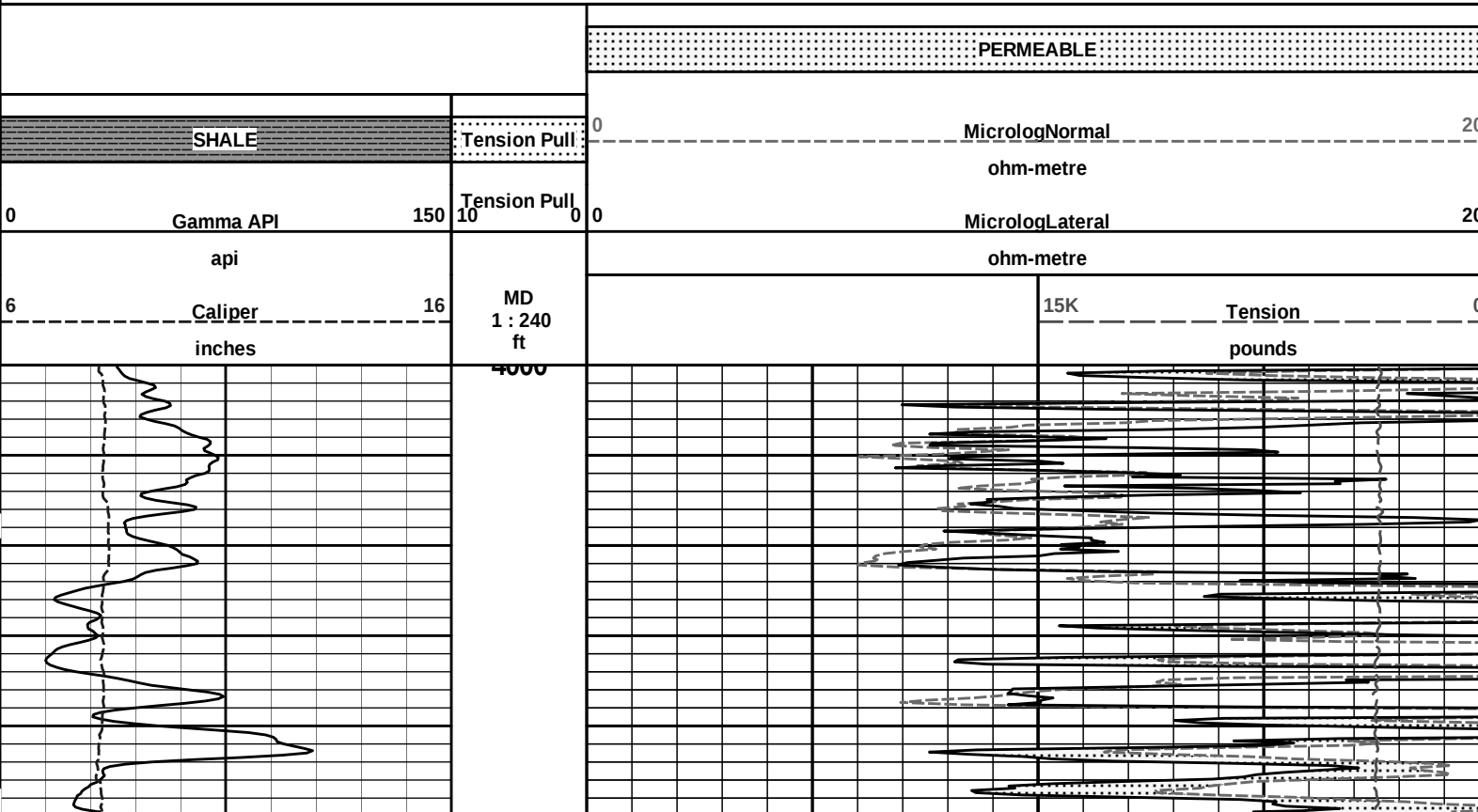


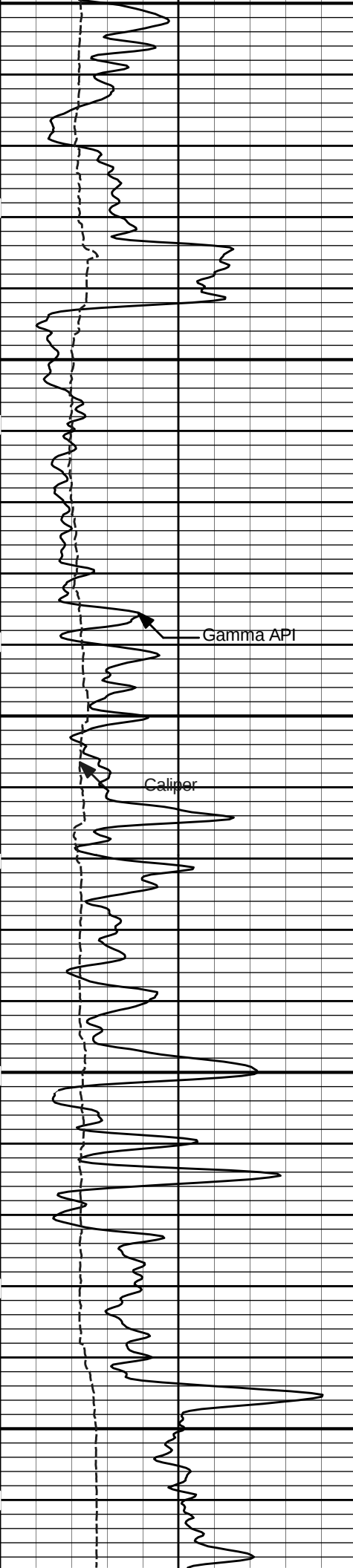
MICROLOG

Fold here

Service Ticket No.: 900523447						API Serial No.: 15187212340000						PGM Version: WL INSITE R3.8.4 (Build 5)					
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	N/A							
Rmc @ Meas. Temp.		@		@			11014296										
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.	GTET	Serial No.				Serial No.				Serial No.							
Model No.	11048627	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							
LOGGING DATA																	

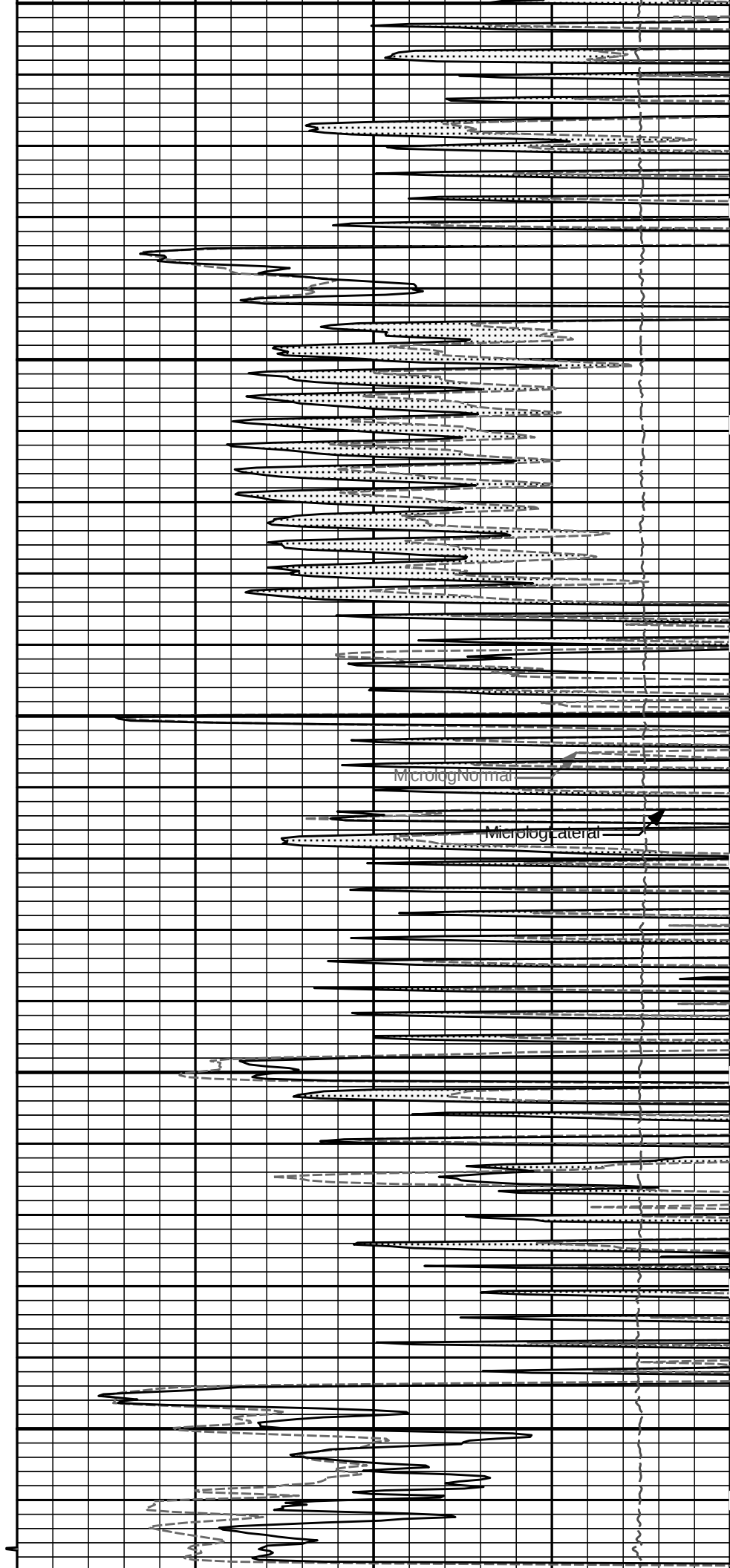
GENERAL				GAMMA		ACOUSTIC			DENSITY			NEUTRON			
Run	Depth		Speed	Scale		Scale		Matrix	Scale		Matrix	Scale		Matrix	
No.	From	To	ft/min	L	R	L	R		L	R		L	R		
ONE	5640	4000	REC	0	150										
DIRECTIONAL INFORMATION															
Maximum Deviation								@	KOP @						
Remarks: ANNULAR HOLE VOLUME CALCULATED FOR 5.5-INCH CASING															
CHLORIDES REPORTED AT 600 MG/L															
LCM REPORTED AT 6 LB/BSL															
GTET-DSNT-SDLT-BSAT-ACRT RUN IN COMBINATION															
TODAY'S CREW: B. TERRELL & V. JAIME															
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															

