HALLIBURTON

MICROLOG

COMPANY **OXY USA INC**

WELL **SMU #320**

FIELD **SMU**

COUNTY **FINNEY** STATE **KANSAS**

OXY USA INC
SMU #320
SMU
FINNEY
KANSAS
COMPANY
WELL
FIELD
COUNTY
STATE

API No. 22-23S-34W

Location 1215' FSL & 2400' FWL

Other Services:
DSNT, SDLT
MICROLOG
ACRT

Sect. 22 Twp. 23S Rge. 34W

Permanent Datum	GL	Elev. 2948.0 ft	Elev.: K.B. 2959.0 ft
Log measured from	KB	, 11.0 ft above perm. Datum	D.F. 2958.0 ft
Drilling measured from	KB		G.L. 2948.0 ft

Date		02-Jul-12					
Run No.		ONE					
Depth - Driller		4920.00 ft					
Depth - Logger		4904.0 ft					
Bottom - Logged Interval		4860.0 ft					
Top - Logged Interval		3700.0 ft					
Casing - Driller		8.625 in @ 1811.0 ft		@		@	
Casing - Logger		1809.0 ft					
Bit Size		7.875 in		@		@	
Type Fluid in Hole		WATER BASED MUD					
Density	Viscosity	9.2 ppg	39.00 s/qt				
PH	Fluid Loss	8.60 pH	9.2 cptm				
Source of Sample		FLOW LINE					
Rm @ Meas. Temperature		0.660 ohmm @ 75.00 degF		@		@	
Rmf @ Meas. Temperature		0.50 ohmm @ 75.00 degF		@		@	
Rmc @ Meas. Temperature		0.800 ohmm @ 75.00 degF		@		@	
Source Rmf	Rmc	MEAS	MEAS				
Rm @ BHT		0.39 ohmm @ 130.0 degF		@		@	
Time Since Circulation		8.0 hr					
Time on Bottom		02-Jul-12 23:04					
Max. Rec. Temperature		130.0 degF @ 4904.0 ft		@		@	
Equipment	Location	10546696	LIBERAL				
Recorded By		J. BOLLOM					
Witnessed By		C. WYLIE					

Fold here

Service Ticket No.: 9625518 API Serial No.: 22-23S-34W PGM Version: WL INSITE R3.6.0 (Build 3)

CHANGE IN MUD TYPE OR ADDITIONAL SAMPLE

RESISTIVITY SCALE CHANGES

	Sample No.			Type Log	Depth	Scale Up Hole	Scale Down Hole
Date							
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		@					

RESISTIVITY EQUIPMENT DATA

	Run No.	Tool Type & No.	Pad Type	Tool Pos.	Other
	@				
	@	MICROLOG	RUBBER	ADJ	N/A
	@	M296			
	@				
	@				
	@				

EQUIPMENT DATA

	GAMMA		ACOUSTIC		DENSITY		NEUTRON	
Run No.	ONE	Run No.		Run No.		Run No.		
Serial No.	11039640	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.	GTET	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	4904	3700	REC	0	150									

