



Company: Lamont Doherty Earth Observatory

Well: Expedition 350, Site U1437D

Field: IBM-1 (Rear Arc)

Rig: JOIDES Resolution Country:

HNGS Spectral Gamma Ray

JOIDES Resolution
IBM-1 (Rear Arc)
Latitude: N 31.7897*
Expedition 350, Site U1437D
Lamont Doherty Earth Observatory

LOCATION	Latitude: N 31.7897* Longitude: E 139.02631*	Elev.: K.B. -2127.30 m G.L. 0.00 m D.F. -2127.30 m
	Permanent Datum: <u>Mean Sea Level</u> Log Measured From: <u>Drill Floor</u> Drilling Measured From: <u>Drill Floor</u>	Elev.: <u>0.00 m</u> 0.00 m above Perm. Datum
	Ocean: Pacific	Max. Well Deviation 0 deg Longitude E 139.02631 Latitude N 31.7897

Run 1

Run 2

R

Logging Date	22-Apr-2014
Run Number	1
Depth Driller	980.4 m
Schlumberger Depth	960 m
Bottom Log Interval	924.2 m
Top Log Interval	0 m
Casing Driller Size @ Depth	5.500 in @ 92.3 m
Casing Schlumberger	92.3 m
Bit Size	9.875 in
Type Fluid In Hole	Seawater
MUD Density	1.03 g/cm3
MUD Viscosity	
MUD Fluid Loss	PH
MUD Source Of Sample	N/A
RM @ Measured Temperature	@ @
RMF @ Measured Temperature	@ @
RMC @ Measured Temperature	@ @
Source RMF	N/A
RMC	N/A
RM @ MRT	@ 60
RMF @ MRT	@ 60
Maximum Recorded Temperatures	60 degC
Circulation Stopped Time	22-Apr-2014 14:00
Logger On Bottom Time	22-Apr-2014 19:25
Unit Number	627314
Location	Houston
Recorded By	C. Furman
Witnessed By	G. Guerin

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	
MUD 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	

DISCLAIMER

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

OTHER SERVICES1

- OS1: HRLA
- OS2: HLDS / APS
- OS3: MSS
- OS4: DSI
- OS5: FMS






REMARKS: RUN NUMBER 1

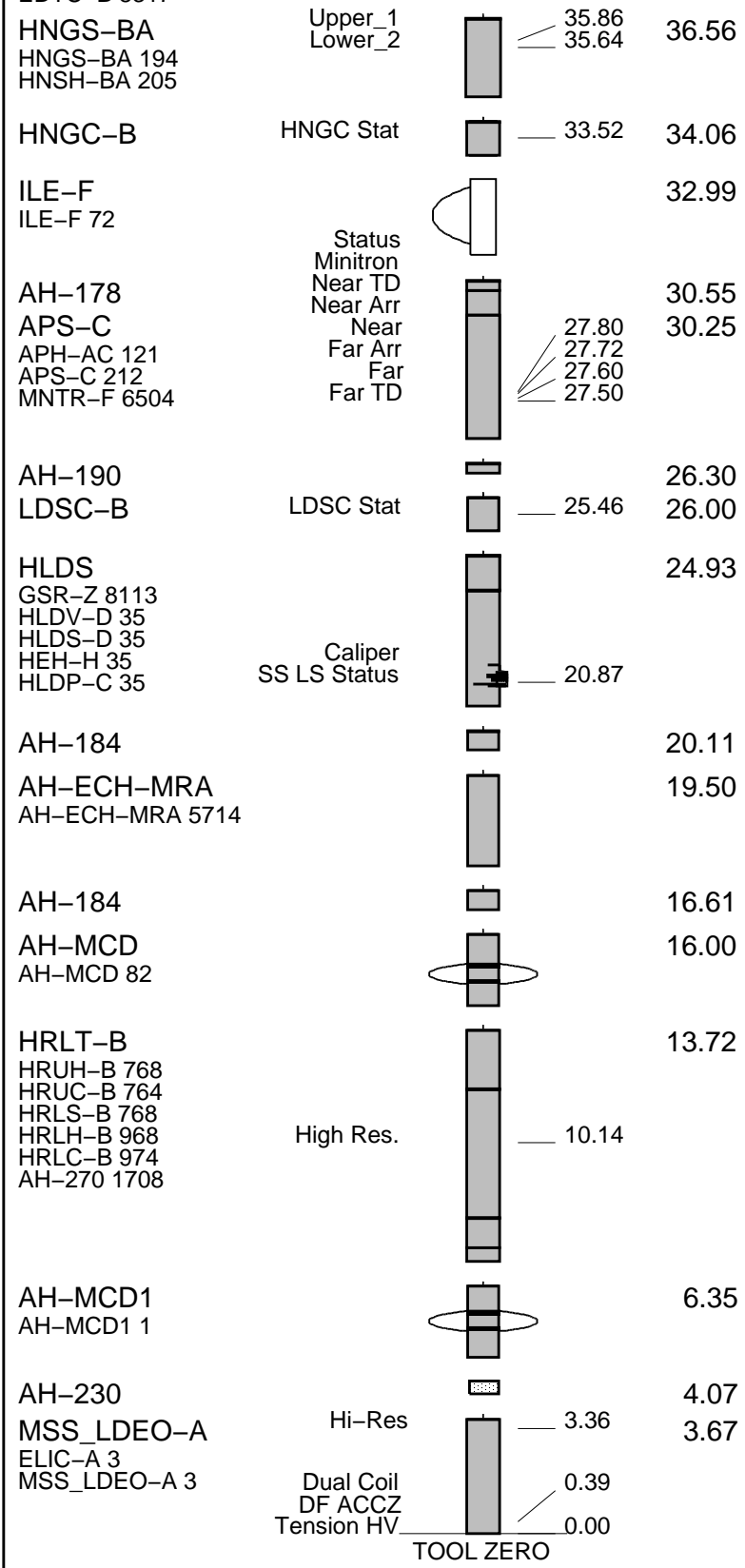
Hole drilled with RCB coring bit and bottom hole assembly (BHA). 9 7/8 " BS
 Coring concluded approximately 24 hours prior to logging.
 Drill pipe set at a depth of 92.3msbf with a logging bit installed to facilitate wireline logging.
 Downlog run with corrections computed using bit size; uplogs corrected for actual hole size using caliper.
 Lower part of toolstring (MSS and HRLA) centralized using modified MCD inline centralizers.
 Upper part of toolstring (HLDS, APS, HNGS) eccentered using HLDS caliper and bowspring, as per toolsketch.
 APS minitron remained off during downlog to avoid GR interference / formation activation.
 Fluid type was sea water, as used to drill, so no barite corrections were required.
 Depth originally recorded from drill floor; played back with sea floor as reference zero.
 All logs presented in measured depth below sea floor (MDBSF).
 Maximum observed temperature on the MSS internal temperature sensor at the bottom of the hole was 60 degC.

RUN 1			RUN 2		
SERVICE ORDER #:			SERVICE ORDER #:		
PROGRAM VERSION: 19C0-187			PROGRAM VERSION:		
FLUID LEVEL:			FLUID LEVEL:		
LOGGED INTERVAL	START	STOP	LOGGED INTERVAL	START	STOP

EQUIPMENT DESCRIPTION

RUN 1		RUN 2	
SURFACE EQUIPMENT			
SFT-281 1			
SFT-178 1			
GSR-U 616008			
WITM (EDTS)-A			

RUN 1		RUN 2	
DOWNHOLE EQUIPMENT			
LEH-QT	MDSB_EDTC Mud Tempe	 38.54	39.86
AH-369	CTEM Gamma Ray	 37.47  36.90	38.97
EDTC-B	EFTB DIAG TelStatus	 38.54	38.54
EDTH-B 8303	EDTCB Ele	 36.56	
EDTC-B 8317			



MAXIMUM STRING DIAMETER 4.50 IN
 MEASUREMENTS RELATIVE TO TOOL ZERO
 ALL LENGTHS IN METERS

Production String	(in)	(m)	Well Schematic	(m)	(in)	Casing String

Kelly Bushing Elevation

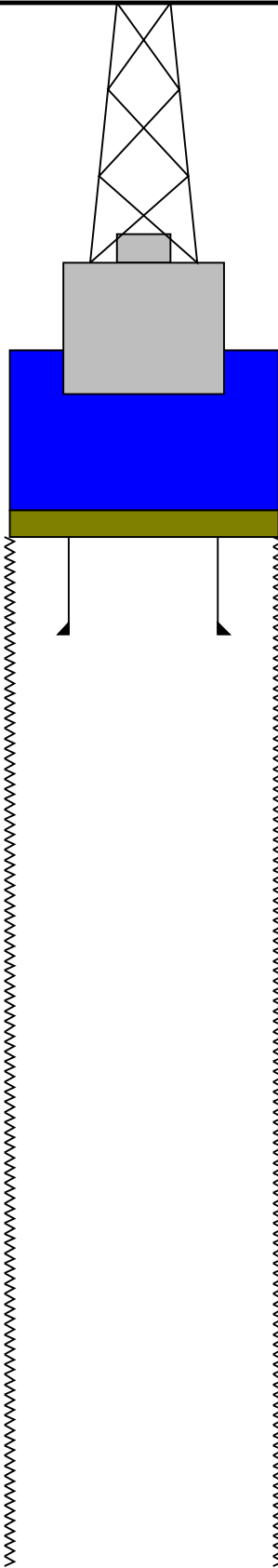
Derrick Floor Elevation

Mean Sea Level

-2127.3

-2127.3

-2117.3



0.0

92.3

5.500

980.4

9.875

Sea Floor

Bit Depth

Total Depth - Driller



Downlog 1:200 Scale

MAXIS Field Log

Input DLIS Files

DEFAULT	Flip_MSS_LDEO_HRLA_033LUP	PRODUCER	25-Apr-2014 00:44	3091.3 M	2064.3 M
---------	---------------------------	----------	-------------------	----------	----------

Output DLIS Files

DEFAULT	MSS_LDEO_HRLA_LDL_037PUP	FN:43	PRODUCER	25-Apr-2014 01:10	964.8 M	-25.0 M
CLIENT	MSS_LDEO_HRLA_LDL_037PUC	FN:44	CUSTOMER	25-Apr-2014 01:10	964.8 M	-25.0 M

OP System Version: 19C0-187

MSS_LDEO-A	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)
 (GAPI) 0 75

Area1
 From HCGR to HSGR

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

HNGS Computed Gamma Ray (HCGR)
 (GAPI) 0 75

Calibrated
 Downhole
 Force
 (CDF)
 (LBF)
 3000 0

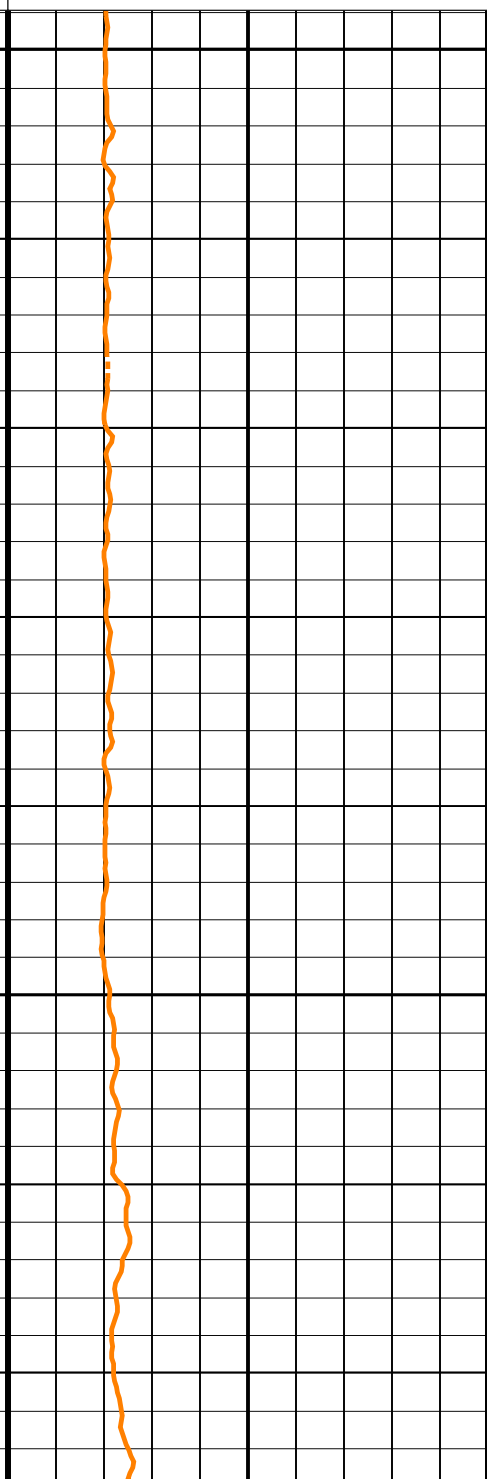
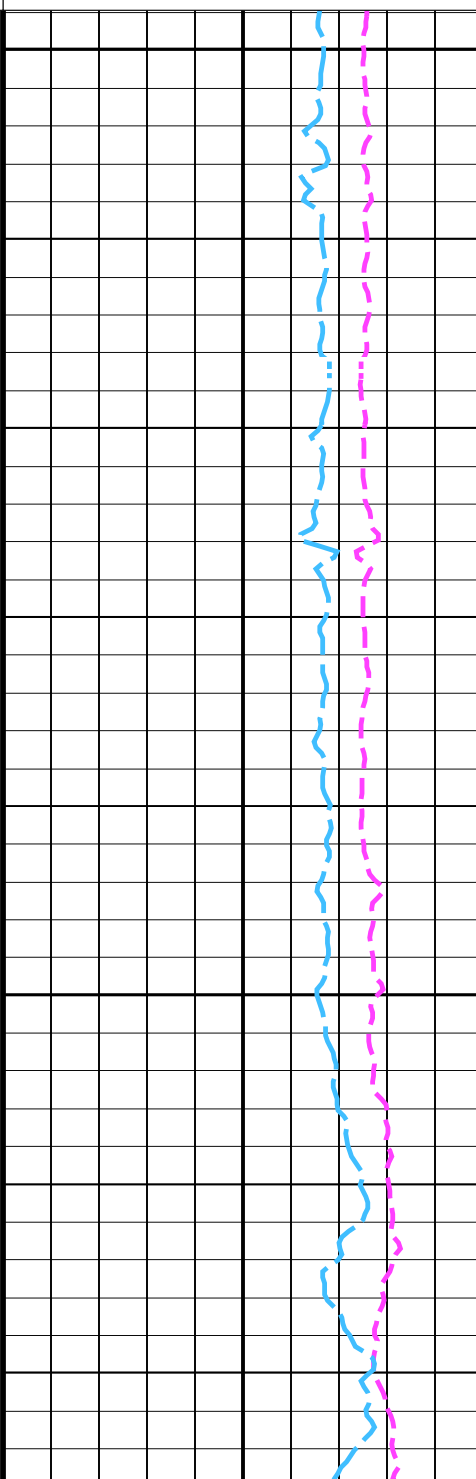
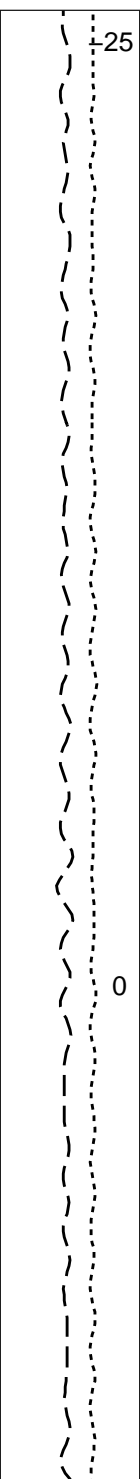
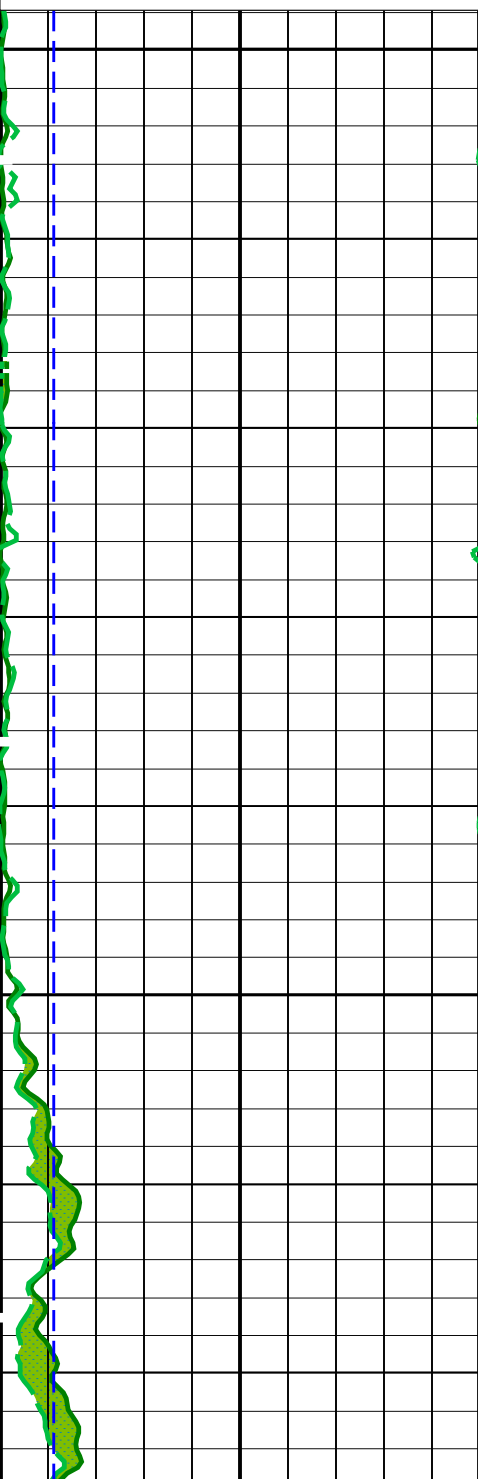
HNGS Uranium (HURA)
 (PPM) -5 10

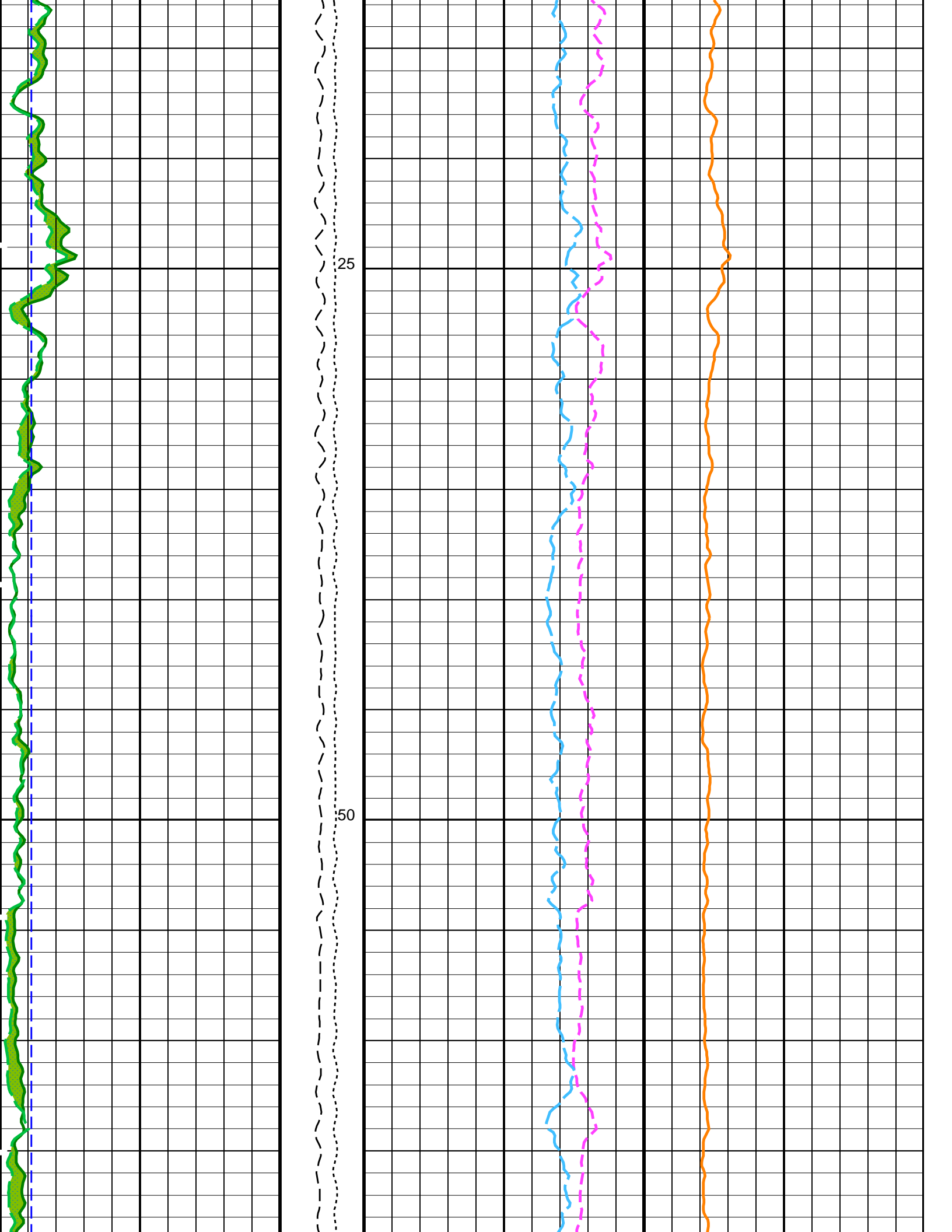
HLDS Caliper (LCAL)
 (IN) 0 20

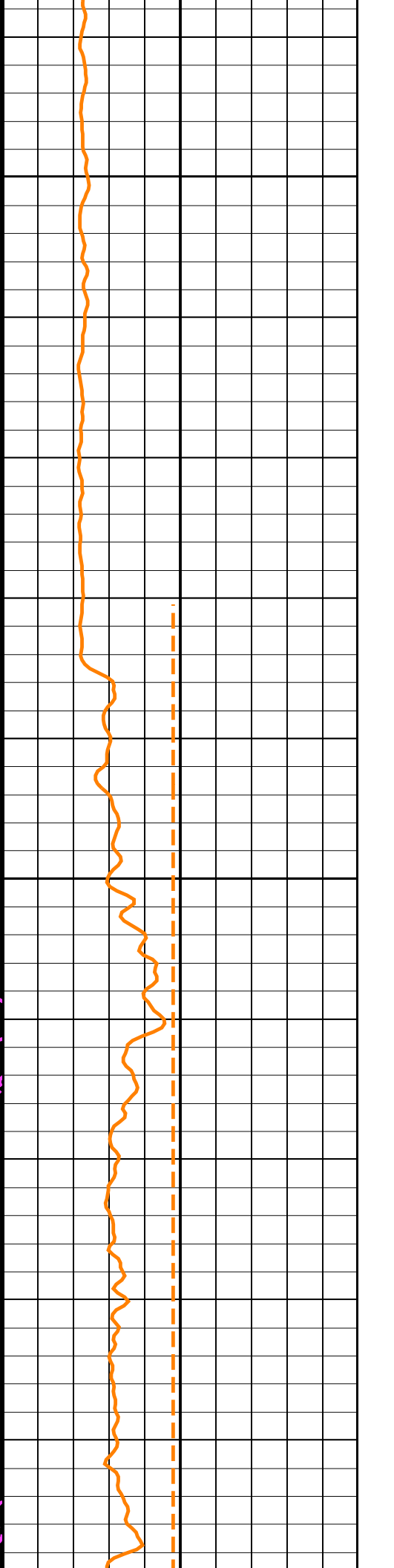
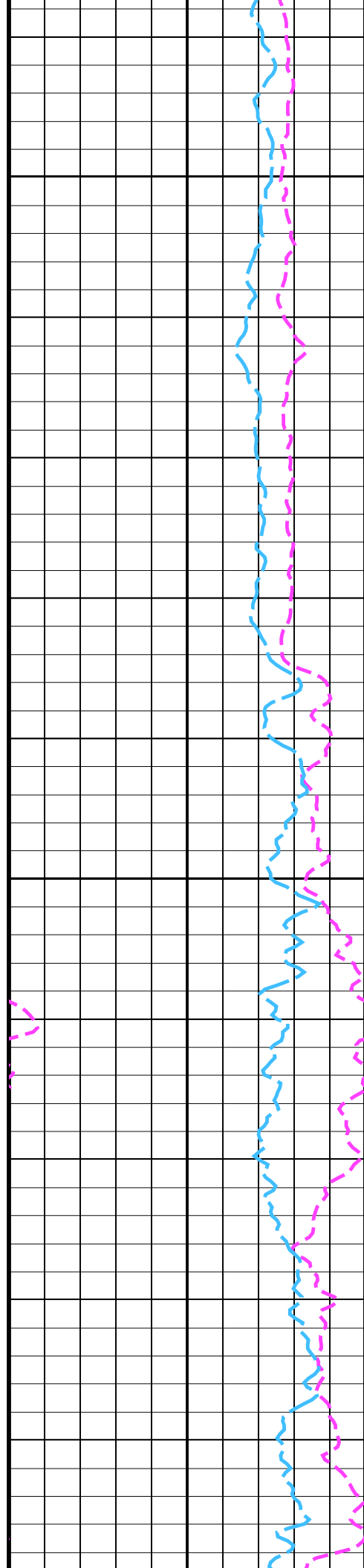
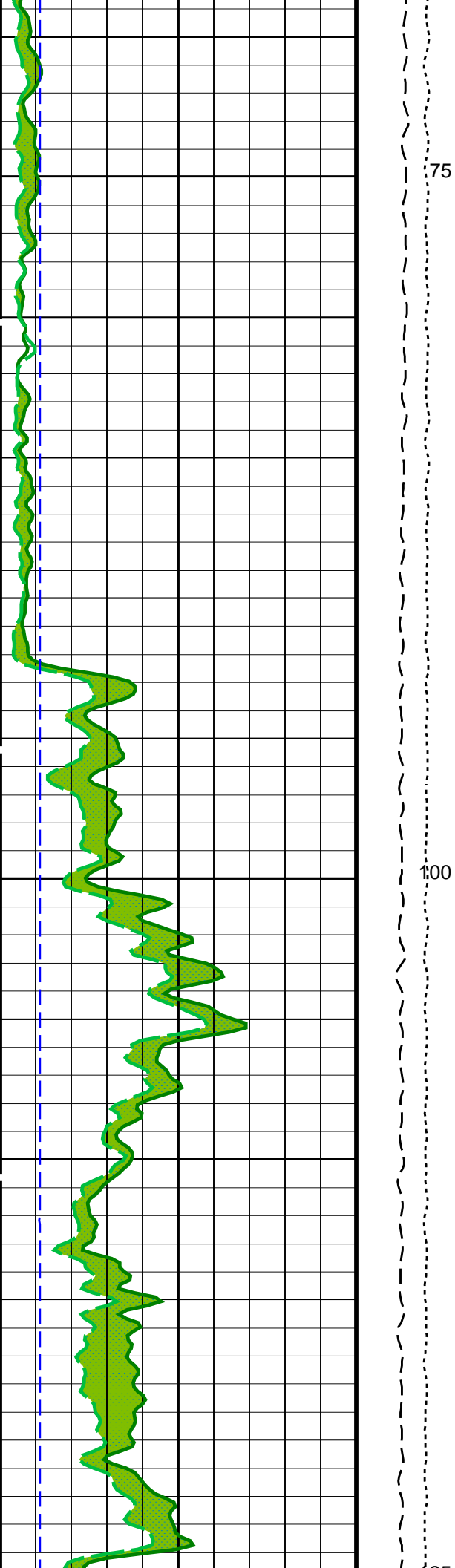
Tension
 (TENS)
 (LBF)
 10000 0

