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**OTHER SERVICES1**  
 OS1: HRLA/MSS/HNGS/Cali  
 OS2: VSI  
 OS3:  
 OS4:  
 OS5:

**OTHER SERVICES2**  
 OS1:  
 OS2:  
 OS3:  
 OS4:  
 OS5:

**REMARKS: RUN NUMBER 1**  
 Hole drilled with RCB bottom hole assembly (BHA) at 9-7/8" BS  
 Bit dropped using Mechanical Bit Release (MBR) prior to logging.  
 Drilled TD was 1270.3mbrf.  
 Drill pipe set at 659.8mbrf and raised to 644.6m for main uplog.  
 Fluid type was Sepeolite mud weighted with Barite to a density of 10.5ppg  
 Depth recorded from drill floor; logs presented as-logged without depth corrections or shifts, as per client instructions.  
 All logs presented in wireline measured depth below rig floor (MDBRF).  
 Caliper opened during upward passes; closed inside pipe.  
 Hole size corrections made using caliper measurements for upward passes.  
 AHC used from TD then switched off to facilitate pipe entry.  
 10.5 lb/gal mud pumped in hole prior to logging.

**REMARKS: RUN NUMBER 2**

RUN 1		
LOGGED INTERVAL	START	STOP



RUN 2		
LOGGED INTERVAL	START	STOP

**EQUIPMENT DESCRIPTION**

**RUN 1 SURFACE EQUIPMENT**  
 GSR-U 6098  
 WITM (EDTS)-A 1

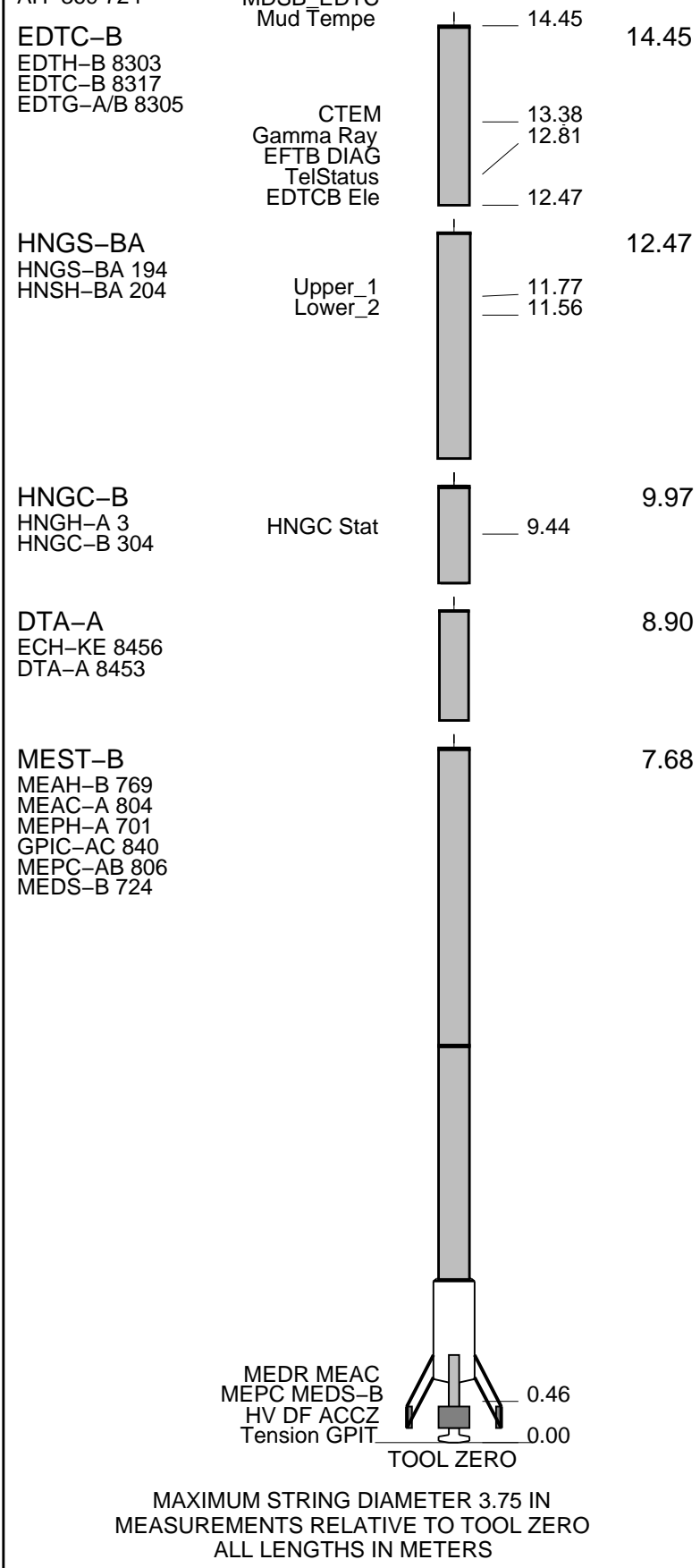
**RUN 2 SURFACE EQUIPMENT**

**RUN 1 DOWNHOLE EQUIPMENT**

LEH-QT LEH-QT 301		15.77
AH-369 AH-369 724		14.88

**RUN 2 DOWNHOLE EQUIPMENT**

MDSB EDTC



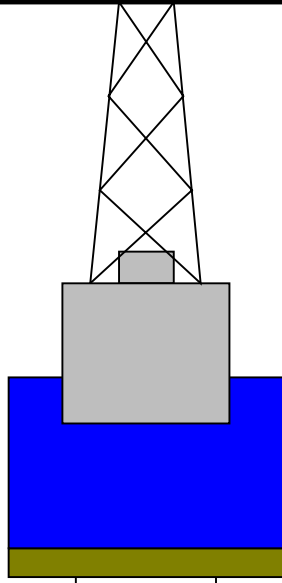
Production String	(in)	(M)	Well Schematic	(M)	(in)	Casing String
	OD	ID		MD	MD	

Kelly Bushing Elevation  
Derrick Floor Elevation

0  
0

Mean Sea Level

11



4.1



568.5 4.1

644.6 9.875

1270.3

Sea Floor

Open Hole

Total Depth

### Input DLIS Files

DEFAULT Flip\_FMS\_NGS\_030LUP PRODUCER 28-Jan-2018 07:10 764.6 M 544.1 M

### Output DLIS Files

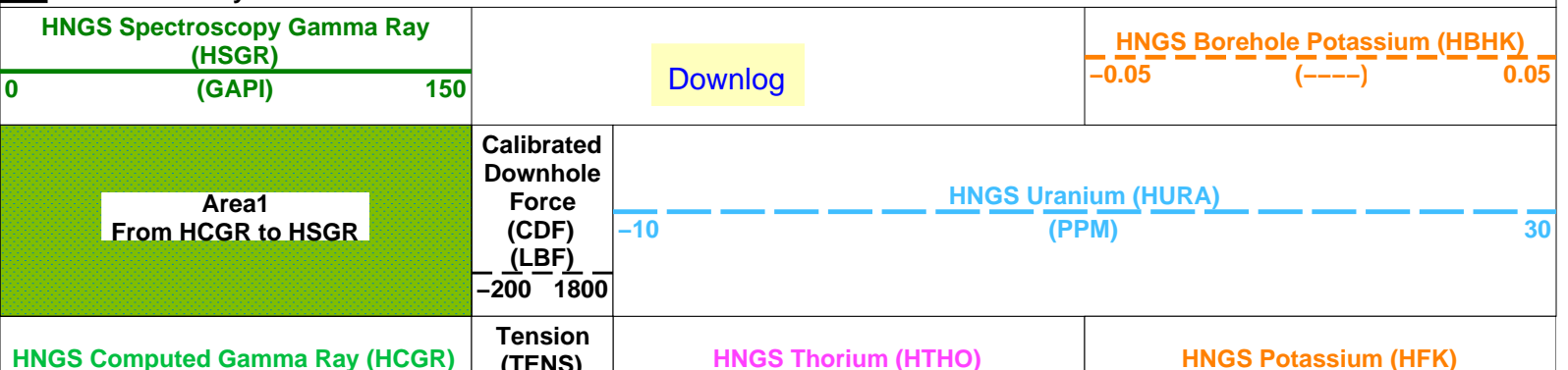
DEFAULT FMS\_NGS\_049PUP FN:64 PRODUCER 29-Jan-2018 04:36 764.4 M 544.1 M