DIRECTIONAL INFORMATION

Maximum Deviation	@	KOP	@

Remarks: ANNULAR HOLE VOLUME CALCULATED FOR 5.5-INCH CASING

CHLORIDES REPORTED AT 5700 MG/L

LCM REPORTED AT 3 LB/BBL

GTET-DSNT-SDLT-BSAT-ACRT RUN IN COMBINATION

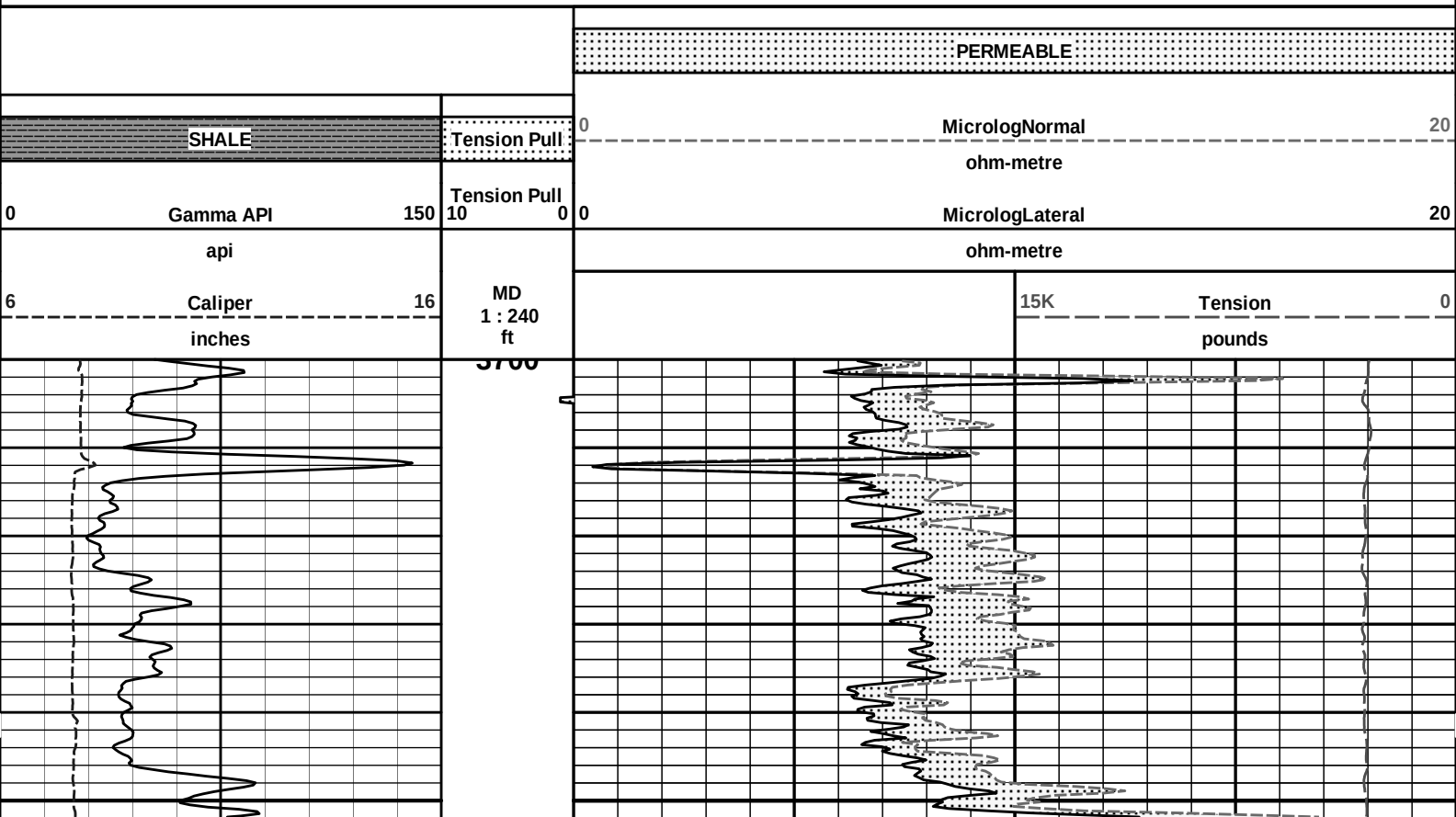
TODAY'S CREW: P. COBLE & V. JAIME

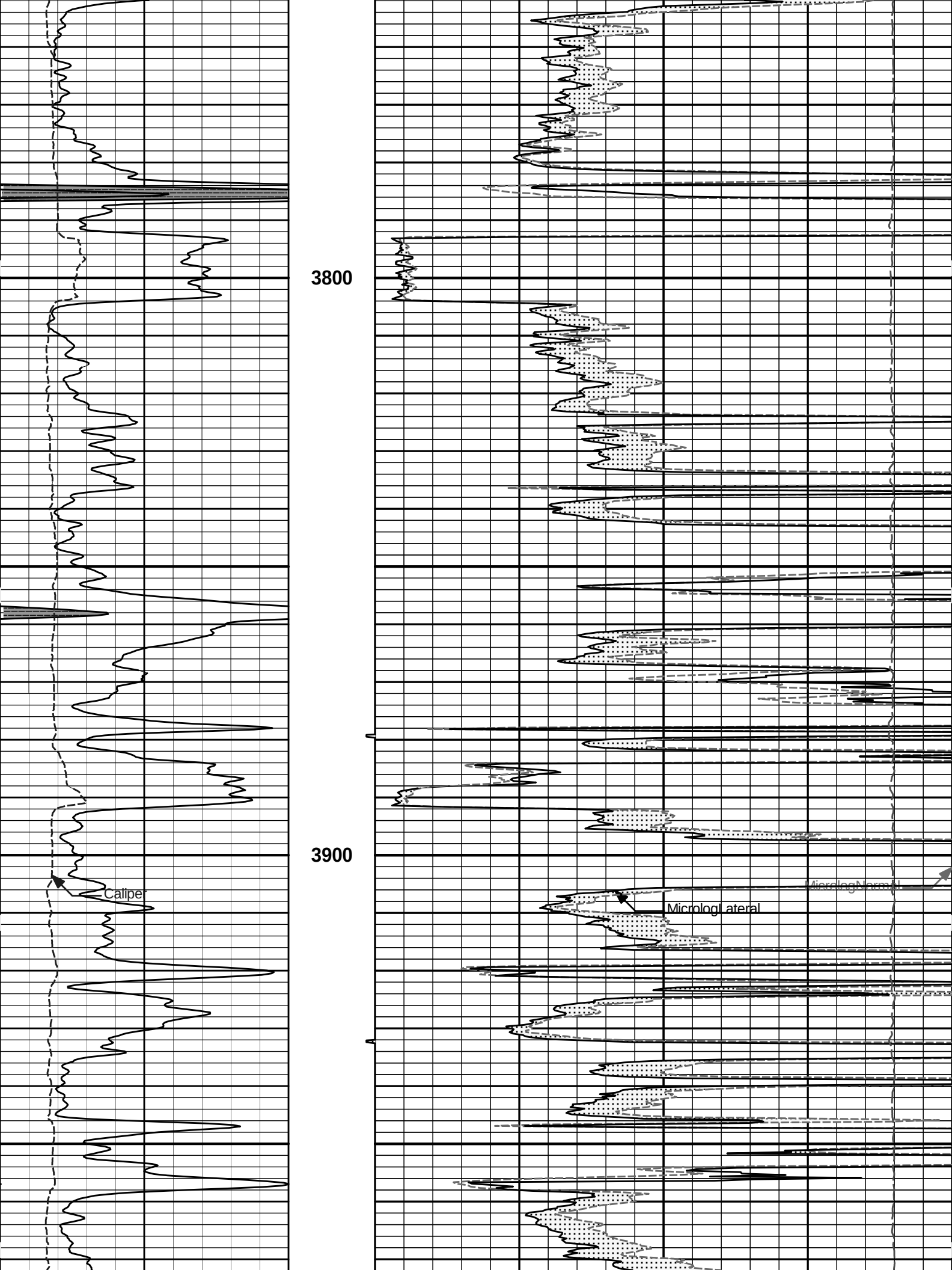
