



Company: International Ocean Discovery Program

Well: Expedition 362T, Site U1473A

Field: SW Indian Ridge Lower Crust and Moho

Rig: JOIDES Resolution Ocean: Indian

RIG: JOIDES Resolution FIELD: SW Indian Ridge Lower Crust and Moho LOCATION: S 32.706036 Deg E 57.27813 Deg WELL: Expedition 362T, Site U1473A COMPANY: International Ocean Discovery Program		Temperature (LEHMT)			
		Natural Gamma Ray Spectroscopy (HNGB)			
LOCATION		Latitude: S 32.706036 Deg	Elev.:	K.B.	11.00 m
		Longitude: E 57.27813 Deg		G.L.	-721.00 m
				D.F.	11.00 m
API Serial No. S32.706036* E57.27813*		Permanent Datum:	Mean Sea Level	Elev.:	0.00 m
		Log Measured From:	Drill Floor	11.00 m	above Perm. Datum
		Drilling Measured From:	Drill Floor		

Logging Date	13-Jul-2016				
Run Number	1				
Depth Driller	1510.7 m				
Schlumberger Depth	997 m				
Bottom Log Interval	997 m				
Top Log Interval	721 m				
Casing Driller Size @ Depth	5.500 in @ 796 m			@	
Casing Schlumberger	795 m				
Bit Size	9.875 in				
Type Fluid In Hole	Fresh Water				
MUD	Density	Viscosity	1 g/cm3		
	Fluid Loss	PH		8.07	
	Source Of Sample	Mudpit			
RM @ Measured Temperature	0.220 ohm.m @ 73 degC			@	
RMF @ Measured Temperature		@		@	
RMC @ Measured Temperature		@		@	
Source RMF	RMC	N/A	N/A		
RM @ MRT	RMF @ MRT	0.623 @ 12	@ 12	@	@
Maximum Recorded Temperatures	12 degC				
Circulation Stopped	Time	23-Jan-2016	18:00		
Logger On Bottom	Time	13-Jul-2016	0:16		
Unit Number	Location	627314	Larose, LA		
Recorded By		K. Swain			
Witnessed By		Z. Mateo, P. Blum			

		Run 1	Run 2	Run 3

Logging Date					
Run Number					
Depth Driller					
Schlumberger Depth					
Bottom Log Interval					
Top Log Interval					
Casing Driller Size @ Depth				@	
Casing Schlumberger					
Bit Size					
Type Fluid In Hole					
MUD	Density	Viscosity			
	Fluid Loss	PH			
	Source Of Sample				
RM @ Measured Temperature				@	
RMF @ Measured Temperature				@	
RMC @ Measured Temperature				@	
Source RMF	RMC				
RM @ MRT	RMF @ MRT	@	@	@	@
Maximum Recorded Temperatures					
Circulation Stopped	Time				
Logger On Bottom	Time				
Unit Number	Location				
Recorded By					
Witnessed By					

DISCLAIMER
 THE USE OF AND RELIANCE UPON THIS RECORDED-DATA BY THE HEREIN NAMED COMPANY (AND ANY OF ITS AFFILIATES, PARTNERS, REPRESENTATIVES, AGENTS, CONSULTANTS AND EMPLOYEES) IS SUBJECT TO THE TERMS AND CONDITIONS AGREED UPON BETWEEN SCHLUMBERGER AND THE COMPANY, INCLUDING: (a) RESTRICTIONS ON USE OF THE RECORDED-DATA; (b) DISCLAIMERS AND WAIVERS OF WARRANTIES AND REPRESENTATIONS REGARDING COMPANY'S USE OF AND RELIANCE UPON THE RECORDED-DATA; AND (c) CUSTOMER'S FULL AND SOLE RESPONSIBILITY FOR ANY INFERENCE DRAWN OR DECISION MADE IN CONNECTION WITH THE USE OF THIS RECORDED-DATA.

OTHER SERVICES1

OS1:
OS2:
OS3:
OS4:
OS5:

OTHER SERVICES2

OS1:
OS2:
OS3:
OS4:
OS5:

REMARKS: RUN NUMBER 1

Hole drilled with RCB coring bit and bottom hole assembly (BHA). 9.875" BS

Drill pipe set at 796.6 mbrf for wireline logging.

Hole re-entered and logged prior to circulation of any fluid.

Fluid type was fresh water at 1.0 g/cc

Depth recorded at drill floor.

All logs presented in measured depth below drill floor (MBRF).

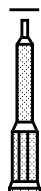
Maximum observed temperature on the LEHMT temperature was 12 degC

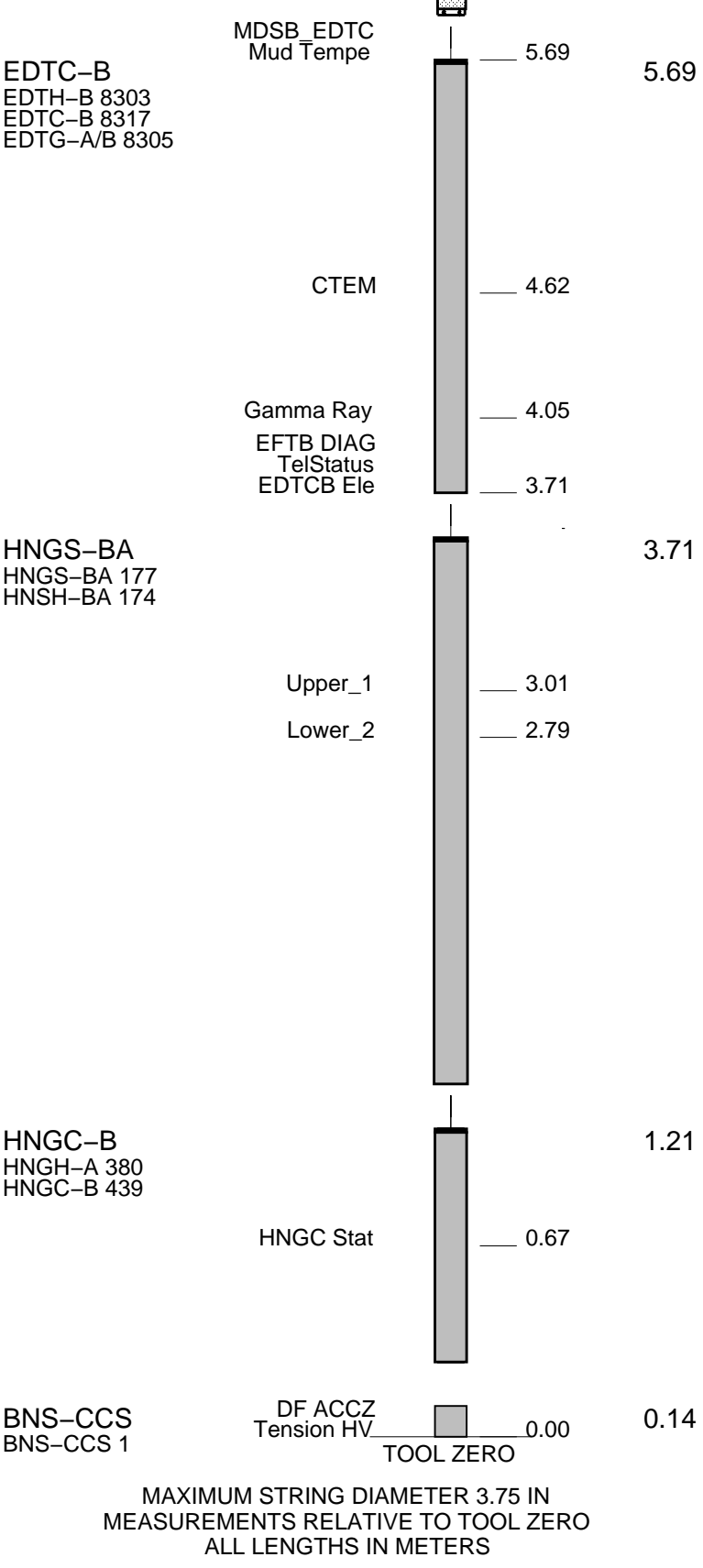
REMARKS: RUN NUMBER 2

RUN 1			RUN 2		
SERVICE ORDER #:			SERVICE ORDER #:		
PROGRAM VERSION:			PROGRAM VERSION:		
FLUID LEVEL:			FLUID LEVEL:		
LOGGED INTERVAL	START	STOP	LOGGED INTERVAL	START	STOP

RUN 2		
SERVICE ORDER #:		
PROGRAM VERSION:		
FLUID LEVEL:		
LOGGED INTERVAL	START	STOP

EQUIPMENT DESCRIPTION

RUN 1	RUN 2
<p style="text-align: center;">SURFACE EQUIPMENT</p> <p>GSR-U 616008 WITM (EDTS)-A</p>	
<p style="text-align: center;">DOWNHOLE EQUIPMENT</p> <p>LEH-MT LEH-MT 101</p> <div style="text-align: center;">  </div> <p style="text-align: right; margin-right: 50px;">6.65</p>	



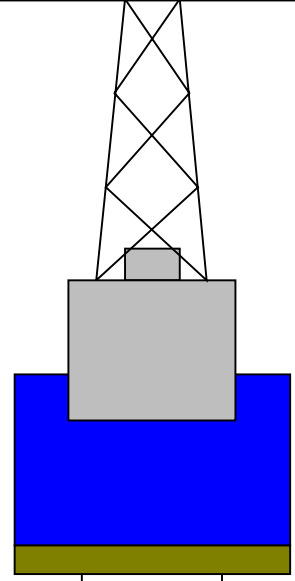
Production String	(in)	(M)	Well Schematic	(M)	(in)	Casing String
	OD	ID		MD	MD	

Kelly Bushing Elevation
Derrick Floor Elevation

0
0

Mean Sea Level

11



4.1



721 4.1
796.60 11.4375
1510.2

Sea Floor
Open Hole
Total Depth

Output DLIS Files

DEFAULT	NGS_047LUP	FN:49	PRODUCER	13-Jul-2016 00:16	996.7 M	709.4 M
BACKUP	NGS_047LUP	FN:50	PRODUCER	13-Jul-2016 00:16	996.7 M	709.4 M

OP System Version: 19C0-187

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

PIP SUMMARY

Time Mark Every 60 S

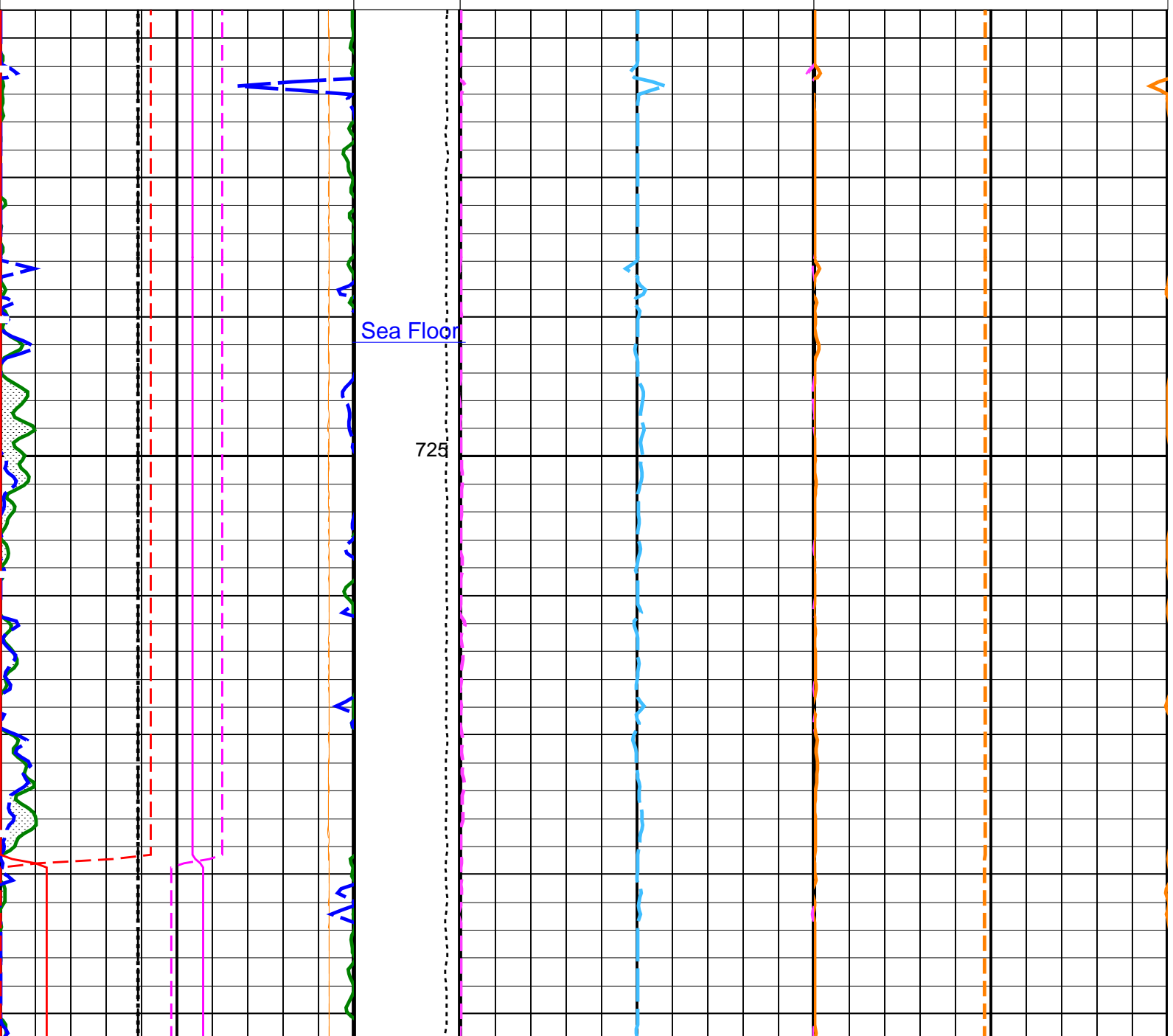
HNGS Spectroscopy Gamma Ray (HSGR)		
0	(GAPI)	25
HNGS Det.2 Resolution Degradation Factor (RDF2)		
0	(-----)	10
HNGS Det.1 Resolution Degradation Factor (RDF1)		
0	(-----)	10
HNGS Det.2 Gain Correction Factor (GCF2)		
0.9	(-----)	1.1

