

|                                                                                                                                                                                                                                                                                   |  |  |  |  |  |  |  |  |  |                                                                                                                      |  |  |  |  |  |  |  |  |  |                                                                                                                                       |  |  |  |  |  |  |  |  |  |                                                                                                                                                                                                    |  |  |  |  |  |  |  |  |  |                                |  |  |  |  |  |  |  |  |  |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|--|--|--|--|--|--|----------------------------------------------------------------------------------------------------------------------|--|--|--|--|--|--|--|--|--|---------------------------------------------------------------------------------------------------------------------------------------|--|--|--|--|--|--|--|--|--|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|--|--|--|--|--|--|--------------------------------|--|--|--|--|--|--|--|--|--|
| <div>Company: PETRO-CANADA</div> <div>Well: PETRO-CANADA BLACKWATER KWIJIKA M-59</div> <div>Field: KWIJIKA</div> <div>Province: NORTHWEST TERRITORIES</div> <div>Location: LSD: M-59</div> <div>Well: PETRO-CANADA BLACKWATER KWIJIKA M-59</div> <div>Company: PETRO-CANADA</div> |  |  |  |  |  |  |  |  |  | <div>Platform Express</div> <div>Compensated Neutron</div> <div>Dual Lithology Density Log</div> <div>NEB COPY</div> |  |  |  |  |  |  |  |  |  | <div>LSD: M-59</div> <div>UWID: 300M596440122300</div> <div>Elev.: K.B. 252.1 m</div> <div>G.L. 245.9 m</div> <div>D.F. 251.8 m</div> |  |  |  |  |  |  |  |  |  | <div>Permanent Datum: GROUND LEVEL</div> <div>Log Measured From: KELLY BUSHING</div> <div>Elev.: 245.9 m</div> <div>6.2 m above Perm. Datum</div> <div>Drilling Measured From: KELLY BUSHING</div> |  |  |  |  |  |  |  |  |  | <div>API Serial No. 1165</div> |  |  |  |  |  |  |  |  |  |
| Logging Date                                                                                                                                                                                                                                                                      |  |  |  |  |  |  |  |  |  | 23-Feb-2008                                                                                                          |  |  |  |  |  |  |  |  |  |                                                                                                                                       |  |  |  |  |  |  |  |  |  |                                                                                                                                                                                                    |  |  |  |  |  |  |  |  |  |                                |  |  |  |  |  |  |  |  |  |
| Run Number                                                                                                                                                                                                                                                                        |  |  |  |  |  |  |  |  |  | ONE                                                                                                                  |  |  |  |  |  |  |  |  |  |                                                                                                                                       |  |  |  |  |  |  |  |  |  |                                                                                                                                                                                                    |  |  |  |  |  |  |  |  |  |                                |  |  |  |  |  |  |  |  |  |
| Depth Driller                                                                                                                                                                                                                                                                     |  |  |  |  |  |  |  |  |  | 1200 m                                                                                                               |  |  |  |  |  |  |  |  |  |                                                                                                                                       |  |  |  |  |  |  |  |  |  |                                                                                                                                                                                                    |  |  |  |  |  |  |  |  |  |                                |  |  |  |  |  |  |  |  |  |
| Schlumberger Depth                                                                                                                                                                                                                                                                |  |  |  |  |  |  |  |  |  | 1201 m                                                                                                               |  |  |  |  |  |  |  |  |  |                                                                                                                                       |  |  |  |  |  |  |  |  |  |                                                                                                                                                                                                    |  |  |  |  |  |  |  |  |  |                                |  |  |  |  |  |  |  |  |  |
| Bottom Log Interval                                                                                                                                                                                                                                                               |  |  |  |  |  |  |  |  |  | 1200.3 m                                                                                                             |  |  |  |  |  |  |  |  |  |                                                                                                                                       |  |  |  |  |  |  |  |  |  |                                                                                                                                                                                                    |  |  |  |  |  |  |  |  |  |                                |  |  |  |  |  |  |  |  |  |
| Top Log Interval                                                                                                                                                                                                                                                                  |  |  |  |  |  |  |  |  |  | 347.5 m                                                                                                              |  |  |  |  |  |  |  |  |  |                                                                                                                                       |  |  |  |  |  |  |  |  |  |                                                                                                                                                                                                    |  |  |  |  |  |  |  |  |  |                                |  |  |  |  |  |  |  |  |  |
| Casing Driller Size @ Depth                                                                                                                                                                                                                                                       |  |  |  |  |  |  |  |  |  | 244.500 mm @ 348 m                                                                                                   |  |  |  |  |  |  |  |  |  |                                                                                                                                       |  |  |  |  |  |  |  |  |  |                                                                                                                                                                                                    |  |  |  |  |  |  |  |  |  |                                |  |  |  |  |  |  |  |  |  |
| Casing Schlumberger                                                                                                                                                                                                                                                               |  |  |  |  |  |  |  |  |  | 347.5 m                                                                                                              |  |  |  |  |  |  |  |  |  |                                                                                                                                       |  |  |  |  |  |  |  |  |  |                                                                                                                                                                                                    |  |  |  |  |  |  |  |  |  |                                |  |  |  |  |  |  |  |  |  |
| Bit Size                                                                                                                                                                                                                                                                          |  |  |  |  |  |  |  |  |  | 222.000 mm                                                                                                           |  |  |  |  |  |  |  |  |  |                                                                                                                                       |  |  |  |  |  |  |  |  |  |                                                                                                                                                                                                    |  |  |  |  |  |  |  |  |  |                                |  |  |  |  |  |  |  |  |  |
| Type Fluid In Hole                                                                                                                                                                                                                                                                |  |  |  |  |  |  |  |  |  | KCL POLYMER                                                                                                          |  |  |  |  |  |  |  |  |  |                                                                                                                                       |  |  |  |  |  |  |  |  |  |                                                                                                                                                                                                    |  |  |  |  |  |  |  |  |  |                                |  |  |  |  |  |  |  |  |  |
| Density                                                                                                                                                                                                                                                                           |  |  |  |  |  |  |  |  |  | 1180 kg/m3                                                                                                           |  |  |  |  |  |  |  |  |  | 47 s                                                                                                                                  |  |  |  |  |  |  |  |  |  |                                                                                                                                                                                                    |  |  |  |  |  |  |  |  |  |                                |  |  |  |  |  |  |  |  |  |
| Fluid Loss                                                                                                                                                                                                                                                                        |  |  |  |  |  |  |  |  |  | 7 cm3                                                                                                                |  |  |  |  |  |  |  |  |  | 10                                                                                                                                    |  |  |  |  |  |  |  |  |  |                                                                                                                                                                                                    |  |  |  |  |  |  |  |  |  |                                |  |  |  |  |  |  |  |  |  |
| Source Of Sample                                                                                                                                                                                                                                                                  |  |  |  |  |  |  |  |  |  | FLOWLINE                                                                                                             |  |  |  |  |  |  |  |  |  |                                                                                                                                       |  |  |  |  |  |  |  |  |  |                                                                                                                                                                                                    |  |  |  |  |  |  |  |  |  |                                |  |  |  |  |  |  |  |  |  |
| RM @ Measured Temperature                                                                                                                                                                                                                                                         |  |  |  |  |  |  |  |  |  | 0.117 ohm.m @ 20 degC                                                                                                |  |  |  |  |  |  |  |  |  | @                                                                                                                                     |  |  |  |  |  |  |  |  |  |                                                                                                                                                                                                    |  |  |  |  |  |  |  |  |  |                                |  |  |  |  |  |  |  |  |  |
| RMF @ Measured Temperature                                                                                                                                                                                                                                                        |  |  |  |  |  |  |  |  |  | 0.103 ohm.m @ 20 degC                                                                                                |  |  |  |  |  |  |  |  |  | @                                                                                                                                     |  |  |  |  |  |  |  |  |  |                                                                                                                                                                                                    |  |  |  |  |  |  |  |  |  |                                |  |  |  |  |  |  |  |  |  |
| RMC @ Measured Temperature                                                                                                                                                                                                                                                        |  |  |  |  |  |  |  |  |  | 0.228 ohm.m @ 20 degC                                                                                                |  |  |  |  |  |  |  |  |  | @                                                                                                                                     |  |  |  |  |  |  |  |  |  |                                                                                                                                                                                                    |  |  |  |  |  |  |  |  |  |                                |  |  |  |  |  |  |  |  |  |
| Source RMF                                                                                                                                                                                                                                                                        |  |  |  |  |  |  |  |  |  | PRESSED                                                                                                              |  |  |  |  |  |  |  |  |  | PRESSED                                                                                                                               |  |  |  |  |  |  |  |  |  |                                                                                                                                                                                                    |  |  |  |  |  |  |  |  |  |                                |  |  |  |  |  |  |  |  |  |
| RM @ MRT                                                                                                                                                                                                                                                                          |  |  |  |  |  |  |  |  |  | 0.099 @ 28                                                                                                           |  |  |  |  |  |  |  |  |  | 0.087 @ 28                                                                                                                            |  |  |  |  |  |  |  |  |  | @                                                                                                                                                                                                  |  |  |  |  |  |  |  |  |  |                                |  |  |  |  |  |  |  |  |  |
| Maximum Recorded Temperatures                                                                                                                                                                                                                                                     |  |  |  |  |  |  |  |  |  | 28 degC                                                                                                              |  |  |  |  |  |  |  |  |  |                                                                                                                                       |  |  |  |  |  |  |  |  |  | @                                                                                                                                                                                                  |  |  |  |  |  |  |  |  |  |                                |  |  |  |  |  |  |  |  |  |
| Circulation Stopped                                                                                                                                                                                                                                                               |  |  |  |  |  |  |  |  |  | 23-Feb-2008                                                                                                          |  |  |  |  |  |  |  |  |  | 7:15                                                                                                                                  |  |  |  |  |  |  |  |  |  |                                                                                                                                                                                                    |  |  |  |  |  |  |  |  |  |                                |  |  |  |  |  |  |  |  |  |
| Logger On Bottom                                                                                                                                                                                                                                                                  |  |  |  |  |  |  |  |  |  | 23-Feb-2008                                                                                                          |  |  |  |  |  |  |  |  |  | 16:06                                                                                                                                 |  |  |  |  |  |  |  |  |  |                                                                                                                                                                                                    |  |  |  |  |  |  |  |  |  |                                |  |  |  |  |  |  |  |  |  |
| Unit Number                                                                                                                                                                                                                                                                       |  |  |  |  |  |  |  |  |  | 4301                                                                                                                 |  |  |  |  |  |  |  |  |  | NORMAN WELLS                                                                                                                          |  |  |  |  |  |  |  |  |  |                                                                                                                                                                                                    |  |  |  |  |  |  |  |  |  |                                |  |  |  |  |  |  |  |  |  |
| Recorded By                                                                                                                                                                                                                                                                       |  |  |  |  |  |  |  |  |  | J.ROLLINGS / R. JACOBS                                                                                               |  |  |  |  |  |  |  |  |  |                                                                                                                                       |  |  |  |  |  |  |  |  |  |                                                                                                                                                                                                    |  |  |  |  |  |  |  |  |  |                                |  |  |  |  |  |  |  |  |  |
| Witnessed By                                                                                                                                                                                                                                                                      |  |  |  |  |  |  |  |  |  | G. TIMMONS / G. DEON                                                                                                 |  |  |  |  |  |  |  |  |  |                                                                                                                                       |  |  |  |  |  |  |  |  |  |                                                                                                                                                                                                    |  |  |  |  |  |  |  |  |  |                                |  |  |  |  |  |  |  |  |  |

|                               |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |
|-------------------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|--|--|--|--|--|--|--|--|--|---|--|--|--|--|--|--|--|--|--|
| Logging Date                  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |
| Run Number                    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |
| Depth Driller                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |
| Schlumberger Depth            |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |
| Bottom Log Interval           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |
| Top Log Interval              |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |
| Casing Driller Size @ Depth   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | @ |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |
| Casing Schlumberger           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |
| Bit Size                      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |
| Type Fluid In Hole            |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |
| Density                       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |
| Fluid Loss                    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |
| Source Of Sample              |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |
| RM @ Measured Temperature     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | @ |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |
| RMF @ Measured Temperature    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | @ |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |
| RMC @ Measured Temperature    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | @ |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |
| Source RMF                    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |
| RM @ MRT                      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | @ |  |  |  |  |  |  |  |  |  | @ |  |  |  |  |  |  |  |  |  |
| Maximum Recorded Temperatures |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |
| Circulation Stopped           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |
| Logger On Bottom              |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |
| Unit Number                   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |
| Recorded By                   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |
| Witnessed By                  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |   |  |  |  |  |  |  |  |  |  |

