



Company: Lamont Doherty

Well: Expedition 312 Site 1256D

Field: Superfast Spreading Crust III

Rig: Joides Resolution Ocean: Pacific Ocean

Hostile Natural Gamma-Ray Sonde

Rig: Joides Resolution

Field: Superfast Spreading Crust III

Location: Expedition 312 Site 1256D

Company: Lamont Doherty

LOCATION		Elev.:	K.B.	11.3 m
Permanent Datum:		Mean Sea Level	G.L.	-3645 m
Log Measured From:	Rig Floor	Elev.: 0 m above Perm. Datum		
Drilling Measured From:	Rig Floor	D.F. 11 m		
API Serial No.	Max. Hole Devi.	Longitude	Latitude	
20-Dec-2005		91° 56.0612 W	6° 44.1631 N	

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

Density

Fluid Loss

Source Of Sample

RM @ Measured Temperature

RMF @ Measured Temperature

RMC @ Measured Temperature

Source RMF

RM @ MRT

Maximum Recorded Temperatures

Circulation Stopped

Logger On Bottom

Unit Number

Recorded By

Witnessed By

Run 1

Run 2

Run

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

Density

Fluid Loss

Source Of Sample

RM @ Measured Temperature

RMF @ Measured Temperature

RMC @ Measured Temperature

Source RMF

RM @ MRT

Maximum Recorded Temperatures

Circulation Stopped

Logger On Bottom

Unit Number

Recorded By

Witnessed By

DISCLAIMER

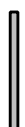


THE USE OF AND RELIANCE UPON THIS RECORDED-DATA BY THE HEREIN NAMED COMPANY (AND ANY OF ITS AFFILIATES, PARTNERS, REPRESENTATIVES, AGENTS, CONSULTANTS AND EMPLOYEES) IS SUBJECT TO THE TERMS AND CONDITIONS AGREED UPON BETWEEN SCHLUMBERGER AND THE COMPANY, INCLUDING: (a) RESTRICTIONS ON USE OF THE RECORDED-DATA; (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.

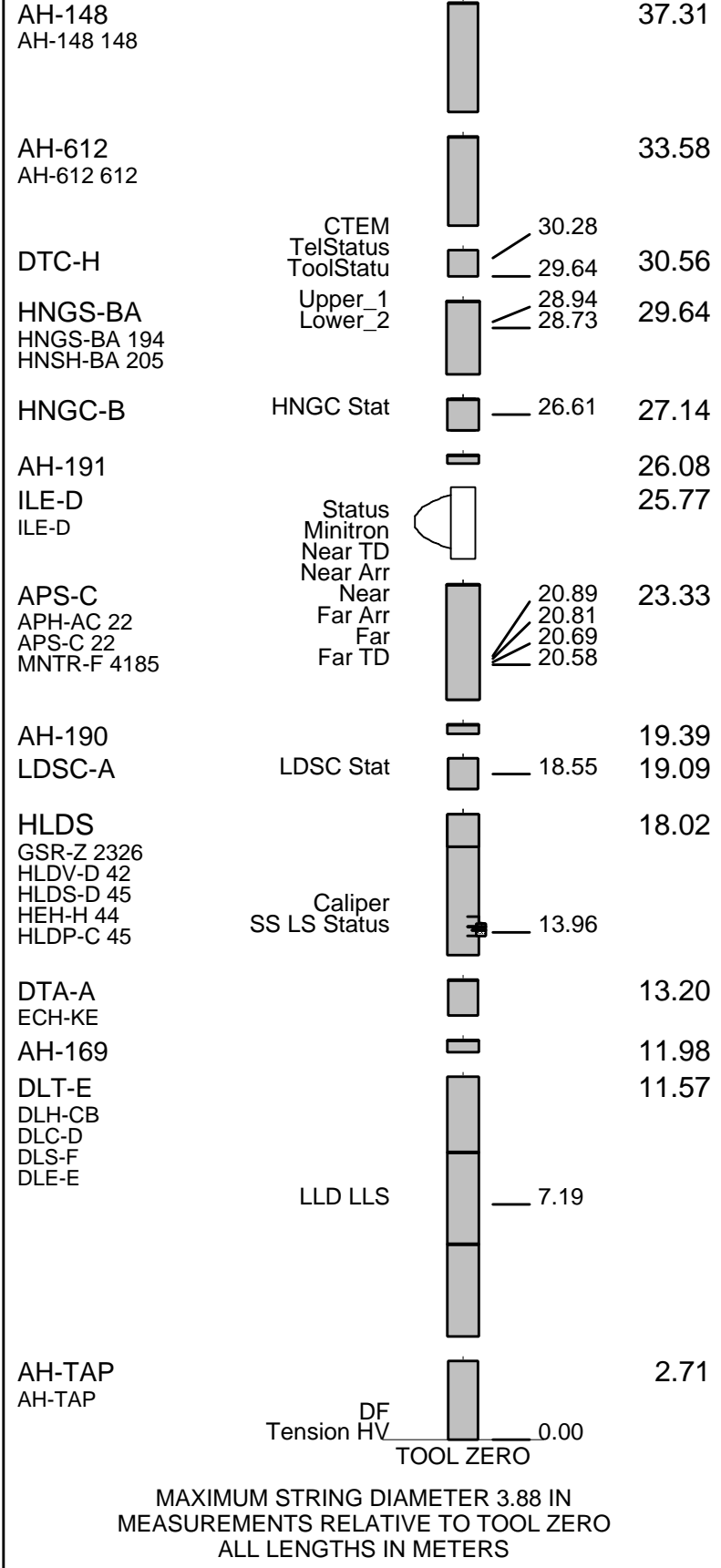
OTHER SERVICES1 OS1: APS, HLDS OS2: MEST, DSI OS3: TAP OS4: UBI OS5:	OTHER SERVICES2 OS1: OS2: OS3: OS4: OS5:
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REMARKS: RUN NUMBER 1 All parameters and presentations as per IODP standards Tool ran as per tool sketch below. Casing and sea floor depth information provided by IODP TD not reached due to hole conditions Hole top section logged in ODP leg 206 and IODP Exp 309. Caliper closed when cable head is 10m. below drill pipe.	REMARKS: RUN NUMBER 2
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RUN 1			RUN 2		
SERVICE ORDER #: PROGRAM VERSION: 12C0-301 FLUID LEVEL:			SERVICE ORDER #: PROGRAM VERSION: FLUID LEVEL:		
LOGGED INTERVAL	START	STOP	LOGGED INTERVAL	START	STOP

EQUIPMENT DESCRIPTION

RUN 1		RUN 2	
SURFACE EQUIPMENT LCM-AA SFT-281 6250 SFT-178 6250 GSR-U 135 WITM (DTS)-A			
DOWNHOLE EQUIPMENT			
BSP BRT-S		62.66	
SP SPARC		41.60	
LEH-MT		38.27	



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

Kelly Bushing Elevation
Derrick Floor Elevation

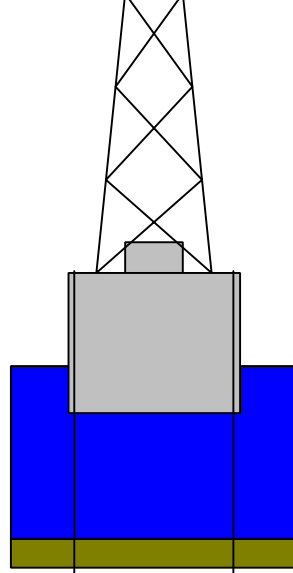
11.3
11.0

11.0 5.500

Casing String

Mean Sea Level

0.0



3645.0 9.875
3934.0 5.500

Borehole Segment
Casing Shoe

Schlumberger

MAIN PASS

MAXIS Field Log

Company: Lamont Doherty

Well: Expedition 312 Site U1256D

Input DLIS Files

DEFAULT	DLL_LDL_APS_NGS_051LUP	FN:54	PRODUCER	20-Dec-2005 07:49	5084.1 M	3894.0 M
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Output DLIS Files

DEFAULT	DLL_LDL_APS_NGS_054PUP	FN:57	PRODUCER	20-Dec-2005 14:21	5084.1 M	3864.3 M
REDUCED	DLL_LDL_APS_NGS_054PUP	FN:58	PRODUCER	20-Dec-2005 14:21	5084.1 M	3864.3 M

OP System Version: 12C0-301
MCM

DLT-E	12C0-301	DTA-A	12C0-301
HLDS	SPC-2602-NUCL	LDSC-A	SPC-2602-NUCL
APS-C	SPC-2602-NUCL	HNGC-B	SPC-2602-NUCL
HNGS-BA	SPC-2602-NUCL	DTC-H	12C0-301

PIP SUMMARY

Time Mark Every 60 S

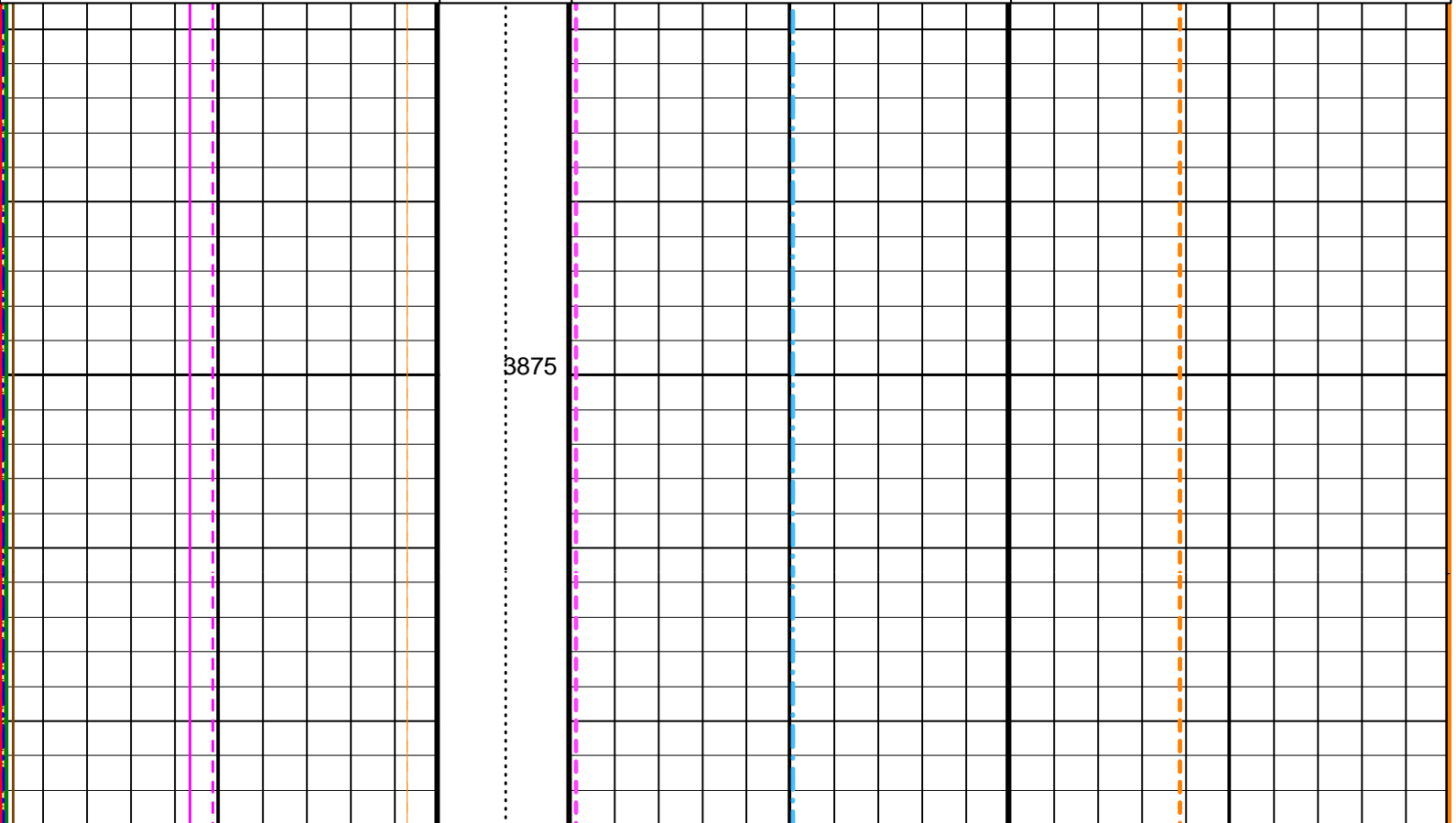
HNGS Spectroscopy Gamma Ray (HSGR)		
0	(GAPI)	20
HNGS Det.2 Resolution Degradation Factor (RDF2)		
0	(---)	10
HNGS Det.1 Resolution Degradation Factor (RDF1)		
0	(---)	10
HNGS Det.2 Gain Correction Factor (GCF2)		
0.9	(---)	1.1
HNGS Det.1 Gain Correction Factor (GCF1)		
0.9	(---)	1.1
Area1 From HCGR to HSGR		
HNGS Computed Gamma Ray (HCGR)		
0	(GAPI)	20
HLDS Caliper (LCAL)		
0	(IN)	20
HNGS Det.2 Chi Squared (CHI2)		
10	(---)	0
HNGS Det.1 Chi Squared (CHI1)		
10	(---)	0

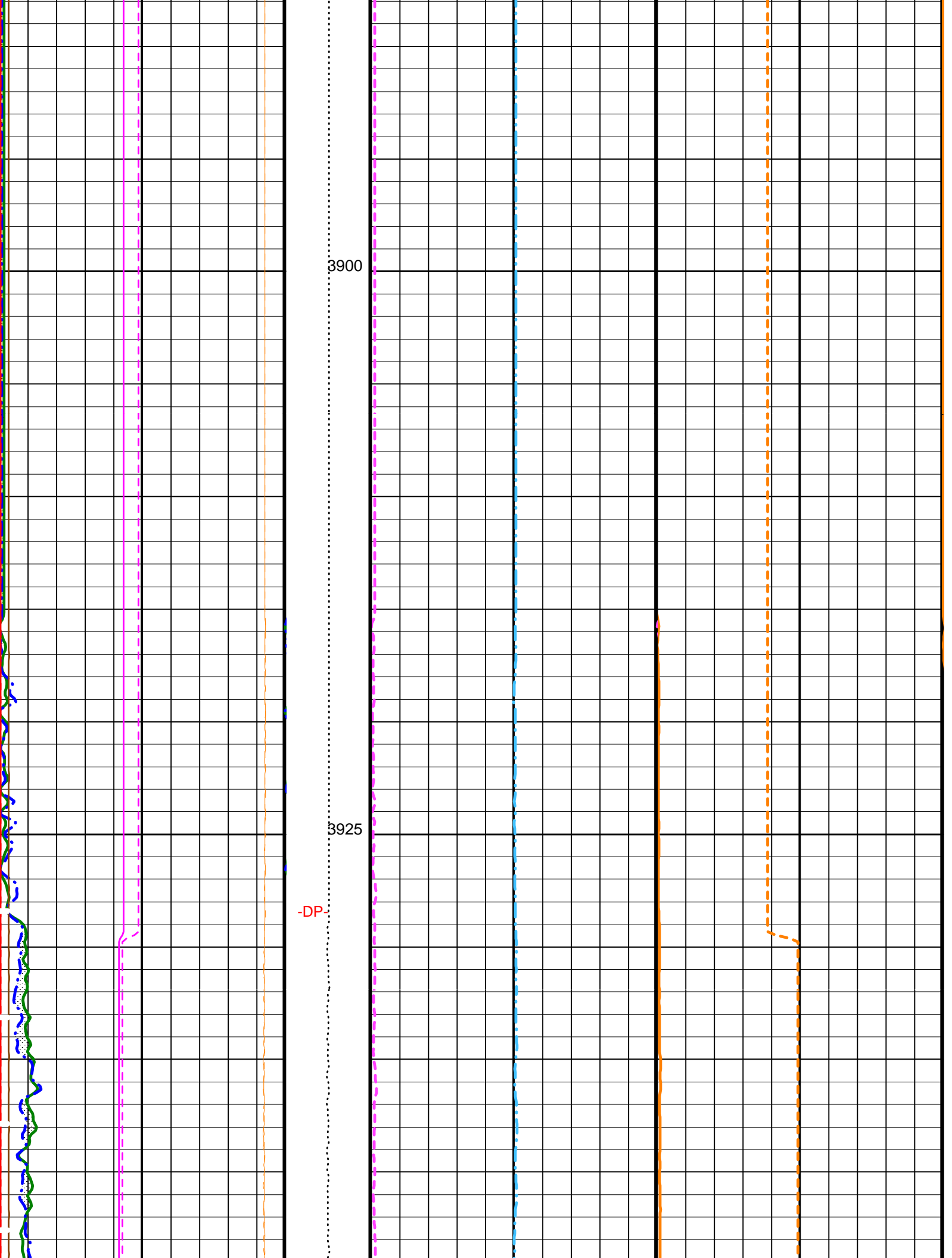
HNGS Borehole Potassium (HBHK)		
-0.05	(V/V)	0.05

