

COMPANY: Lamont Doherty

WELL: ODP Leg 195, Site 1201D (WP-1B)

FIELD: ION

Country: Japan Ocean: West Phillipine

Schlumberger HNGS
Natural gamma Ray

Country: Japan
Field: ION
Location: Rig- Joides Resolution
Well: ODP Leg 195, Site 1201D (WP-1)
Company: Lamont Doherty

| LOCATION | | Rig- Joides Resolution | |
|-------------------------|--------------------------|-------------------------|--------------------------|
| Permanent Datum: | MSL | Elev.: | K.B. 11,2989 m |
| Log Measured From: | DES | | G.L. -5720 m |
| Drilling Measured From: | DES | Elev.: | 0 m |
| | | | 11.3 m above Perm. Datum |
| API Serial No. | Max. Hole Devi. 0 deg | Longitude E 151.9836 | Latitude S 20.2425 |

| Logging Date | Run Number | Run 1 | Run 2 | Run |
|-------------------------------|----------------------------------|-------|-------|-----|
| 12-Apr-2001 | 1 | | | |
| Depth Driller | 6320 m | | | |
| Schlumberger Depth | 6314 m | | | |
| Bottom Log Interval | 6283 m | | | |
| Top Log Interval | 5723 m | | | |
| Casing Driller Size @ Depth | 0.000 in @ 5800 m | | | |
| Casing Schlumberger | 5799.5 m | | | |
| Bit Size | 9.875 in | | | |
| Type Fluid In Hole | Sepiolite/Salt water | | | |
| Density | 1.05 g/cm3 | | | |
| Fluid Loss | PH | | | |
| Source Of Sample | Mud Tank | | | |
| RM @ Measured Temperature | 0.224 ohm.m @ 82 degC | | | |
| RMF @ Measured Temperature | @ @ | | | |
| RMC @ Measured Temperature | @ @ | | | |
| Source RMF | RMC | | | |
| RM @ MRT | 0.612 @ 16 @ 16 | | | |
| Maximum Recorded Temperatures | 16 degC | | | |
| Circulation Stopped | 12-Apr-2001 1:00 | | | |
| Logger On Bottom | 12-Apr-2001 See Log | | | |
| Unit Number | 99 Houston | | | |
| Recorded By | Kerry M. Swain | | | |
| Witnessed By | Samantha Barr, Phillippe Galliot | | | |

| Logging Date | Run Number | Run 1 | Run 2 | Run |
|-------------------------------|----------------------------------|-------|-------|-----|
| 12-Apr-2001 | 1 | | | |
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| Schlumberger Depth | 6314 m | | | |
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| Top Log Interval | 5723 m | | | |
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| Casing Schlumberger | 5799.5 m | | | |
| Bit Size | 9.875 in | | | |
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| Fluid Loss | PH | | | |
| Source Of Sample | Mud Tank | | | |
| RM @ Measured Temperature | 0.224 ohm.m @ 82 degC | | | |
| RMF @ Measured Temperature | @ @ | | | |
| RMC @ Measured Temperature | @ @ | | | |
| Source RMF | RMC | | | |
| RM @ MRT | 0.612 @ 16 @ 16 | | | |
| Maximum Recorded Temperatures | 16 degC | | | |
| Circulation Stopped | 12-Apr-2001 1:00 | | | |
| Logger On Bottom | 12-Apr-2001 See Log | | | |
| Unit Number | 99 Houston | | | |
| Recorded By | Kerry M. Swain | | | |
| Witnessed By | Samantha Barr, Phillippe Galliot | | | |

| Logging Date | Run Number | Run 1 | Run 2 | Run |
|-------------------------------|----------------------------------|-------|-------|-----|
| 12-Apr-2001 | 1 | | | |
| Depth Driller | 6320 m | | | |
| Schlumberger Depth | 6314 m | | | |
| Bottom Log Interval | 6283 m | | | |
| Top Log Interval | 5723 m | | | |
| Casing Driller Size @ Depth | 0.000 in @ 5800 m | | | |
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| Bit Size | 9.875 in | | | |
| Type Fluid In Hole | Sepiolite/Salt water | | | |
| Density | 1.05 g/cm3 | | | |
| Fluid Loss | PH | | | |
| Source Of Sample | Mud Tank | | | |
| RM @ Measured Temperature | 0.224 ohm.m @ 82 degC | | | |
| RMF @ Measured Temperature | @ @ | | | |
| RMC @ Measured Temperature | @ @ | | | |
| Source RMF | RMC | | | |
| RM @ MRT | 0.612 @ 16 @ 16 | | | |
| Maximum Recorded Temperatures | 16 degC | | | |
| Circulation Stopped | 12-Apr-2001 1:00 | | | |
| Logger On Bottom | 12-Apr-2001 See Log | | | |
| Unit Number | 99 Houston | | | |
| Recorded By | Kerry M. Swain | | | |
| Witnessed By | Samantha Barr, Phillippe Galliot | | | |

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: MESTB/LSS
 OS2: DLT/HLDT/APS
 OS3:
 OS4:
 OS5:

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

REMARKS: RUN NUMBER 1
 Hole Cored With RCB.
 WHC used on all runs.
 Seas calm.
 Log Measured in Meters Below Rig Floor (MBRF).
 TD Driller- 6320 MBRF.
 Sea Floor Driller- 5720 MBRF.
 TD Logger- 6314 MBRF.
 Sea Floor Logger- 5723 MBRF.
 Drill Pipe Logger- 5799.5 MBRF.
 Drill Pipe Driller- 5800 MBRF.
 Splice at 6119.5 of original uplogs.
 Some data not recorded in this interval due to lack of overlap.
 Sepiolite mud used to displace hole before logging.
 Original log files recorded with real time speed correction. Displayed data are corrected back to measured depth.

REMARKS: RUN NUMBER 2



| RUN 1 | | |
|-----------------|-------|------|
| LOGGED INTERVAL | START | STOP |
| | | |
| | | |
| | | |
| | | |

| RUN 2 | | |
|-----------------|-------|------|
| LOGGED INTERVAL | START | STOP |
| | | |
| | | |
| | | |
| | | |

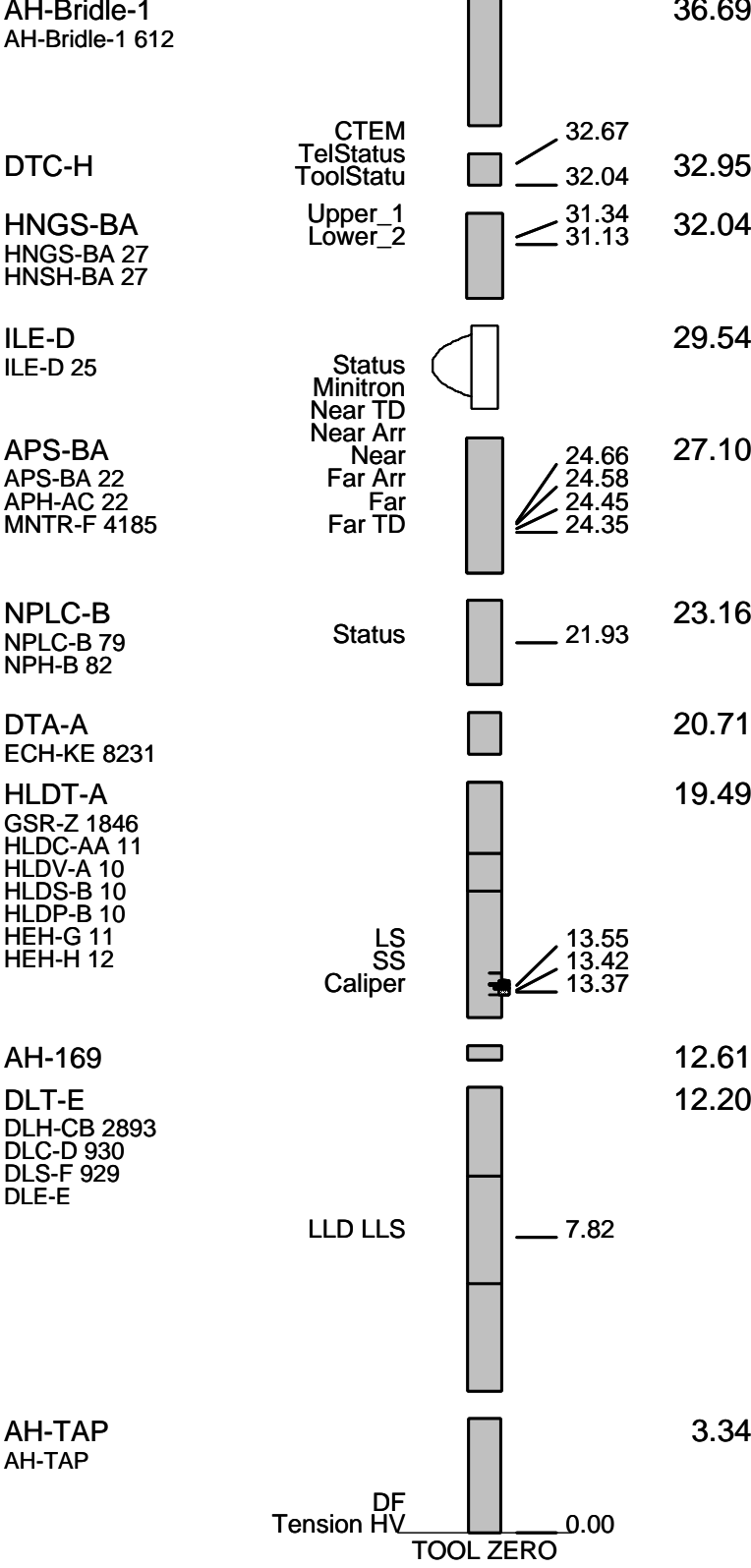
EQUIPMENT DESCRIPTION

RUN 1
SURFACE EQUIPMENT
 LCM-AA 728
 SFT-281 24
 SFT-178 4722
 GSR-U 135
 WITM (DTS)-A

DOWNHOLE EQUIPMENT

| | | |
|-----------------|---|-------|
| LEH-QT |  | 41.31 |
| AH-Bridle-2 |  | 40.42 |
| AH-Bridle-2 148 | | |

RUN 2



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

Input DLIS Files

| | | | | | | |
|---------|------------------------|------|----------|-------------------|----------|----------|
| DEFAULT | SPLICE_DLL_LDL_APS_096 | FN:1 | PRODUCER | 14-Apr-2001 10:44 | 6317.7 M | 5703.9 M |
|---------|------------------------|------|----------|-------------------|----------|----------|

Output DLIS Files

| | | | | | | |
|---------|-------------------------|-------|----------|-------------------|----------|----------|
| DEFAULT | DLL_LDL_APS_HNGS_097PUP | FN:81 | PRODUCER | 14-Apr-2001 10:46 | 6317.7 M | 5712.9 M |
| REDUCE | DLL_LDL_APS_HNGS_097PUP | FN:82 | PRODUCER | 14-Apr-2001 10:46 | 6317.7 M | 5712.9 M |

OP System Version: 9C2-303

MCM

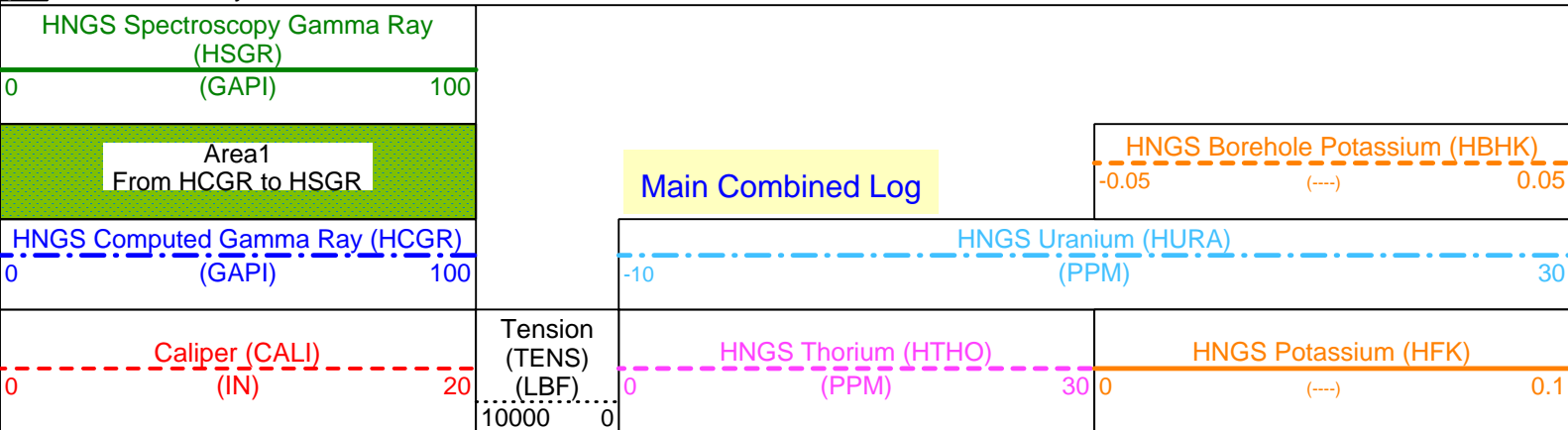
| | | | |
|--------|---------|---------|---------|
| DLT-E | 9C2-303 | HLDT-A | 9C2-303 |
| DTA-A | 9C2-303 | NPLC-B | 9C2-303 |
| APS-BA | 9C2-303 | HNGS-BA | 9C2-303 |
| DTC-H | 9C2-303 | | |