THANK YOU FOR CHOOSING HALLIBURTON ENERGY SERVICES LIBERAL, KS. 620-624-8123

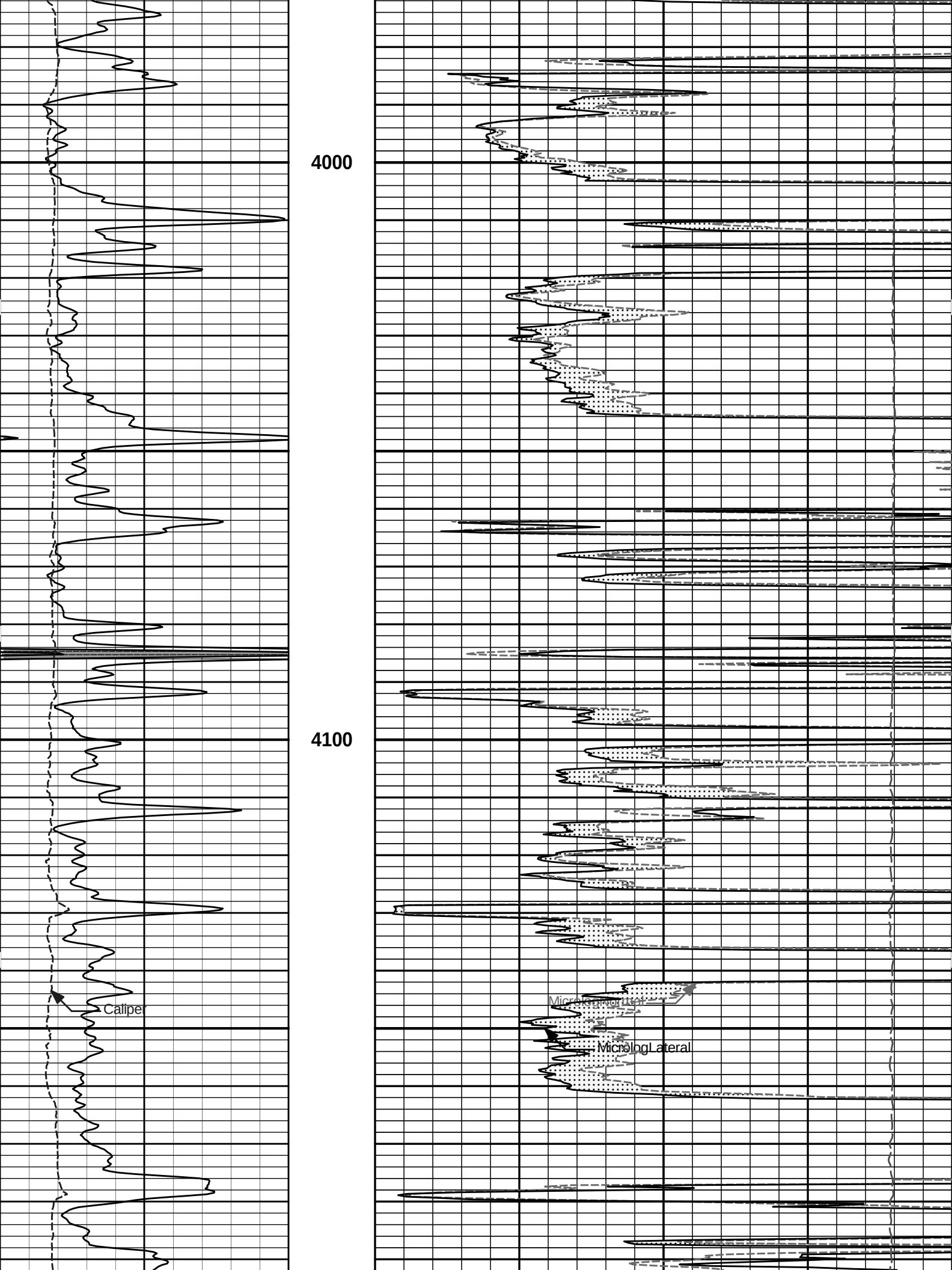
HALLIBURTON

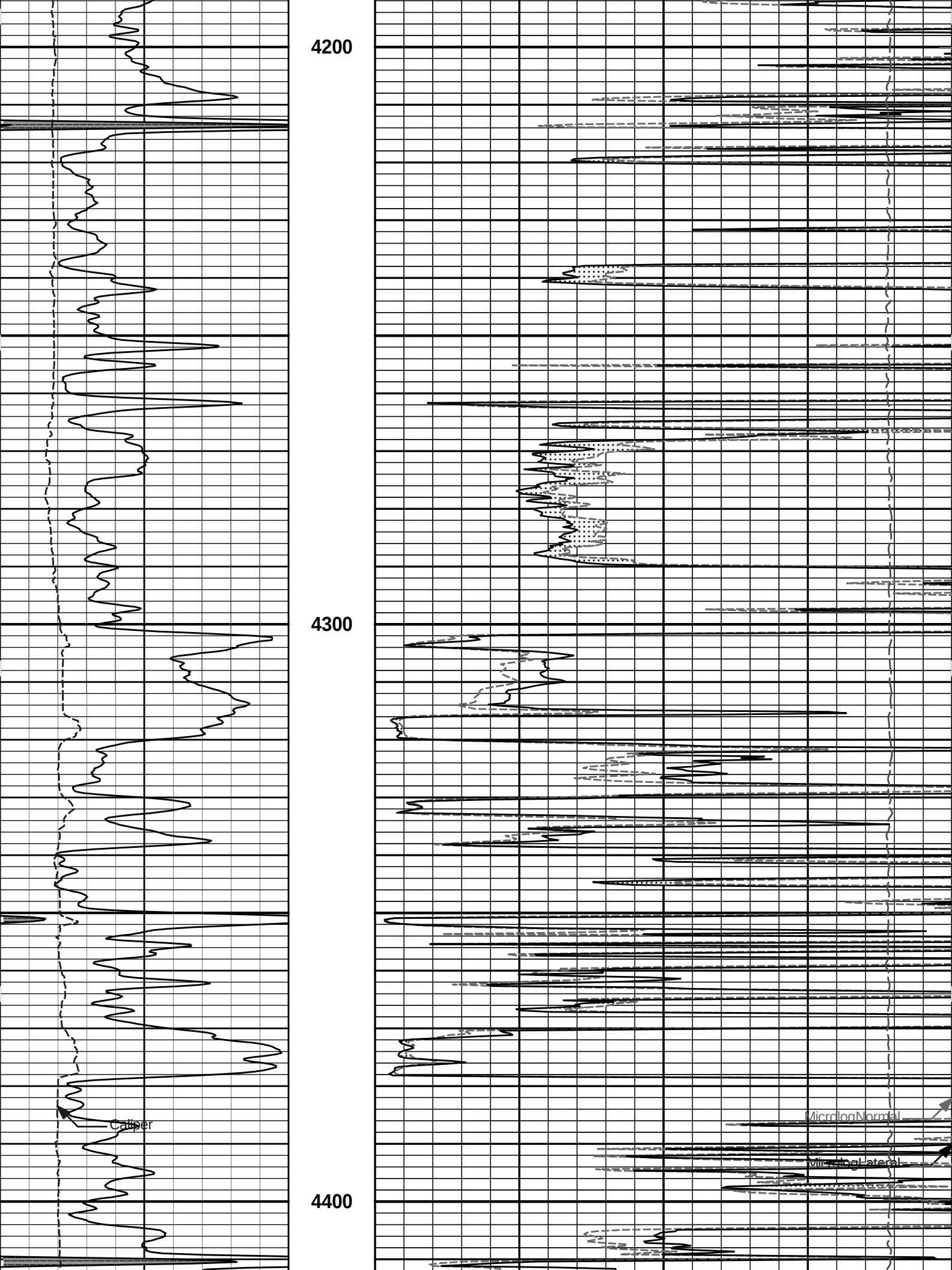
Plot Time: 03-Jul-12 02:21:28
Plot Range: 3700 ft to 4907.75 ft
Data: SMU_320\Well Based\DETAIL
Plot File: \\-LOCAL-\SMU_320\0001 SP-GTET-DSN-SDL-FLEX-BSAT-ACRT-CH\MICRO\Microlog_IQ_5_main_lib

