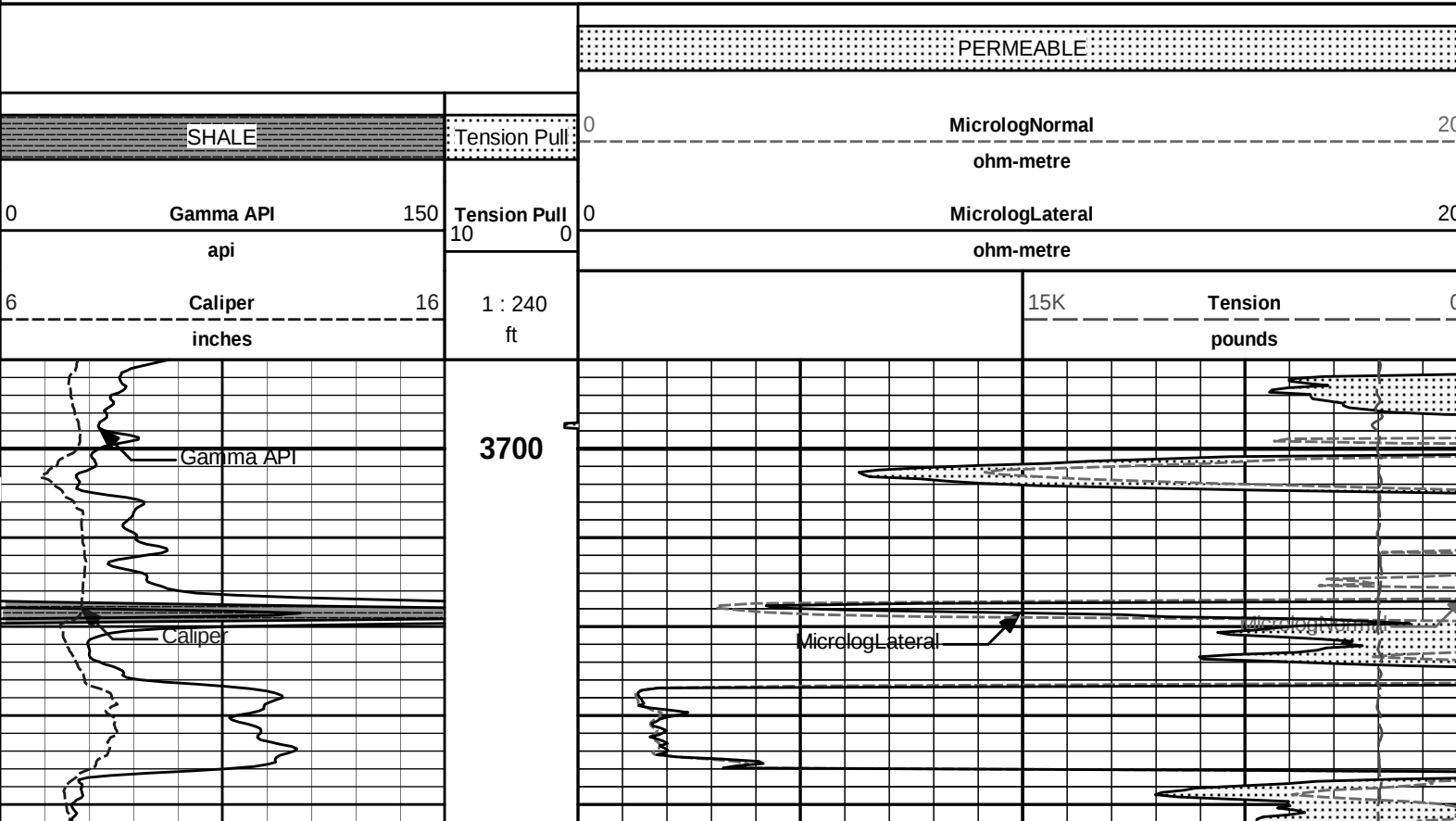
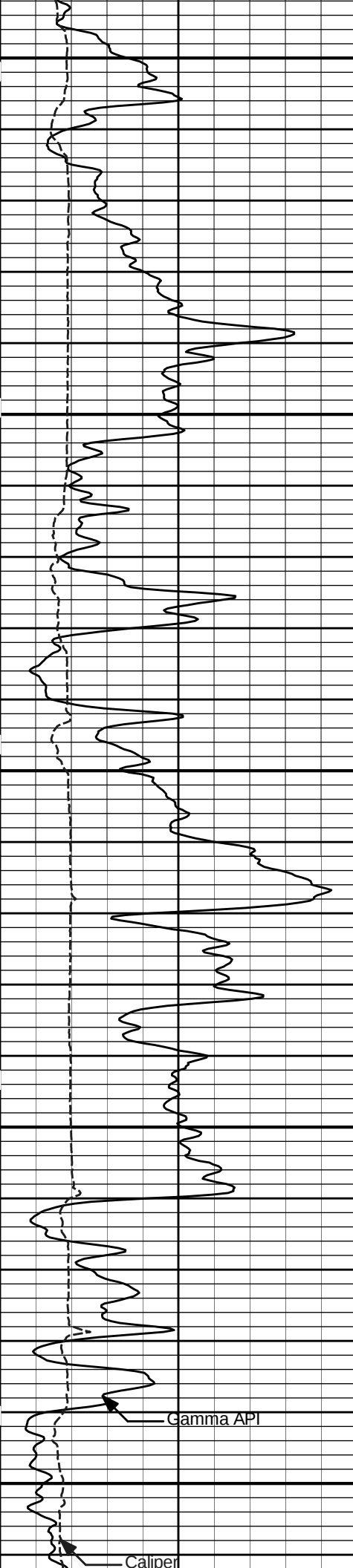


HALLIBURTON										MICROLOG														
COMPANY					OXY USA, INC.					COMPANY					OXY USA, INC.									
WELL					STANFORD C-2					WELL					STANFORD C-2									
FIELD					WILBURTON EAST					FIELD					WILBURTON EAST									
COUNTY					MORTON					COUNTY					MORTON									
STATE					KANSAS					STATE					KANSAS									
Permanent Datum					GL					Elev. 3410.0 ft					Elev.: K.B.					3424.0 ft				
Log measured from					KB					14.0 ft above perm. Datum					D.F.					2423.0 ft				
Drilling measured from					KB										G.L.					2410.0 ft				
Date					01-May-12																			
Run No.					ONE																			
Depth - Driller					6428.00 ft																			
Depth - Logger					6402.0 ft																			
Bottom - Logged Interval					6358 ft																			
Top - Logged Interval					3700 ft																			
Casing - Driller					8.625 in @ 1677.0 ft					@					@									
Casing - Logger					1677.0 ft																			
Bit Size					7.875 in										@									
Type Fluid in Hole					WATER																			
Density					9.2 ppg					50.00 s/qt														
PH					10.00 pH					8.0 cp/m														
Source of Sample					FLOWLINE																			
Rm @ Meas. Temperature					2.200 ohmm @ 110.00 degF					@					@									
Rmf @ Meas. Temperature					1.80 ohmm @ 100.00 degF					@					@									
Rmc @ Meas. Temperature					2.500 ohmm @ 100.00 degF					@					@									
Source Rmf					MEAS					MEAS														
Rm @ BHT					1.75 ohmm @ 140.0 degF					@					@									
Time Since Circulation					8.3 hr																			
Time on Bottom					01-May-12 14:59																			
Max. Rec. Temperature					140.0 degF @ 6402.0 ft					@					@									
Equipment					336					LIBERAL														
Recorded By					C. MARLOWE																			
Witnessed By					K. THREADGILL																			

Fold here

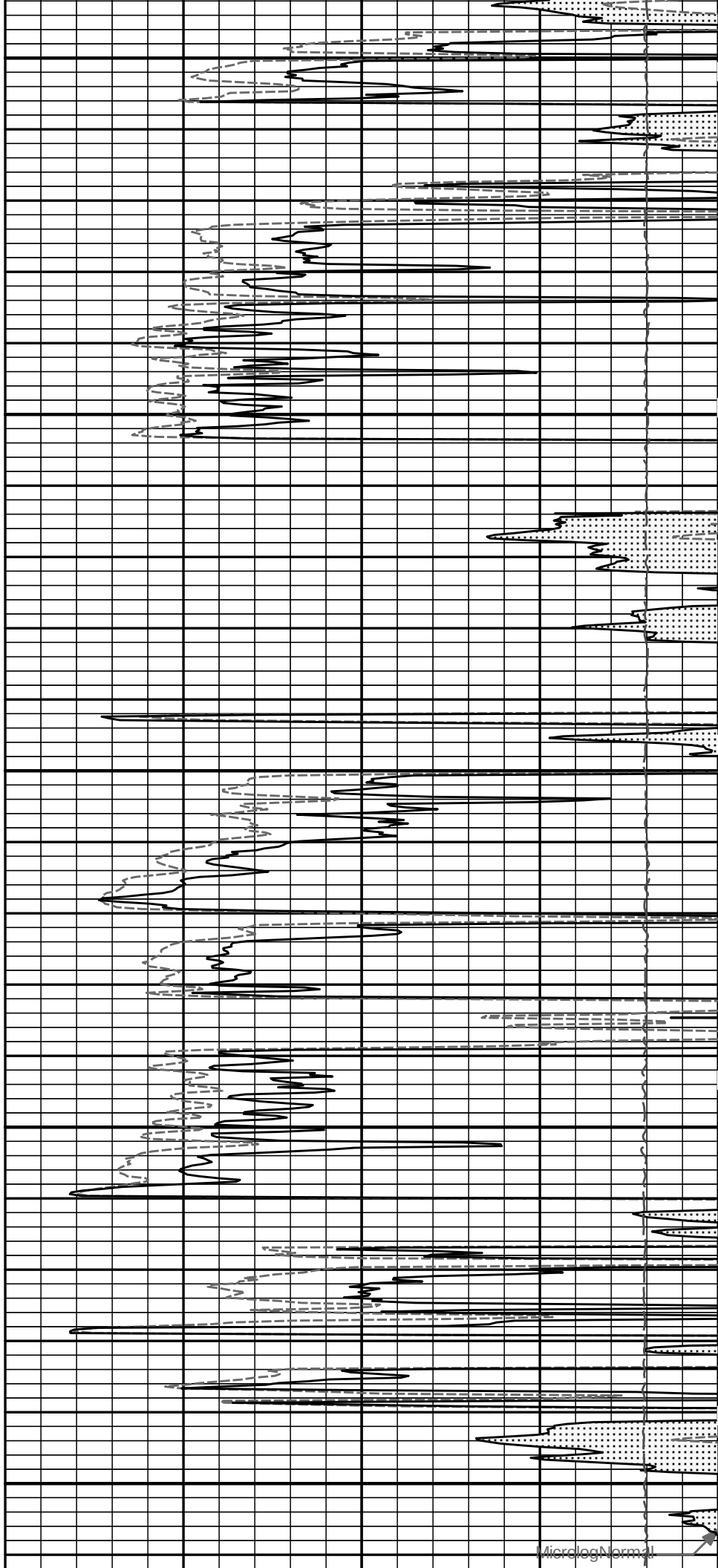
Service Ticket No.: 9465969						API Serial No.: 15-129-21939						PGM Version: WL INSITE R3.4.2 (Build 2)																	
CHANGE IN MUD TYPE OR ADDITIONAL SAMPLE												RESISTIVITY SCALE CHANGES																	
Date		Sample No.										Type Log		Depth		Scale Up Hole				Scale Down Hole									
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.				@				@				ONE		MICROLOG				RUBBER				ADJ				NA			
Rmc @ Meas. Temp.				@				@																					
Source Rmf		Rmc																											
Rm @ BHT				@				@																					
Rmf @ BHT				@				@																					
Rmc @ BHT				@				@																					
EQUIPMENT DATA																													
GAMMA						ACOUSTIC						DENSITY						NEUTRON											
Run No.		ONE				Run No.						Run No.						Run No.											
Serial No.		11021138				Serial No.						Serial No.						Serial No.											
Model No.		GTET				Model No.						Model No.						Model No.											
Diameter		3.625"				No. of Cent.						Diameter						Diameter											
Detector Model No.		T-102				Spacing						Log Type						Log Type											
Type		SCINT										Source Type						Source Type											
Length		8"				LSA [Y/N]						Serial No.						Serial No.											
Distance to Source		10'				FWDA [Y/N]						Strength						Strength											

[illegible]

