

# HALLIBURTON

## BOREHOLE COMPENSATED SONIC ARRAY LOG

COMPANY	OXY USA INC
WELL	FEIGHT A-7
FIELD	VICTORY
COUNTY	HASKELL
STATE	KANSAS
COMPANY	OXY USA INC
WELL	FEIGHT A-7
FIELD	VICTORY
COUNTY	HASKELL
STATE	KANSAS
API No.	15-081-21984
Location	660' FNL & 1980' FEL
Other Services:	MICRO ACRT DSNT / SDLT
Secl.	27
Twp.	29S
Rge.	33W
Permanent Datum	GL
Log measured from	KB
Drilling measured from	KB
Elev.	2940.0 ft
Elev. : K.B.	2955.0 ft
D.F.	2954.0 ft
G.L.	2940.0 ft

Date	03-Jul-12
Run No.	ONE
Depth - Driller	5659.00 ft
Depth - Logger	5645.0 ft
Bottom - Logged Interval	5618.0 ft
Top - Logged Interval	1820.0 ft
Casing - Driller	8.625 in @ 1824.0 ft
Casing - Logger	1820.0 ft
Bit Size	7.875 in @
Type Fluid in Hole	WATER BASED MUD
Density	9.2 ppg
Viscosity	58.00 sqt
PH	9.40 pH
Fluid Loss	7.8 cpm
Source of Sample	FLOWLINE
Rm @ Meas. Temperature	0.860 ohmm @ 80.00 degF
Rmf @ Meas. Temperature	0.85 ohmm @ 72.00 degF
Rmc @ Meas. Temperature	1.100 ohmm @ 72.00 degF
Source Rmf	MEASURED
Rmc	MEASURED
Rm @ BHT	0.59 ohmm @ 146.0 degF
Time Since Circulation	15.1 hr
Time on Bottom	03-Jul-12 07:35
Max. Rec. Temperature	146.0 degF @ 0.6 ft
Equipment	10782954 LIBERAL
Recorded By	C. HAVERKAMP
Witnessed By	D. PRATT

Fold here

Service Ticket No.: 9626301		API Serial No.: 15-081-21984		PGM Version: WL INSITE R3.6.0 (Build 3)			
CHANGE IN MUD TYPE OR ADDITIONAL SAMPLE				RESISTIVITY SCALE CHANGES			
Date	Sample No.			Type Log	Depth	Scale Up Hole	Scale Down Hole
Depth-Driller							
Type Fluid in Hole							
Density	Viscosity						
Ph	Fluid Loss						
Source of Sample				RESISTIVITY EQUIPMENT DATA			
Rm @ Meas. Temp	@	@		Run No.	Tool Type & No.	Pad Type	Tool Pos.
Rmf @ Meas. Temp.	@	@					
Rmc @ Meas. Temp.	@	@					
Source Rmf	Rmc						
Rm @ BHT	@	@					
Rmf @ BHT	@	@					
Rmc @ BHT	@	@					
EQUIPMENT DATA							
GAMMA		ACOUSTIC		DENSITY		NEUTRON	
Run No.	ONE	Run No.	ONE	Run No.		Run No.	
Serial No.	10811258	Serial No.	10747683	Serial No.		Serial No.	
Model No.	GTET	Model No.	BSAT	Model No.		Model No.	
Diameter	3.625	No. of Cent.	TWO	Diameter		Diameter	
Detector Model No.	T-102	Spacing	0.5	Log Type		Log Type	
Type	SCINT			Source Type		Source Type	
Length	8"	LSA [Y/N]	YES	Serial No.		Serial No.	
Distance to Source	10'	FWDA [Y/N]	NO	Strength		Strength	
LOGGING DATA							
GENERAL		GAMMA		ACOUSTIC		DENSITY	
NEUTRON							

Run No.	GENERAL		Speed ft/min	GAMMA		ACOUSTIC		Matrix	DENSITY		Matrix	NEUTRON			
	Depth			L	R	L	R		Scale			L	R	Scale	
	From	To							L	R				L	R
ONE	TD	CSG	REC	0	150	30	-10	47.6							

DIRECTIONAL INFORMATION

Maximum Deviation @ KOP @

Remarks: SP-GTET-DSNT-SDLT-BSAT-ACRT RAN IN COMBINATION.

ANNULAR HOLE VOLUME CALCULATED FOR 5.5 INCH CASING.

CHLORIDES REPORTED AT 4000 MG/L.

LCM REPORTED AT 3 LB/BBL.

YOUR CREW: F. VILLA, B. TERRELL

THANK YOU FOR CHOOSING HALLIBURTON ENERGY SERVICES. LIBERAL, KS 620-624-8123

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.

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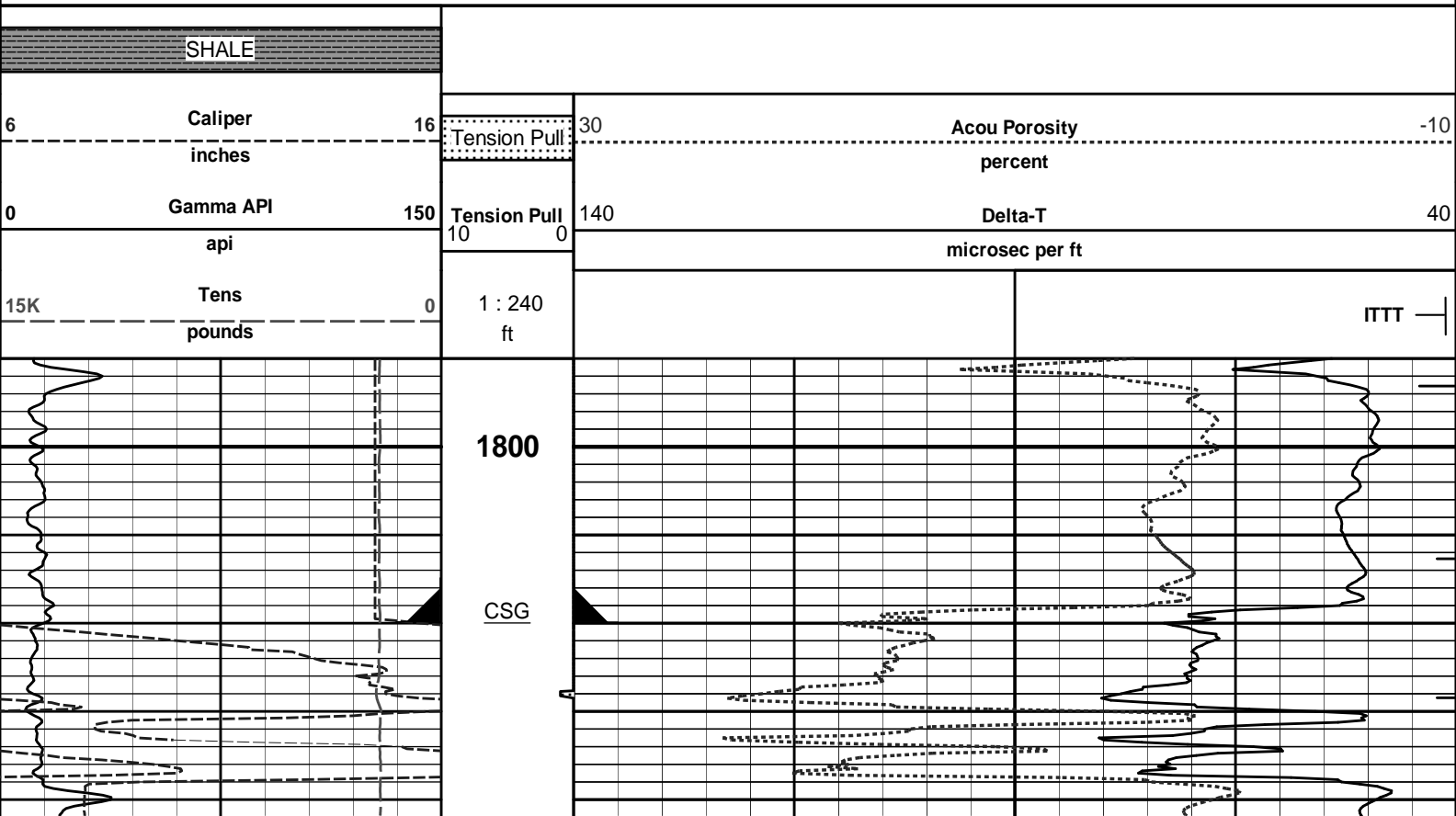
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Plot Range: 1790 ft to 5648.92 ft

Data: FEIGHT\_A\_7Well Based\R1\_CASING\

Plot File: \\BSAT\BSAT\_5\_MAIN\_LIB

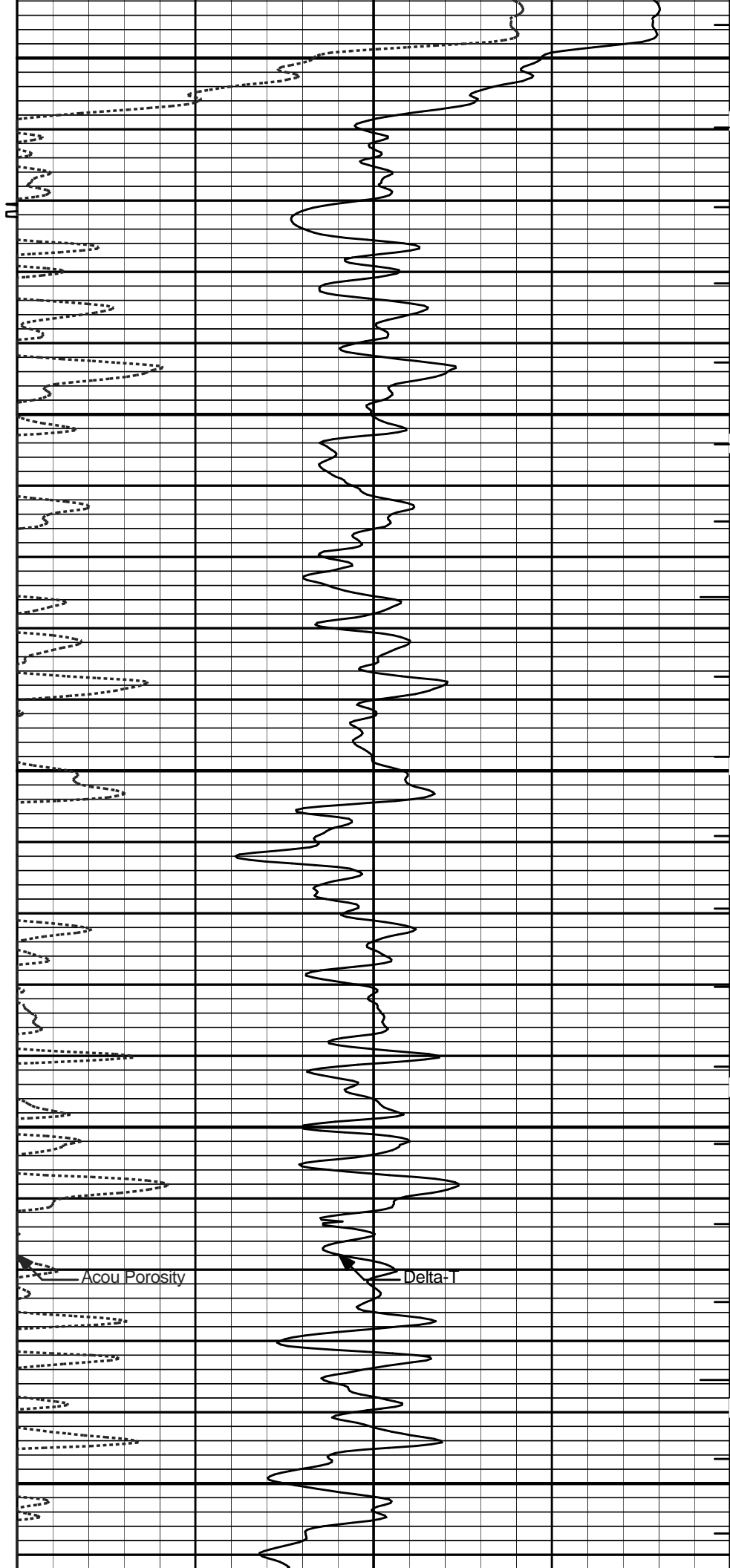
## 5 INCH MAIN LOG

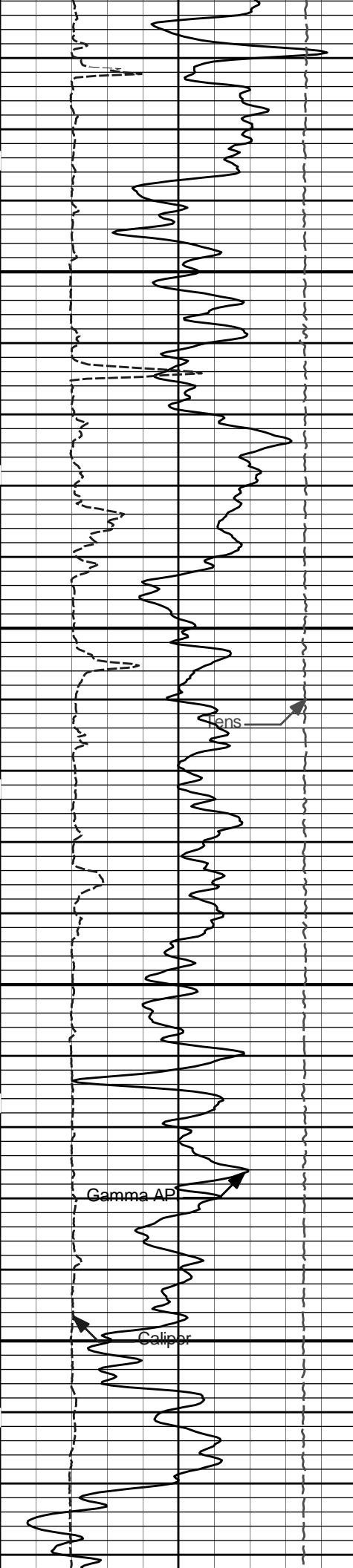




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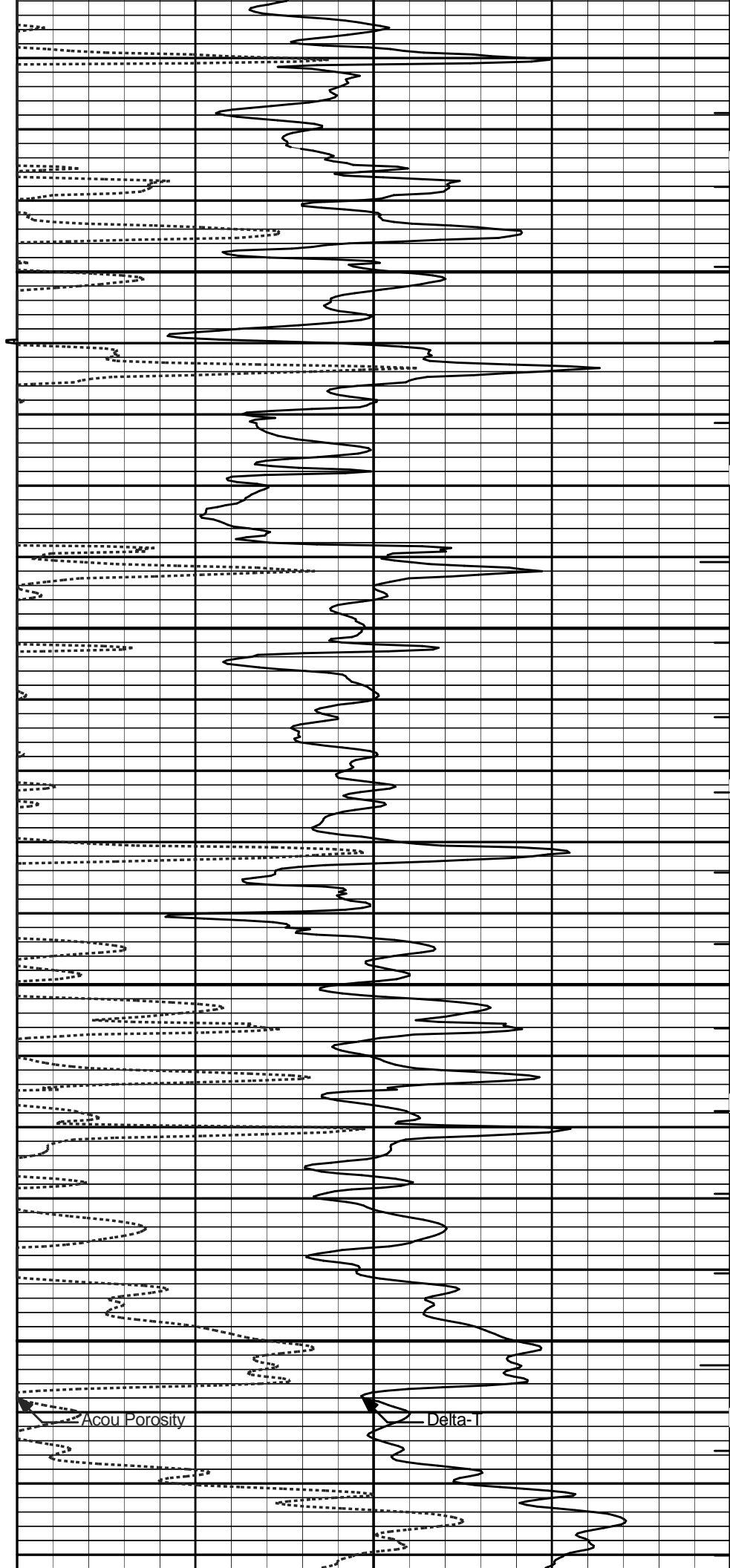
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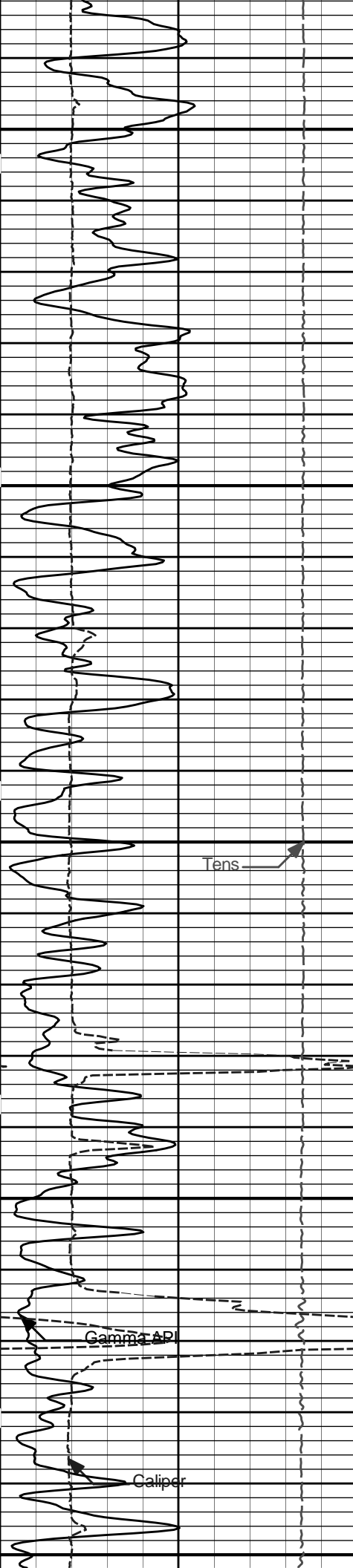




