

HALLIBURTON

MICROLOG

COMPANY	VAL ENERGY INC.		
WELL	NELSON 3-24		
FIELD	MAYBERRY NORTH		
COUNTY	BARBER		
STATE	KANSAS		
COMPANY	VAL ENERGY INC.	API No.	15-007-23930
WELL	NELSON 3-24	Location	(SHL) 2210' FSL & 1526' FWL
FIELD	MAYBERRY NORTH	Other Services: DSN/SDL ACRT MICROLOG	
COUNTY	BARBER	Sec. 24	Twp. 34S Rge. 11W
STATE	KANSAS	Elev. 1346.0 ft	

Permanent Datum	GL	Elev. 1346.0 ft
Log measured from	KB	D.F. 1350.0 ft
Drilling measured from	KB	G.L. 1346.0 ft
Date	09-Sep-12	
Run No.	ONE	
Depth - Driller	5000.00 ft	
Depth - Logger	4995.0 ft	
Bottom - Logged Interval	3200	
Top - Logged Interval	4963	
Casing - Driller	8.625 in @ 218.0 ft	@
Casing - Logger	219.0 ft	@
Bit Size	7.875 in	@
Type Fluid in Hole	WATER BASED MUD	
Density	9.2 ppg	46.00 s/qt
PH	10.50 pH	9.6 cpm
Source of Sample	MUD PIT	
Rm @ Meas. Temperature	0.353 ohmm @ 78.00 degF	@
Rmf @ Meas. Temperature	0.30 ohmm @ 78.00 degF	@
Rmc @ Meas. Temperature	0.405 ohmm @ 78.00 degF	@
Source Rmf	CALC	CALC
Rm @ BHT	0.23 ohmm @ 124.0 degF	@
Time Since Circulation	5.0 hr	
Time on Bottom	09-Sep-12 17:08	
Max. Rec. Temperature	124.0 degF @ 4995.0 ft	@
Equipment	10546696	LIBERAL
Recorded By	S. INGERSOLL	
Witnessed By	S. VANBUSKIRK	

Fold here

Service Ticket No.: 9803847 API Serial No.: 15-007-23930 PGM Version: WL INSITE R3.6.0 (Build 3)

CHANGE IN MUD TYPE OR ADDITIONAL SAMPLE				RESISTIVITY SCALE CHANGES			
Date	Sample No.			Type Log	Depth	Scale Up Hole	Scale Down Hole
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.
Rmf @ Meas. Temp.	@	@		ONE	ACRT	N/A	1.5" S.O.
Rmc @ Meas. Temp.	@	@			I962_S909		
Source Rmf	Rmc						
Rm @ BHT	@	@					
Rmf @ BHT	@	@					
Rmc @ BHT	@	@					

EQUIPMENT DATA							
GAMMA		ACOUSTIC		DENSITY		NEUTRON	
Run No.	ONE	Run No.		Run No.	ONE	Run No.	ONE
Serial No.	11048627	Serial No.		Serial No.	10950489	Serial No.	11055304
Model No.	GTET	Model No.		Model No.	SDLT	Model No.	DSNT
Diameter	3.625"	No. of Cent.		Diameter	4.5"	Diameter	3.625"
Detector Model No.	GTET	Spacing		Log Type	GAM-GAM	Log Type	NEU-NEU
Type	SCINT			Source Type	CS-137	Source Type	AM-241BE
Length	8"	LSA [Y/N]		Serial No.	5168GW	Serial No.	DSN424
Distance to Source		FWDA [Y/N]		Strength	1.5 CI	Strength	15 CI

LOGGING DATA

GENERAL GAMMA ACOUSTIC DENSITY NEUTRON

Run No.	GENERAL		Speed ft/min	GAMMA		ACOUSTIC		Matrix	DENSITY		NEUTRON			
	Depth			Scale		Scale			Matrix	Scale		Matrix		
	From	To		L	R	L	R			L	R			
ONE	TD	CSG	REC	0	150				30	-10	2.71 gm/cc	30	-10	LIME

DIRECTIONAL INFORMATION

Maximum Deviation @ _____ KOP @ _____

Remarks: ANNULAR HOLE VOLUME CALCULATED FOR 5.5 INCH CASING.

CHLORIDES REPORTED AT 4500 PPM.

SP, GTET, DSNT, SDLT, ACRT RUN IN COMBINATION

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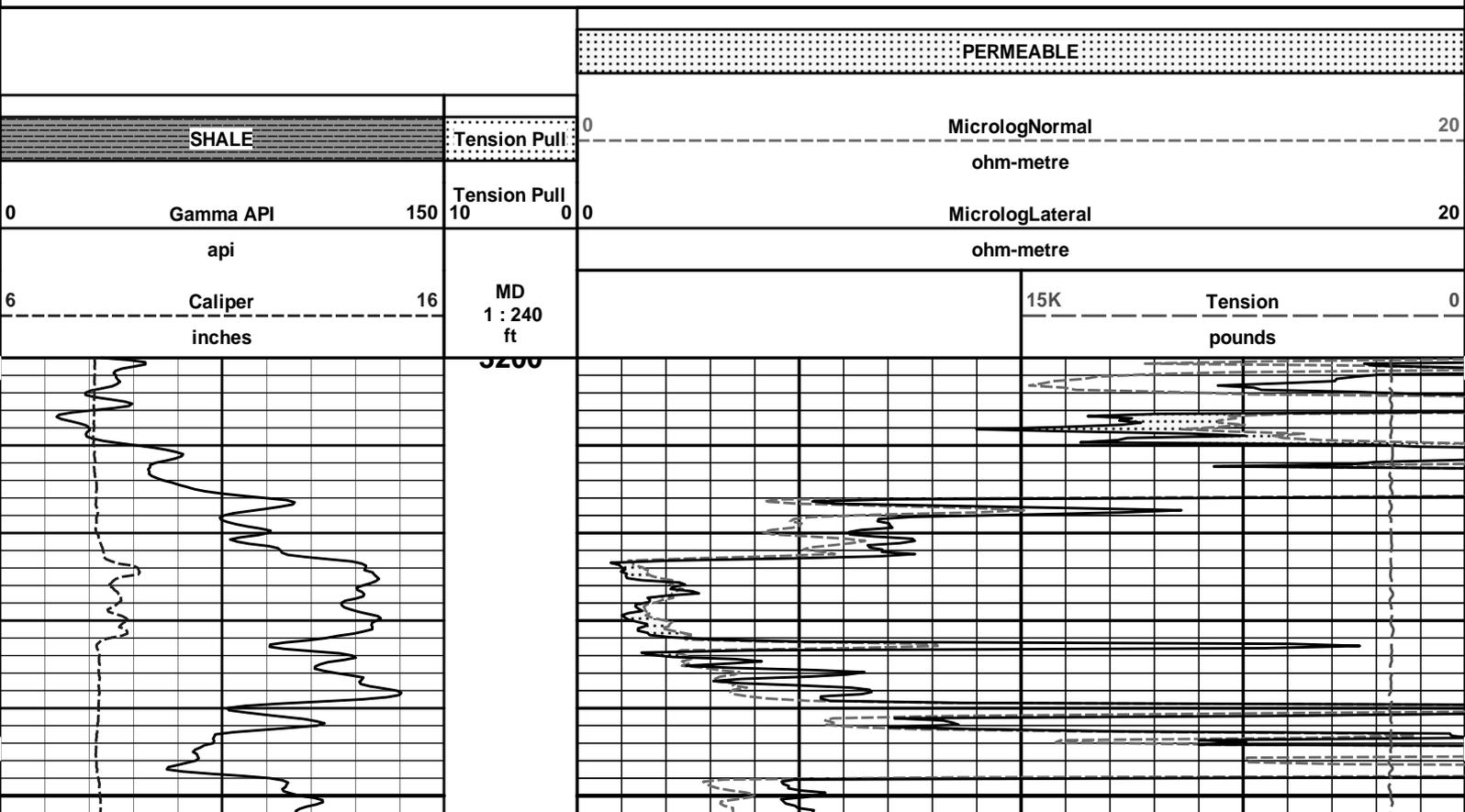
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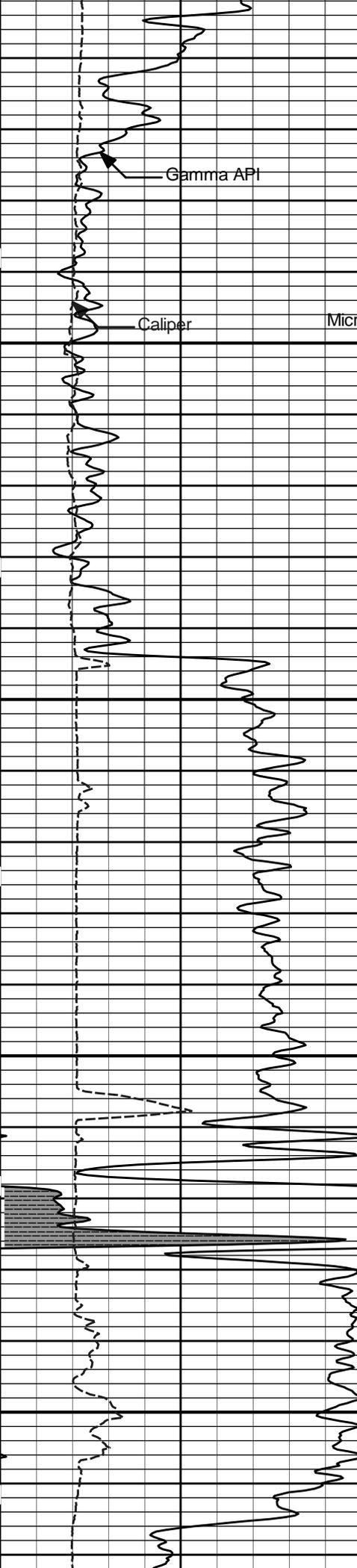
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Plot File: \\LOCAL\VAL_NELSON_3-24\0001 SP-GTET-DSN-SDL-ACRT-CH\MICROLOG\Microlog_IQ_5_main.lib

