

**Company:** Lamont Doherty

**Well:** ODP Leg 204, Site 12445 E

**Field:** Hydrate Ridge

**Ocean:** Pacific

**State:** Oregon

**Ocean:** Pacific  
**Field:** Hydrate Ridge  
**Location:** N 44° 35.1708'  
**Well:** ODP Leg 204, Site 1245 E  
**Company:** Lamont Doherty

<b>Phasor Induction</b>			
<b>Density/APS Porosity</b>			
<b>Natural Gamma Ray (TCOMBO)</b>			
N 44° 35.1708' W 125° 8.9627'		Elev.: K.B. 11.3 m G.L. -882 m D.F. 11 m	
Permanent Datum: _____ Log Measured From: _____ Drilling Measured From: _____	MSL _____ RKB _____ RKB _____	Elev.: 0 m _____ 11.3 m above Perm. Datum	
API Serial No.	Max. Hole Devi.	Longitude	Latitude

Logging Date	14-Aug-2002		
Run Number	1		
Depth Driller	1421 m		
Schlumberger Depth	1201 m		
Bottom Log Interval	1195 m		
Top Log Interval	883 m		
Casing Driller Size @ Depth	0.000 in @ 956 m		
Casing Schlumberger	956 m		
Bit Size	9.875 in		

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		Salt water/ Sepiolite	
Density	Viscosity		
Fluid Loss	PH		
Source Of Sample	Mudpit		
RM @ Measured Temperature	0.322 ohm.m @ 27 degC		
RMF @ Measured Temperature	@ @		
RMC @ Measured Temperature	@ @		
Source RMF	RMC		
RM @ MRT	RMF @ MRT	@ @	@ @
Maximum Recorded Temperatures	17 degC @ 17		
Circulation Stopped	Time	14-Aug-2002	18:00
Logger On Bottom	Time	14-Aug-2002	21:53
Unit Number	Location	99	Houston
Recorded By	K. Swain		
Witnessed By	G. Guerin, S. Barr, T. Collett		

Type Fluid In Hole			
Density	Viscosity		
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			
Witnessed By			

Run 1

Run 2

Run

**DISCLAIMER**  
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**OTHER SERVICES1**  
 OS1: IPL  
 OS2: FMS/DSST  
 OS3: VSI  
 OS4:  
 OS5:

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

**REMARKS: RUN NUMBER 1**  
 Depths in meters below rig floor, mbrf.  
 Rig stuck at 1232 mbrf but became free, logging TD at 1201 mbrf.  
 Drill pipe SLB at 956 mbrf.  
 Sea floor SLB at 883 mbrf.

**REMARKS: RUN NUMBER 2**

**RUN 1**  
 SERVICE ORDER #:  
 PROGRAM VERSION: 10C0-306  
 FLUID LEVEL:

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

LOGGED INTERVAL	START	STOP

LOGGED INTERVAL	START	STOP

## EQUIPMENT DESCRIPTION




**RUN 1**

**SURFACE EQUIPMENT**

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

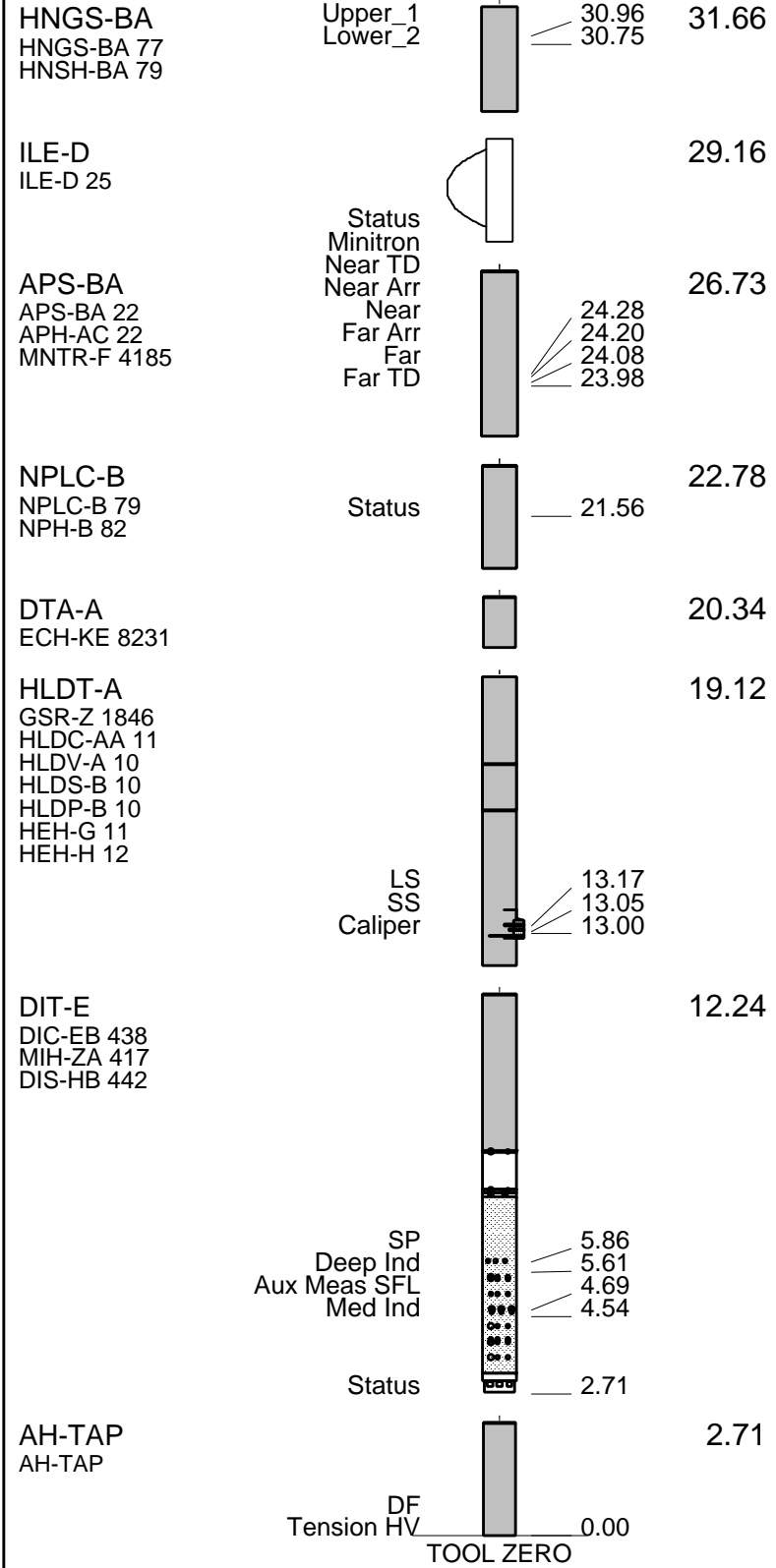
**RUN 2**

**DOWNHOLE EQUIPMENT**

LEH-QT  34.84  
 LEH-QT 1497  
 AH-QSST  33.95  
 AH-QSST 12  
 DTC-H  32.58  
 ECH KC 0841

CTEM  
 TelStatus  
 ToolStatu

32.30  
 31.66



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

### Output DLIS Files

DEFAULT	PI_LDL_APS_NGS_008LUP	FN:9	PRODUCER	14-Aug-2002 21:49	1202.4 M	858.6 M
REDUCE	PI_LDL_APS_NGS_008LUP	FN:10	PRODUCER	14-Aug-2002 21:49	1202.4 M	858.6 M