## DEPTH SUMMARY LISTING

Date Created: 23-FEB-2008 18:18:11

### Depth System Equipment

| Depth Measuring Device    |             | Tension Device            |             | Logging Cable      |           |
|---------------------------|-------------|---------------------------|-------------|--------------------|-----------|
| Type:                     | IDW-B       | Type:                     | CMTD-B/A    | Type:              | 7-46A XXS |
| Serial Number:            | 6423        | Serial Number:            | 2565        | Serial Number:     | 6199      |
| Calibration Date:         | 15-FEB-2008 | Calibration Date:         | 15-FEB-2008 | Length:            | 7800.14 M |
| Calibrator Serial Number: | 4           | Calibrator Serial Number: | -999        |                    |           |
| Calibration Cable Type:   | 7-46P       | Calibration Gain:         | 0.88        | Conveyance Method: | Wireline  |
| Wheel Correction 1:       | -4          | Calibration Offset:       | 336.00      | Rig Type:          | LAND      |
| Wheel Correction 2:       | -5          |                           |             |                    |           |

### Depth Control Parameters

|                             |                       |
|-----------------------------|-----------------------|
| Log Sequence:               | First Log In the Well |
| Rig Up Length At Surface:   | 63.30 M               |
| Rig Up Length At Bottom:    | 63.30 M               |
| Rig Up Length Correction:   | 0.00 M                |
| Stretch Correction:         | 0.70 M                |
| Tool Zero Check At Surface: | 0.10 M                |

## Depth Control Remarks

- |                                                      |  |
|------------------------------------------------------|--|
| 1. IDW IS PRIMARY DEPTH MEASUREMENT                  |  |
| 2. Z-CHART USED AS A SECONDARY DEPTH MEASUREMENTS    |  |
| 3. MAIN PASS TIED INTO DOWN LOG AS FIRST RUN IN HOLE |  |
| 4.                                                   |  |
| 5.                                                   |  |
| 6.                                                   |  |

## DISCLAIMER

DISCLAIMER

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

|                                                                                       |       |          |                       |       |      |
|---------------------------------------------------------------------------------------|-------|----------|-----------------------|-------|------|
| OTHER SERVICES1                                                                       |       |          | OTHER SERVICES2       |       |      |
| OS1: PEX-HRLA-TLD2-HNGS                                                               |       |          | OS1:                  |       |      |
| OS2: FMI-DSI                                                                          |       |          | OS2:                  |       |      |
| OS3:                                                                                  |       |          | OS3:                  |       |      |
| OS4:                                                                                  |       |          | OS4:                  |       |      |
| OS5:                                                                                  |       |          | OS5:                  |       |      |
| REMARKS: RUN NUMBER 1                                                                 |       |          | REMARKS: RUN NUMBER 2 |       |      |
| ALL PRESENTATIONS AS PER LOGGING PROGRAM DATED FEB 6, 2008                            |       |          |                       |       |      |
| INTERVALS CONFIRMED ON LOCATION BY WELLSITE GEOLOGIST                                 |       |          |                       |       |      |
| RUN 1: TLD-HGNS-HRLA-TLD2-HNGS-SP                                                     |       |          |                       |       |      |
| RUN 2: FMI-DSI-EMS-EMA-GR-SAH-F                                                       |       |          |                       |       |      |
| RM1= 0.1168, RM2=0.116 & RM3=0.117 OHMS, RMF1=0.103 & RMF2=0.102 OHMS, RMC=0.228 OHMS |       |          |                       |       |      |
| SP OP CHECKED BEFORE RUNNING IN HOLE - SP GROUND IN THE SUMP 5 FT BELOW               |       |          |                       |       |      |
| SP READING ERRATIC, CHECKED GROUND & STOPPED ALL WELDING ON LOCATION                  |       |          |                       |       |      |
| DOLOMITE HIRES INTERVAL: TD-CS                                                        |       |          |                       |       |      |
| TLD2 RAN 90 DEG OFFSET TO BOTTOM TLD                                                  |       |          |                       |       |      |
| NEUTRON RAN ECCENTERED WITH TWO 120 DEG OFFSET BOWSPRINGS                             |       |          |                       |       |      |
| HRLA ATTEMPTED TO BE CENTRALIZED WITH 25MM PLASTIC STANDOFFS & KNUCKLES               |       |          |                       |       |      |
| HRLA WRAPPING DUE TO HIGH RESISTIVITY FORMATION                                       |       |          |                       |       |      |
| DENSITY POROSITY WRAPPING DUE TO TIGHT FORMATION                                      |       |          |                       |       |      |
| MAXIMUM TEMPERATURE TAKEN FROM HEAD THERMOMETER                                       |       |          |                       |       |      |
|                                                                                       |       |          |                       |       |      |
| RIG: AKITA 51                                                                         |       |          |                       |       |      |
| CREW: BILLY LIAM, LARRY DUDUS                                                         |       |          |                       |       |      |
| RUN 1                                                                                 |       |          | RUN 2                 |       |      |
| SERVICE ORDER #:                                                                      |       | 11958995 | SERVICE ORDER #:      |       |      |
| PROGRAM VERSION:                                                                      |       | 15C0-309 | PROGRAM VERSION:      |       |      |
| FLUID LEVEL:                                                                          |       |          | FLUID LEVEL:          |       |      |
| LOGGED INTERVAL                                                                       | START | STOP     | LOGGED INTERVAL       | START | STOP |
|                                                                                       |       |          |                       |       |      |
|                                                                                       |       |          |                       |       |      |
|                                                                                       |       |          |                       |       |      |
|                                                                                       |       |          |                       |       |      |

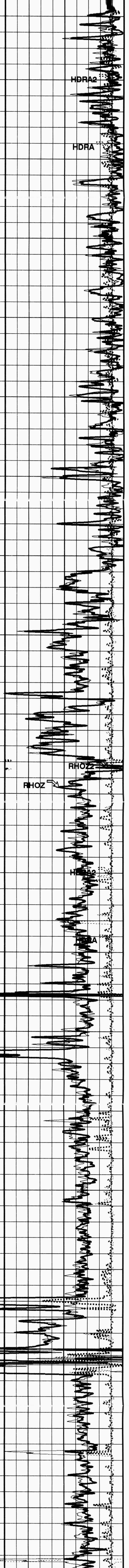
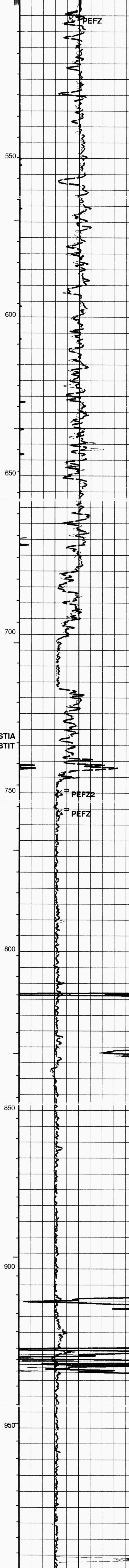
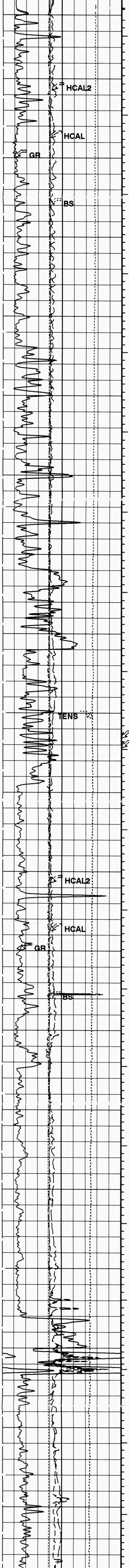
## EQUIPMENT DESCRIPTION

| SURFACE EQUIPMENT       |              | DOWNHOLE EQUIPMENT                                                                  |       |
|-------------------------|--------------|-------------------------------------------------------------------------------------|-------|
| GSR-U/Y 11              | GSR-U 1237   |                                                                                     |       |
| NCT-B                   | WITM (DTS)-A |                                                                                     |       |
| CNB-AB                  |              |                                                                                     |       |
| NCS-VB                  |              |                                                                                     |       |
| LEH-QT 2657             |              |  | 28.33 |
| LEH-QT 2657             |              |                                                                                     |       |
| AH-169 185              |              |  | 27.44 |
| SPA-A 9936              | SP SPARC     |  | 27.04 |
| SPA-A 9936              |              |                                                                                     |       |
| DTC-H                   | CTEM         |  | 25.82 |
| ECH-KC 10485            | TeIStatus    |                                                                                     |       |
|                         | ToolStatu    |  | 24.90 |
| HNGS-BA                 | Upper_1      |  | 24.90 |
| HNGS-BA 163             | Lower_2      |                                                                                     |       |
| HNSH-BA 160             |              |                                                                                     |       |
| HNGC-B                  | HNGC Stat    |  | 22.41 |
| HNGH-A 346              |              |                                                                                     |       |
| HILTH2-FTB              | HMCA2        |  | 21.34 |
| HTBCD2-H2 3733          | HRCC2 car    |                                                                                     |       |
| HMCA-H 3733             | MCFL         |  | 17.85 |
| HRCC-H2 3990            | HILT call    |                                                                                     |       |
| HRMS-H2 3983            | HRDD2-LS     |  | 17.71 |
| HRGD-H2 4709            | HRDD2-SS     |                                                                                     |       |
| GLS-VJ2 1984            | HRDD2-BS     |  | 17.59 |
| MCFL2 Device-H2         |              |                                                                                     |       |
| HILT2 Nucl. LS-H2 28842 |              |                                                                                     |       |
| AH-90 DEG OFFSET        |              |  | 17.00 |
| AH-184 2713             |              |  | 16.55 |
| AH-184 3800             |              |  | 15.94 |
| HRLT-B                  |              |  | 15.33 |
| HRUH-B 1716             |              |                                                                                     |       |
| HRUC-B 1714             |              |                                                                                     |       |
|                         |              |                                                                                     |       |

