

HALLIBURTON

MICROLOG

COMPANY		VAL ENERGY INC.		
WELL		EAST MADDIX 1-2		
FIELD		NURSE NORTHWEST		
COUNTY		BARBER		
STATE		KANSAS		
Permanent Datum Log measured from Drilling measured from	GL KB KB	Sect. 2 Twp. 31S Rge. 13W	Elev. 1726.0 ft D.F. G.L.	Elev. 1737.0 ft 1736.0 ft 1726.0 ft
Date	14-Aug-11			
Run No.	1			
Depth - Driller	4690.00 ft			
Depth - Logger	4682.0 ft			
Bottom - Logged Interval	4659.0 ft			
Top - Logged Interval	2950.0 ft			
Casing - Driller	8.625 in @ 226.0 ft			
Casing - Logger	224.0 ft			
Bit Size	7.875 in			
Type Fluid in Hole	WATER BASED MUD			
Density	9.4 ppg	49.00	s/qt	
PH	11.00 pH	9.2	cp/m	
Source of Sample	FLOW LINE			
Rm @ Meas. Temperature	0.370 ohmm @ 85.00 degF			
Rmf @ Meas. Temperature	0.30 ohmm @ 80.00 degF			
Rmc @ Meas. Temperature	0.440 ohmm @ 80.00 degF			
Source Rmf	MEAS. Rmc			
Rm @ BHT	0.23 ohmm @ 120.0 degF			
Time Since Circulation	3.0 hr			
Time on Bottom	14-Aug-11 00:55			
Max. Rec. Temperature	120.0 degF @ 4682.0 ft			
Equipment	10546696 LIBERAL			
Recorded By	J.BOSH			
Witnessed By	Z STEWART			

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Service Ticket No.: 8378589				API Serial No.: 15-007-23737				PGM Version: WL INSITE R3.2.1 (Build 7)					
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	MICRO P81	RUBBER	ADJ.	N/A			
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.		11048657		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			
LOGGING DATA													
GENERAL				GAMMA		ACOUSTIC		DENSITY		NEUTRON			

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	TD	2950	REC	0	150									
DIRECTIONAL INFORMATION														
Maximum Deviation @								KOP @						
Remarks: ANNULAR HOLE VOLUME CALCULATED FOR 5.5 INCH CASING														
CHLORIDES: 6000 PPM														
GPS COORDINATES: LAT: 37.22 N LONG: 98.42 W														
TODAY'S CREW: K. KING, V. JAIME														
THANK YOU FOR CHOOSING HALLIBURTON ENERGY SERVICES, LIBERAL, KS 620-624-6123														
HALLIBURTON DOES NOT GUARANTEE THE ACCURACY OF ANY INTERPRETATION OF THE LOG DATA, CONVERSION OF LOG DATA TO PHYSICAL ROCK PARAMETERS OR RECOMMENDATIONS WHICH MAY BE GIVEN BY HALLIBURTON PERSONNEL OR WHICH APPEAR ON THE LOG OR IN ANY OTHER FORM. ANY USER OF SUCH DATA, INTERPRETATIONS, CONVERSIONS, OR RECOMMENDATIONS AGREES THAT HALLIBURTON IS NOT RESPONSIBLE EXCEPT WHERE DUE TO GROSS NEGLIGENCE OR WILLFUL MISCONDUCT, FOR ANY LOSS, DAMAGES, OR EXPENSES RESULTING FROM THE USE THEREOF.														
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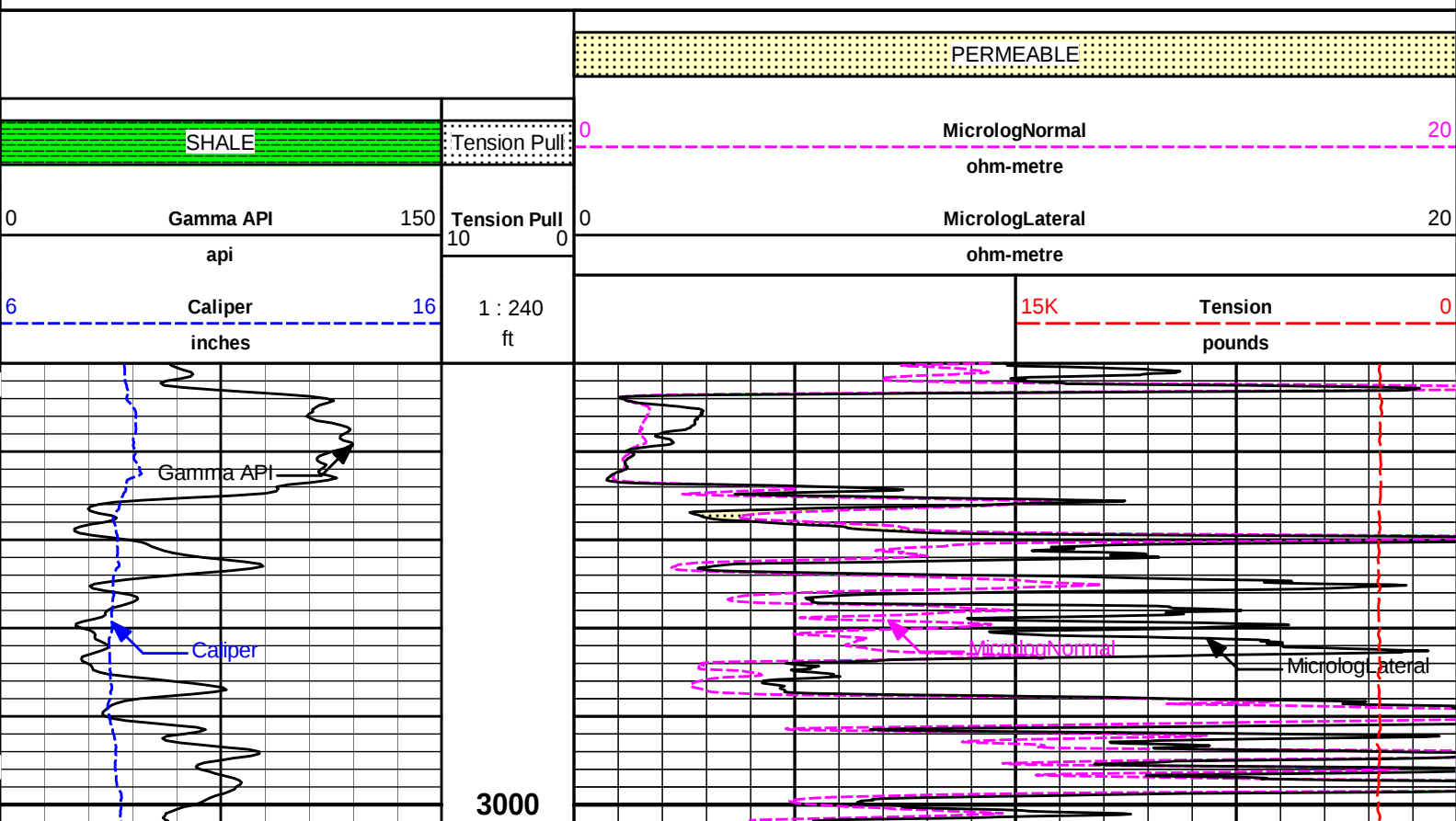
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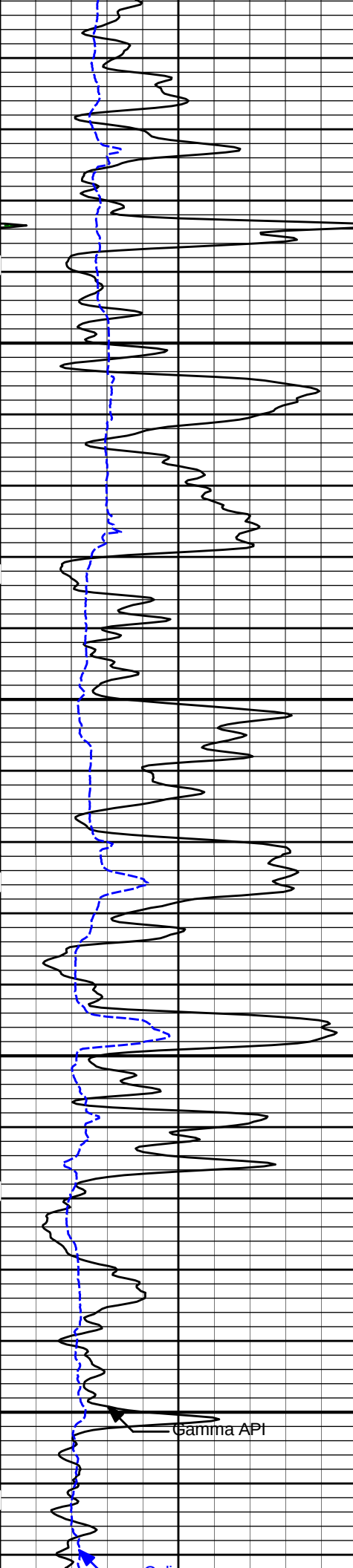
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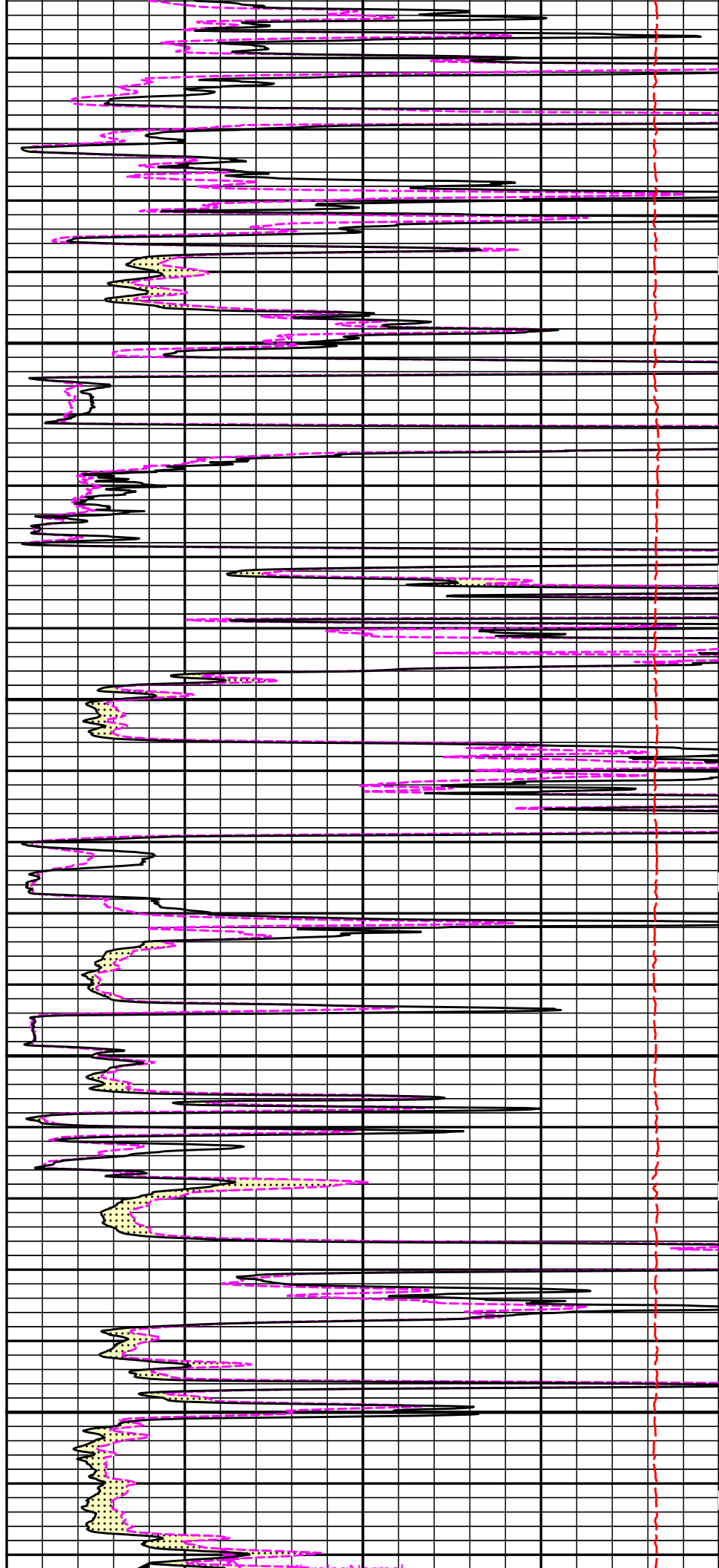
5 INCH MAIN LOG

