HALLIBURTON

MICRO LOG

COMPANY OXY USA
WELL GRIFFIN D-1
FIELD/BLOCK HUGOTON GAS AREA
COUNTY HASKELL
STATE KANSAS

COMPANY **OXY USA**

WELL **GRIFFIN D-1**

FIELD/BLOCK **HUGOTON GAS AREA**

COUNTY **HASKELL** STATE **KANSAS**

API No. 15081220210000

Location NE-NW-SW-NW
1465' FNL 338' FWL
LATITUDE: 37.630904° N LONGITUDE: 100.905798° W

Sect. 11 Twp. 28S Rge. 33W

Other Services:
ACRT
DSNT/SDLT
BSAT

Permanent Datum	GL	Elev. 2981.8 ft	Elev.: K.B. 2995.8 ft
Log measured from	KB	, 14.0 ft above perm. Datum	D.F. 2995.8 ft
Drilling measured from	KB		G.L. 2981.8 ft

Date		11-Jun-13					
Run No.		ONE					
Depth - Driller		5825.00 ft					
Depth - Logger		5829.0 ft					
Bottom - Logged Interval		5785.0 ft					
Top - Logged Interval		4100.0 ft					
Casing - Driller		8.625 in @ 1811.0 ft		@		@	
Casing - Logger		1810.0 ft					
Bit Size		7.875 in		@		@	
Type Fluid in Hole		WATER BASED MUD					
Density	Viscosity	9.2 ppg	44.00 s/qt				
PH	Fluid Loss	9.60 pH	7.6 cptm				
Source of Sample		FLOWLINE					
Rm @ Meas. Temperature		1.050 ohmm @ 75.00 degF		@		@	
Rmf @ Meas. Temperature		0.88 ohmm @ 75.00 degF		@		@	
Rmc @ Meas. Temperature		1.250 ohmm @ 75.00 degF		@		@	
Source Rmf	Rmc	MEASURED	MEASURED				
Rm @ BHT		0.61 ohmm @ 135.0 degF		@		@	
Time Since Circulation		8.0 hr					
Time on Bottom		11-Jun-13 22:11					
Max. Rec. Temperature		135.0 degF @ 5829.0 ft		@		@	
Equipment	Location	10546696	LIBERAL				
Recorded By		THOMAS HYDE					
Witnessed By		A. HOWSON					

Fold here

PGM Version: WL INSITE R3:8.4 (Build 5)

Service Ticket No.: 900495198 API Serial No.: 15081220210000

CHANGE IN MUD TYPE OR ADDITIONAL SAMPLE

RESISTIVITY SCALE CHANGES

	Type Log	Depth	Scale Up Hole	Scale Down Hole

RESISTIVITY EQUIPMENT DATA

	Run No.	Tool Type & No.	Pad Type	Tool Pos.	Other
	@				
	ONE	MICRO	RUBBER	ADJ	N/A
		11014296			

Date	Sample No.							
Depth-Driller								
Type Fluid in Hole								
Density	Viscosity							
Ph	Fluid Loss							
Source of Sample								
Rm @ Meas. Temp		@	@	@	@	@	@	@
Rmf @ Meas. Temp.		@	@	@	@	@	@	@
Rmc @ Meas. Temp.		@	@	@	@	@	@	@
Source Rmf	Rmc							
Rm @ BHT		@	@	@	@	@	@	@
Rmf @ BHT		@	@	@	@	@	@	@
Rmc @ BHT		@	@	@	@	@	@	@

EQUIPMENT DATA

GAMMA		ACOUSTIC		DENSITY		NEUTRON	
Run No.	ONE	Run No.		Run No.		Run No.	
Serial No.	11048627	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		
Run	Depth		Speed	Scale		Scale		Matrix	Scale		Matrix	Scale		Matrix
No.	From	To	ft/min	L	R	L	R		L	R		L	R	
ONE	5829	4100	REC	0	150									