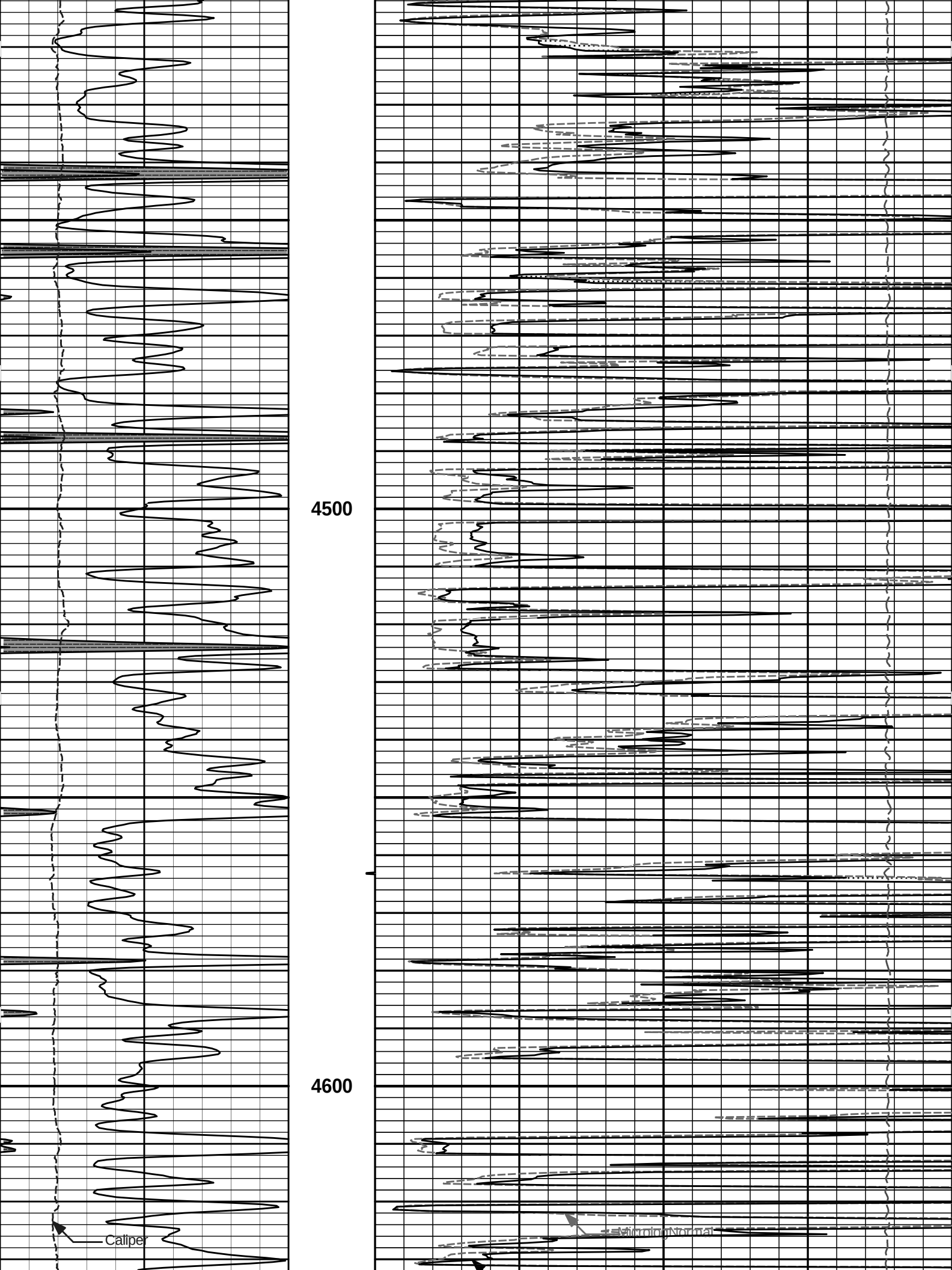
5 INCH MAIN LOG

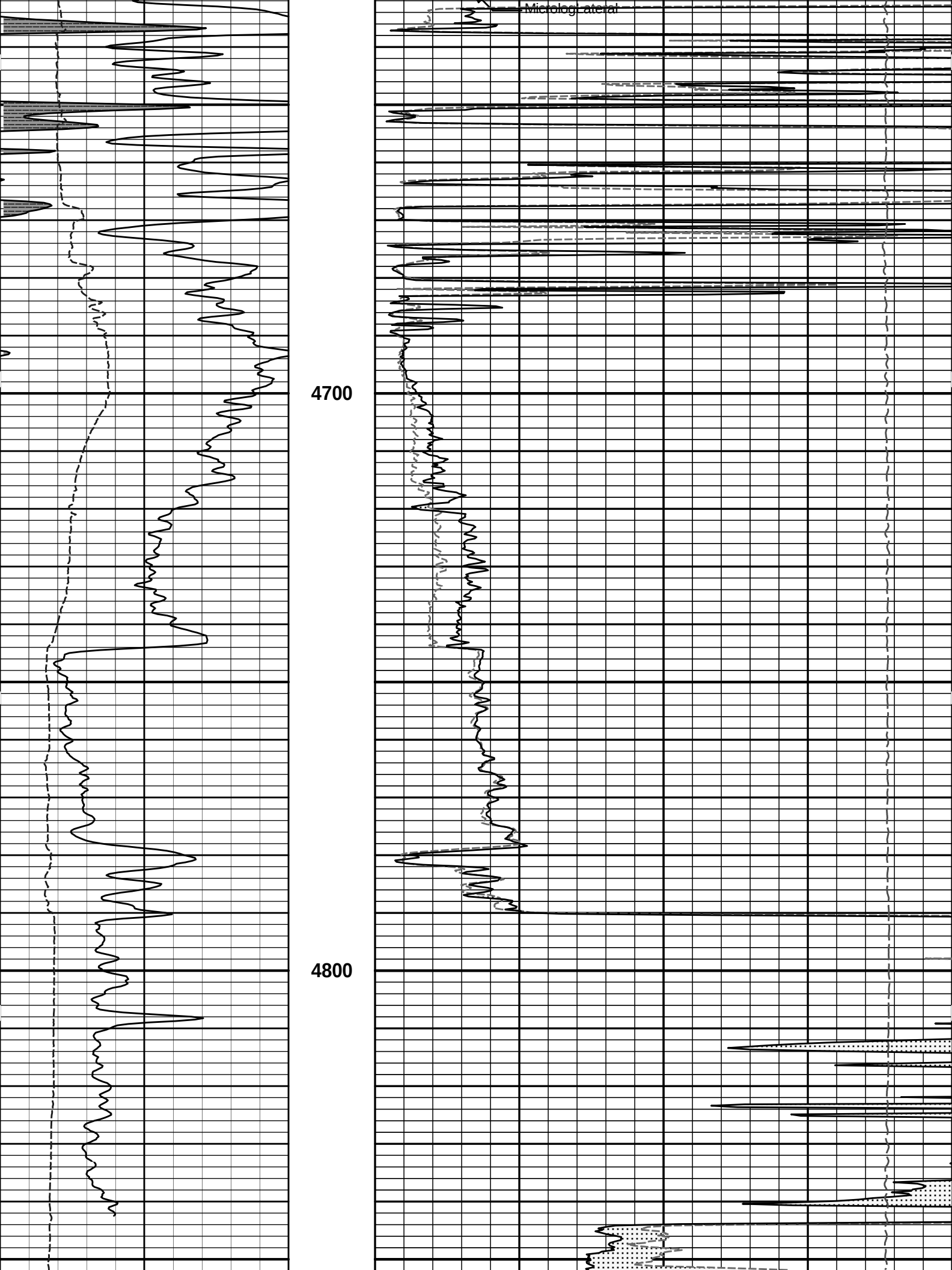


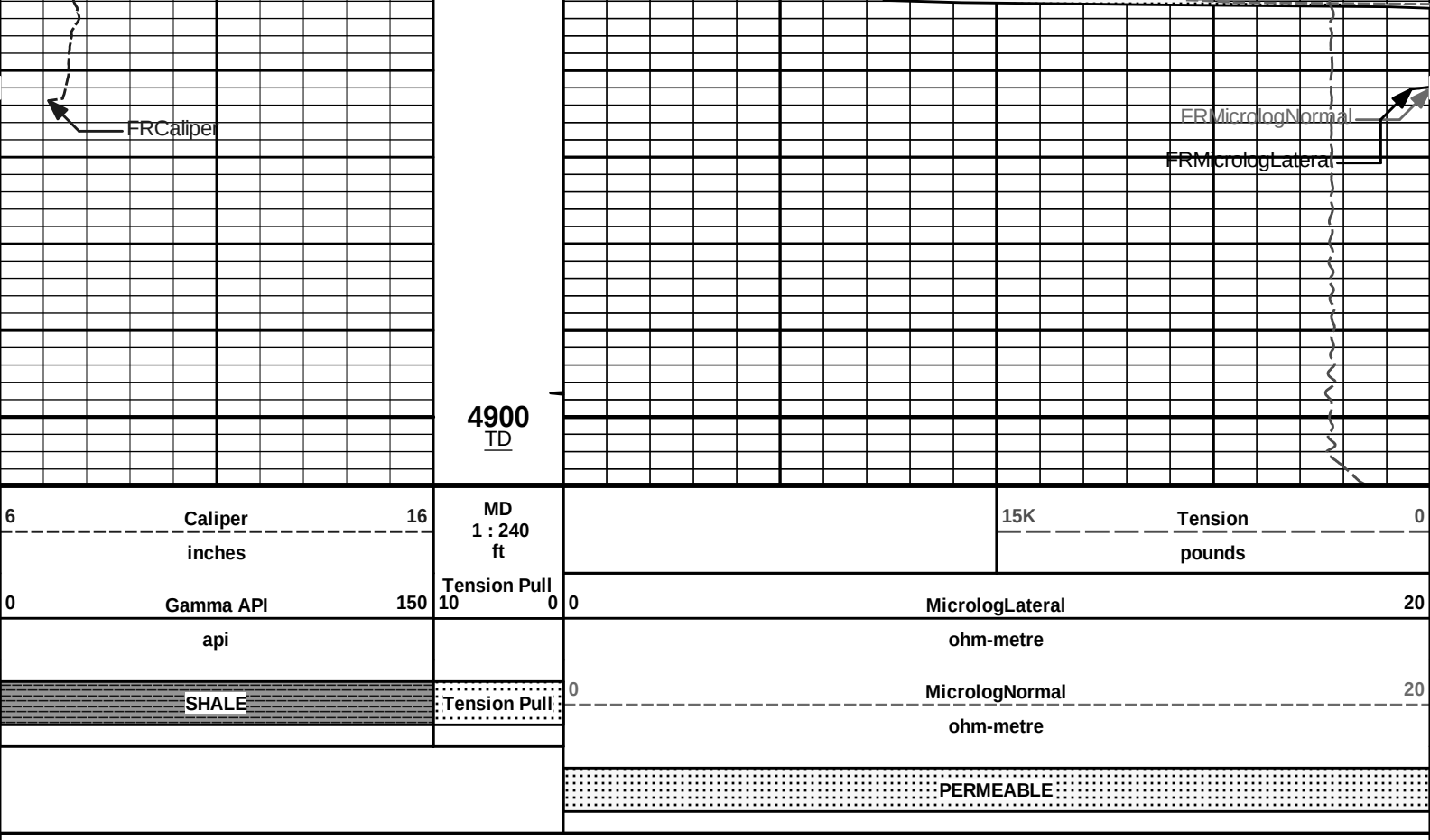

3800
3900
Caliper
MicrologNormal
MicrologLateral


4000
4100
Caliper
MicrologLateral


4200
4300
4400
Caliper
MicrologNormal
MicrologLateral


4500
