

Matrix changes shown on nuclear print

| | | | | | |
|---|-------|------|--|-------|------|
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| | | | | | |
| | | | | | |
| Rig: Ensign 7 | | | | | |
| | | | | | |
| Crew: Ian Derry & David Marquez | | | | | |
| RUN 1 | | | RUN 2 | | |
| SERVICE ORDER #: PROGRAM VERSION: 15C0-309 FLUID LEVEL: | | | SERVICE ORDER #: PROGRAM VERSION: FLUID LEVEL: | | |
| LOGGED INTERVAL | START | STOP | LOGGED INTERVAL | START | STOP |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| EQUIPMENT DESCRIPTION | | | | | |
| RUN 1 | | | RUN 2 | | |
| SURFACE EQUIPMENT WITM (DTS)-A GSR-U/Y NCT-B CNB-AB NCS-VB | | | | | |
| DOWNHOLE EQUIPMENT | | | | | |
| LEH-QT LEH-QT | | | 51.6 | | |
| DTC-H ECH-KC DTCH0-A DTCH1-A | | | 48.6 | | |
| CTEM TelStatus ToolStatu | | | 47.7 45.6 | | |
| AH-NM AH-NM | | | 45.6 | | |
| GPIT-C GPIC-C GPIH-B | | | 41.6 | | |
| HILTB-FTB HGNSD-B HMCA HGNH NLS-KL NSR-F 940 HACCZ HCNT HGR HRCC-B HRMS-B HRGD-B GLS-VJ 5094 MCFL Device HILT Nucl. LS 42767 HILT Nucl. SS 42767 HILT Nucl. BS 42767 AIT-H AHIS-BA 374 AHRM-A NPV-N | | | 37.6 36.9 37.6 | | |
| HGNS HTEM HMCA HGNS Gamm | | | 31.1 30.6 | | |
| HGNS Neut HGNS Neut | | | 28.2 | | |
| HGNS sens | | | 24.2 | | |
| HRCC cart | | | 18.8 | | |

MICFL
HILT cali
HRDD-LS
HRDD-SS
HRDD-BS

18.8

17.9

Induction
Temperatu
Power Sup

7.9

SP SENSOR
GPIT HV DF
HTEN HMAS
Accelerom
Mud Resis
Tension

0.1

0.0

TOOL ZERO

MAXIMUM STRING DIAMETER 4.63 IN
MEASUREMENTS RELATIVE TO TOOL ZERO
ALL LENGTHS IN FEET

(in) (ft)

OD ID MD

Well Schematic

(ft) (in)

MD OD ID

Casing String

Casing String

Casing Shoe

Borehole Segment

0.0

8.625

838.0

8.625

838.0

7.875

All depths are driller's depths



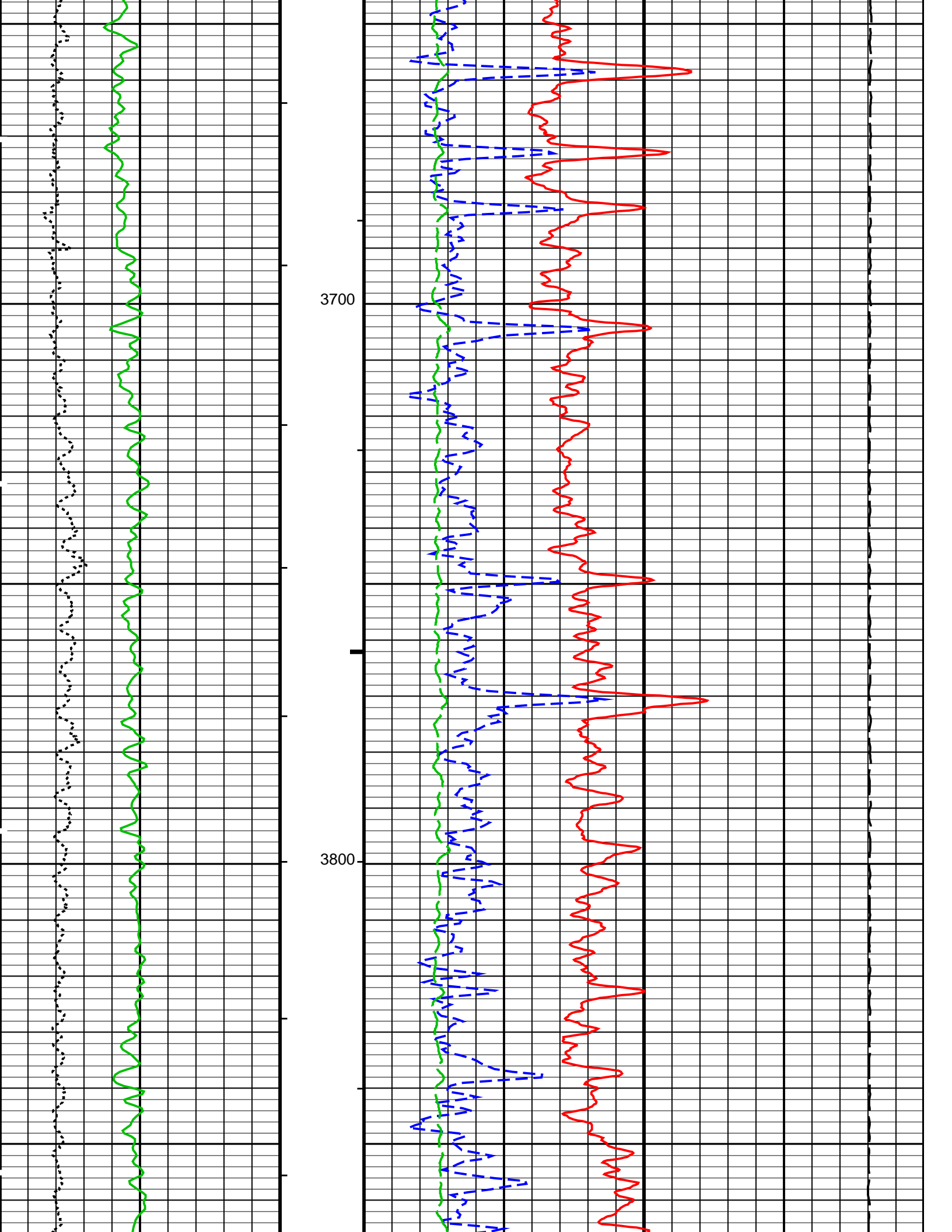
MAXIS Field Log

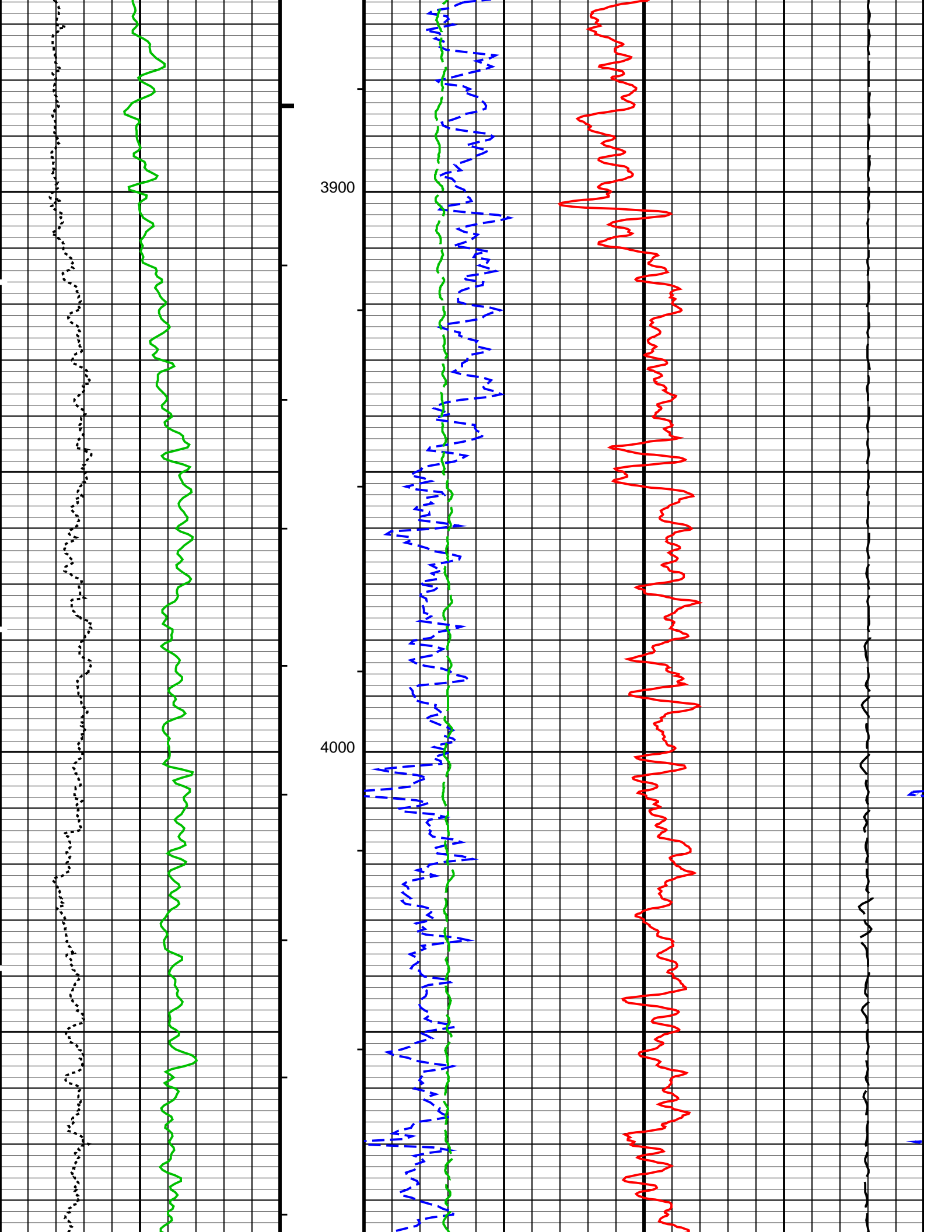
| | | | | | | |
|---------|-------------------------|------|----------|-------------------|-----------|--------|
| DEFAULT | AIT_TLD_MCFL_CNL_010LUP | FN:9 | PRODUCER | 06-Dec-2007 00:25 | 7788.0 FT | 0.0 FT |
|---------|-------------------------|------|----------|-------------------|-----------|--------|

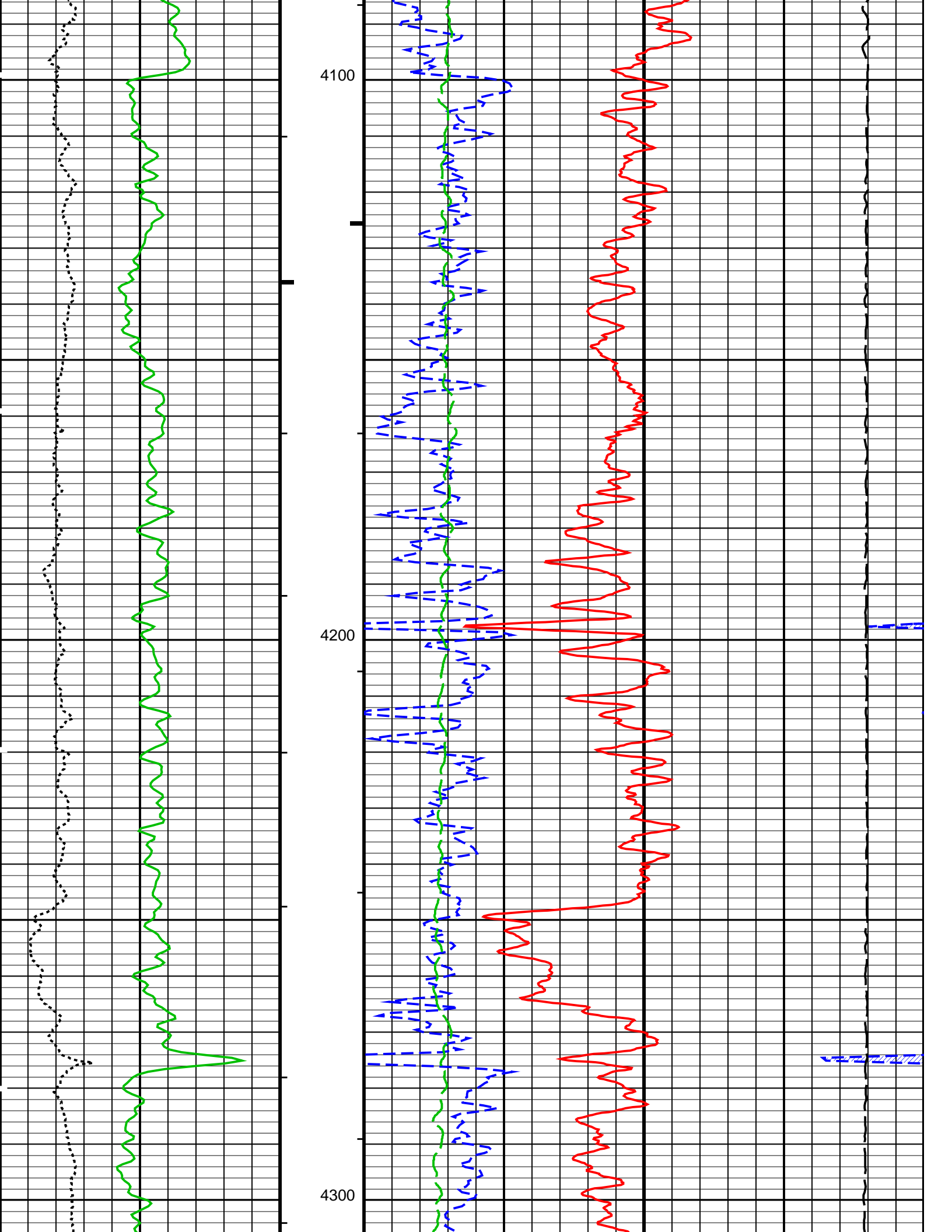
Hole Volume = 1540.83 ft³
Cement Volume = 1067.05 ft³ (assuming 4.50 in casing O.D.)
Computed from 5499.5 ft to 3494.5 ft

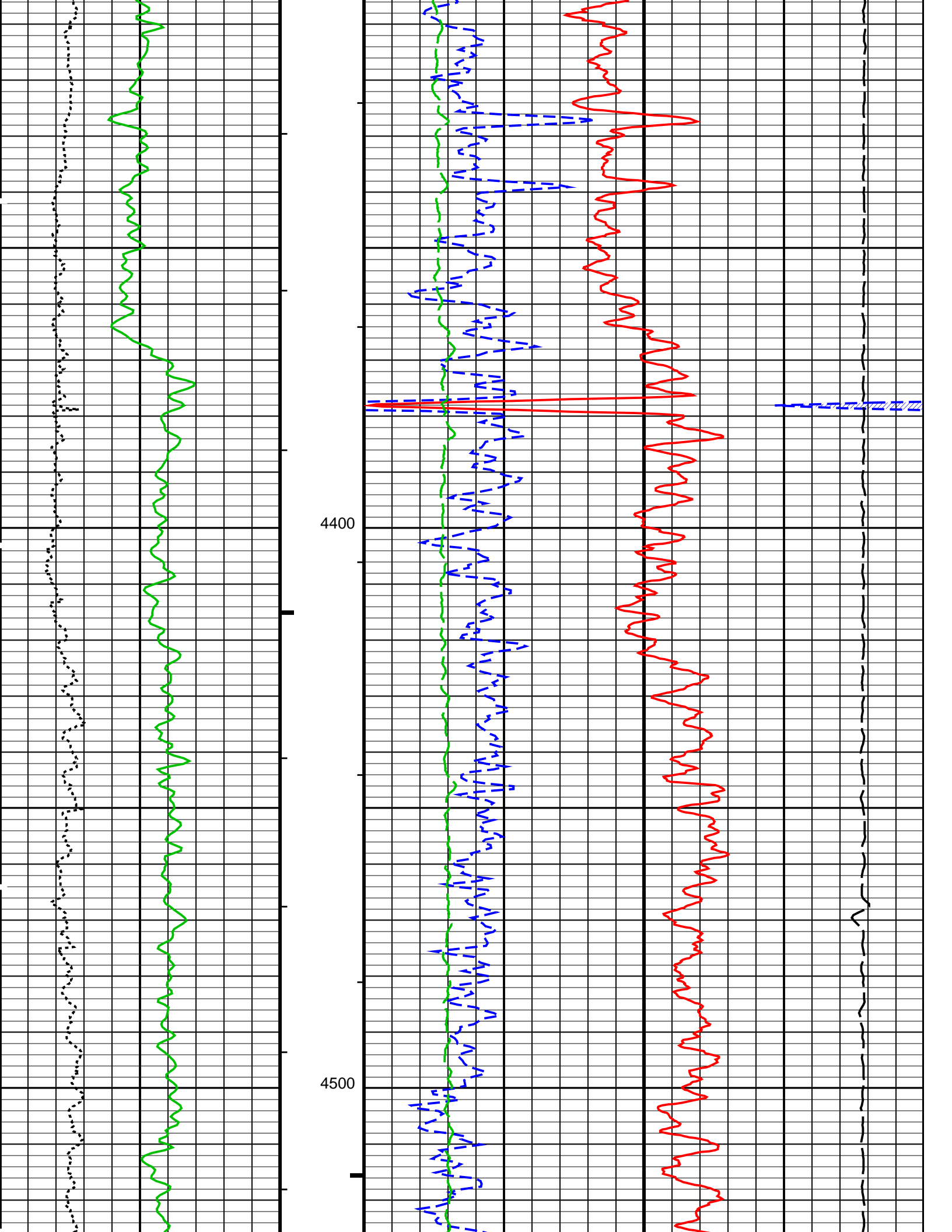
| | | | |
|-------|--------------------|--------|--------------------|
| HILTD | SRPC-3497-NOV_2007 | GPIT-C | SRPC-3497-NOV_2007 |
| DTCH | SRPC-3497-NOV_2007 | | |

