COMPANY: Lamont Doherty

WELL: ODP Leg 189, Site 1171D (STR-2A)

FIELD: Tasmanian Seaway, West Tasmania Site

COUNTY: Offshore STATE: Indian Ocean

COUNTY: Offshore
Field: Tasmanian Seaway, West Tasm
Location:
Well: ODP Leg 189, Site 1171D (STR-2
Company: Lamont Doherty

Schlumberger

Natural Gamma Spectrometry Log

LOCATION

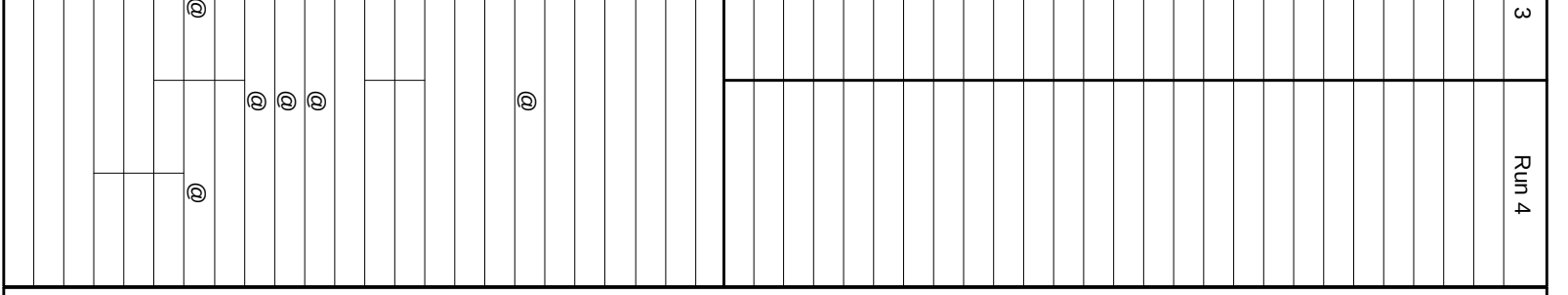
Elev.: K.B. 11.2 m
G.L. -2148 m
D.F. 10.9 m

Permanent Datum: MSL — Elev.: 0 m
Log Measured From: RKB — 11.2 m above Perm. Datum
Drilling Measured From: RKB

API Serial No.	LATTITUDE:	LONGITUDE:	RIG:
	48* 29.9975' S	149* 6.7222' E	JOIDES Resolution

Logging Date			21-APR-2000						
Run Number			One						
Depth Driller			3117.8 m						
Schlumberger Depth			3118 m						
Bottom Log Interval			3089 m						
Top Log Interval			2310 m						
Casing Driller Size @ Depth			0.000 in	@	2310 m		@		
Casing Schlumberger			2310 m						
Bit Size			9.875 in						
Type Fluid In Hole			Salt Water Base						
MUD Density	Viscosity		8.51234 lbm/gal						
MUD Fluid Loss	PH								
MUD Source Of Sample			Salt water						
RM @ Measured Temperature			0.232 ohm.m	@	58 degF		@		
RMF @ Measured Temperature				@			@		
RMC @ Measured Temperature				@			@		
Source RMF	RMC								
RM @ MRT	RMF @ MRT		0.127 @ 111		@ 111		@		@
Maximum Recorded Temperatures			44.1 degC						
Circulation Stopped	Time		21-APR-2000		0:00				
Logger On Bottom	Time		21-APR-2000		3:30				
Unit Number	Location		99	Houston OS					
Recorded By			Kerry M. Swain						
Witnessed By			Patrick Fothergill, Ulysses S. Ninnemann						

	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			
MUD Density / Viscosity			
MUD Fluid Loss / PH			
MUD Source Of Sample			
RM @ Measured Temperature	@		
RMF @ Measured Temperature	@		
RMC @ Measured Temperature	@		
Source RMF / RMC			
RM @ MRT / RMF @ MRT	@	@	
Maximum Recorded Temperatures			
Circulation Stopped / Time			
Logger On Bottom / Time			
Unit Number / Location			
Recorded By			
Witnessed By			



OTHER SERVICES1	OTHER SERVICES2
OS1: HLDS/APS/HNGS	OS1:
OS2:	OS2:
OS3:	OS3:
OS4:	OS4:
OS5:	OS5:

REMARKS: RUN NUMBER 1	REMARKS: RUN NUMBER 2
Hole cored with APC/XCB.	
Sea Floor at 2159 mbrf but could not be verified on log response.	
Log presented in meters below rig floor (mbrf).	
Lamont Temperature Tool, (TAP) , run on DITE/HLDS/APS/HNGS.	
Toolstring- DITE/HLDS/APS/HGNS.	
Wireline Heave Compensator was used on all descents.	
Wireline Heave compensator was off between: 3093-3075, 3040-3009, 2999-2972 mbrf	
due to high heave and or compensator system problems on the main pass.	
Sepiolite mud was used to displace the hole.	
Drillers TD-3117.8 mbrf.	
Loggers TD-3118 mbrf.	
Drill Pipe Driller - 2310 mbrf.	
Logger Drill Pipe - 2310 mbrf.	
The caliper was closed early to prevent problems while entering pipe.	
Depth offsets from the repeat to the main are due to the compensator being off.	
HNGS calibration tolerances are tight and do not affect the log response.	

RUN 1

SERVICE ORDER #:
PROGRAM VERSION: 9C1-303
FLUID LEVEL:

LOGGED INTERVAL	START	STOP

RUN 2

SERVICE ORDER #:
PROGRAM VERSION:
FLUID LEVEL:

LOGGED INTERVAL	START	STOP

EQUIPMENT DESCRIPTION

RUN 1 RUN 2

SURFACE EQUIPMENT

SFT-281 24
SFT-178 4722
GSR-U 135
WITM (DTS)-A

DOWNHOLE EQUIPMENT

LEH-QT 32.03
LEH-QT

CTEM
TelStatus 30.86
ToolStatu 30.23

DTC-H 31.14
ECH-KC 8253

Upper_1 29.53
Lower_2 29.32

HNGS-BA 30.23
HNGS-BA 27

HNSH-BA 27

ILE-D 27.73
ILE-D 25

Status
Minitron
Near TD
Near Arr
Near
Far Arr
Far
Far TD

APS-BA 25.29
APS-BA 22
APH-AC 22
MNTR-F 4185

22.85
22.77
22.64
22.54

NPLC-B 21.35
NPLC-B 82
NPH-B 82

Status 20.12

HLDS 18.90
GSR-Z 1846
HLDV-D 35
HLDS-D 35
HEH-H 35
HLDP-C 12

Caliper
SS LS Status 14.85

DTA-A 14.08
ECH-KE 8261

DIT-E RED 12.87
DIC-EB 171
MIH-ZA 174
DIS-HB 200

SP 6.49
Deep Ind 6.24
Aux Meas SFL 5.32
Med Ind 5.17

Status 3.34

AH-TAP 3.34
AH-TAP

DF
Tension HV 0.00

TOOL ZERO

MAXIMUM STRING DIAMETER 3.88 IN
MEASUREMENTS RELATIVE TO TOOL ZERO
ALL LENGTHS IN METERS

Output DLIS Files

DEFAULT	DITE .008	FN:11	PRODUCER	21-Apr-2000 03:08	3120.4 M	2124.6 M
DITE_CUST	DITE .008	FN:12	PRODUCER	21-Apr-2000 03:08	3120.4 M	2124.6 M

