

HALLIBURTON

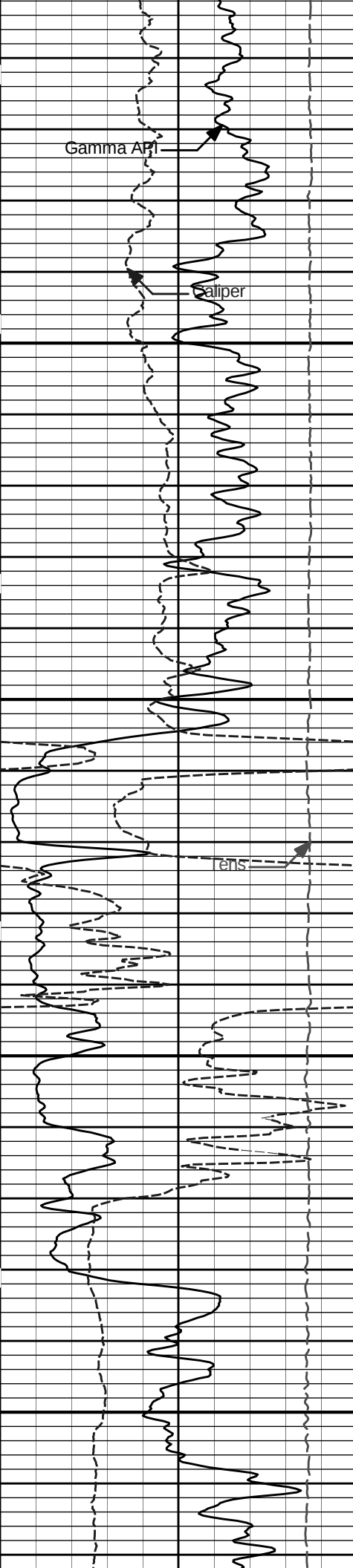
BOREHOLE COMPENSATED SONIC ARRAY LOG

COMPANY		OXY USA INC	
WELL		KELLS H-1	
FIELD		PLEASANT PRARIE SE	
COUNTY		HASKELL	
STATE		KANSAS	
Permanent Datum Log measured from Drilling measured from	GL	Elev. 2984.0 ft	
	KB	D.F. 2999.0 ft	
		G.L. 2984.0 ft	
Date		05-Mar-12	
Run No.		ONE	
Depth - Driller		5509.00 ft	
Depth - Logger		5478.0 ft	
Bottom - Logged Interval		5451.0 ft	
Top - Logged Interval		1776.0 ft	
Casing - Driller		8.625 in @ 1775.0 ft	
Casing - Logger		1776.0 ft	
Bit Size		7.875 in @	
Type Fluid in Hole		WATER BASED MUD	
Density		9.7 ppq 40.00 s/qt	
PH		8.50 pH 12.0 cp/m	
Source of Sample		FLOW LINE	
Rm @ Meas. Temperature		1.270 ohmm @ 74.00 degF	
Rmf @ Meas. Temperature		1.51 ohmm @ 51.00 degF	
Rmc @ Meas. Temperature		2.100 ohmm @ 51.00 degF	
Source Rmf		MEAS	
Rm @ BHT		0.74 ohmm @ 128.0 degF	
Time Since Circulation		0.0 hr	
Time on Bottom		05-Mar-12 19:18	
Max. Rec. Temperature		128.0 degF @ 5478.0 ft	
Equipment		10546696 LIBERAL	
Recorded By		J. BOLLOM	
Witnessed By		A. HOWSON	

COMPANY	OXY USA INC
WELL	KELLS H-1
FIELD	PLEASANT PRARIE SE
COUNTY	HASKELL
STATE	KANSAS
API No.	15-081-21968
Location	1402' FNL & 330' FEL
Other Services:	ACRT MICROLOG DSNT, SDLT

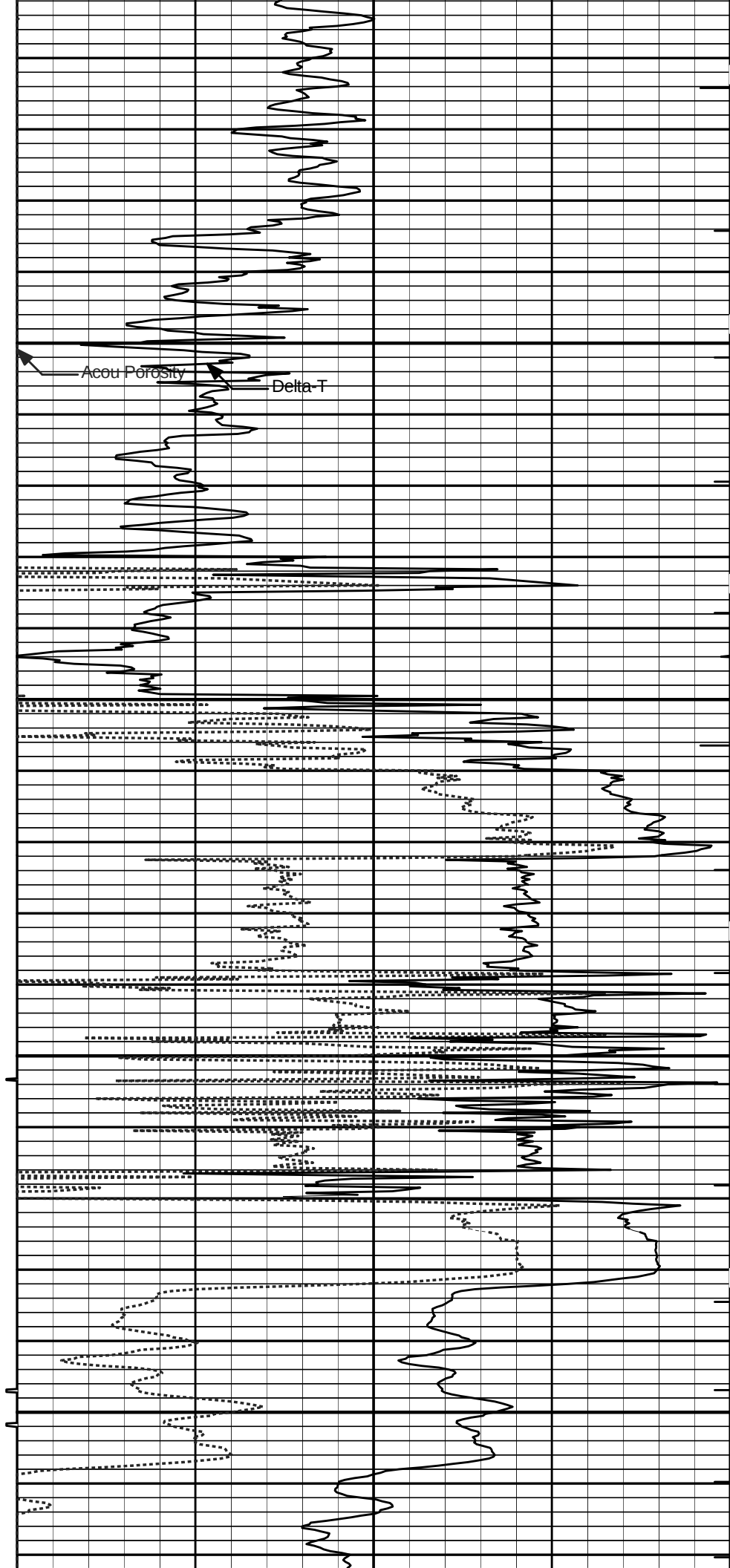
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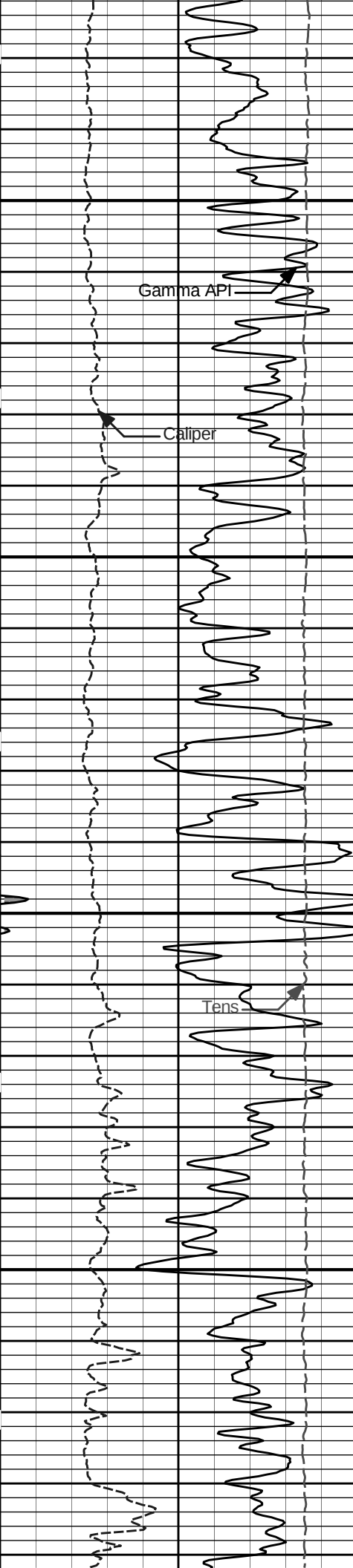
Service Ticket No.: 9323213						API Serial No.: 15-081-21968						PGM Version: WL INSITE R3.4.2 (Build 2)																	
CHANGE IN MUD TYPE OR ADDITIONAL SAMPLE												RESISTIVITY SCALE CHANGES																	
Date		Sample No.										Type Log		Depth		Scale Up Hole				Scale Down Hole									
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.		11039640				Serial No.		10747684				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.		GTET				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											



