

BOREHOLE COMPENSATED
SONIC ARRAY
LOG

Fold here

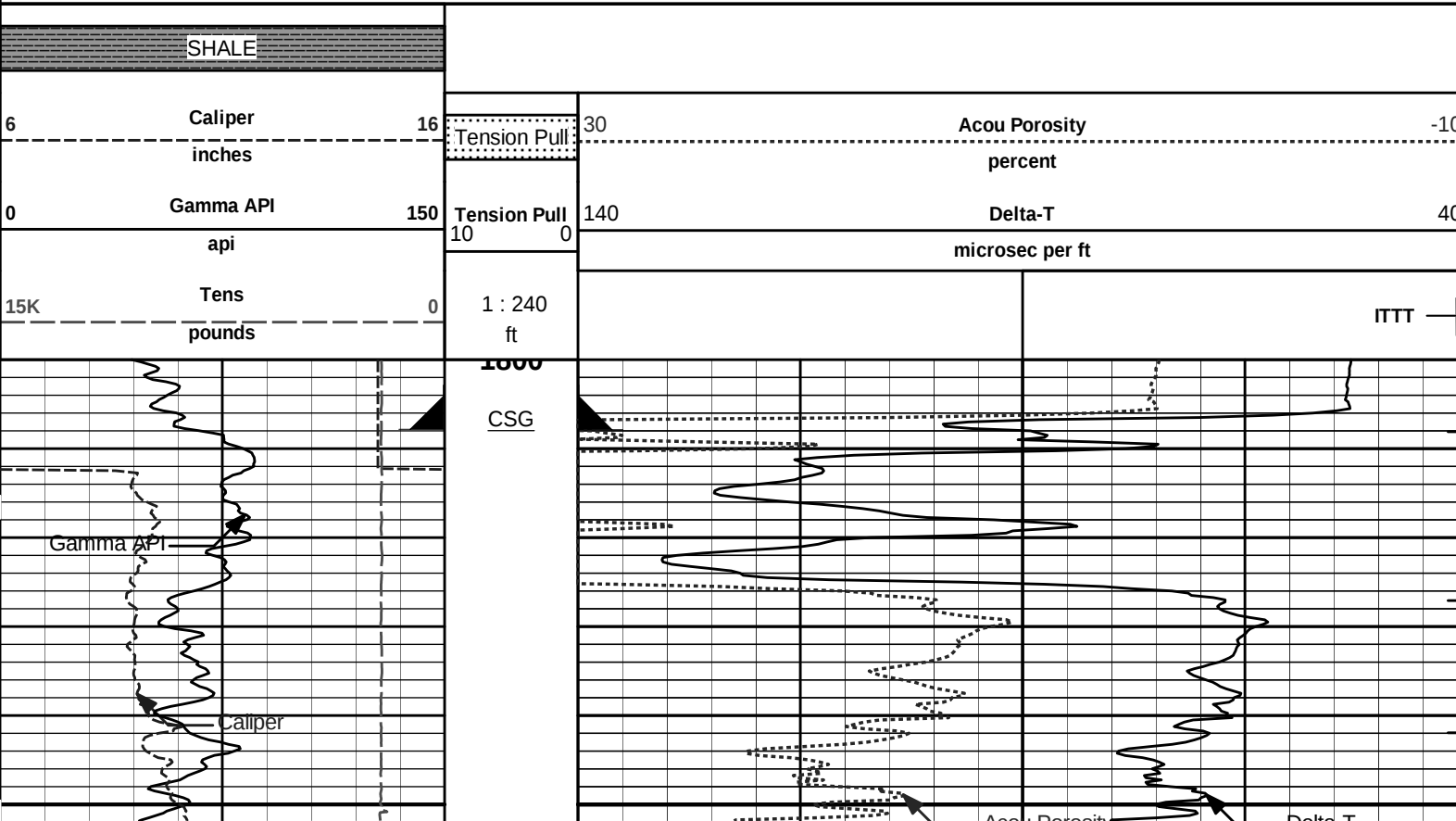
Service Ticket No.: 9429377						API Serial No.: 15-055-22132						PGM Version: WL INSITE R3.4.2 (Build 2)											
CHANGE IN MUD TYPE OR ADDITIONAL SAMPLE												RESISTIVITY SCALE CHANGES											
Date		Sample No.										Type Log		Depth		Scale Up Hole		Scale Down Hole					
Depth-Driller																							
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.		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.		10811258		Serial No.		10747683		Serial No.				Serial No.											
Model No.		GTET		Model No.		BSAT		Model No.				Model No.											
Diameter		3.625"		No. of Cent.		2		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]		Y		Serial No.				Serial No.											
Distance to Source		10'		FWDA [Y/N]		Y		Strength				Strength											
LOGGING DATA																							
GENERAL				GAMMA				ACOUSTIC				DENSITY				NEUTRON							

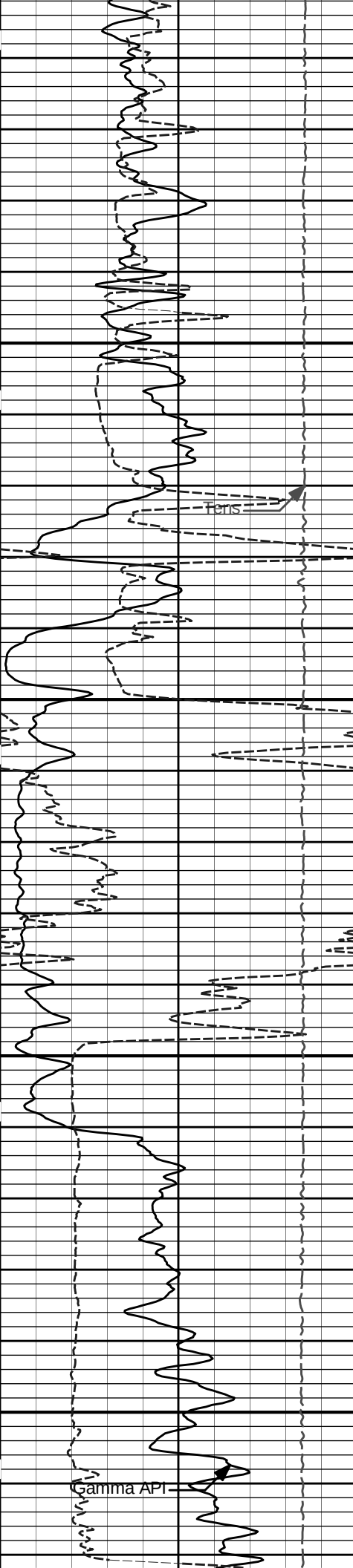
GENERAL				GAMMA		ACOUSTIC		DENSITY		NEUTRON	
Run	Depth		Speed	Scale		Scale		Matrix	Scale		Matrix
No.	From	To	ft/min	L	R	L	R		L	R	
ONE	TD	CSG	REC	0	150	30	-10	47.6			
DIRECTIONAL INFORMATION											
Maximum Deviation @								KOP @			
Remarks: SP-GTET-DSNT-SDLT-BSAT-ACRT RUN IN COMBINATION											
ANNULAR HOLE VOLUME CALCULATED FOR 5.5 INCH CASING											
CHLORIDES REPORTED AT 2600 MG/L											
POST JOB TOOL VERIFICATIONS NOT DONE AT CUSTOMER REQUEST											
TODAY'S CREW: A. VAQUERA, F. VILLA											
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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Plot Time: 14-Apr-12 10:14:16
Plot Range: 1800 ft to 5001.08 ft
Data: SHELL_B_4\Well Based\CASING\
Plot File: \\BSAT\BSAT_5_MAIN_LIB

