

# HALLIBURTON

## BOREHOLE COMPENSATED SONIC ARRAY LOG

COMPANY	OXY USA INC
WELL	FEIGHT A-8
FIELD	VICTORY
COUNTY	HASKELL
STATE	KANSAS
COMPANY	OXY USA INC
WELL	FEIGHT A-8
FIELD	VICTORY
COUNTY	HASKELL
STATE	KANSAS
API No.	15-081-21985
Location	1980' FNL & 660' FWL
Other Services:	MICRO ACRT DSNT / SDLT
Sect.	27
Twp.	29S
Rge.	33W
Elev.	2943.0 ft
Elev.:	K.B. 2957.0 ft
D.F.	2956.0 ft
G.L.	2943.0 ft

Permanent Datum	GL	14-Jul-12
Log measured from	KB	ONE
Drilling measured from	KB	14.0 ft above perm. Datum
Run No.	ONE	
Depth - Driller	5700.00 ft	
Depth - Logger	5698.0 ft	
Bottom - Logged Interval	5972.0 ft	
Top - Logged Interval	1813.0 ft	
Casing - Driller	9.625 in	@ 1816.0 ft
Casing - Logger	1813.0 ft	@
Bit Size	7.875 in	@
Type Fluid in Hole	WATER BASED MUD	
Density	9.6 ppg	75.00 s/qt
PH	10.00 pH	8.0 cp/m
Source of Sample	FLOW LINE	
Rm @ Meas. Temperature	0.390 ohmm	@ 92.00 degF
Rmf @ Meas. Temperature	0.47 ohmm	@ 76.00 degF
Rmc @ Meas. Temperature	0.560 ohmm	@ 76.00 degF
Source Rmf	MEAS	MEAS
Rm @ BHT	0.26 ohmm	@ 151.0 degF
Time Since Circulation	17.6 hr	
Time on Bottom	14-Jul-12 16:08	
Max. Rec. Temperature	5698.0 degF	@ 151.0 ft
Equipment	10546696	LIBERAL
Recorded By	C. HAVERKAMP	
Witnessed By	D. PRATT	

Fold here

Service Ticket No.: 9646571      API Serial No.: 15-081-21985      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		
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.	Other	
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.	11039640	Serial No.	10747684	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		Matrix	
	Depth	From		To	L	R	L		R	L		R	L		R
ONE	5698	1813	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 10000 MG/L. LCM REPORTED AT 1 LB/BBL.  
 POST TOOL SURVEYS NOT PERFORMED PER CUSTOMER REQUEST.  
 CUSTOMER ACCEPTS MICROLOG @ 5500

YOUR CREW: P. COBLE, K. KING

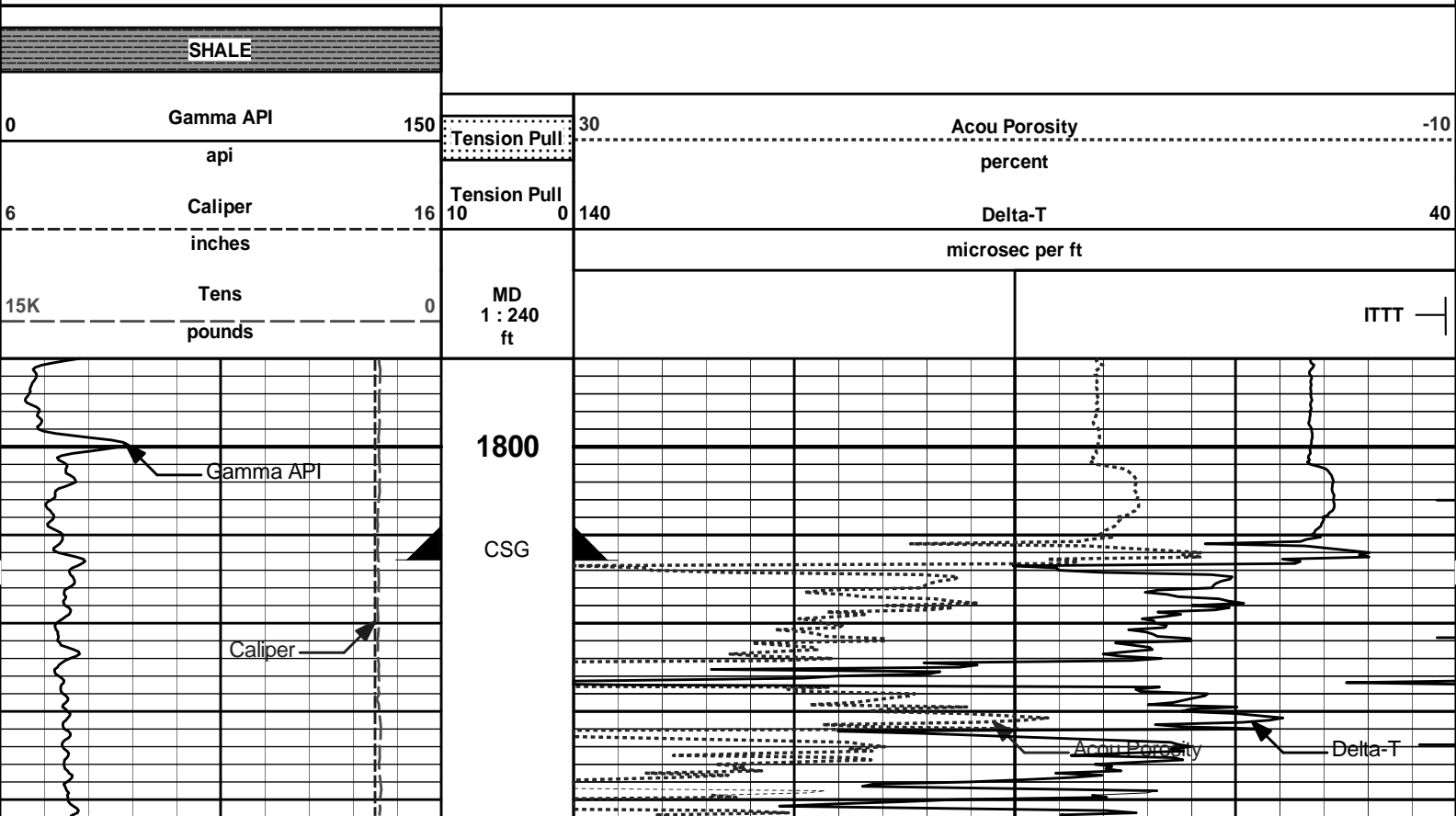
THANK YOU FOR CHOOSING HALLIBURTON ENERGY SERVICES. LIBERAL, KS 620-624-8123

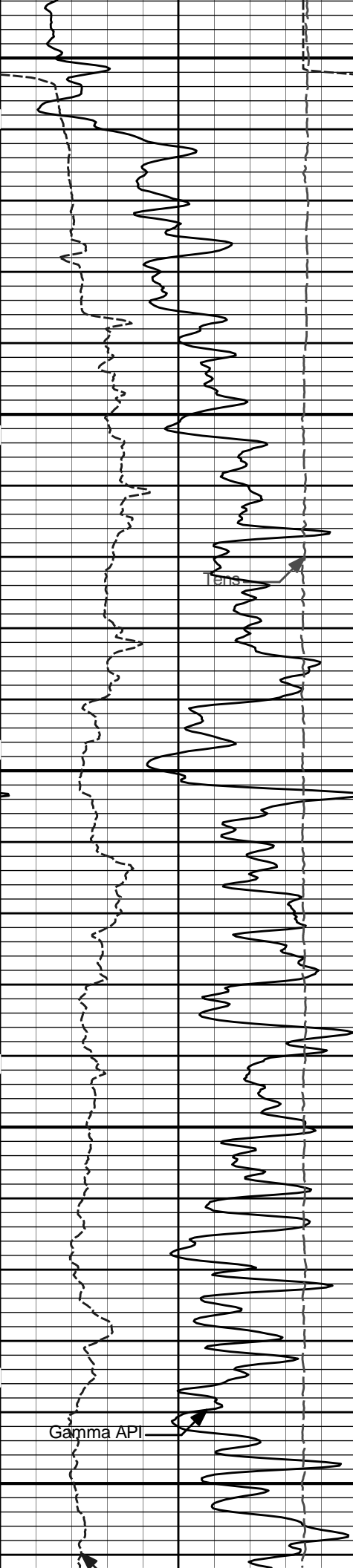
HALLIBURTON DOES NOT GUARANTEE THE ACCURACY OF ANY INTERPRETATION OF THE LOG DATA, CONVERSION OF LOG DATA TO PHYSICAL ROCK PARAMETERS OR RECOMMENDATIONS WHICH MAY BE GIVEN BY HALLIBURTON PERSONNEL OR WHICH APPEAR ON THE LOG OR IN ANY OTHER FORM. ANY USER OF SUCH DATA, INTERPRETATIONS, CONVERSIONS, OR 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.

HALLIBURTON

**HALLIBURTON** Plot Time: 14-Jul-12 18:20:00  
 Plot Range: 1790 ft to 5704.33 ft  
 Data: FEIGHT\_A\_8\Well Based\R1\_CASING\  
 Plot File: \\BSAT\BSAT\_5\_MAIN\_LIB