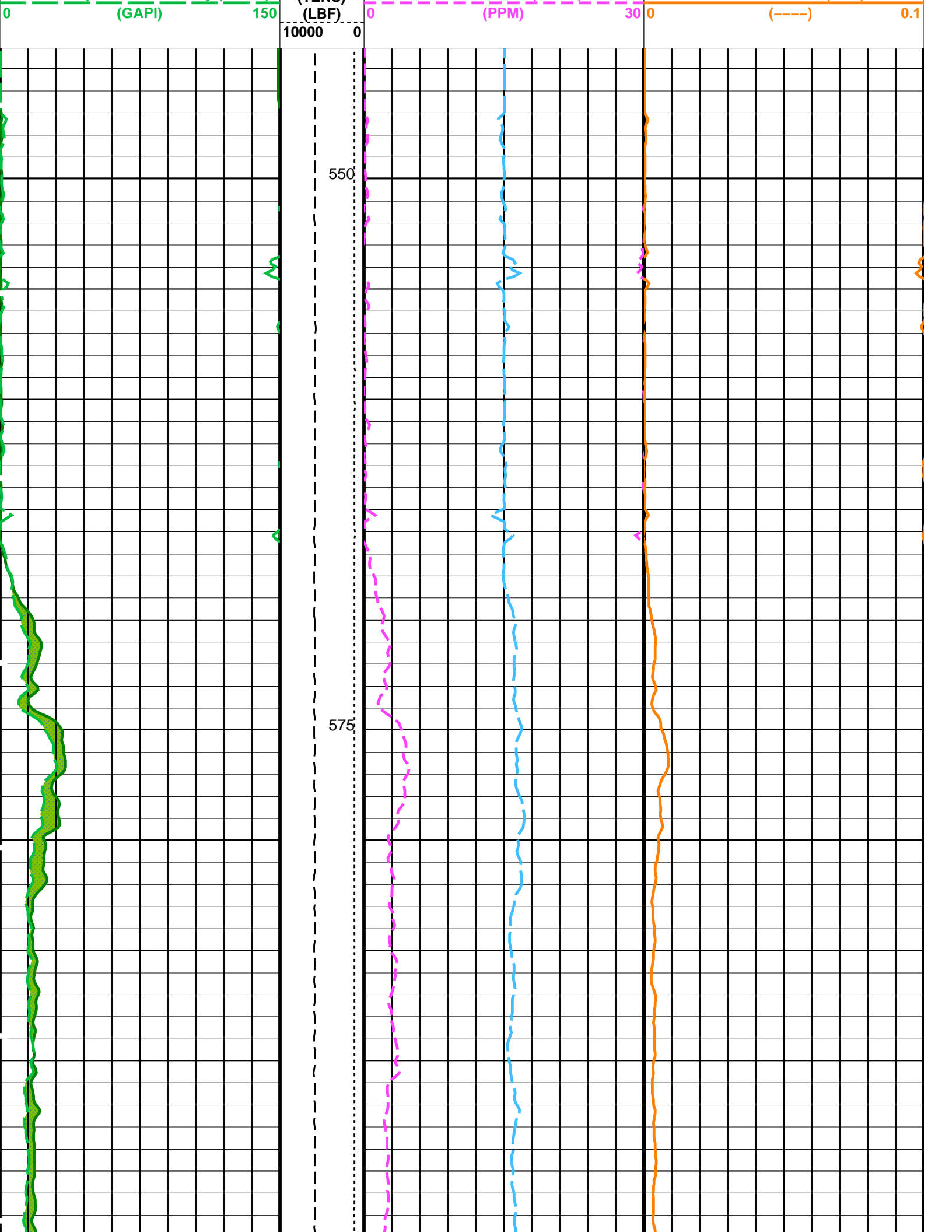
### OP System Version: 19C0-187

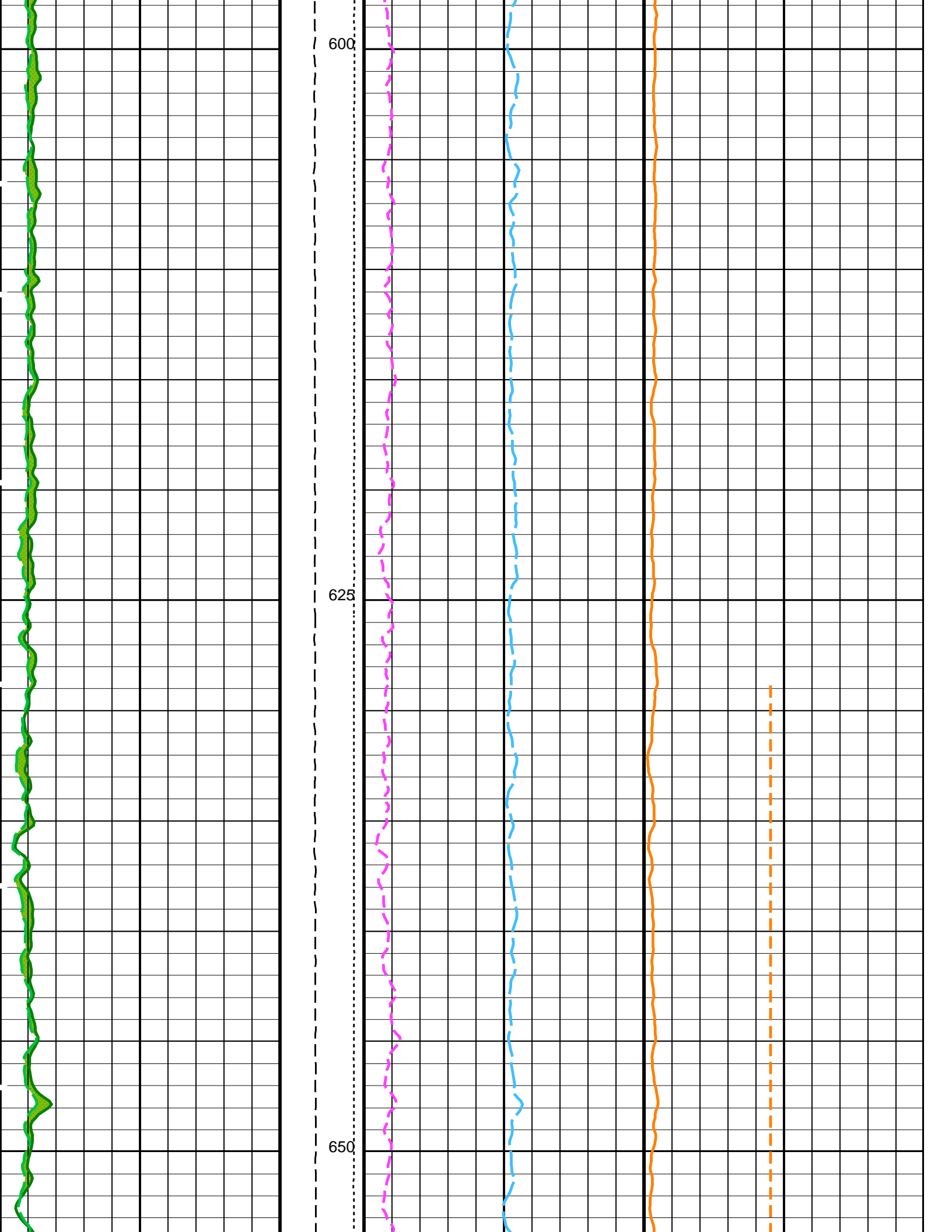
MEST-B 19C0-187 DTA-A 19C0-187  
 HNGC-B 19C0-187 HNGS-BA 19C0-187  
 EDTC-B SKK-5169-EDTCB

