

# HALLIBURTON

## MICROLOG

COMPANY WELL FIELD/BLOCK COUNTY STATE	<b>BEREXCO LLC</b> <b>CRAIG 1-35</b> <b>MANNING NW</b> <b>SCOTT</b> <b>KANSAS</b>
COMPANY WELL FIELD/BLOCK COUNTY STATE	<b>BEREXCO LLC</b> <b>CRAIG 1-35</b> <b>MANNING NW</b> <b>SCOTT</b> <b>KANSAS</b>
API No. 15-171-21024-00-00 Location (SHL) 925' FSL & 1674' FEL SW NE SW SE	Sect. 35 Twp. 17S Rge. 31W Elev. 2917.0 ft D.F. 2928.0 ft G.L. 2917.0 ft
Other Services: ACRT DSNT, SDLT BSAT	

Permanent Datum	GL
Log measured from	KB
Drilling measured from	KB
Date	11-Feb-14
Run No.	ONE
Depth - Driller	4695.00 ft
Depth - Logger	4695.0 ft
Bottom - Logged Interval	4651.0 ft
Top - Logged Interval	3690.0 ft
Casing - Driller	8.625 in @ 420.0 ft
Casing - Logger	418.0 ft
Bit Size	7.875 in @
Type Fluid in Hole	WATER BASED
Density	9.7 ppg @ 52.00 s/qt
PH	9.00 pH @ 7.0 cp/m
Source of Sample	MUD PIT
Rm @ Meas. Temperature	0.900 ohmm @ 75.00 degF
Rmf @ Meas. Temperature	0.73 ohmm @ 75.00 degF
Rmc @ Meas. Temperature	1.210 ohmm @ 75.00 degF
Source Rmf	MEASURED
Rm @ BHT	0.59 ohmm @ 119.0 degF
Time Since Circulation	5.0 hr
Time on Bottom	11-Feb-14 19:28
Max. Rec. Temperature	119.0 degF @ 4695.0 ft
Equipment	11230668 LIBERAL
Recorded By	J. BOLLOW
Witnessed By	I. BOSMEIJER

Fold here

Service Ticket No.: 901111896
API Serial No.: 15-171-21024-00-00
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.		@		@		10673803			
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.	10748374	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

Run No.	GENERAL		Speed ft/min	GAMMA		ACOUSTIC		Matrix	DENSITY		Matrix	NEUTRON		Matrix
	Depth			Scale		Scale			Scale			Scale		
	From	To		L	R	L	R		L	R		L	R	
ONE	4695	3690	REC	0	150									

DIRECTIONAL INFORMATION

Maximum Deviation @ KOP @

Remarks: ANNULAR HOLE VOLUME CALCULATED FOR 5.5-INCH CASING  
 CHLORIDES REPORTED AT 4,000 PPM  
 LCM REPORTED AT 1.5 LB/BBL  
 GTET-DSNT-SDLT-BSAT-ACRT RUN IN COMBINATION  
 PRE-CALS NOT PERFORMED, DST EQUIPMENT LEFT ON CATWALK

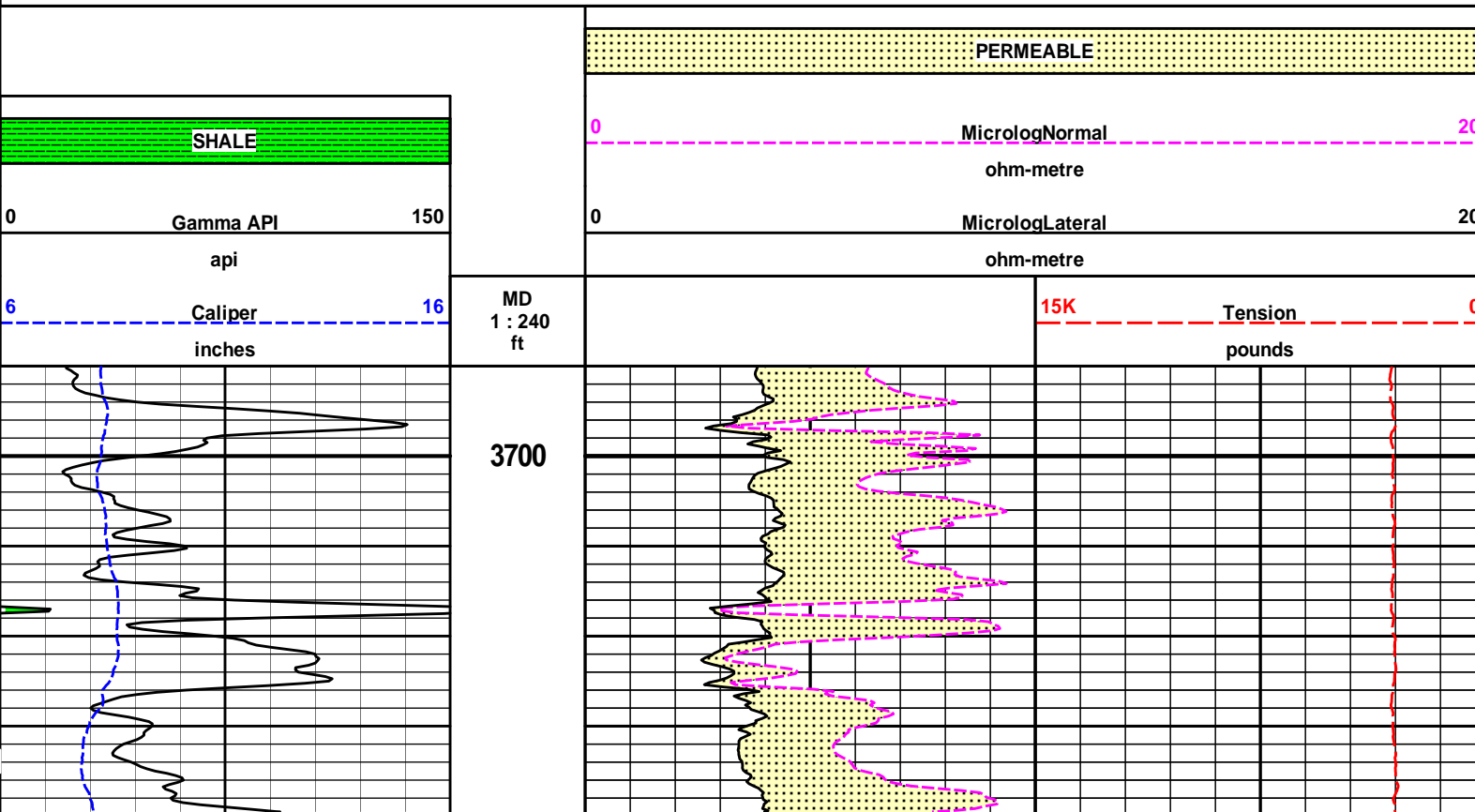
TODAY'S CREW: D. MILLER & E. ZAPIEN  
 THANK YOU FOR CHOOSING HALLIBURTON ENERGY SERVICES LIBERAL, KS. 620-624-8123