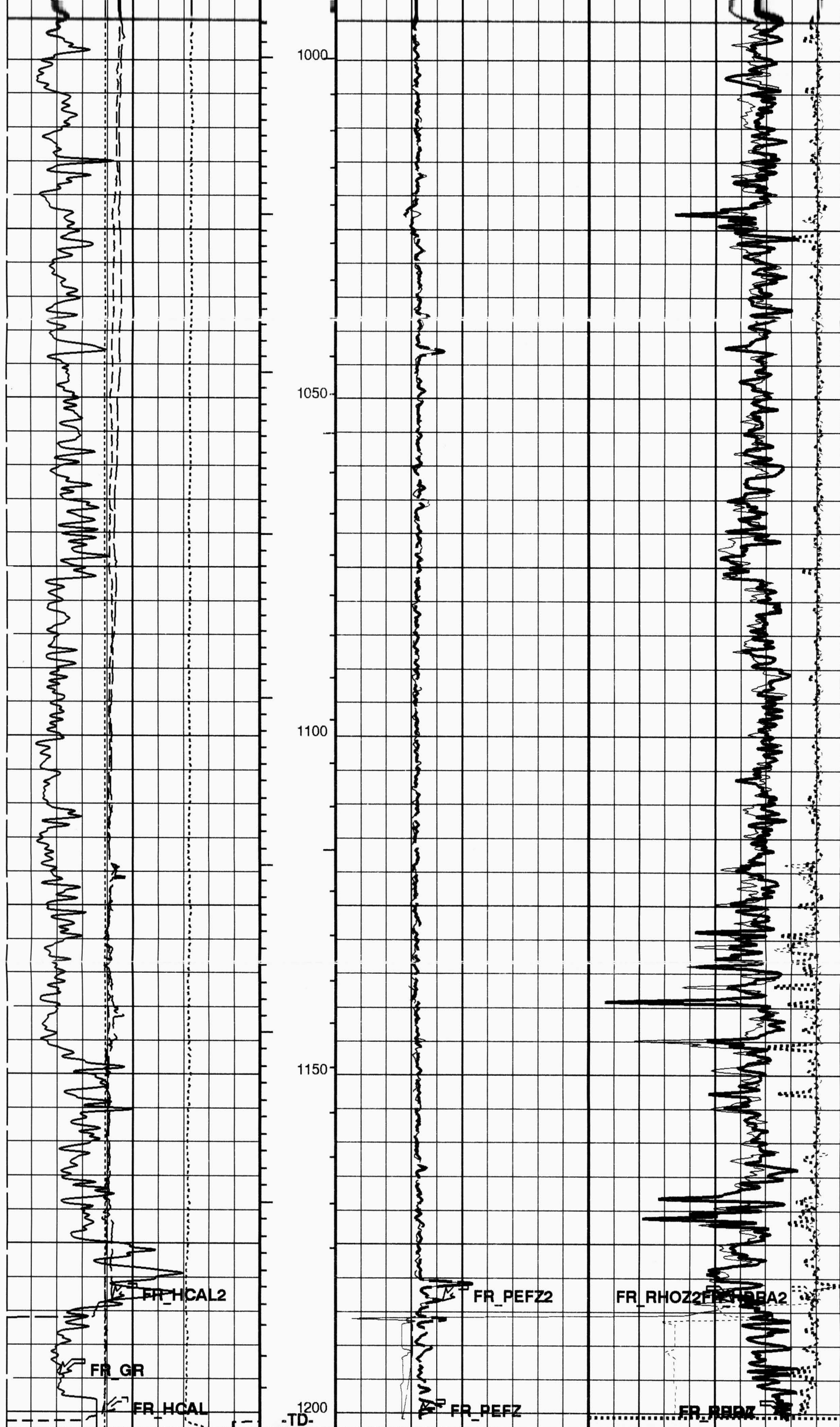












|                                                       |                                              |
|-------------------------------------------------------|----------------------------------------------|
| MAIN PASS: *** DUAL DENSITY - SANDSTONE 2650 KG/M3*** |                                              |
| Bit Size (BS)<br>(MM)                                 | Std. Res. Formation Pe (PEFZ)<br>(----       |
| Gamma Ray (GR)<br>(GAPI)                              | Density Correction (HDRA)<br>(K/M3)          |
| Caliper (HCAL)<br>(MM)                                | Std. Res. Formation Pe (PEFZ2)<br>(----      |
| HILT Caliper (HCAL2)<br>(MM)                          | Density Correction (HDRA2)<br>(K/M3)         |
| Tension (TENS)<br>(N)                                 | Std. Res. Formation Density (RHOZ)<br>(K/M3) |

|                                                 |  |
|-------------------------------------------------|--|
| PIP SUMMARY                                     |  |
| Integrated Hole Volume Minor Pip Every 0.1 M3   |  |
| Integrated Hole Volume Major Pip Every 1 M3     |  |
| Integrated Cement Volume Minor Pip Every 0.1 M3 |  |
| Integrated Cement Volume Major Pip Every 1 M3   |  |

| Parameters                                               |                                          |              |
|----------------------------------------------------------|------------------------------------------|--------------|
| DLIS Name                                                | Description                              | Value        |
| HILTH-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                     | HiRes        |
| NSAR                                                     | HRDD Depth Sampling Rate                 | 25.4 MM      |
| HILTH2-FTB: High resolution Integrated Logging Tool-DTS2 |                                          |              |
| BHFL_TLD                                                 | HILT Nuclear Mud Base                    | WATER        |
| DHC                                                      | Density Hole Correction                  | BS           |
| GCLF2                                                    | Germany Coal-like Formation Option       | NO           |
| NAAC2                                                    | HRDD2 APS Activation Correction          | OFF          |
| NMT                                                      | HILT Nuclear Mud Type                    | NOBARITE     |
| NPRM2                                                    | HRDD2 Processing Mode                    | HiRes        |
| NSAR2                                                    | HRDD2 Depth Sampling Rate                | 25.4 MM      |
| DIR: Directional Survey Computation                      |                                          |              |
| SPVD                                                     | TVD of Starting Point                    | 0 M          |
| TIMD                                                     | Along-hole depth of Tie-in Point         | 348 M        |
| TIVD                                                     | TVD of Tie-in Point                      | 348 M        |
| HOLEV: Integrated Hole/Cement Volume                     |                                          |              |
| FCD                                                      | Future Casing (Outer) Diameter           | 177.8 MM     |
| HVCS                                                     | Integrated Hole Volume Caliper Selection | HCAL/HCAL2   |
| STI: Stuck Tool Indicator                                |                                          |              |
| LBFR                                                     | Trigger for MAXIS First Reading Label    | TDL          |
| STKT                                                     | STI Stuck Threshold                      | 1.524 M      |
| TDD                                                      | Total Depth - Driller                    | 1200.00 M    |
| TDL                                                      | Total Depth - Logger                     | 1201.00 M    |
| System and Miscellaneous                                 |                                          |              |
| BS                                                       | Bit Size                                 | 222.000 MM   |
| DFD                                                      | Drilling Fluid Density                   | 1180.00 K/M3 |
| DO                                                       | Depth Offset for Playback                | 0.0 M        |
| DORL                                                     | Depth Offset for Repeat Analysis         | 0.0 M        |
| PP                                                       | Playback Processing                      | RECOMPUTE    |
| TD                                                       | Total Depth                              | 1201 M       |

Format: DENS Vertical Scale: 1:600 Graphics File Created: 23-Feb-2008 18:53

|                             |                   |        |               |
|-----------------------------|-------------------|--------|---------------|
| OP System Version: 15C0-309 |                   |        |               |
| MCM                         |                   |        |               |
| HILTH-FTB                   | SRPC-3402-Q3_2007 | HRLT-B | 15C0-309      |
| HILTH2-FTB                  | SRPC-3402-Q3_2007 | HNGC-B | SPC-3530-NUCL |
| HNGS-BA                     | SPC-3530-NUCL     | DTC-H  | 15C0-309      |
| SPA-A                       | 9936              |        |               |

| Input DLIS Files  |                          |       |          |                   |          |         |
|-------------------|--------------------------|-------|----------|-------------------|----------|---------|
| DEFAULT           | TLD_MCFL_CNL_HRLA_011LUP | FN:17 | PRODUCER | 23-Feb-2008 16:24 | 1202.4 M | -13.7 M |
| Output DLIS Files |                          |       |          |                   |          |         |
| DEFAULT           | TLD_MCFL_CNL_HRLA_013PUP | FN:21 | PRODUCER | 23-Feb-2008 18:53 |          |         |
| BACKUP            | TLD_MCFL_CNL_HRLA_013PUP | FN:22 | PRODUCER | 23-Feb-2008 18:53 |          |         |

| Input DLIS Files  |                          |       |          |                   |          |         |
|-------------------|--------------------------|-------|----------|-------------------|----------|---------|
| DEFAULT           | TLD_MCFL_CNL_HRLA_011LUP | FN:17 | PRODUCER | 23-Feb-2008 16:24 | 1202.4 M | -13.7 M |
| Output DLIS Files |                          |       |          |                   |          |         |
| DEFAULT           | TLD_MCFL_CNL_HRLA_015PUP | FN:24 | PRODUCER | 23-Feb-2008 19:05 | 353.0 M  | -35.4 M |
| BACKUP            | TLD_MCFL_CNL_HRLA_015PUP | FN:25 | PRODUCER | 23-Feb-2008 19:05 | 353.0 M  | -35.4 M |

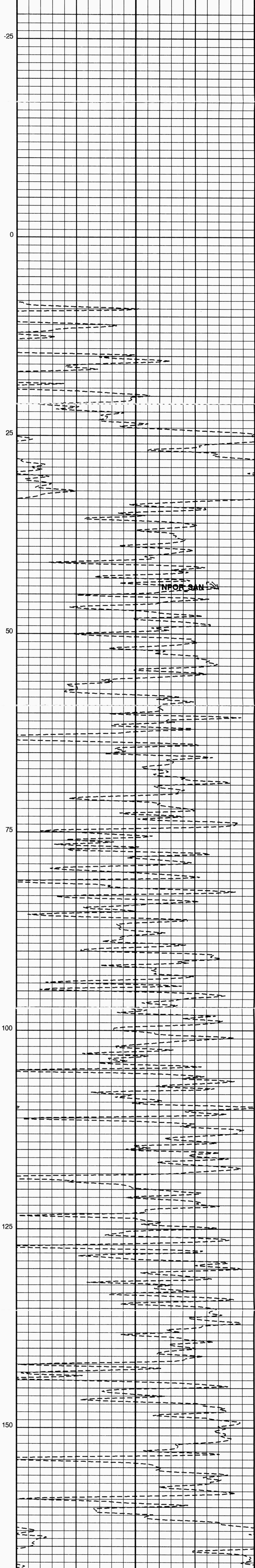
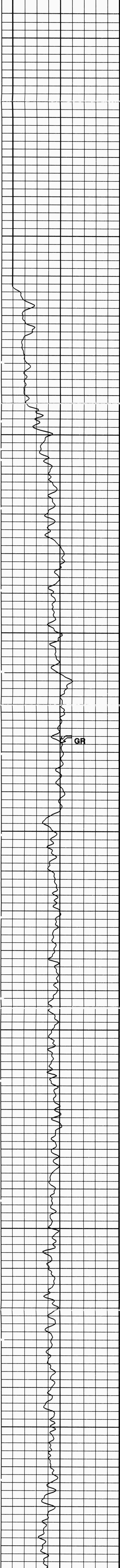
| Integrated Hole/Cement Volume Summary                             |  |
|-------------------------------------------------------------------|--|
| Hole Volume = 0.27 M3                                             |  |
| Cement Volume = 0.14 M3 (assuming 177.80 MM casing O.D.)          |  |
| Computed from 353.0 M to 348.1 M using data channel(s) HCAL HCAL2 |  |

|                             |                   |        |               |
|-----------------------------|-------------------|--------|---------------|
| OP System Version: 15C0-309 |                   |        |               |
| MCM                         |                   |        |               |
| HILTH-FTB                   | SRPC-3402-Q3_2007 | HRLT-B | 15C0-309      |
| HILTH2-FTB                  | SRPC-3402-Q3_2007 | HNGC-B | SPC-3530-NUCL |
| HNGS-BA                     | SPC-3530-NUCL     | DTC-H  | 15C0-309      |
| SPA-A                       | 9936              |        |               |