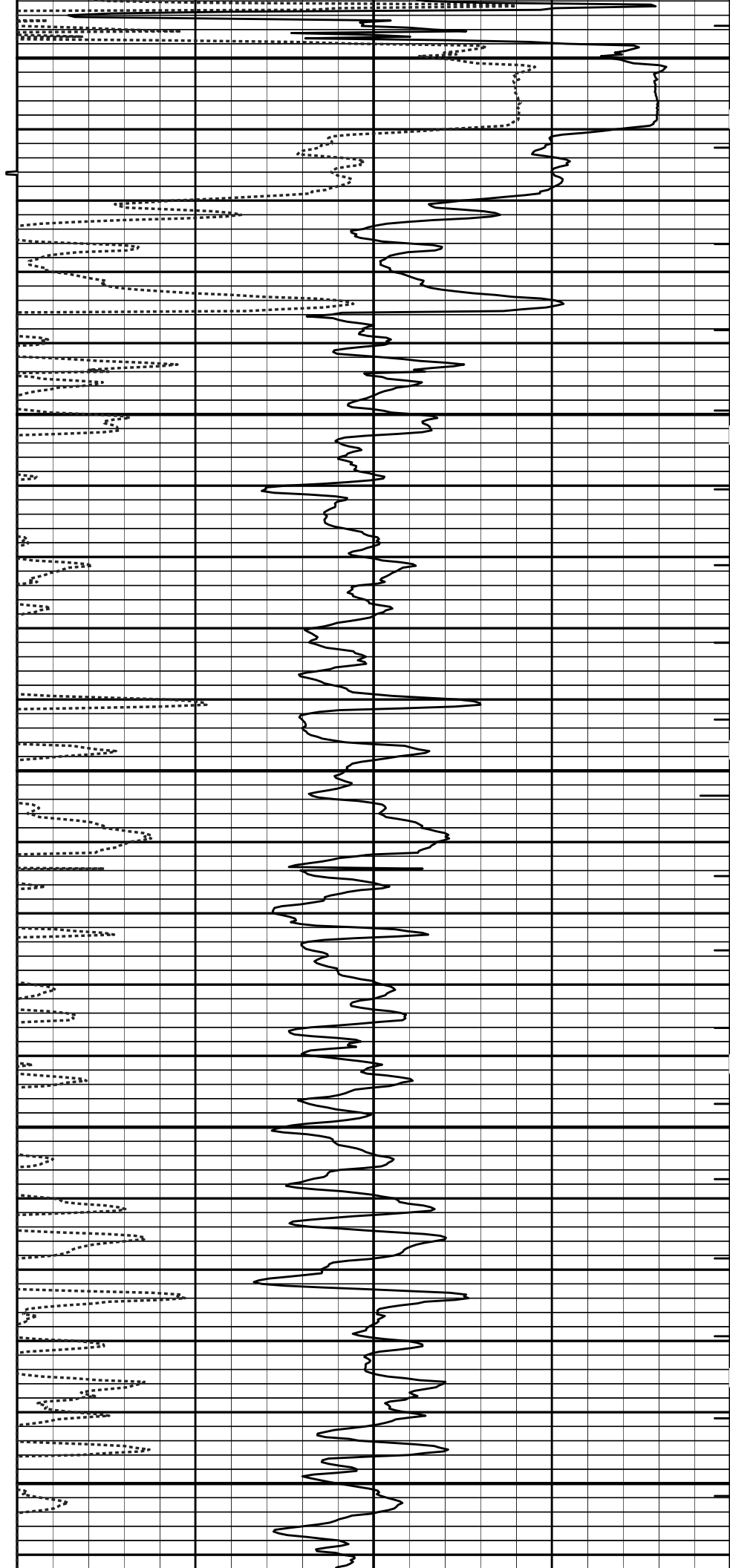
## 5 INCH MAIN LOG



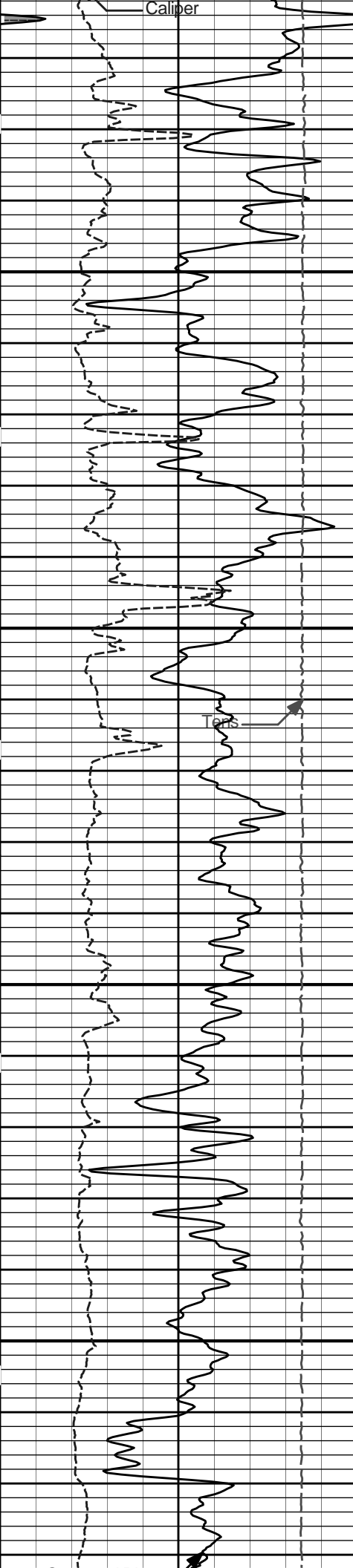


1990

2000

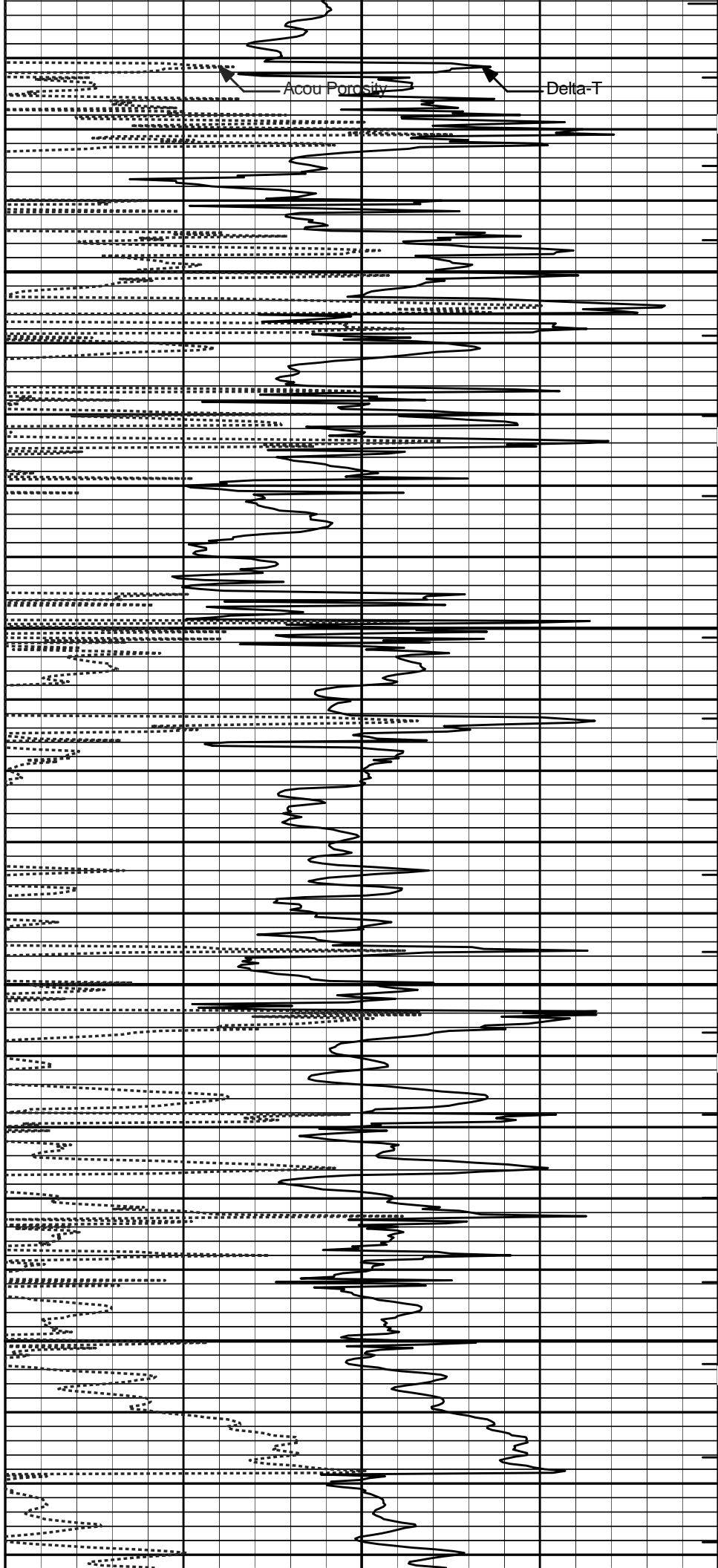


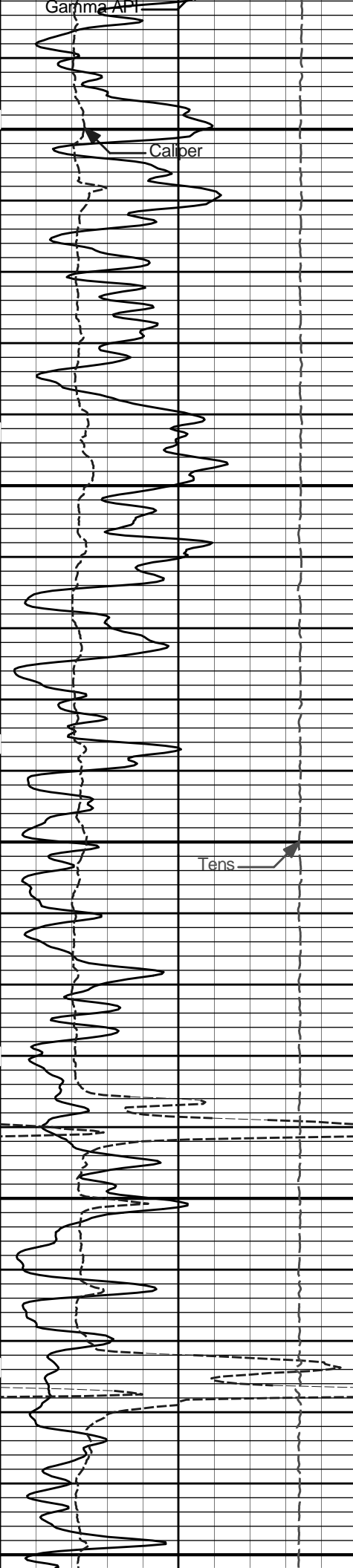
Gamma API



2100

2200

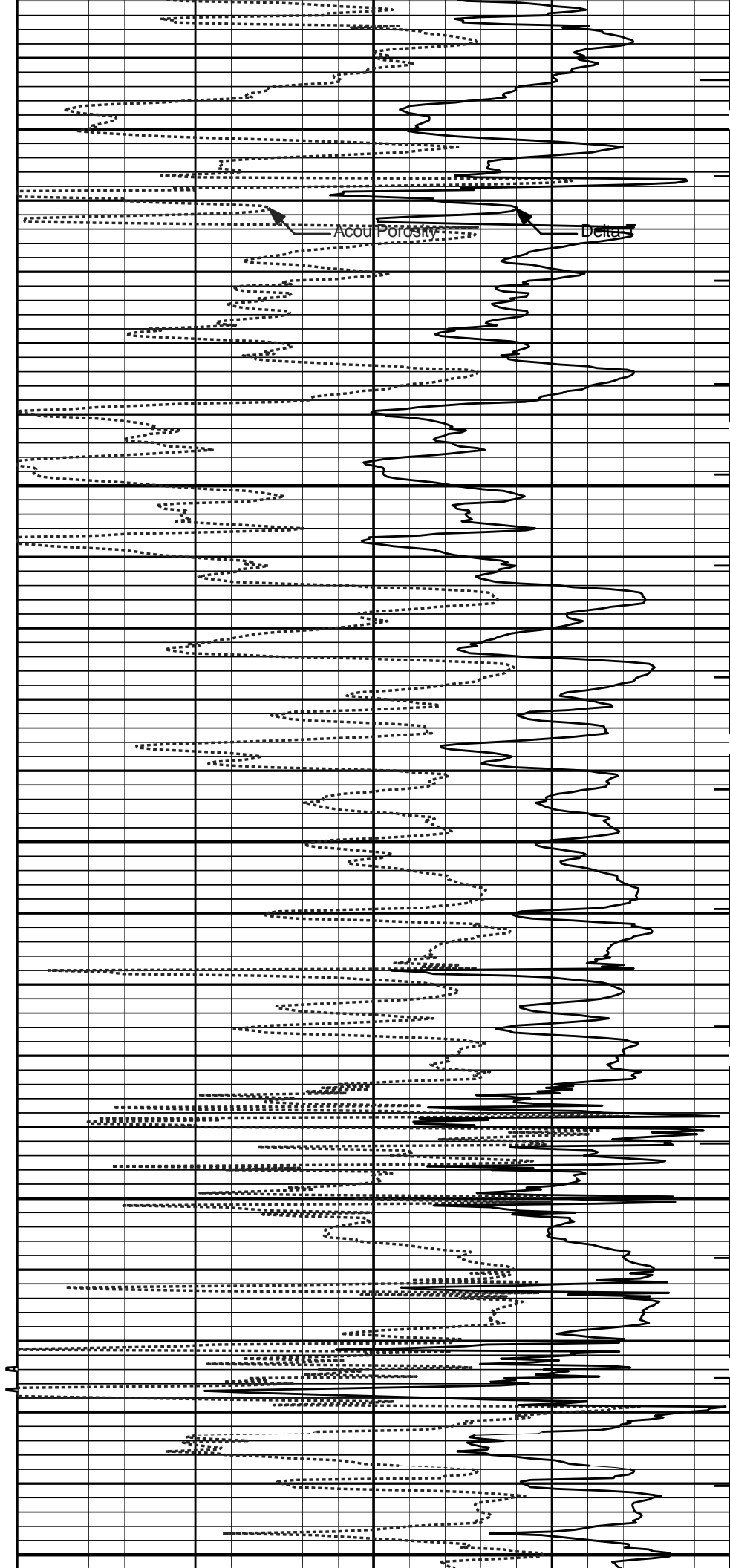




2300

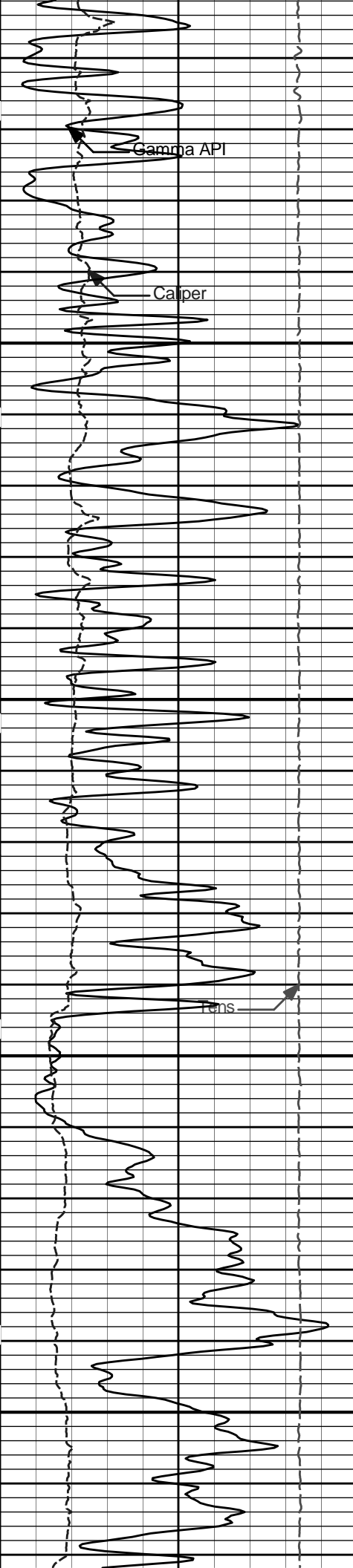
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2500



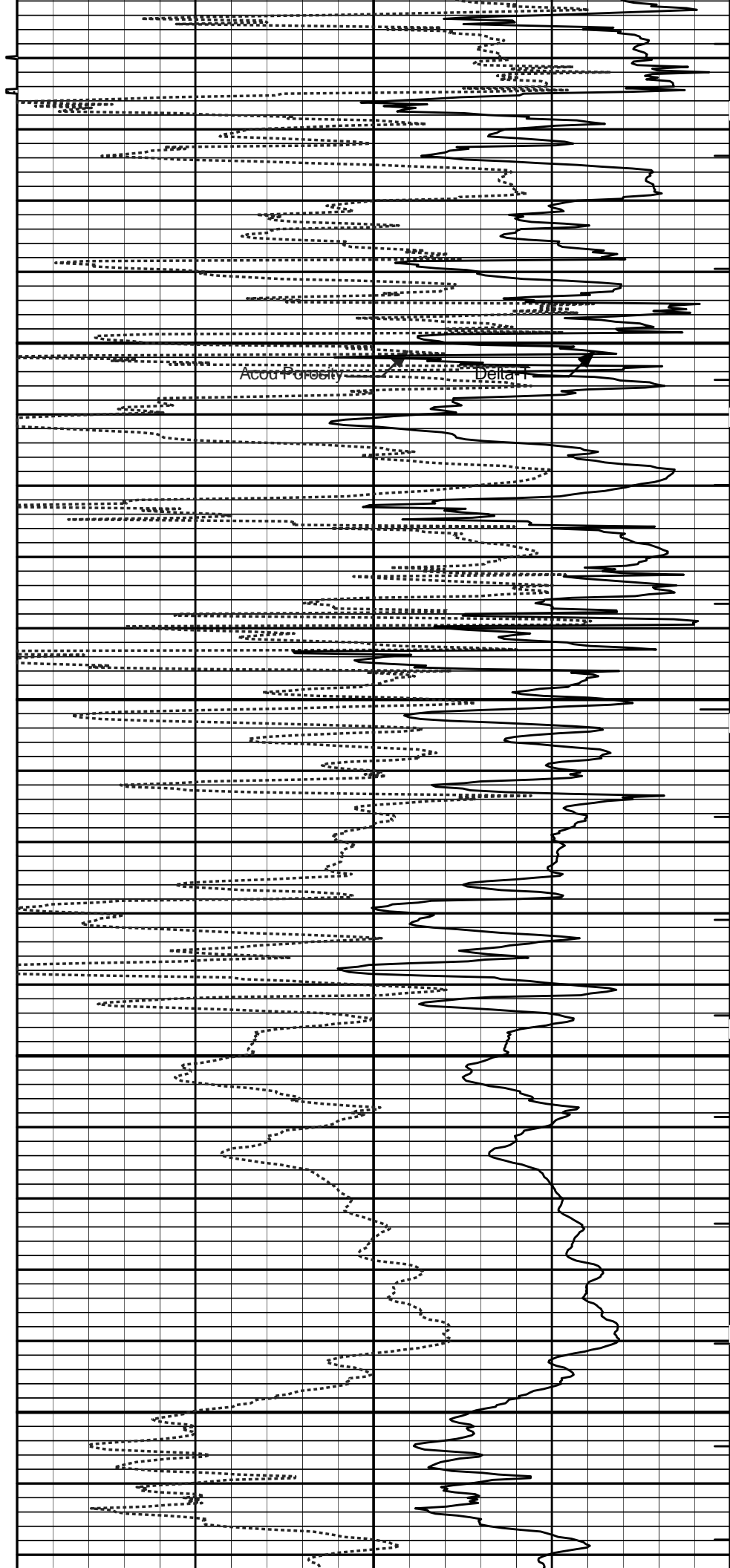
Acoustic Porosity

Delta



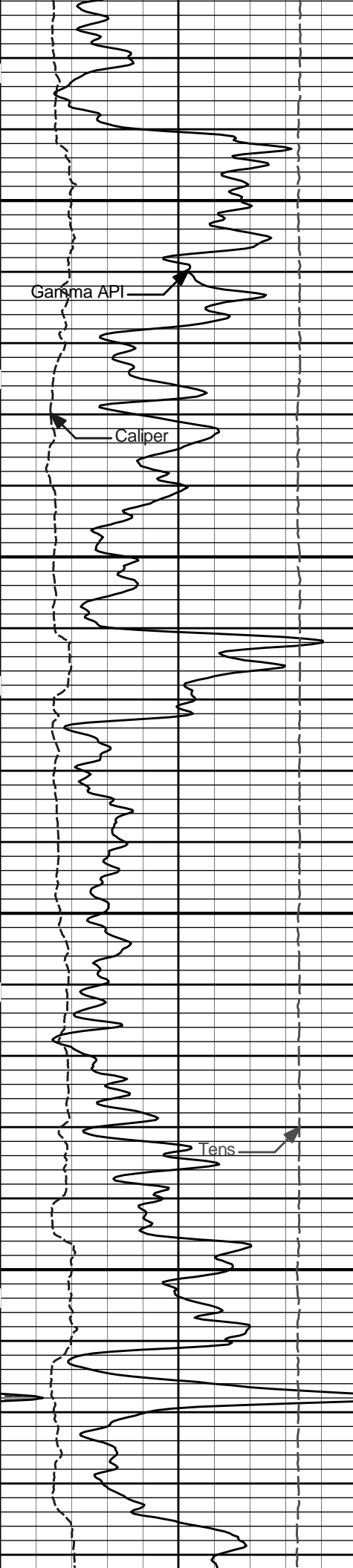
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2700