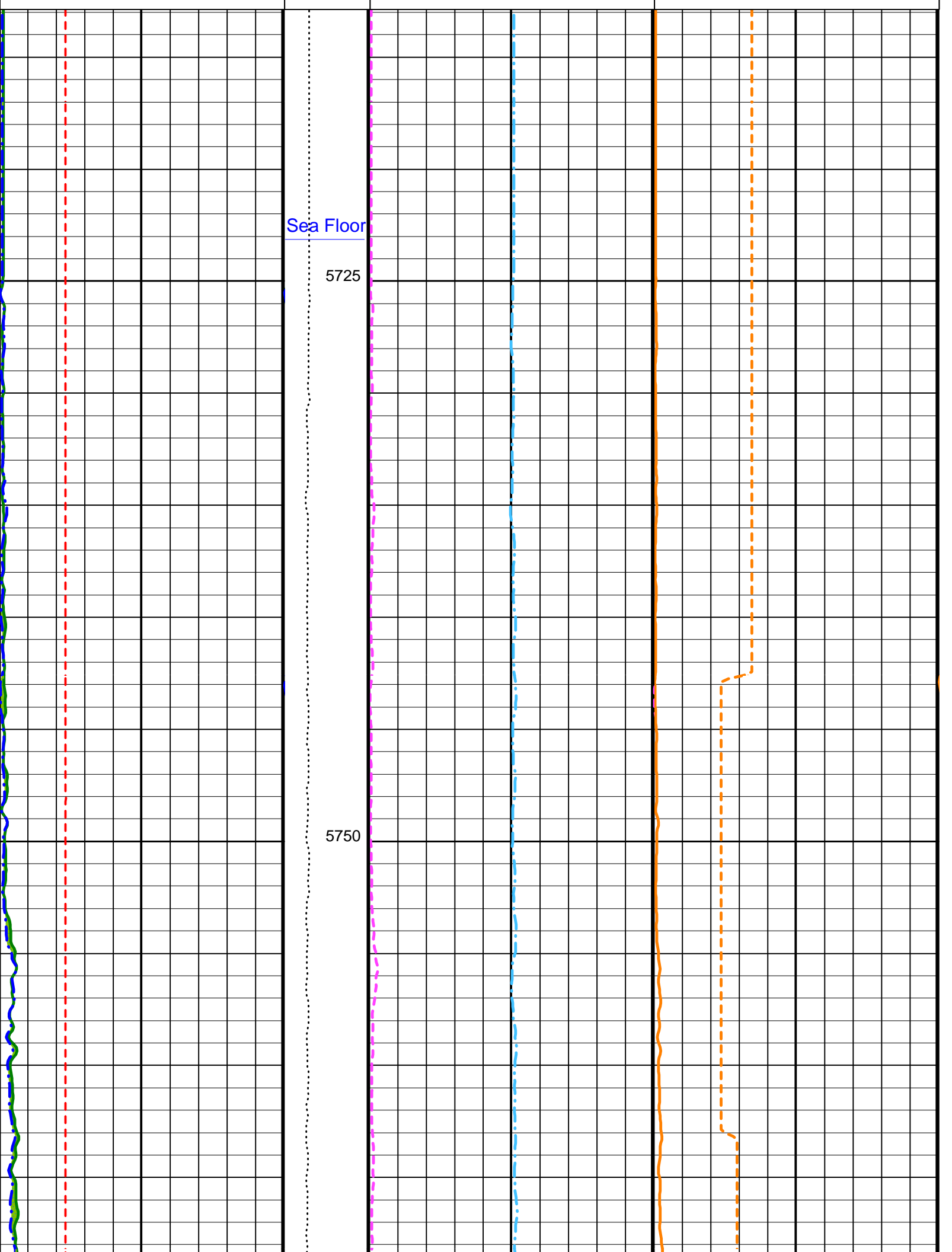
Changed Parameter Summary

| DLIS Name | New Value | Previous Value | Depth & Time |
|-----------|-----------|----------------|-----------------|
| BHS | CASED | OPEN | 5804.3 10:53:48 |
| GCSE | BS | CALI | 5804.3 10:53:44 |

PIP SUMMARY

Time Mark Every 60 S

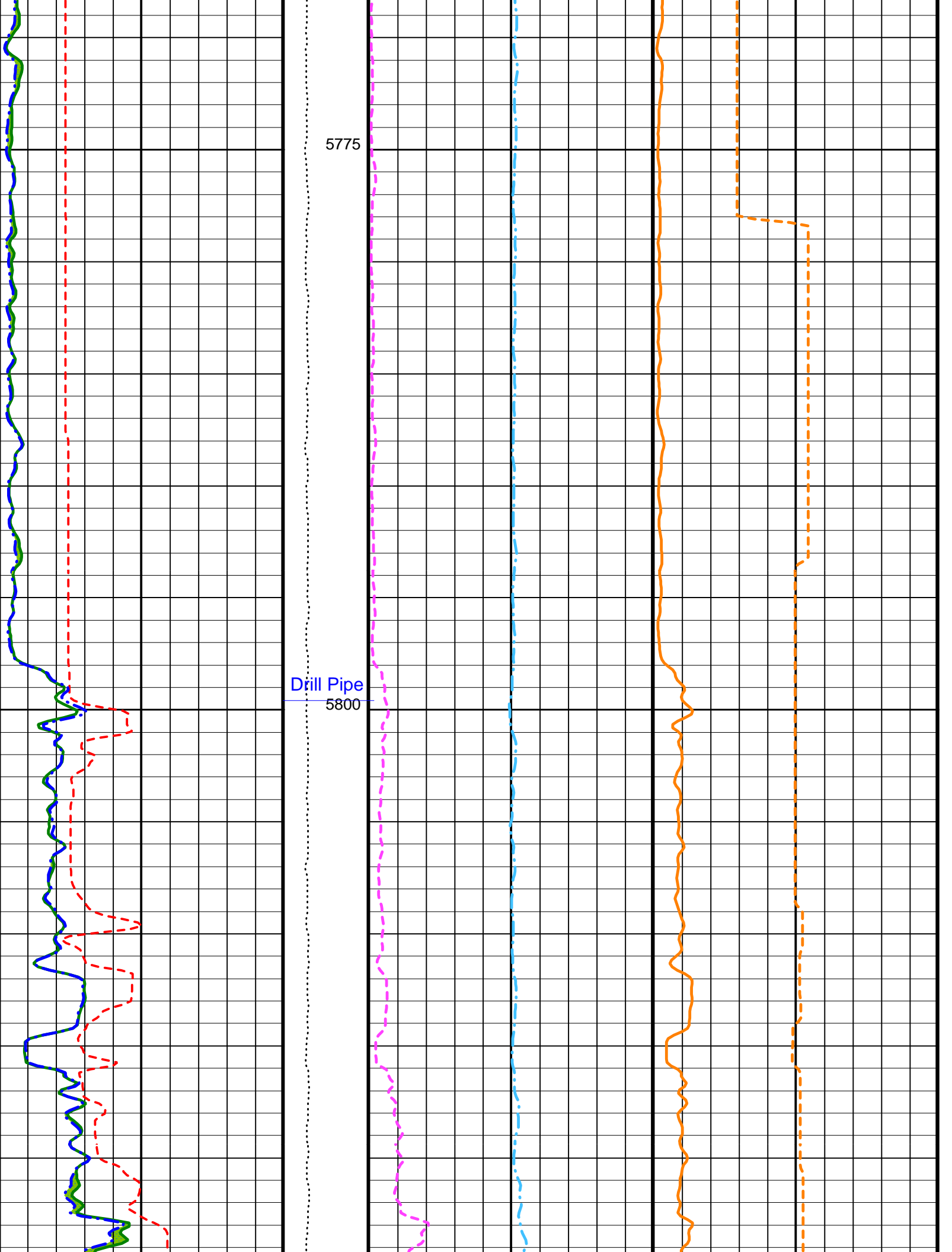


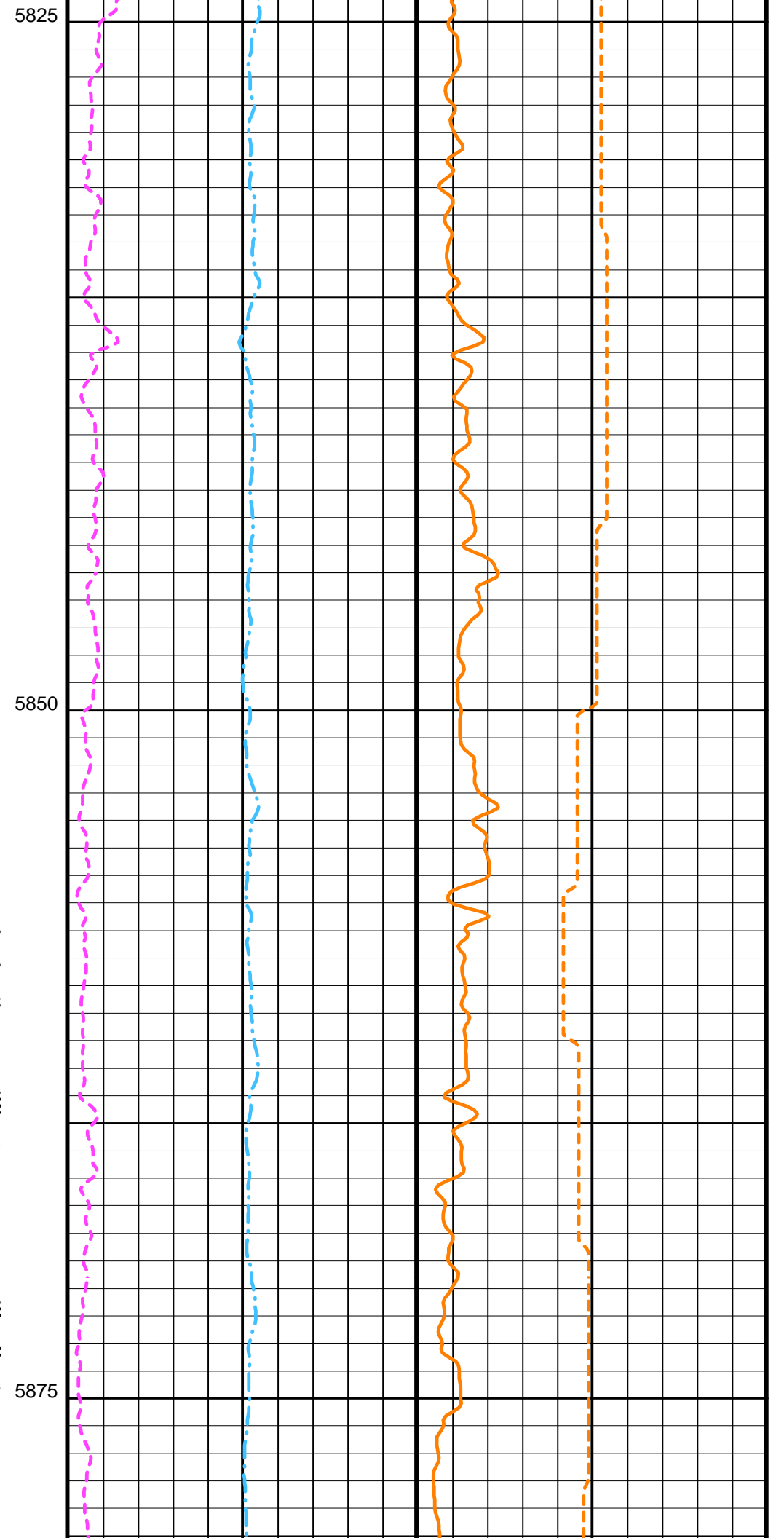
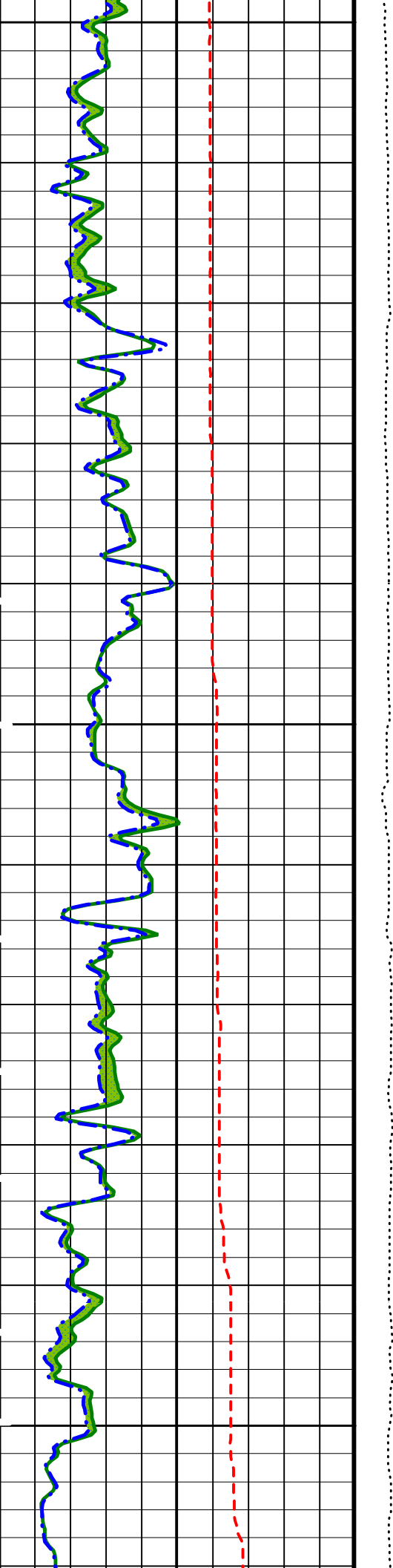


