

**Company:** Lamont Doherty

**Well:** ODP Leg 201, Site 1225A EQP-2A

**Field:** Equatorial Pacific

**Rig:** JOIDES Resolution Ocean: Pacific

## IPLT Triple Combo with Phasor Induction

<b>Rig:</b> JOIDES Resolution <b>Field:</b> Equatorial Pacific <b>Location:</b> 2 Deg 46.22' N Latitude <b>Well:</b> ODP Leg 201, Site 1225A EQP-2A <b>Company:</b> Lamont Doherty		<b>LOCATION</b> 2 Deg 46.22' N Latitude 110 Deg 34.29' W Longitude Elev.: K.B. 11.3 m G.L. -3772 m D.F. 11 m	
Permanent Datum: _____ MSL Log Measured From: _____ RKB Drilling Measured From: _____ RKB Elev.: 0 m _____ 11.3 m above Perm. Datum			
API Serial No. _____	Max. Hole Devi. 0 deg	Longitude _____	Latitude _____

Logging Date	11-Feb-2002
Run Number	1
Depth Driller	4091 m
Schlumberger Depth	4092 m
Bottom Log Interval	4087 m
Top Log Interval	3772 m
Casing Driller Size @ Depth	0.000 in @ 3852 m
Casing Schlumberger	3852 m
Bit Size	11.438 in

Type Fluid In Hole		Septilite/Saltwater	
Density	Viscosity		
Fluid Loss	PH	1.07 g/cm3	
Source Of Sample		mudpit	
RM @ Measured Temperature		0.235 ohm.m @	33 degC @
RMF @ Measured Temperature		@	@
RMC @ Measured Temperature		@	@
Source RMF	RMC	none	none
RM @ MRT	RMF @ MRT	0.434 @ 8	@ @ 8
Maximum Recorded Temperatures		8 degC	
Circulation Stopped	Time	10-Feb-2002	20:00
Logger On Bottom	Time	11-Feb-2002	5:15
Unit Number	Location	99	Houston ODP
Recorded By		K. Swain	
Witnessed By		Gilles Guerin	

Logging Date	11-Feb-2002	Run 1	Run 2	Run
Run Number	1			
Depth Driller	4091 m			
Schlumberger Depth	4092 m			
Bottom Log Interval	4087 m			
Top Log Interval	3772 m			
Casing Driller Size @ Depth	0.000 in @ 3852 m			
Casing Schlumberger	3852 m			
Bit Size	11.438 in			

Type Fluid In Hole		Septilite/Saltwater	
Density	Viscosity		
Fluid Loss	PH	1.07 g/cm3	
Source Of Sample		mudpit	
RM @ Measured Temperature		0.235 ohm.m @	33 degC @
RMF @ Measured Temperature		@	@
RMC @ Measured Temperature		@	@
Source RMF	RMC	none	none
RM @ MRT	RMF @ MRT	0.434 @ 8	@ @ 8
Maximum Recorded Temperatures		8 degC	
Circulation Stopped	Time	10-Feb-2002	20:00
Logger On Bottom	Time	11-Feb-2002	5:15
Unit Number	Location	99	Houston ODP
Recorded By		K. Swain	
Witnessed By		Gilles Guerin	

DISCLAIMER

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OTHER SERVICES1  
OS1: HLDT/APS/HNGS  
OS2:  
OS3:  
OS4:  
OS5:

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

REMARKS: RUN NUMBER 1  
Hole cored with APC, XCB, BCS.  
Log presented in meters below rig floor.  
Lamont Temperature tool (TAP) was run on Triple Combo.  
Wireline Heave Compensator (WHC) was used on all descents.  
Sepiolite mud was used to displace the hole during the wiper trip after drillin  
Drillers TD 4091 mbrf, Driller pipe depth: 3852 mbrf, Sea Floor: 3772 mbrf.  
Schlumberger TD 4092 mbrf.  
Drill Pipe Schlumberger 3852 mbrf.  
Sea Floor Schlumberger 3772 mbrf.  
10khz and 40khz induction frequencies not used in resistivity measurement.  
Software bug shows APS calibration not done for part of calibration.  
Low background countrate on HNGS master calibration signifcices a weak internal  
source used for check of detector and not used in calibration.

REMARKS: RUN NUMBER 2

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

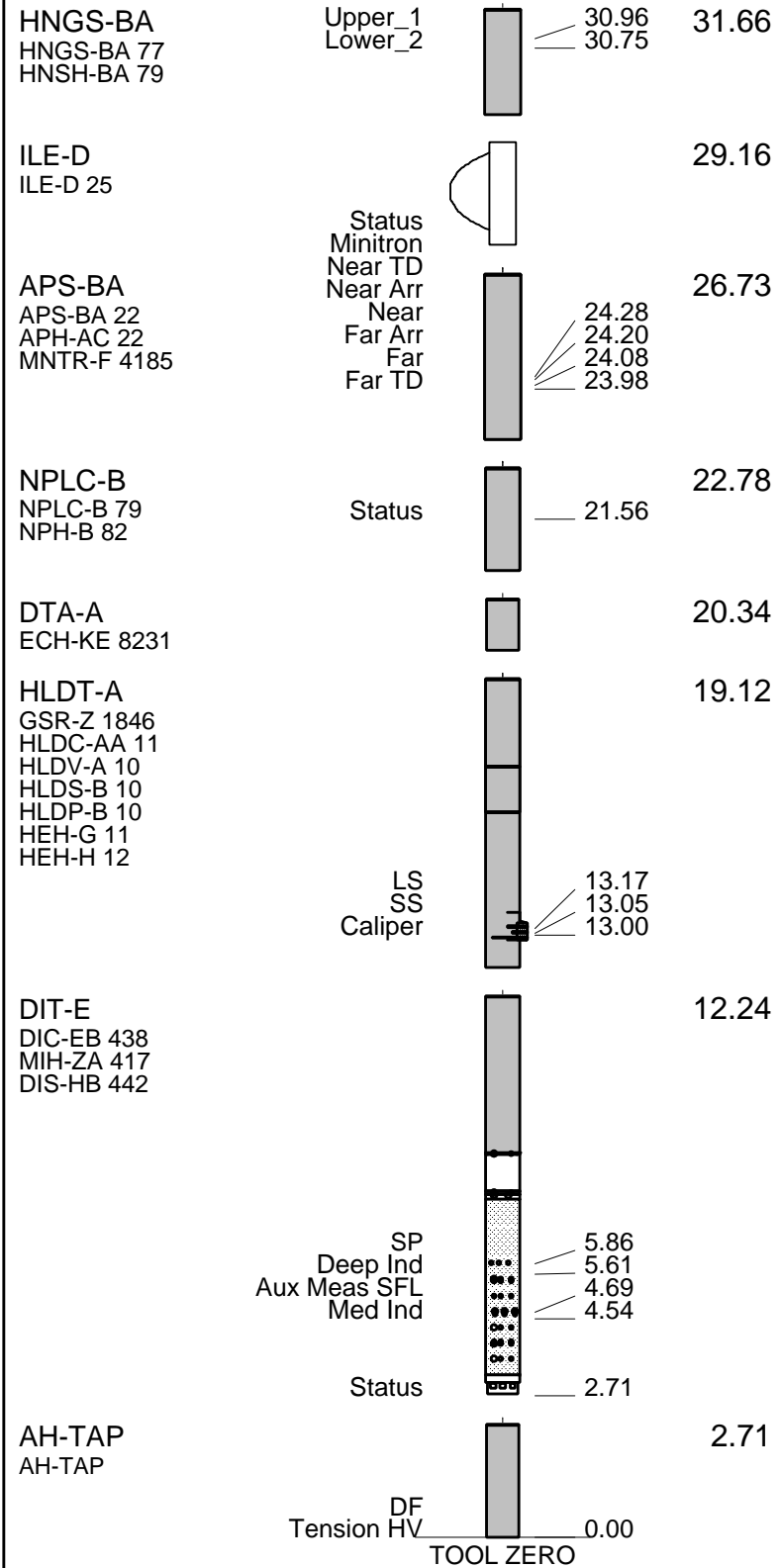
RUN 2  
SERVICE ORDER #:  
PROGRAM VERSION:  
FLUID LEVEL:

