

HALLIBURTON

MICROLOG

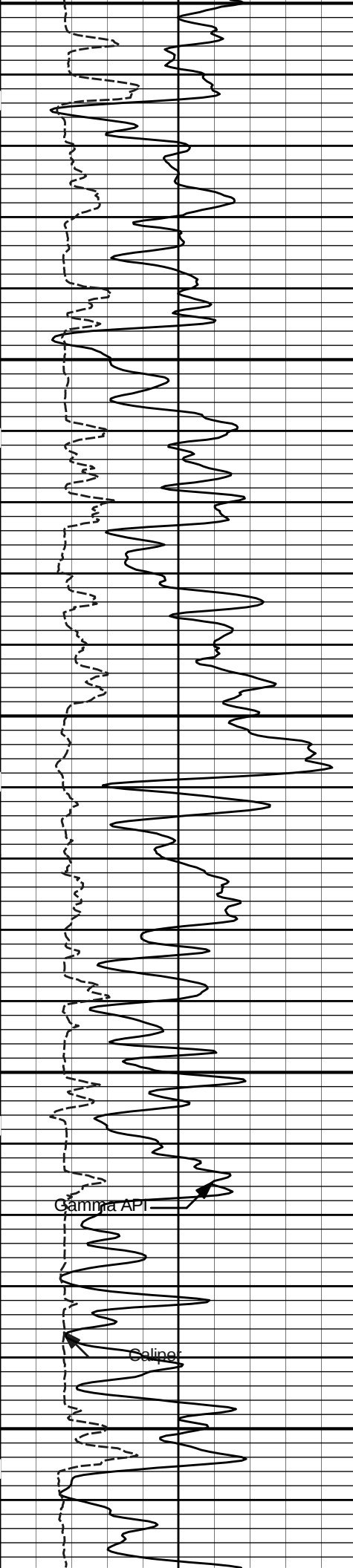
COMPANY WELL FIELD/BLOCK COUNTY STATE										HARTMAN OIL CO. WILLIAMS TRUST 1-19 WILDCAT NORTON KANSAS									
COMPANY WELL FIELD/BLOCK COUNTY STATE										HARTMAN OIL CO. WILLIAMS TRUST 1-19 WILDCAT NORTON KANSAS									
API No. Location (SHL) 1920' & 1832' FEL										Other Services: ACRT DSNT, SDLT BSAT									
Sect. 19 Twp. 5S Rge. 22W										Elev.: K.B. D.F. G.L.									
Permanent Datum Log measured from Drilling measured from										Elev. 2279.0 ft 11.0 ft above perm. Datum 2279.0 ft									
Date Run No. Depth - Driller Depth - Logger Bottom - Logged Interval Top - Logged Interval Casing - Driller Casing - Logger Bit Size Type Fluid in Hole Density PH Source of Sample Rm @ Meas. Temperature Rmf @ Meas. Temperature Rmc @ Meas. Temperature Source Rmf Rmc Rm @ BHT Time Since Circulation Time on Bottom Max. Rec. Temperature Equipment Recorded By Witnessed By										18-Jul-13 ONE 3900.00 ft 3896.0 ft 3852.0 ft 2900.0 ft 8.625 in 332.0 ft 7.875 in WATER BASED MUD 9.1 ppg 11.00 pH MUD PIT 2.000 ohmm 1.40 ohmm 2.650 ohmm MEASURED 2.04 ohmm 5.0 hr 18-Jul-13 22:47 126.0 degF 11230668 J. BOLLOW K. NOAH									

Fold here

Service Ticket No.: 900601060										API Serial No.: 15-137-20632										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.					@					@										1085803																			
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.					10811258					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																																							

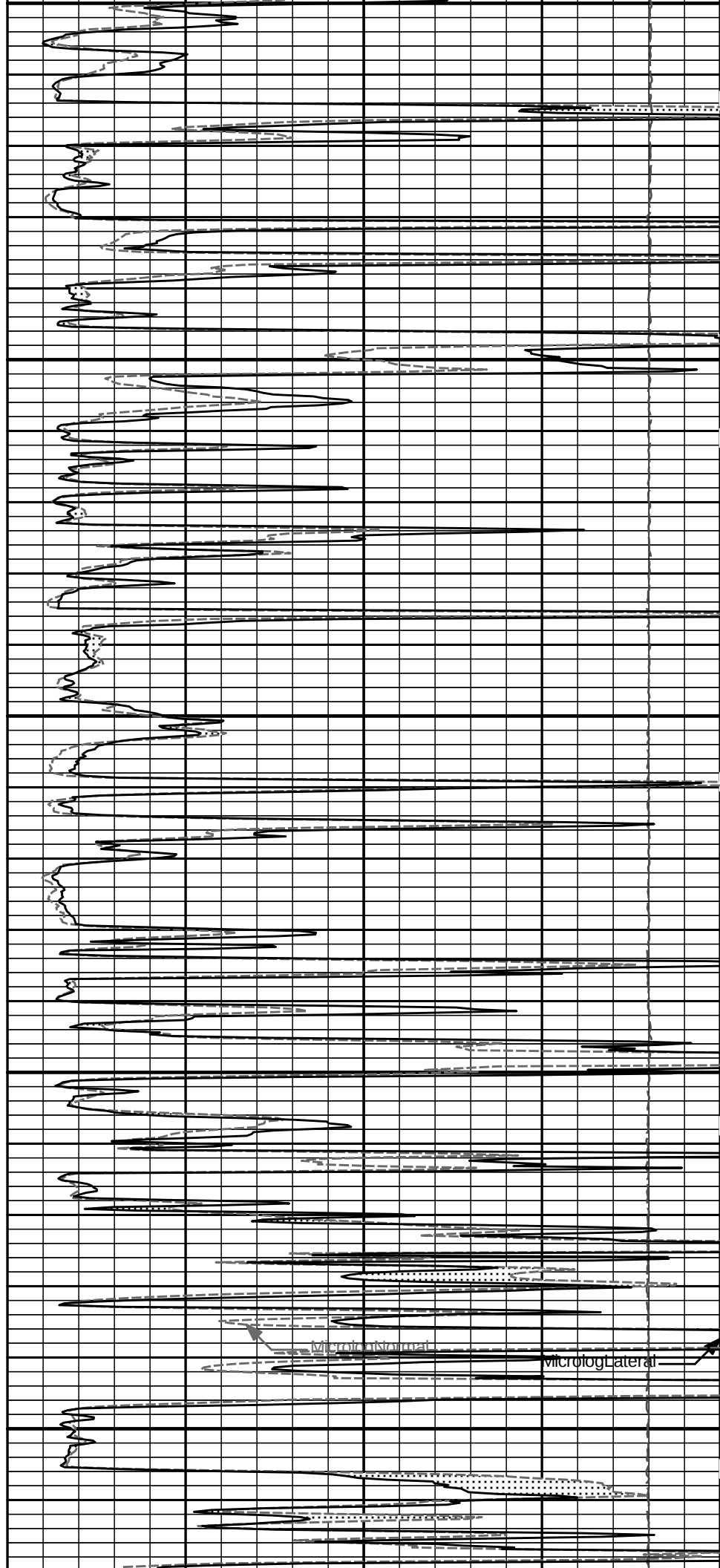
GENERAL				GAMMA		ACOUSTIC			DENSITY			NEUTRON				
Run	Depth		Speed	Scale		Scale		Matrix	Scale		Matrix	Scale		Matrix		
No.	From	To	ft/min	L	R	L	R		L	R		L	R			
ONE	3896	2900	REC	0	150											
DIRECTIONAL INFORMATION																
Maximum Deviation								@	KOP							@
Remarks: ANNULAR HOLE VOLUME CALCULATED FOR 5.5-INCH CASING																
CHLORIDE REPORTED AT 700 PM																
LCM REPORTED AT 2 LB/BBL																
TODAY'S CREW: B. TERRELL & K. KING																
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																

