



**DISCLAIMER**  
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**OTHER SERVICES1**  
 OS1: none  
 OS2:  
 OS3:  
 OS4:  
 OS5:

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

**REMARKS: RUN NUMBER 1**  
 Hole Cored With APC.  
 All depths in Meters Below Rig Floor (MBRF).  
 Hole flushed with Sepiolite  
 Sea Floor Driller 3424.6 MBRF.  
 Sea Floor Logger- 3423 MBRF.  
 Total Depth Driller- 3727 MBRF.  
 Total Depth Logger- 3724 MBRF.  
 Casing Bottom Driller-3489.9 MBRF.  
 Casing Bottom Logger- 3489 MBRF.  
 No Repeat.  
 Winch test performed.

**REMARKS: RUN NUMBER 2**

**RUN 1**  
 SERVICE ORDER #:  
 PROGRAM VERSION: 12C0-301  
 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 6250  
 SFT-178 6250  
 GSR-U 135  
 WITM (DTS)-A

**RUN 2**

**DOWNHOLE EQUIPMENT**

LEH-QT		29.91
LEH-QT		
DTC-H	CTEM	28.74
ECH-KC	TelStatus	29.02
	ToolStatu	28.11
HNGS-BA	Upper_1	27.41
HNGS-BA 77	Lower_2	27.19
		28.11

INPLC-A 79

HNSH-BA 79

ILE-D

ILE-D 25

APS-C

APH-AC 104

APS-C 202

MNTR-F 5124

NPLC-B

NPLC-B 79

NPH-B 82

HLDS

GSR-Z 2326

HLDV-D 35

HLDS-D 35

HEH-H 35

HLDP-C 35

DTA-A

ECH-KE 8231

DTA-A 8231

GPIT-A/B

GPIC-A 719

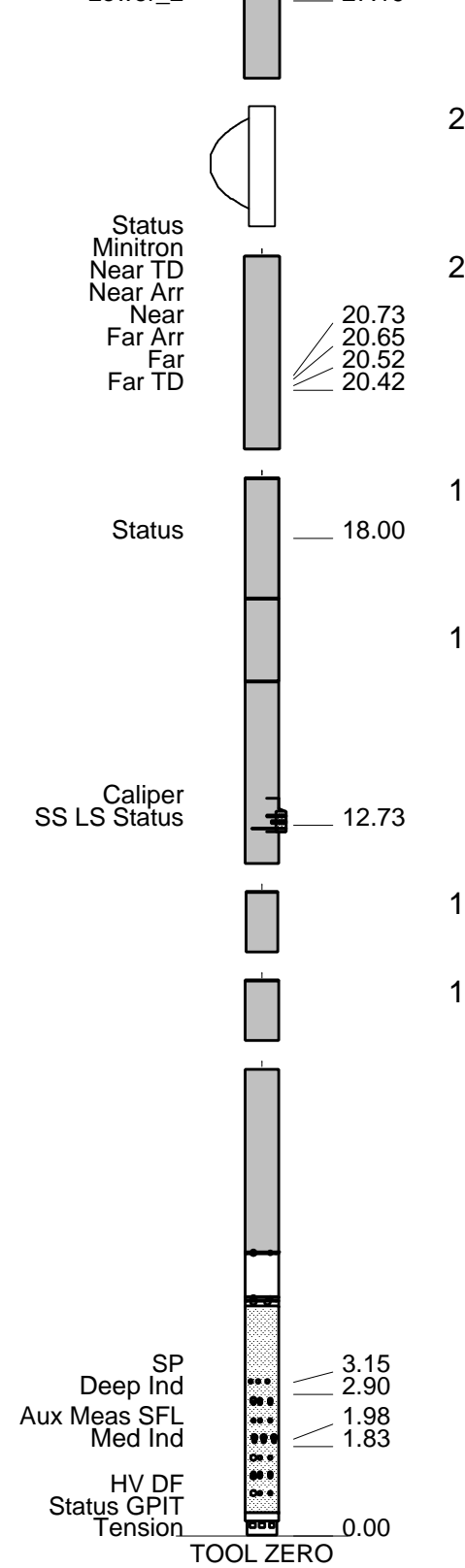
GPIH-A

DIT-E

DIC-EB 438

MIH-ZA 417

DIS-HB 442



25.61

23.17

19.23

16.78

11.96

10.74

9.52

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

## Input DLIS Files

DEFAULT      PI\_LDL\_APS\_NGS\_062LUP      FN:10      PRODUCER      31-Mar-2005 07:28      3723.9 M      3409.3 M

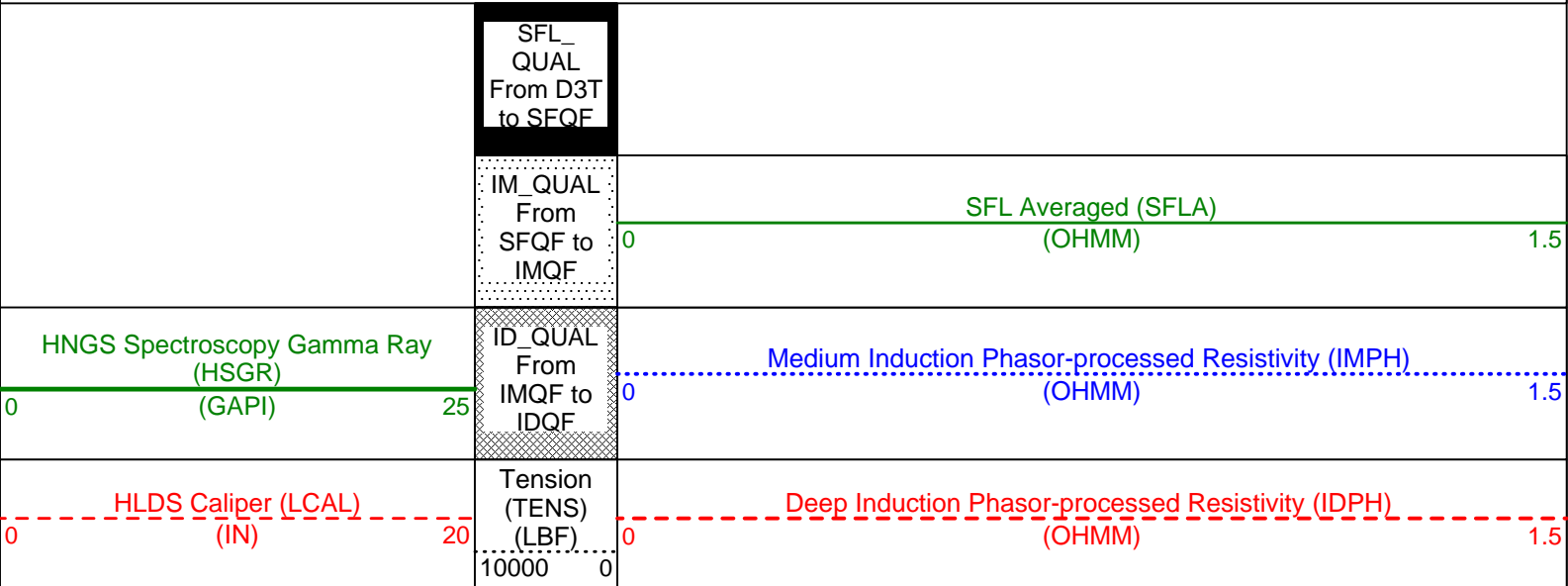
OP System Version: 12C0-301  
MCM

Main Up Log

DIT-E	12C0-301	GPIT-A/B	12C0-301
DTA-A	12C0-301	HLDS	12C0-301
NPLC-B	12C0-301	APS-C	12C0-301
HNGS-BA	12C0-301	DTC-H	12C0-301