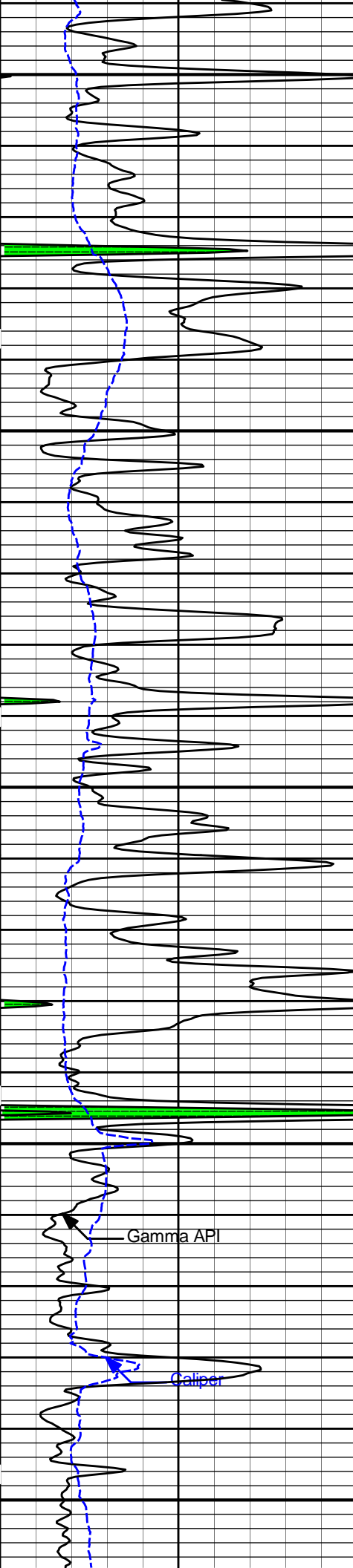
HALLIBURTON DOES NOT GUARANTEE THE ACCURACY OF ANY INTERPRETATION OF THE LOG DATA, CONVERSION OF LOG DATA TO PHYSICAL ROCK PARAMETERS OR RECOMMENDATIONS WHICH MAY BE GIVEN BY HALLIBURTON PERSONNEL OR WHICH APPEAR ON THE LOG OR IN ANY OTHER FORM. ANY USER OF SUCH DATA, INTERPRETATIONS, CONVERSIONS, OR 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

**HALLIBURTON** Plot Time: 11-Feb-14 20:06:36  
 Plot Range: 3690 ft to 4699.33 ft  
 Data: CRAIG\_1-35\Well Based\DETAIL\  
 Plot File: \\LOCAL-ICRAIG\_1-35\0001 SP-GTET-DSN-SDL-FLEX-BSAT-ACRT-BNMICRO\Microlog\_IQ\_5\_main\_lib

