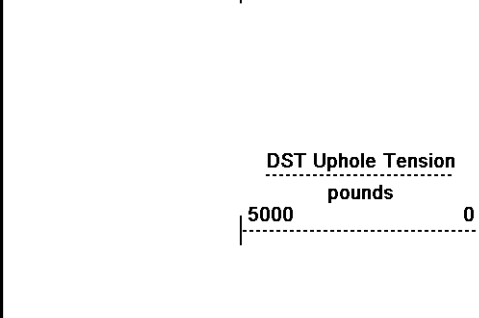
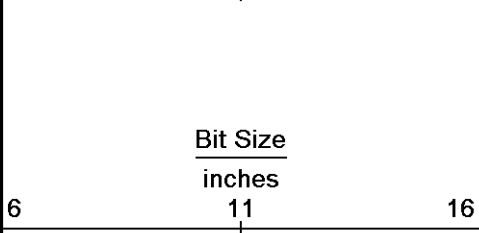
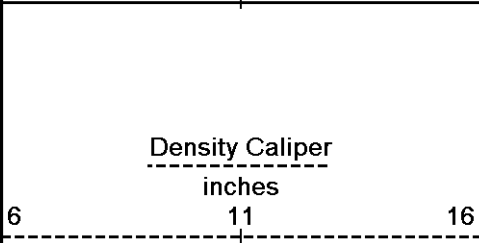
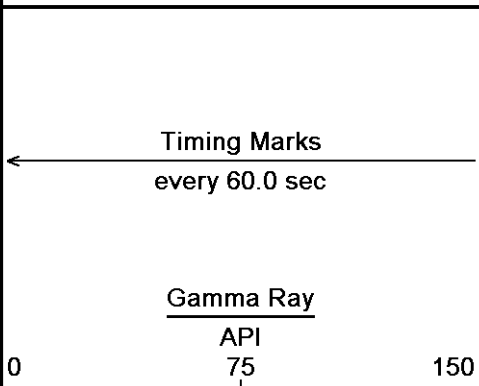
Depth Based Data - Maximum Sampling Increment 10.0cm

Plotted on 07-MAY-2012 08:25

Filename: C:\Minimus 11_03_4044\Data\M...Mull Drilling Company, Inc. Bleumer # 1-13 Run 1_001.dta

Recorded on 07-MAY-2012 03:49

System Versions: Logged with 11.03.4044 Plotted with 11.03.4044

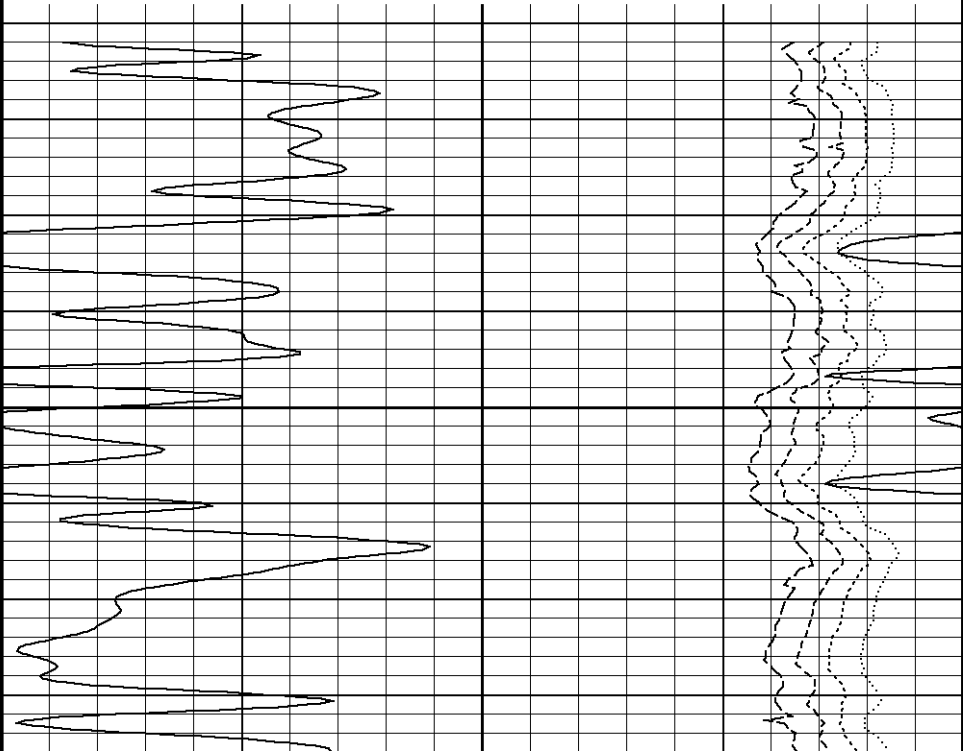
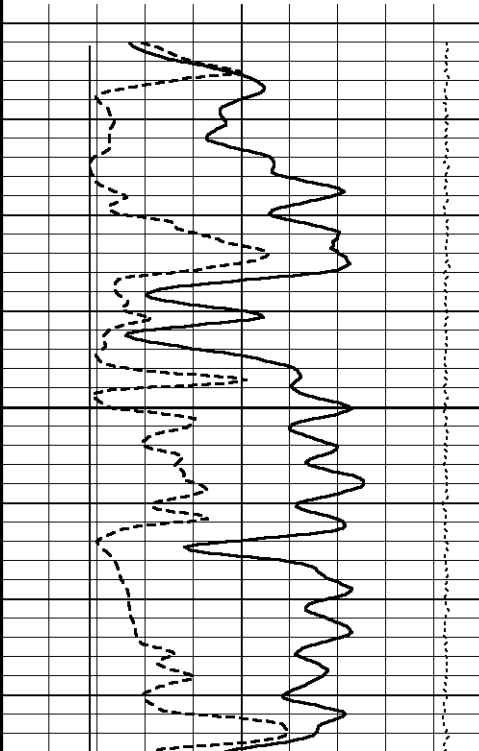
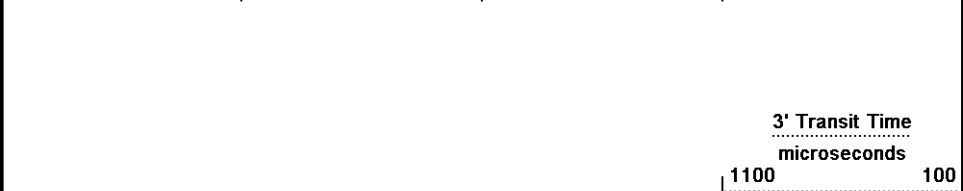
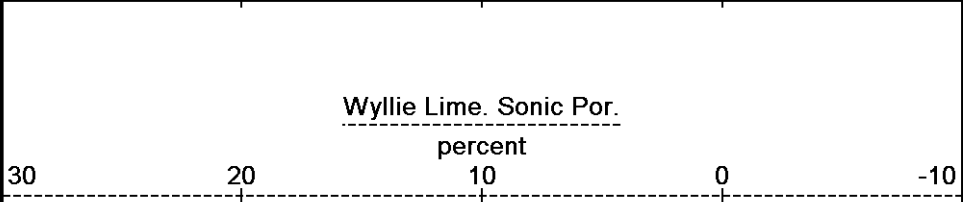
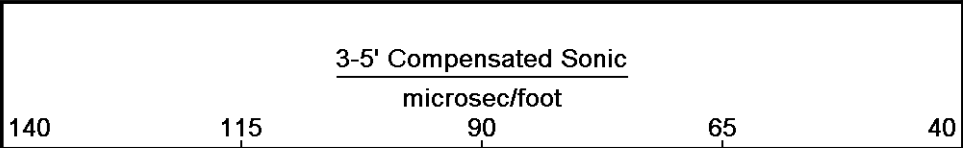


Depth
in
Feet

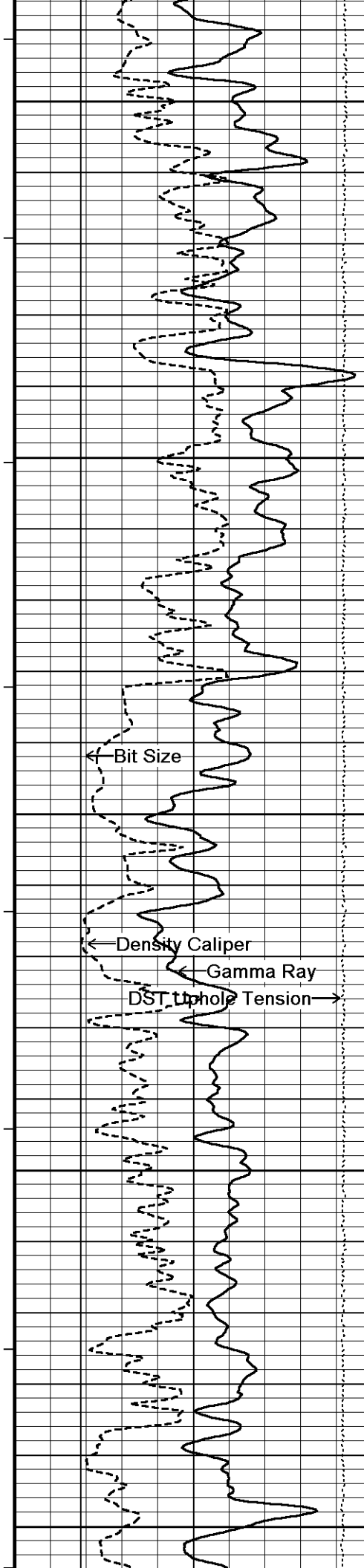
Borehole
Temp in
deg F

Replay
Scale
1:240

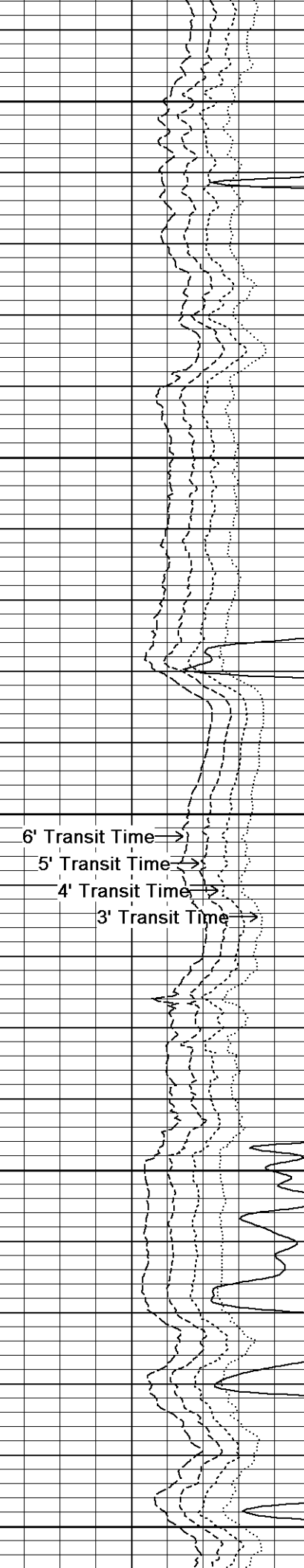
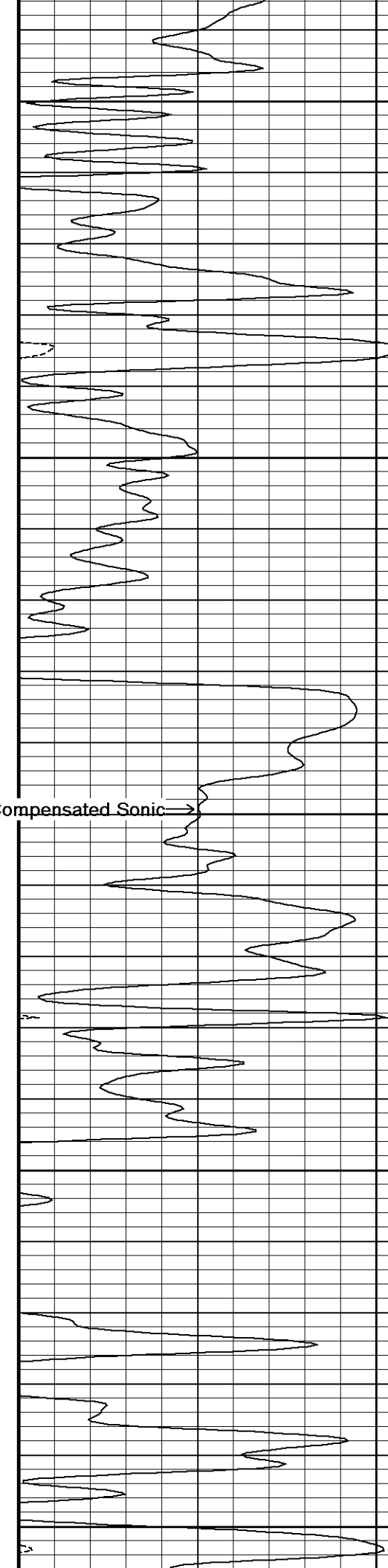
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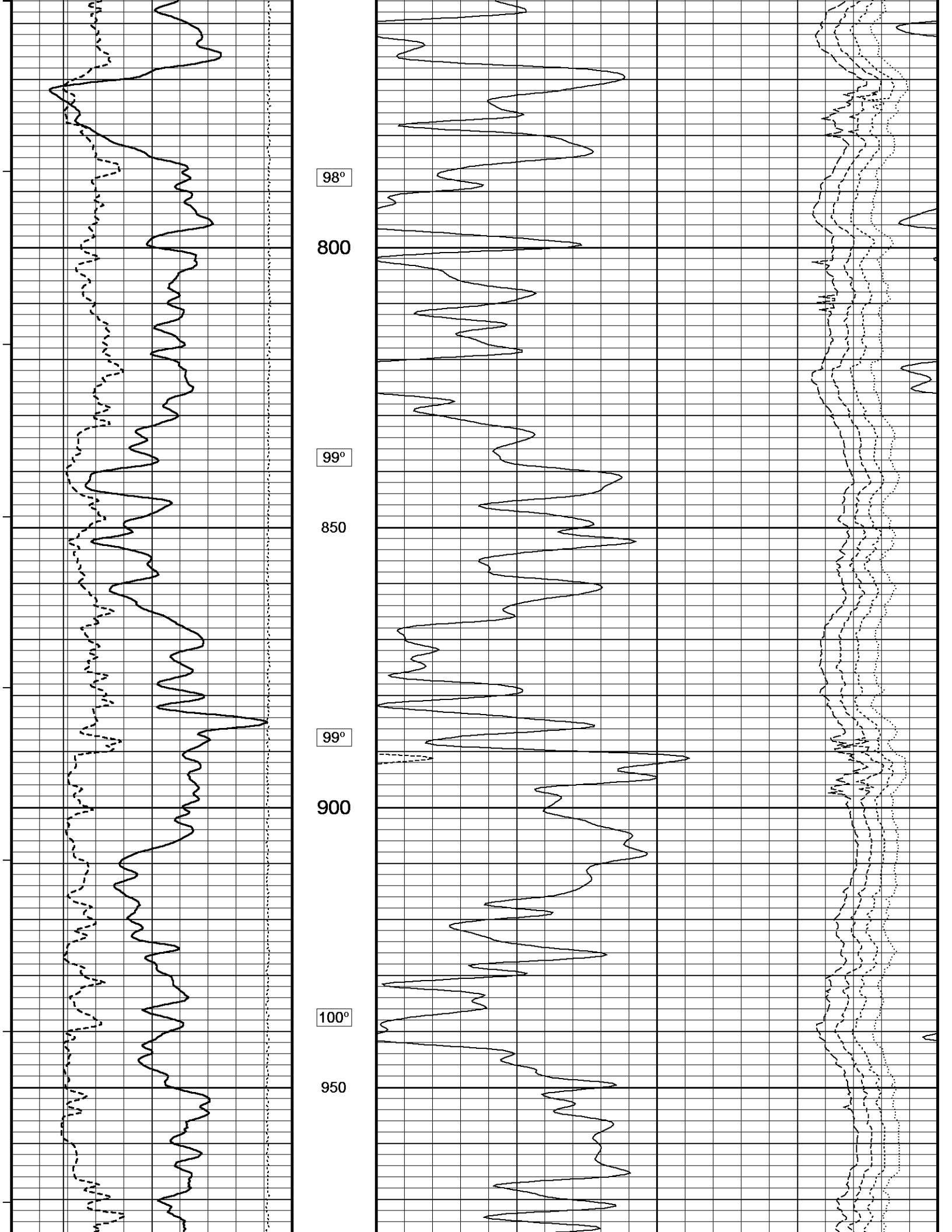


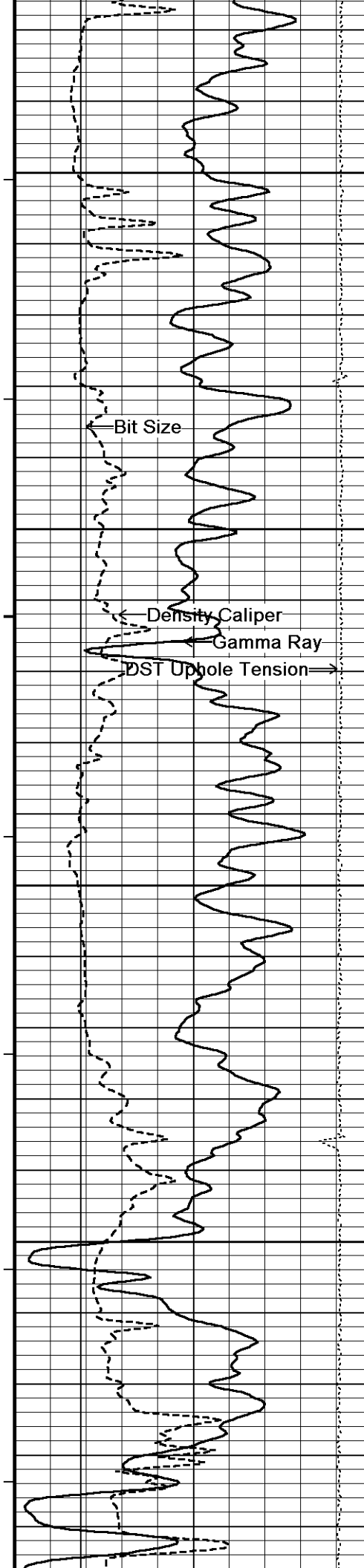
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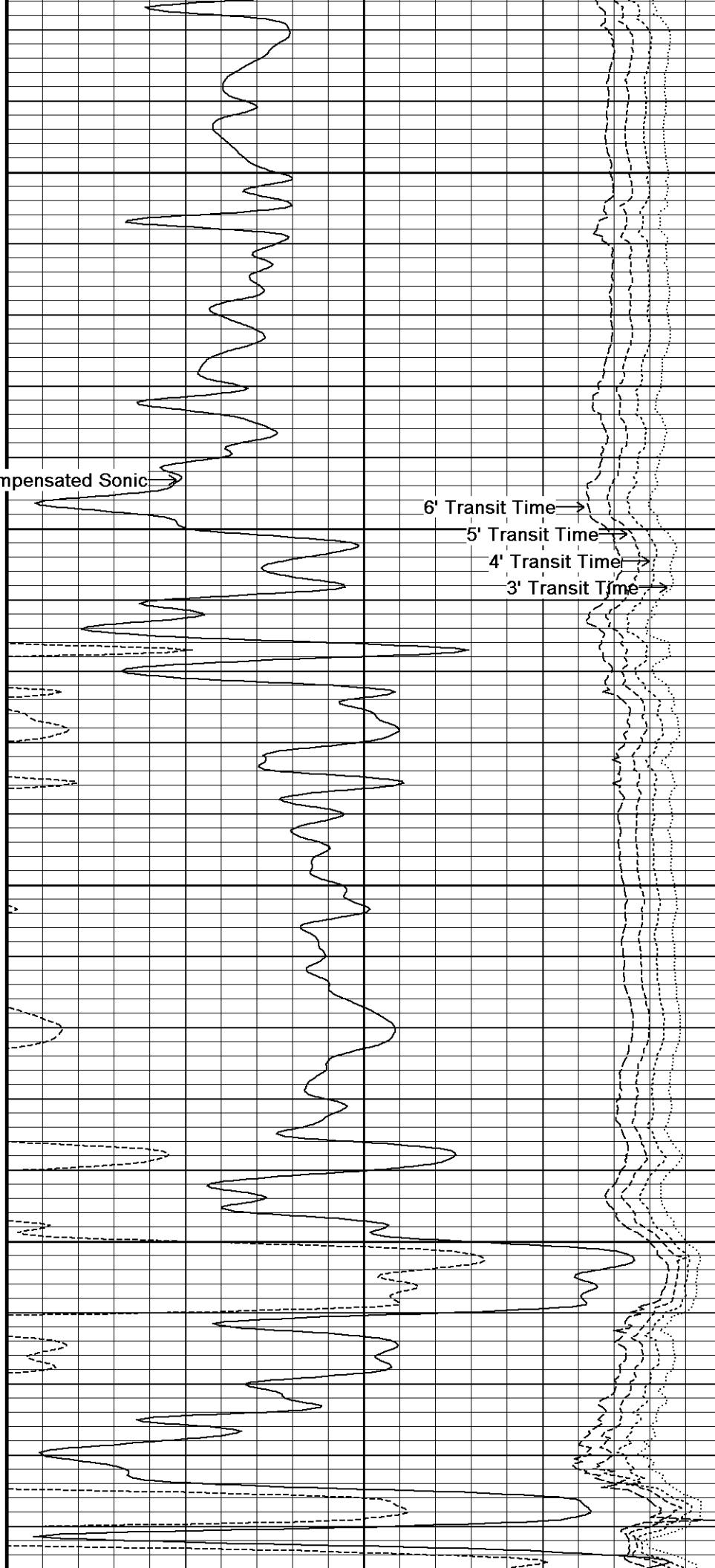
97°
550
97°
600
98°
650
98°
700
98°
750



