

**Company:** Lamont Doherty

**Well:** IODP EXP 304 Site 1309D

**Field:** Atlantis Massif

**Country:** Mid Atlantic Ridge     **Ocean:** Atlantic Ocean

## Natural Gamma Ray

Rig - Joides Resolution		Elev.:	K.B. 11.3 m G.L. -1656 m D.F. 11 m
Permanent Datum: _____		GROUND LEVEL _____	
Log Measured From: _____		DES _____	Elev.: 0 m _____
Drilling Measured From: _____		DES _____	11.3 m above Perm. Datum

**Country:** Mid Atlantic Ridge  
**Field:** Atlantis Massif  
**Location:** Rig- Joides Resolution  
**Well:** IODP EXP 304 Site 1309D  
**Company:** Lamont Doherty

API Serial No. _____	Max. Hole Devi. _____	Longitude 42.11865 W	Latitude 30.16847 N
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<b>Logging Date</b>			
Run Number	1		
Depth Driller	2057.3 m		
Schlumberger Depth	2057 m		
Bottom Log Interval	2053 m		
Top Log Interval	1690 m		
Casing Driller Size @ Depth	0.000 in @ 1710 m		
Casing Schlumberger	1710 m @		
Bit Size	9.875 in		
<b>Type Fluid In Hole</b>			
Density	1.066 g/cm3		
Fluid Loss	0 cm3		
<b>MUD</b>			
<b>Source Of Sample</b>			
RM @ Measured Temperature	0.322 ohm.m @		23 degC @
RMF @ Measured Temperature	@		@
RMC @ Measured Temperature	@		@
<b>Source RMF</b>			
RM @ MRT	0.455 @ 10		@ @ 10
Maximum Recorded Temperatures	10 degC		
Circulation Stopped	Time	1/1/05	0400
Logger On Bottom	Time		See Log
Unit Number	99	Houston	
Recorded By	Steve Kittredge		
Witnessed By	Florence Einaudi		

					Run 1	Run 2	Run

<b>Logging Date</b>			
Run Number			
Depth Driller			
Schlumberger Depth			
Bottom Log Interval			
Top Log Interval			
Casing Driller Size @ Depth			@
Casing Schlumberger			
Bit Size			
<b>Type Fluid In Hole</b>			
Density			
Fluid Loss			
<b>MUD</b>			
<b>Source Of Sample</b>			
RM @ Measured Temperature			@
RMF @ Measured Temperature			@
RMC @ Measured Temperature			@
<b>Source RMF</b>			
RM @ 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: MESTB/DSI/SGTN  
 OS2:  
 OS3:  
 OS4:  
 OS5:

**OTHER SERVICES2**  
 OS1:  
 OS2:  
 OS3:  
 OS4:  
 OS5:

**REMARKS: RUN NUMBER 1**  
 Hole Cored with RCB  
 All depths in Meters Below Rig Floor (MBRF).  
 HOLE FLUSHED WITH FRESH WATER.  
 Sea Floor Driller- 1656 MBRF.  
 Sea Floor Logger- 1656 MBRF.  
 Total Depth Driller- 2057.3 MBRF.  
 Total Depth Logger- 2057 MBRF.  
 Casing Bottom Driller- 1710 MBRF.  
 Casing Bottom Logger- 1710 MBRF.