LOGGED INTERVAL	START	STOP	LOGGED INTERVAL	START	STOP

EQUIPMENT DESCRIPTION

RUN 1	RUN 2
<p><b>SURFACE EQUIPMENT</b> SFT-281 24 SFT-178 4722 GSR-U 135 GSR-U/Y WITM (DTS)-A</p>	

DOWNHOLE EQUIPMENT	
<p>LEH-QT 35.14 LEH-QT 1726 DTC-H CTEM 33.98 ECH-KC 9343 TelStatus 34.25 SGT-N Gamma Ray ToolStatu 33.34 SGH-K 2448 33.06 OCG TD 2500</p>	



TOOL ZERO

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

### Output DLIS Files

DEFAULT	PI_LDL_APS_NGS_016LUP	FN:15	PRODUCER	11-Feb-2002 05:19	4091.9 M	3751.3 M
REDUCE	PI_LDL_APS_NGS_016LUP	FN:16	PRODUCER	11-Feb-2002 05:19	4091.9 M	3749.3 M

### OP System Version: 10C0-306

MCM

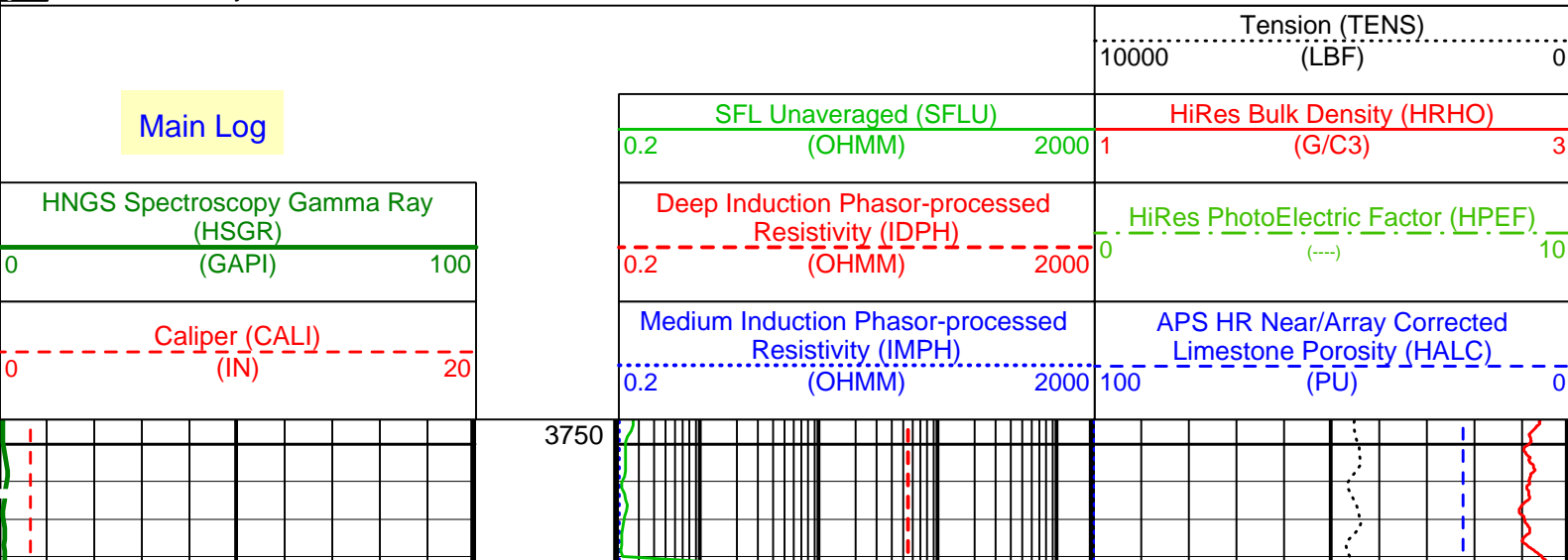
DIT-E	10C0-306	HLDT-A	10C0-306
DTA-A	10C0-306	NPLC-B	10C0-306
APS-BA	10C0-306	HNGS-BA	10C0-306
SGT-N	10C0-306	DTC-H	10C0-306