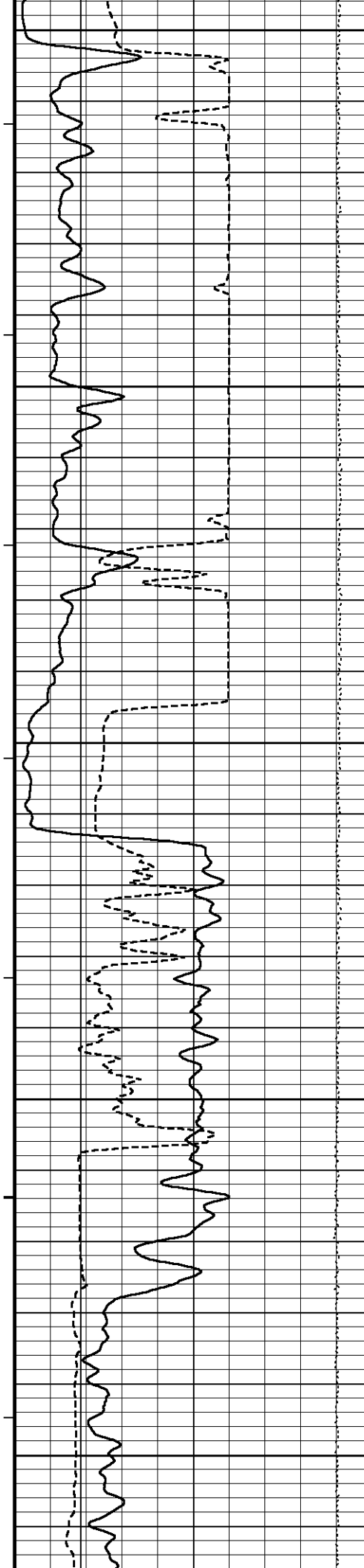




100°
1000
100°
3-5' Compensated Sonic
1050
100°
1100
100°
1150
100°



6' Transit Time
5' Transit Time
4' Transit Time
3' Transit Time



1200

101°

1250

101°

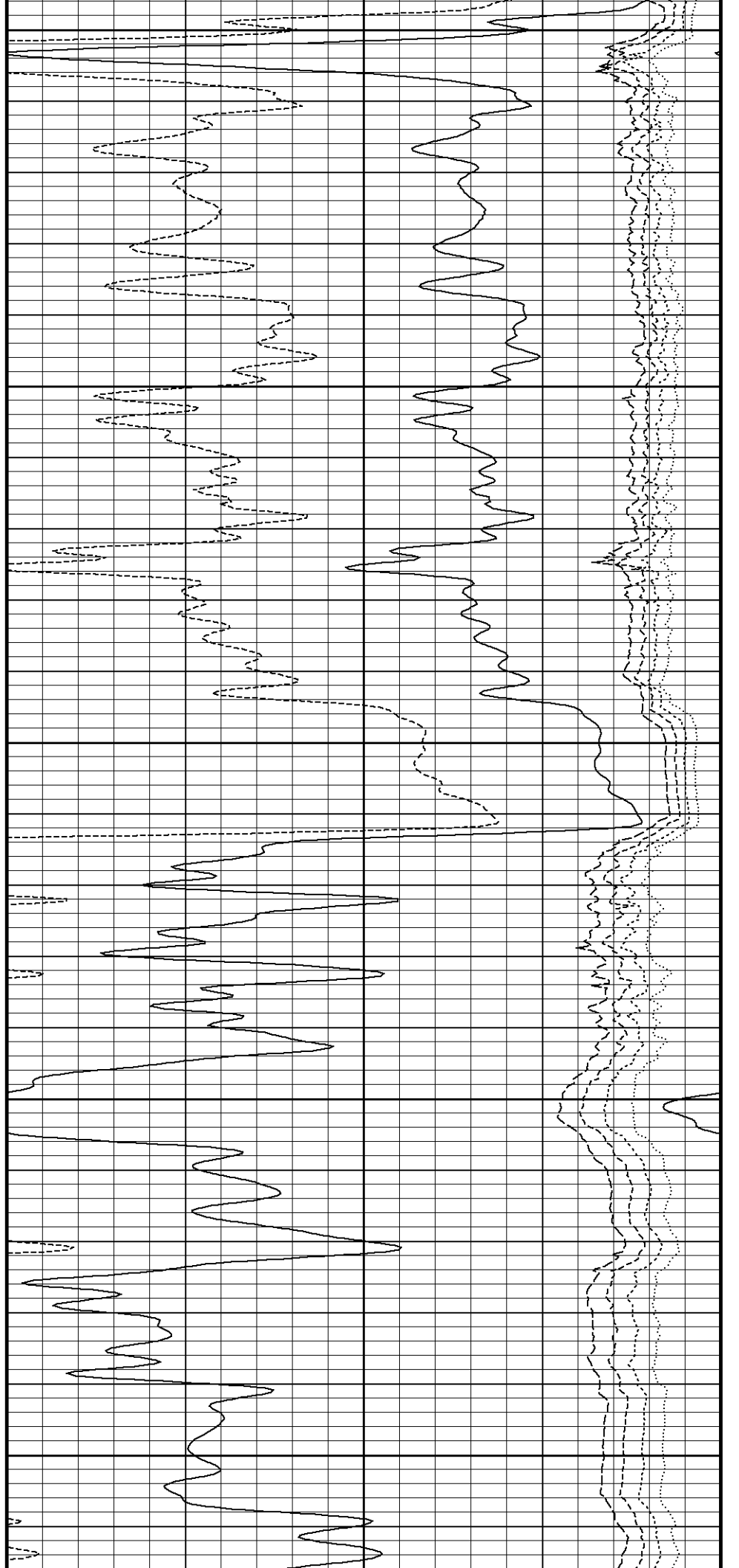
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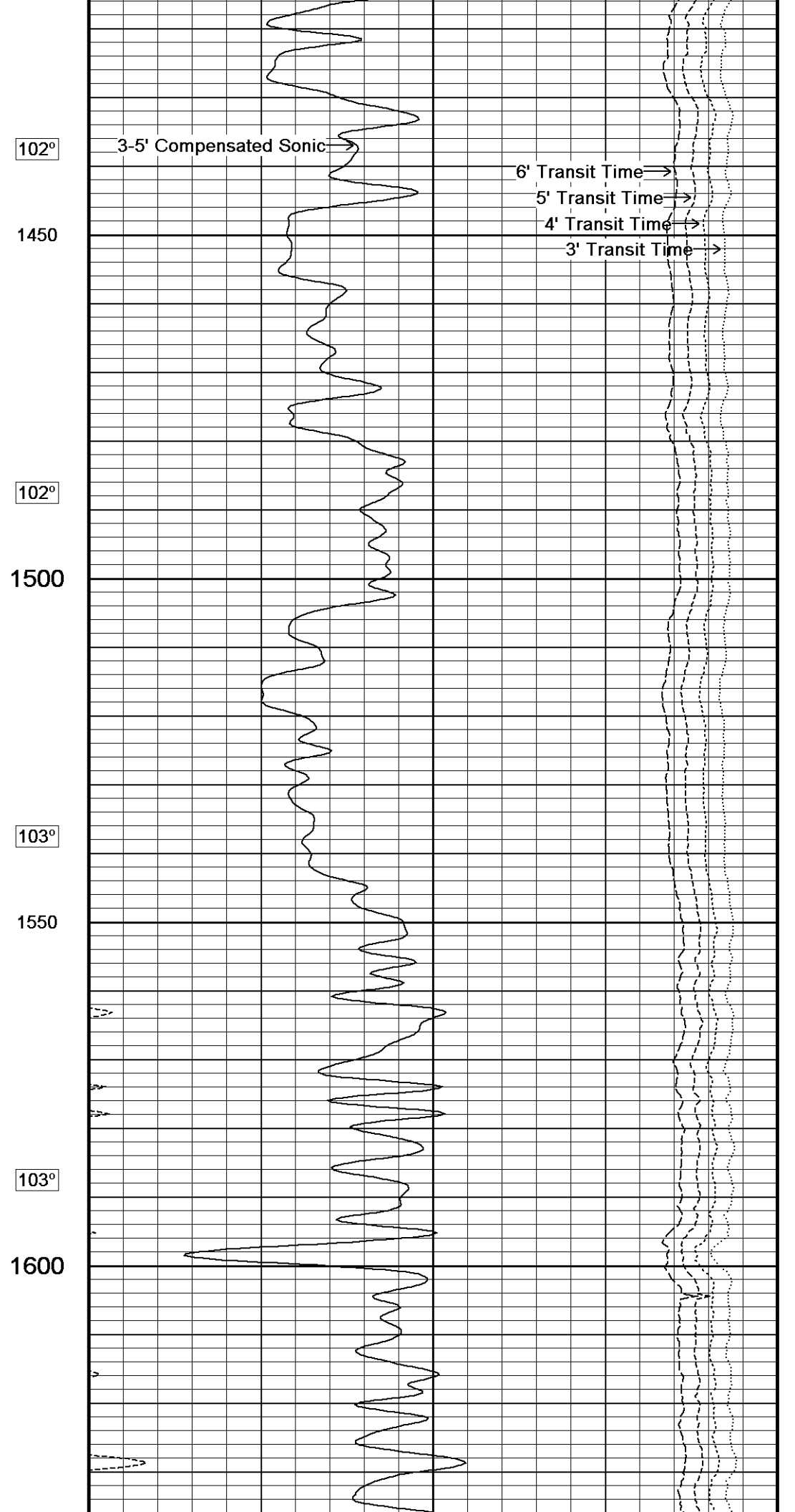
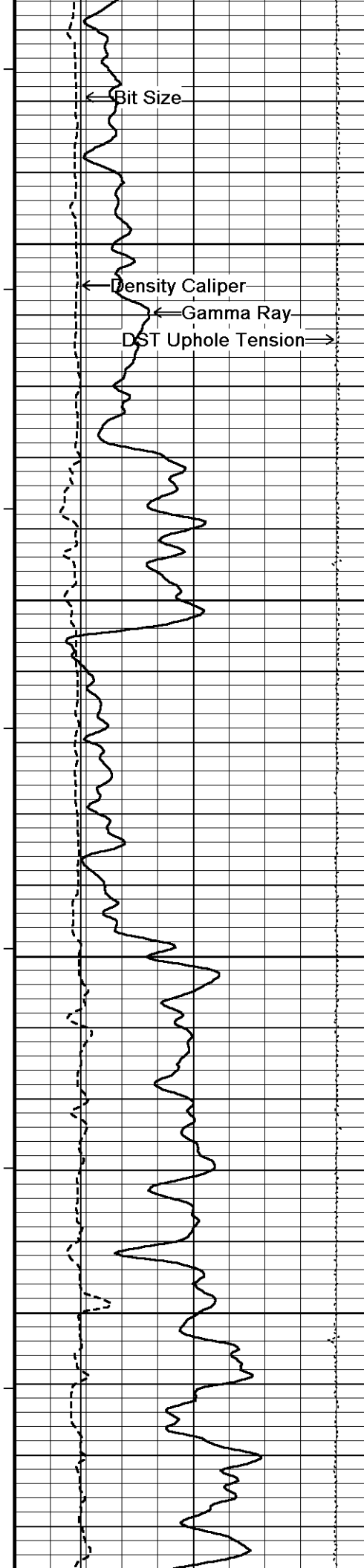
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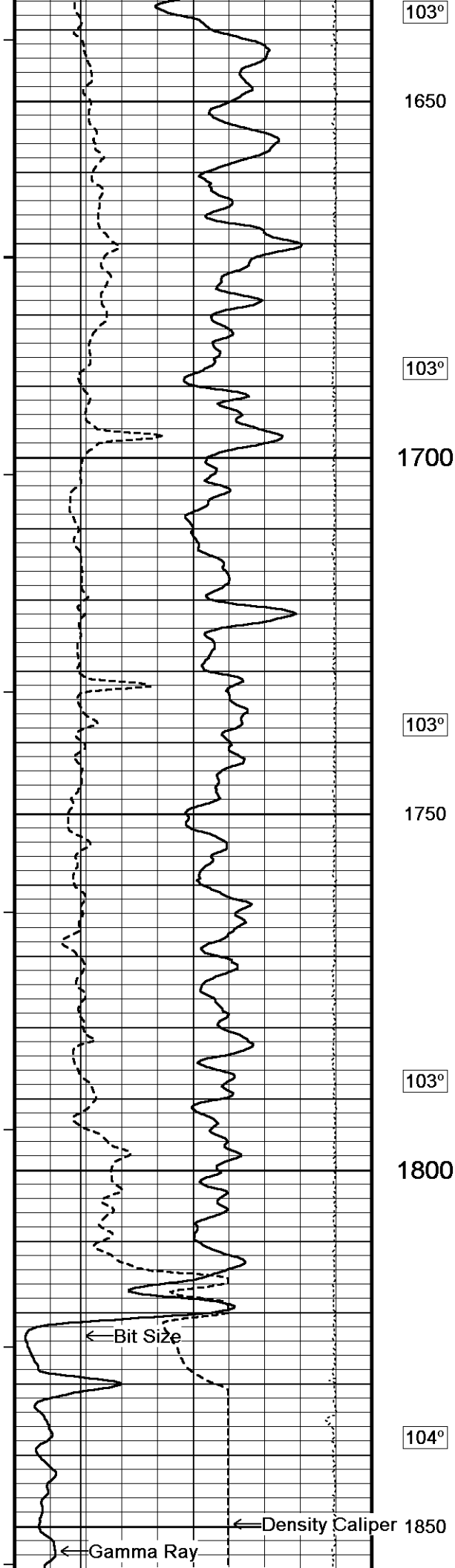
1350

102°

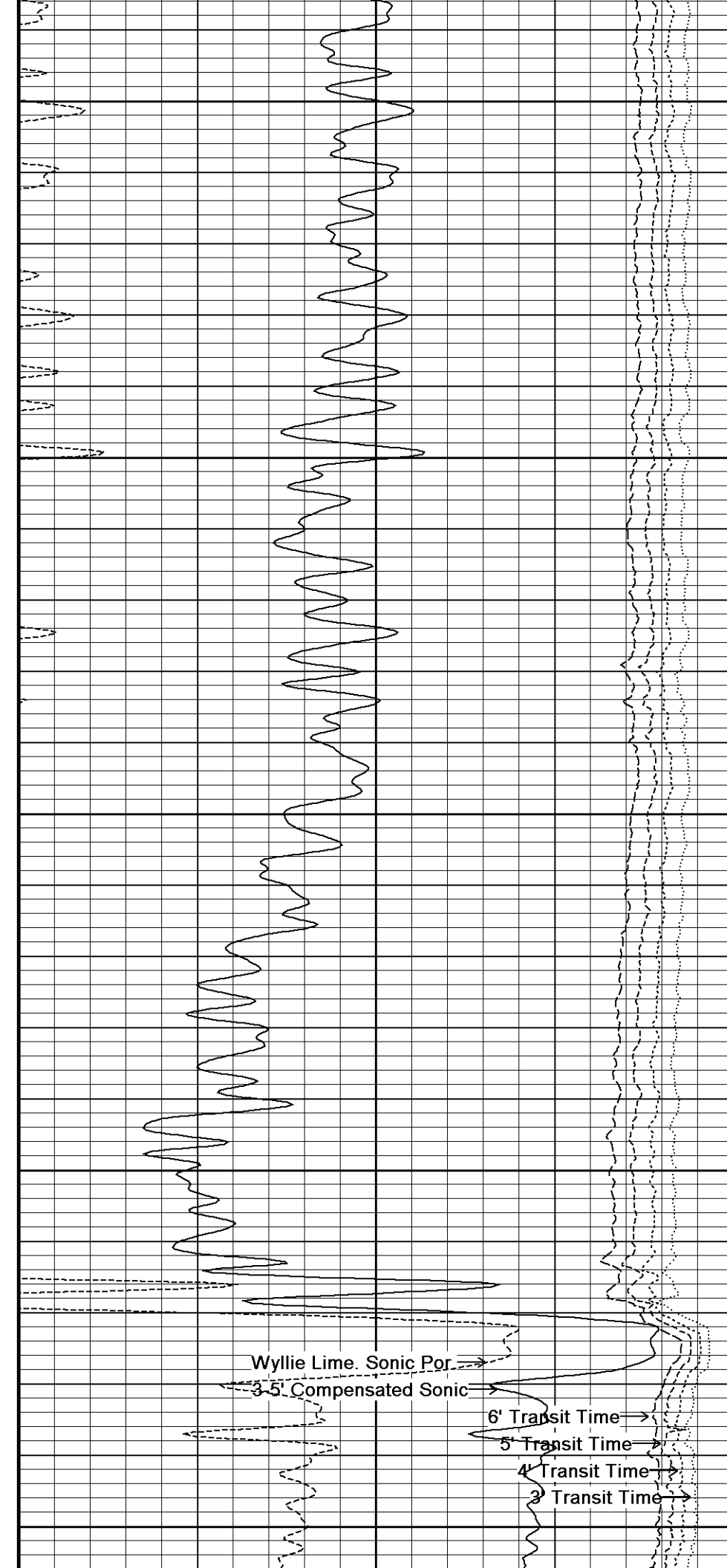
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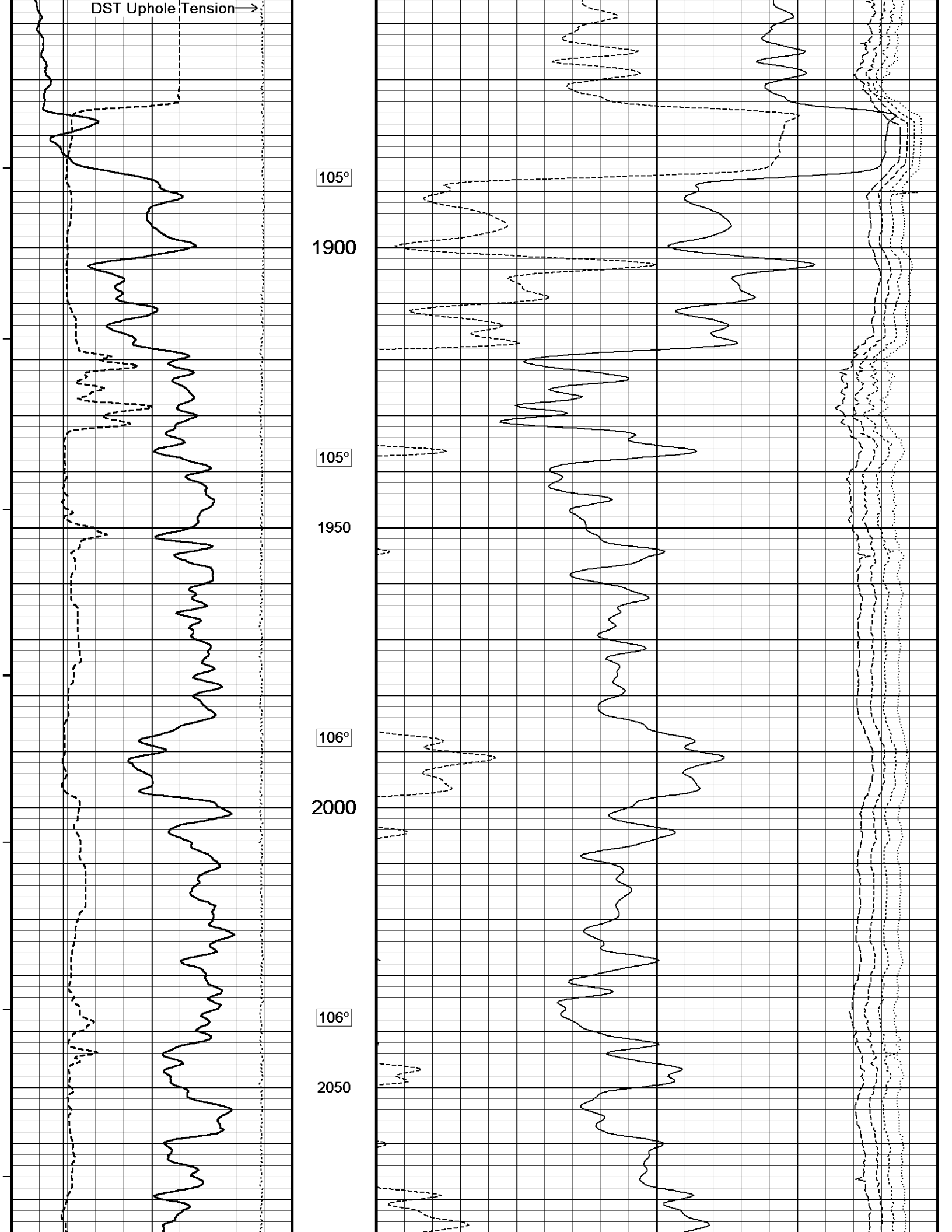


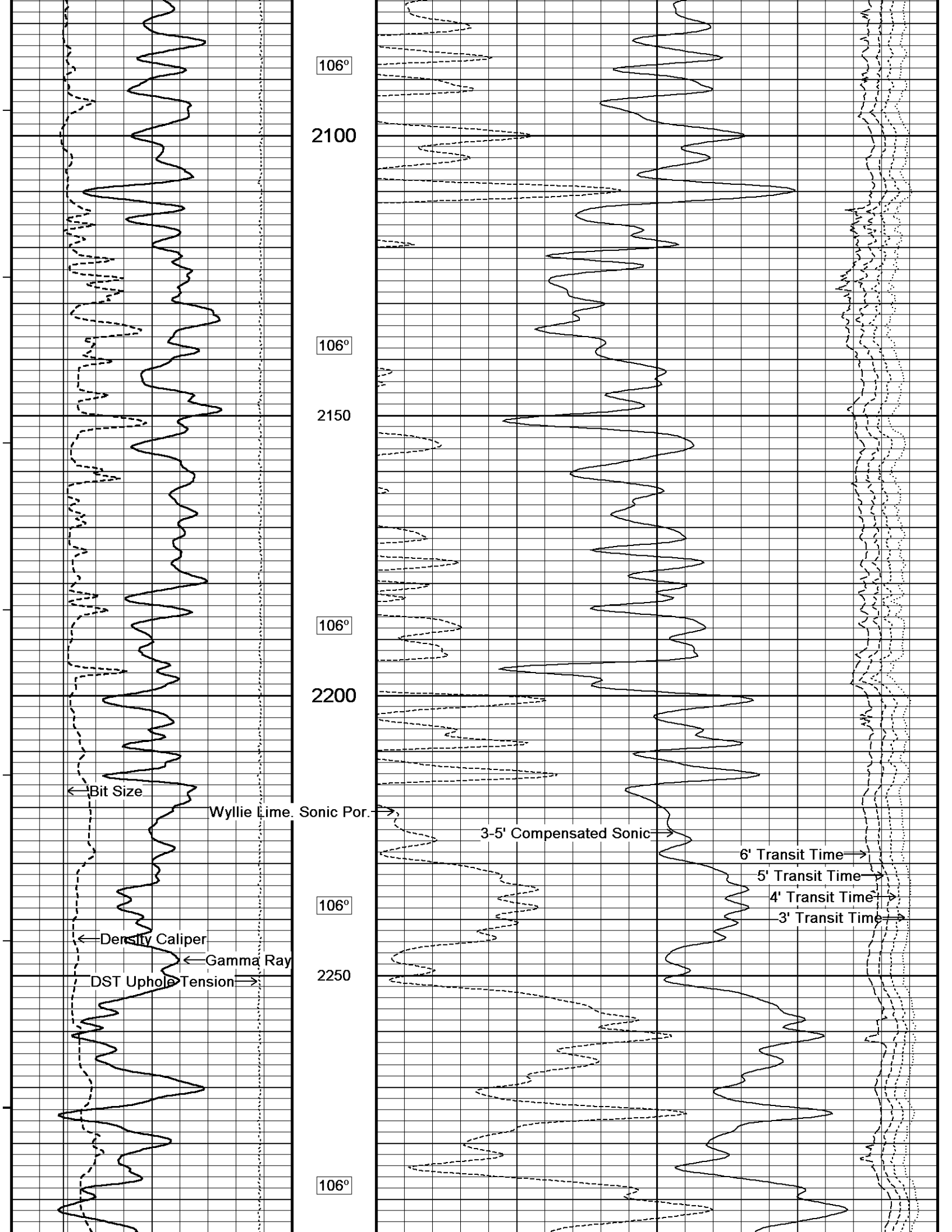
103°
1650
103°
1700
103°
1750
103°
1800
104°