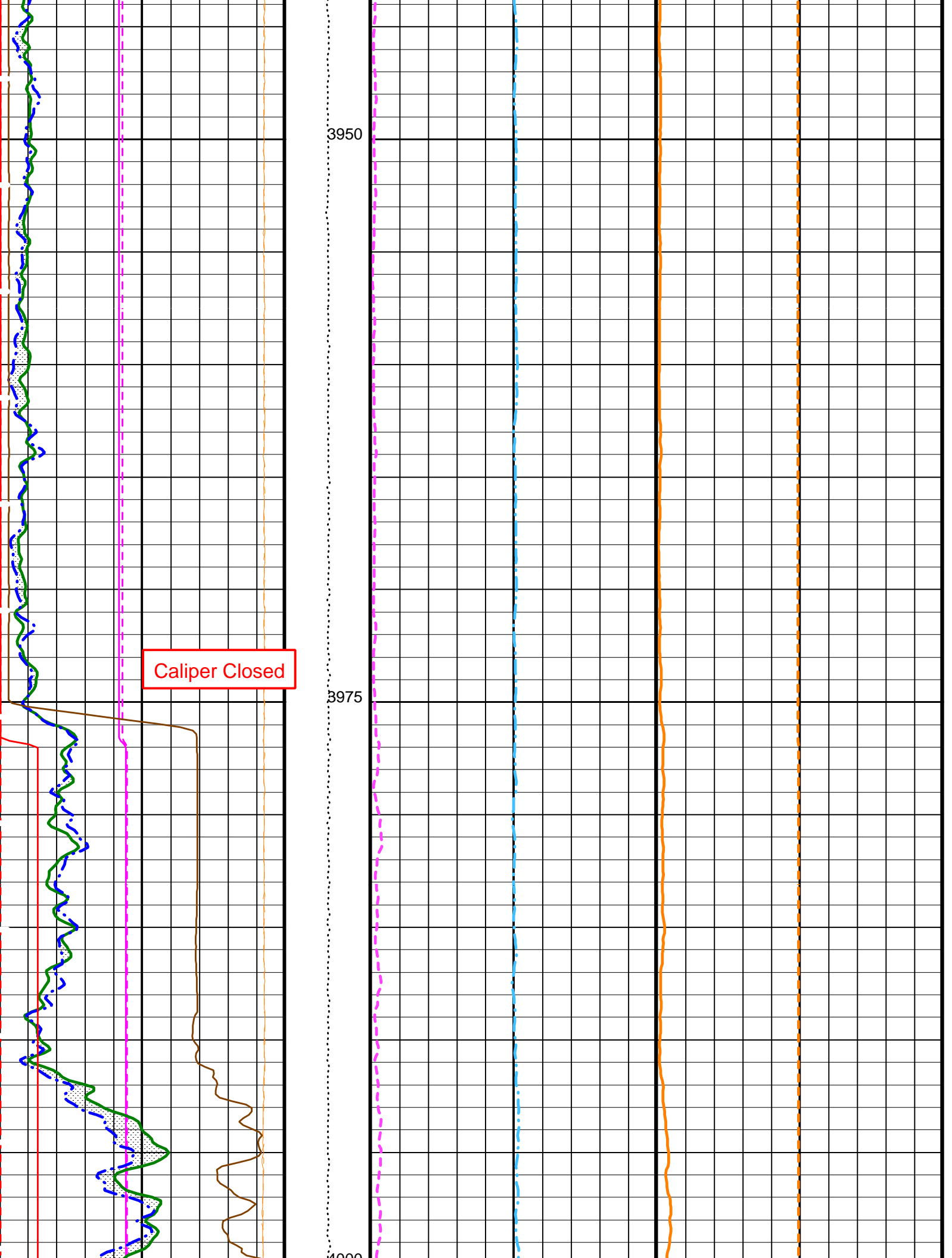
HNGS Uranium (HURA)		
-10	(PPM)	30

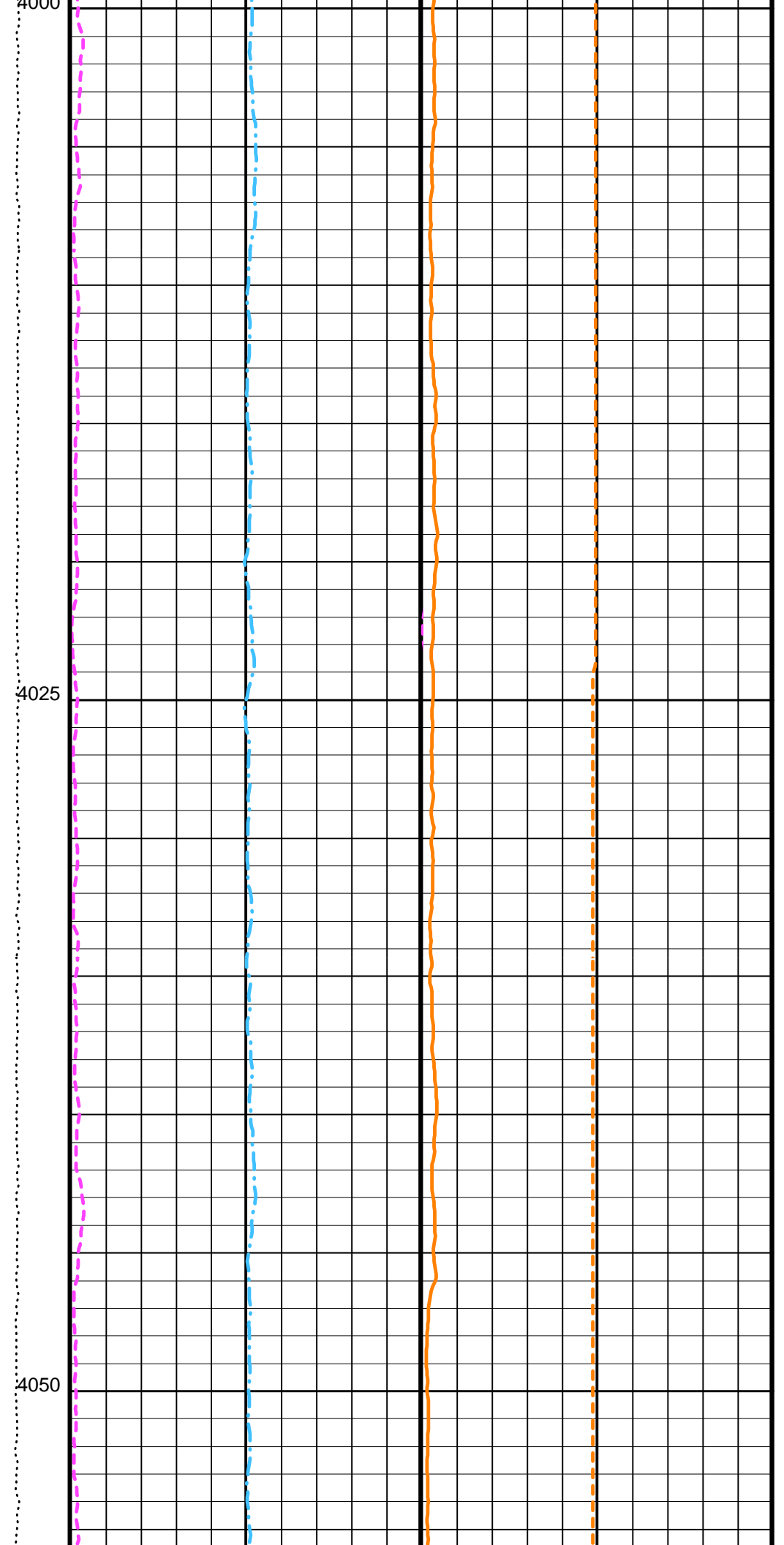
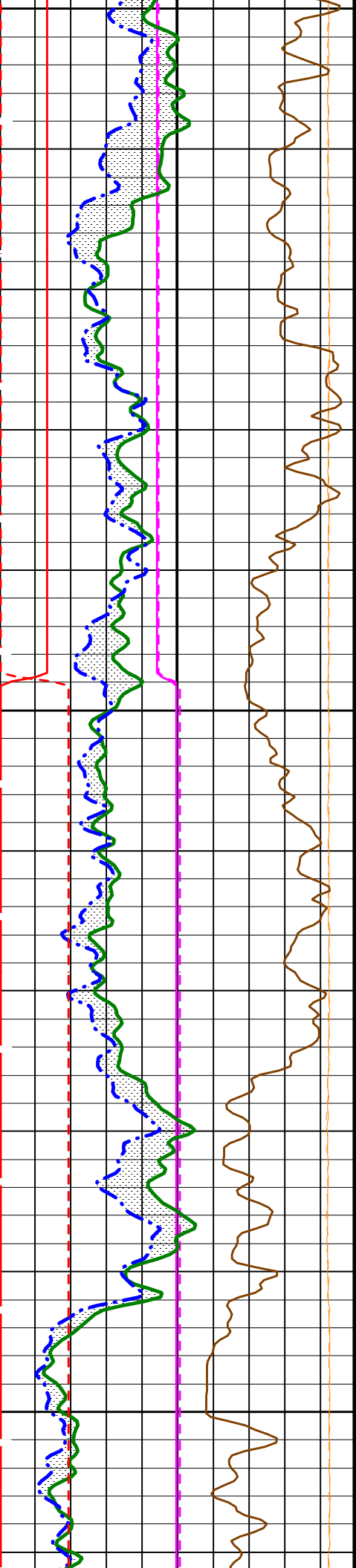
Tension (TENS) (LBF)		
10000	0	
HNGS Thorium (HTHO)		
0	(PPM)	30

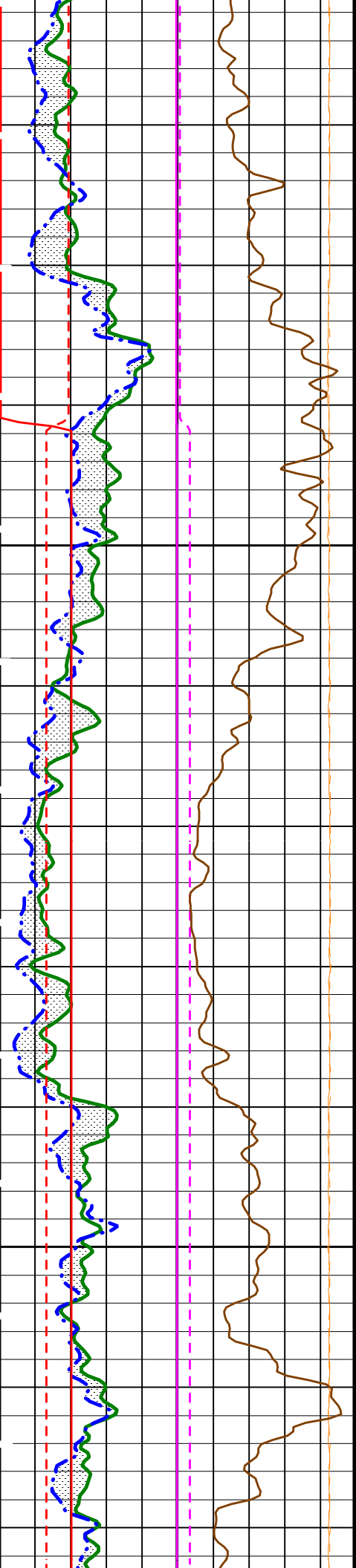
HNGS Potassium (HFK)		
0	(V/V)	0.1





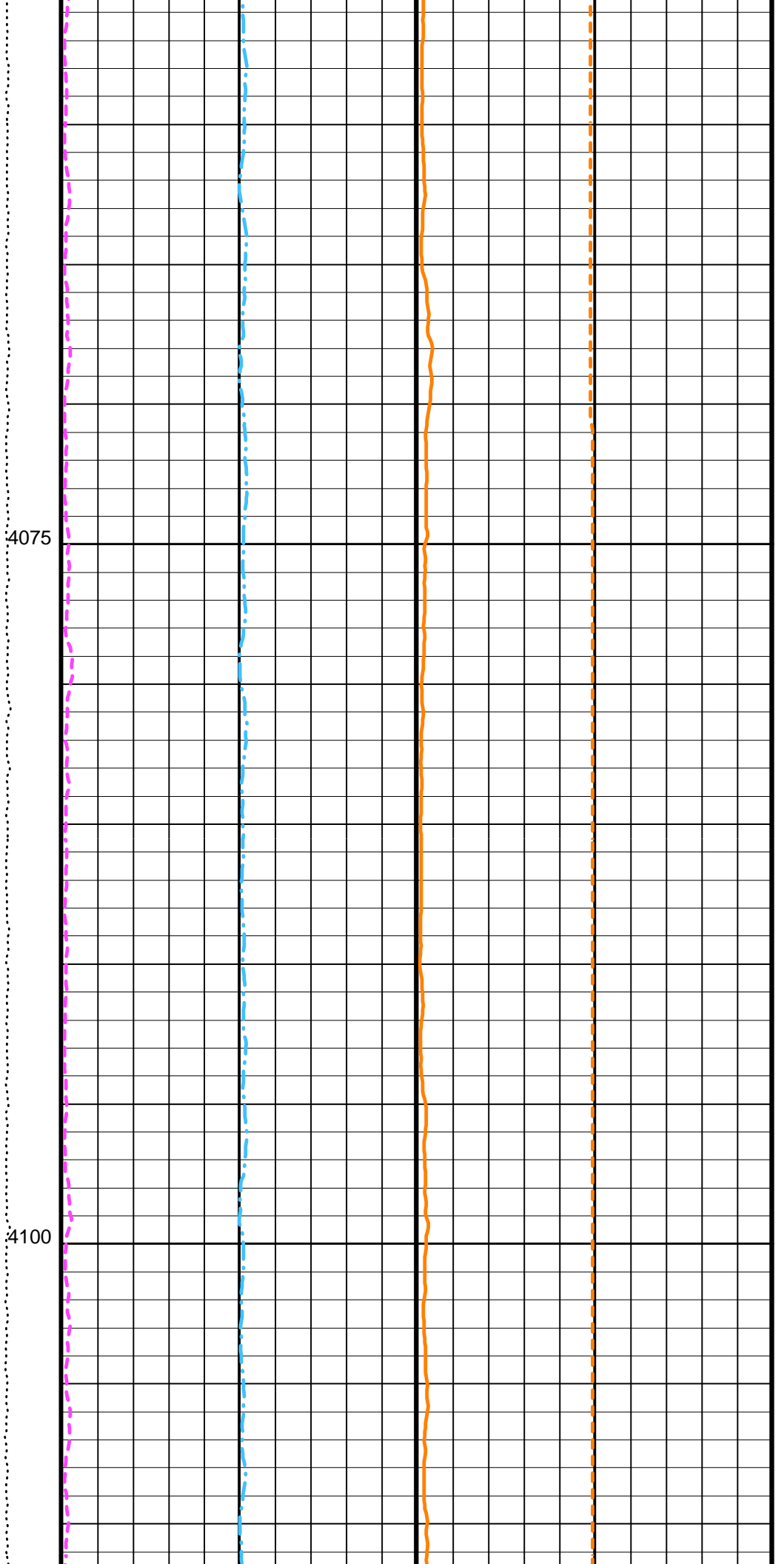


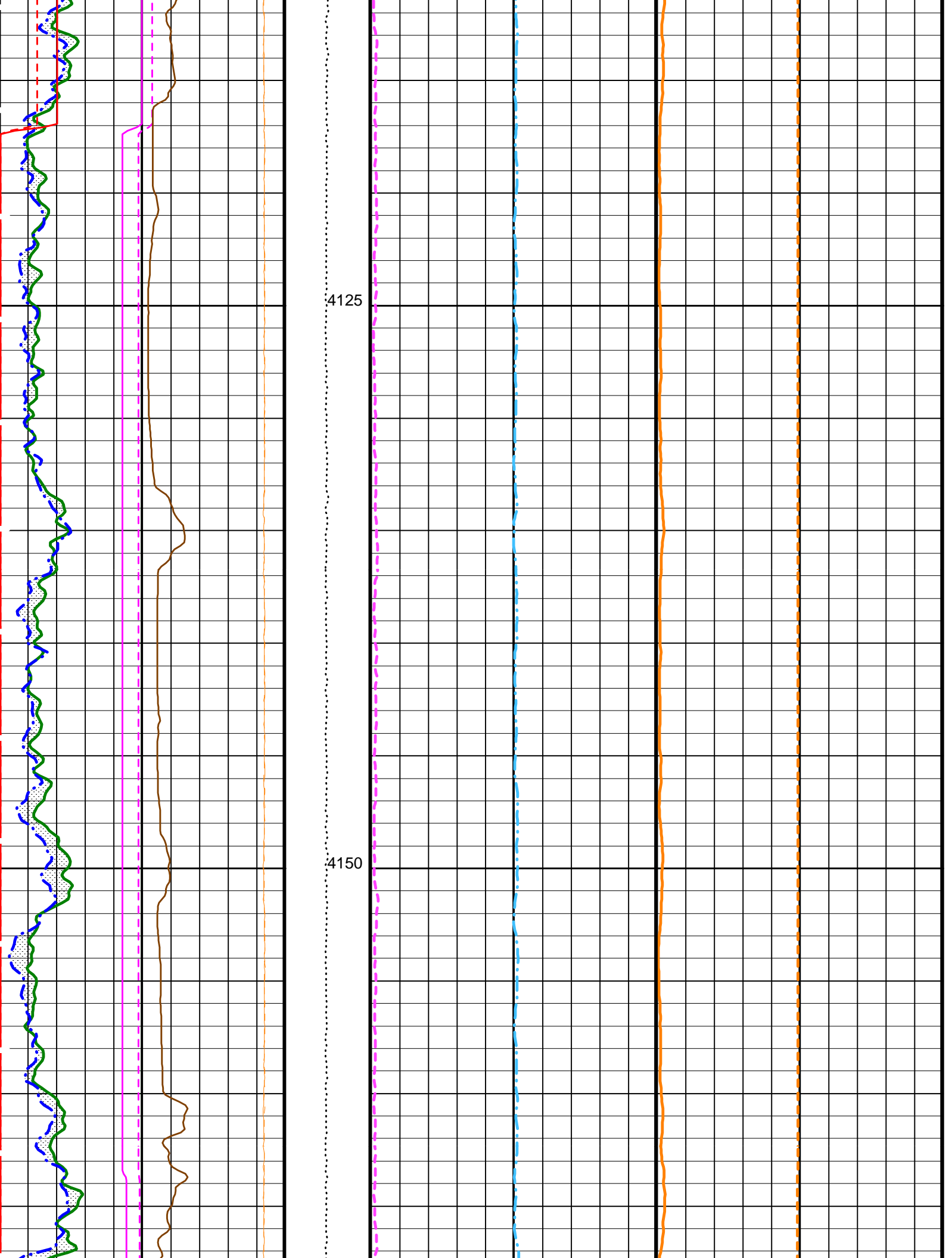




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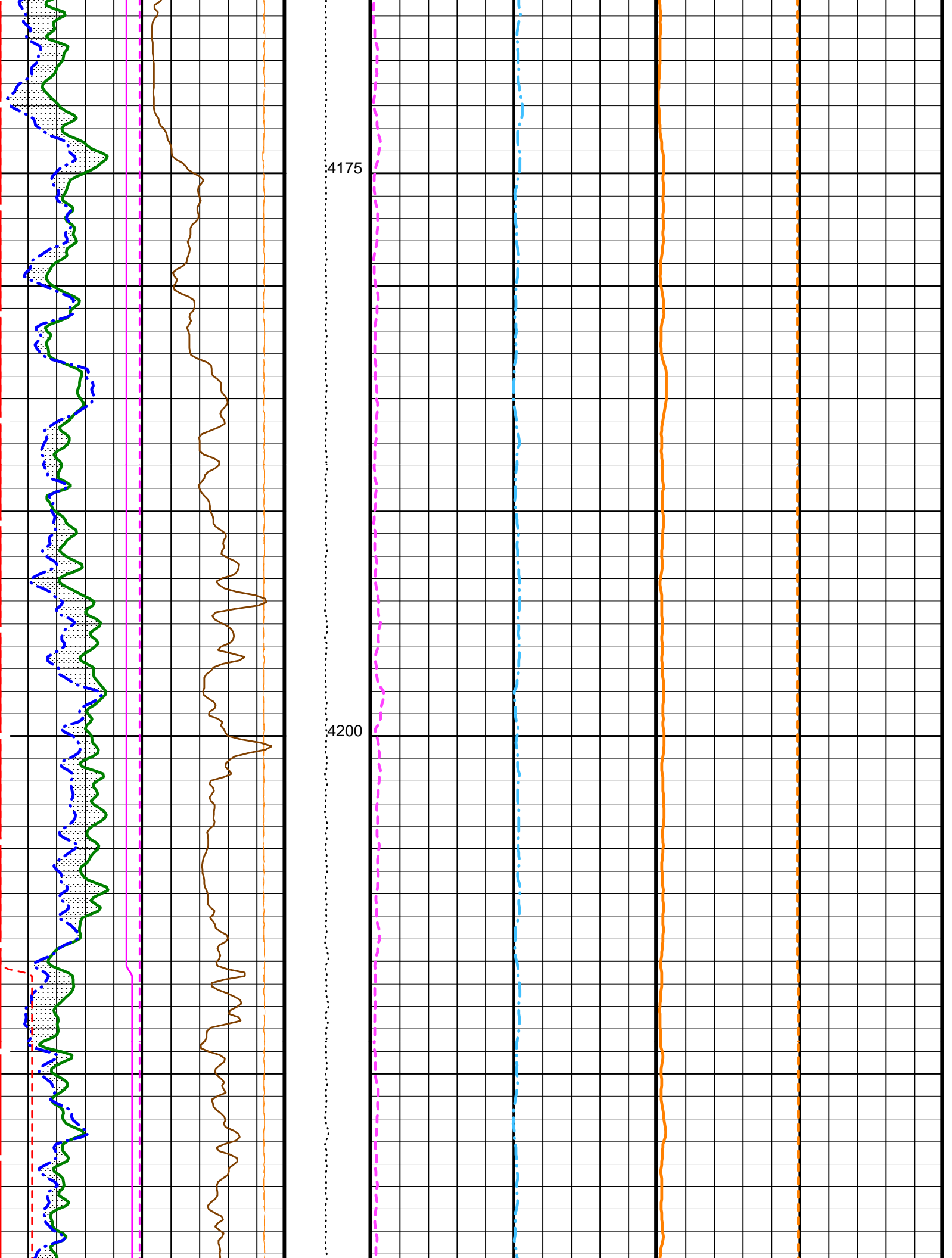
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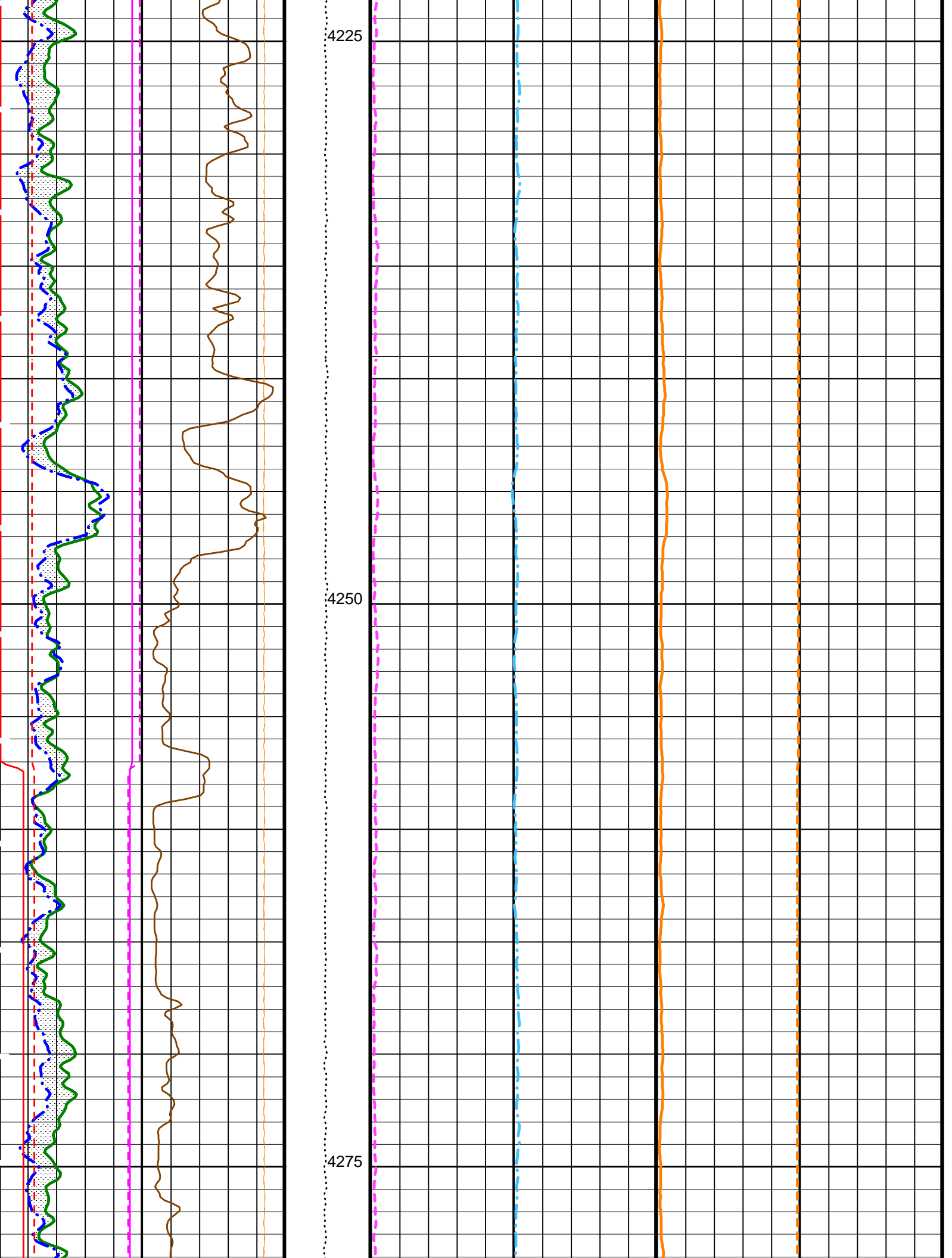