2100

2200

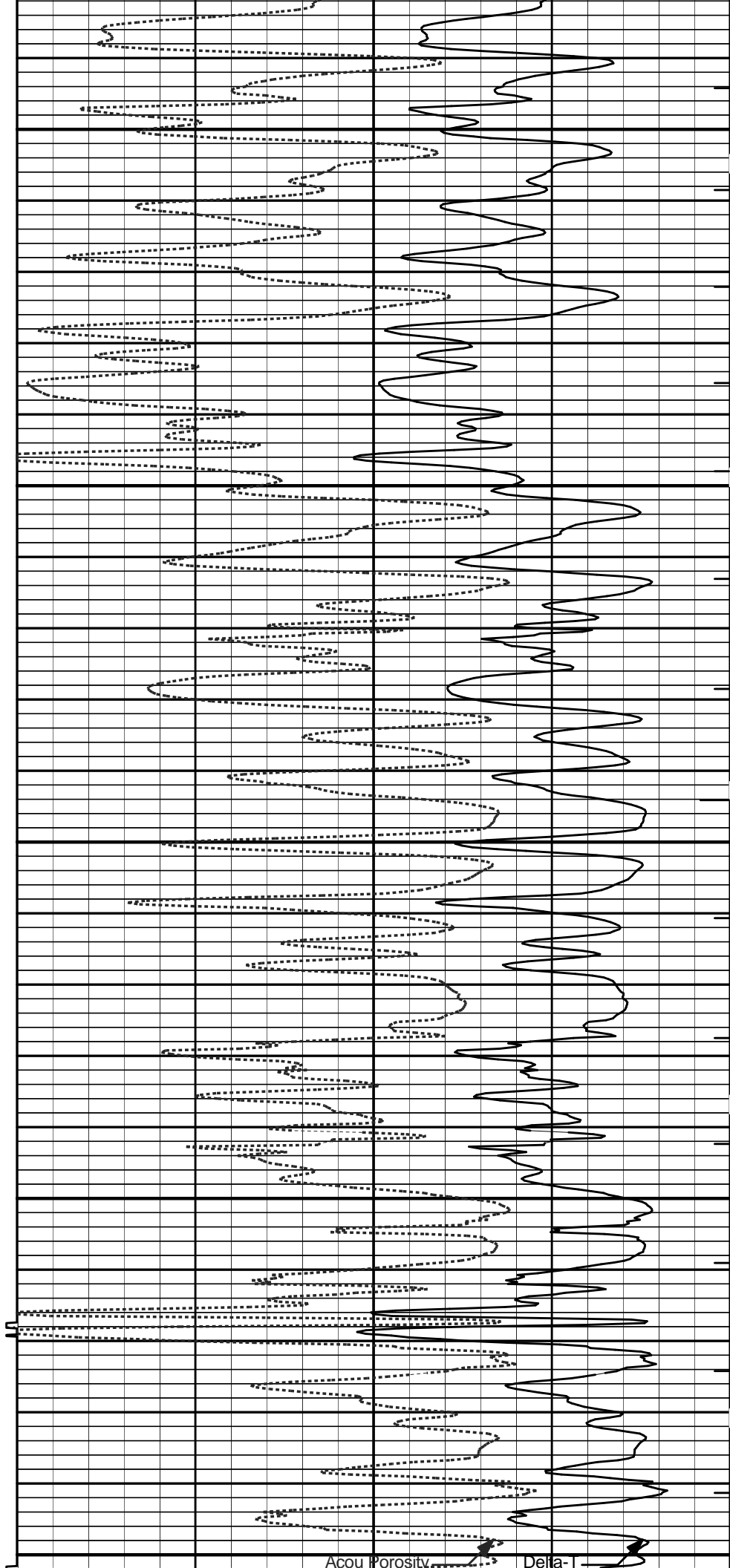




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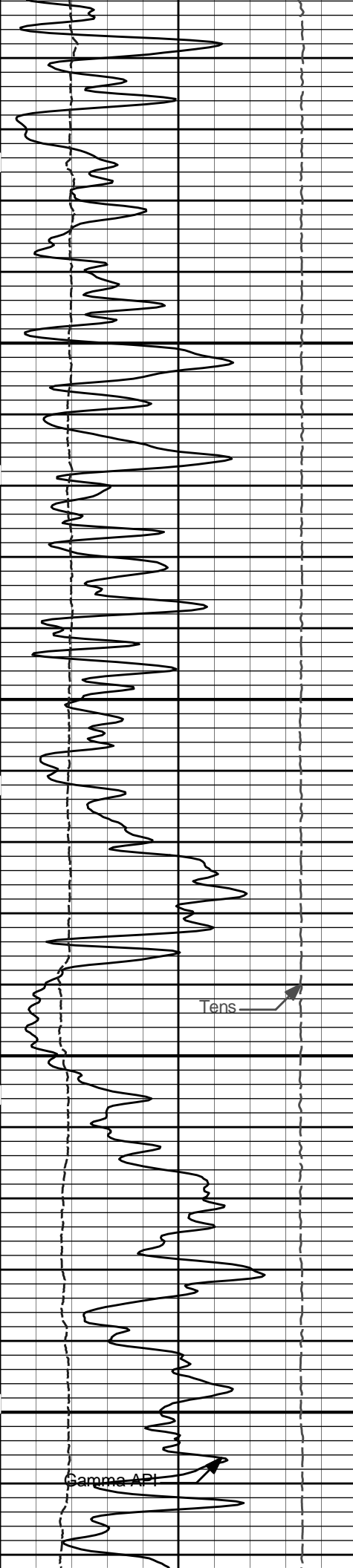
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2500



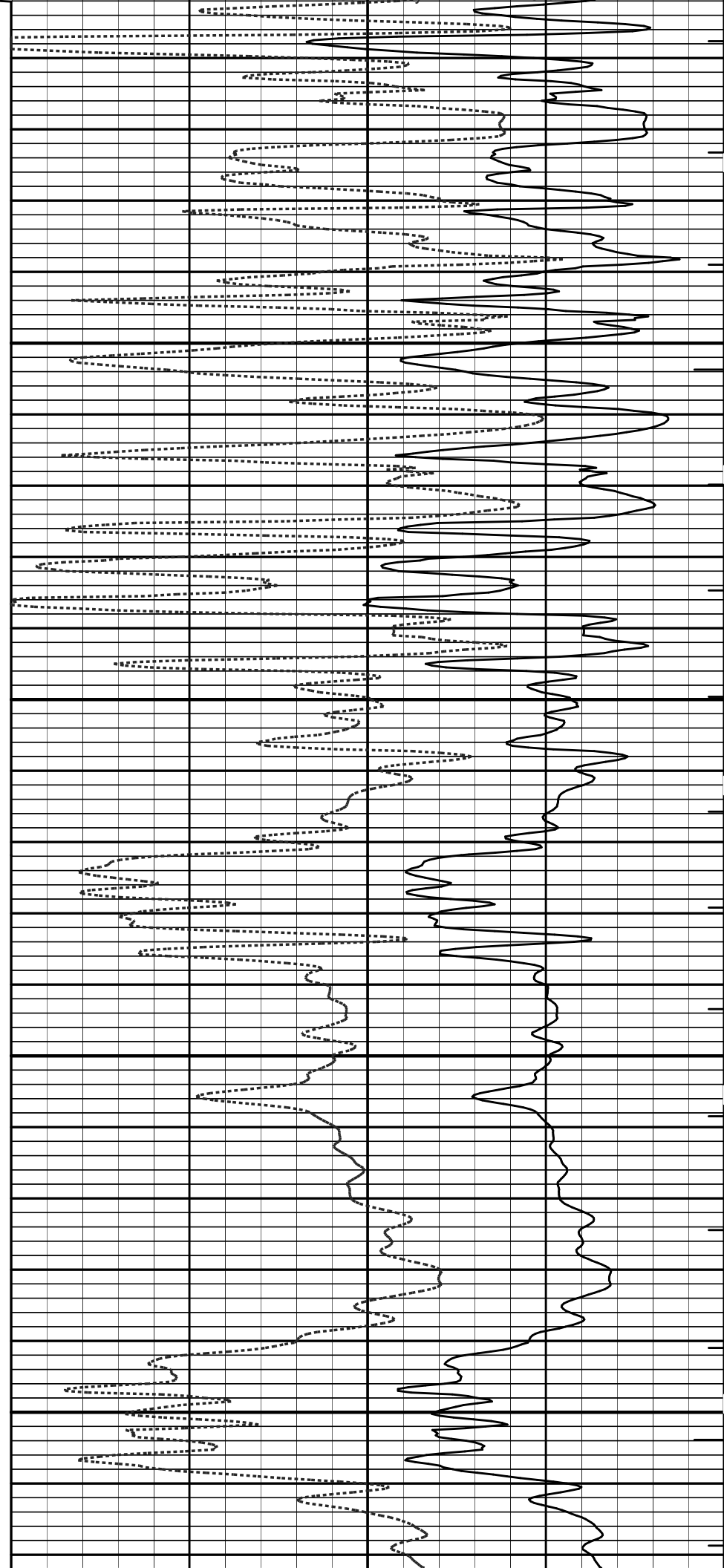
Acou Porositv

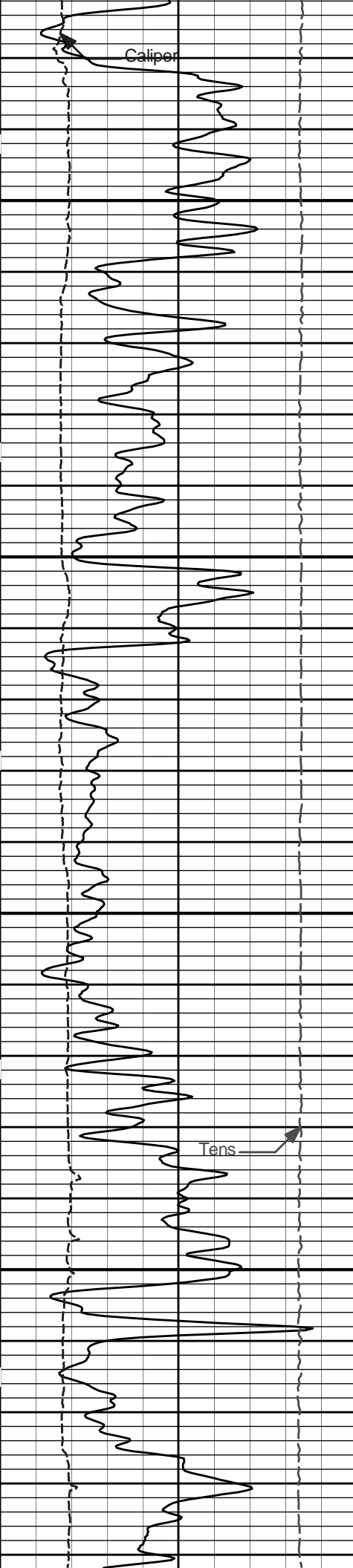
Delta



2600

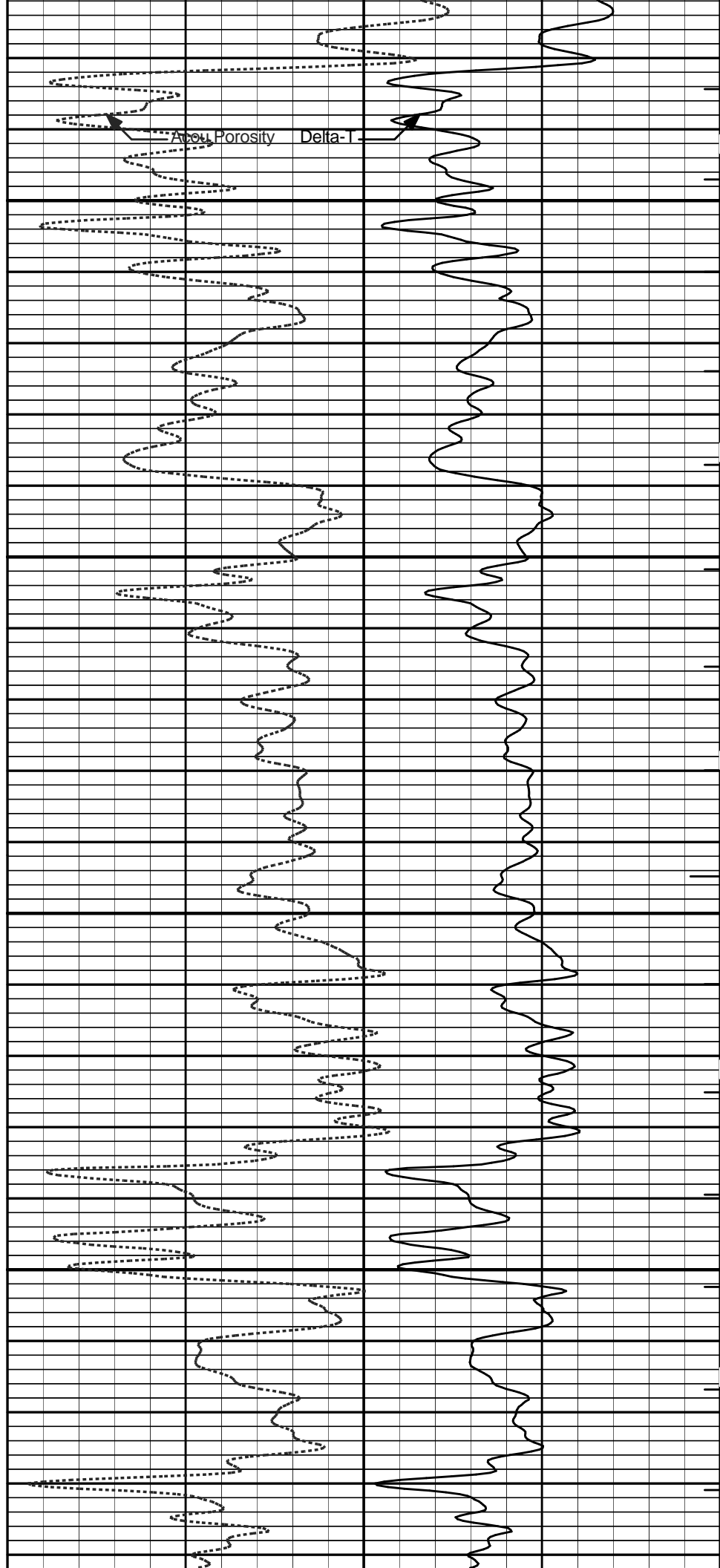
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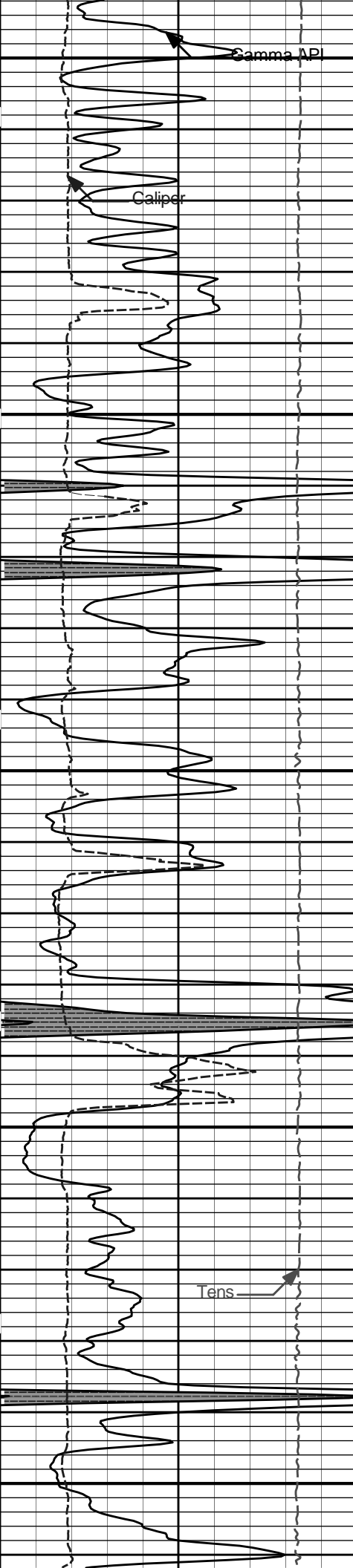