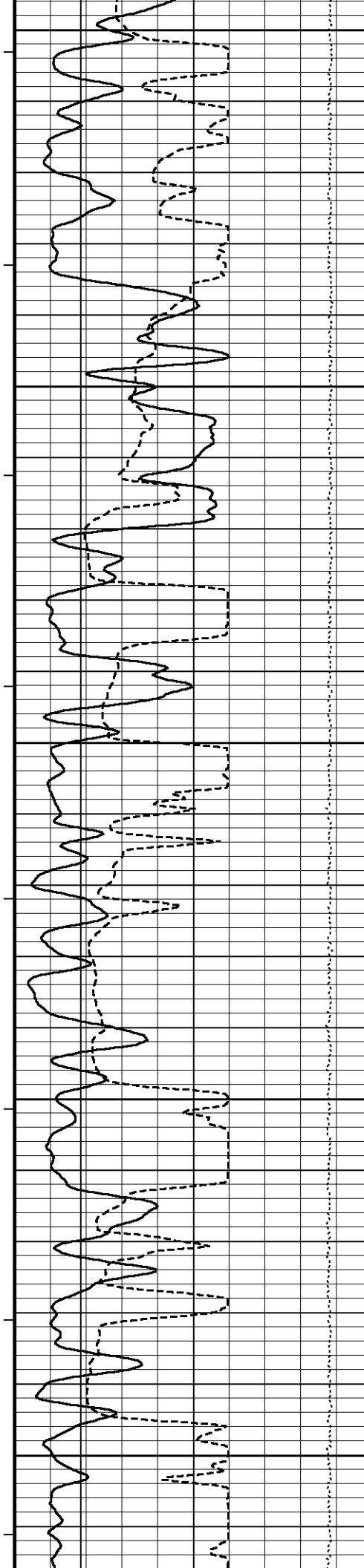


Wyllie Lime Sonic Por. →
3-5' Compensated Sonic →
6' Transit Time →
5' Transit Time →
4' Transit Time →
3' Transit Time →

DST Uphole Tension →







2300

106°

2350

107°

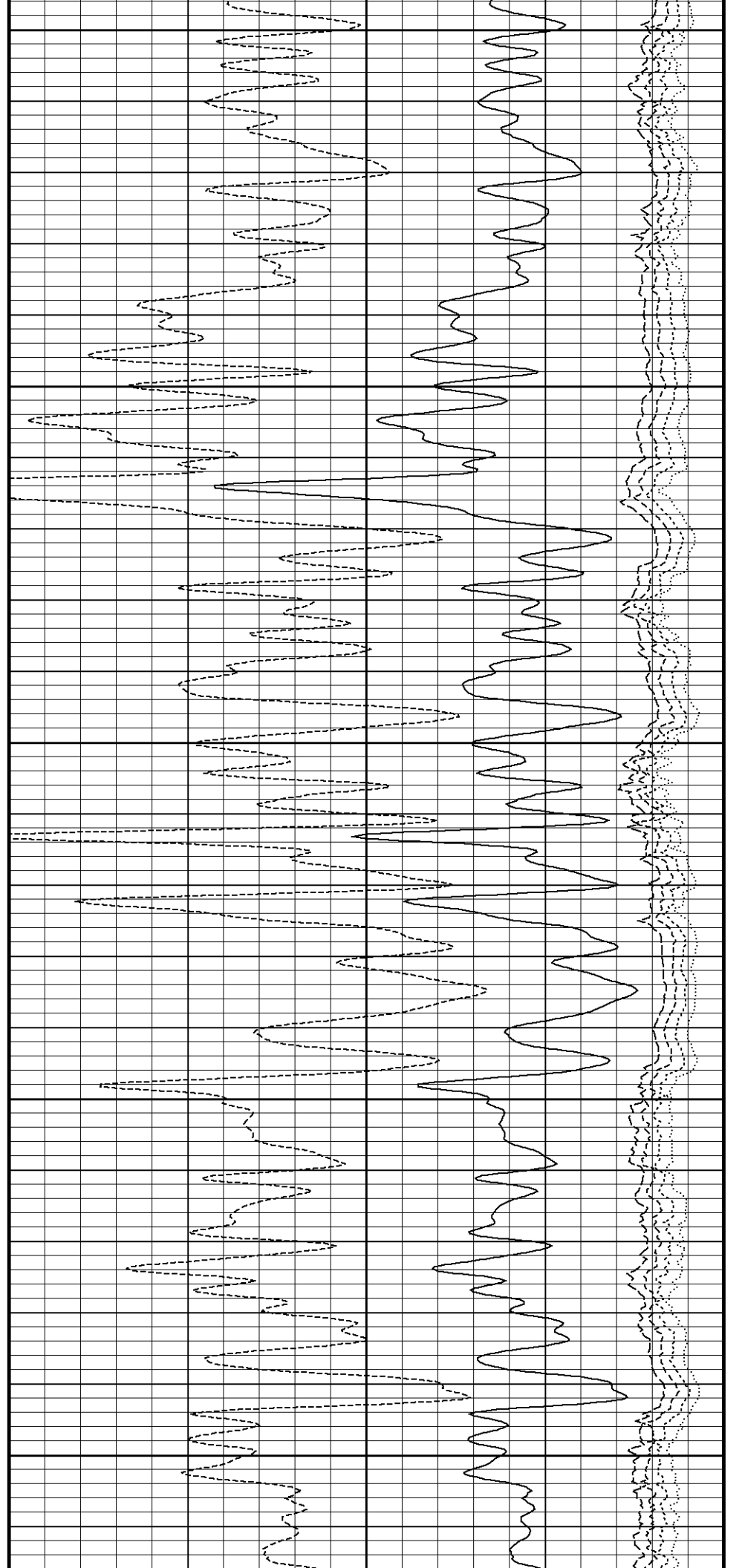
2400

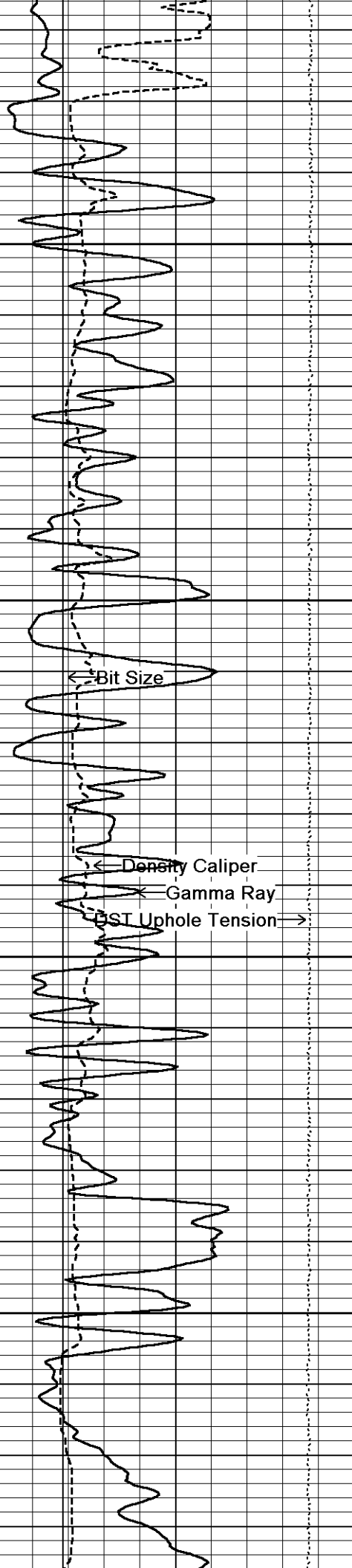
107°

2450

107°

2500





107°

2550

107°

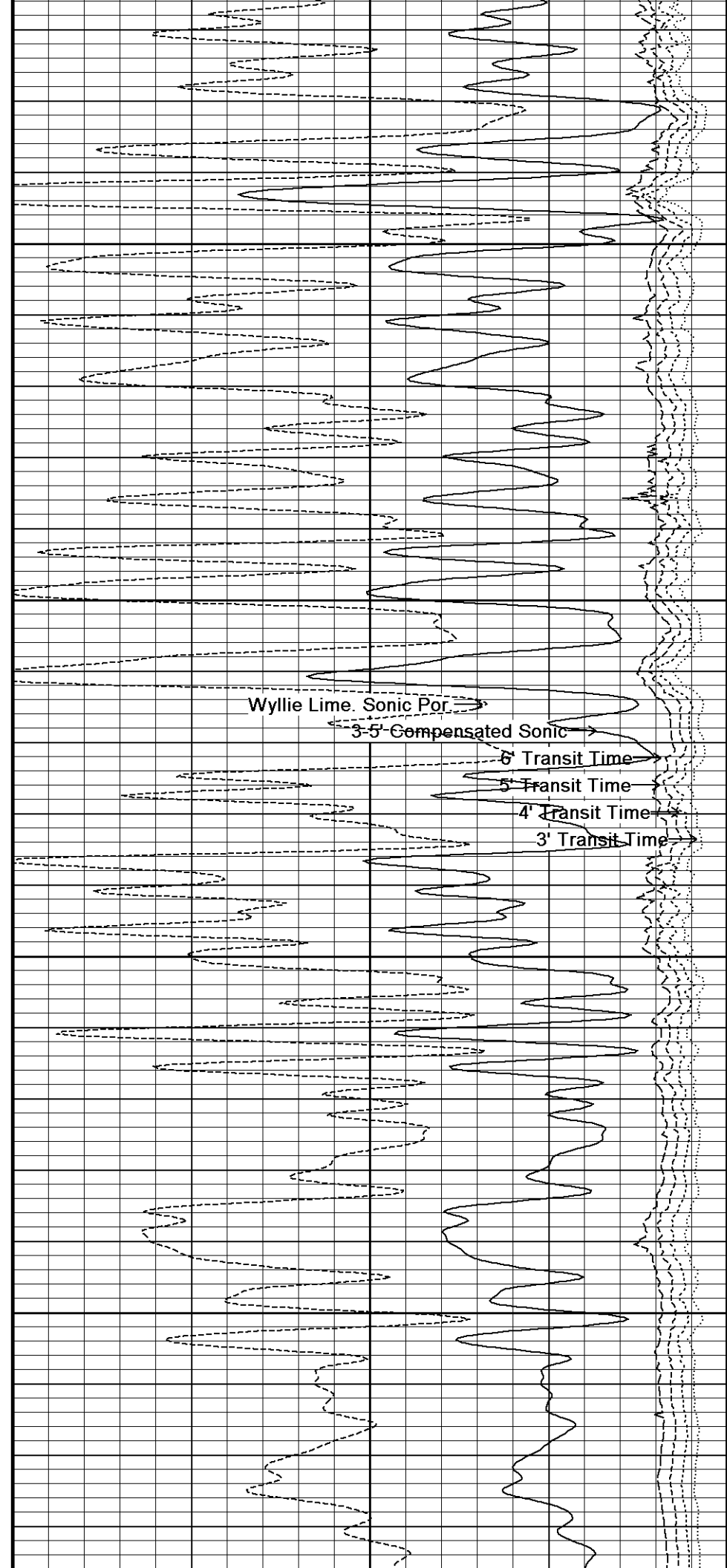
2600

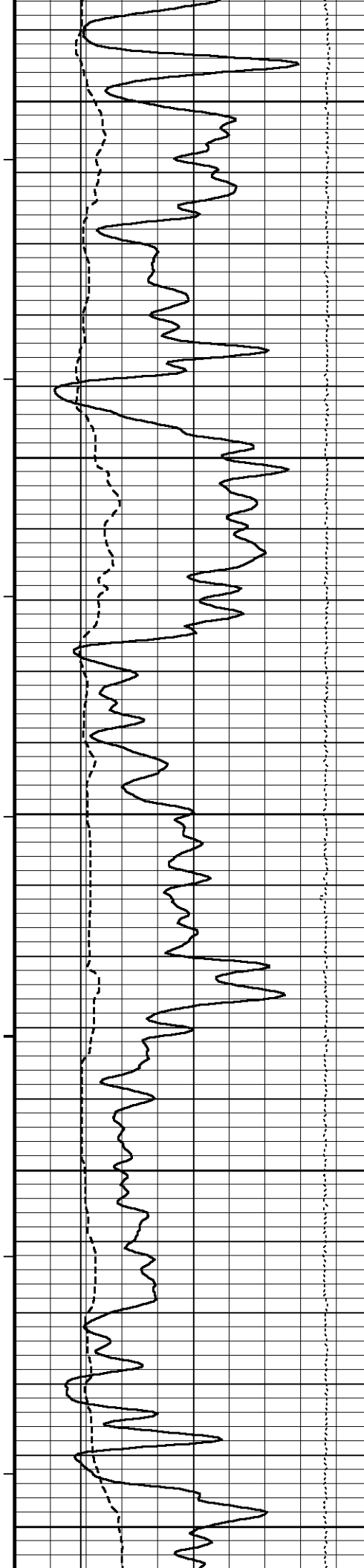
107°

2650

108°

2700





108°

2750

108°

2800

109°

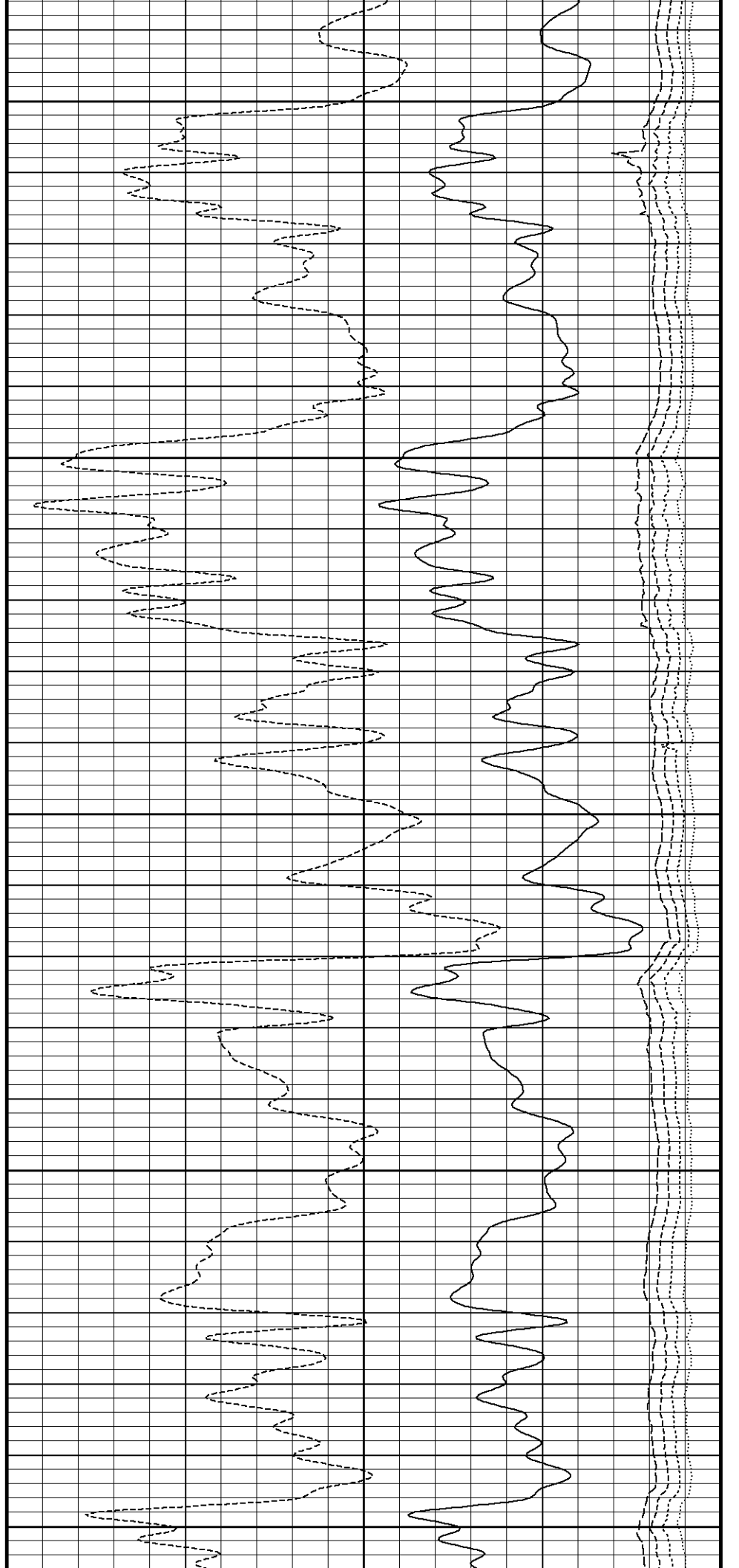
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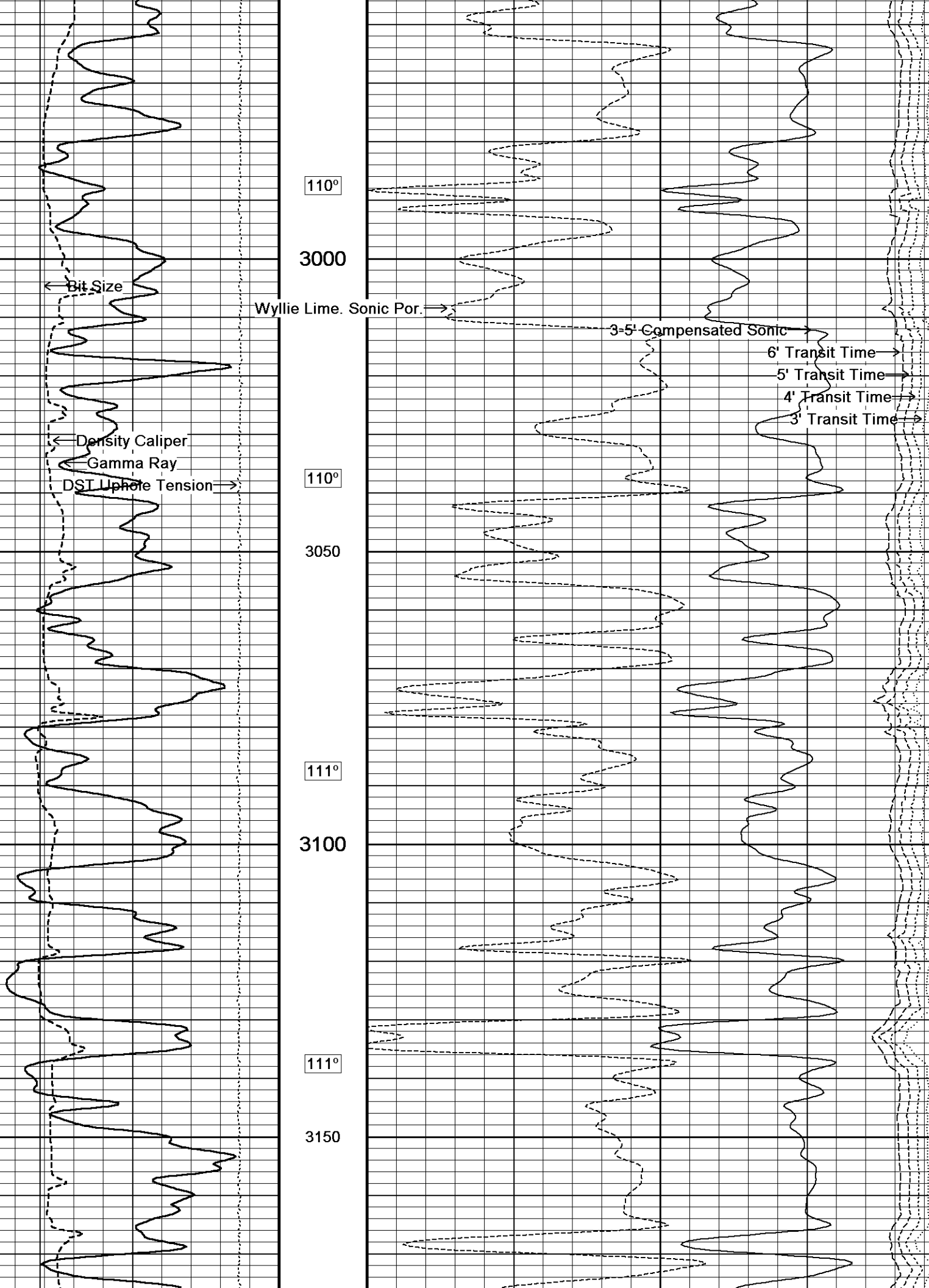
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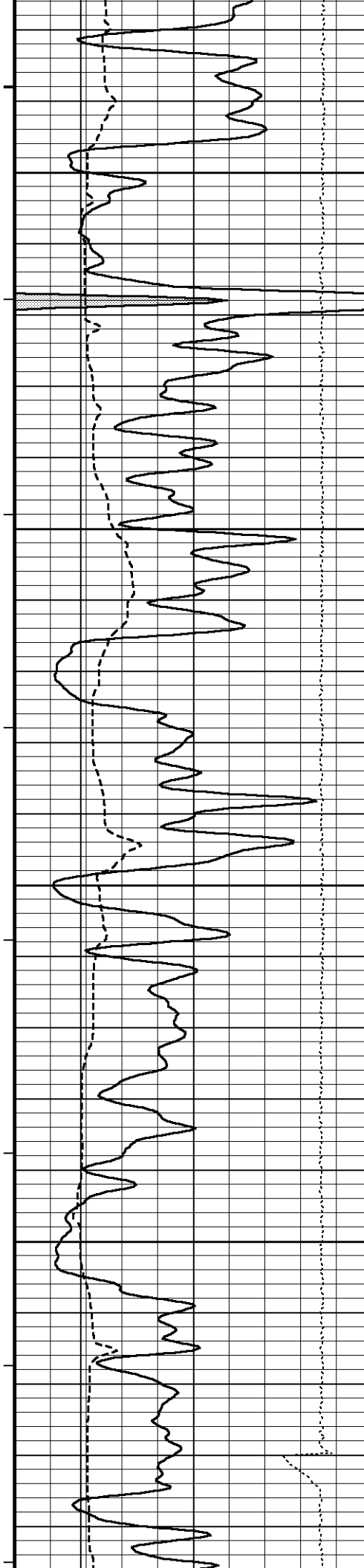
2900

