



**DISCLAIMER**  
 THE USE OF AND RELIANCE UPON THIS RECORDED-DATA BY THE HEREIN NAMED COMPANY (AND ANY OF ITS AFFILIATES, PARTNERS, REPRESENTATIVES, AGENTS, CONSULTANTS AND EMPLOYEES) IS SUBJECT TO THE TERMS AND CONDITIONS AGREED UPON BETWEEN SCHLUMBERGER AND THE COMPANY, INCLUDING: (a) RESTRICTIONS ON USE OF THE RECORDED-DATA; (b) DISCLAIMERS AND WAIVERS OF WARRANTIES AND REPRESENTATIONS REGARDING COMPANY'S USE OF AND RELIANCE UPON THE RECORDED-DATA; AND (c) CUSTOMER'S FULL AND SOLE RESPONSIBILITY FOR ANY INFERENCE DRAWN OR DECISION MADE IN CONNECTION WITH THE USE OF THIS RECORDED-DATA.

**OTHER SERVICES1**  
 OS1: FMS  
 OS2: DSI  
 OS3: HNGS  
 OS4: VSI  
 OS5: HRLA/HLDS/APS

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

**REMARKS: RUN NUMBER 1**  
 Hole drilled with RCB coring bit and bottom hole assembly (BHA). 9 7/8" BS  
 Lamont Magnetic Susceptibility (MSS) tool run in combination with HRLA/HLDS/HNGS  
 2 knuckle joints decouple the eccentered HLDS and HNGS from the centered HRLA  
 and MSS. A thru wired ECH-MRA separates the 2 knuckles for added capability.  
 Deep Reading sensor for MSS tool run on this descent in combination  
 with HRLA/HLDS/APS/HGNS.  
 2 MCD (mechanical Caliper Device) centralizers run with HRLA.  
 LDEO-MSS tool run below HRLA consisting of a deep reading sensor only with the  
 electronics cartridge and ELIC.  
 RCB coring bit released on bottom of hole prior to logging to allow  
 wireline tools to pass out of drill collars/pipe into open hole.  
 APS activation of pipe at drill pipe up to 70 m causes GR to be high due  
 to previous 1st run with APS as drill pipe requires more time to equilibrate  
 once activated.

**REMARKS: RUN NUMBER 2**

**RUN 1**

SERVICE ORDER #: \_\_\_\_\_  
 PROGRAM VERSION: 19C0-187  
 FLUID LEVEL: \_\_\_\_\_

LOGGED INTERVAL	START	STOP

**RUN 2**

SERVICE ORDER #: \_\_\_\_\_  
 PROGRAM VERSION: \_\_\_\_\_  
 FLUID LEVEL: \_\_\_\_\_

LOGGED INTERVAL	START	STOP






## EQUIPMENT DESCRIPTION

**RUN 1**

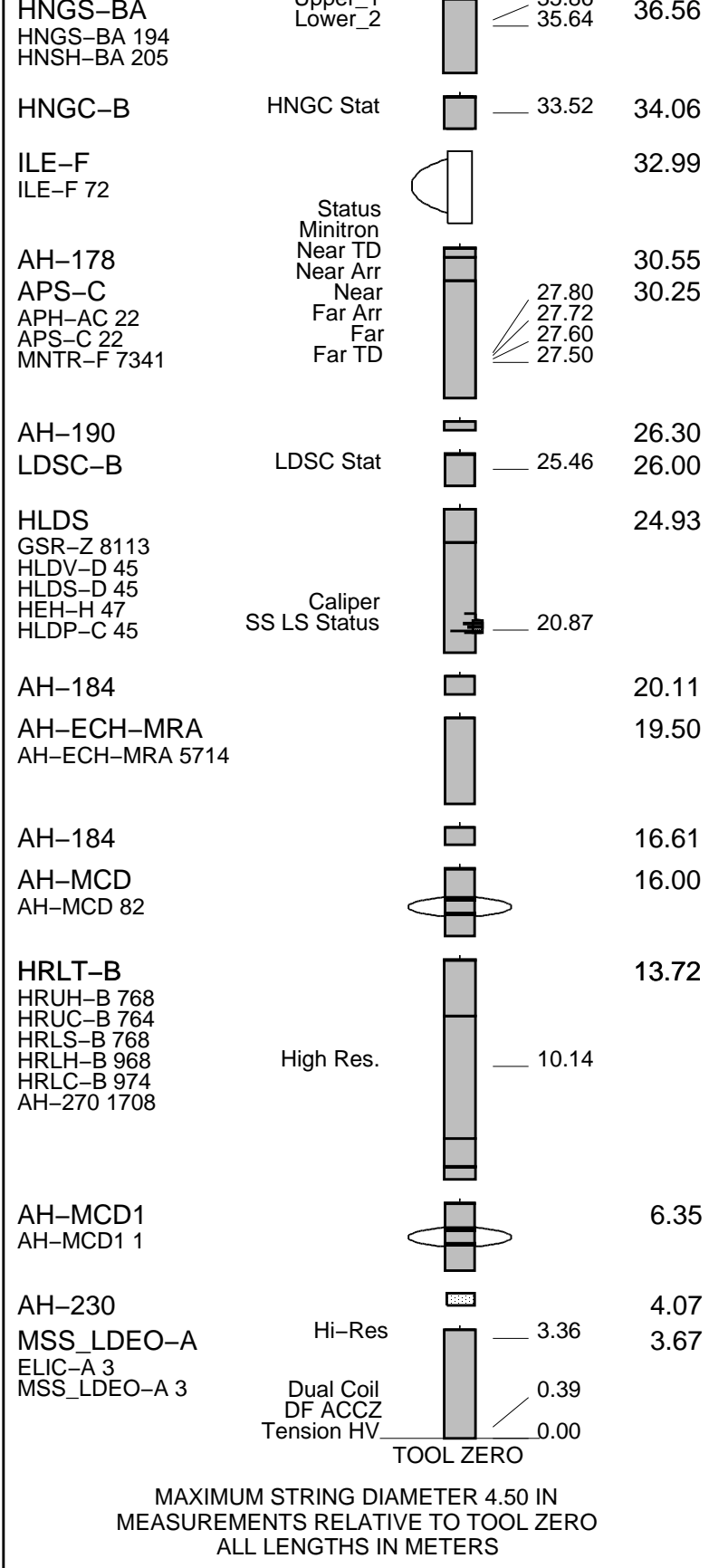
**SURFACE EQUIPMENT**

SFT-281 1  
 SFT-178 1  
 GSR-U 616008  
 WITM (EDTS)-A 1

**DOWNHOLE EQUIPMENT**

LEH-MT 101	MDSB_EDTC		38.54		39.93
	Mud Tempe		37.47		
	CTEM		36.90		38.97
AH-369	Gamma Ray		38.54		
EDTC-B	EFTB DIAG		36.56		
EDTH-B 8303	TelStatus		35.86		
EDTC-B 8317	EDTCB Ele				
	Linner 1				

**RUN 2**



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

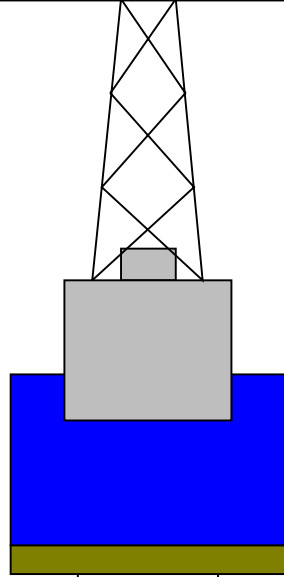
Kelly Bushing Elevation  
Derrick Floor Elevation

Mean Sea Level

-4200

-4200

-4189



4.1



0

84

624

4.1

9.875

Sea Floor

Open Hole

Total Depth

### Input DLIS Files

23-Jun-2013 13:19

### Output DLIS Files

DEFAULT MSS\_LDEO\_HRLA\_LDL\_077PUP FN:101 PRODUCER 23-Jun-2013 14:28 628.6 M -11.6 M

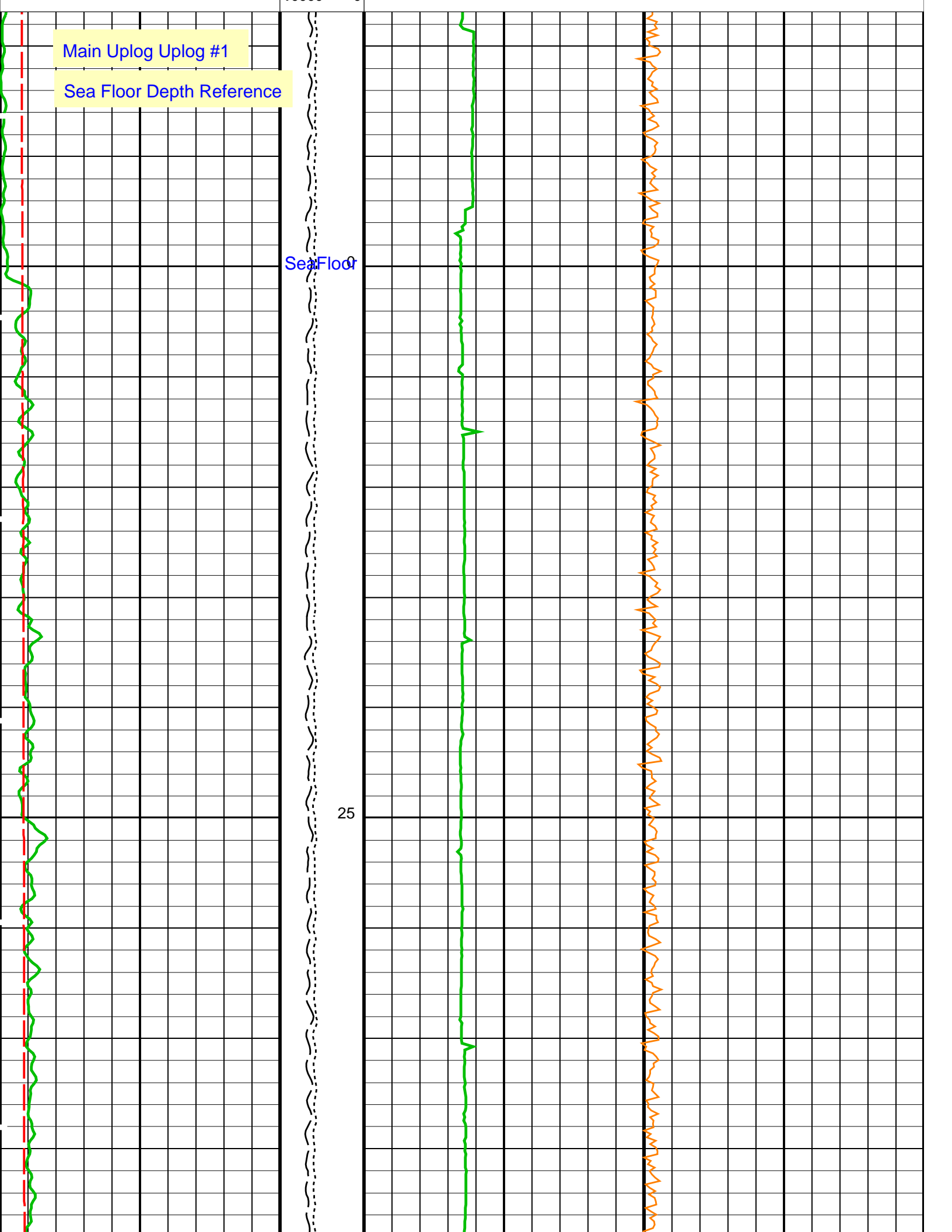
### OP System Version: 19C0-187

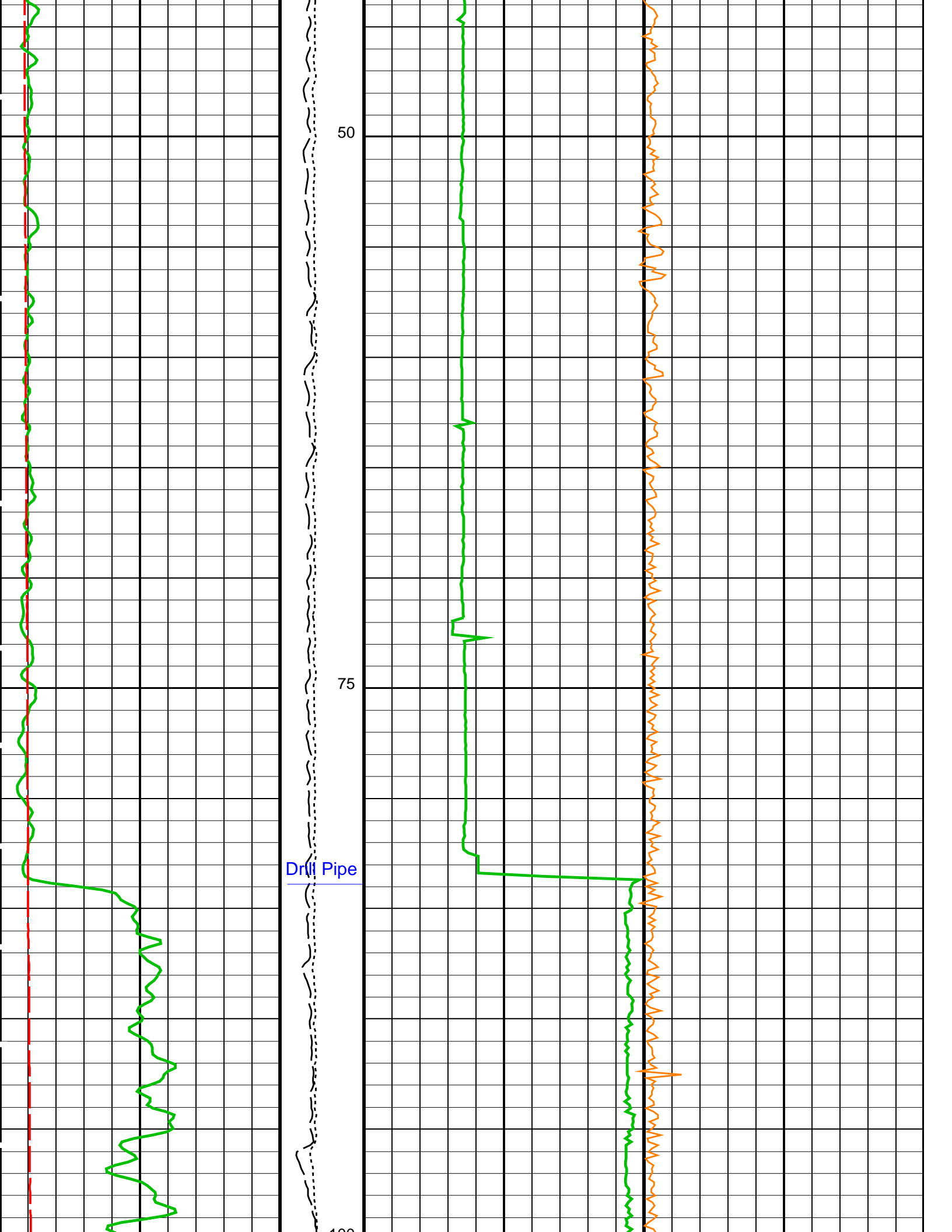
MSS_LDEO-A	19C0-187	HRLT-B	19C0-187
HLDS	19C0-187	LDSC-B	19C0-187
APS-C	19C0-187	HNGC-B	19C0-187
HNGS-BA	19C0-187	EDTC-B	SKK-5169-EDTCB