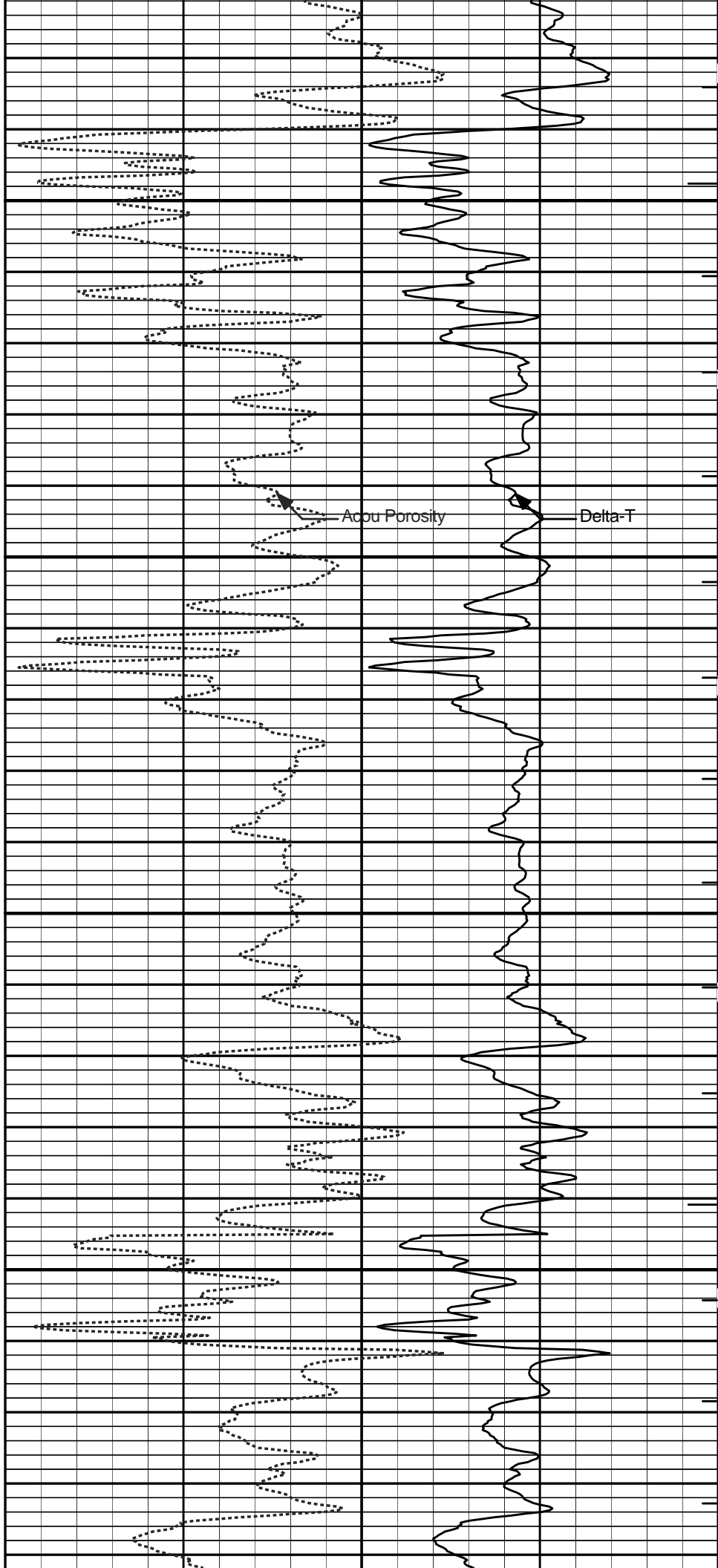
Accu Porosity

Delta T



2800

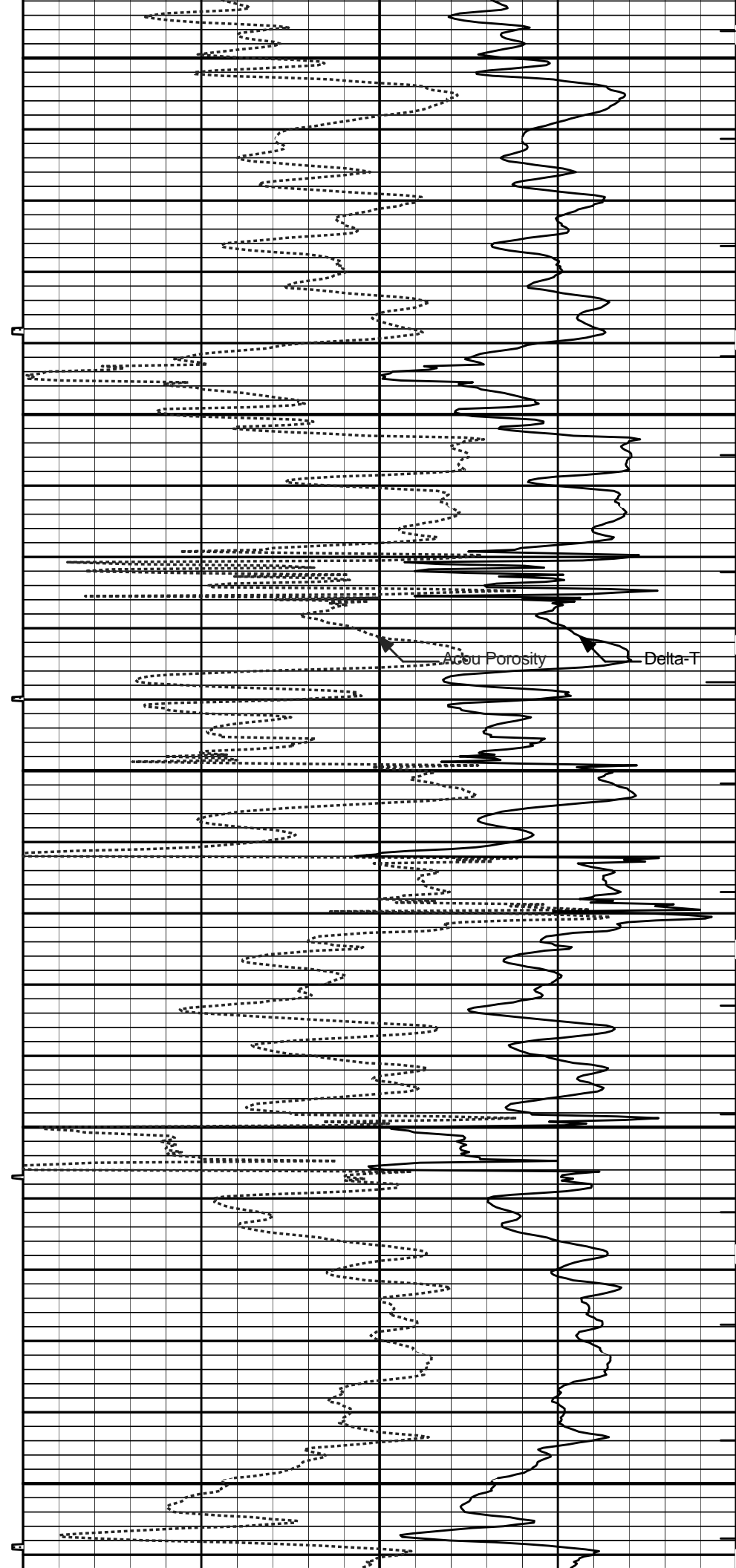
2900





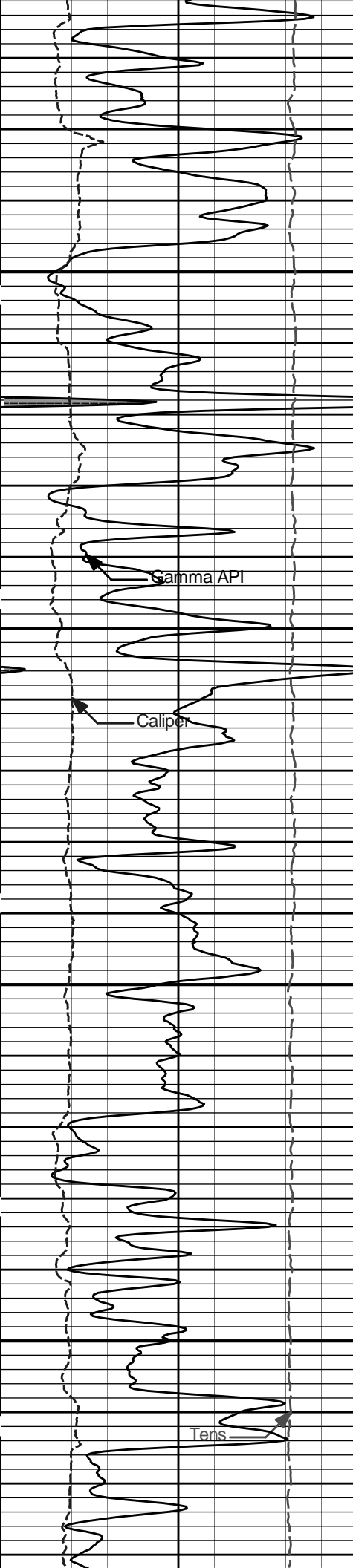
3000

3100



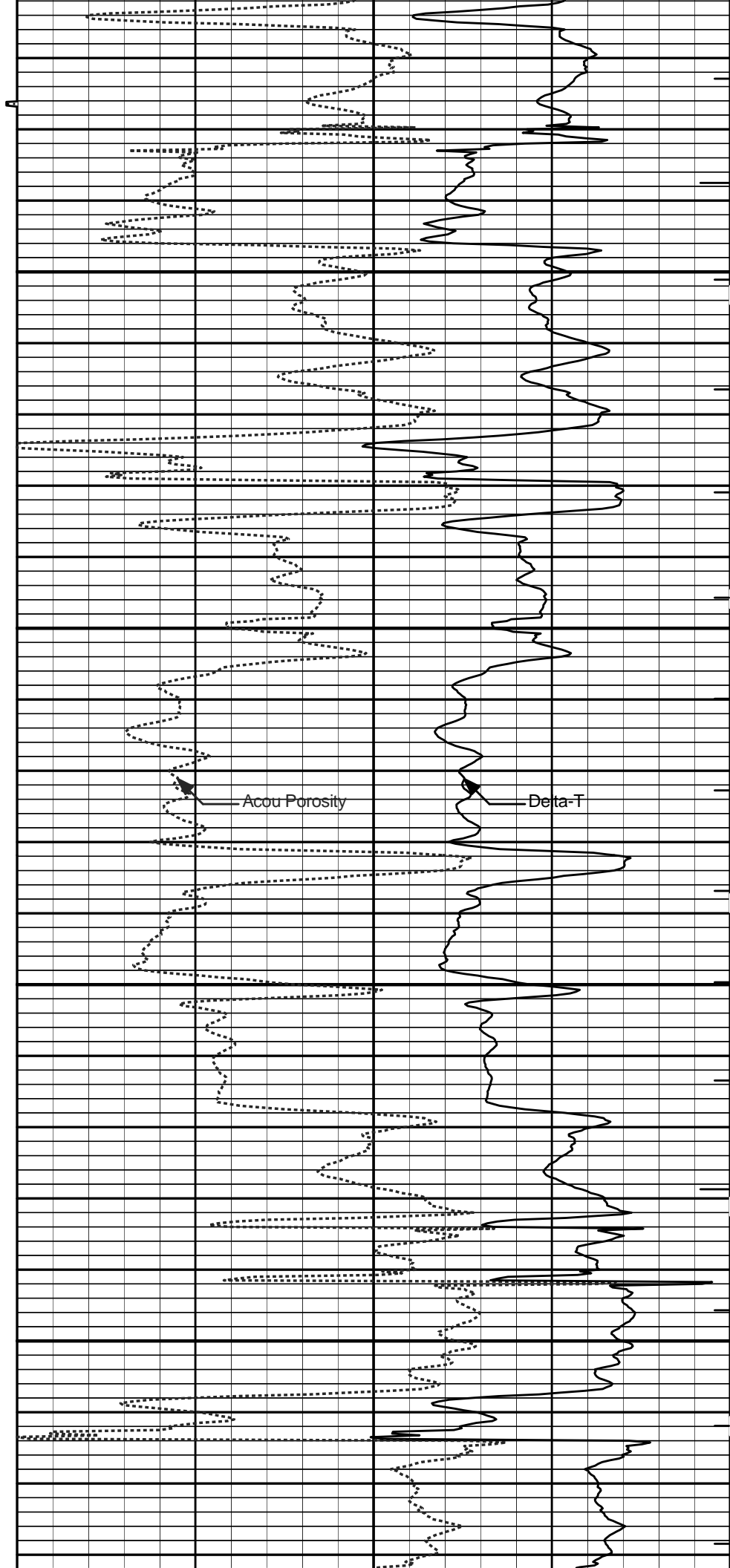
Acou Porosity

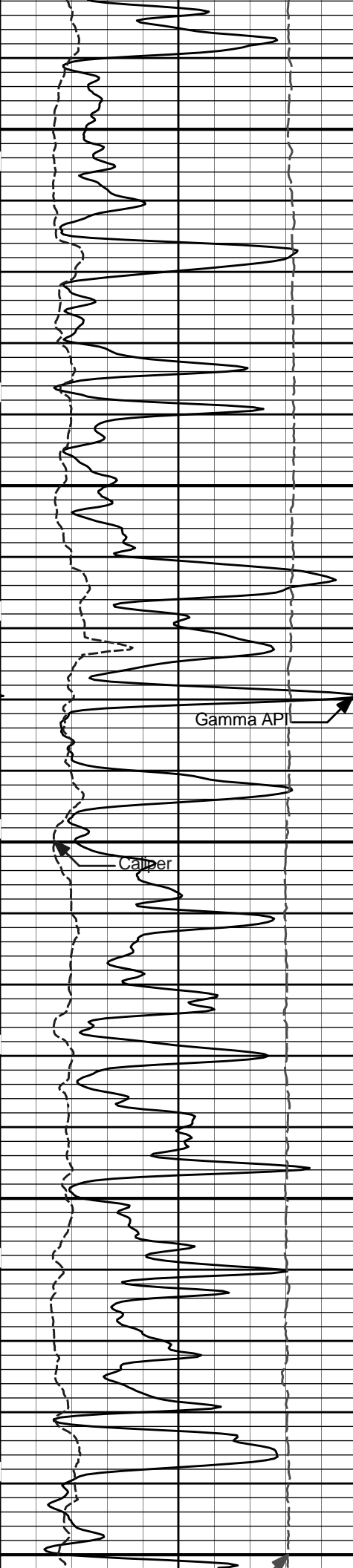
Delta-T



3200

3300





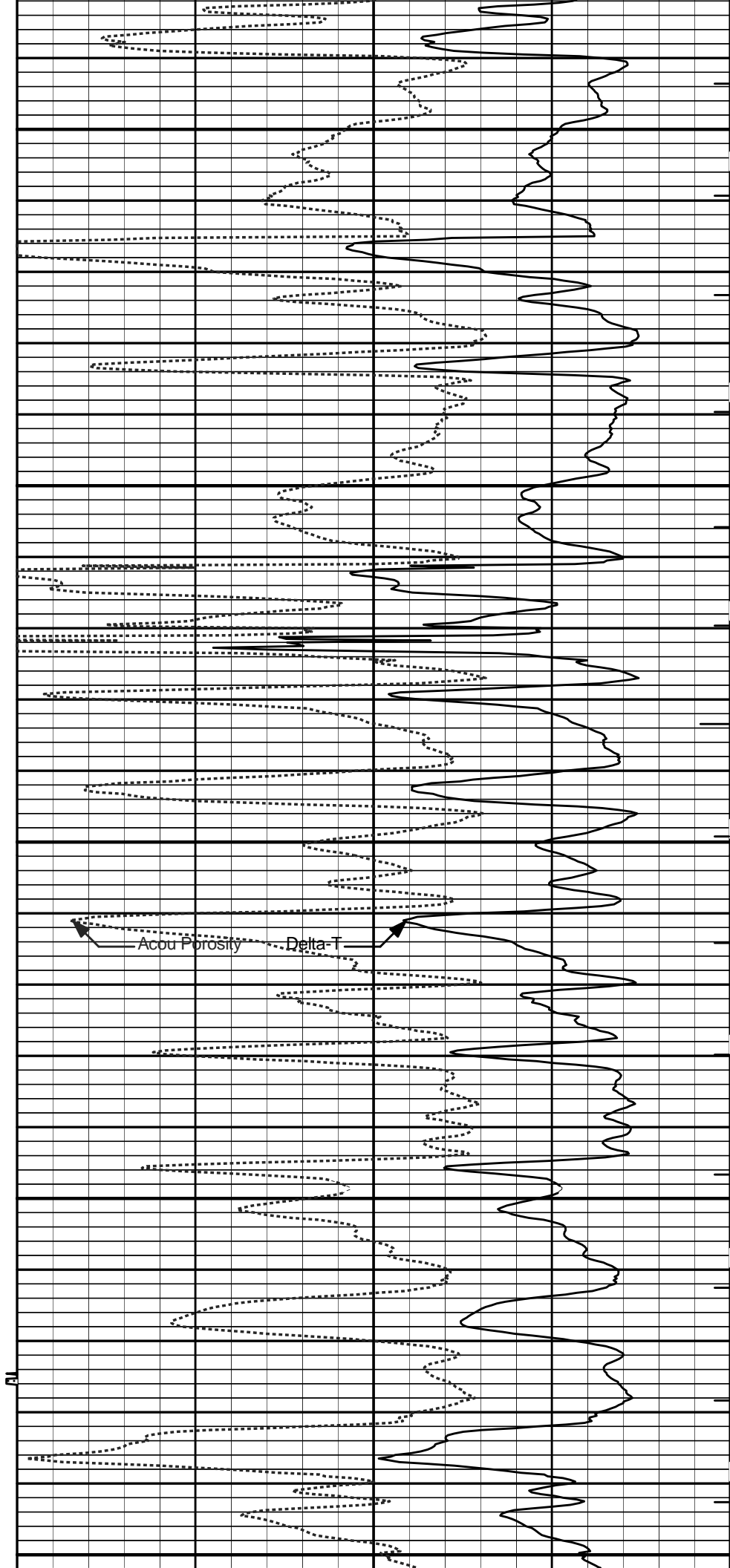
3400

Gamma API

Caliper

3500

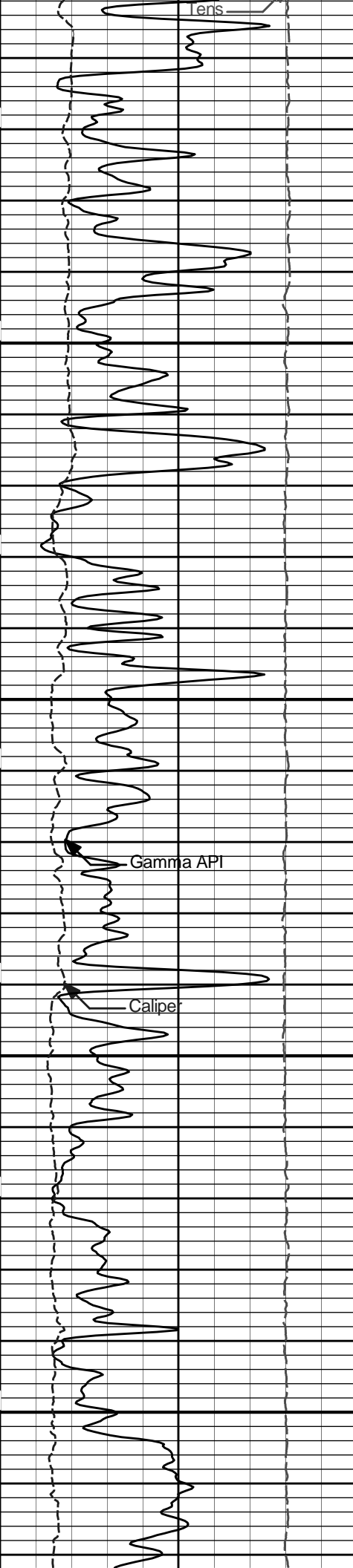