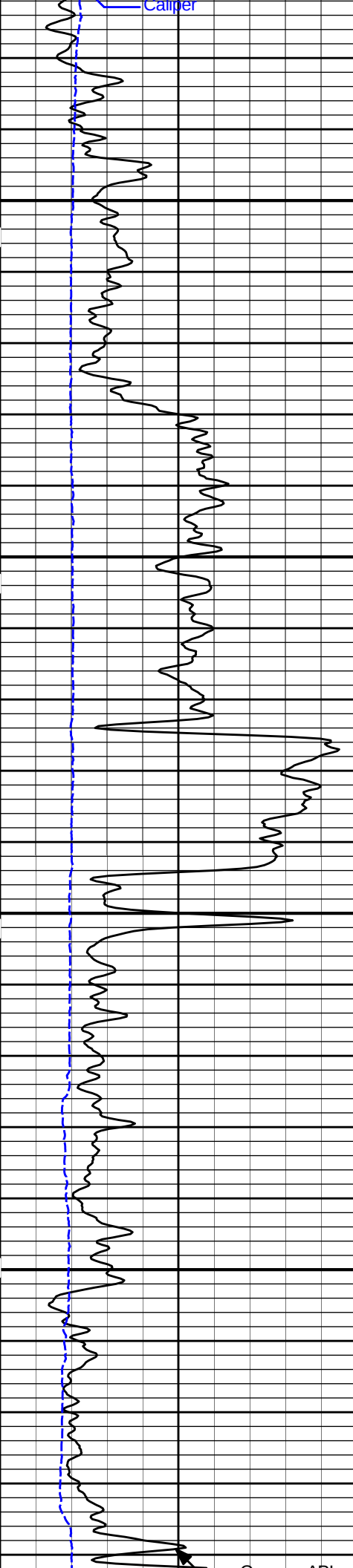




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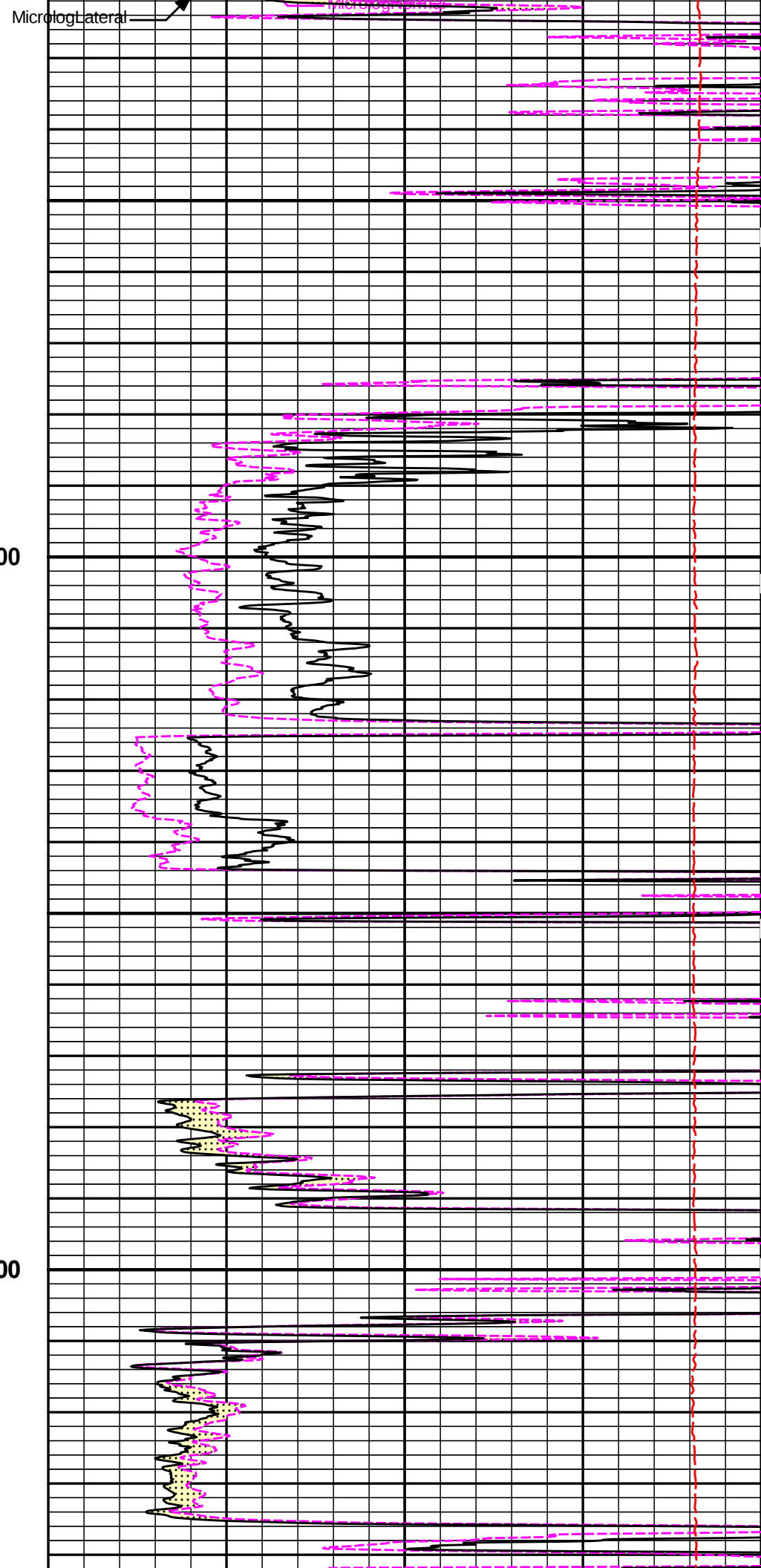
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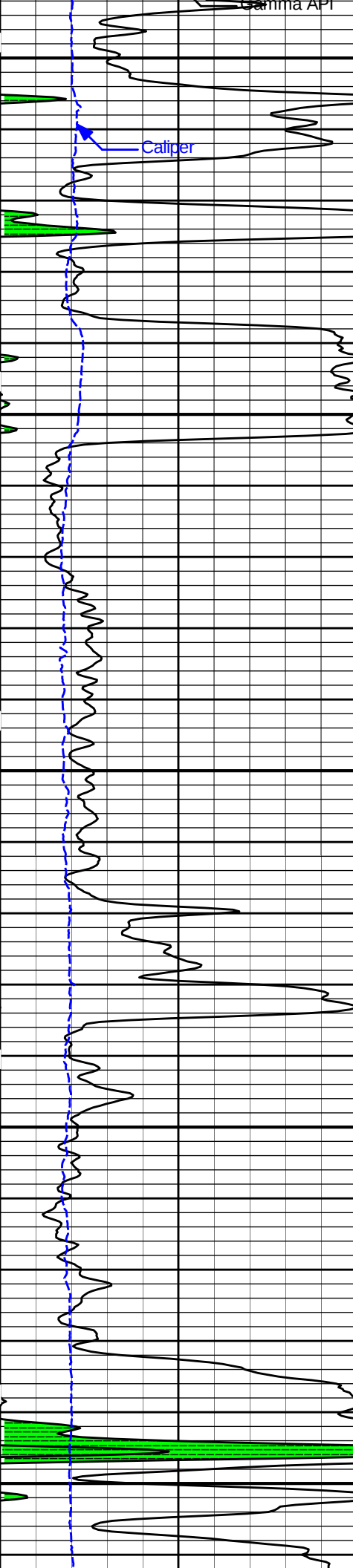




