

**Company:** Lamont Doherty

**Well:** ODP Leg 206, Site 1256D

**Field:** Fast Spreading Crust

**Country:** Coata Rica **Ocean:** Pacific Ocean

## Natural Gamma Ray Log

**Country:** Coata Rica  
**Field:** Fast Spreading Crust  
**Location:** Rig- Joides Resolution  
**Well:** ODP Leg 206, Site 1256D  
**Company:** Lamont Doherty

<b>LOCATION</b>		Rig- Joides Resolution  Permanent Datum: _____ Log Measured From: <u>DES</u> Drilling Measured From: <u>DES</u>	Elev.: K.B. 11.3 m G.L. -3645.4 m D.F. 11 m  Elev.: 0 m 11.3 m above Perm. Datum
API Serial No. _____	Max. Hole Devi. _____	Longitude 91.9343 W	Latitude 6.7365 N

Logging Date	
Run Number	1
Depth Driller	4397.4 m
Schlumberger Depth	4392.5 m
Bottom Log Interval	4387.5 m
Top Log Interval	3881 m
Casing Driller Size @ Depth	0.000 in @ 3914.47 m
Casing Schlumberger	3912 m
Bit Size	9.875 in
Type Fluid In Hole	SALT WATER
Density	1.066 g/cm3
Fluid Loss	PH
Source Of Sample	
RM @ Measured Temperature	0.322 ohm.m @ 23 degC
RMF @ Measured Temperature	@ @
RMC @ Measured Temperature	@ @
Source RMF	RMC
RM @ MRT	0.362 @ 18 @ 18 @
Maximum Recorded Temperatures	18 degC
Circulation Stopped	12/27/02 1100
Logger On Bottom	12/28/02 See Log
Unit Number	99 Houston
Recorded By	Steve Kittredge
Witnessed By	FLORENCE EINAUDI

Logging Date				
Run Number		Run 1	Run 2	Run
Depth Driller				
Schlumberger Depth				
Bottom Log Interval				
Top Log Interval				
Casing Driller Size @ Depth		@		
Casing Schlumberger				
Bit Size				
Type Fluid In Hole				
Density				
Fluid Loss				
Source Of Sample				
RM @ Measured Temperature		@		
RMF @ Measured Temperature		@		
RMC @ Measured Temperature		@		
Source RMF				
RM @ MRT		@	@	
Maximum Recorded Temperatures				
Circulation Stopped				
Logger On Bottom				
Unit Number				
Recorded By				
Witnessed By				

Logging Date	
Run Number	
Depth Driller	
Schlumberger Depth	
Bottom Log Interval	
Top Log Interval	
Casing Driller Size @ Depth	@
Casing Schlumberger	
Bit Size	
Type Fluid In Hole	
Density	
Fluid Loss	
Source Of Sample	
RM @ Measured Temperature	@
RMF @ Measured Temperature	@
RMC @ Measured Temperature	@
Source RMF	
RM @ MRT	@ @
Maximum Recorded Temperatures	
Circulation Stopped	
Logger On Bottom	
Unit Number	
Recorded By	
Witnessed By	

**DISCLAIMER**




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

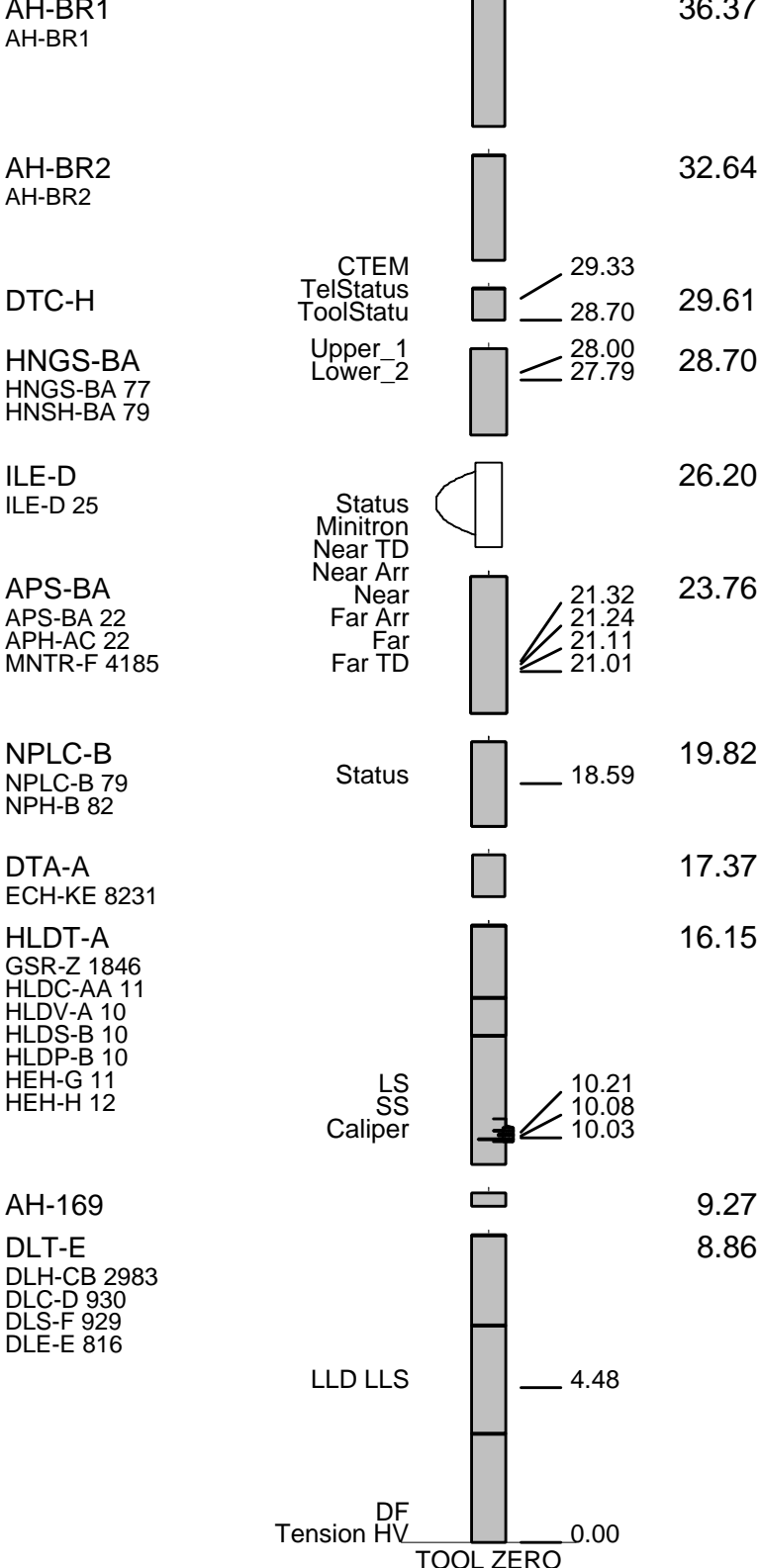
OTHER SERVICES1 OS1: MESTB/SGTN/DSI OS2: UBI OS3: WST OS4: OS5:	OTHER SERVICES2 OS1: OS2: OS3: OS4: OS5:
--------------------------------------------------------------------------------	---------------------------------------------------------

REMARKS: RUN NUMBER 1 Hole cored with RCB All depths in Meters Below Rig Floor (MBRF). SEA WATER USED TO FILL THE HOLE. WHC was run. Sea Floor- 3645.4 MBRF Total Depth Driller- 4397.4 MBRF. Total Depth Logger- 4392.5 MBRF. Casing Driller-3914.47 MBRF.	REMARKS: RUN NUMBER 2
CASING LOGGER- 3912 MBRF. SEA FLOOR DRILLER- 3645.4 MBRF.	