### PIP SUMMARY

Time Mark Every 60 S



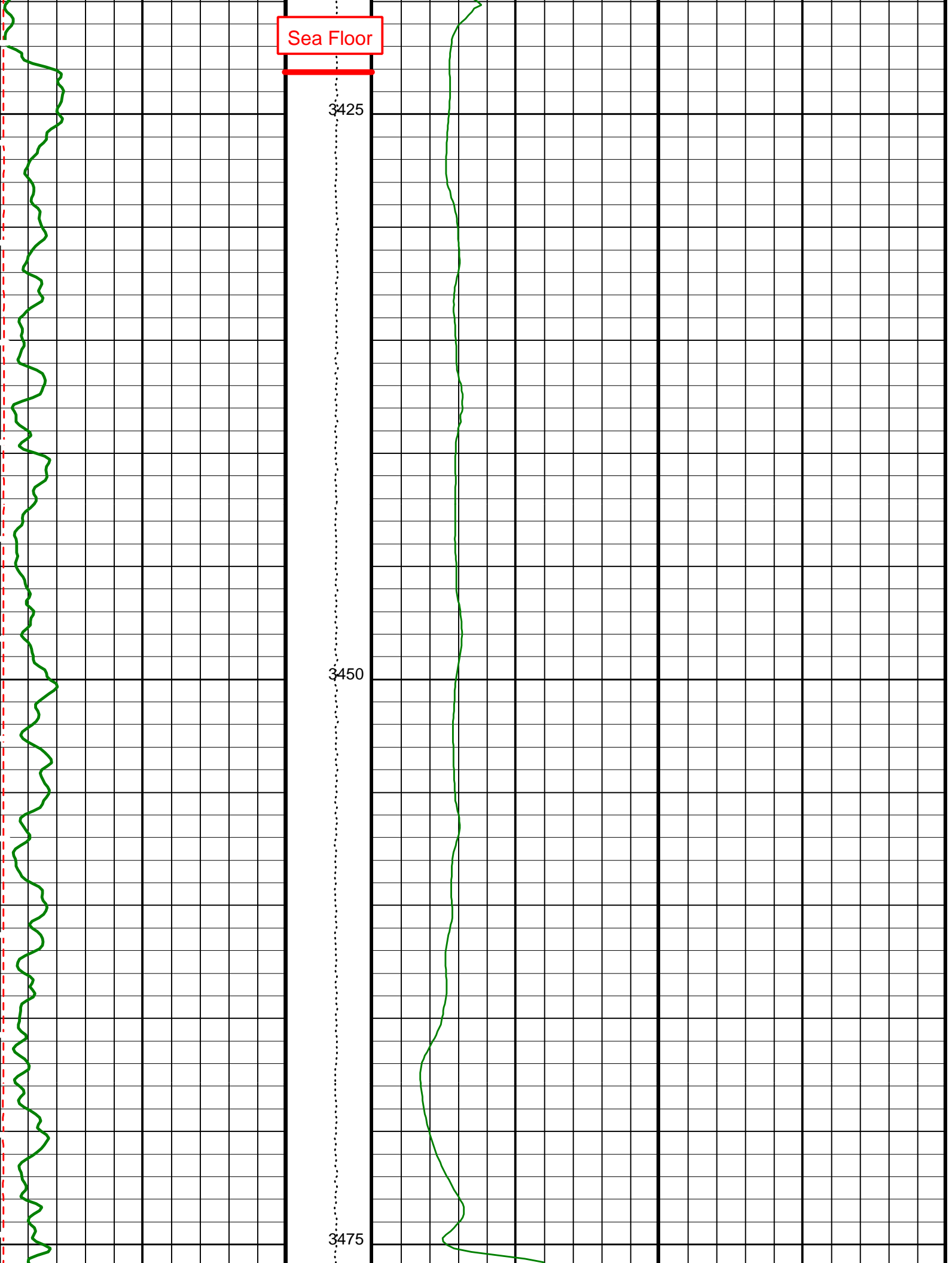
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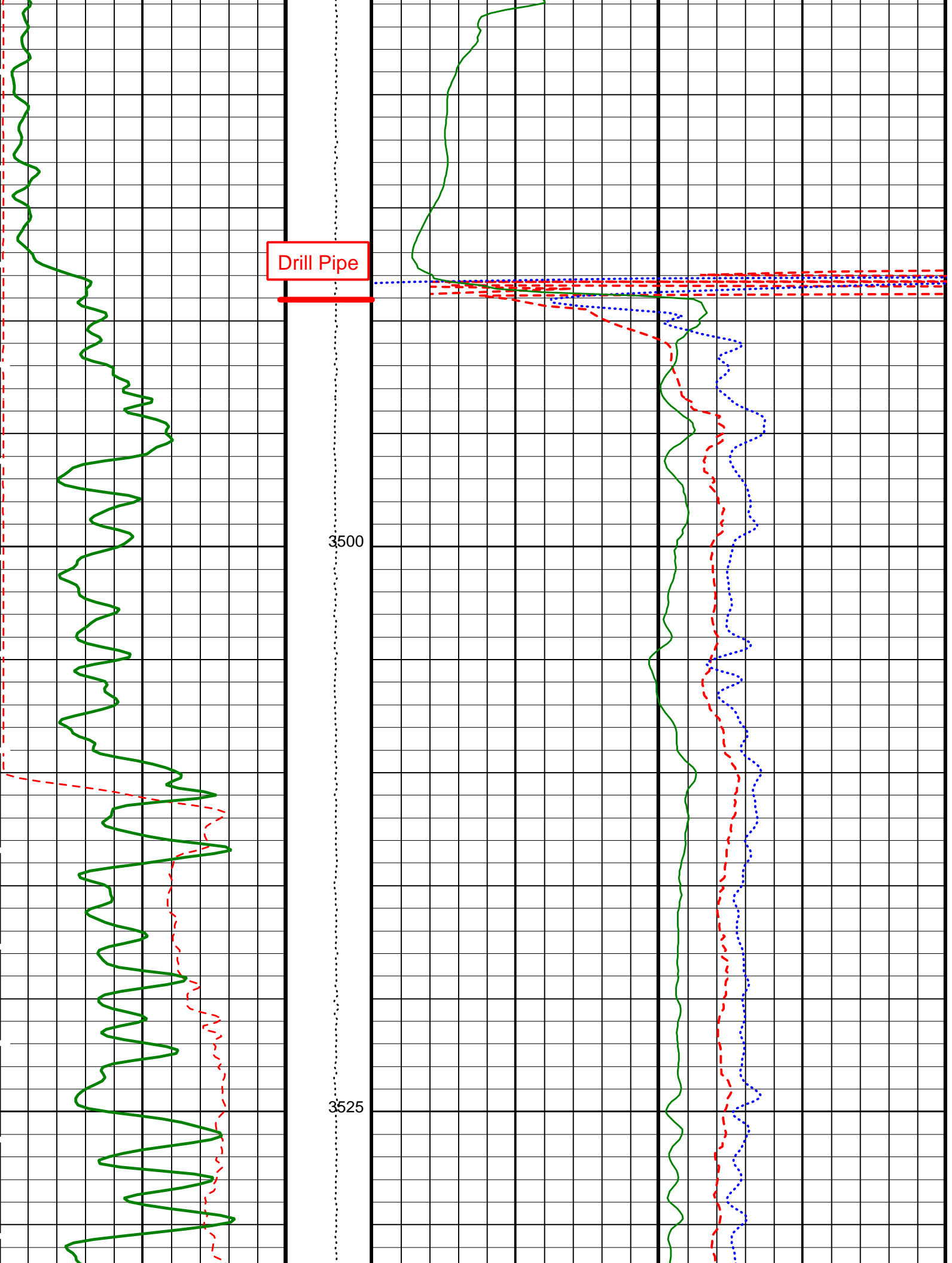
Sea Floor