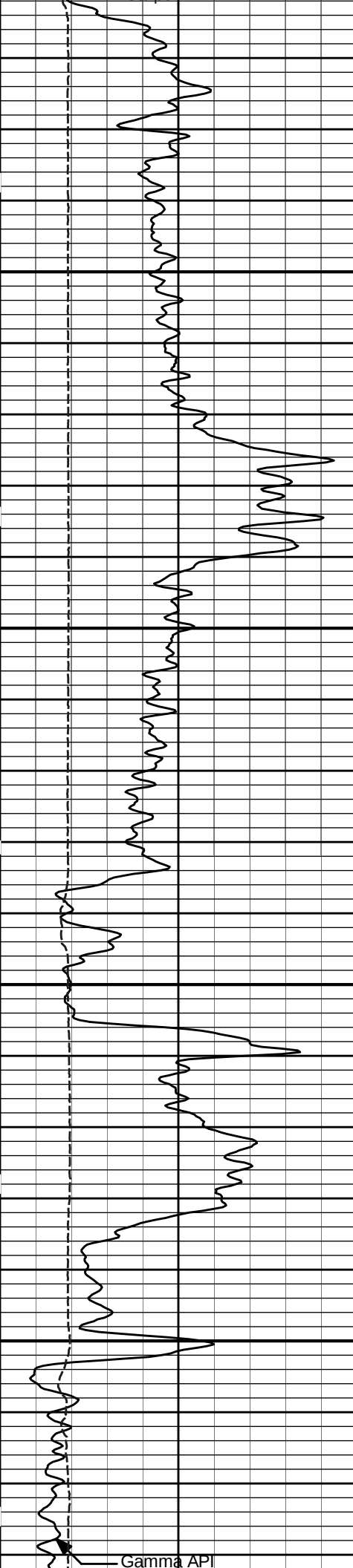


3800

3900

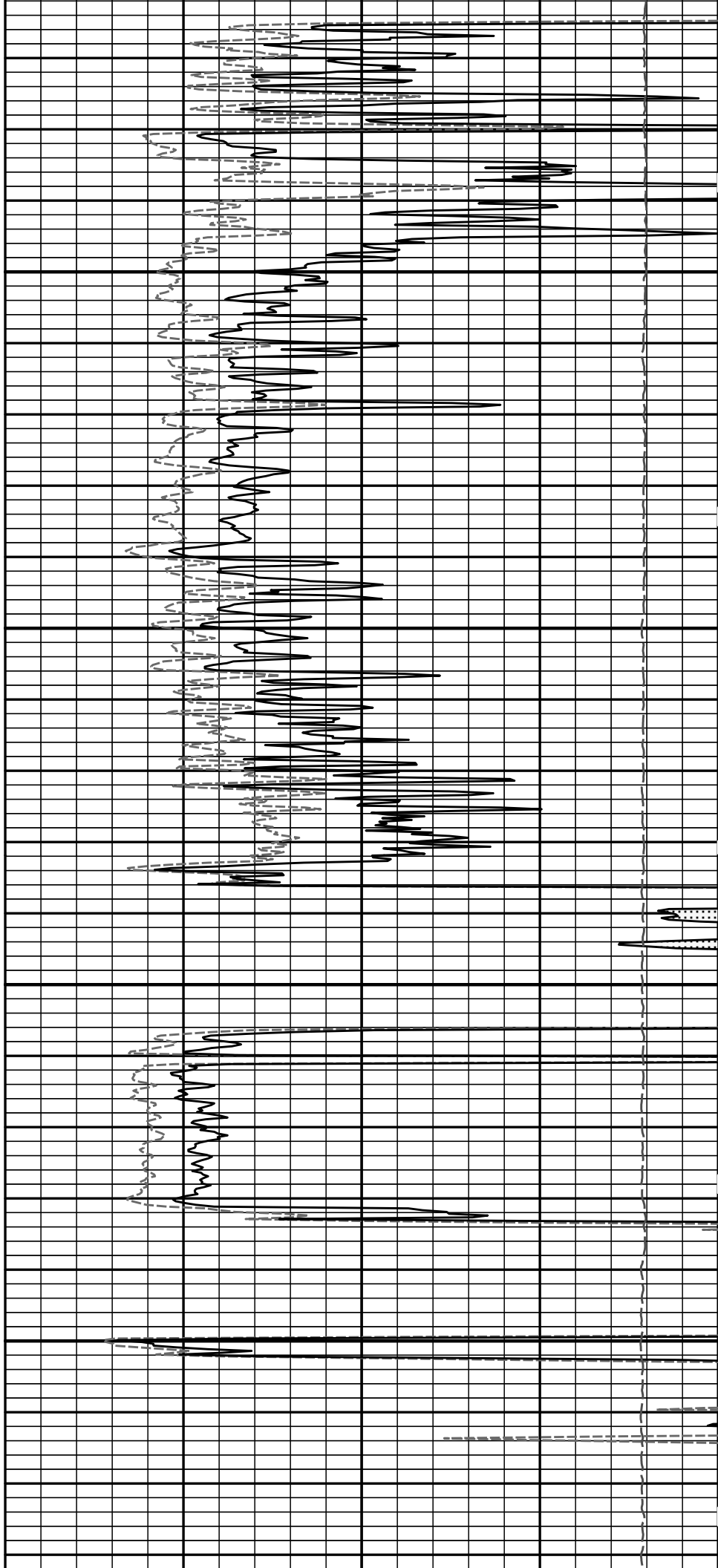


MicrologNormal

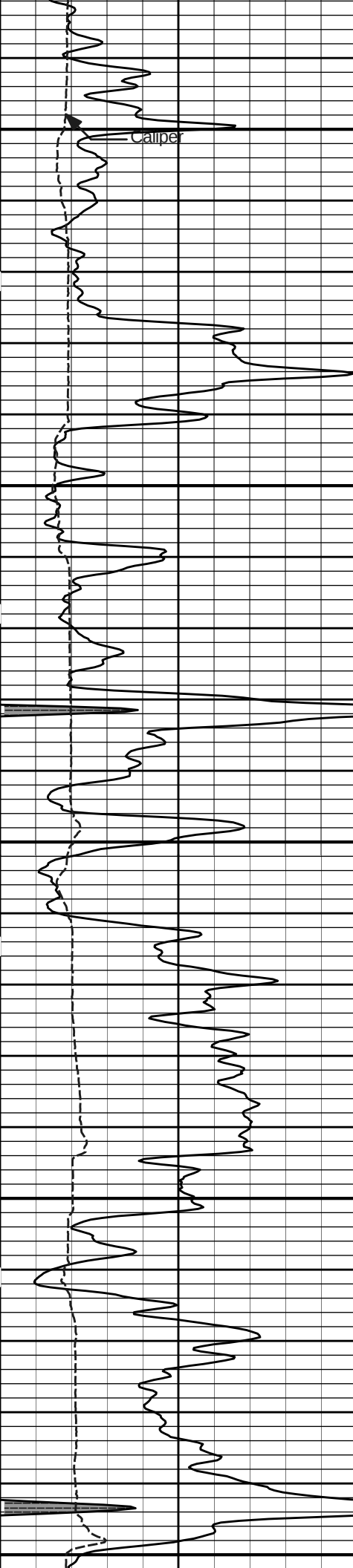


4000

4100



Gamma API

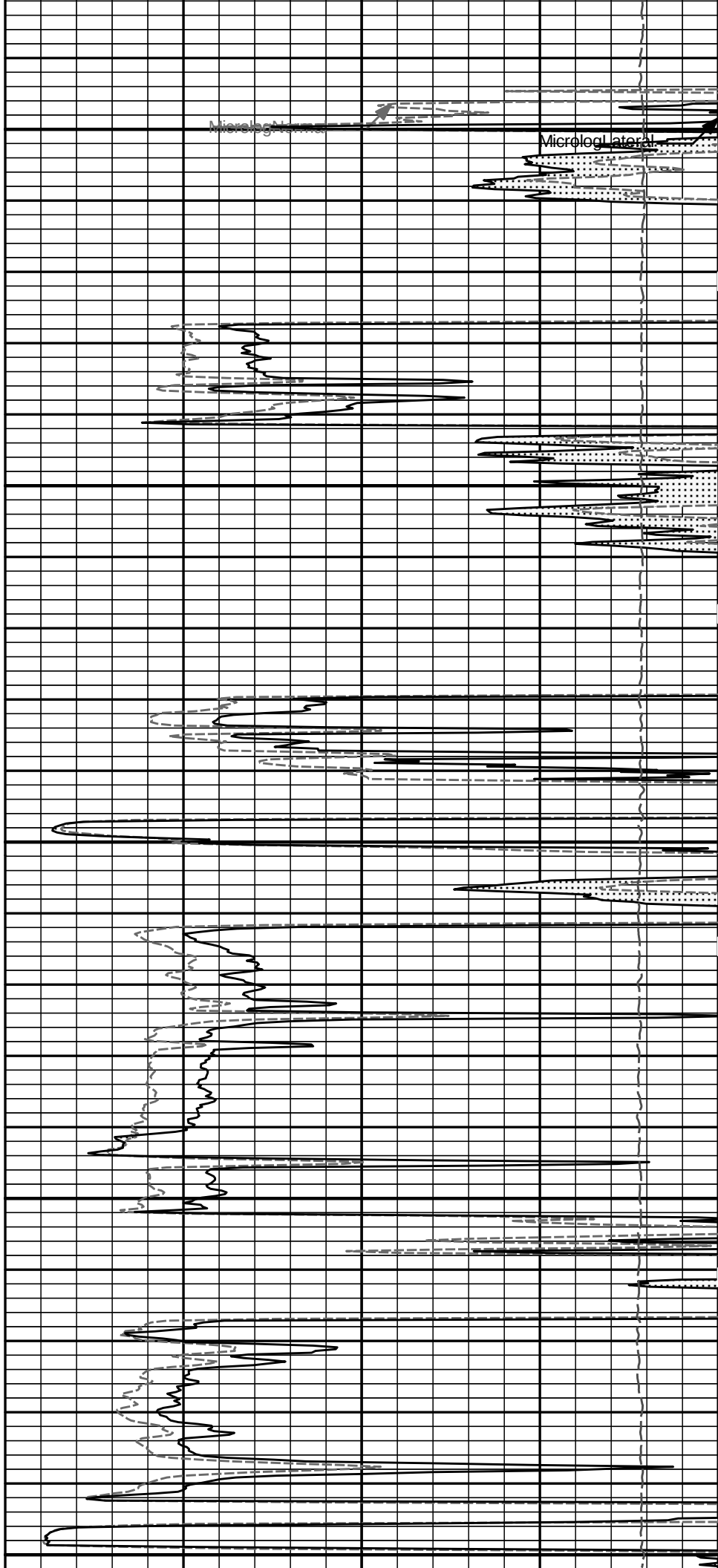


Caliper

4200