			PERMEABLE		
SHALE			0 MicrologNormal 20		
0 Gamma API 150			0 MicrologLateral 20		
api			ohm-metre		
6 Caliper 16			15K Tension 0		
inches			pounds		
MD 1 : 240 ft			15K Tension 0		
2500			pounds		



3000

3100



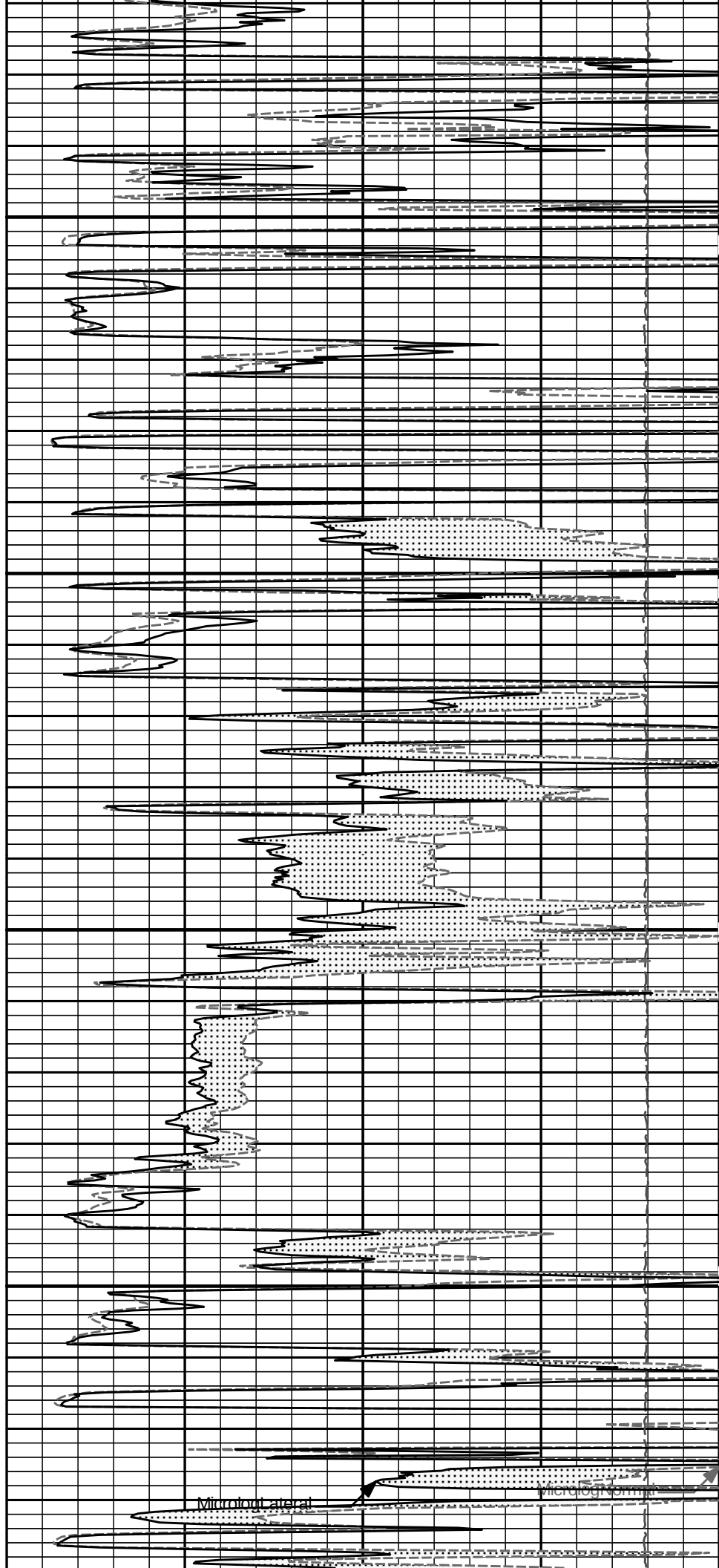


3200

3300

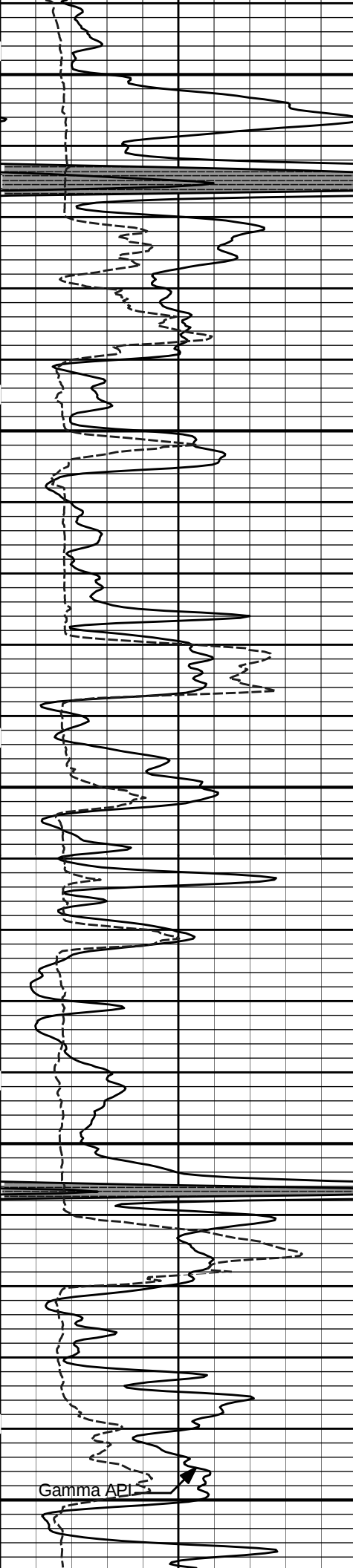
Gamma API

Caliper



Microlog atrial

Microlog Normalized

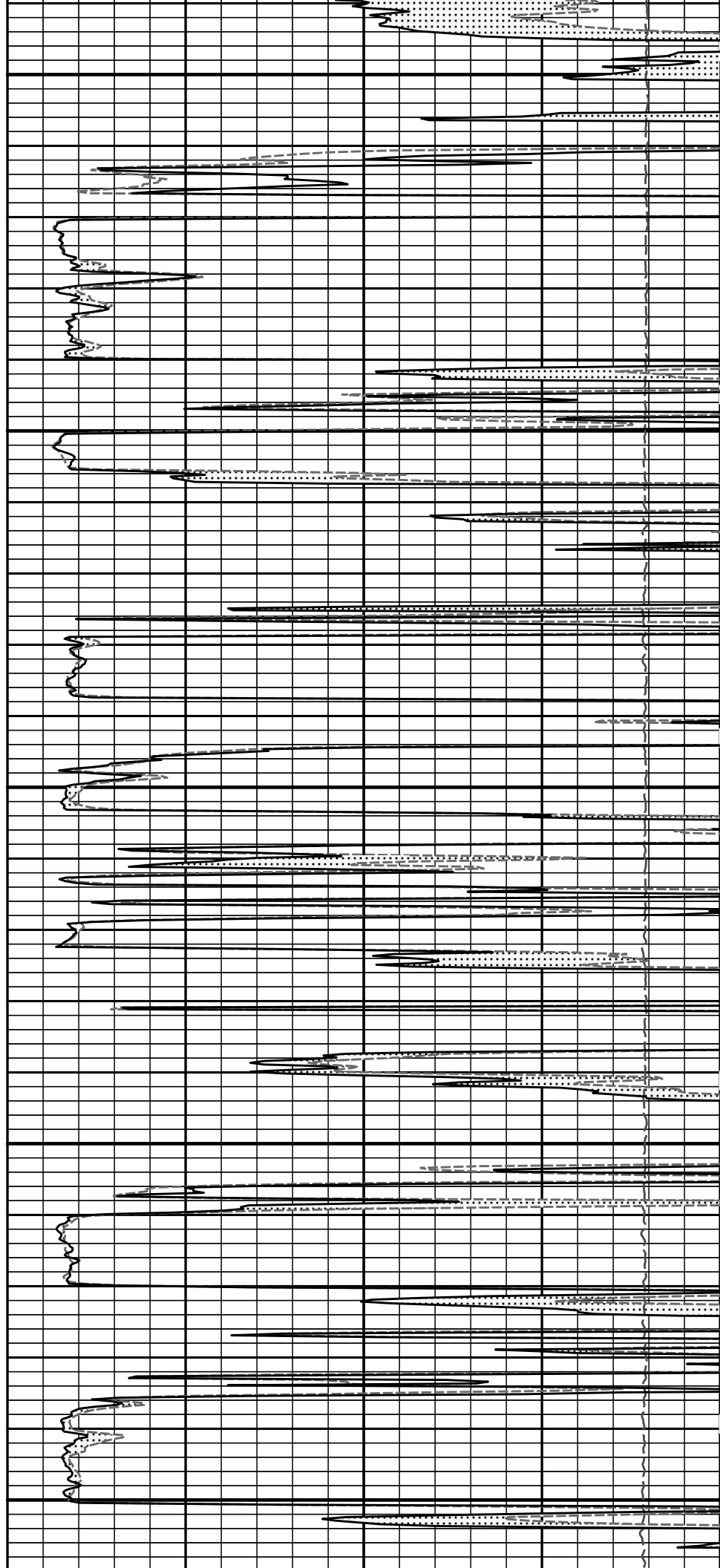


