Schlumberger

Company: **International Ocean Discovery Program**

Well: **Expedition 393, Site U1583F**
Field: **South Atlantic Transect II**
Rig: **JOIDES Resolution** Country: **South Africa**

Rig: JOIDES Resolution
Field: South Atlantic Transect II
Location: Latitude: S 30.7102917 Deg
Well: Expedition 393, Site U1583F
Company: International Ocean Discovery Pr

High Resolution Laterolog (HRLA)
Litho Density (HLDS) Porosity (APS)
Natural Gamma / MSS (HNGS)

LOCATION

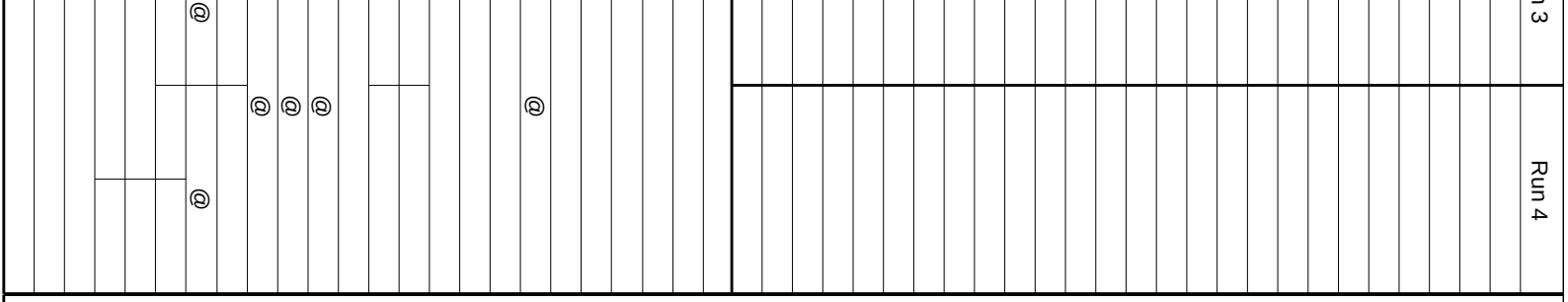
Latitude: S 30.7102917 Deg
Longitude: W 20.4338933 Deg

Elev.: K.B. 0.00 m
G.L. −4221.50 m
D.F. 0.00 m

Permanent Datum: Sea Floor — Elev.: −4221.50 m
Log Measured From: Rig Floor — 4221.50 m above Perm. Datum
Drilling Measured From: Rig Floor

Ocean:	Max. Well Deviation	Longitude	Latitude
Atlantic	0 deg	−20.4338933	−30.7102917

	Run 1	Run 2	Run 1	Run 2
Logging Date	17−Jul−2022			
Run Number	1			
Depth Driller	4461 m			
Schlumberger Depth	4458.4 m			
Bottom Log Interval	4458.4 m			
Top Log Interval	4210 m			
Casing Driller Size @ Depth	0.000 in @ 0 m	@	@	
Casing Schlumberger	0 m			
Bit Size	9.875 in			
Type Fluid In Hole	Seawater			
MUD Density / Viscosity	1.0305 g/cm3 /		/	/
MUD Fluid Loss / PH	/ 8.07		/	/
MUD Source Of Sample	Mudpit			
RM @ Measured Temperature	0.220 ohm.m @ 23 degC	@	@	@
RMF @ Measured Temperature	@	@	@	@
RMC @ Measured Temperature	@	@	@	@
Source RMF / RMC	N/A / N/A		/	/
RM @ MRT / RMF @ MRT	0.301 @ 11 / @ 11	@ / @	@ / @	@ / @
Maximum Recorded Temperatures	11 degC			
Circulation Stopped / Time	16−Jul−2022 / 9:00			
Logger On Bottom / Time	17−Jul−2022 / 4:00			
Unit Number / Location	627314 / Larose, LA		/	/
Recorded By	K. Garrett			
Witnessed By	G. Guerin			



DISCLAIMER

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OTHER SERVICES1	OTHER SERVICES2
OS1: FMS/DSI	OS1:
OS2:	OS2:
OS3:	OS3:
OS4:	OS4:
OS5:	OS5:

REMARKS: RUN NUMBER 1	REMARKS: RUN NUMBER 2
Hole drilled with RCB BHA at 9 7/8" BS	
Drill pipe set at 4324.5 mbrf.	
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 and while logging down.	
Hole size corrections made using caliper measurements for upward passes bit size	
used for downlog corrections.	
AHC used from TD then switched off to facilitate pipe entry.	
Caliper closed prior to shutting off compensator and entering pipe or casing.	

RUN 1

SERVICE ORDER #:
PROGRAM VERSION: 19C0−187
FLUID LEVEL:

LOGGED INTERVAL	START	STOP

RUN 2

SERVICE ORDER #:
PROGRAM VERSION:
FLUID LEVEL:

LOGGED INTERVAL	START	STOP

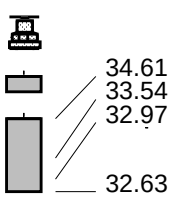
EQUIPMENT DESCRIPTION

RUN 1

SURFACE EQUIPMENT

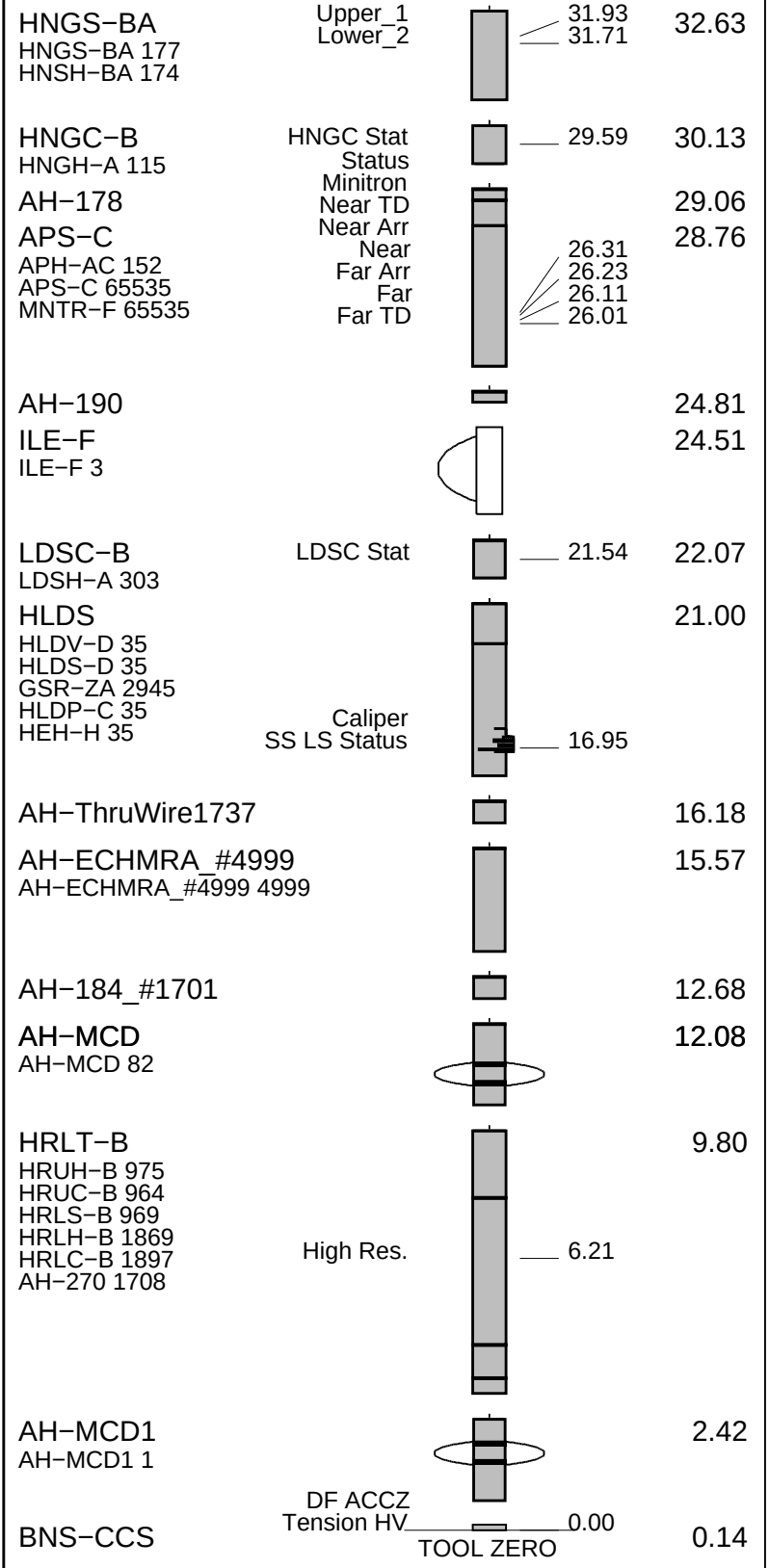
SFT−281 1
SFT−178 1
GSR−U 6098
WITM (EDTS)−A

DOWNHOLE EQUIPMENT

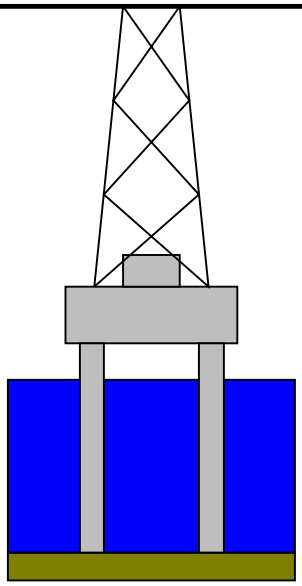


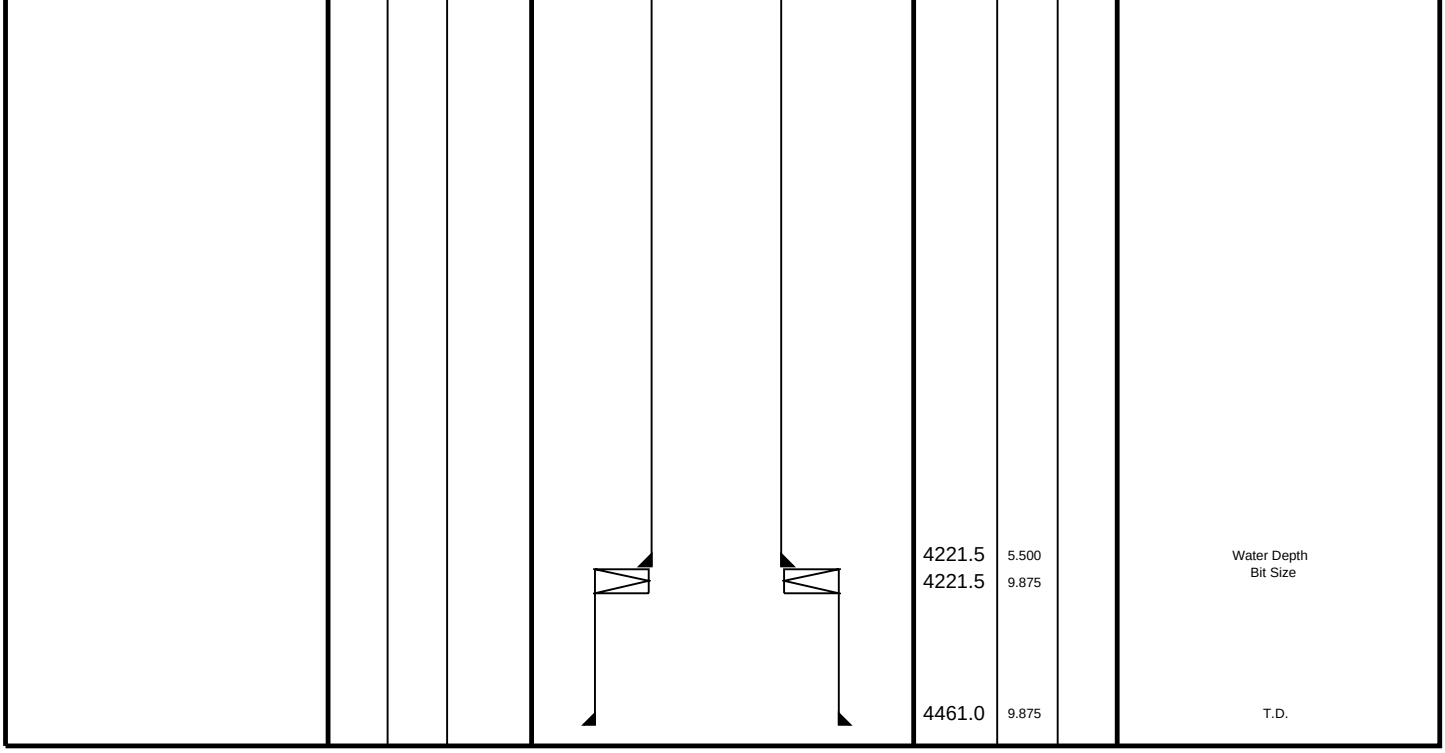
LEH−QT	MDSB_EDTC	35.93
	Mud Tempe	
AH−369	CTEM	35.04
	Gamma Ray	
EDTC−B	EFTB DIAG	34.61
EDTH−B 8528	TelStatus	
EDTC−B 8529	EDTCB Ele	

RUN 2



MAXIMUM STRING DIAMETER 3.75 IN
MEASUREMENTS RELATIVE TO TOOL ZERO
ALL LENGTHS IN METERS

Production String	(in)		(ft)	Well Schematic	(ft)	(in)		Casing String
	OD	ID	MD		MD	OD	ID	
Kelly Bushing Elevation								
Derrick Floor Elevation			11.0					
Mean Sea Level			0.0					
					0.0	5.500		Drill Pipe



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Downlog

MAXIS Field Log

Company: International Ocean Discovery Program **Well: Expedition 393, Site U1583F**

Input DLIS Files

DEFAULT	**Flip_HRLA_LDL_APS_038LUP**		**PRODUCER**	**25−Jul−2022 01:23**	**4423.9 M**	**4151.4 M**

Output DLIS Files

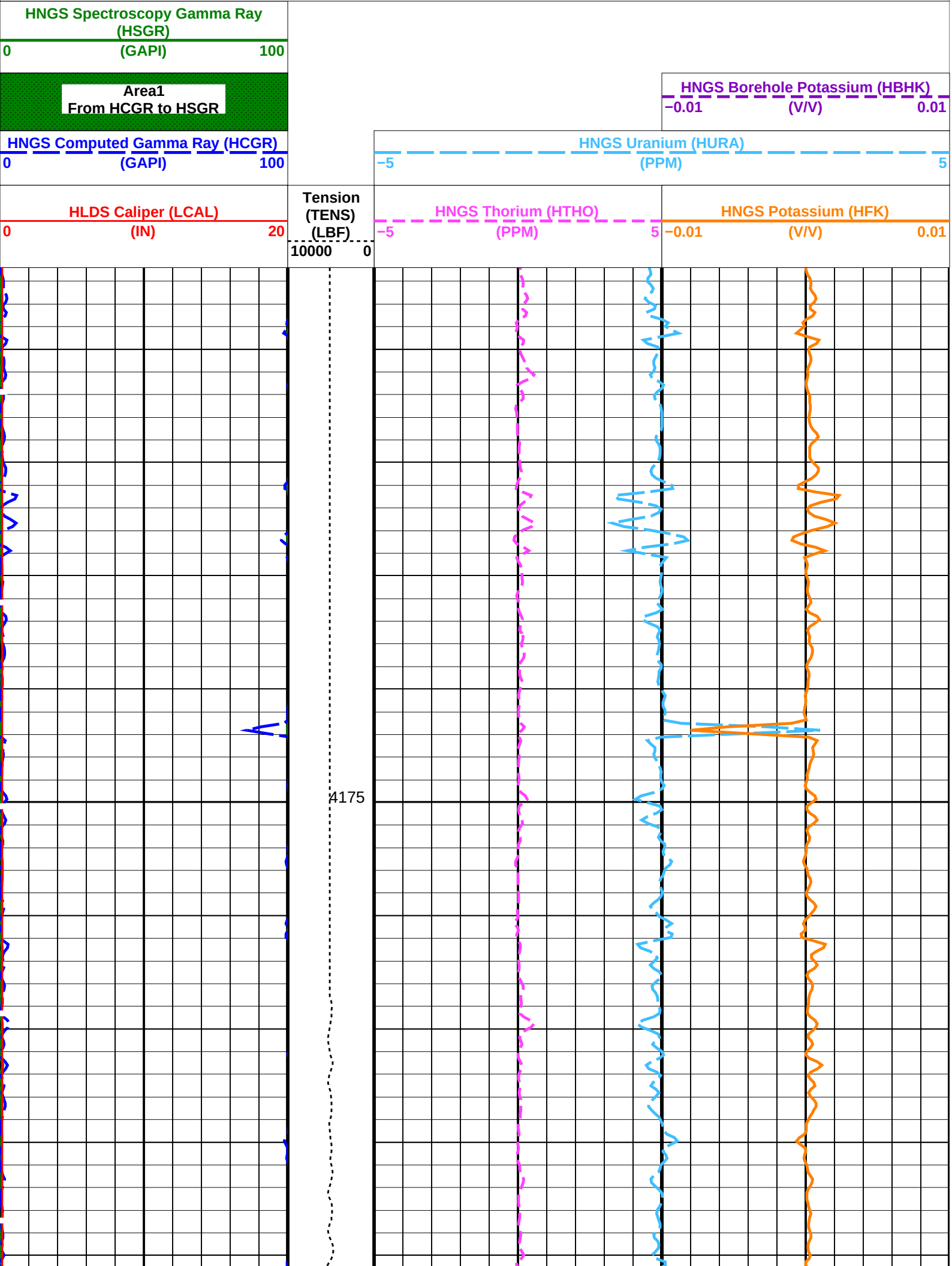
DEFAULT	**HRLA_LDL_APS_NGS_039PUP**	**FN:33**	**PRODUCER**	**25−Jul−2022 01:25**	**4423.9 M**	**4151.4 M**

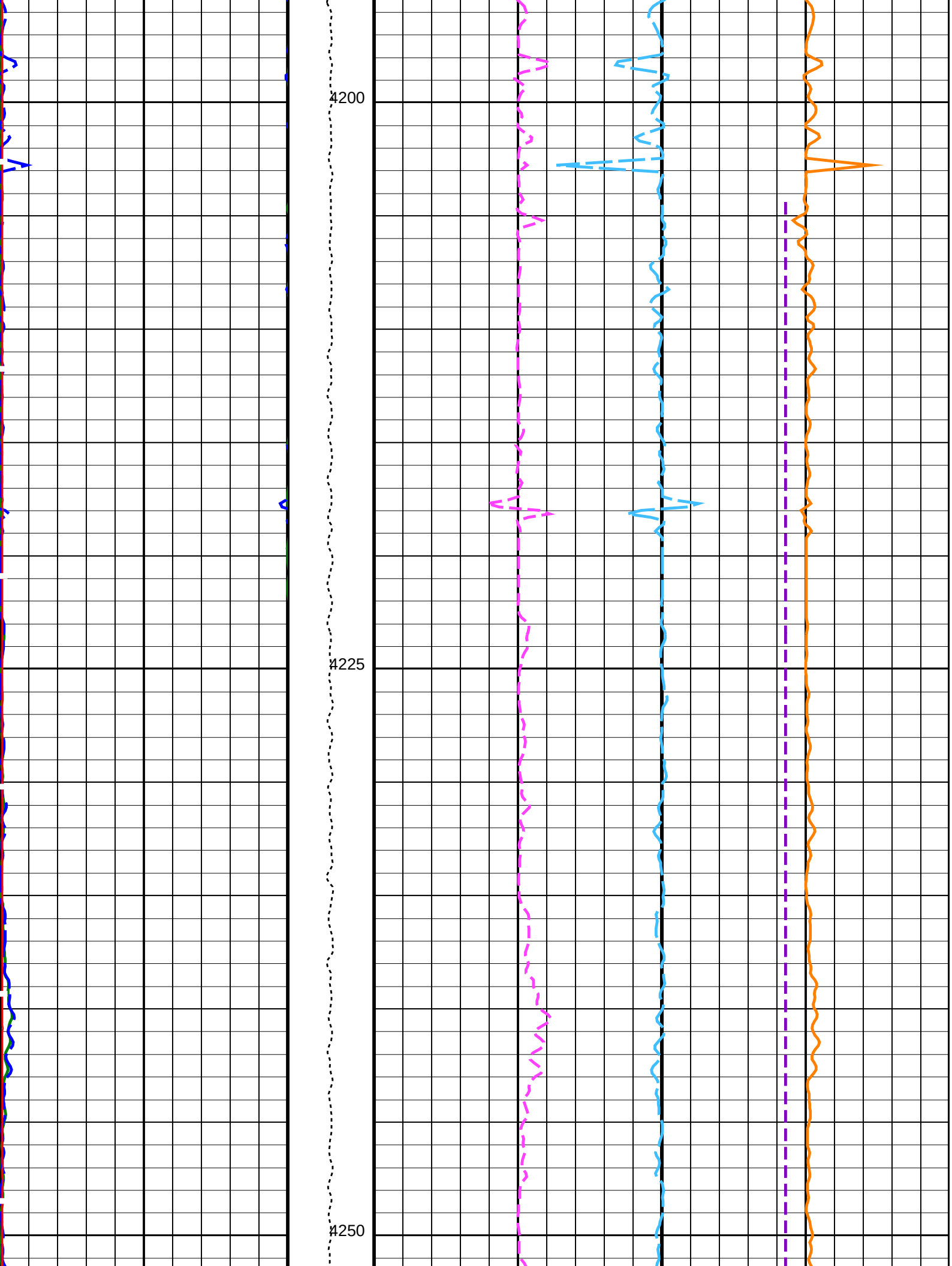
OP System Version: 19C0−187

HRLT−B	**19C0−187**	**HLDS**	**19C0−187**
LDSC−B	**19C0−187**	**APS−C**	**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)
100
Area1
From HCGR to HSGR
HNGS Computed Gamma Ray (HCGR)
0
(GAPI)
100
HNGS Borehole Potassium (HBHK)
−0.01
(V/V)
0.01
HNGS Uranium (HURA)
−5
(PPM)
5
HLDS Caliper (LCAL)
0
(IN)
20
Tension (TENS) (LBF)
10000
0
HNGS Thorium (HTHO)
−5
(PPM)
5
HNGS Potassium (HFK)
−0.01
(V/V)
0.01
4175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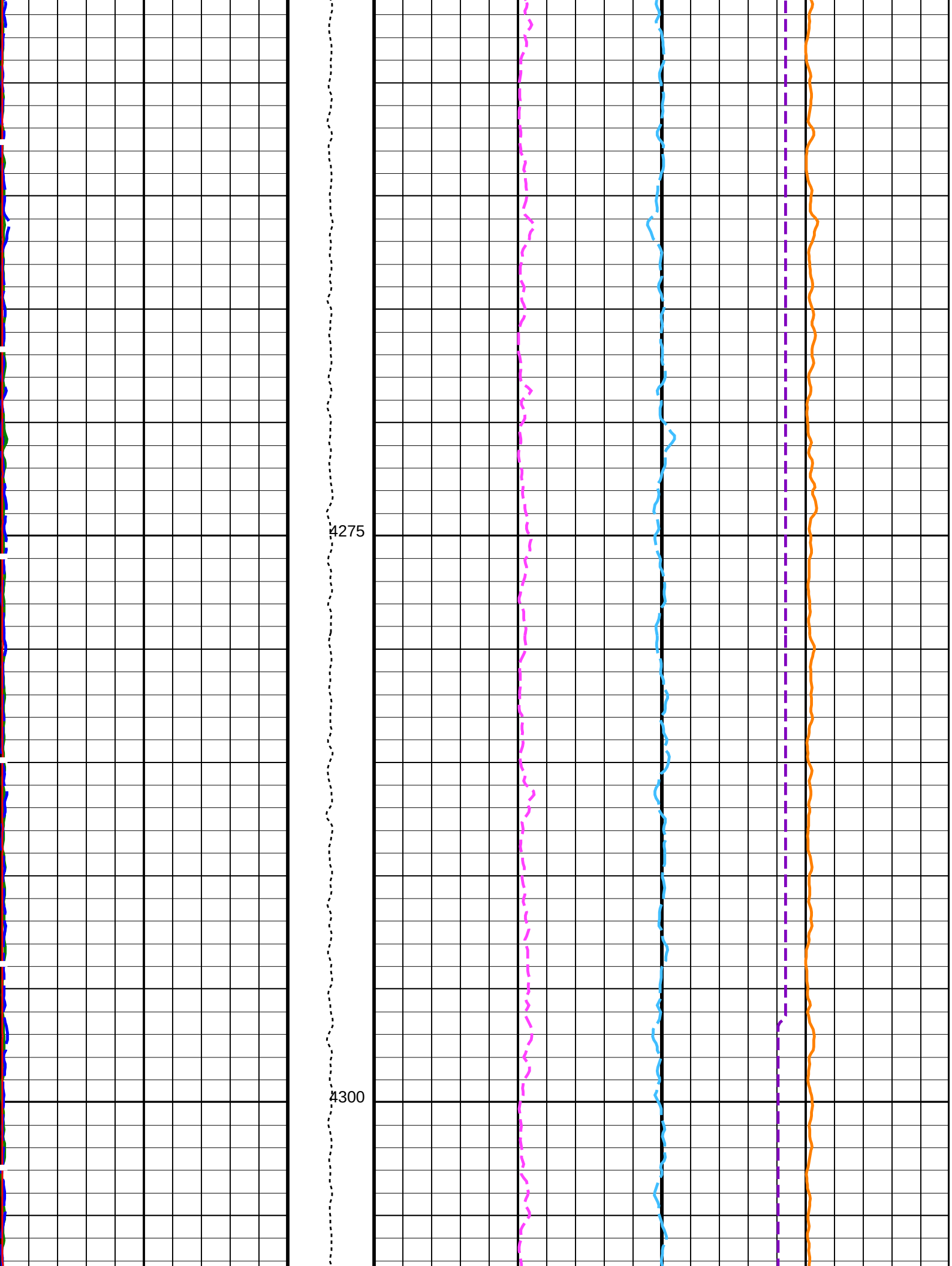
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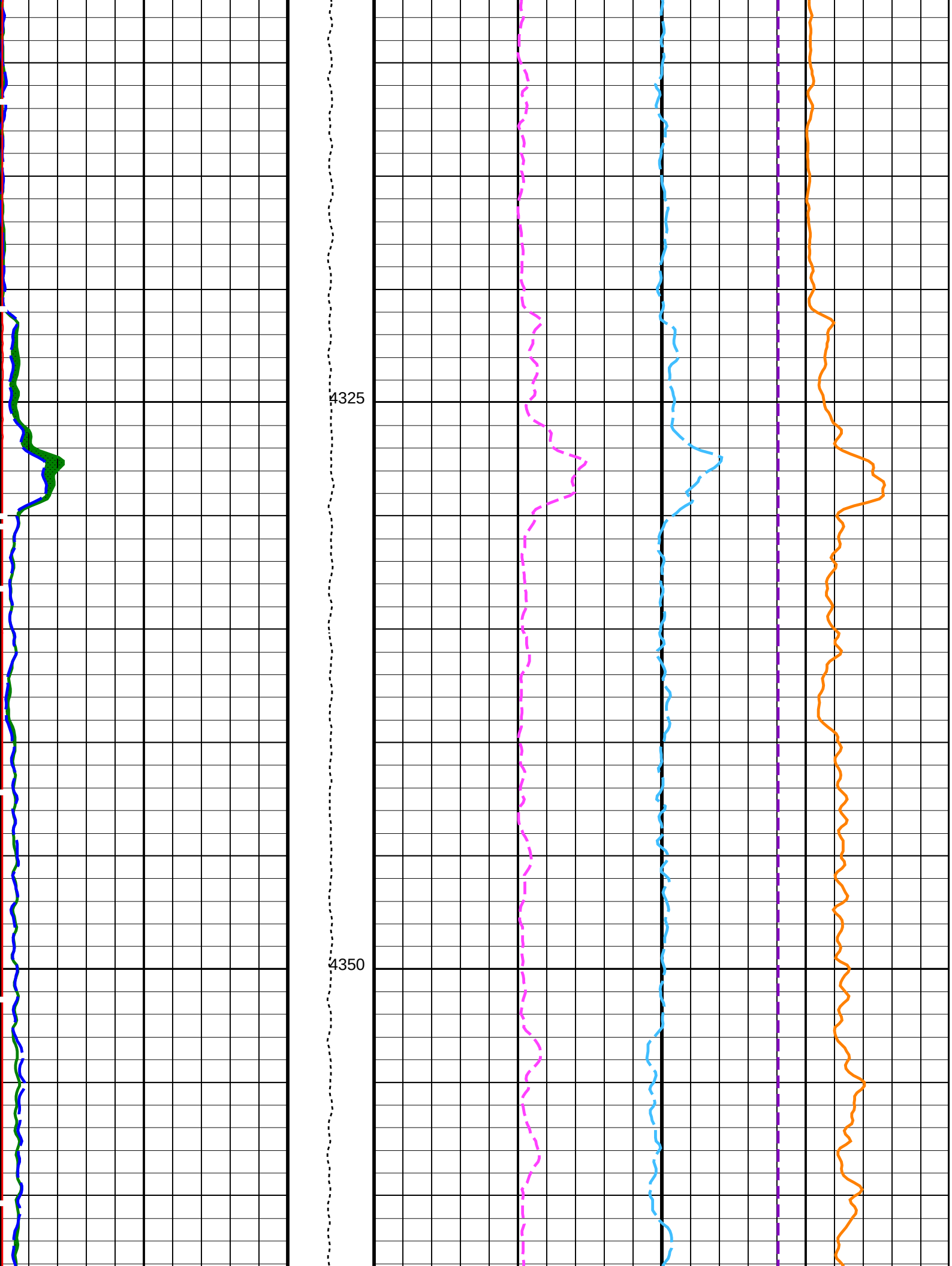
4300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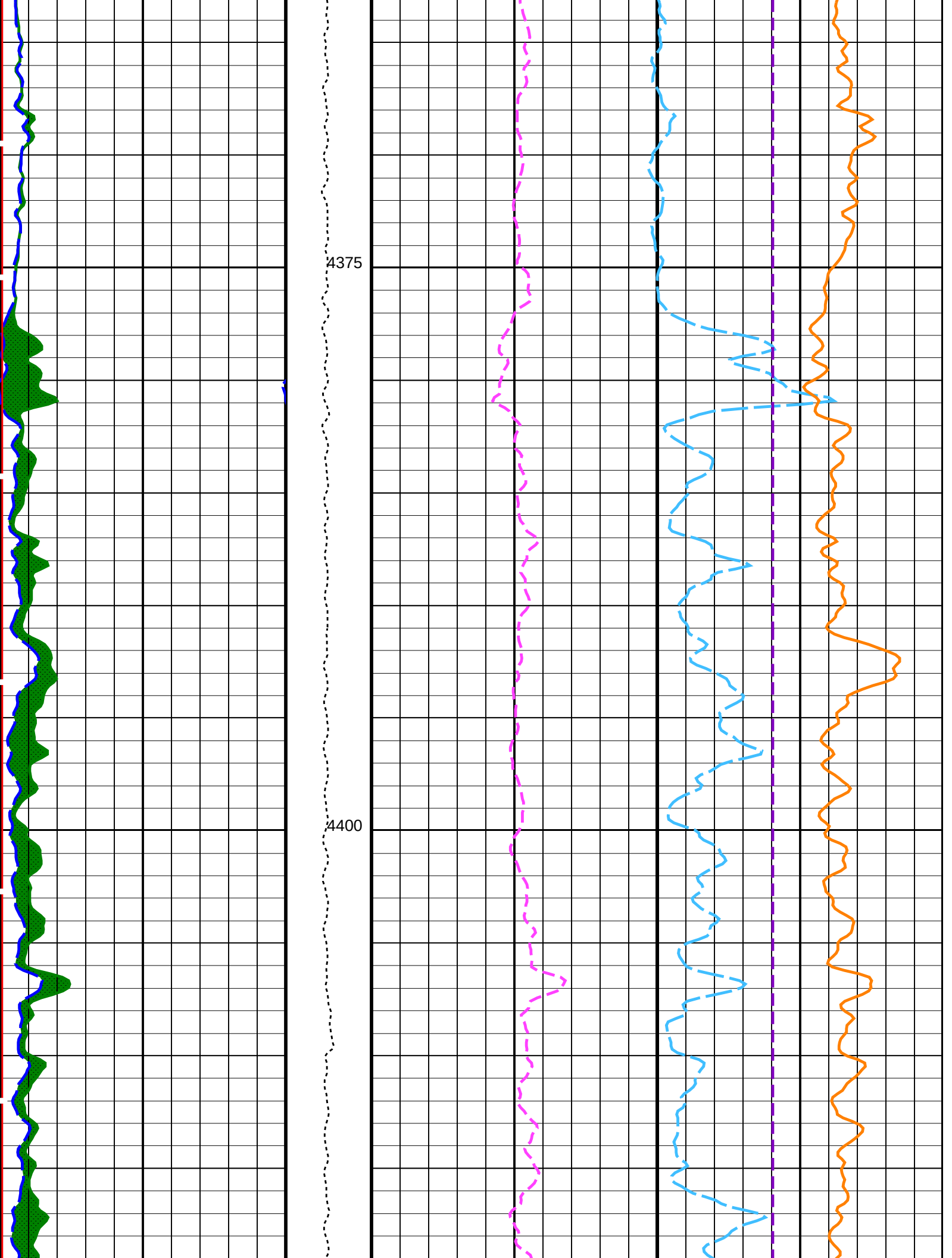
4350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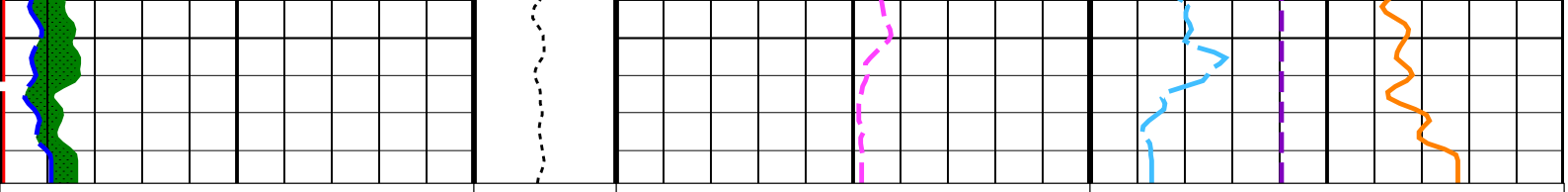


HLDS Caliper (LCAL)
0 (IN) 20

Tension (TENS) (LBF)
10000 0

HNGS Thorium (HTHO)
−5 (PPM) 5

HNGS Potassium (HFK)
−0.01 (V/V) 0.01

HNGS Computed Gamma Ray (HCGR)
0 (GAPI) 100

HNGS Uranium (HURA)
−5 (PPM) 5

Area1
From HCGR to HSGR

HNGS Borehole Potassium (HBHK)
−0.01 (V/V) 0.01

HNGS Spectroscopy Gamma Ray (HSGR)
0 (GAPI) 100

PIP SUMMARY

Time Mark Every 60 S

Parameters

DLIS Name	Description	Value	
	HRLT−B: High Resolution Laterolog Array − B		
BHS	Borehole Status	OPEN	
GCSE	Generalized Caliper Selection	BS	
	APS−C: Accelerator−Porosity Tool		
BHS	Borehole Status	OPEN	
GCSE	Generalized Caliper Selection	BS	
	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	−0.00124408	
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	20.2456	
VBA2	HNGS Detector 2 Variable Barite Factor Running Average	19.4799	
	EDTC−B: Enhanced DTS Cartridge		
BHS	Borehole Status	OPEN	
GCSE	Generalized Caliper Selection	BS	
	System and Miscellaneous		
BS	Bit Size	9.875	IN
DO	Depth Offset for Playback	0.0	M
PP	Playback Processing	NORMAL	

Format: HNGSYields Vertical Scale: 1:200 Graphics File Created: 25−Jul−2022 01:25

OP System Version: 19C0−187

HRLT−B	19C0−187	HLDS	19C0−187
LDSC−B	19C0−187	APS−C	19C0−187
HNGC−B	19C0−187	HNGS−BA	19C0−187
EDTC−B	SKK−5169−EDTCB		

Input DLIS Files

DEFAULT	Flip_HRLA_LDL_APS_038LUP		PRODUCER	25−Jul−2022 01:23	4423.9 M	4151.4 M

Output DLIS Files

DEFAULT	HRLA_LDL_APS_NGS_039PUP	FN:33	PRODUCER	25−Jul−2022 01:25		

Company: International Ocean Discovery Program **Well: Expedition 393, Site U1583F**