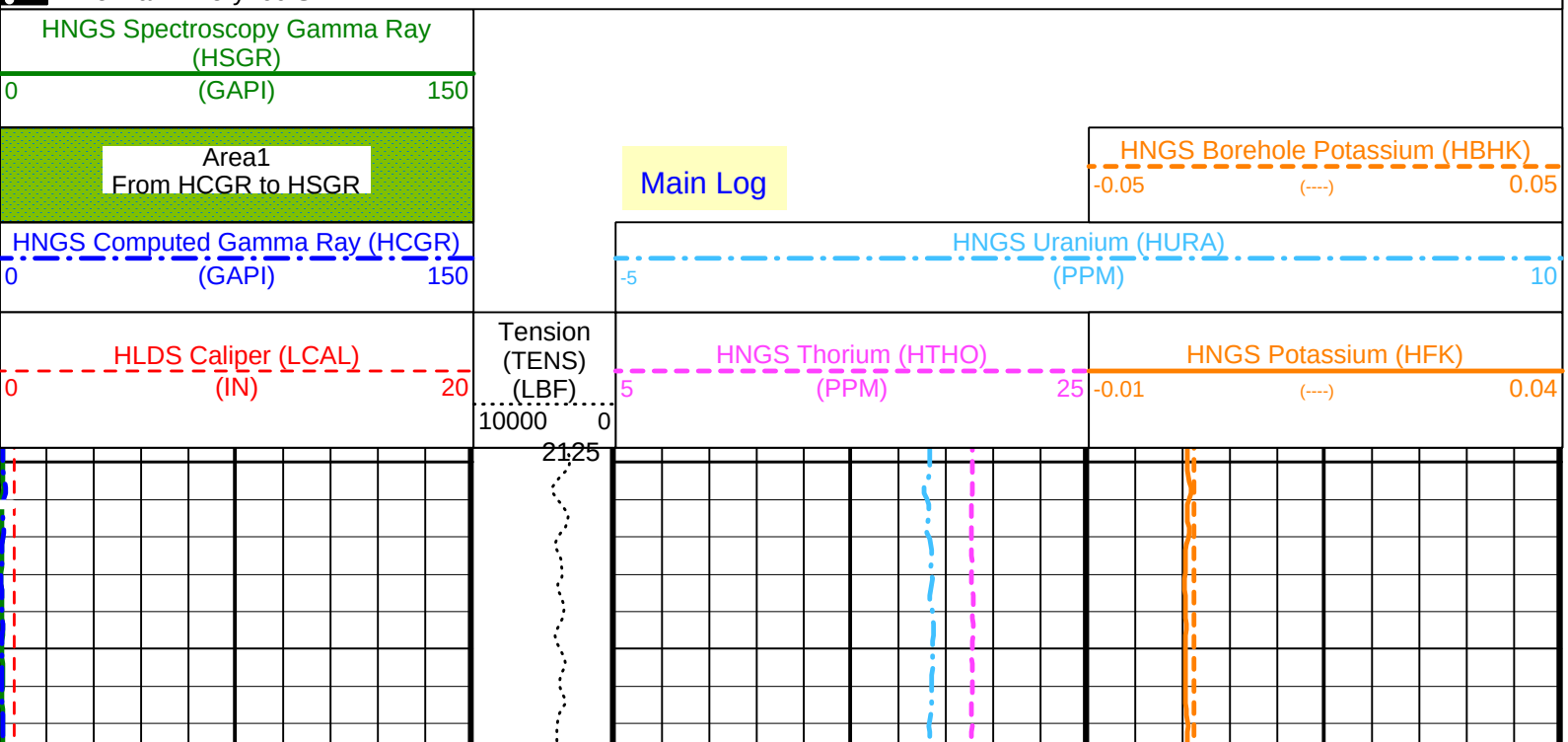
OP System Version: 9C1-303

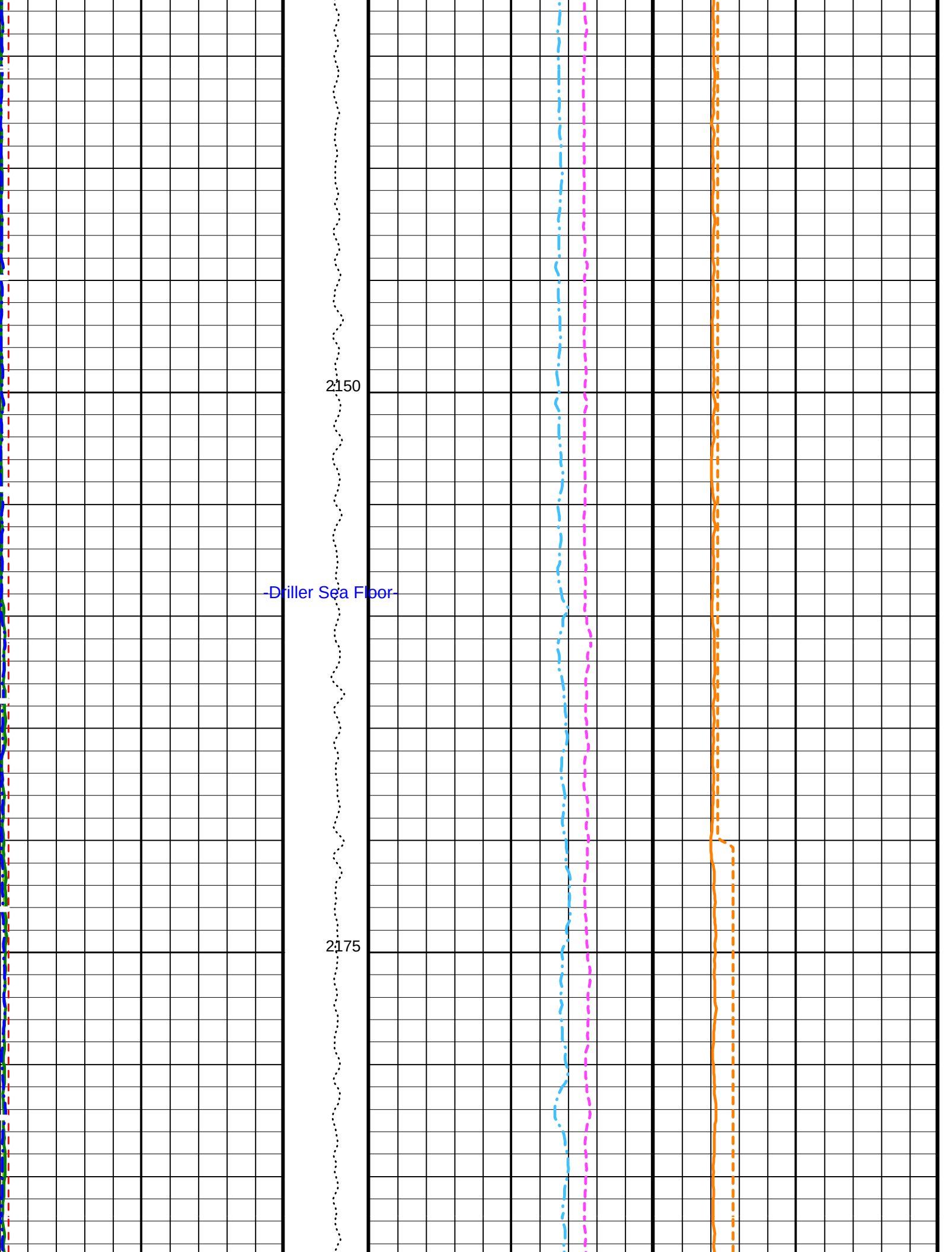
MCM

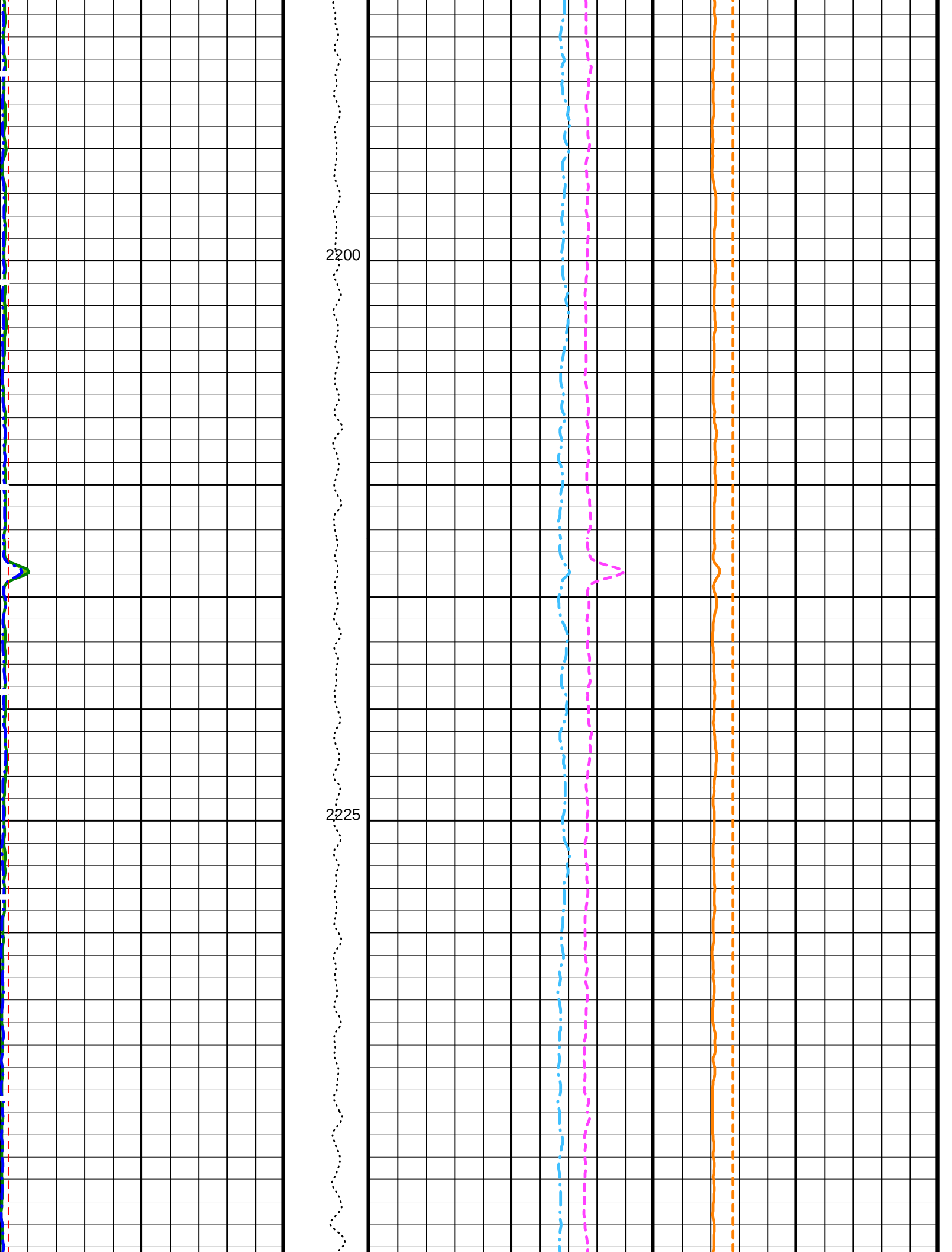
DIT-E	9C1-303	DTA-A	9C1-303
HLDS	9C1-303	NPLC-B	9C1-303
APS-BA	9C1-303	HNGS-BA	9C1-303
DTC-H	9C1-303		