3400

3500

3600

Gamma API



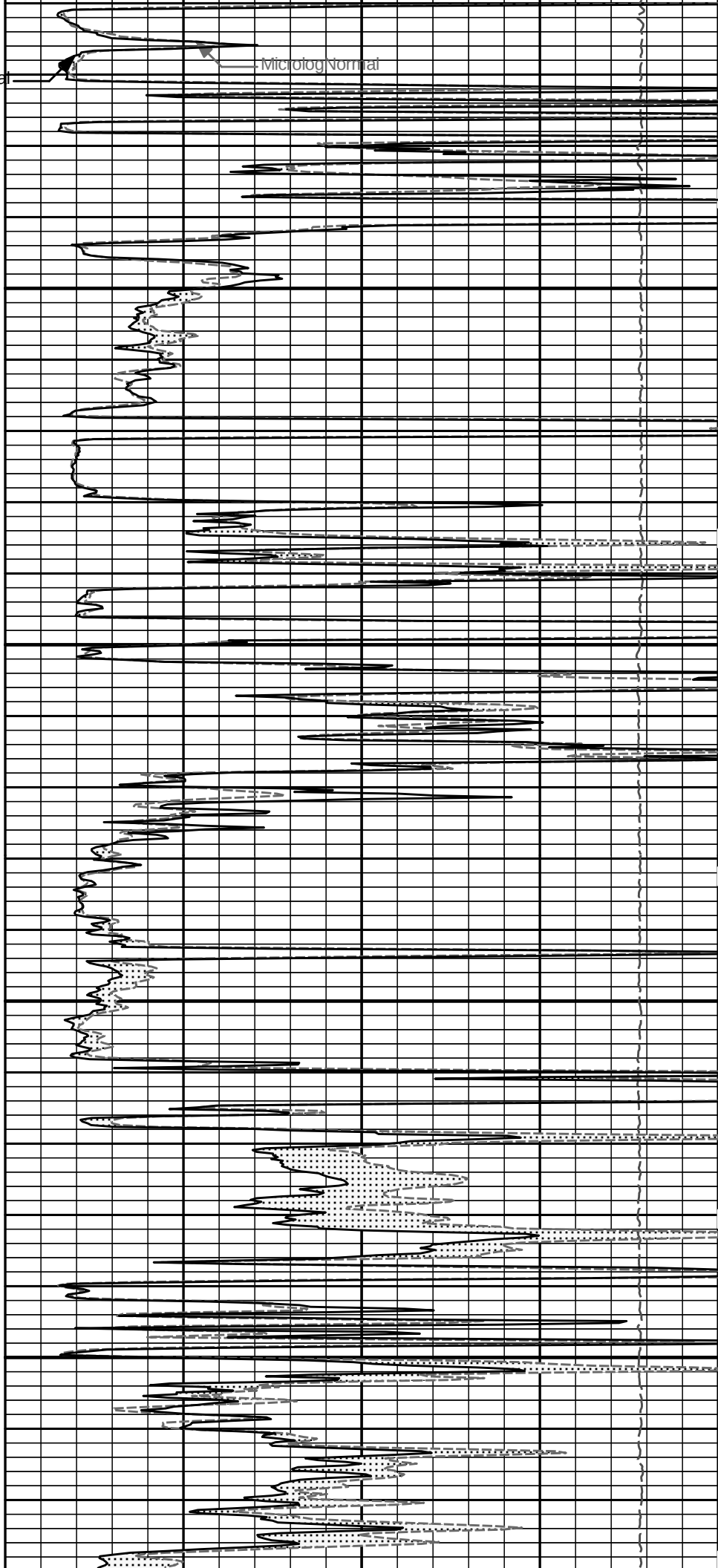


Caliper

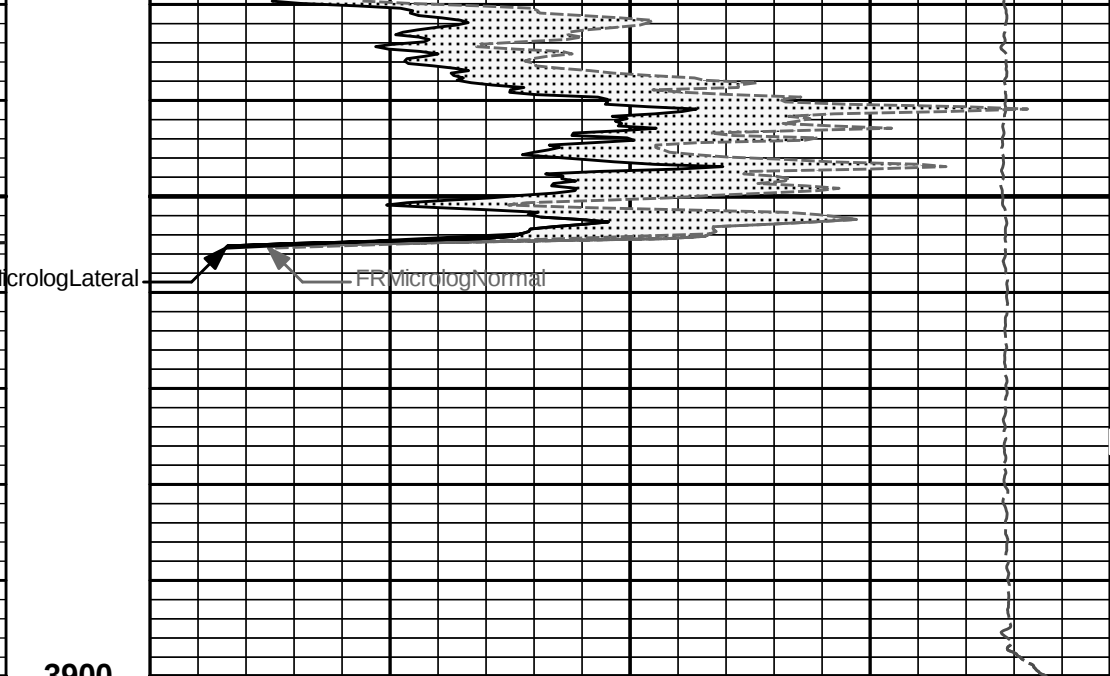
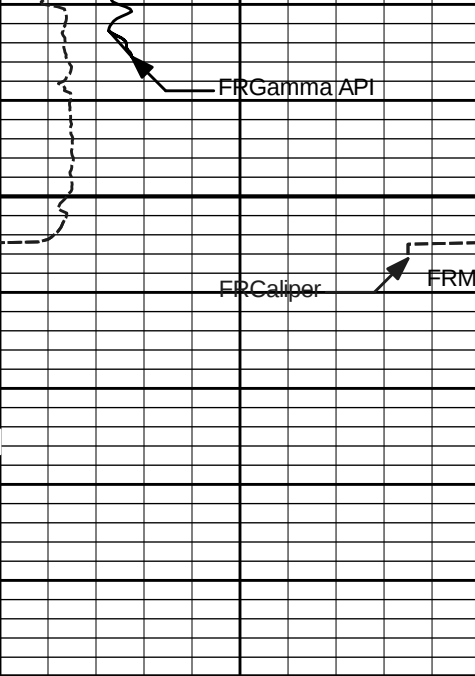
Microlog Lateral