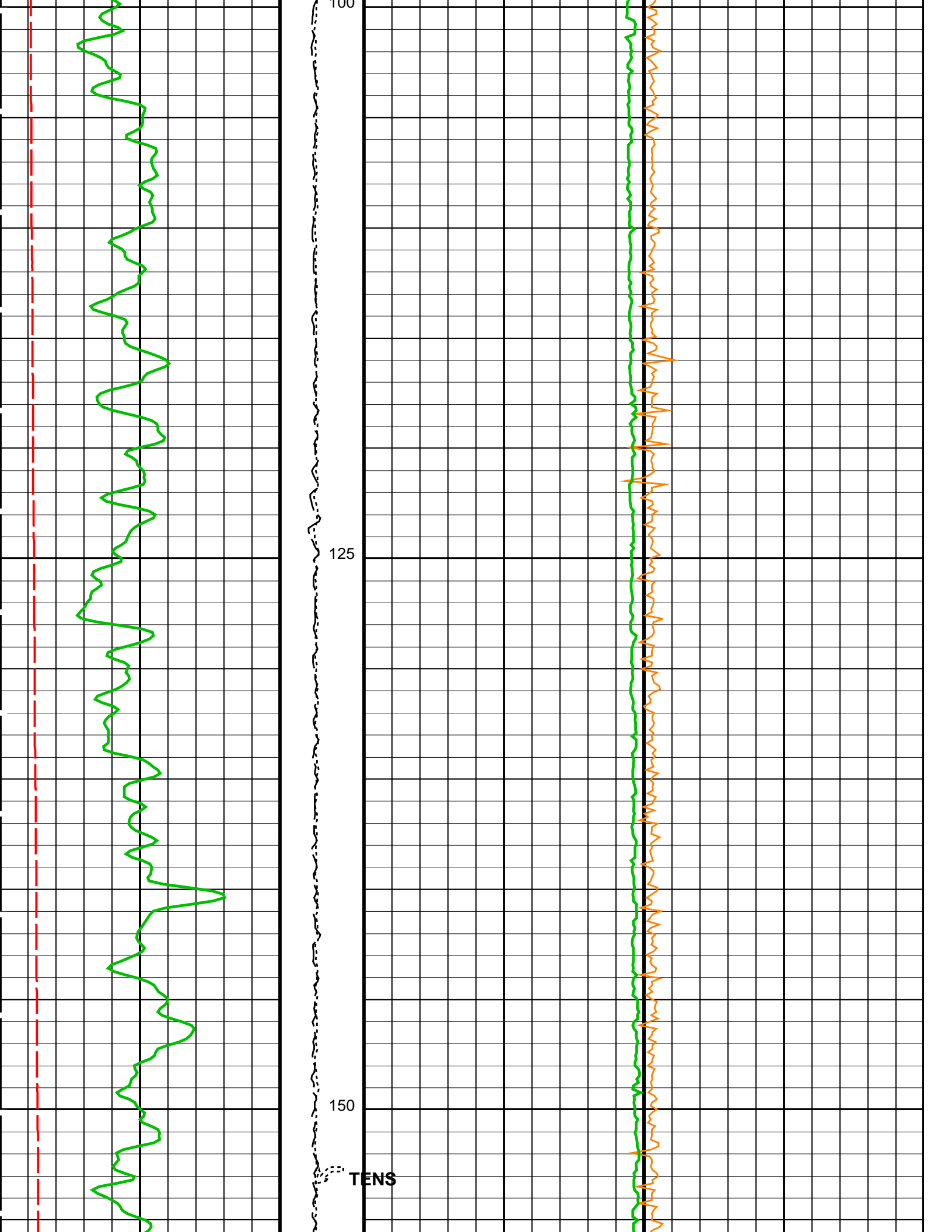
#### PIP SUMMARY

Time Mark Every 60 S

<p><b>Gamma Ray (GR_EDTC)</b></p> <p>0 <b>(GAPI)</b> 75</p>	<p>Calibrated Downhole Force (CDF) (LBF)</p> <p>3000 0</p>	<p><b>Dual-Coil Susceptibility (MSSLUS_LDEO)</b></p> <p>-20000 <b>(PPM)</b> 20000</p>
<p><b>Mud temperature (MTEM)</b></p> <p>0 <b>(DEGC)</b> 50</p>	<p>Tension (TENS) (LBF)</p> <p>10000 0</p>	<p><b>Axial Acceleration (MSSZACC_LDEO)</b></p> <p>0 <b>(M/S2)</b> 20</p>



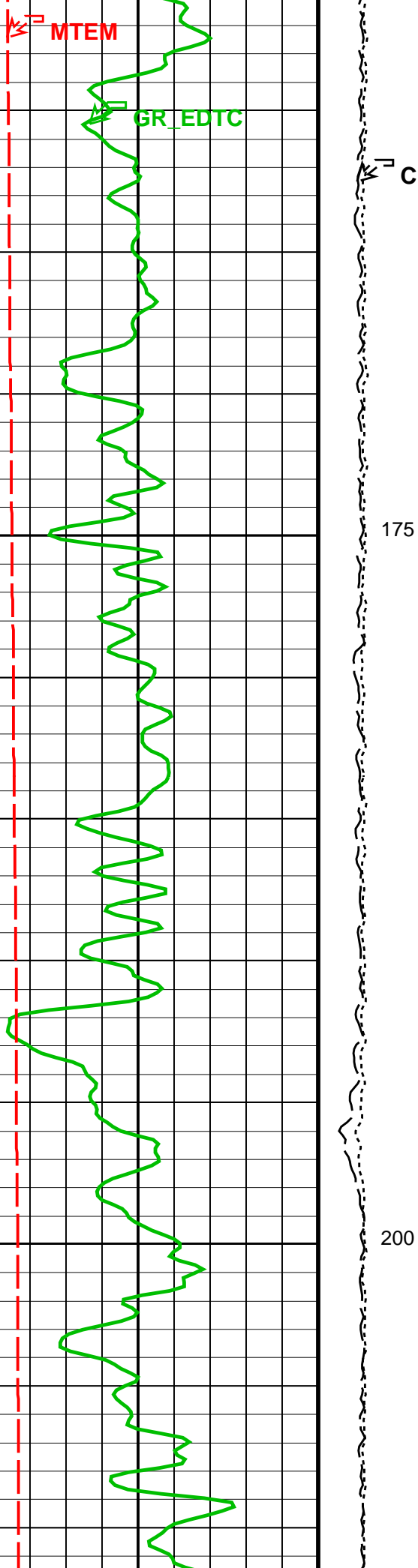






MTEM

GR\_EDTC



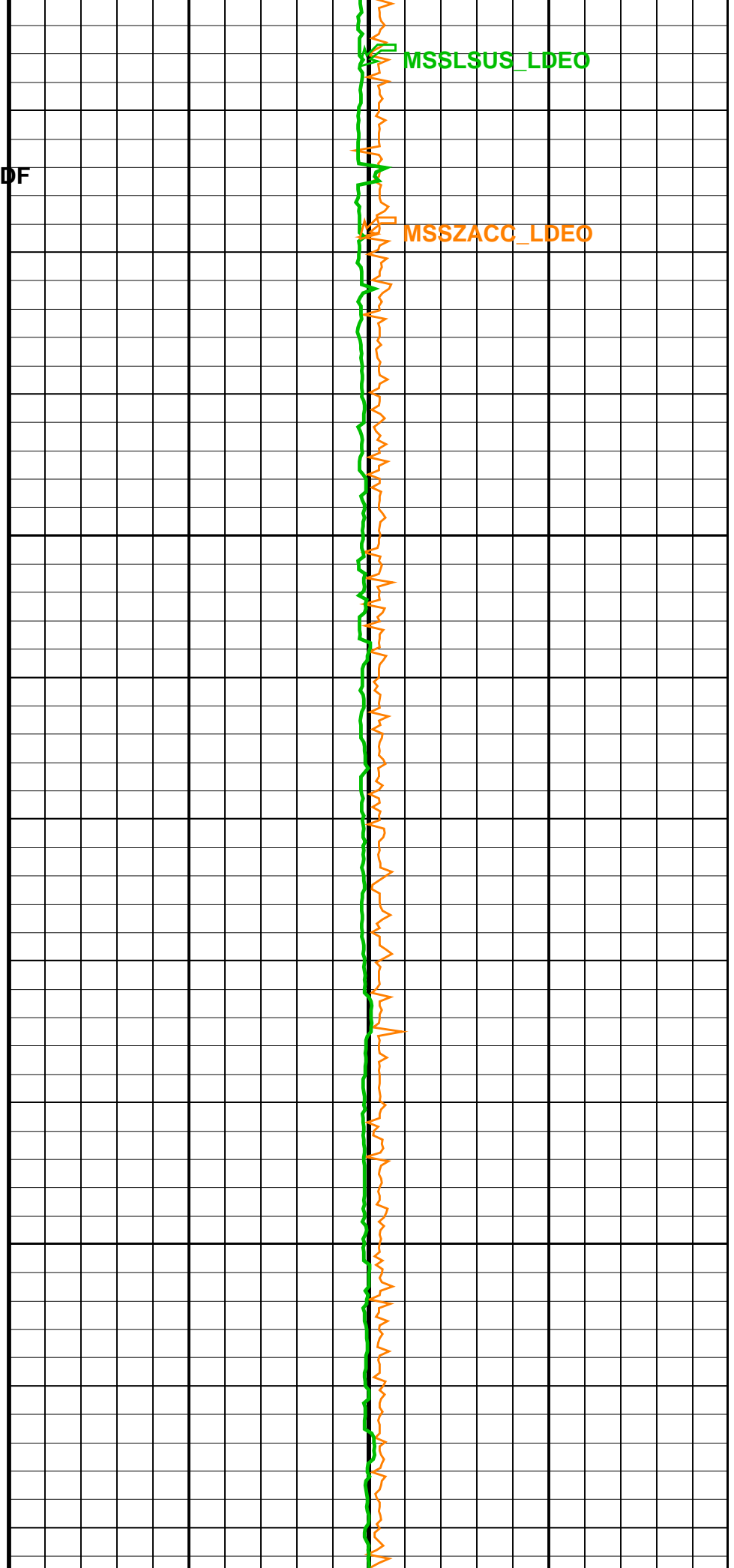
CDF

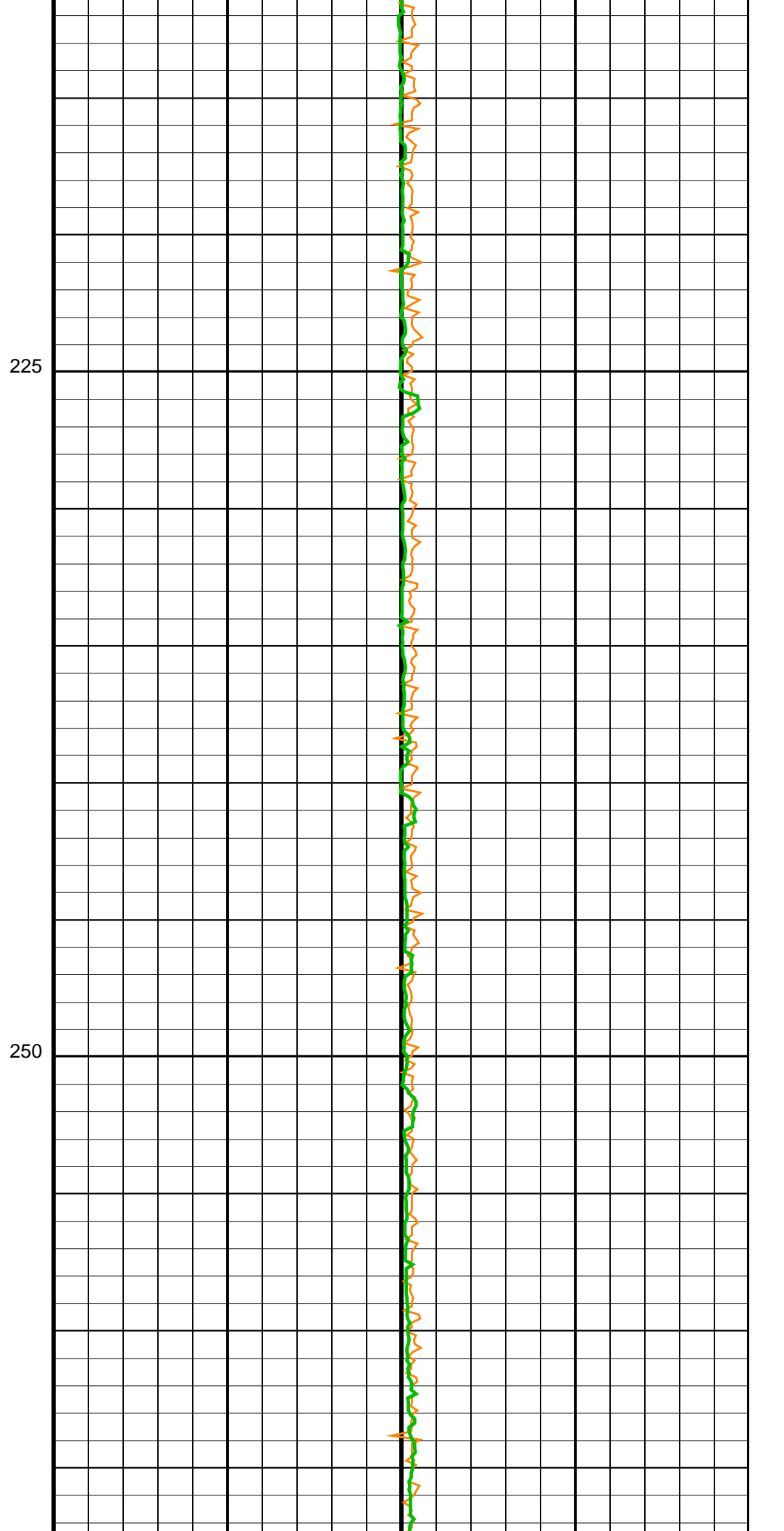
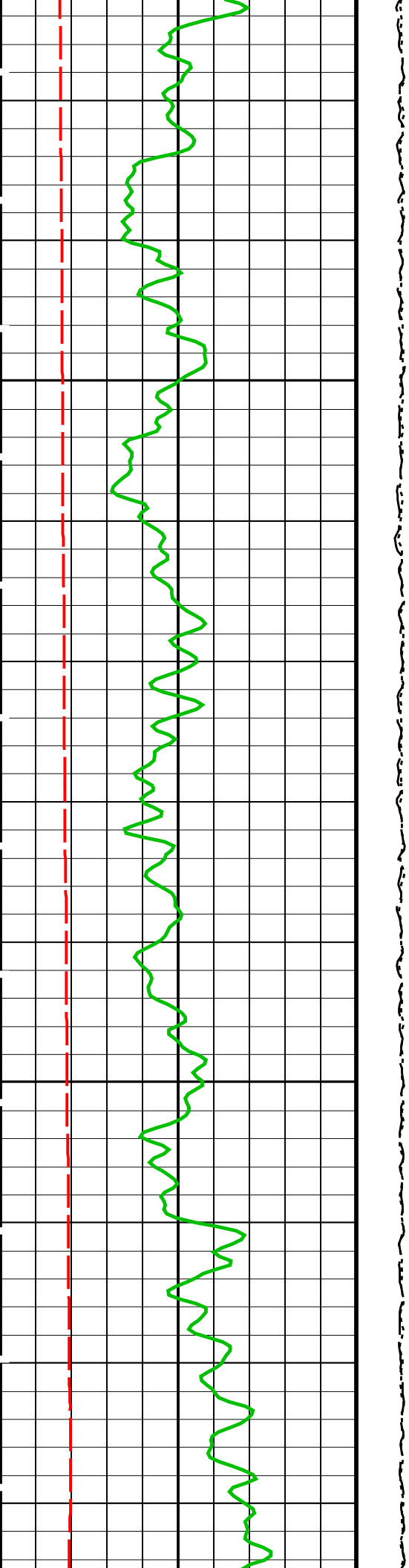
175

