

COMPANY: Lamont Doherty

WELL: ODP Leg 190, Site 1173A

FIELD: Nankai Trough

Country: Japan Ocean: Pacific



APS/Density Porosity

Country: Japan  
Field: Nankai Trough  
Location: Rig: Joides Resolution  
Well: ODP Leg 190, Site 1173A  
Company: Lamont Doherty

LOCATION		Elev.:	
Rig: Joides Resolution		K.B.	11.3 m
Nankai Trough		G.L.	-4801.9 m
		D.F.	11 m
Permanent Datum:	MSL	Elev.:	
Log Measured From:	DES		above Perm. Datum
Drilling Measured From:	DES		
API Serial No.	SECTION	TOWNSHIP	RANGE

Logging Date	Run 1	Run 2	Run
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			
PH			
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	Steve Kittredge		
Witnessed By	Harold Tobin		

Logging Date	June-5-2000
Run Number	1
Depth Driller	5536.2 m
Schlumberger Depth	5239.5 m
Bottom Log Interval	5237 m
Top Log Interval	4790.7 m
Casing Driller Size @ Depth	0.000 in @ 4881 m
Casing Schlumberger	4877 m
Bit Size	9.875 in
Type Fluid In Hole	Sepiolite
Density	1.03 g/cm3
Fluid Loss	PH
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	Steve Kittredge
Witnessed By	Harold Tobin




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OTHER SERVICES1 OS1: MESTB/DSI/NGTC OS2: OS3: OS4: OS5:	OTHER SERVICES2 OS1: OS2: OS3: OS4: OS5:
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REMARKS: RUN NUMBER 1 Hole Cored with APC/XCB Toolstring- DITE/HLDS/APS/HNGS. Log Measured in Meters Below Rig Floor (MBRF). Total Depth Logger- 5239.5 MBRF. Log is split in two sections due to ledge at 5140 MBRF. Bottom section does not overlap upper section. Tool set down at 5240 on bottom section. WHC used on all runs. Drill pipe set at 4881 MBRF for upper section Drill pipe set at 5126 MBRF for lower section. Had problems getting in and out of pipe in lower section. Did not log below 5239.5 MBRF with this tool.	REMARKS: RUN NUMBER 2
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RUN 1			RUN 2		
SERVICE ORDER #:			SERVICE ORDER #:		
PROGRAM VERSION:		9C1-303	PROGRAM VERSION:		
FLUID LEVEL:			FLUID LEVEL:		
LOGGED INTERVAL	START	STOP	LOGGED INTERVAL	START	STOP

**EQUIPMENT DESCRIPTION**

RUN 1		RUN 2	
<b>SURFACE EQUIPMENT</b>			
SFT-281 24 SFT-178 4722 GSR-U 135 WITM (DTS)-A			
<b>DOWNHOLE EQUIPMENT</b>			
LEH-QT			28.69
LEH-QT			
DTC-H	CTEM		27.52
ECH-KC 9349	TelStatus		27.80
	ToolStatu		26.89
HNGS-BA	Upper_1		26.19
HNGS BA 27	Lower_2		25.98
			26.89

HNSG-BA 27  
HNSH-BA 27

Lower\_2

23.95

ILE-D  
ILE-D

24.39

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

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

21.95

19.51  
19.43  
19.30  
19.20

NPLC-B  
NPLC-B 79  
NPH-B 82

Status

18.01

16.78

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

Caliper  
SS LS Status

15.56

11.51

DTA-A  
ECH-KE 8231  
DTA-A 8231

10.74

DIT-E  
DIC-EB 390  
MIH-ZA 397  
DIS-HB 433

9.52

SP  
Deep Ind  
Aux Meas SFL  
Med Ind  
Status HV DF  
Tension

3.15  
2.90  
1.98  
1.83  
0.00

TOOL ZERO

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

## Output DLIS Files

DEFAULT	DITE .021	FN:22 PRODUCER	05-Jun-2000 21:25	5239.5 M	5154.9 M
IPLT_CUST	DITE .021	FN:23 PRODUCER	05-Jun-2000 21:25	5239.5 M	5154.6 M

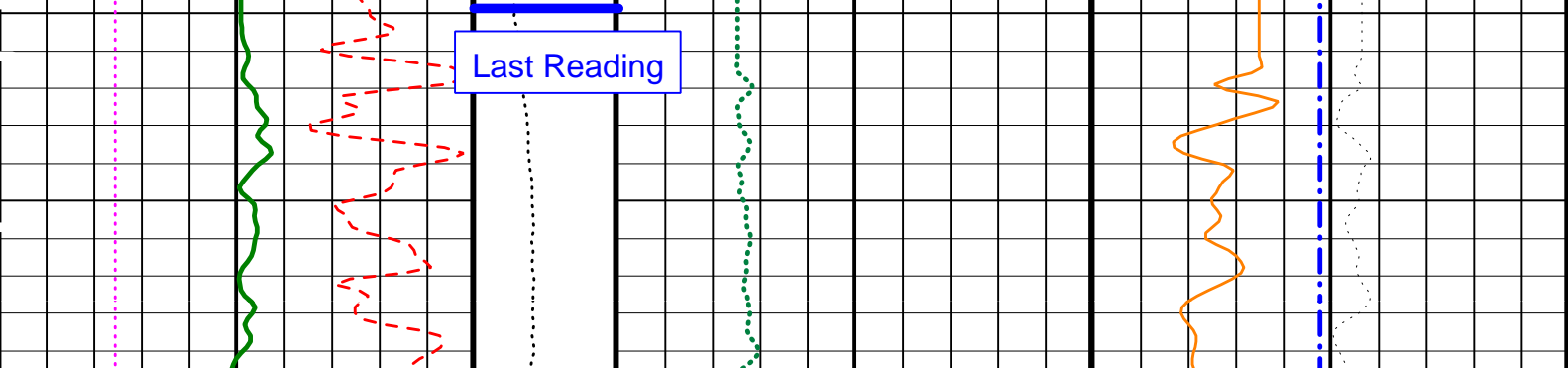
## OP System Version: 9C1-303 MCM

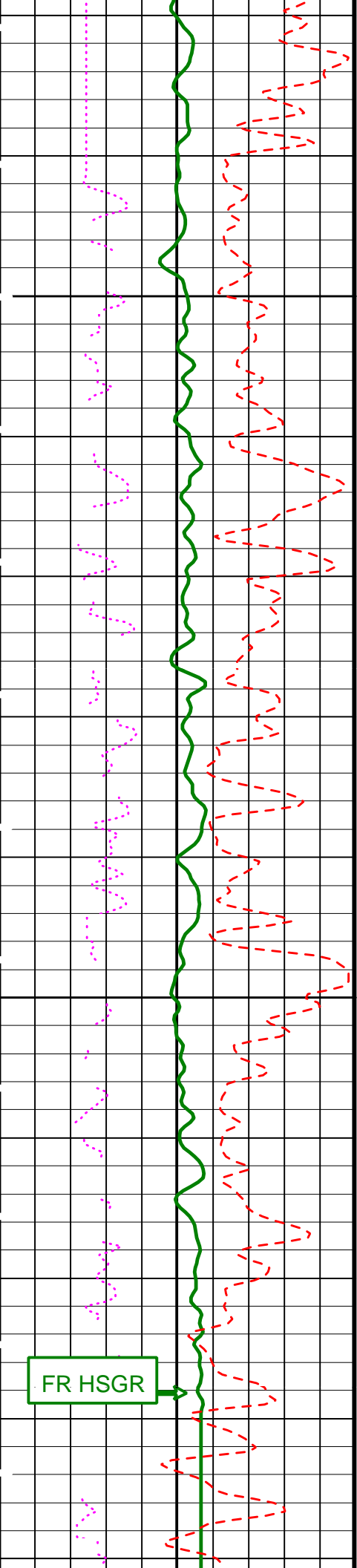
DIT-E	9C1-303	DTA-A	9C1-303	<b>MAIN UP LOG</b>  <b>Lower Section</b>
HLDS	9C1-303	NPLC-B	9C1-303	
APS-BA	9C1-303	HNGS-BA	9C1-303	
DTC-H	9C1-303			