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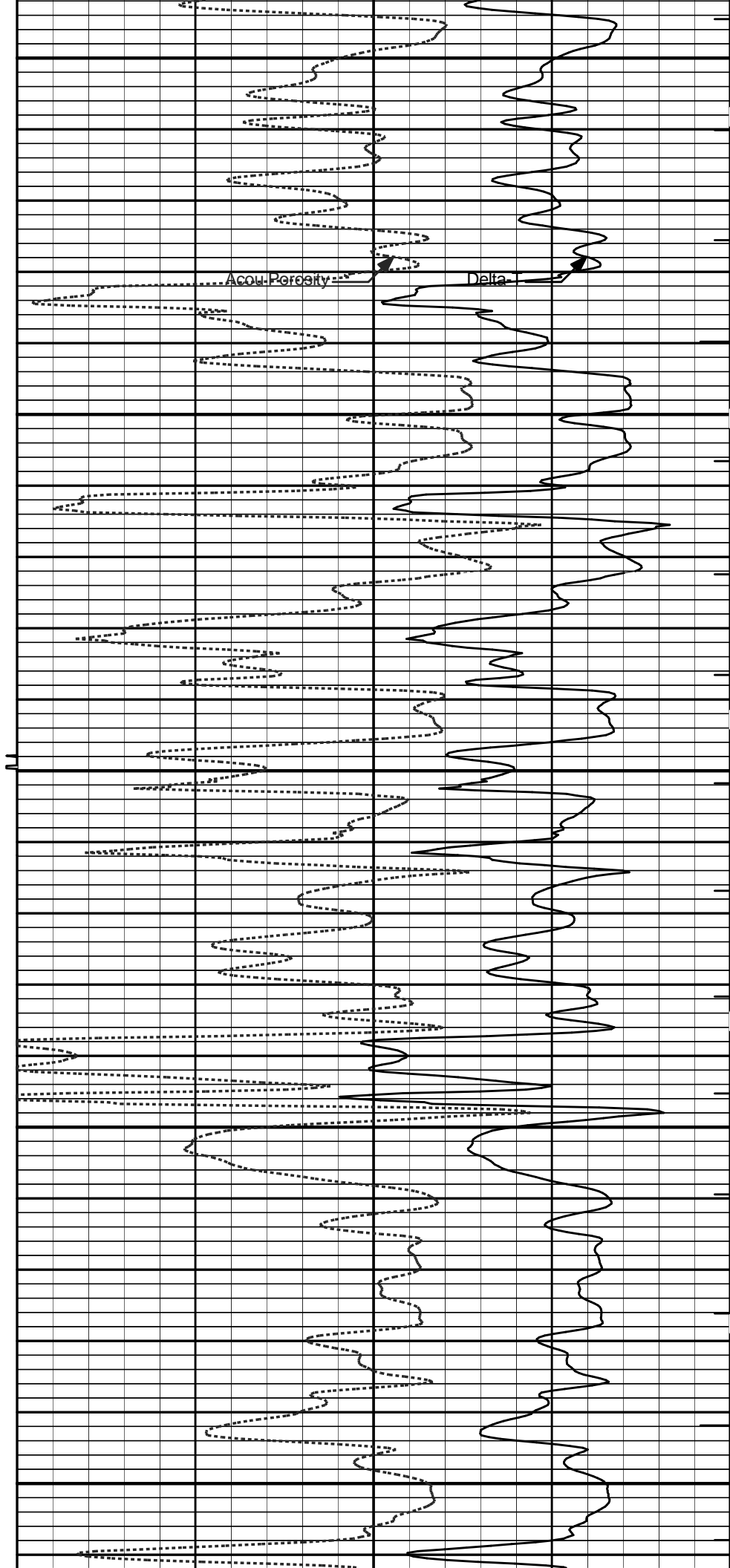
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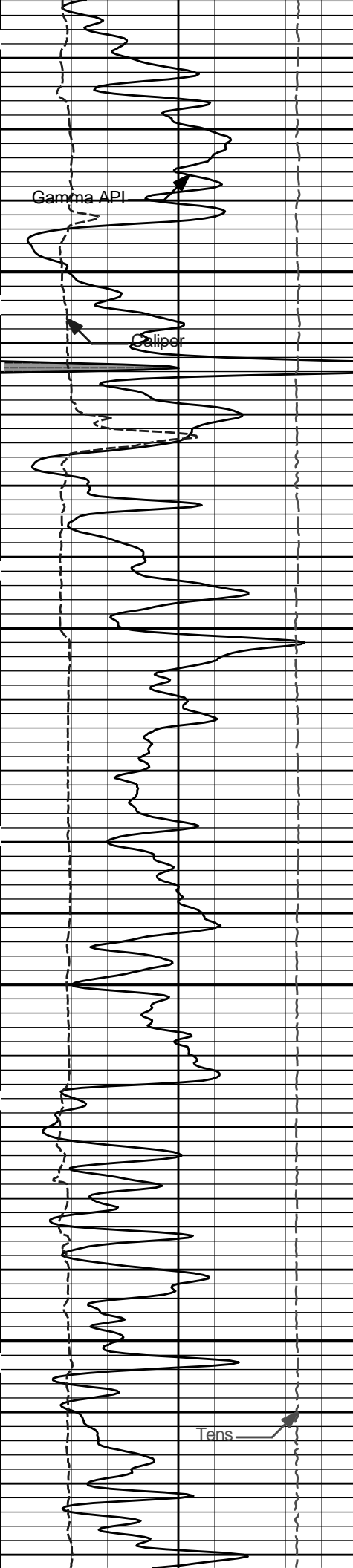


3000

3100

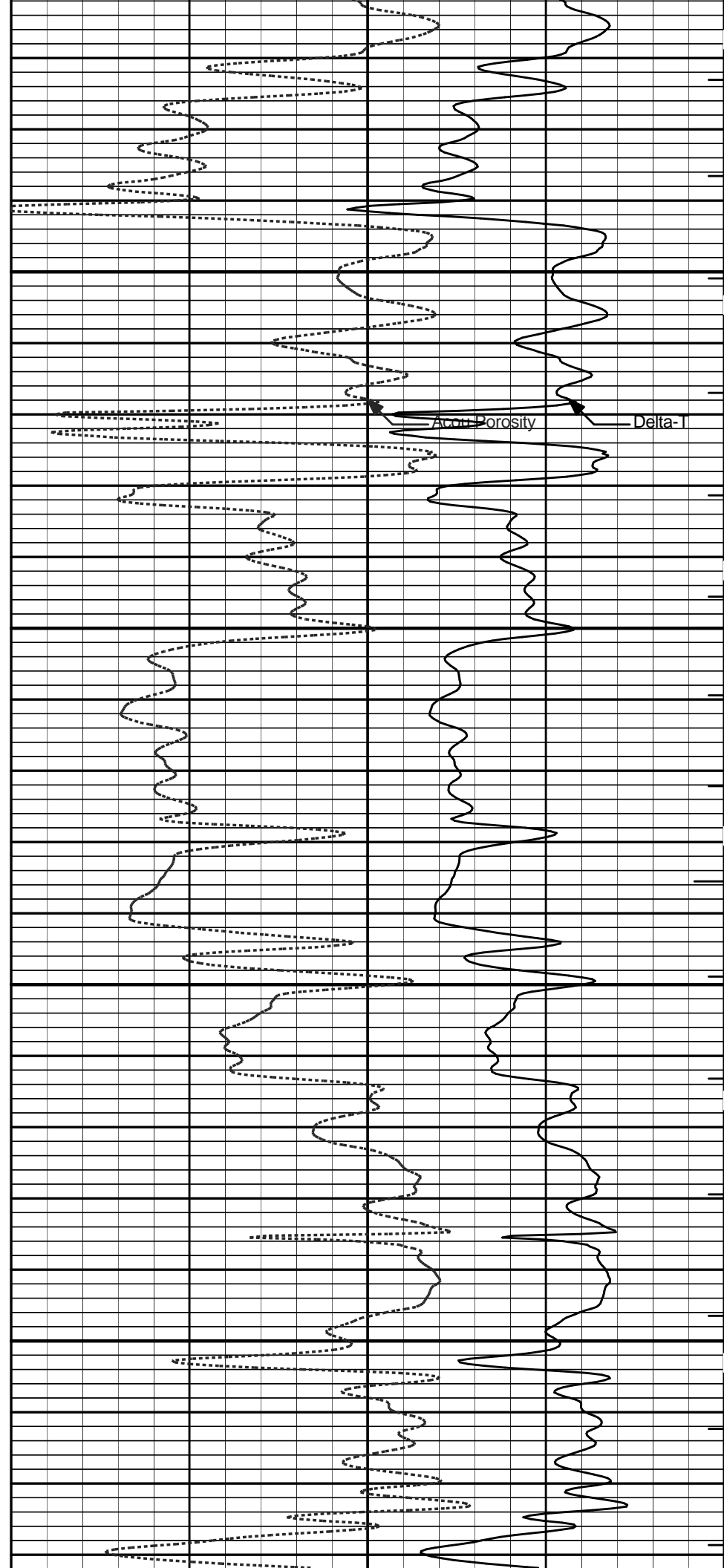


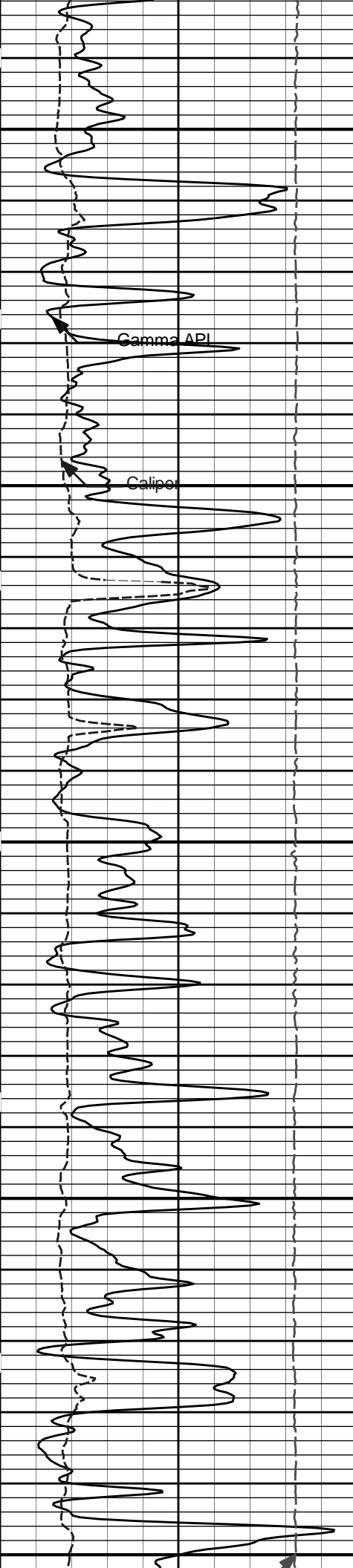




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3300





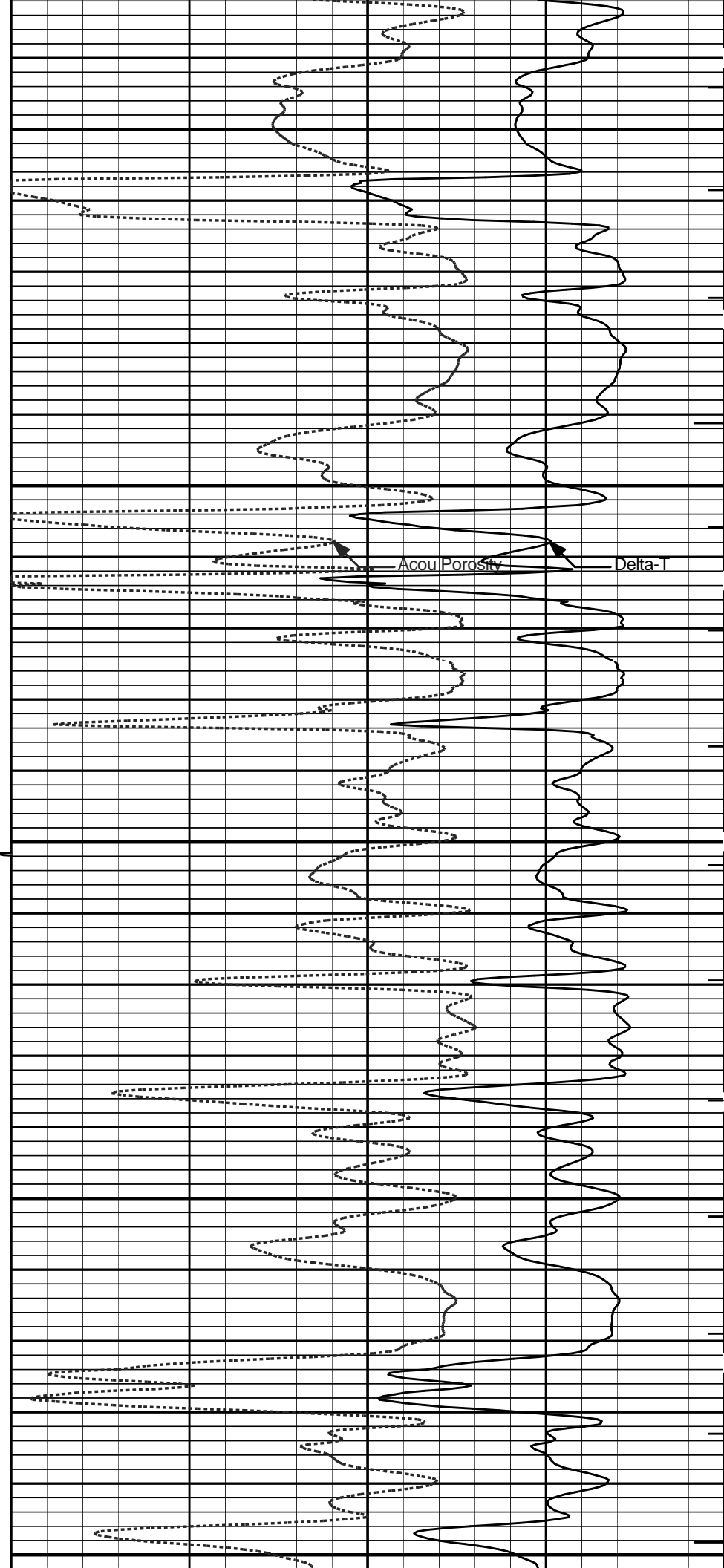
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Gamma API

Caliper

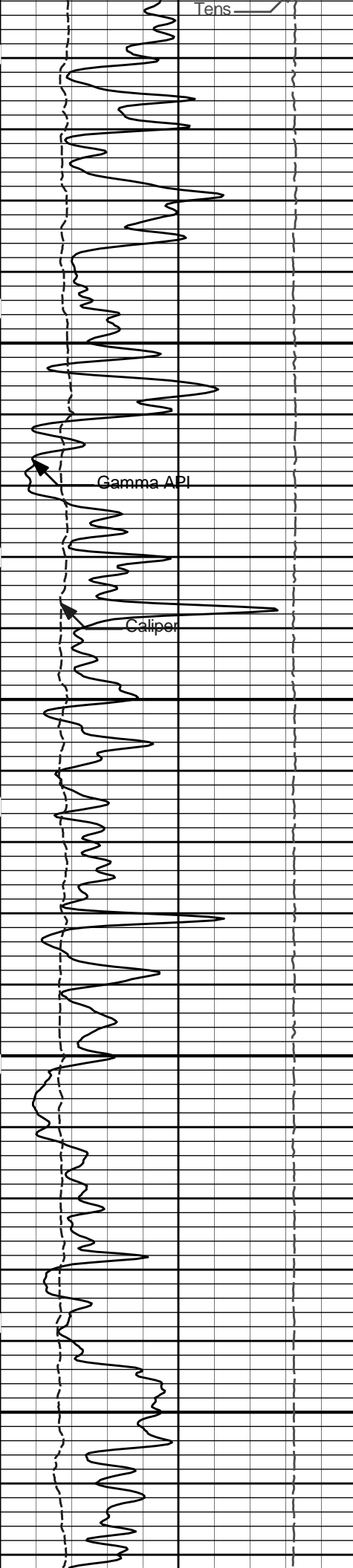
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3600