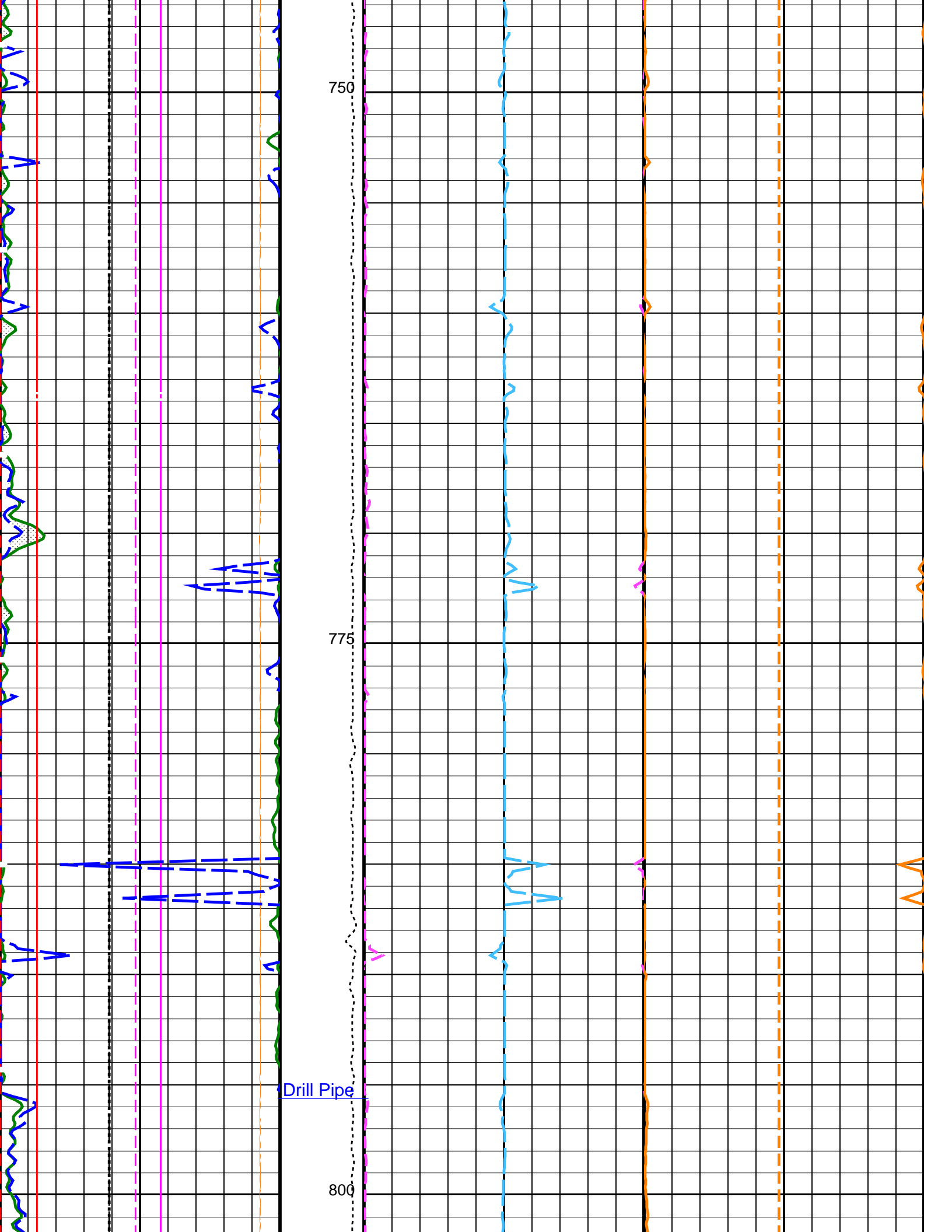
HNGS Det.1 Gain Correction Factor (GCF1)		
0.9	(-----)	1.1
Area1 From HCGR to HSGR		
HNGS Computed Gamma Ray (HCGR)		
0	(GAPI)	25
Caliper (BS)		
6	(IN)	16
Bit Size (BS)		
6	(IN)	16
HNGS Det.2 Chi Squared (CHI2)		
10	(-----)	0
HNGS Det.1 Chi Squared (CHI1)		
10	(-----)	0

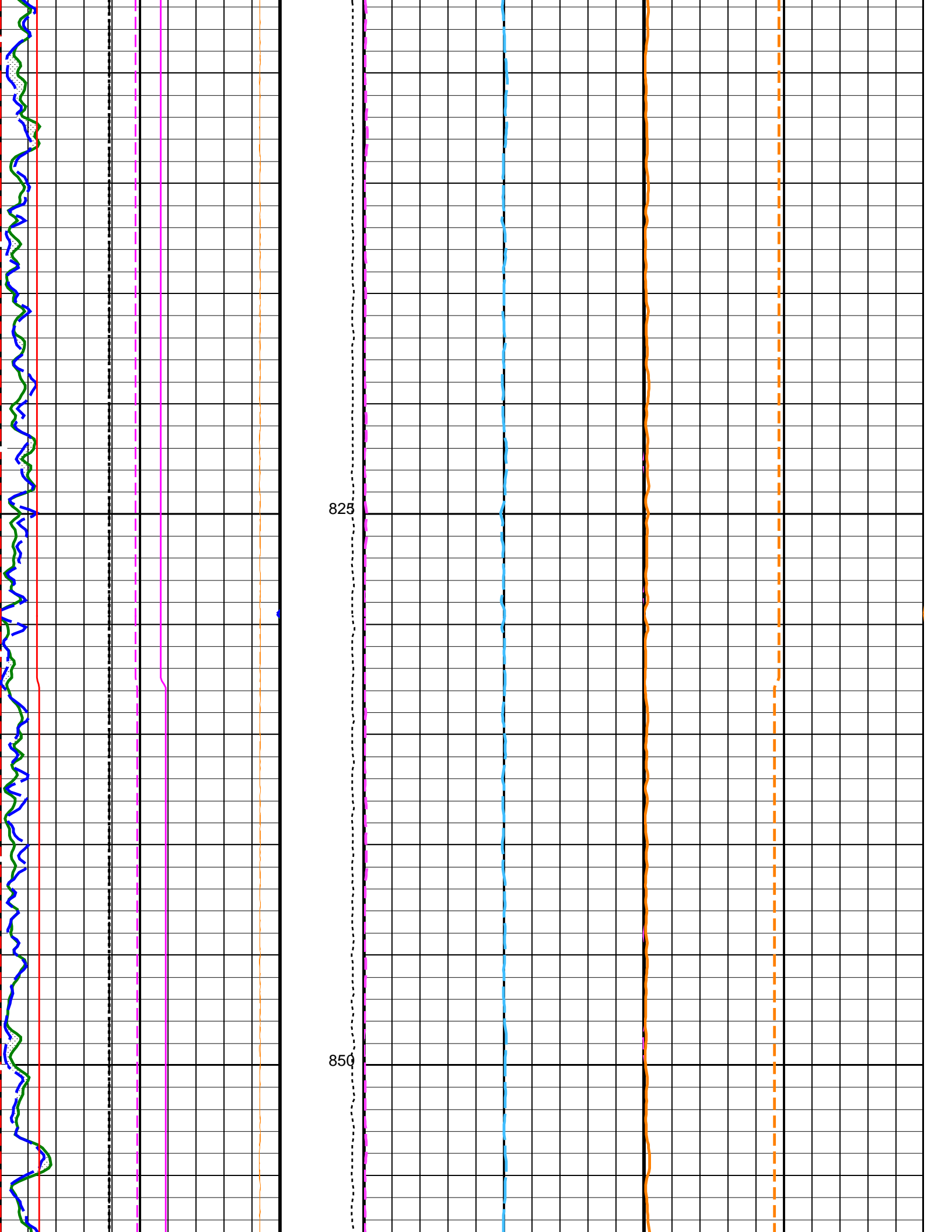
Main Uplog Drill Floor Depth Reference

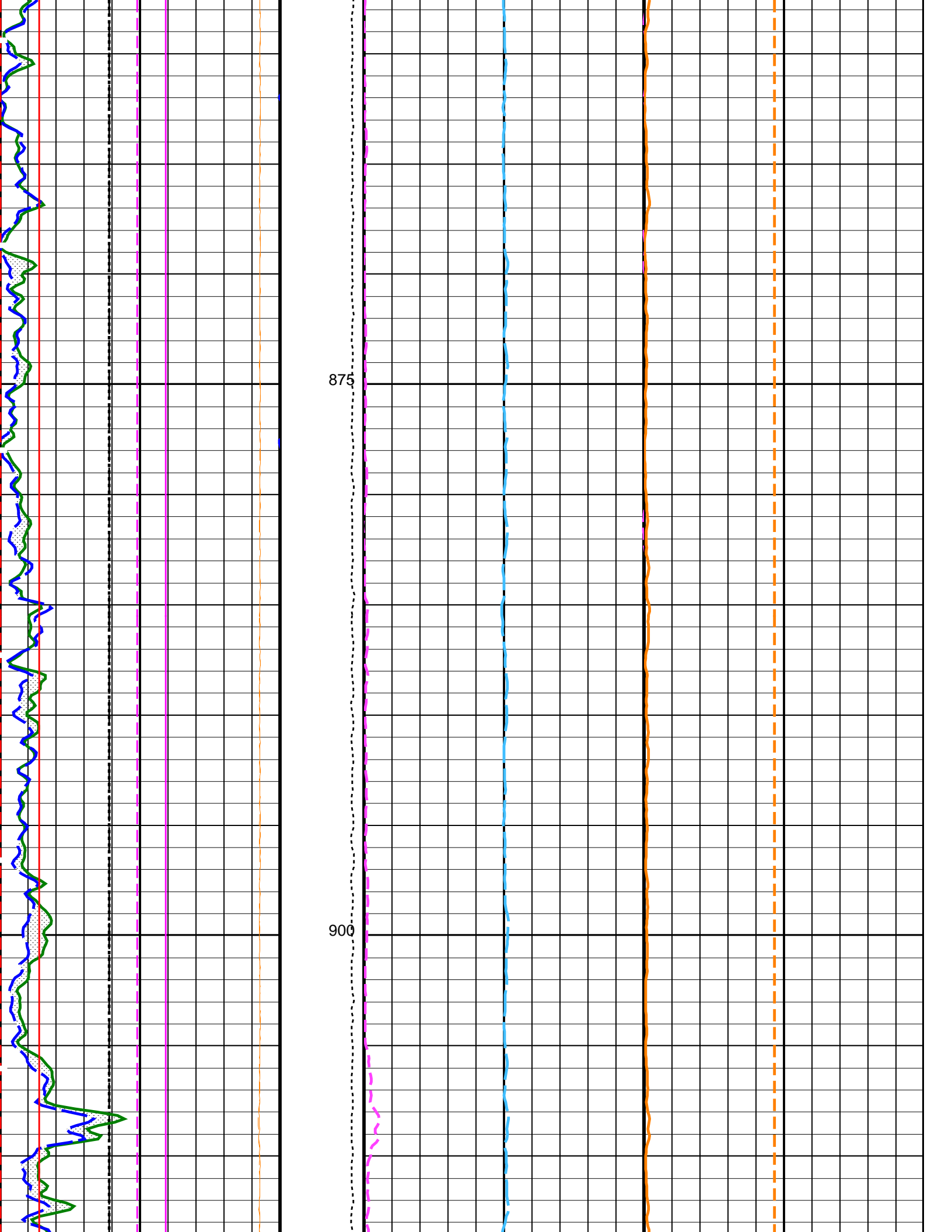
HNGS Borehole Potassium (HBHK)		
-0.05	(V/V)	0.05
HNGS Uranium (HURA)		
-10	(PPM)	30