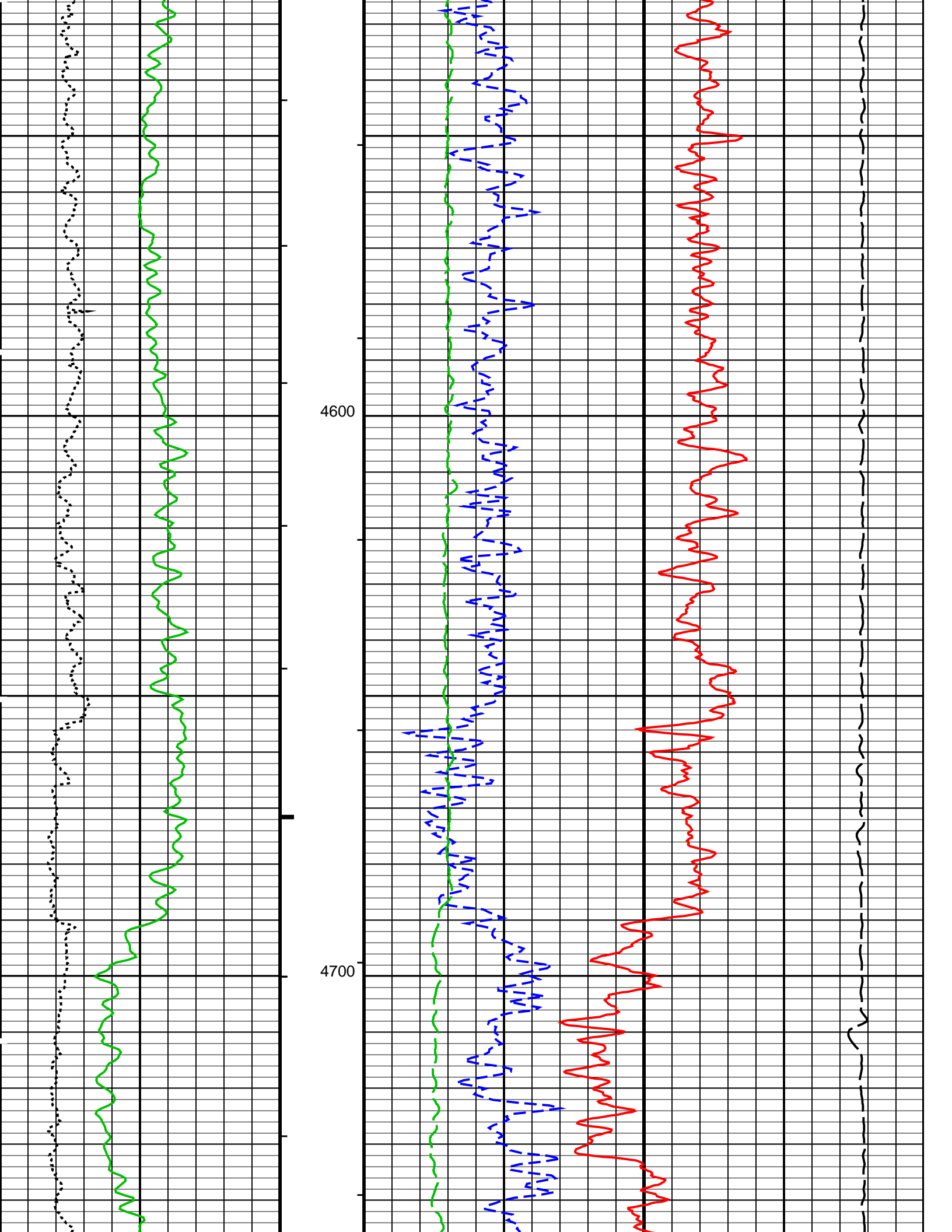
PIP SUMMARY

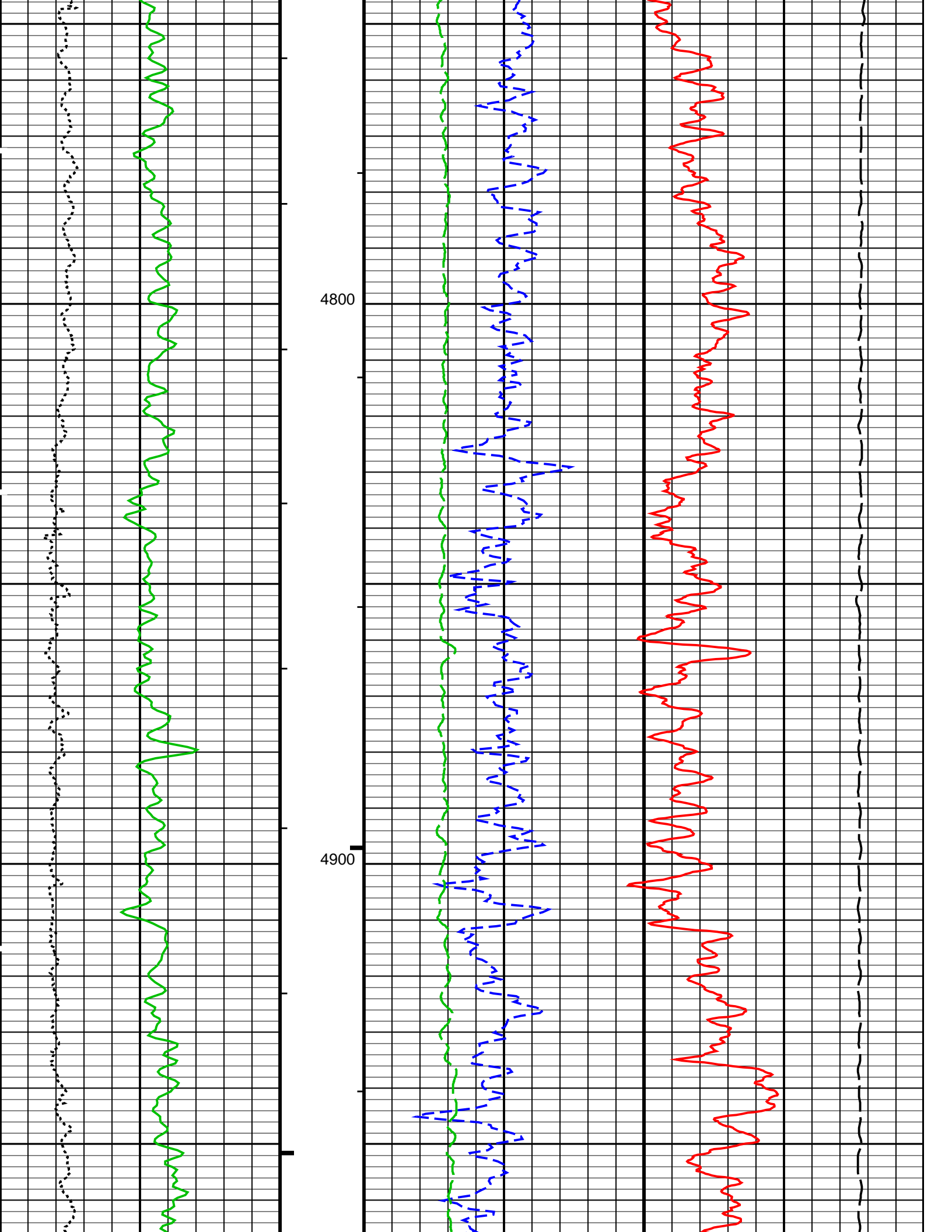


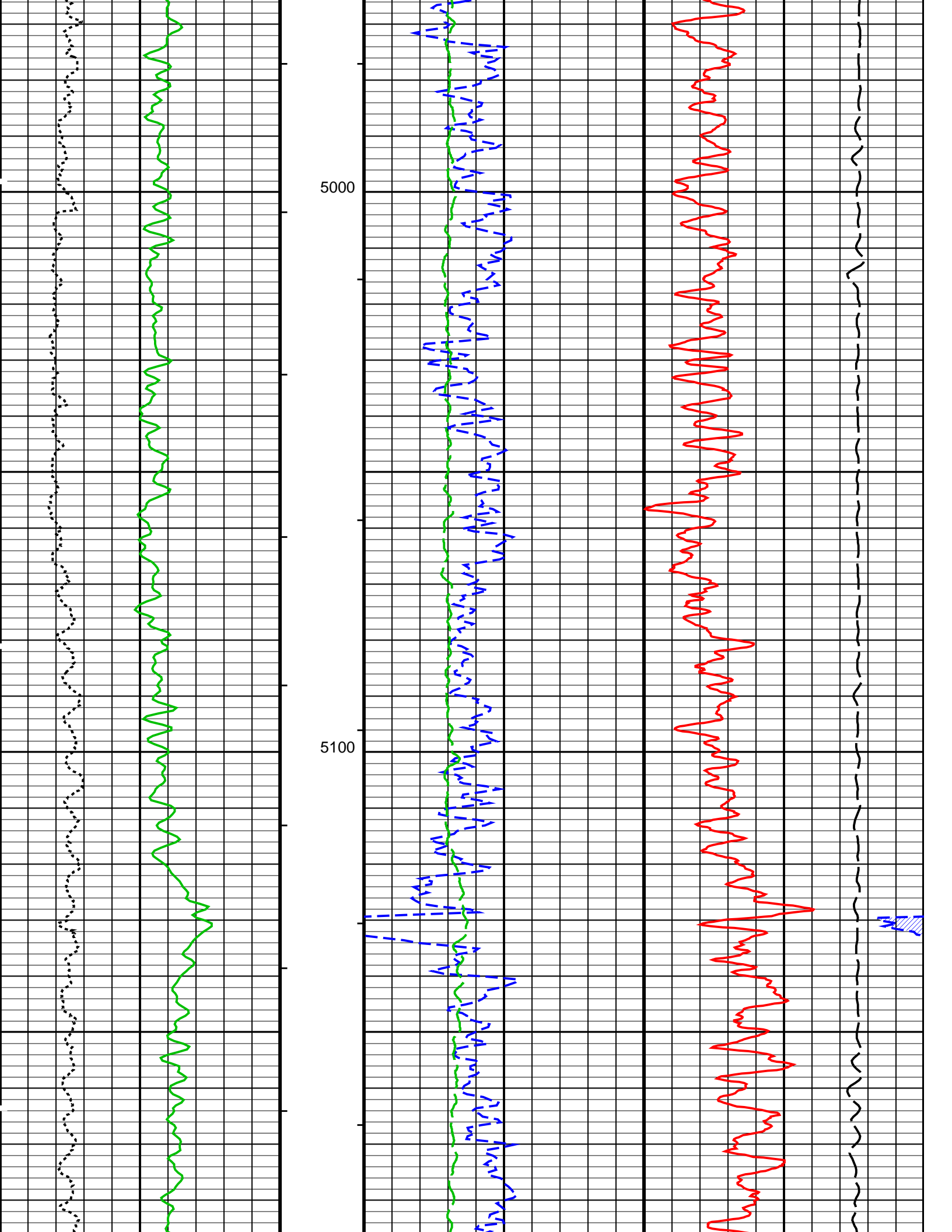


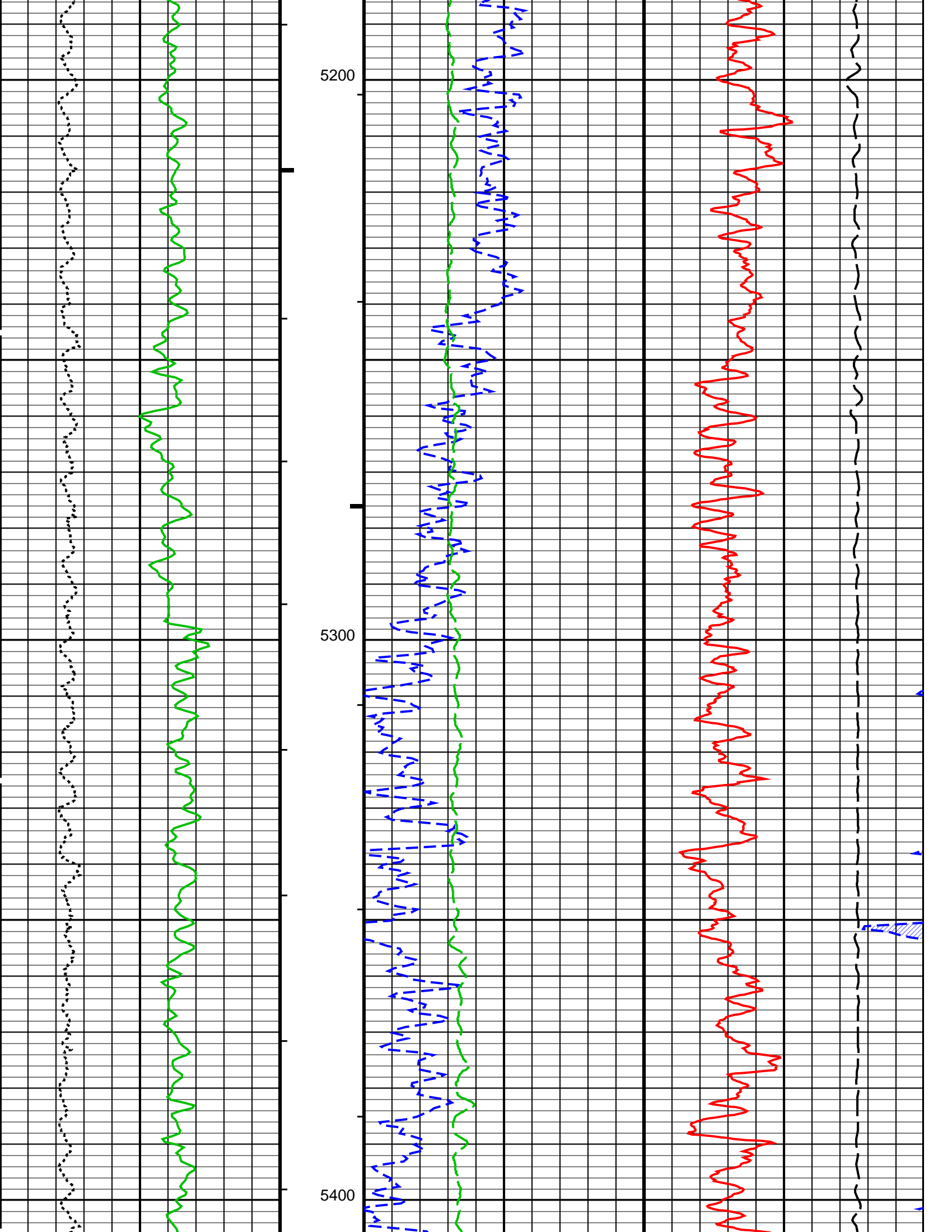


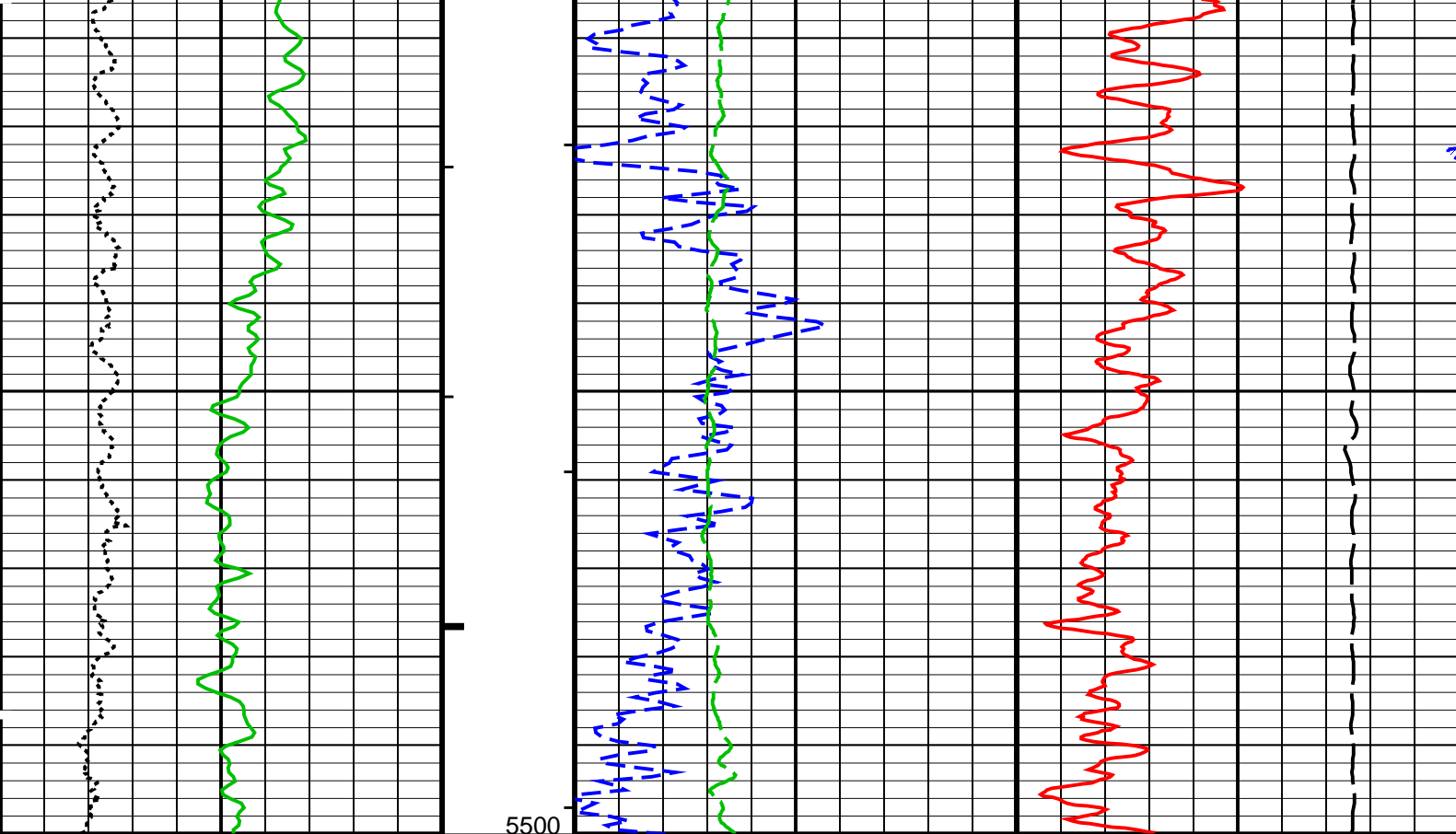




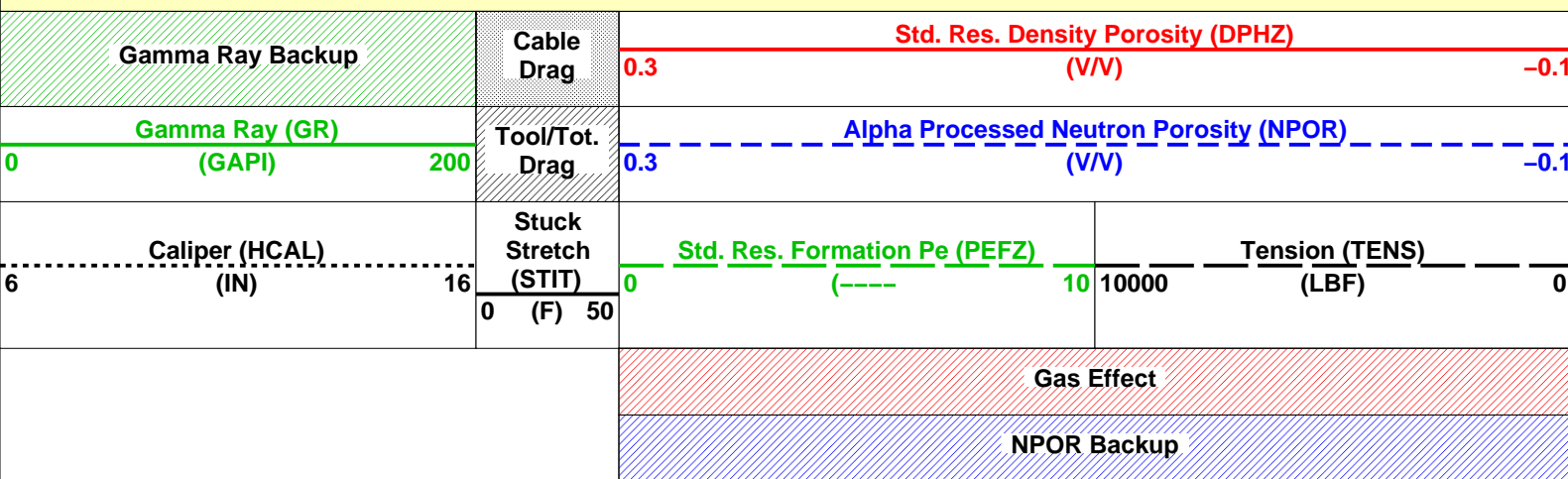








MAIN PASS: *** PLATFORM EXPRESS – NUCLEAR POROSITY ***



PIP SUMMARY

- └ Integrated Hole Volume Minor Pip Every 10 F3
- └ Integrated Hole Volume Major Pip Every 100 F3
- └ Integrated Cement Volume Minor Pip Every 10 F3
- └ Integrated Cement Volume Major Pip Every 100 F3

Time Mark Every 60 S

Parameters

| DLIS Name | Description | Value |
|--|---|---------------|
| HILTB-FTB: High resolution Integrated Logging Tool-DTS | | |
| BHFL | Borehole Fluid Type | WATER |
| BHFL_TLD | HILT Nuclear Mud Base | WATER |
| BHS | Borehole Status | OPEN |
| BSCO | Borehole Salinity Correction Option | NO |
| CCCO | Casing & Cement Thickness Correction Option | NO |
| DHC | Density Hole Correction | BS |
| FD | Fluid Density | 1.000 g/cm3 |
| FSCO | Formation Salinity Correction Option | NO |
| GCLF | Germany Coal-like Formation Option | NO |
| GCSE | Generalized Caliper Selection | HCAL |
| GDEV | Average Angular Deviation of Borehole from Normal | 0.000 deg |
| GGRD | Geothermal Gradient | 0.010 degF/ft |

| | | | |
|--|---|----------|---------|
| HSCO | Hole Size Correction Option | YES | |
| MATR | Rock Matrix for Neutron Porosity Corrections | SAND | |
| MCCO | Mud Cake Correction Option | NO | |
| MCOR | Mud Correction | NATU | |
| MDEN | Matrix Density | 2.650 | g/cm3 |
| MWCO | Mud Weight Correction Option | NO | |
| NAAC | HRDD APS Activation Correction | OFF | |
| NMT | HILT Nuclear Mud Type | NOBARITE | |
| NPRM | HRDD Processing Mode | STDRES | |
| NSAR | HRDD Depth Sampling Rate | 1.000 | in |
| PTCO | Pressure/Temperature Correction Option | NO | |
| SDAT | Standoff Data Source | SOCN | |
| SHT | Surface Hole Temperature | 60.000 | degF |
| SOCN | Standoff Distance | 0.125 | in |
| SOCO | Standoff Correction Option | YES | |
| HOLEV: Integrated Hole/Cement Volume | | | |
| BHS | Borehole Status | OPEN | |
| GCSE | Generalized Caliper Selection | HCAL | |
| GDEV | Average Angular Deviation of Borehole from Normal | 0.000 | deg |
| GGRD | Geothermal Gradient | 0.010 | degF/ft |
| MATR | Rock Matrix for Neutron Porosity Corrections | SAND | |
| SHT | Surface Hole Temperature | 60.000 | degF |
| PERT: Preliminary Evaluation – Real Time | | | |
| BHS | Borehole Status | OPEN | |
| GCSE | Generalized Caliper Selection | HCAL | |
| GDEV | Average Angular Deviation of Borehole from Normal | 0.000 | deg |
| GGRD | Geothermal Gradient | 0.010 | degF/ft |
| MATR | Rock Matrix for Neutron Porosity Corrections | SAND | |
| SHT | Surface Hole Temperature | 60.000 | degF |
| STI: Stuck Tool Indicator | | | |
| STKT | STI Stuck Threshold | 2.500 | ft |
| TDD | Total Depth – Driller | 7769.0 | ft |
| TDL | Total Depth – Logger | 7784.0 | ft |
| System and Miscellaneous | | | |
| BS | Bit Size | 7.875 | in |
| BSAL | Borehole Salinity | | |
| CSIZ | Current Casing Size | 8.625 | in |
| CWEI | Casing Weight | 24.000 | lbm/ft |
| DFD | Drilling Fluid Density | 9.100 | lbm/gal |
| FSAL | Formation Salinity | | |
| MST | Mud Sample Temperature | 60.295 | degF |
| RMFS | Resistivity of Mud Filtrate Sample | 1.701 | ohm.m |

Format: PORO Vertical Scale: 5" per 100' Graphics File Created: 06-Dec-2007 01:30

OP System Version: 15C0-309

MCM

| | | | |
|-------|--------------------|--------|--------------------|
| HILTD | SRPC-3497-NOV_2007 | GPIT-C | SRPC-3497-NOV_2007 |
| DTCH | SRPC-3497-NOV_2007 | | |

Input DLIS Files

| | | | | | | |
|---------|-------------------------|------|----------|-------------------|-----------|--------|
| DEFAULT | AIT_TLD_MCFL_CNL_010LUP | FN:9 | PRODUCER | 06-Dec-2007 00:25 | 7788.0 FT | 0.0 FT |
|---------|-------------------------|------|----------|-------------------|-----------|--------|

Schlumberger

MAIN POROSITY LOG 5" = 100'

MAXIS Field Log

Output DLIS Files

| | | | | |
|---------|-------------------------|------|----------|-------------------|
| DEFAULT | AIT_TLD_MCFL_CNL_010LUP | FN:9 | PRODUCER | 06-Dec-2007 00:25 |
|---------|-------------------------|------|----------|-------------------|

OP System Version: 15C0-309

MCM

| | | | |
|-----------|--------------------|--------|--------------------|
| HILTB-FTB | SRPC-3497-NOV_2007 | GPIT-C | SRPC-3497-NOV_2007 |
| DTC-H | SRPC-3497-NOV_2007 | | |

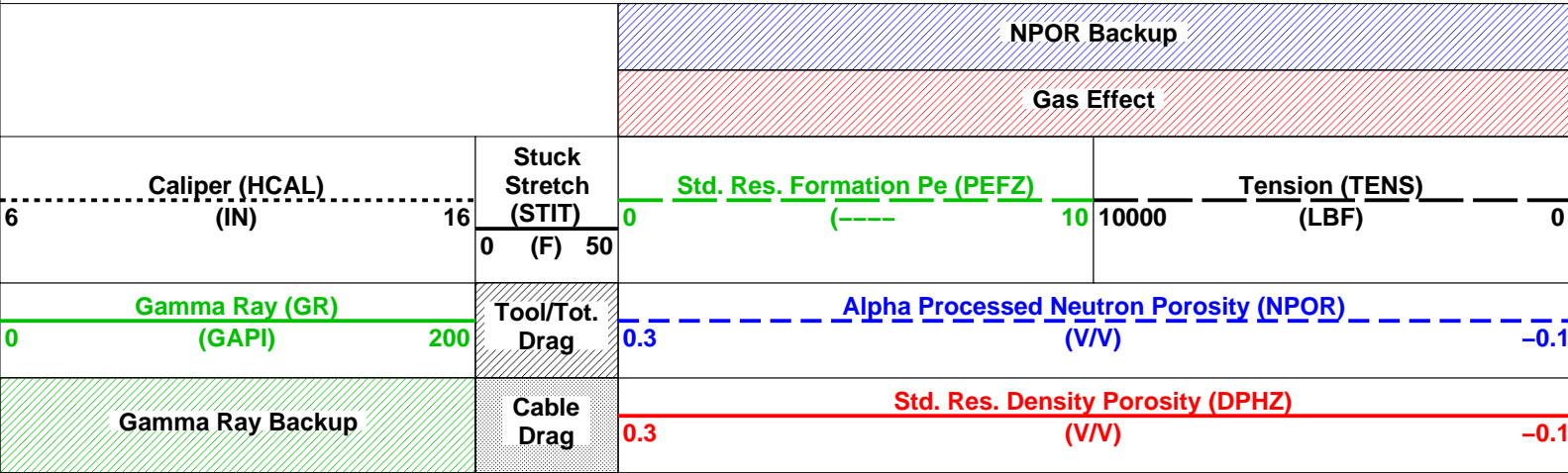
Changed Parameter Summary

| DLIS Name | New Value | Previous Value | Depth & Time |
|-----------|-----------|----------------|-----------------|
| MATR | SANDSTONE | SANDSTONE | 7788.0 00:26:44 |
| MDEN | 2.65 G/C3 | 2.65 G/C3 | 7788.0 00:26:44 |

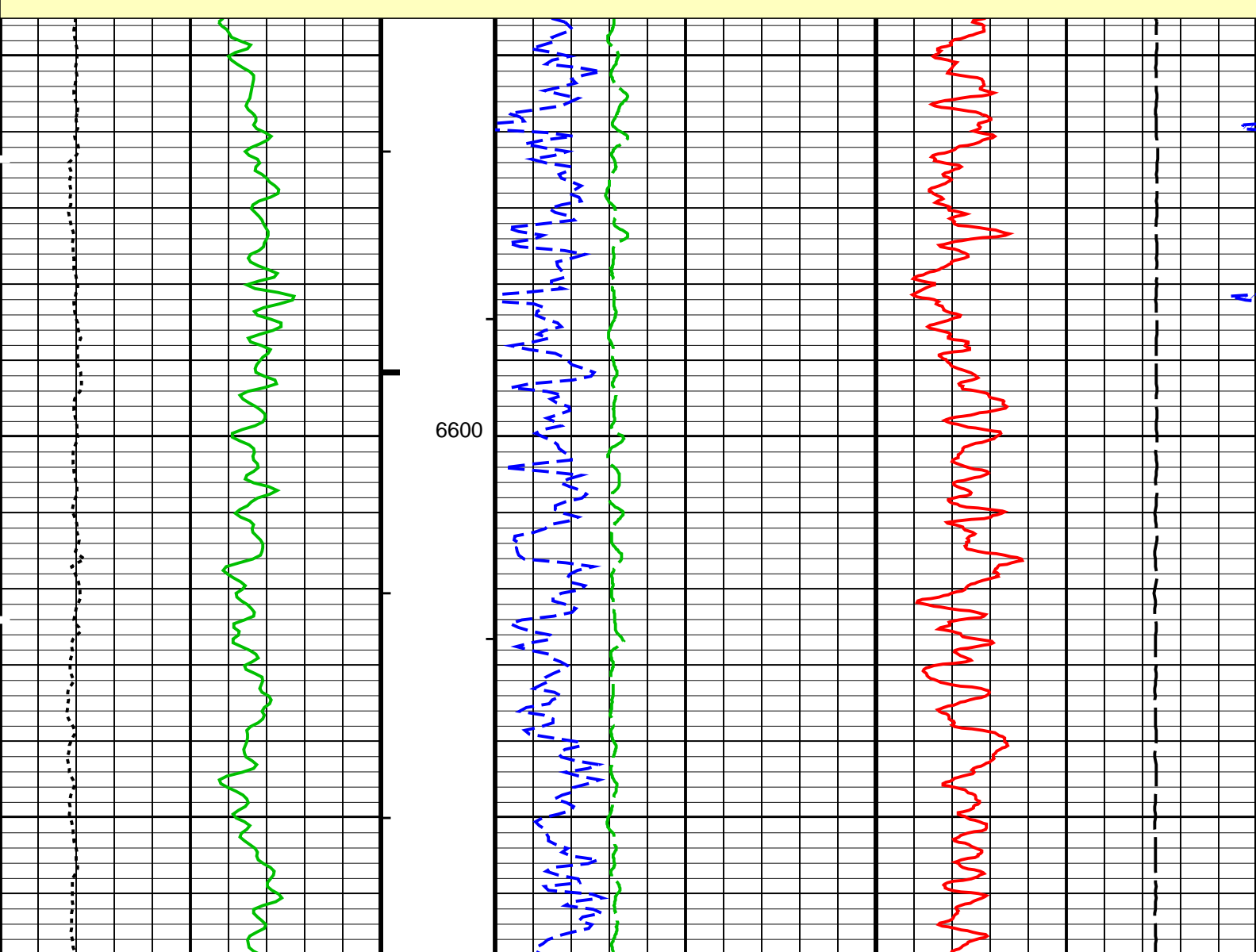
PIP SUMMARY

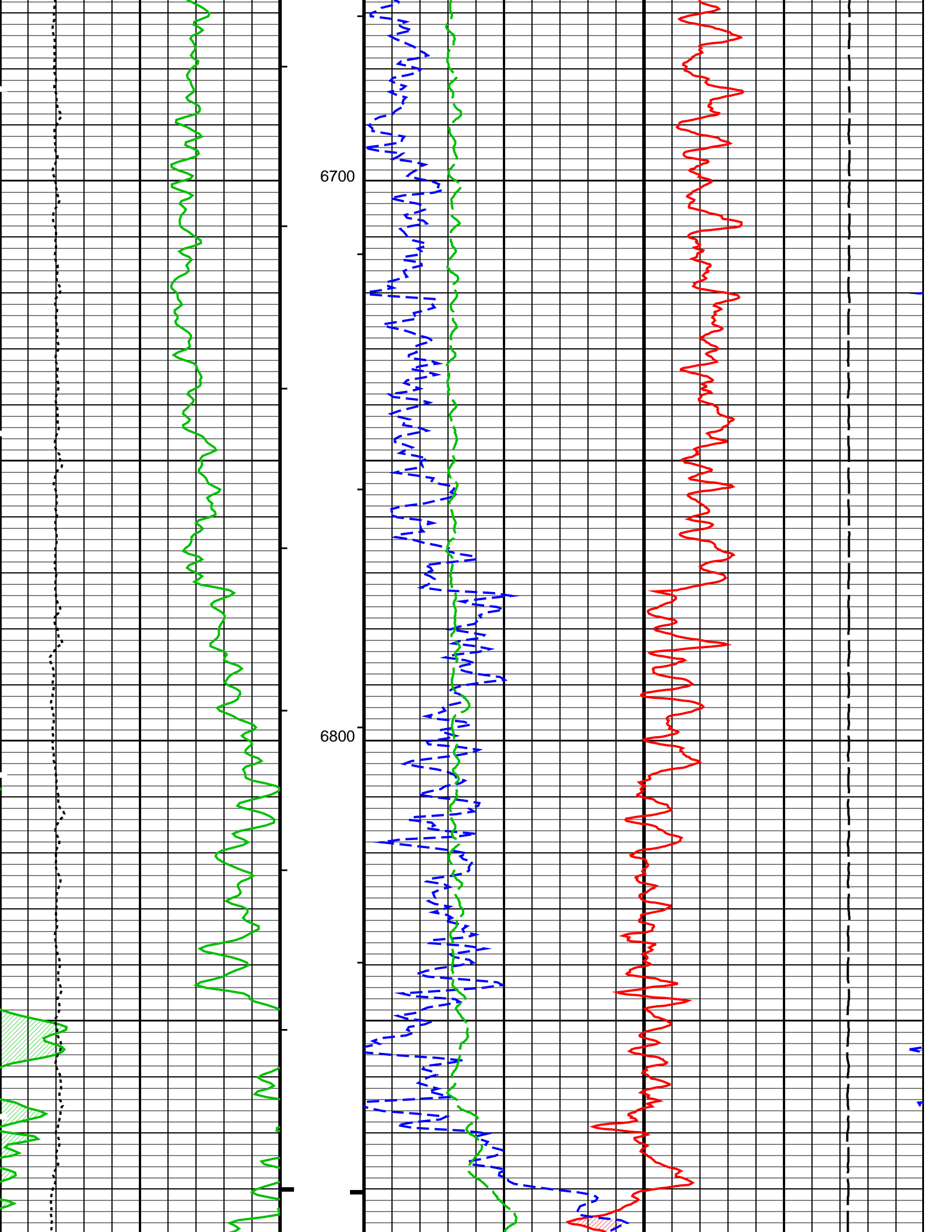
- └ Integrated Hole Volume Minor Pip Every 10 F3
- └ Integrated Hole Volume Major Pip Every 100 F3
- └ Integrated Cement Volume Minor Pip Every 10 F3
- └ Integrated Cement Volume Major Pip Every 100 F3

