Schlumberger

Company: Lamont Doherty

Well: Expedition 320T Site U1330A
Field: Ontog-Java Plateau(Equatorial NWPacific)
Rig: JOIDES Resolution Ocean: Pacific

Rig: JOIDES Resolution
Field: Ontog-Java Plateau(Equatorial N
Location: Latitude: N 3* 36.38'
Well: Expedition 320T Site U1330A
Company: Lamont Doherty

Phasor Induction
Natural Gamma
Spectroscopy

LOCATION

Latitude: N 3* 36.38'
Longitude: E 156* 37.48'

Elev.: K.B. 11.00 m
G.L. -2816.00 m
D.F. 11.00 m

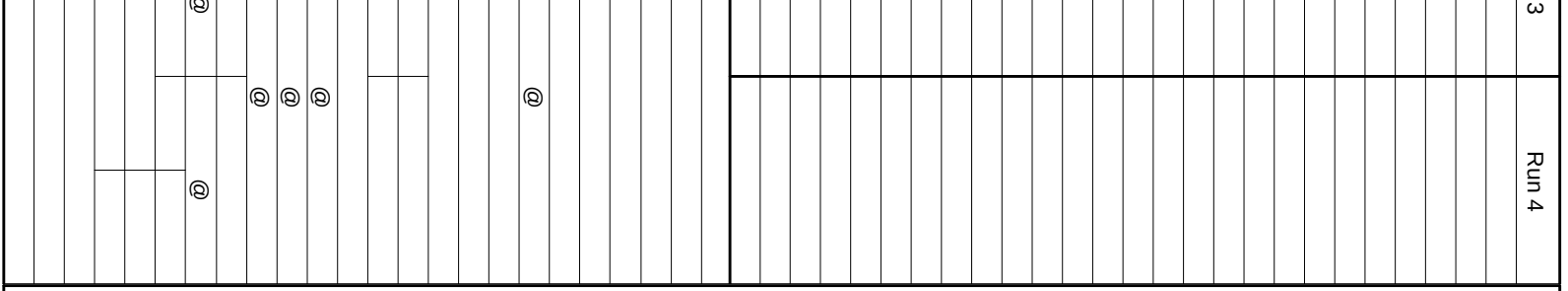
Permanent Datum: Mean Sea Level — Elev.: 0.00 m
Log Measured From: Drill Floor — 11.00 m above Perm. Datum
Drilling Measured From: Drill Floor

API Serial No.	Max. Hole Devi.	Longitude	Latitude
	0 deg		

Logging Date	17-Feb-2009			
Run Number	1			
Depth Driller	3370 m			
Schlumberger Depth	3367 m			
Bottom Log Interval	3365 m			
Top Log Interval	2750 m			
Casing Driller Size @ Depth	4.500 in	@ 2912 m	@	
Casing Schlumberger	2909 m			
Bit Size	9.875 in			
Type Fluid In Hole				
MUD Density / Viscosity	1.1 g/cm3			
MUD Fluid Loss / PH				
MUD Source Of Sample	N/A			
RM @ Measured Temperature	@		@	
RMF @ Measured Temperature	@		@	
RMC @ Measured Temperature	@		@	
Source RMF / RMC	N/A	N/A		
RM @ MRT / RMF @ MRT	@ 10	@ 10	@	@
Maximum Recorded Temperatures	10 degC			
Circulation Stopped / Time	17-Feb-2009	3:00		
Logger On Bottom / Time	17-Feb-2009	23:00		
Unit Number / Location	625003	Houston		
Recorded By	K. Swain			
Witnessed By	E. Meissner, G. Guerrin			

	Run 1	Run 2	Run

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		
MUD Density / Viscosity		
MUD Fluid Loss / PH		
MUD 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		



DISCLAIMER

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OTHER SERVICES1	OTHER SERVICES2
OS1: FMS/HNGS	OS1:
OS2: MSS/Caliper/HNGS	OS2:
OS3:	OS3:
OS4:	OS4:
OS5:	OS5:

REMARKS: RUN NUMBER 1	REMARKS: RUN NUMBER 2
HNGS Master Calibration out of date. Calibration source required onboard before	
a new calibration can be made. All HNGS data can be reprocessed with the new	
calibration once this calibration is made after the expedition.	
320T transit testing expedition tested the new Active Heave Compensator for wire	
line. Data recorded does not reflect the 5 m difference in AHC retracted to	
compensation position. All recorded depths do not reflect the -5m that was	
experienced below drill pipe.	
AHC was activated below drill pipe only.	
Uplog has LCAL closed from 3279m to 3335m as winch experienced pulling problems.	
Main Uplog does not show the sea floor through drill pipe.	

RUN 1

SERVICE ORDER #:
PROGRAM VERSION: 17C0-154
FLUID LEVEL:

LOGGED INTERVAL	START	STOP

RUN 2

SERVICE ORDER #:
PROGRAM VERSION:
FLUID LEVEL:

LOGGED INTERVAL	START	STOP

EQUIPMENT DESCRIPTION

RUN 1

SURFACE EQUIPMENT

GSR-U 1154
WITM (DTS)-A

DOWNHOLE EQUIPMENT

LEH-QT 23.22
LEH-QT 1726

DTC-H 22.33
ECH-KC 1777
DTCH0-A 8798

CTEM
TelStatus
ToolStatu

22.05
21.41

HNGS-BA 21.41

RUN 2

HNGS-BA 27
HNSH-BA 27

Upper_1 20.71
Lower_2 20.50

HNGC-B 18.92
HNGH-A 30
HNGC-B 202
HNGC Stat 18.38

LDSC-B 17.85
LDSH-A 126
LDSC-B 521
LDSC Stat 17.32

HLDS 16.78
GSR-Z 2326
HLDV-D 35
HLDS-D 35
HEH-H 35
HLDP-C 35
Caliper
SS LS Status 12.73

DTA-A 11.96
ECH-KE 8231
DTA-A 8231

GPIT-A/B 10.74
GPIC-A 840
GPIH-A 2864

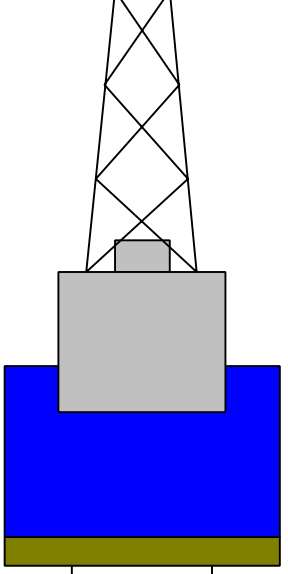
DIT-E 9.52
DIC-EB 438
MIH-ZA 417
DIS-HB 442

SP 3.15
Deep Ind 2.90
Aux Meas SFL 1.98
Med Ind 1.83
HV DF
Status GPIT
Tension 0.00

TOOL ZERO

MAXIMUM STRING DIAMETER 3.75 IN
MEASUREMENTS RELATIVE TO TOOL ZERO
ALL LENGTHS IN METERS

Production String	(in) OD	ID	(M) MD	Well Schematic	(M) MD	(in) OD	ID	Casing String

Kelly Bushing Elevation		11.0				
Derrick Floor Elevation		11.0				
Mean Sea Level		0.0				
				0.0	5.000	Casing String
				2816	9.875	Borehole Segment
				2912	5.0	Casing Shoe
				3370		

Input DLIS Files

DEFAULT	PI_LDL_NGS_055LUP	FN:80	PRODUCER	17-Feb-2009 23:02	3367.3 M	2749.6 M

Output DLIS Files

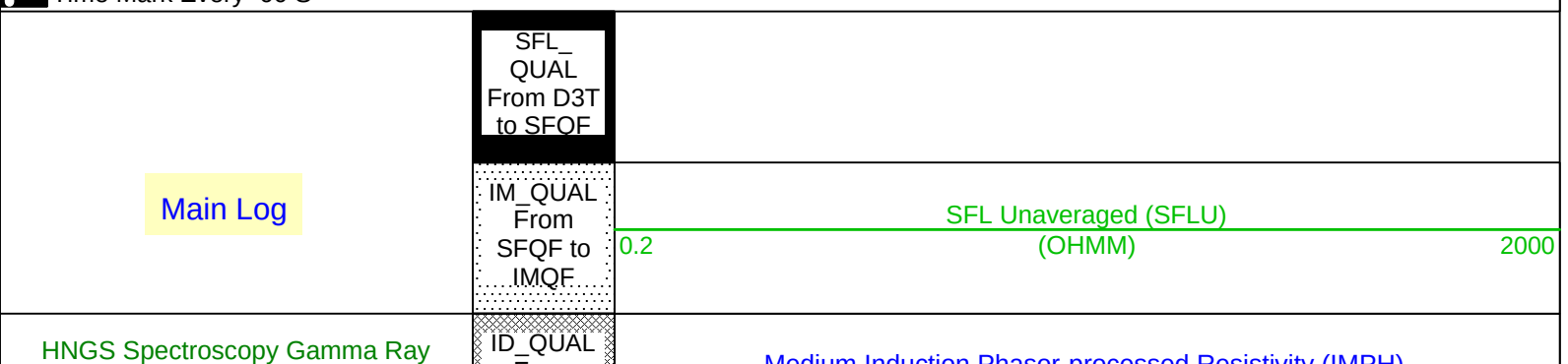
DEFAULT	PI_LDL_NGS_092PUP	FN:148	PRODUCER	03-Mar-2009 16:42	3367.3 M	2749.6 M

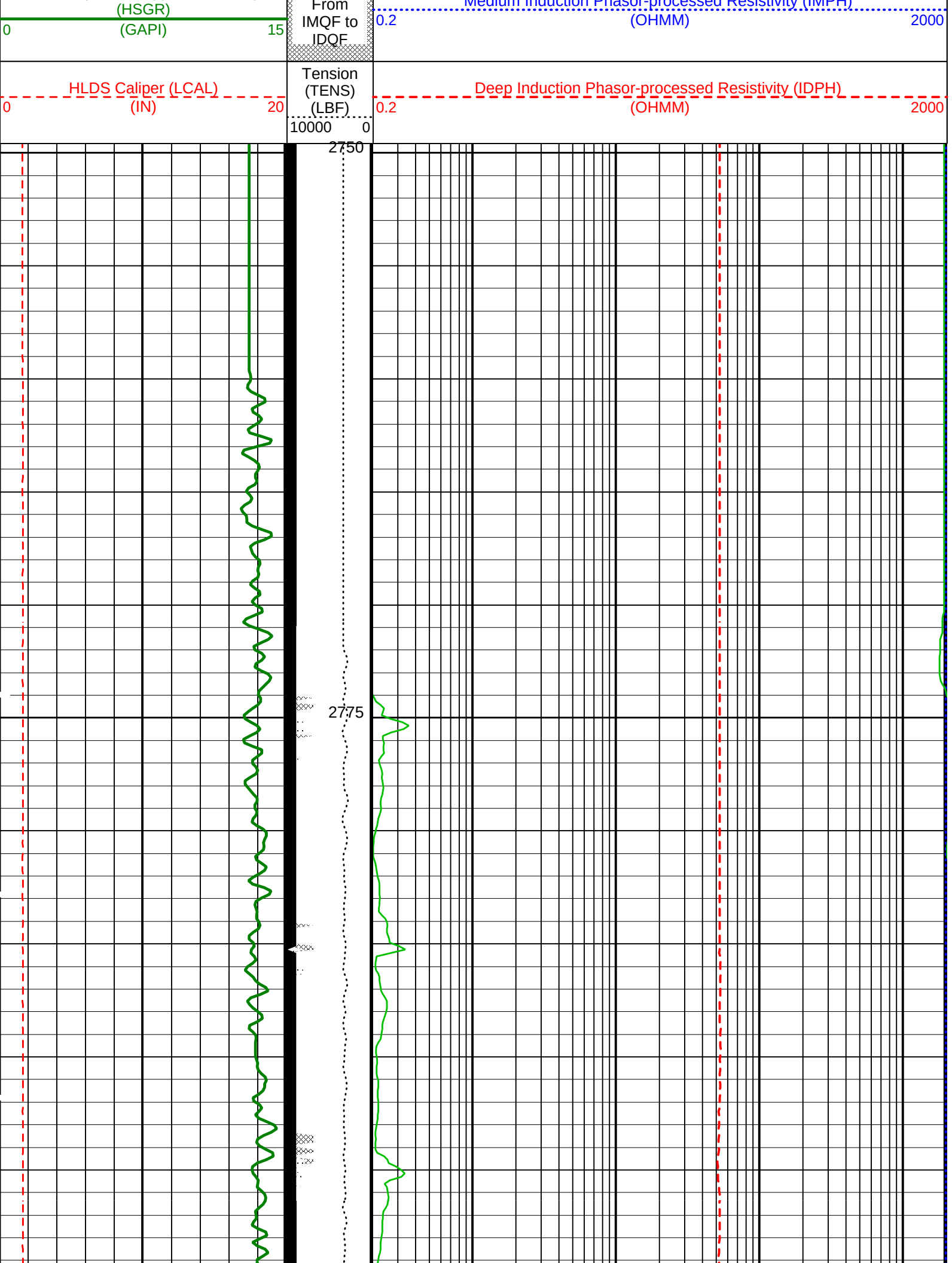
OP System Version: 17C0-154

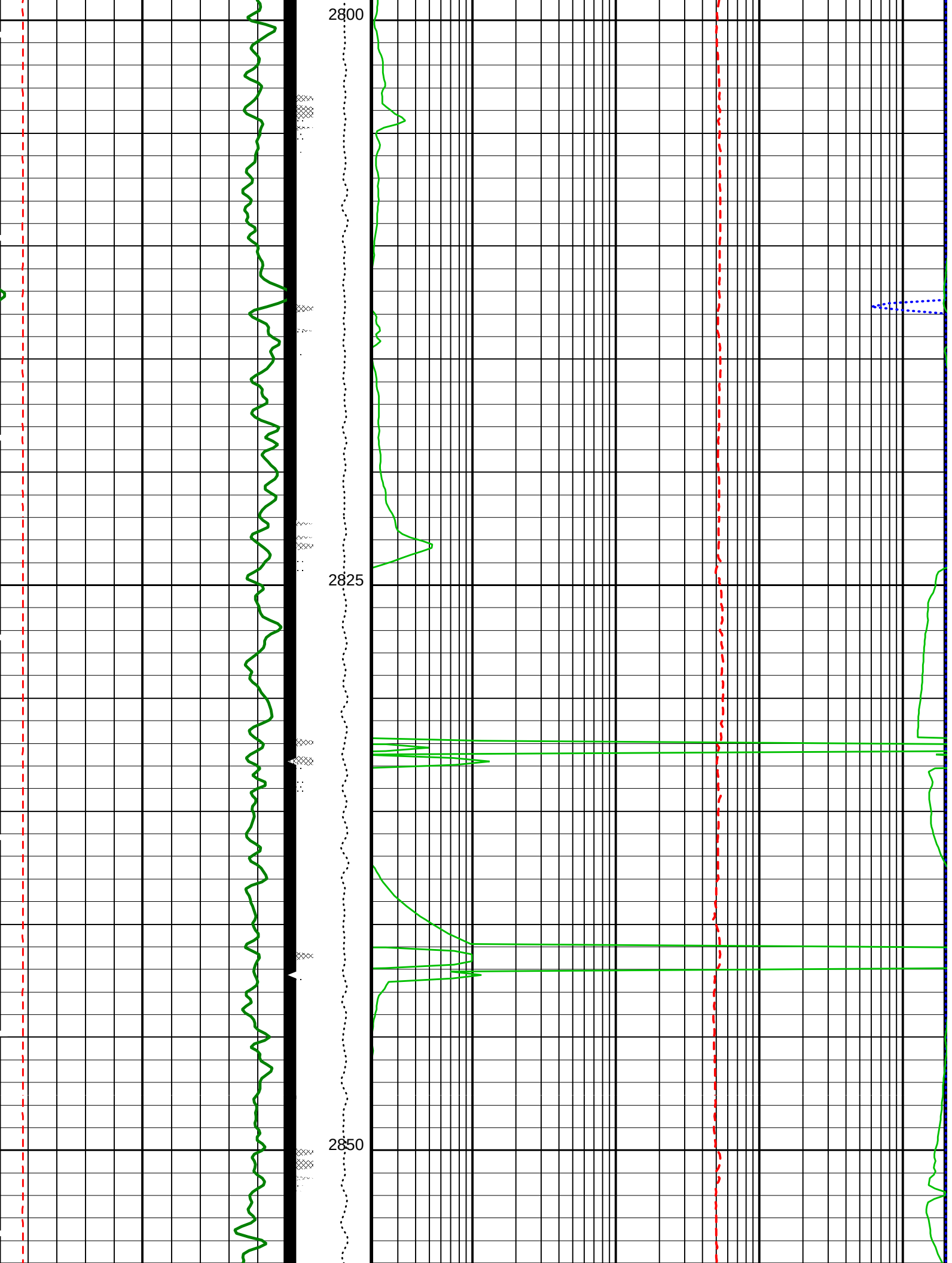
DIT-E	17C0-154	GPIT-A/B	SRPC-3762-Q1_2009_OP17
DTA-A	17C0-154	HLDS	17C0-154
LDSC-B	17C0-154	HNGC-B	17C0-154
HNGS-BA	17C0-154	DTC-H	17C0-154

