



DISCLAIMER

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OTHER SERVICES1  
OS1: FMS  
OS2: DIT  
OS3: APS/HLDS  
OS4: HNGS

REMARKS: RUN NUMBER 1

Logs run in fourth hole ("D" hole) of drilling site U1339 to aid in depth correlation of core data collected in surface labs.

Average heave during the run was only 0.3m; Active Heave Compensator used.

DSI Monopole transmitter run in standard frequency. Upper dipole run in standard frequency.

Lower dipole run in low-frequency mode to obtain slow shear data.

TD was found to be 2080mBRF with the pipe (bit) at 1962mBRF. Sea bed given as 1879.4mBRF.

DSI tool centralized using two modified MCD three-arm bowspring centralizers, one above and one below the DSI.

DSI monopole slowness range set to 120 - 220 uS/ft. as per client instructions.

DSI dipole slowness range set to 300 - 1100 uS/ft. as per client instructions.


Low-Frequency mode on lower dipole provided best shear data.

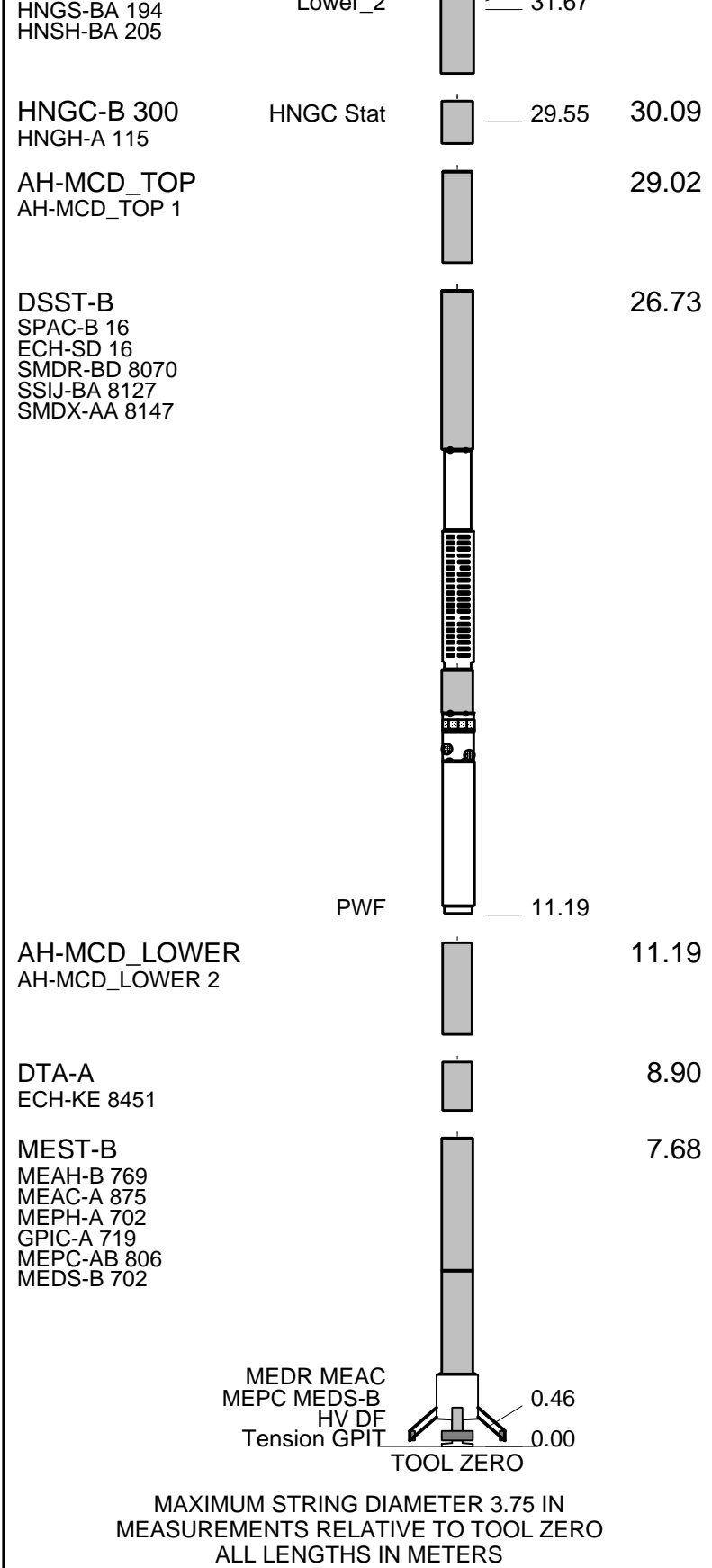
FMS caliper closed and heave compensator switched off at 2005m during Pass #2 prior to entering drill pipe.

| RUN 1  |       |      | RUN 2  |       |      |
|--|-------|------|--|-------|------|
| SERVICE ORDER #:<br>PROGRAM VERSION:<br>FLUID LEVEL: |       |      | SERVICE ORDER #:<br>PROGRAM VERSION:<br>FLUID LEVEL: |       |      |
| 17C0-154   |       |      |  |       |      |
| LOGGED INTERVAL                                      | START | STOP | LOGGED INTERVAL                                      | START | STOP |
|  |       |      |  |       |      |
|  |       |      |  |       |      |
|  |       |      |  |       |      |
|  |       |      |  |       |      |

EQUIPMENT DESCRIPTION

| RUN 1                        | RUN 2 |
|------------------------------|-------|
| <b>SURFACE EQUIPMENT</b>     |       |
| GSR-U 616008<br>WITM (DTS)-A |       |

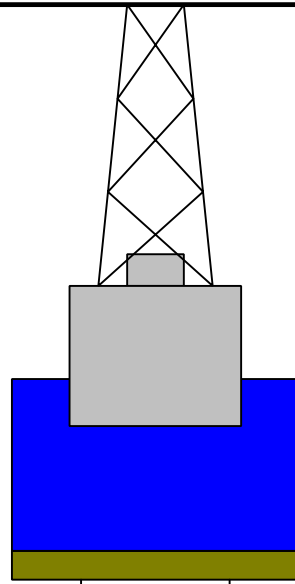
| DOWNHOLE EQUIPMENT |   |       |       |
|--------------------|---|-------|-------|
| LEH-QT             |  | 34.39 |       |
| LEH-QT 301         |   |       |       |
| DTC-H              | CTEM  | 33.22 |       |
| ECH-KC 2304        | TelStatus   | 32.59 | 33.50 |
|                    | ToolStatu   |       |       |
| HNGS-BA 194        | Upper_1   | 31.89 | 32.59 |
|                    | Lower_2   | 31.67 |       |



|                   |      |     |                |     |      |               |
|-------------------|------|-----|----------------|-----|------|---------------|
| Production String | (in) | (m) | Well Schematic | (m) | (in) | Casing String |
|                   | OD   | ID  |                | MD  | MD   |               |

Kelly Bushing Elevation  
Derrick Floor Elevation  
  
Mean Sea Level

11.0  
11.0  
  
0.0



0.0

5.875

Drill Pipe



1879.4

11.340

Sea Bed

1962.0

5.875

Bit Depth

2079.4

11.340

Total Depth

**Schlumberger**

**Pass #2  
TD to Sea Bed**

MAXIS Field Log

Company: Lamont Doherty

Well: Expedition 321 Site U1339D

**Input DLIS Files**

|         |                    |       |          |                   |          |          |
|---------|--------------------|-------|----------|-------------------|----------|----------|
| DEFAULT | FMS_DSI_NGS_033PUP | FN:38 | PRODUCER | 21-Jul-2009 10:51 | 2078.0 M | 1869.6 M |
|---------|--------------------|-------|----------|-------------------|----------|----------|

**Output DLIS Files**

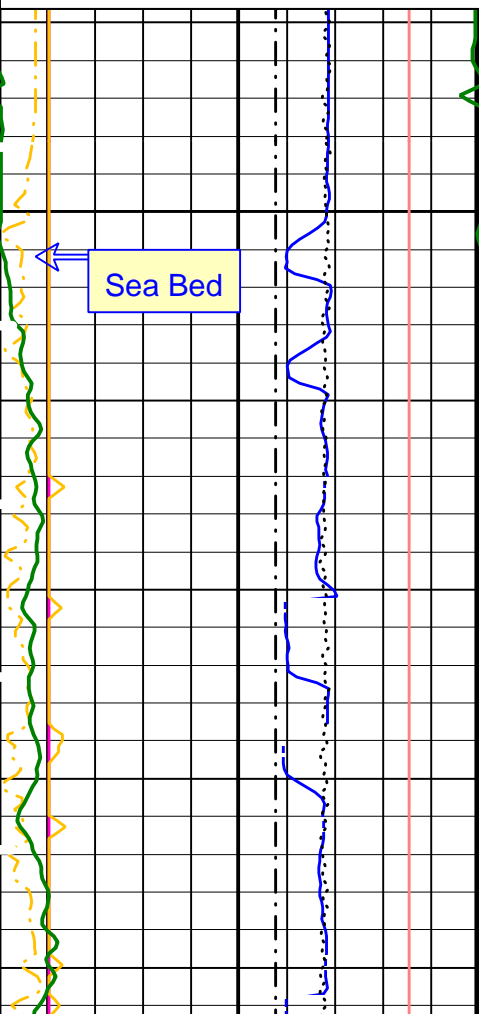
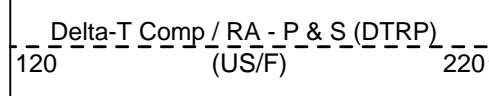
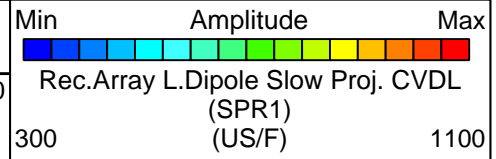
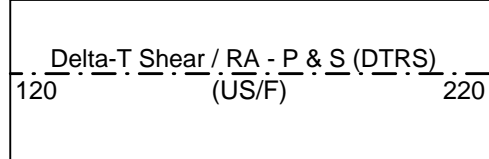
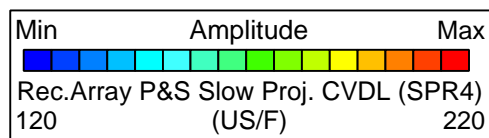
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|---------|--------------------|-------|----------|-------------------|----------|----------|
| DEFAULT | FMS_DSI_NGS_037PUP | FN:42 | PRODUCER | 21-Jul-2009 12:52 | 2078.0 M | 1869.6 M |
|---------|--------------------|-------|----------|-------------------|----------|----------|