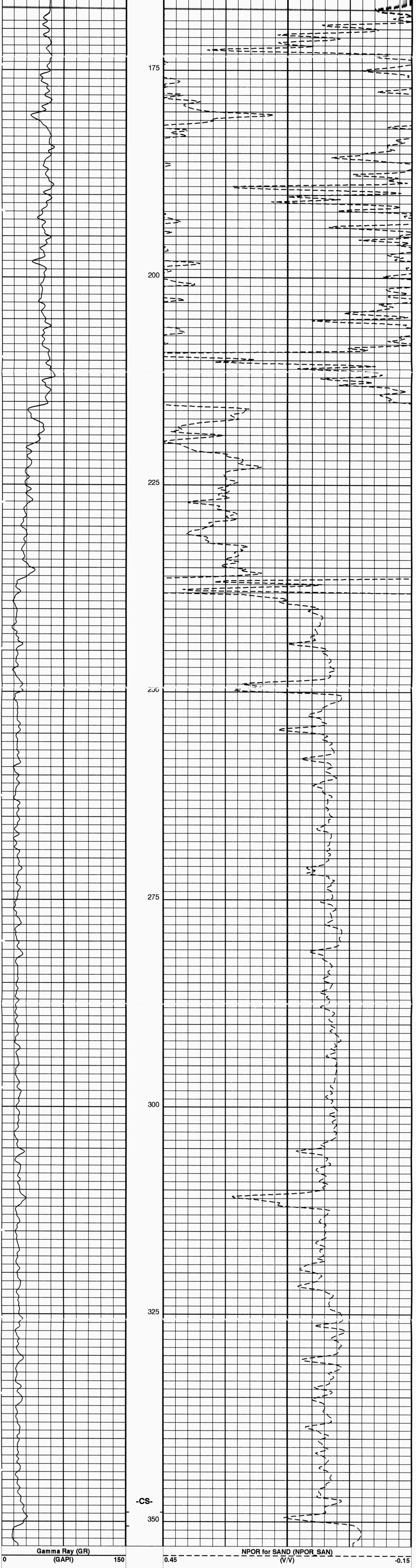
|                                                 |  |
|-------------------------------------------------|--|
| PIP SUMMARY                                     |  |
| Integrated Cement Volume Major Pip Every 1 M3   |  |
| Integrated Cement Volume Minor Pip Every 0.1 M3 |  |
| Integrated Hole Volume Major Pip Every 1 M3     |  |
| Integrated Hole Volume Minor Pip Every 0.1 M3   |  |

|                          |                                   |
|--------------------------|-----------------------------------|
| Time Mark Every 60 S     |                                   |
| Gamma Ray (GR)<br>(GAPI) | NPOR for SAND (NPOR_SAN)<br>(V/V) |
| 0                        | 0.45                              |
| 150                      | -0.15                             |











| DLIS Name                                                | Description                                       | Value         |
|----------------------------------------------------------|---------------------------------------------------|---------------|
| HILTH-FTB: High resolution Integrated Logging Tool-DTS   |                                                   |               |
| BHFL                                                     | Borehole Fluid Type                               | WATER         |
| BHS                                                      | Borehole Status                                   | CASED         |
| BSCO                                                     | Borehole Salinity Correction Option               | NO            |
| CCCO                                                     | Casing & Cement Thickness Correction Option       | YES           |
| FSAL                                                     | Formation Salinity                                | -50000 PPM    |
| FSCO                                                     | Formation Salinity Correction Option              | NO            |
| GDEV                                                     | Average Angular Deviation of Borehole from Normal | 0 DEG         |
| GGRD                                                     | Geothermal Gradient                               | 0.018227 DC/M |
| HSCO                                                     | Hole Size Correction Option                       | YES           |
| MCCO                                                     | Mud Cake Correction Option                        | NO            |
| MCOR                                                     | Mud Correction                                    | NATU          |
| MWCO                                                     | Mud Weight Correction Option                      | NO            |
| PTCO                                                     | Pressure/Temperature Correction Option            | NO            |
| SDAT                                                     | Standoff Data Source                              | SOCN          |
| SOCN                                                     | Standoff Distance                                 | 3.175 MM      |
| SOCO                                                     | Standoff Correction Option                        | YES           |
| HRLT-B: High Resolution Laterolog Array - B              |                                                   |               |
| BHS                                                      | Borehole Status                                   | CASED         |
| GDEV                                                     | Average Angular Deviation of Borehole from Normal | 0 DEG         |
| GGRD                                                     | Geothermal Gradient                               | 0.018227 DC/M |
| HILTH2-FTB: High resolution Integrated Logging Tool-DTS2 |                                                   |               |
| BHFL                                                     | Borehole Fluid Type                               | WATER         |
| BHS                                                      | Borehole Status                                   | CASED         |
| BSCO                                                     | Borehole Salinity Correction Option               | NO            |
| CCCO                                                     | Casing & Cement Thickness Correction Option       | YES           |
| FSAL                                                     | Formation Salinity                                | NO            |
| GDEV                                                     | Average Angular Deviation of Borehole from Normal | 0 DEG         |
| GGRD                                                     | Geothermal Gradient                               | 0.018227 DC/M |
| HSCO                                                     | Hole Size Correction Option                       | YES           |
| MCCO                                                     | Mud Cake Correction Option                        | NO            |
| MCOR                                                     | Mud Correction                                    | NATU          |
| MWCO                                                     | Mud Weight Correction Option                      | NO            |
| PTCO                                                     | Pressure/Temperature Correction Option            | NO            |
| SDAT                                                     | Standoff Data Source                              | SOCN          |
| SOCN                                                     | Standoff Distance                                 | 3.175 MM      |
| SOCO                                                     | Standoff Correction Option                        | YES           |
| HNGS-BA: Hostile Natural Gamma Ray Sonde                 |                                                   |               |
| BHS                                                      | Borehole Status                                   | CASED         |
| GDEV                                                     | Average Angular Deviation of Borehole from Normal | 0 DEG         |
| GGRD                                                     | Geothermal Gradient                               | 0.018227 DC/M |
| DIR: Directional Survey Computation                      |                                                   |               |
| SPVD                                                     | TVD of Starting Point                             | 0 M           |
| TIMD                                                     | Along-hole depth of Tie-in Point                  | 348 M         |
| TIVD                                                     | TVD of Tie-in Point                               | 348 M         |
| HOLEV: Integrated Hole/Cement Volume                     |                                                   |               |
| BHS                                                      | Borehole Status                                   | CASED         |
| FCD                                                      | Future Casing (Outer) Diameter                    | 177.8 MM      |
| GDEV                                                     | Average Angular Deviation of Borehole from Normal | 0 DEG         |
| GGRD                                                     | Geothermal Gradient                               | 0.018227 DC/M |
| HVCS                                                     | Integrated Hole Volume Caliper Selection          | HCAL/HCAL2    |
| STI: Stuck Tool Indicator                                |                                                   |               |
| TDL                                                      | Total Depth - Logger                              | 1201.00 M     |
| System and Miscellaneous                                 |                                                   |               |
| BS                                                       | Bit Size                                          | 311.000 MM    |
| BSAL                                                     | Borehole Salinity                                 | -50000.00 PPM |
| CSIZ                                                     | Current Casing Size                               | 244.500 MM    |
| CWEI                                                     | Casing Weight                                     | 53.57 KG/M    |
| DFD                                                      | Drilling Fluid Density                            | 1180.00 K/M3  |
| DO                                                       | Depth Offset for Playback                         | 0.0 M         |
| MST                                                      | Mud Sample Temperature                            | 20.10 DEGC    |
| PP                                                       | Playback Processing                               | RECOMPUTE     |
| RMFS                                                     | Resistivity of Mud Filtrate Sample                | 0.1030 OHMM   |
| TD                                                       | Total Depth                                       | 1201 M        |

Format: SURFACE

Vertical Scale: 1:240

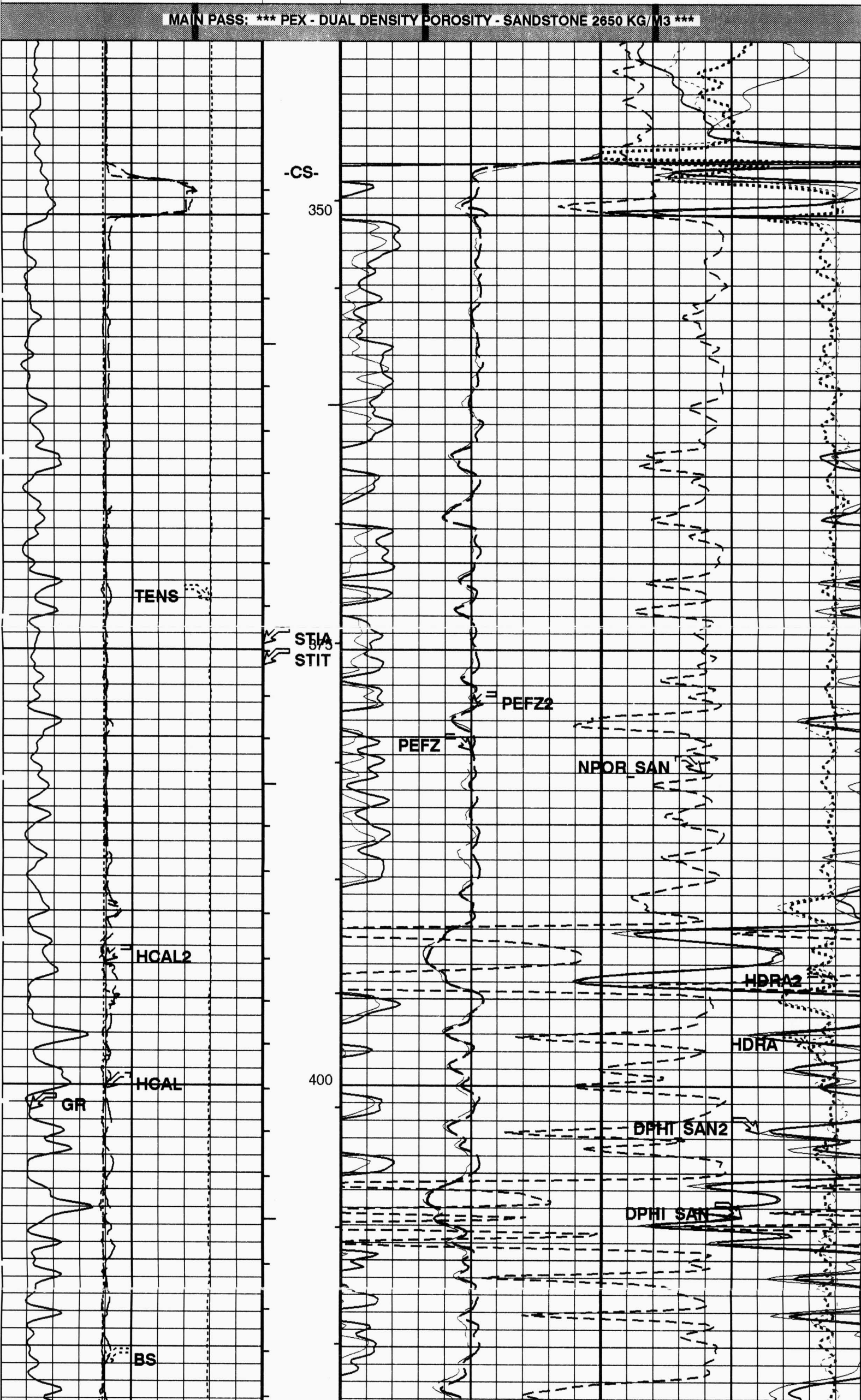
Graphics File Created: 23-Feb-2008 19:05

|                             |                          |        |               |                                    |
|-----------------------------|--------------------------|--------|---------------|------------------------------------|
| OP System Version: 15C0-309 |                          |        |               |                                    |
| MCM                         |                          |        |               |                                    |
| HILTH-FTB                   | SRPC-3402-Q3_2007        | HRLT-B | 15C0-309      |                                    |
| HILTH2-FTB                  | SRPC-3402-Q3_2007        | HNGC-B | SPC-3530-NUCL |                                    |
| HNGS-BA                     | SPC-3530-NUCL            | DTC-H  | 15C0-309      |                                    |
| SPA-A                       | 9936                     |        |               |                                    |
| Input DLIS Files            |                          |        |               |                                    |
| DEFAULT                     | TLD_MCFL_CNL_HRLA_011LUP | FN:17  | PRODUCER      | 23-Feb-2008 16:24 1202.4 M -13.7 M |
| Output DLIS Files           |                          |        |               |                                    |
| DEFAULT                     | TLD_MCFL_CNL_HRLA_015PUP | FN:24  | PRODUCER      | 23-Feb-2008 19:05                  |
| BACKUP                      | TLD_MCFL_CNL_HRLA_015PUP | FN:25  | PRODUCER      | 23-Feb-2008 19:05                  |