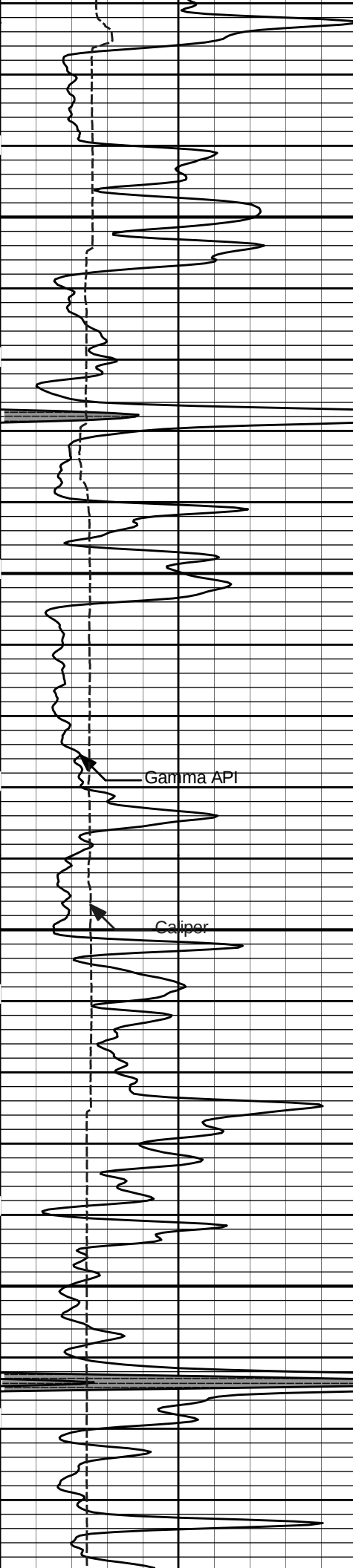




4100

4200



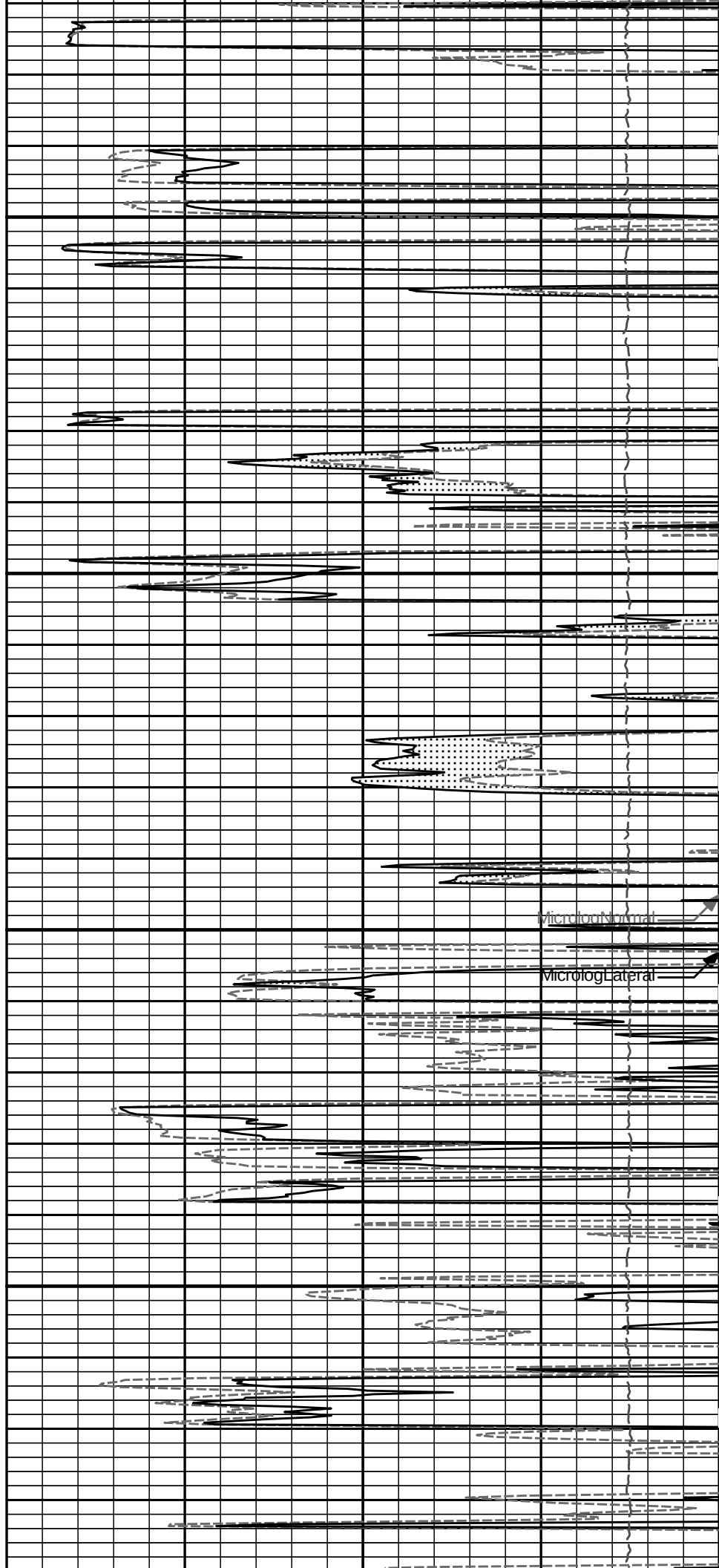


4300

Gamma API

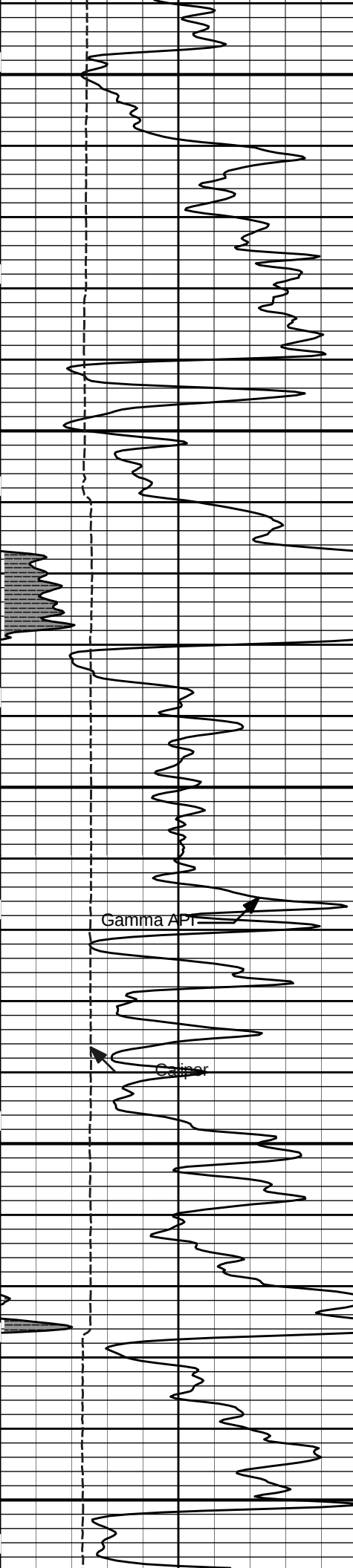
Caliper

4400



MicrologNormal

MicrologLateral



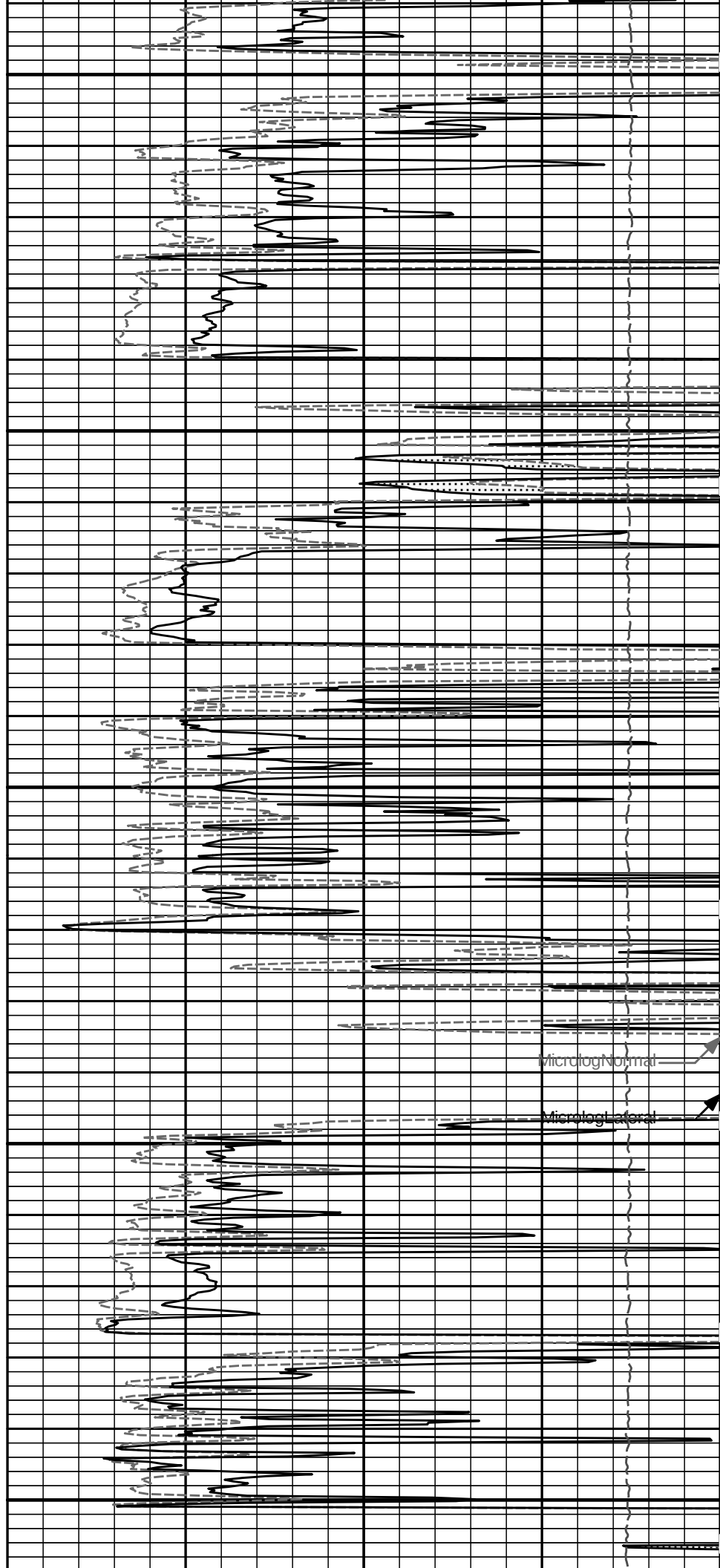
4500

4600

Gamma API

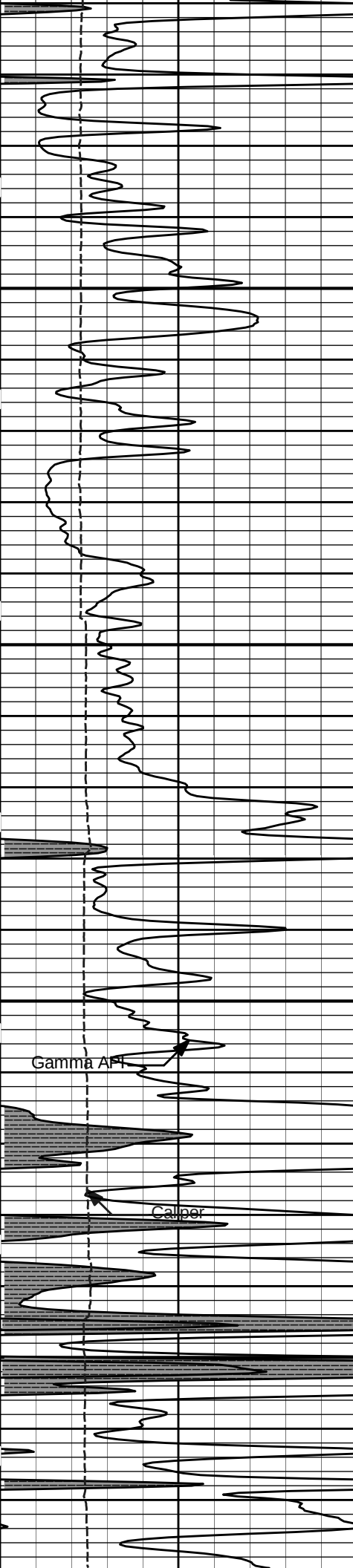
Caliper

4700



MicrologNormal