DIRECTIONAL INFORMATION

Maximum Deviation @	KOP @

Remarks: ANNULAR HOLE VOLUME CALCULATED FOR 5.5 INCH CASING

CHLORIDES REPORTED AT 4000 MG/L

LCM REPORTED AT 2PPB

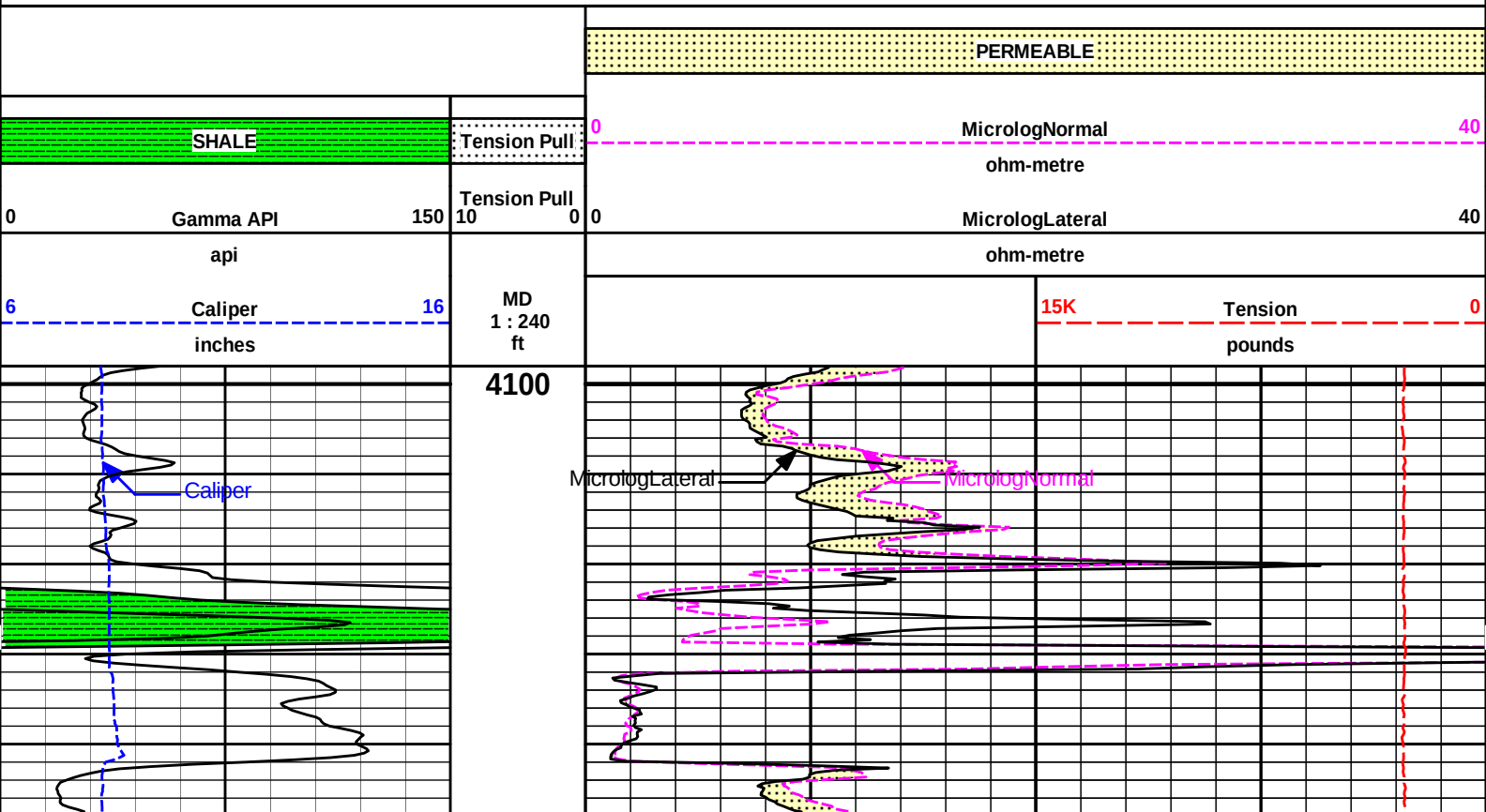
TODAY'S CREW V. JAIME F. VILLA

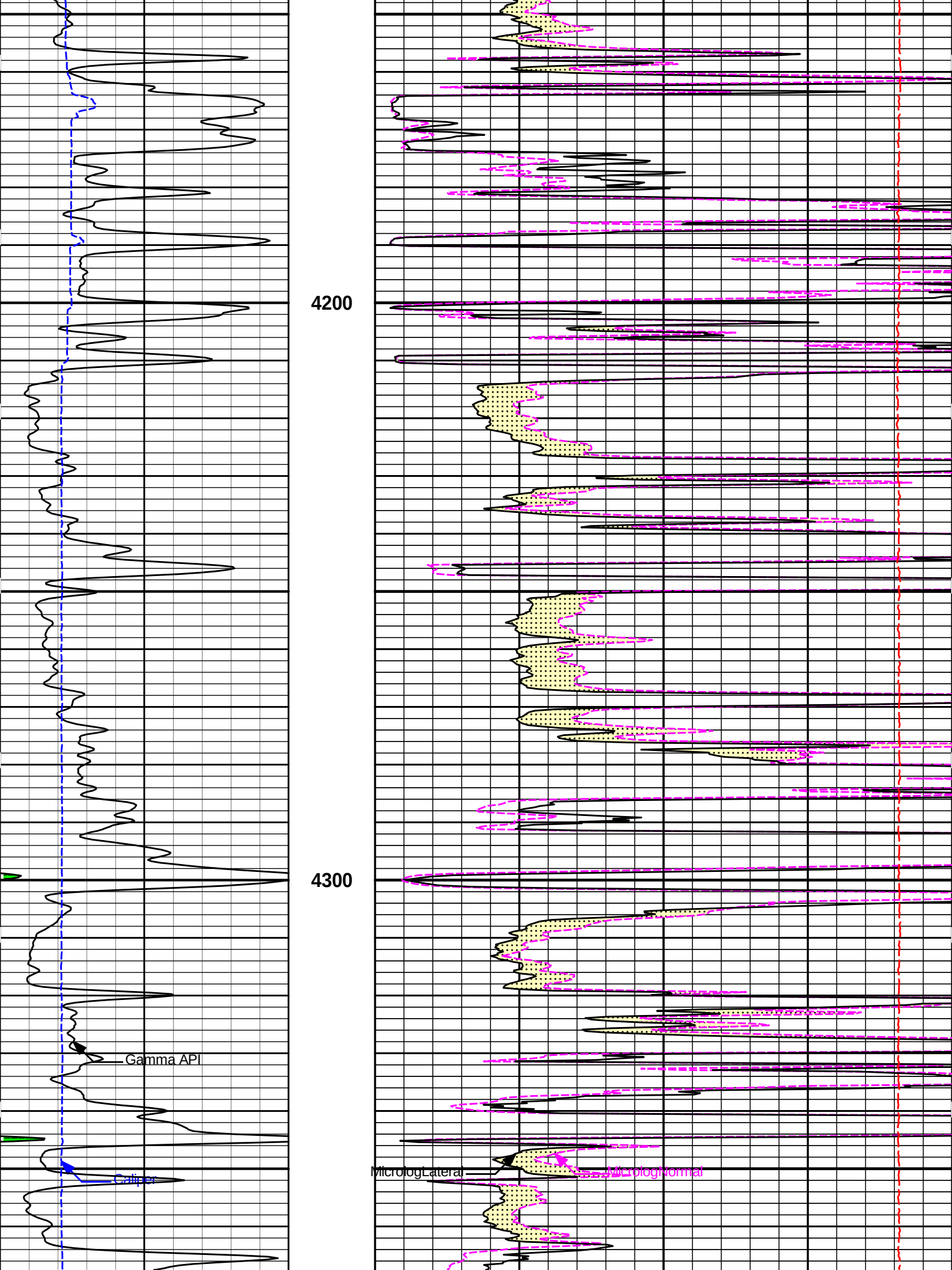
THANK YOU FOR CHOOSING HALLIBURTON ENERGY SERVICES LIBERAL, KANSAS 620-624-8123

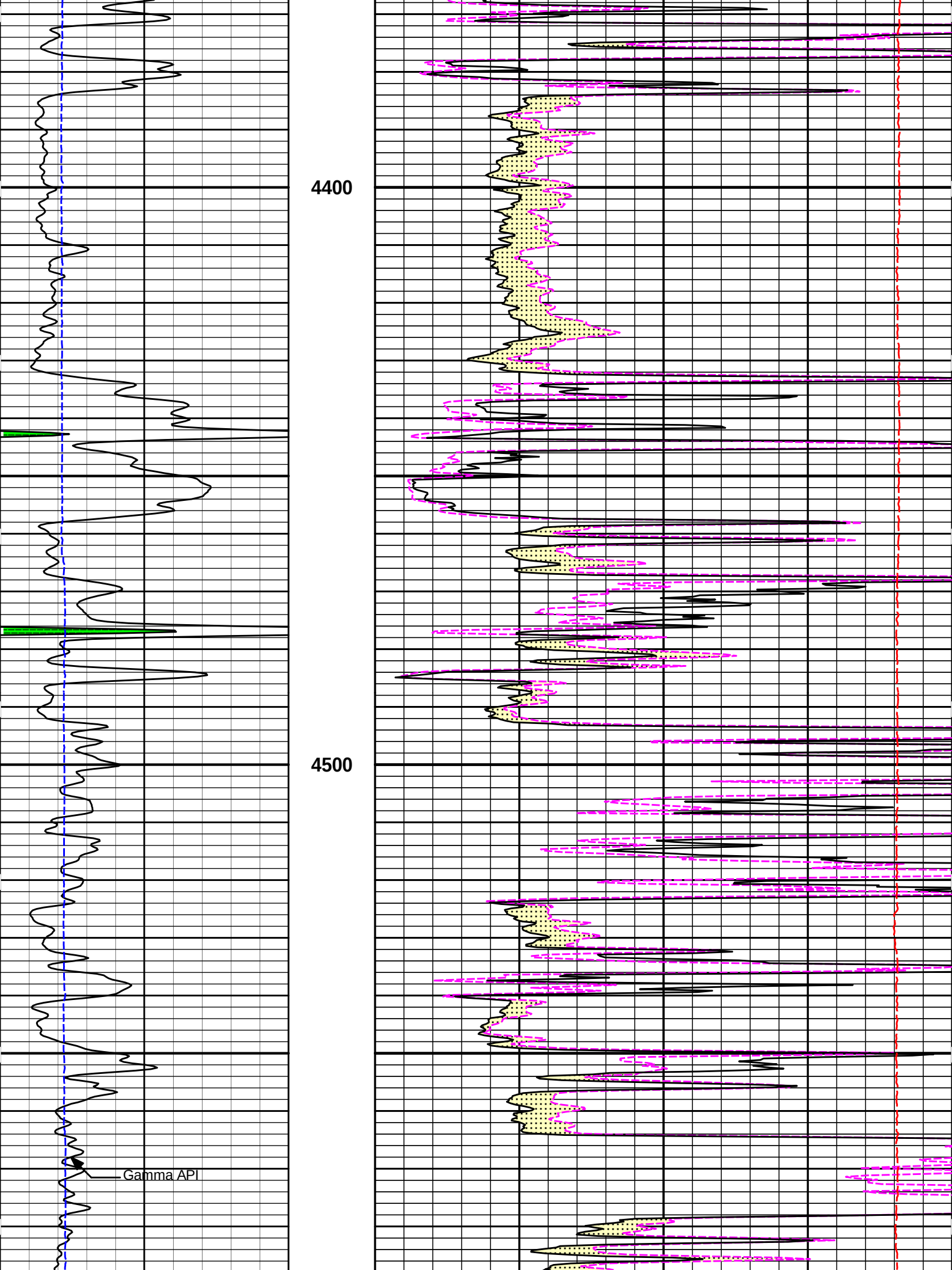
HALLIBURTON

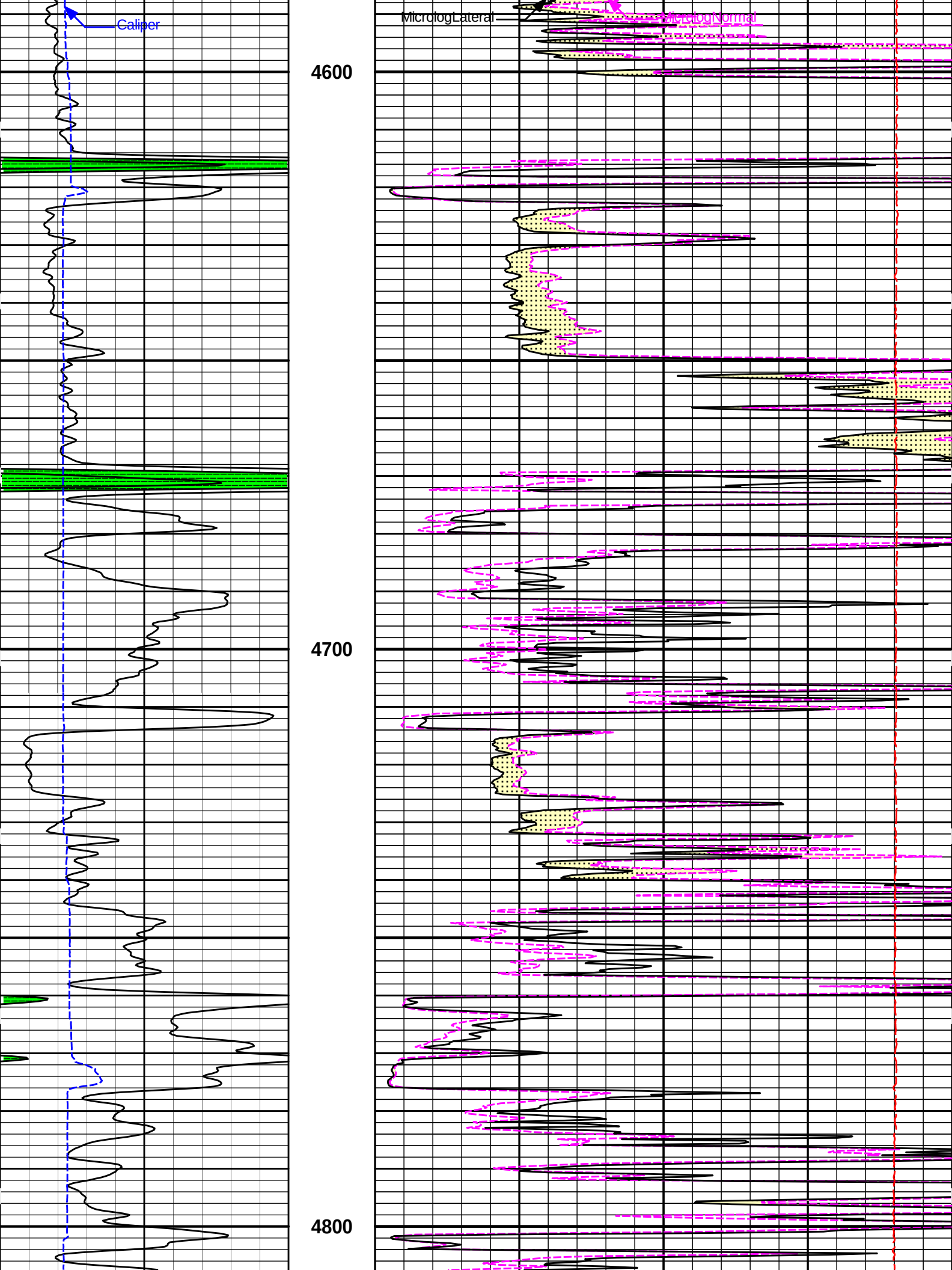
Plot Time: 11-Jun-13 23:10:47
Plot Range: 4098 ft to 5832.92 ft
Data: GRIFFIN_D-1\Well Based\DAQ-0001-003
Plot File: \\-LOCAL-\GRIFFIN_D-1\0001 SP-GTET-DSN-SDL-ACRT-BN\MICRO\Microlog_IQ_5_main_lib