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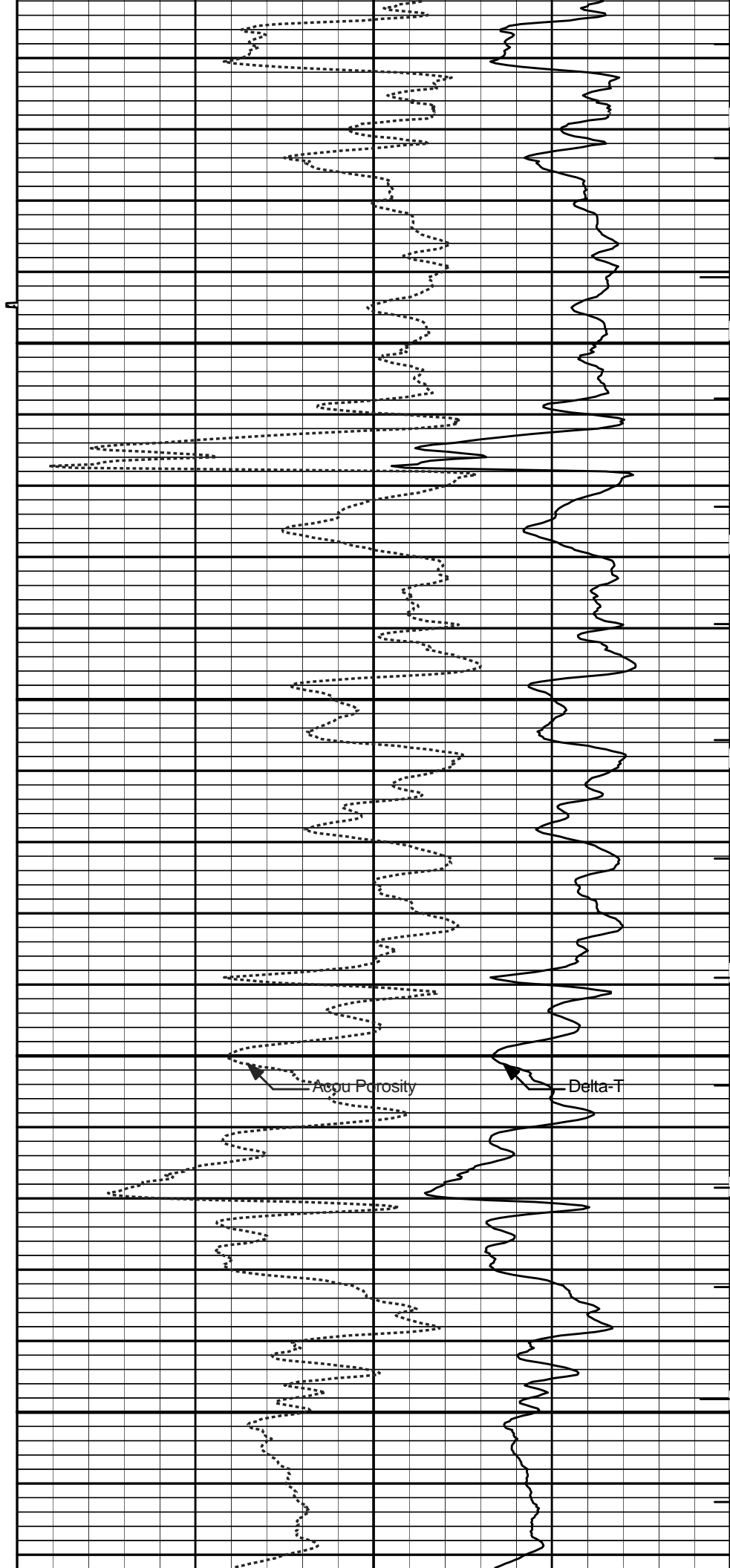
Delta-T

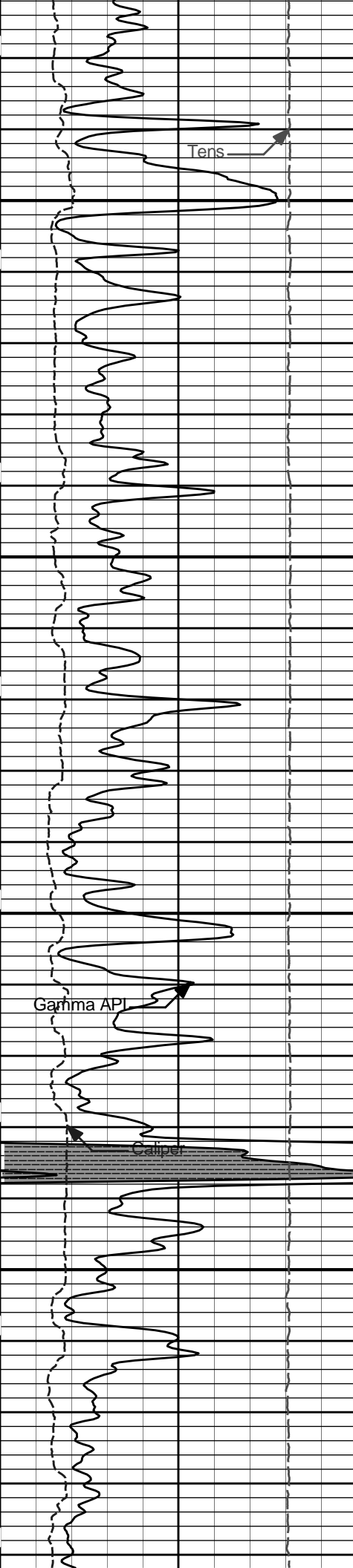
AI



3700

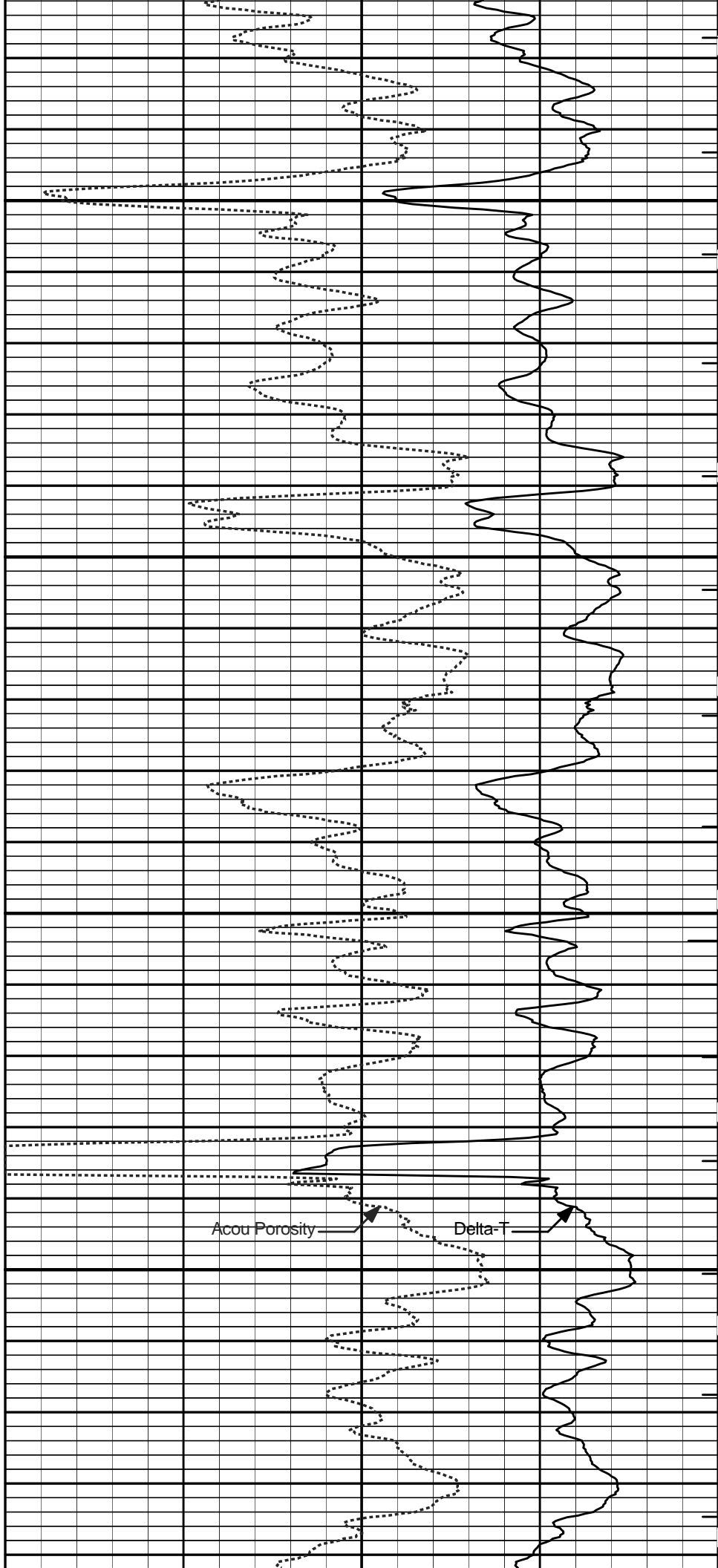
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3900

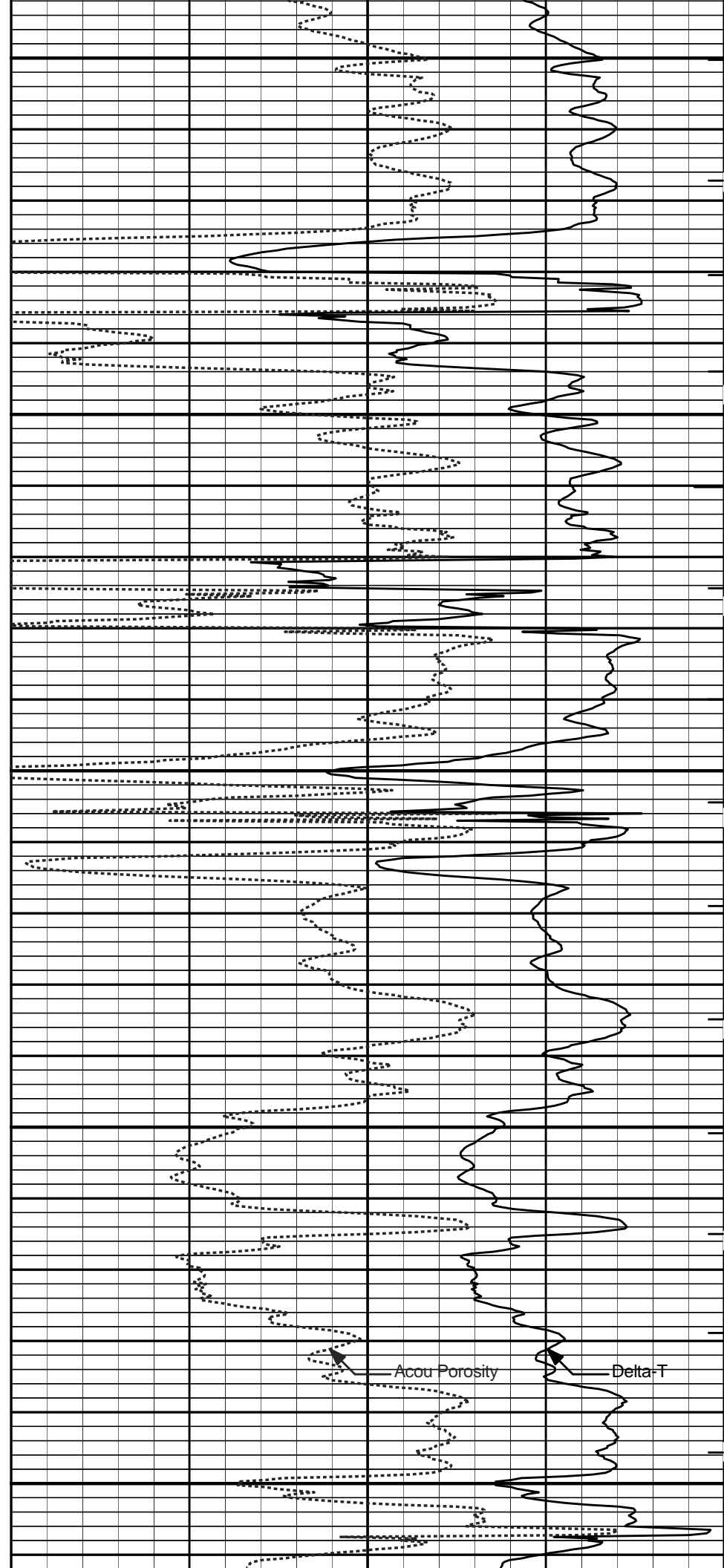
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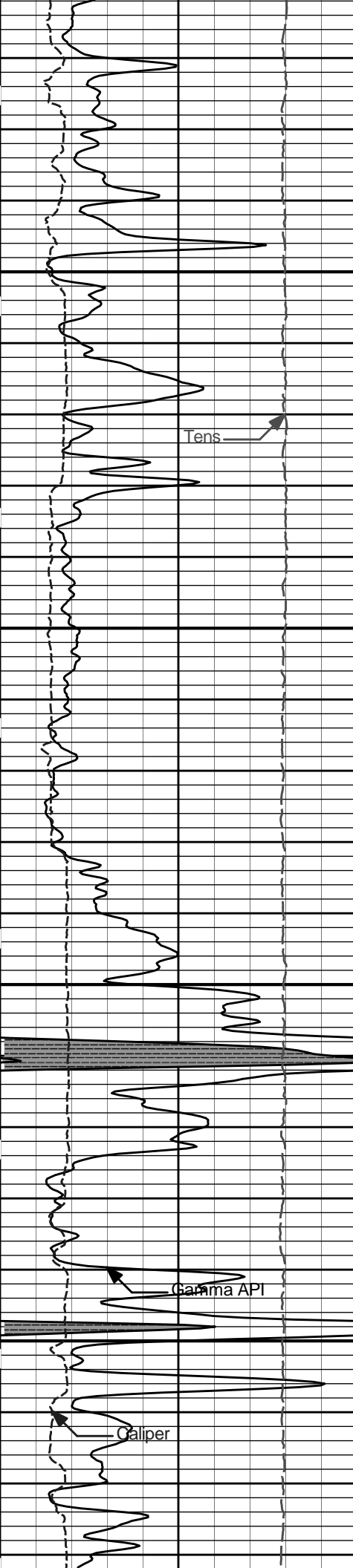
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4200