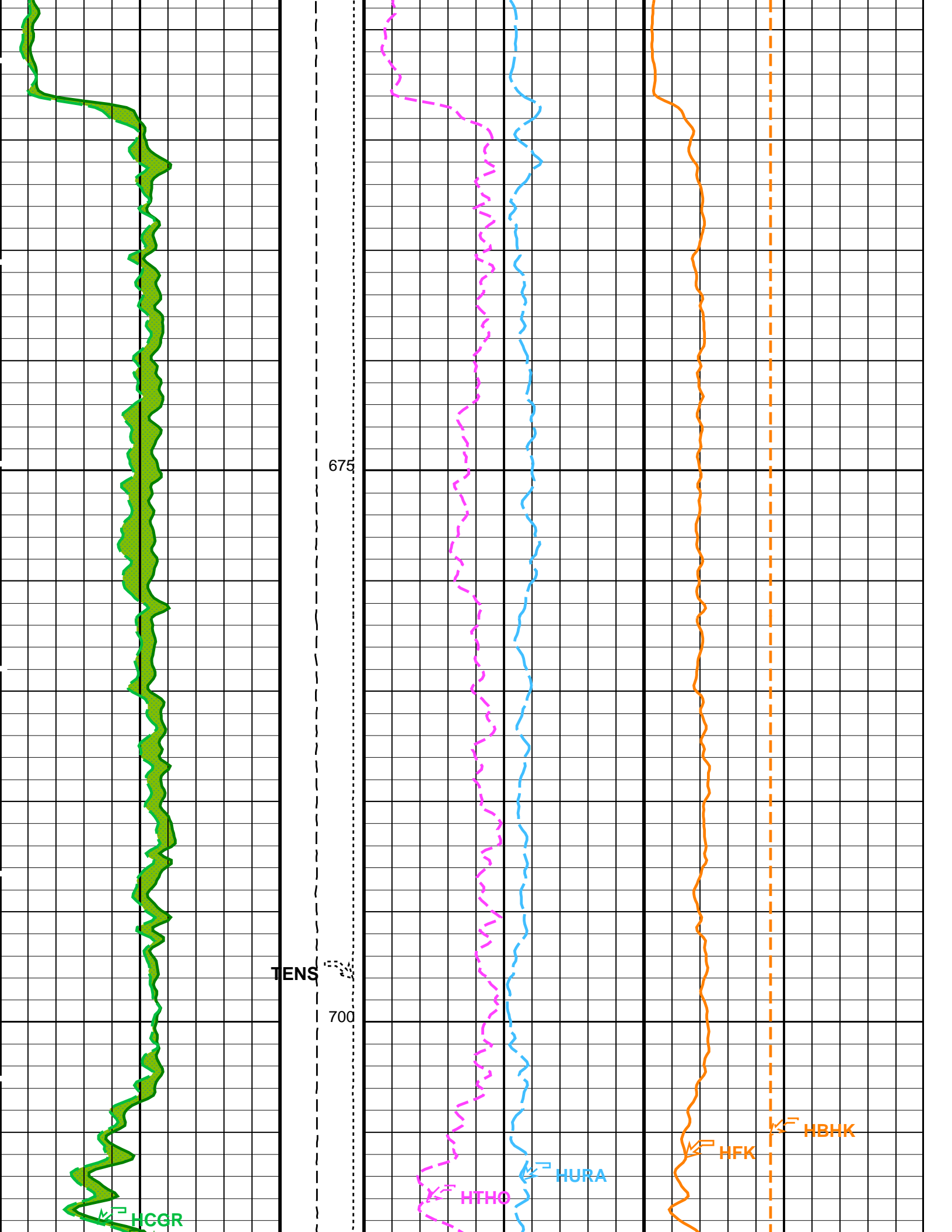
### PIP SUMMARY

Time Mark Every 60 S

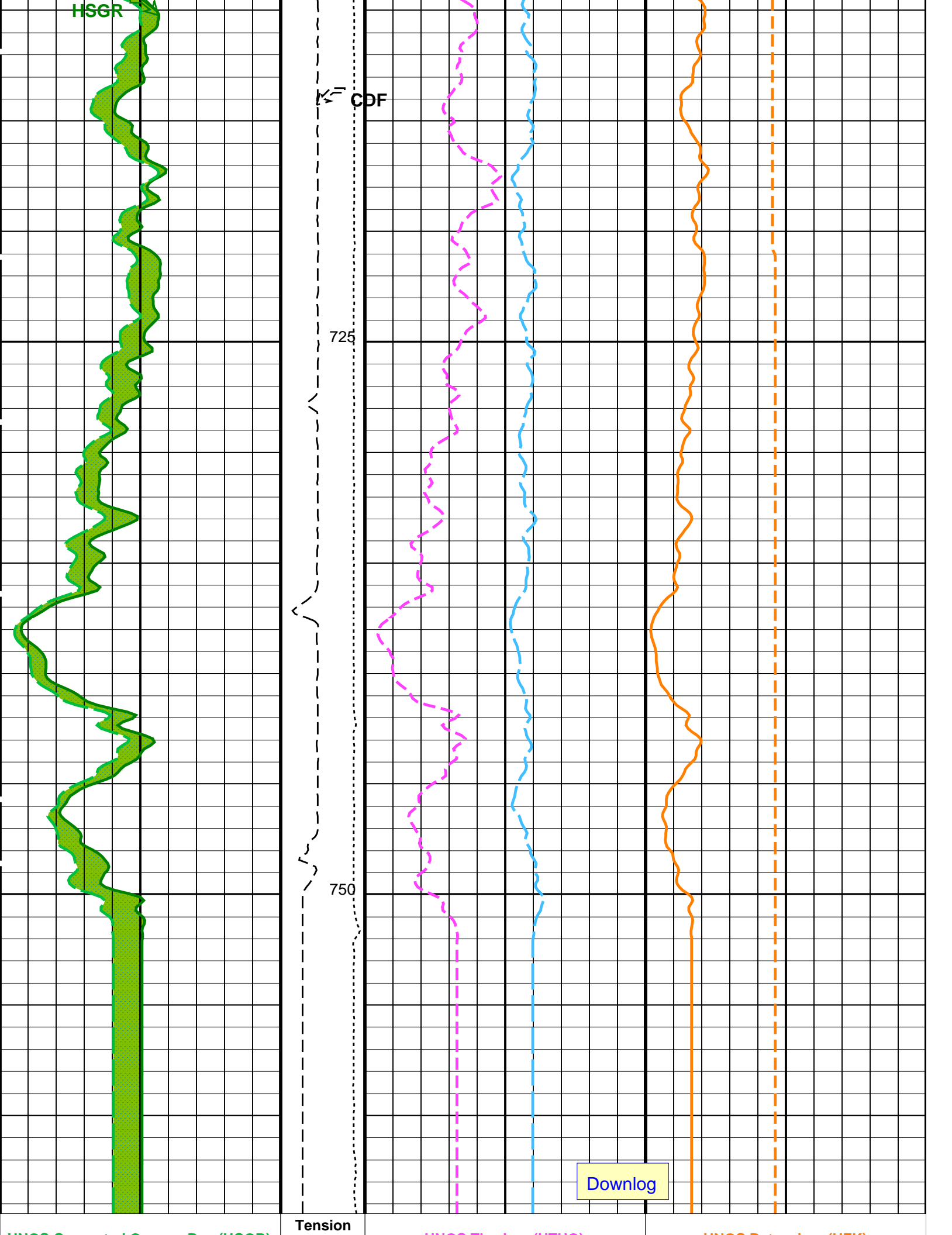












HSGR

CDF

725

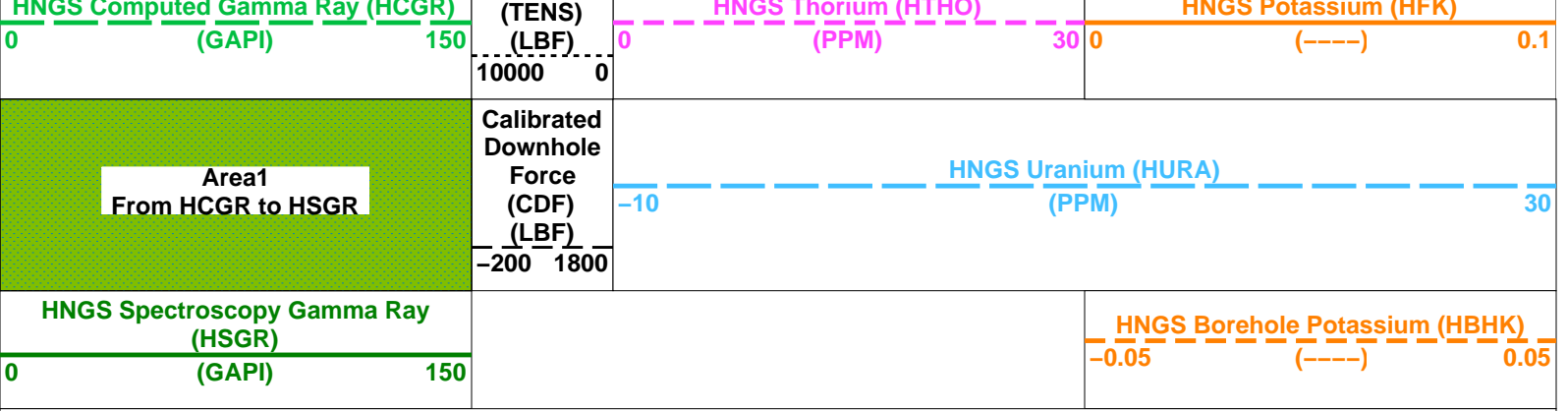
750

Downlog

Tension

UNSC... (MFC)

UNSC... (MFC)



PIP SUMMARY

Time Mark Every 60 S

Parameters

DLIS Name	Description	Value
HNGS-BA: Hostile Natural Gamma Ray Sonde		
BAR1	HNGS Detector 1 Barite Constant	1
BAR2	HNGS Detector 2 Barite Constant	1
BHK	HNGS Borehole Potassium Correction Concentration	0
BHS	Borehole Status	OPEN
CSD1	Inner Casing Outer Diameter	0 IN
CSD2	Outer Casing Outer Diameter	0 IN
CSW1	Inner Casing Weight	0 LB/F
CSW2	Outer Casing Weight	0 LB/F
DBCC	HNGS Barite Constant Correction Flag	NONE
GCSE	Generalized Caliper Selection	BS
H1P	HNGS Detector 1 Allow/Disallow In Processing	ALLOW
H2P	HNGS Detector 2 Allow/Disallow In Processing	ALLOW
HABK	HNGS Borehole Potassium Running Average	-0.00359858
HALF	HNGS Alpha Filter Length	60 IN
HCRB	HNGS Apply Borehole Potassium Correction	NONE
HMWM	Mud Weighting Material	BARI
HNPE	HNGS Processing Enable	YES
S1BI	HNGS Detector 1 Calibration Bismuth Count Rate	1.3 CPS
S2BI	HNGS Detector 2 Calibration Bismuth Count Rate	1.3 CPS
SGRC	HNGS Standard Gamma-Ray Correction Flag	YES