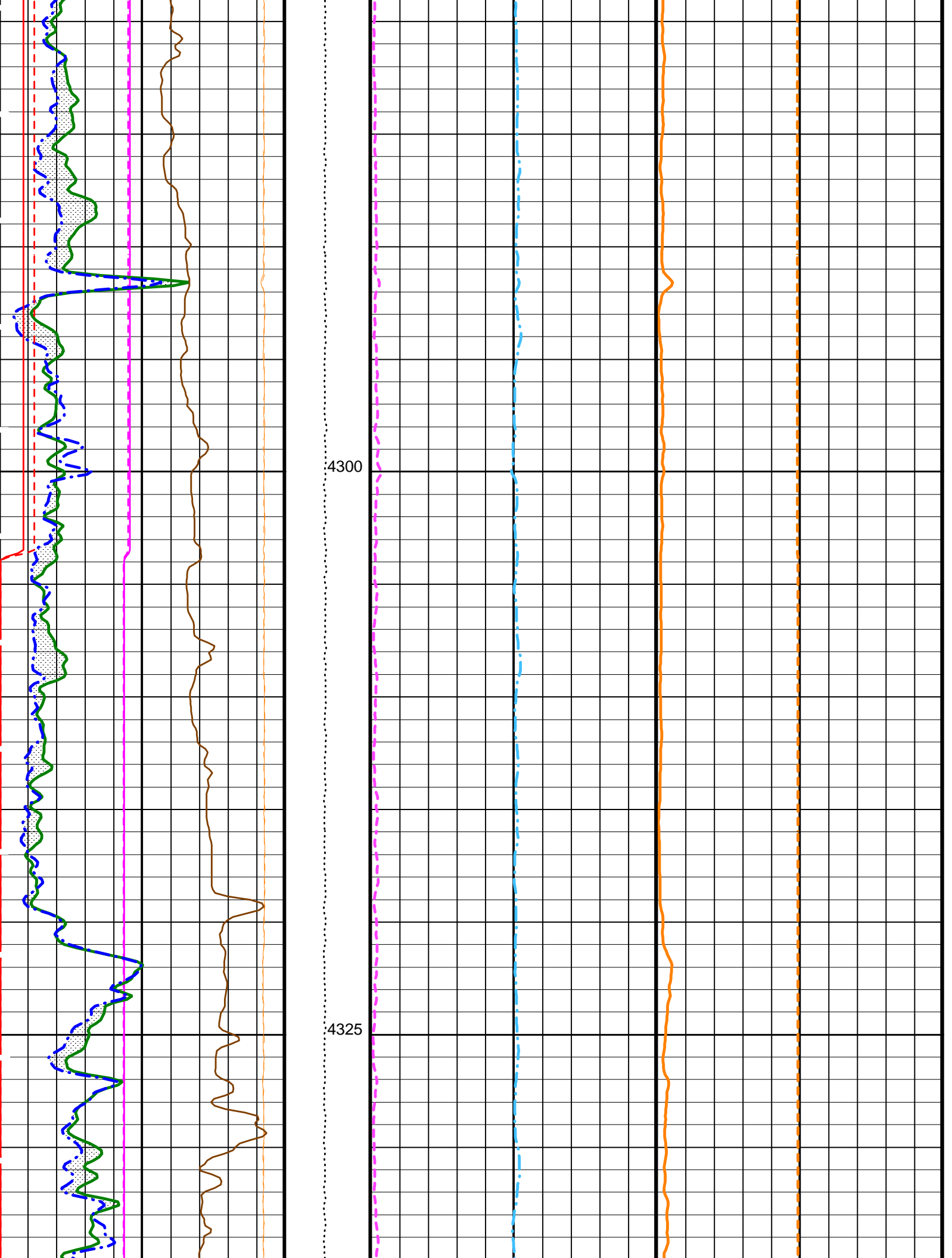


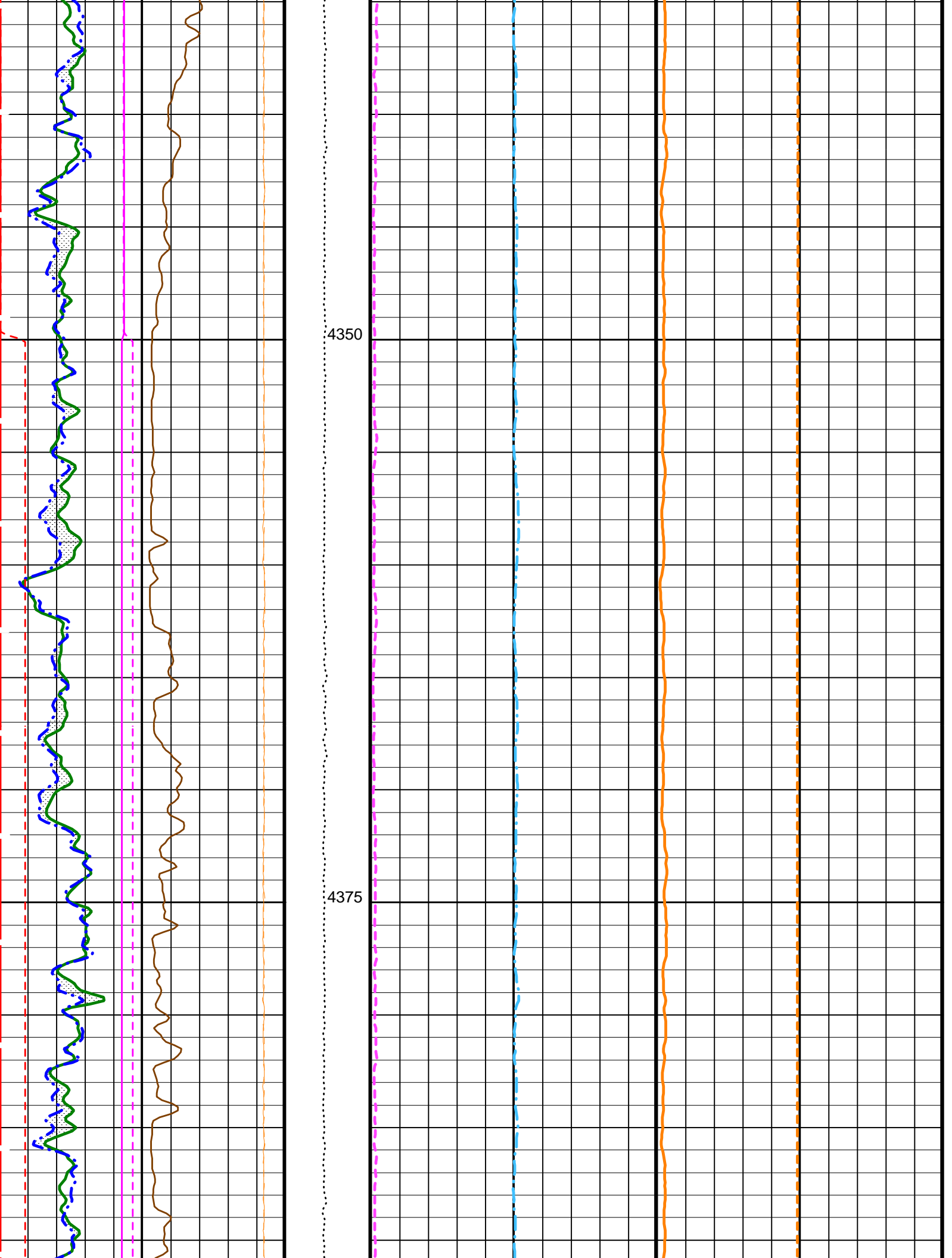
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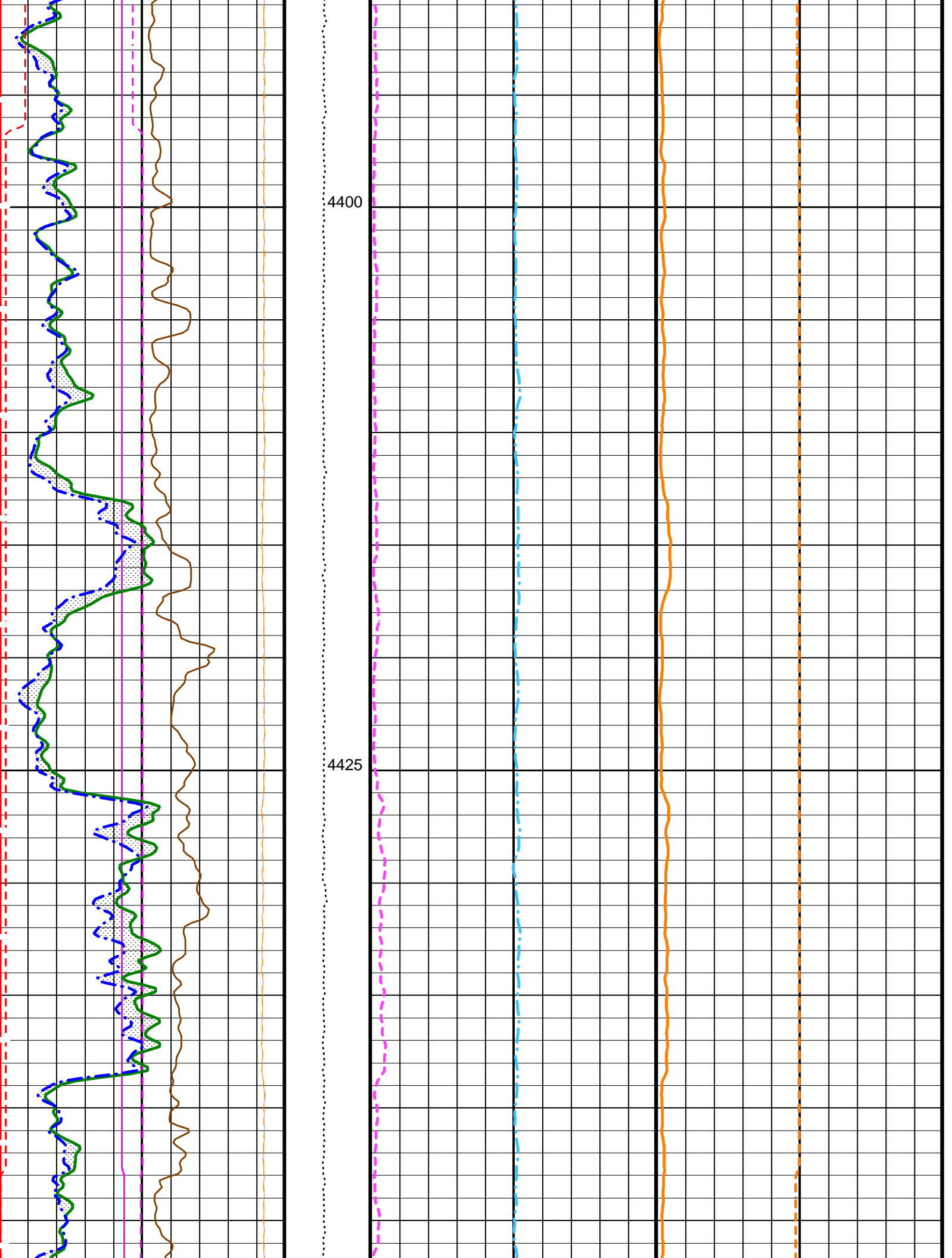
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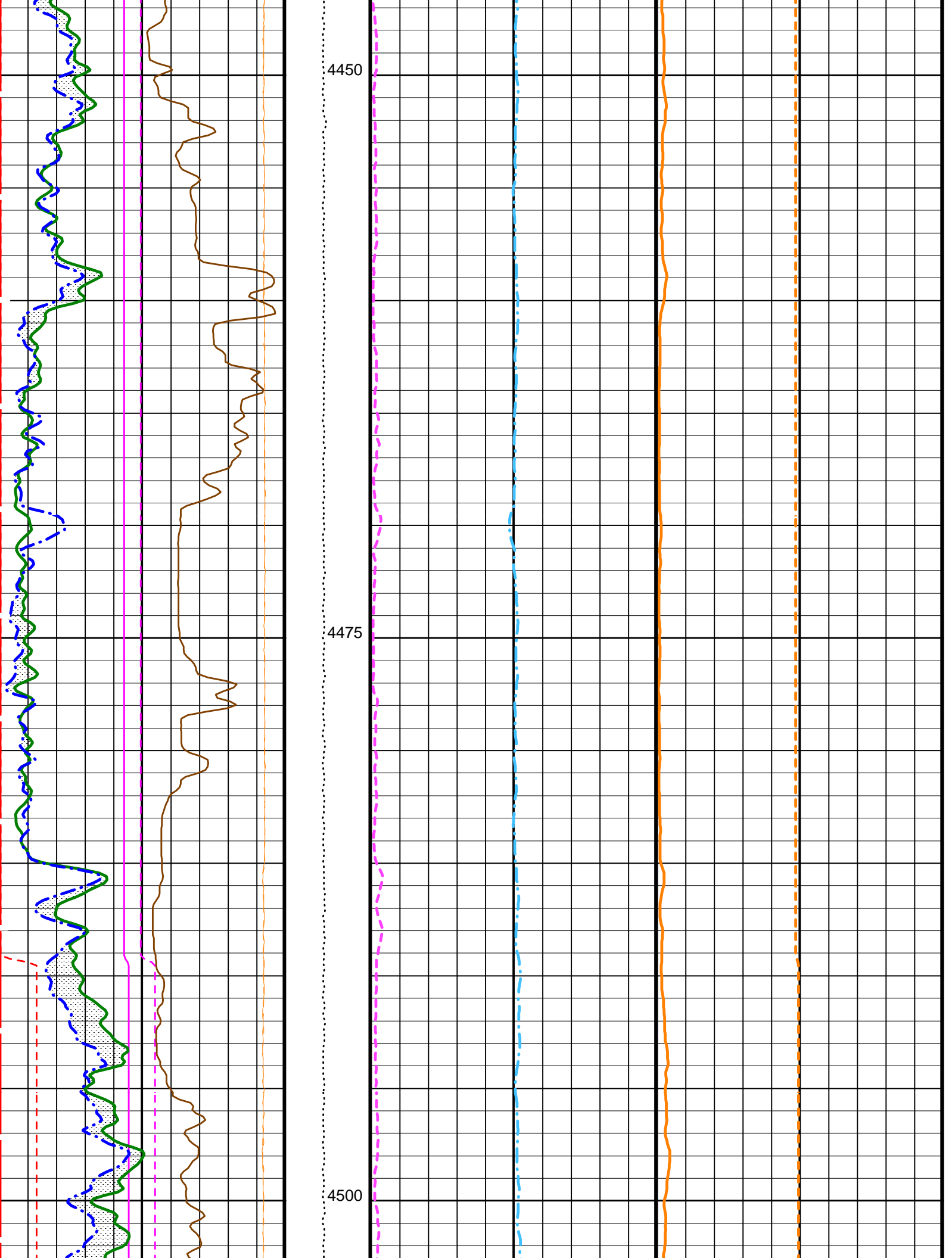