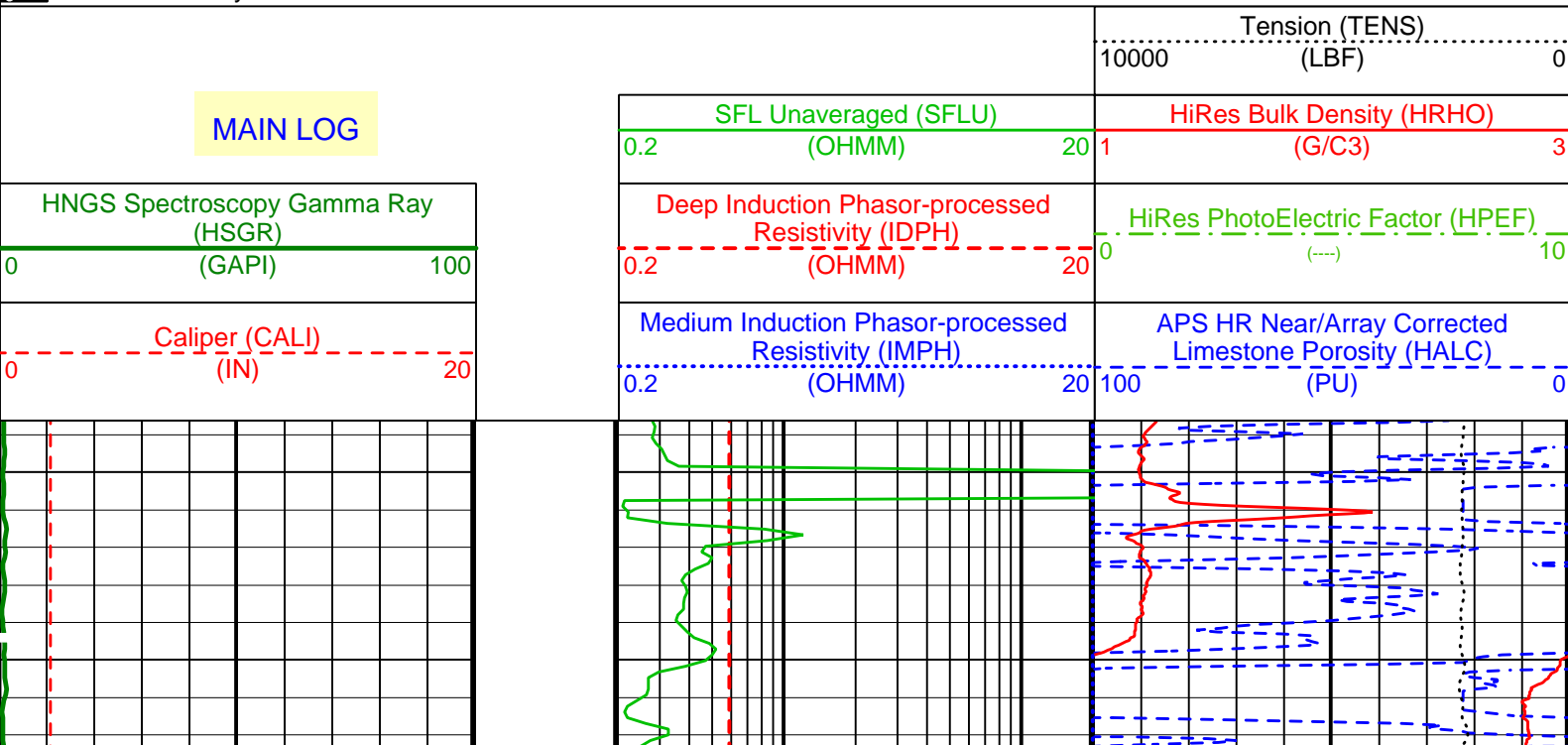
### OP System Version: 10C0-306

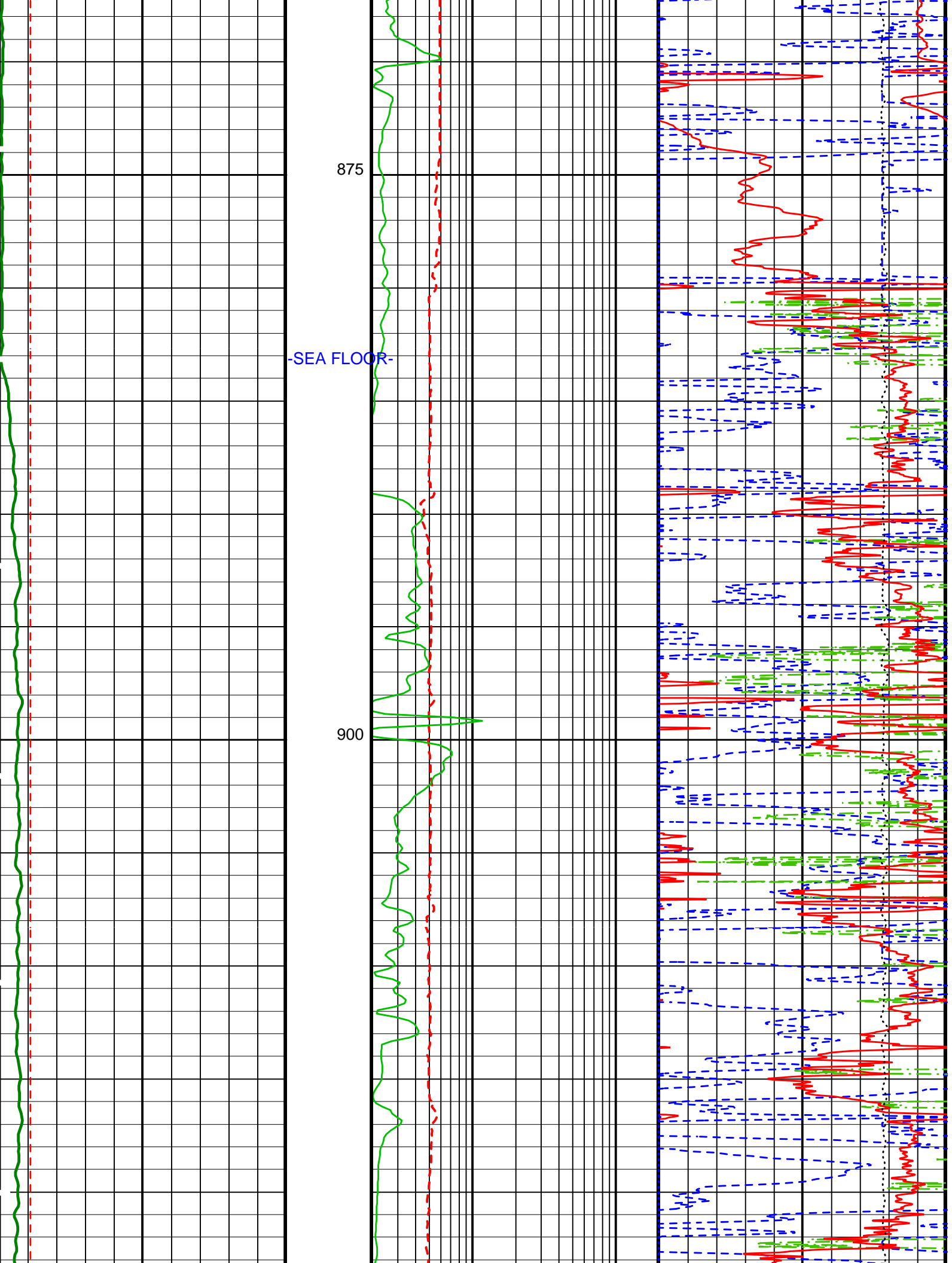
MCM

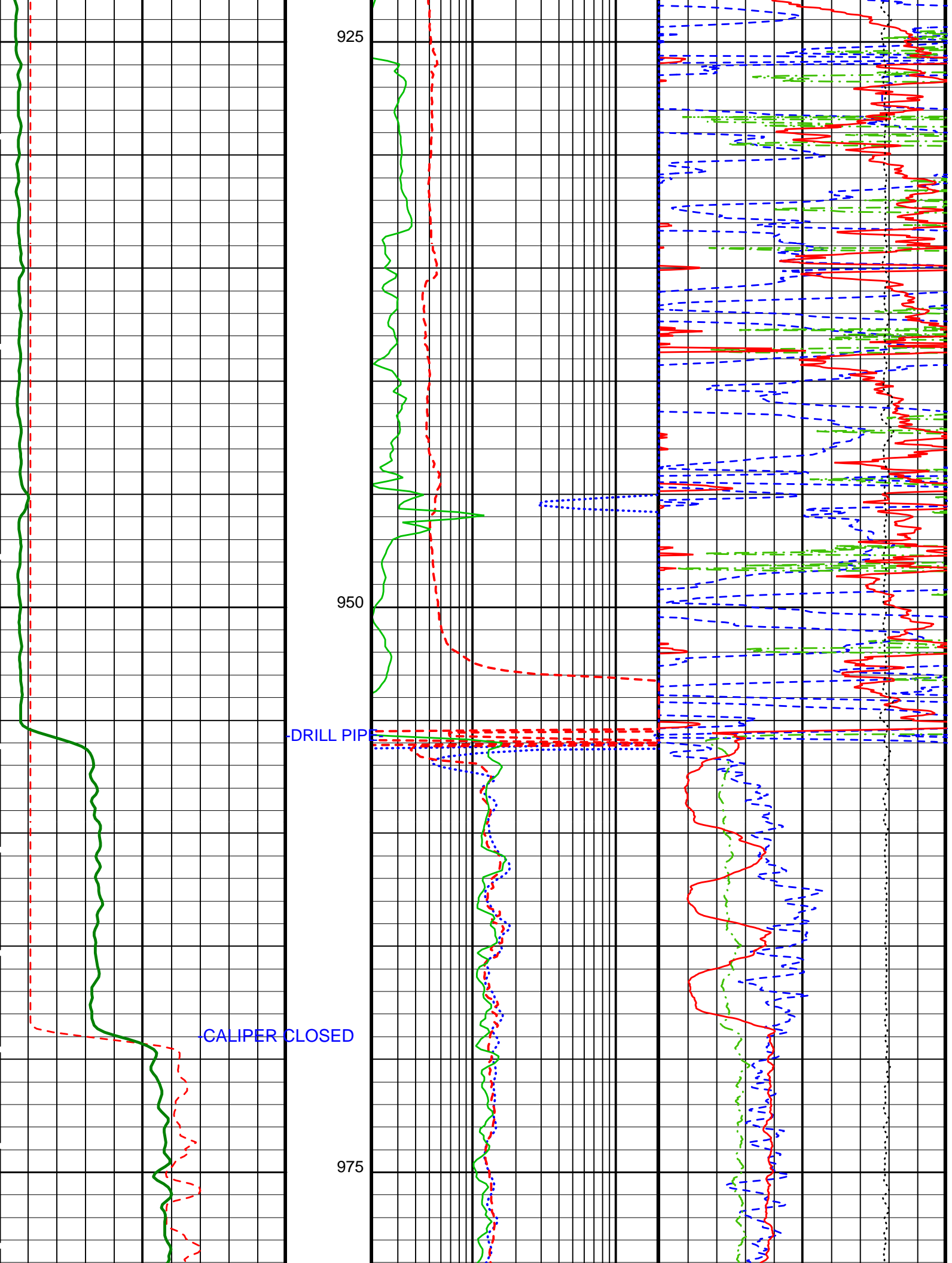
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DTA-A	10C0-306	NPLC-B	OP10-KP1
APS-BA	OP10-KP1	HNGS-BA	OP10-KP1
DTC-H	10C0-306		