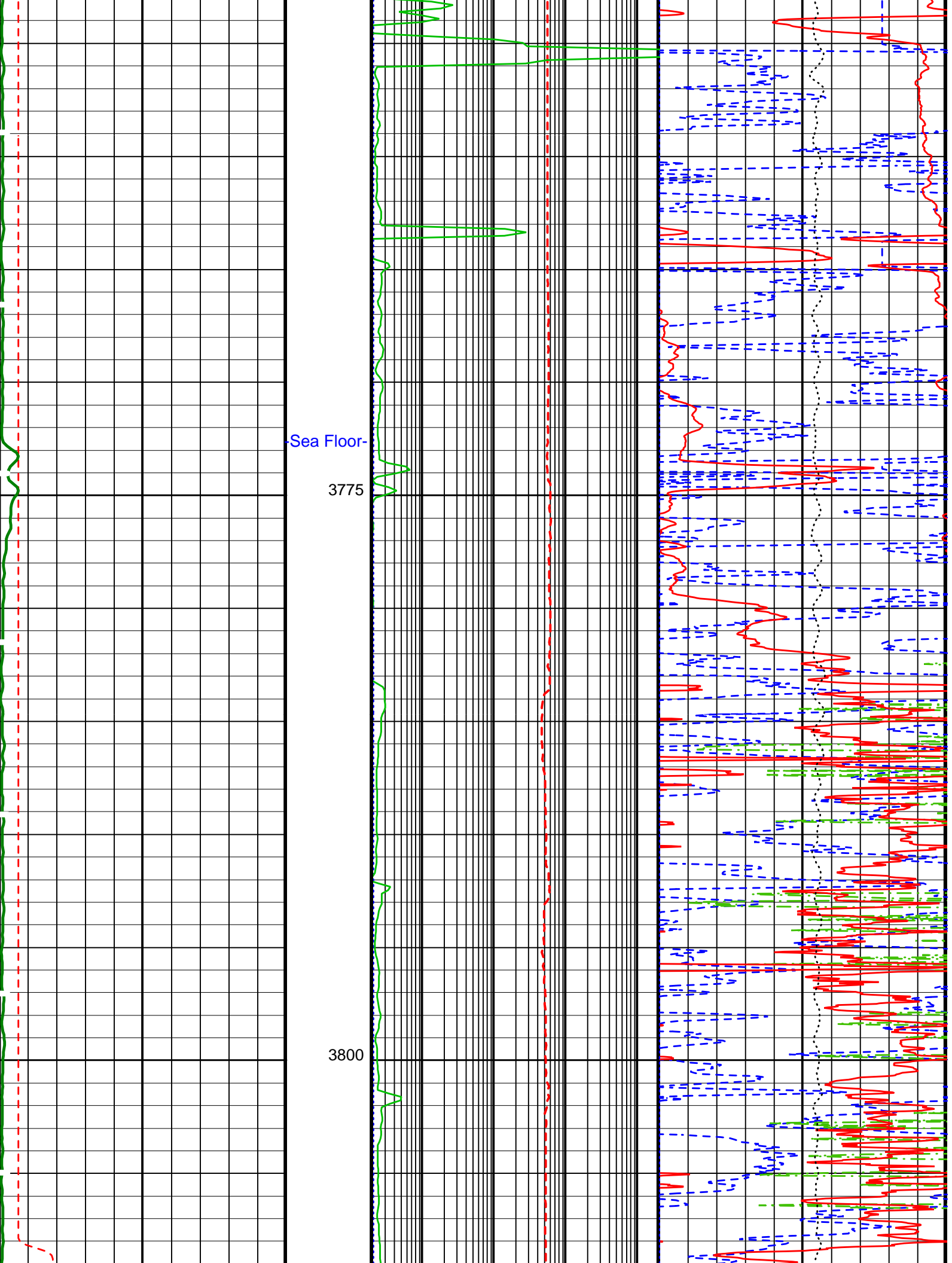
### Changed Parameter Summary

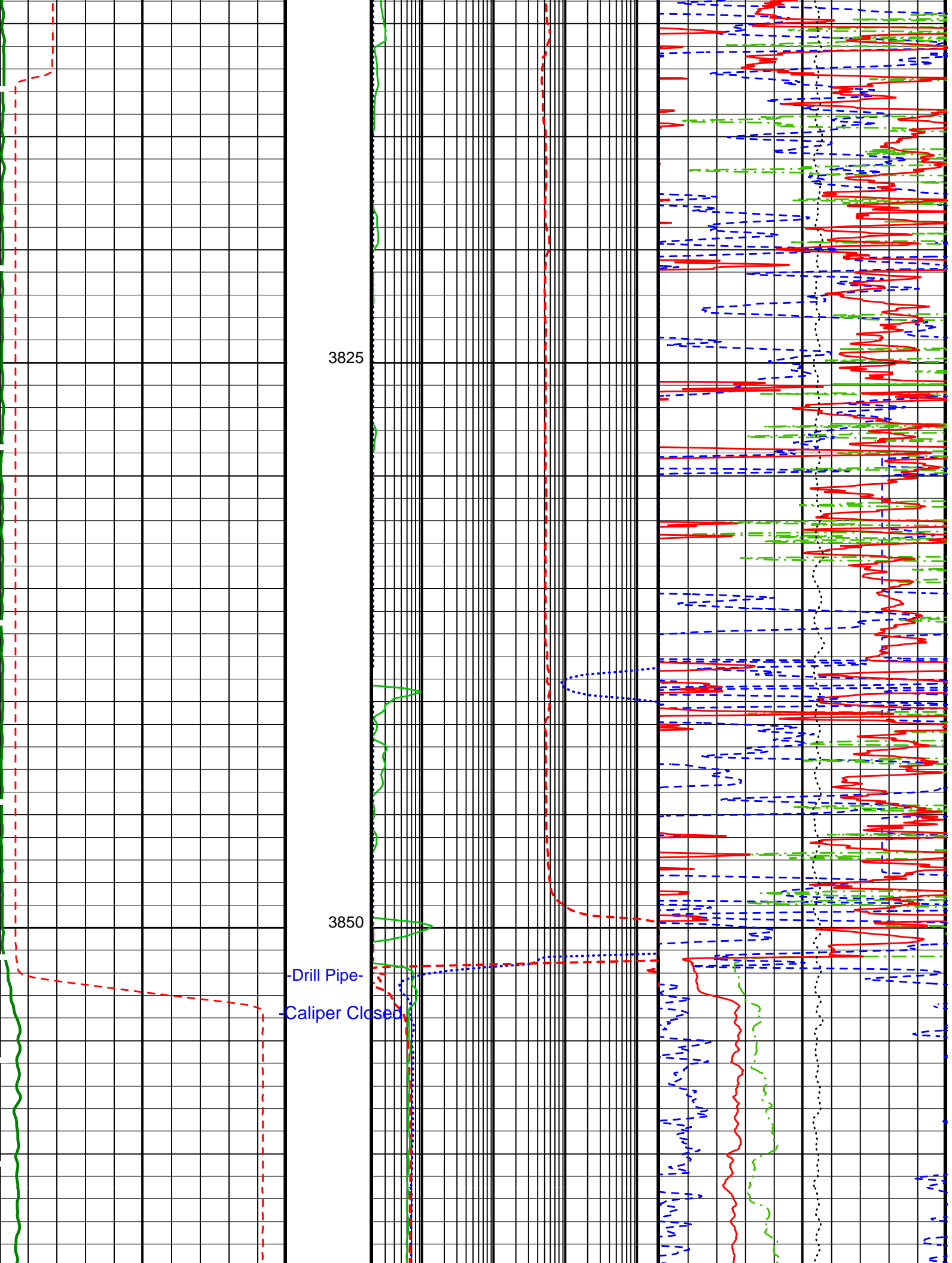
DLIS Name	New Value	Previous Value	Depth & Time
GCSE	CALI	BS	4089.1 05:22:33