## 5 INCH MAIN LOG



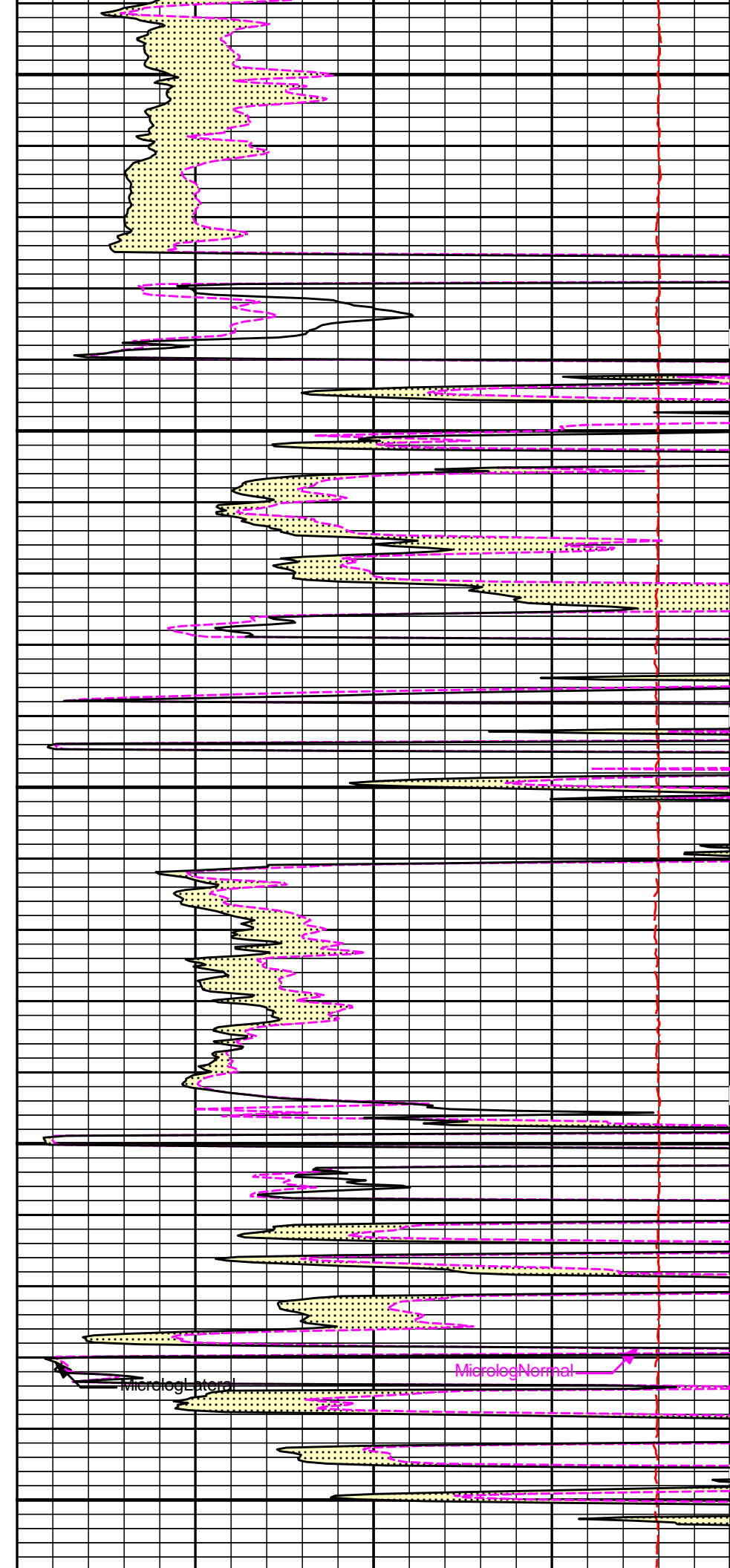


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3900

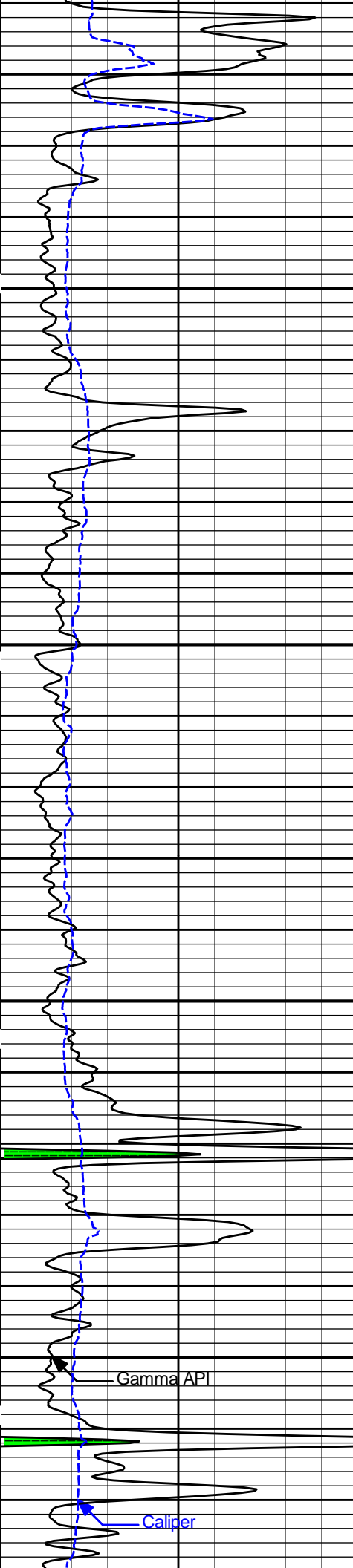
Gamma API

Caliper



Microlog Lateral

Microlog Normal

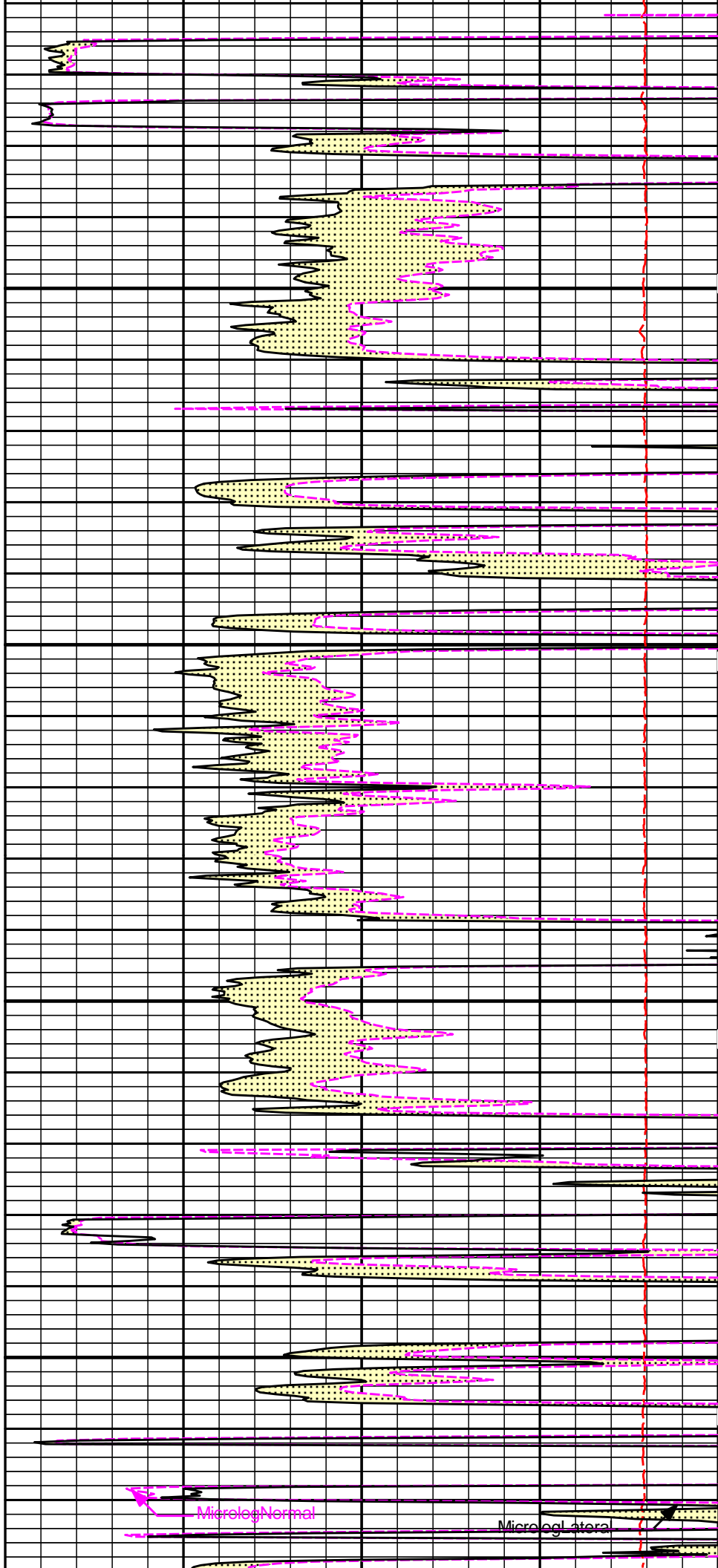


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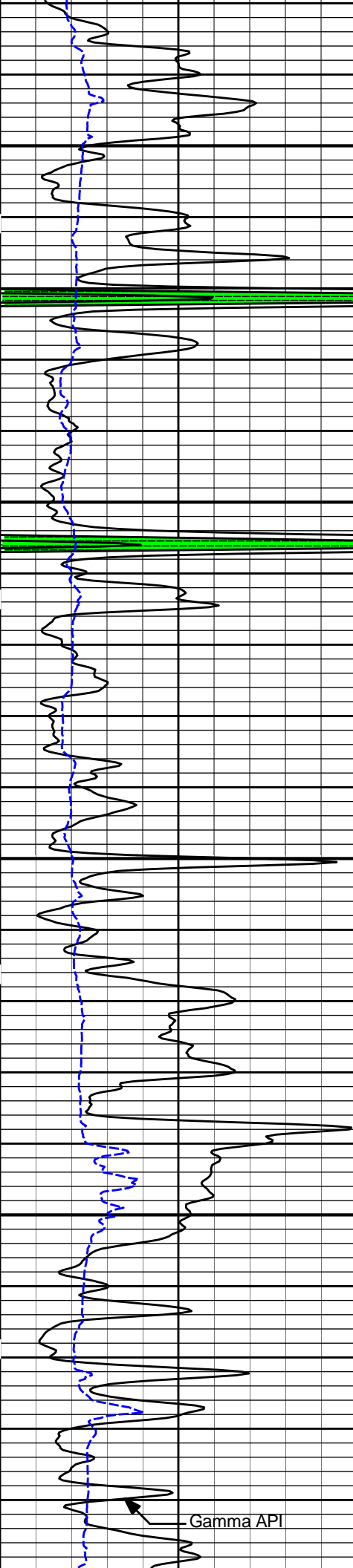
Gamma API