4600
Caliper


Micrologl ateral
4700
4800



HALLIBURTON

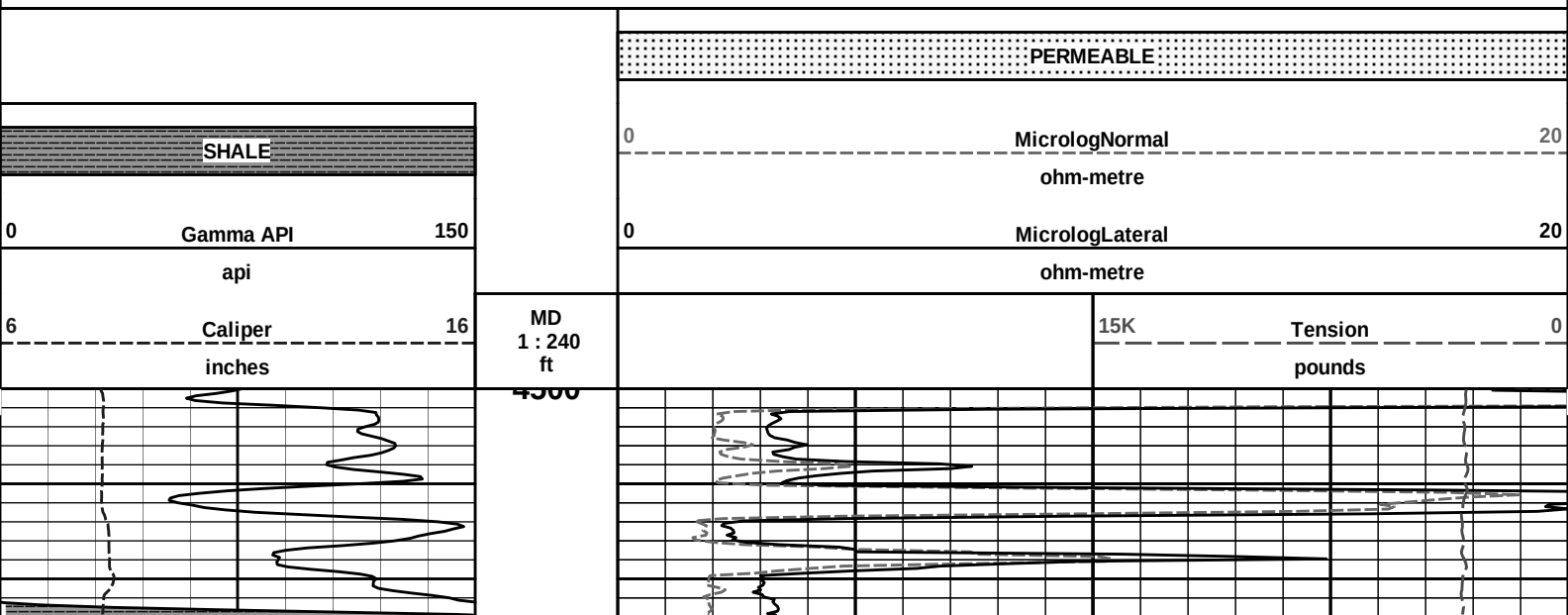
Plot Time: 03-Jul-12 02:21:33
Plot Range: 3700 ft to 4907.75 ft
Data: SMU_320\Well Based\DETAIL\
Plot File: \\-LOCAL-\SMU_320\0001 SP-GTET-DSN-SDL-FLEX-BSAT-ACRT-CH\MICRO\Microlog_IQ_5_main_lib

