

COMPENSATED SPECTRAL NATURAL GAMMA RAY LOG

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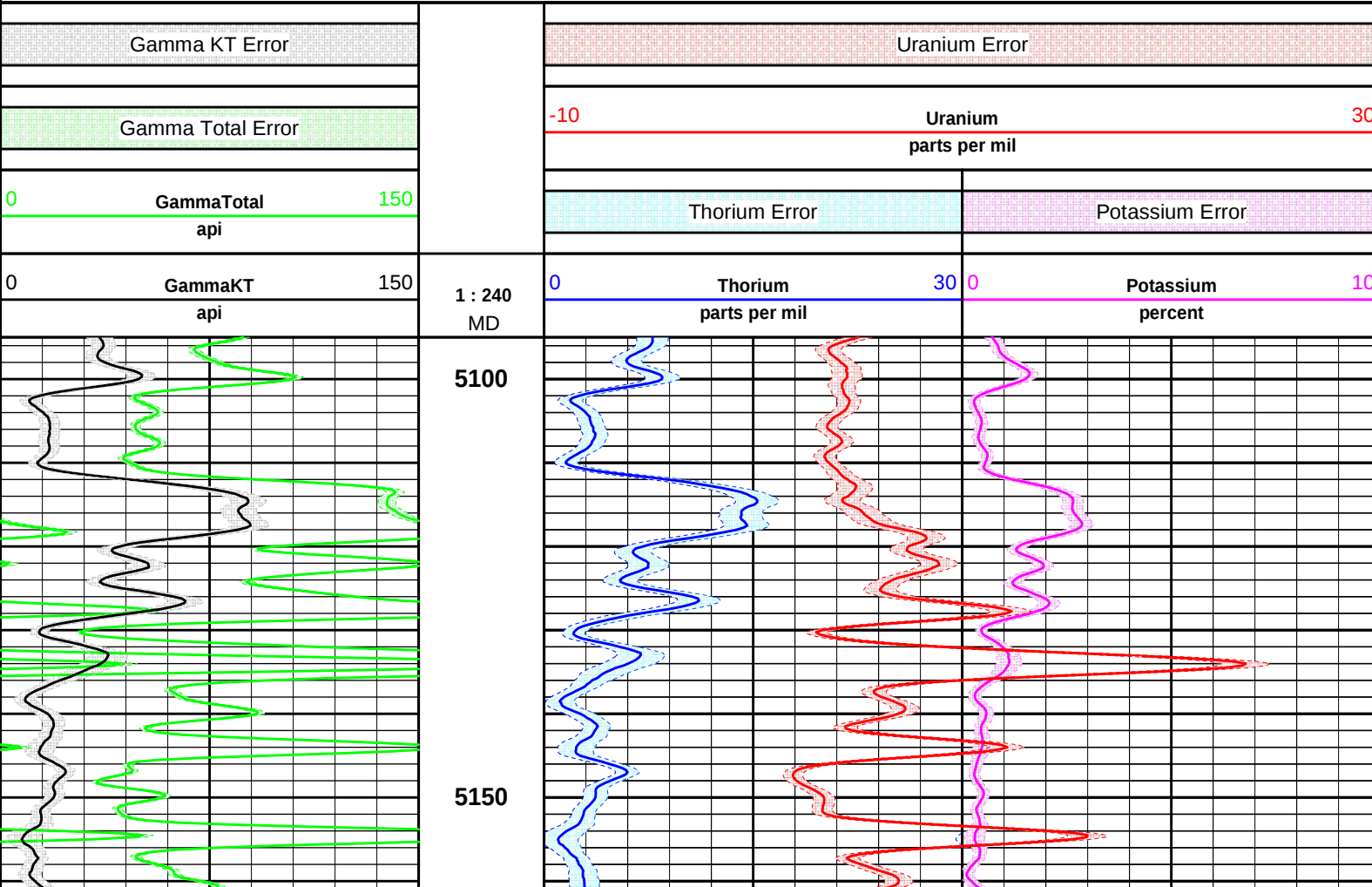
Service Ticket No.: 905001298						API No.: 15081221780000						PGM Version: WL INSITE R5.6.0 (Build 2)									
CHANGE IN MUD TYPE OR ADDITIONAL SAMPLE												RESISTIVITY SCALE CHANGES									
Date		Sample No.										Type Log		Depth		Scale Up Hole		Scale Down Hole			
Depth-Driller																					
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		ACRT		N/A		1.5" S.O.		N/A	
Rmc @ Meas. Temp.				@				@						I-12109517							
Source Rmf		Rmc										S-12109515									
Rm @ BHT				@				@													
Rmf @ BHT				@				@													
Rmc @ BHT				@				@													
EQUIPMENT DATA																					
GAMMA				ACOUSTIC				DENSITY				NEUTRON									
Run No.		ONE		Run No.		ONE		Run No.		ONE		Run No.		ONE							
Serial No.		11013114		Serial No.		10747686		Serial No.		12153520		Serial No.		10993115							
Model No.		GTET		Model No.		BSAT		Model No.		SDLT		Model No.		DSNT							
Diameter		3.625"		No. of Cent.		2		Diameter		5.5"		Diameter		3.625"							
Detector Model No.		T-102		Spacing		EVEN		Log Type		GAM-GAM		Log Type		NEU-NEU							
Type		SCINT						Source Type		CS137		Source Type		AM241BE							
Length		8"		LSA [Y/N]				Serial No.		5471GW		Serial No.		DSN-424							
Distance to Source		N/A		FWDA [Y/N]				Strength		1.78 Ci		Strength		15.0 Ci							
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	TD	CSG	REC	0	150	30	-10	47.6 uSec/ft	30	-10	2.71 gr/cc	30	-10	LIME							