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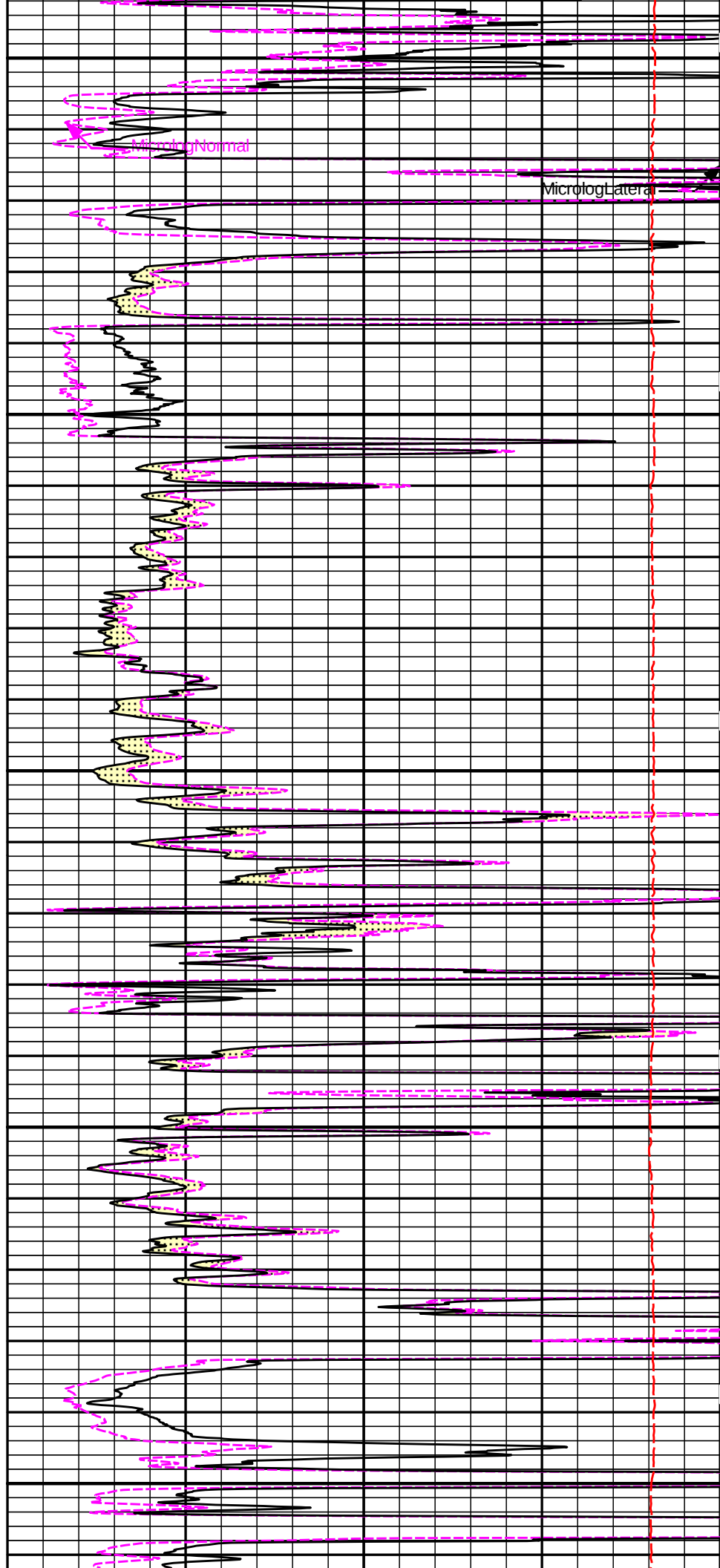
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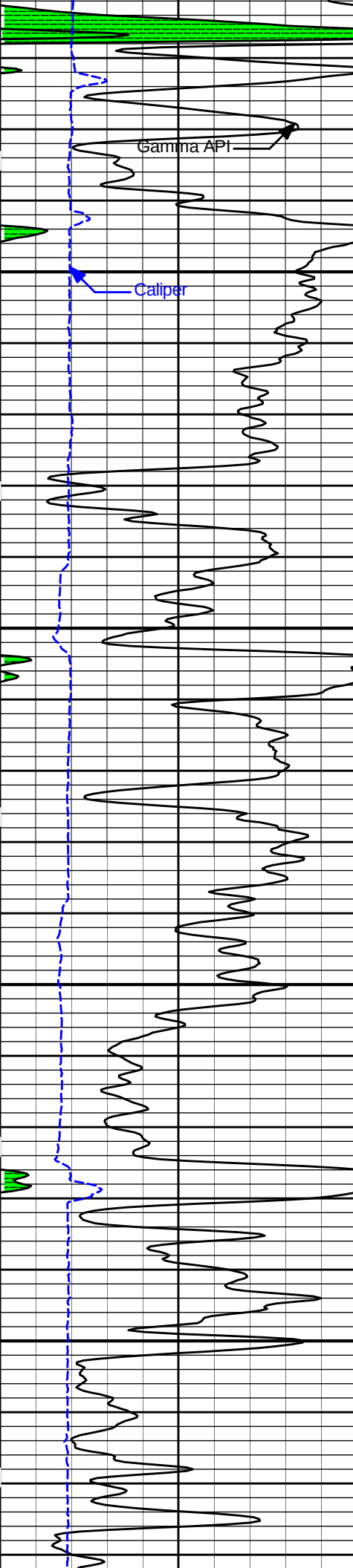