1900

2000





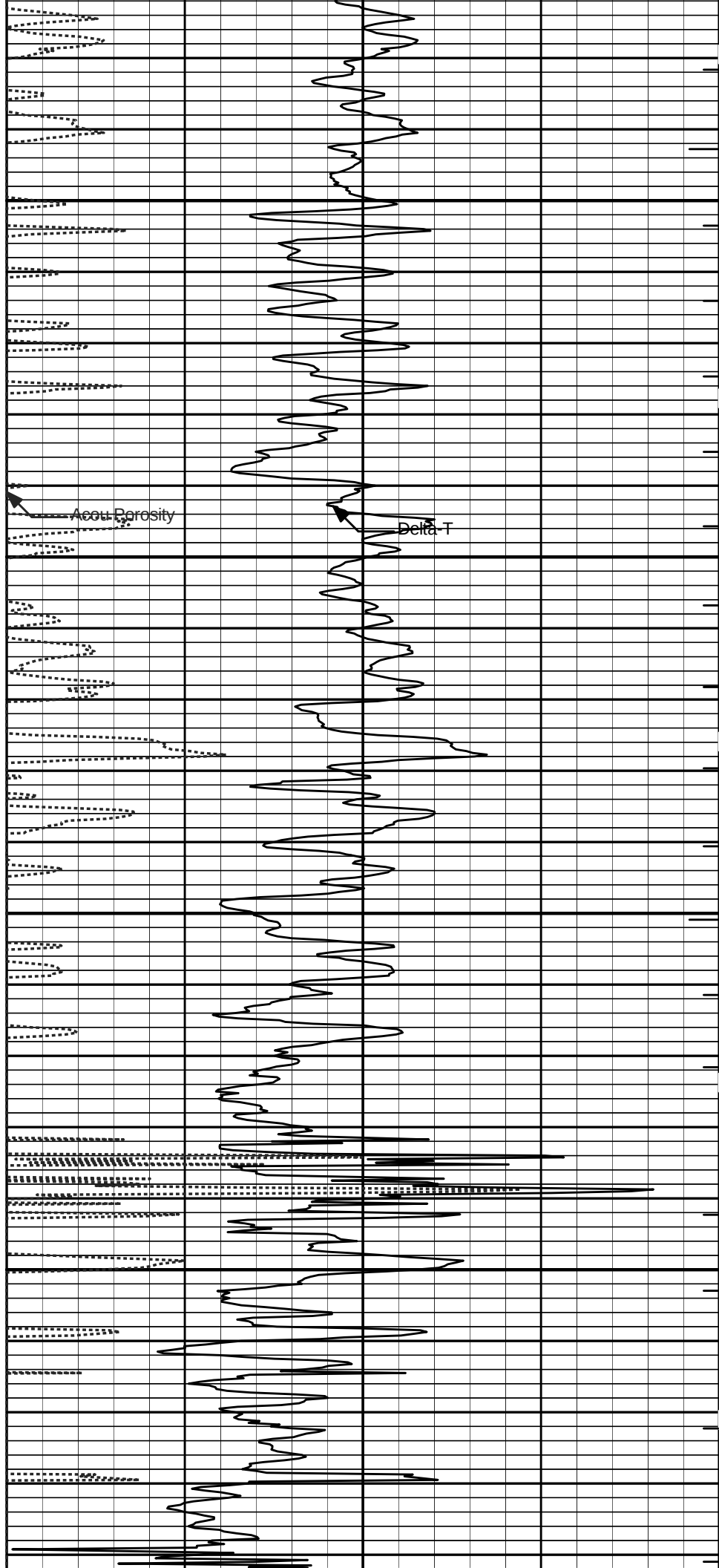
Gamma API

Caliper

Tens

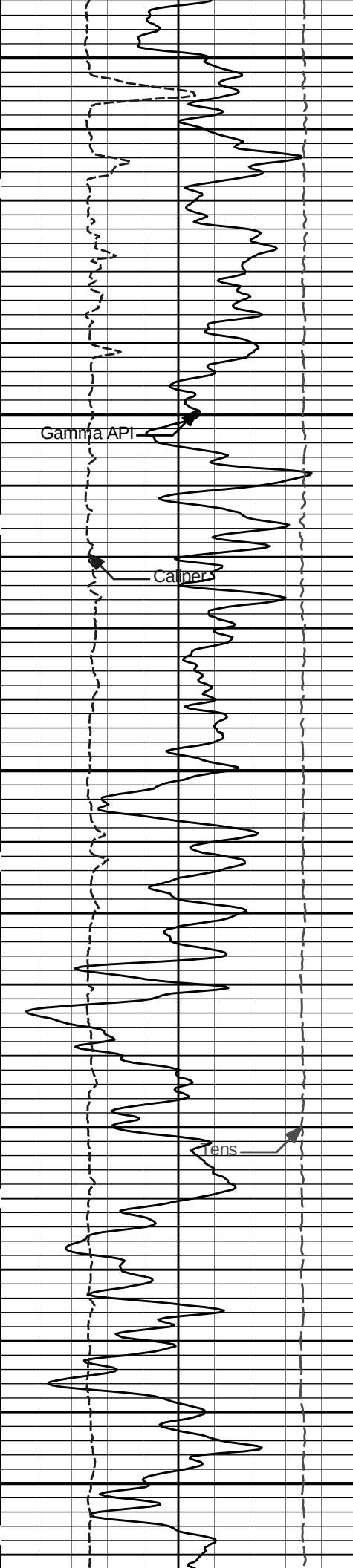
2100

2200



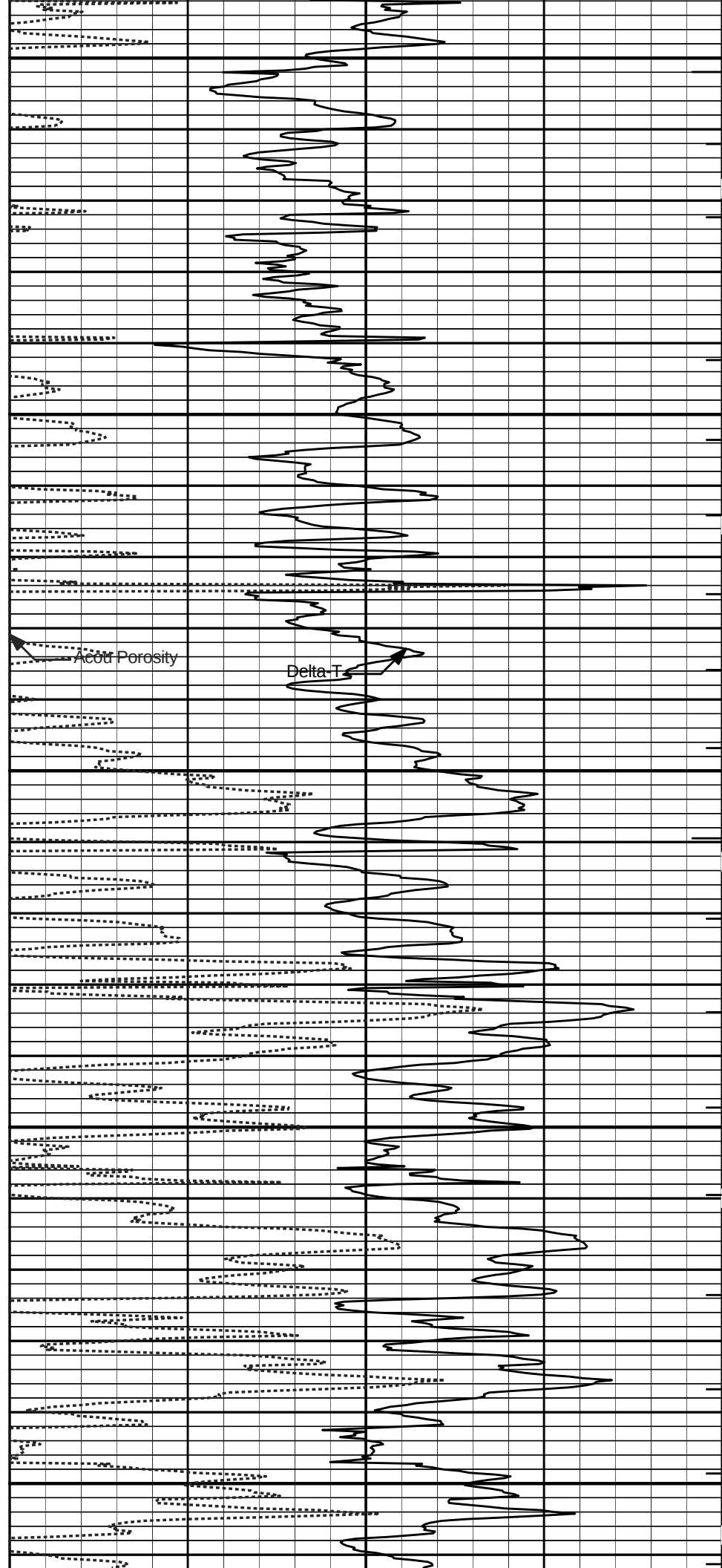
Acoustic Porosity

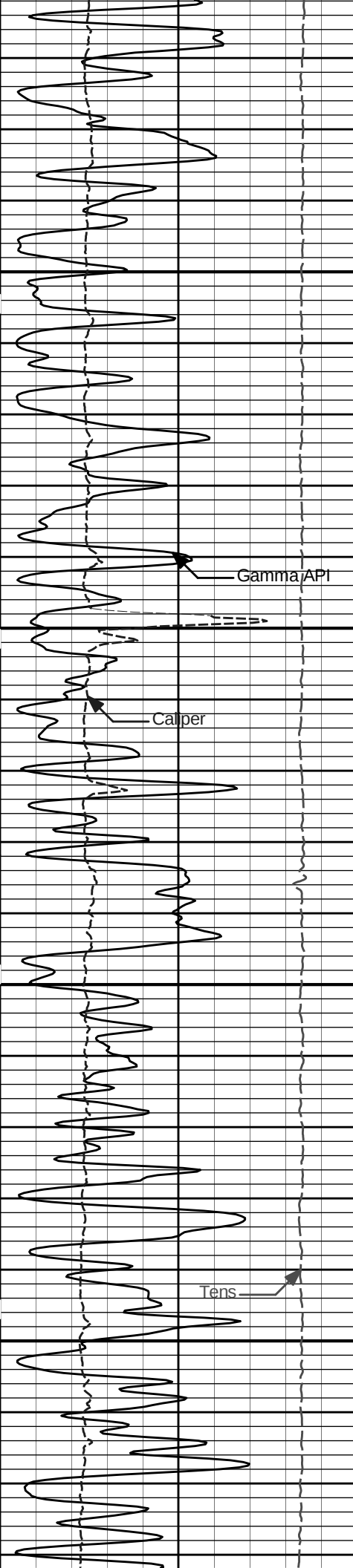
Delta-T



2300

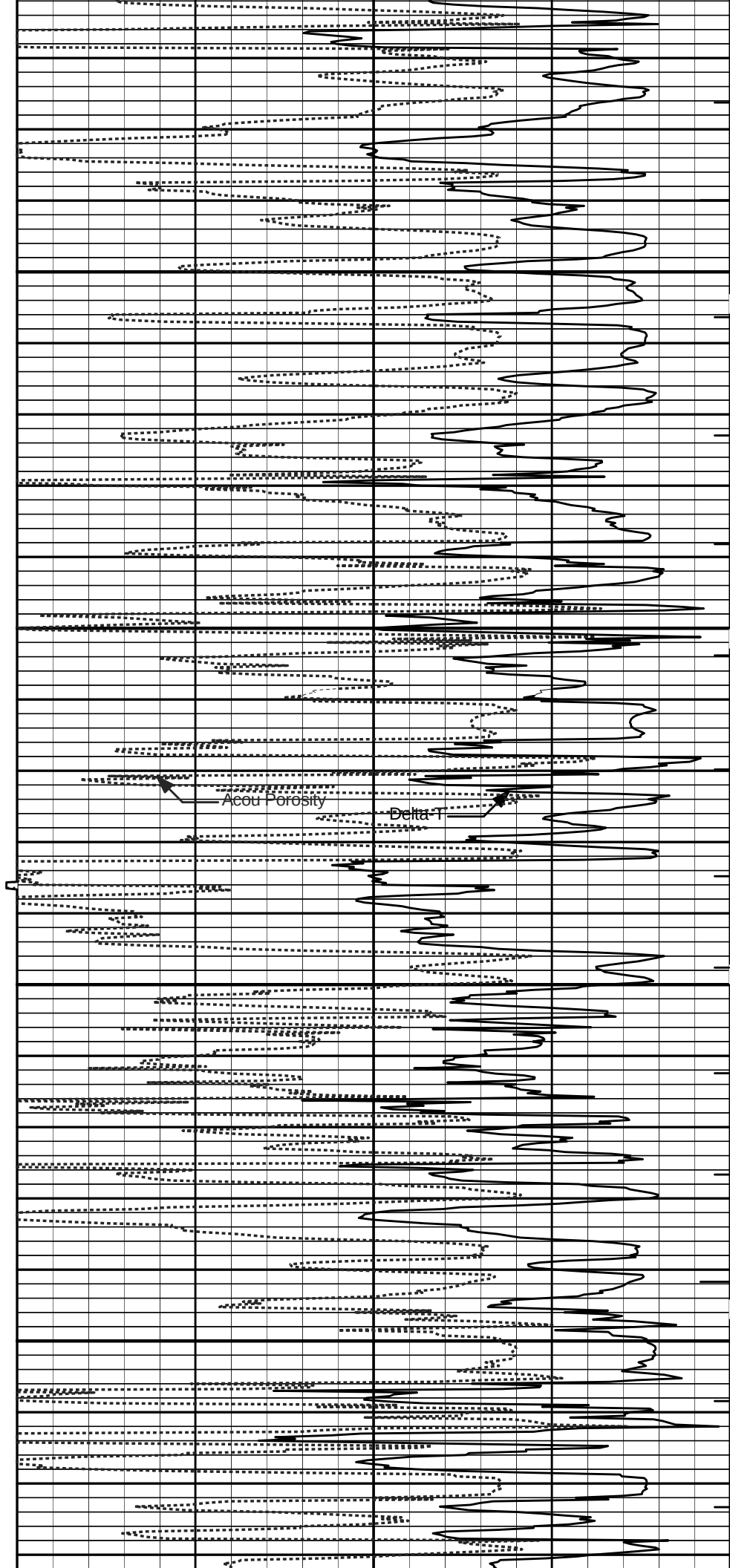
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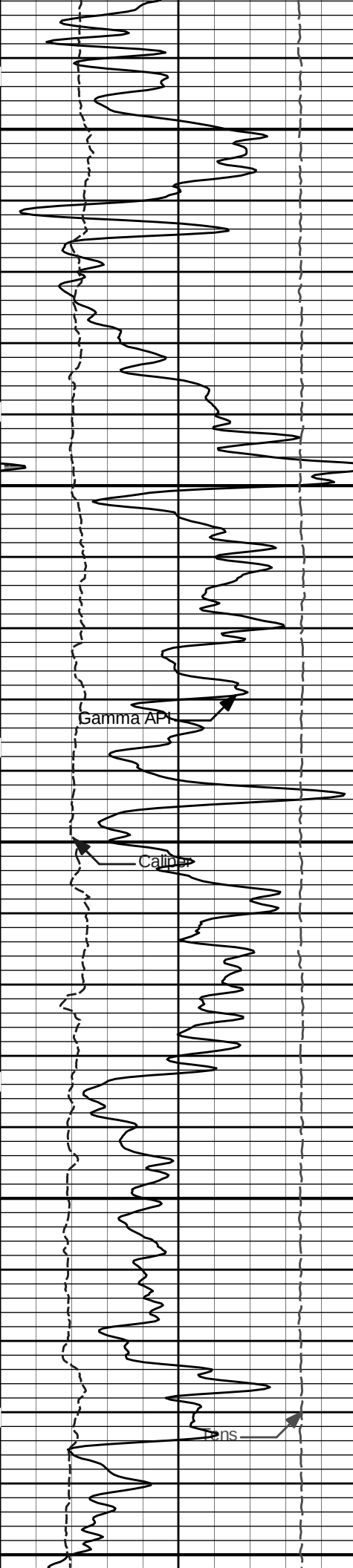