RUN 1			RUN 2		
SERVICE ORDER #:			SERVICE ORDER #:		
PROGRAM VERSION:	10C0-306		PROGRAM VERSION:		
FLUID LEVEL:			FLUID LEVEL:		
LOGGED INTERVAL	START	STOP	LOGGED INTERVAL	START	STOP

**EQUIPMENT DESCRIPTION**

RUN 1		RUN 2	
<b>SURFACE EQUIPMENT</b> LCM-AA 909 SFT-281 24 SFT-178 4722 GSR-U 135 WITM (DTS)-A			
<b>DOWNHOLE EQUIPMENT</b>			
BSP BRT-S			61.64
SP SPARC		40.59	
LEH-QT			37.26



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

## Output DLIS Files

DEFAULT	DLL_LDL_APS_NGS_027LUP	FN:21	PRODUCER	28-Dec-2002 15:18	4153.7 M	4091.6 M
DLL_CUST	DLL_LDL_APS_NGS_027LUP	FN:22	PRODUCER	28-Dec-2002 15:18	4153.7 M	4091.6 M

## OP System Version: 10C0-306

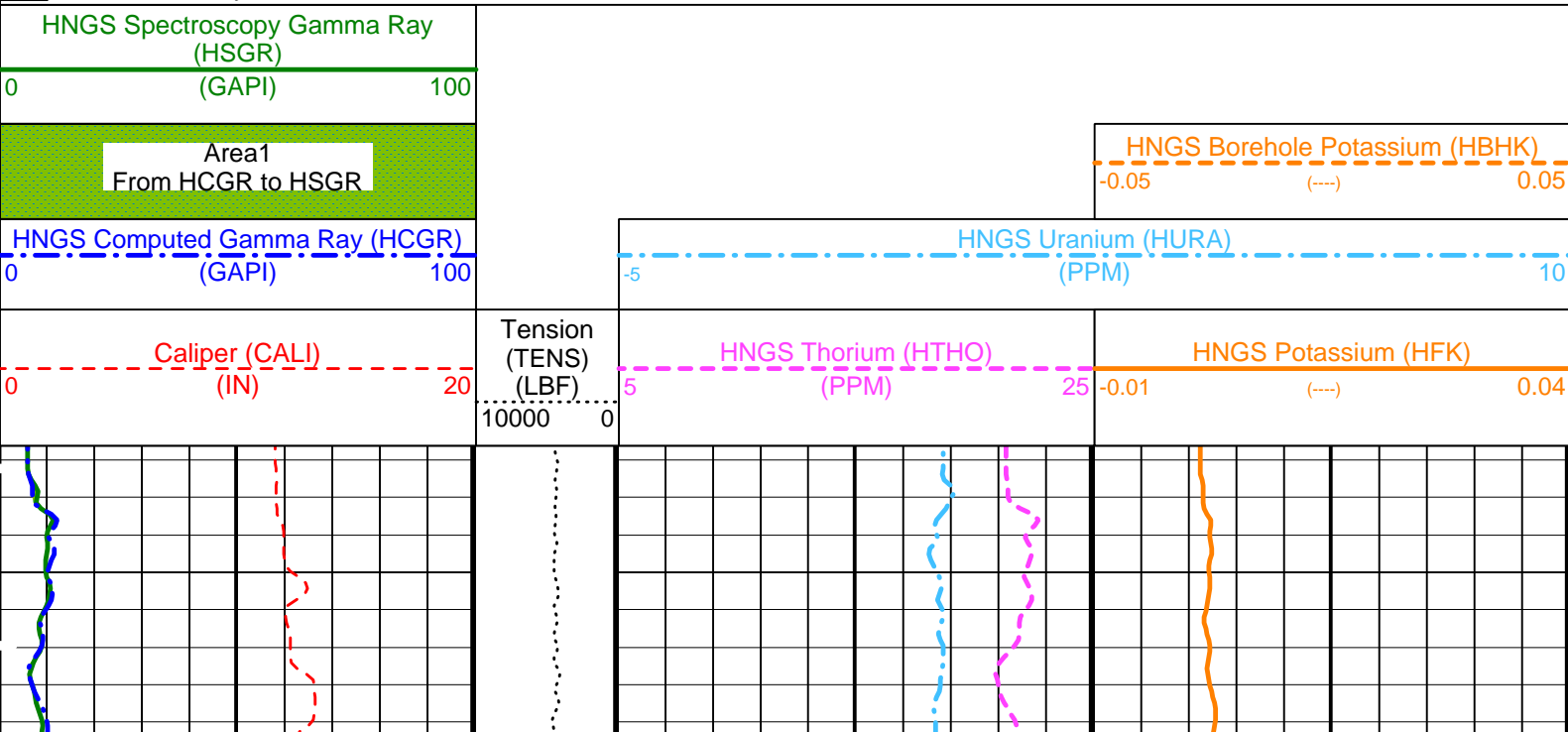
MCM

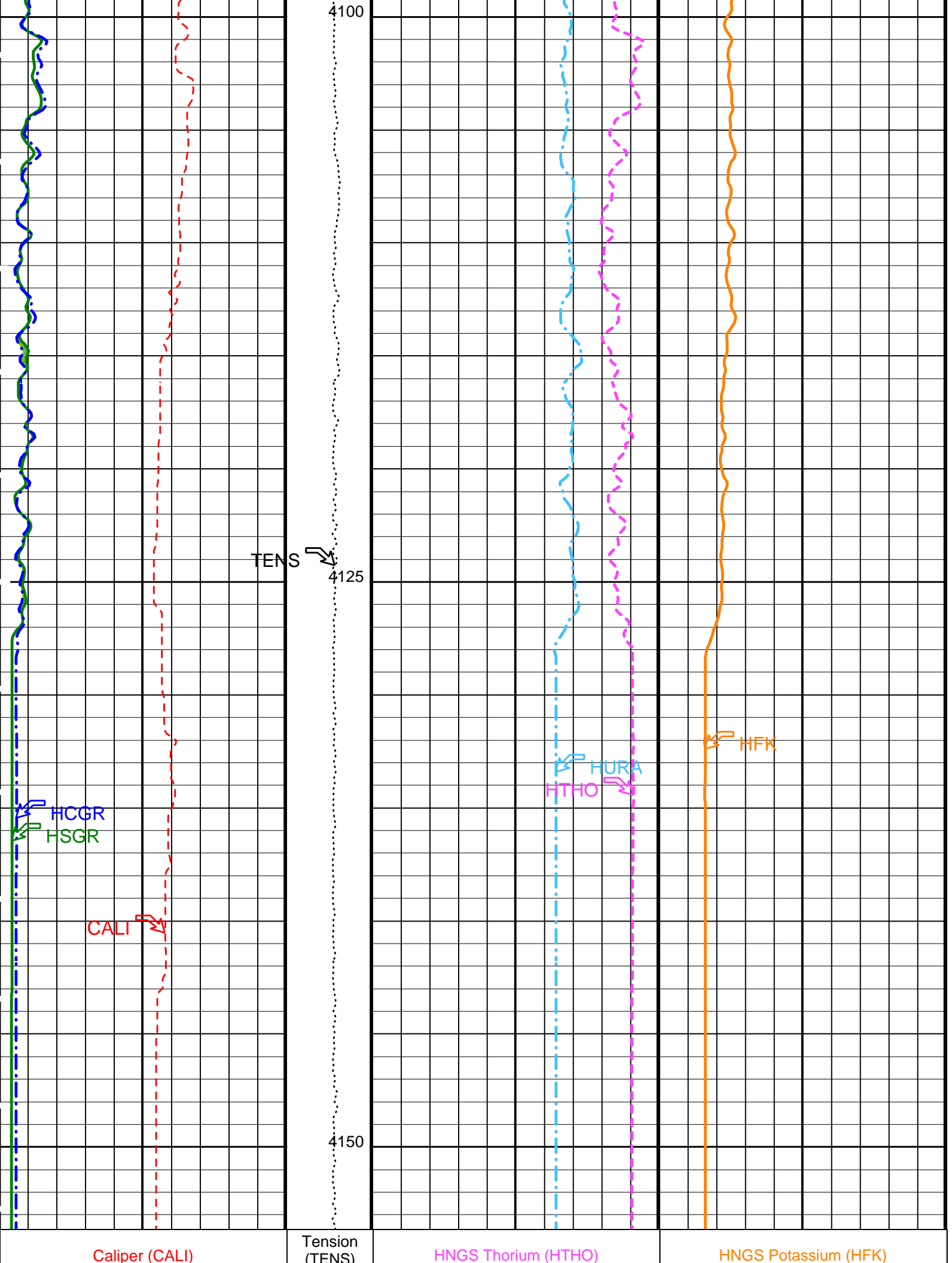
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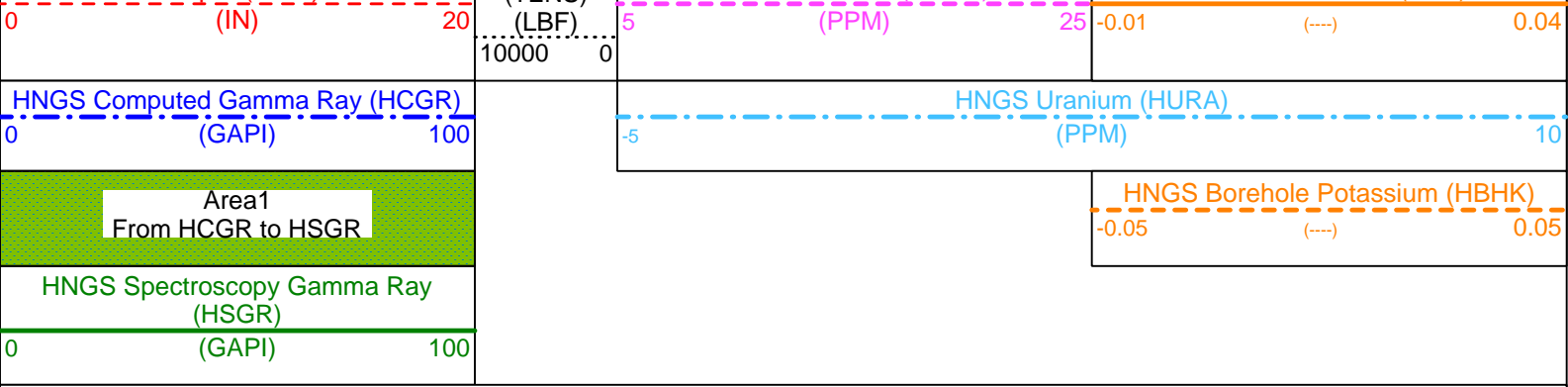
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DTA-A	10C0-306	NPLC-B	OP10-KP1
APS-BA	OP10-KP1	HNGS-BA	OP10-KP1
DTC-H	10C0-306	BSP	10C0-306