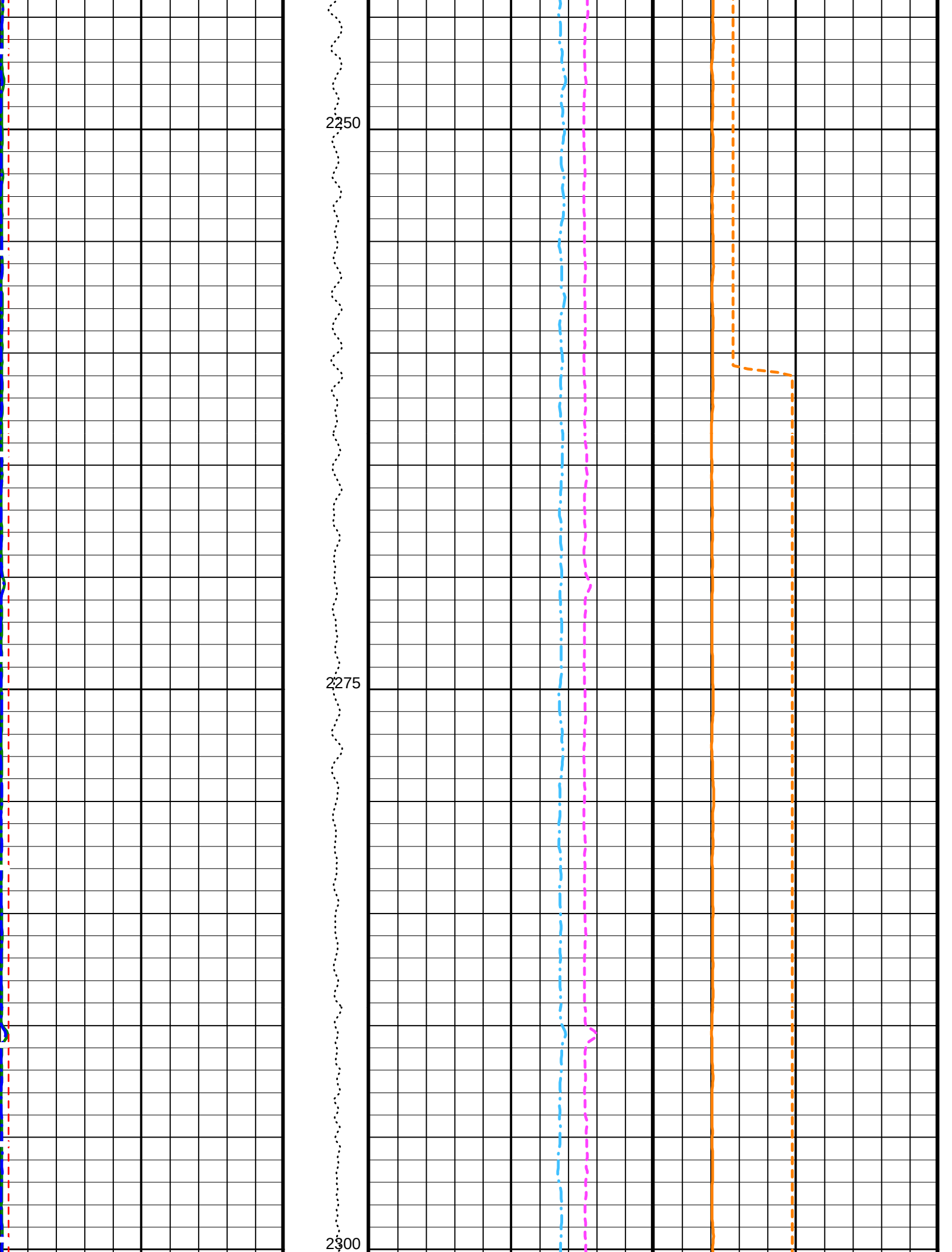
PIP SUMMARY

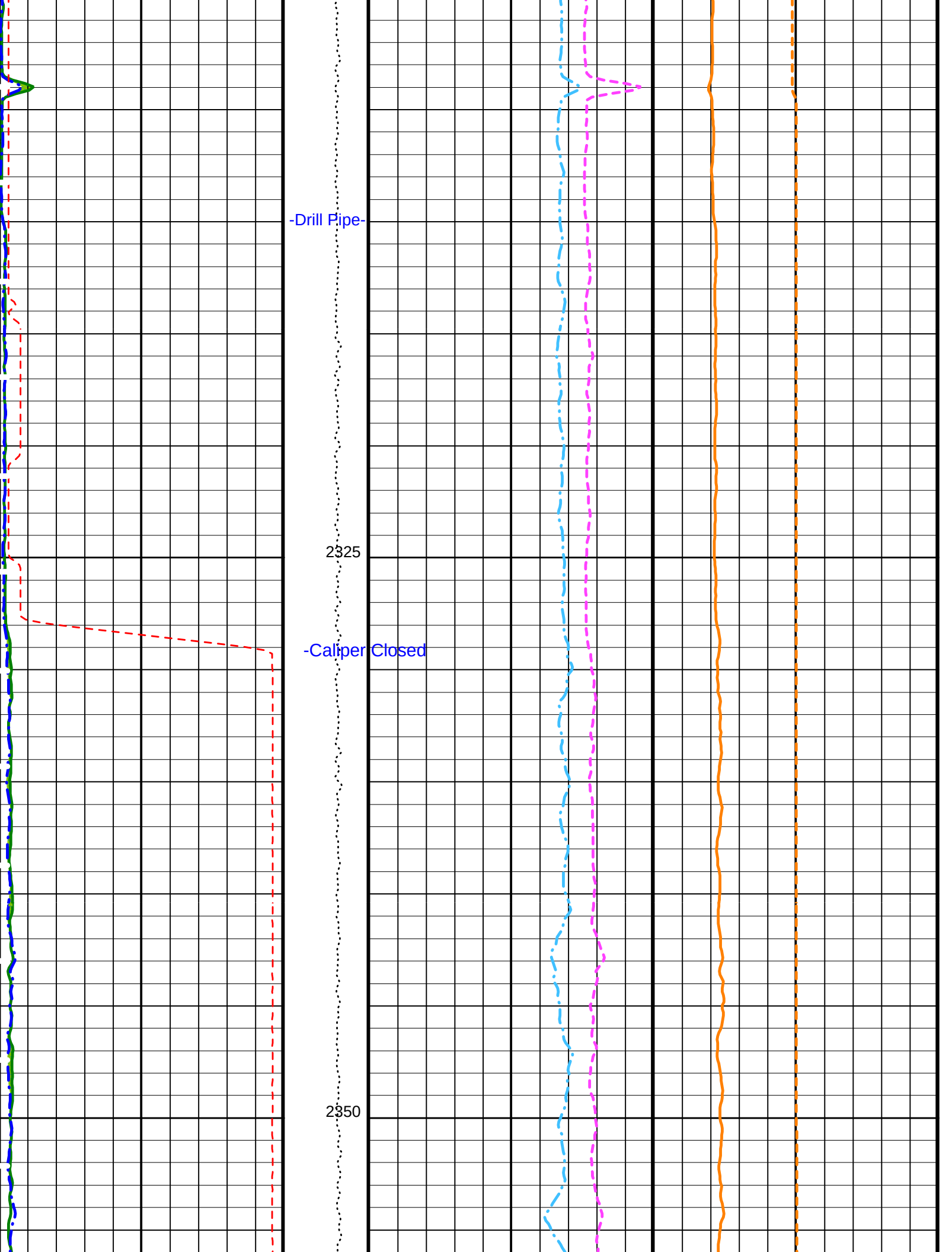
Time Mark Every 60 S

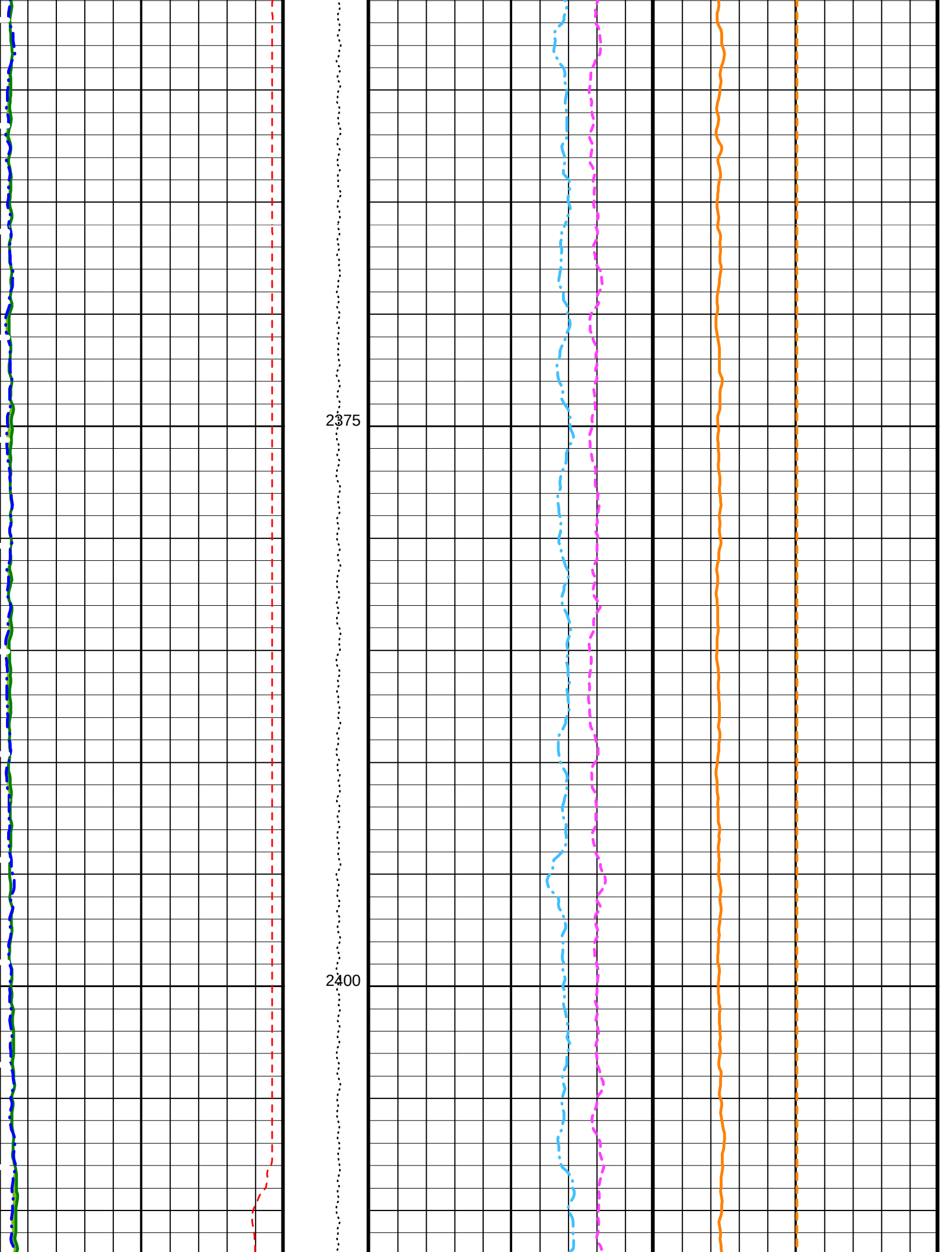


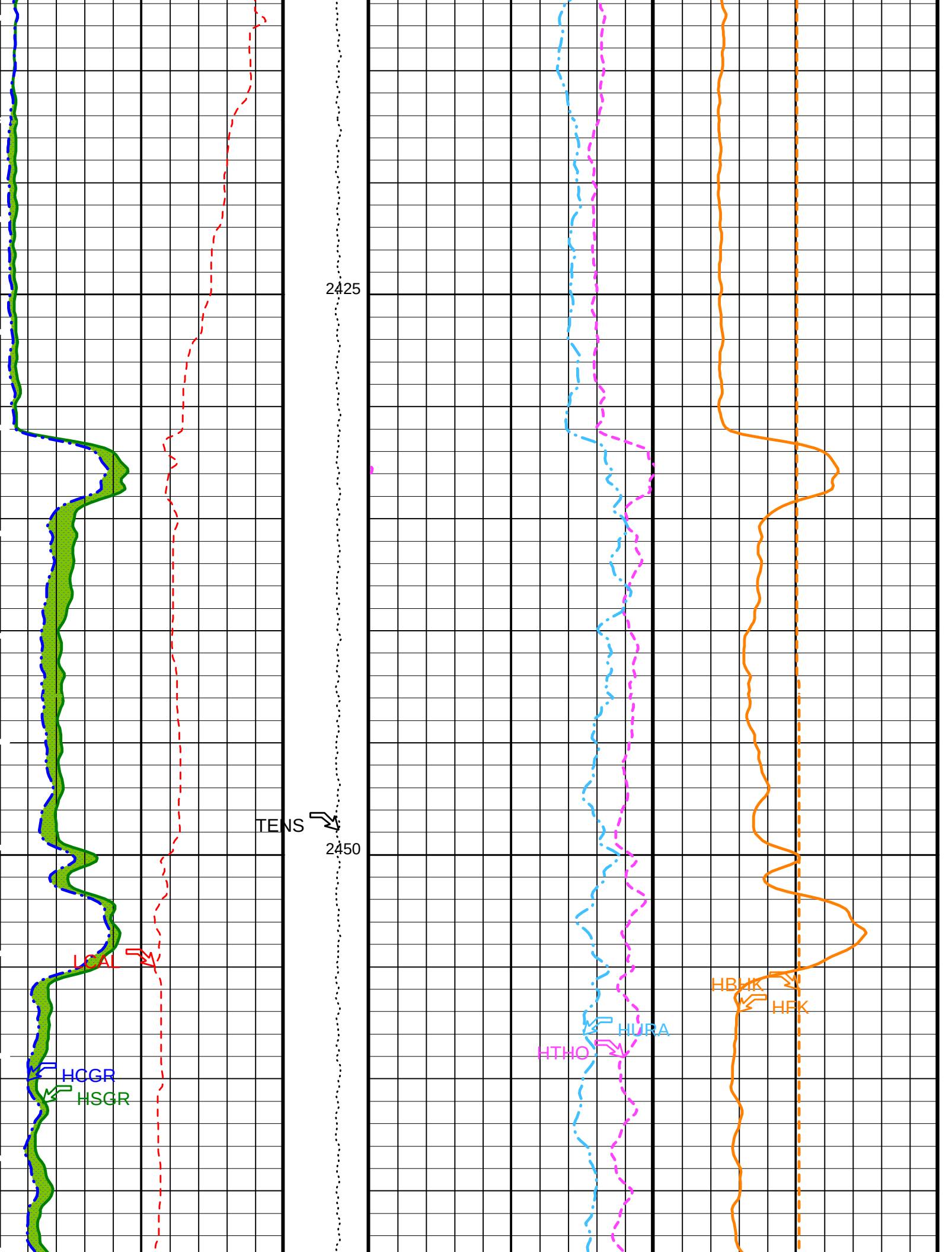

2150
-Driller Sea Floor-
2175

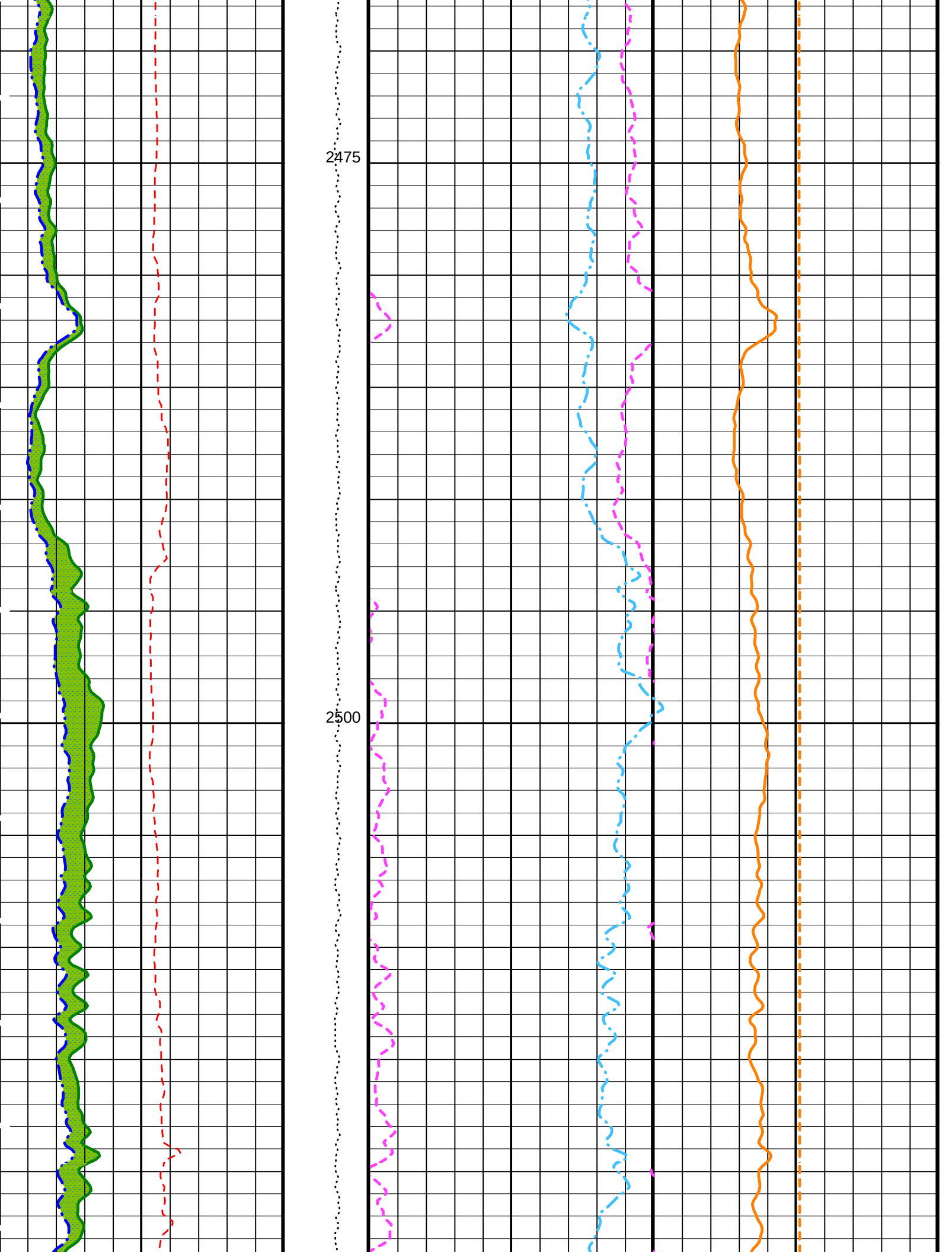

2200
2225

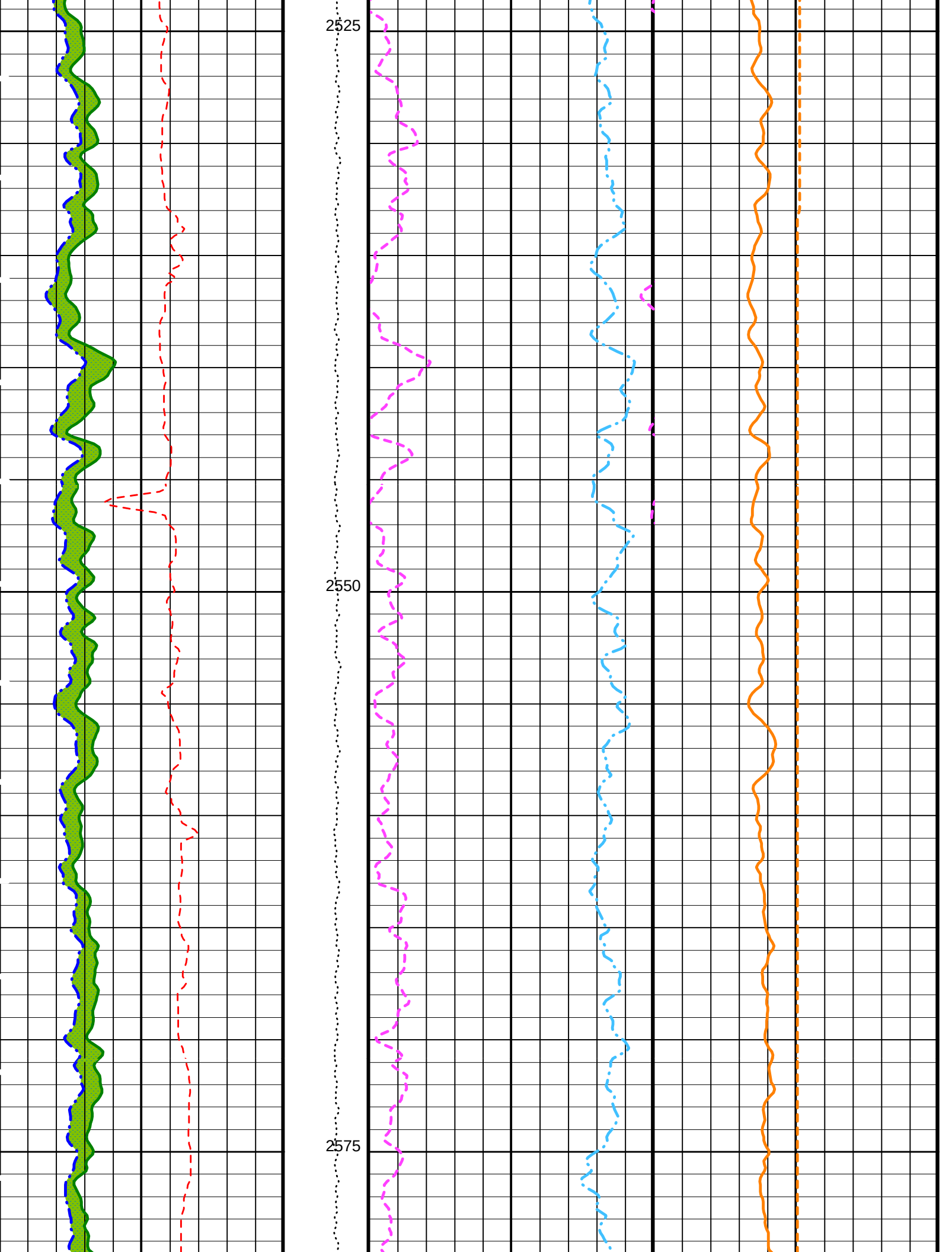

2250
2275