2500

2600

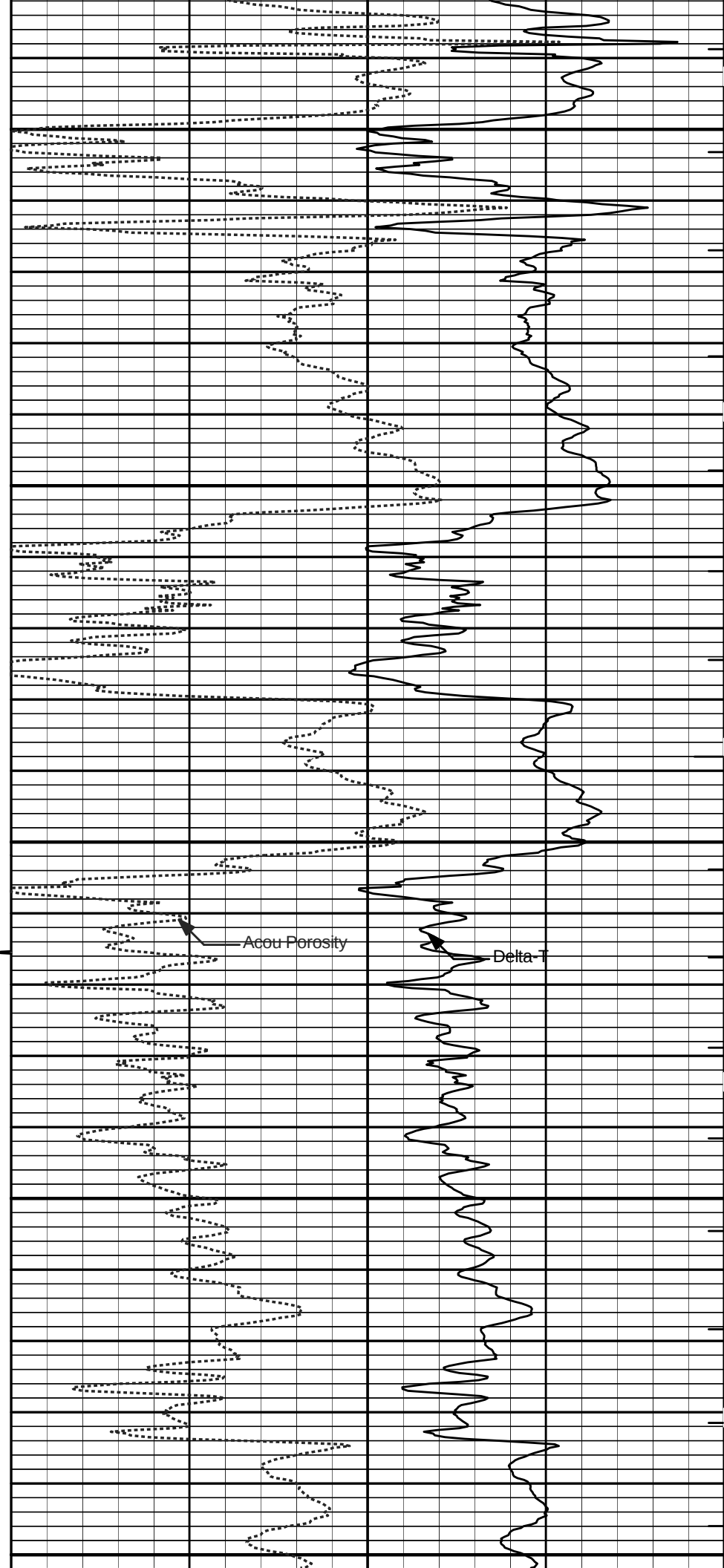


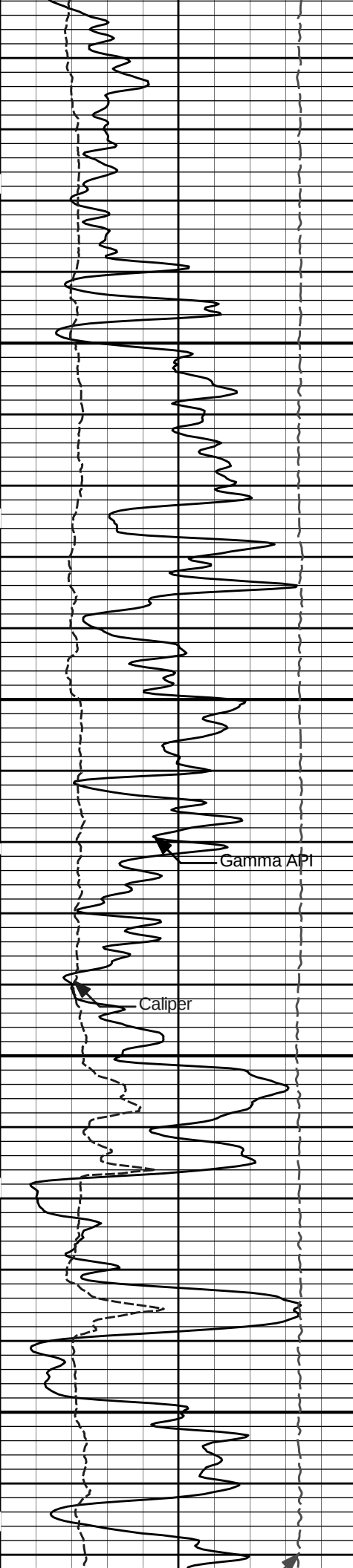


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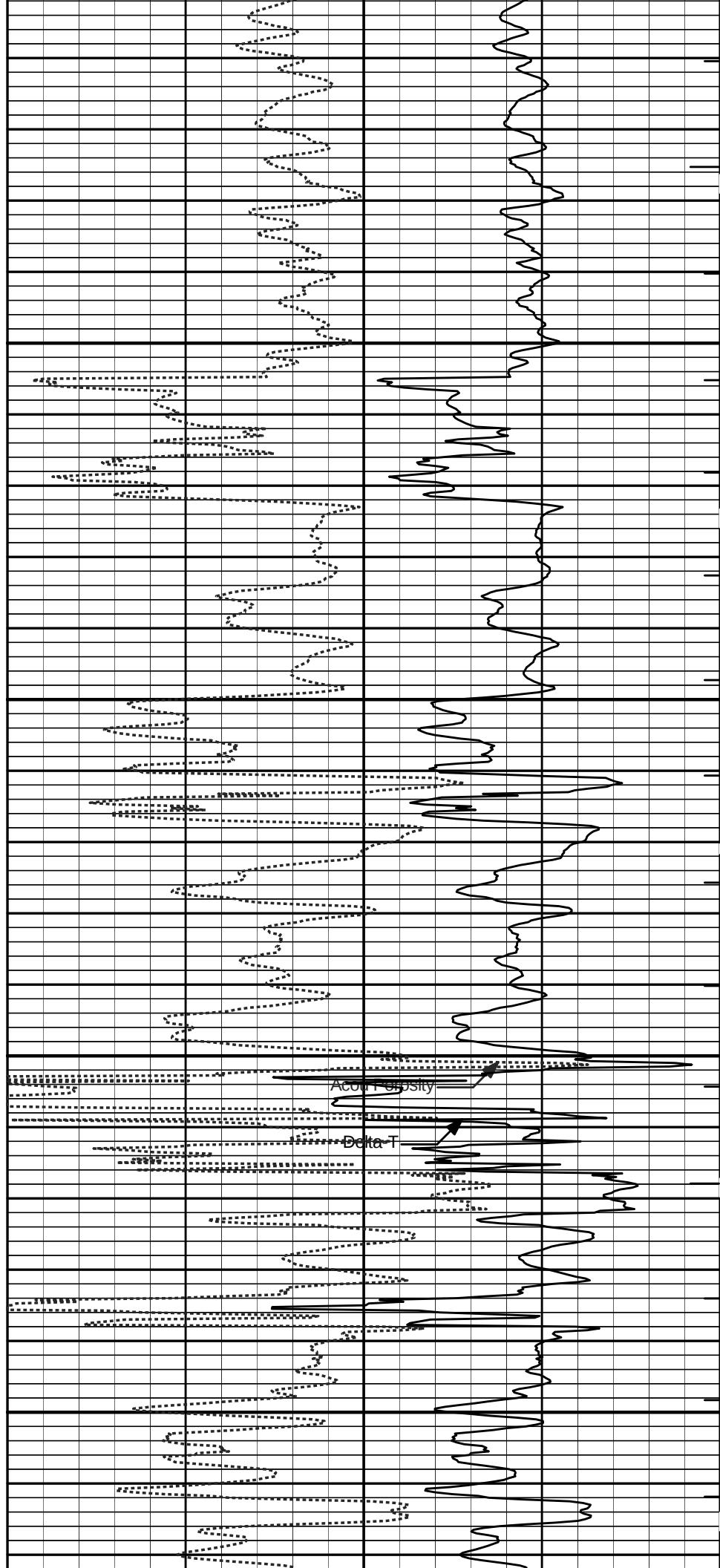
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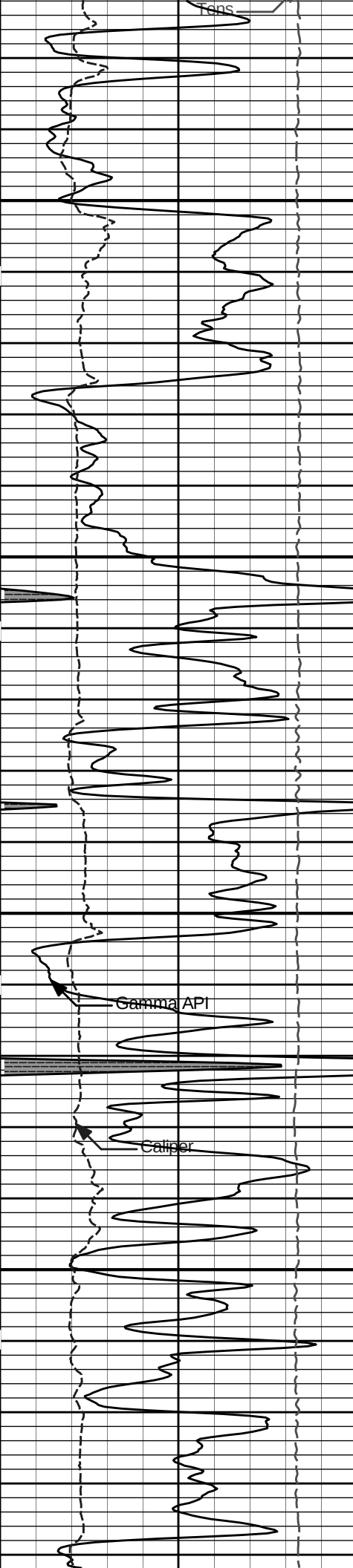




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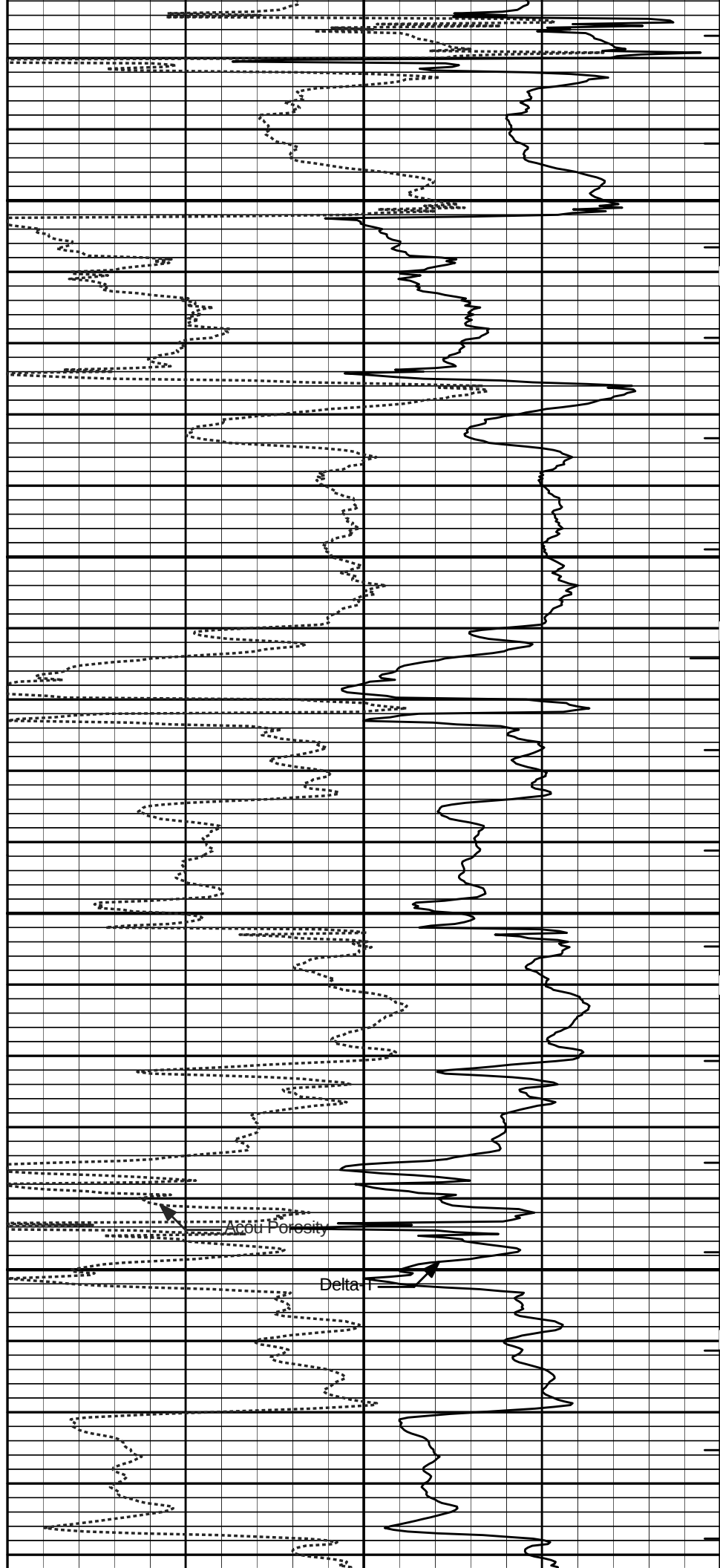
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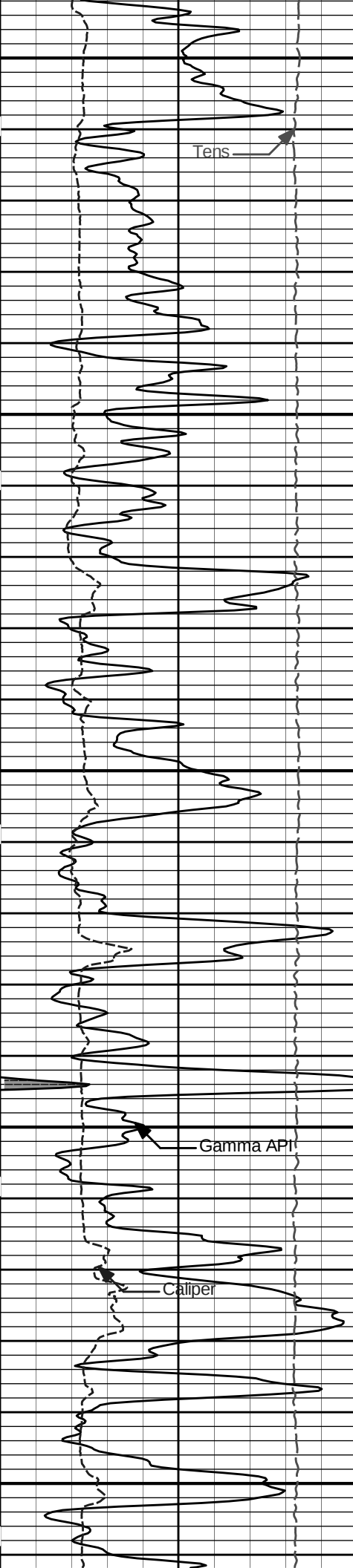