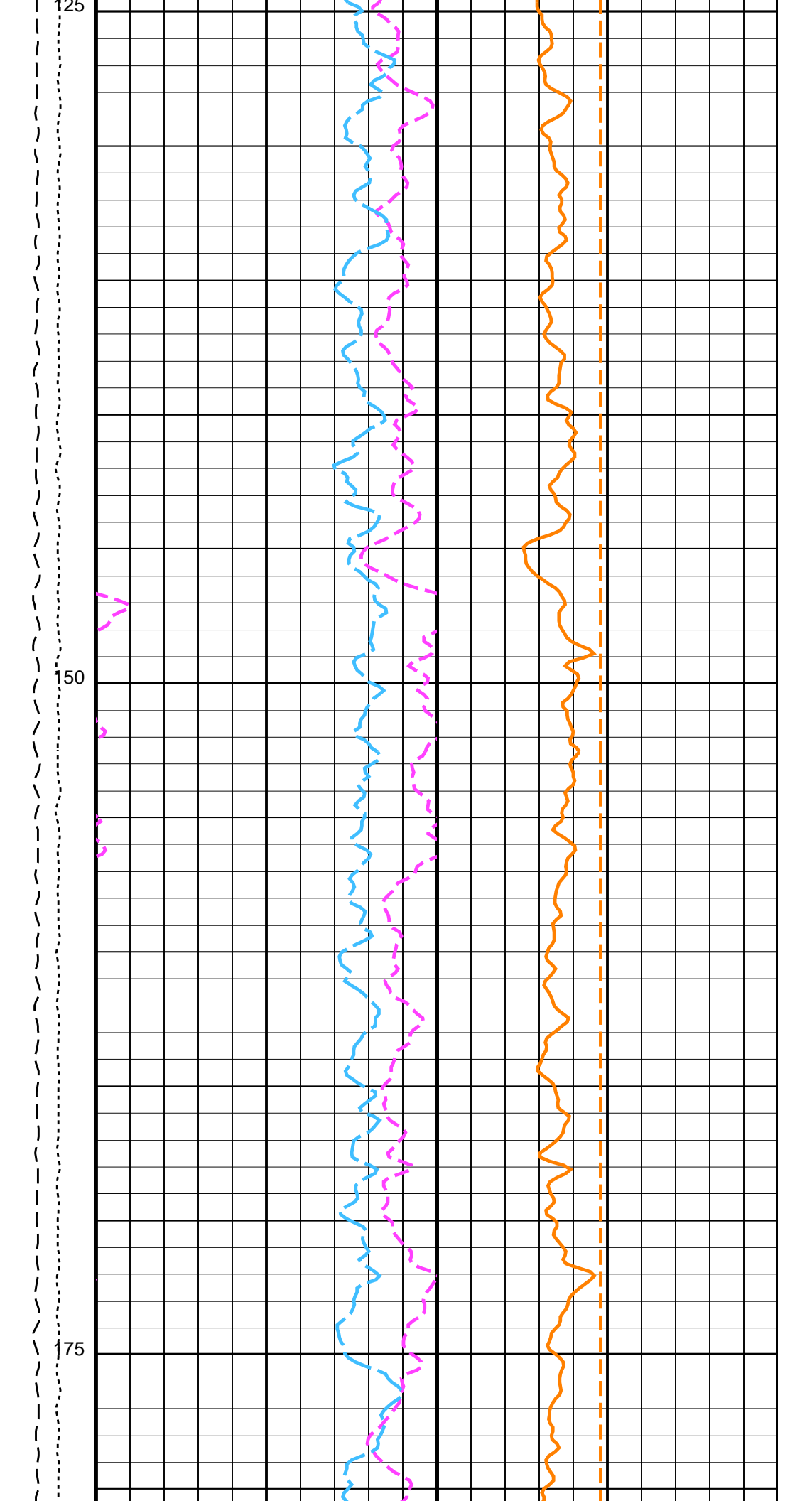
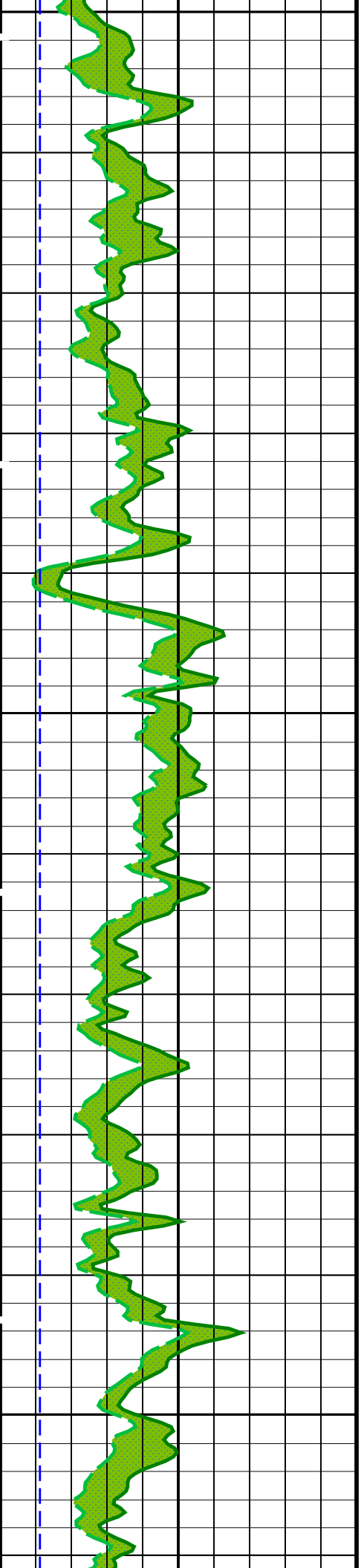
HNGS Thorium (HTHO)
 (PPM) 5 25

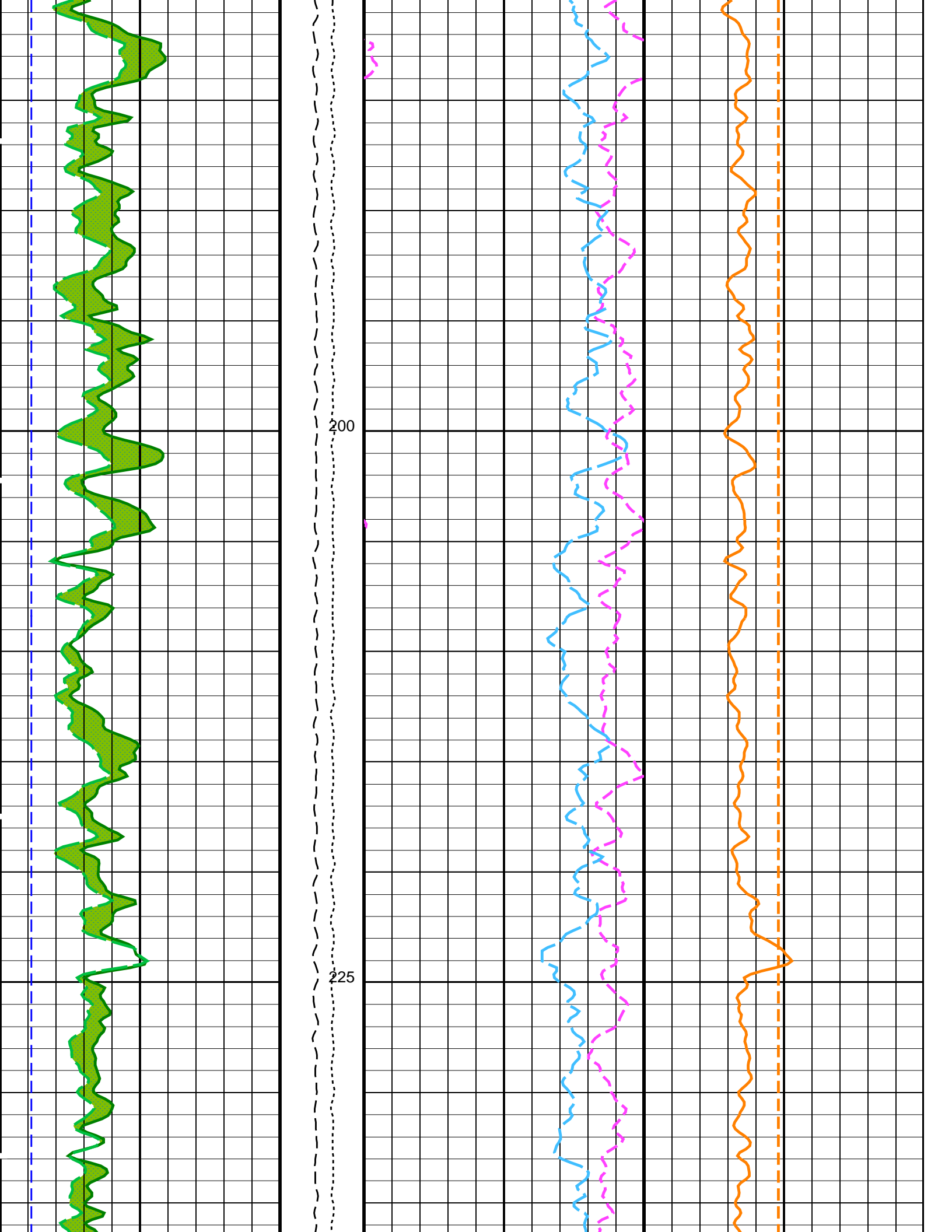
HNGS Potassium (HFK)
 -0.01 (----) 0.04

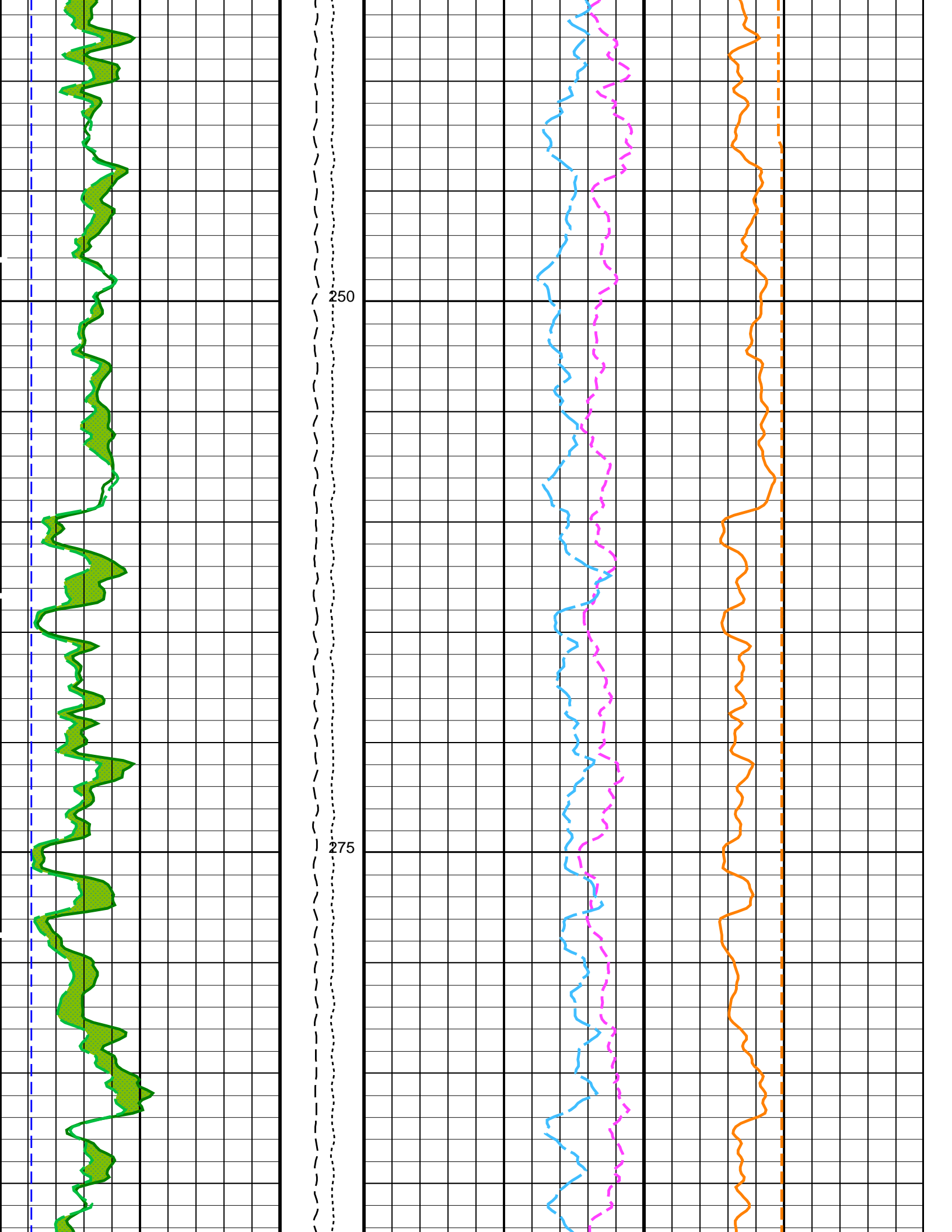


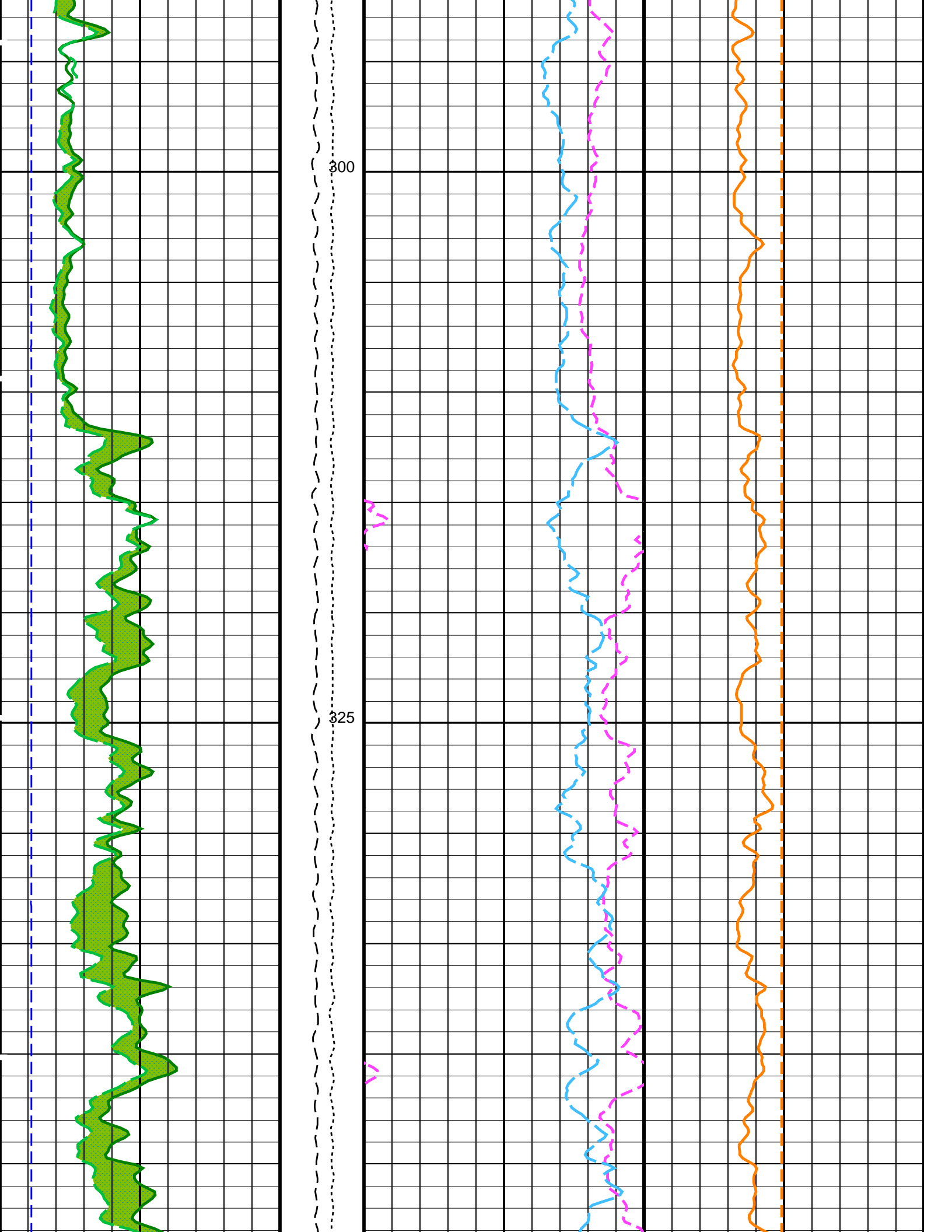


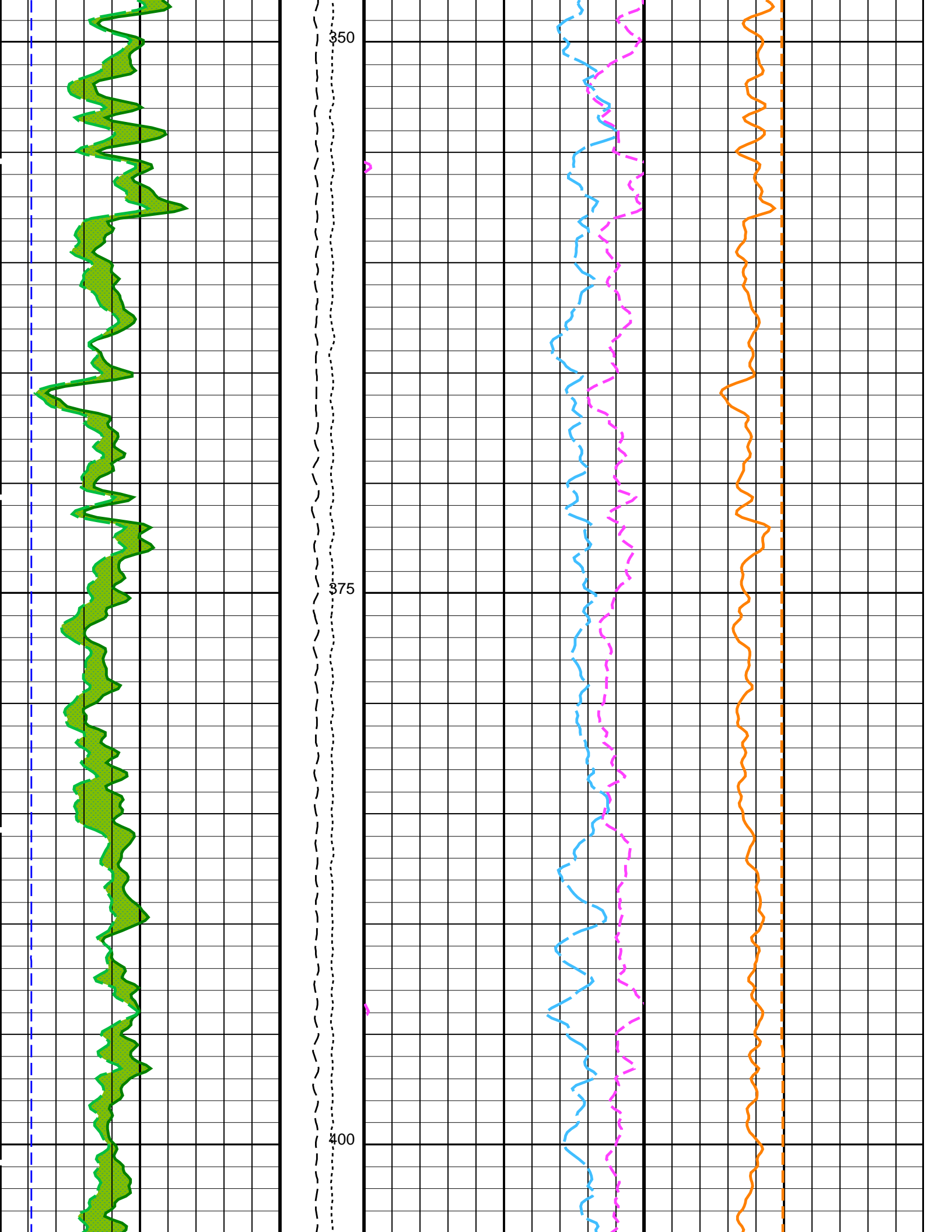


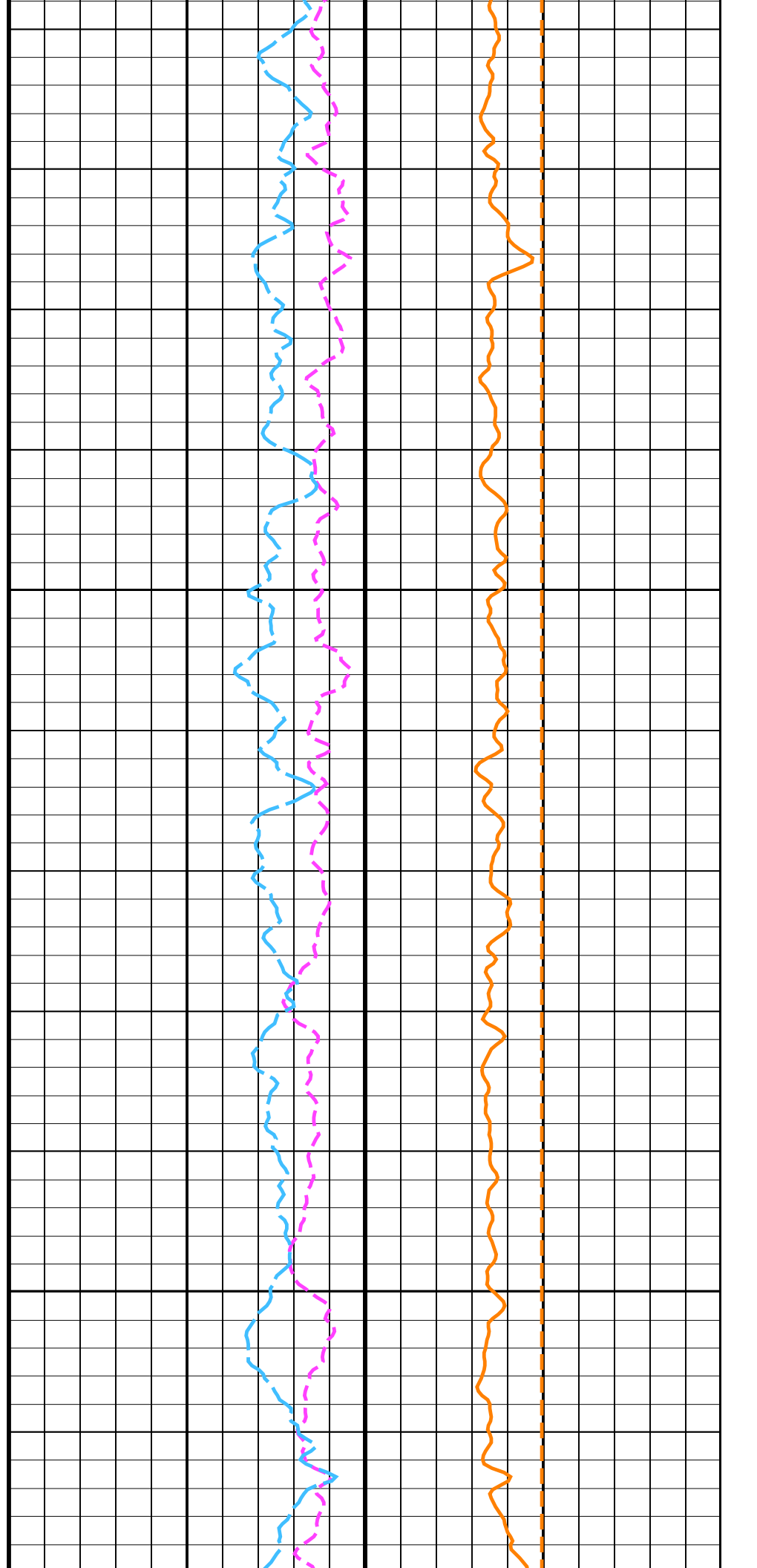
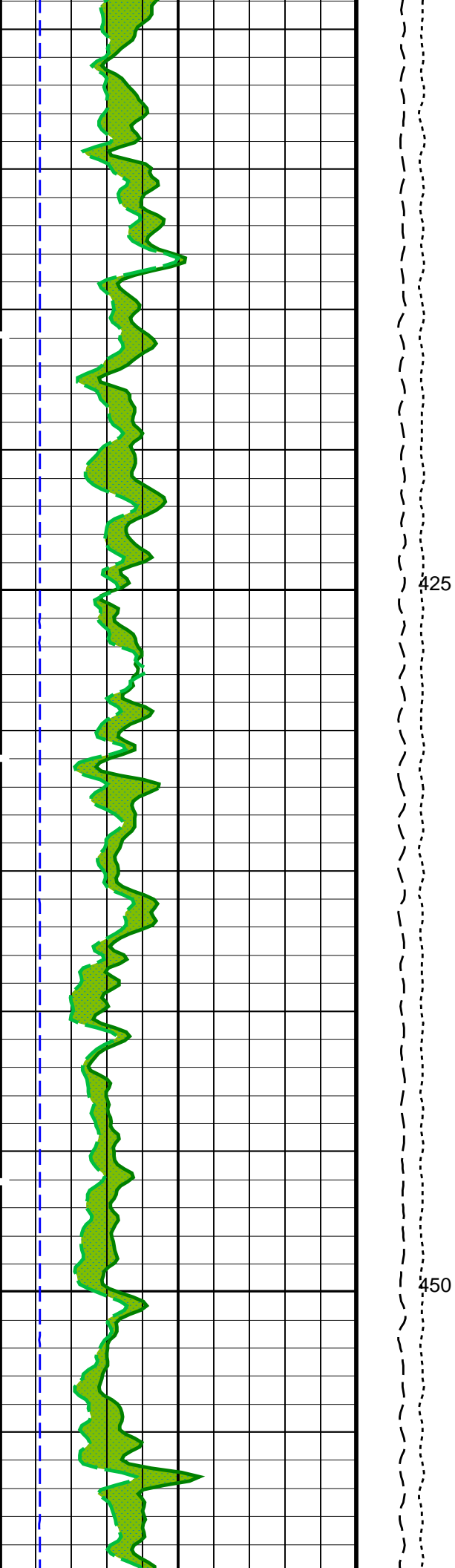


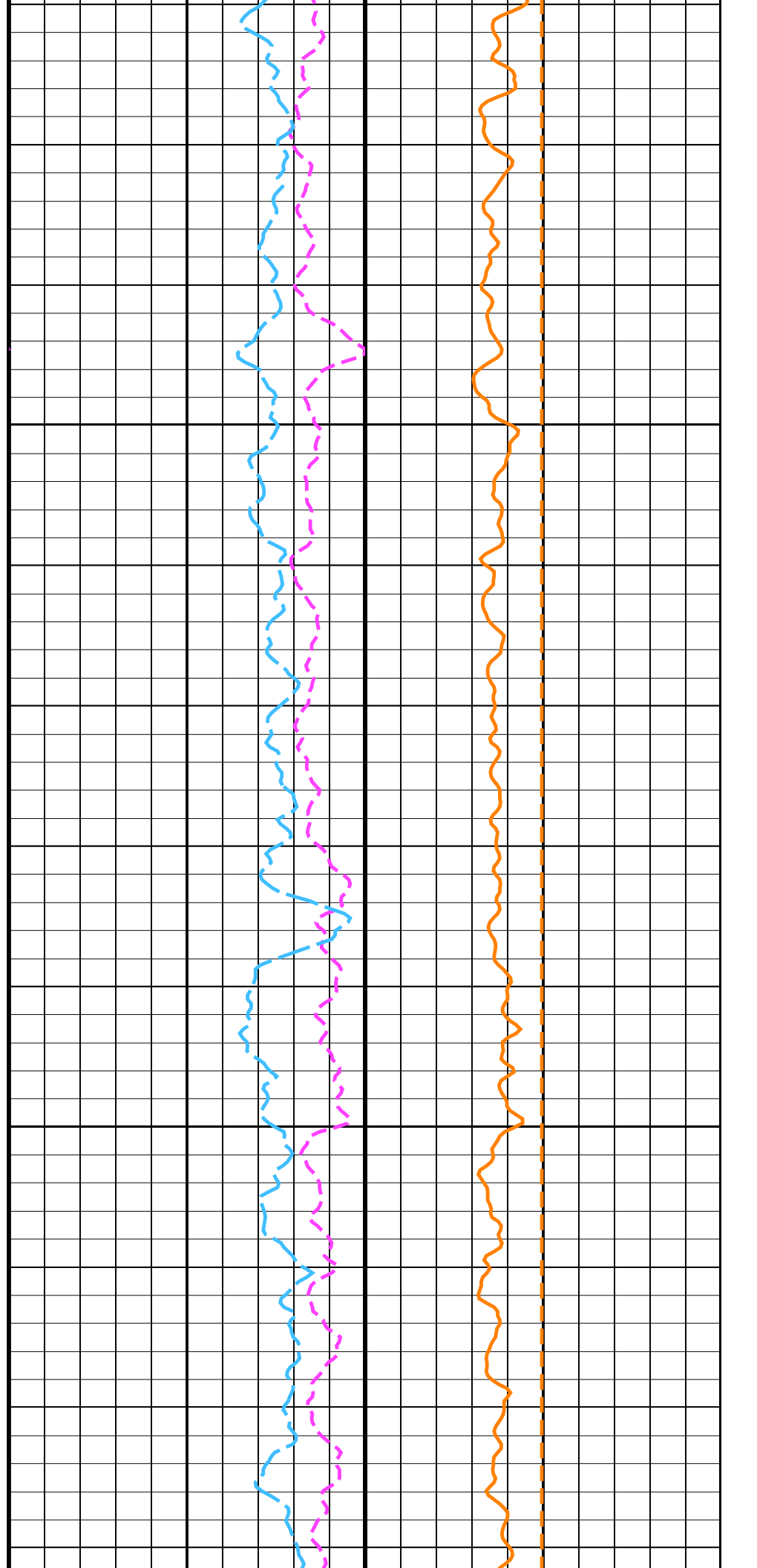
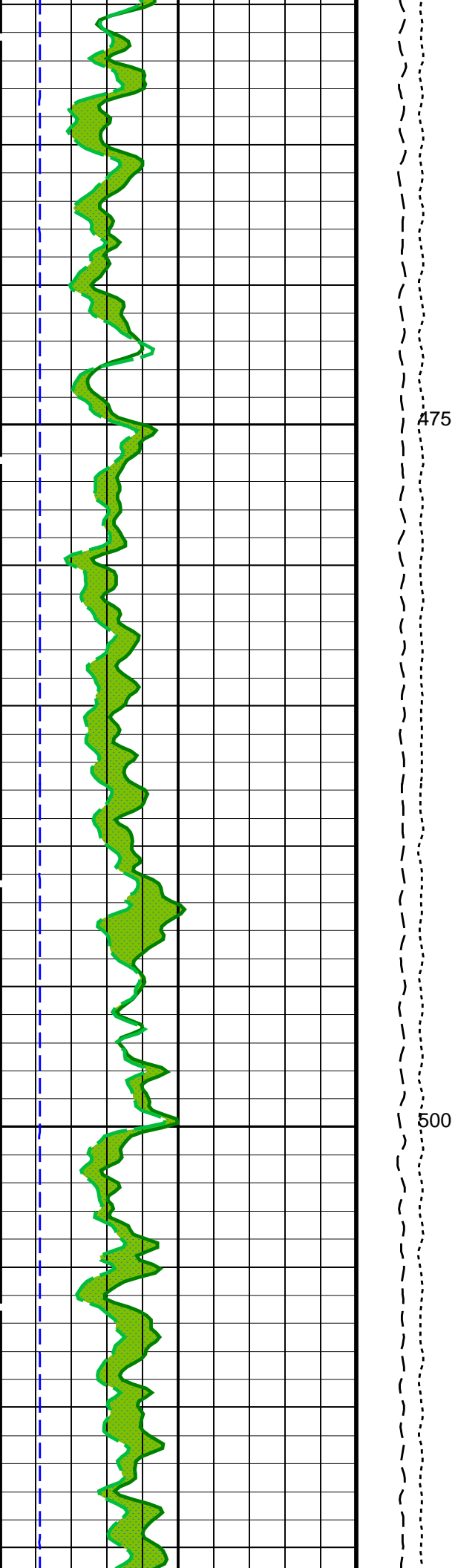