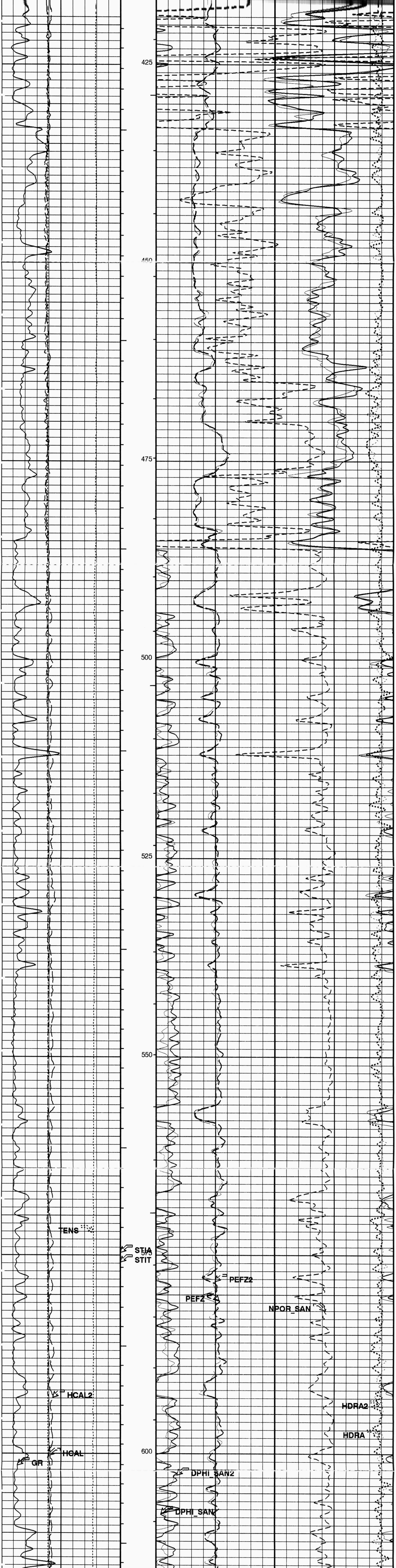
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|--------------------------------------------------------------------|--------------------------|-------|----------|------------------------------------|
| Input DLIS Files                                                   |                          |       |          |                                    |
| DEFAULT                                                            | TLD_MCFL_CNL_HRLA_011LUP | FN:17 | PRODUCER | 23-Feb-2008 16:24 1202.4 M -13.7 M |
| Output DLIS Files                                                  |                          |       |          |                                    |
| DEFAULT                                                            | TLD_MCFL_CNL_HRLA_013PUP | FN:21 | PRODUCER | 23-Feb-2008 18:53 1202.4 M 301.4 M |
| BACKUP                                                             | TLD_MCFL_CNL_HRLA_013PUP | FN:22 | PRODUCER | 23-Feb-2008 18:53 1202.4 M 301.4 M |
| Integrated Hole/Cement Volume Summary                              |                          |       |          |                                    |
| Hole Volume = 34.44 M3                                             |                          |       |          |                                    |
| Cement Volume = 13.26 M3 (assuming 177.80 MM casing O.D.)          |                          |       |          |                                    |
| Computed from 1200.9 M to 348.1 M using data channel(s) HCAL HCAL2 |                          |       |          |                                    |

|                             |                   |        |               |  |
|-----------------------------|-------------------|--------|---------------|--|
| OP System Version: 15C0-309 |                   |        |               |  |
| MCM                         |                   |        |               |  |
| HILTH-FTB                   | SRPC-3402-Q3_2007 | HRLT-B | 15C0-309      |  |
| HILTH2-FTB                  | SRPC-3402-Q3_2007 | HNGC-B | SPC-3530-NUCL |  |
| HNGS-BA                     | SPC-3530-NUCL     | DTC-H  | 15C0-309      |  |
| SPA-A                       | 9936              |        |               |  |

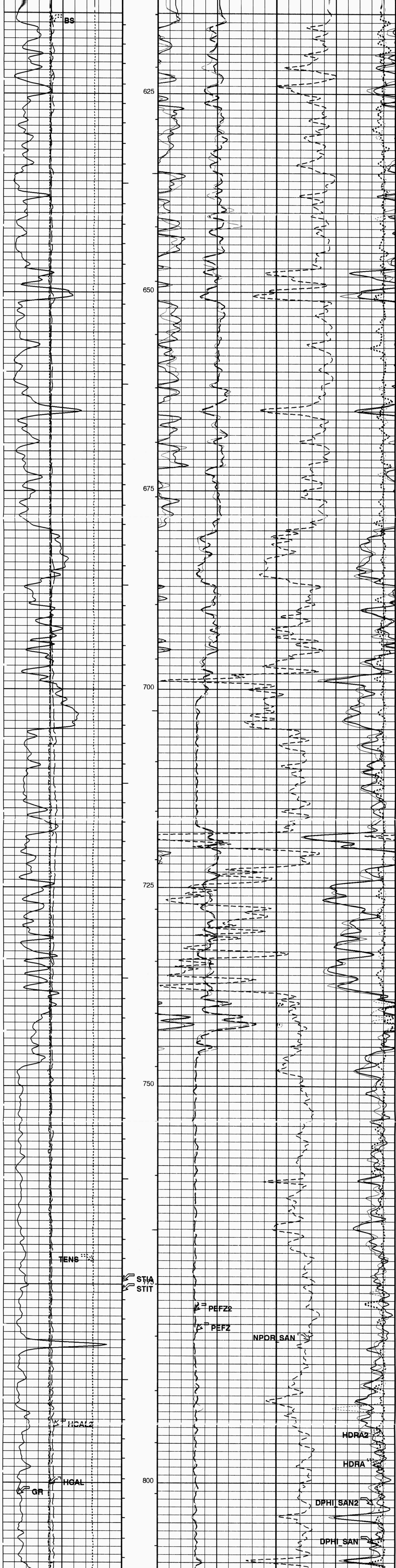
|                                                   |  |                                                   |  |                                          |
|---------------------------------------------------|--|---------------------------------------------------|--|------------------------------------------|
| PIP SUMMARY                                       |  |                                                   |  |                                          |
| └ Integrated Cement Volume Major Pip Every 1 M3   |  |                                                   |  |                                          |
| └ Integrated Cement Volume Minor Pip Every 0.1 M3 |  |                                                   |  |                                          |
| └ Integrated Hole Volume Major Pip Every 1 M3     |  |                                                   |  |                                          |
| └ Integrated Hole Volume Minor Pip Every 0.1 M3   |  |                                                   |  |                                          |
| Time Mark Every 60 S                              |  |                                                   |  |                                          |
| Tension (TENS)<br>25000 (N) 0                     |  | Std. Res. Formation Pe (PEFZ2)<br>0 (----) 10 450 |  | Density Correction (HDRA2)<br>(K/M3) -50 |
| HILT Caliper (HCAL2)<br>125 (MM) 375              |  | Std. Res. Formation Pe (PEFZ)<br>0 (----) 10 450  |  | Density Correction (HDRA)<br>(K/M3) -50  |
| Caliper (HCAL)<br>125 (MM) 375                    |  | NPOR for SAND (NPOR_SAN)<br>0.45 (V/V)            |  | -0.15                                    |
| Gamma Ray (GR)<br>0 (GAPI) 150                    |  | DPHI2 for SAND (DPHI_SAN2)<br>0.45 (V/V)          |  | -0.15                                    |
| Bit Size (BS)<br>125 (MM) 375                     |  | DPHI for SAND (DPHI_SAN)<br>0.45 (V/V)            |  | -0.15                                    |



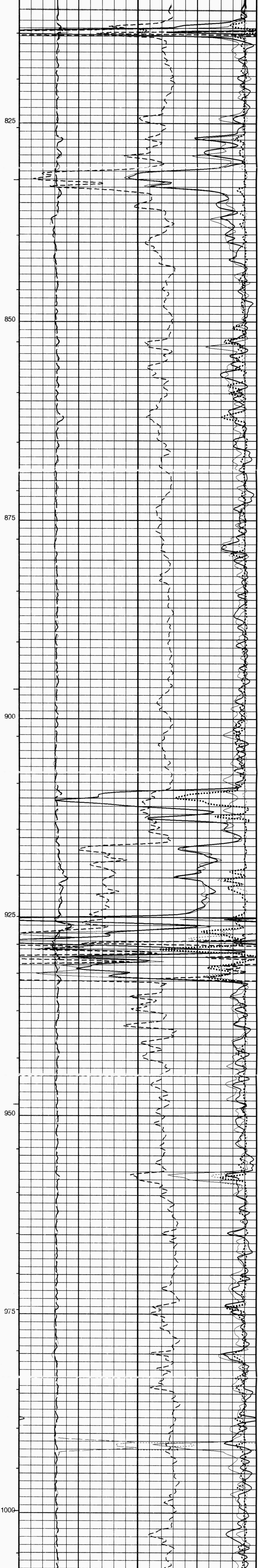
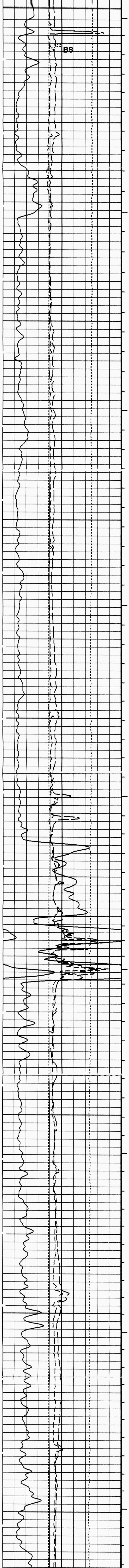




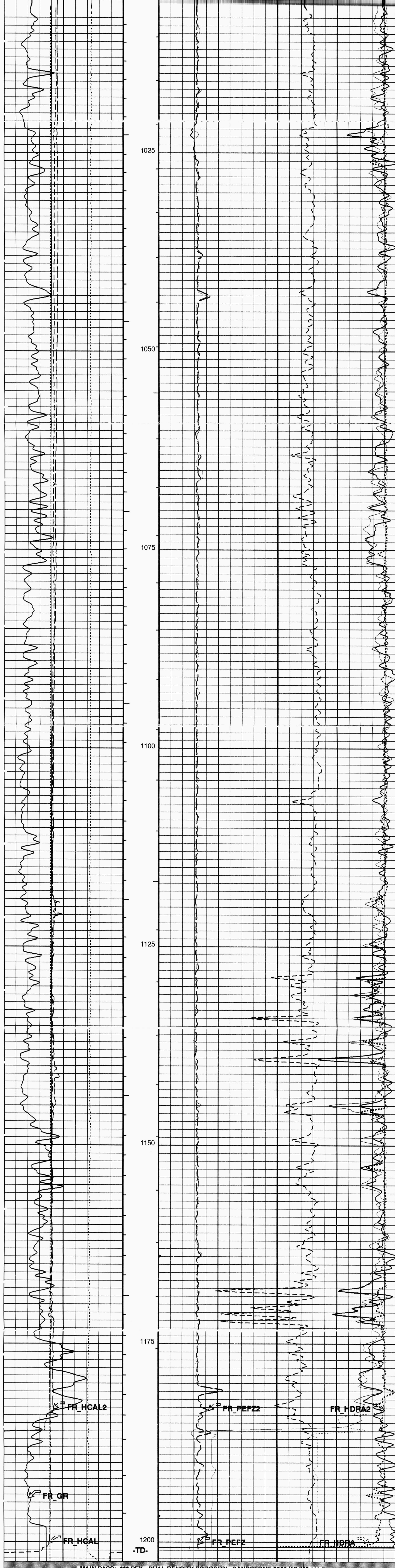














|                      |        |     |                               |       |        |
|----------------------|--------|-----|-------------------------------|-------|--------|
| Bit Size (BS)        |        |     | DPHI for SAND (DPHI_SAN)      |       |        |
| 125                  | (MM)   | 375 | 0.45                          | (V/V) | -0.15  |
| Gamma Ray (GR)       |        |     | DPHI2 for SAND (DPHI_SAN2)    |       |        |
| 0                    | (GAPI) | 150 | 0.45                          | (V/V) | -0.15  |
| Caliper (HCAL)       |        |     | NPOR for SAND (NPOR_SAN)      |       |        |
| 125                  | (MM)   | 375 | 0.45                          | (V/V) | -0.15  |
| HILT Caliper (HCAL2) |        |     | Std. Res. Formation Pe (PEFZ) |       |        |
| 125                  | (MM)   | 375 | 0                             | (---- | 10 450 |
| Tension (TENS)       |        |     | Density Correction (HDRA)     |       |        |
| 25000                | (N)    | 0   | 0                             | (---- | 10 450 |
|                      |        |     | Density Correction (HDRA2)    |       |        |
|                      |        |     | 0                             | (---- | 10 450 |