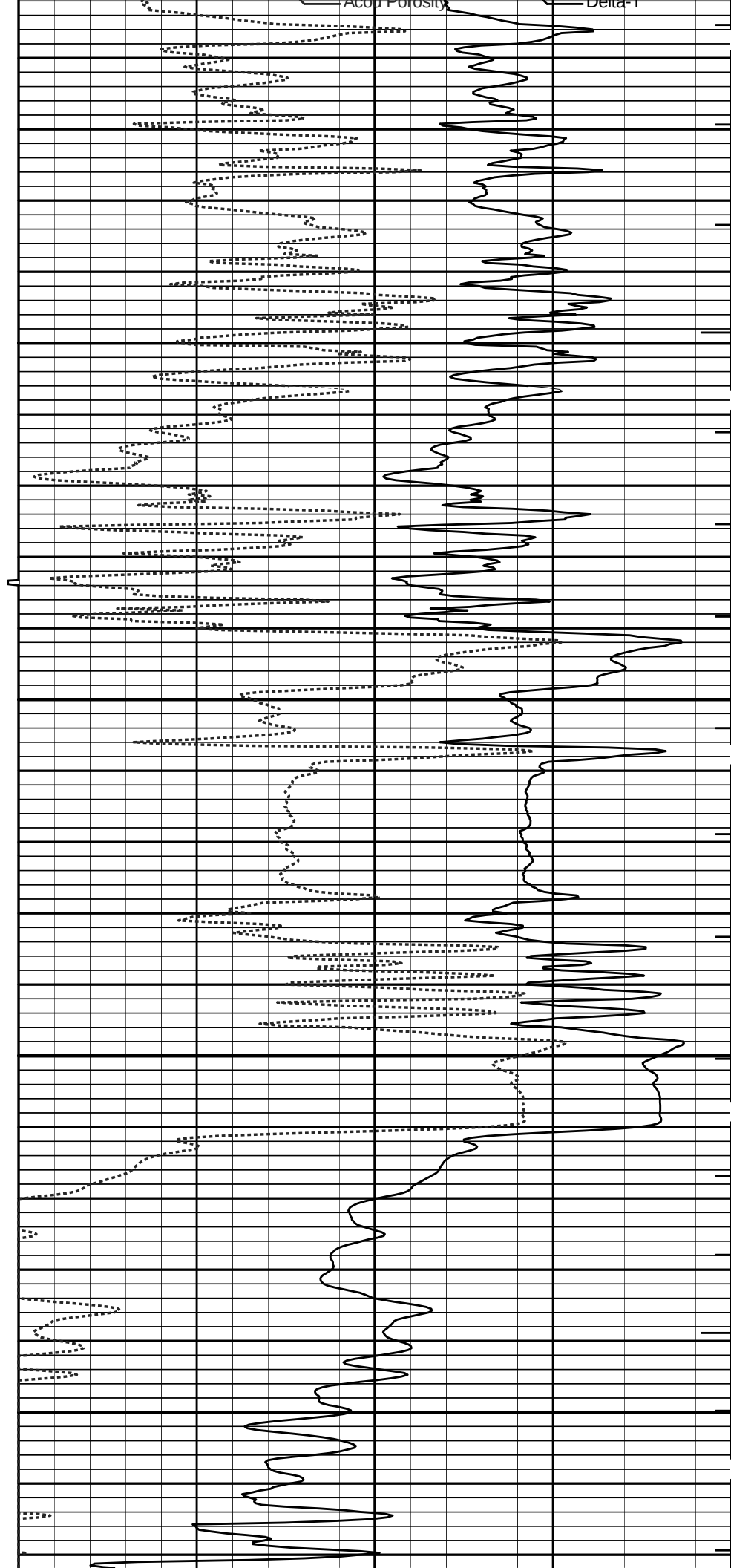
5 INCH MAIN LOG

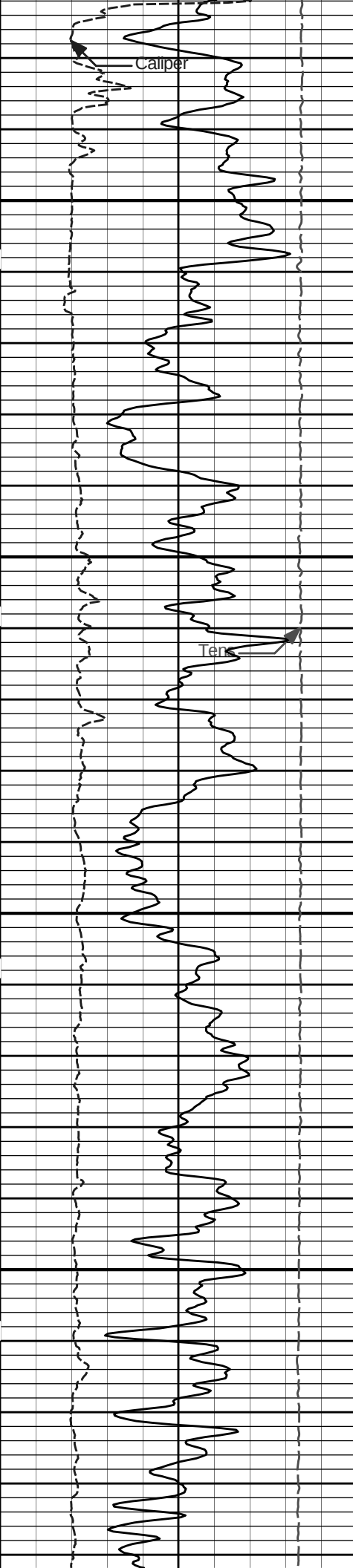




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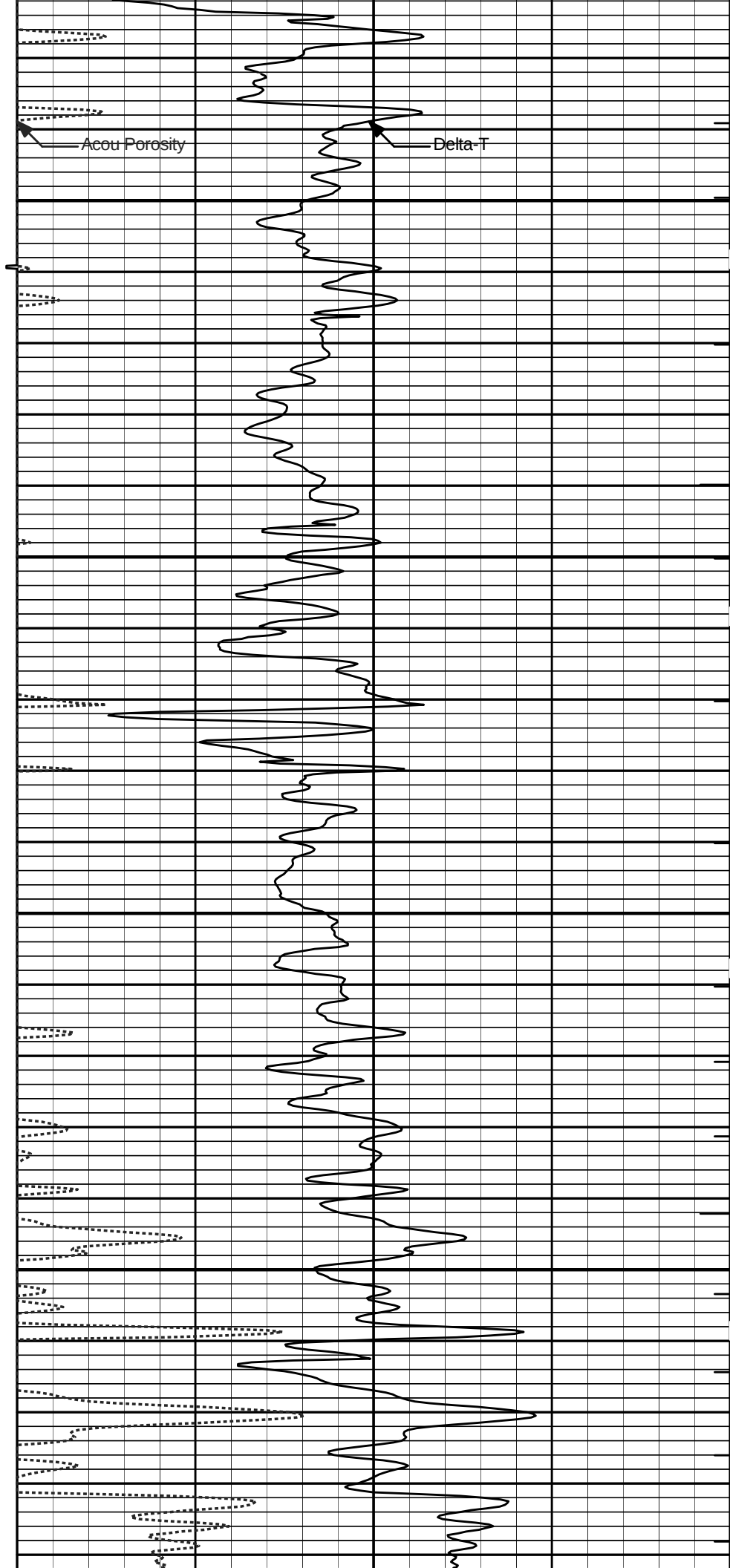
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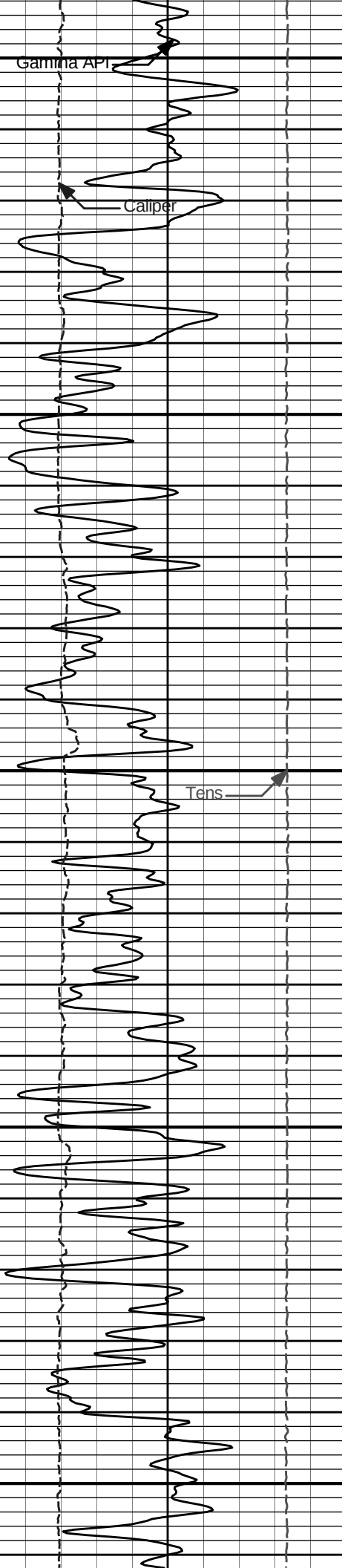