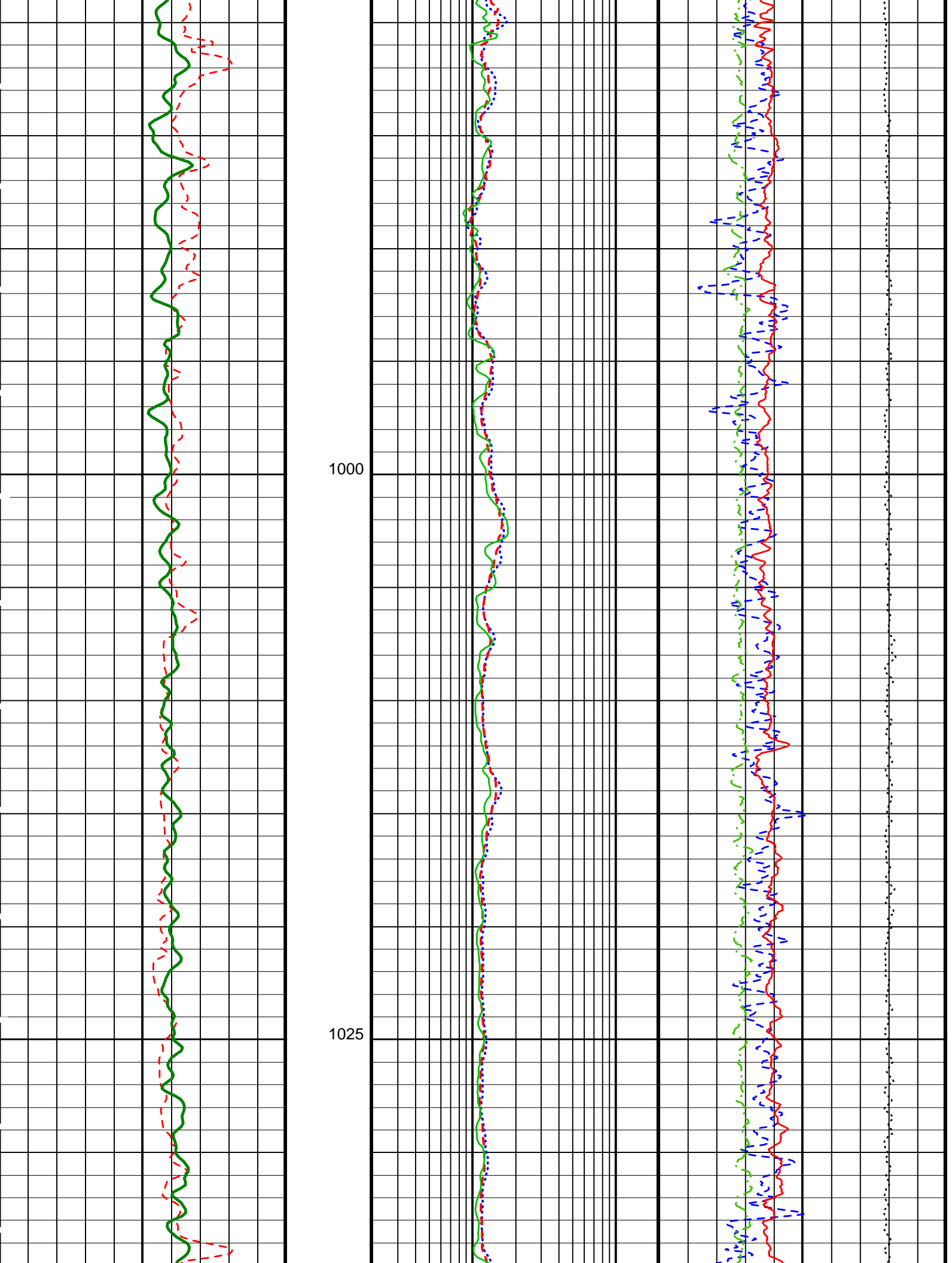
### PIP SUMMARY

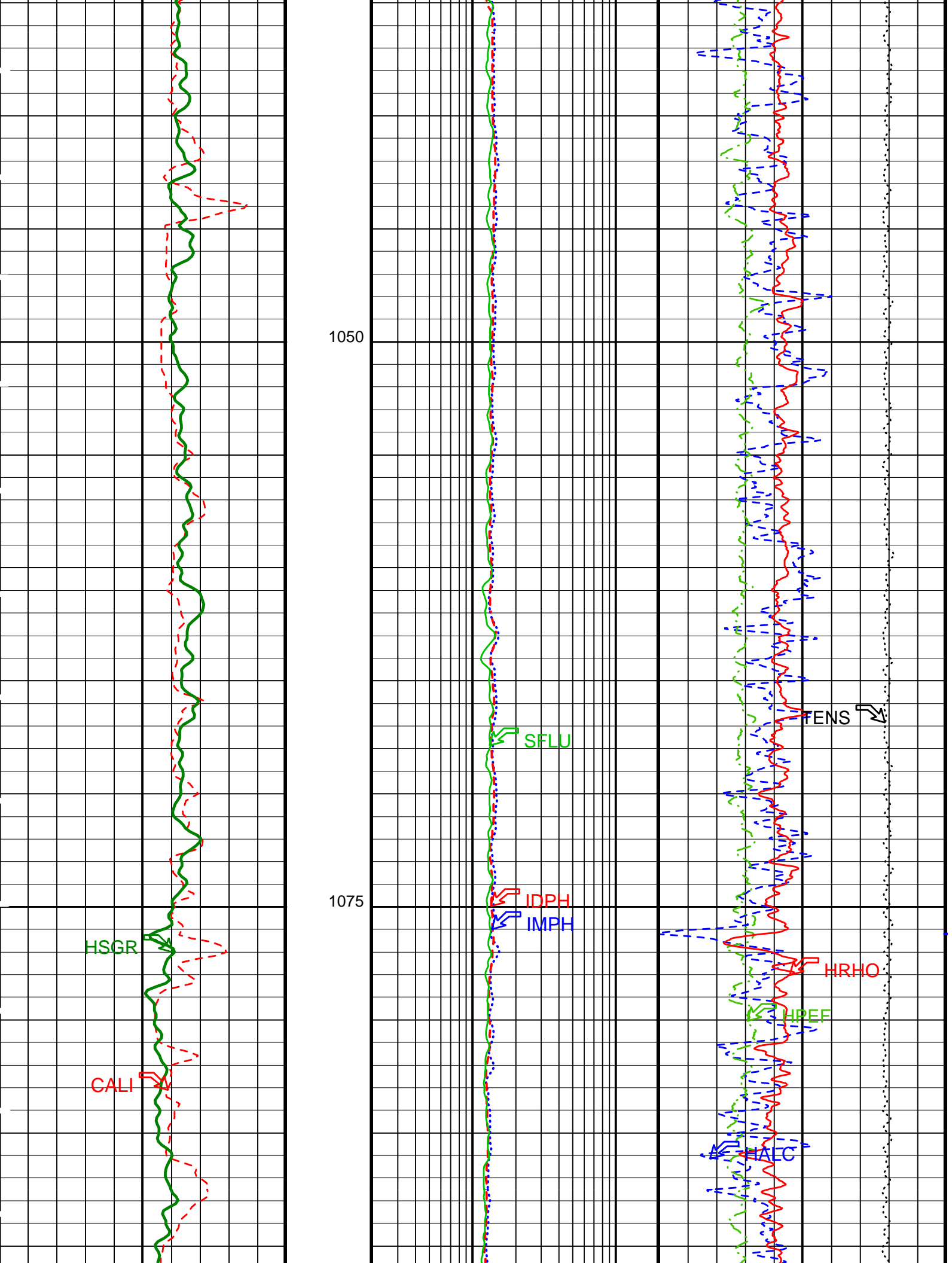
Time Mark Every 60 S



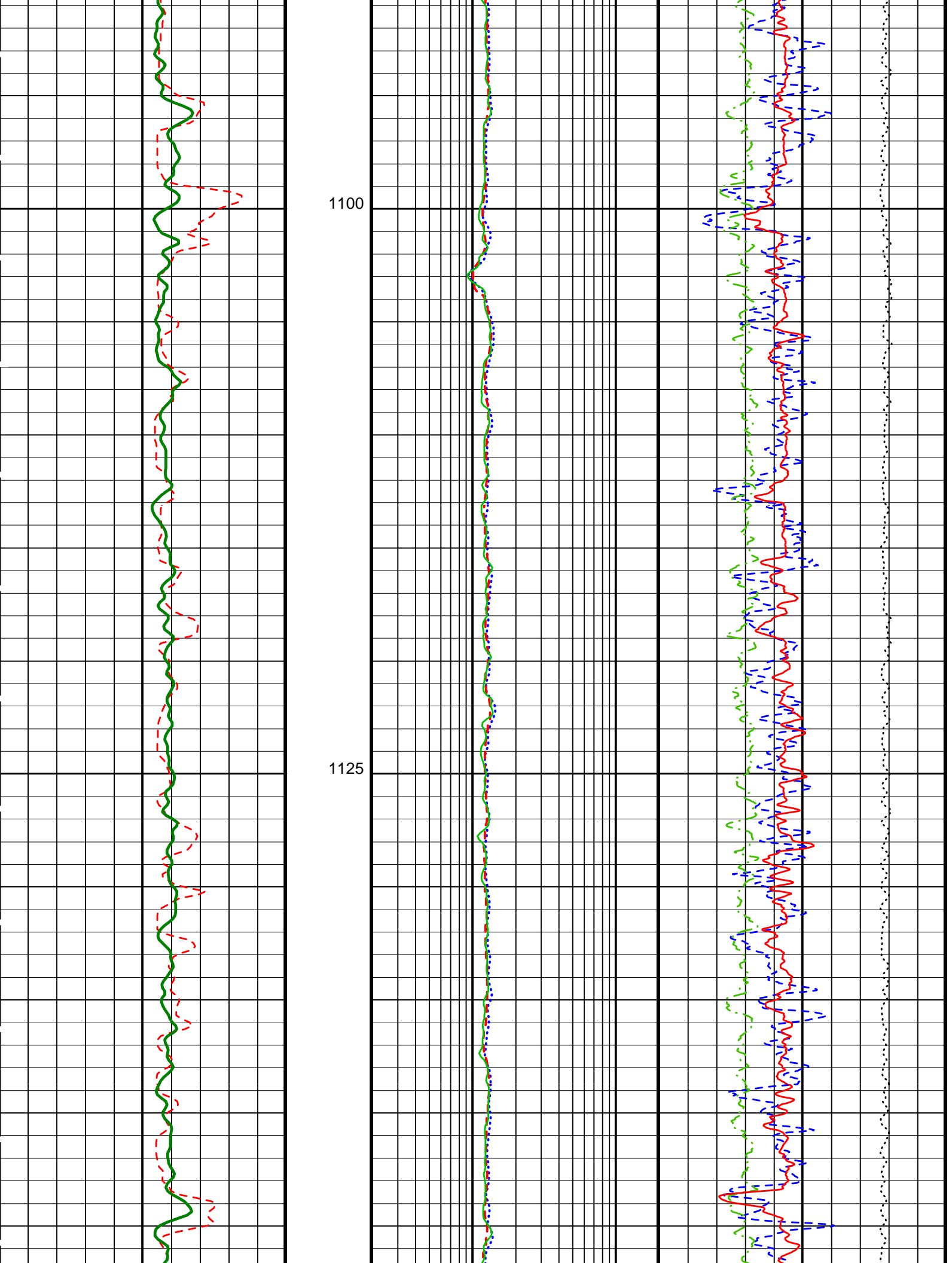














Caliper (CALI) (IN)	0.2	20	Medium Induction Phasor-processed Resistivity (IMPH) (OHMM)	0.2	20	APS HR Near/Array Corrected Limestone Porosity (HALC) (PU)	100	0
HNGS Spectroscopy Gamma Ray (HSGR) (GAPI)	0	100	Deep Induction Phasor-processed Resistivity (IDPH) (OHMM)	0.2	20	HiRes PhotoElectric Factor (HPEF) (---)	0	10
MAIN LOG			SFL Unaveraged (SFLU) (OHMM)	0.2	20	HiRes Bulk Density (HRHO) (G/C3)	1	3
					Tension (TENS) (LBF)		10000	0

PIP SUMMARY

Time Mark Every 60 S

Parameters

DLIS Name	Description	Value	
DIT-E: Dual Induction - E			
BHS	Borehole Status	OPEN	
BHT	Bottom Hole Temperature (used in calculations)	12	DEGC
DGF2	Deep 20 kHz Gain Factor	1.00789	
DPH2	Deep 20 kHz Phase Shift	-0.152394	DEG
DRE2	Deep Real 20 kHz Sonde Error Correction	16.357	MM/M
DSR2	Deep Sigma Reference (20 kHz)	1843	MM/M
DXE2	Deep Quad 20 kHz Sonde Error Correction	64.6326	MM/M
GCSE	Generalized Caliper Selection	CALI	
GDEV	Average Angular Deviation of Borehole from Normal	0	DEG
GGRD	Geothermal Gradient	0.018227	DC/M
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE	
IFRS	DIT-E Induction Frequency Selector	20	
IPHA	DIT-E Phasor Processing Mode	ALL	
IPRO	DIT-E Induction Processing Selector	PHASOR	
ITEN	DIT-E Temperature Enable	ENABLE	
MGF2	Medium 20 kHz Gain Factor	1.02964	
MPH2	Medium 20 kHz Phase Shift	-0.933067	DEG
MRE2	Medium Real 20 kHz Sonde Error Correction	-1.78642	MM/M
MSR2	Medium Sigma Reference (20 kHz)	3250	MM/M
MXE2	Medium Quad 20 kHz Sonde Error Correction	-34.2041	MM/M
SFCR	SFL Channel Ratio	1000	
SHT	Surface Hole Temperature	20	DEGC
HLDT-A: Hostile Environment Litho Density - A			
DHC	Density Hole Correction	BS	
DPPM	Density Porosity Processing Mode	HIRS	
QPPS	Quicklook Processing Pe Select	PEFL	