### PIP SUMMARY

▶ Time Mark Every 60 S







PIP SUMMARY

Time Mark Every 60 S

Parameters

DLIS Name	Description	Value
BHS	APS-BA: Accelerator-Porosity Tool	
GCSE	Borehole Status	OPEN
GCSE	Generalized Caliper Selection	CALI
BAR1	HNGS-BA: Hostile Natural Gamma Ray Sonde	
BAR2	HNGS Detector 1 Barite Constant	1
BHK	HNGS Detector 2 Barite Constant	1
BHS	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	CALI
H1P	HNGS Detector 1 Allow/Disallow In Processing	ALLOW
H2P	HNGS Detector 2 Allow/Disallow In Processing	ALLOW
HABK	HNGS Borehole Potassium Running Average	-0.00235704
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	1.00989
VBA2	HNGS Detector 2 Variable Barite Factor Running Average	1.13112
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: 28-Dec-2002 15:18

OP System Version: 10C0-306

MCM

DLT-E	10C0-306	HLDT-A	10C0-306
DTA-A	10C0-306	NPLC-B	OP10-KP1
APS-BA	OP10-KP1	HNGS-BA	OP10-KP1
DTC-H	10C0-306	BSP	10C0-306

Output DLIS Files

DEFAULT	DLL_LDL_APS_NGS_027LUP	FN:21	PRODUCER	28-Dec-2002 15:18
DLL_CUST	DLL_LDL_APS_NGS_027LUP	FN:22	PRODUCER	28-Dec-2002 15:18

Output DLIS Files

DEFAULT	DLL_LDL_APS_NGS_026LUP	FN:19	PRODUCER	28-Dec-2002 13:14	4393.7 M	3881.7 M
DLL_CUST	DLL_LDL_APS_NGS_026LUP	FN:20	PRODUCER	28-Dec-2002 13:15	4393.7 M	3881.6 M

OP System Version: 10C0-306

MCM



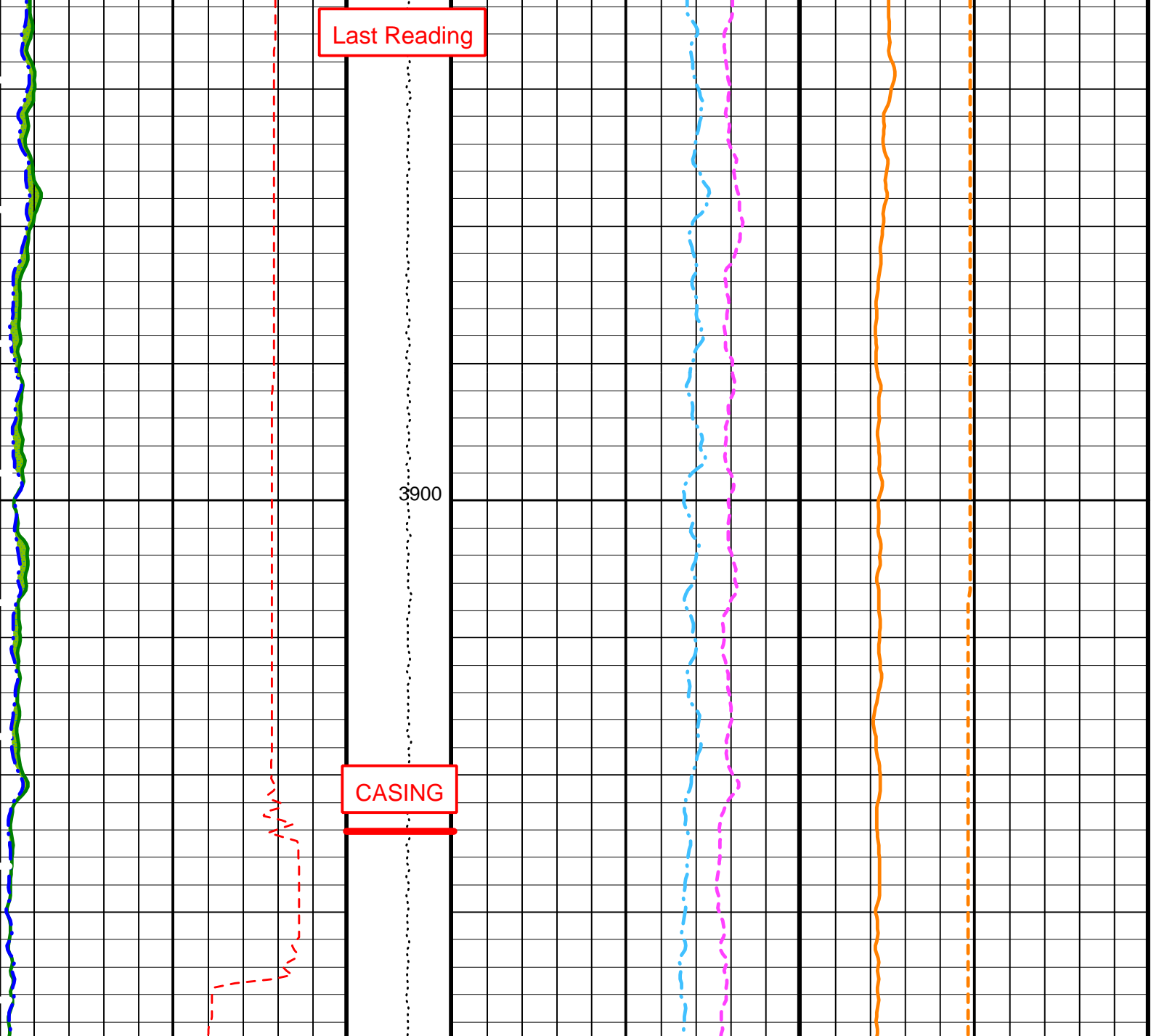
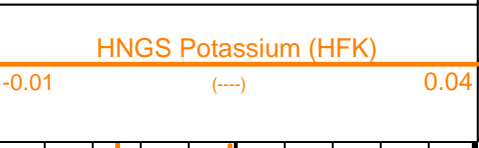
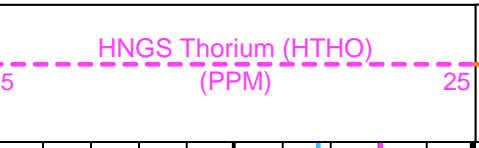
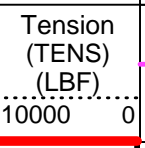
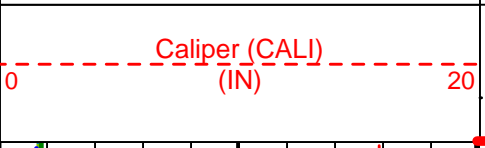
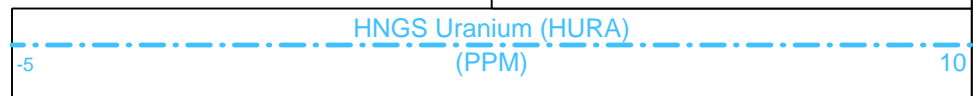
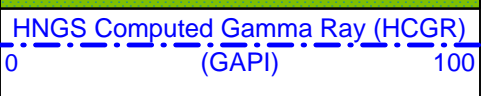
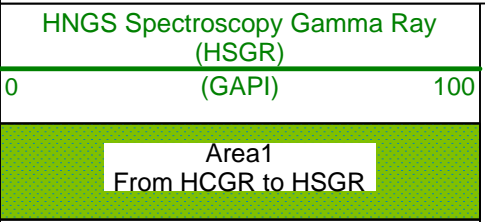
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DTA-A 10C0-306  
APS-BA OP10-KP1  
DTC-H 10C0-306