Input DLIS Files

DEFAULT	Flip_HRLA_LDL_APS_038LUP		PRODUCER	25−Jul−2022 01:23	4423.9 M	4151.4 M

Output DLIS Files

DEFAULT	HRLA_LDL_APS_NGS_039PUP	FN:33	PRODUCER	25−Jul−2022 01:25	4423.9 M	4151.4 M

OP System Version: 19C0−187

HRLT−B	19C0−187	HLDS	19C0−187
LDSC−B	19C0−187	APS−C	19C0−187
HNGC−B	19C0−187	HNGS−BA	19C0−187
EDTC−B	SKK−5169−EDTCB		

PIP SUMMARY

Time Mark Every 60 S

APS Quality of Formation Capture Cross−Section (QSGF)
10 (−−−−) 0

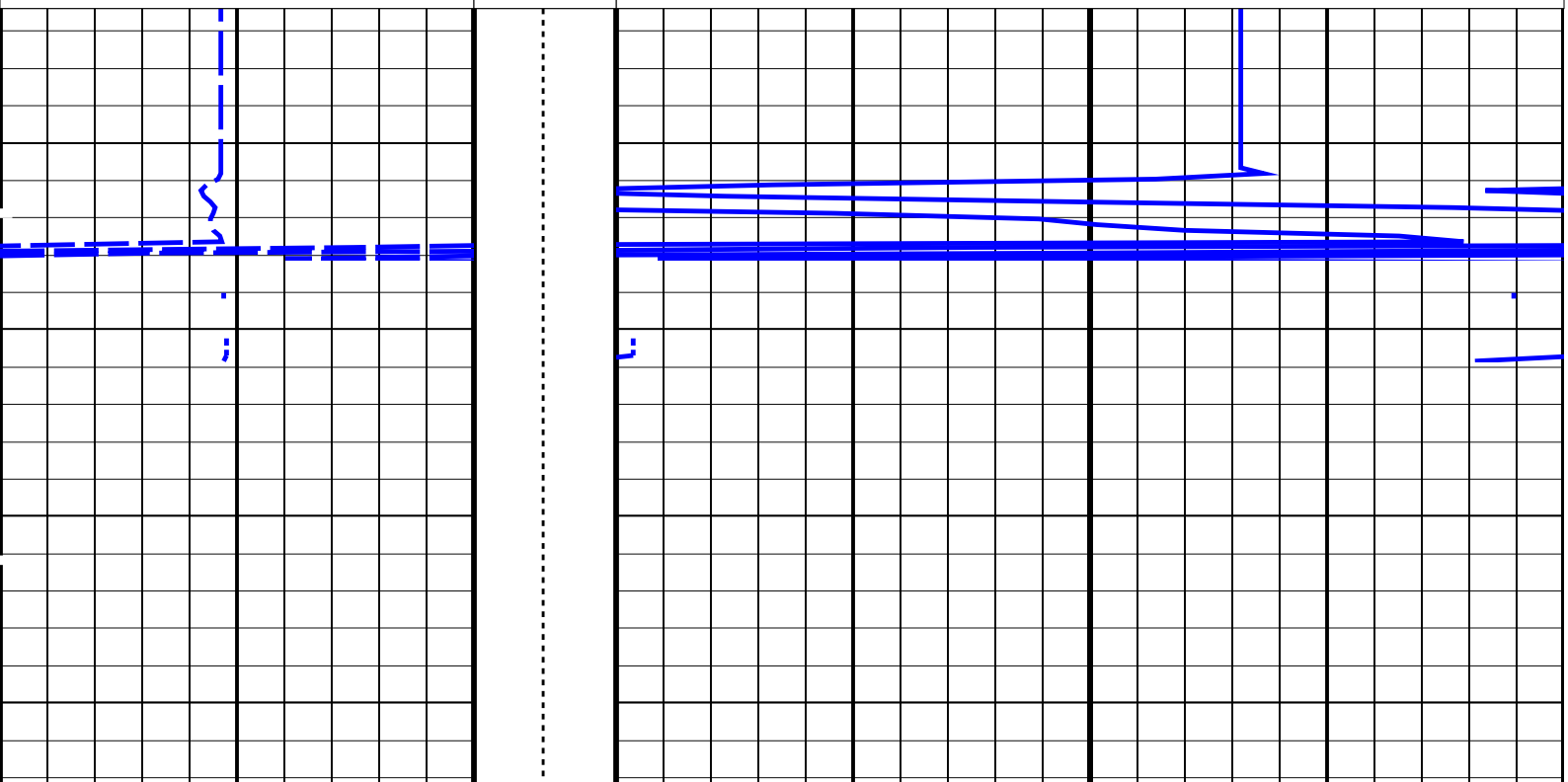
APS Total Correction in APLC (PHICOR_APLC)
−10 (PU) 10

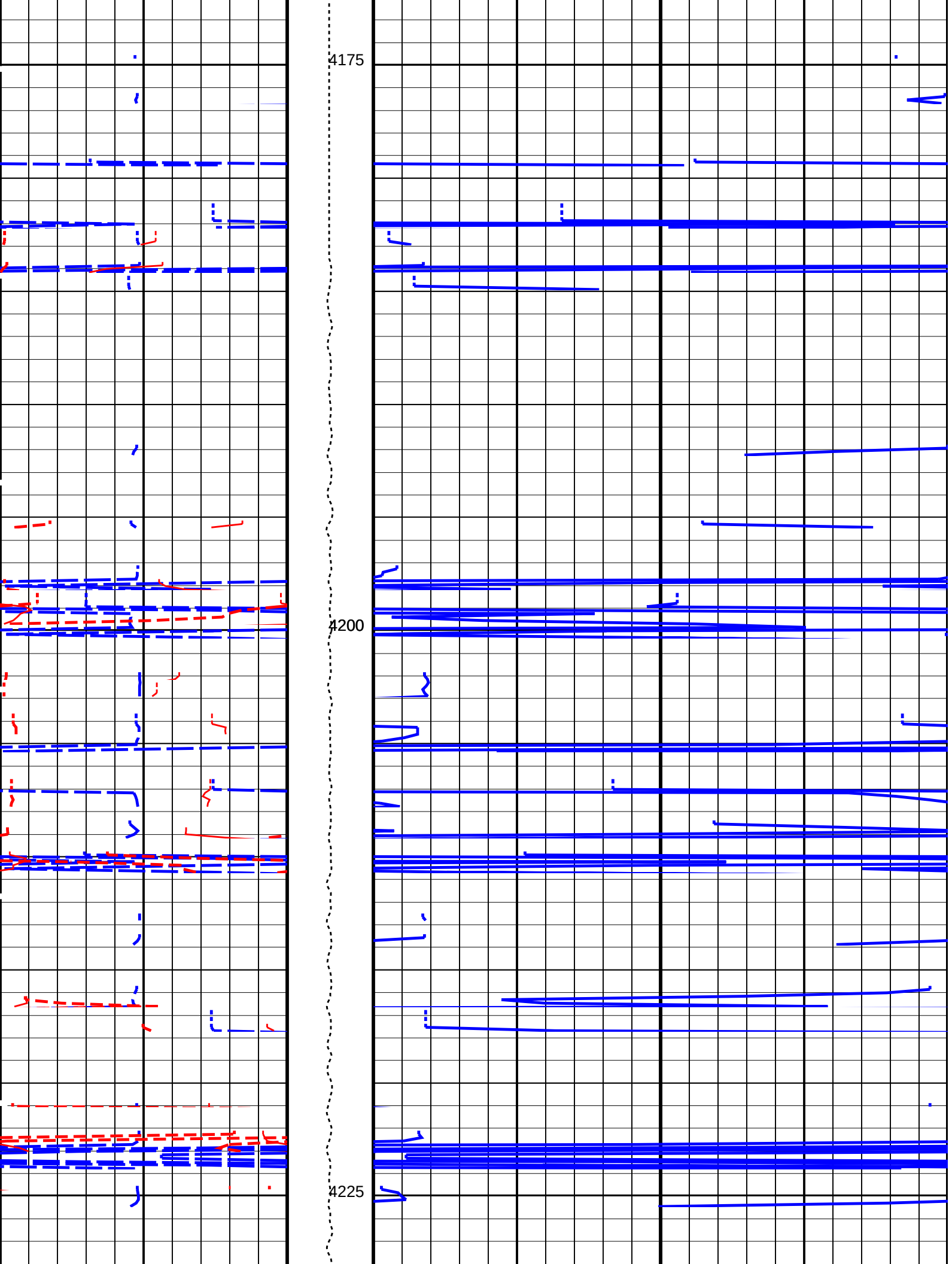
APS Formation Capture Cross−Section (SIGF)
0 (CU) 50

APS Porosity Quality (QSDP)
10 (−−−−) 0

Tension (TENS) (LBF)
10000 0

APS Near/Array Corrected Limestone Porosity (APLC)
60 (PU) 0

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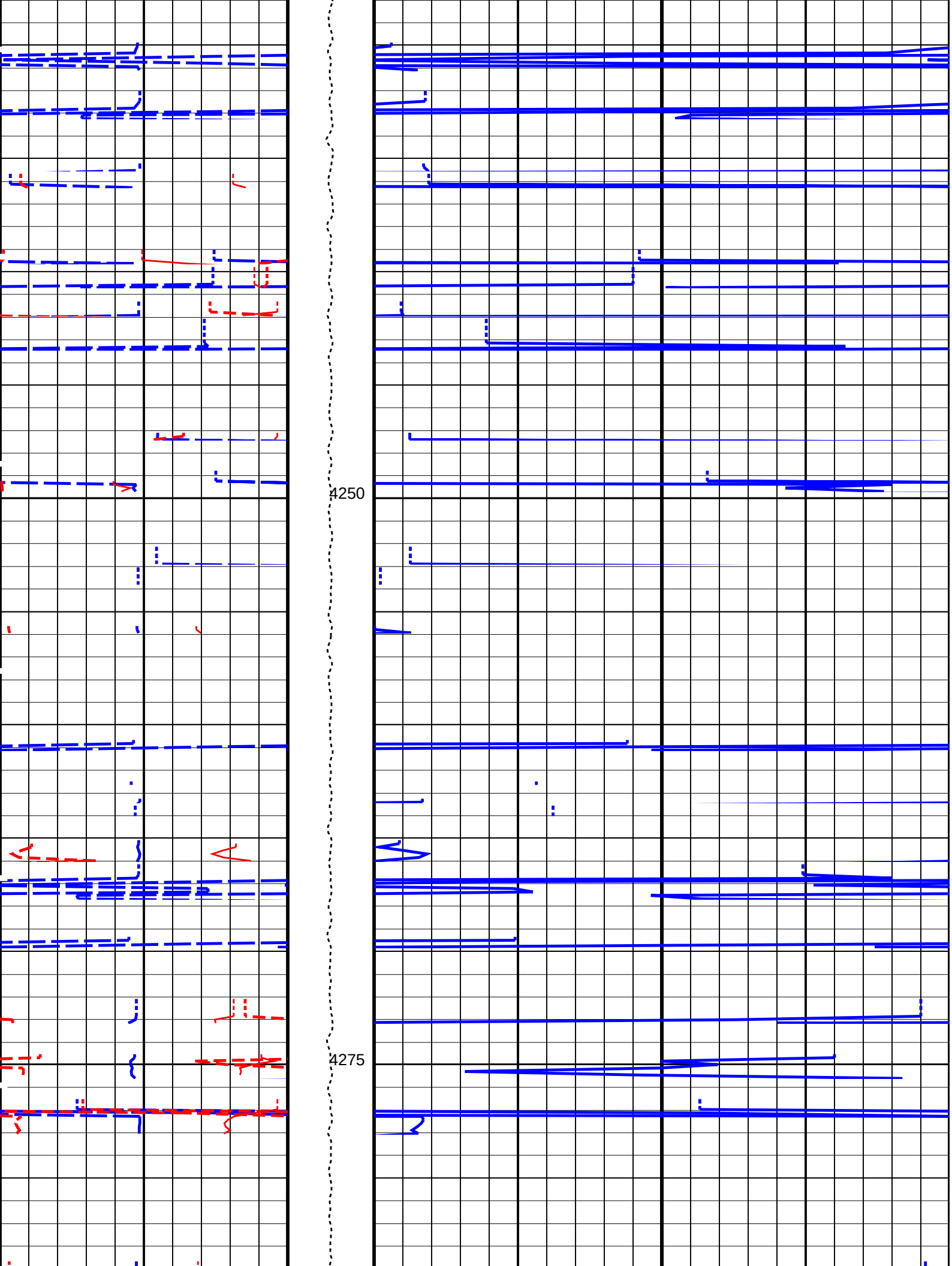
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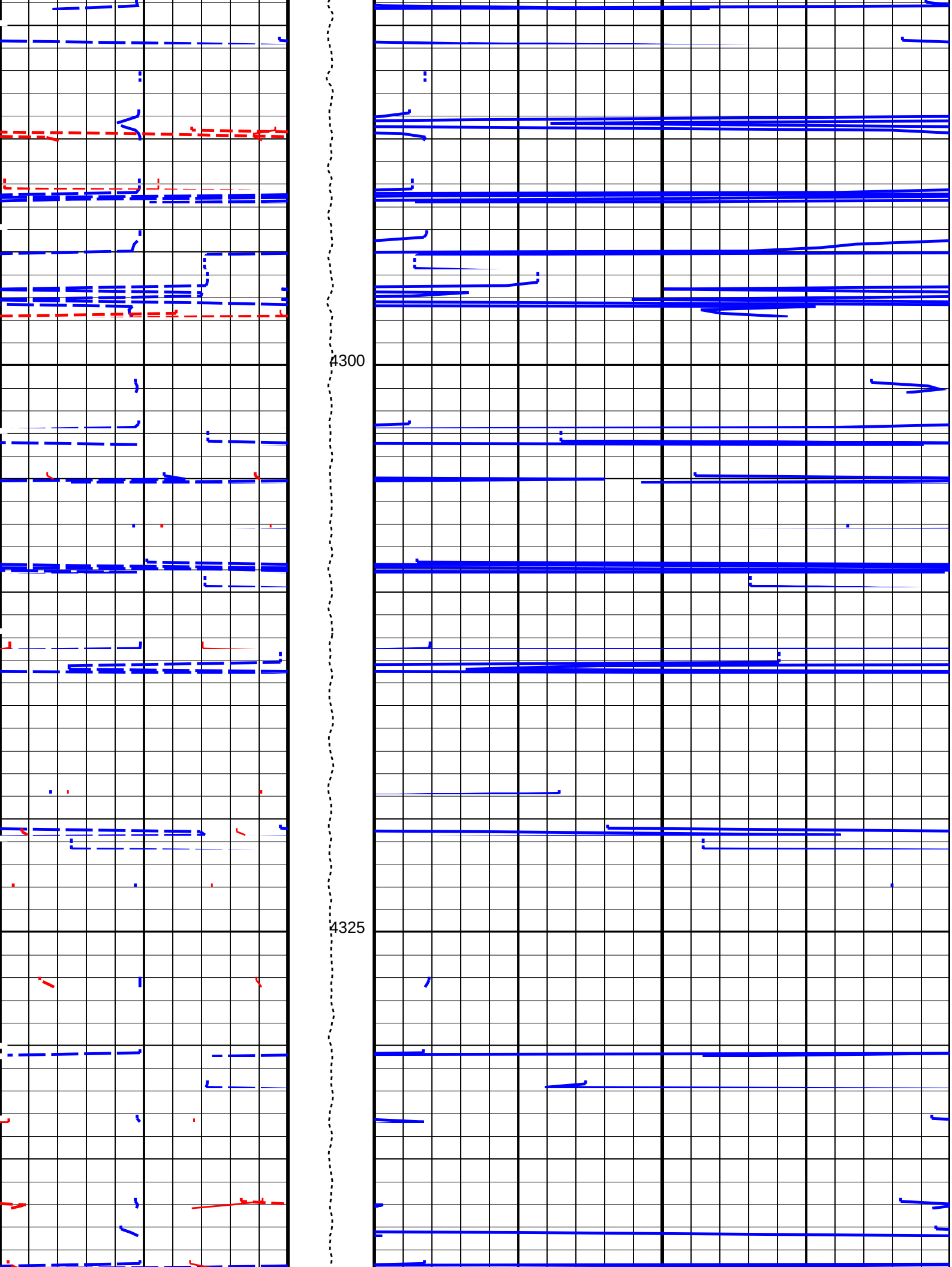
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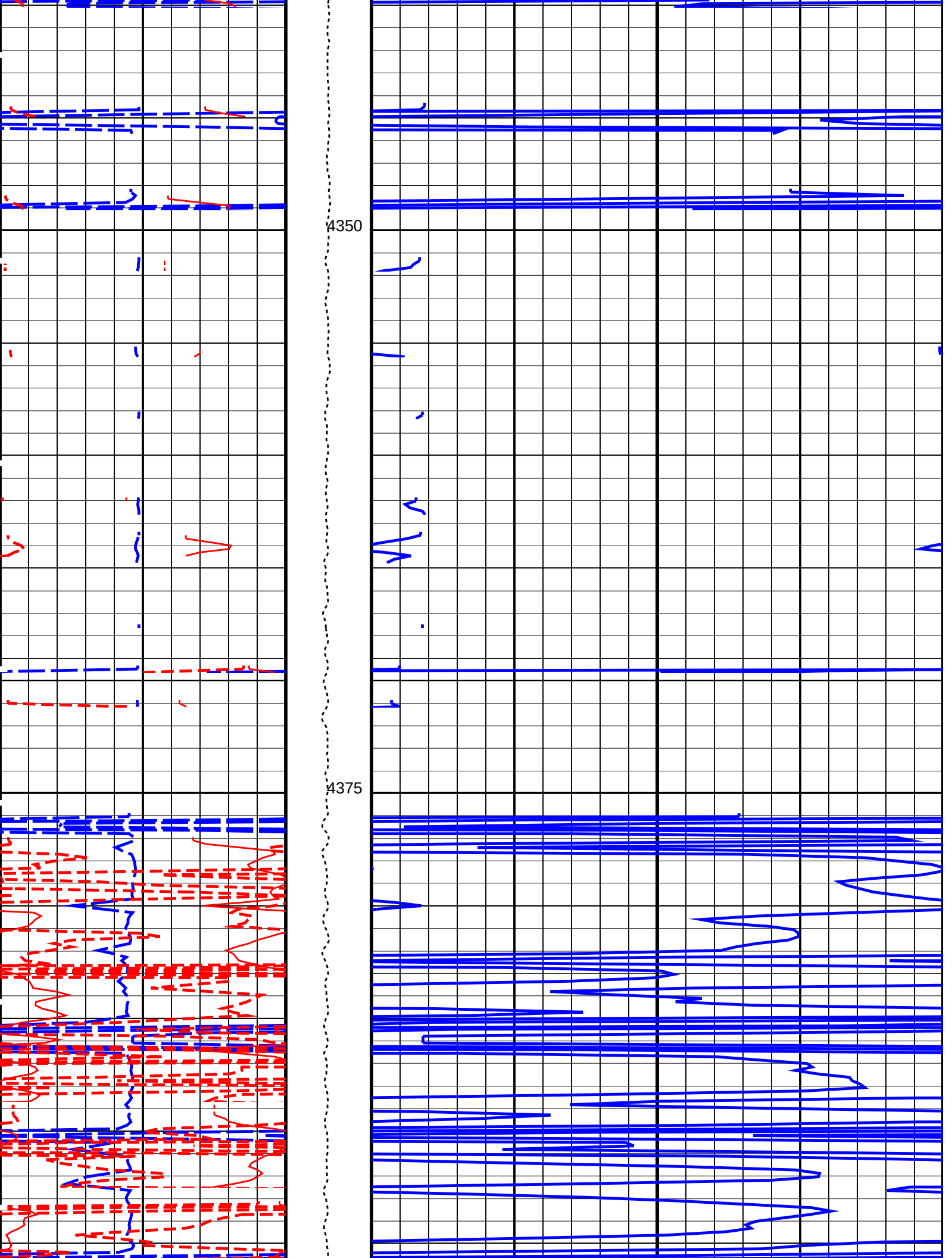
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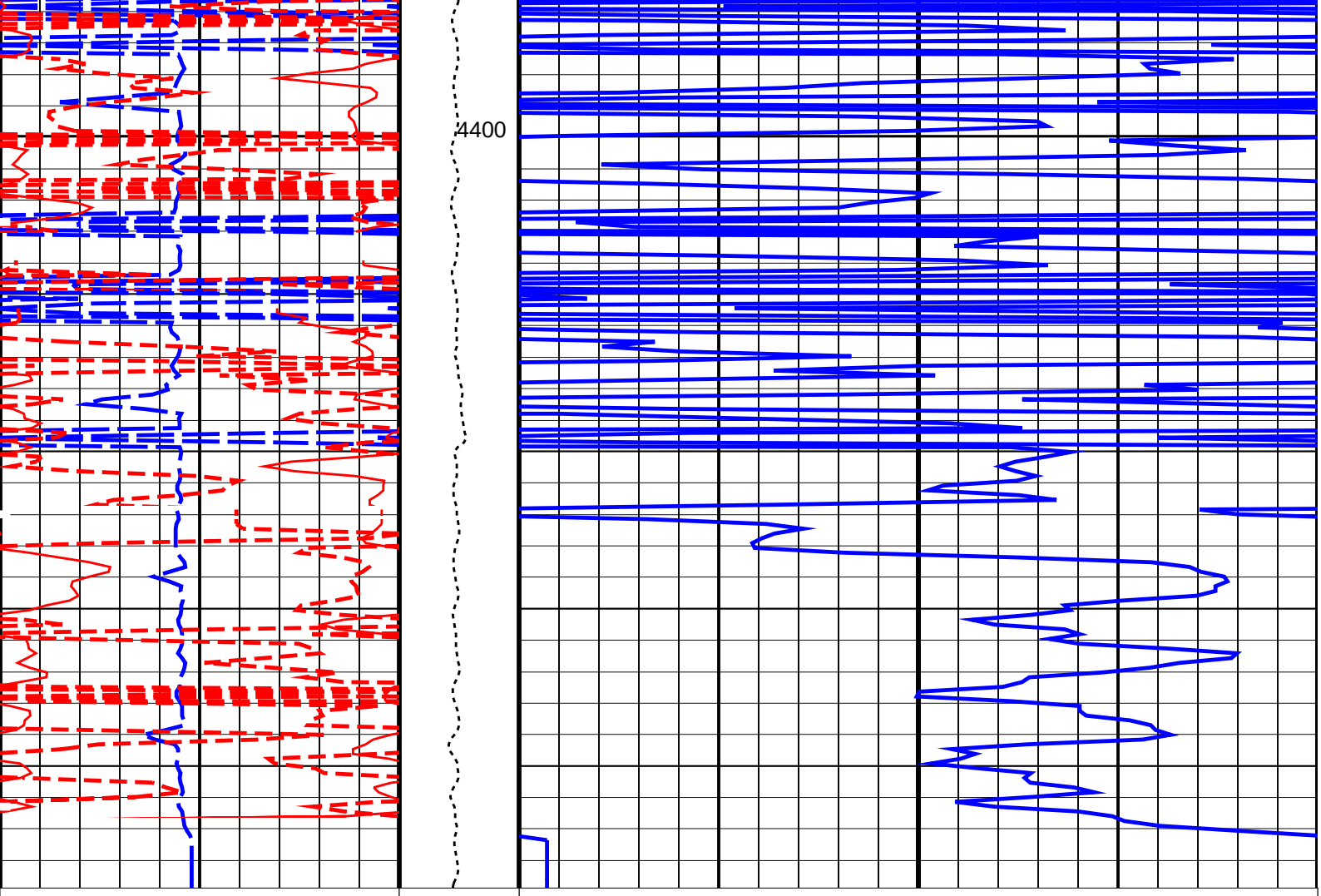


APS Porosity Quality (QSDP)
10 (----) 0

Tension (TENS) (LBF)
10000 0

APS Near/Array Corrected Limestone Porosity (APLC)
60 (PU) 0

APS Formation Capture Cross-Section (SIGF)
0 (CU) 50

APS Total Correction in APLC (PHICOR_APLC)
-10 (PU) 10

APS Quality of Formation Capture Cross-Section (QSGF)
10 (----) 0

PIP SUMMARY

Time Mark Every 60 S

Parameters

DLIS Name	Description	Value	
	HRLT-B: High Resolution Laterolog Array - B		
BHS	Borehole Status	OPEN	
BHT	Bottom Hole Temperature (used in calculations)	20	DEGC
GCSE	Generalized Caliper Selection	BS	
GDEV	Average Angular Deviation of Borehole from Normal	0	DEG
GGRD	Geothermal Gradient	0.018227	DC/M
GRSE	Generalized Mud Resistivity Selection	CHART_GEN_9	
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE	
MATR	Rock Matrix for Neutron Porosity Corrections	LIMESTONE	
SHT	Surface Hole Temperature	20	DEGC
	HLDS: Hostile Litho-Density Sonde		
DPPM	Density Porosity Processing Mode	HIRS	
	APS-C: Accelerator-Porosity Tool		

	APS Software Version	0	
AASD	APS Thermal and Array Detectors High Voltage Setting	1976.24	V
ADSO	APS Array Detectors Data Source Switch	Both	
AFSD	APS Far Detector High Voltage Setting	2067.55	V
AHCS	APS Holesize Correction Source	BS	
AHSS	APS Holesize Correction Switch	ON	
AMTY	APS Environmental Corrections Mud Type	WaterBaseBarite	
ANSD	APS Near Detector High Voltage Setting	1737.8	V
ASOS	APS Standoff Correction Switch	ON	
ATSS	APS Temperature−Pressure−Salinity Correction Switch	ON	
BHFL_APS	APS TNPH Borehole Fluid Type	WATER	
BHS	Borehole Status	OPEN	
BHT	Bottom Hole Temperature (used in calculations)	20	DEGC
BSCO_APS	APS TNPH Borehole Salinity Correction Option	YES	
DPPM	Density Porosity Processing Mode	HIRS	
DSCO_APS	APS TNPH Density Source Correction Option	COMPUTED	
FSAL	Formation Salinity	−50000	PPM
FSCO_APS	APS TNPH Formation Salinity Correction Option	NO	
GCSE	Generalized Caliper Selection	BS	
GDEV	Average Angular Deviation of Borehole from Normal	0	DEG
GGRD	Geothermal Gradient	0.018227	DC/M
GRSE	Generalized Mud Resistivity Selection	CHART_GEN_9	
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE	
HSCO_APS	APS TNPH Hole Size Correction Option	YES	
MATR	Rock Matrix for Neutron Porosity Corrections	LIMESTONE	
MCCO_APS	APS TNPH Mud Cake Correction Option	YES	
MCOR_APS	APS TNPH Mud Correction	NATU	
MWCO_APS	APS TNPH Mud Weight Correction Option	YES	
NARC	APS Near/Array Calibration Ratio	1.08341	
NFRC	APS Near/Far Calibration Ratio	0.942369	
PTCO_APS	APS TNPH Pressure/Temperature Correction Option	YES	
SHT	Surface Hole Temperature	20	DEGC
TNCO_APS	APS TNPH Computation Option	NO	
	HNGS−BA: Hostile Natural Gamma Ray Sonde		
BHS	Borehole Status	OPEN	
BHT	Bottom Hole Temperature (used in calculations)	20	DEGC
GCSE	Generalized Caliper Selection	BS	
GDEV	Average Angular Deviation of Borehole from Normal	0	DEG
GGRD	Geothermal Gradient	0.018227	DC/M
GRSE	Generalized Mud Resistivity Selection	CHART_GEN_9	
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE	
MATR	Rock Matrix for Neutron Porosity Corrections	LIMESTONE	
SHT	Surface Hole Temperature	20	DEGC
	EDTC−B: Enhanced DTS Cartridge		
BHS	Borehole Status	OPEN	
BHT	Bottom Hole Temperature (used in calculations)	20	DEGC
DPPM	Density Porosity Processing Mode	HIRS	
FSAL	Formation Salinity	−50000	PPM
GCSE	Generalized Caliper Selection	BS	
GDEV	Average Angular Deviation of Borehole from Normal	0	DEG
GGRD	Geothermal Gradient	0.018227	DC/M
GRSE	Generalized Mud Resistivity Selection	CHART_GEN_9	
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE	
MATR	Rock Matrix for Neutron Porosity Corrections	LIMESTONE	
SHT	Surface Hole Temperature	20	DEGC
	System and Miscellaneous		
BS	Bit Size	9.875	IN
BSAL	Borehole Salinity	38000.00	PPM
CSIZ	Current Casing Size	0.000	IN
CWEI	Casing Weight	0.00	LB/F
DO	Depth Offset for Playback	0.0	M
FLEV	Fluid Level	−50000.00	M
MST	Mud Sample Temperature	23.00	DEGC
PP	Playback Processing	NORMAL	
RMFS	Resistivity of Mud Filtrate Sample	−50000.0000	OHMM
TD	Total Depth	10190.3	FT

Format: APSLiquidPorosity **Vertical Scale: 1:200** **Graphics File Created: 25−Jul−2022 01:25**

OP System Version: 19C0−187

HRLT−B	19C0−187	HLDS	19C0−187
LDSC−B	19C0−187	APS−C	19C0−187
HNGC−B	19C0−187	HNGS−BA	19C0−187
EDTC−B	SKK−5169−EDTCB		

Input DLIS Files

DEFAULT	Flip_HRLA_LDL_APS_038LUP	PRODUCER	25−Jul−2022 01:23	4423.9 M	4151.4 M

Output DLIS Files

DEFAULT	HRLA_LDL_APS_NGS_039PUP	FN:33	PRODUCER	25−Jul−2022 01:25	

Company: International Ocean Discovery Program — Well: Expedition 393, Site U1583F

Input DLIS Files

DEFAULT	Flip_HRLA_LDL_APS_038LUP	PRODUCER	25−Jul−2022 01:23	4423.9 M	4151.4 M

Output DLIS Files

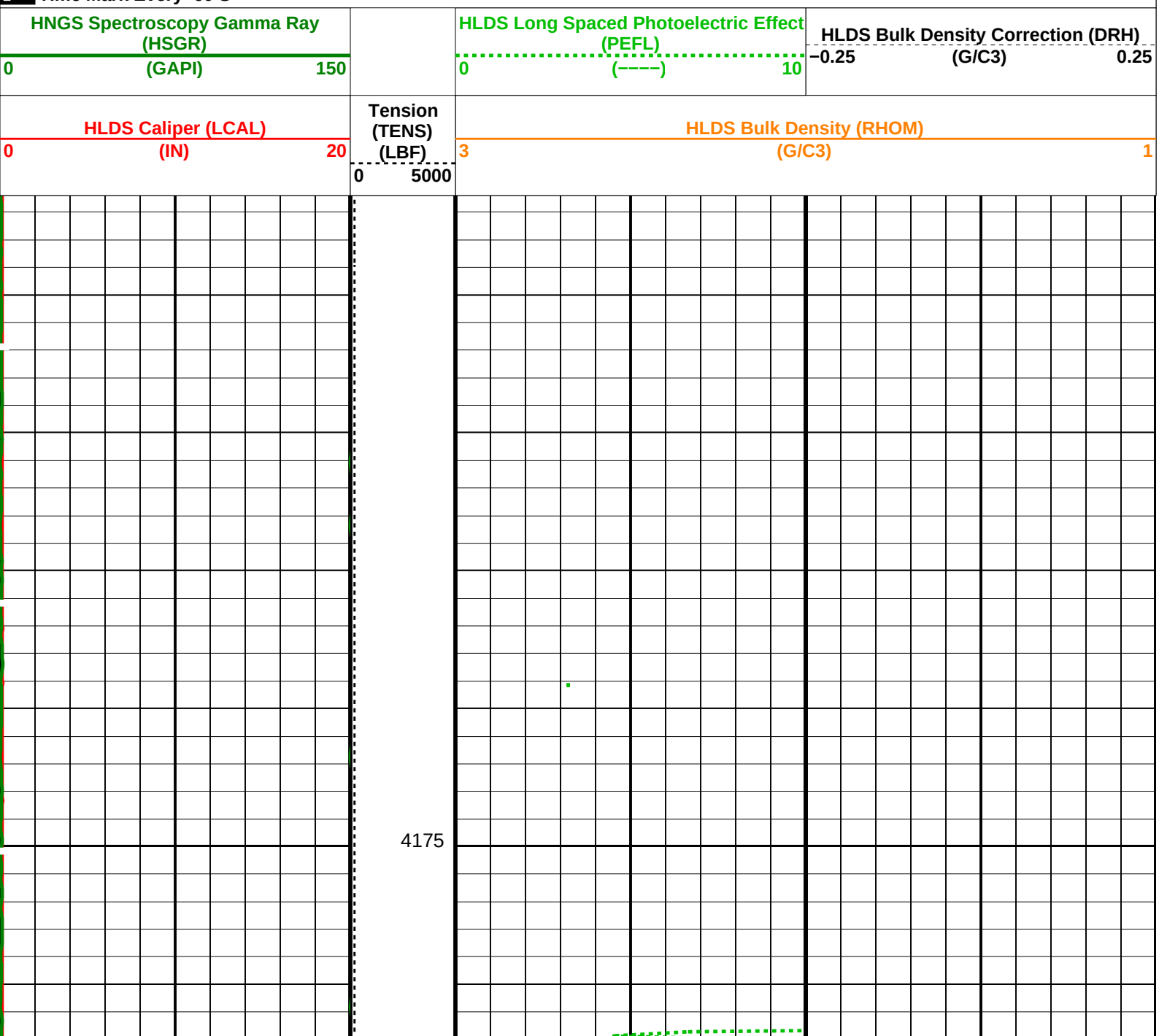
DEFAULT	HRLA_LDL_APS_NGS_039PUP	FN:33	PRODUCER	25−Jul−2022 01:25	4423.9 M	4151.4 M