WMUD	Mud Weight	1.1	G/C3
APS-BA: Accelerator-Porosity Tool			
AASD	APS Software Version	5	
ABOS	APS Thermal and Array Detectors High Voltage Setting	1968.98	V
ADSO	APS Neutron Burst-Off Background Subtraction Switch	ON	
AFSD	APS Array Detectors Data Source Switch	Both	
AHCS	APS Far Detector High Voltage Setting	2052.03	V
AHSS	APS Holesize Correction Source	GCSE	
AMTY	APS Holesize Correction Switch	ON	
ANSD	APS Environmental Corrections Mud Type	WaterBaseBarite	
ASOS	APS Near Detector High Voltage Setting	1748.3	V
ATSS	APS Standoff Correction Switch	ON	
BHS	APS Temperature-Pressure-Salinity Correction Switch	OFF	
BHT	Borehole Status	OPEN	
BHT	Bottom Hole Temperature (used in calculations)	12	DEGC
DPPM	Density Porosity Processing Mode	HIRS	
FSAL	Formation Salinity	-50000	PPM
GCSE	Generalized Caliper Selection	CALI	
GDEV	Average Angular Deviation of Borehole from Normal	0	DEG
GGRD	Geothermal Gradient	0.018227	DC/M
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE	
NARC	APS Near/Array Calibration Ratio	1.06555	
NFRC	APS Near/Far Calibration Ratio	0.907568	
SHT	Surface Hole Temperature	20	DEGC
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	
BHT	Bottom Hole Temperature (used in calculations)	12	DEGC
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	
GDEV	Average Angular Deviation of Borehole from Normal	0	DEG
GGRD	Geothermal Gradient	0.018227	DC/M
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	-0.00234174	
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	
SHT	Surface Hole Temperature	20	DEGC
TPOS	Tool Position	ECCE	
VBA1	HNGS Detector 1 Variable Barite Factor Running Average	0.96881	
VBA2	HNGS Detector 2 Variable Barite Factor Running Average	0.969517	
System and Miscellaneous			
BS	Bit Size	9.875	IN
BSAL	Borehole Salinity	-50000.00	PPM
CSIZ	Current Casing Size	0.000	IN
CWEI	Casing Weight	0.00	LB/F
DFD	Drilling Fluid Density	1.10	G/C3
TD	Total Depth	-50000	M