MicrologLateral

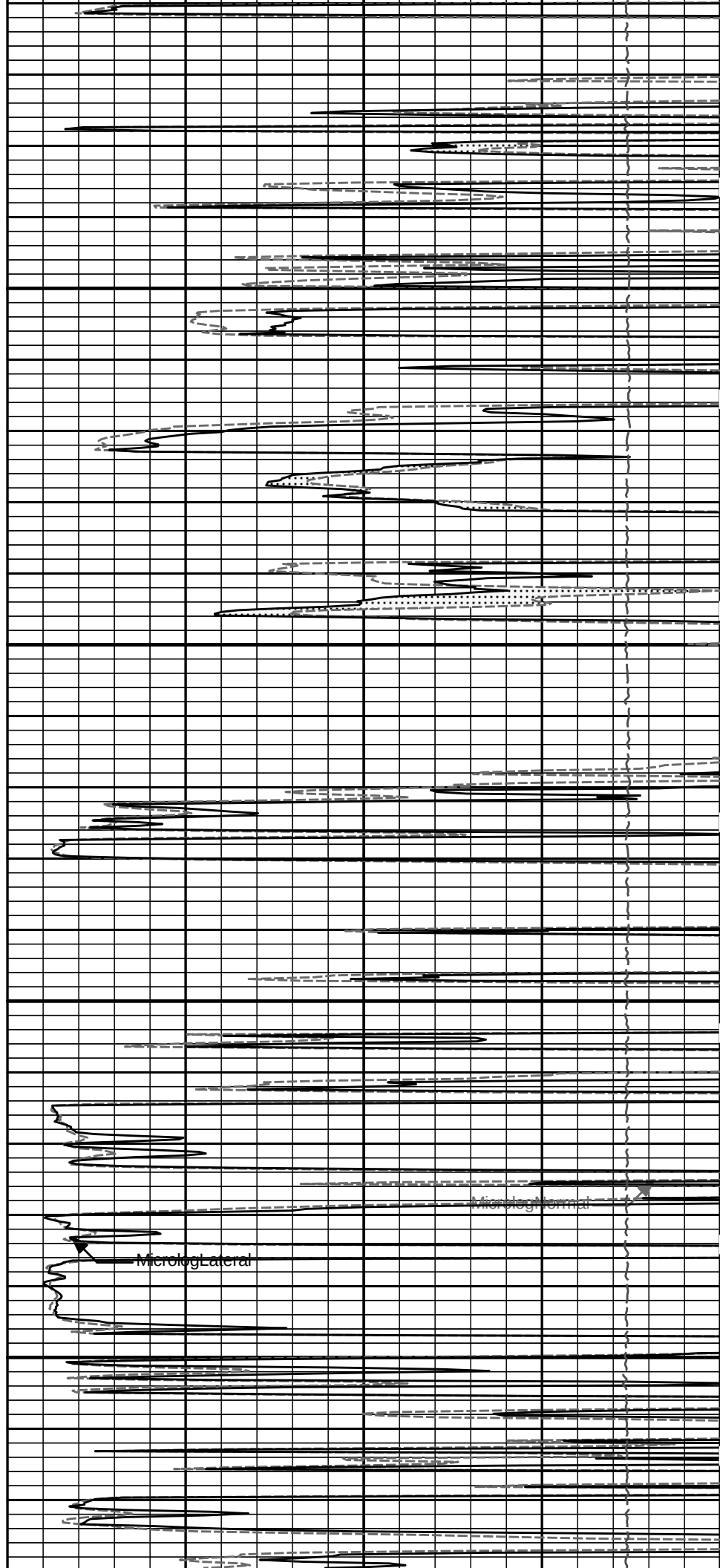


4800

Gamma API

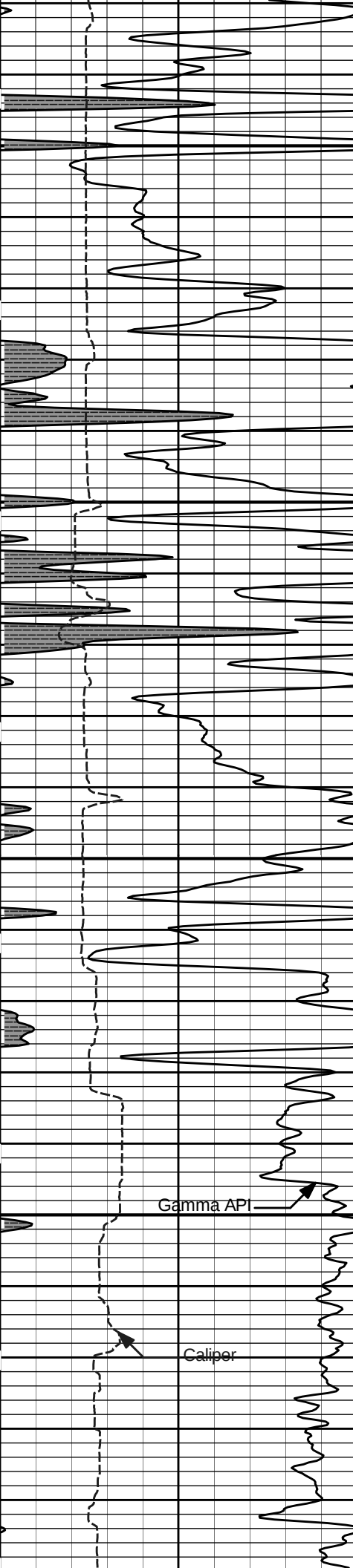
Caliper

4900



Microlog Lateral

Microlog Normal

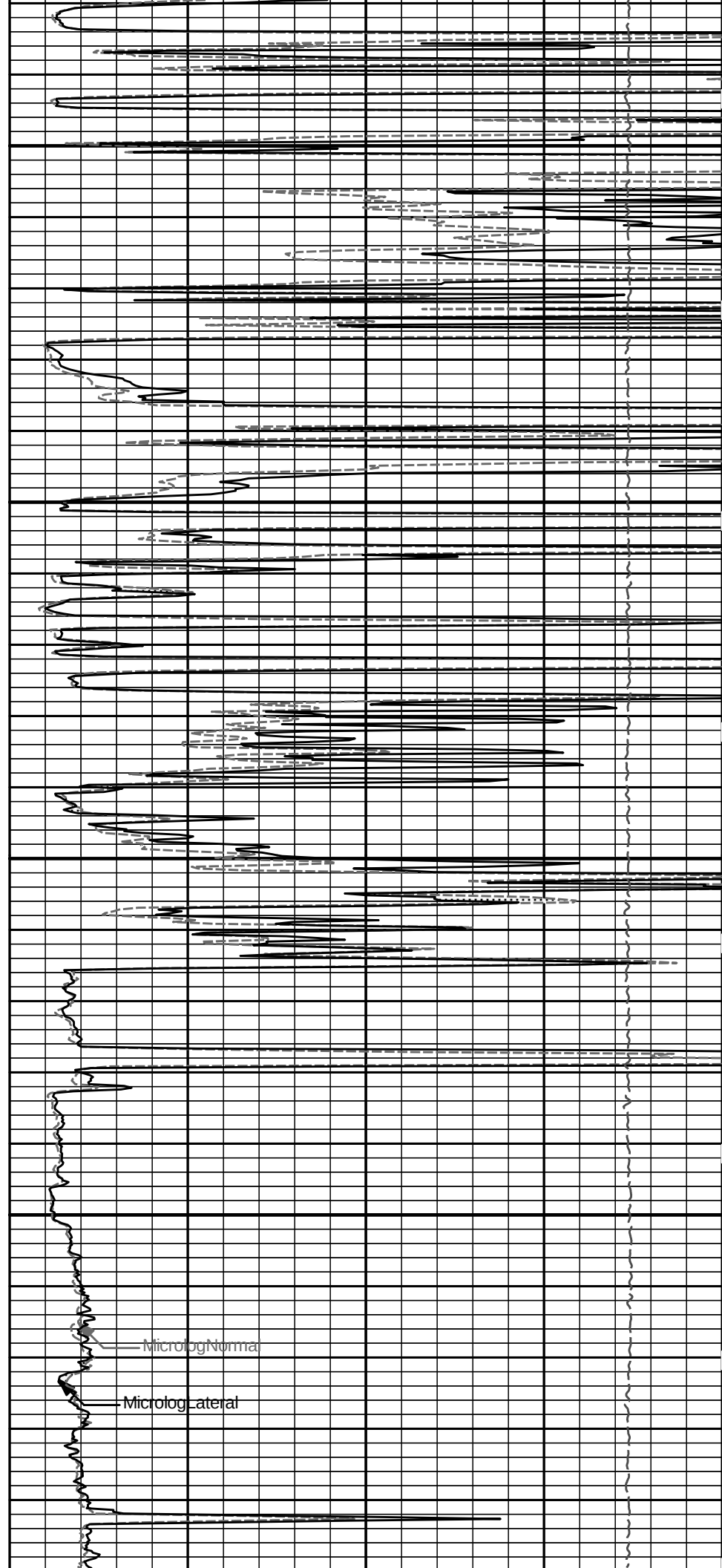


5000

5100

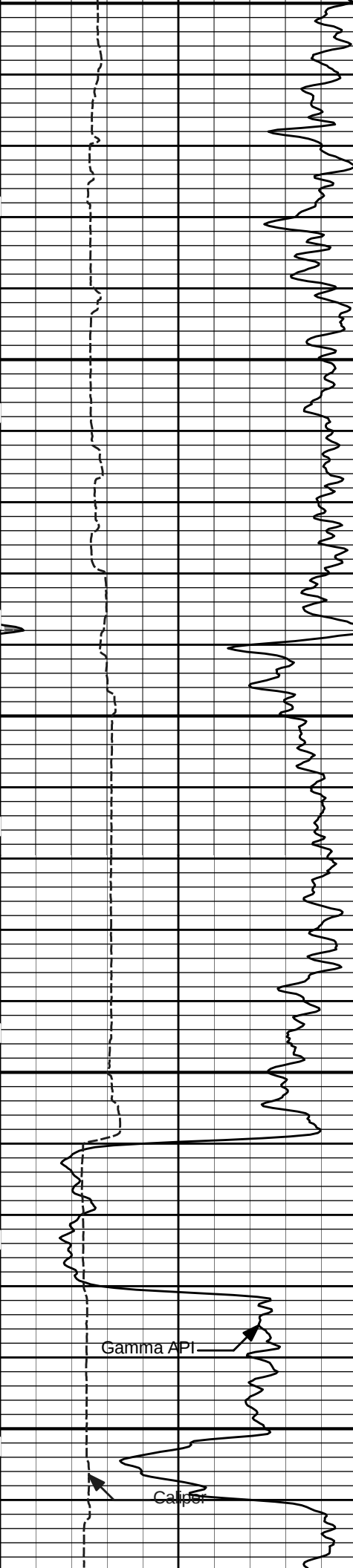
Gamma API

Caliper



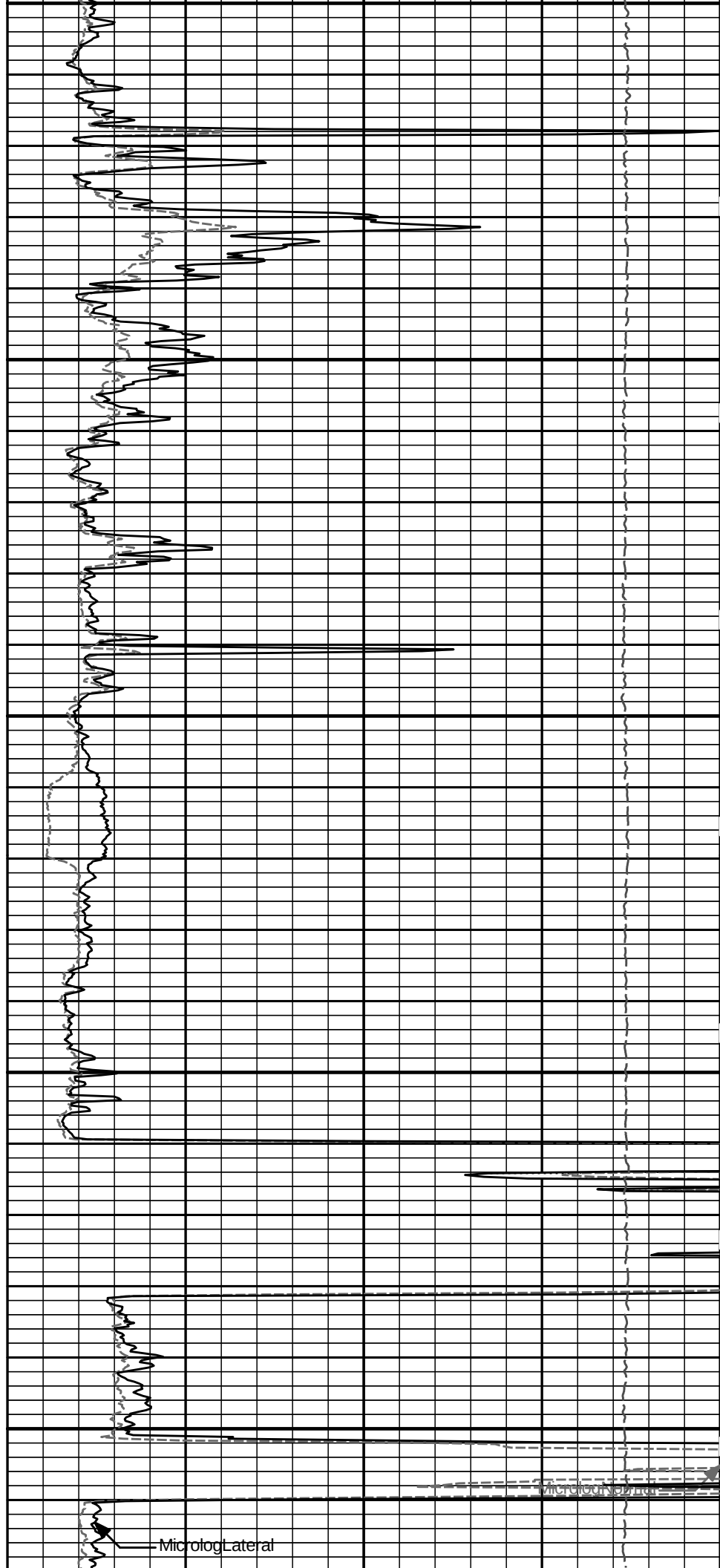
Microlog Normal