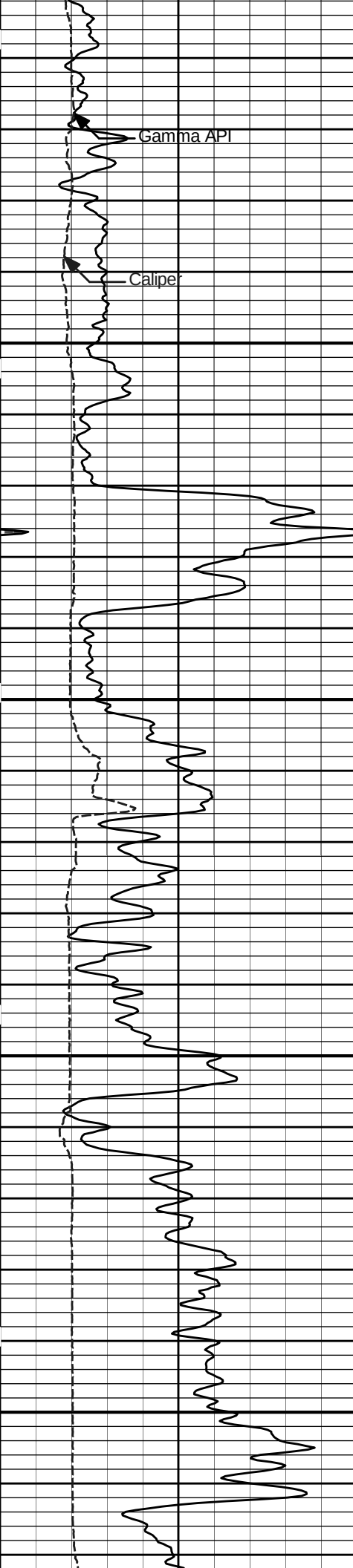
4300

4400



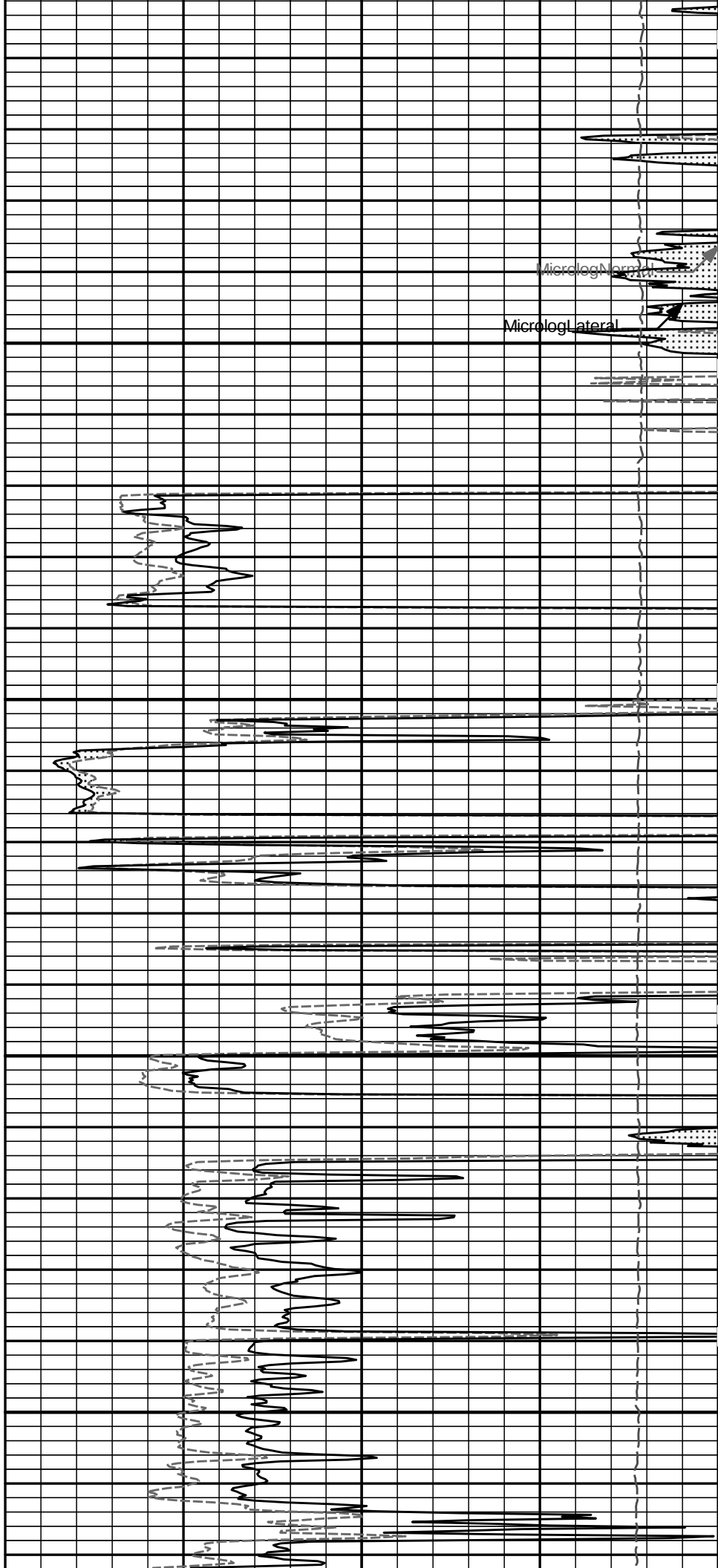
Microlog Normal

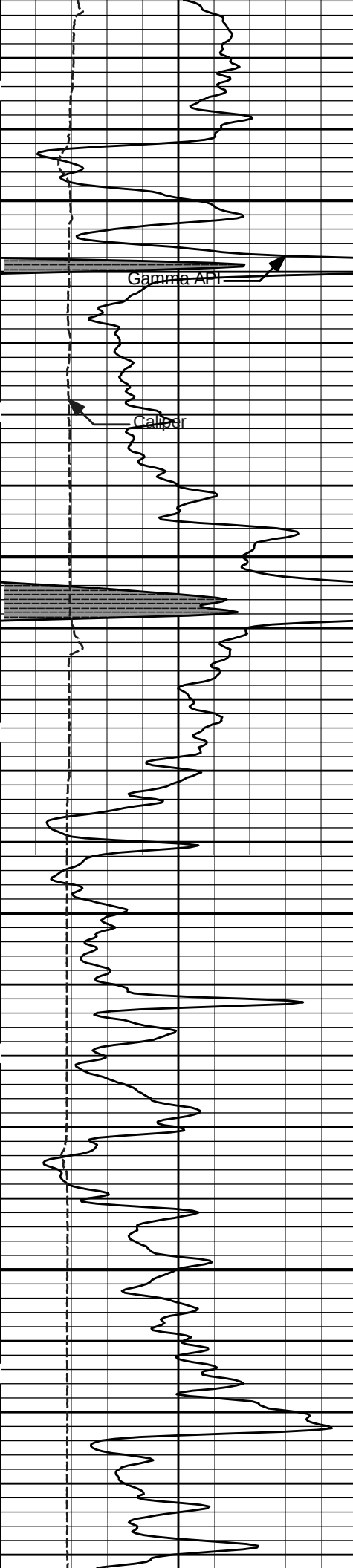
Microlog Lateral



4500

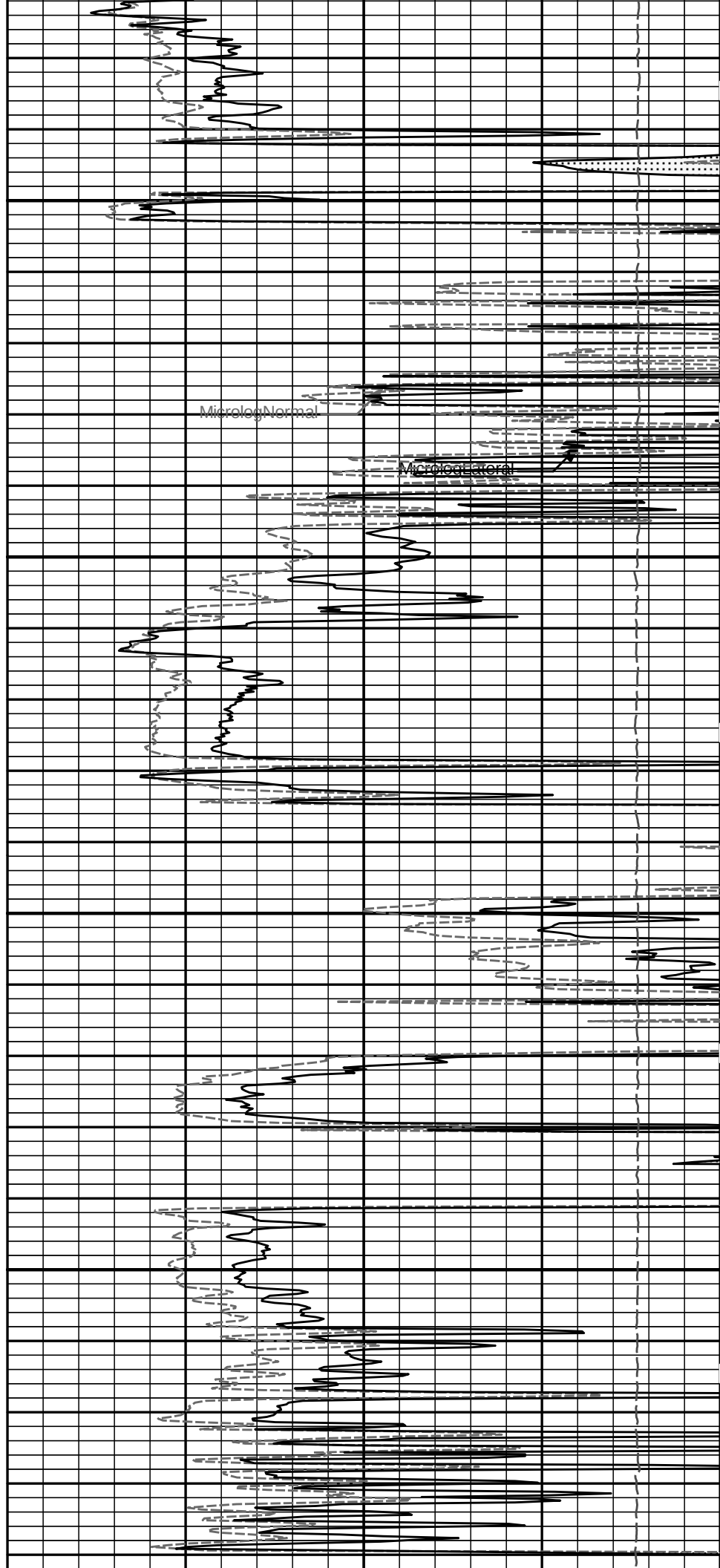
4600

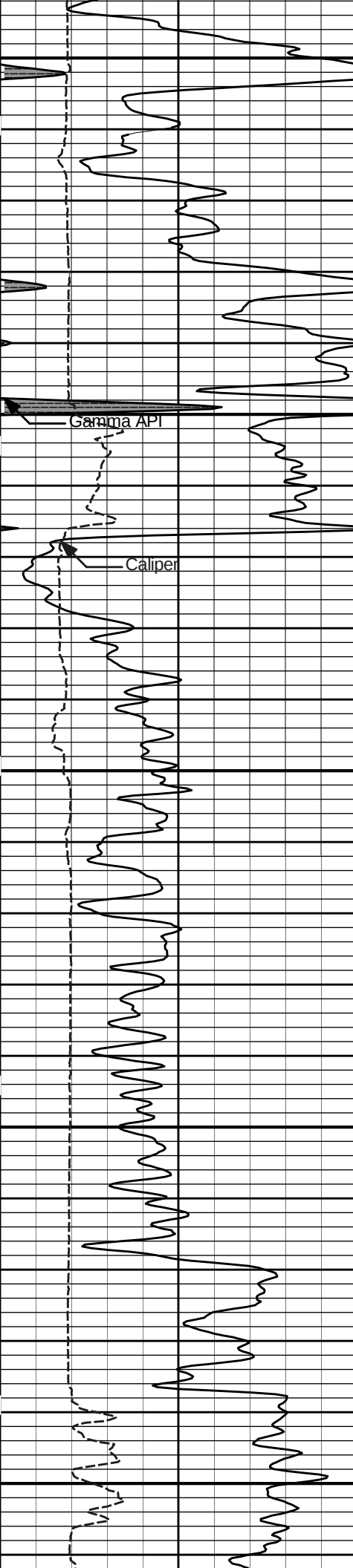