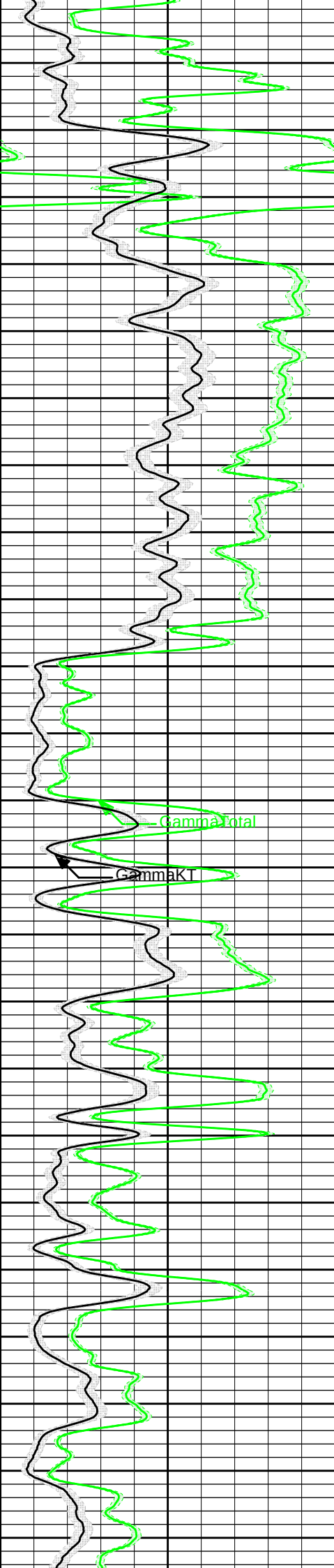
[illegible]

HALLIBURTON

Plot Time: 24-Jul-18 13:24:05
Plot Range: 5095 ft to 5502.5 ft
Data: WELCH-BELL_1\Well Based\CSNG-GEM\
Plot File: \\CSNG\CSNG-FS - Primary 1_240