Format: HLDT\_HR\_TCOM    Vertical Scale: 1:200    Graphics File Created: 14-Aug-2002 21:49

<b>OP System Version: 10C0-306</b>			
MCM			
DIT-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		

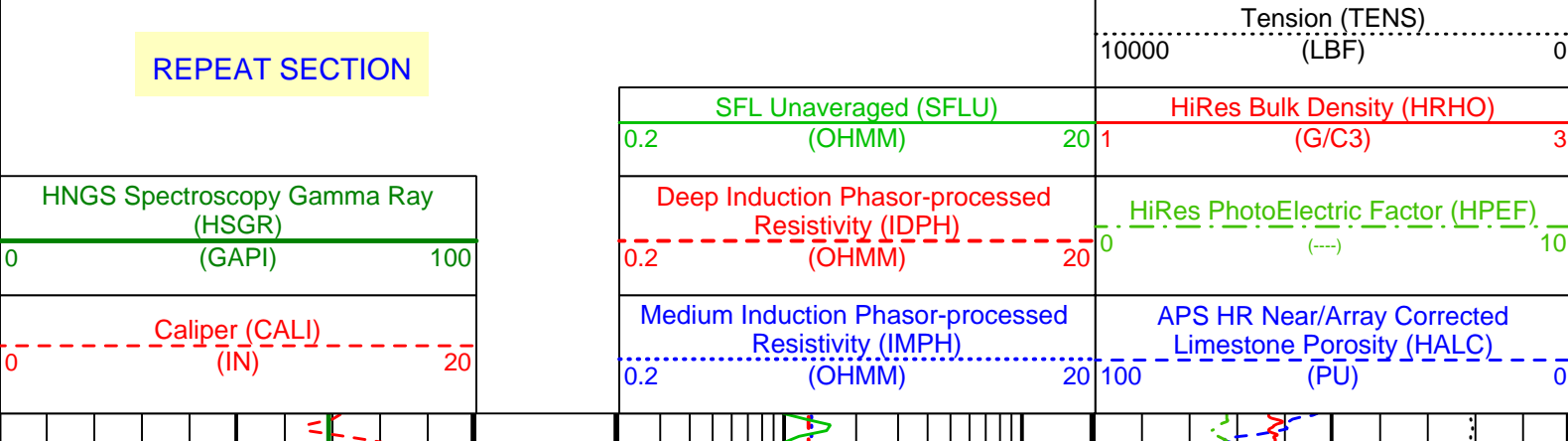
<b>Output DLIS Files</b>					
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REDUCE	PI_LDL_APS_NGS_008LUP	FN:10	PRODUCER	14-Aug-2002 21:49	