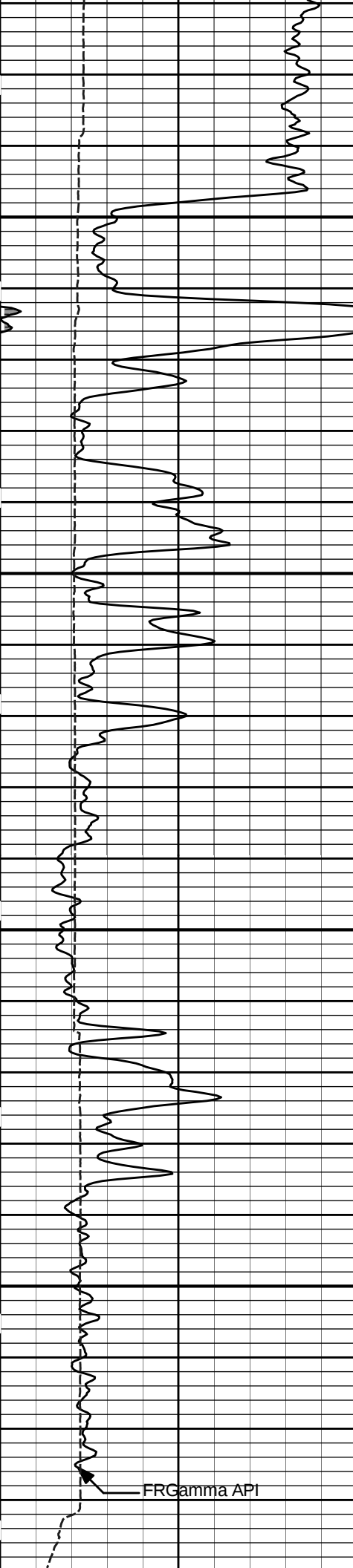
Microlog Lateral



5200

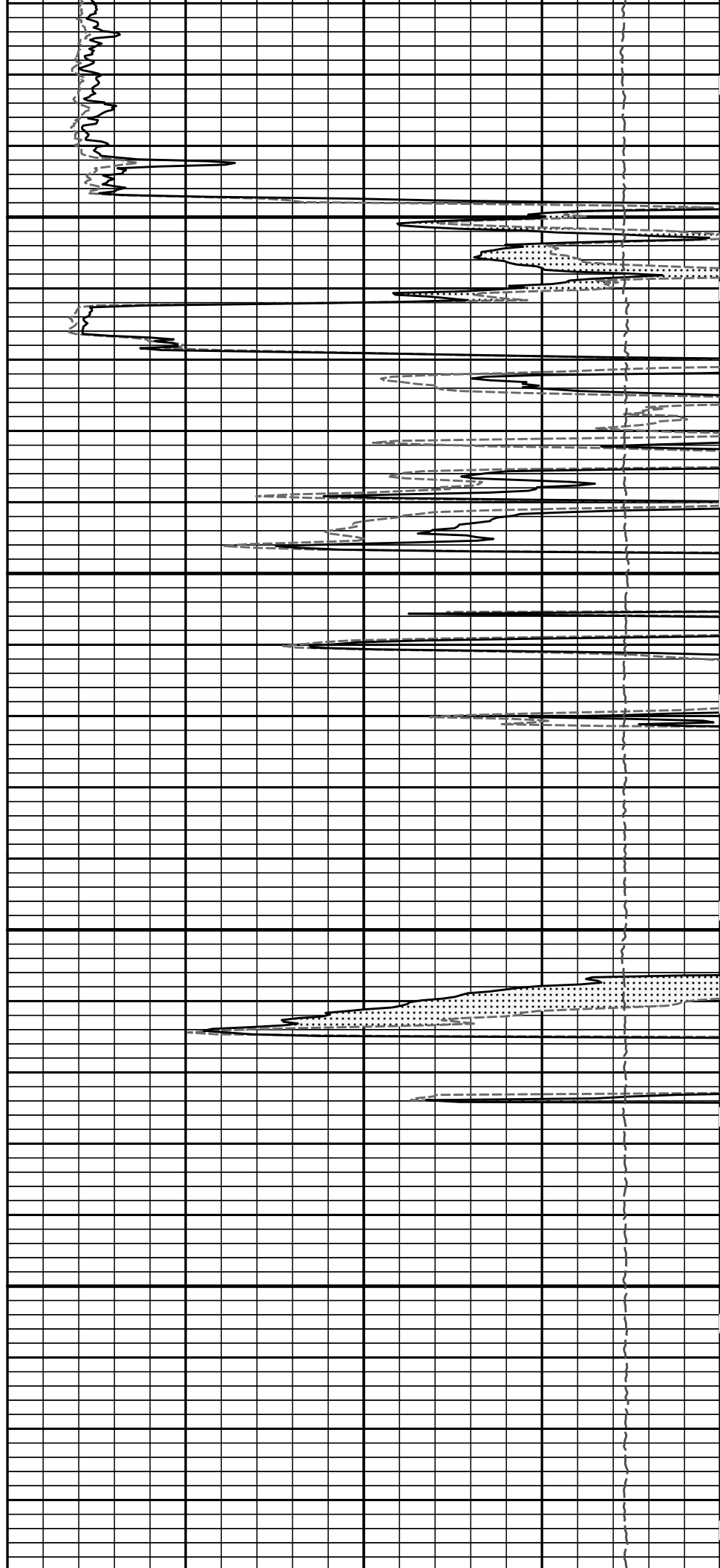
5300

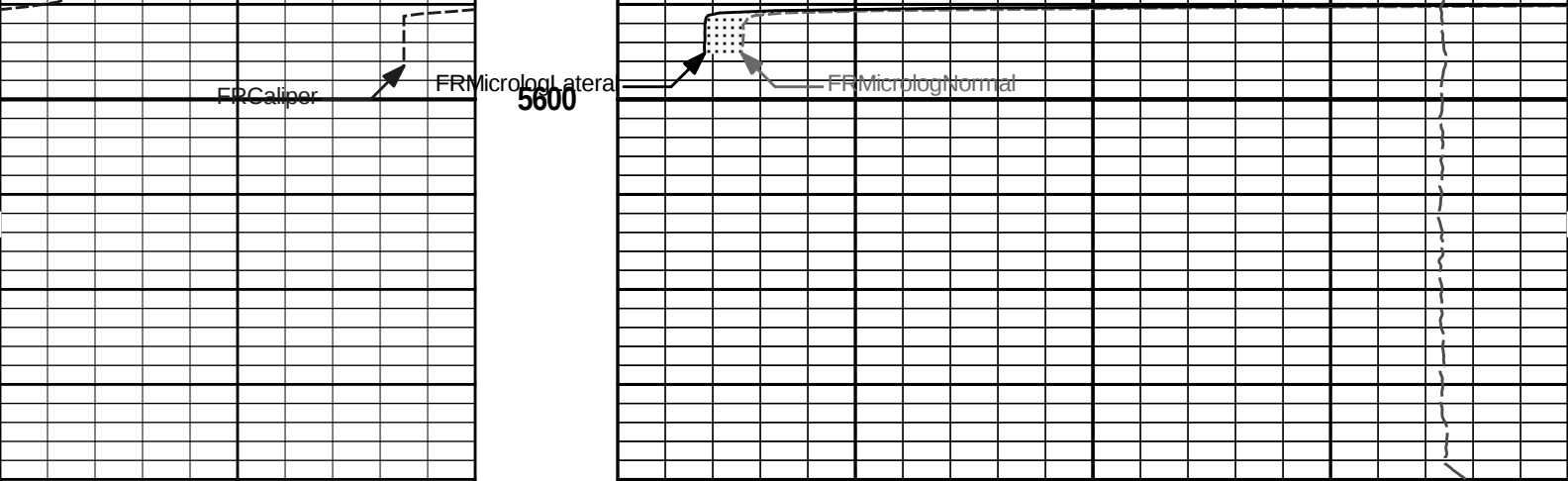




5400

5500





6-----Caliper-----16		MD 1 : 240 ft	15K-----Tension-----0	
inches			pounds	
0-----Gamma API-----150	Tension Pull 10 0	0	MicrologLateral 20	
api			ohm-metre	