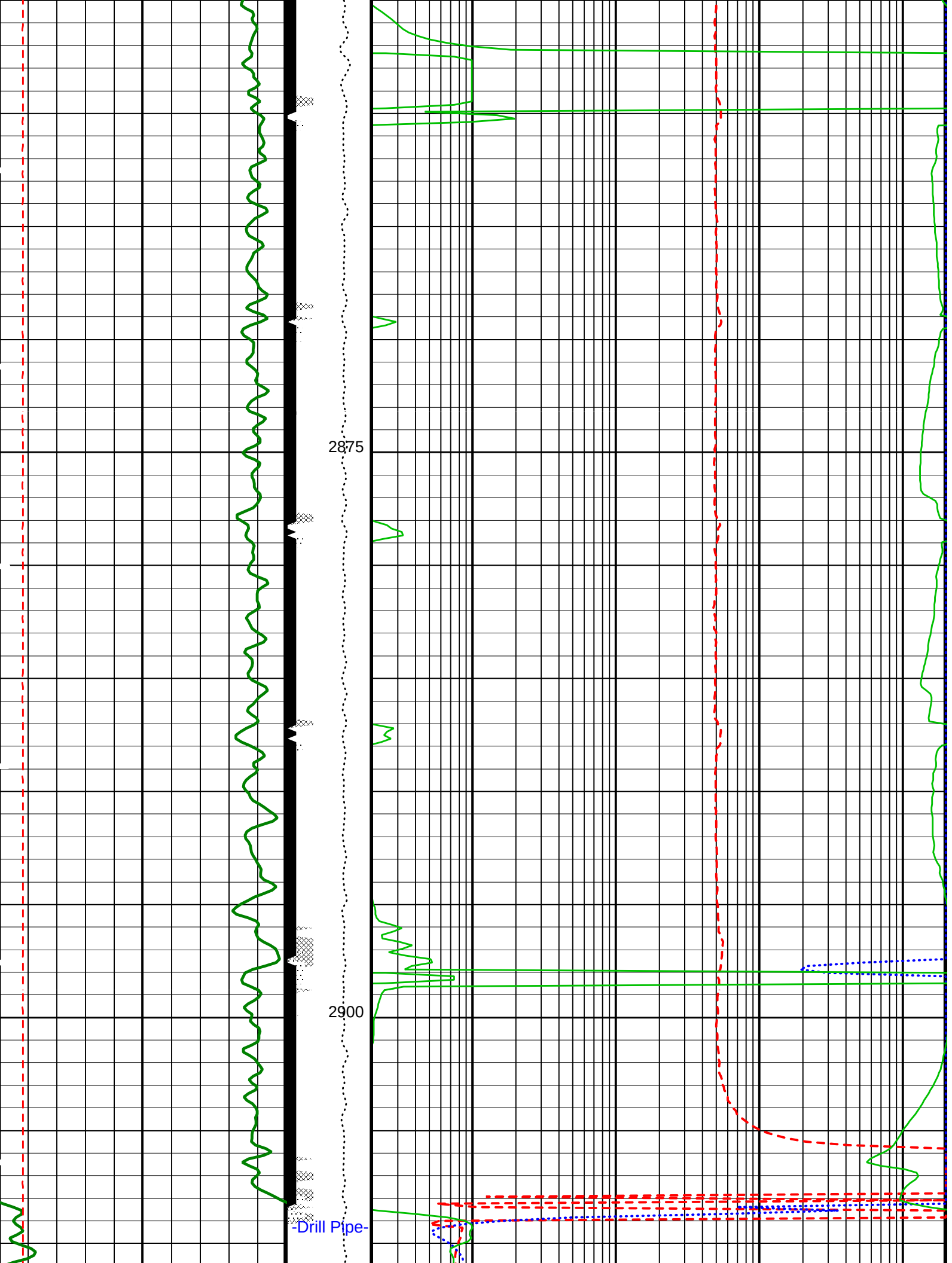
PIP SUMMARY

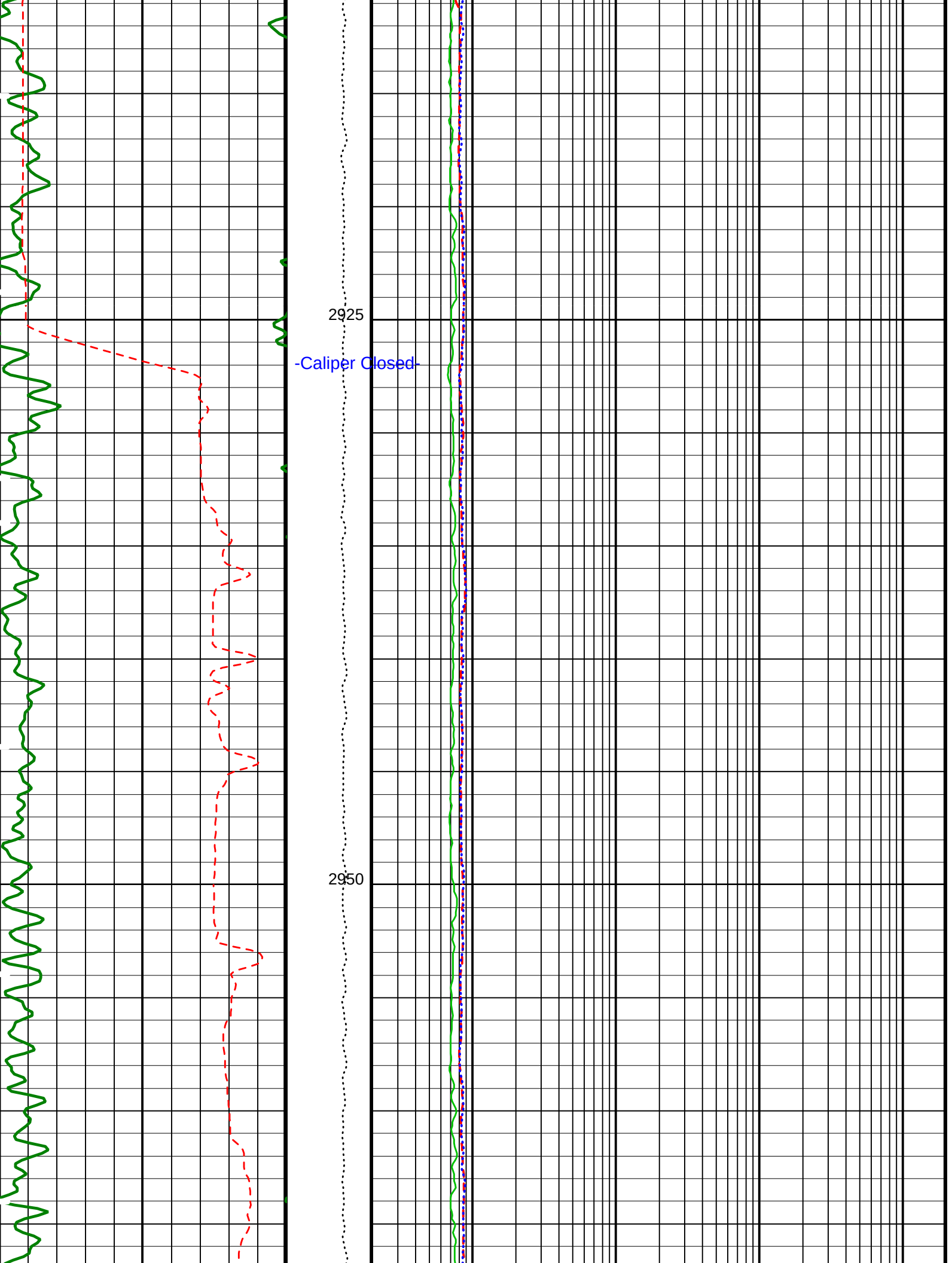
Time Mark Every 60 S

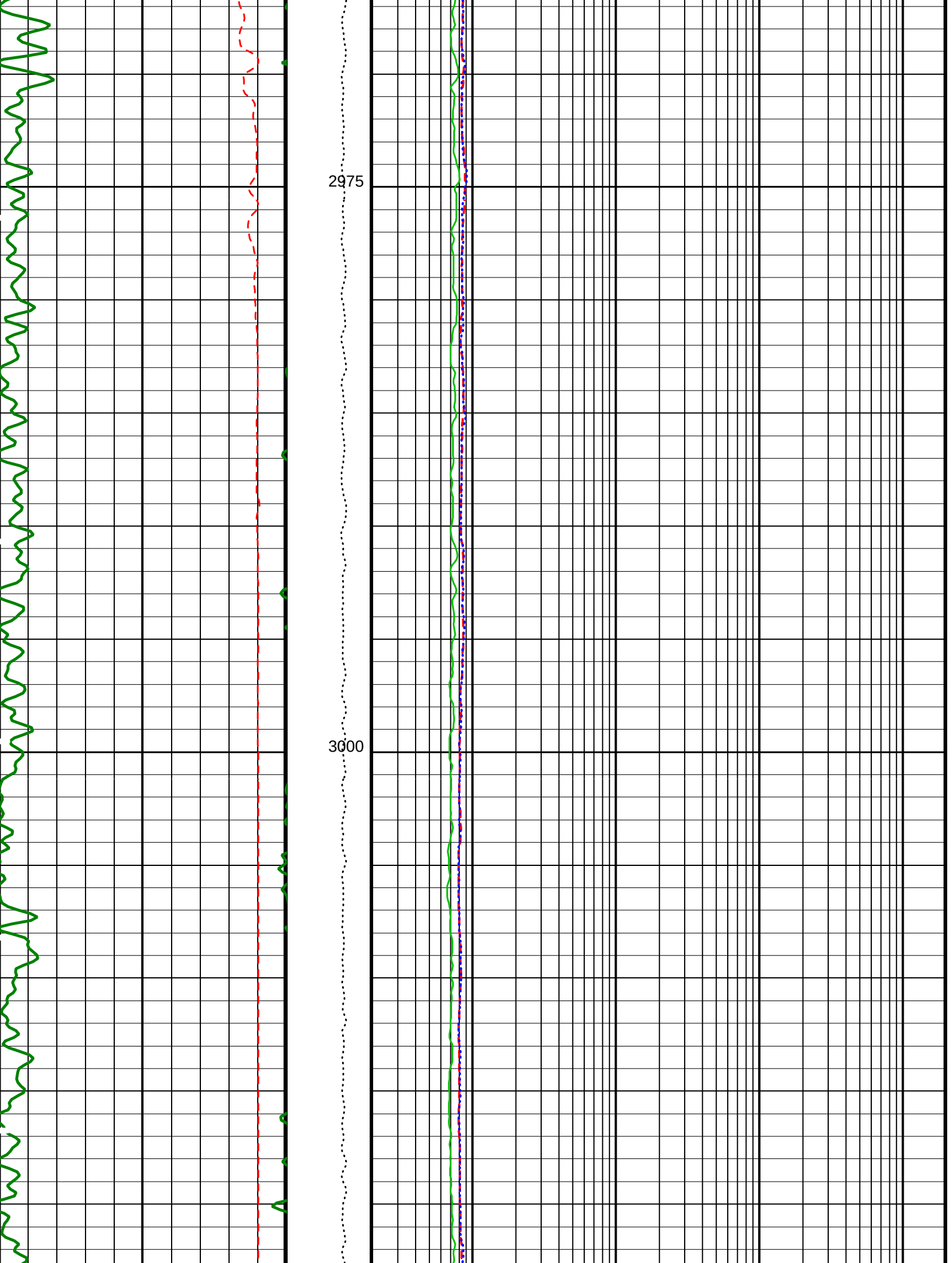


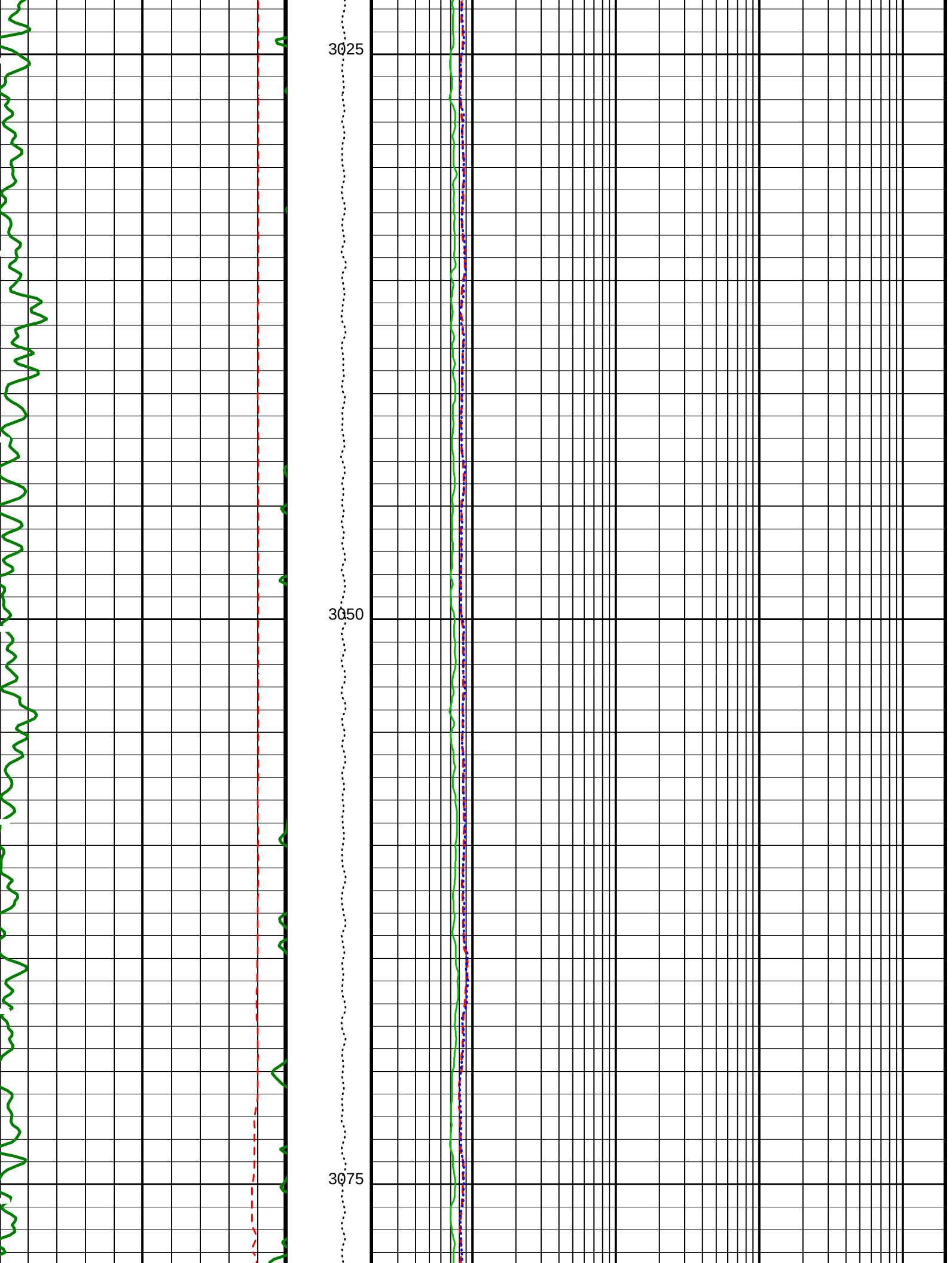

(HSGR)
0
(GAPI)
15
From IMQF to IDQF
Medium Induction Phasor-processed Resistivity (IMPH)
0.2
(OHMM)
2000
HLDS Caliper (LCAL)
0
(IN)
20
Tension (TENS)
(LBF)
10000
0
Deep Induction Phasor-processed Resistivity (IDPH)
0.2
(OHMM)
2000
2750
2775