110°

2950







111°

3200

112°

3250

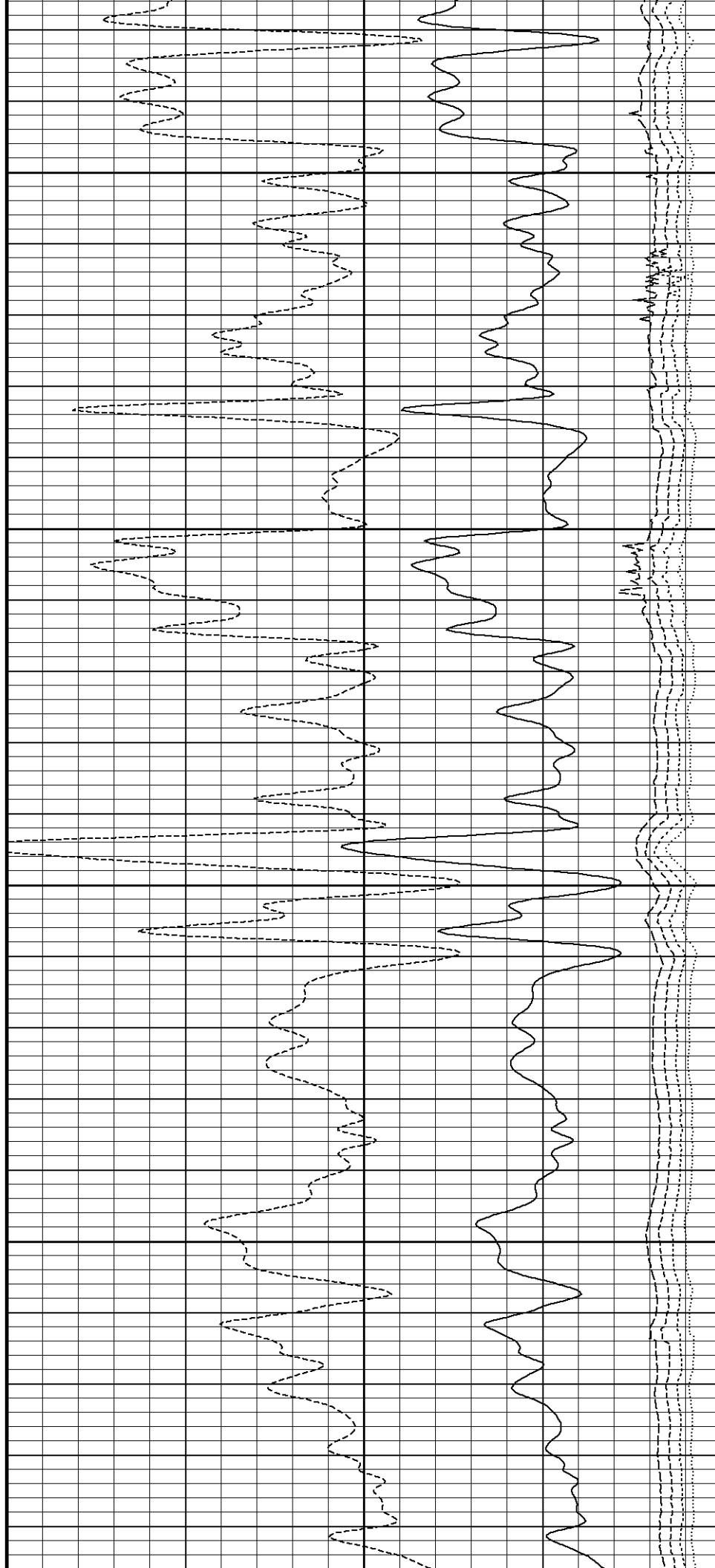
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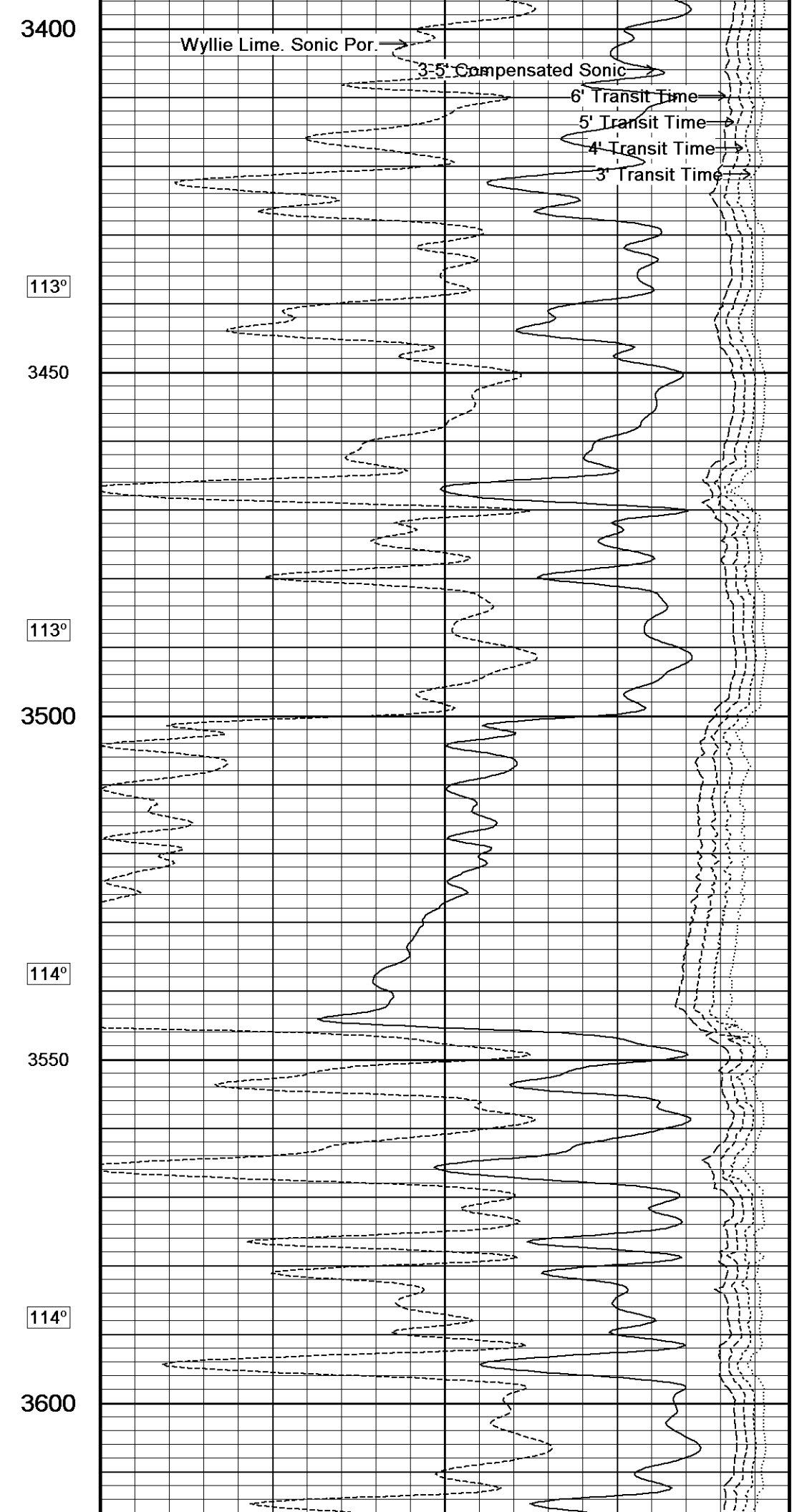
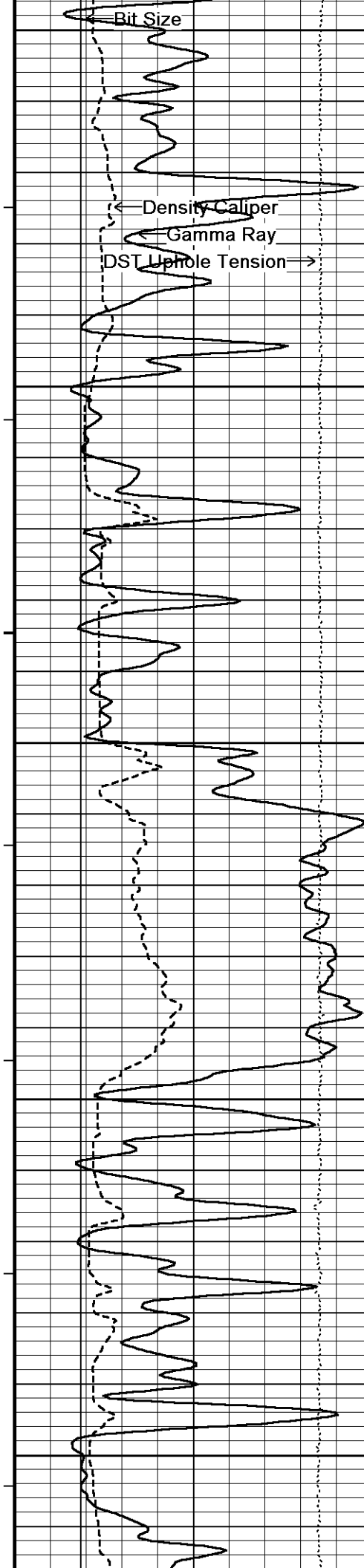
3300

112°

3350

112°





114°

3650

114°

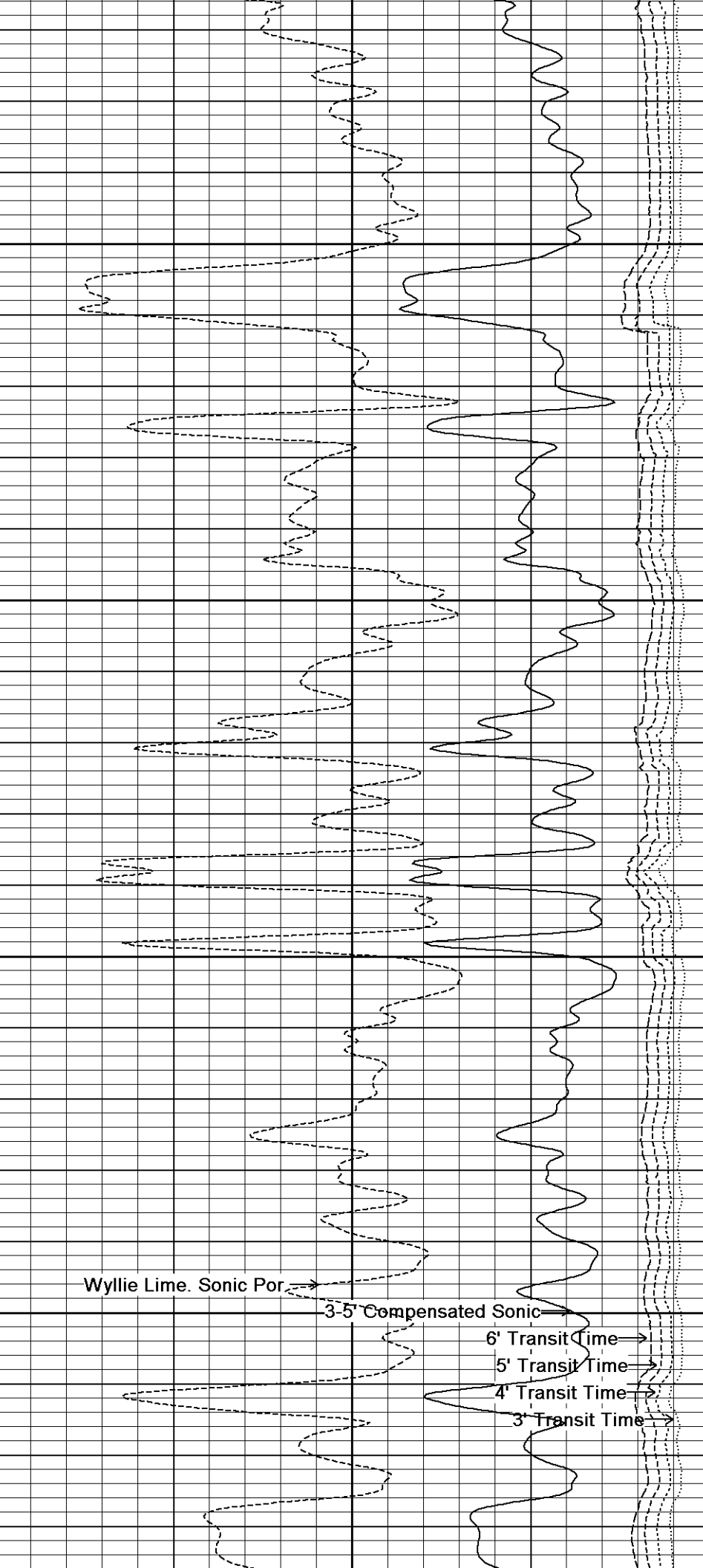
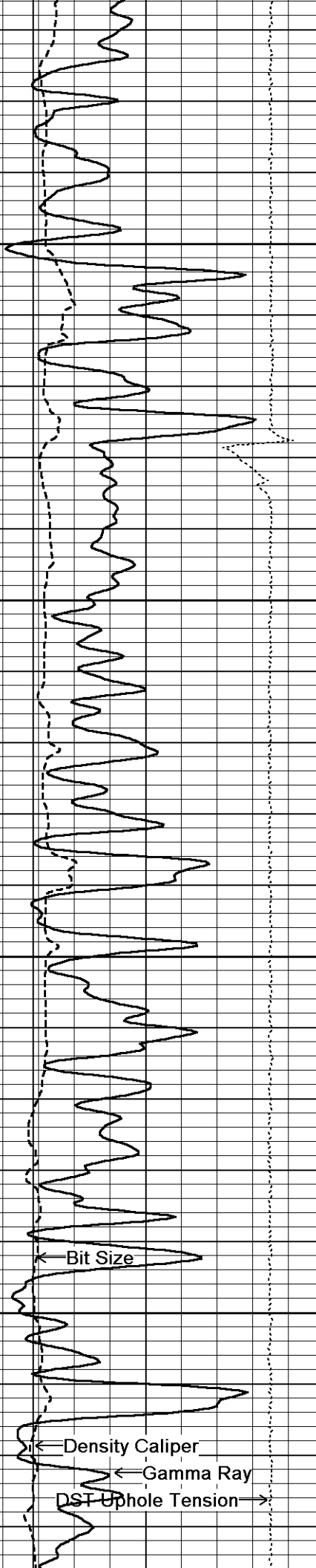
3700

115°

3750

115°

3800



← Bit Size

← Density Caliper

← Gamma Ray

DST Uphole Tension →

Wyllie Lime. Sonic Por. →

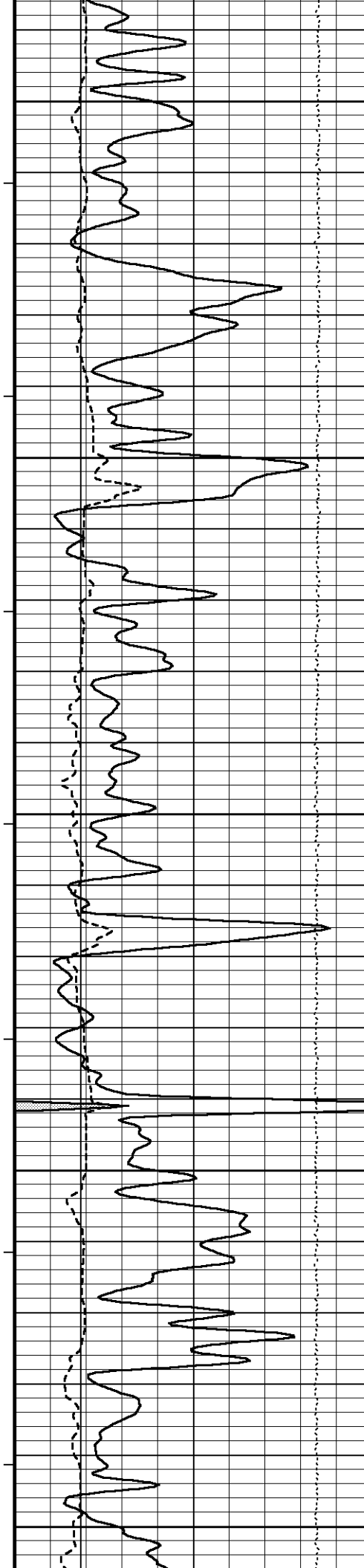
3-5' Compensated Sonic →

6' Transit Time →

5' Transit Time →

4' Transit Time →

3' Transit Time →



115°

3850

115°

3900

116°

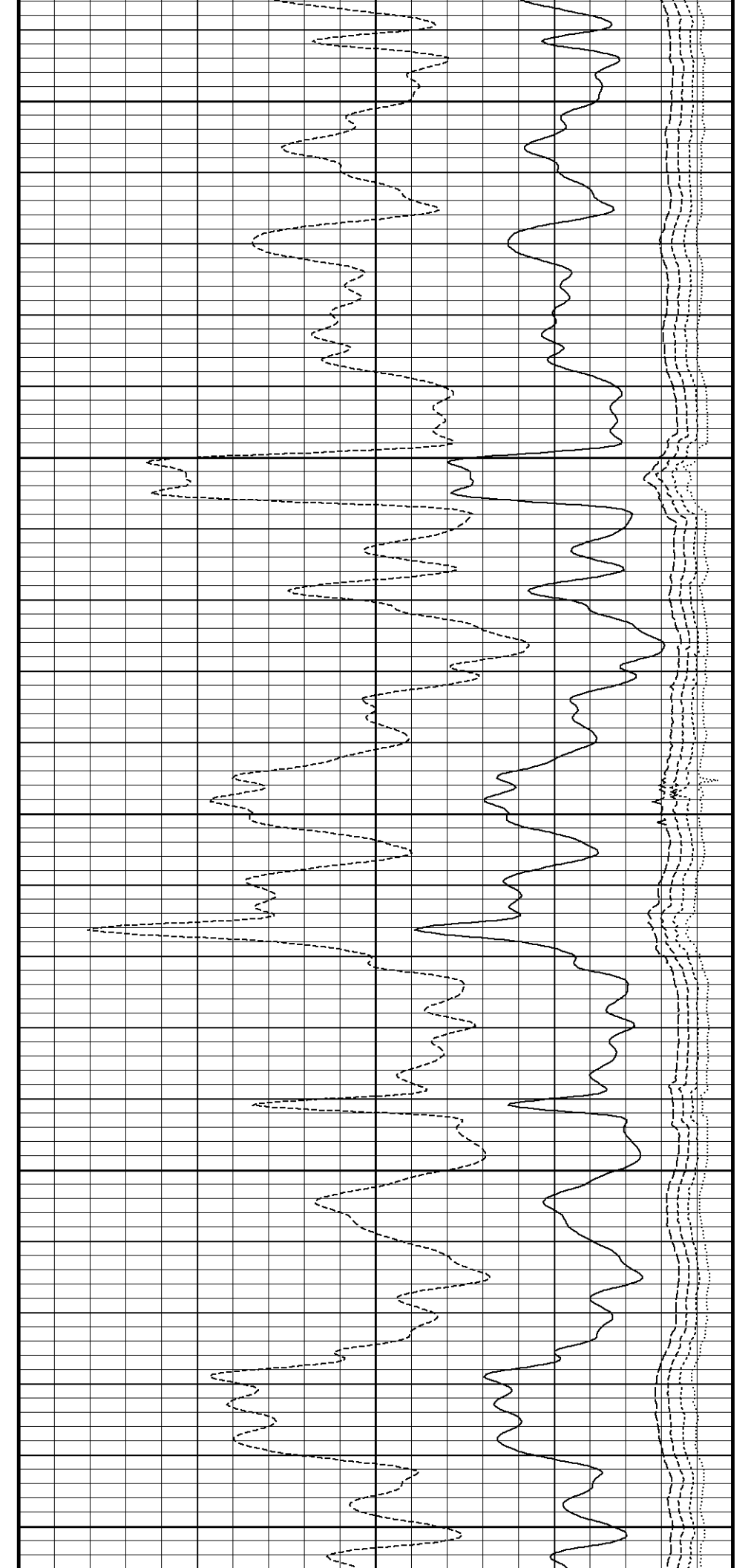
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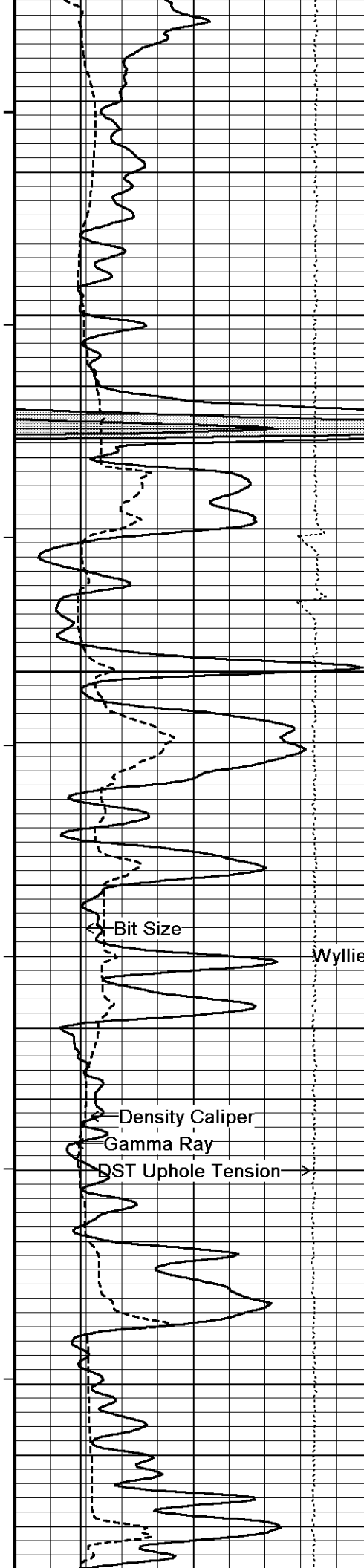
116°