Caliper



MicrologNormal

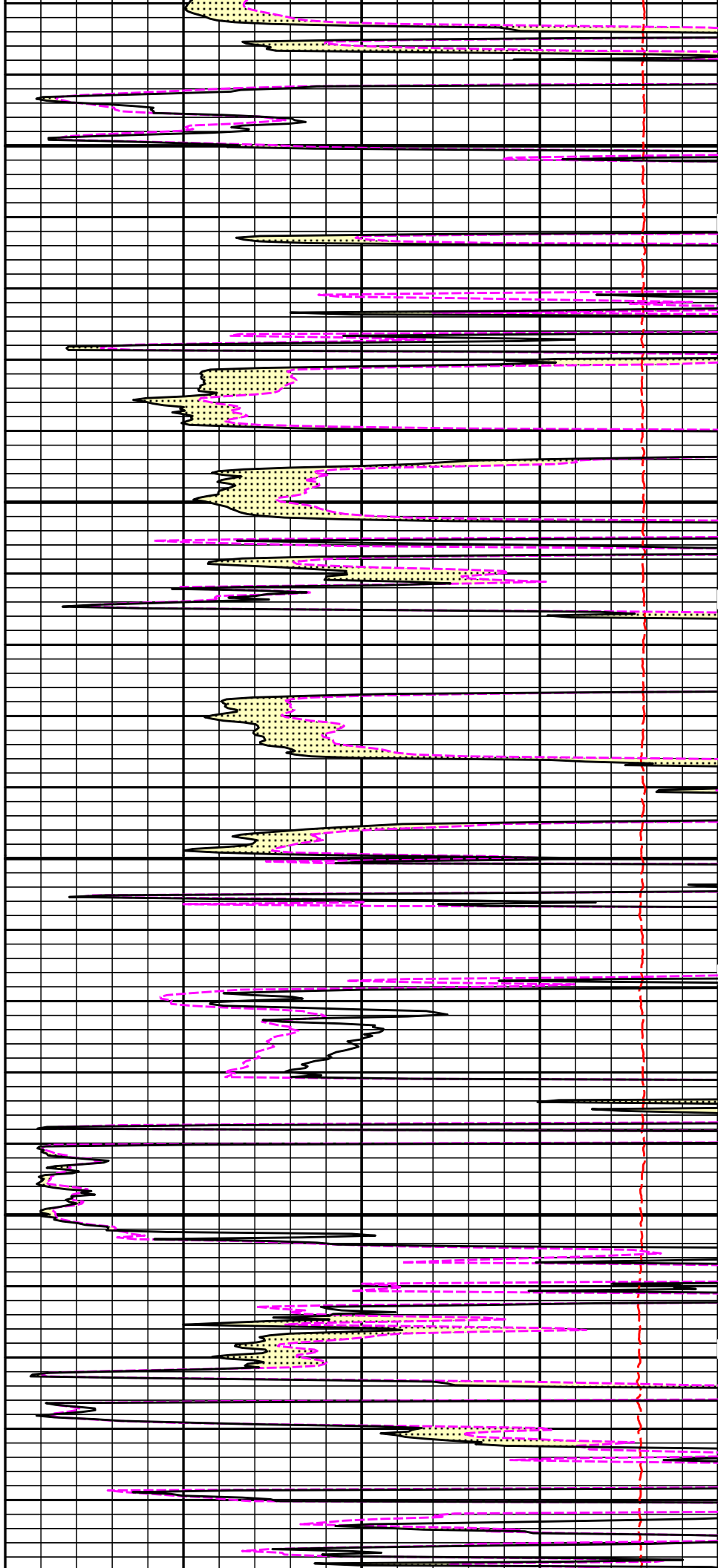
MicrologLateral



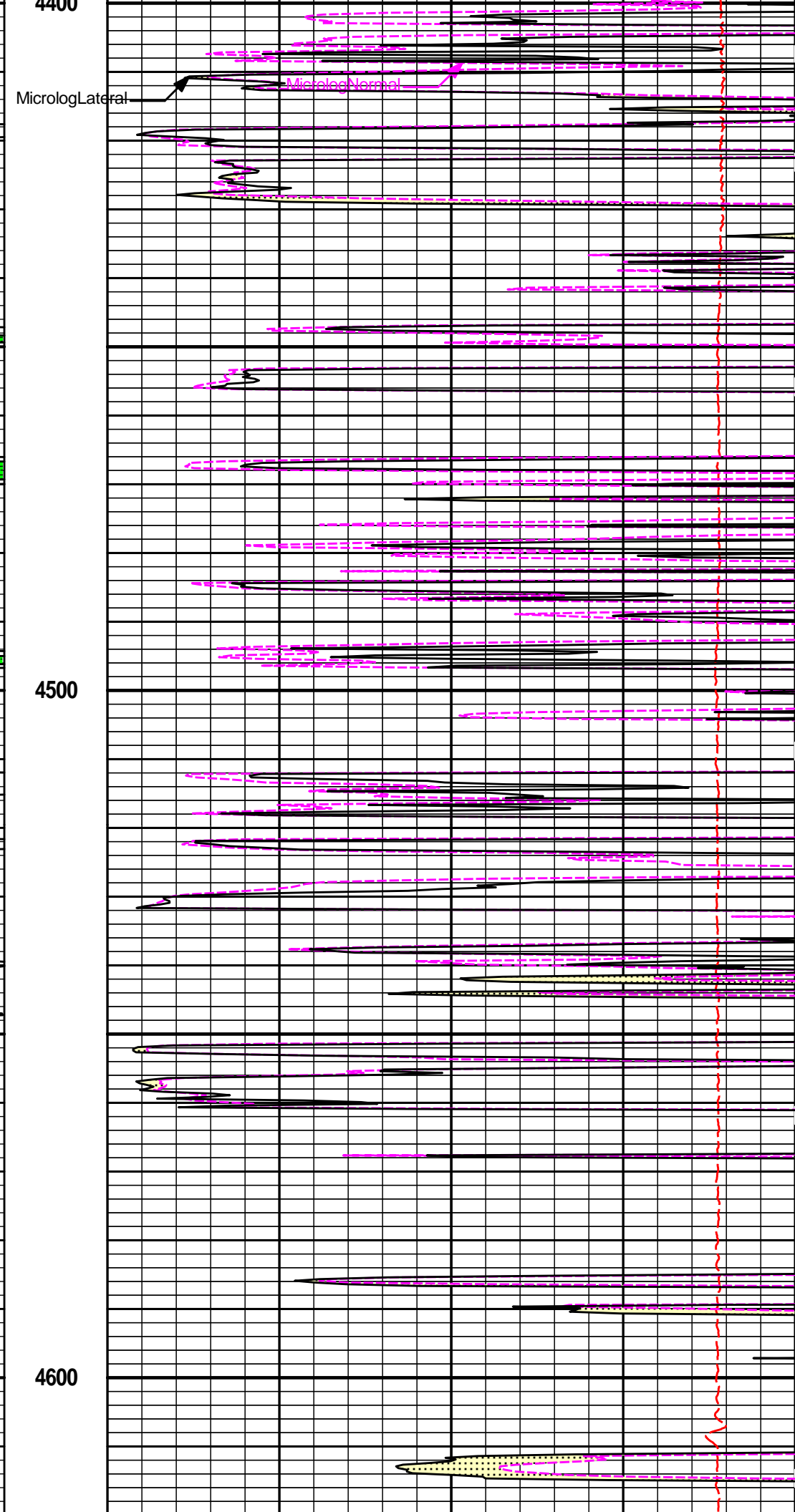
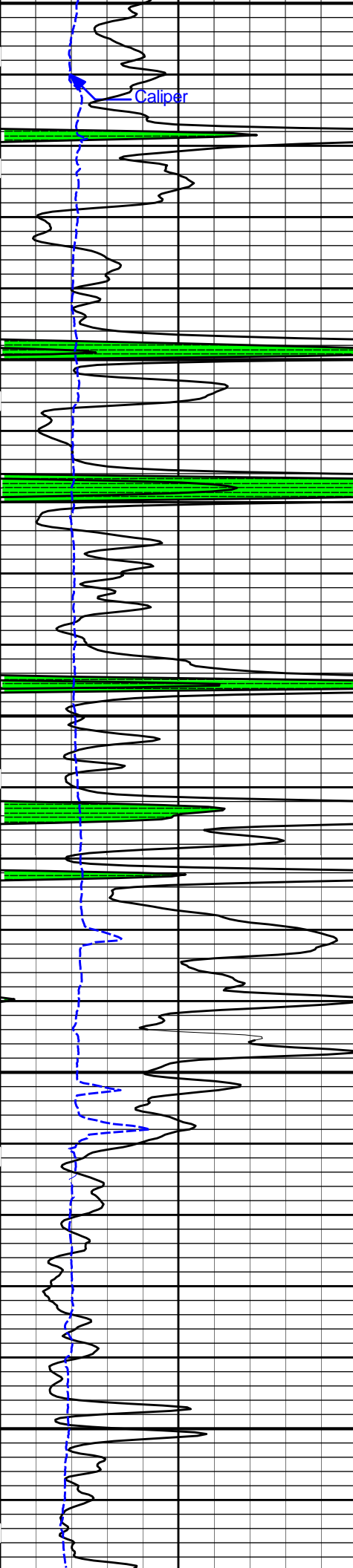