3700

3800



Microlog Normal



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		

HALLIBURTON

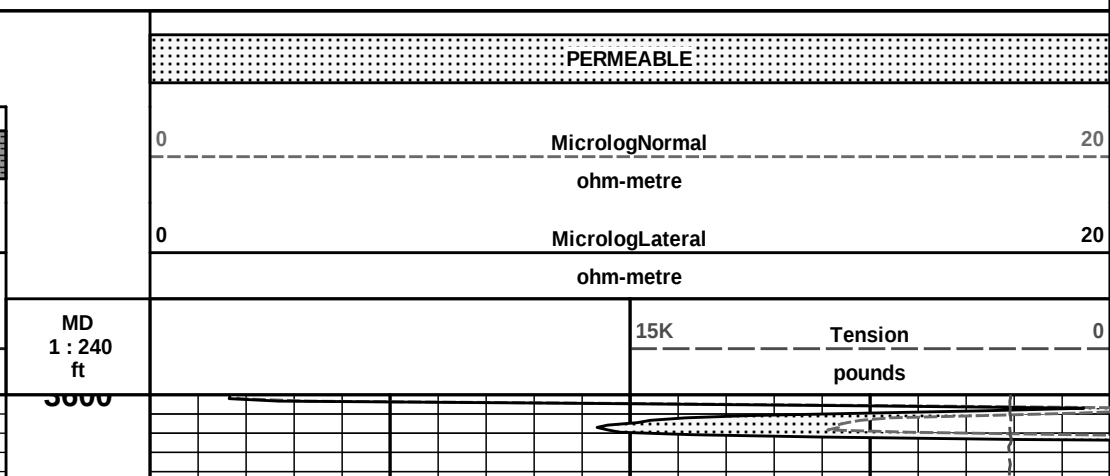
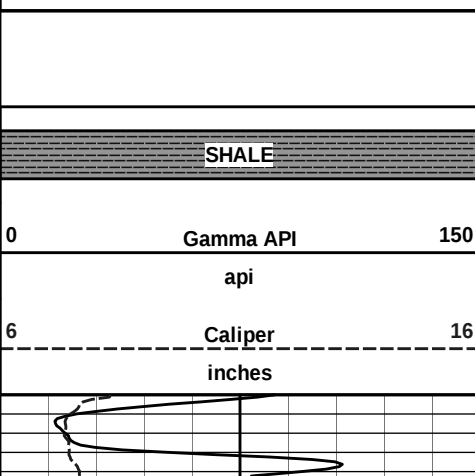
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Plot Range: 2900 ft to 3900.75 ft
Data: WILLIAM_TRUST\Well Based\DETAIL\
Plot File: \\LOCAL\WILLIAM_TRUST\0001 SP-GTET-DSN-SDL-FLEX-BSAT-ACRT-CHIMICRO\Microlog_IQ_5_main.lib

5 INCH MAIN LOG

HALLIBURTON

Plot Time: 18-Jul-13 23:31:55
Plot Range: 3600 ft to 3901.83 ft
Data: WILLIAM_TRUST\Well Based\REPEAT\
Plot File: \\LOCAL\WILLIAM_TRUST\0001 SP-GTET-DSN-SDL-FLEX-BSAT-ACRT-CHIMICRO\Microlog_IQ_5_rep.lib