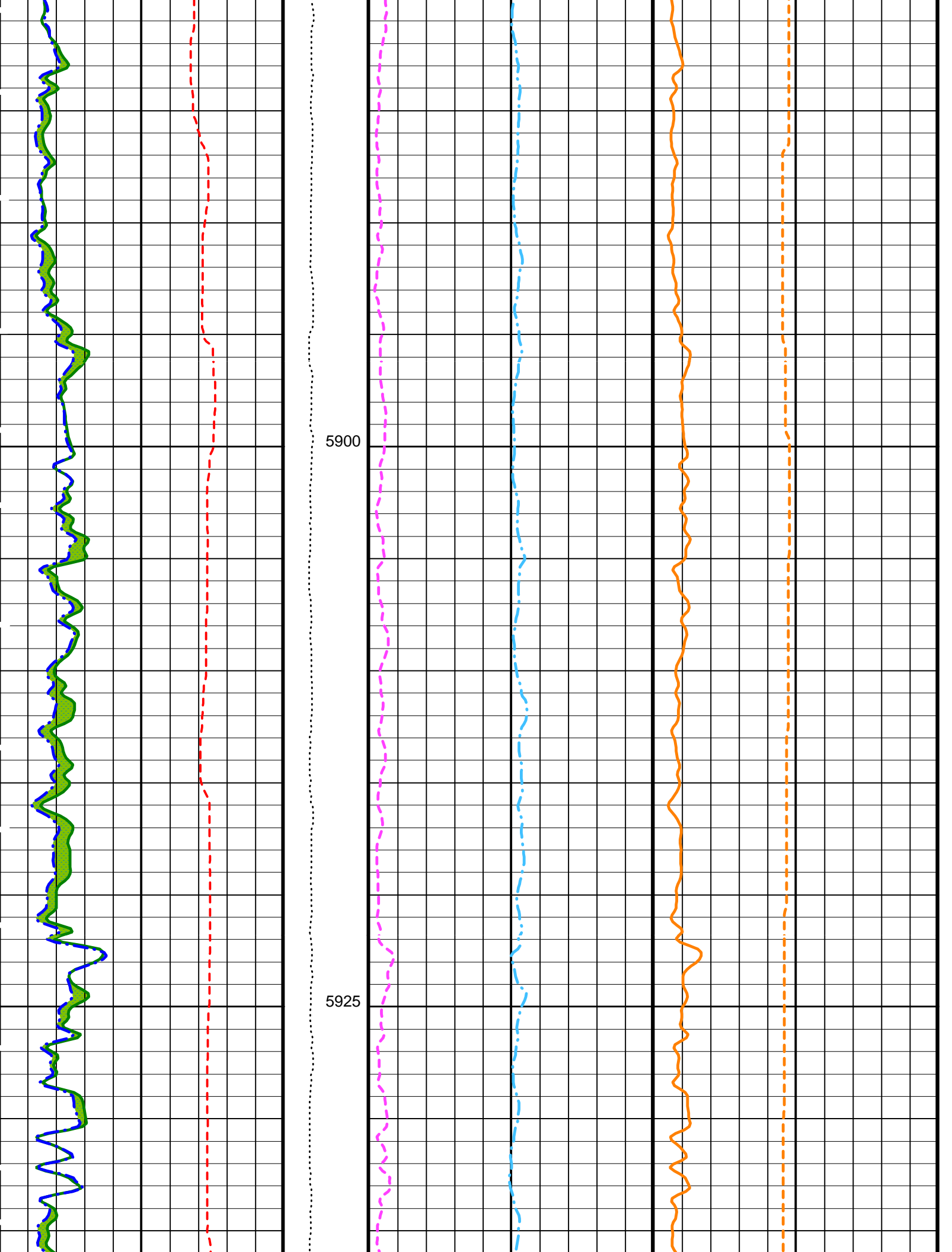
Sea Floor

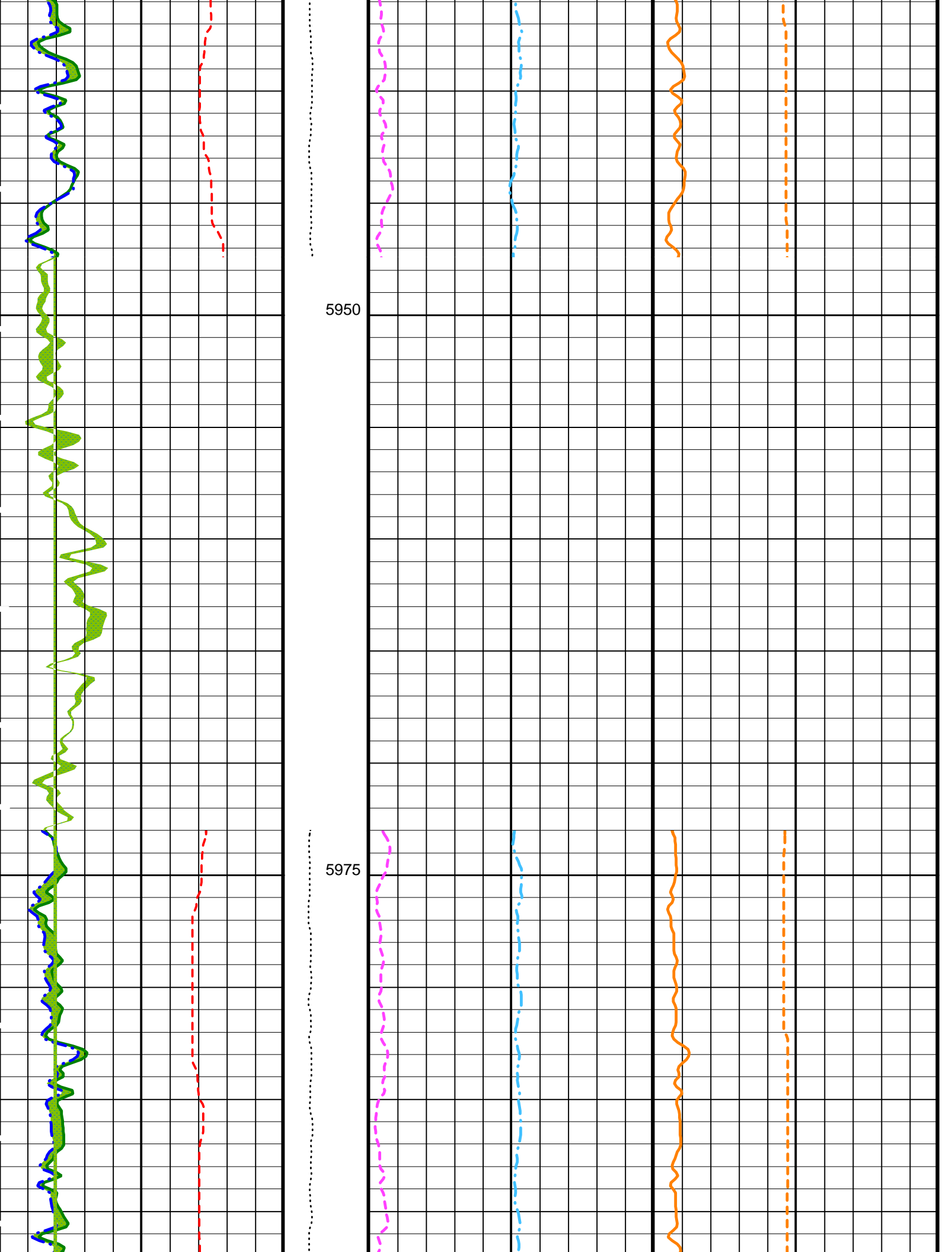
5725

5750



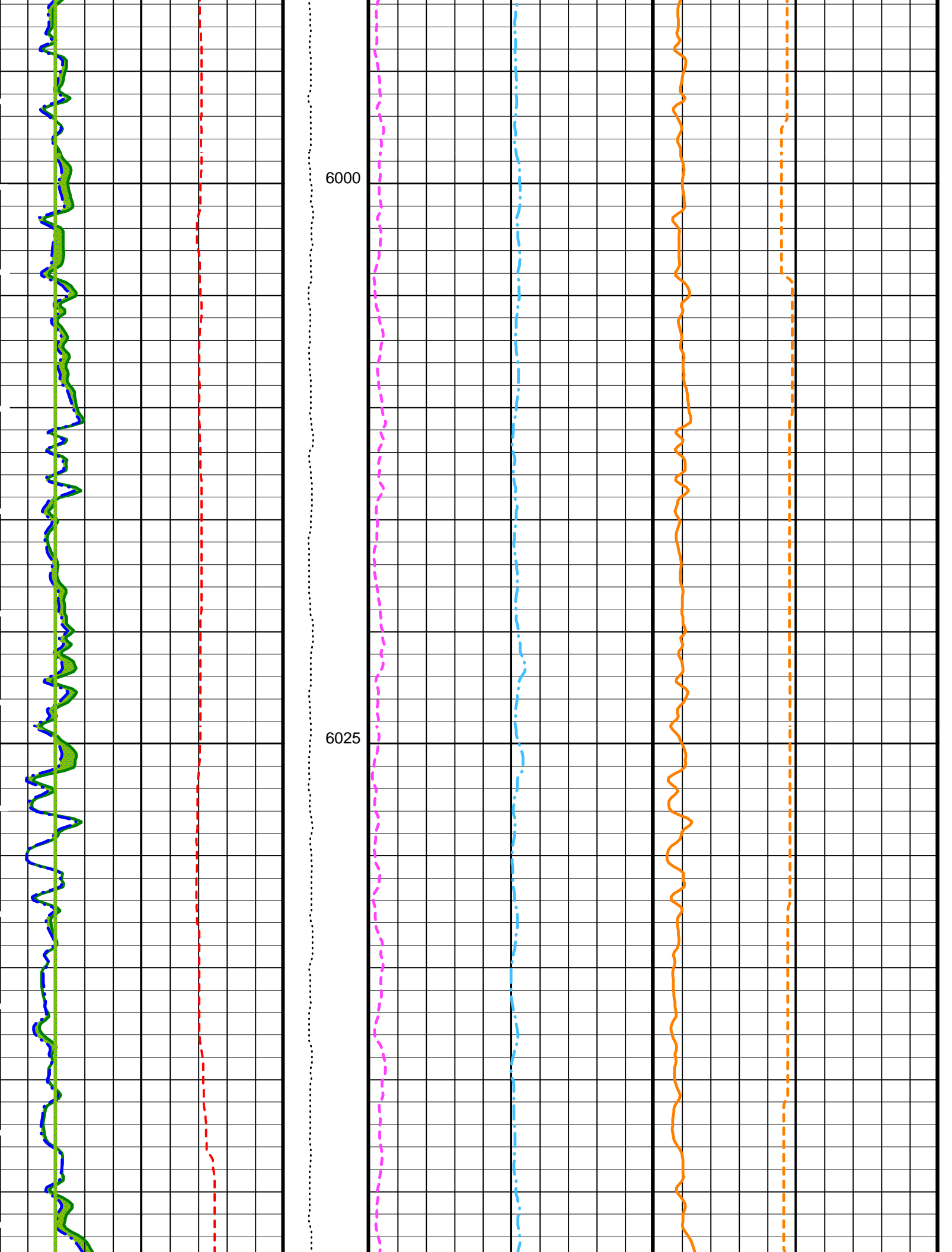


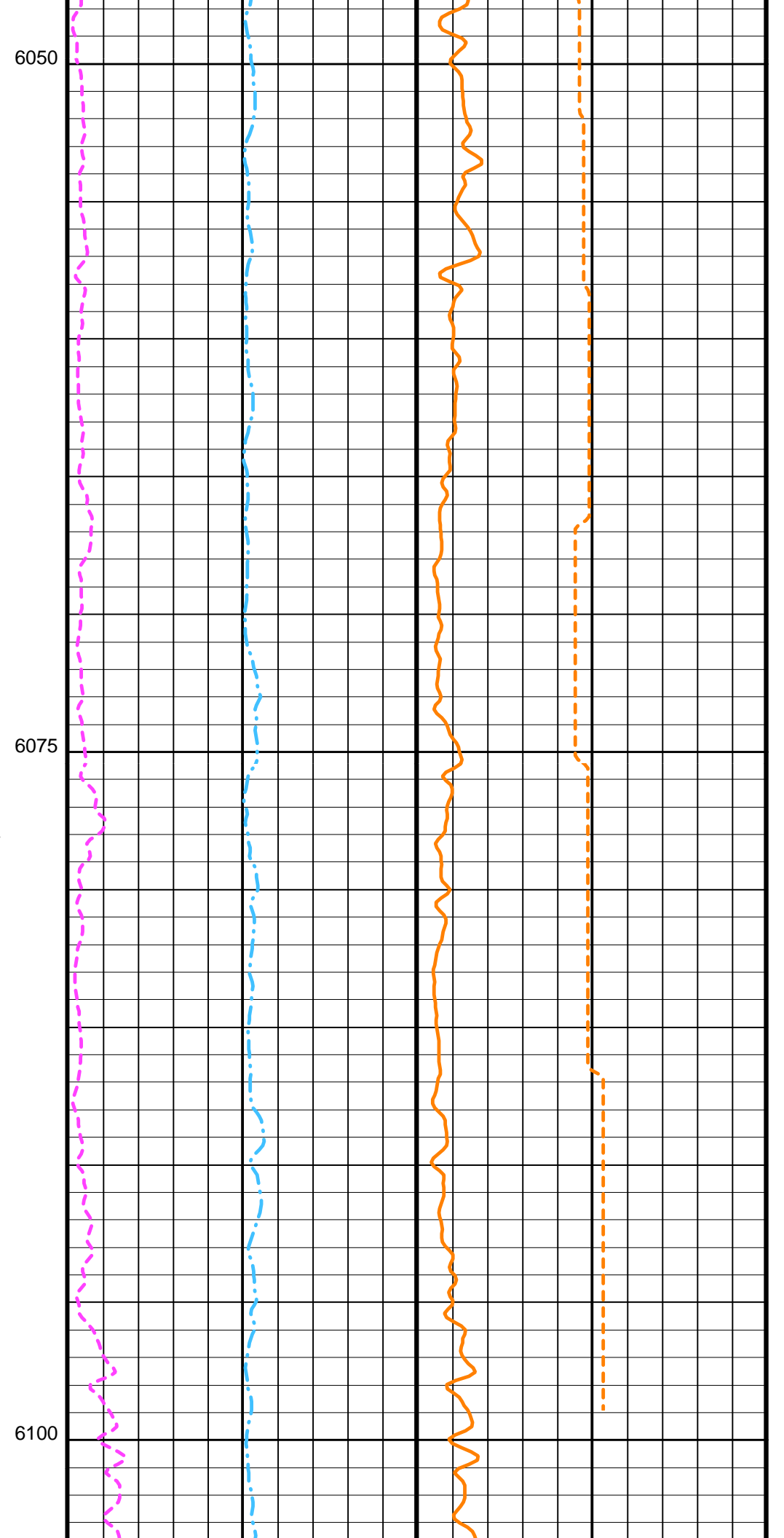
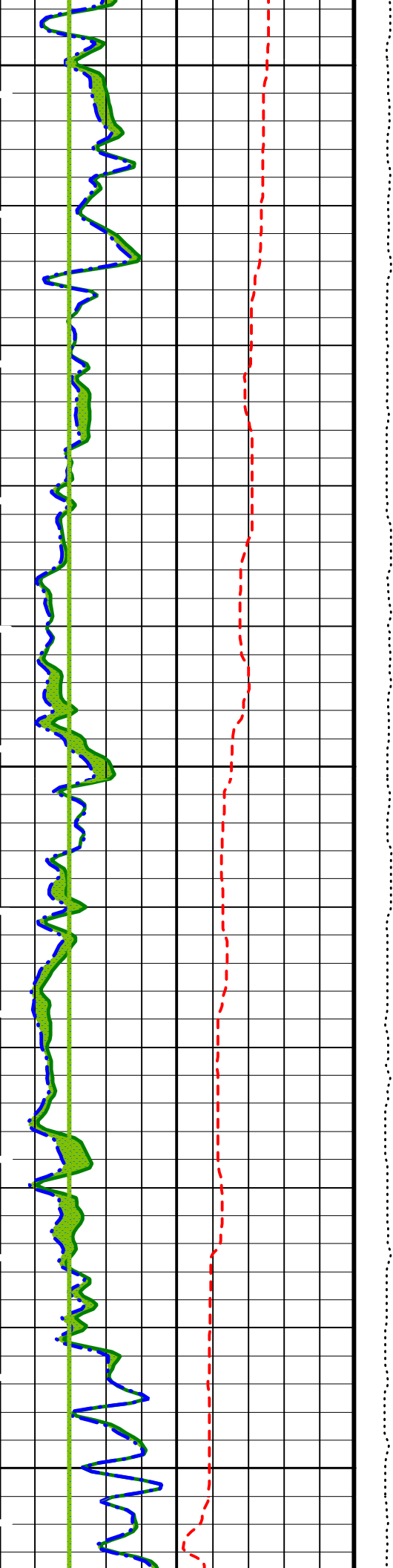