TPOS	Tool Position	ECCE
VBA1	HNGS Detector 1 Variable Barite Factor Running Average	1.01182
VBA2	HNGS Detector 2 Variable Barite Factor Running Average	1.01307
EDTC-B: Enhanced DTS Cartridge		
BHS	Borehole Status	OPEN
GCSE	Generalized Caliper Selection	BS
System and Miscellaneous		
BS	Bit Size	9.875 IN
DFD	Drilling Fluid Density	1.26 G/C3
DO	Depth Offset for Playback	0.0 M
PP	Playback Processing	OFF

Format: HNGSYields Vertical Scale: 1:200 Graphics File Created: 29-Jan-2018 04:36

OP System Version: 19C0-187

MEST-B	19C0-187	DTA-A	19C0-187
HNGC-B	19C0-187	HNGS-BA	19C0-187
EDTC-B	SKK-5169-EDTCB		

Input DLIS Files

DEFAULT	Flip_FMS_NGS_030LUP	PRODUCER	28-Jan-2018 07:10	764.6 M	544.1 M
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Output DLIS Files

DEFAULT	FMS_NGS_049PUP	FN:64	PRODUCER	29-Jan-2018 04:36
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Company: International Ocean Discovery Program Well: Expedition 374, Site U1522A

Output DLIS Files

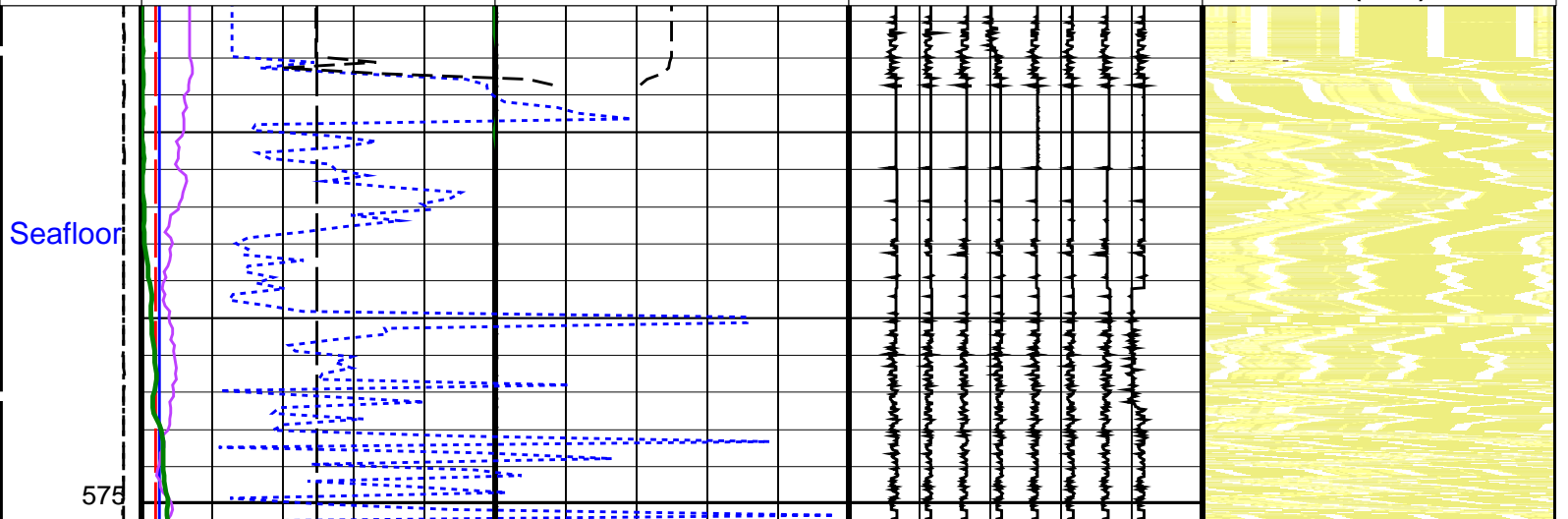
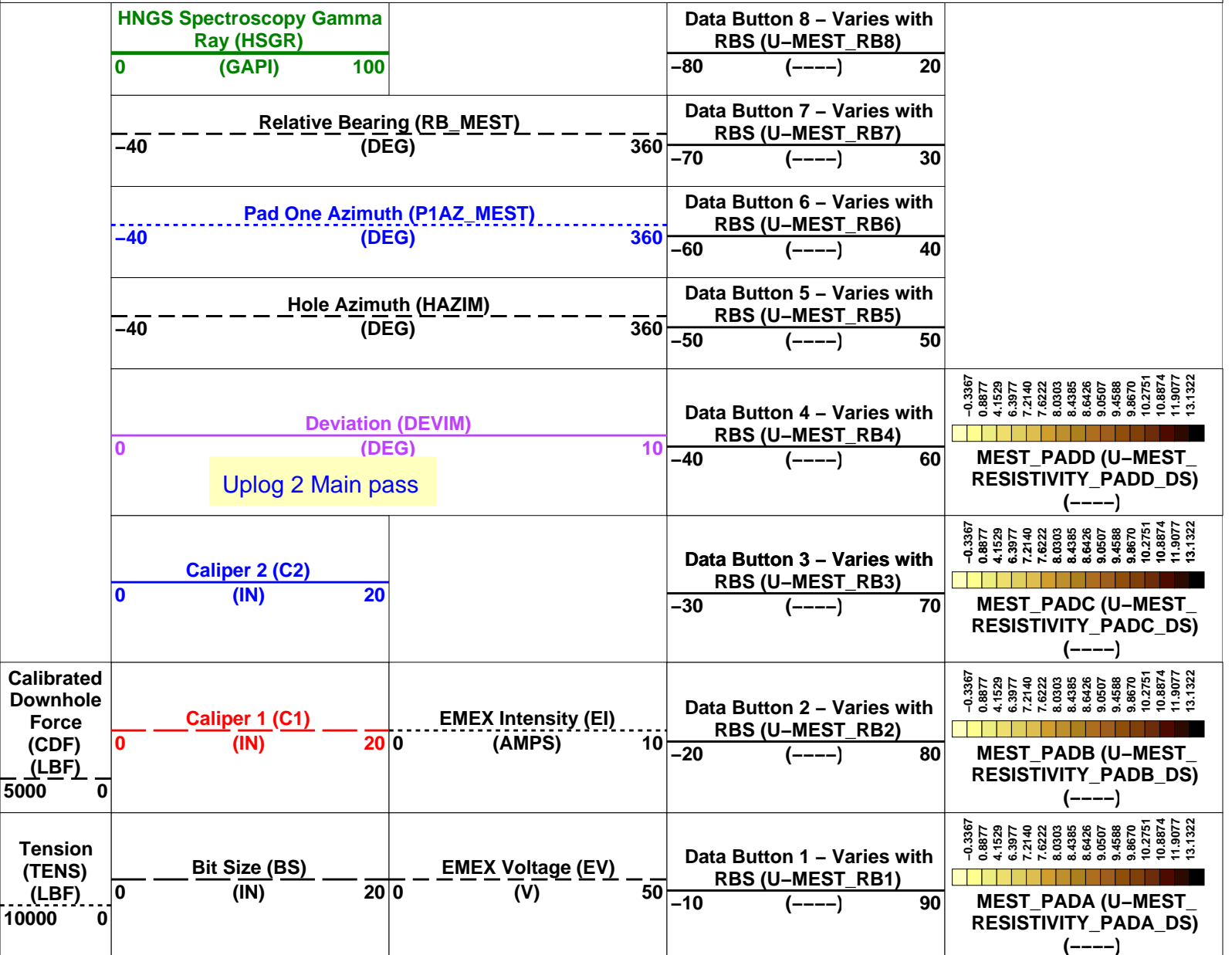
DEFAULT	FMS_NGS_030LUP	FN:64	PRODUCER	28-Jan-2018 06:44	764.6 M	544.1 M
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# OP System Version: 19C0-187