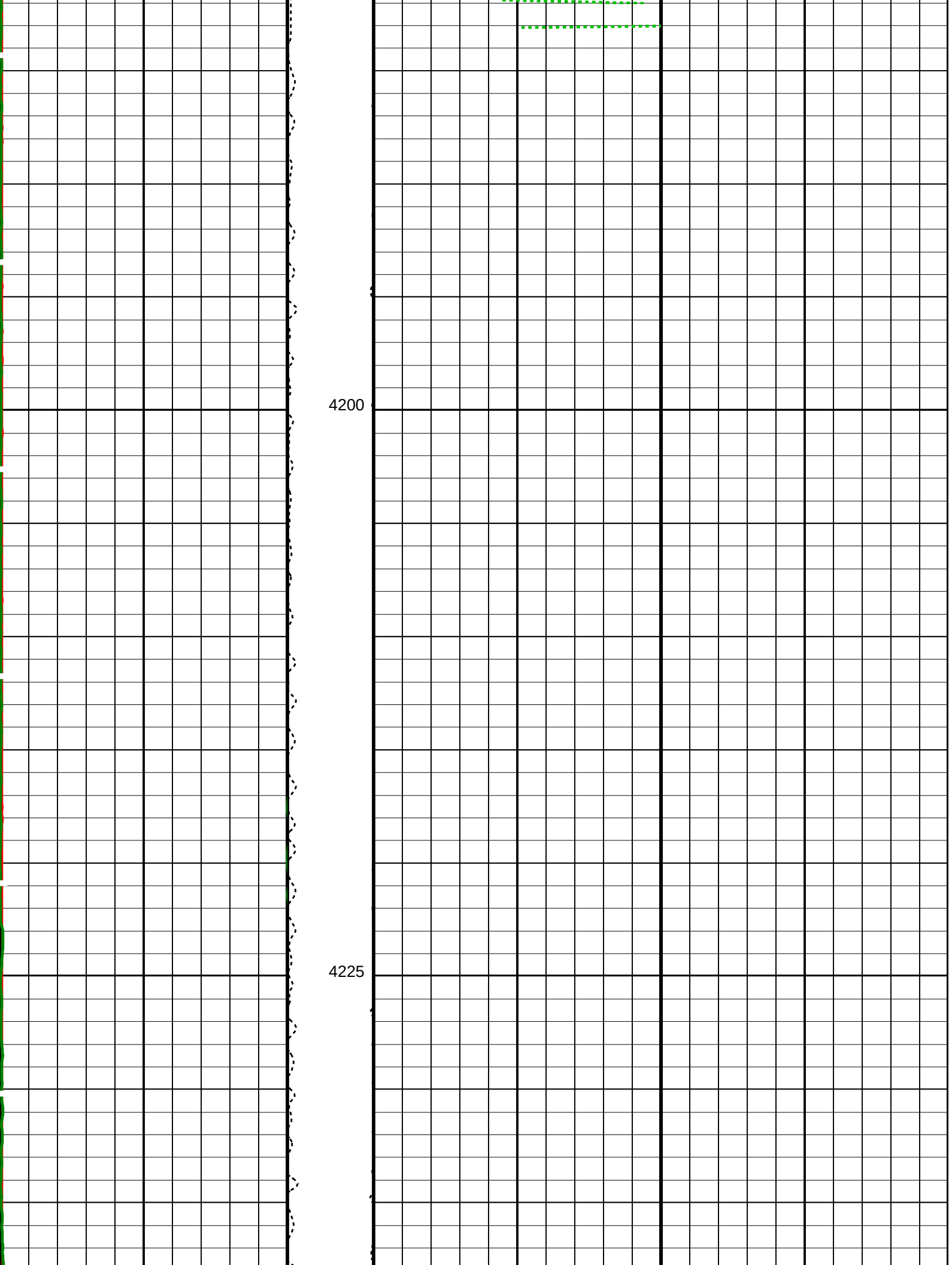
OP System Version: 19C0−187

HRLT−B	19C0−187	HLDS	19C0−187
LDSC−B	19C0−187	APS−C	19C0−187
HNGC−B	19C0−187	HNGS−BA	19C0−187
EDTC−B	SKK−5169−EDTCB		

PIP SUMMARY

Time Mark Every 60 S

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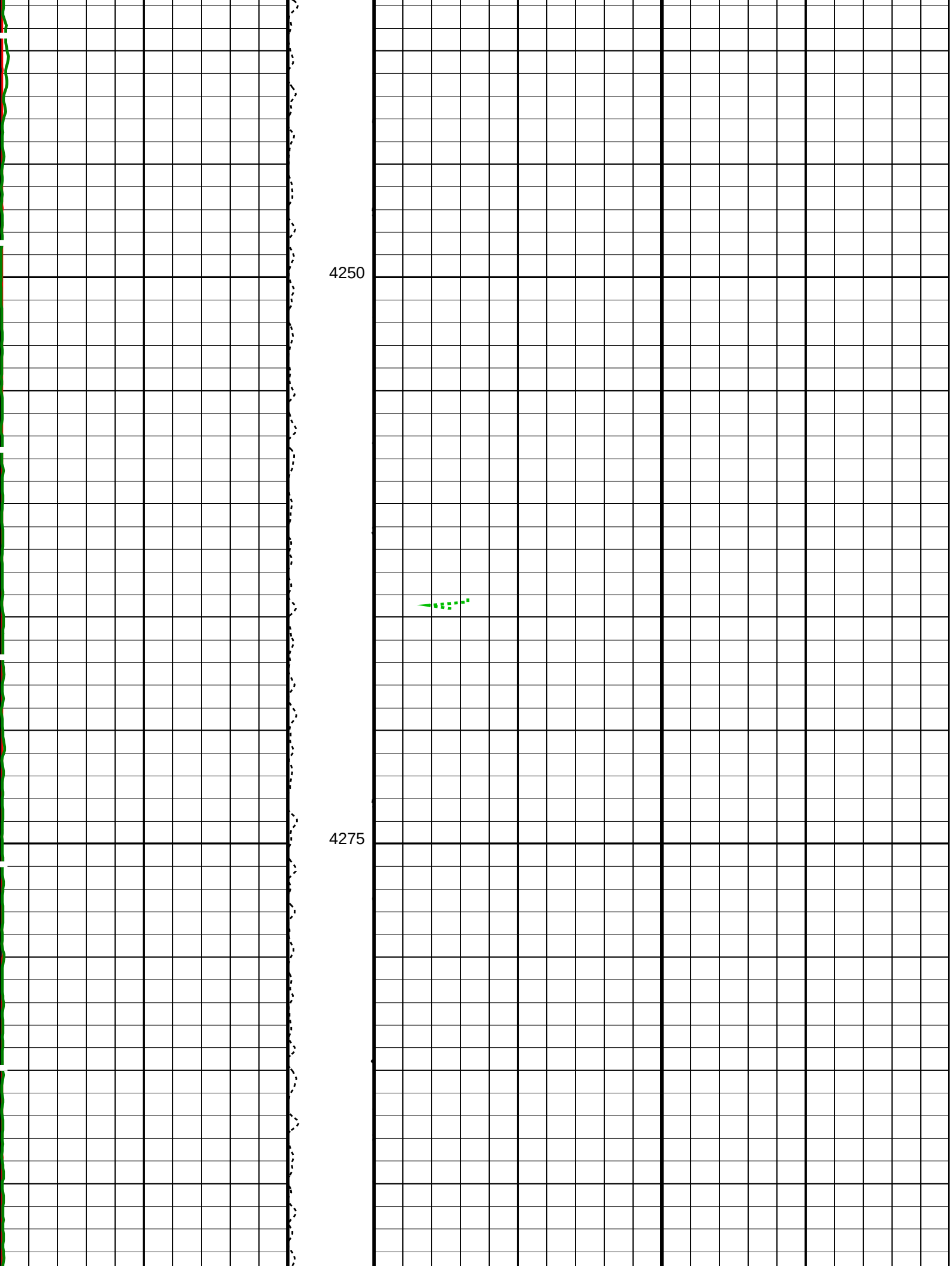
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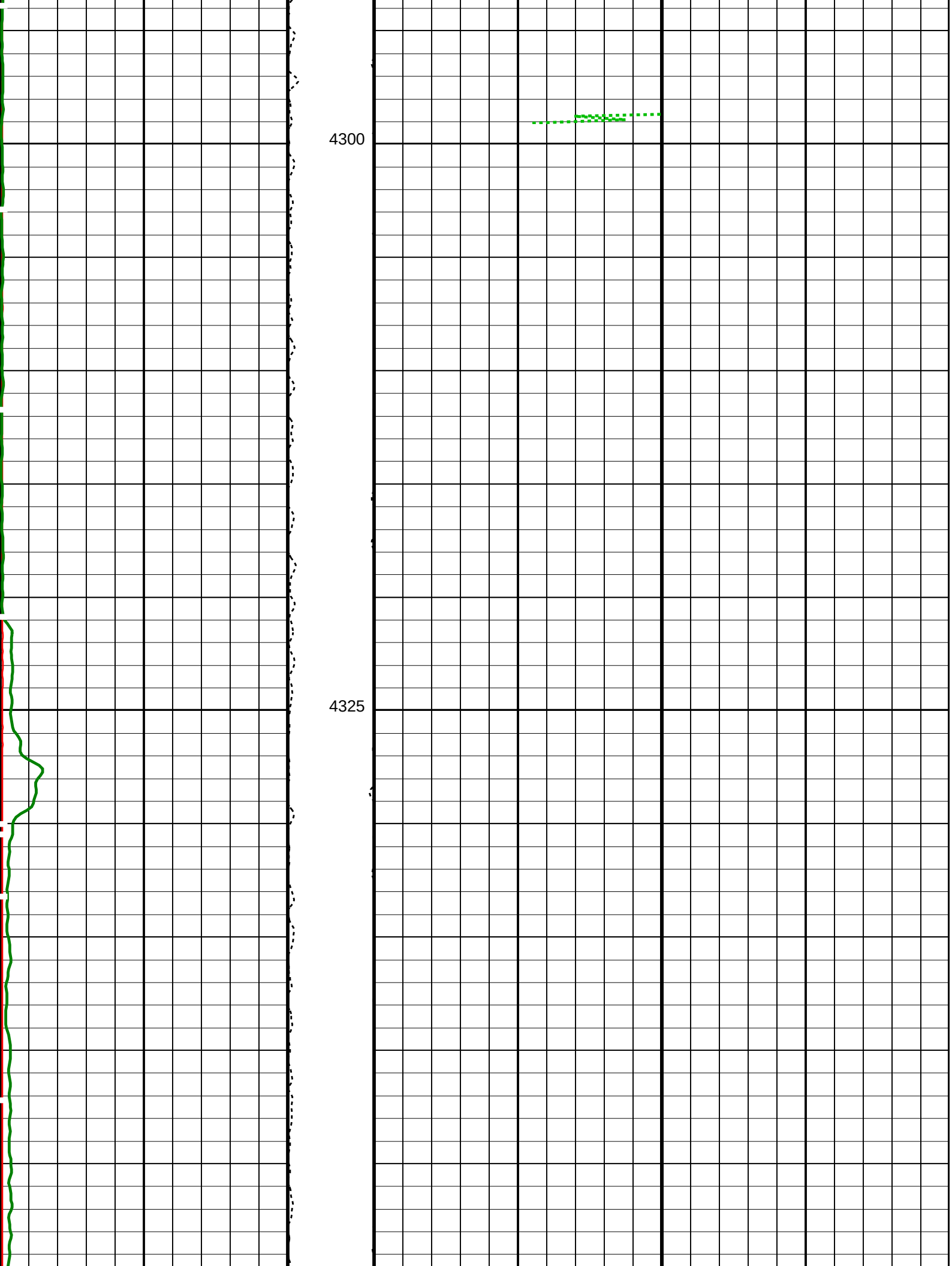
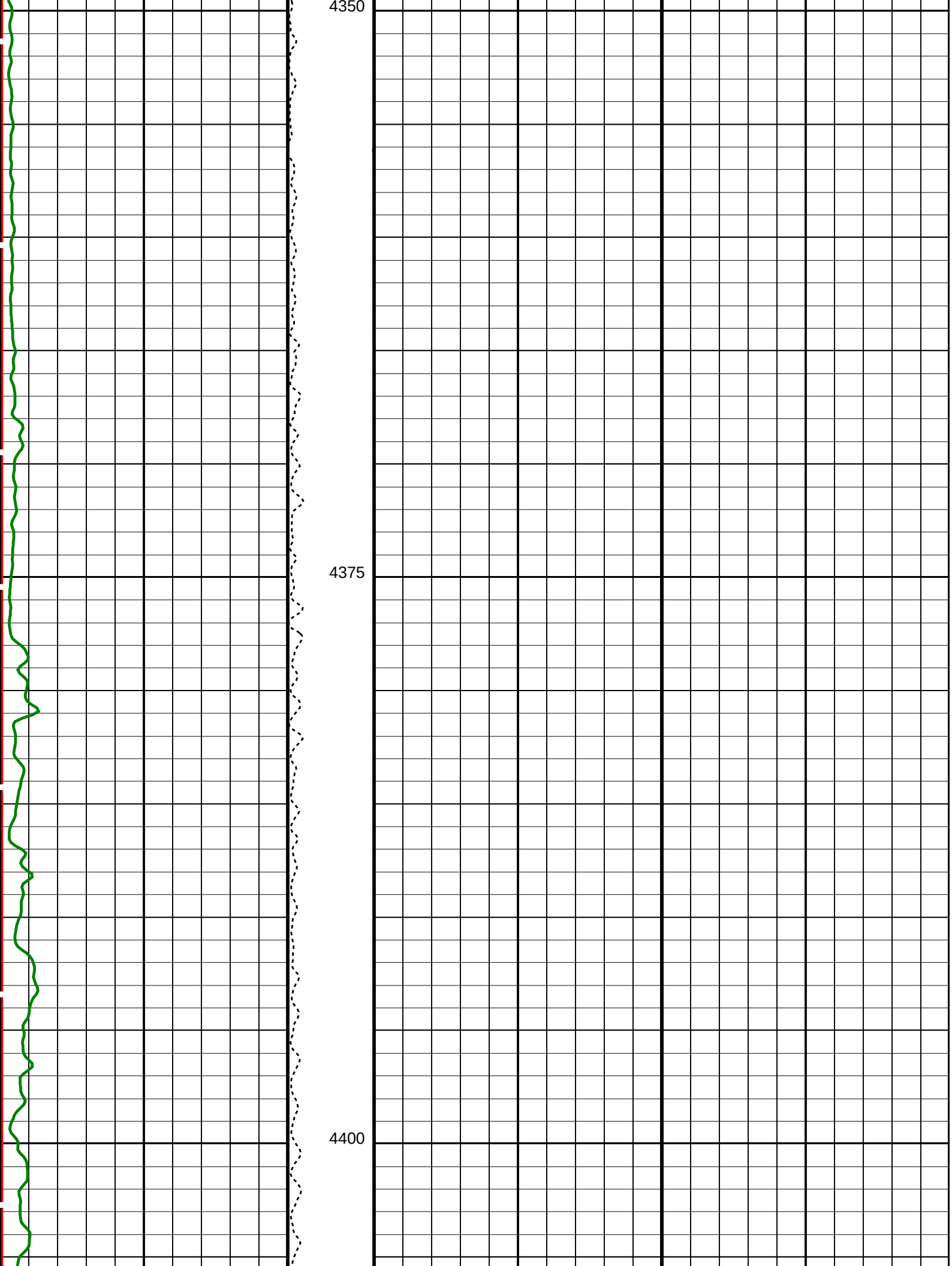

4300
4325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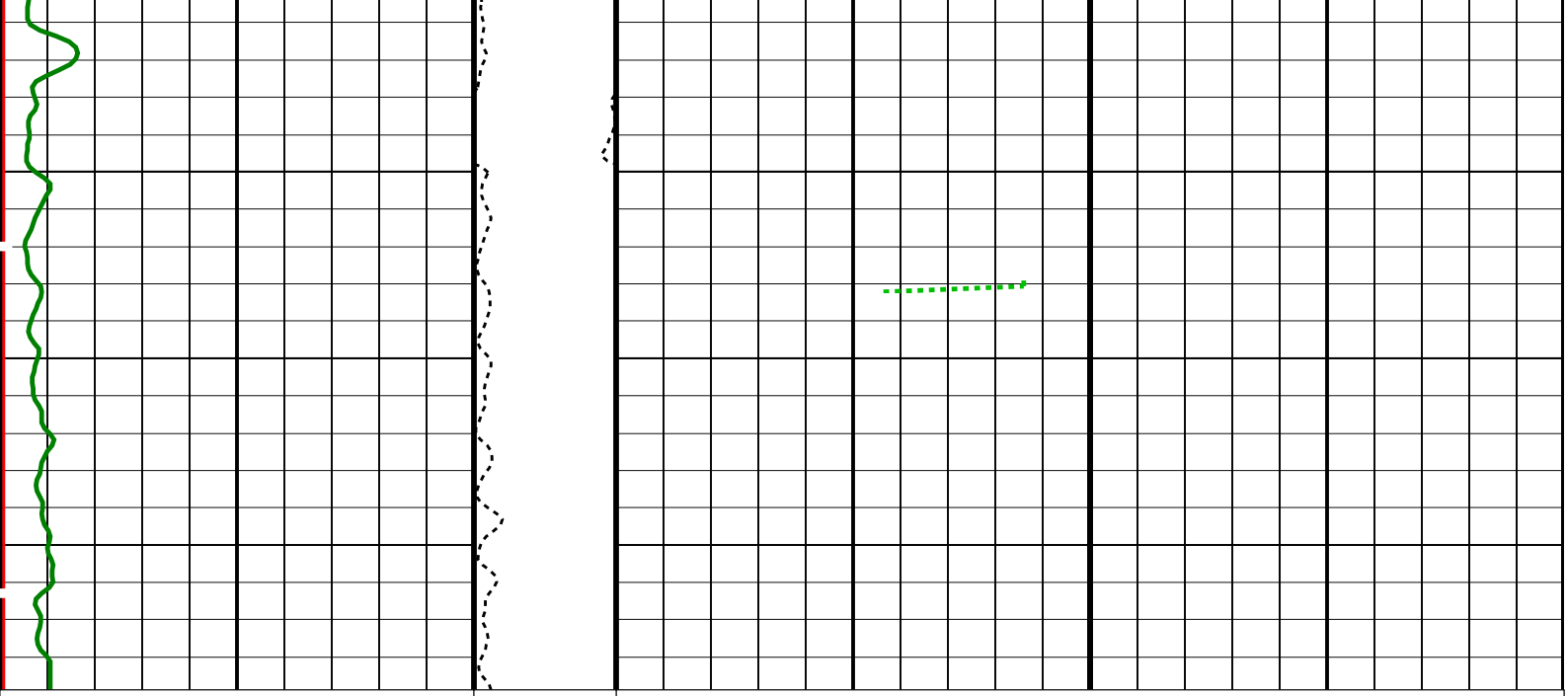


HLDS Caliper (LCAL)	Tension (TENS)	HLDS Bulk Density (RHOM)
0 (IN) 20	(LBF) 0 5000	3 (G/C3) 1

HNGS Spectroscopy Gamma Ray (HSGR)	HLDS Long Spaced Photoelectric Effect (PEFL)	HLDS Bulk Density Correction (DRH)
0 (GAPI) 150	0 (−−−−) 10	−0.25 (G/C3) 0.25

PIP SUMMARY

Time Mark Every 60 S

Parameters

DLIS Name	Description	Value	
	HRLT−B: High Resolution Laterolog Array − B		
BHS	Borehole Status	OPEN	
GCSE	Generalized Caliper Selection	BS	
	HLDS: Hostile Litho−Density Sonde		
DHC	Density Hole Correction	BS	
DPPM	Density Porosity Processing Mode	HIRS	
FD	Fluid Density	1	G/C3
LATC	HLDS Activation Correction	ON	
MDEN	Matrix Density	2.71	G/C3
	APS−C: Accelerator−Porosity Tool		
	APS Software Version	0	
BHS	Borehole Status	OPEN	
DPPM	Density Porosity Processing Mode	HIRS	
GCSE	Generalized Caliper Selection	BS	
	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	−0.00124408	
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	20.2456	
VBA2	HNGS Detector 2 Variable Barite Factor Running Average	19.4799	

VBA2	HNGS Detector 2 Variable Barite Factor Running Average	19.4799	
	EDTC−B: Enhanced DTS Cartridge		
BHS	Borehole Status	OPEN	
DPPM	Density Porosity Processing Mode	HIRS	
GCSE	Generalized Caliper Selection	BS	
	System and Miscellaneous		
BS	Bit Size	9.875	IN
DO	Depth Offset for Playback	0.0	M
PP	Playback Processing	NORMAL	

Format: HLDSDensityPE **Vertical Scale: 1:200** **Graphics File Created: 25−Jul−2022 01:25**

OP System Version: 19C0−187

HRLT−B	19C0−187	HLDS	19C0−187
LDSC−B	19C0−187	APS−C	19C0−187
HNGC−B	19C0−187	HNGS−BA	19C0−187
EDTC−B	SKK−5169−EDTCB		

Input DLIS Files

DEFAULT	Flip_HRLA_LDL_APS_038LUP	PRODUCER	25−Jul−2022 01:23	4423.9 M	4151.4 M

Output DLIS Files

DEFAULT	HRLA_LDL_APS_NGS_039PUP	FN:33	PRODUCER	25−Jul−2022 01:25	

Company: International Ocean Discovery Program **Well: Expedition 393, Site U1583F**

Input DLIS Files

DEFAULT	Flip_HRLA_LDL_APS_038LUP	PRODUCER	25−Jul−2022 01:23	4423.9 M	4151.4 M

Output DLIS Files

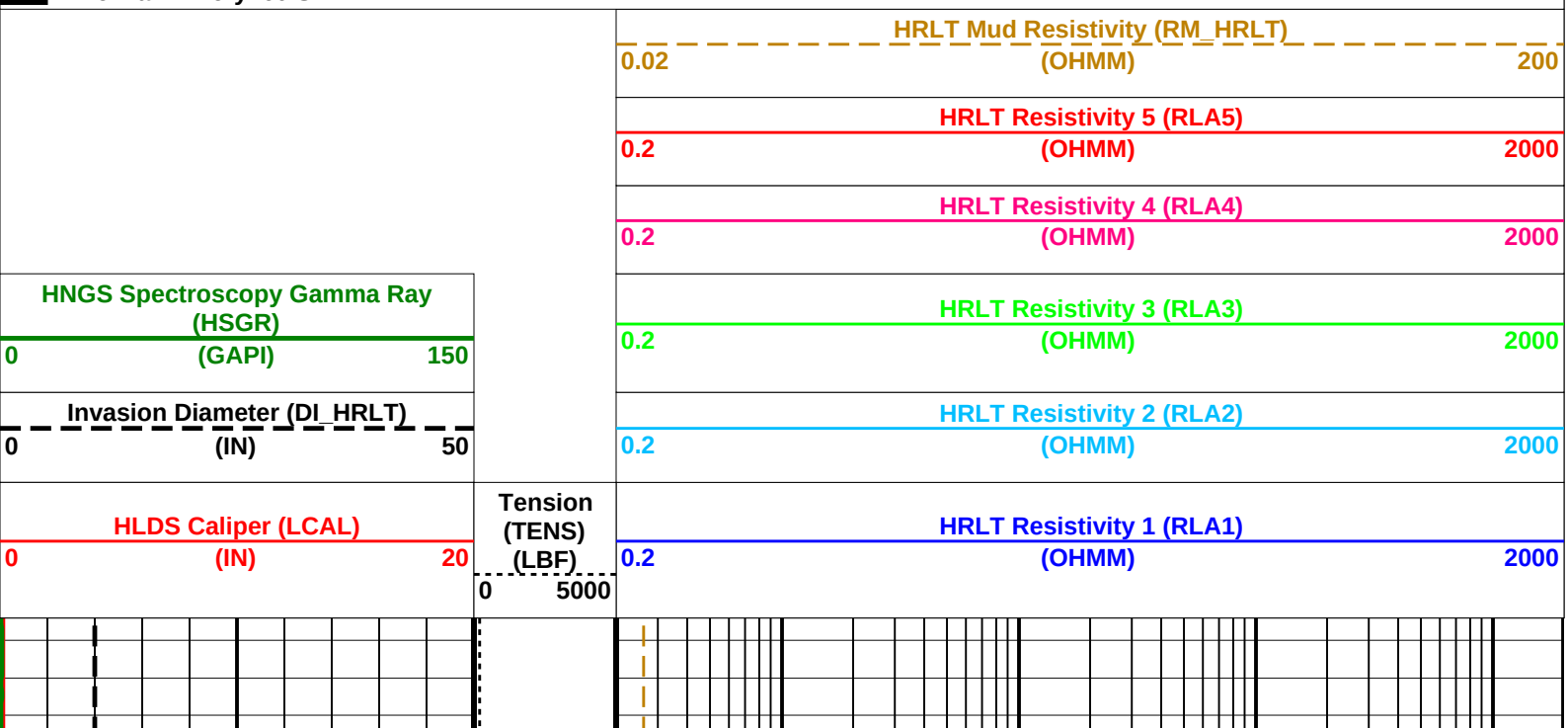
DEFAULT	HRLA_LDL_APS_NGS_039PUP	FN:33	PRODUCER	25−Jul−2022 01:25	4423.9 M	4151.4 M

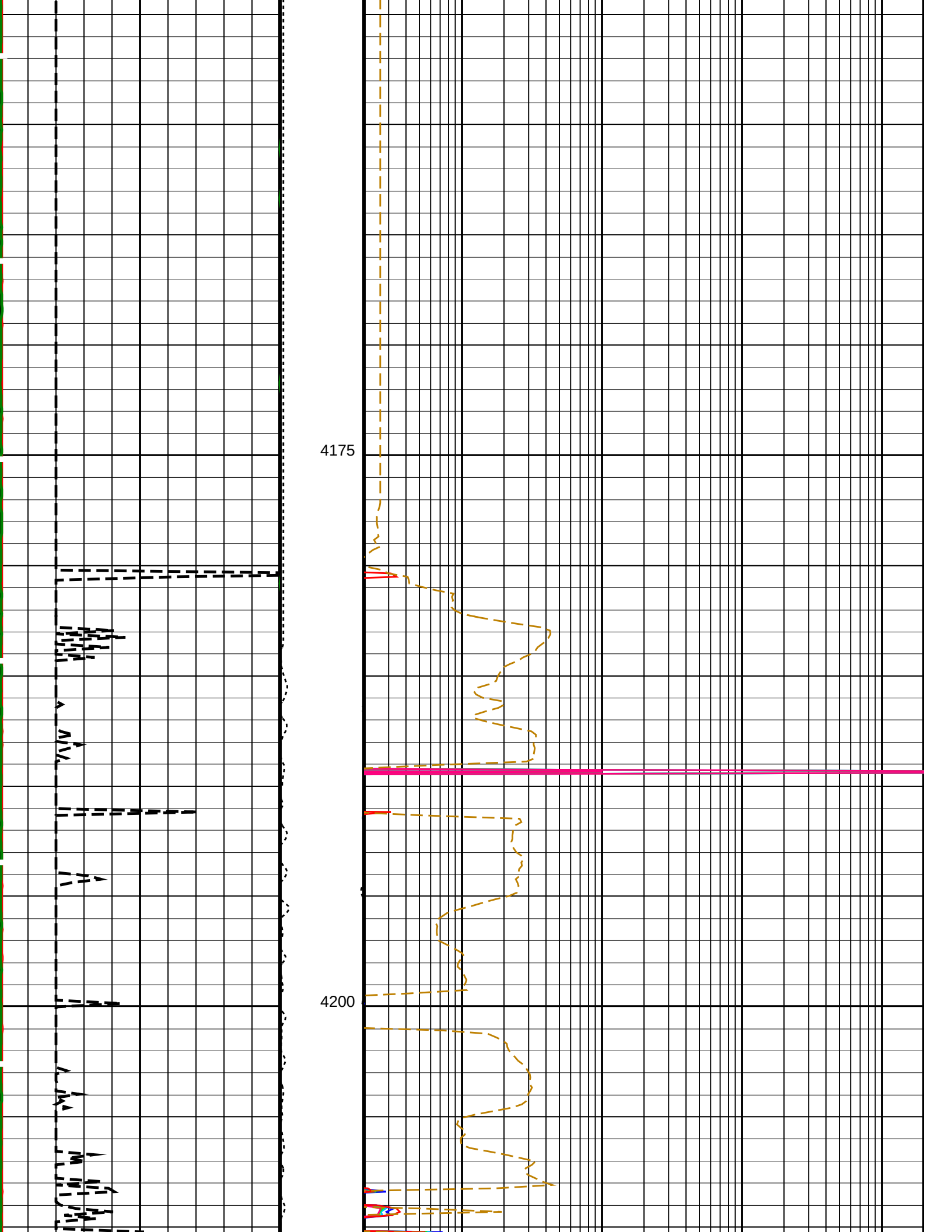
OP System Version: 19C0−187

HRLT−B	19C0−187	HLDS	19C0−187
LDSC−B	19C0−187	APS−C	19C0−187
HNGC−B	19C0−187	HNGS−BA	19C0−187
EDTC−B	SKK−5169−EDTCB		

PIP SUMMARY

Time Mark Every 60 S

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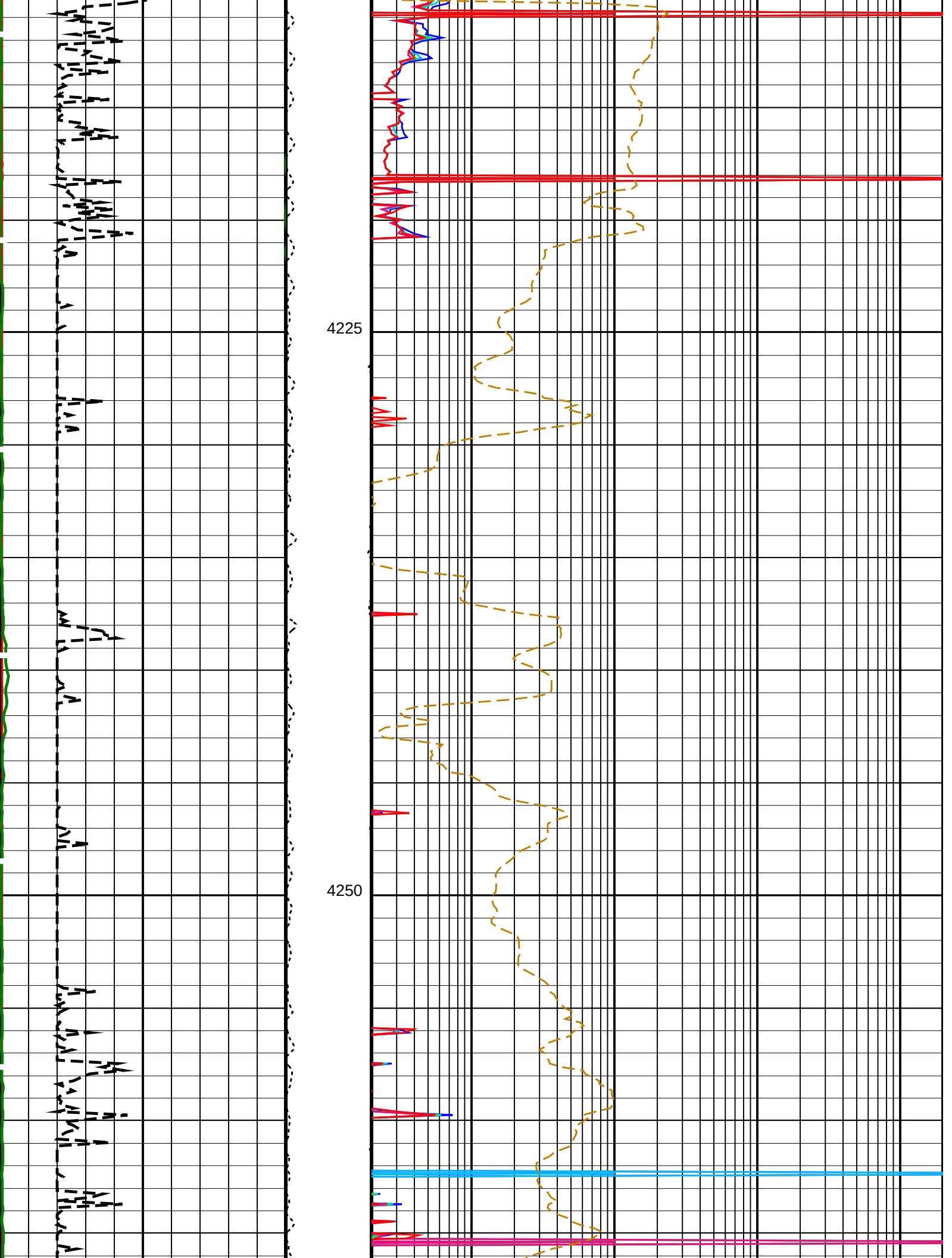
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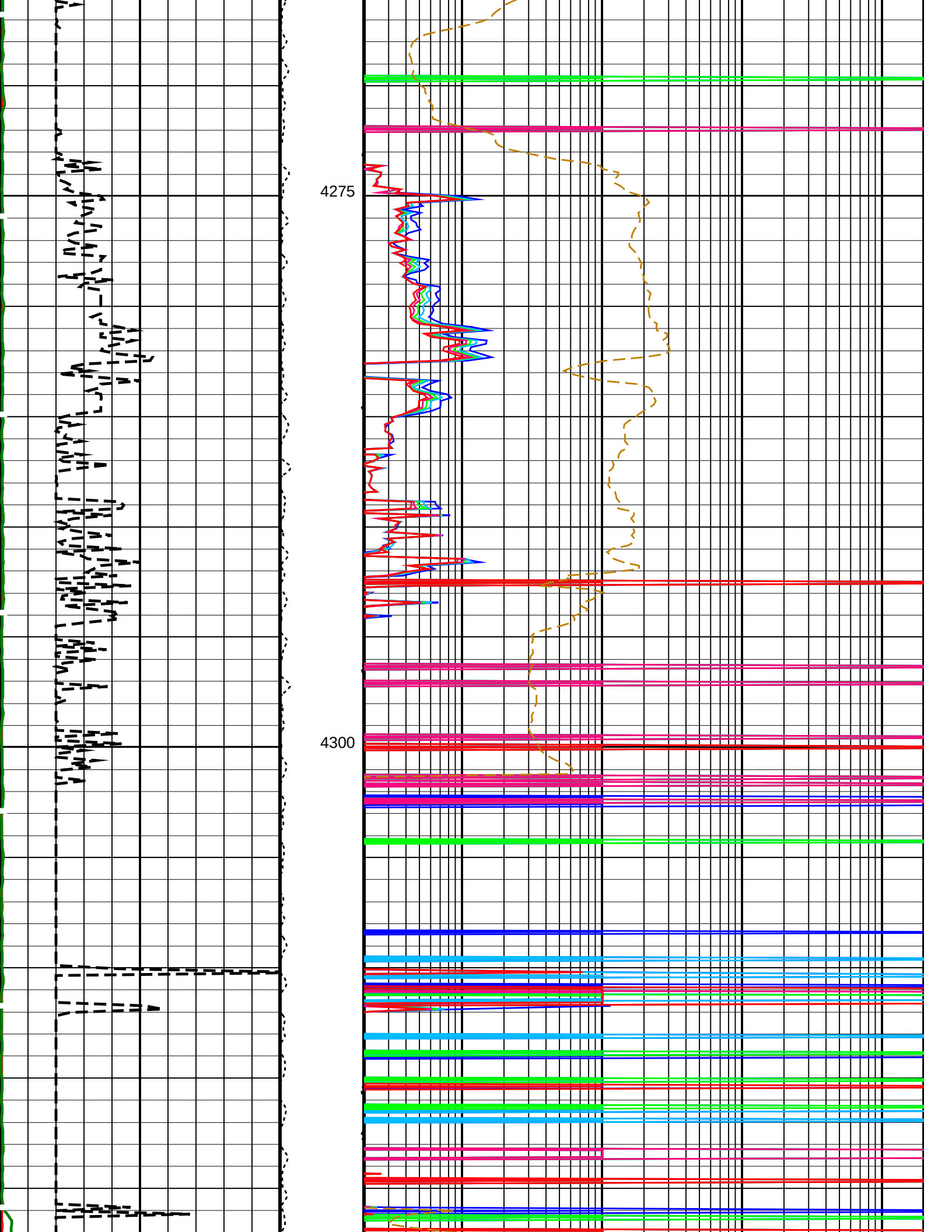
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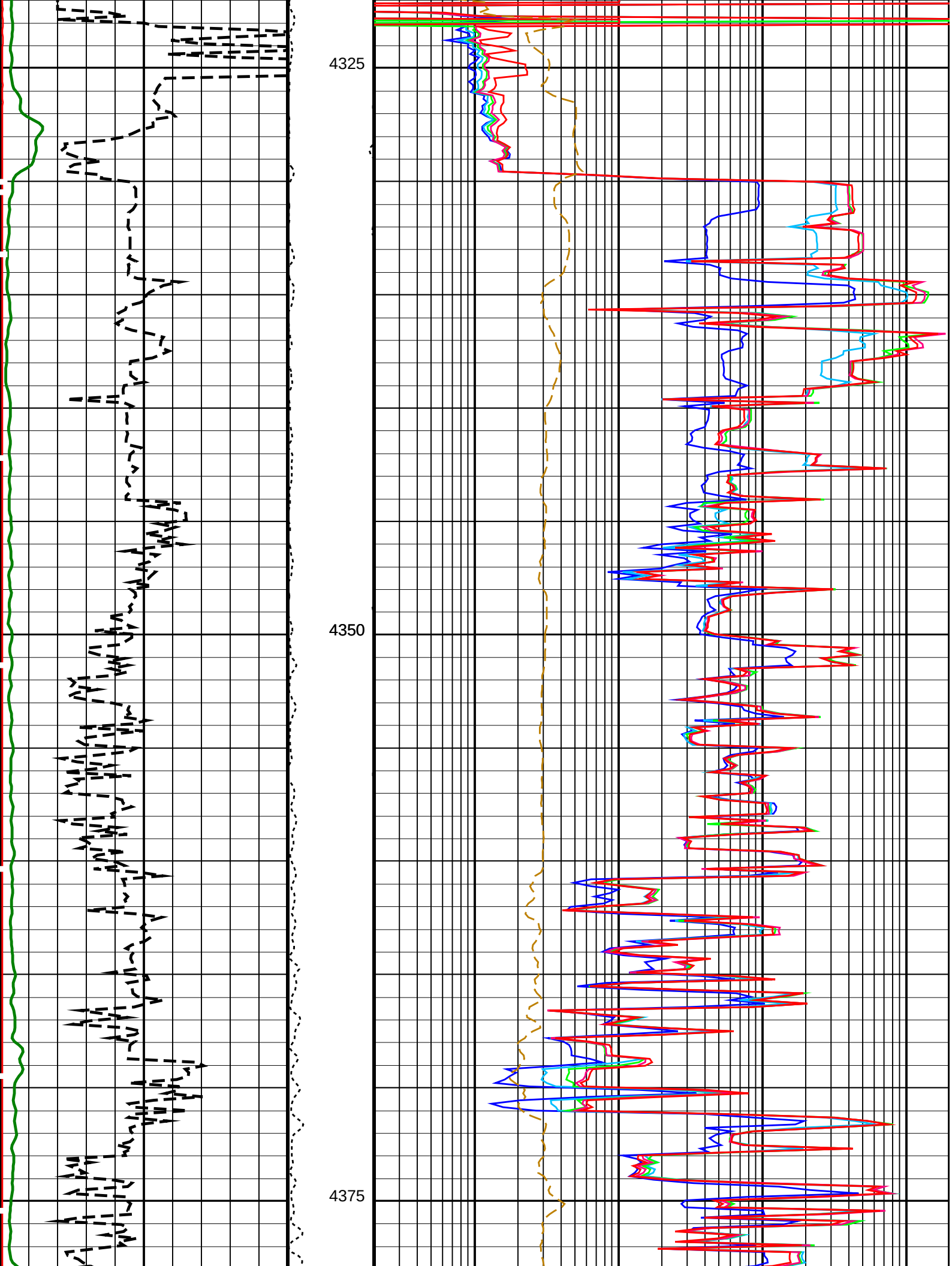
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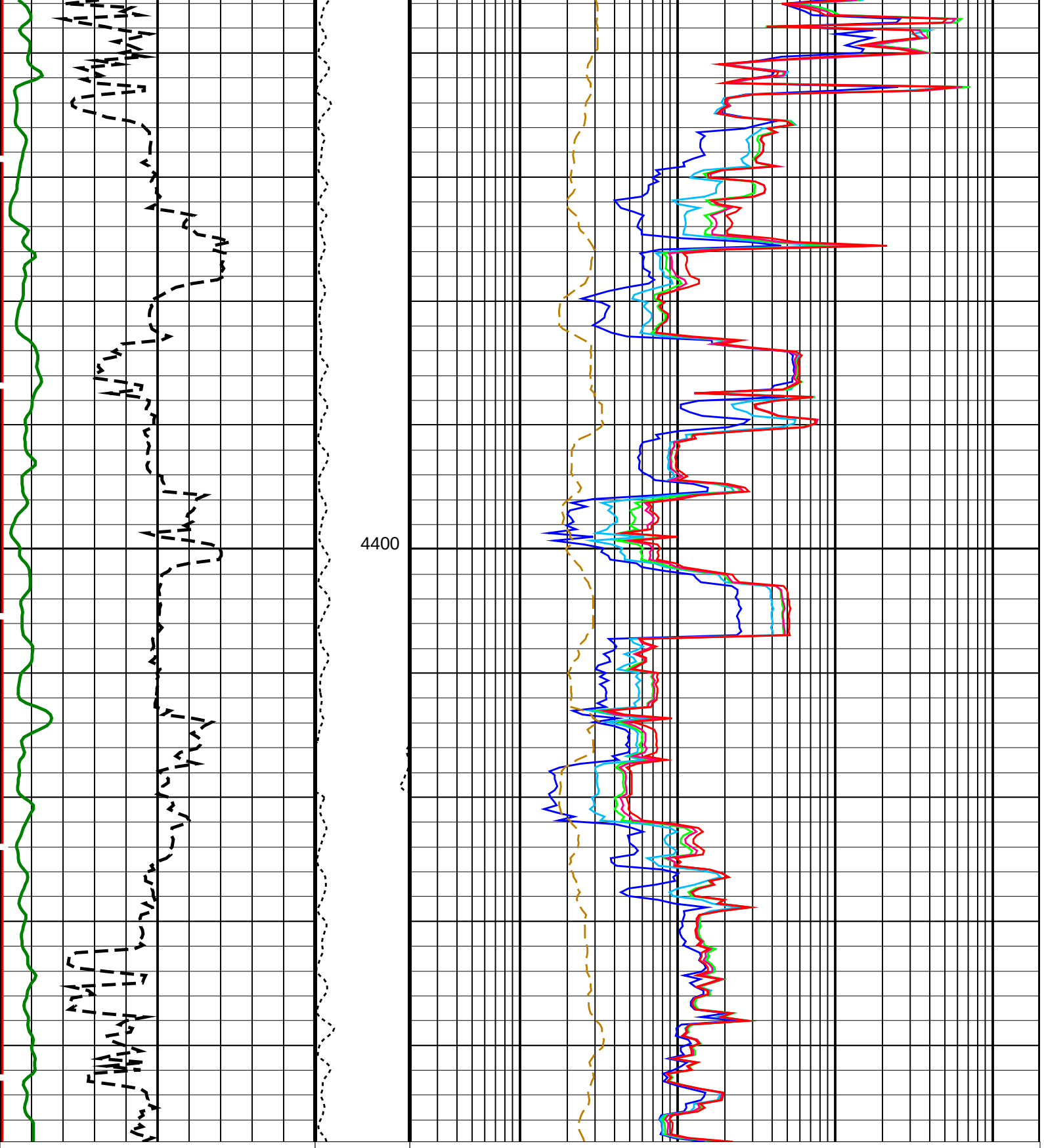