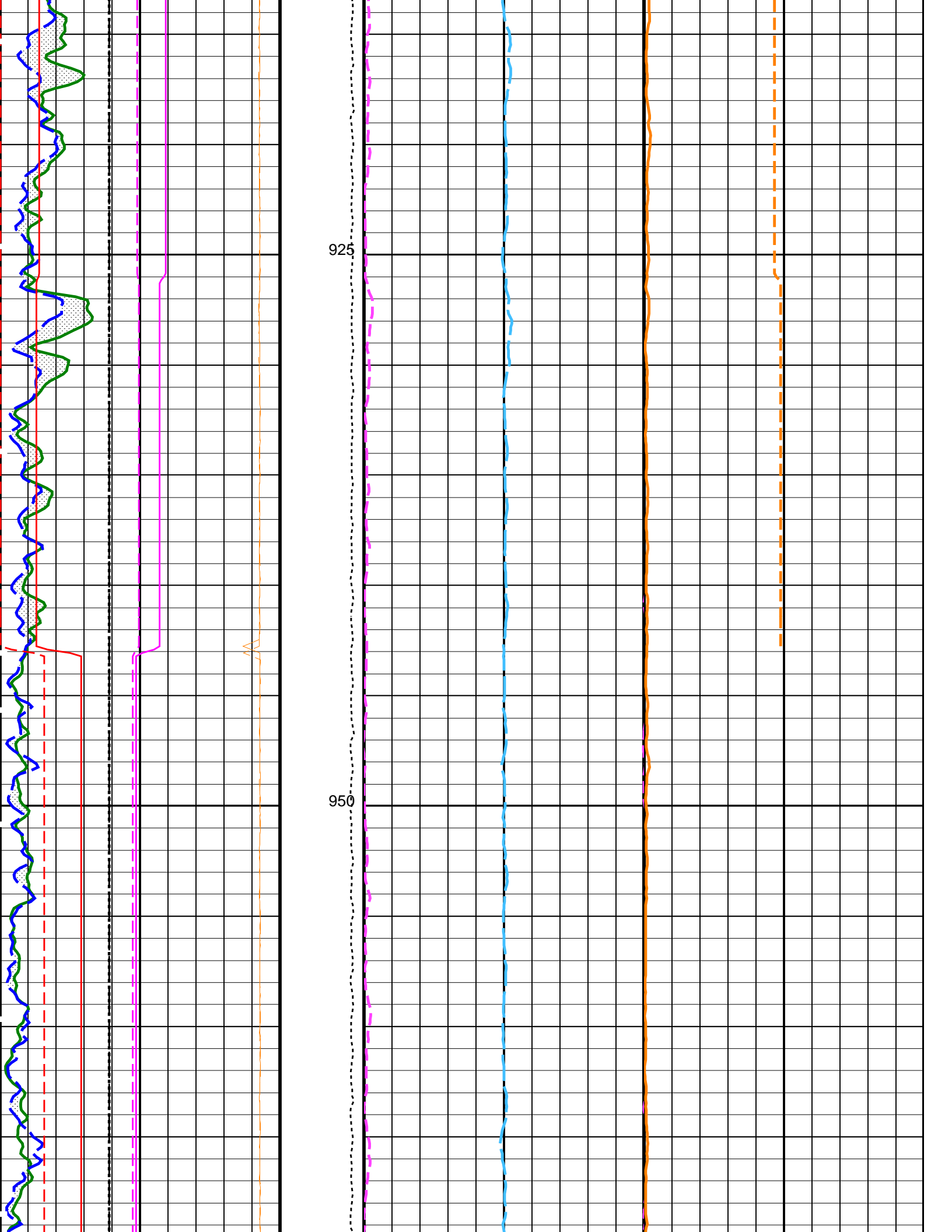
HNGS Thorium (HTHO)			HNGS Potassium (HFK)		
0	(PPM)	30	0	(V/V)	0.1
Tension (TENS) (LBF)			0		
10000		0			

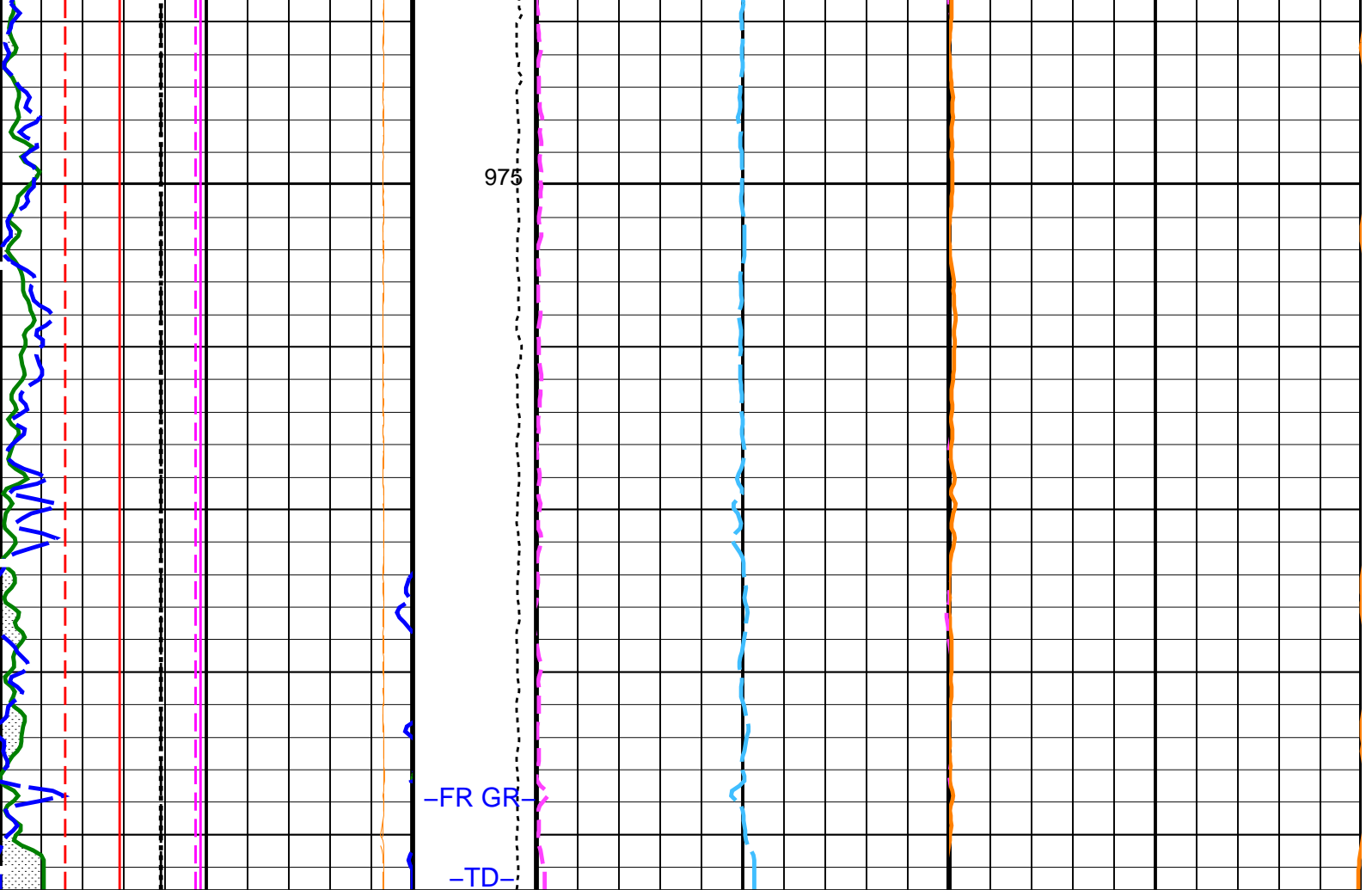












HNGS Det.1 Chi Squared (CH11) 10 (----) 0	Tension (TENS) (LBF) 10000 0	HNGS Thorium (HTHO) (PPM) 0 30	HNGS Potassium (HFK) (V/V) 0 0.1
HNGS Det.2 Chi Squared (CH12) 10 (----) 0	HNGS Uranium (HURA) (PPM) -10 30		
Bit Size (BS) (IN) 6 16	HNGS Borehole Potassium (HBHK) (V/V) -0.05 0.05		
Caliper (BS) (IN) 6 16			

HNGS Computed Gamma Ray (HCGR) (GAPI) 0 25	Main Uplog Drill Floor Depth Reference
--	---

Area1 From HCGR to HSGR		
HNGS Det.1 Gain Correction Factor (GCF1) 0.9 (----) 1.1		
HNGS Det.2 Gain Correction Factor (GCF2) 0.9 (----) 1.1		
HNGS Det.1 Resolution Degradation Factor (RDF1) 0 (----) 10		
HNGS Det.2 Resolution Degradation Factor (RDF2) 0 (----) 10		

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	-0.0012784
HALF	HNGS Alpha Filter Length	60 IN
HCRB	HNGS Apply Borehole Potassium Correction	NONE
HMWM	Mud Weighting Material	NATU
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	-3.22916
VBA2	HNGS Detector 2 Variable Barite Factor Running Average	0.282836
EDTC-B: Enhanced DTS Cartridge		
BHS	Borehole Status	OPEN
GCSE	Generalized Caliper Selection	BS
System and Miscellaneous		
BS	Bit Size	9.875 IN

Format: HNGSYields Vertical Scale: 1:200 Graphics File Created: 13-Jul-2016 00:16

OP System Version: 19C0-187

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

Output DLIS Files

DEFAULT NGS_047LUP FN:49 PRODUCER 13-Jul-2016 00:16
 BACKUP NGS_047LUP FN:50 PRODUCER 13-Jul-2016 00:16

Company: International Ocean Discovery Program Well: Expedition 362T, Site U1473A

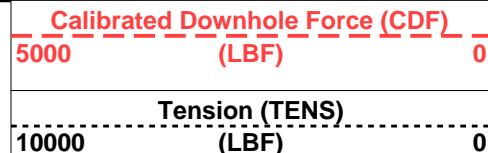
Output DLIS Files

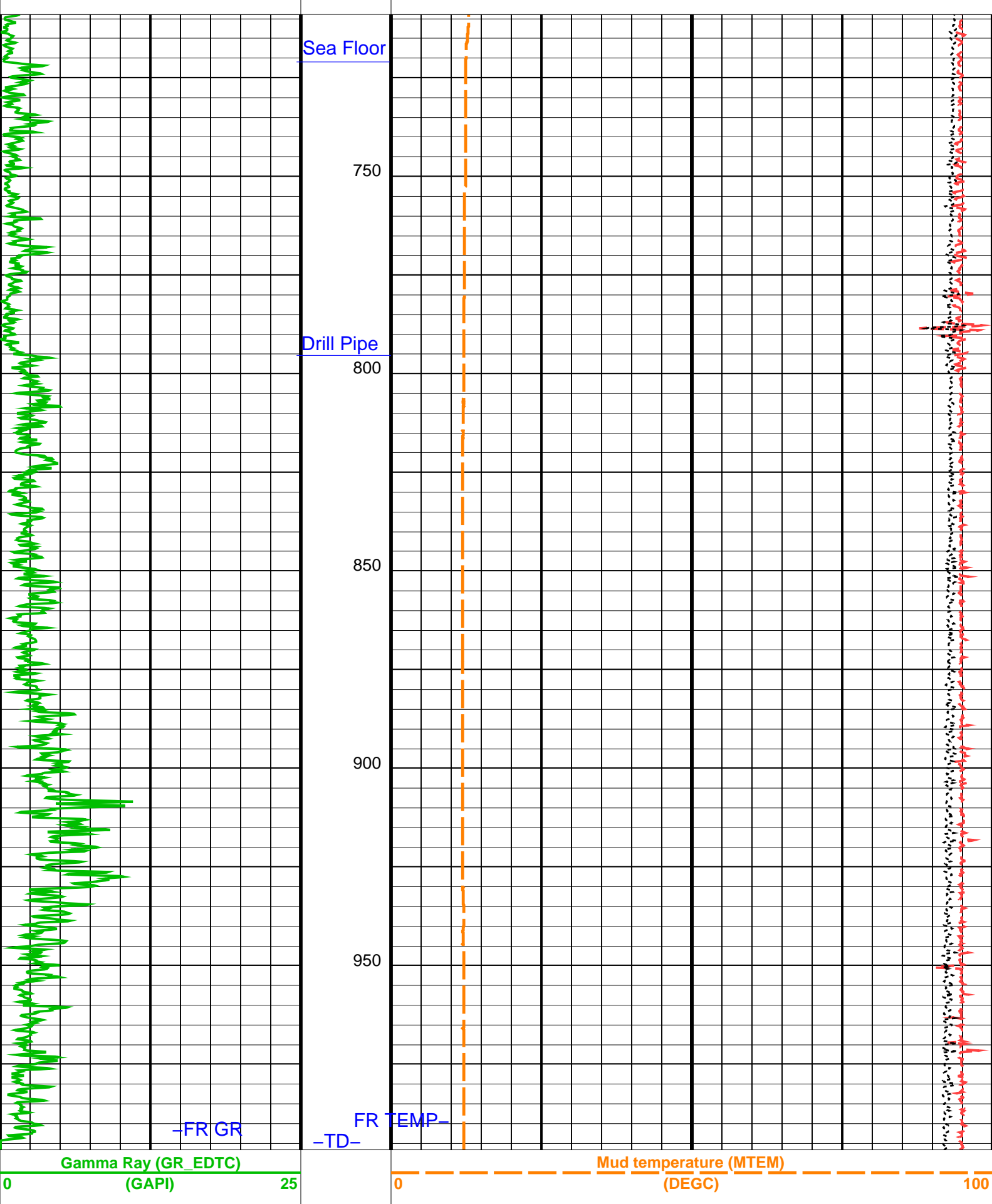
DEFAULT NGS_047LUP FN:49 PRODUCER 13-Jul-2016 00:16 996.7 M 709.4 M
 BACKUP NGS_047LUP FN:50 PRODUCER 13-Jul-2016 00:16 996.7 M 709.4 M