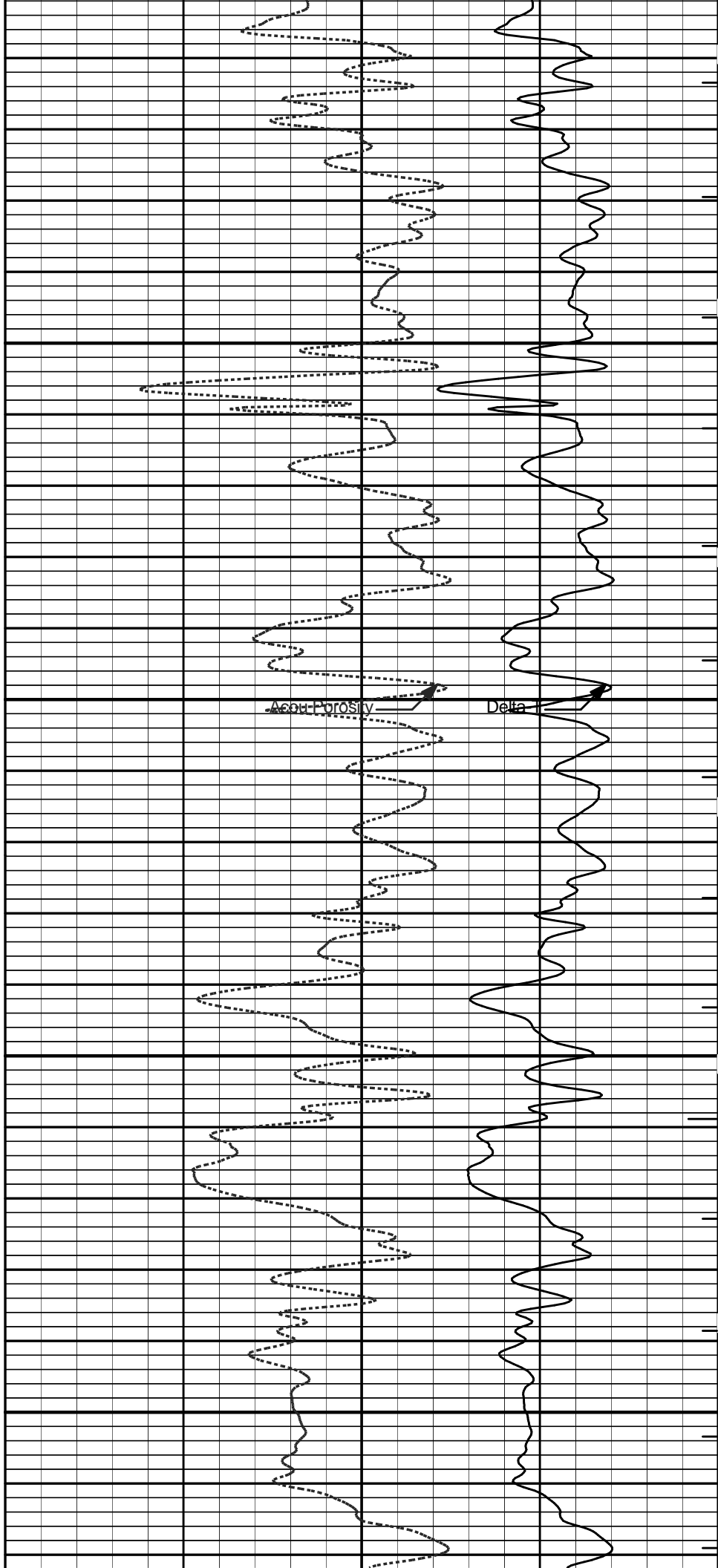
Acou Porosity

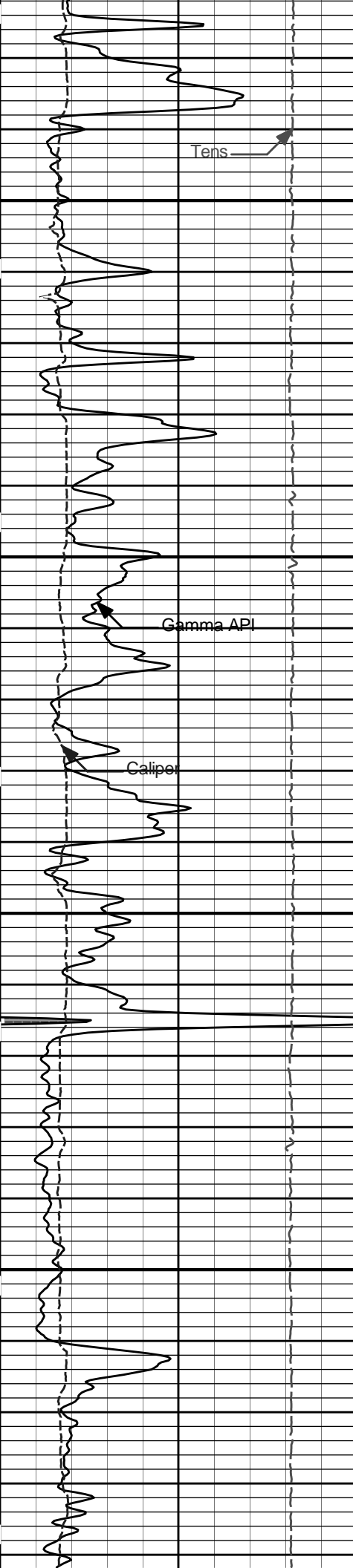
Delta-T



3700

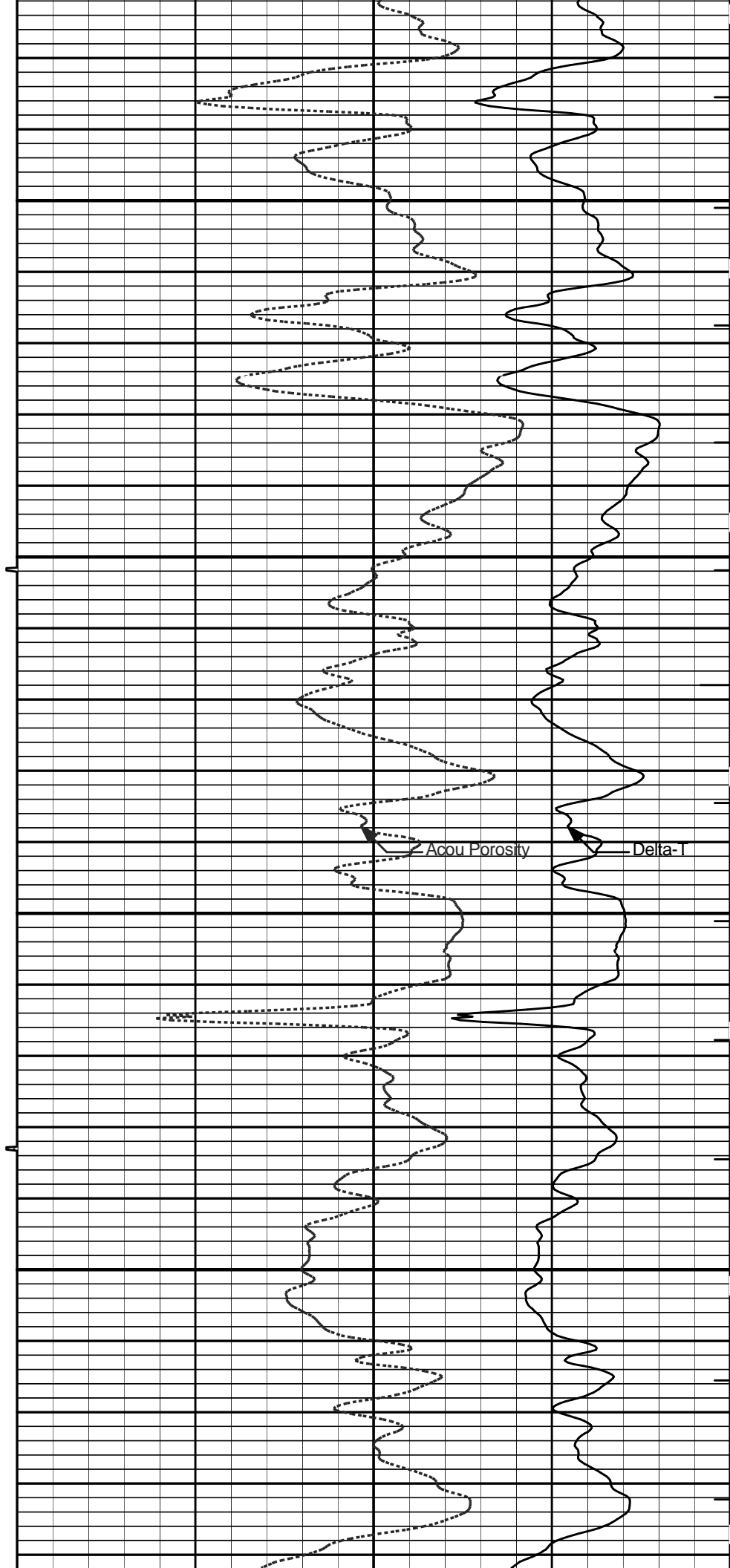
3800





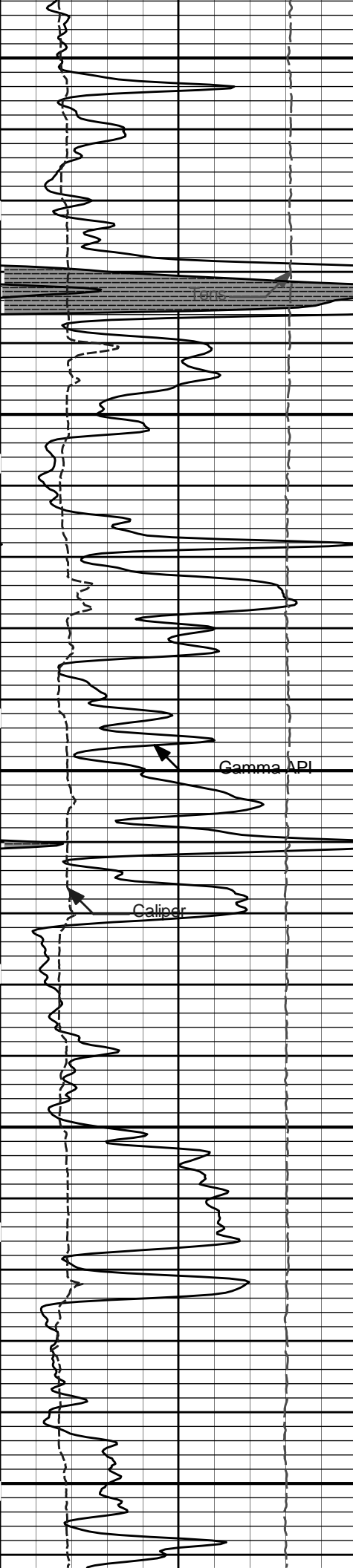
3900

4000



Acou Porosity

Delta-I

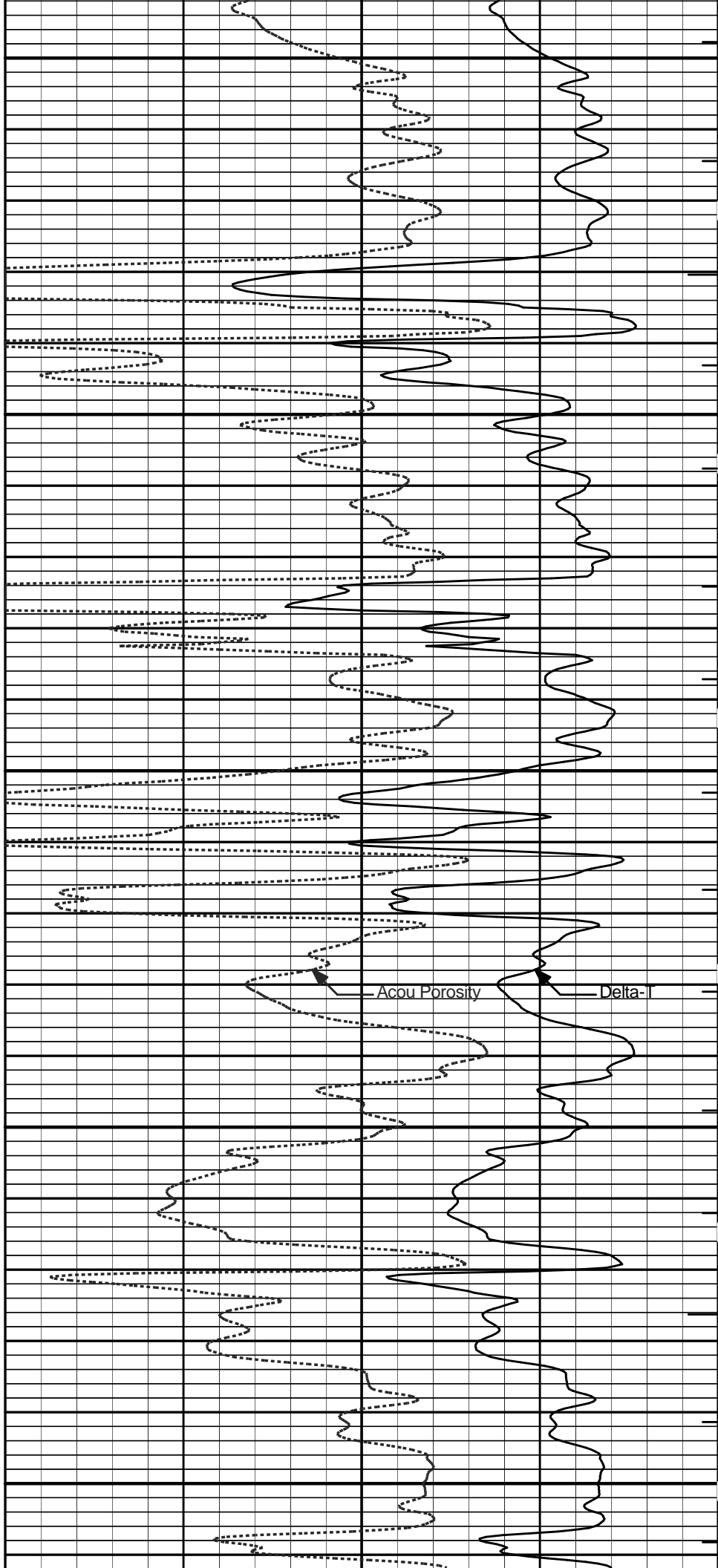


4100

4200

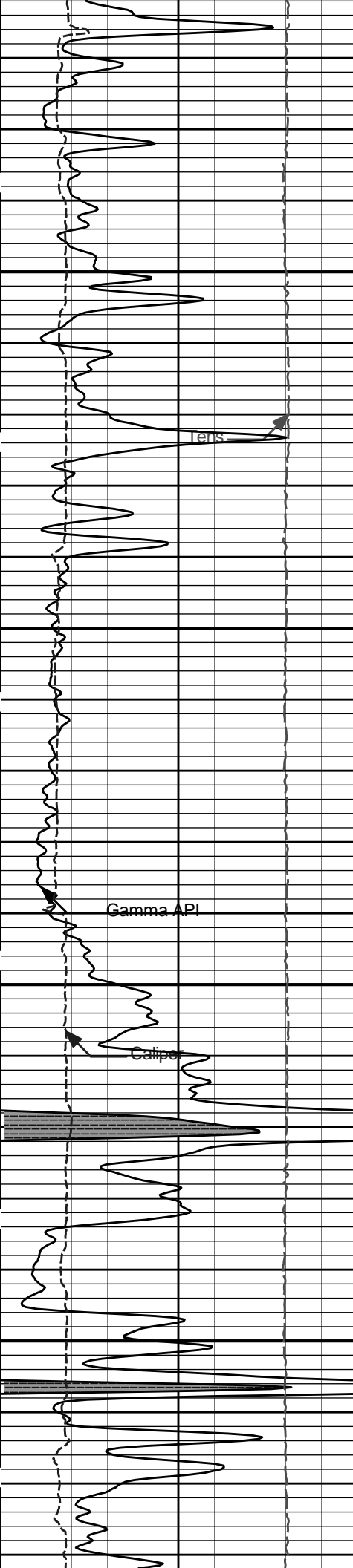
Gamma API

Caliper



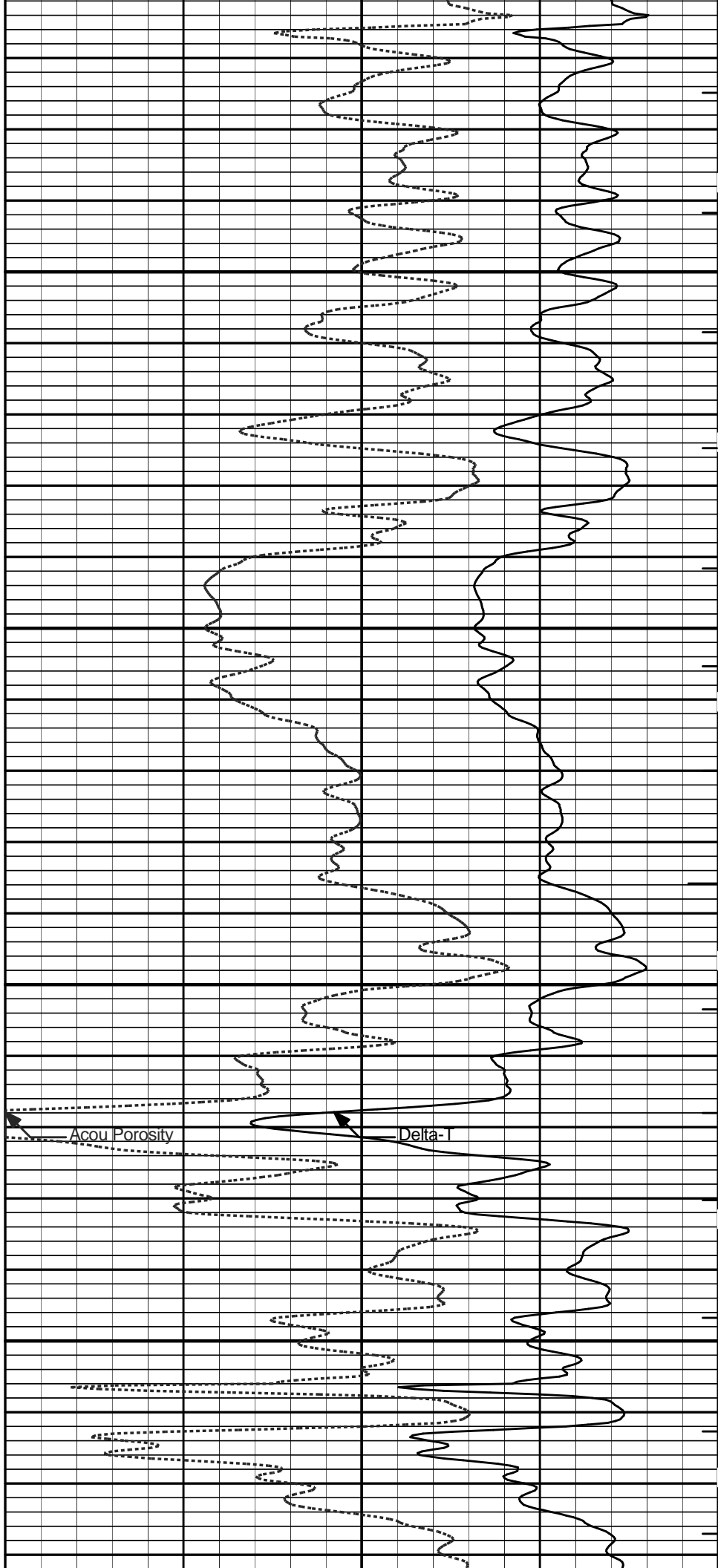
Acou Porosity

Delta-T



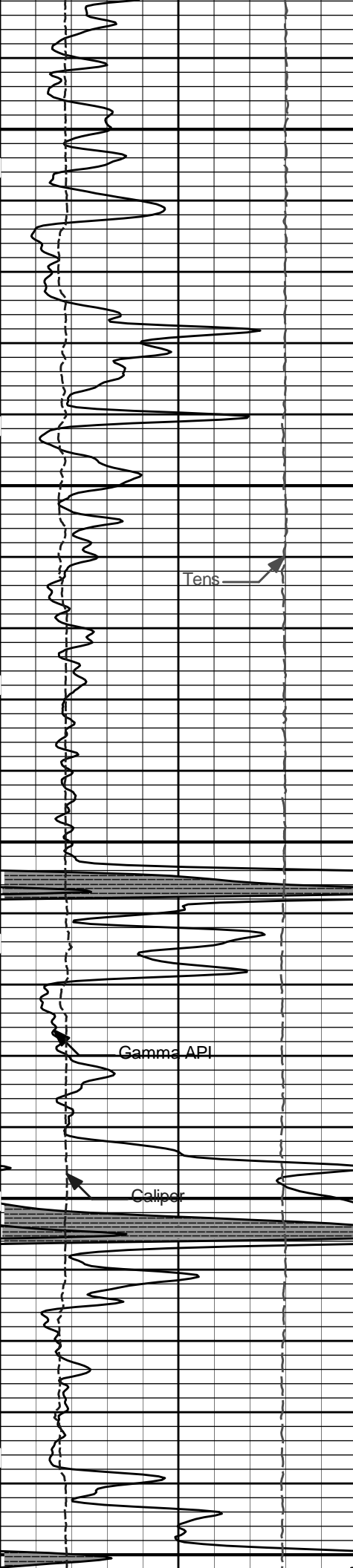
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4400