5 INCH MAIN LOG





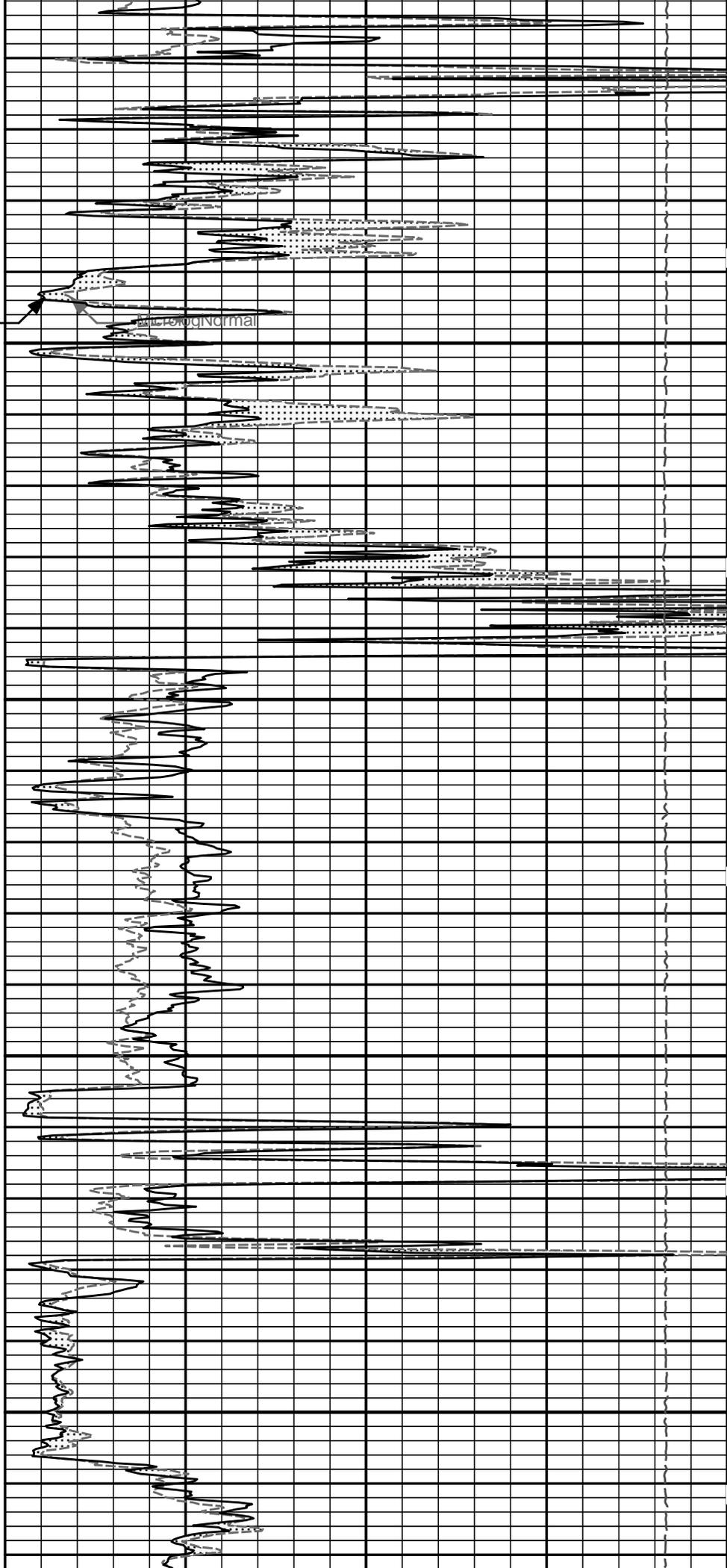
Gamma API

Caliper

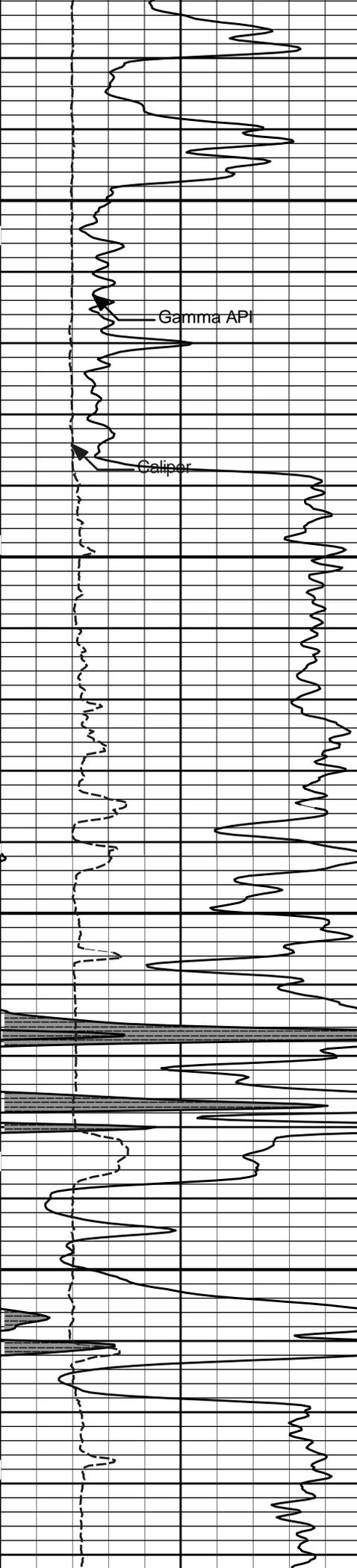
MicrologLateral

3300

3400



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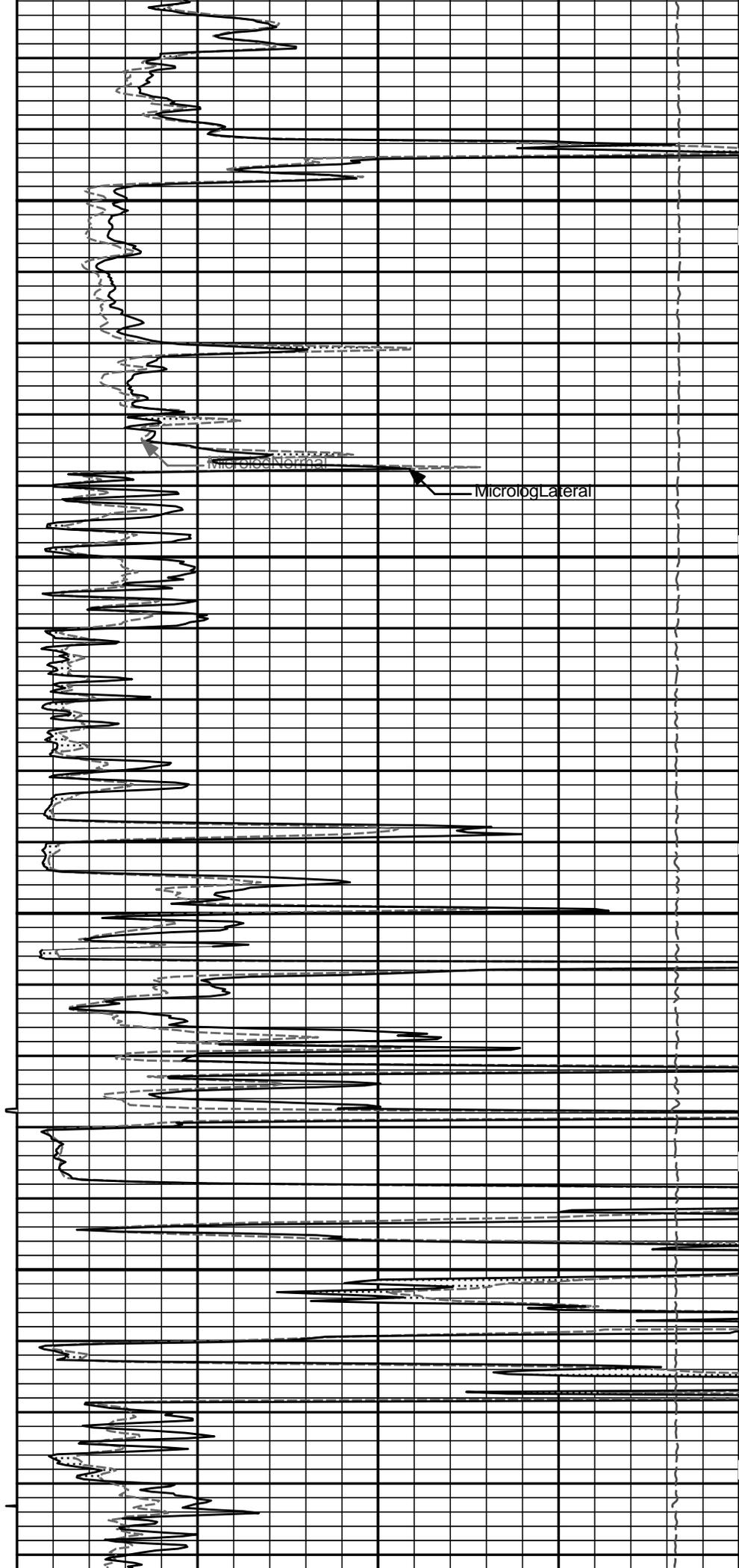