### PIP SUMMARY

Time Mark Every 60 S

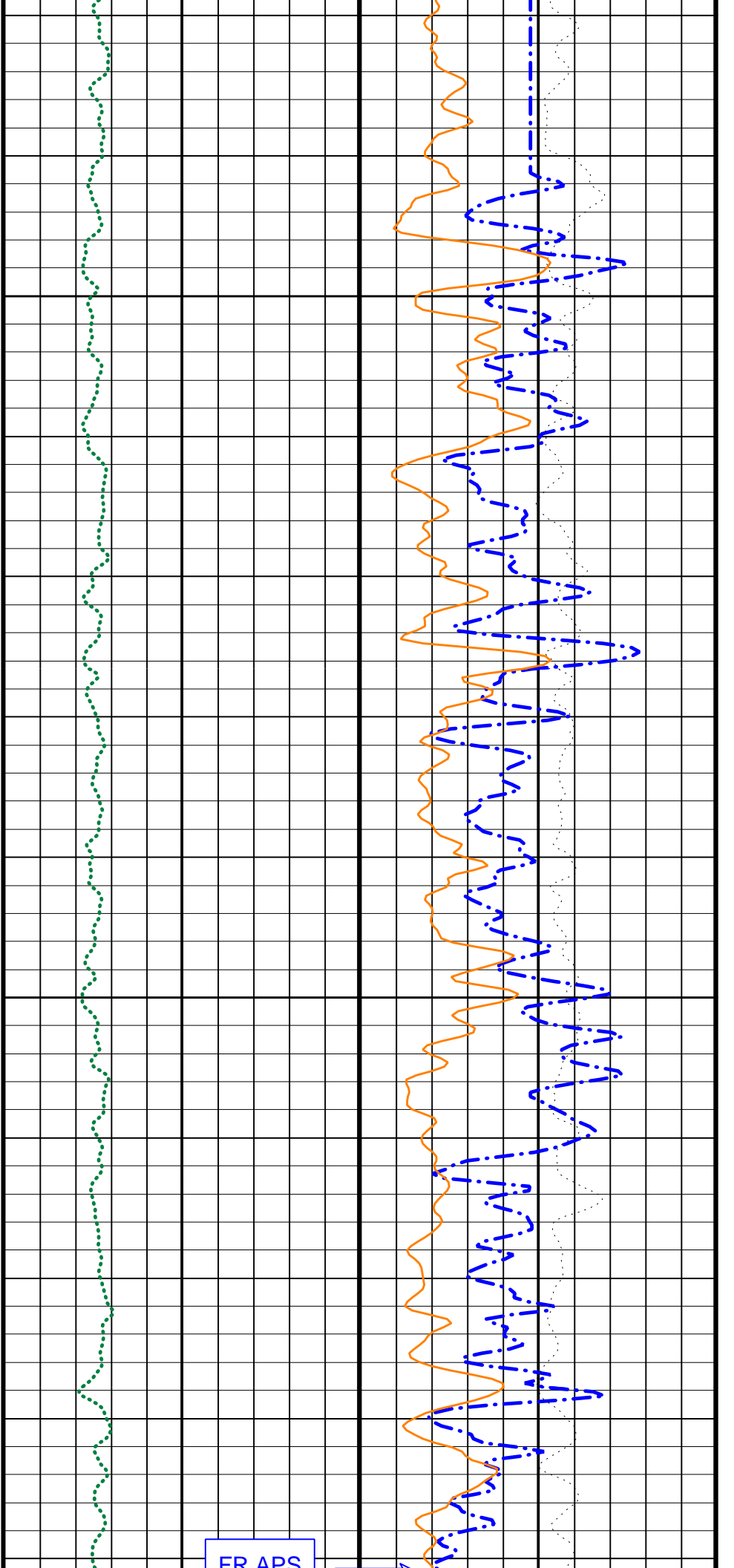
<b>HNGS Spectroscopy Gamma Ray (HSGR)</b> (GAPI) 0 150	<b>HLDS Long Spaced Photoelectric Effect (PEFL)</b> (----) 0 10	<b>HLDS Bulk Density Correction (DRH)</b> (G/C3) -0.25 0.25
<b>APS Effective Standoff in Limestone (STOF)</b> (IN) -1 4	<b>HLDS Bulk Density (RHOM)</b> (G/C3) 3 1	
<b>HLDS Caliper (LCAL)</b> (IN) 0 20	<b>Tension (TENS) (LBF)</b> 10000 0	<b>APS Near/Array Corrected Limestone Porosity (APLC)</b> (PU) 0 100

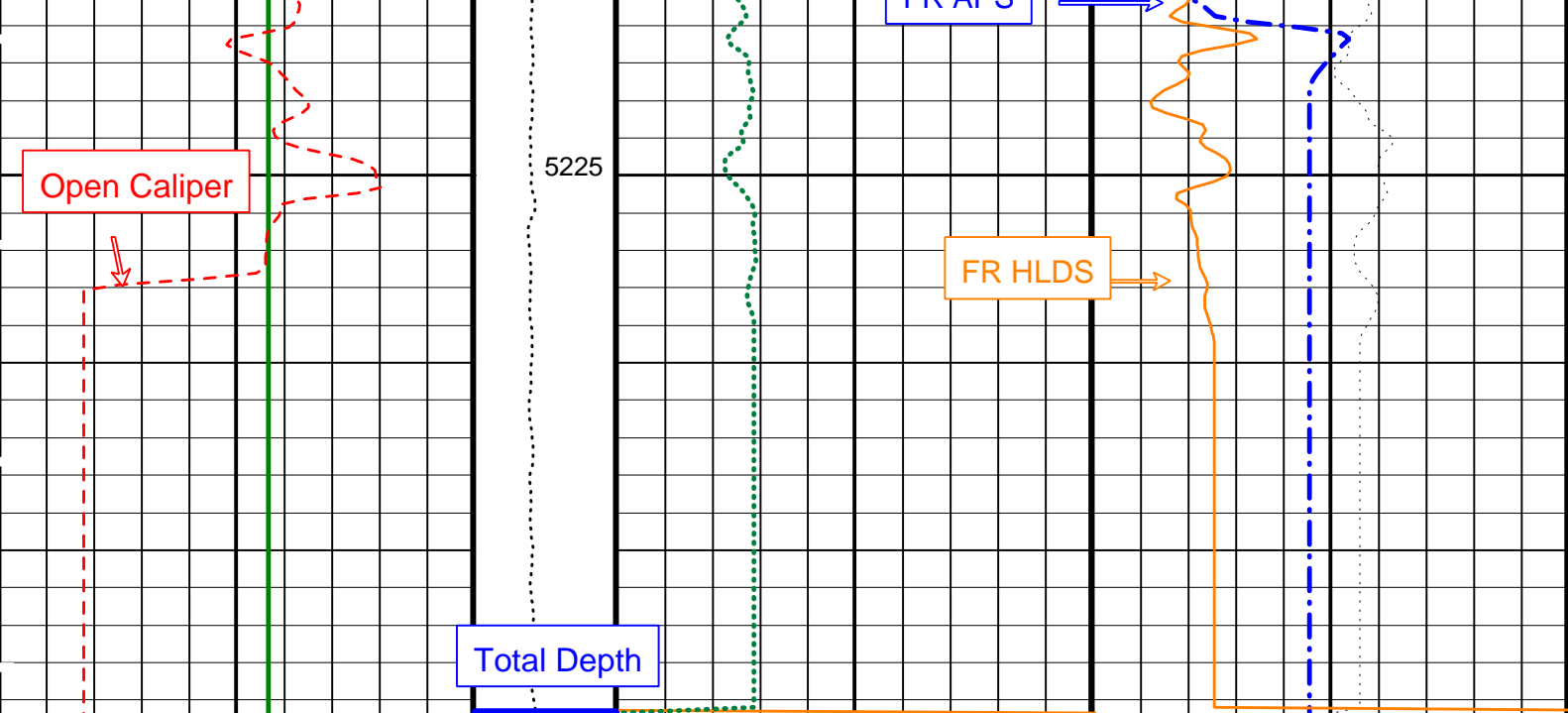




5175

5200





HLDS Caliper (LCAL) (IN)	0	20	Tension (TENS) (LBF)	10000	0	APS Near/Array Corrected Limestone Porosity (APLC) (PU)	0	100
APS Effective Standoff in Limestone (STOF) (IN)	-1	4				HLDS Bulk Density (RHOM) (G/C3)	3	1
HNGS Spectroscopy Gamma Ray (HSGR) (GAPI)	0	150	HLDS Long Spaced Photoelectric Effect (PEFL) (---)	0	10	HLDS Bulk Density Correction (DRH) (G/C3)	-0.25	0.25