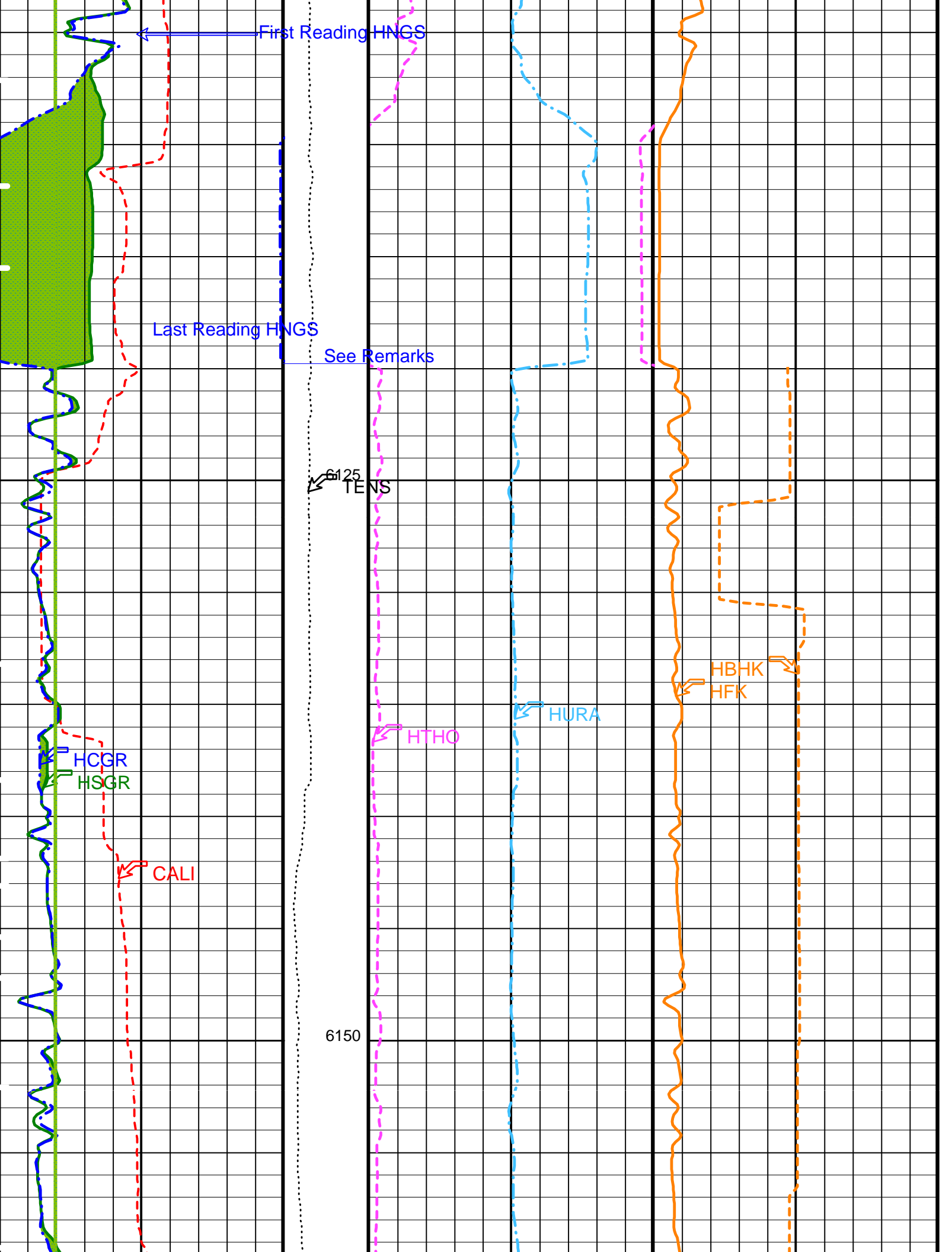


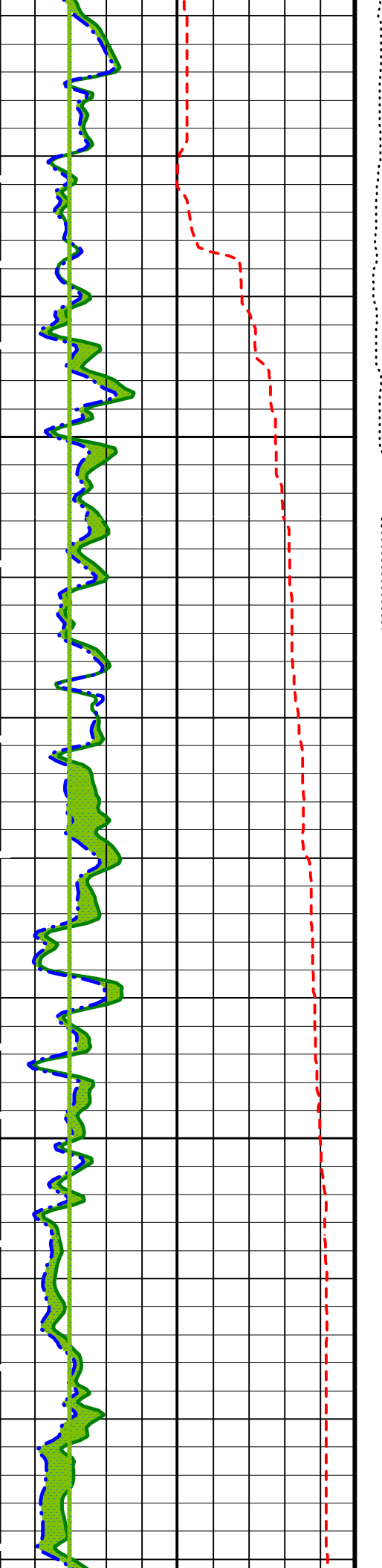
5950

5975



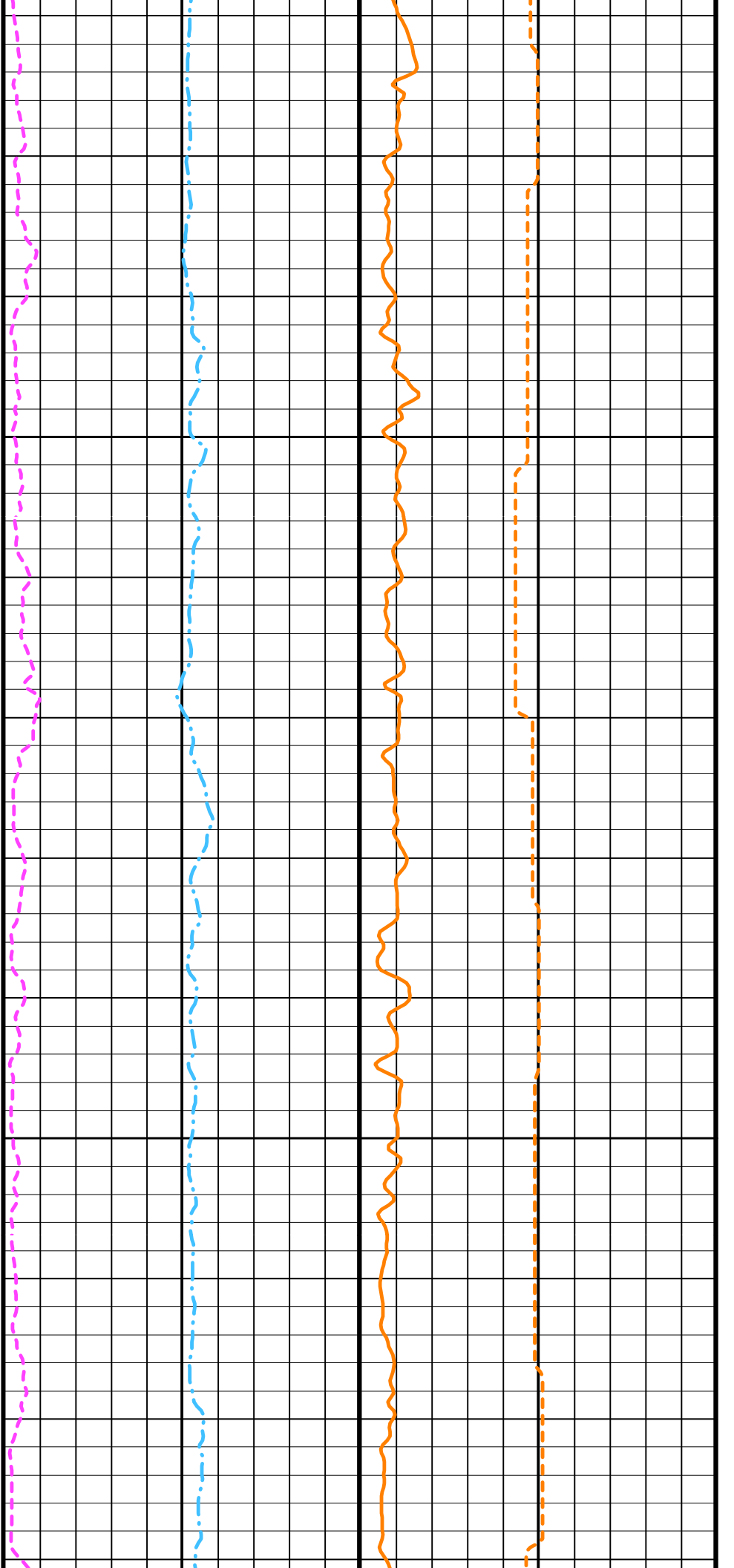


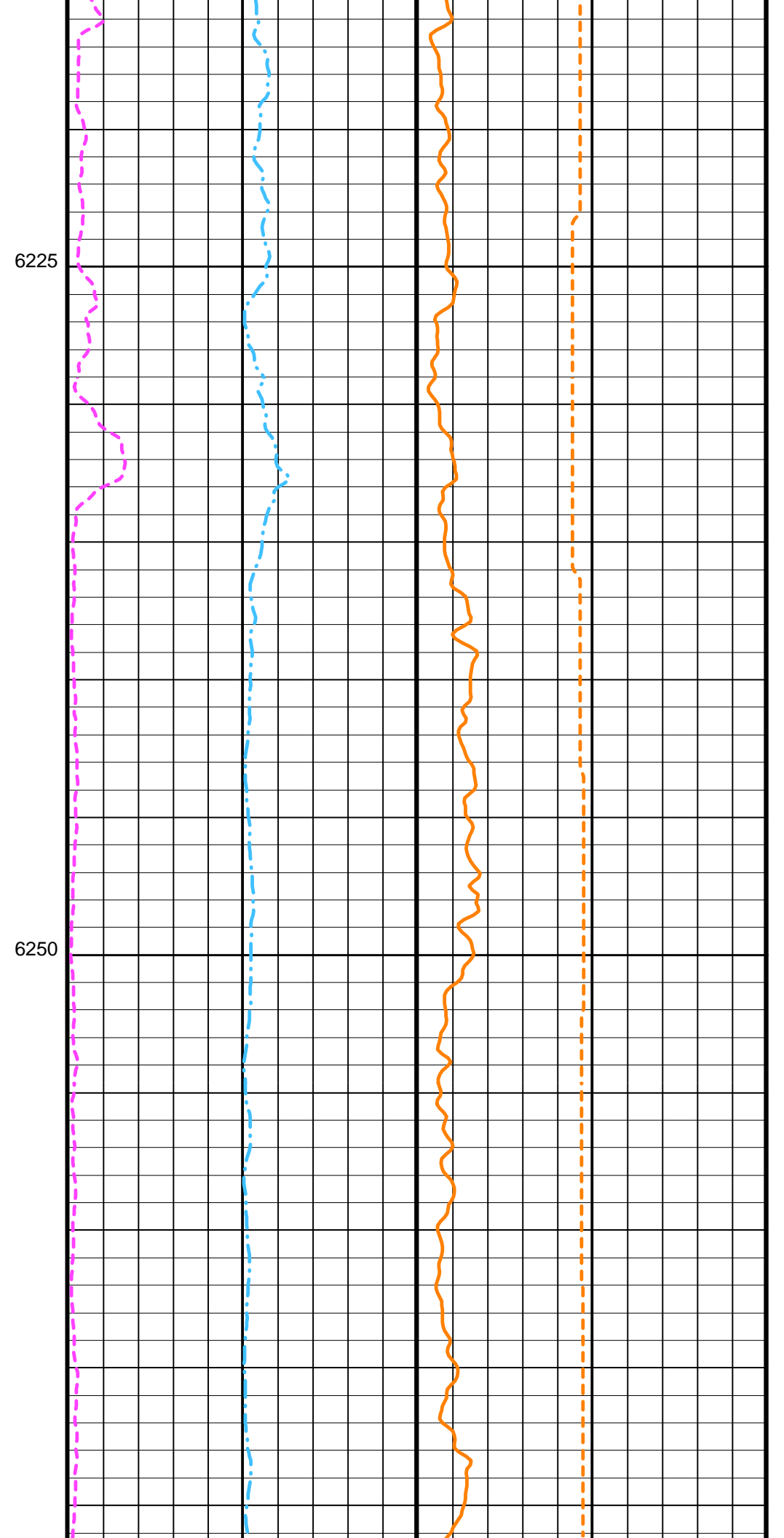