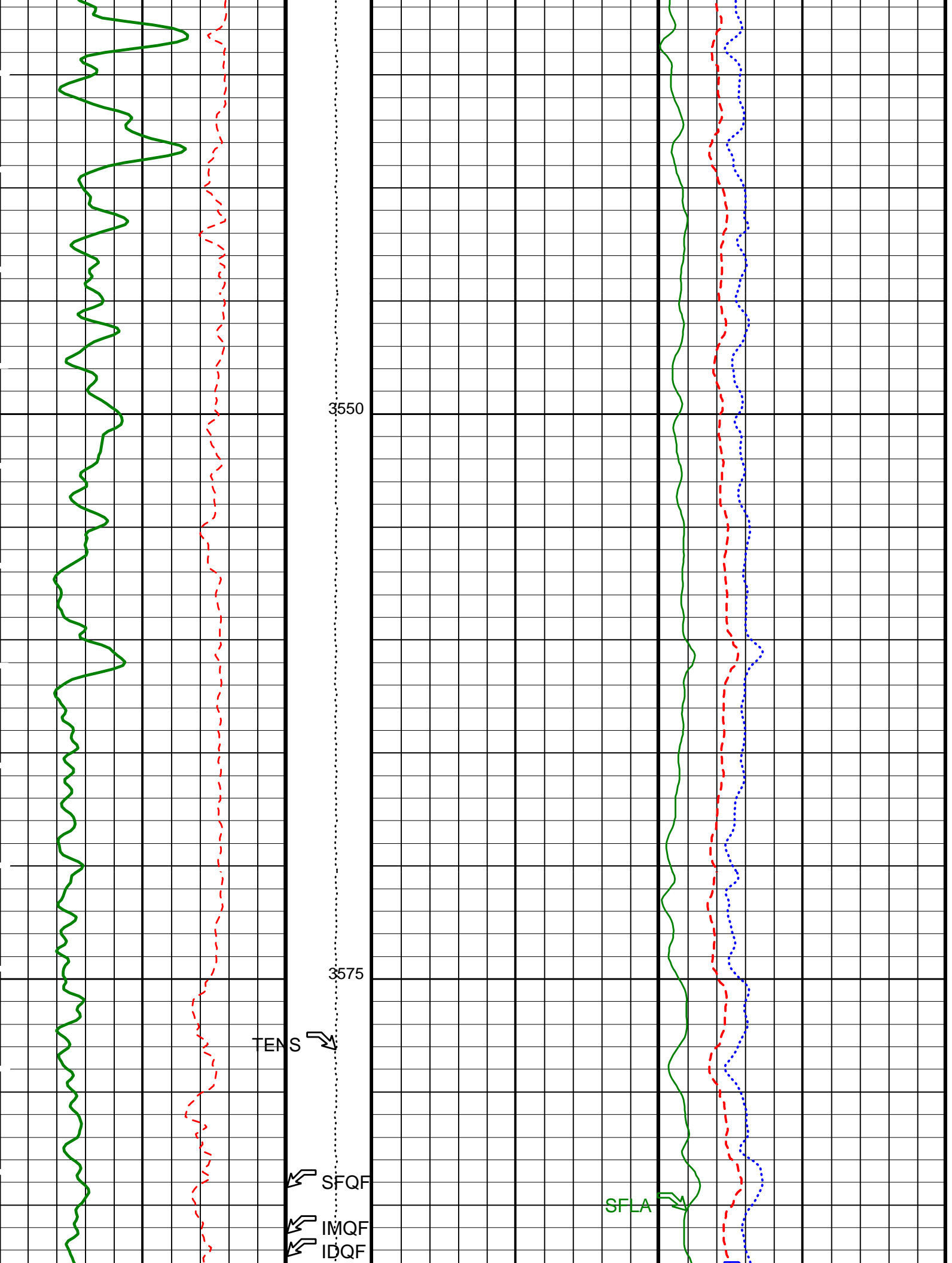
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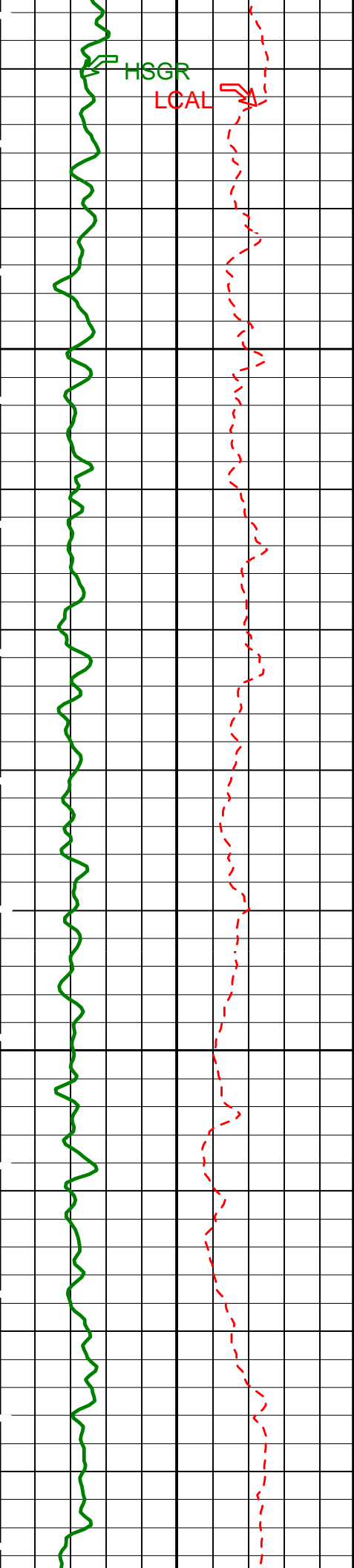
3450