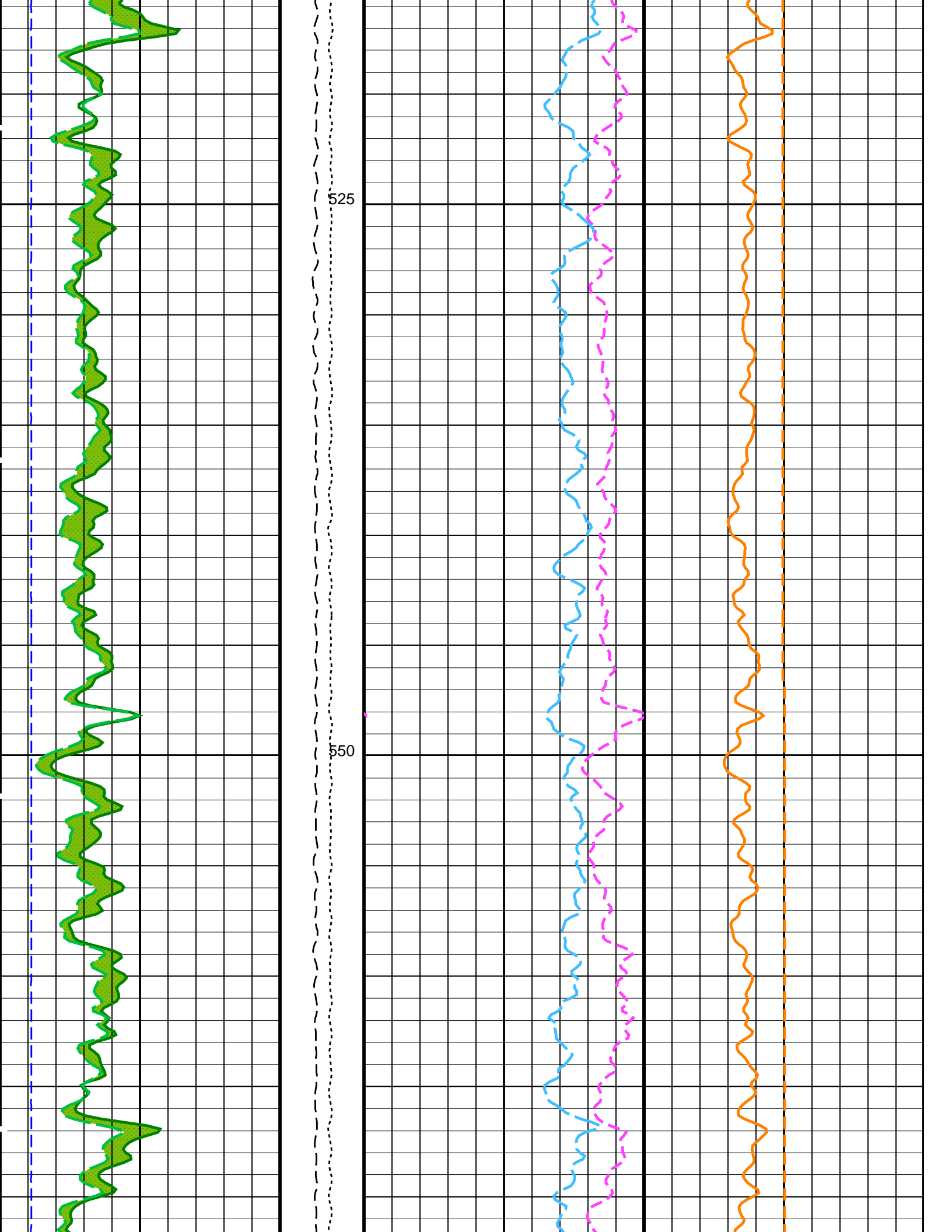


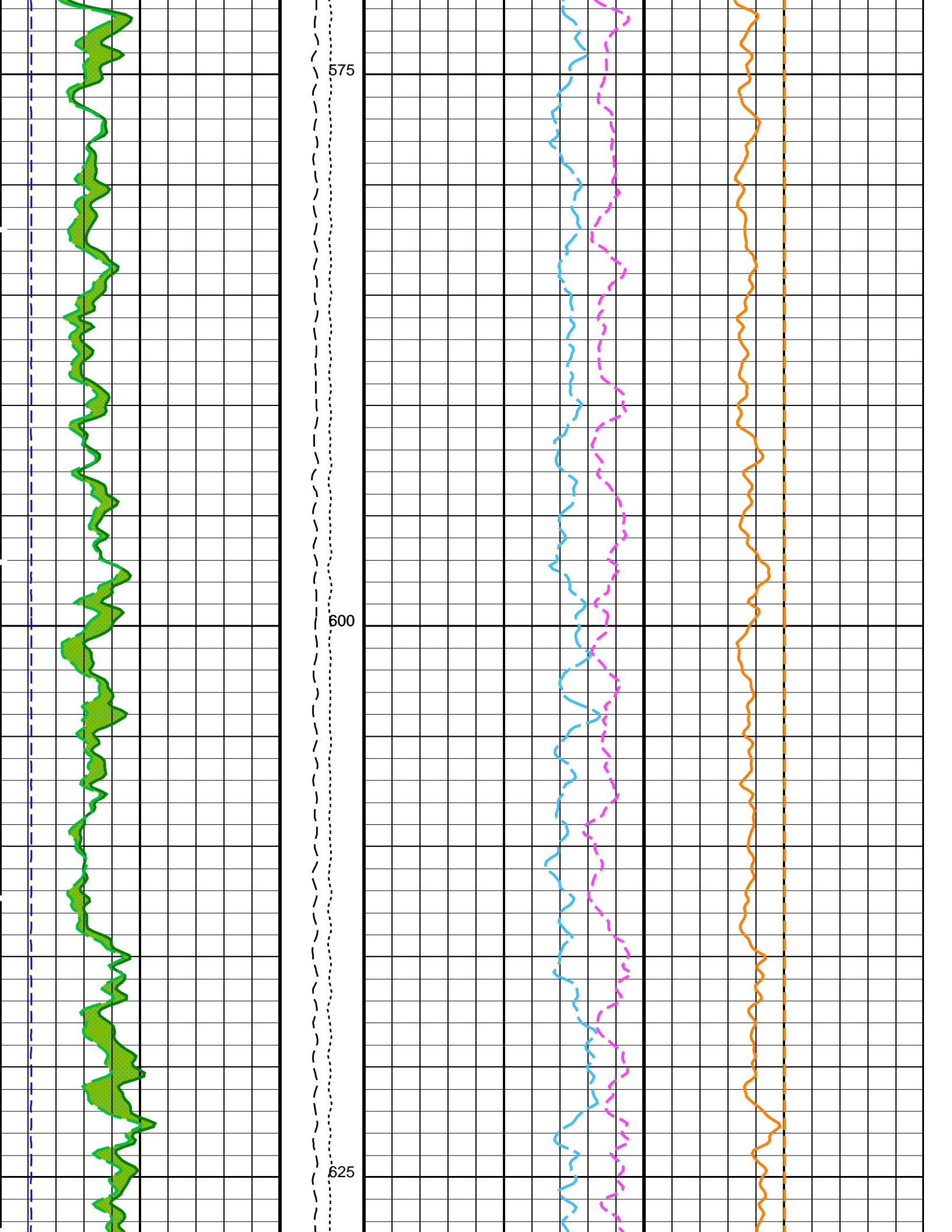


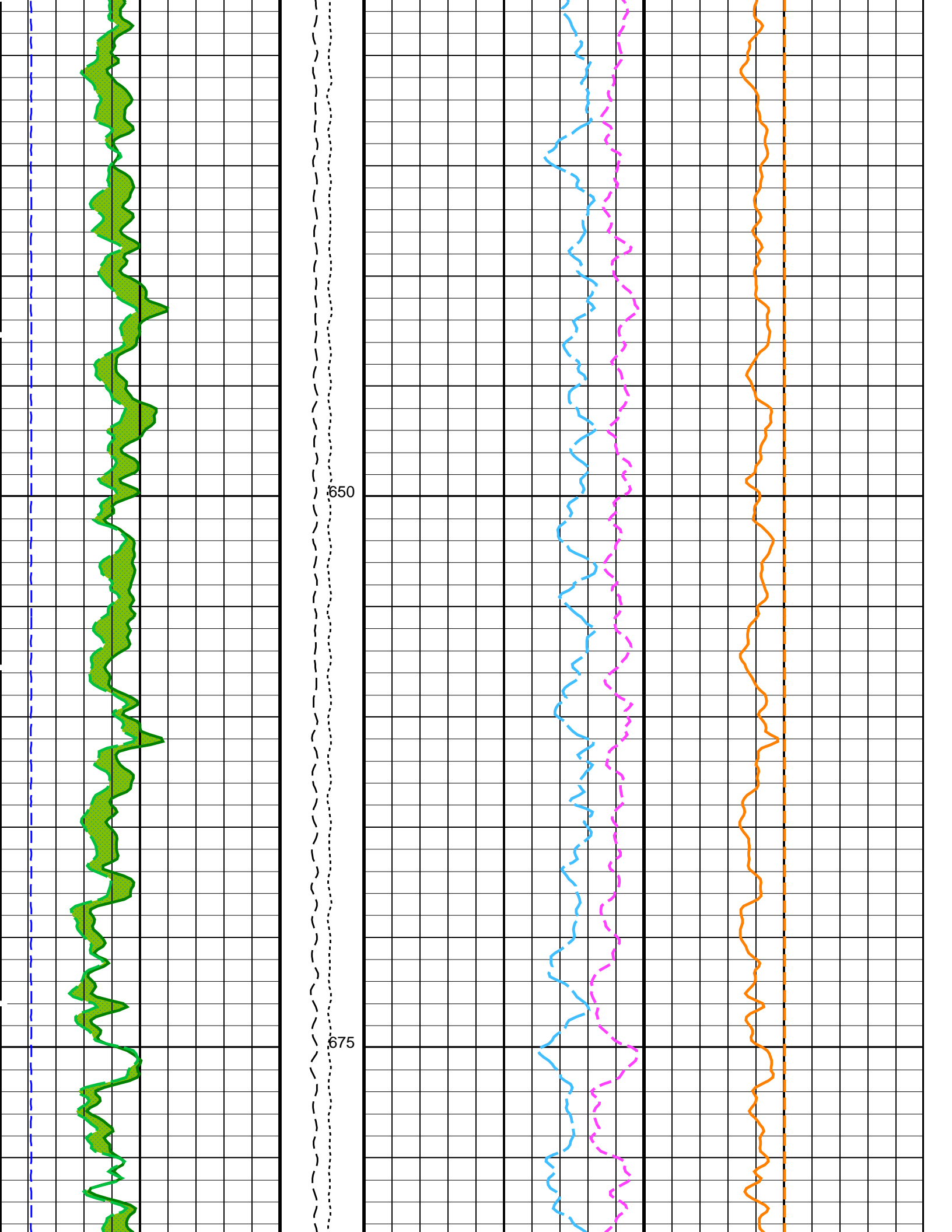


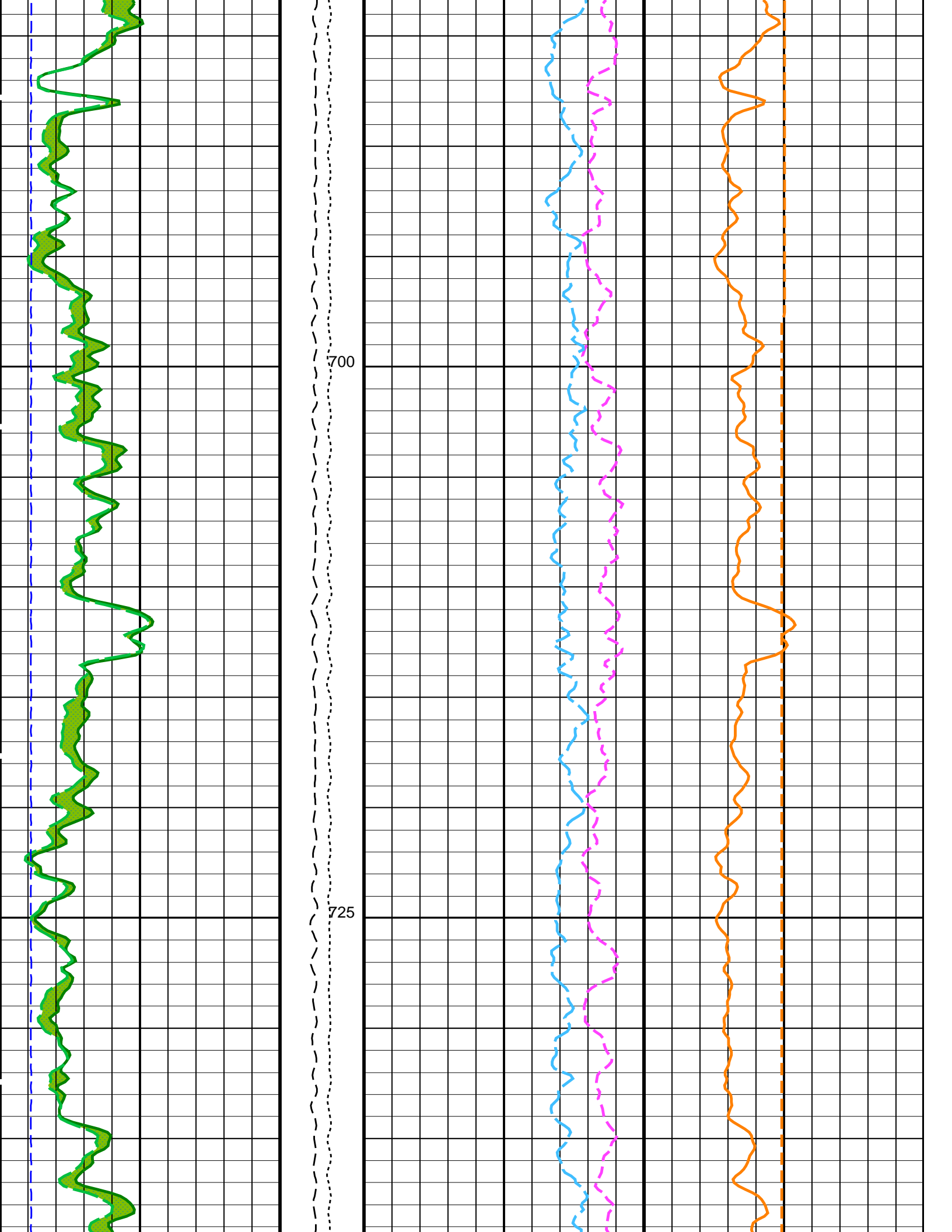


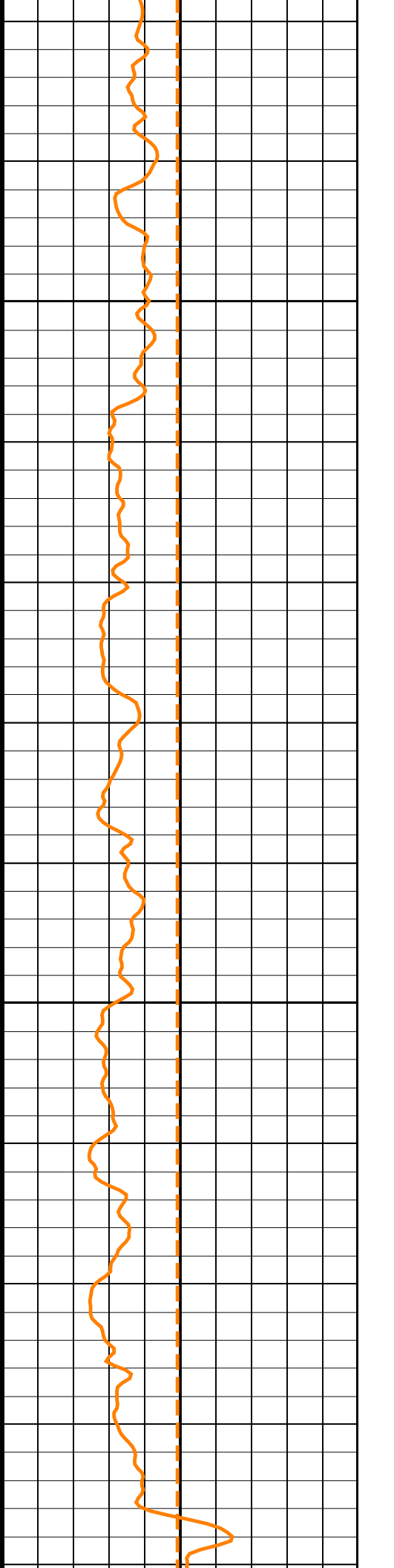
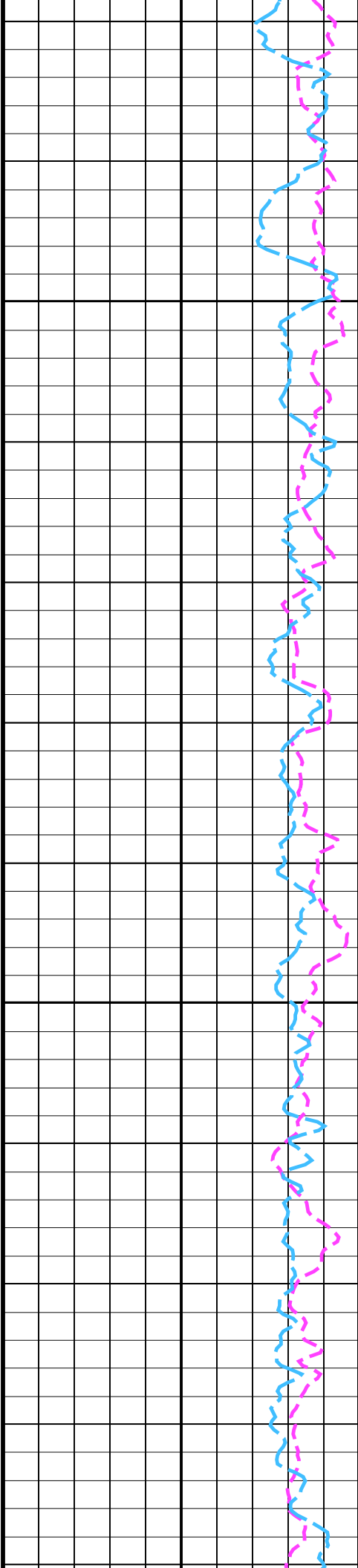
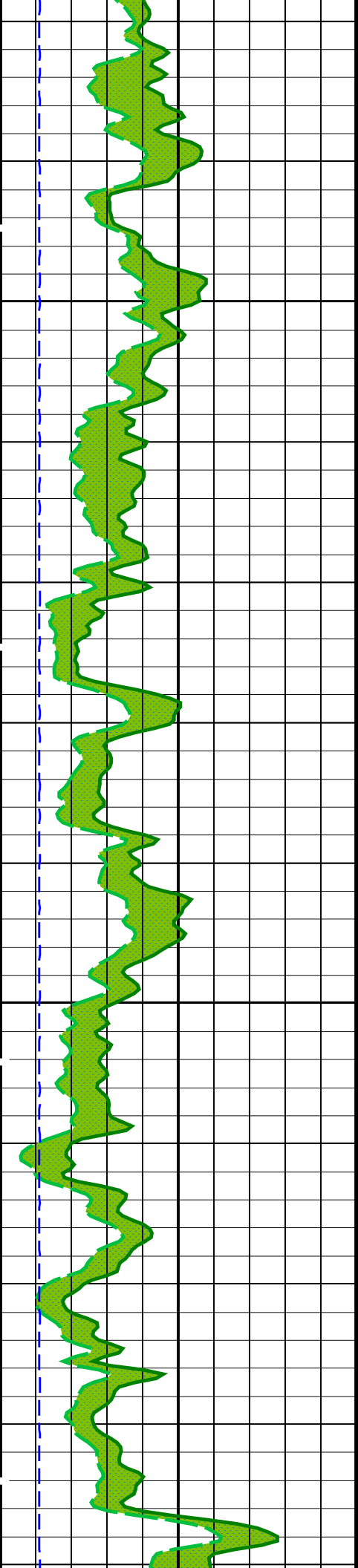


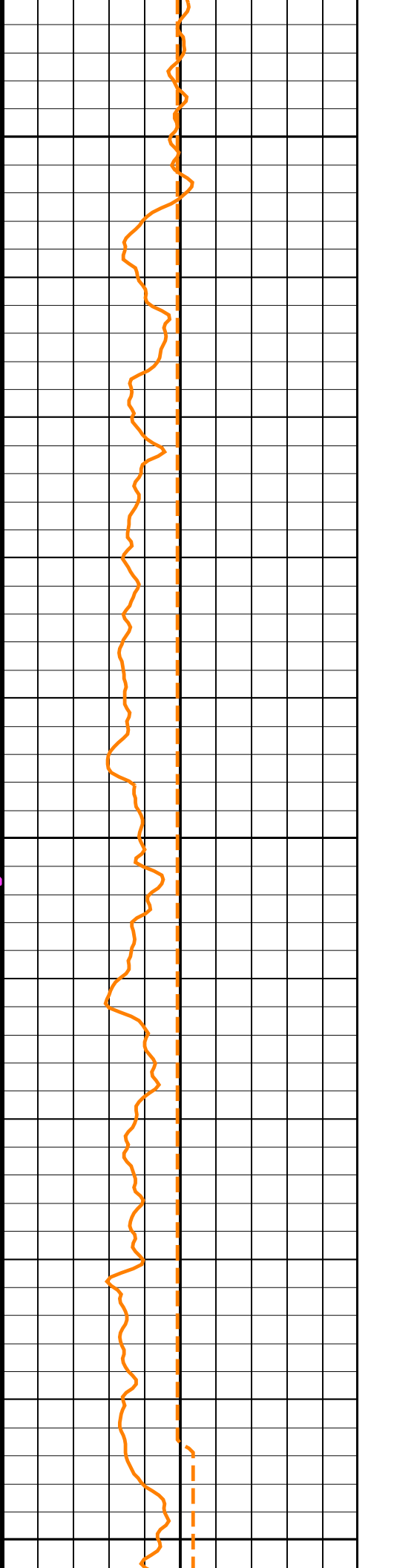
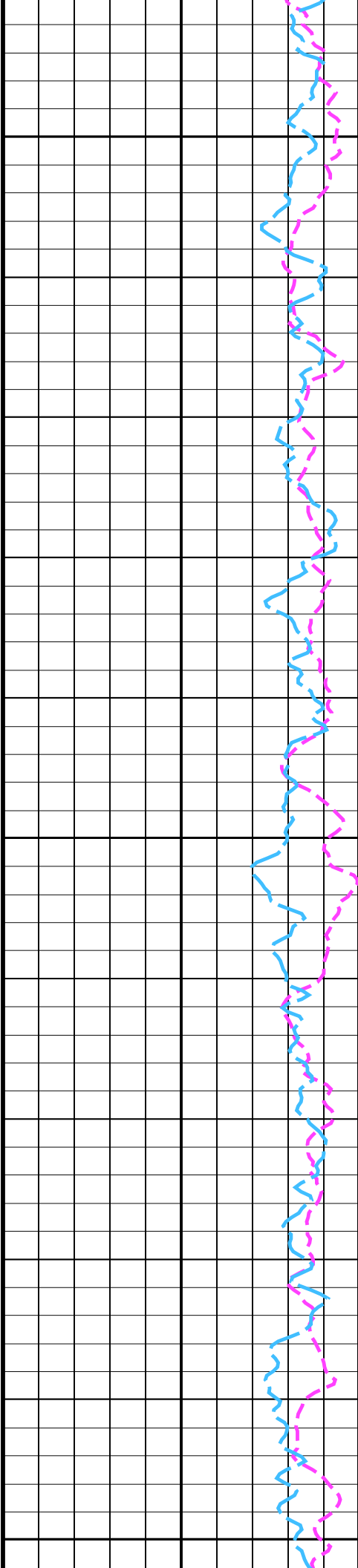
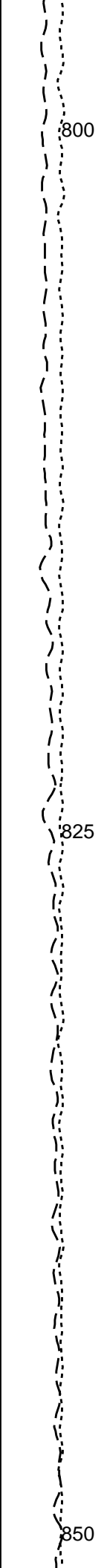
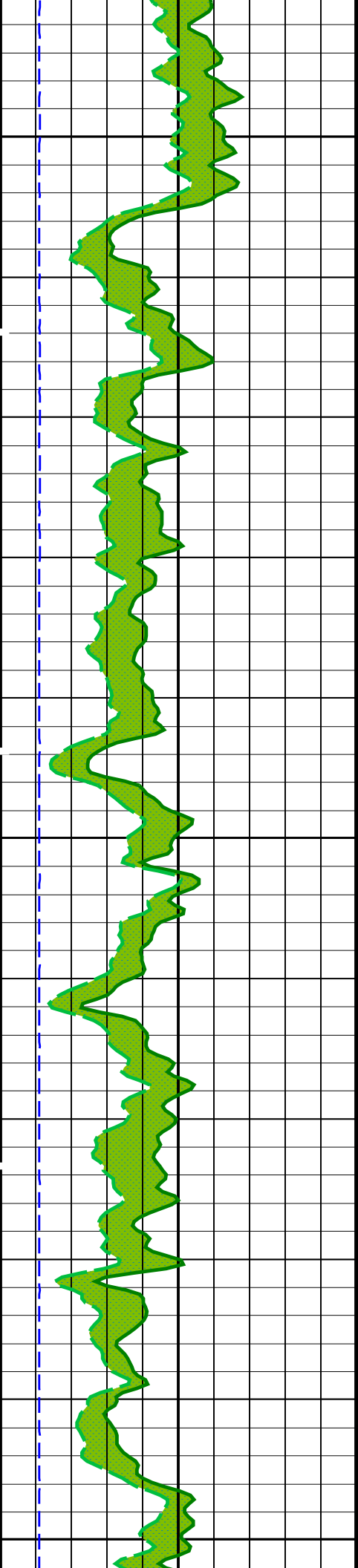