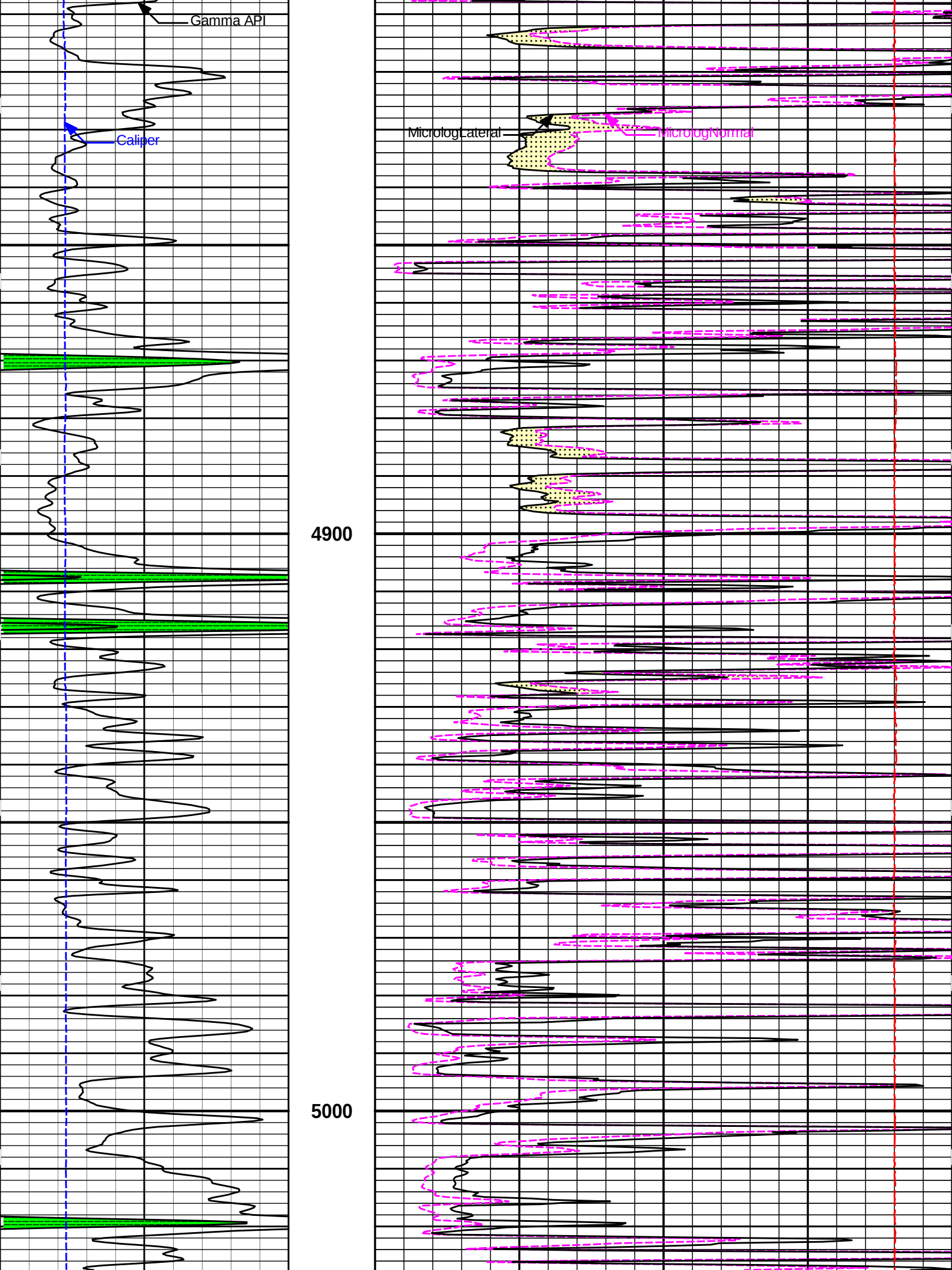
5 INCH MAIN LOG

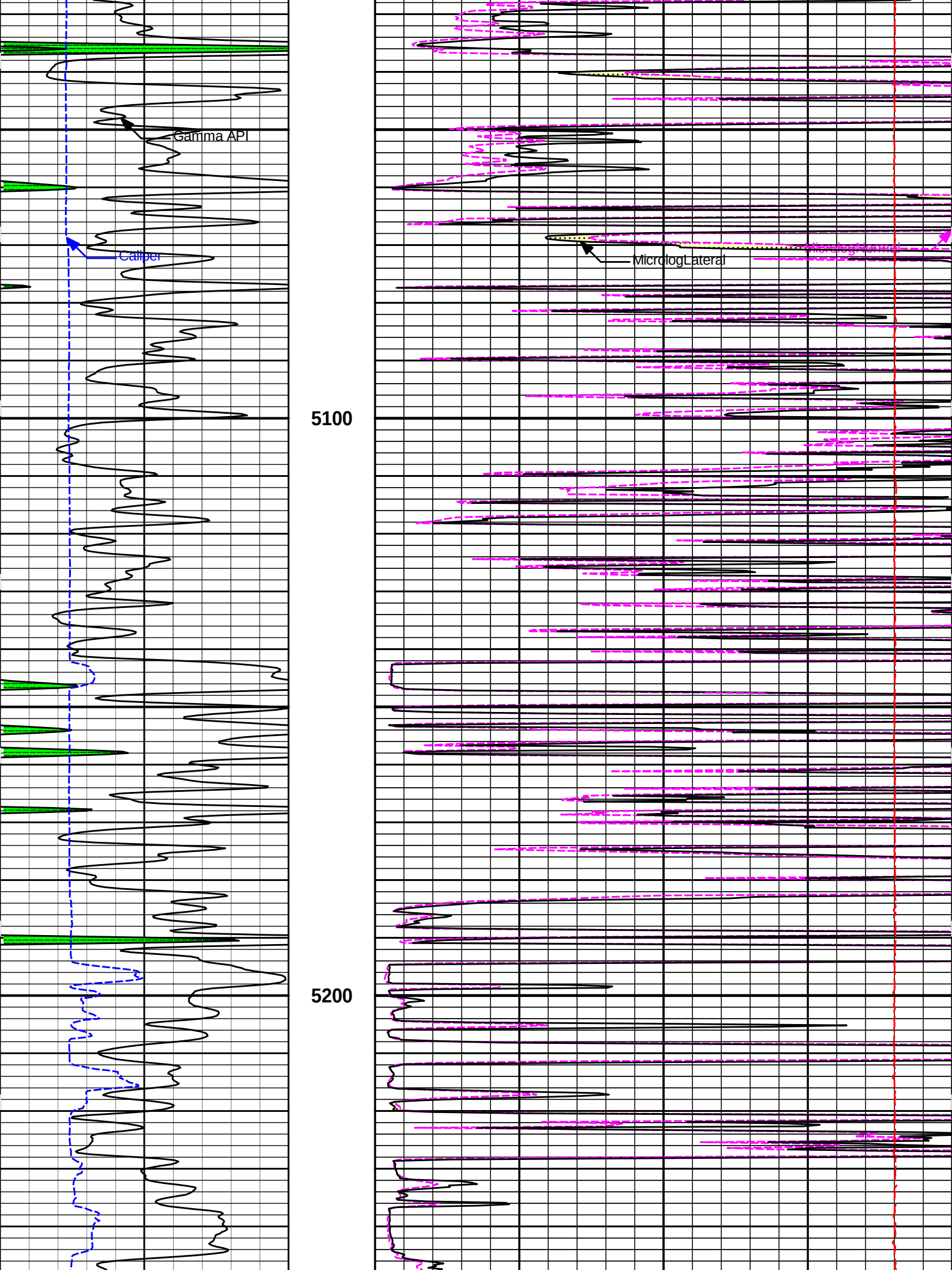


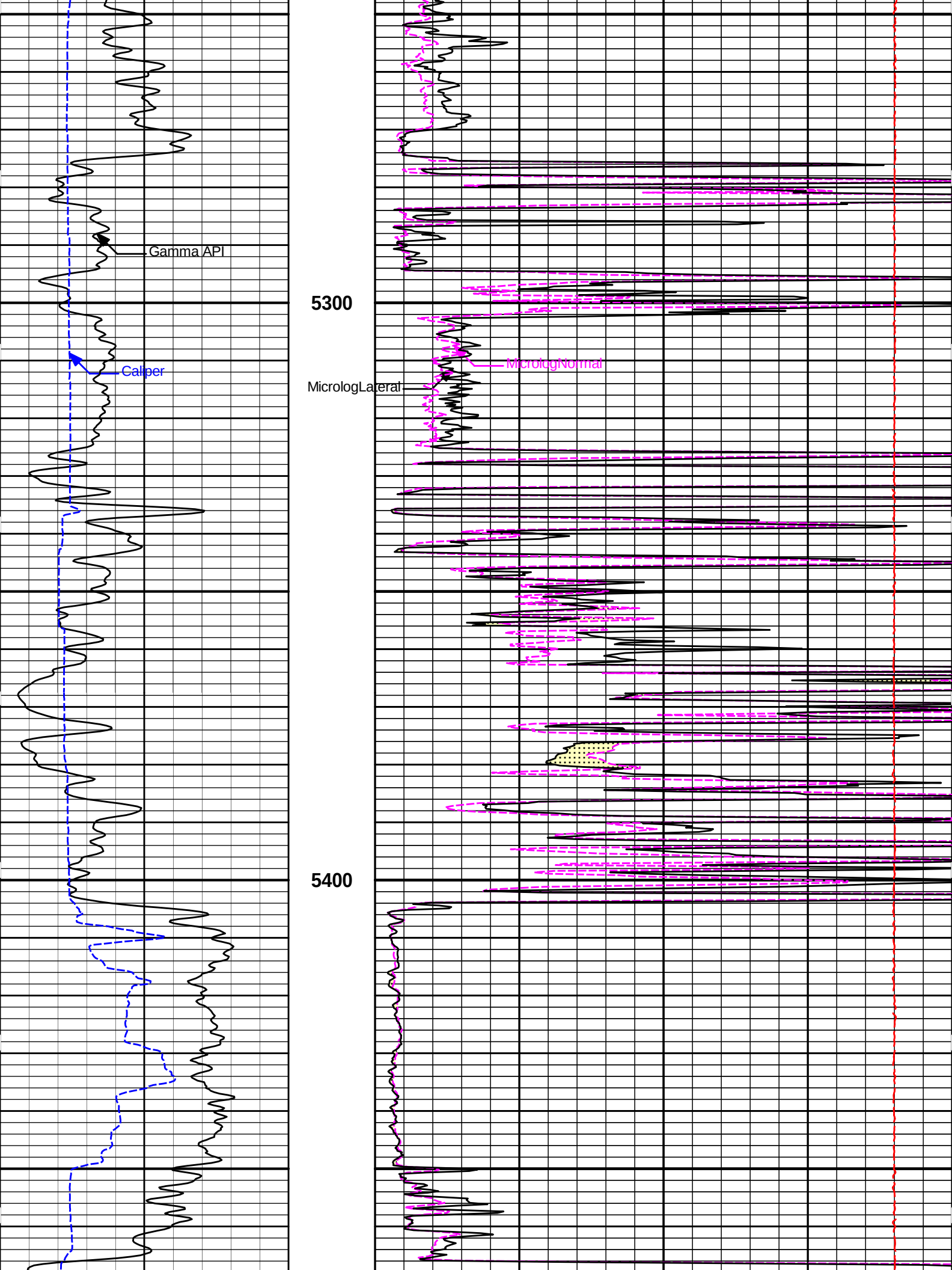

4200
4300
Gamma API
Caliper
MicrologLateral
MicrologNormal

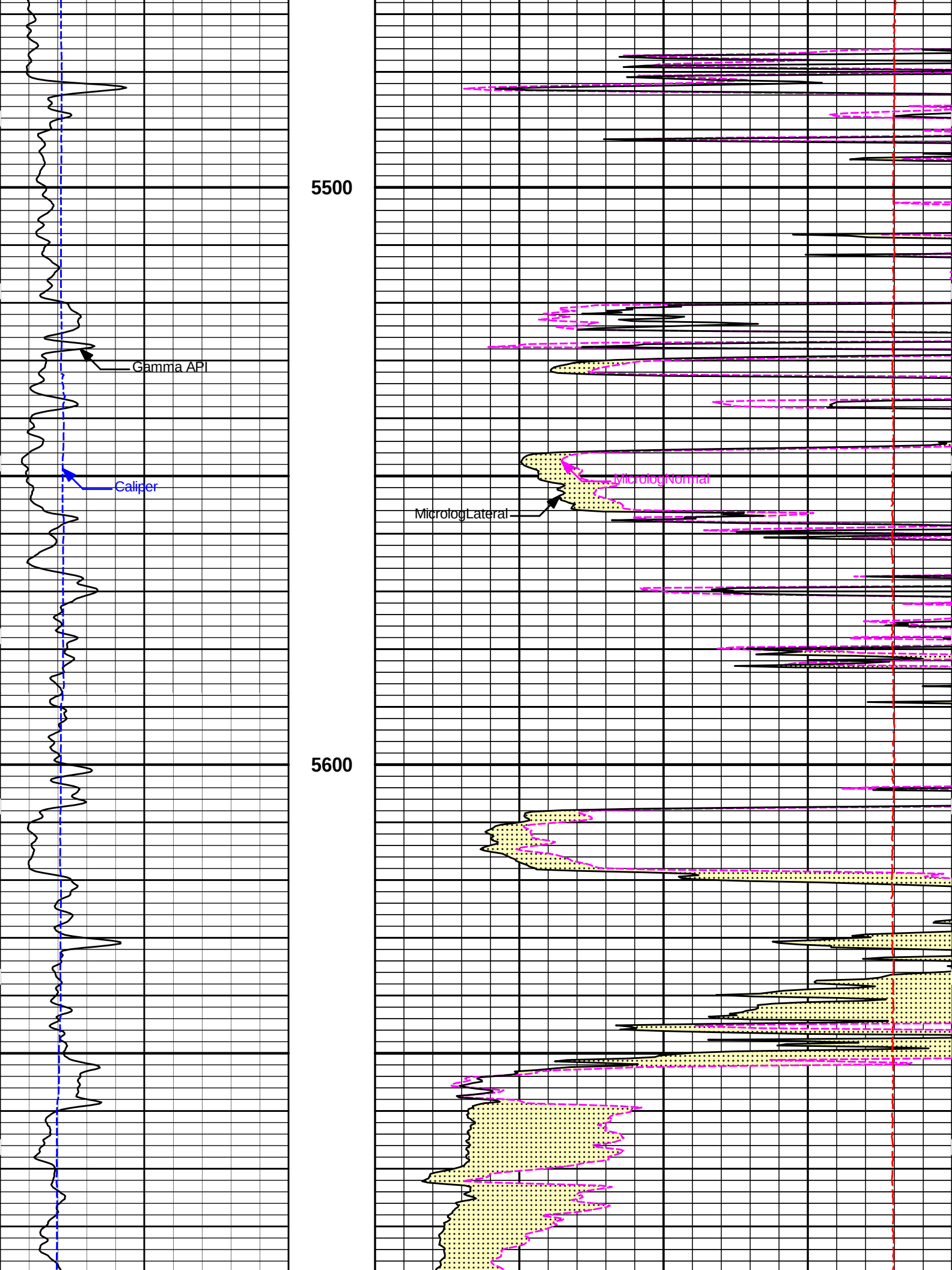

4400
4500
Gamma API

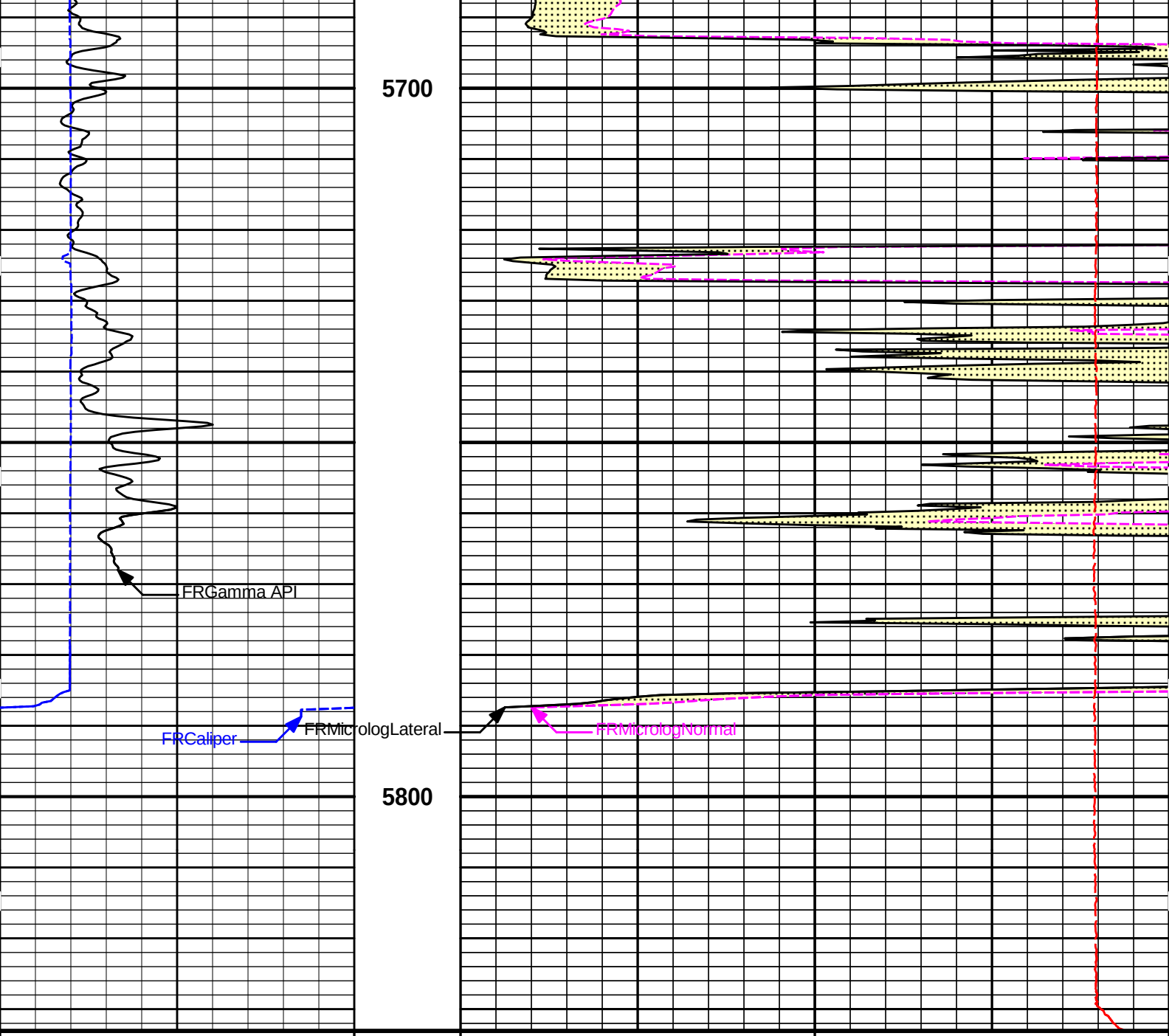

Caliper
MicrologLateral
MicrologNormal
4600
4700
4800


Gamma API
Caliper
MicrologLateral
MicrologNormal
4900
5000


Gamma API
Caliper
MicrologLateral
5100
5200


Gamma API
Caliper
5300
MicrologNormal
MicrologLateral
5400


5500
5600
Gamma API
Caliper
MicrologNormal
MicrologLateral



6 Caliper 16	MD 1 : 240 ft	15K Tension 0
inches		pounds
0 Gamma API 150	Tension Pull 10 0	0 MicrologLateral 40
api		ohm-metre
SHALE	Tension Pull	0 MicrologNormal 40
		ohm-metre
		PERMEABLE