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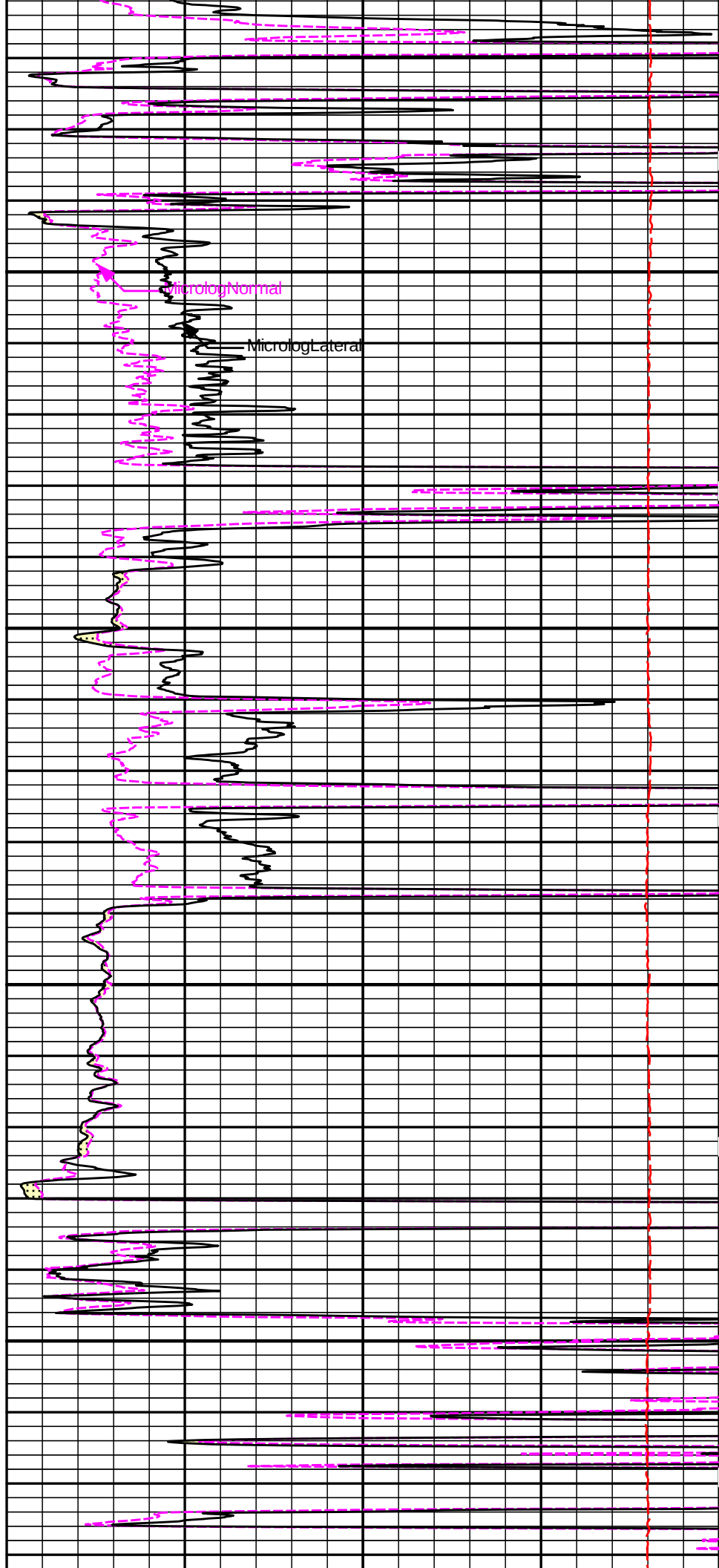
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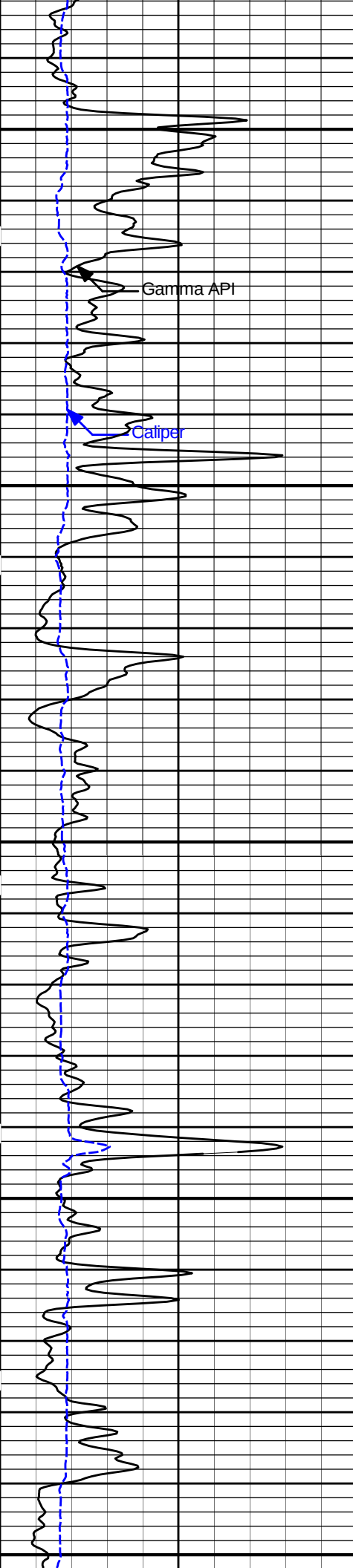




