

ONE	TD	CSG	REC	0	150	30	-10	47.0 us/ft	30	-10	2.77 g/cc	30	-10	LIML
-----	----	-----	-----	---	-----	----	-----	------------	----	-----	-----------	----	-----	------

DIRECTIONAL INFORMATION

Maximum Deviation @ KOP @

Remarks:

GTET-DSNT-SDLT-BSAT-ACRT RUN IN COMBINATION

ANNULAR HOLE VOLUME CALCULATED FOR 5.5 INCH CASING

CHLORIDES REPORTED AT 1600 PPM

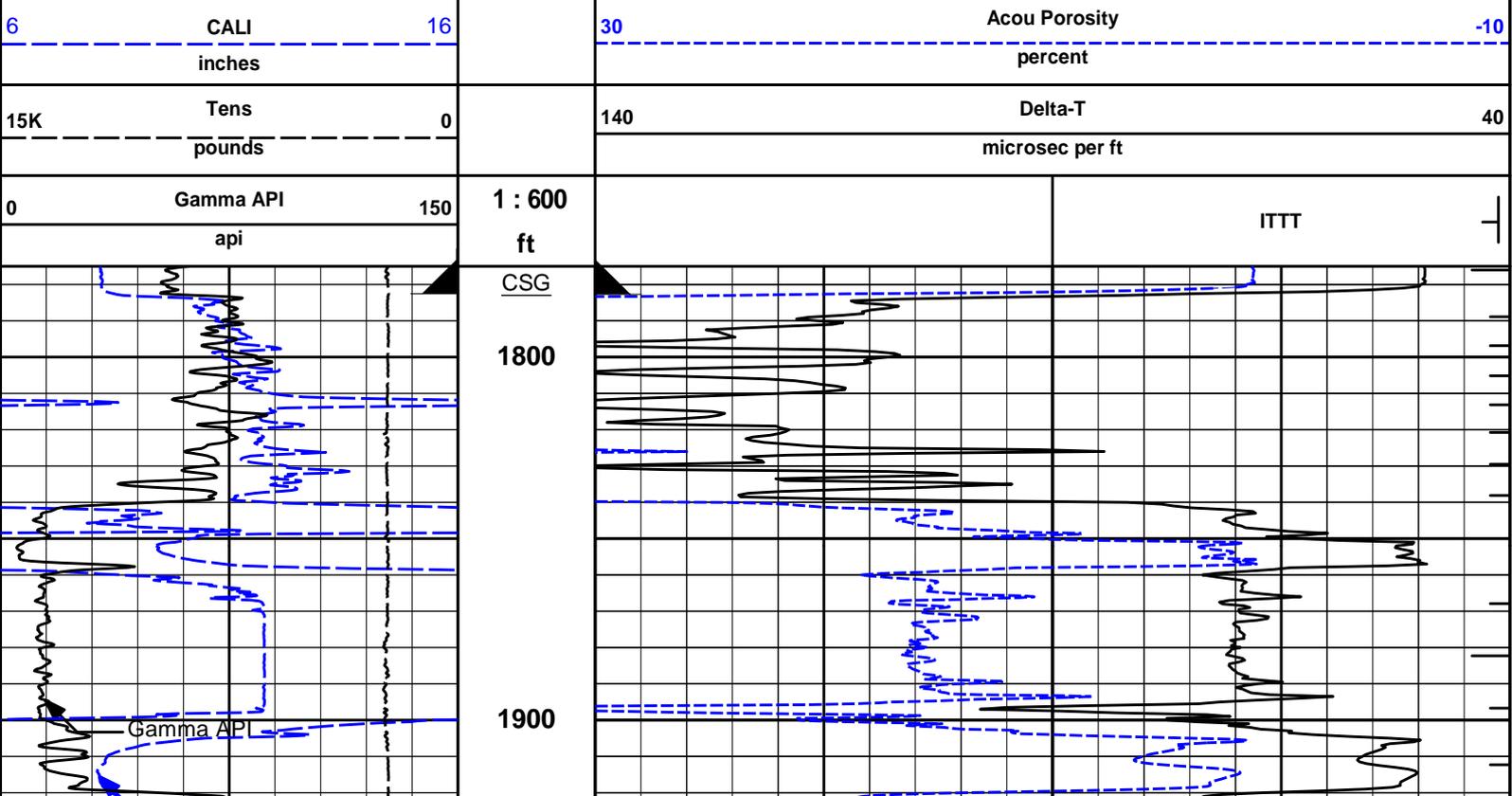
HALLIBURTON DOES NOT GUARANTEE THE ACCURACY OF ANY INTERPRETATION OF THE LOG DATA, CONVERSION OF LOG DATA TO PHYSICAL ROCK PARAMETERS OR RECOMMENDATIONS WHICH MAY BE GIVEN BY HALLIBURTON PERSONNEL OR WHICH APPEAR ON THE LOG OR IN ANY OTHER FORM. ANY USER OF SUCH DATA, INTERPRETATIONS, CONVERSIONS, OR RECOMMENDATIONS AGREES THAT HALLIBURTON IS NOT RESPONSIBLE EXCEPT WHERE DUE TO GROSS NEGLIGENCE OR WILLFUL MISCONDUCT, FOR ANY LOSS, DAMAGES, OR EXPENSES RESULTING FROM THE USE THEREOF.

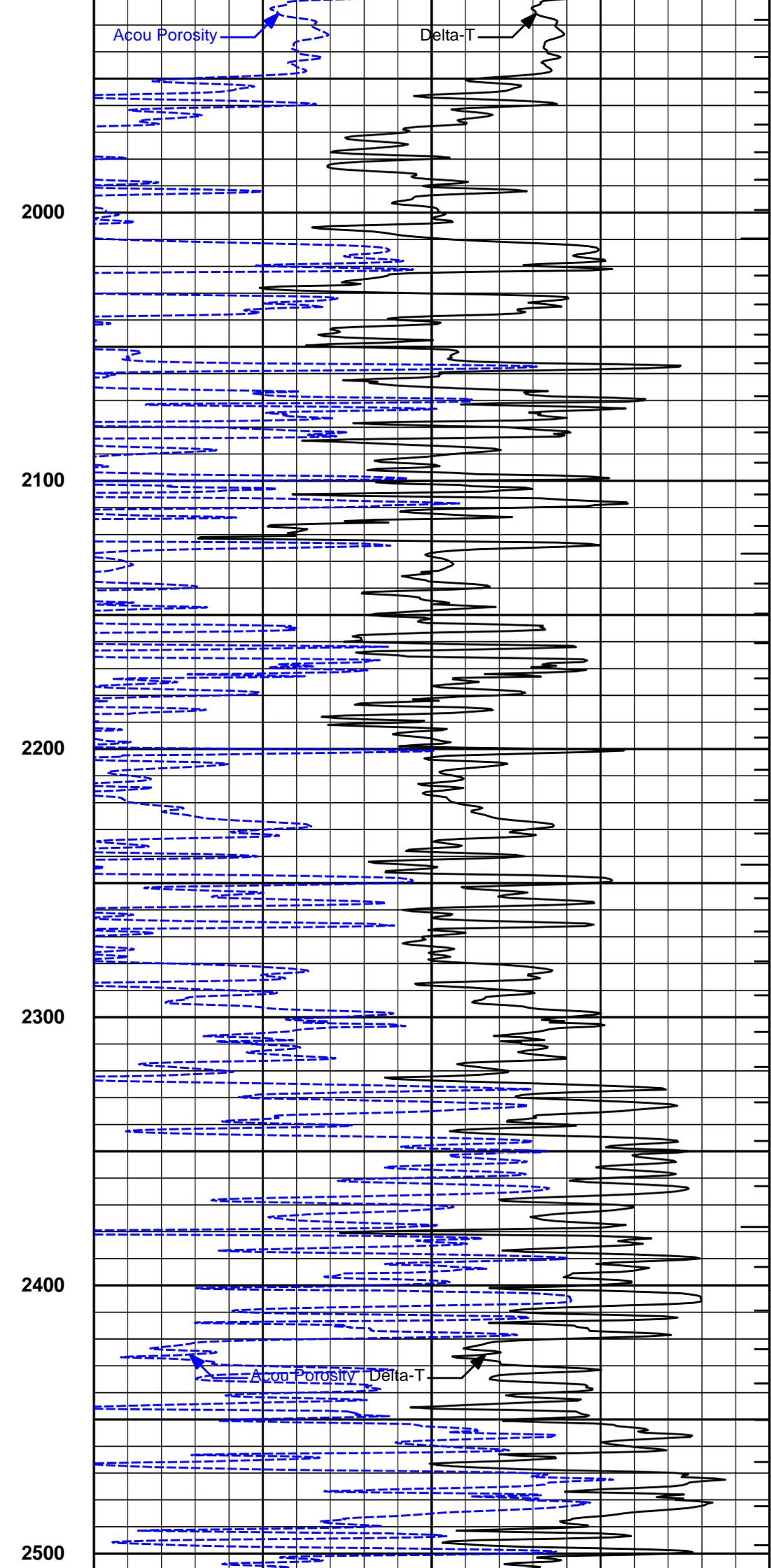
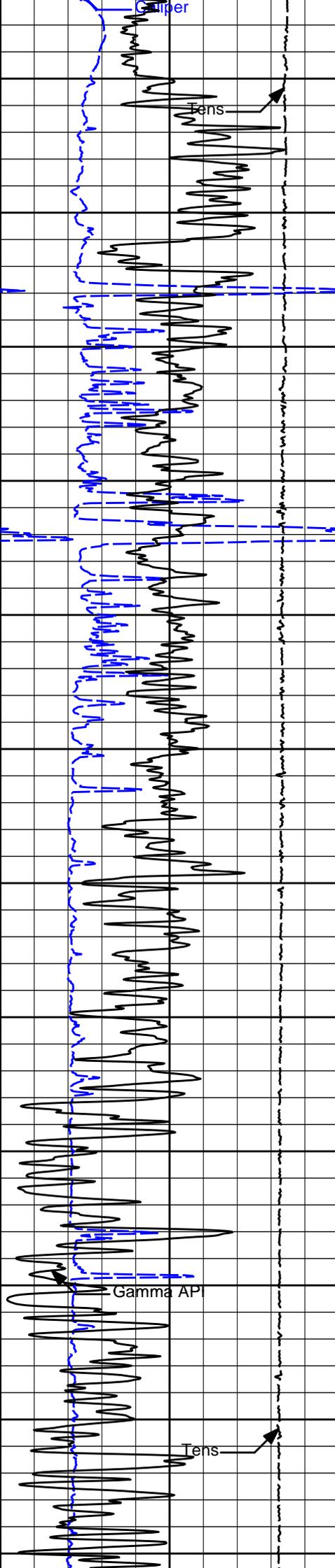
HALLIBURTON

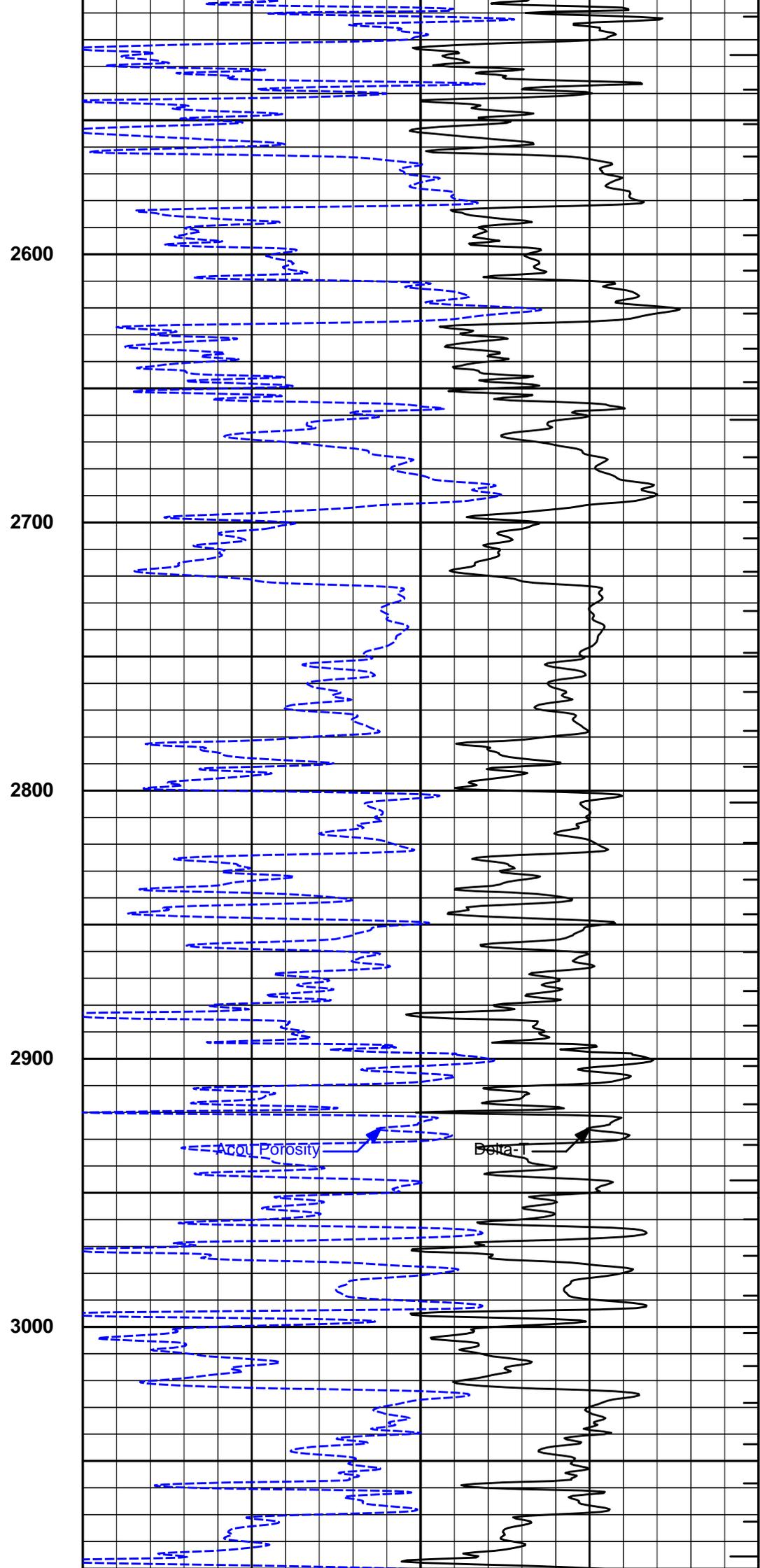
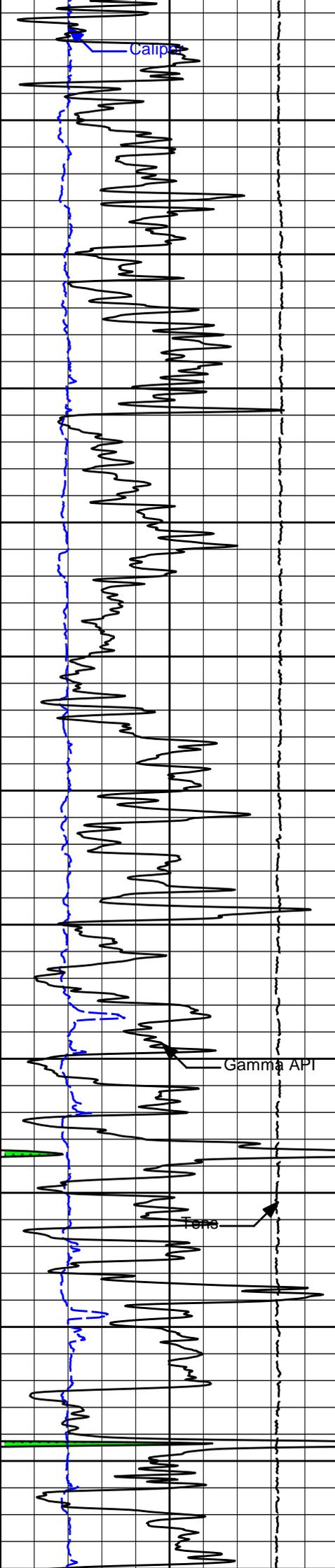
HALLIBURTON Plot Time: 12-Aug-18 01:11:16
 Plot Range: 1775 ft to 4953.58 ft
 Data: MERIT_RIVERBND4\Well Based\MAIN_TD-CSG\
 Plot File: \\BSAT\BSAT_2inch