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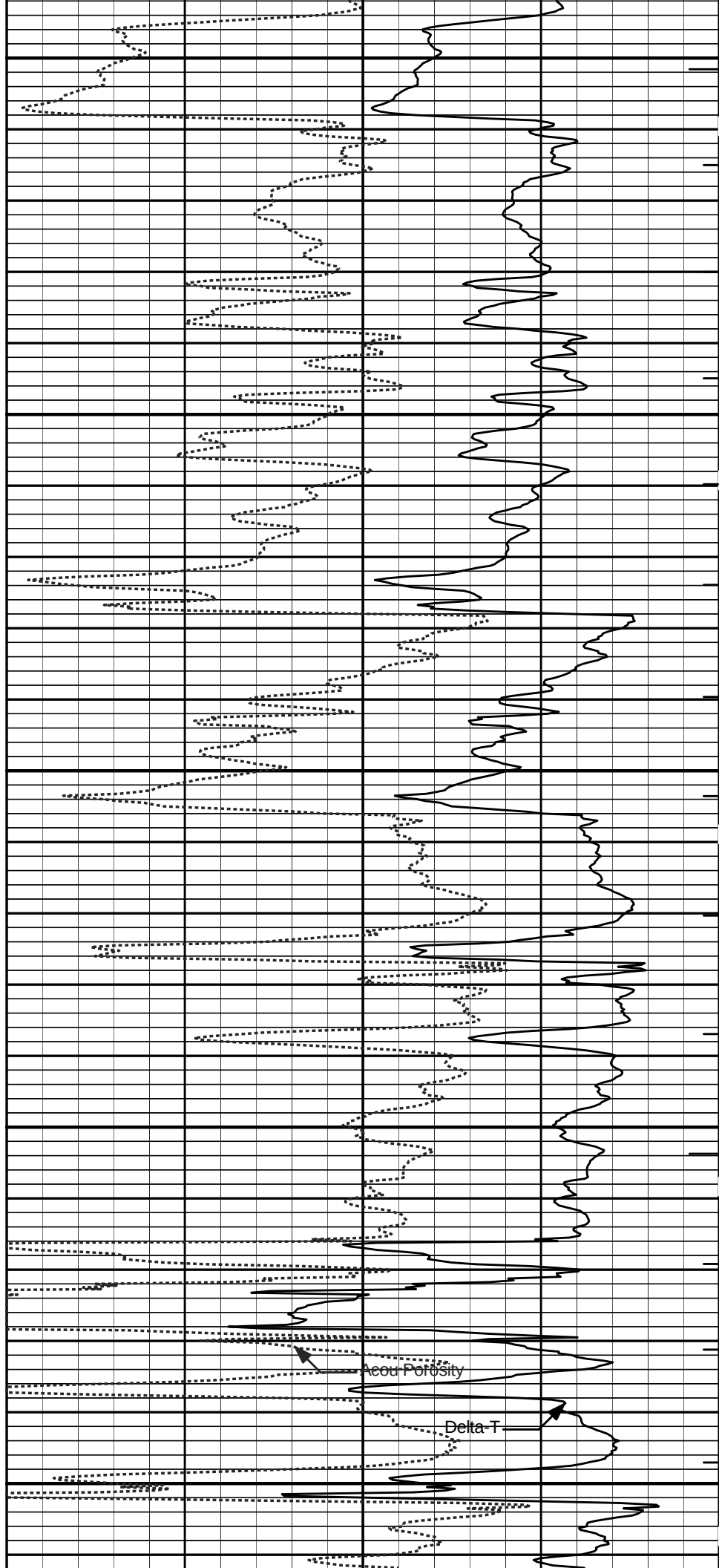
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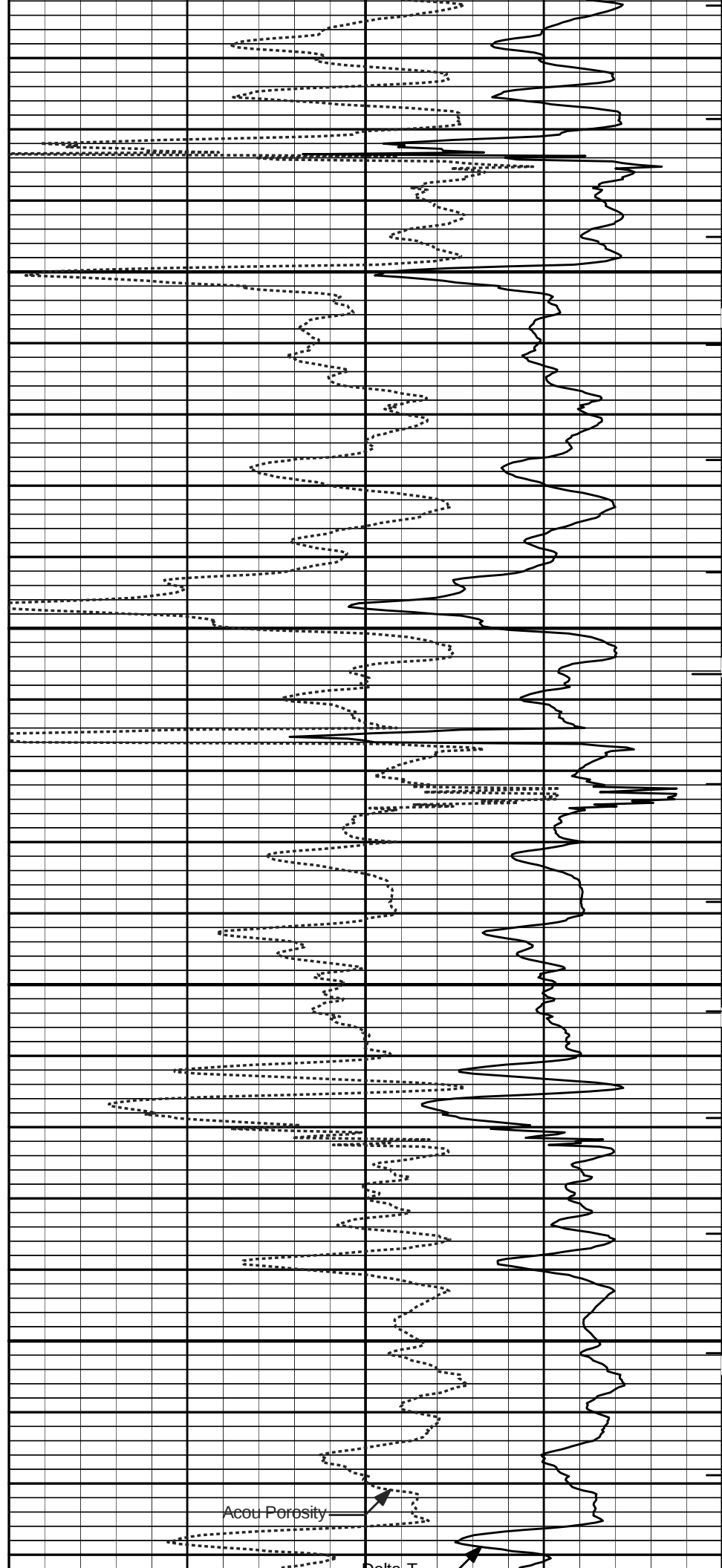
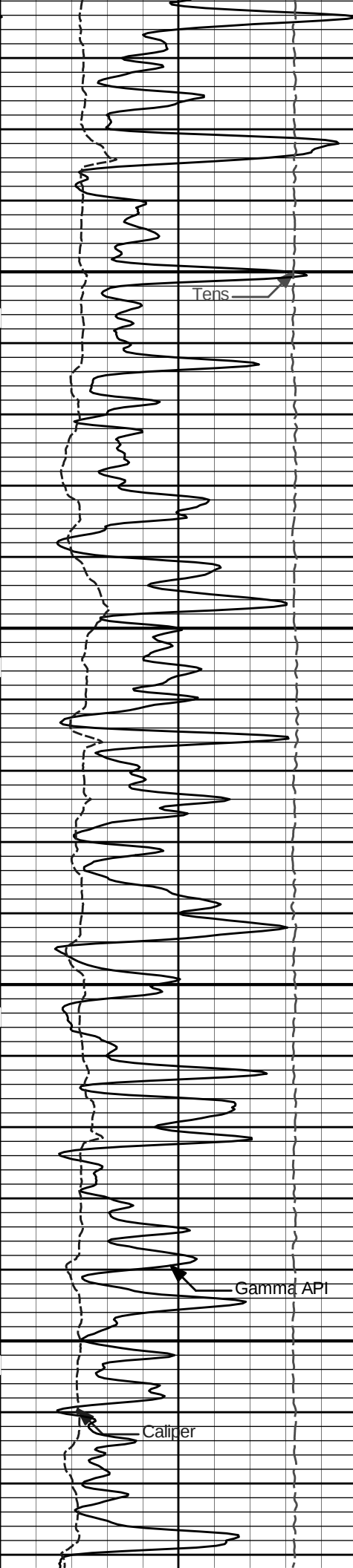


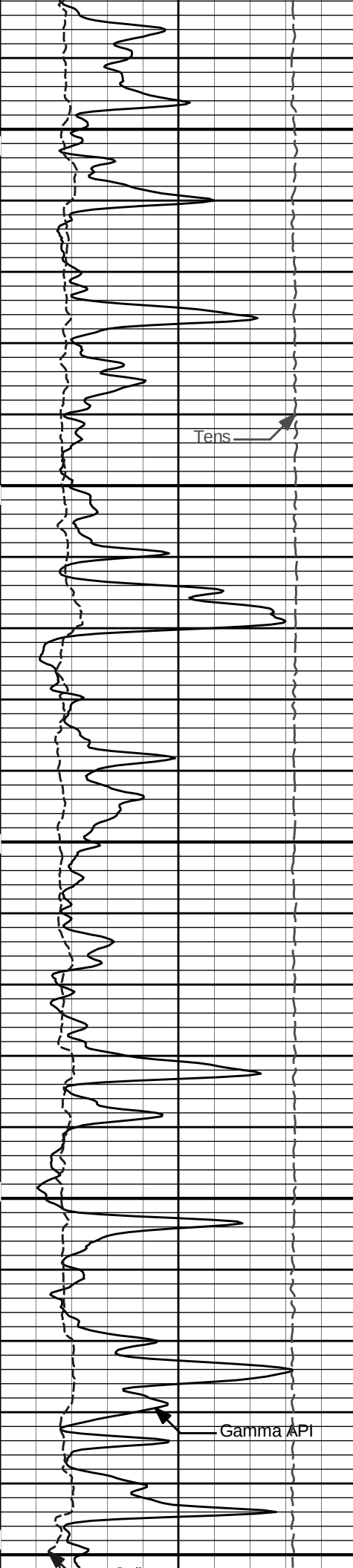


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3500



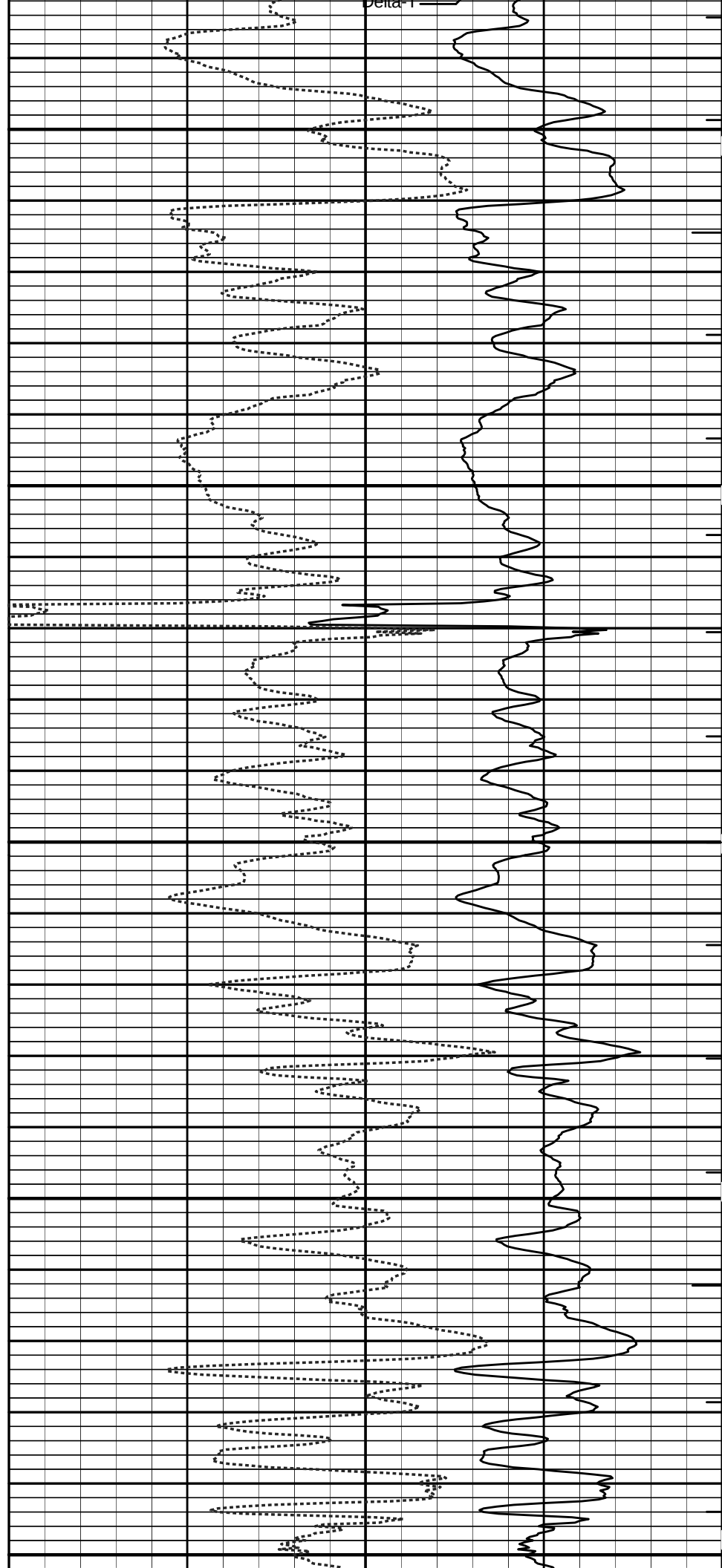


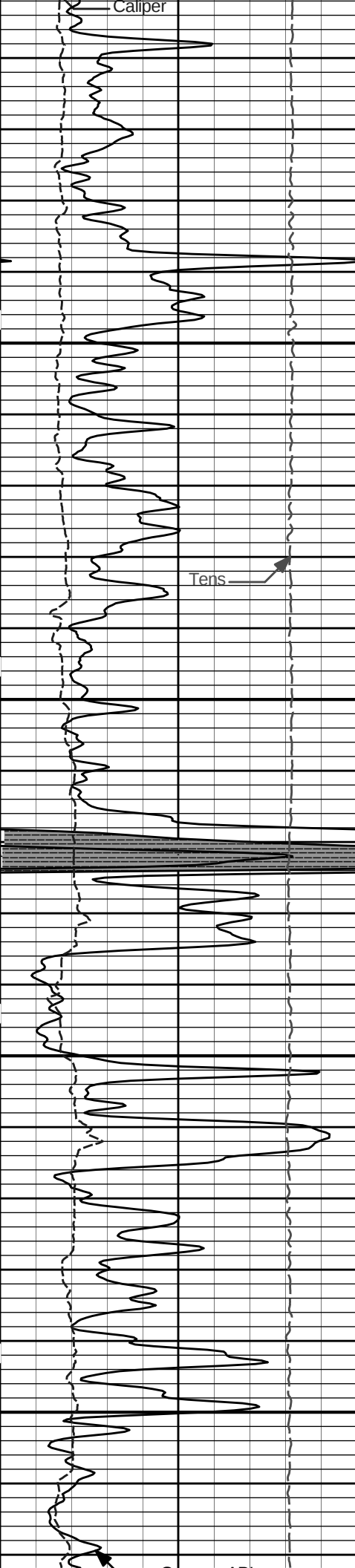


3800

3900

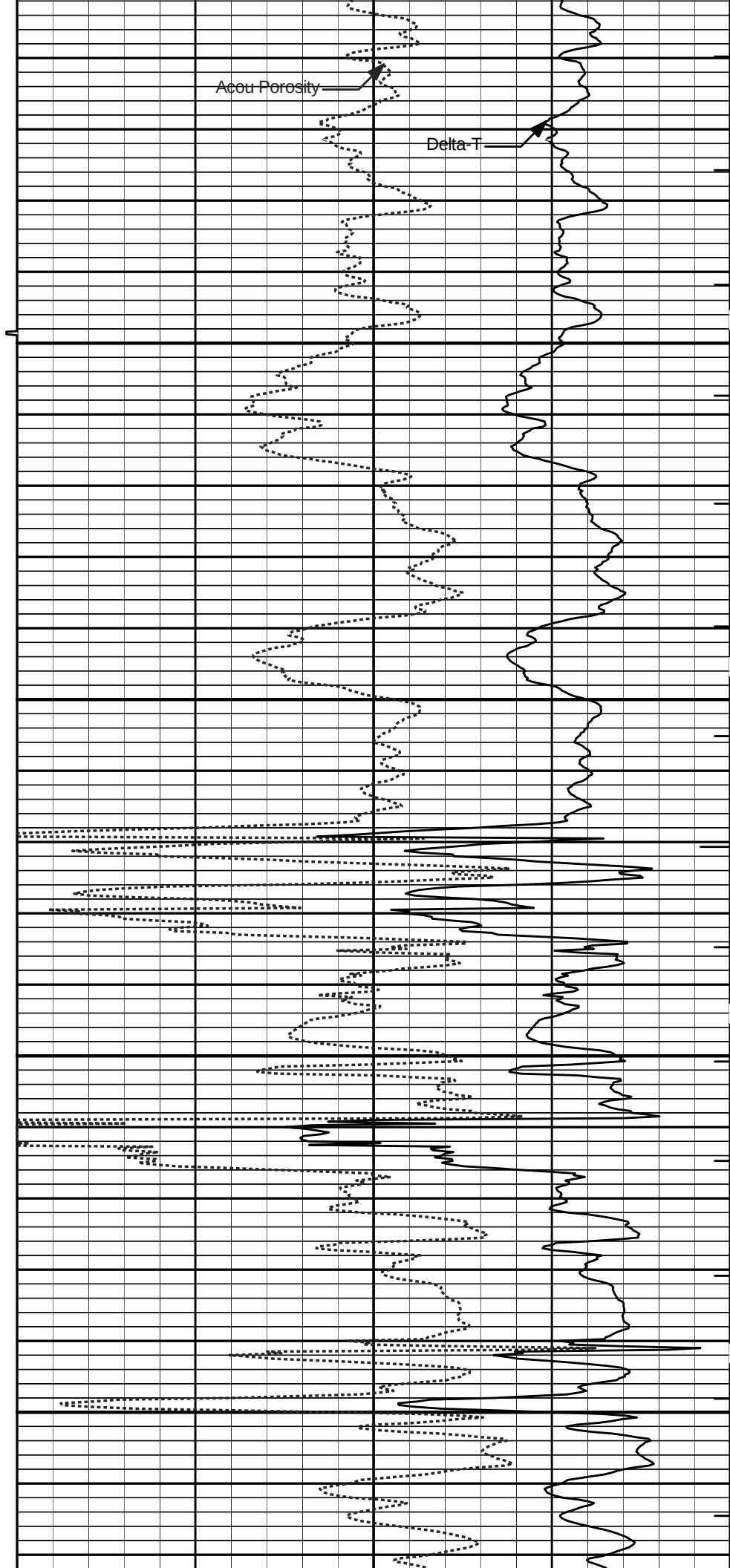
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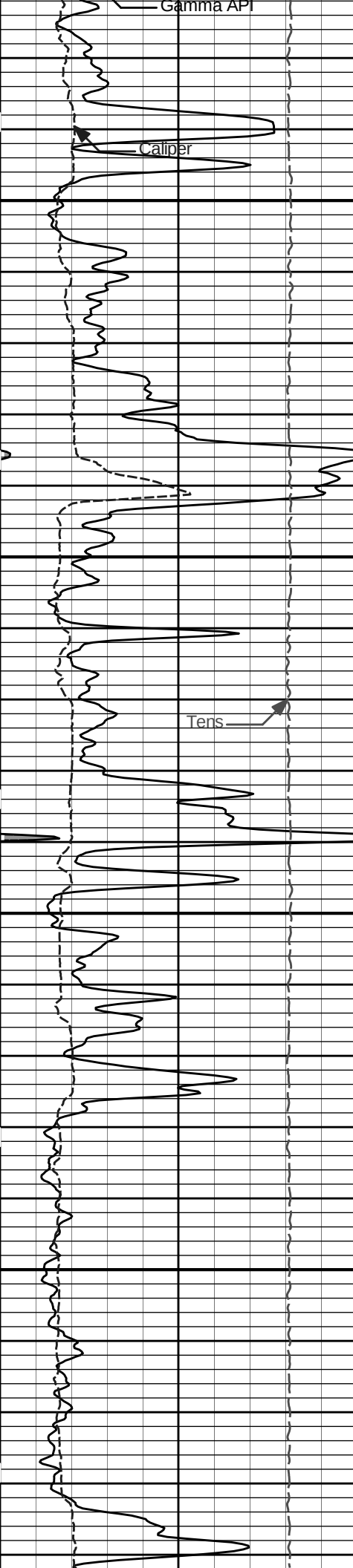