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3800

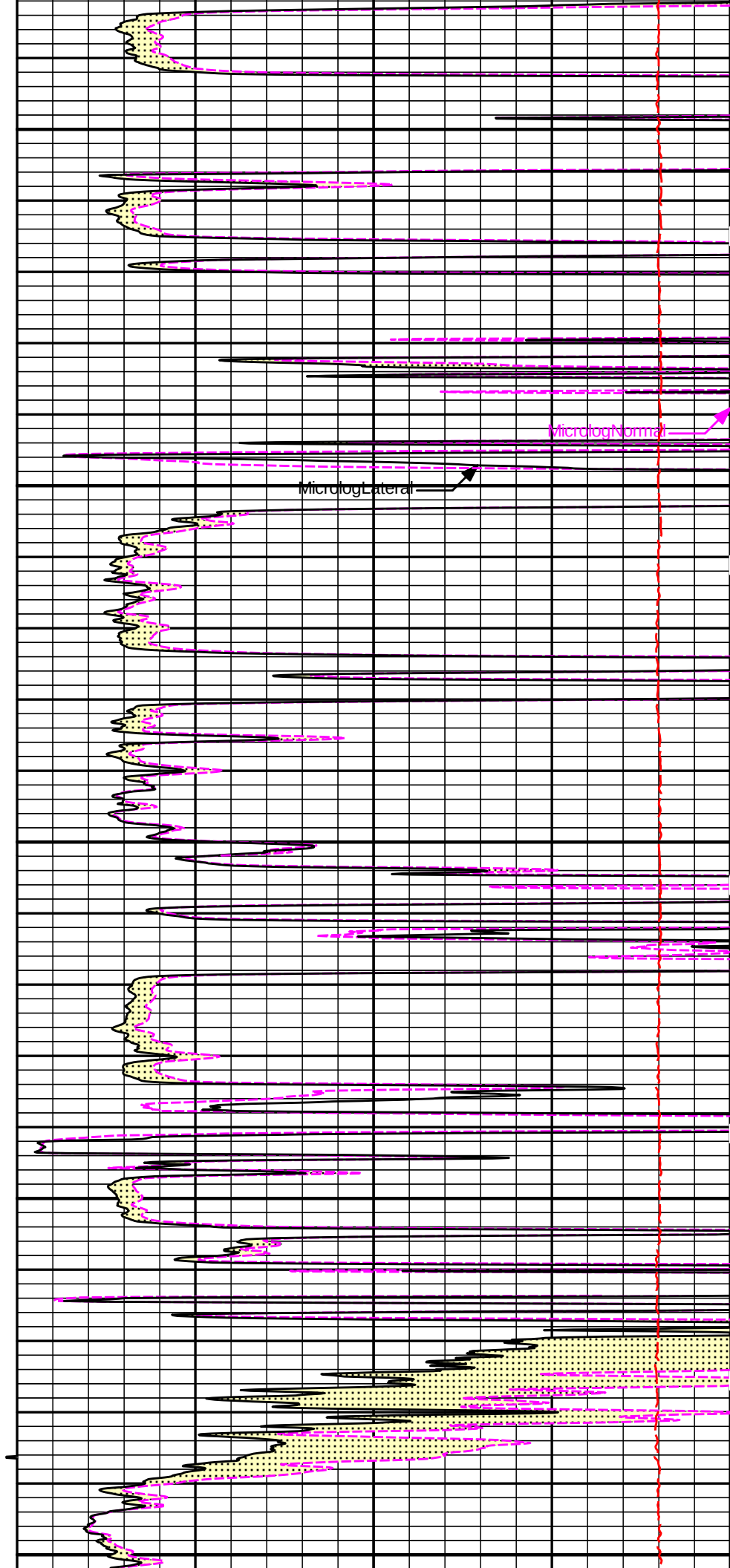


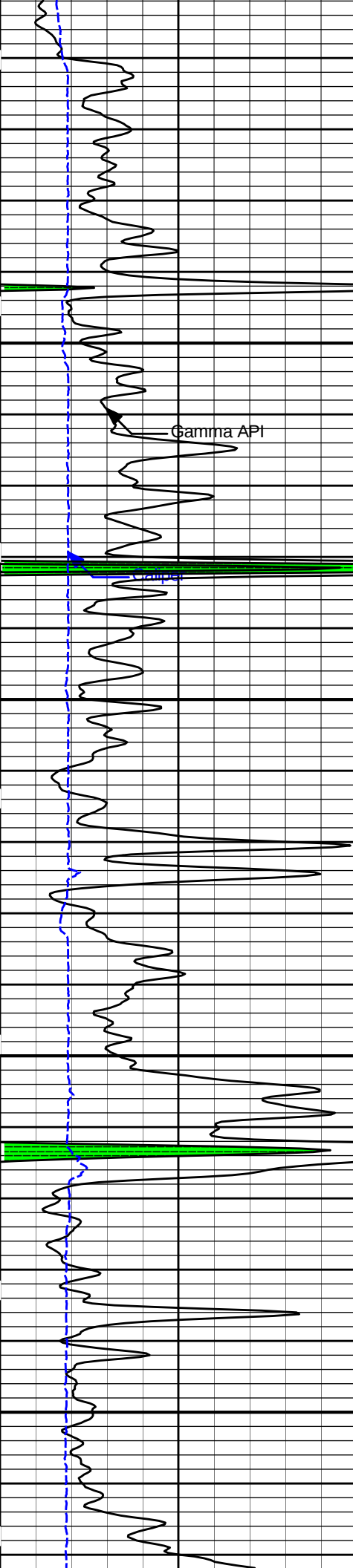


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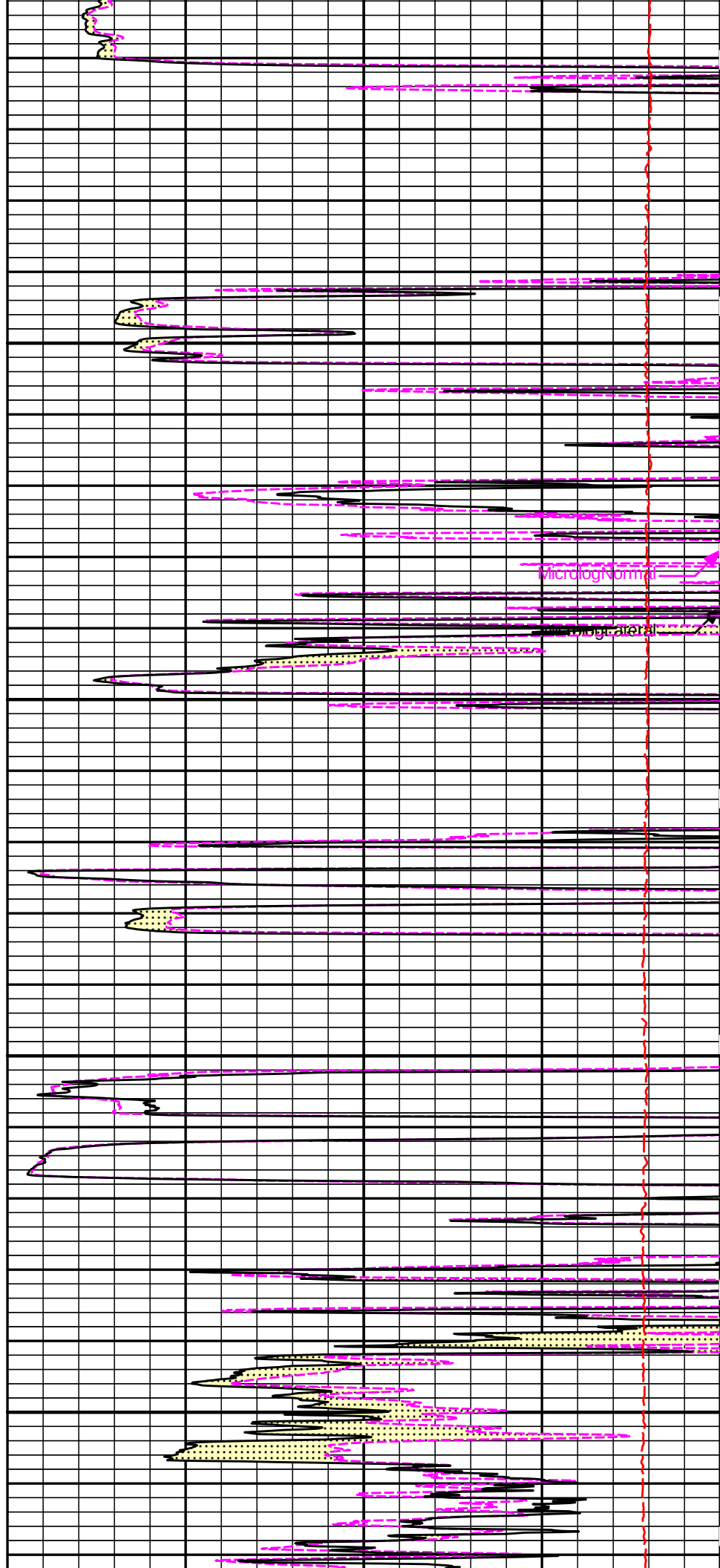
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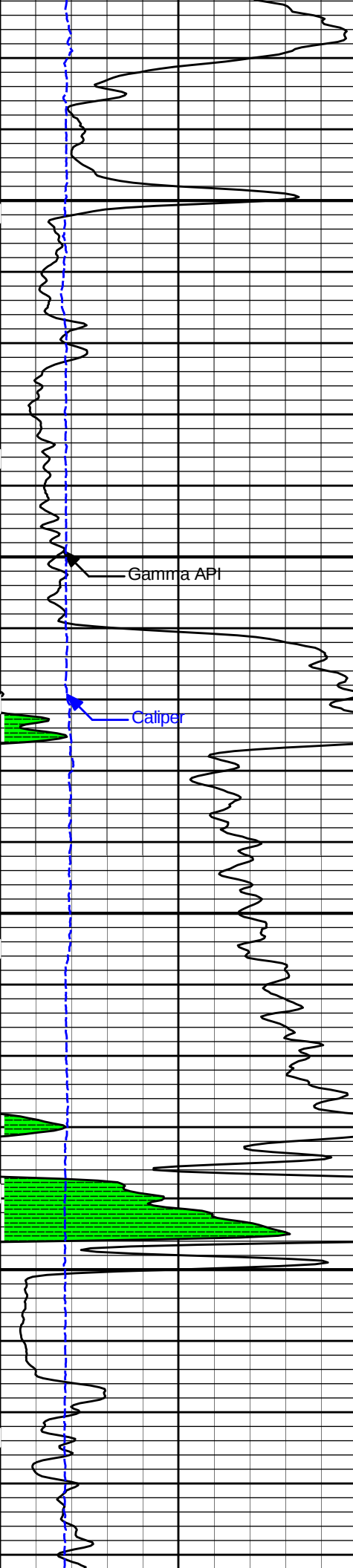