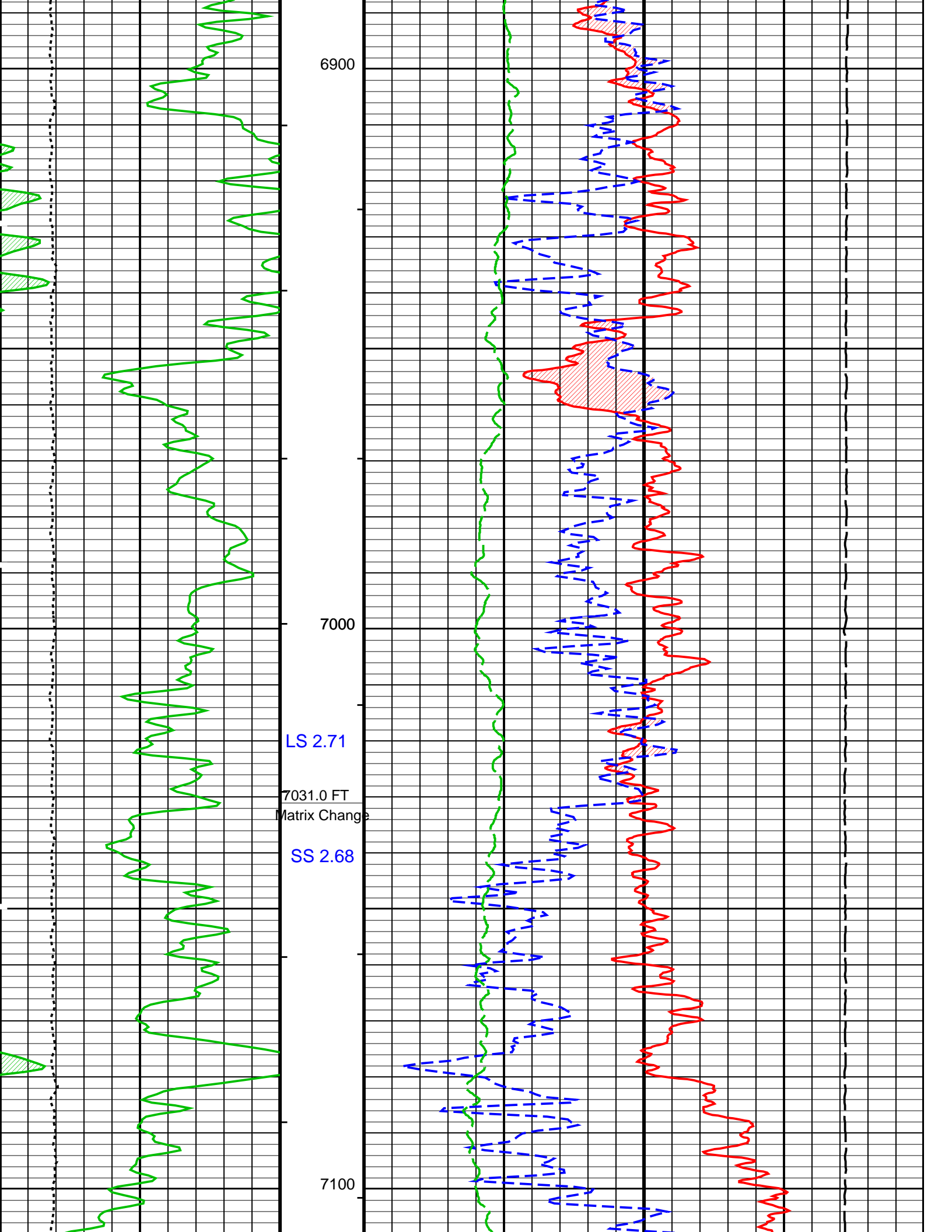
Time Mark Every 60 S

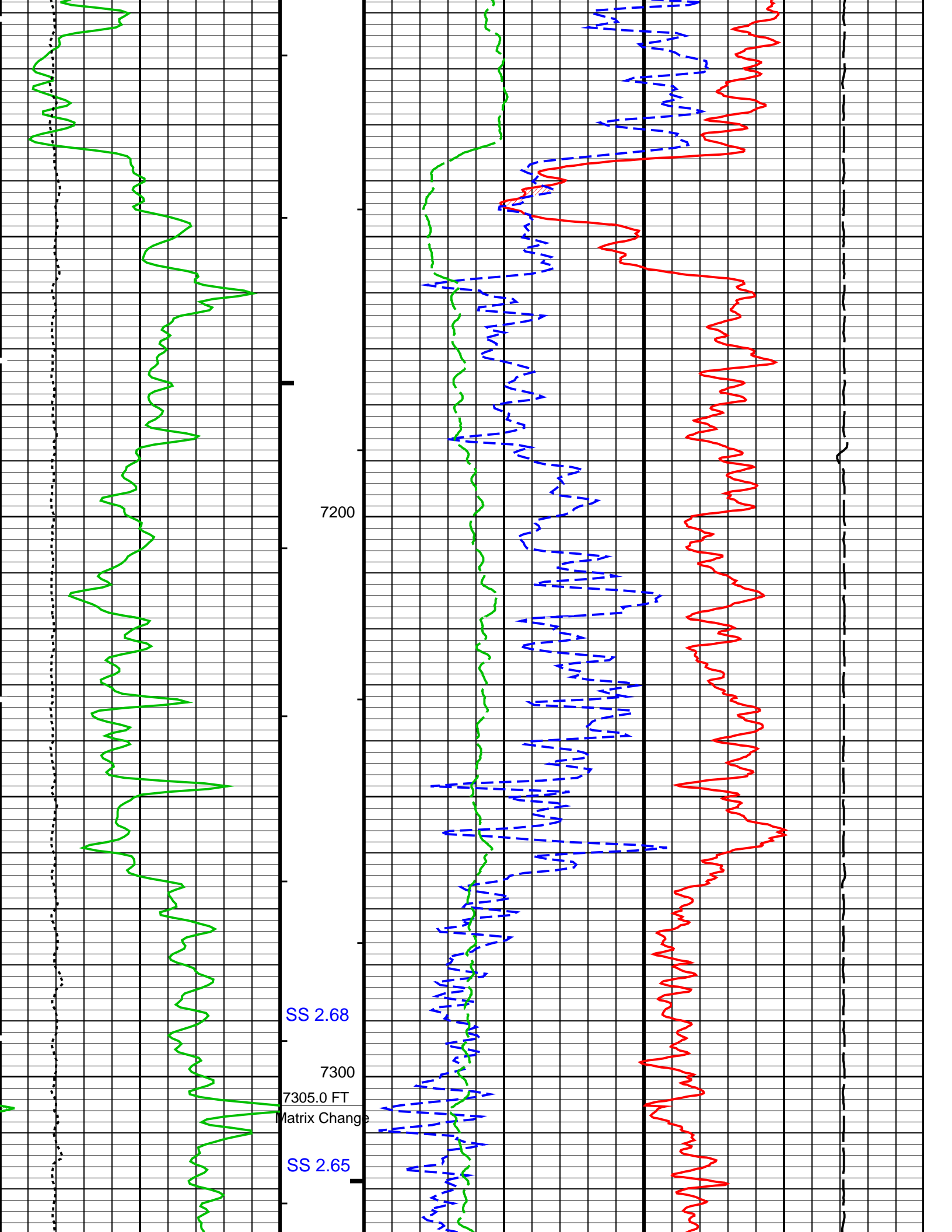


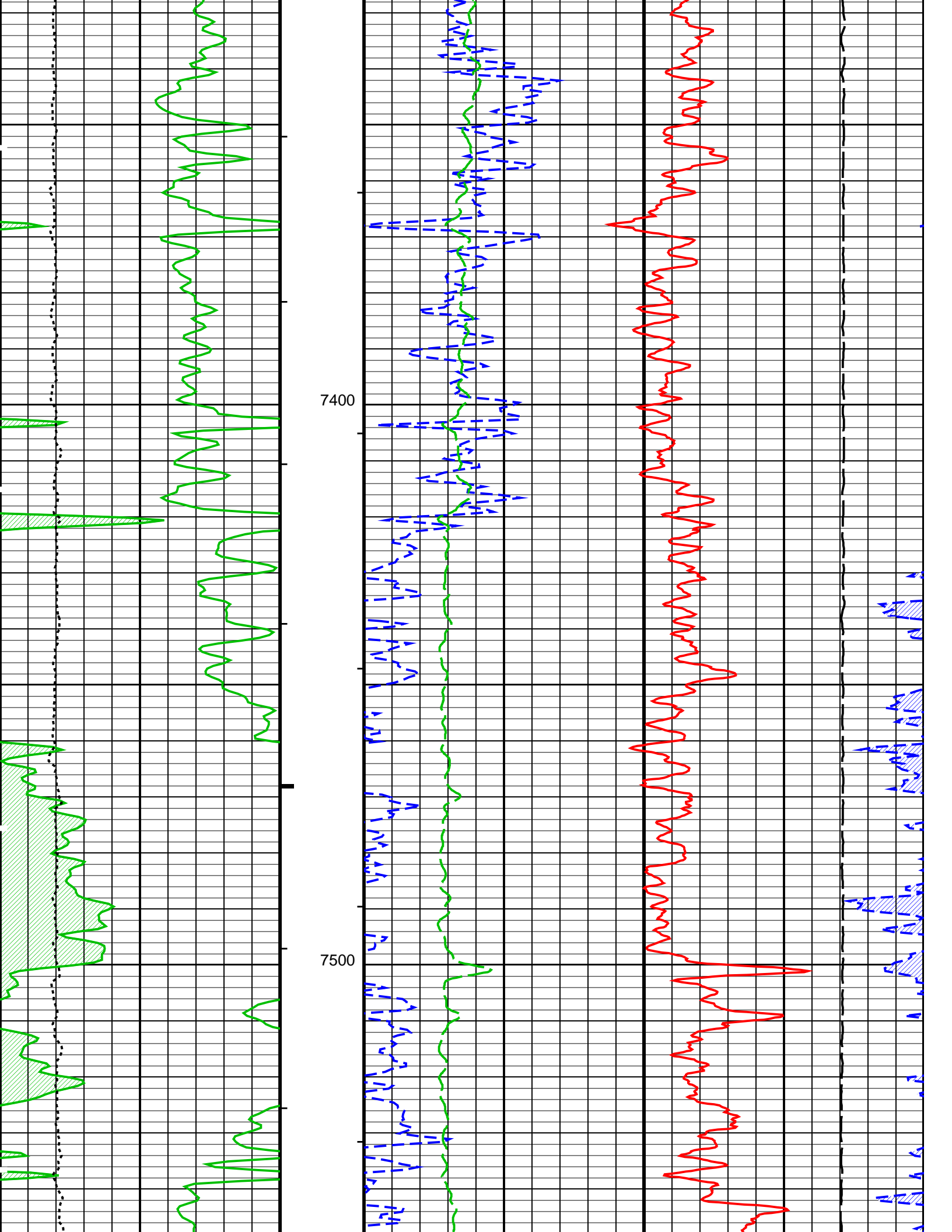
MAIN PASS: *** PLATFORM EXPRESS - NUCLEAR POROSITY ***

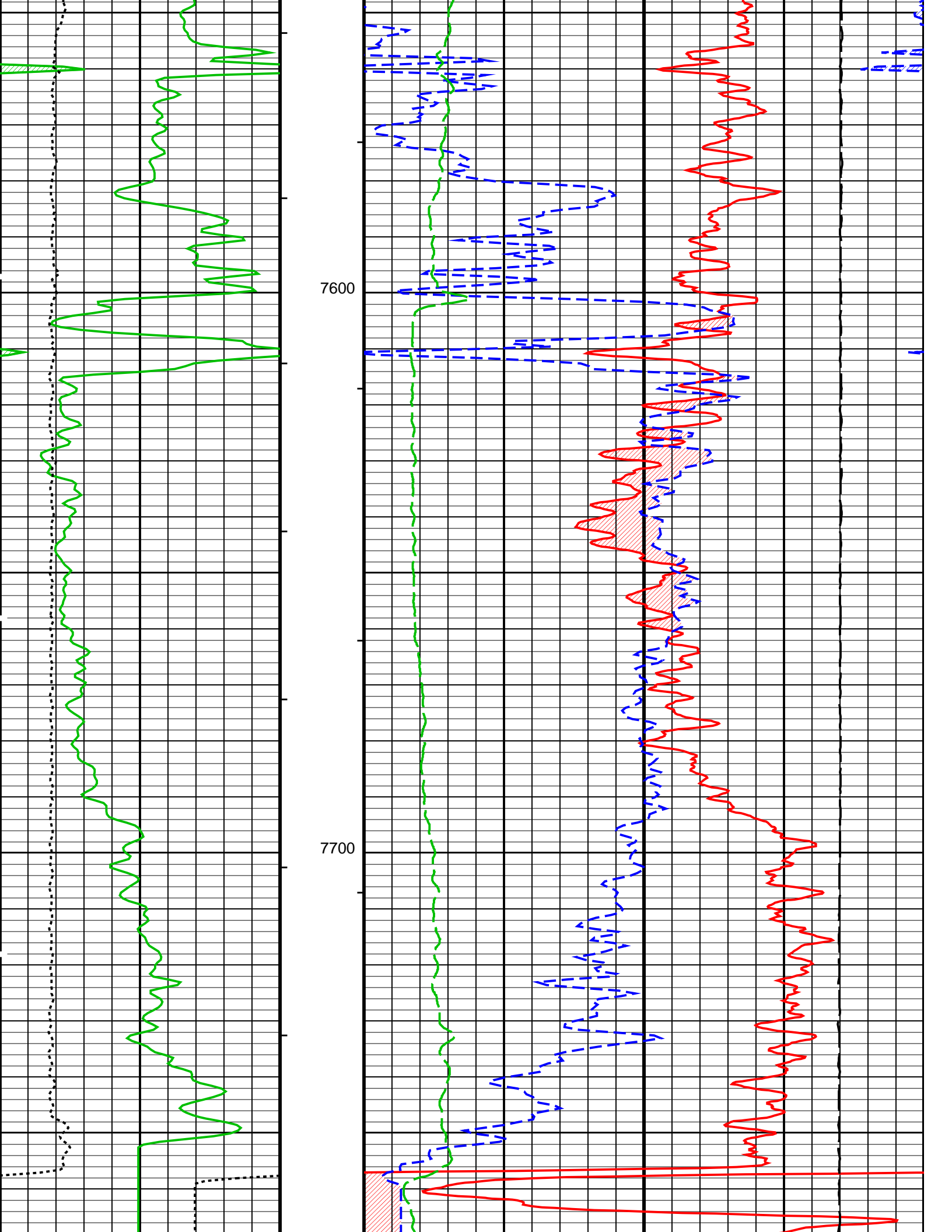


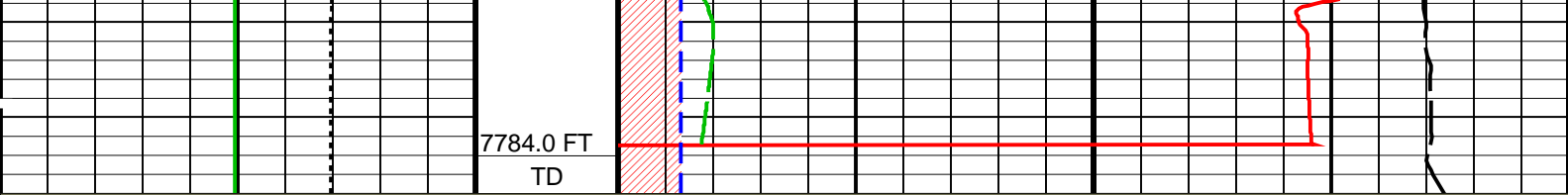












MAIN PASS: *** PLATFORM EXPRESS – NUCLEAR POROSITY ***

| | | | | | |
|--------------------------|----------------------|---|-------|----------------|------|
| Gamma Ray Backup | Cable Drag | Std. Res. Density Porosity (DPHZ) | | | |
| | | 0.3 | (V/V) | | -0.1 |
| Gamma Ray (GR) (GAPI) | Tool/Tot. Drag | Alpha Processed Neutron Porosity (NPOR) | | | |
| 0 | | 0.3 | (V/V) | | -0.1 |
| Caliper (HCAL) (IN) | Stuck Stretch (STIT) | Std. Res. Formation Pe (PEFZ) | | Tension (TENS) | |
| | 0 (F) 50 | 0 | 10 | 10000 | 0 |
| | | Gas Effect | | | |
| | | NPOR Backup | | | |

PIP SUMMARY

- └ Integrated Hole Volume Minor Pip Every 10 F3
- └ Integrated Hole Volume Major Pip Every 100 F3
- └ Integrated Cement Volume Minor Pip Every 10 F3
- └ Integrated Cement Volume Major Pip Every 100 F3

Time Mark Every 60 S

Parameters

| DLIS Name | Description | Value | |
|--|---|-----------|------|
| HILTB–FTB: High resolution Integrated Logging Tool–DTS | | | |
| BHFL | Borehole Fluid Type | WATER | |
| BHFL_TLD | HILT Nuclear Mud Base | WATER | |
| BHS | Borehole Status | OPEN | |
| BSCO | Borehole Salinity Correction Option | NO | |
| CCCO | Casing & Cement Thickness Correction Option | NO | |
| DHC | Density Hole Correction | BS | |
| FD | Fluid Density | 1 | G/C3 |
| FSAL | Formation Salinity | –50000 | PPM |
| FSCO | Formation Salinity Correction Option | NO | |
| GCLF | Germany Coal–like Formation Option | NO | |
| GCSE | Generalized Caliper Selection | HCAL | |
| GDEV | Average Angular Deviation of Borehole from Normal | 0 | DEG |
| GGRD | Geothermal Gradient | 0.01 | DF/F |
| HSCO | Hole Size Correction Option | YES | |
| MATR | Rock Matrix for Neutron Porosity Corrections | SANDSTONE | |
| MCCO | Mud Cake Correction Option | NO | |
| MCOR | Mud Correction | NATU | |
| MDEN | Matrix Density | 2.65 | G/C3 |
| MWCO | Mud Weight Correction Option | NO | |
| NAAC | HRDD APS Activation Correction | OFF | |
| NMT | HILT Nuclear Mud Type | NOBARITE | |
| NPRM | HRDD Processing Mode | StdRes | |
| NSAR | HRDD Depth Sampling Rate | 1 | IN |
| PTCO | Pressure/Temperature Correction Option | NO | |
| SDAT | Standoff Data Source | SOCN | |
| SHT | Surface Hole Temperature | 60 | DEGF |
| SOCN | Standoff Distance | 0.125 | IN |
| SOCO | Standoff Correction Option | YES | |
| HOLEV: Integrated Hole/Cement Volume | | | |
| BHS | Borehole Status | OPEN | |
| FCD | Future Casing (Outer) Diameter | 4.5 | IN |
| GCSE | Generalized Caliper Selection | HCAL | |
| GDEV | Average Angular Deviation of Borehole from Normal | 0 | DEG |
| GGRD | Geothermal Gradient | 0.01 | DF/F |
| HVCS | Integrated Hole Volume Caliper Selection | HCAL | |
| MATR | Rock Matrix for Neutron Porosity Corrections | SANDSTONE | |
| SHT | Surface Hole Temperature | 60 | DEGF |
| PERT: Preliminary Evaluation – Real Time | | | |
| BHS | Borehole Status | OPEN | |
| GCSE | Generalized Caliper Selection | HCAL | |
| GDEV | Average Angular Deviation of Borehole from Normal | 0 | DEG |

| | | | |
|---------------------------|---|-----------|------|
| GGRD | Average Rigular Deviation of Borehole from Normal | 0.01 | DF/F |
| MATR | Rock Matrix for Neutron Porosity Corrections | SANDSTONE | |
| SHT | Surface Hole Temperature | 60 | DEGF |
| STI: Stuck Tool Indicator | | | |
| LBFR | Trigger for MAXIS First Reading Label | STI | |
| STKT | STI Stuck Threshold | 2.5 | FT |
| TDD | Total Depth - Driller | 7769.00 | FT |
| TDL | Total Depth - Logger | 7784.00 | FT |
| System and Miscellaneous | | | |
| BS | Bit Size | 7.875 | IN |
| BSAL | Borehole Salinity | -50000.00 | PPM |
| CSIZ | Current Casing Size | 8.625 | IN |
| CWEI | Casing Weight | 24.00 | LB/F |
| DFD | Drilling Fluid Density | 9.10 | LB/G |
| DORL | Depth Offset for Repeat Analysis | 0.0 | FT |
| MST | Mud Sample Temperature | 60.29 | DEGF |
| RMFS | Resistivity of Mud Filtrate Sample | 1.7010 | OHMM |
| TD | Total Depth | 7784 | FT |


Format: LOWER_PORO

Vertical Scale: 5" per 100'

Graphics File Created: 06-Dec-2007 00:25

| | | | |
|-----------------------------|--------------------|--------|--------------------|
| OP System Version: 15C0-309 | | | |
| MCM | | | |
| HILTB-FTB | SRPC-3497-NOV_2007 | GPIT-C | SRPC-3497-NOV_2007 |
| DTC-H | SRPC-3497-NOV_2007 | | |

| | | | |
|-------------------|-------------------------|------|----------------------------|
| Output DLIS Files | | | |
| DEFAULT | AIT_TLD_MCFL_CNL_010LUP | FN:9 | PRODUCER 06-Dec-2007 00:25 |



REPEAT ANALYSIS

MAXIS Field Log

| | | | | | |
|------------------|-------------------------|------|----------|-------------------|---------------------|
| Input DLIS Files | | | | | |
| DEFAULT | AIT_TLD_MCFL_CNL_005PUP | FN:4 | PRODUCER | 06-Dec-2007 00:18 | 7802.0 FT 7434.5 FT |