3475



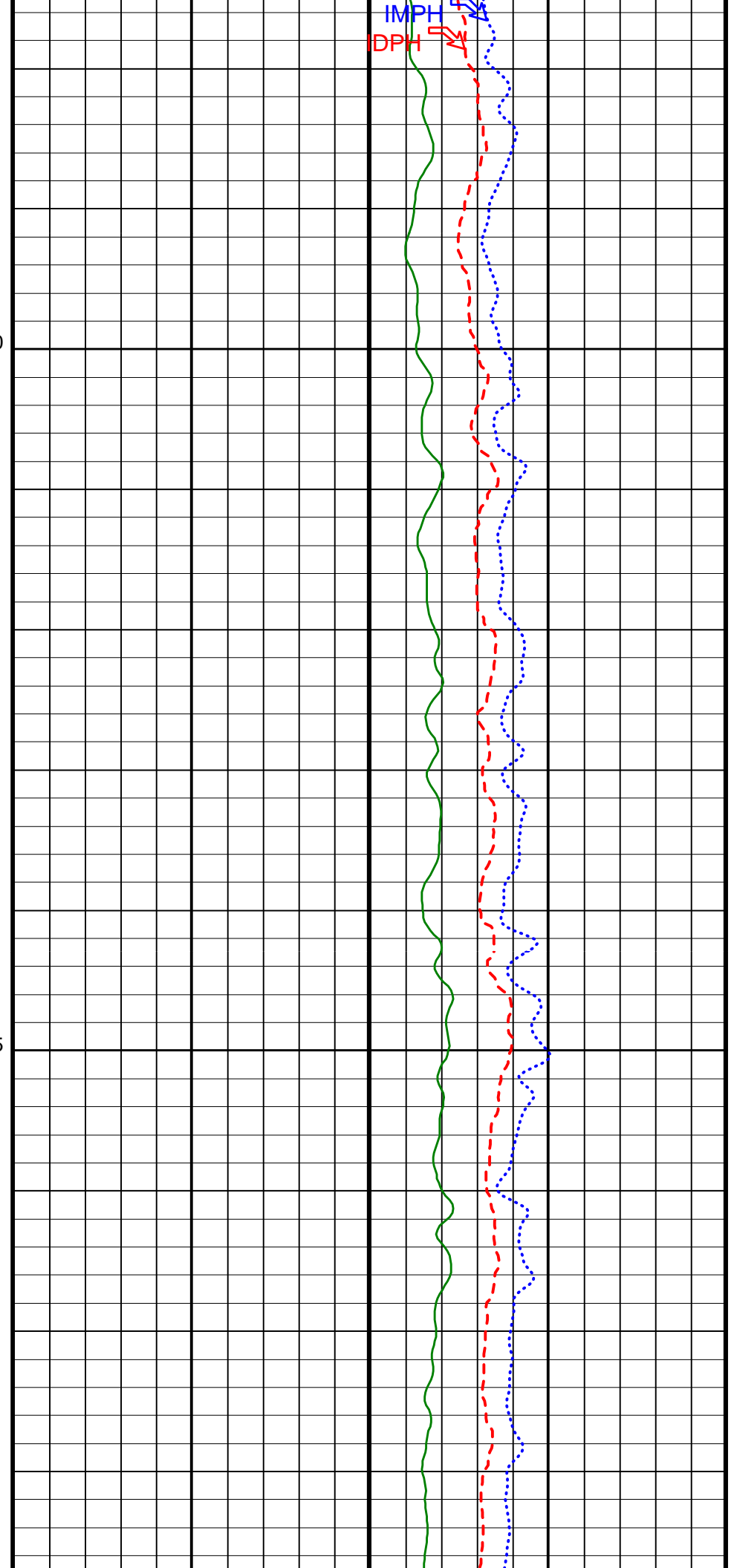






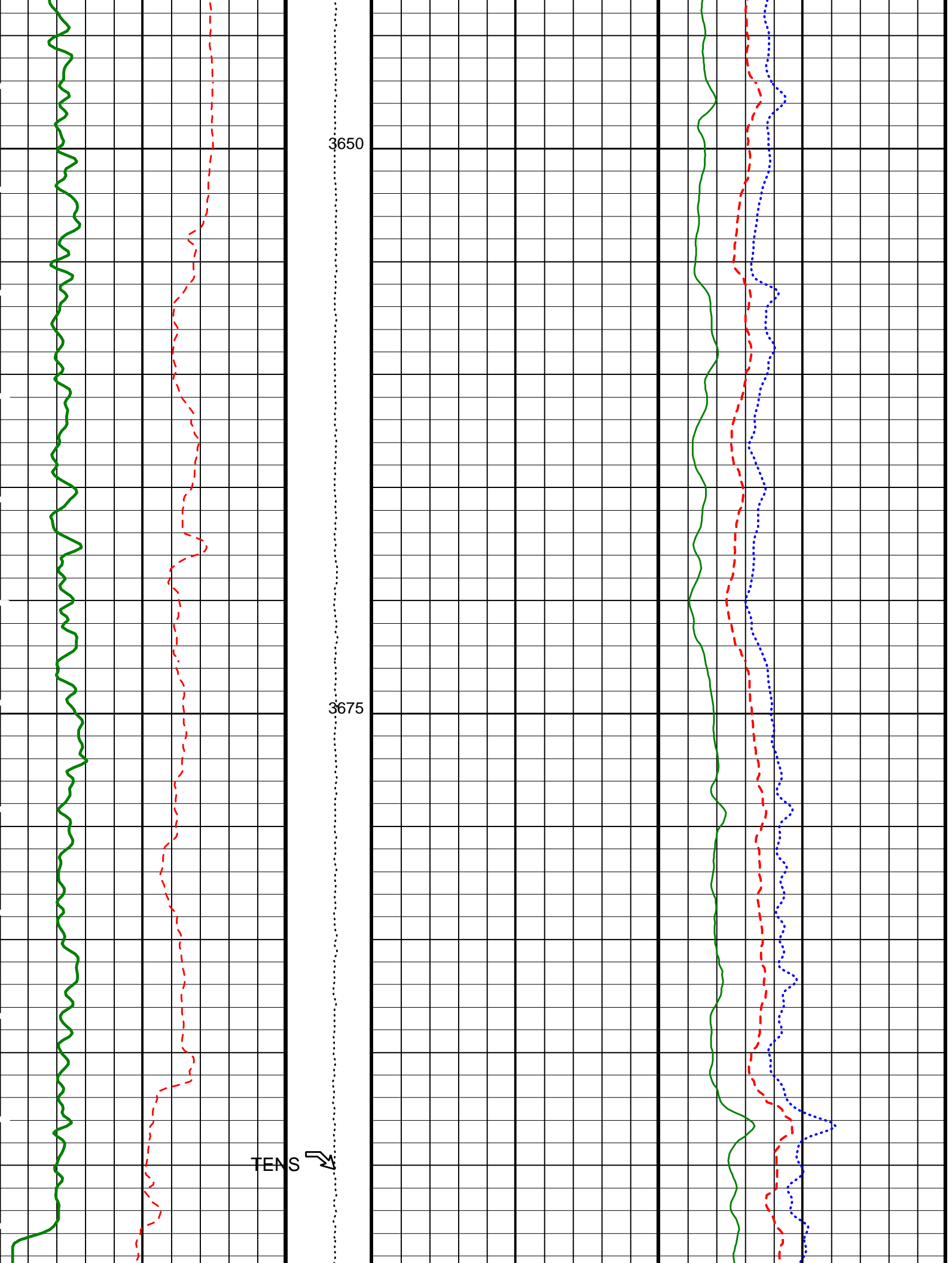
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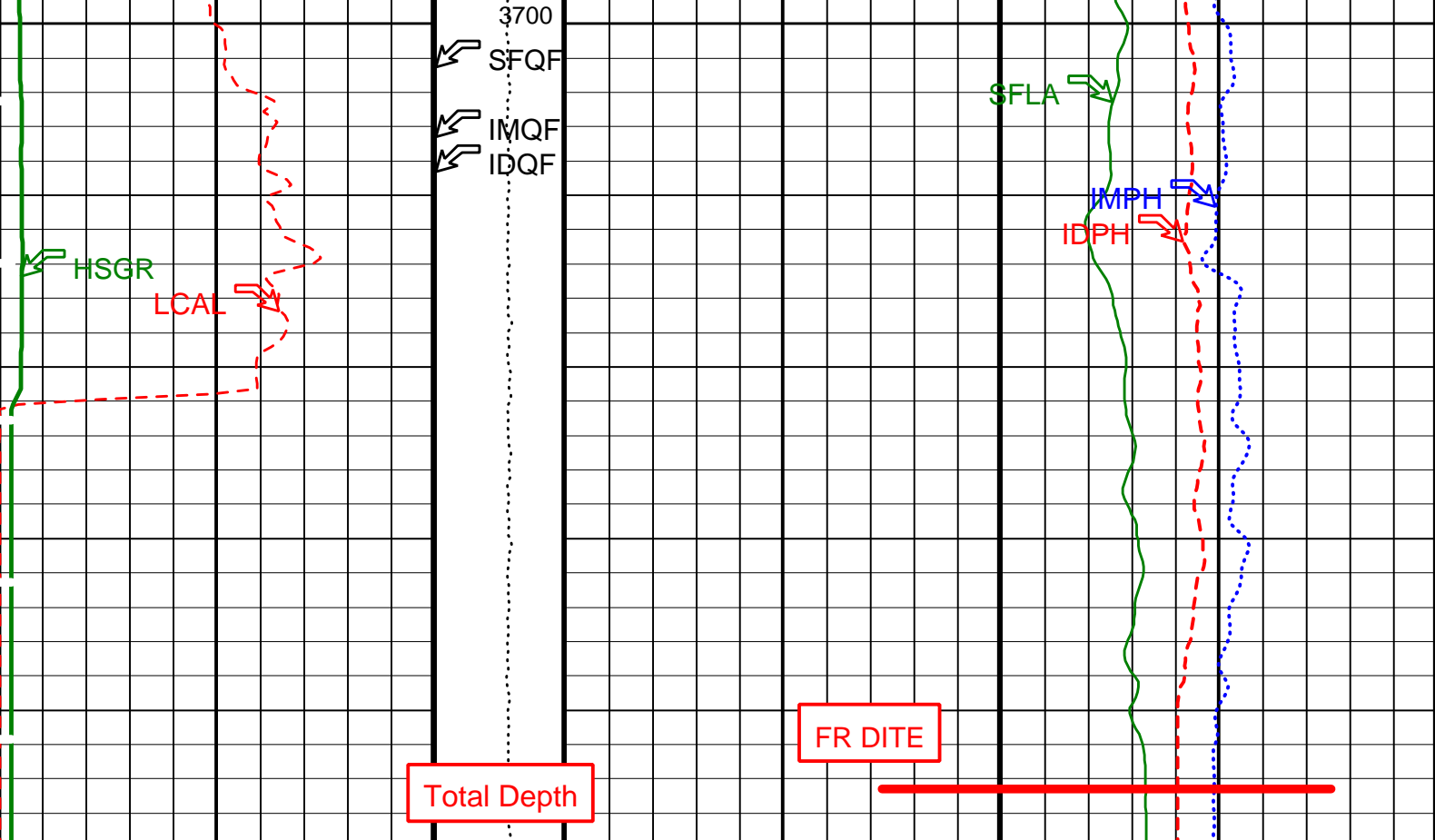
3625