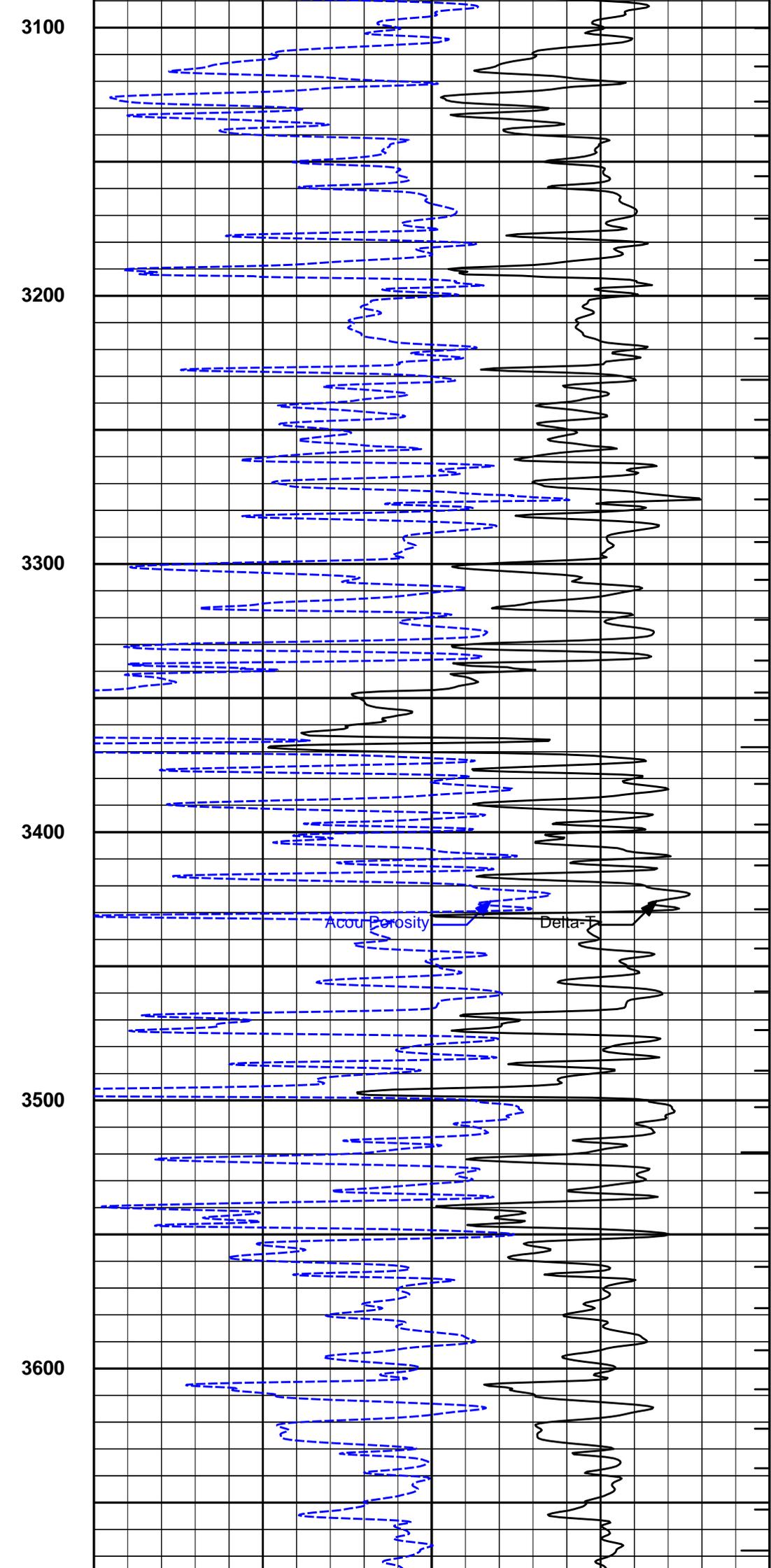
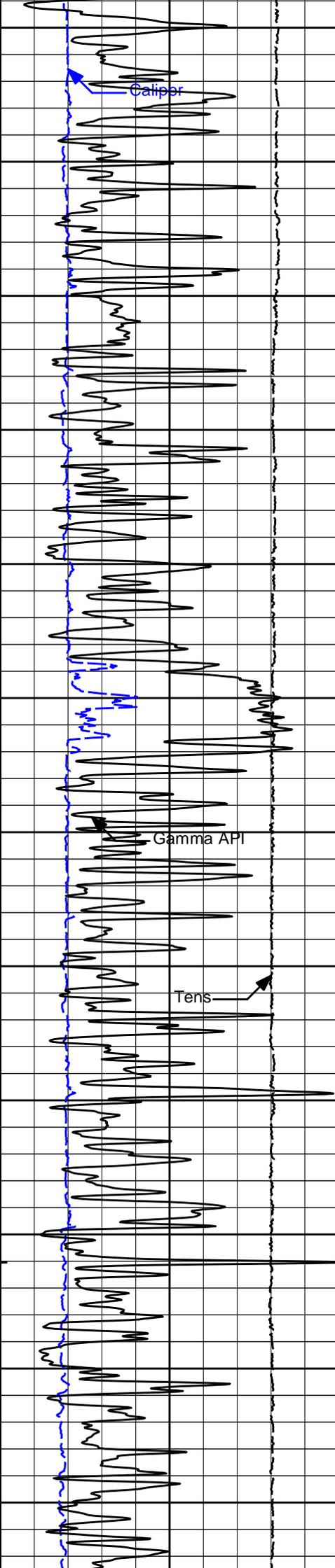
2 INCH MAIN LOG

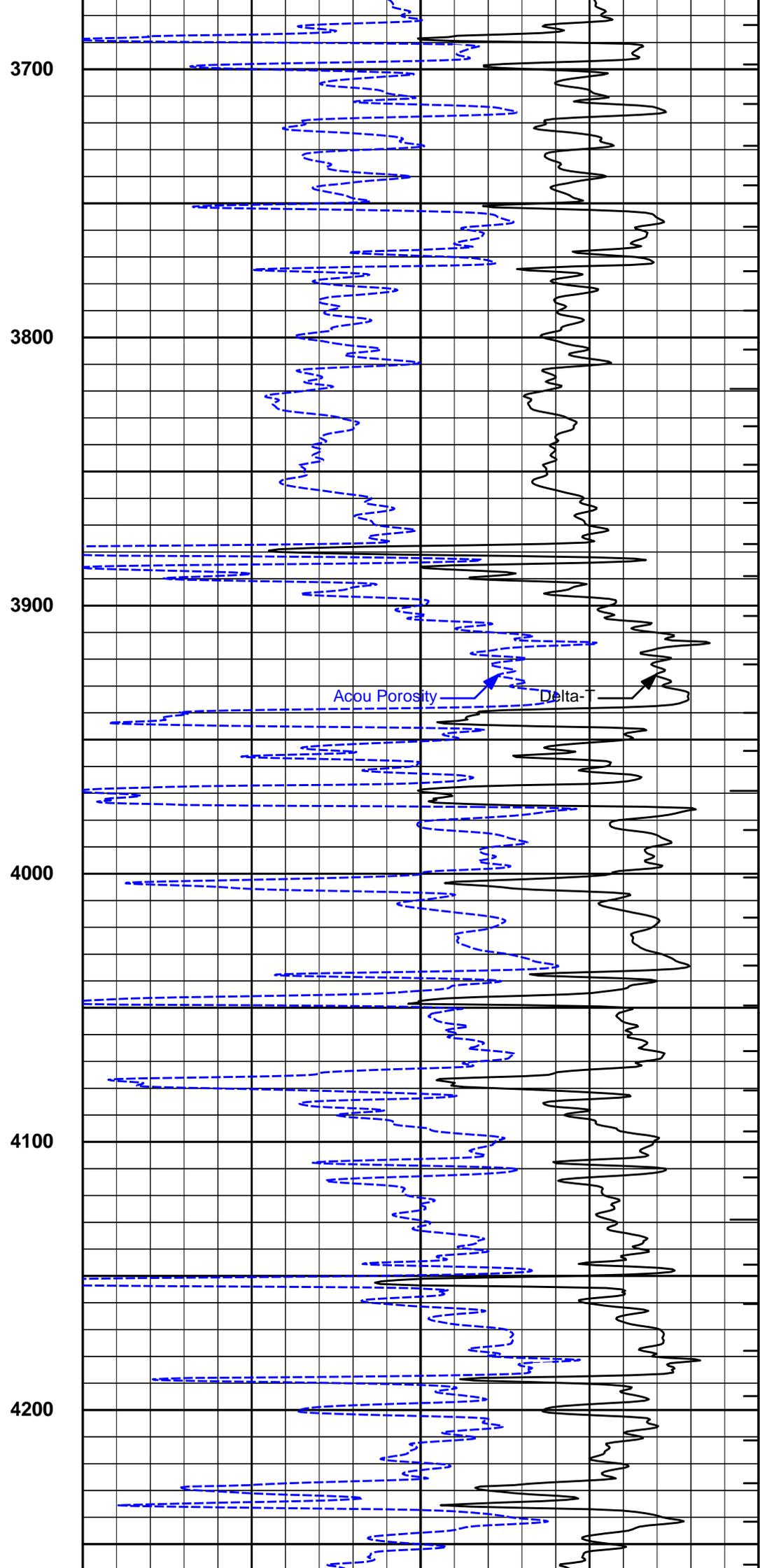
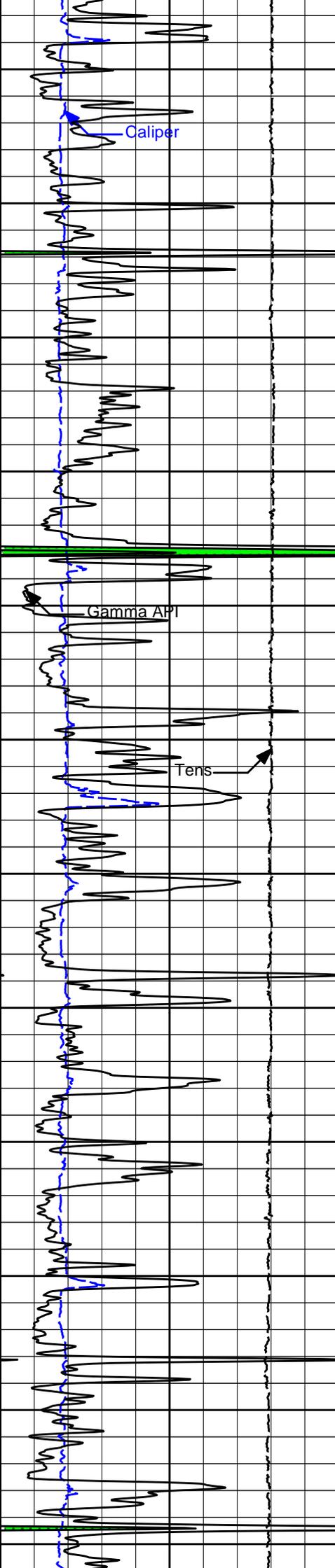
2" MAIN LOG SECTION

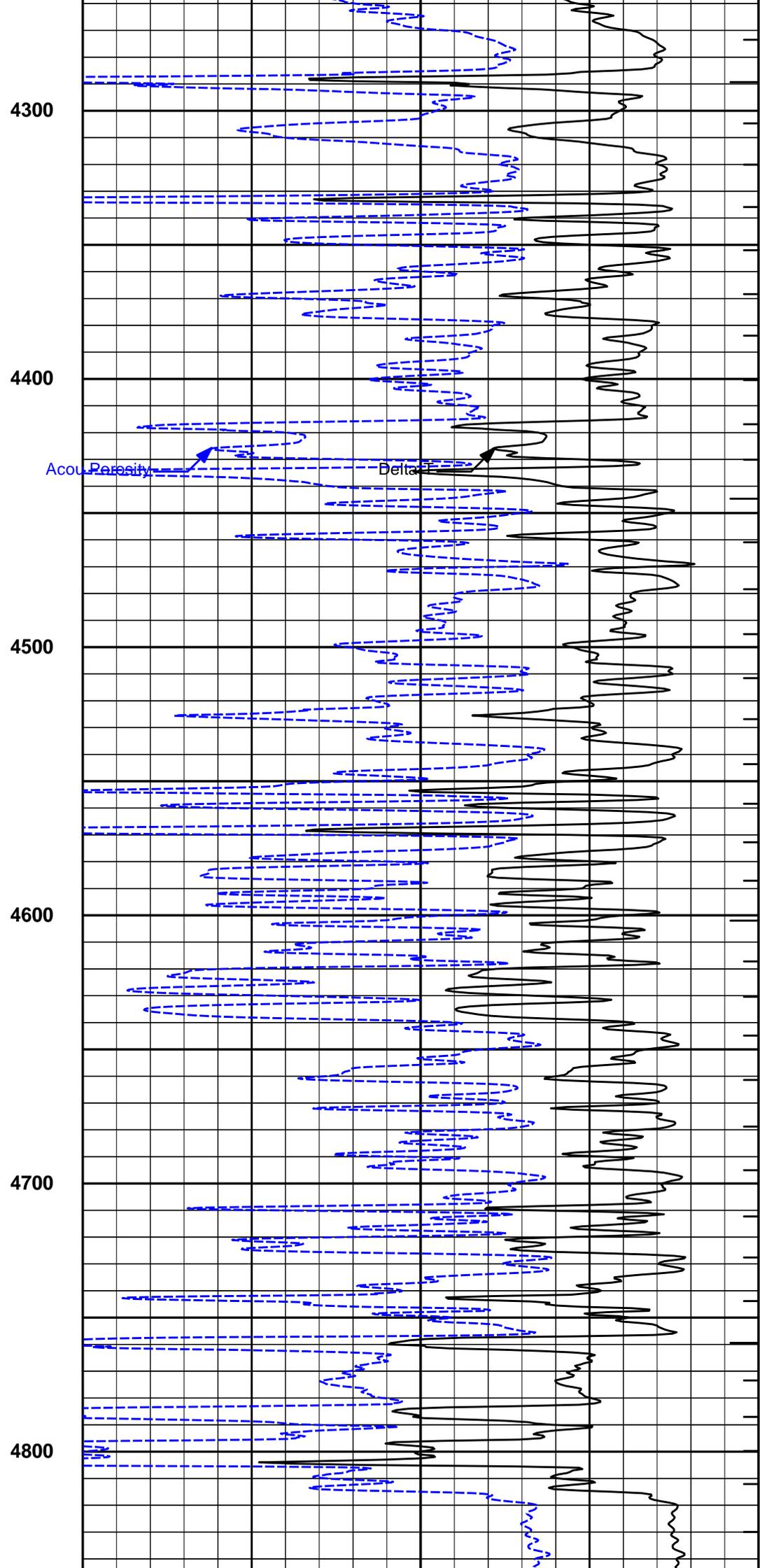
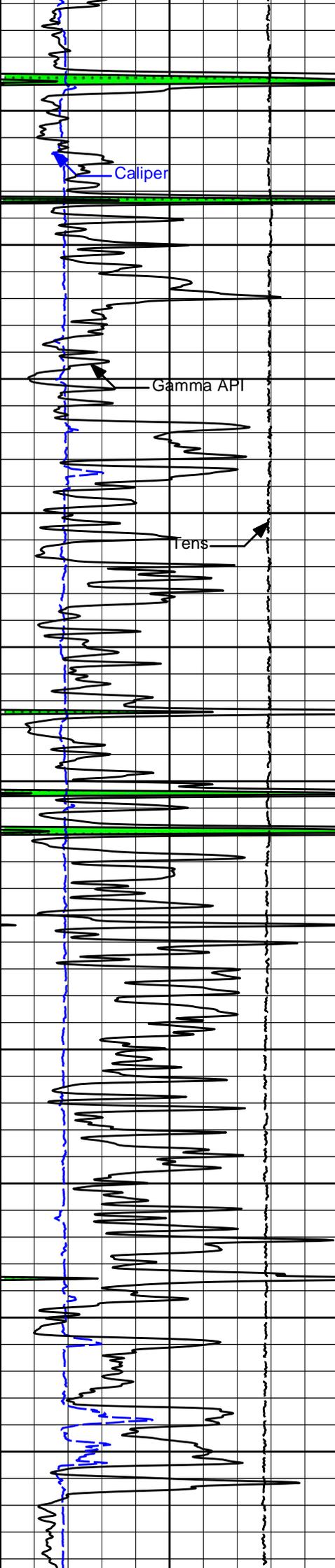


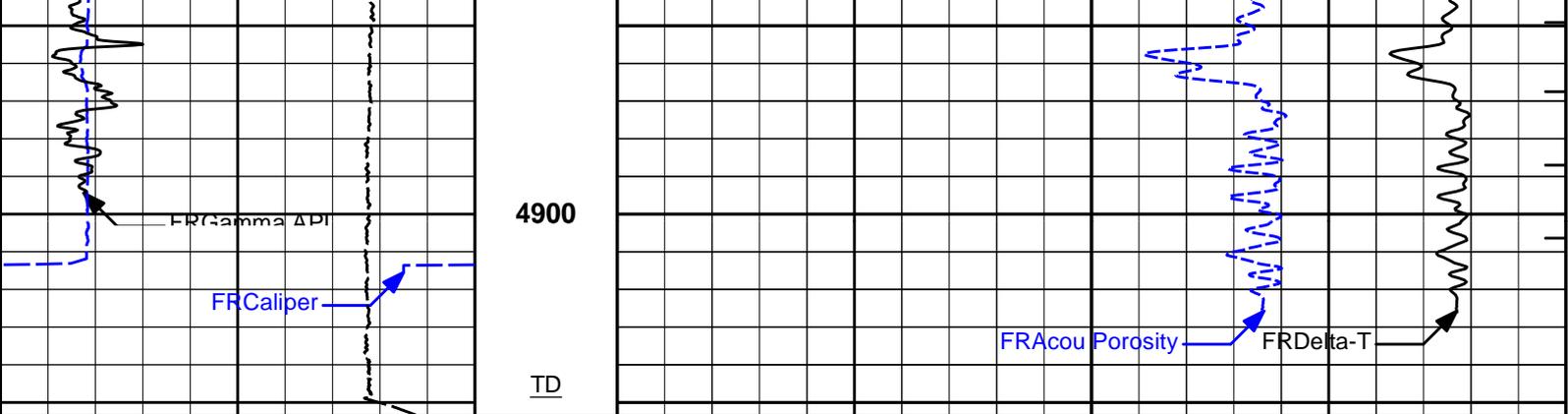












0	Gamma API	150	1 : 600	ITTT
	api			
15K	Tens	0	140	Delta-T
	pounds			
6	CALI	16	30	Acou Porosity
	inches			
				microsec per ft
				percent

HALLIBURTON Plot Time: 12-Aug-18 01:11:19
 Plot Range: 1775 ft to 4953.58 ft
 Data: MERIT_RIVERBND4\Well Based\MAIN_TD-CSG\
 Plot File: \BSAT\BSAT_2inch