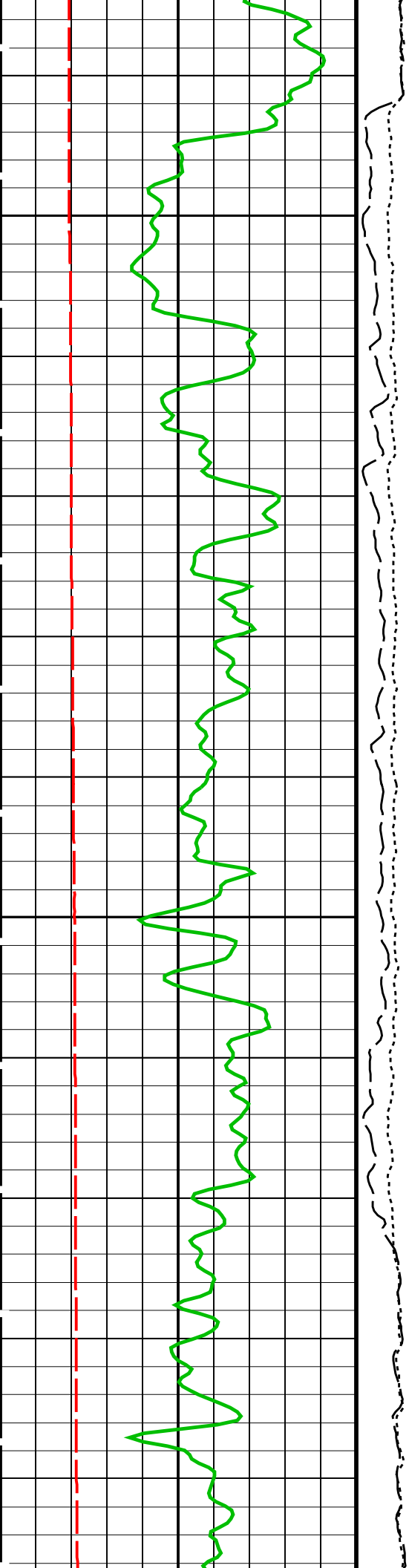
200

MSSL SUS\_LDEO

MSSZACC\_LDEO

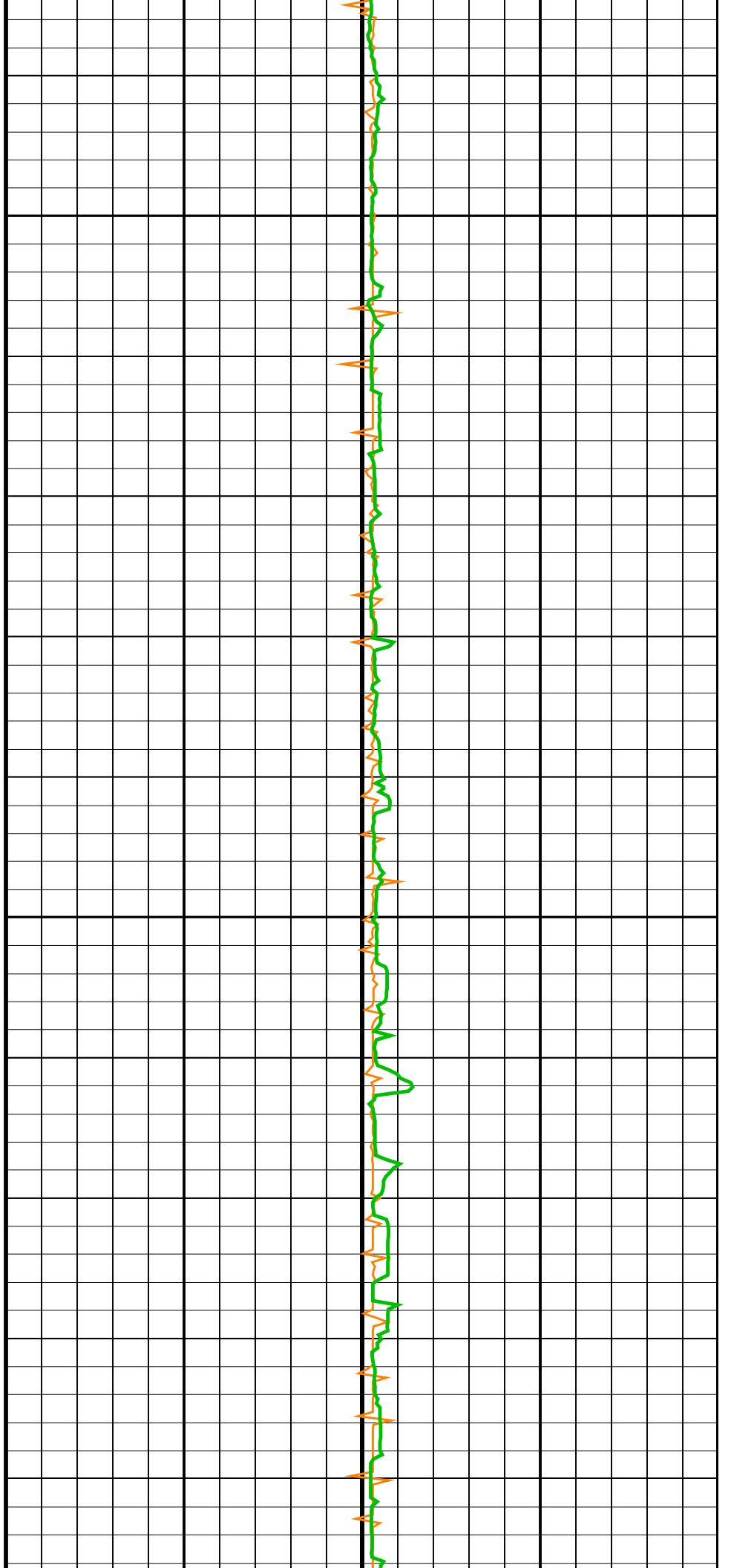


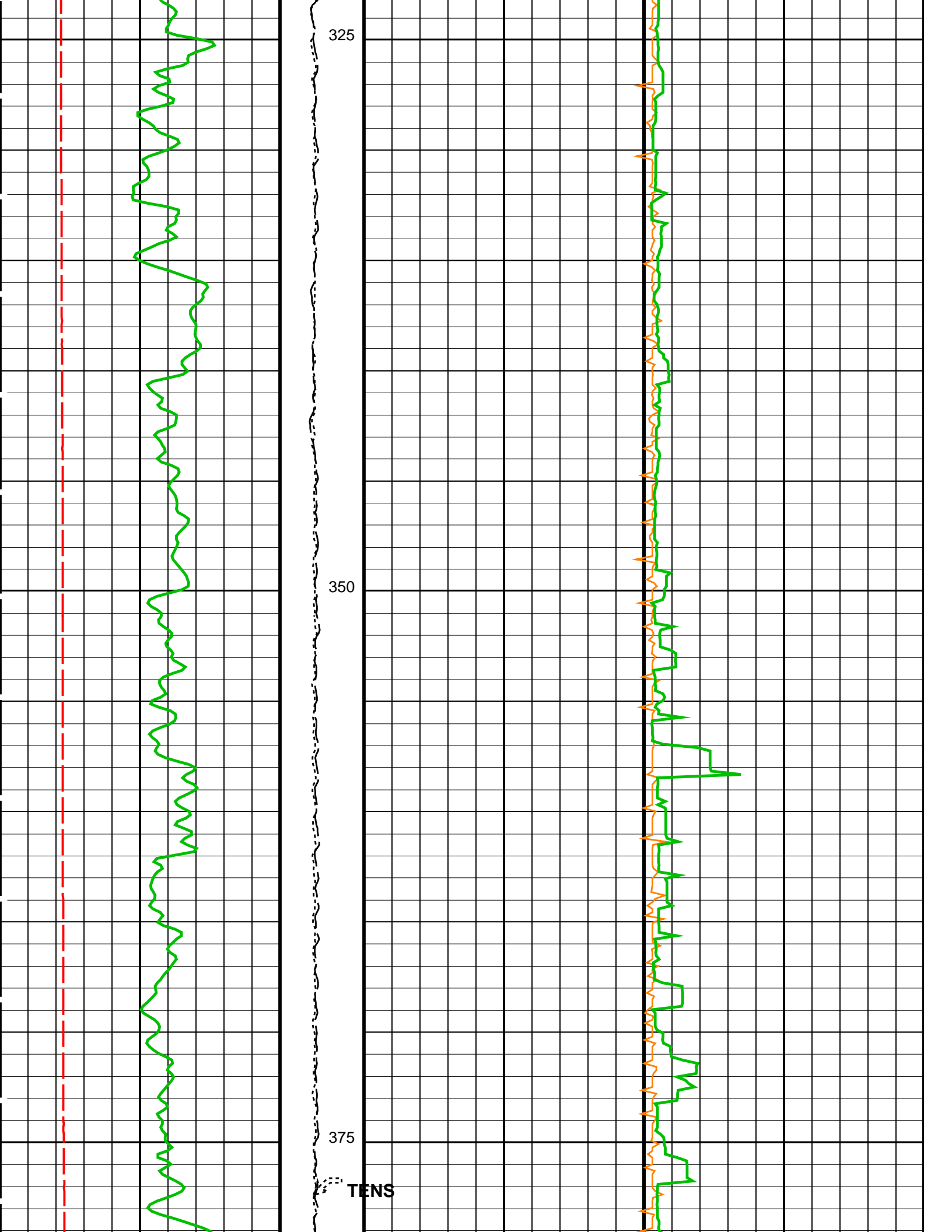




275

300



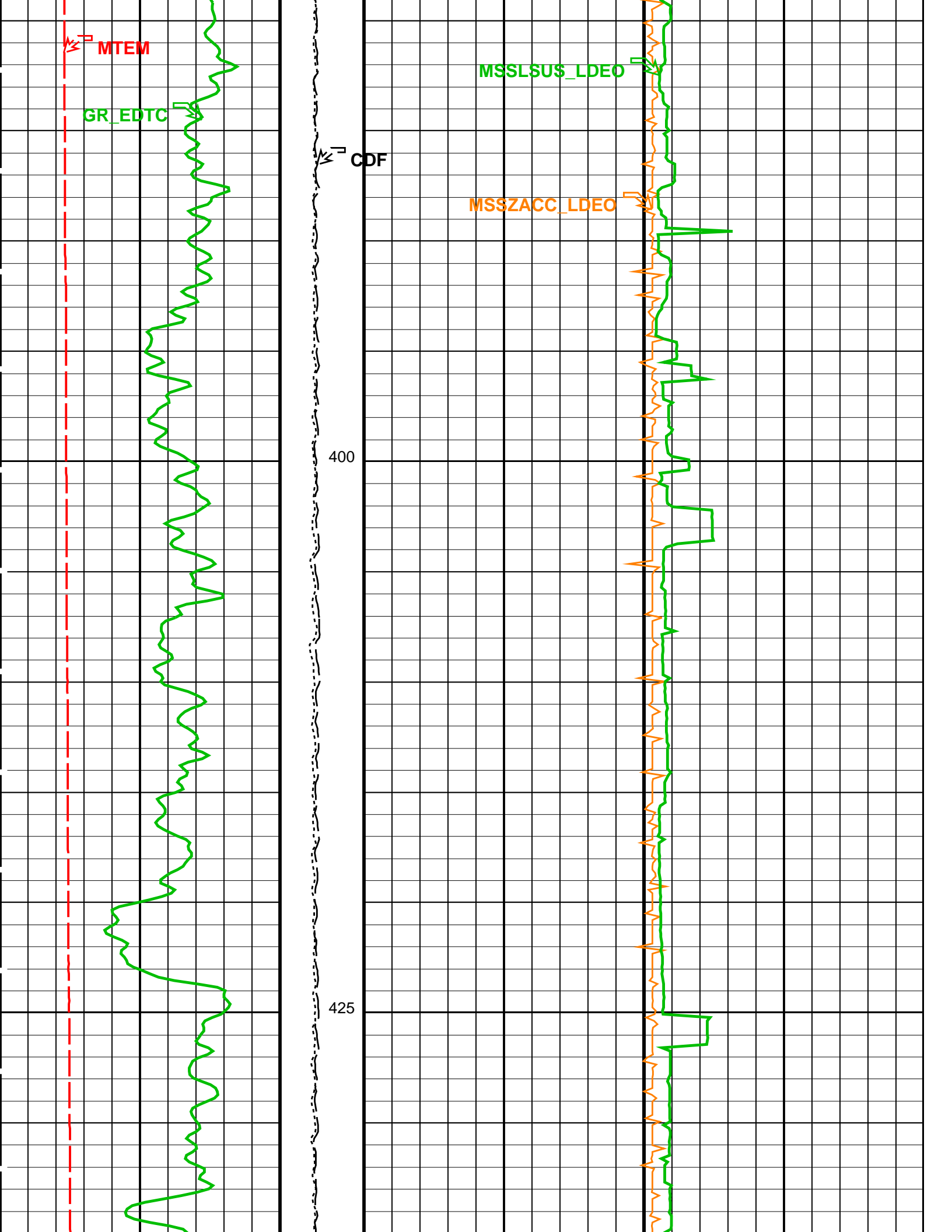