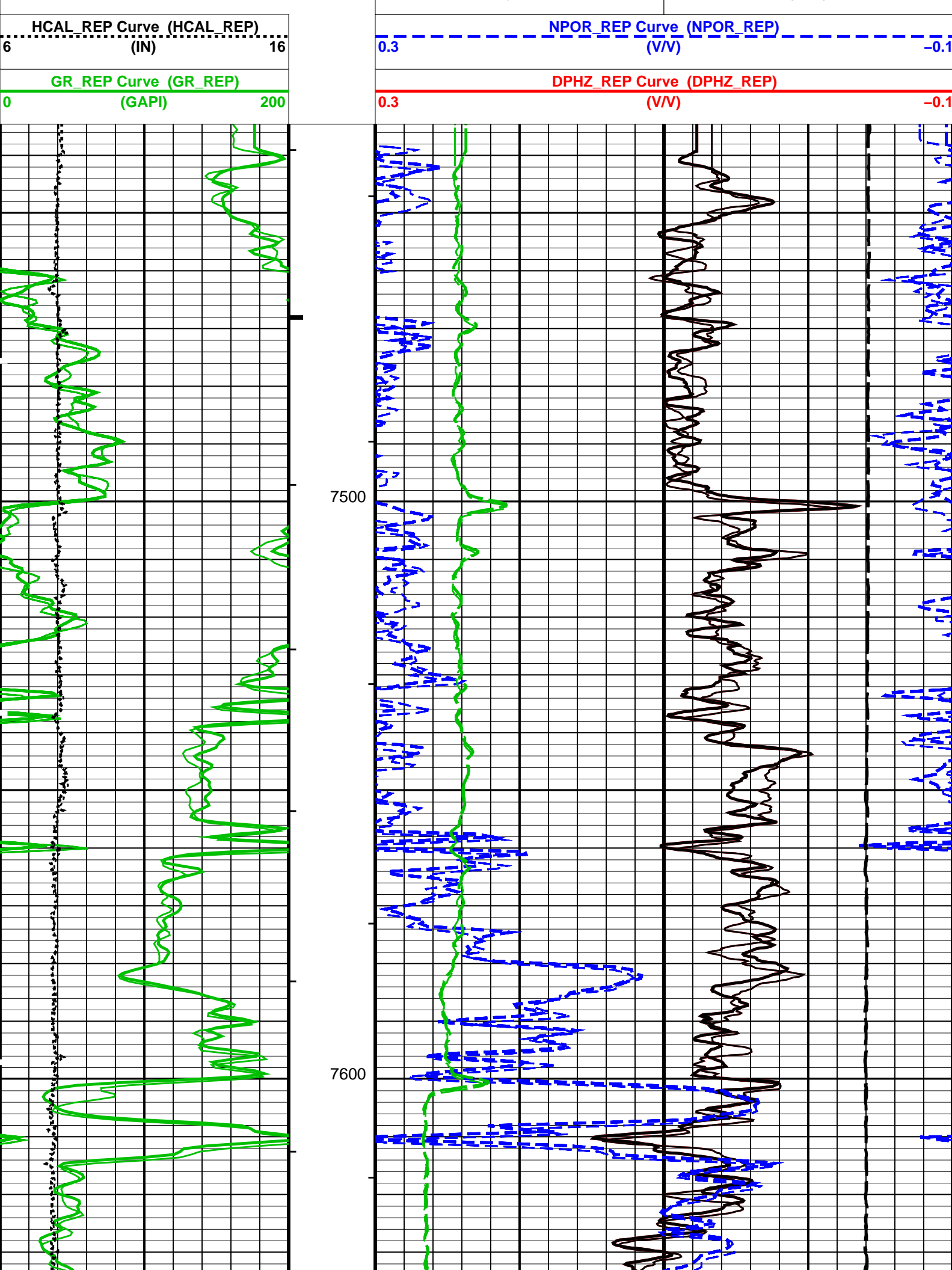
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|-------------------|-------------------------|------|----------|-------------------|--|
| Output DLIS Files | | | | | |
| DEFAULT | AIT_TLD_MCFL_CNL_010LUP | FN:9 | PRODUCER | 06-Dec-2007 00:25 | |

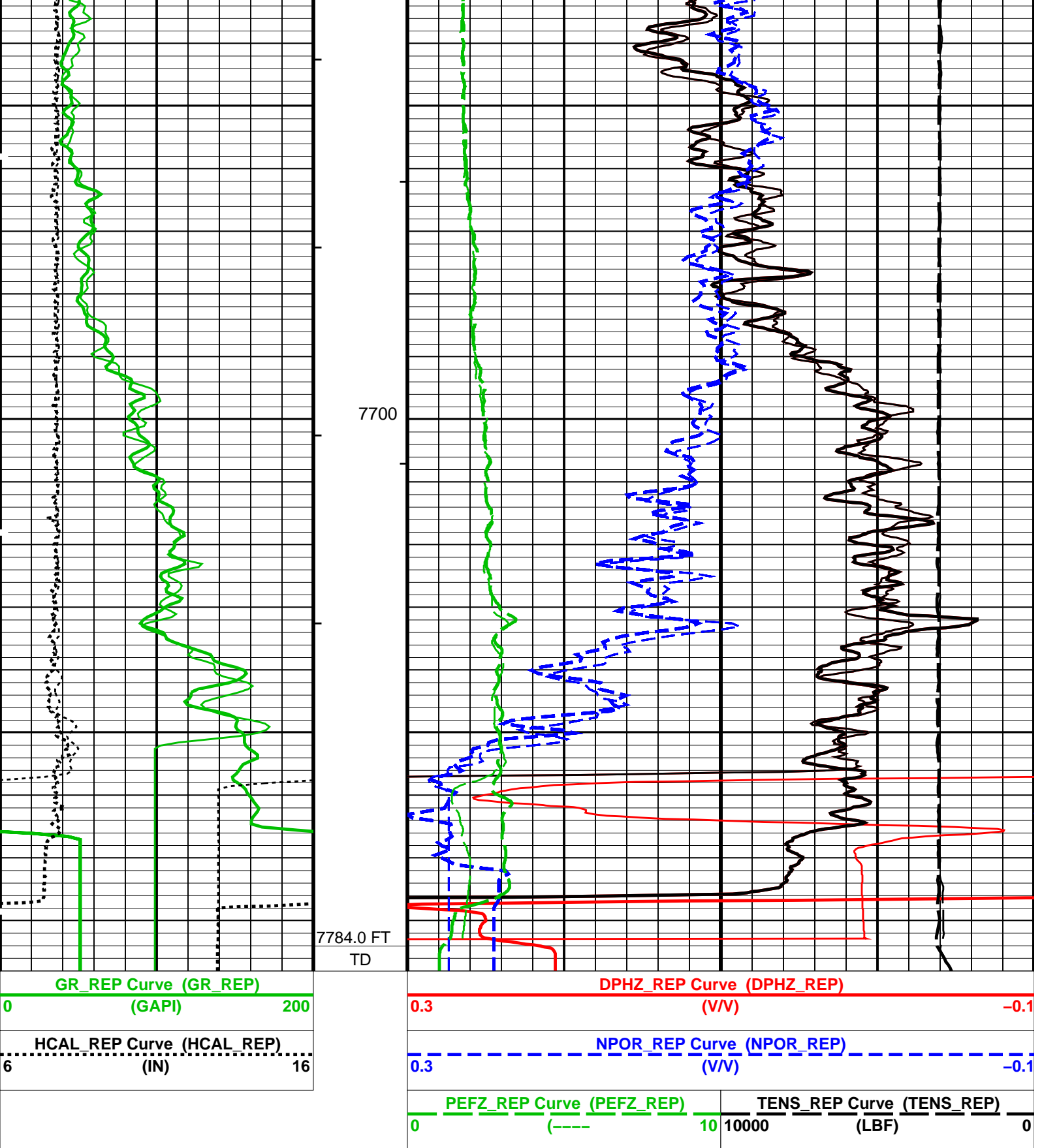
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|-----------------------------|--------------------|--------|--------------------|
| OP System Version: 15C0-309 | | | |
| MCM | | | |
| HILTB-FTB | SRPC-3497-NOV_2007 | GPIT-C | SRPC-3497-NOV_2007 |
| DTC-H | SRPC-3497-NOV_2007 | | |

| | | | |
|---------------------------|-----------|----------------|-----------------|
| Changed Parameter Summary | | | |
| DLIS Name | New Value | Previous Value | Depth & Time |
| MATR | SANDSTONE | SANDSTONE | 7788.0 00:26:44 |
| MDEN | 2.65 G/C3 | 2.65 G/C3 | 7788.0 00:26:44 |

| | | | |
|---|--|--|--|
| PIP SUMMARY | | | |
| └ Integrated Hole Volume Minor Pip Every 10 F3 | | | |
| └ Integrated Hole Volume Major Pip Every 100 F3 | | | |
| └ Integrated Cement Volume Minor Pip Every 10 F3 | | | |
| └ Integrated Cement Volume Major Pip Every 100 F3 | | | |
| Time Mark Every 60 S | | | |







Parameters

| DLIS Name | Description | Value |
|-----------|-------------|-------|
|-----------|-------------|-------|

HII TR-ETR: High resolution Integrated Logging Tool-DTS

| | | | |
|--|---|-----------|------|
| BHFL | Borehole Fluid Type | WATER | |
| BHFL_TLD | HILT Nuclear Mud Base | WATER | |
| BHS | Borehole Status | OPEN | |
| BSCO | Borehole Salinity Correction Option | NO | |
| CCCO | Casing & Cement Thickness Correction Option | NO | |
| DHC | Density Hole Correction | BS | |
| FD | Fluid Density | 1 | G/C3 |
| FSAL | Formation Salinity | -50000 | PPM |
| FSCO | Formation Salinity Correction Option | NO | |
| GCLF | Germany Coal-like Formation Option | NO | |
| GCSE | Generalized Caliper Selection | HCAL | |
| GDEV | Average Angular Deviation of Borehole from Normal | 0 | DEG |
| GGRD | Geothermal Gradient | 0.01 | DF/F |
| HSCO | Hole Size Correction Option | YES | |
| MATR | Rock Matrix for Neutron Porosity Corrections | SANDSTONE | |
| MCCO | Mud Cake Correction Option | NO | |
| MCOR | Mud Correction | NATU | |
| MDEN | Matrix Density | 2.65 | G/C3 |
| MWCO | Mud Weight Correction Option | NO | |
| NAAC | HRDD APS Activation Correction | OFF | |
| NMT | HILT Nuclear Mud Type | NOBARITE | |
| NPRM | HRDD Processing Mode | StdRes | |
| NSAR | HRDD Depth Sampling Rate | 1 | IN |
| PTCO | Pressure/Temperature Correction Option | NO | |
| SDAT | Standoff Data Source | SOCN | |
| SHT | Surface Hole Temperature | 60 | DEGF |
| SOCN | Standoff Distance | 0.125 | IN |
| SOCO | Standoff Correction Option | YES | |
| HOLEV: Integrated Hole/Cement Volume | | | |
| BHS | Borehole Status | OPEN | |
| FCD | Future Casing (Outer) Diameter | 4.5 | IN |
| GCSE | Generalized Caliper Selection | HCAL | |
| GDEV | Average Angular Deviation of Borehole from Normal | 0 | DEG |
| GGRD | Geothermal Gradient | 0.01 | DF/F |
| HVCS | Integrated Hole Volume Caliper Selection | HCAL | |
| MATR | Rock Matrix for Neutron Porosity Corrections | SANDSTONE | |
| SHT | Surface Hole Temperature | 60 | DEGF |
| PERT: Preliminary Evaluation – Real Time | | | |
| BHS | Borehole Status | OPEN | |
| GCSE | Generalized Caliper Selection | HCAL | |
| GDEV | Average Angular Deviation of Borehole from Normal | 0 | DEG |
| GGRD | Geothermal Gradient | 0.01 | DF/F |
| MATR | Rock Matrix for Neutron Porosity Corrections | SANDSTONE | |
| SHT | Surface Hole Temperature | 60 | DEGF |
| STI: Stuck Tool Indicator | | | |
| TDL | Total Depth – Logger | 7784.00 | FT |
| System and Miscellaneous | | | |
| BS | Bit Size | 7.875 | IN |
| BSAL | Borehole Salinity | -50000.00 | PPM |
| CSIZ | Current Casing Size | 8.625 | IN |
| CWEI | Casing Weight | 24.00 | LB/F |
| DFD | Drilling Fluid Density | 9.10 | LB/G |
| DORL | Depth Offset for Repeat Analysis | 0.0 | FT |
| MST | Mud Sample Temperature | 60.29 | DEGF |
| RMFS | Resistivity of Mud Filtrate Sample | 1.7010 | OHMM |
| TD | Total Depth | 7784 | FT |

Format: PORO_REP Vertical Scale: 5" per 100' Graphics File Created: 06-Dec-2007 00:25

OP System Version: 15C0-309

MCM

| | | | |
|-----------|--------------------|--------|--------------------|
| HILTB-FTB | SRPC-3497-NOV_2007 | GPIT-C | SRPC-3497-NOV_2007 |
| DTC-H | SRPC-3497-NOV_2007 | | |

Input DLIS Files

| | | | | | | |
|---------|-------------------------|------|----------|-------------------|-----------|-----------|
| DEFAULT | AIT_TLD_MCFL_CNL_005PUP | FN:4 | PRODUCER | 06-Dec-2007 00:18 | 7802.0 FT | 7434.5 FT |
|---------|-------------------------|------|----------|-------------------|-----------|-----------|

Output DLIS Files

| | | | | |
|---------|-------------------------|------|----------|-------------------|
| DEFAULT | AIT_TLD_MCFL_CNL_010LUP | FN:9 | PRODUCER | 06-Dec-2007 00:25 |
|---------|-------------------------|------|----------|-------------------|

Input DLIS Files

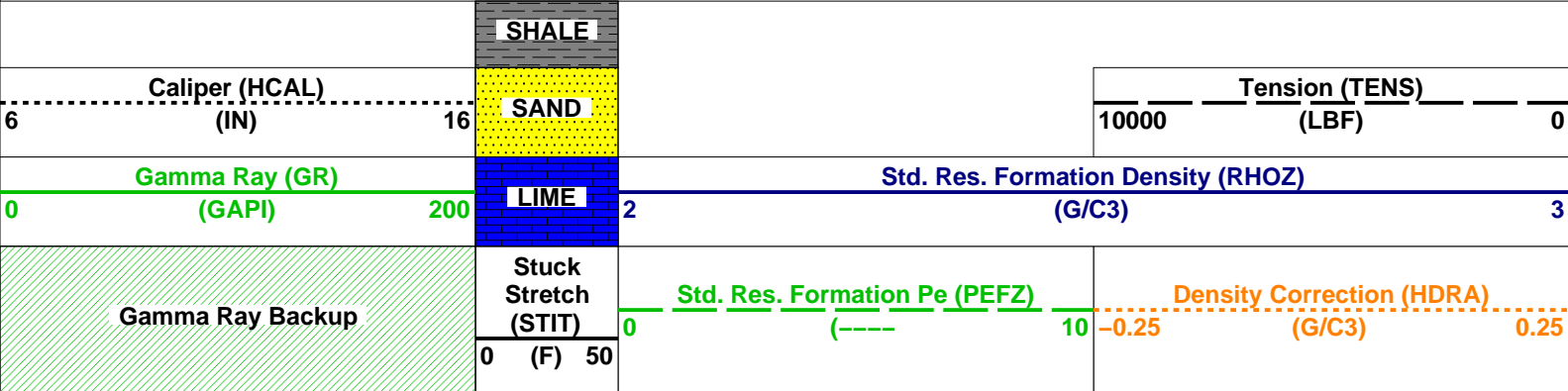
DEFAULT AIT_TLD_MCFL_CNL_010LUP FN:9 PRODUCER 06-Dec-2007 00:25 7788.0 FT 0.0 FT

OP System Version: 15C0-309
MCM

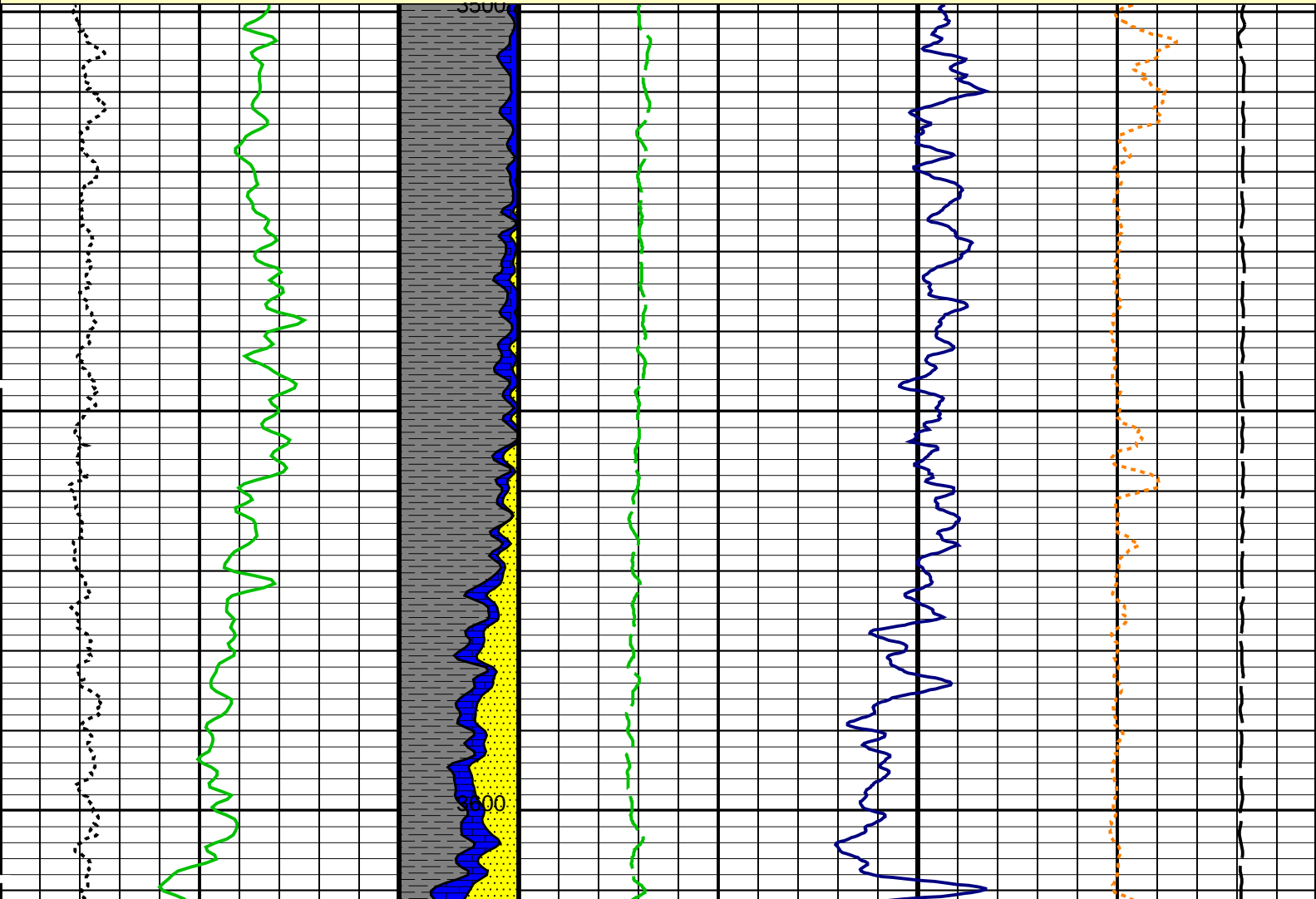
HILTD SRPC-3497-NOV_2007 GPIT-C SRPC-3497-NOV_2007
DTCH SRPC-3497-NOV_2007