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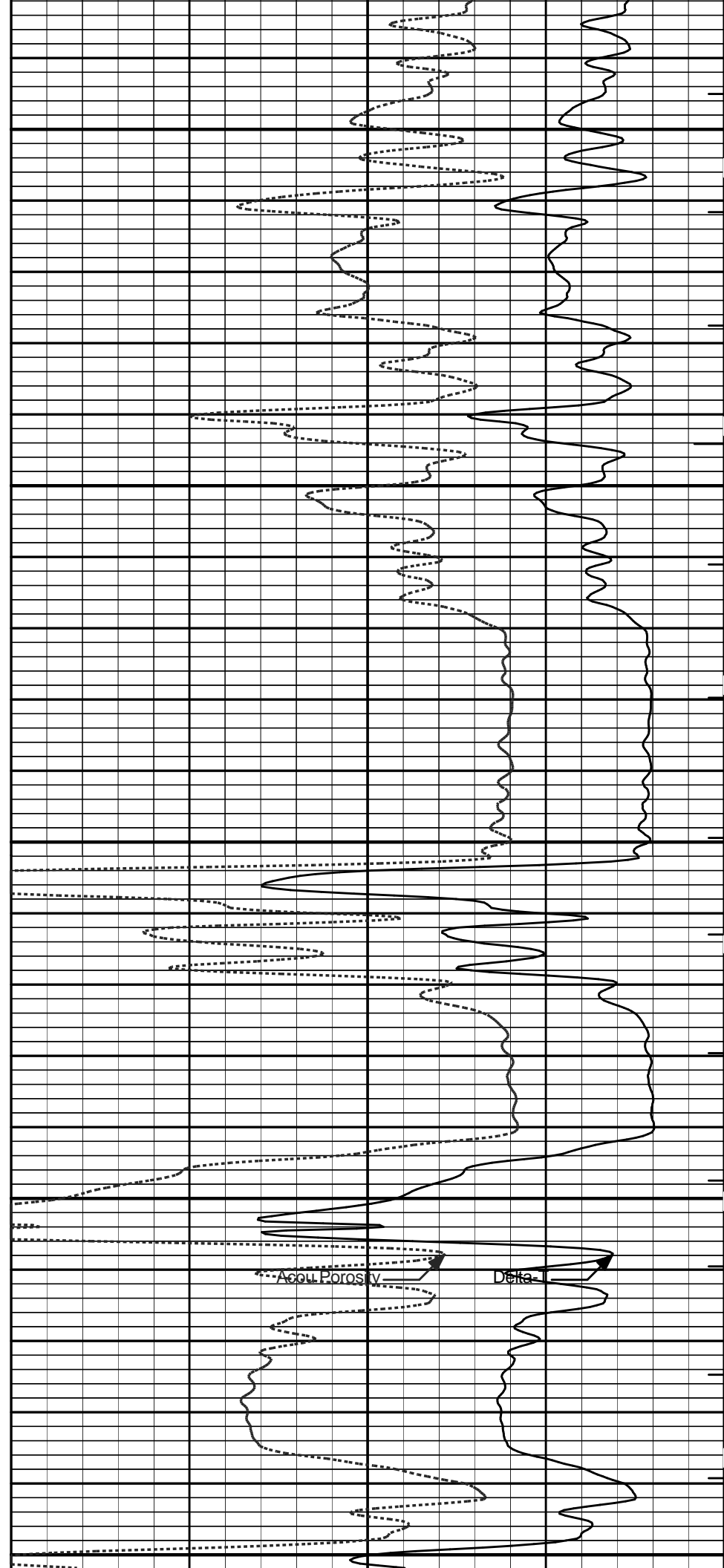
Delta-T

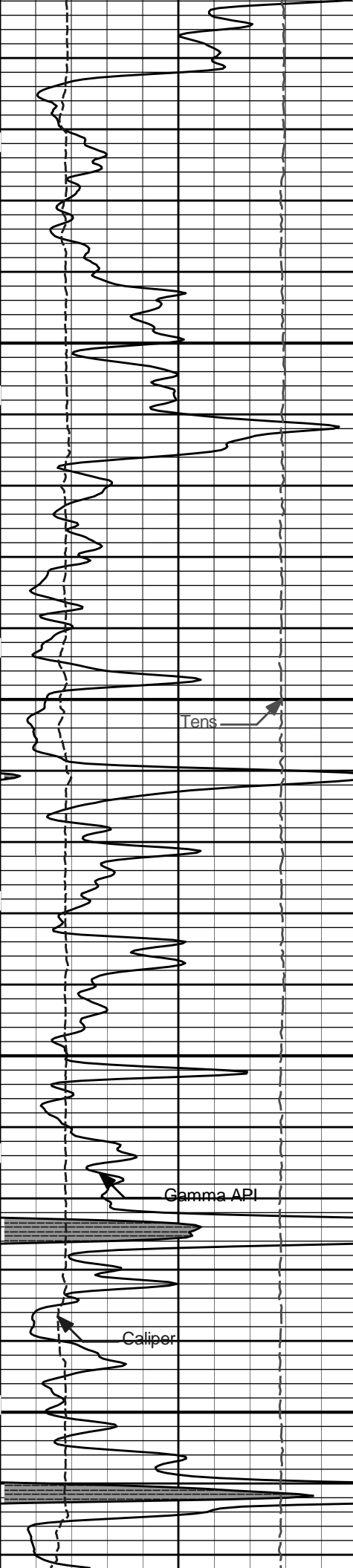


4500

4600

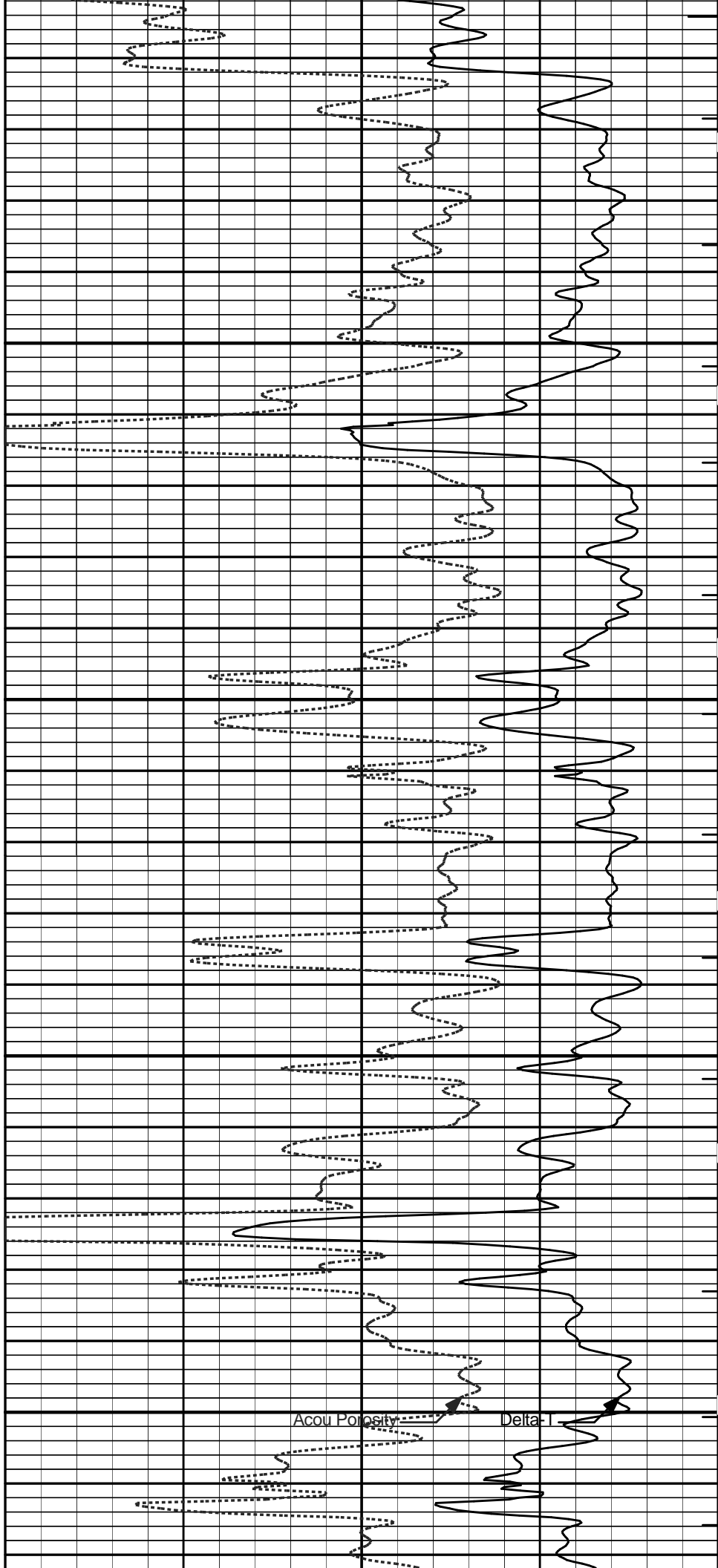
4700





4800

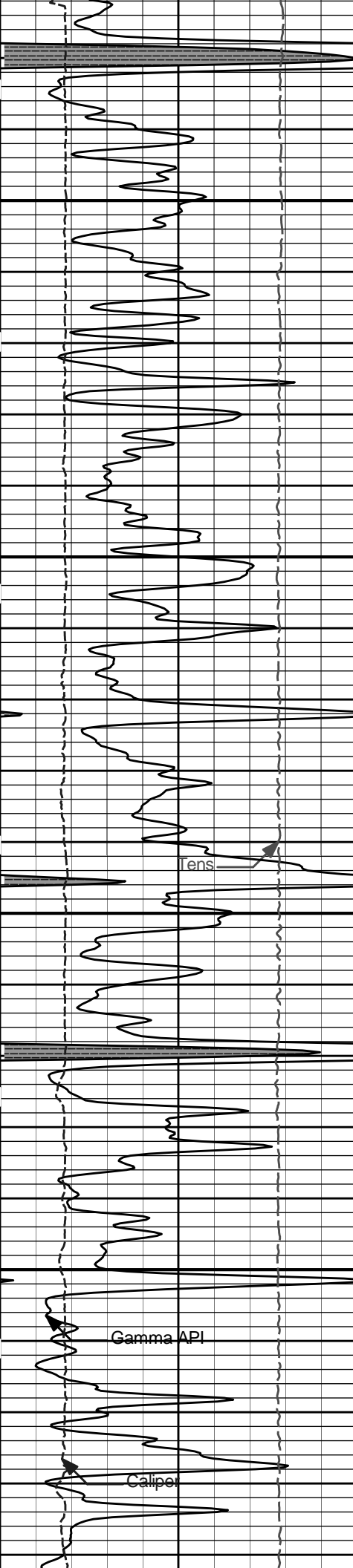
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Acou Porosity