**OP System Version: 17C0-154**

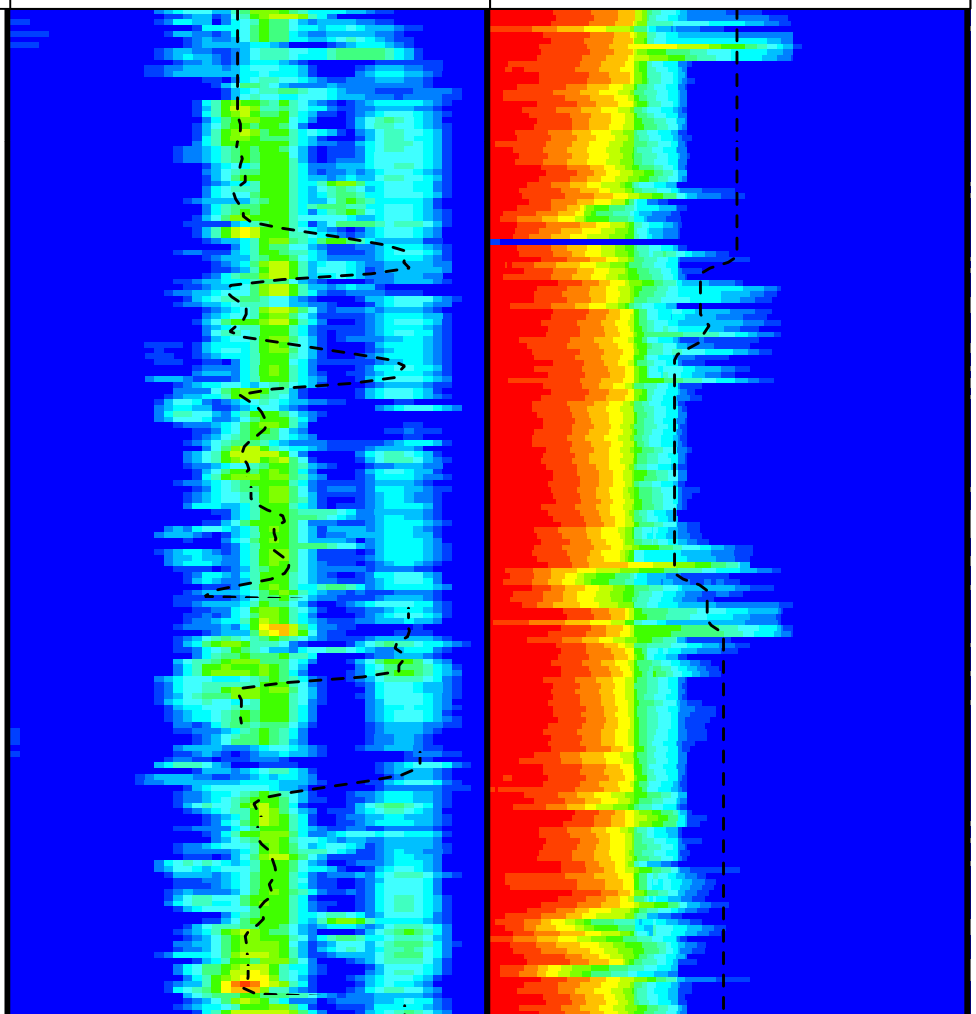
|         |                        |        |          |
|---------|------------------------|--------|----------|
| MEST-B  | SRPC-3762-Q1_2009_OP17 | DTA-A  | 17C0-154 |
| DSST-B  | 17C0-154               | HNGC-B | 17C0-154 |
| HNGS-BA | 17C0-154               | DTC-H  | 17C0-154 |

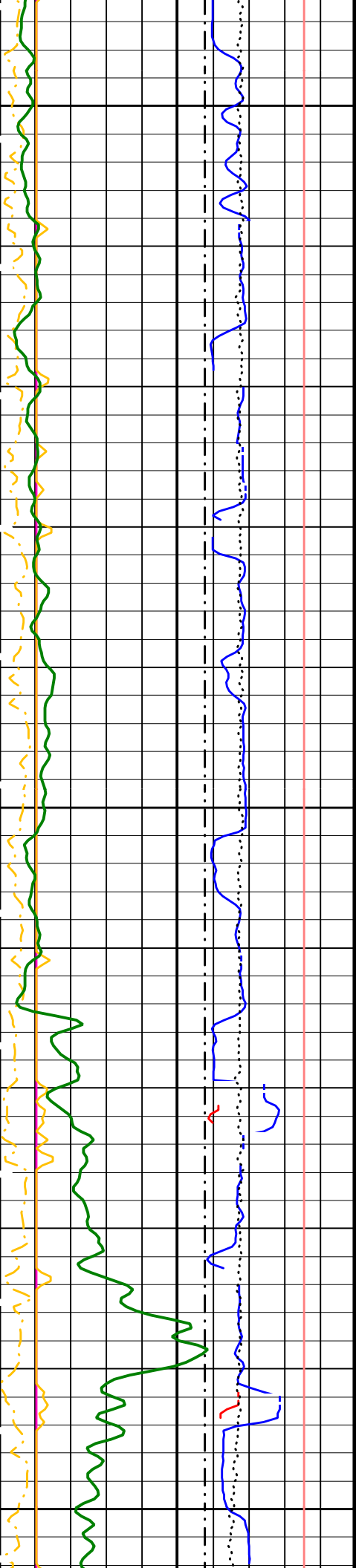
Time Mark Every 60 S

|   |       |        |    |
|---|-------|--------|----|
| Peak Coherence / RA - P & S Shear (CHRS)  | -1    | (---)  | 9  |
| Peak Coherence / RA - P & S Comp (CHRP)   | 0     | (---)  | 10 |
| Peak Coherence / RA - Upper Dipole (CHR2) | 0     | (---)  | 10 |
| HNGS Computed Gamma Ray (HCGR)            | 0     | (GAPI) | 50 |
| Tension (TENS)                            | 10000 | (LBF)  | 0  |
| Delta-T Shear - P & S (DT4S)              | 440   | (US/F) | 40 |
| Delta-T Comp - P & S (DT4P)               | 440   | (US/F) | 40 |
| Delta-T Shear - Upper Dipole (DT2)        | 440   | (US/F) | 40 |
| Bit Size (BS)                             | 0     | (IN)   | 20 |