3500

Gamma API

Caliper

3600



Microlog

Microlog Lateral



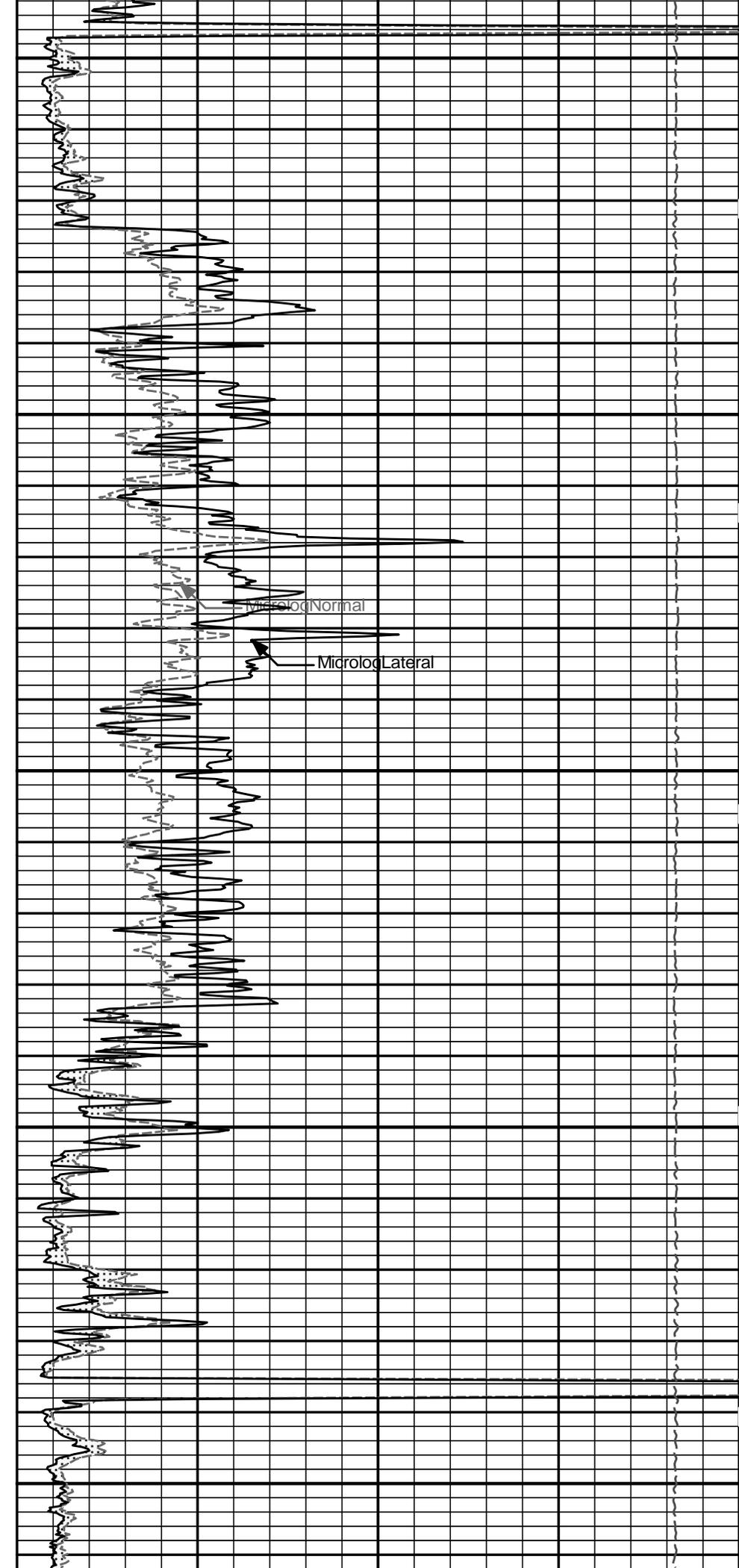
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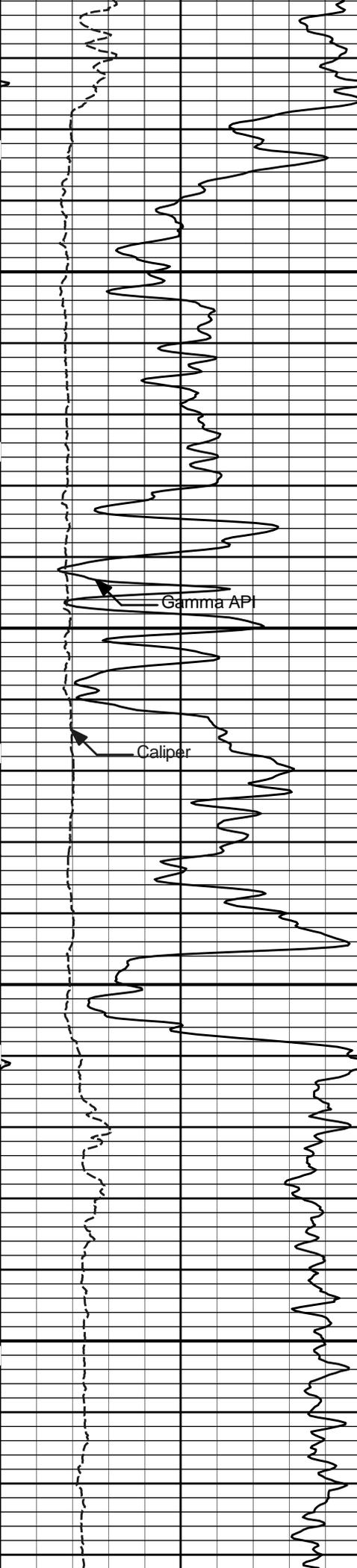
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3900



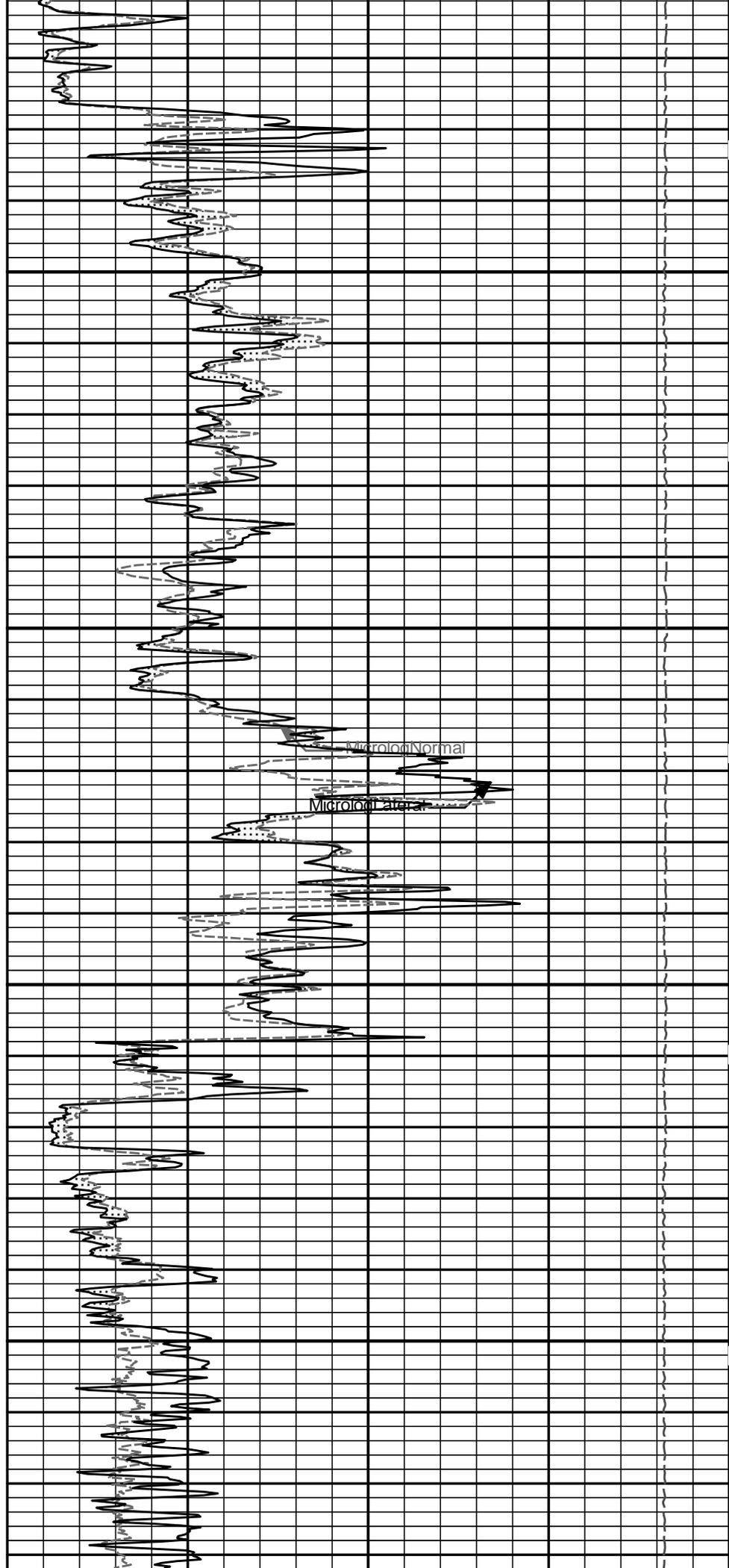
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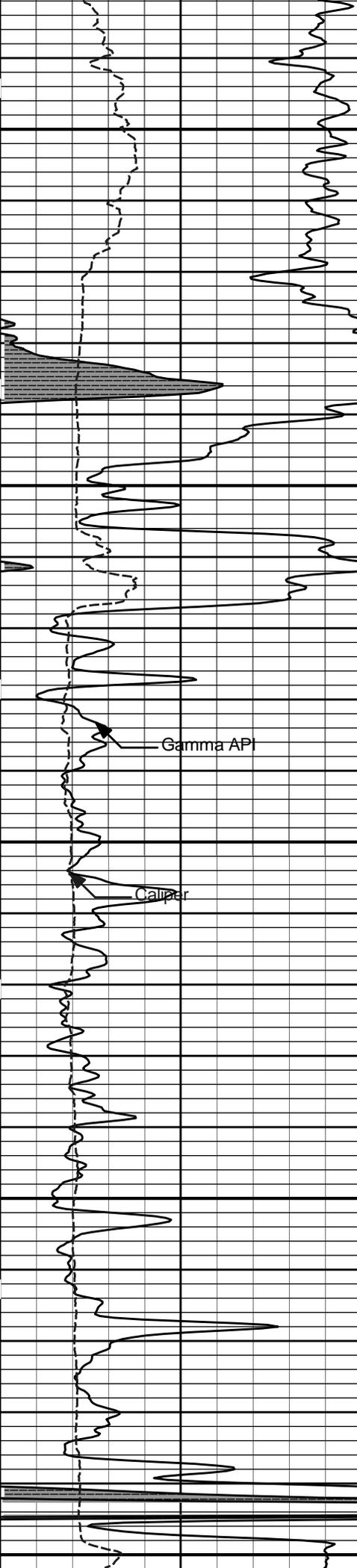
Microlog Lateral