SHALE		Tension Pull 0	MicrologNormal 20	
			ohm-metre	
			PERMEABLE	

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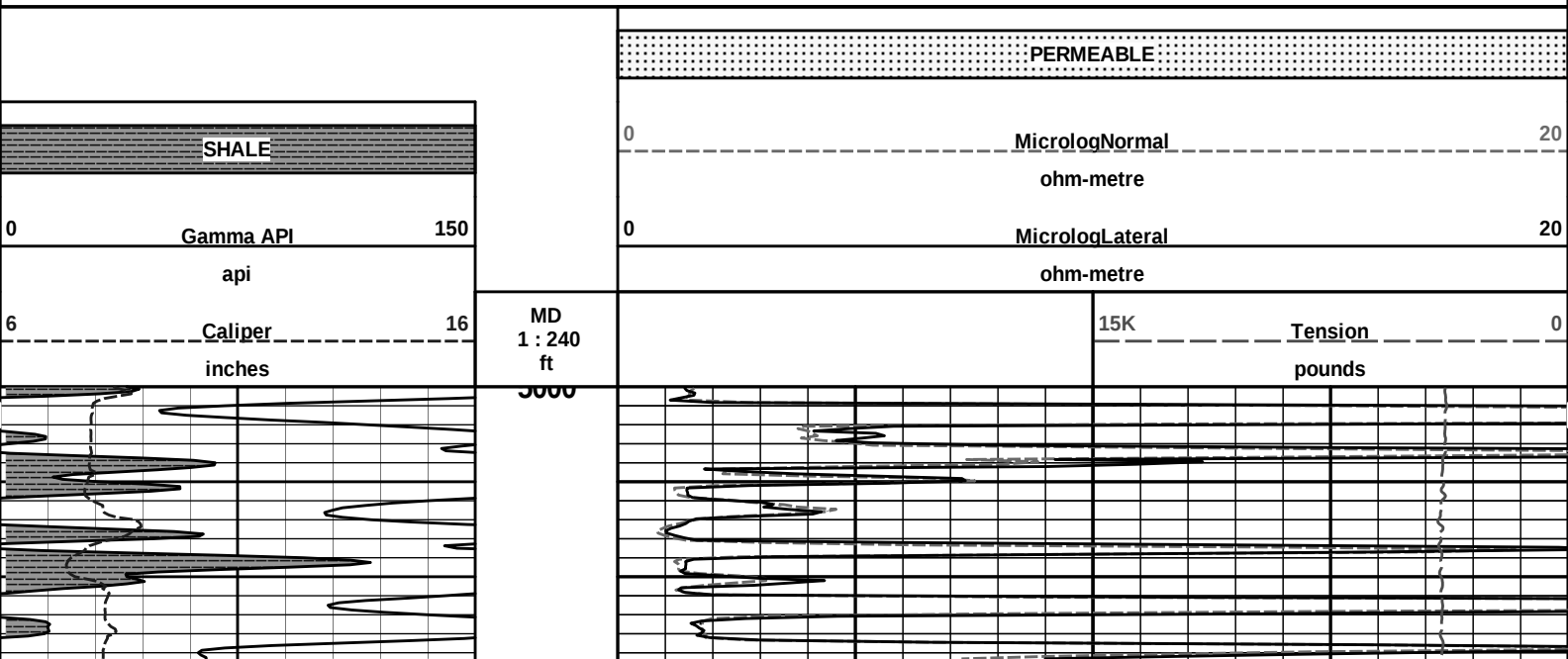
Plot Time: 21-Jun-13 08:50:19
Plot Range: 4000 ft to 5640.58 ft
Data: KU_B-4\Well Based\DETAIL\
Plot File: \\LOCAL\KU_B-4\0001 SP-GTET-DSN-SDL-FLEX-BSAT-ACRT-CH\MICRO\Microlog_IQ_5_main_lib