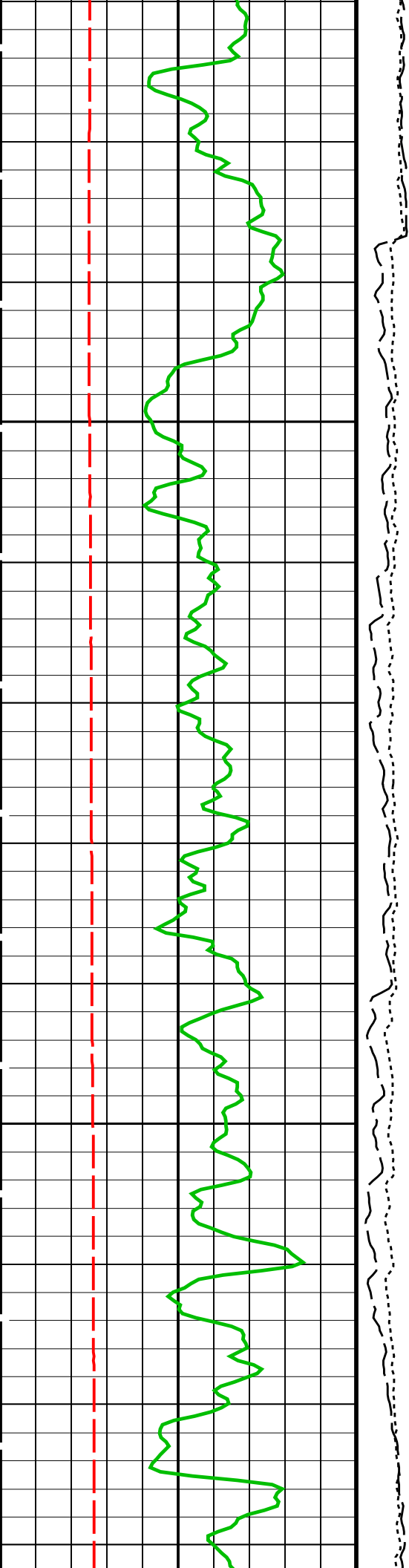
325

350

375

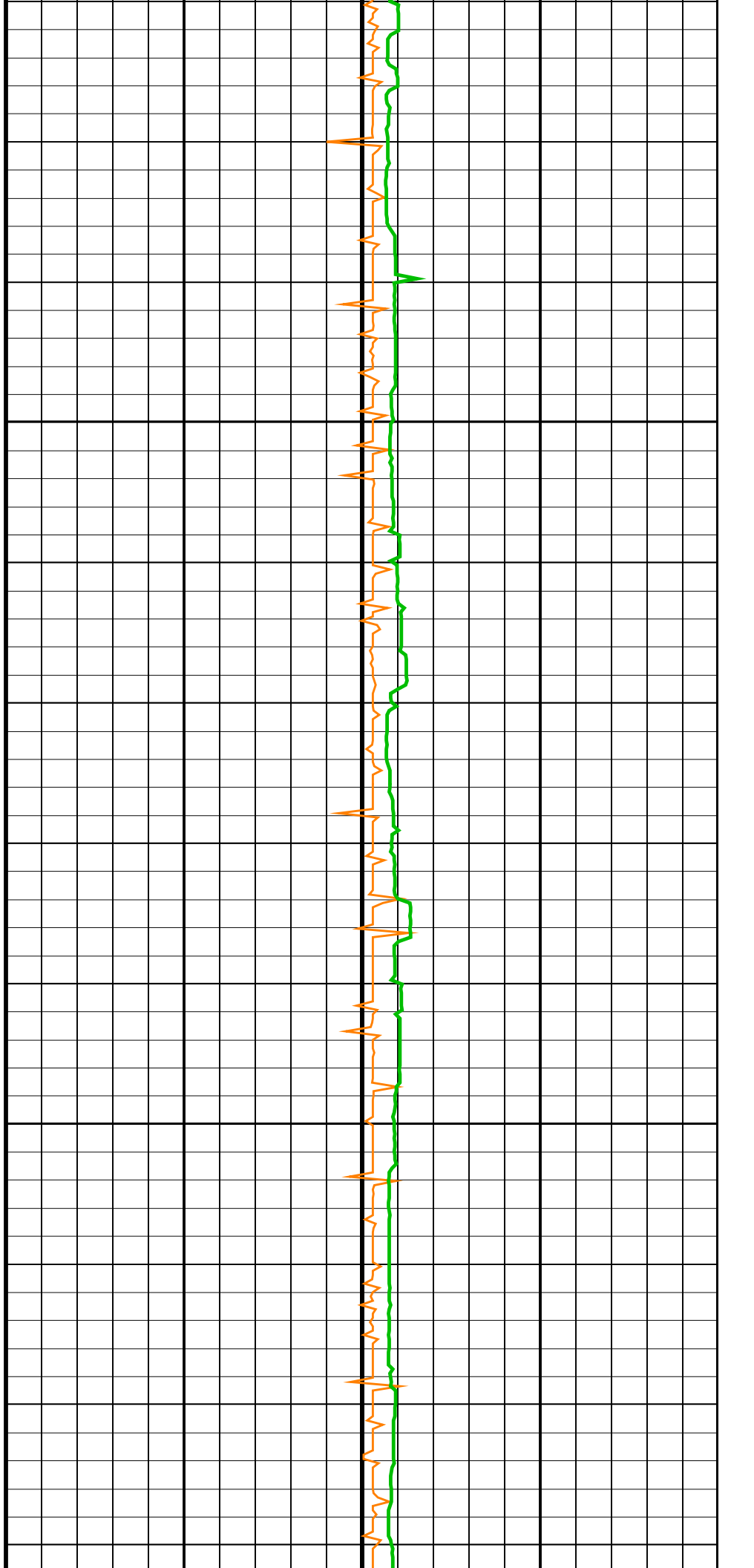
TENS

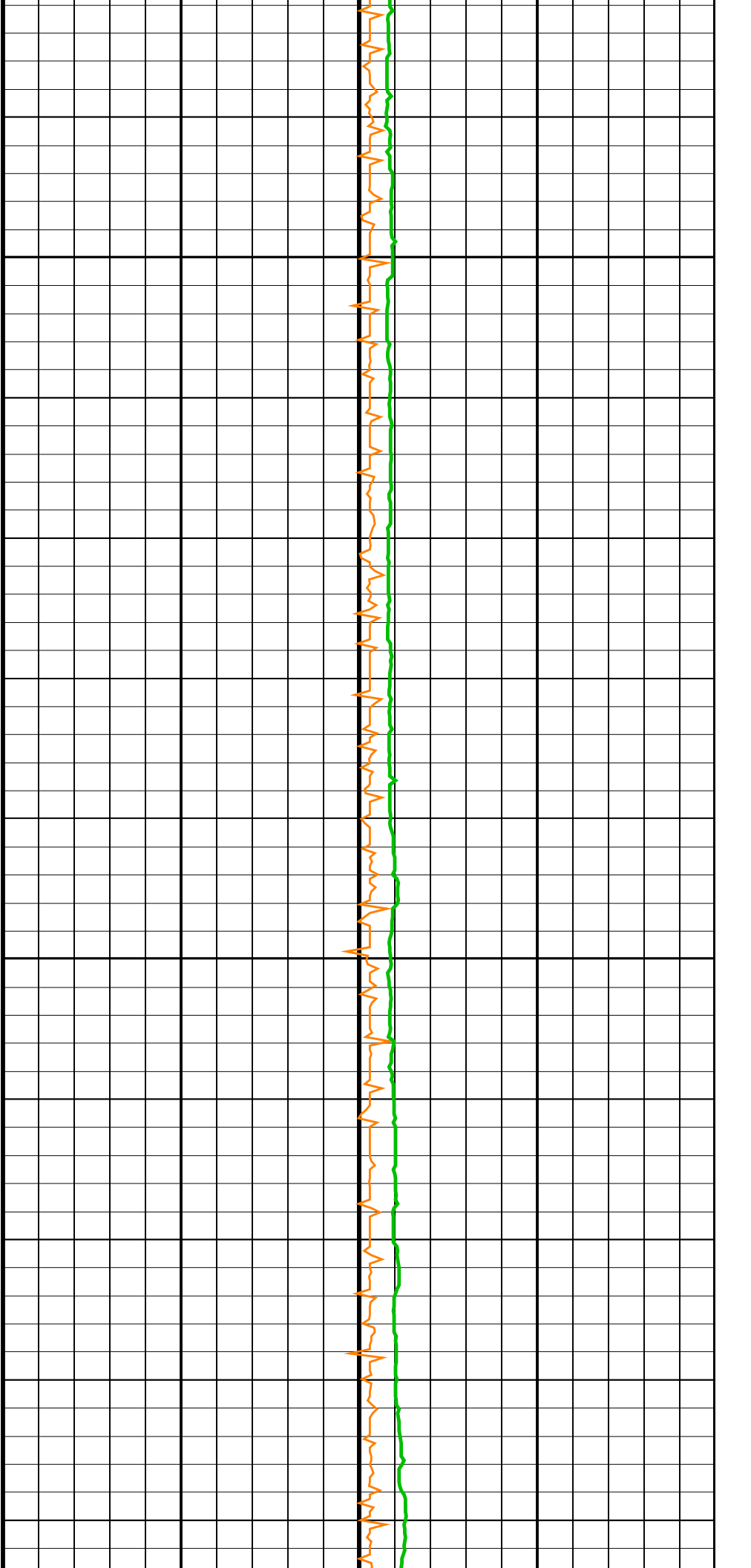
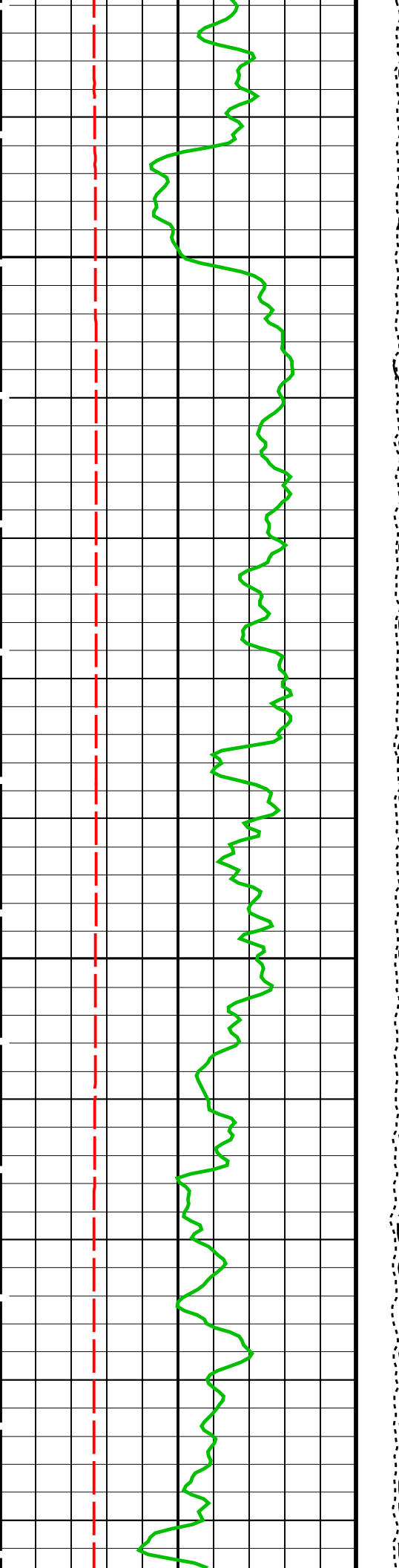