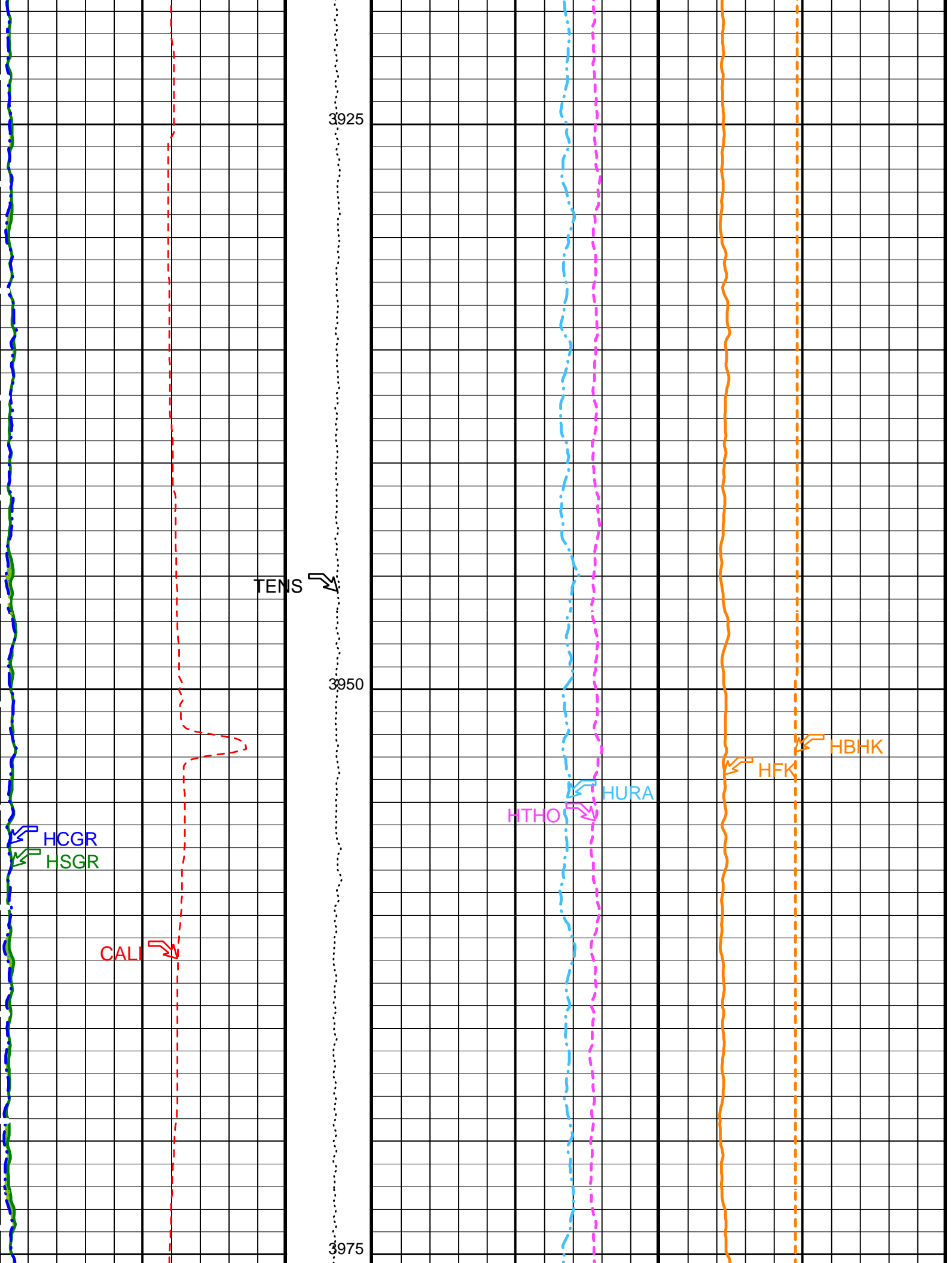
HLDT-A  
NPLC-B  
HNGS-BA  
BSP

10C0-306  
OP10-KP1  
OP10-KP1  
10C0-306

PIP SUMMARY

Time Mark Every 60 S





3925

TENS

3950

HCGR

HSGR

CALI

HTHO

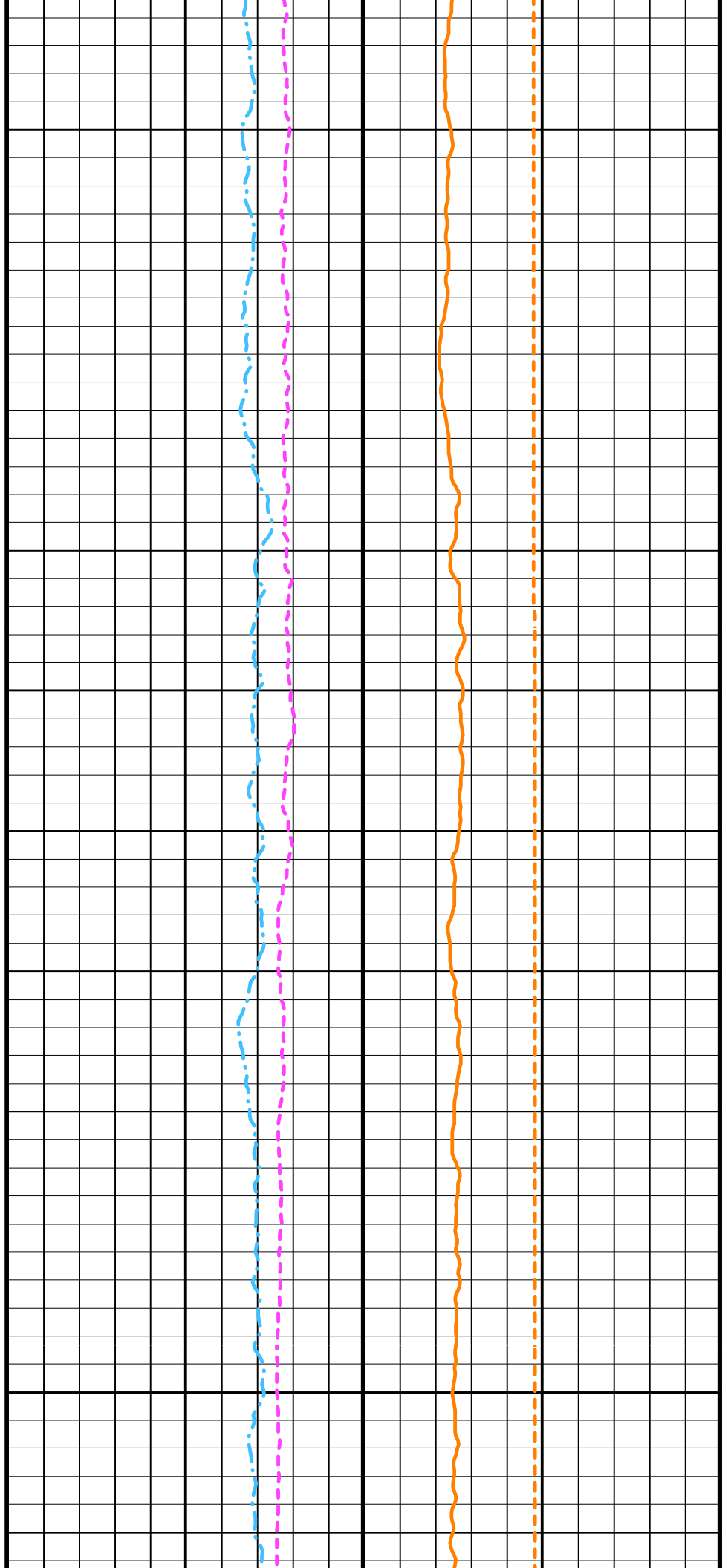
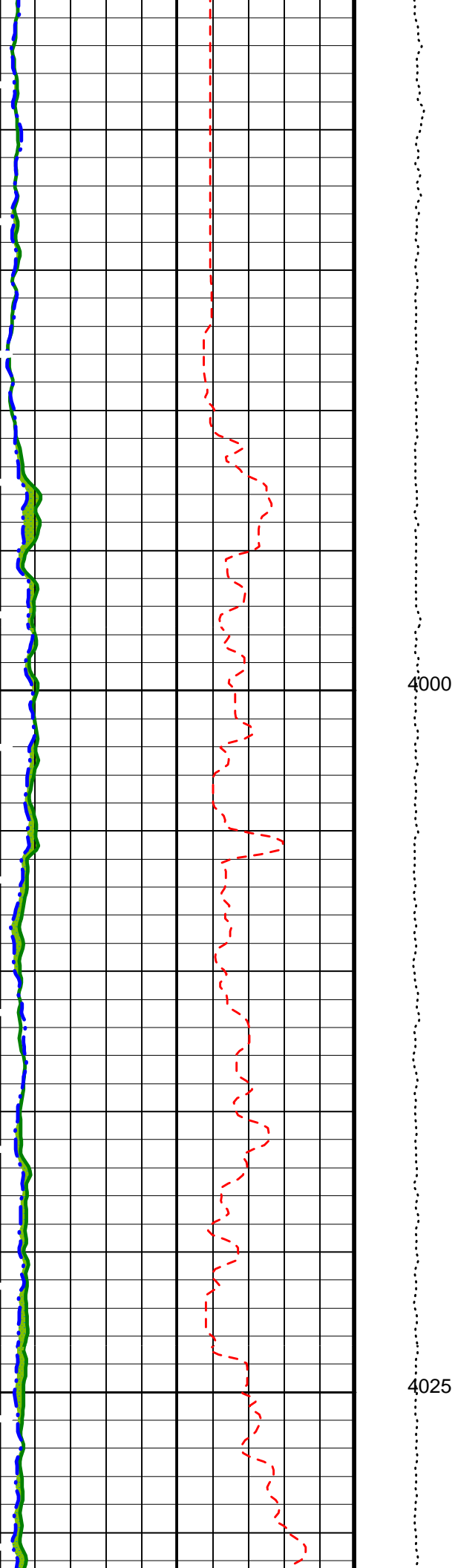
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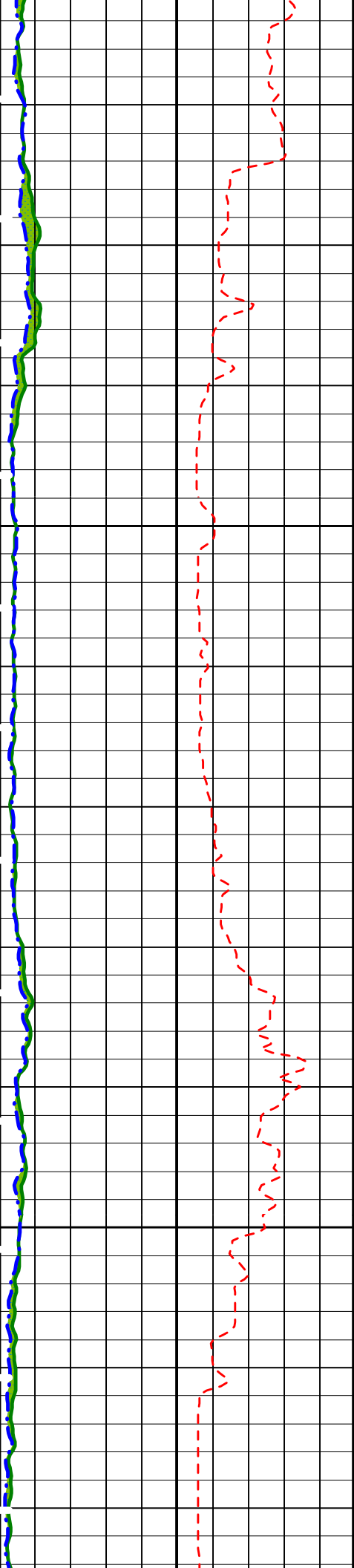
HFK