2100

2200

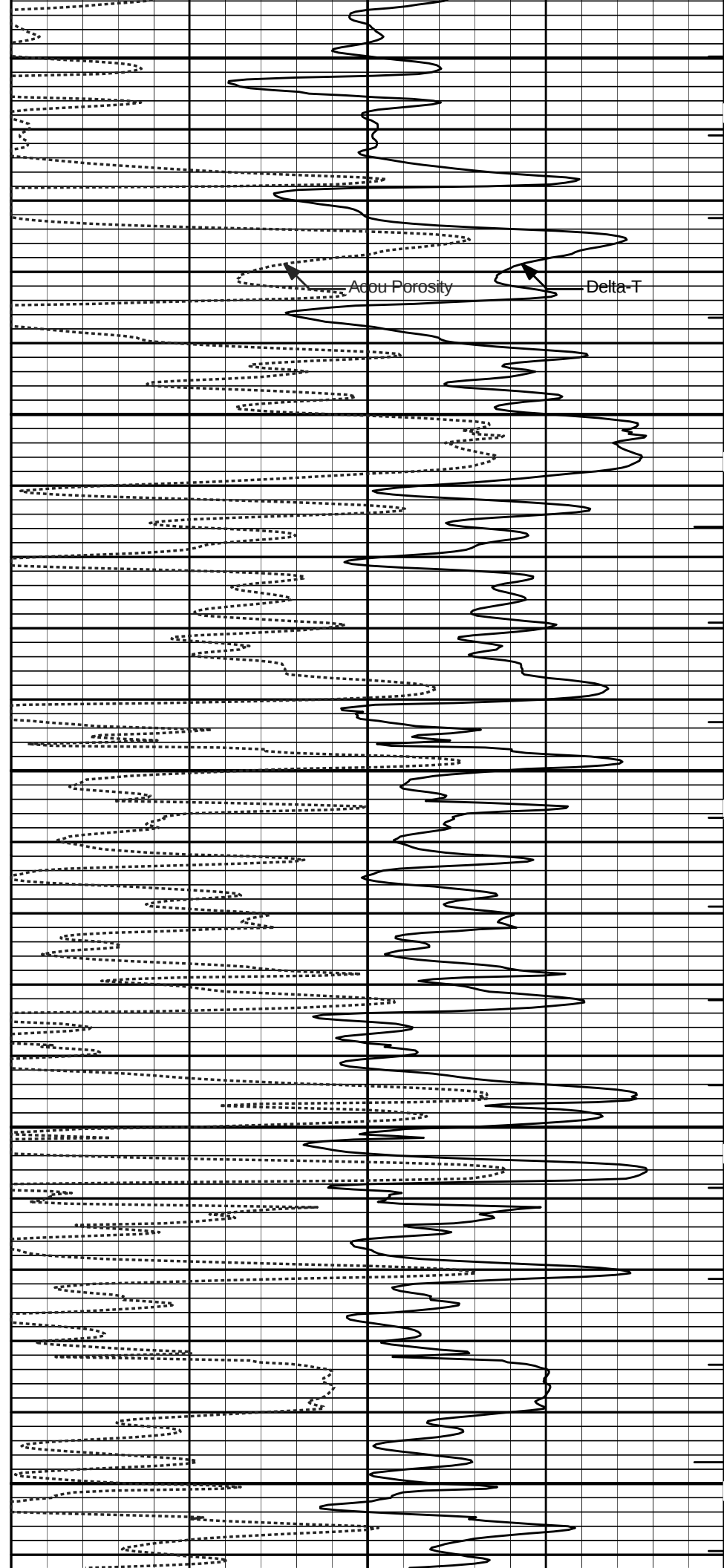


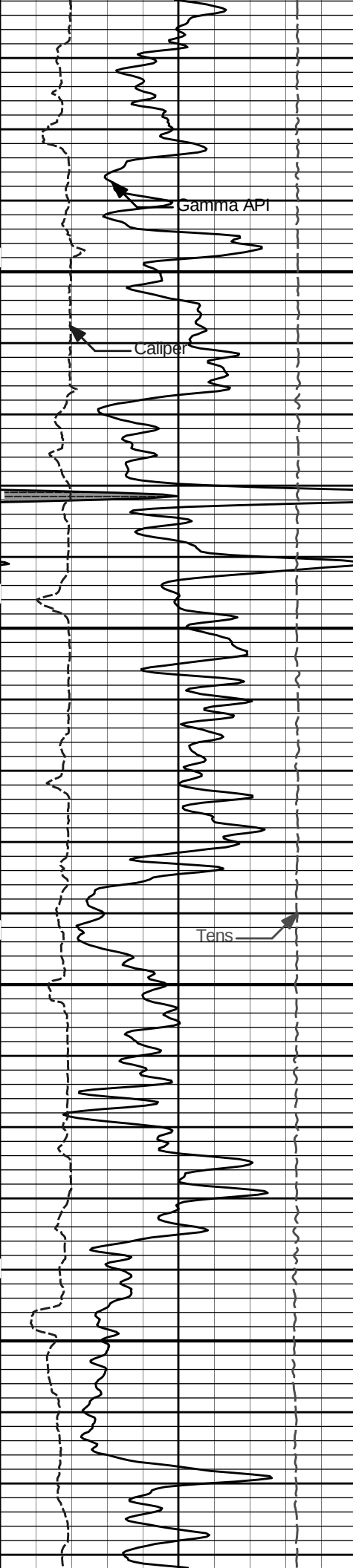


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2400

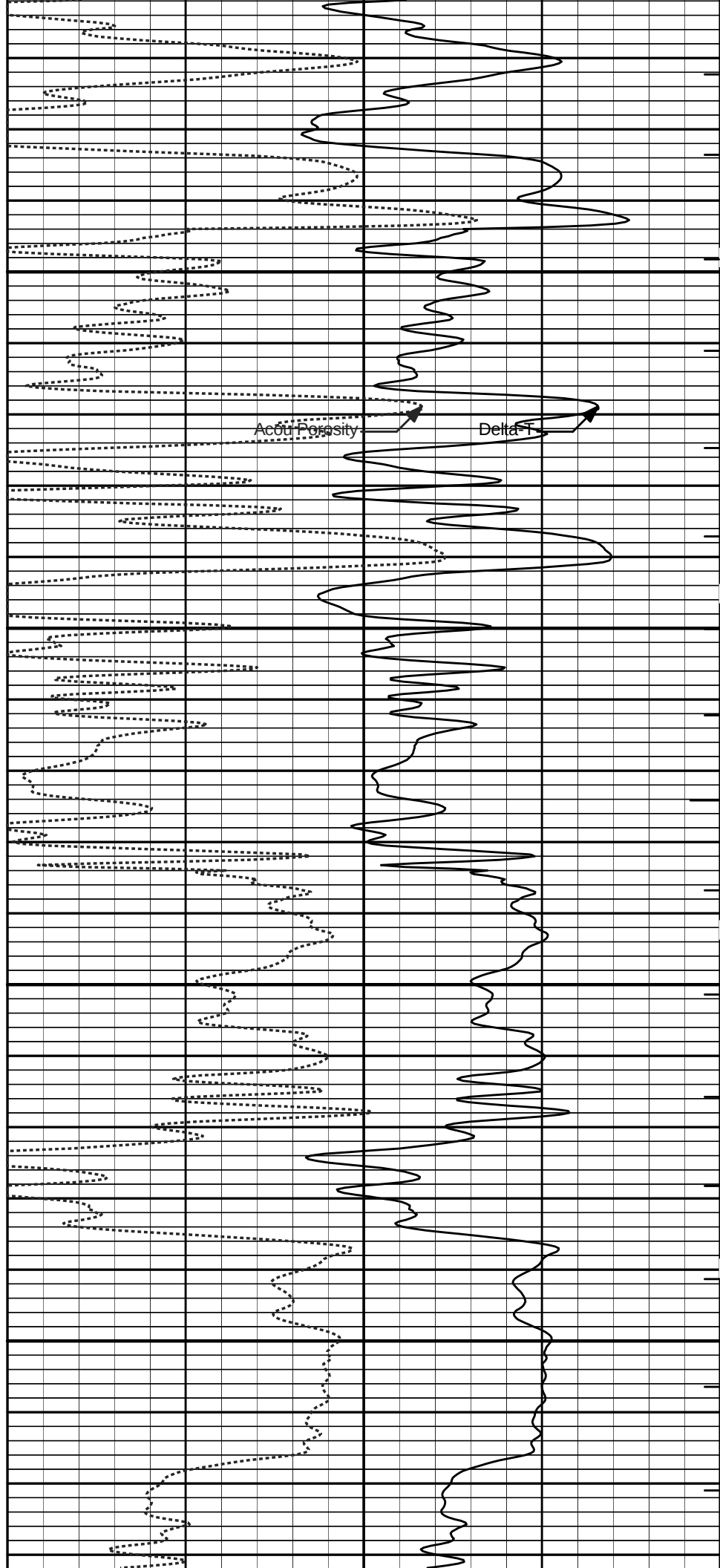
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2600

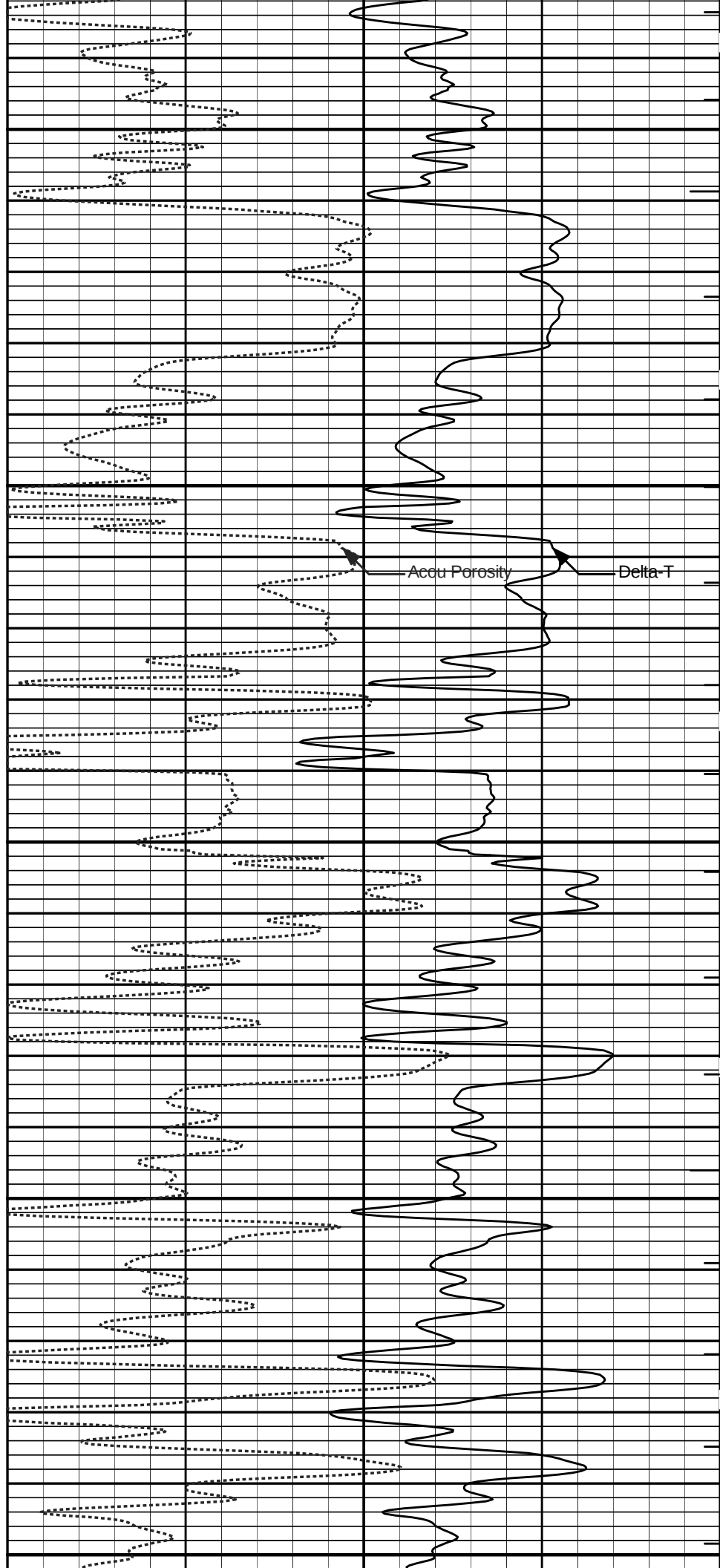
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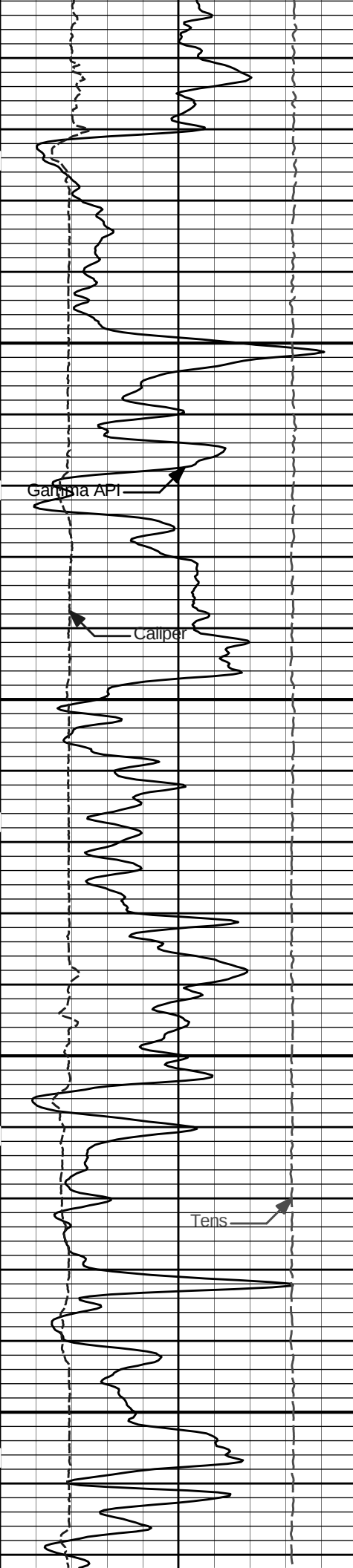




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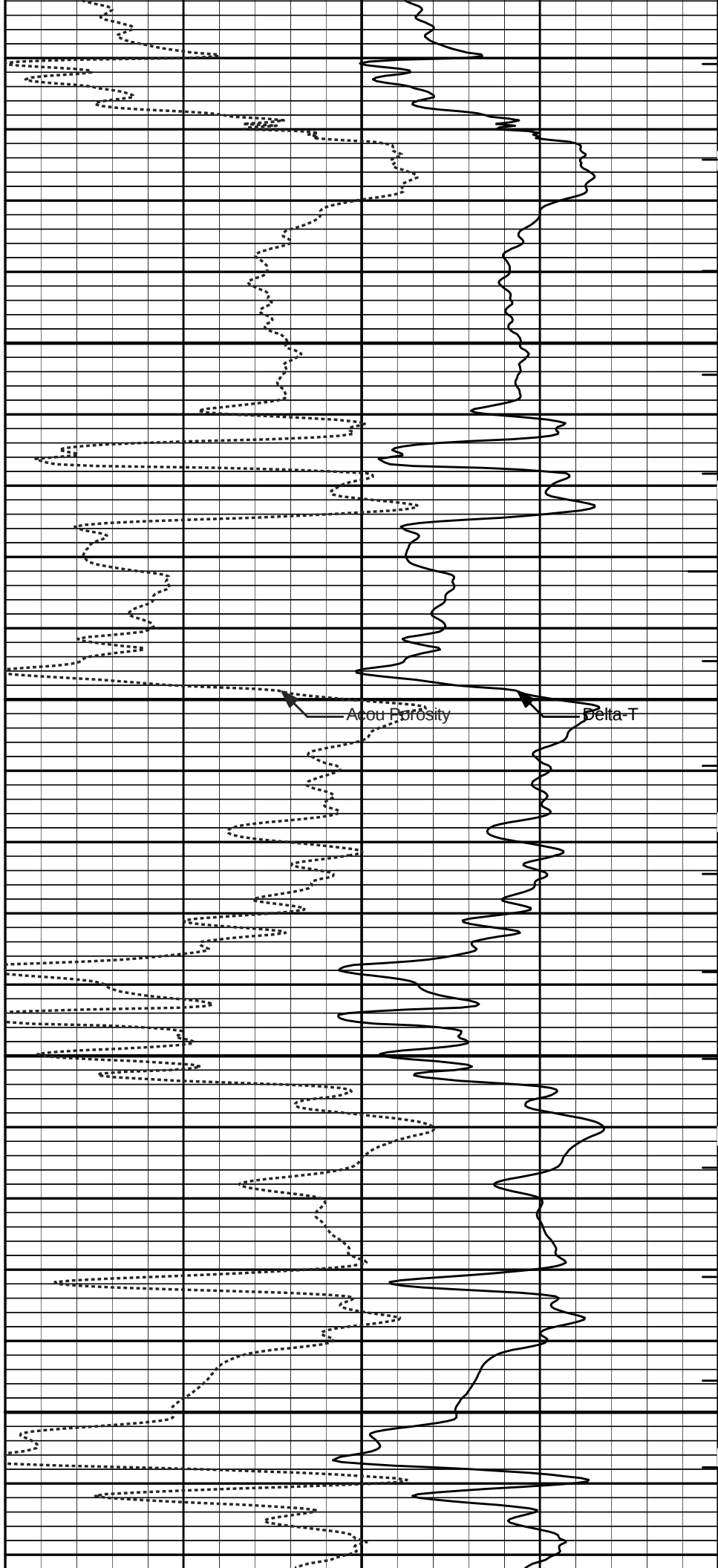
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3000