2 INCH MAIN LOG

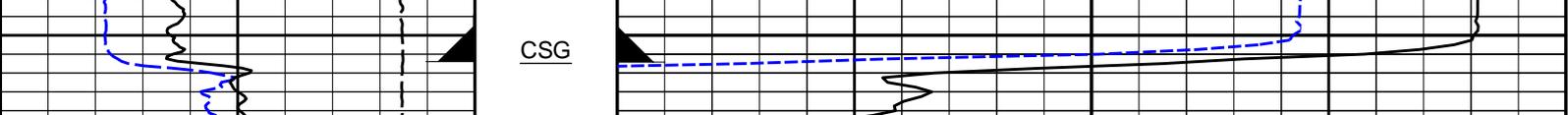
2" MAIN LOG SECTION

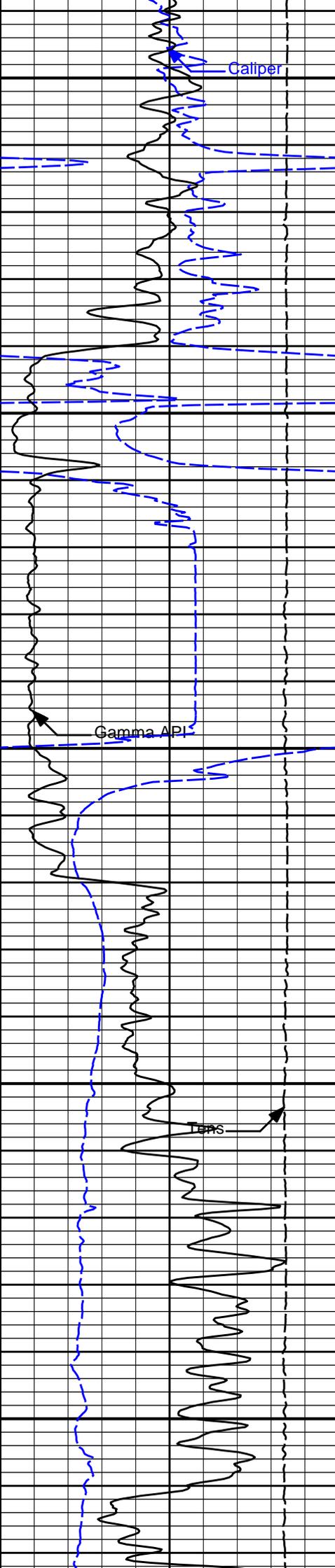
HALLIBURTON Plot Time: 12-Aug-18 01:11:19
 Plot Range: 1775 ft to 4953.58 ft
 Data: MERIT_RIVERBND4\Well Based\MAIN_TD-CSG\
 Plot File: \BSAT\BSAT_5inch_MAIN