2300

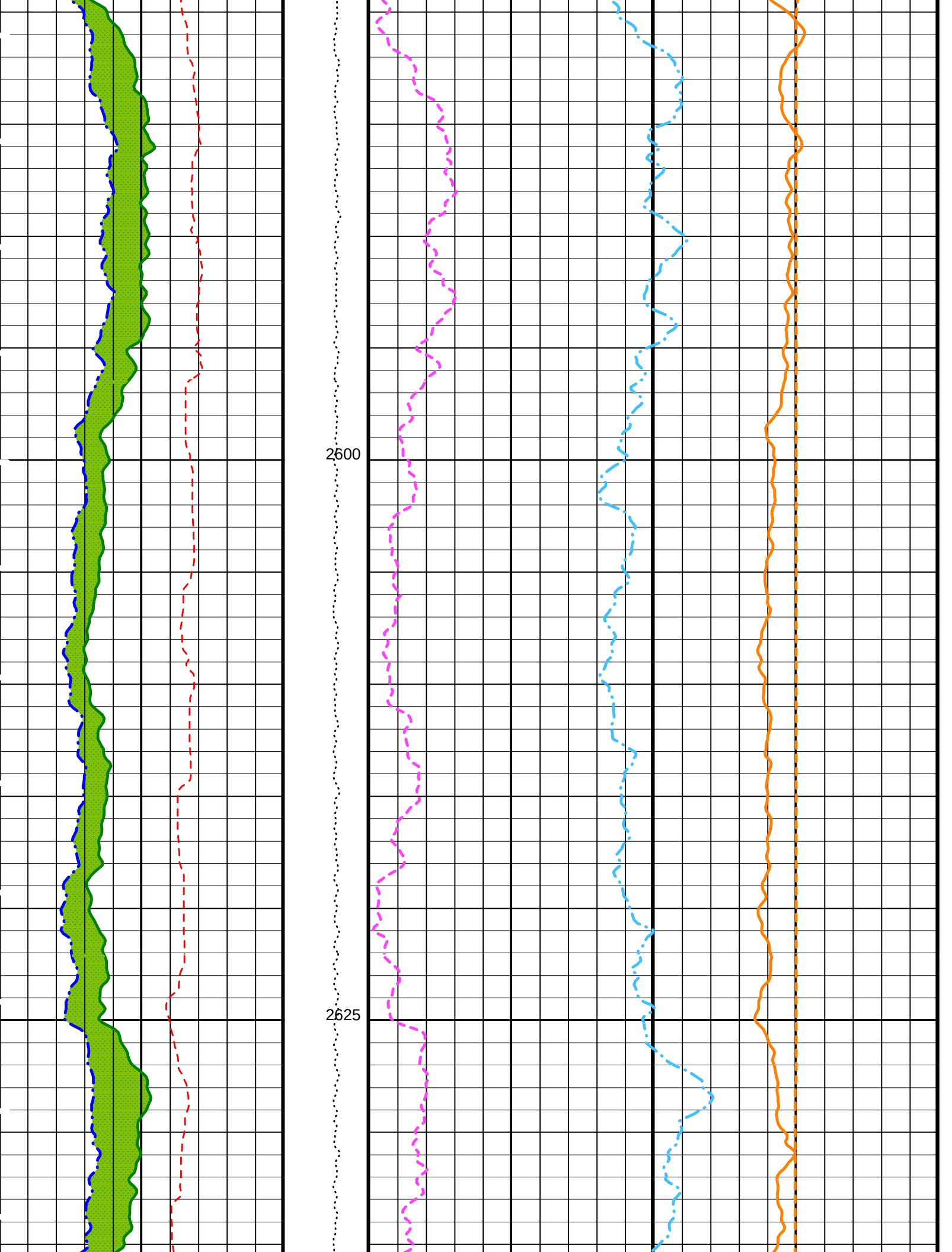

-Drill Pipe-
2325
-Caliper Closed
2350

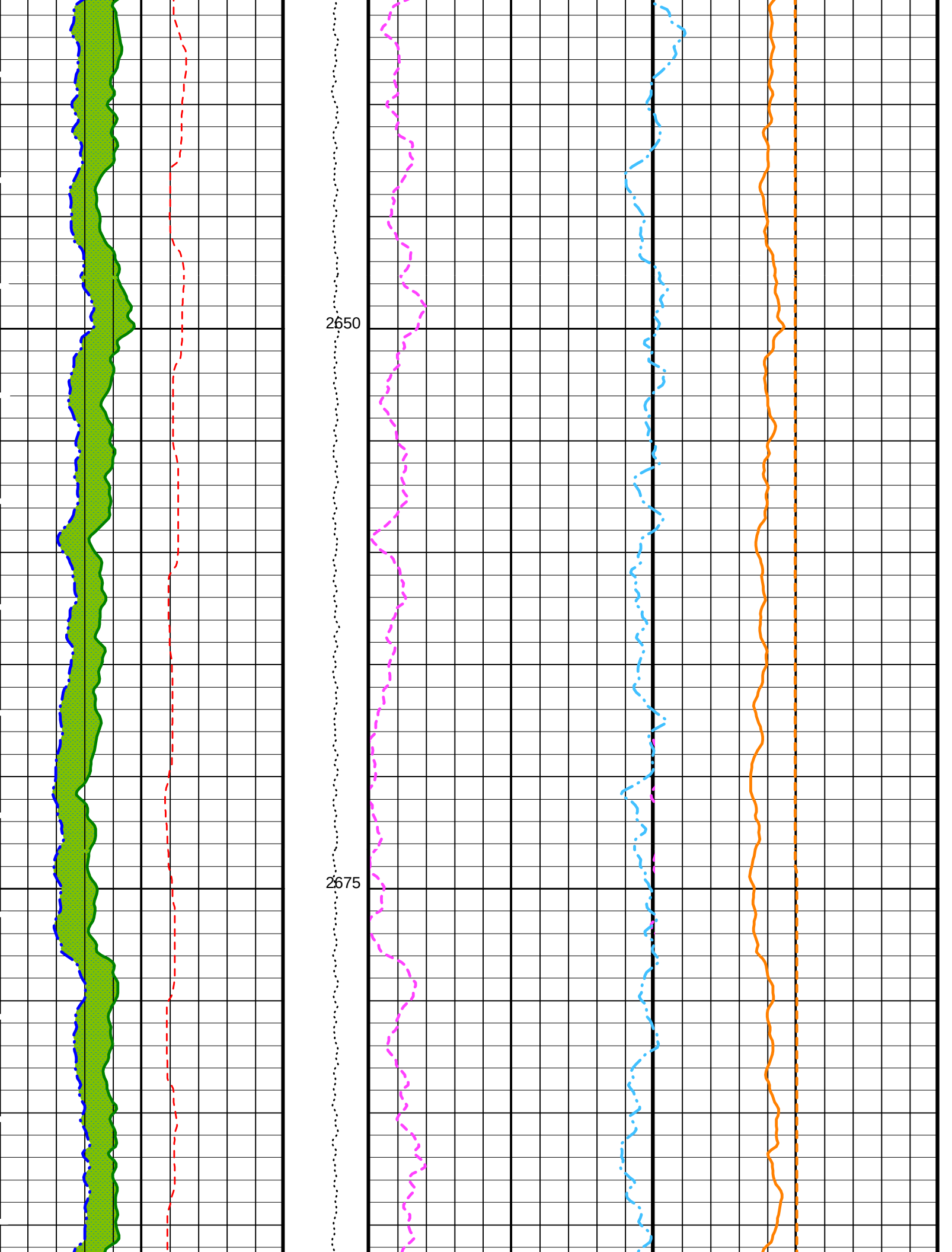

2375
2400

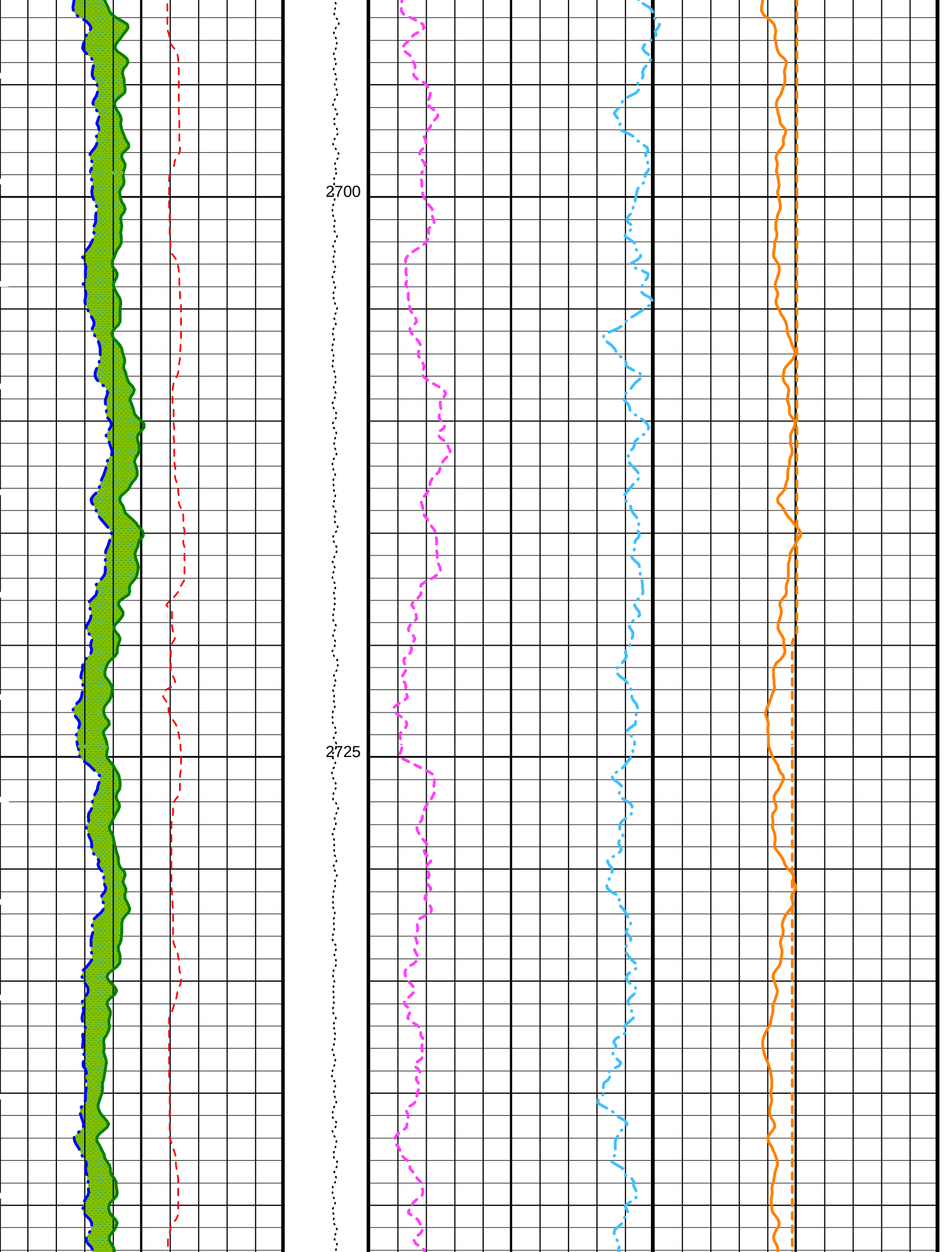

2425
TENS
2450
LCAL
HCGR
HSGR
HTHO
HURA
HBHK
HFK

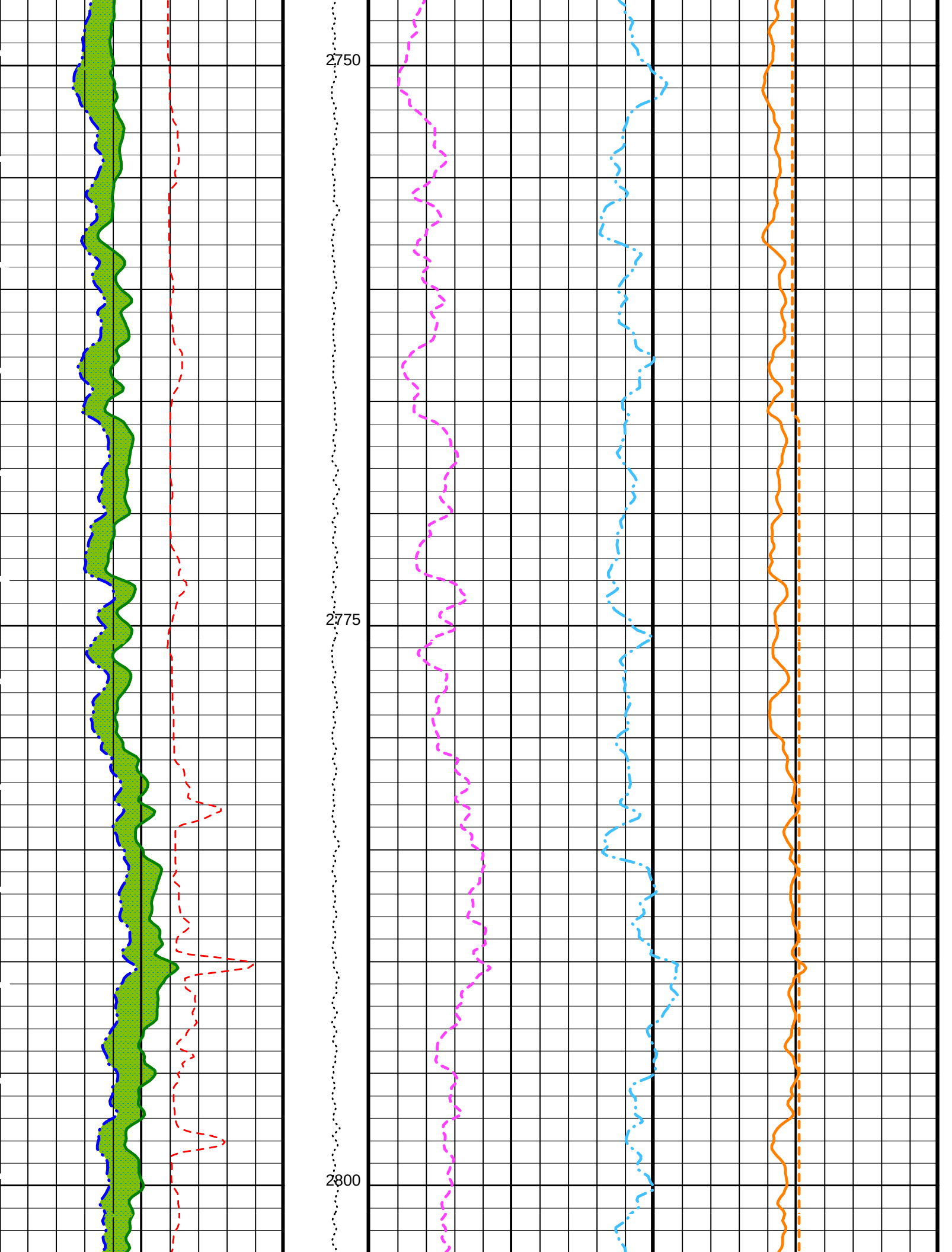

2475
2500


2525
2550
2575


2600
2625


2650
2675


2700