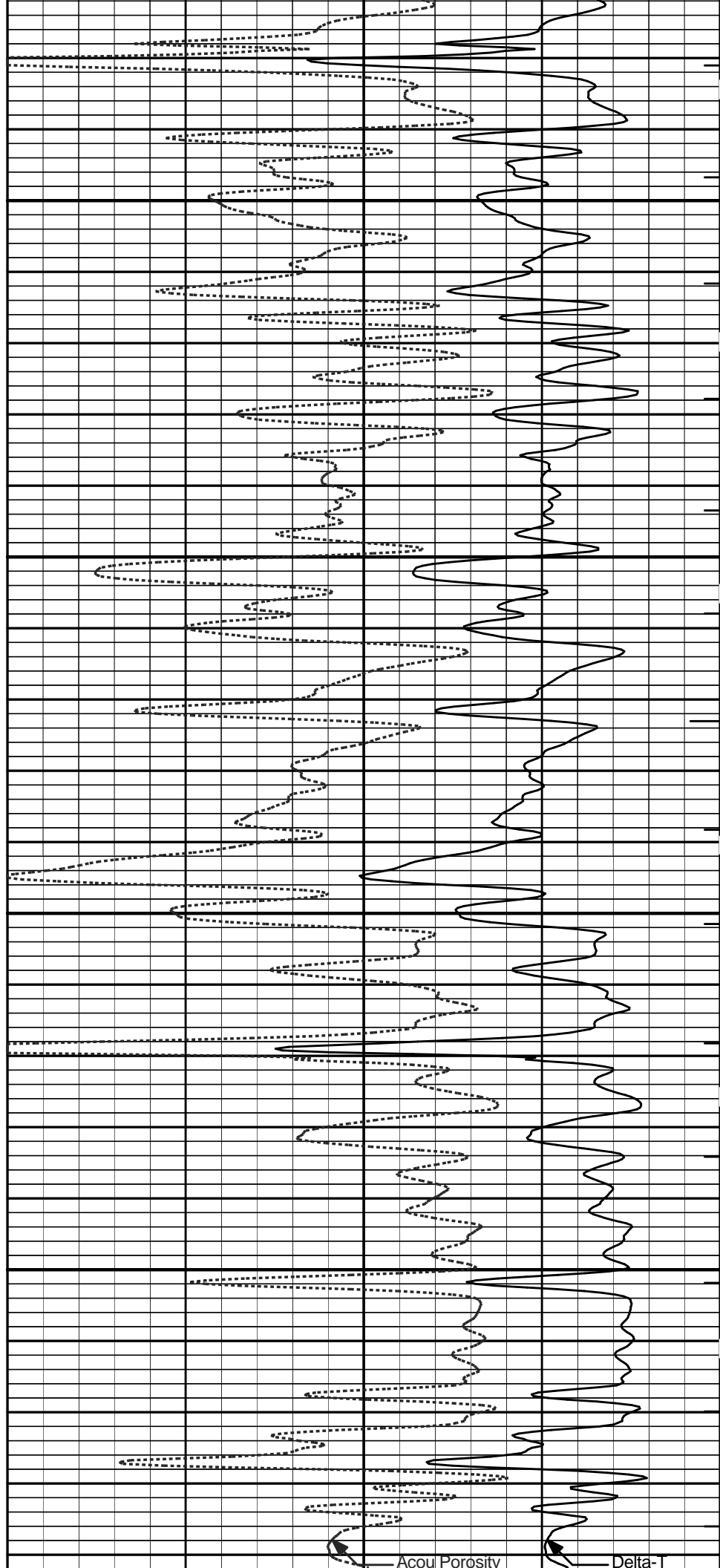
Delta

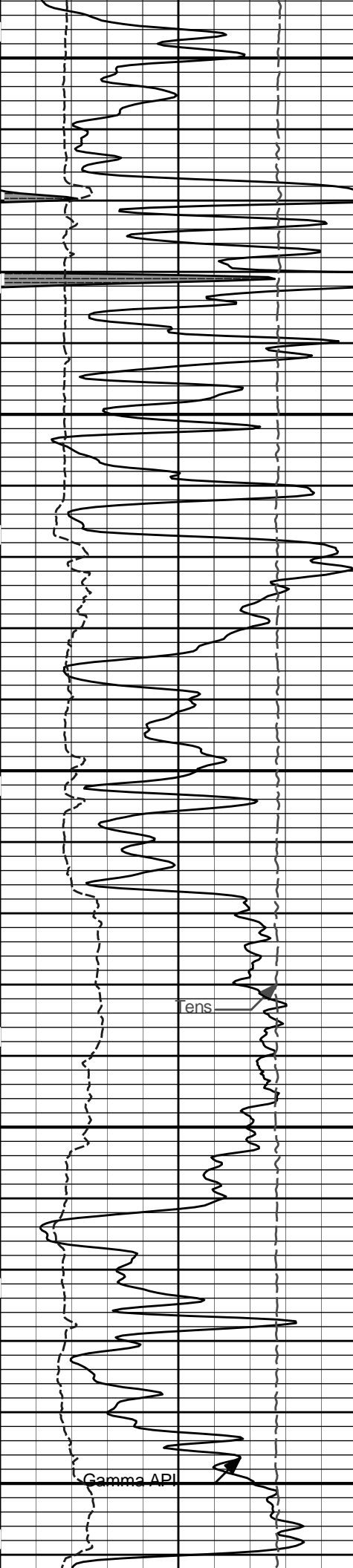




5000

5100

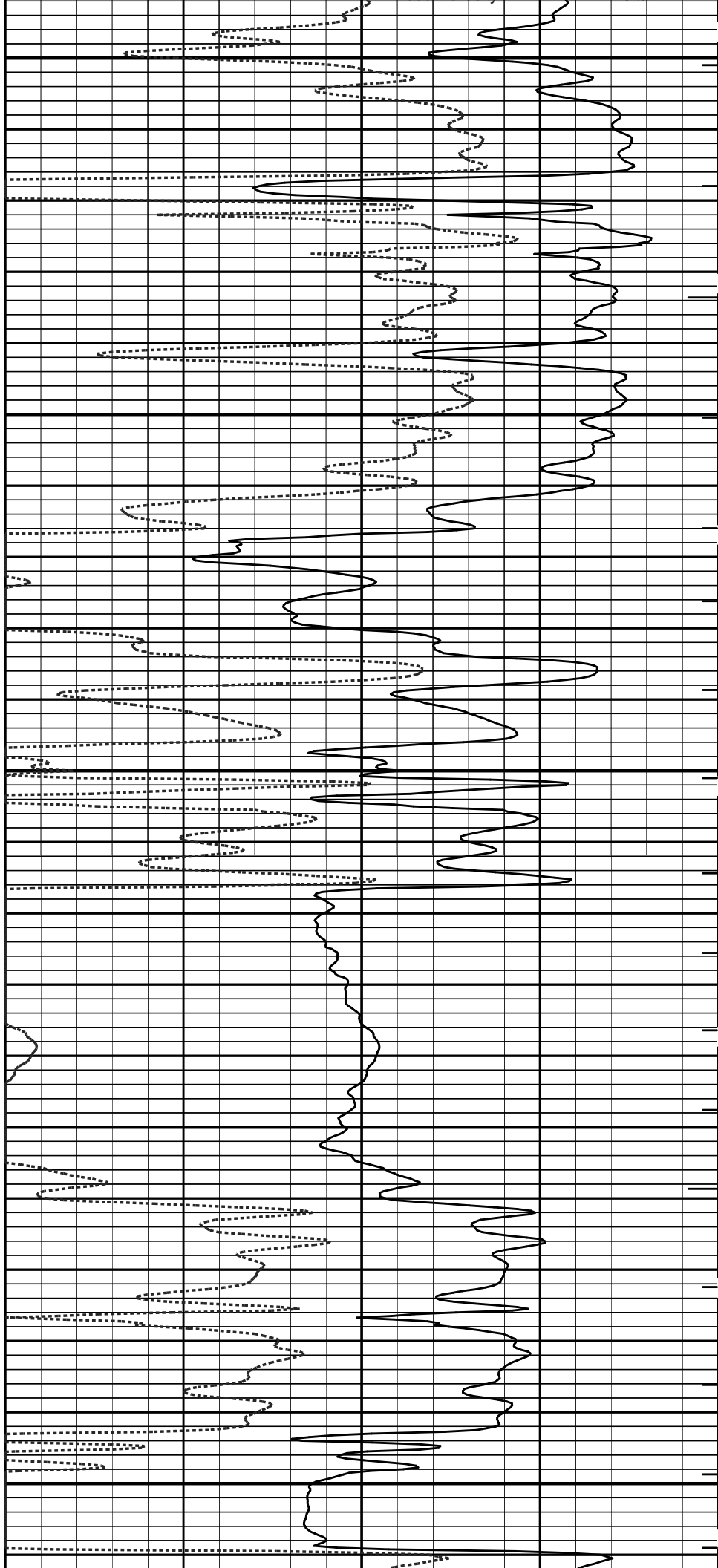


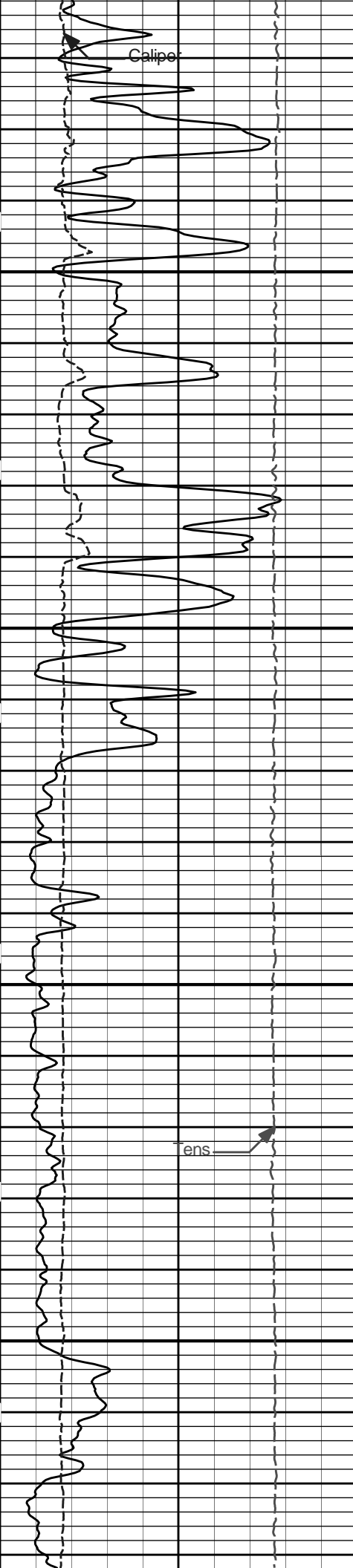


5200

5300

ens



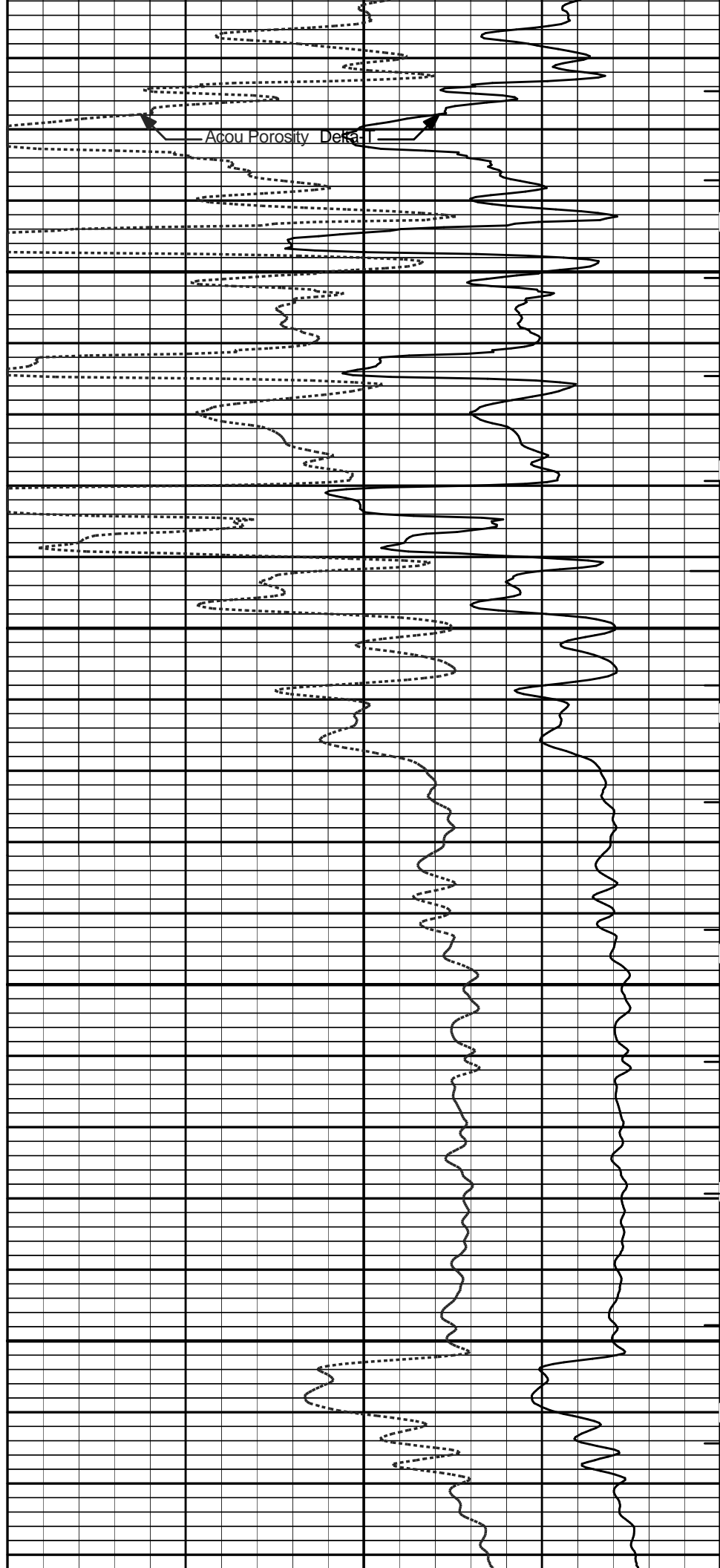


Caliper

5400

5500

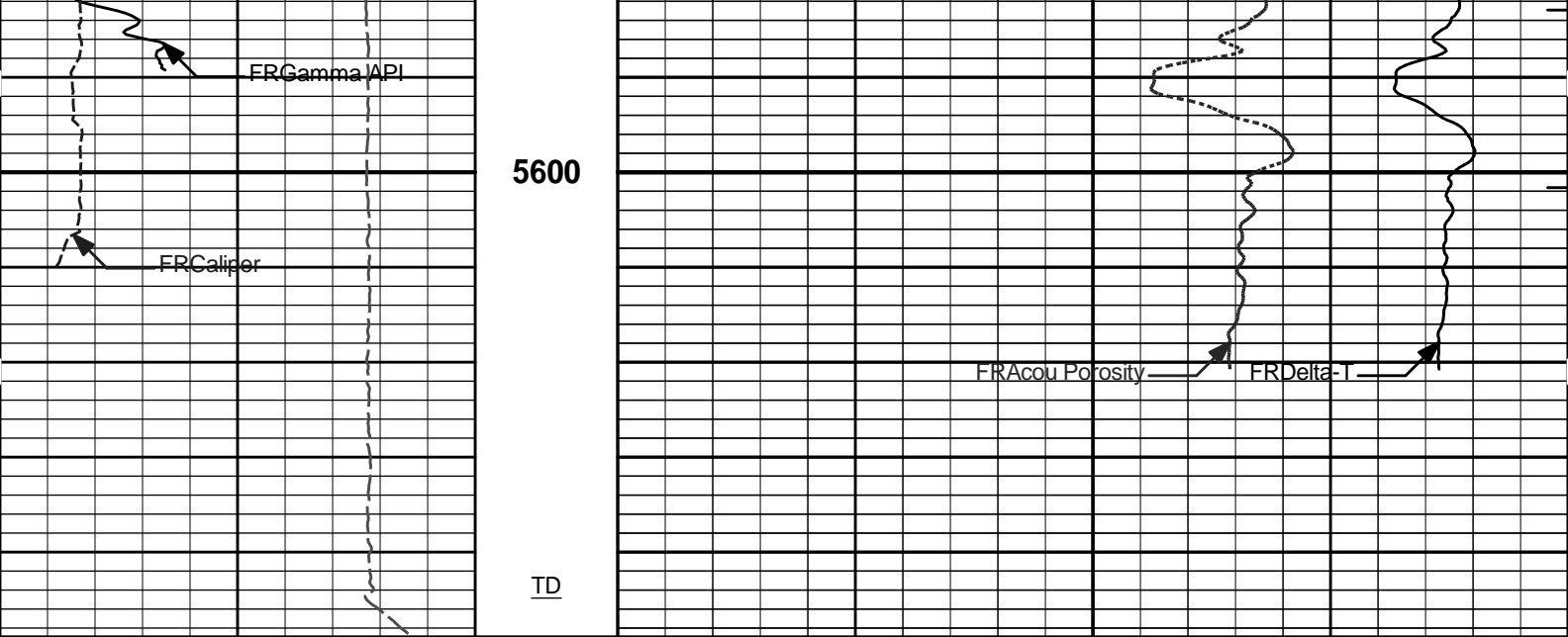
Density



Acoustic Porosity

5400

5500



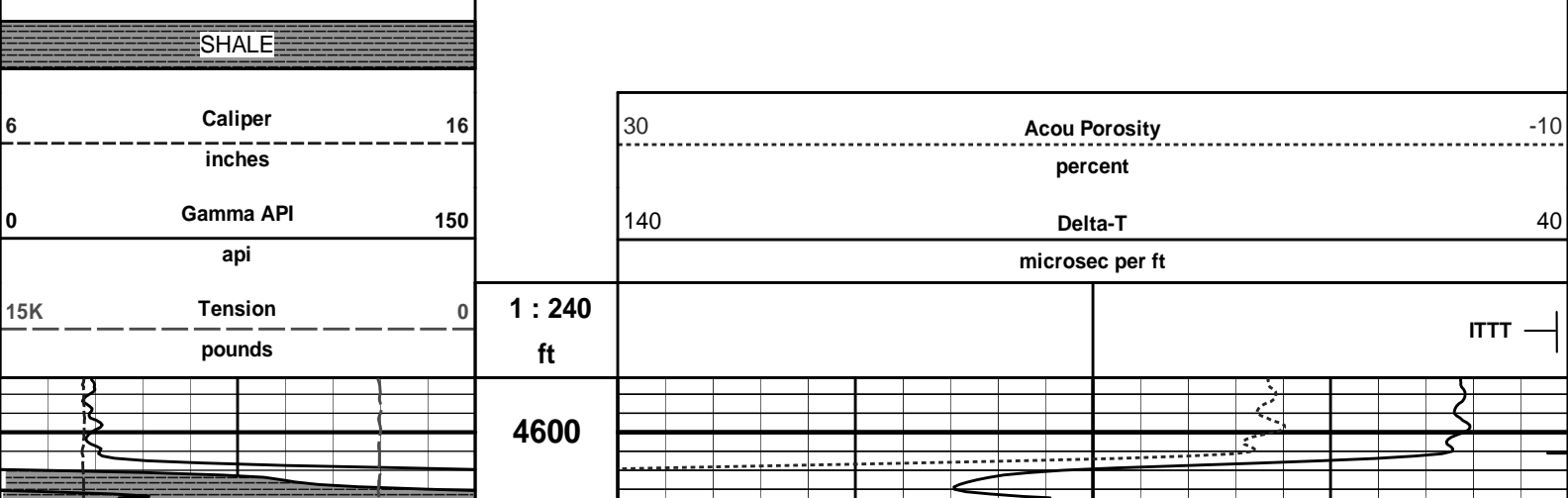
15K	Tens	0	1 : 240				ITTT
	pounds		ft				
0	Gamma API	150	Tension Pull	140		Delta-T	40
	api		10 0			microsec per ft	
6	Caliper	16	Tension Pull	30		Acou Porosity	-10
	inches					percent	
SHALE							

**HALLIBURTON** Plot Time: 03-Jul-12 09:43:02  
 Plot Range: 1790 ft to 5648.92 ft  
 Data: FEIGHT\_A\_7Well Based\R1\_CASING\  
 Plot File: \\BSAT\BSAT\_5\_MAIN\_LIB

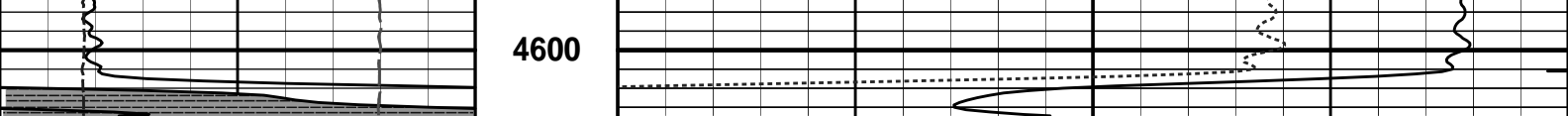
## 5 INCH MAIN LOG

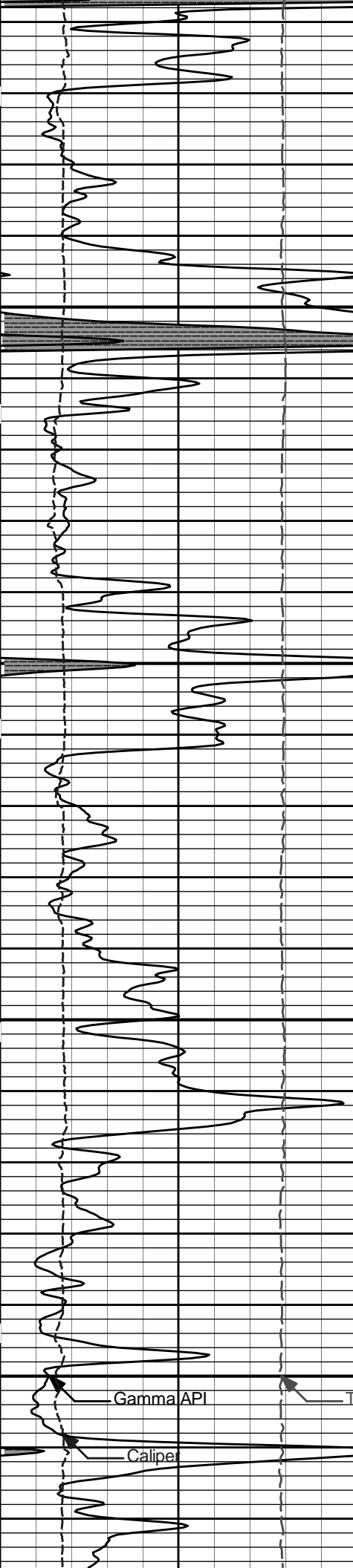
**HALLIBURTON** Plot Time: 03-Jul-12 09:43:03  
 Plot Range: 4594.25 ft to 5650.25 ft  
 Data: FEIGHT\_A\_7Well Based\R1\_REPEAT\  
 Plot File: \\BSAT\BSAT\_5\_REP\_LIB