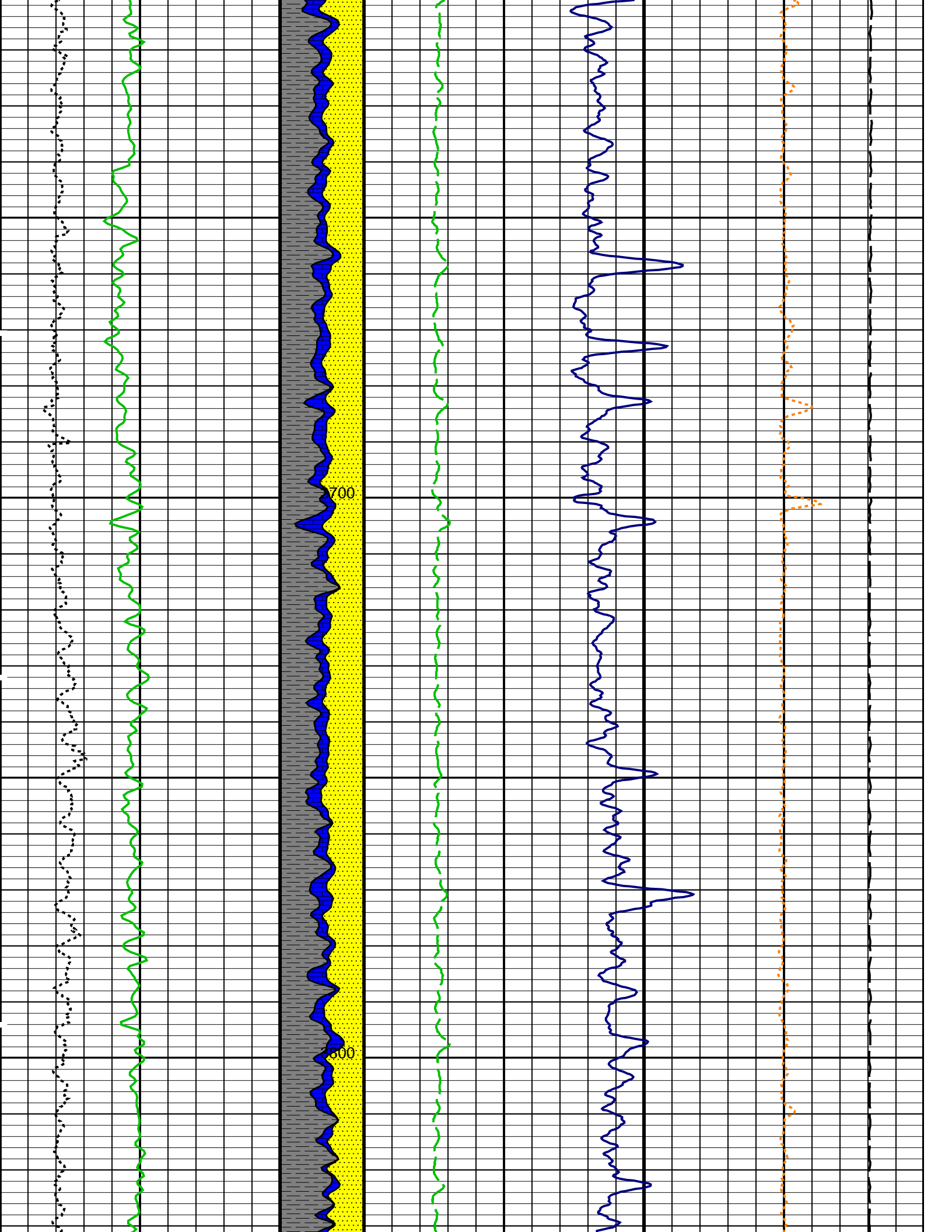
PIP SUMMARY

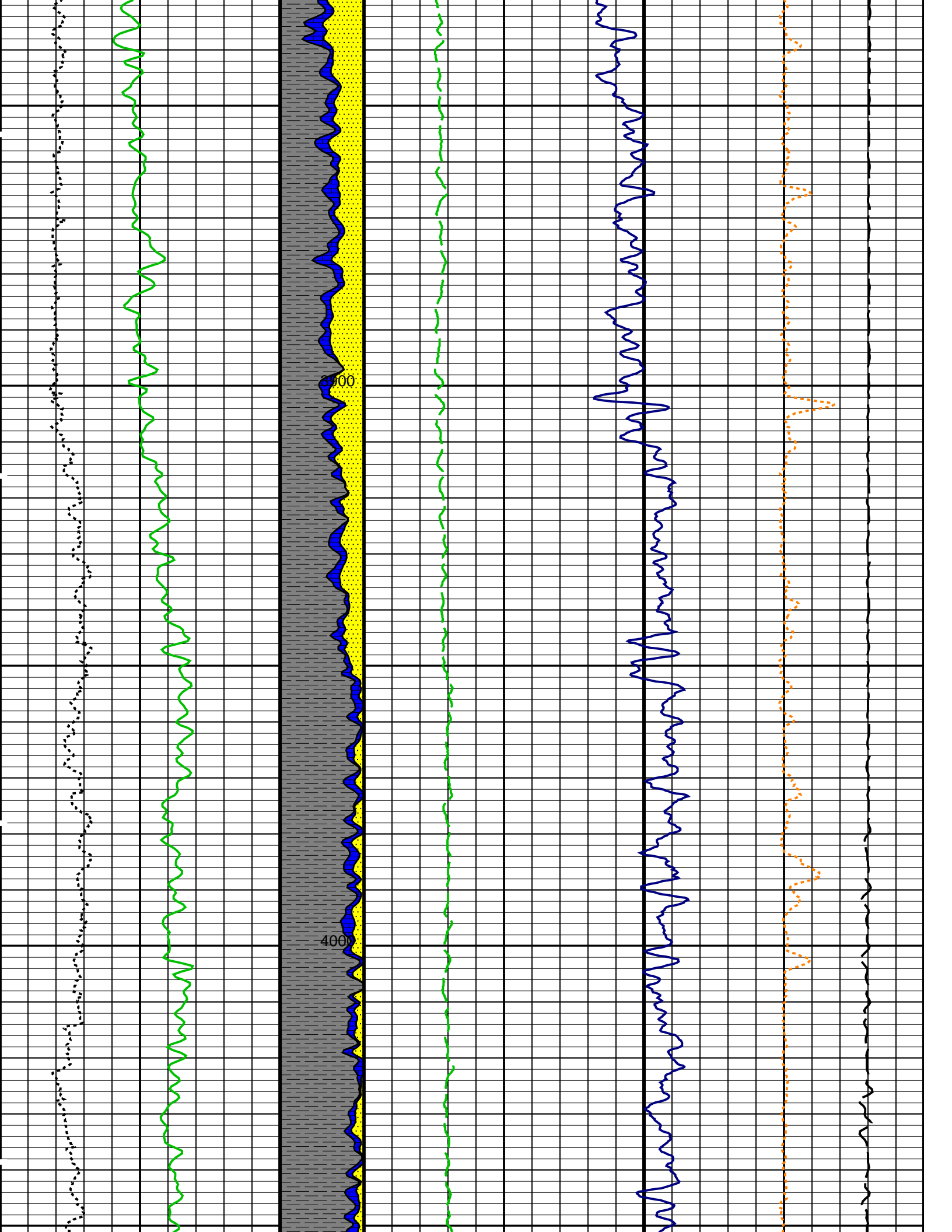
Time Mark Every 60 S

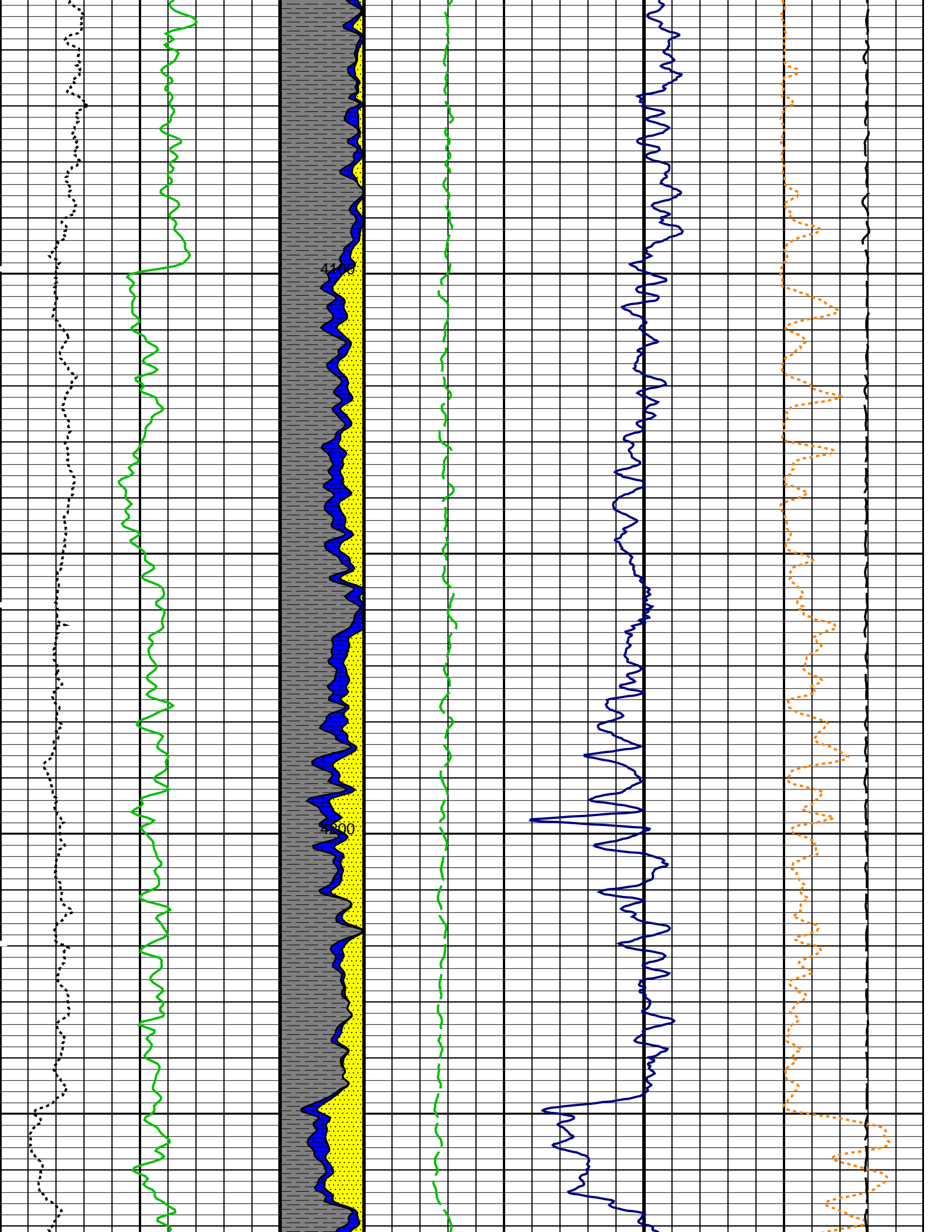


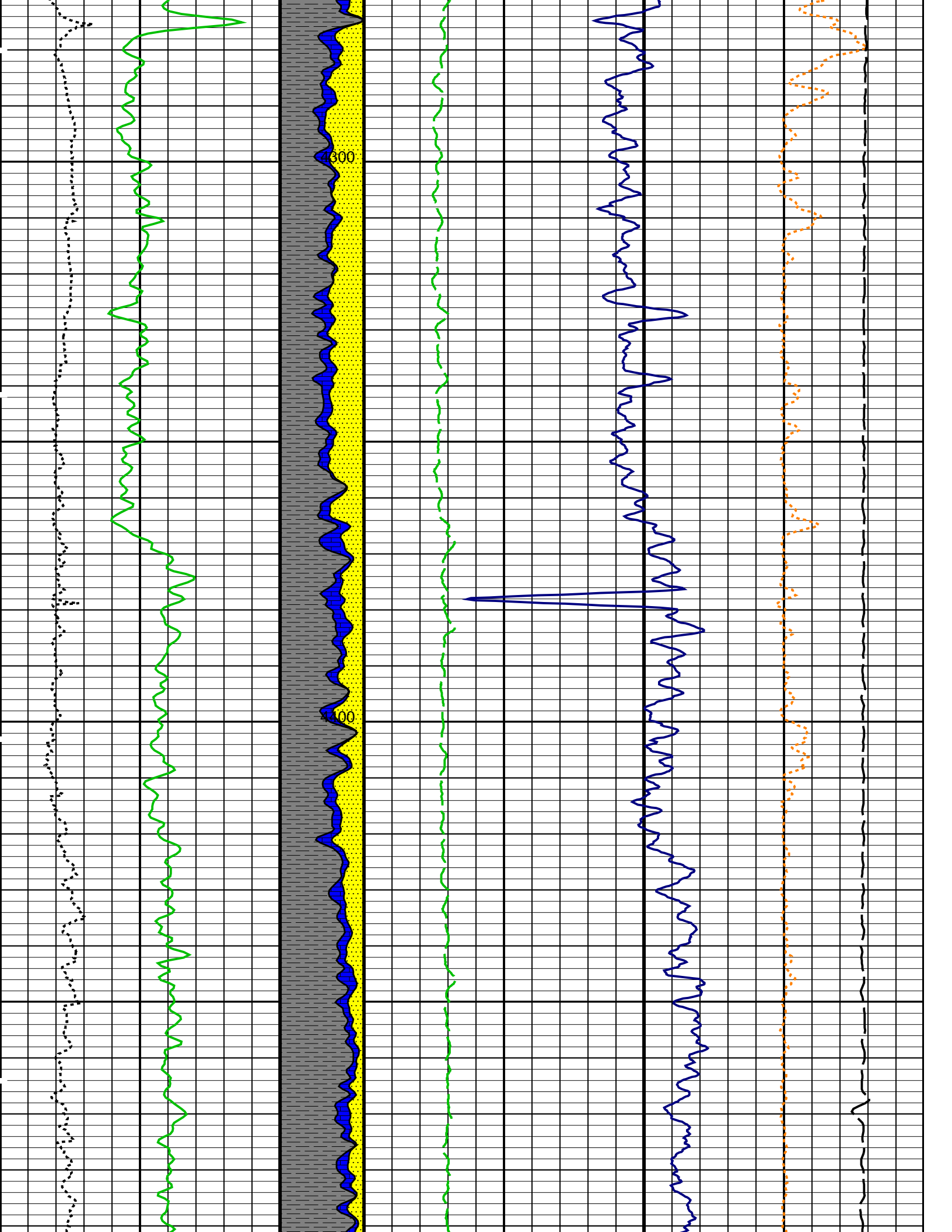
MAIN PASS: *** PLATFORM EXPRESS - LITHOLOGY DENSITY ***