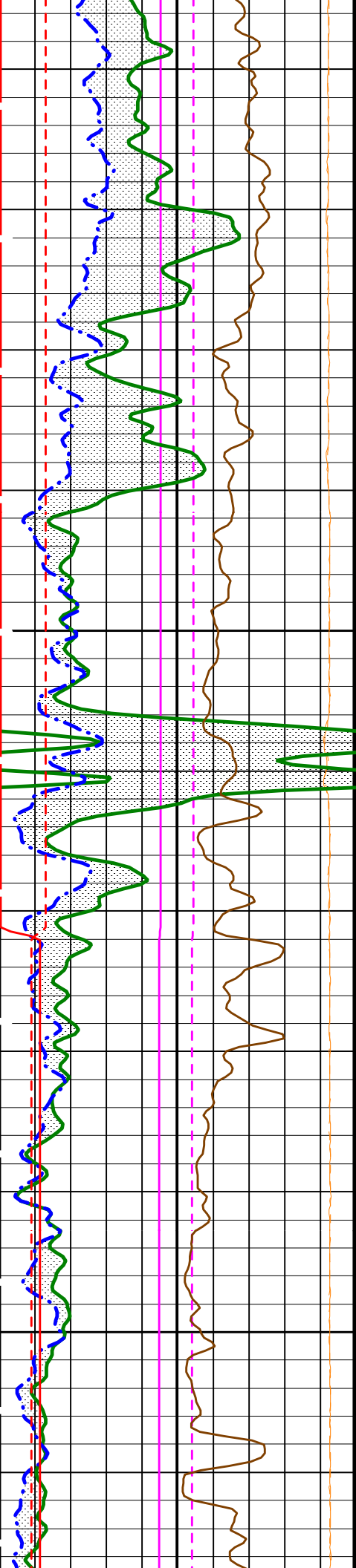






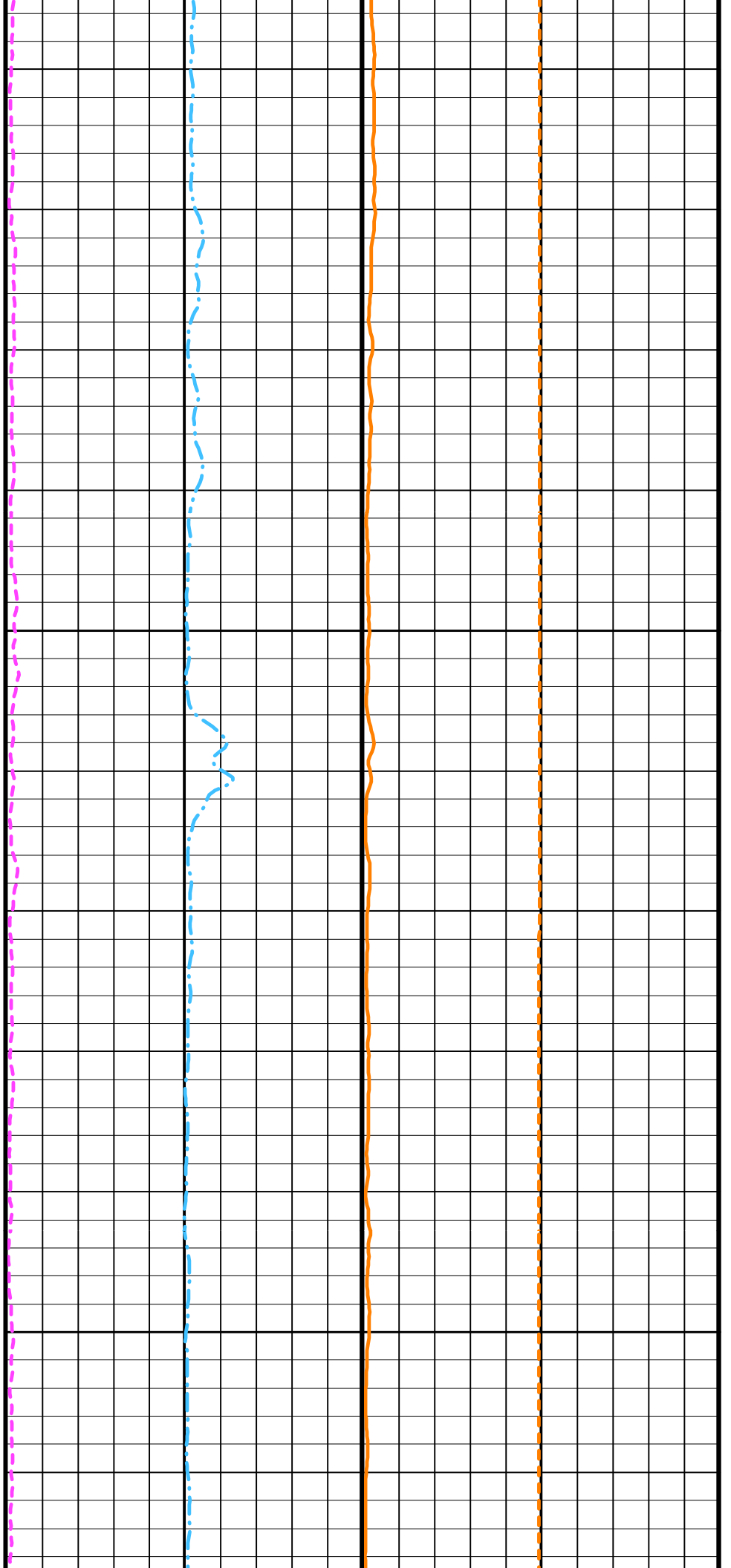


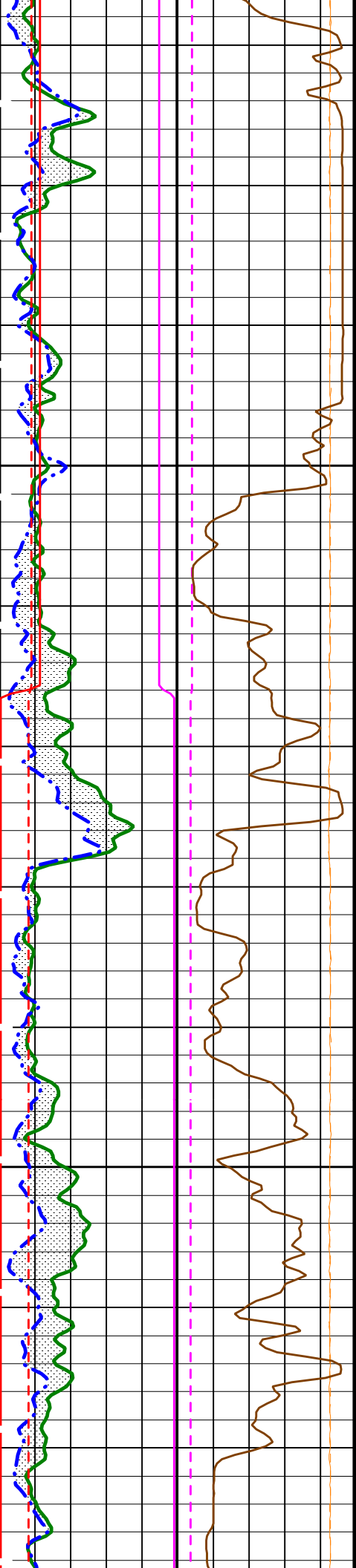




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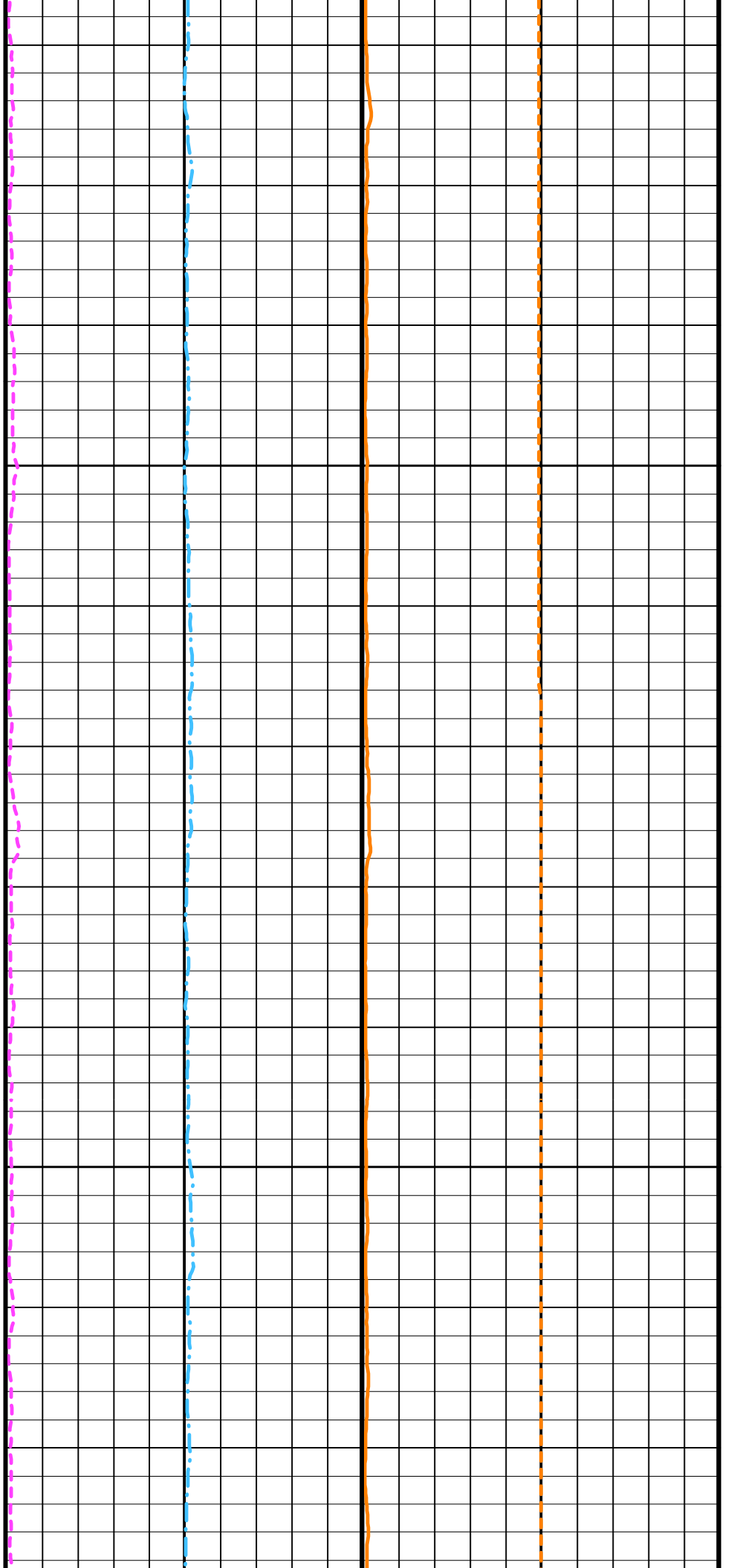
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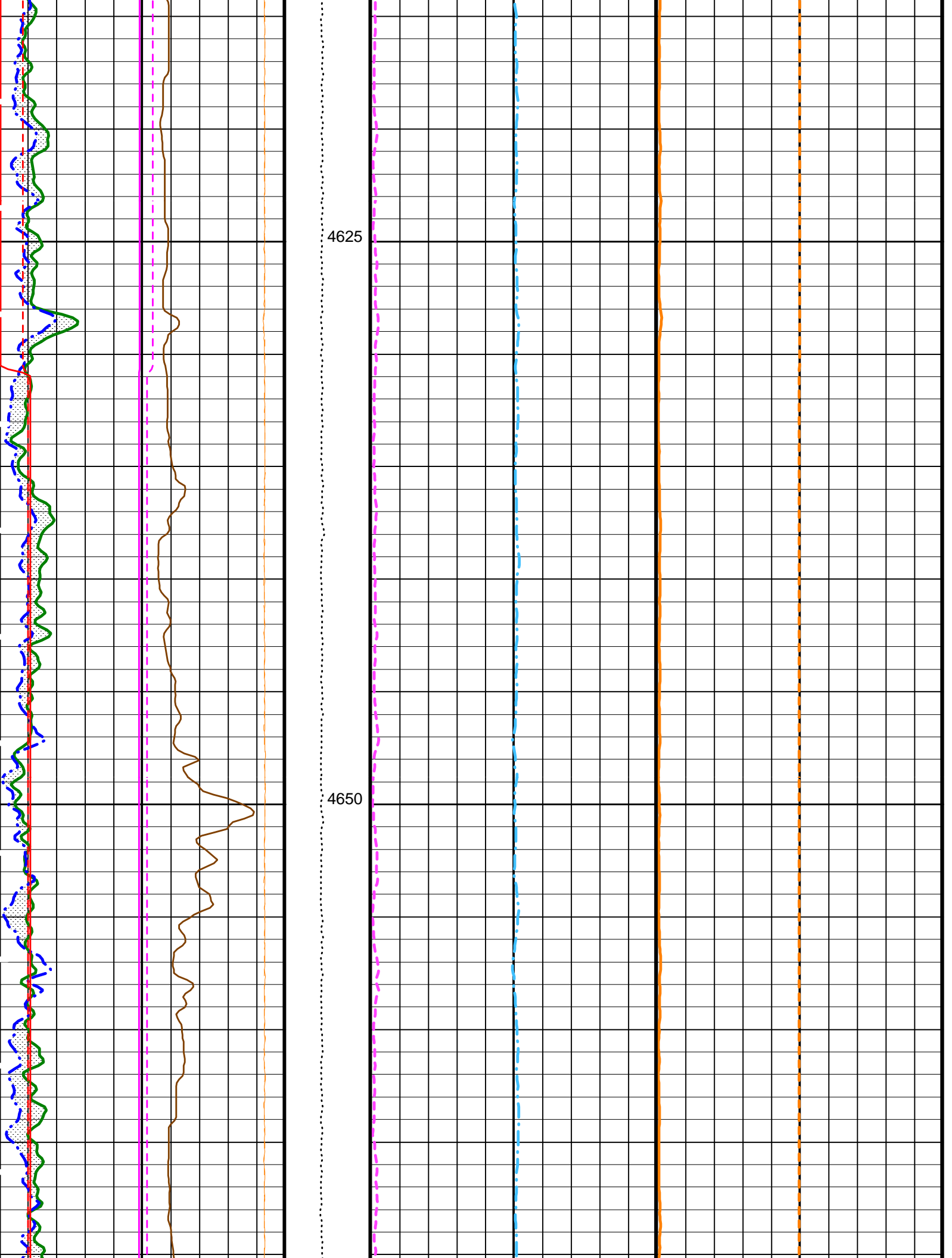


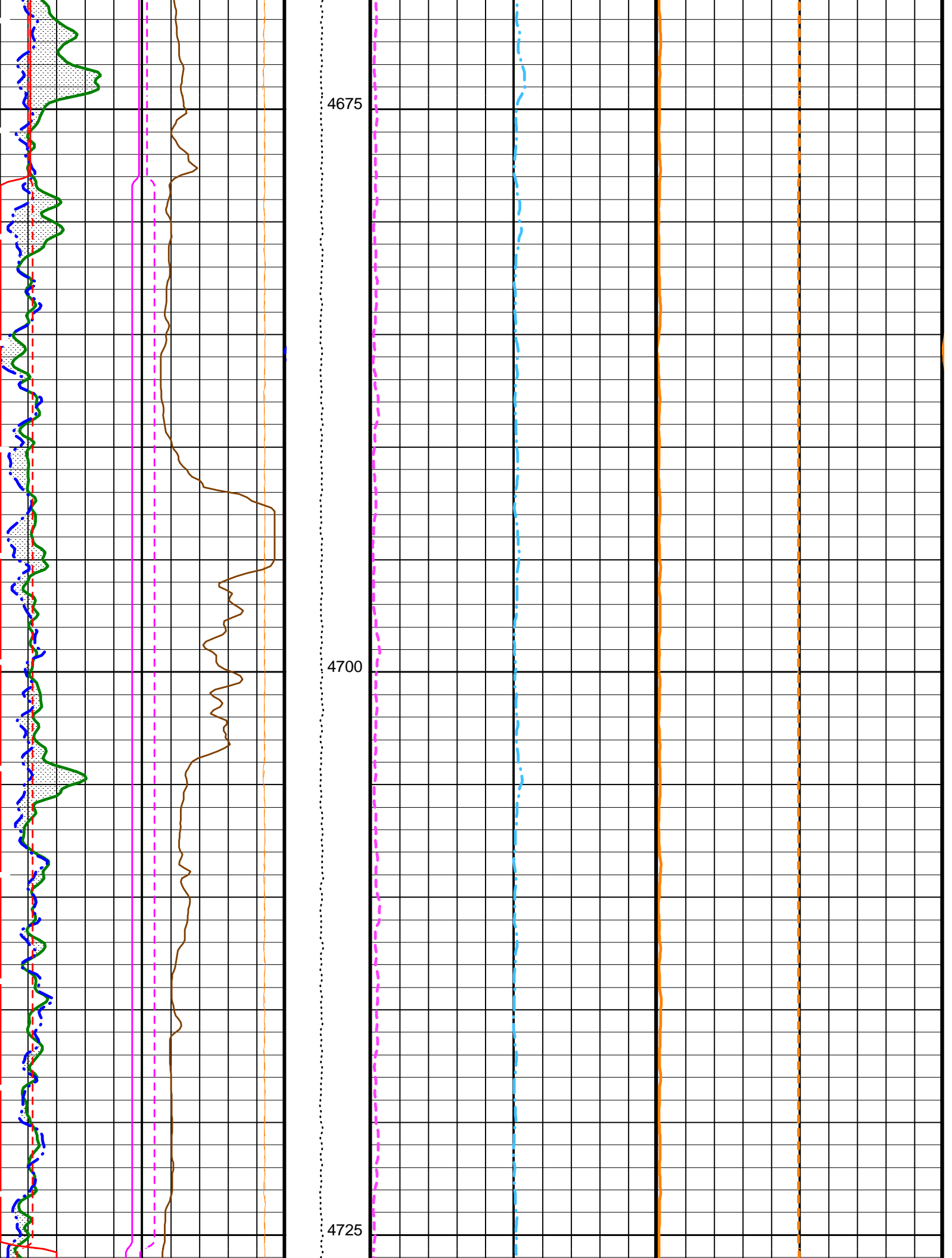


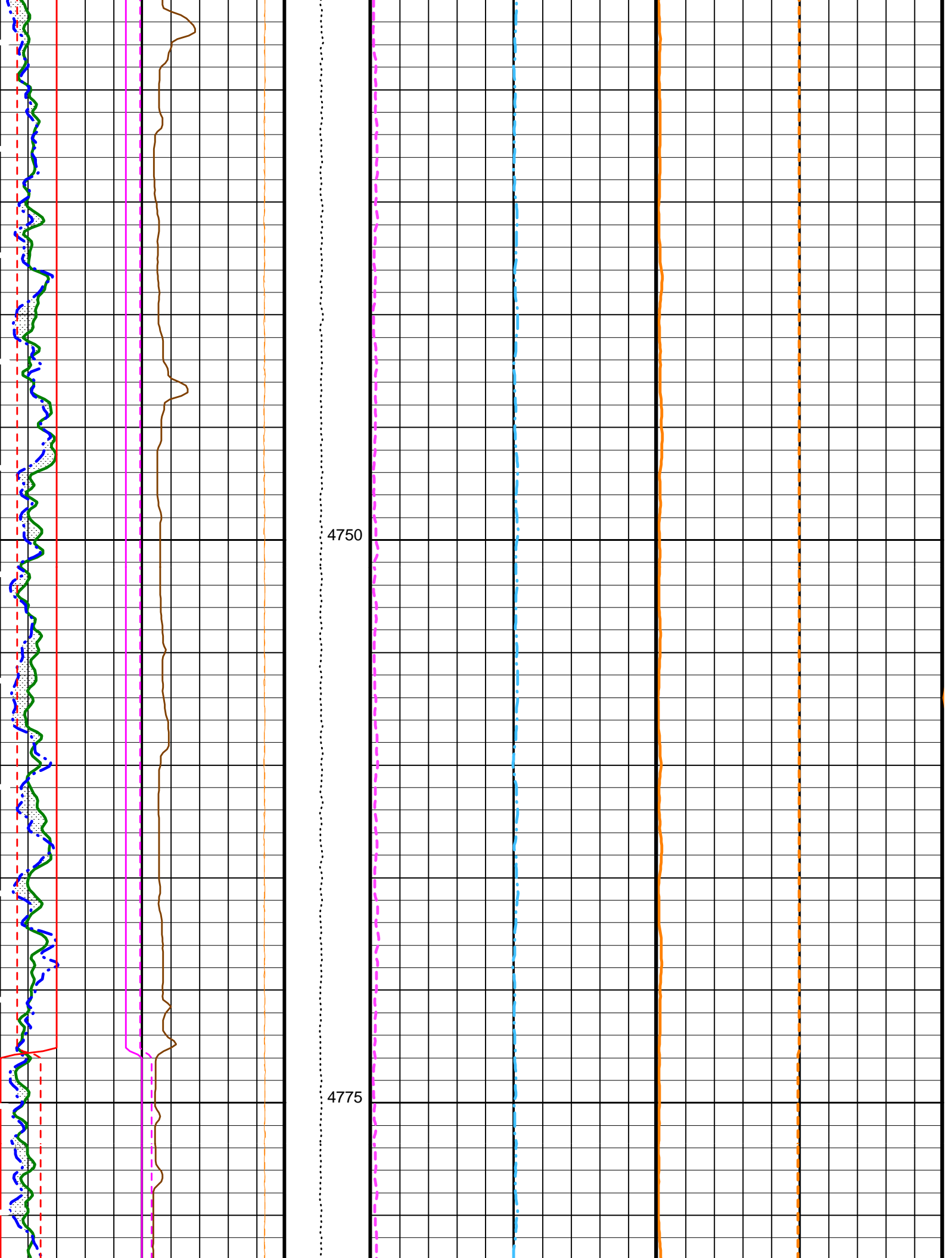
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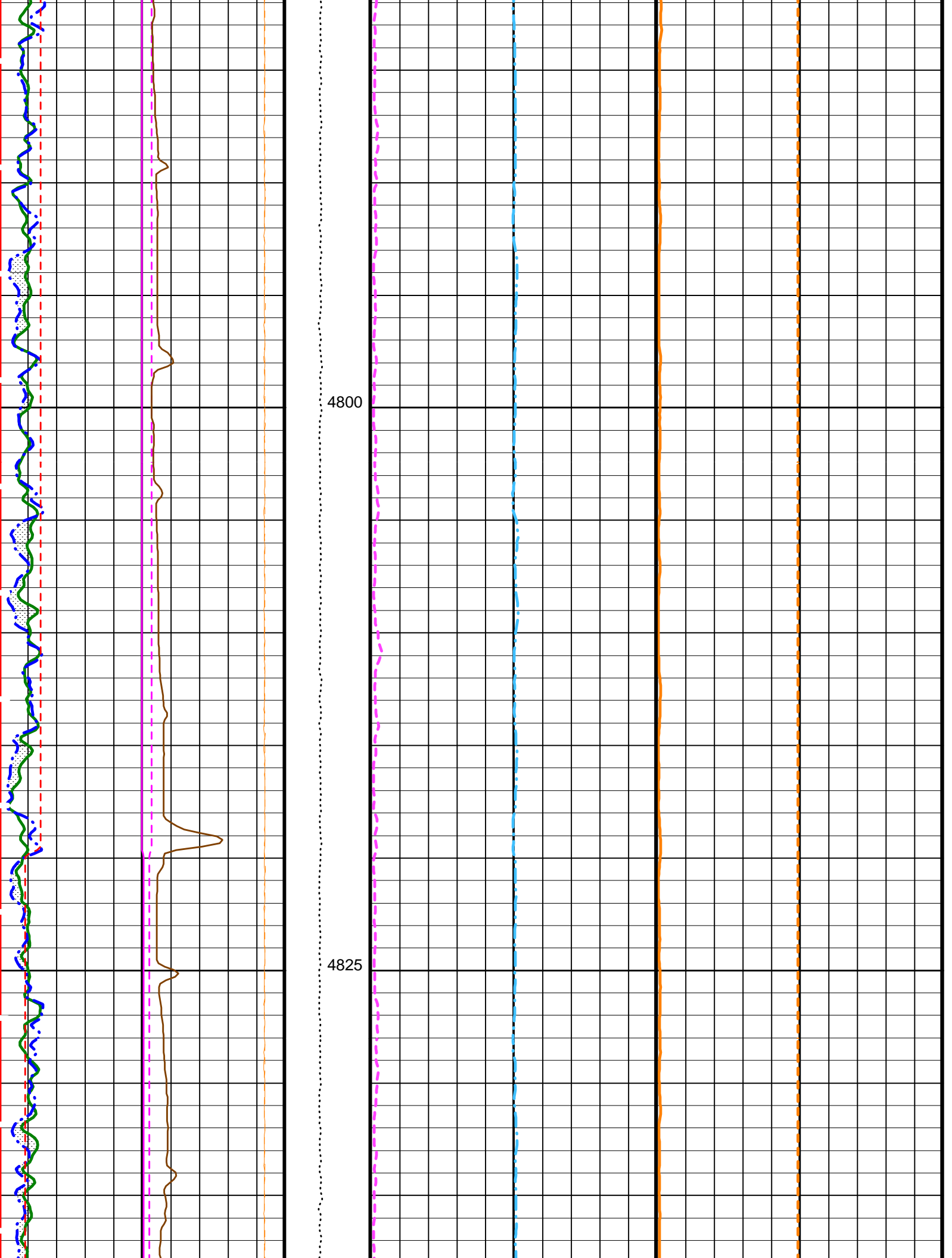