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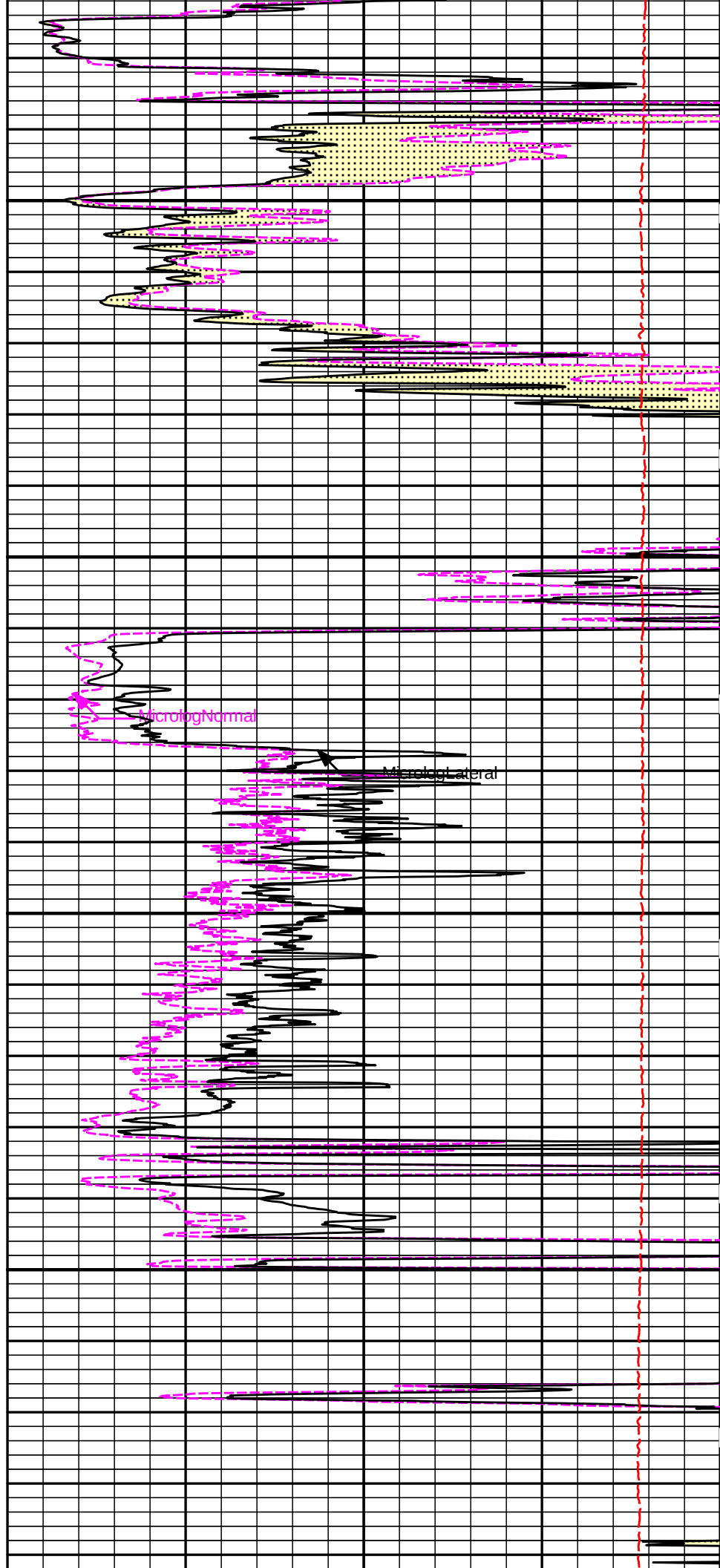
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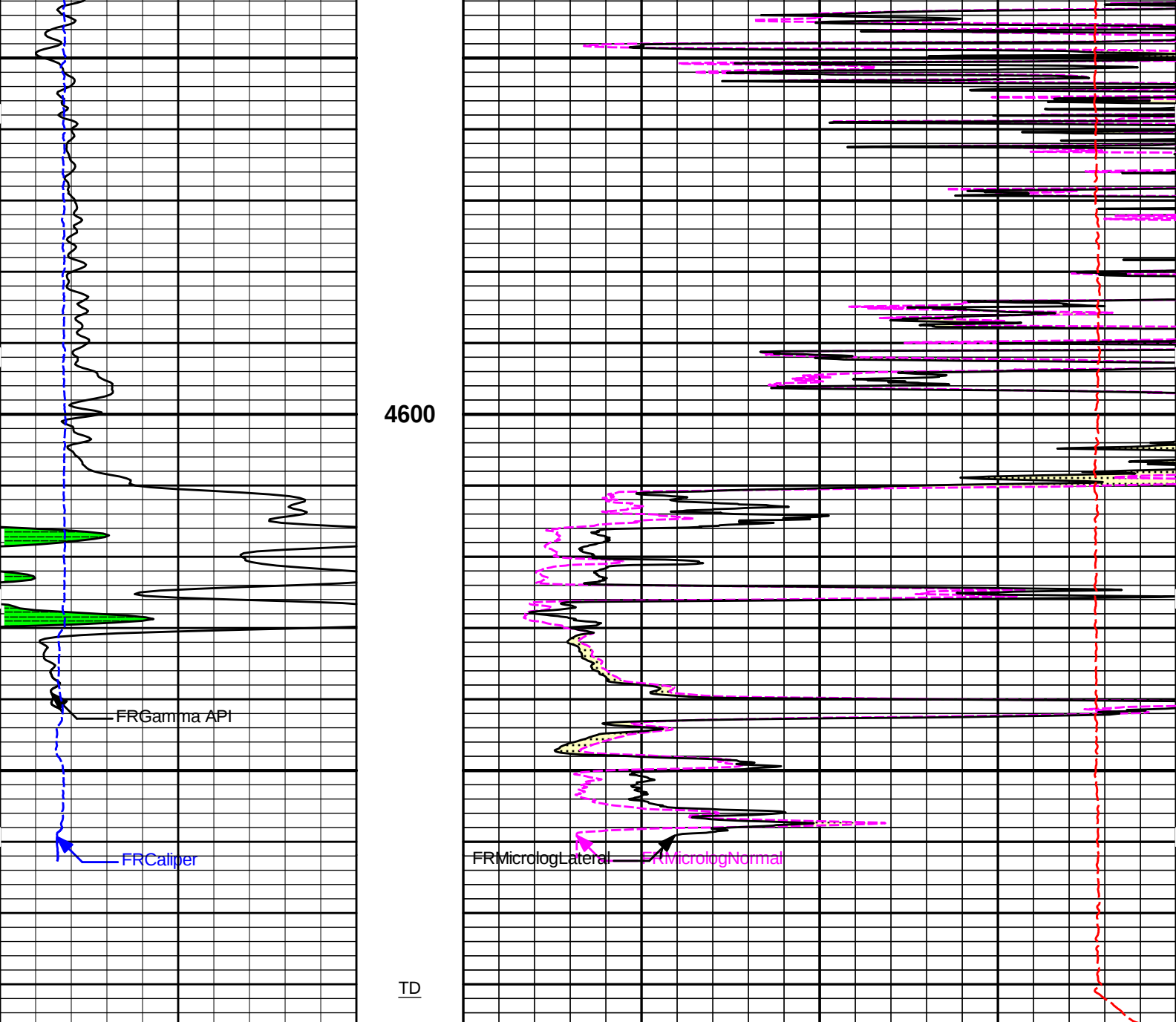