PIP SUMMARY

→ Integrated Cement Volume Major Pip Every 1 M3  
→ Integrated Cement Volume Minor Pip Every 0.1 M3

└ Integrated Hole Volume Major Pip Every 1 M3  
└ Integrated Hole Volume Minor Pip Every 0.1 M3

Time Mark Every 60 S

| Parameters                                               |                                                   |               |
|----------------------------------------------------------|---------------------------------------------------|---------------|
| DLIS Name                                                | Description                                       | Value         |
| HILTH-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                                     | 1000 K/M3     |
| FSAL                                                     | Formation Salinity                                | -50000 PPM    |
| FSCO                                                     | Formation Salinity Correction Option              | NO            |
| GCLF                                                     | Germany Coal-like Formation Option                | NO            |
| GDEV                                                     | Average Angular Deviation of Borehole from Normal | 0 DEG         |
| GGRD                                                     | Geothermal Gradient                               | 0.018227 DC/M |
| HSCO                                                     | Hole Size Correction Option                       | YES           |
| MCCO                                                     | Mud Cake Correction Option                        | NO            |
| MCOR                                                     | Mud Correction                                    | NATU          |
| MWCO                                                     | Mud Weight Correction Option                      | NO            |
| NAAC                                                     | HRDD APS Activation Correction                    | OFF           |
| NMT                                                      | HILT Nuclear Mud Type                             | NOBARITE      |
| NPRM                                                     | HRDD Processing Mode                              | HiRes         |
| NSAR                                                     | HRDD Depth Sampling Rate                          | 25.4 MM       |
| PTCO                                                     | Pressure/Temperature Correction Option            | NO            |
| SDAT                                                     | Standoff Data Source                              | SOCN          |
| SOCN                                                     | Standoff Distance                                 | 3.175 MM      |
| SOCO                                                     | Standoff Correction Option                        | YES           |
| HRLT-B: High Resolution Laterolog Array - B              |                                                   |               |
| BHS                                                      | Borehole Status                                   | OPEN          |
| GDEV                                                     | Average Angular Deviation of Borehole from Normal | 0 DEG         |
| GGRD                                                     | Geothermal Gradient                               | 0.018227 DC/M |
| HILTH2-FTB: High resolution Integrated Logging Tool-DTS2 |                                                   |               |
| 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                                     | 1000 K/M3     |
| FSAL                                                     | Formation Salinity Correction Option              | NO            |
| GCLF2                                                    | Germany Coal-like Formation Option                | NO            |
| GDEV                                                     | Average Angular Deviation of Borehole from Normal | 0 DEG         |
| GGRD                                                     | Geothermal Gradient                               | 0.018227 DC/M |
| HSCO                                                     | Hole Size Correction Option                       | YES           |
| MCCO                                                     | Mud Cake Correction Option                        | NO            |
| MCOR                                                     | Mud Correction                                    | NATU          |
| MWCO                                                     | Mud Weight Correction Option                      | NO            |
| NAAC2                                                    | HRDD2 APS Activation Correction                   | OFF           |
| NMT                                                      | HILT Nuclear Mud Type                             | NOBARITE      |
| NPRM2                                                    | HRDD2 Processing Mode                             | HiRes         |
| NSAR2                                                    | HRDD2 Depth Sampling Rate                         | 25.4 MM       |
| PTCO                                                     | Pressure/Temperature Correction Option            | NO            |
| SDAT                                                     | Standoff Data Source                              | SOCN          |
| SOCN                                                     | Standoff Distance                                 | 3.175 MM      |
| SOCO                                                     | Standoff Correction Option                        | YES           |
| HNCS-BA: Hostile Natural Gamma Ray Sonde                 |                                                   |               |
| BHS                                                      | Borehole Status                                   | OPEN          |
| GDEV                                                     | Average Angular Deviation of Borehole from Normal | 0 DEG         |
| GGRD                                                     | Geothermal Gradient                               | 0.018227 DC/M |
| DIR: Directional Survey Computation                      |                                                   |               |
| SPVD                                                     | TVD of Starting Point                             | 0 M           |
| TMD                                                      | Along-hole depth of Tie-in Point                  | 348 M         |
| TVD                                                      | TVD of Tie-in Point                               | 348 M         |
| HOLEV: Integrated Hole/Cement Volume                     |                                                   |               |
| BHS                                                      | Borehole Status                                   | OPEN          |
| FCD                                                      | Future Casing (Outer) Diameter                    | 177.8 MM      |
| GDEV                                                     | Average Angular Deviation of Borehole from Normal | 0 DEG         |
| GGRD                                                     | Geothermal Gradient                               | 0.018227 DC/M |
| HVCS                                                     | Integrated Hole Volume Caliper Selection          | HCAL/HCAL2    |
| STI: Stuck Tool Indicator                                |                                                   |               |
| LBFR                                                     | Trigger for MAXIS First Reading Label             | TDL           |
| STKT                                                     | STI Stuck Threshold                               | 1.524 M       |
| TDD                                                      | Total Depth - Driller                             | 1200.00 M     |
| TDL                                                      | Total Depth - Logger                              | 1201.00 M     |
| System and Miscellaneous                                 |                                                   |               |
| BS                                                       | Bit Size                                          | 222.000 MM    |
| BSAL                                                     | Borehole Salinity                                 | -50000.00 PPM |
| CSIZ                                                     | Current Casing Size                               | 244.500 MM    |
| CWEI                                                     | Casing Weight                                     | 53.57 KG/M    |
| DFD                                                      | Drilling Fluid Density                            | 1180.00 K/M3  |
| DO                                                       | Depth Offset for Playback                         | 0.0 M         |
| DORL                                                     | Depth Offset for Repeat Analysis                  | 0.0 M         |
| MST                                                      | Mud Sample Temperature                            | 20.10 DEGC    |
| PP                                                       | Playback Processing                               | RECOMPUTE     |
| RMFS                                                     | Resistivity of Mud Filtrate Sample                | 0.1030 OHMM   |
| TD                                                       | Total Depth                                       | 1201 M        |

Format: PORO\_SAND Vertical Scale: 1:240 Graphics File Created: 23-Feb-2008 18:53

| OP System Version: 15C0-309 |                   |        |               |
|-----------------------------|-------------------|--------|---------------|
| MCM                         |                   |        |               |
| HILTH-FTB                   | SRPC-3402-Q3_2007 | HRLT-B | 15C0-309      |
| HILTH2-FTB                  | SRPC-3402-Q3_2007 | HNGC-B | SPC-3530-NUCL |
| HNCS-BA                     | SPC-3530-NUCL     | DTC-H  | 15C0-309      |
| SPA-A                       | 9936              |        |               |

| Input DLIS Files  |                          |       |          |                   |          |         |
|-------------------|--------------------------|-------|----------|-------------------|----------|---------|
| DEFAULT           | TLD_MCFL_CNL_HRLA_011LUP | FN:17 | PRODUCER | 23-Feb-2008 16:24 | 1202.4 M | -13.7 M |
| Output DLIS Files |                          |       |          |                   |          |         |
| DEFAULT           | TLD_MCFL_CNL_HRLA_013PUP | FN:21 | PRODUCER | 23-Feb-2008 18:53 |          |         |
| BACKUP            | TLD_MCFL_CNL_HRLA_013PUP | FN:22 | PRODUCER | 23-Feb-2008 18:53 |          |         |

| Input DLIS Files  |                          |       |          |                   |          |          |
|-------------------|--------------------------|-------|----------|-------------------|----------|----------|
| DEFAULT           | TLD_MCFL_CNL_HRLA_011LUP | FN:17 | PRODUCER | 23-Feb-2008 16:24 | 1202.4 M | -13.7 M  |
| DEFAULT           | TLD_MCFL_CNL_HRLA_012PUP | FN:19 | PRODUCER | 23-Feb-2008 18:38 | 1205.5 M | 1074.1 M |
| Output DLIS Files |                          |       |          |                   |          |          |
| DEFAULT           | TLD_MCFL_CNL_HRLA_013PUP | FN:21 | PRODUCER | 23-Feb-2008 18:53 |          |          |
| BACKUP            | TLD_MCFL_CNL_HRLA_013PUP | FN:22 | PRODUCER | 23-Feb-2008 18:53 |          |          |

| OP System Version: 15C0-309 |                   |        |               |
|-----------------------------|-------------------|--------|---------------|
| MCM                         |                   |        |               |
| HILTH-FTB                   | SRPC-3402-Q3_2007 | HRLT-B | 15C0-309      |
| HILTH2-FTB                  | SRPC-3402-Q3_2007 | HNGC-B | SPC-3530-NUCL |
| HNCS-BA                     | SPC-3530-NUCL     | DTC-H  | 15C0-309      |
| SPA-A                       | 9936              |        |               |

PIP SUMMARY

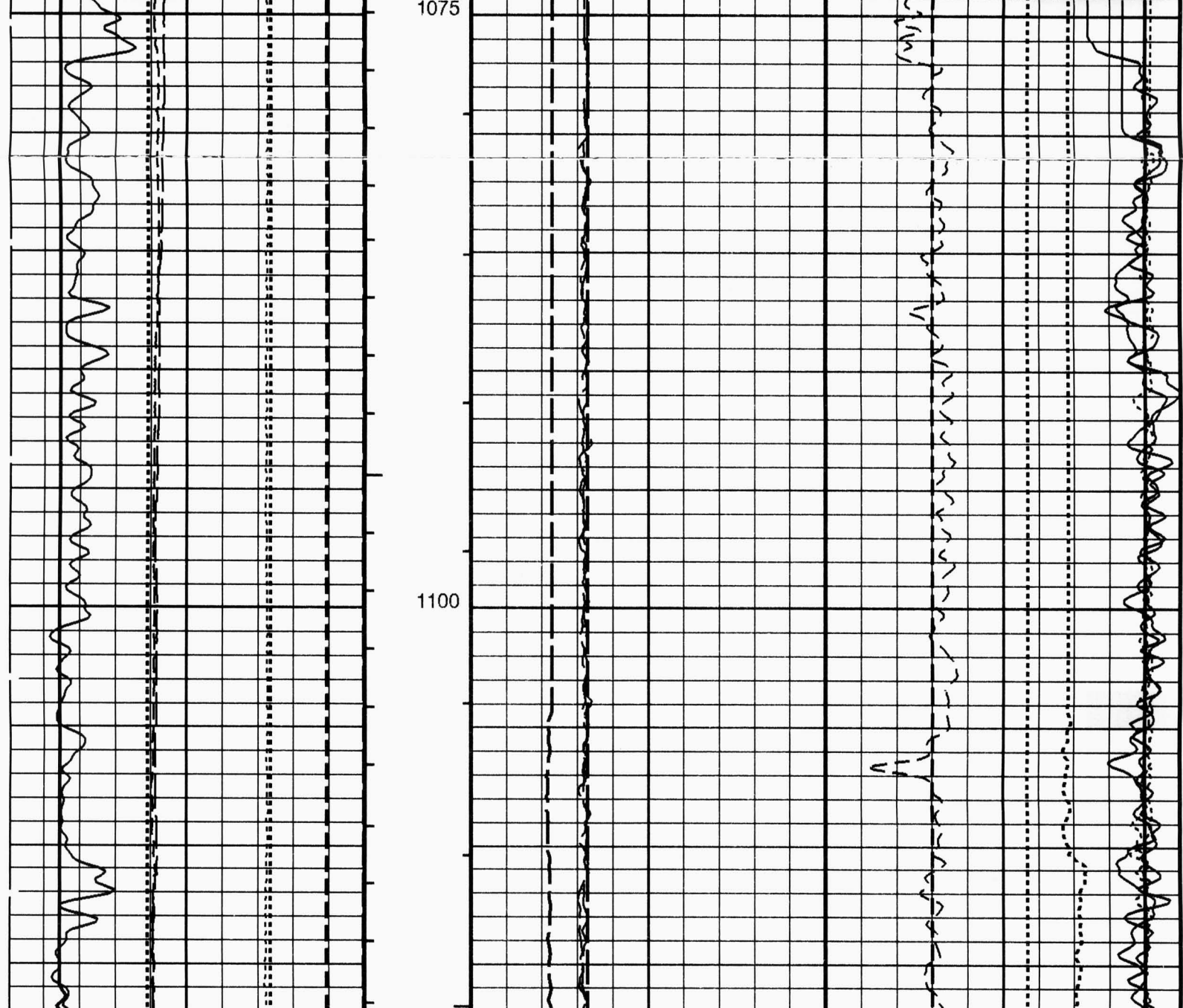
→ Integrated Cement Volume Major Pip Every 1 M3  
→ Integrated Cement Volume Minor Pip Every 0.1 M3