2800
2825
2850


2875
2900
-Drill Pipe-


2925
-Caliper Closed-
2950


2975
3000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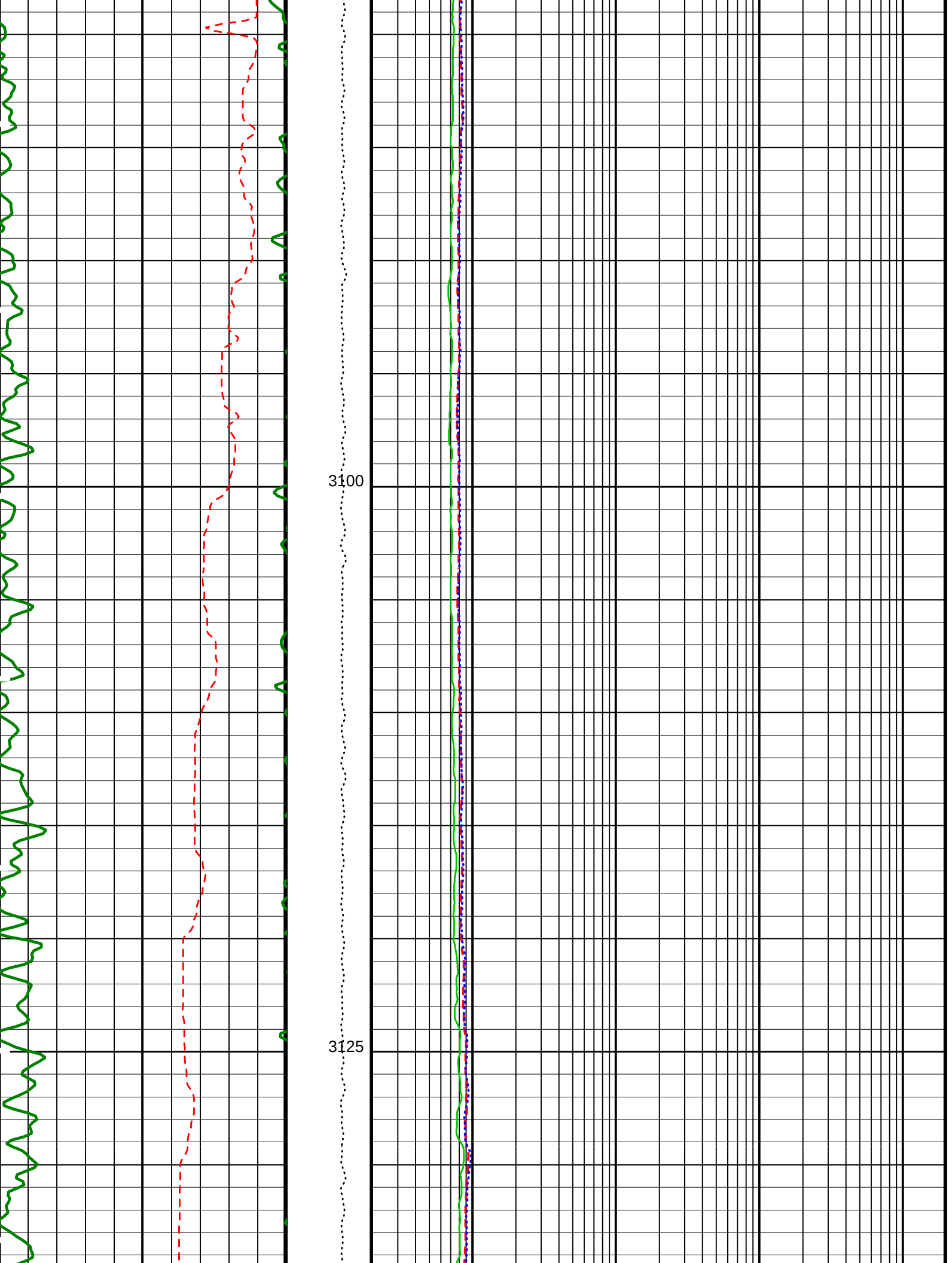
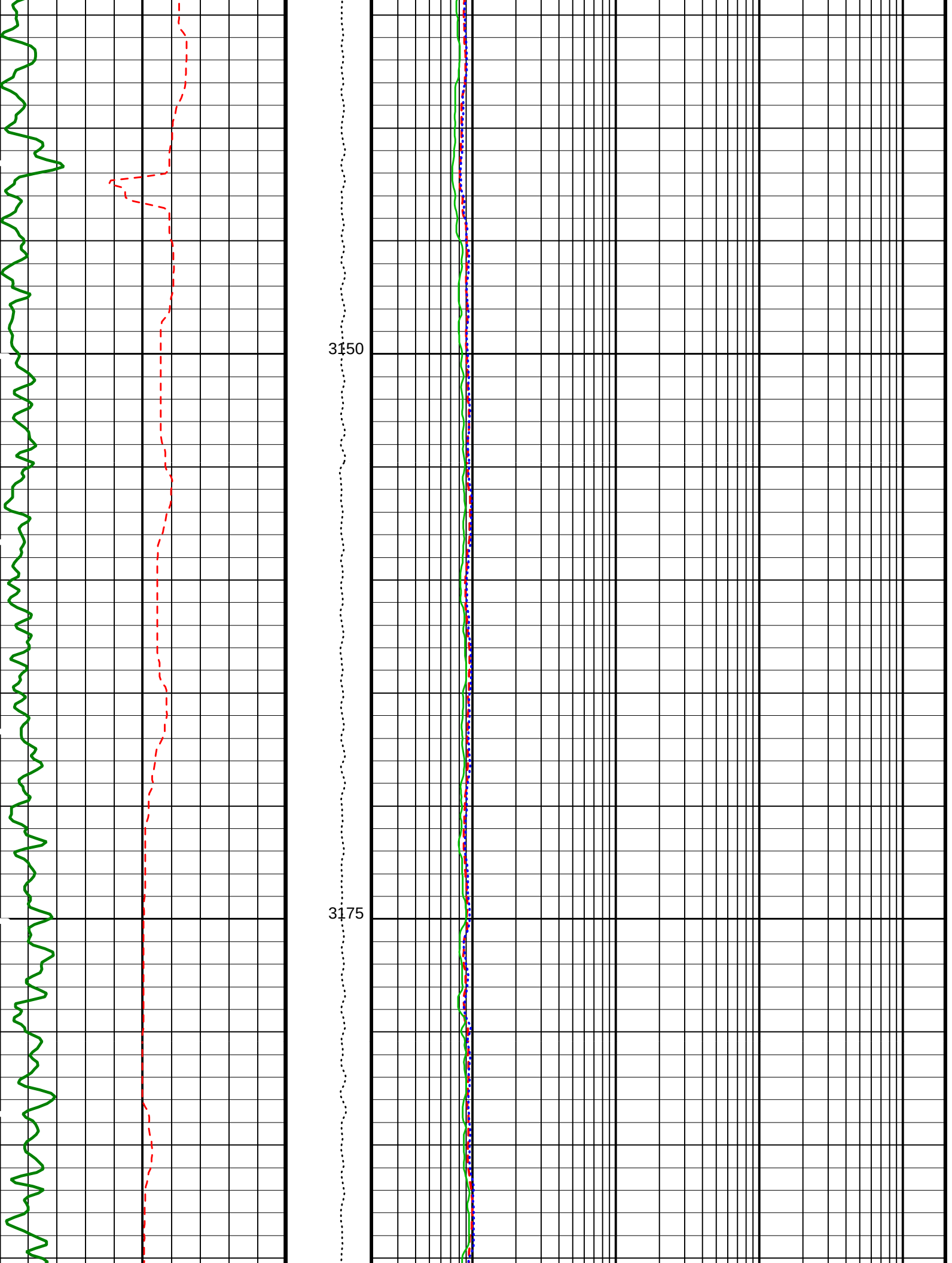
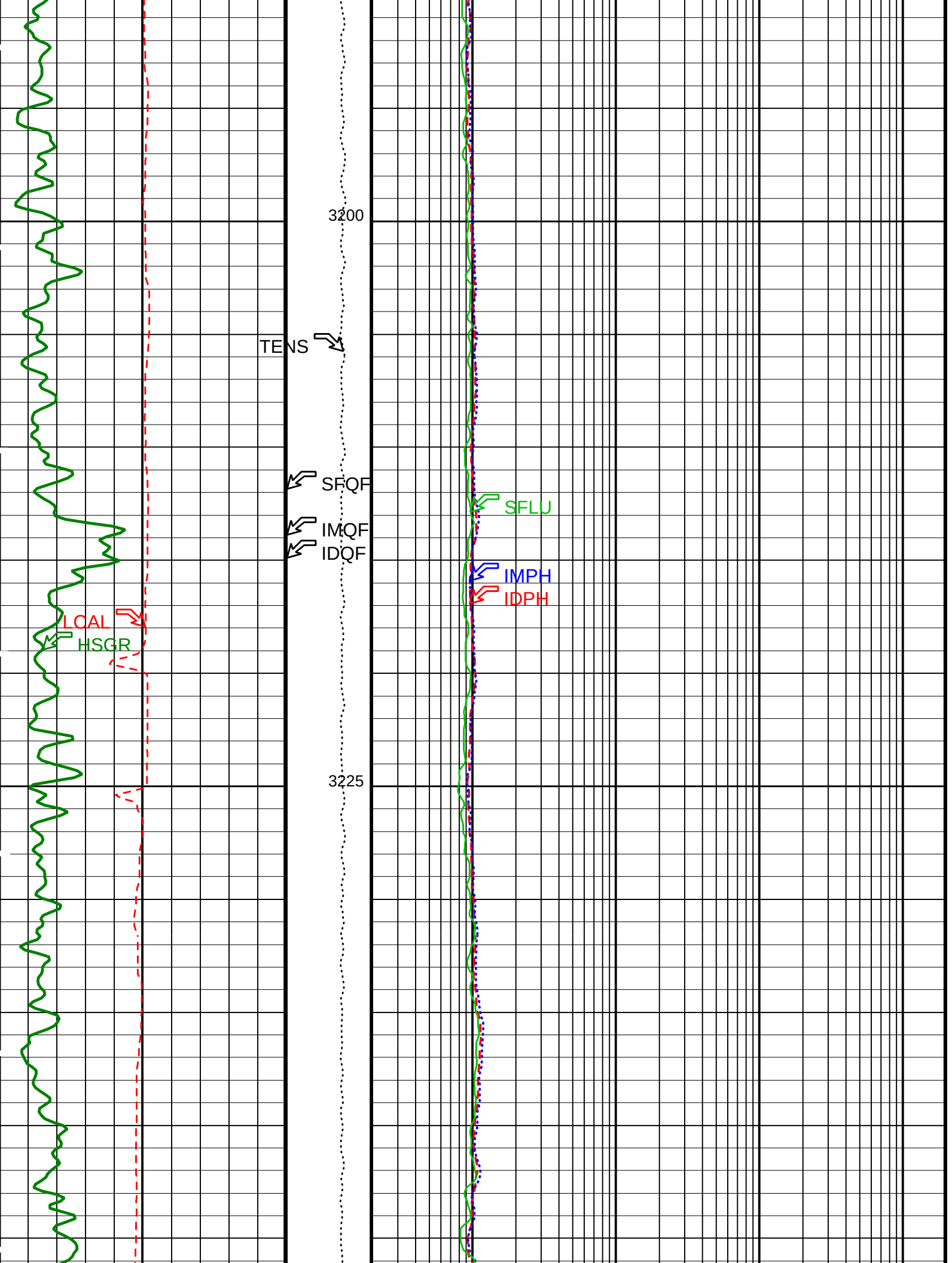
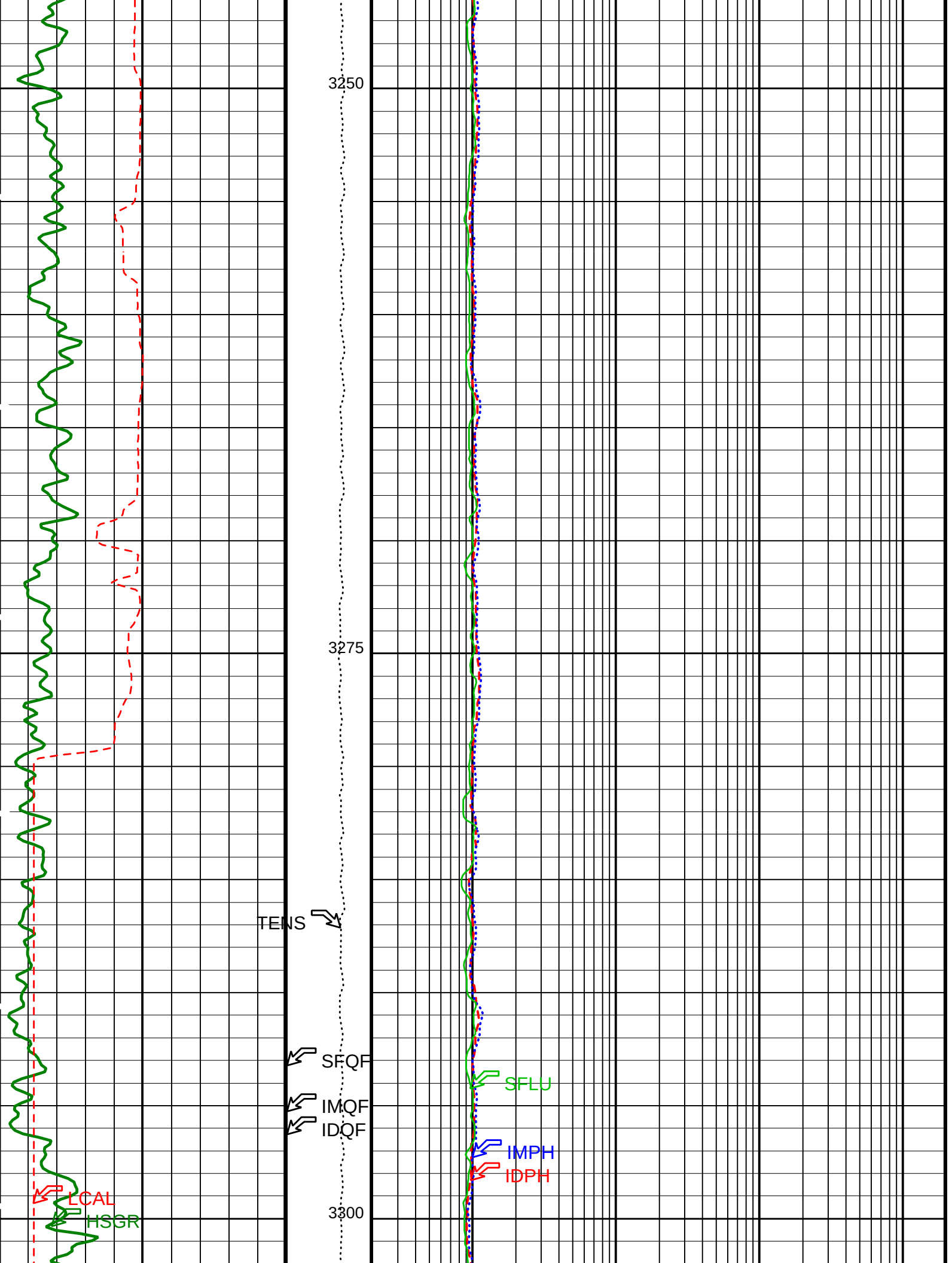
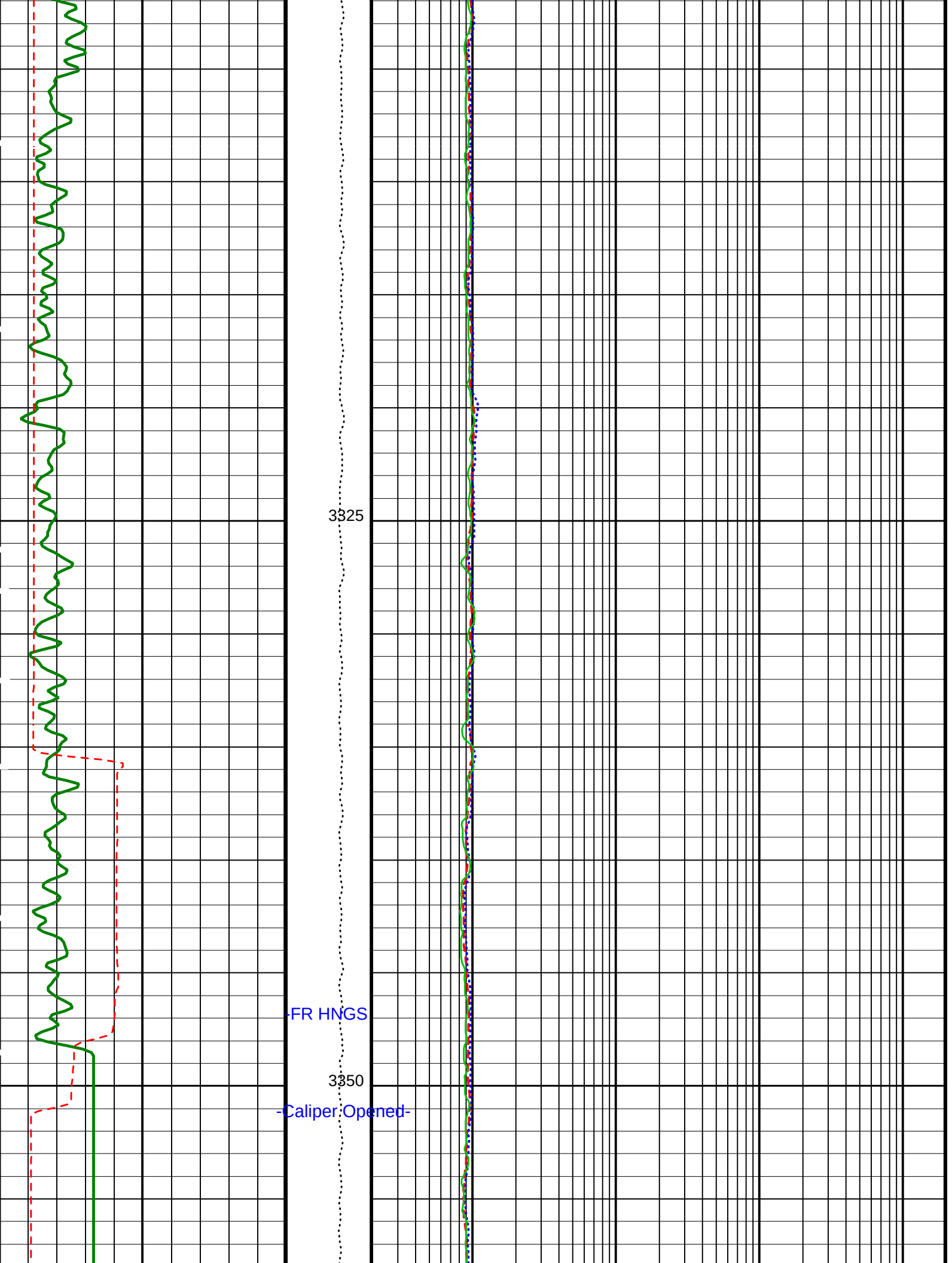
3050
3075

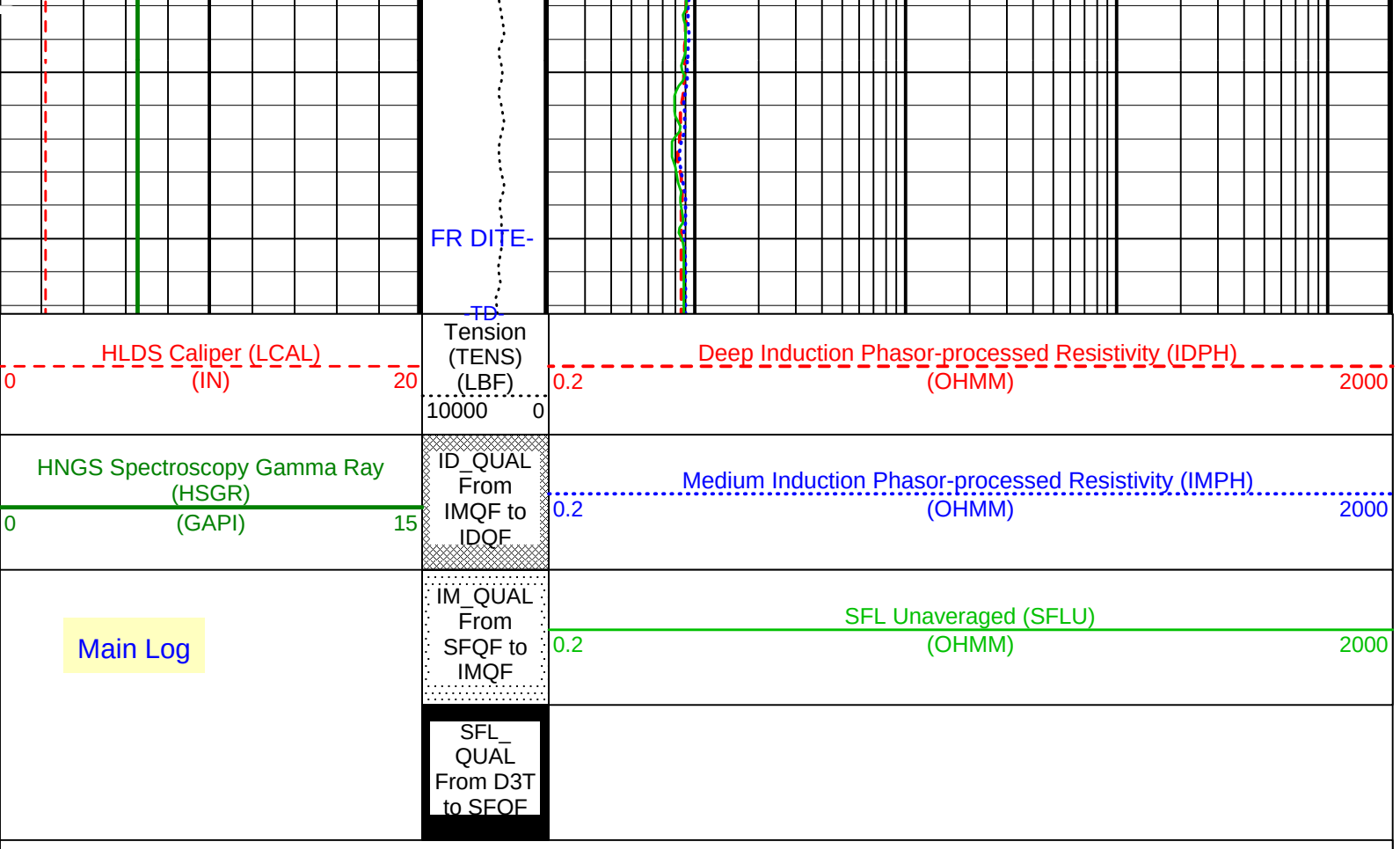

3100
3125


3150
3175


3200
TENS
SFQF
SFLU
IMQF
IDQF
IMPH
IDPH
LCAL
HSGR
3225


3250
3275
3300
TENS
SFQF
IMQF
IDQF
SFLU
IMPH
IDPH
LCAL
HSGR


3325
-FR HNGS
3350
-Caliper Opened-



Parameters

DLIS Name	Description	Value	
	DIT-E: Dual Induction - E		
BHS	Borehole Status	OPEN	
BHT	Bottom Hole Temperature (used in calculations)	60	DEGF
DGF2	Deep 20 kHz Gain Factor	0.981641	
DPH2	Deep 20 kHz Phase Shift	0.58231	DEG
DRE2	Deep Real 20 kHz Sonde Error Correction	16.7871	MM/M
DSR2	Deep Sigma Reference (20 kHz)	1843	MM/M
DXE2	Deep Quad 20 kHz Sonde Error Correction	62.191	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	1.01122	
MPH2	Medium 20 kHz Phase Shift	-0.139176	DEG
MRE2	Medium Real 20 kHz Sonde Error Correction	-2.07993	MM/M
MSR2	Medium Sigma Reference (20 kHz)	3250	MM/M
MXE2	Medium Quad 20 kHz Sonde Error Correction	-32.0861	MM/M
SFCR	SFL Channel Ratio	1000	
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)	60	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	