OP System Version: 19C0-187

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

Main Uplog Drill Floor depth reference





Main Uplug Drill Floor depth reference

OP System Version: 19C0-187

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

Output DLIS Files

DEFAULT NGS_047LUP FN:49 PRODUCER 13-Jul-2016 00:16
 BACKUP NGS_047LUP FN:50 PRODUCER 13-Jul-2016 00:16

Company: International Ocean Discovery Program

Well: Expedition 362T, Site U1473A

Input DLIS Files

DEFAULT Flip_NGS_048LUP PRODUCER 13-Jul-2016 15:06 998.4 M 0.0 M

Output DLIS Files

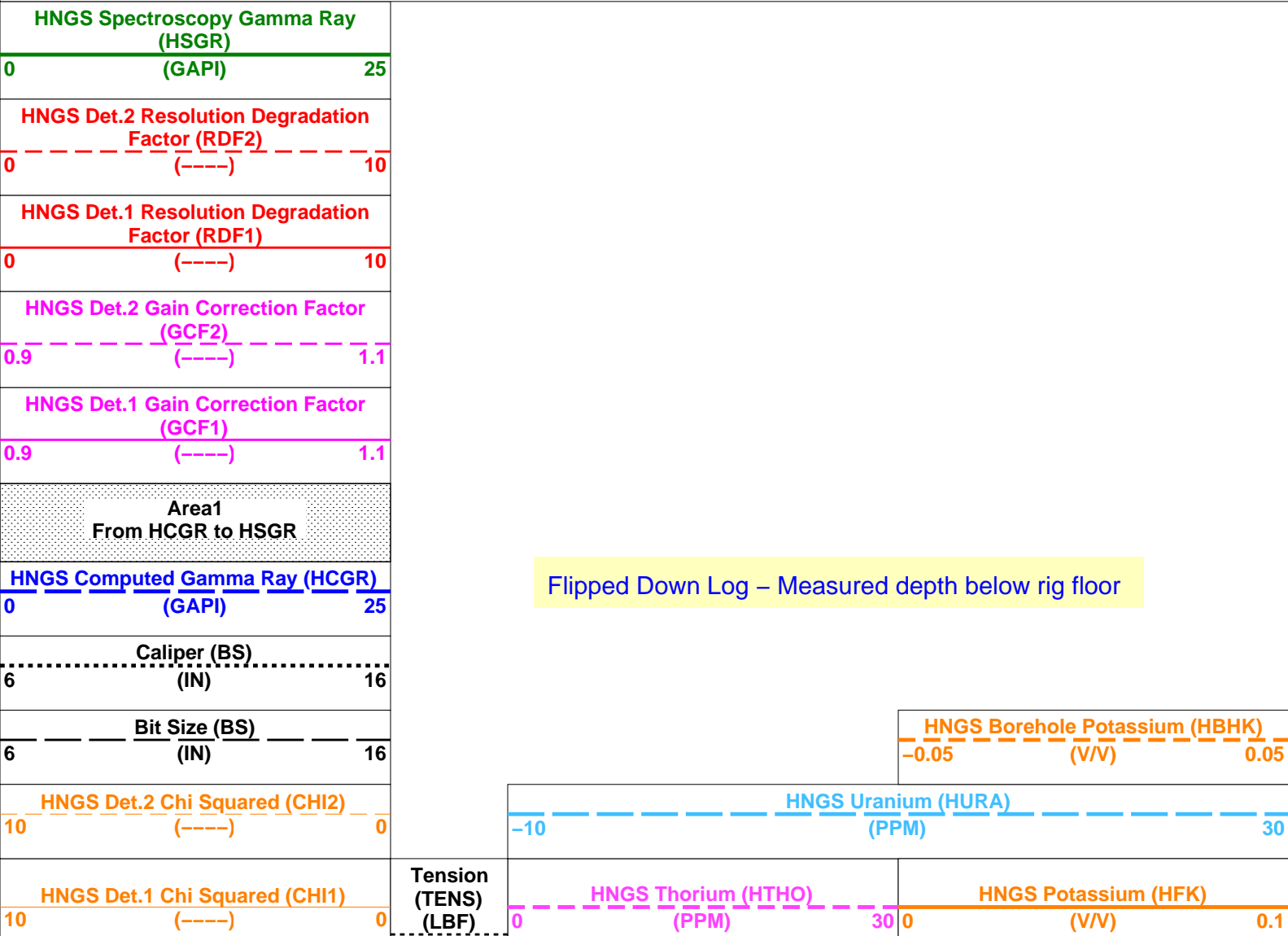
DEFAULT NGS_051PUP FN:52 PRODUCER 19-Jul-2016 12:32 998.4 M 436.8 M

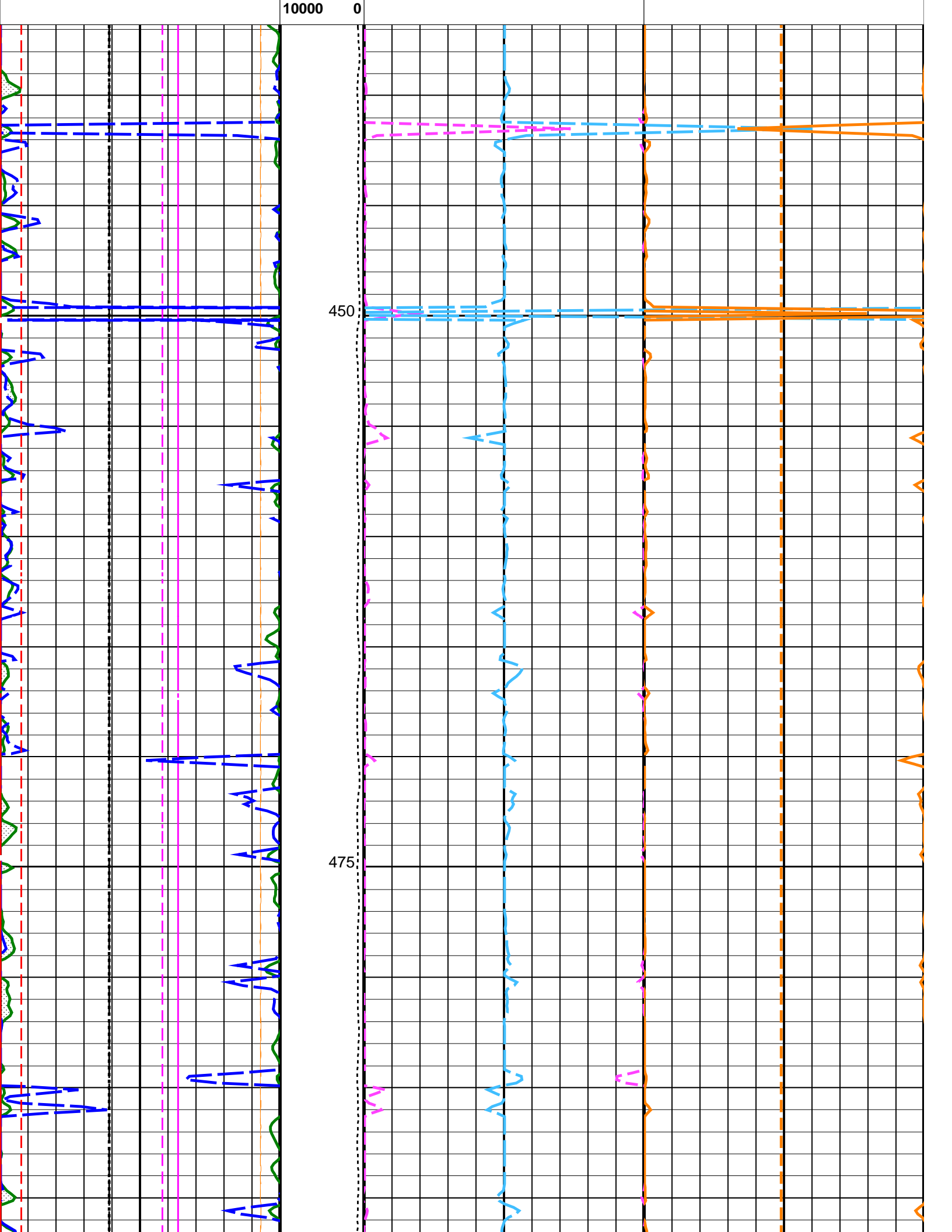
OP System Version: 19C0-187

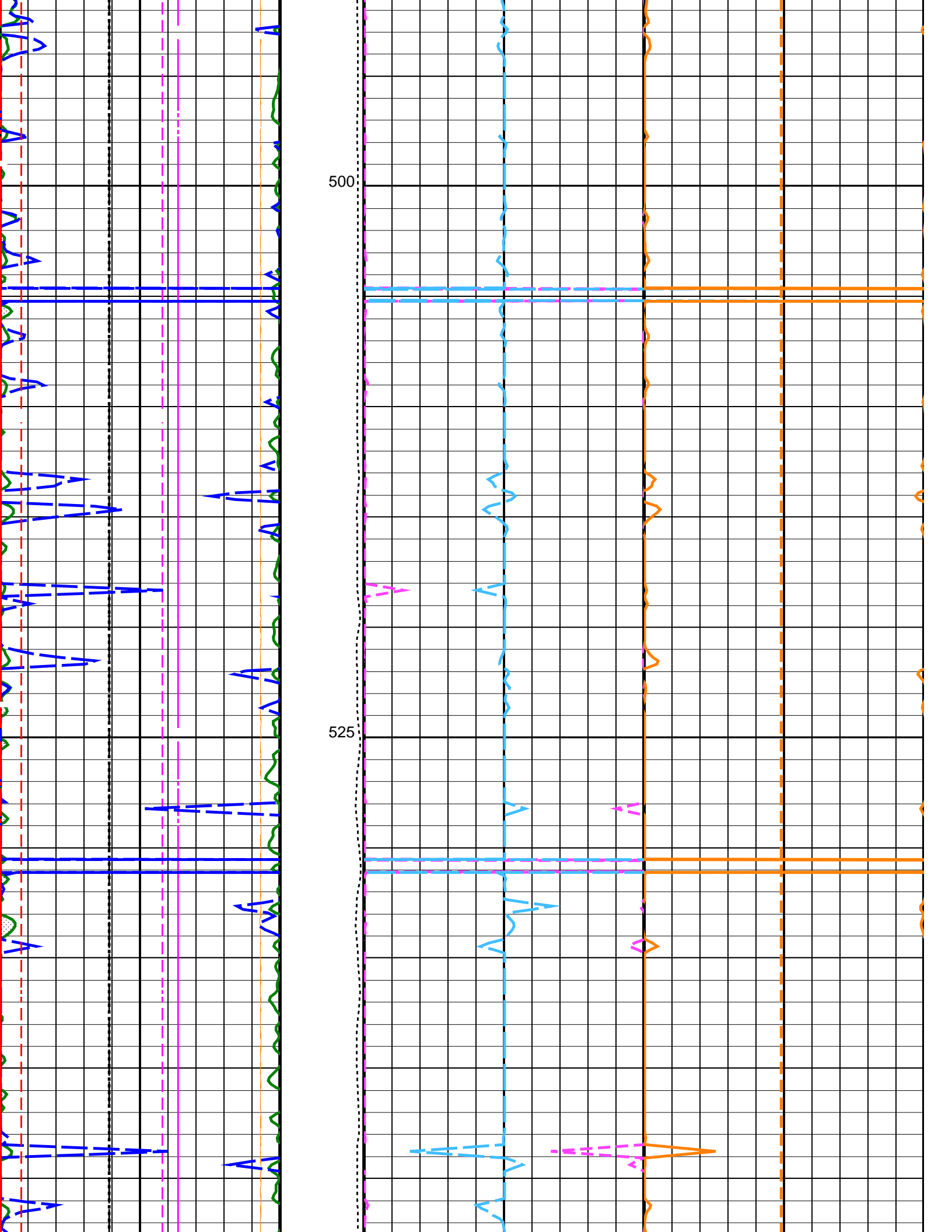
HNGC-B 19C0-187 HNGS-BA 19C0-187
 EDTC-B SKK-5169-EDTCB