IMPH  
DPH







HLDS Caliper (LCAL) (IN)	Tension (TENS) (LBF)	Deep Induction Phasor-processed Resistivity (IDPH) (OHMM)
0 20	10000 0	0 1.5
HNGS Spectroscopy Gamma Ray (HSGR) (GAPI)	ID_QUAL From IMQF to IDQF	Medium Induction Phasor-processed Resistivity (IMPH) (OHMM)
0 25		0 1.5
	IM_QUAL From SFQF to IMQF	SFL Averaged (SFLA) (OHMM)
		0 1.5
	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)	12 DEG
DGF2	Deep 20 kHz Gain Factor	1.02064
DPH2	Deep 20 kHz Phase Shift	-0.243728 DEG
DRE2	Deep Real 20 kHz Sonde Error Correction	16.6208 MM/M
DSR2	Deep Sigma Reference (20 kHz)	1843 MM/M
DXE2	Deep Quad 20 kHz Sonde Error Correction	64.8082 MM/M
GCSE	Generalized Caliper Selection	BS
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

ITRC	DIT-E Radiation Processing Selector	ENABLE	
ITEN	DIT-E Temperature Enable	1	
MGF2	Medium 20 kHz Gain Factor	0	DEG
MPH2	Medium 20 kHz Phase Shift	0	DEG
MRE2	Medium Real 20 kHz Sonde Error Correction	-2.31932	MM/M
MSR2	Medium Sigma Reference (20 kHz)	3250	MM/M
MXE2	Medium Quad 20 kHz Sonde Error Correction	-31.8992	MM/M
SFCR	SFL Channel Ratio	1000	
SHT	Surface Hole Temperature	20	DEGC
APS-C: Accelerator-Porosity Tool			
BHS	Borehole Status	OPEN	
BHT	Bottom Hole Temperature (used in calculations)	12	DEGC
GCSE	Generalized Caliper Selection	BS	
GDEV	Average Angular Deviation of Borehole from Normal	0	DEG
GGRD	Geothermal Gradient	0.018227	DC/M
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE	
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	BS	
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	-0.000377132	
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	1.00133	
VBA2	HNGS Detector 2 Variable Barite Factor Running Average	0.916166	
HOLEV: Integrated Hole/Cement Volume			
BHS	Borehole Status	OPEN	
BHT	Bottom Hole Temperature (used in calculations)	12	DEGC
GCSE	Generalized Caliper Selection	BS	
GDEV	Average Angular Deviation of Borehole from Normal	0	DEG
GGRD	Geothermal Gradient	0.018227	DC/M
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE	
SHT	Surface Hole Temperature	20	DEGC
System and Miscellaneous			
BS	Bit Size	11.438	IN
DFD	Drilling Fluid Density	1.07	G/C3
DO	Depth Offset for Playback	0.0	M
PP	Playback Processing	NORMAL	
TD	Total Depth	3727.3	M

Format: DITE\_LinPhasor\_1      Vertical Scale: 1:200      Graphics File Created: 02-Apr-2005 12:36

## OP System Version: 12C0-301

MCM

DIT-E	12C0-301	GPIT-A/B	12C0-301
DTA-A	12C0-301	HLDS	12C0-301
NPLC-B	12C0-301	APS-C	12C0-301
HNGS-BA	12C0-301	DTC-H	12C0-301

## Input DLIS Files

DEFAULT	PI_LDL_APS_NGS_062LUP	FN:10	PRODUCER	31-Mar-2005 07:28	3723.9 M	3409.3 M
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### Calibration and Check Summary

Measurement	Nominal	Master	Before	After	Change	Limit	Units
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General Purpose Inclinometer Wellsite Calibration - CROUZET ACCELEROMETER PROM HAS BEEN READ CORRECTLY

Before: 31-Mar-2005 3:06

TEMPERATURE REFERENCE :	N/A	N/A	20	N/A	N/A	N/A	DEGC
YEAR OF CALIBRATION :	N/A	N/A	92	N/A	N/A	N/A	
MONTH OF CALIBRATION :	N/A	N/A	10	N/A	N/A	N/A	
SERIAL NUMBER :	N/A	N/A	448	N/A	N/A	N/A	

General Purpose Inclinometer Wellsite Calibration - CROUZET MAGNETOMETER PROM HAS BEEN READ CORRECTLY

Before: 31-Mar-2005 3:06

TEMPERATURE REFERENCE :	N/A	N/A	19	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	12	N/A	N/A	N/A	
SERIAL NUMBER :	N/A	N/A	428	N/A	N/A	N/A	

Hostile Litho-Density Sonde Wellsite Calibration - Background Measurement

Master: 18-Jan-2005 10:17 Before: 12-Mar-2005 14:26 After: 31-Mar-2005 11:15

SS Cs Resolution Bkg	9.000	8.392	8.325	8.353	0.02884	1.800	%
LS Cs Resolution Bkg	9.000	8.031	7.986	8.065	0.07955	1.800	%
LSW1 Background	100.0	82.46	80.81	79.49	-1.321	3.000	CPS
LSW2 Background	100.0	74.65	75.09	73.63	-1.460	3.000	CPS
LSW3 Background	200.0	168.0	167.4	168.8	1.396	6.000	CPS
LSW4 Background	250.0	211.4	207.1	207.3	0.2380	7.500	CPS
LSW5 Background	600.0	472.3	469.1	467.6	-1.495	18.00	CPS
SSW1 Background	100.0	79.79	79.98	78.75	-1.231	3.000	CPS
SSW2 Background	200.0	142.9	141.9	141.0	-0.9577	6.000	CPS
SSW3 Background	500.0	377.8	376.4	377.0	0.6619	15.00	CPS
SSW4 Background	270.0	202.0	202.7	202.2	-0.5094	8.100	CPS
SSW5 Background	200.0	147.1	146.4	146.0	-0.4200	6.000	CPS