**REMARKS: RUN NUMBER 2**

**RUN 1**  
 SERVICE ORDER #:  
 PROGRAM VERSION: 12C0-301  
 FLUID LEVEL:

**RUN 2**  
 SERVICE ORDER #:  
 PROGRAM VERSION:  
 FLUID LEVEL:

LOGGED INTERVAL	START	STOP

LOGGED INTERVAL	START	STOP

**EQUIPMENT DESCRIPTION**

**RUN 1**  
**SURFACE EQUIPMENT**  
 LCM-AA  
 SFT-281 6250  
 SFT-178 6250  
 GSR-U 135  
 WITM (DTS)-A

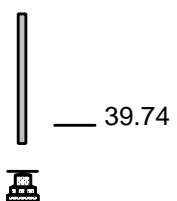
**RUN 2**

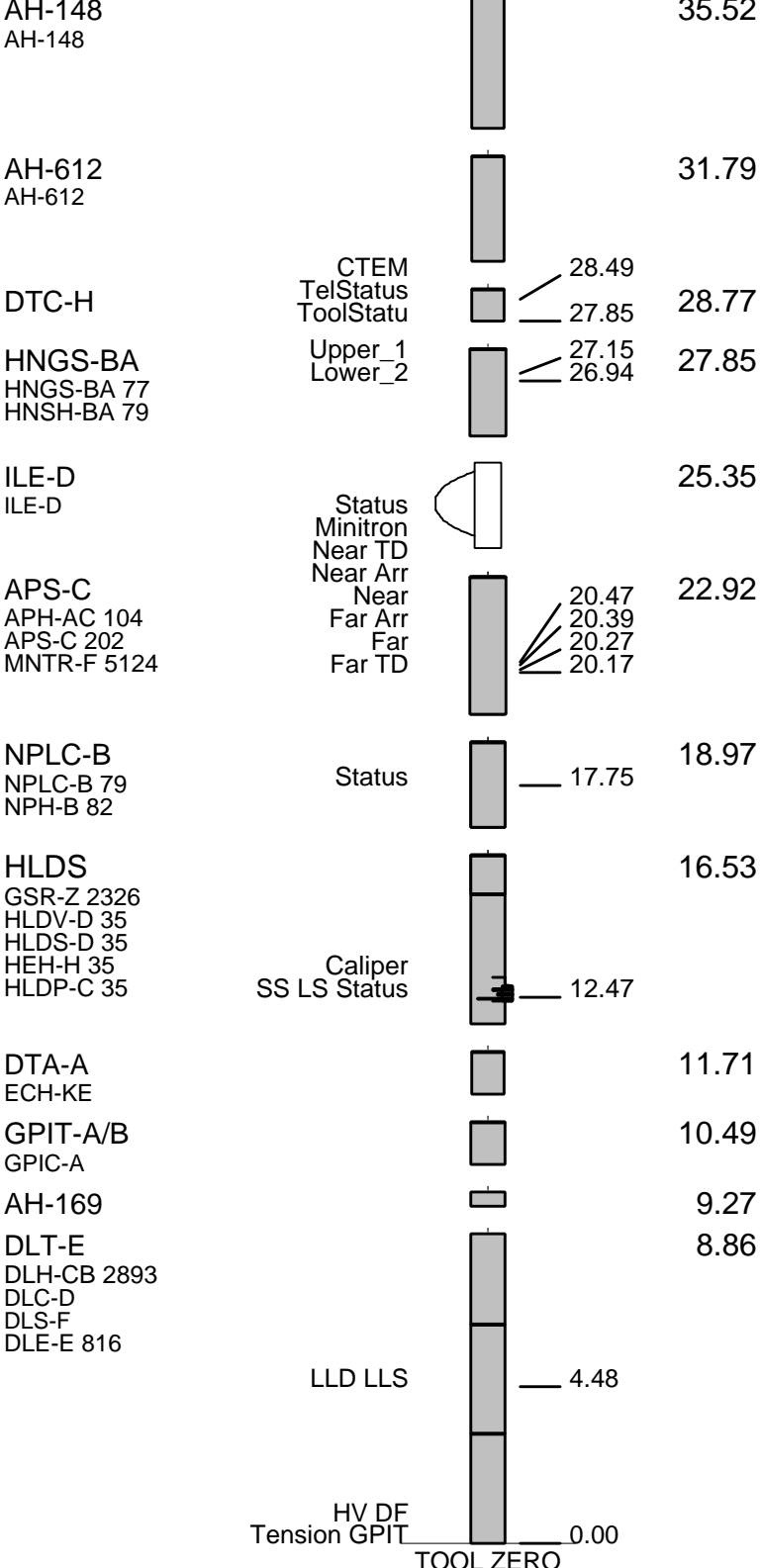
**DOWNHOLE EQUIPMENT**

BSP 60.80  
 BRT-S

SP SPARC 39.74

LEH-QT 36.41





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

### Output DLIS Files

DEFAULT      DLL\_LDL\_APS\_NGS\_030LUP      FN:22    PRODUCER    02-Jan-2005 11:02    2057.4 M    1690.4 M

OP System Version: 12C0-301  
MCM

Main Up Log

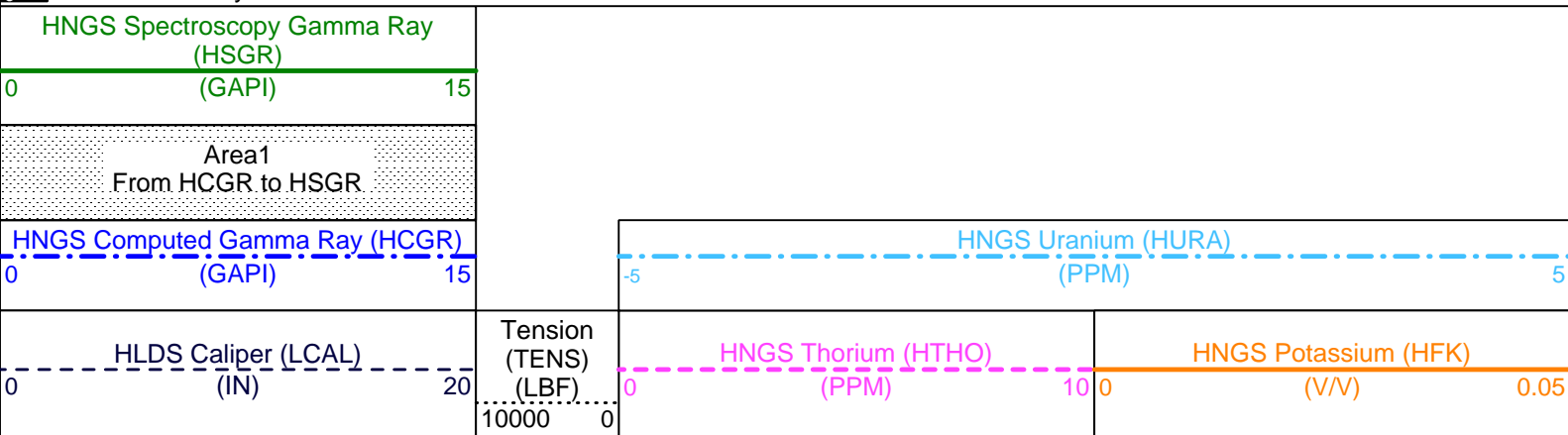
DLT-E	12C0-301	GPIT-A/B	12C0-301
DTA-A	12C0-301	HLDS	12C0-301
NPLC-B	12C0-301	APS-C	12C0-301
HNGS-BA	12C0-301	DTC-H	12C0-301
BSP	12C0-301		