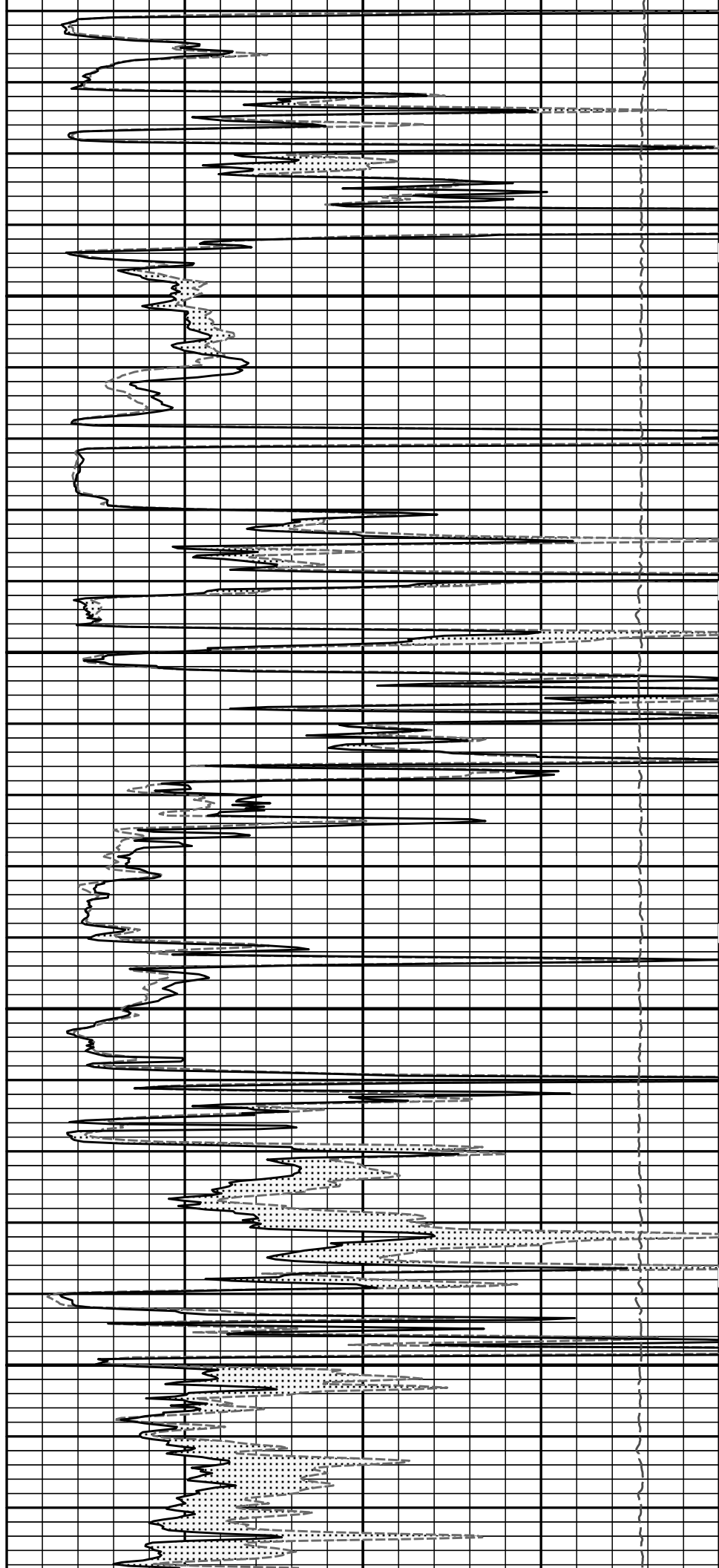
REPEAT SECTION

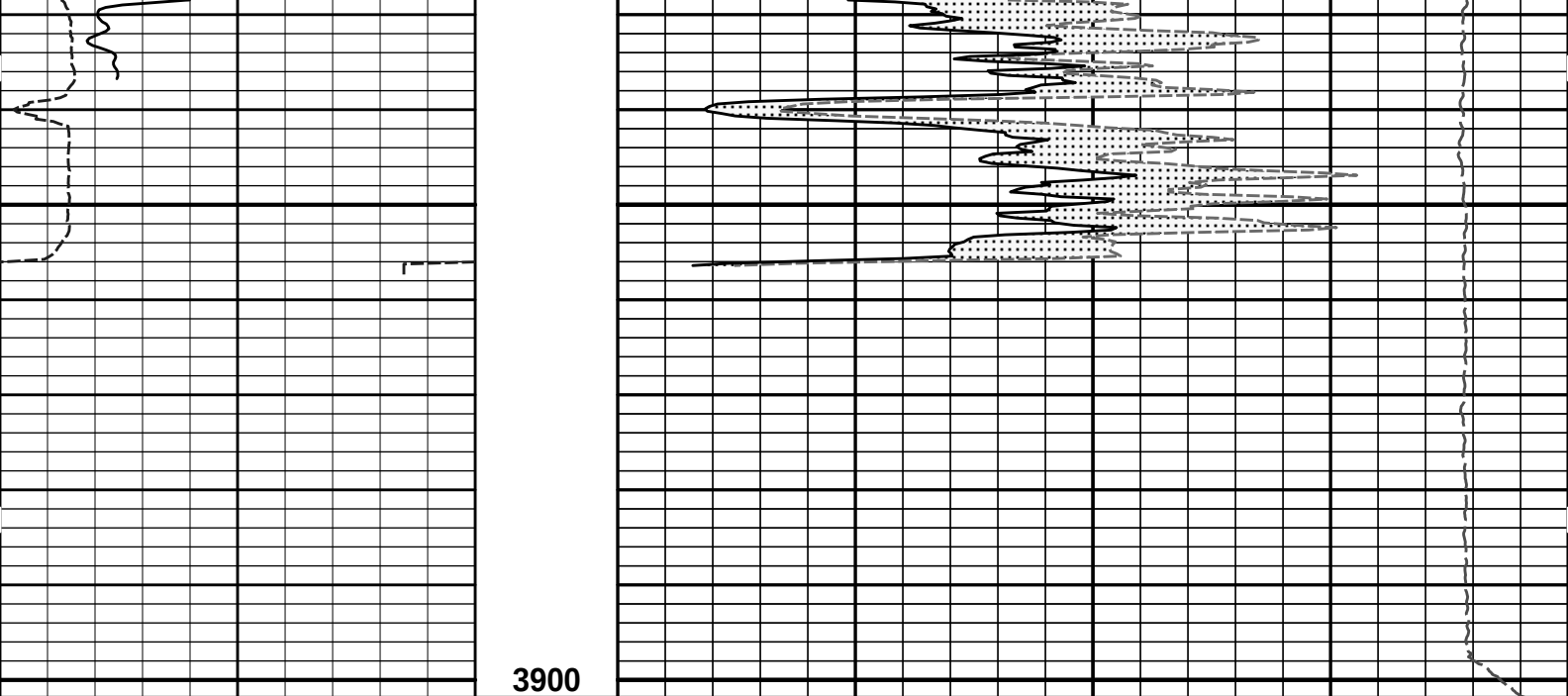




3700

3800





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

HALLIBURTON

Plot Time: 18-Jul-13 23:31:57

Plot Range: 3600 ft to 3901.83 ft

Data: WILLIAM_TRUST\Well Based\REPEAT\

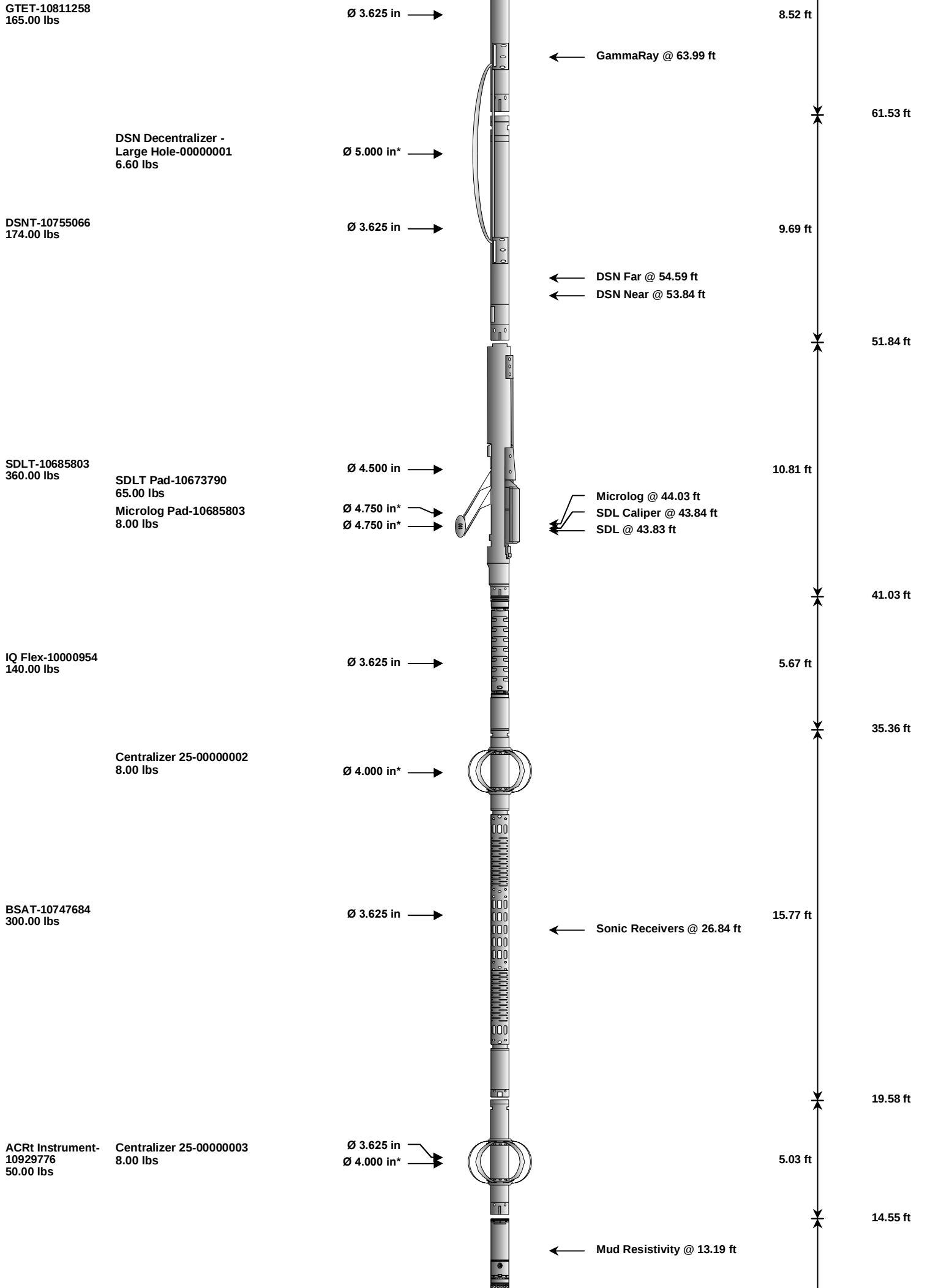
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REPEAT SECTION

HALLIBURTON

TOOL STRING DIAGRAM REPORT

Description	Overbody Description	O.D.	Diagram	Sensors @ Delays	Length	Accumulated Length
CH_HOS-954 37.50 lbs		Ø 2.750 in →		← Temperature @ 76.74 ft	3.03 ft	77.77 ft
XOHD-00000001 20.00 lbs		Ø 2.750 in → Ø 3.625 in →			0.95 ft	74.74 ft
						73.79 ft
SP Sub-12345678 60.00 lbs		Ø 3.625 in →		← SP @ 72.01 ft	3.74 ft	70.05 ft



ACRt Sonde-
10929775
200.00 lbs

Ø 3.625 in →

← ACRt @ 9.21 ft

14.22 ft

Bull Nose-00000001
5.00 lbs

Ø 2.750 in →

0.33 ft

0.33 ft

0.00 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	954	37.50	3.03	74.74	300.00	
XOHD	Hostile to Dits Cross Over	00000001	20.00	0.95	73.79	300.00	