GTSL	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	-0.00661925	
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	-999.25	CPS
S2BI	HNGS Detector 2 Calibration Bismuth Count Rate	-999.25	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	-9.99842	
VBA2	HNGS Detector 2 Variable Barite Factor Running Average	4.55362	
System and Miscellaneous			
BS	Bit Size	9.875	IN
DFD	Drilling Fluid Density	1.10	G/C3
DO	Depth Offset for Playback	0.0	M
FLEV	Fluid Level	-50000.00	M
PP	Playback Processing	OFF	
TD	Total Depth	3380	M

Format: DITE_LogPhasor Vertical Scale: 1:200 Graphics File Created: 03-Mar-2009 16:42

OP System Version: 17C0-154

DIT-E	17C0-154	GPIT-A/B	SRPC-3762-Q1_2009_OP17
DTA-A	17C0-154	HLDS	17C0-154
LDSC-B	17C0-154	HNGC-B	17C0-154
HNGS-BA	17C0-154	DTC-H	17C0-154

Input DLIS Files

DEFAULT	PI_LDL_NGS_055LUP	FN:80	PRODUCER	17-Feb-2009 23:02	3367.3 M	2749.6 M

Output DLIS Files

DEFAULT	PI_LDL_NGS_092PUP	FN:148	PRODUCER	03-Mar-2009 16:42		

Schlumberger

MAIN PASS

MAXIS Field Log

Input DLIS Files

DEFAULT	Flip_PI_LDL_NGS_088LUP	PRODUCER	03-Mar-2009 16:08	3330.1 M	2754.6 M

Output DLIS Files

DEFAULT	PI_LDL_NGS_089PUP	FN:145	PRODUCER	03-Mar-2009 16:17	3330.1 M	2754.6 M

OP System Version: 17C0-154

DIT-E	17C0-154	GPIT-A/B	SRPC-3762-Q1_2009_OP17
DTA-A	17C0-154	HLDS	17C0-154
LDSC-B	17C0-154	HNGC-B	17C0-154
HNGS-BA	17C0-154	DTC-H	17C0-154

PIP SUMMARY

Time Mark Every 60 S

SFL_QUAL From D3T to SFQF

Downlog

IM_QUAL From SFQF to IMQF

SFL Unaveraged (SFLU)
0.2 (OHMM) 2000

HNGS Spectroscopy Gamma Ray (HSGR)
0 (GAPI) 15

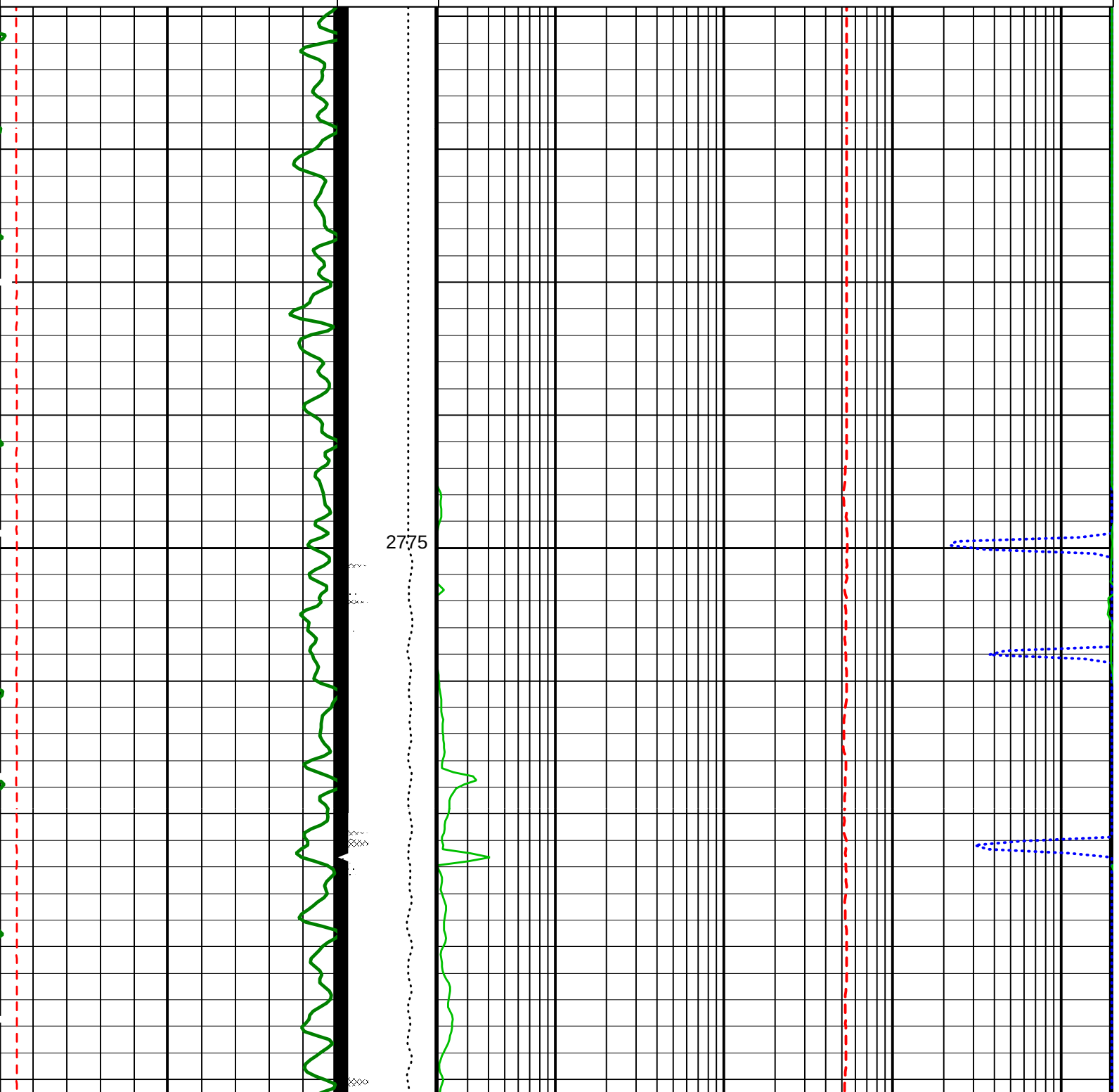
ID_QUAL From IMQF to IDQF

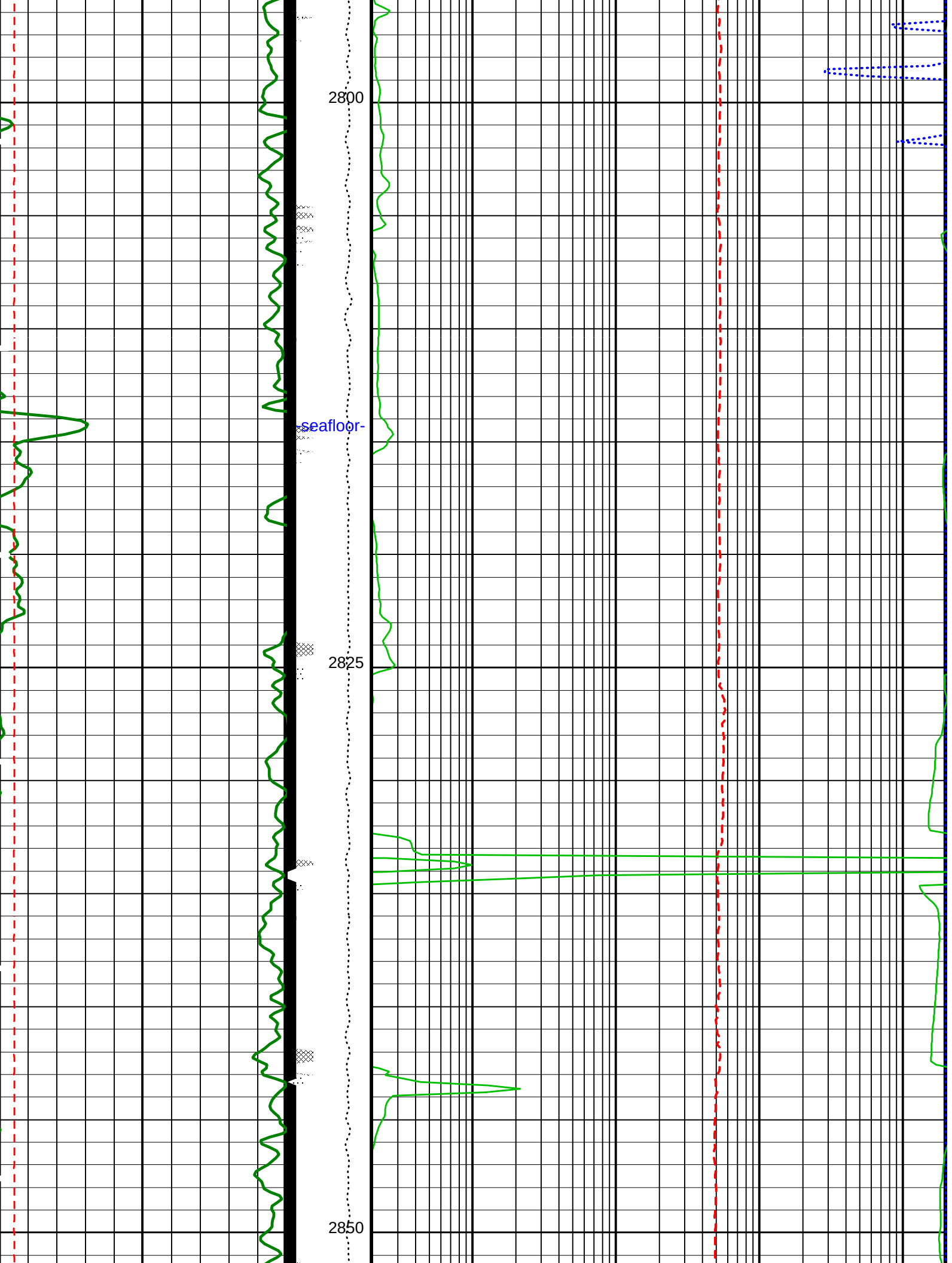
Medium Induction Phasor-processed Resistivity (IMPH)
0.2 (OHMM) 2000