PIP SUMMARY

Time Mark Every 60 S

Parameters

DLIS Name	Description	Value
	HLDS Data Control	AcquiredData
	HLDS SS NCB Mode	Density
	HLDS LS Digital Integrator State	Normal
	HLDS LS Tri-Ported Memory State	Enable
	APS Cement Thickness Source	COMPUTED
	HLDS SS Tri-Ported Memory State	Enable
	HLDS LS NCB Mode	Density
	HLDS Spec Message Rate	1
	Apparent Thickness of Cement	0
	APS Software Version	5
	HLDS SS Digital Integrator State	Normal
	HLDS Diag Message Rate	20
AASD	APS Thermal and Array Detectors High Voltage Setting	1977.42
ABOS	APS Neutron Burst-Off Background Subtraction Switch	ON
ADSO	APS Array Detectors Data Source Switch	Both
AFSD	APS Far Detector High Voltage Setting	2077.17
AHCS	APS Holesize Correction Source	GCSE
AHSS	APS Holesize Correction Switch	ON
AMTY	APS Environmental Corrections Mud Type	WaterBaseBarite
ANSD	APS Near Detector High Voltage Setting	1750.12
ASOS	APS Standoff Correction Switch	ON
ATSS	APS Temperature-Pressure-Salinity Correction Switch	OFF
BAR1	HNGS Detector 1 Barite Constant	1
BAR2	HNGS Detector 2 Barite Constant	1
BHK	HNGS Borehole Potassium Correction Concentration	0
BHS	Borehole Status	OPEN
BHT	Bottom Hole Temperature (used in calculations)	65
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
BSAL	Borehole Salinity	-50000.00

CSD1	Inner Casing Outer Diameter	0	IN
CSD2	Outer Casing Outer Diameter	0	IN
CSIZ	Current Casing Size	0.000	IN
CSW1	Inner Casing Weight	0	LB/F
CSW2	Outer Casing Weight	0	LB/F
CWEI	Casing Weight	0.00	LB/F
D1PR	HNGS Detector 1 Calibration Thorium Peak Resolution	7.03834	%
D1TC	HNGS Detector 1 Calibration Temperature	59.2921	DEGF
D1TL	HNGS Detector 1 Calibration Thorium Peak Location	210.324	
D2PR	HNGS Detector 2 Calibration Thorium Peak Resolution	7.10236	%
D2TC	HNGS Detector 2 Calibration Temperature	57.3948	DEGF
D2TL	HNGS Detector 2 Calibration Thorium Peak Location	209.925	
DBCC	HNGS Barite Constant Correction Flag	NONE	
DFD	Drilling Fluid Density	1.03	G/C3
DHC	Density Hole Correction	BS	
DPPM	Density Porosity Processing Mode	HIRS	
FD	Fluid Density	1.03	G/C3
FSAL	Formation Salinity	35000	PPM
GCF1_START	HNGS Detector 1 GCF Constant	1	
GCF2_START	HNGS Detector 2 GCF Constant	1	
GCSE	Generalized Caliper Selection	BS	
GDEV	Average Angular Deviation of Borehole from Normal	0	DEG
GRD	Geothermal Gradient	0.01	DF/F
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE	
H1P	HNGS Detector 1 Allow/Disallow In Processing	ALLOW	
H2P	HNGS Detector 2 Allow/Disallow In Processing	ALLOW	
HABK	HNGS Borehole Potassium Running Average	0.000509433	
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	9.54467e-036	
LATC	HLDS Activation Correction	ON	
MARQ_START	HNGS Marquardt Start-up Mode	INTERNAL	
MDEN	Matrix Density	2.71	G/C3
NARC	APS Near/Array Calibration Ratio	1.06263	
NFRC	APS Near/Far Calibration Ratio	0.893556	
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	26.8307	CPS
S1NG	HNGS Detector 1 Calibration End-On / Side-On Gain Ratio	0.986846	
S2BI	HNGS Detector 2 Calibration Bismuth Count Rate	1.3	CPS
S2NA	HNGS Detector 2 Calibration Sodium Count Rate	27.2589	CPS
S2NG	HNGS Detector 2 Calibration End-On / Side-On Gain Ratio	0.984706	
SABK	HNGS Statistical Uncertainty in Borehole Potassium Running Average	0.000253594	
SGRC	HNGS Standard Gamma-Ray Correction Flag	YES	
SHT	Surface Hole Temperature	95	DEGF
TD	Total Depth	-50000	M
TPOS	Tool Position	ECCE	
VBA1	HNGS Detector 1 Variable Barite Factor Running Average	0.975294	
VBA2	HNGS Detector 2 Variable Barite Factor Running Average	0.951327	

Format: APSLiquidPorosity\_1    Vertical Scale: 1:200    Graphics File Created: 05-Jun-2000 21:25

<b>OP System Version: 9C1-303</b>			
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		

<b>Output DLIS Files</b>				
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IPLT_CUST	DITE .021	FN:23 PRODUCER	05-Jun-2000 21:25	

<b>Output DLIS Files</b>						
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IPLT_CUST	DITE .020	FN:21 PRODUCER	05-Jun-2000 10:10	5145.8 M	4790.5 M	