## REPEAT SECTION



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

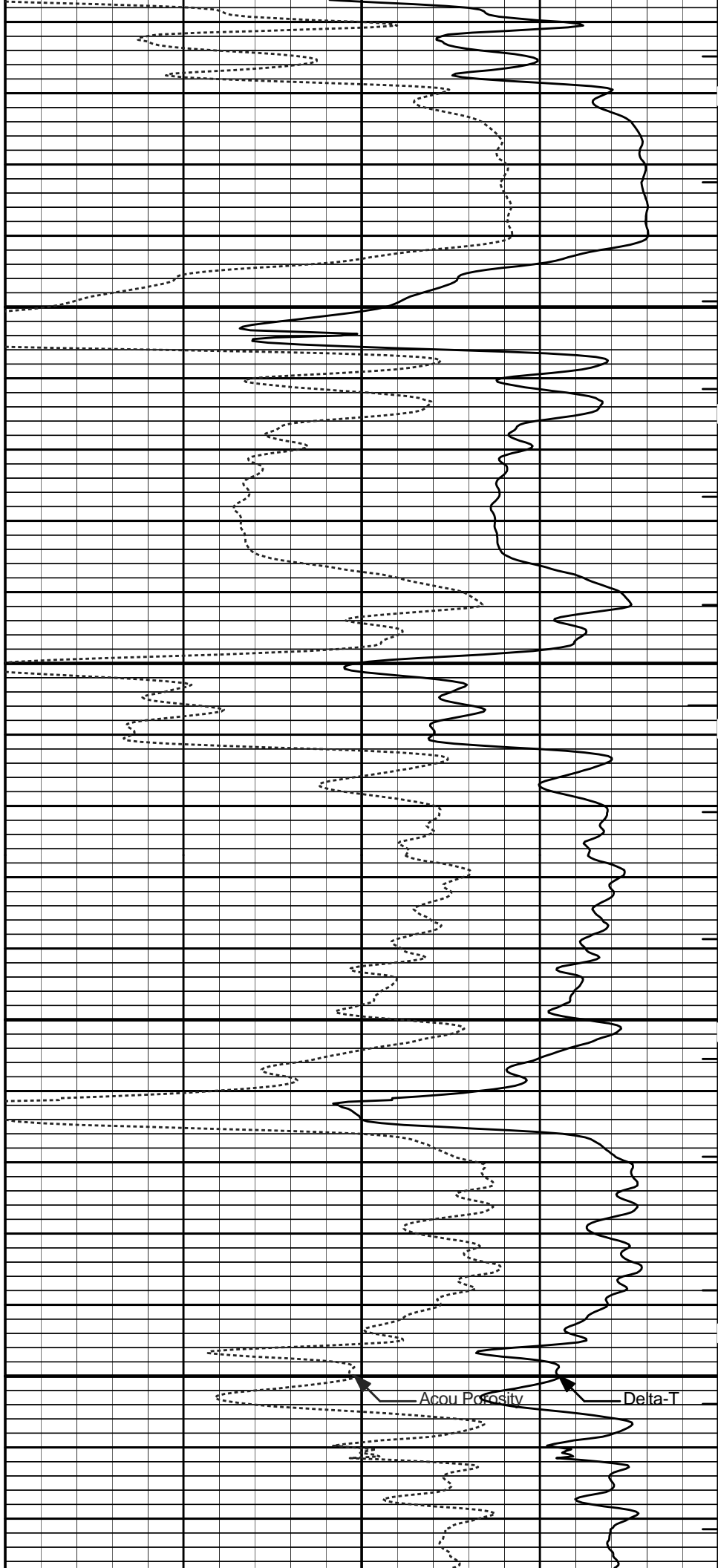




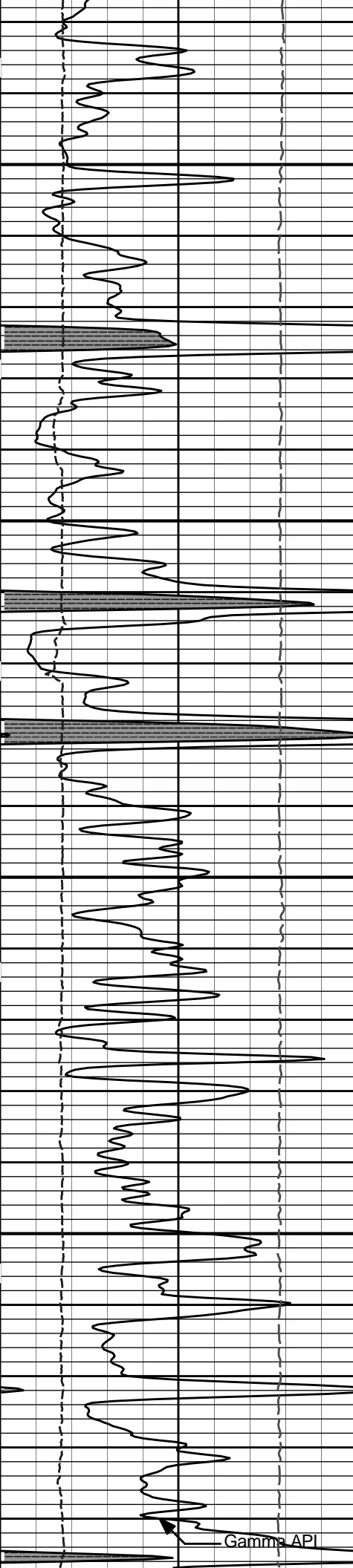
4700

4800

Gamma API  
Caliper  
Tension

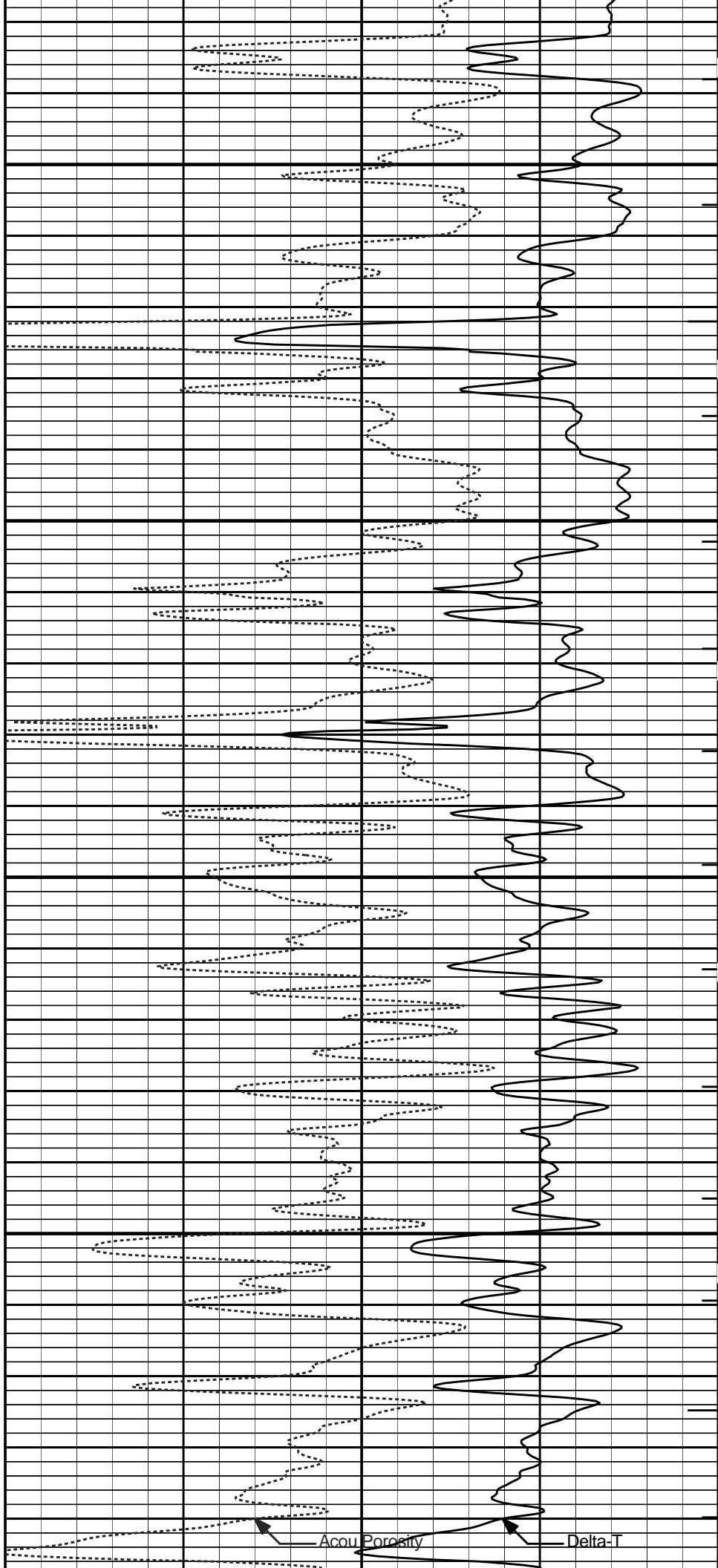


Acou Porosity  
Delta-T



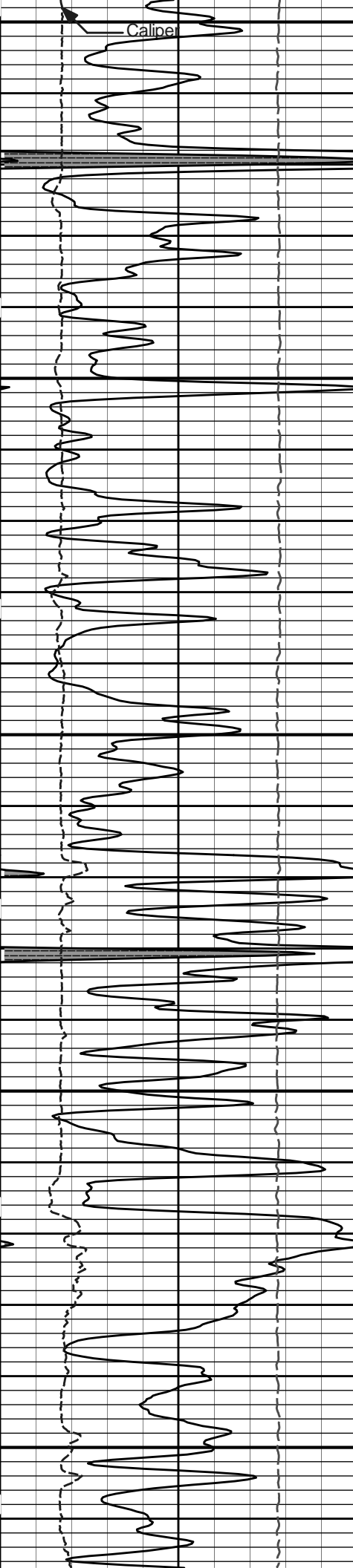
4900

5000



Acou Porosity

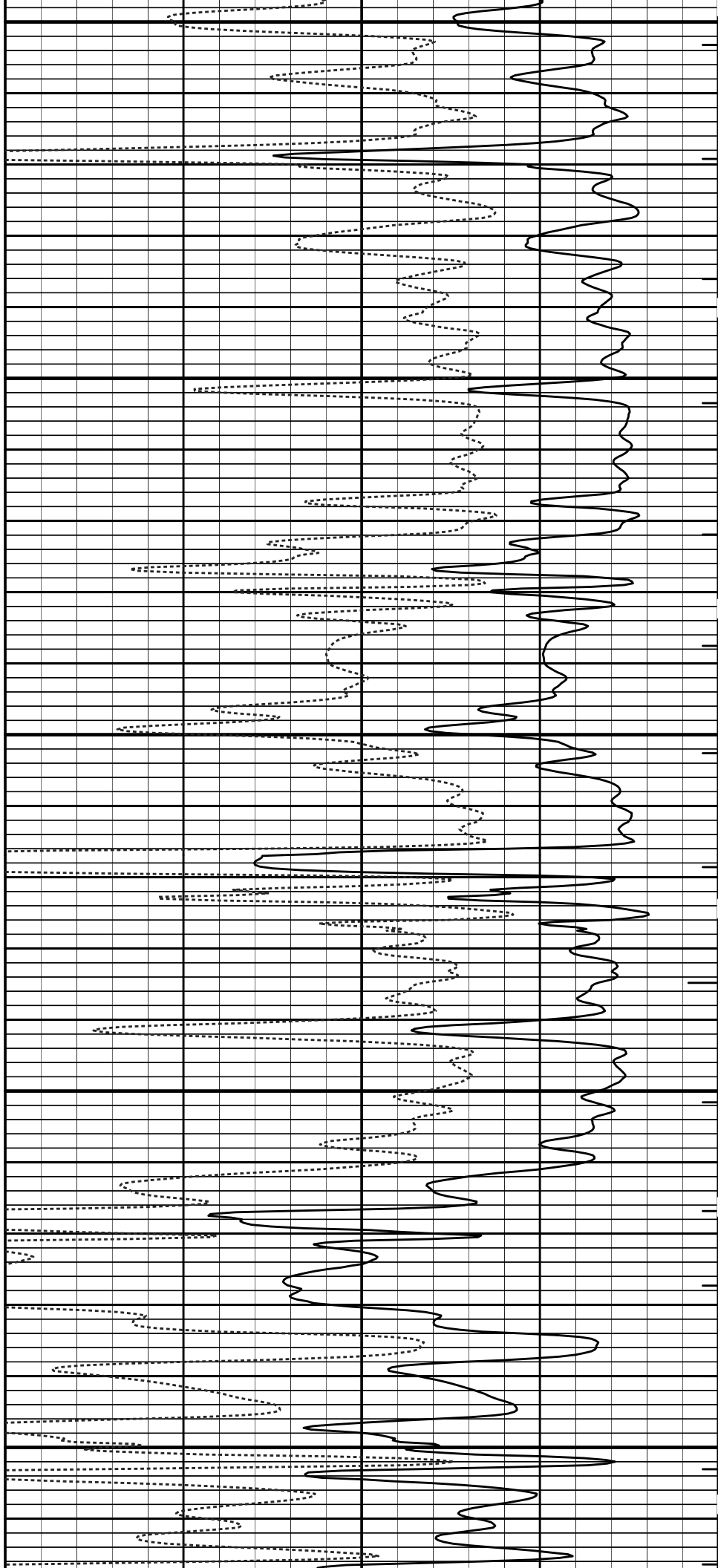
Delta-T

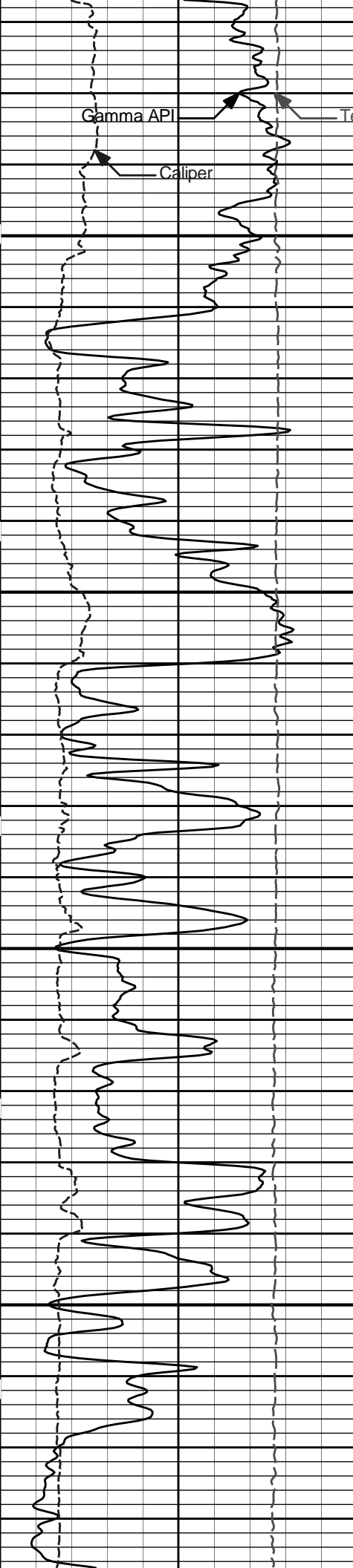


Caliper

5100

5200





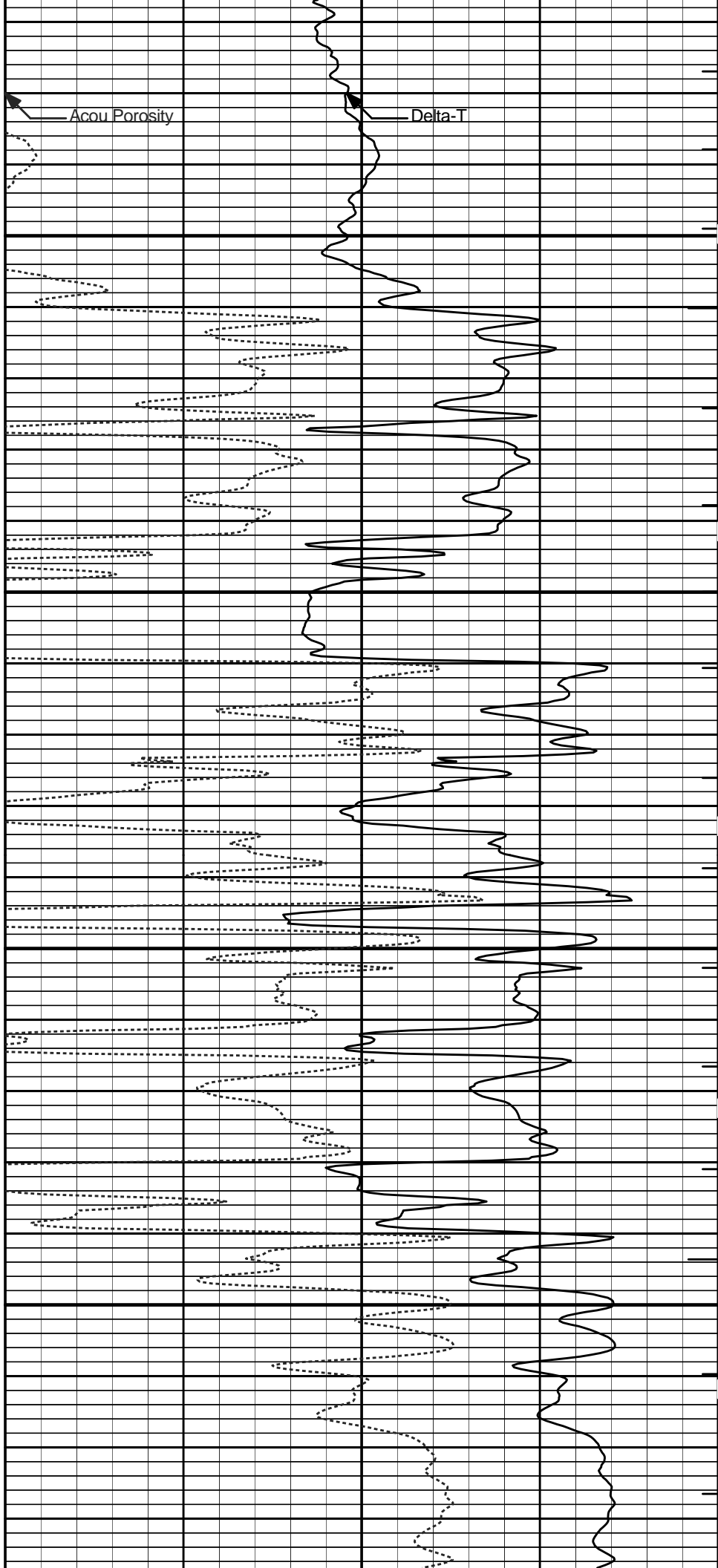
Gamma API

Caliper

Tension

5300

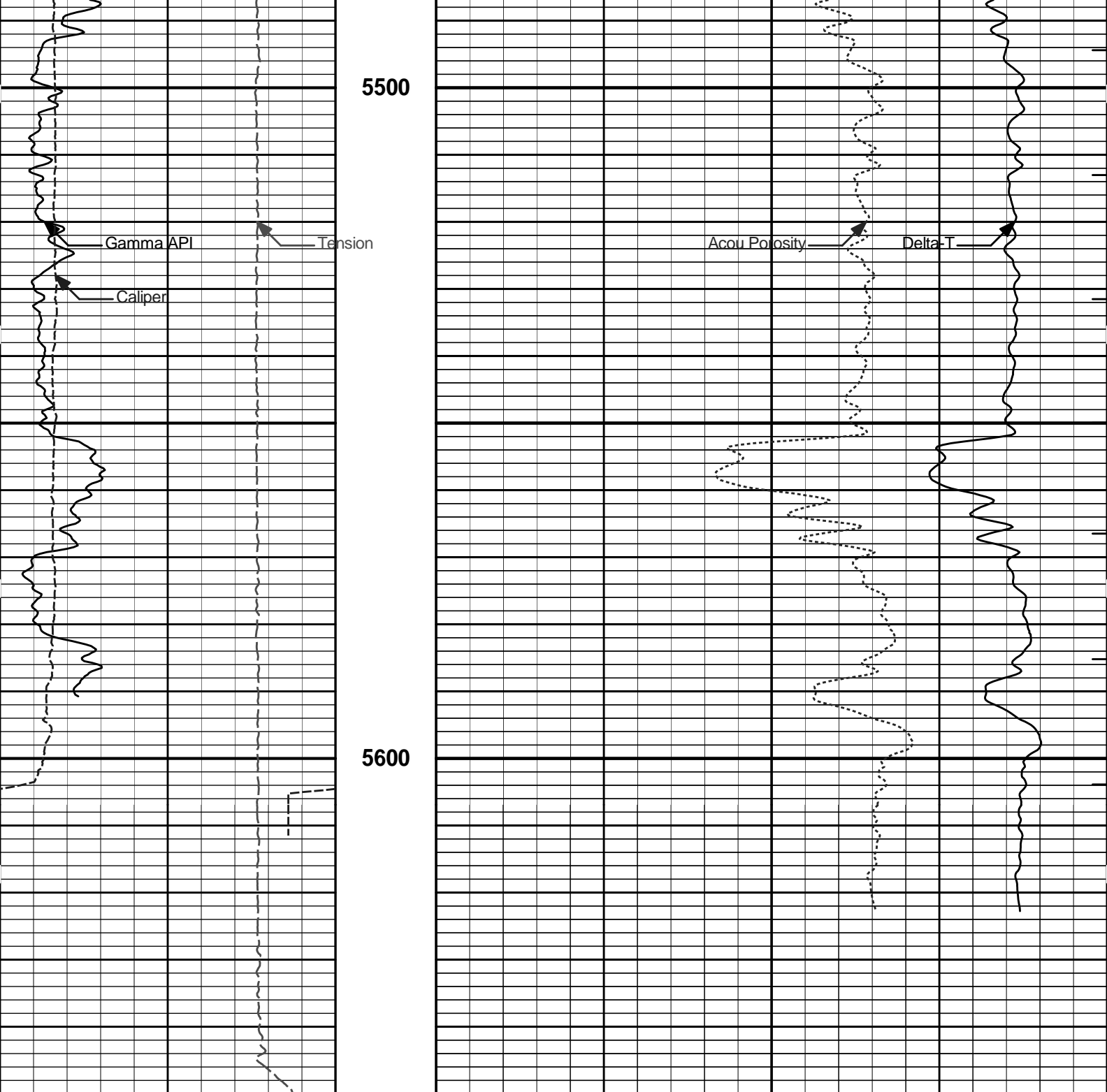
5400



Acou Porosity

Delta-T





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

**HALLIBURTON**

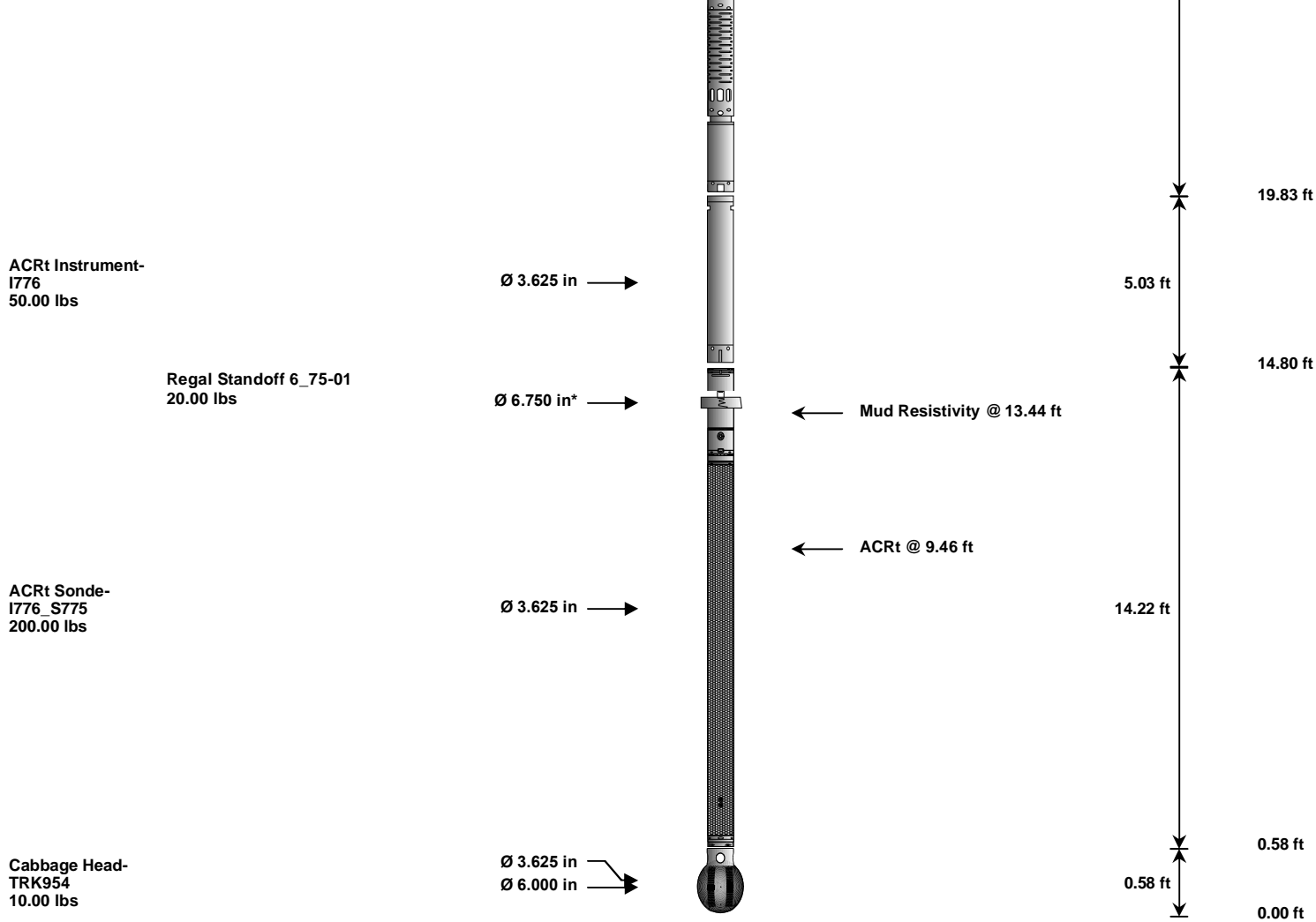
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 Plot Range: 4594.25 ft to 5650.25 ft  
 Data: FEIGHT\_A\_7\Well Based\R1\_REPEAT\  
 Plot File: \BSAT\BSAT\_5\_REP\_LIB

# REPEAT SECTION

**HALLIBURTON**

## TOOL STRING DIAGRAM REPORT

Description	Overbody Description	O.D.	Diagram	Sensors @ Delays	Length	Accumulated Length
Cable Head- PROT01 30.00 lbs		Ø 3.625 in →			1.92 ft	70.28 ft
SP Sub-11441709 60.00 lbs		Ø 3.625 in →		← SP @ 66.59 ft	3.74 ft	68.36 ft
GTET-10811258 165.00 lbs		Ø 3.625 in →		← GammaRay @ 58.56 ft	8.52 ft	64.63 ft
DSNT-10735145 174.00 lbs		Ø 3.625 in →		← DSN Far @ 49.17 ft ← DSN Near @ 48.42 ft	9.69 ft	56.11 ft
SDLT- I145_M73803_P90 360.00 lbs	SDLT Pad-90 65.00 lbs Microlog Pad- I145_M73803_P90 8.00 lbs	Ø 4.500 in → Ø 4.750 in* → Ø 4.750 in* →		Microlog @ 38.61 ft SDL Caliper @ 38.42 ft SDL @ 38.41 ft	10.81 ft	46.42 ft
BSAT-10747683 300.00 lbs		Ø 3.625 in →		← Sonic Receivers @ 27.09 ft	15.77 ft	35.61 ft



Mnemonic	Tool Name	Serial Number	Weight (lbs)	Length (ft)	Accumulated Length (ft)	Max. Log. Speed (fpm)
CH	Standard OH Cable Head	PROT01	30.00	1.92	68.36	300.00
SP	SP Sub	11441709	60.00	3.74	64.63	300.00
GTET	Gamma Telemetry Tool	10811258	165.00	8.52	56.11	60.00
DSNT	Dual Spaced Neutron	10735145	174.00	9.69	46.42	60.00
SDLT	Spectral Density Tool	I145_M73803_P90	360.00	10.81	35.61	60.00
MICP	Microlog Pad	I145_M73803_P90	8.00	1.00 *	38.11	60.00
SDLP	Density Insite Pad	90	65.00	2.55 *	37.82	60.00
BSAT	Borehole Sonic Array Tool	10747683	300.00	15.77	19.83	60.00
ACRt	Array Compensated True Resistivity Instrument Section	1776	50.00	5.03	14.80	300.00
ACRt	Array Compensated True Resistivity Sonde Section	1776_S775	200.00	14.22	0.58	300.00
RSOF	Regal Standoff 6.75in	01	20.00	0.52 *	13.53	300.00
CBHD	Cabbage Head	TRK954	10.00	0.58	0.00	300.00

**Total** **1,442.00**    **70.28**

\* Not included in Total Length and Length Accumulation.

Data: FEIGHT\_A\_7\0001 SP-GTET-DSNT-SDLT-BSAT-ACRT-CHVDLE Date: 03-Jul-12 06:00:41

# 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	MDRS	Mud Resis	Water	

SHARED	MDBS	Mud Base	Water	
SHARED	MDWT	Borehole Fluid Weight	9.200	ppg
SHARED	WAGT	Weighting Agent	Natural	
SHARED	BSAL	Borehole salinity	4000.00	ppm
SHARED	FSAL	Formation Salinity NaCl	0.00	ppm
SHARED	KPCT	Percent K in Mud by Weight?	0.00	%
SHARED	RMUD	Mud Resistivity	0.860	ohmm
SHARED	TRM	Temperature of Mud	80.0	degF
SHARED	CSD	Logging Interval is Cased?	No	
SHARED	ICOD	AHV Casing OD	5.500	in
SHARED	ST	Surface Temperature	75.0	degF
SHARED	TD	Total Well Depth	5659.00	ft
SHARED	BHT	Bottom Hole Temperature	126.0	degF
SHARED	SVTM	Navigation and Survey Master Tool	NONE	
SHARED	AZTM	High Res Z Accelerometer Master Tool	GTET	
SHARED	TEMM	Temperature Master Tool	NONE	
SHARED	BHSM	Borehole Size Master Tool	NONE	
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	
GTET	GROK	Process Gamma Ray?	Yes	
GTET	GRSO	Gamma Tool Standoff	0.000	in
GTET	GEOK	Process Gamma Ray EVR?	No	
GTET	TPOS	Tool Position for Gamma Ray Tools.	Eccentered	
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	DNTP	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	
SDLT	CLOK	Process Caliper 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
Microlog Pad	MLOK	Process MicroLog Outputs?	Yes	
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 Fluid	189.00	uspf
BSAT	DTMT	Delta -T Matrix Type	User define	

BSAT	DTMA	Delta -T Matrix	47.60	uspf
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	Free Hanging	
ACRt Sonde	RMOP	Rmud Source	Mud Cell	
ACRt Sonde	RMIN	Minimum Resistivity for MAP	0.20	ohmm
ACRt Sonde	RMIN	Maximum Resistivity for MAP	200.00	ohmm
ACRt Sonde	THQY	Threshold Quality	0.50	
ACRt Sonde	MRFX	Fixed mud resistivity	2000	ohmm
BOTTOM_____				
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# HALLIBURTON

## INPUTS, DELAYS AND FILTERS TABLE

Mnemonic	Input Description	Delay (ft)	Filter Type	Filter Length (ft)
<b>Depth Panel</b>				
TENS	Tension	0.00	NO	
<b>SP Sub</b>				
PLTC	Plot Control Mask	66.58	NO	
SP	Spontaneous Potential	66.58	BLK	1.250
SPR	Raw Spontaneous Potential	66.58	NO	