MEST-B	19C0-187	DTA-A	19C0-187
HNGC-B	19C0-187	HNGS-BA	19C0-187
EDTC-B	SKK-5169-EDTCB		

## PIP SUMMARY

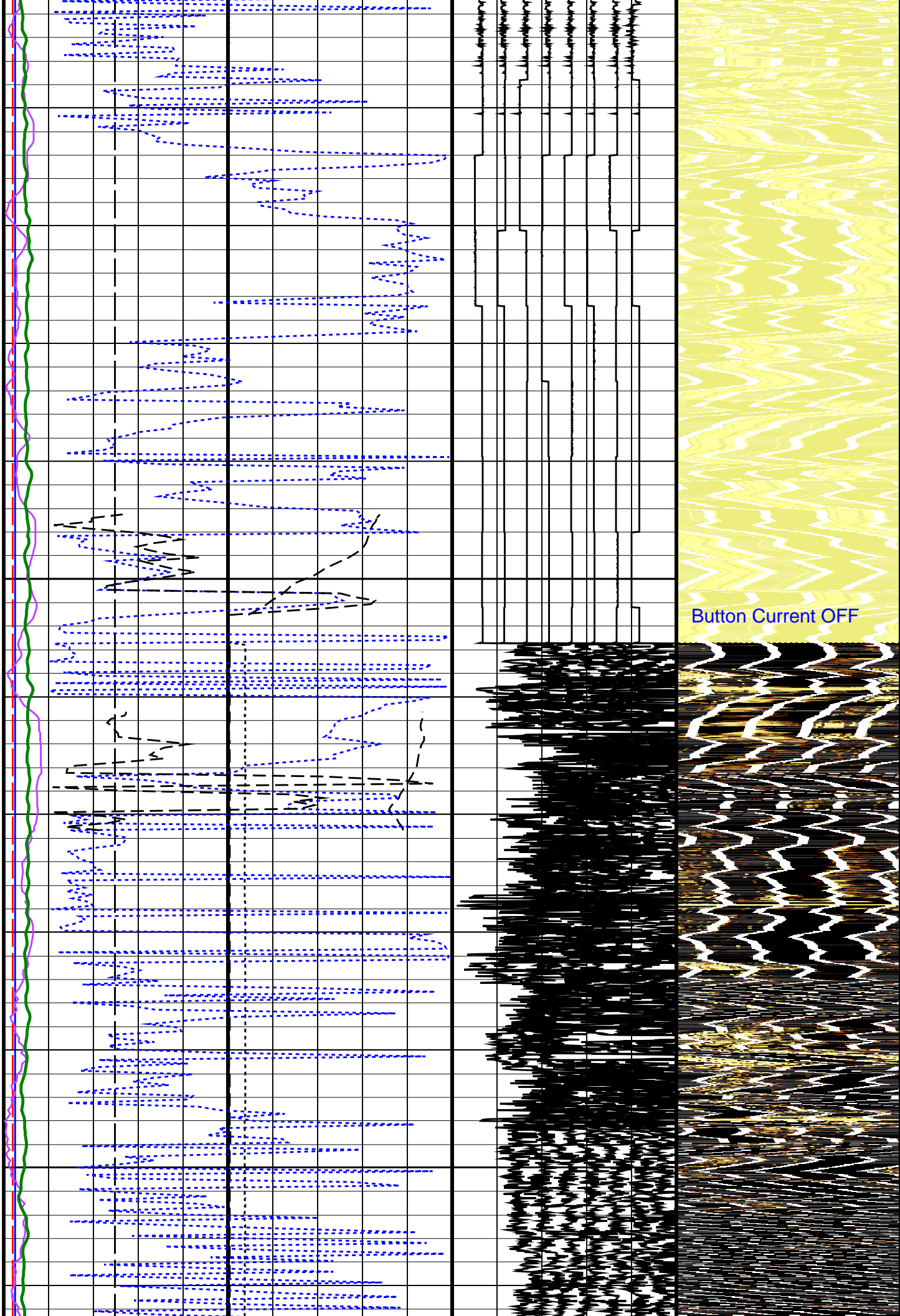
Time Mark Every 60 S

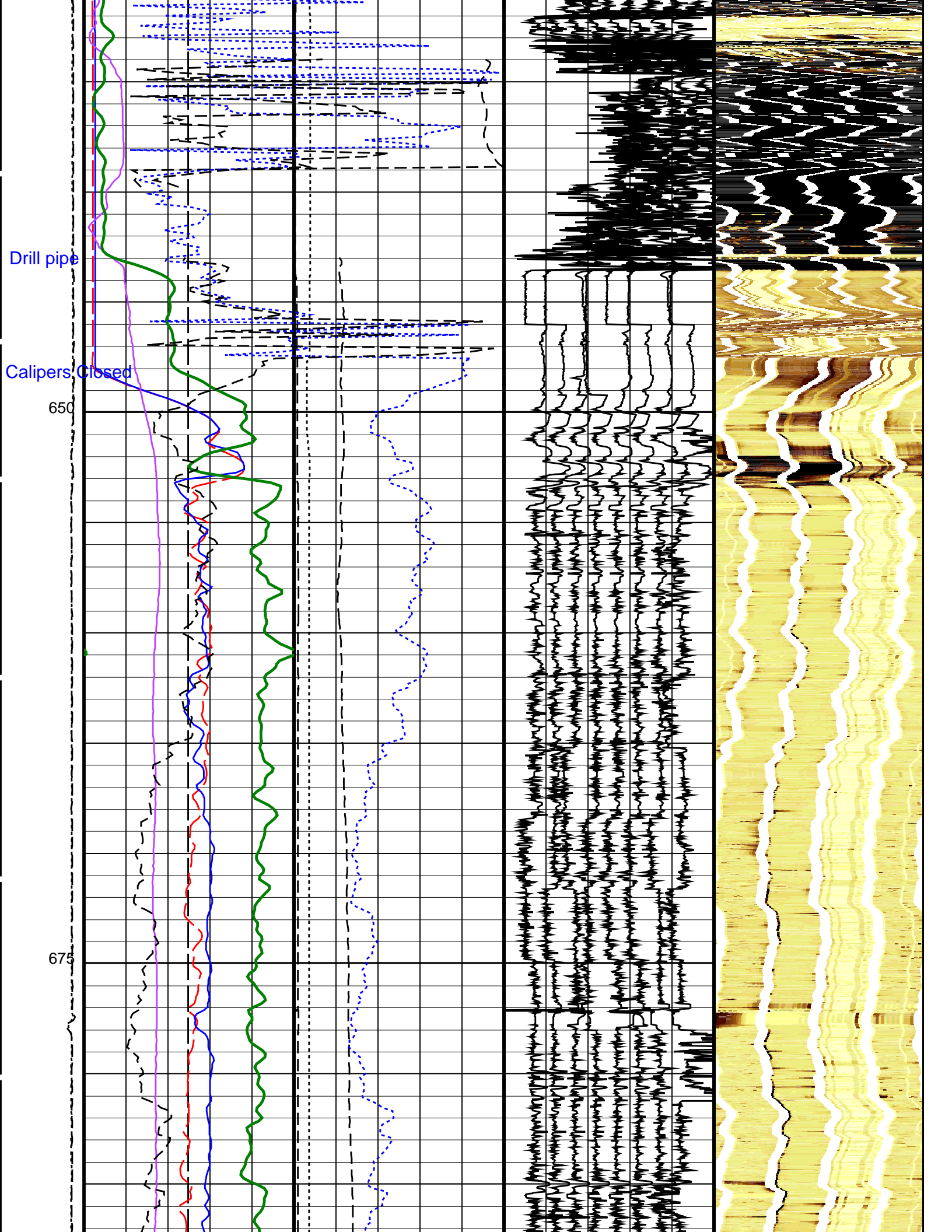


600

625

Button Current OFF

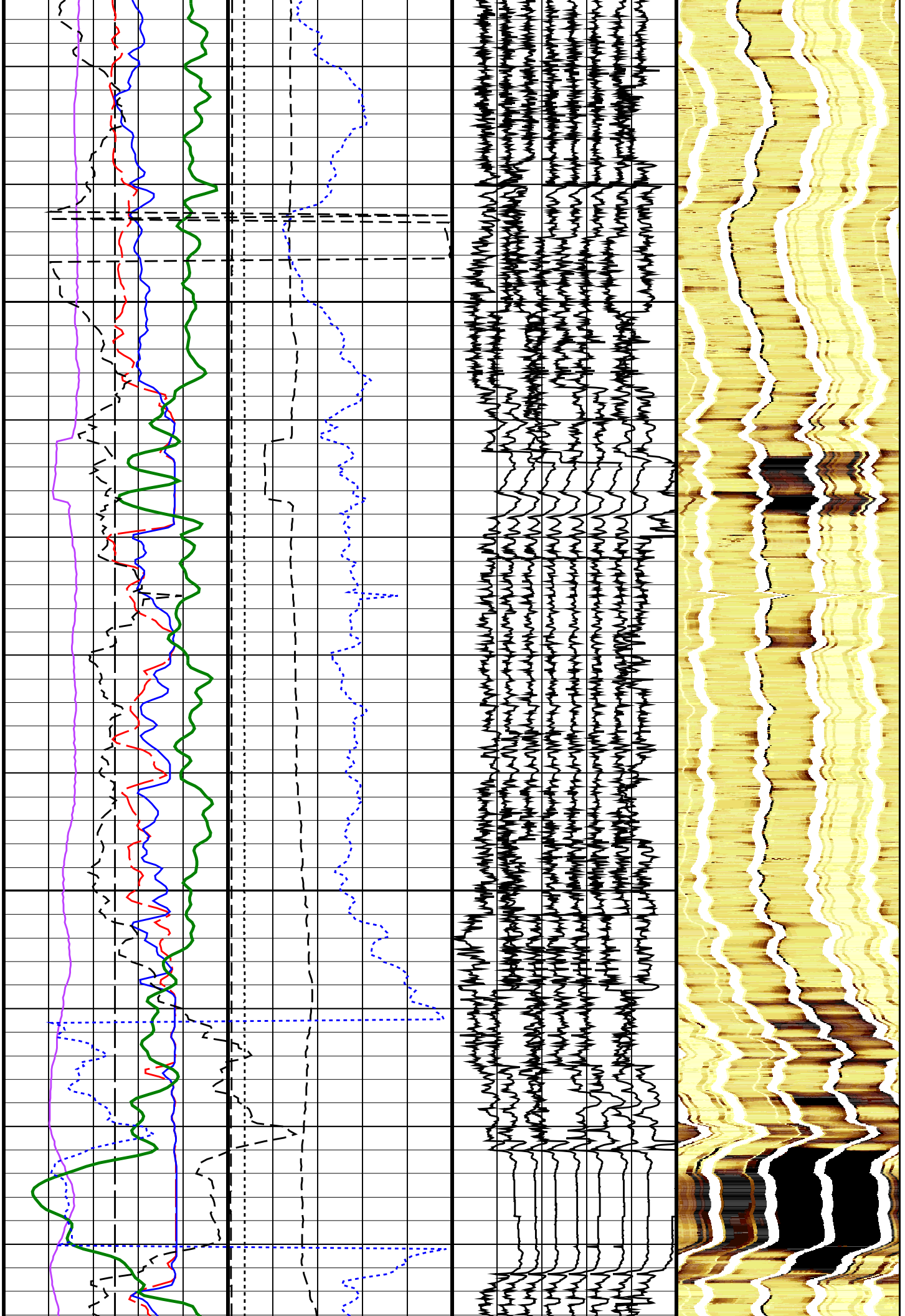


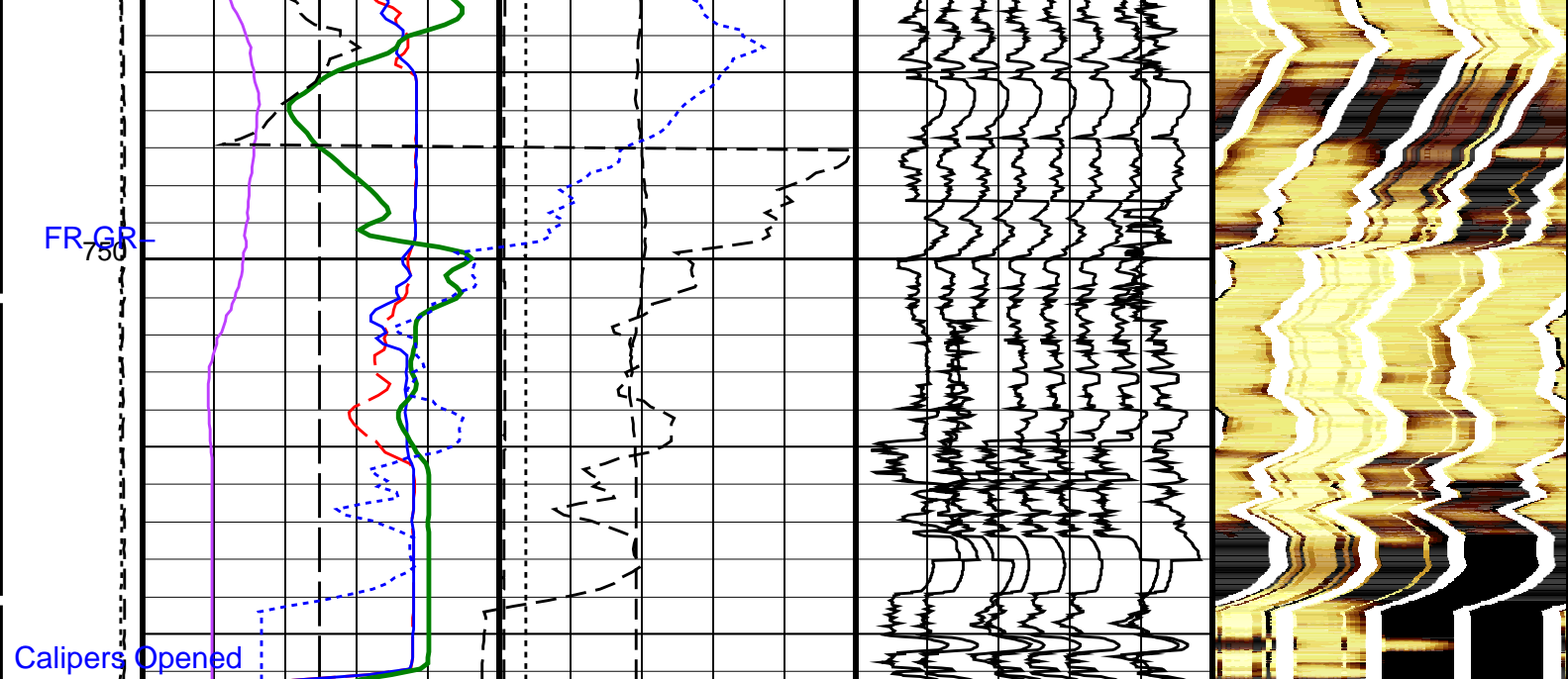




700

725





<b>Tension (TENS) (LBF)</b> 10000 0	<b>Bit Size (BS) (IN)</b> 0 20	<b>EMEX Voltage (EV) (V)</b> 0 50	<b>Data Button 1 - Varies with RBS (U-MEST_RB1)</b> -10 (----) 90	-0.3367 0.8877 4.1529 6.3977 7.2140 7.6222 8.0303 8.4385 8.6426 9.0507 9.4588 9.8670 10.2751 10.8874 11.9077 13.1322
<b>Calibrated Downhole Force (CDF) (LBF)</b> 5000 0	<b>Caliper 1 (C1) (IN)</b> 0 20	<b>EMEX Intensity (EI) (AMPS)</b> 0 10	<b>Data Button 2 - Varies with RBS (U-MEST_RB2)</b> -20 (----) 80	-0.3367 0.8877 4.1529 6.3977 7.2140 7.6222 8.0303 8.4385 8.6426 9.0507 9.4588 9.8670 10.2751 10.8874 11.9077 13.1322
	<b>Caliper 2 (C2) (IN)</b> 0 20	<b>Uplug 2 Main pass</b>	<b>Data Button 3 - Varies with RBS (U-MEST_RB3)</b> -30 (----) 70	-0.3367 0.8877 4.1529 6.3977 7.2140 7.6222 8.0303 8.4385 8.6426 9.0507 9.4588 9.8670 10.2751 10.8874 11.9077 13.1322
	<b>Deviation (DEVIM) (DEG)</b> 0 10		<b>Data Button 4 - Varies with RBS (U-MEST_RB4)</b> -40 (----) 60	-0.3367 0.8877 4.1529 6.3977 7.2140 7.6222 8.0303 8.4385 8.6426 9.0507 9.4588 9.8670 10.2751 10.8874 11.9077 13.1322
	<b>Hole Azimuth (HAZIM) (DEG)</b> -40 360		<b>Data Button 5 - Varies with RBS (U-MEST_RB5)</b> -50 (----) 50	
	<b>Pad One Azimuth (P1AZ_MEST) (DEG)</b> -40 360		<b>Data Button 6 - Varies with RBS (U-MEST_RB6)</b> -60 (----) 40	
	<b>Relative Bearing (RB_MEST) (DEG)</b> -40 360		<b>Data Button 7 - Varies with RBS (U-MEST_RB7)</b> -70 (----) 30	
<b>HNGS Spectroscopy Gamma Ray (HSGR) (GAPI)</b> 0 100			<b>Data Button 8 - Varies with RBS (U-MEST_RB8)</b> -80 (----) 20	