### Changed Parameter Summary

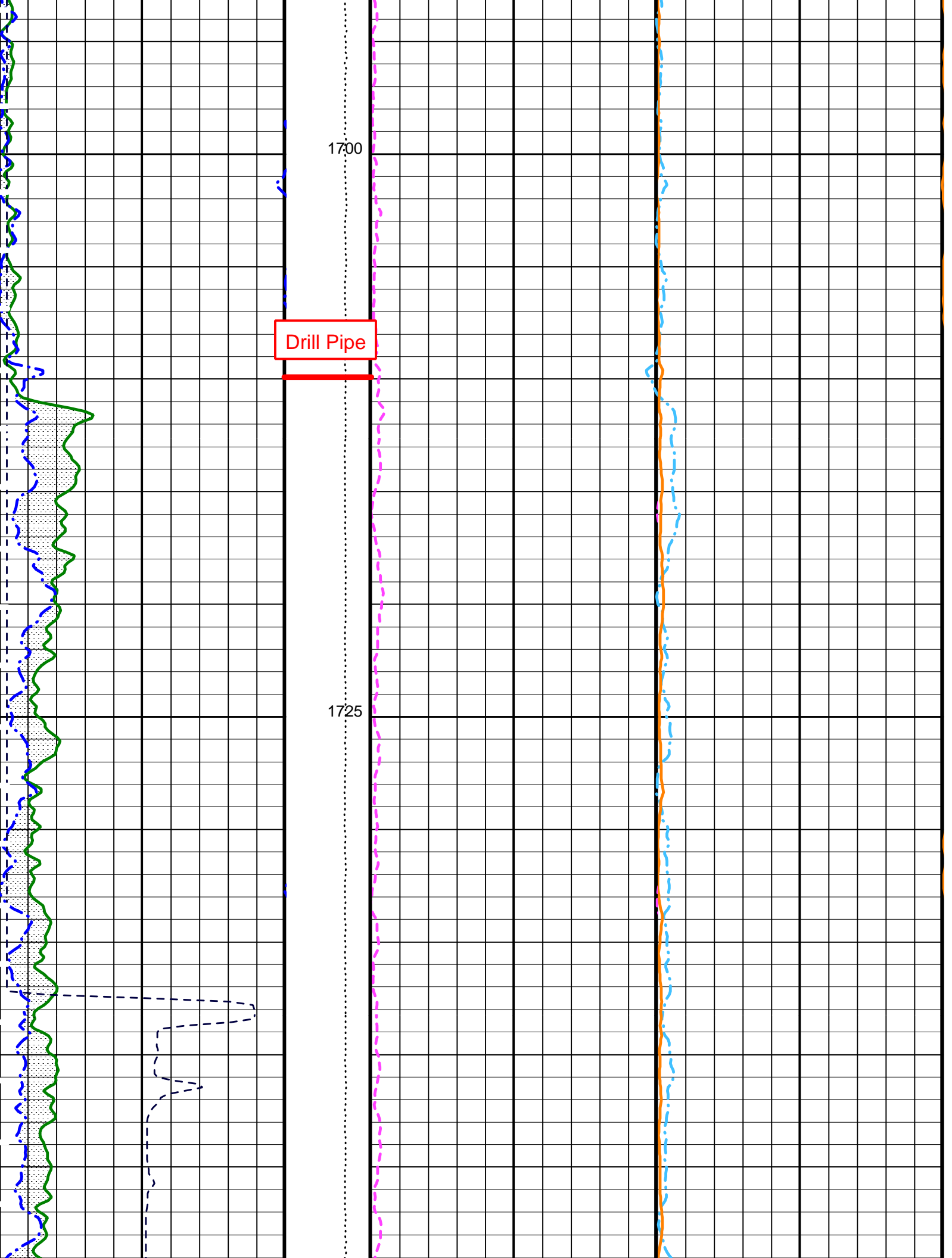
DLIS Name	New Value	Previous Value	Depth & Time
GCSE	BS	LCAL	1750.0 12:20:54