Hostile Litho-Density Sonde Wellsite Calibration - Aluminum Measurement

Master: 18-Jan-2005 11:11

LSW1 Aluminum	600.0	548.6	N/A	N/A	N/A	N/A	CPS
LSW2 Aluminum	900.0	836.5	N/A	N/A	N/A	N/A	CPS
LSW3 Aluminum	1100	1031	N/A	N/A	N/A	N/A	CPS
LSW4 Aluminum	580.0	521.0	N/A	N/A	N/A	N/A	CPS
LSW5 Aluminum	570.0	484.2	N/A	N/A	N/A	N/A	CPS
SSW1 Aluminum	2800	2443	N/A	N/A	N/A	N/A	CPS
SSW2 Aluminum	8000	7110	N/A	N/A	N/A	N/A	CPS
SSW3 Aluminum	11600	10290	N/A	N/A	N/A	N/A	CPS
SSW4 Aluminum	5000	4376	N/A	N/A	N/A	N/A	CPS
SSW5 Aluminum	660.0	601.1	N/A	N/A	N/A	N/A	CPS

Hostile Litho-Density Sonde Wellsite Calibration - Lithology Measurement

Master: 18-Jan-2005 10:52

LSW1 Iron	400.0	384.7	N/A	N/A	N/A	N/A	CPS
LSW2 Iron	730.0	686.2	N/A	N/A	N/A	N/A	CPS
LSW3 Iron	1000	913.5	N/A	N/A	N/A	N/A	CPS
LSW4 Iron	520.0	468.3	N/A	N/A	N/A	N/A	CPS
LSW5 Iron	470.0	445.5	N/A	N/A	N/A	N/A	CPS
SSW1 Iron	2100	1801	N/A	N/A	N/A	N/A	CPS
SSW2 Iron	6800	5868	N/A	N/A	N/A	N/A	CPS
SSW3 Iron	10800	9265	N/A	N/A	N/A	N/A	CPS
SSW4 Iron	4600	3942	N/A	N/A	N/A	N/A	CPS
SSW5 Iron	580.0	520.1	N/A	N/A	N/A	N/A	CPS

Hostile Litho-Density Sonde Wellsite Calibration - Caliper Calibration

Before: 12-Mar-2005 14:30

HLDS Caliper Small Ring	8.000	N/A	10.52	N/A	N/A	N/A	IN
HLDS Caliper Large Ring	12.00	N/A	14.31	N/A	N/A	N/A	IN

Accelerator-Porosity Tool Wellsite Calibration - Detector Background

Master: 22-Mar-2005 19:56 Before: 27-Mar-2005 17:24 After: 31-Mar-2005 11:16

Near Det Bkg Cntrate	30.00	25.38	24.71	26.39	1.675	N/A	CPS
Far Det Bkg Cntrate	30.00	25.40	25.16	26.32	1.158	N/A	CPS
Array-1 Det Bkg Cntrate	30.00	28.70	27.38	26.77	-0.6120	N/A	CPS
Array-2 Det Bkg Cntrate	30.00	25.69	26.59	26.38	-0.2101	N/A	CPS
Array Therm Det Bkg Cntrate	30.00	25.67	25.54	25.22	-0.3188	N/A	CPS

Accelerator-Porosity Tool Wellsite Calibration - Calibration Ratios

Master: 22-Mar-2005 19:56

Near/Far Calibration Ratio	0.9250	0.9625	N/A	N/A	N/A	N/A
Near/Array Calibration Ratio	1.030	0.9914	N/A	N/A	N/A	N/A
Near/Array Cal Ratio Up/Down	1.000	0.9985	N/A	N/A	N/A	N/A

Accelerator-Porosity Tool Wellsite Calibration - Tank Check

Master: 22-Mar-2005 19:56

Array-1 Standoff Porosity	11.75	11.97	N/A	N/A	N/A	N/A	PU
Array-2 Standoff Porosity	11.75	11.85	N/A	N/A	N/A	N/A	PU
Average Slowing Down Time	6.000	5.825	N/A	N/A	N/A	N/A	US
Array-1 SDT Ratio Up/Down	1.000	0.9952	N/A	N/A	N/A	N/A	

Array-2 SDT Ratio Up/Down	1.000	1.006	N/A	N/A	N/A	N/A	N/A	CU
Sigma Formation	27.50	27.53	N/A	N/A	N/A	N/A	N/A	

Accelerator-Porosity Tool Wellsite Calibration - CCR7 signal boxes

Master: 22-Mar-2005 19:02

Near Detector Plateau Setting	1650	1741	N/A	N/A	N/A	N/A	N/A	V
Far Detector Plateau Setting	2000	2082	N/A	N/A	N/A	N/A	N/A	V
Array Detector Plateau Setting	2000	1973	N/A	N/A	N/A	N/A	N/A	V

Hostile Natural Gamma Ray Sonde Wellsite Calibration - Detector 1 Check

Master: 12-Mar-2005 11:23 Before: 12-Mar-2005 11:33 After: 31-Mar-2005 11:18

Na 511 Peak Loc	40.00	40.59	40.61	40.66	0.05276	1.000	
Na 511 Peak Res	15.50	16.84	17.03	16.58	-0.4467	2.000	%
High Voltage	1150	1250	1250	1257	7.578	N/A	V
Na 1785 Peak Loc	142.6	146.2	144.5	145.3	0.7883	7.000	
Na 1785 Peak Res	8.500	9.698	10.04	11.14	1.103	2.000	%
Temperature	15.50	21.01	21.08	20.68	-0.3918	N/A	DEGC
Na Count Rate	45.00	43.77	43.64	44.02	0.3712	8.000	CPS

Hostile Natural Gamma Ray Sonde Wellsite Calibration - Detector 2 Check

Master: 12-Mar-2005 11:23 Before: 12-Mar-2005 11:33 After: 31-Mar-2005 11:18

Na 511 Peak Loc	40.00	40.61	40.48	40.59	0.1058	1.000	
Na 511 Peak Res	15.50	16.72	17.80	17.02	-0.7848	2.000	%
High Voltage	1150	1269	1270	1275	5.734	N/A	V
Na 1785 Peak Loc	142.6	144.6	144.6	144.3	-0.3593	7.000	
Na 1785 Peak Res	8.500	9.947	10.72	10.05	-0.6657	2.000	%
Temperature	15.50	20.07	20.12	21.07	0.9493	N/A	DEGC
Na Count Rate	45.00	44.07	44.08	44.10	0.02787	8.000	CPS

Hostile Natural Gamma Ray Sonde Wellsite Calibration - Ratio Of Detector 1 To Detector 2

Master: 12-Mar-2005 11:23 Before: 12-Mar-2005 11:33 After: 31-Mar-2005 11:18

Coincidence Count Rate Ratio	1.000	0.9930	0.9924	0.9987	0.006301	0.05000	
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Accelerator-Porosity Tool - Detector Plateau Settings :

Near Detector Plateau Setting	1741 V
Far Detector Plateau Setting	2082 V
Array Detector Plateau Setting	1973 V

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
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Dual Induction - E Wellsite Calibration

Induction Electronics (10 kHz)

Phase	ID Elect Real Offset 10 kHz MM/M	Value	Phase	ID Elect Real Gain 10 kHz	Value	Phase	ID Elect Phase 10 kHz DEG	Value
Before		39.35	Before		1.019	Before		8.384
	-300.0 (Minimum) 0 (Nominal) 300.0 (Maximum)			0.8500 (Minimum) 1.000 (Nominal) 1.200 (Maximum)			-10.00 (Minimum) 0 (Nominal) 10.00 (Maximum)	
Phase	ID Elect Quad Offset 10 kHz MM/M	Value	Phase	ID Elect Quad Gain 10 kHz	Value	Phase	IM Elect Phase 10 kHz DEG	Value
Before		23.48	Before		1.007	Before		12.99
	-300.0 (Minimum) 0 (Nominal) 300.0 (Maximum)			0.8500 (Minimum) 1.000 (Nominal) 1.200 (Maximum)			-10.00 (Minimum) 0 (Nominal) 10.00 (Maximum)	
Phase	IM Elect Real Offset 10 kHz MM/M	Value	Phase	IM Elect Real Gain 10 kHz	Value			
Before		96.69	Before		0.9577			
	-550.0 (Minimum) 0 (Nominal) 550.0 (Maximum)			0.8500 (Minimum) 1.000 (Nominal) 1.200 (Maximum)				
Phase	IM Elect Quad Offset 10 kHz MM/M	Value	Phase	IM Elect Quad Gain 10 kHz	Value			
Before		94.63	Before		0.9545			
	-550.0 (Minimum) 0 (Nominal) 550.0 (Maximum)			0.8500 (Minimum) 1.000 (Nominal) 1.200 (Maximum)				