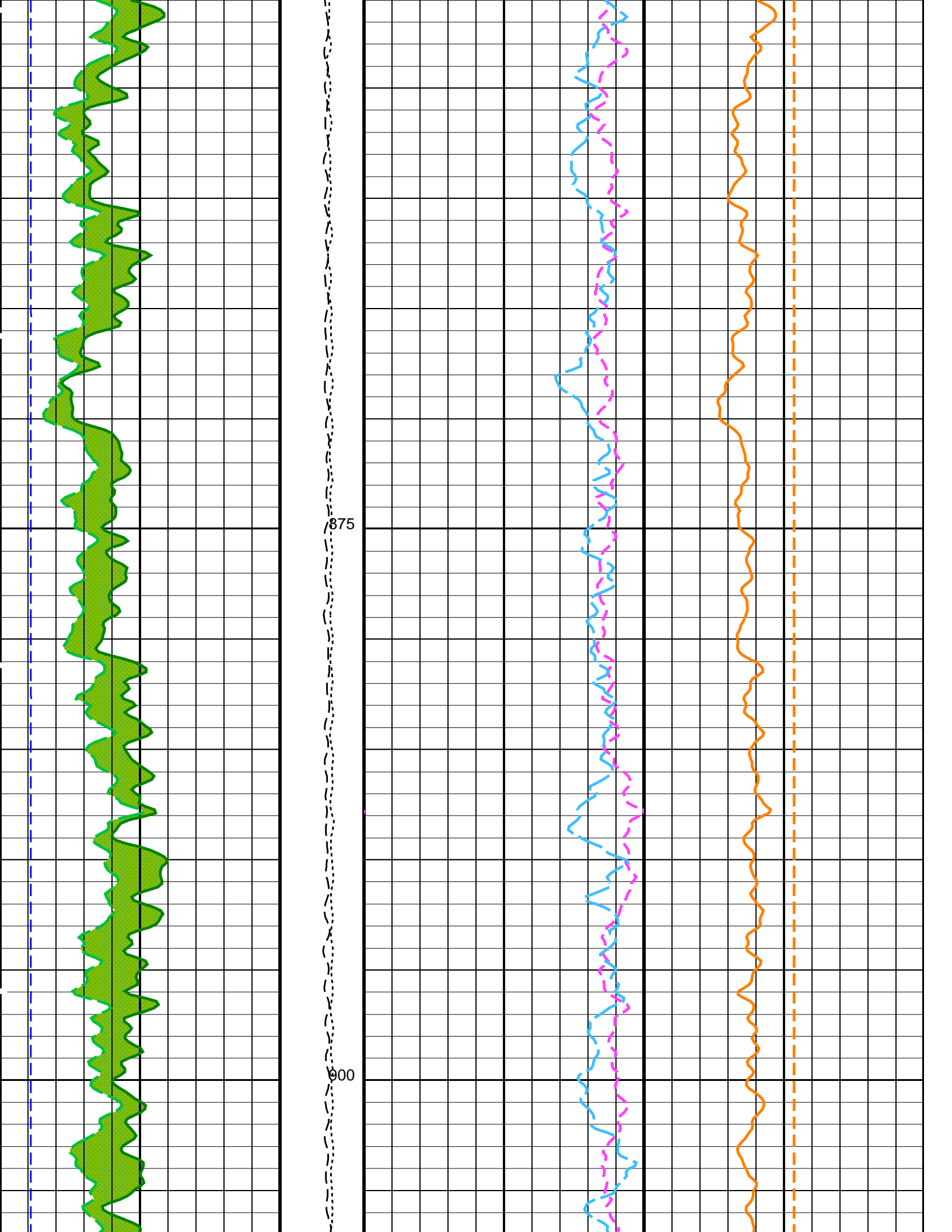


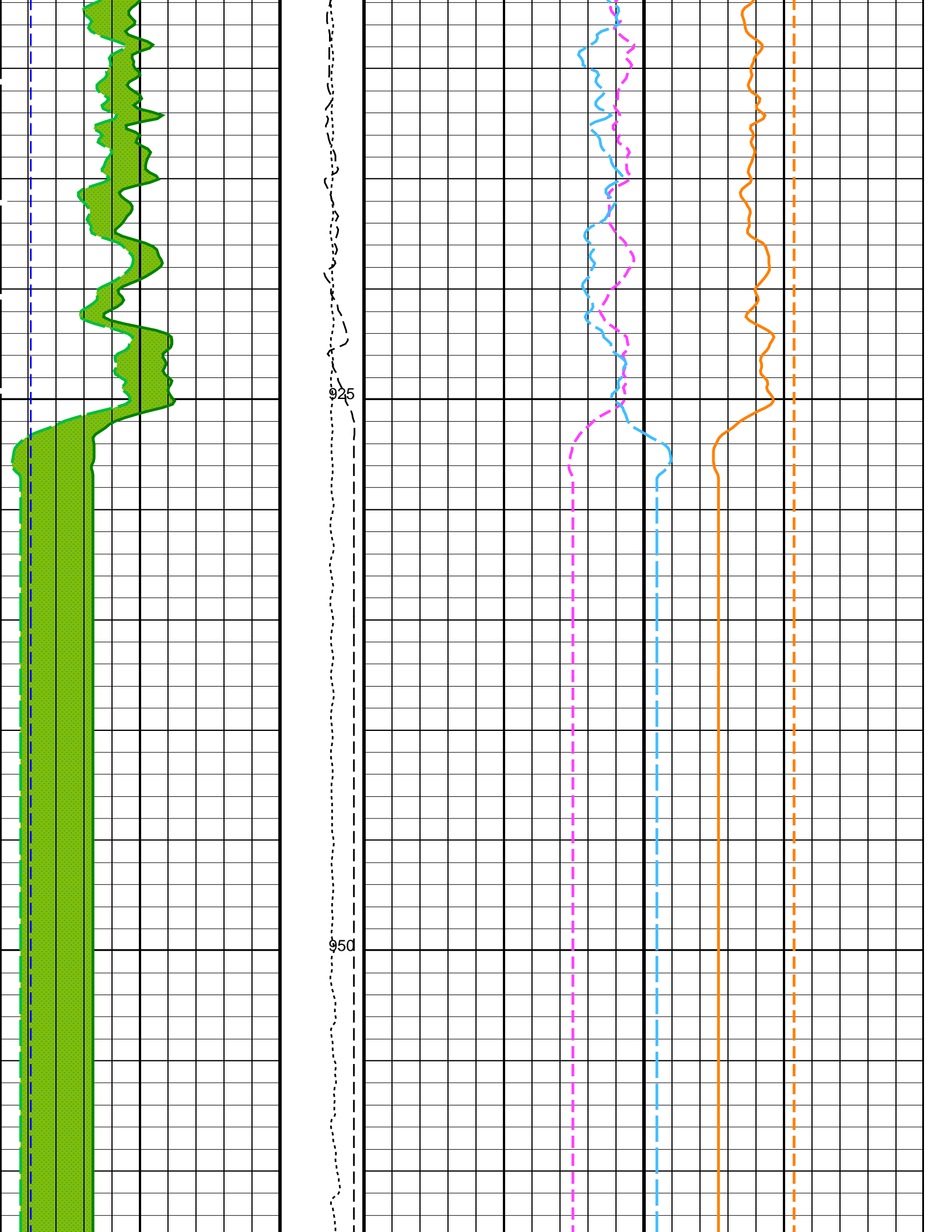


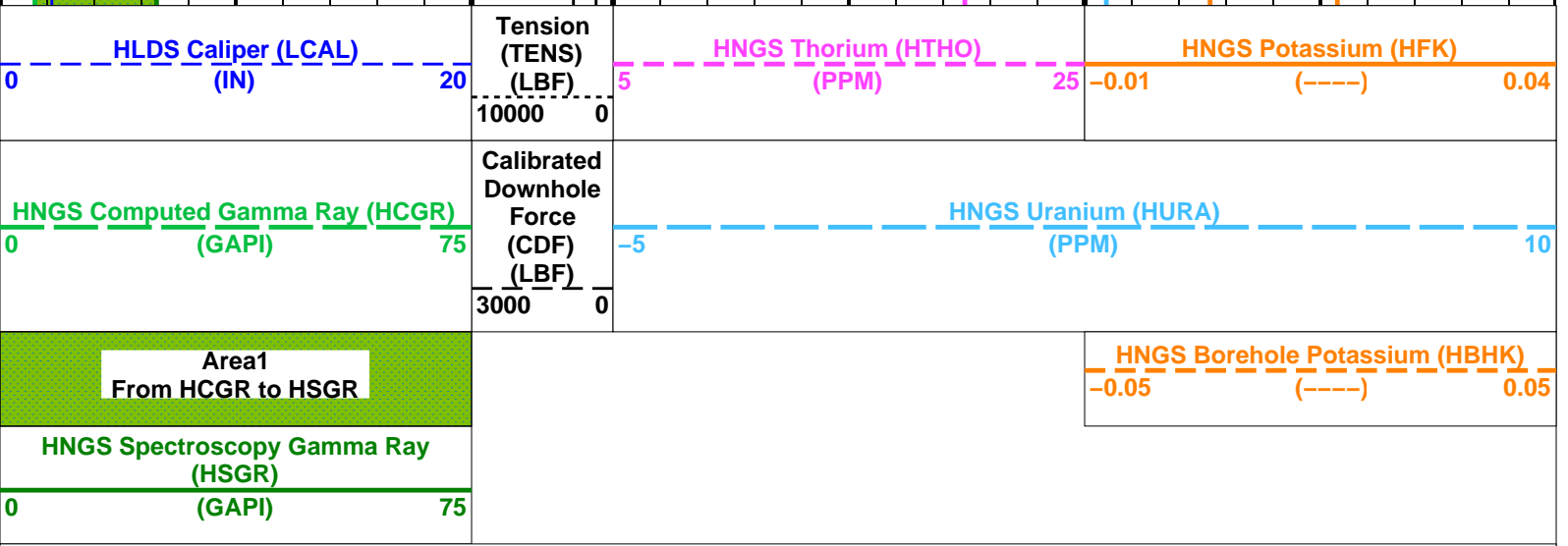












PIP SUMMARY

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	0.00598841
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	0.984674
VBA2	HNGS Detector 2 Variable Barite Factor Running Average	1.55611
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	-2126.5 M
PP	Playback Processing	NORMAL

Format: HNGSYields Vertical Scale: 1:200 Graphics File Created: 25-Apr-2014 01:10

OP System Version: 19C0-187

MSS_LDEO-A	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

Input DLIS Files

DEFAULT Flip_MSS_LDEO_HRLA_033LUP PRODUCER 25-Apr-2014 00:44 3091.3 M 2064.3 M

Output DLIS Files

DEFAULT MSS_LDEO_HRLA_LDL_037PUP FN:43 PRODUCER 25-Apr-2014 01:10
 CLIENT MSS_LDEO_HRLA_LDL_037PUC FN:44 CUSTOMER 25-Apr-2014 01:10



Repeat Pass
1:200 Scale

MAXIS Field Log

Input DLIS Files

DEFAULT MSS_LDEO_HRLA_LDL_017LUP FN:17 PRODUCER 22-Apr-2014 10:49 3086.1 M 2901.1 M

Output DLIS Files

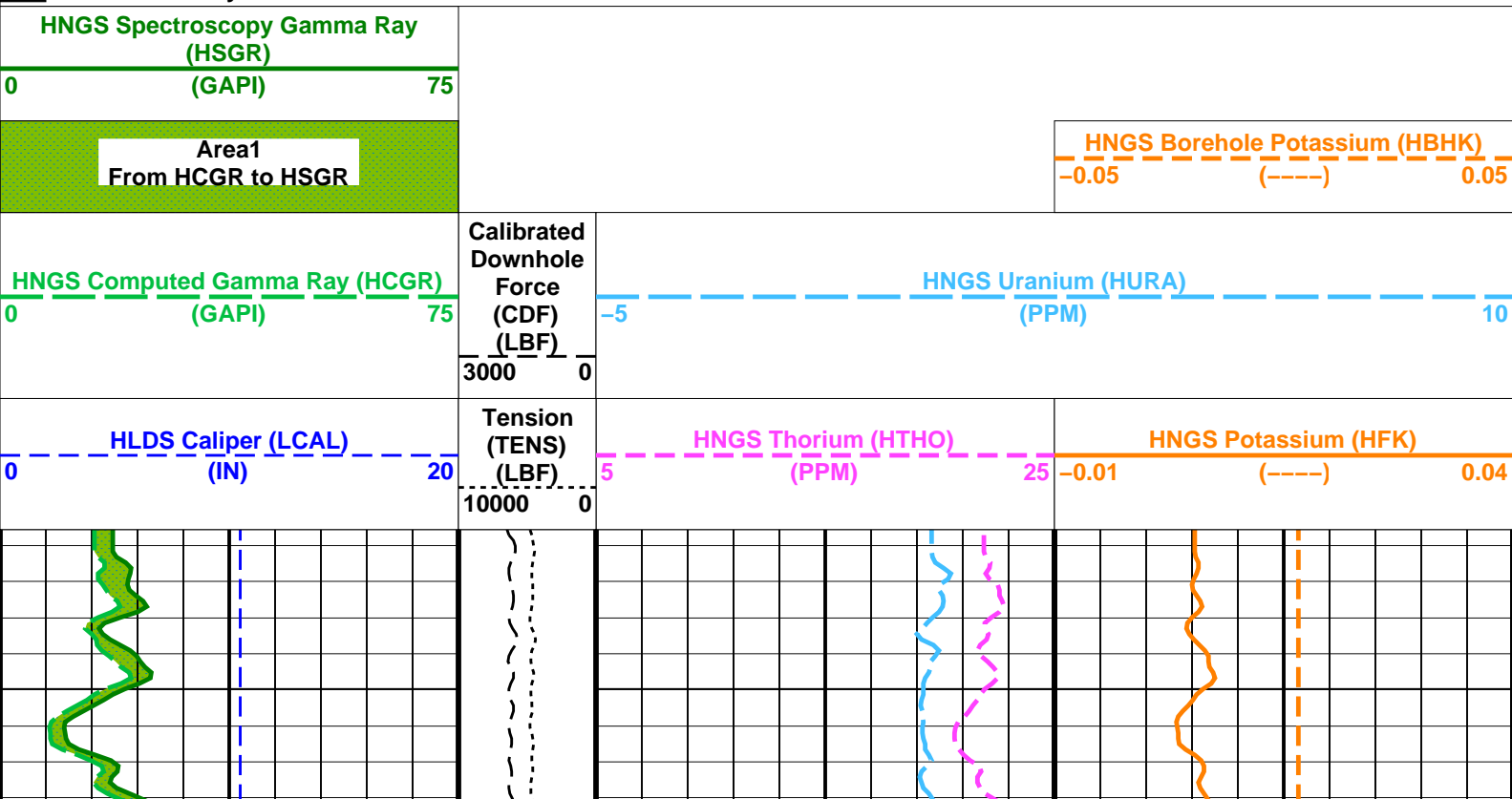
DEFAULT MSS_LDEO_HRLA_LDL_039PUP FN:47 PRODUCER 25-Apr-2014 01:24 960.9 M 775.6 M
 CLIENT MSS_LDEO_HRLA_LDL_039PUC FN:48 CUSTOMER 25-Apr-2014 01:24 960.9 M 775.6 M

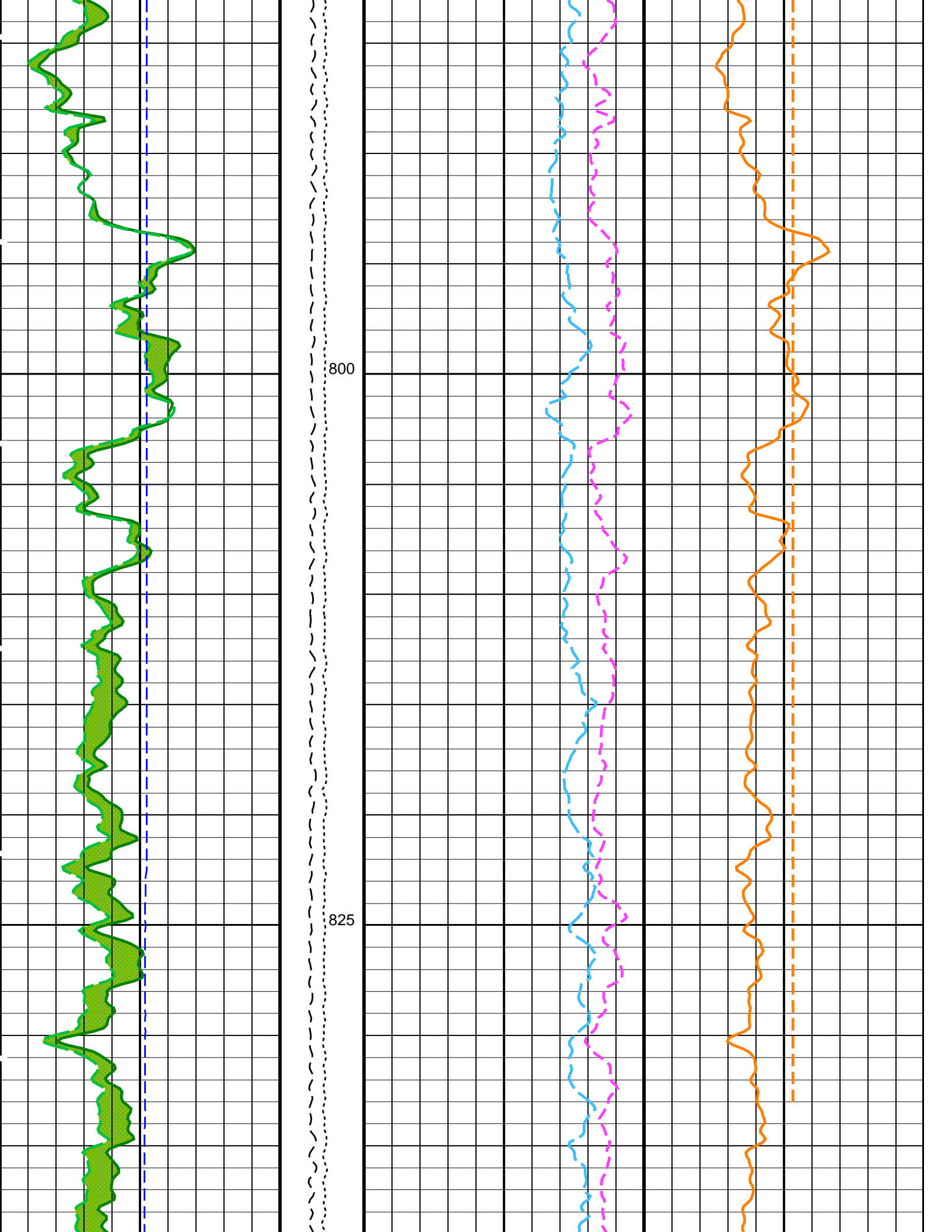
OP System Version: 19C0-187

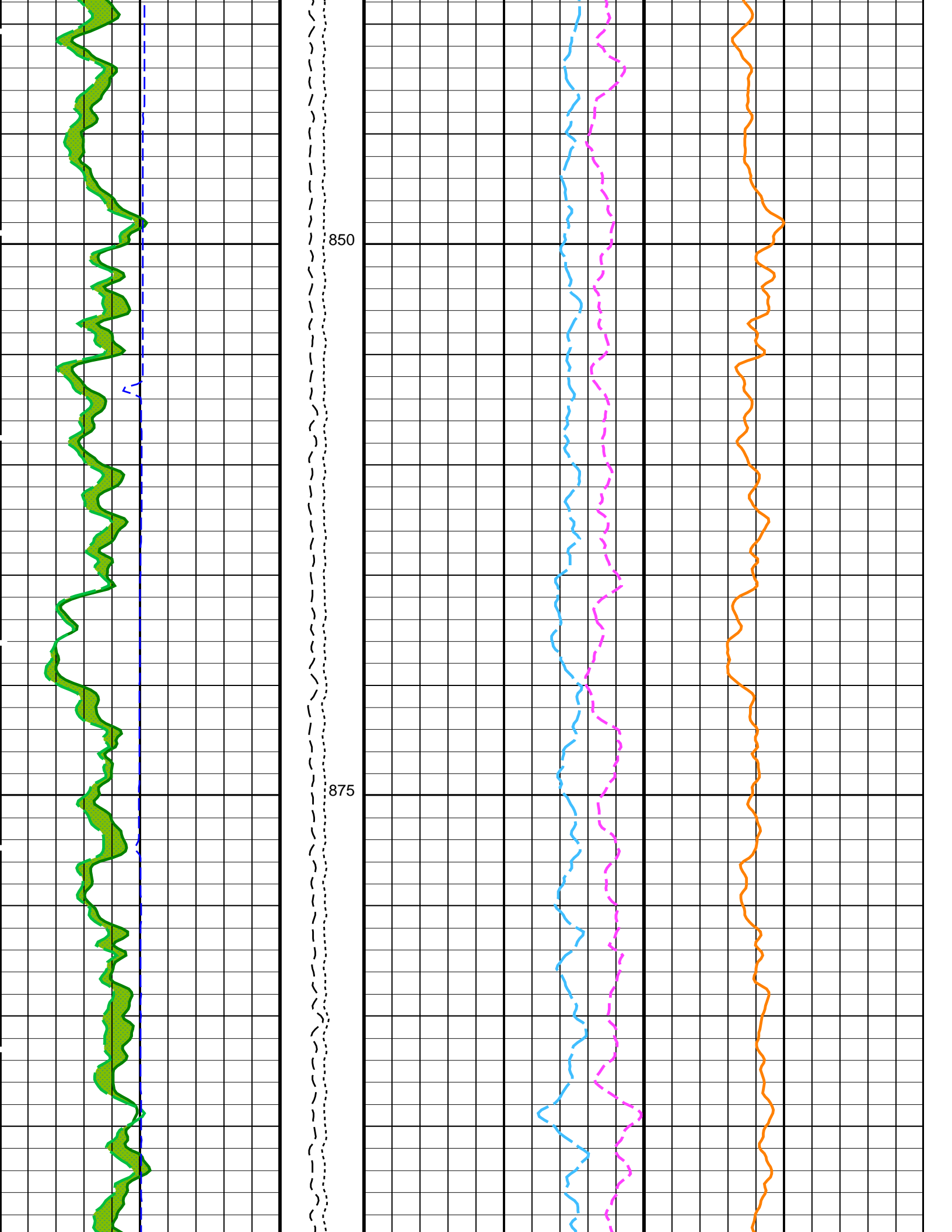
MSS_LDEO-A	19C0-187	HRLT-B	19C0-187
HLDS	19C0-187	LDSC-B	19C0-187
APS-C	19C0-187	HNGC-B	19C0-187
HNGS-BA	19C0-187	EDTC-B	SKK-5169-EDTCB

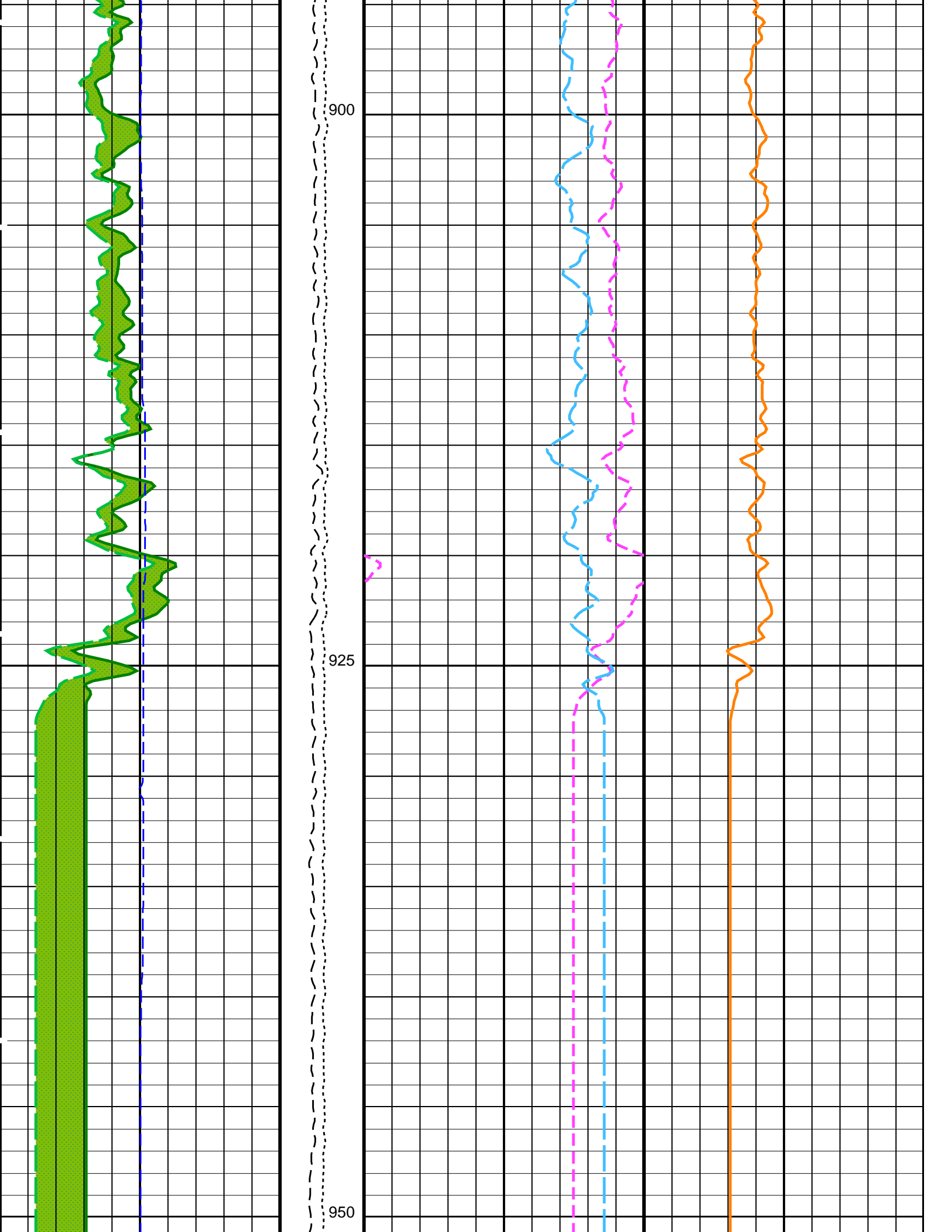
PIP SUMMARY

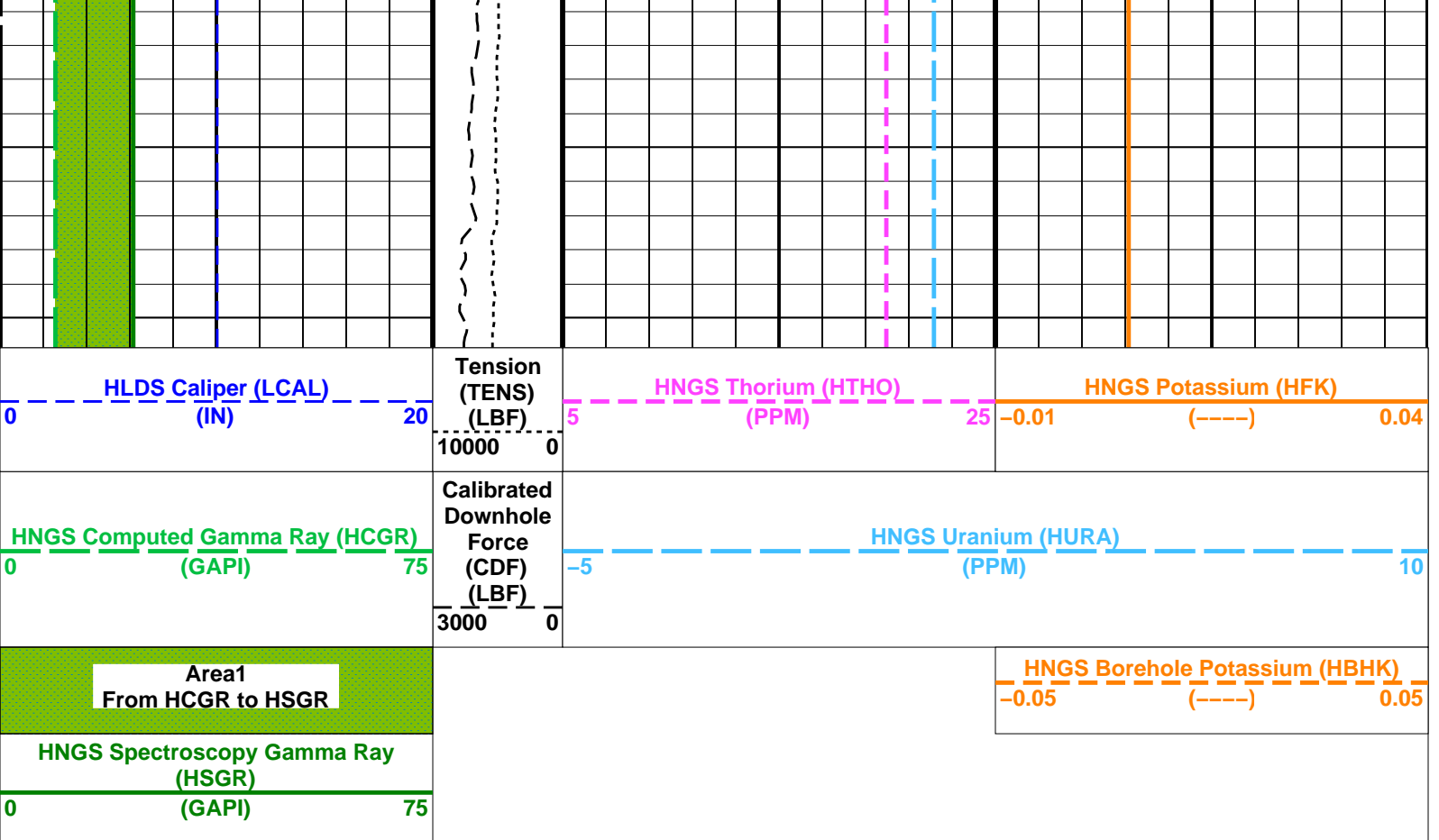
Time Mark Every 60 S











PIP SUMMARY

Time Mark Every 60 S

Parameters

DLIS Name	Description	Value
BHS	HRLT-B: High Resolution Laterolog Array - B	
GCSE	Borehole Status	OPEN
GCSE	Generalized Caliper Selection	LCAL
BHS	APS-C: Accelerator-Porosity Tool	
GCSE	Borehole Status	OPEN
GCSE	Generalized Caliper Selection	LCAL
BHS	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	-0.000199897
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	1.00407
VBA2	HNGS Detector 2 Variable Barite Factor Running Average	1.01069
BHS	EDTC-B: Enhanced DTS Cartridge	
GCSE	Borehole Status	OPEN
GCSE	Generalized Caliper Selection	LCAL
BS	System and Miscellaneous	
DO	Bit Size	9.875 IN
PP	Depth Offset for Playback	-2125.5 M
PP	Playback Processing	NORMAL

OP System Version: 19C0-187

MSS_LDEO-A	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	MSS_LDEO_HRLA_LDL_017LUP	FN:17	PRODUCER	22-Apr-2014 10:49	3086.1 M	2901.1 M
---------	--------------------------	-------	----------	-------------------	----------	----------

Output DLIS Files

DEFAULT	MSS_LDEO_HRLA_LDL_039PUP	FN:47	PRODUCER	25-Apr-2014 01:24		
CLIENT	MSS_LDEO_HRLA_LDL_039PUC	FN:48	CUSTOMER	25-Apr-2014 01:24		



**Main Pass
1:200 Scale**

MAXIS Field Log

Input DLIS Files

DEFAULT	MSS_LDEO_HRLA_LDL_019LUP	FN:20	PRODUCER	22-Apr-2014 11:26	3088.4 M	2114.6 M
---------	--------------------------	-------	----------	-------------------	----------	----------

Output DLIS Files

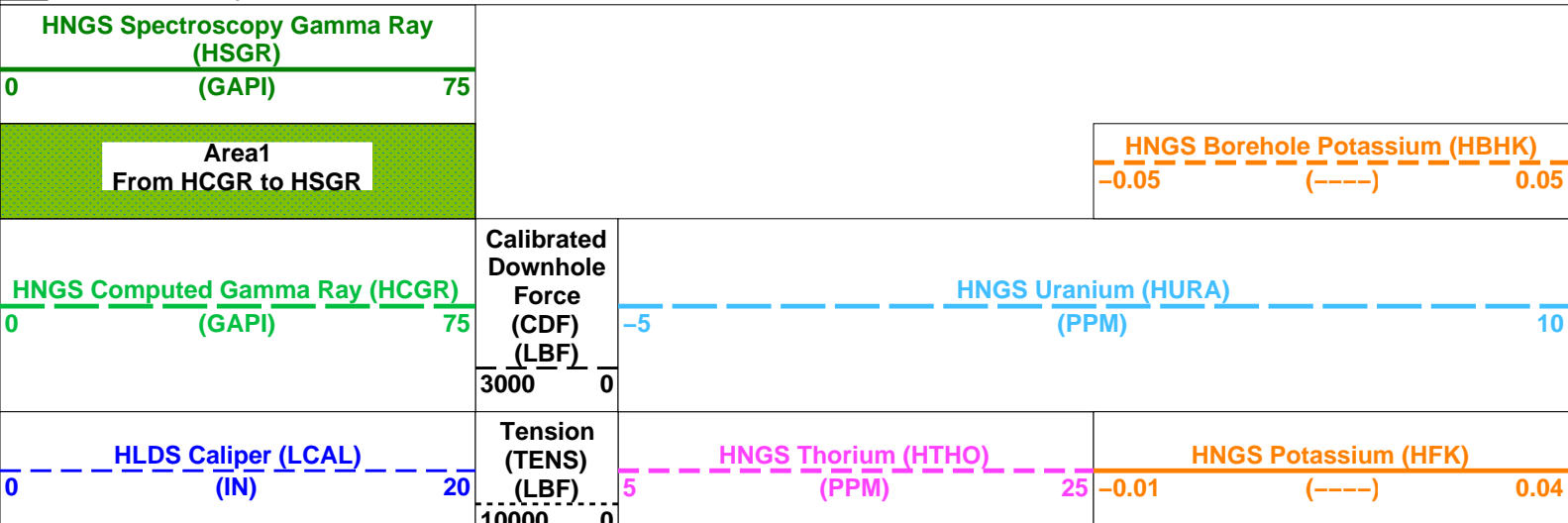
DEFAULT	MSS_LDEO_HRLA_LDL_038PUP	FN:45	PRODUCER	25-Apr-2014 01:15	963.2 M	-7.2 M
CLIENT	MSS_LDEO_HRLA_LDL_038PUC	FN:46	CUSTOMER	25-Apr-2014 01:15	963.2 M	-7.2 M