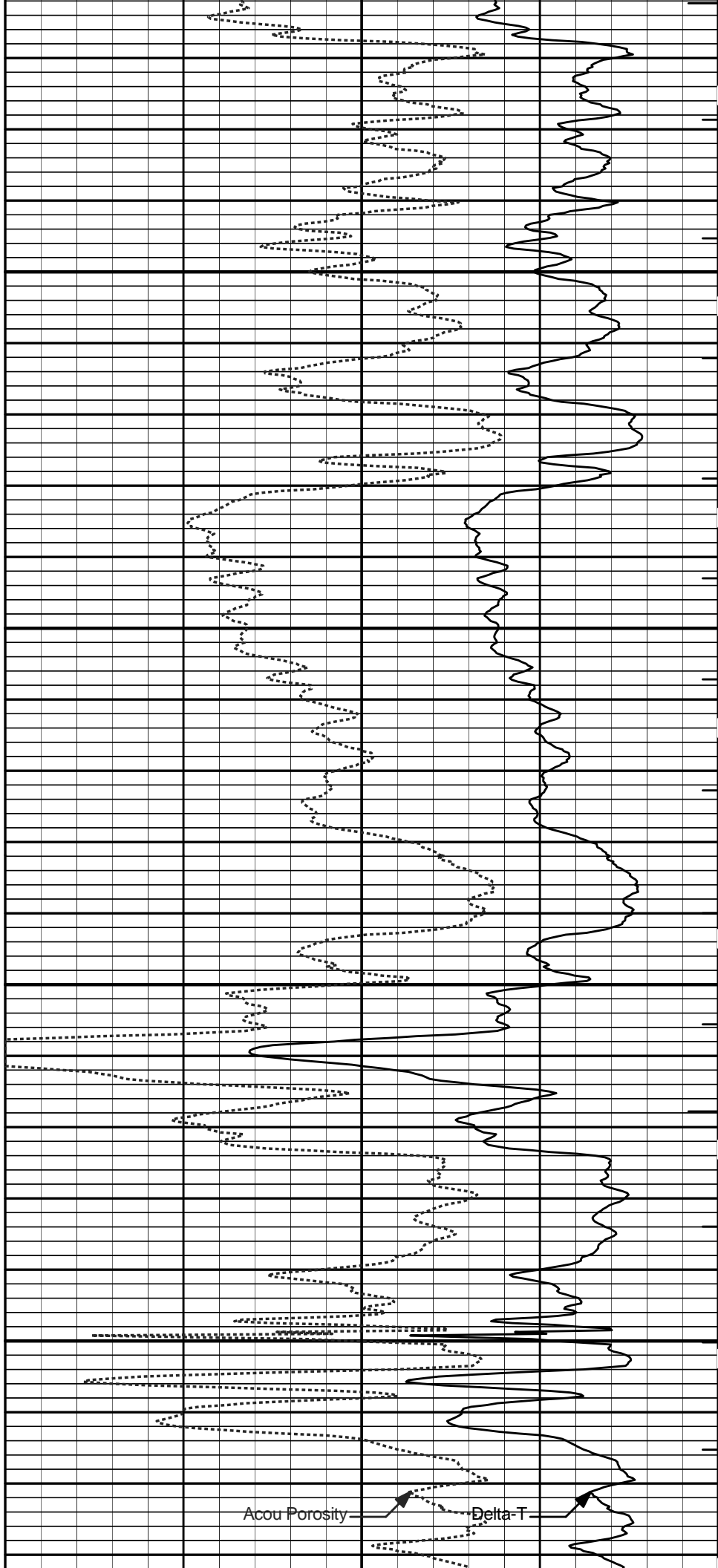
Acou Porosity

Delta-T



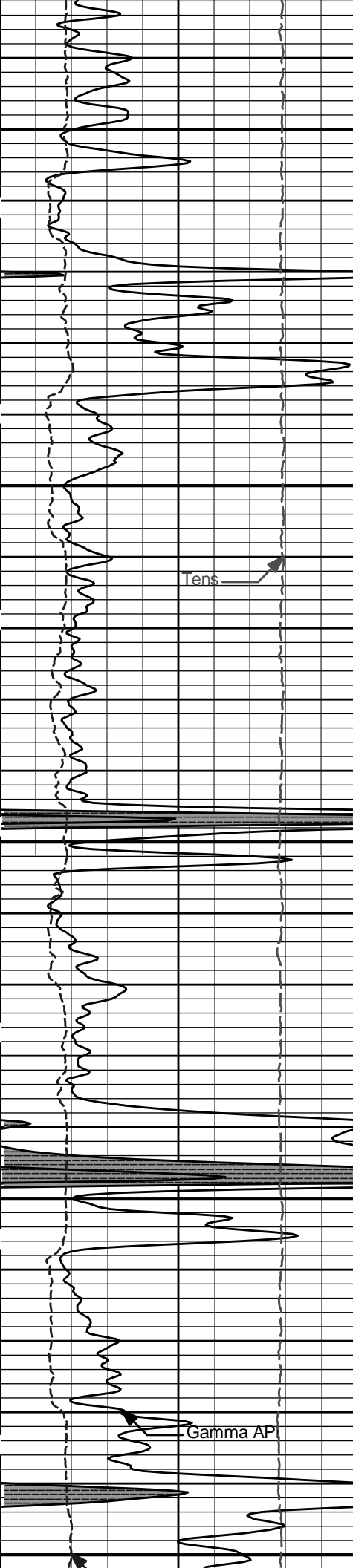
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4400