4700

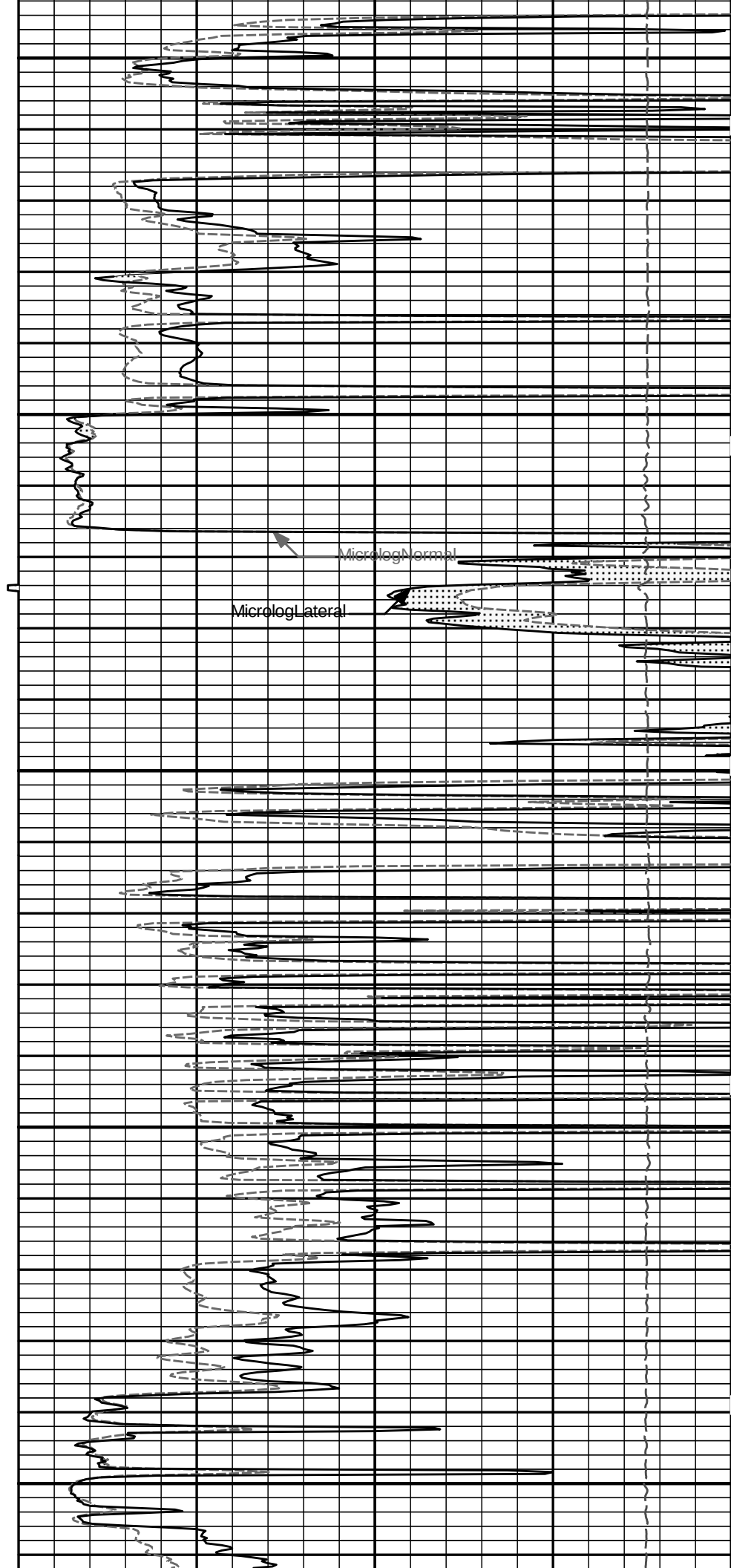
4800

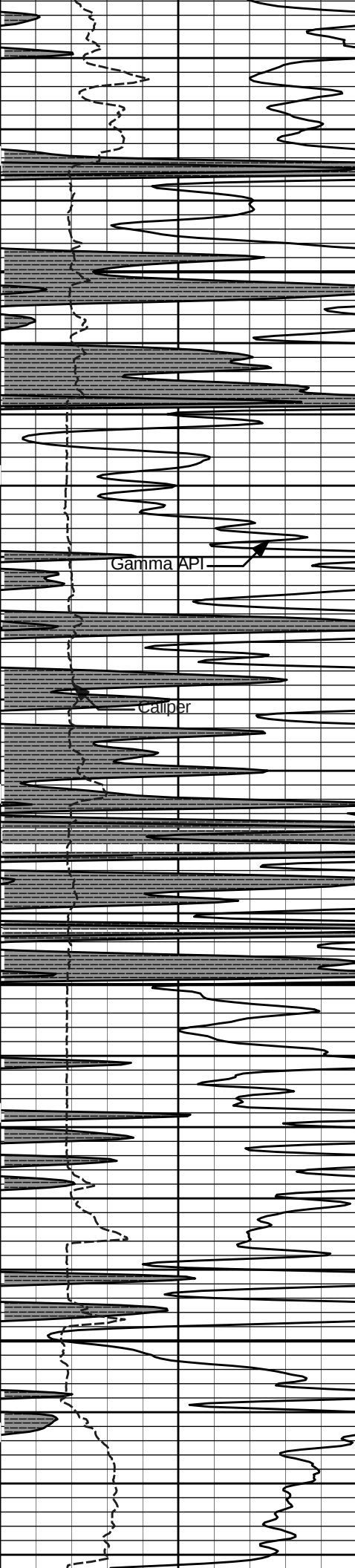




4900

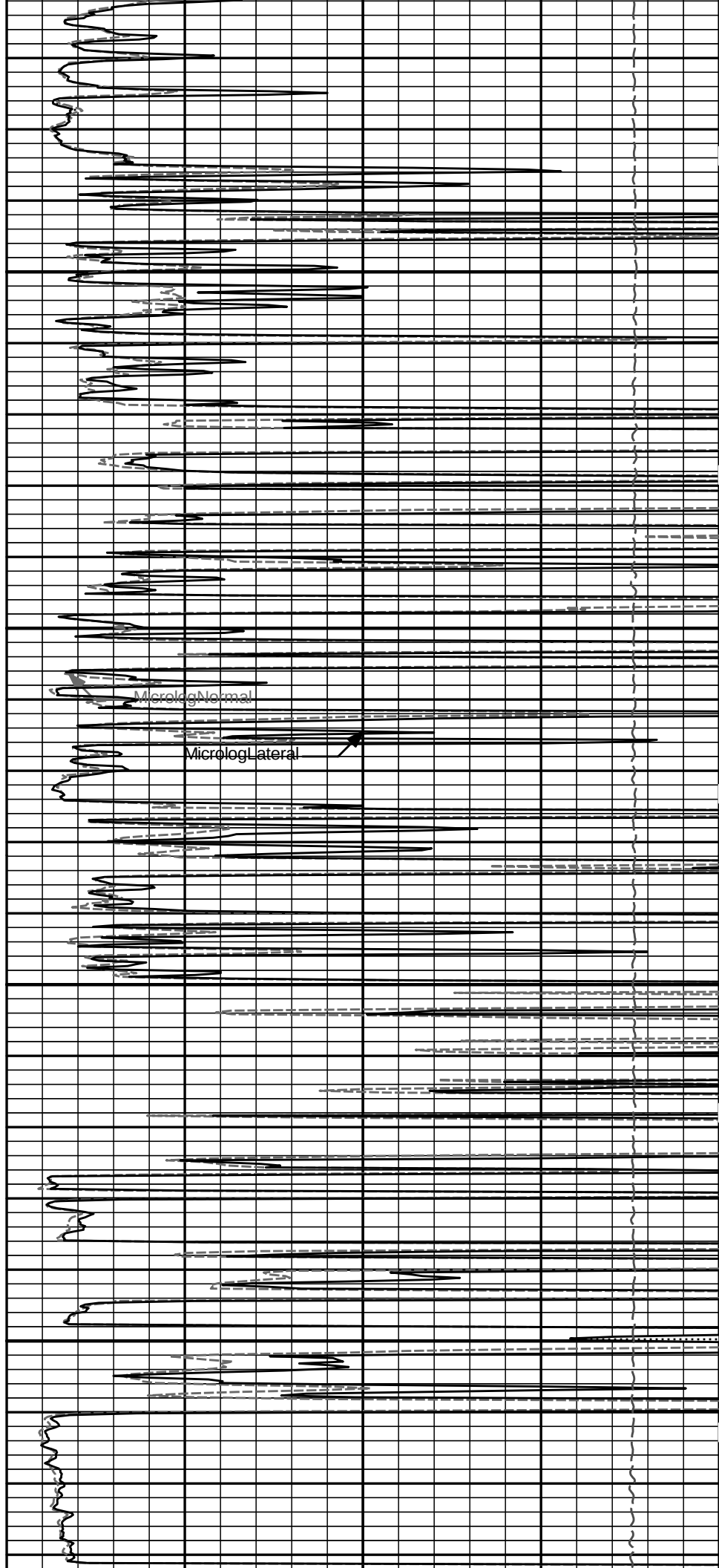
5000

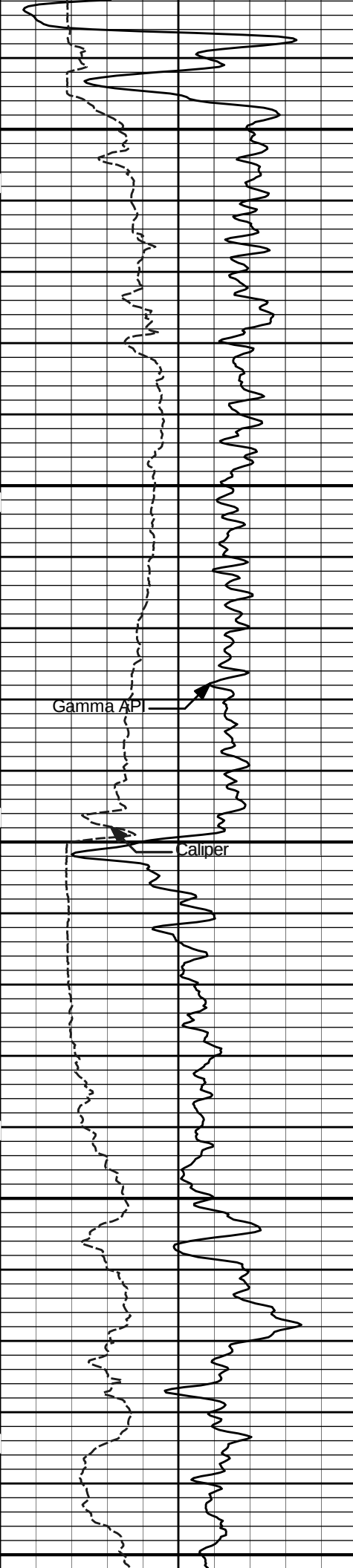




5100

5200

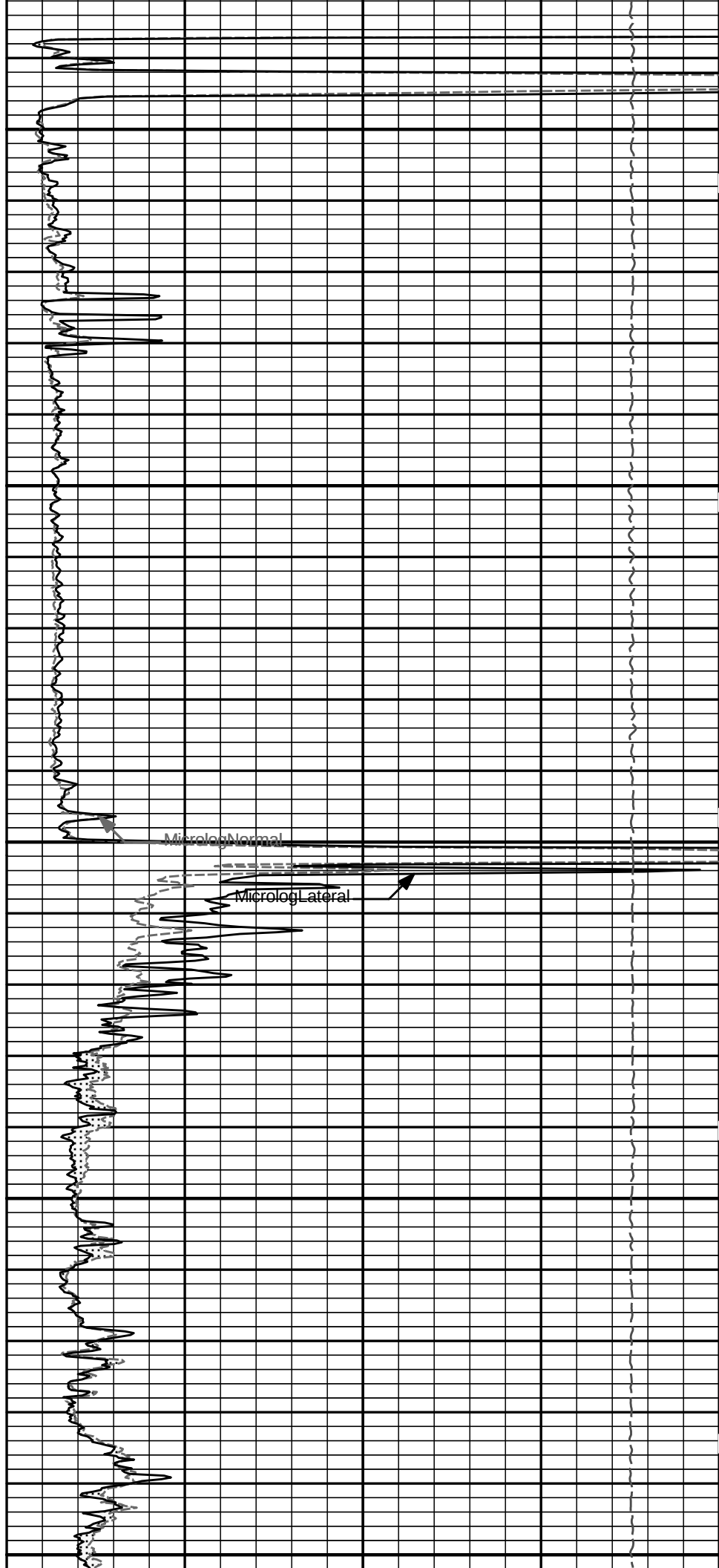