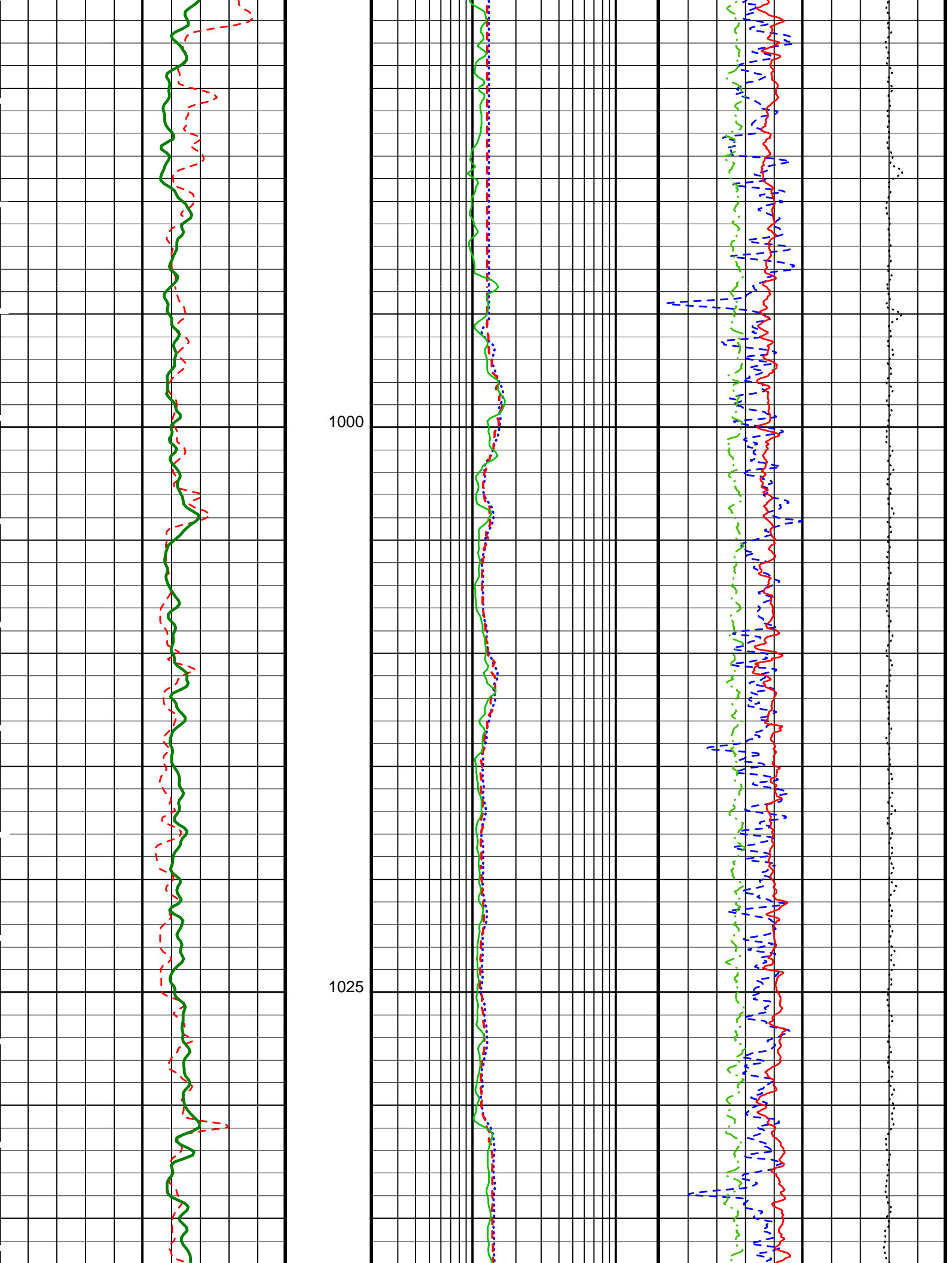
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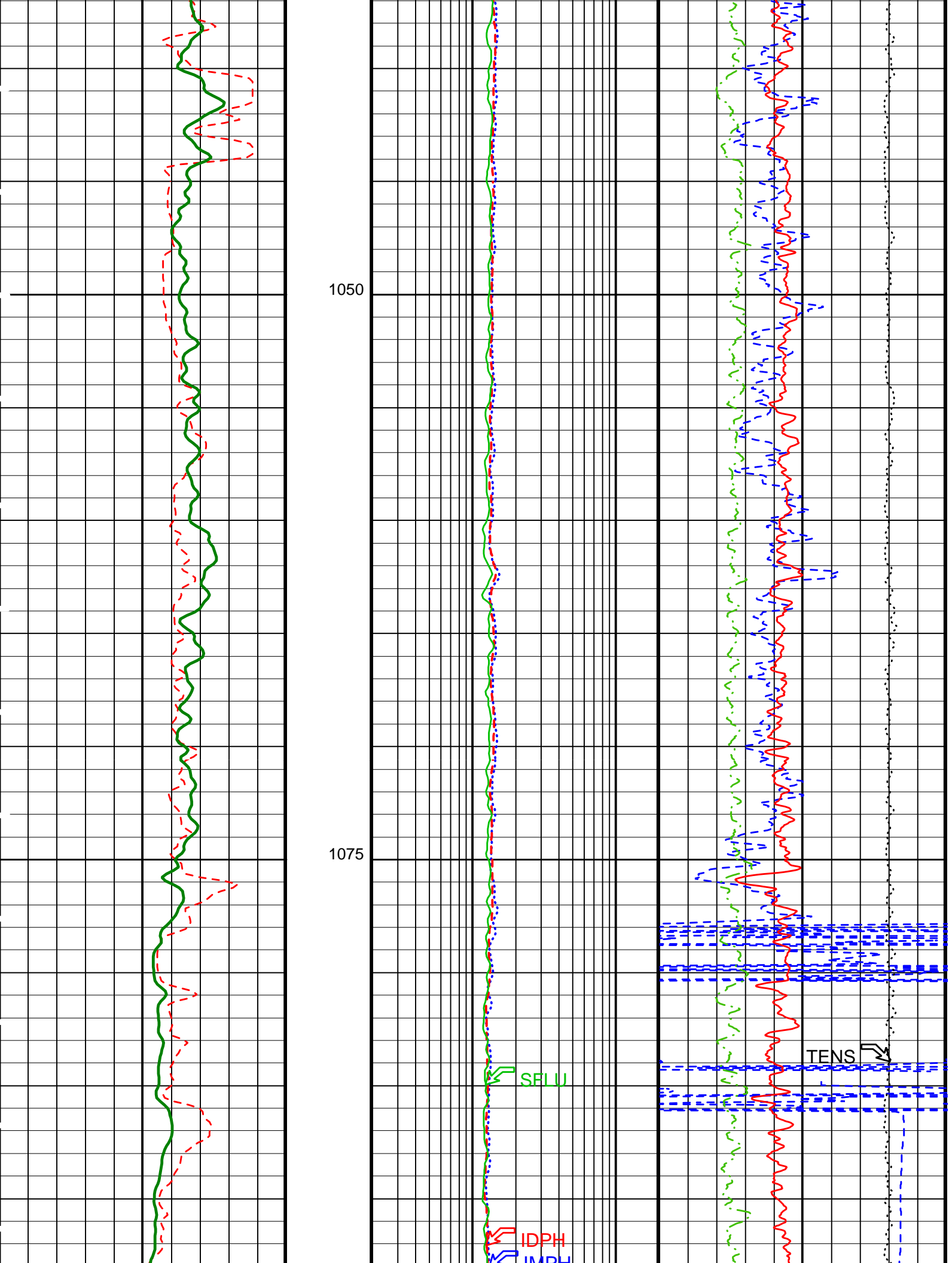
<b>OP System Version: 10C0-306</b>			
MCM			
DIT-E	10C0-306	HLDT-A	10C0-306
DTA-A	10C0-306	NPLC-B	OP10-KP1
APS-BA	OP10-KP1	HNGS-BA	OP10-KP1
DTC-H	10C0-306		