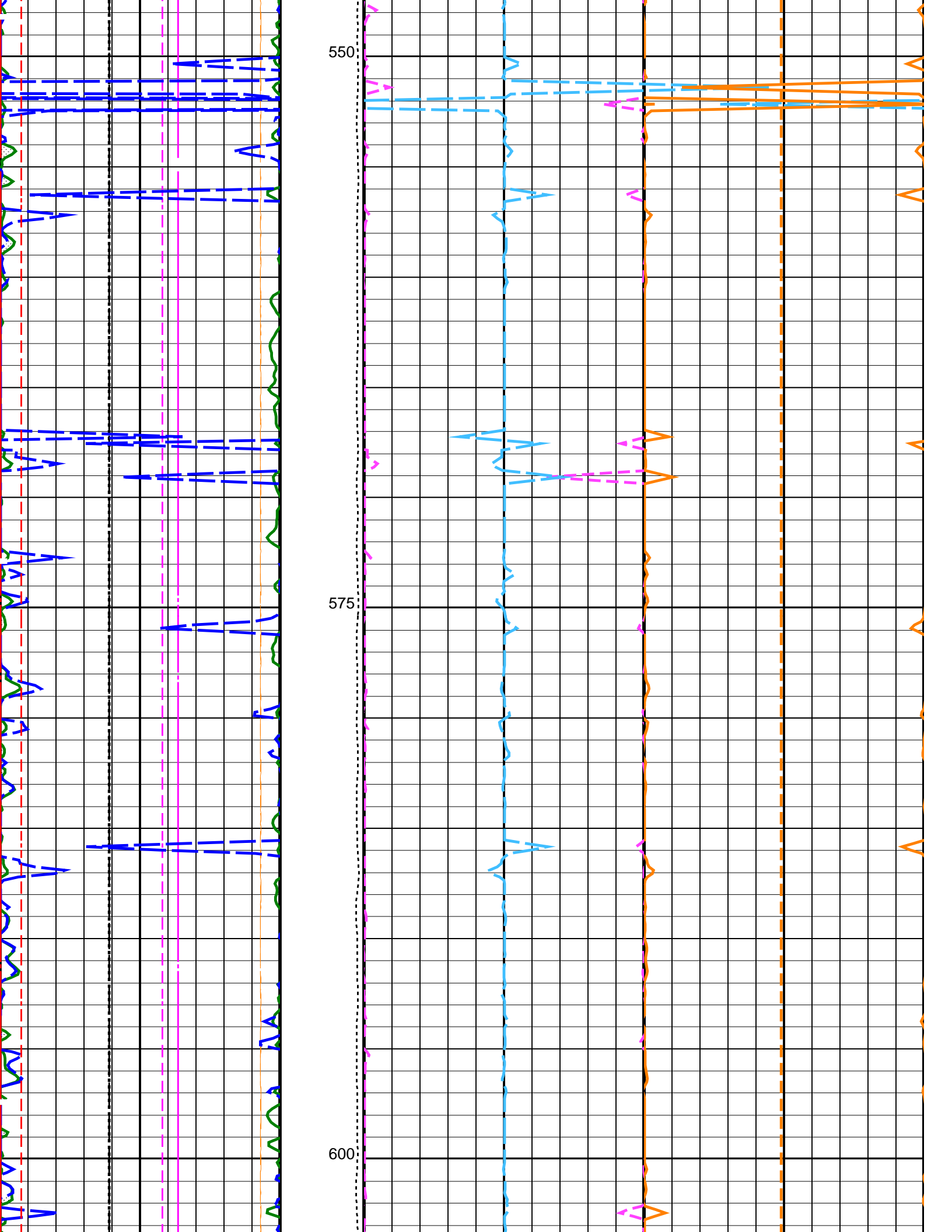
PIP SUMMARY

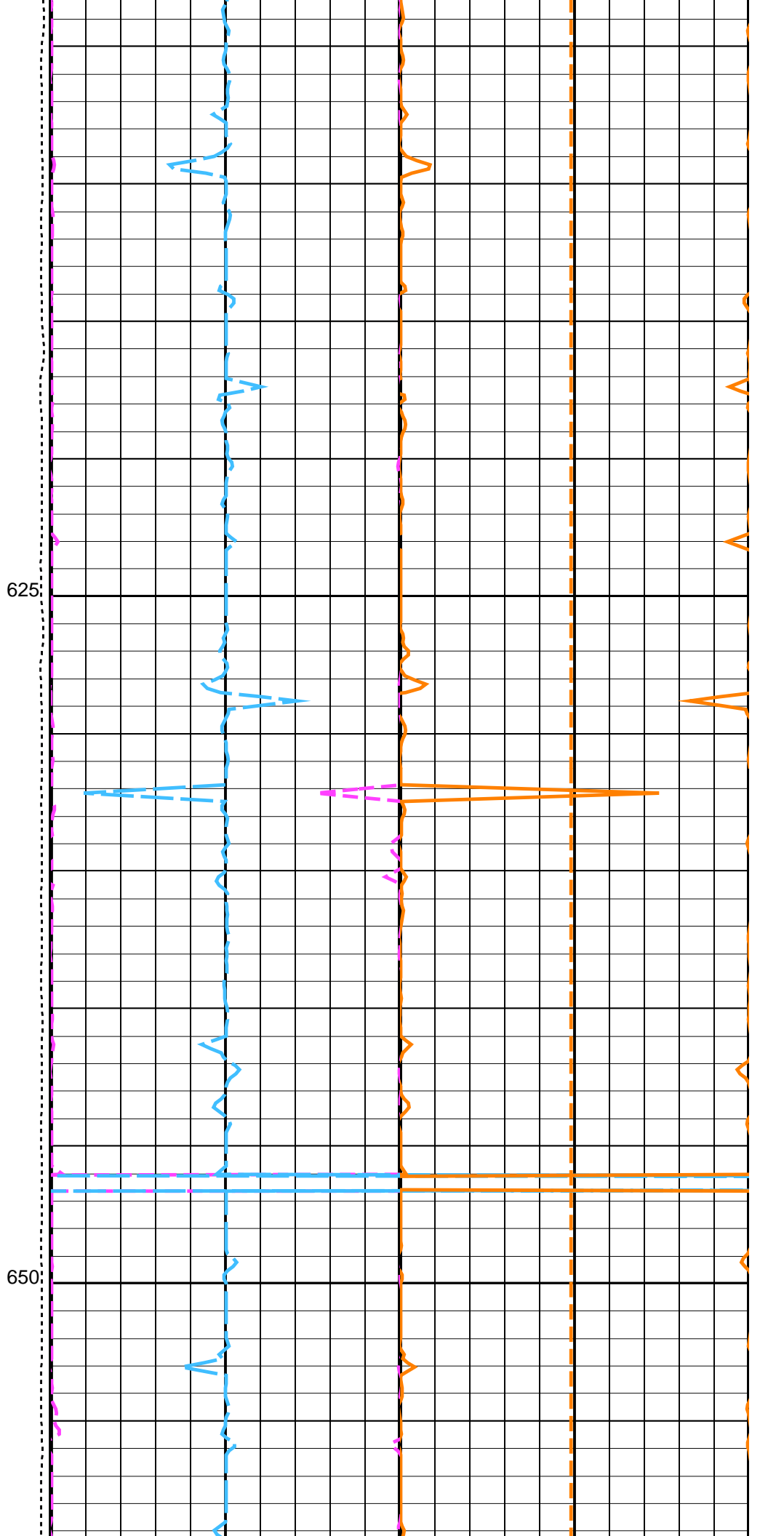
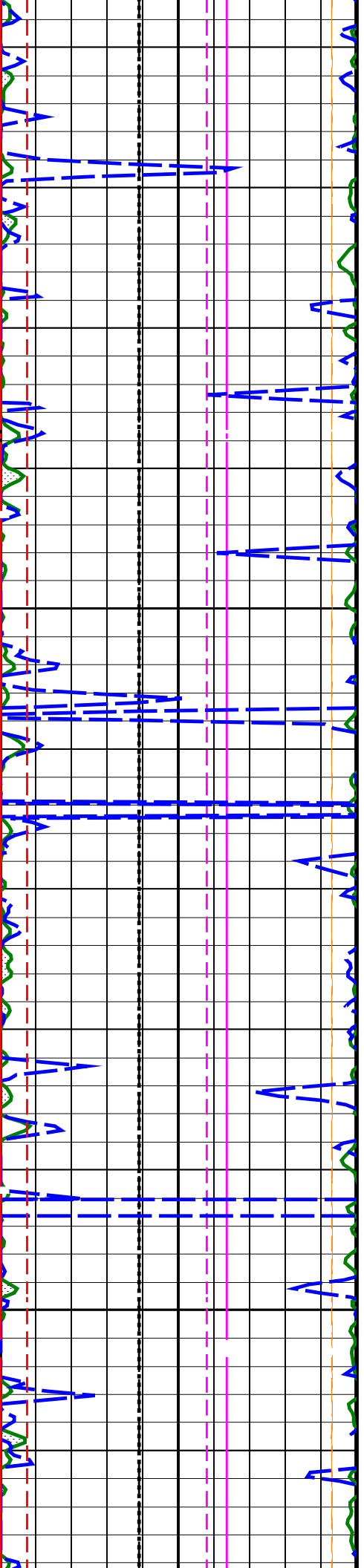
Time Mark Every 60 S