PIP SUMMARY

Time Mark Every 60 S

Parameters

DI IS Name	Description	Value
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Field Name	Description	Value	Unit
<b>MEST-B: Micro Electrical Scanner - B (Slim)</b>			
AFMO	Accelerometer Filtering Mode	MOVING_AVERAGE	
ICMO	Inclinometry Computation Mode	AUTOMATIC_SELECTION	
MDEC	Magnetic Field Declination	111.202	DEG
MLM	MEST Logging Mode	SCAN1800	
RBS	Resistivity Button Selection	AUTO	
XGAI	Gain	GAIN_2	
XOFF	Offset	OFFSET_0	
<b>HNGS-BA: Hostile Natural Gamma Ray Sonde</b>			
BAR1	HNGS Detector 1 Barite Constant	1	
BAR2	HNGS Detector 2 Barite Constant	1	
BHK	HNGS Borehole Potassium Correction Concentration	0	
BHS	Borehole Status	OPEN	
CSD1	Inner Casing Outer Diameter	0	IN
CSD2	Outer Casing Outer Diameter	0	IN
CSW1	Inner Casing Weight	0	LB/F
CSW2	Outer Casing Weight	0	LB/F
DBCC	HNGS Barite Constant Correction Flag	NONE	
GCSE	Generalized Caliper Selection	C1	
H1P	HNGS Detector 1 Allow/Disallow In Processing	ALLOW	
H2P	HNGS Detector 2 Allow/Disallow In Processing	ALLOW	
HABK	HNGS Borehole Potassium Running Average	-0.00359858	
HALF	HNGS Alpha Filter Length	60	IN
HCRB	HNGS Apply Borehole Potassium Correction	NONE	
HMWM	Mud Weighting Material	BARI	
HNPE	HNGS Processing Enable	YES	
S1BI	HNGS Detector 1 Calibration Bismuth Count Rate	1.3	CPS
S2BI	HNGS Detector 2 Calibration Bismuth Count Rate	1.3	CPS
SGRC	HNGS Standard Gamma-Ray Correction Flag	YES	
TPOS	Tool Position	ECCE	
VBA1	HNGS Detector 1 Variable Barite Factor Running Average	1.01182	
VBA2	HNGS Detector 2 Variable Barite Factor Running Average	1.01307	
<b>EDTC-B: Enhanced DTS Cartridge</b>			
BHS	Borehole Status	OPEN	
GCSE	Generalized Caliper Selection	C1	
<b>System and Miscellaneous</b>			
BS	Bit Size	9.875	IN
DFD	Drilling Fluid Density	1.26	G/C3

Format: MEST\_C\_WRAP\_BY\_P1AZ    Vertical Scale: 1:200    Graphics File Created: 28-Jan-2018 06:44

### OP System Version: 19C0-187

MEST-B	19C0-187	DTA-A	19C0-187
HNGC-B	19C0-187	HNGS-BA	19C0-187
EDTC-B	SKK-5169-EDTCB		

### Output DLIS Files

DEFAULT	FMS_NGS_029LUP	FN:46	PRODUCER	28-Jan-2018 06:44
BACKUP	FMS_NGS_029LUP	FN:47	PRODUCER	28-Jan-2018 06:44

Company: International Ocean Discovery Program    Well: Expedition 374, Site U1522A

### Output DLIS Files

DEFAULT	FMS_NGS_028LUP	FN:44	PRODUCER	28-Jan-2018 06:24	763.5 M	671.3 M
BACKUP	FMS_NGS_028LUP	FN:45	PRODUCER	28-Jan-2018 06:24	763.5 M	671.3 M

### OP System Version: 19C0-187

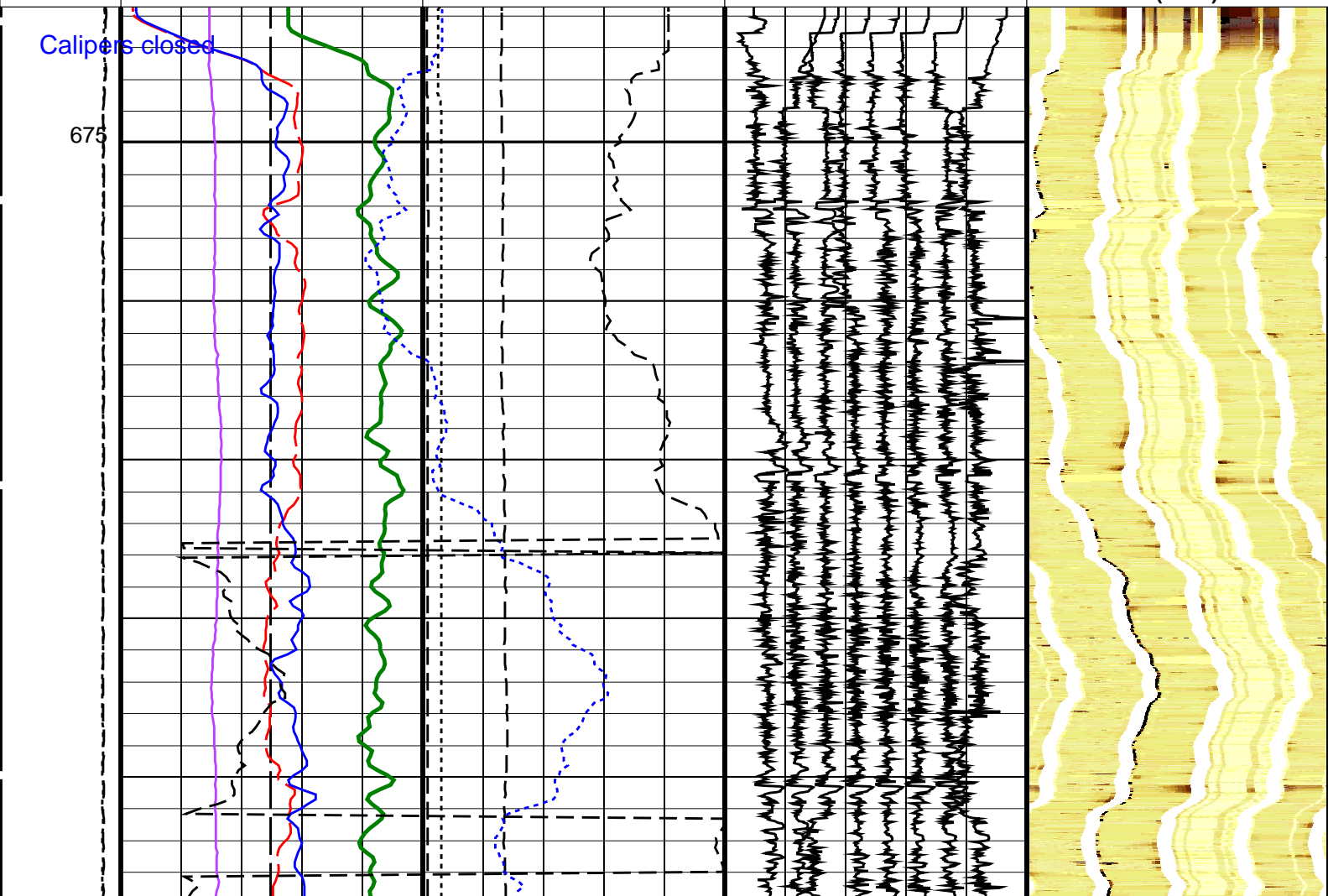
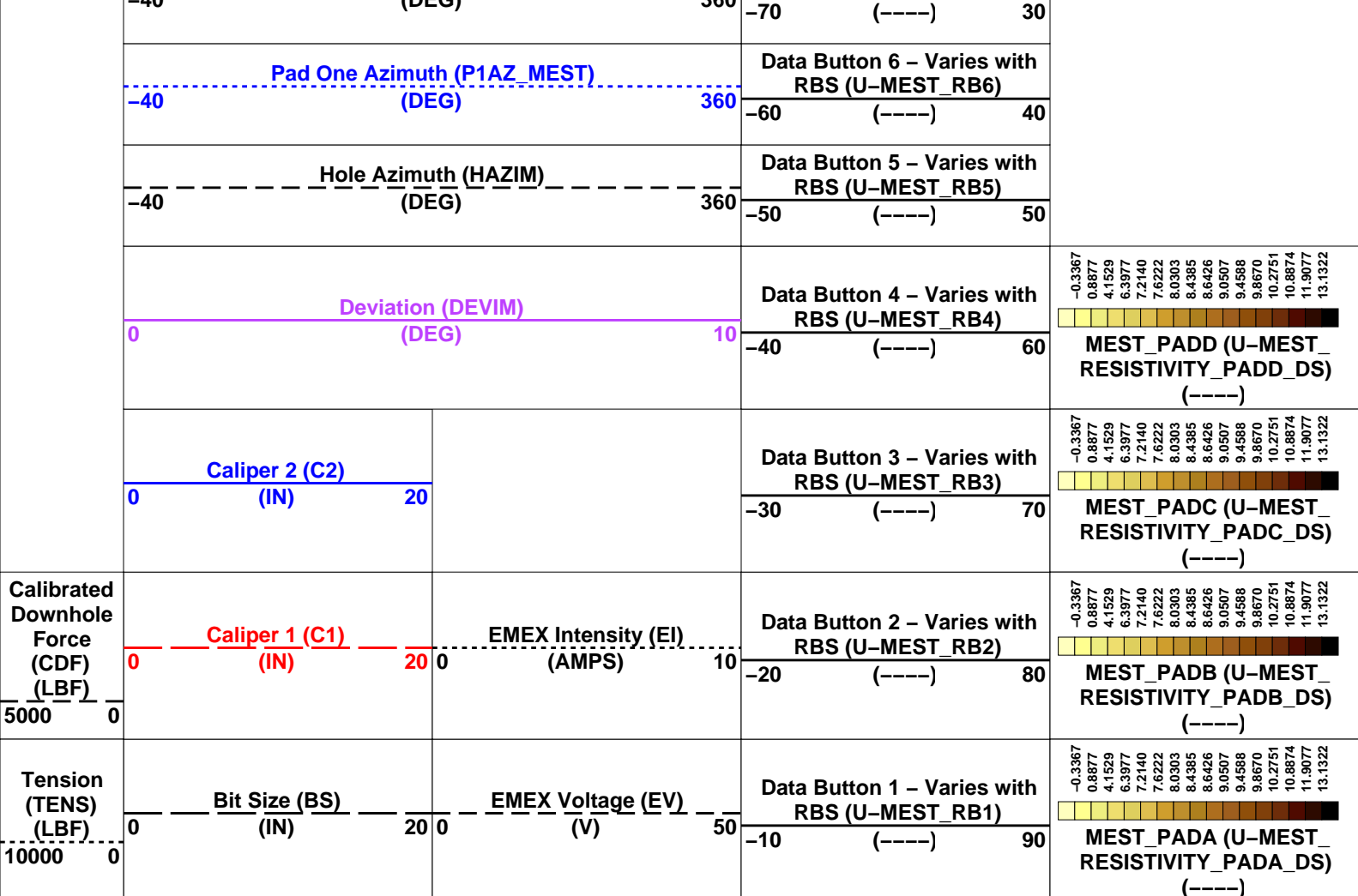
MEST-B	19C0-187	DTA-A	19C0-187
HNGC-B	19C0-187	HNGS-BA	19C0-187
EDTC-B	SKK-5169-EDTCB		

### PIP SUMMARY

Time Mark Every 60 S

<b>HNGS Spectroscopy Gamma Ray (HSGR)</b> 0 (GAPI) 100		Uplog 1	Data Button 8 - Varies with RBS (U-MEST_RB8) -80 (----) 20	
Relative Bearing (RB_MEST) 40 ----- 360 (DEG)			Data Button 7 - Varies with RBS (U-MEST_RB7)	