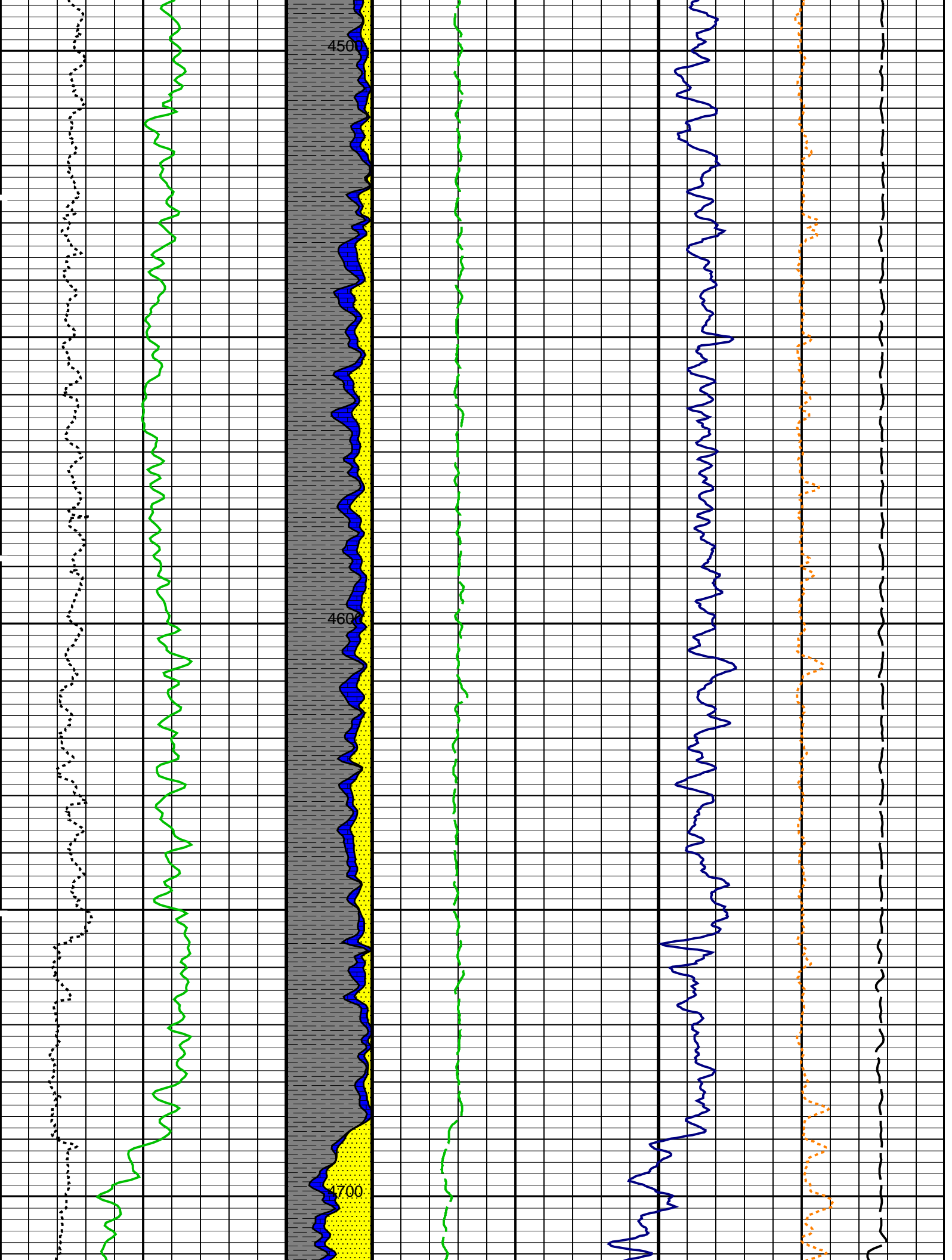


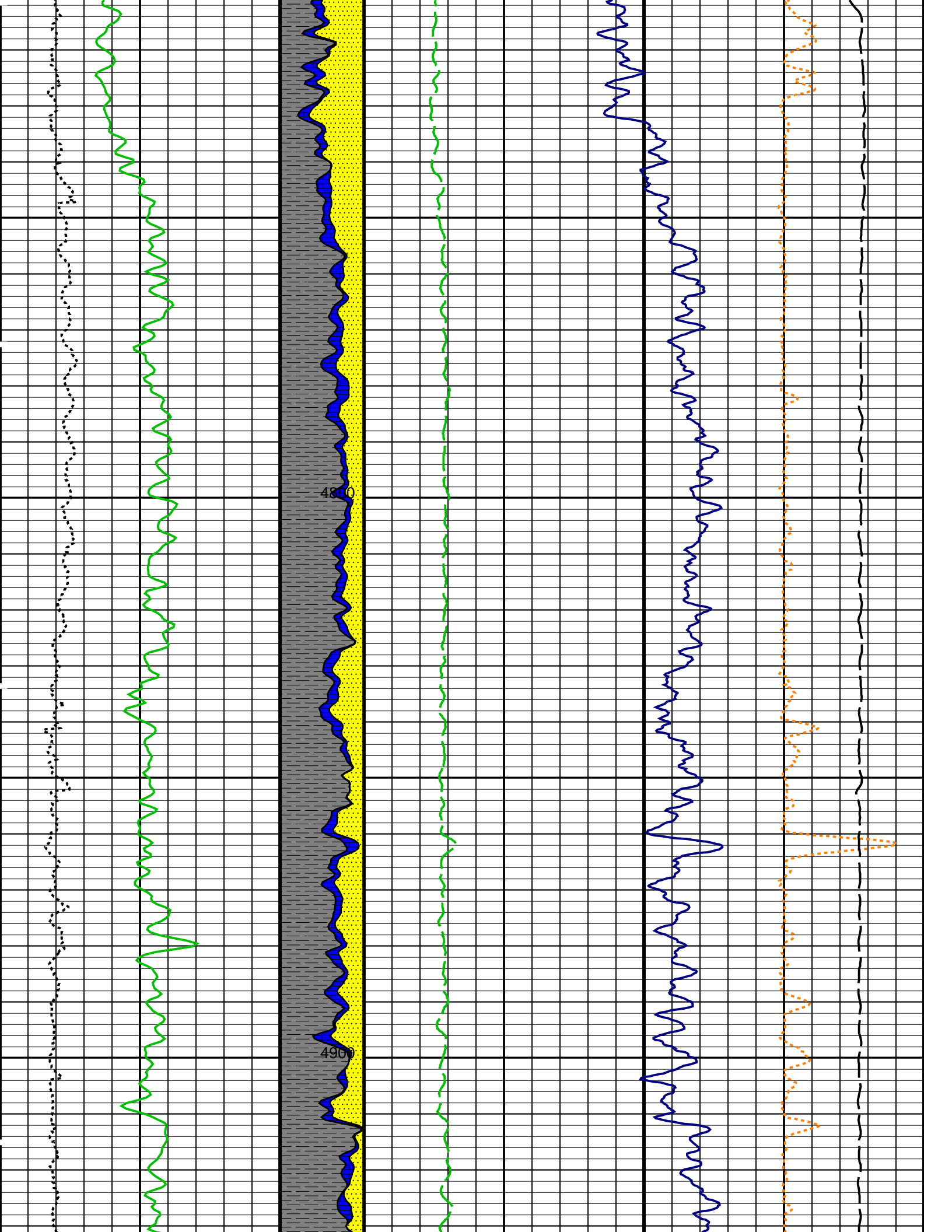


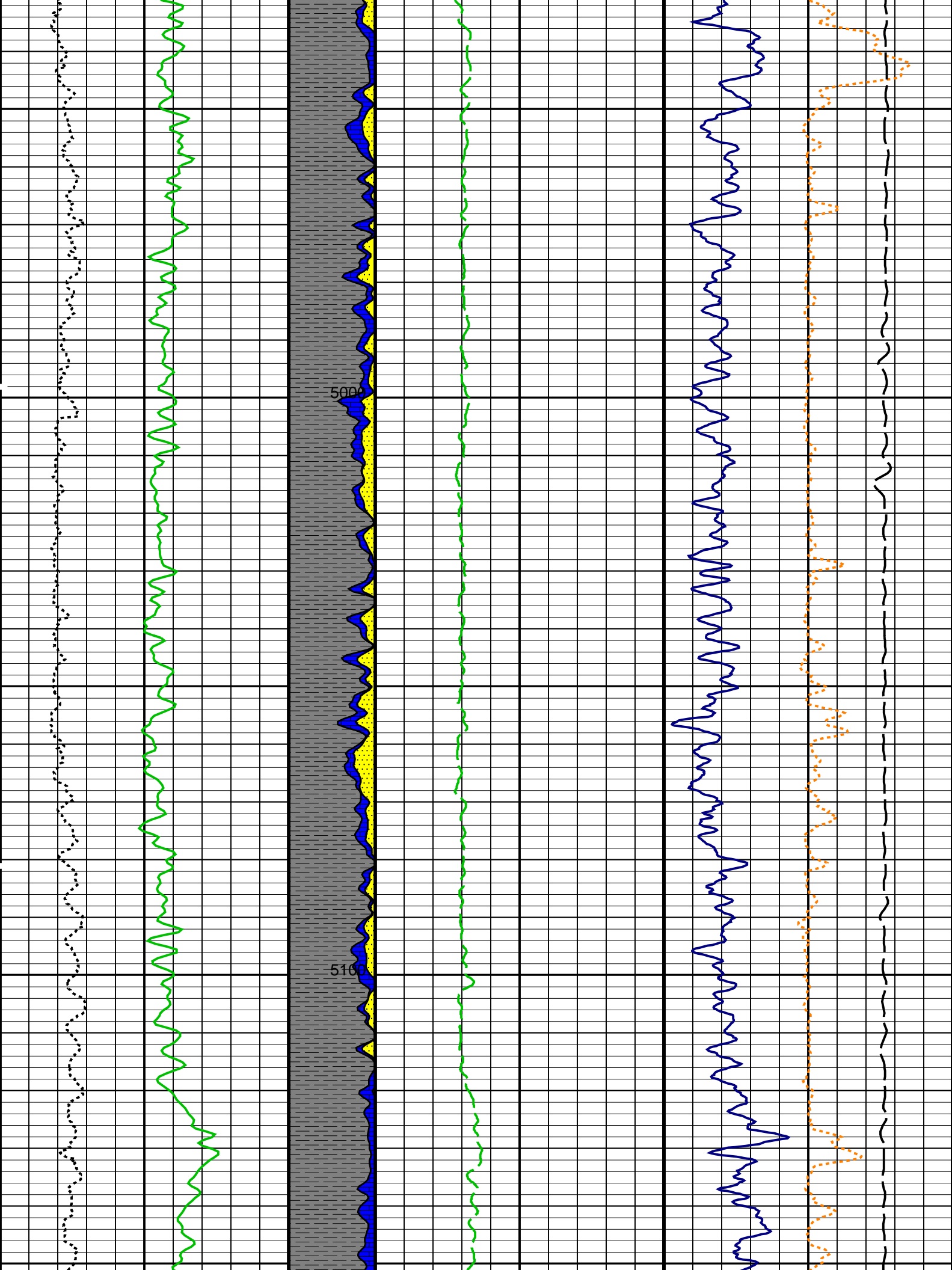


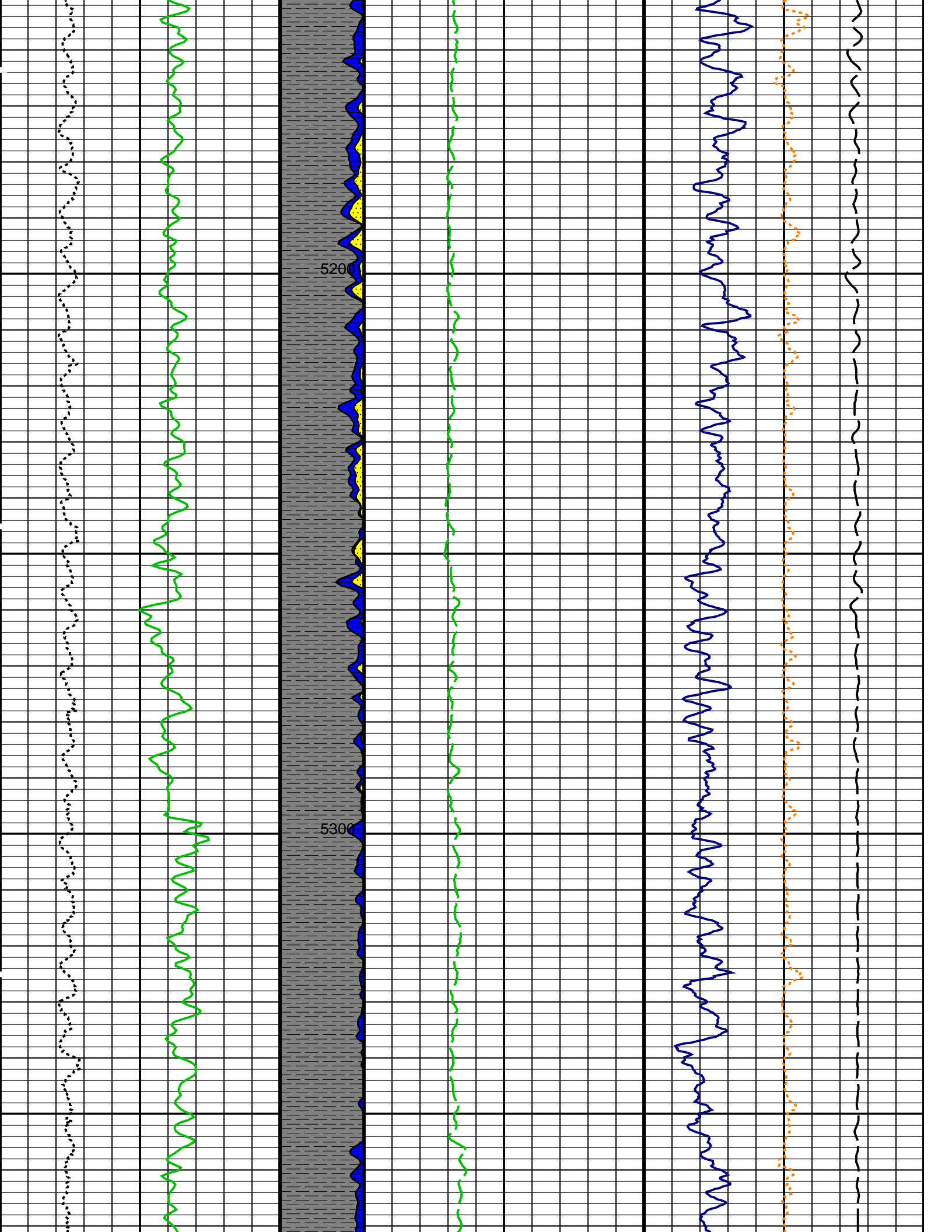


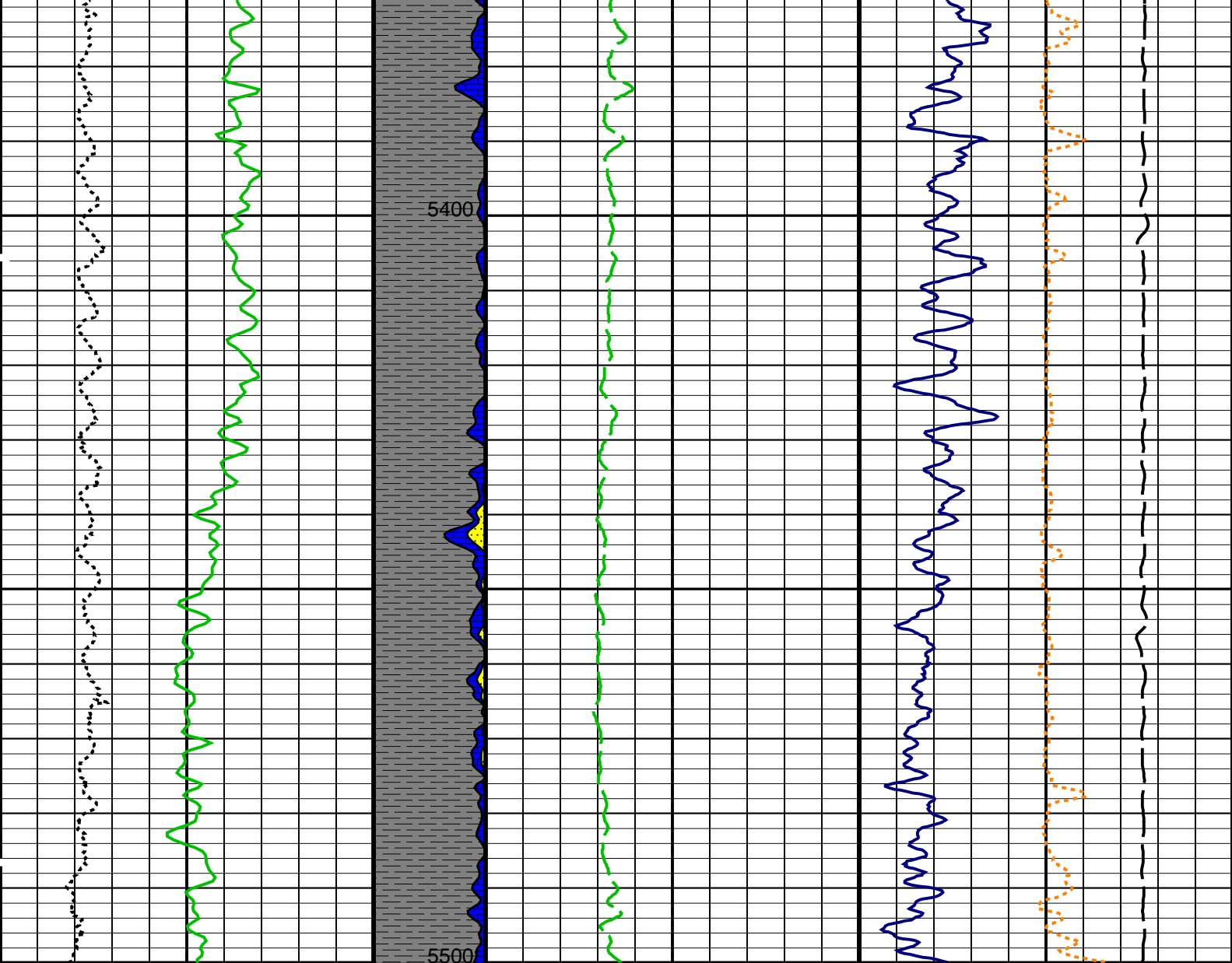




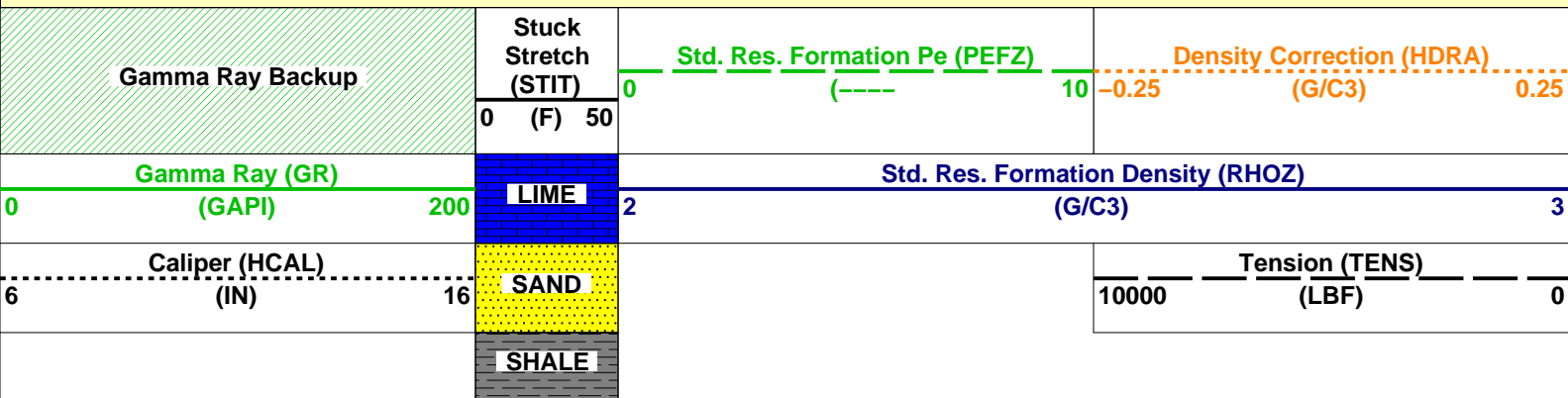








MAIN PASS: *** PLATFORM EXPRESS - LITHOLOGY DENSITY ***



PIP SUMMARY

Time Mark Every 60 S

Parameters

| DLIS Name | Description | Value |
|------------|---|----------|
| HILTB-FTB: | High resolution Integrated Logging Tool-DTS | |
| BHFL_TLD | HILT Nuclear Mud Base | WATER |
| DHC | Density Hole Correction | BS |
| GCLF | Germany Coal-like Formation Option | NO |
| NAAC | HRDD APS Activation Correction | OFF |
| NMT | HILT Nuclear Mud Type | NOBARITE |
| NPRM | HRDD Processing Mode | STDRES |
| NSAR | HRDD Depth Sampling Rate | 1 000 in |

| | | | | |
|------|---------------------------|------------------------|--------|---------|
| STKT | STI: Stuck Tool Indicator | STI Stuck Threshold | 2.500 | ft |
| TDD | | Total Depth – Driller | 7769.0 | ft |
| TDL | | Total Depth – Logger | 7784.0 | ft |
| BS | System and Miscellaneous | Bit Size | 7.875 | in |
| DFD | | Drilling Fluid Density | 9.100 | lbm/gal |


Format: DENS

Vertical Scale: 5" per 100'

Graphics File Created: 06-Dec-2007 01:30

| | | | |
|-----------------------------|--------------------|--------|--------------------|
| OP System Version: 15C0-309 | | | |
| MCM | | | |
| HILTD | SRPC-3497-NOV_2007 | GPIT-C | SRPC-3497-NOV_2007 |
| DTCH | SRPC-3497-NOV_2007 | | |

| | | | | | |
|------------------|-------------------------|------|----------|-------------------|-----------|
| Input DLIS Files | | | | | |
| DEFAULT | AIT_TLD_MCFL_CNL_010LUP | FN:9 | PRODUCER | 06-Dec-2007 00:25 | 7788.0 FT |
| | | | | | 0.0 FT |



MAIN DENSITY LOG 5" = 100'

MAXIS Field Log

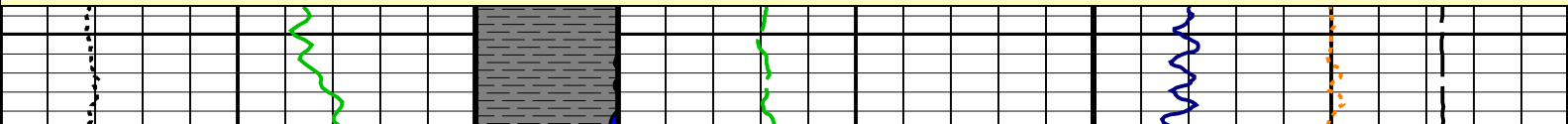
| | | | | | |
|-------------------|-------------------------|------|----------|-------------------|--|
| Output DLIS Files | | | | | |
| DEFAULT | AIT_TLD_MCFL_CNL_010LUP | FN:9 | PRODUCER | 06-Dec-2007 00:25 | |

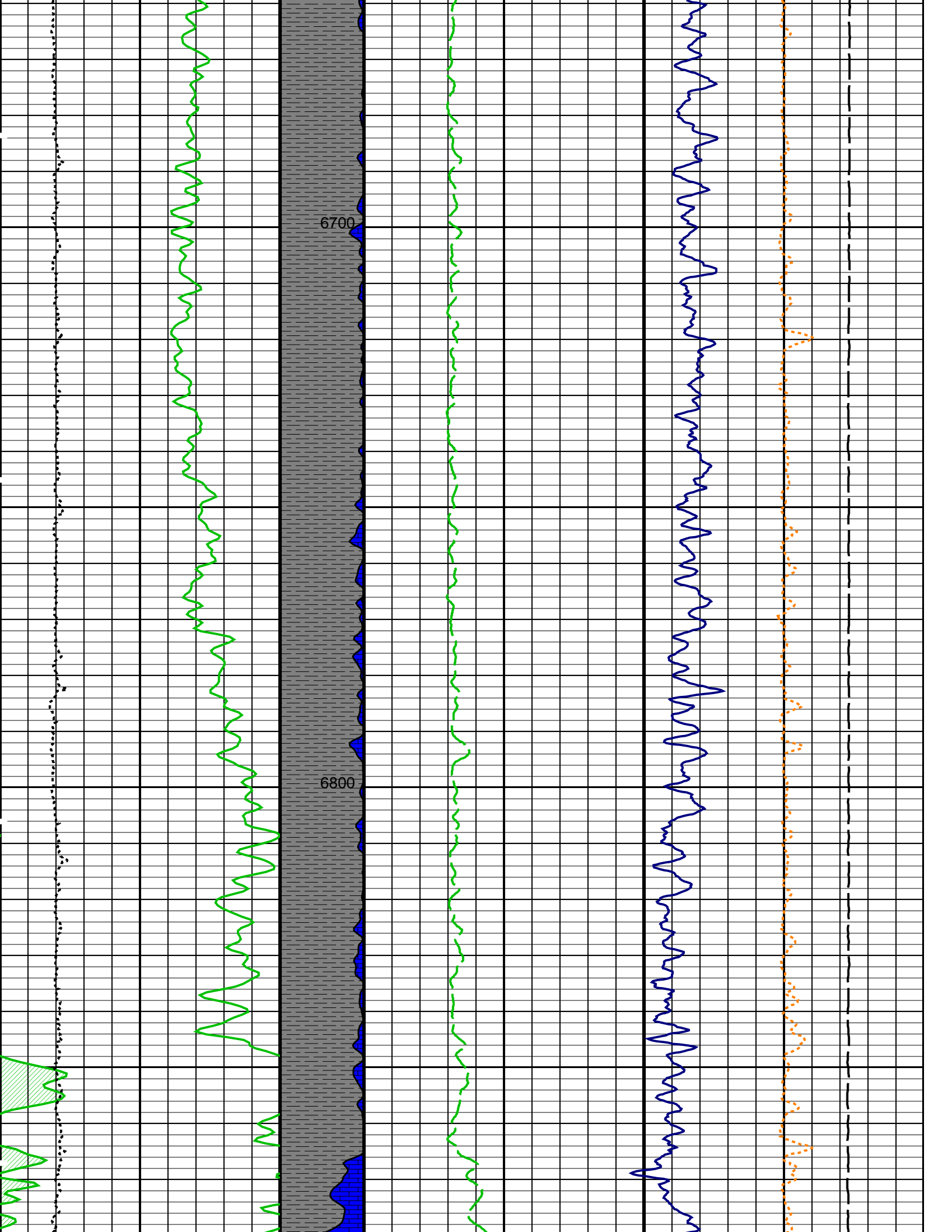
| | | | |
|-----------------------------|--------------------|--------|--------------------|
| OP System Version: 15C0-309 | | | |
| MCM | | | |
| HILTB-FTB | SRPC-3497-NOV_2007 | GPIT-C | SRPC-3497-NOV_2007 |
| DTC-H | SRPC-3497-NOV_2007 | | |

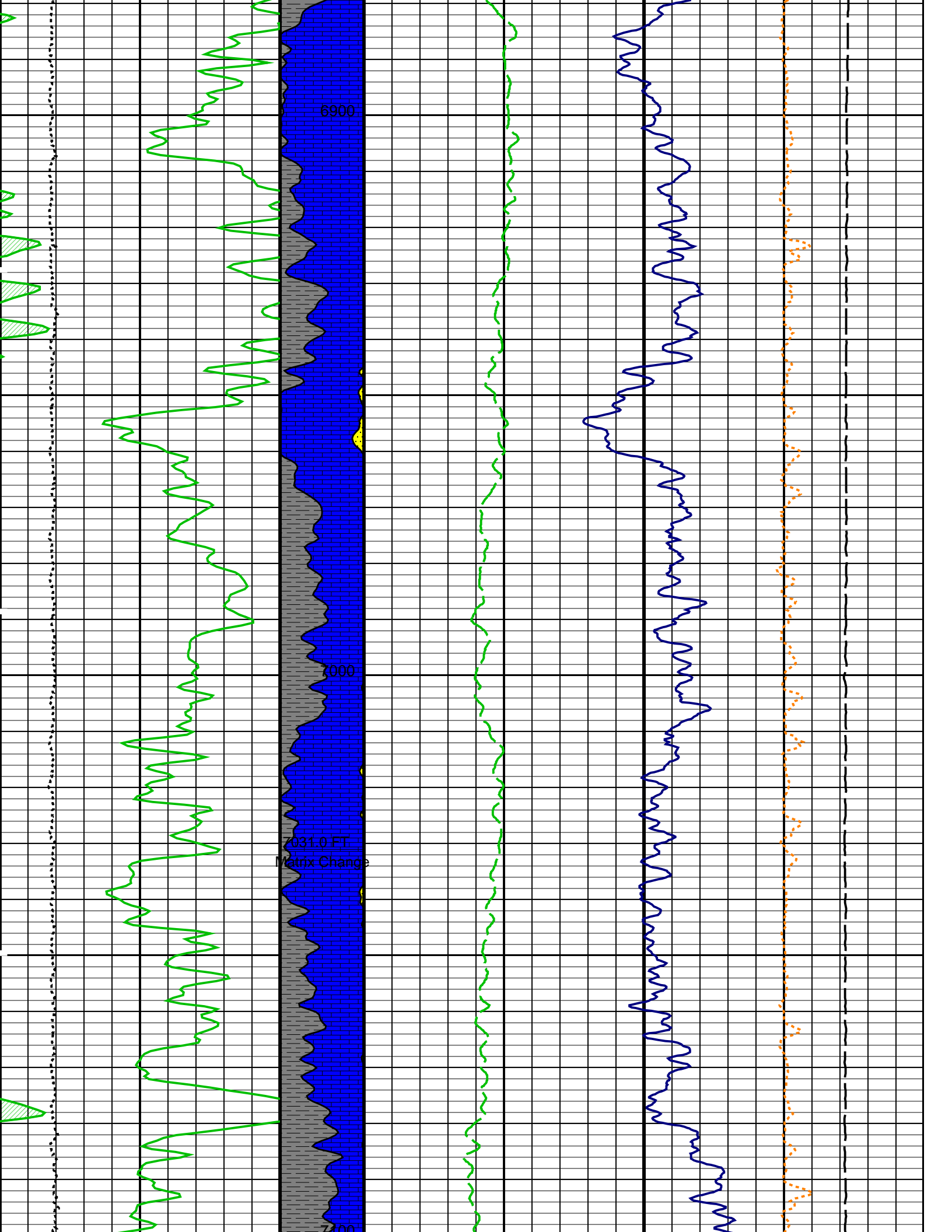
| Changed Parameter Summary | | | |
|---------------------------|-----------|----------------|-----------------|
| DLIS Name | New Value | Previous Value | Depth & Time |
| MATR | SANDSTONE | SANDSTONE | 7788.0 00:26:44 |
| POUT | SANDSTONE | SANDSTONE | 7788.0 00:26:44 |

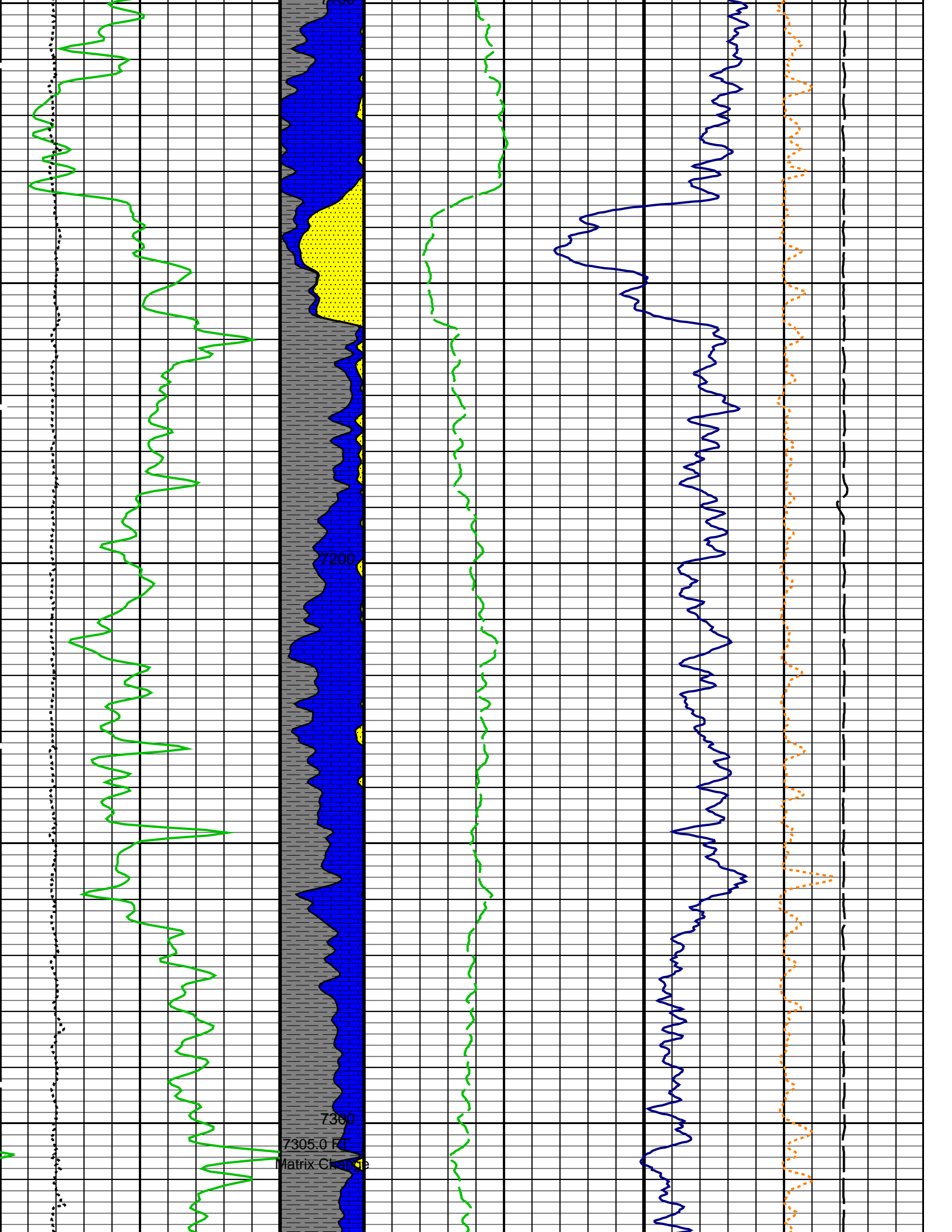
| | | | |
|---|---|---|---|
| PIP SUMMARY | | | |
| Time Mark Every 60 S | | | |
| <div> <div>Caliper (HCAL)</div> <div>(IN)</div> </div> <div> <div>6</div> <div>16</div> </div> | SHALE | | |
| | SAND | <div> <div>Tension (TENS)</div> <div>(LBF)</div> </div> <div> <div>10000</div> <div>0</div> </div> | |
| <div> <div>Gamma Ray (GR)</div> <div>(GAPI)</div> </div> <div> <div>0</div> <div>200</div> </div> | LIME | <div> <div>Std. Res. Formation Density (RHOZ)</div> <div>(G/C3)</div> </div> <div> <div>2</div> <div>3</div> </div> | |
| Gamma Ray Backup | <div> <div>Stuck Stretch (STIT)</div> <div>(F)</div> </div> <div> <div>0</div> <div>50</div> </div> | <div> <div>Std. Res. Formation Pe (PEFZ)</div> <div>(----</div> </div> <div> <div>0</div> <div>10</div> </div> | <div> <div>Density Correction (HDRA)</div> <div>(G/C3)</div> </div> <div> <div>-0.25</div> <div>0.25</div> </div> |

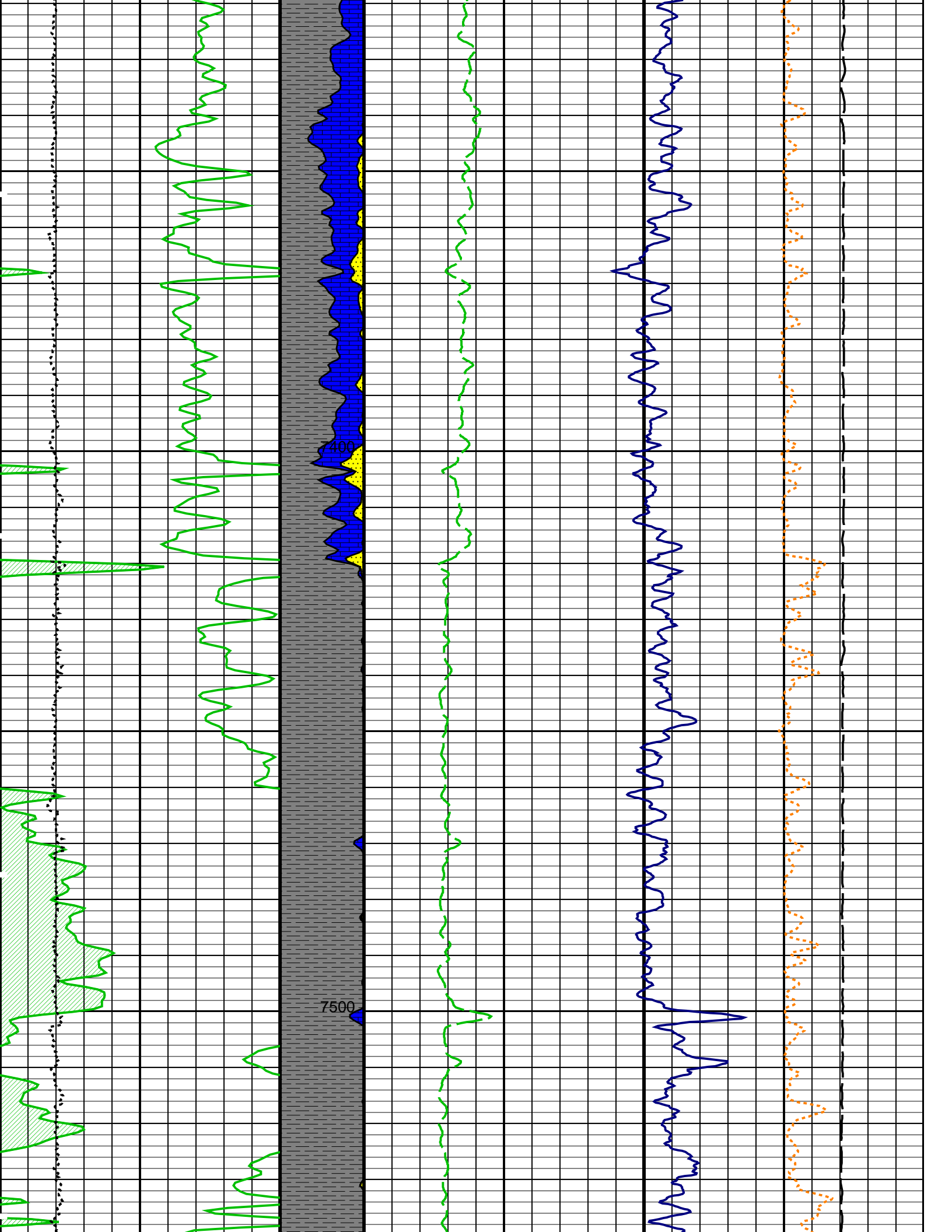
MAIN PASS: *** PLATFORM EXPRESS – LITHOLOGY DENSITY ***