DIT-E 9C1-303  
 HLDS 9C1-303  
 APS-BA 9C1-303  
 DTC-H 9C1-303

DTA-A  
 NPLC-B  
 HNGS-BA

9C1-303  
 9C1-303  
 9C1-303

MAIN OF LOG  
 Upper Section

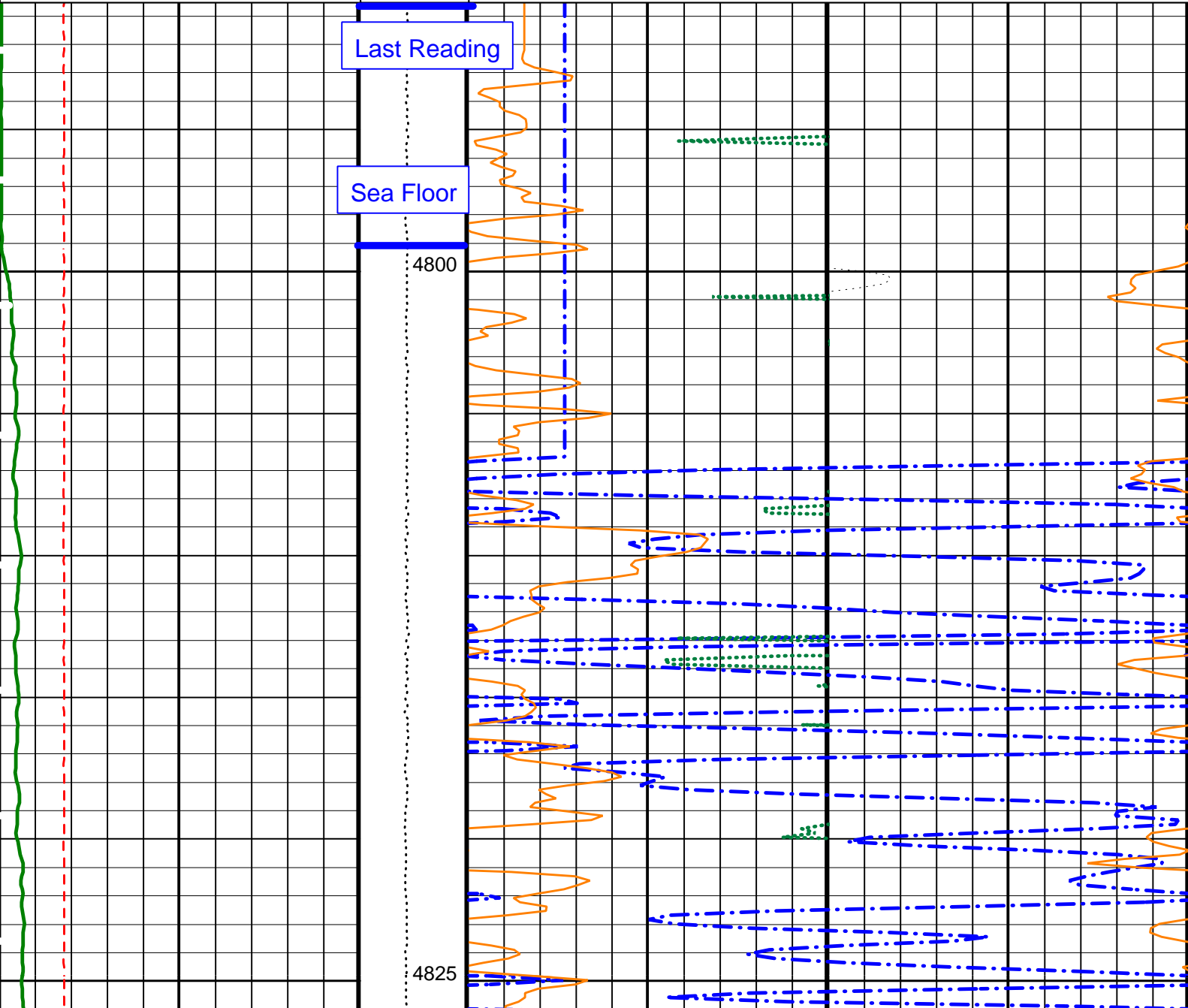
### Changed Parameter Summary

DLIS Name	New Value	Previous Value	Depth & Time
GCSE	BS	LCAL	4879.5 11:15:21

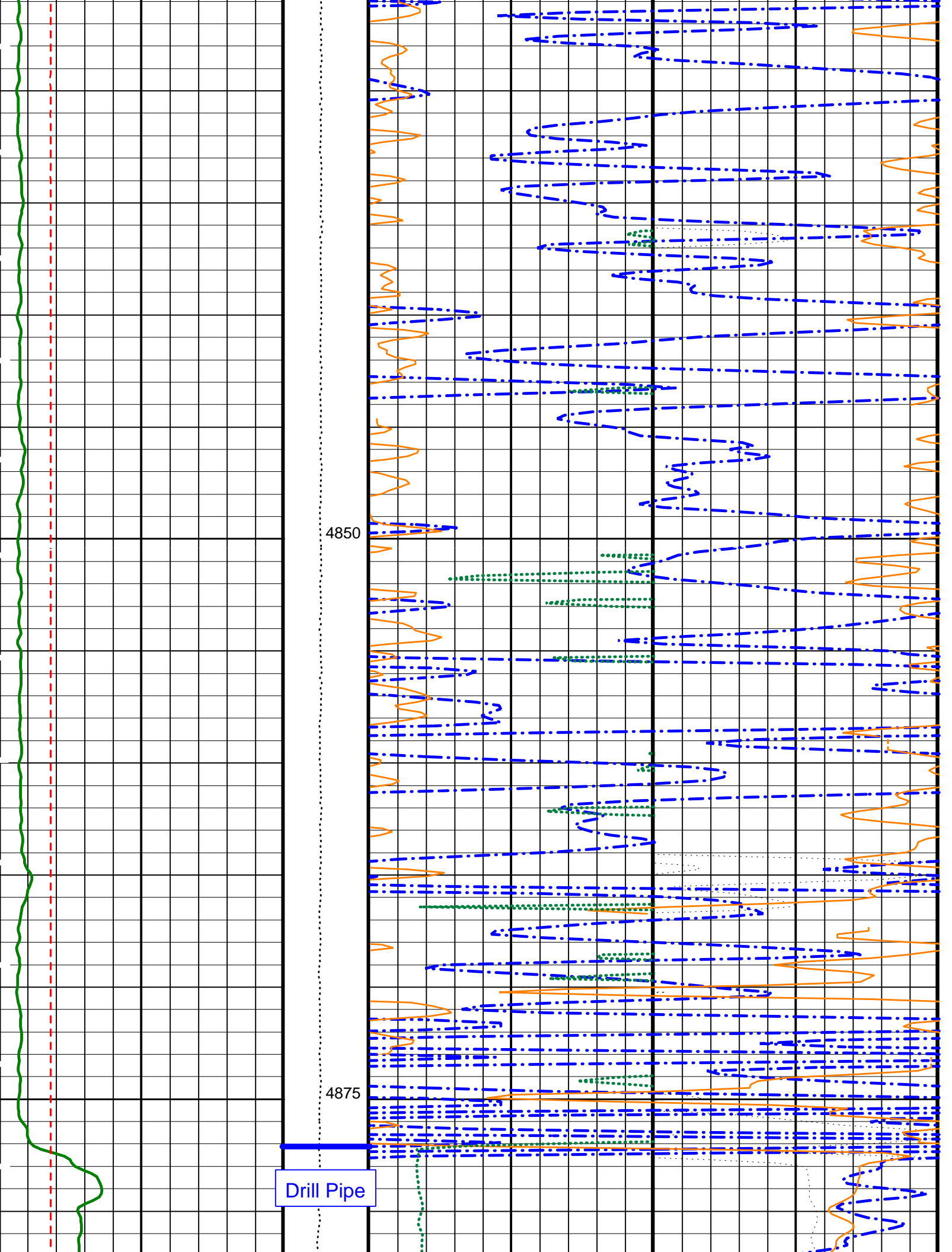
#### PIP SUMMARY

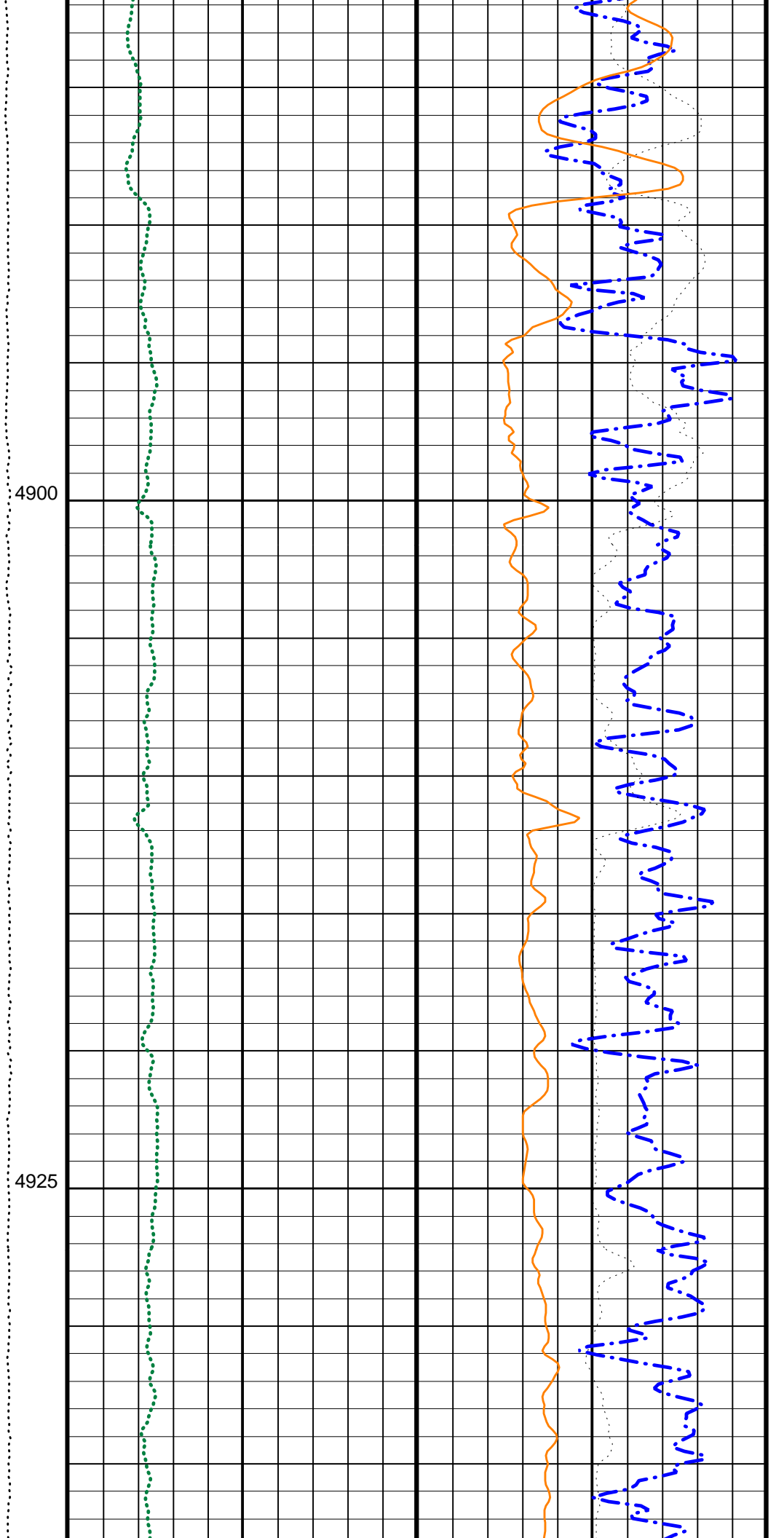
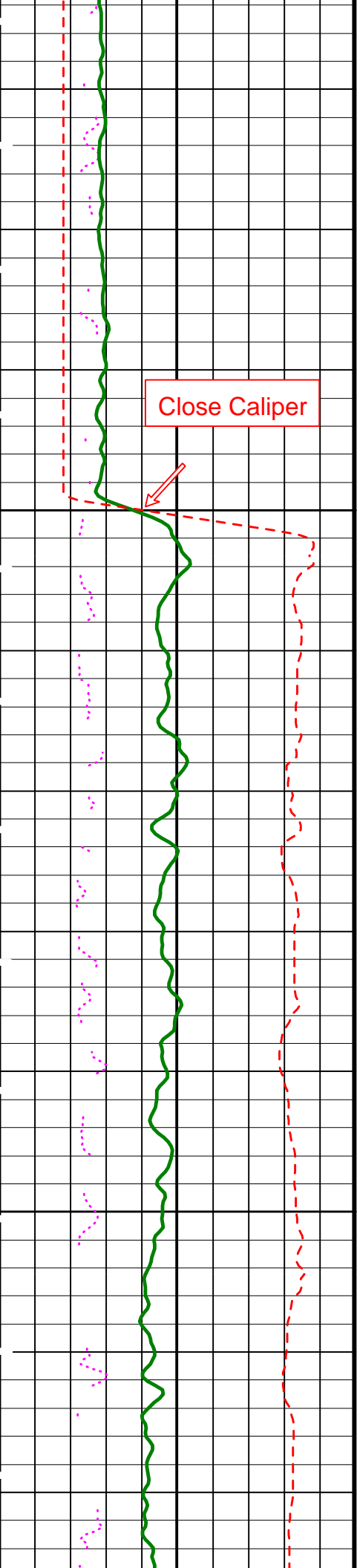
▶ Time Mark Every 60 S

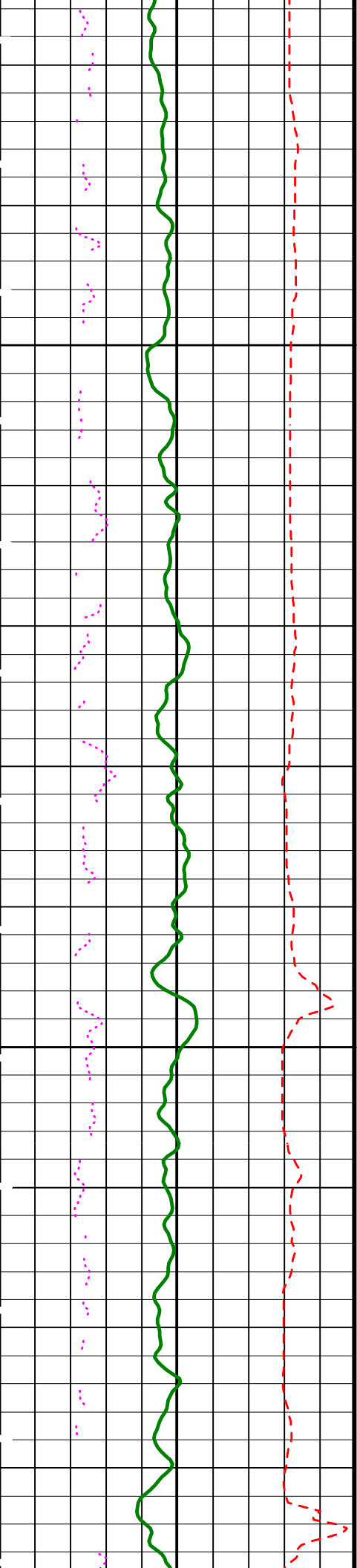
<p style="color: green;">HNGS Spectroscopy Gamma Ray (HSGR) (GAPI) 0 150</p>	<p style="color: green;">HLDS Long Spaced Photoelectric Effect (PEFL) (---) 0 10</p>	<p style="color: black;">HLDS Bulk Density Correction (DRH) (G/C3) -0.25 0.25</p>
<p style="color: magenta;">APS Effective Standoff in Limestone (STOF) (IN) -1 4</p>	<p style="color: orange;">HLDS Bulk Density (RHOM) (G/C3) 3 1</p>	
<p style="color: red;">HLDS Caliper (LCAL) (IN) 0 20</p>	<p style="color: blue;">Tension (TENS) (LBF) 10000 0</p>	<p style="color: blue;">APS Near/Array Corrected Limestone Porosity (APLC) (PU) 0 100</p>