3100



3200

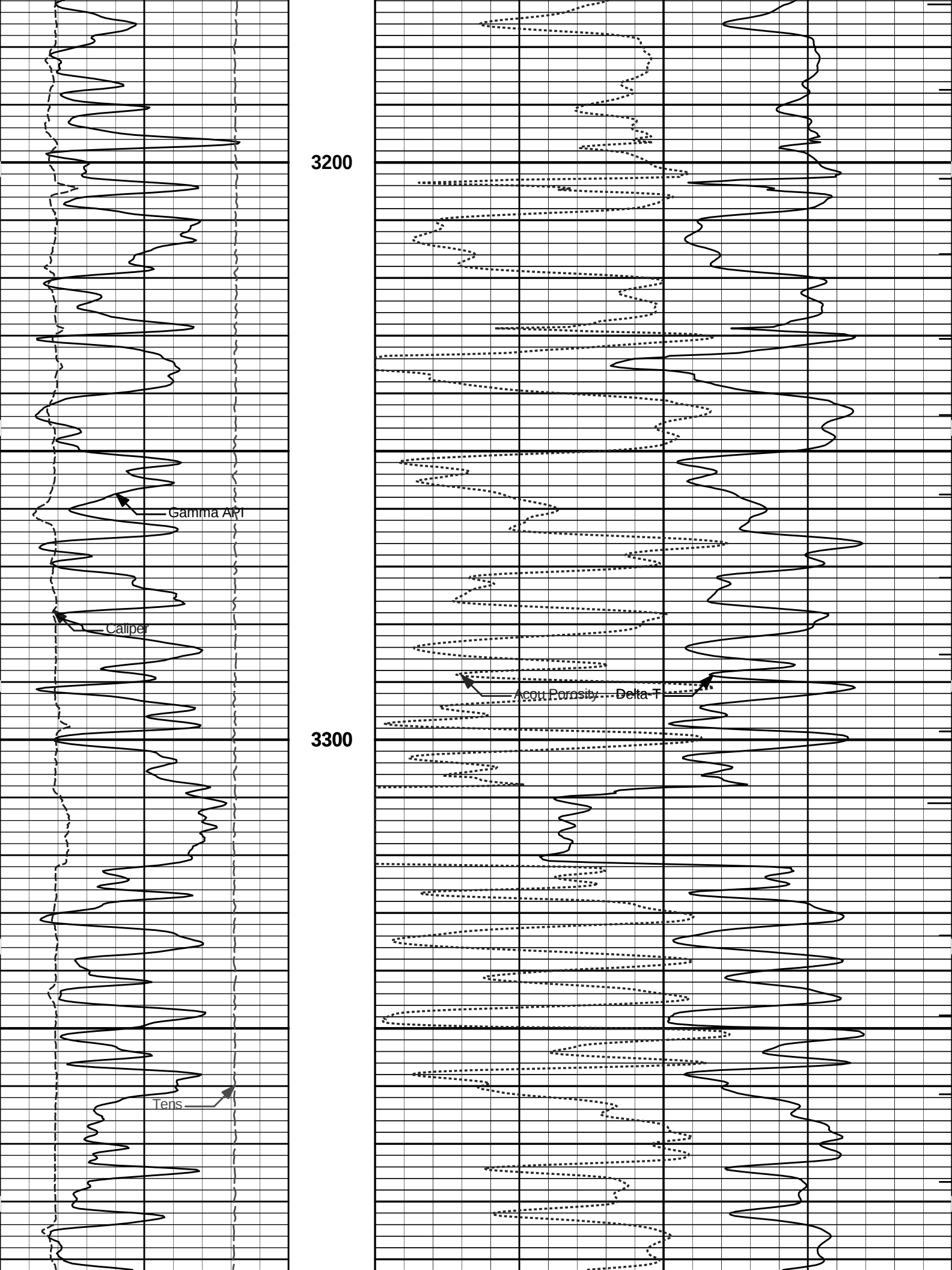
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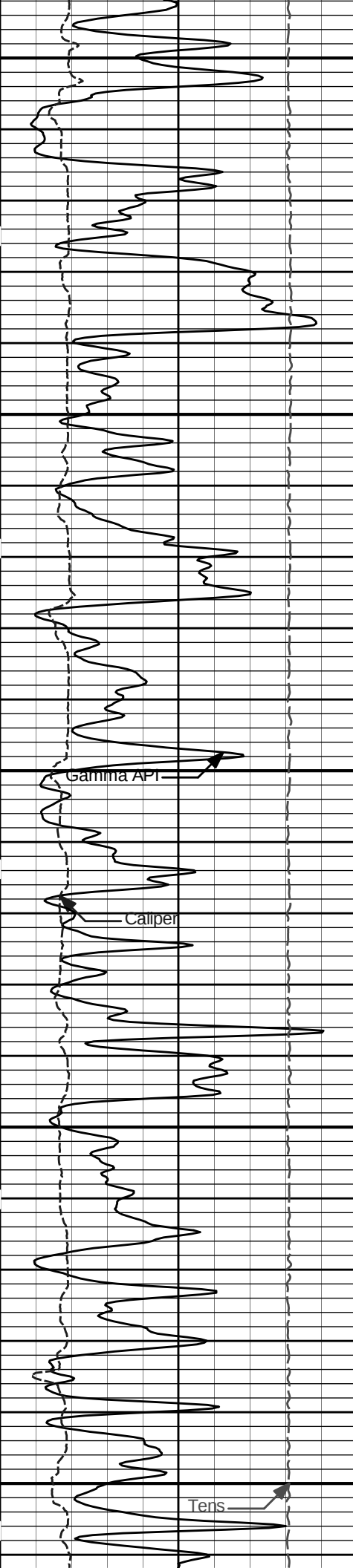
Gamma API

Caliper

Tens

Acou Porosity Delta T





3400

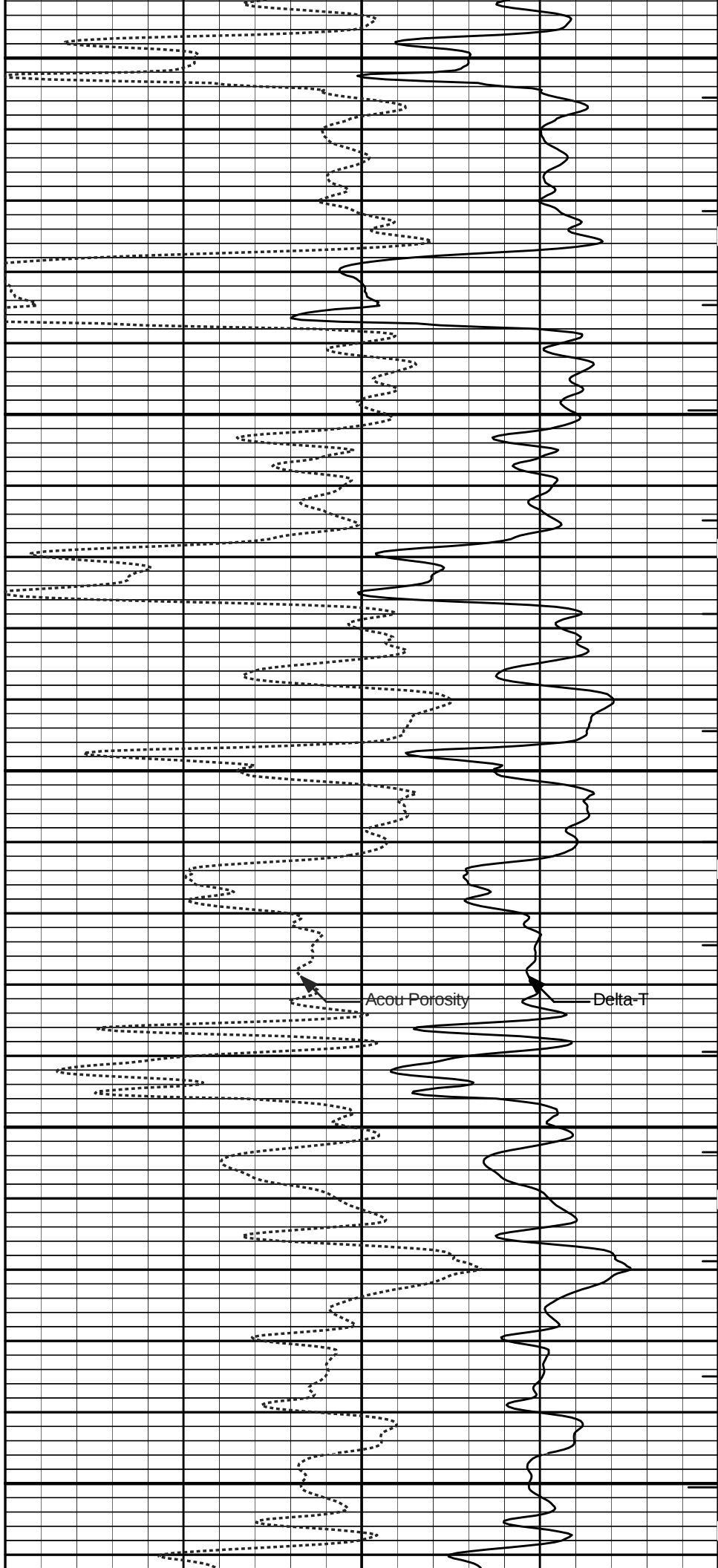
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3600