HBHK

3975

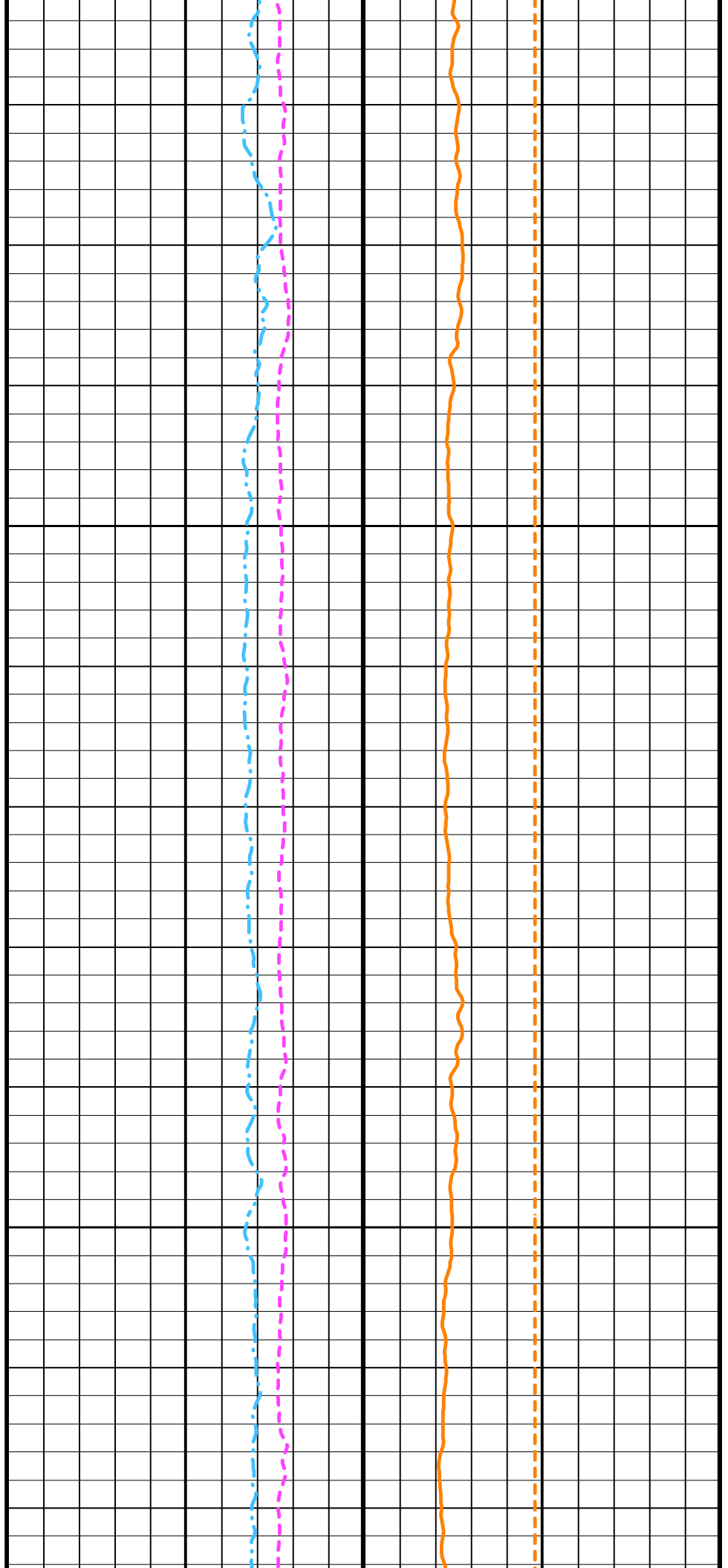


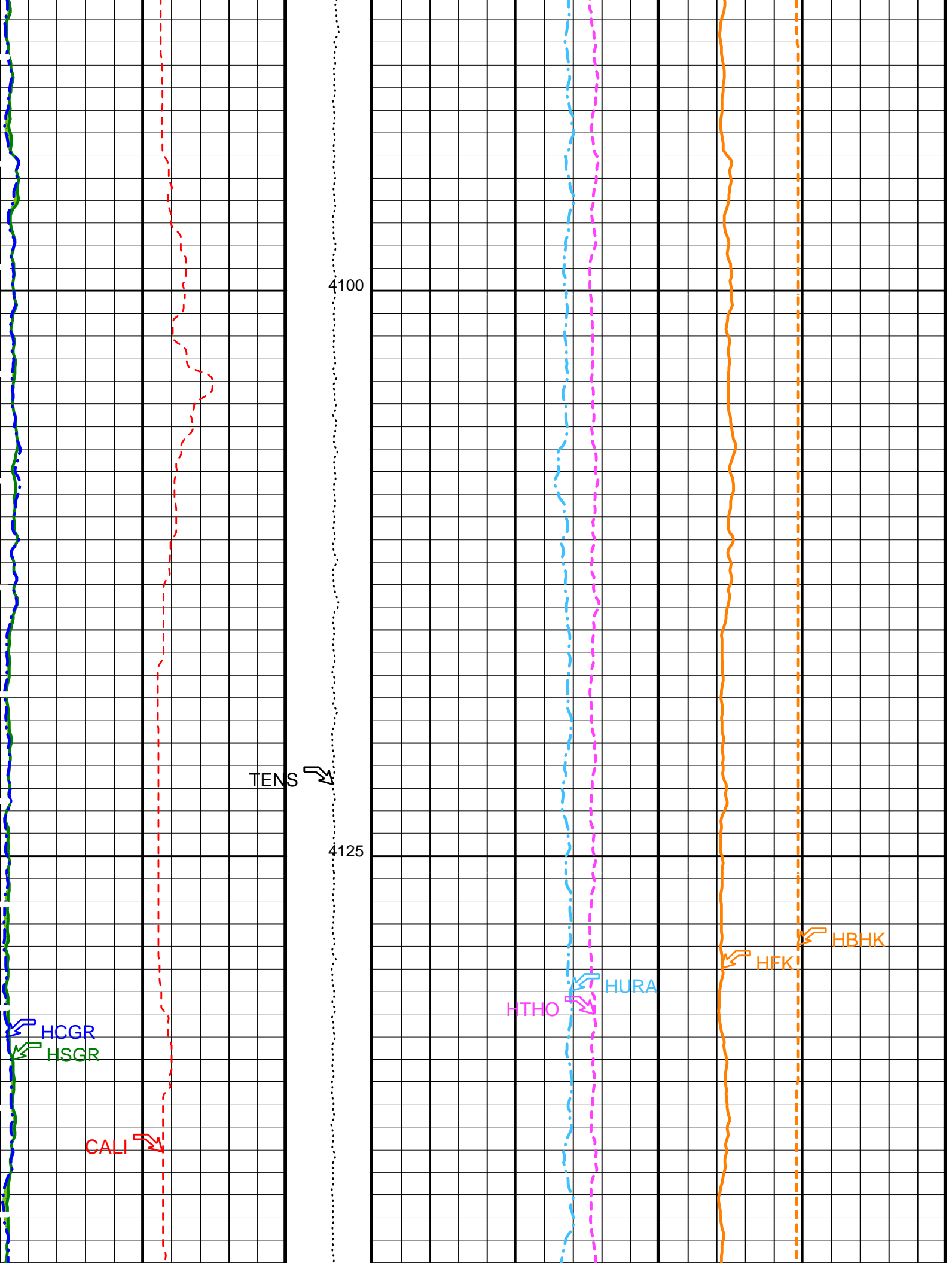


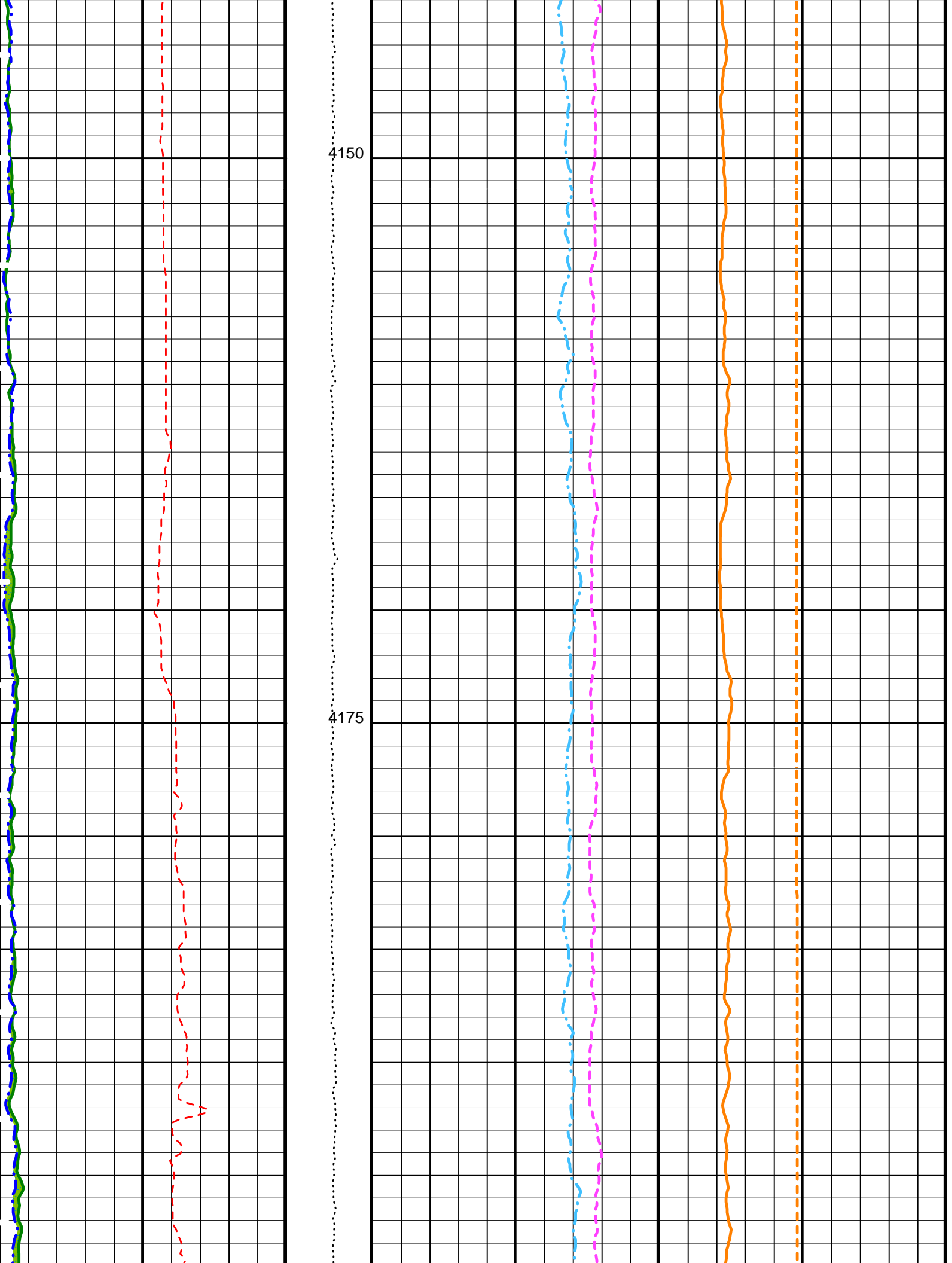