HLDS Caliper (LCAL)
0 (IN) 20

Tension (TENS) (LBF)
0 5000

HRLT Resistivity 1 (RLA1)
0.2 (OHMM) 2000

Invasion Diameter (DI_HRLT)
0 (IN) 50

HRLT Resistivity 2 (RLA2)
0.2 (OHMM) 2000

HNGS Spectroscopy Gamma Ray (HSGR)
0 (GAPI) 150

HRLT Resistivity 3 (RLA3)
0.2 (OHMM) 2000

HRLT Resistivity 4 (RLA4)

HRLT Resistivity 4 (RLA4)		
0.2	(OHMM)	2000
HRLT Resistivity 5 (RLA5)		
0.2	(OHMM)	2000
HRLT Mud Resistivity (RM_HRLT)		
0.02	(OHMM)	200

PIP SUMMARY

Time Mark Every 60 S

Parameters

DLIS Name	Description	Value	
	HRLT−B: High Resolution Laterolog Array − B		
BHS	Borehole Status	OPEN	
BHT	Bottom Hole Temperature (used in calculations)	20	DEGC
GCSE	Generalized Caliper Selection	BS	
GGRD	Geothermal Gradient	0.018227	DC/M
GRSE	Generalized Mud Resistivity Selection	CHART_GEN_9	
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE	
KFAC_HRLT	HRLT K Factor Option	SONDE	
PROCINV	Inversion Selection	ON	
PROCMFL	Inversion Micro−Resistivity Selection	NO_EXTERNAL_RXO	
PROCMSO	Mechanical Standoff Fin Size	0	IN
PROCRM	Processing Mud Resistivity Select	HRLT_Compute	
PROCSPO	Sonde Position	Centered	
SHT	Surface Hole Temperature	20	DEGC
	APS−C: Accelerator−Porosity Tool		
BHS	Borehole Status	OPEN	
BHT	Bottom Hole Temperature (used in calculations)	20	DEGC
GCSE	Generalized Caliper Selection	BS	
GGRD	Geothermal Gradient	0.018227	DC/M
GRSE	Generalized Mud Resistivity Selection	CHART_GEN_9	
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE	
SHT	Surface Hole Temperature	20	DEGC
	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	
BHT	Bottom Hole Temperature (used in calculations)	20	DEGC
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	
GGRD	Geothermal Gradient	0.018227	DC/M
GRSE	Generalized Mud Resistivity Selection	CHART_GEN_9	
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE	
H1P	HNGS Detector 1 Allow/Disallow In Processing	ALLOW	
H2P	HNGS Detector 2 Allow/Disallow In Processing	ALLOW	
HABK	HNGS Borehole Potassium Running Average	−0.00124408	
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	
SHT	Surface Hole Temperature	20	DEGC
TPOS	Tool Position	ECCE	
VBA1	HNGS Detector 1 Variable Barite Factor Running Average	20.2456	
VBA2	HNGS Detector 2 Variable Barite Factor Running Average	19.4799	
	EDTC−B: Enhanced DTS Cartridge		
BHS	Borehole Status	OPEN	
BHT	Bottom Hole Temperature (used in calculations)	20	DEGC
GCSE	Generalized Caliper Selection	BS	
GGRD	Geothermal Gradient	0.018227	DC/M
GRSE	Generalized Mud Resistivity Selection	CHART_GEN_9	
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE	
SHT	Surface Hole Temperature	20	DEGC
	System and Miscellaneous		
BS	Bit Size	9.875	IN
DO	Depth Offset for Playback	0.0	M
MST	Mud Sample Temperature	23.00	DEGC
PP	Playback Processing	NORMAL	
TD	Total Depth	10190.3	FT

Format: HRLT Vertical Scale: 1:200 Graphics File Created: 25-Jul-2022 01:25

OP System Version: 19C0−187

HRLT−B	19C0−187	HLDS	19C0−187
LDSC−B	19C0−187	APS−C	19C0−187
HNGC−B	19C0−187	HNGS−BA	19C0−187
EDTC−B	SKK−5169−EDTCB		

Input DLIS Files

DEFAULT	Flip_HRLA_LDL_APS_038LUP		PRODUCER	25−Jul−2022 01:23	4423.9 M	4151.4 M

Output DLIS Files

DEFAULT	HRLA_LDL_APS_NGS_039PUP	FN:33	PRODUCER	25−Jul−2022 01:25		

Schlumberger

First Up Pass

MAXIS Field Log

Company: International Ocean Discovery Program Well: Expedition 393, Site U1583F

Input DLIS Files

DEFAULT	HRLA_LDL_APS_NGS_012LUP	FN:11	PRODUCER	17−Jul−2022 04:10	4455.4 M	4364.7 M

Output DLIS Files

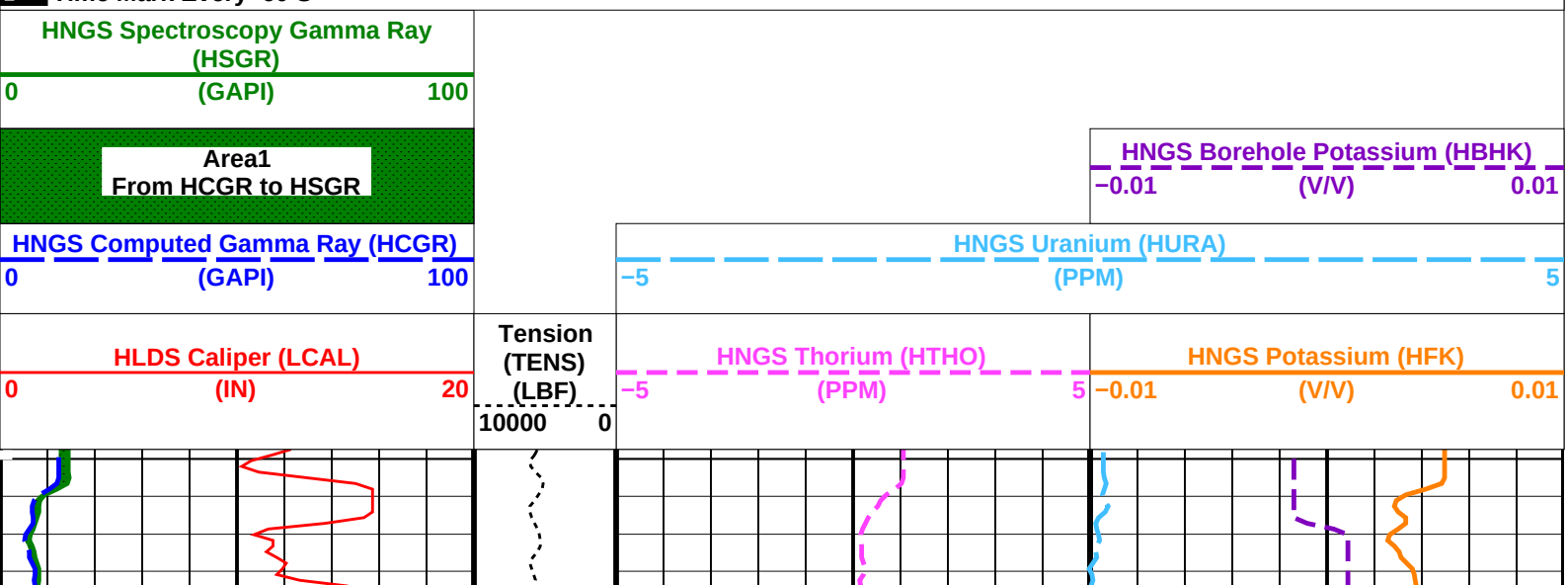
DEFAULT	HRLA_LDL_APS_NGS_041PUP	FN:35	PRODUCER	25−Jul−2022 01:36	4455.4 M	4364.7 M

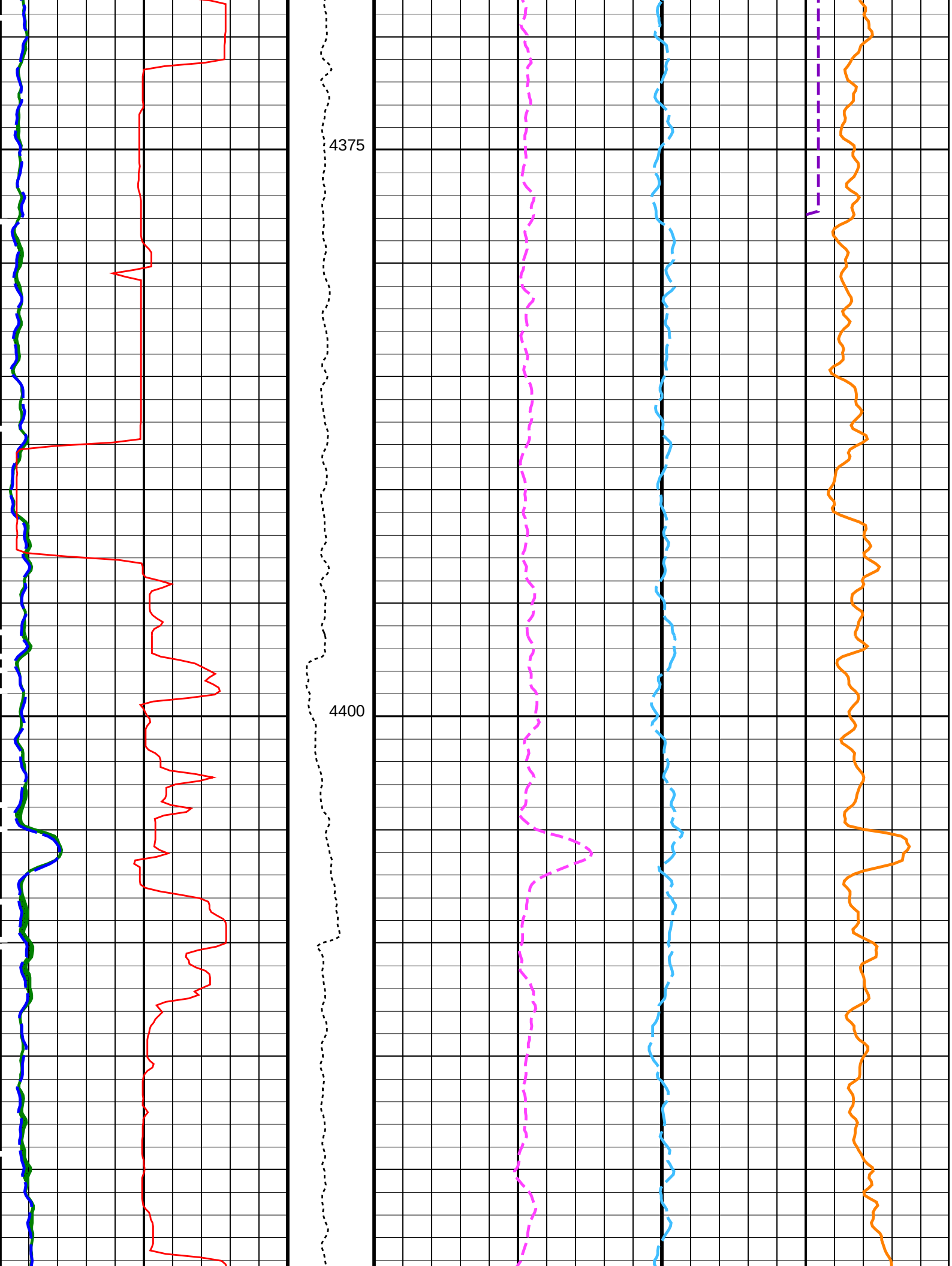
OP System Version: 19C0−187

HRLT−B	19C0−187	HLDS	19C0−187
LDSC−B	19C0−187	APS−C	19C0−187
HNGC−B	19C0−187	HNGS−BA	19C0−187
EDTC−B	SKK−5169−EDTCB		

PIP SUMMARY

Time Mark Every 60 S

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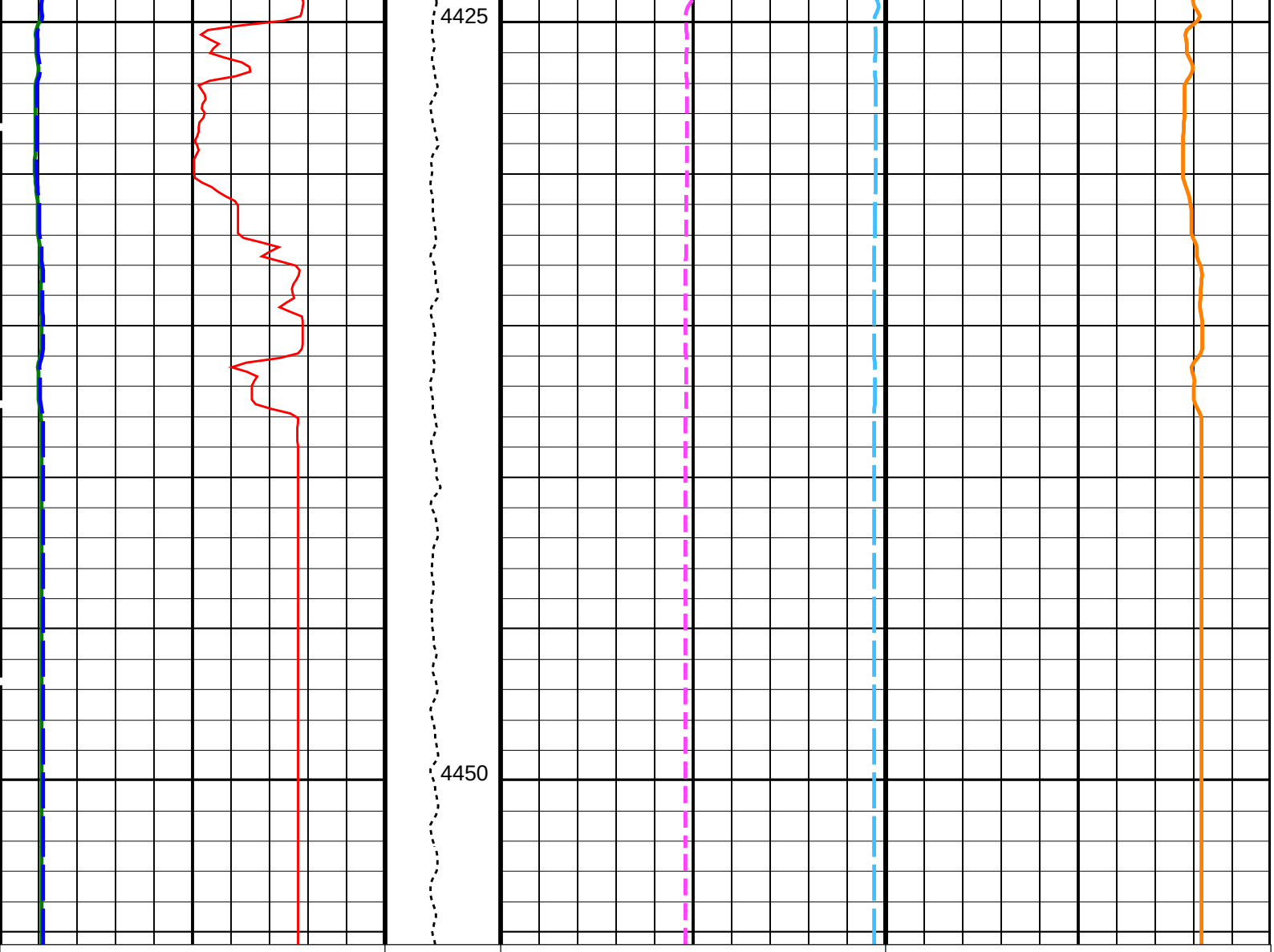


HLDS Caliper (LCAL)
0 (IN) 20

Tension (TENS) (LBF)
10000 0

HNGS Thorium (HTHO)
−5 (PPM) 5

HNGS Potassium (HFK)
−0.01 (V/V) 0.01

HNGS Computed Gamma Ray (HCGR)
0 (GAPI) 100

HNGS Uranium (HURA)
−5 (PPM) 5

Area1
From HCGR to HSGR

HNGS Borehole Potassium (HBHK)
−0.01 (V/V) 0.01

HNGS Spectroscopy Gamma Ray (HSGR)
0 (GAPI) 100

PIP SUMMARY

Time Mark Every 60 S

Parameters

DLIS Name	Description	Value
	HRLT−B: High Resolution Laterolog Array − B	
BHS	Borehole Status	OPEN
GCSE	Generalized Caliper Selection	BS
	APS−C: Accelerator−Porosity Tool	
BHS	Borehole Status	OPEN
GCSE	Generalized Caliper Selection	BS
	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	−0.00124408	
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	20.2456	
VBA2	HNGS Detector 2 Variable Barite Factor Running Average	19.4799	
EDTC−B: Enhanced DTS Cartridge			
BHS	Borehole Status	OPEN	
GCSE	Generalized Caliper Selection	BS	
System and Miscellaneous			
BS	Bit Size	9.875	IN
DO	Depth Offset for Playback	0.0	M
PP	Playback Processing	NORMAL	

Format: HNGSYields Vertical Scale: 1:200 Graphics File Created: 25−Jul−2022 01:37

OP System Version: 19C0−187

HRLT−B	19C0−187	HLDS	19C0−187
LDSC−B	19C0−187	APS−C	19C0−187
HNGC−B	19C0−187	HNGS−BA	19C0−187
EDTC−B	SKK−5169−EDTCB		

Input DLIS Files

DEFAULT	HRLA_LDL_APS_NGS_012LUP	FN:11	PRODUCER	17−Jul−2022 04:10	4455.4 M	4364.7 M

Output DLIS Files

DEFAULT	HRLA_LDL_APS_NGS_041PUP	FN:35	PRODUCER	25−Jul−2022 01:36		

Company: International Ocean Discovery Program Well: Expedition 393, Site U1583F

Input DLIS Files

DEFAULT	HRLA_LDL_APS_NGS_012LUP	FN:11	PRODUCER	17−Jul−2022 04:10	4455.4 M	4364.7 M

Output DLIS Files

DEFAULT	HRLA_LDL_APS_NGS_041PUP	FN:35	PRODUCER	25−Jul−2022 01:36	4455.4 M	4364.7 M

OP System Version: 19C0−187

HRLT−B	19C0−187	HLDS	19C0−187
LDSC−B	19C0−187	APS−C	19C0−187
HNGC−B	19C0−187	HNGS−BA	19C0−187
EDTC−B	SKK−5169−EDTCB		

PIP SUMMARY

Time Mark Every 60 S

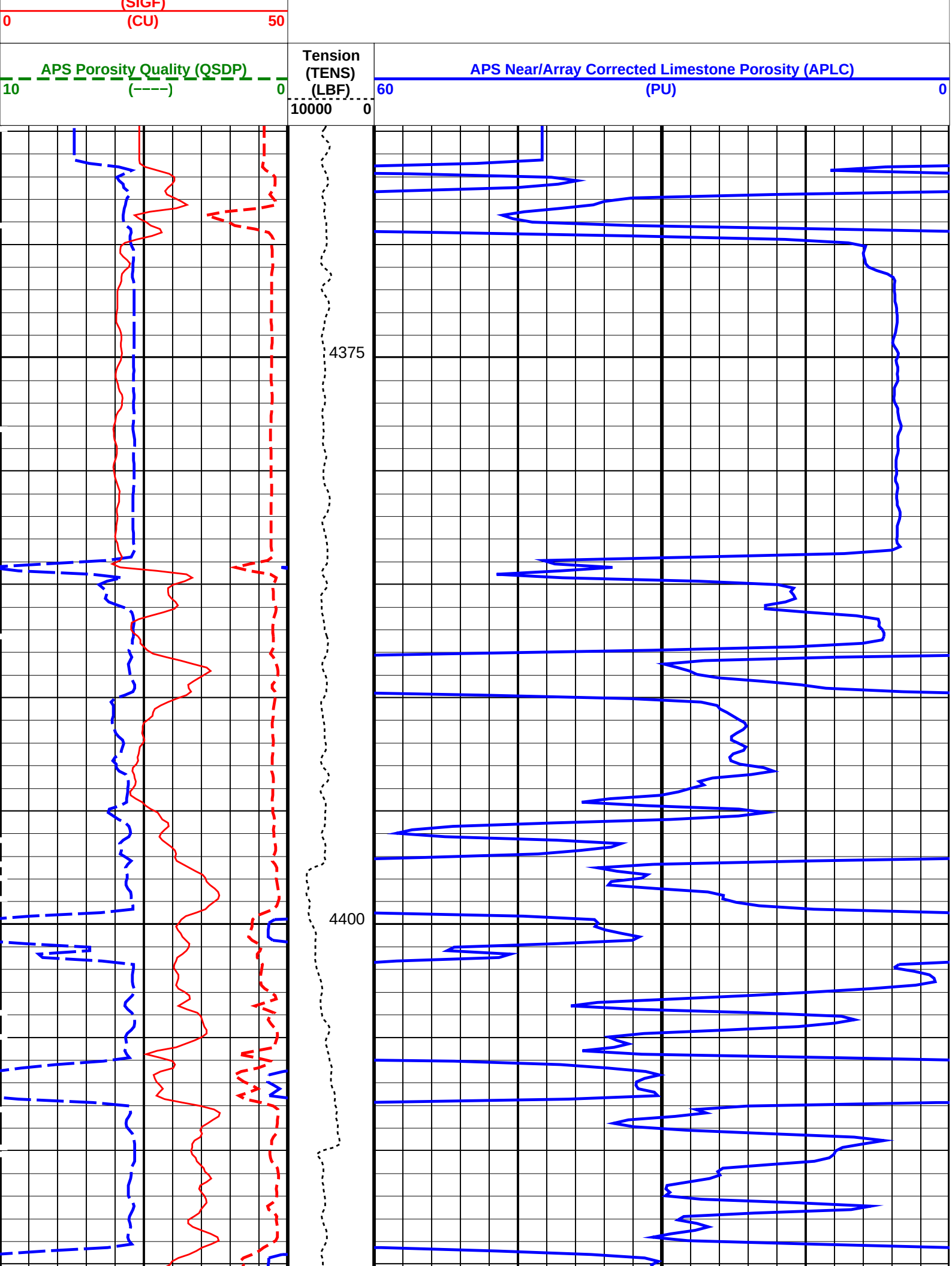
APS Quality of Formation Capture Cross−Section (QSGF)

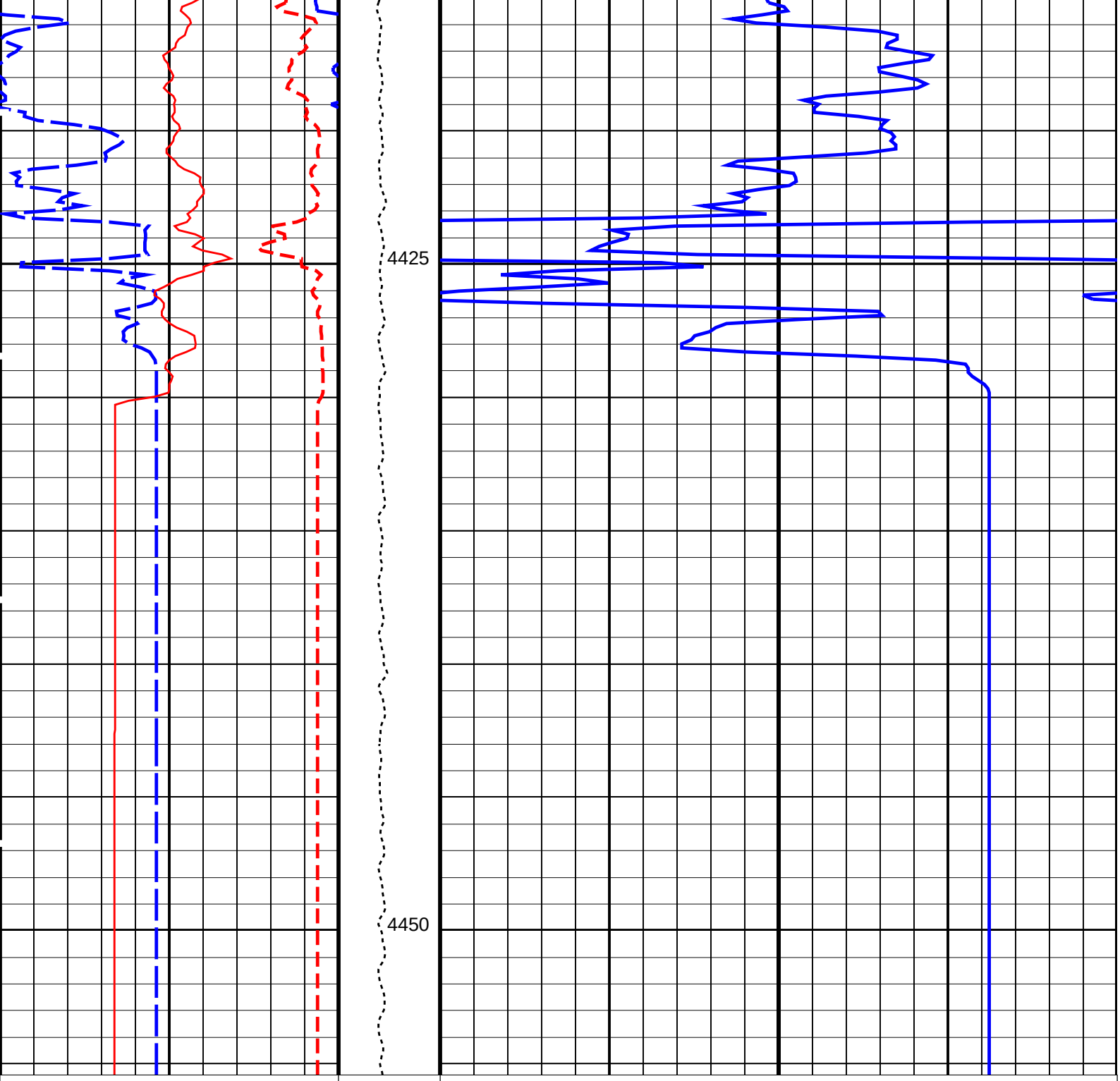
10 (−−−−) 0

APS Total Correction in APLC (PHICOR_APLC)

−10 (PU) 10

APS Formation Capture Cross−Section


(SIGF)
0
(CU)
50
APS Porosity Quality (QSDP)
10
(----)
0
Tension
(TENS)
(LBF)
10000
0
APS Near/Array Corrected Limestone Porosity (APLC)
60
(PU)
0
4375
4400



APS Porosity Quality (QSDP)	Tension (TENS) (LBF)	APS Near/Array Corrected Limestone Porosity (APLC)
10 (----) 0	10000 0	60 (PU) 0

APS Formation Capture Cross-Section (SIGF)
0 (CU) 50

APS Total Correction in APLC (PHICOR_APLC)
−10 (PU) 10

APS Quality of Formation Capture Cross-Section (QSGF)
10 (----) 0

PIP SUMMARY

Time Mark Every 60 S

Parameters

DLIS Name	Description	Value	
	HRLT−B: High Resolution Laterolog Array − B		
BHS	Borehole Status	OPEN	
BHT	Bottom Hole Temperature (used in calculations)	20	DEGC
GCSE	Generalized Caliper Selection	BS	
GDEV	Average Angular Deviation of Borehole from Normal	0	DEG
GGRD	Geothermal Gradient	0.018227	DC/M
GRSE	Generalized Mud Resistivity Selection	CHART_GEN_9	
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE	
MATR	Rock Matrix for Neutron Porosity Corrections	LIMESTONE	
SHT	Surface Hole Temperature	20	DEGC
	HLDS: Hostile Litho−Density Sonde		
DPPM	Density Porosity Processing Mode	HIRS	
	APS−C: Accelerator−Porosity Tool		
	APS Software Version	0	
AASD	APS Thermal and Array Detectors High Voltage Setting	1976.24	V
ADSO	APS Array Detectors Data Source Switch	Both	
AFSD	APS Far Detector High Voltage Setting	2067.55	V
AHCS	APS Holesize Correction Source	BS	
AHSS	APS Holesize Correction Switch	ON	
AMTY	APS Environmental Corrections Mud Type	WaterBaseBarite	
ANSD	APS Near Detector High Voltage Setting	1737.8	V
ASOS	APS Standoff Correction Switch	ON	
ATSS	APS Temperature−Pressure−Salinity Correction Switch	ON	
BHFL_APS	APS TNPH Borehole Fluid Type	WATER	
BHS	Borehole Status	OPEN	
BHT	Bottom Hole Temperature (used in calculations)	20	DEGC
BSCO_APS	APS TNPH Borehole Salinity Correction Option	YES	
DPPM	Density Porosity Processing Mode	HIRS	
DSCO_APS	APS TNPH Density Source Correction Option	COMPUTED	
FSAL	Formation Salinity	−50000	PPM
FSCO_APS	APS TNPH Formation Salinity Correction Option	NO	
GCSE	Generalized Caliper Selection	BS	
GDEV	Average Angular Deviation of Borehole from Normal	0	DEG
GGRD	Geothermal Gradient	0.018227	DC/M
GRSE	Generalized Mud Resistivity Selection	CHART_GEN_9	
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE	
HSCO_APS	APS TNPH Hole Size Correction Option	YES	
MATR	Rock Matrix for Neutron Porosity Corrections	LIMESTONE	
MCCO_APS	APS TNPH Mud Cake Correction Option	YES	
MCOR_APS	APS TNPH Mud Correction	NATU	
MWCO_APS	APS TNPH Mud Weight Correction Option	YES	
NARC	APS Near/Array Calibration Ratio	1.08341	
NFRC	APS Near/Far Calibration Ratio	0.942369	
PTCO_APS	APS TNPH Pressure/Temperature Correction Option	YES	
SHT	Surface Hole Temperature	20	DEGC
TNCO_APS	APS TNPH Computation Option	NO	
	HNGS−BA: Hostile Natural Gamma Ray Sonde		
BHS	Borehole Status	OPEN	
BHT	Bottom Hole Temperature (used in calculations)	20	DEGC
GCSE	Generalized Caliper Selection	BS	
GDEV	Average Angular Deviation of Borehole from Normal	0	DEG
GGRD	Geothermal Gradient	0.018227	DC/M
GRSE	Generalized Mud Resistivity Selection	CHART_GEN_9	
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE	
MATR	Rock Matrix for Neutron Porosity Corrections	LIMESTONE	
SHT	Surface Hole Temperature	20	DEGC
	EDTC−B: Enhanced DTS Cartridge		
BHS	Borehole Status	OPEN	
BHT	Bottom Hole Temperature (used in calculations)	20	DEGC
DPPM	Density Porosity Processing Mode	HIRS	
FSAL	Formation Salinity	−50000	PPM
GCSE	Generalized Caliper Selection	BS	
GDEV	Average Angular Deviation of Borehole from Normal	0	DEG
GGRD	Geothermal Gradient	0.018227	DC/M
GRSE	Generalized Mud Resistivity Selection	CHART_GEN_9	
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE	
MATR	Rock Matrix for Neutron Porosity Corrections	LIMESTONE	
SHT	Surface Hole Temperature	20	DEGC
	System and Miscellaneous		
BS	Bit Size	9.875	IN
BSAL	Borehole Salinity	38000.00	PPM
CSIZ	Current Casing Size	0.000	IN
CWEI	Casing Weight	0.00	LB/F
DO	Depth Offset for Playback	0.0	M
FLEV	Fluid Level	−50000.00	M
MST	Mud Sample Temperature	23.00	DEGC
PP	Playback Processing	NORMAL	
RMFS	Resistivity of Mud Filtrate Sample	−50000.0000	OHMM
TD	Total Depth	10190.3	FT

Format: APSLiquidPorosity Vertical Scale: 1:200 Graphics File Created: 25-Jul-2022 01:37

OP System Version: 19C0-187

HRLT-B	19C0-187	HLDS	19C0-187
LDSC-B	19C0-187	APS-C	19C0-187
HNGC-B	19C0-187	HNGS-BA	19C0-187
EDTC-B	SKK-5169-EDTCB		

Input DLIS Files

DEFAULT	HRLA_LDL_APS_NGS_012LUP	FN:11	PRODUCER	17-Jul-2022 04:10	4455.4 M	4364.7 M

Output DLIS Files

DEFAULT	HRLA_LDL_APS_NGS_041PUP	FN:35	PRODUCER	25-Jul-2022 01:36		

Company: International Ocean Discovery Program Well: Expedition 393, Site U1583F

Input DLIS Files

DEFAULT	HRLA_LDL_APS_NGS_012LUP	FN:11	PRODUCER	17-Jul-2022 04:10	4455.4 M	4364.7 M

Output DLIS Files

DEFAULT	HRLA_LDL_APS_NGS_041PUP	FN:35	PRODUCER	25-Jul-2022 01:36	4455.4 M	4364.7 M

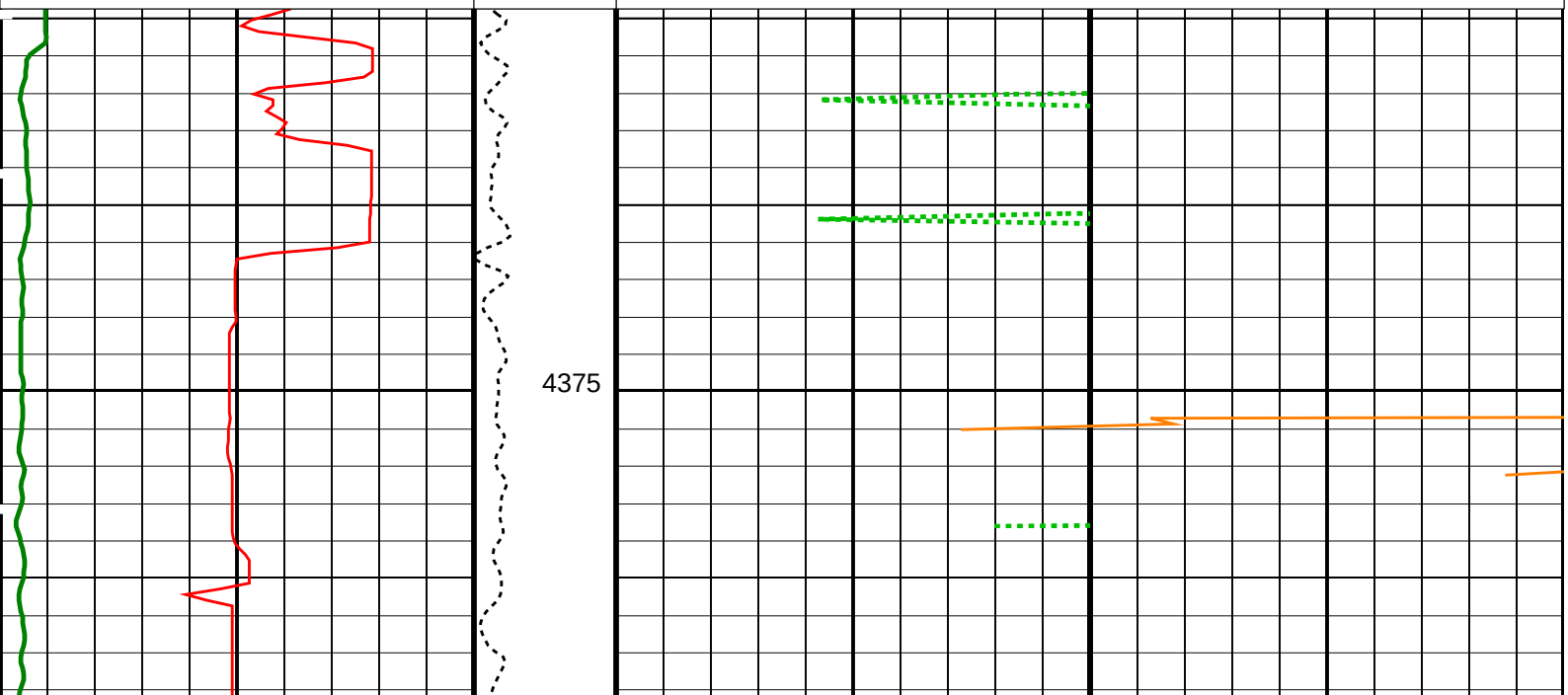
OP System Version: 19C0-187

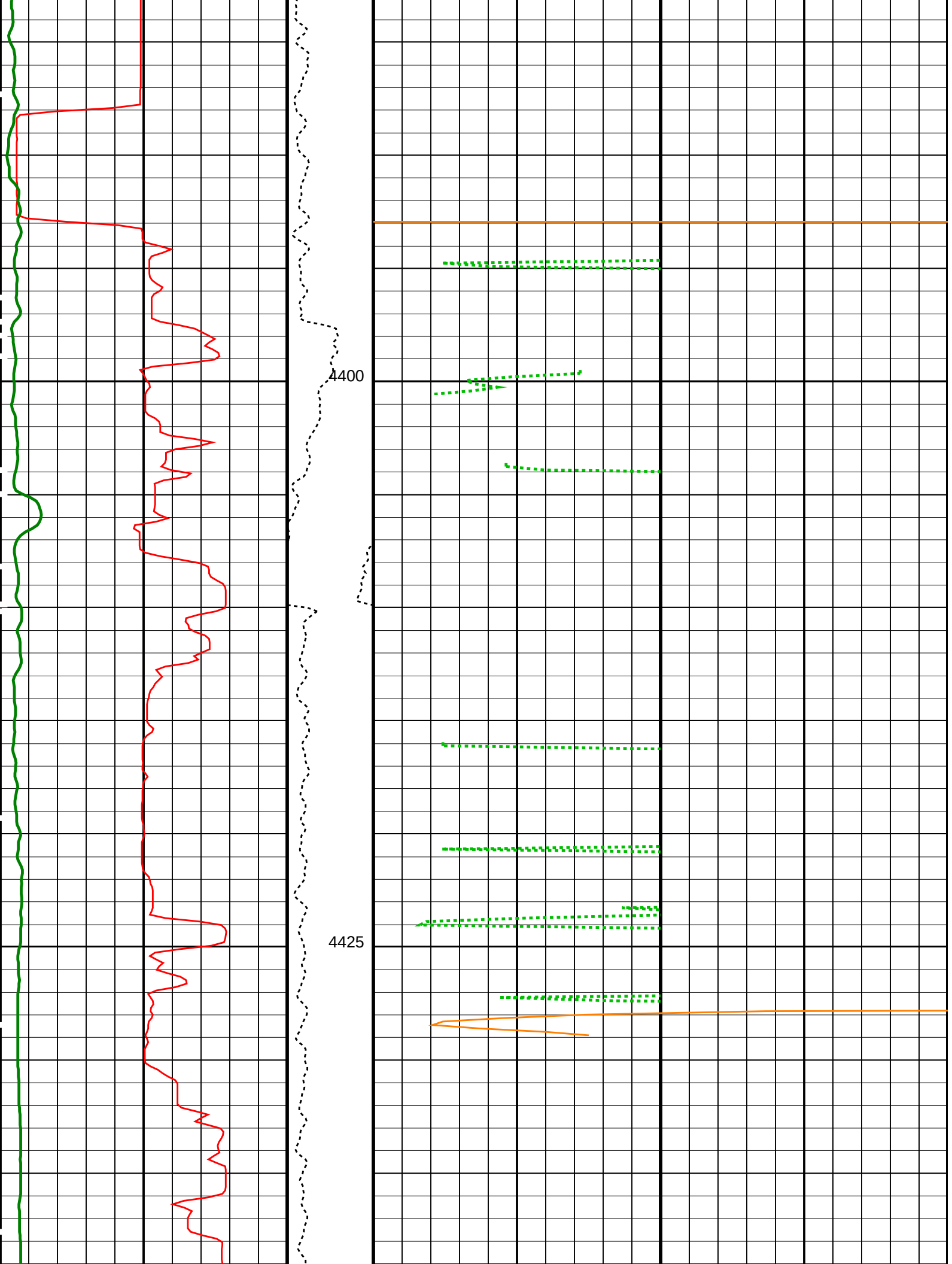
HRLT-B	19C0-187	HLDS	19C0-187
LDSC-B	19C0-187	APS-C	19C0-187
HNGC-B	19C0-187	HNGS-BA	19C0-187
EDTC-B	SKK-5169-EDTCB		