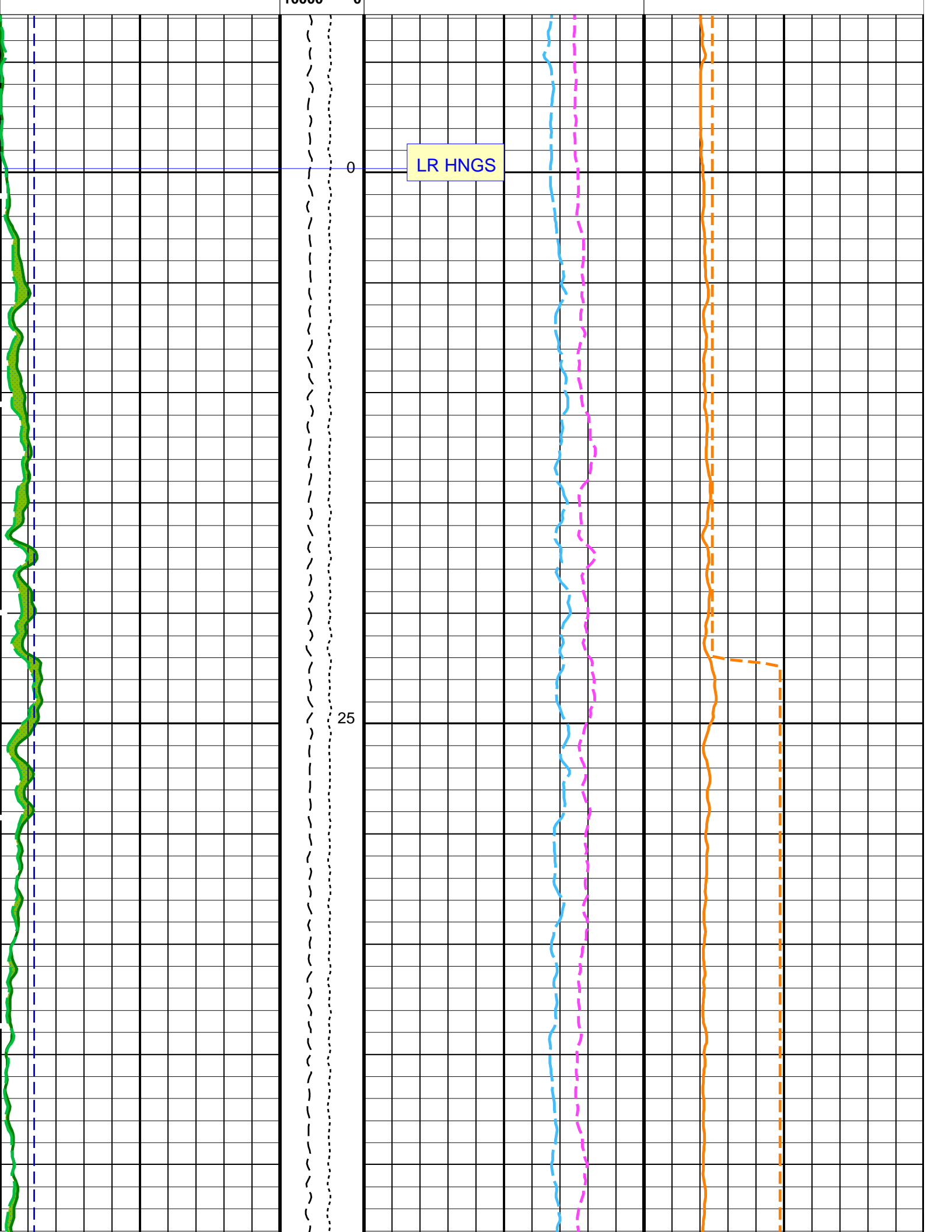
OP System Version: 19C0-187

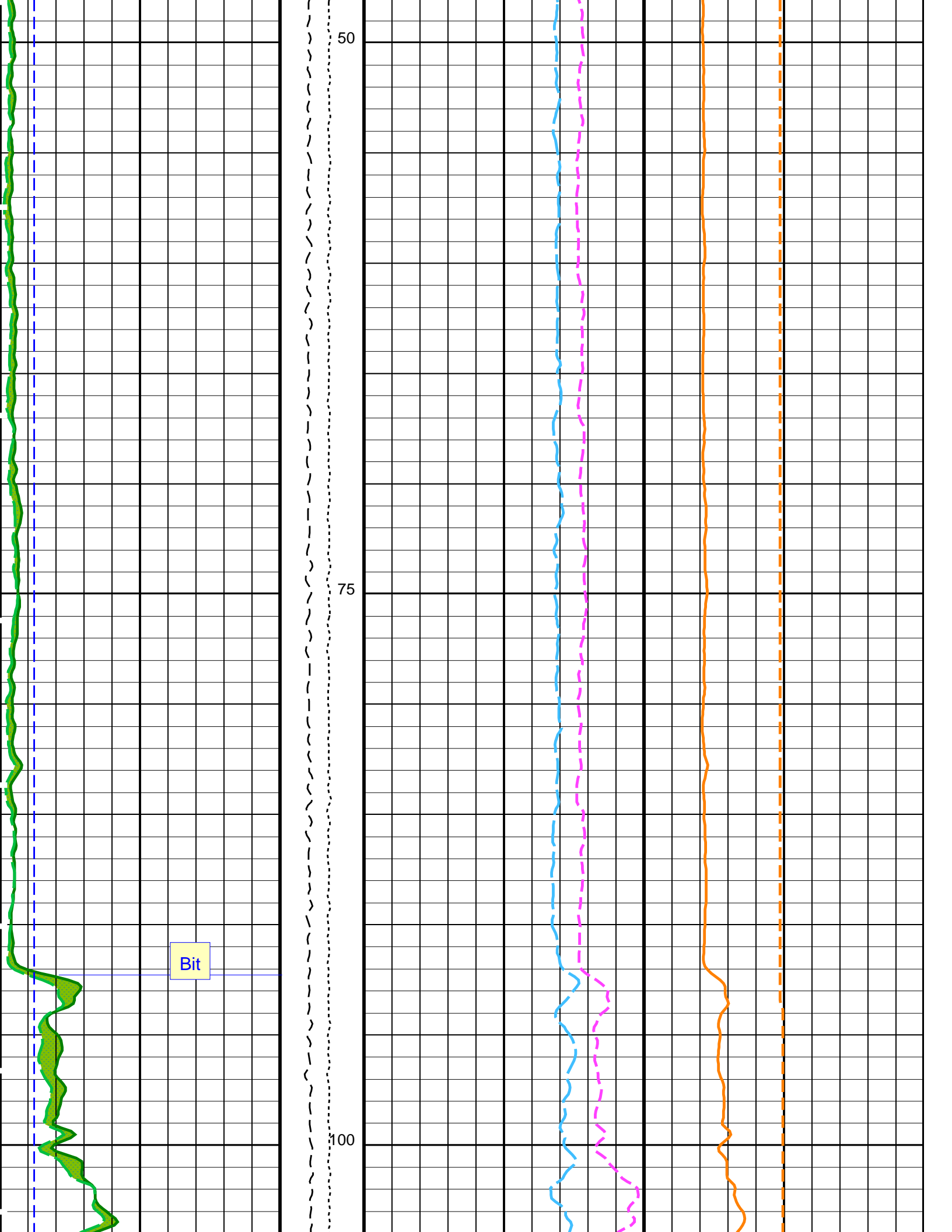
MSS_LDEO-A	19C0-187	HRLT-B	19C0-187
HLDS	19C0-187	LDSC-B	19C0-187
APS-C	19C0-187	HNGC-B	19C0-187
HNGS-BA	19C0-187	EDTC-B	SKK-5169-EDTCB

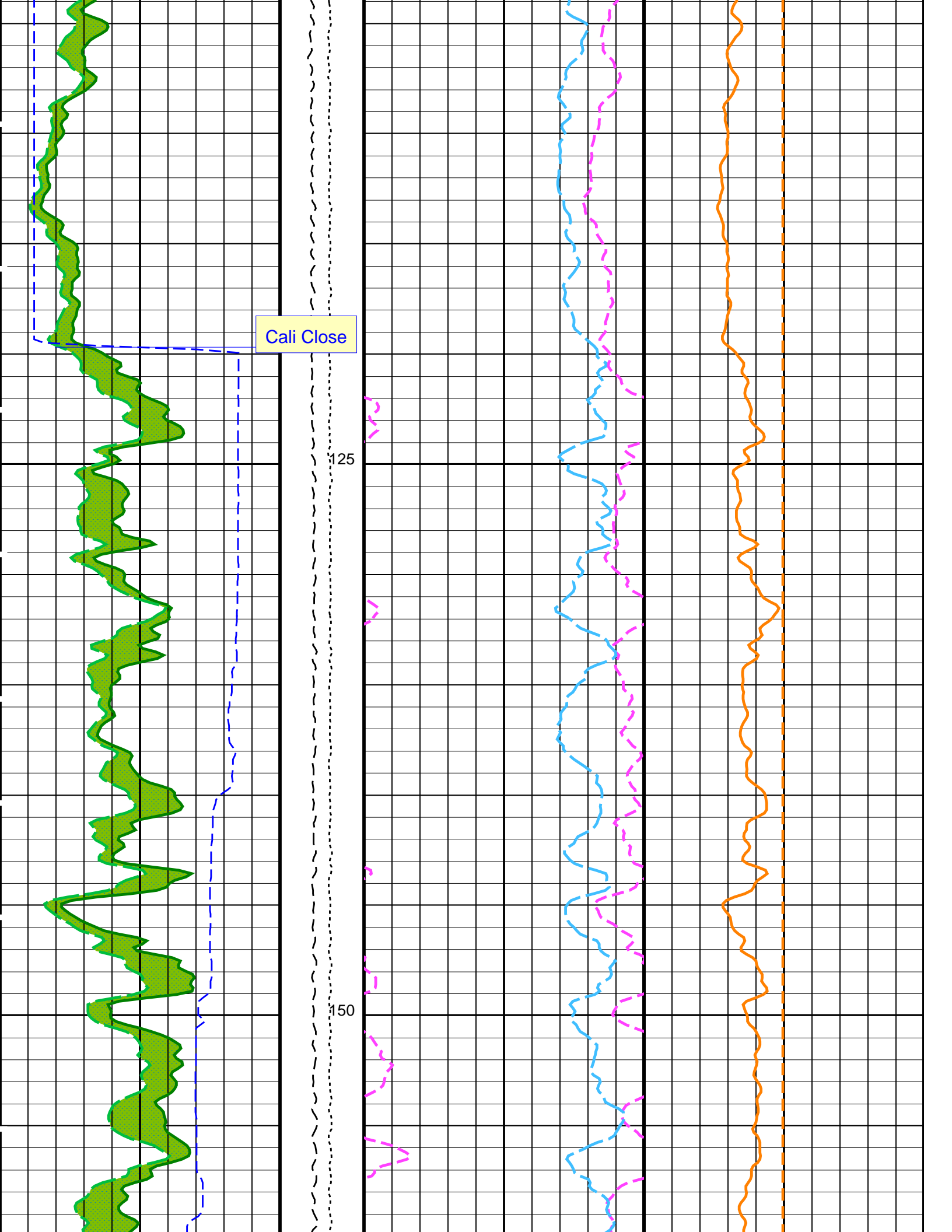
PIP SUMMARY

Time Mark Every 60 S





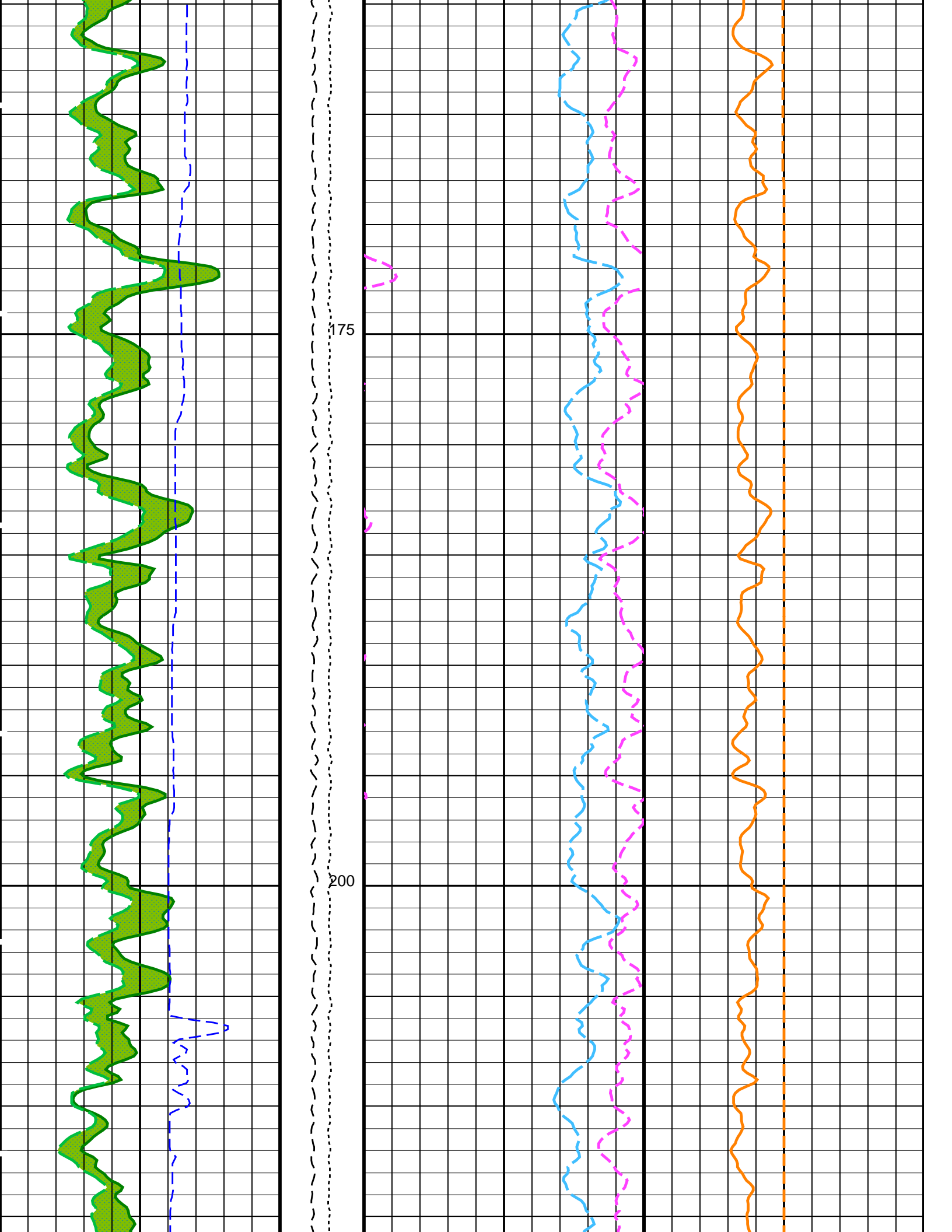


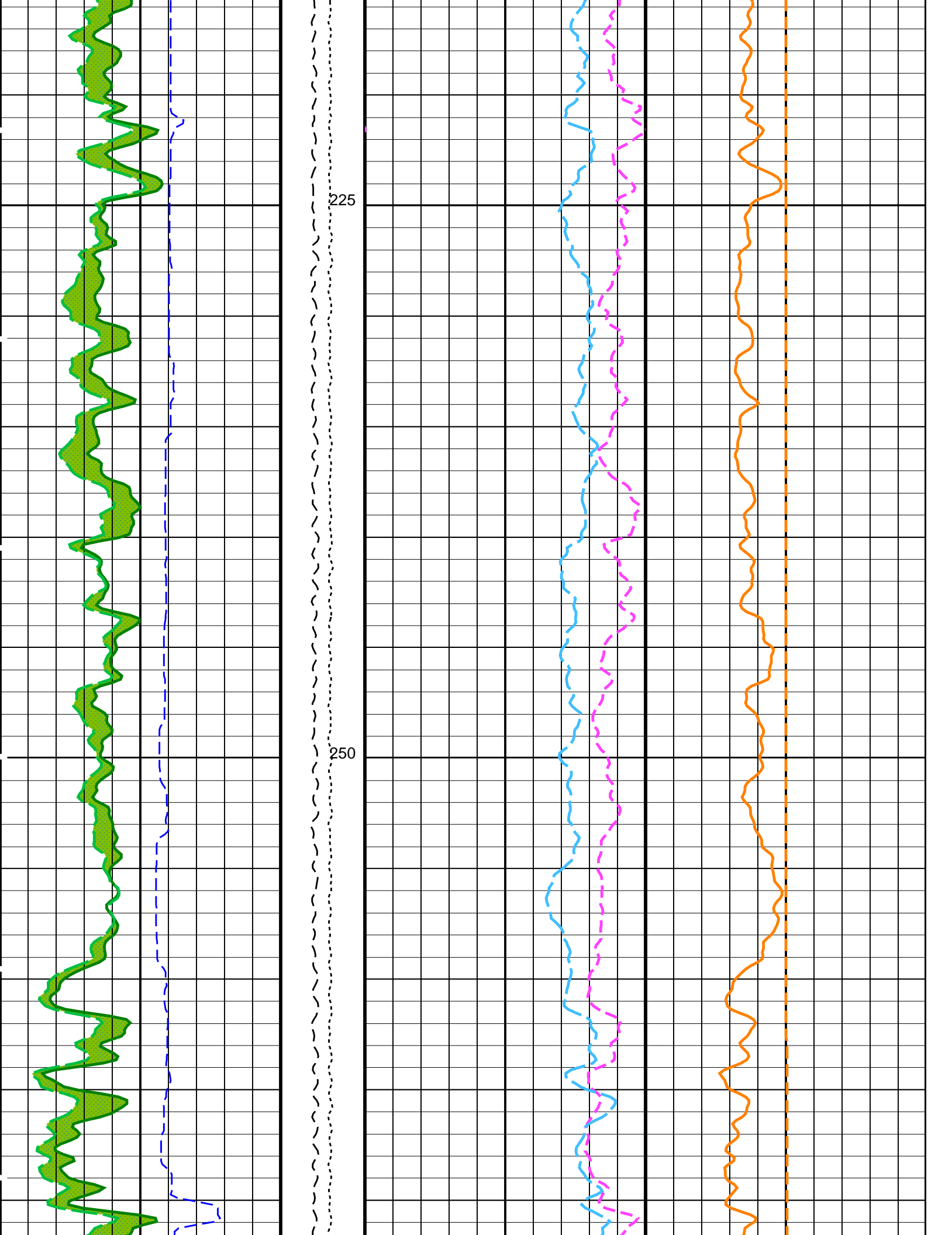


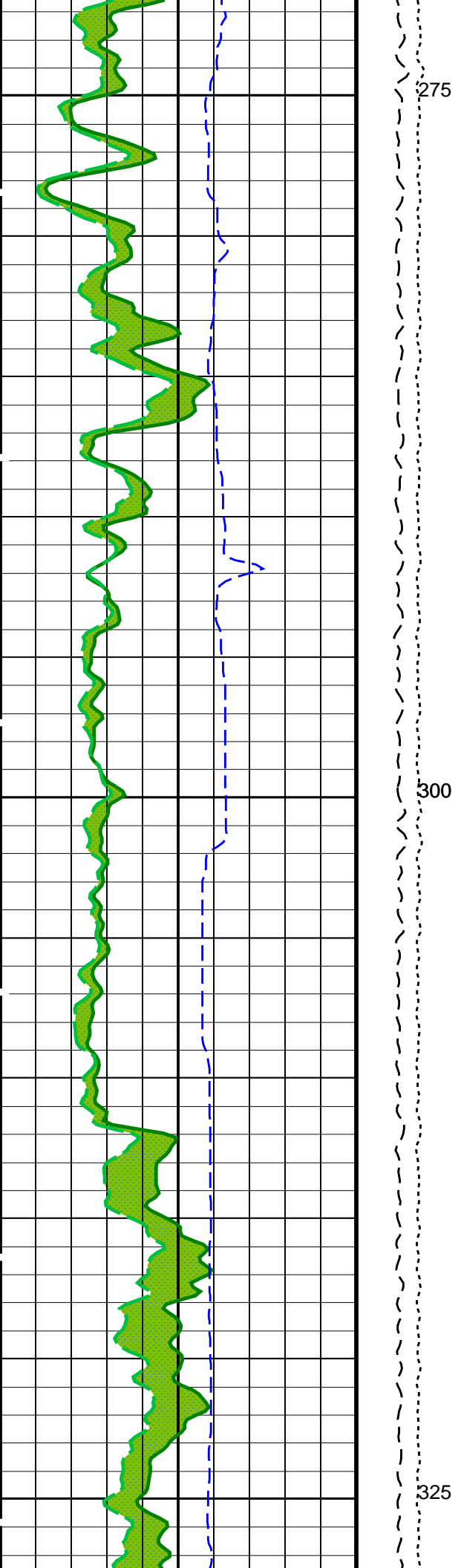
Cali Close

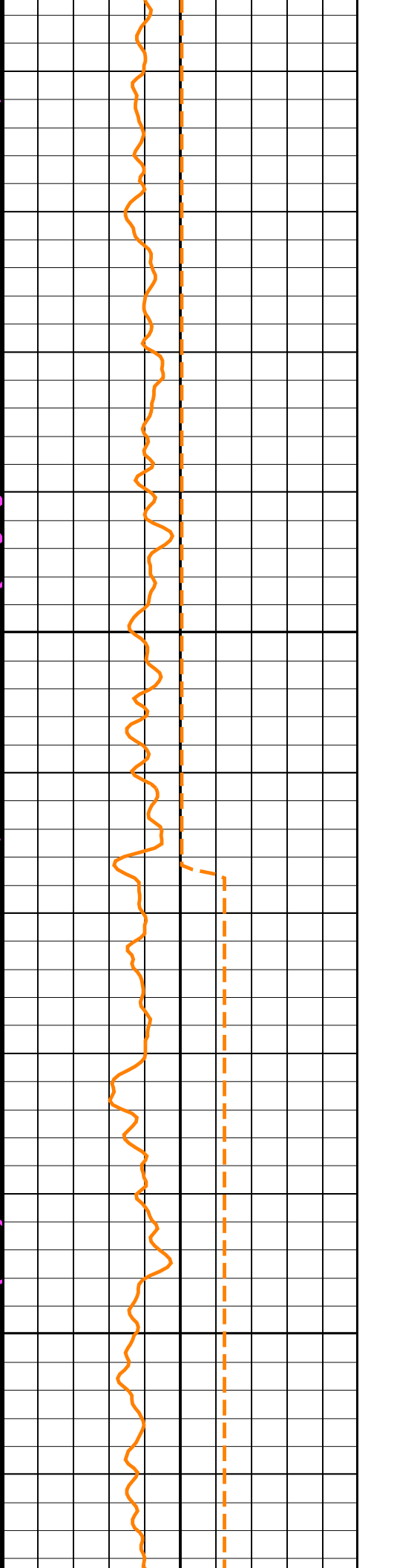
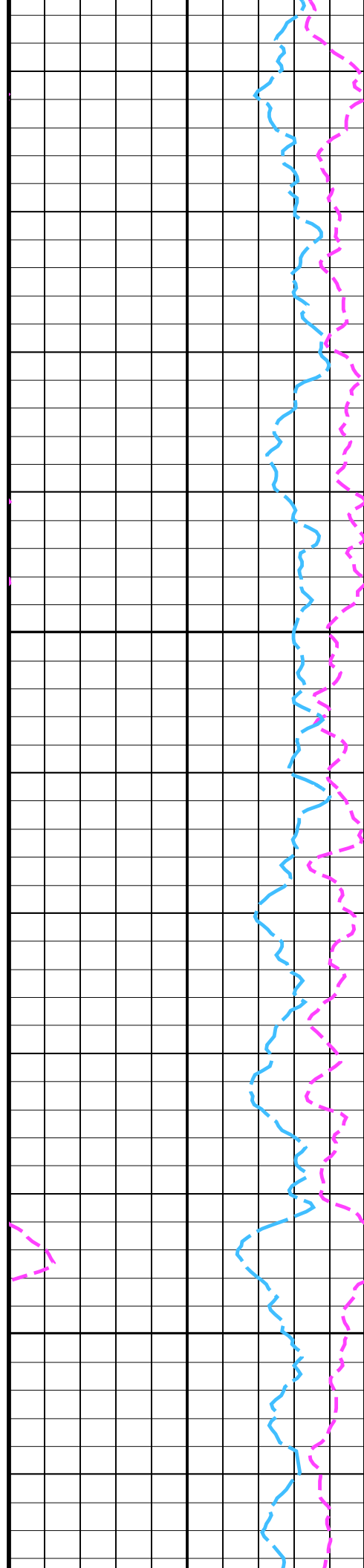
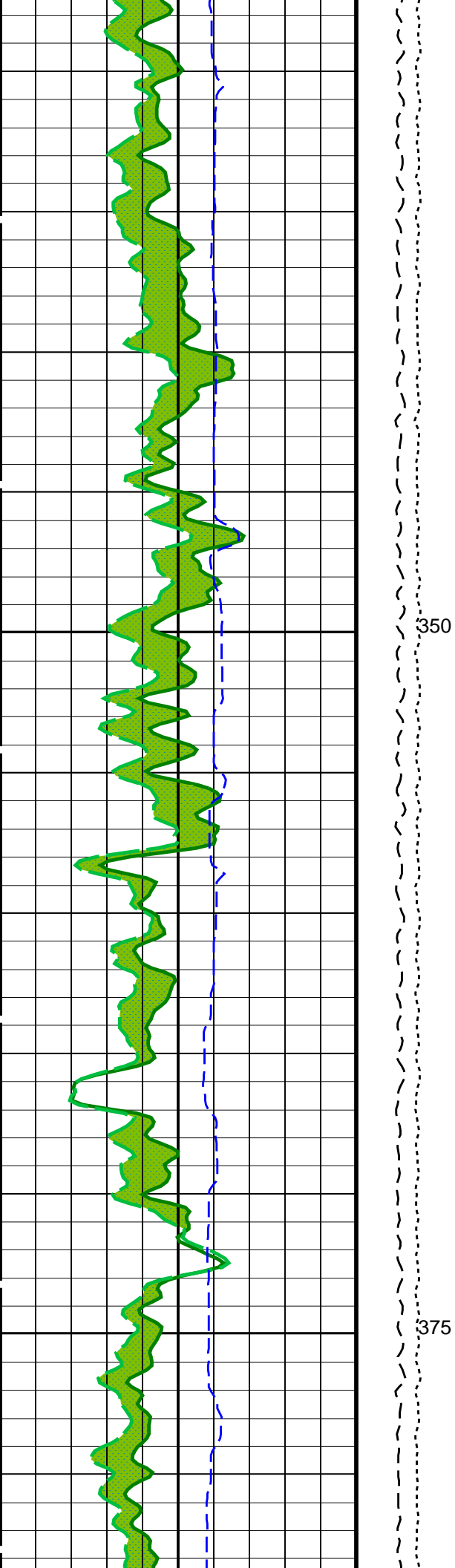
125