#### PIP SUMMARY

▶ Time Mark Every 60 S



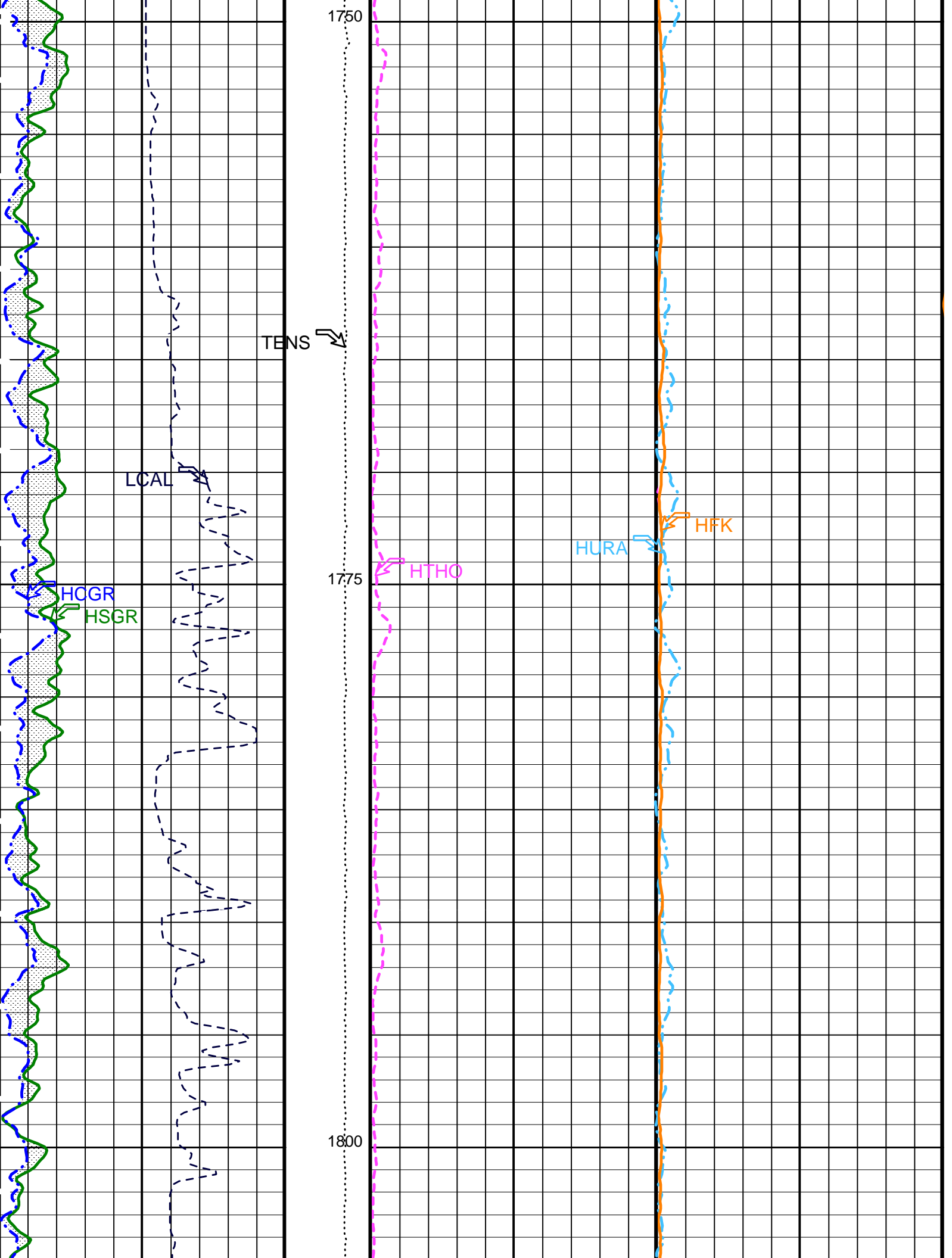
Last Reading

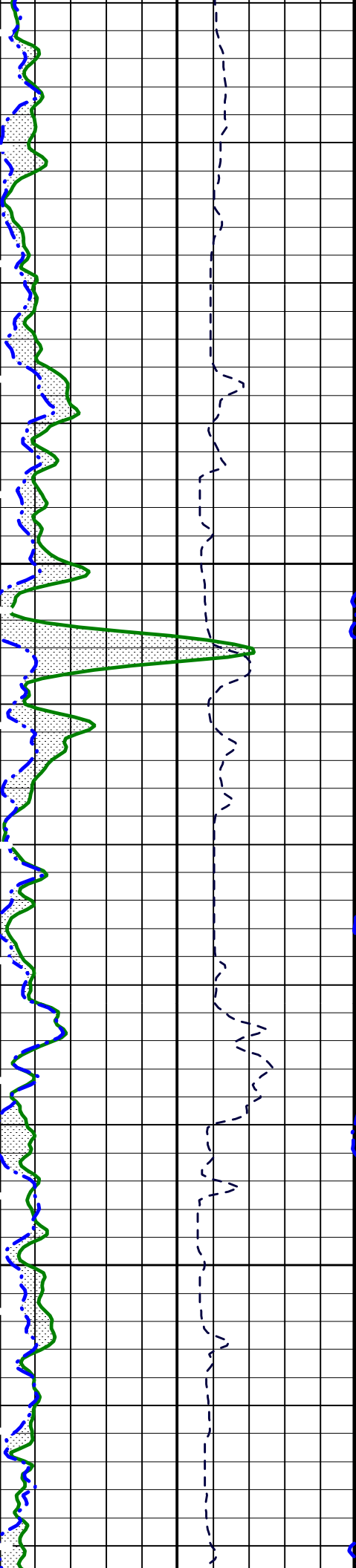


1700

Drill Pipe

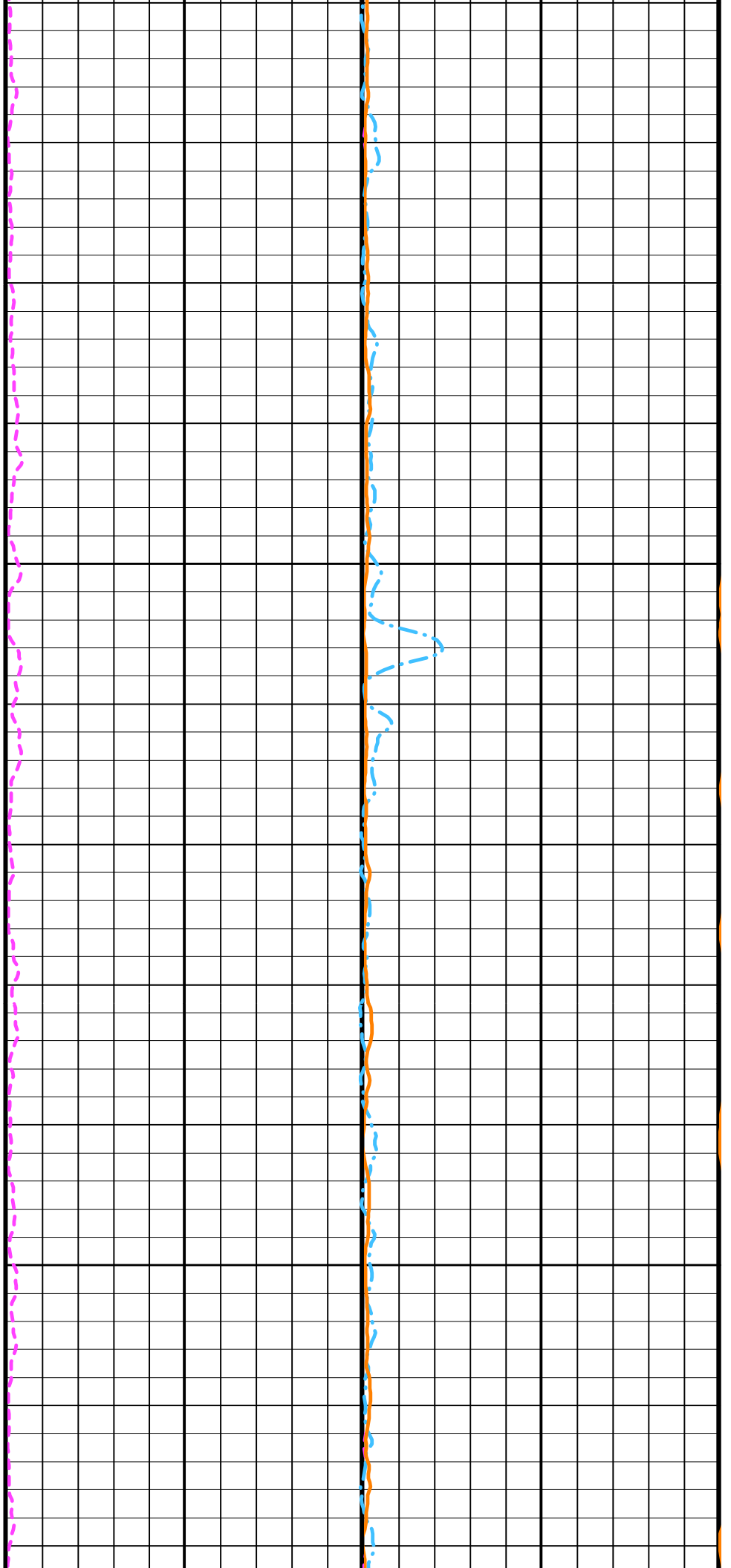
1725

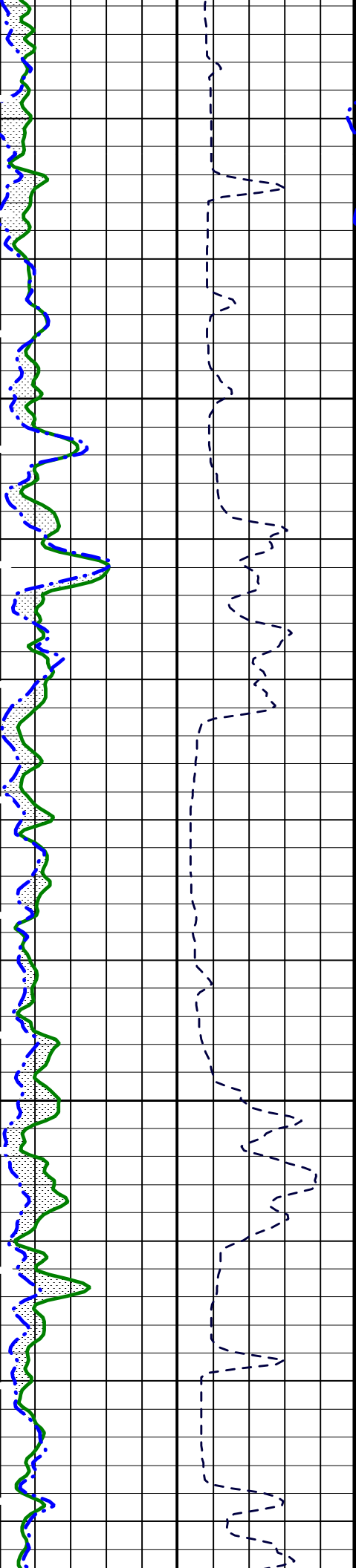




1825

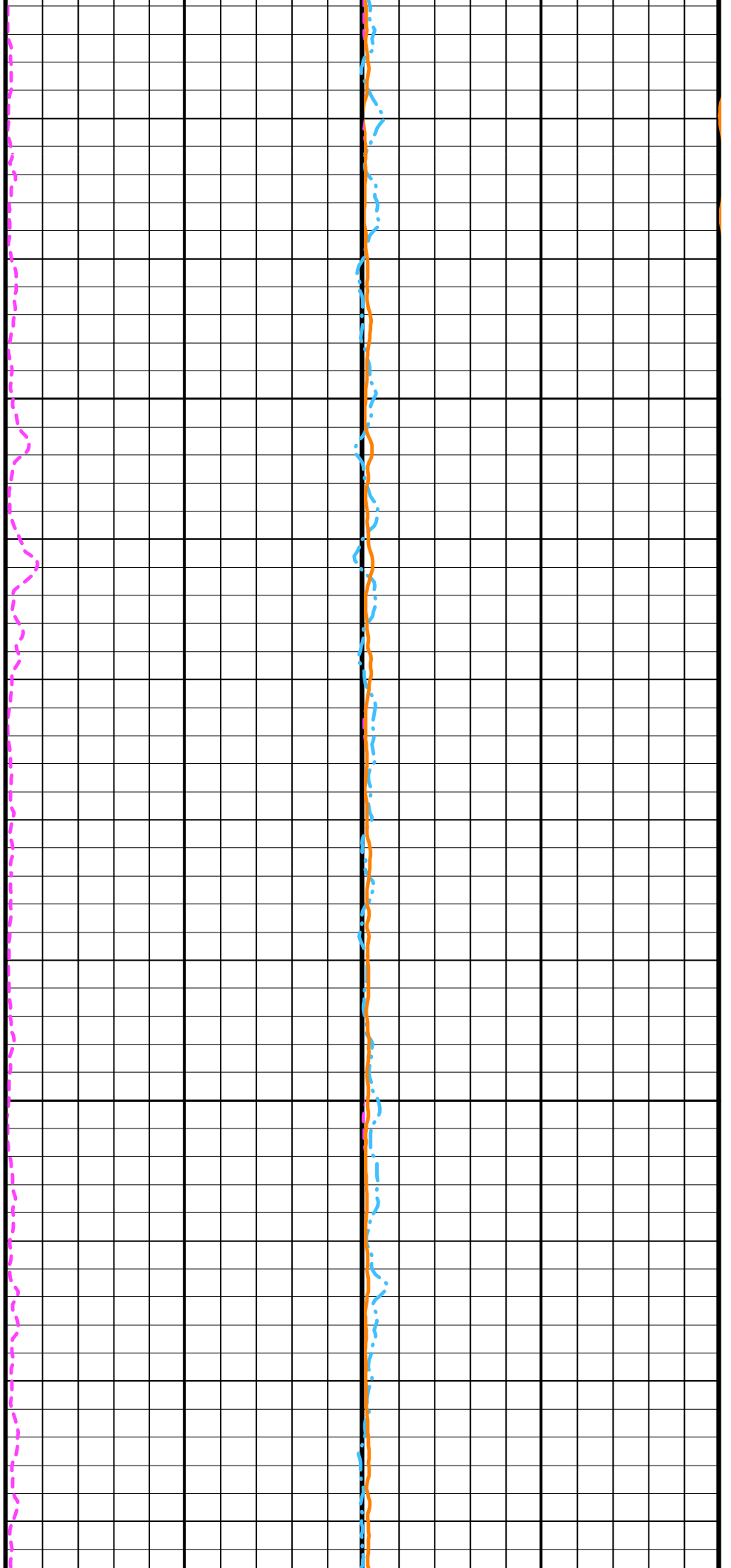
1850



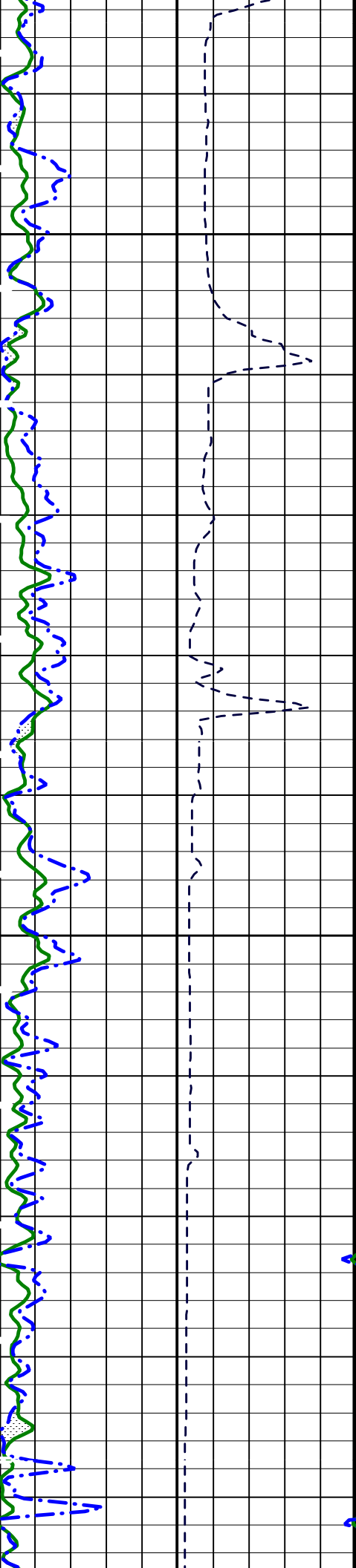


1875

1900

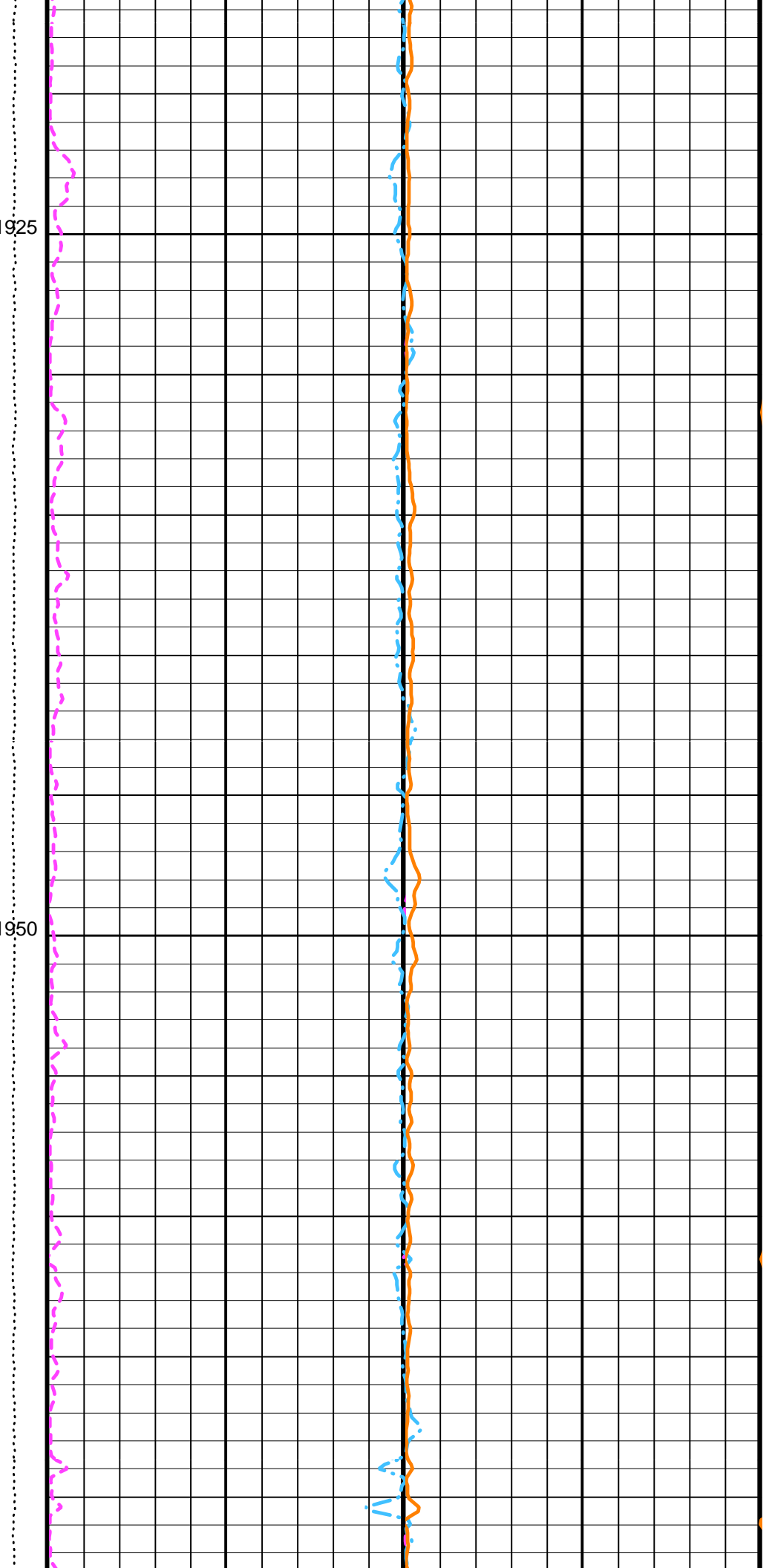


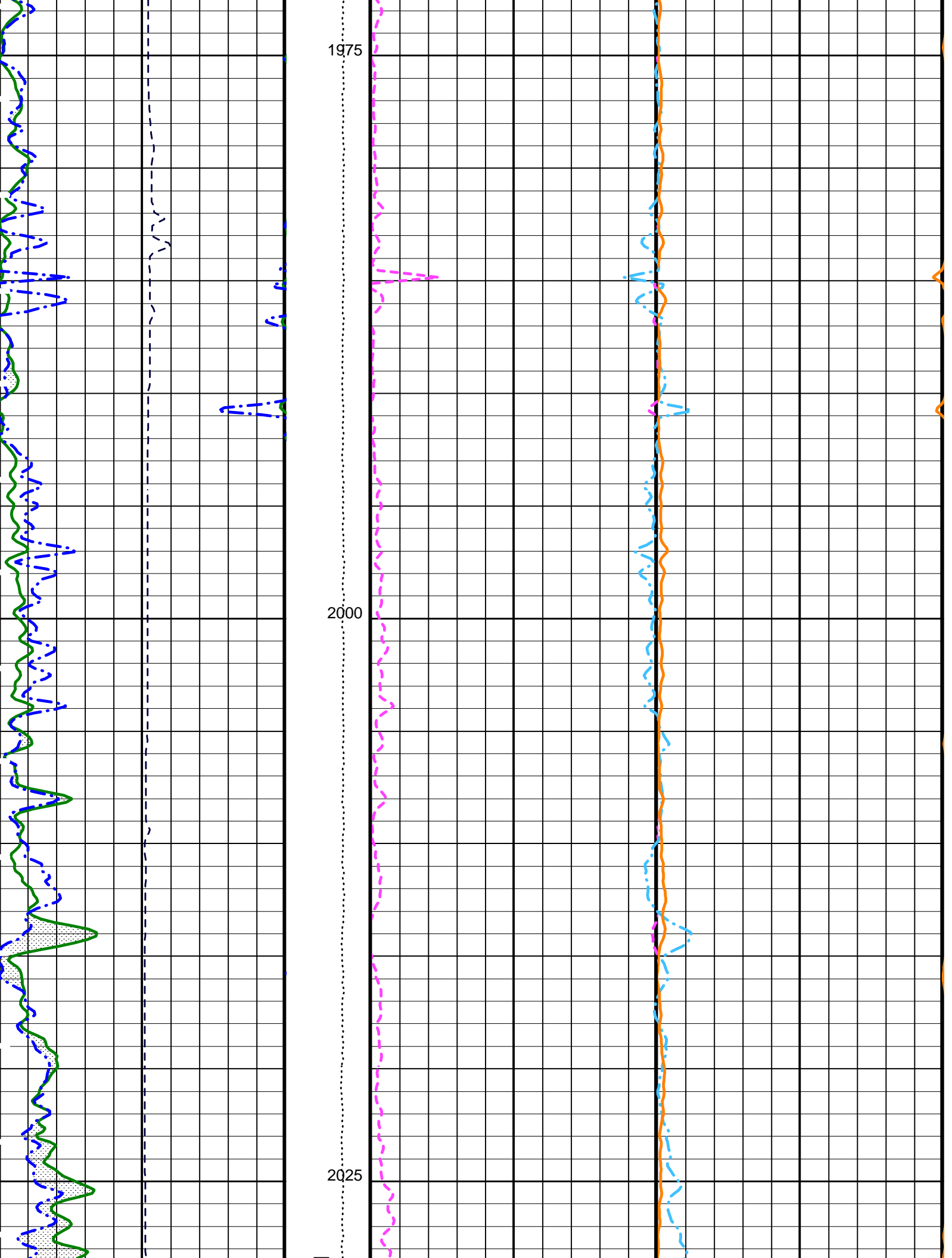