5 INCH MAIN LOG

5" MAIN LOG

6	CALI	16	30	Acou Porosity
	inches			
15K	Tens	0	140	Delta-T
	pounds			
0	Gamma API	150	1 : 240	ITTT
	api			

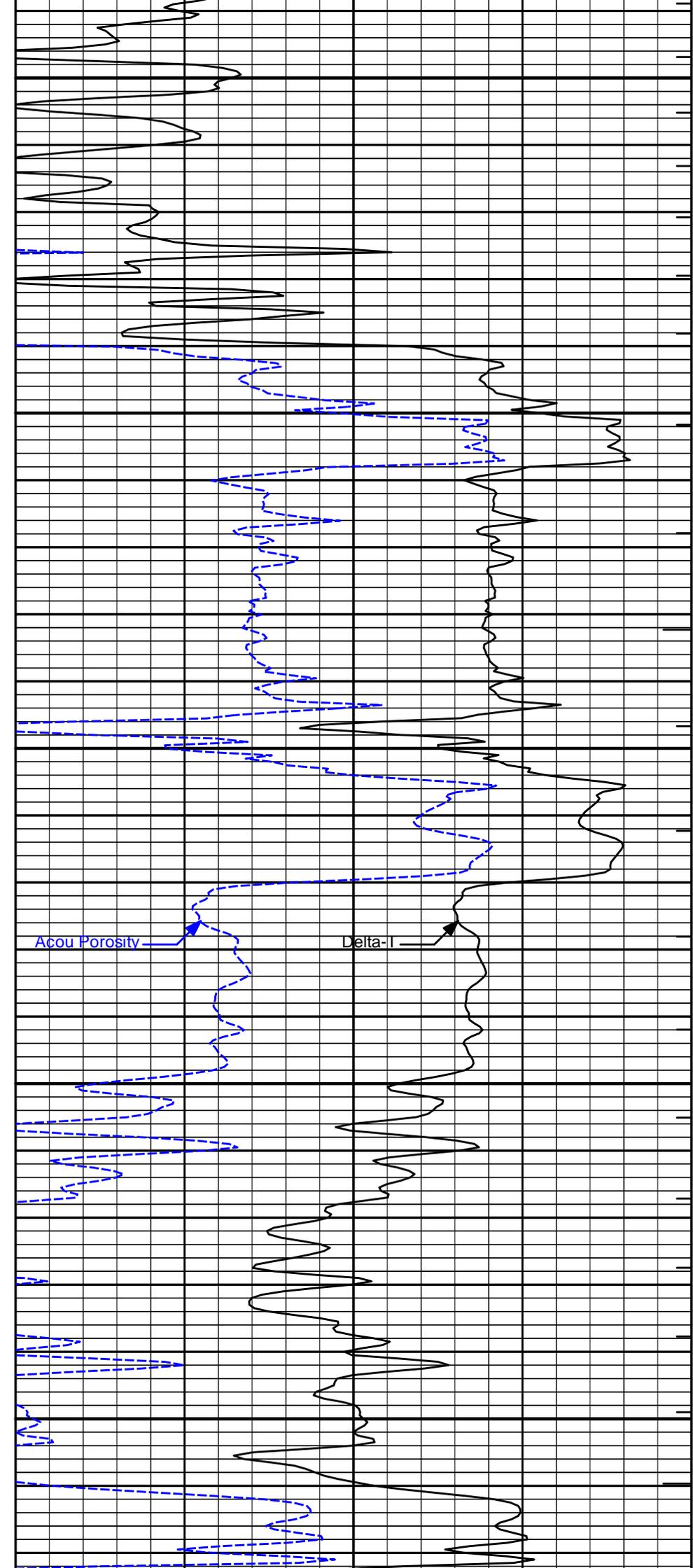




1800

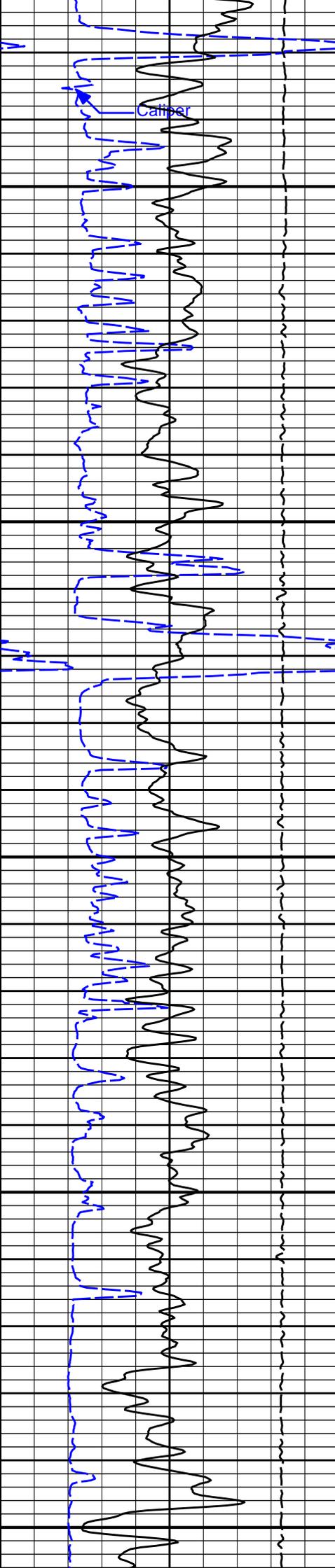
1900

2000



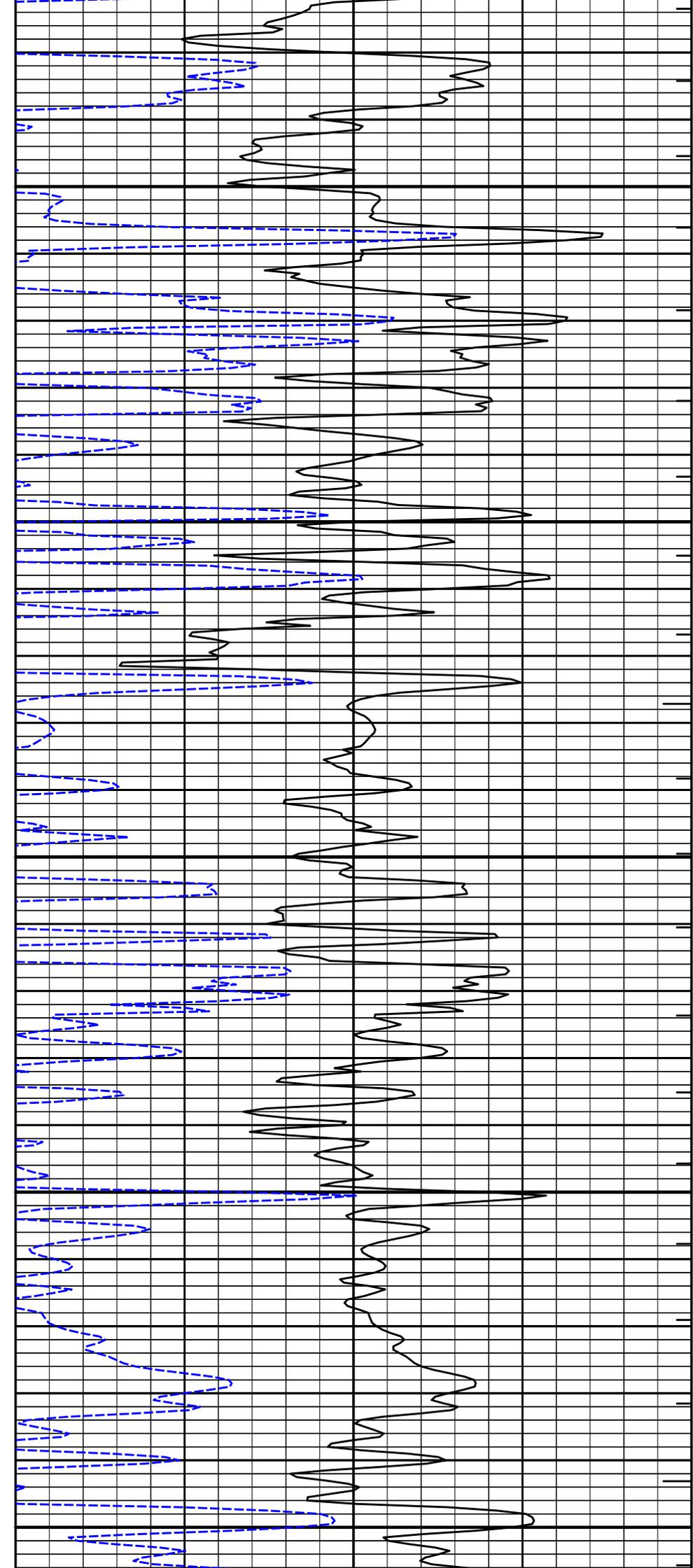
Acou Porosity

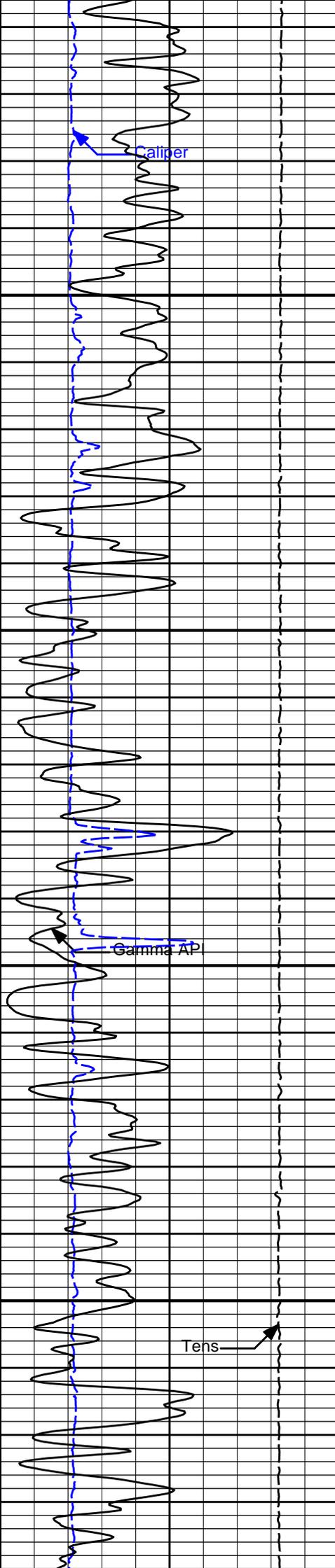
Delta-I



2100

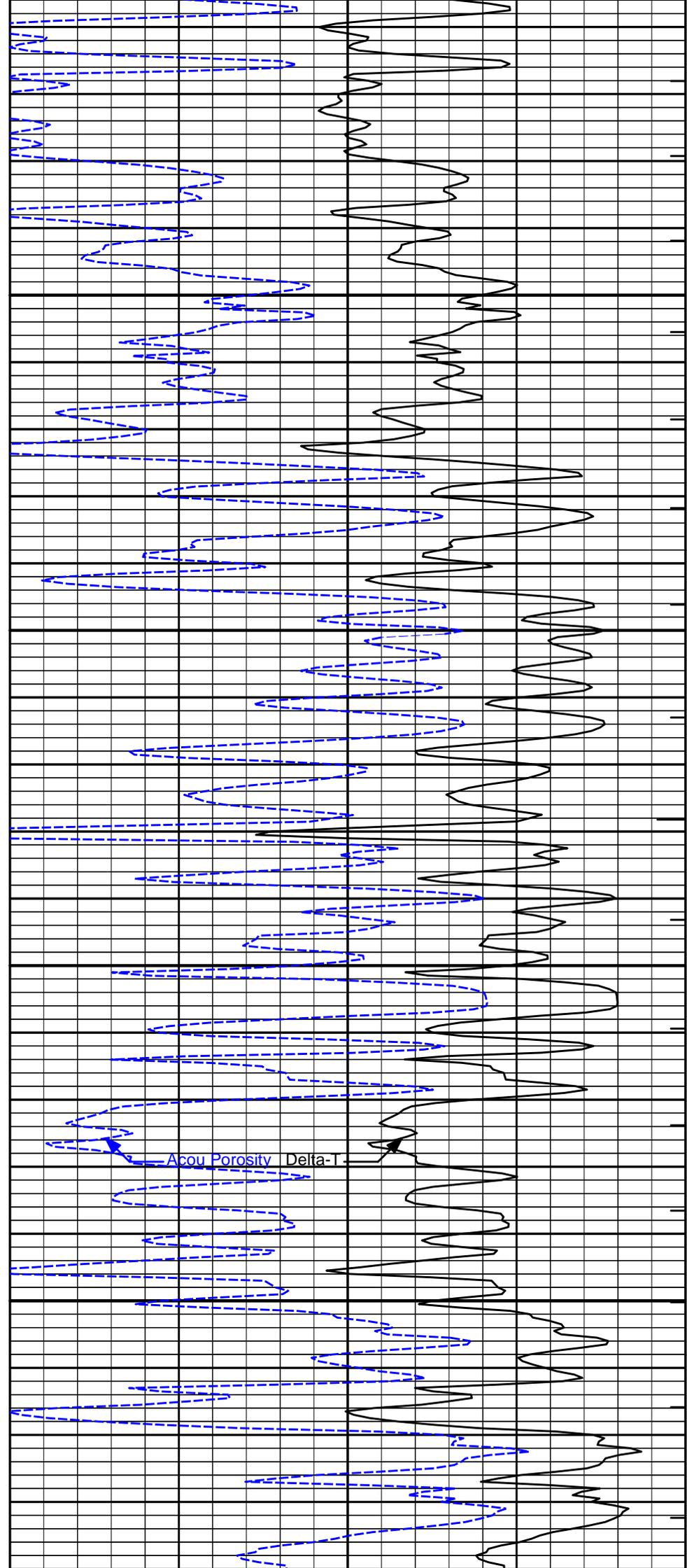
2200



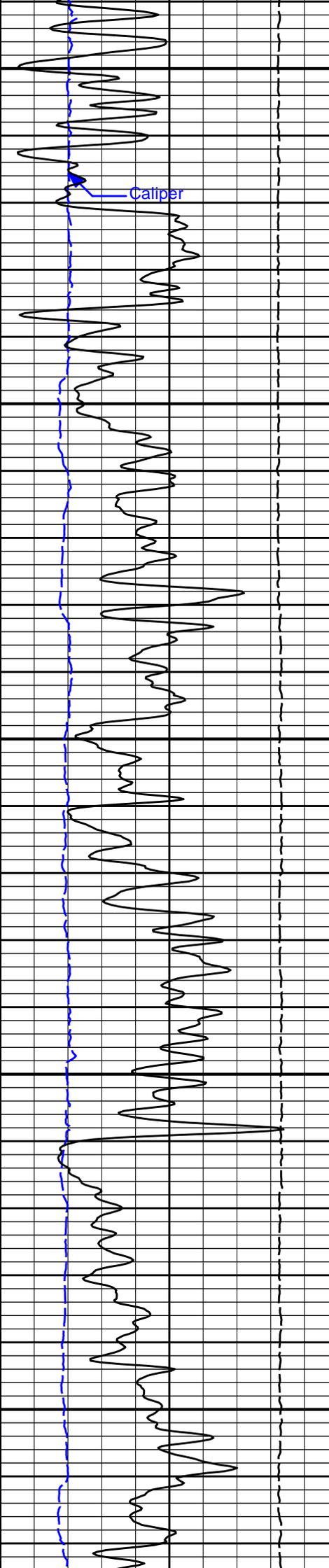


2300

2400



Acou Porosity Delta-T

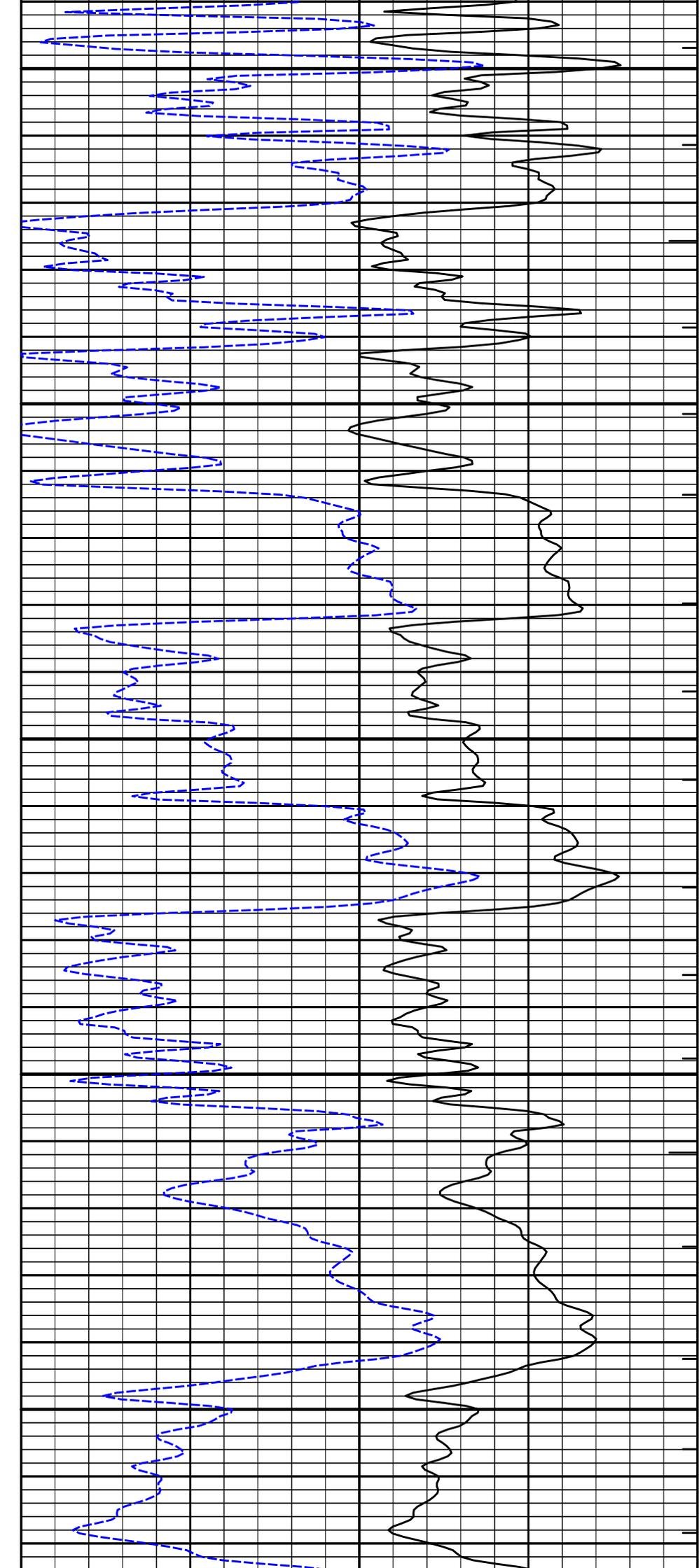


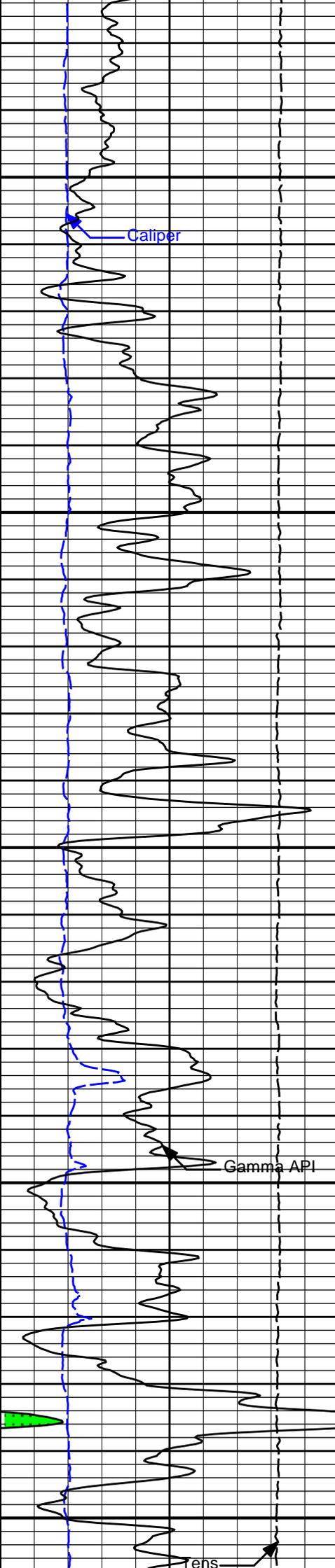
2500

Caliper

2600

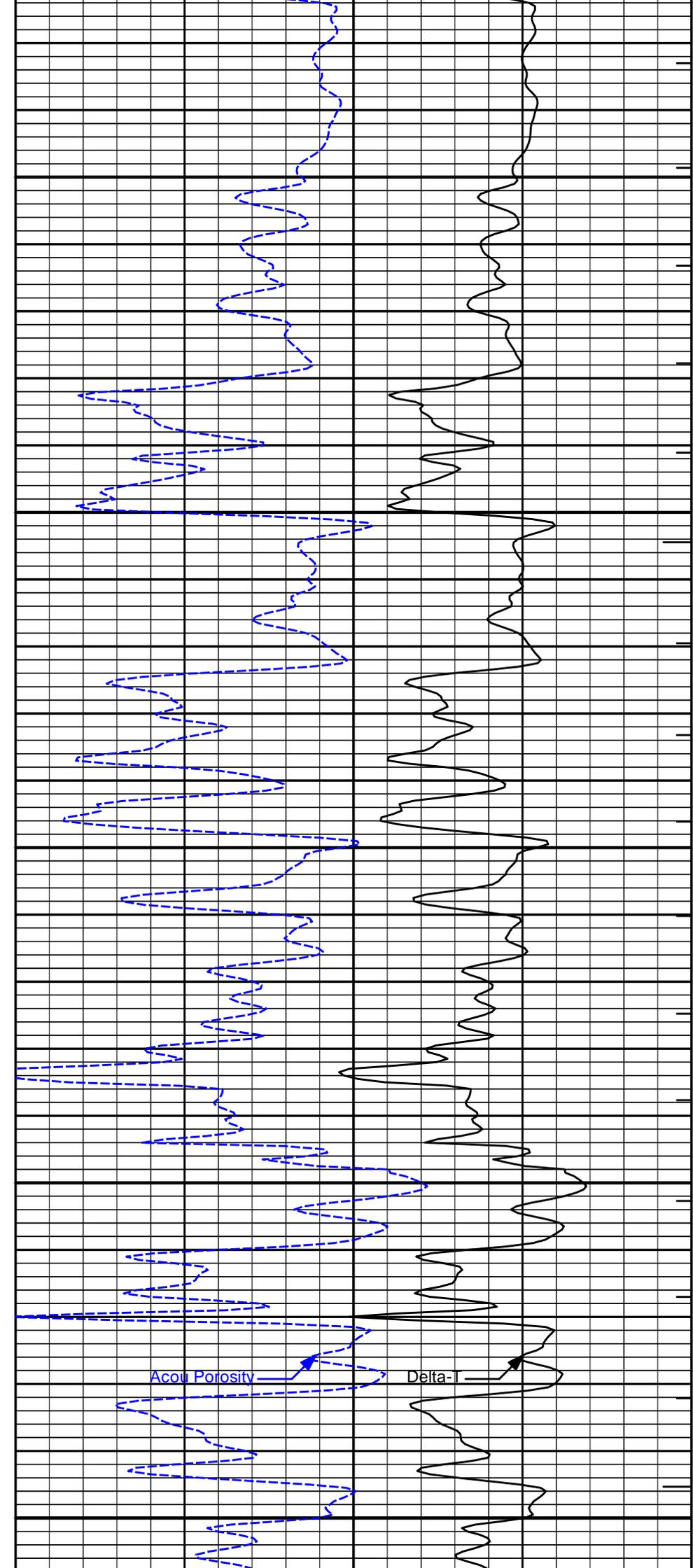
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2800

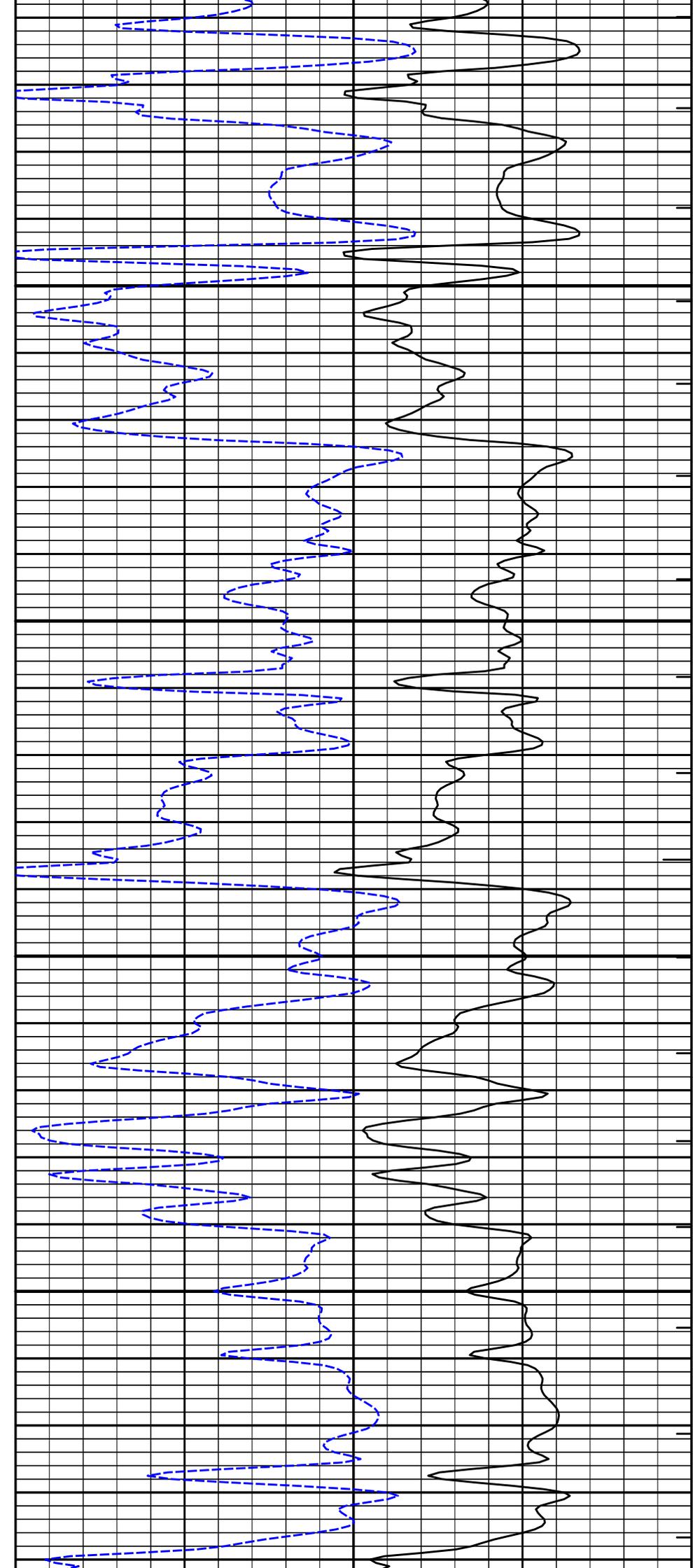
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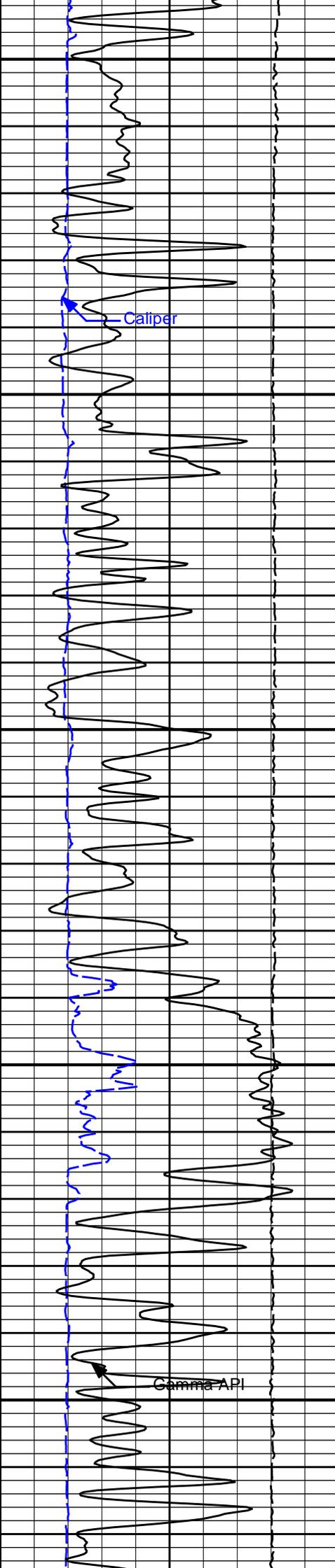