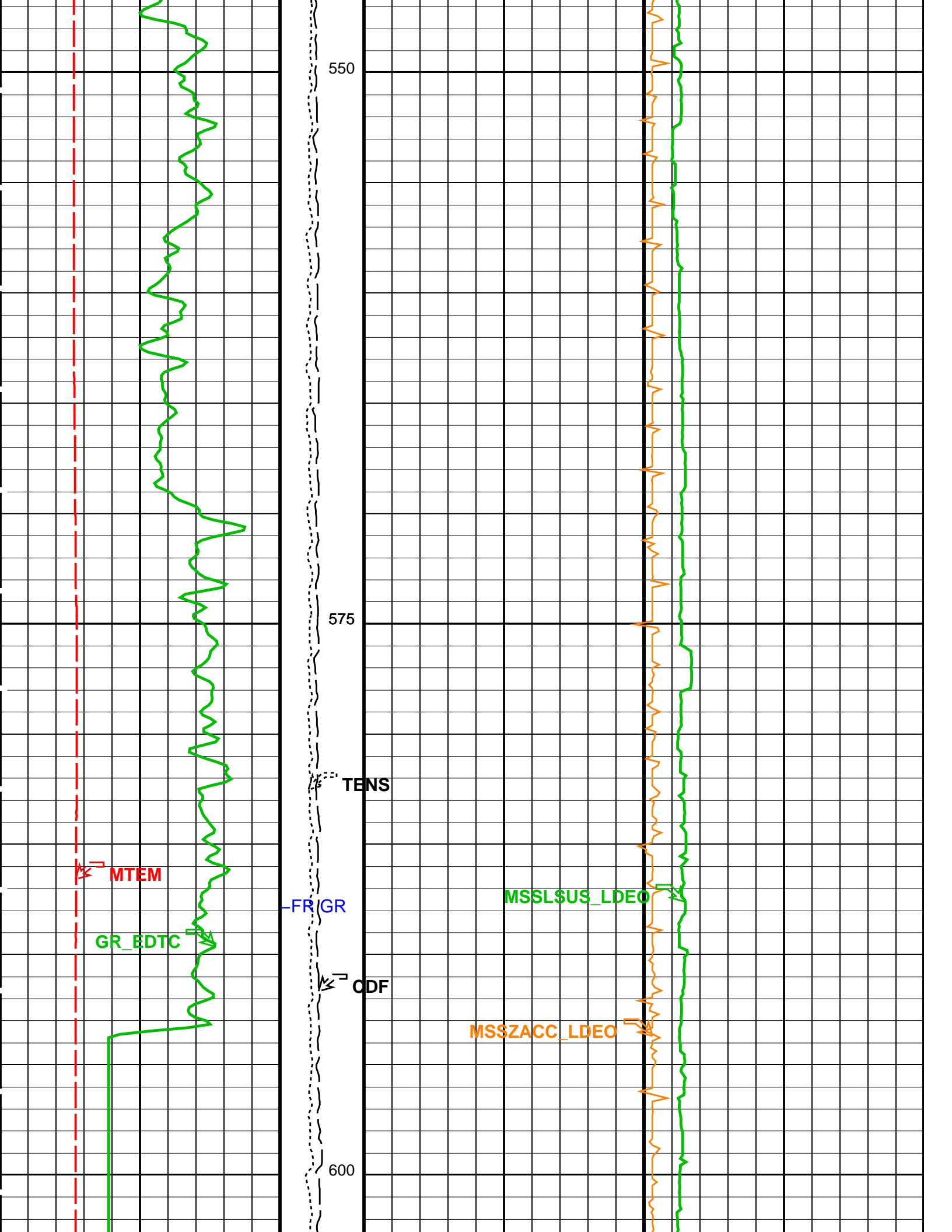


450

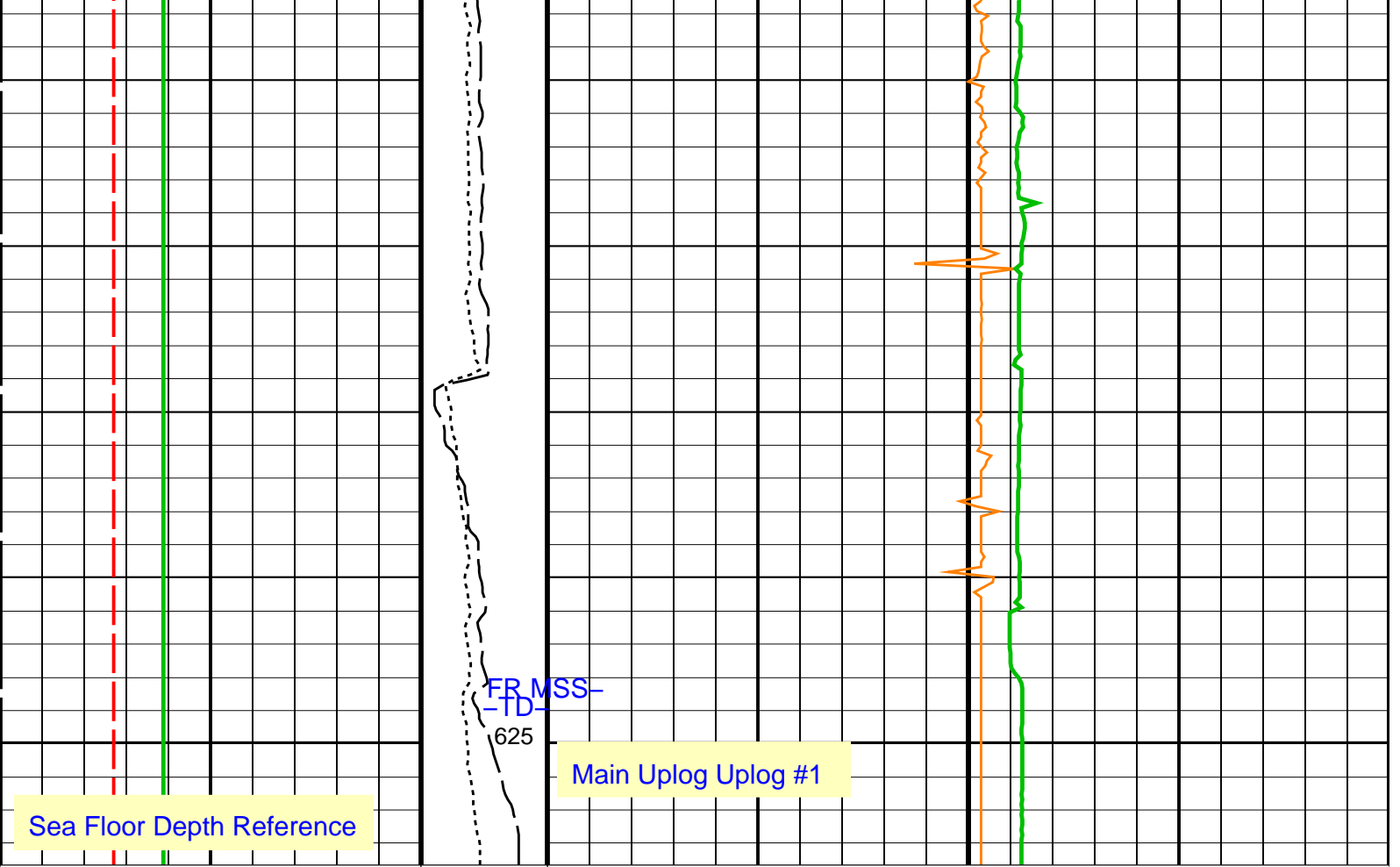
475











<b>Mud temperature (MTEM)</b> (DEGC)	<b>Tension (TENS)</b> (LBF)	<b>Axial Acceleration (MSSZACC_LDEO)</b> (M/S <sup>2</sup> )
0      50	10000    0	0      20
<b>Gamma Ray (GR_EDTC)</b> (GAPI)	<b>Calibrated Downhole Force (CDF)</b> (LBF)	<b>Dual-Coil Susceptibility (MSSLSUS_LDEO)</b> (PPM)
0      75	3000    0	-20000      20000

**PIP SUMMARY**

Time Mark Every 60 S

**Parameters**

DLIS Name	Description	Value
DO	System and Miscellaneous	
PP	Depth Offset for Playback	-4200.0 M
	Playback Processing	OFF

Format: MSS\_Logging    Vertical Scale: 1:200    Graphics File Created: 23-Jun-2013 14:28

**OP System Version: 19C0-187**

MSS_LDEO-A	19C0-187	HRLT-B	19C0-187
HLDS	19C0-187	LDSC-B	19C0-187
APS-C	19C0-187	HNGC-B	19C0-187
HNGS-BA	19C0-187	EDTC-B	SKK-5169-EDTCB

**Input DLIS Files**

DEFAULT	MSS_LDEO_HRLA_LDL_075PUP	FN:99	PRODUCER	23-Jun-2013 13:19	4828.0 M	4188.4 M
---------	--------------------------	-------	----------	-------------------	----------	----------

**Output DLIS Files**

Company: Lamont Doherty Earth Observatory Well: Expedition 341, Site U1417E

### Input DLIS Files

MSS\_LDEO\_HRLA\_LDL\_076PUP FN:100 23-Jun-2013 13:21 4423.4 M 4265.1 M

### Output DLIS Files

DEFAULT MSS\_LDEO\_HRLA\_LDL\_078PUP FN:102 PRODUCER 23-Jun-2013 14:30 224.0 M 65.1 M

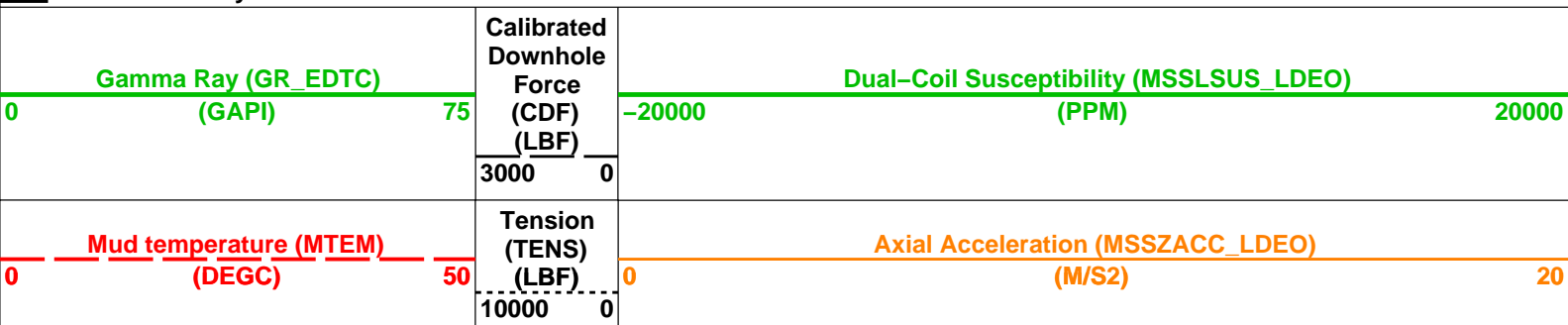
## Speed Corrected Depth Log

OP System Version: 19C0-187

MSS_LDEO-A	19C0-187	HRLT-B	19C0-187
HLDS	19C0-187	LDSC-B	19C0-187
APS-C	19C0-187	HNGC-B	19C0-187
HNGS-BA	19C0-187	EDTC-B	SKK-5169-EDTCB