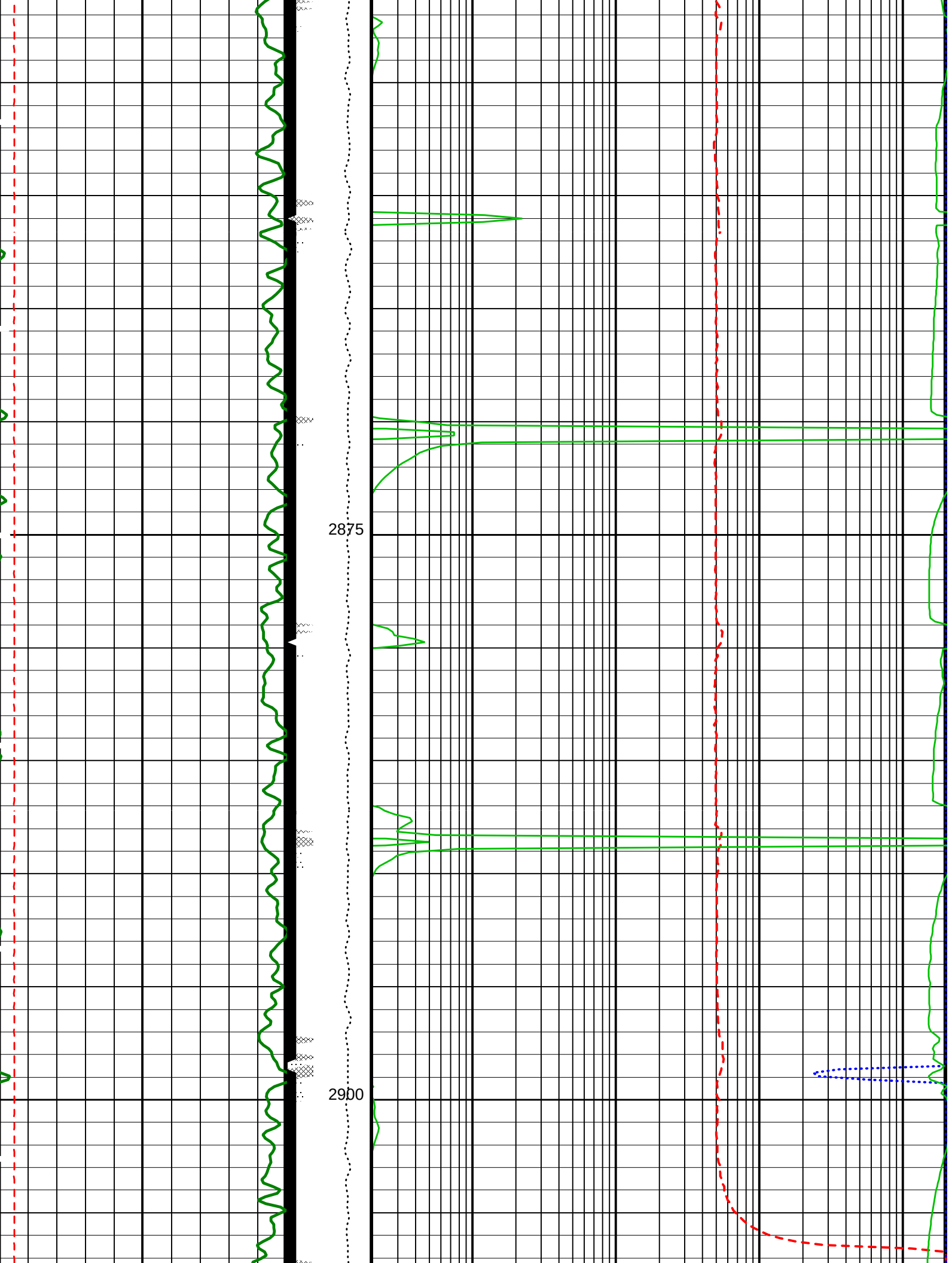
HLDS Caliper (LCAL)
0 (IN) 20

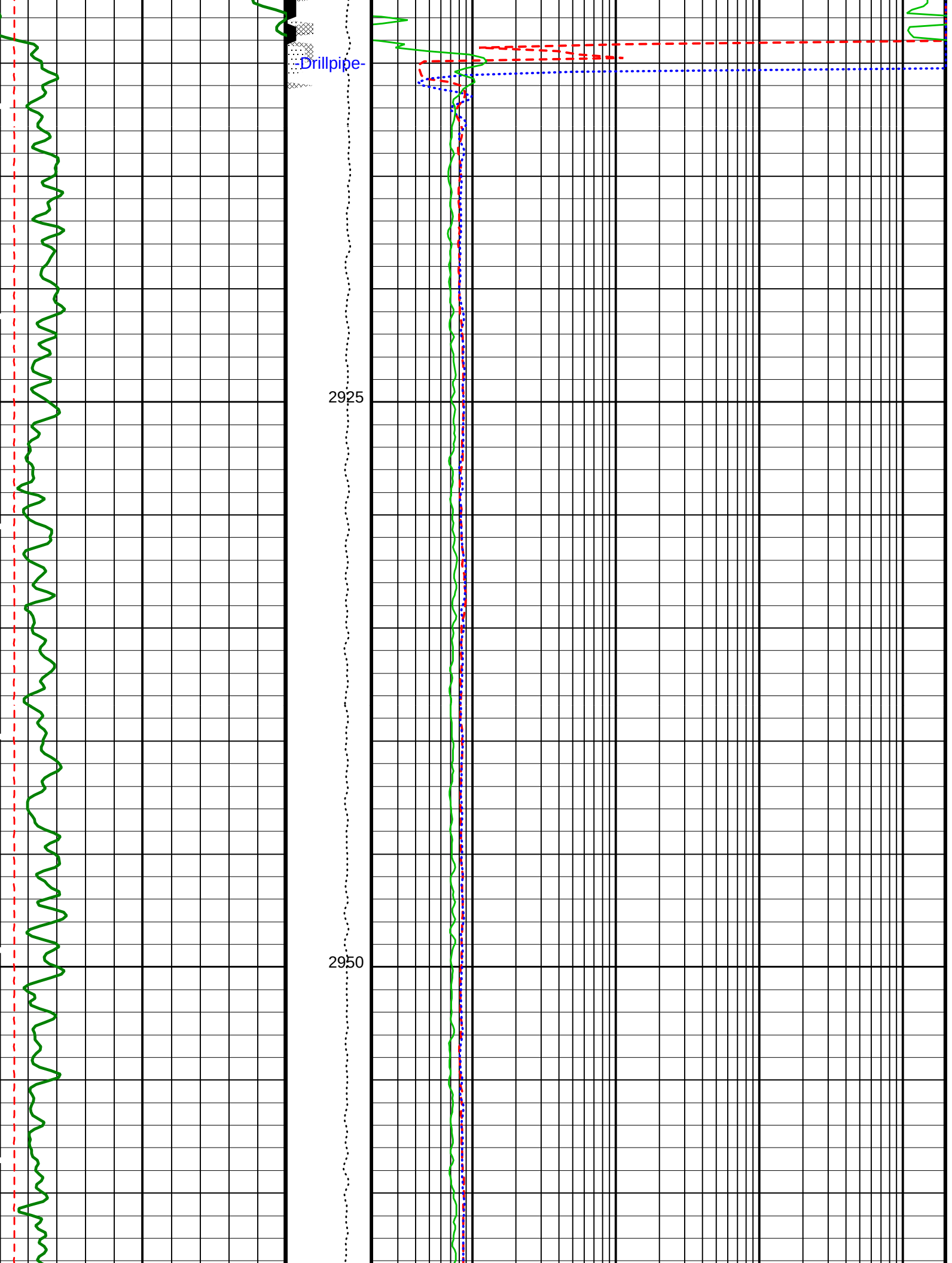
Tension (TENS) (LBF)
10000 0

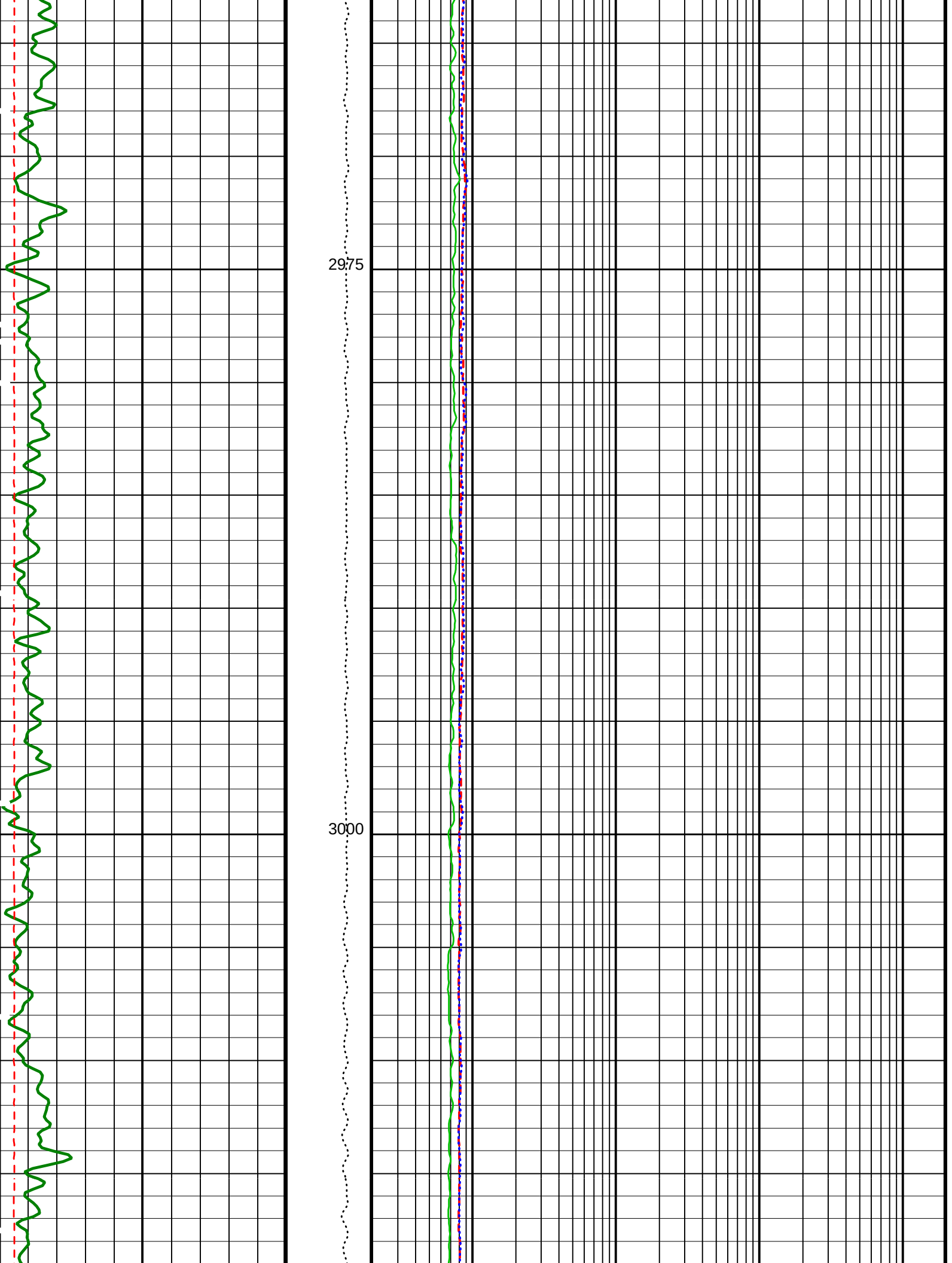
Deep Induction Phasor-processed Resistivity (IDPH)
0.2 (OHMM) 2000




2800
seafloor-
2825
2850


2875
2900


-Drillpipe-
2925
2950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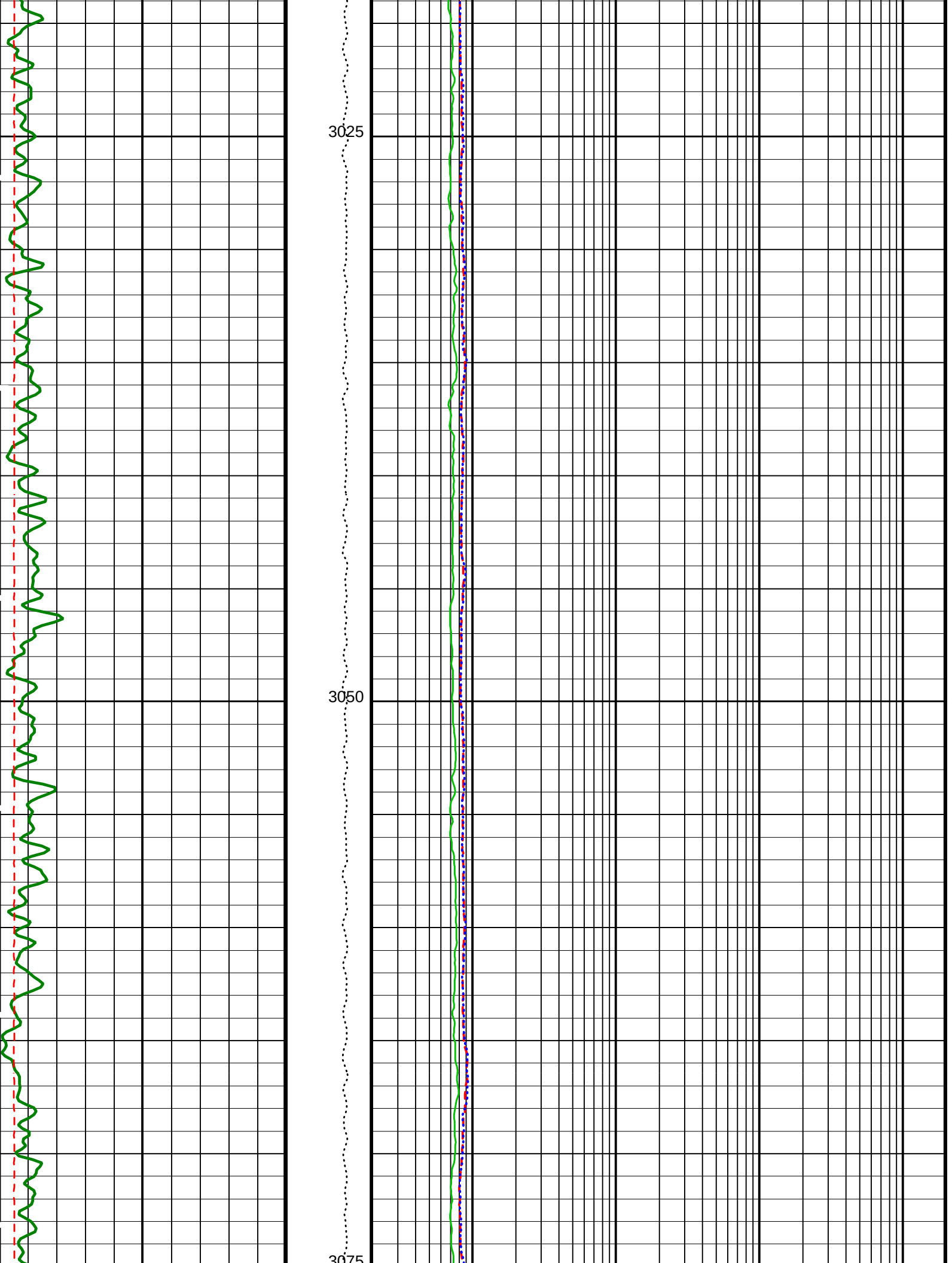
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3050
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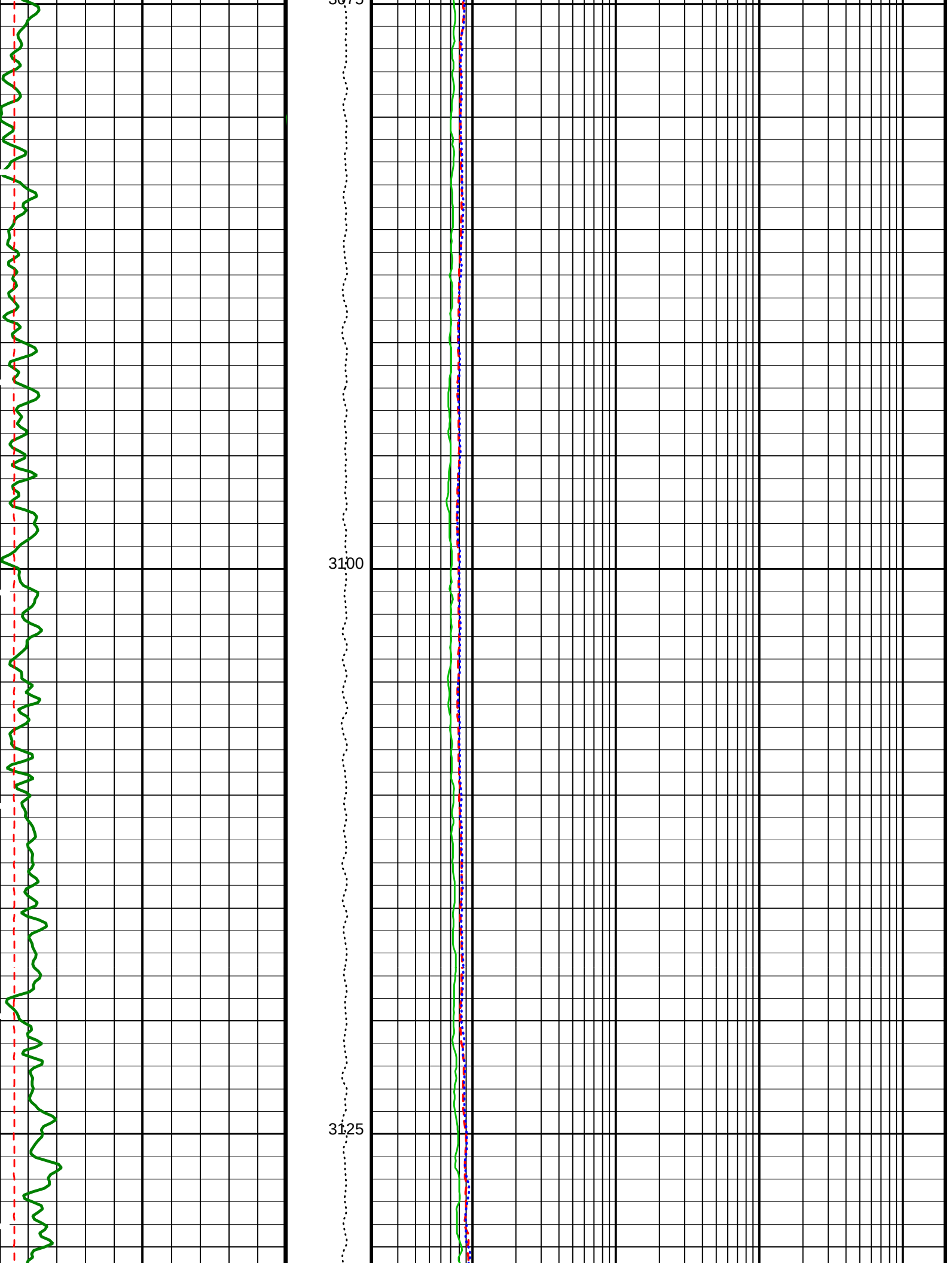
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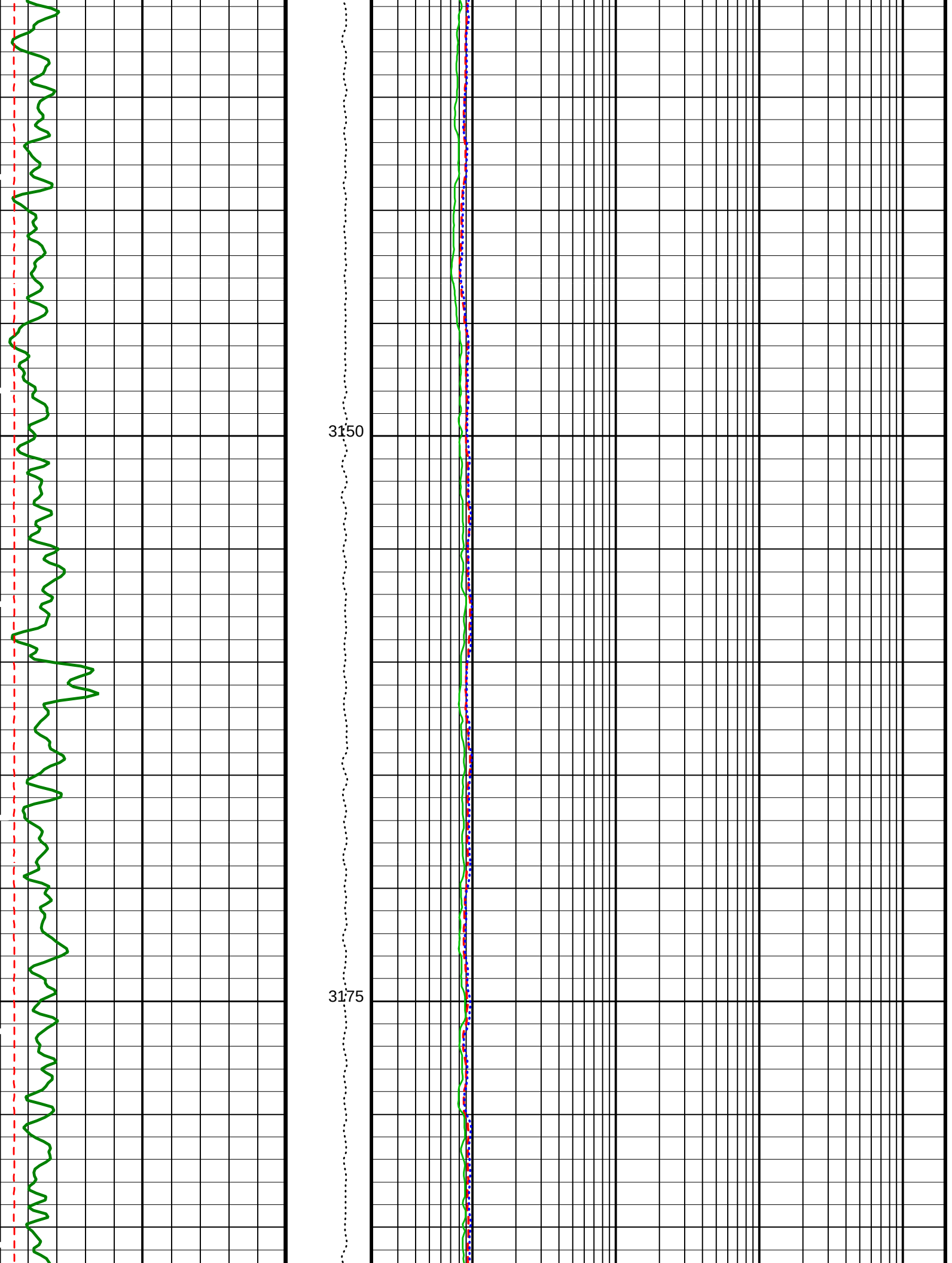
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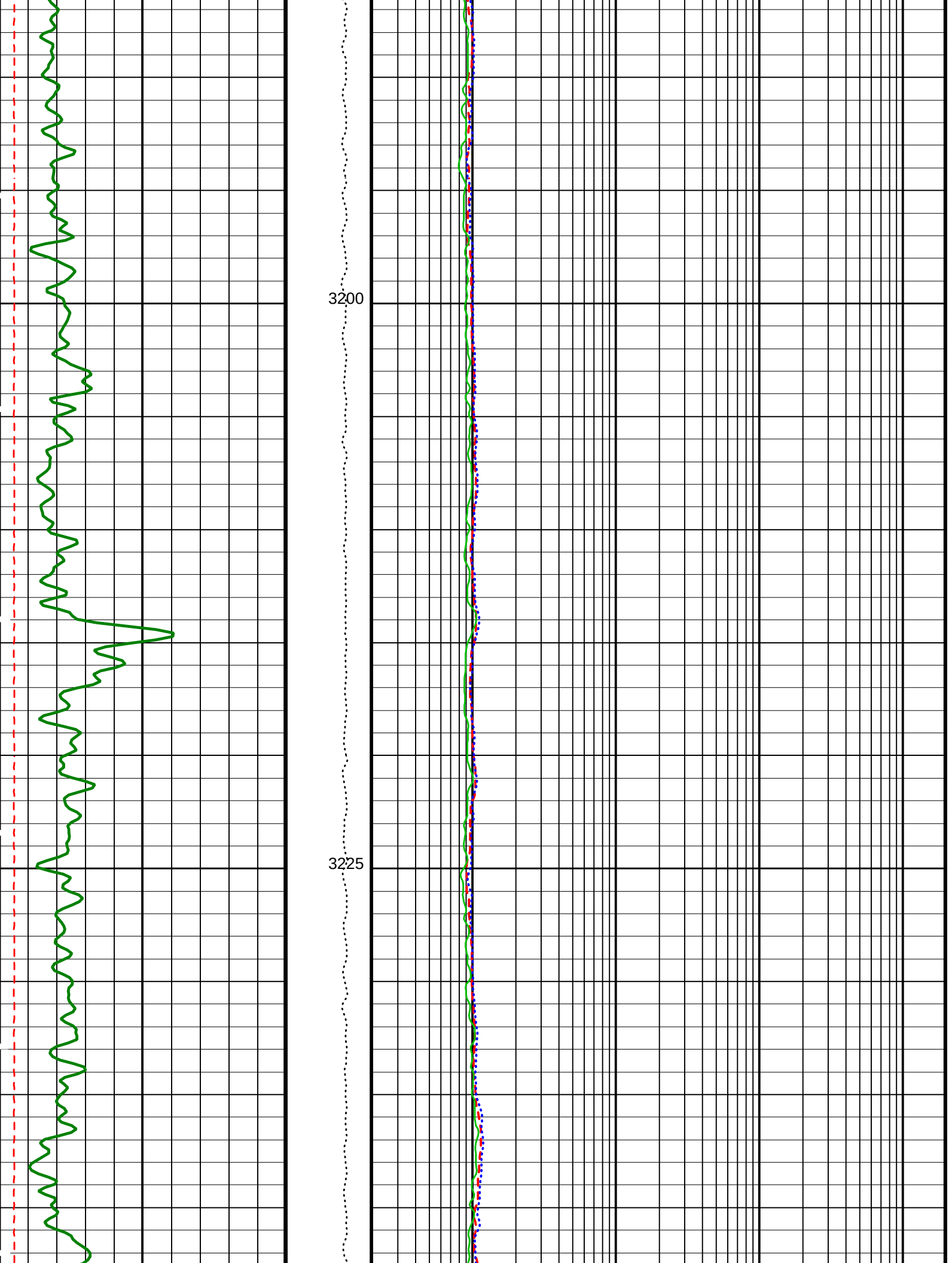
3175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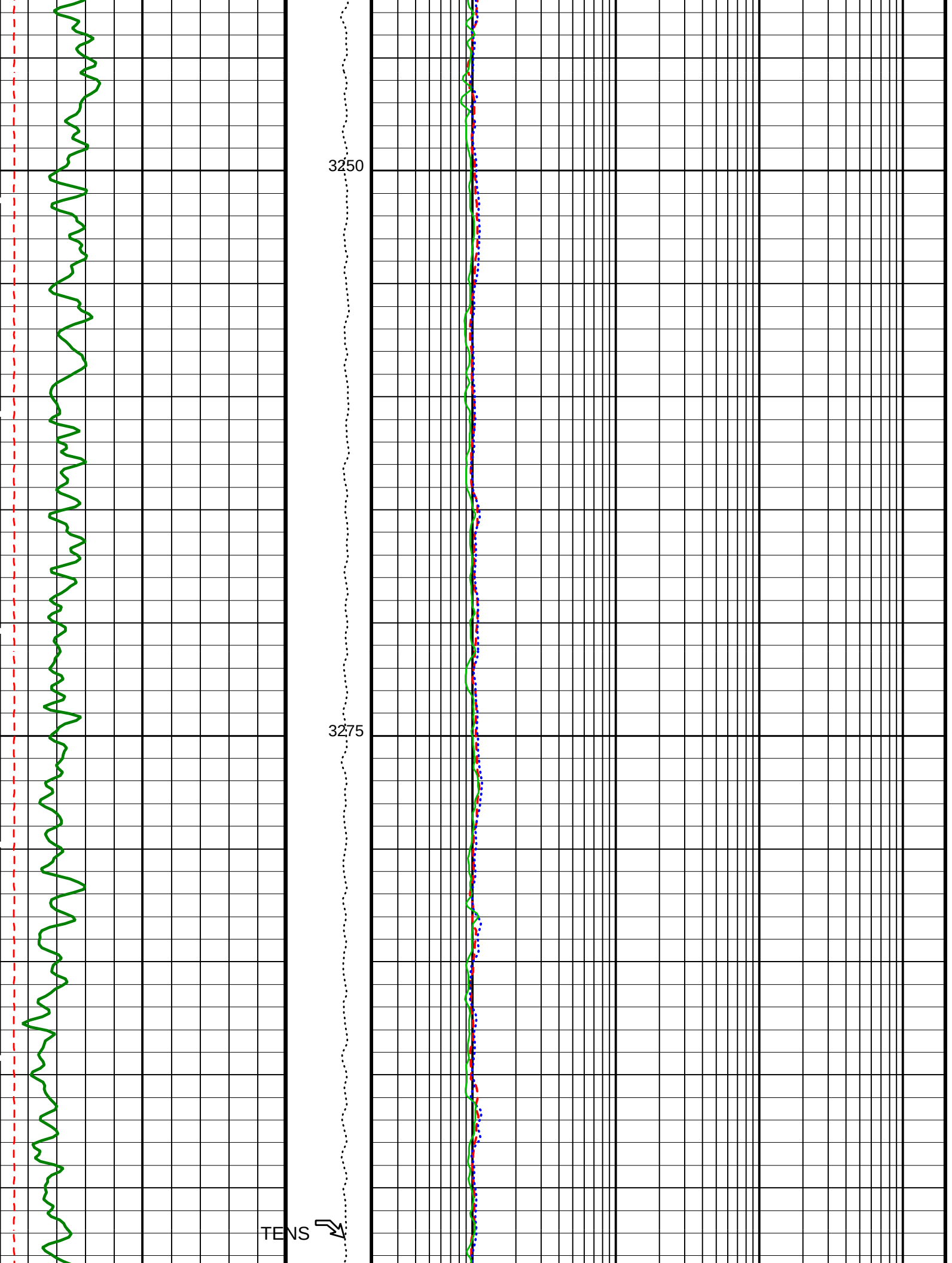
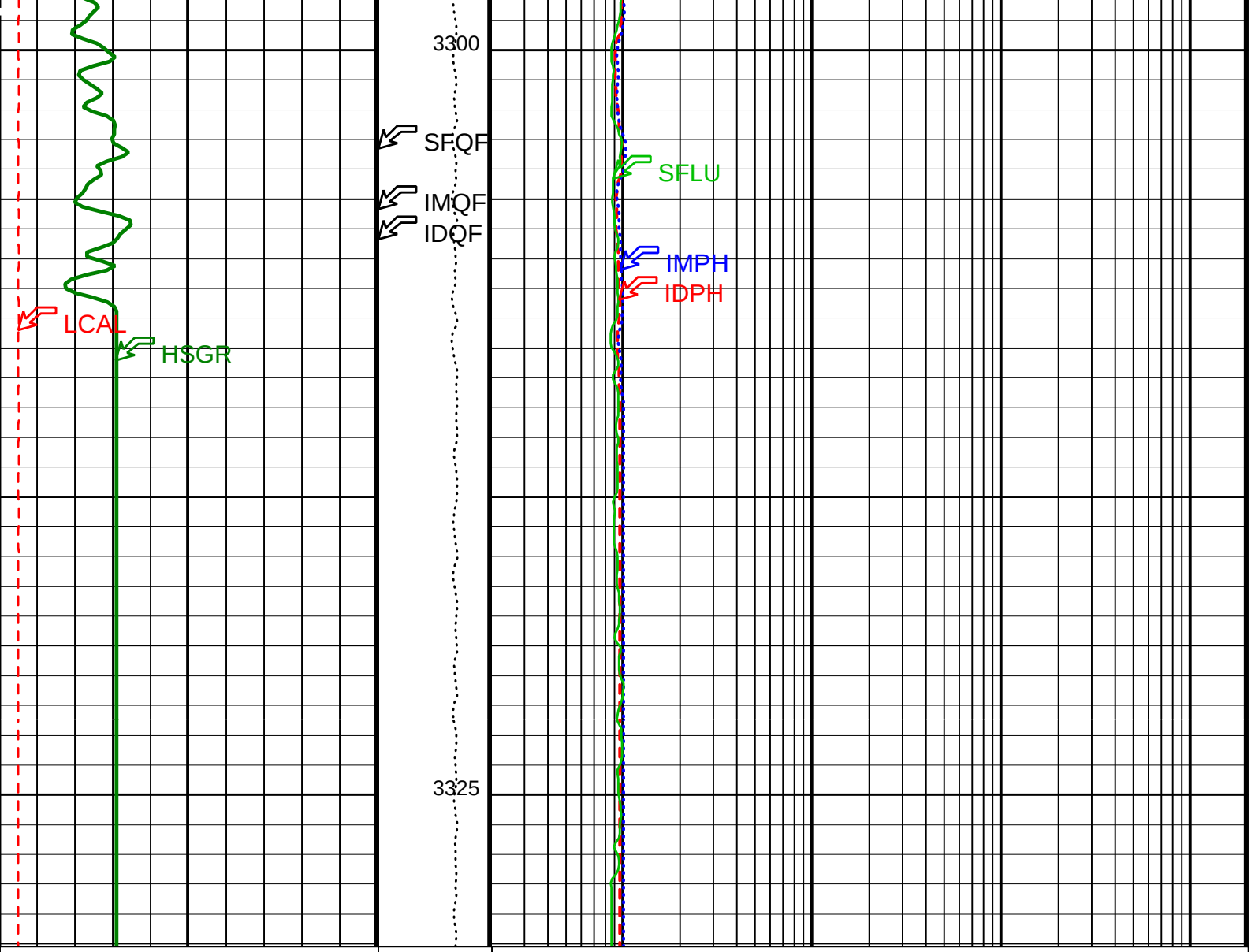
3225