4000

4100



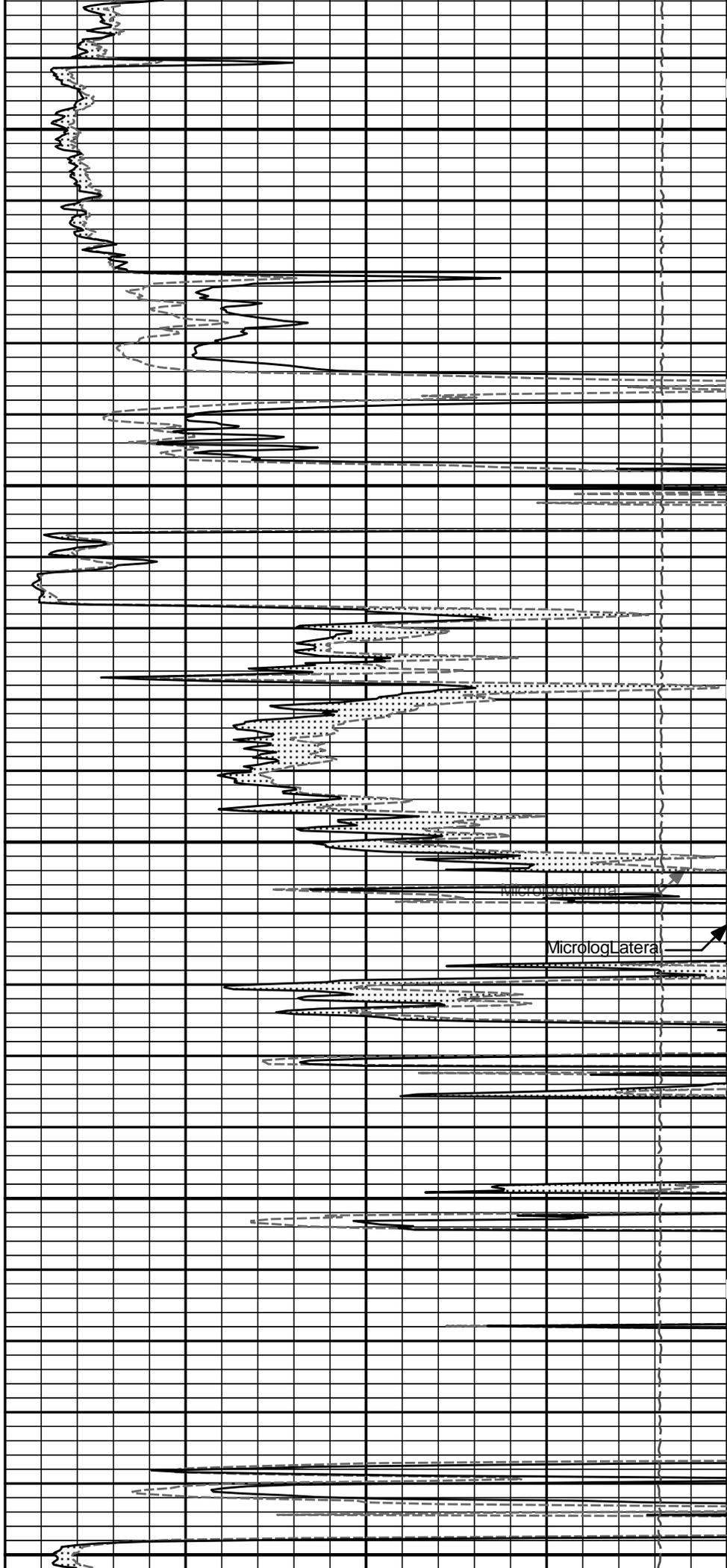


4200

Gamma API

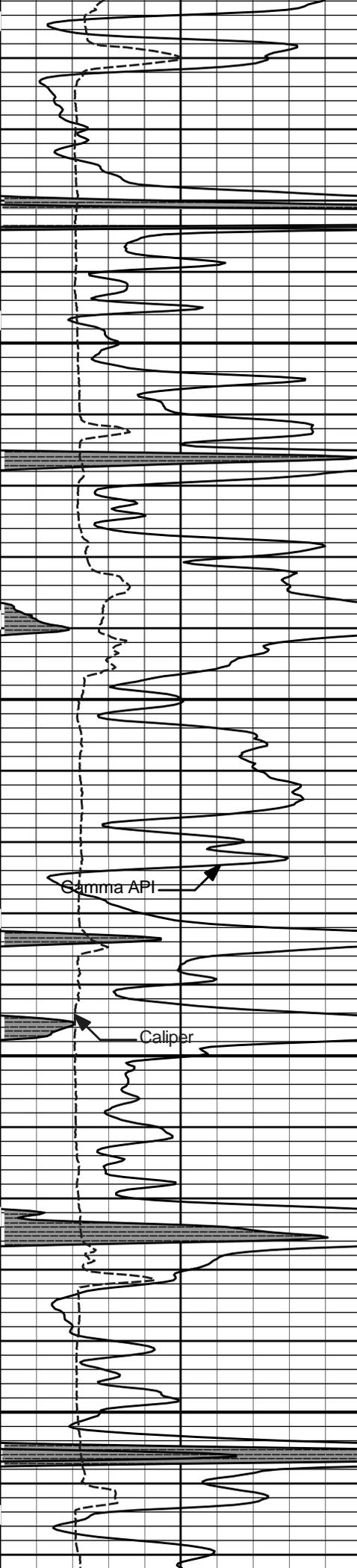
Caliper

4300



MicrologNormal

MicrologLateral

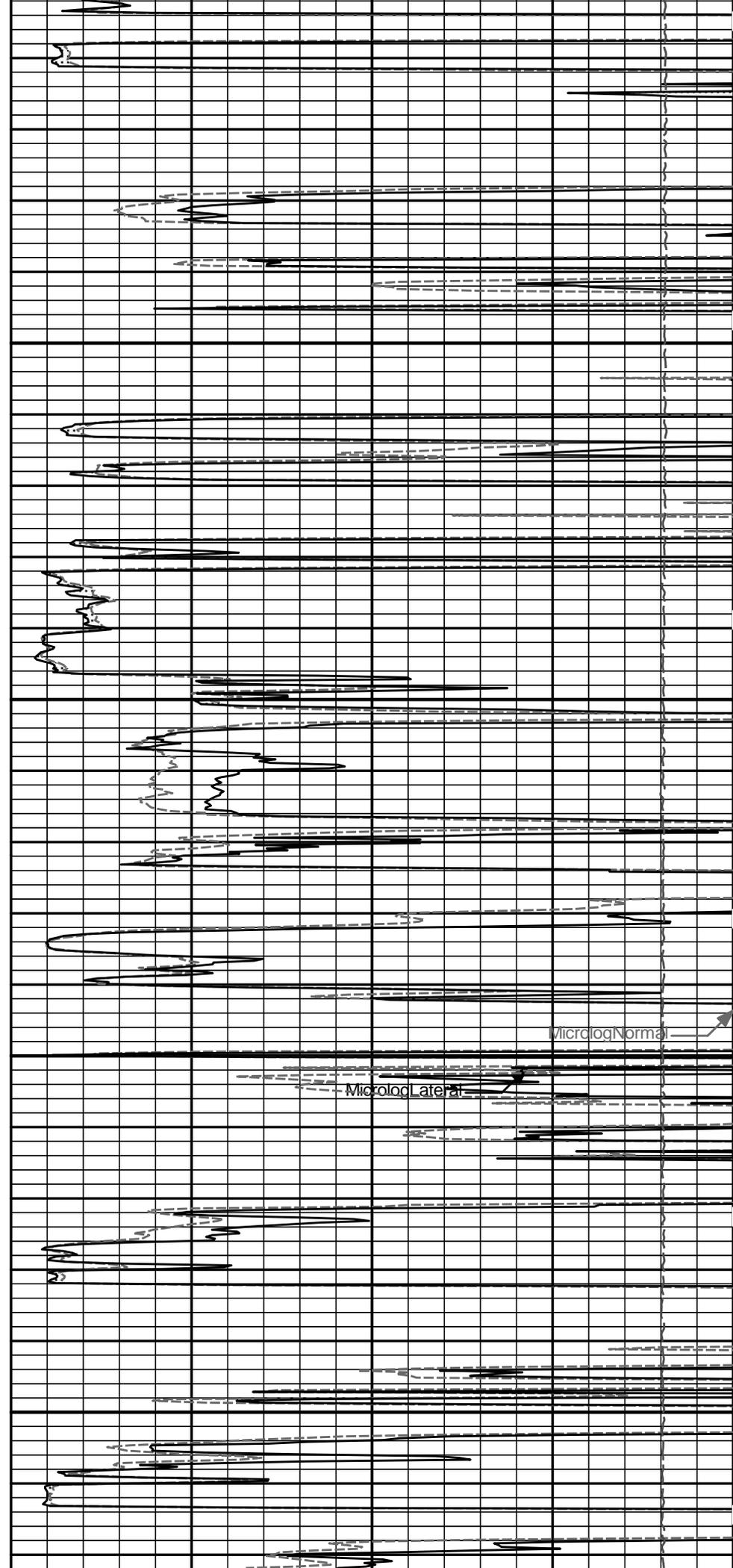


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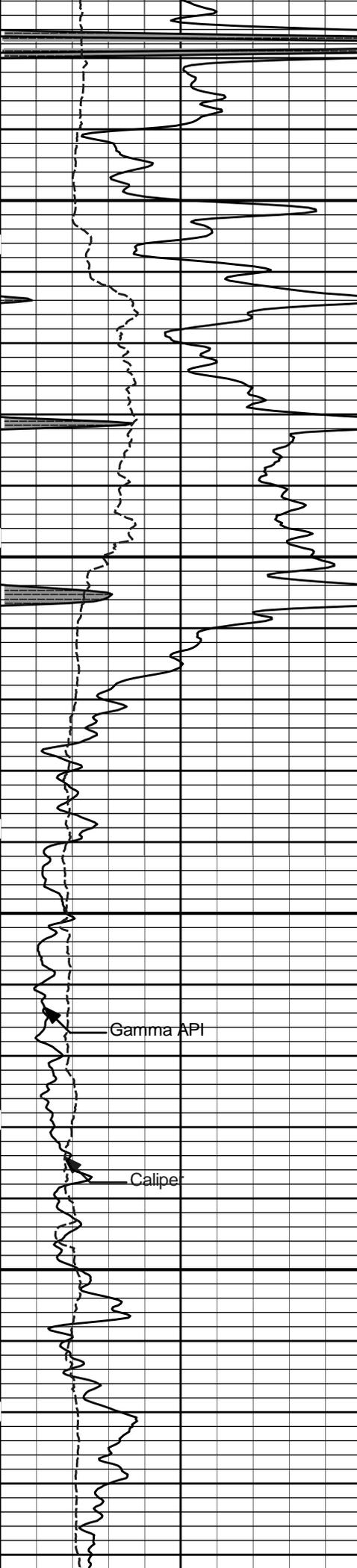
Caliper