HALLIBURTON

Plot Time: 11-Jun-13 23:11:02
Plot Range: 4098 ft to 5832.92 ft
Data: GRIFFIN_D-1\Well Based\DAQ-0001-003\
Plot File: \\-LOCAL-\GRIFFIN_D-1\0001 SP-GTET-DSN-SDL-ACRT-BN\MICRO\Microlog_IQ_5_main_lib

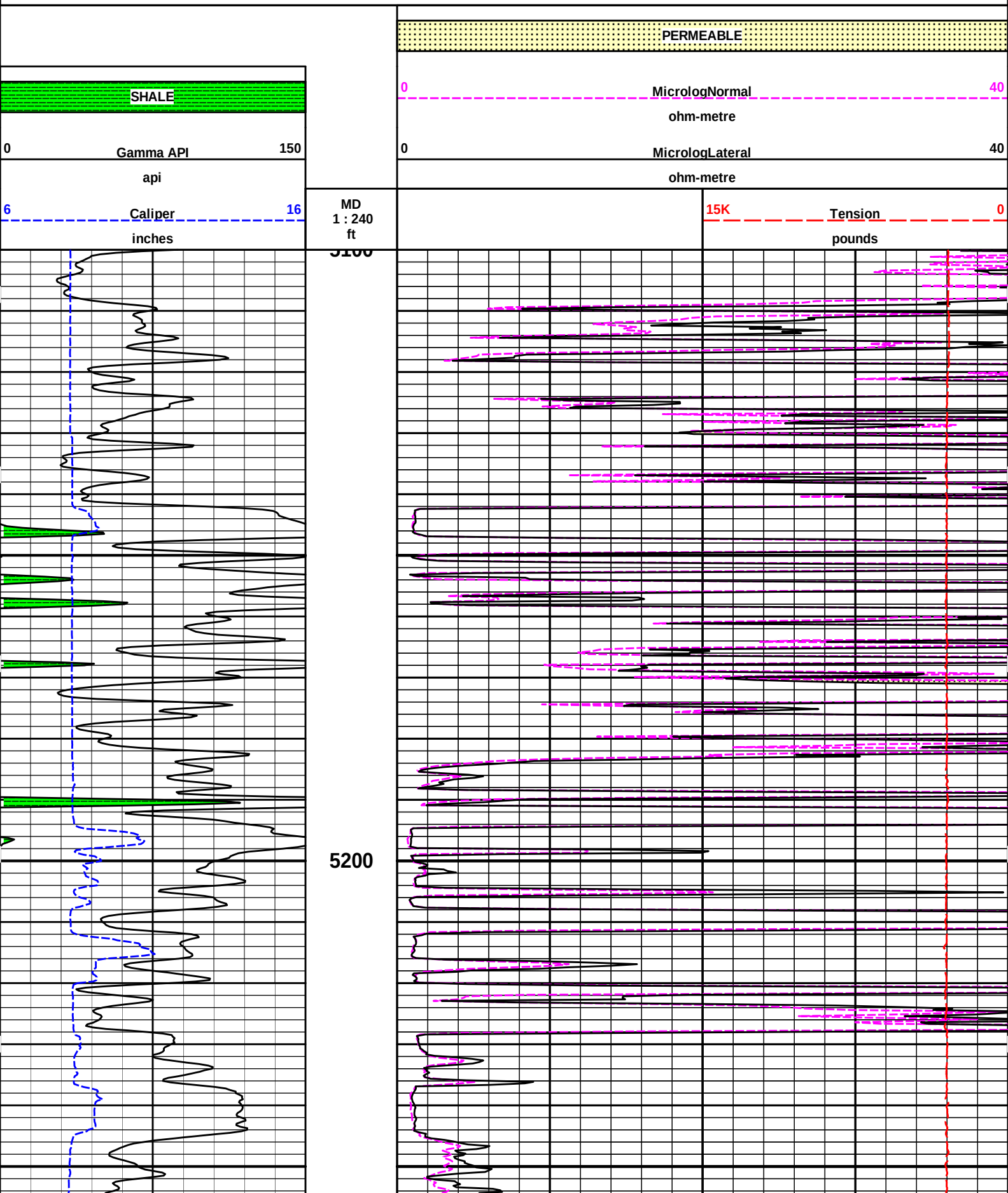
5 INCH MAIN LOG

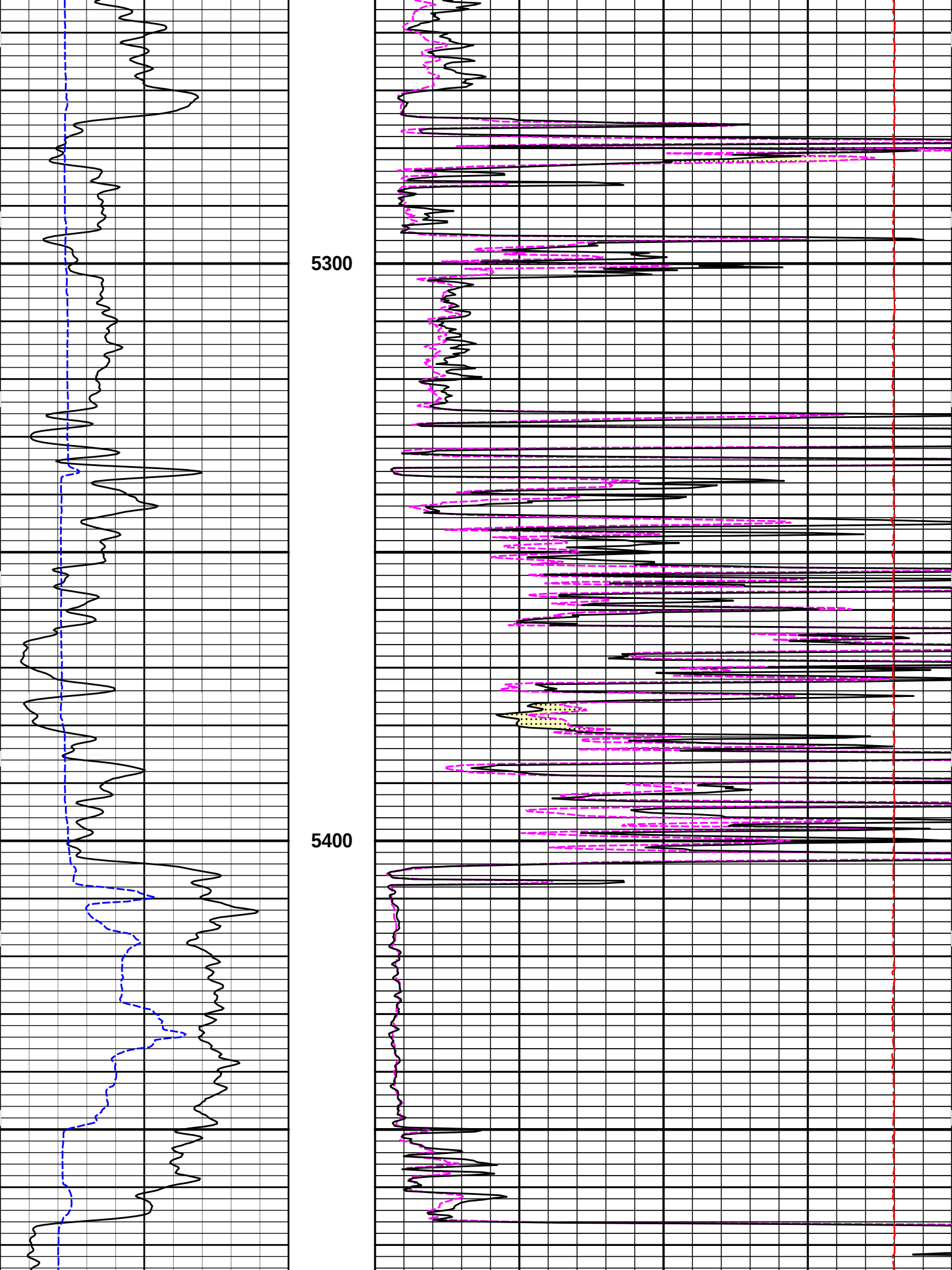
HALLIBURTON

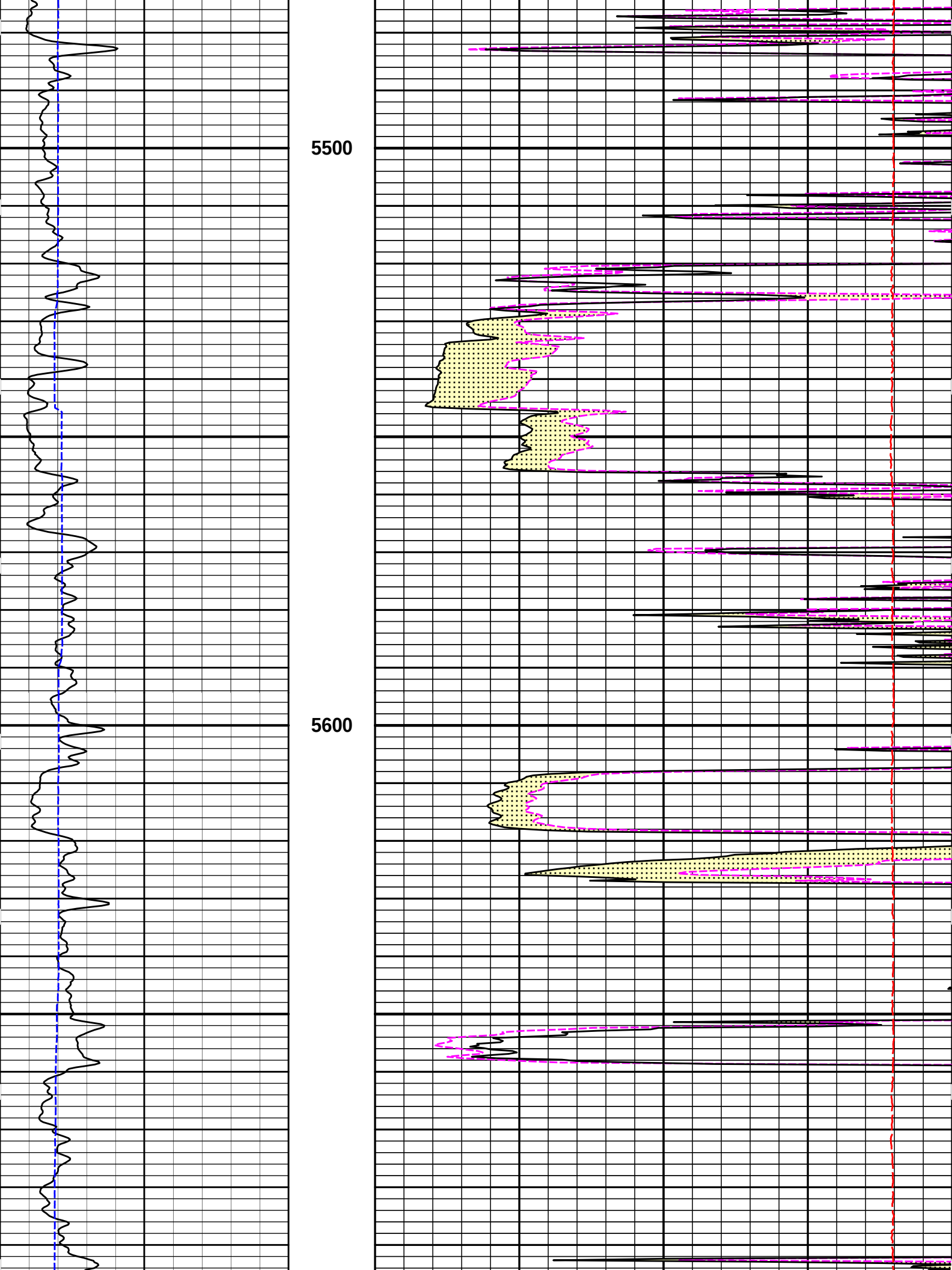
Plot Time: 11-Jun-13 23:11:02

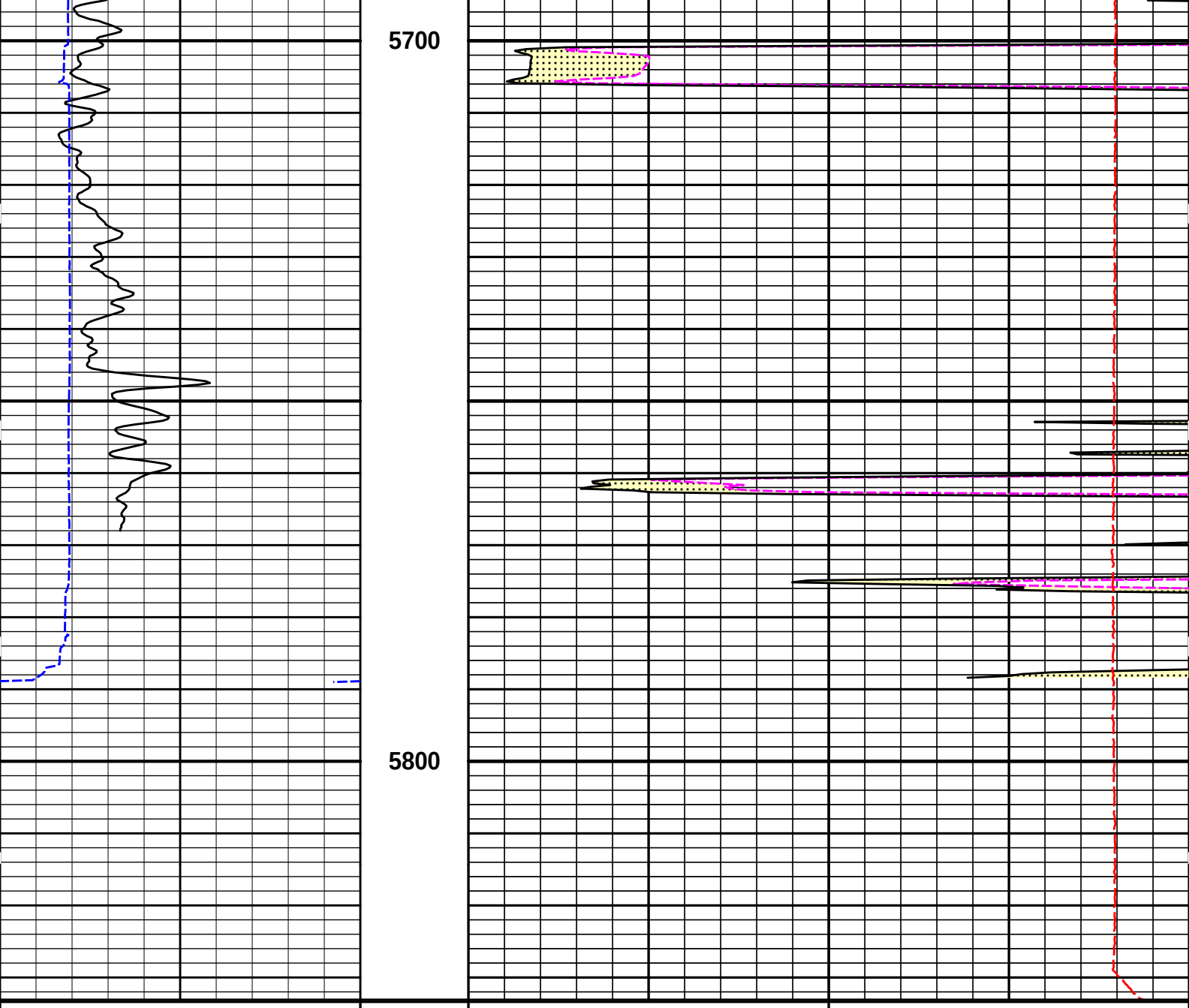
Plot Range: 5100 ft to 5833.08 ft
Data: GRIFFIN_D-1\Well Based\DAQ-0001-002\