SPO	Spontaneous Potential Offset	66.58	NO	
<b>GTET</b>				
TPUL	Tension Pull	58.56	NO	
GR	Natural Gamma Ray API	58.56	TRI	1.750
GRU	Unfiltered Natural Gamma Ray API	58.56	NO	
EGR	Natural Gamma Ray API with Enhanced Vertical Resolution	58.56	W	1.416 , 0.750
ACCZ	Accelerometer Z	0.00	BLK	0.083
DEVI	Inclination	0.00	NO	
<b>DSNT</b>				
TPUL	Tension Pull	48.32	NO	
RNDS	Near Detector Telemetry Counts	48.42	BLK	1.417
RFDS	Far Detector Telemetry Counts	49.17	TRI	0.583
DNTT	DSN Tool Temperature	48.42	NO	
DSNS	DSN Tool Status	48.32	NO	
ERNR	Near Detector Telemetry Counts EVR	48.42	BLK	0.000
ERFD	Far Detector Telemetry Counts EVR	49.17	BLK	0.000
ENTM	DSN Tool Temperature EVR	48.42	NO	
<b>SDLT</b>				
TPUL	Tension Pull	38.42	NO	
PCAL	Pad Caliper	38.42	TRI	0.250
ACAL	Arm Caliper	38.42	TRI	0.250
<b>BSAT</b>				
TPUI	Tension Pull	27.09	NO	

STAT	Status	27.09	NO	
DLYT	Delay Time	27.09	NO	
SI	Sample Interval	27.09	NO	
TXRX	Raw Telemetry 10 Receivers	27.09	NO	
FRMC	Tool Frame Count	27.09	NO	
GMOD	Gain processing mode	19.83	NO	
<b>ACRt Sonde</b>				
TPUL	Tension Pull	2.97	NO	
F1R1	ACRT 12KHz - 80in R value	9.22	BLK	0.000
F1X1	ACRT 12KHz - 80in X value	9.22	BLK	0.000
F1R2	ACRT 12KHz - 50in R value	6.72	BLK	0.000
F1X2	ACRT 12KHz - 50in X value	6.72	BLK	0.000
F1R3	ACRT 12KHz - 29in R value	5.22	BLK	0.000
F1X3	ACRT 12KHz - 29in X value	5.22	BLK	0.000
F1R4	ACRT 12KHz - 17in R value	4.22	BLK	0.000
F1X4	ACRT 12KHz - 17in X value	4.22	BLK	0.000
F1R5	ACRT 12KHz - 10in R value	3.72	BLK	0.000
F1X5	ACRT 12KHz - 10in X value	3.72	BLK	0.000
F1R6	ACRT 12KHz - 6in R value	3.47	BLK	0.000
F1X6	ACRT 12KHz - 6in X value	3.47	BLK	0.000
F2R1	ACRT 36KHz - 80in R value	9.22	BLK	0.000
F2X1	ACRT 36KHz - 80in X value	9.22	BLK	0.000
F2R2	ACRT 36KHz - 50in R value	6.72	BLK	0.000
F2X2	ACRT 36KHz - 50in X value	6.72	BLK	0.000
F2R3	ACRT 36KHz - 29in R value	5.22	BLK	0.000
F2X3	ACRT 36KHz - 29in X value	5.22	BLK	0.000
F2R4	ACRT 36KHz - 17in R value	4.22	BLK	0.000
F2X4	ACRT 36KHz - 17in X value	4.22	BLK	0.000
F2R5	ACRT 36KHz - 10in R value	3.72	BLK	0.000
F2X5	ACRT 36KHz - 10in X value	3.72	BLK	0.000
F2R6	ACRT 36KHz - 6in R value	3.47	BLK	0.000
F2X6	ACRT 36KHz - 6in X value	3.47	BLK	0.000
F3R1	ACRT 72KHz - 80in R value	9.22	BLK	0.000
F3X1	ACRT 72KHz - 80in X value	9.22	BLK	0.000
F3R2	ACRT 72KHz - 50in R value	6.72	BLK	0.000
F3X2	ACRT 72KHz - 50in X value	6.72	BLK	0.000
F3R3	ACRT 72KHz - 29in R value	5.22	BLK	0.000
F3X3	ACRT 72KHz - 29in X value	5.22	BLK	0.000
F3R4	ACRT 72KHz - 17in R value	4.22	BLK	0.000
F3X4	ACRT 72KHz - 17in X value	4.22	BLK	0.000
F3R5	ACRT 72KHz - 10in R value	3.72	BLK	0.000
F3X5	ACRT 72KHz - 10in X value	3.72	BLK	0.000
F3R6	ACRT 72KHz - 6in R value	3.47	BLK	0.000
F3X6	ACRT 72KHz - 6in X value	3.47	BLK	0.000
RMUD	Mud Resistivity	12.76	BLK	0.000
F1RT	Transmitter Reference 12 KHz Real Signal	2.97	BLK	0.000
F1XT	Transmitter Reference 12 KHz Imaginary Signal	2.97	BLK	0.000
F2RT	Transmitter Reference 36 KHz Real Signal	2.97	BLK	0.000
F2XT	Transmitter Reference 36 KHz Imaginary Signal	2.97	BLK	0.000
F3RT	Transmitter Reference 72 KHz Real Signal	2.97	BLK	0.000
F3XT	Transmitter Reference 72 KHz Imaginary Signal	2.97	BLK	0.000
TFPU	Upper Feedpipe Temperature Calculated	2.97	BLK	0.000
TFPL	Lower Feedpipe Temperature Calculated	2.97	BLK	0.000
ITMP	Instrument Temperature	2.97	BLK	0.000
TCVA	Temperature Correction Values Loop Off	2.97	NO	

TCVA	Temperature Correction values Loop Off	2.97	NO
TIDV	Instrument Temperature Derivative	2.97	NO
TUDV	Upper Temperature Derivative	2.97	NO
TLDV	Lower Temperature Derivative	2.97	NO
TRBD	Receiver Board Temperature	2.97	NO

### SDLT Pad

TPUL	Tension Pull	38.41	NO	
NAB	Near Above	38.24	BLK	0.920
NHI	Near Cesium High	38.24	BLK	0.920
NLO	Near Cesium Low	38.24	BLK	0.920
NVA	Near Valley	38.24	BLK	0.920
NBA	Near Barite	38.24	BLK	0.920
NDE	Near Density	38.24	BLK	0.920
NPK	Near Peak	38.24	BLK	0.920
NLI	Near Lithology	38.24	BLK	0.920
NBAU	Near Barite Unfiltered	38.24	BLK	0.250
NLIU	Near Lithology Unfiltered	38.24	BLK	0.250
FAB	Far Above	38.58	BLK	0.250
FHI	Far Cesium High	38.58	BLK	0.250
FLO	Far Cesium Low	38.58	BLK	0.250
FVA	Far Valley	38.58	BLK	0.250
FBA	Far Barite	38.58	BLK	0.250
FDE	Far Density	38.58	BLK	0.250
FPK	Far Peak	38.58	BLK	0.250
FLI	Far Lithology	38.58	BLK	0.250
PTMP	Pad Temperature	38.42	BLK	0.920
NHV	Near Detector High Voltage	37.81	NO	
FHV	Far Detector High Voltage	37.81	NO	
ITMP	Instrument Temperature	37.81	NO	
DDHV	Detector High Voltage	37.81	NO	

### Microlog Pad

TPUL	Tension Pull	38.60	NO	
MINV	Microlog Lateral	38.60	BLK	0.750
MNOR	Microlog Normal	38.60	BLK	0.750

Data: FEIGHT\_A\_710001 SP-GTET-DSNT-SDLT-BSAT-ACRT-CHIDLE

Date: 03-Jul-12 06:29:19

COMPANY	OXY USA INC		
WELL	FEIGHT A-7		
FIELD	VICTORY		
COUNTY	HASKELL	STATE	KANSAS
<b>HALLIBURTON</b>		<b>BOREHOLE COMPENSATED SONIC ARRAY LOG</b>	