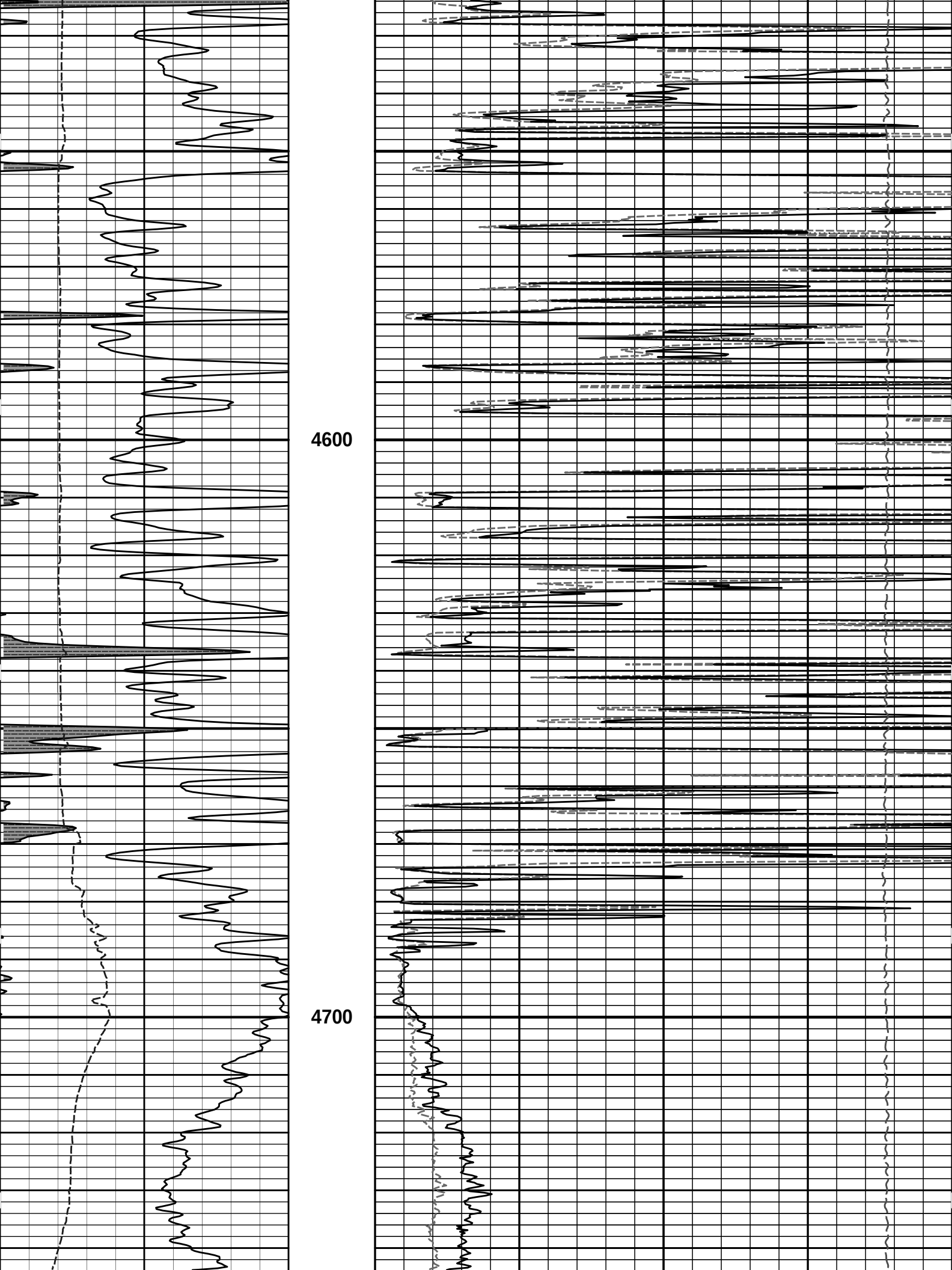
5 INCH MAIN LOG

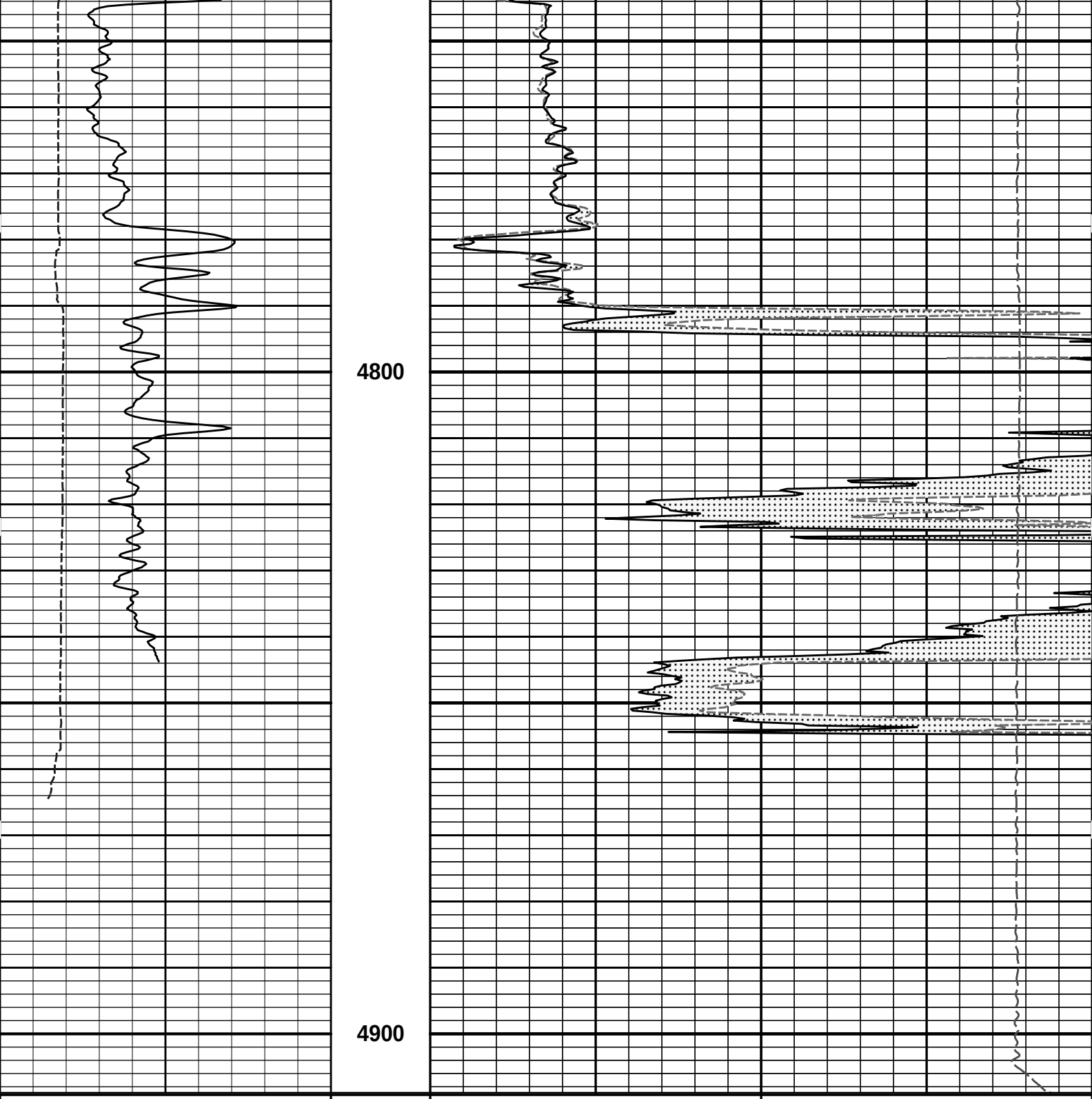
HALLIBURTON

Plot Time: 03-Jul-12 02:21:33
Plot Range: 4500 ft to 4908.92 ft
Data: SMU_320\Well Based\REPEAT\
Plot File: \\-LOCAL-\SMU_320\0001 SP-GTET-DSN-SDL-FLEX-BSAT-ACRT-CH\MICRO\Microlog_IQ_5_rep_lib

REPEAT SECTION




4600
4700



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