1875

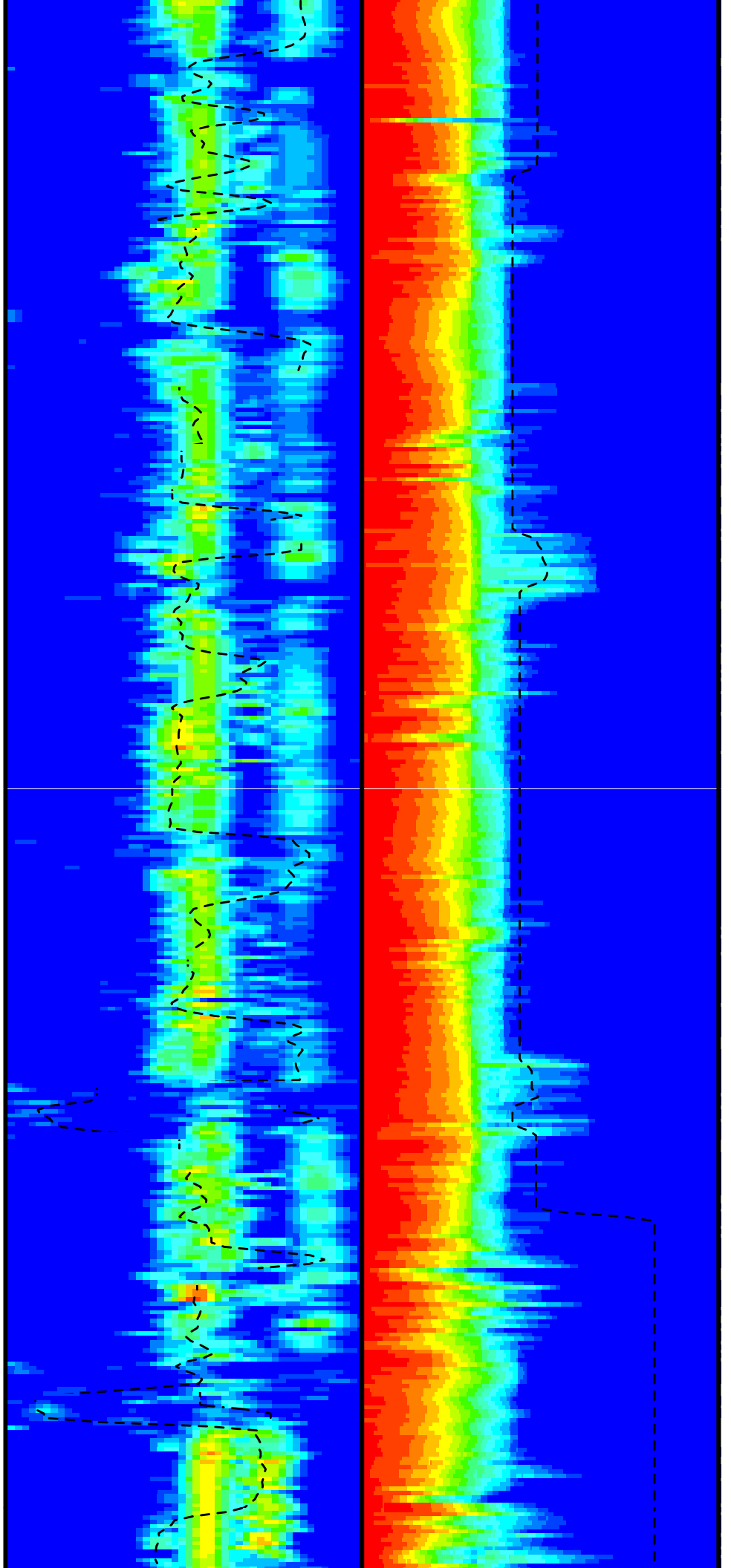


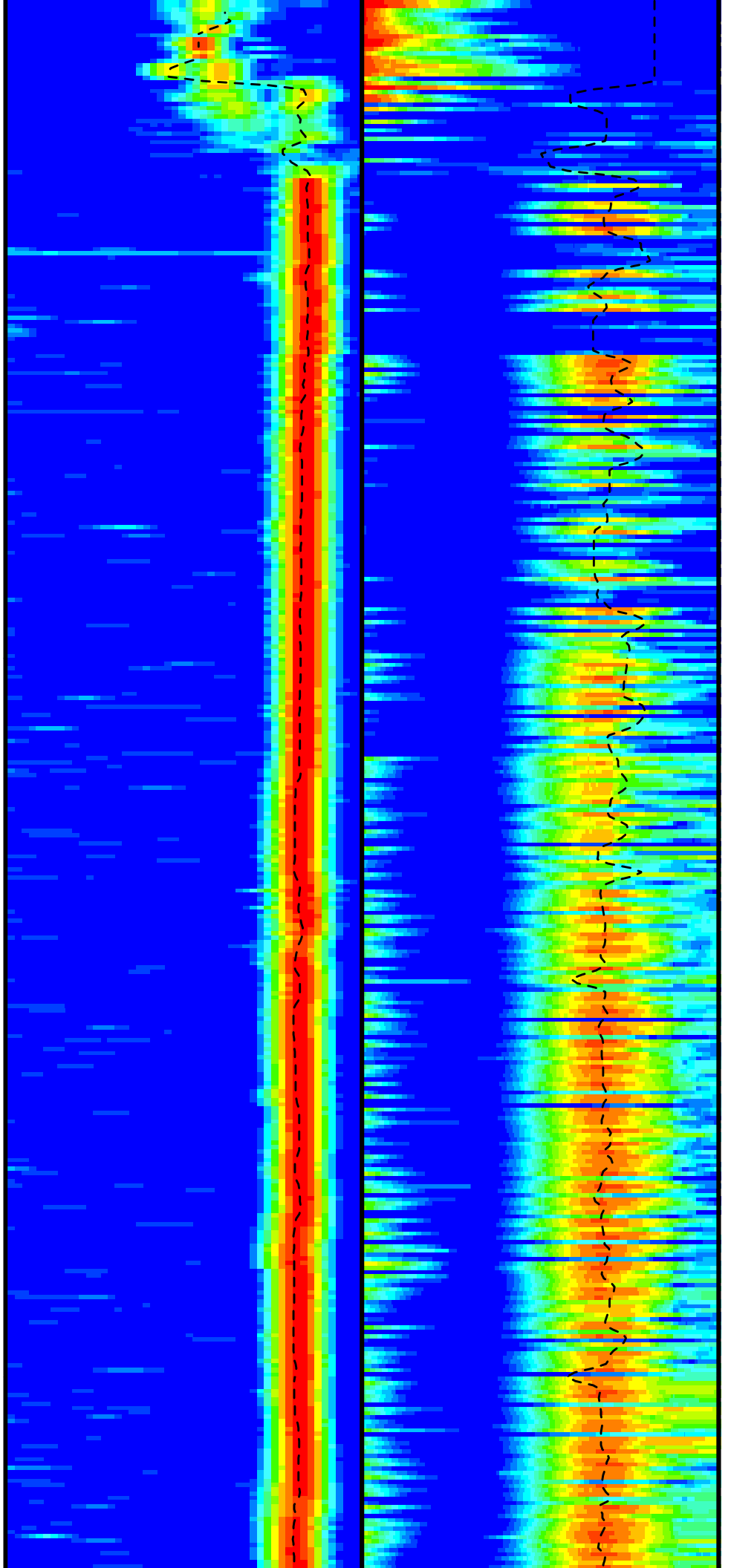
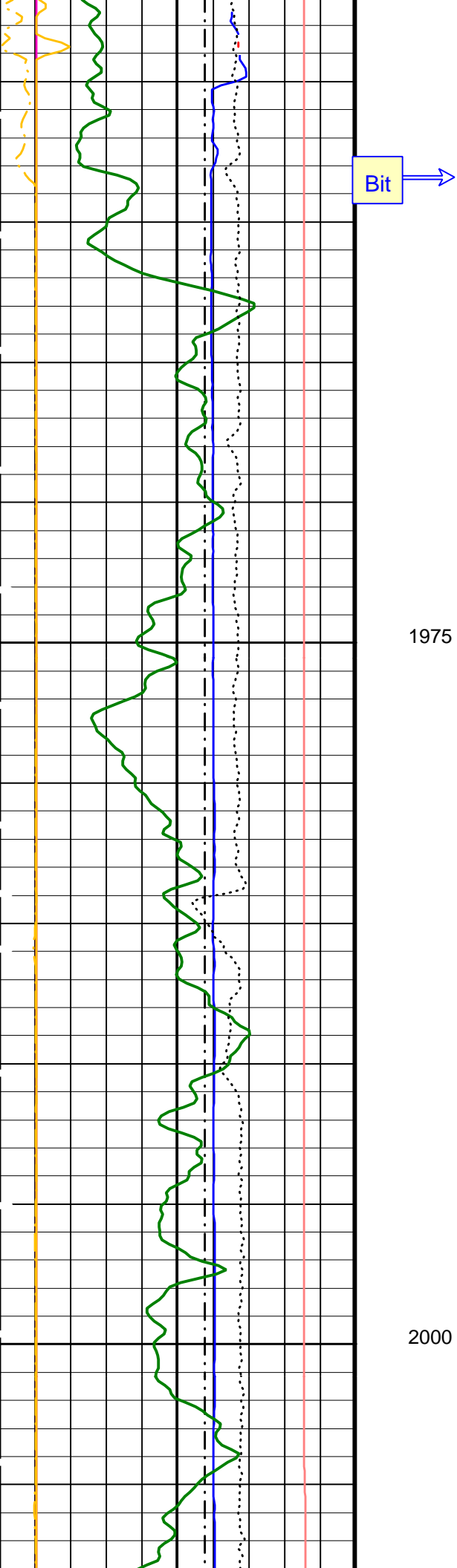