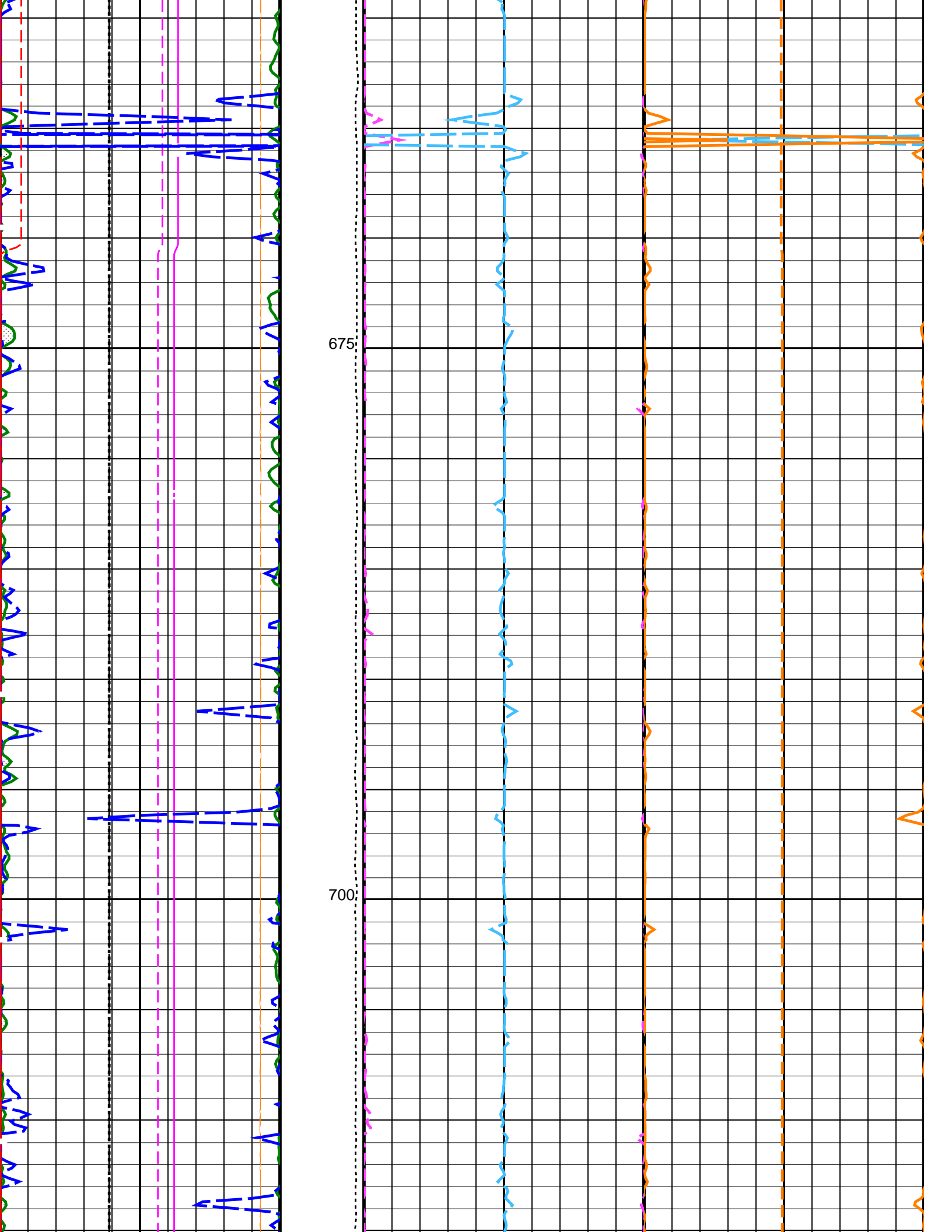


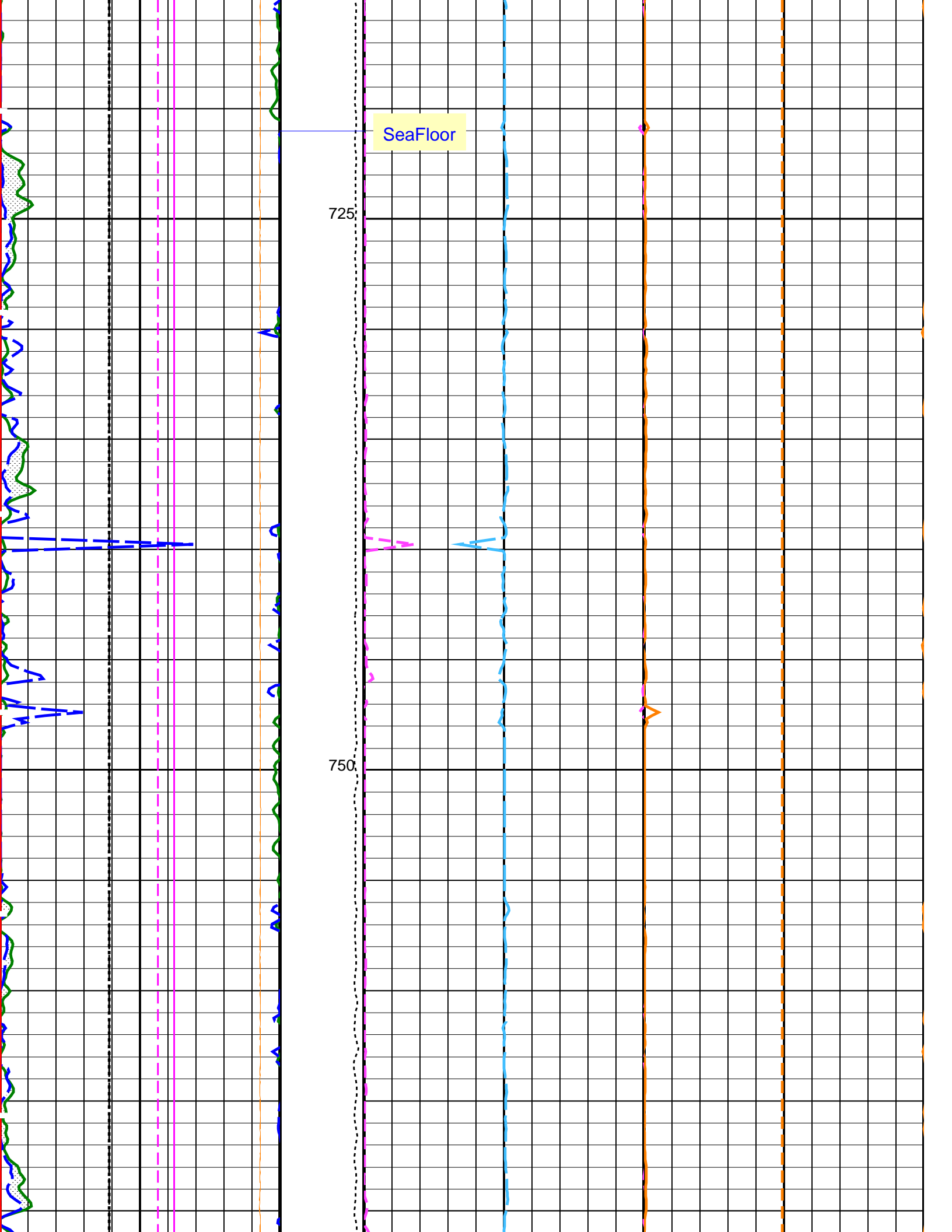




625

650

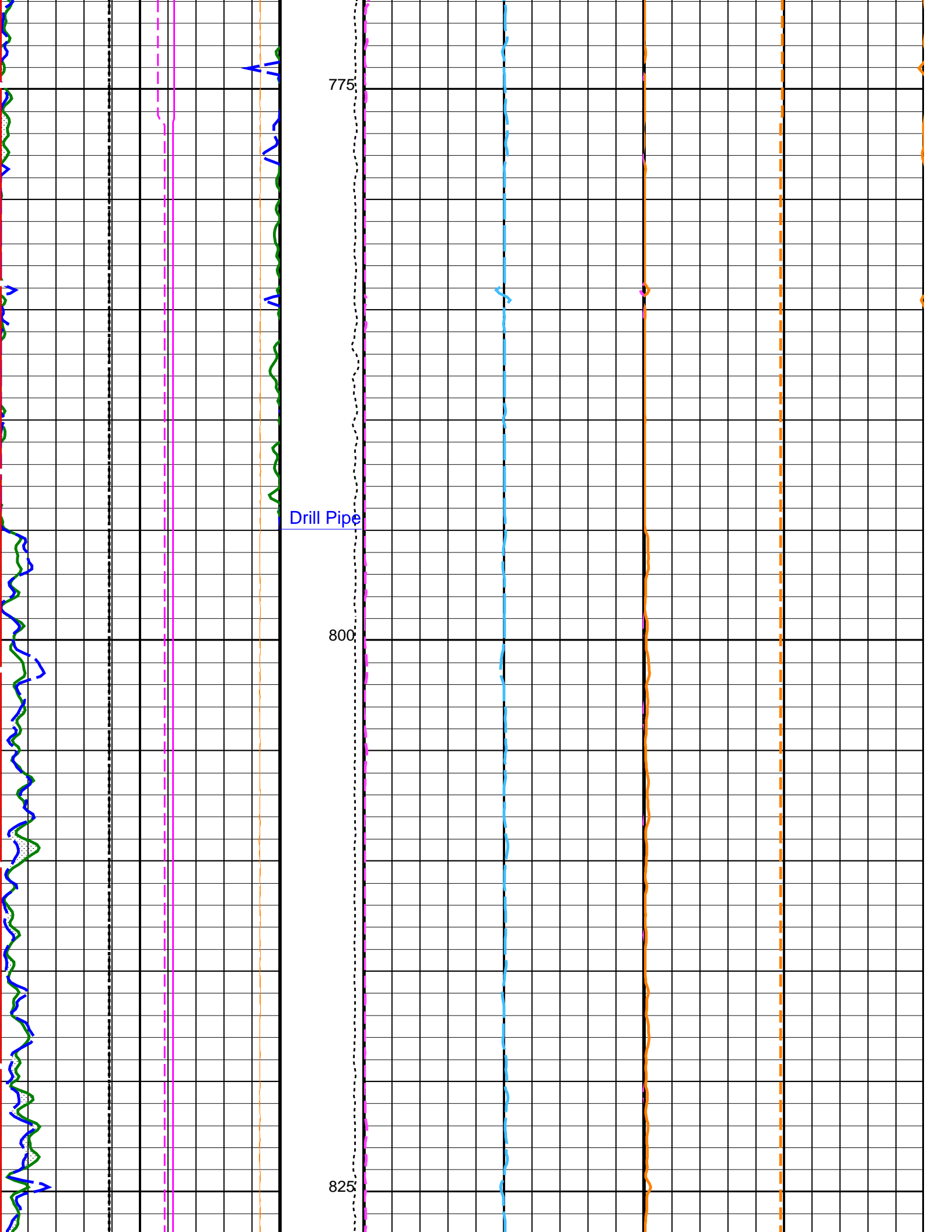


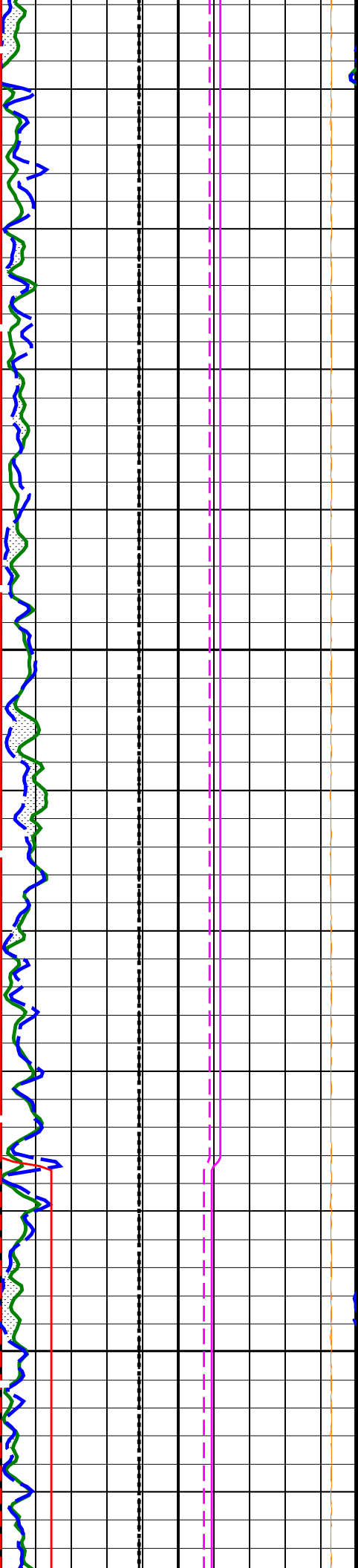


SeaFloor

725

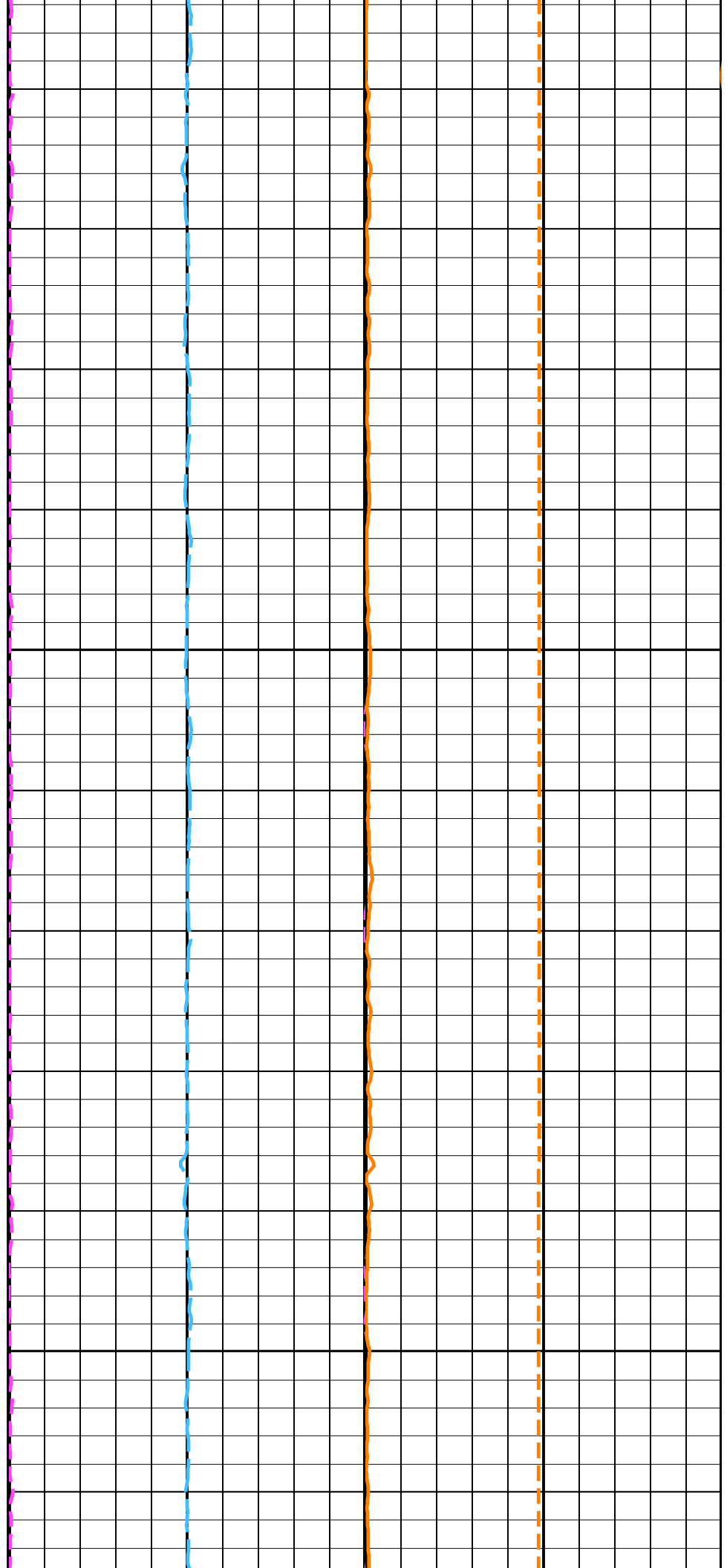
750

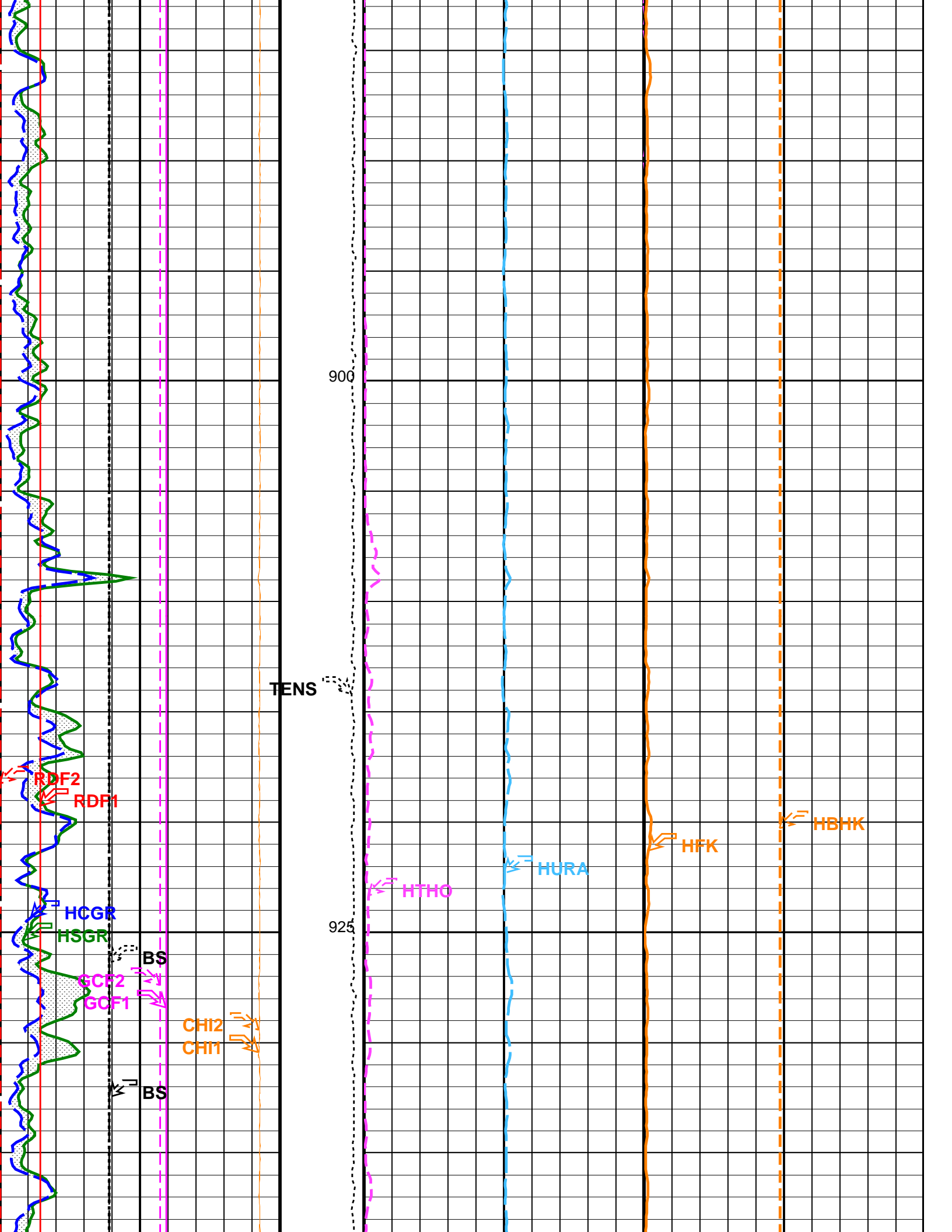


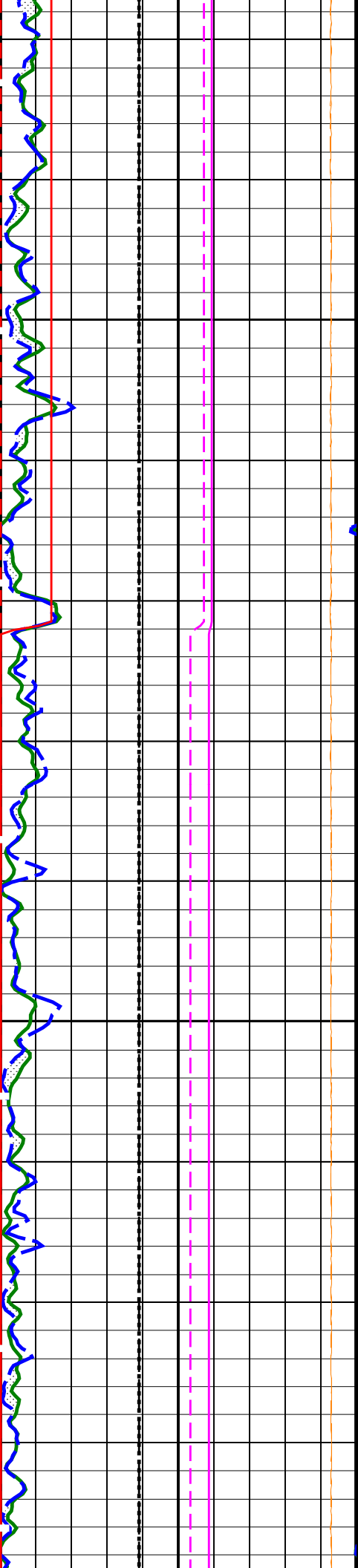


850

875

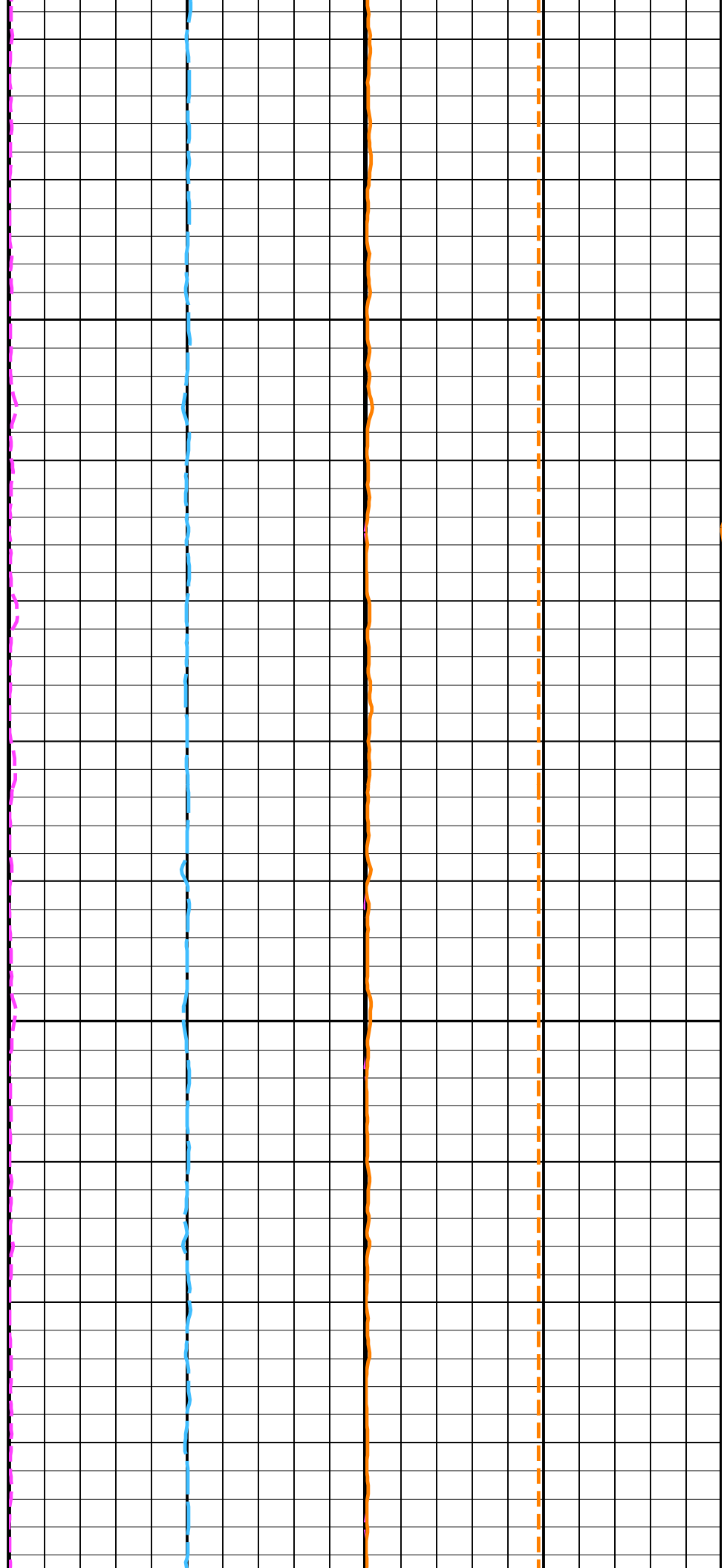






950

975



HNGS Det.1 Chi Squared (CHI1) 10 (----) 0		TD- Last Reading Tension (TENS) (LBF) 10000 0	HNGS Thorium (HTHO) (PPM) 0 30 0		HNGS Potassium (HFK) (V/V) 0 0.1		
HNGS Det.2 Chi Squared (CHI2) 10 (----) 0			HNGS Uranium (HURA) (PPM) -10 30				
Bit Size (BS) (IN) 6 16						HNGS Borehole Potassium (HBHK) (V/V) -0.05 0.05	
Caliper (BS) (IN) 6 16							
HNGS Computed Gamma Ray (HCGR) (GAPI) 0 25		Flipped Down Log – Measured depth below rig floor					
Area1 From HCGR to HSGR							
HNGS Det.1 Gain Correction Factor (GCF1) (----) 0.9 1.1							
HNGS Det.2 Gain Correction Factor (GCF2) (----) 0.9 1.1							
HNGS Det.1 Resolution Degradation Factor (RDF1) (----) 0 10							
HNGS Det.2 Resolution Degradation Factor (RDF2) (----) 0 10							
HNGS Spectroscopy Gamma Ray (HSGR) (GAPI) 0 25							

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	-0.0012784
HALF	HNGS Alpha Filter Length	60 IN
HCRB	HNGS Apply Borehole Potassium Correction	NONE
HMWM	Mud Weighting Material	NATU