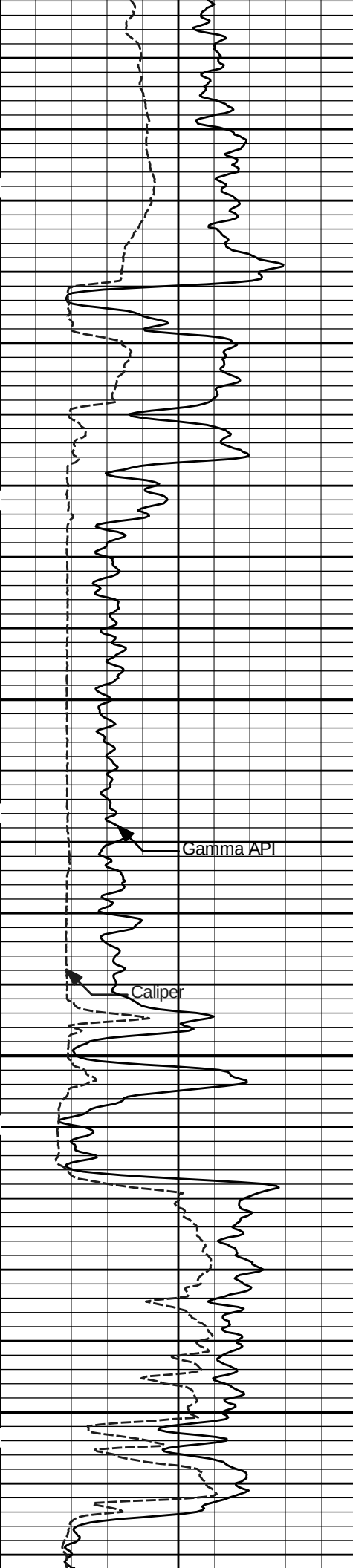


5300

5400

5500



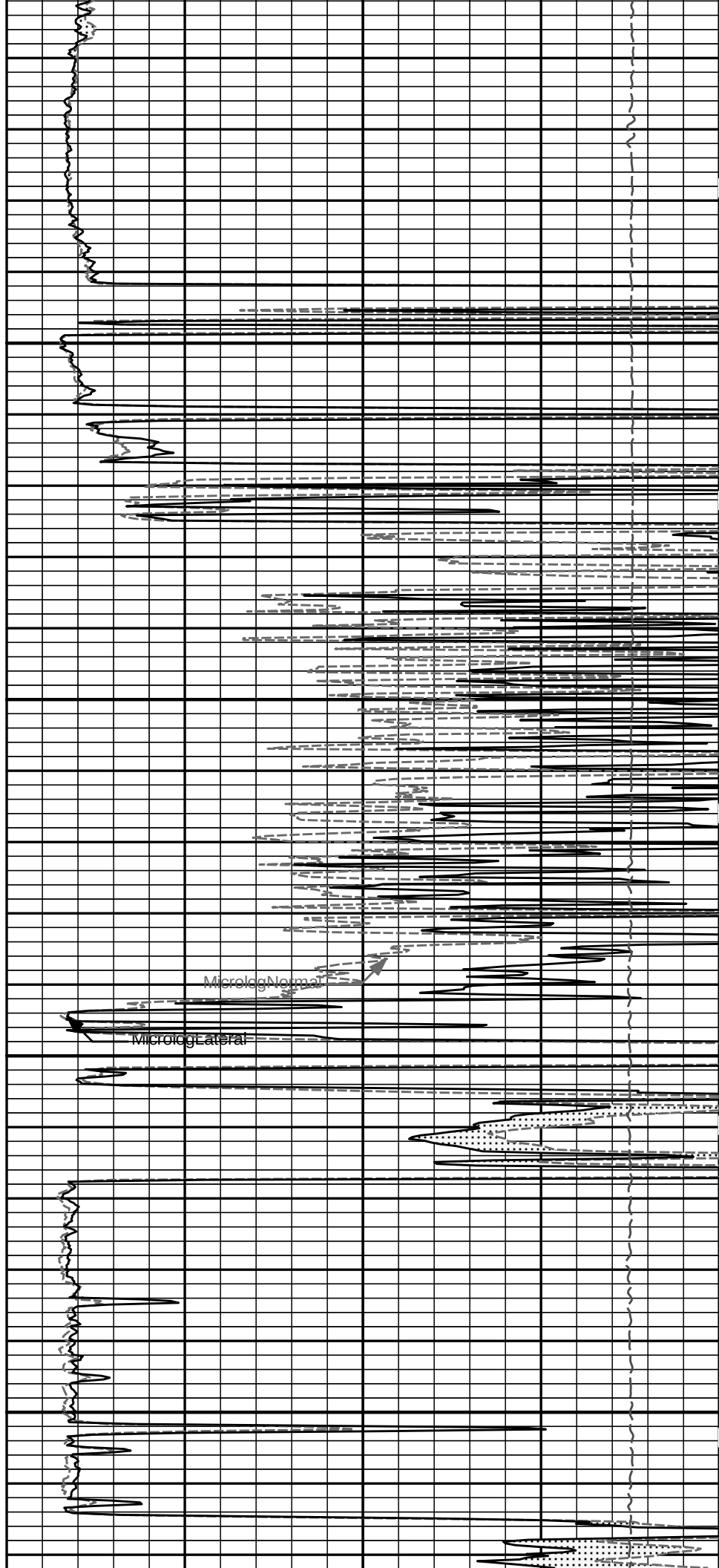


5600

Gamma API

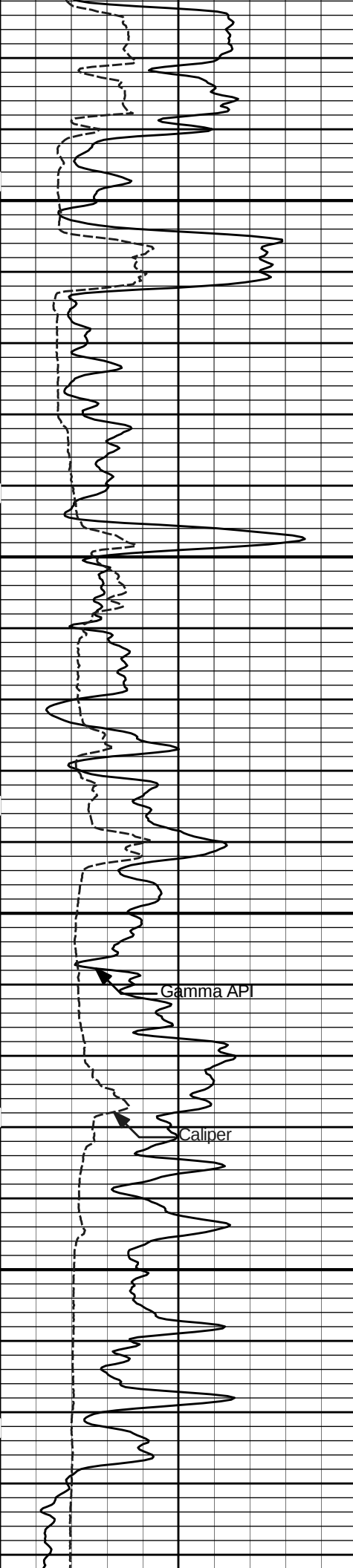
Caliper

5700



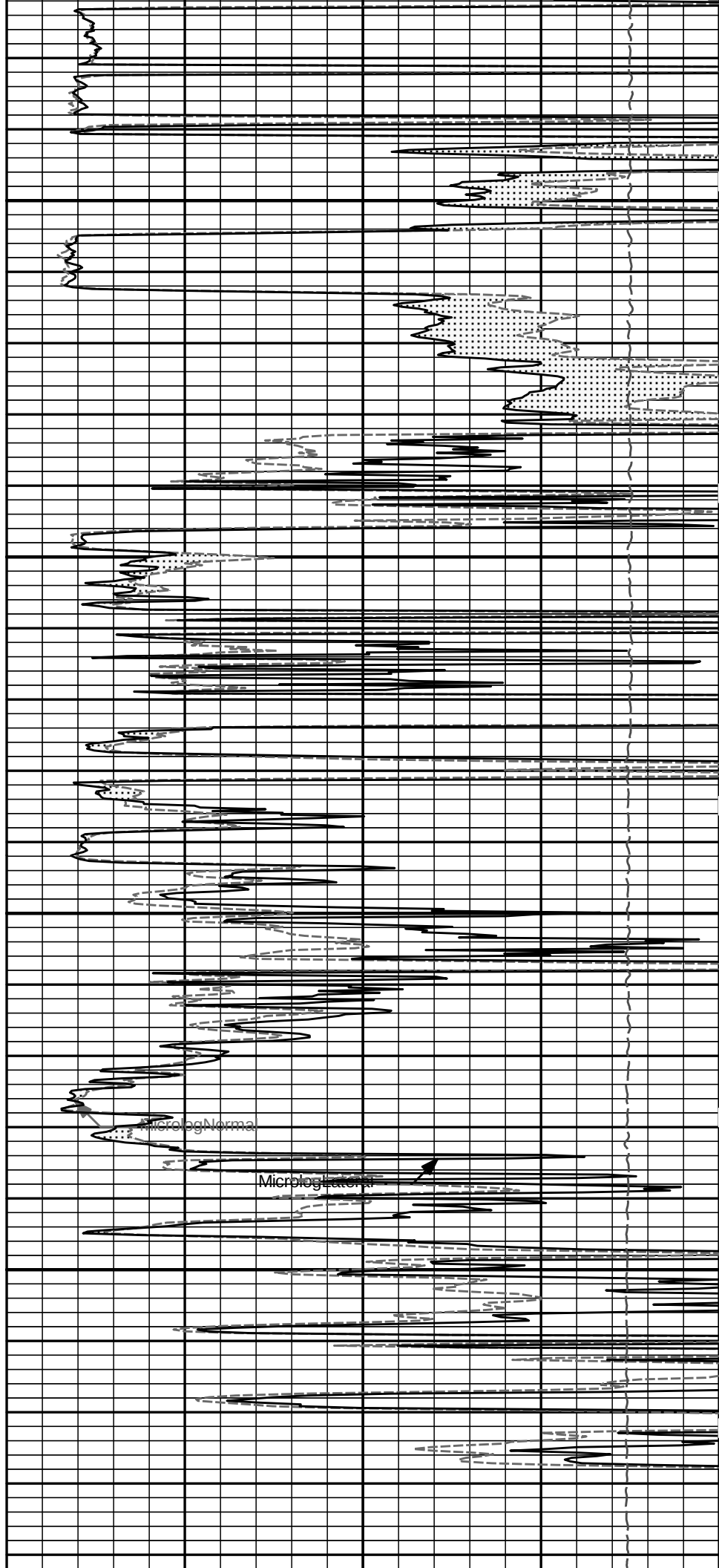