1900

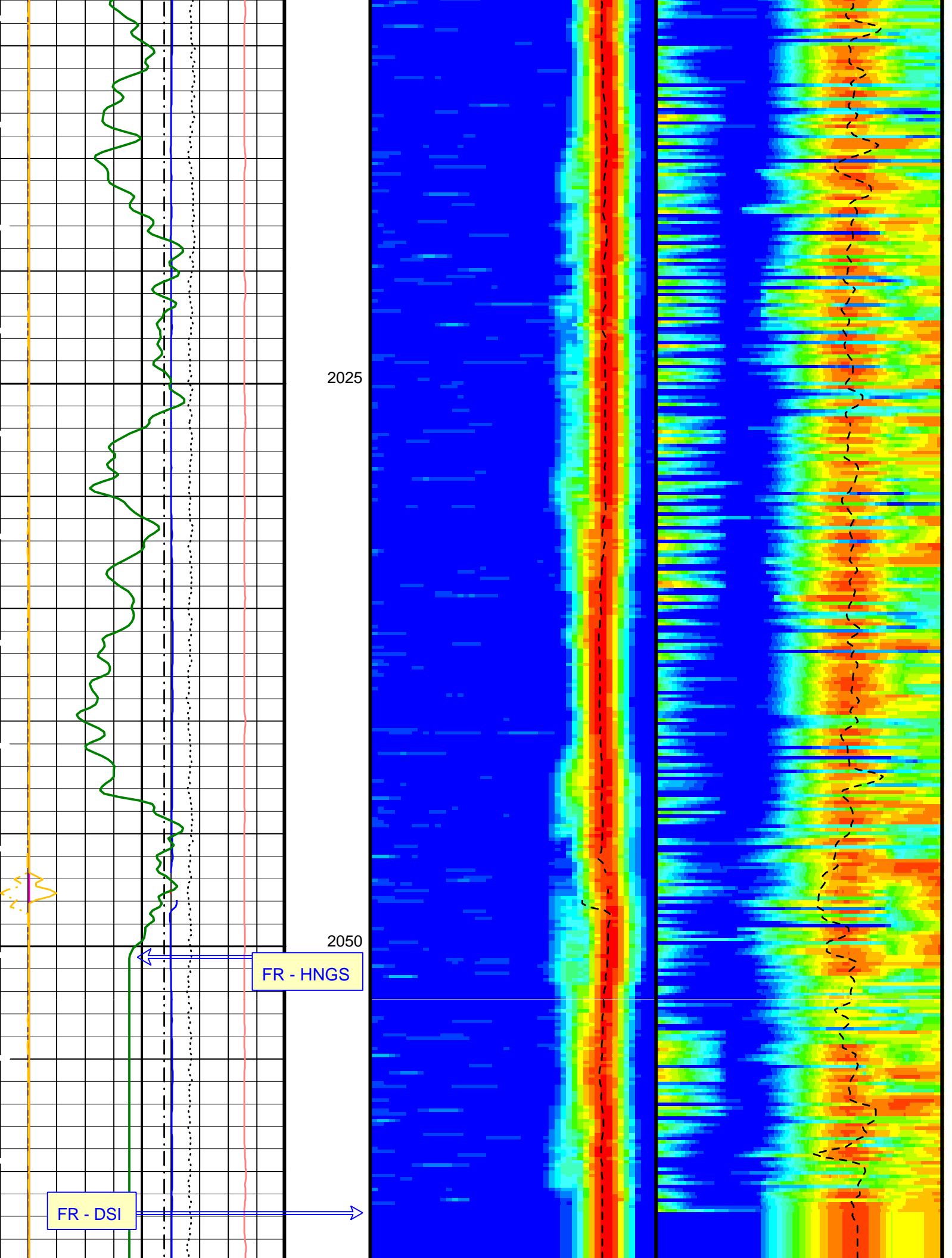
1925

1950







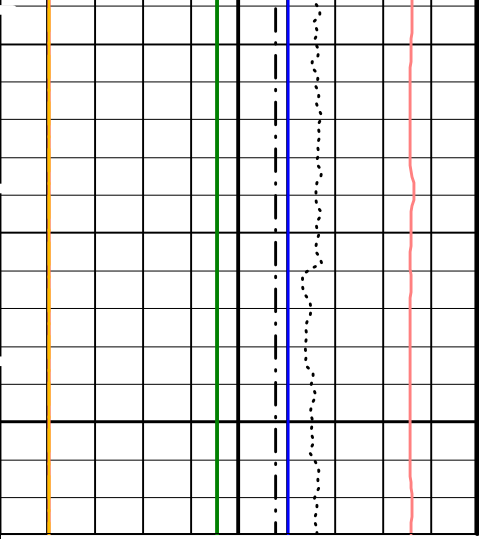


2025

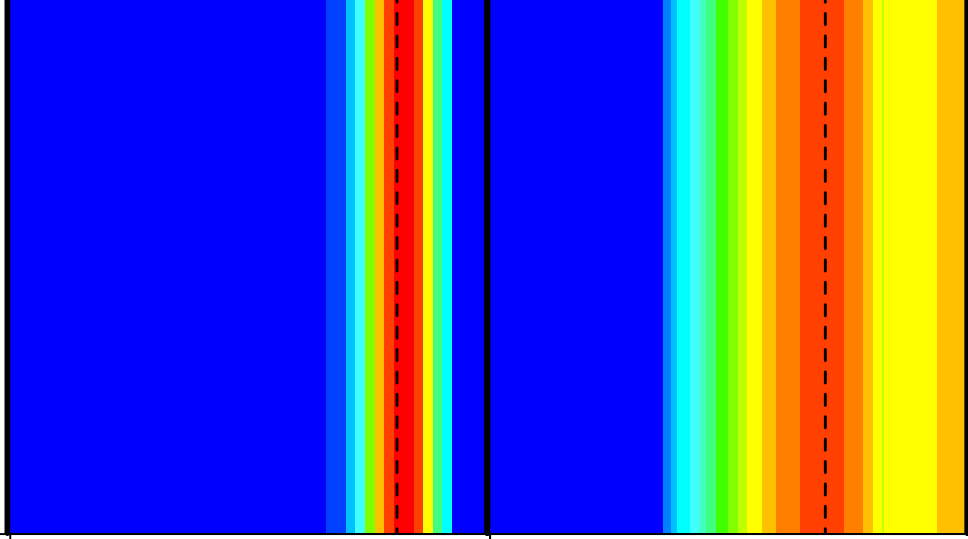
2050

FR - HNGS

FR - DSI



2075



|   |  |        |  |       |    |
|---|--|--------|--|-------|----|
| Bit Size (BS)                             |  | (IN)   |  | 0     | 20 |
| Delta-T Shear - Upper Dipole (DT2)        |  | (US/F) |  | 440   | 40 |
| Delta-T Comp - P & S (DT4P)               |  | (US/F) |  | 440   | 40 |
| Delta-T Shear - P & S (DT4S)              |  | (US/F) |  | 440   | 40 |
| Tension (TENS)                            |  | (LBF)  |  | 10000 | 0  |
| HNGS Computed Gamma Ray (HCGR)            |  | (GAPI) |  | 0     | 50 |
| Peak Coherence / RA - Upper Dipole (CHR2) |  | (---)  |  | 0     | 10 |
| Peak Coherence / RA - P & S Comp (CHRP)   |  | (---)  |  | 0     | 10 |
| Peak Coherence / RA - P & S Shear (CHRS)  |  | (---)  |  | -1    | 9  |

|                                      |           |        |  |     |     |
|--------------------------------------|-----------|--------|--|-----|-----|
| Delta-T Comp / RA - P & S (DTRP)     |           | (US/F) |  | 120 | 220 |
| Delta-T Shear / RA - P & S (DTRS)    |           | (US/F) |  | 120 | 220 |
| Min                                  | Amplitude |        |  | Max |     |
| Rec.Array P&S Slow Proj. CVDL (SPR4) |           |        |  |     |     |
| 120                                  |           |        |  | 220 |     |

|   |           |        |  |      |      |
|---|-----------|--------|--|------|------|
| Delta-T Shear / RA - Lower Dipole (DT1R)  |           | (US/F) |  | 300  | 1100 |
| Min                                       | Amplitude |        |  | Max  |      |
| Rec.Array L.Dipole Slow Proj. CVDL (SPR1) |           |        |  |      |      |
| 300                                       |           |        |  | 1100 |      |

PIP SUMMARY

Time Mark Every 60 S

Parameters

| DLIS Name                       | Description   | Value    |
|---------------------------------|---|----------|
| DSST-B: Dipole Shear Imager - B |   |          |
| BHS                             | Borehole Status   | OPEN     |
| CASF                            | Label Casing Function - Monopole P&S                    | 50       |
| COLL                            | Label Slowness Lower Limit - Monopole P&S Compressional | 120 US/F |
| COUL                            | Label Slowness Upper Limit - Monopole P&S Compressional | 220 US/F |
| DDE1                            | Digitizing Delay 1                                      | 0 US     |
| DDE4                            | Digitizing Delay 4                                      | 0 US     |
| DDEX                            | Digitizing Delay X                                      | 0 US     |
| DLCS                            | Label Compressional Source - Dipole Shear               | USE      |
| DSHL                            | Label Slowness Lower Limit - Dipole Shear               | 600 US/F |
| DSHU                            | Label Slowness Upper Limit - Dipole Shear               | 950 US/F |
| DSI1                            | Digitizer Sample Interval 1                             | 10 US    |
| DSI4                            | Digitizer Sample Interval 4                             | 10 US    |

|  |  |            |      |
|--|--|------------|------|
| DSI#                                     | Digitizer Sample Interval #  | 40         | US   |
| DSIX                                     | Digitizer Sample Interval X  |            |      |
| DTCS                                     | Compressional Delta-T Source for DTCS Channel                            | PS_COMP    |      |
| DTF                                      | Delta-T Fluid  | 204.5      | US/F |
| DWC1                                     | Digitizer Word Count 1   | 512        |      |
| DWC4                                     | Digitizer Word Count 4   | 512        |      |
| DWCX                                     | Digitizer Word Count X   | 512        |      |
| FILG                                     | Label Fill Gap Control - Monopole P&S                                    | COMP_SHEAR |      |
| GCSE                                     | Generalized Caliper Selection  | BS         |      |
| LFC                                      | Label Formation Character - Monopole P&S                                 | DYNAMIC    |      |
| LTXG                                     | Lower Dipole Transmitter Geometry  | 156        | IN   |
| MCS                                      | Mean Casing Slowness   | 57         | US/F |
| MTXG                                     | Monopole Transmitter Geometry  | 186        | IN   |
| NWI1                                     | Number Waveform Items 1  | 0          |      |
| NWI2                                     | Number Waveform Items 2  | 0          |      |
| NWI4                                     | Number Waveform Items 4  | 0          |      |
| NWIX                                     | Number Waveform Items X  | 0          |      |
| RSMN                                     | Label Shear/Compressional Minimum Ratio - Monopole P&S                   | 1.4        |      |
| RSMX                                     | Label Shear/Compressional Maximum Ratio - Monopole P&S                   | 2.12       |      |
| RX1G                                     | Receiver 1 Geometry  | 294        | IN   |
| RX2G                                     | Receiver 2 Geometry  | 300        | IN   |
| RX3G                                     | Receiver 3 Geometry  | 306        | IN   |
| RX4G                                     | Receiver 4 Geometry  | 312        | IN   |
| RX5G                                     | Receiver 5 Geometry  | 318        | IN   |
| RX6G                                     | Receiver 6 Geometry  | 324        | IN   |
| RX7G                                     | Receiver 7 Geometry  | 330        | IN   |
| RX8G                                     | Receiver 8 Geometry  | 336        | IN   |
| SAM1                                     | DSST Sonic Acquisition Mode 1 - Lower Dipole Mode                        | OFF        |      |
| SAM4                                     | DSST Sonic Acquisition Mode 4 - High Frequency Monopole Mode for P&S     | OFF        |      |
| SAMX                                     | DSST Sonic Acquisition Mode X - Both Dipoles or Monopole Mode for Expert | OFF        |      |
| SAS1                                     | STC Sonic Array Status - Lower Dipole                                    | 255        |      |
| SAS2                                     | STC Sonic Array Status - Upper Dipole                                    | 255        |      |
| SAS4                                     | STC Sonic Array Status - Monopole P&S                                    | 255        |      |
| SBO1                                     | STC Search Band Offset - Lower Dipole                                    | 3000       | US   |
| SBO4                                     | STC Search Band Offset - Monopole P&S                                    | 500        | US   |
| SBR4                                     | STC Baseline Removal - Monopole P&S                                      | ON         |      |
| SBW1                                     | STC Search Bandwidth - Lower Dipole                                      | 8000       | US   |
| SBW4                                     | STC Search Bandwidth - Monopole P&S                                      | 2000       | US   |
| SFC1                                     | STC Formation Character - Lower Dipole                                   | SELECTABLE |      |
| SFC4                                     | STC Formation Character - Monopole P&S                                   | SELECTABLE |      |
| SFM1                                     | STC Filter - Lower Dipole  | B.3-1.5K   |      |
| SFM2                                     | STC Filter - Upper Dipole  | B1-2K      |      |
| SFM4                                     | STC Filter - Monopole P&S  | B3-20K     |      |
| SHLL                                     | Label Slowness Lower Limit - Monopole P&S Shear                          | 120        | US/F |
| SHUL                                     | Label Slowness Upper Limit - Monopole P&S Shear                          | 220        | US/F |
| SLL1                                     | STC Slowness Lower Limit - Lower Dipole                                  | 300        | US/F |
| SLL4                                     | STC Slowness Lower Limit - Monopole P&S                                  | 120        | US/F |
| SST1                                     | STC Slowness Step - Lower Dipole   | 4          | US/F |
| SST4                                     | STC Slowness Step - Monopole P&S   | 2          | US/F |
| SSW1                                     | STC Source Waveform - Lower Dipole                                       | WF_SAM1    |      |
| SSW2                                     | STC Source Waveform - Upper Dipole                                       | WF_SAM2    |      |
| SSW4                                     | STC Source Waveform - Monopole P&S                                       | WF_SAM4    |      |
| STLL                                     | Label Slowness Lower Limit - Monopole Stoneley                           | 180        | US/F |
| STUL                                     | Label Slowness Upper Limit - Monopole Stoneley                           | 780        | US/F |
| SUL1                                     | STC Slowness Upper Limit - Lower Dipole                                  | 1100       | US/F |
| SUL4                                     | STC Slowness Upper Limit - Monopole P&S                                  | 220        | US/F |
| SWD1                                     | STC Slowness Width - Lower Dipole  | 40         | US/F |
| SWD4                                     | STC Slowness Width - Monopole P&S  | 10         | US/F |
| TBF1                                     | STC Time for Baseline Fill - Lower Dipole                                | 0          | US   |
| TBF4                                     | STC Time for Baseline Fill - Monopole P&S                                | 300        | US   |
| TLL1                                     | STC Time Lower Limit - Lower Dipole                                      | 2450       | US   |
| TLL4                                     | STC Time Lower Limit - Monopole P&S                                      | 580        | US   |
| TST1                                     | STC Time Step - Lower Dipole   | 200        | US   |
| TST4                                     | STC Time Step - Monopole P&S   | 50         | US   |
| TUL1                                     | STC Time Upper Limit - Lower Dipole                                      | 19650      | US   |
| TUL4                                     | STC Time Upper Limit - Monopole P&S                                      | 3480       | US   |
| TWD1                                     | STC Time Width - Lower Dipole  | 2000       | US   |
| TWD4                                     | STC Time Width - Monopole P&S  | 1000       | US   |
| TWI1                                     | STC Integration Time Window - Lower Dipole                               | 1600       | US   |
| TWI2                                     | STC Integration Time Window - Upper Dipole                               | 1600       | US   |
| TWI4                                     | STC Integration Time Window - Monopole P&S                               | 500        | US   |
| TWSX                                     | Transmitter Waveform Select X  | 0          |      |
| UTXG                                     | Upper Dipole Transmitter Geometry  | 162        | IN   |
| 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       |      |
| 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          |      |
| H1P                      | HNGS Detector 1 Allow/Disallow In Processing           | ALLOW       |      |
| H2P                      | HNGS Detector 2 Allow/Disallow In Processing           | ALLOW       |      |
| HABK                     | HNGS Borehole Potassium Running Average                | -0.00475928 |      |
| HALF                     | HNGS Alpha Filter Length                               | 60          | IN   |
| HCRB                     | HNGS Apply Borehole Potassium Correction               | NONE        |      |
| HMWM                     | Mud Weighting Material                                 | BARI        |      |
| 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         |      |
| TPOS                     | Tool Position  | ECCE        |      |
| VBA1                     | HNGS Detector 1 Variable Barite Factor Running Average | 0.922997    |      |
| VBA2                     | HNGS Detector 2 Variable Barite Factor Running Average | 0.931668    |      |
| System and Miscellaneous |  |             |      |
| BS                       | Bit Size   | 11.438      | IN   |
| DFD                      | Drilling Fluid Density                                 | 1.26        | G/C3 |
| DO                       | Depth Offset for Playback                              | 0.0         | M    |
| PP                       | Playback Processing                                    | NORMAL      |      |