HALLIBURTON

Plot Time: 03-Jul-12 02:21:36
Plot Range: 4500 ft to 4908.92 ft
Data: SMU_320\Well Based\REPEAT\
Plot File: \\-LOCAL-\SMU_320\0001 SP-GTET-DSN-SDL-FLEX-BSAT-ACRT-CH\MICRO\Microlog_IQ_5_rep_lib

REPEAT SECTION

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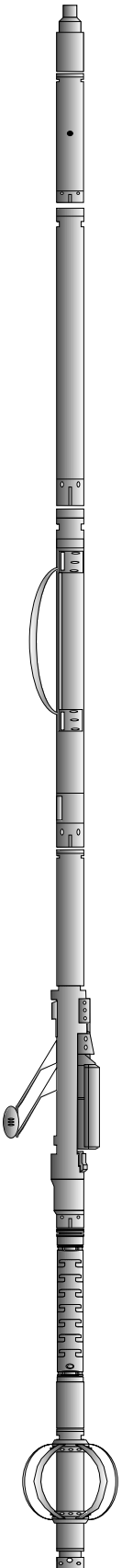
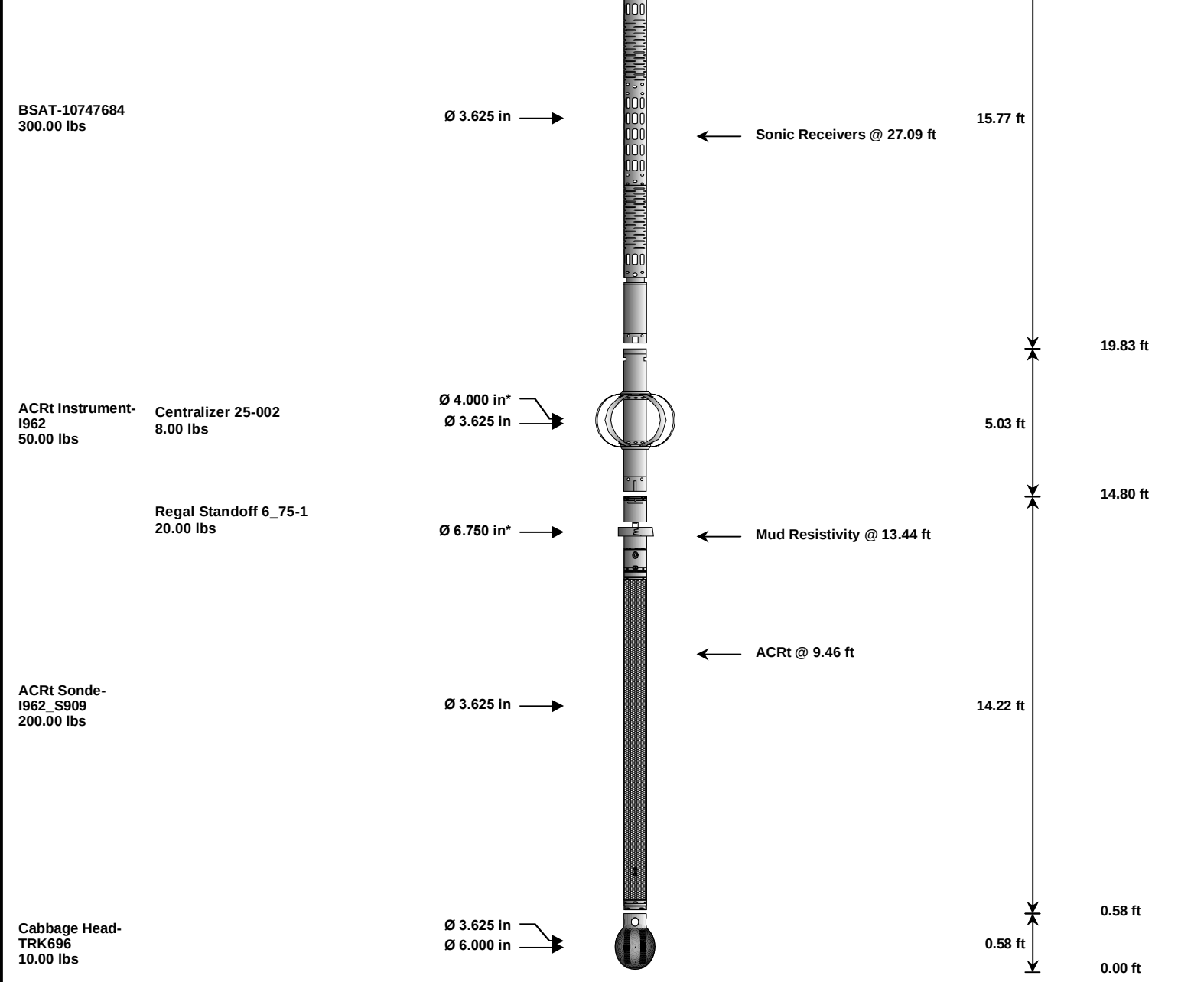
TOOL STRING DIAGRAM REPORT