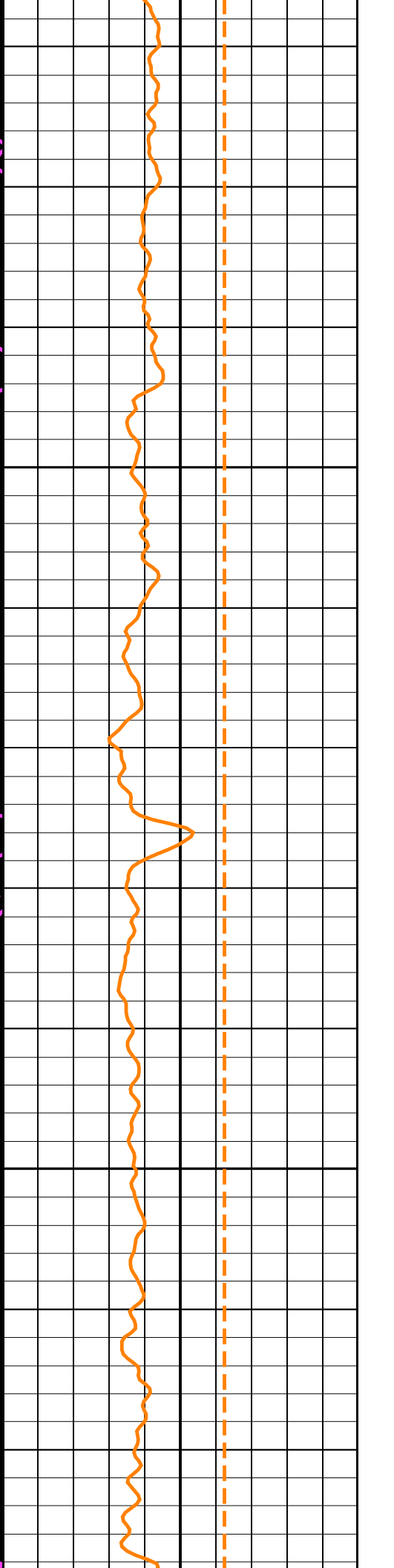
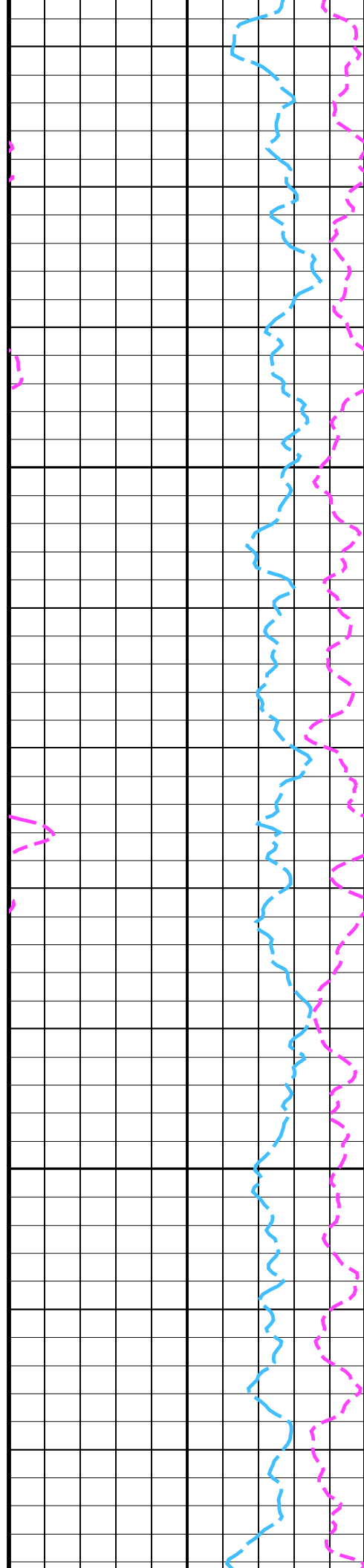
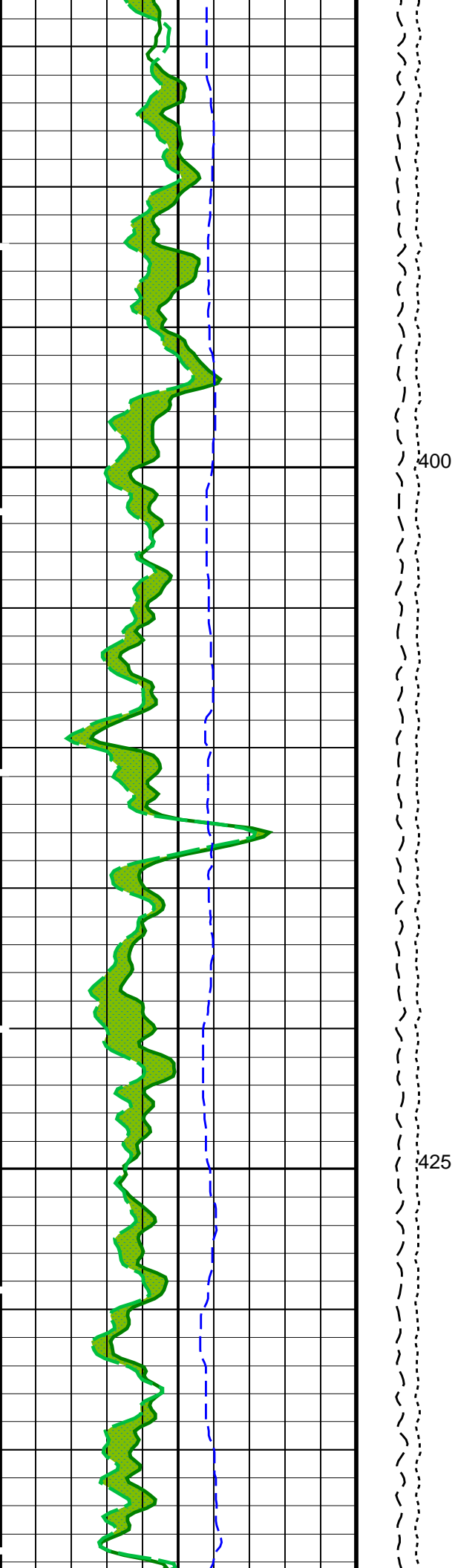
150

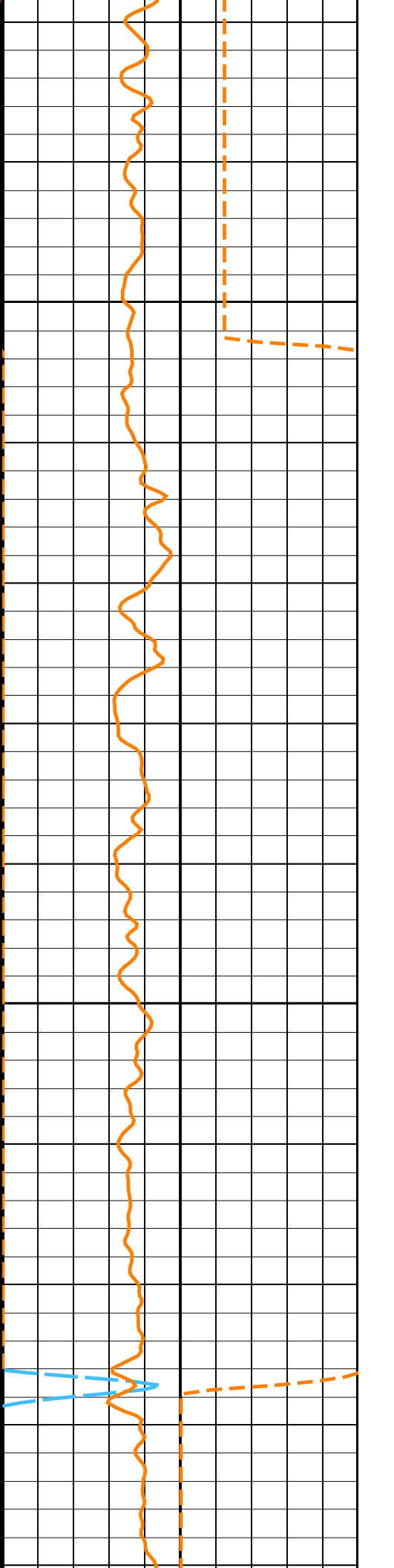
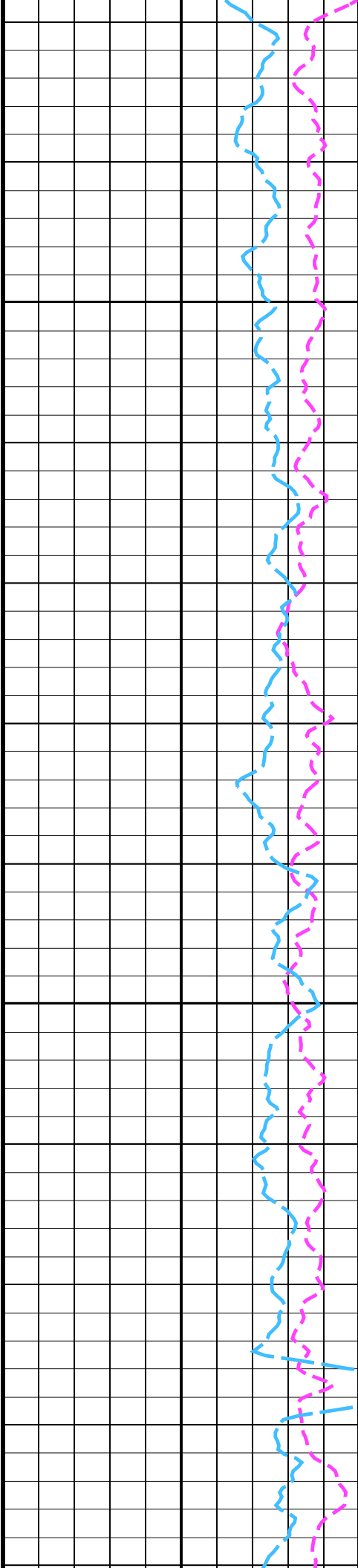
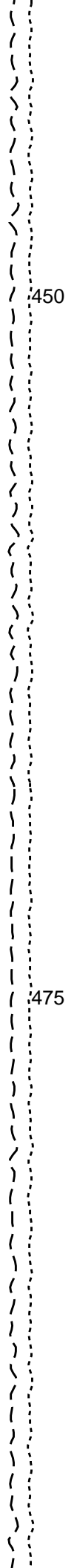
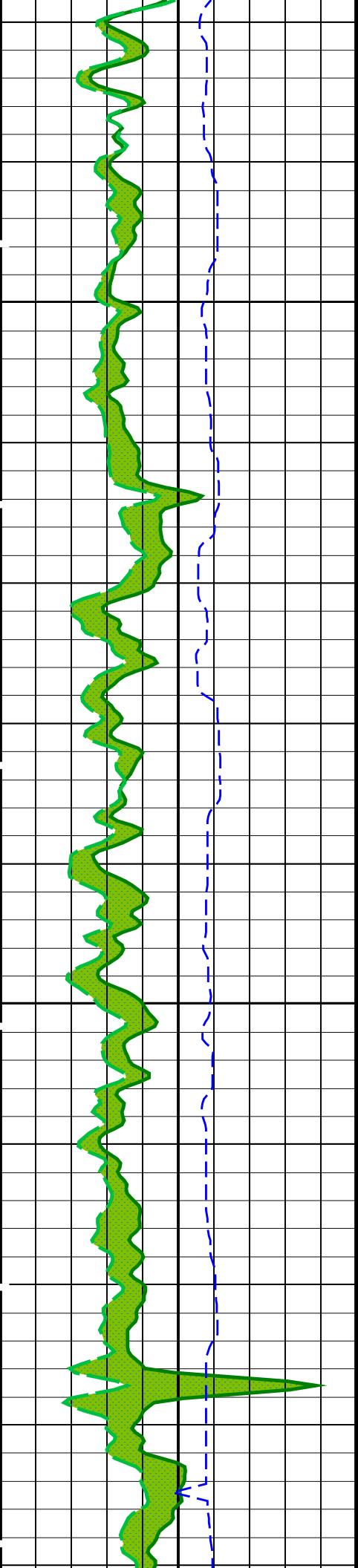


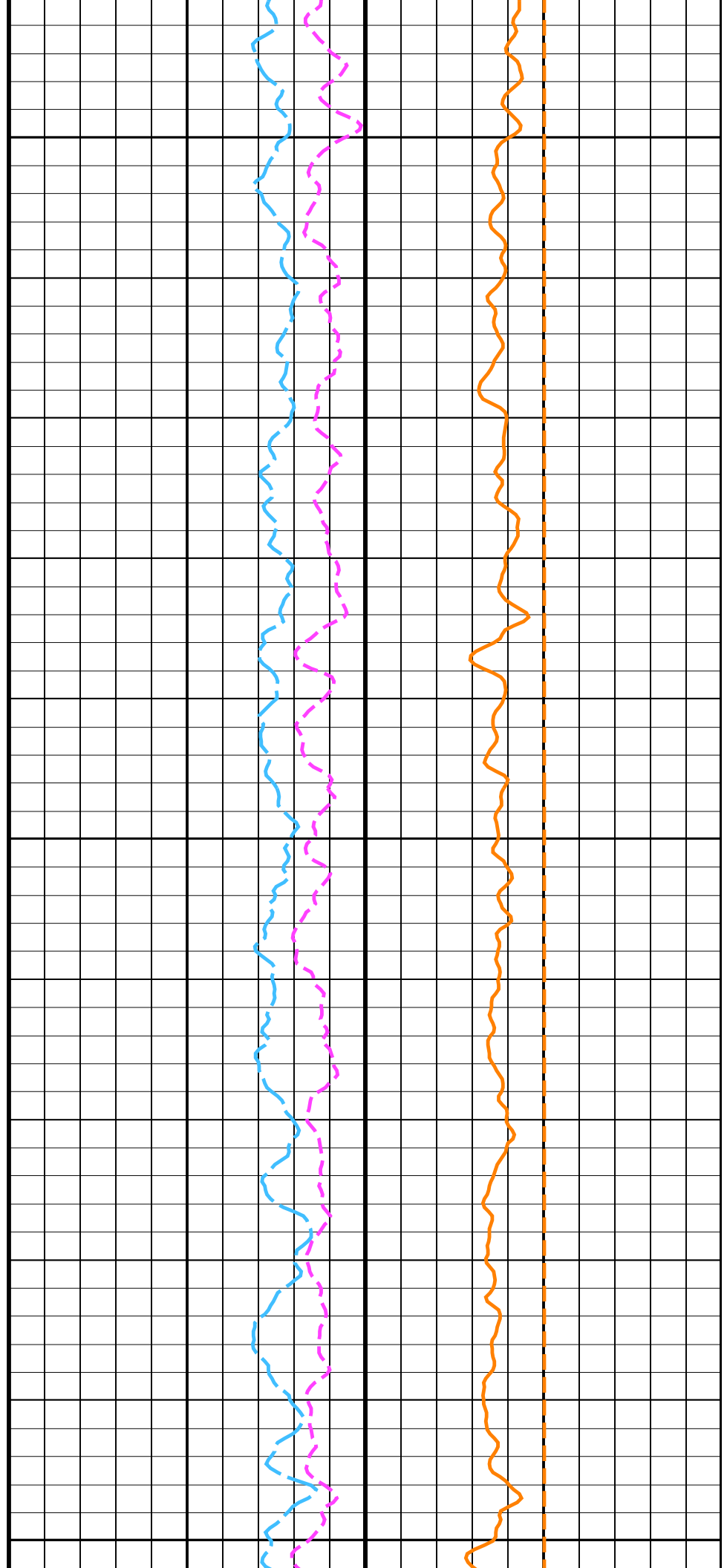
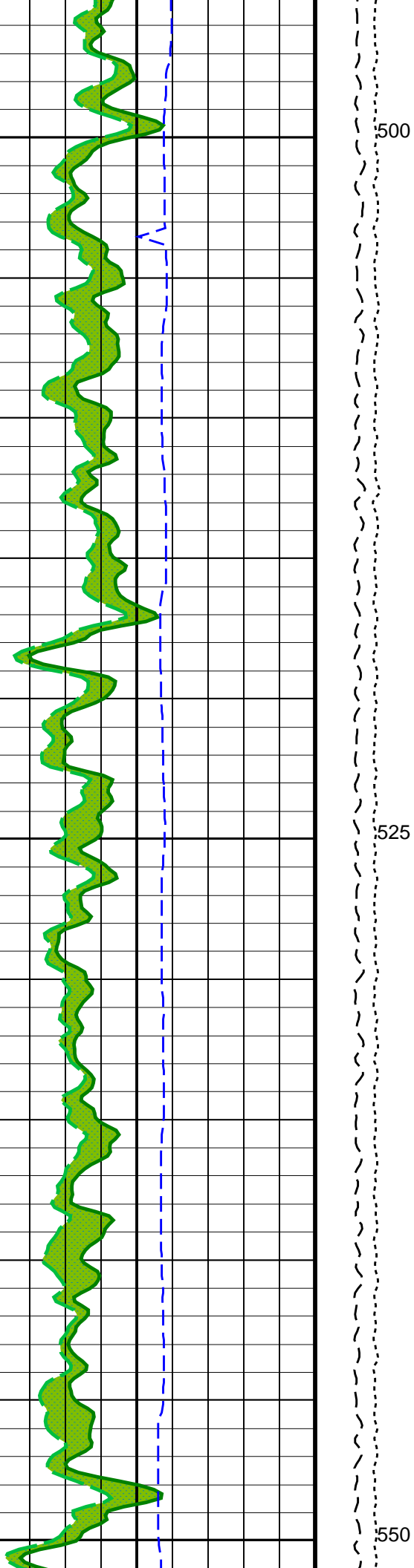


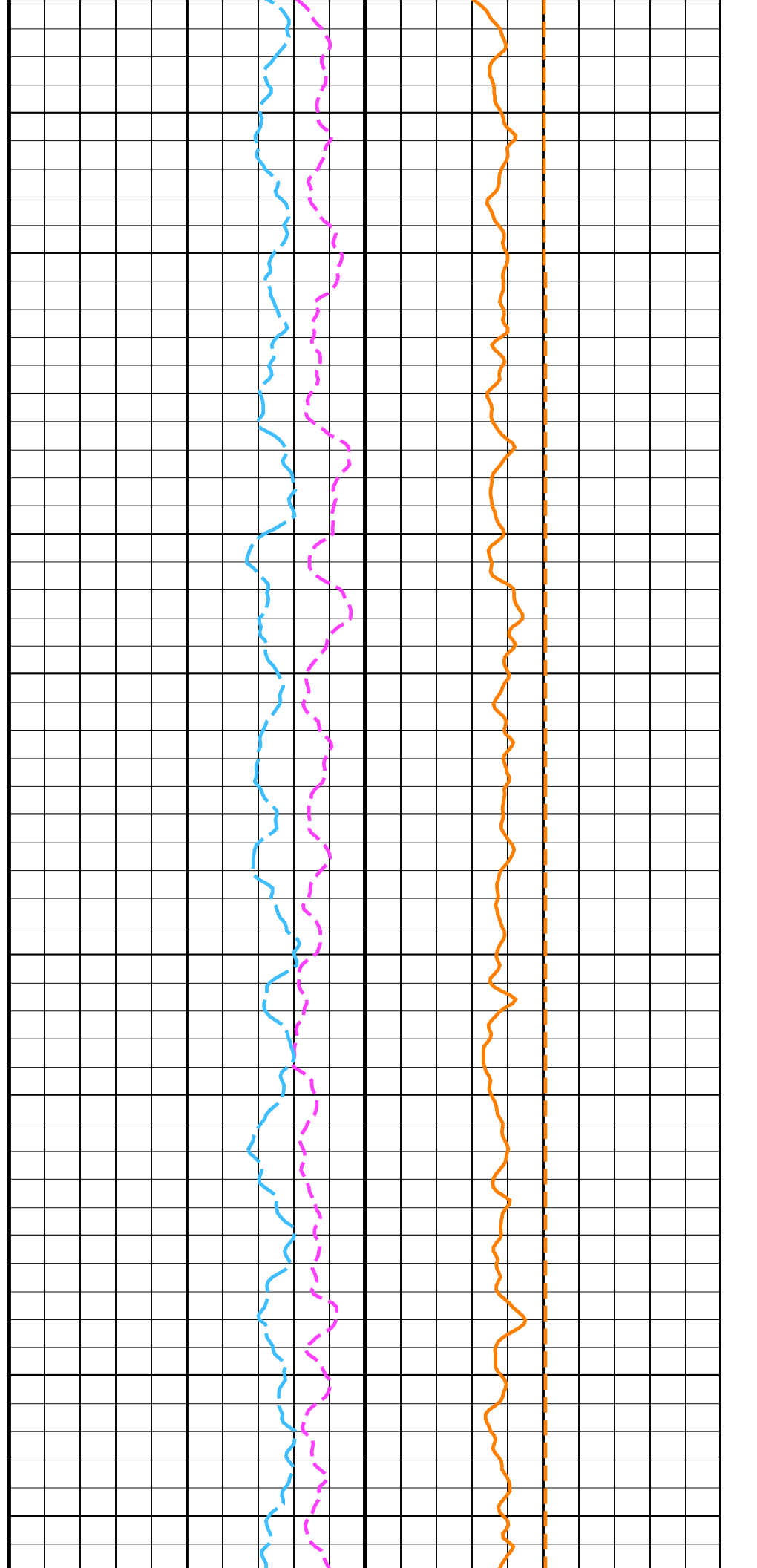
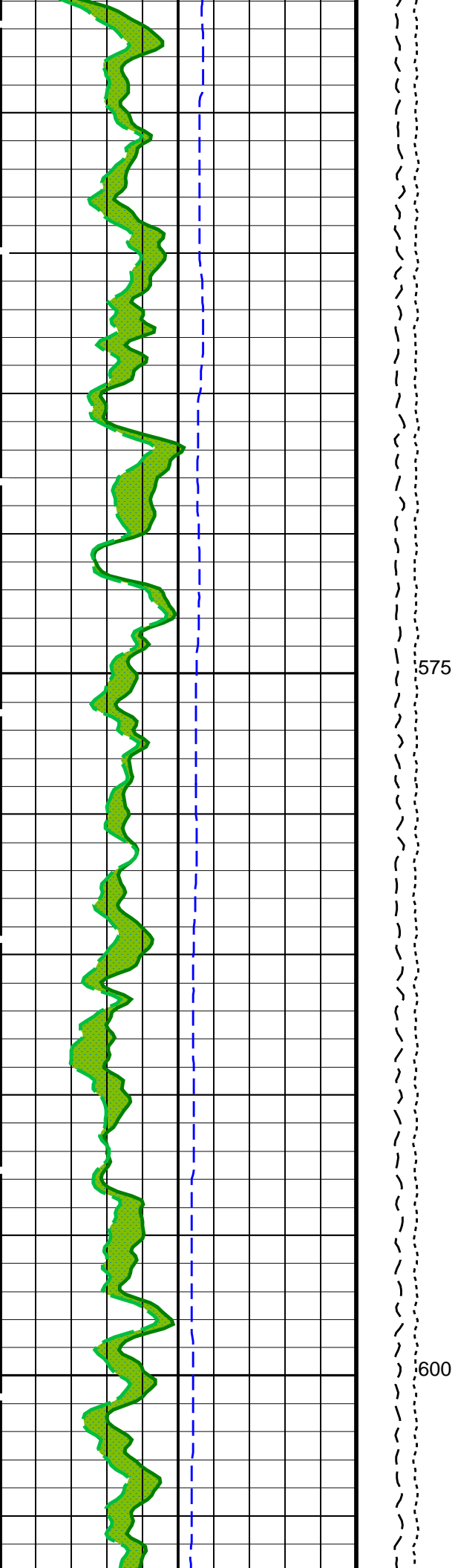