3250
3275
TENS



HLDS Caliper (LCAL)
0 (IN) 20

Tension (TENS) (LBF)
10000 0

Deep Induction Phasor-processed Resistivity (IDPH)
0.2 (OHMM) 2000

HNGS Spectroscopy Gamma Ray (HSGR)
0 (GAPI) 15

ID_QUAL From IMQF to IDQF

Medium Induction Phasor-processed Resistivity (IMPH)
0.2 (OHMM) 2000

Downlog

IM_QUAL From SFQF to IMQF

SFL Unaveraged (SFLU)
0.2 (OHMM) 2000

SFL_ QUAL From D3T to SFQF

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)	60	DEGF
DGF2	Deep 20 kHz Gain Factor	0.981641	

DPH2	Deep 20 kHz Phase Shift	0.58231	DEG
DRE2	Deep Real 20 kHz Sonde Error Correction	16.7871	MM/M
DSR2	Deep Sigma Reference (20 kHz)	1843	MM/M
DXE2	Deep Quad 20 kHz Sonde Error Correction	62.191	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	1.01122	
MPH2	Medium 20 kHz Phase Shift	-0.139176	DEG
MRE2	Medium Real 20 kHz Sonde Error Correction	-2.07993	MM/M
MSR2	Medium Sigma Reference (20 kHz)	3250	MM/M
MXE2	Medium Quad 20 kHz Sonde Error Correction	-32.0861	MM/M
SFCR	SFL Channel Ratio	1000	
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)	60	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	-0.00661925	
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	-999.25	CPS
S2BI	HNGS Detector 2 Calibration Bismuth Count Rate	-999.25	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	-9.99842	
VBA2	HNGS Detector 2 Variable Barite Factor Running Average	4.55362	
System and Miscellaneous			
BS	Bit Size	9.875	IN
DFD	Drilling Fluid Density	1.10	G/C3
DO	Depth Offset for Playback	0.0	M
FLEV	Fluid Level	-50000.00	M
PP	Playback Processing	OFF	
TD	Total Depth	3380	M

Format: DITE_LogPhasor Vertical Scale: 1:200 Graphics File Created: 03-Mar-2009 16:17

OP System Version: 17C0-154

DIT-E	17C0-154	GPIT-A/B	SRPC-3762-Q1_2009_OP17
DTA-A	17C0-154	HLDS	17C0-154
LDSC-B	17C0-154	HNGC-B	17C0-154
HNGS-BA	17C0-154	DTC-H	17C0-154

Input DLIS Files

DEFAULT	Flip_PI_LDL_NGS_088LUP		PRODUCER	03-Mar-2009 16:08	3330.1 M	2754.6 M

Output DLIS Files

DEFAULT	PI_LDL_NGS_089PUP	FN:145	PRODUCER	03-Mar-2009 16:17		

Input DLIS Files

DEFAULT	PI_LDL_NGS_053LUP	FN:74	PRODUCER	17-Feb-2009 22:09	3367.3 M	3251.3 M

Output DLIS Files

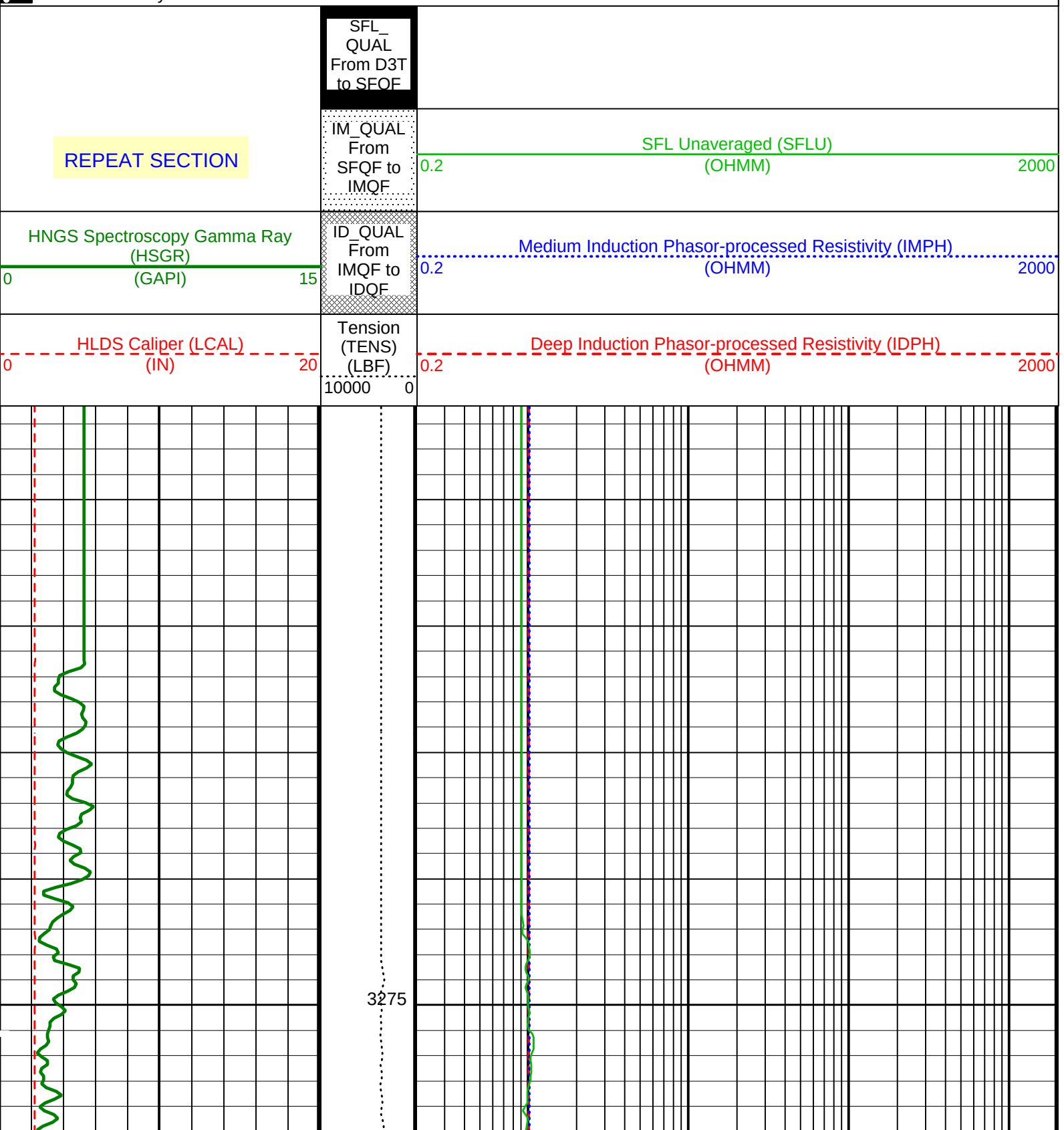
DEFAULT	PI_LDL_NGS_091PUP	FN:147	PRODUCER	03-Mar-2009 16:25	3367.3 M	3251.3 M