Format: DSST\_P\_S\_LOWER\_VDL\_COLOR    Vertical Scale: 1:200    Graphics File Created: 21-Jul-2009 12:52

### OP System Version: 17C0-154

|         |                        |        |          |
|---------|------------------------|--------|----------|
| MEST-B  | SRPC-3762-Q1_2009_OP17 | DTA-A  | 17C0-154 |
| DSST-B  | 17C0-154               | HNGC-B | 17C0-154 |
| HNGS-BA | 17C0-154               | DTC-H  | 17C0-154 |

### Input DLIS Files

|         |                    |       |          |                   |          |          |
|---------|--------------------|-------|----------|-------------------|----------|----------|
| DEFAULT | FMS_DSI_NGS_033PUP | FN:38 | PRODUCER | 21-Jul-2009 10:51 | 2078.0 M | 1869.6 M |
|---------|--------------------|-------|----------|-------------------|----------|----------|

### Output DLIS Files

|         |                    |       |          |                   |  |  |
|---------|--------------------|-------|----------|-------------------|--|--|
| DEFAULT | FMS_DSI_NGS_037PUP | FN:42 | PRODUCER | 21-Jul-2009 12:52 |  |  |
|---------|--------------------|-------|----------|-------------------|--|--|



**Pass #1**  
**OH Only**

### MAXIS Field Log

Company: Lamont Doherty    Well: Expedition 321 Site U1339D

### Input DLIS Files

|         |                    |       |          |                   |          |          |
|---------|--------------------|-------|----------|-------------------|----------|----------|
| DEFAULT | FMS_DSI_NGS_032PUP | FN:37 | PRODUCER | 21-Jul-2009 10:48 | 2078.0 M | 2006.2 M |
|---------|--------------------|-------|----------|-------------------|----------|----------|

### Output DLIS Files

|         |                    |       |          |                   |          |          |
|---------|--------------------|-------|----------|-------------------|----------|----------|
| DEFAULT | FMS_DSI_NGS_036PUP | FN:41 | PRODUCER | 21-Jul-2009 12:51 | 2078.0 M | 2006.2 M |
|---------|--------------------|-------|----------|-------------------|----------|----------|

### OP System Version: 17C0-154

|         |                        |        |          |
|---------|------------------------|--------|----------|
| MEST-B  | SRPC-3762-Q1_2009_OP17 | DTA-A  | 17C0-154 |
| DSST-B  | 17C0-154               | HNGC-B | 17C0-154 |
| HNGS-BA | 17C0-154               | DTC-H  | 17C0-154 |

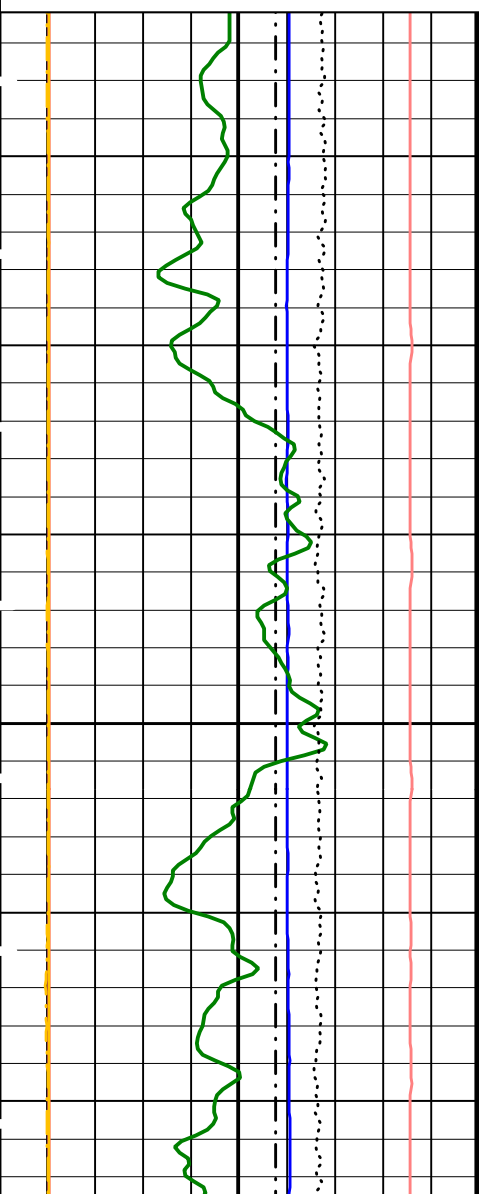
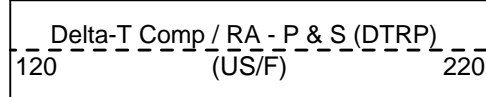
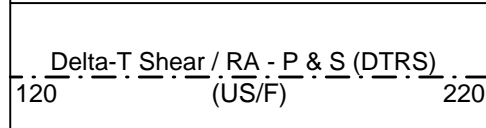
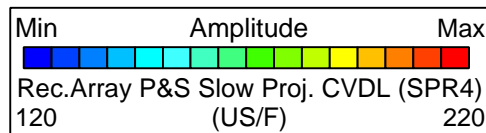
### PIP SUMMARY