MAIN SECTION





5200

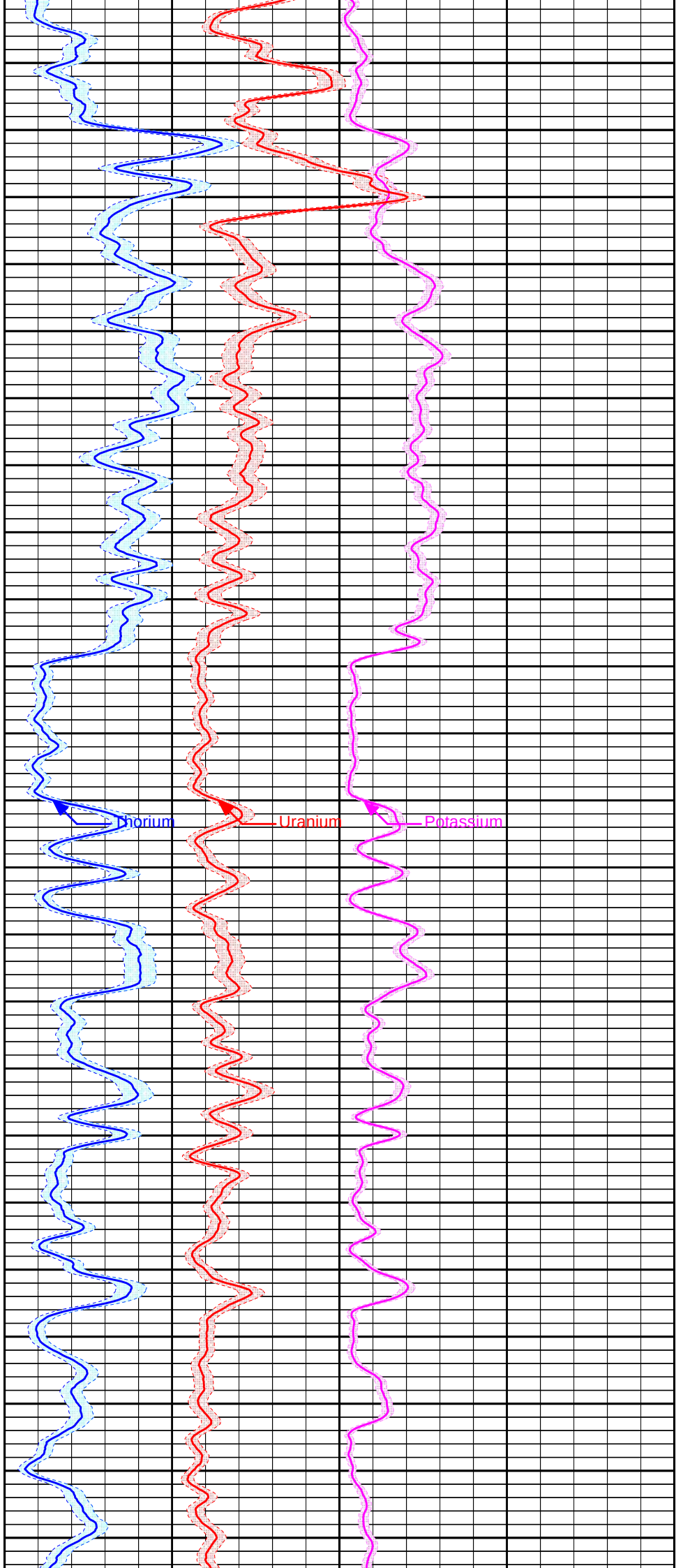
5250

5300

5350

GammaTotal

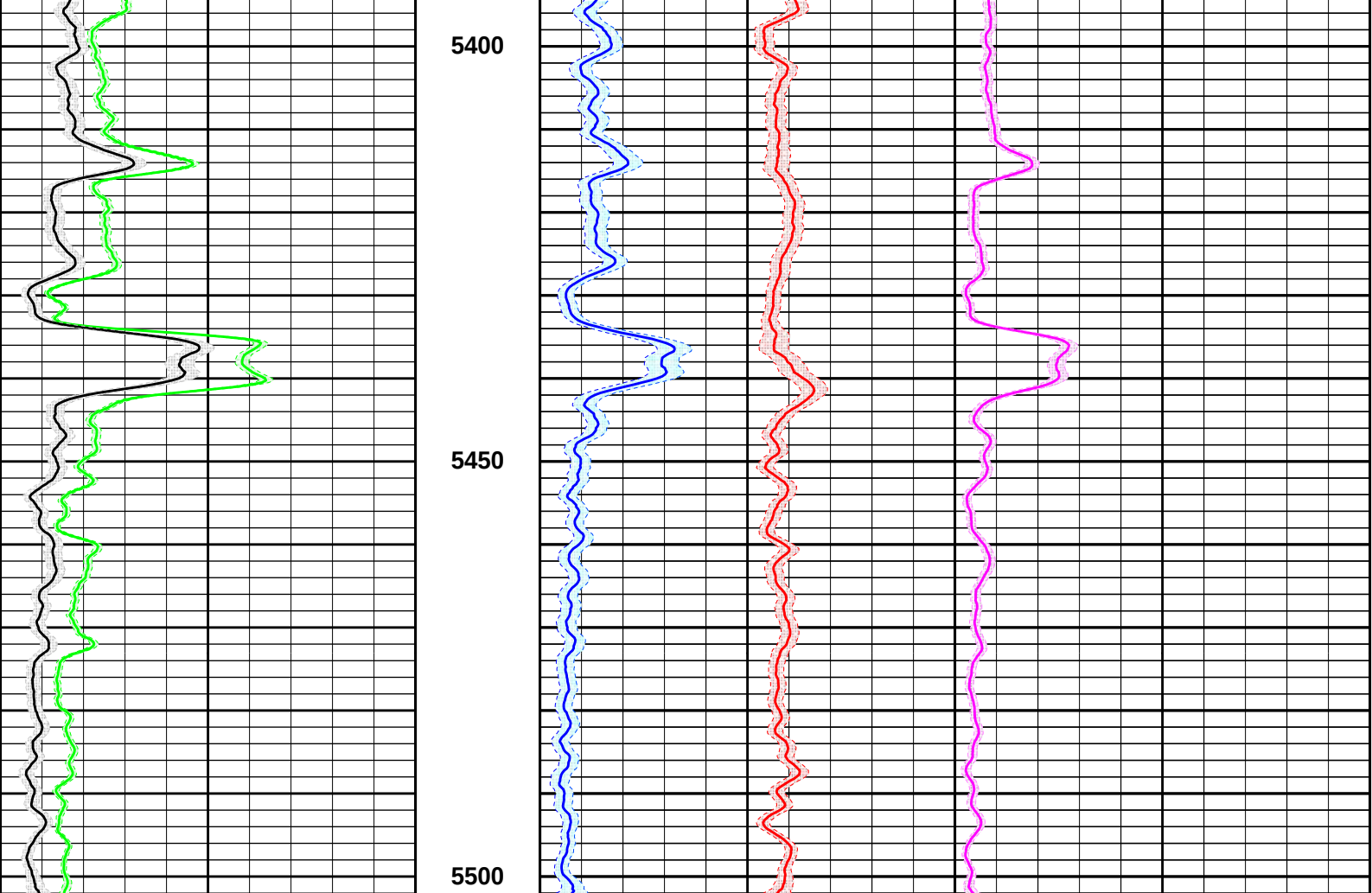
GammaK1



Thorium

Uranium

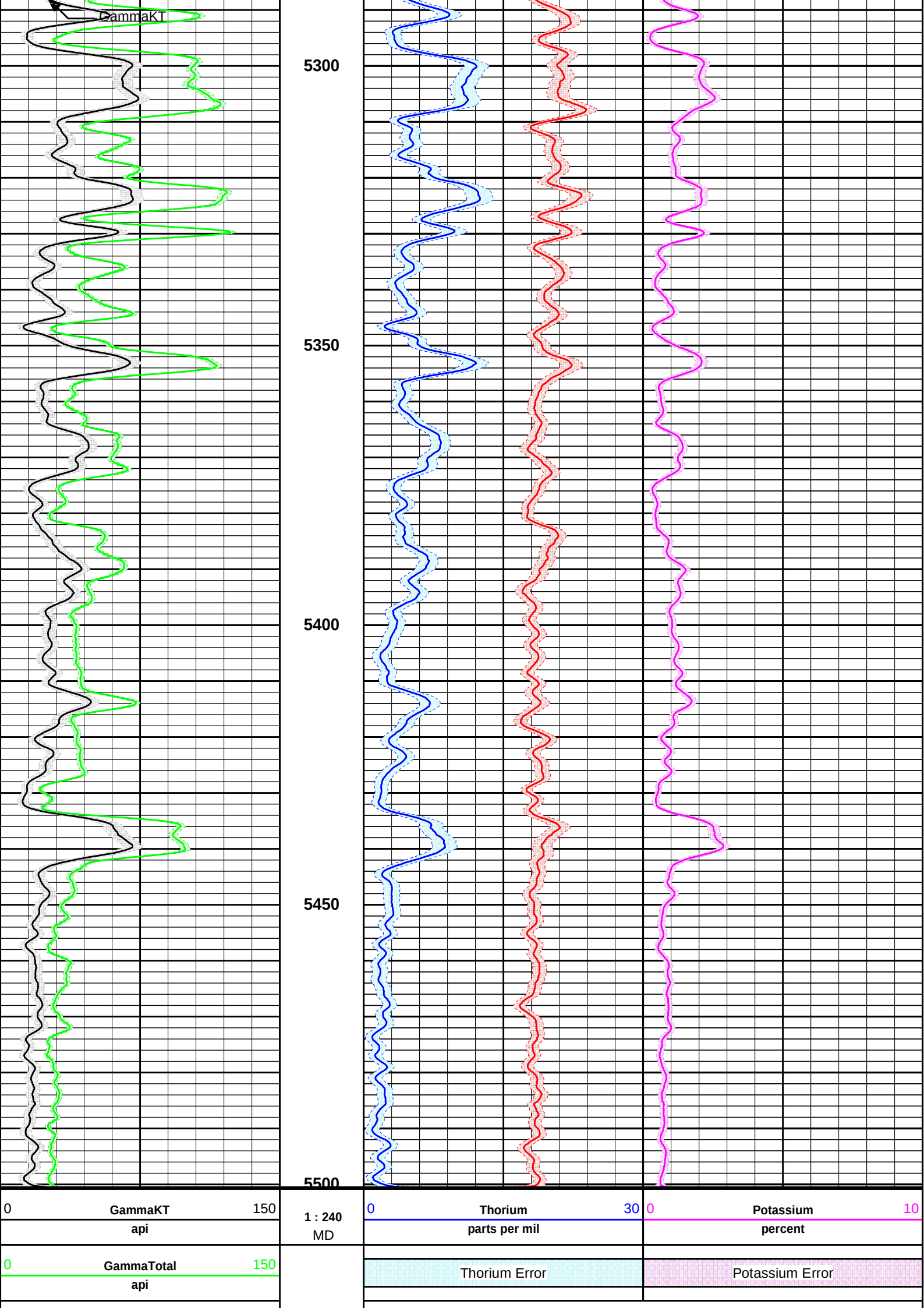
Potassium



0	GammaKT	150	1 : 240 MD	0	Thorium	30	0	Potassium	10
	api				parts per mil			percent	
0	GammaTotal	150			Thorium Error			Potassium Error	
	api								
	Gamma Total Error			-10	Uranium	30			