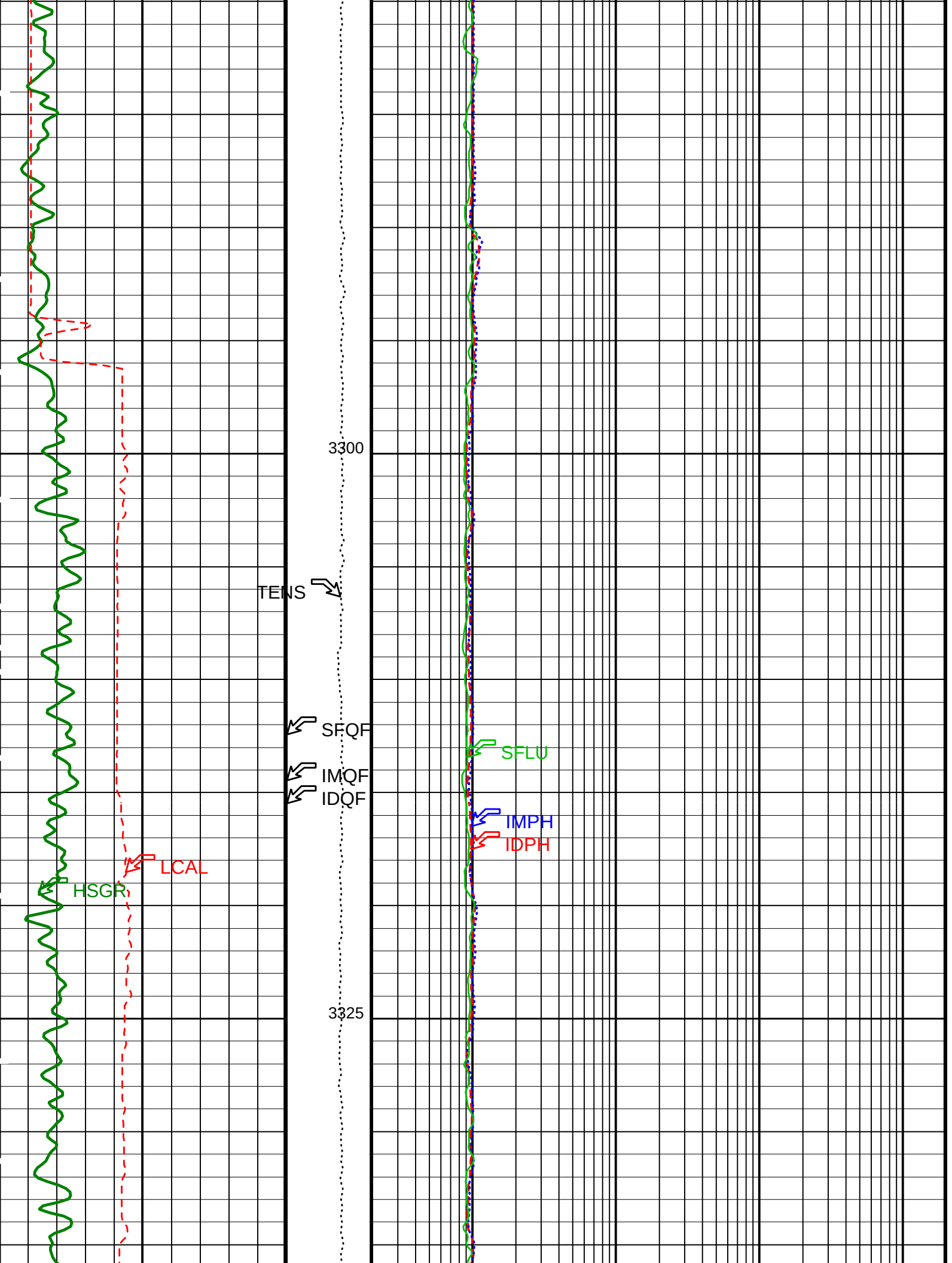
OP System Version: 17C0-154

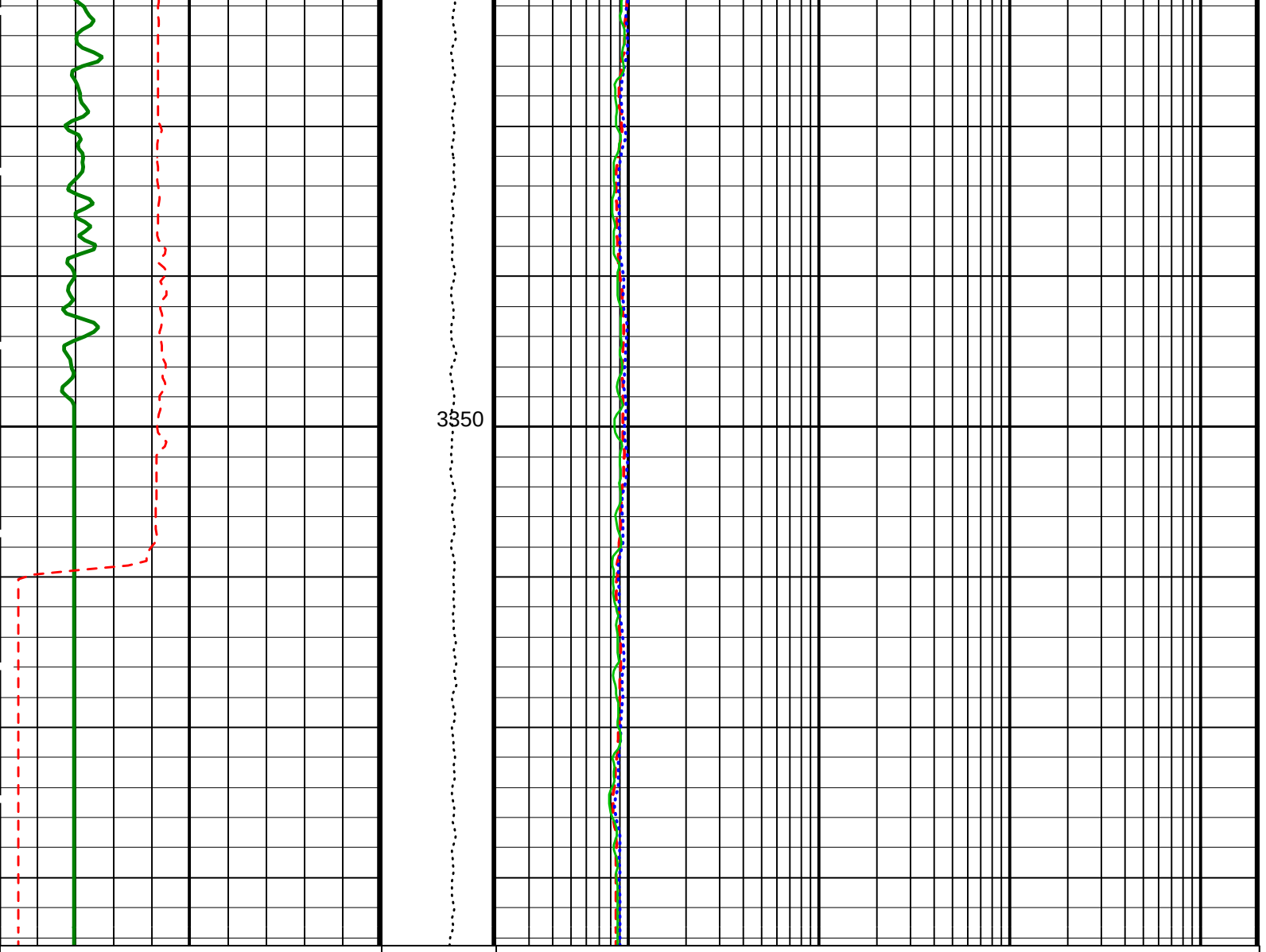
DIT-E	17C0-154	GPIT-A/B	SRPC-3762-Q1_2009_OP17
DTA-A	17C0-154	HLDS	17C0-154
LDSC-B	17C0-154	HNGC-B	17C0-154
HNGS-BA	17C0-154	DTC-H	17C0-154

PIP SUMMARY

Time Mark Every 60 S




3300
TENS
SFQF
IMQF
IDQF
SFLU
IMPH
IDPH
LCAL
HSGR
3325



HLDS Caliper (LCAL)
0 (IN) 20

Tension (TENS) (LBF)
10000 0

Deep Induction Phasor-processed Resistivity (IDPH)
0.2 (OHMM) 2000

HNGS Spectroscopy Gamma Ray (HSGR)
0 (GAPI) 15

ID_QUAL From IMQF to IDQF

Medium Induction Phasor-processed Resistivity (IMPH)
0.2 (OHMM) 2000

REPEAT SECTION

IM_QUAL From SFQF to IMQF

SFL Unaveraged (SFLU)
0.2 (OHMM) 2000

SFL_ QUAL From D3T to SFQF

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)	60	DEGF
DGF2	Deep 20 kHz Gain Factor	0.981641	

DPH2	Deep 20 kHz Phase Shift	0.58231	DEG
DRE2	Deep Real 20 kHz Sonde Error Correction	16.7871	MM/M
DSR2	Deep Sigma Reference (20 kHz)	1843	MM/M
DXE2	Deep Quad 20 kHz Sonde Error Correction	62.191	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	1.01122	
MPH2	Medium 20 kHz Phase Shift	-0.139176	DEG
MRE2	Medium Real 20 kHz Sonde Error Correction	-2.07993	MM/M
MSR2	Medium Sigma Reference (20 kHz)	3250	MM/M
MXE2	Medium Quad 20 kHz Sonde Error Correction	-32.0861	MM/M
SFCR	SFL Channel Ratio	1000	
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)	60	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	-0.00661925	
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	-999.25	CPS
S2BI	HNGS Detector 2 Calibration Bismuth Count Rate	-999.25	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	-9.99842	
VBA2	HNGS Detector 2 Variable Barite Factor Running Average	4.55362	
System and Miscellaneous			
BS	Bit Size	9.875	IN
DFD	Drilling Fluid Density	1.10	G/C3
DO	Depth Offset for Playback	0.0	M
FLEV	Fluid Level	-50000.00	M
PP	Playback Processing	OFF	
TD	Total Depth	3380	M

Format: DITE_LogPhasor Vertical Scale: 1:200 Graphics File Created: 03-Mar-2009 16:25

OP System Version: 17C0-154

DIT-E	17C0-154	GPIT-A/B	SRPC-3762-Q1_2009_OP17
DTA-A	17C0-154	HLDS	17C0-154
LDSC-B	17C0-154	HNGC-B	17C0-154
HNGS-BA	17C0-154	DTC-H	17C0-154

Input DLIS Files

DEFAULT	PI_LDL_NGS_053LUP	FN:74	PRODUCER	17-Feb-2009 22:09	3367.3 M	3251.3 M

Output DLIS Files

DEFAULT	PI_LDL_NGS_091PUP	FN:147	PRODUCER	03-Mar-2009 16:25

Calibration and Check Summary

Measurement	Nominal	Master	Before	After	Change	Limit	Units

Measurement	Nominal	Master	Before	After	Change	Limit	Units
General Purpose Inclinometer Wellsite Calibration - CROUZET ACCELEROMETER PROM HAS BEEN READ CORRECTLY							
Before: 12-Feb-2009 10:09							
TEMPERATURE REFERENCE :	N/A	N/A	20	N/A	N/A	N/A	DEGC
YEAR OF CALIBRATION :	N/A	N/A	99	N/A	N/A	N/A	
MONTH OF CALIBRATION :	N/A	N/A	3	N/A	N/A	N/A	
SERIAL NUMBER :	N/A	N/A	743	N/A	N/A	N/A	
General Purpose Inclinometer Wellsite Calibration - CROUZET MAGNETOMETER PROM HAS BEEN READ CORRECTLY							
Before: 12-Feb-2009 10:09							
TEMPERATURE REFERENCE :	N/A	N/A	23	N/A	N/A	N/A	DEGC
YEAR OF CALIBRATION :	N/A	N/A	3	N/A	N/A	N/A	
MONTH OF CALIBRATION :	N/A	N/A	9	N/A	N/A	N/A	
SERIAL NUMBER :	N/A	N/A	507	N/A	N/A	N/A	
Hostile Litho-Density Sonde Wellsite Calibration - Background Measurement							
Master: Calibration out of date 8-Aug-2008 7:49 Before: 11-Feb-2009 22:41							
SS Cs Resolution Bkg	9.000	8.543	8.544	N/A	N/A	1.800	%
LS Cs Resolution Bkg	9.000	8.493	8.582	N/A	N/A	1.800	%
LSW1 Background	100.0	77.28	76.13	N/A	N/A	3.000	CPS
LSW2 Background	100.0	70.65	70.13	N/A	N/A	3.000	CPS
LSW3 Background	200.0	158.8	155.6	N/A	N/A	6.000	CPS
LSW4 Background	250.0	195.3	189.8	N/A	N/A	7.500	CPS
LSW5 Background	600.0	439.3	431.0	N/A	N/A	18.00	CPS
SSW1 Background	100.0	76.13	74.68	N/A	N/A	3.000	CPS
SSW2 Background	200.0	132.2	129.8	N/A	N/A	6.000	CPS
SSW3 Background	500.0	350.5	343.8	N/A	N/A	15.00	CPS
SSW4 Background	270.0	187.4	185.7	N/A	N/A	8.100	CPS
SSW5 Background	200.0	133.8	132.5	N/A	N/A	6.000	CPS
Hostile Litho-Density Sonde Wellsite Calibration - Aluminum Measurement							
Master: Calibration out of date 8-Aug-2008 8:58							
LSW1 Aluminum	600.0	518.1	N/A	N/A	N/A	N/A	CPS
LSW2 Aluminum	900.0	773.9	N/A	N/A	N/A	N/A	CPS
LSW3 Aluminum	1100	946.7	N/A	N/A	N/A	N/A	CPS
LSW4 Aluminum	580.0	473.3	N/A	N/A	N/A	N/A	CPS
LSW5 Aluminum	570.0	438.3	N/A	N/A	N/A	N/A	CPS
SSW1 Aluminum	2800	2297	N/A	N/A	N/A	N/A	CPS
SSW2 Aluminum	8000	6567	N/A	N/A	N/A	N/A	CPS
SSW3 Aluminum	11600	9498	N/A	N/A	N/A	N/A	CPS
SSW4 Aluminum	5000	3998	N/A	N/A	N/A	N/A	CPS
SSW5 Aluminum	660.0	538.6	N/A	N/A	N/A	N/A	CPS
Hostile Litho-Density Sonde Wellsite Calibration - Lithology Measurement							
Master: Calibration out of date 8-Aug-2008 8:46							
LSW1 Iron	400.0	381.7	N/A	N/A	N/A	N/A	CPS
LSW2 Iron	730.0	666.8	N/A	N/A	N/A	N/A	CPS
LSW3 Iron	1000	893.1	N/A	N/A	N/A	N/A	CPS
LSW4 Iron	520.0	465.3	N/A	N/A	N/A	N/A	CPS
LSW5 Iron	470.0	431.1	N/A	N/A	N/A	N/A	CPS
SSW1 Iron	2100	1780	N/A	N/A	N/A	N/A	CPS
SSW2 Iron	6800	5718	N/A	N/A	N/A	N/A	CPS
SSW3 Iron	10800	9016	N/A	N/A	N/A	N/A	CPS
SSW4 Iron	4600	3838	N/A	N/A	N/A	N/A	CPS
SSW5 Iron	580.0	512.8	N/A	N/A	N/A	N/A	CPS
Hostile Litho-Density Sonde Wellsite Calibration - Caliper Calibration							
Before: 11-Feb-2009 22:03							
HLDS Caliper Small Ring	8.000	N/A	10.66	N/A	N/A	N/A	IN
HLDS Caliper Large Ring	12.00	N/A	14.66	N/A	N/A	N/A	IN
Hostile Natural Gamma Ray Sonde Wellsite Calibration - Detector 1 Check							
Master: Calibration out of date 29-Apr-2008 15:27 Before: 11-Feb-2009 22:36							
Na 511 Peak Loc	40.00	40.61	39.69	N/A	N/A	1.000	
Na 511 Peak Res	15.50	16.89	17.41	N/A	N/A	2.000	%
High Voltage	1150	1170	1192	N/A	N/A	N/A	V
Na 1785 Peak Loc	142.6	145.3	142.3	N/A	N/A	7.000	
Na 1785 Peak Res	8.500	9.978	9.812	N/A	N/A	2.000	%
Temperature	15.50	27.24	36.04	N/A	N/A	N/A	DEGC
Na Count Rate	45.00	47.84	38.46	N/A	N/A	8.000	CPS
Hostile Natural Gamma Ray Sonde Wellsite Calibration - Detector 2 Check							
Master: Calibration out of date 29-Apr-2008 15:27 Before: 11-Feb-2009 22:36							
Na 511 Peak Loc	40.00	40.68	39.73	N/A	N/A	1.000	
Na 511 Peak Res	15.50	14.89	15.70	N/A	N/A	2.000	%
High Voltage	1150	1247	1272	N/A	N/A	N/A	V
Na 1785 Peak Loc	142.6	144.4	141.4	N/A	N/A	7.000	
Na 1785 Peak Res	8.500	8.329	8.903	N/A	N/A	2.000	%
Temperature	15.50	26.21	35.43	N/A	N/A	N/A	DEGC
Na Count Rate	45.00	48.61	39.02	N/A	N/A	8.000	CPS

Hostile Natural Gamma Ray Sonde Wellsite Calibration - Ratio Of Detector 1 To Detector 2
Master: Calibration out of date 29-Apr-2008 15:27 Before: 11-Feb-2009 22:36

Coincidence Count Rate Ratio	1.000	0.9831	0.9864	N/A	N/A	0.05000	

Hostile Natural Gamma Ray Sonde Master Calibration - Detector 1 Calibration
Master: Calibration out of date 29-Apr-2008 15:22

Na 511 Peak Set Point	40.00	42.00	--	--	--	--	
Th Peak Loc	209.6	209.6	--	--	--	--	
Th Peak Res	7.000	7.774	--	--	--	--	%
Background Count Rate	142.5	82.62	--	--	--	--	CPS
Gain Ratio	1.000	0.9819	--	--	--	--	

Hostile Natural Gamma Ray Sonde Master Calibration - Detector 2 Calibration
Master: Calibration out of date 29-Apr-2008 15:22

Na 511 Peak Set Point	40.00	42.00	--	--	--	--	
Th Peak Loc	209.6	208.4	--	--	--	--	
Th Peak Res	7.000	7.245	--	--	--	--	%
Background Count Rate	142.5	83.78	--	--	--	--	CPS
Gain Ratio	1.000	0.9747	--	--	--	--	

Dual Induction - E / Equipment Identification

Primary Equipment:		
Dual Induction Sonde	DIS - HB	442
Dual Induction Cartridge	DIC - EB	438
Auxiliary Equipment:		
Mass Isolated Housing	MIH - ZA	417

Dual Induction - E Wellsite Calibration

Induction Electronics (10 kHz)

Phase	ID Elect Real Offset 10 kHz MM/M	Value
Before		39.26
	-261.2 (Minimum) 38.83 (Nominal) 338.8 (Maximum)	

Phase	ID Elect Real Gain 10 kHz	Value
Before		1.021
	0.8436 (Minimum) 0.9936 (Nominal) 1.191 (Maximum)	

Phase	ID Elect Phase 10 kHz DEG	Value
Before		8.430
	0.1759 (Minimum) 10.18 (Nominal) 20.18 (Maximum)	

Phase	ID Elect Quad Offset 10 kHz MM/M	Value
Before		23.37
	-276.0 (Minimum) 23.99 (Nominal) 324.0 (Maximum)	

Phase	ID Elect Quad Gain 10 kHz	Value
Before		1.009
	0.8333 (Minimum) 0.9833 (Nominal) 1.176 (Maximum)	

Phase	IM Elect Phase 10 kHz DEG	Value
Before		12.96
	3.625 (Minimum) 13.63 (Nominal) 23.63 (Maximum)	

Phase	IM Elect Real Offset 10 kHz MM/M	Value
Before		96.62
	-452.1 (Minimum) 97.90 (Nominal) 647.9 (Maximum)	

Phase	IM Elect Real Gain 10 kHz	Value
Before		0.9591
	0.8095 (Minimum) 0.9595 (Nominal) 1.143 (Maximum)	

Phase	IM Elect Quad Offset 10 kHz MM/M	Value
Before		94.34
	-453.6 (Minimum) 96.36 (Nominal) 646.4 (Maximum)	

Phase	IM Elect Quad Gain 10 kHz	Value
Before		0.9557
	0.8070 (Minimum) 0.9570 (Nominal) 1.139 (Maximum)	

Before: Calibration out of date 22-Oct-2005 15:00

Dual Induction - E Wellsite Calibration

Induction Electronics (20 kHz)