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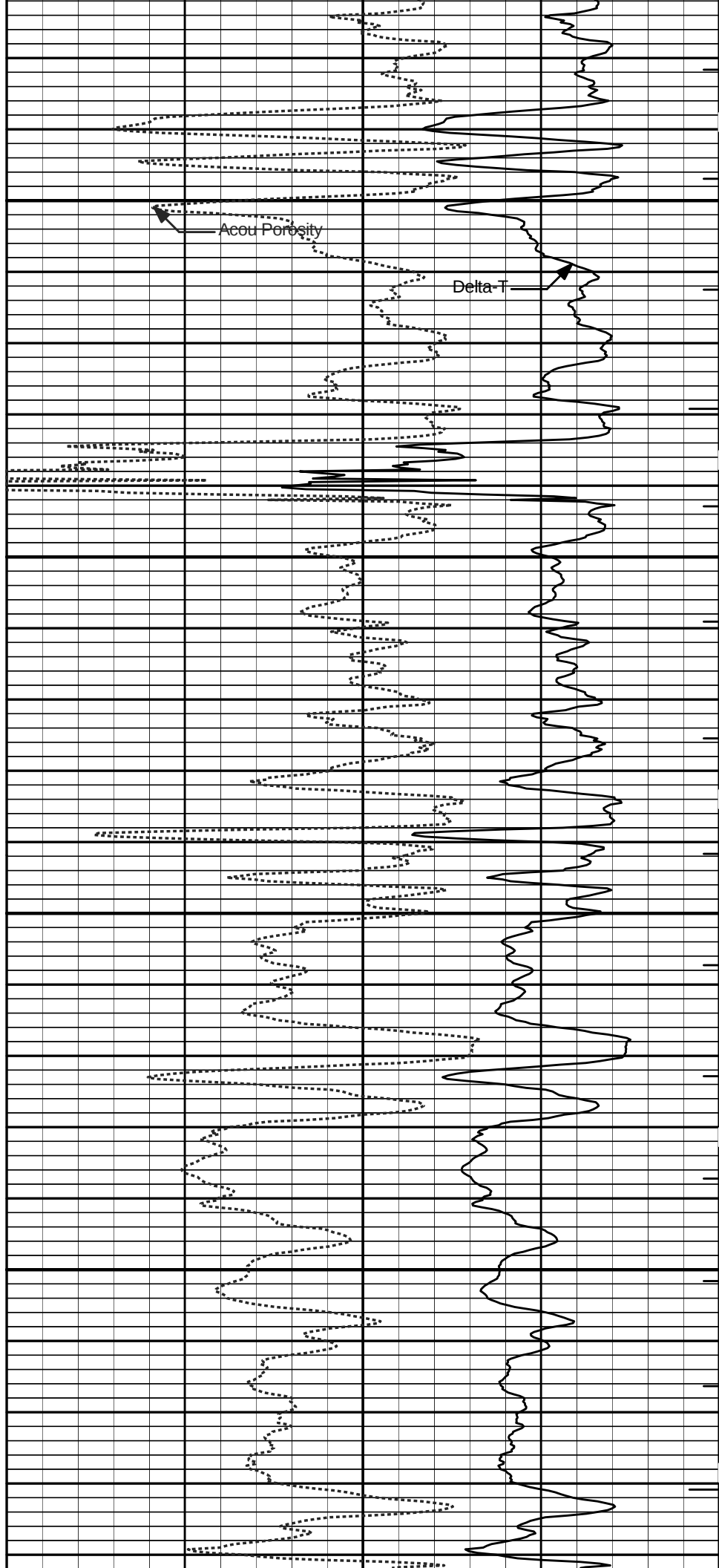
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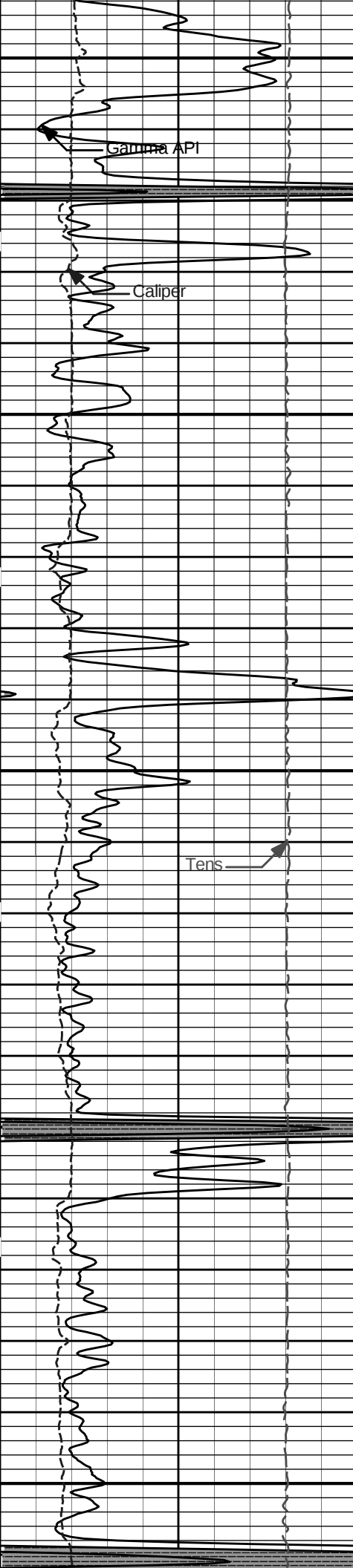




4300

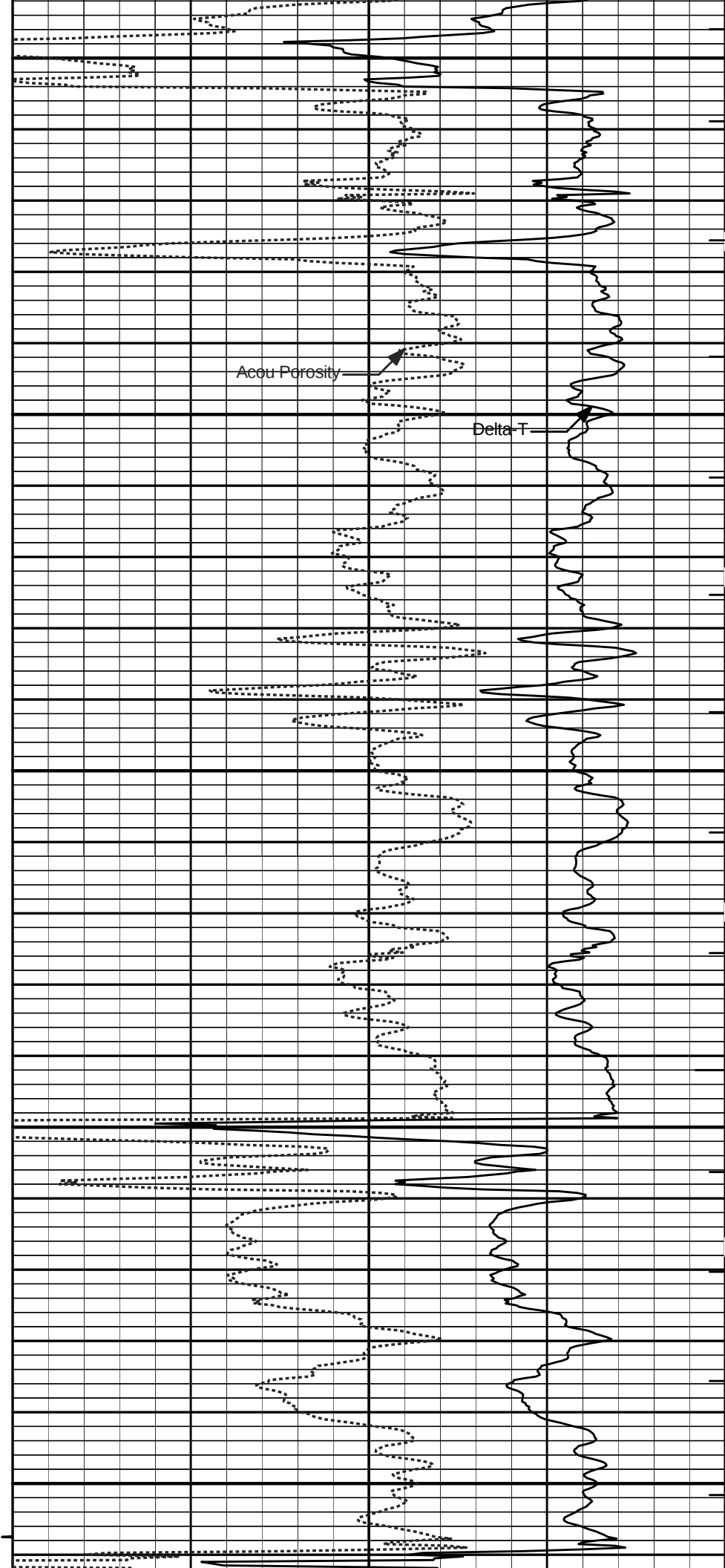
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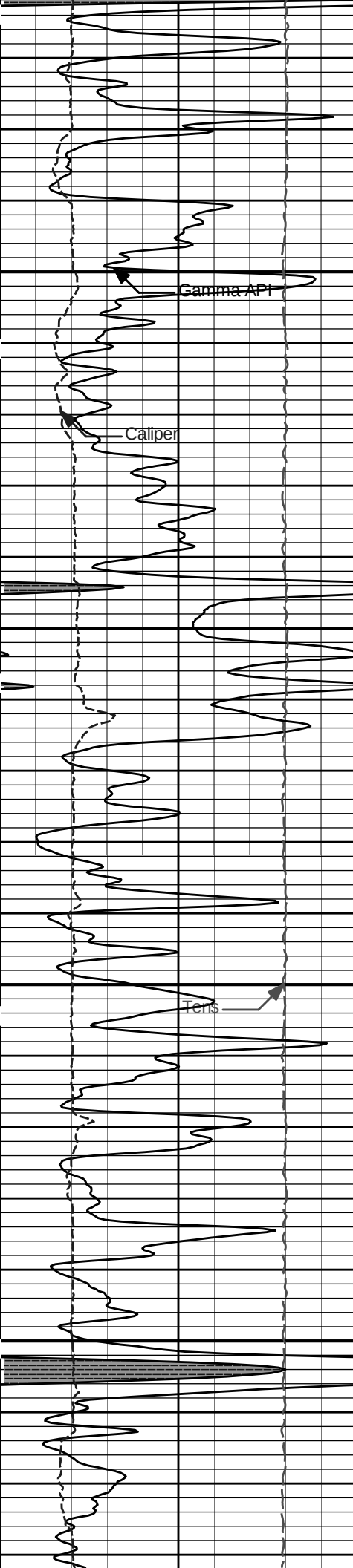




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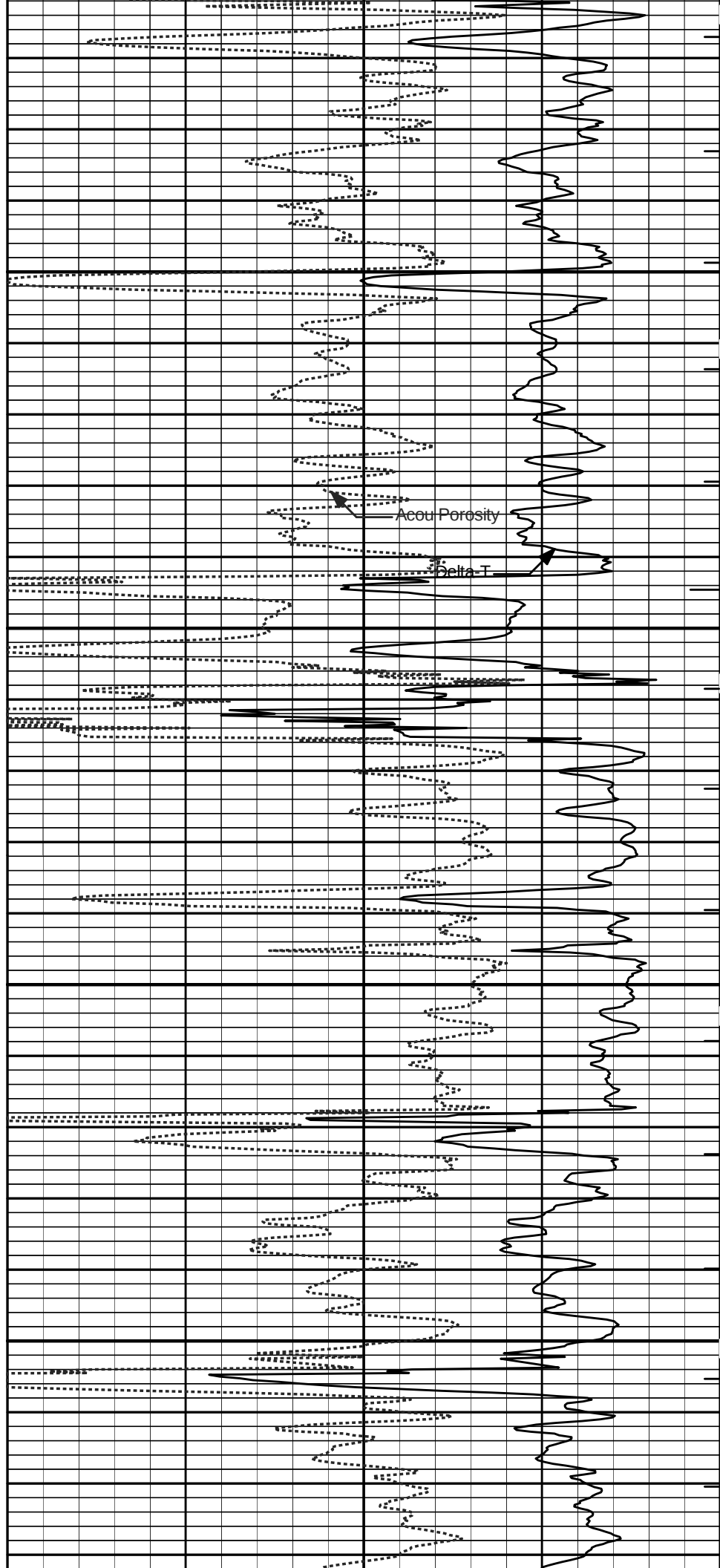
4600