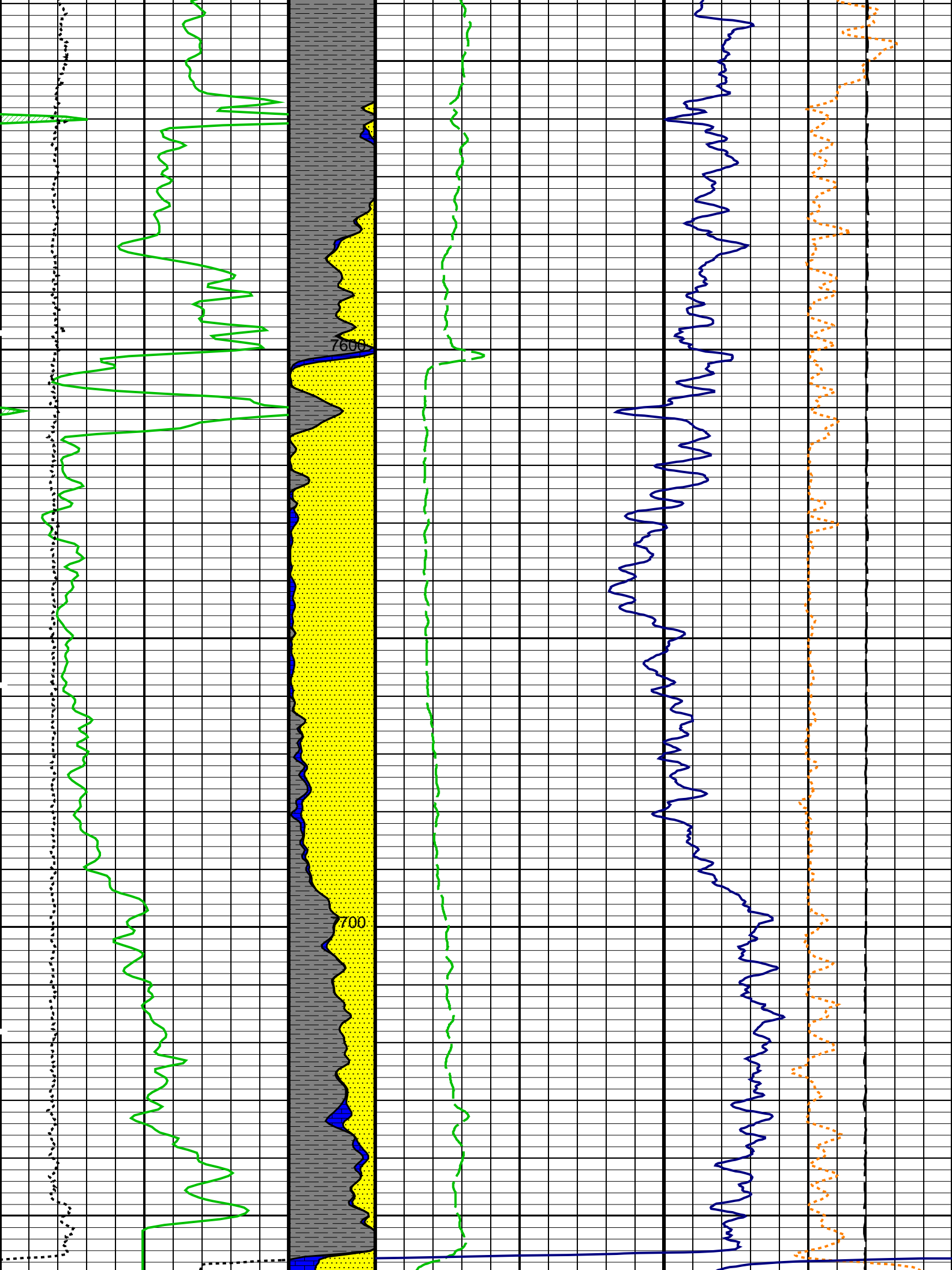


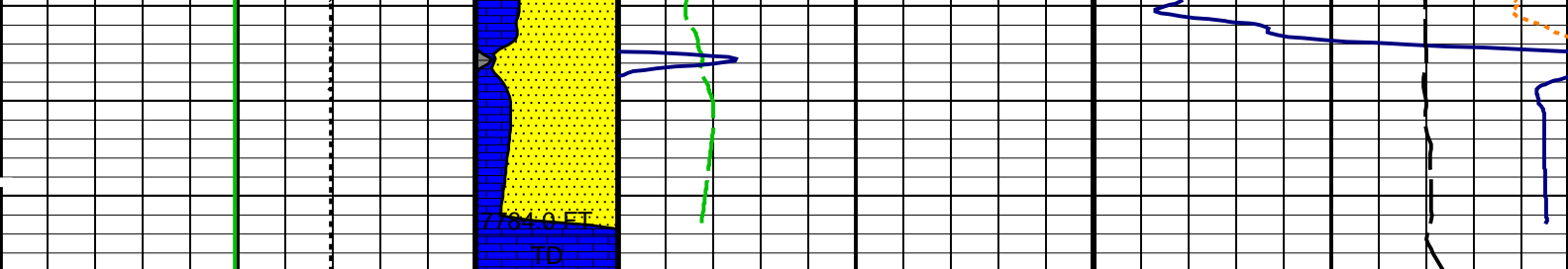












MAIN PASS: *** PLATFORM EXPRESS – LITHOLOGY DENSITY ***

| Gamma Ray Backup | Stuck Stretch (STIT) | Std. Res. Formation Pe (PEFZ) | | Density Correction (HDRA) | |
|-----------------------|----------------------|---|----|---------------------------|------|
| | | 0 | 10 | -0.25 | 0.25 |
| | 0 (F) 50 | | | | |
| Gamma Ray (GR) (GAPI) | | Std. Res. Formation Density (RHOZ) (G/C3) | | | |
| 0 | 200 | 2 | | | 3 |
| Caliper (HCAL) (IN) | | Tension (TENS) (LBF) | | | |
| 6 | 16 | 10000 | | | 0 |
| | LIME | | | | |
| | SAND | | | | |
| | SHALE | | | | |

PIP SUMMARY

Time Mark Every 60 S

Parameters

| DLIS Name | Description | Value | |
|--|--|-----------|------|
| HILTB-FTB: High resolution Integrated Logging Tool-DTS | | | |
| BHFL_TLD | HILT Nuclear Mud Base | WATER | |
| BHT | Bottom Hole Temperature (used in calculations) | 202 | DEGF |
| DHC | Density Hole Correction | BS | |
| FD | Fluid Density | 1 | G/C3 |
| FEXP | Form Factor Exponent | 2 | |
| FNUM | Form Factor Numerator | 1 | |
| GCLF | Germany Coal-like Formation Option | NO | |
| GGRD | Geothermal Gradient | 0.01 | DF/F |
| GTSE | Generalized Temperature Selection | HSTS_HTEM | |
| MATR | Rock Matrix for Neutron Porosity Corrections | SANDSTONE | |
| NAAC | HRDD APS Activation Correction | OFF | |
| NMT | HILT Nuclear Mud Type | NOBARITE | |
| NPRM | HRDD Processing Mode | StdRes | |
| NSAR | HRDD Depth Sampling Rate | 1 | IN |
| SHT | Surface Hole Temperature | 60 | DEGF |
| FEQL: Formation Evaluation Quick Look | | | |
| FEXP | Form Factor Exponent | 2 | |
| FNUM | Form Factor Numerator | 1 | |
| HOLEV: Integrated Hole/Cement Volume | | | |
| BHT | Bottom Hole Temperature (used in calculations) | 202 | DEGF |
| GGRD | Geothermal Gradient | 0.01 | DF/F |
| GTSE | Generalized Temperature Selection | HSTS_HTEM | |
| MATR | Rock Matrix for Neutron Porosity Corrections | SANDSTONE | |
| SHT | Surface Hole Temperature | 60 | DEGF |
| PERT: Preliminary Evaluation – Real Time | | | |
| BDPS | Bulk Density Processing Selector | Standard | |
| BHT | Bottom Hole Temperature (used in calculations) | 202 | DEGF |
| CLIM | Caliper Limit for Bad Hole | 999 | IN |
| CNPS | Corrected Neutron Porosity Selector | NPHI | |
| DRUL | DRHO Upper Limit | 999 | G/C3 |
| FCAL | Caliper Presence Flag | PRESENT | |
| FCGR | CGR Presence Flag | PRESENT | |
| FEXP | Form Factor Exponent | 2 | |
| FLDT | Bulk Density Presence Flag | PRESENT | |
| FNUM | Form Factor Numerator | 1 | |
| FSON | Sonic Presence Flag | ABSENT | |
| GGRD | Geothermal Gradient | 0.01 | DF/F |
| GTSE | Generalized Temperature Selection | HSTS_HTEM | |
| MATR | Rock Matrix for Neutron Porosity Corrections | SANDSTONE | |
| PMAX | PHI Maximum | 0.5 | CFCF |
| POUT | Porosity Output Lithology | SANDSTONE | |
| RG21 | RHO Grain (2-Mineral Model, Min-1) | 2.71 | G/C3 |
| RG22 | RHO Grain (2-Mineral Model, Min-2) | 2.644 | G/C3 |
| RG23 | RHO Grain (2-Mineral Model, Min-3) | 2.877 | G/C3 |
| RG31 | RHO Grain (3-Mineral Model, Min-1) | 2.71 | G/C3 |
| RG32 | RHO Grain (3-Mineral Model, Min-2) | 2.644 | G/C3 |
| RG33 | RHO Grain (3-Mineral Model, Min-3) | 2.877 | G/C3 |

| | | | |
|---------------------------|---------------------------------------|----------|------|
| RG32 | RHO Grain (3-Mineral Model, Min-2) | 2.644 | G/C3 |
| RG33 | RHO Grain (3-Mineral Model, Min-3) | 2.877 | G/C3 |
| RTLF | RT Limit Flag | NO_LIMIT | |
| RWF | Resistivity of Free Water | 0.02 | OHMM |
| SHT | Surface Hole Temperature | 60 | DEGF |
| UF | U Fluid | 0.398 | |
| UM21 | U Matrix (2-Mineral Model, Min-1) | 13.77 | |
| UM22 | U Matrix (2-Mineral Model, Min-2) | 4.779 | |
| UM23 | U Matrix (2-Mineral Model, Min-3) | 8.997 | |
| UM31 | U Matrix (3-Mineral Model, Min-1) | 13.77 | |
| UM32 | U Matrix (3-Mineral Model, Min-2) | 4.779 | |
| UM33 | U Matrix (3-Mineral Model, Min-3) | 8.997 | |
| STI: Stuck Tool Indicator | | | |
| LBFR | Trigger for MAXIS First Reading Label | STI | |
| STKT | STI Stuck Threshold | 2.5 | FT |
| TDD | Total Depth - Driller | 7769.00 | FT |
| TDL | Total Depth - Logger | 7784.00 | FT |
| System and Miscellaneous | | | |
| BS | Bit Size | 7.875 | IN |
| DFD | Drilling Fluid Density | 9.10 | LB/G |
| DORL | Depth Offset for Repeat Analysis | 0.0 | FT |
| RMFS | Resistivity of Mud Filtrate Sample | 1.7010 | OHMM |
| TD | Total Depth | 7784 | FT |
| TWS | Temperature of Connate Water Sample | 100.00 | DEGF |

Format: LOWER_DENS Vertical Scale: 5" per 100' Graphics File Created: 06-Dec-2007 00:25

OP System Version: 15C0-309

MCM

HILTB-FTB SRPC-3497-NOV_2007 GPIT-C SRPC-3497-NOV_2007
DTC-H SRPC-3497-NOV_2007

Output DLIS Files

DEFAULT AIT_TLD_MCFL_CNL_010LUP FN:9 PRODUCER 06-Dec-2007 00:25

Schlumberger

BEFORE CALIBRATIONS

MAXIS Field Log

Calibration and Check Summary

| Measurement | Nominal | Master | Before | After | Change | Limit | Units |
|--|---------|--------|--------|-------|--------|-------|-------|
| High resolution Integrated Logging Tool-DTS Wellsite Calibration - Electronics Calibration Check - Thru Cal Mag. & Phase | | | | | | | |
| Master: 27-Sep-2007 11:01 Before: 5-Dec-2007 16:32 | | | | | | | |
| Thru Cal Magnitude - 0 | 0 | 0.6092 | 0.6109 | N/A | N/A | N/A | V |
| Thru Cal Magnitude - 1 | 0 | 1.249 | 1.253 | N/A | N/A | N/A | V |
| Thru Cal Magnitude - 2 | 0 | 0.6210 | 0.6226 | N/A | N/A | N/A | V |
| Thru Cal Magnitude - 3 | 0 | 0.7034 | 0.7054 | N/A | N/A | N/A | V |
| Thru Cal Magnitude - 4 | 0 | 1.311 | 1.315 | N/A | N/A | N/A | V |
| Thru Cal Magnitude - 5 | 0 | 1.894 | 1.900 | N/A | N/A | N/A | V |
| Thru Cal Magnitude - 6 | 0 | 1.898 | 1.904 | N/A | N/A | N/A | V |
| Thru Cal Magnitude - 7 | 0 | 1.335 | 1.341 | N/A | N/A | N/A | V |
| Phase - 0 | 0 | 49.73 | 50.38 | N/A | N/A | N/A | DEG |
| Phase - 1 | 0 | 48.71 | 49.38 | N/A | N/A | N/A | DEG |
| Phase - 2 | 0 | 44.61 | 45.30 | N/A | N/A | N/A | DEG |
| Phase - 3 | 0 | 43.74 | 44.43 | N/A | N/A | N/A | DEG |
| Phase - 4 | 0 | 36.98 | 37.70 | N/A | N/A | N/A | DEG |
| Phase - 5 | 0 | 34.80 | 35.56 | N/A | N/A | N/A | DEG |
| Phase - 6 | 0 | 34.77 | 35.53 | N/A | N/A | N/A | DEG |
| Phase - 7 | 0 | 28.85 | 29.83 | N/A | N/A | N/A | DEG |

High resolution Integrated Logging Tool-DTS Wellsite Calibration - Electronics Calibration Check - Auxilliary
Master: 27-Sep-2007 11:01 Before: 5-Dec-2007 16:32

| | | | | | | | |
|--------------------------------|--------|-----------|-----------|-----|-----|-----|----|
| Array Induction SPA Plus | 990.5 | 990.0 | 990.1 | N/A | N/A | N/A | MV |
| Array Induction SPA Zero | 0 | 0.1585 | 0.1458 | N/A | N/A | N/A | MV |
| Array Induction Temperature PI | 0.9150 | 0.9167 | 0.9168 | N/A | N/A | N/A | V |
| Array Induction Temperature Ze | 0 | 0.0001591 | 0.0001658 | N/A | N/A | N/A | V |

High resolution Integrated Logging Tool–DTS Wellsite Calibration – Test Loop Gain Correction

Master: 27–Sep–2007 11:01

| | | | | | | | |
|------------------------------|---|-----------|-----|-----|-----|-----|-----|
| Test Loop Gain Magnitude – 0 | 0 | 1.019 | N/A | N/A | N/A | N/A | V |
| Test Loop Gain Magnitude – 1 | 0 | 1.020 | N/A | N/A | N/A | N/A | V |
| Test Loop Gain Magnitude – 2 | 0 | 1.024 | N/A | N/A | N/A | N/A | V |
| Test Loop Gain Magnitude – 3 | 0 | 1.021 | N/A | N/A | N/A | N/A | V |
| Test Loop Gain Magnitude – 4 | 0 | 1.004 | N/A | N/A | N/A | N/A | V |
| Test Loop Gain Magnitude – 5 | 0 | 0.9951 | N/A | N/A | N/A | N/A | V |
| Test Loop Gain Magnitude – 6 | 0 | 1.005 | N/A | N/A | N/A | N/A | V |
| Test Loop Gain Magnitude – 7 | 0 | 1.012 | N/A | N/A | N/A | N/A | V |
| Phase – 0 | 0 | 0.5429 | N/A | N/A | N/A | N/A | DEG |
| Phase – 1 | 0 | 0.5581 | N/A | N/A | N/A | N/A | DEG |
| Phase – 2 | 0 | –0.03639 | N/A | N/A | N/A | N/A | DEG |
| Phase – 3 | 0 | –0.005282 | N/A | N/A | N/A | N/A | DEG |
| Phase – 4 | 0 | –0.03332 | N/A | N/A | N/A | N/A | DEG |
| Phase – 5 | 0 | –0.08879 | N/A | N/A | N/A | N/A | DEG |
| Phase – 6 | 0 | 0.1686 | N/A | N/A | N/A | N/A | DEG |
| Phase – 7 | 0 | –0.4128 | N/A | N/A | N/A | N/A | DEG |

High resolution Integrated Logging Tool–DTS Wellsite Calibration – Sonde Error Correction

Master: 27–Sep–2007 11:01

| | | | | | | | |
|------------------------------|---|---------|-----|-----|-----|-----|------|
| R Sonde Error Correction – 0 | 0 | –110.7 | N/A | N/A | N/A | N/A | MM/M |
| R Sonde Error Correction – 1 | 0 | 161.5 | N/A | N/A | N/A | N/A | MM/M |
| R Sonde Error Correction – 2 | 0 | 116.0 | N/A | N/A | N/A | N/A | MM/M |
| R Sonde Error Correction – 3 | 0 | 59.72 | N/A | N/A | N/A | N/A | MM/M |
| R Sonde Error Correction – 4 | 0 | 23.64 | N/A | N/A | N/A | N/A | MM/M |
| R Sonde Error Correction – 5 | 0 | 12.92 | N/A | N/A | N/A | N/A | MM/M |
| R Sonde Error Correction – 6 | 0 | 9.047 | N/A | N/A | N/A | N/A | MM/M |
| R Sonde Error Correction – 7 | 0 | –0.7151 | N/A | N/A | N/A | N/A | MM/M |
| X Sonde Error Correction – 0 | 0 | –219.3 | N/A | N/A | N/A | N/A | MM/M |
| X Sonde Error Correction – 1 | 0 | –205.6 | N/A | N/A | N/A | N/A | MM/M |
| X Sonde Error Correction – 2 | 0 | –40.24 | N/A | N/A | N/A | N/A | MM/M |
| X Sonde Error Correction – 3 | 0 | 34.19 | N/A | N/A | N/A | N/A | MM/M |
| X Sonde Error Correction – 4 | 0 | 20.51 | N/A | N/A | N/A | N/A | MM/M |
| X Sonde Error Correction – 5 | 0 | 11.70 | N/A | N/A | N/A | N/A | MM/M |
| X Sonde Error Correction – 6 | 0 | 5.787 | N/A | N/A | N/A | N/A | MM/M |
| X Sonde Error Correction – 7 | 0 | 0.9127 | N/A | N/A | N/A | N/A | MM/M |

High resolution Integrated Logging Tool–DTS Wellsite Calibration – Mud Gain Correction

Master: 27–Sep–2007 11:01

| | | | | | | |
|------------------------------|---|--------|-----|-----|-----|-----|
| Coarse – Mag, Real, Imag – 0 | 0 | 0.8865 | N/A | N/A | N/A | N/A |
| Coarse – Mag, Real, Imag – 1 | 0 | 0.8865 | N/A | N/A | N/A | N/A |
| Coarse – Mag, Real, Imag – 2 | 0 | 0.8865 | N/A | N/A | N/A | N/A |
| Fine – Mag, Real, Imag – 0 | 0 | 0.8929 | N/A | N/A | N/A | N/A |
| Fine – Mag, Real, Imag – 1 | 0 | 0.8929 | N/A | N/A | N/A | N/A |
| Fine – Mag, Real, Imag – 2 | 0 | 0.8929 | N/A | N/A | N/A | N/A |

High resolution Integrated Logging Tool–DTS Wellsite Calibration – Stab Measurement Summary

Before: 5–Dec–2007 16:37

| | | | | | | | |
|-----------------|--------|-----|--------|-----|-----|-----|-----|
| BS Window Ratio | 0.7104 | N/A | 0.7097 | N/A | N/A | N/A | |
| BS Window Sum | 8992 | N/A | 8978 | N/A | N/A | N/A | CPS |
| SS Window Ratio | 0.4968 | N/A | 0.4940 | N/A | N/A | N/A | |
| SS Window Sum | 10290 | N/A | 10290 | N/A | N/A | N/A | CPS |
| LS Window Ratio | 0.2932 | N/A | 0.2879 | N/A | N/A | N/A | |
| LS Window Sum | 1080 | N/A | 1068 | N/A | N/A | N/A | CPS |

High resolution Integrated Logging Tool–DTS Wellsite Calibration – Photo–multiplier High Voltages Calibrations

Before: 5–Dec–2007 16:37

| | | | | | | | |
|------------------------------|------|-----|------|-----|-----|-----|---|
| BS PM High Voltage (Command) | 1446 | N/A | 1439 | N/A | N/A | N/A | V |
| SS PM High Voltage (Command) | 1580 | N/A | 1574 | N/A | N/A | N/A | V |
| LS PM High Voltage (Command) | 1411 | N/A | 1431 | N/A | N/A | N/A | V |

High resolution Integrated Logging Tool–DTS Wellsite Calibration – Crystal Quality Resolutions Calibration

Before: 5–Dec–2007 16:37

| | | | | | | | |
|-----------------------|-------|-----|-------|-----|-----|-----|---|
| BS Crystal Resolution | 10.31 | N/A | 10.37 | N/A | N/A | N/A | % |
| SS Crystal Resolution | 9.688 | N/A | 9.729 | N/A | N/A | N/A | % |
| LS Crystal Resolution | 8.772 | N/A | 8.719 | N/A | N/A | N/A | % |

High resolution Integrated Logging Tool–DTS Wellsite Calibration – MCFL Calibration

Before: 5–Dec–2007 16:45

































| | | | | | | | |
|--------------------|------|-----|------|-----|-----|-----|------|
| Raw B0 Resistivity | 3875 | N/A | 3852 | N/A | N/A | N/A | OHMM |
| Raw B1 Resistivity | 3830 | N/A | 3793 | N/A | N/A | N/A | OHMM |
| Raw B2 Resistivity | 3830 | N/A | 3789 | N/A | N/A | N/A | OHMM |









High resolution Integrated Logging Tool–DTS Wellsite Calibration – HILT Caliper Calibration











Before: 5–Dec–2007 16:31

| | | | | | | | |
|-----------------|-------|-----|-------|-----|-----|-----|----|
| BS HILT Caliper | 0.000 | N/A | 0.000 | N/A | N/A | N/A | IN |
|-----------------|-------|-----|-------|-----|-----|-----|----|

| High resolution Integrated Logging Tool–DTS / Equipment Identification | | | |
|--|-----------|------|--|
| Primary Equipment: | | | |
| Array Induction Tool – H | AIT – H | | |
| Rm/SP Bottom Nose | AHRM – A | | |
| Array Induction Sonde | AHIS – BA | 374 | |
| HILT high–Resolution Mechanical Sonde | HRMS – B | | |
| HILT Rxo Gamma–ray Device | HRGD – B | | |
| HILT Micro Cylindrically Focused Log Dev | MCFL – | | |
| GR Logging Source | GLS – VJ | 5094 | |
| HILT High Res. Control Cartridge | HRCC – B | | |
| Auxiliary Equipment: | | | |

| High resolution Integrated Logging Tool–DTS Wellsite Calibration | | | | | | | |
|--|--------|----------------------|---|--------------------------|-------------------------|---|--------------------------|
| Electronics Calibration Check – Thru Cal Mag. & Phase | | | | | | | |
| Idx | Phase | Value | Thru Cal Magnitude V | Nominal | Value | Phase DEG | Nominal |
| 0 | Master | 0.6092 |  | 0.6050 | 49.73 |  | 71.00 |
| | Before | 0.6109 |  | | 50.38 |  | |
| 1 | Master | 1.249 |  | 1.270 | 48.71 |  | 70.00 |
| | Before | 1.253 |  | | 49.38 |  | |
| 2 | Master | 0.6210 |  | 0.6230 | 44.61 |  | 66.00 |
| | Before | 0.6226 |  | | 45.30 |  | |
| 3 | Master | 0.7034 |  | 0.7040 | 43.74 |  | 65.00 |
| | Before | 0.7054 |  | | 44.43 |  | |
| 4 | Master | 1.311 |  | 1.337 | 36.98 |  | 59.00 |
| | Before | 1.315 |  | | 37.70 |  | |
| 5 | Master | 1.894 |  | 1.955 | 34.80 |  | 57.00 |
| | Before | 1.900 |  | | 35.56 |  | |
| 6 | Master | 1.898 |  | 1.955 | 34.77 |  | 57.00 |
| | Before | 1.904 |  | | 35.53 |  | |
| 7 | Master | 1.335 |  | 1.415 | 28.85 |  | 53.00 |
| | Before | 1.341 |  | | 29.83 |  | |
| | | 60.00 % (Minimum) | (Nominal) | 140.0 % (Maximum) | Nom -60.00 (Minimum) | (Nominal) | Nom + 60.00 (Maximum) |
| Master: 27-Sep-2007 11:01 | | | | Before: 5-Dec-2007 16:32 | | | |

| High resolution Integrated Logging Tool–DTS Wellsite Calibration | | | | | | |
|--|---|---------------------|--------------------------|---|----------------|----------------------|
| Electronics Calibration Check – Auxilliary | | | | | | |
| Phase | Array Induction SPA Plus MV | Value | Phase | Array Induction SPA Zero MV | Value | |
| Master |  | 990.0 | Master |  | 0.1585 | |
| Before |  | 990.1 | Before |  | 0.1458 | |
| | 941.0 (Minimum) | 990.5 (Nominal) | 1040 (Maximum) | -50.00 (Minimum) | 0 (Nominal) | 50.00 (Maximum) |
| Phase | Array Induction Temperature Plus V | Value | Phase | Array Induction Temperature Zero V | Value | |
| Master |  | 0.9167 | Master |  | 0.0001591 | |
| Before |  | 0.9168 | Before |  | 0.0001658 | |
| | 0.8700 (Minimum) | 0.9150 (Nominal) | 0.9600 (Maximum) | -0.05000 (Minimum) | 0 (Nominal) | 0.05000 (Maximum) |
| Master: 27-Sep-2007 11:01 | | | Before: 5-Dec-2007 16:32 | | | |

| High resolution Integrated Logging Tool–DTS Wellsite Calibration | | | | | | | |
|--|-------|---|--------------------|--------------------|---------------------|---|--------------------|
| Test Loop Gain Correction | | | | | | | |
| Idx | Value | Test Loop Gain Magnitude V | | | Value | Phase DEG | |
| 0 | 1.019 |  | | | 0.5429 |  | |
| | | 0.9500 (Minimum) | 1.000 (Nominal) | 1.050 (Maximum) | -3.000 (Minimum) | 0 (Nominal) | 3.000 (Maximum) |
| 1 | 1.020 |  | | | 0.5581 |  | |
| | | 0.9500 (Minimum) | 1.000 (Nominal) | 1.050 (Maximum) | -3.000 (Minimum) | 0 (Nominal) | 3.000 (Maximum) |
| 2 | 1.024 |  | | | -0.03639 |  | |
| | | 0.9500 (Minimum) | 1.000 (Nominal) | 1.050 (Maximum) | -3.000 (Minimum) | 0 (Nominal) | 3.000 (Maximum) |
| 3 | 1.021 |  | | | -0.005282 |  | |
| | | 0.9500 (Minimum) | 1.000 (Nominal) | 1.050 (Maximum) | -3.000 (Minimum) | 0 (Nominal) | 3.000 (Maximum) |
| 4 | 1.004 |  | | | -0.03332 |  | |
| | | 0.9500 (Minimum) | 1.000 (Nominal) | 1.050 (Maximum) | -3.000 (Minimum) | 0 (Nominal) | 3.000 (Maximum) |







| | | (Minimum) | (Nominal) | (Maximum) | | (Minimum) | (Nominal) | (Maximum) |
|---|--------|---------------------|--------------------|--------------------|----------|---------------------|----------------|--------------------|
| 5 | 0.9951 | | | | -0.08879 | | | |
| | | 0.9500 (Minimum) | 1.000 (Nominal) | 1.050 (Maximum) | | -3.000 (Minimum) | 0 (Nominal) | 3.000 (Maximum) |
| 6 | 1.005 | | | | 0.1686 | | | |
| | | 0.9500 (Minimum) | 1.000 (Nominal) | 1.050 (Maximum) | | -3.000 (Minimum) | 0 (Nominal) | 3.000 (Maximum) |
| 7 | 1.012 | | | | -0.4128 | | | |
| | | 0.9500 (Minimum) | 1.000 (Nominal) | 1.050 (Maximum) | | -3.000 (Minimum) | 0 (Nominal) | 3.000 (Maximum) |