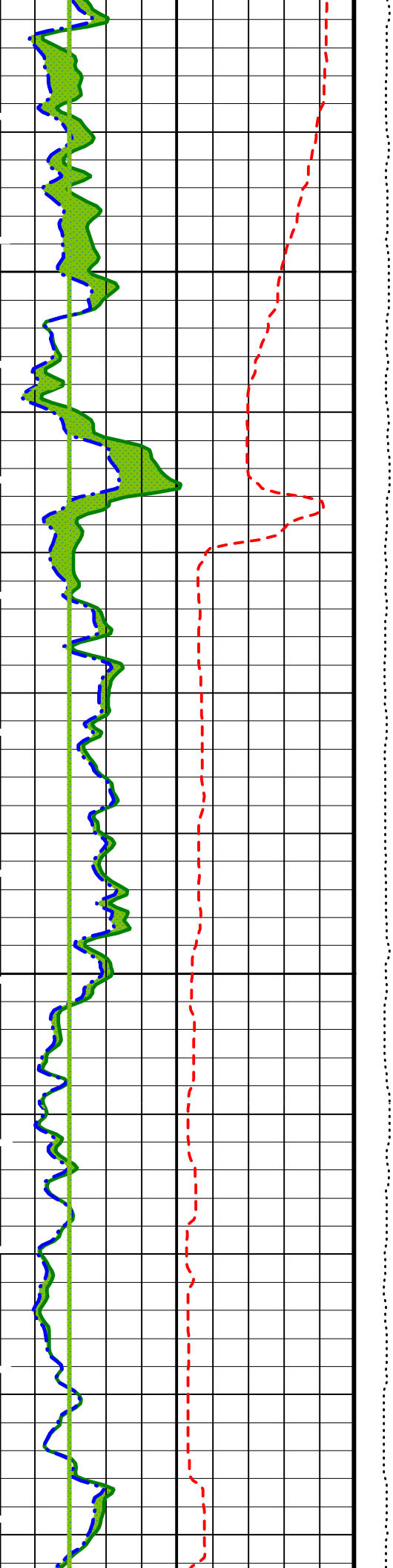




6175

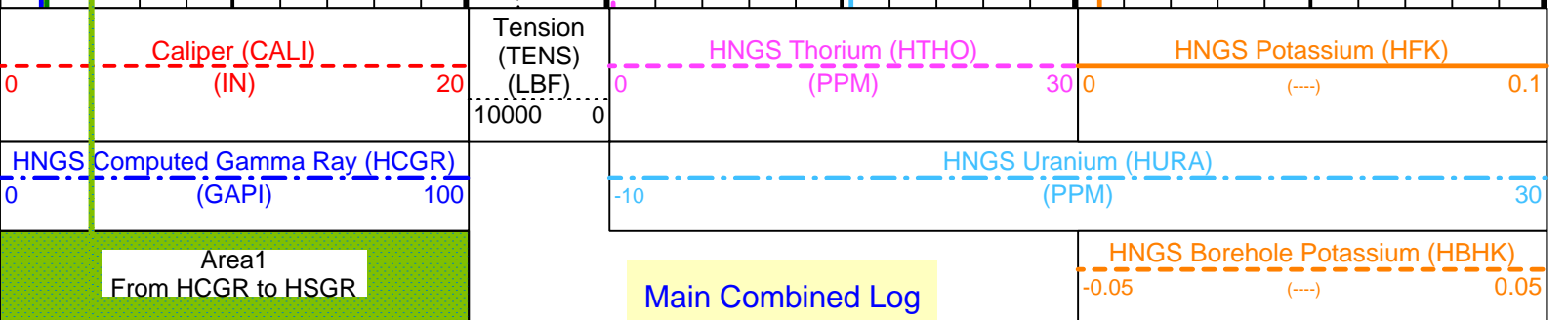
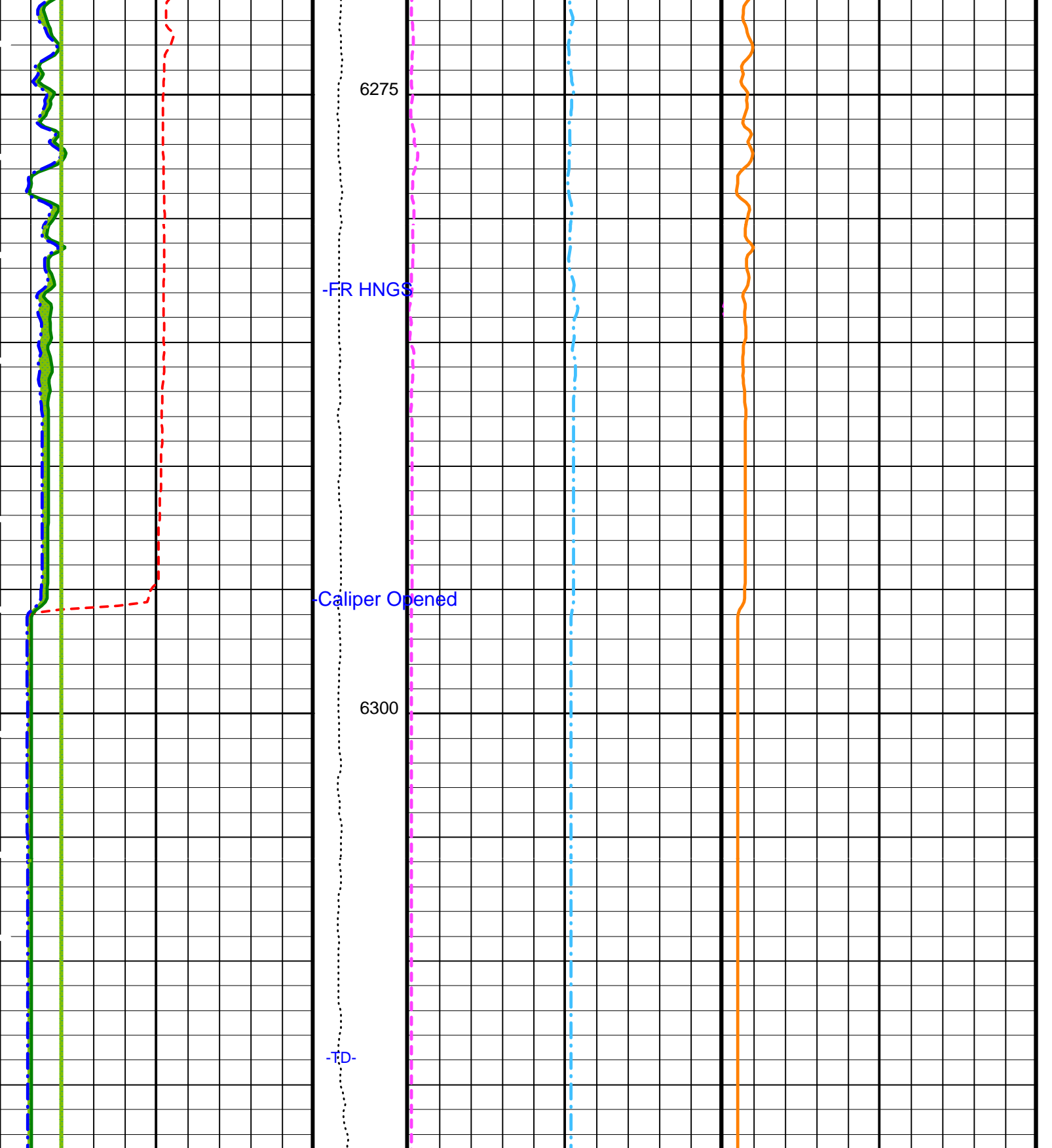
6200