4000

116°

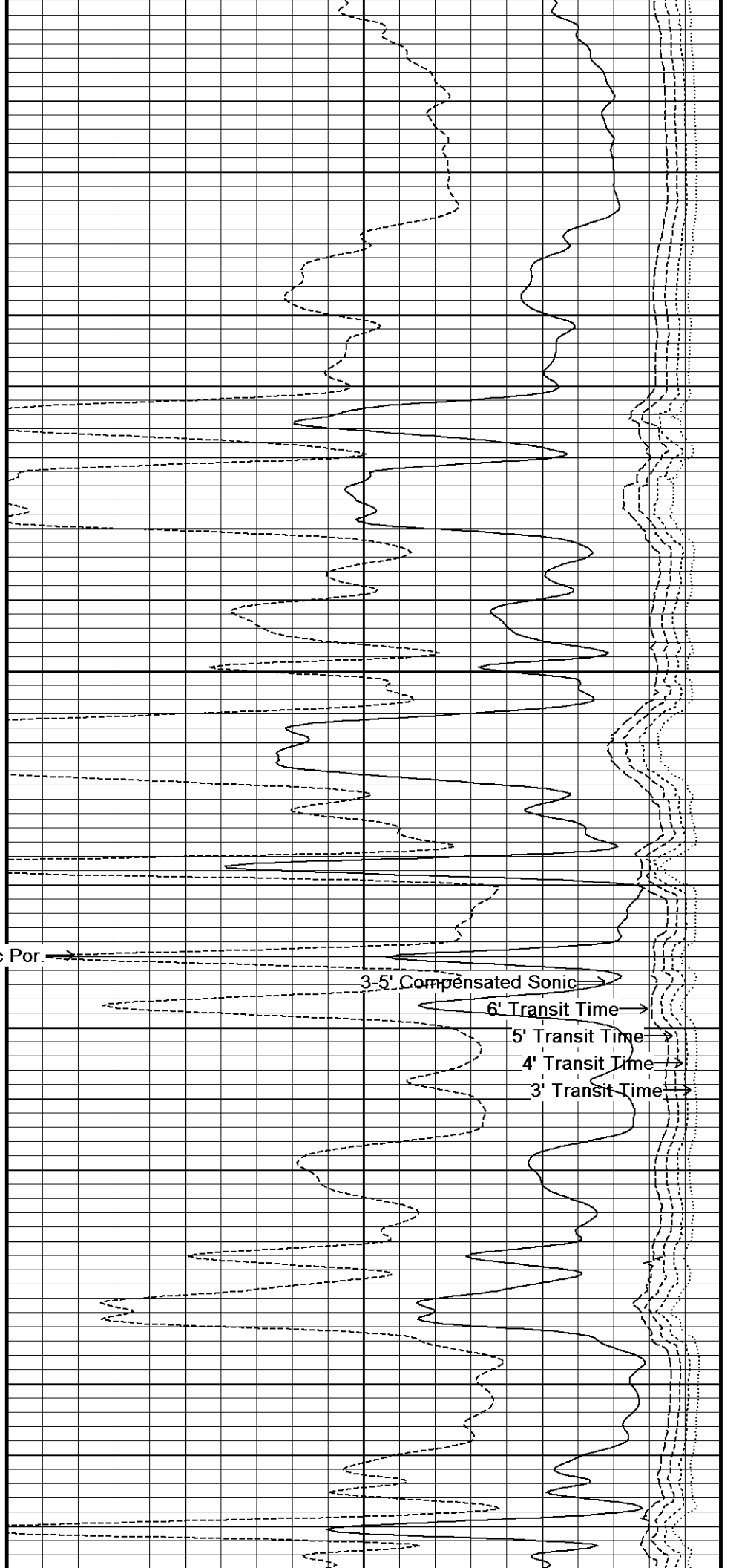
4050

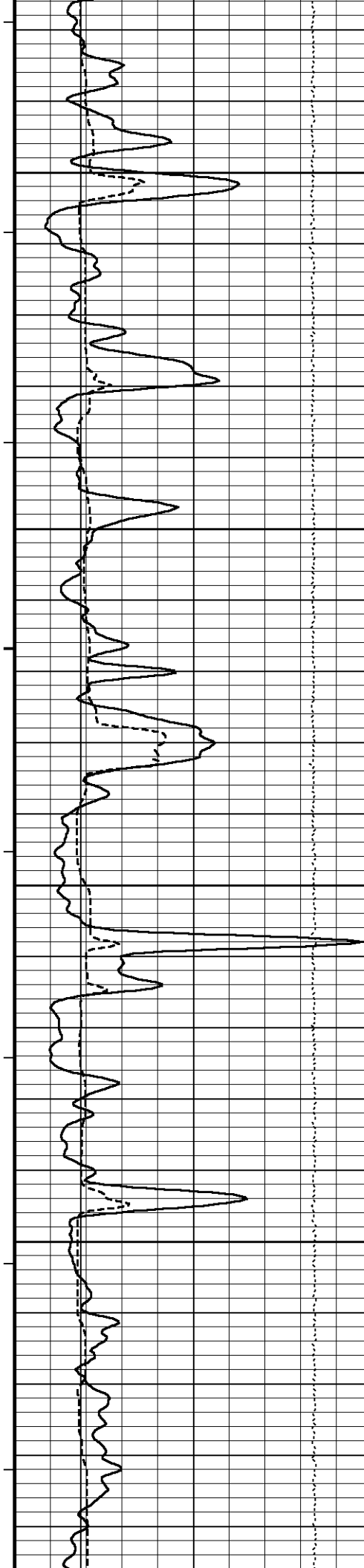




117°
4100
117°
4150
117°
4200
117°
4250

Wyllie Lime. Sonic Por. →





118°

4300

118°

4350

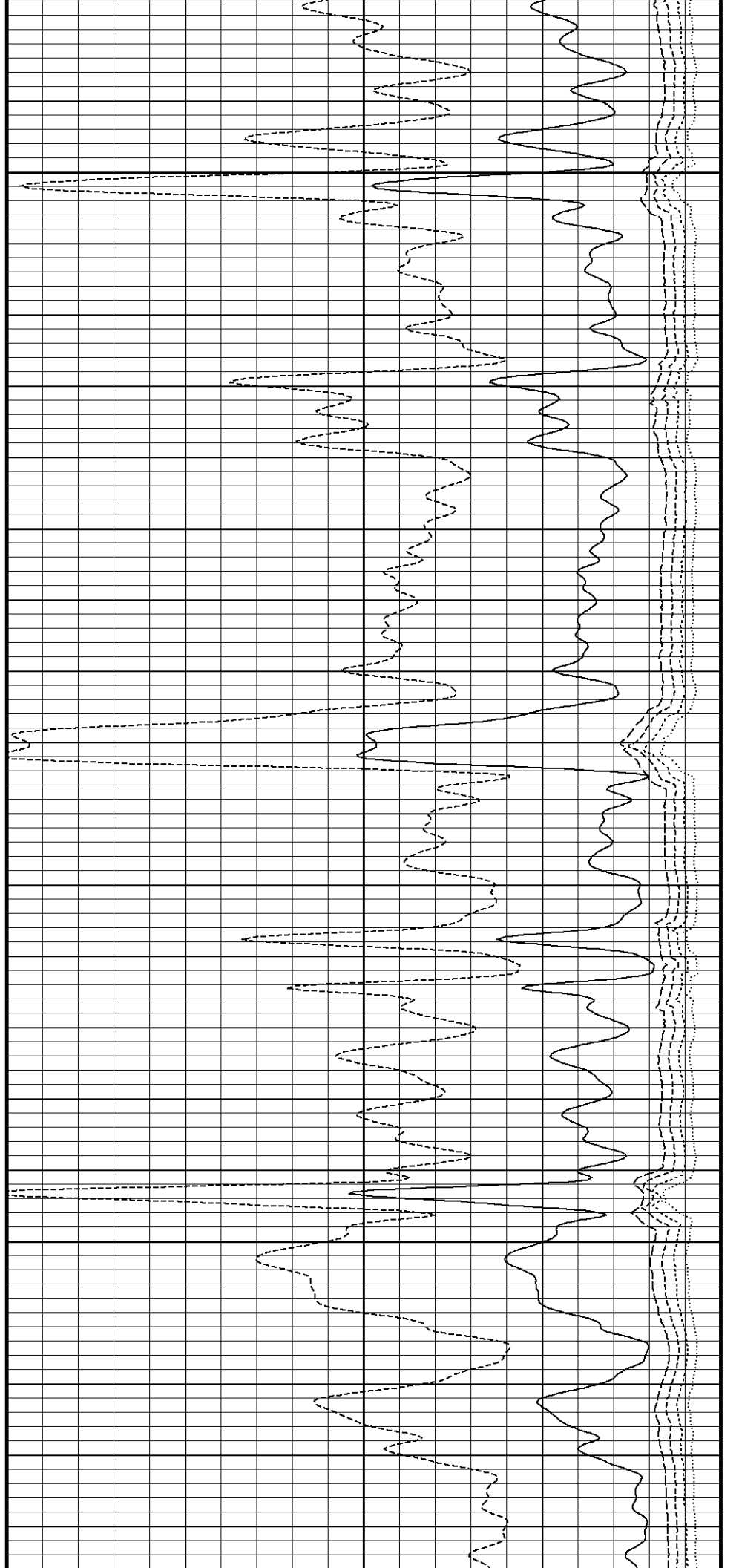
118°

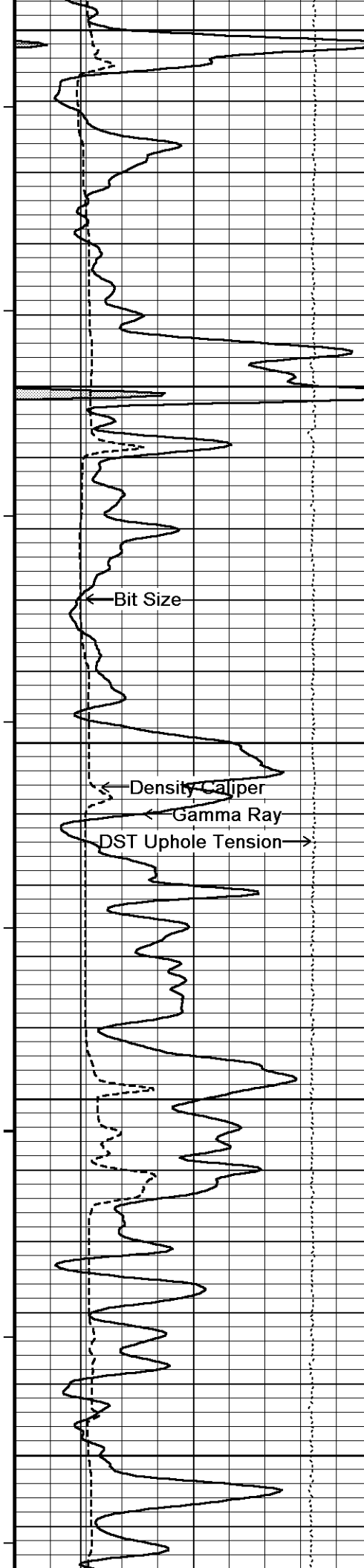
4400

119°

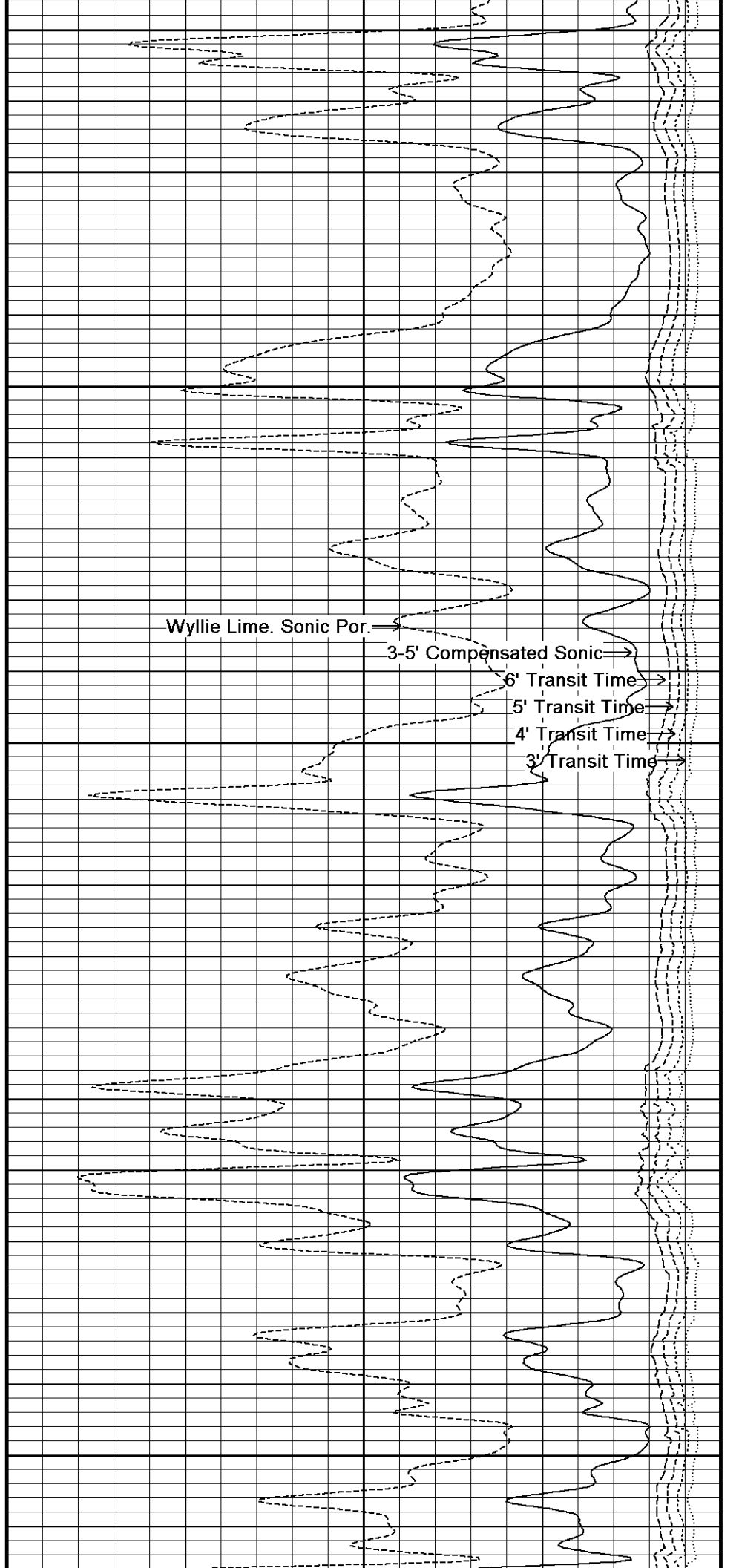
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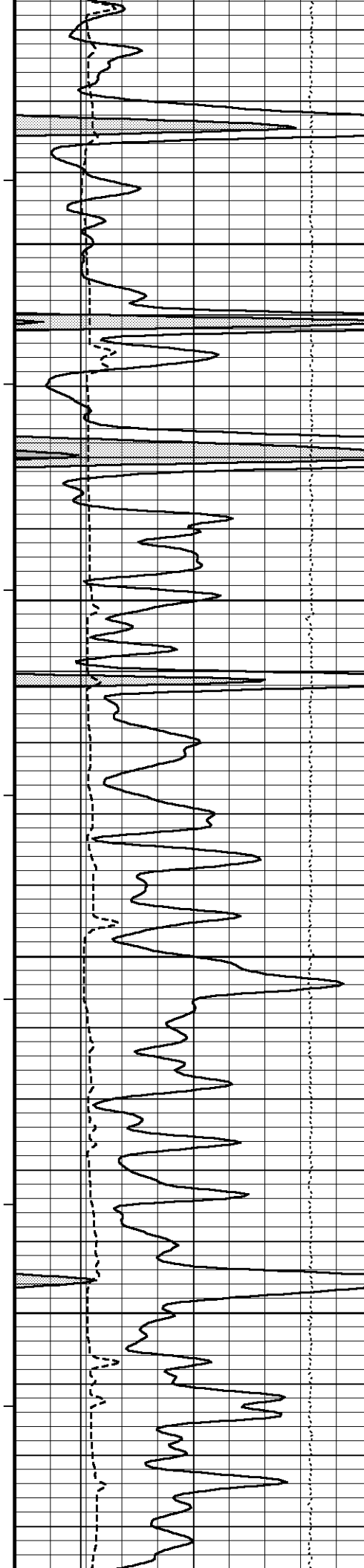
119°