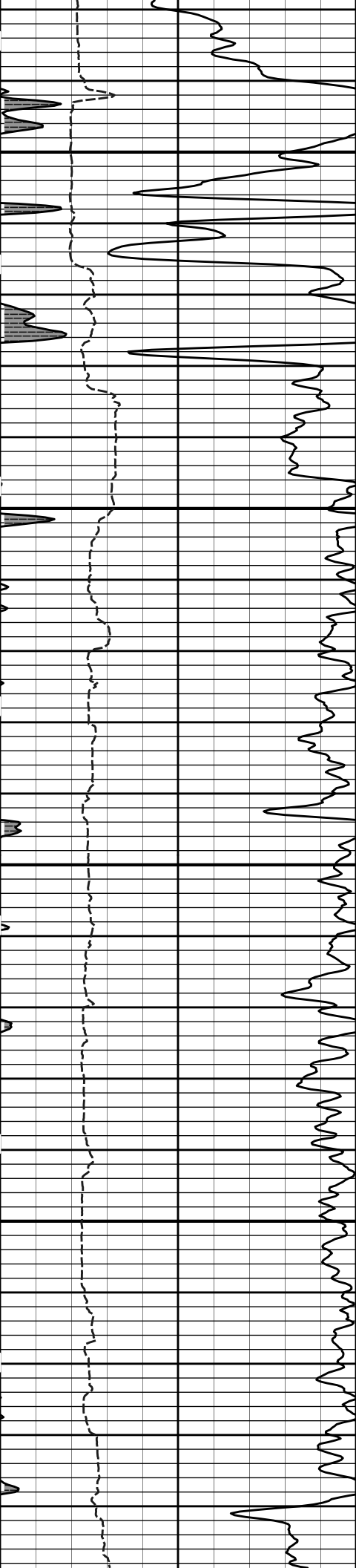
5 INCH MAIN LOG

HALLIBURTON

Plot Time: 21-Jun-13 08:50:19
Plot Range: 5000 ft to 5643.58 ft
Data: KU_B-4\Well Based\REPEAT\
Plot File: \\LOCAL\KU_B-4\0001 SP-GTET-DSN-SDL-FLEX-BSAT-ACRT-CH\MICRO\Microlog_IQ_5_rep_lib