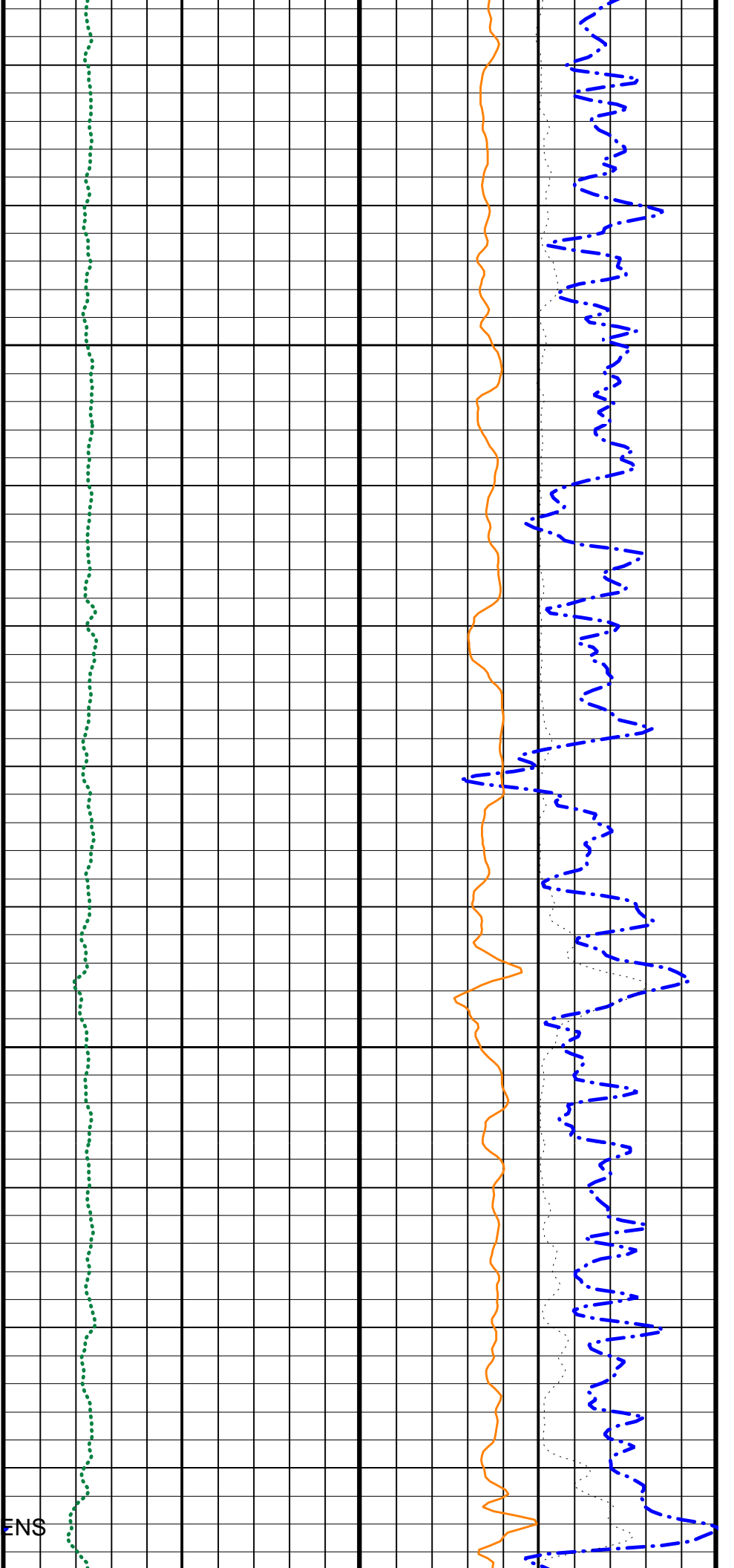


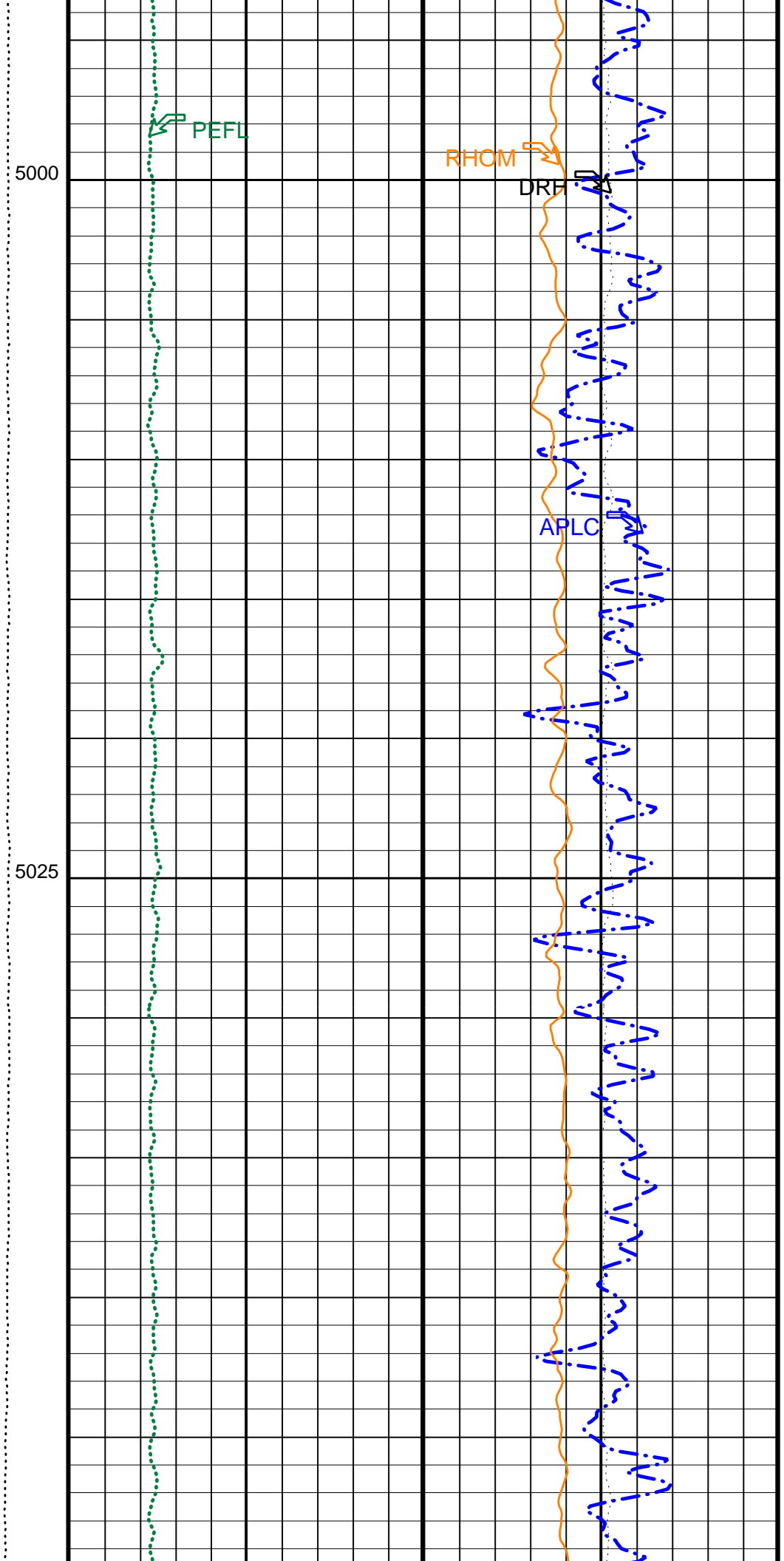
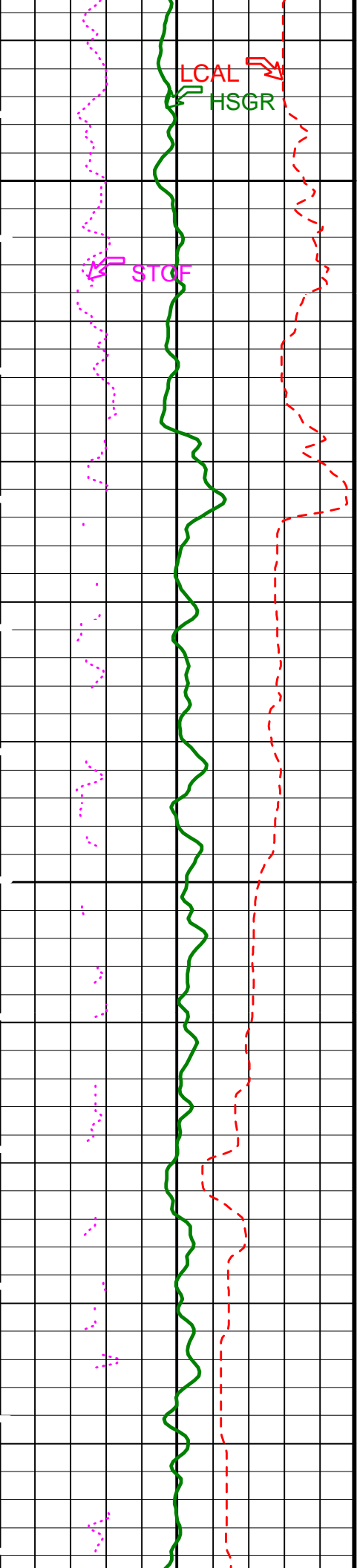