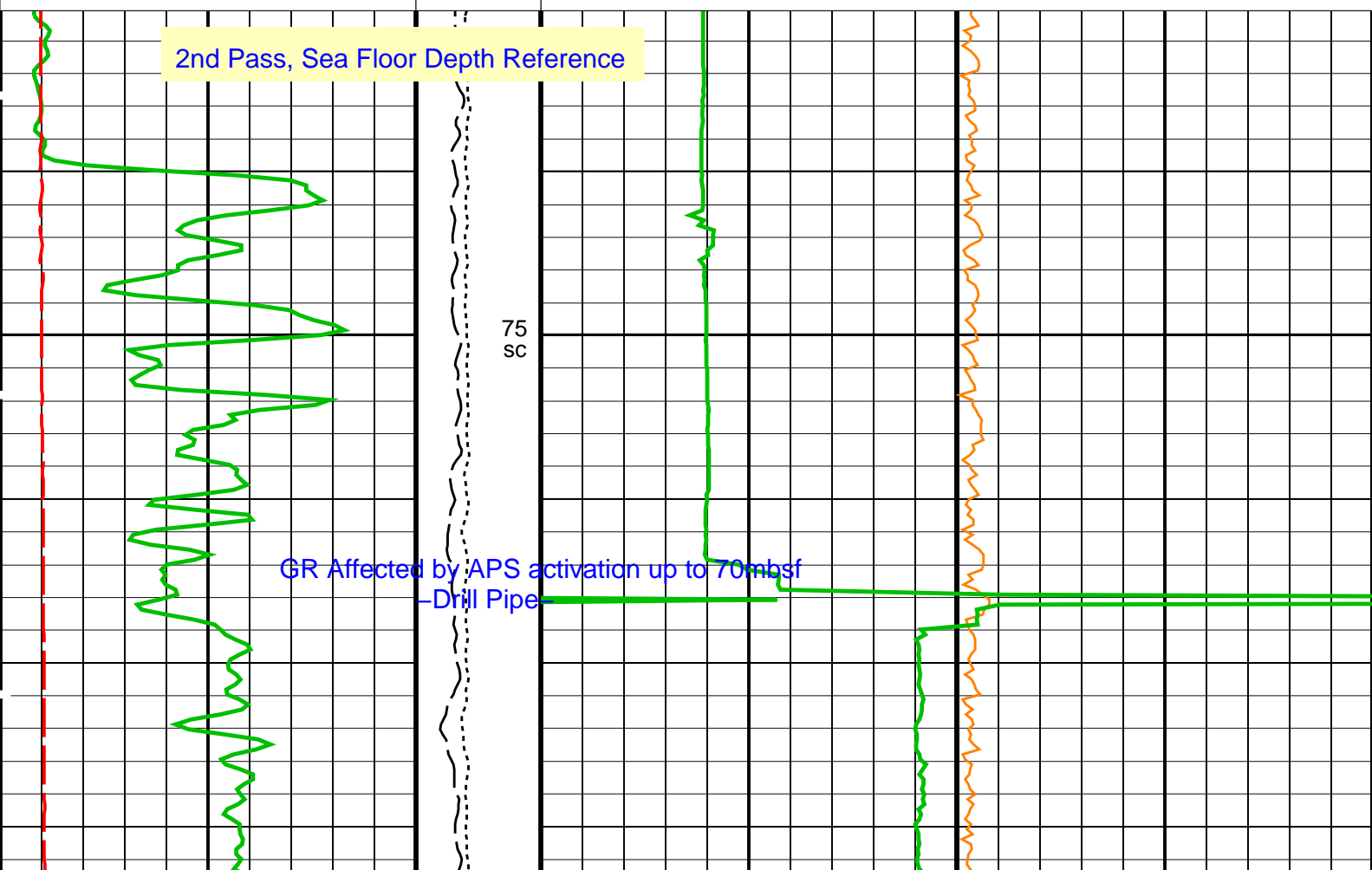
### PIP SUMMARY

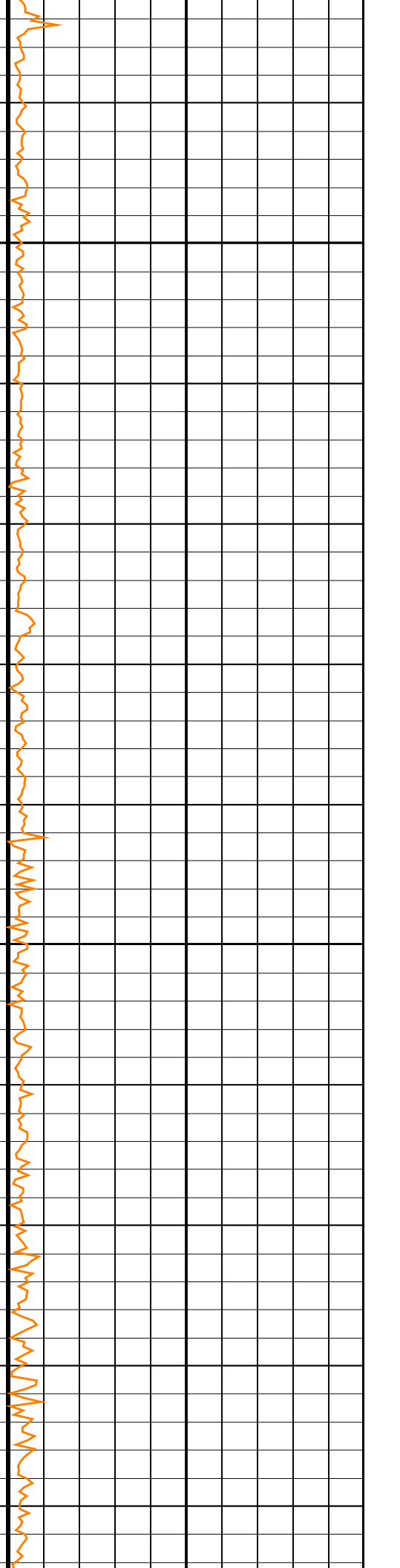
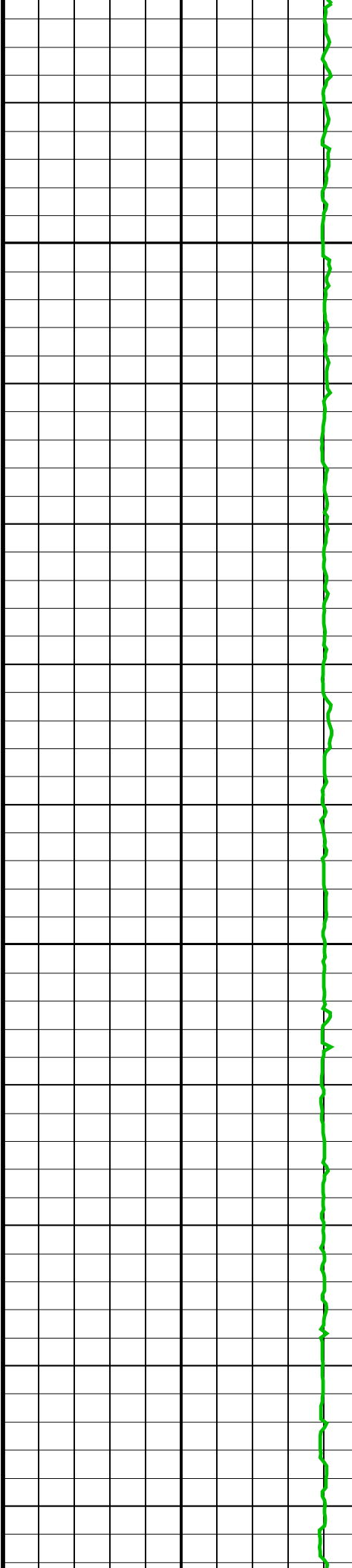
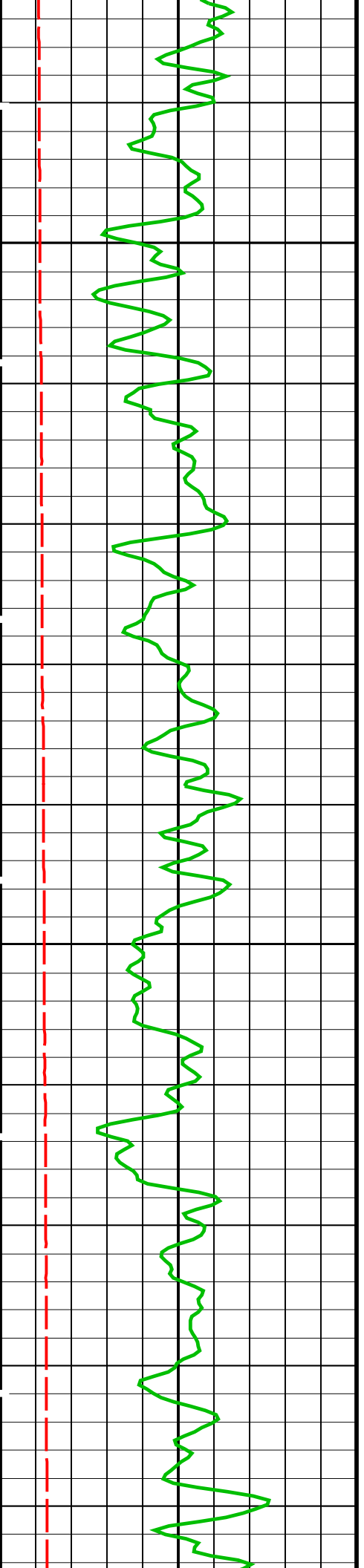
Time Mark Every 60 S

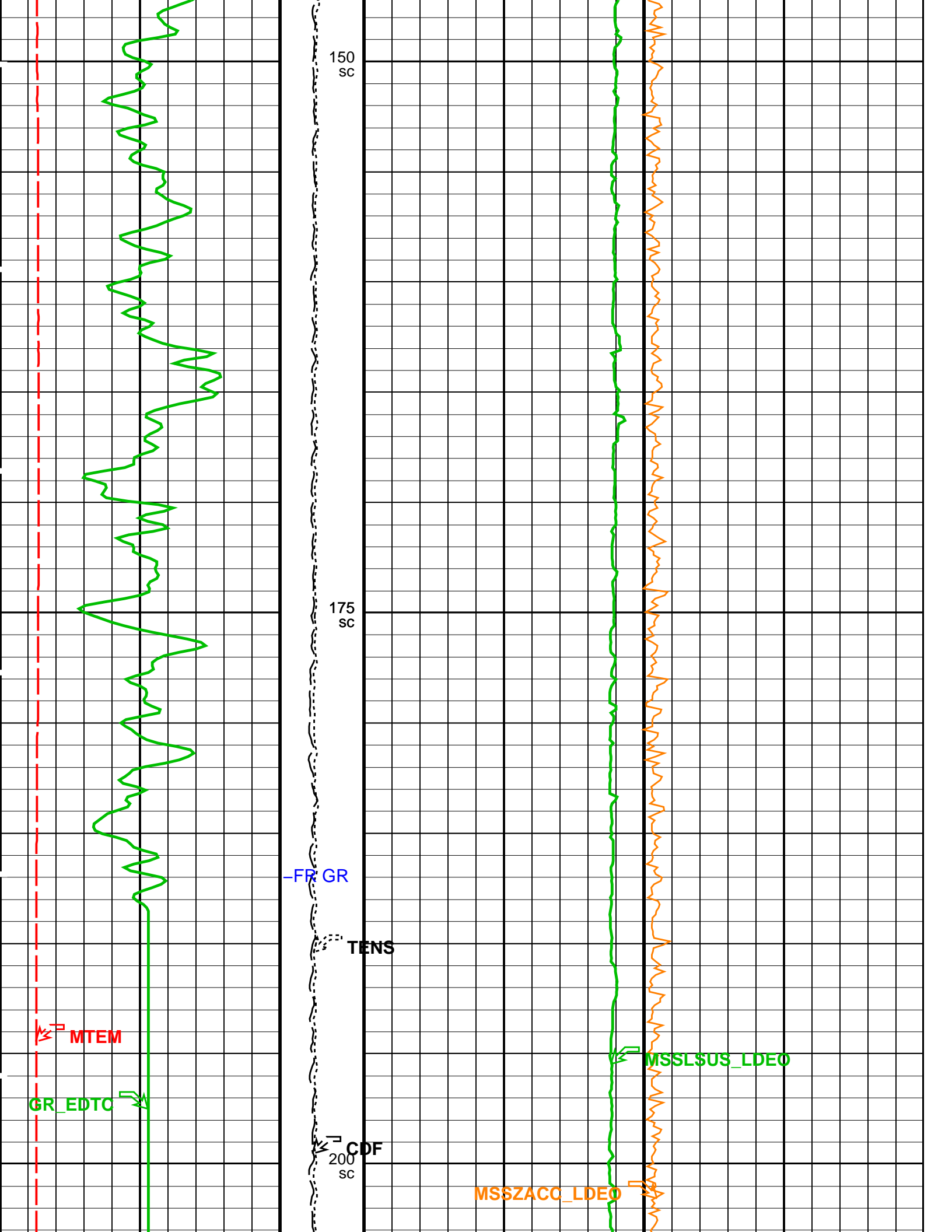


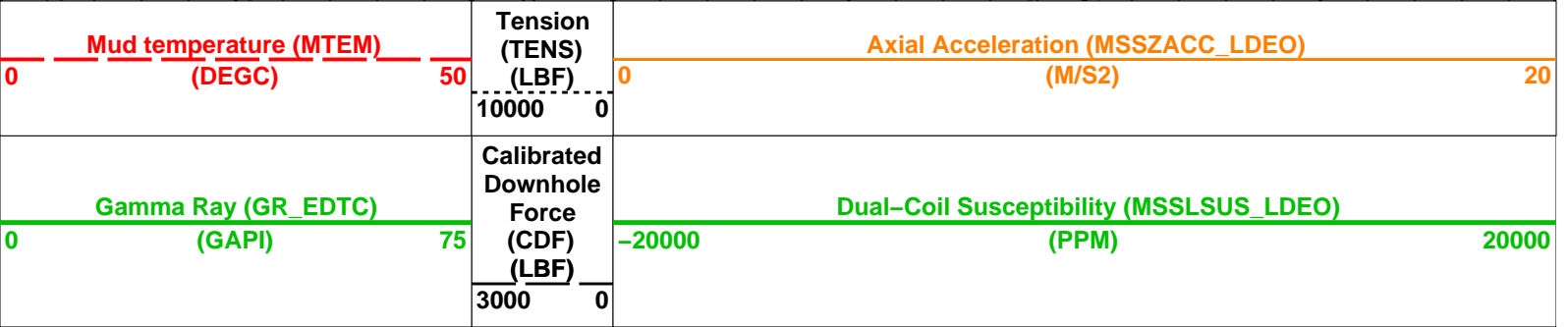
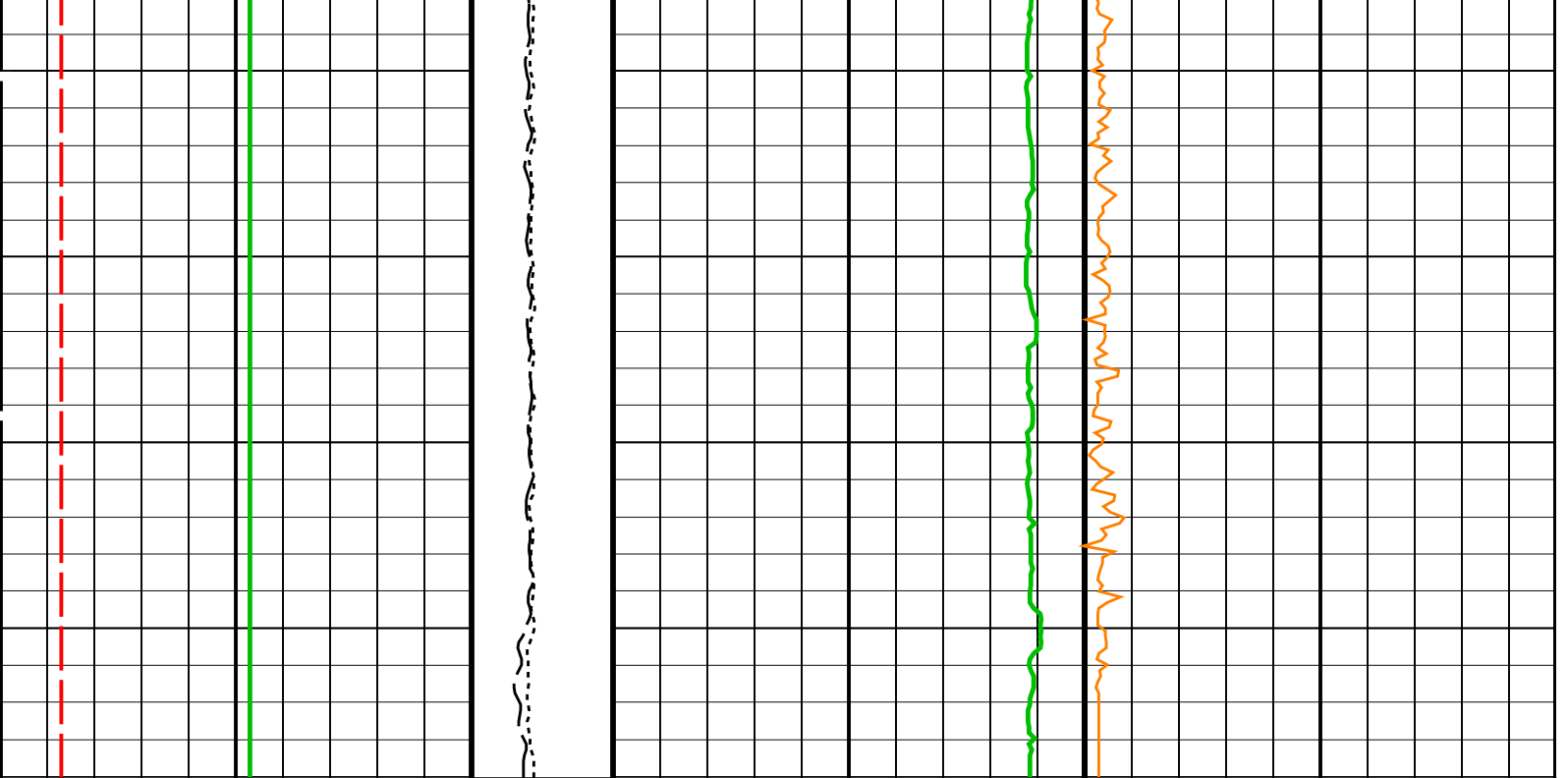
2nd Pass, Sea Floor Depth Reference