4400

4500





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

HALLIBURTON

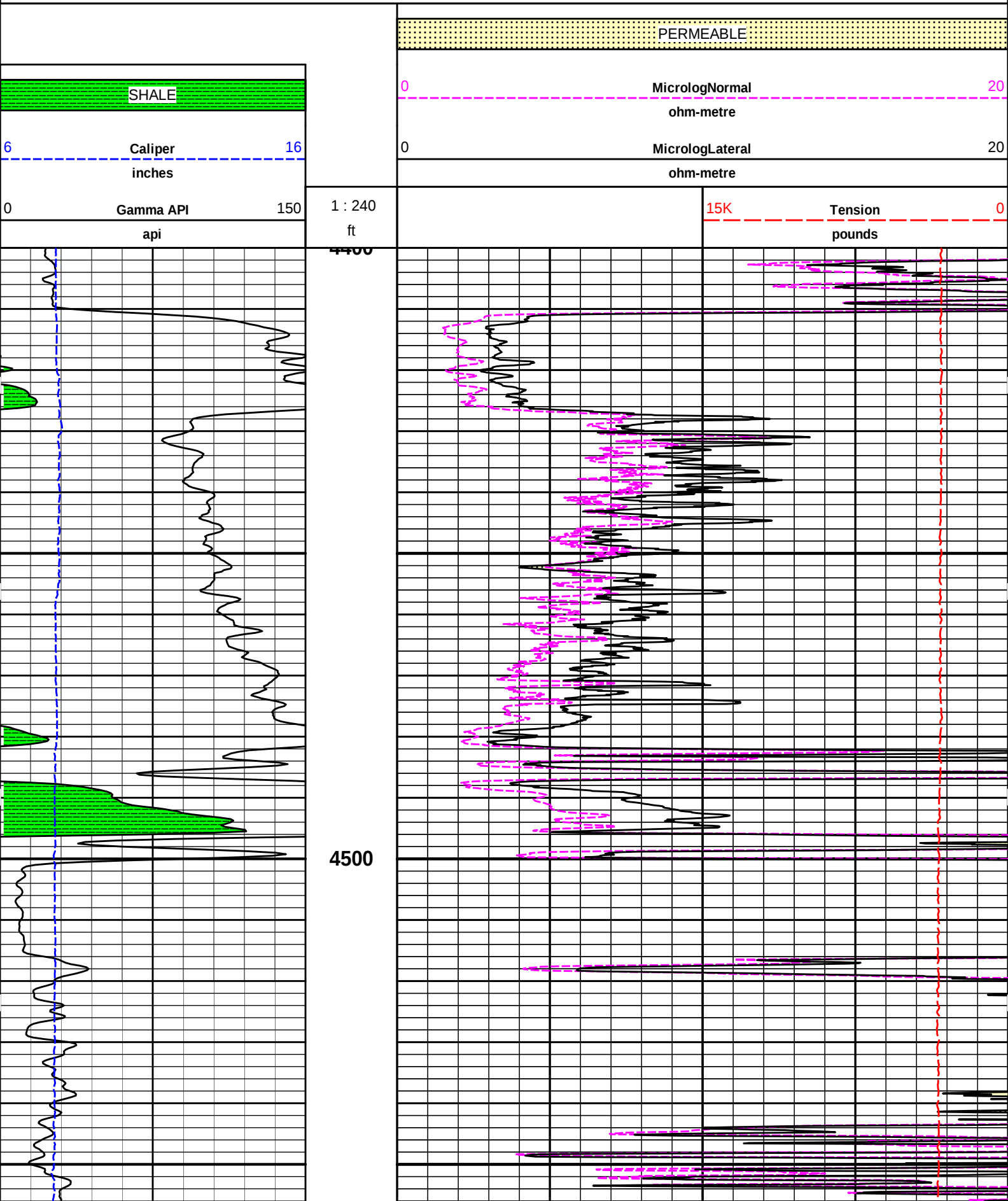
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Plot Range: 2950 ft to 4685.58 ft
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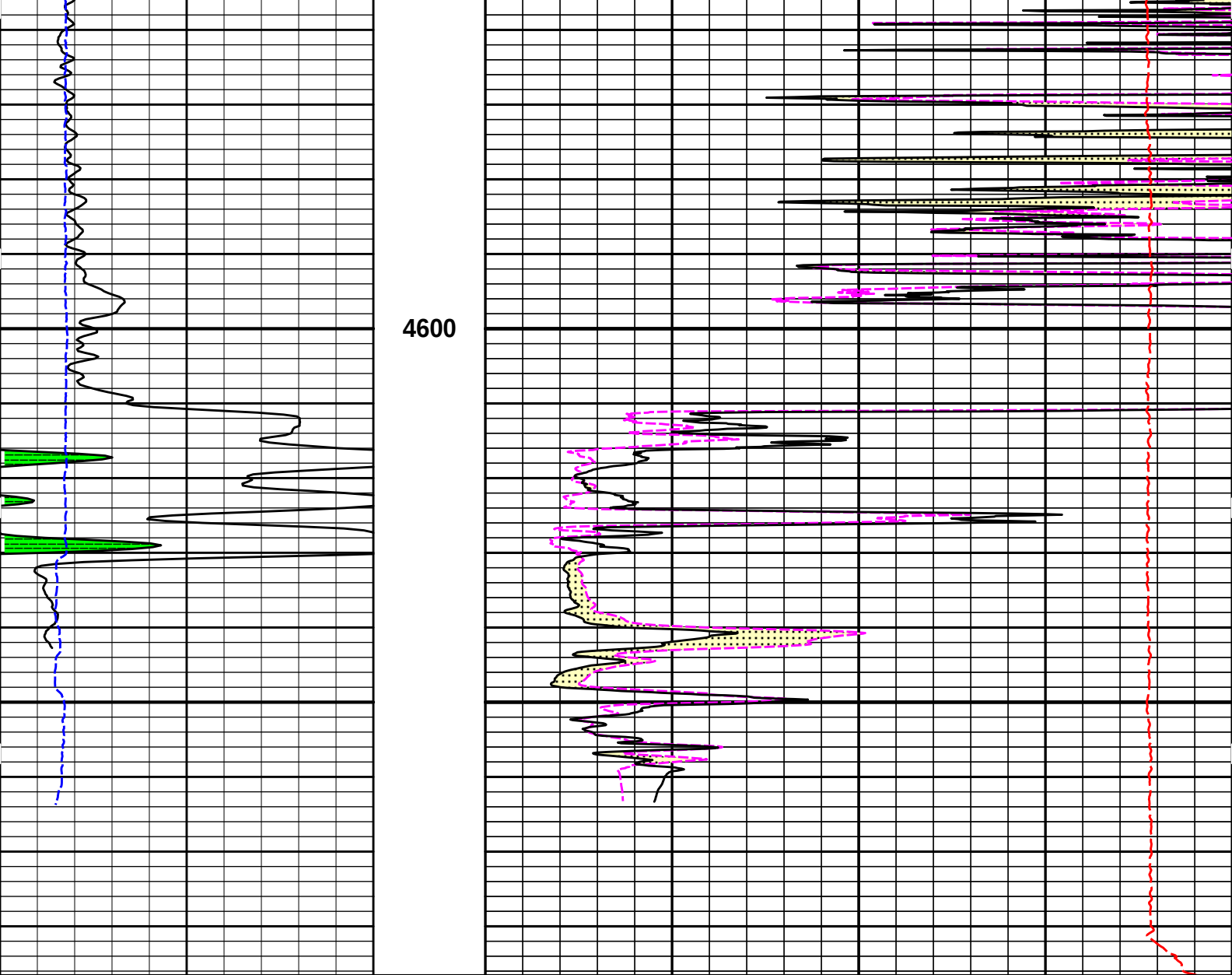
5 INCH MAIN LOG