6225

6250



Area1 From HCGR to HSGR

Main Combined Log

PIP SUMMARY

Time Mark Every 60 S

Parameters

| DLIS Name | Description | Value | |
|------------|--|--------------|------|
| 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 | |
| BKSF | HNGS Borehole Fluid Excluder Sleeve Algorithm Factor | 1 | |
| BKSH | HNGS Borehole Fluid Excluder Sleeve Algorithm High Channel | 245 | |
| BKSL | HNGS Borehole Fluid Excluder Sleeve Algorithm Low Channel | 17 | |
| BS | Bit Size | 9.875 | IN |
| 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 |
| D1FR | HNGS Detector 1 Calibration Thorium Peak Resolution | 8.0343 | % |
| D1TC | HNGS Detector 1 Calibration Temperature | 87.4251 | DEGF |
| D1TL | HNGS Detector 1 Calibration Thorium Peak Location | 210.477 | |
| D2FR | HNGS Detector 2 Calibration Thorium Peak Resolution | 7.33894 | % |
| D2TC | HNGS Detector 2 Calibration Temperature | 85.5201 | DEGF |
| D2TL | HNGS Detector 2 Calibration Thorium Peak Location | 208.56 | |
| DBCC | HNGS Barite Constant Correction Flag | NONE | |
| DFD | Drilling Fluid Density | 1.05 | G/C3 |
| DO | Depth Offset for Playback | 0.0 | M |
| GCF1_START | HNGS Detector 1 GCF Constant | 1 | |
| GCF2_START | HNGS Detector 2 GCF Constant | 1 | |
| GCSE | Generalized Caliper Selection | CALI | |
| H1F | HNGS Detector 1 Allow/Disallow In Processing | ALLOW | |
| H2F | HNGS Detector 2 Allow/Disallow In Processing | ALLOW | |
| HABK | HNGS Borehole Potassium Running Average | -0.00377598 | |
| HALF | HNGS Alpha Filter Length | 60 | IN |
| HATIM | HNGS Marquardt Accumulation Time | 600 | S |
| HCRB | HNGS Apply Borehole Potassium Correction | NONE | |
| HMWM | Mud Weighting Material | NATU | |
| HNPE | HNGS Processing Enable | YES | |
| HSLV | HNGS Borehole Fluid Excluder Sleeve Status | NO | |
| HSVN | HNGS Spectral Standards Version Number | 3.92875e-032 | |
| MARQ_START | HNGS Marquardt Start-up Mode | INTERNAL | |
| PP | Playback Processing | NORMAL | |
| RDF1_START | HNGS Detector 1 RDF Constant | 0 | |
| RDF2_START | HNGS Detector 2 RDF Constant | 0 | |
| S1EI | HNGS Detector 1 Calibration Bismuth Count Rate | 1.3 | CPS |
| S1NA | HNGS Detector 1 Calibration Sodium Count Rate | 21.323 | CPS |
| S1NG | HNGS Detector 1 Calibration End-On / Side-On Gain Ratio | 0.986452 | |
| S2EI | HNGS Detector 2 Calibration Bismuth Count Rate | 1.3 | CPS |
| S2NA | HNGS Detector 2 Calibration Sodium Count Rate | 21.8134 | CPS |
| S2NG | HNGS Detector 2 Calibration End-On / Side-On Gain Ratio | 0.977534 | |
| SABK | HNGS Statistical Uncertainty in Borehole Potassium Running Average | 9.20898e-005 | |
| SGRC | HNGS Standard Gamma-Ray Correction Flag | YES | |
| TPCS | Tool Position | ECCE | |
| VBA1 | HNGS Detector 1 Variable Barite Factor Running Average | 1.07226 | |
| VBA2 | HNGS Detector 2 Variable Barite Factor Running Average | 1.02923 | |

Format HNGSYields

Vertical Scale: 1:200

Graphics File Created: 14-Apr-2001 10:46

OP System Version: 9C2-303

MCM

| | | | |
|--------|---------|---------|---------|
| DLT-E | 9C2-303 | HLDT-A | 9C2-303 |
| DTA-A | 9C2-303 | NPLC-B | 9C2-303 |
| APS-BA | 9C2-303 | HNGS-BA | 9C2-303 |
| DTC-H | 9C2-303 | | |

Input DLIS Files

| | | | | | | |
|---------|------------------------|------|----------|-------------------|----------|----------|
| DEFAULT | SPLICE_DLL_LDL_APS_096 | FN:1 | PRODUCER | 14-Apr-2001 10:44 | 6317.7 M | 5703.9 M |
|---------|------------------------|------|----------|-------------------|----------|----------|

Output DLIS Files

| | | | | |
|---------|-------------------------|-------|----------|-------------------|
| DEFAULT | DLL_LDL_APS_HNGS_097PUP | FN:81 | PRODUCER | 14-Apr-2001 10:46 |
| REDUCE | DLL_LDL_APS_HNGS_097PUP | FN:82 | PRODUCER | 14-Apr-2001 10:46 |

Input DLIS Files

| | | | | | | |
|---------|-------------------------|-------|----------|-------------------|----------|----------|
| DEFAULT | DLL_LDL_APS_HNGS_030LUP | FN:20 | PRODUCER | 12-Apr-2001 21:59 | 5904.7 M | 5810.1 M |
|---------|-------------------------|-------|----------|-------------------|----------|----------|

Output DLIS Files

| | | | | | | |
|---------|-------------------------|-------|----------|-------------------|----------|----------|
| DEFAULT | DLL_LDL_APS_HNGS_038PUP | FN:36 | PRODUCER | 13-Apr-2001 00:53 | 5904.7 M | 5815.7 M |
| REDUCE | DLL_LDL_APS_HNGS_038PUP | FN:37 | PRODUCER | 13-Apr-2001 00:53 | 5904.7 M | 5815.7 M |

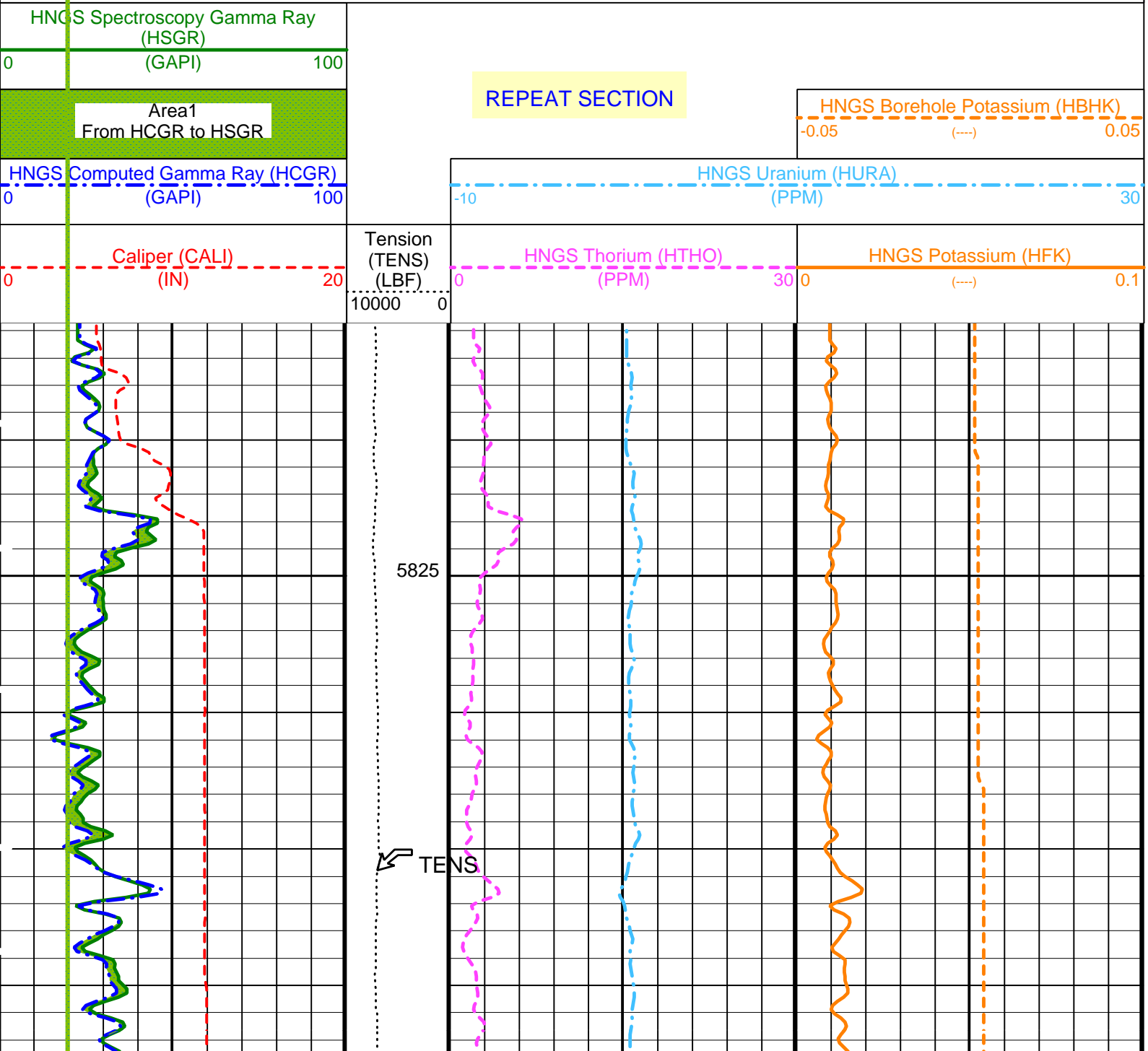
OP System Version: 9C2-303

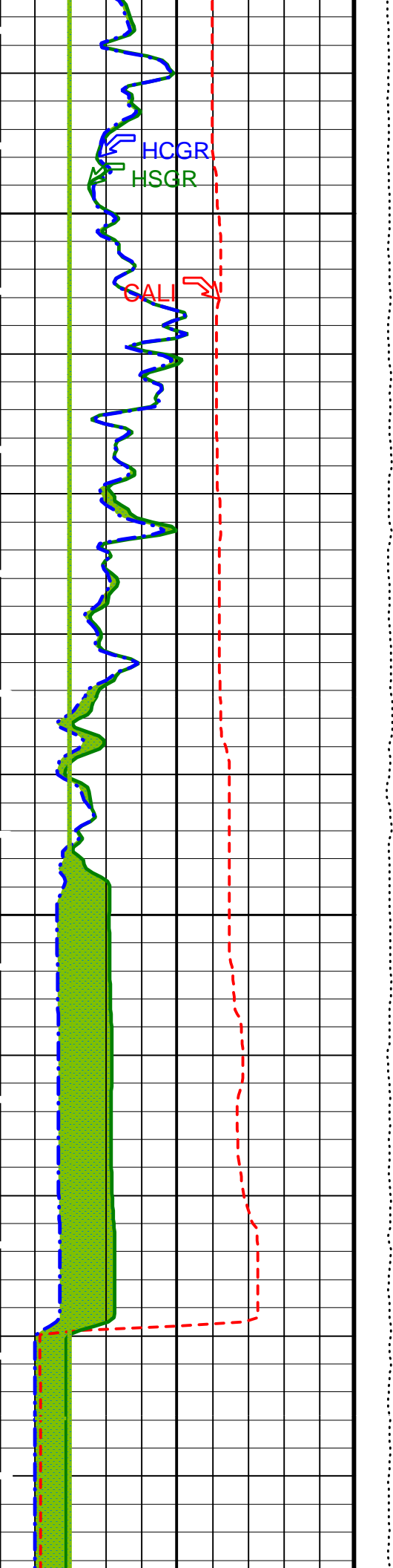
MCM

| | | | |
|--------|---------|---------|---------|
| DLT-E | 9C2-303 | HLDT-A | 9C2-303 |
| DTA-A | 9C2-303 | NPLC-B | 9C2-303 |
| APS-BA | 9C2-303 | HNGS-BA | 9C2-303 |
| DTC-H | 9C2-303 | | |