3000

3100

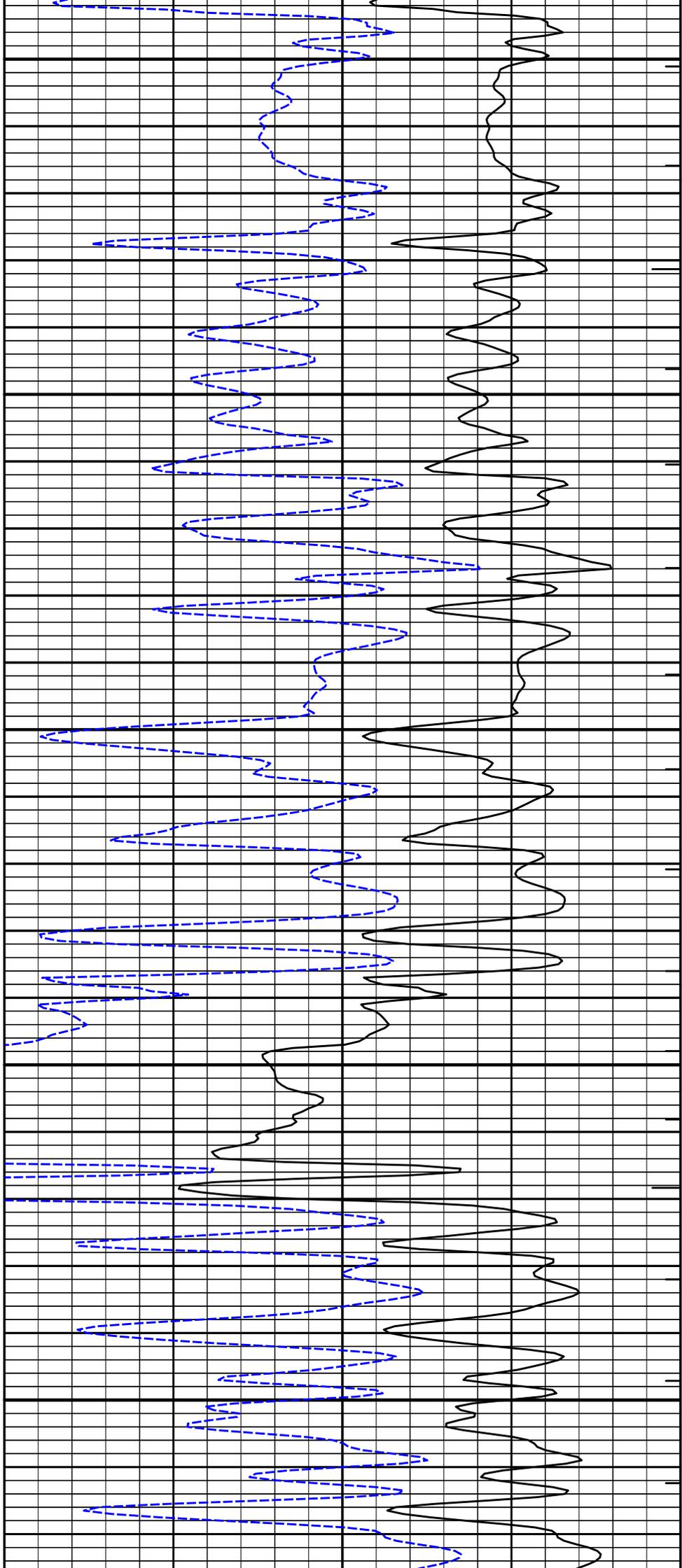


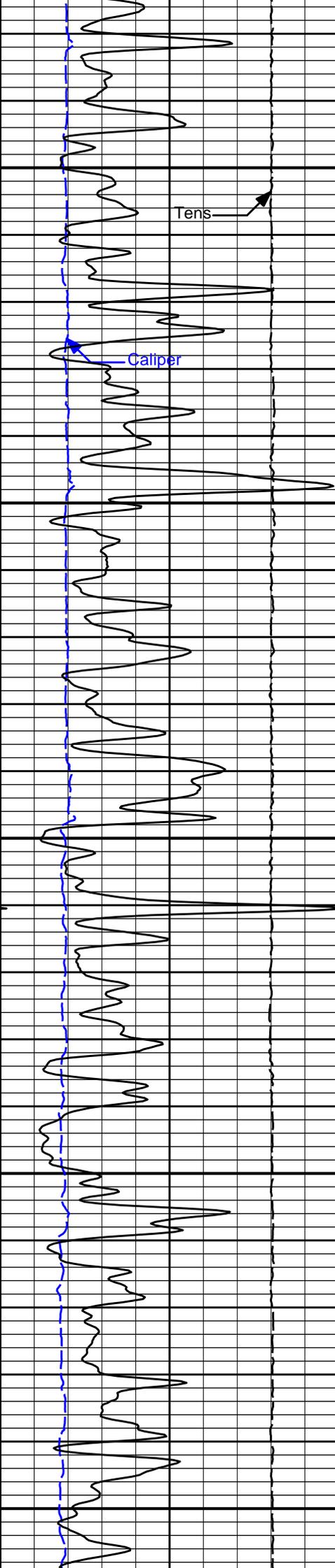


3200

3300

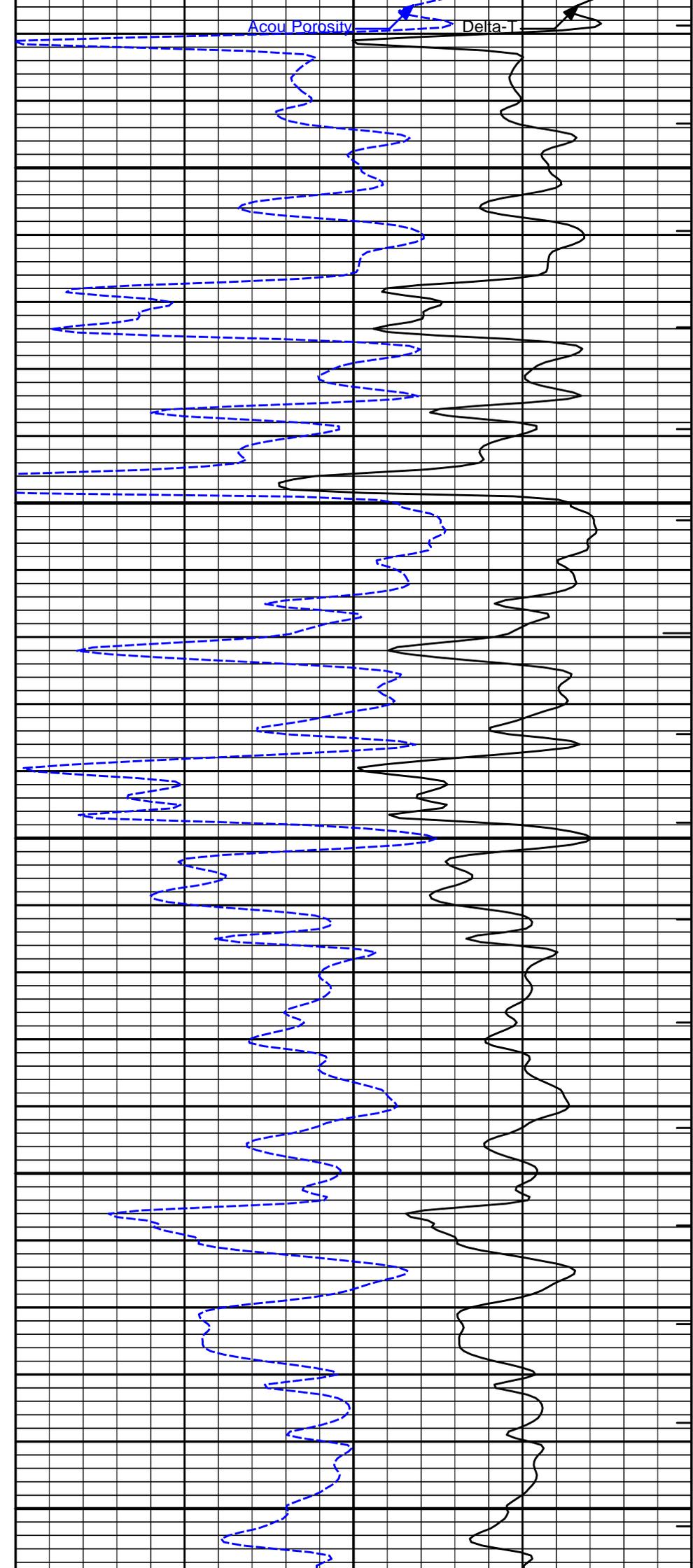
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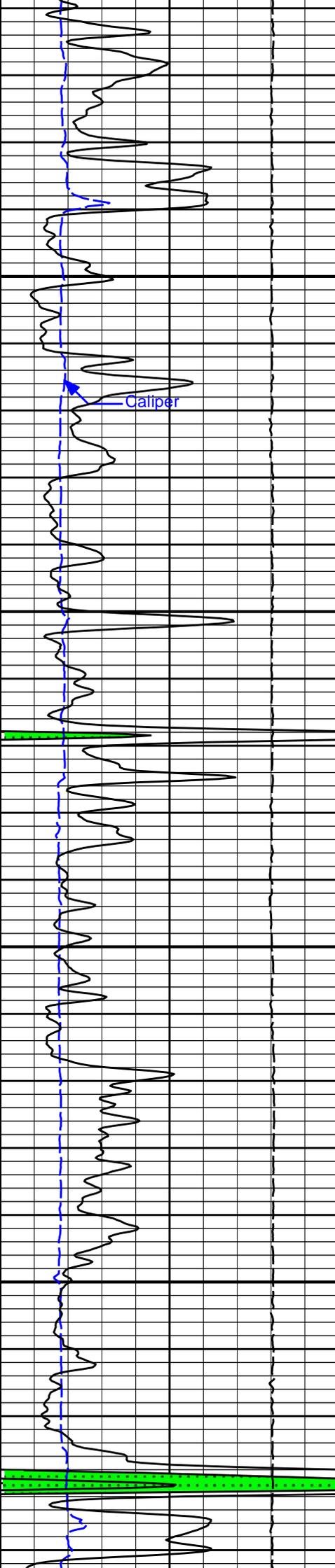




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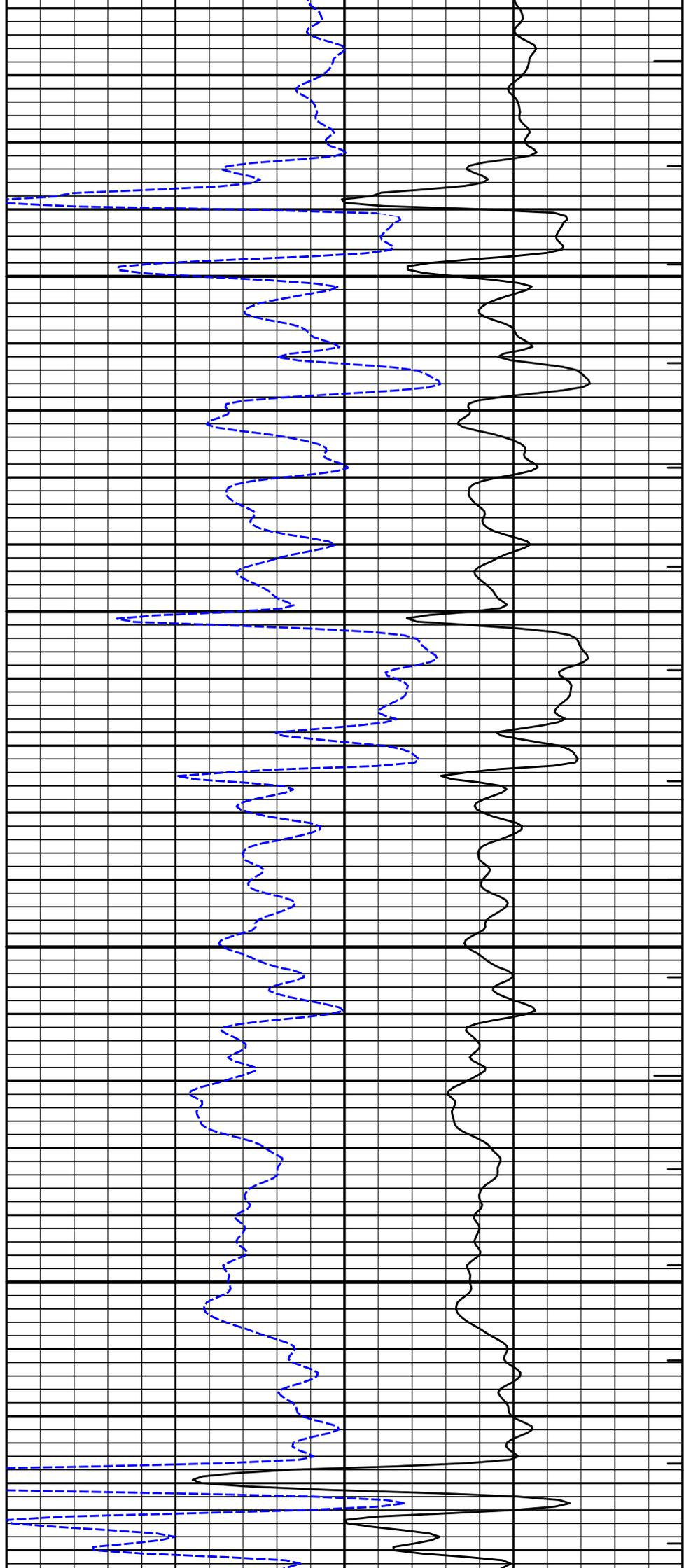
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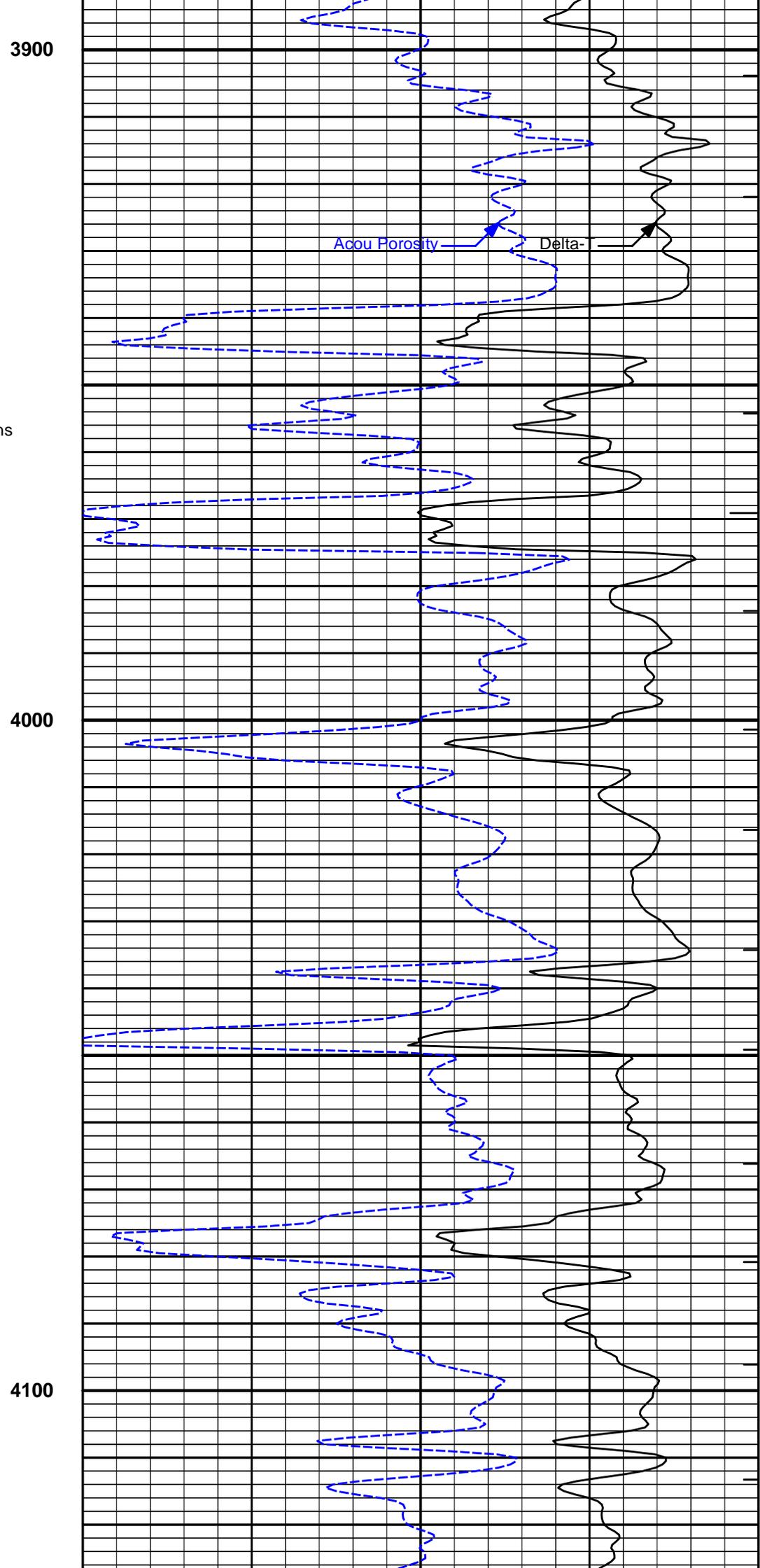
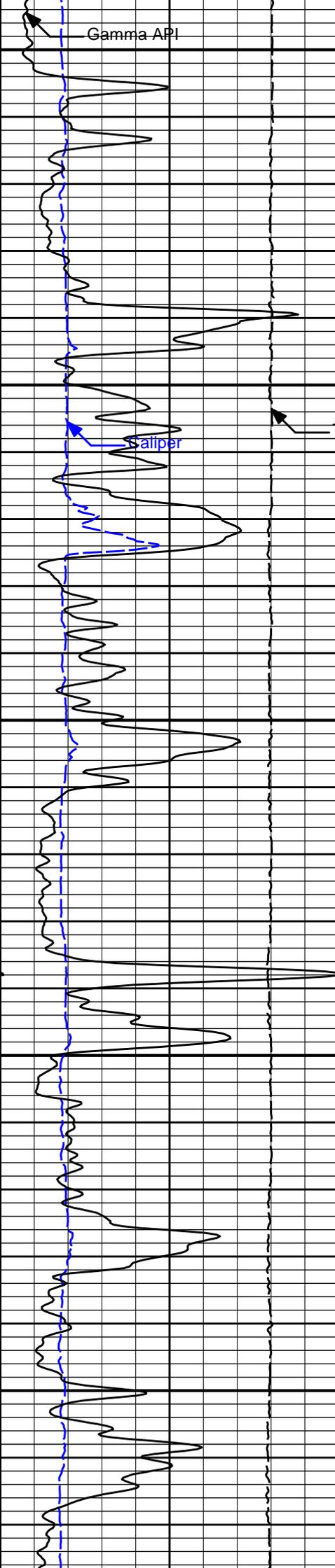