Gamma API

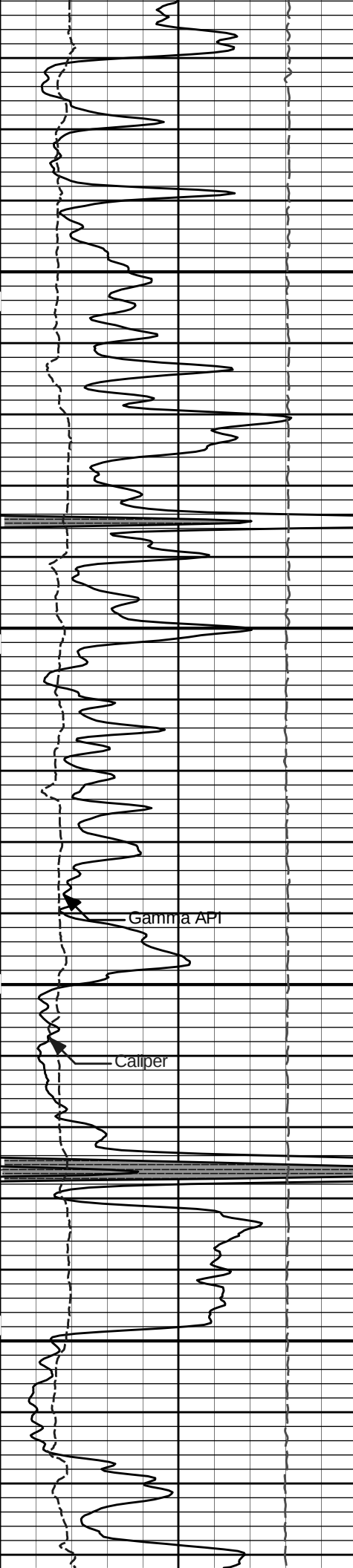
Calliper

Tens



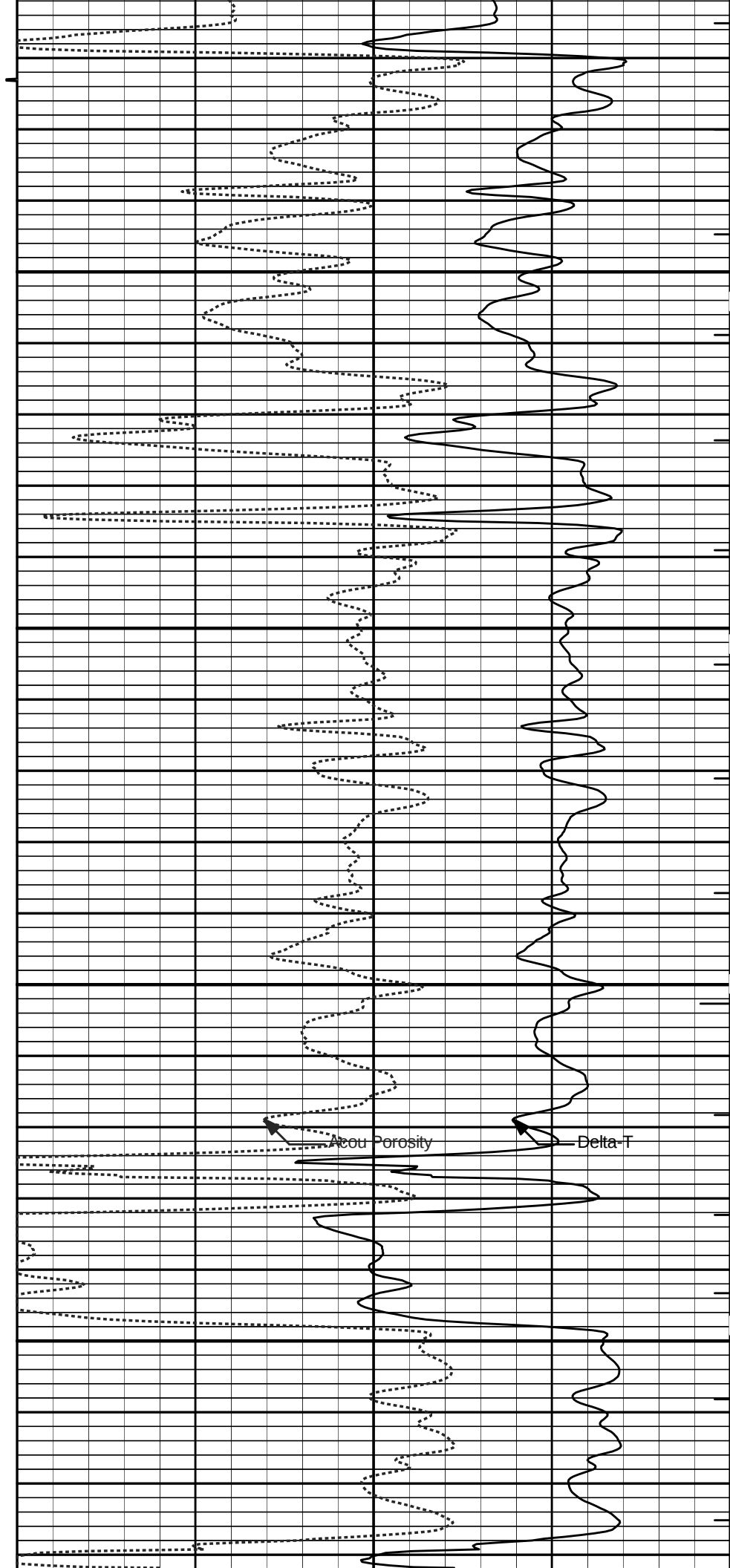
Acou Porosity

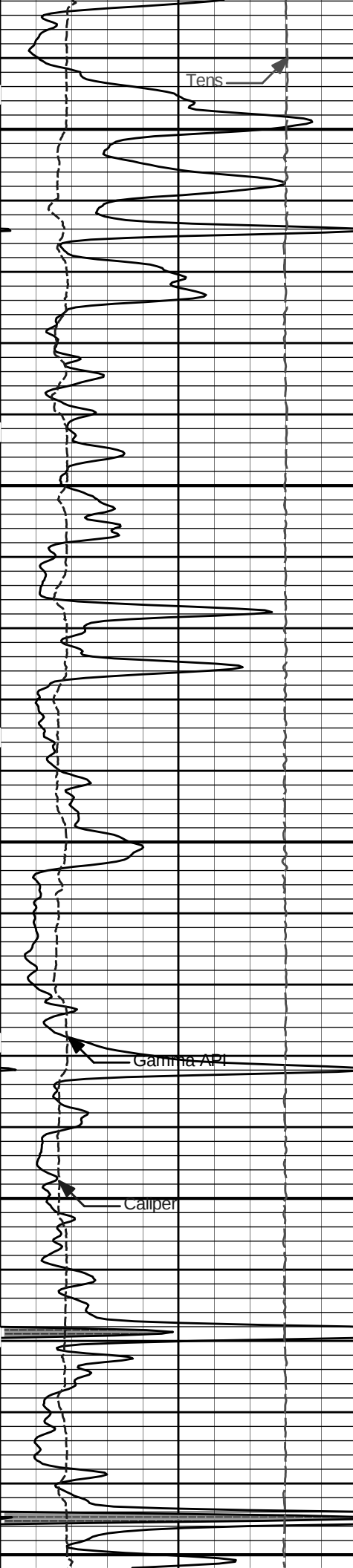
Delta-T



3700

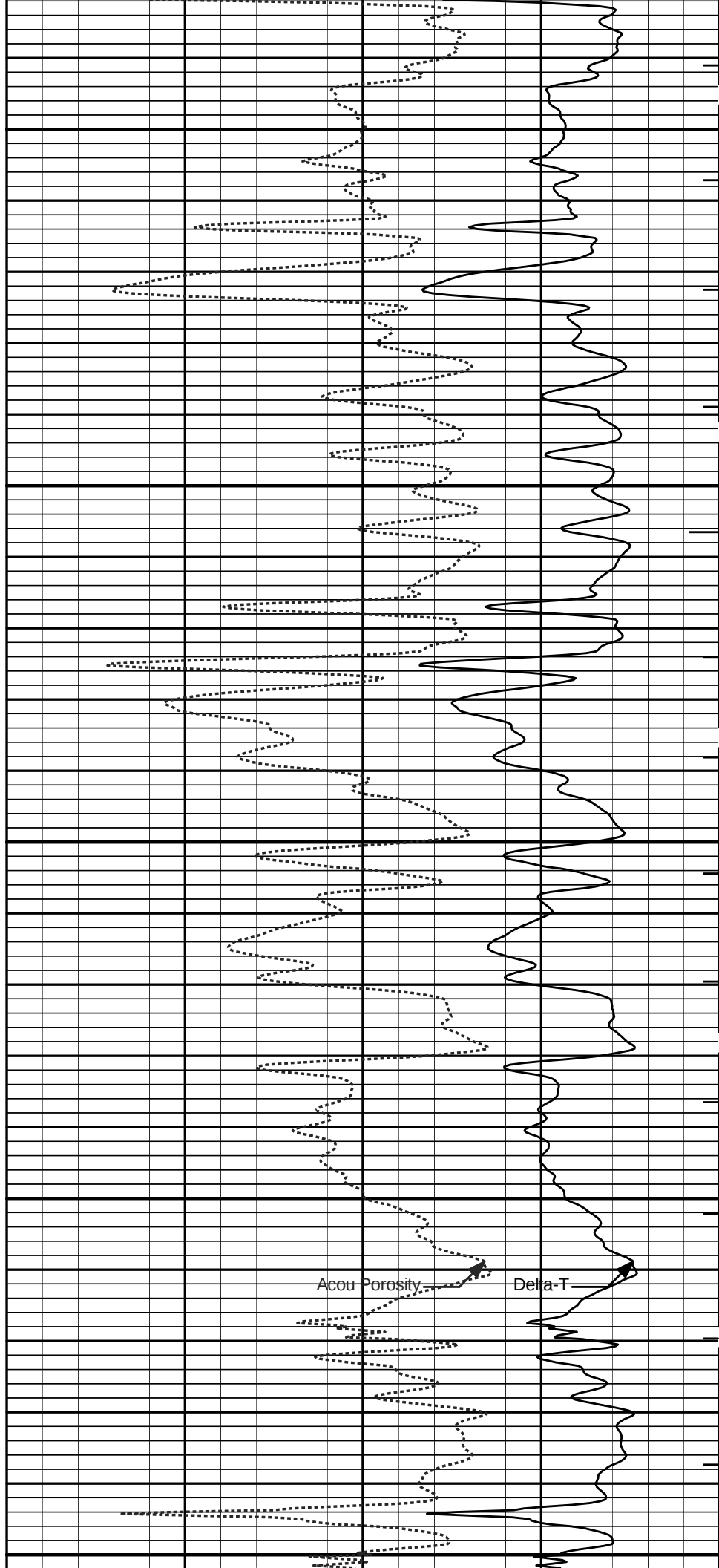
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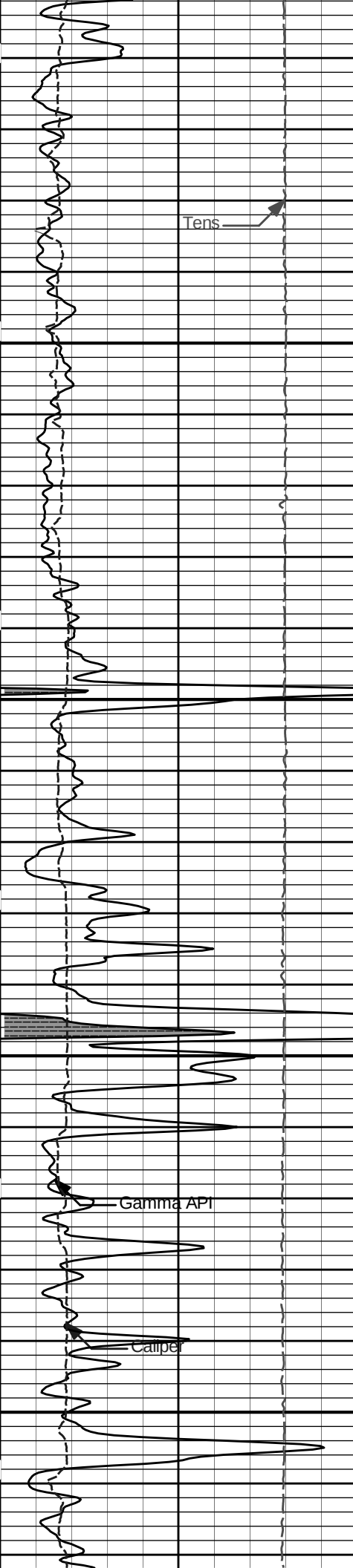




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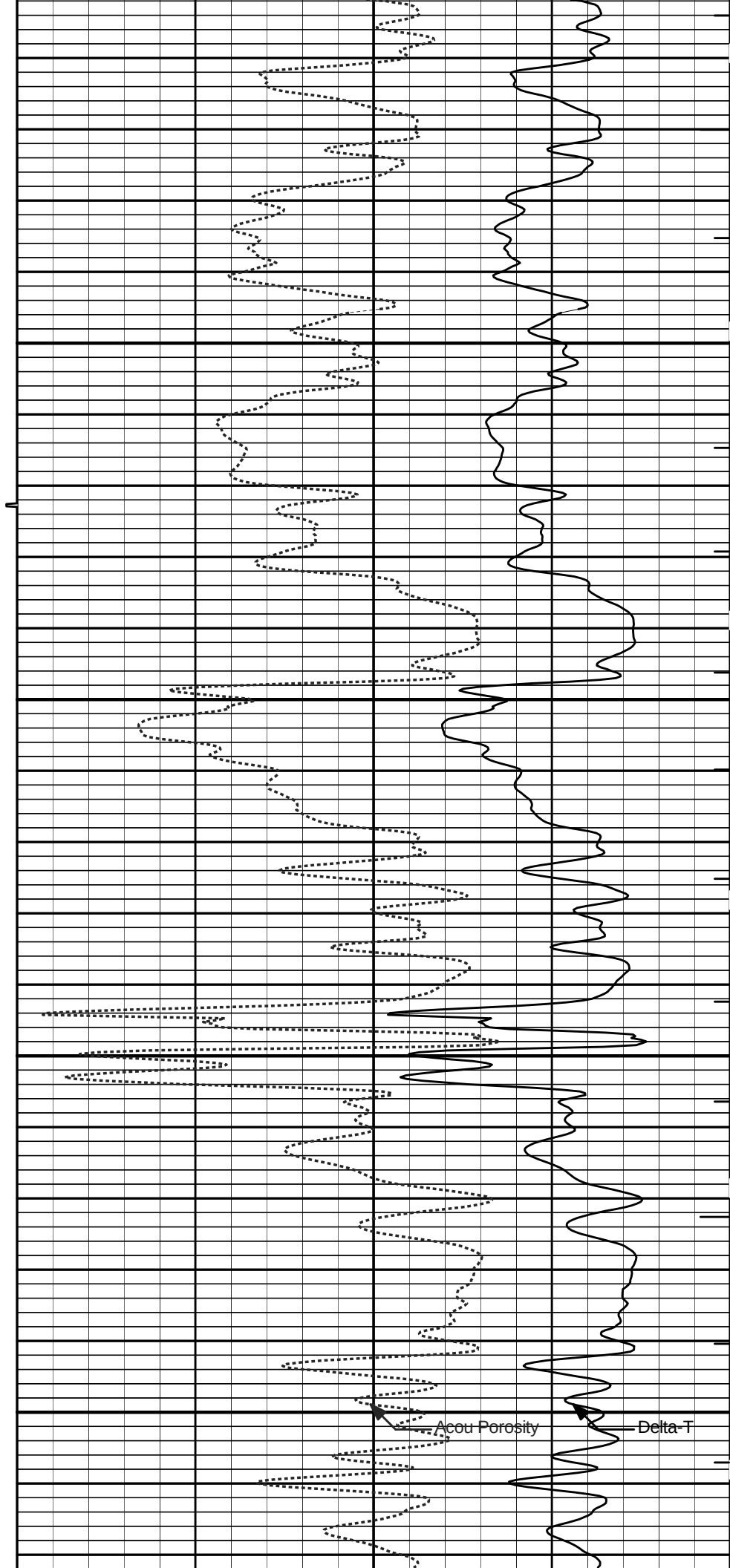
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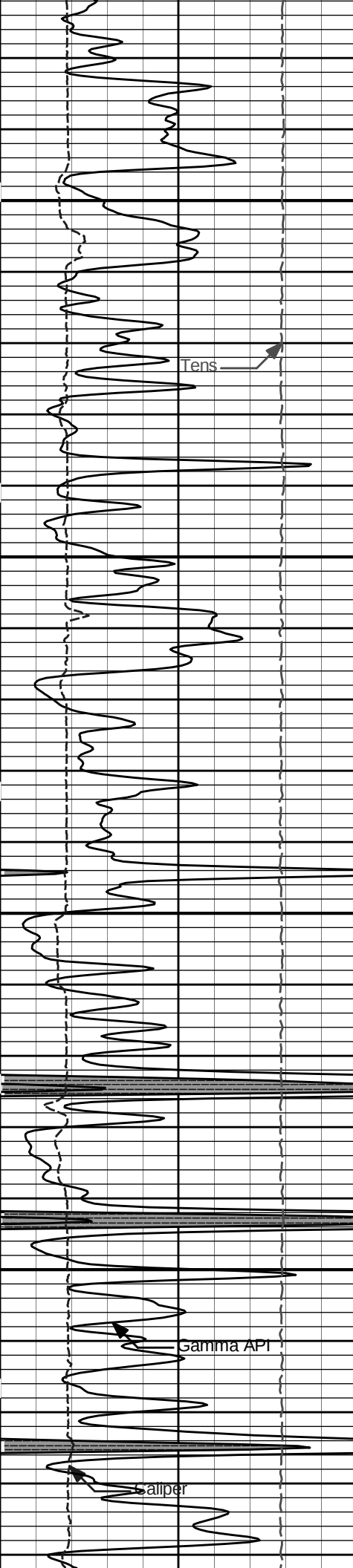