└ Integrated Hole Volume Major Pip Every 1 M3  
└ Integrated Hole Volume Minor Pip Every 0.1 M3

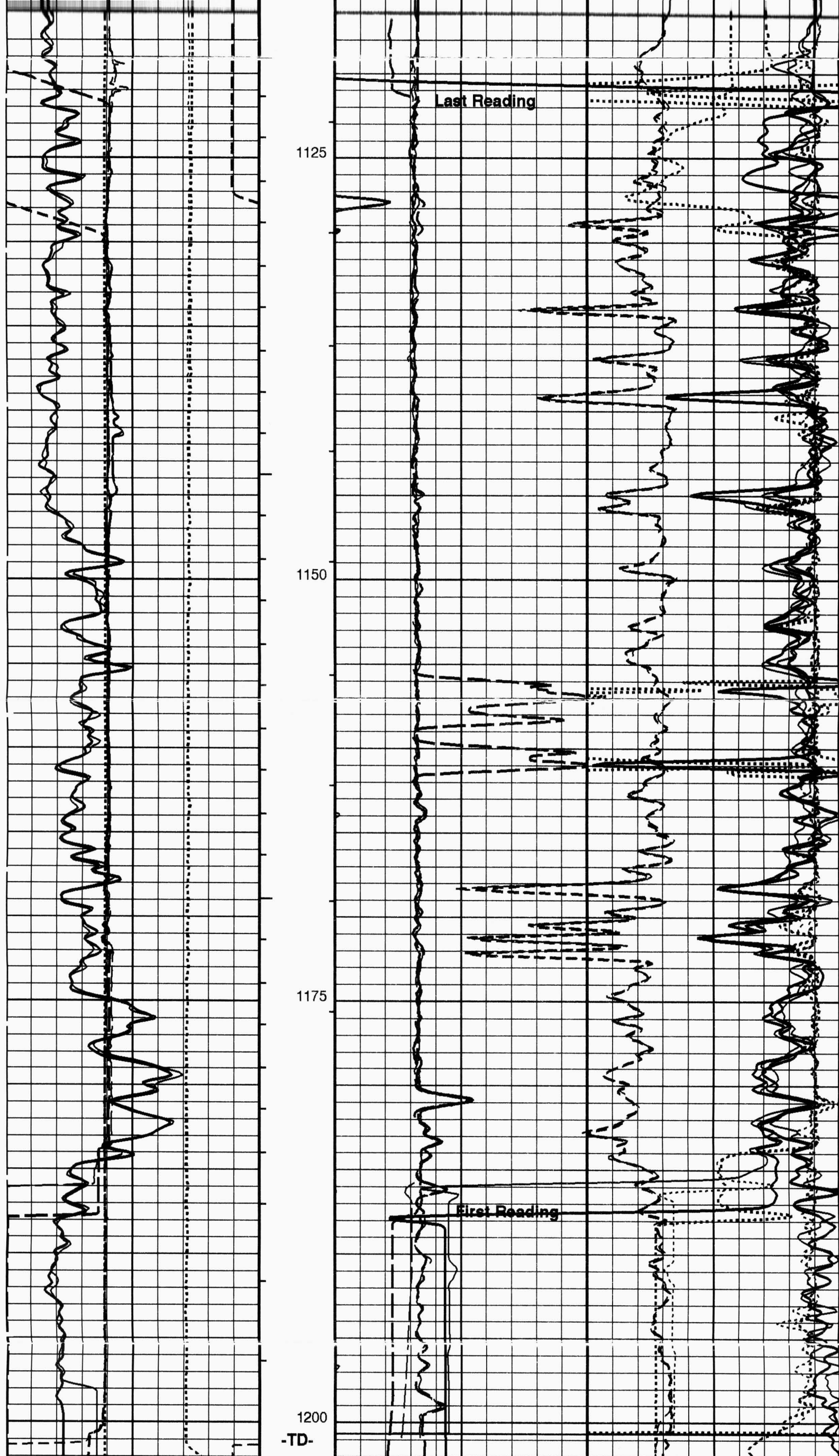
Time Mark Every 60 S

| TENS_REP Curve (TENS_REP)   |        |     | PEFZ2_REP Curve (PEFZ2_REP)       |        |        | HDRA2_REP Curve (HDRA2_REP)         |       |       |
|-----------------------------|--------|-----|-----------------------------------|--------|--------|-------------------------------------|-------|-------|
| 25000                       | (N)    | 0   | 0                                 | (----) | 10 450 | (K/M3)                              | -50   |       |
| HCAL2_REP Curve (HCAL2_REP) |        |     | PEFZ_REP Curve (PEFZ_REP)         |        |        | HDRA_REP Curve (HDRA_REP)           |       |       |
| 125                         | (MM)   | 375 | 0                                 | (----) | 10 450 | (K/M3)                              | -50   |       |
| HCAL_REP Curve (HCAL_REP)   |        |     | NPOR_SAN_REP Curve (NPOR_SAN_REP) |        |        | DPHI_SAN2_REP Curve (DPHI_SAN2_REP) |       |       |
| 125                         | (MM)   | 375 | 0.45                              | (V/V)  | -0.15  | 0.45                                | (V/V) | -0.15 |
| GR_REP Curve (GR_REP)       |        |     | DPHI_SAN_REP Curve (DPHI_SAN_REP) |        |        |                                     |       |       |
| 0                           | (GAPI) | 150 | 0.45                              | (V/V)  | -0.15  |                                     |       |       |
| BS_REP Curve (BS_REP)       |        |     |                                   |        |        |                                     |       |       |
| 125                         | (MM)   | 375 | 0.45                              | (V/V)  | -0.15  |                                     |       |       |

REPEAT ANALYSIS: \*\*\* PEX - DUAL DENSITY POROSITY - SANDSTONE 2650 KG/M3 \*\*\*







REPEAT ANALYSIS: \*\*\* PEX - DUAL DENSITY POROSITY - SANDSTONE 2650 KG/M3 \*\*\*

|                                             |  |                                                         |                                           |
|---------------------------------------------|--|---------------------------------------------------------|-------------------------------------------|
| BS_REP Curve (BS_REP)<br>125 (MM) 375       |  | DPHI_SAN_REP Curve (DPHI_SAN_REP)<br>0.45 (V/V) -0.15   |                                           |
| GR_REP Curve (GR_REP)<br>0 (GAPI) 150       |  | DPHI_SAN2_REP Curve (DPHI_SAN2_REP)<br>0.45 (V/V) -0.15 |                                           |
| HCAL_REP Curve (HCAL_REP)<br>125 (MM) 375   |  | NPOR_SAN_REP Curve (NPOR_SAN_REP)<br>0.45 (V/V) -0.15   |                                           |
| HCAL2_REP Curve (HCAL2_REP)<br>125 (MM) 375 |  | PEFZ_REP Curve (PEFZ_REP)<br>0 (----) 10 450            | HDRA_REP Curve (HDRA_REP)<br>(K/M3) -50   |
| TENS_REP Curve<br>(TENS_REP)<br>25000 (N) 0 |  | PEFZ2_REP Curve (PEFZ2_REP)<br>0 (----) 10 450          | HDRA2_REP Curve (HDRA2_REP)<br>(K/M3) -50 |

#### PIP SUMMARY

- Integrated Cement Volume Major Pip Every 1 M3
- Integrated Cement Volume Minor Pip Every 0.1 M3
- Integrated Hole Volume Major Pip Every 1 M3
- Integrated Hole Volume Minor Pip Every 0.1 M3