	Gamma KT Error				parts per mil				
					Uranium Error				

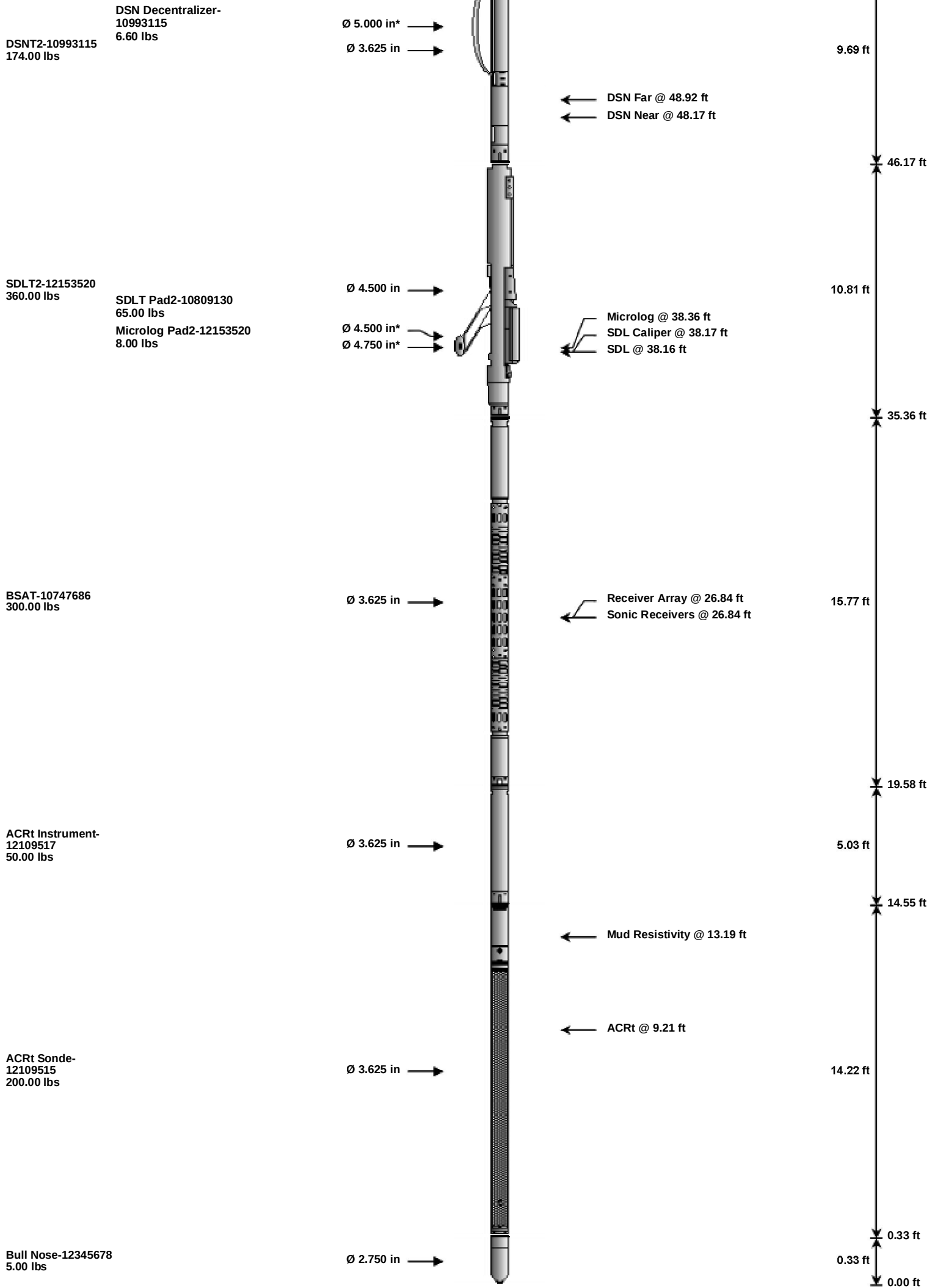
HALLIBURTON		Plot Time: 24-Jul-18 13:24:07 Plot Range: 5095 ft to 5502.5 ft Data: WELCH-BELL_1\Well Based\CSNG-GEM\ Plot File: \\CSNG\CSNG-FS - Primary 1_240
MAIN SECTION		
HALLIBURTON		Plot Time: 24-Jul-18 13:24:08 Plot Range: 5095 ft to 5500.5 ft Data: WELCH-BELL_1\Well Based\REPEAT\ Plot File: \\CSNG\CSNG-FS - Primary 1_240