Microlog Normal

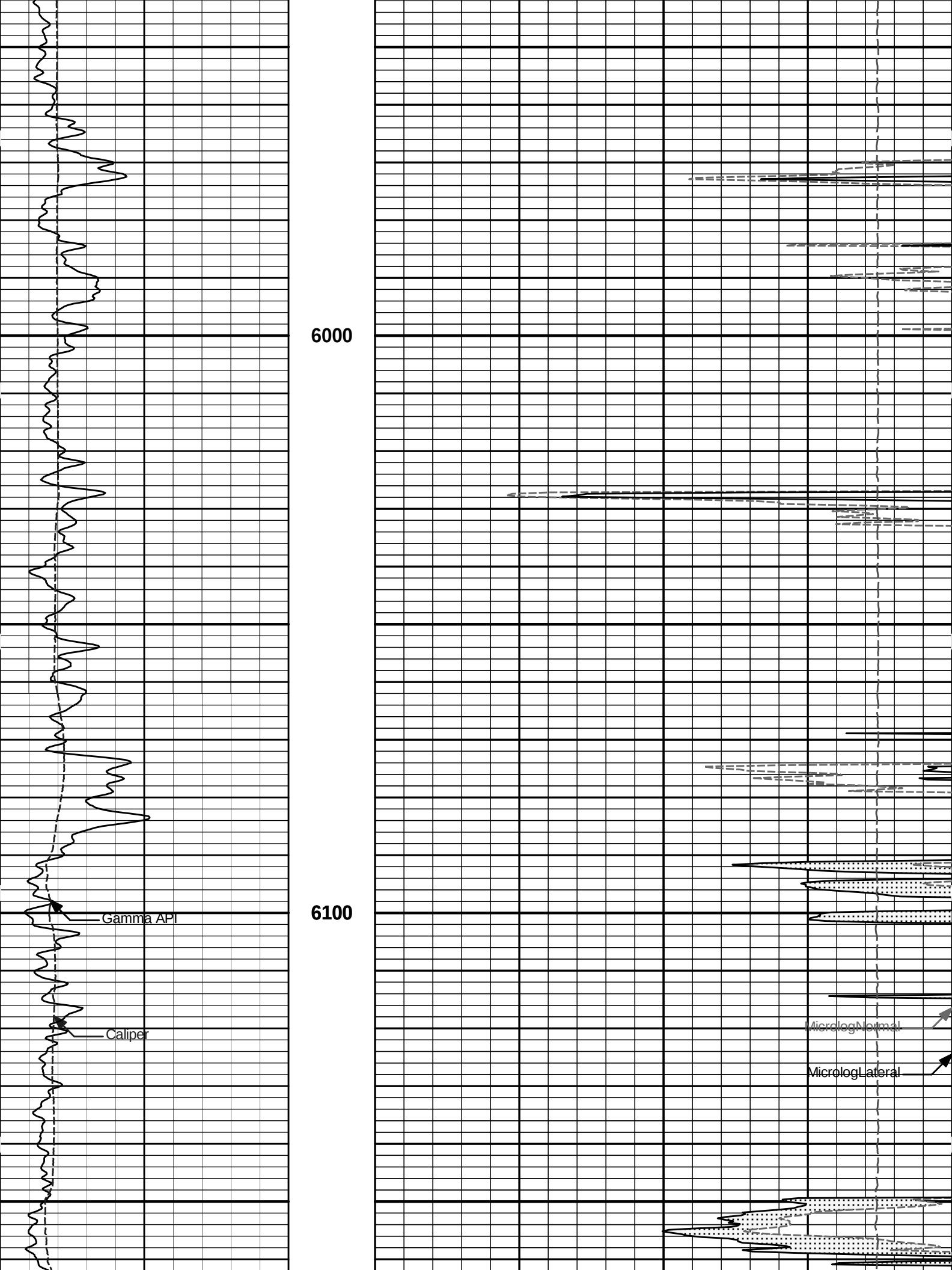
Microlog Lateral

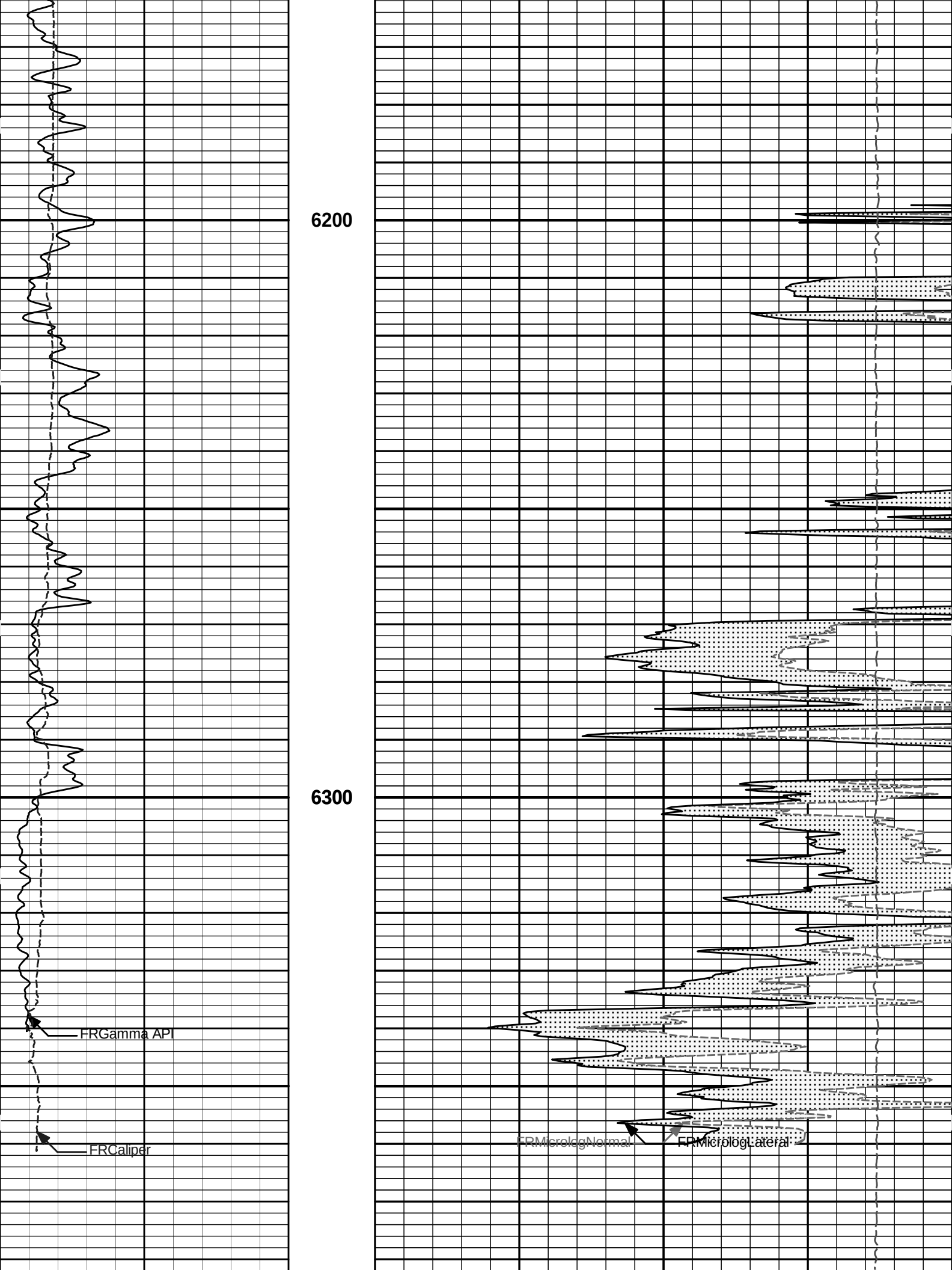


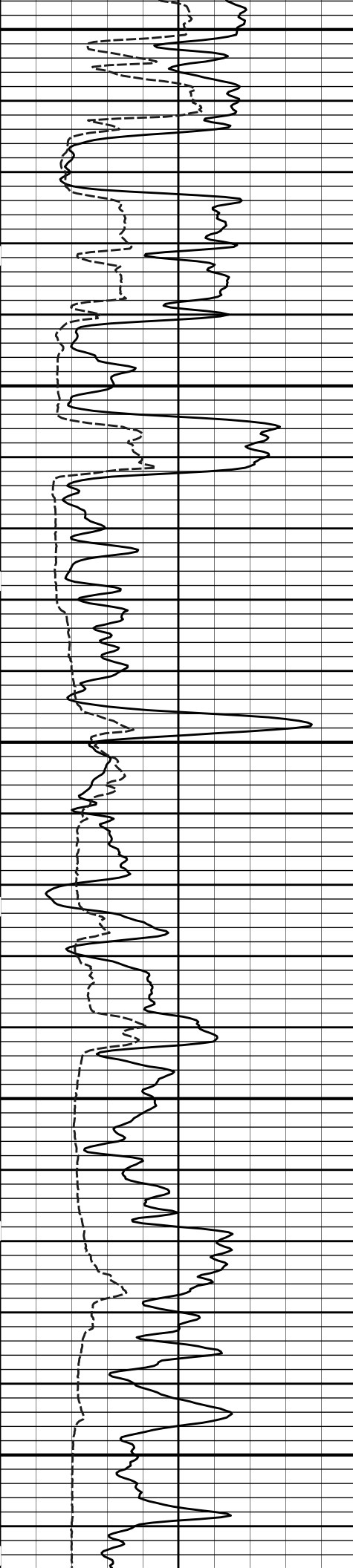
5800

5900





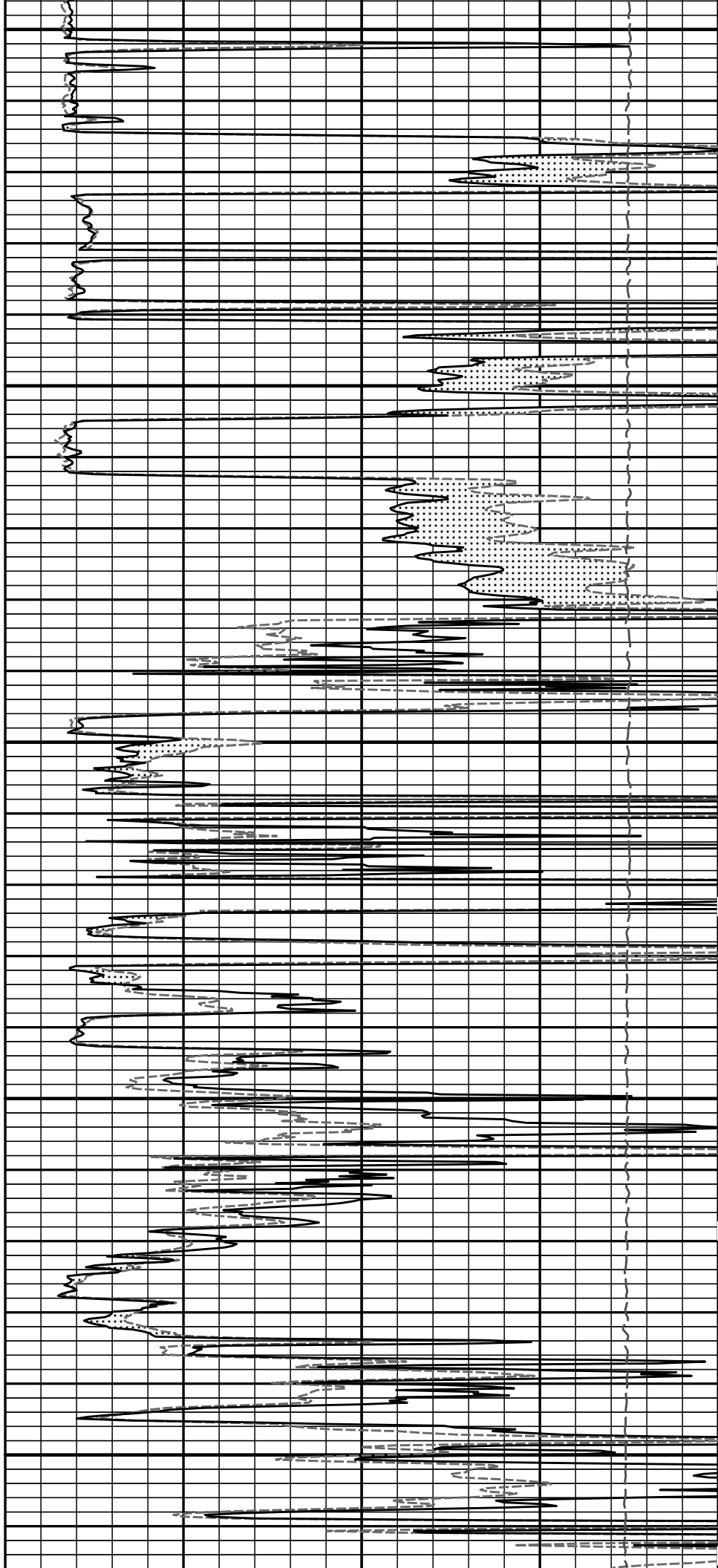


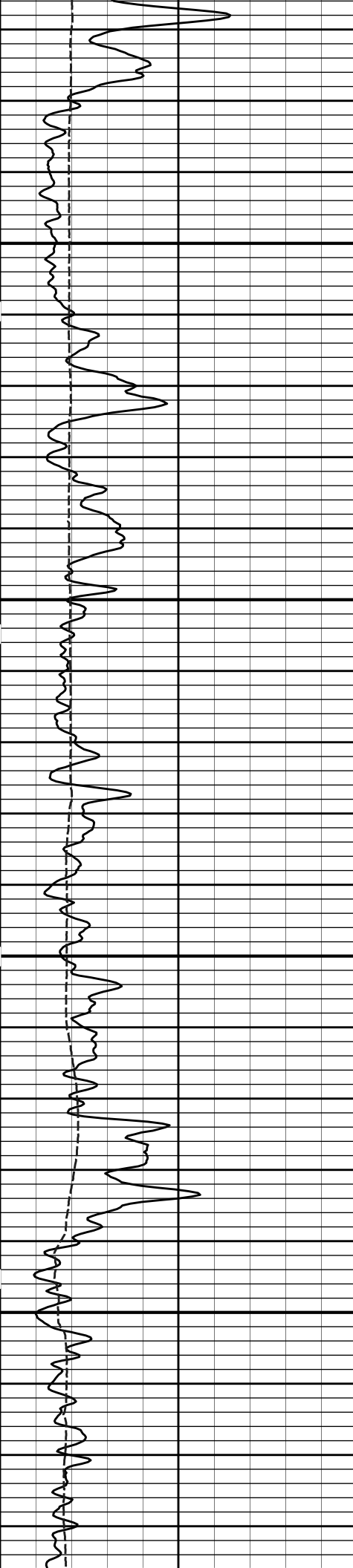