4500



MicrologNormal

MicrologLateral

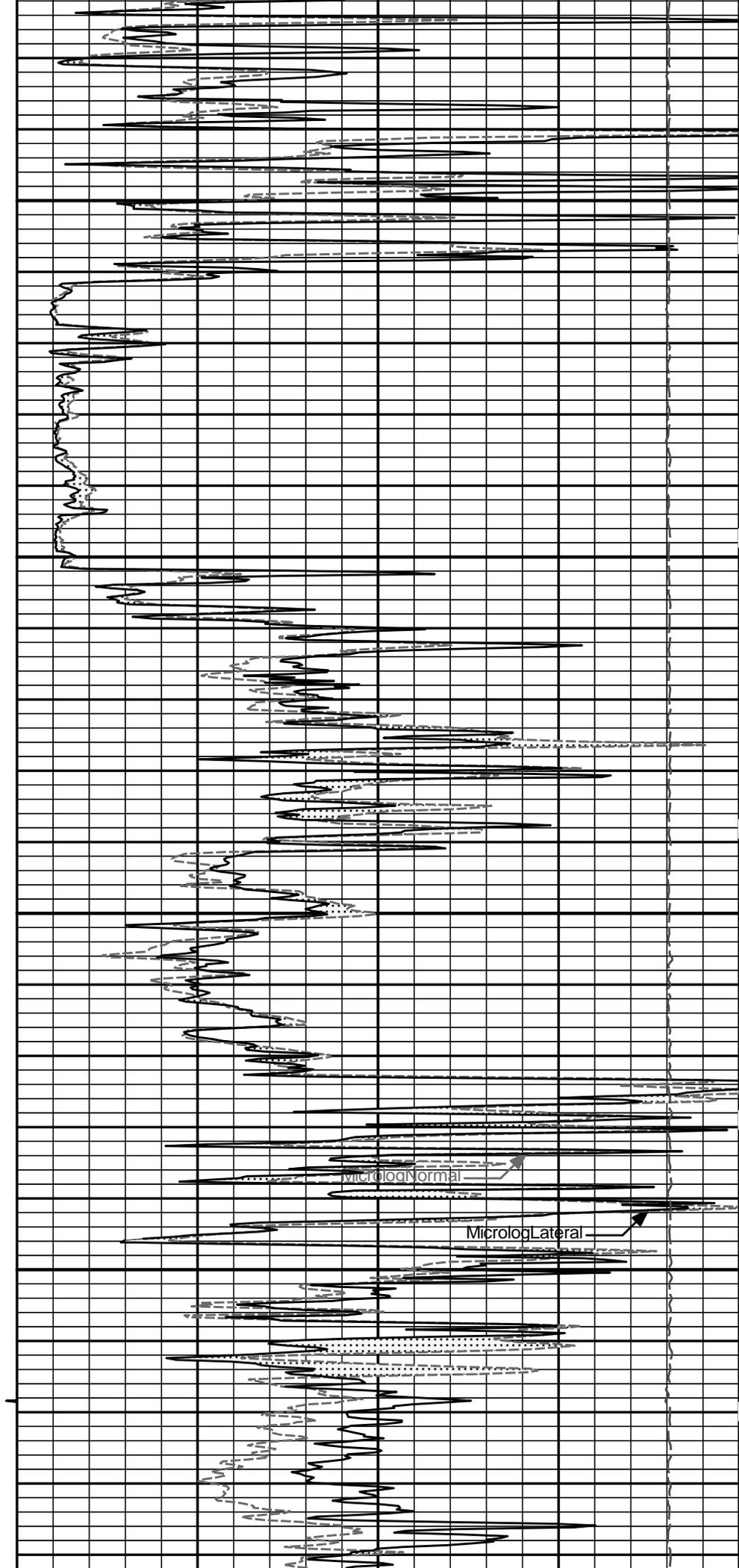


4600

4700

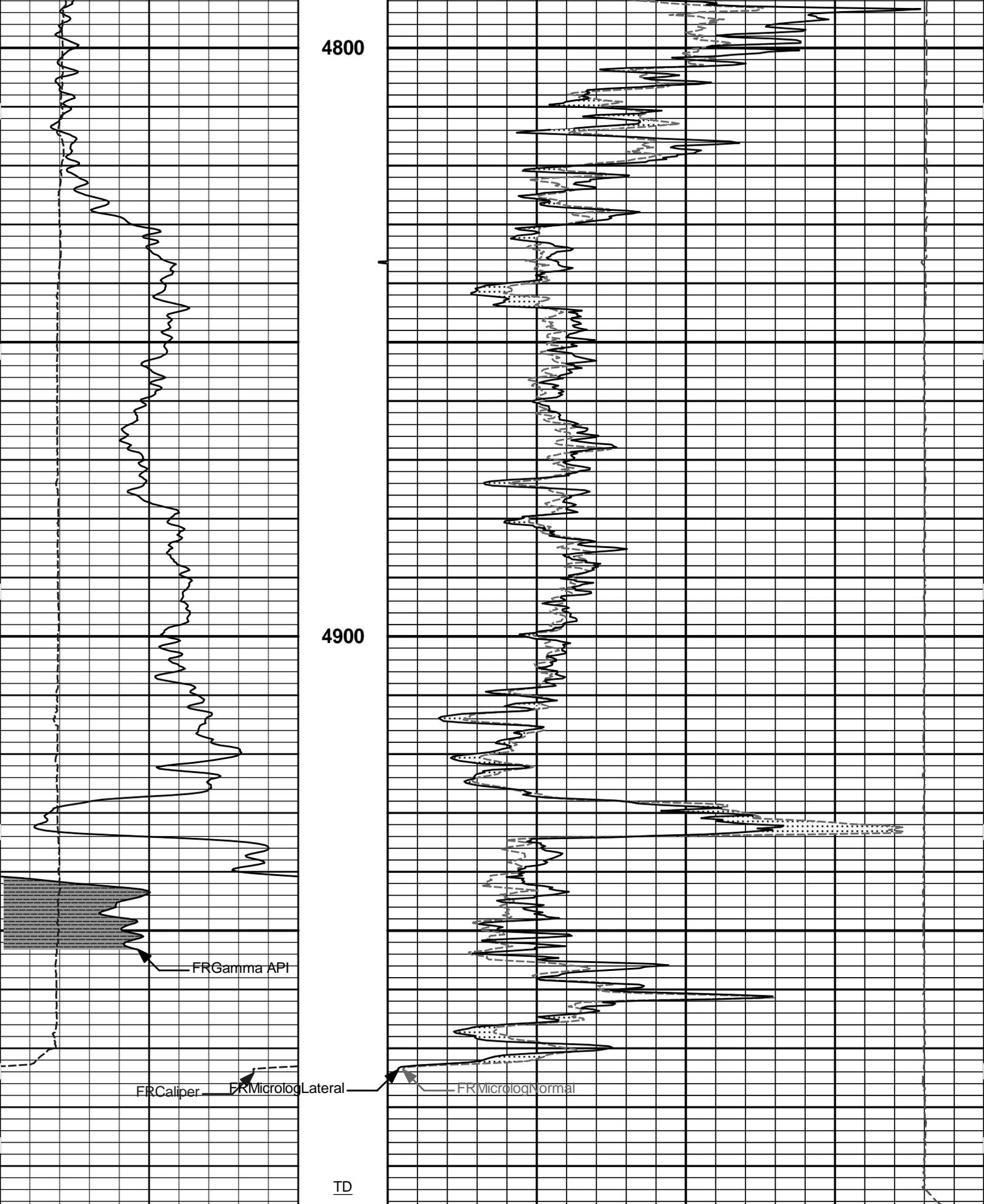
Gamma API

Caliper



MicrologNormal

MicrologLateral



4800

4900

FRGamma API

FRCaliper

FRMicrologLateral

FRMicrologNormal

TD

6 Caliper 16
inches

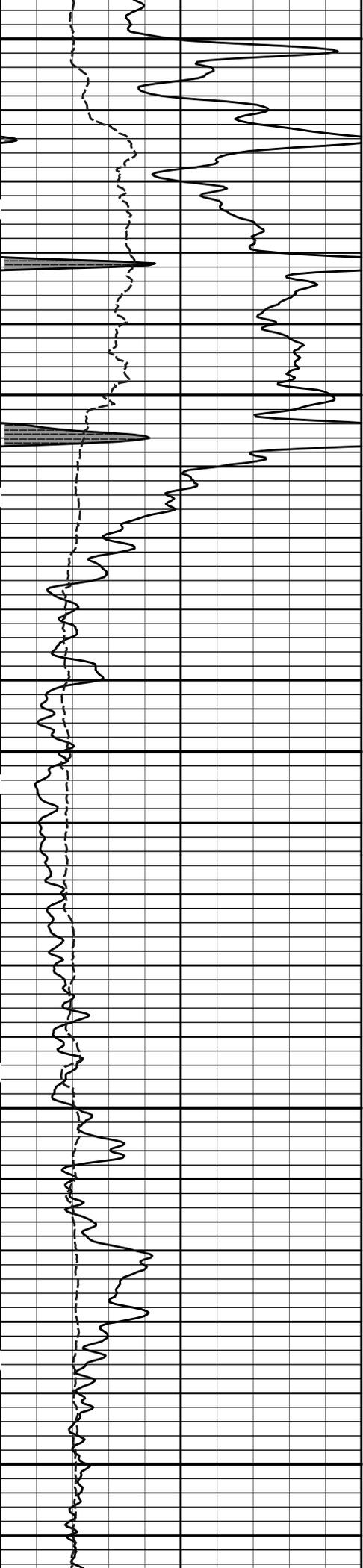
0 Gamma API 150

MD
1 : 240
ft

Tension Pull