PIP SUMMARY

Time Mark Every 60 S

HNGS Spectroscopy Gamma Ray (HSGR)		HLDS Long Spaced Photoelectric Effect (PEFL)	HLDS Bulk Density Correction (DRH)
0 (GAPI) 150		0 (-----) 10	-0.25 (G/C3) 0.25
HLDS Caliper (LCAL)	**Tension (TENS) (LBF)**	**HLDS Bulk Density (RHOM)**	
0 (IN) 20	0 5000	3 (G/C3) 1	

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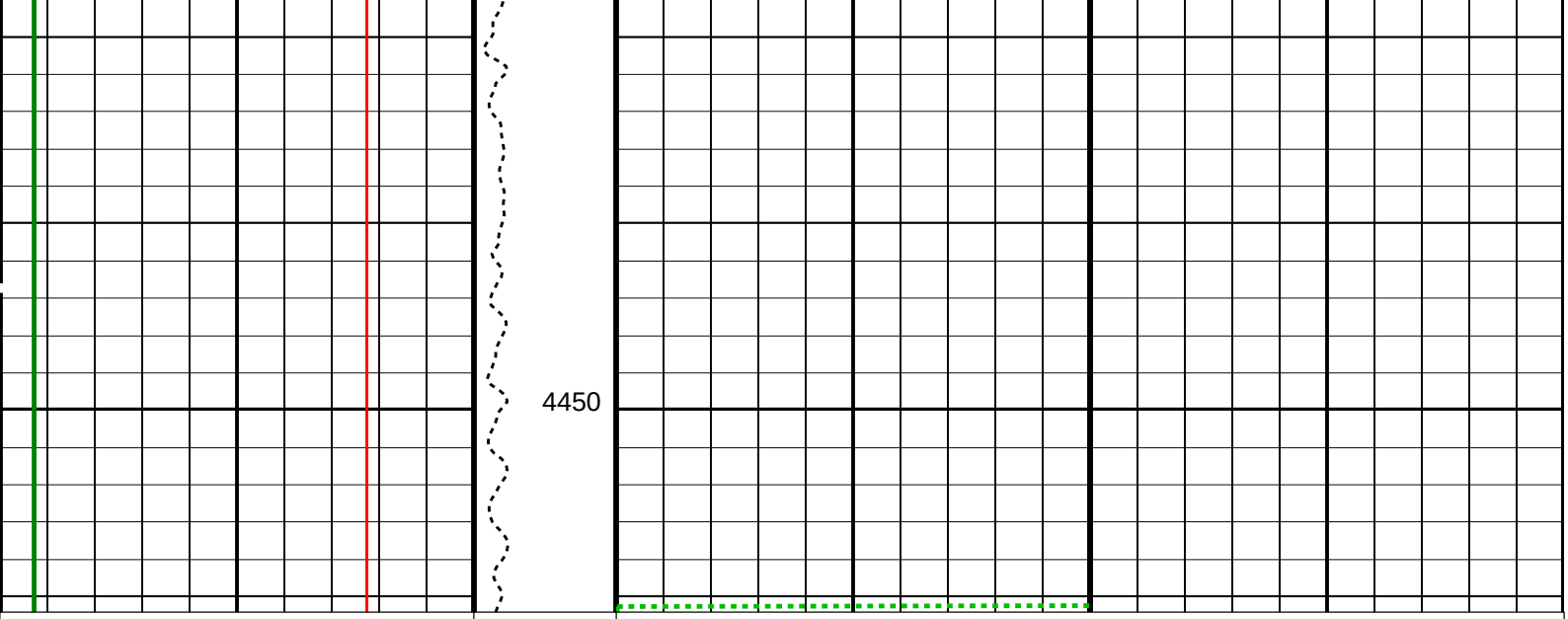


HLDS Caliper (LCAL)	Tension (TENS)	HLDS Bulk Density (RHOM)
0 (IN) 20	(LBF) 0 5000	3 (G/C3) 1

HNGS Spectroscopy Gamma Ray (HSGR)	HLDS Long Spaced Photoelectric Effect (PEFL)	HLDS Bulk Density Correction (DRH)
0 (GAPI) 150	0 (−−−−) 10	−0.25 (G/C3) 0.25

PIP SUMMARY

Time Mark Every 60 S

Parameters

DLIS Name	Description	Value	
	HRLT−B: High Resolution Laterolog Array − B		
BHS	Borehole Status	OPEN	
GCSE	Generalized Caliper Selection	BS	
	HLDS: Hostile Litho−Density Sonde		
DHC	Density Hole Correction	BS	
DPPM	Density Porosity Processing Mode	HIRS	
FD	Fluid Density	1	G/C3
LATC	HLDS Activation Correction	ON	
MDEN	Matrix Density	2.71	G/C3
	APS−C: Accelerator−Porosity Tool		
	APS Software Version	0	
BHS	Borehole Status	OPEN	
DPPM	Density Porosity Processing Mode	HIRS	
GCSE	Generalized Caliper Selection	BS	
	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	−0.00124408	
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	20.2456	
VBA2	HNGS Detector 2 Variable Barite Factor Running Average	19.4799	
	EDTC−B: Enhanced DTS Cartridge		
BHS	Borehole Status	OPEN	
DPPM	Density Porosity Processing Mode	HIRS	

GCSE	Generalized Caliper Selection	BS	
System and Miscellaneous			
BS	Bit Size	9.875	IN
DO	Depth Offset for Playback	0.0	M
PP	Playback Processing	NORMAL	

Format: HLDSDensityPE Vertical Scale: 1:200 Graphics File Created: 25−Jul−2022 01:37

OP System Version: 19C0−187

HRLT−B	19C0−187	HLDS	19C0−187
LDSC−B	19C0−187	APS−C	19C0−187
HNGC−B	19C0−187	HNGS−BA	19C0−187
EDTC−B	SKK−5169−EDTCB		

Input DLIS Files

DEFAULT	HRLA_LDL_APS_NGS_012LUP	FN:11	PRODUCER	17−Jul−2022 04:10	4455.4 M	4364.7 M

Output DLIS Files

DEFAULT	HRLA_LDL_APS_NGS_041PUP	FN:35	PRODUCER	25−Jul−2022 01:36		

Company: International Ocean Discovery Program Well: Expedition 393, Site U1583F

Input DLIS Files

DEFAULT	HRLA_LDL_APS_NGS_012LUP	FN:11	PRODUCER	17−Jul−2022 04:10	4455.4 M	4364.7 M

Output DLIS Files

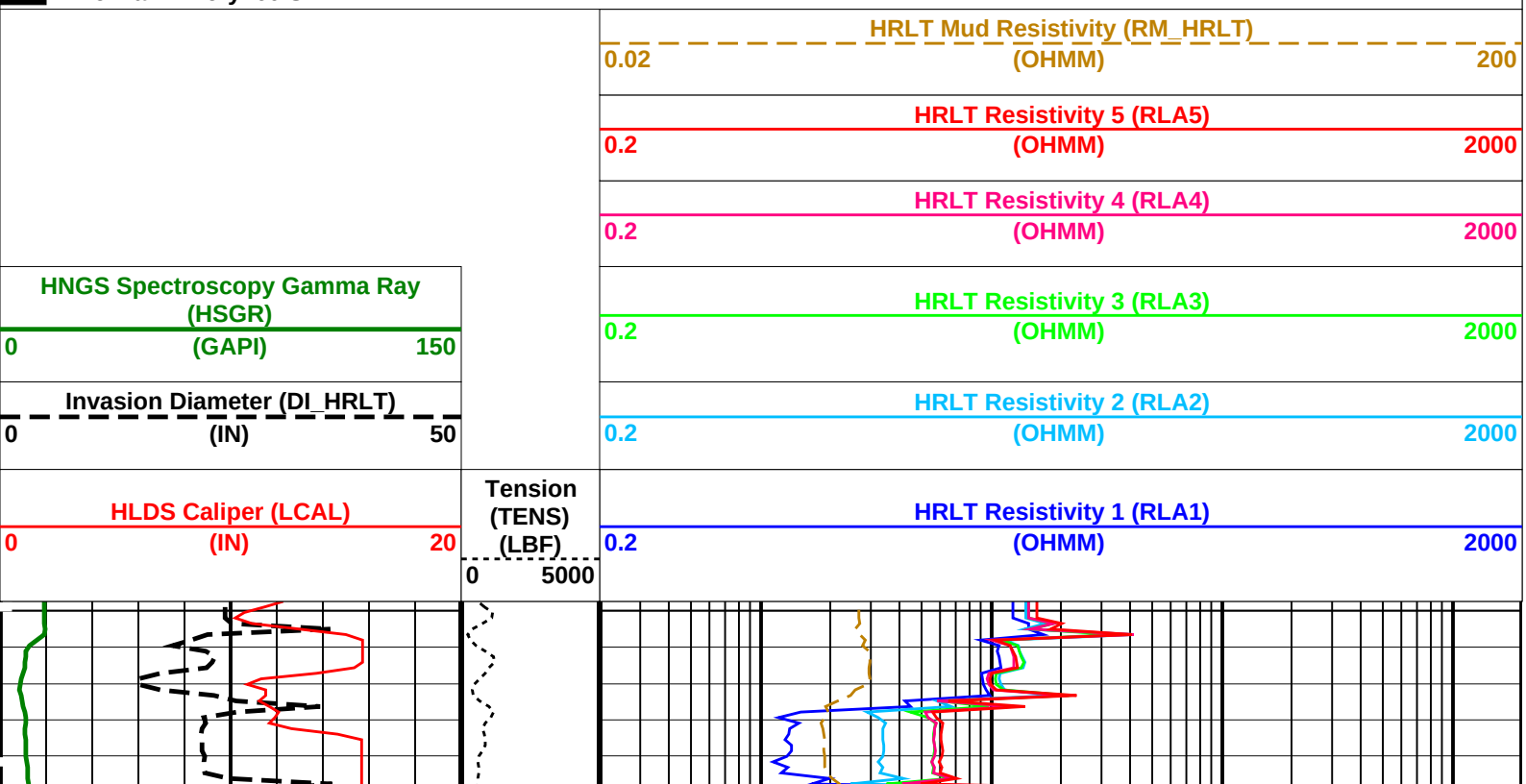
DEFAULT	HRLA_LDL_APS_NGS_041PUP	FN:35	PRODUCER	25−Jul−2022 01:36	4455.4 M	4364.7 M

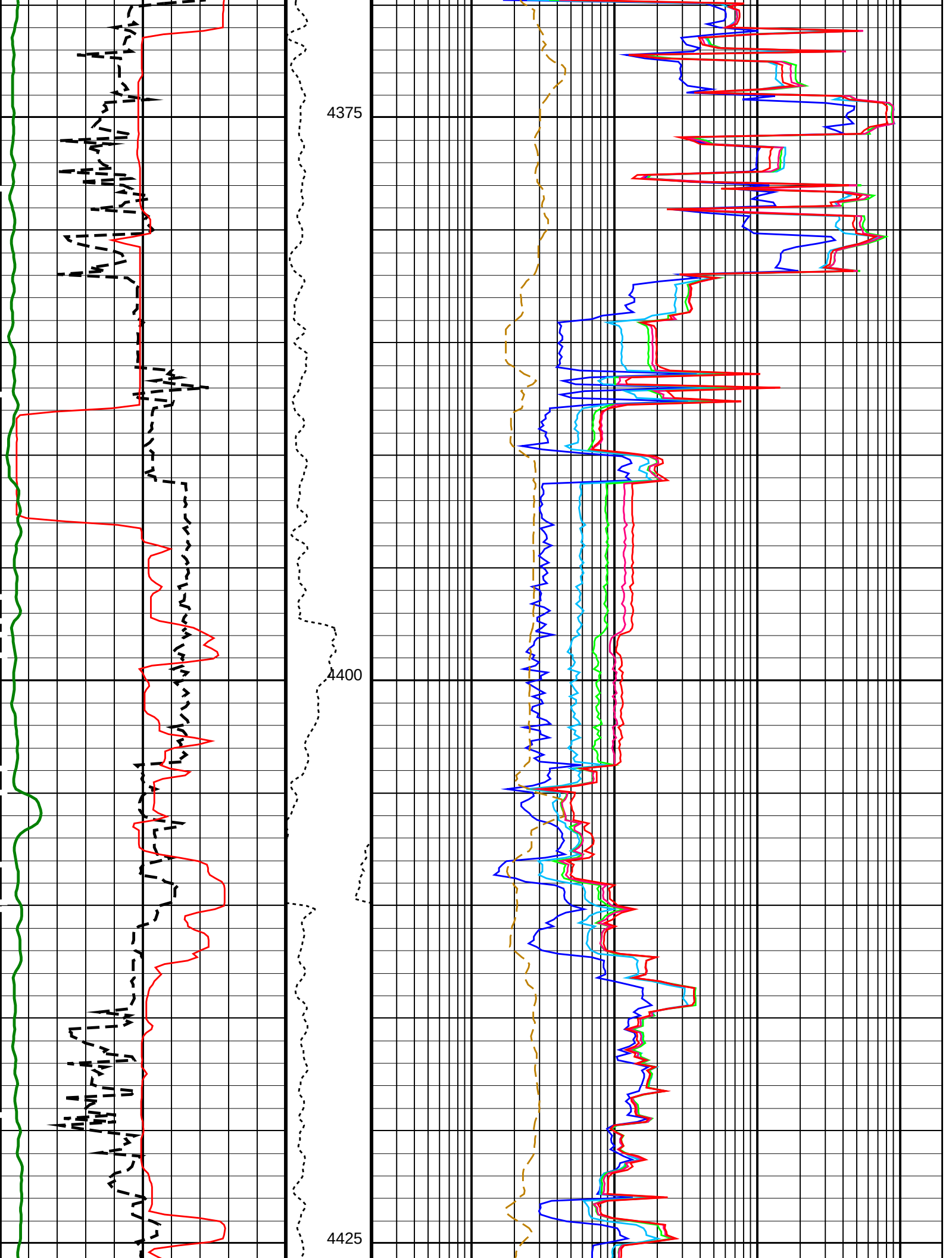
OP System Version: 19C0−187

HRLT−B	19C0−187	HLDS	19C0−187
LDSC−B	19C0−187	APS−C	19C0−187
HNGC−B	19C0−187	HNGS−BA	19C0−187
EDTC−B	SKK−5169−EDTCB		

PIP SUMMARY

Time Mark Every 60 S

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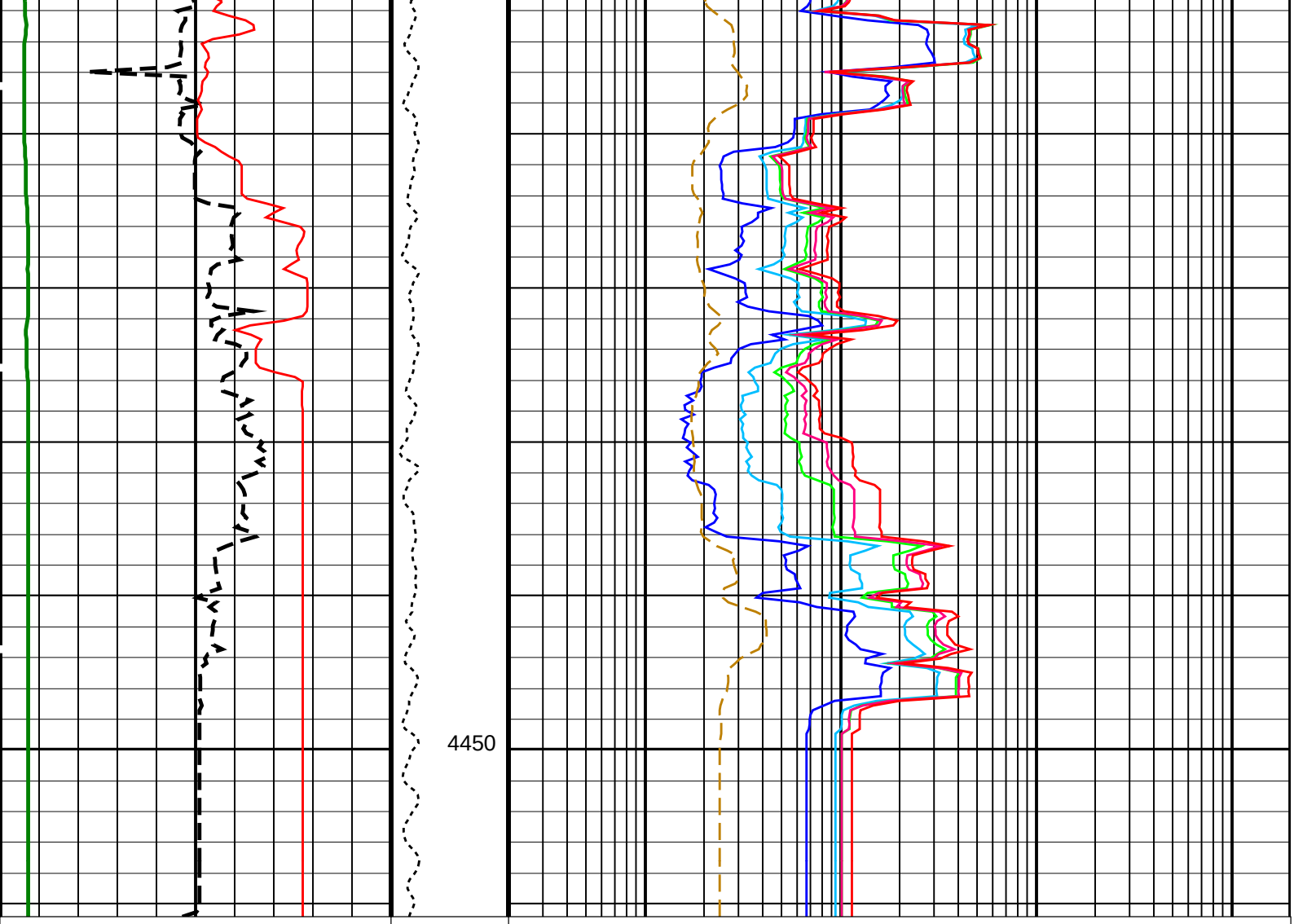


HLDS Caliper (LCAL) 0 (IN) 20	Tension (TENS) (LBF) 0 5000	HRLT Resistivity 1 (RLA1) 0.2 (OHMM) 2000
Invasion Diameter (DI_HRLT) 0 (IN) 50		HRLT Resistivity 2 (RLA2) 0.2 (OHMM) 2000
HNGS Spectroscopy Gamma Ray (HSGR) 0 (GAPI) 150		HRLT Resistivity 3 (RLA3) 0.2 (OHMM) 2000
		HRLT Resistivity 4 (RLA4) 0.2 (OHMM) 2000
		HRLT Resistivity 5 (RLA5) 0.2 (OHMM) 2000
		HRLT Mud Resistivity (RM_HRLT) 0.02 (OHMM) 200

PIP SUMMARY

Time Mark Every 60 S

Parameters

DLIS Name	Description	Value	
	HRLT−B: High Resolution Laterolog Array − B		
BHS	Borehole Status	OPEN	
BHT	Bottom Hole Temperature (used in calculations)	20	DEGC
GCSE	Generalized Caliper Selection	BS	
GGRD	Geothermal Gradient	0.018227	DC/M
GRSE	Generalized Mud Resistivity Selection	CHART_GEN_9	

GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE	
KFAC_HRLT	HRLT K Factor Option	SONDE	
PROCINV	Inversion Selection	ON	
PROCMFL	Inversion Micro−Resistivity Selection	NO_EXTERNAL_RXO	
PROCMSO	Mechanical Standoff Fin Size	0	IN
PROCRM	Processing Mud Resistivity Select	HRLT_Compute	
PROCSPO	Sonde Position	Centered	
SHT	Surface Hole Temperature	20	DEGC
APS−C: Accelerator−Porosity Tool			
BHS	Borehole Status	OPEN	
BHT	Bottom Hole Temperature (used in calculations)	20	DEGC
GCSE	Generalized Caliper Selection	BS	
GGRD	Geothermal Gradient	0.018227	DC/M
GRSE	Generalized Mud Resistivity Selection	CHART_GEN_9	
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE	
SHT	Surface Hole Temperature	20	DEGC
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	
BHT	Bottom Hole Temperature (used in calculations)	20	DEGC
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	
GGRD	Geothermal Gradient	0.018227	DC/M
GRSE	Generalized Mud Resistivity Selection	CHART_GEN_9	
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE	
H1P	HNGS Detector 1 Allow/Disallow In Processing	ALLOW	
H2P	HNGS Detector 2 Allow/Disallow In Processing	ALLOW	
HABK	HNGS Borehole Potassium Running Average	−0.00124408	
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	
SHT	Surface Hole Temperature	20	DEGC
TPOS	Tool Position	ECCE	
VBA1	HNGS Detector 1 Variable Barite Factor Running Average	20.2456	
VBA2	HNGS Detector 2 Variable Barite Factor Running Average	19.4799	
EDTC−B: Enhanced DTS Cartridge			
BHS	Borehole Status	OPEN	
BHT	Bottom Hole Temperature (used in calculations)	20	DEGC
GCSE	Generalized Caliper Selection	BS	
GGRD	Geothermal Gradient	0.018227	DC/M
GRSE	Generalized Mud Resistivity Selection	CHART_GEN_9	
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE	
SHT	Surface Hole Temperature	20	DEGC
System and Miscellaneous			
BS	Bit Size	9.875	IN
DO	Depth Offset for Playback	0.0	M
MST	Mud Sample Temperature	23.00	DEGC
PP	Playback Processing	NORMAL	
TD	Total Depth	10190.3	FT

Format: HRLT Vertical Scale: 1:200 Graphics File Created: 25−Jul−2022 01:37

OP System Version: 19C0−187

HRLT−B	19C0−187	HLDS	19C0−187
LDSC−B	19C0−187	APS−C	19C0−187
HNGC−B	19C0−187	HNGS−BA	19C0−187
EDTC−B	SKK−5169−EDTCB		

Input DLIS Files

DEFAULT	HRLA_LDL_APS_NGS_012LUP	FN:11	PRODUCER	17−Jul−2022 04:10	4455.4 M	4364.7 M

Output DLIS Files

DEFAULT	HRLA_LDL_APS_NGS_041PUP	FN:35	PRODUCER	25−Jul−2022 01:36

Schlumberger

Second Up Pass

MAXIS Field Log

Company: International Ocean Discovery Program | **Well: Expedition 393, Site U1558D**

Input DLIS Files

DEFAULT	HRLA_LDL_APS_NGS_013LUP	FN:12	PRODUCER	17−Jul−2022 05:56	4400.5 M	4175.7 M

Output DLIS Files

DEFAULT	HRLA_LDL_APS_NGS_044PUP	FN:38	PRODUCER	25−Jul−2022 02:27	4400.5 M	4175.8 M

OP System Version: 19C0−187

HRLT−B	19C0−187	HLDS	19C0−187
LDSC−B	19C0−187	APS−C	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) 100