Plot File: \\-LOCAL-\GRIFFIN_D-1\0001 SP-GTET-DSN-SDL-ACRT-BN\MICRO\Microlog_IQ_5_rep_lib

REPEAT SECTION




5300
5400


5500
5600



6 Caliper 16
inches

MD
1 : 240
ft

15K Tension 0
pounds

0 Gamma API 150
api

SHALE

0 MicrologLateral 40
ohm-metre

0 MicrologNormal 40
ohm-metre

PERMEABLE

HALLIBURTON

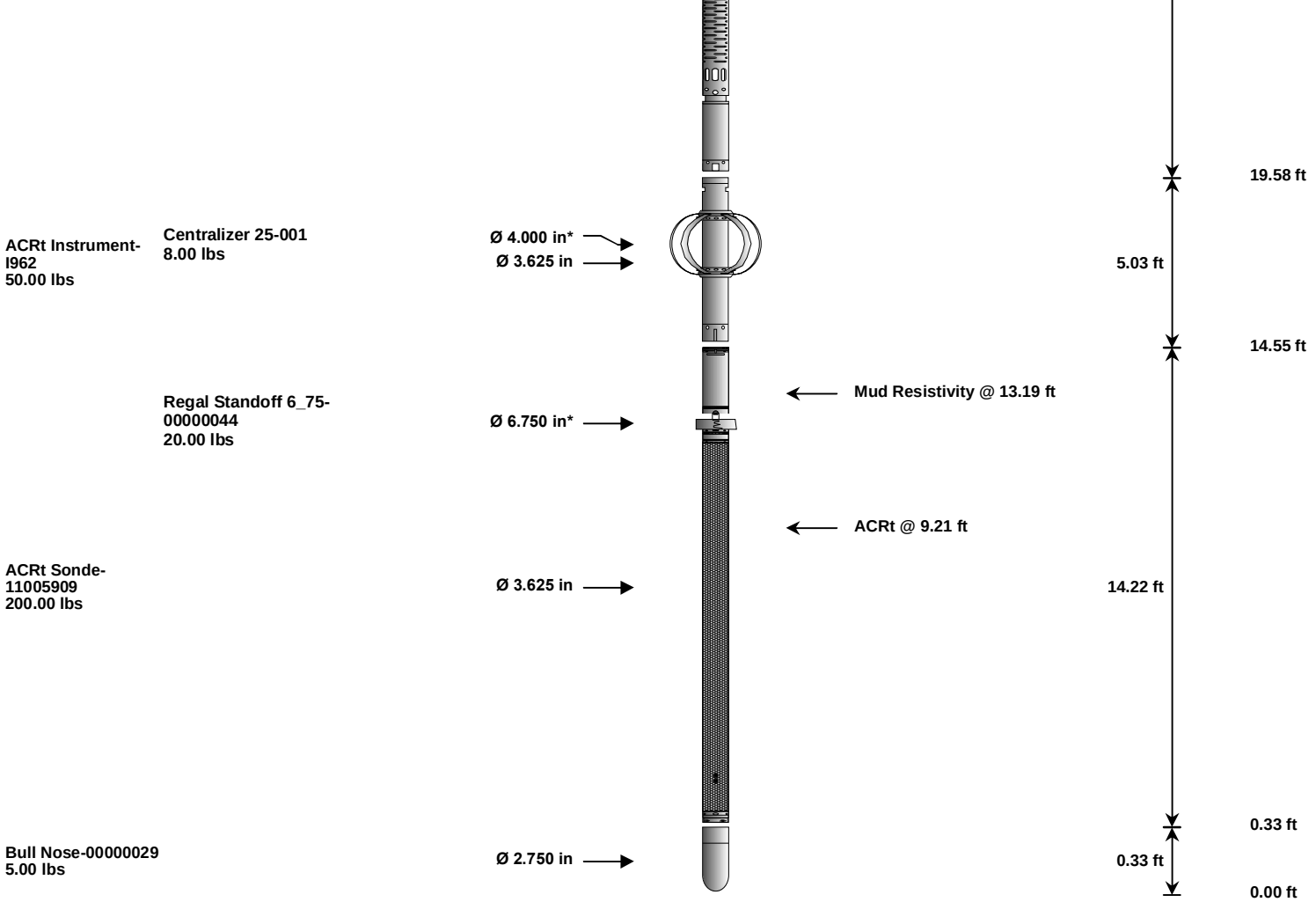
Plot Time: 11-Jun-13 23:11:05
Plot Range: 5100 ft to 5833.08 ft
Data: GRIFFIN_D-1\Well Based\DAQ-0001-002\
Plot File: \\-LOCAL-\GRIFFIN_D-1\0001 SP-GTET-DSN-SDL-ACRT-BN\MICRO\Microlog_IQ_5_rep_lib