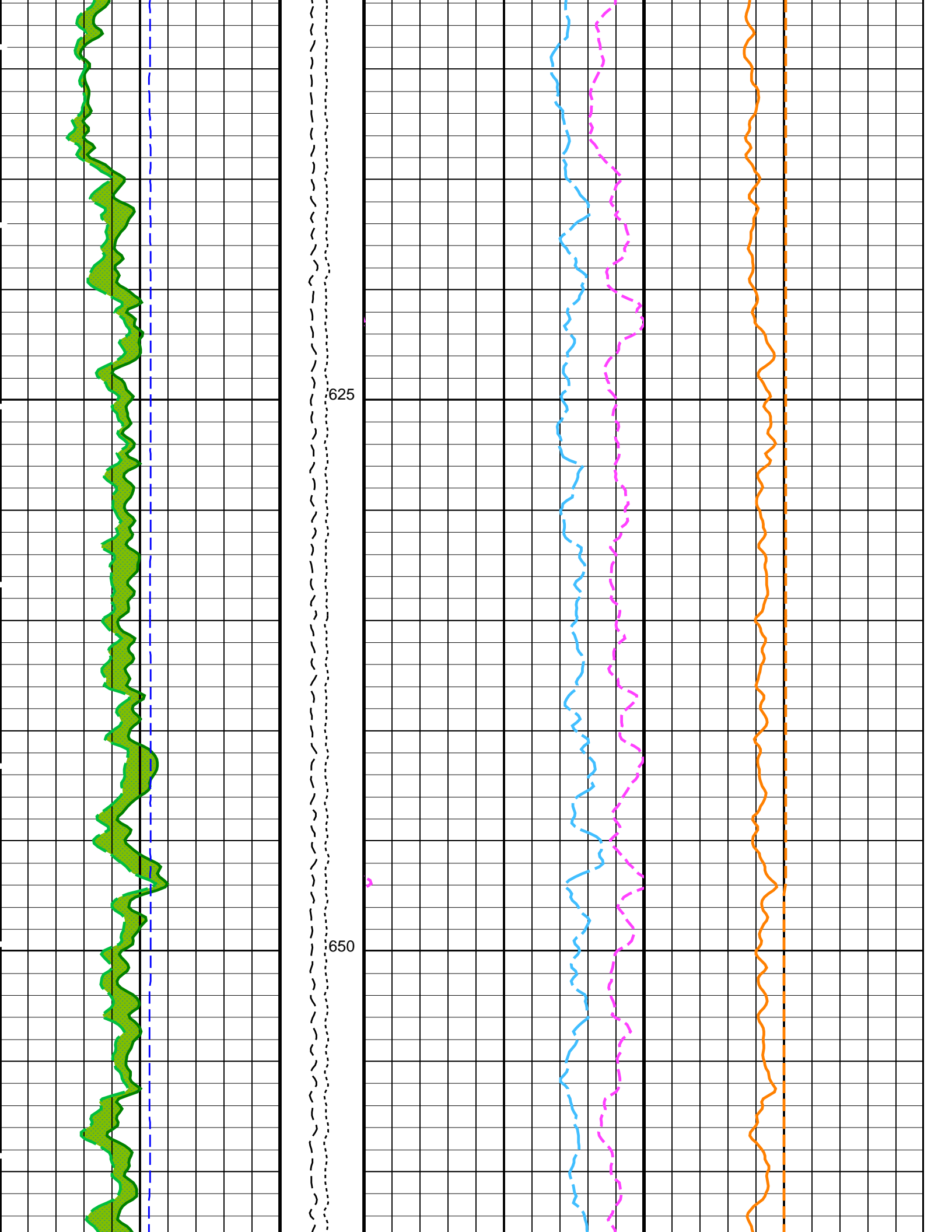


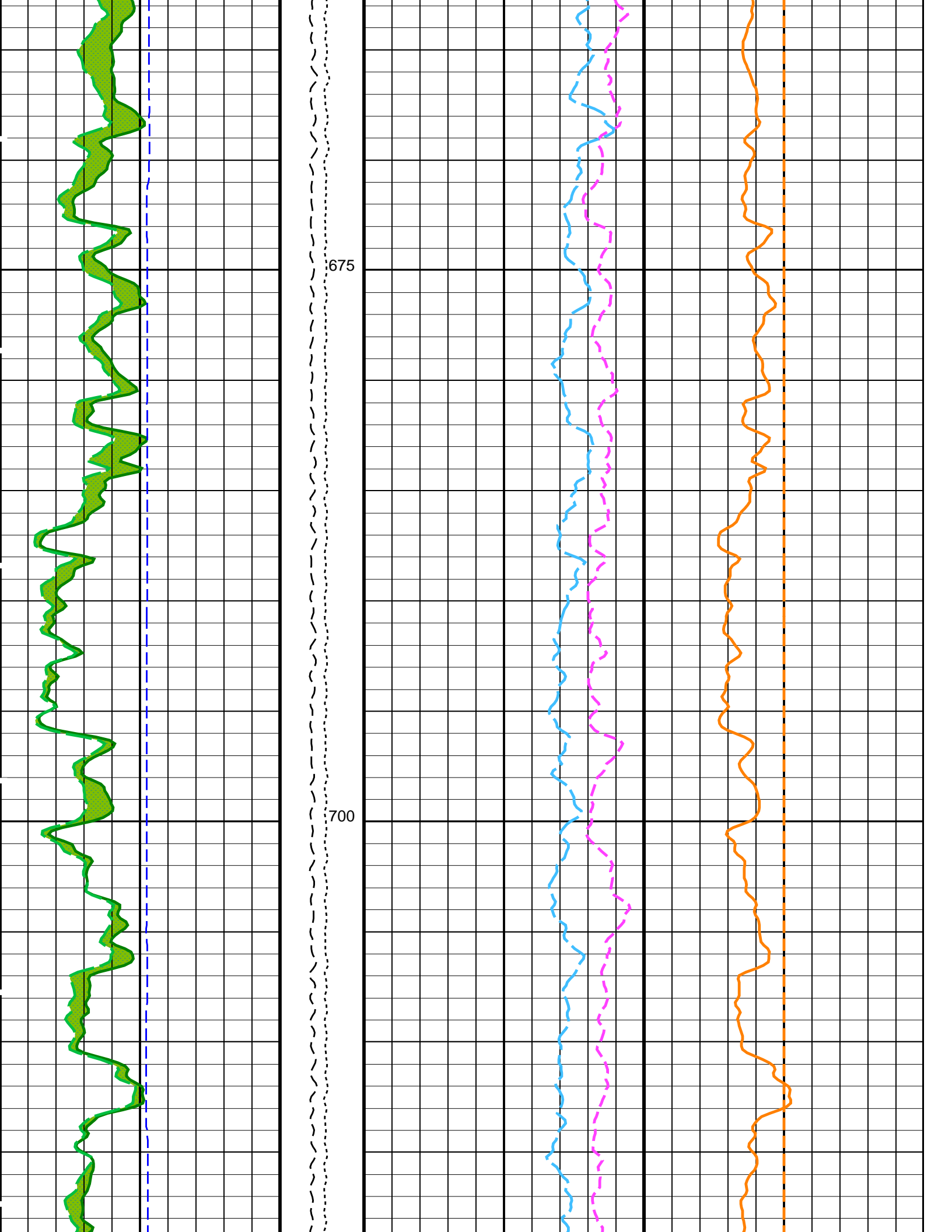


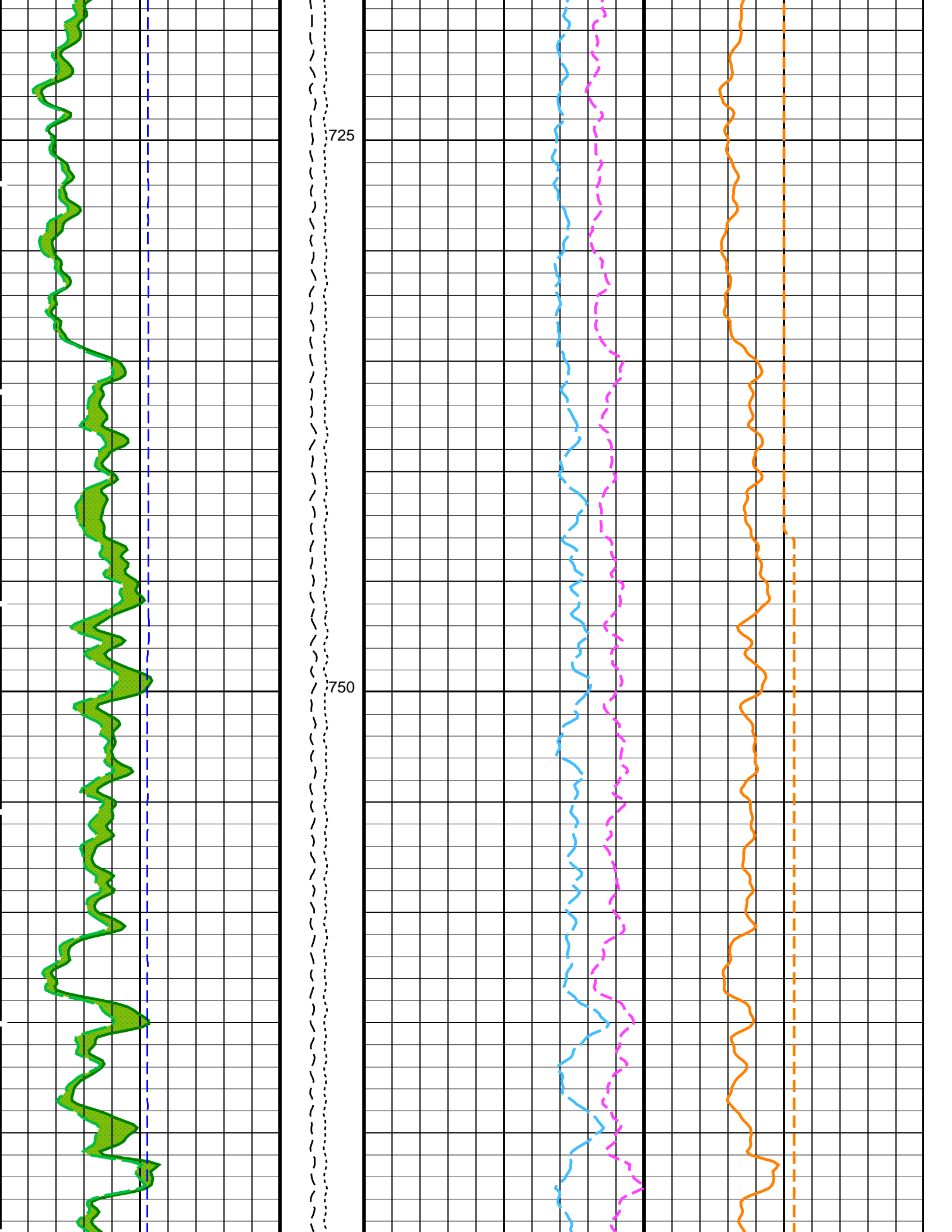


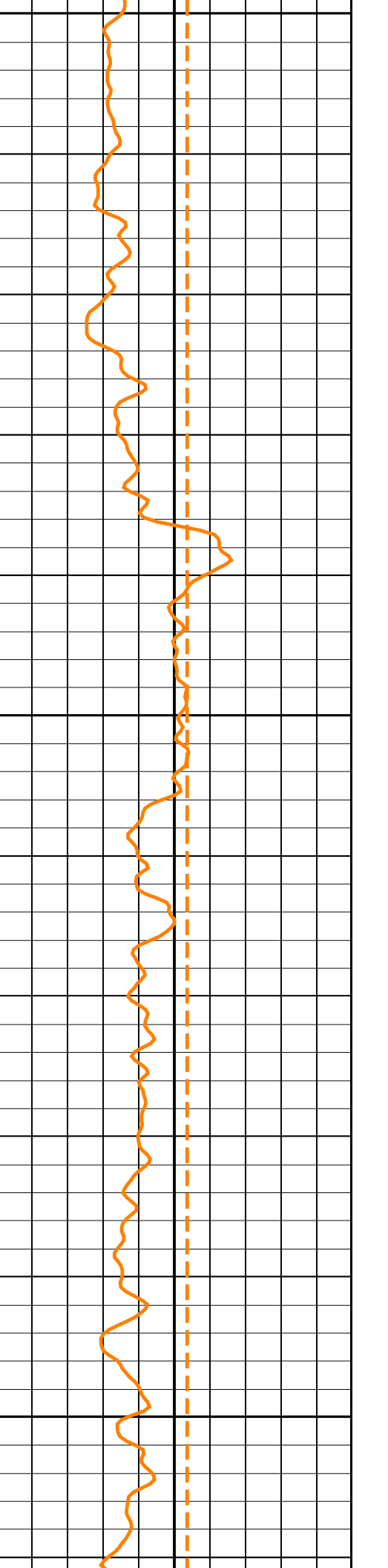
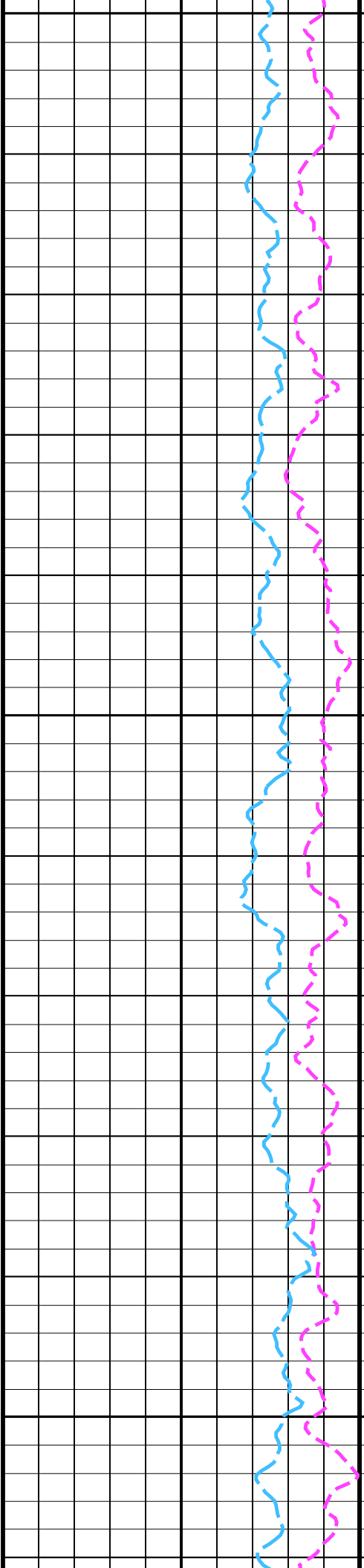
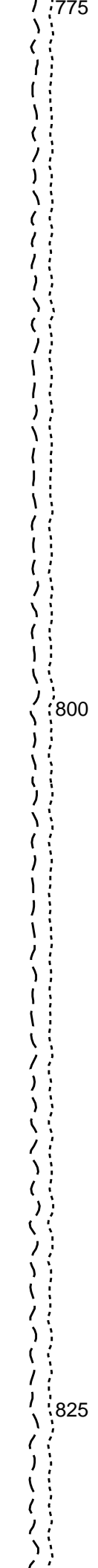
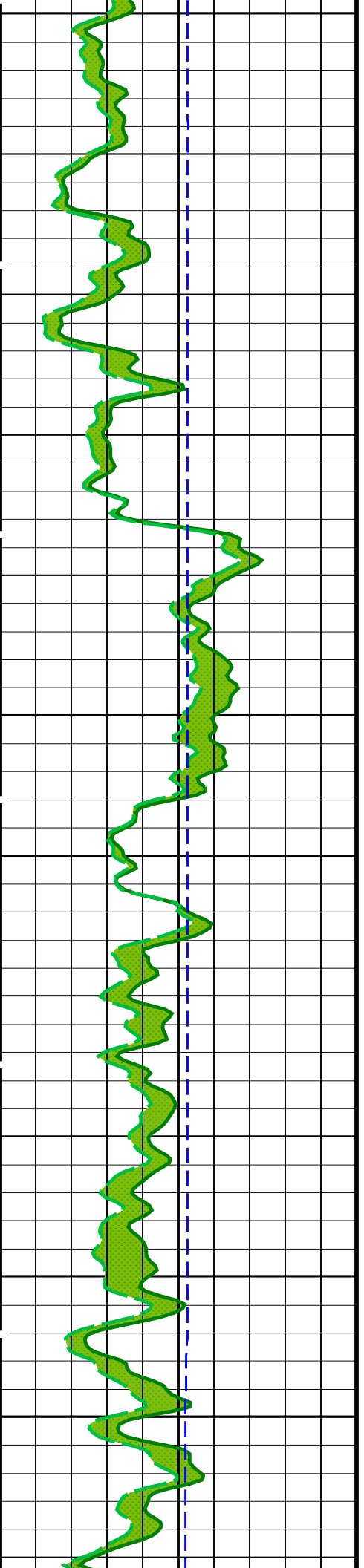


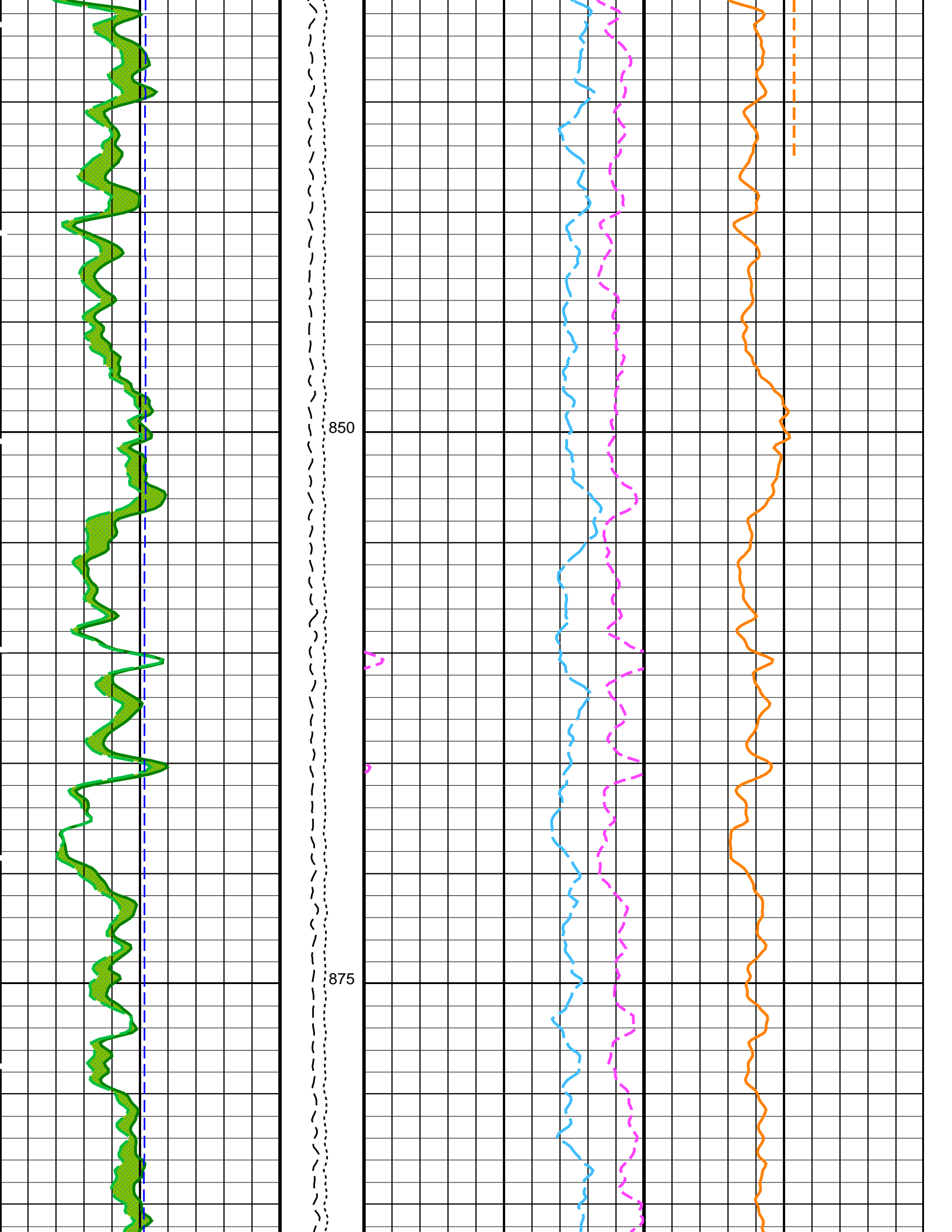


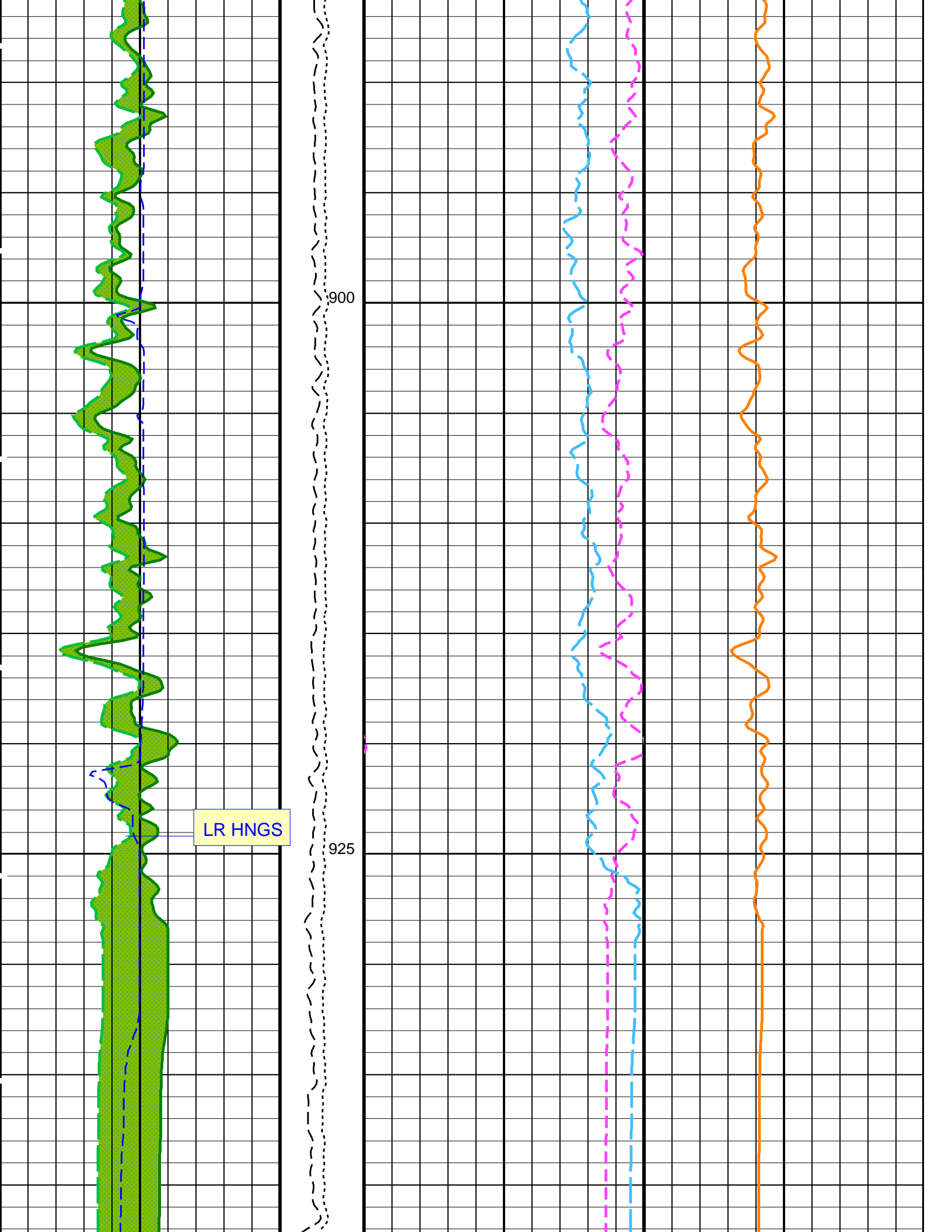








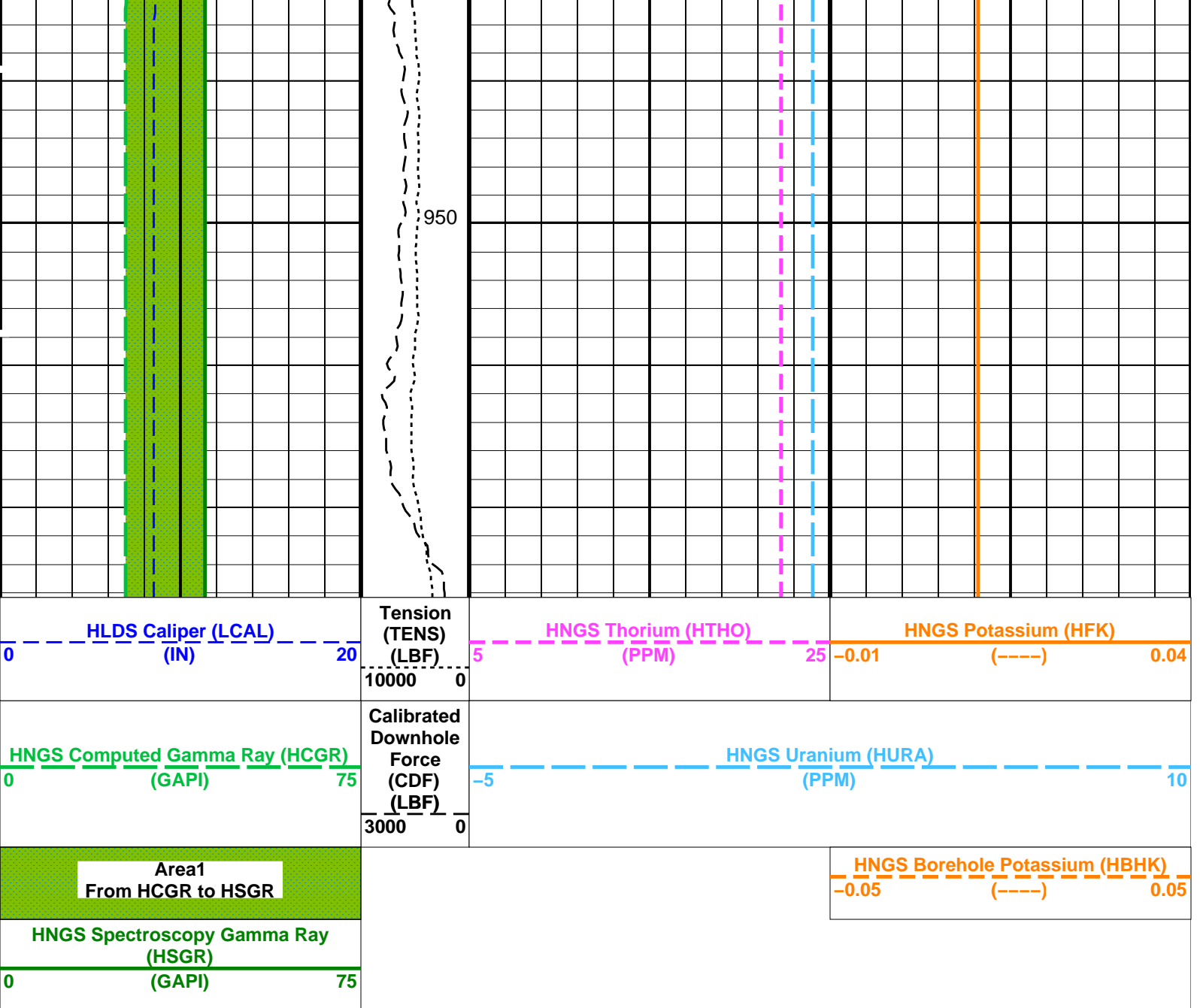




LR HNGS

900

925



0	HLDS Caliper (LCAL) (IN)	20	Tension (TENS) (LBF)	5	HNGS Thorium (HTHO) (PPM)	25	-0.01	HNGS Potassium (HFK) (-----)	0.04
0	HNGS Computed Gamma Ray (HCGR) (GAPI)	75	Calibrated Downhole Force (CDF) (LBF)	-5	HNGS Uranium (HURA) (PPM)	10			
0	Area1 From HCGR to HSGR						-0.05	HNGS Borehole Potassium (HBHK) (-----)	0.05
0	HNGS Spectroscopy Gamma Ray (HSGR) (GAPI)	75							

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	-0.000199897
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	1.00407	
VBA2	HNGS Detector 2 Variable Barite Factor Running Average	1.01069	
EDTC-B: Enhanced DTS Cartridge			
BHS	Borehole Status	OPEN	
GCSE	Generalized Caliper Selection	LCAL	
System and Miscellaneous			
BS	Bit Size	9.875	IN
DO	Depth Offset for Playback	-2125.5	M
PP	Playback Processing	NORMAL	

Format: HNGSYields Vertical Scale: 1:200 Graphics File Created: 25-Apr-2014 01:15

OP System Version: 19C0-187

MSS_LDEO-A	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	MSS_LDEO_HRLA_LDL_019LUP	FN:20	PRODUCER	22-Apr-2014 11:26	3088.4 M	2114.6 M
---------	--------------------------	-------	----------	-------------------	----------	----------

Output DLIS Files

DEFAULT	MSS_LDEO_HRLA_LDL_038PUP	FN:45	PRODUCER	25-Apr-2014 01:15
CLIENT	MSS_LDEO_HRLA_LDL_038PUC	FN:46	CUSTOMER	25-Apr-2014 01:15



Calibrations

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: 22-Apr-2014 11:12 After: 22-Apr-2014 15:20							
HRLT M0-M1 Voltage Plus - 0	0	N/A	-319.1	-318.8	0.3062	9.681	UV
HRLT M0-M1 Voltage Plus - 1	0	N/A	-331.1	-332.9	-1.821	9.681	UV
HRLT M0-M1 Voltage Plus - 2	0	N/A	-332.4	-334.2	-1.765	9.681	UV
HRLT M0-M1 Voltage Plus - 3	0	N/A	-336.5	-337.9	-1.335	9.681	UV
HRLT M0-M1 Voltage Plus - 4	0	N/A	-325.8	-326.3	-0.4844	9.681	UV
HRLT M0-M1 Voltage Plus - 5	0	N/A	-322.2	-322.4	-0.2563	9.681	UV
HRLT M0-M1 Voltage Plus - 6	0	N/A	320.1	324.2	4.174	9.681	UV
HRLT M0-M1 Voltage Plus - 7	0	N/A	-322.7	-322.7	0	9.681	UV
High Resolution Laterolog Array - B Wellsite Calibration - HRLT M12							
Before: 22-Apr-2014 11:12 After: 22-Apr-2014 15:20							
HRLT M1-M2 Voltage Plus - 0	0	N/A	1759	1753	-5.530	53.42	UV
HRLT M1-M2 Voltage Plus - 1	0	N/A	1826	1834	7.958	53.42	UV
HRLT M1-M2 Voltage Plus - 2	0	N/A	1828	1834	6.914	53.42	UV
HRLT M1-M2 Voltage Plus - 3	0	N/A	1850	1853	3.145	53.42	UV
HRLT M1-M2 Voltage Plus - 4	0	N/A	1791	1789	-2.477	53.42	UV
HRLT M1-M2 Voltage Plus - 5	0	N/A	1772	1768	-3.955	53.42	UV
HRLT M1-M2 Voltage Plus - 6	0	N/A	-1773	-1795	-22.06	53.42	UV

HRLT M1-M2 Voltage Plus - 7	0	N/A	1781	1781	0	53.42	UV	
High Resolution Laterolog Array - B Wellsite Calibration - HRLT M23								
Before: 22-Apr-2014 11:12 After: 22-Apr-2014 15:20								
HRLT M2-M3 Voltage Plus - 0	0	N/A	1744	1739	-5.546	53.42	UV	
HRLT M2-M3 Voltage Plus - 1	0	N/A	1824	1831	6.561	53.42	UV	
HRLT M2-M3 Voltage Plus - 2	0	N/A	1827	1833	5.856	53.42	UV	
HRLT M2-M3 Voltage Plus - 3	0	N/A	1853	1856	2.514	53.42	UV	
HRLT M2-M3 Voltage Plus - 4	0	N/A	1787	1784	-2.507	53.42	UV	
HRLT M2-M3 Voltage Plus - 5	0	N/A	1769	1765	-3.755	53.42	UV	
HRLT M2-M3 Voltage Plus - 6	0	N/A	-1762	-1782	-20.04	53.42	UV	
HRLT M2-M3 Voltage Plus - 7	0	N/A	1781	1781	0	53.42	UV	

HRLT A3-A4 Voltage Plus - 0	0	N/A	68490	68380	-104.8	2100	UV	
High Resolution Laterolog Array - B Wellsite Calibration - HRLT V34								
Before: 22-Apr-2014 11:12 After: 22-Apr-2014 15:20								
HRLT A3-A4 Voltage Plus - 1	0	N/A	71440	71810	365.7	2100	UV	
HRLT A3-A4 Voltage Plus - 2	0	N/A	71830	72190	361.5	2100	UV	
HRLT A3-A4 Voltage Plus - 3	0	N/A	73090	73320	228.5	2100	UV	
HRLT A3-A4 Voltage Plus - 4	0	N/A	70460	70490	28.09	2100	UV	
HRLT A3-A4 Voltage Plus - 5	0	N/A	69760	69740	-23.30	2100	UV	
HRLT A3-A4 Voltage Plus - 6	0	N/A	-67950	-68850	-894.5	2100	UV	
HRLT A3-A4 Voltage Plus - 7	0	N/A	70000	70000	0	2100	UV	

HRLT A4-A5 Voltage Plus - 0	0	N/A	68740	68660	-75.27	2100	UV	
High Resolution Laterolog Array - B Wellsite Calibration - HRLT V45								
Before: 22-Apr-2014 11:12 After: 22-Apr-2014 15:20								
HRLT A4-A5 Voltage Plus - 1	0	N/A	71800	72210	406.9	2100	UV	
HRLT A4-A5 Voltage Plus - 2	0	N/A	72170	72540	372.2	2100	UV	
HRLT A4-A5 Voltage Plus - 3	0	N/A	73420	73660	239.9	2100	UV	
HRLT A4-A5 Voltage Plus - 4	0	N/A	70750	70790	44.78	2100	UV	
HRLT A4-A5 Voltage Plus - 5	0	N/A	70030	70000	-31.07	2100	UV	
HRLT A4-A5 Voltage Plus - 6	0	N/A	-68330	-69240	-908.4	2100	UV	
HRLT A4-A5 Voltage Plus - 7	0	N/A	70000	70000	0	2100	UV	

HRLT A5-A6 Voltage Plus - 0	0	N/A	68640	68560	-76.52	2100	UV	
High Resolution Laterolog Array - B Wellsite Calibration - HRLT V56								
Before: 22-Apr-2014 11:12 After: 22-Apr-2014 15:20								
HRLT A5-A6 Voltage Plus - 1	0	N/A	71530	71930	396.8	2100	UV	
HRLT A5-A6 Voltage Plus - 2	0	N/A	71930	72310	378.7	2100	UV	
HRLT A5-A6 Voltage Plus - 3	0	N/A	73210	73460	252.0	2100	UV	
HRLT A5-A6 Voltage Plus - 4	0	N/A	70600	70640	41.45	2100	UV	
HRLT A5-A6 Voltage Plus - 5	0	N/A	69910	69900	-12.29	2100	UV	
HRLT A5-A6 Voltage Plus - 6	0	N/A	-68070	-68970	-905.8	2100	UV	
HRLT A5-A6 Voltage Plus - 7	0	N/A	70000	70000	0	2100	UV	

HRLT Torpedo-M0 Voltage - 0	0	N/A	-68340	-68230	103.6	2100	UV	
High Resolution Laterolog Array - B Wellsite Calibration - HRLT VTP								
Before: 22-Apr-2014 11:12 After: 22-Apr-2014 15:20								
HRLT Torpedo-M0 Voltage - 1	0	N/A	-71860	-72250	-393.8	2100	UV	
HRLT Torpedo-M0 Voltage - 2	0	N/A	-72240	-72610	-367.6	2100	UV	
HRLT Torpedo-M0 Voltage - 3	0	N/A	-73520	-73760	-235.8	2100	UV	
HRLT Torpedo-M0 Voltage - 4	0	N/A	-70820	-70840	-21.06	2100	UV	
HRLT Torpedo-M0 Voltage - 5	0	N/A	-70090	-70050	41.42	2100	UV	
HRLT Torpedo-M0 Voltage - 6	0	N/A	68330	69240	912.8	2100	UV	
HRLT Torpedo-M0 Voltage - 7	0	N/A	-70000	-70000	0	2100	UV	

HRLT Bridle#9-M0 Voltage - 0	0	N/A	-68330	-68230	100.6	2100	UV	
High Resolution Laterolog Array - B Wellsite Calibration - HRLT VBD								
Before: 22-Apr-2014 11:12 After: 22-Apr-2014 15:20								
HRLT Bridle#9-M0 Voltage - 1	0	N/A	-71830	-72240	-412.0	2100	UV	
HRLT Bridle#9-M0 Voltage - 2	0	N/A	-72220	-72590	-369.9	2100	UV	
HRLT Bridle#9-M0 Voltage - 3	0	N/A	-73500	-73730	-227.9	2100	UV	
HRLT Bridle#9-M0 Voltage - 4	0	N/A	-70820	-70840	-22.34	2100	UV	
HRLT Bridle#9-M0 Voltage - 5	0	N/A	-70090	-70040	48.22	2100	UV	
HRLT Bridle#9-M0 Voltage - 6	0	N/A	68300	69210	914.5	2100	UV	
HRLT Bridle#9-M0 Voltage - 7	0	N/A	-70000	-70000	0	2100	UV	