Phase	ID Elect Real Offset 20 kHz MM/M	Value
Before		15.20
	-109.8 (Minimum) 15.15 (Nominal) 140.2 (Maximum)	

Phase	ID Elect Real Gain 20 kHz	Value
Before		1.027
	0.8559 (Minimum) 1.006 (Nominal) 1.208 (Maximum)	

Phase	ID Elect Phase 20 kHz DEG	Value
Before		6.612
	-6.430 (Minimum) 8.570 (Nominal) 23.57 (Maximum)	

Phase	ID Elect Quad Offset 20 kHz MM/M	Value
Before		9.214
	-115.5 (Minimum) 9.522 (Nominal) 134.5 (Maximum)	

Phase	ID Elect Quad Gain 20 kHz	Value
Before		1.015
	0.8453 (Minimum) 0.9953 (Nominal) 1.193 (Maximum)	

Phase	IM Elect Phase 20 kHz DEG	Value
Before		11.37
	-2.601 (Minimum) 12.40 (Nominal) 27.40 (Maximum)	

Phase	IM Elect Real Offset 20 kHz MM/M	Value
Before		40.26
	-184.3 (Minimum) 40.66 (Nominal) 265.7 (Maximum)	

Phase	IM Elect Real Gain 20 kHz	Value
Before		1.018
	0.8562 (Minimum) 1.006 (Nominal) 1.209 (Maximum)	

Phase	IM Elect Quad Offset 20 kHz MM/M	Value
Before		39.41
	-184.8 40.18 265.2	

Phase	IM Elect Quad Gain 20 kHz	Value
Before		1.014
	0.8534 1.003 1.205	

(Minimum)	(Nominal)	(Maximum)	(Minimum)	(Nominal)	(Maximum)

Before: Calibration out of date 22-Oct-2005 15:01

Dual Induction - E Wellsite Calibration

Induction Electronics (40 kHz)

Phase	ID Elect Real Offset 40 kHz MM/M	Value
Before		9.811
-75.13 (Minimum)	9.871 (Nominal)	94.87 (Maximum)

Phase	ID Elect Real Gain 40 kHz	Value
Before		0.9984
0.8385 (Minimum)	0.9885 (Nominal)	1.184 (Maximum)

Phase	ID Elect Phase 40 kHz DEG	Value
Before		24.98
8.300 (Minimum)	28.30 (Nominal)	48.30 (Maximum)

Phase	ID Elect Quad Offset 40 kHz MM/M	Value
Before		5.953
-78.79 (Minimum)	6.213 (Nominal)	91.21 (Maximum)

Phase	ID Elect Quad Gain 40 kHz	Value
Before		0.9850
0.8272 (Minimum)	0.9772 (Nominal)	1.168 (Maximum)

Phase	IM Elect Phase 40 kHz DEG	Value
Before		29.57
12.35 (Minimum)	32.35 (Nominal)	52.35 (Maximum)

Phase	IM Elect Real Offset 40 kHz MM/M	Value
Before		26.24
-103.5 (Minimum)	26.51 (Nominal)	156.5 (Maximum)

Phase	IM Elect Real Gain 40 kHz	Value
Before		1.031
0.8684 (Minimum)	1.018 (Nominal)	1.226 (Maximum)

Phase	IM Elect Quad Offset 40 kHz MM/M	Value
Before		25.74
-103.7 (Minimum)	26.25 (Nominal)	156.3 (Maximum)

Phase	IM Elect Quad Gain 40 kHz	Value
Before		1.027
0.8652 (Minimum)	1.015 (Nominal)	1.221 (Maximum)

Before: Calibration out of date 22-Oct-2005 15:01

Dual Induction - E Wellsite Calibration

SFL Electronics

Phase	SFL Voltage Offset MV	Value
Before		1.166
-15.00 (Minimum)	0 (Nominal)	15.00 (Maximum)

Phase	SFL Voltage Gain	Value
Before		1.013
0.8500 (Minimum)	1.000 (Nominal)	1.200 (Maximum)

Phase	SFL Current Offset MA	Value
Before		0.008091
-0.6000 (Minimum)	0 (Nominal)	0.6000 (Maximum)

Phase	SFL Current Gain	Value
Before		0.9921
0.8500 (Minimum)	1.000 (Nominal)	1.200 (Maximum)

Before: Calibration out of date 22-Oct-2005 15:02

Dual Induction - E Wellsite Calibration

Electronics Calibration Changes Files/Depth Intervals:

Phase	ID (R > 27 OHM-M) MM/M	Value
After		0.1720
0 (Minimum)	0 (Nominal)	0.7500 (Maximum)

Phase	ID (R < 27 OHM-M) %	Value
After		0.0004916
0 (Minimum)	0 (Nominal)	2.000 (Maximum)

Phase	SFL (R < 1 OHM-M) OHMM	Value
After		0.0007355
0 (Minimum)	0 (Nominal)	0.02000 (Maximum)

Phase	IM (R > 27 OHM-M) MM/M	Value
After		0.1699
0 (Minimum)	0 (Nominal)	0.7500 (Maximum)

Phase	IM (R < 27 OHM-M) %	Value
After		0.0002167
0 (Minimum)	0 (Nominal)	2.000 (Maximum)

Phase	SFL (R > 27 OHM-M) MM/M	Value
After		0.09797
0 (Minimum)	0 (Nominal)	0.7500 (Maximum)

Phase	SFL (R < 27 OHM-M) %	Value
After		0.003834
0 (Minimum)	0 (Nominal)	2.000 (Maximum)

After: 18-Feb-2009 0:16

Dual Induction - E Master Calibration

Test Loop Calibration: Calibration of Internal Reference to Test Loop Standard

Phase	Deep 10 kHz Gain Factor	Value
Master		0.9680
0.9000 (Minimum)	1.000 (Nominal)	1.100 (Maximum)

Phase	Deep 20 kHz Gain Factor	Value
Master		0.9816
0.9000 (Minimum)	1.000 (Nominal)	1.100 (Maximum)

Phase	Deep 40 kHz Gain Factor	Value
Master		1.004
0.9000 (Minimum)	1.000 (Nominal)	1.100 (Maximum)

Phase	Medium 10 kHz Gain Factor	Value
Master		1.002
0.9000 (Minimum)	1.000 (Nominal)	1.100 (Maximum)

Phase	Medium 20 kHz Gain Factor	Value
Master		1.011
0.9000 (Minimum)	1.000 (Nominal)	1.100 (Maximum)

Phase	Medium 40 kHz Gain Factor	Value
Master		1.048
0.9000 (Minimum)	1.000 (Nominal)	1.100 (Maximum)

Phase	Deep 10 kHz Phase Shift	Value
Master		0.5195
-1.500 (Minimum)	0 (Nominal)	1.500 (Maximum)

Phase	Deep 20 kHz Phase Shift	Value
Master		0.5823
-2.000 (Minimum)	0 (Nominal)	2.000 (Maximum)

Phase	Deep 40 kHz Phase Shift	Value
Master		-0.02310
-4.000 (Minimum)	-1.000 (Nominal)	2.000 (Maximum)

Phase	Medium 10 kHz Phase Shift	Value	Phase	Medium 20 kHz Phase Shift	Value	Phase	Medium 40 kHz Phase Shift	Value
Master		0.1902	Master		-0.1392	Master		-1.016
	-1.500 (Minimum) 0 (Nominal) 1.500 (Maximum)			-3.000 (Minimum) -1.000 (Nominal) 1.000 (Maximum)			-5.000 (Minimum) -2.000 (Nominal) 1.000 (Maximum)	

Master: Calibration out of date 1-May-2008 9:35

Dual Induction - E Master Calibration

Sonde Error Corrections: Correction for sonde response in zero conductivity environment. (Normalized to 25C).

Phase	Real Deep 10 kHz S.E. Corr.	Value	Phase	Real Deep 20 kHz S.E. Corr.	Value	Phase	Real Deep 40 kHz S.E. Corr.	Value
Master		47.03	Master		16.79	Master		5.701
	-50.00 (Minimum) 0 (Nominal) 125.0 (Maximum)			-30.00 (Minimum) 0 (Nominal) 30.00 (Maximum)			-15.00 (Minimum) 0 (Nominal) 15.00 (Maximum)	
Phase	Quad Deep 10 kHz S.E. Corr.	Value	Phase	Quad Deep 20 kHz S.E. Corr.	Value	Phase	Quad Deep 40 kHz S.E. Corr.	Value
Master		100.5	Master		62.19	Master		44.67
	-250.0 (Minimum) 0 (Nominal) 350.0 (Maximum)			-125.0 (Minimum) 0 (Nominal) 200.0 (Maximum)			-75.00 (Minimum) 0 (Nominal) 125.0 (Maximum)	
Phase	Real Medium 10 kHz S.E. Corr.	Value	Phase	Real Medium 20 kHz S.E. Corr.	Value	Phase	Real Medium 40 kHz S.E. Corr.	Value
Master		17.11	Master		-2.080	Master		-9.895
	-50.00 (Minimum) 0 (Nominal) 140.0 (Maximum)			-50.00 (Minimum) 0 (Nominal) 50.00 (Maximum)			-30.00 (Minimum) 0 (Nominal) 30.00 (Maximum)	
Phase	Quad Medium 10 kHz S.E. Corr.	Value	Phase	Quad Medium 20 kHz S.E. Corr.	Value	Phase	Quad Medium 40 kHz S.E. Corr.	Value
Master		-94.74	Master		-32.09	Master		12.90
	-1300 (Minimum) 0 (Nominal) 1300 (Maximum)			-650.0 (Minimum) 0 (Nominal) 650.0 (Maximum)			-350.0 (Minimum) 0 (Nominal) 350.0 (Maximum)	

Master: Calibration out of date 1-May-2008 9:49

General Purpose Inclinometer / Equipment Identification

Primary Equipment:		
GPIT Cartridge - A	GPIC - A	840
Auxiliary Equipment:		
GPIT Housing	GPIH - A	2864

Hostile Litho-Density Sonde / Equipment Identification

Primary Equipment:		
Hostile Litho Density Sonde	HLDS - D	35
Hostile Litho Density High Voltage	HLDV - D	35
Gamma Source Radioactive	GSR - Z	2326
Auxiliary Equipment:		
Hostile Litho Density Pad	HLDP - C	35
Hostile Litho Density High Voltage Housi	HEH - H	35

Hostile Litho-Density Sonde Wellsite Calibration

Background Measurement

Phase	SS Cs Resolution Bkg %	Value	Phase	LS Cs Resolution Bkg %	Value	Phase	LSW1 Background CPS	Value
Master		8.543	Master		8.493	Master		77.28
Before		8.544	Before		8.582	Before		76.13
	7.000 (Minimum) 9.000 (Nominal) 11.00 (Maximum)			7.000 (Minimum) 9.000 (Nominal) 11.00 (Maximum)			55.00 (Minimum) 100.0 (Nominal) 150.0 (Maximum)	
Phase	LSW2 Background CPS	Value	Phase	LSW3 Background CPS	Value	Phase	LSW4 Background CPS	Value
Master		70.65	Master		158.8	Master		195.3
Before		70.13	Before		155.6	Before		189.8
	50.00 (Minimum) 100.0 (Nominal) 140.0 (Maximum)			110.0 (Minimum) 200.0 (Nominal) 290.0 (Maximum)			140.0 (Minimum) 250.0 (Nominal) 360.0 (Maximum)	
Phase	LSW5 Background CPS	Value	Phase	SSW1 Background CPS	Value	Phase	SSW2 Background CPS	Value
Master		439.3	Master		76.13	Master		132.2
Before		431.0	Before		74.68	Before		129.8
	330.0 (Minimum) 600.0 (Nominal) 830.0 (Maximum)			55.00 (Minimum) 100.0 (Nominal) 150.0 (Maximum)			100.0 (Minimum) 200.0 (Nominal) 260.0 (Maximum)	

Phase	SSW3 Background CPS	Value
Master		350.5
Before		343.8
	280.0 (Minimum) 500.0 (Nominal) 700.0 (Maximum)	

Phase	SSW4 Background CPS	Value
Master		187.4
Before		185.7
	150.0 (Minimum) 270.0 (Nominal) 380.0 (Maximum)	

Phase	SSW5 Background CPS	Value
Master		133.8
Before		132.5
	110.0 (Minimum) 200.0 (Nominal) 270.0 (Maximum)	

Master: Calibration out of date 8-Aug-2008 7:49 Before: 11-Feb-2009 22:41

Litho-Density Spectroscopy Cartridge - B / Equipment Identification

Primary Equipment:		
LDSC Cartridge	LDSC - B	521
Auxiliary Equipment:		
LDSC Housing	LDSH - A	126

Hostile Natural Gamma Ray Cartridge - B / Equipment Identification

Primary Equipment:		
HNGC Cartridge	HNGC - B	202
Auxiliary Equipment:		
HNGC Housing	HNGH - A	30

Hostile Natural Gamma Ray Sonde / Equipment Identification

Primary Equipment:		
HNGS Sonde	HNGS - BA	27
Auxiliary Equipment:		
HNGS Sonde Housing	HNSH - BA	27
Gamma Source Radioactive	GSR - U	1154

Hostile Natural Gamma Ray Sonde Wellsite Calibration

Detector 1 Check

Phase	Na 511 Peak Loc	Value
Master		40.61
Before		39.69
	37.50 (Minimum) 40.00 (Nominal) 43.50 (Maximum)	

Phase	Na 511 Peak Res %	Value
Master		16.89
Before		17.41
	12.00 (Minimum) 15.50 (Nominal) 19.00 (Maximum)	

Phase	High Voltage V	Value
Master		1170
Before		1192
	900.0 (Minimum) 1150 (Nominal) 1600 (Maximum)	

Phase	Na 1785 Peak Loc	Value
Master		145.3
Before		142.3
	135.0 (Minimum) 142.6 (Nominal) 150.3 (Maximum)	

Phase	Na 1785 Peak Res %	Value
Master		9.978
Before		9.812
	7.000 (Minimum) 8.500 (Nominal) 11.00 (Maximum)	

Phase	Temperature DEGC	Value
Master		27.24
Before		36.04
	-28.89 (Minimum) 15.50 (Nominal) 60.00 (Maximum)	

Phase	Na Count Rate CPS	Value
Master		47.84
Before		38.46
	10.00 (Minimum) 45.00 (Nominal) 100.0 (Maximum)	

MASTER-BEFORE LIMIT

Master: Calibration out of date 29-Apr-2008 15:27 Before: 11-Feb-2009 22:36

Hostile Natural Gamma Ray Sonde Wellsite Calibration

Detector 2 Check

Phase	Na 511 Peak Loc	Value
Master		40.68
Before		39.73
	37.50 (Minimum) 40.00 (Nominal) 43.50 (Maximum)	

Phase	Na 511 Peak Res %	Value
Master		14.89
Before		15.70
	12.00 (Minimum) 15.50 (Nominal) 19.00 (Maximum)	

Phase	High Voltage V	Value
Master		1247
Before		1272
	900.0 (Minimum) 1150 (Nominal) 1600 (Maximum)	

Phase	Na 1785 Peak Loc	Value
Master		144.4

Phase	Na 1785 Peak Res %	Value
Master		8.329

Phase	Temperature DEGC	Value
Master		26.21

Phase		Value
Before		141.4
	135.0 (Minimum) 142.6 (Nominal) 150.3 (Maximum)	

Phase		Value
Before		8.903
	7.000 (Minimum) 8.500 (Nominal) 11.00 (Maximum)	

Phase		Value
Before		35.43
	-28.89 (Minimum) 15.50 (Nominal) 60.00 (Maximum)	

Phase	Na Count Rate CPS	Value
Master		48.61
Before		39.02
	10.00 (Minimum) 45.00 (Nominal) 100.0 (Maximum)	

MASTER-BEFORE LIMIT

Master: Calibration out of date 29-Apr-2008 15:27

Before: 11-Feb-2009 22:36

Hostile Natural Gamma Ray Sonde Wellsite Calibration

Ratio Of Detector 1 To Detector 2

Phase	Coincidence Count Rate Ratio	Value
Master		0.9831
Before		0.9864
	0.9500 (Minimum) 1.000 (Nominal) 1.050 (Maximum)	

Master: Calibration out of date 29-Apr-2008 15:27

Before: 11-Feb-2009 22:36

Hostile Natural Gamma Ray Sonde Master Calibration

Detector 1 Calibration

Phase	Na 511 Peak Set Point	Value
Master		42.00
	38.00 (Minimum) 40.00 (Nominal) 43.00 (Maximum)	

Phase	Th Peak Loc	Value
Master		209.6
	201.0 (Minimum) 209.6 (Nominal) 218.3 (Maximum)	

Phase	Th Peak Res %	Value
Master		7.774
	5.000 (Minimum) 7.000 (Nominal) 9.000 (Maximum)	

Phase	Background Count Rate CPS	Value
Master		82.62
	10.00 (Minimum) 142.5 (Nominal) 265.0 (Maximum)	

Phase	Gain Ratio	Value
Master		0.9819
	0.9400 (Minimum) 1.000 (Nominal) 1.060 (Maximum)	

Master: Calibration out of date 29-Apr-2008 15:22

Hostile Natural Gamma Ray Sonde Master Calibration

Detector 2 Calibration

Phase	Na 511 Peak Set Point	Value
Master		42.00
	38.00 (Minimum) 40.00 (Nominal) 43.00 (Maximum)	

Phase	Th Peak Loc	Value
Master		208.4
	201.0 (Minimum) 209.6 (Nominal) 218.3 (Maximum)	

Phase	Th Peak Res %	Value
Master		7.245
	5.000 (Minimum) 7.000 (Nominal) 9.000 (Maximum)	

Phase	Background Count Rate CPS	Value
Master		83.78
	10.00 (Minimum) 142.5 (Nominal) 265.0 (Maximum)	

Phase	Gain Ratio	Value
Master		0.9747
	0.9400 (Minimum) 1.000 (Nominal) 1.060 (Maximum)	

Master: Calibration out of date 29-Apr-2008 15:22

DTS Telemetry Tool / Equipment Identification

Primary Equipment:		
DTC-H Auxiliary Cartridge	DTCH - A	8798
DTC-H Telemetry Cartridge	DTCH - A	8798
Auxiliary Equipment:		
DTCH Telemetry Cartridge Housing	ECH - KC	1777

Well:	Expedition 320T Site U1330A
Field:	Ontog-Java Plateau(Equatorial NWPacific)
Rig:	JOIDES Resolution
Ocean:	Pacific

Phasor Induction
Natural Gamma
Spectroscopy