REPEAT SECTION

HALLIBURTON

TOOL STRING DIAGRAM REPORT

Description	Overbody Description	O.D.	Diagram	Sensors @ Delays	Length	Accumulated Length
						75.79 ft
Cable Head Tension-00046696 30.00 lbs		Ø 3.625 in		Load Cell @ 74.79 ft	2.00 ft	
						73.79 ft
SP Sub-11441455 60.00 lbs		Ø 3.625 in		SP @ 72.01 ft	3.74 ft	
						70.05 ft
GTET-11048627 165.00 lbs		Ø 3.625 in			8.52 ft	
				GammaRay @ 63.99 ft		
						61.53 ft
	DSN Decentralizer-11005605 6.60 lbs	Ø 5.000 in*				
DSNT-11055304 174.00 lbs		Ø 3.625 in			9.69 ft	
				DSN Far @ 54.59 ft		
				DSN Near @ 53.84 ft		
						51.84 ft
SDLT-11014296 360.00 lbs		Ø 4.500 in			10.81 ft	
	SDLT Pad-10865884 65.00 lbs					
	Microlog Pad-11014296 8.00 lbs	Ø 4.750 in*		Microlog @ 44.03 ft		
		Ø 4.750 in*		SDL Caliper @ 43.84 ft		
				SDL @ 43.83 ft		
						41.03 ft
IQ Flex-696 140.00 lbs		Ø 3.625 in			5.67 ft	
						35.36 ft
	Centralizer 25-002 8.00 lbs	Ø 4.000 in*				
BSAT-10747683 300.00 lbs		Ø 3.625 in			15.77 ft	
				Sonic Receivers @ 26.84 ft		



Mnemonic	Tool Name	Serial Number	Weight (lbs)	Length (ft)		Accumulated Length (ft)	Max.Log. Speed (fpm)
CHT	Cable Head with Load Cell	00046696	30.00	2.00		73.79	300.00
SP	SP Sub	11441455	60.00	3.74		70.05	300.00
GTET	Gamma Telemetry Tool	11048627	165.00	8.52		61.53	60.00
DSNT	Dual Spaced Neutron	11055304	174.00	9.69		51.84	60.00
DCNT	DSN Decentralizer	11005605	6.60	5.13	*	55.17	300.00
SDLT	Spectral Density Tool	11014296	360.00	10.81		41.03	60.00
SDLP	Density Insite Pad	10865884	65.00	2.55	*	43.24	60.00
MICP	Microlog Pad	11014296	8.00	1.00	*	43.53	60.00
IQF	IQ Flex tool	696	140.00	5.67		35.36	300.00
BSAT	Borehole Sonic Array Tool	10747683	300.00	15.77		19.58	60.00
OBCEN	Centralizer - 25 in. Overbody	002	8.00	2.08	*	32.64	300.00
ACRt	Array Compensated True Resistivity Instrument Section	I962	50.00	5.03		14.55	300.00
OBCEN	Centralizer - 25 in. Overbody	001	8.00	2.08	*	16.47	300.00
ACRt	Array Compensated True Resistivity Sonde Section	11005909	200.00	14.22		0.33	300.00
RSOF	Regal Standoff 6.75in	00000044	20.00	0.52	*	12.05	300.00
BLNS	Bull Nose	00000029	5.00	0.33		0.00	300.00
Total			**1,599.60**	**75.79**			

* Not included in Total Length and Length Accumulation.

Data: GRIFFIN_D-1\0001 SP-GTET-DSN-SDL-ACRT-BN\IDLE **Date: 11-Jun-13 20:21:03**

HALLIBURTON

CALIBRATION REPORT

NATURAL GAMMA RAY TOOL SHOP CALIBRATION

Tool Name: GTET - 11048627 **Reference Calibration Date:** 16-May-13 10:59:59

Engineer:	**THOMAS HYDE**	**Calibration Date:**	**06-Jun-13 12:46:30**
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	20.2	21.0	api
Background + Calibrator	275.3	286.0	api
Calibrator	265.8	265.0	api

NATURAL GAMMA RAY TOOL FIELD CALIBRATION

Tool Name:	**GTET - 11048627**	**Reference Calibration Date:**	**06-Jun-13 12:46:30**
Engineer:	**THOMAS HYDE**	**Calibration Date:**	**11-Jun-13 16:07:41**
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	21.0	54.9	api
Background + Calibrator	286.0	321.8	api
Calibrator	265.0	266.9	api

Shop	Field	Difference	Tolerance
265.0	266.9	-1.9	+/- 9.00

MICRO LOG SHOP CALIBRATION

Tool Name:	**Microlog Pad - 11014296**	**Reference Calibration Date:**	**30-May-13 08:15:42**
Engineer:	**J. BOLLOM**	**Calibration Date:**	**09-Jun-13 12:00:28**
Software Version:	**WL INSITE R3.8.4 (Build 5)**	**Calibration Version:**	**1**
Host Tool Name:	**DSNT - 11055304**		

CALIBRATION COEFFICIENT SUMMARY

Measurement	Micro Log Normal		Micro Log Lateral		
	Measured	Calibrated	Measured	Calibrated	Units
Tool Zero	-0.06	-0.09	-0.01	-0.01	ohmm
Calibration Point #1	0.03	0.00	-0.01	0.00	ohmm
Calibration Point #2	20.01	20.00	20.04	20.00	ohmm
Internal Reference	19.93	19.92	20.02	19.99	ohmm

Measurement	Micro Log Normal Tool Value	Micro Log Lateral Tool Value	Units
Tool Zero	0.63	0.40	V
Calibration Point #1	25.02	2.34	V
Calibration Point #2	5298.56	6877.77	V
Internal Reference	5276.63	6873.02	V

MICRO LOG FIELD CHECK

Tool Name:	**Microlog Pad - 11014296**	**Reference Calibration Date:**	**09-Jun-13 12:00:28**
Engineer:	**THOMAS HYDE**	**Calibration Date:**	**11-Jun-13 16:05:00**
Software Version:	**WL INSITE R3.8.4 (Build 5)**	**Calibration Version:**	**1**

Measurement	Micro Log Normal		Micro Log Lateral		
	Shop	Field	Shop	Field	Units

Tool Zero	-0.09	-0.09	-0.01	-0.01	ohmm
Internal Reference	19.92	19.97	19.99	20.04	ohmm

Summary

Signal	Shop	Field	Difference	Tolerence
Microlog Normal	19.92	19.97	-0.05	+/- 0.80
Microlog Lateral	19.99	20.04	-0.05	+/- 0.80

CALIBRATION SUMMARY

Sensor	Shop	Field	Post	Difference	Tolerance	Units
GTET-11048627						
Gamma Ray Calibrator	265.0	266.9	----------	-1.9	+/- 9.00	api
Microlog Pad-11014296						
MicroLog Normal	19.92	19.97	----------	-0.05	+/-0.80	ohmm
MicroLog Lateral	19.99	20.04	----------	-0.05	+/-0.80	ohmm

Data: GRIFFIN_D-1\0001 SP-GTET-DSN-SDL-ACRT-BN\IDLE **Date: 11-Jun-13 21:16:44**

HALLIBURTON

PARAMETERS REPORT

Depth (ft)	Tool Name	Mnemonic	Description	Value	Units
TOP					
	SHARED	BS	Bit Size	7.875	in
	SHARED	UBS	Use Bit Size instead of Caliper for all applications.	No	
	SHARED	MDBS	Mud Base	Water	
	SHARED	MDWT	Borehole Fluid Weight	9.200	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	1.050	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	5825.00	ft
	SHARED	BHT	Bottom Hole Temperature	200.0	degF
	SHARED	SVTM	Navigation and Survey Master Tool	NONE	
	SHARED	AZTM	High Res Z Accelerometer Master Tool	GTET	
	SHARED	TEMM	Temperature Master Tool	NONE	
	SHARED	BHSM	Borehole Size Master Tool	NONE	
	Rwa / CrossPlot	XPOK	Process Crossplot?	Yes	
	Rwa / CrossPlot	FCHO	Select Source of F	Automatic	
	Rwa / CrossPlot	AFAC	Archie A factor	0.6200	
	Rwa / CrossPlot	MFAC	Archie M factor	2.1500	
	Rwa / CrossPlot	RMFR	Rmf Reference	0.10	ohmm
	Rwa / CrossPlot	TMFR	Rmf Ref Temp	75.00	degF
	Rwa / CrossPlot	RWA	Resistivity of Formation Water	0.05	ohmm