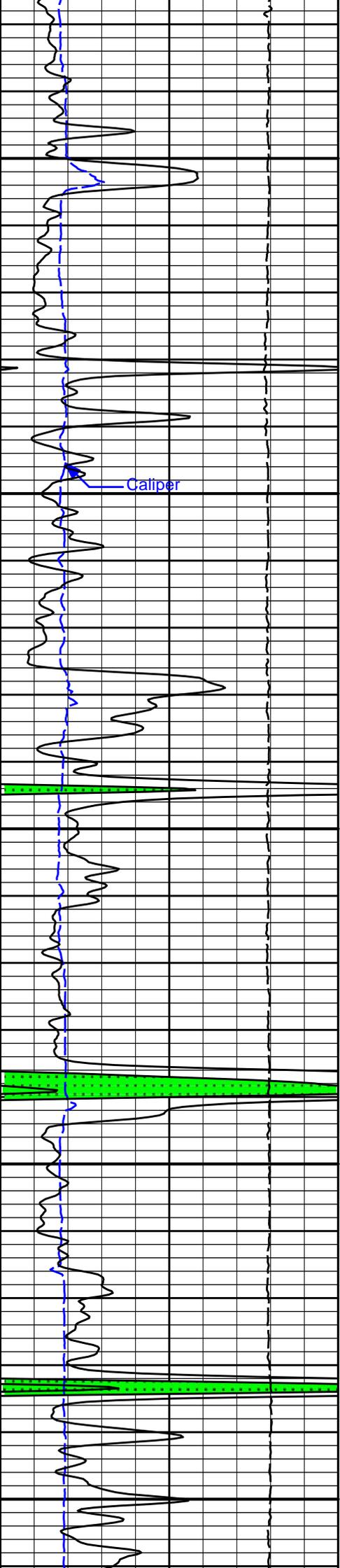


3700

3800

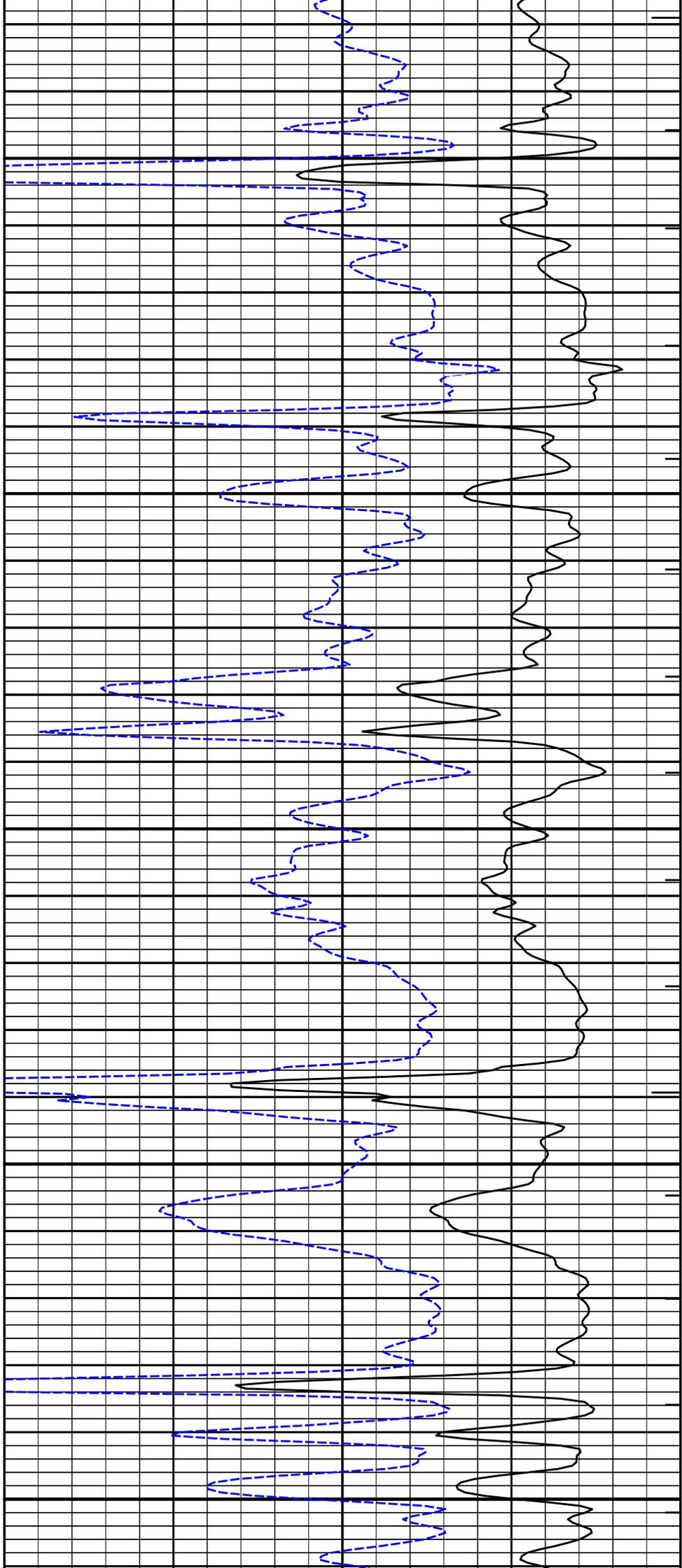


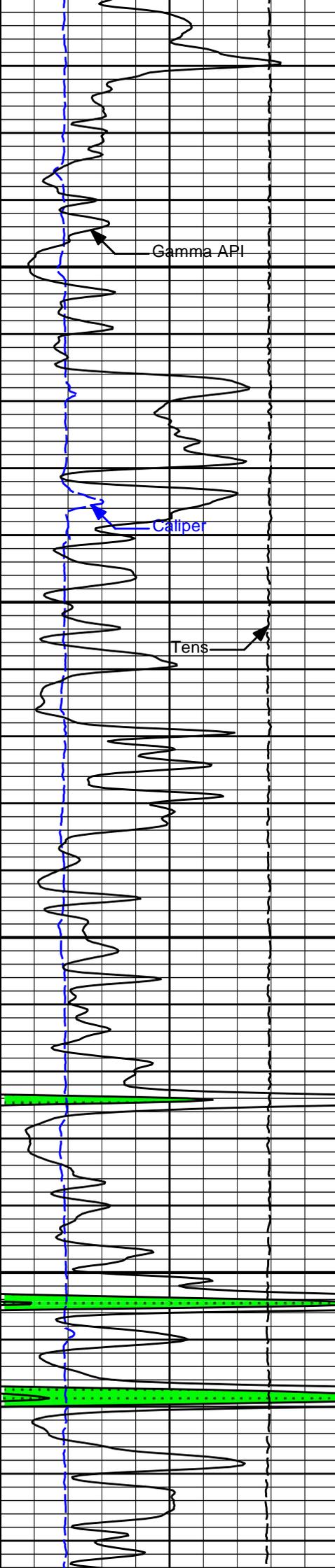




4200

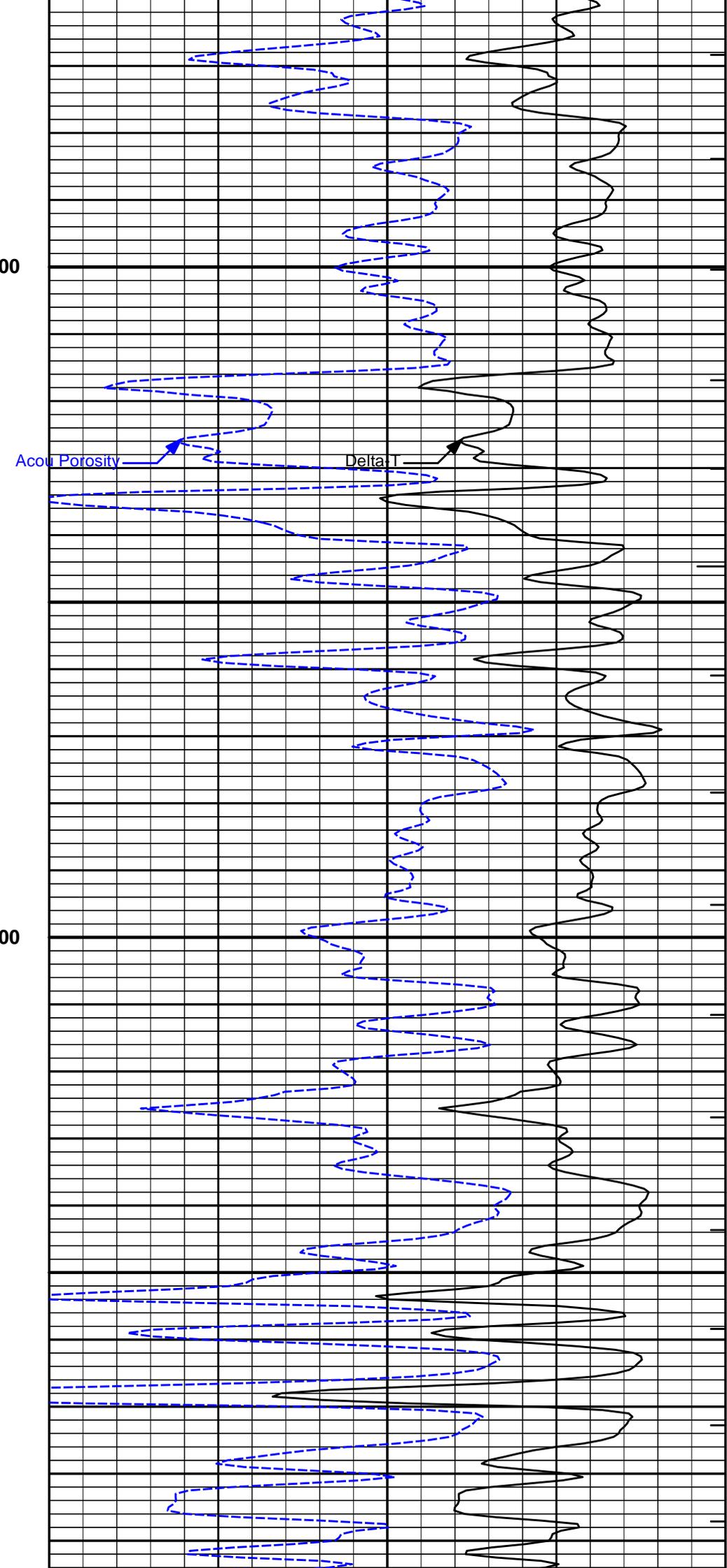
4300





4400

4500



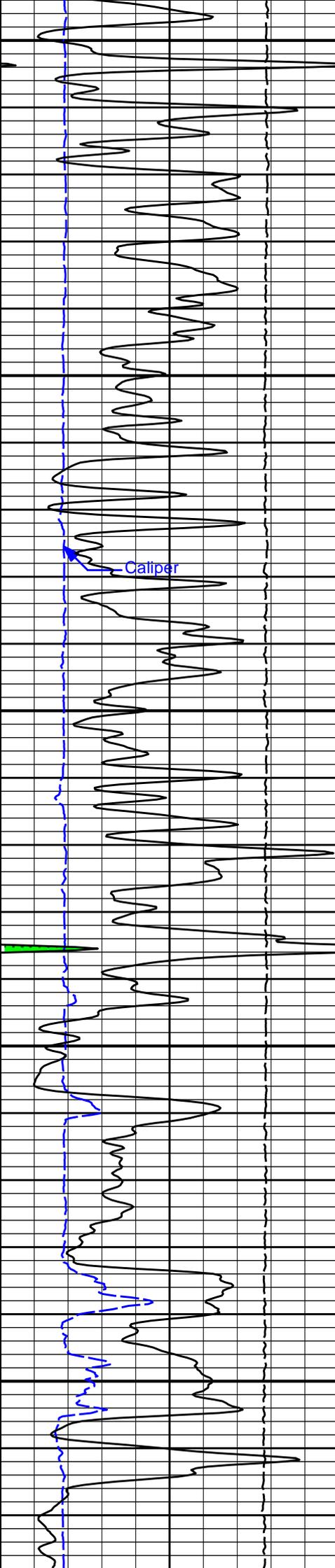
Gamma API

Caliper

Tens

Acou Porosity

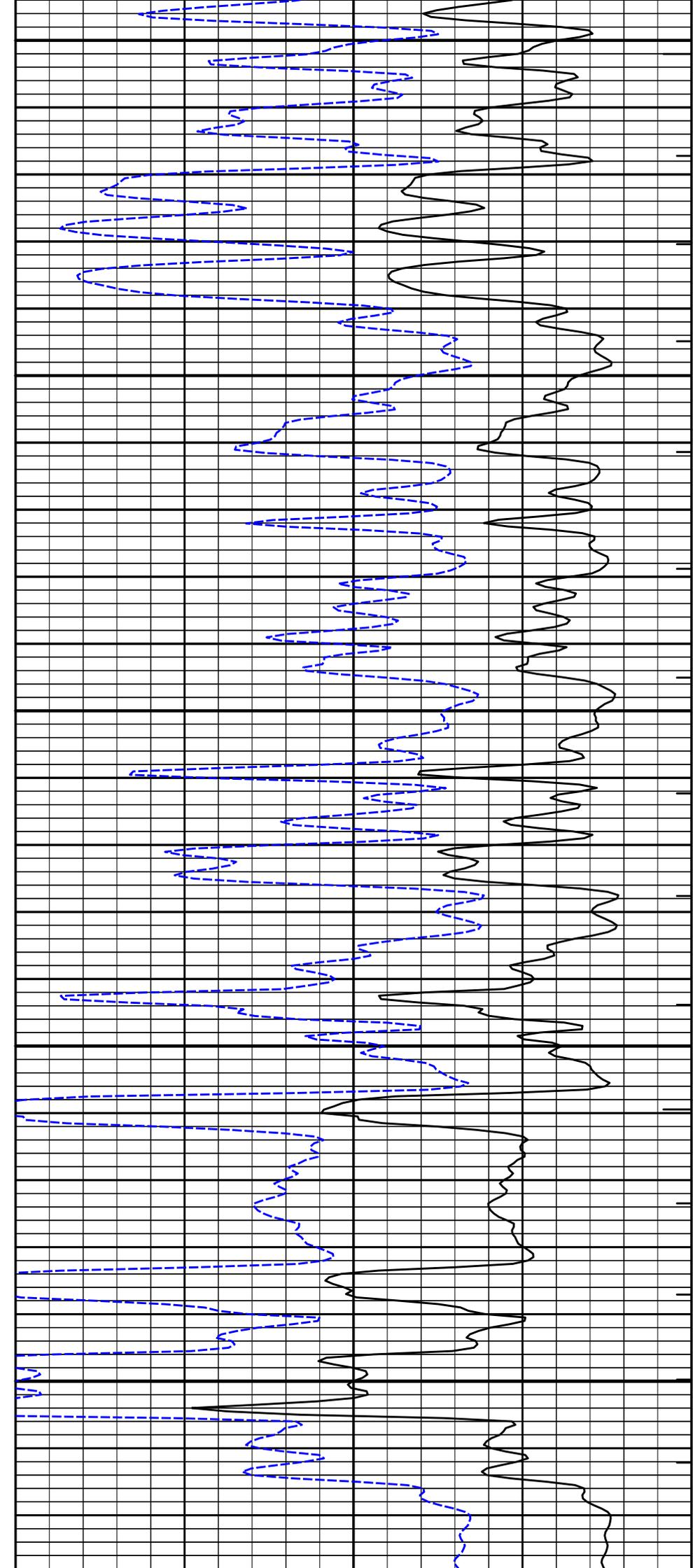
Delta T

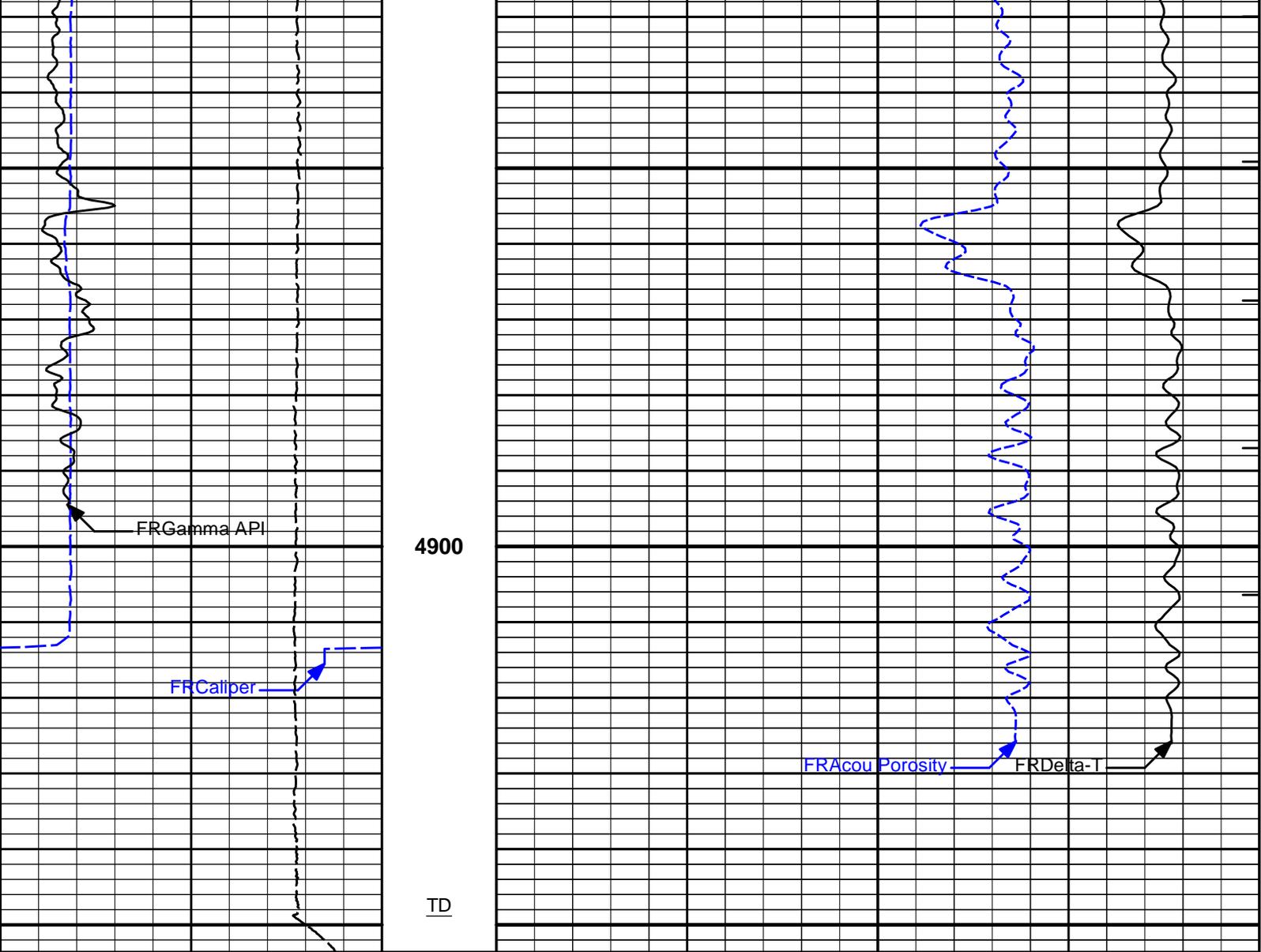


4600

4700

4800





0	Gamma API	150	1 : 240 ft		ITTT	
	api					
15K	Tens	0		140	Delta-T	40
	pounds				microsec per ft	
6	CALI	16		30	Acou Porosity	-10
	inches				percent	

HALLIBURTON

Plot Time: 12-Aug-18 01:11:23
 Plot Range: 1775 ft to 4953.58 ft
 Data: MERIT_RIVERBND4\Well Based\MAIN_TD-CSG\
 Plot File: \BSAT\BSAT_5inch_MAIN