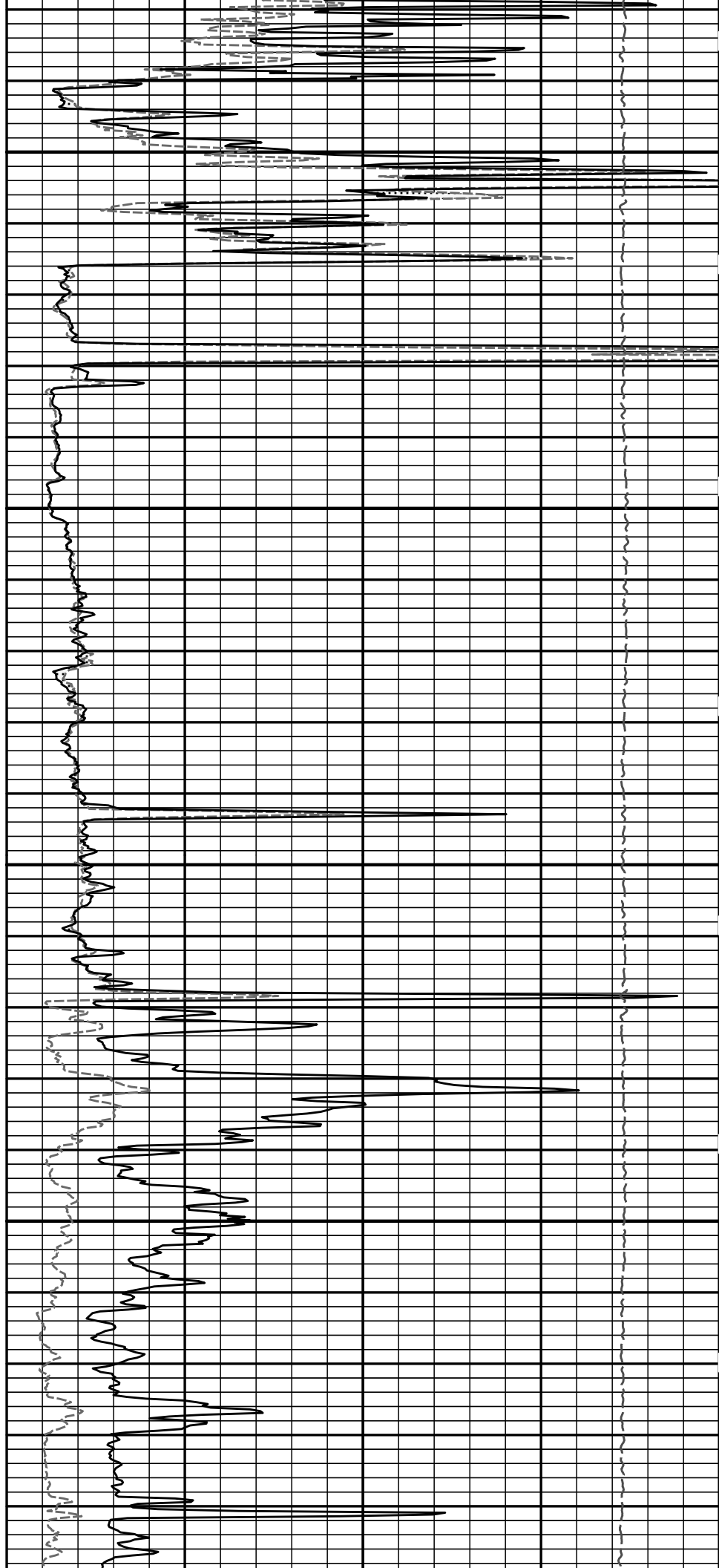
REPEAT SECTION

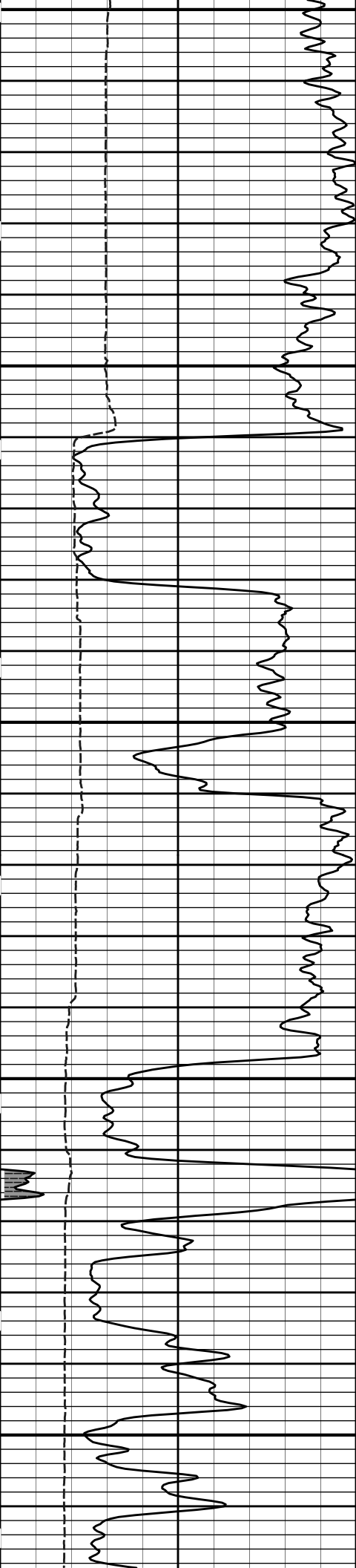




5100

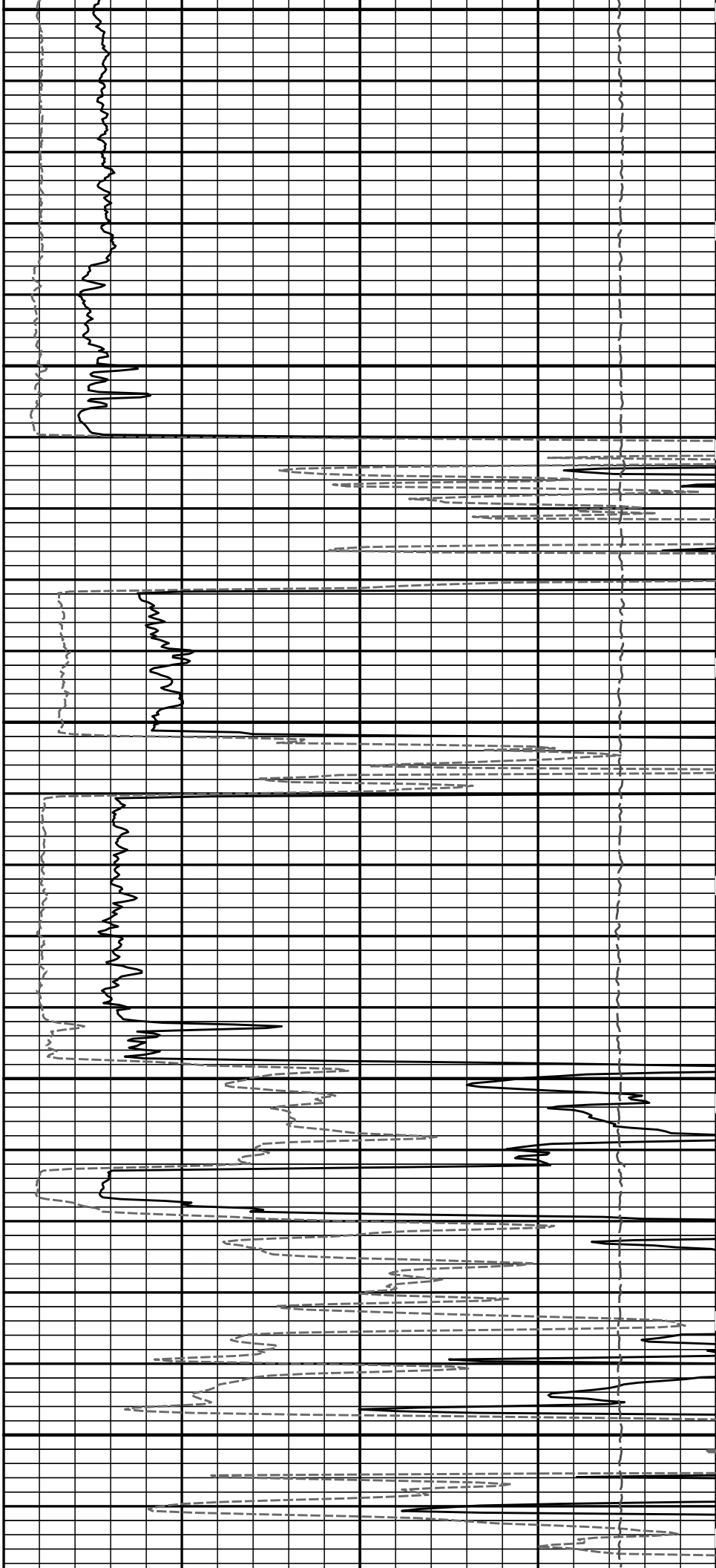
5200

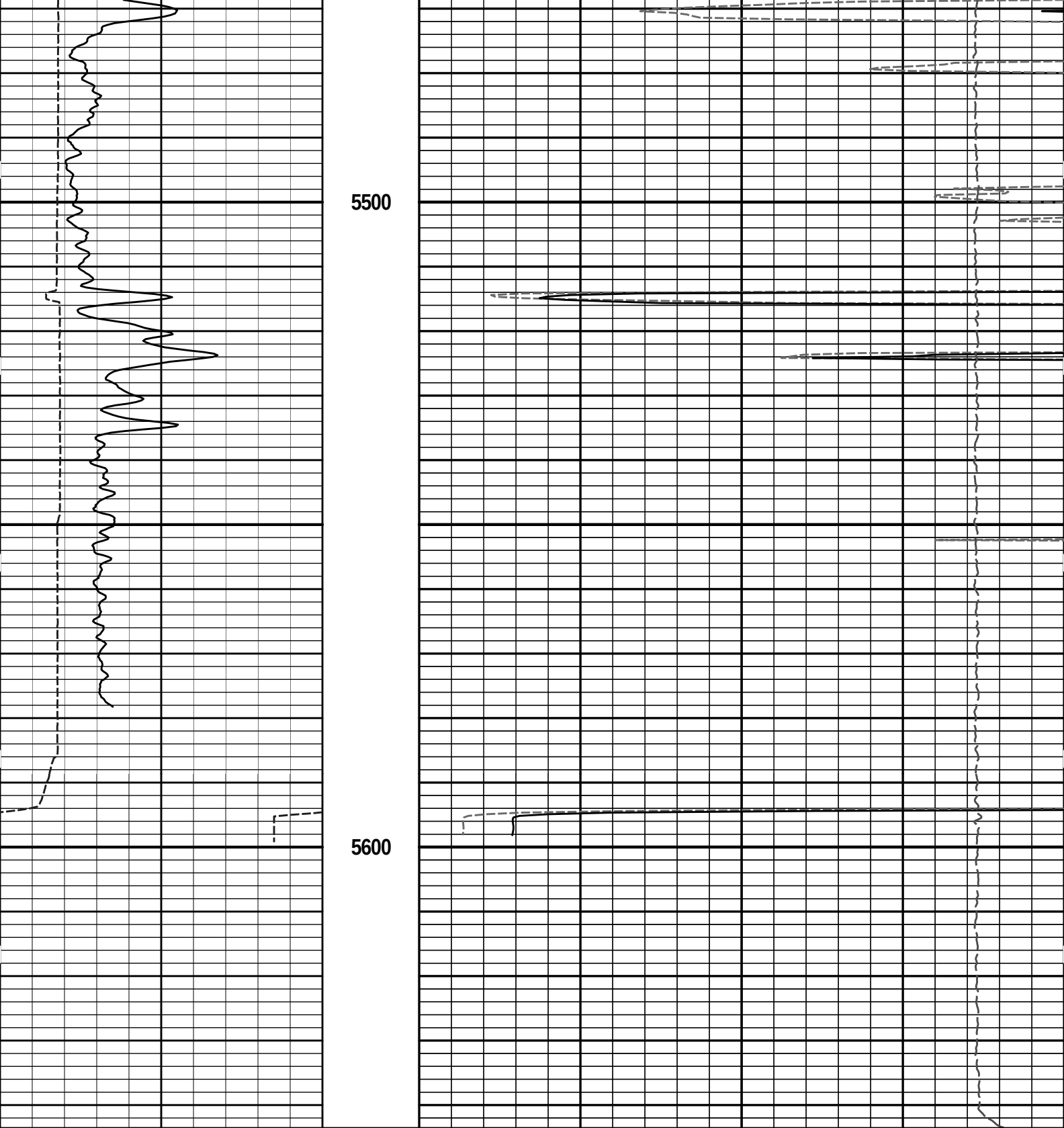




5300

5400



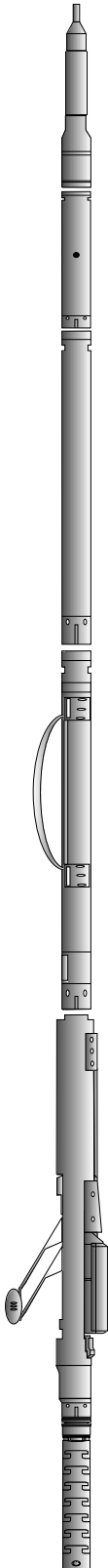
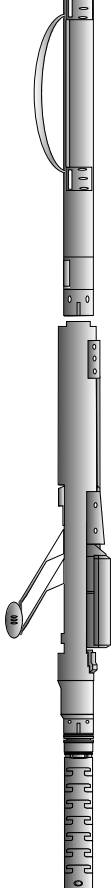
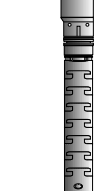
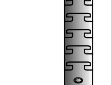


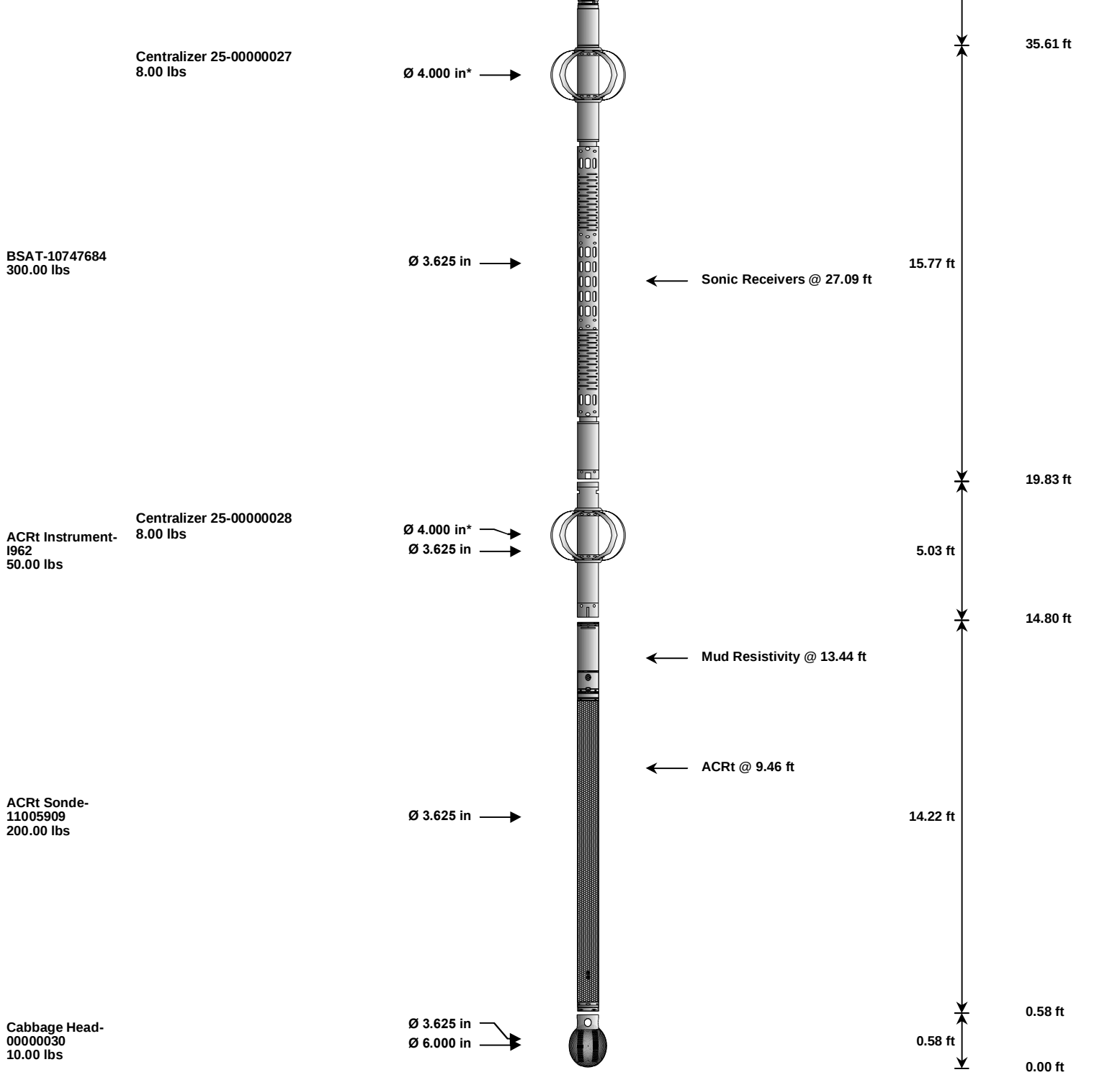
6	Caliper	16	MD	15K	Tension	0
	inches		1 : 240		pounds	
0	Gamma API	150		0	MicrologLateral	20
	api				ohm-metre	
	SHALE			0	MicrologNormal	20
					ohm-metre	
					PERMEABLE	