Before: 31-Mar-2005 7:25

Dual Induction - E Wellsite Calibration

Induction Electronics (20 kHz)

Phase	ID Elect Real Offset 20 kHz MM/M	Value	Phase	ID Elect Real Gain 20 kHz	Value	Phase	ID Elect Phase 20 kHz DEG	Value
Before		15.23	Before		1.026	Before		6.599
	-125.0 (Minimum) 0 (Nominal) 125.0 (Maximum)			0.8500 (Minimum) 1.000 (Nominal) 1.200 (Maximum)			-15.00 (Minimum) 0 (Nominal) 15.00 (Maximum)	
Phase	ID Elect Quad Offset 20 kHz MM/M	Value	Phase	ID Elect Quad Gain 20 kHz	Value	Phase	IM Elect Phase 20 kHz DEG	Value
Before		9.252	Before		1.014	Before		11.38
	-125.0 (Minimum) 0 (Nominal) 125.0 (Maximum)			0.8500 (Minimum) 1.000 (Nominal) 1.200 (Maximum)			-15.00 (Minimum) 0 (Nominal) 15.00 (Maximum)	
Phase	IM Elect Real Offset 20 kHz MM/M	Value	Phase	IM Elect Real Gain 20 kHz	Value			
Before		40.29	Before		1.017			
	-225.0 (Minimum) 0 (Nominal) 225.0 (Maximum)			0.8500 (Minimum) 1.000 (Nominal) 1.200 (Maximum)				
Phase	IM Elect Quad Offset 20 kHz MM/M	Value	Phase	IM Elect Quad Gain 20 kHz	Value			
Before		39.51	Before		1.014			
	-225.0 (Minimum) 0 (Nominal) 225.0 (Maximum)			0.8500 (Minimum) 1.000 (Nominal) 1.200 (Maximum)				

Before: 31-Mar-2005 7:26

Dual Induction - E Wellsite Calibration

Induction Electronics (40 kHz)

Phase	ID Elect Real Offset 40 kHz MM/M	Value	Phase	ID Elect Real Gain 40 kHz	Value	Phase	ID Elect Phase 40 kHz DEG	Value
Before		9.830	Before		0.9970	Before		24.98
	-85.00 (Minimum) 0 (Nominal) 85.00 (Maximum)			0.8500 (Minimum) 1.000 (Nominal) 1.200 (Maximum)			-20.00 (Minimum) 0 (Nominal) 20.00 (Maximum)	
Phase	ID Elect Quad Offset 40 kHz MM/M	Value	Phase	ID Elect Quad Gain 40 kHz	Value	Phase	IM Elect Phase 40 kHz DEG	Value
Before		5.978	Before		0.9838	Before		29.56
	-85.00 (Minimum) 0 (Nominal) 85.00 (Maximum)			0.8500 (Minimum) 1.000 (Nominal) 1.200 (Maximum)			-20.00 (Minimum) 0 (Nominal) 20.00 (Maximum)	
Phase	IM Elect Real Offset 40 kHz MM/M	Value	Phase	IM Elect Real Gain 40 kHz	Value			
Before		26.26	Before		1.031			
	-130.0 (Minimum) 0 (Nominal) 130.0 (Maximum)			0.8500 (Minimum) 1.000 (Nominal) 1.200 (Maximum)				
Phase	IM Elect Quad Offset 40 kHz MM/M	Value	Phase	IM Elect Quad Gain 40 kHz	Value			
Before		25.81	Before		1.027			
	-130.0 (Minimum) 0 (Nominal) 130.0 (Maximum)			0.8500 (Minimum) 1.000 (Nominal) 1.200 (Maximum)				

Before: 31-Mar-2005 7:27

Dual Induction - E Wellsite Calibration

SFL Electronics

Phase	SFL Voltage Offset MV	Value	Phase	SFL Voltage Gain	Value
Before		1.180	Before		1.013
	-15.00 (Minimum) 0 (Nominal) 15.00 (Maximum)			0.8500 (Minimum) 1.000 (Nominal) 1.200 (Maximum)	
Phase	SFL Current Offset MA	Value	Phase	SFL Current Gain	Value
Before		0.008456	Before		0.9922
	-0.6000 (Minimum) 0 (Nominal) 0.6000 (Maximum)			0.8500 (Minimum) 1.000 (Nominal) 1.200 (Maximum)	

Before: 31-Mar-2005 7:28

Dual Induction - E Wellsite Calibration

Electronics Calibration Changes

Files/Depth Intervals: 62: 3723.9 - 3409.3 63: 3522.7 - 3555.2 64: 12191.2 - 11931.1 65: 12191.2 - 12102.8 66: 3591.3 - 3534.5 67: 3579.9 - 3575.3

Phase	ID (R > 27 OHM-M) MM/M	Value	Phase	ID (R < 27 OHM-M) %	Value	Phase	SFL (R < 1 OHM-M) OHMM	Value
After		0	After		0.0001568	After		0.0006379
	0 (Minimum) 0 (Nominal) 0.7500 (Maximum)			0 (Minimum) 0 (Nominal) 2.000 (Maximum)			0 (Minimum) 0 (Nominal) 0.02000 (Maximum)	
Phase	IM (R > 27 OHM-M) MM/M	Value	Phase	IM (R < 27 OHM-M) %	Value			
After		0	After		0.0001169			
	0 (Minimum) 0 (Nominal) 0.7500 (Maximum)			0 (Minimum) 0 (Nominal) 2.000 (Maximum)				
Phase	SFL (R > 27 OHM-M) MM/M	Value	Phase	SFL (R < 27 OHM-M) %	Value			
After		0	After		0.0004257			
	0 (Minimum) 0 (Nominal) 0.7500 (Maximum)			0 (Minimum) 0 (Nominal) 2.000 (Maximum)				

General Purpose Inclinometer / Equipment Identification

Primary Equipment:  
GPIT Cartridge - A

GPIC - A

Auxiliary Equipment:  
GPIT Housing

GPIH - A

Hostile Litho-Density Sonde / Equipment Identification

Primary Equipment:

Hostile Litho Density Sonde  
Hostile Litho Density High Voltage  
Gamma Source Radioactive

HLDS - D 35  
HLDV - D 35  
GSR - Z 2326

Auxiliary Equipment:

Hostile Litho Density Pad  
Hostile Litho Density High Voltage Housi

HLDP - C 35  
HEH - H

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		8.392	Master		8.031	Master		82.46
Before		8.325	Before		7.986	Before		80.81
After		8.353	After		8.065	After		79.49
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		74.65	Master		168.0	Master		211.4
Before		75.09	Before		167.4	Before		207.1
After		73.63	After		168.8	After		207.3
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		472.3	Master		79.79	Master		142.9
Before		469.1	Before		79.98	Before		141.9
After		467.6	After		78.75	After		141.0
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	Phase	SSW4 Background CPS	Value	Phase	SSW5 Background CPS	Value
Master		377.8	Master		202.0	Master		147.1
Before		376.4	Before		202.7	Before		146.4
After		377.0	After		202.2	After		146.0
280.0 (Minimum) 500.0 (Nominal) 700.0 (Maximum)			150.0 (Minimum) 270.0 (Nominal) 380.0 (Maximum)			110.0 (Minimum) 200.0 (Nominal) 270.0 (Maximum)		