5 INCH MAIN LOG

5" MAIN LOG

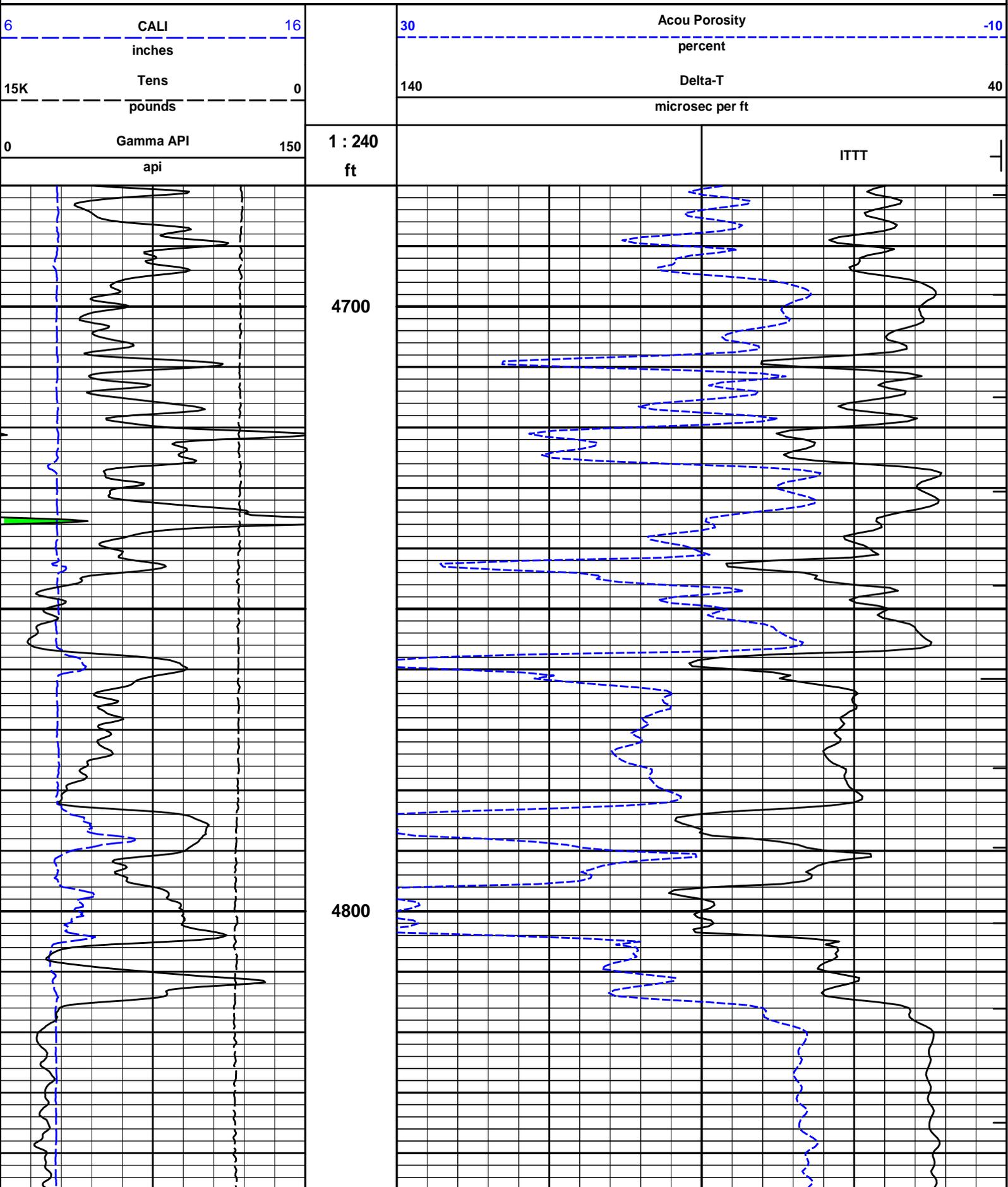
HALLIBURTON

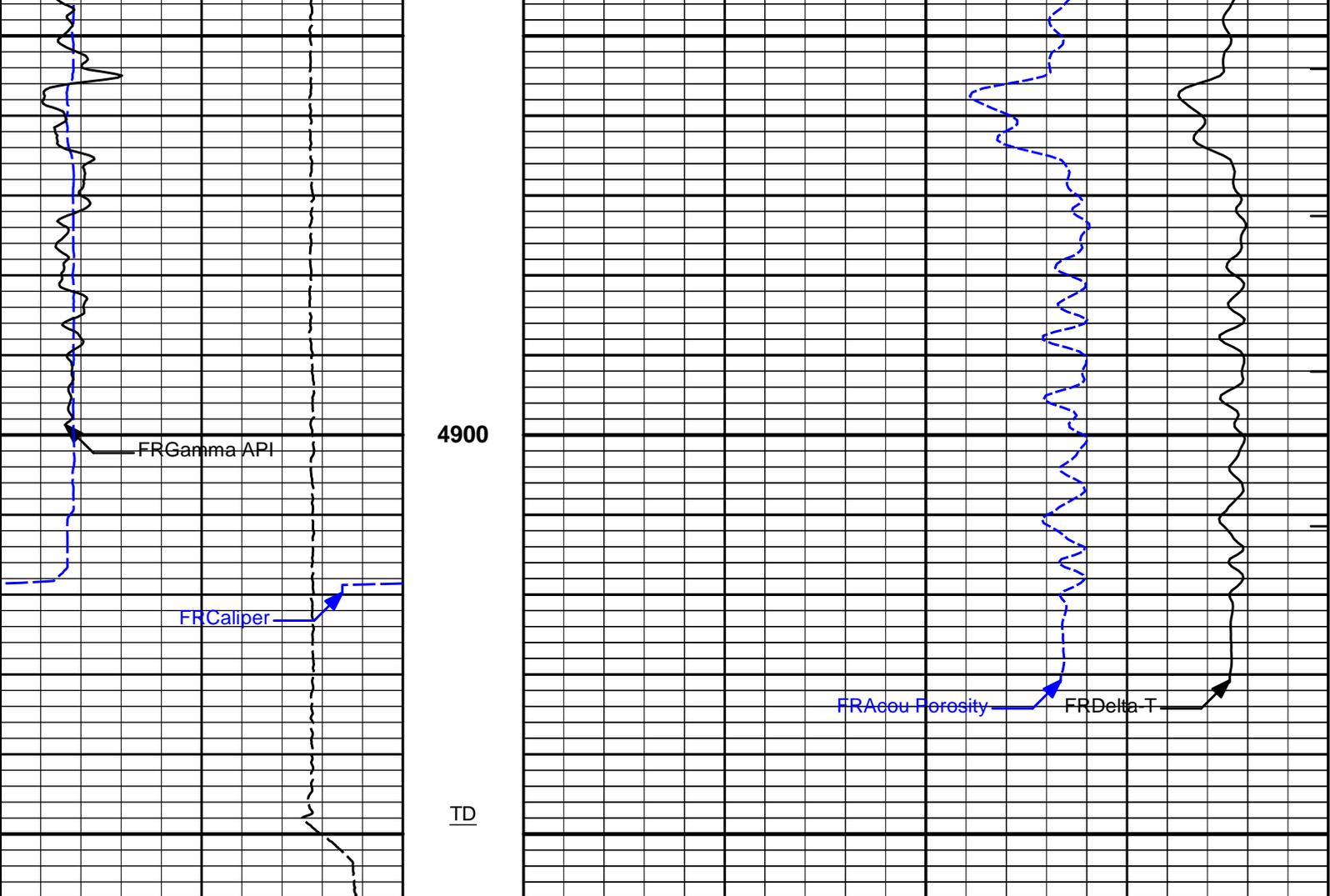
Plot Time: 12-Aug-18 01:11:23
 Plot Range: 4680 ft to 4958.08 ft
 Data: MERIT_RIVERBND4\Well Based\REPEAT*
 Plot File: \BSAT\BSAT_5inch_RPT

REPEAT SECTION

REPEAT SECTION

5" REPEAT SECTION





0	Gamma API	150	1 : 240 ft		ITTT	
	api					
15K	Tens	0		140	Delta-T	40
	pounds				microsec per ft	
6	CALI	16		30	Acou Porosity	-10
	inches				percent	

HALLIBURTON

Plot Time: 12-Aug-18 01:11:24
 Plot Range: 4680 ft to 4958.08 ft
 Data: MERIT_RIVERBND4\Well Based\REPEAT*
 Plot File: \BSAT\BSAT_5inch_RPT

REPEAT SECTION

5" REPEAT SECTION

HALLIBURTON

PARAMETERS REPORT

Depth (ft)	Tool Name	Mnemonic	Description	Value	Units
TOP					
	SHARED	BS	Bit Size	7.875	in

SHARED	UBS	Use Bit Size instead of Caliper for all applications.	No	
SHARED	MDBS	Mud Base	Water	
SHARED	MDWT	Borehole Fluid Weight	9.200	ppg
SHARED	WAGT	Weighting Agent	Natural	
SHARED	BSAL	Borehole salinity	0.00	ppm
SHARED	FSAL	Formation Salinity NaCl	0.00	ppm
SHARED	KPCT	Percent K in Mud by Weight?	0.00	%
SHARED	RMUD	Mud Resistivity	2.000	ohmm
SHARED	TRM	Temperature of Mud	75.0	degF
SHARED	CSD	Logging Interval is Cased?	No	
SHARED	ICOD	AHV Casing OD	5.500	in
SHARED	CSTR	Compressive Strength	1000.00	psia
SHARED	ST	Surface Temperature	75.0	degF
SHARED	TD	Total Well Depth	4950.00	ft
SHARED	BHT	Bottom Hole Temperature	135.0	degF
SHARED	SVTM	Navigation and Survey Master Tool	NONE	
SHARED	AZTM	High Res Z Accelerometer Master Tool	GTET	
SHARED	TEMM	CBM Temperature Master Tool	GTET	
SHARED	SOCI	Source of Casing Information	Parameters	
SHARED	MSAL	Water-base mud filtrate salinity	0.00	ppm
Rwa / CrossPlot	XPOK	Process Crossplot?	Yes	
Rwa / CrossPlot	FCHO	Select Source of F	Automatic	
Rwa / CrossPlot	AFAC	Archie A factor	0.6200	
Rwa / CrossPlot	MFAC	Archie M factor	2.1500	
Rwa / CrossPlot	RMFR	Rmf Reference	0.10	ohmm
Rwa / CrossPlot	TMFR	Rmf Ref Temp	75.00	degF
Rwa / CrossPlot	RWA	Resistivity of Formation Water	0.05	ohmm
Rwa / CrossPlot	ADP	Use Air Porosity to calculate CrossplotPhi	No	
Rwa / CrossPlot	BHSM	Borehole Size Source Tool	SDLT	
Rwa / CrossPlot	ROIN	Input for RO Calculation	Rwa	
GTET	GROK	Process Gamma Ray?	Yes	
GTET	GEOK	Process Gamma Ray EVR?	No	
GTET	TPOS	Tool Position for Gamma Ray Tools.	Eccentered	
GTET	BHSM	Borehole Size Source Tool	SDLT	
DSNT	DNOK	Process DSN?	Yes	
DSNT	DEOK	Process DSN EVR?	No	
DSNT	NLIT	Neutron Lithology	Limestone	
DSNT	DNSO	DSN Standoff - 0.25 in (6.35 mm) Recommended	0.250	in
DSNT	DNTT	Temperature Correction Type	None	
DSNT	DPRS	DSN Pressure Correction Type	None	
DSNT	SHCO	View More Correction Options	No	
DSNT	UTVD	Use TVD for Gradient Corrections?	No	
DSNT	LHWT	Logging Horizontal Water Tank?	No	
DSNT	UCLA	Classic Neutron Parameter utilized?	No	
DSNT	BHSM	Borehole Size Source Tool	SDLT	
SDLT	CLOK	Process Caliper Outputs?	Yes	
Microlog Pad	MLOK	Process MicroLog Outputs?	Yes	
SDLT Pad	DNOK	Process Density?	Yes	
SDLT Pad	DNOK	Process Density EVR?	No	
SDLT Pad	CB	Logging Calibration Blocks?	No	
SDLT Pad	SPVT	SDLT Pad Temperature Valid?	Yes	
SDLT Pad	DTWN	Disable temperature warning	No	
SDLT Pad	DMA	Formation Density Matrix	2.710	g/cc
SDLT Pad	DFL	Formation Density Fluid	1.000	g/cc

SDLT Pad	BHSM	Borehole Size Source Tool	SDLT	
BSAT	MBOK	Compute BCAS Results?	Yes	
BSAT	FLLO	Frequency Filter Low Pass Value?	5000	Hz
BSAT	FLHI	Frequency Filter High Pass Value?	27000	Hz
BSAT	DTFL	Delta -T Pore Fluid	189.00	uspf
BSAT	DTMT	Delta -T Matrix Type	Limestone 47.6	
BSAT	DTSH	Delta -T Shale	100.00	uspf
BSAT	SPEQ	Acoustic Porosity Equation	Wylie	
ACRt Sonde	RTOK	Process ACRt?	Yes	
ACRt Sonde	MNSO	Minimum Tool Standoff	1.50	in
ACRt Sonde	TCS1	Temperature Correction Source	FP Lwr & FP Upr	
ACRt Sonde	TPOS	Tool Position	Eccentered	
ACRt Sonde	RMOP	Rmud Source	Mud Cell	
ACRt Sonde	RMIN	Minimum Resistivity for MAP	0.20	ohmm
ACRt Sonde	RMAX	Maximum Resistivity for MAP	200.00	ohmm
ACRt Sonde	THQY	Threshold Quality	0.50	
ACRt Sonde	MRFX	Fixed mud resistivity	2000	ohmm
ACRt Sonde	BHSM	Borehole Size Source Tool	SDLT	
ACRt Sonde	MBFL	Apply Corkscrew Effect?	No	

BOTTOM

Data: MERIT_RIVERBND4\0001 GTET-DSNT-SDLT-BSAT-ACRT004 11-Aug-18 23:24 Up @4954.0f

Date: 11-Aug-18 23:45:32

HALLIBURTON

CALIBRATION REPORT

NATURAL GAMMA RAY TOOL SHOP CALIBRATION

Tool Name: GTET - 11013113

Reference Calibration Date: 02-May-18 11:20:36

Engineer: WHITLOCK

Calibration Date: 05-Aug-18 09:58:00

Software Version: WL INSITE R5.6.3 (Build 4)

Calibration Version: 1

Calibrator Source S/N: TB-79

Calibrator API Reference:222.00 api

Equivalent Calibrator API Reference:225.9 api

Measurement	Measured	Calibrated	Units
Background	26.4	26.2	api
Background + Calibrator	253.6	252.1	api
Calibrator	227.2	225.9	api

NATURAL GAMMA RAY TOOL FIELD CALIBRATION

Tool Name: GTET - 11013113

Reference Calibration Date: 05-Aug-18 09:58:00

Engineer: WHITLOCK

Calibration Date: 05-Aug-18 10:00:58

Software Version: WL INSITE R5.6.3 (Build 4)

Calibration Version: 1

Calibrator Source S/N: TB-79

Calibrator API Reference:222.00 api

Equivalent Calibrator API Reference:225.9 api

Field Verification	Shop	Field	Units
Background	26.2	26.1	api
Background + Calibrator	252.1	251.2	api
Calibrator	225.9	225.0	api

Shop	Field	Difference	Tolerance
225.9	225.0	0.9	+/- 9.00

DUAL SPACED NEUTRON SHOP CALIBRATION

Tool Name: DSNT - 11010011

Reference Calibration Date: 04-Aug-18 10:00:11

Tool Name: DSNT - 11019641

Reference Calibration Date: 04-Aug-18 12:03:14

Engineer: SCHLIEM

Calibration Date: 04-Aug-18 12:26:27

Software Version: WL INSITE R5.6.3 (Build 4)

Calibration Version: 1

Logging Source S/N: DSN-436

Tank Serial Number: EL RENO HWT

Reference value assigned to Tank: 56.100

Snow Block S/N: 12156883

Calibration Tank Water Temperature: 89 degF

Min. Tool Housing Outside Diameter: 3.625 in

CALIBRATION CONSTANTS

Measurement	Prev. Value	New Value	Control Limit On New Value
Gain:	0.97922	0.97742	0.900 - 1.100

WATER TANK SUMMARY (Horizontal Water Tank)

Measurement	Current Reading (Previous Coef.)	Calibrated (New Coef.)	Change	Control Limit On Change
Porosity (decp):	0.2364	0.2358	0.0006	+/- 0.0020
Calibrated Ratio:	10.5794	10.5599	0.019	+/- 0.050

VERIFIER

Measurement	Value	Control Limit
Snow-Block Porosity (decp):	0.0667	0.02000 - 0.09000

PASS/FAIL SUMMARY

Background Check:	Passed
Gain-Range Check:	Passed
Snow-Block Check:	Passed

DUAL SPACED NEUTRON FIELD CALIBRATION

Tool Name: DSNT - 11019641

Reference Calibration Date: 04-Aug-18 12:26:27

Engineer: WHITLOCK

Calibration Date: 05-Aug-18 09:45:13

Software Version: WL INSITE R5.6.3 (Build 4)

Calibration Version: 1

Logging Source S/N: DSN-436

Snow Block S/N: 12156883

NEUTRON FIELD-CHECK SUMMARY

	Shop	Field	Difference	Control Limit On Change
Snow-Block Porosity (decp):	0.0667	0.0665	-0.0002	+/- 0.0150

PASS/FAIL SUMMARY

Block Change Check:	Passed
Snow Block Stat Check:	Passed
Temperature Check:	Passed