Gamma KT Error		1 : 240 MD	Uranium Error		
			-10		



Gamma Total Error		-10	Uranium	30
			parts per mil	
Gamma KT Error			Uranium Error	
HALLIBURTON Plot Time: 24-Jul-18 13:24:10 Plot Range: 5095 ft to 5500.5 ft Data: WELCH-BELL_1\Well Based\REPEAT\ Plot File: \\CSNG\CSNG-FS - Primary 1_240				
HALLIBURTON				
TOOL STRING DIAGRAM REPORT				

Description	Overbody Description	O.D.	Diagram	Sensors @ Delays	Length	Accumulated Length
CH_HOS-00000025 37.50 lbs		Ø 2.750 in →		← Temperature @ 88.88 ft	3.03 ft	89.91 ft
XOHD-11572809 20.00 lbs		Ø 2.750 in → Ø 3.625 in →			0.95 ft	86.88 ft
SP Sub-11153357 60.00 lbs		Ø 3.625 in →		← SP @ 84.15 ft	3.74 ft	85.93 ft
				← Z-Accelerometer @ 81.74 ft		82.19 ft
GTET-11013114 165.00 lbs		Ø 3.625 in →			8.52 ft	
				← GammaRay @ 76.13 ft		73.67 ft
CSNG-10736164 114.00 lbs	UnivWearRing3.6-10965402 5.00 lbs	Ø 4.200 in* → Ø 3.625 in →		← CSNG @ 68.04 ft	8.17 ft	
						65.50 ft
GEMT Instrument-11519905 80.00 lbs		Ø 3.625 in →			3.37 ft	62.13 ft
GEMT Mandrel-11362710 270.00 lbs		Ø 5.000 in →		← BGO Crystal @ 58.02 ft	6.27 ft	
						55.86 ft



Mnemonic	Tool Name	Serial	Weight	Length	Accumulated	Max.Log.
			(lb)	(ft)	Length	Speed

		Number	(lbs)	(ft)	(ft)	(fpm)
CH_HOS	Hostile Cable Head with Load Cell	00000025	37.50	3.03	86.88	300.00
XOHD	Hostile to Dits Cross Over	11572809	20.00	0.95	85.93	300.00
SP	SP Sub	11153357	60.00	3.74	82.19	300.00
GTET	Gamma Telemetry Tool	11013114	165.00	8.52	73.67	60.00
CSNG	Compensated Spectral Natural Gamma	10736164	114.00	8.17	65.50	15.00
UWR3P6	Universal Wear Ring 3 5-8 inch	10965402	5.00	0.35 *	69.58	300.00
GEMT	Gamma, Elements and Minerals Tool-Instrument	11519905	80.00	3.37	62.13	15.00
GEMT	Gamma, Elements and Minerals Tool-Mandrel	11362710	270.00	6.27	55.86	15.00
DSNT	Dual Spaced Neutron	10993115	174.00	9.69	46.17	60.00
DCNT	DSN Decentralizer	10993115	6.60	5.13 *	49.50	300.00
SDLT	Spectral Density Tool	12153520	360.00	10.81	35.36	60.00
SDLP	Density Insite Pad	10809130	65.00	2.55 *	37.57	60.00
MICP	Microlog Pad	12153520	8.00	1.00 *	37.86	60.00
BSAT	Borehole Sonic Array Tool	10747686	300.00	15.77	19.58	60.00
ACRt	Array Compensated True Resistivity Instrument Section	12109517	50.00	5.03	14.55	120.00
ACRt	Array Compensated True Resistivity Sonde Section	12109515	200.00	14.22	0.33	120.00
BLNS	Bull Nose	12345678	5.00	0.33	0.00	300.00
Total			1,920.10	89.91		
* Not included in Total Length and Length Accumulation.						
Data: WELCH-BELL_110001 GTET-CSNG-GEM-DSN2-SDL2-BSAT-ACRT				IDLE Date: 24-Jul-18 11:02:05		