SP	SP Sub	12345678	60.00	3.74	70.05	300.00	
GTET	Gamma Telemetry Tool	10811258	165.00	8.52	61.53	60.00	
DSNT	Dual Spaced Neutron	10755066	174.00	9.69	51.84	60.00	
DCNT	DSN Decentralizer Large Hole	00000001	6.60	9.42	*	55.17	300.00
SDLT	Spectral Density Tool	10685803	360.00	10.81	41.03	60.00	
MICP	Microlog Pad	10685803	8.00	1.00	*	43.53	60.00
SDLP	Density Insite Pad	10673790	65.00	2.55	*	43.24	60.00
IQF	IQ Flex tool	10000954	140.00	5.67	35.36	300.00	
BSAT	Borehole Sonic Array Tool	10747684	300.00	15.77	19.58	60.00	
OBCEN	Centralizer - 25 in. Overbody	00000002	8.00	2.08	*	32.51	300.00
ACRt	Array Compensated True Resistivity Instrument Section	10929776	50.00	5.03	14.55	300.00	
OBCEN	Centralizer - 25 in. Overbody	00000003	8.00	2.08	*	15.87	300.00
ACRt	Array Compensated True Resistivity Sonde Section	10929775	200.00	14.22	0.33	300.00	
BLNS	Bull Nose	00000001	5.00	0.33	0.00	300.00	
Total			1,607.10	77.77			
* Not included in Total Length and Length Accumulation.							
Data: WILLIAM_TRUST\0001 SP-GTET-DSN-SDL-FLEX-BSAT-ACRT-CH\IDLE					Date: 18-Jul-13 21:45:33		