PIP SUMMARY

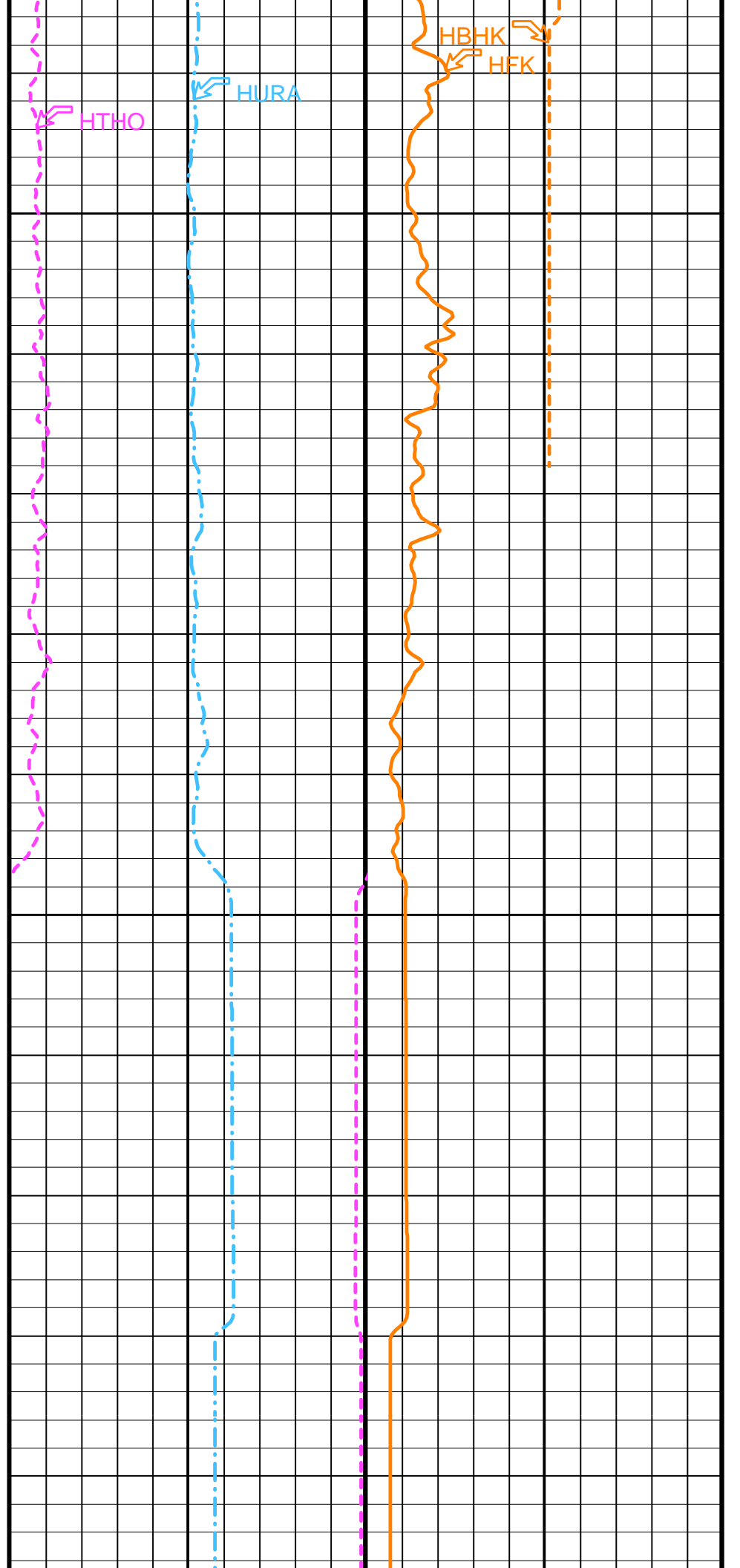
▶ Time Mark Every 60 S

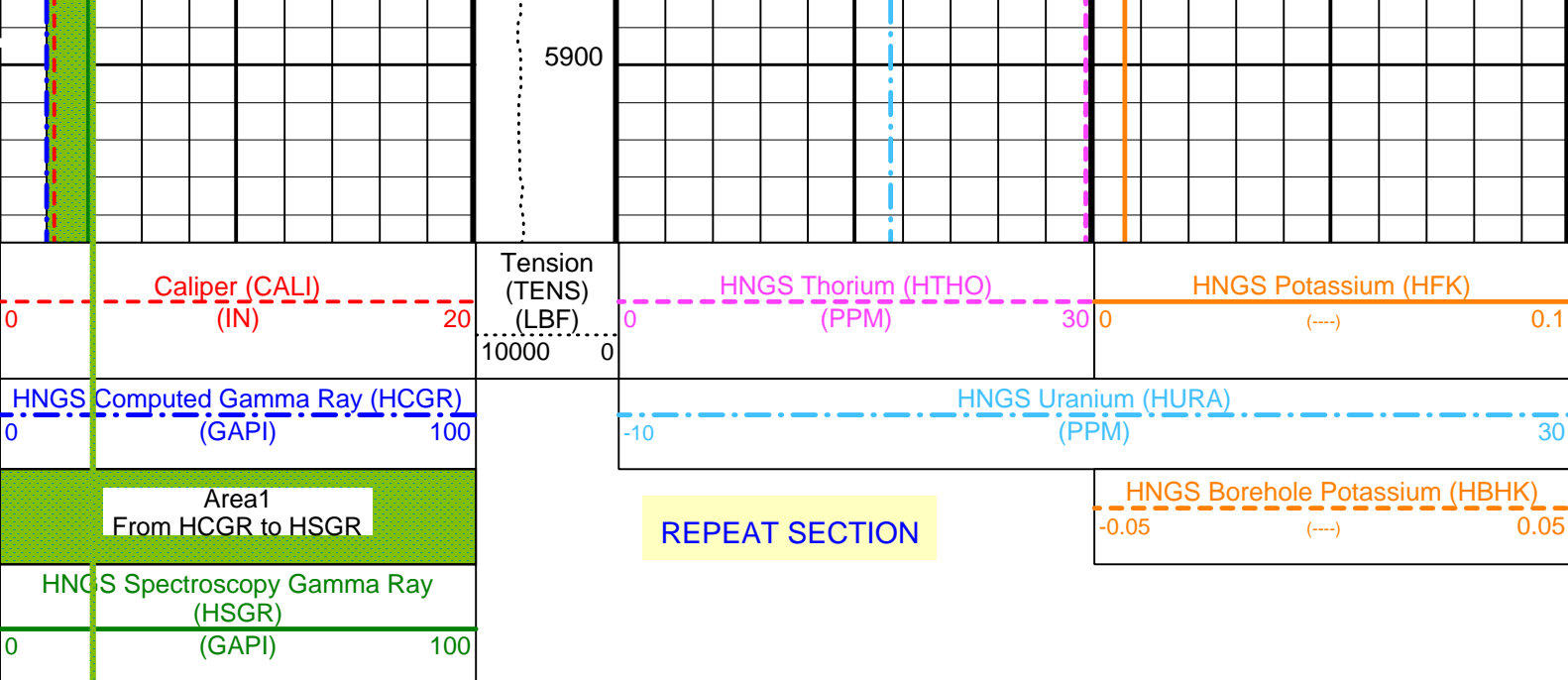




5850

5875





PIP SUMMARY

▶ Time Mark Every 60 S

Parameters

| DLIS Name | Description | Value |
|------------|--|---------------|
| ALDPCHAN | Name of alternate depth channel | MeasuredDepth |
| 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 |
| BKSF | HNGS Borehole Fluid Excluder Sleeve Algorithm Factor | 1 |
| BKSH | HNGS Borehole Fluid Excluder Sleeve Algorithm High Channel | 245 |
| BKSL | HNGS Borehole Fluid Excluder Sleeve Algorithm Low Channel | 17 |
| BS | Bit Size | 9.875 IN |
| 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 |
| D1FR | HNGS Detector 1 Calibration Thorium Peak Resolution | 8.0343 % |
| D1TC | HNGS Detector 1 Calibration Temperature | 87.4251 DEGF |
| D1TL | HNGS Detector 1 Calibration Thorium Peak Location | 210.477 |
| D2FR | HNGS Detector 2 Calibration Thorium Peak Resolution | 7.33894 % |
| D2TC | HNGS Detector 2 Calibration Temperature | 85.5201 DEGF |
| D2TL | HNGS Detector 2 Calibration Thorium Peak Location | 208.56 |
| DBCC | HNGS Barite Constant Correction Flag | NONE |
| DFD | Drilling Fluid Density | 1.05 G/C3 |
| DO | Depth Offset for Playback | 0.0 M |
| GCF1_START | HNGS Detector 1 GCF Constant | 1 |
| GCF2_START | HNGS Detector 2 GCF Constant | 1 |
| GCSE | Generalized Caliper Selection | CALI |
| H1F | HNGS Detector 1 Allow/Disallow In Processing | ALLOW |
| H2F | HNGS Detector 2 Allow/Disallow In Processing | ALLOW |
| HABK | HNGS Borehole Potassium Running Average | -0.0040082 |
| HALF | HNGS Alpha Filter Length | 60 IN |
| HATIM | HNGS Marquardt Accumulation Time | 600 S |
| HCRB | HNGS Apply Borehole Potassium Correction | NONE |
| HMVM | Mud Weighting Material | NATU |
| HNPE | HNGS Processing Enable | YES |
| HSLV | HNGS Borehole Fluid Excluder Sleeve Status | NO |
| HSVN | HNGS Spectral Standards Version Number | 2.30388e-036 |
| MARQ_START | HNGS Marquardt Start-up Mode | INTERNAL |
| PBV_SADP | Use alternate depth channel for playback | YES |
| PP | Playback Processing | RECOMPUTE |
| RDF1_START | HNGS Detector 1 RDF Constant | 0 |
| RDF2_START | HNGS Detector 2 RDF Constant | 0 |
| S1EI | HNGS Detector 1 Calibration Bismuth Count Rate | 1.3 CPS |
| S1NA | HNGS Detector 1 Calibration Sodium Count Rate | 21.323 CPS |
| S1NG | HNGS Detector 1 Calibration End-On / Side-On Gain Ratio | 0.986452 |
| S2EI | HNGS Detector 2 Calibration Bismuth Count Rate | 1.3 CPS |
| S2NA | HNGS Detector 2 Calibration Sodium Count Rate | 21.8134 CPS |
| S2NG | HNGS Detector 2 Calibration End-On / Side-On Gain Ratio | 0.977534 |
| SABK | HNGS Statistical Uncertainty in Borehole Potassium Running Average | 8.45832e-005 |

OP System Version: 9C2-303

MCM

| | | | |
|--------|---------|---------|---------|
| DLT-E | 9C2-303 | HLDT-A | 9C2-303 |
| DTA-A | 9C2-303 | NPLC-B | 9C2-303 |
| APS-BA | 9C2-303 | HNGS-BA | 9C2-303 |
| DTC-H | 9C2-303 | | |

Input DLIS Files

| | | | | | | |
|---------|-------------------------|-------|----------|-------------------|----------|----------|
| DEFAULT | DLL_LDL_APS_HNGS_030LUP | FN:20 | PRODUCER | 12-Apr-2001 21:59 | 5904.7 M | 5810.1 M |
|---------|-------------------------|-------|----------|-------------------|----------|----------|

Output DLIS Files

| | | | | |
|---------|-------------------------|-------|----------|-------------------|
| DEFAULT | DLL_LDL_APS_HNGS_038PUP | FN:36 | PRODUCER | 13-Apr-2001 00:53 |
| REDUCE | DLL_LDL_APS_HNGS_038PUP | FN:37 | PRODUCER | 13-Apr-2001 00:53 |