HALLIBURTON

Plot Time: 14-Aug-11 09:43:46
Plot Range: 4400 ft to 4686.58 ft

REPEAT SECTION





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

HALLIBURTON

Plot Time: 14-Aug-11 09:43:48
Plot Range: 4400 ft to 4686.58 ft
Data: EAST_MADDIX_1_2\Well Based\DAQ-0001-003\
Plot File: \\-LOCAL-\\EAST_MADDIX_1_2\Well Based\MICRO\Microlog_IQ_5_rep_lib

REPEAT SECTION

HALLIBURTON

TOOL STRING DIAGRAM REPORT

Description	Overbody Description	O.D.	Diagram	Sensors @ Delays	Length	Accumulated Length
Cable Head- PROT01 30.00 lbs		Ø 3.625 in →			1.92 ft	54.51 ft
SP Sub-001 60.00 lbs		Ø 3.625 in →		← SP @ 50.81 ft	3.74 ft	52.59 ft
						48.85 ft
GTET-11048627 165.00 lbs		Ø 3.625 in →		← GammaRay @ 42.79 ft	8.52 ft	
						40.33 ft
DSNT-11019643 174.00 lbs	DSN Decentralizer- 11005605 6.60 lbs	Ø 3.625 in* → Ø 3.625 in →		← DSN Far @ 33.39 ft ← DSN Near @ 32.64 ft	9.69 ft	
						30.64 ft
SDLT-I43_P81 360.00 lbs		Ø 4.500 in → Ø 4.750 in →		SDL Microlog @ 22.83 ft SDL Caliper @ 22.65 ft SDL @ 22.64 ft	10.81 ft	
						19.83 ft
				← Mud Resistivity @ 13.44 ft		
ACRt-I962_S909 250.00 lbs		Ø 3.625 in →		← ACRt @ 9.46 ft	19.25 ft	

Cabbage Head- TRK696 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	Standard OH Cable Head	PROT01	30.00	1.92	52.59	300.00
SP	SP Sub	001	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	11019643	174.00	9.69	30.64	60.00
DCNT	DSN Decentralizer	11005605	6.60	5.13	*	33.97
SDLT	Spectral Density Tool	I43_P81	360.00	10.81	19.83	60.00
ACRt	Array Compensated True Resistivity	I962 S909	250.00	19.25	0.58	300.00
CBHD	Cabbage Head	TRK696	10.00	0.58	0.00	300.00
Total			1,055.60	54.51		
* Not included in Total Length and Length Accumulation.						
Data: EAST_MADDIX_1_2\0001 SP-GTET-DSN-SDL-ACRT-CH\IDLE						
Date: 14-Aug-11 01:04:07						

HALLIBURTON

CALIBRATION REPORT

MICRO LOG SHOP CALIBRATION

Tool Name:SDLT - I43_P81

Reference Calibration Date:06-Jul-11 10:55:47

Engineer:C.PARKER

Calibration Date:08-Aug-11 18:41:18

Software Version:WL INSITE R3.2.1 (Build 7)

Calibration Version:1

CALIBRATION COEFFICIENT SUMMARY					
Measurement	Micro Log Normal		Micro Log Lateral		Units
	Measured	Calibrated	Measured	Calibrated	
Tool Zero	-0.07	-0.07	-0.01	-0.02	ohmm
Calibration Point #1	0.01	0.00	0.02	0.00	ohmm
Calibration Point #2	20.21	20.00	22.16	20.00	ohmm
Internal Reference	20.14	19.94	22.15	19.99	ohmm

Measurement	Micro Log Normal Tool Value	Micro Log Lateral Tool Value	Units
Tool Zero	-1.30	-0.22	V
Calibration Point #1	18.06	7.90	V
Calibration Point #2	5380.92	6941.42	V
Internal Reference	5363.83	6938.89	V

CALIBRATION SUMMARY

Sensor	Shop	Field	Post	Difference	Tolerance	Units
SDLT-I43_P81						
MicroLog Normal	19.94	-----	-----	0.00	-----	ohmm
MicroLog Lateral	19.99	-----	-----	0.00	-----	ohmm

Data: EAST_MADDIX_1_2\0001 SP-GTET-DSN-SDL-ACRT-CH\IDLEDate: 14-Aug-11 01:06:02

HALLIBURTON

PARAMETERS REPORT

Depth (ft)	Tool Name	Mnemonic	Description	Value	Units
TOP					
	DSNT	DNOK	Process DSN?	No	
	SDLT	DNOK	Process Density?	No	
	SDLT	MLOK	Process MicroLog Outputs?	No	
2940.00					
	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	9.400	ppg
	SHARED	WAGT	Weighting Agent	Barite	
	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	0.370	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	4690.00	ft
	SHARED	BHT	Bottom Hole Temperature	120.0	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	
	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	Centered	
	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	DNOK	Process Density?	Yes	
	SDLT	DNOK	Process Density EVR?	No	
	SDLT	CB	Logging Calibration Blocks?	No	
	SDLT	SPVT	SDLT Pad Temperature Valid?	Yes	
	SDLT	DTWN	Disable temperature warning	No	
	SDLT	DMA	Formation Density Matrix	2.710	g/cc
	SDLT	DFL	Formation Density Fluid	1.000	g/cc
	SDLT	CLOK	Process Caliper Outputs?	Yes	
	SDLT	MLOK	Process MicroLog Outputs?	Yes	
	ACRt	RTOK	Process ACRt?	Yes	
	ACRt	MNSO	Minimum Tool Standoff	1.50	in
	ACRt	TCS1	Temperature Correction Source	FP Lwr & FP Up	
	ACRt	TPOS	Tool Position	Free Hanging	
	ACRt	RMOP	Rmud Source	Mud Cell	
	ACRt	RMIN	Minimum Resistivity for MAP	0.20	ohmm
	ACRt	RMIN	Maximum Resistivity for MAP	200.00	ohmm

ACRT		THQY	Threshold Quality	0.50
BOTTOM				
Data: EAST_MADDIX_1_2\0001 SP-GTET-DSN-SDL-ACRT-CH\IDLE				Date: 14-Aug-11 09:08:09
HALLIBURTON 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	22.64	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	19.83	NO	
FHV	Far Detector High Voltage	19.83	NO	
ITMP	Instrument Temperature	19.83	NO	
DDHV	Detector High Voltage	19.83	NO	
TPUL	Tension Pull	22.65	NO	
PCAL	Pad Caliper	22.65	TRI	0.250
ACAL	Arm Caliper	22.65	TRI	0.250
TPUL	Tension Pull	22.83	NO	
MINV	Microlog Lateral	22.83	BLK	0.750
MNOR	Microlog Normal	22.83	BLK	0.750
ACRt				
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	
Data: EAST_MADDIX_1_2I0001 SP-GTET-DSN-SDL-ACRT-CHIIDLE			Date: 14-Aug-11 01:06:26	

COMPANY	VAL ENERGY INC.		
WELL	EAST MADDIX 1-2		
FIELD	NURSE NORTHWEST		
COUNTY	BARBER	STATE	KANSAS
HALLIBURTON		MICROLOG	