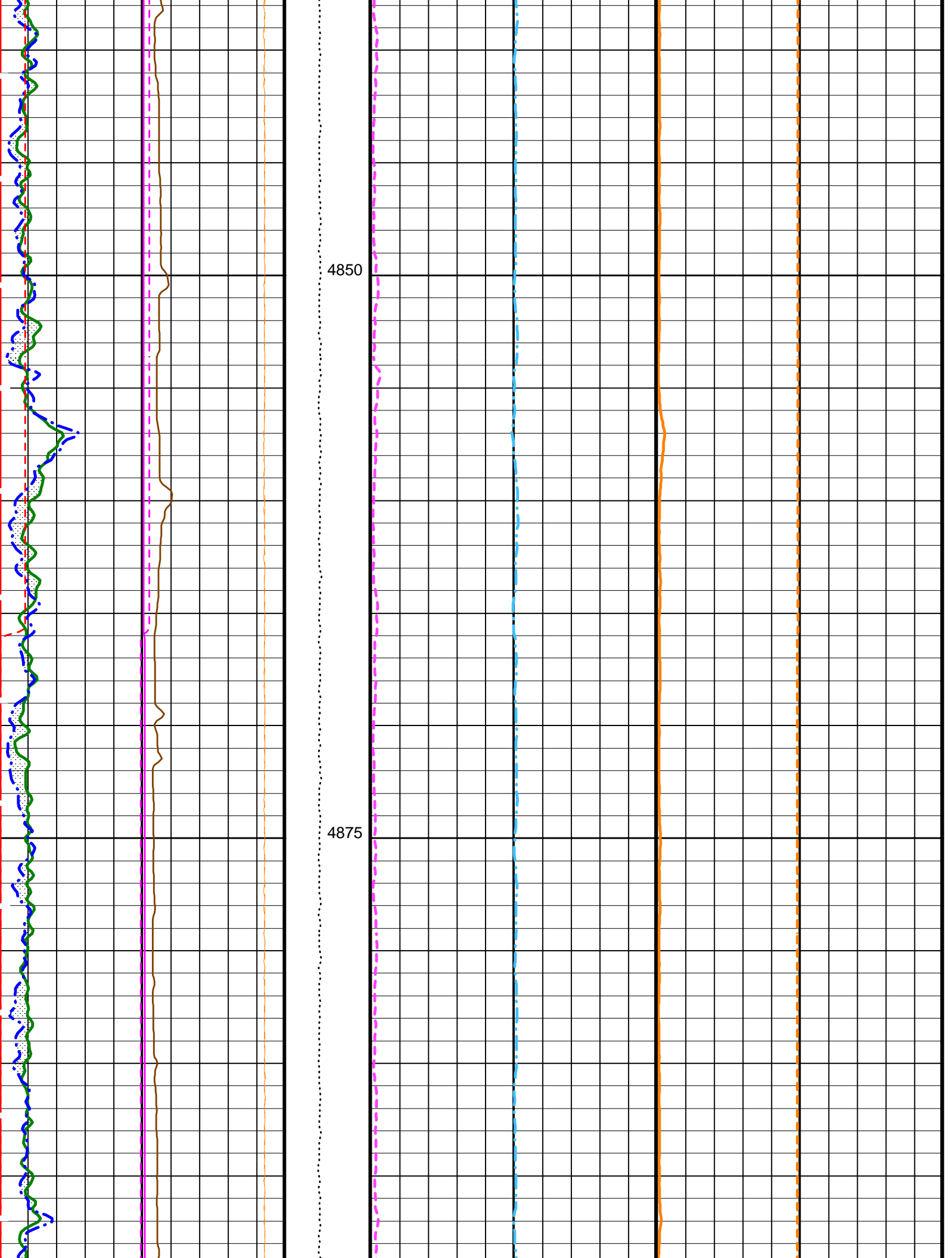


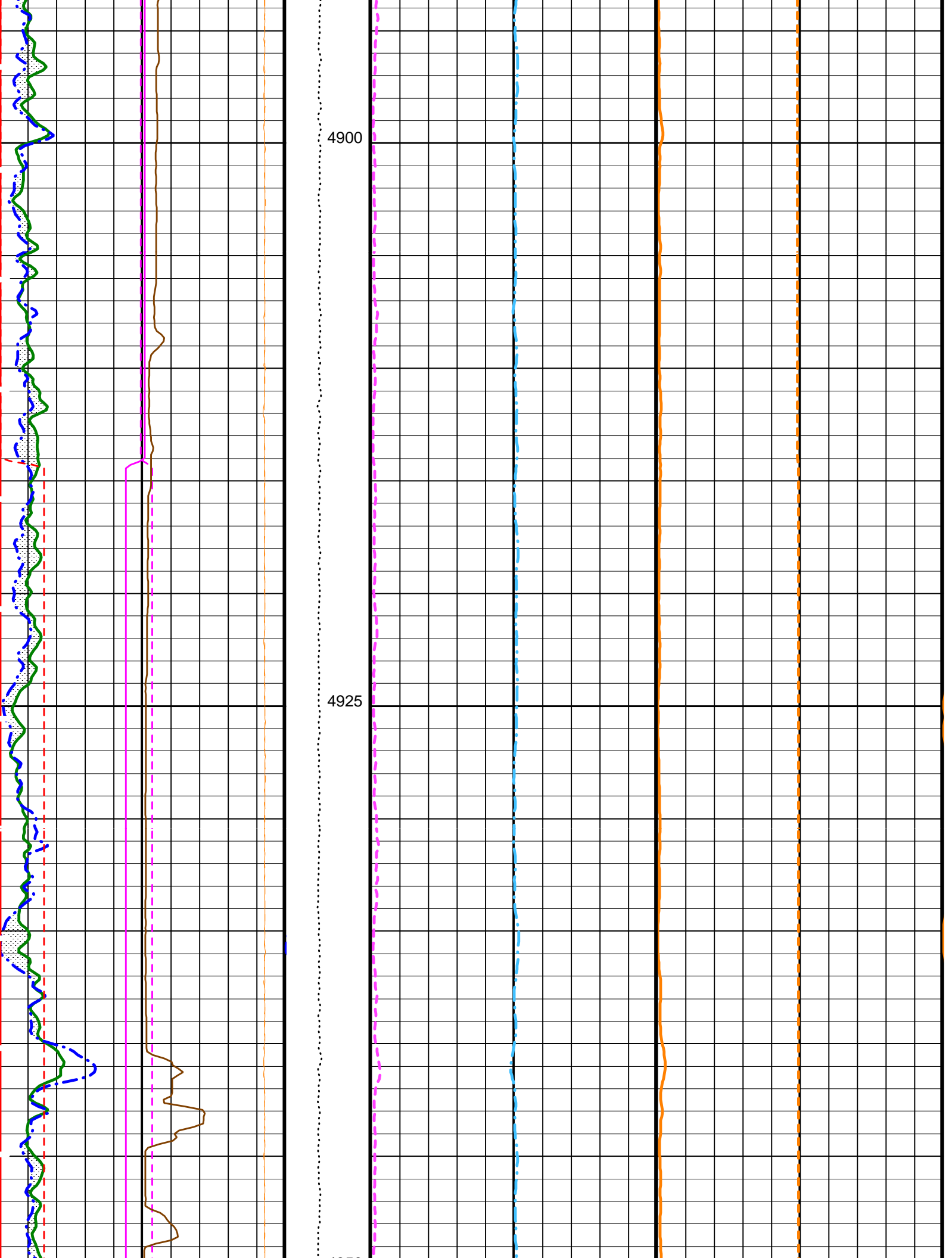


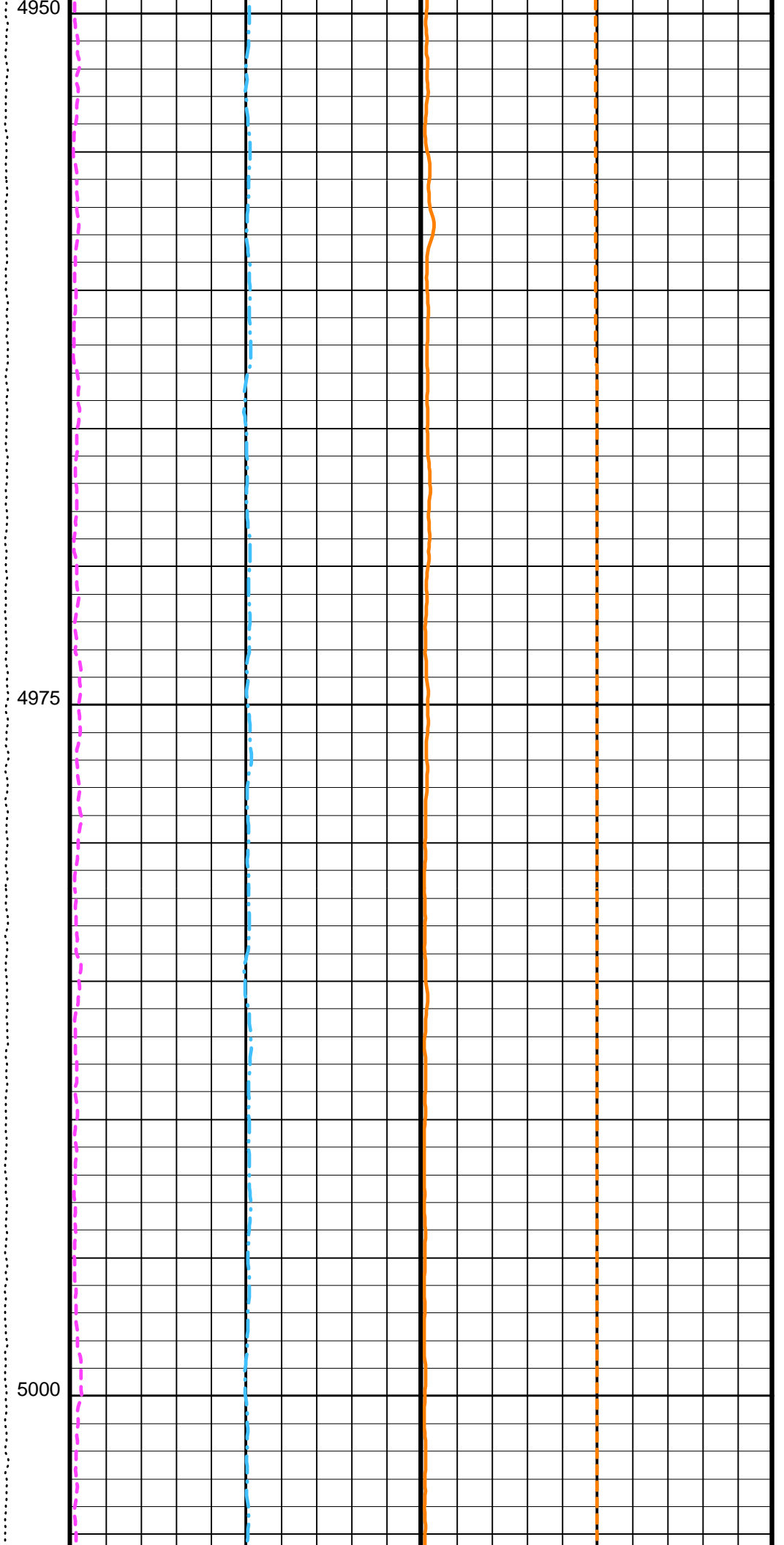
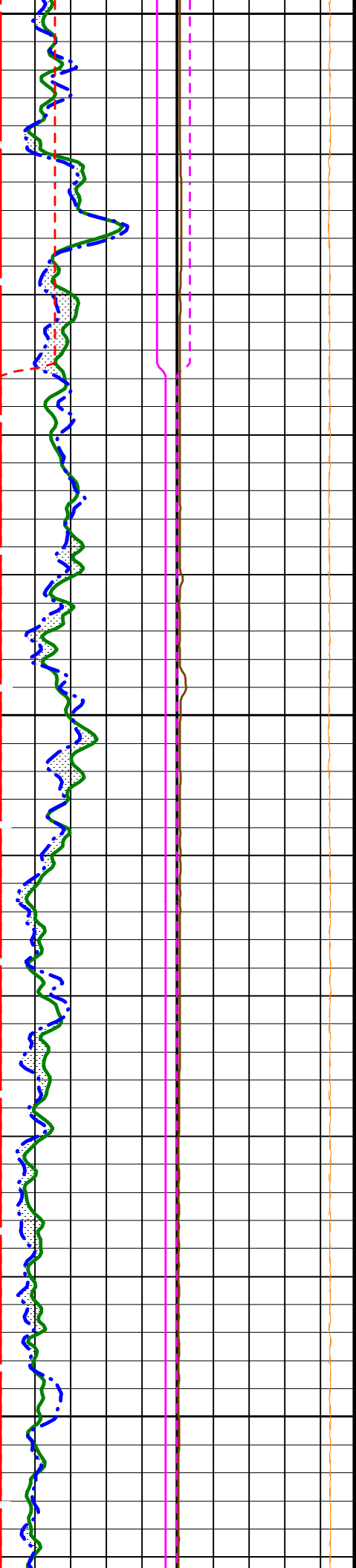
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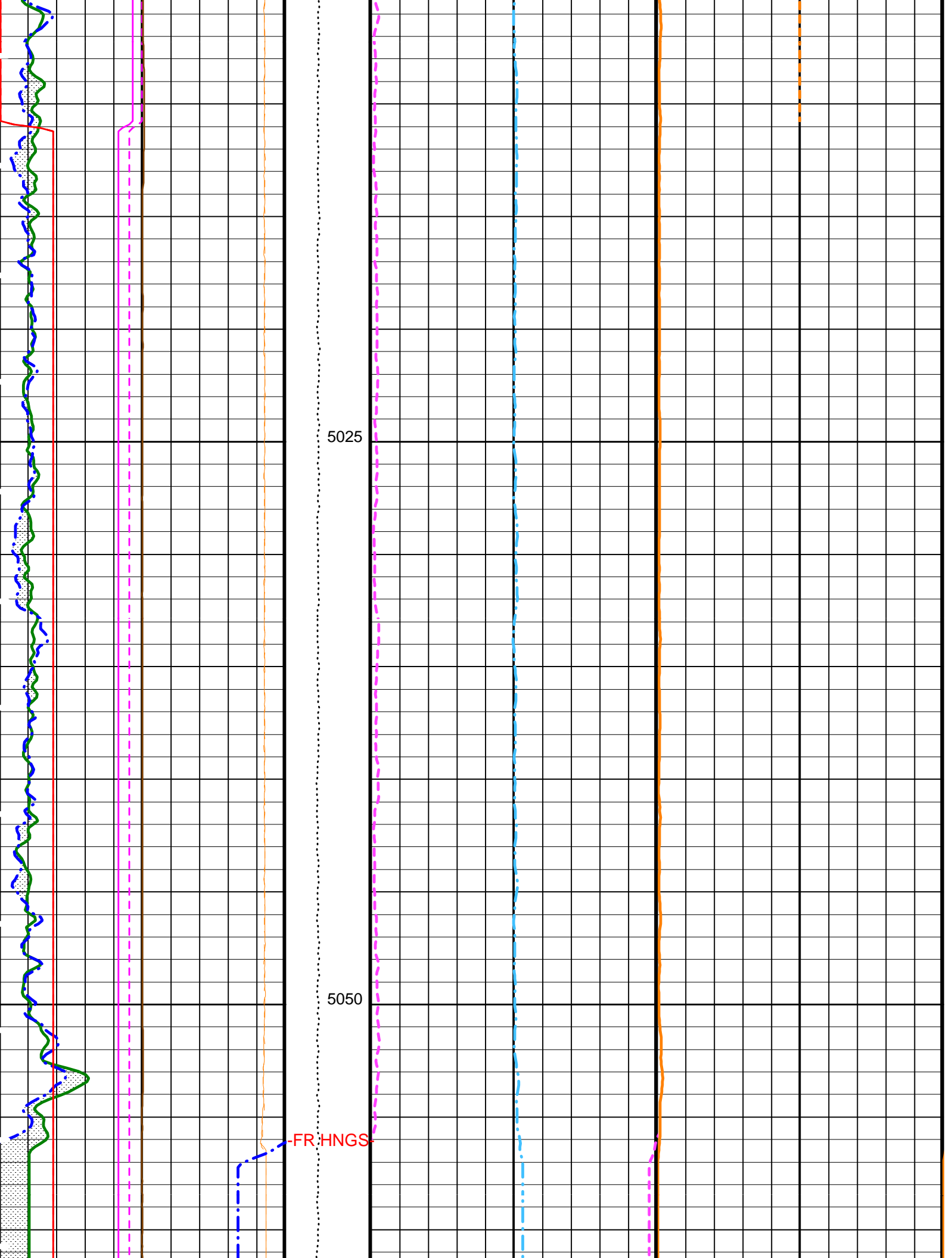
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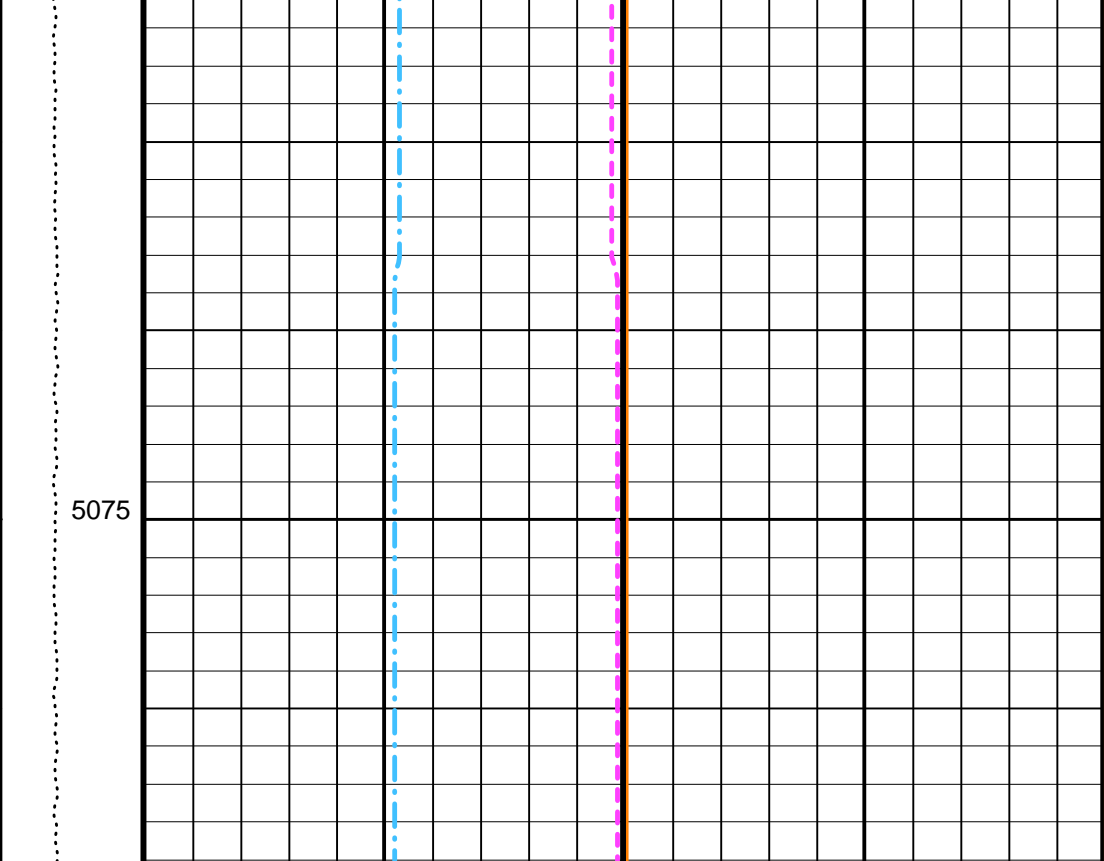
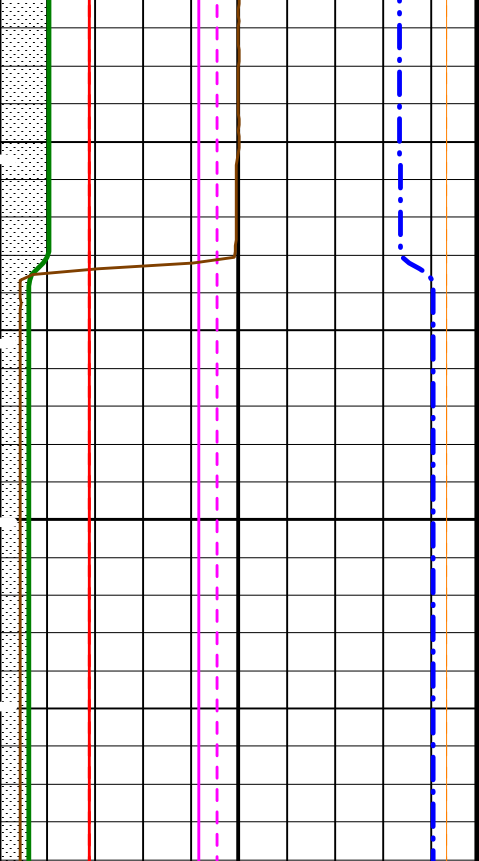












HNGS Det.1 Chi Squared (CHI1)	(---)	0
HNGS Det.2 Chi Squared (CHI2)	(---)	0
HLDS Caliper (LCAL)	(IN)	20
HNGS Computed Gamma Ray (HCGR)	(GAPI)	20
Area1 From HCGR to HSGR		
HNGS Det.1 Gain Correction Factor (GCF1)	(---)	1.1
HNGS Det.2 Gain Correction Factor (GCF2)	(---)	1.1
HNGS Det.1 Resolution Degradation Factor (RDF1)	(---)	10
HNGS Det.2 Resolution Degradation Factor (RDF2)	(---)	10
HNGS Spectroscopy Gamma Ray (HSGR)	(GAPI)	20

Tension (TENS) (LBF)	0	10000
HNGS Thorium (HTHO) (PPM)	0	30
HNGS Potassium (HFK) (V/V)	0	0.1
HNGS Uranium (HURA) (PPM)	-10	30
HNGS Borehole Potassium (HBHK) (V/V)	-0.05	0.05

PIP SUMMARY

Time Mark Every 60 S

Parameters

DLIS Name	Description	Value	
APS-C: Accelerator-Porosity Tool			
BHS	Borehole Status	OPEN	
GCSE	Generalized Caliper Selection	LCAL	
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	LCAL	
H1P	HNGS Detector 1 Allow/Disallow In Processing	ALLOW	
H2P	HNGS Detector 2 Allow/Disallow In Processing	ALLOW	
HABK	HNGS Borehole Potassium Running Average	-0.0010471	
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	1.02532	
VBA2	HNGS Detector 2 Variable Barite Factor Running Average	1.03512	
System and Miscellaneous			
BS	Bit Size	9.875	IN
DFD	Drilling Fluid Density	1.07	G/C3
DO	Depth Offset for Playback	0.0	M
PP	Playback Processing	NORMAL	

Format: HNGSYields Vertical Scale: 1:200 Graphics File Created: 20-Dec-2005 14:21

OP System Version: 12C0-301
MCM

DLT-E	12C0-301	DTA-A	12C0-301
HLDS	SPC-2602-NUCL	LDSC-A	SPC-2602-NUCL
APS-C	SPC-2602-NUCL	HNGC-B	SPC-2602-NUCL
HNGS-BA	SPC-2602-NUCL	DTC-H	12C0-301
BSP	12C0-301		

Input DLIS Files

DEFAULT	DLL_LDL_APS_NGS_051LUP	FN:54	PRODUCER	20-Dec-2005 07:49	5084.1 M	3894.0 M
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Output DLIS Files

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REDUCED	DLL_LDL_APS_NGS_054PUP	FN:58	PRODUCER	20-Dec-2005 14:21		



REPEAT SECTION

MAXIS Field Log

Company: Lamont Doherty Well: Expedition 312 Site U1256D

Input DLIS Files

DEFAULT	DLL_LDL_APS_NGS_053LUP	FN:56	PRODUCER	20-Dec-2005 12:59	5081.8 M	4704.7 M
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Output DLIS Files