2725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2775
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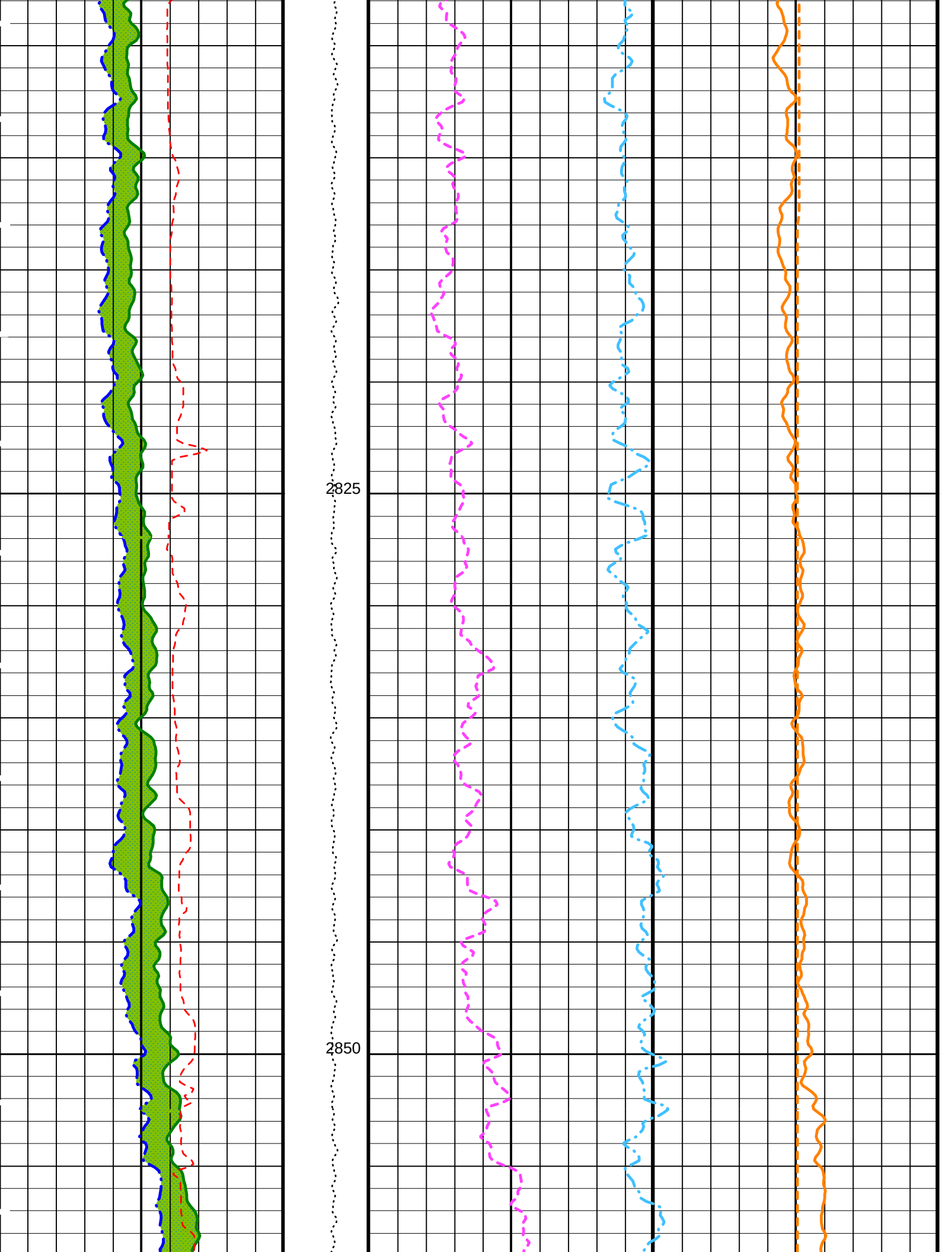
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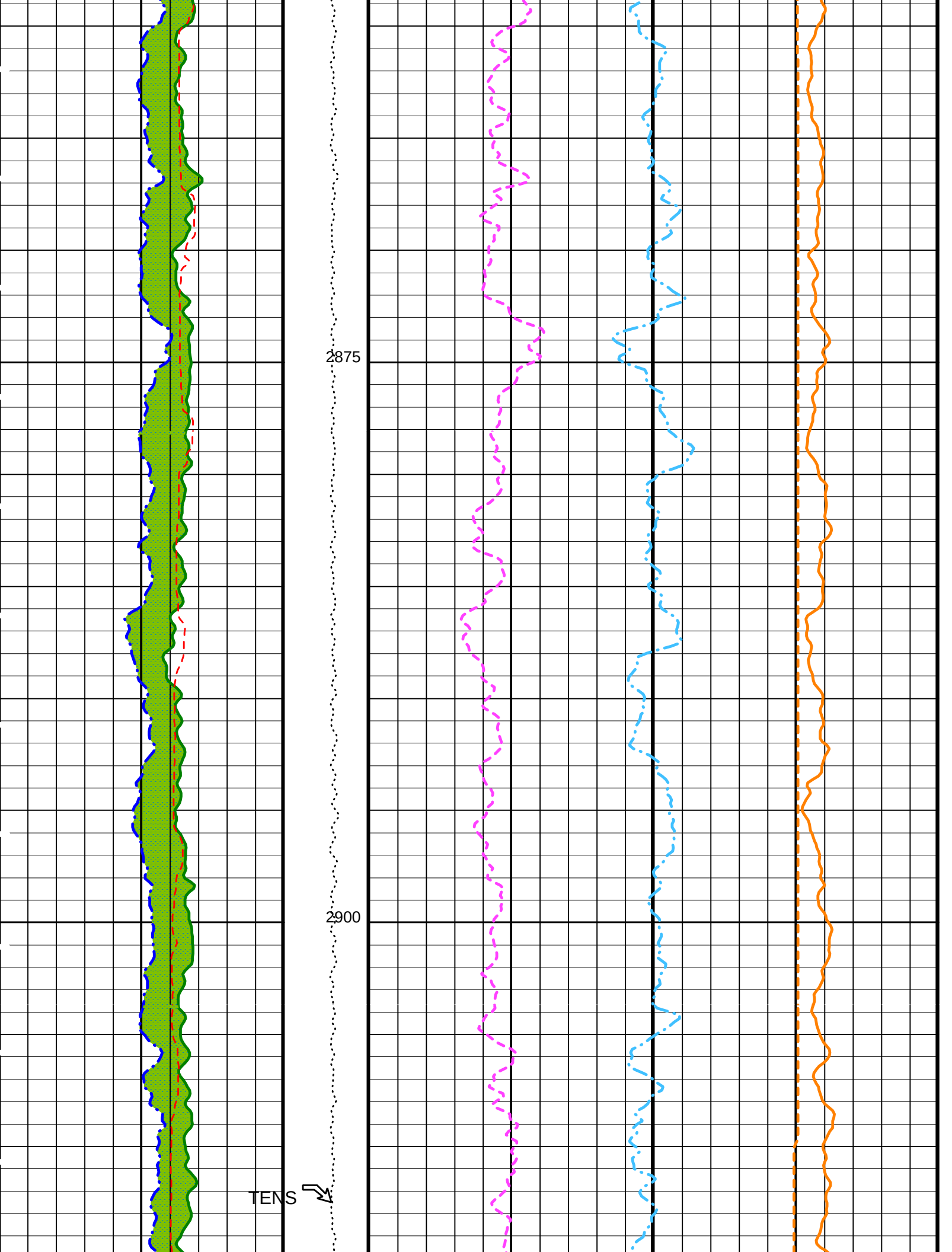
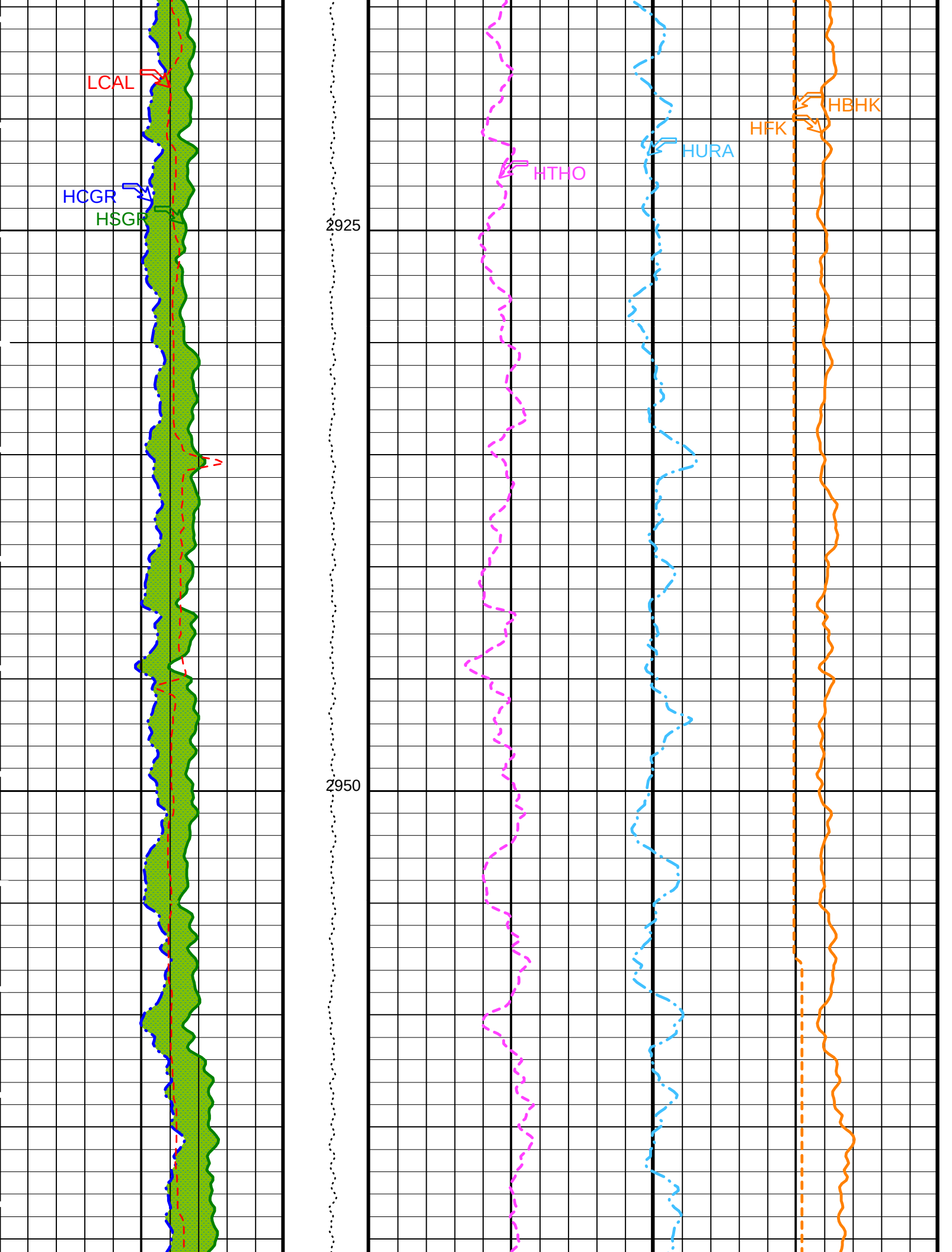
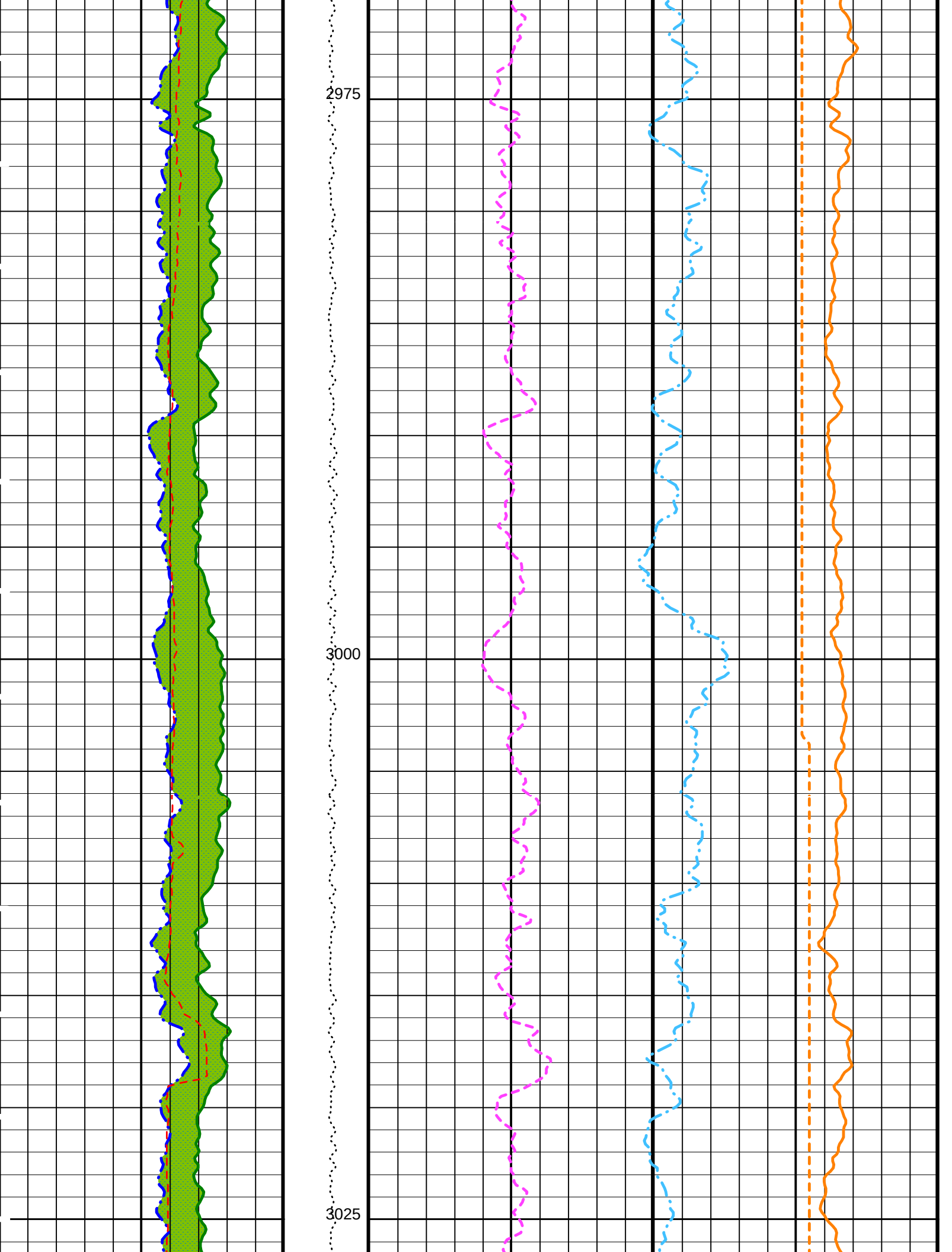
2850