4700

4800

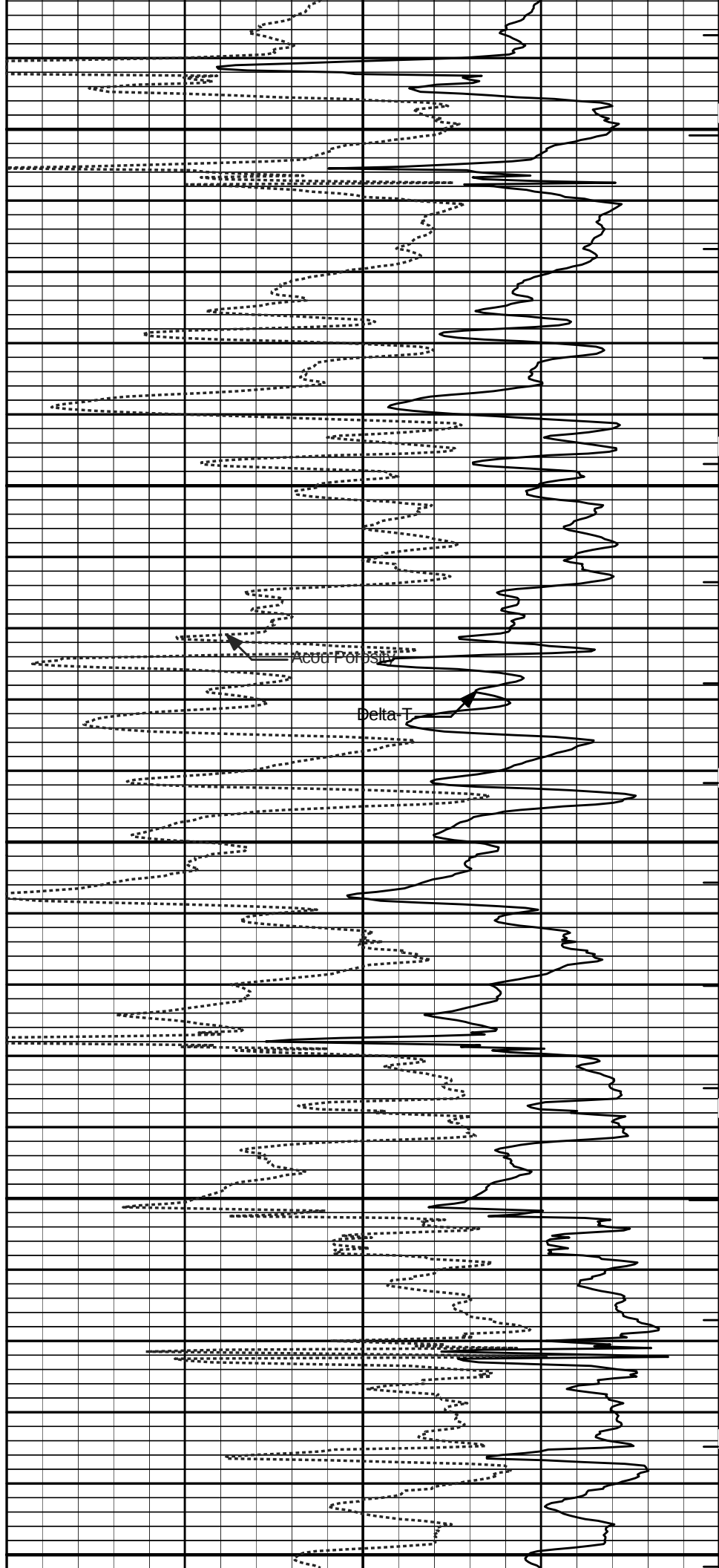




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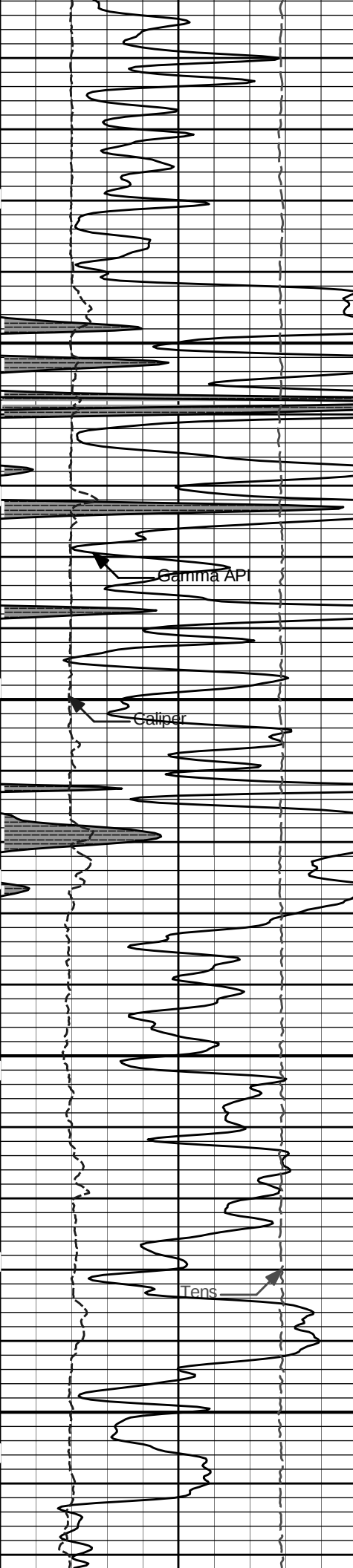
5000