5700

5800

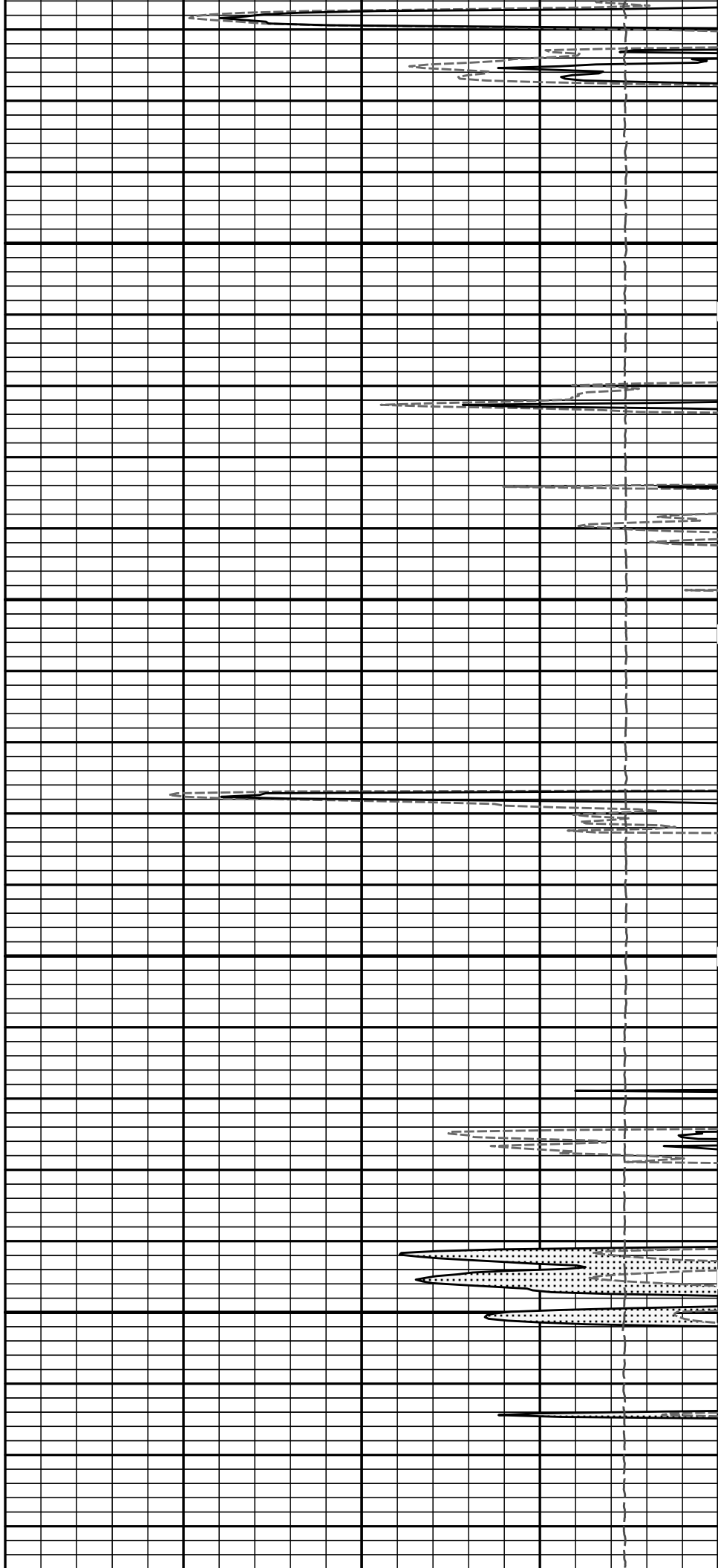
5900

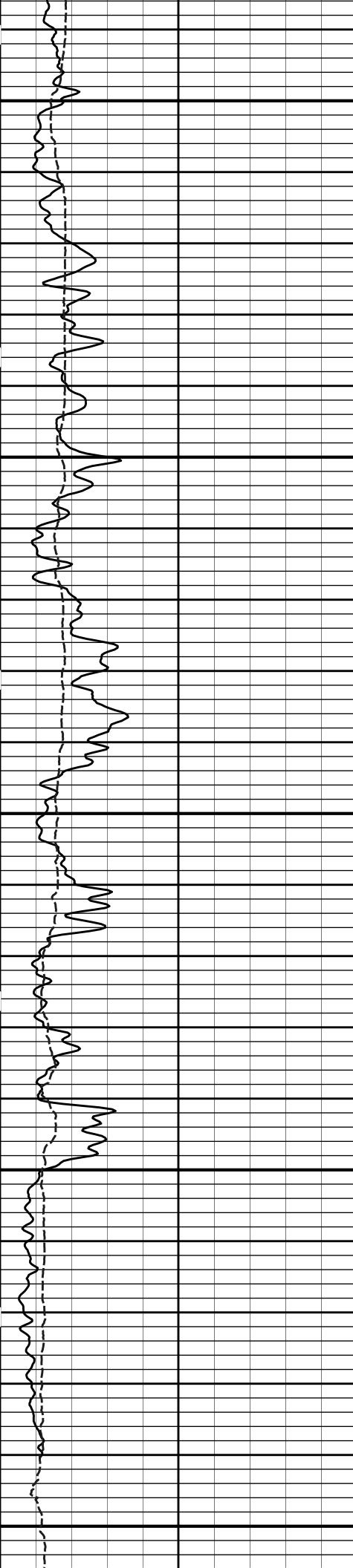




6000

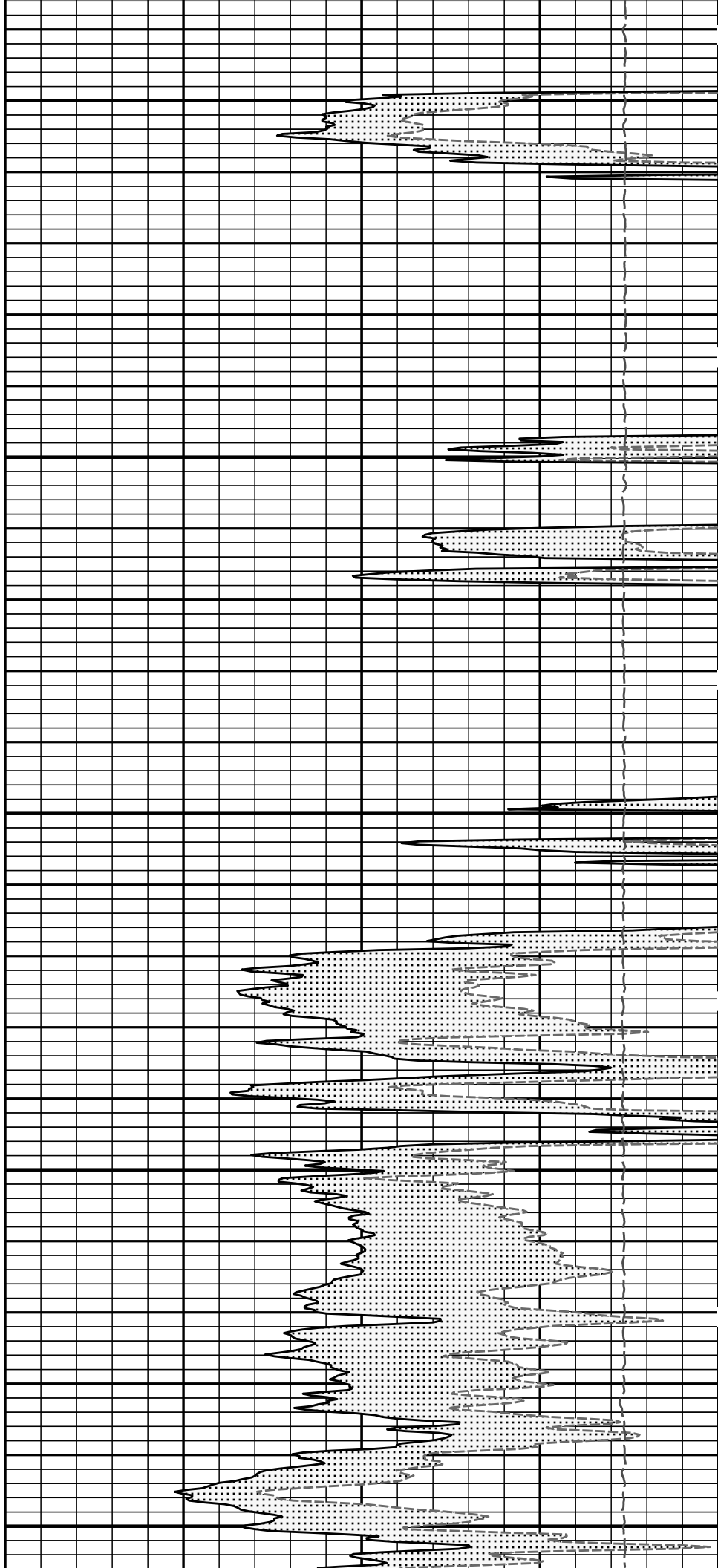
6100

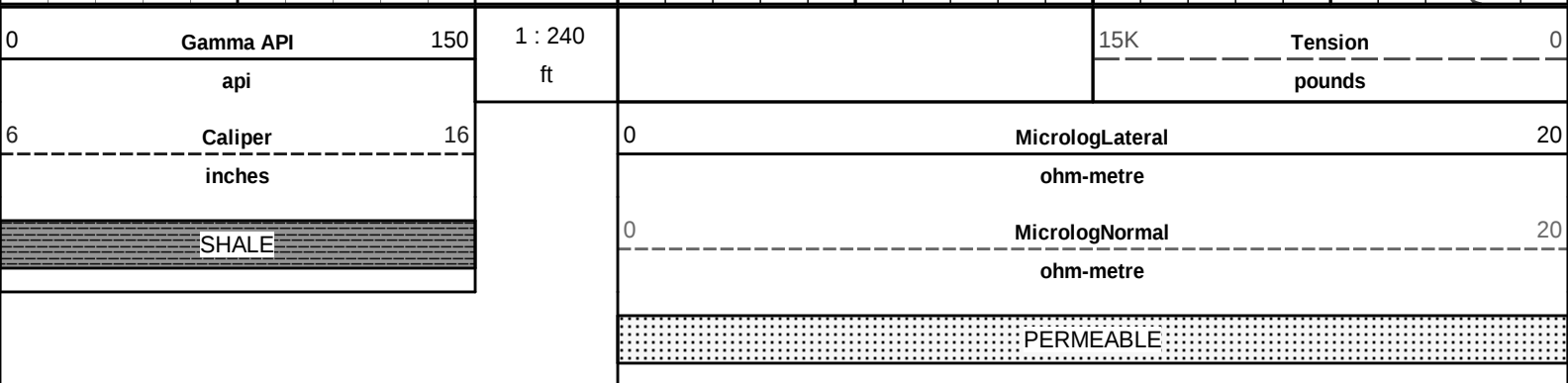
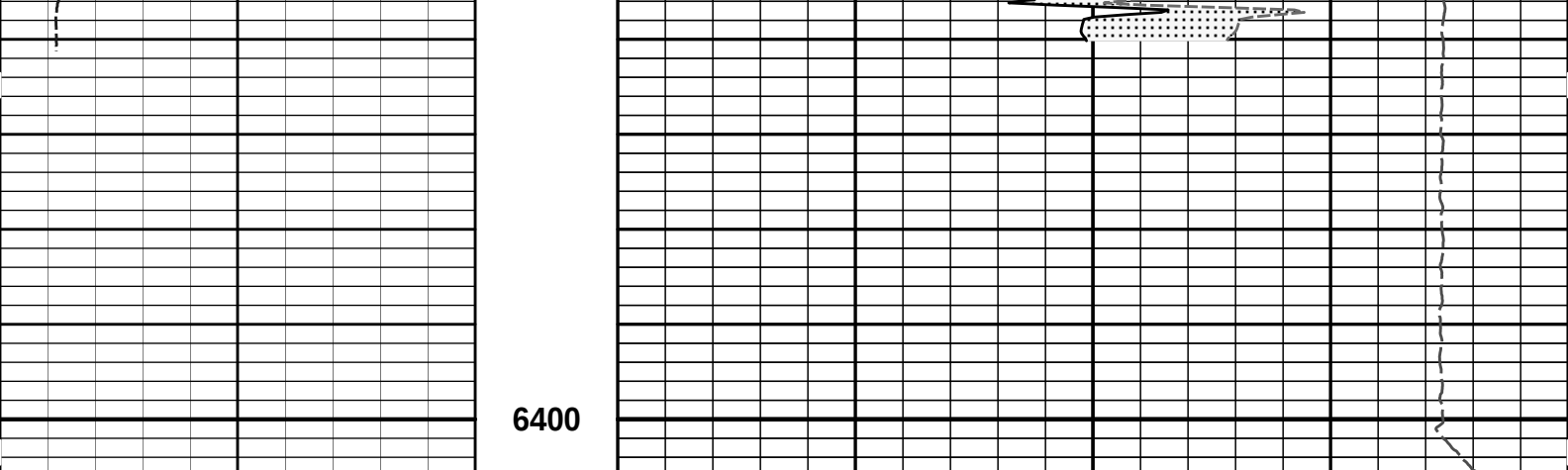