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	9.500	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	0.971	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	CSTR	Compressive Strength	1000.00	psia
	SHARED	ST	Surface Temperature	75.0	degF
	SHARED	TD	Total Well Depth	5570.00	ft
	SHARED	BHT	Bottom Hole Temperature	136.0	degF
	SHARED	SVTM	Navigation and Survey Master Tool	NONE	
	SHARED	AZTM	High Res Z Accelerometer Master Tool	GTET	
	SHARED	TEMM	CBM Temperature Master Tool	GTET	
	SHARED	SOCI	Source of Casing Information	Parameters	
	SHARED	MSAL	Water-base mud filtrate salinity	0.00	ppm
	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 /	PWA	Resistivity of Formation Water	0.05	ohmm

	CrossPlot	RWA	Resistivity of Formation Water	0.05	0.01mm
	Rwa / CrossPlot	ADP	Use Air Porosity to calculate CrossplotPhi	No	
	Rwa / CrossPlot	BHSM	Borehole Size Source Tool	SDLT2	
	Rwa / CrossPlot	ROIN	Input for RO Calculation	Rwa	
	GTET	GROK	Process Gamma Ray?	Yes	
	GTET	GEOK	Process Gamma Ray EVR?	No	
	GTET	TPOS	Tool Position for Gamma Ray Tools.	Eccentered	
	GTET	BHSM	Borehole Size Source Tool	SDLT2	
	CSNG	CGOK	Process CSNG Data?	Yes	
	CSNG	CENT	Is Tool Centralized?	No	
	CSNG	GBOK	Gamma Enviromental Corrections?	Yes	
	CSNG	BARF	Barite Correction Factor	1.00	
	CSNG	ORDG	Use Fixed Gain	No	
	CSNG	ORDO	Use Fixed Offset	No	
	CSNG	ORDR	Use Fixed Resolution Degradation Factor	No	
	CSNG	BHSM	Borehole Size Source Tool	SDLT2	
	GEMT Mandrel	GMOK	Compute GEMT Results?	Yes	
	GEMT Mandrel	FTAL	Fit Chemical Element Al	Yes	
	GEMT Mandrel	FTBA	Fit Chemical Element Ba	No	
	GEMT Mandrel	FITC	Fit Chemical Element C	Yes	
	GEMT Mandrel	FTCA	Fit Chemical Element Ca	Yes	
	GEMT Mandrel	FTCL	Fit Chemical Element Cl	Yes	
	GEMT Mandrel	FTFE	Fit Chemical Element Fe	Yes	
	GEMT Mandrel	FTGD	Fit Chemical Element Gd	Yes	
	GEMT Mandrel	FITH	Fit Chemical Element H	Yes	
	GEMT Mandrel	FTK	Fit Chemical Element K	Yes	
	GEMT Mandrel	FTMG	Fit Chemical Element Mg	Yes	
	GEMT Mandrel	FTMN	Fit Chemical Element Mn	Yes	
	GEMT Mandrel	FTNA	Fit Chemical Element Na	No	
	GEMT Mandrel	FITO	Fit Chemical Element O	Yes	
	GEMT Mandrel	FTS	Fit Chemical Element S	Yes	
	GEMT Mandrel	FTSI	Fit Chemical Element Si	Yes	
	GEMT Mandrel	FTTI	Fit Chemical Element Ti	Yes	
	GEMT Mandrel	KFIT	Potassium constraint flag (No = don't fit,Yes = fit)	Yes	
	GEMT Mandrel	UFDF	Use Fix Resolution Degradation Factor	No	
	GEMT Mandrel	EBCA	Apply estimated Ca bias correction	No	
	GEMT Mandrel	EBSU	Apply estimated Su bias correction	No	
	GEMT Mandrel	BHSM	Borehole Size Source Tool	SDLT2	
	DSNT2	DNOK	Process DSN?	Yes	
	DSNT2	DEOK	Process DSN EVR?	No	
	DSNT2	NLIT	Neutron Lithology	Limestone	
	DSNT2	DNSO	DSN Standoff - 0.25 in (6.35 mm) Recommended	0.250	in
	DSNT2	DNTT	Temperature Correction Type	None	
	DSNT2	DPRS	DSN Pressure Correction Type	None	
	DSNT2	SHCO	View More Correction Options	No	
	DSNT2	UTVD	Use TVD for Gradient Corrections?	No	
	DSNT2	LHWT	Logging Horizontal Water Tank?	No	
	DSNT2	UCLA	Classic Neutron Parameter utilized?	No	
	DSNT2	BHSM	Borehole Size Source Tool	SDLT2	
	SDLT2	CLOK	Process Caliper Outputs?	Yes	
	Microlog Pad2	MLOK	Process MicroLog Outputs?	Yes	
	SDLT Pad2	DNOK	Process Density?	Yes	
	SDLT Pad2	DNOK	Process Density EVR?	No	
	SDLT Pad2	CB	Logging Calibration Blocks?	No	
	SDLT Pad2	SPVT	SDLT Pad Temperature Valid?	Yes	
	SDLT Pad2	DTWN	Disable temperature warning	No	
	SDLT Pad2	DMA	Formation Density Matrix	2.710	g/cc

	SDLT Pad2	DLE	Formation Density Fluid	1.000	g/cc
	SDLT Pad2	BHSM	Borehole Size Source Tool	SDLT2	
	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 Pore Fluid	189.00	uspf
	BSAT	DTMT	Delta -T Matrix Type	Limestone 47.6	
	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 Up	
	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	RMAX	Maximum Resistivity for MAP	200.00	ohmm
	ACRt Sonde	THQY	Threshold Quality	0.50	
	ACRt Sonde	MRFX	Fixed mud resistivity	2000	ohmm
	ACRt Sonde	BHSM	Borehole Size Source Tool	SDLT2	
	ACRt Sonde	MBFL	Apply Corkscrew Effect?	No	
BOTTOM					
Data: WELCH-BELL_110001 GTET-CSNG-GEM-DSN2-SDL2-BSAT-ACRTIDLE					
Date: 24-Jul-18 11:59:47					