4500
119°
4550
119°
4600
120°
4650
120°
4700





120°

4750

121°

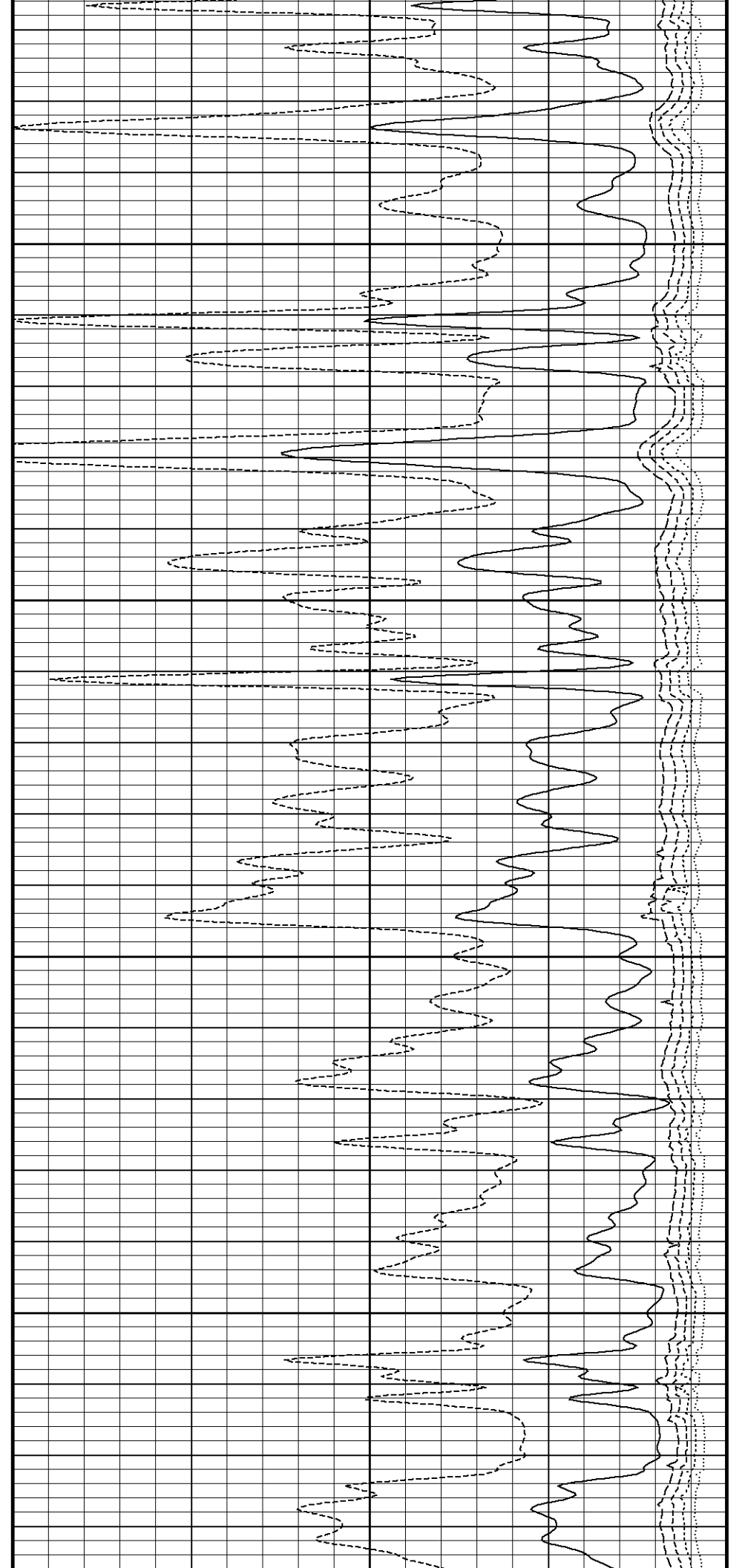
4800

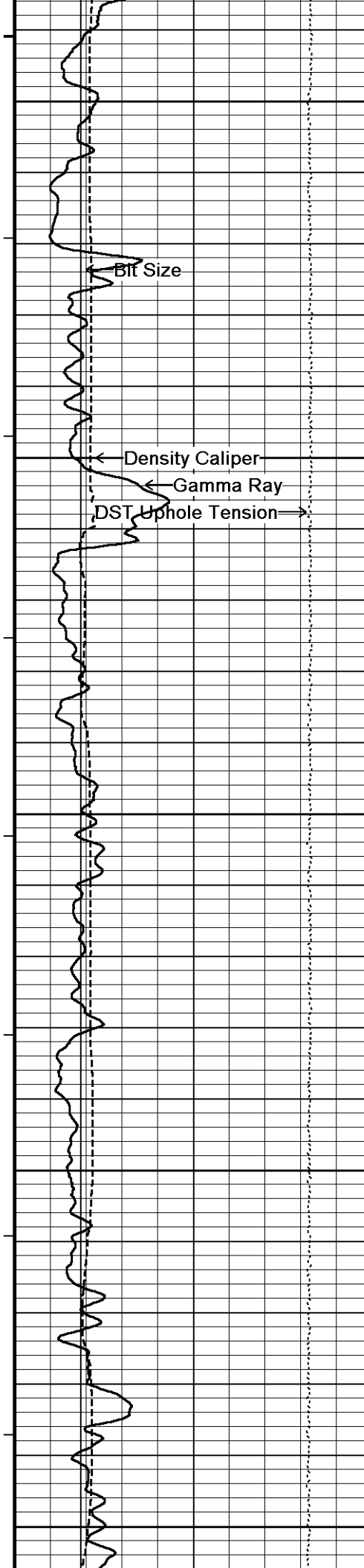
121°

4850

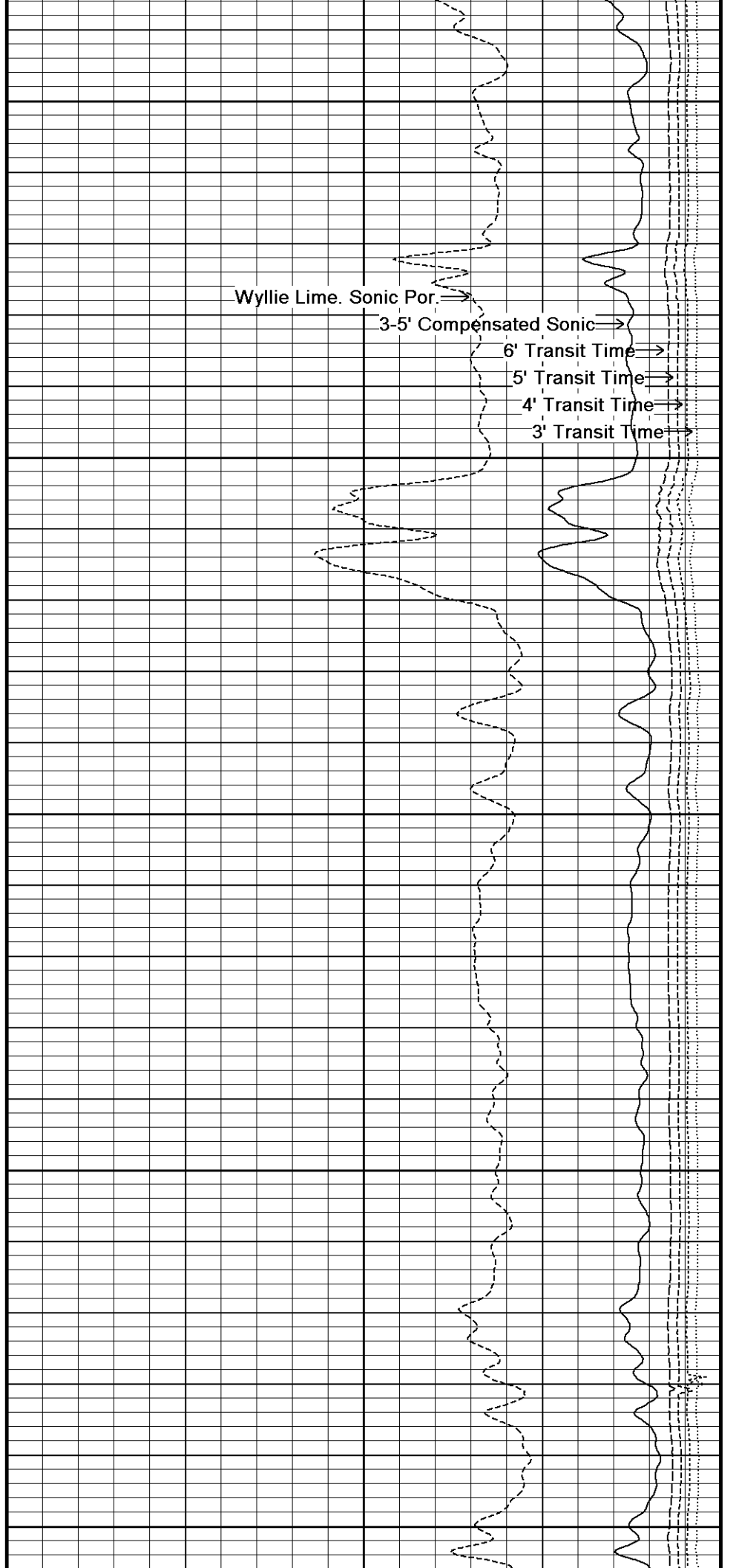
121°

4900

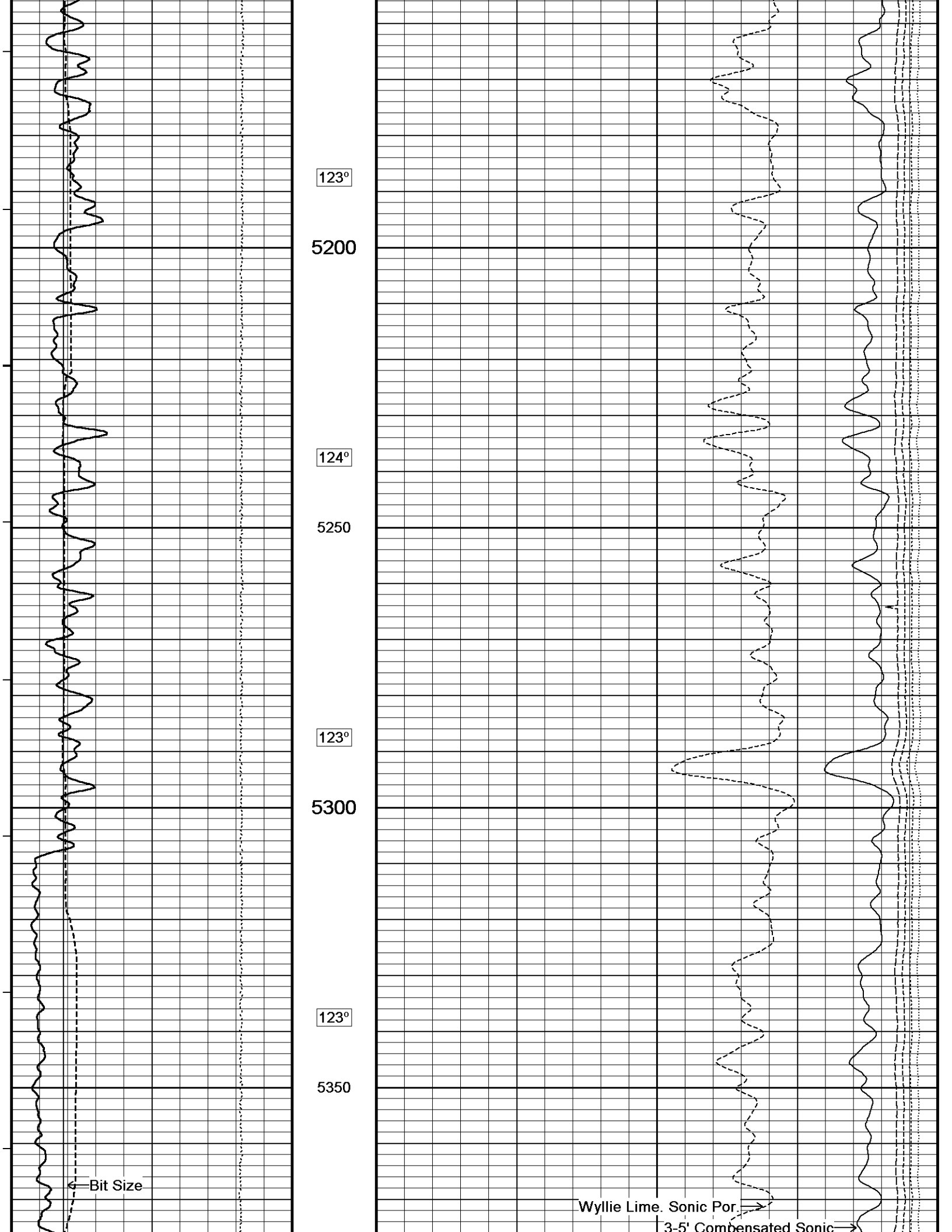


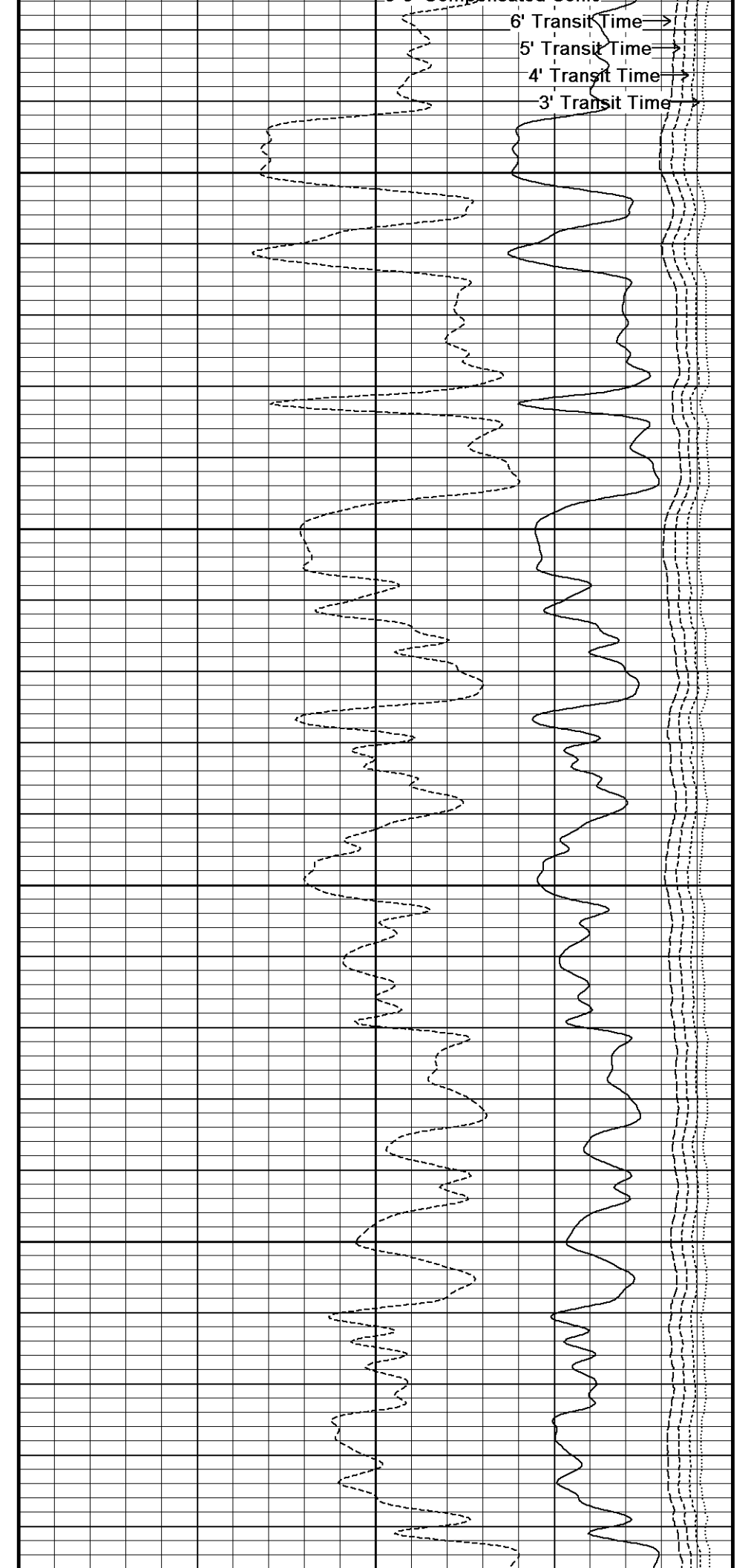
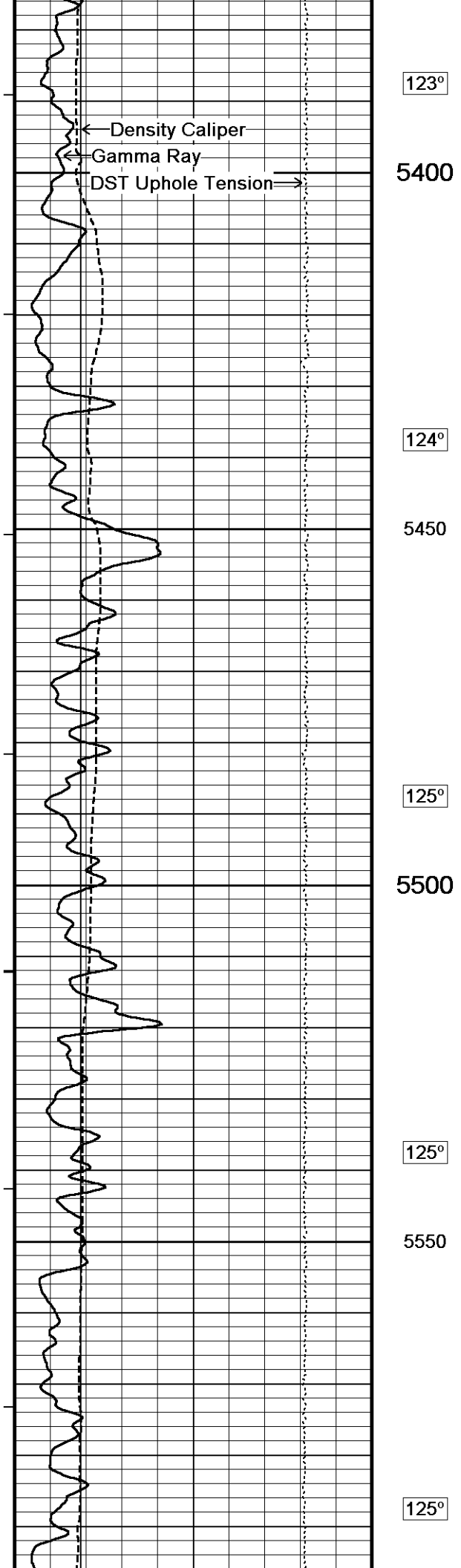


122°
4950
122°
5000
123°
5050
123°
5100
123°
5150



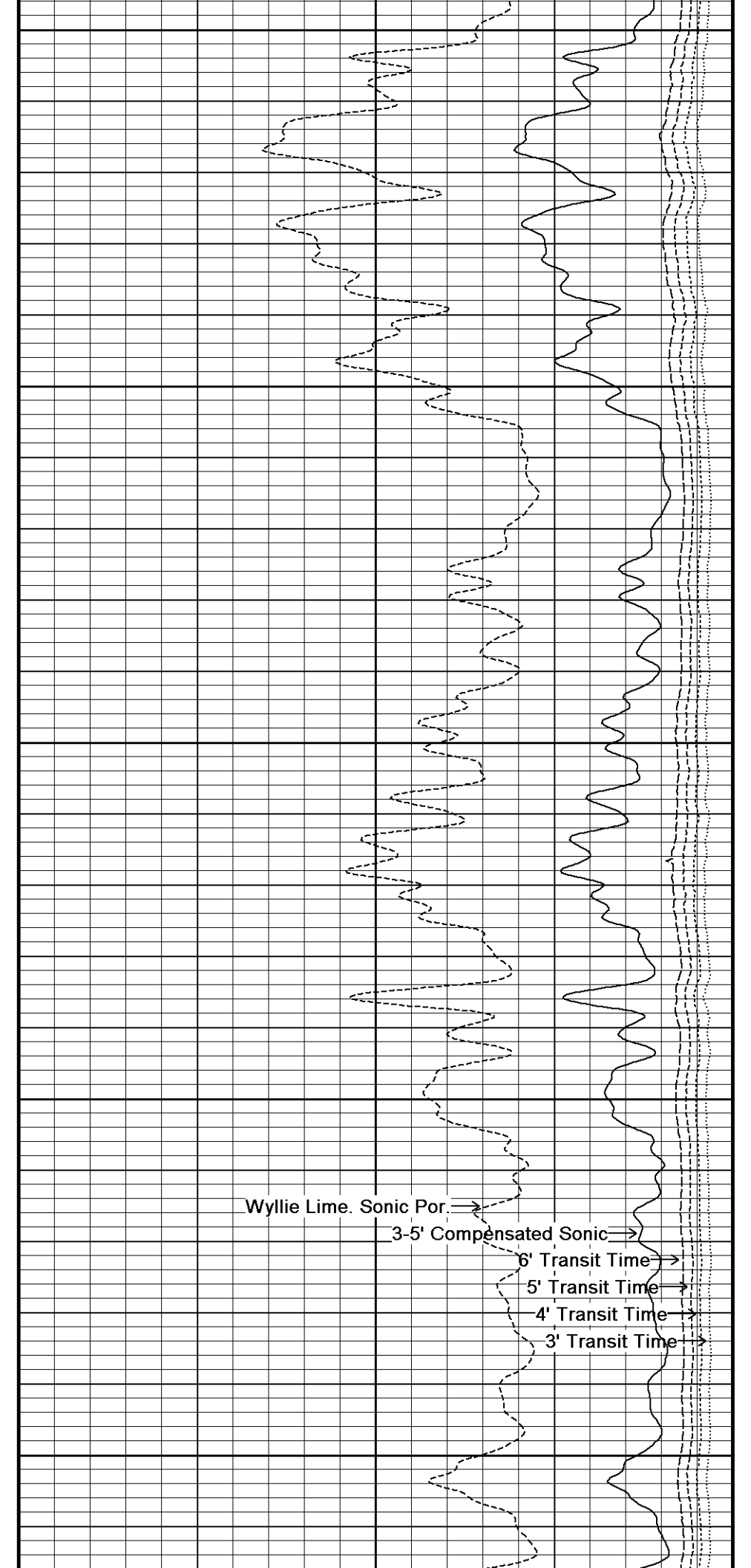
Wyllie Lime. Sonic Por. →
3-5' Compensated Sonic →
6' Transit Time →
5' Transit Time →
4' Transit Time →
3' Transit Time →