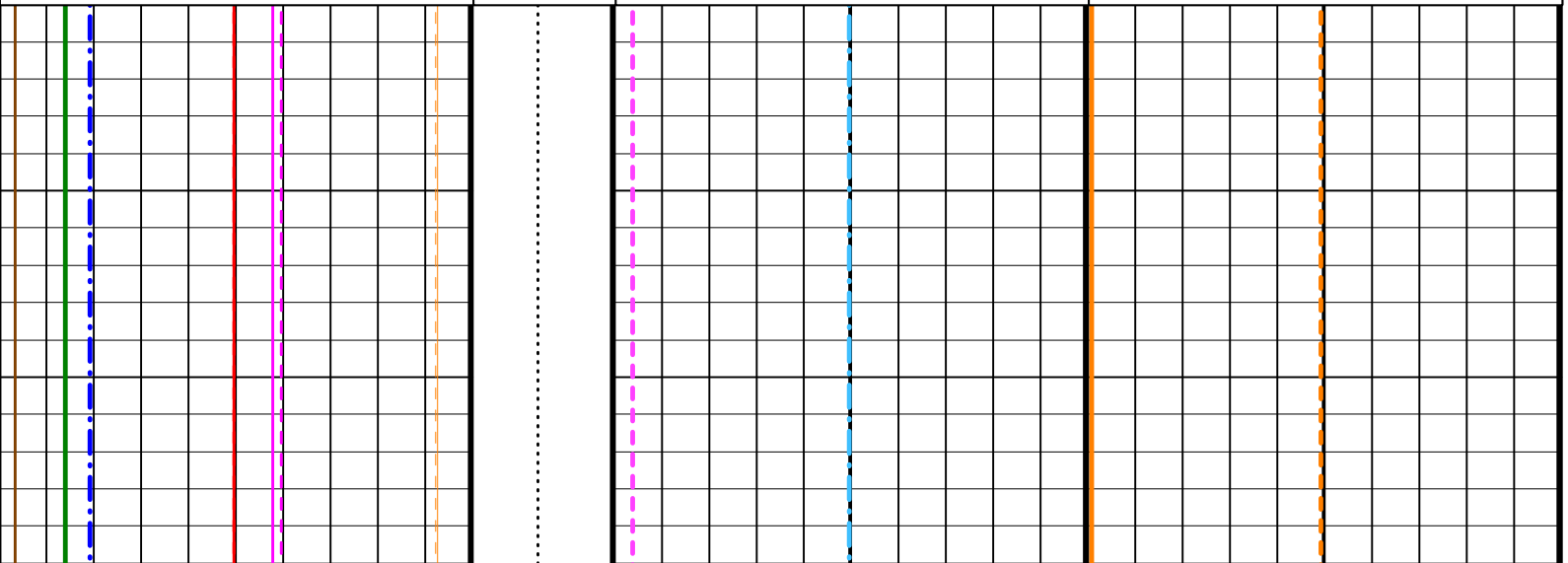
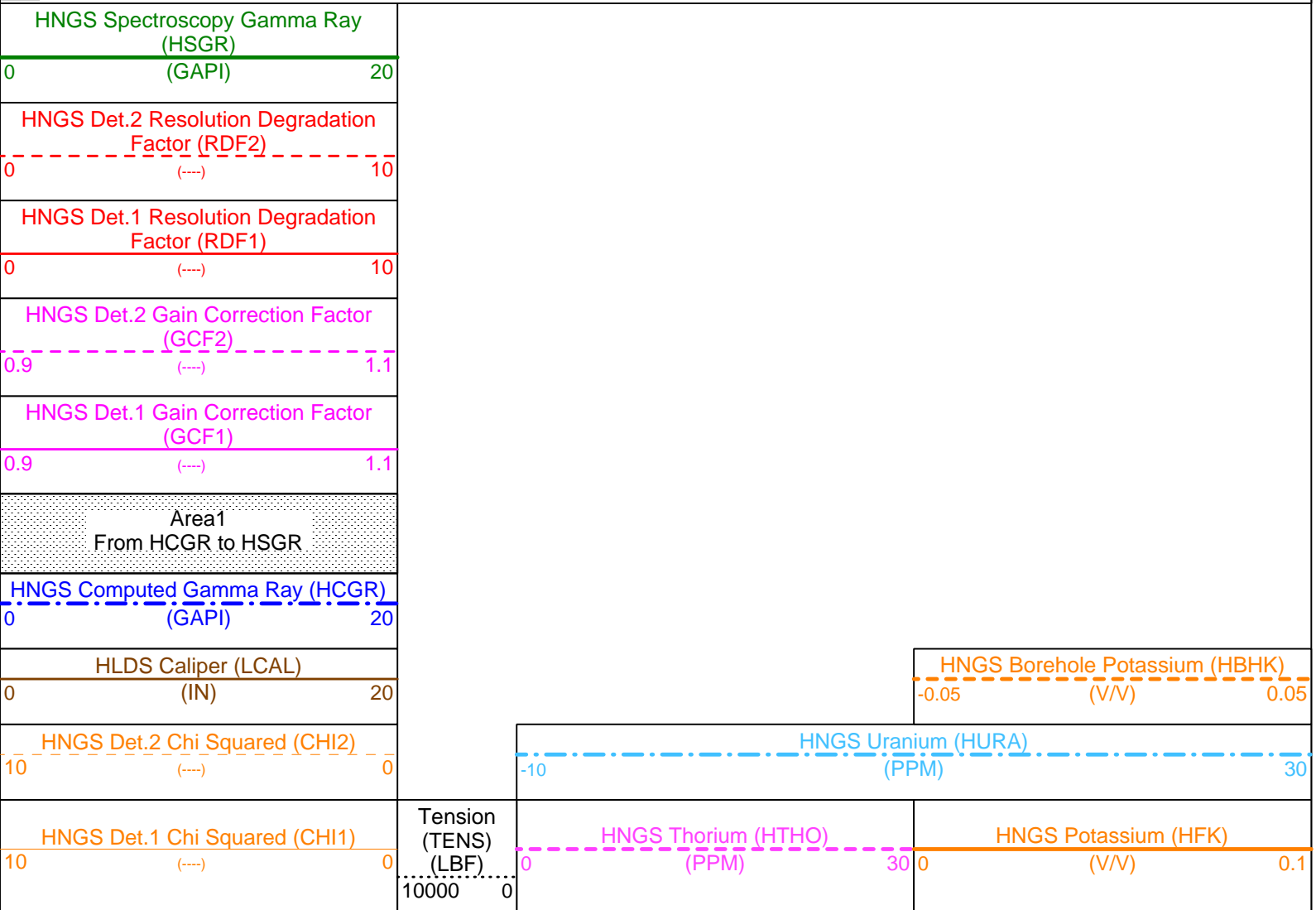
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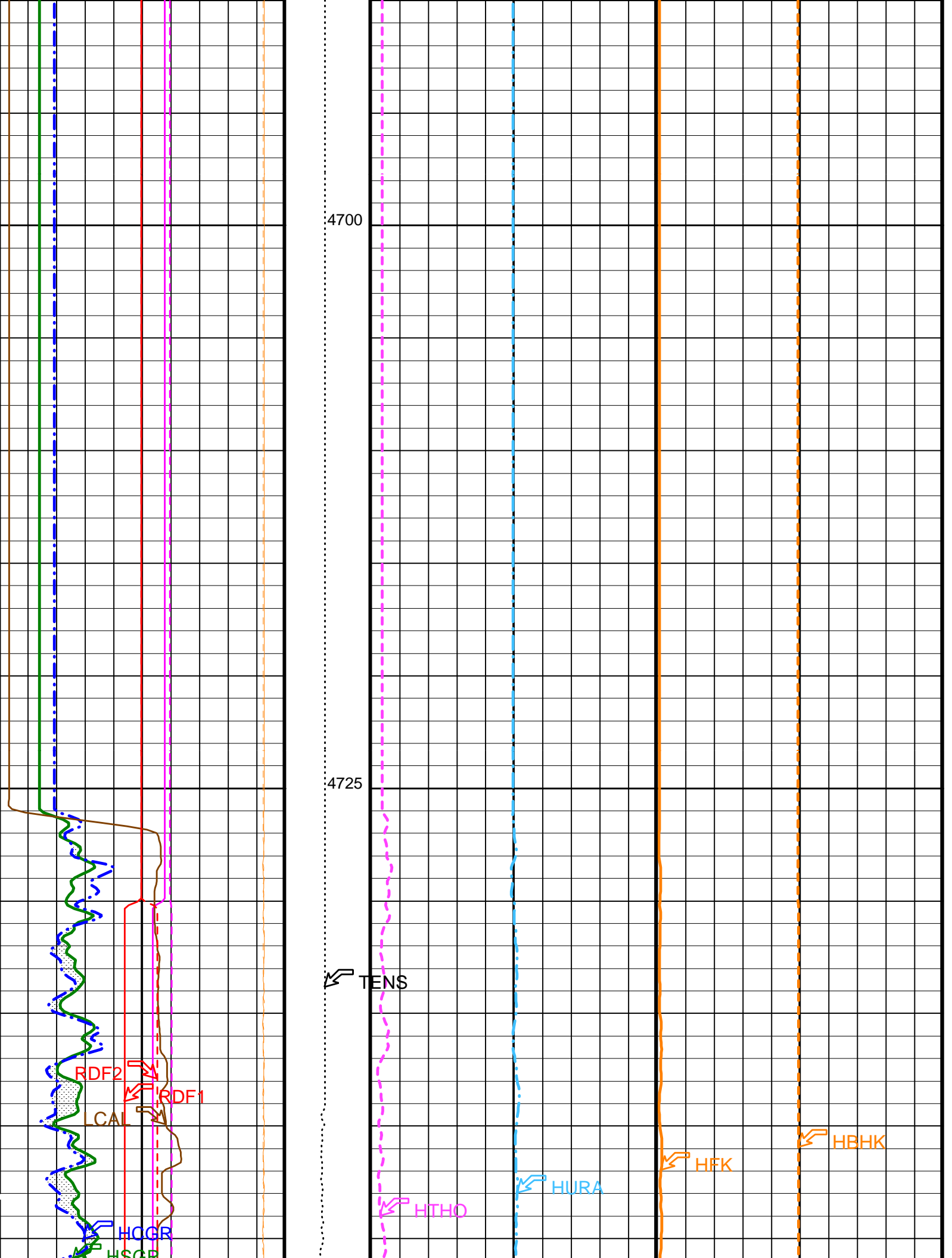
OP System Version: 12C0-301
MCM

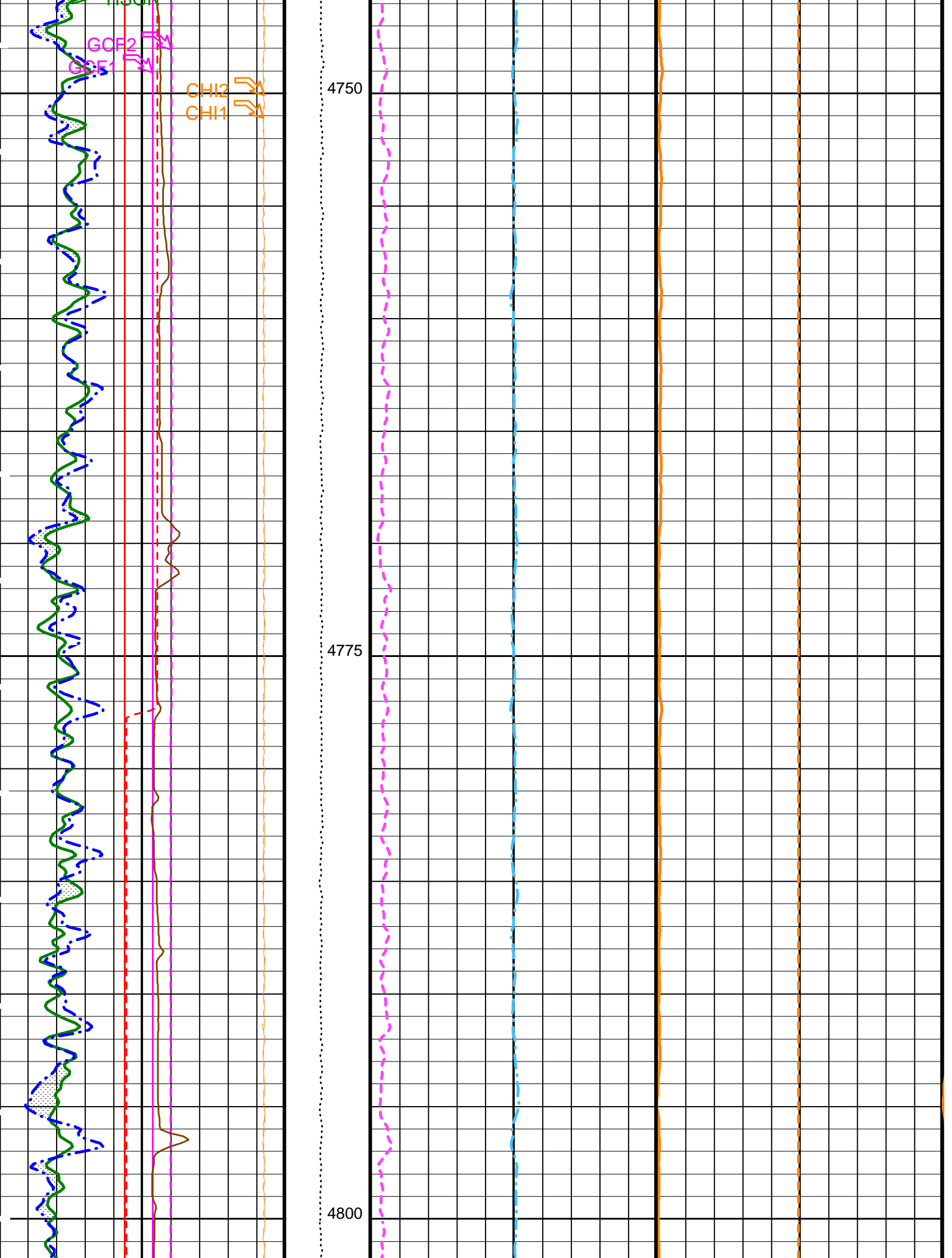
DLT-E	12C0-301	DTA-A	12C0-301
HLDS	SPC-2602-NUCL	LDSC-A	SPC-2602-NUCL
APS-C	SPC-2602-NUCL	HNGC-B	SPC-2602-NUCL
HNGS-BA	SPC-2602-NUCL	DTC-H	12C0-301
BSP	12C0-301		