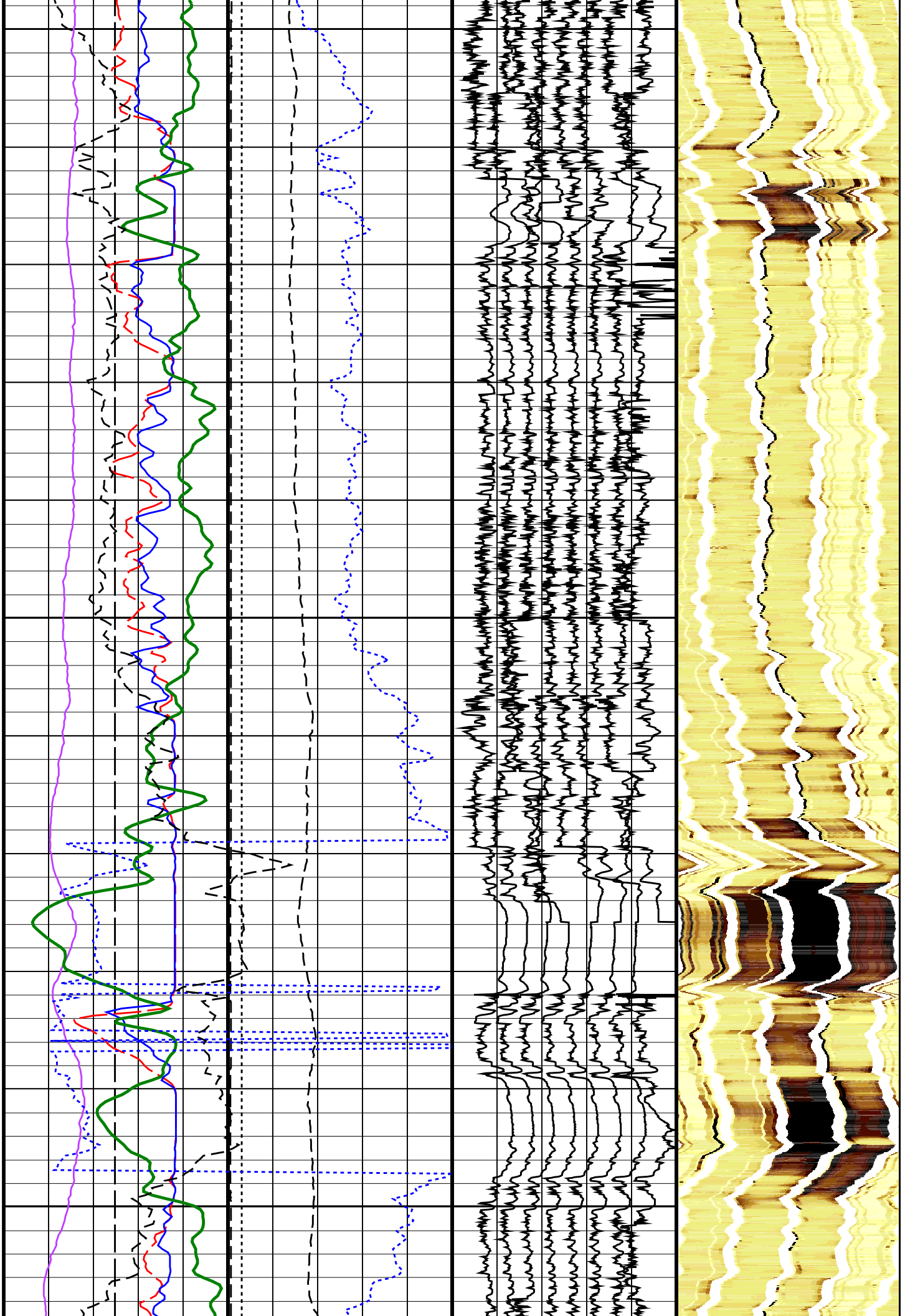


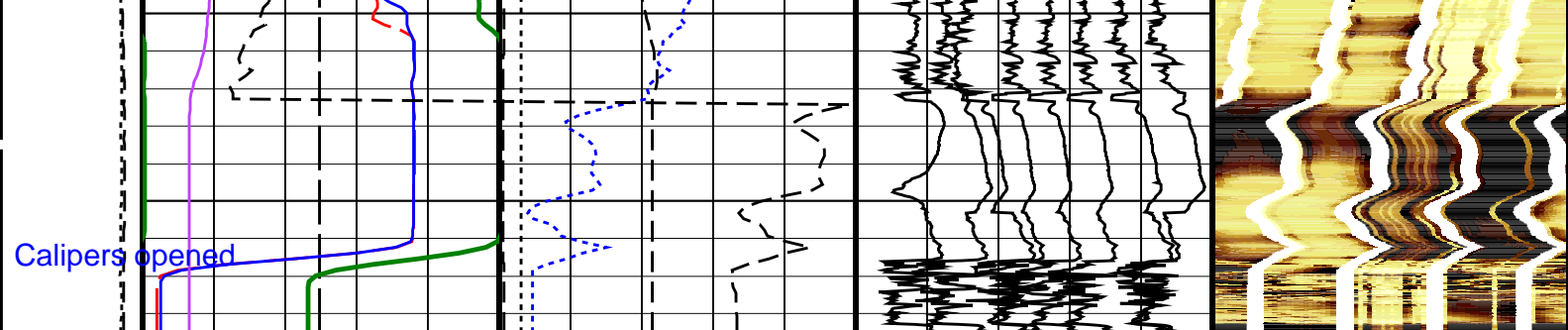
FR GR

700

725

750





<b>Tension (TENS) (LBF)</b> 10000 0	<b>Bit Size (BS) (IN)</b> 0 20	<b>EMEX Voltage (EV) (V)</b> 0 50	<b>Data Button 1 - Varies with RBS (U-MEST_RB1)</b> -10 (----) 90	-0.3367 0.8877 4.1529 6.3977 7.2140 7.6222 8.0303 8.4385 8.6426 9.0507 9.4588 9.8670 10.2751 10.8874 11.9077 13.1322
<b>Calibrated Downhole Force (CDF) (LBF)</b> 5000 0	<b>Caliper 1 (C1) (IN)</b> 0 20	<b>EMEX Intensity (EI) (AMPS)</b> 0 10	<b>Data Button 2 - Varies with RBS (U-MEST_RB2)</b> -20 (----) 80	-0.3367 0.8877 4.1529 6.3977 7.2140 7.6222 8.0303 8.4385 8.6426 9.0507 9.4588 9.8670 10.2751 10.8874 11.9077 13.1322
	<b>Caliper 2 (C2) (IN)</b> 0 20	<b>Uplog 1</b>	<b>Data Button 3 - Varies with RBS (U-MEST_RB3)</b> -30 (----) 70	-0.3367 0.8877 4.1529 6.3977 7.2140 7.6222 8.0303 8.4385 8.6426 9.0507 9.4588 9.8670 10.2751 10.8874 11.9077 13.1322
	<b>Deviation (DEVIM) (DEG)</b> 0 10		<b>Data Button 4 - Varies with RBS (U-MEST_RB4)</b> -40 (----) 60	-0.3367 0.8877 4.1529 6.3977 7.2140 7.6222 8.0303 8.4385 8.6426 9.0507 9.4588 9.8670 10.2751 10.8874 11.9077 13.1322
	<b>Hole Azimuth (HAZIM) (DEG)</b> -40 360		<b>Data Button 5 - Varies with RBS (U-MEST_RB5)</b> -50 (----) 50	
	<b>Pad One Azimuth (P1AZ_MEST) (DEG)</b> -40 360		<b>Data Button 6 - Varies with RBS (U-MEST_RB6)</b> -60 (----) 40	
	<b>Relative Bearing (RB_MEST) (DEG)</b> -40 360		<b>Data Button 7 - Varies with RBS (U-MEST_RB7)</b> -70 (----) 30	
	<b>HNGS Spectroscopy Gamma Ray (HSGR) (GAPI)</b> 0 100		<b>Data Button 8 - Varies with RBS (U-MEST_RB8)</b> -80 (----) 20	

PIP SUMMARY

Time Mark Every 60 S

Parameters

DLIS Name	Description	Value
MEST-B: Micro Electrical Scanner - B (Slim)		
AFMO	Accelerometer Filtering Mode	MOVING_AVERAGE
ICMO	Inclinometry Computation Mode	AUTOMATIC_SELECTION
MDEC	Magnetic Field Declination	111.202 DEG
MLM	MEST Logging Mode	SCAN1800
RBS	Resistivity Button Selection	AUTO
XGAI	Gain	GAIN_2
XOFF	Offset	OFFSET_0
HNGS-BA: Hostile Natural Gamma Ray Sonde		
BAR1	HNGS Detector 1 Barite Constant	1
BAR2	HNGS Detector 2 Barite Constant	1
BHK	HNGS Borehole Potassium Correction Concentration	0
BHS	Borehole Status	OPEN

CSD1	Inner Casing Outer Diameter	0	IN
CSD2	Outer Casing Outer Diameter	0	IN
CSW1	Inner Casing Weight	0	LB/F
CSW2	Outer Casing Weight	0	LB/F
DBCC	HNGS Barite Constant Correction Flag	NONE	
GCSE	Generalized Caliper Selection	C1	
H1P	HNGS Detector 1 Allow/Disallow In Processing	ALLOW	
H2P	HNGS Detector 2 Allow/Disallow In Processing	ALLOW	
HABK	HNGS Borehole Potassium Running Average	-0.00445939	
HALF	HNGS Alpha Filter Length	60	IN
HCRB	HNGS Apply Borehole Potassium Correction	NONE	
HMWM	Mud Weighting Material	BARI	
HNPE	HNGS Processing Enable	YES	
S1BI	HNGS Detector 1 Calibration Bismuth Count Rate	1.3	CPS
S2BI	HNGS Detector 2 Calibration Bismuth Count Rate	1.3	CPS
SGRC	HNGS Standard Gamma-Ray Correction Flag	YES	
TPOS	Tool Position	ECCE	
VBA1	HNGS Detector 1 Variable Barite Factor Running Average	0.926042	
VBA2	HNGS Detector 2 Variable Barite Factor Running Average	0.934098	
	EDTC-B: Enhanced DTS Cartridge		
BHS	Borehole Status	OPEN	
GCSE	Generalized Caliper Selection	C1	
	System and Miscellaneous		
BS	Bit Size	9.875	IN
DFD	Drilling Fluid Density	1.26	G/C3

Format: MEST\_C\_WRAP\_BY\_P1AZ Vertical Scale: 1:200 Graphics File Created: 28-Jan-2018 06:24