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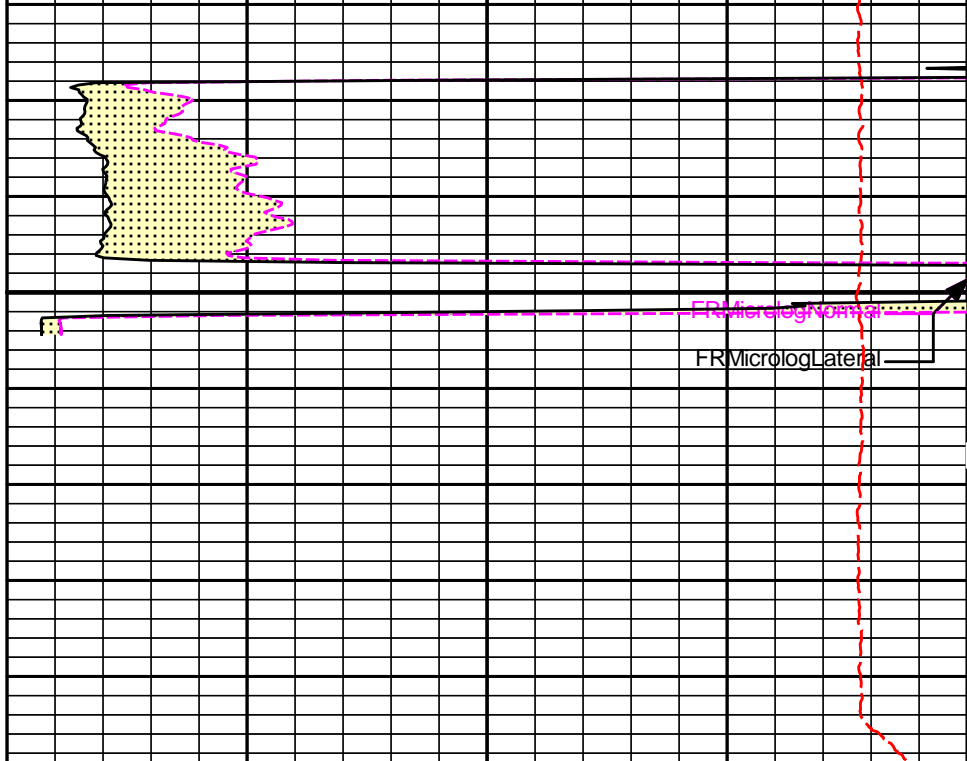
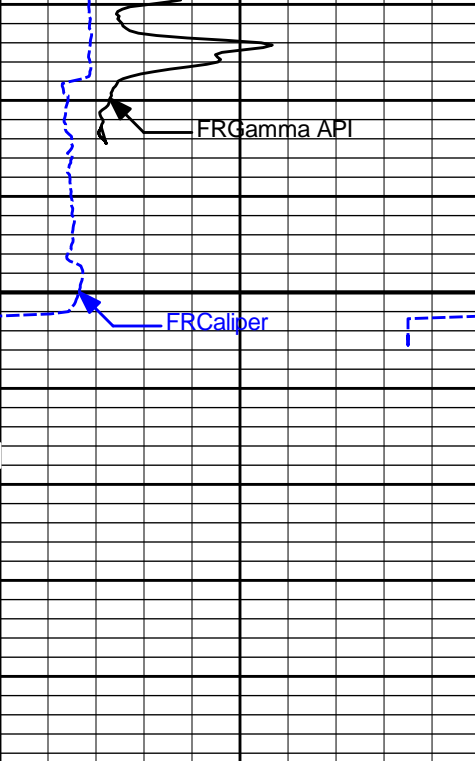
4300