2875
2900
TENS


LCAL
HCGR
HSGR
2925
2950
HTHO
HURA
HFK
HBHK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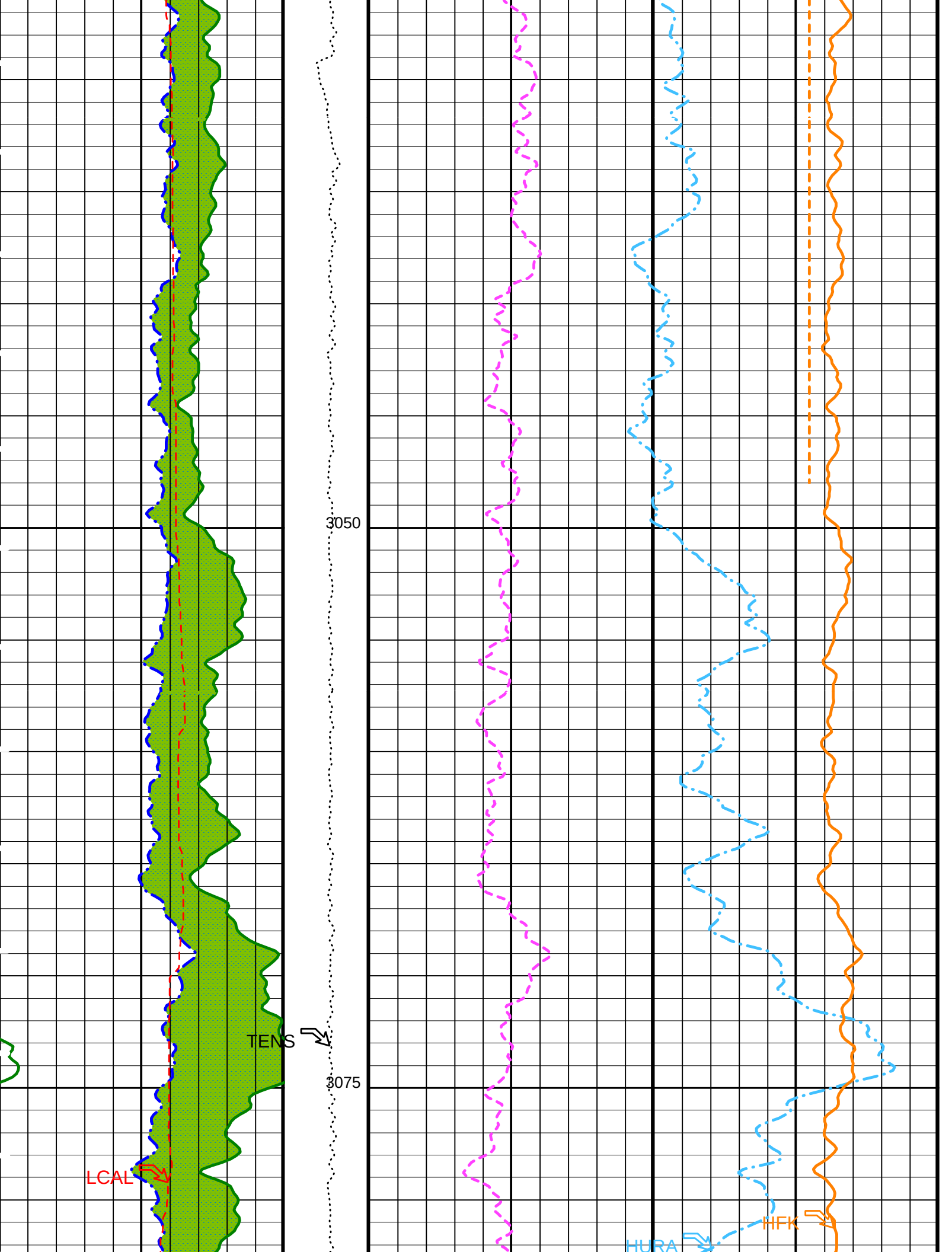
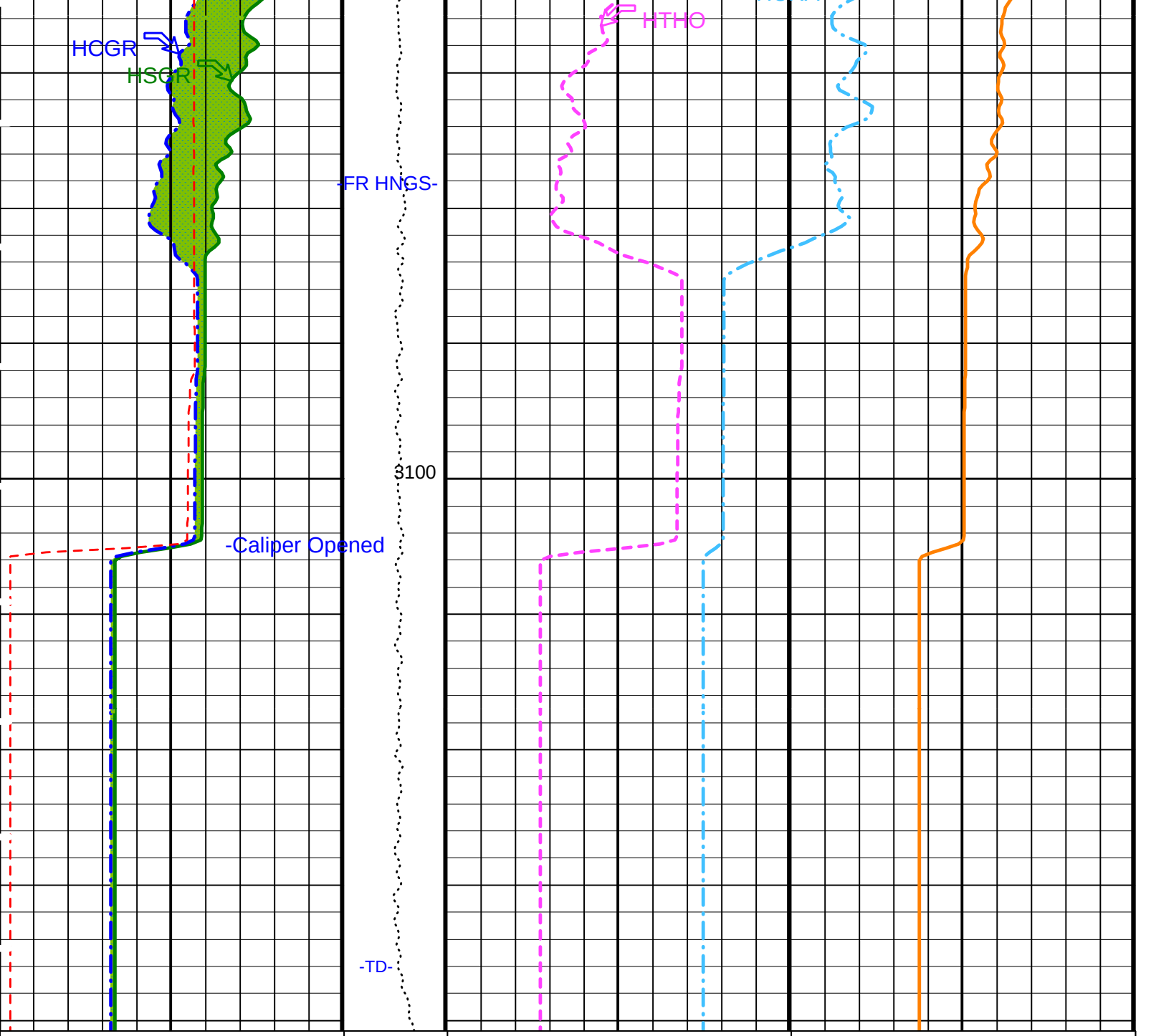
3000
3025


3050
TENS
3075
LCAL
HFK
HURA



HLDS Caliper (LCAL)
0 (IN) 20

Tension (TENS) (LBF)
10000 0

HNGS Thorium (HTHO)
5 (PPM) 25

HNGS Potassium (HFK)
-0.01 (----) 0.04

HNGS Computed Gamma Ray (HCGR)
0 (GAPI) 150

HNGS Uranium (HURA)
-5 (PPM) 10

Area1
From HCGR to HSGR

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

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

Main Log

PIP SUMMARY

Time Mark Every 60 S

Parameters

DLIS Name	Description	Value
BAR1	HNGS Detector 1 Barite Constant	1

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	
BKSF	HNGS Borehole Fluid Excluder Sleeve Algorithm Factor	1	
BKSH	HNGS Borehole Fluid Excluder Sleeve Algorithm High Channel	245	
BKSL	HNGS Borehole Fluid Excluder Sleeve Algorithm Low Channel	17	
BS	Bit Size	9.875	IN
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
D1PR	HNGS Detector 1 Calibration Thorium Peak Resolution	7.46561	%
D1TC	HNGS Detector 1 Calibration Temperature	46.8749	DEGF
D1TL	HNGS Detector 1 Calibration Thorium Peak Location	211.312	
D2PR	HNGS Detector 2 Calibration Thorium Peak Resolution	6.19449	%
D2TC	HNGS Detector 2 Calibration Temperature	44.9572	DEGF
D2TL	HNGS Detector 2 Calibration Thorium Peak Location	209.601	
DBCC	HNGS Barite Constant Correction Flag	NONE	
DFD	Drilling Fluid Density	8.51	LB/G
GCF1_START	HNGS Detector 1 GCF Constant	1	
GCF2_START	HNGS Detector 2 GCF Constant	1	
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	
HALF	HNGS Alpha Filter Length	60	IN
HATIM	HNGS Marquardt Accumulation Time	600	S
HCRB	HNGS Apply Borehole Potassium Correction	NONE	
HMWM	Mud Weighting Material	NATU	
HNPE	HNGS Processing Enable	YES	
HSLV	HNGS Borehole Fluid Excluder Sleeve Status	NO	
HSVN	HNGS Spectral Standards Version Number	1.03041e-029	
MARQ_START	HNGS Marquardt Start-up Mode	INTERNAL	
RDF1_START	HNGS Detector 1 RDF Constant	0	
RDF2_START	HNGS Detector 2 RDF Constant	0	
S1BI	HNGS Detector 1 Calibration Bismuth Count Rate	1.3	CPS
S1NA	HNGS Detector 1 Calibration Sodium Count Rate	28.899	CPS
S1NG	HNGS Detector 1 Calibration End-On / Side-On Gain Ratio	0.992258	
S2BI	HNGS Detector 2 Calibration Bismuth Count Rate	1.3	CPS
S2NA	HNGS Detector 2 Calibration Sodium Count Rate	29.4941	CPS
S2NG	HNGS Detector 2 Calibration End-On / Side-On Gain Ratio	0.981545	
SABK	HNGS Statistical Uncertainty in Borehole Potassium Running Average	-999.25	
SGRC	HNGS Standard Gamma-Ray Correction Flag	YES	
TPOS	Tool Position	ECCE	
VBA1	HNGS Detector 1 Variable Barite Factor Running Average	0	
VBA2	HNGS Detector 2 Variable Barite Factor Running Average	0	

Format: HNGSYields Vertical Scale: 1:200 Graphics File Created: 21-Apr-2000 03:08

OP System Version: 9C1-303

MCM

DIT-E	9C1-303	DTA-A	9C1-303
HLDS	9C1-303	NPLC-B	9C1-303
APS-BA	9C1-303	HNGS-BA	9C1-303
DTC-H	9C1-303		

Output DLIS Files

DEFAULT	DITE .008	FN:11	PRODUCER	21-Apr-2000 03:08	
DITE_CUST	DITE .008	FN:12	PRODUCER	21-Apr-2000 03:08	

Output DLIS Files

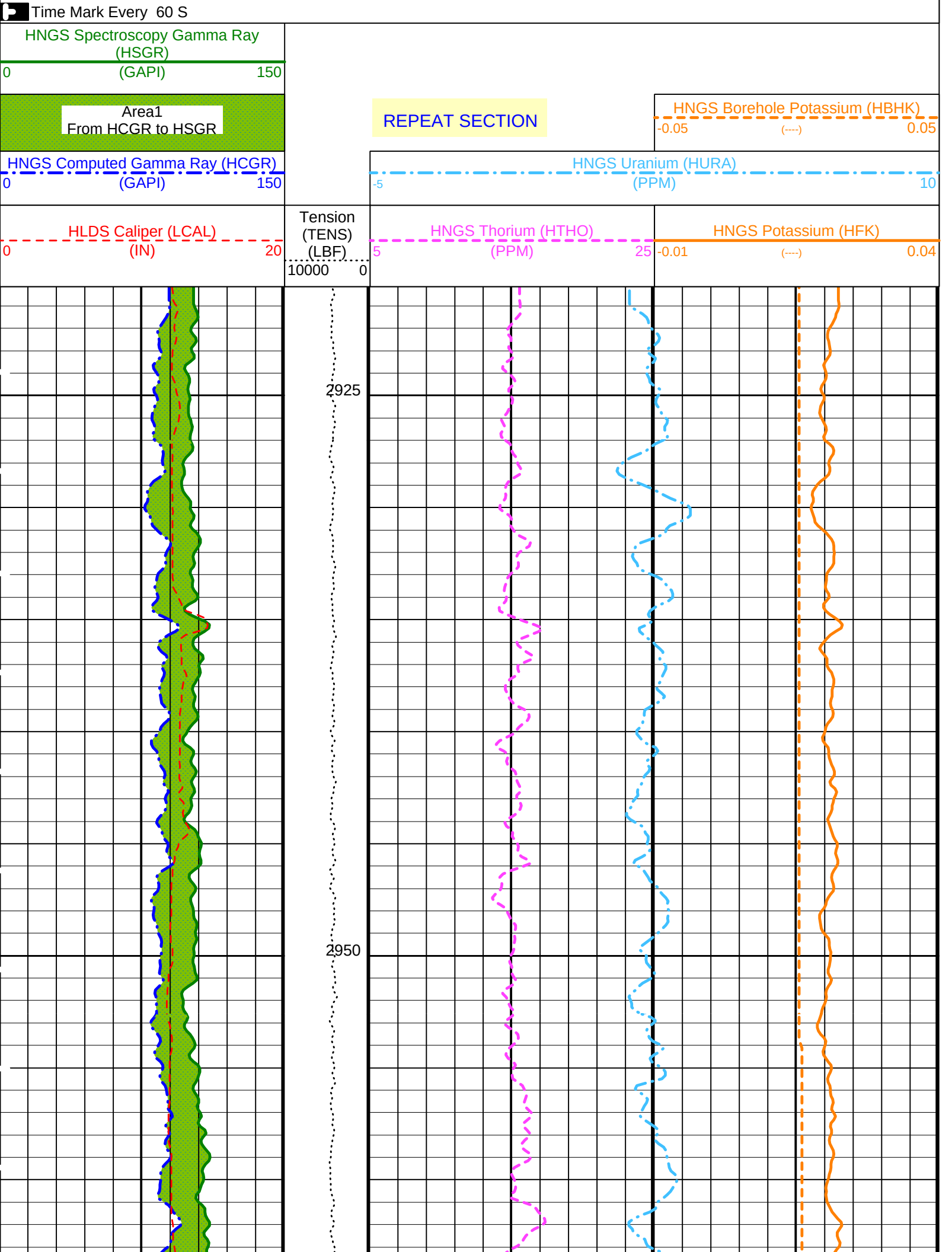
DEFAULT	DITE .011	FN:17	PRODUCER	21-Apr-2000 07:24	3118.1 M	2920.2 M
DITE_CUST	DITE .011	FN:18	PRODUCER	21-Apr-2000 07:24	3118.1 M	2920.2 M