Time Mark Every 60 S

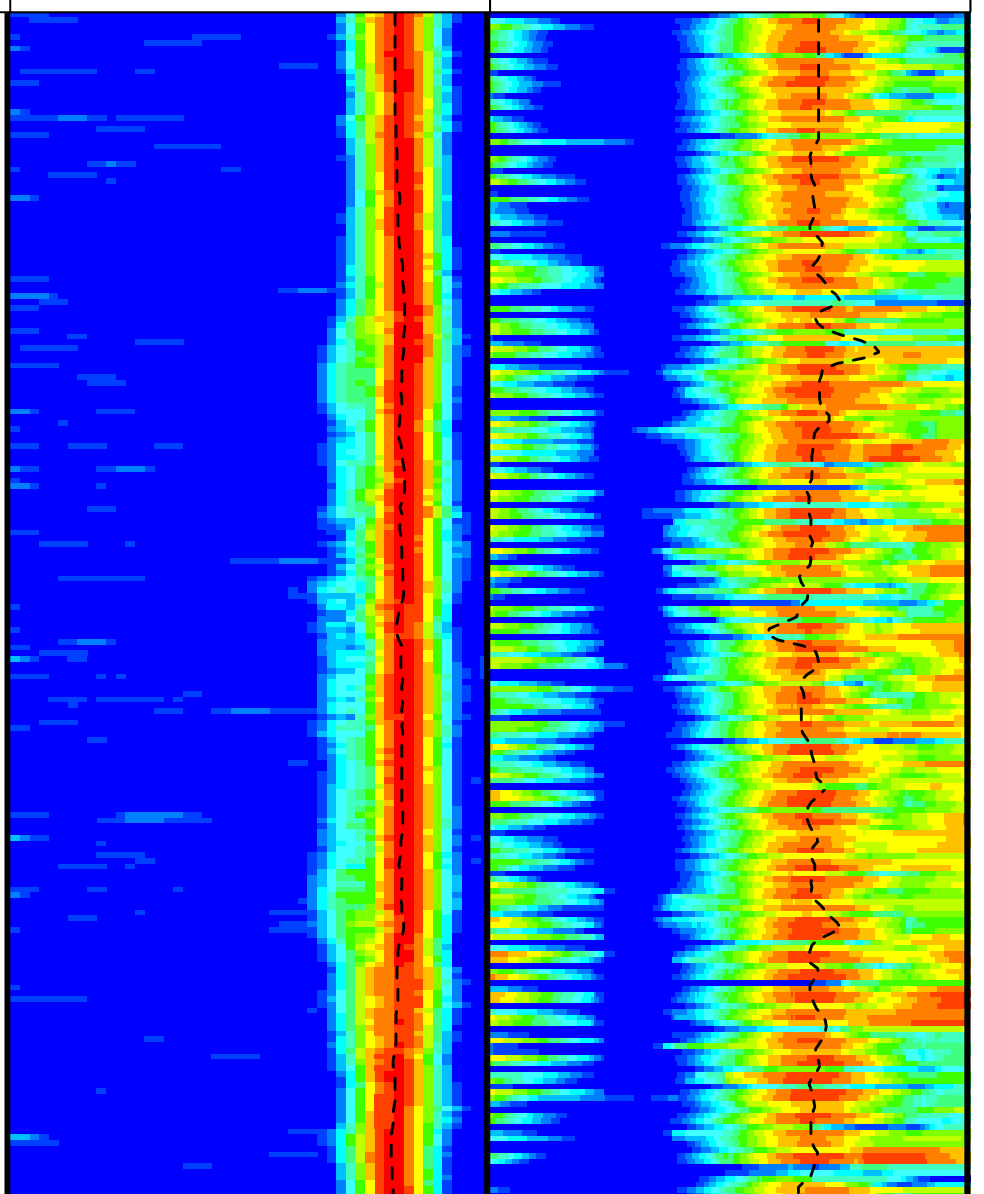
Peak Coherence / RA - P & S Shear (CHRS)

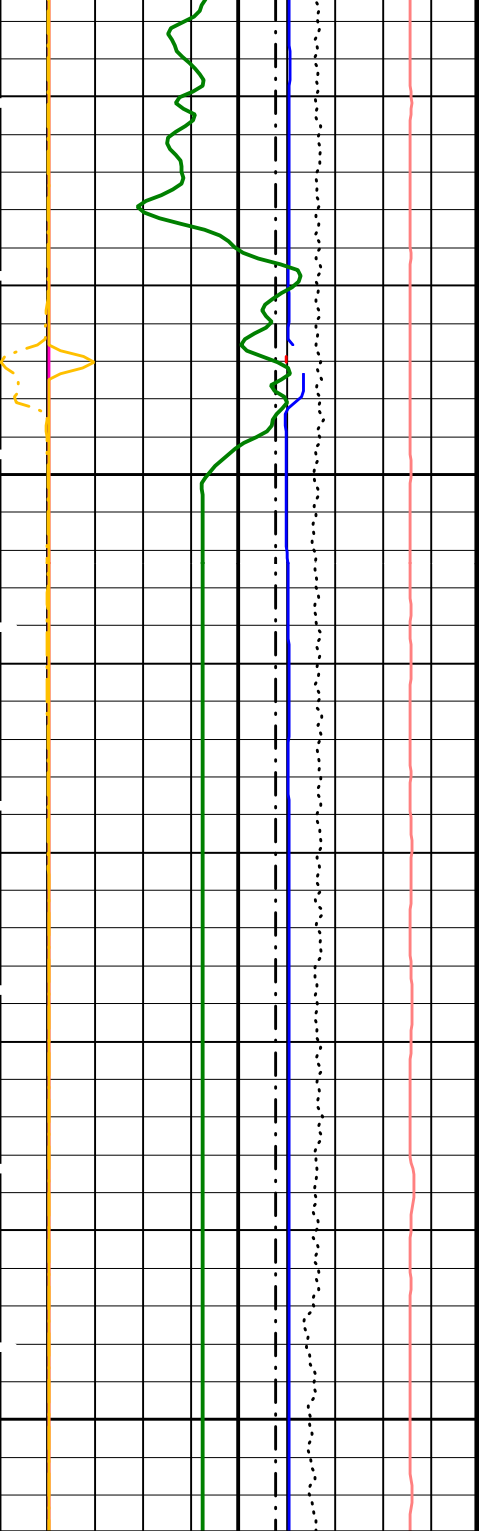
-1    (----)    9

|  |       |    |
|--|-------|----|
| Peak Coherence / RA - P & S Comp<br>(CHRP)   | 0     | 10 |
| Peak Coherence / RA - Upper Dipole<br>(CHR2) | 0     | 10 |
| HNGS Computed Gamma Ray (HCGR)<br>(GAPI)     | 0     | 50 |
| Tension (TENS)<br>(LBF)                      | 10000 | 0  |
| Delta-T Shear - P & S (DT4S)<br>(US/F)       | 440   | 40 |
| Delta-T Comp - P & S (DT4P)<br>(US/F)        | 440   | 40 |
| Delta-T Shear - Upper Dipole (DT2)<br>(US/F) | 440   | 40 |
| Bit Size (BS)<br>(IN)                        | 0     | 20 |



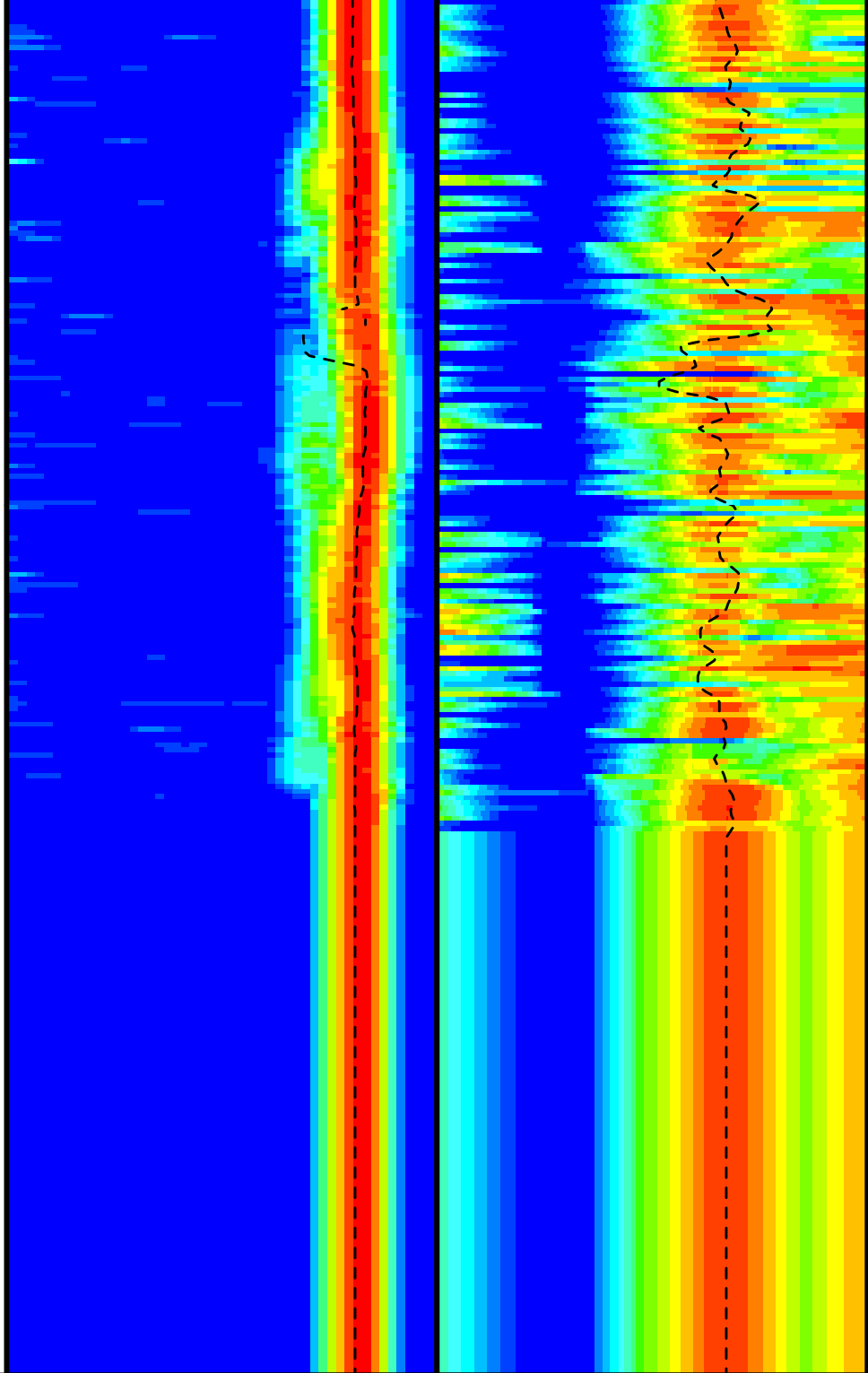
2025





2050

2075



0 --- Bit Size (BS) --- 20  
(IN)

Delta-T Shear - Upper Dipole (DT2)  
440 (US/F) 40

Delta-T Comp - P & S (DT4P)  
440 (US/F) 40

Delta-T Shear - P & S (DT4S)  
440 (US/F) 40

10000 --- Tension (TENS) --- 0  
(LBF)

120 --- Delta-T Comp / RA - P & S (DTRP) --- 220  
(US/F)

120 --- Delta-T Shear / RA - P & S (DTRS) --- 220  
(US/F)