REPEAT SECTION

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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 @ 76.98 ft	3.03 ft	78.01 ft
XOHD-TRK696 20.00 lbs		Ø 2.750 in → Ø 3.625 in →			0.95 ft	74.98 ft
SP Sub-11441455 60.00 lbs		Ø 3.625 in →		← SP @ 72.26 ft	3.74 ft	74.03 ft
						70.30 ft
GTET-11048627 165.00 lbs		Ø 3.625 in →		← GammaRay @ 64.23 ft	8.52 ft	
						61.78 ft
DSNT-11055304 174.00 lbs	DSN Decentralizer-11005605 6.60 lbs	Ø 5.000 in* → Ø 3.625 in →		← DSN Far @ 54.84 ft ← DSN Near @ 54.09 ft	9.69 ft	
						52.09 ft
SDLT-11014296 360.00 lbs	SDLT Pad-10865884 65.00 lbs Microlog Pad-11014296 8.00 lbs	Ø 4.500 in → Ø 4.750 in* → Ø 4.750 in* →		Microlog @ 44.28 ft SDL Caliper @ 44.09 ft SDL @ 44.08 ft	10.81 ft	
						41.28 ft
Flex Joint-001 140.00 lbs		Ø 3.625 in →			5.67 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	74.98	300.00
XOHD	Hostile to Dits Cross Over	TRK696	20.00	0.95	74.03	300.00
SP	SP Sub	11441455	60.00	3.74	70.30	300.00
GTET	Gamma Telemetry Tool	11048627	165.00	8.52	61.78	60.00
DSNT	Dual Spaced Neutron	11055304	174.00	9.69	52.09	60.00
DCNT	DSN Decentralizer	11005605	6.60	5.13	* 55.42	300.00
SDLT	Spectral Density Tool	11014296	360.00	10.81	41.28	60.00
MICP	Microlog Pad	11014296	8.00	1.00	* 43.78	60.00
SDLP	Density Insite Pad	10865884	65.00	2.55	* 43.49	60.00
FLEX	Flex Joint	001	140.00	5.67	35.61	300.00
BSAT	Borehole Sonic Array Tool	10747684	300.00	15.77	19.83	60.00
OBCEN	Centralizer - 25 in. Overbody	00000027	8.00	2.08	* 33.50	300.00
ACRt	Array Compensated True Resistivity Instrument Section	1962	50.00	5.03	14.80	300.00
OBCEN	Centralizer - 25 in. Overbody	00000028	8.00	2.08	* 16.80	300.00
ACRt	Array Compensated True Resistivity Sonde Section	11005909	200.00	14.22	0.58	300.00
CBHD	Cabbage Head	00000030	10.00	0.58	0.00	300.00

HALLIBURTON

CALIBRATION REPORT

NATURAL GAMMA RAY TOOL SHOP CALIBRATION

Tool Name:GTET - 11048627

Reference Calibration Date:06-Jun-13 12:46:30

Engineer:SHELDON INGERSOLL

Calibration Date:17-Jun-13 14:38:32

Software Version:WL INSITE R3.8.4 (Build 5)

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	16.6	16.4	api
Background + Calibrator	288.6	286.1	api
Calibrator	272.1	269.6	api

NATURAL GAMMA RAY TOOL FIELD CALIBRATION

Tool Name:GTET - 11048627

Reference Calibration Date:17-Jun-13 14:38:32

Engineer:J. BOLLUM

Calibration Date:19-Jun-13 09:47:57

Software Version:WL INSITE R3.8.4 (Build 5)

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	16.4	29.3	api
Background + Calibrator	286.1	299.0	api
Calibrator	269.6	269.7	api

Shop	Field	Difference	Tolerance
269.6	269.7	-0.1	+/- 9.00

DUAL SPACED NEUTRON SHOP CALIBRATION

Tool Name:DSNT - 11055304

Reference Calibration Date:20-May-13 09:50:12

Engineer:THOMAS HYDE

Calibration Date:20-May-13 10:05:01

Software Version:WL INSITE R3.8.4 (Build 5)

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: 72 degF
Min. Tool Housing Outside Diameter: 3.620 in

CALIBRATION CONSTANTS			
Measurement	Prev. Value	New Value	Control Limit On New Value
Gain:	0.971	0.975	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):	0.2097	0.2107	0.0009	+/- 0.0020
Calibrated Ratio:	9.69	9.72	0.031	+/- 0.050

VERIFIER		
Measurement	Value	Control Limit
Snow-Block Porosity (decp):	0.0635	0.02000 - 0.09000

PASS/FAIL SUMMARY	
Background Check:	Passed
Gain-Range Check:	Passed
Snow-Block Check:	Passed

DENSITY CALIPER SHOP CALIBRATION

Tool Name:	SDLT - 11014296	Reference Calibration Date:	16-Apr-13 08:29:16
Engineer:	THOMAS HYDE	Calibration Date:	30-May-13 08:27:38
Software Version:	WL INSITE R3.8.4 (Build 5)	Calibration Version:	1
Host Tool Name:	DSNT - 11055304		

CALIBRATION COEFFICIENTS			
Measurement	Previous Value	New Value	Control Limit On New Value
Pad Offset	-4390.41	-4151.69	-7000.00 - -1000.00
Pad Gain	0.0003927	0.0004028	0.000200 - 0.000600
Arm Offset	-2117.94	-2550.43	-5000.00 - 3000.00
Arm Gain	0.0004920	0.0005352	0.000300 - 0.000700
Arm Power	-0.000003440	-0.000007104	-0.000010000 - 0.000010000

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)	1.86	2.00	0.14	+/- 0.20
Medium Ring (in)	3.56	3.75	0.19	+/- 0.20
RING DIAMETER:				
Small Ring (in)	6.47	6.50	0.03	+/- 0.20
Medium Ring (in)	8.15	8.25	0.10	+/- 0.20
Large Ring (in)	15.19	15.00	-0.19	+/- 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 - 11014296	Reference Calibration Date:	30-May-13 08:27:38
Engineer:	J. BOLLLOM	Calibration Date:	19-Jun-13 09:50:28
Software Version:	WL INSITE R3.8.4 (Build 5)	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	8.25	0.00	+/- 0.15

PASS/FAIL SUMMARY	
Pad Extension Check:	Passed
Diameter Check:	Passed

SPECTRAL DENSITY SHOP CALIBRATION				
Tool Name:	SDLT Pad - 10865884	Reference Calibration Date:	09-Apr-13 11:34:03	
Engineer:	THOMAS HYDE	Calibration Date:	30-May-13 07:48:06	
Software Version:	WL INSITE R3.8.4 (Build 5)	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	1.0458	1.0217	0.90 - 1.10
Near Dens Gain	1.0099	1.0088	0.90 - 1.10
Near Peak Gain	1.0073	0.9995	0.90 - 1.10
Near Lith Gain	0.9733	0.9661	0.90 - 1.10
Far Bar Gain	1.0117	1.0092	0.90 - 1.10
Far Dens Gain	1.0020	1.0004	0.90 - 1.10
Far Peak Gain	0.9931	0.9944	0.90 - 1.10
Far Lith Gain	0.9700	0.9674	0.90 - 1.10
Near Bar Offset	-0.2172	0.0023	NONE
Near Dens Offset	0.0802	0.0870	NONE
Near Peak Offset	0.0793	0.1396	NONE
Near Lith Offset	0.3210	0.3762	NONE
Far Bar Offset	0.0401	0.0594	NONE
Far Dens Offset	0.0981	0.1059	NONE
Far Peak Offset	0.1441	0.1250	NONE
Far Lith Offset	0.2803	0.2869	NONE
Near Bar Background	829.86	824.65	700 - 1450
Near Dens Background	274.06	273.73	230 - 480
Near Peak Background	120.83	119.39	100 - 210
Near Lith Background	147.93	146.80	125 - 260
Far Bar Background	510.54	511.66	450 - 900
Far Dens Background	200.45	199.80	175 - 345
Far Peak Background	78.57	79.58	70 - 140
Far Lith Background	81.79	82.15	75 - 145

CALIBRATION BLOCK SUMMARY				
Measurement	Current Reading (Previous Coef)	Calibrated (New Coef)	Change	Control Limit On Change
MAGNESIUM				
Density (g/cc)	1.683	1.684	0.001	+/- 0.015
Pe	2.539	2.561	0.022	+/- 0.150
ALUMINUM				

CALIBRATION SUMMARY						
Sensor	Shop	Field	Post	Difference	Tolerance	Units
GTET-11048627						
Gamma Ray Calibrator	269.6	269.7	-----	-0.1	+/- 9.00	api
DSNT-11055304						
Snow-Block Porosity	0.0635	-----	-----	0.0000	+/- -.--	decp
SDLT-11014296						
Pad Extension	3.75	3.81	-----	-0.06	+/-0.10	in
Ring Diameter	8.25	8.25	-----	0.00	+/-0.15	in

Near(B+D+P+L)	1364.575	1367.492	-----	-2.917	+/-14.931	cps
Far(B+D+P+L)	873.199	872.254	-----	0.945	+/-16.144	cps

Data: KIL B-410001 SP-GTET-DSN-SDL-ELEX-BSAT-ACRT-CHUDLE Date: 20-Jun-13 03:24:37

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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	8.500	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	2.000	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	5645.00	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	DSNO	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	
ACRt Sonde	MRFX	Fixed mud resistivity	2000	ohmm
BOTTOM				
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HALLIBURTON				
INPUTS, DELAYS AND FILTERS TABLE				
Mnemonic	Input Description	Delay (ft)	Filter Type	Filter Length (ft)
Depth Panel				
TENS	Tension	0.00	NO	
CH_HOS				
DHTN	DownholeTension	0.00	BLK	0.000
SP Sub				
PLTC	Plot Control Mask	72.25	NO	
SP	Spontaneous Potential	72.25	BLK	1.250
SPR	Raw Spontaneous Potential	72.25	NO	
SPO	Spontaneous Potential Offset	72.25	NO	
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	
SI	Sample Interval	27.09	NO	
TXRX	Raw Telemetry 10 Receivers	27.09	NO	
FRMC	Tool Frame Count	27.09	NO	
GMOD	Gain processing mode	19.83	NO	
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 Current Raw 12K X Receiver	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	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

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COMPANY	OXY USA INC.
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WELL	KU B-4		
FIELD	ARROYO		
COUNTY	STANTON	STATE	KANSAS
HALLIBURTON		MICROLOG	