5100



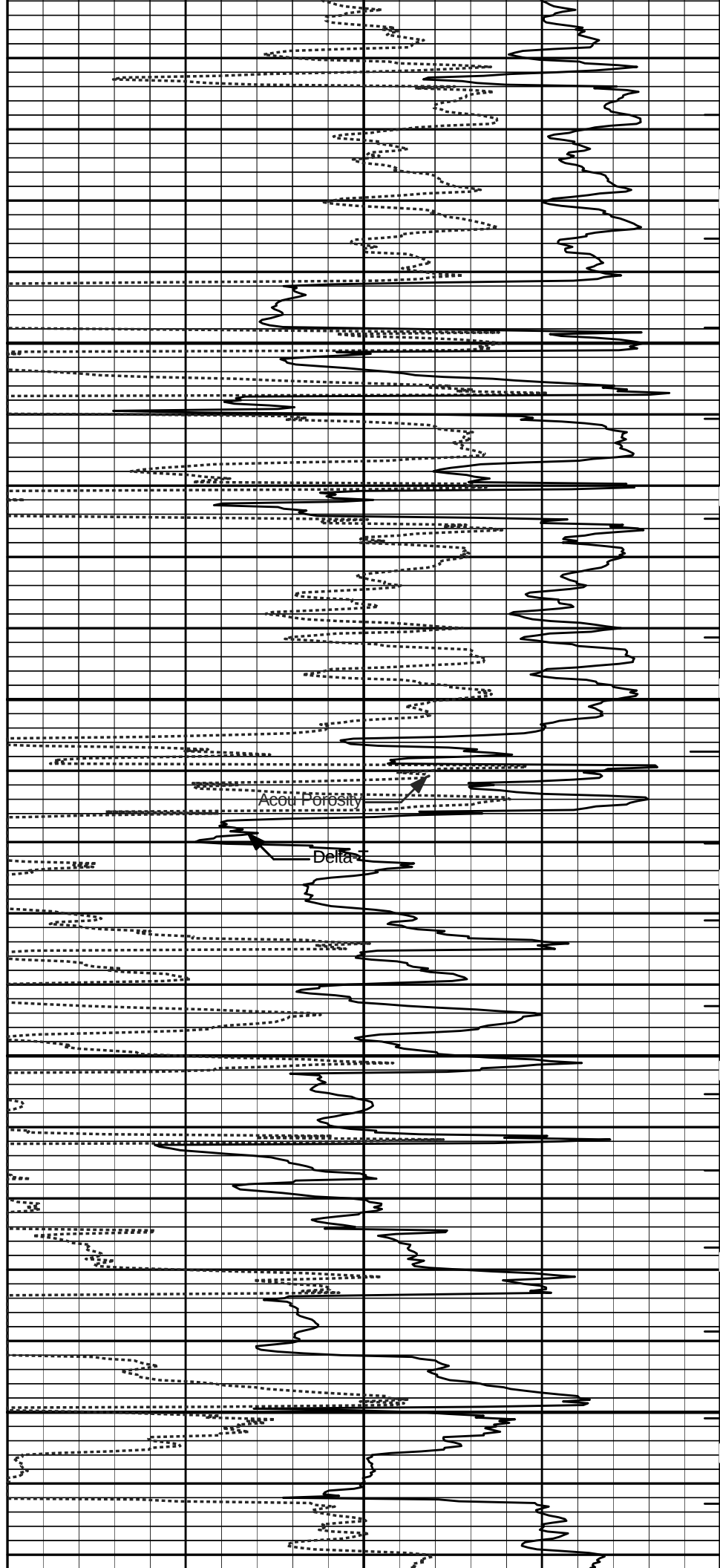
Delta T

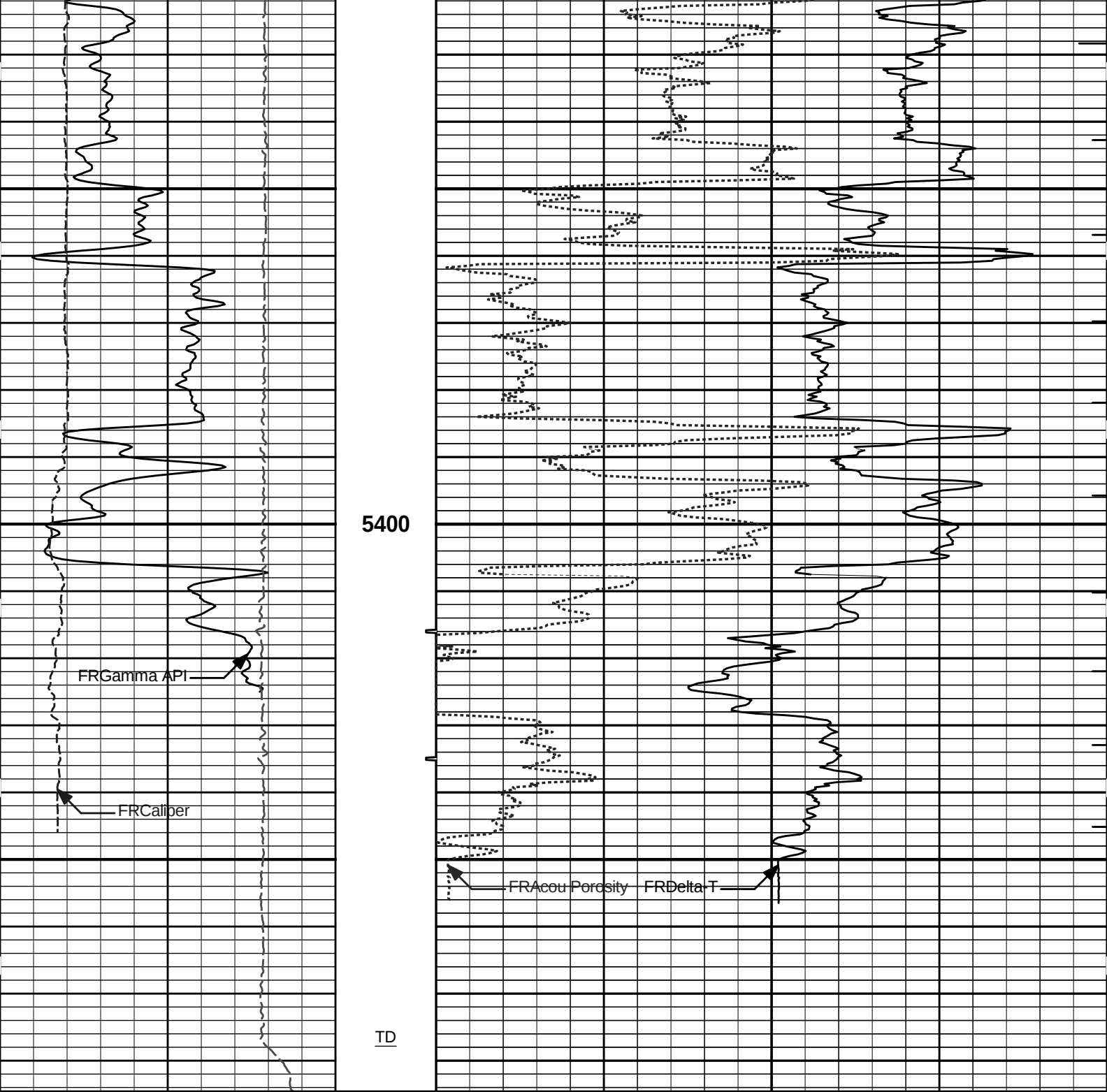
Acid Porosity



5200

5300





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

HALLIBURTON

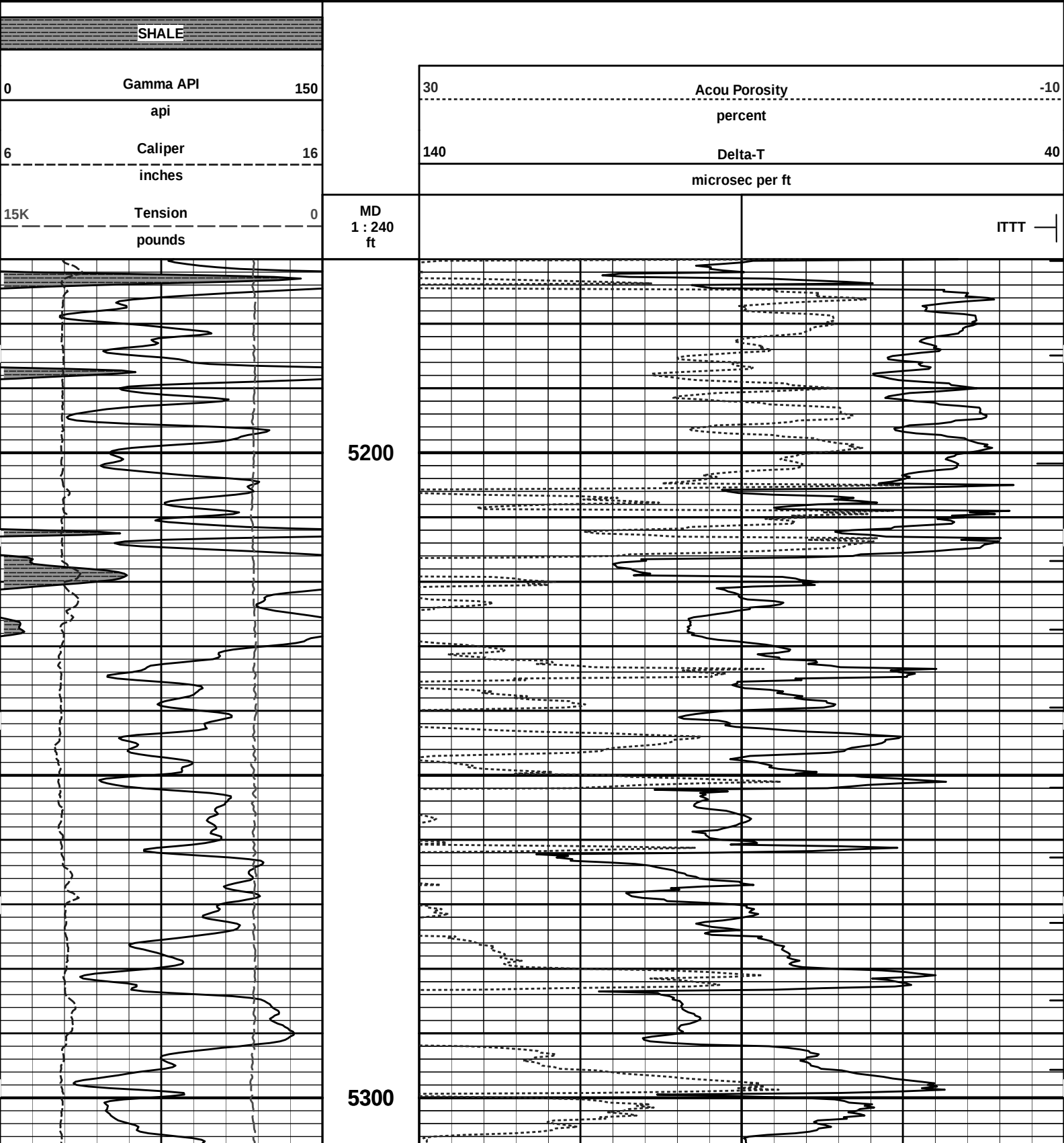
Plot Time: 06-Mar-12 01:16:27
 Plot Range: 1750 ft to 5484.58 ft
 Data: KELLS_H_1\Well Based\CASING\
 Plot File: \\BSAT\BSAT_5_MAIN_LIB

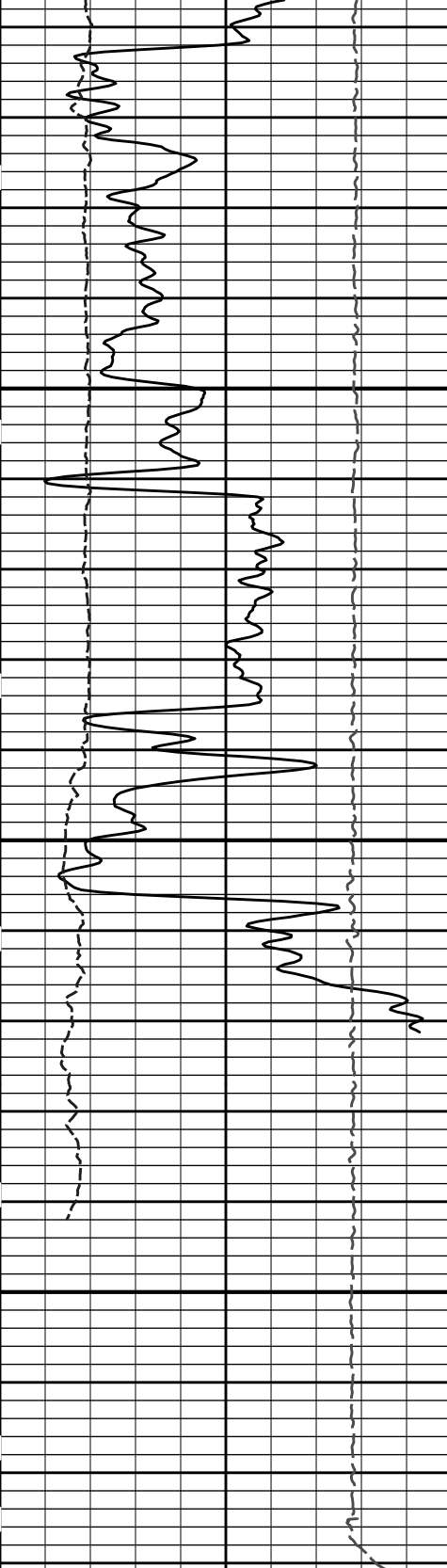
5 INCH MAIN LOG

HALLIBURTON

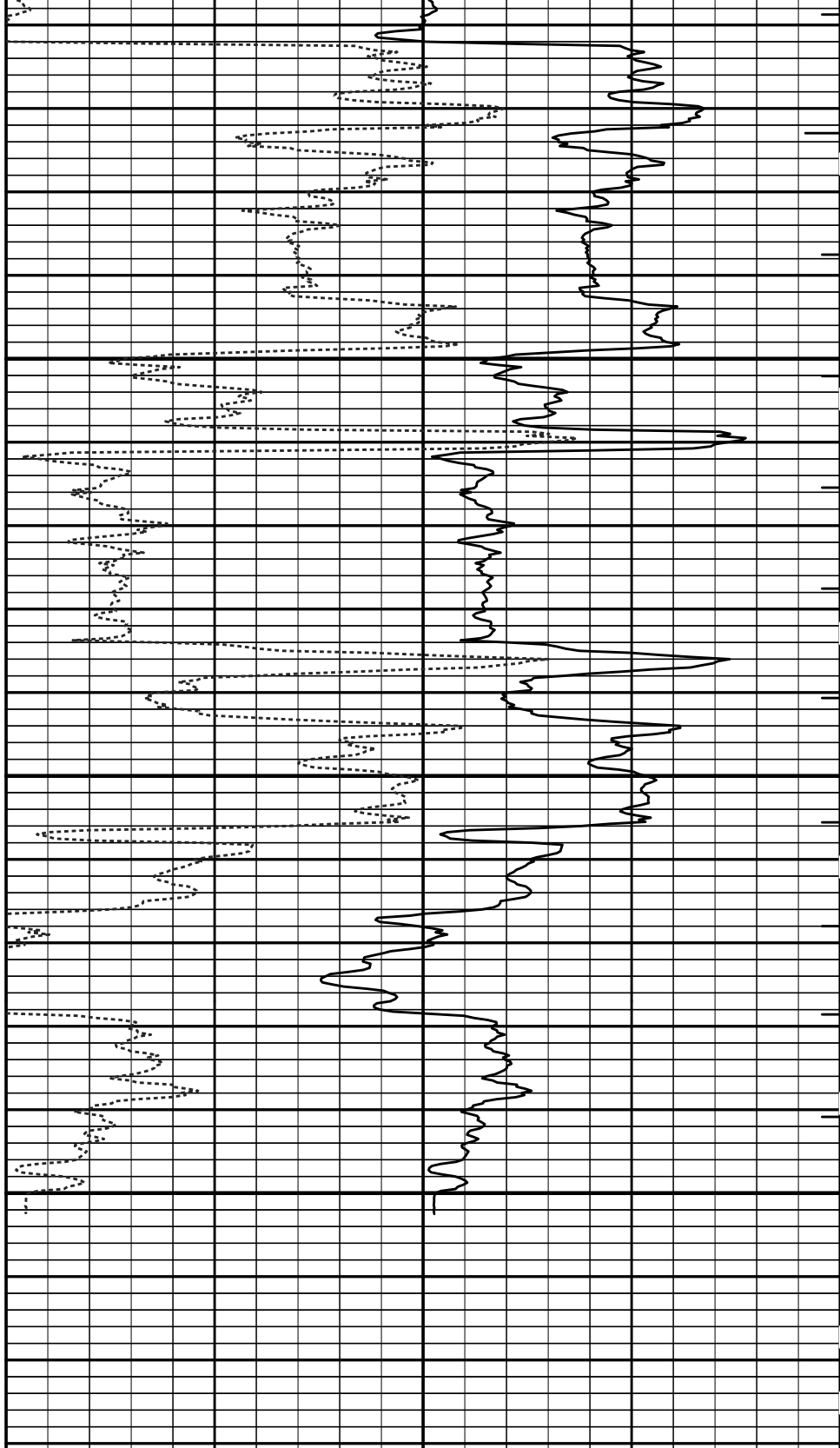
Plot Time: 06-Mar-12 01:16:27
Plot Range: 5170 ft to 5480.75 ft
Data: KELLS_H_1\Well Based\REPEAT\
Plot File: \BSAT\BSAT_5_REP_LIB

REPEAT SECTION





5400



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

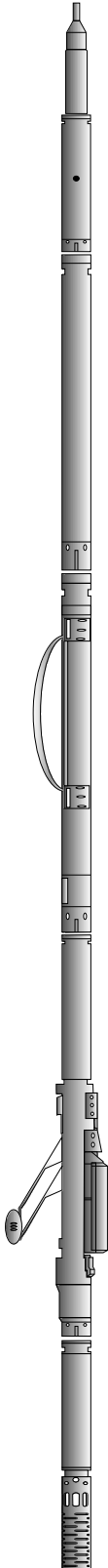
MD
1 : 240
ft

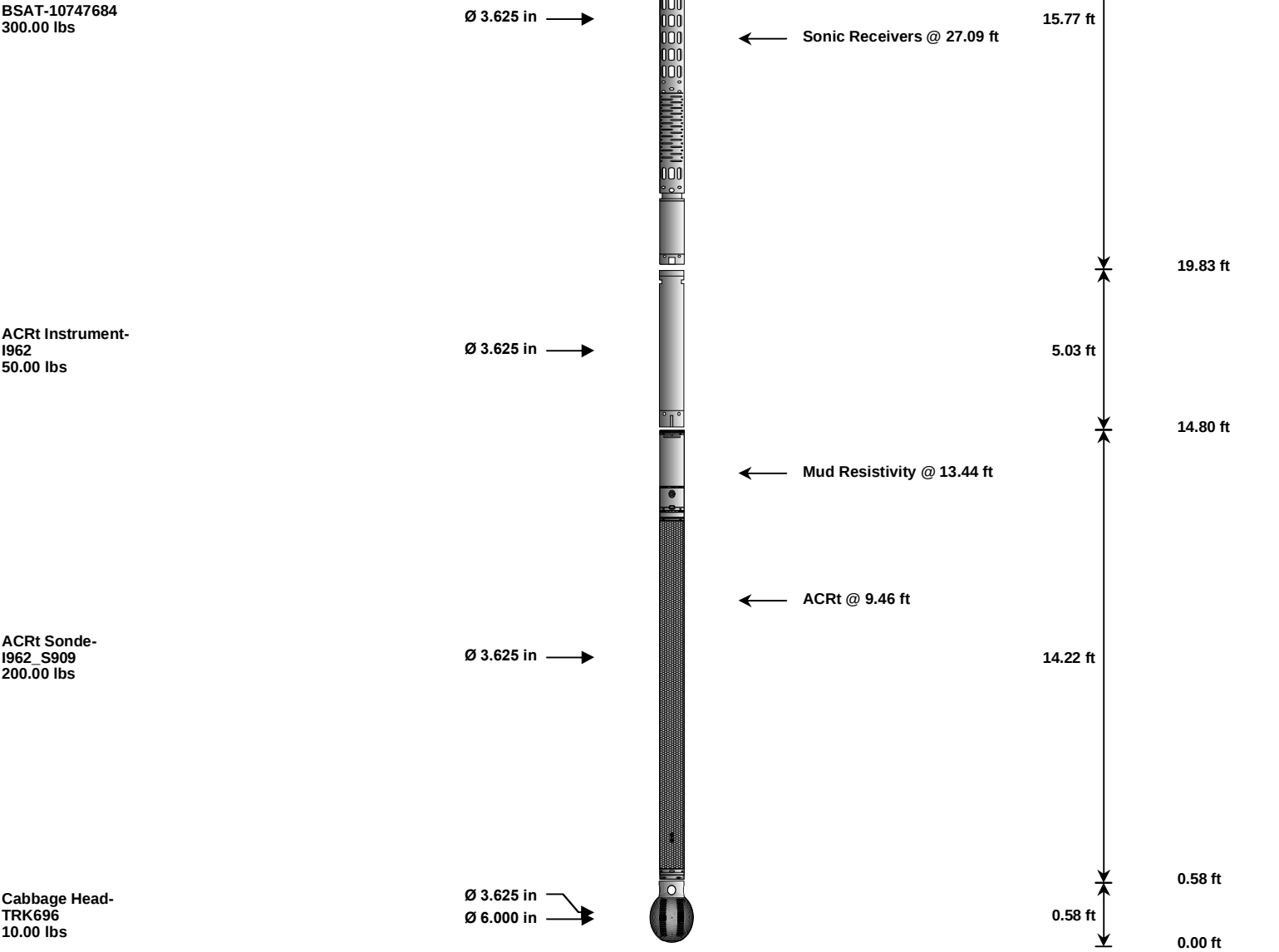
		ITTT —
140	Delta-T	40
	microsec per ft	
30	Acou Porosity	-10
	percent	

REPEAT SECTION

HALLIBURTON

TOOL STRING DIAGRAM REPORT

Description	Overbody Description	O.D.	Diagram	Sensors @ Delays	Length	Accumulated Length
CH_HOS-CH_696 37.50 lbs		Ø 2.750 in →		← Temperature @ 70.36 ft	3.03 ft	71.39 ft
SP Sub-001 60.00 lbs		Ø 3.625 in →		← SP @ 66.59 ft	3.74 ft	68.36 ft
GTET-11039640 165.00 lbs		Ø 3.625 in →		← GammaRay @ 58.56 ft	8.52 ft	64.63 ft
DSNT-11019643 174.00 lbs	DSN Decentralizer-11005605 6.60 lbs	Ø 5.000 in* → Ø 3.625 in →		← DSN Far @ 49.17 ft ← DSN Near @ 48.42 ft	9.69 ft	56.11 ft
SDLT-I43_M469 360.00 lbs	SDLT Pad-P81 65.00 lbs Microlog Pad-M469 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
						35.61 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_696	37.50	3.03	68.36	300.00
SP	SP Sub	001	60.00	3.74	64.63	300.00
GTET	Gamma Telemetry Tool	11039640	165.00	8.52	56.11	60.00
DSNT	Dual Spaced Neutron	11019643	174.00	9.69	46.42	60.00
DCNT	DSN Decentralizer	11005605	6.60	5.13	* 49.75	300.00
SDLT	Spectral Density Tool	I43_M469	360.00	10.81	35.61	60.00
MICP	Microlog Pad	M469	8.00	1.00	* 38.11	60.00
SDLP	Density Insite Pad	P81	65.00	2.55	* 37.82	60.00
BSAT	Borehole Sonic Array Tool	10747684	300.00	15.77	19.83	60.00
ACRt	Array Compensated True Resistivity Instrument Section	I962	50.00	5.03	14.80	300.00
ACRt	Array Compensated True Resistivity	I962_S909	200.00	14.22	0.58	300.00
CBHD	Cabbage Head	TRK696	10.00	0.58	0.00	300.00