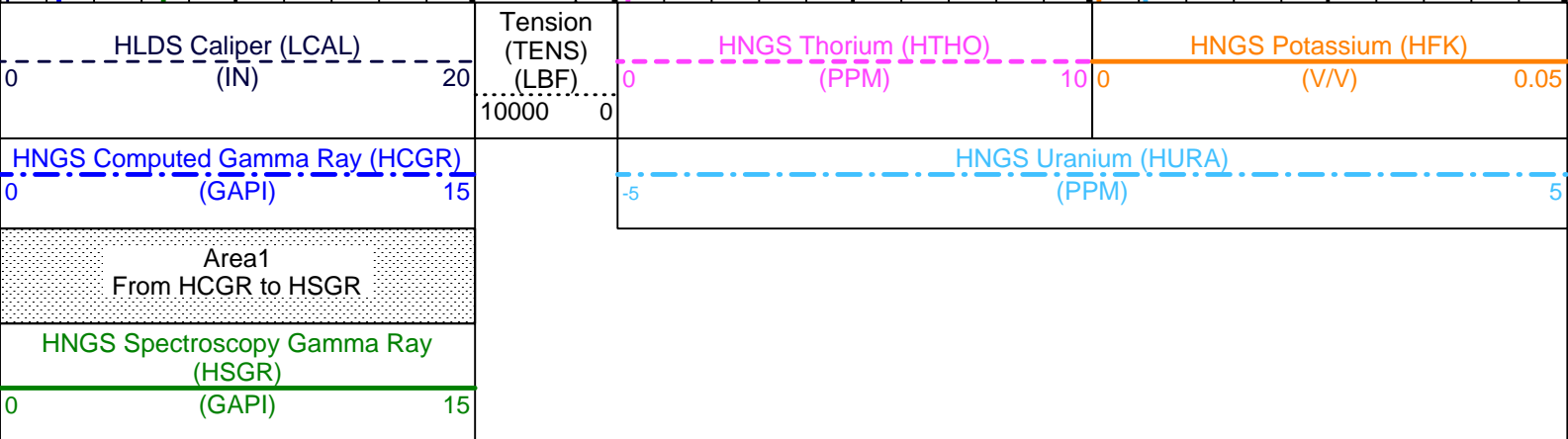
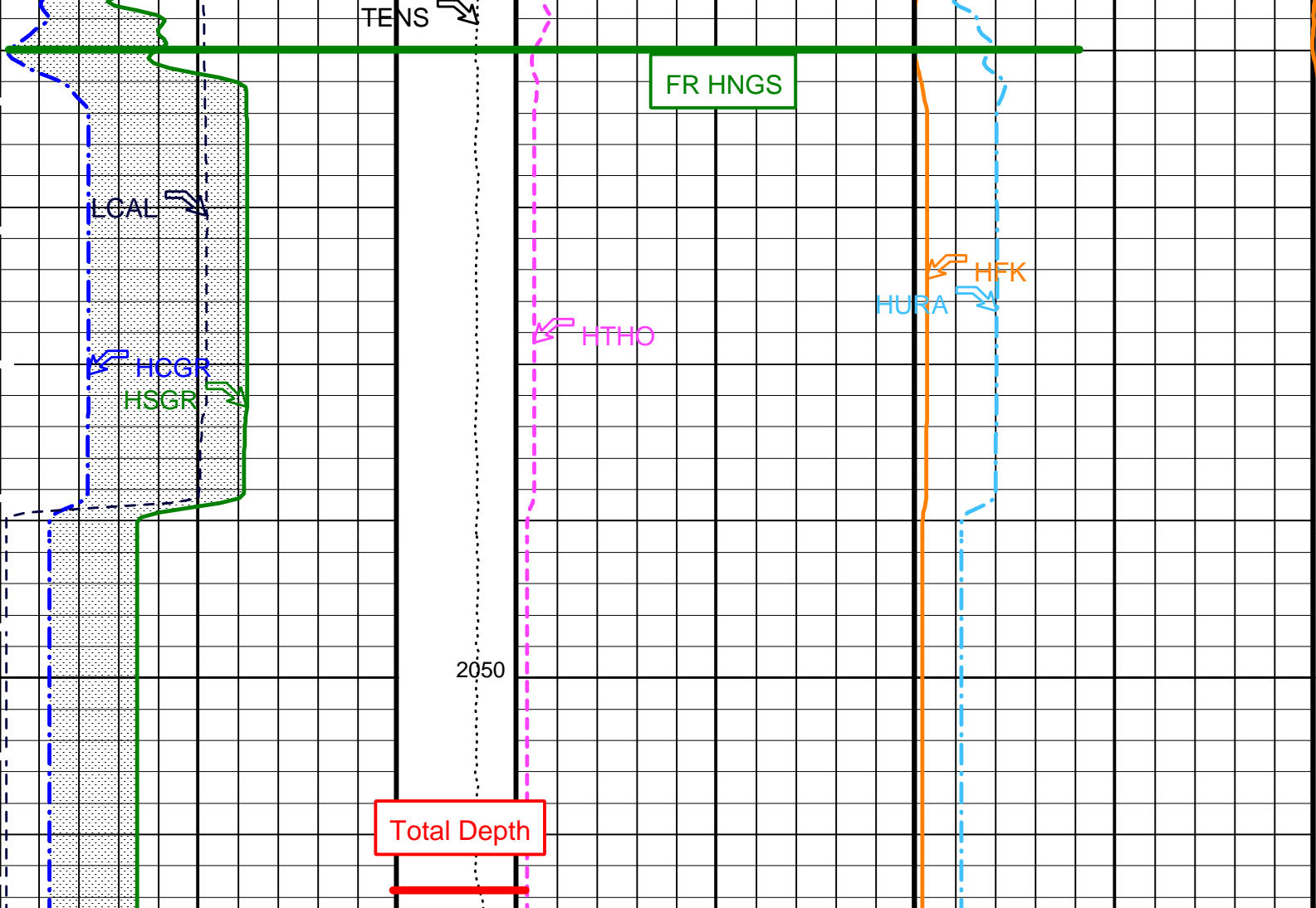


1925

1950







PIP SUMMARY

Time Mark Every 60 S

Parameters

DLIS Name	Description	Value
APS-C:	Accelerator-Porosity Tool	
BHS	Borehole Status	OPEN
GCSE	Generalized Caliper Selection	LCAL
HNGS-BA:	Hostile Natural Gamma Ray Sonde	
BAR1	HNGS Detector 1 Barite Constant	1
BAR2	HNGS Detector 2 Barite Constant	1
BHK	HNGS Borehole Potassium Correction Concentration	0