Master: 18-Jan-2005 10:17

Before: 12-Mar-2005 14:26

After: 31-Mar-2005 11:15

Nuclear Porosity Lithology Cartridge - B / Equipment Identification

Primary Equipment:  
NPLC Cartridge

NPLC - B 79

Auxiliary Equipment:  
NPLC Housing

NPH - B 82

**Accelerator-Porosity Tool / Equipment Identification**

**Primary Equipment:**

Accelerator-Porosity Sonde  
APS Minitron

APS - C                    202  
MNTR - F                5124

**Auxiliary Equipment:**

Accelerator-Porosity Housing  
APS Calibration Water Tank  
APS Aluminum Calibrator Sleeve

APH - AC                104  
SFT - 178               6250  
SFT - 281               6250

Accelerator-Porosity Tool Wellsite Calibration														
Detector Background														
Phase	Near Det Bkg Cntrate CPS			Value	Phase	Far Det Bkg Cntrate CPS			Value	Phase	Array-1 Det Bkg Cntrate CPS			Value
Master				25.38	Master				25.40	Master				28.70
Before				24.71	Before				25.16	Before				27.38
After				26.39	After				26.32	After				26.77
	1.000 (Minimum)	30.00 (Nominal)	50.00 (Maximum)			1.000 (Minimum)	30.00 (Nominal)	50.00 (Maximum)			1.000 (Minimum)	30.00 (Nominal)	50.00 (Maximum)	
Phase	Array-2 Det Bkg Cntrate CPS			Value	Phase	Array Therm Det Bkg Cntrate CPS			Value					
Master				25.69	Master				25.67					
Before				26.59	Before				25.54					
After				26.38	After				25.22					
	1.000 (Minimum)	30.00 (Nominal)	50.00 (Maximum)			1.000 (Minimum)	30.00 (Nominal)	50.00 (Maximum)						
Master: 22-Mar-2005 19:56					Before: 27-Mar-2005 17:24					After: 31-Mar-2005 11:16				

Accelerator-Porosity Tool Wellsite Calibration														
Calibration Ratios														
Phase	Near/Far Calibration Ratio			Value	Phase	Near/Array Calibration Ratio			Value	Phase	Near/Array Cal Ratio Up/Down			Value
Master				0.9625	Master				0.9914	Master				0.9985
	0.8000 (Minimum)	0.9250 (Nominal)	1.050 (Maximum)			0.9000 (Minimum)	1.030 (Nominal)	1.170 (Maximum)			0.9700 (Minimum)	1.000 (Nominal)	1.030 (Maximum)	
Master: 22-Mar-2005 19:56														

Accelerator-Porosity Tool Wellsite Calibration														
Tank Check														
Phase	Array-1 Standoff Porosity PU			Value	Phase	Array-2 Standoff Porosity PU			Value	Phase	Average Slowing Down Time US			Value
Master				11.97	Master				11.85	Master				5.825
	9.900 (Minimum)	11.75 (Nominal)	13.60 (Maximum)			9.900 (Minimum)	11.75 (Nominal)	13.60 (Maximum)			5.500 (Minimum)	6.000 (Nominal)	6.250 (Maximum)	
Phase	Array-1 SDT Ratio Up/Down			Value	Phase	Array-2 SDT Ratio Up/Down			Value	Phase	Sigma Formation CU			Value
Master				0.9952	Master				1.006	Master				27.53
	0.9500 (Minimum)	1.000 (Nominal)	1.050 (Maximum)			0.9500 (Minimum)	1.000 (Nominal)	1.050 (Maximum)			20.00 (Minimum)	27.50 (Nominal)	35.00 (Maximum)	
Master: 22-Mar-2005 19:56														

**Hostile Natural Gamma Ray Sonde / Equipment Identification**

**Primary Equipment:**

HNGS Sonde

HNGS - BA                77

**Auxiliary Equipment:**

HNGS Sonde Housing  
Gamma Source Radioactive

HNSH - BA               79  
GSR - U                 135

Hostile Natural Gamma Ray Sonde Wellsite Calibration														
Detector 1 Check														
Phase	Na 511 Peak Loc			Value	Phase	Na 511 Peak Res %			Value	Phase	High Voltage V			Value
Master				40.59	Master				16.84	Master				1250
Before				40.61	Before				17.03	Before				1250
After				40.66	After				16.58	After				1257



37.50 (Minimum) 40.00 (Nominal) 42.50 (Maximum)			12.00 (Minimum) 15.50 (Nominal) 19.00 (Maximum)			900.0 (Minimum) 1150 (Nominal) 1600 (Maximum)		
Phase	Na 1785 Peak Loc	Value	Phase	Na 1785 Peak Res %	Value	Phase	Temperature DEGC	Value
Master		146.2	Master		9.698	Master		21.01
Before		144.5	Before		10.04	Before		21.08
After		145.3	After		11.14	After		20.68
135.0 (Minimum) 142.6 (Nominal) 150.3 (Maximum)			7.000 (Minimum) 8.500 (Nominal) 11.00 (Maximum)			-28.89 (Minimum) 15.50 (Nominal) 60.00 (Maximum)		
Phase	Na Count Rate CPS	Value						
Master		43.77						
Before		43.64						
After		44.02						
10.00 (Minimum) 45.00 (Nominal) 100.0 (Maximum)								
Master: 12-Mar-2005 11:23			Before: 12-Mar-2005 11:33			After: 31-Mar-2005 11:18		

Hostile Natural Gamma Ray Sonde Wellsite Calibration								
Detector 2 Check								
Phase	Na 511 Peak Loc	Value	Phase	Na 511 Peak Res %	Value	Phase	High Voltage V	Value
Master		40.61	Master		16.72	Master		1269
Before		40.48	Before		17.80	Before		1270
After		40.59	After		17.02	After		1275
37.50 (Minimum) 40.00 (Nominal) 42.50 (Maximum)			12.00 (Minimum) 15.50 (Nominal) 19.00 (Maximum)			900.0 (Minimum) 1150 (Nominal) 1600 (Maximum)		
Phase	Na 1785 Peak Loc	Value	Phase	Na 1785 Peak Res %	Value	Phase	Temperature DEGC	Value
Master		144.6	Master		9.947	Master		20.07
Before		144.6	Before		10.72	Before		20.12
After		144.3	After		10.05	After		21.07
135.0 (Minimum) 142.6 (Nominal) 150.3 (Maximum)			7.000 (Minimum) 8.500 (Nominal) 11.00 (Maximum)			-28.89 (Minimum) 15.50 (Nominal) 60.00 (Maximum)		
Phase	Na Count Rate CPS	Value						
Master		44.07						
Before		44.08						
After		44.10						
10.00 (Minimum) 45.00 (Nominal) 100.0 (Maximum)								
Master: 12-Mar-2005 11:23			Before: 12-Mar-2005 11:33			After: 31-Mar-2005 11:18		

Hostile Natural Gamma Ray Sonde Wellsite Calibration		
Ratio Of Detector 1 To Detector 2		
Phase	Coincidence Count Rate Ratio	Value
Master		0.9930
Before		0.9924
After		0.9987
0.9500 (Minimum) 1.000 (Nominal) 1.050 (Maximum)		
Master: 12-Mar-2005 11:23		
Before: 12-Mar-2005 11:33		
After: 31-Mar-2005 11:18		

Well: IODP EXP 306 Site 1313 B  
Field: Ice-Rafted Debris  
Country: Portugal  
Ocean: Atlantic Ocean

Phasor Induction/HNGS