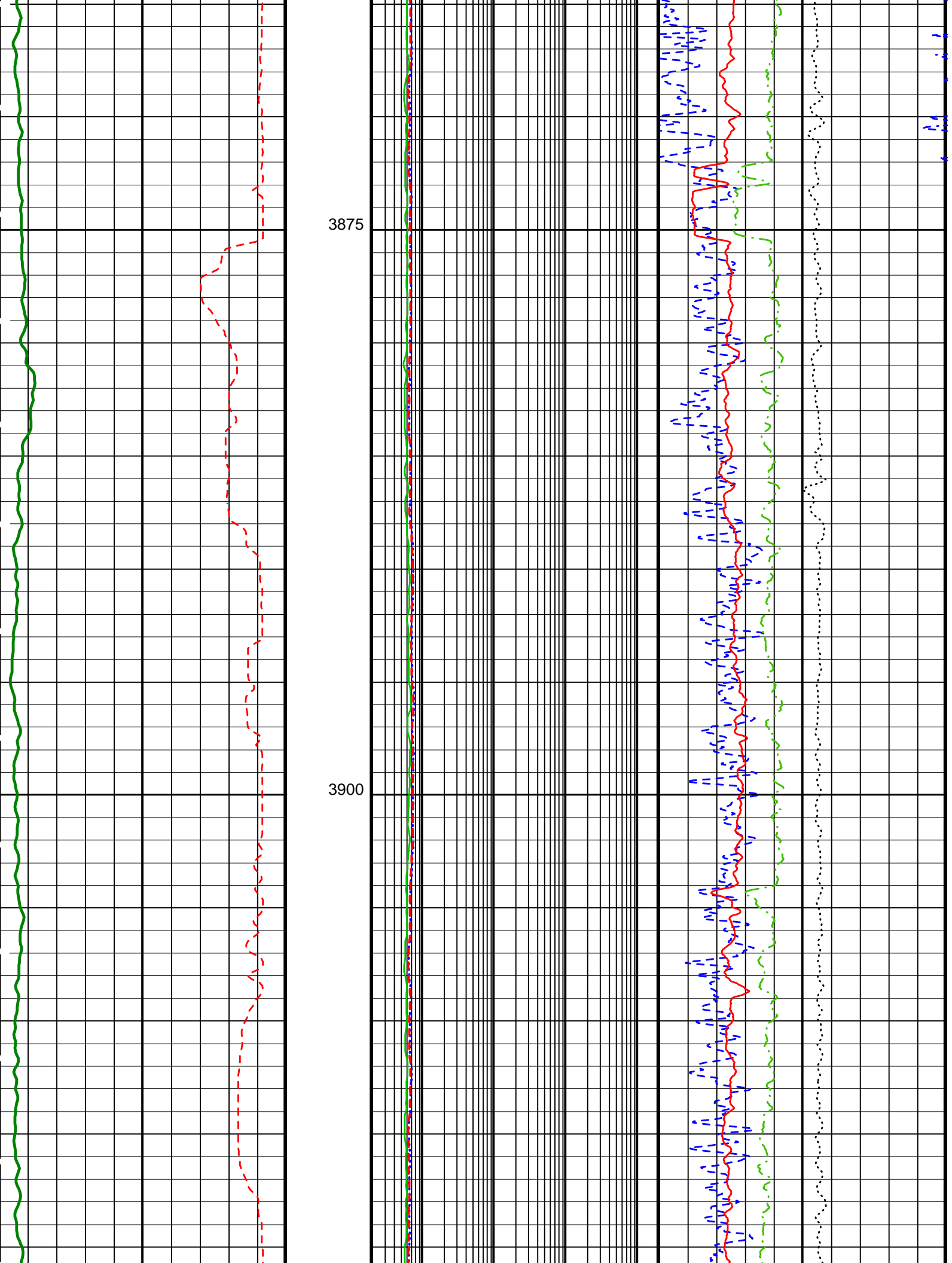
#### PIP SUMMARY

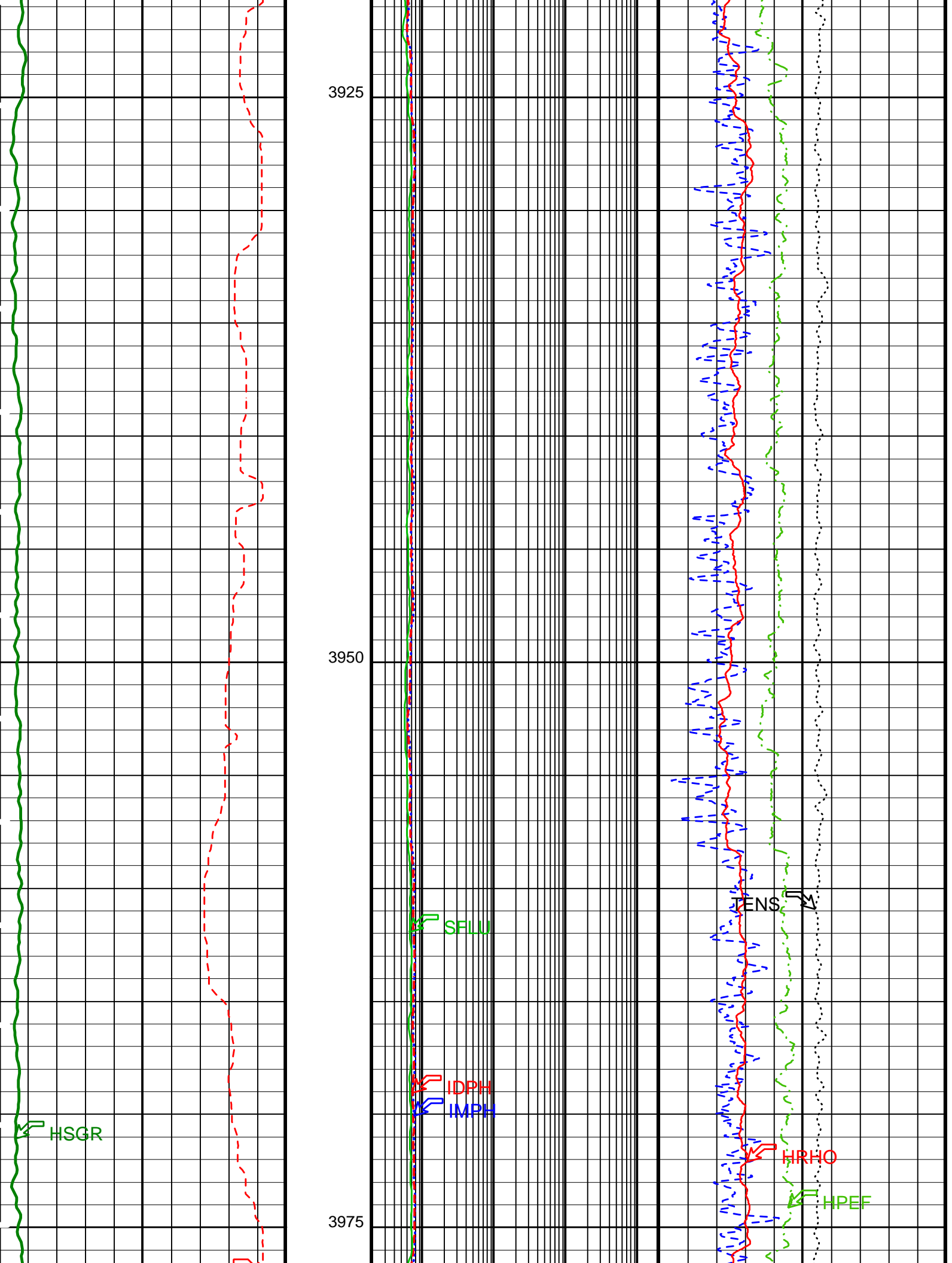
Time Mark Every 60 S



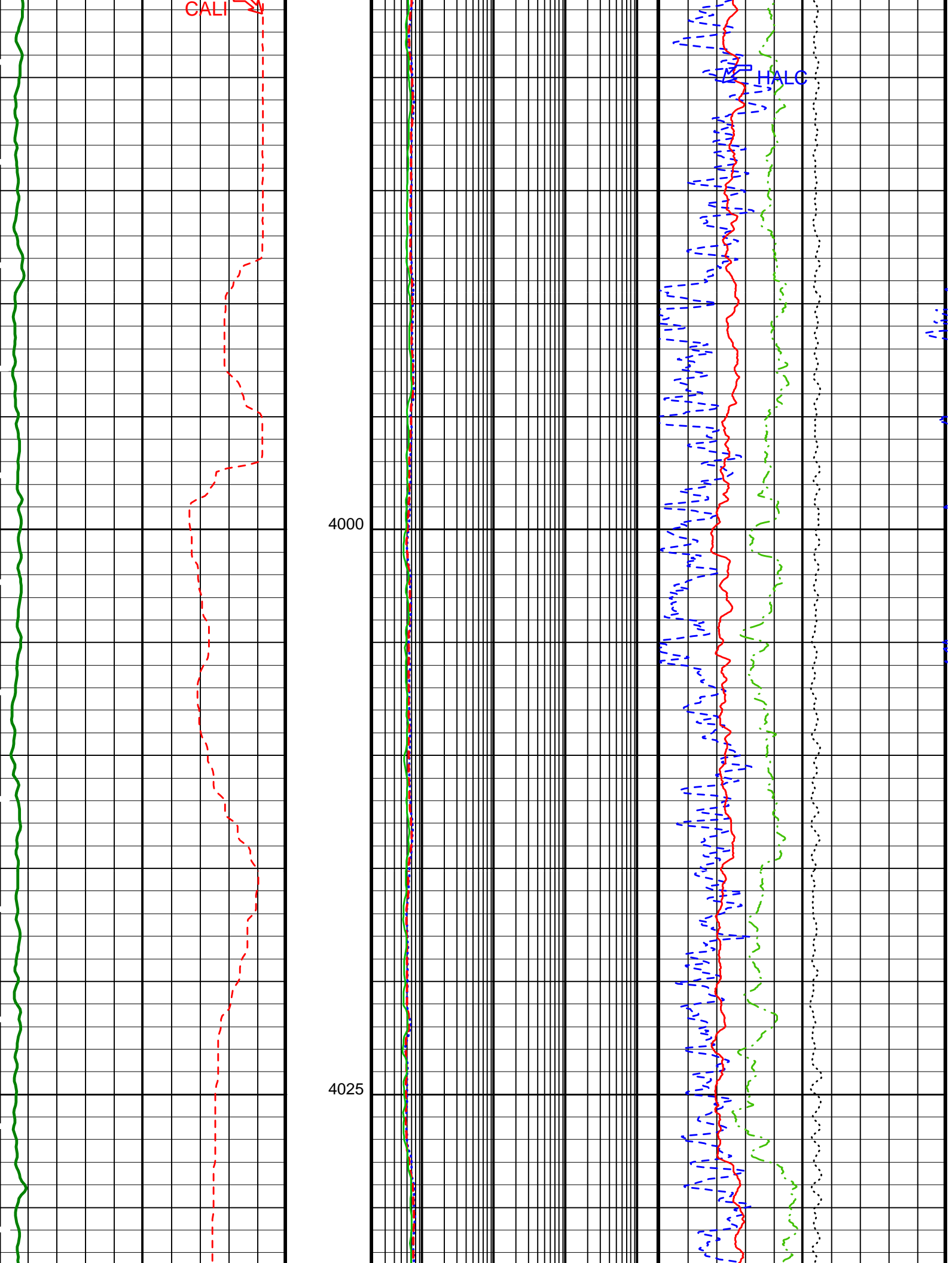


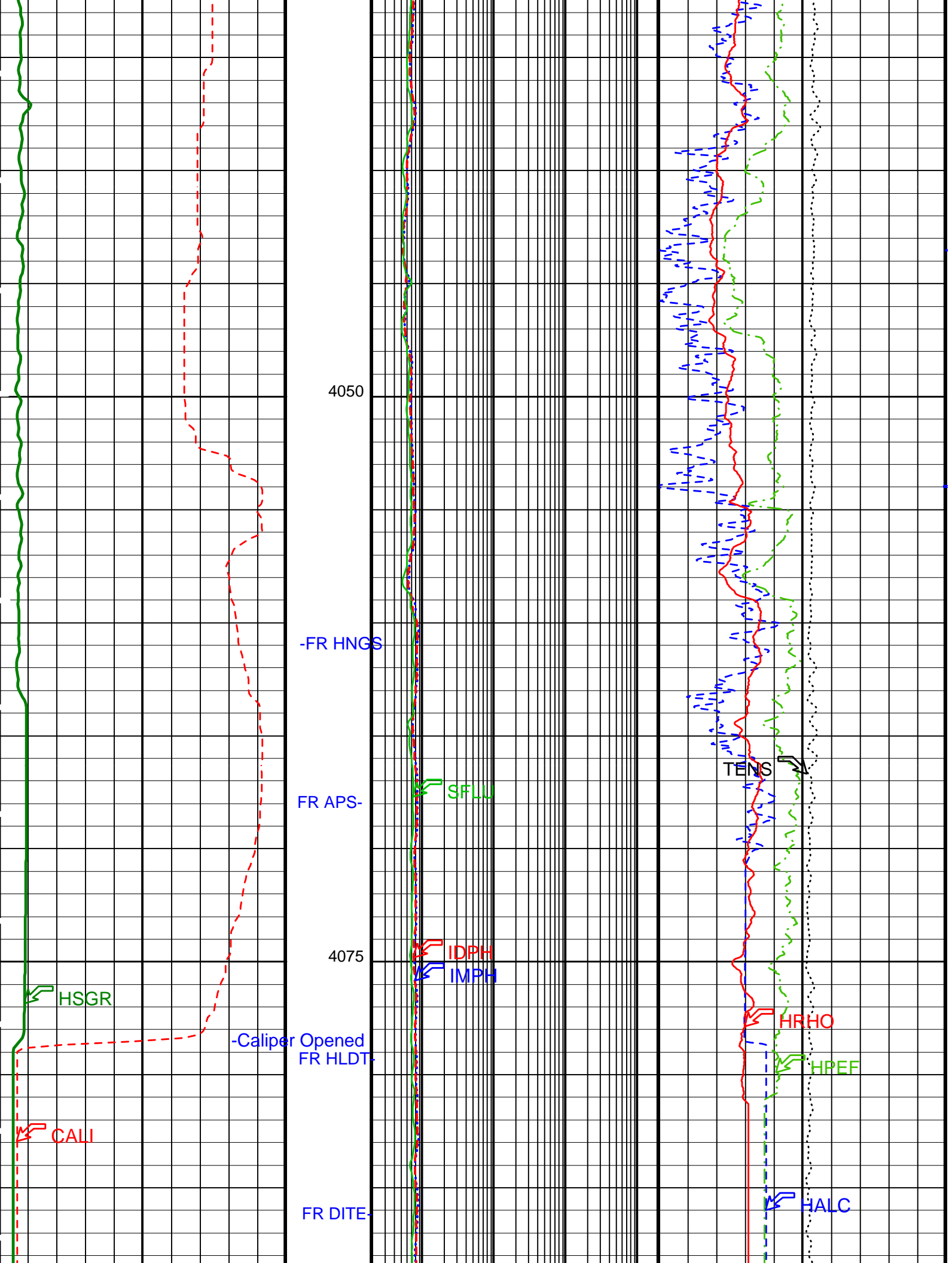


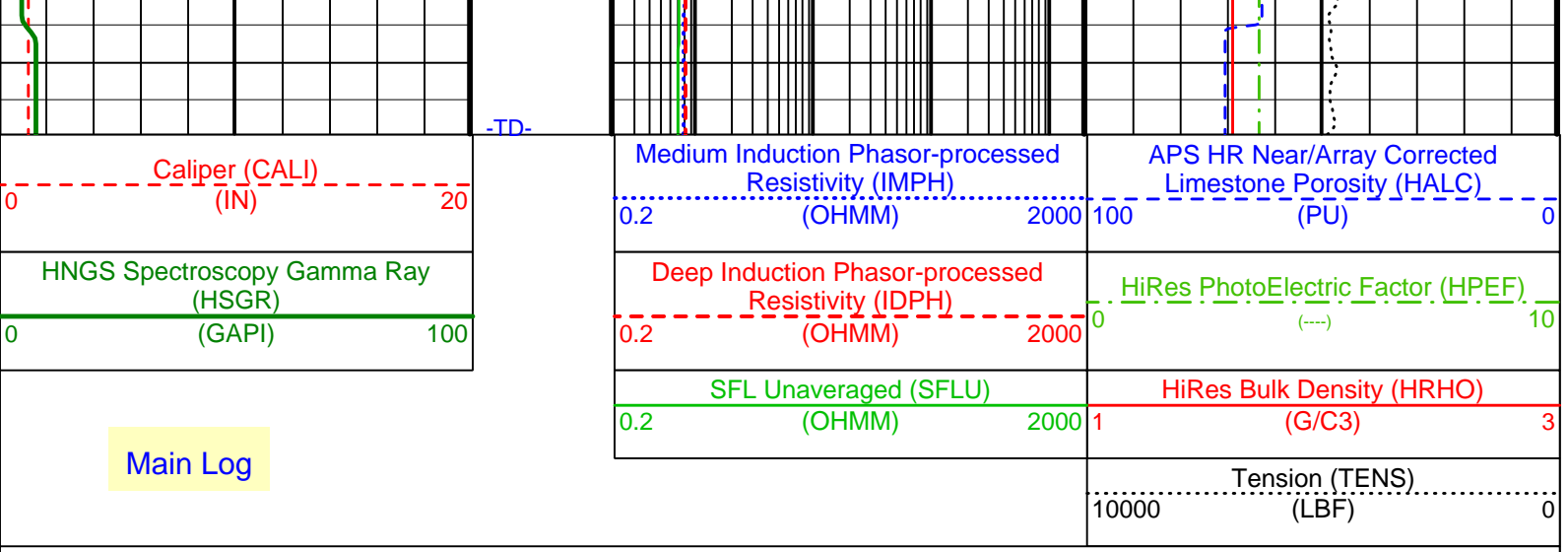












PIP SUMMARY

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)	40 DEGF
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	BS
GDEV	Average Angular Deviation of Borehole from Normal	0 DEG
GGRD	Geothermal Gradient	0.01 DF/F
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	68 DEGF
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	1.07 G/C3
APS-BA: Accelerator-Porosity Tool		
APS Software Version		5
AASD	APS Thermal and Array Detectors High Voltage Setting	1968.98 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	2052.03 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	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)	40 DEGF
DPPM	Density Porosity Processing Mode	HIRS
FSAL	Formation Salinity	-50000 PPM
GCSE	Generalized Caliper Selection	BS
GDEV	Average Angular Deviation of Borehole from Normal	0 DEG
GGRD	Geothermal Gradient	0.01 DF/F
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE
NARC	APS Near/Array Calibration Ratio	1.0631
NFRC	APS Near/Far Calibration Ratio	0.902243
SHT	Surface Hole Temperature	68 DEGF
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	1	
BHS	Borehole Status	OPEN	
BHT	Bottom Hole Temperature (used in calculations)	40	DEGF
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	
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	-0.001858	
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	68	DEGF
TPOS	Tool Position	ECCE	
VBA1	HNGS Detector 1 Variable Barite Factor Running Average	1.01514	
VBA2	HNGS Detector 2 Variable Barite Factor Running Average	1.08847	
SGT-N: Scintillation Gamma-Ray - N			
BHS	Borehole Status	OPEN	
BHT	Bottom Hole Temperature (used in calculations)	40	DEGF
DPPM	Density Porosity Processing Mode	HIRS	
GCSE	Generalized Caliper Selection	BS	
GDEV	Average Angular Deviation of Borehole from Normal	0	DEG
GGRD	Geothermal Gradient	0.01	DF/F
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE	
SHT	Surface Hole Temperature	68	DEGF
System and Miscellaneous			
BS	Bit Size	11.438	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	1.07	G/C3
TD	Total Depth	13421.9	FT