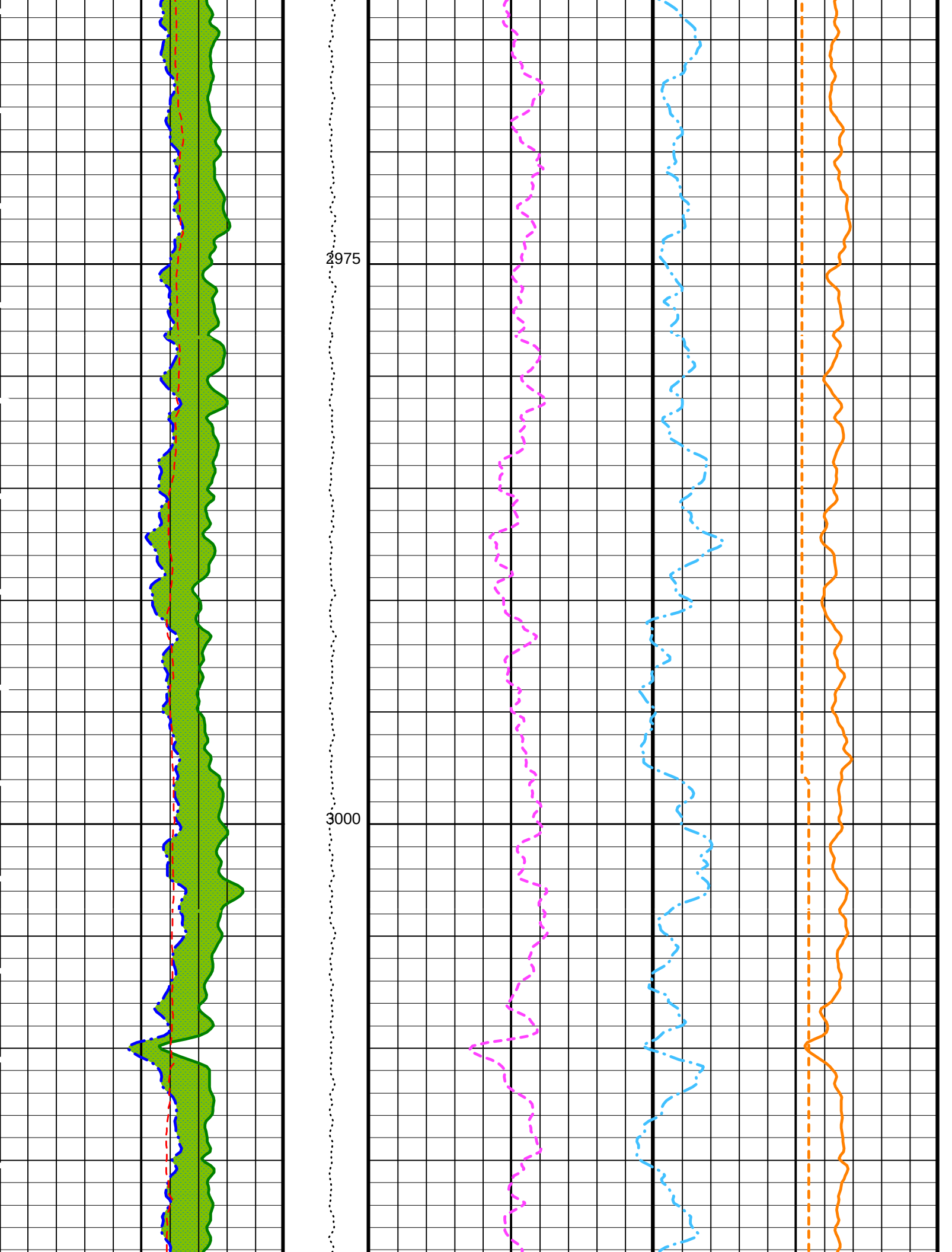
OP System Version: 9C1-303

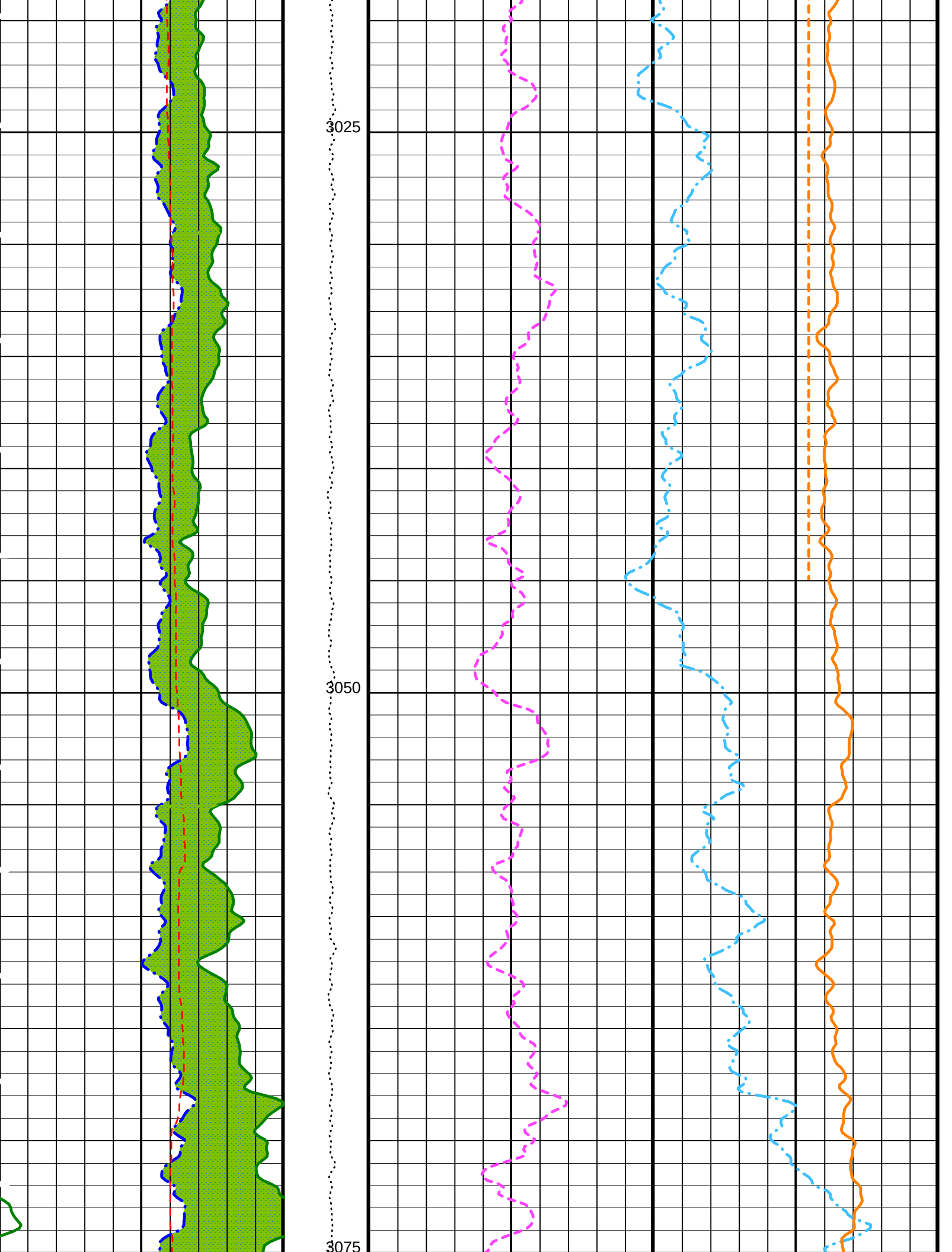
MCM

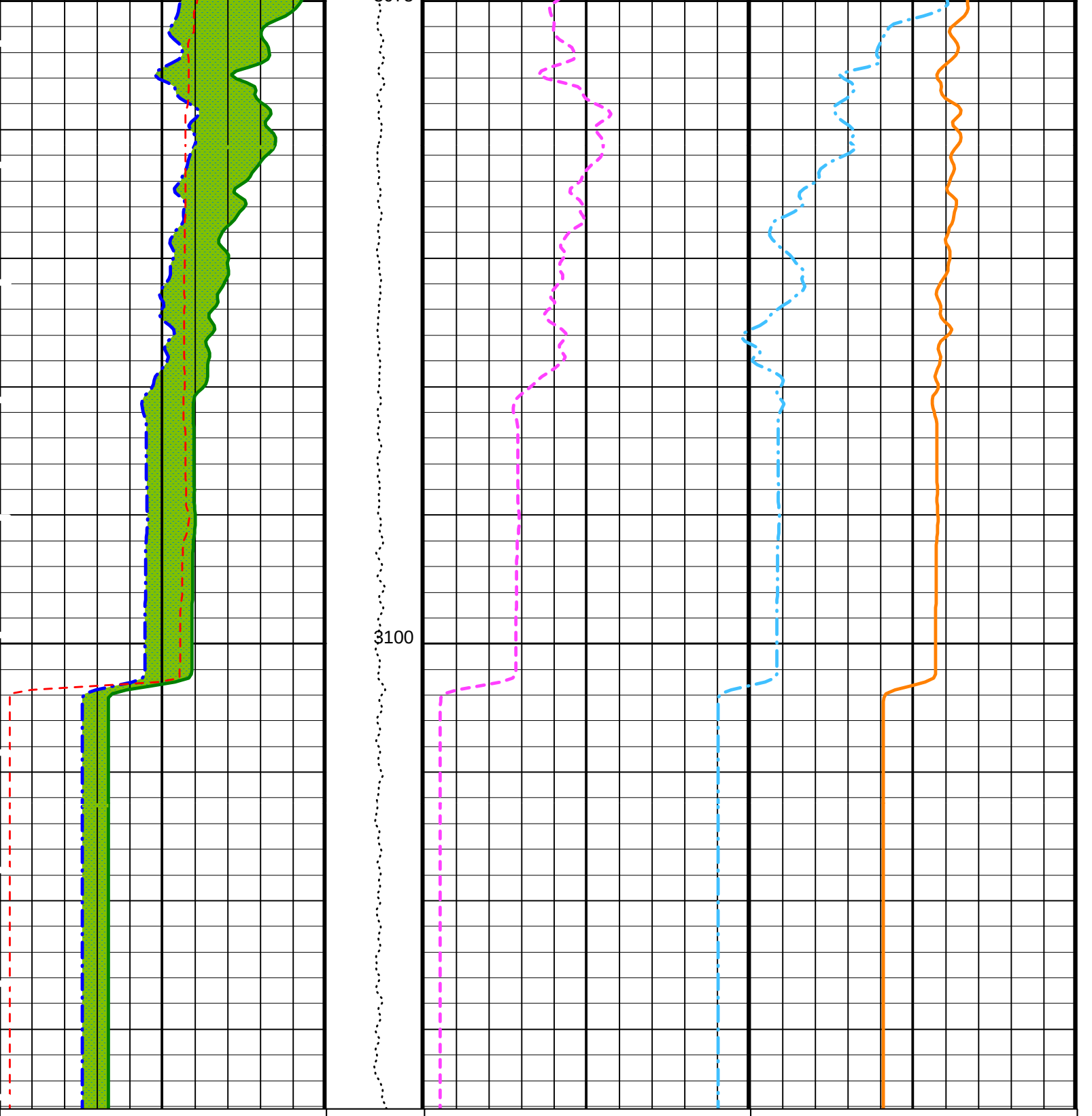
DIT-E	9C1-303	DTA-A	9C1-303
HLDS	9C1-303	NPLC-B	9C1-303
APS-BA	9C1-303	HNGS-BA	9C1-303
DTC-H	9C1-303		

PIP SUMMARY


Time Mark Every 60 S
HNGS Spectroscopy Gamma Ray (HSGR)
0
(GAPI)
150
Area1
From HCGR to HSGR
HNGS Computed Gamma Ray (HCGR)
0
(GAPI)
150
REPEAT SECTION
HNGS Borehole Potassium (HBHK)
-0.05
(----)
0.05
HNGS Uranium (HURA)
-5
(PPM)
10
HLDS Caliper (LCAL)
0
(IN)
20
Tension (TENS) (LBF)
10000
0
HNGS Thorium (HTHO)
5
(PPM)
25
HNGS Potassium (HFK)
-0.01
(----)
0.04
2925
2950