BHS	Borehole Status	OPEN
CSD1	Inner Casing Outer Diameter	0 IN
CSD2	Outer Casing Outer Diameter	0 IN
CSW1	Inner Casing Weight	0 LB/F
CSW2	Outer Casing Weight	0 LB/F
DBCC	HNGS Barite Constant Correction Flag	NONE
GCSE	Generalized Caliper Selection	LCAL

H1P	HNGS Detector 1 Allow/Disallow In Processing	ALLOW	
H2P	HNGS Detector 2 Allow/Disallow In Processing	ALLOW	
HABK	HNGS Borehole Potassium Running Average	0	
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	
VBA2	HNGS Detector 2 Variable Barite Factor Running Average	0	
	HOLEV: Integrated Hole/Cement Volume		
BHS	Borehole Status	OPEN	
GCSE	Generalized Caliper Selection	LCAL	
	System and Miscellaneous		
BS	Bit Size	9.875	IN
DFD	Drilling Fluid Density	1.07	G/C3

Format: HNGSYields      Vertical Scale: 1:200      Graphics File Created: 02-Jan-2005 11:02

**OP System Version: 12C0-301**  
MCM

DLT-E	12C0-301	GPIT-A/B	12C0-301
DTA-A	12C0-301	HLDS	12C0-301
NPLC-B	12C0-301	APS-C	12C0-301
HNGS-BA	12C0-301	DTC-H	12C0-301
BSP	12C0-301		

**Output DLIS Files**

DEFAULT      DLL\_LDL\_APS\_NGS\_030LUP      FN:22      PRODUCER      02-Jan-2005 11:02

**Company:** Lamont Doherty

**Schlumberger**

**Well:** IODP EXP 304 Site 1309D

**Field:** Atlantis Massif

**Country:** Mid Atlantic Ridge

**Ocean:** Atlantic Ocean

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