Format: HLDT\_HR\_TCOM    Vertical Scale: 1:200    Graphics File Created: 11-Feb-2002 05:19

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

DIT-E	10C0-306	HLDT-A	10C0-306
DTA-A	10C0-306	NPLC-B	10C0-306
APS-BA	10C0-306	HNGS-BA	10C0-306
SGT-N	10C0-306	DTC-H	10C0-306

**Output DLIS Files**

DEFAULT	PI_LDL_APS_NGS_016LUP	FN:15	PRODUCER	11-Feb-2002 05:19
REDUCE	PI_LDL_APS_NGS_016LUP	FN:16	PRODUCER	11-Feb-2002 05:19

**Output DLIS Files**

DEFAULT	PI_LDL_APS_NGS_017LUP	FN:17	PRODUCER	11-Feb-2002 06:40	4094.2 M	3927.7 M
REDUCE	PI_LDL_APS_NGS_017LUP	FN:18	PRODUCER	11-Feb-2002 06:40	4094.2 M	3927.7 M

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

DIT-E	10C0-306	HLDT-A	10C0-306
DTA-A	10C0-306	NPLC-B	10C0-306
APS-BA	10C0-306	HNGS-BA	10C0-306
SGT-N	10C0-306	DTC-H	10C0-306

**Changed Parameter Summary**

DLIS Name	New Value	Previous Value	Depth & Time
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PIP SUMMARY

Time Mark Every 60 S

Tension (TENS)  
10000 (LBF) 0

REPEAT SECTION

SFL Unaveraged (SFLU)  
0.2 (OHMM) 2000

HiRes Bulk Density (HRHO)  
1 (G/C3) 3

HNGS Spectroscopy Gamma Ray  
(HSGR)

Deep Induction Phasor-processed  
Resistivity (IDPH)

HiRes PhotoElectric Factor (HPEF)

(GAPI) 0 100

0.2 (OHMM) 2000

0 (---) 10

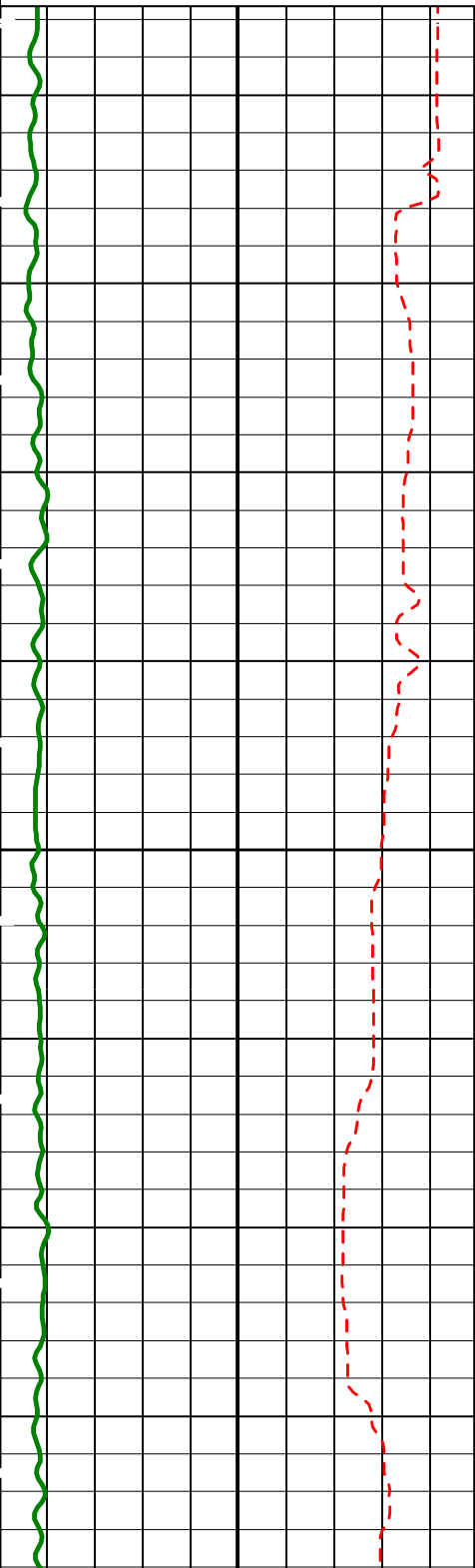
Caliper (CALI)  
(IN) 0 20

Medium Induction Phasor-processed  
Resistivity (IMPH)

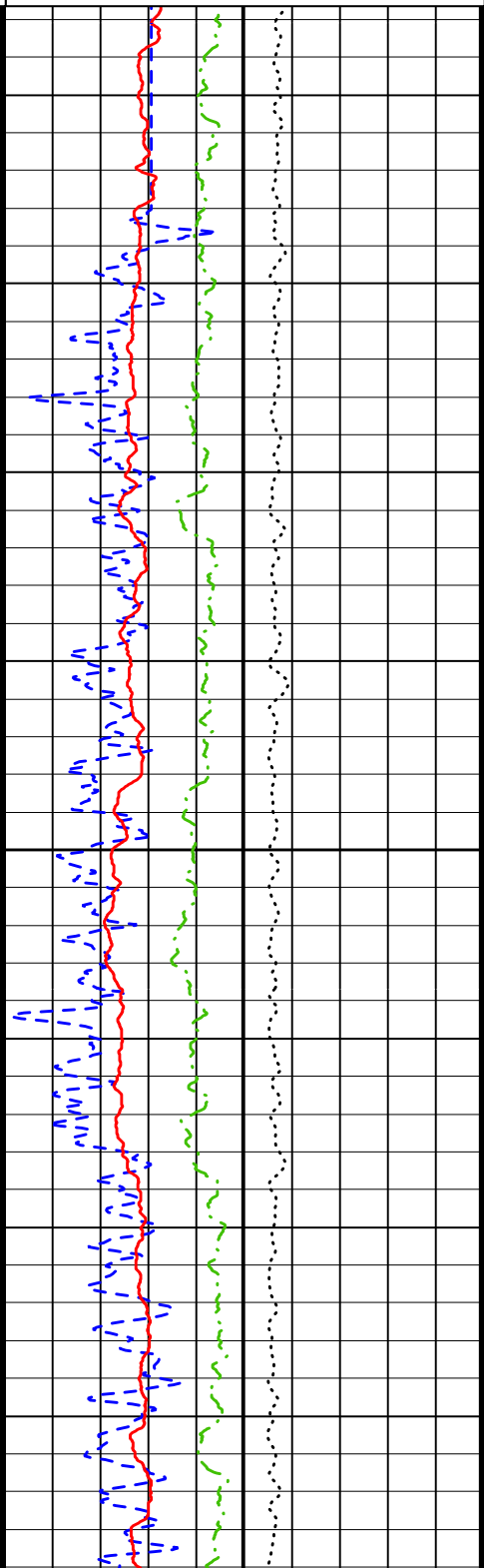
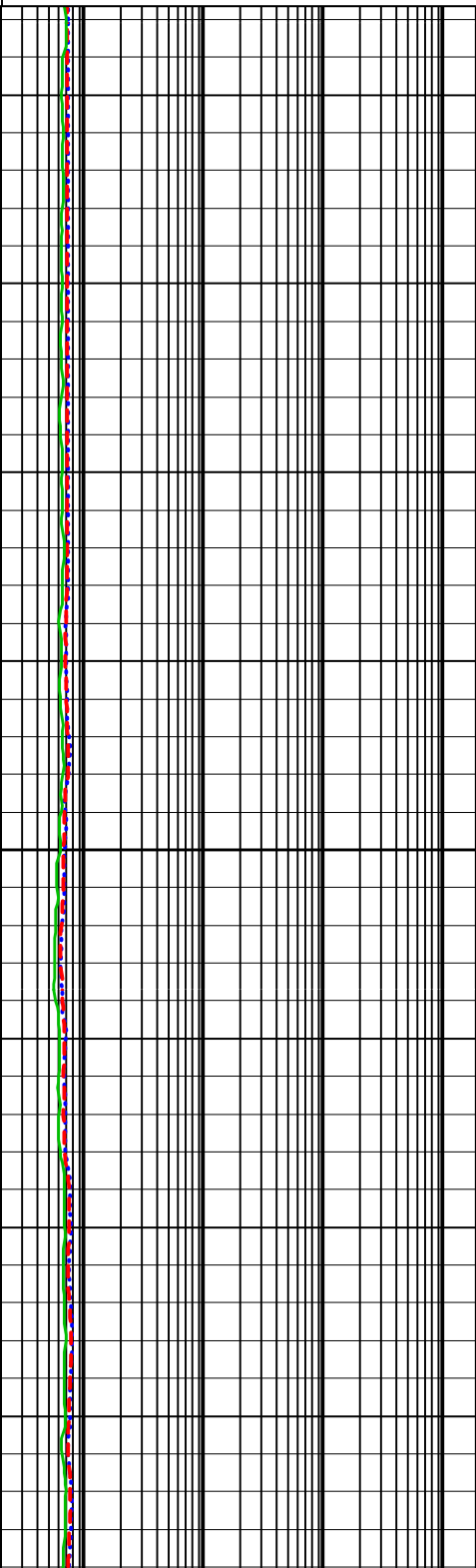
APS HR Near/Array Corrected  
Limestone Porosity (HALC)