Acou Porosity

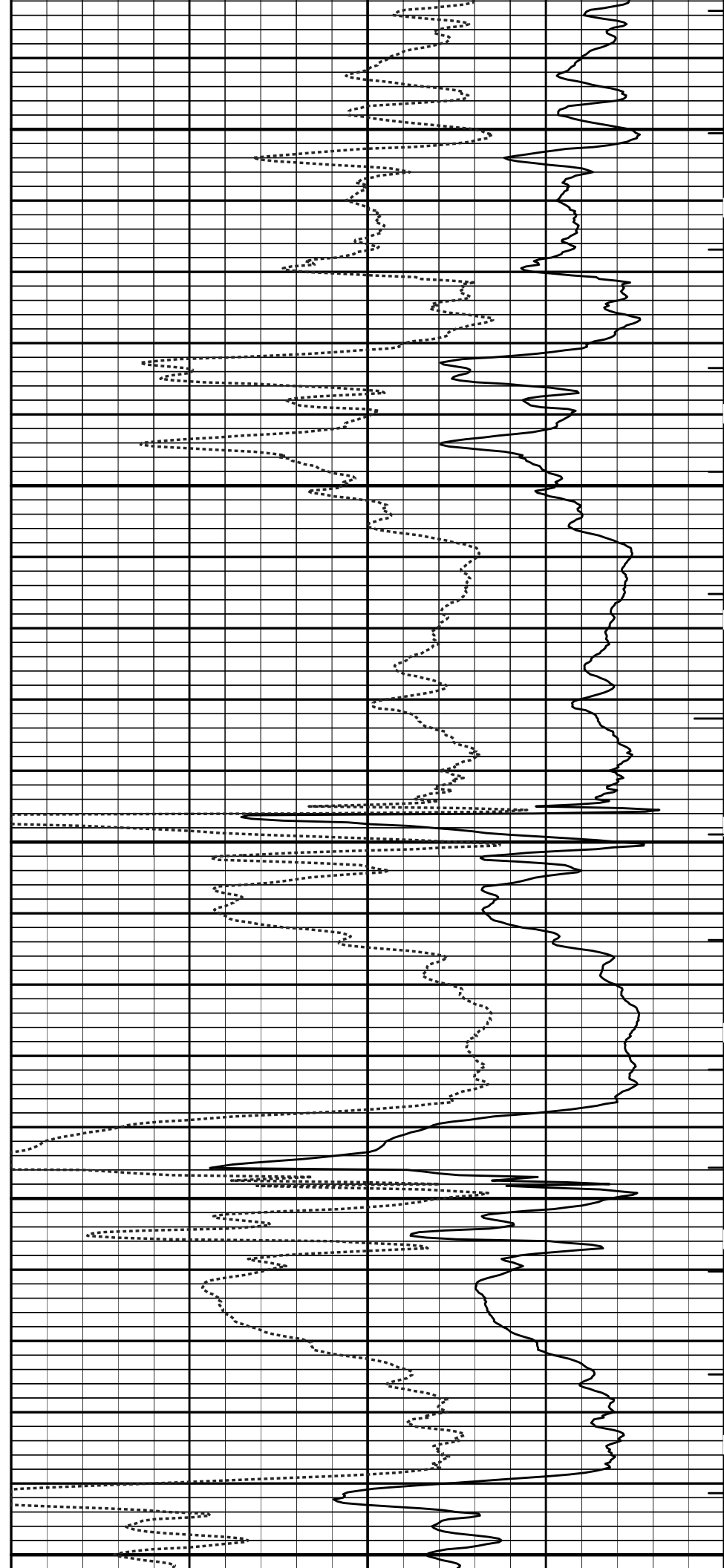
Delta-T

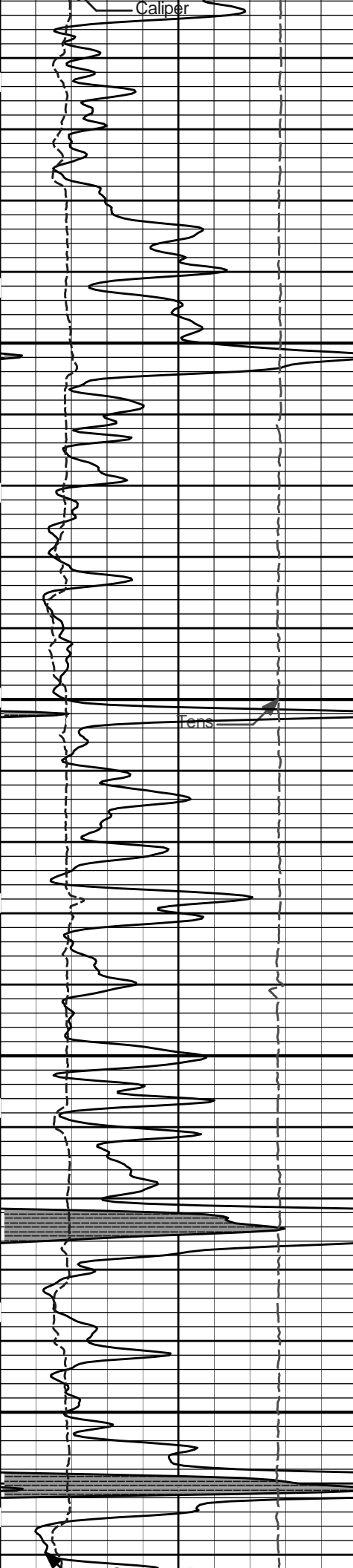


4500

4600

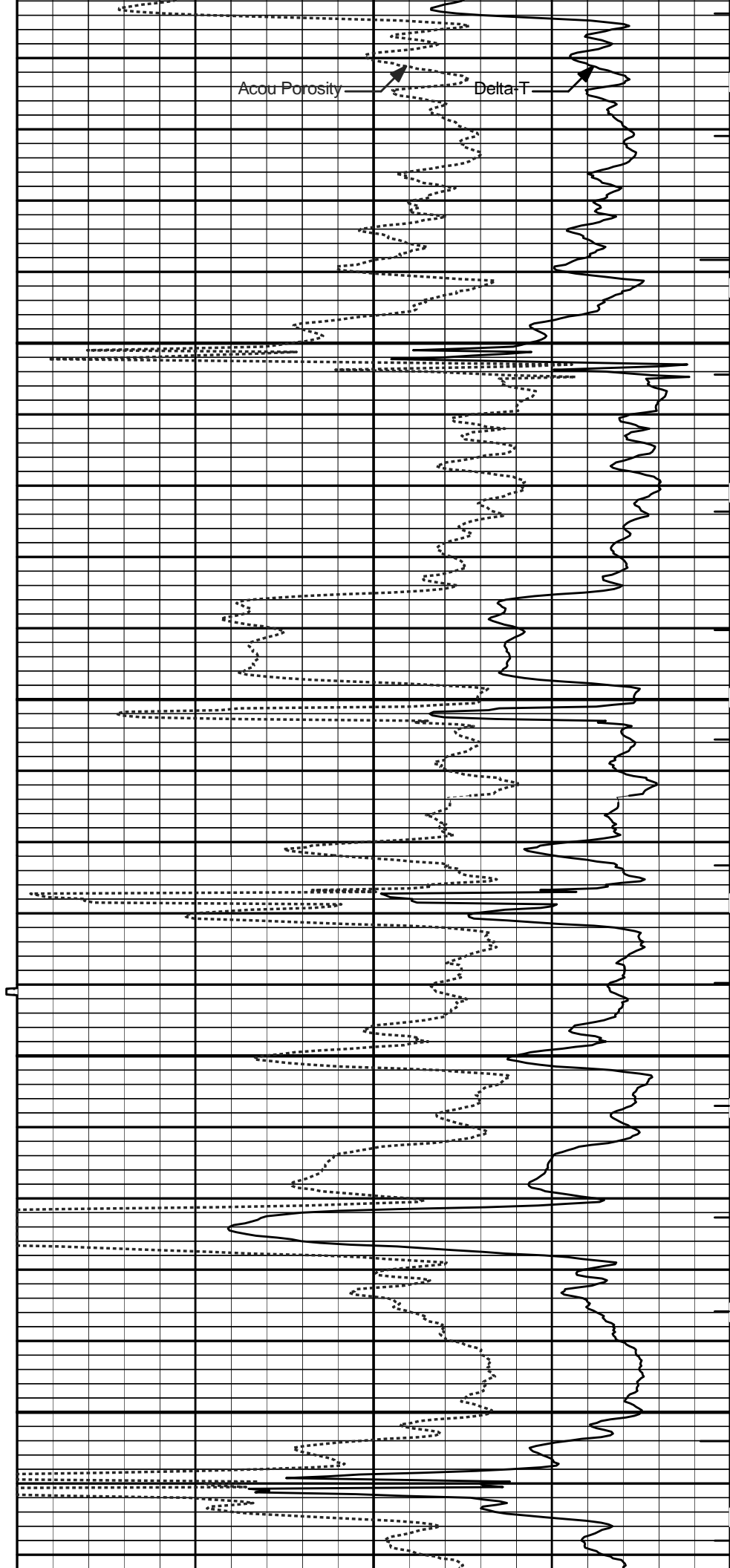
4700





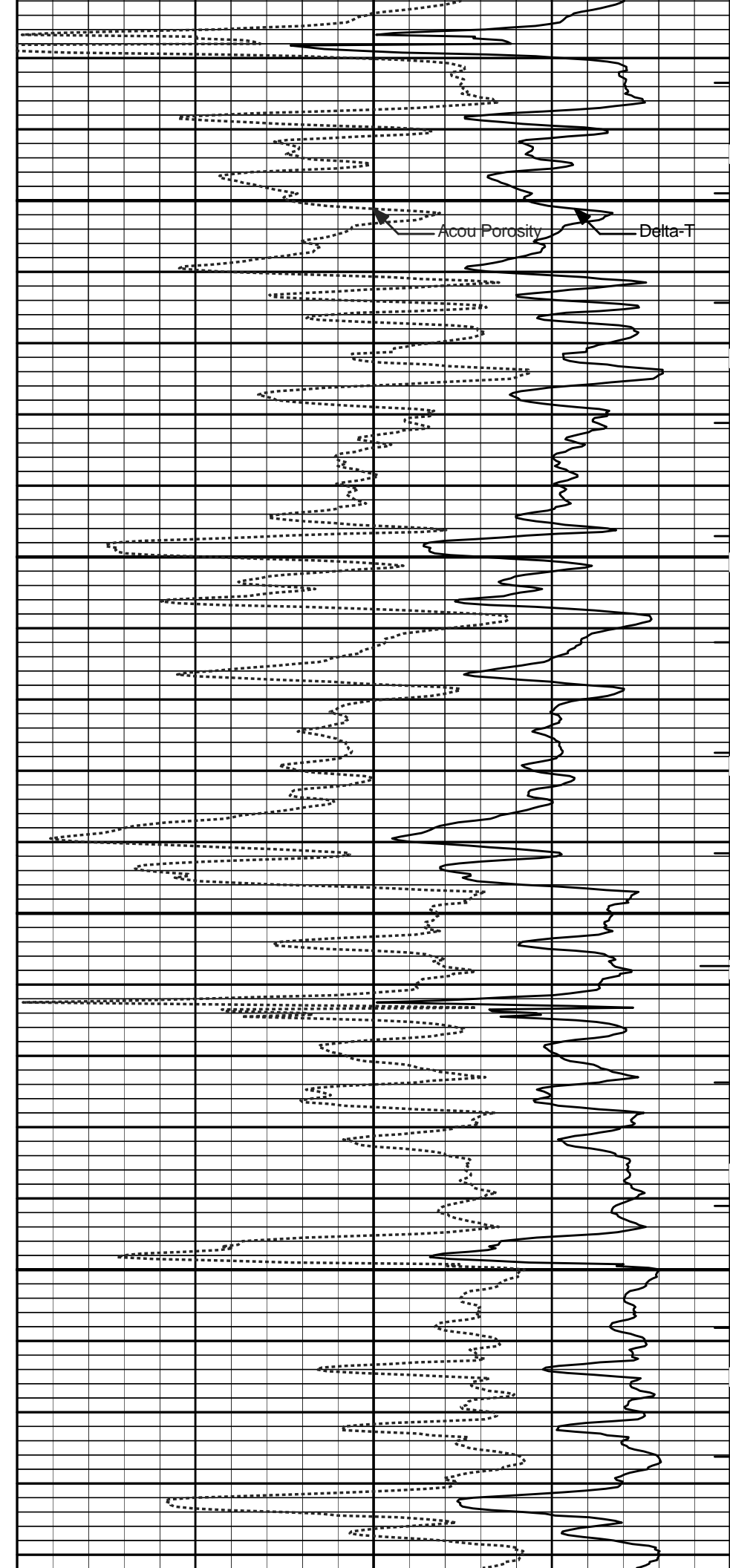
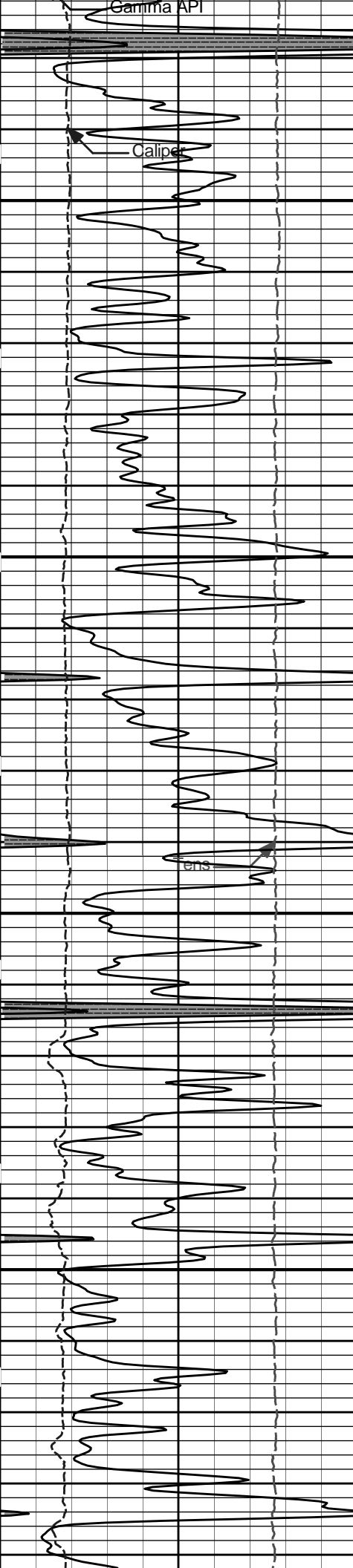
4800