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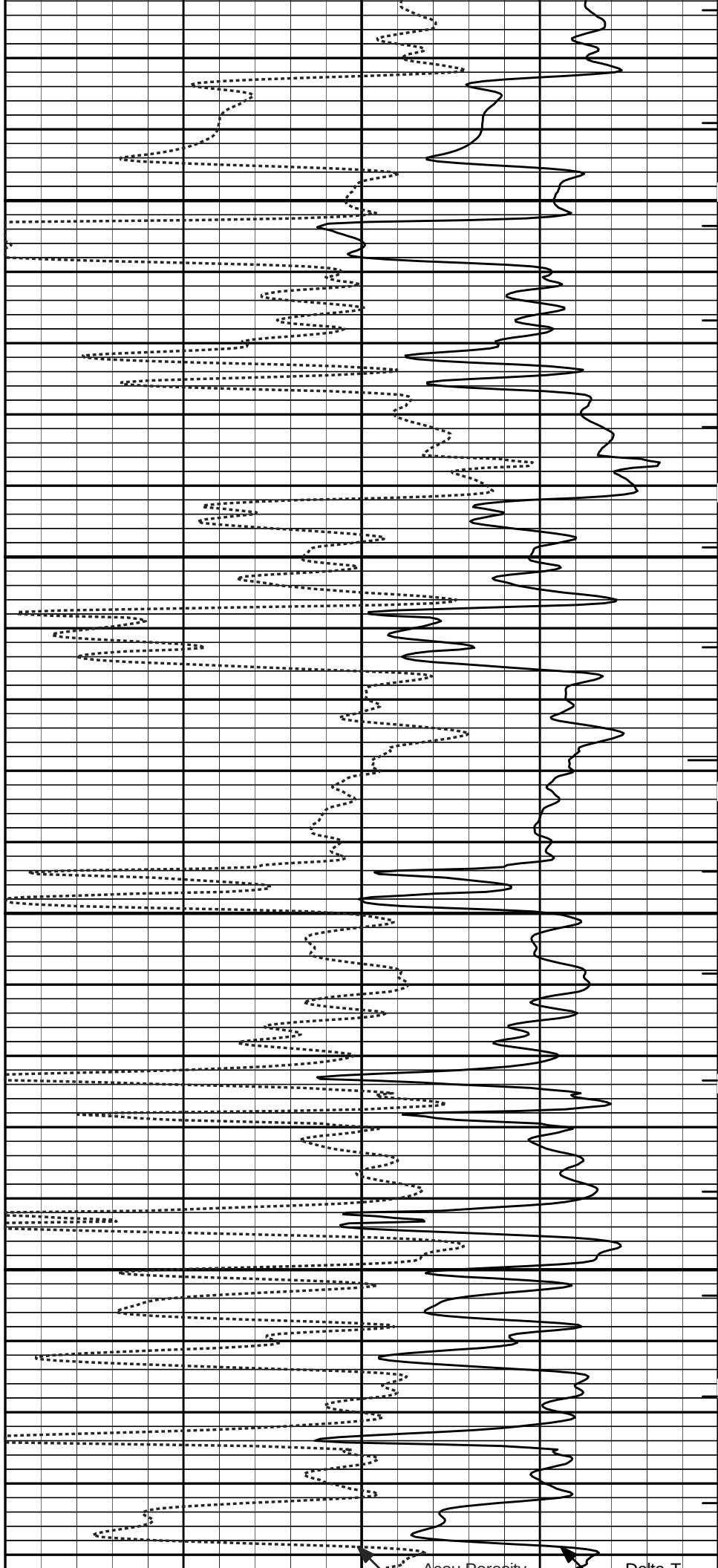
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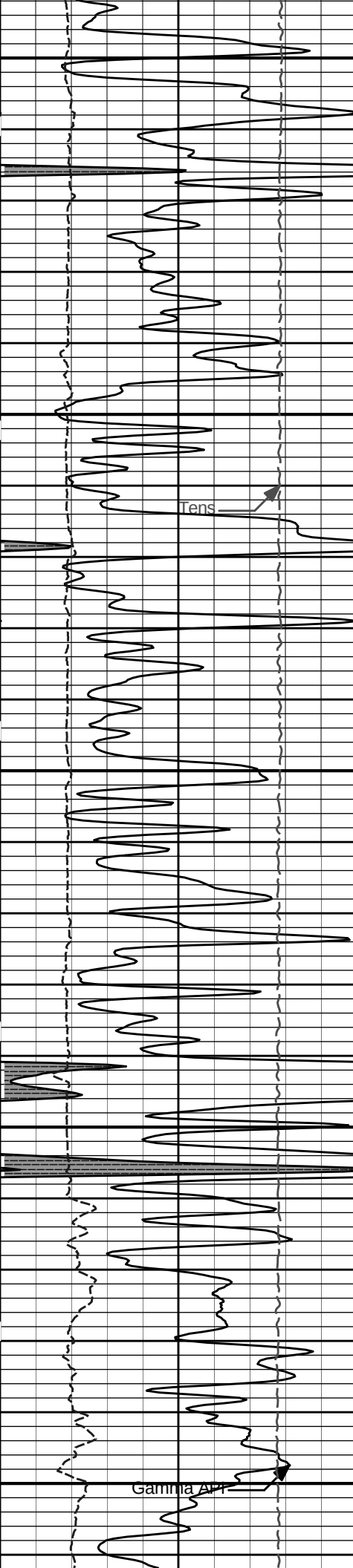