GR Affected by APS activation up to 70 mbsf - Drill Pipe









PIP SUMMARY

2nd Pass, Sea Floor Depth Reference

Time Mark Every 60 S

Parameters

DLIS Name	Description	Value
DO	System and Miscellaneous	
PP	Depth Offset for Playback	-4200.0 M
	Playback Processing	OFF

Format: MSS\_Logging      Vertical Scale: 1:200      Graphics File Created: 23-Jun-2013 14:30

OP System Version: 19C0-187

MSS_LDEO-A	19C0-187	HRLT-B	19C0-187
HLDS	19C0-187	LDSC-B	19C0-187
APS-C	19C0-187	HNGC-B	19C0-187
HNGS-BA	19C0-187	EDTC-B	SKK-5169-EDTCB

Speed Corrected Depth Log

Input DLIS Files

MSS\_LDEO\_HRLA\_LDL\_076PUP      FN:100      23-Jun-2013 13:21      4423.4 M      4265.1 M

Output DLIS Files

DEFAULT      MSS\_LDEO\_HRLA\_LDL\_078PUP      FN:102      PRODUCER      23-Jun-2013 14:30

Calibration and Check Summary

Measurement	Nominal	Master	Before	After	Change	Limit	Units
<b>High Resolution Laterolog Array – B Wellsite Calibration – HRLT M01</b>							
Before: 21-Jun-2013 5:02 After: 21-Jun-2013 14:19							
HRLT M0-M1 Voltage Plus – 0	0	N/A	-319.5	-319.6	-0.06070	9.681	UV
HRLT M0-M1 Voltage Plus – 1	0	N/A	-336.4	-338.8	-2.425	9.681	UV
HRLT M0-M1 Voltage Plus – 2	0	N/A	-336.7	-338.4	-1.714	9.681	UV
HRLT M0-M1 Voltage Plus – 3	0	N/A	-339.9	-341.0	-1.113	9.681	UV
HRLT M0-M1 Voltage Plus – 4	0	N/A	-327.2	-327.7	-0.4758	9.681	UV
HRLT M0-M1 Voltage Plus – 5	0	N/A	-323.2	-323.5	-0.2760	9.681	UV
HRLT M0-M1 Voltage Plus – 6	0	N/A	328.0	329.5	1.473	9.681	UV
HRLT M0-M1 Voltage Plus – 7	0	N/A	-322.7	-322.7	0	9.681	UV
<b>High Resolution Laterolog Array – B Wellsite Calibration – HRLT M12</b>							
Before: 21-Jun-2013 5:02 After: 21-Jun-2013 14:19							
HRLT M1-M2 Voltage Plus – 0	0	N/A	1757	1757	-0.3696	53.42	UV
HRLT M1-M2 Voltage Plus – 1	0	N/A	1854	1865	11.04	53.42	UV
HRLT M1-M2 Voltage Plus – 2	0	N/A	1848	1856	7.536	53.42	UV
HRLT M1-M2 Voltage Plus – 3	0	N/A	1864	1868	4.795	53.42	UV
HRLT M1-M2 Voltage Plus – 4	0	N/A	1794	1795	1.535	53.42	UV
HRLT M1-M2 Voltage Plus – 5	0	N/A	1773	1773	0.4408	53.42	UV
HRLT M1-M2 Voltage Plus – 6	0	N/A	-1817	-1823	-6.657	53.42	UV
HRLT M1-M2 Voltage Plus – 7	0	N/A	1781	1781	0	53.42	UV
<b>High Resolution Laterolog Array – B Wellsite Calibration – HRLT M23</b>							
Before: 21-Jun-2013 5:02 After: 21-Jun-2013 14:19							
HRLT M2-M3 Voltage Plus – 0	0	N/A	1744	1742	-1.570	53.42	UV
HRLT M2-M3 Voltage Plus – 1	0	N/A	1852	1862	9.860	53.42	UV
HRLT M2-M3 Voltage Plus – 2	0	N/A	1848	1855	6.829	53.42	UV
HRLT M2-M3 Voltage Plus – 3	0	N/A	1867	1871	3.787	53.42	UV
HRLT M2-M3 Voltage Plus – 4	0	N/A	1791	1791	-0.02759	53.42	UV
HRLT M2-M3 Voltage Plus – 5	0	N/A	1770	1770	-0.4113	53.42	UV
HRLT M2-M3 Voltage Plus – 6	0	N/A	-1804	-1809	-4.846	53.42	UV
HRLT M2-M3 Voltage Plus – 7	0	N/A	1781	1781	0	53.42	UV
<b>High Resolution Laterolog Array – B Wellsite Calibration – HRLT V34</b>							
Before: 21-Jun-2013 5:02 After: 21-Jun-2013 14:19							
HRLT A3-A4 Voltage Plus – 0	0	N/A	68520	68530	6.273	2100	UV
HRLT A3-A4 Voltage Plus – 1	0	N/A	72600	73030	438.0	2100	UV
HRLT A3-A4 Voltage Plus – 2	0	N/A	72720	73020	299.0	2100	UV
HRLT A3-A4 Voltage Plus – 3	0	N/A	73760	73950	192.8	2100	UV
HRLT A3-A4 Voltage Plus – 4	0	N/A	70690	70750	58.16	2100	UV
HRLT A3-A4 Voltage Plus – 5	0	N/A	69900	69940	39.48	2100	UV
HRLT A3-A4 Voltage Plus – 6	0	N/A	-69680	-69950	-265.2	2100	UV
HRLT A3-A4 Voltage Plus – 7	0	N/A	70000	70000	0	2100	UV
<b>High Resolution Laterolog Array – B Wellsite Calibration – HRLT V45</b>							
Before: 21-Jun-2013 5:02 After: 21-Jun-2013 14:19							
HRLT A4-A5 Voltage Plus – 0	0	N/A	68810	68810	7.523	2100	UV
HRLT A4-A5 Voltage Plus – 1	0	N/A	72970	73440	472.7	2100	UV
HRLT A4-A5 Voltage Plus – 2	0	N/A	73090	73390	301.5	2100	UV
HRLT A4-A5 Voltage Plus – 3	0	N/A	74100	74290	194.3	2100	UV
HRLT A4-A5 Voltage Plus – 4	0	N/A	70990	71050	59.49	2100	UV
HRLT A4-A5 Voltage Plus – 5	0	N/A	70190	70210	25.24	2100	UV
HRLT A4-A5 Voltage Plus – 6	0	N/A	-70060	-70330	-273.9	2100	UV
HRLT A4-A5 Voltage Plus – 7	0	N/A	70000	70000	0	2100	UV
<b>High Resolution Laterolog Array – B Wellsite Calibration – HRLT V56</b>							
Before: 21-Jun-2013 5:02 After: 21-Jun-2013 14:19							
HRLT A5-A6 Voltage Plus – 0	0	N/A	68710	68710	5.008	2100	UV
HRLT A5-A6 Voltage Plus – 1	0	N/A	72700	73170	472.7	2100	UV
HRLT A5-A6 Voltage Plus – 2	0	N/A	72850	73150	304.0	2100	UV
HRLT A5-A6 Voltage Plus – 3	0	N/A	73900	74090	192.0	2100	UV
HRLT A5-A6 Voltage Plus – 4	0	N/A	70840	70910	68.19	2100	UV
HRLT A5-A6 Voltage Plus – 5	0	N/A	70060	70090	34.30	2100	UV
HRLT A5-A6 Voltage Plus – 6	0	N/A	-69770	-70030	-267.8	2100	UV
HRLT A5-A6 Voltage Plus – 7	0	N/A	70000	70000	0	2100	UV
<b>High Resolution Laterolog Array – B Wellsite Calibration – HRLT VTP</b>							
Before: 21-Jun-2013 5:02 After: 21-Jun-2013 14:19							
HRLT Torpedo-M0 Voltage – 0	0	N/A	-68390	-68390	5.992	2100	UV
HRLT Torpedo-M0 Voltage – 1	0	N/A	-73050	-73490	-439.0	2100	UV
HRLT Torpedo-M0 Voltage – 2	0	N/A	-73160	-73470	-310.5	2100	UV
HRLT Torpedo-M0 Voltage – 3	0	N/A	-74210	-74390	-177.9	2100	UV
HRLT Torpedo-M0 Voltage – 4	0	N/A	-71060	-71110	-51.70	2100	UV
HRLT Torpedo-M0 Voltage – 5	0	N/A	-70230	-70250	-22.26	2100	UV
HRLT Torpedo-M0 Voltage – 6	0	N/A	-70000	-70000	0	2100	UV
HRLT Torpedo-M0 Voltage – 7	0	N/A	-70000	-70000	0	2100	UV

HRLT Torpedo-M0 Voltage - 6	0	N/A	7007.0	7032.0	250.7	2100	UV
HRLT Torpedo-M0 Voltage - 7	0	N/A	-70000	-70000	0	2100	UV

#### High Resolution Laterolog Array - B Wellsite Calibration - HRLT VBD

Before: 21-Jun-2013 5:02 After: 21-Jun-2013 14:19

HRLT Bridle#9-M0 Voltage - 0	0	N/A	-68370	-68380	-8.383	2100	UV
HRLT Bridle#9-M0 Voltage - 1	0	N/A	-73020	-73480	-457.3	2100	UV
HRLT Bridle#9-M0 Voltage - 2	0	N/A	-73130	-73450	-316.7	2100	UV
HRLT Bridle#9-M0 Voltage - 3	0	N/A	-74170	-74370	-204.0	2100	UV
HRLT Bridle#9-M0 Voltage - 4	0	N/A	-71040	-71110	-63.20	2100	UV
HRLT Bridle#9-M0 Voltage - 5	0	N/A	-70210	-70250	-34.00	2100	UV
HRLT Bridle#9-M0 Voltage - 6	0	N/A	70020	70300	273.8	2100	UV
HRLT Bridle#9-M0 Voltage - 7	0	N/A	-70000	-70000	0	2100	UV

#### High Resolution Laterolog Array - B Wellsite Calibration - HRLT ISO

Before: 21-Jun-2013 5:02 After: 21-Jun-2013 14:19

HRLT Source Current Plus - 0	0	N/A	285.1	285.2	0.03937	8.520	UA
HRLT Source Current Plus - 1	0	N/A	281.1	281.1	0	8.520	UA
HRLT Source Current Plus - 2	0	N/A	281.1	281.1	0	8.520	UA
HRLT Source Current Plus - 3	0	N/A	281.1	281.1	0	8.520	UA
HRLT Source Current Plus - 4	0	N/A	281.1	281.1	0	8.520	UA
HRLT Source Current Plus - 5	0	N/A	281.1	281.1	0	8.520	UA
HRLT Source Current Plus - 6	0	N/A	281.1	281.1	0	8.520	UA
HRLT Source Current Plus - 7	0	N/A	281.1	281.1	0	8.520	UA

#### High Resolution Laterolog Array - B Wellsite Calibration - HRLT MV

Before: 21-Jun-2013 5:02 After: 21-Jun-2013 14:19

HRLT Vertical Voltage PI - 0	0	N/A	-321.9	-321.9	0.03369	9.681	UV
HRLT Vertical Voltage PI - 1	0	N/A	-331.5	-333.6	-2.111	9.681	UV
HRLT Vertical Voltage PI - 2	0	N/A	-330.4	-332.0	-1.516	9.681	UV
HRLT Vertical Voltage PI - 3	0	N/A	-331.7	-332.6	-0.8864	9.681	UV
HRLT Vertical Voltage PI - 4	0	N/A	-316.3	-316.6	-0.2819	9.681	UV
HRLT Vertical Voltage PI - 5	0	N/A	-327.4	-327.6	-0.1616	9.681	UV
HRLT Vertical Voltage PI - 6	0	N/A	336.5	337.6	1.141	9.681	UV
HRLT Vertical Voltage PI - 7	0	N/A	-322.7	-322.7	0	9.681	UV

#### Hostile Litho-Density Sonde Wellsite Calibration - Background Measurement

Master: 23-May-2013 18:26 Before: 5-Jun-2013 5:19 After: 21-Jun-2013 15:43

SS Cs Resolution Bkg	9.000	7.935	8.049	7.894	-0.1558	1.800	%
LS Cs Resolution Bkg	9.000	8.162	8.063	8.099	0.03602	1.800	%
LSW1 Background	100.0	71.72	70.78	70.77	-0.009674	0.03000	CPS
LSW2 Background	100.0	65.95	64.89	65.91	1.019	0.03000	CPS
LSW3 Background	200.0	146.1	143.2	142.4	-0.8057	0.03000	CPS
LSW4 Background	250.0	176.3	175.6	173.4	-2.196	0.03000	CPS
LSW5 Background	600.0	404.2	405.6	401.3	-4.256	0.03000	CPS
SSW1 Background	100.0	80.22	79.61	80.05	0.4435	0.03000	CPS
SSW2 Background	200.0	141.1	142.8	140.8	-2.062	0.03000	CPS
SSW3 Background	500.0	380.9	379.7	382.0	2.379	0.03000	CPS
SSW4 Background	270.0	201.0	199.2	199.1	-0.1189	0.03000	CPS
SSW5 Background	200.0	143.8	144.9	143.3	-1.597	0.03000	CPS

#### Hostile Litho-Density Sonde Wellsite Calibration - Aluminum Measurement

Master: 23-May-2013 19:07

LSW1 Aluminum	600.0	513.7	N/A	N/A	N/A	N/A	CPS
LSW2 Aluminum	900.0	737.9	N/A	N/A	N/A	N/A	CPS
LSW3 Aluminum	1100	887.0	N/A	N/A	N/A	N/A	CPS
LSW4 Aluminum	580.0	448.1	N/A	N/A	N/A	N/A	CPS
LSW5 Aluminum	570.0	411.4	N/A	N/A	N/A	N/A	CPS
SSW1 Aluminum	2800	2391	N/A	N/A	N/A	N/A	CPS
SSW2 Aluminum	8000	6513	N/A	N/A	N/A	N/A	CPS
SSW3 Aluminum	11600	9048	N/A	N/A	N/A	N/A	CPS
SSW4 Aluminum	5000	3653	N/A	N/A	N/A	N/A	CPS
SSW5 Aluminum	660.0	442.2	N/A	N/A	N/A	N/A	CPS