10 0 0

15K Tension
pounds 0

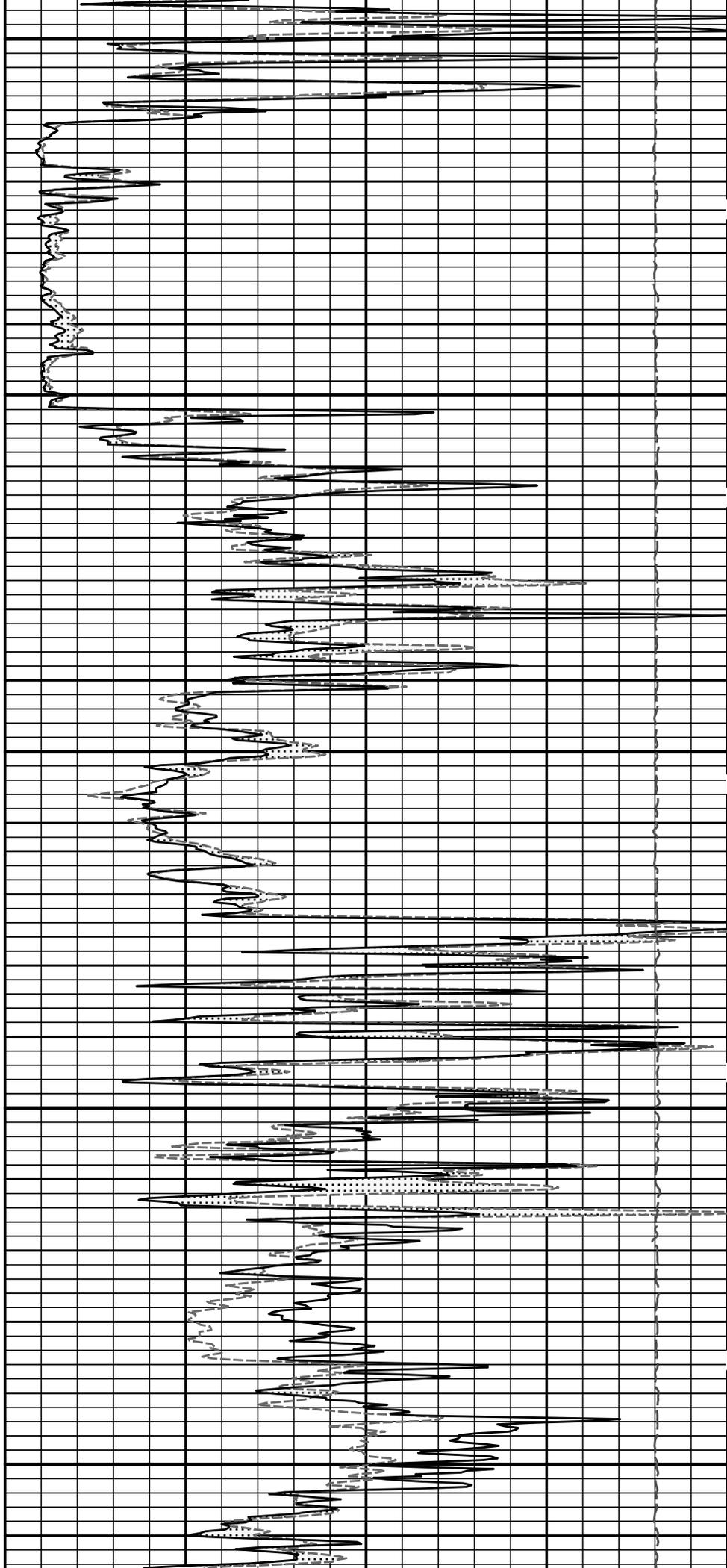
MicrologLateral 20

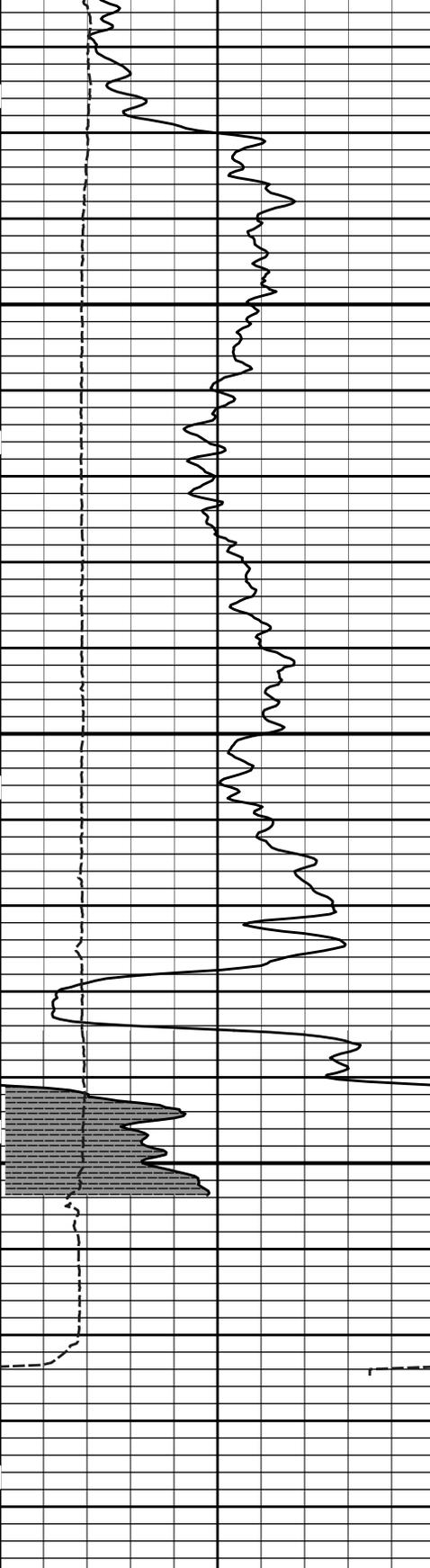


4600

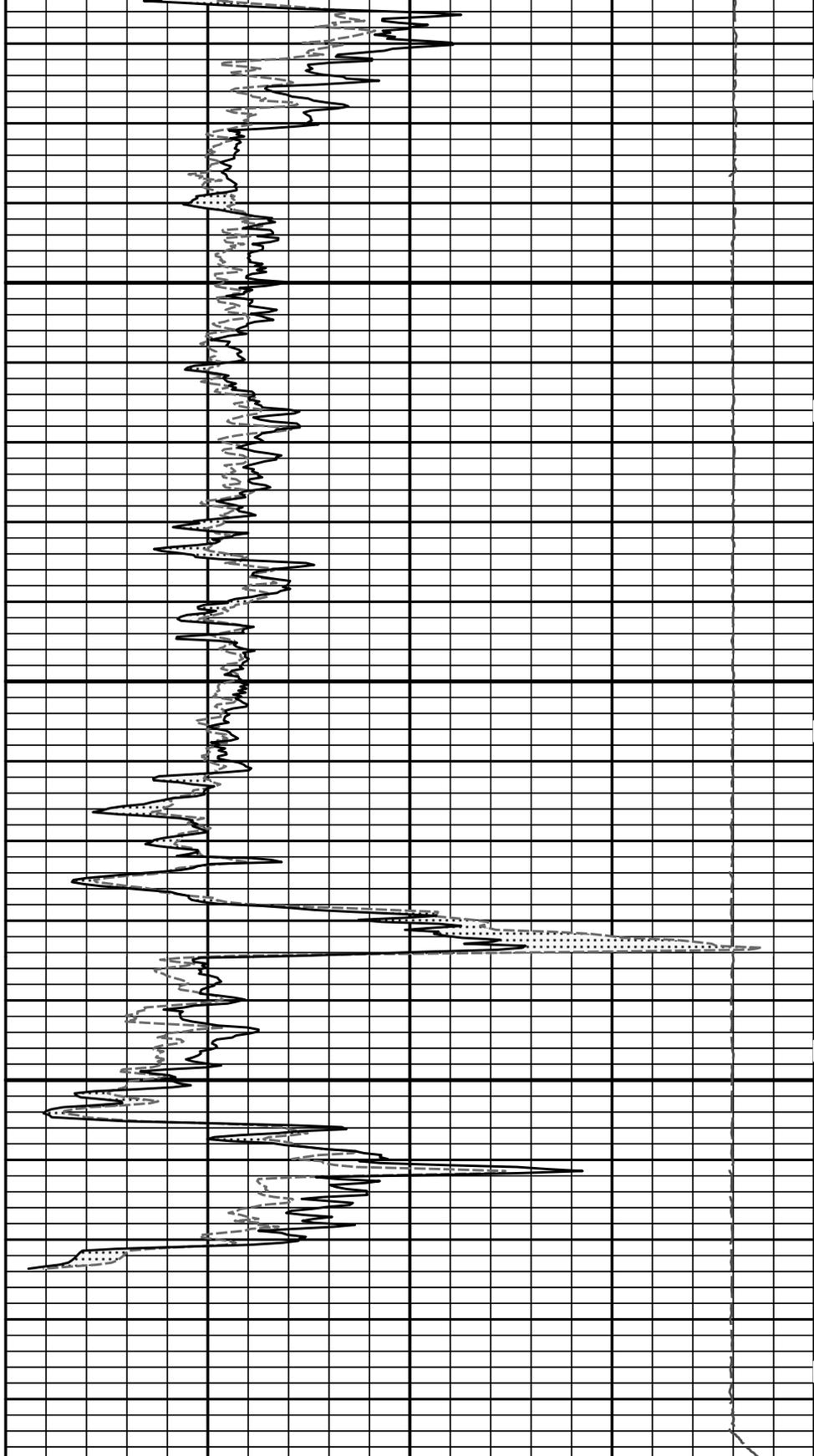
4700

4800





4900



6	Caliper	16
	inches	
0	Gamma API	150
	api	
SHALE		

MD
1 : 240
ft

15K	Tension	0
	pounds	
0	MicrologLateral	20
	ohm-metre	
0	MicrologNormal	20
	ohm-metre	
PERMEABLE		