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4400

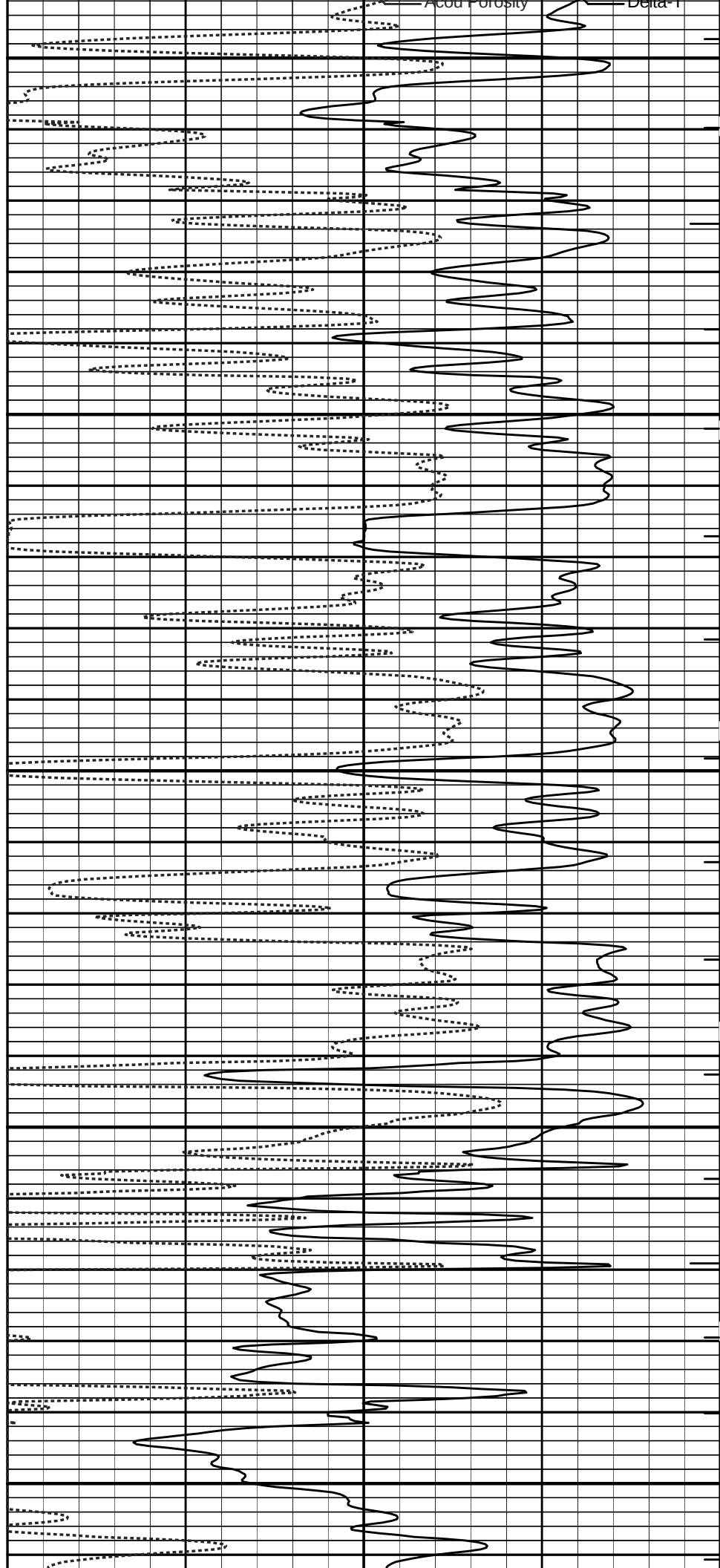


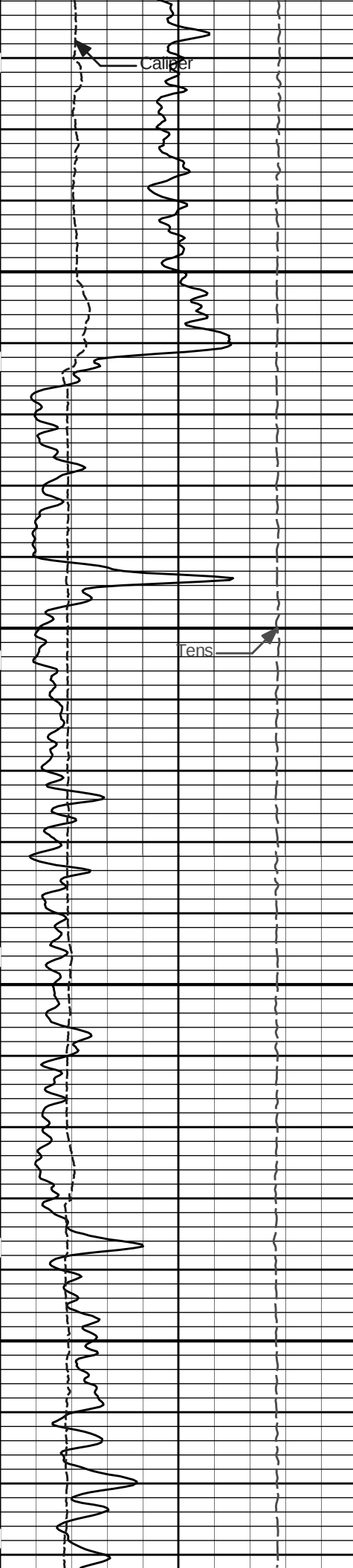


4500

4600

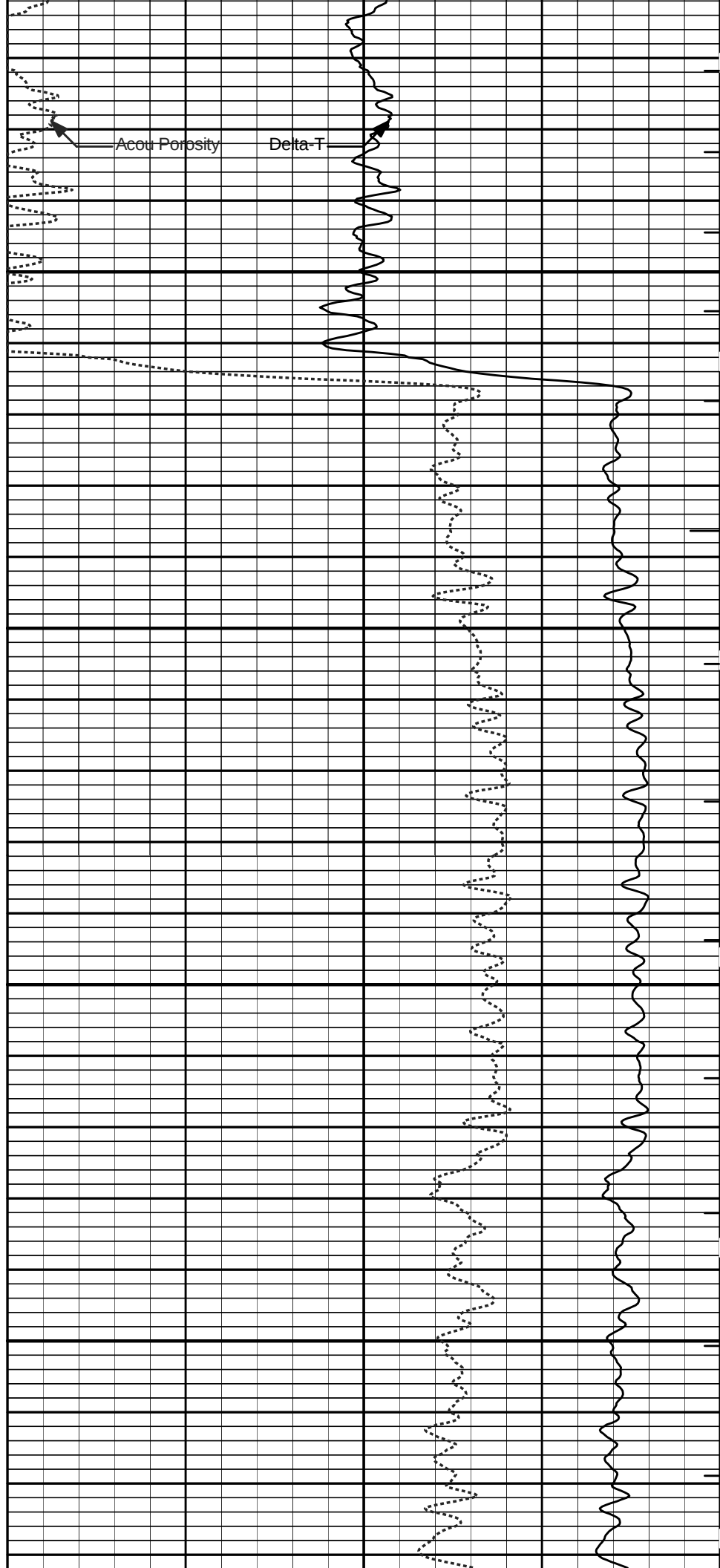
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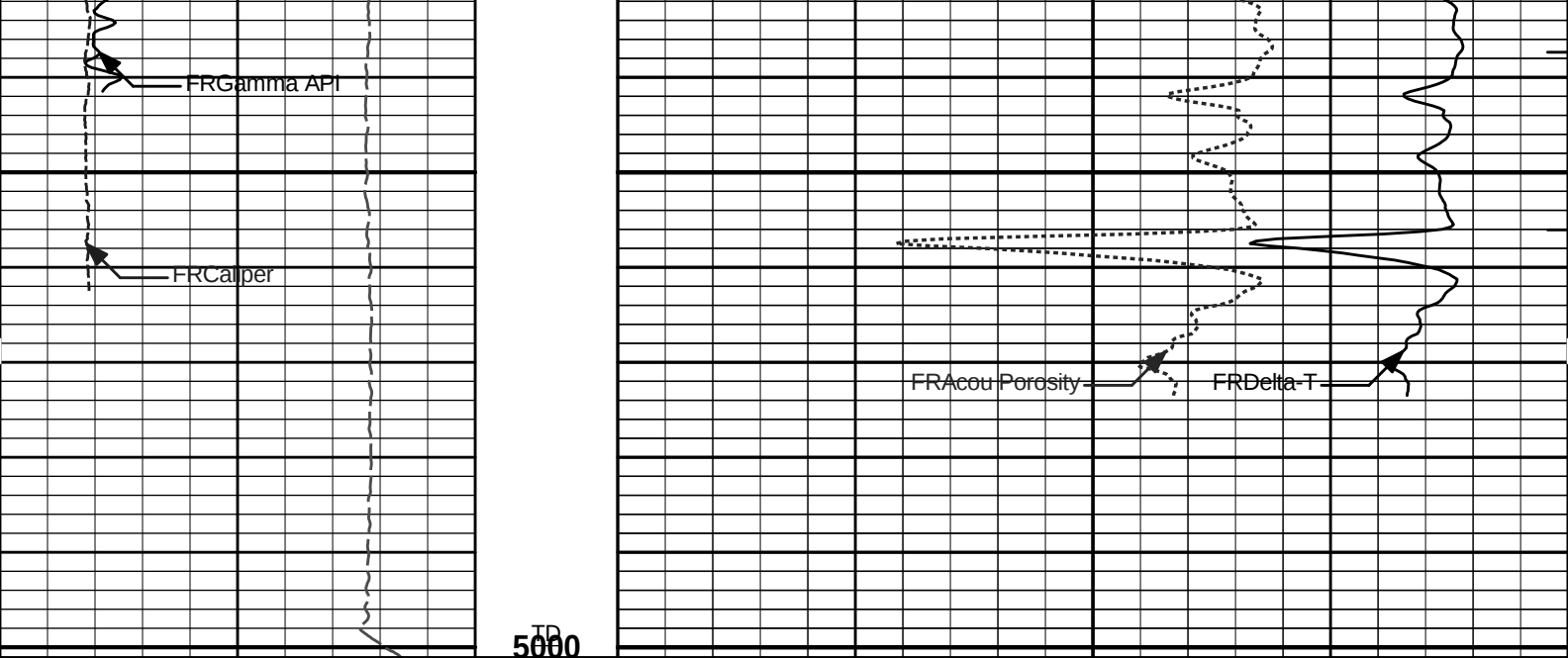




4800

4900





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

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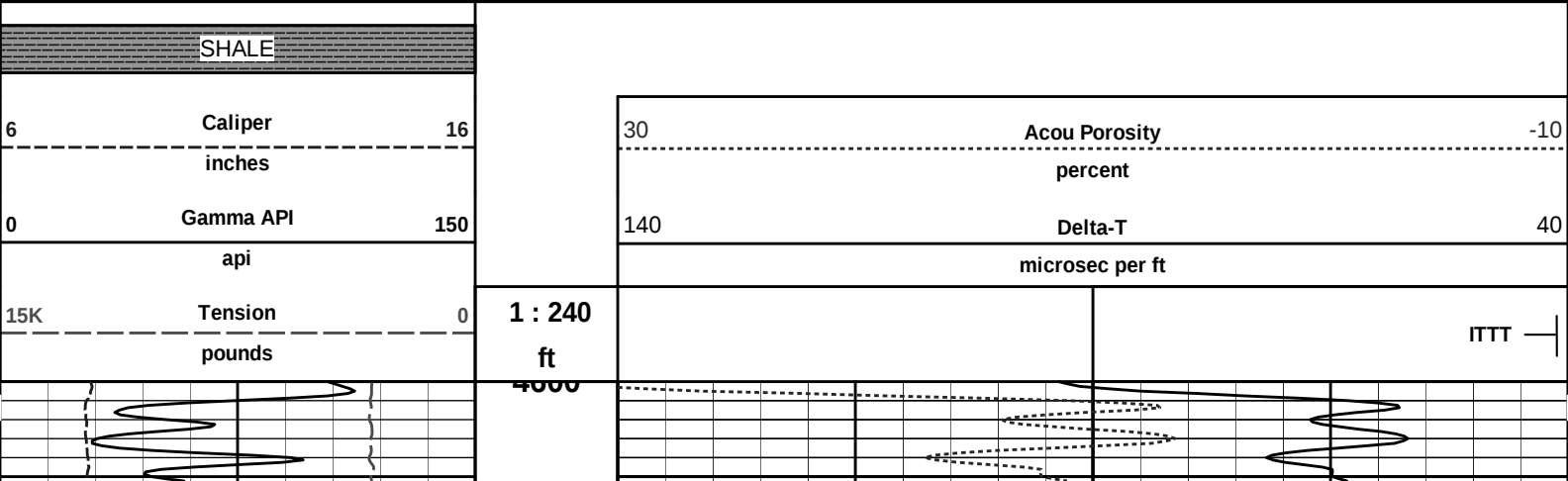
Plot Time: 14-Apr-12 10:14:23
Plot Range: 1800 ft to 5001.08 ft
Data: SHELL_B_4\Well Based\CASING\
Plot File: \\BSAT\BSAT_5_MAIN_LIB

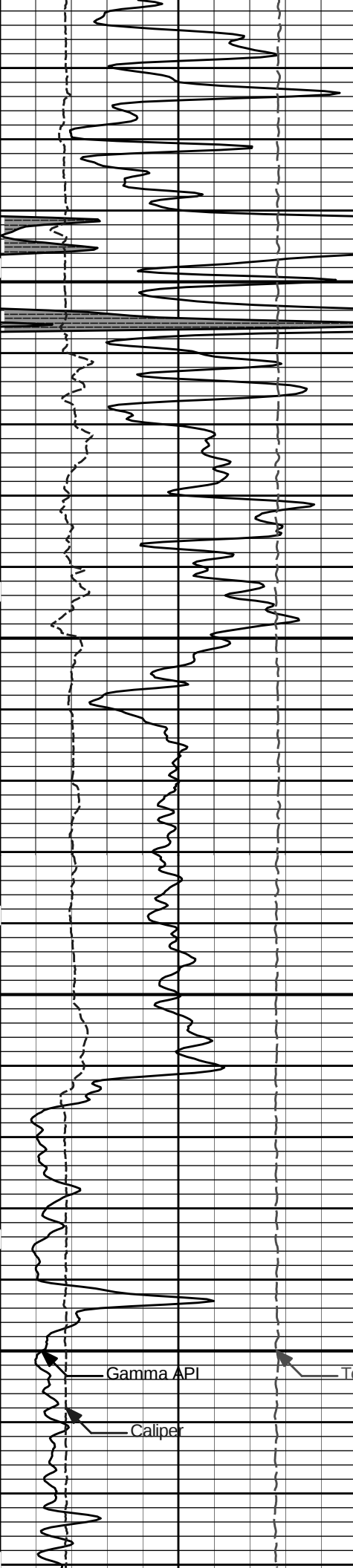
5 INCH MAIN LOG

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Plot Time: 14-Apr-12 10:14:23
Plot Range: 4600 ft to 5002.5 ft
Data: SHELL_B_4\Well Based\REPEAT\
Plot File: \\BSAT\BSAT_5_REP_LIB