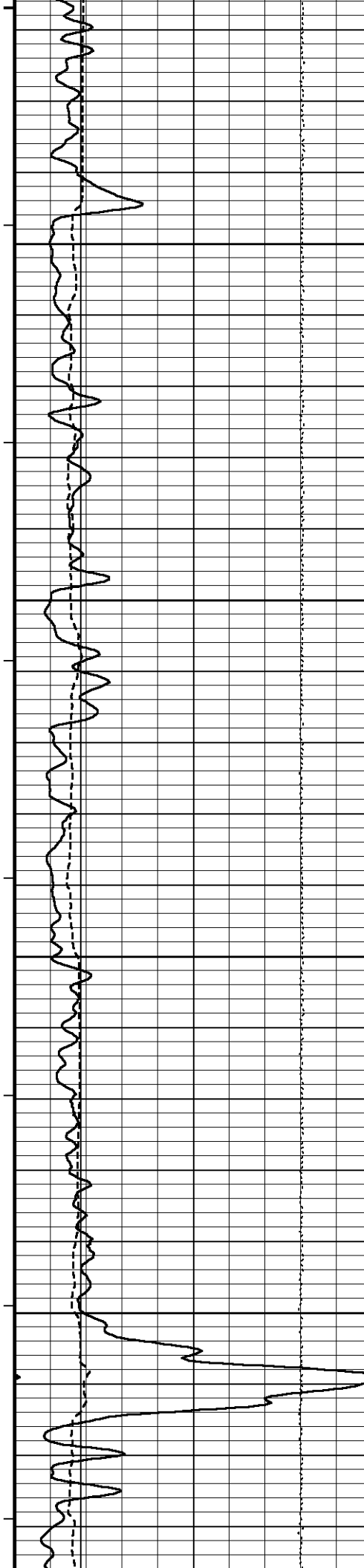






5600
125°
5650
126°
5700
126°
5750
127°
5800





127°

5850

127°

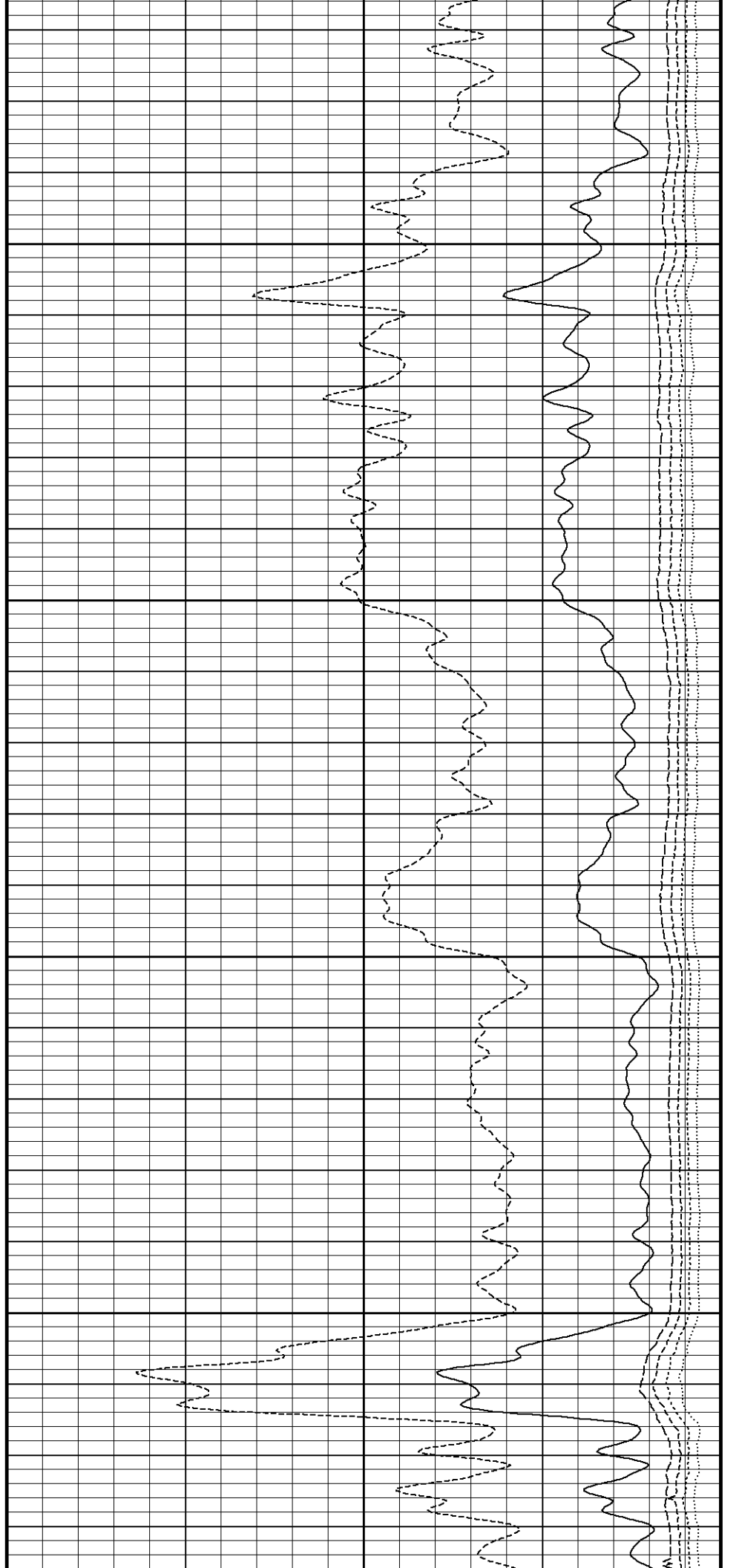
5900

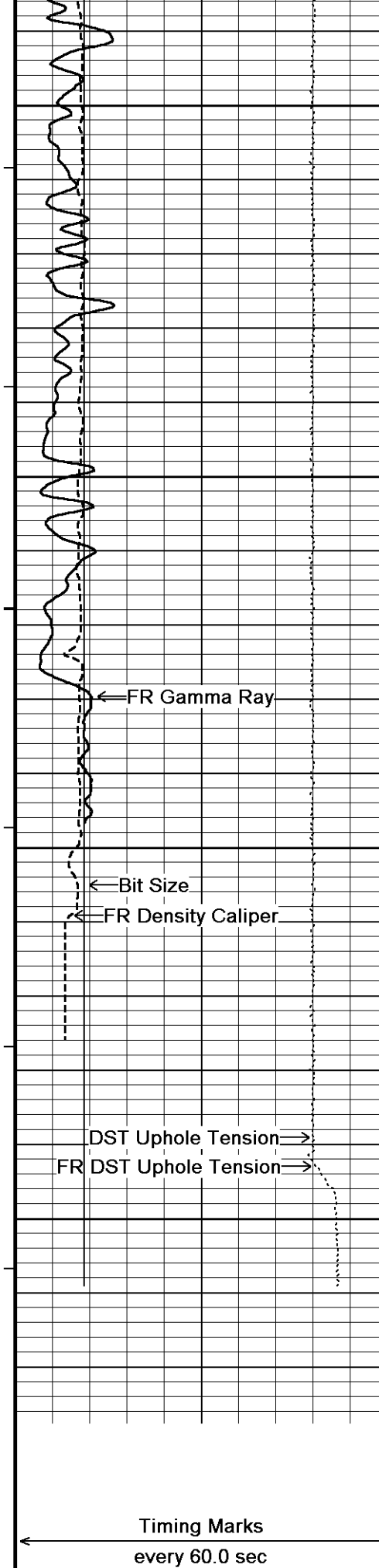
128°

5950

129°

6000





129°

6050

130°

6100

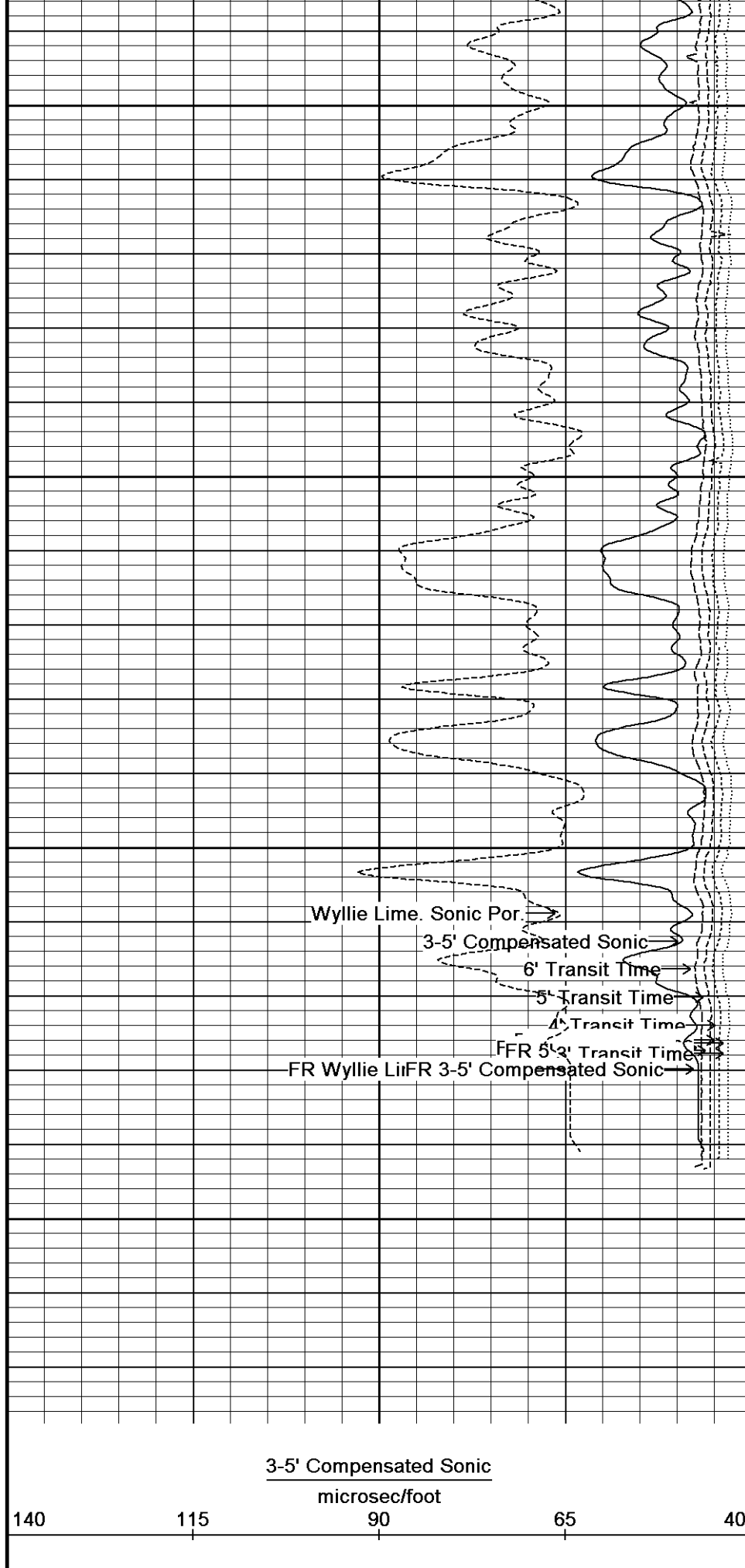
129°

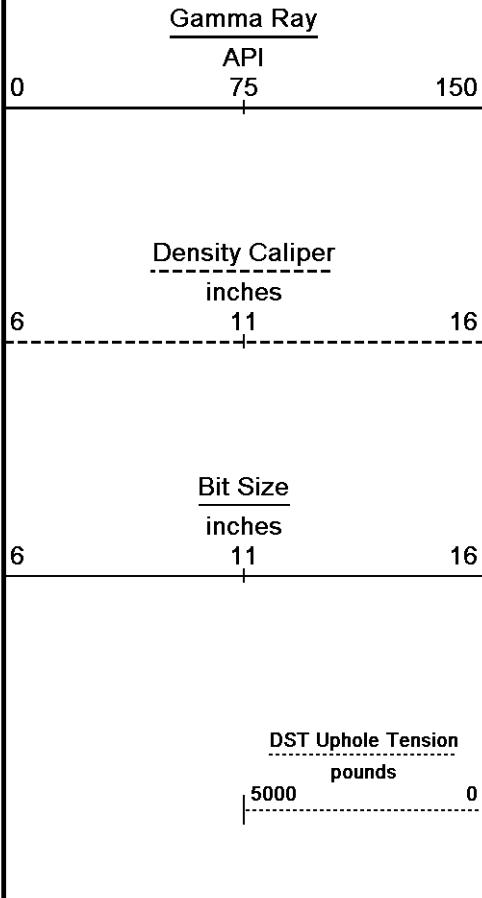
6150

6200

6226

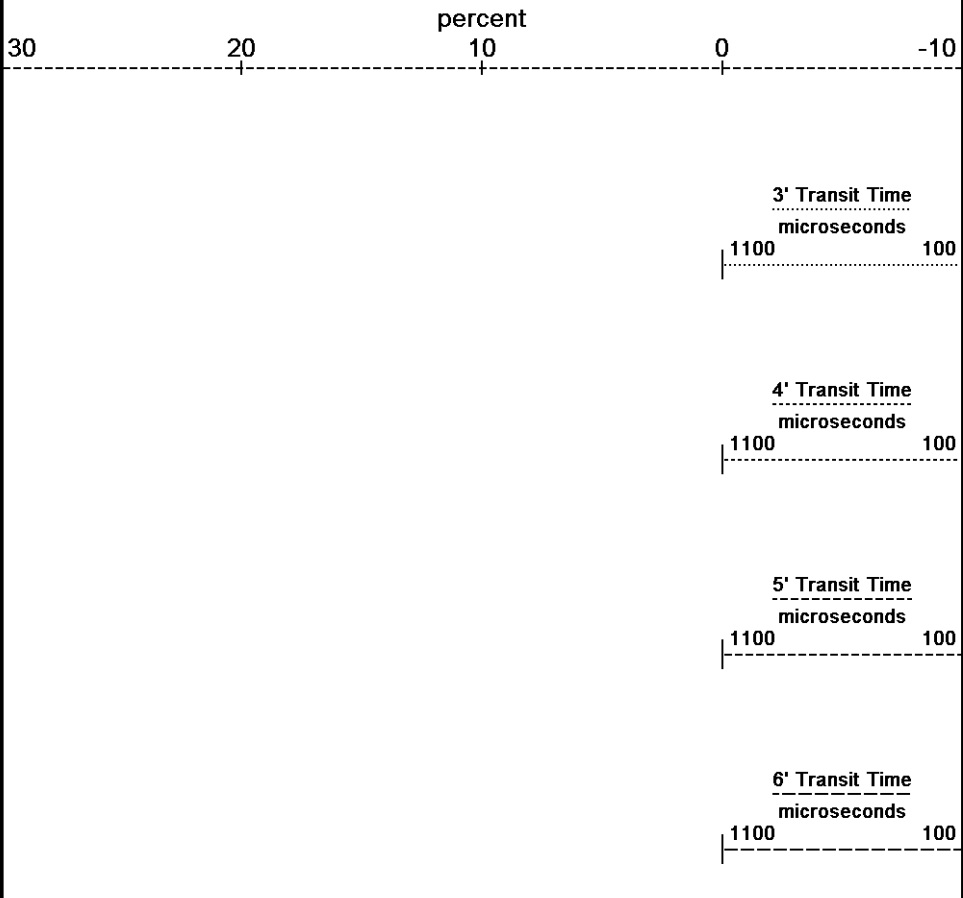
Depth in Feet





Borehole
Temp in
deg F

Replay
Scale
1:240

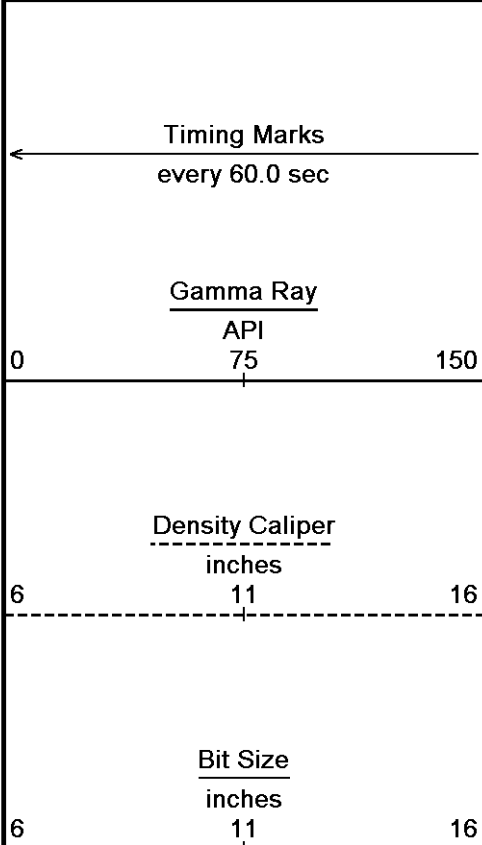


Depth Based Data - Maximum Sampling Increment 10.0cm
 Plotted on 07-MAY-2012 08:25
 Filename: C:\Minimus 11_03_4044\Data\M...Mull Drilling Company, Inc. Bleumer # 1-13 Run 1_001.dta
 Recorded on 07-MAY-2012 03:49
 System Versions: Logged with 11.03.4044 Plotted with 11.03.4044

↑ 5 INCH MAIN ↑

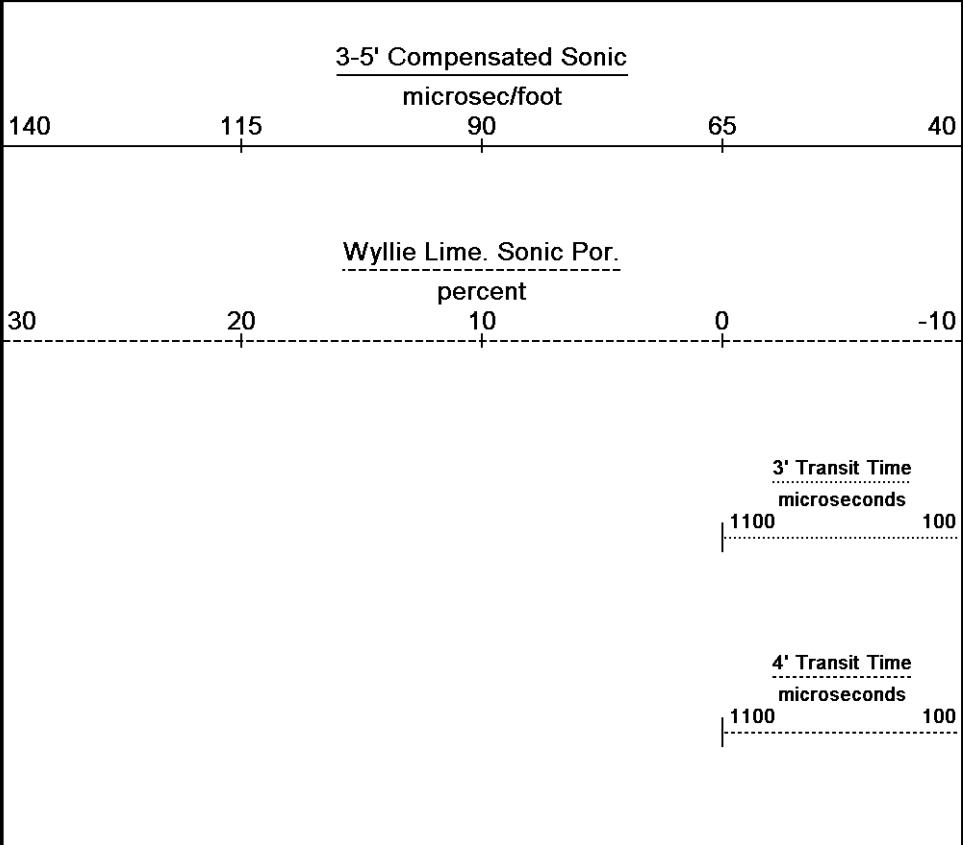
↓ REPEAT SECTION ↓

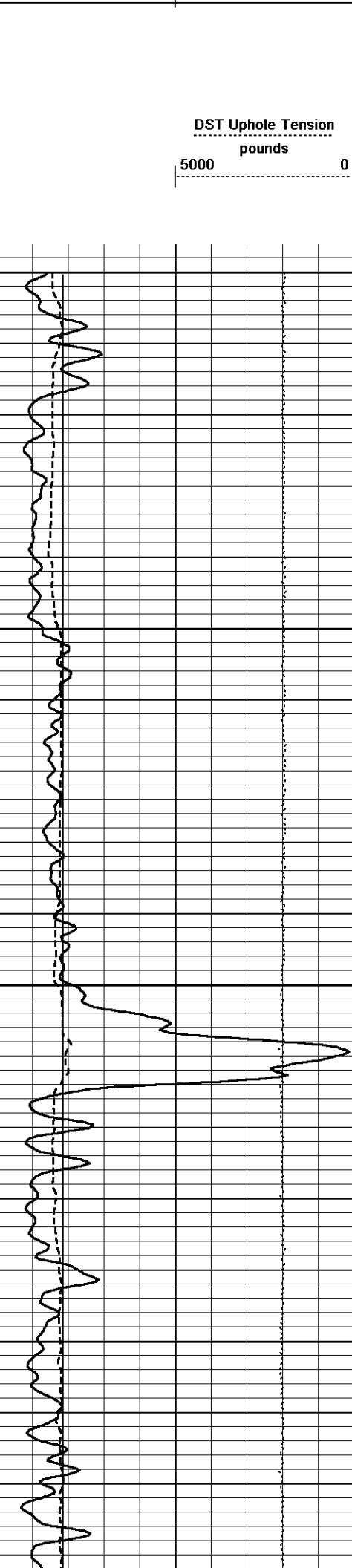
Depth Based Data - Maximum Sampling Increment 10.0cm
 Plotted on 07-MAY-2012 08:25
 Filename: C:\Minimus 11_03_4044\Data\Mull Dr...Mull Drilling Company, Inc. Bleumer # 1-13 Run 1.dta
 Recorded on 07-MAY-2012 03:22
 System Versions: Logged with 11.03.4044 Plotted with 11.03.4044



Depth
in
Feet

Borehole
Temp in
deg F





Replay
Scale
1:240

5900

127°

5950

128°

6000

129°

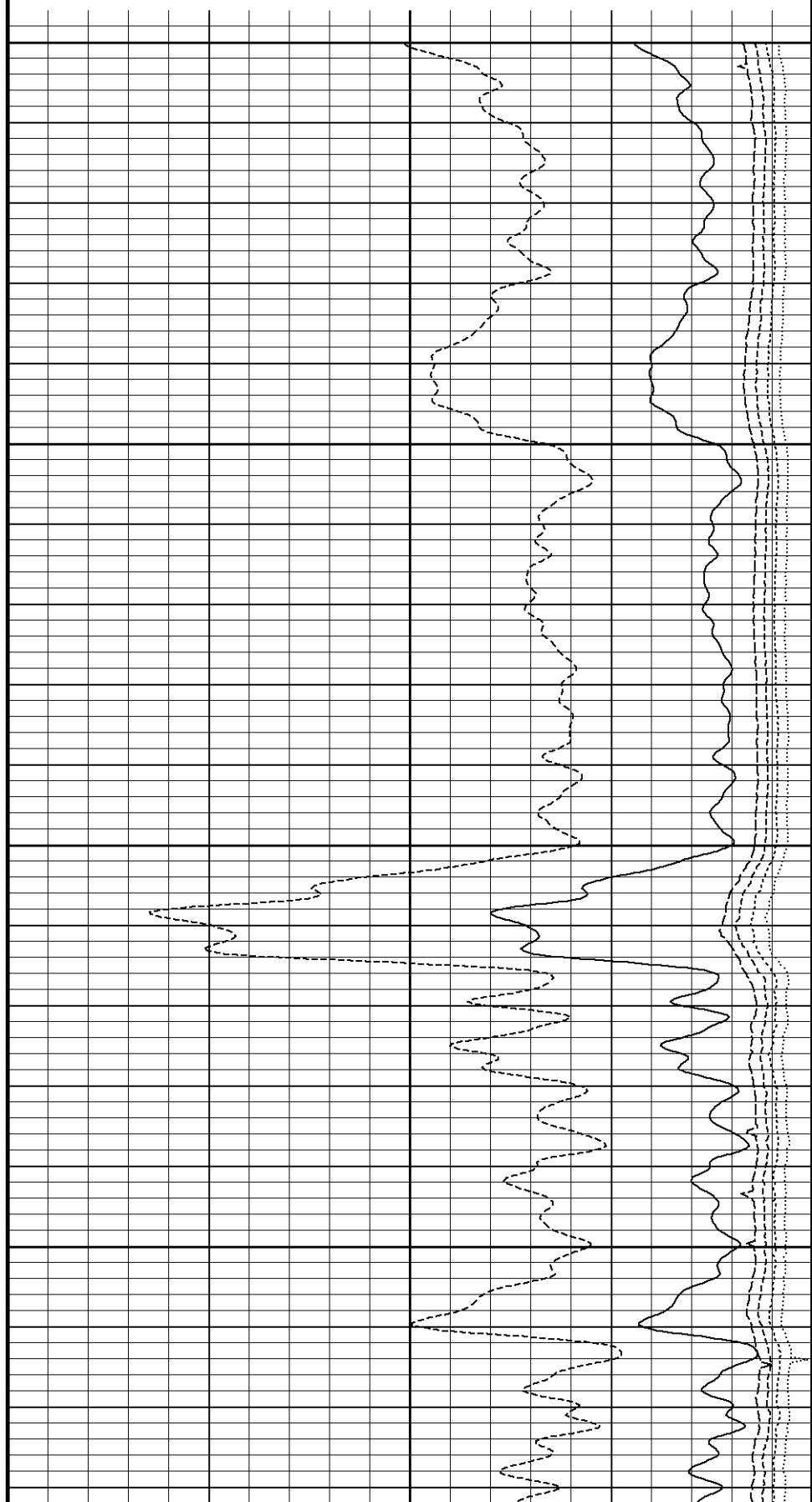
6050

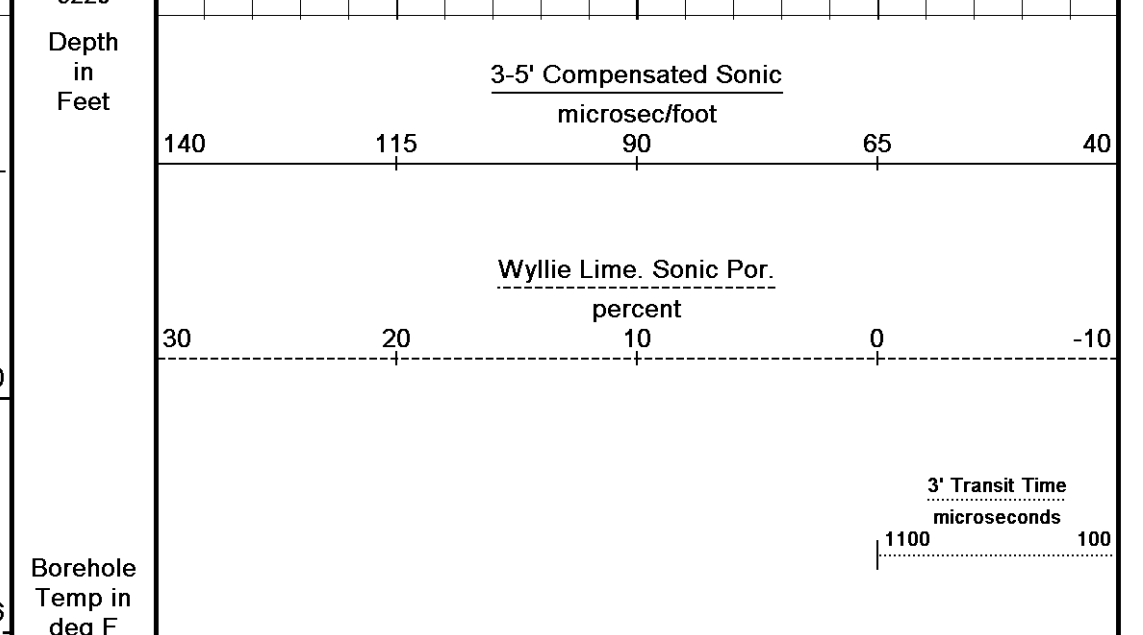
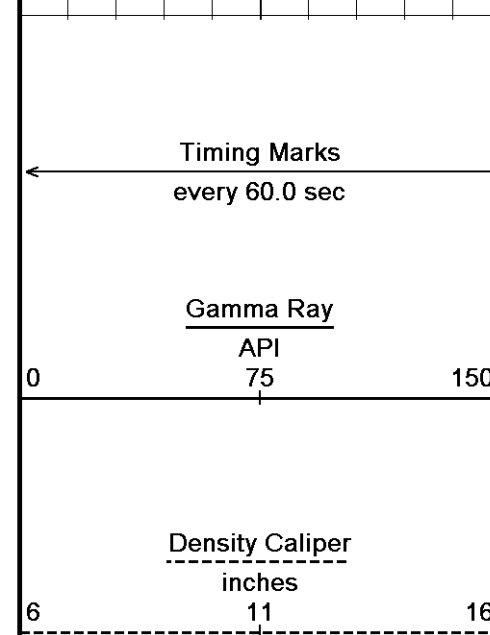
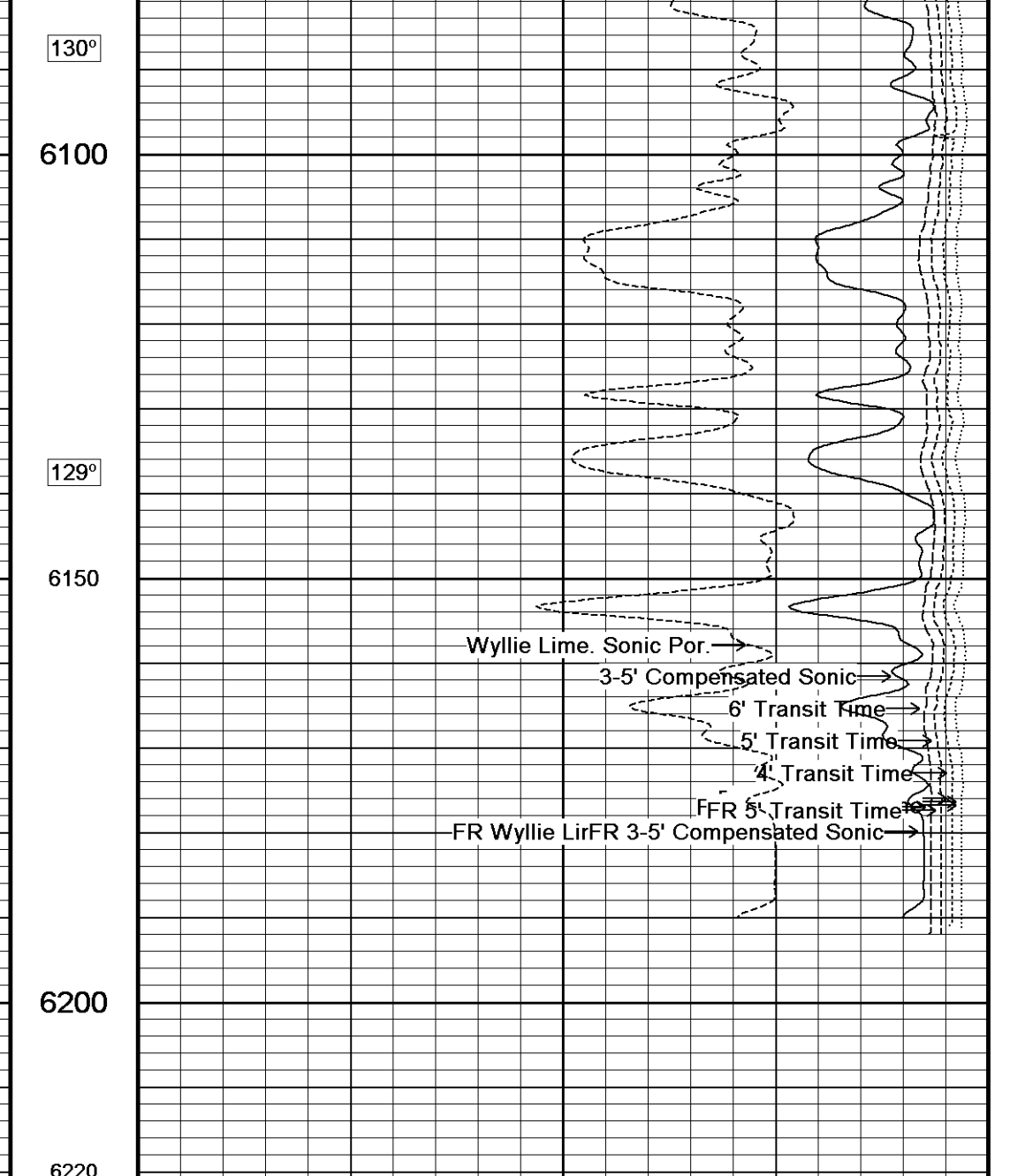
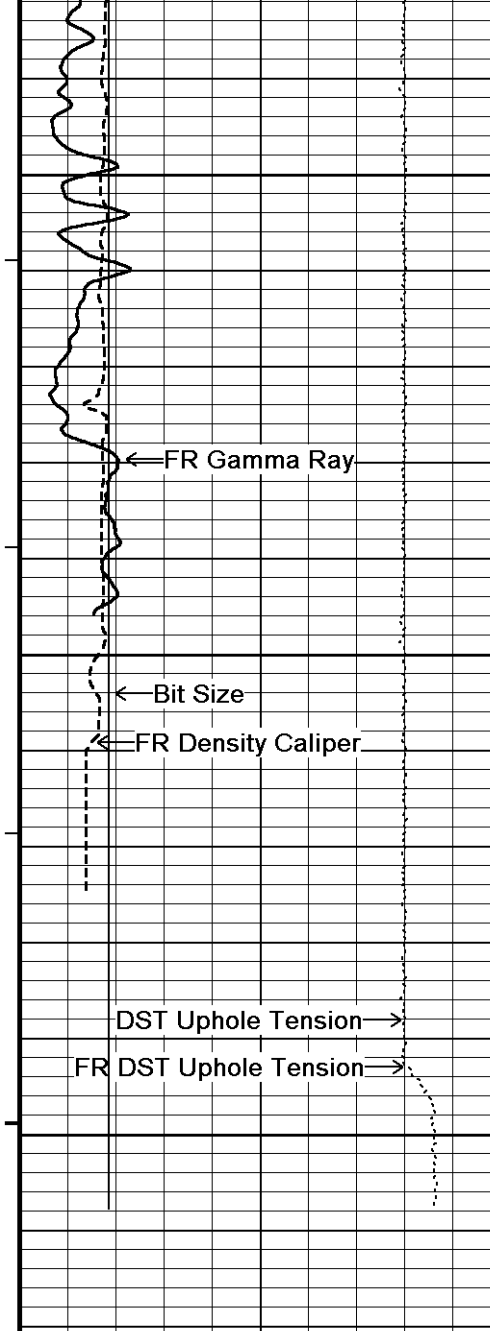
5' Transit Time
microseconds