Area1
From HCGR to HSGR

HNGS Computed Gamma Ray (HCGR)
0 (GAPI) 100

HNGS Borehole Potassium (HBHK)
−0.01 (V/V) 0.01

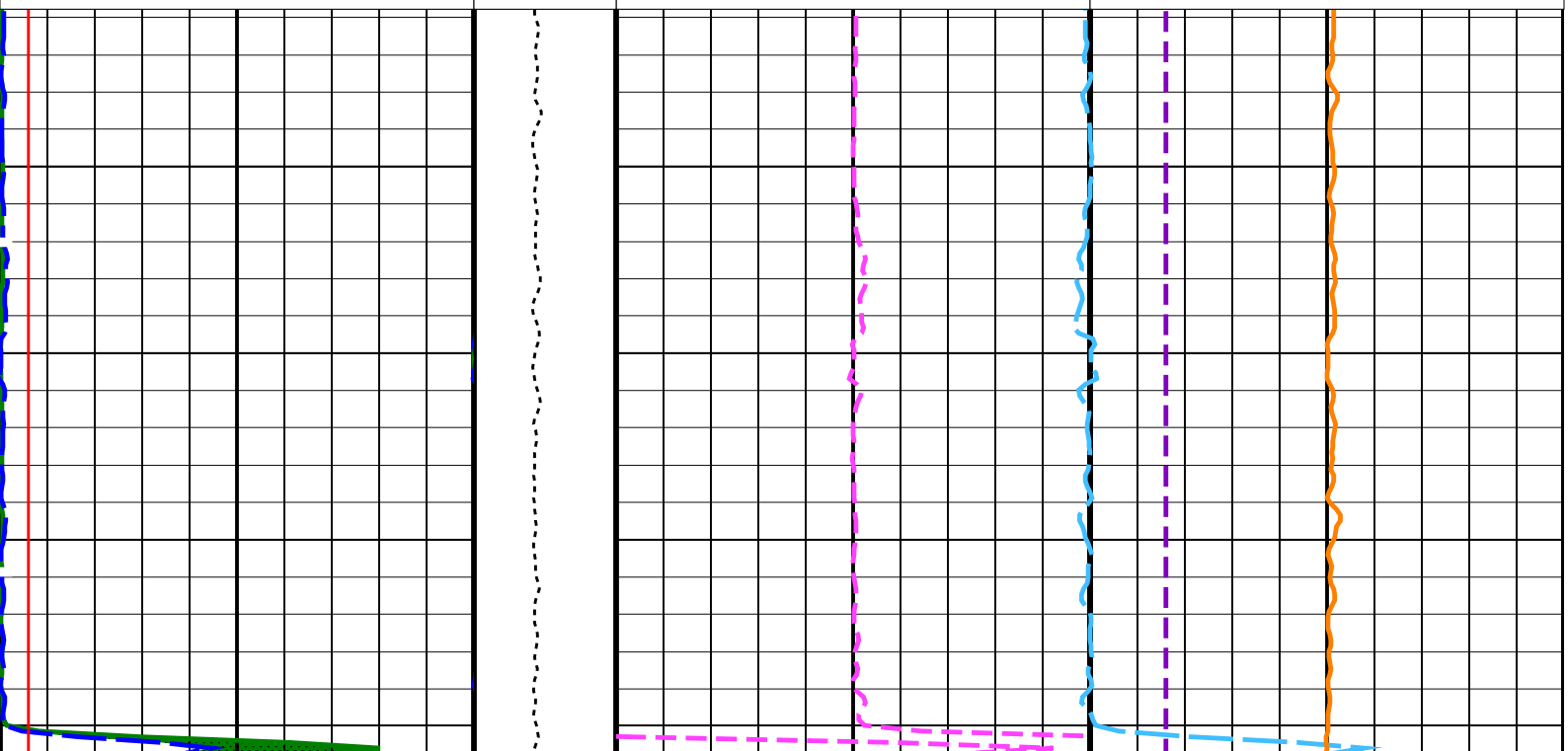
HNGS Uranium (HURA)
−5 (PPM) 5

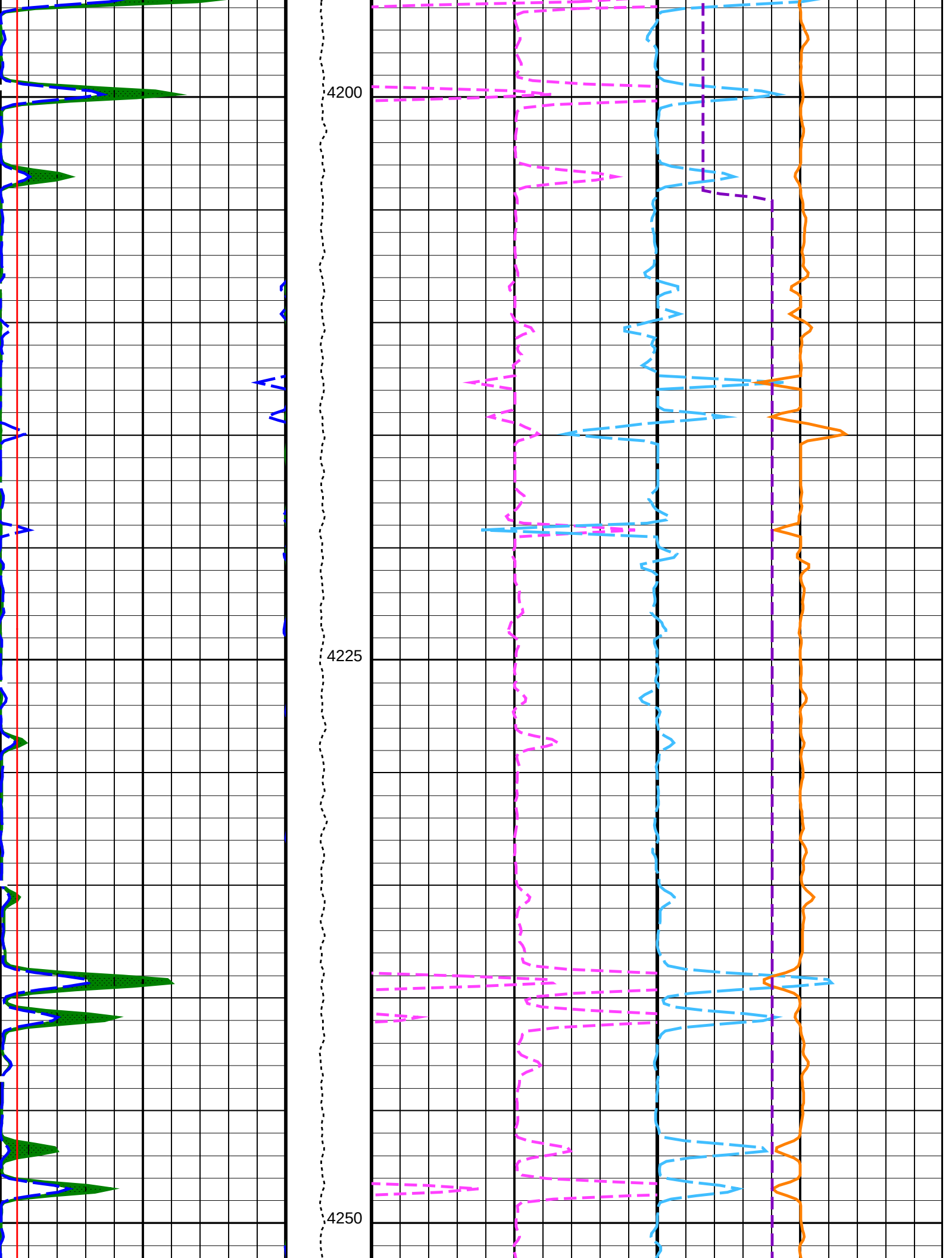
HLDS Caliper (LCAL)
0 (IN) 20

Tension (TENS) (LBF)
10000 0

HNGS Thorium (HTHO)
−5 (PPM) 5

HNGS Potassium (HFK)
−0.01 (V/V) 0.01

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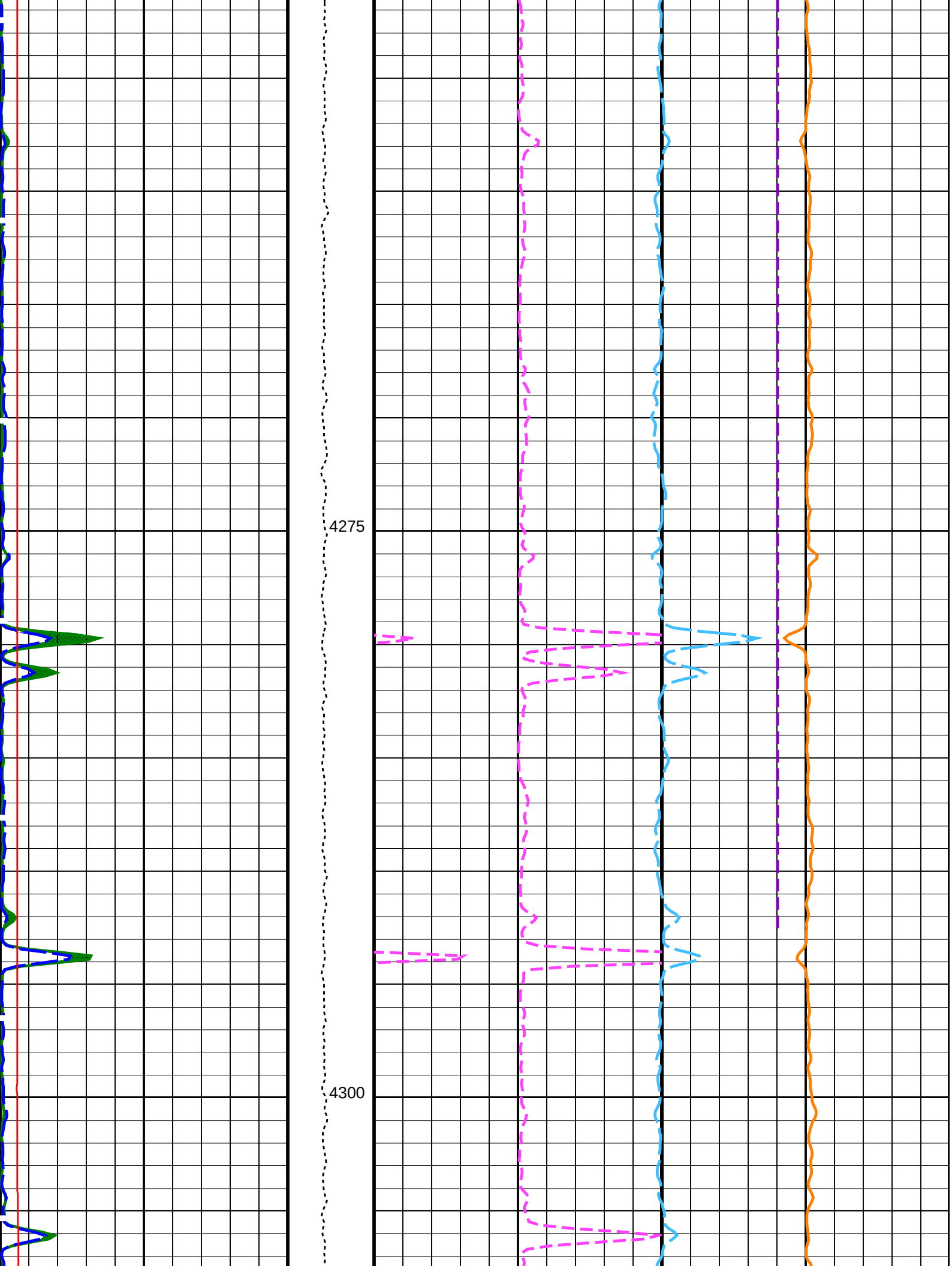
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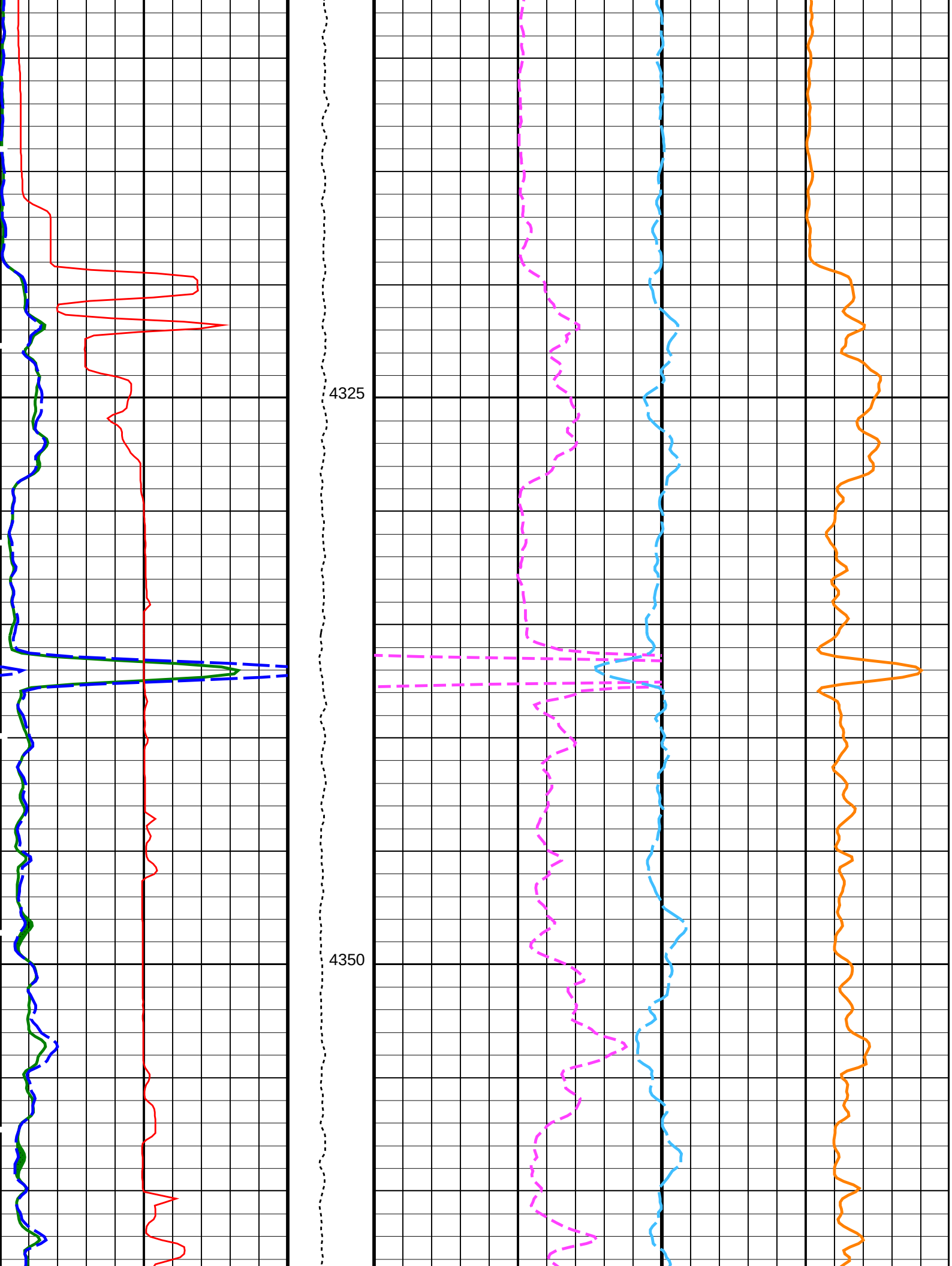
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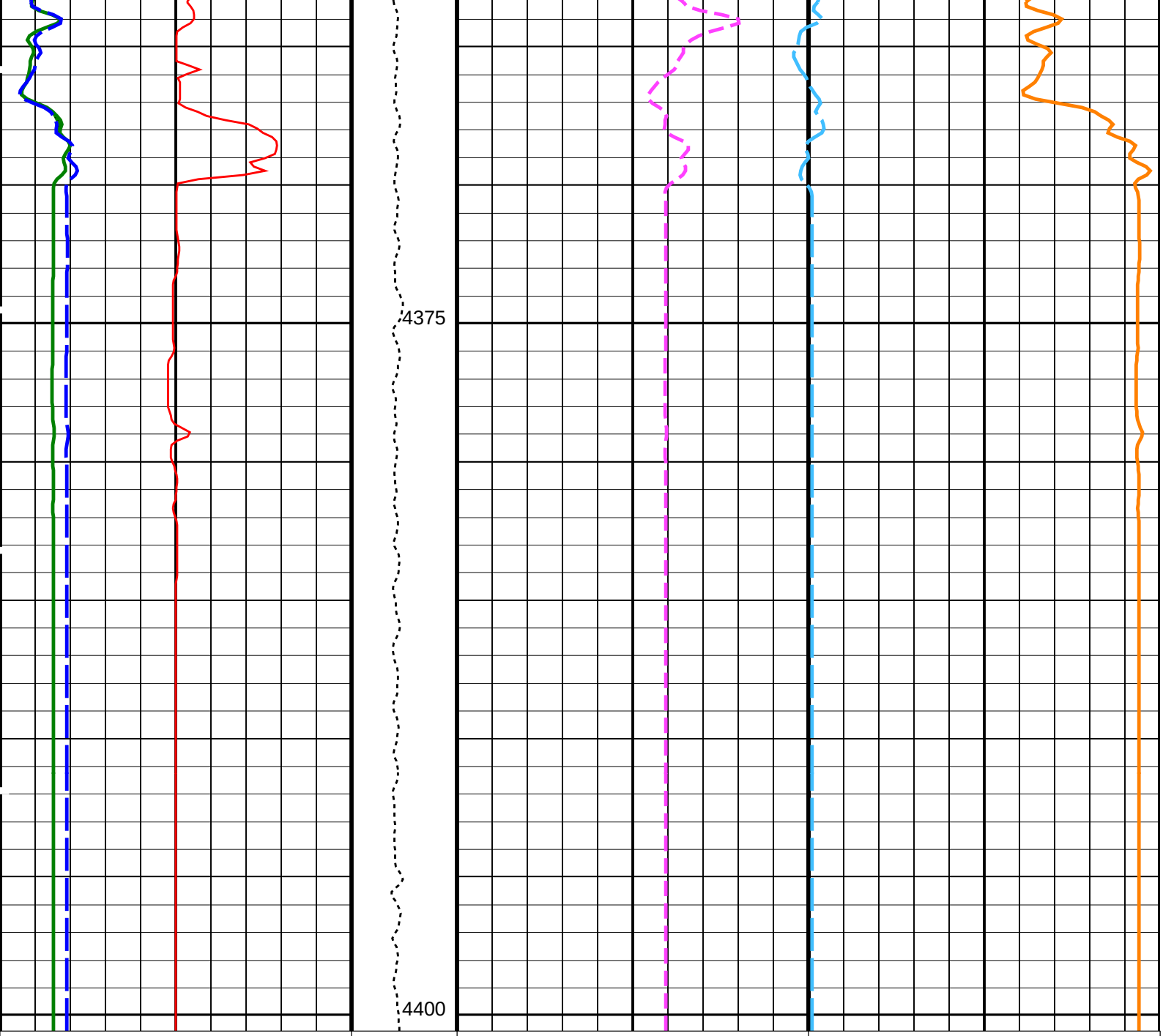


HLDS Caliper (LCAL)
0 (IN) 20

Tension (TENS) (LBF)
10000 0

HNGS Thorium (HTHO)
−5 (PPM) 5

HNGS Potassium (HFK)
−0.01 (V/V) 0.01

HNGS Computed Gamma Ray (HCGR)
0 (GAPI) 100

HNGS Uranium (HURA)
−5 (PPM) 5

Area1
From HCGR to HSGR

HNGS Borehole Potassium (HBHK)
−0.01 (V/V) 0.01

HNGS Spectroscopy Gamma Ray (HSGR)
0 (GAPI) 100

PIP SUMMARY

Time Mark Every 60 S

Parameters

DLIS Name	Description	Value
	HRLT−B: High Resolution Laterolog Array − B	
BHS	Borehole Status	OPEN

GCSE	Generalized Caliper Selection	LCAL	
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	−0.00103029	
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	1.1054	
VBA2	HNGS Detector 2 Variable Barite Factor Running Average	−0.0842659	
EDTC−B: Enhanced DTS Cartridge			
BHS	Borehole Status	OPEN	
GCSE	Generalized Caliper Selection	LCAL	
System and Miscellaneous			
BS	Bit Size	9.875	IN
DFD	Drilling Fluid Density	1.03	G/C3
DO	Depth Offset for Playback	0.0	M
PP	Playback Processing	NORMAL	

Format: HNGSYields Vertical Scale: 1:200 Graphics File Created: 25−Jul−2022 02:27

OP System Version: 19C0−187

HRLT−B	19C0−187	HLDS	19C0−187
LDSC−B	19C0−187	APS−C	19C0−187
HNGC−B	19C0−187	HNGS−BA	19C0−187
EDTC−B	SKK−5169−EDTCB		

Input DLIS Files

DEFAULT	HRLA_LDL_APS_NGS_013LUP	FN:12	PRODUCER	17−Jul−2022 05:56	4400.5 M	4175.7 M

Output DLIS Files

DEFAULT	HRLA_LDL_APS_NGS_044PUP	FN:38	PRODUCER	25−Jul−2022 02:27		

Company: International Ocean Discovery Program Well: Expedition 393, Site U1558D

Input DLIS Files

DEFAULT	HRLA_LDL_APS_NGS_013LUP	FN:12	PRODUCER	17−Jul−2022 05:56	4400.5 M	4175.7 M

Output DLIS Files

DEFAULT	HRLA_LDL_APS_NGS_044PUP	FN:38	PRODUCER	25−Jul−2022 02:27	4400.5 M	4175.8 M

OP System Version: 19C0−187

HRLT−B	19C0−187	HLDS	19C0−187
LDSC−B	19C0−187	APS−C	19C0−187
HNGC−B	19C0−187	HNGS−BA	19C0−187
EDTC−B	SKK−5169−EDTCB		

PIP SUMMARY

Time Mark Every 60 S

APS Quality of Formation Capture

Cross−Section (QSGF)

10 (−−−−) 0

APS Total Correction in APLC (PHICOR_APLC)

−10 (PU) 10

APS Formation Capture Cross−Section (SIGF)

0 (CU) 50

APS Porosity Quality (QSDP)

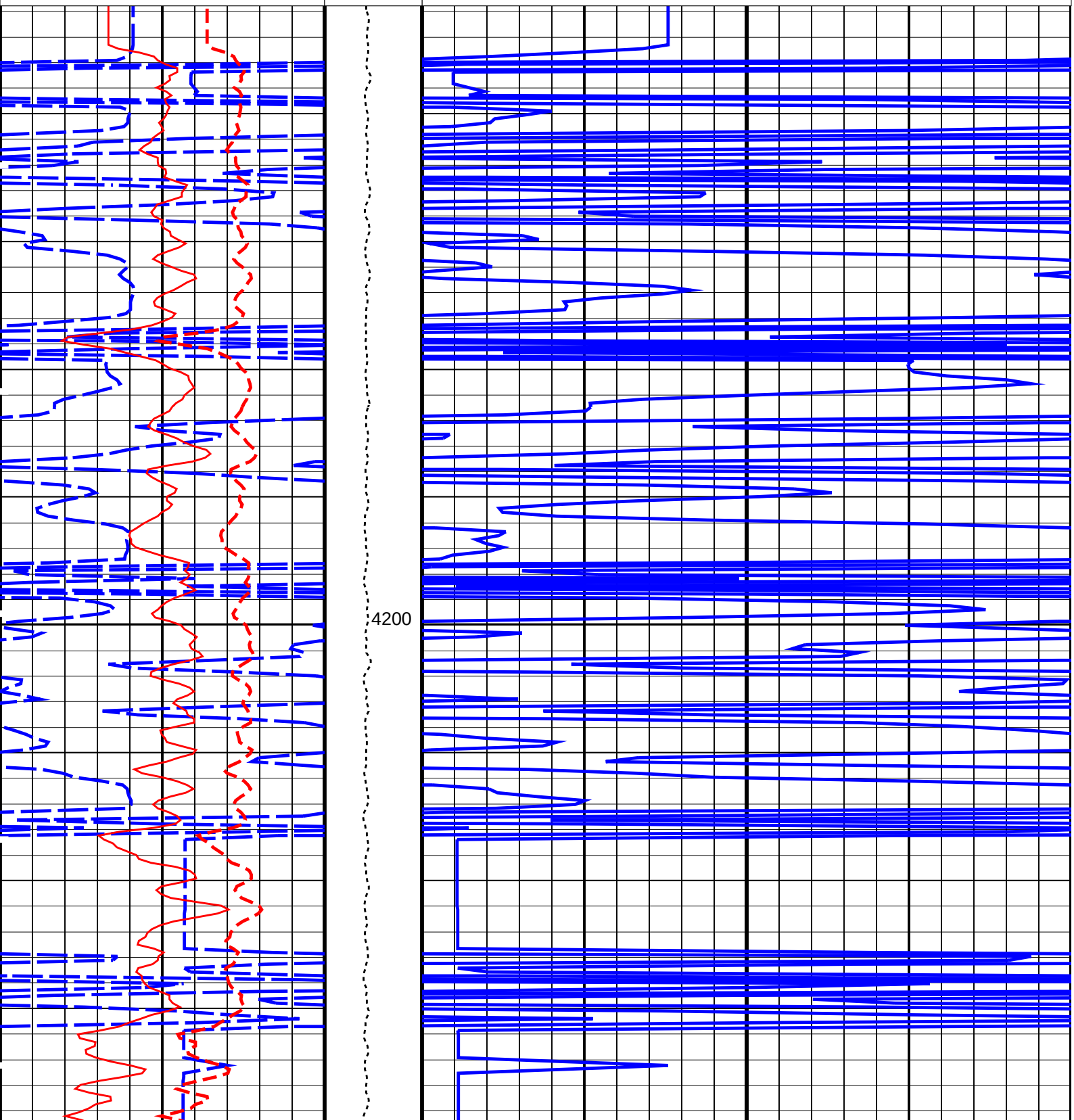
10 (−−−−) 0

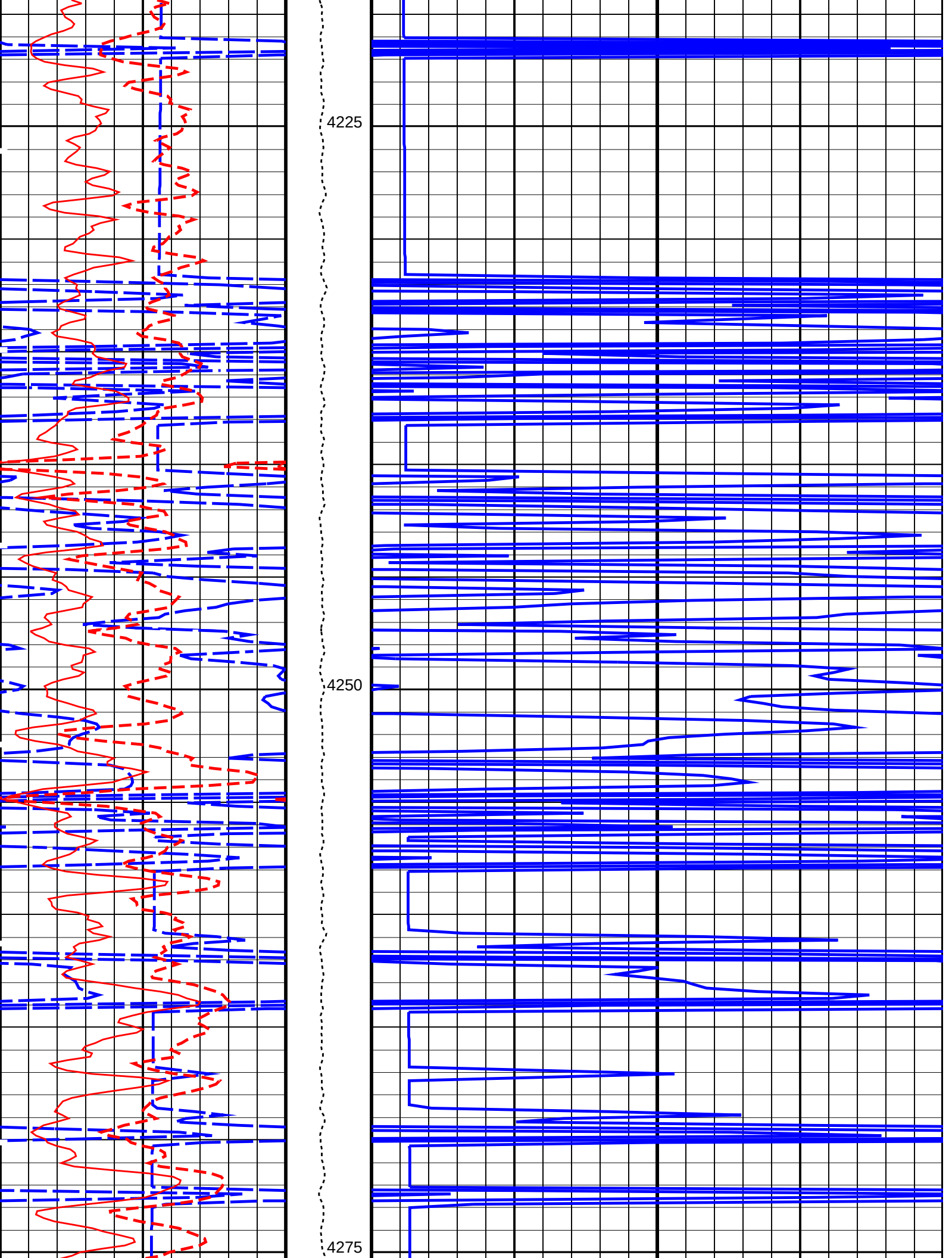
Tension (TENS) (LBF)

10000 0

APS Near/Array Corrected Limestone Porosity (APLC)

60 (PU) 0

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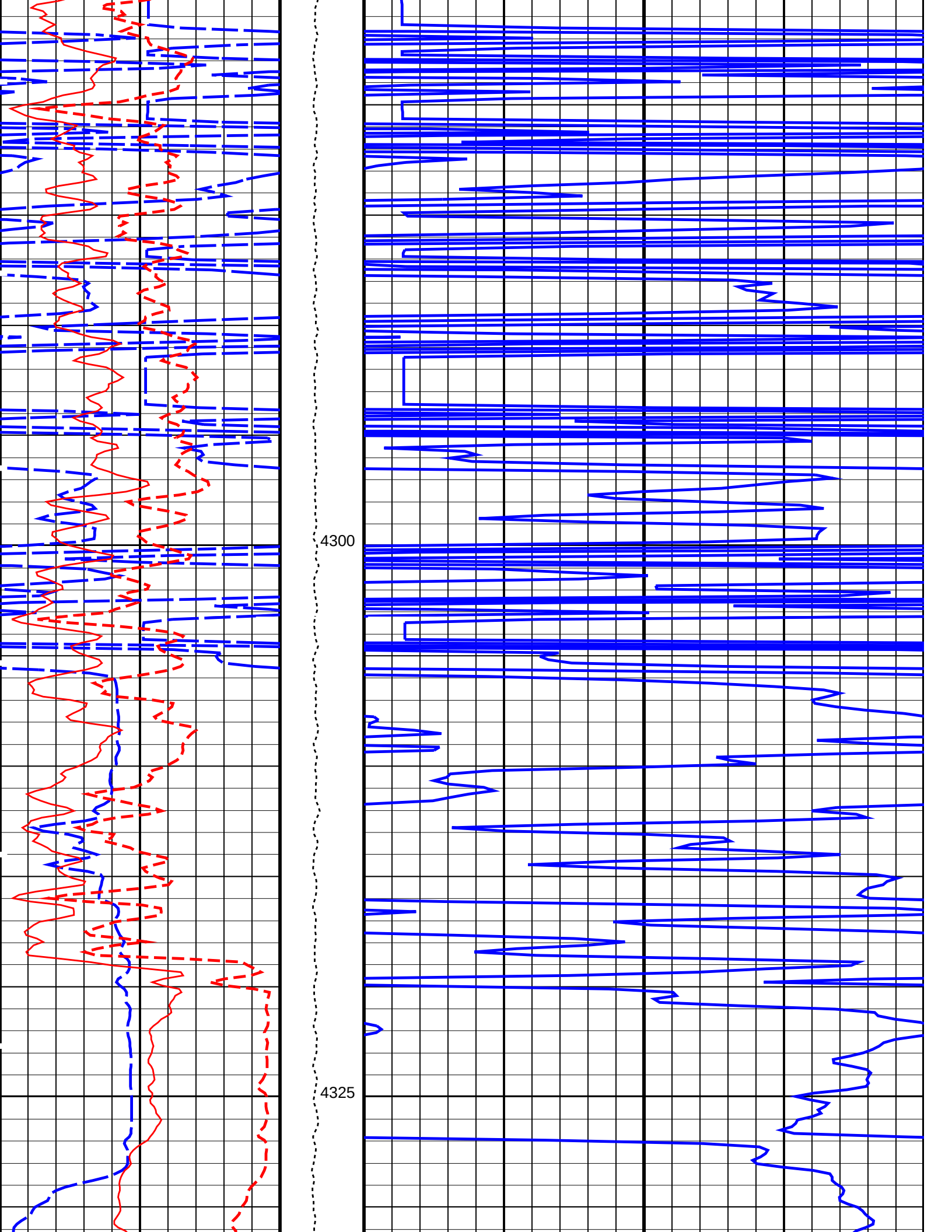
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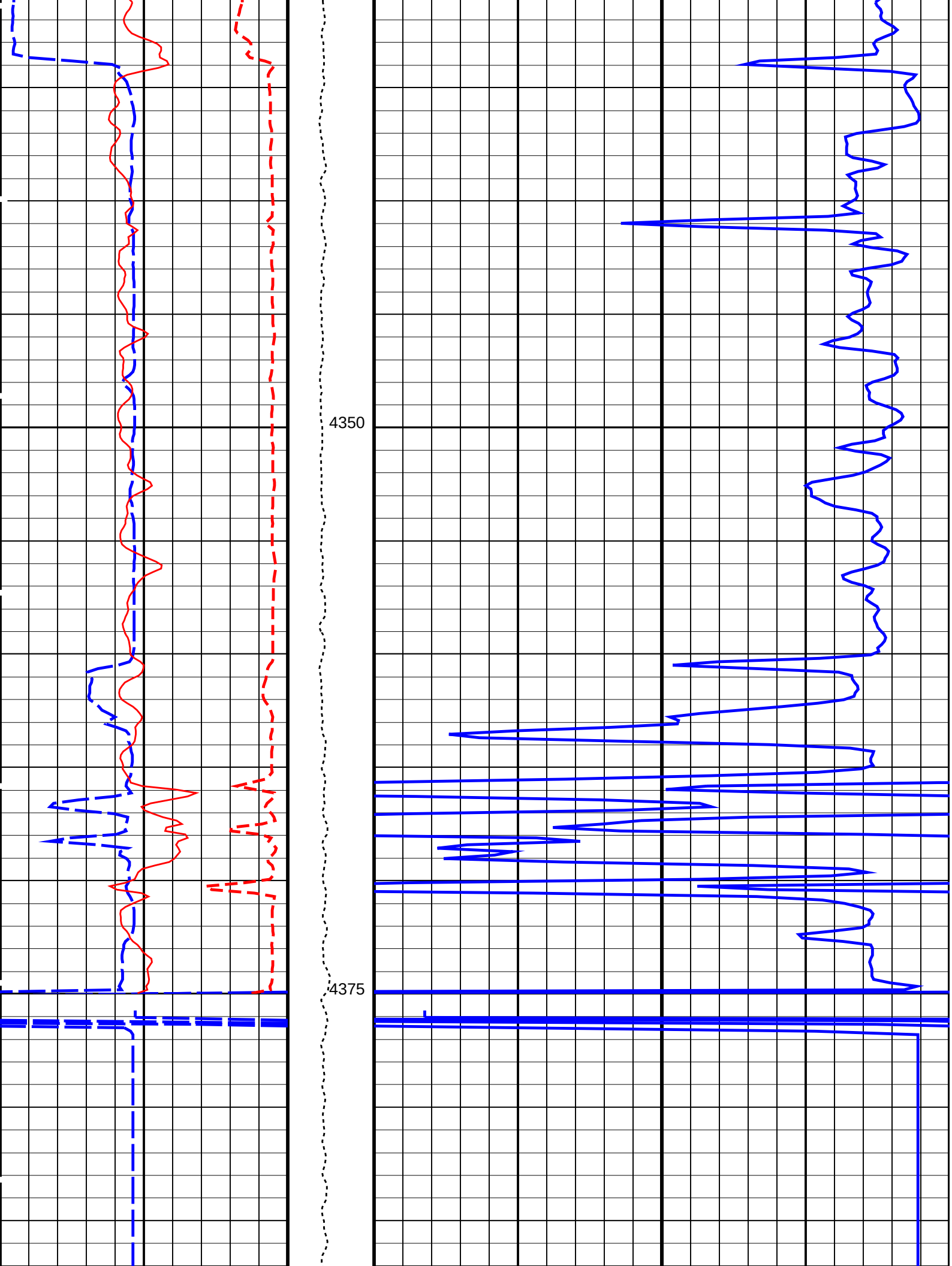
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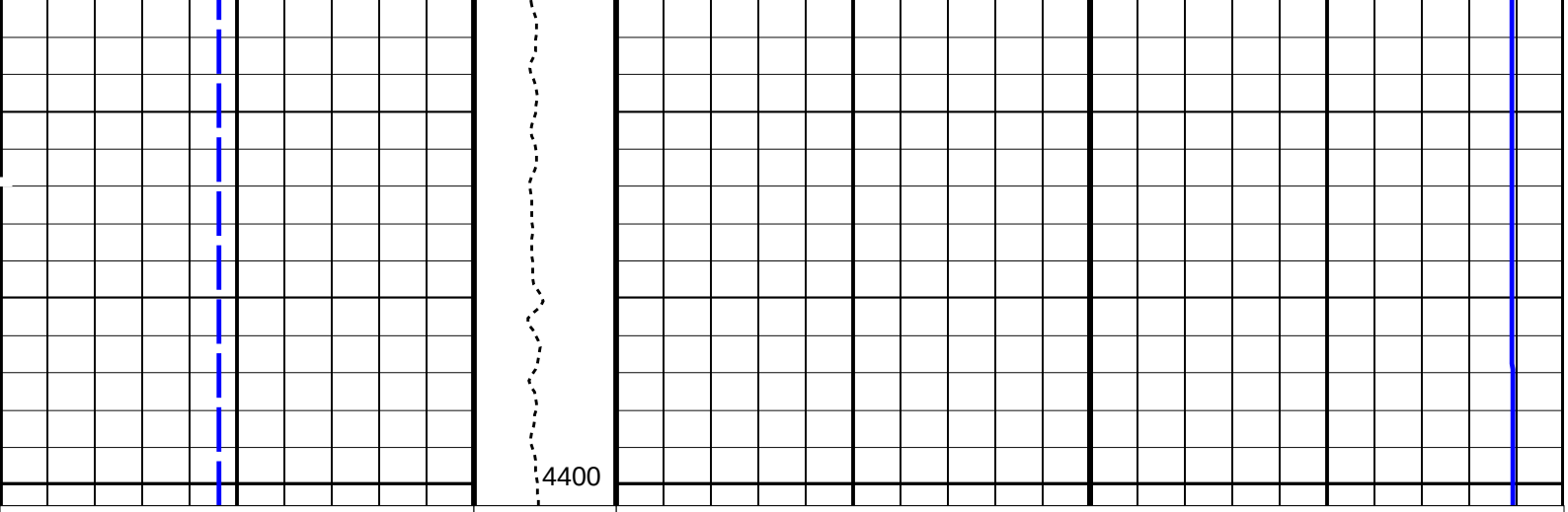


APS Porosity Quality (QSDP)	Tension (TENS) (LBF)	APS Near/Array Corrected Limestone Porosity (APLC)
10 (----) 0	10000 0	60 (PU) 0

APS Formation Capture Cross-Section (SIGF)
0 (CU) 50

APS Total Correction in APLC (PHICOR_APLC)
−10 (PU) 10

APS Quality of Formation Capture Cross-Section (QSGF)
10 (----) 0

PIP SUMMARY

Time Mark Every 60 S

Parameters

DLIS Name	Description	Value	
	HRLT−B: High Resolution Laterolog Array − B		
BHS	Borehole Status	OPEN	
BHT	Bottom Hole Temperature (used in calculations)	20	DEGC
GCSE	Generalized Caliper Selection	LCAL	
GDEV	Average Angular Deviation of Borehole from Normal	0	DEG
GGRD	Geothermal Gradient	0.018227	DC/M
GRSE	Generalized Mud Resistivity Selection	CHART_GEN_9	
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE	
MATR	Rock Matrix for Neutron Porosity Corrections	LIMESTONE	
SHT	Surface Hole Temperature	20	DEGC
	HLDS: Hostile Litho−Density Sonde		
DPPM	Density Porosity Processing Mode	HIRS	
	APS−C: Accelerator−Porosity Tool		
	APS Software Version	0	
AASD	APS Thermal and Array Detectors High Voltage Setting	1976.24	V
ADSO	APS Array Detectors Data Source Switch	Both	
AFSD	APS Far Detector High Voltage Setting	2067.55	V
AHCS	APS Holesize Correction Source	BS	
AHSS	APS Holesize Correction Switch	ON	
AMTY	APS Environmental Corrections Mud Type	WaterBaseBarite	
ANSD	APS Near Detector High Voltage Setting	1737.8	V
ASOS	APS Standoff Correction Switch	ON	
ATSS	APS Temperature−Pressure−Salinity Correction Switch	ON	
BHFL_APS	APS TNPH Borehole Fluid Type	WATER	
BHS	Borehole Status	OPEN	
BHT	Bottom Hole Temperature (used in calculations)	20	DEGC
BSCO_APS	APS TNPH Borehole Salinity Correction Option	YES	
DPPM	Density Porosity Processing Mode	HIRS	
DSCO_APS	APS TNPH Density Source Correction Option	COMPUTED	
FSAL	Formation Salinity	−50000	PPM
FSCO_APS	APS TNPH Formation Salinity Correction Option	NO	
GCSE	Generalized Caliper Selection	LCAL	
GDEV	Average Angular Deviation of Borehole from Normal	0	DEG
GGRD	Geothermal Gradient	0.018227	DC/M
GRSE	Generalized Mud Resistivity Selection	CHART_GEN_9	

GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE	
HSCO_APS	APS TNPH Hole Size Correction Option	YES	
MATR	Rock Matrix for Neutron Porosity Corrections	LIMESTONE	
MCCO_APS	APS TNPH Mud Cake Correction Option	YES	
MCOR_APS	APS TNPH Mud Correction	NATU	
MWCO_APS	APS TNPH Mud Weight Correction Option	YES	
NARC	APS Near/Array Calibration Ratio	1.08341	
NFRC	APS Near/Far Calibration Ratio	0.942369	
PTCO_APS	APS TNPH Pressure/Temperature Correction Option	YES	
SHT	Surface Hole Temperature	20	DEGC
TNCO_APS	APS TNPH Computation Option	NO	
HNGS−BA: Hostile Natural Gamma Ray Sonde			
BHS	Borehole Status	OPEN	
BHT	Bottom Hole Temperature (used in calculations)	20	DEGC
GCSE	Generalized Caliper Selection	LCAL	
GDEV	Average Angular Deviation of Borehole from Normal	0	DEG
GGRD	Geothermal Gradient	0.018227	DC/M
GRSE	Generalized Mud Resistivity Selection	CHART_GEN_9	
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE	
MATR	Rock Matrix for Neutron Porosity Corrections	LIMESTONE	
SHT	Surface Hole Temperature	20	DEGC
EDTC−B: Enhanced DTS Cartridge			
BHS	Borehole Status	OPEN	
BHT	Bottom Hole Temperature (used in calculations)	20	DEGC
DPPM	Density Porosity Processing Mode	HIRS	
FSAL	Formation Salinity	−50000	PPM
GCSE	Generalized Caliper Selection	LCAL	
GDEV	Average Angular Deviation of Borehole from Normal	0	DEG
GGRD	Geothermal Gradient	0.018227	DC/M
GRSE	Generalized Mud Resistivity Selection	CHART_GEN_9	
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE	
MATR	Rock Matrix for Neutron Porosity Corrections	LIMESTONE	
SHT	Surface Hole Temperature	20	DEGC
System and Miscellaneous			
BS	Bit Size	9.875	IN
BSAL	Borehole Salinity	38000.00	PPM
CWEI	Casing Weight	55.40	LB/F
DFD	Drilling Fluid Density	1.03	G/C3
DO	Depth Offset for Playback	0.0	M
FLEV	Fluid Level	−50000.00	M
MST	Mud Sample Temperature	23.00	DEGC
PP	Playback Processing	NORMAL	
RMFS	Resistivity of Mud Filtrate Sample	−50000.0000	OHMM
TD	Total Depth	10190.3	FT

Format: APSLiquidPorosity Vertical Scale: 1:200 Graphics File Created: 25−Jul−2022 02:27

OP System Version: 19C0−187

HRLT−B	19C0−187	HLDS	19C0−187
LDSC−B	19C0−187	APS−C	19C0−187
HNGC−B	19C0−187	HNGS−BA	19C0−187
EDTC−B	SKK−5169−EDTCB		

Input DLIS Files

DEFAULT	HRLA_LDL_APS_NGS_013LUP	FN:12	PRODUCER	17−Jul−2022 05:56	4400.5 M	4175.7 M

Output DLIS Files

DEFAULT	HRLA_LDL_APS_NGS_044PUP	FN:38	PRODUCER	25−Jul−2022 02:27		

Company: International Ocean Discovery Program Well: Expedition 393, Site U1558D

Input DLIS Files

DEFAULT	HRLA_LDL_APS_NGS_013LUP	FN:12	PRODUCER	17−Jul−2022 05:56	4400.5 M	4175.7 M

Output DLIS Files

DEFAULT	HRLA_LDL_APS_NGS_044PUP	FN:38	PRODUCER	25−Jul−2022 02:27	4400.5 M	4175.8 M

OP System Version: 19C0−187

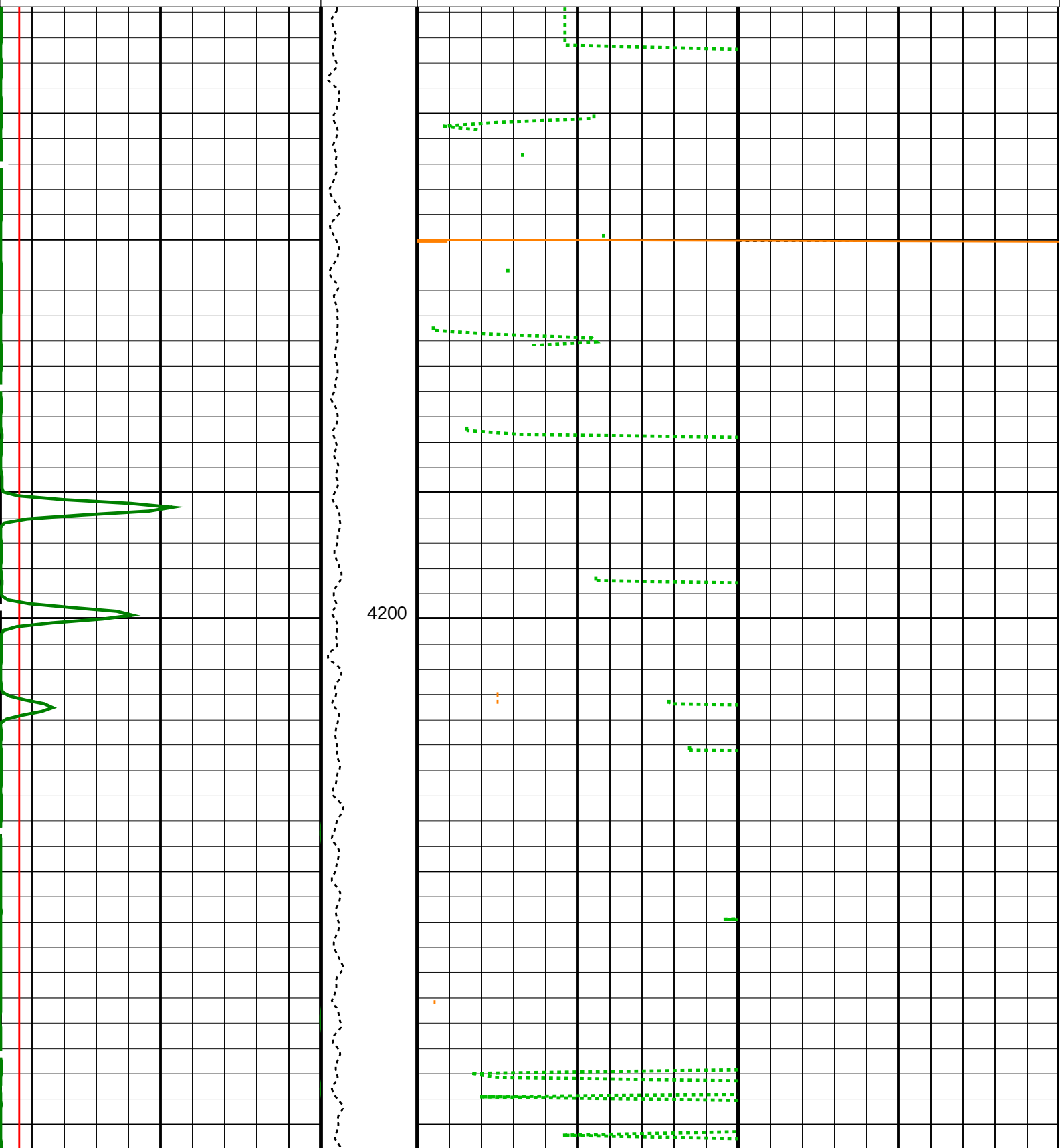
HRLT−B	19C0−187	HLDS	19C0−187
LDSC−B	19C0−187	APS−C	19C0−187