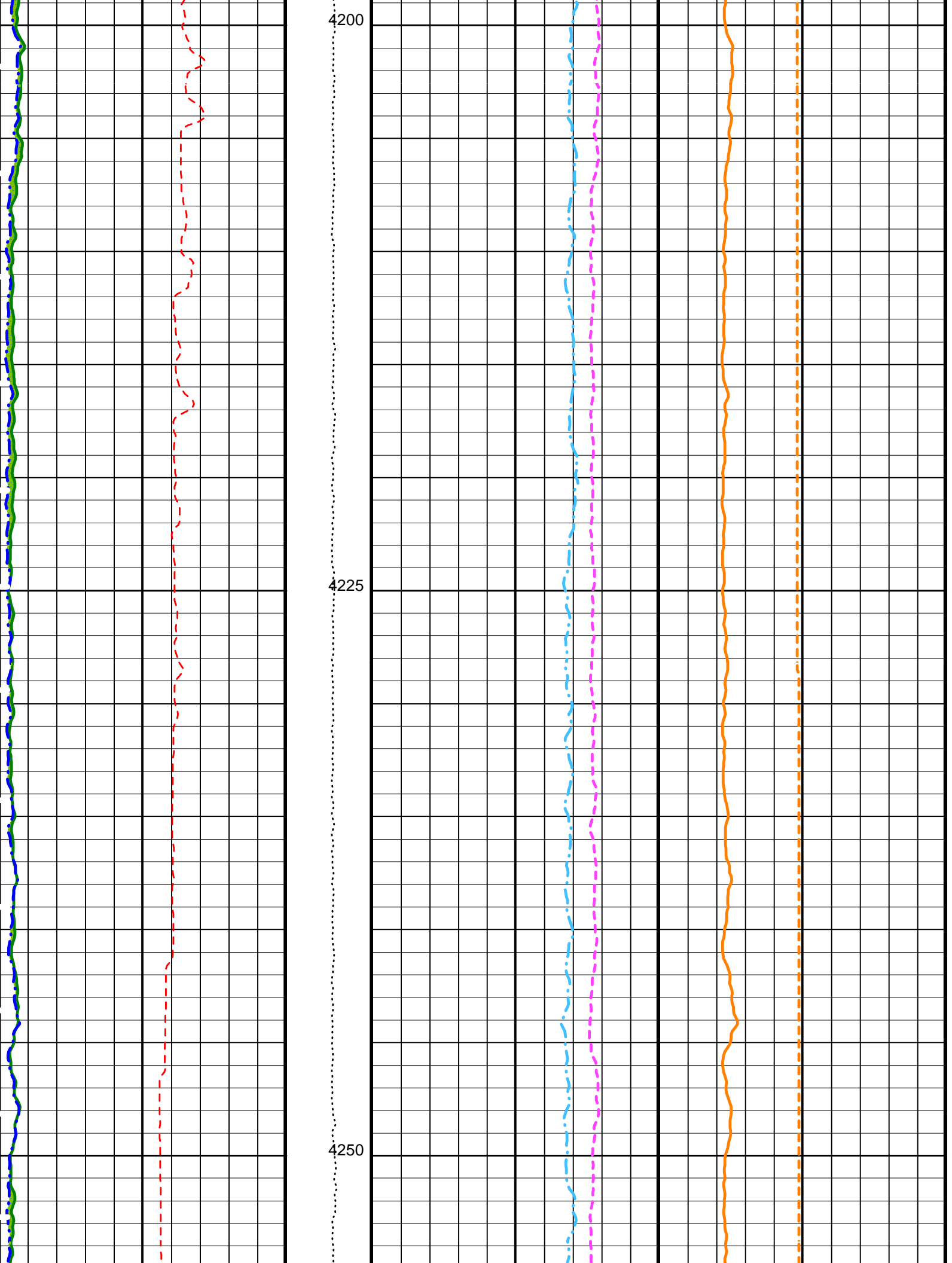
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