1100 100

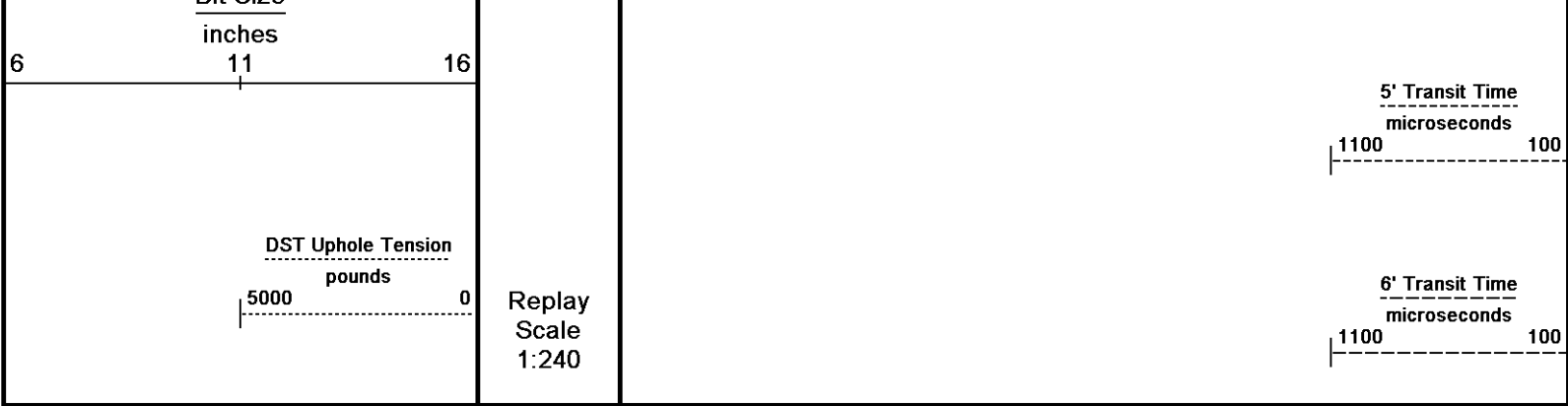
6' Transit Time
microseconds

1100 100





Borehole Temp in deg F



Depth Based Data - Maximum Sampling Increment 10.0cm
 Plotted on 07-MAY-2012 08:25
 Filename: C:\Minimus 11_03_4044\Data\Mull Dr...\Mull Drilling Company, Inc. Bleumer # 1-13 Run 1.dta
 Recorded on 07-MAY-2012 03:22
 System Versions: Logged with 11.03.4044 Plotted with 11.03.4044

↑ REPEAT SECTION ↑

BEFORE SURVEY CALIBRATION
 C:\Minimus 11_03_4044\Data\Mull Drilling Company, Inc. Bleumer # 1-13\Mull Drilling Company, Inc. Bleumer # 1-13 Run 1_001.dta

General Constants All 000 Last Edited on 07-MAY-2012,02:08

General Parameters		
Mud Resistivity	0.870	ohm-metres
Mud Resistivity Temperature	70.000	degrees F
Water Level	0.000	feet
Density/Neutron Processing	Wet Hole	
Hole/Annular Volume and Differential Caliper Parameters		
HVOL Method	Single Caliper	
HVOL Caliper 1	Density Caliper	
HVOL Caliper 2	N/A	
Annular Volume Diameter	5.000	inches
Caliper for Differential Caliper	Density Caliper	
Rwa Parameters		
Porosity used	Limestone Density Por.	
Resistivity used	Array Ind. One Res Rt	
RWA Constant A	1.000	
RWA Constant M	2.000	

Down-hole Tension Calibration SMS 0 Field Calibration on 23-FEB-2012 23:25

Reading No	Measured	Calibrated (lbs)
1	13693.36	0.00
2	14387.39	407.90

Gamma Calibration MCG-B 39 Field Calibration on 02-APR-2012 14:02

	Measured	Calibrated (API)
Background	74	49
Calibrator (Gross)	752	505
Calibrator (Net)	678	456

Gamma Constants MCG-B 39 Last Edited on 07-MAY-2012,00:51

Gamma Calibrator Number	GRC141	
Mud Density	1.13	gm/cc
Caliper Source for Processing	Density Caliper	
Tool Position	Eccentred	
Concentration of KCl	0.00	kppm

SP Calibration MCG-B 39 Field Calibration on 02-APR-2012,14:02

	Measured	Calibrated (mV)
Reference 1	100.0	100.0
Reference 2	-100.0	-100.0

Lower	Measured	Calibrated(Deg F)
Upper	50.00	50.00
	100.00	100.00

High Resolution Temperature Constants MCG-B 39

Last Edited on

Pre-filter Length 11

Caliper Calibration MML-A 4

Base Calibration on 0C3170021008,
Field Calibration on 0C4060524000

Base Calibration		
Reading No	Measured	Calibrator Size (in)
1	15017	5.98
2	18447	7.97
3	21786	9.86
4	25801	11.92
5	0	0.00
6	N/A	N/A

Field Calibration	Measured Caliper (in)	Actual Caliper (in)
	6.08	5.98

Micro Normal and Micro Inverse Calibration MML-A 4

Base Calibration on 0C3170023008,
Field Check on 0C4060525000

Base Calibration				
Channel	Resistor 1	Measured Resistor 2	Calibrated Resistor 1	Resistor 2
Micro Normal	12.2	60.2	5.0	25.0
Micro Inverse	15.7	78.3	5.0	25.0
Channel	Base Check (ohm-m)		Field Check (ohm-m)	
Micro Normal		62.9		62.9
Micro Inverse		48.3		48.3

Micro Normal and Micro Inverse Constants MML-A 4

Last Edited on 0C4060A13004,

Pad Type	8-12 in Soft Rubber Inflatable 006-9011-159		
Micro Normal K Factor			1.0000
Micro Inverse K Factor			1.0000
Standoff Offset			N/A inches

Neutron Calibration MDN-B.J 387

Base Calibration on 0C31C0938008
Field Check on 0C4060537000

Base Calibration				
	Near	Measured Far	Calibrated Near	Far
	2956	91	3714	110
Ratio		32.635		33.764
Field Calibrator at Base			Calibrated (cps)	
			2214	3169
Ratio				0.699
Field Check			Calibrated (cps)	
			2202	3182
Ratio				0.692

Neutron Constants MDN-B.J 387

Last Edited on 07-MAY-2012,00:51

Neutron Source Id	P0204NN		
Neutron Jig Number	NEDC117		
Epithermal Neutron	No		
Caliper Source for Processing	Density Caliper		
Stand-off	0.00		inches
Mud Density	1.00		gm/cc
Limestone Sigma	7.10		cu
Sandstone Sigma	4.26		cu
Dolomite Sigma	4.70		cu
Formation Pressure Source	Constant Value		
Formation Pressure	0.00		kpsi

Temperature Source	Constant Value	
Temperature	68.00	degrees F
Mud Salinity	0.00	kppm
Formation Fluid Salinity Source	Constant Value	
Formation Fluid Salinity	0.00	kppm
Barite Mud Correction	Not Applied	

FE Calibration MFE-B.J 352

Base Calibration on 0C31B0831004
Field Check on 0C4060523000

Base Calibration		
	Measured	Calibrated (ohm-m)
Reference 1	0.0	0.0
Reference 2	963.7	126.8
Base Check		281.5
Field Check		281.5

FE Constants MFE-B.J 352

Last Edited on 07-MAY-2012,00:52

Running Mode	No Sleeve	
MFE K Factor	0.1268	
Caliper Source for FE correction	Density Caliper	
Caliper Value for FE correction	N/A	inches
Rm Source for FE correction	Temperature Corr	
Temp. for Rm Corr.	MCG External Temperature	
Stand-off	0.5	inches

Sonic Constants MSS-A.A 126

Last Edited on 07-MAY-2012,00:53

Maximum Boundary Contrast	100.00	micro-sec/ft
Fluid Transit Time	189.00	micro-sec/ft
Limestone Transit Time	47.50	micro-sec/ft
Sandstone Transit Time	55.50	micro-sec/ft
Dolomite Transit Time	43.50	micro-sec/ft
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

Sonde Mode	Compensated
Hole Type	Open Hole

Sonde Parameters

	Measured	Calibrated
Offset	N/A	0.0000
Free Pipe	N/A	N/A
Peak Amplitude Source		N/A

Waveform	Start Time (micro-sec)	Width (micro-sec)	Pre Gain	Start Gain	Discriminator (mV)
3'	N/A	N/A	N/A	N/A	N/A
4'	N/A	N/A	N/A	N/A	N/A
5'	N/A	N/A	N/A	N/A	N/A
6'	N/A	N/A	N/A	N/A	N/A

Processed Fixed Gate Parameters

Waveform Used For Processing	N/A			
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	

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

Induction Calibration MAI-A.A 178

Base Calibration on 0C31B0B06000,
Field Check on 0C4060521000

Base Calibration

Test Loop Calibration

Channel	Measured		Calibrated (mmho/m)	
	Low	High	Low	High
1	17.6	484.7	9.3	966.2
2	6.2	391.4	7.6	821.4
3	4.0	264.5	5.2	566.0
4	2.3	135.1	2.6	279.2

Array Temperature 77.0 Deg F

Channel	Base Check (mmho/m)		Field Check (mmho/m)	
	Low	High	Low	High
1	0.0	0.0	12.3	3762.6
2	0.0	0.0	29.6	3466.9
3	0.0	0.0	27.3	3014.1
4	0.0	0.0	18.8	2064.7
Deep	0.0	0.0	15.9	1995.3
Medium	0.0	0.0	40.3	3955.3
Shallow	0.0	0.0	45.3	5081.7

Array Temperature 0.0 72.7 Deg F

Induction Constants MAI-A.A 178

Last Edited on 07-MAY-2012,03:16

Induction Model	RtAP-WBM		
Caliper for Borehole Corr.	Density Caliper		
Hole Size for Borehole Correction	N/A	inches	
Tool Centred	No		
Stand-off Type	Fins		
Stand-off	0.50	inches	
Number of Fins on Stand-off	8.0000		
Stand-off Fin Angle	45.00	degrees	
Stand-off Fin Width	0.5000	inches	
Borehole Corr. Rm Source	Constant Value		
Temp. for Rm Corr.	N/A		
Squasher Start	0.0020	mhos/metre	
Squasher Offset	N/A	mhos/metre	
Borehole Normalisation			
DRM1	0.0000	DRC1	0.0000
DRM2	0.0000	DRC2	0.0000
MRM1	0.0000	MRC1	0.0000
MRM2	0.0000	MRC2	0.0000
SRM1	0.0000	SRC1	0.0000
SRM2	0.0000	SRC2	0.0000

Calibration Site Corrections

Channel 1	0.00	mmhos/metre
Channel 2	0.00	mmhos/metre
Channel 3	0.00	mmhos/metre
Channel 4	0.00	mmhos/metre

Apparent Porosity and Water Saturation Constants

Archie Constant (A)	1.00
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Cementation Exponent (M)	2.00	
Saturation Exponent (N)	2.00	
Saturation of Water for Apor	100.00	percent
Resistivity of Water for Apor and Sw	0.05	ohm-m
Resistivity of Mud Filtrate for Sw	0.00	ohm-m
Source for Rt	0.00	
Source for Rxo	0.00	

High Resolution Temperature Calibration MAI-A.A 178

Field Calibration on 0C4030110004,

	Measured	Calibrated(Deg F)
Lower	32.00	32.00
Upper	68.00	68.00

High Resolution Temperature Constants MAI-A.A 178

Last Edited on 0C4060522000,

Pre-filter Length	11
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Caliper Calibration MPD-B 35

Base Calibration on 0C31C0A2C008
Field Calibration on 0C4060527000

Base Calibration		
Reading No	Measured	Calibrator Size (in)
1	20688	3.99
2	30944	5.98
3	41312	7.97
4	50976	9.86
5	61184	11.92
6	N/A	N/A

Field Calibration		
	Measured Caliper (in)	Actual Caliper (in)
	5.99	5.98

Photo Density Calibration MPD-B 35

Base Calibration on 0C31C0B00008
Field Check on 0C406052B000

Density Calibration				
Base Calibration				
	Measured		Calibrated (sdu)	
	Near	Far	Near	Far
Reference 1	62298	31871	59556	30836
Reference 2	26887	2863	24941	2541
Field Check at Base				
	1142.9	1359.1		
Field Check				
	1145.7	1361.2		

PE Calibration				
Base Calibration				
	WS	Measured	Ratio	Calibrated
		WH		Ratio
Background	204	1008		
Reference 1	23049	62096	0.374	0.371
Reference 2	7079	26739	0.267	0.272
Field Check at Base				
	204.4	1008.1		
Field Check				
	206.4	1011.8		

Density Constants MPD-B 35

Last Edited on 07-MAY-2012,00:52

Density Source Id	18235B	
Nylon Calibrator Number	DNCE695	
Aluminium Calibrator Number	DACD698	
Density Shoe Profile	8 inch	
Caliper Source for Processing	Density Caliper	
PE Correction to Density	Not Applied	
Mud Density	1.13	gm/cc
Mud Density Z/A Multiplier	1.11	
Mud Filtrate Density	1.00	gm/cc
Dry Hole Mud Filtrate Density	1.00	gm/cc
DNCT	0.00	gm/cc

DNC1	0.00	gm/cc
CRCT	0.00	gm/cc
Density Z/A Correction	Hybrid	
Matrix Density (gm/cc)	Depth (ft)	
2.71	0.00	
0.00	0.00	
0.00	0.00	
0.00	0.00	
0.00	0.00	
0.00	0.00	
0.00	0.00	
0.00	0.00	

Spectral Gamma Calibration SGS-E.J 150

Base Calibration on 14-NOV-2011,14:14
Field Calibration on 14-NOV-2011,14:09

Base Calibration

Potassium Calibrator

	Gate 1	Gate 2	Gate 3	Gate 4	Gate 5
Background	79.9	23.1	2.2	0.8	1.4
Calibrator (Gross)	204.7	109.8	22.0	0.9	1.3
Calibrator (Net)	124.8	86.7	19.7	0.2	-0.1

Concentrations	K %	U ppm	Th ppm
	5.8	0.0	0.0

Uranium Calibrator

	Gate 1	Gate 2	Gate 3	Gate 4	Gate 5
Background	79.9	23.1	2.2	0.8	1.4
Calibrator (Gross)	480.7	164.8	14.5	7.2	4.1
Calibrator (Net)	400.8	141.7	12.3	6.5	2.7

Concentrations	K %	U ppm	Th ppm
	0.0	9.8	0.0

Thorium Calibrator

	Gate 1	Gate 2	Gate 3	Gate 4	Gate 5
Background	79.9	23.1	2.2	0.8	1.4
Calibrator (Gross)	397.7	137.8	11.3	6.3	15.0
Calibrator (Net)	317.8	114.7	9.0	5.6	13.6

Concentrations	K %	U ppm	Th ppm
	0.0	0.0	44.3

Mixture Calibrator

	Gate 1	Gate 2	Gate 3	Gate 4	Gate 5
Background	79.9	23.1	2.2	0.8	1.4
Calibrator (Gross)	914.0	361.7	43.2	12.9	17.8
Calibrator (Net)	834.0	338.5	41.0	12.1	16.4

Field Calibration

Gamma Ray

	Measured	Calibrated (API)
Background	112	23
Calibrator (Gross)	1354	273
Calibrator (Net)	1242	250

Mixture Calibrator

	Gate 1	Gate 2	Gate 3	Gate 4	Gate 5
Background	79.9	23.1	2.2	0.8	1.4
Calibrator (Gross)	914.0	361.7	43.2	12.9	17.8
Calibrator (Net)	834.0	338.5	41.0	12.1	16.4

Spectral Gamma Constants SGS-E.J 150

Last Edited on 30-APR-2012,12:03

Mixture Calibrator Number	147-1	
Potassium Calibrator Number	148-1	
Uranium Calibrator Number	150-1	
Thorium Calibrator Number	149-1	
Mud Density	1.13	gm/cc
Caliper Source for Processing	Density Caliper	
Tool Position	Eccentred	

DOWNHOLE EQUIPMENT

C:\Minimus 11_03_4044\Data\Mull Drilling Company, Inc. Bleumer # 1-13\Mull Drilling Company, Inc. Bleumer # 1-13 Run 1_001.dta

MCB-A.A 11B Tension Cablehead
 MCB-A.A 161 LG: 2.40 ft WT: 19.8 lb OD: 2.24 in

SHA-F Compact Swivel Head Adaptor
 SHA-F 59 LG: 2.74 ft WT: 26.5 lb OD: 2.24 in

Compact Comms Gamma
 MCG-B 39 LG: 8.70 ft WT: 63.9 lb OD: 2.24 in

Spectral Gamma Ray Sub
 SGS-E.J 150 LG: 7.78 ft WT: 105.8 lb OD: 3.54 in

Compact Micro-log
 MML-A 4 LG: 7.97 ft WT: 81.6 lb OD: 2.24 in

Compact Neutron
 MDN-B.J 387 LG: 5.04 ft WT: 50.7 lb OD: 2.24 in

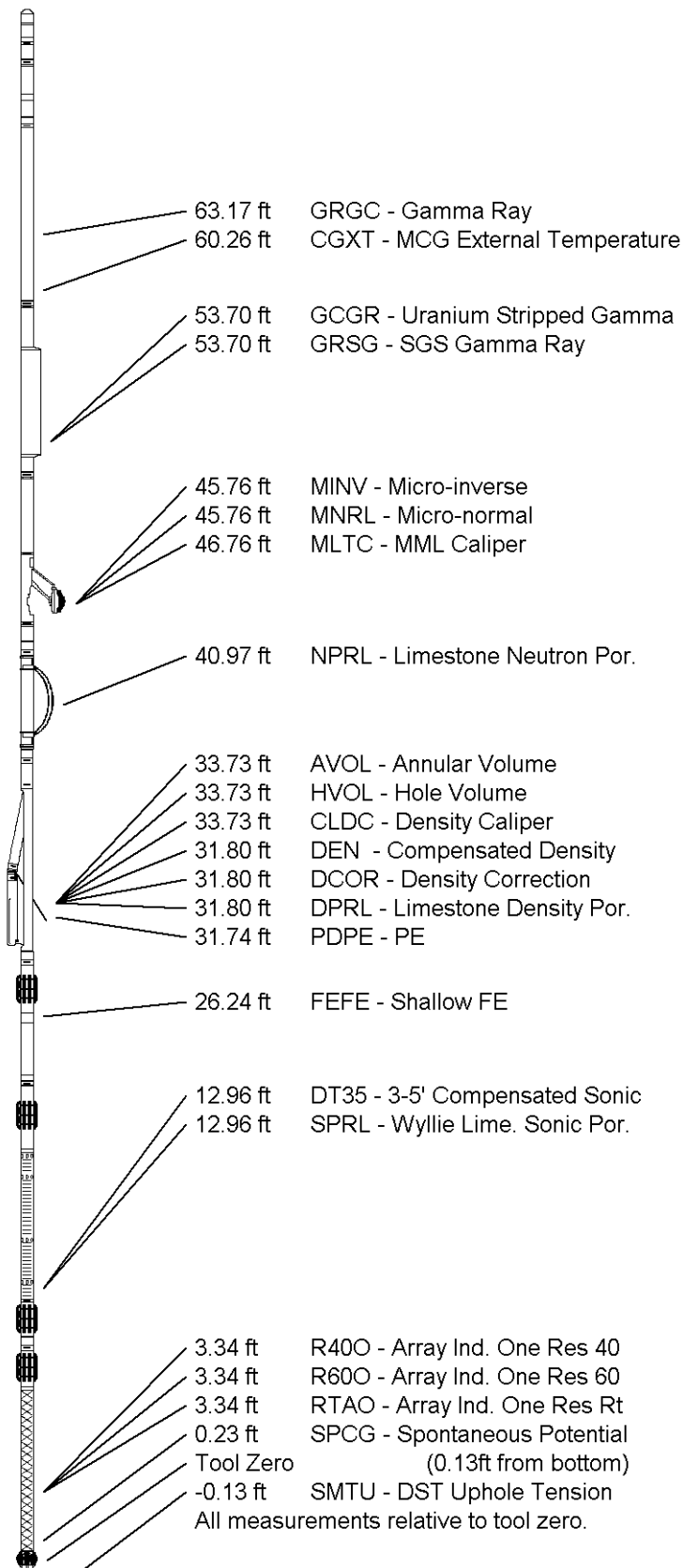
Compact Density/Caliper
 MPD-B 35 LG: 9.59 ft WT: 90.4 lb OD: 2.45 in

Compact Focussed Electric
 MFE-B.J 352 LG: 6.05 ft WT: 48.5 lb OD: 2.24 in

Compact Sonic
 MSS-A.A 126 LG: 12.52 ft WT: 72.8 lb OD: 2.24 in

Compact Induction
 MAI-A.A 178 LG: 10.81 ft WT: 48.5 lb OD: 2.24 in

Total Length: 73.59 ft Weight: 608.5 lb



COMPANY

MULL DRILLING COMPANY, INC.

WELL

BLEUMER # 1-13

FIELD

WILDCAT

FIELD WILDOR
PROVINCE/COUNTY GRAY COUNTY
COUNTRY/STATE U.S.A. / KANSAS

Elevation Kelly Bushing	2785.00	feet	First Reading	6180.00	feet
Elevation Drill Floor	2783.00	feet	Depth Driller	6200.00	feet
Elevation Ground Level	2772.00	feet	Depth Logger	6193.00	feet



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