#### Hostile Litho-Density Sonde Wellsite Calibration - Lithology Measurement

Master: 23-May-2013 18:57

LSW1 Iron	400.0	354.2	N/A	N/A	N/A	N/A	CPS
LSW2 Iron	730.0	602.9	N/A	N/A	N/A	N/A	CPS
LSW3 Iron	1000	794.0	N/A	N/A	N/A	N/A	CPS
LSW4 Iron	520.0	408.1	N/A	N/A	N/A	N/A	CPS
LSW5 Iron	470.0	376.8	N/A	N/A	N/A	N/A	CPS
SSW1 Iron	2100	1748	N/A	N/A	N/A	N/A	CPS
SSW2 Iron	6800	5423	N/A	N/A	N/A	N/A	CPS
SSW3 Iron	10800	8249	N/A	N/A	N/A	N/A	CPS
SSW4 Iron	4600	3342	N/A	N/A	N/A	N/A	CPS
SSW5 Iron	580.0	391.9	N/A	N/A	N/A	N/A	CPS

#### Hostile Litho-Density Sonde Wellsite Calibration - Caliper Calibration

Before: 5-Jun-2013 5:19

HLDS Caliper Small Ring	12.00	N/A	16.02	N/A	N/A	N/A	IN
HLDS Caliper Large Ring	15.19	N/A	19.90	N/A	N/A	N/A	IN

Accelerator-Porosity Tool Wellsite Calibration – Background								
Master: 24-May-2013 10:47 Before: 24-May-2013 10:54 After: 21-Jun-2013 14:24								
Near Det Bkg Cntrate	30.00	33.52	32.19	32.47	0.2844	N/A		CPS
Far Det Bkg Cntrate	30.00	33.43	32.67	32.86	0.1863	N/A		CPS
Array-1 Det Bkg Cntrate	30.00	29.51	28.88	30.28	1.405	N/A		CPS
Array-2 Det Bkg Cntrate	30.00	29.86	29.59	29.53	-0.06015	N/A		CPS
Array Therm Det Bkg Cntrate	30.00	31.39	34.16	31.82	-2.336	N/A		CPS
Accelerator-Porosity Tool Wellsite Calibration – Calibration Ratios								
Master: 24-May-2013 10:47								
Near/Far Calibration Ratio	0.9250	0.8891	N/A	N/A	N/A	N/A		
Near/Array Calibration Ratio	1.030	1.063	N/A	N/A	N/A	N/A		
Near/Array Cal Ratio Up/Down	1.000	1.017	N/A	N/A	N/A	N/A		
Accelerator-Porosity Tool Wellsite Calibration – Tank Check								
Master: 24-May-2013 10:47								
Array-1 Standoff Porosity	11.75	10.38	N/A	N/A	N/A	N/A		PU
Array-2 Standoff Porosity	11.75	10.04	N/A	N/A	N/A	N/A		PU
Average Slowing Down Time	6.000	6.114	N/A	N/A	N/A	N/A		US
Array-1 SDT Ratio Up/Down	1.000	0.9764	N/A	N/A	N/A	N/A		
Array-2 SDT Ratio Up/Down	1.000	0.9755	N/A	N/A	N/A	N/A		
Sigma Formation	27.50	34.51	N/A	N/A	N/A	N/A		CU
Accelerator-Porosity Tool Wellsite Calibration – CCR7 signal boxes								
Master: 24-May-2013 10:47								
Near Detector Plateau Setting	1650	1732	N/A	N/A	N/A	N/A		V
Far Detector Plateau Setting	2000	2085	N/A	N/A	N/A	N/A		V
Array Detector Plateau Setting	2000	1965	N/A	N/A	N/A	N/A		V
Hostile Natural Gamma Ray Sonde Wellsite Calibration – Detector 1 Check								
Master: 22-May-2013 20:18 Before: 5-Jun-2013 5:31 After: 21-Jun-2013 15:44								
Na 511 Peak Loc	40.00	39.77	39.78	39.85	0.06499	1.000		
Na 511 Peak Res	15.50	15.23	15.40	12.72	-2.674	2.000	%	
High Voltage	1150	1161	1143	1151	7.681	N/A	V	
Na 1785 Peak Loc	142.6	143.9	143.2	141.3	-1.901	7.000		
Na 1785 Peak Res	8.500	7.558	8.088	7.759	-0.3289	2.000	%	
Temperature	15.50	16.49	14.24	16.34	2.107	N/A	DEGC	
Na Count Rate	45.00	14.90	15.37	14.04	-1.332	8.000	CPS	
Hostile Natural Gamma Ray Sonde Wellsite Calibration – Detector 2 Check								
Master: 22-May-2013 20:18 Before: 5-Jun-2013 5:31 After: 21-Jun-2013 15:44								
Na 511 Peak Loc	40.00	39.67	39.68	39.51	-0.1639	1.000		
Na 511 Peak Res	15.50	15.00	15.05	15.43	0.3853	2.000	%	
High Voltage	1150	1082	1074	1085	11.62	N/A	V	
Na 1785 Peak Loc	142.6	141.4	140.3	143.0	2.653	7.000		
Na 1785 Peak Res	8.500	9.134	8.027	9.053	1.026	2.000	%	
Temperature	15.50	16.94	14.41	18.12	3.704	N/A	DEGC	
Na Count Rate	45.00	14.58	15.20	14.08	-1.128	8.000	CPS	
Hostile Natural Gamma Ray Sonde Wellsite Calibration – Ratio Of Detector 1 To Detector 2								
Master: 22-May-2013 20:18 Before: 5-Jun-2013 5:31 After: 21-Jun-2013 15:44								
Coincidence Count Rate Ratio	1.000	1.024	1.014	0.9996	-0.01401	0.05000		
Hostile Natural Gamma Ray Sonde Master Calibration – Detector 1 Calibration								
Master: 22-May-2013 20:18								
Na 511 Peak Set Point	40.00	41.00	---	---	---	---		
Th Peak Loc	209.6	211.4	---	---	---	---		
Th Peak Res	7.000	6.972	---	---	---	---	%	
Background Count Rate	142.5	18.97	---	---	---	---	CPS	
Gain Ratio	1.000	1.011	---	---	---	---		
Hostile Natural Gamma Ray Sonde Master Calibration – Detector 2 Calibration								
Master: 22-May-2013 20:18								
Na 511 Peak Set Point	40.00	41.00	---	---	---	---		
Th Peak Loc	209.6	208.8	---	---	---	---		
Th Peak Res	7.000	6.474	---	---	---	---	%	
Background Count Rate	142.5	18.20	---	---	---	---	CPS	
Gain Ratio	1.000	1.001	---	---	---	---		
Enhanced DTS Cartridge Wellsite Calibration – EDTC Accelerometer Calibration								
Before: 21-Jun-2013 5:02								
EDTC Z-Axis Acceleration	9.810	N/A	9.801	N/A	N/A	N/A		M/S2
Enhanced DTS Cartridge Wellsite Calibration – Detector Calibration								
Before: 5-Jun-2013 5:18								
Gamma Ray (Jig – Bkg)	156.4	N/A	156.4	N/A	N/A	14.22		GAPI
Gamma Ray (Calibrated)	164.0	N/A	164.0	N/A	N/A	15.00		GAPI
Accelerator-Porosity Tool – Detector Plateau Settings :								



Near Detector Plateau Setting 1732 V  
Far Detector Plateau Setting 2085 V  
Array Detector Plateau Setting 1965 V

High Resolution Laterolog Array – B / Equipment Identification

Primary Equipment:		
HRLT Sonde	HRLS – B	768
Auxiliary Equipment:		
HRLT lower Housing	HRLH – B	968
HRLT Lower Cartridge	HRLC – B	974
HRLT upper Housing	HRUH – B	768
HRLT Upper Cartridge	HRUC – B	764

Hostile Litho–Density Sonde / Equipment Identification

Primary Equipment:		
Hostile Litho Density Sonde	HLDS – D	45
Hostile Litho Density High Voltage	HLDV – D	45
Gamma Source Radioactive	GSR – Z	8113
Auxiliary Equipment:		
Hostile Litho Density Pad	HLDP – C	45
Hostile Litho Density High Voltage Housi	HEH – H	47

Litho–Density Spectroscopy Cartridge – B / Equipment Identification

Primary Equipment:		
LDSC Cartridge	LDSC – B	521
Auxiliary Equipment:		
LDSC Housing	LDSH – A	319

Accelerator–Porosity Tool / Equipment Identification

Primary Equipment:		
Accelerator–Porosity Sonde	APS – C	22
APS Minitron	MNTR – F	7341
Auxiliary Equipment:		
Accelerator–Porosity Housing	APH – AC	22
APS Calibration Water Tank	SFT – 178	1
APS Aluminum Calibrator Sleeve	SFT – 281	1

Hostile Natural Gamma Ray Cartridge – B / Equipment Identification

Primary Equipment:		
HNGC Cartridge	HNGC – B	300
Auxiliary Equipment:		
HNGC Housing	HNGH – A	115

Hostile Natural Gamma Ray Sonde / Equipment Identification

Primary Equipment:		
HNGS Sonde	HNGS – BA	194
Auxiliary Equipment:		
HNGS Sonde Housing	HNSH – BA	205
Gamma Source Radioactive	GSR – U	616008

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		39.77	Master		15.23	Master		1161
Before		39.78	Before		15.40	Before		1143
After		39.85	After		12.72	After		1151
37.50 (Minimum) 40.00 (Nominal) 43.50 (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		143.9	Master		7.558	Master		16.49
Before		143.2	Before		8.088	Before		14.24
After		141.3	After		7.759	After		16.34
135.0 (Minimum) 142.6 (Nominal) 150.3 (Maximum)			7.000 (Minimum) 8.500 (Nominal) 11.000 (Maximum)			-28.89 (Minimum) 15.50 (Nominal) 60.00 (Maximum)		
Phase	Na Count Rate CPS	Value						
Master		14.90						
Before		15.37						
After		14.04						
10.00 (Minimum) 45.00 (Nominal) 100.0 (Maximum)								
Master: 22-May-2013 20:18			Before: 5-Jun-2013 5:31			After: 21-Jun-2013 15:44		

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		39.67	Master		15.00	Master		1082
Before		39.68	Before		15.05	Before		1074
After		39.51	After		15.43	After		1085
37.50 (Minimum) 40.00 (Nominal) 43.50 (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		141.4	Master		9.134	Master		16.94
Before		140.3	Before		8.027	Before		14.41
After		143.0	After		9.053	After		18.12
135.0 (Minimum) 142.6 (Nominal) 150.3 (Maximum)			7.000 (Minimum) 8.500 (Nominal) 11.000 (Maximum)			-28.89 (Minimum) 15.50 (Nominal) 60.00 (Maximum)		
Phase	Na Count Rate CPS	Value						
Master		14.58						
Before		15.20						
After		14.08						
10.00 (Minimum) 45.00 (Nominal) 100.0 (Maximum)								
Master: 22-May-2013 20:18			Before: 5-Jun-2013 5:31			After: 21-Jun-2013 15:44		

Hostile Natural Gamma Ray Sonde Wellsite Calibration		
Ratio Of Detector 1 To Detector 2		
Phase	Coincidence Count Rate Ratio	Value
Master		1.024
Before		1.014
After		0.9996
0.9500 (Minimum) 1.000 (Nominal) 1.050 (Maximum)		
Master: 22-May-2013 20:18		
Before: 5-Jun-2013 5:31		
After: 21-Jun-2013 15:44		

Hostile Natural Gamma Ray Sonde Master Calibration

Detector 1 Calibration

**Detector 1 Calibration**

Phase	Na 511 Peak Set Point		Value	Phase	Th Peak Loc		Value	Phase	Th Peak Res %		Value
Master			41.00	Master			211.4	Master			6.972
	38.00 (Minimum)	40.00 (Nominal)	43.00 (Maximum)		201.0 (Minimum)	209.6 (Nominal)	218.3 (Maximum)		5.000 (Minimum)	7.000 (Nominal)	9.000 (Maximum)
Phase	Background Count Rate CPS		Value	Phase	Gain Ratio		Value				
Master			18.97	Master			1.011				
	10.00 (Minimum)	142.5 (Nominal)	265.0 (Maximum)		0.9400 (Minimum)	1.000 (Nominal)	1.060 (Maximum)				

Master: 22-May-2013 20:18

**Hostile Natural Gamma Ray Sonde Master Calibration**

**Detector 2 Calibration**

Phase	Na 511 Peak Set Point		Value	Phase	Th Peak Loc		Value	Phase	Th Peak Res %		Value
Master			41.00	Master			208.8	Master			6.474
	38.00 (Minimum)	40.00 (Nominal)	43.00 (Maximum)		201.0 (Minimum)	209.6 (Nominal)	218.3 (Maximum)		5.000 (Minimum)	7.000 (Nominal)	9.000 (Maximum)
Phase	Background Count Rate CPS		Value	Phase	Gain Ratio		Value				
Master			18.20	Master			1.001				
	10.00 (Minimum)	142.5 (Nominal)	265.0 (Maximum)		0.9400 (Minimum)	1.000 (Nominal)	1.060 (Maximum)				

Master: 22-May-2013 20:18

**Enhanced DTS Cartridge / Equipment Identification**

Primary Equipment:

EDTC Gamma Ray Detector	EDTG - A/B	8305
Enhanced DTS Cartridge	EDTC - B	8317

Auxiliary Equipment:

EDTC Housing	EDTH - B	8303
--------------	----------	------

**Enhanced DTS Cartridge Wellsite Calibration**

**EDTC Accelerometer Calibration**

Phase	EDTC Z-Axis Acceleration M/S2	Value	
Before		9.801	
	9.610 (Minimum)	9.810 (Nominal)	10.01 (Maximum)

Before: 21-Jun-2013 5:02

**Enhanced DTS Cartridge Wellsite Calibration**

**Detector Calibration**

Phase	Gamma Ray Background GAPI		Value	Phase	Gamma Ray (Jig - Bkg) GAPI		Value	Phase	Gamma Ray (Calibrated) GAPI		Value
Before			6.203	Before			156.4	Before			164.0
	0 (Minimum)	30.00 (Nominal)	120.0 (Maximum)		142.2 (Minimum)	156.4 (Nominal)	170.6 (Maximum)		149.0 (Minimum)	164.0 (Nominal)	179.0 (Maximum)

Before: 5-Jun-2013 5:18

Company: **Lamont Doherty Earth Observatory**



Well: **Expedition 341, Site U1417E**

Field: **Southern Alaska Margin Tectonics**

Rig: **JOIDES Resolution**

Ocean: **Pacific**

Magnetic Susceptibility Sonde

Deep Reading

Gamma Ray