4900



Accu Porosity

Delta-T





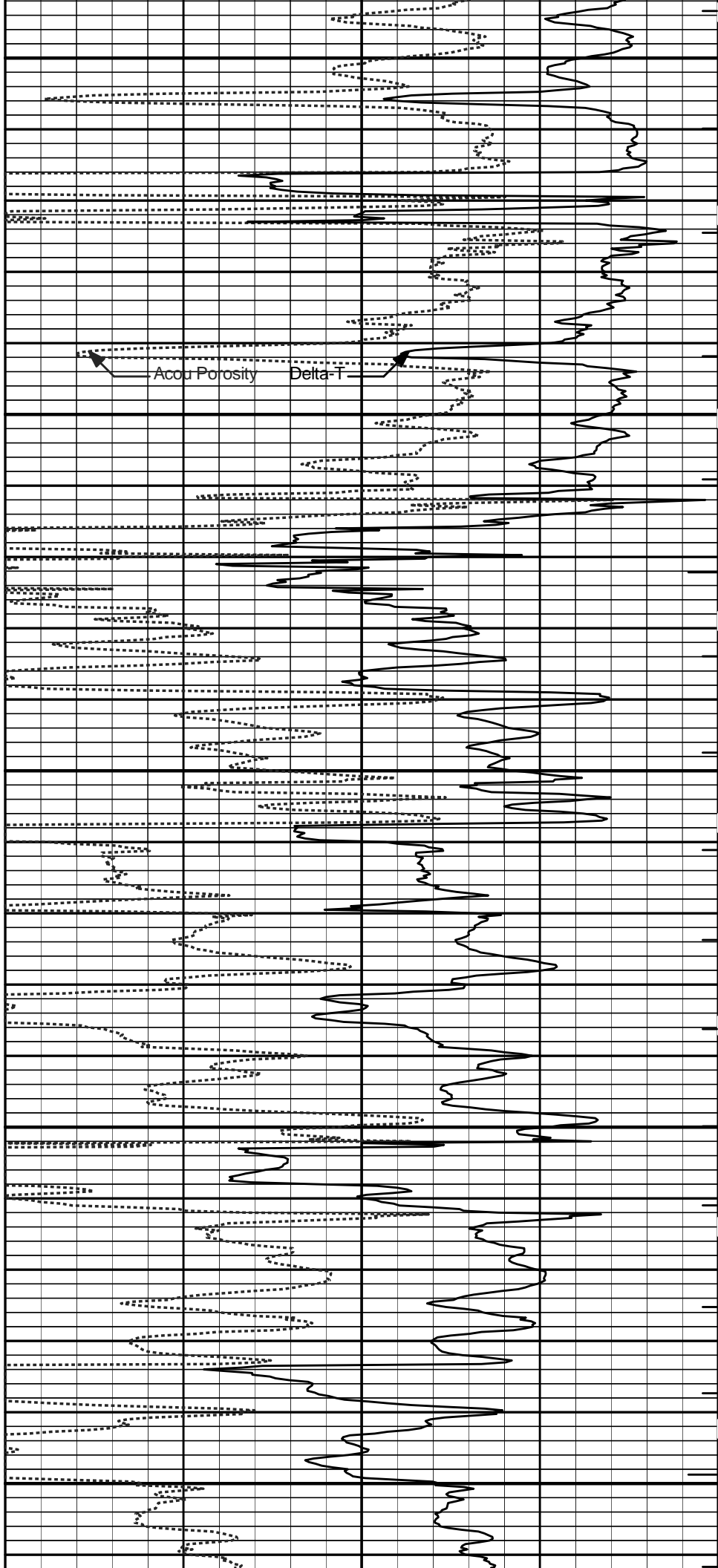
Gamma API

Caliper

Tens

5200

5300



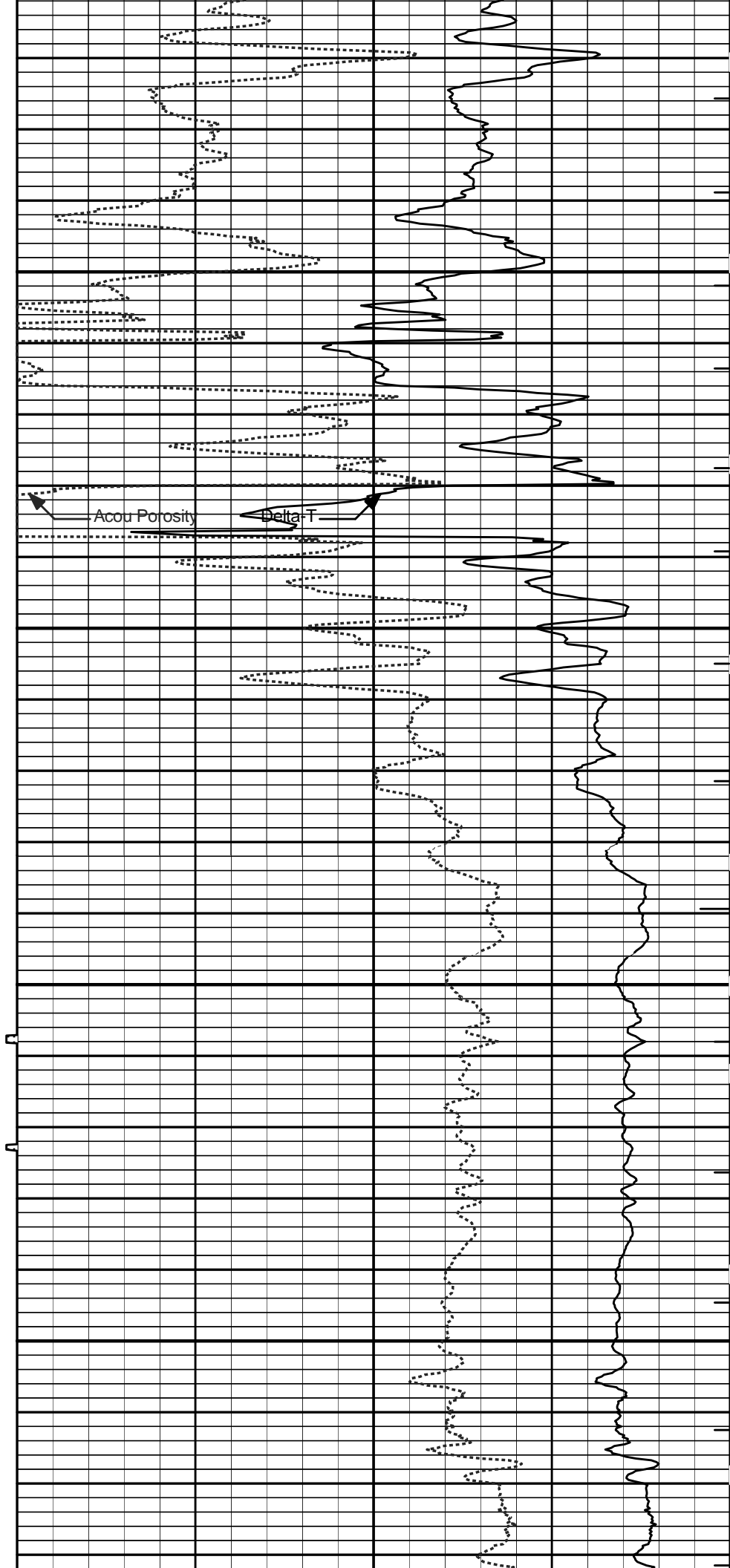
Acou Porosity

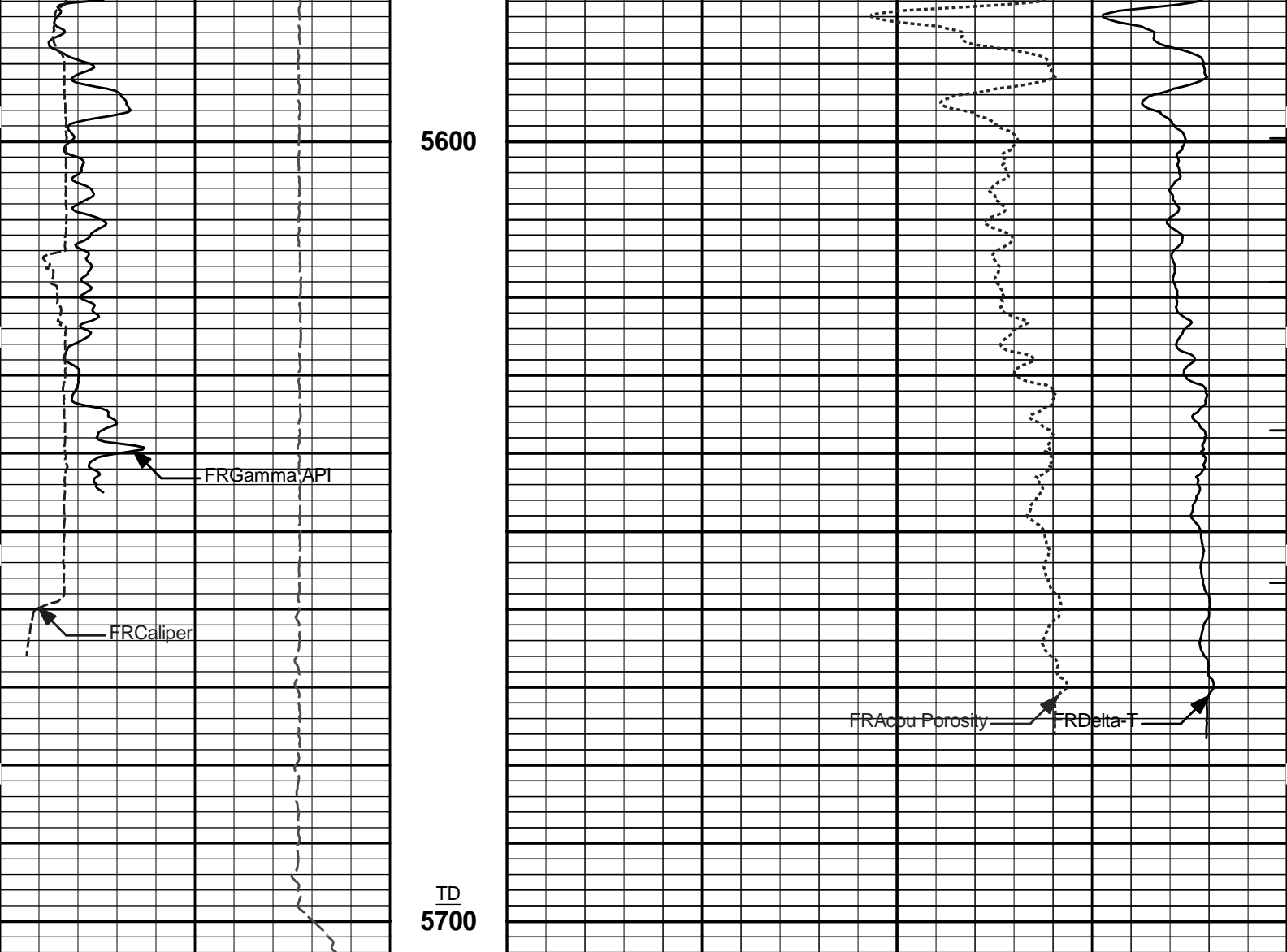
Delta-T



5400

5500





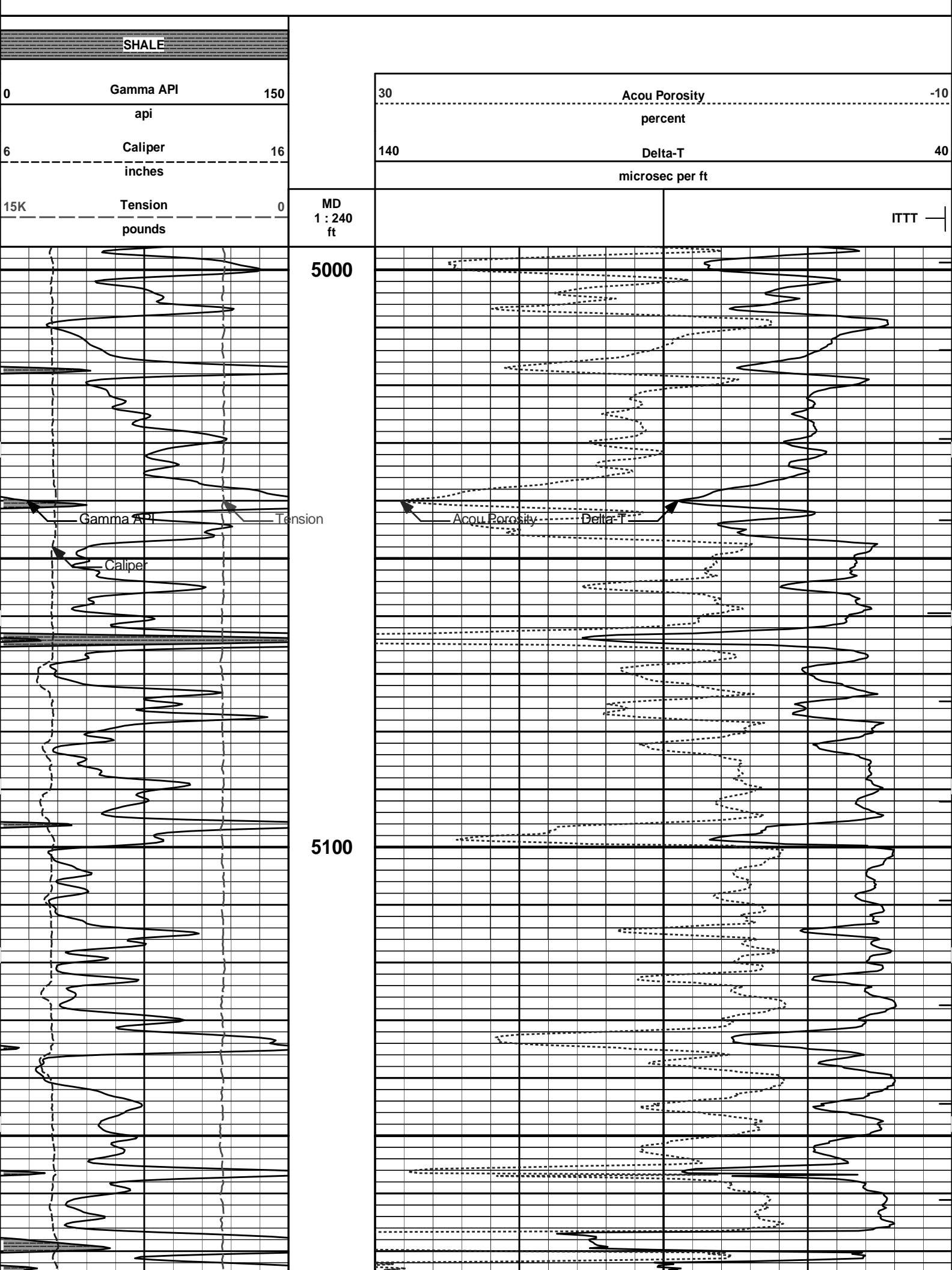
15K	Tens pounds	0	MD 1 : 240 ft	ITTT
6	Caliper inches	16	Tension Pull 10 0 140	Delta-T microsec per ft
0	Gamma API api	150	Tension Pull 30	Acou Porosity percent
SHALE				

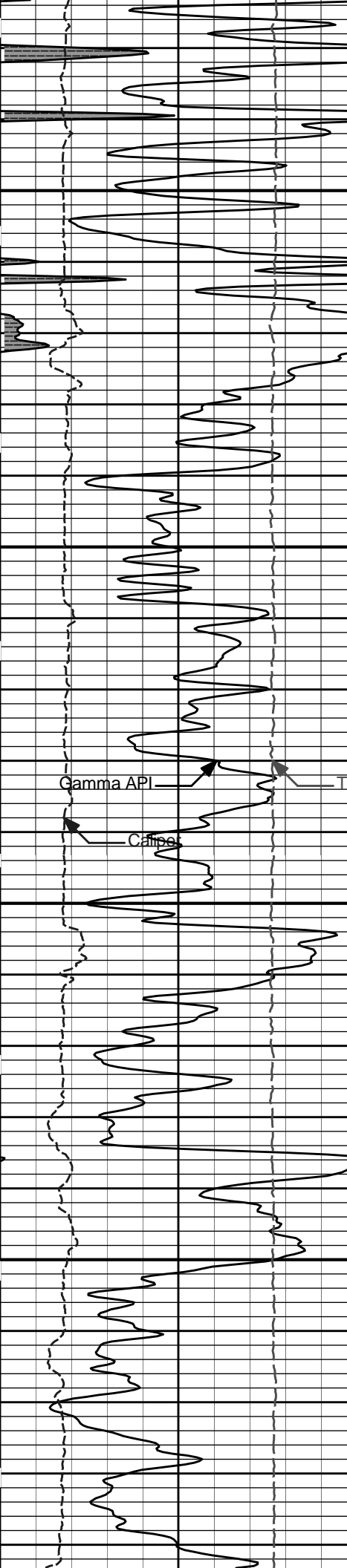
**HALLIBURTON** Plot Time: 14-Jul-12 18:20:31  
 Plot Range: 1790 ft to 5704.33 ft  
 Data: FEIGHT\_A\_8\Well Based\R1\_CASING\  
 Plot File: \BSAT\BSAT\_5\_MAIN\_LIB

## 5 INCH MAIN LOG

**HALLIBURTON** Plot Time: 14-Jul-12 18:20:31  
 Plot Range: 4996 ft to 5704.67 ft  
 Data: FEIGHT\_A\_8\Well Based\R1\_REPEAT\  
 Plot File: \BSAT\BSAT\_5\_REP\_LIB