Total	1,436.10	71.39
* Not included in Total Length and Length Accumulation.		
Data: KELLS_H_1I0001 SP-GTET-DSN-SDL-BSAT-ACRT-CHIDLE		
Date: 05-Mar-12 18:51:41		

HALLIBURTON

CALIBRATION REPORT

NATURAL GAMMA RAY TOOL SHOP CALIBRATION

Tool Name:	GTET - 11039640	Reference Calibration Date:	22-Feb-12 07:32:04
Engineer:	C. MARLOWE	Calibration Date:	22-Feb-12 20:28:49
Software Version:	WL INSITE R3.4.2 (Build 2)	Calibration Version:	1

Calibrator Source S/N: TB146
Calibrator API Reference:265.00 api
Equivalent Calibrator API Reference:269.6 api

Measurement	Measured	Calibrated	Units
Background	48.5	48.8	api
Background + Calibrator	316.6	318.4	api
Calibrator	268.1	269.6	api

NATURAL GAMMA RAY TOOL FIELD CALIBRATION			
Tool Name:	GTET - 11039640	Reference Calibration Date:	22-Feb-12 20:28:49
Engineer:	J. BOLLUM	Calibration Date:	05-Mar-12 18:18:43
Software Version:	WL INSITE R3.4.2 (Build 2)	Calibration Version:	1

Calibrator Source S/N: TB146
Calibrator API Reference:265.00 api
Equivalent Calibrator API Reference:269.6 api

Field Verification	Shop	Field	Units
Background	48.8	52.9	api
Background + Calibrator	318.4	321.3	api
Calibrator	269.6	268.4	api

Shop	Field	Difference	Tolerance
269.6	268.4	1.2	+/- 9.00

DUAL SPACED NEUTRON SHOP CALIBRATION			
Tool Name:	DSNT - 11019643	Reference Calibration Date:	16-Feb-12 08:54:03
Engineer:	C.PARKER	Calibration Date:	16-Feb-12 09:05:04
Software Version:	WL INSITE R3.4.2 (Build 2)	Calibration Version:	1

Logging Source S/N: 696
Tank Serial Number: LIBERAL_NEUTRON
Reference value assigned to Tank: 51.680
Snow Block S/N: 696
Calibration Tank Water Temperature: 62 degF
Min. Tool Housing Outside Diameter: 3.625 in

CALIBRATION CONSTANTS			
Measurement	Prev. Value	New Value	Control Limit On New Value
Gain:	0.955	0.956	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):	0.2107	0.2110	0.0002	+/- 0.0020
Calibrated Ratio:	9.72	9.73	0.007	+/- 0.050

VERIFIER		
Measurement	Value	Control Limit
Snow-Block Porosity (decp):	0.0734	0.02000 - 0.09000

PACKING SUMMARY		
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PASS/FAIL SUMMARY				
Background Check:		Passed		
Gain-Range Check:		Passed		
Snow-Block Check:		Passed		
DUAL SPACED NEUTRON FIELD CALIBRATION				
Tool Name:	DSNT - 11019643	Reference Calibration Date:	16-Feb-12 09:05:04	
Engineer:	J. BOLLUM	Calibration Date:	05-Mar-12 18:24:07	
Software Version:	WL INSITE R3.4.2 (Build 2)	Calibration Version:	1	
Logging Source S/N: 696				
Snow Block S/N: 696				
NEUTRON FIELD-CHECK SUMMARY				
	Shop	Field	Difference	Control Limit On Change
Snow-Block Porosity (decp):	0.0734	0.0600	-0.0134	+/- 0.0150
PASS/FAIL SUMMARY				
Block Change Check:		Passed		
Snow Block Stat Check:		Passed		
Temperature Check:		Passed		
DENSITY CALIPER SHOP CALIBRATION				
Tool Name:	SDLT - I43_M469	Reference Calibration Date:	16-Feb-12 10:03:14	
Engineer:	C.PARKER	Calibration Date:	16-Feb-12 10:07:31	
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	-1784.89	-1917.62	-7000.00 - -1000.00	
Pad Gain	0.0003910	0.0003971	0.000200 - 0.000600	
Arm Offset	-330.31	-137.08	-5000.00 - 3000.00	
Arm Gain	0.0005187	0.0005069	0.000300 - 0.000700	
Arm Power	-0.000006098	-0.000005316	-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)	2.02	2.00	-0.02	+/- 0.20
Medium Ring (in)	3.74	3.75	0.01	+/- 0.20
RING DIAMETER:				
Small Ring (in)	6.50	6.50	0.00	+/- 0.20
Medium Ring (in)	8.28	8.25	-0.03	+/- 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 - I43_M469	Reference Calibration Date:	16-Feb-12 10:07:31	

Tool Name: SDLT - I43_M409		Reference Calibration Date: 16-Feb-12 10:07:51							
Engineer: J. BOLLUM		Calibration Date: 05-Mar-12 18:28:58							
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	3.81	0.06 +/- 0.10					
	Ring Diameter	8.25	8.32	0.07 +/- 0.15					
	PASS/FAIL SUMMARY								
Pad Extension Check:		Passed							
Diameter Check:		Passed							
ARRAY COMPENSATED TRUE RESISTIVITY SHOP CALIBRATION									
Tool Name: ACRt Sonde - I962_S909		Reference Calibration Date: 24-Jan-12 09:31:40							
Engineer: C. HAVERKAMP		Calibration Date: 24-Feb-12 13:24:09							
Software Version: WL INSITE R3.4.2 (Build 2)		Calibration Version: 1							
TYPICAL GAIN RANGE									
Subarray	R12KHz			R36KHz			R72KHz		
	Lower	(mmho/m)	Upper	Lower	(mmho/m)	Upper	Lower	(mmho/m)	Upper
A1 (80")	0.95	1.0168	1.05	0.95	1.0229	1.05	0.95	1.0207	1.05
A2 (50")	0.95	1.0114	1.05	0.95	1.0172	1.05	0.95	1.0165	1.05
A3 (29")	0.95	1.0025	1.05	0.95	1.0075	1.05	0.95	1.0045	1.05
A4 (17")	0.95	1.0042	1.05	0.95	1.0069	1.05	0.95	1.0066	1.05
A5 (10")	N/A	N/A	N/A	0.95	1.0047	1.05	0.95	1.0023	1.05
A6 (6")	N/A	N/A	N/A	0.95	0.9883	1.05	0.95	0.9861	1.05
TYPICAL SONDE OFFSET RANGE									
Subarray	R12KHz			R36KHz			R72KHz		
	Lower	(mmho/m)	Upper	Lower	(mmho/m)	Upper	Lower	(mmho/m)	Upper
A1 (80")	-5	-0.741	2	-6	-4.230	-2	-8	-4.258	-2
A2 (50")	-7	-1.770	-1	-6	-3.669	-2	-7	-4.211	-2
A3 (29")	-27	-14.223	-9	-9	-4.442	-3	-7	-2.621	-1
A4 (17")	-180	-101.737	-60	-45	-30.295	-15	-39	-25.948	-13
A5 (10")	N/A	N/A	N/A	-150	-100.527	-50	-80	-45.910	-10
A6 (6")	N/A	N/A	N/A	175	282.721	525	90	148.160	270
TRANSMITTER CURRENT GAIN				R-MUD VERIFICATION					
Signal	Lower	R	Upper	Signal	Lower (ohm-m)	Measured (ohm-m)	Upper (ohm-m)		
12K	0.6	0.8813	1.3	Mud Cell	0.95	1.002	1.05		
36K	1.0	1.3484	2.0						
72K	1.0	1.5779	2.0						
SPECTRAL DENSITY SHOP CALIBRATION									
Tool Name: SDLT Pad - P81				Reference Calibration Date: 16-Feb-12 09:32:29					
Engineer: C.PARKER				Calibration Date: 16-Feb-12 09:50:51					
Software Version: WL INSITE R3.4.2 (Build 2)				Calibration Version: 1					
Logging Source S/N: 5168GW									
Aluminum Block S/N: LIBERAL				Density: 2.598g/cc		Pe: 3.170			
Magnesium Block S/N: LIBERAL				Density: 1.684g/cc		Pe: 2.598			

DENSITY CALIBRATION SUMMARY			
Measurement	Previous Value	New Value	Control Limit
Near Bar Gain	1.0007	1.0390	0.90 - 1.10
Near Dens Gain	0.9863	1.0240	0.90 - 1.10
Near Peak Gain	0.9638	1.0214	0.90 - 1.10
Near Lith Gain	0.9505	0.9895	0.90 - 1.10
Far Bar Gain	1.0070	1.0126	0.90 - 1.10
Far Dens Gain	0.9953	1.0029	0.90 - 1.10
Far Peak Gain	0.9892	0.9950	0.90 - 1.10
Far Lith Gain	0.9673	0.9741	0.90 - 1.10
Near Bar Offset	0.1494	-0.1966	NONE
Near Dens Offset	0.2613	-0.0657	NONE
Near Peak Offset	0.4387	-0.0378	NONE
Near Lith Offset	0.5394	0.2188	NONE
Far Bar Offset	0.0283	-0.0164	NONE
Far Dens Offset	0.1237	0.0609	NONE
Far Peak Offset	0.1380	0.0956	NONE
Far Lith Offset	0.2818	0.2321	NONE
Near Bar Background	823.63	824.58	700 - 1450
Near Dens Background	269.31	269.85	230 - 480
Near Peak Background	117.39	117.18	100 - 210
Near Lith Background	146.50	146.84	125 - 260
Far Bar Background	536.19	537.63	450 - 900
Far Dens Background	209.96	210.26	175 - 345
Far Peak Background	83.75	84.87	70 - 140
Far Lith Background	88.57	87.09	75 - 145

CALIBRATION BLOCK SUMMARY				
Measurement	Current Reading (Previous Coef)	Calibrated (New Coef)	Change	Control Limit On Change
MAGNESIUM				
Density (g/cc)	1.679	1.684	0.005	+/- 0.015
Pe	2.565	2.557	-0.008	+/- 0.150
ALUMINUM				
Density (g/cc)	2.597	2.598	0.001	+/- 0.01500
Pe	3.116	3.126	0.010	+/- 0.150

TOOL SUMMARY				
Measurement	Near Detector		Far Detector	
	Value	Control Limits	Value	Control Limits
QUALITY				
Background	0.0011	+/- 0.0110	0.0000	+/- 0.0140
Magnesium Block	-0.0008	+/- 0.0110	-0.0013	+/- 0.0140
Aluminum Block	-0.0006	+/- 0.0110	-0.0011	+/- 0.0140
Resolution	9.43	6.00 - 11.50	8.92	6.00 - 11.50
Internal Verifier(B+D+P+L)	1358	1200 - 2700	920	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 - P81	Reference Calibration Date:	16-Feb-12 09:50:51
Engineer:	J. BOLLLOM	Calibration Date:	05-Mar-12 18:18:49
Software Version:	WL INSITE R3.4.2 (Build 2)	Calibration Version:	1

Pad Temperature: 74.5 degF

DENSITY FIELD CALIBRATION SUMMARY				
Measurement	Shop	Field	Change	Control Limit +/-
Near (B+D+P+L) cps	1358.449	1358.934	0.485	14.900
Far (B+D+P+L) cps	919.854	929.193	9.339	16.438
Near Resolution	9.43	9.54	0.110	0.50
Far Resolution	8.92	9.32	0.400	1.00

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

MICRO LOG SHOP CALIBRATION

Tool Name:	Microlog Pad - M469	Reference Calibration Date:	20-Jan-12 09:25:17
Engineer:	C.PARKER	Calibration Date:	16-Feb-12 10:13:03
Software Version:	WL INSITE R3.4.2 (Build 2)	Calibration Version:	1

CALIBRATION COEFFICIENT SUMMARY					
Measurement	Micro Log Normal		Micro Log Lateral		Units
	Measured	Calibrated	Measured	Calibrated	
Tool Zero	-0.06	-0.07	-0.06	-0.01	ohmm
Calibration Point #1	0.00	0.00	-0.04	0.00	ohmm
Calibration Point #2	20.03	20.00	20.01	20.00	ohmm
Internal Reference	19.97	19.94	20.00	19.99	ohmm

Measurement	Micro Log Normal Tool Value	Micro Log Lateral Tool Value	Units
Tool Zero	-0.02	0.03	V
Calibration Point #1	17.53	4.88	V
Calibration Point #2	5362.47	7021.63	V
Internal Reference	5346.02	7018.61	V

MICRO LOG FIELD CHECK

Tool Name:	Microlog Pad - M469	Reference Calibration Date:	16-Feb-12 10:13:03
Engineer:	J. BOLLLOM	Calibration Date:	05-Mar-12 18:30:04
Software Version:	WL INSITE R3.4.2 (Build 2)	Calibration Version:	1

Measurement	Micro Log Normal		Micro Log Lateral		Units
	Shop	Field	Shop	Field	
Tool Zero	-0.07	-0.07	-0.01	-0.01	ohmm
Internal Reference	19.94	19.92	19.99	19.97	ohmm

		Summary				
	Signal	Shop	Field	Difference	Tolerance	
	Microlog Normal	19.94	19.92	0.02	+/- 0.80	
	Microlog Lateral	19.99	19.97	0.02	+/- 0.80	
CALIBRATION SUMMARY						
Sensor	Shop	Field	Post	Difference	Tolerance	Units
GTET-11039640						
Gamma Ray Calibrator	269.6	268.4	-----	1.2	+/- 9.00	api
DSNT-11019643						
Snow-Block Porosity	0.0734	0.0600	-----	0.0134	+/- 0.0150	decP
SDLT-I43_M469						
Pad Extension	3.75	3.81	-----	-0.06	+/-0.10	in
Ring Diameter	8.25	8.32	-----	-0.070	+/-0.15	in
ACRt Sonde-I962_S909						
Mud Cell	1.002	-----	-----	0.000	-----	ohm-m
SDLT Pad-P81						
Near(B+D+P+L)	1358.449	1358.934	-----	-0.485	+/-14.900	cps
Far(B+D+P+L)	919.854	929.193	-----	-9.339	+/-16.438	cps
Microlog Pad-M469						
MicroLog Normal	19.94	19.92	-----	0.02	+/-0.80	ohmm
MicroLog Lateral	19.99	19.97	-----	0.02	+/-0.80	ohmm
Data: KELLS_H_110001 SP-GTET-DSN-SDL-BSAT-ACRT-CHIDLE				Date: 05-Mar-12 18:54:44		

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	9.700	ppg
	SHARED	WAGT	Weighting Agent	Natural	
	SHARED	BSAL	Borehole salinity	4500.00	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	ST	Surface Temperature	75.0	degF
	SHARED	TD	Total Well Depth	5509.00	ft
	SHARED	BHT	Bottom Hole Temperature	200.0	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 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	

Mnemonic	Input Description	Delay (ft)	Filter Type	Filter Length (ft)
Depth Panel				
TENS	Tension	0.00	NO	
CH_HOS				
DHTN	DownholeTension	0.00	BLK	0.000
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
FHL	Far Cesium High	38.58	BLK	0.250

TPH	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: KELLS_H_1\0001 SP-GTET-DSN-SDL-BSAT-ACRT-CHIDLE			Date: 05-Mar-12 18:52:37	

COMPANY	OXY USA INC		
WELL	KELLS H-1		
FIELD	PLEASANT PRARIE SE		
COUNTY	HASKELL	STATE	KANSAS
HALLIBURTON		BOREHOLE COMPENSATED SONIC ARRAY LOG	