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| High resolution Integrated Logging Tool-DTS Wellsite Calibration | | | | | | | |
|--|---------|-------------------------------|---------------------|--------------------|--------|-------------------------------|--------------------------------------|
| Sonde Error Correction | | | | | | | |
| Idx | Value | R Sonde Error Correction MM/M | | | Value | X Sonde Error Correction MM/M | |
| 0 | -110.7 | | | | -219.3 | | |
| | | -231.0 (Minimum) | -56.00 (Nominal) | 119.0 (Maximum) | | -2250 (Minimum) | 0 (Nominal) 2250 (Maximum) |
| 1 | 161.5 | | | | -205.6 | | |
| | | 114.0 (Minimum) | 159.0 (Nominal) | 204.0 (Maximum) | | -625.0 (Minimum) | 0 (Nominal) 625.0 (Maximum) |
| 2 | 116.0 | | | | -40.24 | | |
| | | 66.00 (Minimum) | 111.0 (Nominal) | 156.0 (Maximum) | | -350.0 (Minimum) | 0 (Nominal) 350.0 (Maximum) |
| 3 | 59.72 | | | | 34.19 | | |
| | | 39.00 (Minimum) | 64.00 (Nominal) | 89.00 (Maximum) | | -250.0 (Minimum) | 0 (Nominal) 250.0 (Maximum) |
| 4 | 23.64 | | | | 20.51 | | |
| | | 15.00 (Minimum) | 25.00 (Nominal) | 35.00 (Maximum) | | -63.00 (Minimum) | 0 (Nominal) 63.00 (Maximum) |
| 5 | 12.92 | | | | 11.70 | | |
| | | 4.000 (Minimum) | 14.00 (Nominal) | 24.00 (Maximum) | | -50.00 (Minimum) | 0 (Nominal) 50.00 (Maximum) |
| 6 | 9.047 | | | | 5.787 | | |
| | | 5.000 (Minimum) | 10.00 (Nominal) | 15.00 (Maximum) | | -30.00 (Minimum) | 0 (Nominal) 30.00 (Maximum) |
| 7 | -0.7151 | | | | 0.9127 | | |
| | | -5.000 (Minimum) | 0 (Nominal) | 5.000 (Maximum) | | -30.00 (Minimum) | 0 (Nominal) 30.00 (Maximum) |
| Master: 27-Sep-2007 11:01 | | | | | | | |

Master: 27-Sep-2007 11:01




| High resolution Integrated Logging Tool–DTS Wellsite Calibration | | | | | | | |
|--|--------|---|--------------------|--------------------|--------|---|--|
| Mud Gain Correction | | | | | | | |
| Idx | Value | Coarse – Mag, Real, Imag | | | Value | Fine – Mag, Real, Imag | |
| 0 | 0.8865 |  | | | 0.8929 |  | |
| | | 0.8000 (Minimum) | 1.000 (Nominal) | 1.200 (Maximum) | | 0.8000 (Minimum) | 1.000 (Nominal) 1.200 (Maximum) |
| 1 | 0.8865 |  | | | 0.8929 |  | |
| | | 0.8000 (Minimum) | 1.000 (Nominal) | 1.200 (Maximum) | | 0.8000 (Minimum) | 1.000 (Nominal) 1.200 (Maximum) |
| 2 | 0.8865 |  | | | 0.8929 |  | |
| | | 0.8000 (Minimum) | 1.000 (Nominal) | 1.200 (Maximum) | | 0.8000 (Minimum) | 1.000 (Nominal) 1.200 (Maximum) |




Master: 27-Sep-2007 11:01

| High resolution Integrated Logging Tool-DTS Wellsite Calibration | | | | | | | | | |
|--|---------------------|---------------------|---------------------|--------|--------|---------------------|---------------------|---------------------|--------|
| Stab Measurement Summary | | | | | | | | | |
| Phase | BS Window Ratio | | | Value | Phase | SS Window Ratio | | | Value |
| Before | | | | 0.7097 | Before | | | | 0.4940 |
| | 0.6749 (Minimum) | 0.7104 (Nominal) | 0.7459 (Maximum) | | | 0.4719 (Minimum) | 0.4968 (Nominal) | 0.5216 (Maximum) | |
| Phase | BS Window Sum CPS | | | Value | Phase | SS Window Sum CPS | | | Value |
| Before | | | | 8978 | Before | | | | 10290 |
| | 8542 (Minimum) | 8992 (Nominal) | 9442 (Maximum) | | | 9773 (Minimum) | 10290 (Nominal) | 10800 (Maximum) | |
| Phase | LS Window Ratio | | | Value | Phase | LS Window Sum CPS | | | Value |
| Before | | | | 0.2879 | Before | | | | 1068 |
| | 0.2786 (Minimum) | 0.2932 (Nominal) | 0.3079 (Maximum) | | | 1026 (Minimum) | 1080 (Nominal) | 1134 (Maximum) | |

Before: 5-Dec-2007 16:37

| High resolution Integrated Logging Tool–DTS Wellsite Calibration | | | | | | | | | | | |
|--|--------------------------------|-------------------|-------------------|--------|--------------------------------|-------------------|-------------------|--------|--------------------------------|-------------------|-------------------|
| Photo-multiplier High Voltages Calibrations | | | | | | | | | | | |
| Phase | BS PM High Voltage (Command) V | | Value | Phase | SS PM High Voltage (Command) V | | Value | Phase | LS PM High Voltage (Command) V | | Value |
| Before | | | 1439 | Before | | | 1574 | Before | | | 1431 |
| | 1346 (Minimum) | 1446 (Nominal) | 1546 (Maximum) | | 1480 (Minimum) | 1580 (Nominal) | 1680 (Maximum) | | 1311 (Minimum) | 1411 (Nominal) | 1511 (Maximum) |
| Before: 5–Dec–2007 16:37 | | | | | | | | | | | |




| High resolution Integrated Logging Tool–DTS Wellsite Calibration | | | | | | | | | | | | | | |
|--|---|--------------------|--------------------|-------|--------------------|---|--------------------|--|--------------------|--------------------|---|--|--|-------|
| Crystal Quality Resolutions Calibration | | | | | | | | | | | | | | |
| Phase | BS Crystal Resolution % | | | Value | Phase | SS Crystal Resolution % | | | Value | Phase | LS Crystal Resolution % | | | Value |
| Before |  | | | 10.37 | Before |  | | | 9.729 | Before |  | | | 8.719 |
| | 9.315 (Minimum) | 10.31 (Nominal) | 11.31 (Maximum) | | 8.688 (Minimum) | 9.688 (Nominal) | 10.69 (Maximum) | | 7.772 (Minimum) | 8.772 (Nominal) | 9.772 (Maximum) | | | |
| Before: 5–Dec–2007 16:37 | | | | | | | | | | | | | | |


| High resolution Integrated Logging Tool–DTS Wellsite Calibration | | | | | | | | | | | | | | |
|--|---|-------------------|-------------------|-------|--------|---|-------------------|-------------------|-------|--------|---|-------------------|-------------------|-------|
| MCFL Calibration | | | | | | | | | | | | | | |
| Phase | Raw B0 Resistivity OHMM | | | Value | Phase | Raw B1 Resistivity OHMM | | | Value | Phase | Raw B2 Resistivity OHMM | | | Value |
| Before |  | | | 3852 | Before |  | | | 3793 | Before |  | | | 3789 |
| | 3565 (Minimum) | 3875 (Nominal) | 4185 (Maximum) | | | 3524 (Minimum) | 3830 (Nominal) | 4136 (Maximum) | | | 3524 (Minimum) | 3830 (Nominal) | 4136 (Maximum) | |
| Before: 5–Dec–2007 16:45 | | | | | | | | | | | | | | |

















| High resolution Integrated Logging Tool–DTS Wellsite Calibration | | | | | | | |
|--|----------------------------------|--------------------|--------------------|--------|----------------------------------|--------------------|--------------------|
| HILT Caliper Calibration | | | | | | | |
| Phase | HILT Caliper Zero Measurement IN | | Value | Phase | HILT Caliper Plus Measurement IN | | Value |
| Before | | | 8.246 | Before | | | 12.39 |
| | 6.000 (Minimum) | 8.000 (Nominal) | 10.00 (Maximum) | | 9.000 (Minimum) | 12.00 (Nominal) | 15.00 (Maximum) |
| Before: 5–Dec–2007 16:31 | | | | | | | |

| High resolution Integrated Logging Tool–DTS Wellsite Calibration | | | | | | | | | | | | | | |
|--|---------------------------|--------------------|--------------------|-------|--------------------|----------------------------|--------------------|--|-------|--------------------|-----------------------------|--------------------|--|-------|
| Detector Calibration | | | | | | | | | | | | | | |
| Phase | Gamma Ray Background GAPI | | | Value | Phase | Gamma Ray (Jig – Bkg) GAPI | | | Value | Phase | Gamma Ray (Calibrated) GAPI | | | Value |
| Before | | | | 75.45 | Before | | | | 170.9 | Before | | | | 165.0 |
| | 0 (Minimum) | 30.00 (Nominal) | 120.0 (Maximum) | | 155.4 (Minimum) | 170.9 (Nominal) | 186.5 (Maximum) | | | 150.0 (Minimum) | 165.0 (Nominal) | 180.0 (Maximum) | | |
| Before: 5–Dec–2007 16:31 | | | | | | | | | | | | | | |





| High resolution Integrated Logging Tool–DTS Wellsite Calibration | | | | | | | | | |
|--|---------------------|--|--|--|--------------------------|---------------------|--|--|-------|
| Zero Measurement | | | | | | | | | |
| Phase | CNTC Background CPS | | | Value | Phase | CFTC Background CPS | | | Value |
| Master | | | | 27.59 | Master | | | | 29.13 |
| Before | | | | 27.68 | Before | | | | 28.93 |
| 5.000 (Minimum)27.59 (Nominal)40.00 (Maximum) | | | | 5.000 (Minimum)29.13 (Nominal)40.00 (Maximum) | | | | | |
| Master: 14–Sep–2007 17:57 | | | | | Before: 5–Dec–2007 16:32 | | | | |

| High resolution Integrated Logging Tool–DTS Wellsite Calibration | | | | | | | | | | | | | |
|--|---|-------------------|-------------------|-------|-------------------|---|-------------------|--|-------|--------------------|---|--------------------|-------|
| Ratio Measurement | | | | | | | | | | | | | |
| Phase | Thermal Near Corr. (Tank) CPS | | | Value | Phase | Thermal Far Corr. (Tank) CPS | | | Value | Phase | CNTC/CFTC (Tank) | | Value |
| Master |  | | | 5348 | Master |  | | | 2176 | Master |  | | 2.458 |
| | 4700 (Minimum) | 5800 (Nominal) | 6900 (Maximum) | | 1900 (Minimum) | 2400 (Nominal) | 2900 (Maximum) | | | 2.120 (Minimum) | 2.159 (Nominal) | 2.540 (Maximum) | |
| Master: 14–Sep–2007 17:57 | | | | | | | | | | | | | |

















| High resolution Integrated Logging Tool–DTS | | |
|---|---|--------------------|
| Wellsite Calibration | | |
| Accelerometer Calibration | | |
| Phase | Z–Axis Acceleration F/S2 | Value |
| Before |  | 32.19 |
| 31.53 (Minimum) | 32.19 (Nominal) | 32.84 (Maximum) |

| High resolution Integrated Logging Tool-DTS Master Calibration | | | | | | | |
|--|--------|----------------------|---|----------------------|-------------------------|---|--------------------------|
| Electronics Calibration Check – Thru Cal Mag. & Phase | | | | | | | |
| Idx | Phase | Value | Thru Cal Magnitude V | Nominal | Value | Phase DEG | Nominal |
| 0 | Master | 0.6092 |  | 0.6050 | 49.73 |  | 71.00 |
| 1 | Master | 1.249 |  | 1.270 | 48.71 |  | 70.00 |
| 2 | Master | 0.6210 |  | 0.6230 | 44.61 |  | 66.00 |
| 3 | Master | 0.7034 |  | 0.7040 | 43.74 |  | 65.00 |
| 4 | Master | 1.311 |  | 1.337 | 36.98 |  | 59.00 |
| 5 | Master | 1.894 |  | 1.955 | 34.80 |  | 57.00 |
| 6 | Master | 1.898 |  | 1.955 | 34.77 |  | 57.00 |
| 7 | Master | 1.335 |  | 1.415 | 28.85 |  | 53.00 |
| | | 60.00 % (Minimum) | (Nominal) | 140.0 % (Maximum) | Nom -60.00 (Minimum) | (Nominal) | Nom + 60.00 (Maximum) |



Master: 27-Sep-2007 11:01

| High resolution Integrated Logging Tool-DTS Master Calibration | | | | | | | |
|--|---|---------------------|---------------------|--------|---|----------------|----------------------|
| Electronics Calibration Check – Auxilliary | | | | | | | |
| Phase | Array Induction SPA Plus MV | | Value | Phase | Array Induction SPA Zero MV | | Value |
| Master |  | | 990.0 | Master |  | | 0.1585 |
| | 941.0 (Minimum) | 990.5 (Nominal) | 1040 (Maximum) | | -50.00 (Minimum) | 0 (Nominal) | 50.00 (Maximum) |
| Phase | Array Induction Temperature Plus V | | Value | Phase | Array Induction Temperature Zero V | | Value |
| Master |  | | 0.9167 | Master |  | | 0.0001591 |
| | 0.8700 (Minimum) | 0.9150 (Nominal) | 0.9600 (Maximum) | | -0.05000 (Minimum) | 0 (Nominal) | 0.05000 (Maximum) |

Master: 27-Sep-2007 11:01



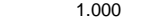



| High resolution Integrated Logging Tool–DTS Master Calibration | | | | | | | |
|--|--------|---|--------------------|--------------------|---------------------|---|--------------------|
| Test Loop Gain Correction | | | | | | | |
| Idx | Value | Test Loop Gain Magnitude V | | | Value | Phase DEG | |
| 0 | 1.019 |  | | | 0.5429 |  | |
| | | 0.9500 (Minimum) | 1.000 (Nominal) | 1.050 (Maximum) | -3.000 (Minimum) | 0 (Nominal) | 3.000 (Maximum) |
| 1 | 1.020 |  | | | 0.5581 |  | |
| | | 0.9500 (Minimum) | 1.000 (Nominal) | 1.050 (Maximum) | -3.000 (Minimum) | 0 (Nominal) | 3.000 (Maximum) |
| 2 | 1.024 |  | | | -0.03639 |  | |
| | | 0.9500 (Minimum) | 1.000 (Nominal) | 1.050 (Maximum) | -3.000 (Minimum) | 0 (Nominal) | 3.000 (Maximum) |
| 3 | 1.021 |  | | | -0.005282 |  | |
| | | 0.9500 (Minimum) | 1.000 (Nominal) | 1.050 (Maximum) | -3.000 (Minimum) | 0 (Nominal) | 3.000 (Maximum) |
| 4 | 1.004 |  | | | -0.03332 |  | |
| | | 0.9500 (Minimum) | 1.000 (Nominal) | 1.050 (Maximum) | -3.000 (Minimum) | 0 (Nominal) | 3.000 (Maximum) |
| 5 | 0.9951 |  | | | -0.08879 |  | |
| | | 0.9500 (Minimum) | 1.000 (Nominal) | 1.050 (Maximum) | -3.000 (Minimum) | 0 (Nominal) | 3.000 (Maximum) |
| 6 | 1.005 |  | | | 0.1686 |  | |
| | | 0.9500 (Minimum) | 1.000 (Nominal) | 1.050 (Maximum) | -3.000 (Minimum) | 0 (Nominal) | 3.000 (Maximum) |
| 7 | 1.012 |  | | | -0.4128 |  | |
| | | 0.9500 (Minimum) | 1.000 (Nominal) | 1.050 (Maximum) | -3.000 (Minimum) | 0 (Nominal) | 3.000 (Maximum) |

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| High resolution Integrated Logging Tool-DTS Master Calibration | | | | |
|--|--------|---|--|---|
| Sonde Error Correction | | | | |
| Idx | Value | R Sonde Error Correction MM/M | | X Sonde Error Correction MM/M |
| 0 | -110.7 |  | |  |
| | | | | |

| | | | | | | | | |
|---|---------|---------------------|---------------------|--------------------|--|---------------------|----------------|--------------------|
| | | -231.0 (Minimum) | -56.00 (Nominal) | 119.0 (Maximum) | | -225.0 (Minimum) | 0 (Nominal) | 225.0 (Maximum) |
| 1 | 161.5 | | | | | -205.6 | | |
| | | 114.0 (Minimum) | 159.0 (Nominal) | 204.0 (Maximum) | | -625.0 (Minimum) | 0 (Nominal) | 625.0 (Maximum) |
| 2 | 116.0 | | | | | -40.24 | | |
| | | 66.00 (Minimum) | 111.0 (Nominal) | 156.0 (Maximum) | | -350.0 (Minimum) | 0 (Nominal) | 350.0 (Maximum) |
| 3 | 59.72 | | | | | 34.19 | | |
| | | 39.00 (Minimum) | 64.00 (Nominal) | 89.00 (Maximum) | | -250.0 (Minimum) | 0 (Nominal) | 250.0 (Maximum) |
| 4 | 23.64 | | | | | 20.51 | | |
| | | 15.00 (Minimum) | 25.00 (Nominal) | 35.00 (Maximum) | | -63.00 (Minimum) | 0 (Nominal) | 63.00 (Maximum) |
| 5 | 12.92 | | | | | 11.70 | | |
| | | 4.000 (Minimum) | 14.00 (Nominal) | 24.00 (Maximum) | | -50.00 (Minimum) | 0 (Nominal) | 50.00 (Maximum) |
| 6 | 9.047 | | | | | 5.787 | | |
| | | 5.000 (Minimum) | 10.00 (Nominal) | 15.00 (Maximum) | | -30.00 (Minimum) | 0 (Nominal) | 30.00 (Maximum) |
| 7 | -0.7151 | | | | | 0.9127 | | |
| | | -5.000 (Minimum) | 0 (Nominal) | 5.000 (Maximum) | | -30.00 (Minimum) | 0 (Nominal) | 30.00 (Maximum) |

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| High resolution Integrated Logging Tool–DTS Master Calibration | | | | | | | | |
|--|--------|--|--------------------|--------------------|--------|--|--------------------|--------------------|
| Mud Gain Correction | | | | | | | | |
| Idx | Value | Coarse – Mag, Real, Imag | | | Value | Fine – Mag, Real, Imag | | |
| 0 | 0.8865 |  | | | 0.8929 |  | | |
| | | 0.8000 (Minimum) | 1.000 (Nominal) | 1.200 (Maximum) | | 0.8000 (Minimum) | 1.000 (Nominal) | 1.200 (Maximum) |
| 1 | 0.8865 |  | | | 0.8929 |  | | |
| | | 0.8000 (Minimum) | 1.000 (Nominal) | 1.200 (Maximum) | | 0.8000 (Minimum) | 1.000 (Nominal) | 1.200 (Maximum) |
| 2 | 0.8865 |  | | | 0.8929 |  | | |
| | | 0.8000 (Minimum) | 1.000 (Nominal) | 1.200 (Maximum) | | 0.8000 (Minimum) | 1.000 (Nominal) | 1.200 (Maximum) |

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| High resolution Integrated Logging Tool—DTS Master Calibration | | | | | | | | | |
|--|------------------------|--------------------|--------------------|-------|--------|------------------------|--------------------|--------------------|-------|
| Inversion results | | | | | | | | | |
| Phase | Rho Aluminum G/C3 | | | Value | Phase | Rho Magnesium G/C3 | | | Value |
| Master | <div><div></div></div> | | | 2.600 | Master | <div><div></div></div> | | | 1.687 |
| | 2.586 (Minimum) | 2.596 (Nominal) | 2.606 (Maximum) | | | 1.676 (Minimum) | 1.686 (Nominal) | 1.696 (Maximum) | |
| Phase | Pe Aluminum | | | Value | Phase | Pe Magnesium | | | Value |
| Master | <div><div></div></div> | | | 2.555 | Master | <div><div></div></div> | | | 2.631 |
| | 2.470 (Minimum) | 2.570 (Nominal) | 2.670 (Maximum) | | | 2.550 (Minimum) | 2.650 (Nominal) | 2.750 (Maximum) | |
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| High resolution Integrated Logging Tool-DTS Master Calibration | | | | | | | | | |
|--|------------------------|----------------|---------------------|--------|--------|------------------------|----------------|--------------------|--------|
| Deviation Summary | | | | | | | | | |
| Phase | BS Average Deviation % | | | Value | Phase | SS Average Deviation % | | | Value |
| Master | | | | 0.3446 | Master | | | | 0.2535 |
| | -0.6000 (Minimum) | 0 (Nominal) | 0.6000 (Maximum) | | | -1.000 (Minimum) | 0 (Nominal) | 1.000 (Maximum) | |
| Phase | BS Max Deviation % | | | Value | Phase | SS Max Deviation % | | | Value |
| Master | | | | 1.006 | Master | | | | 0.8238 |
| | -1.600 (Minimum) | 0 (Nominal) | 1.600 (Maximum) | | | -2.500 (Minimum) | 0 (Nominal) | 2.500 (Maximum) | |
| Phase | LS Average Deviation % | | | Value | Phase | LS Max Deviation % | | | Value |
| Master | | | | 0.4908 | Master | | | | 0.9686 |
| | -1.500 (Minimum) | 0 (Nominal) | 1.500 (Maximum) | | | -3.500 (Minimum) | 0 (Nominal) | 3.500 (Maximum) | |

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| High resolution Integrated Logging Tool—DTS Master Calibration | | | | | | | |
|--|----------------------|--|-------|-------|----------------------|--|-------|
| Zero Measurement | | | | | | | |
| Phase | CNTC Background, GPS | | Value | Phase | CETC Background, GPS | | Value |

| Phase | CNTC Background | CPS | value | Phase | CFTC Background | CPS | value |
|---------------------------|---|--------------------|--------------------|--------------------|---|--------------------|--------------------|
| Master |  | | 27.59 | Master |  | | 29.13 |
| 5.000 (Minimum) | | 27.59 (Nominal) | 40.00 (Maximum) | 5.000 (Minimum) | | 29.13 (Nominal) | 40.00 (Maximum) |
| Master: 14-Sep-2007 17:57 | | | | | | | |

| High resolution Integrated Logging Tool–DTS Master Calibration | | | | | | | | | | | | | | | | | |
|--|-------------------------------|--|--|-------------------|-------------------|------------------------------|--|--|-------|-------------------|------------------------|--------------------|--|-------|--|--------------------|--------------------|
| Tank Measurement | | | | | | | | | | | | | | | | | |
| Phase | Thermal Near Corr. (Tank) CPS | | | Value | Phase | Thermal Far Corr. (Tank) CPS | | | Value | Phase | CNTC/CFTC (Tank) | | | Value | | | |
| Master | <div><div></div></div> | | | 5348 | Master | <div><div></div></div> | | | 2176 | Master | <div><div></div></div> | | | 2.458 | | | |
| 4700 (Minimum) | | | | 5800 (Nominal) | 6900 (Maximum) | 1900 (Minimum) | | | | 2400 (Nominal) | 2900 (Maximum) | 2.120 (Minimum) | | | | 2.159 (Nominal) | 2.540 (Maximum) |
| Master: 14–Sep–2007 17:57 | | | | | | | | | | | | | | | | | |

General Purpose Inclinometer / Equipment Identification

Primary Equipment:
GPIT Cartridge – C

GPIC – C

Auxiliary Equipment:
GPIT Housing

GPIH – B

DTS Telemetry Tool / Equipment Identification

Primary Equipment:
DTC–H Auxiliary Cartridge
DTC–H Telemetry Cartridge

DTCH – A
DTCH – A

Auxiliary Equipment:
DTCH Telemetry Cartridge Housing

ECH – KC

Company: **Orr Energy LLC**

Schlumberger

Well: **South 6–22D**

Field: **Wattenburg**

County: **Weld**

State: **Colorado**

Platform Express
Compensated Neutron
Litho Density