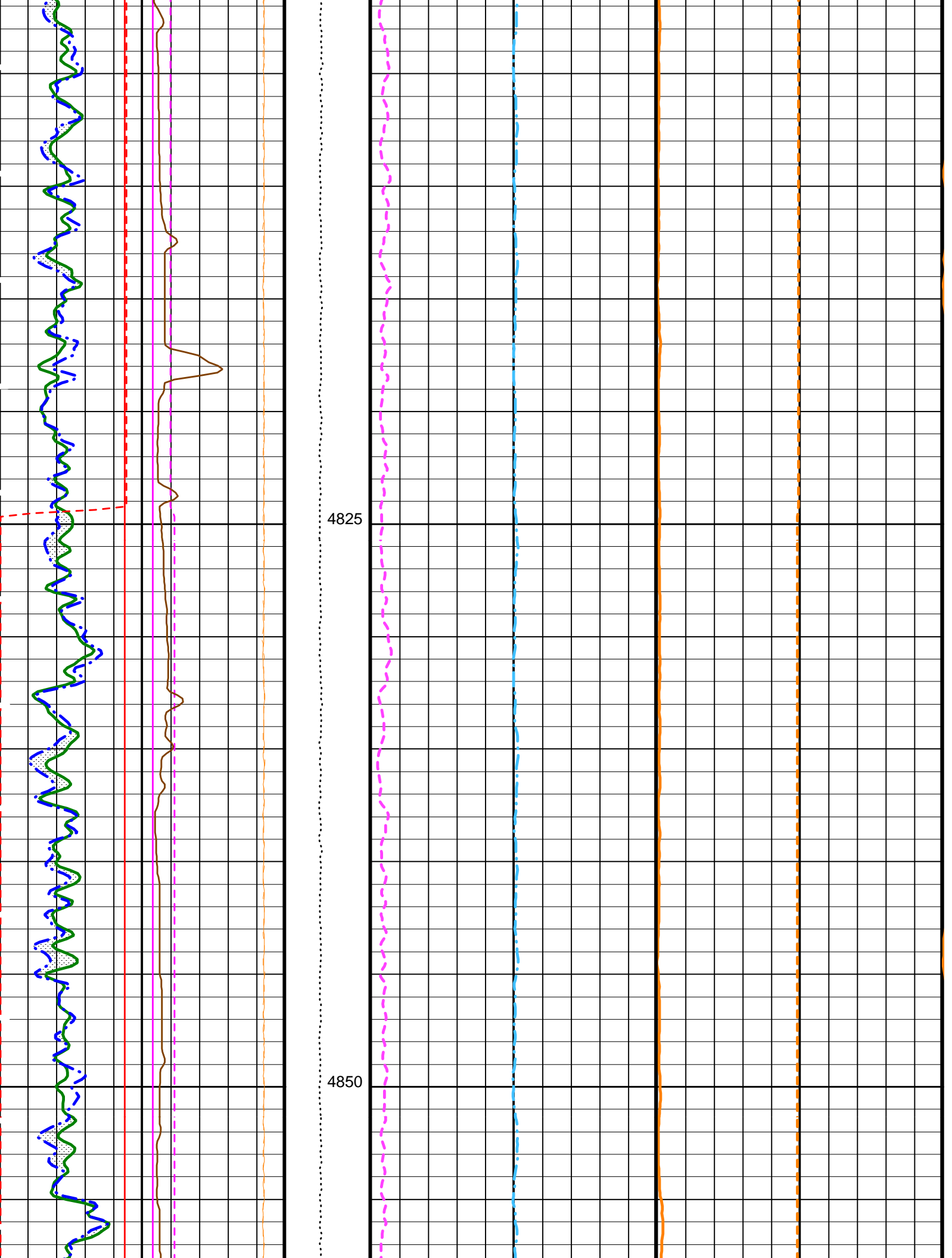
PIP SUMMARY

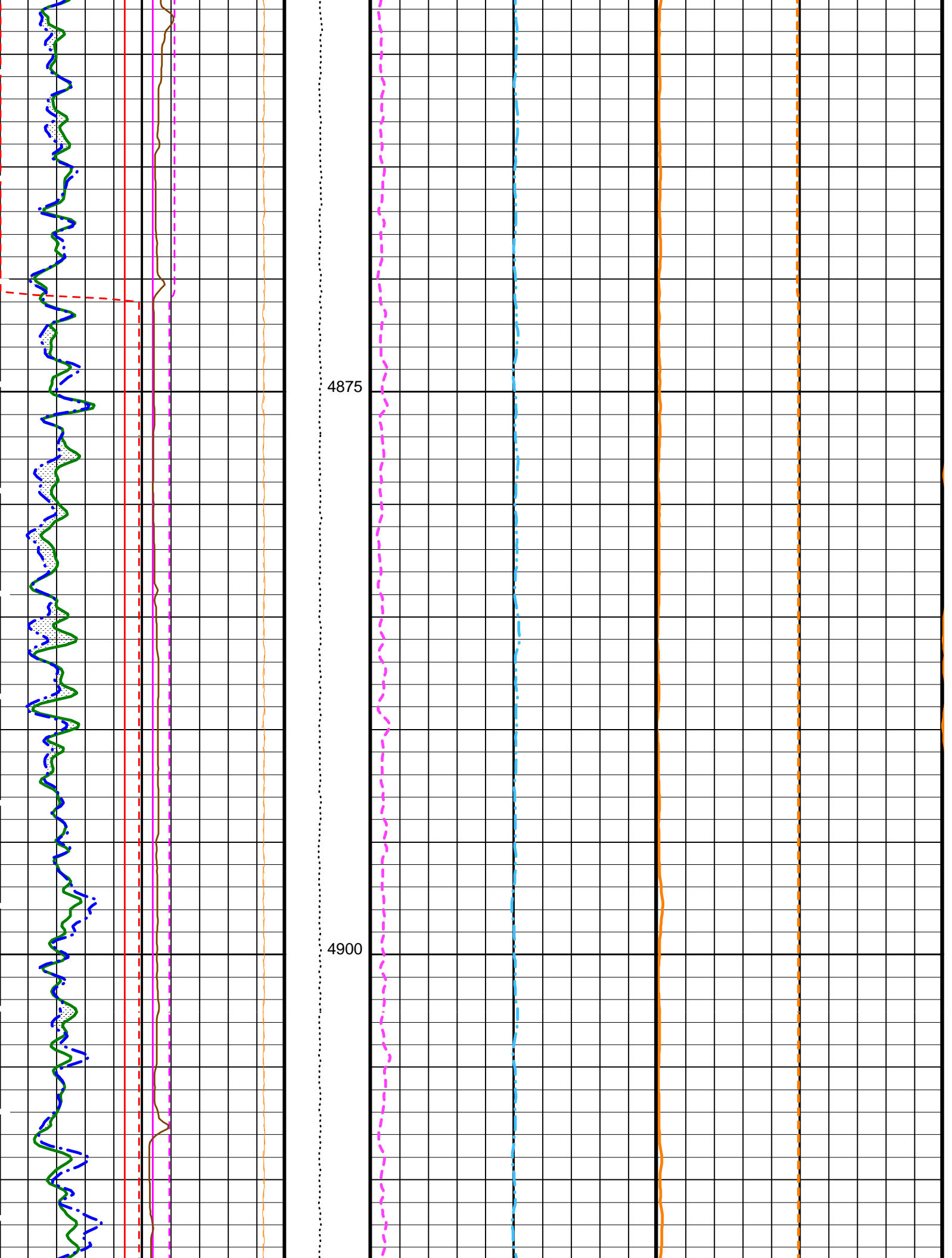
Time Mark Every 60 S

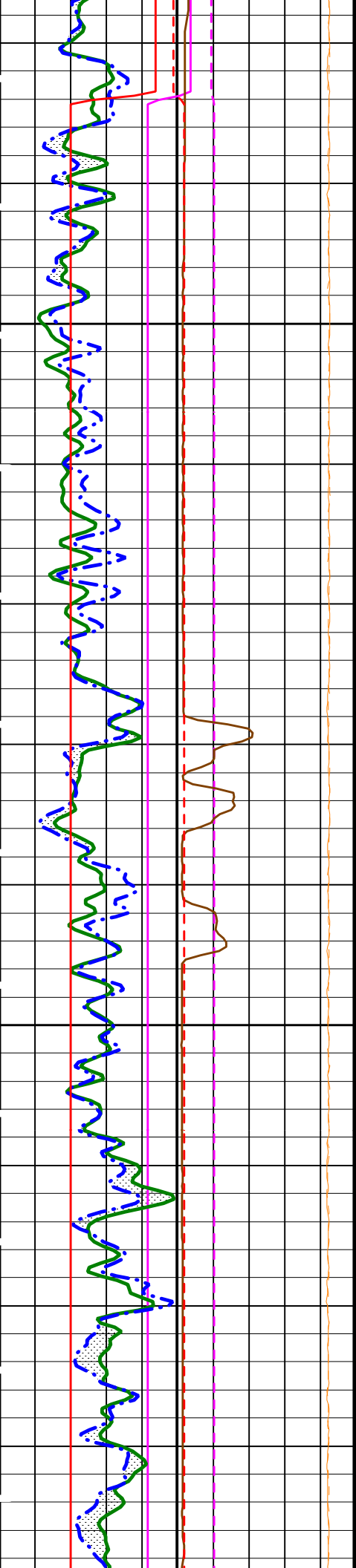






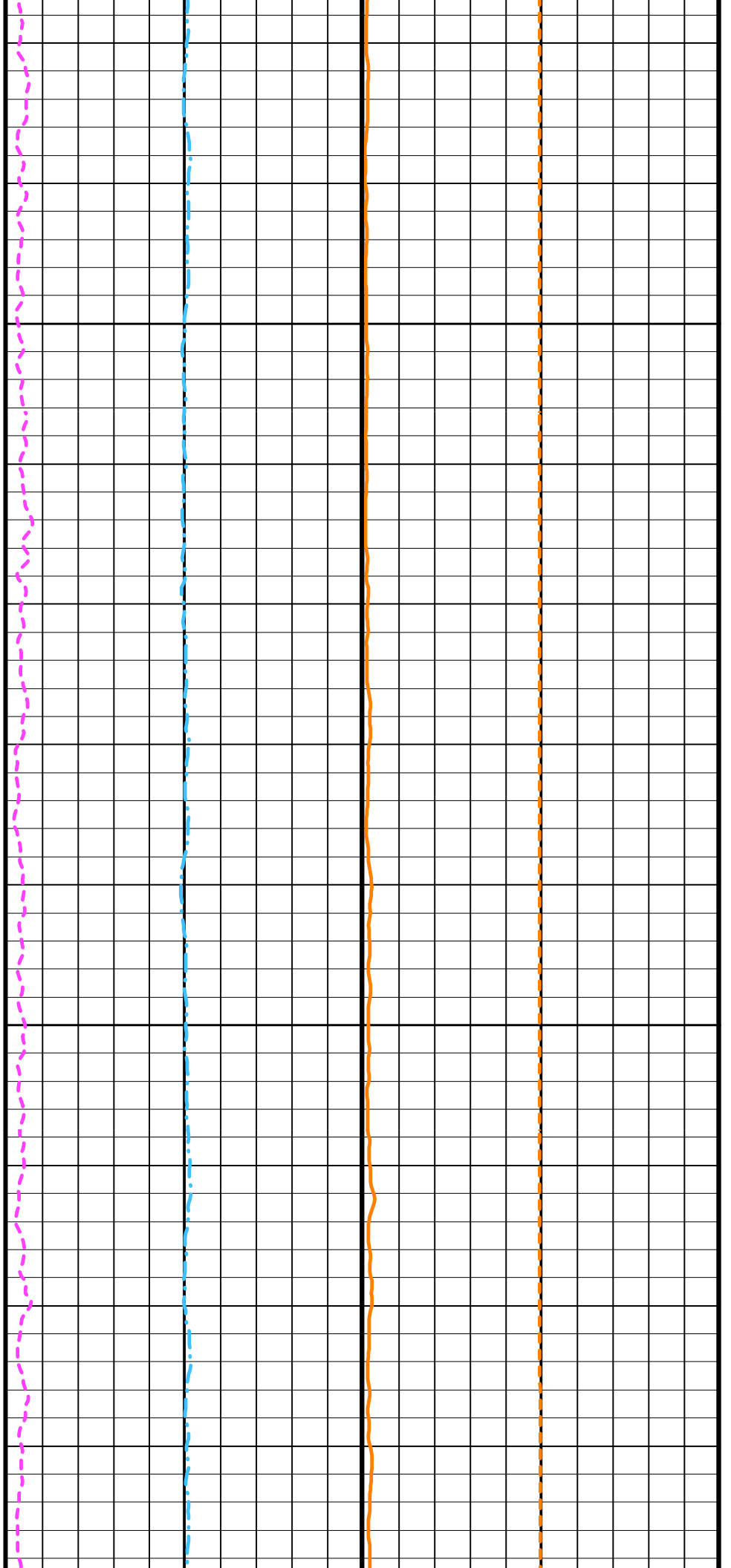


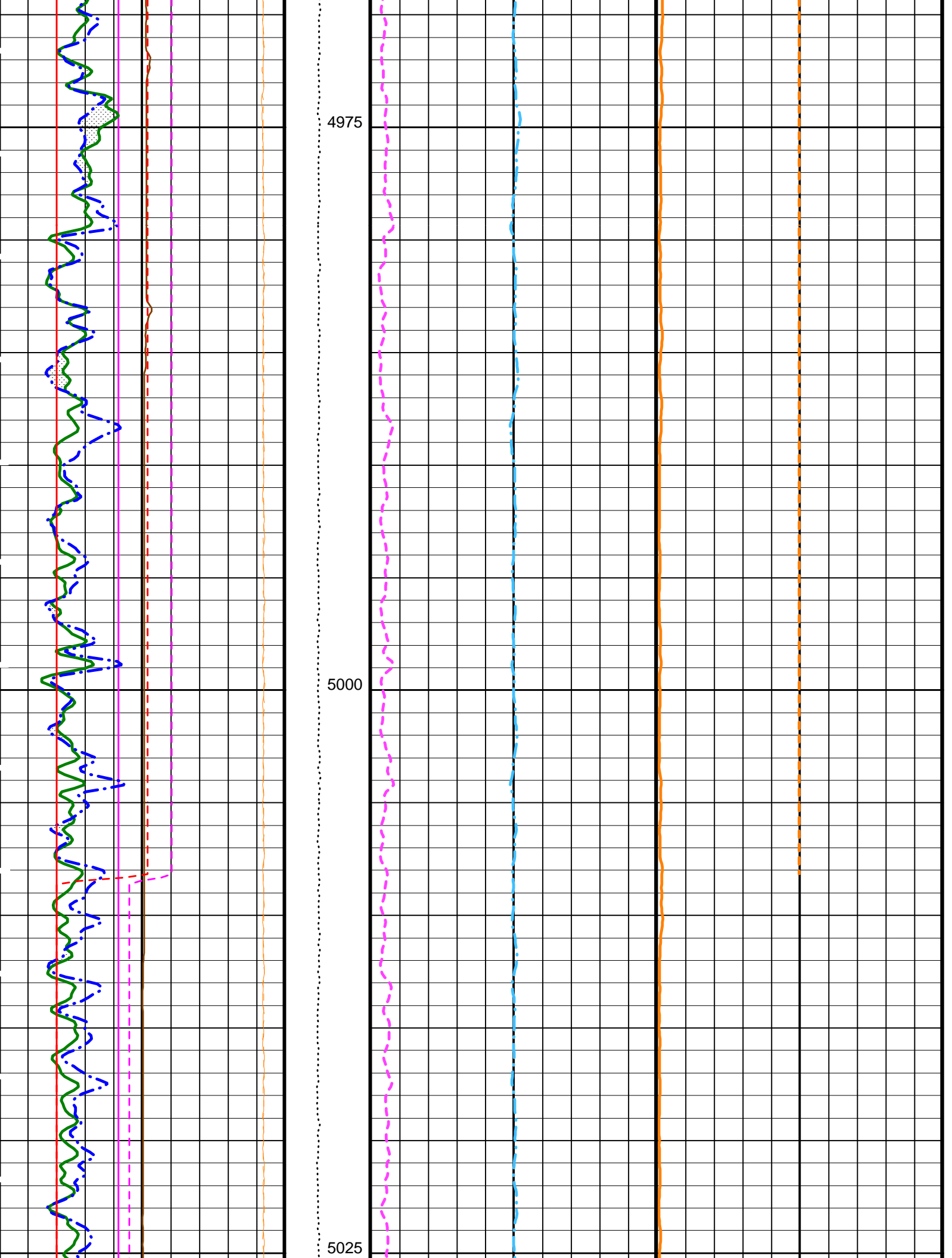


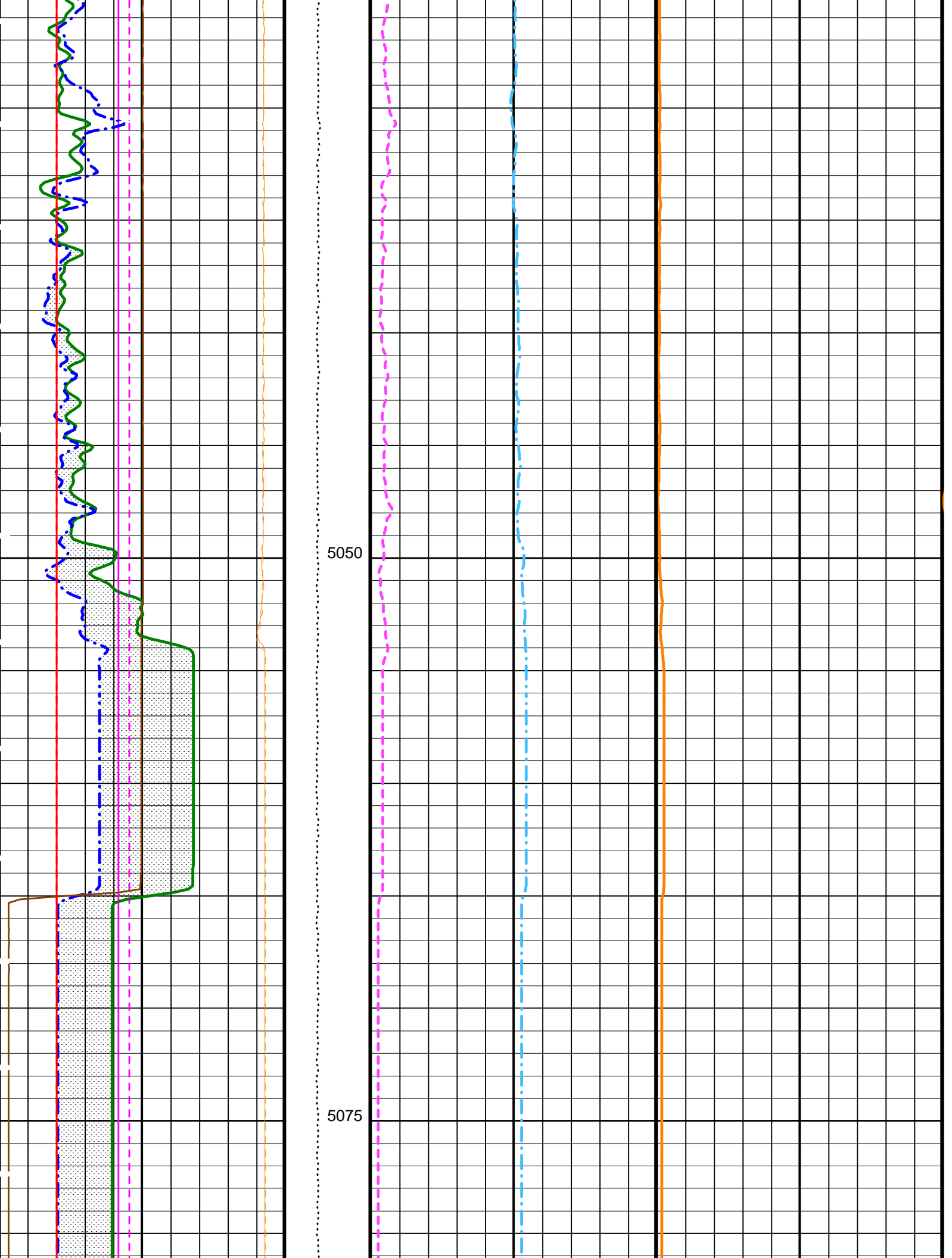


4925

4950







HNGS Det.1 Chi Squared (CHI1) 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 (CHI2) 10 (----) 0		HNGS Uranium (HURA) (PPM) -10 30	
HLDS Caliper (LCAL) 0 (IN) 20			HNGS Borehole Potassium (HBHK) (V/V) -0.05 0.05
HNGS Computed Gamma Ray (HCGR) (GAPI) 0 20			
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 20			

PIP SUMMARY

Time Mark Every 60 S

Parameters

DLIS Name	Description	Value
APS-C: Accelerator-Porosity Tool		
BHS	Borehole Status	OPEN
GCSE	Generalized Caliper Selection	LCAL
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	LCAL
H1P	HNGS Detector 1 Allow/Disallow In Processing	ALLOW
H2P	HNGS Detector 2 Allow/Disallow In Processing	ALLOW
HABK	HNGS Borehole Potassium Running Average	-0.0010471
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	1.02532
VBA2	HNGS Detector 2 Variable Barite Factor Running Average	1.03512
System and Miscellaneous		
BS	Bit Size	9.875 IN
DFD	Drilling Fluid Density	1.07 G/C3
DO	Depth Offset for Playback	0.0 M

OP System Version: 12C0-301
MCM

DLT-E	12C0-301	DTA-A	12C0-301
HLDS	SPC-2602-NUCL	LDSC-A	SPC-2602-NUCL
APS-C	SPC-2602-NUCL	HNGC-B	SPC-2602-NUCL
HNGS-BA	SPC-2602-NUCL	DTC-H	12C0-301
BSP	12C0-301		

Input DLIS Files

DEFAULT	DLL_LDL_APS_NGS_053LUP	FN:56	PRODUCER	20-Dec-2005 12:59	5081.8 M	4704.7 M
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Output DLIS Files

DEFAULT	DLL_LDL_APS_NGS_055PUP	FN:59	PRODUCER	20-Dec-2005 14:24		
REDUCED	DLL_LDL_APS_NGS_055PUP	FN:60	PRODUCER	20-Dec-2005 14:24		



CALIBRATIONS

MAXIS Field Log

Calibration and Check Summary

Measurement	Nominal	Master	Before	After	Change	Limit	Units
DUAL LATEROLOG - E Wellsite Calibration - DLT ELECTRONICS CALIBRATION Laterolog Measurement							
Before: Calibration not done							
MEASURED LLD	31.62	N/A	0	N/A	N/A	0.9000	OHMM
MEASURED LLS	31.62	N/A	0	N/A	N/A	0.9000	OHMM
Hostile Litho-Density Sonde Wellsite Calibration - Background Measurement							
Master: 26-Nov-2005 17:48 Before: 17-Dec-2005 12:49							
SS Cs Resolution Bkg	9.000	8.065	7.945	N/A	N/A	1.800	%
LS Cs Resolution Bkg	9.000	8.155	8.148	N/A	N/A	1.800	%
LSW1 Background	100.0	82.91	82.77	N/A	N/A	3.000	CPS
LSW2 Background	100.0	77.00	75.90	N/A	N/A	3.000	CPS
LSW3 Background	200.0	169.0	168.1	N/A	N/A	6.000	CPS
LSW4 Background	250.0	207.2	206.8	N/A	N/A	7.500	CPS
LSW5 Background	600.0	473.3	472.8	N/A	N/A	18.00	CPS
SSW1 Background	100.0	92.34	91.07	N/A	N/A	3.000	CPS
SSW2 Background	200.0	165.1	164.6	N/A	N/A	6.000	CPS
SSW3 Background	500.0	450.1	447.7	N/A	N/A	15.00	CPS
SSW4 Background	270.0	229.8	227.0	N/A	N/A	8.100	CPS
SSW5 Background	200.0	164.6	163.5	N/A	N/A	6.000	CPS
Hostile Litho-Density Sonde Wellsite Calibration - Aluminum Measurement							
Master: 26-Nov-2005 18:16							
LSW1 Aluminum	600.0	603.1	N/A	N/A	N/A	N/A	CPS
LSW2 Aluminum	900.0	870.7	N/A	N/A	N/A	N/A	CPS
LSW3 Aluminum	1100	1046	N/A	N/A	N/A	N/A	CPS
LSW4 Aluminum	580.0	528.2	N/A	N/A	N/A	N/A	CPS
LSW5 Aluminum	570.0	478.3	N/A	N/A	N/A	N/A	CPS
SSW1 Aluminum	2800	2778	N/A	N/A	N/A	N/A	CPS
SSW2 Aluminum	8000	7548	N/A	N/A	N/A	N/A	CPS
SSW3 Aluminum	11600	10540	N/A	N/A	N/A	N/A	CPS
SSW4 Aluminum	5000	4254	N/A	N/A	N/A	N/A	CPS
SSW5 Aluminum	660.0	524.4	N/A	N/A	N/A	N/A	CPS

Hostile Litho-Density Sonde Wellsite Calibration - Lithology Measurement

Master: 26-Nov-2005 18:10

LSW1 Iron	400.0	409.3	N/A	N/A	N/A	N/A	CPS
LSW2 Iron	730.0	694.8	N/A	N/A	N/A	N/A	CPS
LSW3 Iron	1000	921.3	N/A	N/A	N/A	N/A	CPS
LSW4 Iron	520.0	476.7	N/A	N/A	N/A	N/A	CPS
LSW5 Iron	470.0	435.7	N/A	N/A	N/A	N/A	CPS
SSW1 Iron	2100	2024	N/A	N/A	N/A	N/A	CPS
SSW2 Iron	6800	6257	N/A	N/A	N/A	N/A	CPS
SSW3 Iron	10800	9563	N/A	N/A	N/A	N/A	CPS
SSW4 Iron	4600	3859	N/A	N/A	N/A	N/A	CPS
SSW5 Iron	580.0	457.3	N/A	N/A	N/A	N/A	CPS

Hostile Litho-Density Sonde Wellsite Calibration - Caliper Calibration

Before: 17-Dec-2005 12:57

HLDS Caliper Small Ring	8.000	N/A	9.531	N/A	N/A	N/A	IN
HLDS Caliper Large Ring	12.00	N/A	13.55	N/A	N/A	N/A	IN

Accelerator-Porosity Tool Wellsite Calibration - Detector Background

Master: 13-Oct-2005 17:54 Before: 17-Dec-2005 12:56

Near Det Bkg Cntrate	30.00	31.38	31.45	N/A	N/A	N/A	CPS
Far Det Bkg Cntrate	30.00	33.49	33.05	N/A	N/A	N/A	CPS
Array-1 Det Bkg Cntrate	30.00	30.21	31.19	N/A	N/A	N/A	CPS
Array-2 Det Bkg Cntrate	30.00	28.25	28.93	N/A	N/A	N/A	CPS
Array Therm Det Bkg Cntrate	30.00	33.45	33.09	N/A	N/A	N/A	CPS

Accelerator-Porosity Tool Wellsite Calibration - Calibration Ratios

Master: 13-Oct-2005 17:54

Near/Far Calibration Ratio	0.9250	0.8905	N/A	N/A	N/A	N/A
Near/Array Calibration Ratio	1.030	1.058	N/A	N/A	N/A	N/A
Near/Array Cal Ratio Up/Down	1.000	1.004	N/A	N/A	N/A	N/A

Accelerator-Porosity Tool Wellsite Calibration - Tank Check

Master: 13-Oct-2005 17:54

Array-1 Standoff Porosity	11.75	11.54	N/A	N/A	N/A	N/A	PU
Array-2 Standoff Porosity	11.75	11.93	N/A	N/A	N/A	N/A	PU
Average Slowing Down Time	6.000	5.836	N/A	N/A	N/A	N/A	US
Array-1 SDT Ratio Up/Down	1.000	0.9826	N/A	N/A	N/A	N/A	
Array-2 SDT Ratio Up/Down	1.000	1.002	N/A	N/A	N/A	N/A	
Sigma Formation	27.50	27.08	N/A	N/A	N/A	N/A	CU

Accelerator-Porosity Tool Wellsite Calibration - CCR7 signal boxes

Master: 13-Oct-2005 17:54

Near Detector Plateau Setting	1650	1732	N/A	N/A	N/A	N/A	V
Far Detector Plateau Setting	2000	2099	N/A	N/A	N/A	N/A	V
Array Detector Plateau Setting	2000	1966	N/A	N/A	N/A	N/A	V