ACRt Sonde-
I962_S909
200.00 lbs

Ø 3.625 in →

← Mud Resistivity @ 13.44 ft

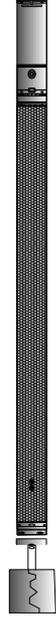
← ACRt @ 9.46 ft

14.22 ft

Cabbage Head-
TRK696
10.00 lbs

Regal Standoff 6_75-1
2.00 lbs

Ø 3.625 in
Ø 5.625 in*
Ø 6.000 in



0.58 ft
0.58 ft
0.00 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	52.59	300.00
SP	SP Sub	11441455	60.00	3.74	48.85	300.00
GTET	Gamma Telemetry Tool	11048627	165.00	8.52	40.33	60.00
DSNT	Dual Spaced Neutron	11055304	174.00	9.69	30.64	60.00
DCNT	DSN Decentralizer	10755066	6.60	5.13 *	33.97	300.00
SDLT	Spectral Density Tool	I43_M489	360.00	10.81	19.83	60.00
SDLP	Density Insite Pad	P81	65.00	2.55 *	22.04	60.00
MICP	Microlog Pad	M489	8.00	1.00 *	22.33	60.00
ACRt	Array Compensated True Resistivity Instrument Section	I962	50.00	5.03	14.80	300.00
ACRt	Array Compensated True Resistivity Sonde Section	I962_S909	200.00	14.22	0.58	300.00
CBHD	Cabbage Head	TRK696	10.00	0.58	0.00	300.00
RSOF	Regal Standoff 6.75in	1	2.00	0.52 *	0.00	300.00

Total			1,130.60	54.51		
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* Not included in Total Length and Length Accumulation.

Data: VAL_NELSON_3-24\0001 SP-GTET-DSN-SDL-ACRT-CH\LDLE

Date: 09-Sep-12 16:43:54

HALLIBURTON

CALIBRATION REPORT

NATURAL GAMMA RAY TOOL SHOP CALIBRATION

Tool Name: GTET - 11048627	Reference Calibration Date: 09-Aug-12 10:44:30
Engineer: T. HYDE	Calibration Date: 09-Aug-12 10:50:33
Software Version: WL INSITE R3.6.0 (Build 3)	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	57.5	57.1	api
Background + Calibrator	328.7	326.8	api
Calibrator	271.3	269.6	api

NATURAL GAMMA RAY TOOL FIELD CALIBRATION

Tool Name: GTET - 11048627	Reference Calibration Date: 09-Aug-12 10:50:33
Engineer: S. INGERSOLL	Calibration Date: 09-Sep-12 09:53:50

Calibrator Source S/N: TB146

Calibrator API Reference:265.00 api

Equivalent Calibrator API Reference:269.6 api

Field Verification	Shop	Field	Units
Background	57.1	55.0	api
Background + Calibrator	326.8	326.2	api
Calibrator	269.6	271.2	api

Shop	Field	Difference	Tolerance
269.6	271.2	-1.6	+/- 9.00

DUAL SPACED NEUTRON SHOP CALIBRATION

Tool Name: DSNT - 11055304

Reference Calibration Date: 05-Sep-12 14:27:57

Engineer: T. HYDE

Calibration Date: 05-Sep-12 14:46:31

Software Version: WL INSITE R3.6.0 (Build 3)

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: 68 degF

Min. Tool Housing Outside Diameter: 3.620 in

CALIBRATION CONSTANTS

Measurement	Prev. Value	New Value	Control Limit On New Value
Gain:	0.987	0.989	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):	0.2101	0.2107	0.0006	+/- 0.0020
Calibrated Ratio:	9.70	9.72	0.019	+/- 0.050

VERIFIER

Measurement	Value	Control Limit
Snow-Block Porosity (decp):	0.0691	0.02000 - 0.09000

PASS/FAIL SUMMARY

Background Check:	Passed
Gain-Range Check:	Passed
Snow-Block Check:	Passed

DUAL SPACED NEUTRON FIELD CALIBRATION

Tool Name: DSNT - 11055304

Reference Calibration Date: 05-Sep-12 14:46:31

Engineer: S. INGERSOLL

Calibration Date: 09-Sep-12 10:02:22

Software Version: WL INSITE R3.6.0 (Build 3)

Calibration Version: 1

Logging Source S/N: 696

Snow Block S/N: 696

NEUTRON FIELD-CHECK SUMMARY

Shop	Field	Difference	Control Limit On Change
0.987	0.989	0.0015	+/- 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_M489	Reference Calibration Date:	01-Jan-70 00:00:00
Engineer:	S. INGERSOLL	Calibration Date:	06-Sep-12 07:33:37
Software Version:	WL INSITE R3.6.0 (Build 3)	Calibration Version:	1
Host Tool Name:	DSNT - 11055304		

CALIBRATION COEFFICIENTS

Measurement	Previous Value	New Value	Control Limit On New Value
Pad Offset	-2153.99	-2153.99	-7000.00 - -1000.00
Pad Gain	0.0003997	0.0003997	0.000200 - 0.000600
Arm Offset	1430.46	1430.46	-5000.00 - 3000.00
Arm Gain	0.0003851	0.0003851	0.000300 - 0.000700
Arm Power	0.000004432	0.000004432	-0.000010000 - 0.000010000

The ring diameter is computed from: $\text{DIAMETER} = \text{PAD EXTENSION} + \text{ARM EXTENSION} + \text{TOOL DIAMETER}$

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)	2.00	2.00	0.00	+/- 0.20
Medium Ring (in)	3.75	3.75	0.00	+/- 0.20
RING DIAMETER:				
Small Ring (in)	6.50	6.50	0.00	+/- 0.20
Medium Ring (in)	8.25	8.25	0.00	+/- 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
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SPECTRAL DENSITY SHOP CALIBRATION

Tool Name:	SDLT Pad - P81	Reference Calibration Date:	10-Aug-12 11:31:26
Engineer:	T. HYDE	Calibration Date:	10-Aug-12 11:49:11
Software Version:	WL INSITE R3.6.0 (Build 3)	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	1.0481	1.0562	0.90 - 1.10
Near Dens Gain	1.0278	1.0364	0.90 - 1.10
Near Peak Gain	1.0245	1.0524	0.90 - 1.10
Near Lith Gain	1.0006	1.0234	0.90 - 1.10

Near Bar Gain	1.0186	1.0128	0.90 - 1.10
Far Dens Gain	1.0024	1.0012	0.90 - 1.10
Far Peak Gain	0.9960	0.9928	0.90 - 1.10
Far Lith Gain	0.9724	0.9721	0.90 - 1.10
<hr/>			
Near Bar Offset	-0.2447	-0.3186	NONE
Near Dens Offset	-0.0693	-0.1422	NONE
Near Peak Offset	-0.0351	-0.2659	NONE
Near Lith Offset	0.1493	-0.0358	NONE
Far Bar Offset	-0.0284	0.0226	NONE
Far Dens Offset	0.1035	0.1123	NONE
Far Peak Offset	0.1312	0.1570	NONE
Far Lith Offset	0.2924	0.2917	NONE
<hr/>			
Near Bar Background	816.13	814.50	700 - 1450
Near Dens Background	266.21	267.82	230 - 480
Near Peak Background	117.08	115.74	100 - 210
Near Lith Background	143.90	144.47	125 - 260
Far Bar Background	532.29	535.49	450 - 900
Far Dens Background	209.58	211.26	175 - 345
Far Peak Background	84.04	84.43	70 - 140
Far Lith Background	86.02	87.66	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	2.603	2.564	-0.039	+/- 0.150
ALUMINUM				
Density (g/cc)	2.599	2.598	-0.001	+/- 0.01500
Pe	3.142	3.133	-0.009	+/- 0.150

TOOL SUMMARY

Measurement	Near Detector		Far Detector	
	Value	Control Limits	Value	Control Limits
QUALITY				
Background	0.0014	+/- 0.0110	0.0016	+/- 0.0140
Magnesium Block	-0.0003	+/- 0.0110	-0.0021	+/- 0.0140
Aluminum Block	0.0000	+/- 0.0110	-0.0003	+/- 0.0140
Resolution	9.31	6.00 - 11.50	8.82	6.00 - 11.50
Internal Verifier(B+D+P+L)	1343	1200 - 2700	919	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: 10-Aug-12 11:49:11
Engineer: S. INGERSOLL	Calibration Date: 09-Sep-12 09:53:07
Software Version: WL INSITE R3.6.0 (Build 3)	Calibration Version: 1

Pad Temperature: 75.2 degF

DENSITY FIELD CALIBRATION SUMMARY

Measurement	Shop	Field	Change	Control Limit +/-
Near (B+D+P+L) cps	1342.531	1343.195	0.664	14.818
Far (B+D+P+L) cps	918.840	913.800	-5.040	16.432
Near Resolution	9.31	9.33	0.020	0.50
Far Resolution	8.82	8.92	0.100	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 - M489	Reference Calibration Date: 01-Jan-70 00:00:00
Engineer: C.PARKER	Calibration Date: 01-Nov-11 03:10:56
Software Version: WL INSITE R3.4.2 (Build 2)	Calibration Version: 1
Host Tool Name: DSNT - 11055304	