4400



Gamma API





6	Caliper	16
	inches	
0	Gamma API	150
	api	

SHALE

MD  
1 : 240  
ft

15K Tension  
pounds

0 MicrologLateral 20

ohm-metre

0 MicrologNormal 20

ohm-metre

PERMEABLE

**HALLIBURTON**

Plot Time: 11-Feb-14 20:06:40  
 Plot Range: 3690 ft to 4699.33 ft  
 Data: CRAIG\_1-35\Well Based\DETAIL\  
 Plot File: \\LOCAL\CRAIG\_1-35\0001 SP-GTET-DSN-SDL-FLEX-BSAT-ACRT-BNMMICRO\Microlog\_IQ\_5\_main\_lib

### 5 INCH MAIN LOG

**HALLIBURTON**

Plot Time: 11-Feb-14 20:06:40  
 Plot Range: 4400 ft to 4698.42 ft  
 Data: CRAIG\_1-35\Well Based\REPEAT\  
 Plot File: \\LOCAL\CRAIG\_1-35\0001 SP-GTET-DSN-SDL-FLEX-BSAT-ACRT-BNMMICRO\Microlog\_IQ\_5\_rep\_lib

### REPEAT SECTION

SHALE

0	Gamma API	150
	api	

6	Caliper	16
	inches	

MD  
1 : 240  
ft

15K Tension  
pounds

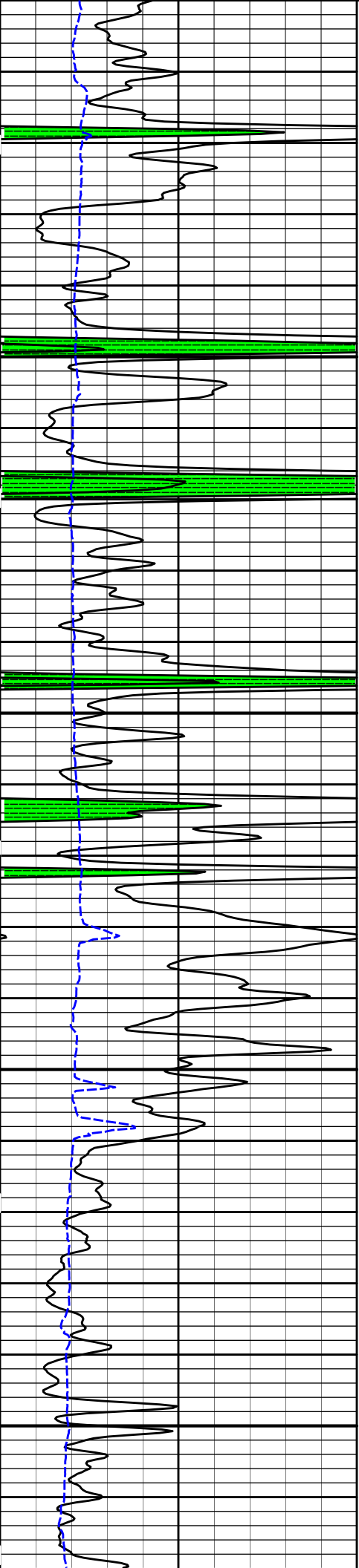
0 MicrologLateral 20

ohm-metre

0 MicrologNormal 20

ohm-metre

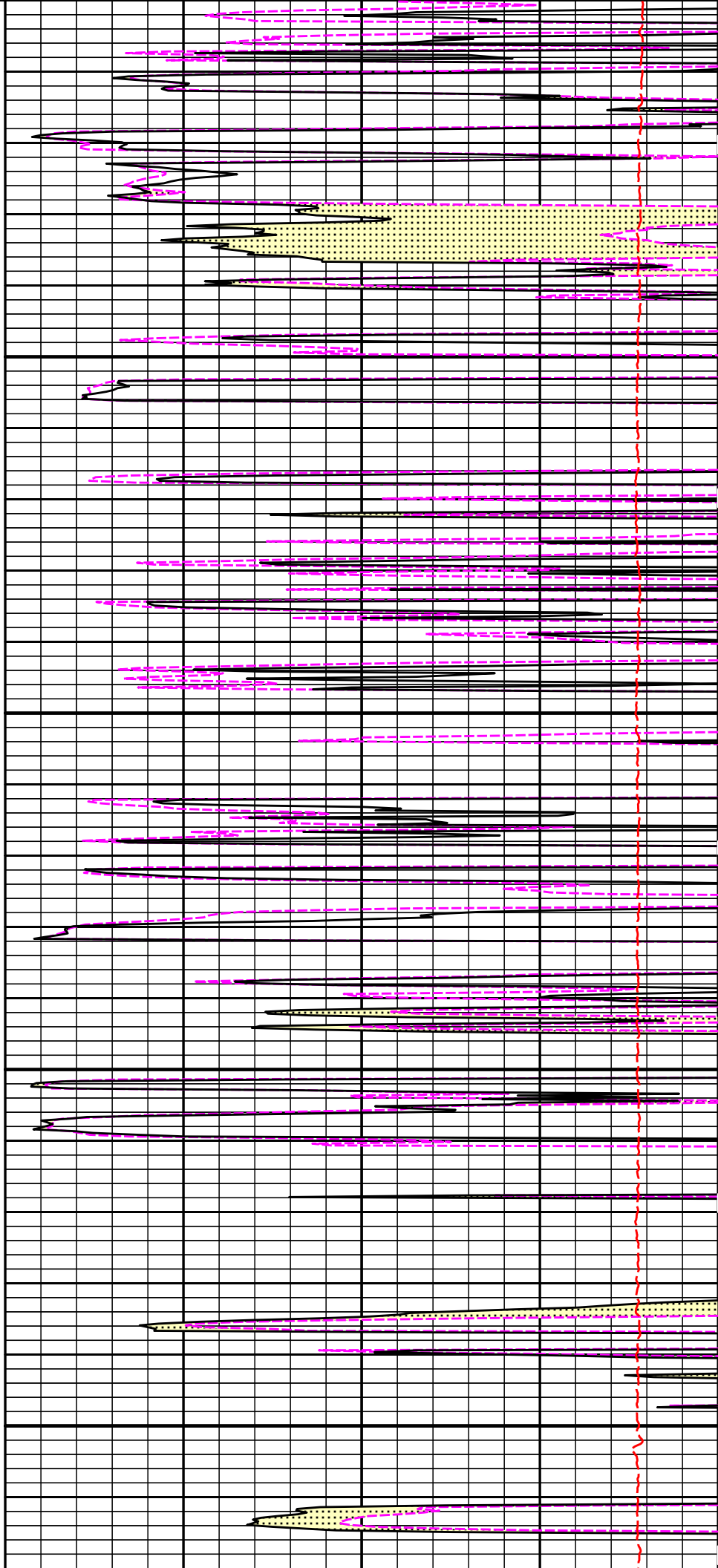
PERMEABLE

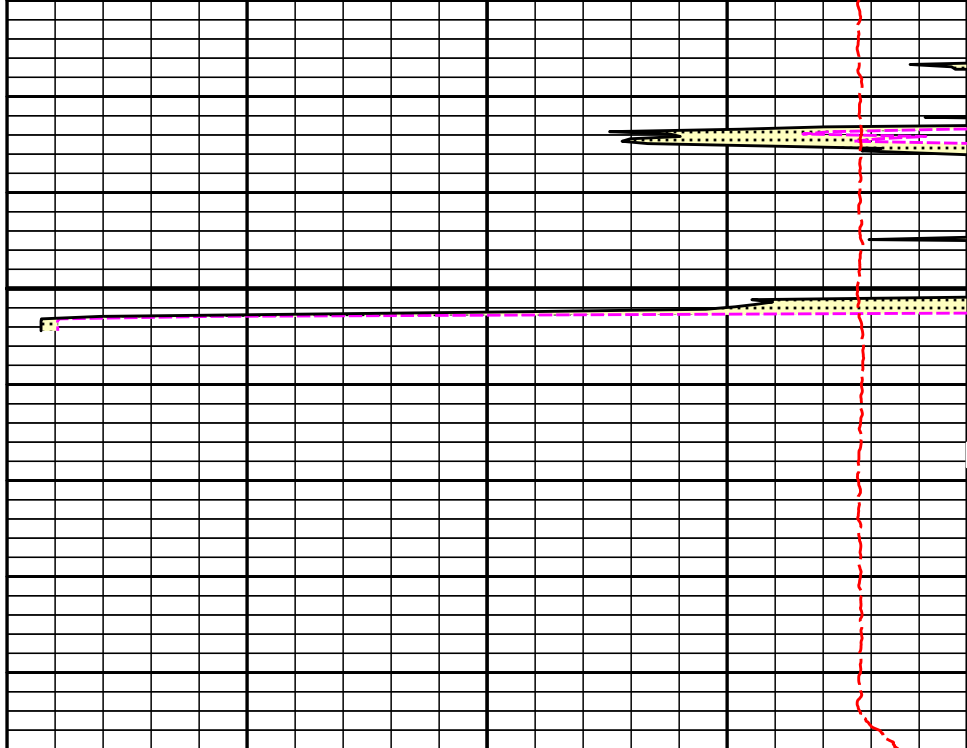
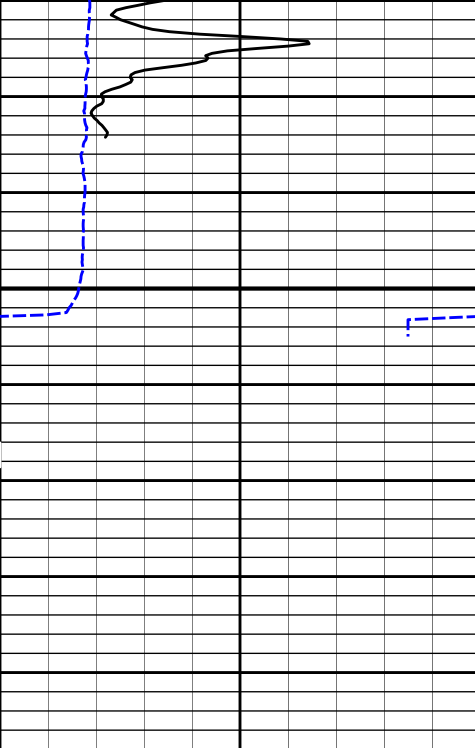


4400

4500

4600





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**

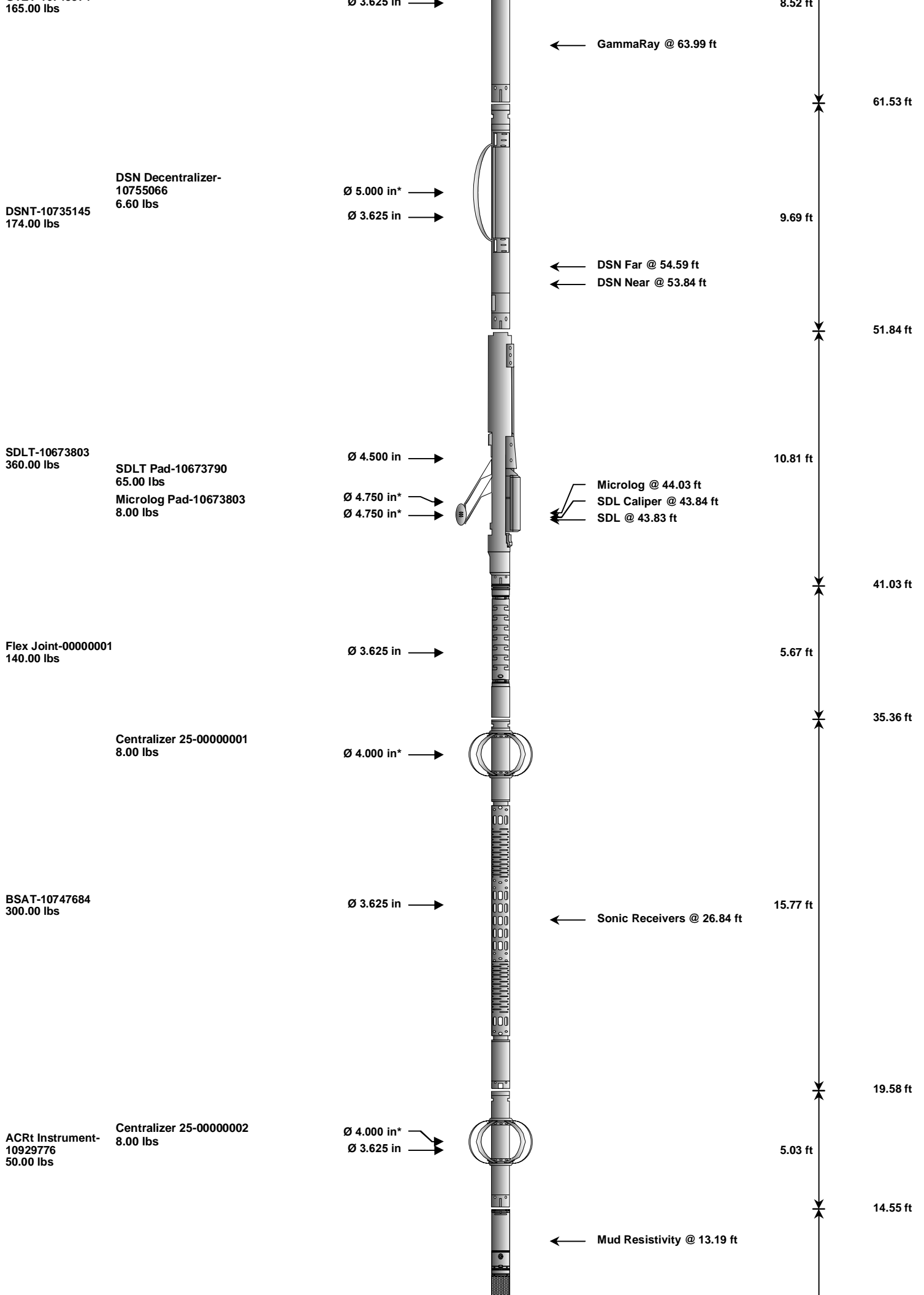
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 Plot Range: 4400 ft to 4698.42 ft  
 Data: CRAIG\_1-35\Well Based\REPEAT\  
 Plot File: \\-LOCAL-\CRAIG\_1-35\0001 SP-GTET-DSN-SDL-FLEX-BSAT-ACRT-BN\MICROMicrolog\_IQ\_5\_rep\_lib