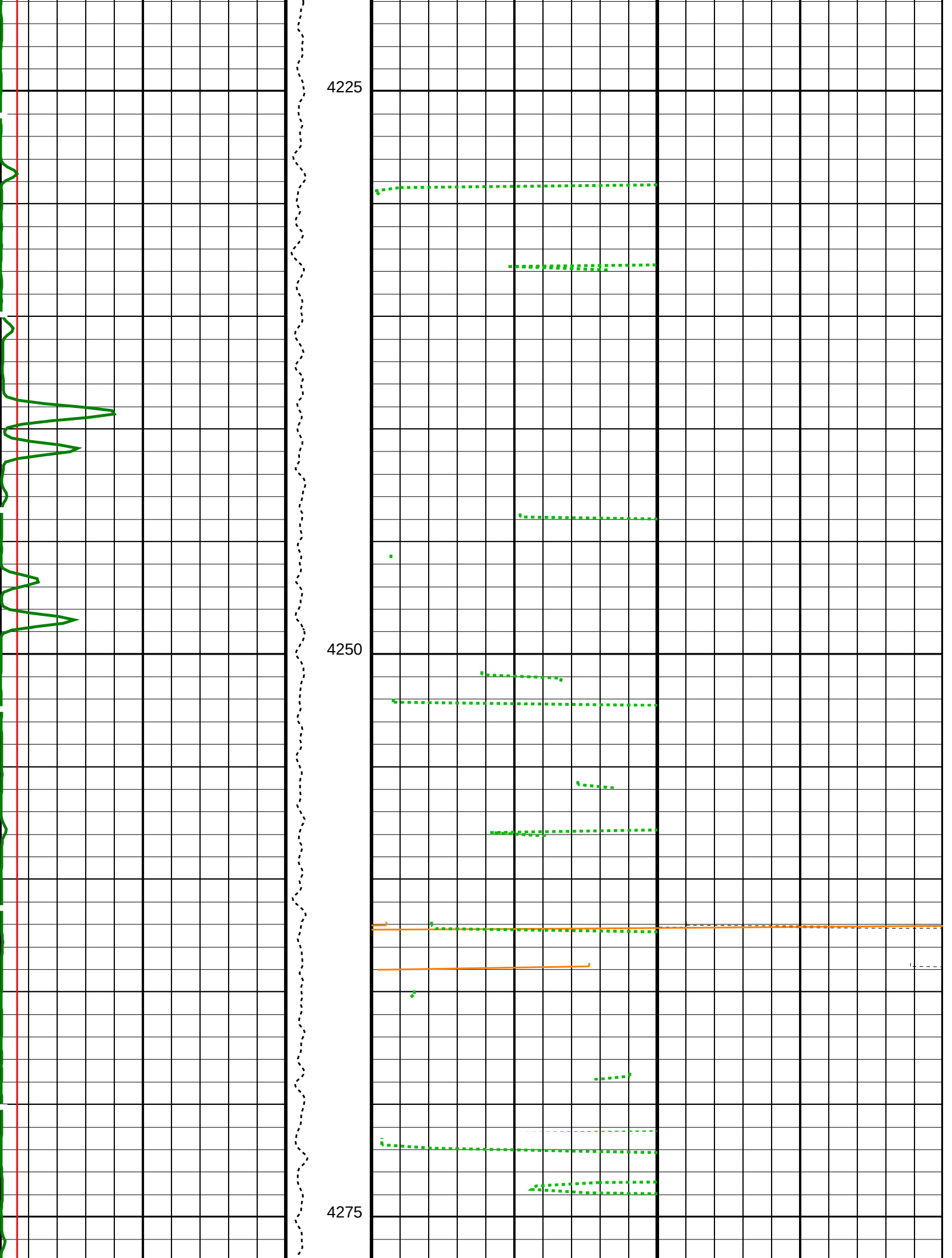
HNGC−B	19C0−187	HNGS−BA	19C0−187
EDTC−B	SKK−5169−EDTCB		

PIP SUMMARY

Time Mark Every 60 S

HNGS Spectroscopy Gamma Ray (HSGR)		HLDS Long Spaced Photoelectric Effect (PEFL)	HLDS Bulk Density Correction (DRH)
0 (GAPI) 150		0 (−−−−) 10	−0.25 (G/C3) 0.25
HLDS Caliper (LCAL)	**Tension (TENS) (LBF)**	**HLDS Bulk Density (RHOM)**	
0 (IN) 20	0 5000	3 (G/C3) 1	




4225
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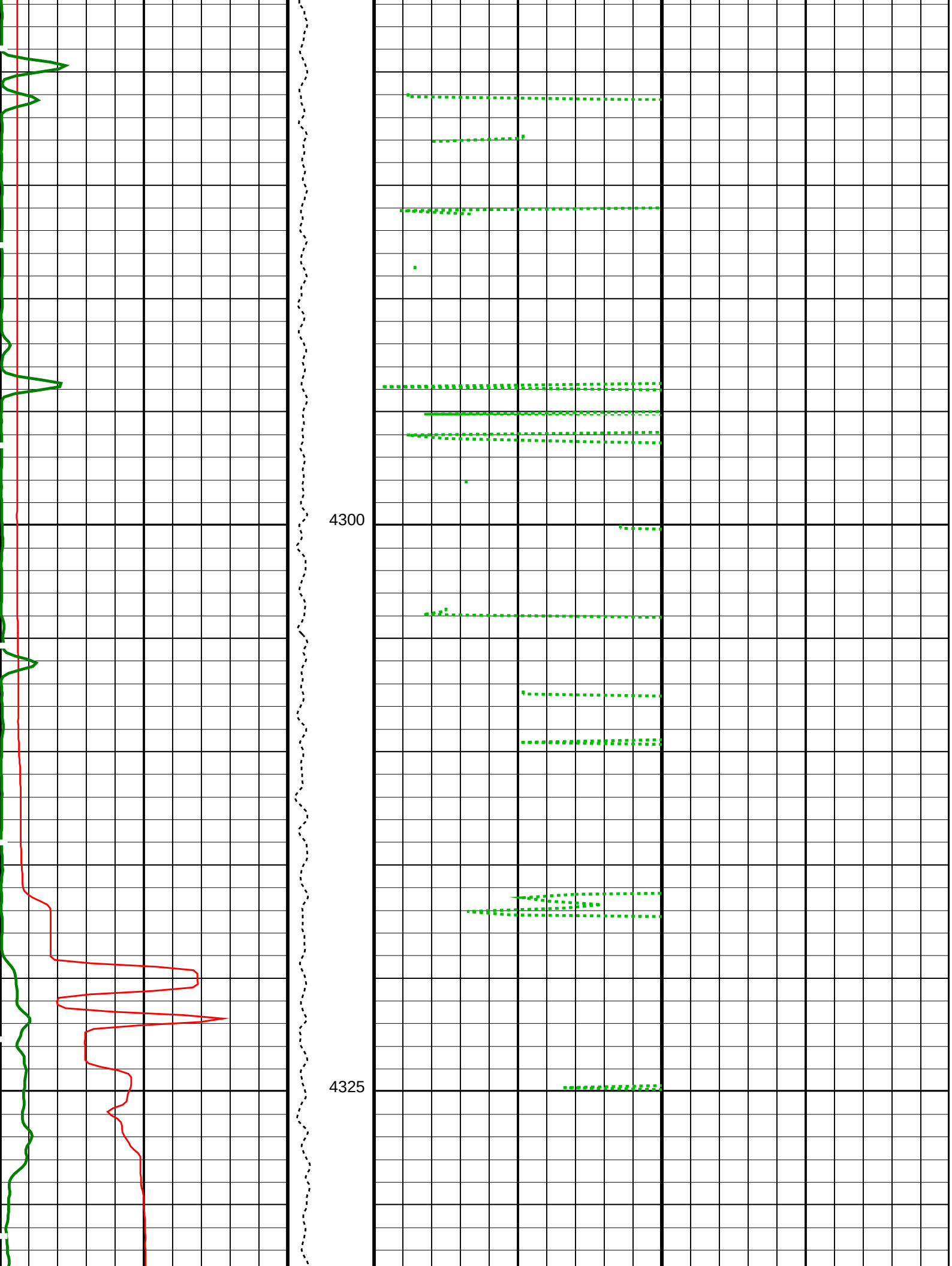
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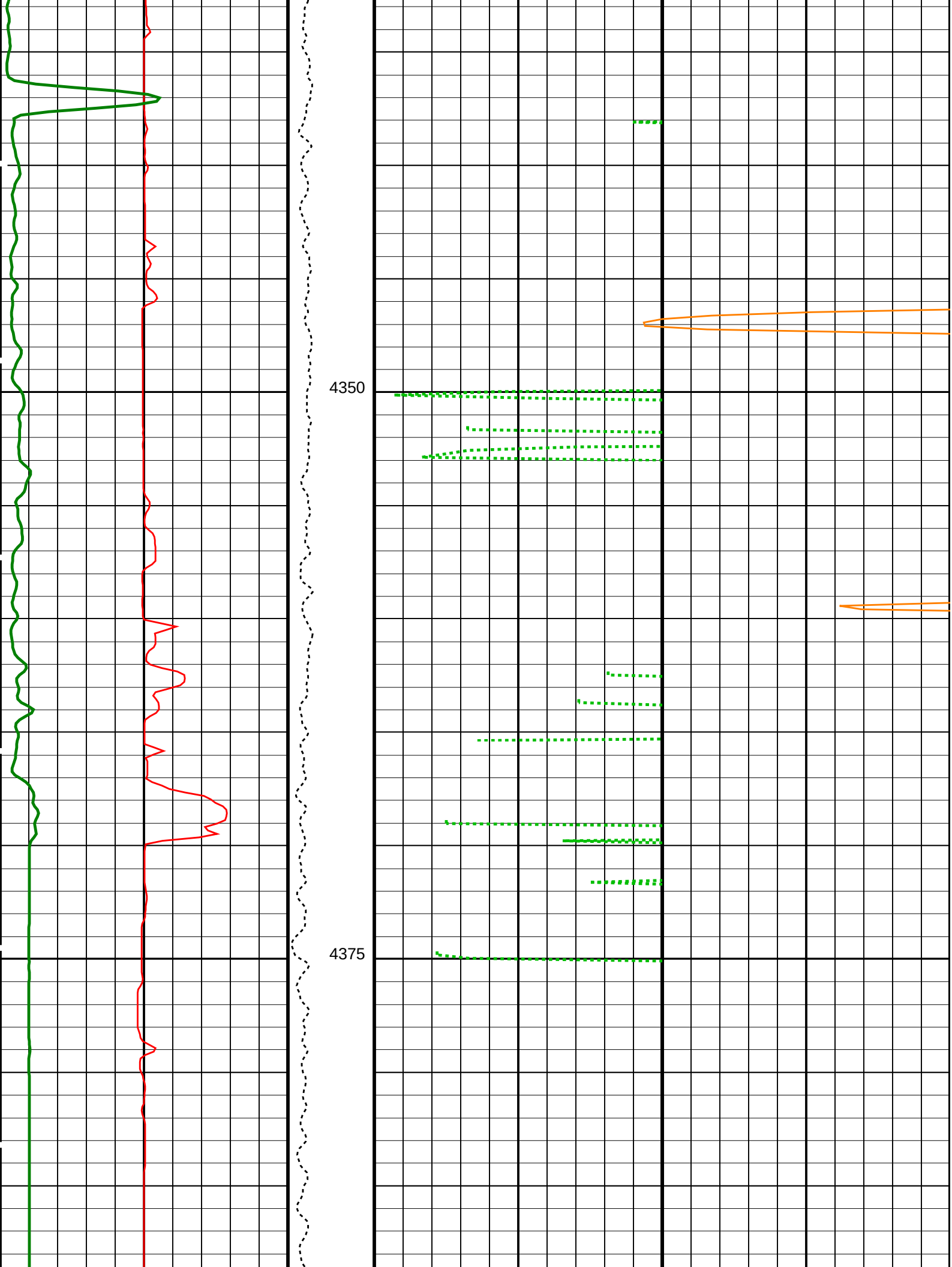
4325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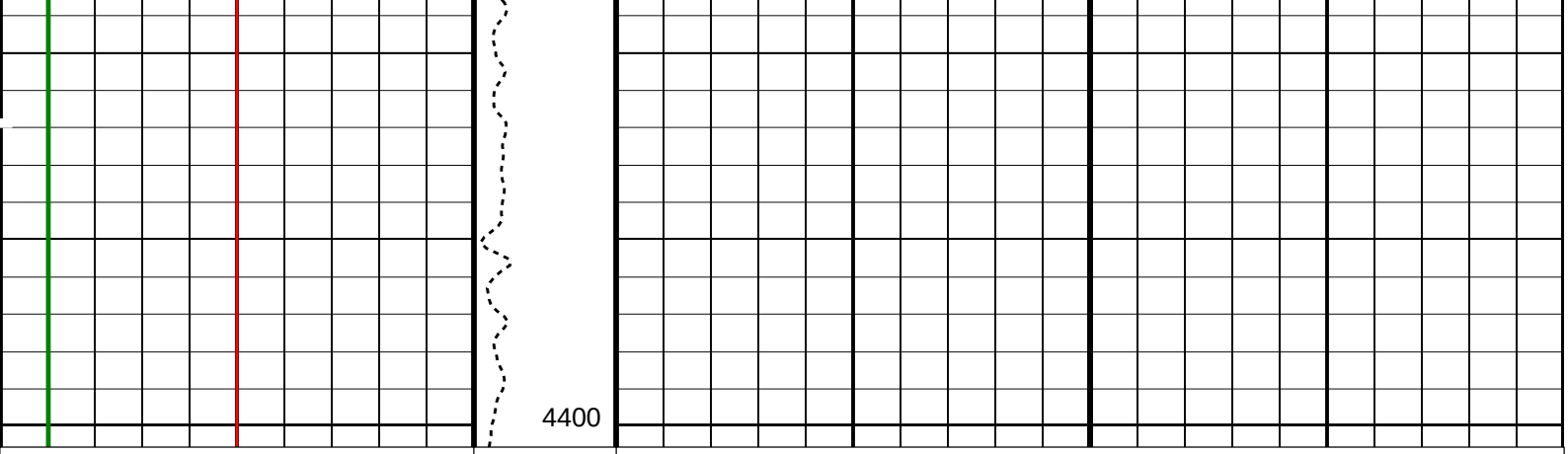
4375



HLDS Caliper (LCAL)	Tension (TENS)	HLDS Bulk Density (RHOM)
0 (IN) 20	0 5000 (LBF)	3 (G/C3) 1

HNGS Spectroscopy Gamma Ray (HSGR)	HLDS Long Spaced Photoelectric Effect (PEFL)	HLDS Bulk Density Correction (DRH)
0 (GAPI) 150	0 (----) 10	−0.25 (G/C3) 0.25

PIP SUMMARY

Time Mark Every 60 S

Parameters

DLIS Name	Description	Value	
	HRLT−B: High Resolution Laterolog Array − B		
BHS	Borehole Status	OPEN	
GCSE	Generalized Caliper Selection	LCAL	
	HLDS: Hostile Litho−Density Sonde		
DHC	Density Hole Correction	CALIPER	
DPPM	Density Porosity Processing Mode	HIRS	
FD	Fluid Density	1	G/C3
LATC	HLDS Activation Correction	OFF	
MDEN	Matrix Density	2.71	G/C3
	APS−C: Accelerator−Porosity Tool		
	APS Software Version	0	
BHS	Borehole Status	OPEN	
DPPM	Density Porosity Processing Mode	HIRS	
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	−0.00103029	
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	1.1054	
VBA2	HNGS Detector 2 Variable Barite Factor Running Average	−0.0842659	
	EDTC−B: Enhanced DTS Cartridge		
BHS	Borehole Status	OPEN	
DPPM	Density Porosity Processing Mode	HIRS	
GCSE	Generalized Caliper Selection	LCAL	
	System and Miscellaneous		
BS	Bit Size	9.875	IN
DFD	Drilling Fluid Density	1.03	G/C3
DO	Depth Offset for Playback	0.0	M
PP	Playback Processing	NORMAL	

Format: HLDSDensityPE Vertical Scale: 1:200 Graphics File Created: 25-Jul-2022 02:27

OP System Version: 19C0-187

HRLT-B	19C0-187	HLDS	19C0-187
LDSC-B	19C0-187	APS-C	19C0-187
HNGC-B	19C0-187	HNGS-BA	19C0-187
EDTC-B	SKK-5169-EDTCB		

Input DLIS Files

DEFAULT	HRLA_LDL_APS_NGS_013LUP	FN:12	PRODUCER	17-Jul-2022 05:56	4400.5 M	4175.7 M

Output DLIS Files

DEFAULT	HRLA_LDL_APS_NGS_044PUP	FN:38	PRODUCER	25-Jul-2022 02:27		

Company: International Ocean Discovery Program Well: Expedition 393, Site U1558D

Input DLIS Files

DEFAULT	HRLA_LDL_APS_NGS_013LUP	FN:12	PRODUCER	17-Jul-2022 05:56	4400.5 M	4175.7 M

Output DLIS Files

DEFAULT	HRLA_LDL_APS_NGS_044PUP	FN:38	PRODUCER	25-Jul-2022 02:27	4400.5 M	4175.8 M

OP System Version: 19C0-187

HRLT-B	19C0-187	HLDS	19C0-187
LDSC-B	19C0-187	APS-C	19C0-187
HNGC-B	19C0-187	HNGS-BA	19C0-187
EDTC-B	SKK-5169-EDTCB		

PIP SUMMARY

Time Mark Every 60 S

HRLT Mud Resistivity (RM_HRLT)
0.02 (OHMM) 200

HRLT Resistivity 5 (RLA5)
0.2 (OHMM) 2000

HRLT Resistivity 4 (RLA4)
0.2 (OHMM) 2000

HNGS Spectroscopy Gamma Ray (HSGR)
0 (GAPI) 150

HRLT Resistivity 3 (RLA3)
0.2 (OHMM) 2000

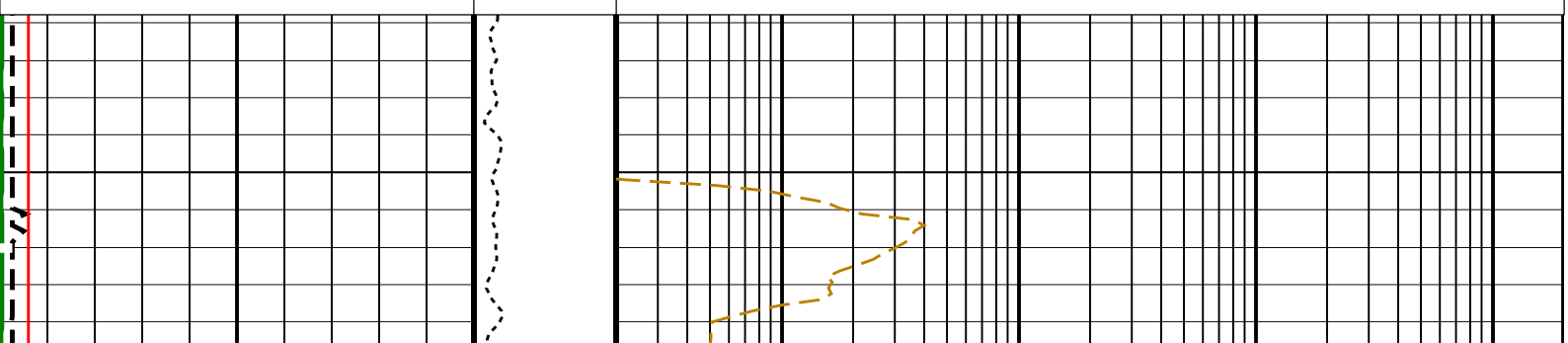
Invasion Diameter (DI_HRLT)
0 (IN) 50

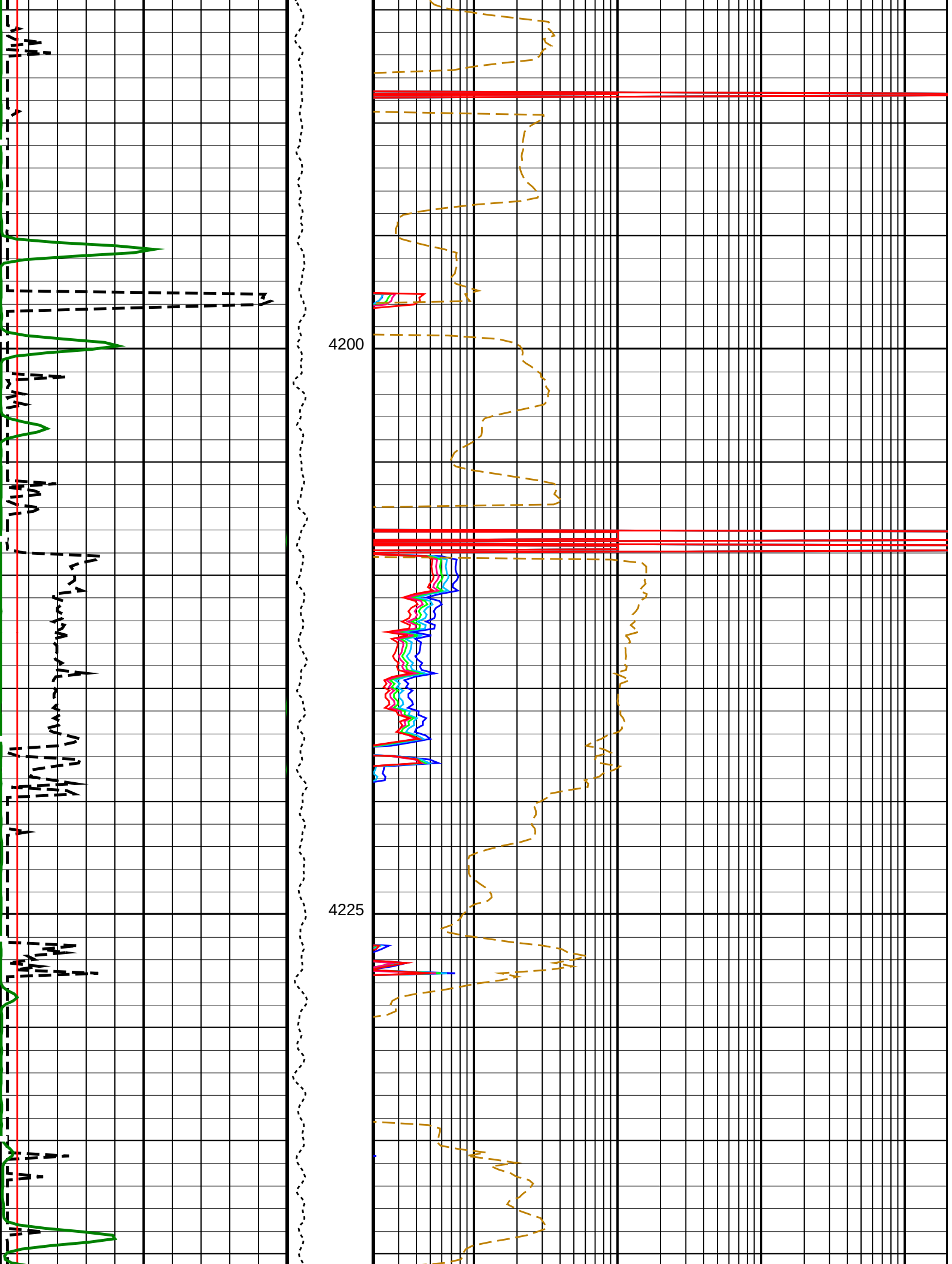
HRLT Resistivity 2 (RLA2)
0.2 (OHMM) 2000

HLDS Caliper (LCAL)
0 (IN) 20

Tension (TENS) (LBF)
0 5000

HRLT Resistivity 1 (RLA1)
0.2 (OHMM) 2000

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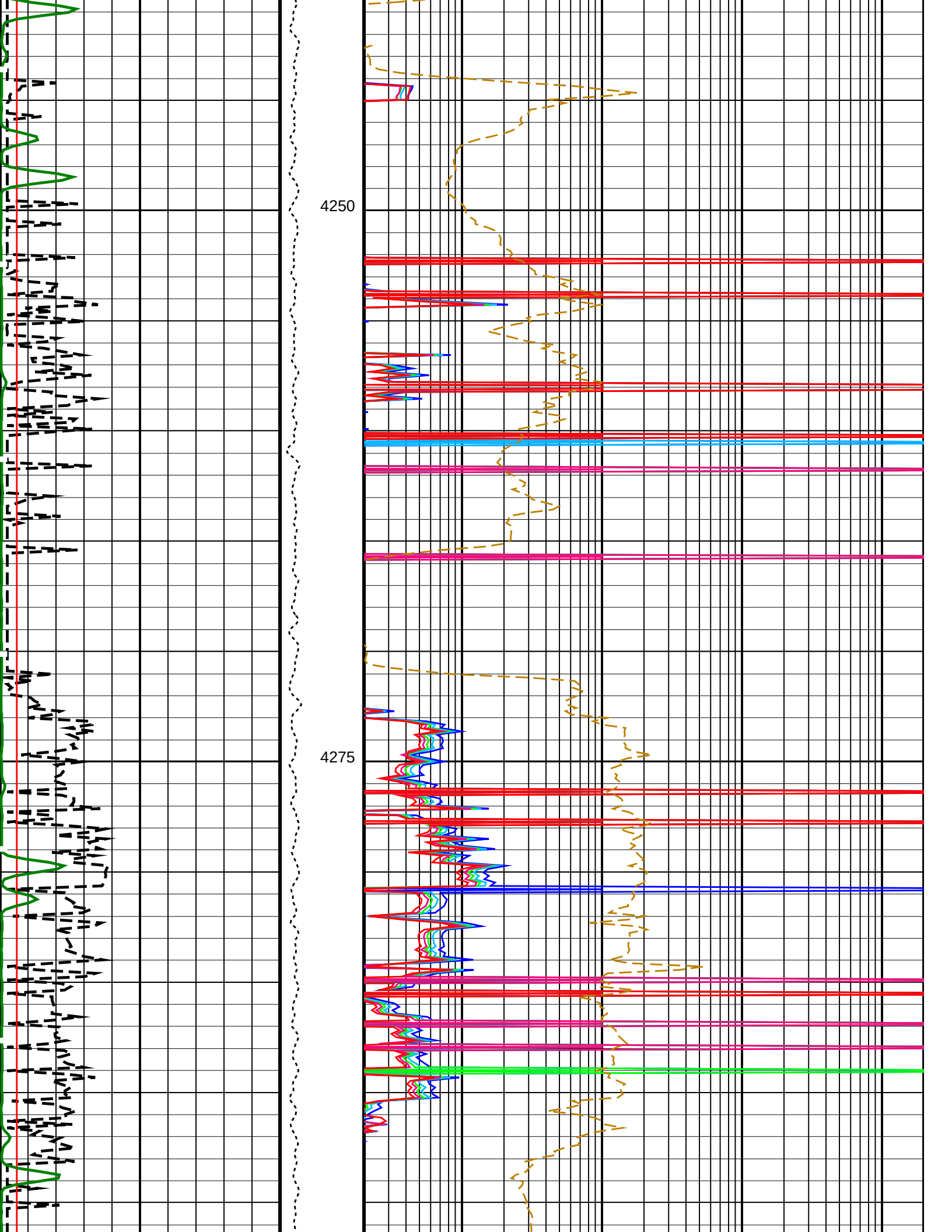
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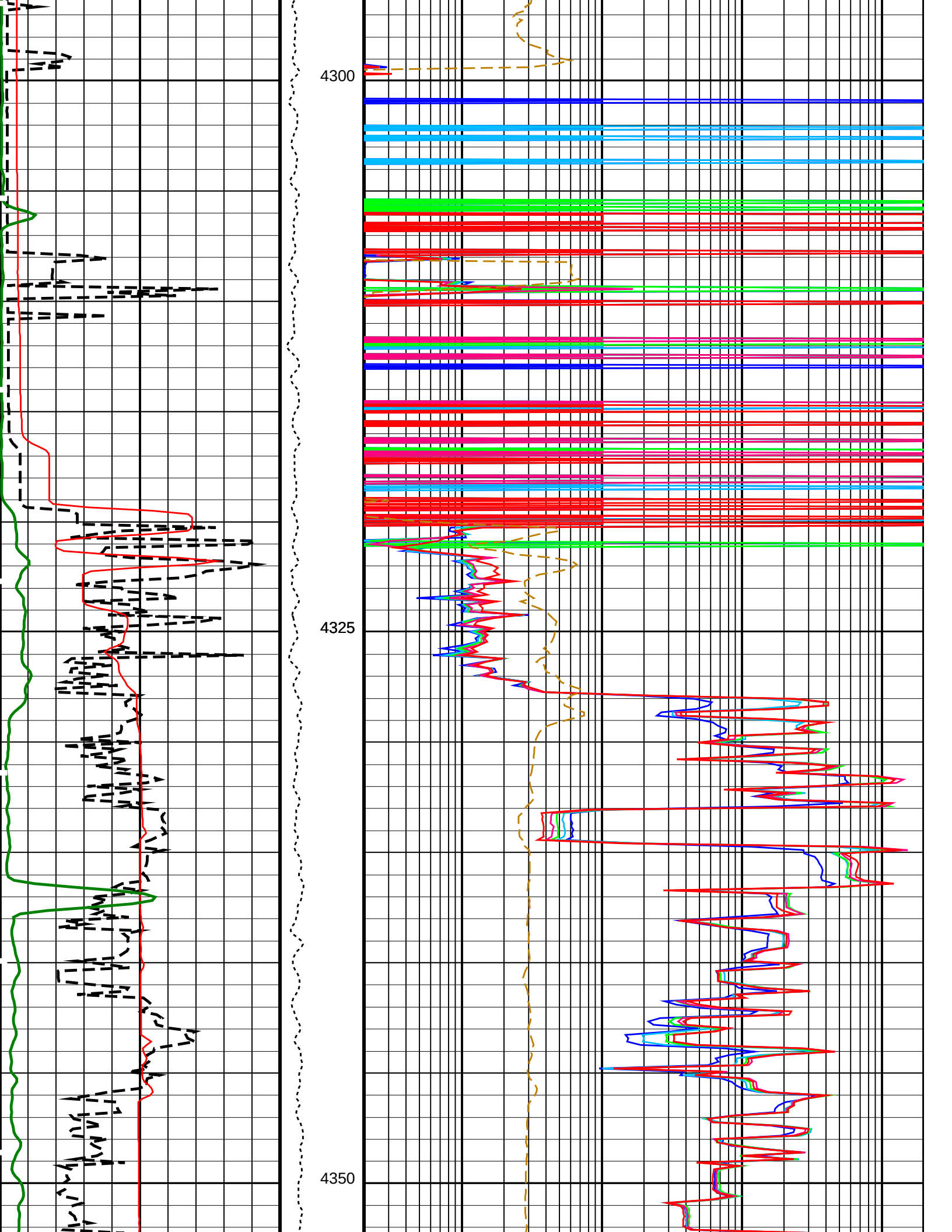
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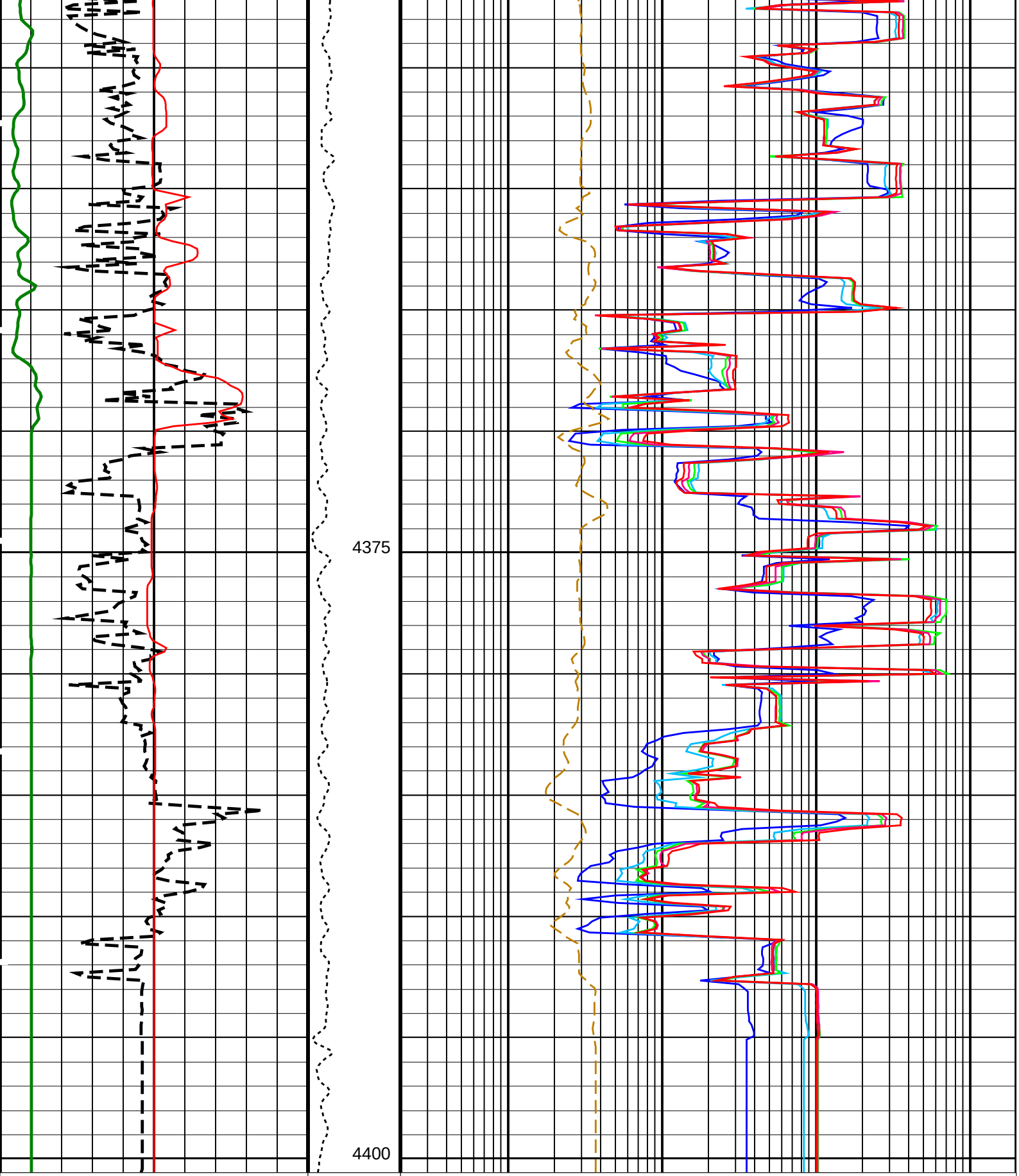

HLDS Caliper (LCAL)
0 (IN) 20

Invasion Diameter (DI_HRLT)
0 (IN) 50

HNGS Spectroscopy Gamma Ray (HSGR)

Tension (TENS) (LBF)
0 5000

HRLT Resistivity 1 (RLA1)
0.2 (OHMM) 2000

HRLT Resistivity 2 (RLA2)
0.2 (OHMM) 2000

HRLT Resistivity 3 (RLA3)

0	(GAPI)	150

0.2	(OHMM)	2000

HRLT Resistivity 4 (RLA4)

0.2	(OHMM)	2000

HRLT Resistivity 5 (RLA5)

0.2	(OHMM)	2000

HRLT Mud Resistivity (RM_HRLT)

0.02	(OHMM)	200

PIP SUMMARY

Time Mark Every 60 S

Parameters

DLIS Name	Description	Value	
	HRLT−B: High Resolution Laterolog Array − B		
BHS	Borehole Status	OPEN	
BHT	Bottom Hole Temperature (used in calculations)	20	DEGC
GCSE	Generalized Caliper Selection	LCAL	
GGRD	Geothermal Gradient	0.018227	DC/M
GRSE	Generalized Mud Resistivity Selection	CHART_GEN_9	
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE	
KFAC_HRLT	HRLT K Factor Option	SONDE	
PROCINV	Inversion Selection	ON	
PROCMFL	Inversion Micro−Resistivity Selection	NO_EXTERNAL_RXO	
PROCMSO	Mechanical Standoff Fin Size	0	IN
PROCRM	Processing Mud Resistivity Select	HRLT_Compute	
PROCSPO	Sonde Position	Centered	
SHT	Surface Hole Temperature	20	DEGC
	APS−C: Accelerator−Porosity Tool		
BHS	Borehole Status	OPEN	
BHT	Bottom Hole Temperature (used in calculations)	20	DEGC
GCSE	Generalized Caliper Selection	LCAL	
GGRD	Geothermal Gradient	0.018227	DC/M
GRSE	Generalized Mud Resistivity Selection	CHART_GEN_9	
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE	
SHT	Surface Hole Temperature	20	DEGC
	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	
BHT	Bottom Hole Temperature (used in calculations)	20	DEGC
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	
GGRD	Geothermal Gradient	0.018227	DC/M
GRSE	Generalized Mud Resistivity Selection	CHART_GEN_9	
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE	
H1P	HNGS Detector 1 Allow/Disallow In Processing	ALLOW	
H2P	HNGS Detector 2 Allow/Disallow In Processing	ALLOW	
HABK	HNGS Borehole Potassium Running Average	−0.00103029	
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	
SHT	Surface Hole Temperature	20	DEGC
TPOS	Tool Position	ECCE	
VBA1	HNGS Detector 1 Variable Barite Factor Running Average	1.1054	
VBA2	HNGS Detector 2 Variable Barite Factor Running Average	−0.0842659	
	EDTC−B: Enhanced DTS Cartridge		
BHS	Borehole Status	OPEN	
BHT	Bottom Hole Temperature (used in calculations)	20	DEGC
GCSE	Generalized Caliper Selection	LCAL	
GGRD	Geothermal Gradient	0.018227	DC/M
GRSE	Generalized Mud Resistivity Selection	CHART_GEN_9	
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE	
SHT	Surface Hole Temperature	20	DEGC
	System and Miscellaneous		
BS	Bit Size	9.875	IN
DFD	Drilling Fluid Density	1.03	G/C3
DO	Depth Offset for Playback	0.0	M