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	-3.22916	
VBA2	HNGS Detector 2 Variable Barite Factor Running Average	0.282836	
BHS	EDTC-B: Enhanced DTS Cartridge		
GCSE	Borehole Status	OPEN	
	Generalized Caliper Selection	BS	
BS	System and Miscellaneous		
DFD	Bit Size	9.875	IN
DO	Drilling Fluid Density	1.00	G/C3
PP	Depth Offset for Playback	0.0	M
	Playback Processing	NORMAL	

Format: HNGSYields Vertical Scale: 1:200 Graphics File Created: 19-Jul-2016 12:32

OP System Version: 19C0-187

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

Input DLIS Files

DEFAULT	Flip_NGS_048LUP	PRODUCER	13-Jul-2016 15:06	998.4 M	0.0 M
---------	-----------------	----------	-------------------	---------	-------

Output DLIS Files

DEFAULT	NGS_051PUP	FN:52	PRODUCER	19-Jul-2016 12:32	
---------	------------	-------	----------	-------------------	--

Company: International Ocean Discovery Program Well: Expedition 362T, Site U1473A

Input DLIS Files

DEFAULT	Flip_NGS_048LUP	PRODUCER	13-Jul-2016 15:06	998.4 M	0.0 M
---------	-----------------	----------	-------------------	---------	-------

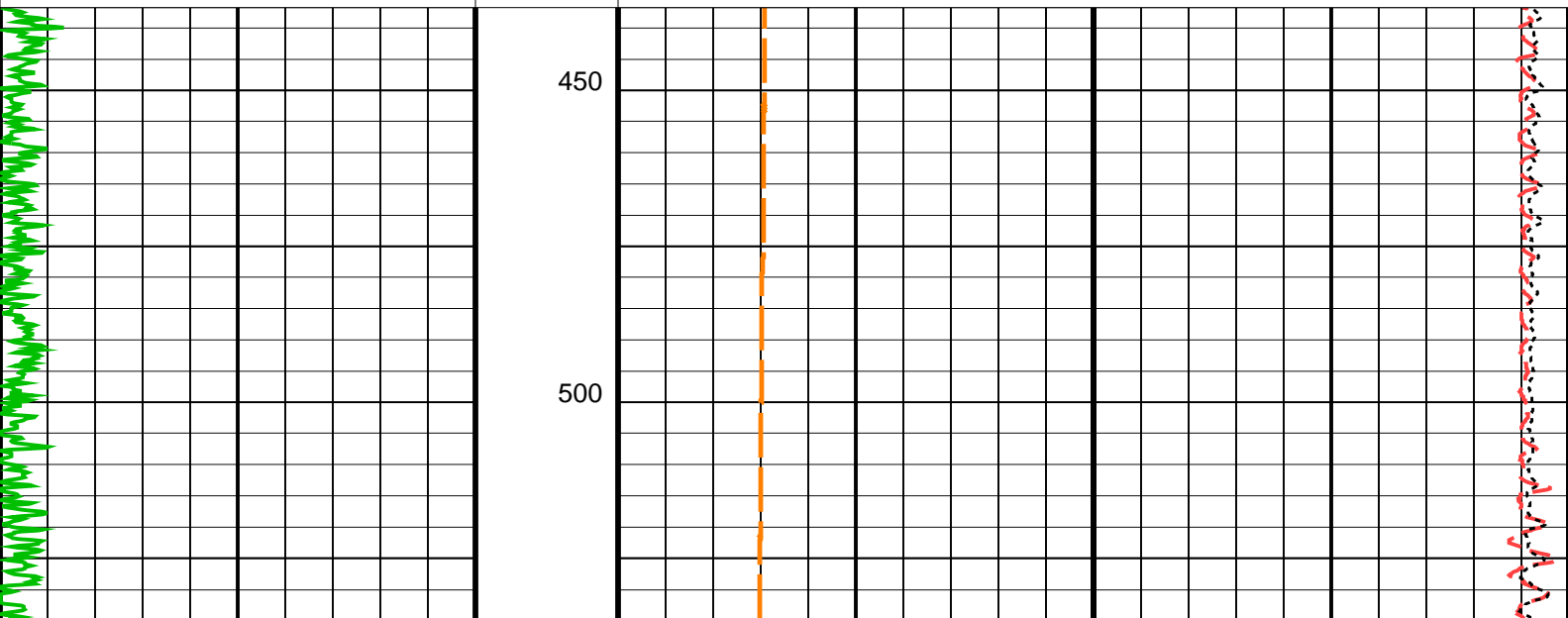
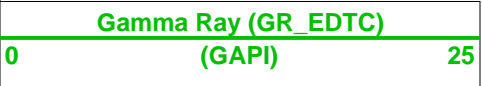
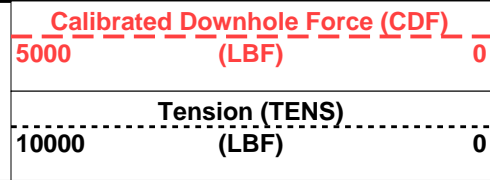
Output DLIS Files

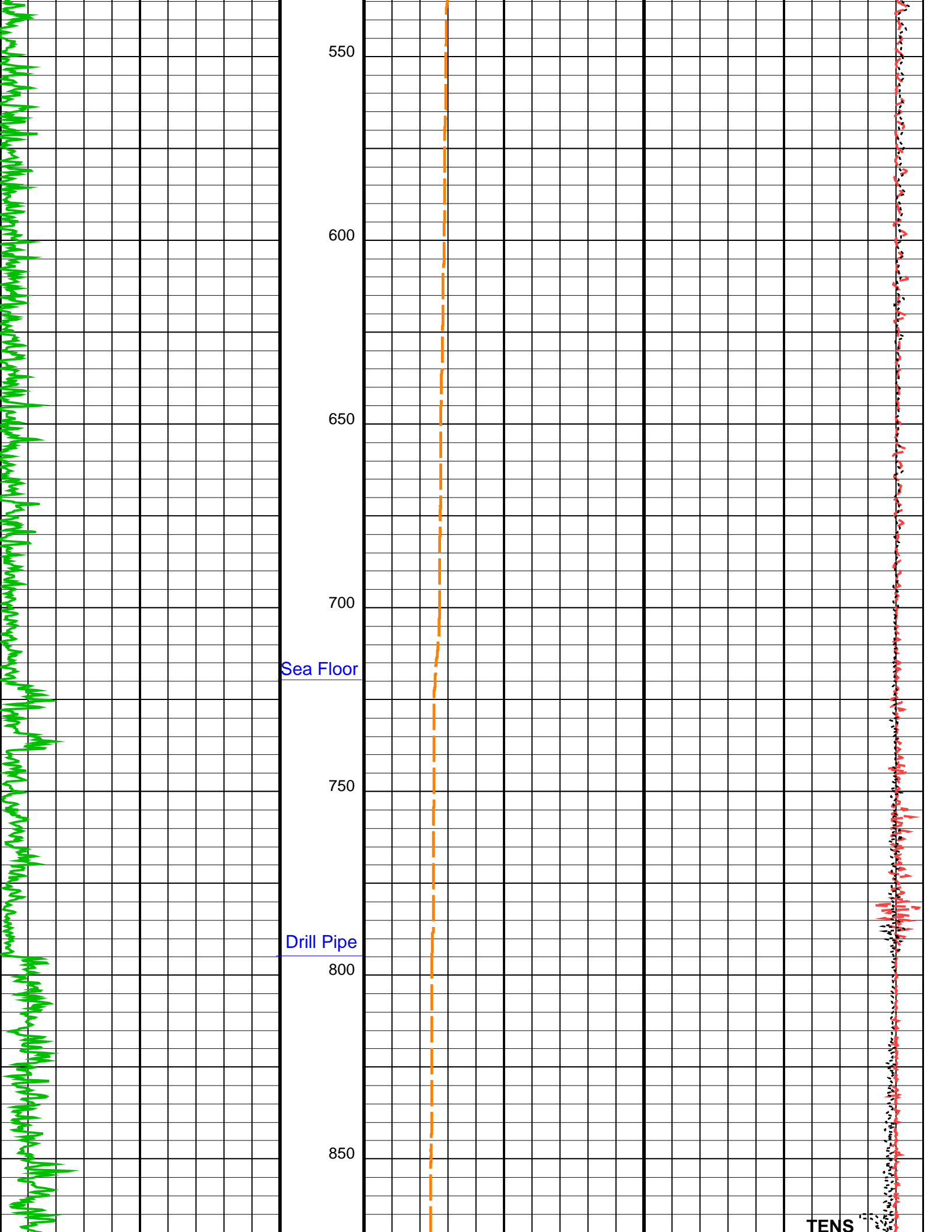
DEFAULT	NGS_051PUP	FN:52	PRODUCER	19-Jul-2016 12:32	998.4 M	436.8 M
---------	------------	-------	----------	-------------------	---------	---------