CALIBRATION REPORT

NATURAL GAMMA RAY TOOL SHOP CALIBRATION

Tool Name: GTET - 11013114

Reference Calibration Date: 20-May-18 14:50:21

Engineer: JORGE ORLANDO PEREZ

Calibration Date: 05-Jun-18 11:57:37

Software Version: WL INSITE R5.6.0 (Build 2)

Calibration Version: 1

Calibrator Source S/N: TB-146

Calibrator API Reference:225.00 api

Equivalent Calibrator API Reference:228.9 api

Measurement	Measured	Calibrated	Units
Background	35.2	35.7	api
Background + Calibrator	260.9	264.7	api
Calibrator	225.7	228.9	api

NATURAL GAMMA RAY TOOL FIELD CALIBRATION

Tool Name: GTET - 11013114

Reference Calibration Date: 05-Jun-18 11:57:37

Engineer: JORGE ORLANDO PEREZ

Calibration Date: 23-Jul-18 09:29:06

Software Version: WL INSITE R5.6.0 (Build 2)

Calibration Version: 1

Calibrator Source S/N: TB-146

Calibrator API Reference:225.00 api

Equivalent Calibrator API Reference:228.9 api

Field Verification	Shop	Field	Units
Background	35.7	24.5	api
Background + Calibrator	264.7	257.9	api
Calibrator	228.9	233.4	api

Shop	Field	Difference	Tolerance
228.9	233.4	-4.5	+/- 9.00

CSNG-FS SHOP CALIBRATION

Tool Name: CSNG 10736164

Reference Calibration Date: 18 Nov 17 12:13:04

Tool Name:	CSNG - 10736164	Reference Calibration Date:	18-Nov-17 12:13:04
Engineer:	JORGE ORLANDO PEREZ	Calibration Date:	15-Mar-18 14:44:31
Software Version:	WL INSITE R5.0.5 (Build 8)	Calibration Version:	1
Source SN:	TB-146		

TITANIUM CASE	Measured	Calibrated	Units
60 KEV Peak Channel #	48.0	48.0	Channel #
239 KEV Peak Channel #	22.8	23.1	Channel #
583 KEV Peak Channel #	51.6	51.9	Channel #
2614 KEV Peak Channel #	212.5	213.8	Channel #
Calibrate Temperature	74.2	59.0	degF

Pass/Fail Summary	Centroid
239 KEV Peak	Passed
583 KEV Peak	Passed
2614 KEV Peak	Passed

Blanket Reference Value: 225.00 API
Calibrator Value: 255.5 API

	Counts	Units	Measured	Calibrated	Units
Thorium Blanket	1375.4	CPS	277.1	274.3	API
Background	94.0	CPS	21.5	18.8	API

Gamma Ray Gain: 1.00
Expected Gain Range: 0.85 - 1.15
Gamma Gain Check: Passed

CSNG-FS FIELD CALIBRATION			
Tool Name:	CSNG - 10736164	Reference Calibration Date:	15-Mar-18 14:44:31
Engineer:	JORGE ORLANDO PEREZ	Calibration Date:	15-Mar-18 14:57:55
Software Version:	WL INSITE R5.0.5 (Build 8)	Calibration Version:	1
Source SN:			

TITANIUM CASE	Shop	Field	Units
60 KEV Peak Channel #	48.0	48.0	Channel #
239 KEV Peak Channel #	23.1	23.1	Channel #
583 KEV Peak Channel #	51.9	51.8	Channel #
2614 KEV Peak Channel #	213.8	213.8	Channel #
Calibrate Temperature	59.0	61.4	degF

Pass/Fail Summary	Centroid
239 KEV Peak	Passed
583 KEV Peak	Passed
2614 KEV Peak	Passed

Blanket Reference Value: 225.00 API
Calibrator Value: 255.5 API

	Counts	Units	Measured	Calibrated	Units
Thorium Blanket	1380.9	CPS	274.3	274.4	API
Background	94.7	CPS	18.8	18.8	API

Gamma Ray Gain: 1.00
Expected Gain Range: 0.85 - 1.15

CALIBRATION SUMMARY						
Sensor	Shop	Field	Post	Difference	Tolerance	Units
GTET-11013114						
Gamma Ray Calibrator	228.9	233.4	-----	-4.5	+/- 9.00	api
CSNG-10736164						
60 KEV Peak Channel #	48.0	48.0	-----	0.0	-----	Channel #
239 KEV Peak Channel #	23.1	23.1	-----	0.0	-----	Channel #
583 KEV Peak Channel #	51.9	51.8	-----	0.1	-----	Channel #
2614 KEV Peak Channel #	213.8	213.8	-----	0.0	-----	Channel #
Data: WELCH-BELL_110001 GTET-CSNG-GEM-DSN2-SDL2-BSAT-ACRTIDLE					Date: 24-Jul-18 12:00:53	