CALIBRATION COEFFICIENT SUMMARY

Measurement	Micro Log Normal		Micro Log Lateral		Units
	Measured	Calibrated	Measured	Calibrated	
Tool Zero	-0.07	-0.07	-0.01	-0.01	ohmm
Calibration Point #1	0.00	0.00	0.00	0.00	ohmm
Calibration Point #2	20.00	20.00	20.00	20.00	ohmm
Internal Reference	19.94	19.94	20.01	20.01	ohmm

Measurement	Micro Log Normal Tool Value	Micro Log Lateral Tool Value	Units
Tool Zero	0.47	-0.57	V
Calibration Point #1	20.48	2.51	V
Calibration Point #2	5369.32	7024.07	V
Internal Reference	5352.53	7028.02	V

MICRO LOG FIELD CHECK

Tool Name: Microlog Pad - M489	Reference Calibration Date: 01-Nov-11 03:10:56
Engineer: S. INGERSOLL	Calibration Date: 09-Sep-12 09:52:23
Software Version: WL INSITE R3.6.0 (Build 3)	Calibration Version: 1

Measurement	Micro Log Normal		Micro Log Lateral		Units
	Shop	Field	Shop	Field	
Tool Zero	-0.07	-0.08	-0.01	-0.01	ohmm
Internal Reference	19.94	19.64	20.01	19.57	ohmm

Summary

Signal	Shop	Field	Difference	Tolerance
Microlog Normal	19.94	19.64	0.30	+/- 0.80
Microlog Lateral	20.01	19.57	0.44	+/- 0.80

SDLT CALIPER FIELD CALIBRATION

Tool Name: SDLT - I43_M489

Reference Calibration Date: 06-Sep-12 07:33:37

Engineer: S. INGERSOLL

Calibration Date: 09-Sep-12 09:58:33

Software Version: WL INSITE R3.6.0 (Build 3)

Calibration Version: 1

MEASURED CALIPER VALUES

Measurement	Shop	Field	Change	Control Limit On New Value
Pad Extension	3.75	3.77	0.02	+/- 0.10
Ring Diameter	8.25	8.29	0.04	+/- 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: 11-Jul-12 14:10:58

Engineer: T. HYDE

Calibration Date: 23-Aug-12 19:00:08

Software Version: WL INSITE R3.6.0 (Build 3)

Calibration Version: 1

Host Tool Name: ACRt Instrument - I962

TYPICAL GAIN RANGE

Subarray	R12KHz			R36KHz			R72KHz		
	Lower	(mmho/m)	Upper	Lower	(mmho/m)	Upper	Lower	(mmho/m)	Upper
A1 (80")	0.95	1.04	1.05	0.95	1.04	1.05	0.95	1.04	1.05
A2 (50")	0.95	1.01	1.05	0.95	1.02	1.05	0.95	1.02	1.05
A3 (29")	0.95	1.01	1.05	0.95	1.01	1.05	0.95	1.01	1.05
A4 (17")	0.95	1.00	1.05	0.95	1.01	1.05	0.95	1.01	1.05
A5 (10")	N/A	N/A	N/A	0.95	1.00	1.05	0.95	1.00	1.05
A6 (6")	N/A	N/A	N/A	0.95	0.99	1.05	0.95	0.98	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	-0.64	2	-6	-3.61	-2	-8	-5.12	-2
A2 (50")	-7	-1.57	0	-7	-3.48	0	-7	-4.37	0
A3 (29")	-27	-13.72	-9	-9	-4.41	-3	-7	-2.62	-1
A4 (17")	-180	-101.07	-60	-45	-30.50	-15	-39	-25.77	-13
A5 (10")	N/A	N/A	N/A	-150	-99.60	-50	-80	-44.58	-10
A6 (6")	N/A	N/A	N/A	175	287.56	525	90	154.09	270

TRANSMITTER CURRENT GAIN

Signal	Lower	R	Upper
12K	0.6	0.92	1.3
36K	1.0	1.37	2.0
72K	1.0	1.61	2.0

R-MUD VERIFICATION

Signal	Lower (ohm-m)	Measured (ohm-m)	Upper (ohm-m)
Mud Cell	0.95	1.00	1.05

PASS/FAIL SUMMARY

GAIN RANGE CHK	PASS
SONDE OFFSET RANGE CHK	PASS
Tx CURRENT GAIN	PASS
Rmud VERIFICATION	PASS

CALIBRATION SUMMARY

Sensor	Shop	Field	Post	Difference	Tolerance	Units
GTET-11048627						
Gamma Ray Calibrator	269.6	271.2	-----	-1.6	+/- 9.00	api
DSNT-11055304						
Snow-Block Porosity	0.0691	0.0807	-----	-0.0116	+/- 0.0150	decp
SDLT-I43_M489						
Pad Extension	3.75	3.77	-----	-0.02	+/-0.10	in
Ring Diameter	8.25	8.29	-----	-0.04	+/-0.15	in
SDLT Pad-P81						
Near(B+D+P+L)	1342.531	1343.195	-----	-0.664	+/-14.818	cps
Far(B+D+P+L)	918.840	913.800	-----	5.040	+/-16.432	cps
Microlog Pad-M489						
MicroLog Normal	19.94	19.64	-----	0.30	+/-0.80	ohmm
MicroLog Lateral	20.01	19.57	-----	0.44	+/-0.80	ohmm
ACRt Sonde-I962_S909						
Mud Cell	1.00	-----	-----	0.00	-----	ohm-m

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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	9.200	ppg
	SHARED	WAGT	Weighting Agent	Barite	
	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	5000.00	ft
	SHARED	BHT	Bottom Hole Temperature	130.0	degF
	SHARED	SVTM	Navigation and Survey Master Tool	NONE	
	SHARED	AZTM	High Res Z Accelerometer Master Tool	GTET	
	SHARED	TEMM	Temperature Master Tool	NONE	
	SHARED	BHSM	Borehole Size Master Tool	NONE	
	Rwa / CrossPlot	XPOK	Process Crossplot?	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	

CrossPlot	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	
	ACRt Sonde	RTOK	Process ACRt?	Yes	
	ACRt Sonde	MNSO	Minimum Tool Standoff	1.50	in
	ACRt Sonde	TCS1	Temperature Correction Source	FP Lwr & FP Upr	
	ACRt Sonde	TPOS	Tool Position	Free Hanging	
	ACRt Sonde	RMOP	Rmud Source	Mud Cell	
	ACRt Sonde	RMIN	Minimum Resistivity for MAP	0.20	ohmm
	ACRt Sonde	RMIN	Maximum Resistivity for MAP	200.00	ohmm
	ACRt Sonde	THQY	Threshold Quality	0.50	
	ACRt Sonde	MRFX	Fixed mud resistivity	2000	ohmm

BOTTOM

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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	50.81	NO	
SP	Spontaneous Potential	50.81	BLK	1.250
SPR	Raw Spontaneous Potential	50.81	NO	
SPO	Spontaneous Potential Offset	50.81	NO	

GTET				
TPUL	Tension Pull	42.79	NO	
GR	Natural Gamma Ray API	42.79	TRI	1.750
GRU	Unfiltered Natural Gamma Ray API	42.79	NO	
EGR	Natural Gamma Ray API with Enhanced Vertical Resolution	42.79	W	1.416 , 0.750
ACCZ	Accelerometer Z	0.00	BLK	0.083
DEVI	Inclination	0.00	NO	
DSNT				
TPUL	Tension Pull	32.54	NO	
RNDS	Near Detector Telemetry Counts	32.64	BLK	1.417
RFDS	Far Detector Telemetry Counts	33.39	TRI	0.583
DNTT	DSN Tool Temperature	32.64	NO	
DSNS	DSN Tool Status	32.54	NO	
ERND	Near Detector Telemetry Counts EVR	32.64	BLK	0.000
ERFD	Far Detector Telemetry Counts EVR	33.39	BLK	0.000
ENTM	DSN Tool Temperature EVR	32.64	NO	
SDLT				
TPUL	Tension Pull	22.65	NO	
PCAL	Pad Caliper	22.65	TRI	0.250
ACAL	Arm Caliper	22.65	TRI	0.250
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	22.64	NO	
NAB	Near Above	22.46	BLK	0.920
NHI	Near Cesium High	22.46	BLK	0.920
NLO	Near Cesium Low	22.46	BLK	0.920
NVA	Near Valley	22.46	BLK	0.920
NBA	Near Barite	22.46	BLK	0.920
NDE	Near Density	22.46	BLK	0.920
NPK	Near Peak	22.46	BLK	0.920
NLI	Near Lithology	22.46	BLK	0.920
NBAU	Near Barite Unfiltered	22.46	BLK	0.250
NLIU	Near Lithology Unfiltered	22.46	BLK	0.250
FAB	Far Above	22.81	BLK	0.250
FHI	Far Cesium High	22.81	BLK	0.250
FLO	Far Cesium Low	22.81	BLK	0.250
FVA	Far Valley	22.81	BLK	0.250
FBA	Far Barite	22.81	BLK	0.250
FDE	Far Density	22.81	BLK	0.250
FPK	Far Peak	22.81	BLK	0.250
FLI	Far Lithology	22.81	BLK	0.250
PTMP	Pad Temperature	22.65	BLK	0.920
NHV	Near Detector High Voltage	22.04	NO	
FHV	Far Detector High Voltage	22.04	NO	
ITMP	Instrument Temperature	22.04	NO	
DDHV	Detector High Voltage	22.04	NO	

Microlog Pad

TPUL	Tension Pull	22.83	NO	
MINV	Microlog Lateral	22.83	BLK	0.750
MNOR	Microlog Normal	22.83	BLK	0.750

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COMPANY VAL ENERGY INC.

WELL NELSON 3-24

FIELD MAYBERRY NORTH

COUNTY BARBER STATE KANSAS

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