6200

6300





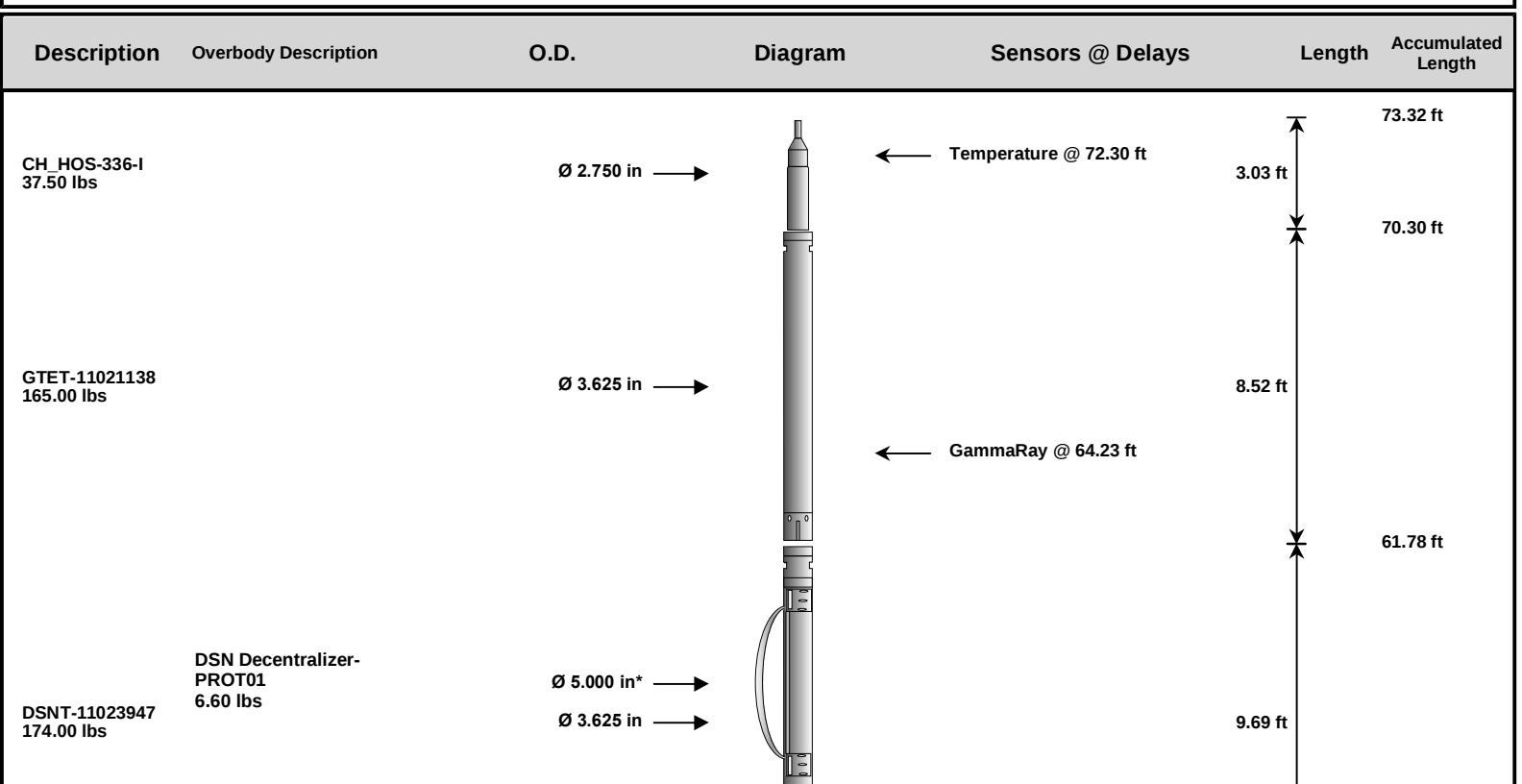
HALLIBURTON

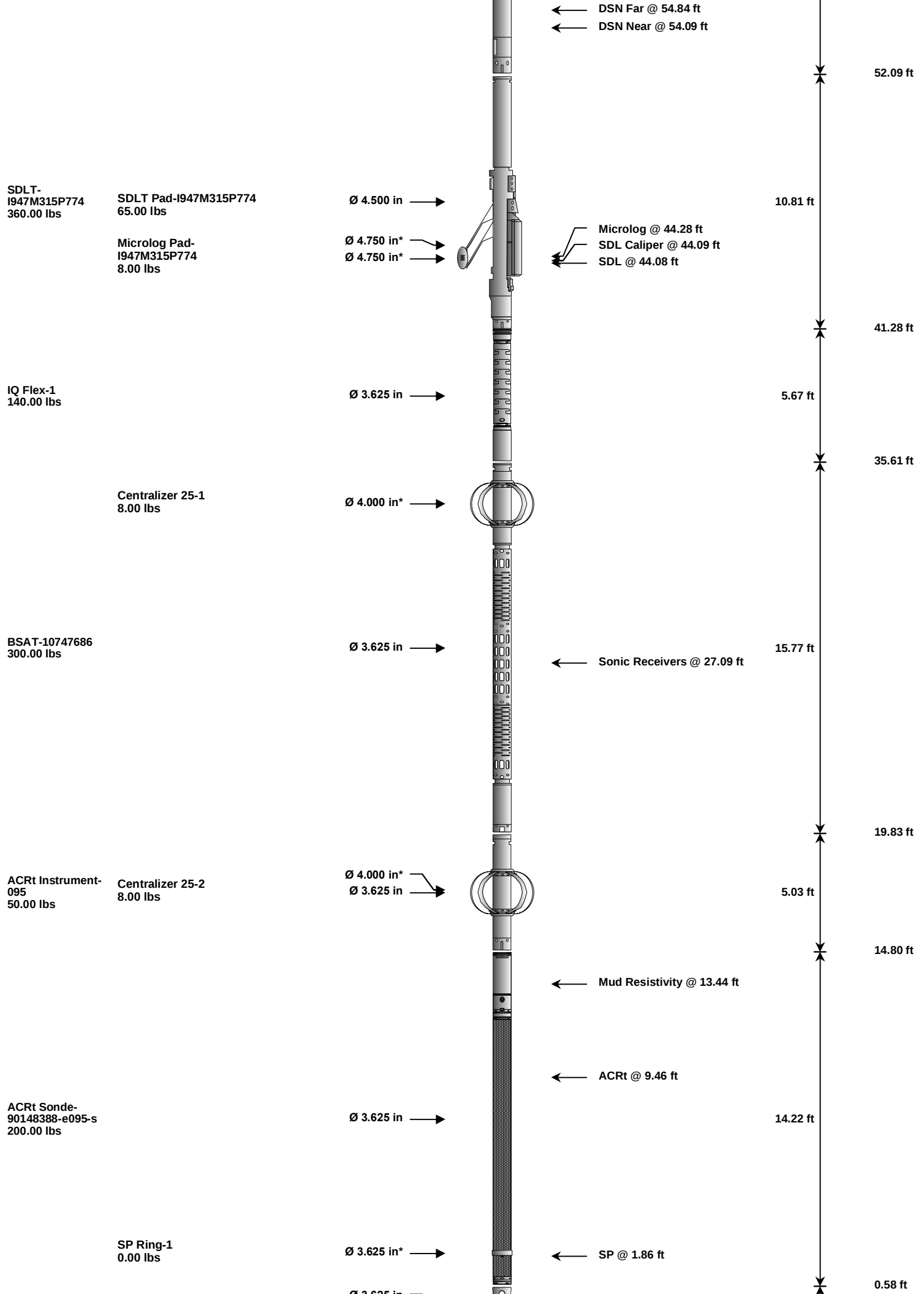
Plot Time: 01-May-12 16:14:37
Plot Range: 5640 ft to 6405.67 ft
Data: STANFORD_C_2\Well Based\REPEAT\
Plot File: \\-LOCAL-STANFORD_C_2\0001 GTET-BSAT-FLEX-DSNT-SDLT-ACRT-CBGHD\ML\Microlog_IQ_5_rep_lib

REPEAT SECTION

HALLIBURTON

TOOL STRING DIAGRAM REPORT





Cabbage Head-01 10.00 lbs		Ø 3.625 in Ø 6.000 in				0.58 ft 0.00 ft	
Mnemonic	Tool Name	Serial Number	Weight (lbs)	Length (ft)	Accumulated Length (ft)	Max.Log. Speed (fpm)	
CH_HOS	Hostile Cable Head with Load Cell	336-I	37.50	3.03	70.30	300.00	
GTET	Gamma Telemetry Tool	11021138	165.00	8.52	61.78	60.00	
DSNT	Dual Spaced Neutron	11023947	174.00	9.69	52.09	60.00	
DCNT	DSN Decentralizer	PROT01	6.60	5.13	*	55.42	300.00
SDLT	Spectral Density Tool	I947M315P774	360.00	10.81	41.28	60.00	
SDLP	Density Insite Pad	I947M315P774	65.00	2.55	*	43.49	60.00
MICP	Microlog Pad	I947M315P774	8.00	1.00	*	43.78	60.00
IQF	IQ Flex tool	1	140.00	5.67	35.61	300.00	
BSAT	Borehole Sonic Array Tool	10747686	300.00	15.77	19.83	60.00	
OBCEN	Centralizer - 25 in. Overbody	1	8.00	2.08	*	32.82	300.00
ACRt	Array Compensated True Resistivity Instrument Section	095	50.00	5.03	14.80	300.00	
OBCEN	Centralizer - 25 in. Overbody	2	8.00	2.08	*	16.30	300.00
ACRt	Array Compensated True Resistivity	90148388-e095-s	200.00	14.22	0.58	300.00	
SP	SP Ring	1	0.00	0.25	*	1.86	300.00
CBHD	Cabbage Head	01	10.00	0.58	0.00	300.00	
Total			1,532.10	73.32			
* Not included in Total Length and Length Accumulation.							
Data: STANFORD_C_2I0001 GTET-BSAT-FLEX-DSNT-SDLT-ACRT-CBGHDWIDLE							
Date: 01-May-12 13:21:38							

HALLIBURTON

CALIBRATION REPORT

NATURAL GAMMA RAY TOOL SHOP CALIBRATION

Tool Name:GTET - 11021138

Engineer:BOMAR

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

Reference Calibration Date:22-Apr-12 21:03:46

Calibration Date:22-Apr-12 21:06:30

Calibration Version:1

Calibrator Source S/N: MP051807-02

Calibrator API Reference:234.00 api

Equivalent Calibrator API Reference:238.1 api

Measurement	Measured	Calibrated	Units
Background	73.1	73.3	api
Background + Calibrator	310.4	311.4	api
Calibrator	237.3	238.1	api

NATURAL GAMMA RAY TOOL FIELD CALIBRATION

Tool Name:GTET - 11021138

Engineer:C. MARLOWE

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

Reference Calibration Date:22-Apr-12 21:06:30

Calibration Date:01-May-12 13:00:32

Calibration Version:1

Calibrator Source S/N: MP051807-02

Calibrator API Reference:234.00 api

Equivalent Calibrator API Reference:238.1 api

Field Verification	Shop	Field	Units
Background	73.3	72.9	api
Background + Calibrator	311.4	307.5	api
Calibrator	238.1	234.5	api

Shop	Field	Difference	Tolerance
238.1	234.5	3.6	+/- 9.00

MICRO LOG SHOP CALIBRATION						
Tool Name: Microlog Pad - I947M315P774		Reference Calibration Date: 06-Apr-12 06:17:36				
Engineer: BOMAR		Calibration Date: 22-Apr-12 21:28:26				
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	-0.11	-0.18	-0.01	-0.01	ohmm
	Calibration Point #1	0.07	0.00	0.00	0.00	ohmm
	Calibration Point #2	20.18	20.00	20.08	20.00	ohmm
	Internal Reference	19.98	19.80	20.09	20.01	ohmm
	Measurement	Micro Log Normal Tool Value		Micro Log Lateral Tool Value		Units
	Tool Zero	1.57		-0.83		V
	Calibration Point #1	49.66		2.20		V
	Calibration Point #2	5346.79		6925.38		V
	Internal Reference	5293.72		6928.27		V
MICRO LOG FIELD CHECK						
Tool Name: Microlog Pad - I947M315P774		Reference Calibration Date: 22-Apr-12 21:28:26				
Engineer: C. MARLOWE		Calibration Date: 01-May-12 13:07:52				
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	-0.18	-0.19	-0.01	-0.01	ohmm
	Internal Reference	19.80	19.84	20.01	20.06	ohmm
	Summary					
	Signal	Shop	Field	Difference	Tolerance	
	Microlog Normal	19.80	19.84	-0.04	+/- 0.80	
	Microlog Lateral	20.01	20.06	-0.05	+/- 0.80	
CALIBRATION SUMMARY						
Sensor	Shop	Field	Post	Difference	Tolerance	Units
GTET-11021138						
Gamma Ray Calibrator	238.1	234.5	-----	3.6	+/- 9.00	api
Microlog Pad-I947M315P774						
MicroLog Normal	19.80	19.84	-----	-0.04	+/-0.80	ohmm
MicroLog Lateral	20.01	20.06	-----	-0.05	+/-0.80	ohmm
Data: STANFORD_C_2I0001 GTET-BSAT-FLEX-DSNT-SDLT-ACRT-CBGHD\IDLE					Date: 01-May-12 15:26:05	
HALLIBURTON						
PARAMETERS REPORT						
Depth (ft)	Tool Name	Mnemonic	Description	Value	Units	
TOP						
	SHARED	BS	Bit Size	7.875	in	

	SHARED	UBS	Use Bit Size instead of Caliper for all applications.	No	
	SHARED	MDBS	Mud Base	Water	
	SHARED	MDWT	Borehole Fluid Weight	9.200	ppg
	SHARED	WAGT	Weighting Agent	Natural	
	SHARED	BSAL	Borehole salinity	0.00	ppm
	SHARED	FSAL	Formation Salinity NaCl	0.00	ppm
	SHARED	KPCT	Percent K in Mud by Weight?	0.00	%
	SHARED	RMUD	Mud Resistivity	2.200	ohmm
	SHARED	TRM	Temperature of Mud	110.0	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	6428.00	ft
	SHARED	BHT	Bottom Hole Temperature	140.0	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	1.80	ohmm
	Rwa / CrossPlot	TMFR	Rmf Ref Temp	100.00	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	100.00	degF

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	
BOTTOM				
Data: STANFORD_C_2I0001 GTET-BSAT-FLEX-DSNT-SDLT-ACRT-CBGHD			IDLE	
			Date: 01-May-12 15:23:37	

HALLIBURTON				
INPUTS, DELAYS AND FILTERS TABLE				
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
GTET				
TPUL	Tension Pull	64.23	NO	
GR	Natural Gamma Ray API	64.23	TRI	1.750
GRU	Unfiltered Natural Gamma Ray API	64.23	NO	
EGR	Natural Gamma Ray API with Enhanced Vertical Resolution	64.23	W	1.416 , 0.750
ACCZ	Accelerometer Z	0.00	BLK	0.083
DEVI	Inclination	0.00	NO	
DSNT				
TPUL	Tension Pull	53.99	NO	
RNDS	Near Detector Telemetry Counts	54.09	BLK	1.417
RFDS	Far Detector Telemetry Counts	54.84	TRI	0.583
DNTT	DSN Tool Temperature	54.09	NO	
DSNS	DSN Tool Status	53.99	NO	
ERND	Near Detector Telemetry Counts EVR	54.09	BLK	0.000
ERFD	Far Detector Telemetry Counts EVR	54.84	BLK	0.000
ENTM	DSN Tool Temperature EVR	54.09	NO	
SDLT				
TPUL	Tension Pull	44.09	NO	
PCAL	Pad Caliper	44.09	TRI	0.250
ACAL	Arm Caliper	44.09	TRI	0.250
BSAT				
TPUL	Tension Pull	27.09	NO	
STAT	Status	27.09	NO	
DLYT	Delay Time	27.09	NO	
CH	Sample Interval	27.09	NO	

	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	
TL DV	Lower Temperature Derivative	2.97	NO	

TRBD	Receiver Board Temperature	2.97	NO	
SDLT Pad				
TPUL	Tension Pull	44.08	NO	
NAB	Near Above	43.90	BLK	0.920
NHI	Near Cesium High	43.90	BLK	0.920
NLO	Near Cesium Low	43.90	BLK	0.920
NVA	Near Valley	43.90	BLK	0.920
NBA	Near Barite	43.90	BLK	0.920
NDE	Near Density	43.90	BLK	0.920
NPK	Near Peak	43.90	BLK	0.920
NLI	Near Lithology	43.90	BLK	0.920
NBAU	Near Barite Unfiltered	43.90	BLK	0.250
NLIU	Near Lithology Unfiltered	43.90	BLK	0.250
FAB	Far Above	44.26	BLK	0.250
FHI	Far Cesium High	44.26	BLK	0.250
FLO	Far Cesium Low	44.26	BLK	0.250
FVA	Far Valley	44.26	BLK	0.250
FBA	Far Barite	44.26	BLK	0.250
FDE	Far Density	44.26	BLK	0.250
FPK	Far Peak	44.26	BLK	0.250
FLI	Far Lithology	44.26	BLK	0.250
PTMP	Pad Temperature	44.09	BLK	0.920
NHV	Near Detector High Voltage	43.49	NO	
FHV	Far Detector High Voltage	43.49	NO	
ITMP	Instrument Temperature	43.49	NO	
DDHV	Detector High Voltage	43.49	NO	
Microlog Pad				
TPUL	Tension Pull	44.28	NO	
MINV	Microlog Lateral	44.28	BLK	0.750
MNOR	Microlog Normal	44.28	BLK	0.750
SP Ring				
PLTC	Plot Control Mask	1.86	NO	
SP	Spontaneous Potential	1.86	BLK	1.250
SPR	Raw Spontaneous Potential	1.86	NO	
SPO	Spontaneous Potential Offset	1.86	NO	
Data: STANFORD_C_210001 GTET-BSAT-FLEX-DSNT-SDLT-ACRT-CBGHDIDLE			Date: 01-May-12 15:23:51	
COMPANY	OXY USA, INC.			
WELL	STANFORD C-2			
FIELD	WILBURTON EAST			
COUNTY	MORTON	STATE	KANSAS	
HALLIBURTON		MICROLOG		