HALLIBURTON

INPUTS, DELAYS AND FILTERS TABLE

Mnemonic	Input Description	Delay (ft)	Filter Type	Filter Length (ft)
Depth Panel				
TENS	Tension	0.00	NO	
Rwa / CrossPlot				
TPUL	Tension Pull	89.91	NO	
BS	Bit Size	89.91	NO	
HDIA	Measured Hole Diameter	0.00	NO	
CH_HOS				
DHTN	DownholeTension	0.00	BLK	0.000
SP Sub				
PLTC	Plot Control Mask	84.15	NO	
SP	Spontaneous Potential	84.15	BLK	1.250
SPR	Raw Spontaneous Potential	84.15	NO	
SPO	Spontaneous Potential Offset	84.15	NO	
GTET				
TPUL	Tension Pull	76.13	NO	
GR	Natural Gamma Ray API	76.13	TRI	1.750
GRU	Unfiltered Natural Gamma Ray API	76.13	NO	
EGR	Natural Gamma Ray API with Enhanced Vertical Resolution	76.13	W	1.416 , 0.750
HDIA	Measured Hole Diameter	0.00	NO	
ACCZ	Accelerometer Z	0.00	BLK	0.083
DEVI	Inclination	0.00	NO	
CSNG				
TPUL	Tension Pull	68.04	NO	
STAT	Status	68.04	NO	
FRMC	Tool Frame Count	68.04	BLK	0.250
TFRM	Total Frames	68.04	NO	
LSPD	Line Speed	68.04	BLK	0.250
CTIM	Accumulation time for sample	68.04	BLK	0.250
NOIS	Spectral Noise	68.04	BLK	0.250
STAB	Stabilizer Voltage in mv	68.04	BLK	0.250
STBP	Stabilizer 60 KEV Peak	68.04	BLK	0.250
AMER	Americium	68.04	BLK	0.250
FTMP	Flask PCB Temperature	68.04	BLK	0.250
SPEL	Low Energy Spectrum	68.04	BLK	0.250
SPEH	High Energy Spectrum	68.04	BLK	0.250

SSP	Stabilization Energy Spectrum	68.04	BLK	0.250
HDIA	Measured Hole Diameter	0.00	NO	
CSPC	CSNG Lo Hi Spectrum Data	68.04	NO	
GEMT Mandrel				
TPUL	Tension Pull	58.02	NO	
FRMC	Tool Frame Count	58.02	NO	
TFRM	Total Frames	58.02	NO	
LSPD	Line Speed	58.02	NO	
ATIM	Accumulation time for sample	58.02	NO	
CTIM	Accumulation time for single frame	58.02	NO	
STAT	Status	58.02	NO	
PHMI	Photomultiplier Current	58.02	NO	
PHVT	Photomultiplier Voltage	58.02	NO	
FTMP	Flask PCB Temperature	58.02	NO	
GSP	GEMT Spectrum	58.02	NO	
HDIA	Measured Hole Diameter	0.00	NO	
DSNT2				
TPUL	Tension Pull	48.07	NO	
RNDS	Near Detector Telemetry Counts	48.17	BLK	1.417
RFDS	Far Detector Telemetry Counts	48.92	TRI	0.583
DNTT	DSN Tool Temperature	48.17	NO	
DSNS	DSN Tool Status	48.07	NO	
ERND	Near Detector Telemetry Counts EVR	48.17	BLK	0.000
ERFD	Far Detector Telemetry Counts EVR	48.92	BLK	0.000
ENTM	DSN Tool Temperature EVR	48.17	NO	
HDIA	Measured Hole Diameter	0.00	NO	
SDLT2				
TPUL	Tension Pull	38.17	NO	
PCAL	Pad Caliper	38.17	TRI	0.250
ACAL	Arm Caliper	38.17	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 Reference 12 KHz Real Signal	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	
HDIA	Measured Hole Diameter	0.00	NO	
Microlog Pad2				
TPUL	Tension Pull	38.36	NO	
MINV	Microlog Lateral	38.36	BLK	0.750
MNOR	Microlog Normal	38.36	BLK	0.750
SDLT Pad2				
TPUL	Tension Pull	38.16	NO	
NAB	Near Above	37.99	BLK	0.920
NHI	Near Cesium High	37.99	BLK	0.920
NLO	Near Cesium Low	37.99	BLK	0.920
NVA	Near Valley	37.99	BLK	0.920
NBA	Near Barite	37.99	BLK	0.920
NDE	Near Density	37.99	BLK	0.920
NPK	Near Peak	37.99	BLK	0.920
NLI	Near Lithology	37.99	BLK	0.920
NBAU	Near Barite Unfiltered	37.99	BLK	0.250
NLIU	Near Lithology Unfiltered	37.99	BLK	0.250
FAB	Far Above	38.34	BLK	0.250
FHI	Far Cesium High	38.34	BLK	0.250
FLO	Far Cesium Low	38.34	BLK	0.250
FVA	Far Valley	38.34	BLK	0.250

FBA	Far Barite	38.34	BLK	0.250
FDE	Far Density	38.34	BLK	0.250
FPK	Far Peak	38.34	BLK	0.250
FLI	Far Lithology	38.34	BLK	0.250
PTMP	Pad Temperature	38.17	BLK	0.920
NHV	Near Detector High Voltage	37.57	NO	
FHV	Far Detector High Voltage	37.57	NO	
ITMP	Instrument Temperature	37.57	NO	
DDHV	Detector High Voltage	37.57	NO	
HDIA	Measured Hole Diameter	0.00	NO	
Data: WELCH-BELL_110001 GTET-CSNG-GEM-DSN2-SDL2-BSAT-ACRTIDLE			Date: 24-Jul-18 12:00:03	

COMPANY	MERIT ENERGY COMPANY		
WELL	WELCH BELL 1		
FIELD	EUBANK		
COUNTY	HASKELL	STATE	KANSAS
HALLIBURTON		COMPENSATED SPECTRAL NATURAL GAMMA RAY LOG	