HRLT Source Current Plus - 0	0	N/A	285.0	284.6	-0.4069	8.520	UA	
High Resolution Laterolog Array - B Wellsite Calibration - HRLT ISO								
Before: 22-Apr-2014 11:12 After: 22-Apr-2014 15:20								
HRLT Source Current Plus - 1	0	N/A	281.1	281.1	0	8.520	UA	
HRLT Source Current Plus - 2	0	N/A	281.1	281.1	0	8.520	UA	
HRLT Source Current Plus - 3	0	N/A	281.1	281.1	0	8.520	UA	
HRLT Source Current Plus - 4	0	N/A	281.1	281.1	0	8.520	UA	
HRLT Source Current Plus - 5	0	N/A	281.1	281.1	0	8.520	UA	
HRLT Source Current Plus - 6	0	N/A	281.1	281.1	0	8.520	UA	
HRLT Source Current Plus - 7	0	N/A	281.1	281.1	0	8.520	UA	

HRLT Vertical Voltage Pl - 0	0	N/A	-321.8	-321.2	0.5255	9.681	UV	
High Resolution Laterolog Array - B Wellsite Calibration - HRLT MV								
Before: 22-Apr-2014 11:12 After: 22-Apr-2014 15:20								

HRLT Vertical Voltage PI - 1	0	N/A	-326.0	-327.9	-1.913	9.681	UV
HRLT Vertical Voltage PI - 2	0	N/A	-326.3	-328.0	-1.707	9.681	UV
HRLT Vertical Voltage PI - 3	0	N/A	-328.7	-329.8	-1.082	9.681	UV
HRLT Vertical Voltage PI - 4	0	N/A	-315.3	-315.4	-0.03436	9.681	UV
HRLT Vertical Voltage PI - 5	0	N/A	-326.9	-326.6	0.2318	9.681	UV
HRLT Vertical Voltage PI - 6	0	N/A	328.0	332.6	4.506	9.681	UV
HRLT Vertical Voltage PI - 7	0	N/A	-322.7	-322.7	0	9.681	UV

Hostile Litho-Density Sonde Wellsite Calibration - Background Measurement

Master: 30-Mar-2014 17:31 Before: 22-Apr-2014 8:11 After: 22-Apr-2014 15:52

SS Cs Resolution Bkg	9.000	7.835	7.769	7.662	-0.1067	1.800	%
LS Cs Resolution Bkg	9.000	8.052	8.051	8.070	0.01894	1.800	%
LSW1 Background	100.0	85.40	81.87	83.71	1.840	3.000	CPS
LSW2 Background	100.0	75.91	75.44	75.85	0.4115	3.000	CPS
LSW3 Background	200.0	172.7	173.8	172.5	-1.346	6.000	CPS
LSW4 Background	250.0	211.3	210.9	212.1	1.252	7.500	CPS
LSW5 Background	600.0	495.5	492.0	493.1	1.094	18.00	CPS
SSW1 Background	100.0	82.18	80.25	81.59	1.343	3.000	CPS
SSW2 Background	200.0	140.5	140.8	140.4	-0.4067	6.000	CPS
SSW3 Background	500.0	389.3	390.9	391.2	0.2448	15.00	CPS
SSW4 Background	270.0	210.4	209.5	207.4	-2.117	8.100	CPS
SSW5 Background	200.0	149.3	148.9	150.1	1.210	6.000	CPS

Hostile Litho-Density Sonde Wellsite Calibration - Aluminum Measurement

Master: 30-Mar-2014 17:55

LSW1 Aluminum	600.0	474.9	N/A	N/A	N/A	N/A	CPS
LSW2 Aluminum	900.0	698.9	N/A	N/A	N/A	N/A	CPS
LSW3 Aluminum	1100	843.5	N/A	N/A	N/A	N/A	CPS
LSW4 Aluminum	580.0	422.2	N/A	N/A	N/A	N/A	CPS
LSW5 Aluminum	570.0	388.1	N/A	N/A	N/A	N/A	CPS
SSW1 Aluminum	2800	2208	N/A	N/A	N/A	N/A	CPS
SSW2 Aluminum	8000	6092	N/A	N/A	N/A	N/A	CPS
SSW3 Aluminum	11600	8590	N/A	N/A	N/A	N/A	CPS
SSW4 Aluminum	5000	3536	N/A	N/A	N/A	N/A	CPS
SSW5 Aluminum	660.0	421.8	N/A	N/A	N/A	N/A	CPS

Hostile Litho-Density Sonde Wellsite Calibration - Lithology Measurement

Master: 30-Mar-2014 17:49

LSW1 Iron	400.0	324.7	N/A	N/A	N/A	N/A	CPS
LSW2 Iron	730.0	565.3	N/A	N/A	N/A	N/A	CPS
LSW3 Iron	1000	741.4	N/A	N/A	N/A	N/A	CPS
LSW4 Iron	520.0	383.6	N/A	N/A	N/A	N/A	CPS
LSW5 Iron	470.0	349.9	N/A	N/A	N/A	N/A	CPS
SSW1 Iron	2100	1623	N/A	N/A	N/A	N/A	CPS
SSW2 Iron	6800	5092	N/A	N/A	N/A	N/A	CPS
SSW3 Iron	10800	7826	N/A	N/A	N/A	N/A	CPS
SSW4 Iron	4600	3213	N/A	N/A	N/A	N/A	CPS
SSW5 Iron	580.0	372.1	N/A	N/A	N/A	N/A	CPS

Hostile Litho-Density Sonde Wellsite Calibration - Caliper Calibration

Before: 30-Mar-2014 20:42

HLDS Caliper Small Ring	12.00	N/A	14.54	N/A	N/A	N/A	IN
HLDS Caliper Large Ring	15.19	N/A	18.12	N/A	N/A	N/A	IN

Accelerator-Porosity Tool Wellsite Calibration - Detector Background

Master: 30-Mar-2014 12:33 Before: 22-Apr-2014 8:10 After: 22-Apr-2014 15:23

Near Det Bkg Cntrate	30.00	27.13	26.65	25.40	-1.257	N/A	CPS
Far Det Bkg Cntrate	30.00	28.20	27.24	27.62	0.3806	N/A	CPS
Array-1 Det Bkg Cntrate	30.00	26.50	25.50	26.54	1.040	N/A	CPS
Array-2 Det Bkg Cntrate	30.00	27.19	26.35	26.51	0.1599	N/A	CPS
Array Therm Det Bkg Cntrate	30.00	27.32	25.77	27.04	1.261	N/A	CPS

Accelerator-Porosity Tool Wellsite Calibration - Calibration Ratios

Master: 30-Mar-2014 12:33

Near/Far Calibration Ratio	0.9250	0.9737	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	1.018	N/A	N/A	N/A	N/A	

Accelerator-Porosity Tool Wellsite Calibration - Tank Check

Master: 30-Mar-2014 12:33

Array-1 Standoff Porosity	11.75	10.24	N/A	N/A	N/A	N/A	PU
Array-2 Standoff Porosity	11.75	10.46	N/A	N/A	N/A	N/A	PU
Average Slowing Down Time	6.000	6.082	N/A	N/A	N/A	N/A	US
Array-1 SDT Ratio Up/Down	1.000	0.9762	N/A	N/A	N/A	N/A	
Array-2 SDT Ratio Up/Down	1.000	0.9753	N/A	N/A	N/A	N/A	
Sigma Formation	27.50	34.48	N/A	N/A	N/A	N/A	CU

Accelerator-Porosity Tool Wellsite Calibration - CCR7 signal boxes

Master: 30-Mar-2014 11:56

Near Detector Plateau Setting	1650	1699	N/A	N/A	N/A	N/A	V
Far Detector Plateau Setting	2000	2036	N/A	N/A	N/A	N/A	V

Array Detector Plateau Setting	2000	1937	N/A	N/A	N/A	N/A	V
Hostile Natural Gamma Ray Sonde Wellsite Calibration – Detector 1 Check							
Master: 27–Mar–2014 5:59	Before: 27–Mar–2014 6:07	After: 27–Mar–2014 6:13					
Na 511 Peak Loc	40.00	39.78	39.67	39.66	-0.01299	1.000	
Na 511 Peak Res	15.50	16.03	15.21	17.13	1.922	2.000	%
High Voltage	1150	1197	1196	1198	1.049	N/A	V
Na 1785 Peak Loc	142.6	142.2	143.6	142.1	-1.514	7.000	
Na 1785 Peak Res	8.500	8.755	9.665	9.508	-0.1568	2.000	%
Temperature	15.50	33.07	33.06	33.03	-0.02276	N/A	DEGC
Na Count Rate	45.00	11.79	12.09	12.03	-0.06420	8.000	CPS

Hostile Natural Gamma Ray Sonde Wellsite Calibration – Detector 2 Check							
Master: 27–Mar–2014 5:59	Before: 27–Mar–2014 6:07	After: 27–Mar–2014 6:13					
Na 511 Peak Loc	40.00	39.69	39.69	39.64	-0.04813	1.000	
Na 511 Peak Res	15.50	15.94	16.10	16.73	0.6302	2.000	%
High Voltage	1150	1120	1119	1119	-0.2911	N/A	V
Na 1785 Peak Loc	142.6	143.1	142.2	141.3	-0.9386	7.000	
Na 1785 Peak Res	8.500	9.947	8.813	9.218	0.4048	2.000	%
Temperature	15.50	33.86	33.85	33.87	0.01951	N/A	DEGC
Na Count Rate	45.00	12.27	12.51	12.48	-0.02532	8.000	CPS

Hostile Natural Gamma Ray Sonde Wellsite Calibration – Ratio Of Detector 1 To Detector 2							
Master: 27–Mar–2014 5:59	Before: 27–Mar–2014 6:07	After: 27–Mar–2014 6:13					
Coincidence Count Rate Ratio	1.000	0.9619	0.9664	0.9652	-0.001153	0.05000	

Enhanced DTS Cartridge Wellsite Calibration – EDTC Accelerometer Calibration							
Before: 22–Apr–2014 8:07							
EDTC Z–Axis Acceleration	9.810	N/A	9.752	N/A	N/A	N/A	M/S2

Enhanced DTS Cartridge Wellsite Calibration – Detector Calibration							
Before: 22–Apr–2014 8:17	After: 22–Apr–2014 15:50						
Gamma Ray (Jig – Bkg)	156.4	N/A	156.4	158.2	1.813	14.22	GAPI
Gamma Ray (Calibrated)	165.0	N/A	165.0	166.9	1.913	15.00	GAPI

Accelerator–Porosity Tool – Detector Plateau Settings :

Near Detector Plateau Setting 1699 V
 Far Detector Plateau Setting 2036 V
 Array Detector Plateau Setting 1937 V

High Resolution Laterolog Array – B / Equipment Identification		
Primary Equipment:		
HRLT Sonde	HRLS – B	768
Auxiliary Equipment:		
HRLT lower Housing	HRLH – B	968
HRLT Lower Cartridge	HRLC – B	974
HRLT upper Housing	HRUH – B	768
HRLT Upper Cartridge	HRUC – B	764

High Resolution Laterolog Array – B Wellsite Calibration							
HRLT M01							
Idx	Phase	HRLT M0–M1 Voltage Plus UV	Value	Nominal	Maximum	Minimum	
0	Before		-319.1	-322.7	-280.7	-379.7	
	After		-318.8				
1	Before		-331.1	-322.7	-280.7	-379.7	
	After		-332.9				
2	Before		-332.4	-322.7	-280.7	-379.7	
	After		-334.2				
3	Before		-336.5	-322.7	-280.7	-379.7	
	After		-337.9				
4	Before		-325.8	-322.7	-280.7	-379.7	
	After		-326.3				

5	Before		-322.2	-322.7	-280.7	-379.7
	After		-322.4			
6	Before		320.1	322.7	379.7	280.7
	After		324.2			
7	Before		-322.7	-322.7	-280.7	-379.7
	After		-322.7			
		(Minimum) (Nominal) (Maximum)				

Before: 22-Apr-2014 11:12
After: 22-Apr-2014 15:20

High Resolution Laterolog Array – B Wellsite Calibration						
HRLT M12						
Idx	Phase	HRLT M1–M2 Voltage Plus UV	Value	Nominal	Maximum	Minimum
0	Before		1759	1781	2095	1549
	After		1753			
1	Before		1826	1781	2095	1549
	After		1834			
2	Before		1828	1781	2095	1549
	After		1834			
3	Before		1850	1781	2095	1549
	After		1853			
4	Before		1791	1781	2095	1549
	After		1789			
5	Before		1772	1781	2095	1549
	After		1768			
6	Before		-1773	-1781	-1549	-2095
	After		-1795			
7	Before		1781	1781	2095	1549
	After		1781			
		(Minimum) (Nominal) (Maximum)				

Before: 22-Apr-2014 11:12
After: 22-Apr-2014 15:20

High Resolution Laterolog Array – B Wellsite Calibration						
HRLT M23						
Idx	Phase	HRLT M2–M3 Voltage Plus UV	Value	Nominal	Maximum	Minimum
0	Before		1744	1781	2095	1549
	After		1739			
1	Before		1824	1781	2095	1549
	After		1831			
2	Before		1827	1781	2095	1549
	After		1833			
3	Before		1853	1781	2095	1549
	After		1856			
4	Before		1787	1781	2095	1549
	After		1784			
5	Before		1769	1781	2095	1549
	After		1765			

6	Before		-1762	-1781	-1549	-2095
	After		-1782			
7	Before		1781	1781	2095	1549
	After		1781			
			(Minimum)	(Nominal)	(Maximum)	
Before: 22-Apr-2014 11:12						
After: 22-Apr-2014 15:20						

High Resolution Laterolog Array – B Wellsite Calibration						
HRLT V34						
Idx	Phase	HRLT A3–A4 Voltage Plus UV	Value	Nominal	Maximum	Minimum
0	Before		68490	70000	82360	60900
	After		68380			
1	Before		71440	70000	82360	60900
	After		71810			
2	Before		71830	70000	82360	60900
	After		72190			
3	Before		73090	70000	82360	60900
	After		73320			
4	Before		70460	70000	82360	60900
	After		70490			
5	Before		69760	70000	82360	60900
	After		69740			
6	Before		-67950	-70000	-60900	-82360
	After		-68850			
7	Before		70000	70000	82360	60900
	After		70000			
			(Minimum)	(Nominal)	(Maximum)	
Before: 22-Apr-2014 11:12						
After: 22-Apr-2014 15:20						

High Resolution Laterolog Array – B Wellsite Calibration						
HRLT V45						
Idx	Phase	HRLT A4–A5 Voltage Plus UV	Value	Nominal	Maximum	Minimum
0	Before		68740	70000	82360	60900
	After		68660			
1	Before		71800	70000	82360	60900
	After		72210			
2	Before		72170	70000	82360	60900
	After		72540			
3	Before		73420	70000	82360	60900
	After		73660			
4	Before		70750	70000	82360	60900
	After		70790			
5	Before		70030	70000	82360	60900
	After		70000			
6	Before		-68330	-70000	-60900	-82360
	After		-69240			

7	Before		70000	82360	60900
	After		70000		
		(Minimum) (Nominal) (Maximum)			

Before: 22-Apr-2014 11:12
 After: 22-Apr-2014 15:20

High Resolution Laterolog Array – B Wellsite Calibration						
HRLT V56						
Idx	Phase	HRLT A5–A6 Voltage Plus UV	Value	Nominal	Maximum	Minimum
0	Before		68640	70000	82360	60900
	After		68560			
1	Before		71530	70000	82360	60900
	After		71930			
2	Before		71930	70000	82360	60900
	After		72310			
3	Before		73210	70000	82360	60900
	After		73460			
4	Before		70600	70000	82360	60900
	After		70640			
5	Before		69910	70000	82360	60900
	After		69900			
6	Before		-68070	-70000	-60900	-82360
	After		-68970			
7	Before		70000	70000	82360	60900
	After		70000			
		(Minimum) (Nominal) (Maximum)				

Before: 22-Apr-2014 11:12
 After: 22-Apr-2014 15:20

High Resolution Laterolog Array – B Wellsite Calibration						
HRLT VTP						
Idx	Phase	HRLT Torpedo–M0 Voltage Plus UV	Value	Nominal	Maximum	Minimum
0	Before		-68340	-70000	-60900	-82360
	After		-68230			
1	Before		-71860	-70000	-60900	-82360
	After		-72250			
2	Before		-72240	-70000	-60900	-82360
	After		-72610			
3	Before		-73520	-70000	-60900	-82360
	After		-73760			
4	Before		-70820	-70000	-60900	-82360
	After		-70840			
5	Before		-70090	-70000	-60900	-82360
	After		-70050			
6	Before		68330	70000	82360	60900
	After		69240			
7	Before		-70000	-70000	-60900	-82360
	After		-70000			

(Minimum)	(Nominal)	(Maximum)
Before: 22-Apr-2014 11:12		
After: 22-Apr-2014 15:20		

High Resolution Laterolog Array – B Wellsite Calibration							
HRLT VBD							
Idx	Phase	HRLT Bridle#9-M0 Voltage Plus UV	Value	Nominal	Maximum	Minimum	
0	Before		-68330	-70000	-60900	-82360	
	After		-68230				
1	Before		-71830	-70000	-60900	-82360	
	After		-72240				
2	Before		-72220	-70000	-60900	-82360	
	After		-72590				
3	Before		-73500	-70000	-60900	-82360	
	After		-73730				
4	Before		-70820	-70000	-60900	-82360	
	After		-70840				
5	Before		-70090	-70000	-60900	-82360	
	After		-70040				
6	Before		68300	70000	82360	60900	
	After		69210				
7	Before		-70000	-70000	-60900	-82360	
	After		-70000				
		(Minimum) (Nominal) (Maximum)					
Before: 22-Apr-2014 11:12							
After: 22-Apr-2014 15:20							

High Resolution Laterolog Array – B Wellsite Calibration							
HRLT ISO							
Idx	Phase	HRLT Source Current Plus UA	Value	Nominal	Maximum	Minimum	
0	Before		285.0	284.0	334.1	247.0	
	After		284.6				
1	Before		281.1	281.1	330.7	244.4	
	After		281.1				
2	Before		281.1	281.1	330.7	244.4	
	After		281.1				
3	Before		281.1	281.1	330.7	244.4	
	After		281.1				
4	Before		281.1	281.1	330.7	244.4	
	After		281.1				
5	Before		281.1	281.1	330.7	244.4	
	After		281.1				
6	Before		281.1	281.1	330.7	244.4	
	After		281.1				
7	Before		281.1	281.1	330.7	244.4	
	After		281.1				
		(Minimum) (Nominal) (Maximum)					
Before: 22-Apr-2014 11:12							
After: 22-Apr-2014 15:20							

High Resolution Laterolog Array – B Wellsite Calibration

HRLT MV

Idx	Phase	HRLT Vertical Voltage Plus UV	Value	Nominal	Maximum	Minimum
0	Before		-321.8	-322.7	-280.7	-379.7
	After		-321.2			
1	Before		-326.0	-322.7	-280.7	-379.7
	After		-327.9			
2	Before		-326.3	-322.7	-280.7	-379.7
	After		-328.0			
3	Before		-328.7	-322.7	-280.7	-379.7
	After		-329.8			
4	Before		-315.3	-322.7	-280.7	-379.7
	After		-315.4			
5	Before		-326.9	-322.7	-280.7	-379.7
	After		-326.6			
6	Before		328.0	322.7	379.7	280.7
	After		332.6			
7	Before		-322.7	-322.7	-280.7	-379.7
	After		-322.7			

(Minimum) (Nominal) (Maximum)

Before: 22-Apr-2014 11:12

After: 22-Apr-2014 15:20

Hostile Litho-Density Sonde / Equipment Identification

Primary Equipment:

Hostile Litho Density Sonde
Hostile Litho Density High Voltage
Gamma Source Radioactive

HLDS – D 35
HLDV – D 35
GSR – Z 8113

Auxiliary Equipment:

Hostile Litho Density Pad
Hostile Litho Density High Voltage Housi

HLDP – C 35
HEH – H 35

Hostile Litho-Density Sonde Wellsite Calibration

Background Measurement

Phase	SS Cs Resolution Bkg %	Value	Phase	LS Cs Resolution Bkg %	Value	Phase	LSW1 Background CPS	Value
Master		7.835	Master		8.052	Master	 MASTER-BEFORE LIMIT	85.40
Before		7.769	Before		8.051	Before		81.87
After		7.662	After		8.070	After		83.71
7.000 (Minimum) 9.000 (Nominal) 11.000 (Maximum)			7.000 (Minimum) 9.000 (Nominal) 11.000 (Maximum)			55.00 (Minimum) 100.0 (Nominal) 150.0 (Maximum)		
Phase	LSW2 Background CPS	Value	Phase	LSW3 Background CPS	Value	Phase	LSW4 Background CPS	Value
Master		75.91	Master		172.7	Master		211.3
Before		75.44	Before		173.8	Before		210.9
After		75.85	After		172.5	After		212.1
50.00 (Minimum) 100.0 (Nominal) 140.0 (Maximum)			110.0 (Minimum) 200.0 (Nominal) 290.0 (Maximum)			140.0 (Minimum) 250.0 (Nominal) 360.0 (Maximum)		
Phase	LSW5 Background CPS	Value	Phase	SSW1 Background CPS	Value	Phase	SSW2 Background CPS	Value
Master		495.5	Master		82.18	Master		140.5
Before		492.0	Before		80.25	Before		140.8
After		493.1	After		81.59	After		140.4

SSW3 Background CPS			SSW4 Background CPS			SSW5 Background CPS		
Phase	Value	Value	Phase	Value	Value	Phase	Value	Value
Master	389.3	389.3	Master	210.4	210.4	Master	149.3	149.3
Before	390.9	390.9	Before	209.5	209.5	Before	148.9	148.9
After	391.2	391.2	After	207.4	207.4	After	150.1	150.1
280.0 (Minimum)	500.0 (Nominal)	700.0 (Maximum)	150.0 (Minimum)	270.0 (Nominal)	380.0 (Maximum)	110.0 (Minimum)	200.0 (Nominal)	270.0 (Maximum)
Master: 30-Mar-2014 17:31			Before: 22-Apr-2014 8:11			After: 22-Apr-2014 15:52		

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 Minitron	APS - C MNTR - F	212 6504
Auxiliary Equipment: Accelerator-Porosity Housing APS Calibration Water Tank APS Aluminum Calibrator Sleeve	APH - AC SFT - 178 SFT - 281	121 1 1

Accelerator-Porosity Tool Wellsite Calibration

Detector Background

Near Det Bkg Cntrate CPS			Far Det Bkg Cntrate CPS			Array-1 Det Bkg Cntrate CPS		
Phase	Value	Value	Phase	Value	Value	Phase	Value	Value
Master	27.13	27.13	Master	28.20	28.20	Master	26.50	26.50
Before	26.65	26.65	Before	27.24	27.24	Before	25.50	25.50
After	25.40	25.40	After	27.62	27.62	After	26.54	26.54
1.000 (Minimum)	30.00 (Nominal)	50.00 (Maximum)	1.000 (Minimum)	30.00 (Nominal)	50.00 (Maximum)	1.000 (Minimum)	30.00 (Nominal)	50.00 (Maximum)
Array-2 Det Bkg Cntrate CPS			Array Therm Det Bkg Cntrate CPS					
Phase	Value	Value	Phase	Value	Value			
Master	27.19	27.19	Master	27.32	27.32			
Before	26.35	26.35	Before	25.77	25.77			
After	26.51	26.51	After	27.04	27.04			
1.000 (Minimum)	30.00 (Nominal)	50.00 (Maximum)	1.000 (Minimum)	30.00 (Nominal)	50.00 (Maximum)			
Master: 30-Mar-2014 12:33			Before: 22-Apr-2014 8:10			After: 22-Apr-2014 15:23		

Accelerator-Porosity Tool Wellsite Calibration

Calibration Ratios

Near/Far Calibration Ratio			Near/Array Calibration Ratio			Near/Array Cal Ratio Up/Down		
Phase	Value	Value	Phase	Value	Value	Phase	Value	Value
Master	0.9737	0.9737	Master	1.083	1.083	Master	1.018	1.018
0.8000 (Minimum)	0.9250 (Nominal)	1.050 (Maximum)	0.9000 (Minimum)	1.030 (Nominal)	1.170 (Maximum)	0.9700 (Minimum)	1.000 (Nominal)	1.030 (Maximum)
Master: 30-Mar-2014 12:33								

Accelerator-Porosity Tool Wellsite Calibration

Tank Check

Array-1 Standoff Porosity PU			Array-2 Standoff Porosity PU			Average Slowing Down Time US		
Phase	Value	Value	Phase	Value	Value	Phase	Value	Value
Master	10.24	10.24	Master	10.46	10.46	Master	6.082	6.082
9.900 (Minimum)	11.75 (Nominal)	13.60 (Maximum)	9.900 (Minimum)	11.75 (Nominal)	13.60 (Maximum)	5.500 (Minimum)	6.000 (Nominal)	6.250 (Maximum)
Array-1 SDT Ratio Up/Down			Array-2 SDT Ratio Up/Down			Sigma Formation CU		
Phase	Value	Value	Phase	Value	Value	Phase	Value	Value
Master	0.9762	0.9762	Master	0.9753	0.9753	Master	34.48	34.48

Hostile Natural Gamma Ray Cartridge – B / Equipment Identification

Primary Equipment: HNGC Cartridge	HNGC – B	300
Auxiliary Equipment: HNGC Housing	HNGH – A	115

Hostile Natural Gamma Ray Sonde / Equipment Identification

Primary Equipment: HNGS Sonde	HNGS – BA	194
Auxiliary Equipment: HNGS Sonde Housing Gamma Source Radioactive	HNSH – BA GSR – U	205 616008

Hostile Natural Gamma Ray Sonde Wellsite Calibration

Detector 1 Check

Phase	Na 511 Peak Loc	Value	Phase	Na 511 Peak Res %	Value	Phase	High Voltage V	Value	
Master		39.78	Master		16.03	Master		1197	
Before		39.67	Before		15.21	Before		1196	
After		39.66	After		17.13	After		1198	
	37.50 (Minimum)	40.00 (Nominal)	43.50 (Maximum)	12.00 (Minimum)	15.50 (Nominal)	19.00 (Maximum)	900.0 (Minimum)	1150 (Nominal)	1600 (Maximum)
Phase	Na 1785 Peak Loc	Value	Phase	Na 1785 Peak Res %	Value	Phase	Temperature DEGC	Value	
Master		142.2	Master		8.755	Master		33.07	
Before		143.6	Before		9.665	Before		33.06	
After		142.1	After		9.508	After		33.03	
	135.0 (Minimum)	142.6 (Nominal)	150.3 (Maximum)	7.000 (Minimum)	8.500 (Nominal)	11.00 (Maximum)	-28.89 (Minimum)	15.50 (Nominal)	60.00 (Maximum)
Phase	Na Count Rate CPS	Value							
Master		11.79							
Before		12.09							
After		12.03							
	10.00 (Minimum)	45.00 (Nominal)	100.0 (Maximum)						

Master: 27-Mar-2014 5:59

Before: 27-Mar-2014 6:07

After: 27-Mar-2014 6:13

Hostile Natural Gamma Ray Sonde Wellsite Calibration

Detector 2 Check

Phase	Na 511 Peak Loc	Value	Phase	Na 511 Peak Res %	Value	Phase	High Voltage V	Value	
Master		39.69	Master		15.94	Master		1120	
Before		39.69	Before		16.10	Before		1119	
After		39.64	After		16.73	After		1119	
	37.50 (Minimum)	40.00 (Nominal)	43.50 (Maximum)	12.00 (Minimum)	15.50 (Nominal)	19.00 (Maximum)	900.0 (Minimum)	1150 (Nominal)	1600 (Maximum)
Phase	Na 1785 Peak Loc	Value	Phase	Na 1785 Peak Res %	Value	Phase	Temperature DEGC	Value	
Master		143.1	Master		9.947	Master		33.86	
Before		142.2	Before		8.813	Before		33.85	
After		141.3	After		9.218	After		33.87	
	135.0 (Minimum)	142.6 (Nominal)	150.3 (Maximum)	7.000 (Minimum)	8.500 (Nominal)	11.00 (Maximum)	-28.89 (Minimum)	15.50 (Nominal)	60.00 (Maximum)
Phase	Na Count Rate CPS	Value							
Master		12.27							

Before		12.51
After		12.48
	10.00 (Minimum) 45.00 (Nominal) 100.0 (Maximum)	

Master: 27-Mar-2014 5:59 Before: 27-Mar-2014 6:07 After: 27-Mar-2014 6:13

Hostile Natural Gamma Ray Sonde Wellsite Calibration		
Ratio Of Detector 1 To Detector 2		
Phase	Coincidence Count Rate Ratio	Value
Master		0.9619
Before		0.9664
After		0.9652
	0.9500 (Minimum) 1.000 (Nominal) 1.050 (Maximum)	

Master: 27-Mar-2014 5:59
Before: 27-Mar-2014 6:07
After: 27-Mar-2014 6:13

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

Enhanced DTS Cartridge Wellsite Calibration		
EDTC Accelerometer Calibration		
Phase	EDTC Z-Axis Acceleration M/S2	Value
Before		9.752
	9.610 (Minimum) 9.810 (Nominal) 10.01 (Maximum)	

Before: 22-Apr-2014 8:07

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			11.20	Before			156.4	Before			165.0
After			6.774	After			158.2	After			166.9
	0 (Minimum) 30.00 (Nominal) 120.0 (Maximum)				142.2 (Minimum) 156.4 (Nominal) 170.7 (Maximum)				150.0 (Minimum) 165.0 (Nominal) 180.0 (Maximum)		

Before: 22-Apr-2014 8:17 After: 22-Apr-2014 15:50

Company:	Lamont Doherty Earth Observatory	
Well:	Expedition 350, Site U1437D	
Field:	IBM-1 (Rear Arc)	
Rig:	JOIDES Resolution	
Country:		