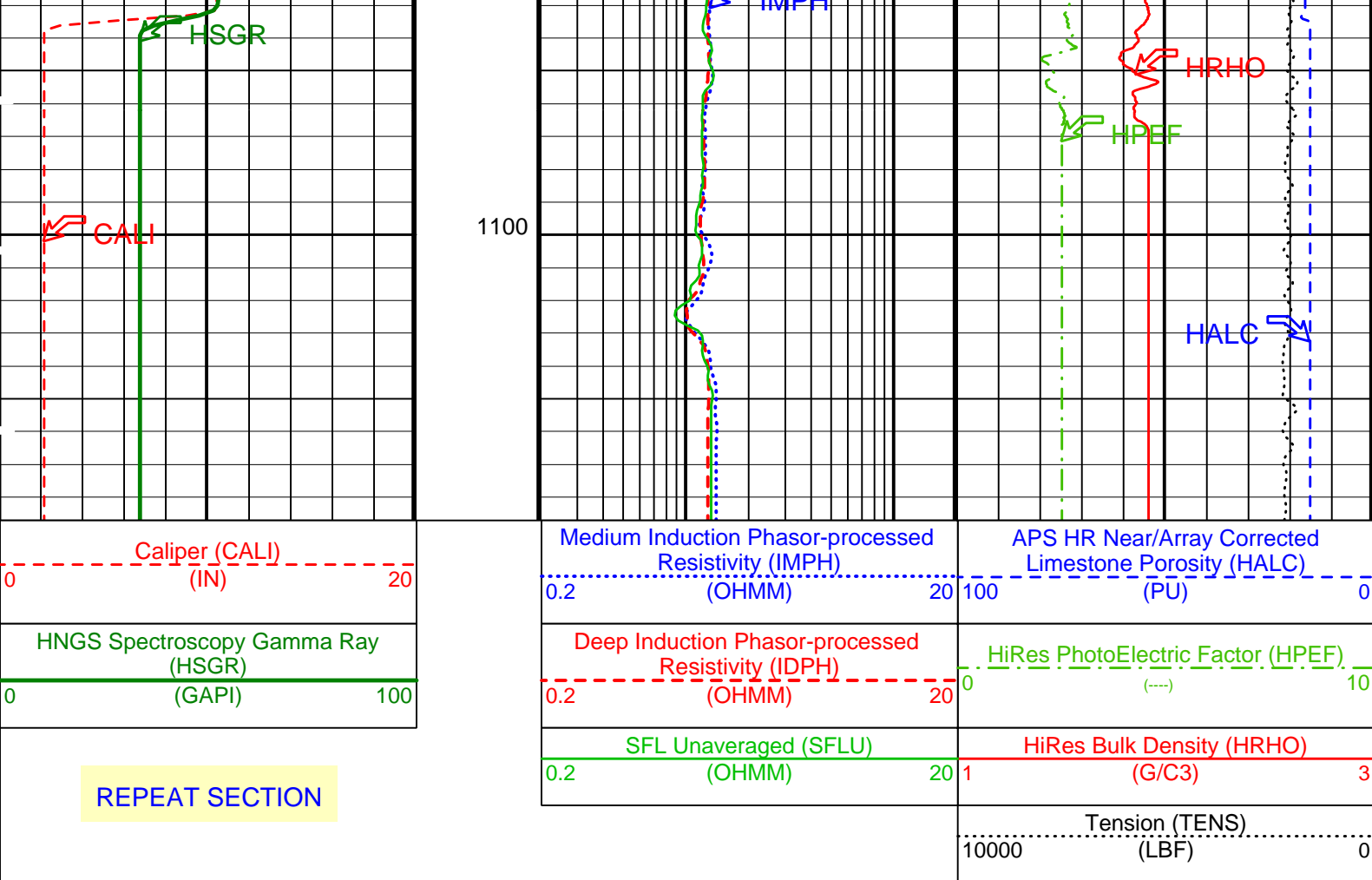
PIP SUMMARY

Time Mark Every 60 S









PIP SUMMARY

Time Mark Every 60 S

Parameters

DLIS Name	Description	Value
DIT-E: Dual Induction - E		
BHS	Borehole Status	OPEN
BHT	Bottom Hole Temperature (used in calculations)	12 DEGC
DGF2	Deep 20 kHz Gain Factor	1.00789
DPH2	Deep 20 kHz Phase Shift	-0.152394 DEG
DRE2	Deep Real 20 kHz Sonde Error Correction	16.357 MM/M
DSR2	Deep Sigma Reference (20 kHz)	1843 MM/M
DXE2	Deep Quad 20 kHz Sonde Error Correction	64.6326 MM/M
GCSE	Generalized Caliper Selection	CALI
GDEV	Average Angular Deviation of Borehole from Normal	0 DEG
GGRD	Geothermal Gradient	0.018227 DC/M
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE
IFRS	DIT-E Induction Frequency Selector	20
IPHA	DIT-E Phasor Processing Mode	ALL
IPRO	DIT-E Induction Processing Selector	PHASOR
ITEN	DIT-E Temperature Enable	ENABLE
MGF2	Medium 20 kHz Gain Factor	1.02964
MPH2	Medium 20 kHz Phase Shift	-0.933067 DEG
MRE2	Medium Real 20 kHz Sonde Error Correction	-1.78642 MM/M
MSR2	Medium Sigma Reference (20 kHz)	3250 MM/M
MXE2	Medium Quad 20 kHz Sonde Error Correction	-34.2041 MM/M
SFCR	SFL Channel Ratio	1000
SHT	Surface Hole Temperature	20 DEGC
HLDT-A: Hostile Environment Litho Density - A		
DHC	Density Hole Correction	BS
DPPM	Density Porosity Processing Mode	HIRS
QPPS	Quicklook Processing Pe Select	PEFL
WMUD	Mud Weight	1.1 G/C3
APS-BA: Accelerator-Porosity Tool		
AASD	APS Software Version	5
ABOS	APS Thermal and Array Detectors High Voltage Setting	1968.98 V
ADSO	APS Neutron Burst-Off Background Subtraction Switch	ON
AFSD	APS Array Detectors Data Source Switch	Both
AHCS	APS Far Detector High Voltage Setting	2052.03 V
	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	1748.3	V
ASOS	APS Standoff Correction Switch	ON	
ATSS	APS Temperature-Pressure-Salinity Correction Switch	OFF	
BHS	Borehole Status	OPEN	
BHT	Bottom Hole Temperature (used in calculations)	12	DEGC
DPPM	Density Porosity Processing Mode	HIRS	
FSAL	Formation Salinity	-50000	PPM
GCSE	Generalized Caliper Selection	CALI	
GDEV	Average Angular Deviation of Borehole from Normal	0	DEG
GGRD	Geothermal Gradient	0.018227	DC/M
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE	
NARC	APS Near/Array Calibration Ratio	1.06555	
NFRC	APS Near/Far Calibration Ratio	0.907568	
SHT	Surface Hole Temperature	20	DEGC
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	
BHT	Bottom Hole Temperature (used in calculations)	12	DEGC
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	
GDEV	Average Angular Deviation of Borehole from Normal	0	DEG
GGRD	Geothermal Gradient	0.018227	DC/M
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	-0.00989776	
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	
SHT	Surface Hole Temperature	20	DEGC
TPOS	Tool Position	ECCE	
VBA1	HNGS Detector 1 Variable Barite Factor Running Average	0.949044	
VBA2	HNGS Detector 2 Variable Barite Factor Running Average	0.95209	
System and Miscellaneous			
BS	Bit Size	9.875	IN
BSAL	Borehole Salinity	-50000.00	PPM
CSIZ	Current Casing Size	0.000	IN
CWEI	Casing Weight	0.00	LB/F
DFD	Drilling Fluid Density	1.10	G/C3
TD	Total Depth	-50000	M

Format: HLDT\_HR\_TCOM      Vertical Scale: 1:200      Graphics File Created: 15-Aug-2002 00:38

### OP System Version: 10C0-306 MCM

DIT-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		

### Output DLIS Files

DEFAULT	PI_LDL_APS_NGS_021LUP	FN:23	PRODUCER	15-Aug-2002 00:38
REDUCE	PI_LDL_APS_NGS_021LUP	FN:24	PRODUCER	15-Aug-2002 00:38

Company: Lamont Doherty

**Schlumberger**

Well: ODP Leg 204, Site 1245 E

Field: Hydrate Ridge

Ocean: Pacific

State: Oregon

Phasor Induction



Density/APS Porosity

Natural Gamma Ray (TCOMBO)