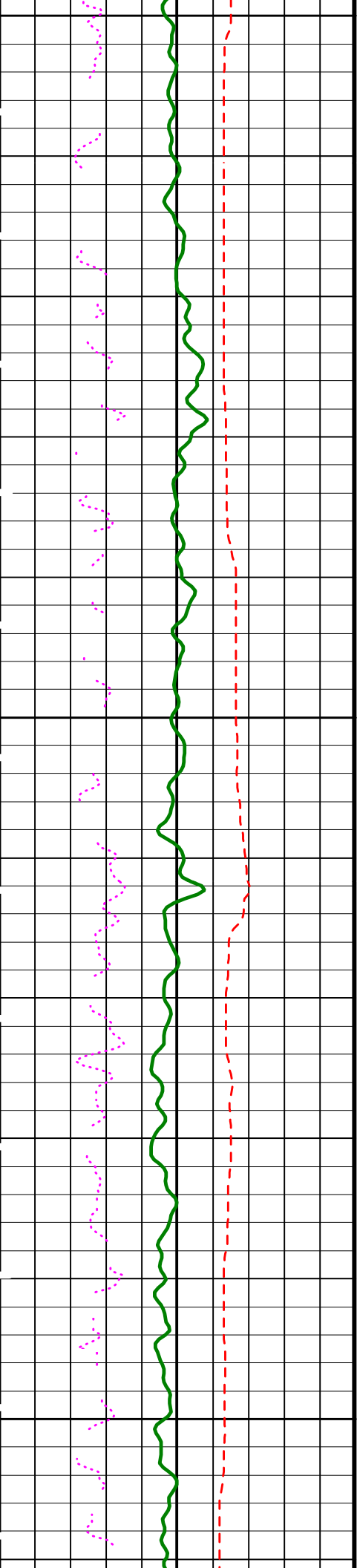
4950

4975

↙ TENS



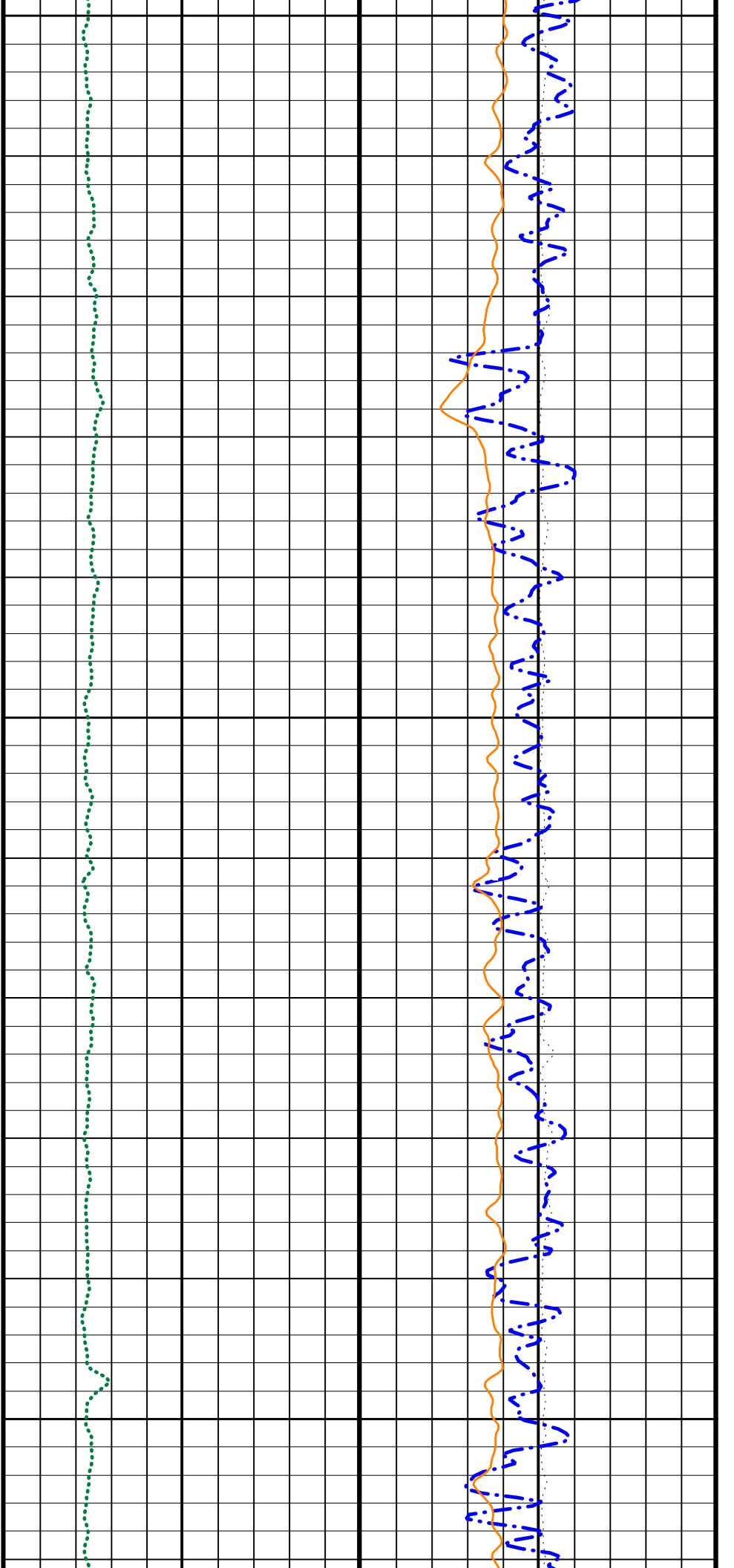


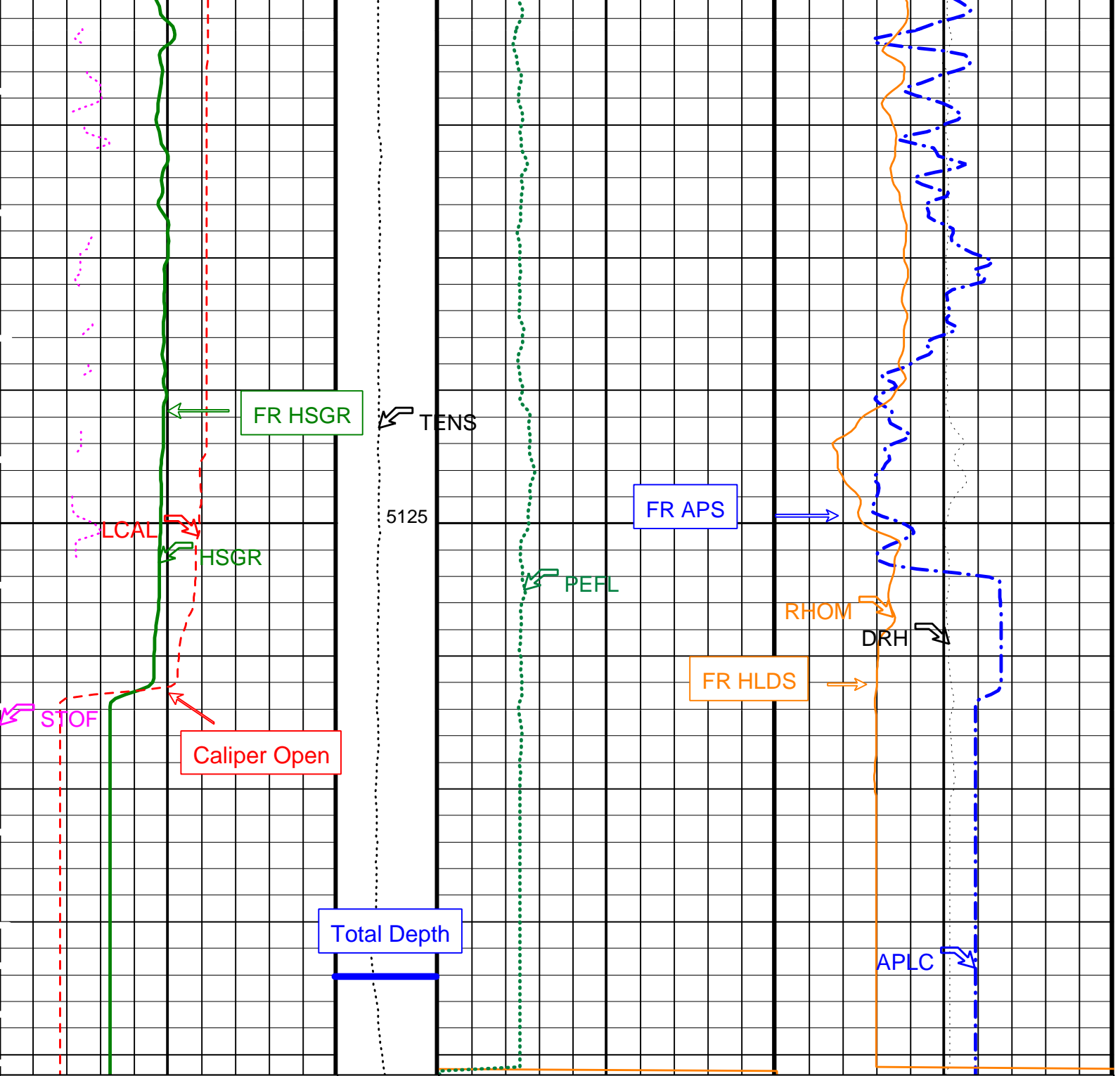


5050

5075

5100





HLDS Caliper (LCAL) (IN)	Tension (TENS) (LBF)	APS Near/Array Corrected Limestone Porosity (APLC) (PU)
0 20	10000 0	0 100
APS Effective Standoff in Limestone (STOF) (IN)		HLDS Bulk Density (RHOM) (G/C3)
-1 4		3 1
HNGS Spectroscopy Gamma Ray (HSGR) (GAPI)	HLDS Long Spaced Photoelectric Effect (PEFL) (---)	HLDS Bulk Density Correction (DRH) (G/C3)
0 150	0 10	-0.25 0.25

PIP SUMMARY

Time Mark Every 60 S

### Parameters

DLIS Name	Description	Value
-----------	-------------	-------

	HLDS Data Control	AcquiredData	
	HLDS SS NCB Mode	Density	
	HLDS LS Digital Integrator State	Normal	
	HLDS LS Tri-Ported Memory State	Enable	
	APS Cement Thickness Source	COMPUTED	
	HLDS SS Tri-Ported Memory State	Enable	
	HLDS LS NCB Mode	Density	
	HLDS Spec Message Rate	1	
	Apparent Thickness of Cement	0	IN
	APS Software Version	5	
	HLDS SS Digital Integrator State	Normal	
	HLDS Diag Message Rate	20	
AASD	APS Thermal and Array Detectors High Voltage Setting	1977.42	V
ABOS	APS Neutron Burst-Off Background Subtraction Switch	ON	
ADSO	APS Array Detectors Data Source Switch	Both	
AFSD	APS Far Detector High Voltage Setting	2077.17	V
AHCS	APS Holesize Correction Source	GCSE	
AHSS	APS Holesize Correction Switch	ON	
AMTY	APS Environmental Corrections Mud Type	WaterBaseBarite	
ANSD	APS Near Detector High Voltage Setting	1750.12	V
ASOS	APS Standoff Correction Switch	ON	
ATSS	APS Temperature-Pressure-Salinity Correction Switch	OFF	
BAR1	HNGS Detector 1 Barite Constant	1	
BAR2	HNGS Detector 2 Barite Constant	1	
BHK	HNGS Borehole Potassium Correction Concentration	0	
BHS	Borehole Status	OPEN	
BHT	Bottom Hole Temperature (used in calculations)	65	DEGF
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
BSAL	Borehole Salinity	-50000.00	PPM
CSD1	Inner Casing Outer Diameter	0	IN
CSD2	Outer Casing Outer Diameter	0	IN
CSIZ	Current Casing Size	0.000	IN
CSW1	Inner Casing Weight	0	LB/F
CSW2	Outer Casing Weight	0	LB/F
CWEI	Casing Weight	0.00	LB/F
D1PR	HNGS Detector 1 Calibration Thorium Peak Resolution	7.03834	%
D1TC	HNGS Detector 1 Calibration Temperature	59.2921	DEGF