2975
3000


3025
3050
3075



HLDS Caliper (LCAL)
0 (IN) 20

Tension (TENS) (LBF)
10000 0

HNGS Thorium (HTHO)
5 (PPM) 25

HNGS Potassium (HFK)
-0.01 (----) 0.04

HNGS Computed Gamma Ray (HCGR)
0 (GAPI) 150

HNGS Uranium (HURA)
-5 (PPM) 10

Area1
From HCGR to HSGR

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

REPEAT SECTION

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

PIP SUMMARY

Time Mark Every 60 S

Parameters

DLIS Name	Description	Value	
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	
BKSF	HNGS Borehole Fluid Excluder Sleeve Algorithm Factor	1	
BKSH	HNGS Borehole Fluid Excluder Sleeve Algorithm High Channel	245	
BKSL	HNGS Borehole Fluid Excluder Sleeve Algorithm Low Channel	17	
BS	Bit Size	9.875	IN
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
D1PR	HNGS Detector 1 Calibration Thorium Peak Resolution	7.46561	%
D1TC	HNGS Detector 1 Calibration Temperature	46.8749	DEGF
D1TL	HNGS Detector 1 Calibration Thorium Peak Location	211.312	
D2PR	HNGS Detector 2 Calibration Thorium Peak Resolution	6.19449	%
D2TC	HNGS Detector 2 Calibration Temperature	44.9572	DEGF
D2TL	HNGS Detector 2 Calibration Thorium Peak Location	209.601	
DBCC	HNGS Barite Constant Correction Flag	NONE	
DFD	Drilling Fluid Density	8.51	LB/G
GCF1_START	HNGS Detector 1 GCF Constant	1	
GCF2_START	HNGS Detector 2 GCF Constant	1	
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	-0.00262684	
HALF	HNGS Alpha Filter Length	60	IN
HATIM	HNGS Marquardt Accumulation Time	600	S
HCRB	HNGS Apply Borehole Potassium Correction	NONE	
HMWM	Mud Weighting Material	NATU	
HNPE	HNGS Processing Enable	YES	
HSLV	HNGS Borehole Fluid Excluder Sleeve Status	NO	
HSVN	HNGS Spectral Standards Version Number	2.5113e-031	
MARQ_START	HNGS Marquardt Start-up Mode	INTERNAL	
RDF1_START	HNGS Detector 1 RDF Constant	0	
RDF2_START	HNGS Detector 2 RDF Constant	0	
S1BI	HNGS Detector 1 Calibration Bismuth Count Rate	1.3	CPS
S1NA	HNGS Detector 1 Calibration Sodium Count Rate	28.899	CPS
S1NG	HNGS Detector 1 Calibration End-On / Side-On Gain Ratio	0.992258	
S2BI	HNGS Detector 2 Calibration Bismuth Count Rate	1.3	CPS
S2NA	HNGS Detector 2 Calibration Sodium Count Rate	29.4941	CPS
S2NG	HNGS Detector 2 Calibration End-On / Side-On Gain Ratio	0.981545	
SABK	HNGS Statistical Uncertainty in Borehole Potassium Running Average	0.000366421	
SGRC	HNGS Standard Gamma-Ray Correction Flag	YES	
TPOS	Tool Position	ECCE	
VBA1	HNGS Detector 1 Variable Barite Factor Running Average	1.08021	
VBA2	HNGS Detector 2 Variable Barite Factor Running Average	0.983989	

Format: HNGSYields Vertical Scale: 1:200 Graphics File Created: 21-Apr-2000 07:24

OP System Version: 9C1-303

MCM

DIT-E	9C1-303	DTA-A	9C1-303
HLDS	9C1-303	NPLC-B	9C1-303
APS-BA	9C1-303	HNGS-BA	9C1-303
DTC-H	9C1-303		

Output DLIS Files

DEFAULT	DITE .011	FN:17	PRODUCER	21-Apr-2000 07:24
DITE_CUST	DITE .011	FN:18	PRODUCER	21-Apr-2000 07:24

Calibration and Check Summary

Measurement	Nominal	Master	Before	After	Change	Limit	Units

Hostile Litho-Density Sonde Wellsite Calibration - Background Measurement

Master: 10-MAR-2000 10:06 Before: 17-MAR-2000 18:41 After: 21-APR-2000 10:34

Master: 16-MAR-2000 16:00 Before: 17-MAR-2000 18:41 After: 21-APR-2000 10:34

SS Total Countrate Bkg	1645	1446	1441	1438	-3.191	80.00	CPS
SS HV Measured Bkg	1100	1077	1070	1070	-0.08301	80.00	V
SS Cs Centroid Bkg	661.0	661.3	661.0	661.4	0.3835	1.500	KEV
SS Cs Resolution Bkg	9.000	8.490	8.564	8.498	-0.06644	1.800	%
LS Total Countrate Bkg	1645	1468	1467	1468	0.3845	80.00	CPS
LS HV Measured Bkg	1100	1195	1190	1188	-2.429	80.00	V
LS Cs Centroid Bkg	661.0	661.3	661.2	661.2	0.04645	1.500	KEV
LS Cs Resolution Bkg	9.000	8.744	8.772	8.837	0.06551	1.800	%

Hostile Litho-Density Sonde Wellsite Calibration - Caliper Calibration
Before: 17-MAR-2000 19:48

HLDS Caliper Small Ring	8.000	N/A	9.714	N/A	N/A	N/A	IN
HLDS Caliper Large Ring	12.00	N/A	13.89	N/A	N/A	N/A	IN

Accelerator-Porosity Tool Wellsite Calibration - Detector Background
Master: 2-FEB-2000 21:50 Before: 21-APR-2000 2:18 After: 21-APR-2000 7:05

Near Det Bkg Cntrate	30.00	32.07	32.82	32.20	-0.6148	N/A	CPS
Far Det Bkg Cntrate	30.00	32.19	32.41	33.49	1.080	N/A	CPS
Array-1 Det Bkg Cntrate	30.00	28.58	29.01	29.69	0.6811	N/A	CPS
Array-2 Det Bkg Cntrate	30.00	30.06	29.14	30.01	0.8639	N/A	CPS
Array Therm Det Bkg Cntrate	30.00	33.94	33.90	35.35	1.447	N/A	CPS

Accelerator-Porosity Tool Wellsite Calibration - Detector Plateau Settings
Master: 2-FEB-2000 20:07

Near Detector Plateau Setting	1650	1762	N/A	N/A	N/A	N/A	V
Far Detector Plateau Setting	2000	2069	N/A	N/A	N/A	N/A	V
Array Detector Plateau Setting	2000	1987	N/A	N/A	N/A	N/A	V

Accelerator-Porosity Tool Wellsite Calibration - Calibration Ratios
Master: 2-FEB-2000 21:50

Near/Far Calibration Ratio	0.9250	0.9031	N/A	N/A	N/A	N/A	
Near/Array Calibration Ratio	1.030	1.068	N/A	N/A	N/A	N/A	

Hostile Natural Gamma Ray Sonde Wellsite Calibration - Detector 1 Check
Master: 2-FEB-2000 11:55 Before: 17-MAR-2000 18:42 After: 21-APR-2000 10:35

Na 511 Peak Loc	40.00	40.51	40.70	40.67	-0.03928	1.000	
Na 511 Peak Res	15.50	15.86	15.41	15.38	-0.02697	2.000	%
High Voltage	1150	1114	1112	1113	1.265	30.00	V
Na 1785 Peak Loc	142.6	145.5	145.3	145.2	-0.1492	7.000	
Na 1785 Peak Res	8.500	9.054	8.948	9.603	0.6542	2.000	%
Temperature	15.50	8.268	21.55	15.17	-6.379	N/A	DEGC
Na Count Rate	45.00	28.90	27.69	26.48	-1.208	8.000	CPS

Hostile Natural Gamma Ray Sonde Wellsite Calibration - Detector 2 Check
Master: 2-FEB-2000 11:55 Before: 17-MAR-2000 18:42 After: 21-APR-2000 10:35

Na 511 Peak Loc	40.00	40.64	40.50	40.68	0.1817	1.000	
Na 511 Peak Res	15.50	14.00	15.27	14.59	-0.6871	2.000	%
High Voltage	1150	1201	1200	1199	-1.425	30.00	V
Na 1785 Peak Loc	142.6	144.2	145.0	145.0	0.01640	7.000	
Na 1785 Peak Res	8.500	8.101	8.587	7.770	-0.8167	2.000	%
Temperature	15.50	7.197	20.53	15.41	-5.111	N/A	DEGC
Na Count Rate	45.00	29.49	28.21	26.74	-1.471	8.000	CPS

Hostile Natural Gamma Ray Sonde Wellsite Calibration - Ratio Of Detector 1 To Detector 2
Master: 2-FEB-2000 11:55 Before: 17-MAR-2000 18:42 After: 21-APR-2000 10:35

Coincidence Count Rate Ratio	1.000	0.9809	0.9840	0.9869	0.002968	0.05000	

Hostile Natural Gamma Ray Sonde Master Calibration - Detector 1 Calibration
Master: 2-FEB-2000 11:43

Na 511 Peak Set Point	40.00	41.00	--	--	--	--	
Th Peak Loc	209.6	211.3	--	--	--	--	
Th Peak Res	7.000	7.466	--	--	--	--	%
Background Count Rate	142.5	18.16	--	--	--	--	CPS
Gain Ratio	1.000	0.9923	--	--	--	--	

Hostile Natural Gamma Ray Sonde Master Calibration - Detector 2 Calibration
Master: 2-FEB-2000 11:43

Na 511 Peak Set Point	40.00	41.00	--	--	--	--	
Th Peak Loc	209.6	209.6	--	--	--	--	
Th Peak Res	7.000	6.194	--	--	--	--	%
Background Count Rate	142.5	20.51	--	--	--	--	CPS
Gain Ratio	1.000	0.9815	--	--	--	--	

Dual Induction - E / Equipment Identification

Primary Equipment:

Dual Induction Sonde	DIS - HB	200
Dual Induction Cartridge	DIS - EB	171

Dual Induction Cartridge	DIC - EB	171
Auxiliary Equipment:		
Mass Isolated Housing	MIH - ZA	174

Hostile Litho-Density Sonde / Equipment Identification

Primary Equipment:		
Hostile Litho Density Sonde	HLDS - D	35
Hostile Litho Density High Voltage	HLDV - D	35
Gamma Source Radioactive	GSR - Z	1846
Auxiliary Equipment:		
Hostile Litho Density Pad	HLDP - C	12
Hostile Litho Density High Voltage Housi	HEH - H	35

Nuclear Porosity Lithology Cartridge - B / Equipment Identification

Primary Equipment:		
NPLC Cartridge	NPLC - B	82
Auxiliary Equipment:		
NPLC Housing	NPH - B	82

Accelerator-Porosity Tool / Equipment Identification

Primary Equipment:		
Accelerator-Porosity Sonde	APS - BA	22
APS Minitron	MNTR - F	4185
Auxiliary Equipment:		
Accelerator-Porosity Housing	APH - AC	22
APS Calibration Water Tank	SFT - 178	4722
APS Aluminium Calibrator Sleeve	SFT - 281	24

Hostile Natural Gamma Ray Sonde / Equipment Identification

Primary Equipment:		
HNGS Sonde	HNGS - BA	27
Auxiliary Equipment:		
HNGS Sonde Housing	HNSH - BA	27
Gamma Source Radioactive	GSR - U	135

Hostile Natural Gamma Ray Sonde Wellsite Calibration

Detector 1 Check

Phase	Na 511 Peak Loc	Value
Master		40.51
Before		40.70
After		40.67
	37.50 (Minimum) 40.00 (Nominal) 42.50 (Maximum)	

Phase	Na 511 Peak Res %	Value
Master		15.86
Before		15.41
After		15.38
	12.00 (Minimum) 15.50 (Nominal) 19.00 (Maximum)	

Phase	High Voltage V	Value
Master		1114
Before		1112
After		1113
	900.0 (Minimum) 1150 (Nominal) 1600 (Maximum)	

Phase	Na 1785 Peak Loc	Value
Master		145.5
Before		145.3
After		145.2
	135.0 (Minimum) 142.6 (Nominal) 150.3 (Maximum)	

Phase	Na 1785 Peak Res %	Value
Master		9.054
Before		8.948
After		9.603
	7.000 (Minimum) 8.500 (Nominal) 11.00 (Maximum)	

Phase	Temperature DEGC	Value
Master		8.268
Before		21.55
After		15.17
	-28.89 (Minimum) 15.50 (Nominal) 60.00 (Maximum)	

Phase	Na Count Rate CPS	Value
Master		28.90
Before		27.69

Phase	Value
After	26.48

15.00 (Minimum) 45.00 (Nominal) 100.0 (Maximum)

Master: 2-FEB-2000 11:55 Before: 17-MAR-2000 18:42 After: 21-APR-2000 10:35

Hostile Natural Gamma Ray Sonde Wellsite Calibration

Detector 2 Check

Phase	Na 511 Peak Loc	Na 511 Peak Res %	High Voltage V
Master	40.64	14.00	1201
Before	40.50	15.27	1200
After	40.68	14.59	1199
(Minimum)	37.50	12.00	900.0
(Nominal)	40.00	15.50	1150
(Maximum)	42.50	19.00	1600

Phase	Na 1785 Peak Loc	Na 1785 Peak Res %	Temperature DEGC
Master	144.2	8.101	7.197
Before	145.0	8.587	20.53
After	145.0	7.770	15.41
(Minimum)	135.0	7.000	-28.89
(Nominal)	142.6	8.500	15.50
(Maximum)	150.3	11.00	60.00

Phase	Na Count Rate CPS
Master	29.49
Before	28.21
After	26.74

15.00 (Minimum) 45.00 (Nominal) 100.0 (Maximum)

Master: 2-FEB-2000 11:55 Before: 17-MAR-2000 18:42 After: 21-APR-2000 10:35

Hostile Natural Gamma Ray Sonde Wellsite Calibration

Ratio Of Detector 1 To Detector 2

Phase	Coincidence Count Rate Ratio
Master	0.9809
Before	0.9840
After	0.9869

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

Master: 2-FEB-2000 11:55
Before: 17-MAR-2000 18:42
After: 21-APR-2000 10:35

Hostile Natural Gamma Ray Sonde Master Calibration

Detector 1 Calibration

Phase	Na 511 Peak Set Point	Th Peak Loc	Th Peak Res %
Master	41.00	211.3	7.466
(Minimum)	38.00	201.0	5.000
(Nominal)	40.00	209.6	7.000
(Maximum)	42.00	218.3	9.000

Phase	Background Count Rate CPS	Gain Ratio
Master	EXCEEDS LIMIT 18.16	0.9923
(Minimum)	20.00	0.9400
(Nominal)	142.5	1.000
(Maximum)	265.0	1.060

See Remarks

Master: 2-FEB-2000 11:43

Hostile Natural Gamma Ray Sonde Master Calibration

Detector 2 Calibration

Phase	Na 511 Peak Set Point	Th Peak Loc	Th Peak Res %
Master	41.00	209.6	6.194
(Minimum)	38.00	201.0	5.000
(Nominal)	40.00	209.6	7.000
(Maximum)	42.00	218.3	9.000

Phase	Background Count Rate CPS	Gain Ratio
Master	20.51	0.9815
(Minimum)	20.00	0.9400
(Nominal)	142.5	1.000
(Maximum)	265.0	1.060

Master: 2-FEB-2000 11:43

COMPANY:	Lamont Doherty
WELL:	ODP Leg 189, Site 1171D (STR-2A)
FIELD:	Tasmanian Seaway, West Tasmania Site
COUNTY:	Offshore
STATE:	Indian Ocean

BOTTOM LOG INTERVAL	3089 m
SCHLUMBERGER DEPTH	3118 m
DEPTH DRILLER	3117.8 m
KELLY BUSHING	11.2 m
DRILL FLOOR	10.9 m
GROUND LEVEL	-2148

Schlumberger

Natural Gamma Spectrometry Log