DENSITY CALIPER SHOP CALIBRATION

Tool Name: SDLT - 10960494

Reference Calibration Date: 01-Jan-70 00:00:00

Engineer: WHITLOCK

Calibration Date: 08-Jun-18 16:19:27

Software Version: WL INSITE R5.6.3 (Build 4)

Calibration Version: 1

Host Tool Name: DSNT - 11019641

CALIBRATION COEFFICIENTS

Measurement	Previous Value	New Value	Control Limit On New Value
Pad Offset	-3977.11	-3977.11	-7000.00 - -1000.00
Pad Gain	0.0003897	0.0003897	0.0002000 - 0.0006000

Arm Offset	-3073.13	-3073.13	-5000.00 - 3000.00
Arm Gain	0.0005210	0.0005210	0.000300 - 0.000700
Arm Power	-0.000005094	-0.000005094	-0.000010000 - 0.000010000

The ring diameter is computed from: $\text{DIAMETER} = \text{PAD EXTENSION} + \text{ARM EXTENSION} + \text{TOOL DIAMETER}$

Tool Diameter: 4.50 in

CALIBRATION RINGS					
Measurement	Current Reading (Previous Coeff.)	Calibrated (New Coeff.)	Change	Control Limit On New Value	
PAD EXTENSION:					
Small Ring (in)	2.00	2.00	0.00	+/- 0.20	
Medium Ring (in)	3.75	3.75	0.00	+/- 0.20	
RING DIAMETER:					
Small Ring (in)	6.50	6.50	0.00	+/- 0.20	
Medium Ring (in)	8.25	8.25	0.00	+/- 0.20	
Large Ring (in)	15.00	15.00	0.00	+/- 0.20	

PASS/FAIL SUMMARY	
Calibration-Coefficients Range Check:	Passed
Ring-Measurement Check:	Passed
PASS/FAIL SUMMARY	
Calibration-Coefficients Range Check:	Passed

SDLT CALIPER FIELD CALIBRATION

Tool Name: SDLT - 10960494	Reference Calibration Date: 08-Jun-18 16:19:27
Engineer: WHITLOCK	Calibration Date: 05-Aug-18 09:46:30
Software Version: WL INSITE R5.6.3 (Build 4)	Calibration Version: 1

MEASURED CALIPER VALUES				
Measurement	Shop	Field	Change	Control Limit On New Value
Pad Extension	3.75	3.79	0.04	+/- 0.10
Ring Diameter	8.25	8.25	-0.00	+/- 0.15

PASS/FAIL SUMMARY	
Pad Extension Check:	Passed
Diameter Check:	Passed

MICRO LOG SHOP CALIBRATION

Tool Name: Microlog Pad - 10960494	Reference Calibration Date: 01-Jan-70 00:00:00
Engineer: WHITLOCK	Calibration Date: 08-Jun-18 16:08:54
Software Version: WL INSITE R5.6.3 (Build 4)	Calibration Version: 1
Host Tool Name: DSNT - 11019641	

CALIBRATION COEFFICIENT SUMMARY					
Measurement	Micro Log Normal		Micro Log Lateral		Units
	Measured	Calibrated	Measured	Calibrated	
Tool Zero	-0.07	-0.07	-0.01	-0.01	ohmm
Calibration Point #1	0.00	0.00	0.00	0.00	ohmm
Calibration Point #2	20.00	20.00	20.00	20.00	ohmm
Internal Reference	19.92	19.92	19.98	19.98	ohmm

Measurement	Micro Log Normal Tool Value	Micro Log Lateral Tool Value	Units
Tool Zero	-0.11	0.18	V
Calibration Point #1	18.42	2.03	V
Calibration Point #2	5354.08	6974.83	V
Internal Reference	5331.77	6967.38	V

MICRO LOG FIELD CHECK

ALUMINUM				
Density (g/cc)	2.582	2.581	-0.001	+/- 0.0150
Pe	3.106	3.132	0.026	+/- 0.150

TOOL SUMMARY				
Measurement	Near Detector		Far Detector	
	Value	Control Limits	Value	Control Limits
QUALITY				
Background	0.0017	+/- 0.0110	0.0006	+/- 0.0140
Magnesium Block	-0.0008	+/- 0.0110	-0.0008	+/- 0.0140
Aluminum Block	-0.0005	+/- 0.0110	-0.0001	+/- 0.0140
Resolution	9.21	6.00 - 11.50	9.21	6.00 - 11.50
Internal Verifier(B+D+P+L)	1580	1200 - 2700	831	800 - 1700

PASS/FAIL SUMMARY	
Background Quality Check:	Passed
Background Range Check:	Passed
Background Resolution Check:	Passed
Background Verification Check:	Passed
Magnesium Quality Check:	Passed
Aluminum Quality Check:	Passed
Gains Check:	Passed
Changes in Calibration Blocks:	Passed

SPECTRAL DENSITY FIELD CHECK

Tool Name: SDLT Pad - 11213308 **Reference Calibration Date:** 08-Jun-18 11:01:29
Engineer: WHITLOCK **Calibration Date:** 05-Aug-18 09:57:45
Software Version: WL INSITE R5.6.3 (Build 4) **Calibration Version:** 1

Pad Temperature: 89.3 degF

DENSITY FIELD CALIBRATION SUMMARY				
Measurement	Shop	Field	Change	Control Limit +/-
Near (B+D+P+L) cps	1579.927	1575.636	-4.291	15.990
Far (B+D+P+L) cps	831.441	827.695	-3.746	15.874
Near Resolution	9.21	9.13	-0.080	0.50
Far Resolution	9.21	9.31	0.100	1.00

PASS/FAIL SUMMARY	
Bkg Quality Check:	Passed
Bkg Resolution Check:	Passed
Bkg Verification Check:	Passed

ARRAY COMPENSATED TRUE RESISTIVITY SHOP CALIBRATION

Tool Name: ACRt Sonde - 11830728 **Reference Calibration Date:** 23-Feb-18 10:15:37
Engineer: WHITLOCK **Calibration Date:** 06-Jun-18 13:24:46
Software Version: WL INSITE R5.6.3 (Build 4) **Calibration Version:** 1
Host Tool Name: ACRt Instrument - 11830684

TYPICAL GAIN RANGE

Subarray	R12KHz			R36KHz			R72KHz		
	Lower	(mmho/m)	Upper	Lower	(mmho/m)	Upper	Lower	(mmho/m)	Upper
A1 (80")	0.95	1.0279	1.05	0.95	1.0076	1.05	0.95	0.9997	1.05
A2 (50")	0.95	1.0334	1.05	0.95	1.0139	1.05	0.95	1.0097	1.05
A3 (29")	0.95	1.0346	1.05	0.95	1.0146	1.05	0.95	1.0081	1.05
A4 (17")	0.95	1.0279	1.05	0.95	1.0063	1.05	0.95	1.0018	1.05

A5 (10")	N/A	N/A	N/A	0.95	1.0001	1.05	0.95	0.9950	1.05
A6 (6")	N/A	N/A	N/A	0.95	0.9869	1.05	0.95	0.9818	1.05

SONDE OFFSET

Subarray	R12KHz (mmho/m)	R36KHz (mmho/m)	R72KHz (mmho/m)
A1 (80")	0.315	-4.964	-5.711
A2 (50")	0.409	-3.450	-5.485
A3 (29")	-11.648	-3.720	-3.783
A4 (17")	-90.980	-28.724	-23.707
A5 (10")	N/A	-76.200	-37.537
A6 (6")	N/A	280.488	149.005

TRANSMITTER CURRENT GAIN

Signal	Lower	R	Upper
12K	0.6	0.82	1.3
36K	1.0	1.80	2.0
72K	1.0	1.05	2.0

R-MUD VERIFICATION

Signal	Lower (ohm-m)	Measured (ohm-m)	Upper (ohm-m)
Mud Cell	0.95	0.99	1.05

PASS/FAIL SUMMARY

GAIN RANGE CHK	PASS
SONDE OFFSET CHK	PASS

TOOL OK TO LOG

CALIBRATION SUMMARY

Sensor	Shop	Field	Post	Difference	Tolerance	Units
GTET-11013113						
Gamma Ray Calibrator	225.9	225.0	-----	0.9	+/- 9.00	api
DSNT-11019641						
Snow-Block Porosity	0.0667	0.0665	-----	0.0002	+/- 0.0150	decp
SDLT-10960494						
Pad Extension	3.75	3.79	-----	-0.04	+/-0.10	in
Ring Diameter	8.25	8.25	-----	0.00	+/-0.15	in
Microlog Pad-10960494						
MicroLog Normal	19.92	19.89	-----	0.03	+/-0.80	ohmm
MicroLog Lateral	19.98	19.95	-----	0.03	+/-0.80	ohmm
SDLT Pad-11213308						
Near(B+D+P+L)	1579.927	1575.636	-----	4.291	+/-15.990	cps
Far(B+D+P+L)	831.441	827.695	-----	3.746	+/-15.874	cps
ACRt Sonde-11830728						
Mud Cell	0.99	-----	-----	0	-----	ohm-m

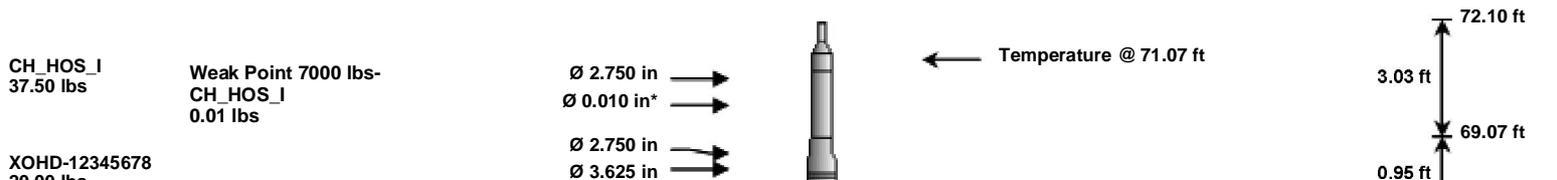
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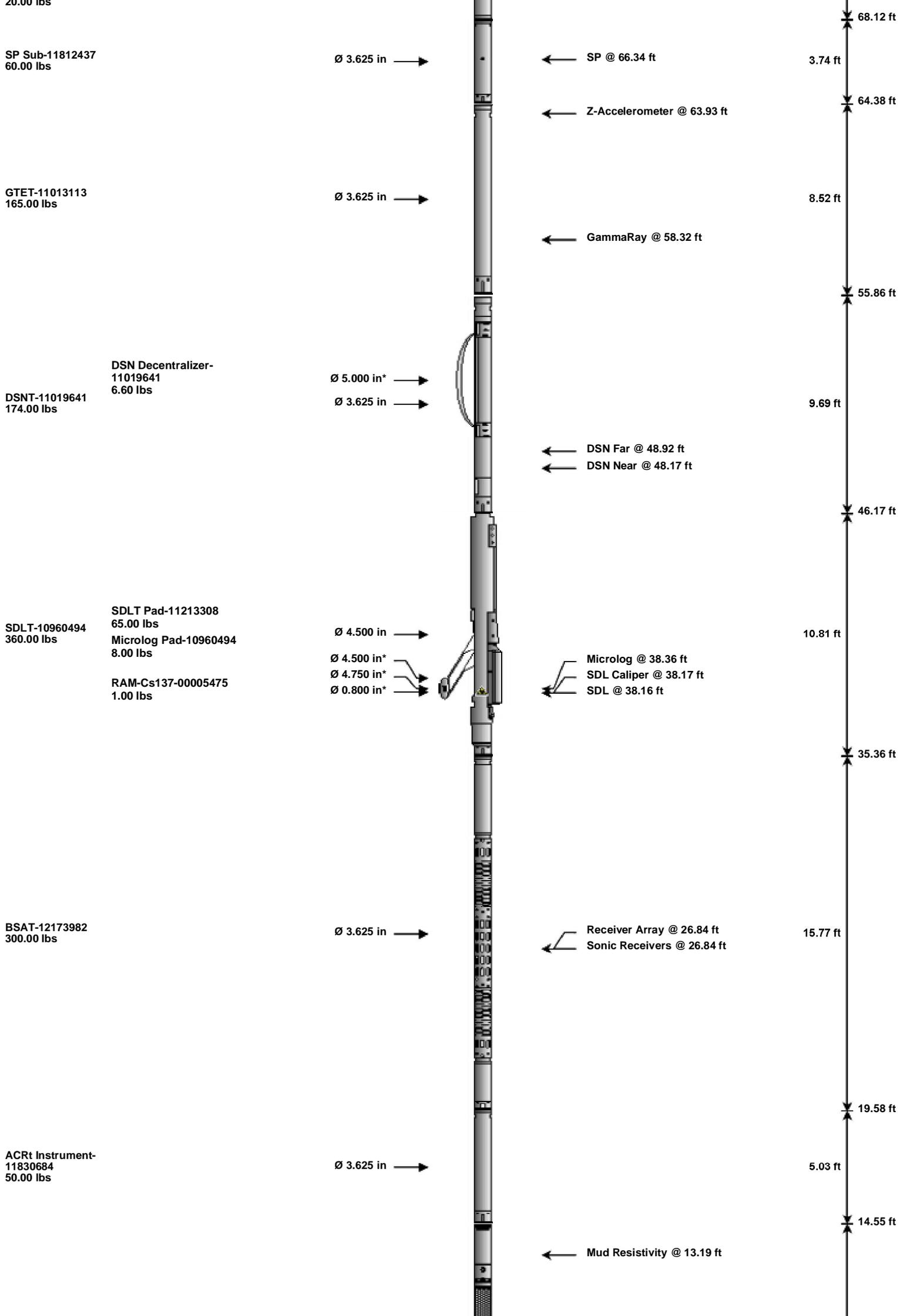
Date: 11-Aug-18 22:35:44



TOOL STRING DIAGRAM REPORT

Description	Overbody Description	O.D.	Diagram	Sensors @ Delays	Length	Accumulated Length
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20.00 lbs

SP Sub-11812437
60.00 lbs

Ø 3.625 in →

← SP @ 66.34 ft

3.74 ft

68.12 ft

← Z-Accelerometer @ 63.93 ft

64.38 ft

GTET-11013113
165.00 lbs

Ø 3.625 in →

8.52 ft

← GammaRay @ 58.32 ft

55.86 ft

DSNT-11019641
174.00 lbs

DSN Decentralizer-
11019641
6.60 lbs

Ø 5.000 in* →

Ø 3.625 in →

9.69 ft

← DSN Far @ 48.92 ft

← DSN Near @ 48.17 ft

46.17 ft

SDLT-10960494
360.00 lbs

SDLT Pad-11213308
65.00 lbs
Microlog Pad-10960494
8.00 lbs

RAM-Cs137-00005475
1.00 lbs

Ø 4.500 in →

Ø 4.500 in* →

Ø 4.750 in* →

Ø 0.800 in* →

10.81 ft

← Microlog @ 38.36 ft

← SDL Caliper @ 38.17 ft

← SDL @ 38.16 ft

35.36 ft

BSAT-12173982
300.00 lbs

Ø 3.625 in →

← Receiver Array @ 26.84 ft
← Sonic Receivers @ 26.84 ft

15.77 ft

19.58 ft

ACRT Instrument-
11830684
50.00 lbs

Ø 3.625 in →

5.03 ft

← Mud Resistivity @ 13.19 ft

14.55 ft

ACRt Sonde-
11830728
200.00 lbs

Ø 3.625 in →

← ACRt @ 9.21 ft

14.22 ft

Bull Nose-12345678
5.00 lbs

Ø 2.750 in →

0.33 ft
0.33 ft
0.00 ft



Mnemonic	Tool Name	Serial Number	Weight (lbs)	Length (ft)	Accumulated Length (ft)	Max. Log. Speed (fpm)
CH_HOS	Hostile Cable Head with Load Cell	CH_HOS_I	37.50	3.03	69.07	300.00
WP7K	Weak Point 7000 lbs	CH_HOS_I	0.01	0.01	* 69.87	300.00
XOHD	Hostile to Dits Cross Over	12345678	20.00	0.95	68.12	300.00
SP	SP Sub	11812437	60.00	3.74	64.38	300.00
GTET	Gamma Telemetry Tool	11013113	165.00	8.52	55.86	60.00
DSNT	Dual Spaced Neutron	11019641	174.00	9.69	46.17	60.00
DCNT	DSN Decentralizer	11019641	6.60	5.13	* 49.50	300.00
SDLT	Spectral Density Tool	10960494	360.00	10.81	35.36	60.00
SDLP	Density Insite Pad	11213308	65.00	2.55	* 37.57	60.00
Cs137	Logging Source, SDLT-I, 1.78 Ci - Cs137	00005475	1.00	0.80	* 37.80	300.00
MICP	Microlog Pad	10960494	8.00	1.00	* 37.86	60.00
BSAT	Borehole Sonic Array Tool	12173982	300.00	15.77	19.58	60.00
ACRt	Array Compensated True Resistivity Instrument Section	11830684	50.00	5.03	14.55	120.00
ACRt	Array Compensated True Resistivity Sonde Section	11830728	200.00	14.22	0.33	120.00
BLNS	Bull Nose	12345678	5.00	0.33	0.00	300.00
Total			1,452.11	72.10		

* Not included in Total Length and Length Accumulation.

Data: MERIT_RIVERBND4\0001 GTET-DSNT-SDLT-BSAT-ACRT\004 11-Aug-18 23:24 Up @4954.0f Date: 11-Aug-18 23:44:38

COMPANY	MERIT ENERGY COMPANY		
WELL	RIVER BEND 4		
FIELD	ARKANSAS RIVER		
COUNTY	FINNEY	STATE	KANSAS
HALLIBURTON		BOREHOLE COMPENSATED SONIC ARRAY LOG	