D1TL	HNGS Detector 1 Calibration Thorium Peak Location	210.324	
D2PR	HNGS Detector 2 Calibration Thorium Peak Resolution	7.10236	%
D2TC	HNGS Detector 2 Calibration Temperature	57.3948	DEGF
D2TL	HNGS Detector 2 Calibration Thorium Peak Location	209.925	
DBCC	HNGS Barite Constant Correction Flag	NONE	
DFD	Drilling Fluid Density	1.03	G/C3
DHC	Density Hole Correction	BS	
DPPM	Density Porosity Processing Mode	HIRS	
FD	Fluid Density	1.03	G/C3
FSAL	Formation Salinity	35000	PPM
GCF1_START	HNGS Detector 1 GCF Constant	1	
GCF2_START	HNGS Detector 2 GCF Constant	1	
GCSE	Generalized Caliper Selection	LCAL	
GDEV	Average Angular Deviation of Borehole from Normal	0	DEG
GGRD	Geothermal Gradient	0.01	DF/F
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE	
H1P	HNGS Detector 1 Allow/Disallow In Processing	ALLOW	
H2P	HNGS Detector 2 Allow/Disallow In Processing	ALLOW	
HABK	HNGS Borehole Potassium Running Average	0	
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	8.70492e-032	
LATC	HLDS Activation Correction	ON	
MARQ_START	HNGS Marquardt Start-up Mode	INTERNAL	
MDEN	Matrix Density	2.71	G/C3
NARC	APS Near/Array Calibration Ratio	1.06263	
NFRC	APS Near/Far Calibration Ratio	0.893556	
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	26.8307	CPS
S1NG	HNGS Detector 1 Calibration End-On / Side-On Gain Ratio	0.986846	
S2BI	HNGS Detector 2 Calibration Bismuth Count Rate	1.3	CPS
S2NA	HNGS Detector 2 Calibration Sodium Count Rate	27.2589	CPS
S2NG	HNGS Detector 2 Calibration End-On / Side-On Gain Ratio	0.984706	
SABK	HNGS Statistical Uncertainty in Borehole Potassium Running Average	0	
SGRC	HNGS Standard Gamma-Ray Correction Flag	YES	
SHT	Surface Hole Temperature	95	DEGF
TD	Total Depth	-50000	M
TPOS	Tool Position	ECCE	

**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 .020	FN:20 PRODUCER	05-Jun-2000 10:10
IPLT_CUST	DITE .020	FN:21 PRODUCER	05-Jun-2000 10:10

<b>COMPANY:</b>	<b>Lamont Doherty</b>	<b>BOTTOM LOG INTERVAL</b>	5237 m
<b>WELL:</b>	<b>ODP Leg 190, Site 1173A</b>	<b>SCHLUMBERGER DEPTH</b>	5239.5 m
<b>FIELD:</b>	<b>Nankai Trough</b>	<b>DEPTH DRILLER</b>	5536.2 m
<b>Country:</b>	<b>Japan</b>	<b>KELLY BUSHING</b>	11.3 m
<b>Ocean:</b>	<b>Pacific</b>	<b>DRILL FLOOR</b>	11 m
		<b>GROUND LEVEL</b>	-4801.9 m



APS/Density Porosity