DO	Depth Offset for Playback	0.0	M
MST	Mud Sample Temperature	23.00	DEGC
PP	Playback Processing	NORMAL	
TD	Total Depth	10190.3	FT

Format: HRLT **Vertical Scale: 1:200** **Graphics File Created: 25−Jul−2022 02:27**

OP System Version: 19C0−187

HRLT−B	19C0−187	HLDS	19C0−187
LDSC−B	19C0−187	APS−C	19C0−187
HNGC−B	19C0−187	HNGS−BA	19C0−187
EDTC−B	SKK−5169−EDTCB		

Input DLIS Files

DEFAULT	HRLA_LDL_APS_NGS_013LUP	FN:12	PRODUCER	17−Jul−2022 05:56	4400.5 M	4175.7 M

Output DLIS Files

DEFAULT	HRLA_LDL_APS_NGS_044PUP	FN:38	PRODUCER	25−Jul−2022 02:27

Schlumberger

Callibrations

MAXIS Field Log

Calibration and Check Summary

Measurement	Nominal	Master	Before	After	Change	Limit	Units
High Resolution Laterolog Array − B Wellsite Calibration − HRLT M01							
Before: 4−May−2022 20:43							
HRLT M0−M1 Voltage Plus − 0	0	N/A	−318.3	N/A	N/A	9.681	UV
HRLT M0−M1 Voltage Plus − 1	0	N/A	−330.7	N/A	N/A	9.681	UV
HRLT M0−M1 Voltage Plus − 2	0	N/A	−338.5	N/A	N/A	9.681	UV
HRLT M0−M1 Voltage Plus − 3	0	N/A	−328.8	N/A	N/A	9.681	UV
HRLT M0−M1 Voltage Plus − 4	0	N/A	−319.7	N/A	N/A	9.681	UV
HRLT M0−M1 Voltage Plus − 5	0	N/A	−321.6	N/A	N/A	9.681	UV
HRLT M0−M1 Voltage Plus − 6	0	N/A	319.9	N/A	N/A	9.681	UV
HRLT M0−M1 Voltage Plus − 7	0	N/A	−322.7	N/A	N/A	9.681	UV
High Resolution Laterolog Array − B Wellsite Calibration − HRLT M12							
Before: 4−May−2022 20:43							
HRLT M1−M2 Voltage Plus − 0	0	N/A	1738	N/A	N/A	53.42	UV
HRLT M1−M2 Voltage Plus − 1	0	N/A	1813	N/A	N/A	53.42	UV
HRLT M1−M2 Voltage Plus − 2	0	N/A	1849	N/A	N/A	53.42	UV
HRLT M1−M2 Voltage Plus − 3	0	N/A	1794	N/A	N/A	53.42	UV
HRLT M1−M2 Voltage Plus − 4	0	N/A	1743	N/A	N/A	53.42	UV
HRLT M1−M2 Voltage Plus − 5	0	N/A	1754	N/A	N/A	53.42	UV
HRLT M1−M2 Voltage Plus − 6	0	N/A	−1762	N/A	N/A	53.42	UV
HRLT M1−M2 Voltage Plus − 7	0	N/A	1781	N/A	N/A	53.42	UV
High Resolution Laterolog Array − B Wellsite Calibration − HRLT M23							
Before: 4−May−2022 20:43							
HRLT M2−M3 Voltage Plus − 0	0	N/A	1730	N/A	N/A	53.42	UV
HRLT M2−M3 Voltage Plus − 1	0	N/A	1815	N/A	N/A	53.42	UV
HRLT M2−M3 Voltage Plus − 2	0	N/A	1853	N/A	N/A	53.42	UV
HRLT M2−M3 Voltage Plus − 3	0	N/A	1801	N/A	N/A	53.42	UV
HRLT M2−M3 Voltage Plus − 4	0	N/A	1745	N/A	N/A	53.42	UV
HRLT M2−M3 Voltage Plus − 5	0	N/A	1757	N/A	N/A	53.42	UV
HRLT M2−M3 Voltage Plus − 6	0	N/A	−1753	N/A	N/A	53.42	UV
HRLT M2−M3 Voltage Plus − 7	0	N/A	1781	N/A	N/A	53.42	UV

High Resolution Laterolog Array − B Wellsite Calibration − HRLT V34
Before: 4−May−2022 20:43

HRLT A3−A4 Voltage Plus − 0	0	N/A	68590	N/A	N/A	2100	UV
HRLT A3−A4 Voltage Plus − 1	0	N/A	71800	N/A	N/A	2100	UV
HRLT A3−A4 Voltage Plus − 2	0	N/A	73570	N/A	N/A	2100	UV
HRLT A3−A4 Voltage Plus − 3	0	N/A	71790	N/A	N/A	2100	UV
HRLT A3−A4 Voltage Plus − 4	0	N/A	69500	N/A	N/A	2100	UV
HRLT A3−A4 Voltage Plus − 5	0	N/A	70000	N/A	N/A	2100	UV
HRLT A3−A4 Voltage Plus − 6	0	N/A	−68340	N/A	N/A	2100	UV
HRLT A3−A4 Voltage Plus − 7	0	N/A	70000	N/A	N/A	2100	UV

High Resolution Laterolog Array − B Wellsite Calibration − HRLT V45
Before: 4−May−2022 20:43

HRLT A4−A5 Voltage Plus − 0	0	N/A	68660	N/A	N/A	2100	UV
HRLT A4−A5 Voltage Plus − 1	0	N/A	72000	N/A	N/A	2100	UV
HRLT A4−A5 Voltage Plus − 2	0	N/A	73750	N/A	N/A	2100	UV
HRLT A4−A5 Voltage Plus − 3	0	N/A	71950	N/A	N/A	2100	UV
HRLT A4−A5 Voltage Plus − 4	0	N/A	69600	N/A	N/A	2100	UV
HRLT A4−A5 Voltage Plus − 5	0	N/A	70090	N/A	N/A	2100	UV
HRLT A4−A5 Voltage Plus − 6	0	N/A	−68550	N/A	N/A	2100	UV
HRLT A4−A5 Voltage Plus − 7	0	N/A	70000	N/A	N/A	2100	UV

High Resolution Laterolog Array − B Wellsite Calibration − HRLT V56
Before: 4−May−2022 20:43

HRLT A5−A6 Voltage Plus − 0	0	N/A	68510	N/A	N/A	2100	UV
HRLT A5−A6 Voltage Plus − 1	0	N/A	71840	N/A	N/A	2100	UV
HRLT A5−A6 Voltage Plus − 2	0	N/A	73590	N/A	N/A	2100	UV
HRLT A5−A6 Voltage Plus − 3	0	N/A	71800	N/A	N/A	2100	UV
HRLT A5−A6 Voltage Plus − 4	0	N/A	69490	N/A	N/A	2100	UV
HRLT A5−A6 Voltage Plus − 5	0	N/A	69950	N/A	N/A	2100	UV
HRLT A5−A6 Voltage Plus − 6	0	N/A	−68390	N/A	N/A	2100	UV
HRLT A5−A6 Voltage Plus − 7	0	N/A	70000	N/A	N/A	2100	UV

High Resolution Laterolog Array − B Wellsite Calibration − HRLT VTP
Before: 4−May−2022 20:43

HRLT Torpedo−M0 Voltage − 0	0	N/A	−68040	N/A	N/A	2100	UV
HRLT Torpedo−M0 Voltage − 1	0	N/A	−71630	N/A	N/A	2100	UV
HRLT Torpedo−M0 Voltage − 2	0	N/A	−73430	N/A	N/A	2100	UV
HRLT Torpedo−M0 Voltage − 3	0	N/A	−71710	N/A	N/A	2100	UV
HRLT Torpedo−M0 Voltage − 4	0	N/A	−69420	N/A	N/A	2100	UV
HRLT Torpedo−M0 Voltage − 5	0	N/A	−69910	N/A	N/A	2100	UV
HRLT Torpedo−M0 Voltage − 6	0	N/A	68150	N/A	N/A	2100	UV
HRLT Torpedo−M0 Voltage − 7	0	N/A	−70000	N/A	N/A	2100	UV

High Resolution Laterolog Array − B Wellsite Calibration − HRLT VBD
Before: 4−May−2022 20:43

HRLT Bridle#9−M0 Voltage − 0	0	N/A	−68070	N/A	N/A	2100	UV
HRLT Bridle#9−M0 Voltage − 1	0	N/A	−71720	N/A	N/A	2100	UV
HRLT Bridle#9−M0 Voltage − 2	0	N/A	−73500	N/A	N/A	2100	UV
HRLT Bridle#9−M0 Voltage − 3	0	N/A	−71780	N/A	N/A	2100	UV
HRLT Bridle#9−M0 Voltage − 4	0	N/A	−69470	N/A	N/A	2100	UV
HRLT Bridle#9−M0 Voltage − 5	0	N/A	−69950	N/A	N/A	2100	UV
HRLT Bridle#9−M0 Voltage − 6	0	N/A	68240	N/A	N/A	2100	UV
HRLT Bridle#9−M0 Voltage − 7	0	N/A	−70000	N/A	N/A	2100	UV

High Resolution Laterolog Array − B Wellsite Calibration − HRLT ISO
Before: 4−May−2022 20:43

HRLT Source Current Plus − 0	0	N/A	284.0	N/A	N/A	8.520	UA
HRLT Source Current Plus − 1	0	N/A	281.1	N/A	N/A	8.520	UA
HRLT Source Current Plus − 2	0	N/A	281.1	N/A	N/A	8.520	UA
HRLT Source Current Plus − 3	0	N/A	281.1	N/A	N/A	8.520	UA
HRLT Source Current Plus − 4	0	N/A	281.1	N/A	N/A	8.520	UA
HRLT Source Current Plus − 5	0	N/A	281.1	N/A	N/A	8.520	UA
HRLT Source Current Plus − 6	0	N/A	281.1	N/A	N/A	8.520	UA
HRLT Source Current Plus − 7	0	N/A	281.1	N/A	N/A	8.520	UA

High Resolution Laterolog Array − B Wellsite Calibration − HRLT MV
Before: 4−May−2022 20:43

HRLT Vertical Voltage Pl − 0	0	N/A	−320.0	N/A	N/A	9.681	UV
HRLT Vertical Voltage Pl − 1	0	N/A	−325.4	N/A	N/A	9.681	UV
HRLT Vertical Voltage Pl − 2	0	N/A	−331.9	N/A	N/A	9.681	UV
HRLT Vertical Voltage Pl − 3	0	N/A	−320.6	N/A	N/A	9.681	UV
HRLT Vertical Voltage Pl − 4	0	N/A	−308.8	N/A	N/A	9.681	UV
HRLT Vertical Voltage Pl − 5	0	N/A	−325.5	N/A	N/A	9.681	UV
HRLT Vertical Voltage Pl − 6	0	N/A	327.4	N/A	N/A	9.681	UV
HRLT Vertical Voltage Pl − 7	0	N/A	−322.7	N/A	N/A	9.681	UV

Hostile Litho−Density Sonde Wellsite Calibration − Background Measurement
Master: Calibration out of date 7−Apr−2022 22:41 Before: 17−Jul−2022 1:03

SS Cs Resolution Bkg	9.000	8.010	8.050	N/A	N/A	1.800	%
LS Cs Resolution Bkg	9.000	7.678	7.741	N/A	N/A	1.800	%
LSW1 Background	100.0	58.91	57.40	N/A	N/A	3.000	CPS

LSW2 Background	100.0	53.03	53.81	N/A	N/A	3.000	CPS
LSW3 Background	200.0	117.9	118.7	N/A	N/A	6.000	CPS
LSW4 Background	250.0	142.0	142.4	N/A	N/A	7.500	CPS
LSW5 Background	600.0	328.3	324.9	N/A	N/A	18.00	CPS
SSW1 Background	100.0	66.11	65.88	N/A	N/A	3.000	CPS
SSW2 Background	200.0	116.3	114.9	N/A	N/A	6.000	CPS
SSW3 Background	500.0	311.2	309.2	N/A	N/A	15.00	CPS
SSW4 Background	270.0	163.1	161.4	N/A	N/A	8.100	CPS
SSW5 Background	200.0	118.9	118.4	N/A	N/A	6.000	CPS

Hostile Litho−Density Sonde Wellsite Calibration − Aluminum Measurement
Master: Calibration out of date 8−Apr−2022 0:54

LSW1 Aluminum	600.0	425.7	N/A	N/A	N/A	N/A	CPS
LSW2 Aluminum	900.0	625.0	N/A	N/A	N/A	N/A	CPS
LSW3 Aluminum	1100	755.3	N/A	N/A	N/A	N/A	CPS
LSW4 Aluminum	580.0	380.7	N/A	N/A	N/A	N/A	CPS
LSW5 Aluminum	570.0	351.8	N/A	N/A	N/A	N/A	CPS
SSW1 Aluminum	2800	2010	N/A	N/A	N/A	N/A	CPS
SSW2 Aluminum	8000	5500	N/A	N/A	N/A	N/A	CPS
SSW3 Aluminum	11600	7680	N/A	N/A	N/A	N/A	CPS
SSW4 Aluminum	5000	3178	N/A	N/A	N/A	N/A	CPS
SSW5 Aluminum	660.0	386.3	N/A	N/A	N/A	N/A	CPS

Hostile Litho−Density Sonde Wellsite Calibration − Lithology Measurement
Master: Calibration out of date 8−Apr−2022 0:49

LSW1 Iron	400.0	296.1	N/A	N/A	N/A	N/A	CPS
LSW2 Iron	730.0	510.2	N/A	N/A	N/A	N/A	CPS
LSW3 Iron	1000	668.0	N/A	N/A	N/A	N/A	CPS
LSW4 Iron	520.0	344.0	N/A	N/A	N/A	N/A	CPS
LSW5 Iron	470.0	322.1	N/A	N/A	N/A	N/A	CPS
SSW1 Iron	2100	1478	N/A	N/A	N/A	N/A	CPS
SSW2 Iron	6800	4607	N/A	N/A	N/A	N/A	CPS
SSW3 Iron	10800	7034	N/A	N/A	N/A	N/A	CPS
SSW4 Iron	4600	2907	N/A	N/A	N/A	N/A	CPS
SSW5 Iron	580.0	346.5	N/A	N/A	N/A	N/A	CPS

Hostile Litho−Density Sonde Wellsite Calibration − Caliper Calibration
Before: Calibration out of date 8−Apr−2022 1:48

HLDS Caliper Small Ring	12.00	N/A	14.85	N/A	N/A	N/A	IN
HLDS Caliper Large Ring	15.19	N/A	18.31	N/A	N/A	N/A	IN

Accelerator−Porosity Tool Wellsite Calibration − Detector Background
Master: Calibration out of date 3−May−2021 6:13 Before: 5−May−2022 8:29

Near Det Bkg Cntrate	30.00	25.16	25.84	N/A	N/A	N/A	CPS
Far Det Bkg Cntrate	30.00	24.05	25.26	N/A	N/A	N/A	CPS
Array−1 Det Bkg Cntrate	30.00	23.15	25.14	N/A	N/A	N/A	CPS
Array−2 Det Bkg Cntrate	30.00	23.93	24.36	N/A	N/A	N/A	CPS
Array Therm Det Bkg Cntrate	30.00	26.33	24.33	N/A	N/A	N/A	CPS

Accelerator−Porosity Tool Wellsite Calibration − Calibration Ratios
Master: Calibration out of date 3−May−2021 6:15

Near/Far Calibration Ratio	0.9250	0.9424	N/A	N/A	N/A	N/A	
Near/Array Calibration Ratio	1.030	1.083	N/A	N/A	N/A	N/A	
Near/Array Cal Ratio Up/Down	1.000	1.016	N/A	N/A	N/A	N/A	

Accelerator−Porosity Tool Wellsite Calibration − Tank Check
Master: Calibration out of date 3−May−2021 6:16

Array−1 Standoff Porosity	11.75	11.04	N/A	N/A	N/A	N/A	PU
Array−2 Standoff Porosity	11.75	10.88	N/A	N/A	N/A	N/A	PU
Average Slowing Down Time	6.000	5.997	N/A	N/A	N/A	N/A	US
Array−1 SDT Ratio Up/Down	1.000	0.9943	N/A	N/A	N/A	N/A	
Array−2 SDT Ratio Up/Down	1.000	0.9896	N/A	N/A	N/A	N/A	
Sigma Formation	27.50	27.71	N/A	N/A	N/A	N/A	CU

Accelerator−Porosity Tool Wellsite Calibration − CCR7 signal boxes
Master: Calibration out of date 3−May−2021 5:26

Near Detector Plateau Setting	1650	1738	N/A	N/A	N/A	N/A	V
Far Detector Plateau Setting	2000	2068	N/A	N/A	N/A	N/A	V
Array Detector Plateau Setting	2000	1976	N/A	N/A	N/A	N/A	V

Hostile Natural Gamma Ray Sonde Wellsite Calibration − Detector 1 Check
Master: Calibration out of date 2−May−2021 11:41 Before: 17−Jul−2022 1:05

Na 511 Peak Loc	40.00	38.51	39.33	N/A	N/A	1.000	
Na 511 Peak Res	15.50	16.08	16.21	N/A	N/A	2.000	%
High Voltage	1150	1210	1194	N/A	N/A	N/A	V
Na 1785 Peak Loc	142.6	140.8	143.4	N/A	N/A	7.000	
Na 1785 Peak Res	8.500	9.038	9.728	N/A	N/A	2.000	%
Temperature	15.50	27.21	22.26	N/A	N/A	N/A	DEGC
Na Count Rate	45.00	10.57	7.097	N/A	N/A	8.000	CPS

Hostile Natural Gamma Ray Sonde Wellsite Calibration − Detector 2 Check

Master: Calibration out of date 2−May−2021 11:41 Before: 17−Jul−2022 1:05

Na 511 Peak Loc	40.00	39.36	40.42	N/A	N/A	1.000	
Na 511 Peak Res	15.50	16.98	15.75	N/A	N/A	2.000	%
High Voltage	1150	1089	1081	N/A	N/A	N/A	V
Na 1785 Peak Loc	142.6	142.8	145.6	N/A	N/A	7.000	
Na 1785 Peak Res	8.500	9.374	9.548	N/A	N/A	2.000	%
Temperature	15.50	26.50	21.59	N/A	N/A	N/A	DEGC
Na Count Rate	45.00	10.57	7.046	N/A	N/A	8.000	CPS

Hostile Natural Gamma Ray Sonde Wellsite Calibration − Ratio Of Detector 1 To Detector 2
Master: Calibration out of date 2−May−2021 11:41 Before: 17−Jul−2022 1:05

Coincidence Count Rate Ratio	1.000	0.9991	1.0000	N/A	N/A	0.05000	

Enhanced DTS Cartridge Wellsite Calibration − EDTC Accelerometer Calibration
Before: Calibration out of date 4−May−2022 20:04

EDTC Z−Axis Acceleration	9.810	N/A	9.850	N/A	N/A	N/A	M/S2

Enhanced DTS Cartridge Wellsite Calibration − Detector Calibration
Before: Calibration out of date 4−May−2022 20:10

Gamma Ray (Jig − Bkg)	114.1	N/A	114.1	N/A	N/A	10.37	GAPI
Gamma Ray (Calibrated)	165.0	N/A	165.9	N/A	N/A	15.00	GAPI

Accelerator−Porosity Tool − Detector Plateau Settings :

Near Detector Plateau Setting 1738 V
Far Detector Plateau Setting 2068 V
Array Detector Plateau Setting 1976 V

High Resolution Laterolog Array − B / Equipment Identification

Primary Equipment:		
HRLT Sonde	HRLS − B	969
Auxiliary Equipment:		
HRLT lower Housing	HRLH − B	1869
HRLT Lower Cartridge	HRLC − B	1897
HRLT upper Housing	HRUH − B	975
HRLT Upper Cartridge	HRUC − B	964

High Resolution Laterolog Array − B Wellsite Calibration
HRLT M01

Idx	Phase	HRLT M0−M1 Voltage Plus UV	Value	Nominal	Maximum	Minimum
0	Before		−318.3	−322.7	−280.7	−379.7
1	Before		−330.7	−322.7	−280.7	−379.7
2	Before		−338.5	−322.7	−280.7	−379.7
3	Before		−328.8	−322.7	−280.7	−379.7
4	Before		−319.7	−322.7	−280.7	−379.7
5	Before		−321.6	−322.7	−280.7	−379.7
6	Before		319.9	322.7	379.7	280.7
7	Before		−322.7	−322.7	−280.7	−379.7
		(Minimum) (Nominal) (Maximum)				

Before: 4−May−2022 20:43

High Resolution Laterolog Array − B Wellsite Calibration
HRLT M12

Idx	Phase	HRLT M1−M2 Voltage Plus UV	Value	Nominal	Maximum	Minimum
0	Before		1738	1781	2095	1549
1	Before		1813	1781	2095	1549
2	Before		1849	1781	2095	1549
3	Before		1794	1781	2095	1549
4	Before		1743	1781	2095	1549

5	Before		1754	1781	2095	1549
6	Before		−1762	−1781	−1549	−2095
7	Before		1781	1781	2095	1549
		(Minimum) (Nominal) (Maximum)				

Before: 4−May−2022 20:43

High Resolution Laterolog Array − B Wellsite Calibration

HRLT M23

Idx	Phase	HRLT M2−M3 Voltage Plus UV	Value	Nominal	Maximum	Minimum
0	Before		1730	1781	2095	1549
1	Before		1815	1781	2095	1549
2	Before		1853	1781	2095	1549
3	Before		1801	1781	2095	1549
4	Before		1745	1781	2095	1549
5	Before		1757	1781	2095	1549
6	Before		−1753	−1781	−1549	−2095
7	Before		1781	1781	2095	1549
		(Minimum) (Nominal) (Maximum)				

Before: 4−May−2022 20:43

High Resolution Laterolog Array − B Wellsite Calibration

HRLT V34

Idx	Phase	HRLT A3−A4 Voltage Plus UV	Value	Nominal	Maximum	Minimum
0	Before		68590	70000	82360	60900
1	Before		71800	70000	82360	60900
2	Before		73570	70000	82360	60900
3	Before		71790	70000	82360	60900
4	Before		69500	70000	82360	60900
5	Before		70000	70000	82360	60900
6	Before		−68340	−70000	−60900	−82360
7	Before		70000	70000	82360	60900
		(Minimum) (Nominal) (Maximum)				

Before: 4−May−2022 20:43

High Resolution Laterolog Array − B Wellsite Calibration

HRLT V45

Idx	Phase	HRLT A4−A5 Voltage Plus UV	Value	Nominal	Maximum	Minimum
0	Before		68660	70000	82360	60900
1	Before		72000	70000	82360	60900
2	Before		73750	70000	82360	60900
3	Before		71950	70000	82360	60900
4	Before		69600	70000	82360	60900
5	Before		70090	70000	82360	60900
6	Before		−68550	−70000	−60900	−82360
7	Before		70000	70000	82360	60900
		(Minimum) (Nominal) (Maximum)				

Before: 4−May−2022 20:43

High Resolution Laterolog Array − B Wellsite Calibration

HRLT V56

Idx	Phase	HRLT A5−A6 Voltage Plus UV	Value	Nominal	Maximum	Minimum
0	Before		68510	70000	82360	60900
1	Before		71840	70000	82360	60900
2	Before		73590	70000	82360	60900
3	Before		71800	70000	82360	60900
4	Before		69490	70000	82360	60900
5	Before		69950	70000	82360	60900
6	Before		−68390	−70000	−60900	−82360
7	Before		70000	70000	82360	60900
		(Minimum) (Nominal) (Maximum)				

Before: 4−May−2022 20:43

High Resolution Laterolog Array − B Wellsite Calibration

HRLT VTP

Idx	Phase	HRLT Torpedo−M0 Voltage Plus UV	Value	Nominal	Maximum	Minimum
0	Before		−68040	−70000	−60900	−82360
1	Before		−71630	−70000	−60900	−82360
2	Before		−73430	−70000	−60900	−82360
3	Before		−71710	−70000	−60900	−82360
4	Before		−69420	−70000	−60900	−82360
5	Before		−69910	−70000	−60900	−82360
6	Before		68150	70000	82360	60900
7	Before		−70000	−70000	−60900	−82360
		(Minimum) (Nominal) (Maximum)				

Before: 4−May−2022 20:43

High Resolution Laterolog Array − B Wellsite Calibration

HRLT VBD

Idx	Phase	HRLT Bridle#9−M0 Voltage Plus UV	Value	Nominal	Maximum	Minimum
0	Before		−68070	−70000	−60900	−82360
1	Before		−71720	−70000	−60900	−82360
2	Before		−73500	−70000	−60900	−82360
3	Before		−71780	−70000	−60900	−82360
4	Before		−69470	−70000	−60900	−82360
5	Before		−69950	−70000	−60900	−82360
6	Before		68240	70000	82360	60900
7	Before		−70000	−70000	−60900	−82360
		(Minimum) (Nominal) (Maximum)				

Before: 4−May−2022 20:43

High Resolution Laterolog Array − B Wellsite Calibration

HRLT ISO

Idx	Phase	HRLT Source Current Plus UA	Value	Nominal	Maximum	Minimum
0	Before		284.0	284.0	334.1	247.0
1	Before		281.1	281.1	330.7	244.4
2	Before		281.1	281.1	330.7	244.4
3	Before		281.1	281.1	330.7	244.4
4	Before		281.1	281.1	330.7	244.4
5	Before		281.1	281.1	330.7	244.4

6	Before		281.1	281.1	330.7	244.4
7	Before		281.1	281.1	330.7	244.4
		(Minimum) (Nominal) (Maximum)				

Before: 4−May−2022 20:43

High Resolution Laterolog Array − B Wellsite Calibration

HRLT MV

Idx	Phase	HRLT Vertical Voltage Plus UV	Value	Nominal	Maximum	Minimum
0	Before		−320.0	−322.7	−280.7	−379.7
1	Before		−325.4	−322.7	−280.7	−379.7
2	Before		−331.9	−322.7	−280.7	−379.7
3	Before		−320.6	−322.7	−280.7	−379.7
4	Before		−308.8	−322.7	−280.7	−379.7
5	Before		−325.5	−322.7	−280.7	−379.7
6	Before		327.4	322.7	379.7	280.7
7	Before		−322.7	−322.7	−280.7	−379.7
		(Minimum) (Nominal) (Maximum)				

Before: 4−May−2022 20:43

Hostile Litho−Density Sonde / Equipment Identification

Primary Equipment:		
Gamma Source Radioactive	GSR − ZA	2945
Hostile Litho Density Sonde	HLDS − D	35
Hostile Litho Density High Voltage	HLDV − D	35
Auxiliary Equipment:		
Hostile Litho Density High Voltage Housi	HEH − H	35
Hostile Litho Density Pad	HLDP − C	35

Hostile Litho−Density Sonde Wellsite Calibration

Background Measurement

Phase	SS Cs Resolution Bkg %	Value
Master		8.010
Before		8.050
	7.000 (Minimum) 9.000 (Nominal) 11.00 (Maximum)	

Phase	LS Cs Resolution Bkg %	Value
Master		7.678
Before		7.741
	7.000 (Minimum) 9.000 (Nominal) 11.00 (Maximum)	

Phase	LSW1 Background CPS	Value
Master		58.91
Before		57.40
	55.00 (Minimum) 100.0 (Nominal) 150.0 (Maximum)	

Phase	LSW2 Background CPS	Value
Master		53.03
Before		53.81
	50.00 (Minimum) 100.0 (Nominal) 140.0 (Maximum)	

Phase	LSW3 Background CPS	Value
Master		117.9
Before		118.7
	110.0 (Minimum) 200.0 (Nominal) 290.0 (Maximum)	

Phase	LSW4 Background CPS	Value
Master		142.0
Before		142.4
	140.0 (Minimum) 250.0 (Nominal) 360.0 (Maximum)	

Phase	LSW5 Background CPS	Value
Master	EXCEEDS LIMIT	328.3
Before	EXCEEDS LIMIT	324.9
	330.0 (Minimum) 600.0 (Nominal) 830.0 (Maximum)	

Phase	SSW1 Background CPS	Value
Master		66.11
Before		65.88
	55.00 (Minimum) 100.0 (Nominal) 150.0 (Maximum)	

Phase	SSW2 Background CPS	Value
Master		116.3
Before		114.9
	100.0 (Minimum) 200.0 (Nominal) 260.0 (Maximum)	

Phase	SSW3 Background CPS	Value
Master		311.2
Before		309.2
	280.0 (Minimum) 500.0 (Nominal) 700.0 (Maximum)	

Phase	SSW4 Background CPS	Value
Master		163.1
Before		161.4
	150.0 (Minimum) 270.0 (Nominal) 380.0 (Maximum)	

Phase	SSW5 Background CPS	Value
Master		118.9
Before		118.4
	110.0 (Minimum) 200.0 (Nominal) 270.0 (Maximum)	

Master: Calibration out of date 7−Apr−2022 22:41 Before: 17−Jul−2022 1:03

Litho−Density Spectroscopy Cartridge − B / Equipment Identification

Primary Equipment:

LDSC Cartridge	LDSC − B	326

Auxiliary Equipment:

LDSC Housing	LDSH − A	303

Accelerator−Porosity Tool / Equipment Identification

Primary Equipment:

Accelerator−Porosity Sonde	APS − C	65535
APS Minitron	MNTR − F	65535

Auxiliary Equipment:

Accelerator−Porosity Housing	APH − AC	152
APS Calibration Water Tank	SFT − 178	1
APS Aluminum Calibrator Sleeve	SFT − 281	1

Accelerator−Porosity Tool Wellsite Calibration

Detector Background

Phase	Near Det Bkg Cntrate CPS	Value
Master		25.16
Before		25.84
	1.000 (Minimum) 30.00 (Nominal) 50.00 (Maximum)	

Phase	Far Det Bkg Cntrate CPS	Value
Master		24.05
Before		25.26
	1.000 (Minimum) 30.00 (Nominal) 50.00 (Maximum)	

Phase	Array−1 Det Bkg Cntrate CPS	Value
Master		23.15
Before		25.14
	1.000 (Minimum) 30.00 (Nominal) 50.00 (Maximum)	

Phase	Array−2 Det Bkg Cntrate CPS	Value
Master		23.93
Before		24.36
	1.000 (Minimum) 30.00 (Nominal) 50.00 (Maximum)	

Phase	Array Therm Det Bkg Cntrate CPS	Value
Master		26.33
Before		24.33
	1.000 (Minimum) 30.00 (Nominal) 50.00 (Maximum)	

Master: Calibration out of date 3−May−2021 6:13 Before: 5−May−2022 8:29

Accelerator−Porosity Tool Wellsite Calibration

Calibration Ratios

Phase	Near/Far Calibration Ratio	Value
Master		0.9424
	0.8000 (Minimum) 0.9250 (Nominal) 1.050 (Maximum)	

Phase	Near/Array Calibration Ratio	Value
Master		1.083
	0.9000 (Minimum) 1.030 (Nominal) 1.170 (Maximum)	

Phase	Near/Array Cal Ratio Up/Down	Value
Master		1.016
	0.9700 (Minimum) 1.000 (Nominal) 1.030 (Maximum)	

Master: Calibration out of date 3−May−2021 6:15

Accelerator−Porosity Tool Wellsite Calibration

Tank Check

Phase	Array−1 Standoff Porosity PU	Value
Master		11.04
	9.900 (Minimum) 11.75 (Nominal) 13.60 (Maximum)	

Phase	Array−2 Standoff Porosity PU	Value
Master		10.88
	9.900 (Minimum) 11.75 (Nominal) 13.60 (Maximum)	

Phase	Average Slowing Down Time US	Value
Master		5.997
	5.500 (Minimum) 6.000 (Nominal) 6.250 (Maximum)	

Phase	Array−1 SDT Ratio Up/Down	Value
Master		0.9943
	0.9500 (Minimum) 1.000 (Nominal) 1.050 (Maximum)	

Phase	Array−2 SDT Ratio Up/Down	Value
Master		0.9896
	0.9500 (Minimum) 1.000 (Nominal) 1.050 (Maximum)	

Phase	Sigma Formation CU	Value
Master		27.71
	20.00 (Minimum) 27.50 (Nominal) 35.00 (Maximum)	

Master: Calibration out of date 3−May−2021 6:16

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	177

Auxiliary Equipment:

HNGS Sonde Housing	HNSH − BA	174
Gamma Source Radioactive	GSR − U	6098

Hostile Natural Gamma Ray Sonde Wellsite Calibration

Detector 1 Check

Phase	Na 511 Peak Loc	Value
Master		38.51
Before		39.33

37.50 (Minimum) 40.00 (Nominal) 43.50 (Maximum)

Phase	Na 511 Peak Res %	Value
Master		16.08
Before		16.21

12.00 (Minimum) 15.50 (Nominal) 19.00 (Maximum)

Phase	High Voltage V	Value
Master		1210
Before		1194

900.0 (Minimum) 1150 (Nominal) 1600 (Maximum)

Phase	Na 1785 Peak Loc	Value
Master		140.8
Before		143.4

135.0 (Minimum) 142.6 (Nominal) 150.3 (Maximum)

Phase	Na 1785 Peak Res %	Value
Master		9.038
Before		9.728

7.000 (Minimum) 8.500 (Nominal) 11.00 (Maximum)

Phase	Temperature DEGC	Value
Master		27.21
Before		22.26

−28.89 (Minimum) 15.50 (Nominal) 60.00 (Maximum)

Phase	Na Count Rate CPS	Value
Master		10.57
Before	EXCEEDS LIMIT	7.097

10.00 (Minimum) 45.00 (Nominal) 100.0 (Maximum)

Master: Calibration out of date 2−May−2021 11:41 Before: 17−Jul−2022 1:05

Hostile Natural Gamma Ray Sonde Wellsite Calibration

Detector 2 Check

Phase	Na 511 Peak Loc	Value
Master	MASTER−BEFORE LIMIT	39.36
Before		40.42

37.50 (Minimum) 40.00 (Nominal) 43.50 (Maximum)

Phase	Na 511 Peak Res %	Value
Master		16.98
Before		15.75

12.00 (Minimum) 15.50 (Nominal) 19.00 (Maximum)

Phase	High Voltage V	Value
Master		1089
Before		1081

900.0 (Minimum) 1150 (Nominal) 1600 (Maximum)

Phase	Na 1785 Peak Loc	Value
Master		142.8
Before		145.6

135.0 (Minimum) 142.6 (Nominal) 150.3 (Maximum)

Phase	Na 1785 Peak Res %	Value
Master		9.374
Before		9.548

7.000 (Minimum) 8.500 (Nominal) 11.00 (Maximum)

Phase	Temperature DEGC	Value
Master		26.50
Before		21.59

−28.89 (Minimum) 15.50 (Nominal) 60.00 (Maximum)

Phase	Na Count Rate CPS	Value
Master		10.57
Before	EXCEEDS LIMIT	7.046

10.00 (Minimum) 45.00 (Nominal) 100.0 (Maximum)

Master: Calibration out of date 2−May−2021 11:41 Before: 17−Jul−2022 1:05

Hostile Natural Gamma Ray Sonde Wellsite Calibration

Ratio Of Detector 1 To Detector 2

Phase	Coincidence Count Rate Ratio	Value
Master		0.9991
Before		1.0000

0.9500 (Minimum) 1.000 (Nominal) 1.050 (Maximum)

Master: Calibration out of date 2−May−2021 11:41

Before: 17−Jul−2022 1:05

Enhanced DTS Cartridge / Equipment Identification

Primary Equipment:

EDTC Gamma Ray Detector	EDTG − A/B	77693
Enhanced DTS Cartridge	EDTC − B	8529

Auxiliary Equipment:

EDTC Housing	EDTH − B	8528

Enhanced DTS Cartridge Wellsite Calibration		
EDTC Accelerometer Calibration		
Phase	EDTC Z−Axis Acceleration M/S2	Value
Before		9.850
9.610 (Minimum)	9.810 (Nominal)	10.01 (Maximum)
Before: Calibration out of date 4−May−2022 20:04		

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		1.113	Before		114.1	Before		165.9
0 (Minimum)	30.00 (Nominal)	120.0 (Maximum)	103.7 (Minimum)	114.1 (Nominal)	124.4 (Maximum)	150.0 (Minimum)	165.0 (Nominal)	180.0 (Maximum)
Before: Calibration out of date 4−May−2022 20:10								

Company: **International Ocean Discovery Program**

Schlumberger

Well: **Expedition 393, Site U1583F**
Field: **South Atlantic Transect II**
Rig: **JOIDES Resolution**
Country: **South Africa**

High Resolution Laterolog (HRLA)
Litho Density (HLDS) Porosity (APS)
Natural Gamma / MSS (HNGS)