Calibration and Check Summary

| Measurement | Nominal | Master | Before | After | Change | Limit | Units |
|---|---------|--------|--------|--------|-----------|---------|-------|
| DUAL LATEROLOG - E Wellsite Calibration - DLT ELECTRONICS CALIBRATION Laterolog Measurement | | | | | | | |
| Before: 12-Apr-2001 19:31 After: 13-Apr-2001 0:05 | | | | | | | |
| MEASURED LLD | 31.62 | N/A | 31.96 | 31.95 | -0.009939 | 0.9000 | OHMM |
| MEASURED LLS | 31.62 | N/A | 31.13 | 31.15 | 0.01953 | 0.9000 | OHMM |
| Hostile Environment Litho Density - A Wellsite Calibration - Background Measurement | | | | | | | |
| Master: 25-Feb-2001 4:31 Before: 17-Mar-2001 2:28 After: 13-Apr-2001 2:11 | | | | | | | |
| LSW1 Background | 100.0 | 89.57 | 90.13 | 89.70 | -0.4220 | 0.03000 | CPS |
| LSW2 Background | 105.0 | 93.01 | 94.83 | 94.01 | -0.8213 | 0.03000 | CPS |
| LSW3 Background | 210.0 | 182.4 | 180.0 | 181.4 | 1.325 | 0.03000 | CPS |
| LSW4 Background | 290.0 | 244.1 | 244.0 | 243.0 | -1.012 | 0.03000 | CPS |
| LSW5 Background | 610.0 | 539.3 | 535.2 | 533.1 | -2.070 | 0.03000 | CPS |
| SSW1 Background | 100.0 | 86.90 | 87.09 | 86.97 | -0.1207 | 0.03000 | CPS |
| SSW2 Background | 200.0 | 172.0 | 171.7 | 170.1 | -1.511 | 0.03000 | CPS |
| SSW3 Background | 530.0 | 455.8 | 454.0 | 451.8 | -2.122 | 0.03000 | CPS |
| SSW4 Background | 280.0 | 240.8 | 240.9 | 239.7 | -1.131 | 0.03000 | CPS |
| SSW5 Background | 205.0 | 178.8 | 179.0 | 179.2 | 0.2390 | 0.03000 | CPS |
| Hostile Environment Litho Density - A Wellsite Calibration - Tool Quality Control Information High Voltage | | | | | | | |
| Master: 25-Feb-2001 4:31 Before: 17-Mar-2001 2:28 After: 13-Apr-2001 2:11 | | | | | | | |
| LS Bkg. High Voltage | 1127 | 1127 | 1132 | 1134 | 2.103 | N/A | V |
| SS Bkg. High Voltage | 1178 | 1178 | 1178 | 1180 | 2.536 | N/A | V |
| Hostile Environment Litho Density - A Wellsite Calibration - Detectors Resolution From BKG Measurements | | | | | | | |
| Master: 25-Feb-2001 4:31 Before: 17-Mar-2001 2:28 After: 13-Apr-2001 2:11 | | | | | | | |
| LS Background Resolution | 1.000 | 1.027 | 1.041 | 1.045 | 0.003996 | N/A | |
| SS Background Resolution | 1.000 | 0.9461 | 0.9462 | 0.9470 | 0.0008126 | N/A | |
| Hostile Environment Litho Density - A Wellsite Calibration - Caliper Calibration | | | | | | | |
| Before: 17-Mar-2001 2:07 | | | | | | | |
| Caliper Small Ring | 12.00 | N/A | 16.23 | N/A | N/A | N/A | IN |
| Caliper Large Ring | 18.25 | N/A | 23.88 | N/A | N/A | N/A | IN |
| Accelerator-Porosity Tool Wellsite Calibration - Detector Background | | | | | | | |
| Master: 24-Feb-2001 4:02 Before: 12-Apr-2001 16:55 After: 12-Apr-2001 23:55 | | | | | | | |
| Near Det Bkg Cntrate | 30.00 | 32.57 | 32.70 | 55.83 | 23.12 | N/A | CPS |
| Far Det Bkg Cntrate | 30.00 | 32.66 | 32.64 | 34.38 | 1.745 | N/A | CPS |
| Array-1 Det Bkg Cntrate | 30.00 | 29.51 | 29.03 | 38.58 | 9.554 | N/A | CPS |
| Array-2 Det Bkg Cntrate | 30.00 | 30.14 | 31.34 | 37.91 | 6.580 | N/A | CPS |
| Array Therm Det Bkg Cntrate | 30.00 | 33.69 | 31.99 | 38.16 | 6.171 | N/A | CPS |
| Accelerator-Porosity Tool Wellsite Calibration - Calibration Ratios | | | | | | | |
| Master: 24-Feb-2001 4:02 | | | | | | | |
| Near/Far Calibration Ratio | 0.9250 | 0.9008 | N/A | N/A | N/A | N/A | |
| Near/Array Calibration Ratio | 1.030 | 1.064 | N/A | N/A | N/A | N/A | |

Hostile Natural Gamma Ray Sonde Wellsite Calibration - Detector 1 Check

Master: 24-Feb-2001 5:08 Before: 11-Mar-2001 3:09 After: 13-Apr-2001 2:16

| | | | | | | | |
|------------------|-------|-------|-------|-------|----------|-------|------|
| Na 511 Peak Loc | 40.00 | 40.59 | 40.57 | 40.79 | 0.2230 | 1.000 | |
| Na 511 Peak Res | 15.50 | 16.64 | 16.82 | 15.62 | -1.199 | 2.000 | % |
| High Voltage | 1150 | 1101 | 1108 | 1108 | -0.2228 | 30.00 | V |
| Na 1785 Peak Loc | 142.6 | 145.5 | 146.4 | 146.3 | -0.03072 | 7.000 | |
| Na 1785 Peak Res | 8.500 | 9.019 | 9.237 | 9.499 | 0.2612 | 2.000 | % |
| Temperature | 15.50 | 30.80 | 32.93 | 30.94 | -1.994 | N/A | DEGC |
| Na Count Rate | 45.00 | 21.32 | 21.01 | 20.42 | -0.5898 | 8.000 | CPS |

Hostile Natural Gamma Ray Sonde Wellsite Calibration - Detector 2 Check

Master: 24-Feb-2001 5:08 Before: 11-Mar-2001 3:09 After: 13-Apr-2001 2:16

| | | | | | | | |
|------------------|-------|-------|-------|-------|----------|-------|------|
| Na 511 Peak Loc | 40.00 | 40.60 | 40.59 | 40.49 | -0.09770 | 1.000 | |
| Na 511 Peak Res | 15.50 | 16.11 | 16.15 | 15.31 | -0.8404 | 2.000 | % |
| High Voltage | 1150 | 1189 | 1197 | 1196 | -0.6383 | 30.00 | V |
| Na 1785 Peak Loc | 142.6 | 144.7 | 145.0 | 144.8 | -0.2100 | 7.000 | |
| Na 1785 Peak Res | 8.500 | 9.551 | 7.951 | 8.858 | 0.9066 | 2.000 | % |
| Temperature | 15.50 | 29.75 | 31.98 | 30.79 | -1.189 | N/A | DEGC |
| Na Count Rate | 45.00 | 21.81 | 21.19 | 20.76 | -0.4358 | 8.000 | CPS |

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

Master: 24-Feb-2001 5:08 Before: 11-Mar-2001 3:09 After: 13-Apr-2001 2:16

| | | | | | | | |
|------------------------------|-------|--------|--------|--------|-----------|---------|--|
| Coincidence Count Rate Ratio | 1.000 | 0.9809 | 0.9916 | 0.9853 | -0.006294 | 0.05000 | |
|------------------------------|-------|--------|--------|--------|-----------|---------|--|

Hostile Natural Gamma Ray Sonde Master Calibration - Detector 1 Calibration

Master: 24-Feb-2001 4:53

| | | | | | | | |
|-----------------------|-------|--------|----|----|----|----|-----|
| Na 511 Peak Set Point | 40.00 | 41.00 | -- | -- | -- | -- | |
| Th Peak Loc | 209.6 | 210.5 | -- | -- | -- | -- | |
| Th Peak Res | 7.000 | 8.034 | -- | -- | -- | -- | % |
| Background Count Rate | 142.5 | 16.57 | -- | -- | -- | -- | CPS |
| Gain Ratio | 1.000 | 0.9865 | -- | -- | -- | -- | |

Hostile Natural Gamma Ray Sonde Master Calibration - Detector 2 Calibration

Master: 24-Feb-2001 4:53

| | | | | | | | |
|-----------------------|-------|--------|----|----|----|----|-----|
| Na 511 Peak Set Point | 40.00 | 41.00 | -- | -- | -- | -- | |
| Th Peak Loc | 209.6 | 208.6 | -- | -- | -- | -- | |
| Th Peak Res | 7.000 | 7.339 | -- | -- | -- | -- | % |
| Background Count Rate | 142.5 | 18.32 | -- | -- | -- | -- | CPS |
| Gain Ratio | 1.000 | 0.9775 | -- | -- | -- | -- | |

Accelerator-Porosity Tool - Detector Plateau Settings :

| | |
|--------------------------------|--------|
| Near Detector Plateau Setting | 1748 V |
| Far Detector Plateau Setting | 2052 V |
| Array Detector Plateau Setting | 1969 V |

DUAL LATEROLOG - E / Equipment Identification

Primary Equipment:

Auxiliary Equipment:

| | | |
|--------------------------|----------|------|
| Dual Laterolog Electrode | DLE - E | |
| Dual Laterolog Sonde | DLS - F | 929 |
| Dual Laterolog Housing | DLH - CB | 2893 |
| Dual Laterolog Cartridge | DLC - D | 930 |
| Laterolog Control Module | LCM - AA | 728 |

Hostile Environment Litho Density - A / Equipment Identification

Primary Equipment:

| | | |
|--|-----------|------|
| HOSTILE ENVIRONMENT LITHO DENSITY HIGH V | HLDV - A | 10 |
| HOSTILE ENVIRONMENT LITHO DENSITY CARTRI | HLDC - AA | 11 |
| Gamma Source Radioactive | GSR - Z | 1846 |

Auxiliary Equipment:

| | | |
|--|----------|----|
| HOSTILE ENVIRONMENT LITHO DENSITY SONDE | HLDS - B | 10 |
| HOSTILE ENVIRONMENT ELECTRONICS CARTRIDG | HEH - H | 12 |
| HOSTILE ENVIRONMENT ELECTRONICS CARTRIDG | HEH - G | 11 |
| HOSTILE ENVIRONMENT LITHO DENSITY PAD | HLDP - B | 10 |

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 - BA | 22 | |
| APS Minitron | MNTR - F | 4185 | |
| Auxiliary Equipment: | | | |
| Accelerator-Porosity Housing | APH - AC | 22 | |
| APS Calibration Water Tank | SFT - 178 | 4722 | |
| APS Aluminium Calibrator Sleeve | SFT - 281 | 24 | |

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 | 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 | | 16.64 | Master | | 1101 | |
| Before | | 40.57 | Before | | 16.82 | Before | | 1108 | |
| After | | 40.79 | After | | 15.62 | After | | 1108 | |
| | 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 | | 145.5 | Master | | 9.019 | Master | | 30.80 | |
| Before | | 146.4 | Before | | 9.237 | Before | | 32.93 | |
| After | | 146.3 | After | | 9.499 | After | | 30.94 | |
| | 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 | | 21.32 | | | | | | | |
| Before | | 21.01 | | | | | | | |
| After | | 20.42 | | | | | | | |
| | 15.00 (Minimum) | 45.00 (Nominal) | 100.0 (Maximum) | | | | | | |
| Master: 2--Feb-2001 5:08 | | | Before: 11-Mar-2001 3:09 | | | After: 13-Apr-2001 2:16 | | | |

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 | | 40.60 | Master | | 16.11 | Master | | 1189 | |
| Before | | 40.59 | Before | | 16.15 | Before | | 1197 | |
| After | | 40.49 | After | | 15.31 | After | | 1196 | |
| | 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 | | 144.7 | Master | | 9.551 | Master | | 29.75 | |

| | | | | | | | | |
|--------------------------|--------------------|--------------------|--------------------------|--------------------|--------------------|-------------------------|--------------------|--------------------|
| Before | | 145.0 | Before | | 7.951 | Before | | 31.98 |
| After | | 144.8 | After | | 8.858 | After | | 30.79 |
| 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 | | 21.81 | | | | | | |
| Before | | 21.19 | | | | | | |
| After | | 20.76 | | | | | | |
| 15.00 (Minimum) | 45.00 (Nominal) | 100.0 (Maximum) | | | | | | |
| Master: 2--Feb-2001 5:08 | | | Before: 11-Mar-2001 3:09 | | | After: 13-Apr-2001 2:16 | | |

| | | |
|--|------------------------------|--------------------|
| Hostile Natural Gamma Ray Sonde Wellsite Calibration | | |
| Ratio Of Detector 1 To Detector 2 | | |
| Phase | Coincidence Count Rate Ratio | Value |
| Master | | 0.9809 |
| Before | | 0.9916 |
| After | | 0.9853 |
| 0.9500 (Minimum) | 1.000 (Nominal) | 1.050 (Maximum) |
| Master: 2--Feb-2001 5:08 | | |
| Before: 11-Mar-2001 3:09 | | |
| After: 13-Apr-2001 2:16 | | |

| | | | | | | | | |
|--|---------------------------|--------------------|---------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| Hostile Natural Gamma Ray Sonde Master 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 | | 210.5 | Master | | 8.034 |
| 38.00 (Minimum) | 40.00 (Nominal) | 42.00 (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 | EXCEEDS LIMIT | 16.57 | Master | | 0.9865 | | | |
| 20.00 (Minimum) | 142.5 (Nominal) | 265.0 (Maximum) | 0.9400 (Minimum) | 1.000 (Nominal) | 1.060 (Maximum) | | | |
| Master: 2--Feb-2001 4:53 | | | | | | | | |

| | | | | | | | | |
|--|---------------------------|--------------------|---------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| 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 | | 208.6 | Master | | 7.339 |
| 38.00 (Minimum) | 40.00 (Nominal) | 42.00 (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 | EXCEEDS LIMIT | 18.32 | Master | | 0.9775 | | | |
| 20.00 (Minimum) | 142.5 (Nominal) | 265.0 (Maximum) | 0.9400 (Minimum) | 1.000 (Nominal) | 1.060 (Maximum) | | | |
| Master: 2--Feb-2001 4:53 | | | | | | | | |

| | | | |
|----------|---------------------------------|---------------------|-----------|
| COMPANY: | Lamont Doherty | BOTTOM LOG INTERVAL | 6283 m |
| WELL: | ODP Leg 195, Site 1201D (WP-1B) | SCHLUMBERGER DEPTH | 6314 m |
| FIELD: | ION | DEPTH DRILLER | 6320 m |
| Country: | Japan | KELLY BUSHING | 11.2989 m |
| | | DRILL FLOOR | 11 m |

| | | |
|---|---------------------|-------------------------|
| Country: | Japan | |
| Ocean: | West Phillipine Sea | GROUND LEVEL -5720 m |
| <p>Schlumberger HNGS Natural gamma Ray</p> | | |