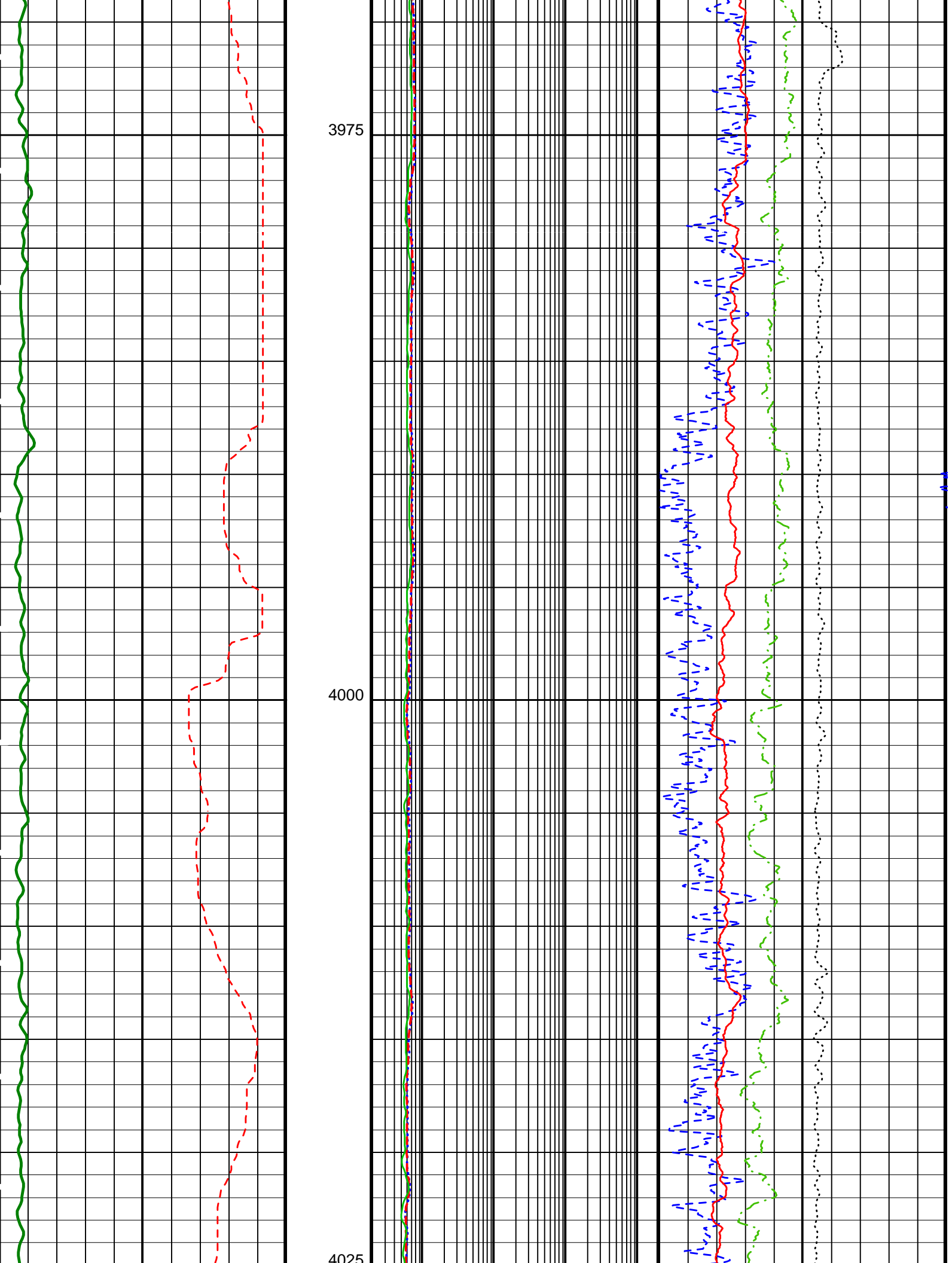
0.2 (OHMM) 2000

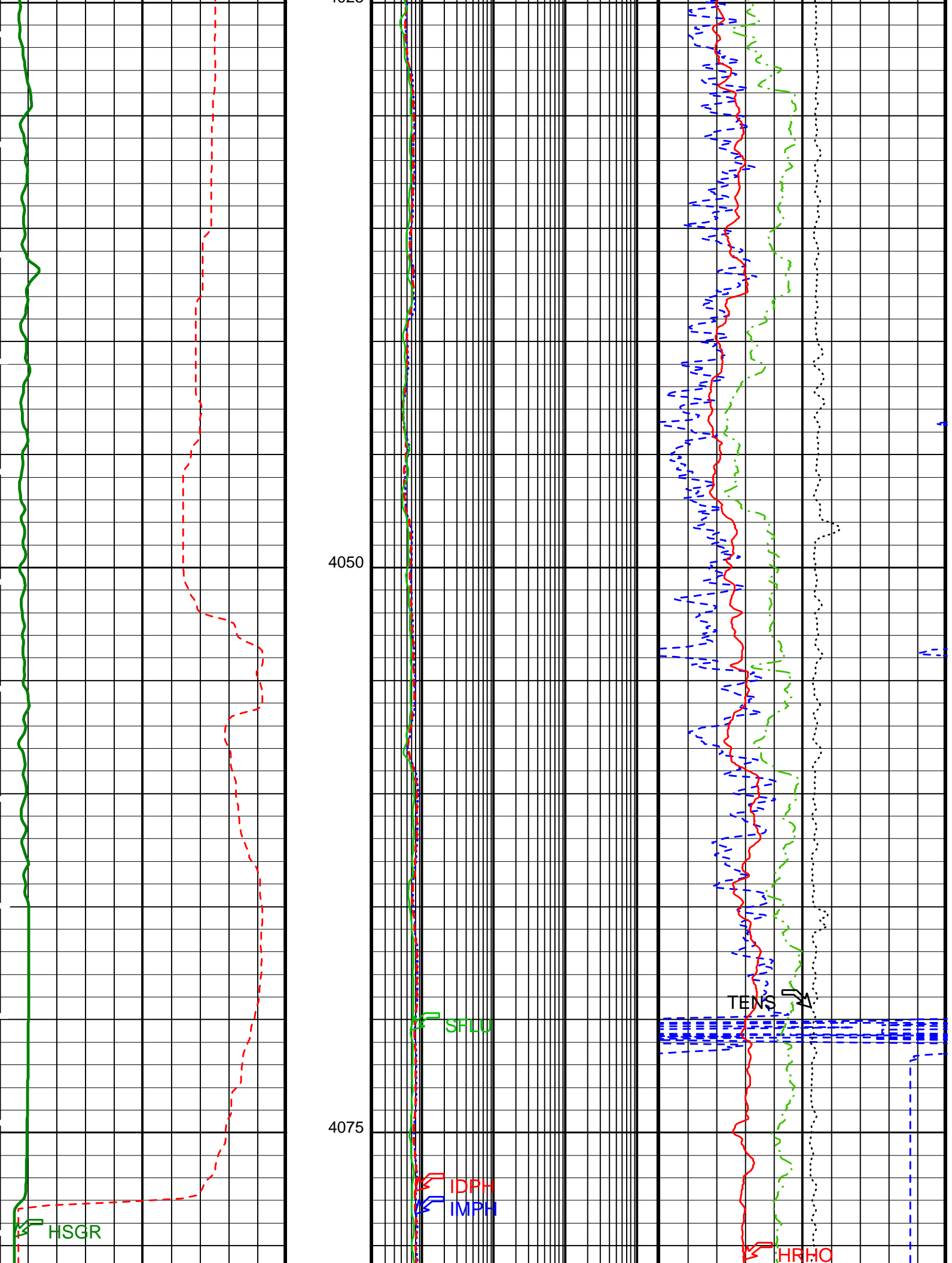
100 (PU) 0

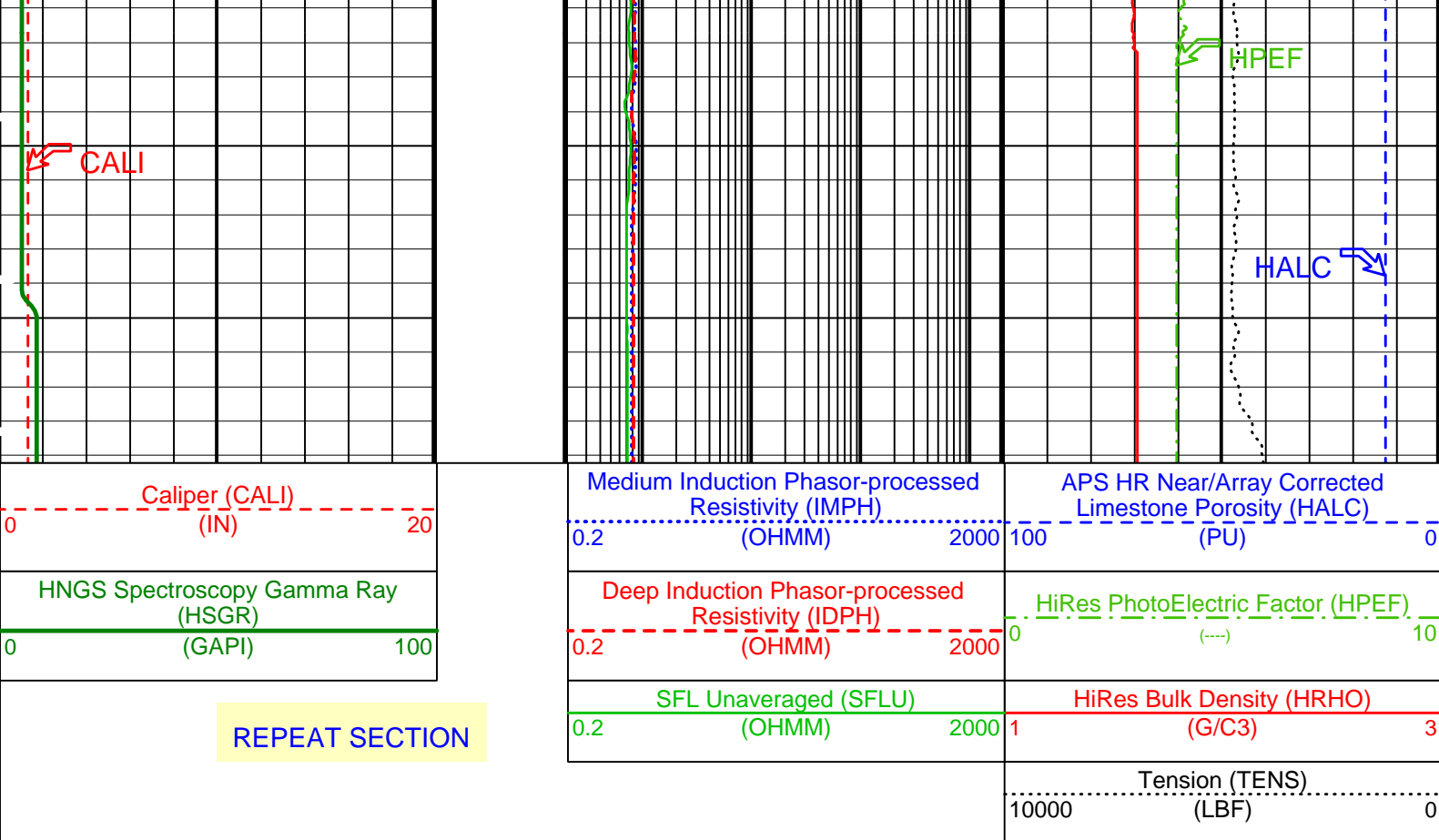


3950









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)	40 DEGF
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	0.01 DF/F
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	68 DEGF
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	1.07 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
AFSD	APS Far Detector High Voltage Setting	2052.03 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	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)	40	DEGF
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	0.01	DF/F
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE	
NARC	APS Near/Array Calibration Ratio	1.0631	
NFRC	APS Near/Far Calibration Ratio	0.902243	
SHT	Surface Hole Temperature	68	DEGF
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)	40	DEGF
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	0.01	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	-0.00675083	
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	68	DEGF
TPOS	Tool Position	ECCE	
VBA1	HNGS Detector 1 Variable Barite Factor Running Average	0.998744	