Hostile Natural Gamma Ray Sonde Wellsite Calibration - Detector 1 Check

Master: 17-Dec-2005 12:43 Before: 17-Dec-2005 12:50

Na 511 Peak Loc	40.00	39.69	39.59	N/A	N/A	1.000	
Na 511 Peak Res	15.50	15.57	16.23	N/A	N/A	2.000	%
High Voltage	1150	1112	1113	N/A	N/A	N/A	V
Na 1785 Peak Loc	142.6	142.0	142.2	N/A	N/A	7.000	
Na 1785 Peak Res	8.500	9.001	8.723	N/A	N/A	2.000	%
Temperature	15.50	30.76	30.77	N/A	N/A	N/A	DEGC
Na Count Rate	45.00	43.80	44.27	N/A	N/A	8.000	CPS

Hostile Natural Gamma Ray Sonde Wellsite Calibration - Detector 2 Check

Master: 17-Dec-2005 12:43 Before: 17-Dec-2005 12:50

Na 511 Peak Loc	40.00	39.62	39.54	N/A	N/A	1.000	
Na 511 Peak Res	15.50	14.94	16.14	N/A	N/A	2.000	%
High Voltage	1150	1192	1193	N/A	N/A	N/A	V
Na 1785 Peak Loc	142.6	141.3	141.7	N/A	N/A	7.000	
Na 1785 Peak Res	8.500	8.839	8.795	N/A	N/A	2.000	%
Temperature	15.50	30.03	30.01	N/A	N/A	N/A	DEGC
Na Count Rate	45.00	43.60	43.98	N/A	N/A	8.000	CPS

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

Master: 17-Dec-2005 12:43 Before: 17-Dec-2005 12:50

Coincidence Count Rate Ratio	1.000	1.006	1.009	N/A	N/A	0.05000
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Hostile Natural Gamma Ray Sonde Master Calibration - Detector 1 Calibration

Master: 17-Dec-2005 12:38

Na 511 Peak Set Point	40.00	41.00	--	--	--	--	
Th Peak Loc	209.6	208.2	--	--	--	--	
Th Peak Res	7.000	7.029	--	--	--	--	%
Background Count Rate	142.5	26.12	--	--	--	--	CPS
Gain Ratio	1.000	0.9980	--	--	--	--	

Hostile Natural Gamma Ray Sonde Master Calibration - Detector 2 Calibration

Master: 17-Dec-2005 12:38

Na 511 Peak Set Point	40.00	41.00	--	--	--	--	
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Na 511 Peak Set Point	40.00	41.00	--	--	--	--
Th Peak Loc	209.6	209.8	--	--	--	--
Th Peak Res	7.000	7.025	--	--	--	--
Background Count Rate	142.5	26.22	--	--	--	--
Gain Ratio	1.000	1.008	--	--	--	--

%
CPS

Accelerator-Porosity Tool - Detector Plateau Settings :

Near Detector Plateau Setting 1732 V
 Far Detector Plateau Setting 2099 V
 Array Detector Plateau Setting 1966 V

DUAL LATEROLOG - E / Equipment Identification

Primary Equipment:

Auxiliary Equipment:

Dual Laterolog Electrode	DLE - E
Dual Laterolog Sonde	DLS - F
Dual Laterolog Housing	DLH - CB
Dual Laterolog Cartridge	DLC - D
Laterolog Control Module	LCM - AA

DUAL LATEROLOG - E Wellsite Calibration

DLT ELECTRONICS CALIBRATION Laterolog Measurement

Phase	MEASURED LLD OHMM	Value	Phase	MEASURED LLS OHMM	Value
Before	EXCEEDS LIMIT	0	Before	EXCEEDS LIMIT	0
	29.00 (Minimum) 31.62 (Nominal) 40.00 (Maximum)			29.00 (Minimum) 31.62 (Nominal) 40.00 (Maximum)	

Before: Calibration not done

DUAL LATEROLOG - E Wellsite Calibration






DLT Electronics Calibration Plus Measurement

Phase	Deep Current Plus UA	Value	Phase	Deep Voltage Plus MV	Value	Phase	Groningen Voltage Plus MV	Value
Before	NOT DONE	N/A	Before	NOT DONE	N/A	Before	NOT DONE	N/A
	317.5 (Minimum) 342.5 (Nominal) 367.5 (Maximum)			9.830 (Minimum) 10.83 (Nominal) 11.83 (Maximum)			9.830 (Minimum) 10.83 (Nominal) 11.83 (Maximum)	
Phase	Shallow Current Plus UA	Value	Phase	Shallow Voltage Plus MV	Value			
Before	NOT DONE	N/A	Before	NOT DONE	N/A			
	317.5 (Minimum) 342.5 (Nominal) 367.5 (Maximum)			9.830 (Minimum) 10.83 (Nominal) 11.83 (Maximum)				

Before: Calibration not done

DUAL LATEROLOG - E Wellsite Calibration

DLT Electronics Calibration Zero Measurement

Phase	Deep Current Zero UA	Value	Phase	Deep Voltage Zero MV	Value	Phase	Groningen Voltage Zero MV	Value
Before		0	Before		0.003849	Before		0.003798
	-1.000 (Minimum) 0 (Nominal) 1.000 (Maximum)			-0.1000 (Minimum) 0 (Nominal) 0.1000 (Maximum)			-0.1000 (Minimum) 0 (Nominal) 0.1000 (Maximum)	
Phase	Shallow Current Zero UA	Value	Phase	Shallow Voltage Zero MV	Value			
Before		-0.1276	Before		-0.007697			
	-1.000 (Minimum) 0 (Nominal) 1.000 (Maximum)			-0.1000 (Minimum) 0 (Nominal) 0.1000 (Maximum)				

Before: 17-Dec-2005 12:45

Hostile Litho-Density Sonde / Equipment Identification

Primary Equipment:

Hostile Litho Density Sonde	HLDS - D	45
Hostile Litho Density High Voltage	HLDV - D	42
Gamma Source Radioactive	GSR - Z	2326

Auxiliary Equipment:

Hostile Litho Density Pad	HLDP - C	45
Hostile Litho Density High Voltage Housi	HEH - H	44

Hostile Litho-Density Sonde Wellsite Calibration								
Background Measurement								
Phase	SS Cs Resolution Bkg %	Value	Phase	LS Cs Resolution Bkg %	Value	Phase	LSW1 Background CPS	Value
Master		8.065	Master		8.155	Master		82.91
Before		7.945	Before		8.148	Before		82.77
	7.000 (Minimum) 9.000 (Nominal) 11.00 (Maximum)			7.000 (Minimum) 9.000 (Nominal) 11.00 (Maximum)			55.00 (Minimum) 100.0 (Nominal) 150.0 (Maximum)	
Phase	LSW2 Background CPS	Value	Phase	LSW3 Background CPS	Value	Phase	LSW4 Background CPS	Value
Master		77.00	Master		169.0	Master		207.2
Before		75.90	Before		168.1	Before		206.8
	50.00 (Minimum) 100.0 (Nominal) 140.0 (Maximum)			110.0 (Minimum) 200.0 (Nominal) 290.0 (Maximum)			140.0 (Minimum) 250.0 (Nominal) 360.0 (Maximum)	
Phase	LSW5 Background CPS	Value	Phase	SSW1 Background CPS	Value	Phase	SSW2 Background CPS	Value
Master		473.3	Master		92.34	Master		165.1
Before		472.8	Before		91.07	Before		164.6
	330.0 (Minimum) 600.0 (Nominal) 830.0 (Maximum)			55.00 (Minimum) 100.0 (Nominal) 150.0 (Maximum)			100.0 (Minimum) 200.0 (Nominal) 260.0 (Maximum)	
Phase	SSW3 Background CPS	Value	Phase	SSW4 Background CPS	Value	Phase	SSW5 Background CPS	Value
Master		450.1	Master		229.8	Master		164.6
Before		447.7	Before		227.0	Before		163.5
	280.0 (Minimum) 500.0 (Nominal) 700.0 (Maximum)			150.0 (Minimum) 270.0 (Nominal) 380.0 (Maximum)			110.0 (Minimum) 200.0 (Nominal) 270.0 (Maximum)	
Master: 26-Nov-2005 17:48			Before: 17-Dec-2005 12:49					

Hostile Litho-Density Sonde Master Calibration								
Detector Background Measurement								
Phase	LSW1 Background CPS	Value	Phase	LSW2 Background CPS	Value	Phase	LSW3 Background CPS	Value
Master		82.91	Master		77.00	Master		169.0
	55.00 (Minimum) 100.0 (Nominal) 150.0 (Maximum)			50.00 (Minimum) 100.0 (Nominal) 140.0 (Maximum)			110.0 (Minimum) 200.0 (Nominal) 290.0 (Maximum)	
Phase	LSW4 Background CPS	Value	Phase	LSW5 Background CPS	Value	Phase	LS Cs Resolution Bkg %	Value
Master		207.2	Master		473.3	Master		8.155
	140.0 (Minimum) 250.0 (Nominal) 360.0 (Maximum)			330.0 (Minimum) 600.0 (Nominal) 830.0 (Maximum)			7.000 (Minimum) 9.000 (Nominal) 11.00 (Maximum)	
Phase	SSW1 Background CPS	Value	Phase	SSW2 Background CPS	Value	Phase	SSW3 Background CPS	Value
Master		92.34	Master		165.1	Master		450.1
	55.00 (Minimum) 100.0 (Nominal) 150.0 (Maximum)			100.0 (Minimum) 200.0 (Nominal) 260.0 (Maximum)			280.0 (Minimum) 500.0 (Nominal) 700.0 (Maximum)	
Phase	SSW4 Background CPS	Value	Phase	SSW5 Background CPS	Value	Phase	SS Cs Resolution Bkg %	Value
Master		229.8	Master		164.6	Master		8.065
	150.0 (Minimum) 270.0 (Nominal) 380.0 (Maximum)			110.0 (Minimum) 200.0 (Nominal) 270.0 (Maximum)			7.000 (Minimum) 9.000 (Nominal) 11.00 (Maximum)	
Master: 26-Nov-2005 17:48								

Hostile Litho-Density Sonde Master Calibration								
Detector Aluminum Measurement (bkgd-subtracted)								
Phase	LSW1 Aluminum CPS	Value	Phase	LSW2 Aluminum CPS	Value	Phase	LSW3 Aluminum CPS	Value
Master		603.1	Master		870.7	Master		1046
	420.0 (Minimum) 600.0 (Nominal) 700.0 (Maximum)			650.0 (Minimum) 900.0 (Nominal) 1050 (Maximum)			800.0 (Minimum) 1100 (Nominal) 1300 (Maximum)	
Phase	LSW4 Aluminum CPS	Value	Phase	LSW5 Aluminum CPS	Value	Phase	SSW1 Aluminum CPS	Value
Master		528.2	Master		478.3	Master		2778
	410.0 (Minimum) 580.0 (Nominal) 670.0 (Maximum)			410.0 (Minimum) 570.0 (Nominal) 660.0 (Maximum)			2000 (Minimum) 2800 (Nominal) 3200 (Maximum)	
Phase	SSW2 Aluminum CPS	Value	Phase	SSW3 Aluminum CPS	Value	Phase	SSW4 Aluminum CPS	Value
Master		7548	Master		10540	Master		4254
	5800 (Minimum) 8000 (Nominal) 9300 (Maximum)			8300 (Minimum) 11600 (Nominal) 13500 (Maximum)			3500 (Minimum) 5000 (Nominal) 5800 (Maximum)	
Phase	SSW5 Aluminum CPS	Value						
Master		524.4						
	470.0 (Minimum) 660.0 (Nominal) 770.0 (Maximum)							

Hostile Litho-Density Sonde Master Calibration														
Detector Litholog Measurement (bkqg-subtracted)														
Phase	LSW1 Iron CPS			Value	Phase	LSW2 Iron CPS			Value	Phase	LSW3 Iron CPS			Value
Master				409.3	Master				694.8	Master				921.3
	290.0 (Minimum)	400.0 (Nominal)	470.0 (Maximum)			520.0 (Minimum)	730.0 (Nominal)	850.0 (Maximum)			720.0 (Minimum)	1000 (Nominal)	1160 (Maximum)	
Phase	LSW4 Iron CPS			Value	Phase	LSW5 Iron CPS			Value	Phase	SSW1 Iron CPS			Value
Master				476.7	Master				435.7	Master				2024
	370.0 (Minimum)	520.0 (Nominal)	600.0 (Maximum)			340.0 (Minimum)	470.0 (Nominal)	550.0 (Maximum)			1500 (Minimum)	2100 (Nominal)	2400 (Maximum)	
Phase	SSW2 Iron CPS			Value	Phase	SSW3 Iron CPS			Value	Phase	SSW4 Iron CPS			Value
Master				6257	Master				9563	Master				3859
	4900 (Minimum)	6800 (Nominal)	7900 (Maximum)			7800 (Minimum)	10800 (Nominal)	12600 (Maximum)			3300 (Minimum)	4600 (Nominal)	5400 (Maximum)	
Phase	SSW5 Iron CPS			Value										
Master				457.3										
	420.0 (Minimum)	580.0 (Nominal)	680.0 (Maximum)											

Hostile Litho-Density Sonde Master Calibration														
Quality Ratios														
Phase	AL CALIBRATION RATIO 1			Value	Phase	AL CALIBRATION RATIO 2			Value	Phase	AL CALIBRATION RATIO 3			Value
Master				1.039	Master				2.205	Master				0.5992
	0.9000 (Minimum)	1.000 (Nominal)	1.100 (Maximum)			1.900 (Minimum)	2.100 (Nominal)	2.300 (Maximum)			0.4500 (Minimum)	0.5500 (Nominal)	0.6500 (Maximum)	
Phase	AL CALIBRATION RATIO 4			Value	Phase	Pad-Wear SS Ratio			Value	Phase	Pad-Wear LS Ratio			Value
Master				0.5814	Master				0.9923	Master				0.9844
	0.4000 (Minimum)	0.5500 (Nominal)	0.6500 (Maximum)			0.9800 (Minimum)	0.9880 (Nominal)	0.9960 (Maximum)			0.9800 (Minimum)	0.9880 (Nominal)	0.9960 (Maximum)	
Phase	Pad-Position SS Ratio			Value	Phase	Pad-Position LS Ratio			Value					
Master				1.003	Master				0.9868					
	0.9900 (Minimum)	0.9940 (Nominal)	1.015 (Maximum)			0.9850 (Minimum)	0.9940 (Nominal)	1.010 (Maximum)						

Litho-Density Spectroscopy Cartridge - A / Equipment Identification		
Primary Equipment:		
LDSC Cartridge	LDSC - A	16
Auxiliary Equipment:		
LDSC Housing	LDSH - A	52

Accelerator-Porosity Tool / Equipment Identification		
Primary Equipment:		
Accelerator-Porosity Sonde	APS - C	22
APS Minitron	MNTR - F	4185
Auxiliary Equipment:		
Accelerator-Porosity Housing	APH - AC	22
APS Calibration Water Tank	SFT - 178	6250
APS Aluminum Calibrator Sleeve	SFT - 281	6250

Accelerator-Porosity Tool Wellsite Calibration														
Detector Background														
Phase	Near Det Bkg Cntrate CPS			Value	Phase	Far Det Bkg Cntrate CPS			Value	Phase	Array-1 Det Bkg Cntrate CPS			Value
Master				31.38	Master				33.49	Master				30.21
Before				31.45	Before				33.05	Before				31.19

1.000 (Minimum) 30.00 (Nominal) 50.00 (Maximum)			1.000 (Minimum) 30.00 (Nominal) 50.00 (Maximum)			1.000 (Minimum) 30.00 (Nominal) 50.00 (Maximum)		
Phase	Array-2 Det Bkg Cntrate CPS	Value	Phase	Array Therm Det Bkg Cntrate CPS	Value			
Master		28.25	Master		33.45			
Before		28.93	Before		33.09			
1.000 (Minimum) 30.00 (Nominal) 50.00 (Maximum)			1.000 (Minimum) 30.00 (Nominal) 50.00 (Maximum)					
Master: 13-Oct-2005 17:54						Before: 17-Dec-2005 12:56		

Accelerator-Porosity Tool Wellsite Calibration								
Calibration Ratios								
Phase	Near/Far Calibration Ratio	Value	Phase	Near/Array Calibration Ratio	Value	Phase	Near/Array Cal Ratio Up/Down	Value
Master		0.8905	Master		1.058	Master		1.004
0.8000 (Minimum) 0.9250 (Nominal) 1.050 (Maximum)			0.9000 (Minimum) 1.030 (Nominal) 1.170 (Maximum)			0.9700 (Minimum) 1.000 (Nominal) 1.030 (Maximum)		
Master: 13-Oct-2005 17:54								

Accelerator-Porosity Tool Wellsite Calibration								
Tank Check								
Phase	Array-1 Standoff Porosity PU	Value	Phase	Array-2 Standoff Porosity PU	Value	Phase	Average Slowing Down Time US	Value
Master		11.54	Master		11.93	Master		5.836
9.900 (Minimum) 11.75 (Nominal) 13.60 (Maximum)			9.900 (Minimum) 11.75 (Nominal) 13.60 (Maximum)			5.500 (Minimum) 6.000 (Nominal) 6.250 (Maximum)		
Phase	Array-1 SDT Ratio Up/Down	Value	Phase	Array-2 SDT Ratio Up/Down	Value	Phase	Sigma Formation CU	Value
Master		0.9826	Master		1.002	Master		27.08
0.9500 (Minimum) 1.000 (Nominal) 1.050 (Maximum)			0.9500 (Minimum) 1.000 (Nominal) 1.050 (Maximum)			20.00 (Minimum) 27.50 (Nominal) 35.00 (Maximum)		
Master: 13-Oct-2005 17:54								

Accelerator-Porosity Tool Master Calibration								
Detector Calibration								
Phase	Near/Far Calibration Ratio	Value	Phase	Near/Array Calibration Ratio	Value	Phase	Near/Array Cal Ratio Up/Down	Value
Master		0.8905	Master		1.058	Master		1.004
0.8000 (Minimum) 0.9250 (Nominal) 1.050 (Maximum)			0.9000 (Minimum) 1.030 (Nominal) 1.170 (Maximum)			0.9700 (Minimum) 1.000 (Nominal) 1.030 (Maximum)		
Master: 13-Oct-2005 17:54								

Accelerator-Porosity Tool Master Calibration								
Tank Check								
Phase	Array-1 Standoff Porosity PU	Value	Phase	Array-2 Standoff Porosity PU	Value	Phase	Average Slowing Down Time US	Value
Master		11.54	Master		11.93	Master		5.836
9.900 (Minimum) 11.75 (Nominal) 13.60 (Maximum)			9.900 (Minimum) 11.75 (Nominal) 13.60 (Maximum)			5.500 (Minimum) 6.000 (Nominal) 6.250 (Maximum)		
Phase	Array-1 SDT Ratio Up/Down	Value	Phase	Array-2 SDT Ratio Up/Down	Value	Phase	Sigma Formation CU	Value
Master		0.9826	Master		1.002	Master		27.08
0.9500 (Minimum) 1.000 (Nominal) 1.050 (Maximum)			0.9500 (Minimum) 1.000 (Nominal) 1.050 (Maximum)			20.00 (Minimum) 27.50 (Nominal) 35.00 (Maximum)		
Master: 13-Oct-2005 17:54								

Hostile Natural Gamma Ray Cartridge - B / Equipment Identification		
Primary Equipment:	HNGC Cartridge	HNGC - B 300
Auxiliary Equipment:	HNGC Housing	HNGH - A 115

Hostile Natural Gamma Ray Sonde / Equipment Identification		
Primary Equipment:	HNGS Sonde	HNGS - BA 194
Auxiliary Equipment:	HNGS Sonde Housing	HNSH - BA 205

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		39.69	Master		15.57	Master		1112	
Before		39.59	Before		16.23	Before		1113	
	37.50 (Minimum)	40.00 (Nominal)	42.50 (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		142.0	Master		9.001	Master		30.76	
Before		142.2	Before		8.723	Before		30.77	
	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		43.80							
Before		44.27							
	10.00 (Minimum)	45.00 (Nominal)	100.0 (Maximum)						
Master: 17-Dec-2005 12:43			Before: 17-Dec-2005 12:50						






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		39.62	Master		14.94	Master		1192	
Before		39.54	Before		16.14	Before		1193	
	37.50 (Minimum)	40.00 (Nominal)	42.50 (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		141.3	Master		8.839	Master		30.03	
Before		141.7	Before		8.795	Before		30.01	
	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		43.60							
Before		43.98							
	10.00 (Minimum)	45.00 (Nominal)	100.0 (Maximum)						
Master: 17-Dec-2005 12:43			Before: 17-Dec-2005 12:50						

Hostile Natural Gamma Ray Sonde Wellsite Calibration			
Ratio Of Detector 1 To Detector 2			
Phase	Coincidence Count Rate Ratio	Value	
Master		1.006	
Before		1.009	
	0.9500 (Minimum)	1.000 (Nominal)	1.050 (Maximum)
Master: 17-Dec-2005 12:43			
Before: 17-Dec-2005 12:50			

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		208.2	Master		7.029	
	38.00 (Minimum)	40.00 (Nominal)	42.00 (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		26.12	Master		0.9980				
	20.00 (Minimum)	142.5 (Nominal)	265.0 (Maximum)	0.9400 (Minimum)	1.000 (Nominal)	1.060 (Maximum)			
Master: 17-Dec-2005 12:38									

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		209.8	Master		7.025
	38.00 (Minimum) 40.00 (Nominal) 42.00 (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		26.22	Master		1.008			
	20.00 (Minimum) 142.5 (Nominal) 265.0 (Maximum)			0.9400 (Minimum) 1.000 (Nominal) 1.060 (Maximum)				

Master: 17-Dec-2005 12:38

Company: Lamont Doherty

Schlumberger

Well: Expedition 312 Site 1256D
 Field: Superfast Spreading Crust III
 Rig: Joides Resolution
 Ocean: Pacific Ocean

Hostile Natural Gamma-Ray Sonde