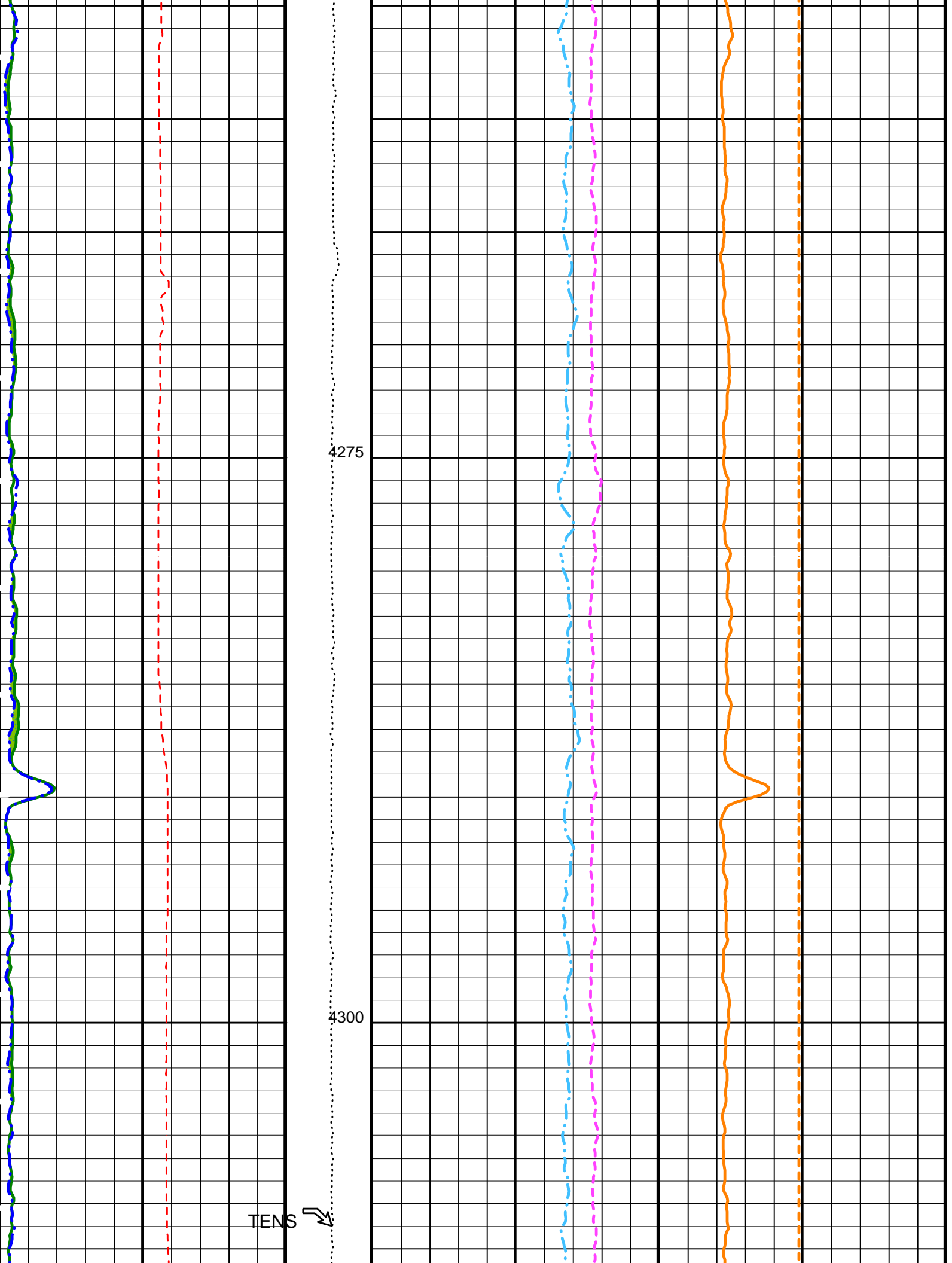
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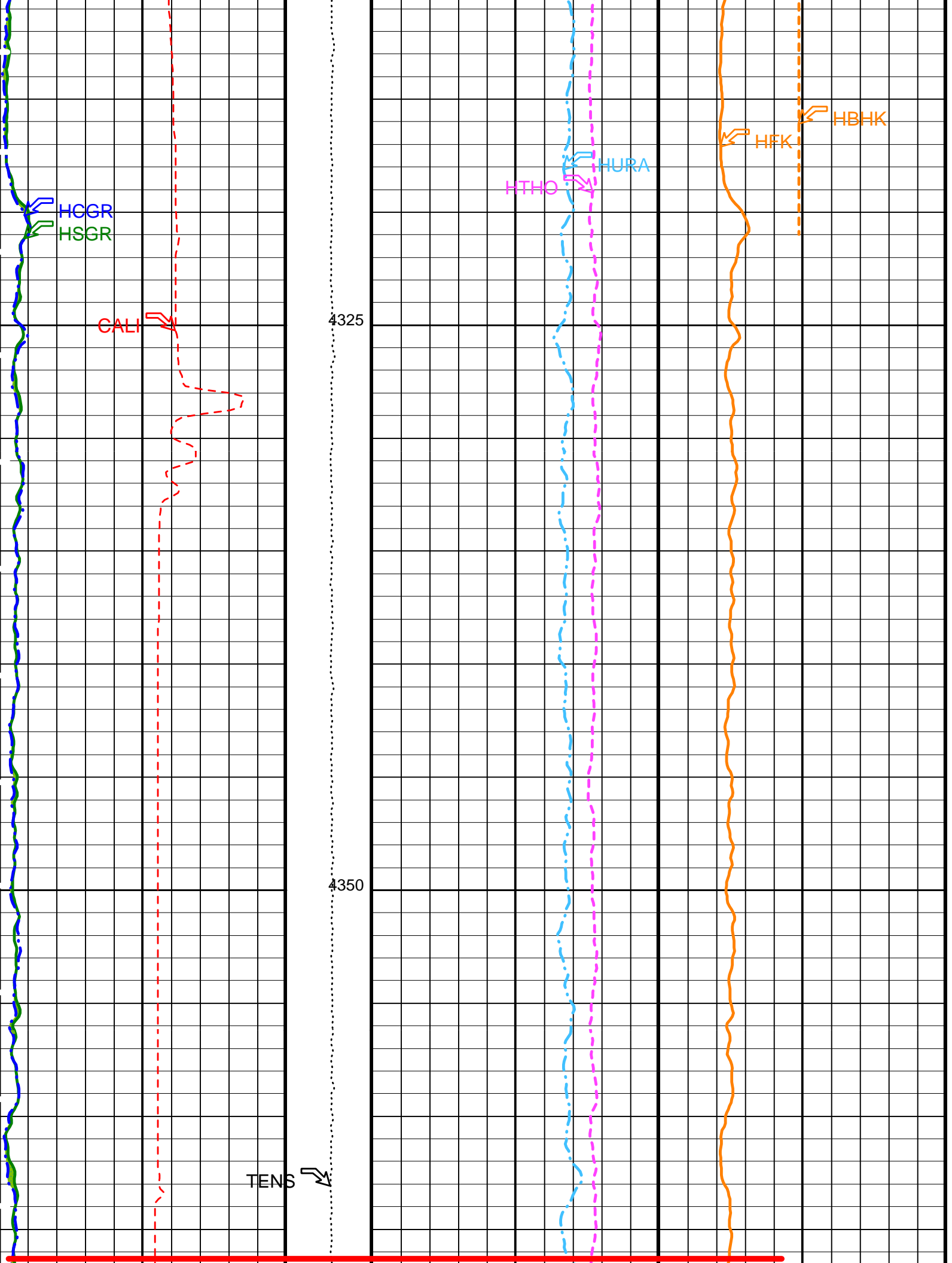