### OP System Version: 19C0-187

MEST-B	19C0-187	DTA-A	19C0-187
HNGC-B	19C0-187	HNGS-BA	19C0-187
EDTC-B	SKK-5169-EDTCB		

### Output DLIS Files

DEFAULT	FMS_NGS_028LUP	FN:44	PRODUCER	28-Jan-2018 06:24
BACKUP	FMS_NGS_028LUP	FN:45	PRODUCER	28-Jan-2018 06:24

#### Calibration and Check Summary

Measurement	Nominal	Master	Before	After	Change	Limit	Units
Micro Electrical Scanner - B (Slim) Wellsite Calibration - Caliper Calibration							
Before: 6-Jan-2018 12:36							
Caliper 1 Zero Measurement	12.00	N/A	12.80	N/A	N/A	N/A	IN
Caliper 2 Zero Measurement	12.00	N/A	12.57	N/A	N/A	N/A	IN
Caliper 1 Plus Measurement	15.30	N/A	15.71	N/A	N/A	N/A	IN
Caliper 2 Plus Measurement	15.30	N/A	15.56	N/A	N/A	N/A	IN
Micro Electrical Scanner - B (Slim) Wellsite Calibration - CROUZET ACCELEROMETER PROM HAS BEEN READ CORRECTLY							
Before: 28-Jan-2018 5:27							
TEMPERATURE REFERENCE :	N/A	N/A	20	N/A	N/A	N/A	DEGC
YEAR OF CALIBRATION :	N/A	N/A	92	N/A	N/A	N/A	
MONTH OF CALIBRATION :	N/A	N/A	10	N/A	N/A	N/A	
SERIAL NUMBER :	N/A	N/A	448	N/A	N/A	N/A	
Micro Electrical Scanner - B (Slim) Wellsite Calibration - CROUZET MAGNETOMETER PROM HAS BEEN READ CORRECTLY							
Before: 28-Jan-2018 5:27							
TEMPERATURE REFERENCE :	N/A	N/A	19	N/A	N/A	N/A	DEGC
YEAR OF CALIBRATION :	N/A	N/A	99	N/A	N/A	N/A	
MONTH OF CALIBRATION :	N/A	N/A	12	N/A	N/A	N/A	
SERIAL NUMBER :	N/A	N/A	428	N/A	N/A	N/A	
Hostile Natural Gamma Ray Sonde Wellsite Calibration - Detector 1 Check							
Master: 8-Jan-2018 8:17 Before: 18-Jan-2018 15:02 After: 8-Jan-2018 8:28							
Na 511 Peak Loc	40.00	39.59	39.55	39.53	-0.01984	1.000	
Na 511 Peak Res	15.50	15.64	14.43	15.55	1.119	2.000	%
High Voltage	1150	1167	1135	1167	32.27	N/A	V
Na 1785 Peak Loc	142.6	142.6	142.3	141.4	-0.9036	7.000	
Na 1785 Peak Res	8.500	7.971	7.766	8.609	0.8427	2.000	%
Temperature	15.50	23.45	6.172	23.47	17.30	N/A	DEGC
Na Count Rate	45.00	25.59	25.18	25.12	-0.06201	8.000	CPS
Hostile Natural Gamma Ray Sonde Wellsite Calibration - Detector 2 Check							

Hostile Natural Gamma Ray Sonde Wellsite Calibration – Detector 2 Check								
Master: 8-Jan-2018 8:17 Before: 18-Jan-2018 15:02 After: 8-Jan-2018 8:28								
Na 511 Peak Loc	40.00	39.56	39.62	39.54	-0.08187	1.000		
Na 511 Peak Res	15.50	15.96	14.71	16.21	1.496	2.000	%	
High Voltage	1150	1099	1064	1099	34.71	N/A	V	
Na 1785 Peak Loc	142.6	141.9	140.7	141.4	0.6870	7.000		
Na 1785 Peak Res	8.500	8.488	8.077	8.675	0.5976	2.000	%	
Temperature	15.50	24.00	6.628	24.04	17.41	N/A	DEGC	
Na Count Rate	45.00	25.29	25.36	24.99	-0.3764	8.000	CPS	

Hostile Natural Gamma Ray Sonde Wellsite Calibration – Ratio Of Detector 1 To Detector 2

Master: 8-Jan-2018 8:17 Before: 18-Jan-2018 15:02 After: 8-Jan-2018 8:28

Coincidence Count Rate Ratio	1.000	1.012	0.9949	1.005	0.01014	0.05000		
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Hostile Natural Gamma Ray Sonde Master Calibration – Detector 1 Calibration

Master: 8-Jan-2018 8:08

Na 511 Peak Set Point	40.00	41.00	--	--	--	--		
Th Peak Loc	209.6	209.5	--	--	--	--		
Th Peak Res	7.000	6.944	--	--	--	--	%	
Background Count Rate	142.5	28.74	--	--	--	--	CPS	
Gain Ratio	1.000	1.006	--	--	--	--		

Hostile Natural Gamma Ray Sonde Master Calibration – Detector 2 Calibration

Master: 8-Jan-2018 8:08

Na 511 Peak Set Point	40.00	41.00	--	--	--	--		
Th Peak Loc	209.6	209.2	--	--	--	--		
Th Peak Res	7.000	6.965	--	--	--	--	%	
Background Count Rate	142.5	27.70	--	--	--	--	CPS	
Gain Ratio	1.000	1.006	--	--	--	--		

Enhanced DTS Cartridge Wellsite Calibration – EDTC Accelerometer Calibration

Before: 27-Jan-2018 14:18

EDTC Z-Axis Acceleration	9.810	N/A	9.790	N/A	N/A	N/A	M/S2	
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Enhanced DTS Cartridge Wellsite Calibration – Detector Calibration

Before: 8-Jan-2018 7:48 After: 8-Jan-2018 8:26

Gamma Ray (Jig – Bkg)	139.2	N/A	139.2	139.5	0.3707	12.65	GAPI	
Gamma Ray (Calibrated)	164.0	N/A	164.0	164.4	0.4368	15.00	GAPI	

Micro Electrical Scanner – B (Slim) / Equipment Identification

Primary Equipment:

MEST Sonde – B	MEDS – B	724
MEST Preamplifier Cartridge – AB	MEPC – AB	806
GPIT Cartridge – AC	GPIC – AC	840
MEST Acquisition Cartridge – A	MEAC – A	804

Auxiliary Equipment:

MEST-B Preamplifier Cartridge Housing	MEPH – A	701
MEST Acquisition Cartridge Housing (Slim)	MEAH – B	769

Hostile Natural Gamma Ray Cartridge – B / Equipment Identification

Primary Equipment:

HNGC Cartridge	HNGC – B	304
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Auxiliary Equipment:

HNGC Housing	HNGH – A	3
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Hostile Natural Gamma Ray Sonde / Equipment Identification

Primary Equipment:

HNGS Sonde	HNGS – BA	194
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Auxiliary Equipment:

HNGS Sonde Housing	HNSH – BA	204
Gamma Source Radioactive	GSR – U	6098

Hostile Natural Gamma Ray Sonde Wellsite Calibration

Detector 1 Check

Phase	Na 511 Peak Loc	Value	Phase	Na 511 Peak Res. %	Value	Phase	High Voltage V	Value
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Phase	Na 511 Peak Loc	Value	Phase	Na 511 Peak Res %	Value	Phase	High Voltage V	Value
Master		39.59	Master		15.64	Master		1167
Before		39.55	Before		14.43	Before		1135
After		39.53	After		15.55	After		1167
37.50 (Minimum) 40.00 (Nominal) 43.50 (Maximum)			12.00 (Minimum) 15.50 (Nominal) 19.00 (Maximum)			900.0 (Minimum) 1150 (Nominal) 1600 (Maximum)		
Phase	Na 1785 Peak Loc	Value	Phase	Na 1785 Peak Res %	Value	Phase	Temperature DEGC	Value
Master		142.6	Master		7.971	Master		23.45
Before		142.3	Before		7.766	Before		6.172
After		141.4	After		8.609	After		23.47
135.0 (Minimum) 142.6 (Nominal) 150.3 (Maximum)			7.000 (Minimum) 8.500 (Nominal) 11.00 (Maximum)			-28.89 (Minimum) 15.50 (Nominal) 60.00 (Maximum)		
Phase	Na Count Rate CPS	Value						
Master		25.59						
Before		25.18						
After		25.12						
10.00 (Minimum) 45.00 (Nominal) 100.0 (Maximum)								
Master: 8-Jan-2018 8:17			Before: 18-Jan-2018 15:02			After: 8-Jan-2018 8:28		

Hostile Natural Gamma Ray Sonde Wellsite Calibration								
Detector 2 Check								
Phase	Na 511 Peak Loc	Value	Phase	Na 511 Peak Res %	Value	Phase	High Voltage V	Value
Master		39.56	Master		15.96	Master		1099
Before		39.62	Before		14.71	Before		1064
After		39.54	After		16.21	After		1099
37.50 (Minimum) 40.00 (Nominal) 43.50 (Maximum)			12.00 (Minimum) 15.50 (Nominal) 19.00 (Maximum)			900.0 (Minimum) 1150 (Nominal) 1600 (Maximum)		
Phase	Na 1785 Peak Loc	Value	Phase	Na 1785 Peak Res %	Value	Phase	Temperature DEGC	Value
Master		141.9	Master		8.488	Master		24.00
Before		140.7	Before		8.077	Before		6.628
After		141.4	After		8.675	After		24.04
135.0 (Minimum) 142.6 (Nominal) 150.3 (Maximum)			7.000 (Minimum) 8.500 (Nominal) 11.00 (Maximum)			-28.89 (Minimum) 15.50 (Nominal) 60.00 (Maximum)		
Phase	Na Count Rate CPS	Value						
Master		25.29						
Before		25.36						
After		24.99						
10.00 (Minimum) 45.00 (Nominal) 100.0 (Maximum)								
Master: 8-Jan-2018 8:17			Before: 18-Jan-2018 15:02			After: 8-Jan-2018 8:28		

Hostile Natural Gamma Ray Sonde Wellsite Calibration		
Ratio Of Detector 1 To Detector 2		
Phase	Coincidence Count Rate Ratio	Value
Master		1.012
Before		0.9949
After		1.005
0.9500 (Minimum) 1.000 (Nominal) 1.050 (Maximum)		
Master: 8-Jan-2018 8:17		
Before: 18-Jan-2018 15:02		
After: 8-Jan-2018 8:28		

Hostile Natural Gamma Ray Sonde Master Calibration								
Detector 1 Calibration								
Phase	Na 511 Peak Set Point	Value	Phase	Th Peak Loc	Value	Phase	Th Peak Res %	Value
Master		41.00	Master		209.5	Master		6.944
39.00 (Minimum) 41.00 (Nominal) 43.00 (Maximum)			201.0 (Minimum) 209.0 (Nominal) 218.0 (Maximum)			5.000 (Minimum) 7.000 (Nominal) 8.000 (Maximum)		





Natural Gamma Ray (HNGS)  
Gamma Ray (EDTC)