VBA2	HNGS Detector 2 Variable Barite Factor Running Average	1.16884	
SGT-N: Scintillation Gamma-Ray - N			
BHS	Borehole Status	OPEN	
BHT	Bottom Hole Temperature (used in calculations)	40	DEGF
DPPM	Density Porosity Processing Mode	HIRS	
GCSE	Generalized Caliper Selection	CALI	
GDEV	Average Angular Deviation of Borehole from Normal	0	DEG
GGRD	Geothermal Gradient	0.01	DF/F
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE	
SHT	Surface Hole Temperature	68	DEGF
System and Miscellaneous			
BS	Bit Size	11.438	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	1.07	G/C3
TD	Total Depth	13435	FT

Format: HLDT\_HR\_TCOM      Vertical Scale: 1:200      Graphics File Created: 11-Feb-2002 06:40

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

DIT-E	10C0-306	HLDT-A	10C0-306
DTA-A	10C0-306	NPLC-B	10C0-306
APS-BA	10C0-306	HNGS-BA	10C0-306
SGT-N	10C0-306	DTC-H	10C0-306

### Output DLIS Files

DEFAULT	PI_LDL_APS_NGS_017LUP	FN:17	PRODUCER	11-Feb-2002 06:40
REDUCE	PI_LDL_APS_NGS_017LUP	FN:18	PRODUCER	11-Feb-2002 06:40

Company: Lamont Doherty

**Schlumberger**

Well: ODP Leg 201, Site 1225A EQP-2A

Field: Equatorial Pacific

Rig: JOIDES Resolution

Ocean: Pacific

IPLT Triple Combo  
with Phasor Induction