HALLIBURTON

PARAMETERS REPORT

Depth (ft)	Tool Name	Mnemonic	Description	Value	Units
TOP					
	GTET	GEOK	Process Gamma Ray EVR?	No	
	DSNT	DEOK	Process DSN EVR?	No	
	SDLT Pad	DNOK	Process Density EVR?	No	
2800.00					
	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	9.100	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	BMUD	Mud Resistivity	2.000	ohmm

SHARED	RMOD	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	3900.00	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?	Yes	
GTET	TPOS	Tool Position for Gamma Ray Tools.	Eccentered	
DSNT	DNOK	Process DSN?	Yes	
DSNT	DEOK	Process DSN EVR?	Yes	
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?	Yes	
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	EP Lwr & EP 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				
Data: WILLIAM_TRUST\0001 SP-GTET-DSN-SDL-FLEX-BSAT-ACRT-CHIDLE				Date: 18-Jul-13 22:30:48

HALLIBURTON

CALIBRATION REPORT

NATURAL GAMMA RAY TOOL SHOP CALIBRATION				
Tool Name:	GTET - 10811258		Reference Calibration Date:	05-Jun-13 10:17:04
Engineer:	S. INGERSOLL		Calibration Date:	01-Jul-13 12:19:31
Software Version:	WL INSITE R3.8.4 (Build 5)		Calibration Version:	1
Calibrator Source S/N: TB-185				
Calibrator API Reference:228.00 api				
Equivalent Calibrator API Reference:232.0 api				
	Measurement	Measured	Calibrated	Units
	Background	35.8	34.7	api
	Background + Calibrator	274.6	266.7	api
	Calibrator	238.8	232.0	api

NATURAL GAMMA RAY TOOL FIELD CALIBRATION				
Tool Name:	GTET - 10811258		Reference Calibration Date:	01-Jul-13 12:19:31
Engineer:	J. BOLLLOM		Calibration Date:	17-Jul-13 10:53:59
Software Version:	WL INSITE R3.8.4 (Build 5)		Calibration Version:	1
Calibrator Source S/N: TB-185				
Calibrator API Reference:228.00 api				
Equivalent Calibrator API Reference:232.0 api				
	Field Verification	Shop	Field	Units
	Background	34.7	41.7	api
	Background + Calibrator	266.7	268.2	api
	Calibrator	232.0	226.6	api
	Shop	Field	Difference	Tolerance
	232.0	226.6	5.4	+/- 9.00

MICRO LOG SHOP CALIBRATION				
Tool Name:	Microlog Pad - 10685803		Reference Calibration Date:	20-Jun-13 16:00:09
Engineer:	S. INGERSOLL		Calibration Date:	01-Jul-13 15:35:47
Software Version:	WL INSITE R3.8.4 (Build 5)		Calibration Version:	1
Host Tool Name:	DSNT - 10755066			

CALIBRATION COEFFICIENT SUMMARY					
Measurement	Micro Log Normal		Micro Log Lateral		Units
	Measured	Calibrated	Measured	Calibrated	
Tool Zero	-0.06	-0.06	-0.01	-0.01	ohmm
Calibration Point #1	-0.00	0.00	0.00	0.00	ohmm

Calibration Point #1	20.03	20.00	20.01	20.00	ohmm
Calibration Point #2	20.03	20.00	20.01	20.00	ohmm
Internal Reference	19.94	19.91	20.01	20.00	ohmm

Measurement	Micro Log Normal Tool Value	Micro Log Lateral Tool Value	Units
Tool Zero	3.66	-0.82	V
Calibration Point #1	18.59	1.56	V
Calibration Point #2	5318.23	6890.99	V
Internal Reference	5294.50	6890.98	V

MICRO LOG FIELD CHECK			
Tool Name:	Microlog Pad - 10685803	Reference Calibration Date:	01-Jul-13 15:35:47
Engineer:	J. BOLLUM	Calibration Date:	17-Jul-13 10:49:20
Software Version:	WL INSITE R3.8.4 (Build 5)	Calibration Version:	1

Measurement	Micro Log Normal		Micro Log Lateral		Units
	Shop	Field	Shop	Field	
Tool Zero	-0.06	-0.07	-0.01	-0.00	ohmm
Internal Reference	19.91	19.87	20.00	19.96	ohmm
Summary					
Signal	Shop	Field	Difference		Tolerance
Microlog Normal	19.91	19.87	0.04		+/- 0.80
Microlog Lateral	20.00	19.96	0.04		+/- 0.80

CALIBRATION SUMMARY						
Sensor	Shop	Field	Post	Difference	Tolerance	Units
GTET-10811258						
Gamma Ray Calibrator	232.0	226.6	-----	5.4	+/- 9.00	api
Microlog Pad-10685803						
MicroLog Normal	19.91	19.87	-----	0.04	+/-0.80	ohmm
MicroLog Lateral	20.00	19.96	-----	0.04	+/-0.80	ohmm
Data: WILLIAM_TRUST\0001 SP-GTET-DSN-SDL-FLEX-BSAT-ACRT-CH\001 18-Jul-13 22:16 Dn @218.0f					Date: 18-Jul-13 22:22:47	

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	72.01	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	
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	
Microlog Pad				
TPUL	Tension Pull	44.83	NO	

TPUL	Tension Pull	44.03	NO	
MINV	Microlog Lateral	44.03	BLK	0.750
MNOR	Microlog Normal	44.03	BLK	0.750
Data: WILLIAM_TRUST10001 SP-GTET-DSN-SDL-FLEX-BSAT-ACRT-CHIDLE				Date: 18-Jul-13 21:56:01
COMPANY	HARTMAN OIL CO.			
WELL	WILLIAMS TRUST 1-19			
FIELD	WILDCAT			
COUNTY	NORTON	STATE	KANSAS	
HALLIBURTON		MICROLOG		