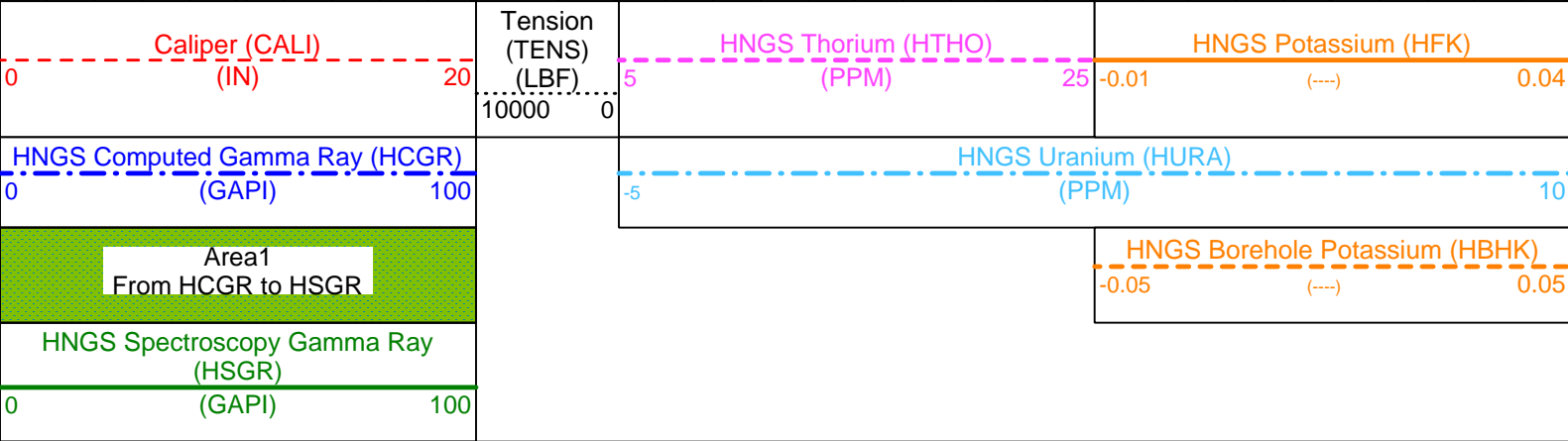
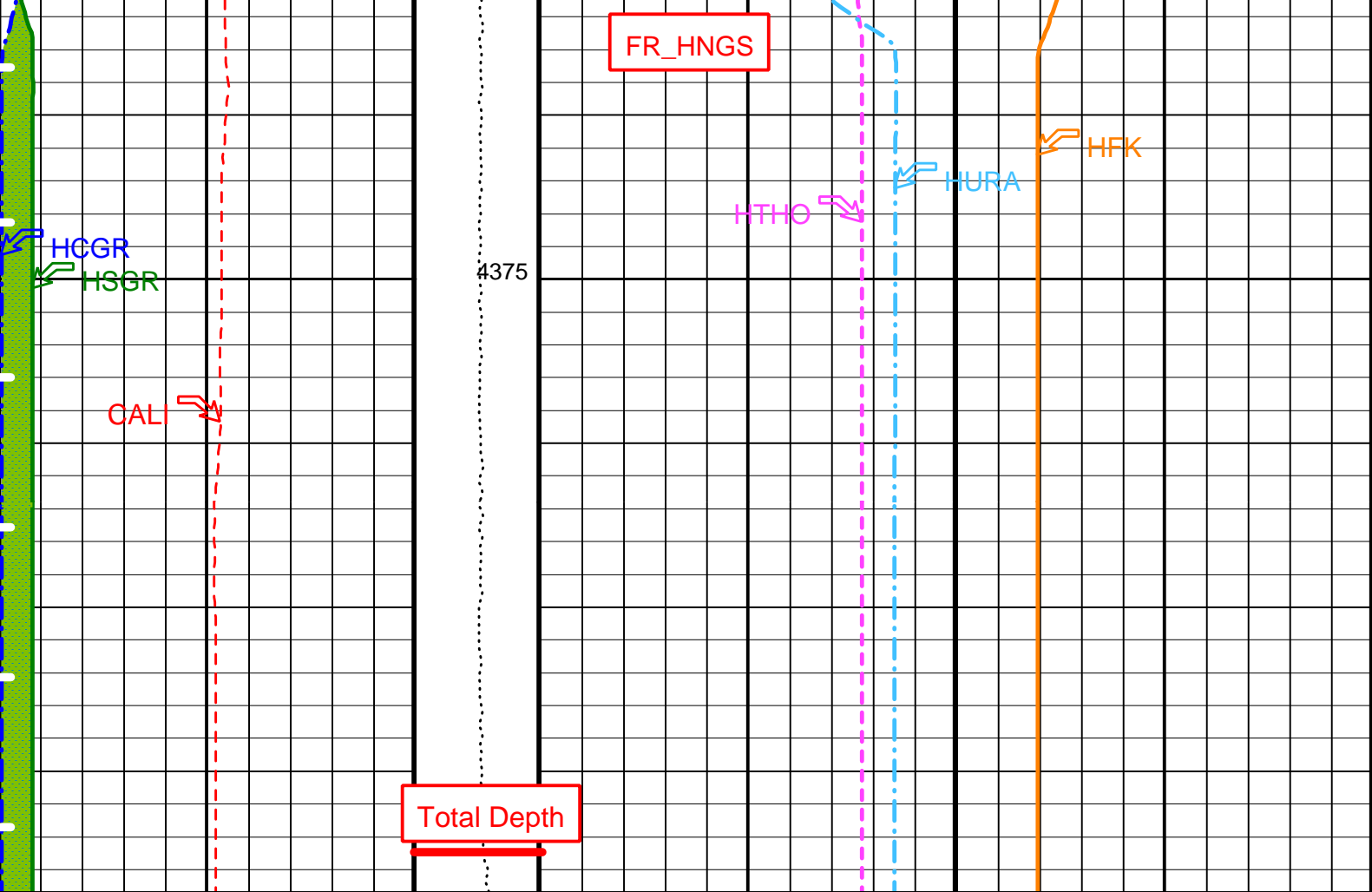












PIP SUMMARY

Time Mark Every 60 S

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BHS	Borehole Status	OPEN
GCSE	Generalized Caliper Selection	CALI
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	CALI
H1P	HNGS Detector 1 Allow/Disallow In Processing	ALLOW
H2P	HNGS Detector 2 Allow/Disallow In Processing	ALLOW
HABK	HNGS Borehole Potassium Running Average	-0.0089739



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	0.833538	
VBA2	HNGS Detector 2 Variable Barite Factor Running Average	0.846703	
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: 28-Dec-2002 13:15

## OP System Version: 10C0-306

MCM

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Company: Lamont Doherty

**Schlumberger**

Well: ODP Leg 206, Site 1256D

Field: Fast Spreading Crust

Country: Coata Rica

Ocean: Pacific Ocean

Natural Gamma Ray Log