Min Amplitude Max  
Rec.Array P&S Slow Proj. CVDL (SPR4)  
120 (US/F) 220

300 --- Delta-T Shear / RA - Lower Dipole (DT1R) --- 1100  
(US/F)

Min Amplitude Max  
Rec.Array L.Dipole Slow Proj. CVDL (SPR1)  
300 (US/F) 1100

|   |        |    |
|---|--------|----|
| HNGS Computed Gamma Ray (HCGR)            |        |    |
| 0   | (GAPI) | 50 |
| Peak Coherence / RA - Upper Dipole (CHR2) |        |    |
| 0   | (----  | 10 |
| Peak Coherence / RA - P & S Comp (CHRP)   |        |    |
| 0   | (----  | 10 |
| Peak Coherence / RA - P & S Shear (CHRS)  |        |    |
| -1  | (----  | 9  |

PIP SUMMARY

Time Mark Every 60 S

Parameters

| DLIS Name | Description  | Value      |
|-----------|--|------------|
|           | DSST-B: Dipole Shear Imager - B  |            |
| BHS       | Borehole Status  | OPEN       |
| CASF      | Label Casing Function - Monopole P&S                                     | 50         |
| COLL      | Label Slowness Lower Limit - Monopole P&S Compressional                  | 120 US/F   |
| COUL      | Label Slowness Upper Limit - Monopole P&S Compressional                  | 220 US/F   |
| DDE1      | Digitizing Delay 1   | 0 US       |
| DDE4      | Digitizing Delay 4   | 0 US       |
| DDEX      | Digitizing Delay X   | 0 US       |
| DLCS      | Label Compressional Source - Dipole Shear                                | USE        |
| DSHL      | Label Slowness Lower Limit - Dipole Shear                                | 600 US/F   |
| DSHU      | Label Slowness Upper Limit - Dipole Shear                                | 950 US/F   |
| DSI1      | Digitizer Sample Interval 1  | 10 US      |
| DSI4      | Digitizer Sample Interval 4  | 10 US      |
| DSIX      | Digitizer Sample Interval X  | 40 US      |
| DTCS      | Compressional Delta-T Source for DTCS Channel                            | PS_COMP    |
| DTF       | Delta-T Fluid  | 204.5 US/F |
| DWC1      | Digitizer Word Count 1   | 512        |
| DWC4      | Digitizer Word Count 4   | 512        |
| DWCX      | Digitizer Word Count X   | 512        |
| FILG      | Label Fill Gap Control - Monopole P&S                                    | COMP_SHEAR |
| GCSE      | Generalized Caliper Selection  | BS         |
| LFC       | Label Formation Character - Monopole P&S                                 | DYNAMIC    |
| LTXG      | Lower Dipole Transmitter Geometry  | 156 IN     |
| MCS       | Mean Casing Slowness   | 57 US/F    |
| MTXG      | Monopole Transmitter Geometry  | 186 IN     |
| NWI1      | Number Waveform Items 1  | 0          |
| NWI2      | Number Waveform Items 2  | 0          |
| NWI4      | Number Waveform Items 4  | 0          |
| NWIX      | Number Waveform Items X  | 0          |
| RSMN      | Label Shear/Compressional Minimum Ratio - Monopole P&S                   | 1.4        |
| RSMX      | Label Shear/Compressional Maximum Ratio - Monopole P&S                   | 2.12       |
| RX1G      | Receiver 1 Geometry  | 294 IN     |
| RX2G      | Receiver 2 Geometry  | 300 IN     |
| RX3G      | Receiver 3 Geometry  | 306 IN     |
| RX4G      | Receiver 4 Geometry  | 312 IN     |
| RX5G      | Receiver 5 Geometry  | 318 IN     |
| RX6G      | Receiver 6 Geometry  | 324 IN     |
| RX7G      | Receiver 7 Geometry  | 330 IN     |
| RX8G      | Receiver 8 Geometry  | 336 IN     |
| SAM1      | DSST Sonic Acquisition Mode 1 - Lower Dipole Mode                        | OFF        |
| SAM4      | DSST Sonic Acquisition Mode 4 - High Frequency Monopole Mode for P&S     | OFF        |
| SAMX      | DSST Sonic Acquisition Mode X - Both Dipoles or Monopole Mode for Expert | OFF        |
| SAS1      | STC Sonic Array Status - Lower Dipole                                    | 255        |
| SAS2      | STC Sonic Array Status - Upper Dipole                                    | 255        |
| SAS4      | STC Sonic Array Status - Monopole P&S                                    | 255        |
| SBO1      | STC Search Band Offset - Lower Dipole                                    | 3000 US    |
| SBO4      | STC Search Band Offset - Monopole P&S                                    | 500 US     |
| SBR4      | STC Baseline Removal - Monopole P&S                                      | ON         |
| SBW1      | STC Search Bandwidth - Lower Dipole                                      | 8000 US    |
| SBW4      | STC Search Bandwidth - Monopole P&S                                      | 2000 US    |
| SFC1      | STC Formation Character - Lower Dipole                                   | SELECTABLE |
| SFC4      | STC Formation Character - Monopole P&S                                   | SELECTABLE |
| SFM1      | STC Filter - Lower Dipole  | B.3-1.5K   |
| SFM2      | STC Filter - Upper Dipole  | B1-2K      |
| SFM4      | STC Filter - Monopole P&S  | B3-20K     |

|  |  |             |      |
|--|--|-------------|------|
| SHLL                                     | Label Slowness Lower Limit - Monopole P&S Shear        | 120         | US/F |
| SHUL                                     | Label Slowness Upper Limit - Monopole P&S Shear        | 220         | US/F |
| SLL1                                     | STC Slowness Lower Limit - Lower Dipole                | 300         | US/F |
| SLL4                                     | STC Slowness Lower Limit - Monopole P&S                | 120         | US/F |
| SST1                                     | STC Slowness Step - Lower Dipole                       | 4           | US/F |
| SST4                                     | STC Slowness Step - Monopole P&S                       | 2           | US/F |
| SSW1                                     | STC Source Waveform - Lower Dipole                     | WF_SAM1     |      |
| SSW2                                     | STC Source Waveform - Upper Dipole                     | WF_SAM2     |      |
| SSW4                                     | STC Source Waveform - Monopole P&S                     | WF_SAM4     |      |
| STLL                                     | Label Slowness Lower Limit - Monopole Stoneley         | 180         | US/F |
| STUL                                     | Label Slowness Upper Limit - Monopole Stoneley         | 780         | US/F |
| SUL1                                     | STC Slowness Upper Limit - Lower Dipole                | 1100        | US/F |
| SUL4                                     | STC Slowness Upper Limit - Monopole P&S                | 220         | US/F |
| SWD1                                     | STC Slowness Width - Lower Dipole                      | 40          | US/F |
| SWD4                                     | STC Slowness Width - Monopole P&S                      | 10          | US/F |
| TBF1                                     | STC Time for Baseline Fill - Lower Dipole              | 0           | US   |
| TBF4                                     | STC Time for Baseline Fill - Monopole P&S              | 300         | US   |
| TLL1                                     | STC Time Lower Limit - Lower Dipole                    | 2450        | US   |
| TLL4                                     | STC Time Lower Limit - Monopole P&S                    | 580         | US   |
| TST1                                     | STC Time Step - Lower Dipole                           | 200         | US   |
| TST4                                     | STC Time Step - Monopole P&S                           | 50          | US   |
| TUL1                                     | STC Time Upper Limit - Lower Dipole                    | 19650       | US   |
| TUL4                                     | STC Time Upper Limit - Monopole P&S                    | 3480        | US   |
| TWD1                                     | STC Time Width - Lower Dipole                          | 2000        | US   |
| TWD4                                     | STC Time Width - Monopole P&S                          | 1000        | US   |
| TWI1                                     | STC Integration Time Window - Lower Dipole             | 1600        | US   |
| TWI2                                     | STC Integration Time Window - Upper Dipole             | 1600        | US   |
| TWI4                                     | STC Integration Time Window - Monopole P&S             | 500         | US   |
| TWSX                                     | Transmitter Waveform Select X                          | 0           |      |
| UTXG                                     | Upper Dipole Transmitter Geometry                      | 162         | IN   |
| 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        |      |
| 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          |      |
| H1P                                      | HNGS Detector 1 Allow/Disallow In Processing           | ALLOW       |      |
| H2P                                      | HNGS Detector 2 Allow/Disallow In Processing           | ALLOW       |      |
| HABK                                     | HNGS Borehole Potassium Running Average                | -0.00475928 |      |
| HALF                                     | HNGS Alpha Filter Length                               | 60          | IN   |
| HCRB                                     | HNGS Apply Borehole Potassium Correction               | NONE        |      |
| HMWM                                     | Mud Weighting Material                                 | BARI        |      |
| 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         |      |
| TPOS                                     | Tool Position  | ECCE        |      |
| VBA1                                     | HNGS Detector 1 Variable Barite Factor Running Average | 0.922997    |      |
| VBA2                                     | HNGS Detector 2 Variable Barite Factor Running Average | 0.931668    |      |
| System and Miscellaneous                 |  |             |      |
| BS                                       | Bit Size   | 11.438      | IN   |
| DFD                                      | Drilling Fluid Density                                 | 1.26        | G/C3 |
| DO                                       | Depth Offset for Playback                              | 0.0         | M    |
| PP                                       | Playback Processing                                    | NORMAL      |      |

Format: DSST\_P\_S\_LOWER\_VDL\_COLOR    Vertical Scale: 1:200    Graphics File Created: 21-Jul-2009 12:51

## OP System Version: 17C0-154

|         |                        |        |          |
|---------|------------------------|--------|----------|
| MEST-B  | SRPC-3762-Q1_2009_OP17 | DTA-A  | 17C0-154 |
| DSST-B  | 17C0-154               | HNGC-B | 17C0-154 |
| HNGS-BA | 17C0-154               | DTC-H  | 17C0-154 |

## Input DLIS Files

|         |                    |       |          |                   |          |          |
|---------|--------------------|-------|----------|-------------------|----------|----------|
| DEFAULT | FMS_DSI_NGS_032PUP | FN:37 | PRODUCER | 21-Jul-2009 10:48 | 2078.0 M | 2006.2 M |
|---------|--------------------|-------|----------|-------------------|----------|----------|