Description	Overbody Description	O.D.	Diagram	Sensors @ Delays	Length	Accumulated Length
						75.95 ft
Cable Head-PROT01 30.00 lbs		Ø 3.625 in			1.92 ft	
						74.03 ft
SP Sub-001 60.00 lbs		Ø 3.625 in		SP @ 72.26 ft	3.74 ft	
						70.30 ft
GTET-11039640 165.00 lbs		Ø 3.625 in			8.52 ft	
				GammaRay @ 64.23 ft		
						61.78 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 @ 54.84 ft DSN Near @ 54.09 ft		
						52.09 ft
SDLT-I04_M296 360.00 lbs		Ø 4.500 in			10.81 ft	
	SDLT Pad-P84 65.00 lbs					
	Microlog Pad-M296 8.00 lbs	Ø 4.750 in* Ø 4.750 in*		Microlog @ 44.28 ft SDL Caliper @ 44.09 ft SDL @ 44.08 ft		
						41.28 ft
IQ Flex-696 140.00 lbs		Ø 3.625 in			5.67 ft	
						35.61 ft
	Centralizer 29-2 12.00 lbs	Ø 4.000 in*				





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		74.03	300.00
SP	SP Sub	001	60.00	3.74		70.30	300.00
GTET	Gamma Telemetry Tool	11039640	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	I04_M296	360.00	10.81		41.28	60.00
SDLP	Density Insite Pad	P84	65.00	2.55	*	43.49	60.00
MICP	Microlog Pad	M296	8.00	1.00	*	43.78	60.00
IQF	IQ Flex tool	696	140.00	5.67		35.61	300.00
BSAT	Borehole Sonic Array Tool	10747684	300.00	15.77		19.83	60.00
OBCEN	Centralizer - 29 in.Overbody	2	12.00	2.42	*	32.88	300.00
ACRt	Array Compensated True Resistivity Instrument Section	I962	50.00	5.03		14.80	300.00
OBCEN	Centralizer - 25 in. Overbody	002	8.00	2.08	*	16.30	300.00
ACRt	Array Compensated True Resistivity Sonde Section	I962_S909	200.00	14.22		0.58	300.00
RSOF	Regal Standoff 6.75in	1	20.00	0.52	*	13.38	300.00
CBHD	Cabbage Head	TRK696	10.00	0.58		0.00	300.00
Total			**1,608.60**	**75.95**			

* Not included in Total Length and Length Accumulation.

Data: SMU_320\0001 SP-GTET-DSN-SDL-FLEX-BSAT-ACRT-CH\IDLE **Date: 02-Jul-12 17:50:41**

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CALIBRATION REPORT

NATURAL GAMMA RAY TOOL SHOP CALIBRATION

Tool Name:	**GTET - 11039640**	**Reference Calibration Date:**	**17-May-12 09:57:29**
Engineer:	**THOMAS HYDE**	**Calibration Date:**	**14-Jun-12 08:57:44**
Software Version:	**WL INSITE R3.4.2 (Build 2)**	**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	51.3	51.0	api
Background + Calibrator	322.2	320.7	api
Calibrator	270.9	269.6	api

NATURAL GAMMA RAY TOOL FIELD CALIBRATION

Tool Name:	**GTET - 11039640**	**Reference Calibration Date:**	**14-Jun-12 08:57:44**
Engineer:	**C. HAVERKAMP**	**Calibration Date:**	**02-Jul-12 17:32:38**
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

Field Verification	Shop	Field	Units
Background	51.0	63.5	api
Background + Calibrator	320.7	328.6	api
Calibrator	269.6	265.1	api

Shop	Field	Difference	Tolerance
269.6	265.1	4.5	+/- 9.00

MICRO LOG SHOP CALIBRATION

Tool Name:	**Microlog Pad - M296**	**Reference Calibration Date:**	**01-Jan-70 00:00:00**
Engineer:	**THOMAS HYDE**	**Calibration Date:**	**19-May-12 15:53:34**
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		
	Measured	Calibrated	Measured	Calibrated	Units
Tool Zero	-0.27	-0.27	-0.16	-0.16	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	20.43	20.43	20.39	20.39	ohmm

Measurement	Micro Log Normal Tool Value	Micro Log Lateral Tool Value	Units
Tool Zero	-0.50	-0.18	V
Calibration Point #1	69.00	51.86	V
Calibration Point #2	5177.32	6760.23	V
Internal Reference	5286.51	6889.75	V

MICRO LOG FIELD CHECK

Tool Name:	**Microlog Pad - M296**	**Reference Calibration Date:**	**19-May-12 15:53:34**
Engineer:	**C. HAVERKAMP**	**Calibration Date:**	**02-Jul-12 17:33:02**
Software Version:	**WL INSITE R3.6.0 (Build 3)**	**Calibration Version:**	**1**

Measurement	Micro Log Normal		Micro Log Lateral		
	Shop	Field	Shop	Field	Units
Tool Zero	-0.27	-0.27	-0.16	-0.15	ohmm
Internal Reference	20.43	20.44	20.39	20.40	ohmm

Summary

Signal	Shop	Field	Difference	Tolerence
Microlog Normal	20.43	20.44	-0.01	+/- 0.80
Microlog Lateral	20.39	20.40	-0.01	+/- 0.80

CALIBRATION SUMMARY

Sensor	Shop	Field	Post	Difference	Tolerance	Units
GTET-11039640						
Gamma Ray Calibrator	269.6	265.1	----------	4.5	+/- 9.00	api
Microlog Pad-M296						
MicroLog Normal	20.43	20.44	----------	-0.01	+/-0.80	ohmm
MicroLog Lateral	20.39	20.40	----------	-0.01	+/-0.80	ohmm

Data: SMU_320\0001 SP-GTET-DSN-SDL-FLEX-BSAT-ACRT-CH\IDLE **Date: 02-Jul-12 17:54:09**

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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	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	4920.00	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	

	CrossPlot				
	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	
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

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	
	Microlog Pad			
TPUL	Tension Pull	44.28	NO	
MINV	Microlog Lateral	44.28	BLK	0.750
MNOR	Microlog Normal	44.28	BLK	0.750
	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
NRAU	Near Barite Unfiltered	43.90	BLK	0.250

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	

Data: SMU_320\0001 SP-GTET-DSN-SDL-FLEX-BSAT-ACRT-CH\IDLE **Date: 03-Jul-12 01:13:50**

COMPANY	**OXY USA INC**		
WELL	**SMU #320**		
FIELD	**SMU**		
COUNTY	**FINNEY**	STATE	**KANSAS**

HALLIBURTON

MICROLOG