REPEAT SECTION





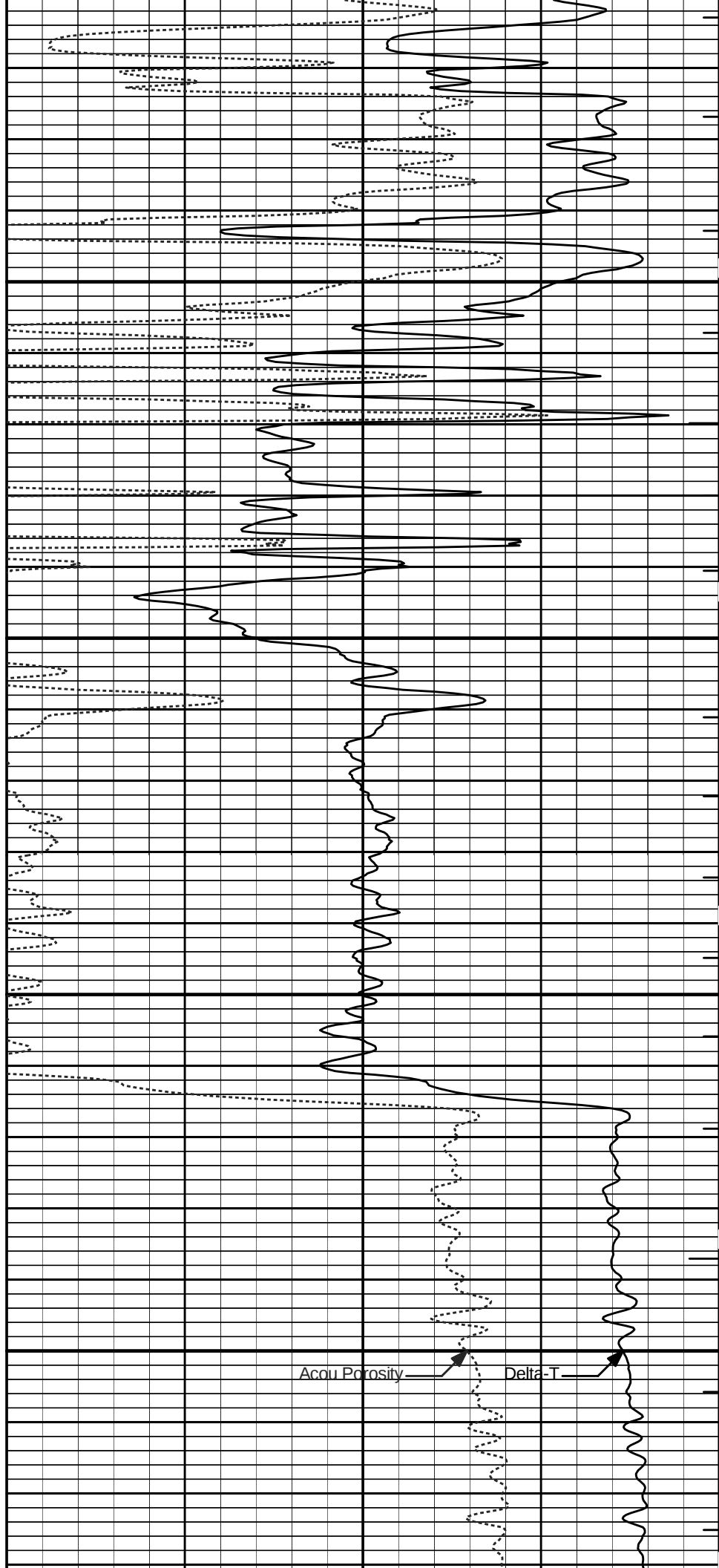
4700

4800

Gamma API

Caliper

Tension



Acou Porosity

Delta-T



15K	Tension	0
	pounds	
0	Gamma API	150
	api	
6	Caliper	16
	inches	
SHALE		

1 : 240
ft

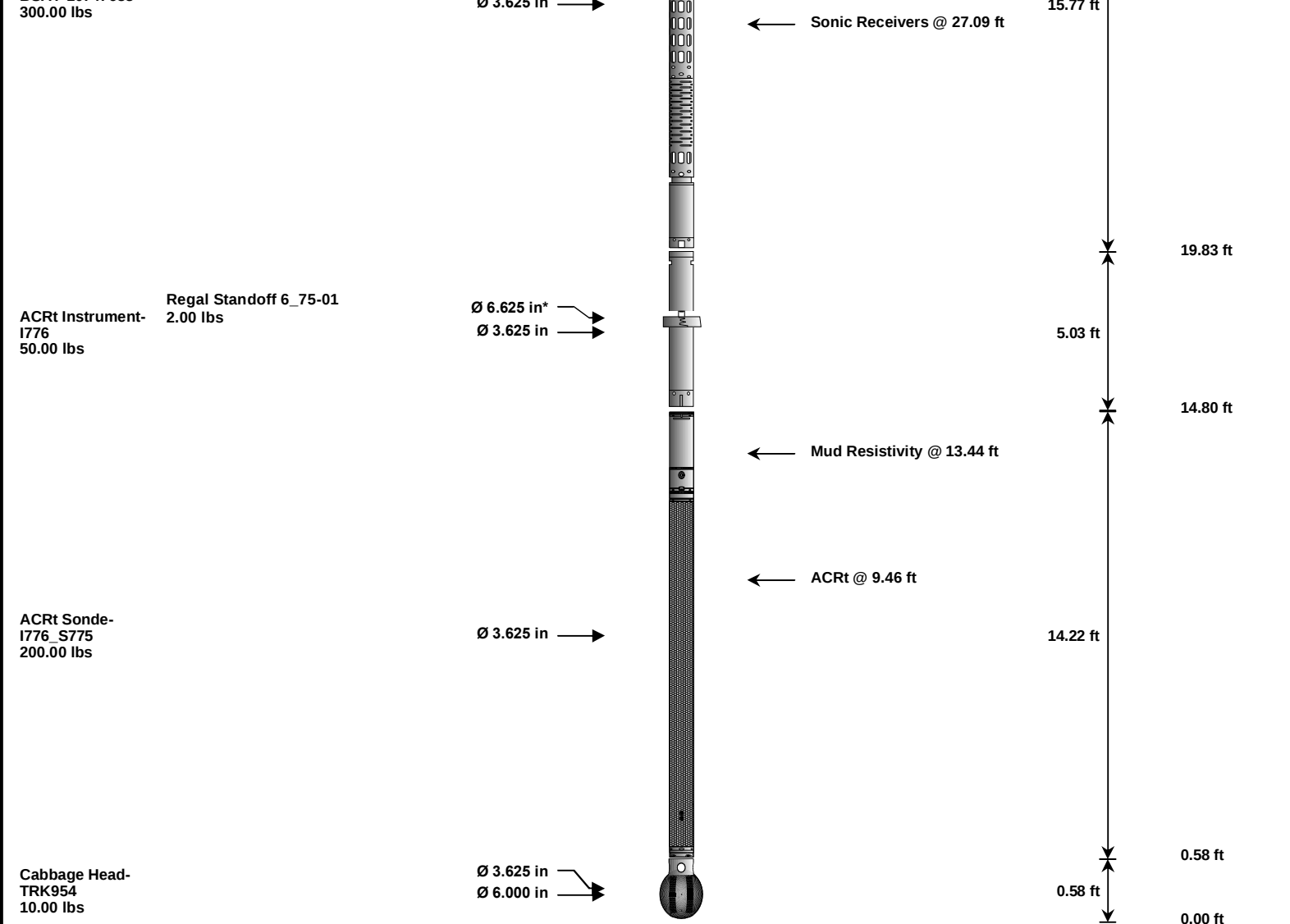
		ITTT —
140	Delta-T	40
	microsec per ft	
30	Acou Porosity	-10
	percent	

REPEAT SECTION

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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
						68.36 ft
SP Sub-PROT01 60.00 lbs		Ø 3.625 in →		← SP @ 66.59 ft	3.74 ft	
						64.63 ft
GTET-10811258 165.00 lbs		Ø 3.625 in →			8.52 ft	
				← GammaRay @ 58.56 ft		56.11 ft
DSN Decentralizer- 10735145 6.60 lbs		Ø 5.000 in* →				
DSNT-10735145 174.00 lbs		Ø 3.625 in →			9.69 ft	
				← DSN Far @ 49.17 ft ← DSN Near @ 48.42 ft		46.42 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	
						35.61 ft
	Regal Standoff 6_75-02 2.00 lbs	Ø 6.625 in* →				
BSAT-10747683		Ø 3.625 in →			12.55 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	PROT01	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
DCNT	DSN Decentralizer	10735145	6.60	5.13	* 49.75	300.00
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
RSOF	Regal Standoff 6.75in	02	2.00	0.52	* 33.63	300.00
ACRt	Array Compensated True Resistivity Instrument Section	I776	50.00	5.03	14.80	300.00
RSOF	Regal Standoff 6.75in	01	2.00	0.52	* 17.40	300.00
ACRt	Array Compensated True Resistivity	I776_S775	200.00	14.22	0.58	300.00
CBHD	Cabbage Head	TRK954	10.00	0.58	0.00	300.00
Total			1,432.60	70.28		
* Not included in Total Length and Length Accumulation.						
Data: SHELL_B_4I0001 SP-GTET-DSN-SDL-BSAT-ACRT-CHIDLE					Date: 14-Apr-12 07:15:55	

Tool Name: GTET - 10811258		Reference Calibration Date: 27-Feb-12 10:45:14	
Engineer: C. MARLOWE		Calibration Date: 03-Apr-12 13:40:54	
Software Version: WL INSITE R3.4.2 (Build 2)		Calibration Version: 1	
Calibrator Source S/N: TB-185 Calibrator API Reference:228.00 api Equivalent Calibrator API Reference:232.0 api			
	Measurement	Measured	Calibrated Units
	Background	23.6	23.3 api
	Background + Calibrator	258.0	255.3 api
	Calibrator	234.4	232.0 api

NATURAL GAMMA RAY TOOL FIELD CALIBRATION			
Tool Name: GTET - 10811258		Reference Calibration Date: 03-Apr-12 13:40:54	
Engineer: CORY HANSON		Calibration Date: 14-Apr-12 06:52:40	
Software Version: WL INSITE R3.4.2 (Build 2)		Calibration Version: 1	
Calibrator Source S/N: TB-185 Calibrator API Reference:228.00 api Equivalent Calibrator API Reference:232.0 api			
	Field Verification	Shop	Field Units
	Background	23.3	30.5 api
	Background + Calibrator	255.3	259.8 api
	Calibrator	232.0	229.2 api
	Shop	Field	Difference Tolerance
	232.0	229.2	2.8 +/- 9.00

DENSITY CALIPER SHOP CALIBRATION			
Tool Name: SDLT - I145_M73803_P90		Reference Calibration Date: 15-Oct-11 01:31:43	
Engineer: C. MARLOWE		Calibration Date: 16-Dec-11 08:53:18	
Software Version: WL INSITE R3.4.2 (Build 2)		Calibration Version: 1	

	CALIBRATION COEFFICIENTS			
	Measurement	Previous Value	New Value Control Limit On New Value	
	Pad Offset	-2810.00	-2999.04 -7000.00 - -1000.00	
	Pad Gain	0.0004066	0.0004000 0.000200 - 0.000600	
	Arm Offset	-1181.84	-1398.96 -5000.00 - 3000.00	
	Arm Gain	0.0005021	0.0005230 0.000300 - 0.000700	
	Arm Power	-0.000004412	-0.000004686 -0.000010 - 0.000010	
The ring diameter is computed from: DIAMETER = PAD EXTENSION + ARM EXTENSION + 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)	2.11	2.00 -0.11 +/- 0.20	
	Medium Ring (in)	3.89	3.75 -0.14 +/- 0.20	
	RING DIAMETER:			
	Small Ring (in)	6.60	6.50 -0.10 +/- 0.20	
	Medium Ring (in)	8.28	8.25 -0.03 +/- 0.20	
	Large Ring (in)	14.82	15.00 0.18 +/- 0.20	

PASS/FAIL SUMMARY	
Calibration Coefficients Range Check: Passed	

Calibration-Coefficients Range Check:

Passed

PASS/FAIL SUMMARY

Calibration-Coefficients Range Check:

Passed

SDLT CALIPER FIELD CALIBRATION

Tool Name:SDLT - I145_M73803_P90

Reference Calibration Date:16-Dec-11 08:53:18

Engineer:CORY HANSON

Calibration Date:14-Apr-12 07:08:41

Software Version:WL INSITE R3.4.2 (Build 2)

Calibration Version:1

MEASURED CALIPER VALUES

Measurement	Shop	Field	Change	Control Limit On New Value
Pad Extension	3.75	3.80	0.05	+/- 0.10
Ring Diameter	8.25	8.29	0.04	+/- 0.15

PASS/FAIL SUMMARY

Pad Extension Check:

Passed

Diameter Check:

Passed

CALIBRATION SUMMARY

Sensor	Shop	Field	Post	Difference	Tolerance	Units
GTET-10811258						
Gamma Ray Calibrator	232.0	229.2	-----	2.8	+/- 9.00	api
SDLT-I145_M73803_P90						
Pad Extension	3.75	3.80	-----	-0.05	+/-0.10	in
Ring Diameter	8.25	8.29	-----	-0.040	+/-0.15	in

Data: SHELL_B_4I0001 SP-GTET-DSN-SDL-BSAT-ACRT-CHIDLE

Date: 14-Apr-12 09:07:22

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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	9.000	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	2.290	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	5033.00	ft
	SHARED	BHT	Bottom Hole Temperature	125.0	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	2.00	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 Up	
	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	

BOTTOM

INPUTS, DELAYS AND FILTERS TABLE

Mnemonic	Input Description	Delay (ft)	Filter Type	Filter Length (ft)
Depth Panel				
TENS	Tension	0.00	NO	
SP Sub				
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	
GTET				
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	
DSNT				
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	
ERND	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	
SDLT				
TPUL	Tension Pull	38.42	NO	
PCAL	Pad Caliper	38.42	TRI	0.250
ACAL	Arm Caliper	38.42	TRI	0.250
BSAT				
TPUL	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	
ACRt Sonde				
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	
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: SHELL_B_4I0001 SP-GTET-DSN-SDL-BSAT-ACRT-CHIDLE			Date: 14-Apr-12 09:04:54	

COMPANY	OXY USA INC		
WELL	SHELL B-4		
FIELD	AMAZON DITCH		
COUNTY	FINNEY	STATE	KANSAS
HALLIBURTON		BOREHOLE COMPENSATED SONIC ARRAY LOG	