## Output DLIS Files

|         |                    |       |          |                   |
|---------|--------------------|-------|----------|-------------------|
| DEFAULT | FMS_DSI_NGS_036PUP | FN:41 | PRODUCER | 21-Jul-2009 12:51 |
|---------|--------------------|-------|----------|-------------------|



## MAXIS Field Log

## Calibration and Check Summary

| Measurement   | Nominal | Master | Before | After  | Change   | Limit   | Units |
|---|---------|--------|--------|--------|----------|---------|-------|
| Micro Electrical Scanner - B (Slim) Wellsite Calibration - Caliper Calibration                                |         |        |        |        |          |         |       |
| Before: Calibration out of date 4-Jun-2009 2:47   |         |        |        |        |          |         |       |
| Caliper 1 Zero Measurement  | 12.00   | N/A    | 12.57  | N/A    | N/A      | N/A     | IN    |
| Caliper 2 Zero Measurement  | 12.00   | N/A    | 12.44  | N/A    | N/A      | N/A     | IN    |
| Caliper 1 Plus Measurement  | 15.19   | N/A    | 15.77  | N/A    | N/A      | N/A     | IN    |
| Caliper 2 Plus Measurement  | 15.19   | N/A    | 15.68  | N/A    | N/A      | N/A     | IN    |
| Micro Electrical Scanner - B (Slim) Wellsite Calibration - CROUZET ACCELEROMETER PROM HAS BEEN READ CORRECTLY |         |        |        |        |          |         |       |
| Before: 20-Jul-2009 20:16   |         |        |        |        |          |         |       |
| 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     |       |
| Micro Electrical Scanner - B (Slim) Wellsite Calibration - CROUZET MAGNETOMETER PROM HAS BEEN READ CORRECTLY  |         |        |        |        |          |         |       |
| Before: 20-Jul-2009 20:16   |         |        |        |        |          |         |       |
| 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 Natural Gamma Ray Sonde Wellsite Calibration - Detector 1 Check                                       |         |        |        |        |          |         |       |
| Master: 19-Jun-2009 23:49 Before: 16-May-2009 19:11 After: 21-Jul-2009 0:09                                   |         |        |        |        |          |         |       |
| Na 511 Peak Loc   | 40.00   | 39.80  | 39.53  | 39.66  | 0.1310   | 1.000   |       |
| Na 511 Peak Res   | 15.50   | 15.76  | 16.37  | 14.66  | -1.708   | 2.000   | %     |
| High Voltage  | 1150    | 1181   | 1179   | 1144   | -34.77   | N/A     | V     |
| Na 1785 Peak Loc  | 142.6   | 142.6  | 141.7  | 142.3  | 0.5753   | 7.000   |       |
| Na 1785 Peak Res  | 8.500   | 8.553  | 9.055  | 7.980  | -1.075   | 2.000   | %     |
| Temperature   | 15.50   | 32.22  | 32.56  | 13.35  | -19.20   | N/A     | DEGC  |
| Na Count Rate   | 45.00   | 37.08  | 38.79  | 35.91  | -2.883   | 8.000   | CPS   |
| Hostile Natural Gamma Ray Sonde Wellsite Calibration - Detector 2 Check                                       |         |        |        |        |          |         |       |
| Master: 19-Jun-2009 23:49 Before: 16-May-2009 19:11 After: 21-Jul-2009 0:09                                   |         |        |        |        |          |         |       |
| Na 511 Peak Loc   | 40.00   | 39.62  | 39.75  | 39.73  | -0.02171 | 1.000   |       |
| Na 511 Peak Res   | 15.50   | 16.69  | 15.15  | 15.28  | 0.1299   | 2.000   | %     |
| High Voltage  | 1150    | 1114   | 1113   | 1080   | -33.24   | N/A     | V     |
| Na 1785 Peak Loc  | 142.6   | 142.4  | 142.3  | 142.2  | -0.1297  | 7.000   |       |
| Na 1785 Peak Res  | 8.500   | 8.478  | 8.759  | 9.067  | 0.3081   | 2.000   | %     |
| Temperature   | 15.50   | 32.71  | 33.15  | 14.96  | -18.19   | N/A     | DEGC  |
| Na Count Rate   | 45.00   | 38.14  | 39.43  | 35.97  | -3.462   | 8.000   | CPS   |
| Hostile Natural Gamma Ray Sonde Wellsite Calibration - Ratio Of Detector 1 To Detector 2                      |         |        |        |        |          |         |       |
| Master: 19-Jun-2009 23:49 Before: 16-May-2009 19:11 After: 21-Jul-2009 0:09                                   |         |        |        |        |          |         |       |
| Coincidence Count Rate Ratio  | 1.000   | 0.9751 | 0.9835 | 0.9990 | 0.01556  | 0.05000 |       |

## Micro Electrical Scanner - B (Slim) / Equipment Identification

## Primary Equipment:

|                                  |           |     |
|----------------------------------|-----------|-----|
| MEST Sonde - B                   | MEDS - B  | 702 |
| MEST Preamplifier Cartridge - AB | MEPC - AB | 806 |
| GPIT Cartridge - A               | GPIC - A  | 719 |
| MEST Acquisition Cartridge - A   | MEAC - A  | 875 |

## Auxiliary Equipment:

|   |          |     |
|---|----------|-----|
| MEST-B Preamplifier Cartridge Housing     | MEPH - A | 702 |
| MEST Acquisition Cartridge Housing (Slim) | MEAH - B | 769 |

Hostile Natural Gamma Ray Cartridge - B / Equipment Identification

|                                      |          |     |
|--------------------------------------|----------|-----|
| Primary Equipment:<br>HNGC Cartridge | HNGC - B | 300 |
| Auxiliary Equipment:<br>HNGC Housing | HNGH - A | 115 |

Hostile Natural Gamma Ray Sonde / Equipment Identification

|  |           |        |
|--|-----------|--------|
| Primary Equipment:<br>HNGS Sonde           | HNGS - BA | 194    |
| Auxiliary Equipment:<br>HNGS Sonde Housing | HNSH - BA | 205    |
| Gamma Source Radioactive                   | GSR - U   | 616008 |

Hostile Natural Gamma Ray Sonde Wellsite Calibration

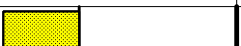

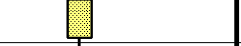
Detector 1 Check

| Phase                     | Na 511 Peak Loc                                 | Value | Phase                     | Na 511 Peak Res %                               | Value | Phase                   | High Voltage V                                   | Value |
|---------------------------|---|-------|---------------------------|---|-------|-------------------------|--|-------|
| Master                    |   | 39.80 | Master                    |   | 15.76 | Master                  |  | 1181  |
| Before                    |   | 39.53 | Before                    |   | 16.37 | Before                  |  | 1179  |
| After                     |   | 39.66 | After                     |   | 14.66 | After                   |  | 1144  |
|                           | 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                    |   | 142.6 | Master                    |   | 8.553 | Master                  |  | 32.22 |
| Before                    |   | 141.7 | Before                    |   | 9.055 | Before                  |  | 32.56 |
| After                     |   | 142.3 | After                     |   | 7.980 | After                   |  | 13.35 |
|                           | 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                    |   | 37.08 |                           |   |       |                         |  |       |
| Before                    |   | 38.79 |                           |   |       |                         |  |       |
| After                     |   | 35.91 |                           |   |       |                         |  |       |
|                           | 10.00 (Minimum) 45.00 (Nominal) 100.0 (Maximum) |       |                           |   |       |                         |  |       |
| Master: 19-Jun-2009 23:49 |   |       | Before: 16-May-2009 19:11 |   |       | After: 21-Jul-2009 0:09 |  |       |


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 |   | 39.62 | Master |   | 16.69 | Master |  | 1114  |
| Before |   | 39.75 | Before |   | 15.15 | Before |  | 1113  |
| After  |   | 39.73 | After  |   | 15.28 | After  |  | 1080  |
|        | 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 |   | 142.4 | Master |   | 8.478 | Master |  | 32.71 |
| Before |   | 142.3 | Before |   | 8.759 | Before |  | 33.15 |
| After  |   | 142.2 | After  |   | 9.067 | After  |  | 14.96 |
|        | 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 |   | 38.14 |        |   |       |        |  |       |
| Before |   | 39.43 |        |   |       |        |  |       |
| After  |   | 35.97 |        |   |       |        |  |       |
|        | 10.00 (Minimum) 45.00 (Nominal) 100.0 (Maximum) |       |        |   |       |        |  |       |

| Hostile Natural Gamma Ray Sonde Wellsite Calibration |   |        |
|--|---|--------|
| Ratio Of Detector 1 To Detector 2                    |   |        |
| Phase  | Coincidence Count Rate Ratio  | Value  |
| Master   |  | 0.9751 |
| Before   |  | 0.9835 |
| After  |  | 0.9990 |
|  | 0.9500<br>(Minimum)      1.000<br>(Nominal)      1.050<br>(Maximum)               |        |
| Master: 19-Jun-2009 23:49                            |   |        |
| Before: 16-May-2009 19:11                            |   |        |
| After: 21-Jul-2009 0:09                              |   |        |

| DTS Telemetry Tool / Equipment Identification |          |      |  |
|---|----------|------|--|
| Primary Equipment:                            |          |      |  |
| DTC-H Auxiliary Cartridge                     | DTCH - A |      |  |
| DTC-H Telemetry Cartridge                     | DTCH - A | 8753 |  |
| Auxiliary Equipment:                          |          |      |  |
| DTCH Telemetry Cartridge Housing              | ECH - KC | 2304 |  |

|   |   |
|---|---|
| <b>Company:</b> Lamont Doherty          |  |
| <b>Well:</b> Expedition 323 Site U1339D |   |
| <b>Field:</b> Bering Sea                |   |
| <b>Rig:</b> JOIDES Resolution           |   |
| <b>Country:</b> USA                     |   |

|   |
|---|
| Dipole<br>Shear Sonic<br>Natural Gamma Spectroscopy |
|---|