OP System Version: 19C0-187

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

Flipped Downlog, rig floor depth reference





550

600

650

700

Sea Floor

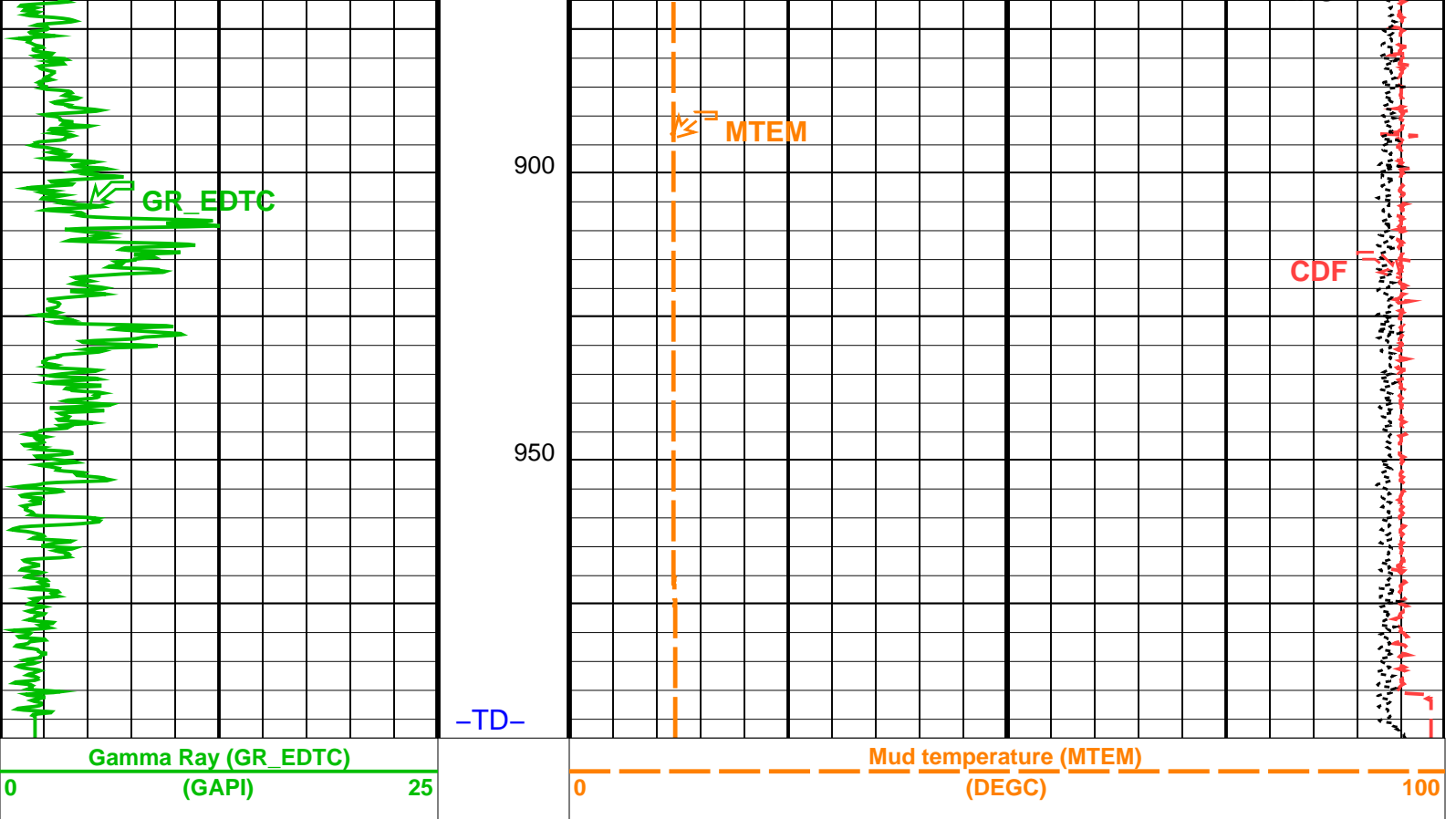
750

Drill Pipe

800

850

TENS



Flipped Downlog, rig floor depth reference

Tension (TENS)	
10000	0
(LBF)	
Calibrated Downhole Force (CDF)	
5000	0
(LBF)	

Parameters		
DLIS Name	Description	Value
System and Miscellaneous		
DO	Depth Offset for Playback	0.0 M
PP	Playback Processing	NORMAL

Format: CORRELATION Vertical Scale: 1:1200 Graphics File Created: 19-Jul-2016 12:32

OP System Version: 19C0-187			
HNGC-B	19C0-187	HNGS-BA	19C0-187
EDTC-B	SKK-5169-EDTCB		

Input DLIS Files					
DEFAULT	Flip_NGS_048LUP	PRODUCER	13-Jul-2016 15:06	998.4 M	0.0 M

Output DLIS Files					
DEFAULT	NGS_051PUP	FN:52	PRODUCER	19-Jul-2016 12:32	

Calibration and Check Summary							
Measurement	Nominal	Master	Before	After	Change	Limit	Units
Hostile Natural Gamma Ray Sonde Wellsite Calibration – Detector 1 Check							
Master: 1-Jul-2016 15:59 Before: 1-Jul-2016 16:15 After: 1-Jul-2016 16:20							
Na 511 Peak Loc	40.00	37.58	37.63	37.61	-0.01318	1.000	
Na 511 Peak Res	15.50	15.45	16.01	15.51	-0.4950	2.000	%

High Voltage	1150	1190	1191	1190	1190	-0.8153	N/A	V
Na 1785 Peak Loc	142.6	136.8	136.6	136.3	136.3	-0.2263	7.000	
Na 1785 Peak Res	8.500	8.499	10.04	8.855	8.855	-1.183	2.000	%
Temperature	15.50	16.16	16.26	16.24	16.24	-0.01946	N/A	DEGC
Na Count Rate	45.00	34.93	34.40	34.76	34.76	0.3537	8.000	CPS

Hostile Natural Gamma Ray Sonde Wellsite Calibration – Detector 2 Check
 Master: 1-Jul-2016 15:59 Before: 1-Jul-2016 16:15 After: 1-Jul-2016 16:20

Na 511 Peak Loc	40.00	39.63	39.55	39.59	39.59	0.04658	1.000	
Na 511 Peak Res	15.50	15.05	15.61	16.29	16.29	0.6799	2.000	%
High Voltage	1150	1077	1077	1077	1077	0.5004	N/A	V
Na 1785 Peak Loc	142.6	143.1	142.6	143.3	143.3	0.6619	7.000	
Na 1785 Peak Res	8.500	8.797	8.475	9.371	9.371	0.8962	2.000	%
Temperature	15.50	15.73	15.79	15.91	15.91	0.1265	N/A	DEGC
Na Count Rate	45.00	35.22	34.39	34.91	34.91	0.5141	8.000	CPS

Hostile Natural Gamma Ray Sonde Wellsite Calibration – Ratio Of Detector 1 To Detector 2
 Master: 1-Jul-2016 15:59 Before: 1-Jul-2016 16:15 After: 1-Jul-2016 16:20

Coincidence Count Rate Ratio	1.000	0.9852	0.9943	0.9878	0.9878	-0.006432	0.05000	
------------------------------	-------	--------	--------	--------	--------	-----------	---------	--

Hostile Natural Gamma Ray Sonde Master Calibration – Detector 1 Calibration

Master: 1-Jul-2016 15:46

Na 511 Peak Set Point	40.00	39.00	--	--	--	--	--	
Th Peak Loc	209.6	207.0	--	--	--	--	--	
Th Peak Res	7.000	7.622	--	--	--	--	--	%
Background Count Rate	142.5	28.77	--	--	--	--	--	CPS
Gain Ratio	1.000	1.047	--	--	--	--	--	

Hostile Natural Gamma Ray Sonde Master Calibration – Detector 2 Calibration

Master: 1-Jul-2016 15:46

Na 511 Peak Set Point	40.00	41.00	--	--	--	--	--	
Th Peak Loc	209.6	211.8	--	--	--	--	--	
Th Peak Res	7.000	6.966	--	--	--	--	--	%
Background Count Rate	142.5	28.96	--	--	--	--	--	CPS
Gain Ratio	1.000	1.017	--	--	--	--	--	

Enhanced DTS Cartridge Wellsite Calibration – EDTC Accelerometer Calibration

Before: 12-Jul-2016 22:35

EDTC Z-Axis Acceleration	9.810	N/A	9.788	N/A	N/A	N/A	N/A	M/S2
--------------------------	-------	-----	-------	-----	-----	-----	-----	------

Enhanced DTS Cartridge Wellsite Calibration – Detector Calibration

Before: 1-Jul-2016 15:03 After: 1-Jul-2016 16:17

Gamma Ray (Jig – Bkg)	149.3	N/A	149.3	145.3	-3.983	13.57	GAPI
Gamma Ray (Calibrated)	164.0	N/A	164.0	159.6	-4.376	15.00	GAPI

Hostile Natural Gamma Ray Cartridge – B / Equipment Identification

Primary Equipment:								
HNGC Cartridge				HNGC – B		439		
Auxiliary Equipment:								
HNGC Housing				HNGH – A		380		

Hostile Natural Gamma Ray Sonde / Equipment Identification

Primary Equipment:								
HNGS Sonde				HNGS – BA		177		
Auxiliary Equipment:								
HNGS Sonde Housing				HNSH – BA		174		
Gamma Source Radioactive				GSR – U		616008		

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
Master		37.58	Master		15.45	Master		1190
Before		37.63	Before		16.01	Before		1191
After		37.61	After		15.51	After		1190
	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		136.8	Master		8.499	Master		16.16
Before		136.6	Before		10.04	Before		16.26
After		136.3	After		8.855	After		16.24
	135.0 (Minimum)	142.6 (Nominal)	150.3 (Maximum)		7.000 (Minimum)	8.500 (Nominal)	11.00 (Maximum)	
Phase	Na Count Rate CPS	Value						
Master		34.93						
Before		34.40						
After		34.76						
	10.00 (Minimum)	45.00 (Nominal)	100.0 (Maximum)					
Master: 1-Jul-2016 15:59			Before: 1-Jul-2016 16:15			After: 1-Jul-2016 16:20		

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		39.63	Master		15.05	Master		1077
Before		39.55	Before		15.61	Before		1077
After		39.59	After		16.29	After		1077
	37.50 (Minimum)	40.00 (Nominal)	43.50 (Maximum)		12.00 (Minimum)	15.50 (Nominal)	19.00 (Maximum)	
Phase	Na 1785 Peak Loc	Value	Phase	Na 1785 Peak Res %	Value	Phase	Temperature DEGC	Value
Master		143.1	Master		8.797	Master		15.73
Before		142.6	Before		8.475	Before		15.79
After		143.3	After		9.371	After		15.91
	135.0 (Minimum)	142.6 (Nominal)	150.3 (Maximum)		7.000 (Minimum)	8.500 (Nominal)	11.00 (Maximum)	
Phase	Na Count Rate CPS	Value						
Master		35.22						
Before		34.39						
After		34.91						
	10.00 (Minimum)	45.00 (Nominal)	100.0 (Maximum)					
Master: 1-Jul-2016 15:59			Before: 1-Jul-2016 16:15			After: 1-Jul-2016 16:20		

Hostile Natural Gamma Ray Sonde Wellsite Calibration		
Ratio Of Detector 1 To Detector 2		
Phase	Coincidence Count Rate Ratio	Value
Master		0.9852
Before		0.9943
After		0.9878
	0.9500 (Minimum)	1.000 (Nominal)
		1.050 (Maximum)
Master: 1-Jul-2016 15:59		
Before: 1-Jul-2016 16:15		
After: 1-Jul-2016 16:20		

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		39.00	Master		207.0	Master		7.622
	38.00 (Minimum)	40.00 (Nominal)	43.00 (Maximum)		201.0 (Minimum)	209.6 (Nominal)	218.3 (Maximum)	
Phase	Background Count Rate CPS	Value	Phase	Gain Ratio	Value			
Master		28.77	Master		1.047			
	10.00 (Minimum)	142.5 (Nominal)	265.0 (Maximum)		0.9400 (Minimum)	1.000 (Nominal)	1.060 (Maximum)	
Master: 1-Jul-2016 15:46								

Hostile Natural Gamma Ray Sonde Master Calibration											
Detector 2 Calibration											
Phase	Na 511 Peak Set Point		Value	Phase	Th Peak Loc		Value	Phase	Th Peak Res %		Value
Master			41.00	Master			211.8	Master			6.966
	38.00 (Minimum)	40.00 (Nominal)	43.00 (Maximum)		201.0 (Minimum)	209.6 (Nominal)	218.3 (Maximum)		5.000 (Minimum)	7.000 (Nominal)	9.000 (Maximum)
Phase	Background Count Rate CPS		Value	Phase	Gain Ratio		Value				
Master			28.96	Master			1.017				
	10.00 (Minimum)	142.5 (Nominal)	265.0 (Maximum)		0.9400 (Minimum)	1.000 (Nominal)	1.060 (Maximum)				

Master: 1-Jul-2016 15:46

Enhanced DTS Cartridge / Equipment Identification			
Primary Equipment:			
EDTC Gamma Ray Detector	EDTG - A/B	8305	
Enhanced DTS Cartridge	EDTC - B	8317	
Auxiliary Equipment:			
EDTC Housing	EDTH - B	8303	

Enhanced DTS Cartridge Wellsite Calibration		
EDTC Accelerometer Calibration		
Phase	EDTC Z-Axis Acceleration M/S2	Value
Before		9.788
	9.610 (Minimum)	9.810 (Nominal)
		10.01 (Maximum)

Before: 12-Jul-2016 22:35

Enhanced DTS Cartridge Wellsite Calibration											
Detector Calibration											
Phase	Gamma Ray Background GAPI		Value	Phase	Gamma Ray (Jig - Bkg) GAPI		Value	Phase	Gamma Ray (Calibrated) GAPI		Value
Before			6.959	Before			149.3	Before			164.0
After			7.714	After			145.3	After			159.6
	0 (Minimum)	30.00 (Nominal)	120.0 (Maximum)		135.7 (Minimum)	149.3 (Nominal)	162.8 (Maximum)		149.0 (Minimum)	164.0 (Nominal)	179.0 (Maximum)

Before: 1-Jul-2016 15:03

After: 1-Jul-2016 16:17

Company: **International Ocean Discovery Program**

Schlumberger

Well: **Expedition 362T, Site U1473A**
 Field: **SW Indian Ridge Lower Crust and Moho**
 Rig: **JOIDES Resolution**
 Ocean: **Indian**

Temperature (LEHMT)

Natural Gamma Ray Spectroscopy (HNCS)