## REPEAT SECTION

**HALLIBURTON**

## TOOL STRING DIAGRAM REPORT

Description	Overbody Description	O.D.	Diagram	Sensors @ Delays	Length	Accumulated Length
CH_HOS-HOSTILE 37.50 lbs		ø 2.750 in →		← Temperature @ 75.79 ft	3.03 ft	76.82 ft
SP Sub-12345678 60.00 lbs		ø 3.625 in →		← SP @ 72.01 ft	3.74 ft	73.79 ft
GTET-10748374		ø 3.625 in →			3.52 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	HOSTILE	37.50	3.03	73.79	300.00
SP	SP Sub	12345678	60.00	3.74	70.05	300.00
GTET	Gamma Telemetry Tool	10748374	165.00	8.52	61.53	60.00
DSNT	Dual Spaced Neutron	10735145	174.00	9.69	51.84	60.00
DCNT	DSN Decentralizer	10755066	6.60	5.13	* 55.17	300.00
SDLT	Spectral Density Tool	10673803	360.00	10.81	41.03	60.00
MICP	Microlog Pad	10673803	8.00	1.00	* 43.53	60.00
SDLP	Density Insite Pad	10673790	65.00	2.55	* 43.24	60.00
FLEX	Flex Joint	00000001	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	00000001	8.00	2.08	* 32.82	300.00
ACRt	Array Compensated True Resistivity Instrument Section	10929776	50.00	5.03	14.55	300.00
OBCEN	Centralizer - 25 in. Overbody	00000002	8.00	2.08	* 16.30	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** **1,587.10**   **76.82**

\* Not included in Total Length and Length Accumulation.

Data: CRAIG\_1-35\0001 SP-GTET-DSN-SDL-FLEX-BSAT-ACRT-BN\IDLE

Date: 11-Feb-14 18:15:21

**HALLIBURTON**

## CALIBRATION REPORT

### NATURAL GAMMA RAY TOOL SHOP CALIBRATION

Tool Name: GTET - 10748374	Reference Calibration Date: 25-Nov-13 16:08:30
Engineer: SHELDON INGERSOLL	Calibration Date: 03-Feb-14 18:18:39
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	44.9	44.5	api
Background + Calibrator	279.2	276.5	api
Calibrator	234.3	232.0	api

### MICRO LOG SHOP CALIBRATION

Tool Name: Microlog Pad - 10673803	Reference Calibration Date: 23-Dec-13 17:20:28
Engineer: THOMAS HYDE	Calibration Date: 08-Jan-14 21:58:47
Software Version: WL INSITE R3.8.4 (Build 5)	Calibration Version: 1

## CALIBRATION COEFFICIENT SUMMARY

Measurement	Micro Log Normal		Micro Log Lateral		Units
	Measured	Calibrated	Measured	Calibrated	
Tool Zero	-0.06	-0.08	-0.01	-0.02	ohmm
Calibration Point #1	0.02	0.00	0.01	0.00	ohmm
Calibration Point #2	20.19	20.00	20.15	20.00	ohmm
Internal Reference	20.10	19.92	20.15	20.00	ohmm

Measurement	Micro Log Normal	Micro Log Lateral	Units
	Tool Value	Tool Value	
Tool Zero	0.04	-3.47	V
Calibration Point #1	20.88	4.20	V
Calibration Point #2	5414.44	7020.96	V
Internal Reference	5392.27	7022.48	V

## CALIBRATION SUMMARY

Sensor	Shop	Field	Post	Difference	Tolerance	Units
GTET-10748374						
Gamma Ray Calibrator	232.0	-----	-----	0.0	+/- 9.00	api
Microlog Pad-10673803						
MicroLog Normal	19.92	-----	-----	0.00	-----	ohmm
MicroLog Lateral	20.00	-----	-----	0.00	-----	ohmm

Data: CRAIG\_1-35\0001 SP-GTET-DSN-SDL-FLEX-BSAT-ACRT-BNIDLE

Date: 11-Feb-14 18:19:32

**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	9.700	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	4695.00	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	
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	
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

## INPUTS, DELAYS AND FILTERS TABLE

Mnemonic	Input Description	Delay (ft)	Filter Type	Filter Length (ft)
<b>Depth Panel</b>				
TENS	Tension	0.00	NO	
<b>CH_HOS</b>				
DHTN	Downhole Tension	0.00	BLK	0.000
<b>SP Sub</b>				
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	
<b>GTET</b>				
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	
<b>DSNT</b>				
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	
ERNR	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	
<b>SDLT</b>				
TPUL	Tension Pull	43.84	NO	
PCAL	Pad Caliper	43.84	TRI	0.250
ACAL	Arm Caliper	43.84	TRI	0.250
<b>BSAT</b>				
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	
<b>ACRt Sonde</b>				
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	
<b>SDLT Pad</b>				
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	44.03	NO	
MINV	Microlog Lateral	44.03	BLK	0.750
MNOR	Microlog Normal	44.03	BLK	0.750

Data: CRAIG\_1-35\0001 SP-GTET-DSN-SDL-FLEX-BSAT-ACRT-BNIDLE

Date: 11-Feb-14 18:18:11

COMPANY	<b>BEREXCO LLC</b>			
WELL	<b>CRAIG 1-35</b>			
FIELD	<b>MANNING NW</b>			
COUNTY	<b>SCOTT</b>	STATE	<b>KANSAS</b>	

**HALLIBURTON**

**MICROLOG**