	Rwa / CrossPlot	ADP	Use Air Porosity to calculate CrossplotPhi	No	
	GTET	GROK	Process Gamma Ray?	Yes	
	GTET	GRSO	Gamma Tool Standoff	0.000	in
	GTET	GEOK	Process Gamma Ray EVR?	No	
	GTET	TPOS	Tool Position for Gamma Ray Tools.	Eccentered	
	DSNT	DNOK	Process DSN?	Yes	
	DSNT	DEOK	Process DSN EVR?	No	
	DSNT	NLIT	Neutron Lithology	Limestone	
	DSNT	DNSO	DSN Standoff - 0.25 in (6.35 mm) Recommended	0.250	in
	DSNT	DNTP	Temperature Correction Type	None	
	DSNT	DPRS	DSN Pressure Correction Type	None	
	DSNT	SHCO	View More Correction Options	No	
	DSNT	UTVD	Use TVD for Gradient Corrections?	No	
	DSNT	LHWT	Logging Horizontal Water Tank?	No	
	SDLT	CLOK	Process Caliper Outputs?	Yes	
	Microlog Pad	MLOK	Process MicroLog 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
	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 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

HALLIBURTON

INPUTS, DELAYS AND FILTERS TABLE

Mnemonic	Input Description	Delay (ft)	Filter Type	Filter Length (ft)
	Depth Panel			
TENS	Tension	0.00	NO	
	Cable Head Tension			
DHTN	DownholeTension	0.00	BLK	0.000

SP Sub				
PLTC	Plot Control Mask	72.01	NO	
SP	Spontaneous Potential	72.01	BLK	1.250
SPR	Raw Spontaneous Potential	72.01	NO	
SPO	Spontaneous Potential Offset	72.01	NO	
GTET				
TPUL	Tension Pull	63.99	NO	
GR	Natural Gamma Ray API	63.99	TRI	1.750
GRU	Unfiltered Natural Gamma Ray API	63.99	NO	
EGR	Natural Gamma Ray API with Enhanced Vertical Resolution	63.99	W	1.416 , 0.750
ACCZ	Accelerometer Z	0.00	BLK	0.083
DEVI	Inclination	0.00	NO	
DSNT				
TPUL	Tension Pull	53.74	NO	
RNDS	Near Detector Telemetry Counts	53.84	BLK	1.417
RFDS	Far Detector Telemetry Counts	54.59	TRI	0.583
DNTT	DSN Tool Temperature	53.84	NO	
DSNS	DSN Tool Status	53.74	NO	
ERND	Near Detector Telemetry Counts EVR	53.84	BLK	0.000
ERFD	Far Detector Telemetry Counts EVR	54.59	BLK	0.000
ENTM	DSN Tool Temperature EVR	53.84	NO	
SDLT				
TPUL	Tension Pull	43.84	NO	
PCAL	Pad Caliper	43.84	TRI	0.250
ACAL	Arm Caliper	43.84	TRI	0.250
BSAT				
TPUL	Tension Pull	26.84	NO	
STAT	Status	26.84	NO	
DLYT	Delay Time	26.84	NO	
SI	Sample Interval	26.84	NO	
TXRX	Raw Telemetry 10 Receivers	26.84	NO	
FRMC	Tool Frame Count	26.84	NO	
GMOD	Gain processing mode	19.58	NO	
ACRt Sonde				
TPUL	Tension Pull	2.73	NO	
F1R1	ACRT 12KHz - 80in R value	8.98	BLK	0.000
F1X1	ACRT 12KHz - 80in X value	8.98	BLK	0.000
F1R2	ACRT 12KHz - 50in R value	6.48	BLK	0.000
F1X2	ACRT 12KHz - 50in X value	6.48	BLK	0.000
F1R3	ACRT 12KHz - 29in R value	4.98	BLK	0.000
F1X3	ACRT 12KHz - 29in X value	4.98	BLK	0.000
F1R4	ACRT 12KHz - 17in R value	3.98	BLK	0.000
F1X4	ACRT 12KHz - 17in X value	3.98	BLK	0.000
F1R5	ACRT 12KHz - 10in R value	3.48	BLK	0.000
F1X5	ACRT 12KHz - 10in X value	3.48	BLK	0.000
F1R6	ACRT 12KHz - 6in R value	3.23	BLK	0.000
F1X6	ACRT 12KHz - 6in X value	3.23	BLK	0.000
F2R1	ACRT 36KHz - 80in R value	8.98	BLK	0.000
F2X1	ACRT 36KHz - 80in X value	8.98	BLK	0.000
F2R2	ACRT 36KHz - 50in R value	6.48	BLK	0.000

F2X2	ACRT 36KHz - 50in X value	6.48	BLK	0.000
F2R3	ACRT 36KHz - 29in R value	4.98	BLK	0.000
F2X3	ACRT 36KHz - 29in X value	4.98	BLK	0.000
F2R4	ACRT 36KHz - 17in R value	3.98	BLK	0.000
F2X4	ACRT 36KHz - 17in X value	3.98	BLK	0.000
F2R5	ACRT 36KHz - 10in R value	3.48	BLK	0.000
F2X5	ACRT 36KHz - 10in X value	3.48	BLK	0.000
F2R6	ACRT 36KHz - 6in R value	3.23	BLK	0.000
F2X6	ACRT 36KHz - 6in X value	3.23	BLK	0.000
F3R1	ACRT 72KHz - 80in R value	8.98	BLK	0.000
F3X1	ACRT 72KHz - 80in X value	8.98	BLK	0.000
F3R2	ACRT 72KHz - 50in R value	6.48	BLK	0.000
F3X2	ACRT 72KHz - 50in X value	6.48	BLK	0.000
F3R3	ACRT 72KHz - 29in R value	4.98	BLK	0.000
F3X3	ACRT 72KHz - 29in X value	4.98	BLK	0.000
F3R4	ACRT 72KHz - 17in R value	3.98	BLK	0.000
F3X4	ACRT 72KHz - 17in X value	3.98	BLK	0.000
F3R5	ACRT 72KHz - 10in R value	3.48	BLK	0.000
F3X5	ACRT 72KHz - 10in X value	3.48	BLK	0.000
F3R6	ACRT 72KHz - 6in R value	3.23	BLK	0.000
F3X6	ACRT 72KHz - 6in X value	3.23	BLK	0.000
RMUD	Mud Resistivity	12.52	BLK	0.000
F1RT	Transmitter Current Raw 12K X Receiver	2.73	BLK	0.000
F1XT	Transmitter Reference 12 KHz Imaginary Signal	2.73	BLK	0.000
F2RT	Transmitter Reference 36 KHz Real Signal	2.73	BLK	0.000
F2XT	Transmitter Reference 36 KHz Imaginary Signal	2.73	BLK	0.000
F3RT	Transmitter Reference 72 KHz Real Signal	2.73	BLK	0.000
F3XT	Transmitter Reference 72 KHz Imaginary Signal	2.73	BLK	0.000
TFPU	Upper Feedpipe Temperature Calculated	2.73	BLK	0.000
TFPL	Lower Feedpipe Temperature Calculated	2.73	BLK	0.000
ITMP	Instrument Temperature	2.73	BLK	0.000
TCVA	Temperature Correction Values Loop Off	2.73	NO	
TIDV	Instrument Temperature Derivative	2.73	NO	
TUDV	Upper Temperature Derivative	2.73	NO	
TLDV	Lower Temperature Derivative	2.73	NO	
TRBD	Receiver Board Temperature	2.73	NO	
	Microlog Pad			
TPUL	Tension Pull	44.03	NO	
MINV	Microlog Lateral	44.03	BLK	0.750
MNOR	Microlog Normal	44.03	BLK	0.750
	SDLT Pad			
TPUL	Tension Pull	43.83	NO	
NAB	Near Above	43.66	BLK	0.920
NHI	Near Cesium High	43.66	BLK	0.920
NLO	Near Cesium Low	43.66	BLK	0.920
NVA	Near Valley	43.66	BLK	0.920
NBA	Near Barite	43.66	BLK	0.920
NDE	Near Density	43.66	BLK	0.920
NPK	Near Peak	43.66	BLK	0.920
NLI	Near Lithology	43.66	BLK	0.920
NBAU	Near Barite Unfiltered	43.66	BLK	0.250
NLIU	Near Lithology Unfiltered	43.66	BLK	0.250
FAB	Far Above	44.01	BLK	0.250

FHI	Far Cesium High	44.01	BLK	0.250
FLO	Far Cesium Low	44.01	BLK	0.250
FVA	Far Valley	44.01	BLK	0.250
FBA	Far Barite	44.01	BLK	0.250
FDE	Far Density	44.01	BLK	0.250
FPK	Far Peak	44.01	BLK	0.250
FLI	Far Lithology	44.01	BLK	0.250
PTMP	Pad Temperature	43.84	BLK	0.920
NHV	Near Detector High Voltage	43.24	NO	
FHV	Far Detector High Voltage	43.24	NO	
ITMP	Instrument Temperature	43.24	NO	
DDHV	Detector High Voltage	43.24	NO	

Data: GRIFFIN_D-1\0001 SP-GTET-DSN-SDL-ACRT-BN\IDLE **Date: 11-Jun-13 21:17:57**

COMPANY	**OXY USA**		
WELL	**GRIFFIN D-1**		
FIELD	**HUGOTON GAS AREA**		
COUNTY	**HASKELL**	STATE	**KANSAS**

HALLIBURTON

MICRO LOG