## REPEAT SECTION





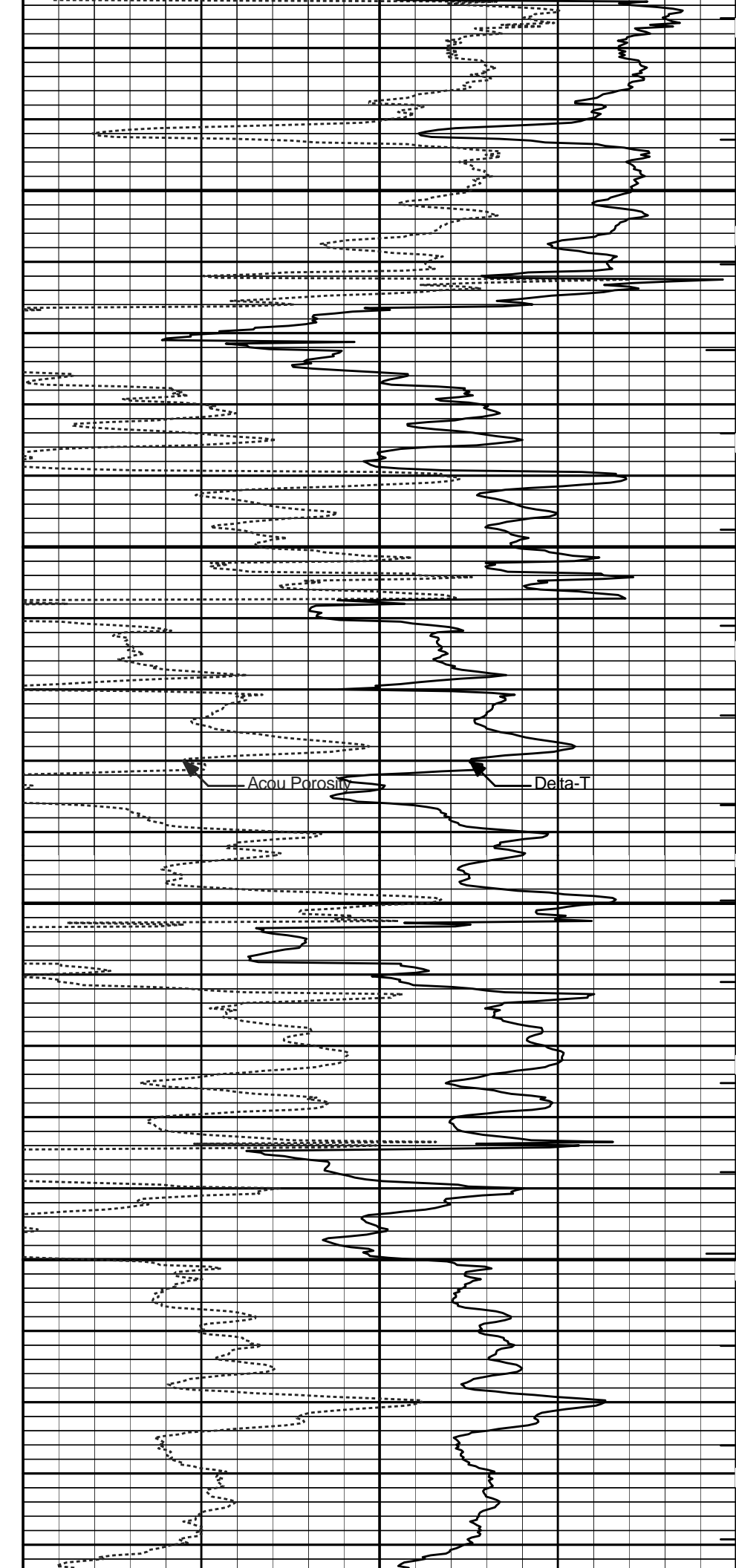
5200

Gamma API

Tension

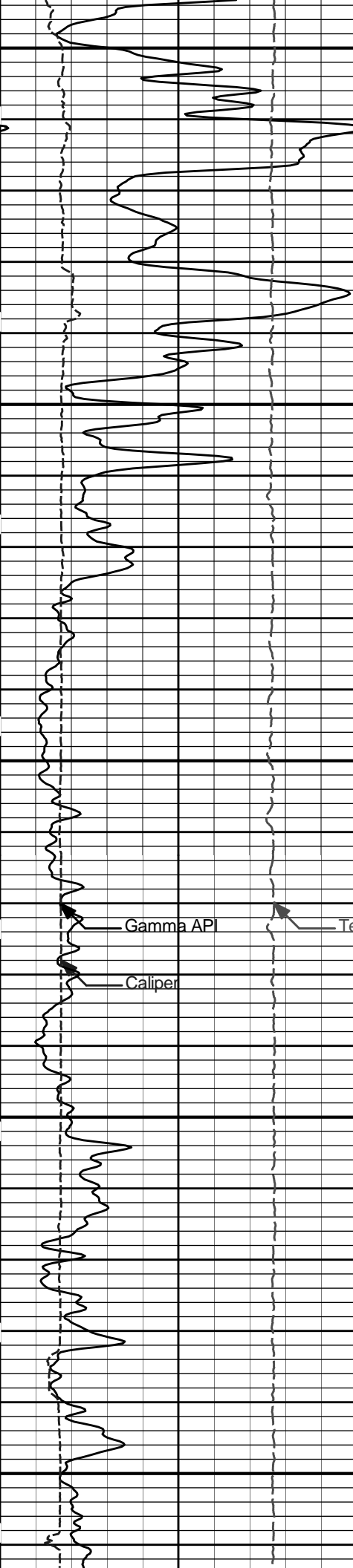
Caliper

5300



Acou Porosity

Delta-T



5400

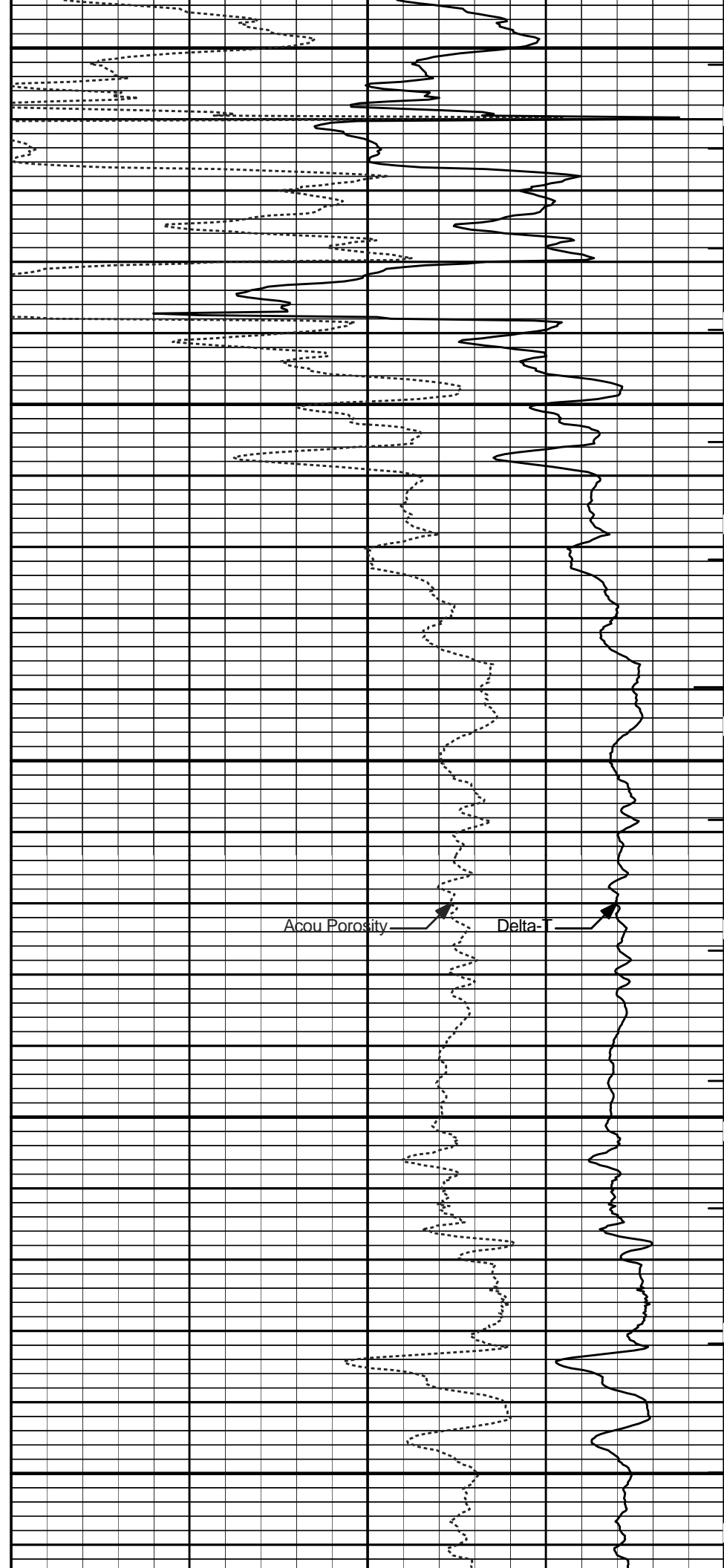
5500

5600

Gamma API

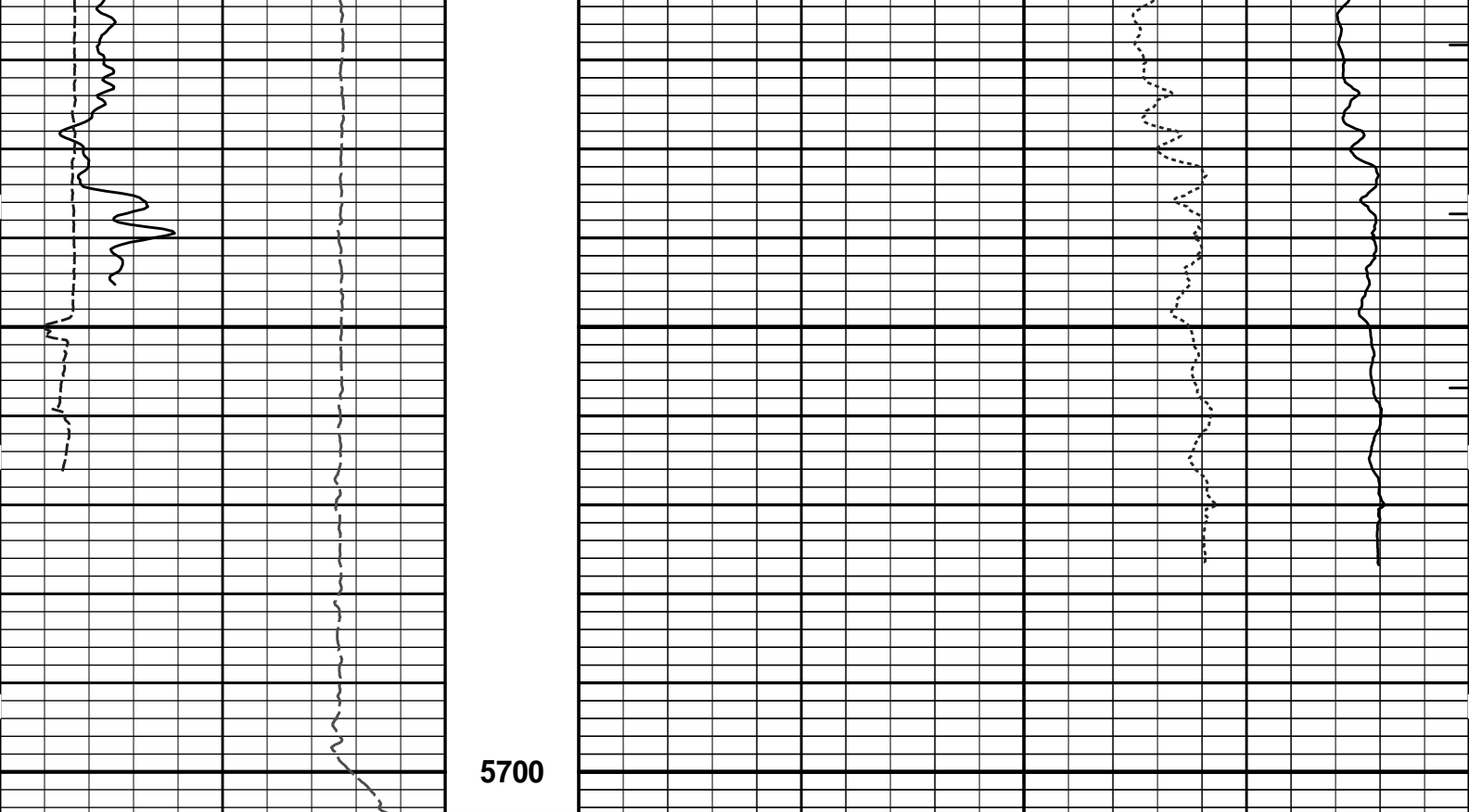
Tension

Caliper



Acou Porosity

Delta-T



5700

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

**HALLIBURTON**

Plot Time: 14-Jul-12 18:20:34  
 Plot Range: 4996 ft to 5704.67 ft  
 Data: FEIGHT\_A\_8\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	70.04 ft
SP Sub-11441455 60.00 lbs		Ø 3.625 in →		← SP @ 66.34 ft	3.74 ft	68.12 ft
						64.38 ft

GTET-11039640  
165.00 lbs

Ø 3.625 in →

8.52 ft

← GammaRay @ 58.32 ft

55.86 ft

DSN Decentralizer-  
10755066  
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

DSNT-11019643  
174.00 lbs

SDLT-I43\_M489  
360.00 lbs

SDLT Pad-P81  
65.00 lbs  
Microlog Pad-M489  
8.00 lbs

Ø 4.500 in →

Ø 4.750 in\* →

Ø 4.750 in\* →

10.81 ft

← Microlog @ 38.36 ft  
← SDL Caliper @ 38.17 ft  
← SDL @ 38.16 ft

35.36 ft

BSAT-10747684  
300.00 lbs

Ø 3.625 in →

15.77 ft

← Sonic Receivers @ 26.84 ft

19.58 ft

ACRt Instrument-  
I5059\_S8385  
50.00 lbs

Ø 3.625 in →

5.03 ft

← Mud Resistivity @ 13.19 ft

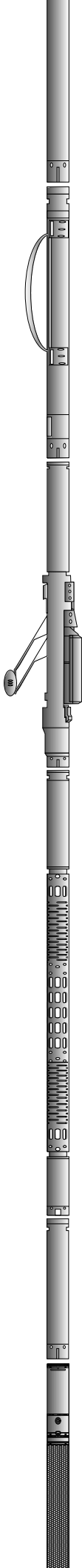
14.55 ft

← ACRt @ 9.21 ft

ACRt Sonde-  
I5059\_S8385

Ø 3.625 in →

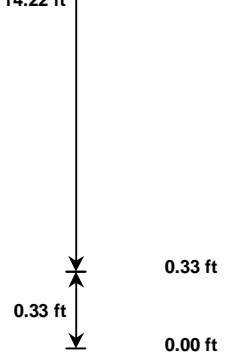
14.22 ft



I5059\_S8385  
200.00 lbs

Bull Nose-001  
5.00 lbs

Ø 2.750 in →



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	68.12	300.00
SP	SP Sub	11441455	60.00	3.74	64.38	300.00
GTET	Gamma Telemetry Tool	11039640	165.00	8.52	55.86	60.00
DSNT	Dual Spaced Neutron	11019643	174.00	9.69	46.17	60.00
DCNT	DSN Decentralizer	10755066	6.60	5.13 *	49.50	300.00
SDLT	Spectral Density Tool	I43_M489	360.00	10.81	35.36	60.00
MICP	Microlog Pad	M489	8.00	1.00 *	37.86	60.00
SDLP	Density Insite Pad	P81	65.00	2.55 *	37.57	60.00
BSAT	Borehole Sonic Array Tool	10747684	300.00	15.77	19.58	60.00
ACRt	Array Compensated True Resistivity Instrument Section	I5059_S8385	50.00	5.03	14.55	300.00
ACRt	Array Compensated True Resistivity Sonde Section	I5059_S8385	200.00	14.22	0.33	300.00
BLNS	Bull Nose	001	5.00	0.33	0.00	300.00

**Total** **1,423.60** **70.04**

\* Not included in Total Length and Length Accumulation.

Data: FEIGHT\_A\_8\0001 SP-GTET-DSN-SDL-BSAT-ACRT-BNIDLE

Date: 14-Jul-12 14:37:45

# 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	9.600	ppg
	SHARED	WAGT	Weighting Agent	Natural	
	SHARED	BSAL	Borehole salinity	10000.00	ppm
	SHARED	FSAL	Formation Salinity NaCl	0.00	ppm
	SHARED	KPCT	Percent K in Mud by Weight?	0.00	%
	SHARED	RMUD	Mud Resistivity	0.323	ohmm
	SHARED	TRM	Temperature of Mud	111.0	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	5700.00	ft
	SHARED	BHT	Bottom Hole Temperature	130.0	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?	No	

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

Data: FEIGHT\_A\_8\0001 SP-GTET-DSN-SDL-BSAT-ACRT-BNIDLE

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**HALLIBURTON**

**INPUTS, DELAYS AND FILTERS TABLE**

Mnemonic	Input Description	Delay (ft)	Filter Type	Filter Length (ft)
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## Depth Panel

TENS	Tension	0.00	NO	
<b>SP Sub</b>				
PLTC	Plot Control Mask	66.34	NO	
SP	Spontaneous Potential	66.34	BLK	1.250
SPR	Raw Spontaneous Potential	66.34	NO	
SPO	Spontaneous Potential Offset	66.34	NO	
<b>GTET</b>				
TPUL	Tension Pull	58.32	NO	
GR	Natural Gamma Ray API	58.32	TRI	1.750
GRU	Unfiltered Natural Gamma Ray API	58.32	NO	
EGR	Natural Gamma Ray API with Enhanced Vertical Resolution	58.32	W	1.416 , 0.750
ACCZ	Accelerometer Z	0.00	BLK	0.083
DEVI	Inclination	0.00	NO	
<b>DSNT</b>				
TPUL	Tension Pull	48.07	NO	
RNDS	Near Detector Telemetry Counts	48.17	BLK	1.417
RFDS	Far Detector Telemetry Counts	48.92	TRI	0.583
DNTT	DSN Tool Temperature	48.17	NO	
DSNS	DSN Tool Status	48.07	NO	
ERND	Near Detector Telemetry Counts EVR	48.17	BLK	0.000
ERFD	Far Detector Telemetry Counts EVR	48.92	BLK	0.000
ENTM	DSN Tool Temperature EVR	48.17	NO	
<b>SDLT</b>				
TPUL	Tension Pull	38.17	NO	
PCAL	Pad Caliper	38.17	TRI	0.250
ACAL	Arm Caliper	38.17	TRI	0.250
<b>BSAT</b>				
TPUL	Tension Pull	26.84	NO	
STAT	Status	26.84	NO	
DLYT	Delay Time	26.84	NO	
SI	Sample Interval	26.84	NO	
TXRX	Raw Telemetry 10 Receivers	26.84	NO	
FRMC	Tool Frame Count	26.84	NO	
GMOD	Gain processing mode	19.58	NO	
<b>ACRt Sonde</b>				
TPUL	Tension Pull	2.73	NO	
F1R1	ACRT 12KHz - 80in R value	8.98	BLK	0.000
F1X1	ACRT 12KHz - 80in X value	8.98	BLK	0.000
F1R2	ACRT 12KHz - 50in R value	6.48	BLK	0.000
F1X2	ACRT 12KHz - 50in X value	6.48	BLK	0.000
F1R3	ACRT 12KHz - 29in R value	4.98	BLK	0.000
F1X3	ACRT 12KHz - 29in X value	4.98	BLK	0.000
F1R4	ACRT 12KHz - 17in R value	3.98	BLK	0.000
F1X4	ACRT 12KHz - 17in X value	3.98	BLK	0.000
F1R5	ACRT 12KHz - 10in R value	3.48	BLK	0.000
F1X5	ACRT 12KHz - 10in X value	3.48	BLK	0.000
F1R6	ACRT 12KHz - 6in R value	3.23	BLK	0.000
F1X6	ACRT 12KHz - 6in X value	3.23	BLK	0.000
F2R1	ACRT 36KHz - 80in R value	8.98	BLK	0.000
F2X1	ACRT 36KHz - 80in X value	8.98	BLK	0.000

F2R2	ACRT 36KHz - 50in R value	6.48	BLK	0.000
F2X2	ACRT 36KHz - 50in X value	6.48	BLK	0.000
F2R3	ACRT 36KHz - 29in R value	4.98	BLK	0.000
F2X3	ACRT 36KHz - 29in X value	4.98	BLK	0.000
F2R4	ACRT 36KHz - 17in R value	3.98	BLK	0.000
F2X4	ACRT 36KHz - 17in X value	3.98	BLK	0.000
F2R5	ACRT 36KHz - 10in R value	3.48	BLK	0.000
F2X5	ACRT 36KHz - 10in X value	3.48	BLK	0.000
F2R6	ACRT 36KHz - 6in R value	3.23	BLK	0.000
F2X6	ACRT 36KHz - 6in X value	3.23	BLK	0.000
F3R1	ACRT 72KHz - 80in R value	8.98	BLK	0.000
F3X1	ACRT 72KHz - 80in X value	8.98	BLK	0.000
F3R2	ACRT 72KHz - 50in R value	6.48	BLK	0.000
F3X2	ACRT 72KHz - 50in X value	6.48	BLK	0.000
F3R3	ACRT 72KHz - 29in R value	4.98	BLK	0.000
F3X3	ACRT 72KHz - 29in X value	4.98	BLK	0.000
F3R4	ACRT 72KHz - 17in R value	3.98	BLK	0.000
F3X4	ACRT 72KHz - 17in X value	3.98	BLK	0.000
F3R5	ACRT 72KHz - 10in R value	3.48	BLK	0.000
F3X5	ACRT 72KHz - 10in X value	3.48	BLK	0.000
F3R6	ACRT 72KHz - 6in R value	3.23	BLK	0.000
F3X6	ACRT 72KHz - 6in X value	3.23	BLK	0.000
RMUD	Mud Resistivity	12.52	BLK	0.000
F1RT	Transmitter Reference 12 KHz Real Signal	2.73	BLK	0.000
F1XT	Transmitter Reference 12 KHz Imaginary Signal	2.73	BLK	0.000
F2RT	Transmitter Reference 36 KHz Real Signal	2.73	BLK	0.000
F2XT	Transmitter Reference 36 KHz Imaginary Signal	2.73	BLK	0.000
F3RT	Transmitter Reference 72 KHz Real Signal	2.73	BLK	0.000
F3XT	Transmitter Reference 72 KHz Imaginary Signal	2.73	BLK	0.000
TFPU	Upper Feedpipe Temperature Calculated	2.73	BLK	0.000
TFPL	Lower Feedpipe Temperature Calculated	2.73	BLK	0.000
ITMP	Instrument Temperature	2.73	BLK	0.000
TCVA	Temperature Correction Values Loop Off	2.73	NO	
TIDV	Instrument Temperature Derivative	2.73	NO	
TUDV	Upper Temperature Derivative	2.73	NO	
TLDV	Lower Temperature Derivative	2.73	NO	
TRBD	Receiver Board Temperature	2.73	NO	
<b>SDLT Pad</b>				
TPUL	Tension Pull	38.16	NO	
NAB	Near Above	37.99	BLK	0.920
NHI	Near Cesium High	37.99	BLK	0.920
NLO	Near Cesium Low	37.99	BLK	0.920
NVA	Near Valley	37.99	BLK	0.920
NBA	Near Barite	37.99	BLK	0.920
NDE	Near Density	37.99	BLK	0.920
NPK	Near Peak	37.99	BLK	0.920
NLI	Near Lithology	37.99	BLK	0.920
NBAU	Near Barite Unfiltered	37.99	BLK	0.250
NLIU	Near Lithology Unfiltered	37.99	BLK	0.250
FAB	Far Above	38.34	BLK	0.250
FHI	Far Cesium High	38.34	BLK	0.250
FLO	Far Cesium Low	38.34	BLK	0.250
FVA	Far Valley	38.34	BLK	0.250
FBA	Far Barite	38.34	BLK	0.250
FDE	Far Density	38.34	BLK	0.250

FPK	Far Peak	38.34	BLK	0.250
FLI	Far Lithology	38.34	BLK	0.250
PTMP	Pad Temperature	38.17	BLK	0.920
NHV	Near Detector High Voltage	37.57	NO	
FHV	Far Detector High Voltage	37.57	NO	
ITMP	Instrument Temperature	37.57	NO	
DDHV	Detector High Voltage	37.57	NO	

**Microlog Pad**

TPUL	Tension Pull	38.36	NO	
MINV	Microlog Lateral	38.36	BLK	0.750
MNOR	Microlog Normal	38.36	BLK	0.750

Data: FEIGHT\_A\_8\0001 SP-GTET-DSN-SDL-BSAT-ACRT-BNIDLE

Date: 14-Jul-12 14:43:26

COMPANY      **OXY USA INC**

WELL            **FEIGHT A-8**

FIELD          **VICTORY**

COUNTY        **HASKELL**

STATE

**KANSAS**

**HALLIBURTON**

**BOREHOLE COMPENSATED  
SONIC ARRAY  
LOG**