Time Mark Every 60 S

#### Parameters

| DLIS Name                                                | Description                                       | Value         |
|----------------------------------------------------------|---------------------------------------------------|---------------|
| HILTH-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                                     | 1000 K/M3     |
| FSAL                                                     | Formation Salinity                                | -50000 PPM    |
| FSCO                                                     | Formation Salinity Correction Option              | NO            |
| GCLF                                                     | Germany Coal-like Formation Option                | NO            |
| GDEV                                                     | Average Angular Deviation of Borehole from Normal | 0 DEG         |
| GGRD                                                     | Geothermal Gradient                               | 0.018227 DC/M |
| HSCO                                                     | Hole Size Correction Option                       | YES           |
| MCCO                                                     | Mud Cake Correction Option                        | NO            |
| MCOR                                                     | Mud Correction                                    | NATU          |
| MWCO                                                     | Mud Weight Correction Option                      | NO            |
| NAAC                                                     | HRDD APS Activation Correction                    | OFF           |
| NMT                                                      | HILT Nuclear Mud Type                             | NOBARITE      |
| NPRM                                                     | HRDD Processing Mode                              | HiRes         |
| NSAR                                                     | HRDD Depth Sampling Rate                          | 25.4 MM       |
| PTCO                                                     | Pressure/Temperature Correction Option            | NO            |
| SDAT                                                     | Standoff Data Source                              | SOCN          |
| SOCN                                                     | Standoff Distance                                 | 3.175 MM      |
| SOCO                                                     | Standoff Correction Option                        | YES           |
| HRLT-B: High Resolution Laterolog Array - B              |                                                   |               |
| BHS                                                      | Borehole Status                                   | OPEN          |
| GDEV                                                     | Average Angular Deviation of Borehole from Normal | 0 DEG         |
| GGRD                                                     | Geothermal Gradient                               | 0.018227 DC/M |
| HILTH2-FTB: High resolution Integrated Logging Tool-DTS2 |                                                   |               |
| 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                                     | 1000 K/M3     |
| FSCO                                                     | Formation Salinity Correction Option              | NO            |
| GCLF2                                                    | Germany Coal-like Formation Option                | NO            |
| GDEV                                                     | Average Angular Deviation of Borehole from Normal | 0 DEG         |
| GGRD                                                     | Geothermal Gradient                               | 0.018227 DC/M |
| HSCO                                                     | Hole Size Correction Option                       | YES           |
| MCCO                                                     | Mud Cake Correction Option                        | NO            |
| MCOR                                                     | Mud Correction                                    | NATU          |
| MWCO                                                     | Mud Weight Correction Option                      | NO            |
| NAAC2                                                    | HRDD2 APS Activation Correction                   | OFF           |
| NMT                                                      | HILT Nuclear Mud Type                             | NOBARITE      |
| NPRM2                                                    | HRDD2 Processing Mode                             | HiRes         |
| NSAR2                                                    | HRDD2 Depth Sampling Rate                         | 25.4 MM       |
| PTCO                                                     | Pressure/Temperature Correction Option            | NO            |
| SDAT                                                     | Standoff Data Source                              | SOCN          |
| SOCN                                                     | Standoff Distance                                 | 3.175 MM      |
| SOCO                                                     | Standoff Correction Option                        | YES           |
| HNGS-BA: Hostile Natural Gamma Ray Sonde                 |                                                   |               |
| BHS                                                      | Borehole Status                                   | OPEN          |
| GDEV                                                     | Average Angular Deviation of Borehole from Normal | 0 DEG         |
| GGRD                                                     | Geothermal Gradient                               | 0.018227 DC/M |
| DIR: Directional Survey Computation                      |                                                   |               |
| SPVD                                                     | TVD of Starting Point                             | 0 M           |
| TIMD                                                     | Along-hole depth of Tie-in Point                  | 348 M         |
| TIVD                                                     | TVD of Tie-in Point                               | 348 M         |
| HOLEV: Integrated Hole/Cement Volume                     |                                                   |               |
| BHS                                                      | Borehole Status                                   | OPEN          |
| FCD                                                      | Future Casing (Outer) Diameter                    | 177.8 MM      |
| GDEV                                                     | Average Angular Deviation of Borehole from Normal | 0 DEG         |
| GGRD                                                     | Geothermal Gradient                               | 0.018227 DC/M |
| HVCS                                                     | Integrated Hole Volume Caliper Selection          | HCAL/HCAL2    |
| STI: Stuck Tool Indicator                                |                                                   |               |
| TDL                                                      | Total Depth - Logger                              | 1201.00 M     |
| System and Miscellaneous                                 |                                                   |               |
| BS                                                       | Bit Size                                          | 222.000 MM    |
| BSAL                                                     | Borehole Salinity                                 | -50000.00 PPM |
| CSIZ                                                     | Current Casing Size                               | 244.500 MM    |
| CWEI                                                     | Casing Weight                                     | 53.57 KG/M    |
| DFD                                                      | Drilling Fluid Density                            | 1180.00 K/M3  |
| DO                                                       | Depth Offset for Playback                         | 0.0 M         |
| DORL                                                     | Depth Offset for Repeat Analysis                  | 0.0 M         |
| MST                                                      | Mud Sample Temperature                            | 20.10 DEGC    |
| PP                                                       | Playback Processing                               | RECOMPUTE     |
| RMFS                                                     | Resistivity of Mud Filtrate Sample                | 0.1030 OHMM   |
| TD                                                       | Total Depth                                       | 1201 M        |

Format: PORO\_SAND\_REP

Vertical Scale: 1:240

Graphics File Created: 23-Feb-2008 18:53

#### OP System Version: 15C0-309

MCM

|            |                   |        |               |
|------------|-------------------|--------|---------------|
| HILTH-FTB  | SRPC-3402-Q3_2007 | HRLT-B | 15C0-309      |
| HILTH2-FTB | SRPC-3402-Q3_2007 | HNGC-B | SPC-3530-NUCL |
| HNGS-BA    | SPC-3530-NUCL     | DTC-H  | 15C0-309      |
| SPA-A      | 9936              |        |               |

#### Input DLIS Files

|         |                          |       |          |                   |          |          |
|---------|--------------------------|-------|----------|-------------------|----------|----------|
| DEFAULT | TLD_MCFL_CNL_HRLA_011LUP | FN:17 | PRODUCER | 23-Feb-2008 16:24 | 1202.4 M | -13.7 M  |
| DEFAULT | TLD_MCFL_CNL_HRLA_012PUP | FN:19 | PRODUCER | 23-Feb-2008 18:38 | 1205.5 M | 1074.1 M |

#### Output DLIS Files

|         |                          |       |          |                   |  |  |
|---------|--------------------------|-------|----------|-------------------|--|--|
| DEFAULT | TLD_MCFL_CNL_HRLA_013PUP | FN:21 | PRODUCER | 23-Feb-2008 18:53 |  |  |
| BACKUP  | TLD_MCFL_CNL_HRLA_013PUP | FN:22 | PRODUCER | 23-Feb-2008 18:53 |  |  |



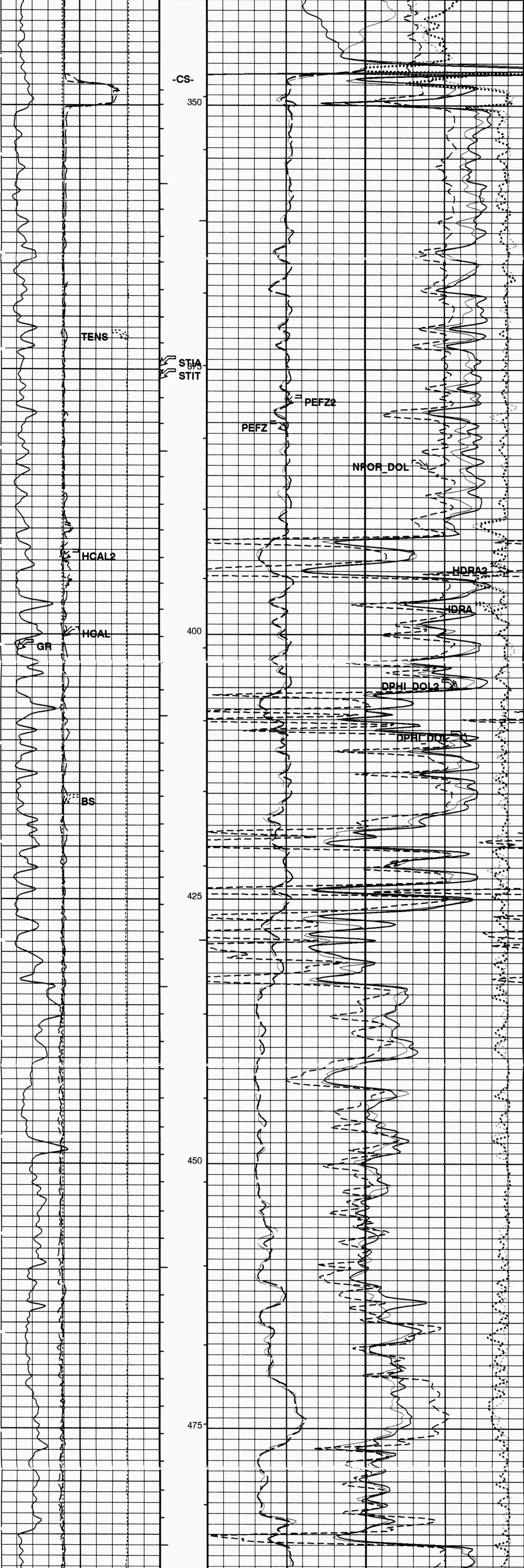
| Input DLIS Files  |                          |       |          |                   |          |         |
|-------------------|--------------------------|-------|----------|-------------------|----------|---------|
| DEFAULT           | TLD_MCFL_CNL_HRLA_011LUP | FN:17 | PRODUCER | 23-Feb-2008 16:24 | 1202.4 M | -13.7 M |
| Output DLIS Files |                          |       |          |                   |          |         |
| DEFAULT           | TLD_MCFL_CNL_HRLA_013PUP | FN:21 | PRODUCER | 23-Feb-2008 18:53 | 1202.4 M | 301.4 M |
| BACKUP            | TLD_MCFL_CNL_HRLA_013PUP | FN:22 | PRODUCER | 23-Feb-2008 18:53 | 1202.4 M | 301.4 M |

| Integrated Hole/Cement Volume Summary |                                                      |
|---------------------------------------|------------------------------------------------------|
| Hole Volume =                         | 34.44 M3                                             |
| Cement Volume =                       | 13.26 M3 (assuming 177.80 MM casing O.D.)            |
| Computed from                         | 1200.9 M to 348.1 M using data channel(s) HCAL HCAL2 |

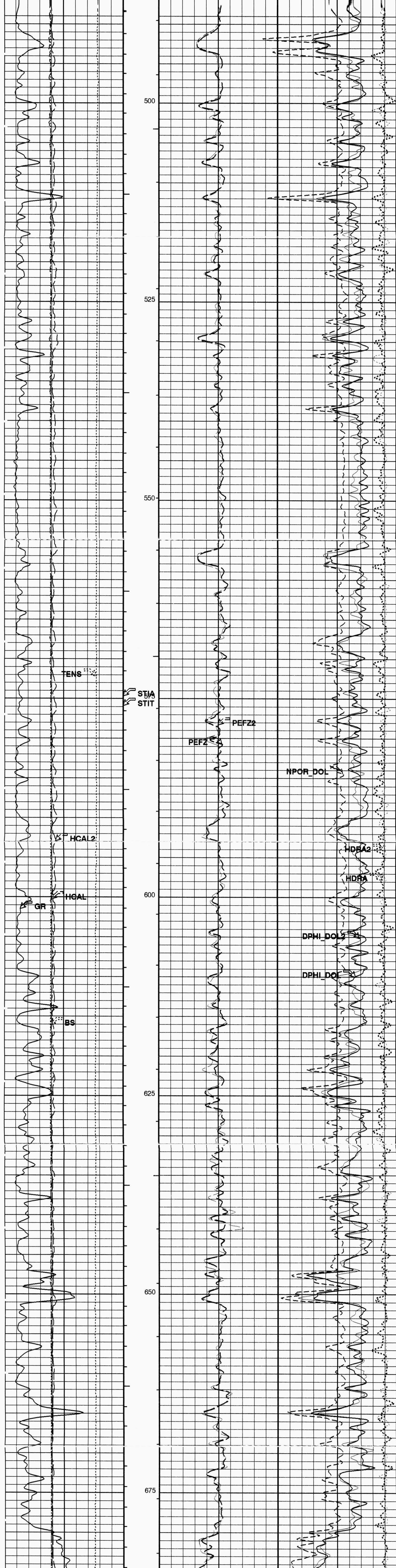
| OP System Version: 15C0-309 |                   |        |               |
|-----------------------------|-------------------|--------|---------------|
| MCM                         |                   |        |               |
| HILTH-FTB                   | SRPC-3402-Q3_2007 | HRLT-B | 15C0-309      |
| HILTH2-FTB                  | SRPC-3402-Q3_2007 | HNGC-B | SPC-3530-NUCL |
| HNGS-BA                     | SPC-3530-NUCL     | DTC-H  | 15C0-309      |
| SPA-A                       | 9936              |        |               |

| PIP SUMMARY                                       |  |                                |                            |
|---------------------------------------------------|--|--------------------------------|----------------------------|
| └ Integrated Cement Volume Major Pip Every 1 M3   |  |                                |                            |
| └ Integrated Cement Volume Minor Pip Every 0.1 M3 |  |                                |                            |
| └ Integrated Hole Volume Major Pip Every 1 M3     |  |                                |                            |
| └ Integrated Hole Volume Minor Pip Every 0.1 M3   |  |                                |                            |
| Time Mark Every 60 S                              |  |                                |                            |
| Tension (TENS)                                    |  | Std. Res. Formation Pe (PEFZ2) | Density Correction (HDRA2) |
| 25000 (N) 0                                       |  | 0 (----)                       | 10 450 (K/M3) -50          |
| HILT Caliper (HCAL2)                              |  | Std. Res. Formation Pe (PEFZ)  | Density Correction (HDRA)  |
| (MM) 125 375                                      |  | 0 (----)                       | 10 450 (K/M3) -50          |
| Caliper (HCAL)                                    |  | NPOR for DOLO (NPOR_DOL)       |                            |
| (MM) 125 375                                      |  | 0.45 (V/V) -0.15               |                            |
| Gamma Ray (GR)                                    |  | DPHI2 for DOLO (DPHI_DOL2)     |                            |
| (GAPI) 0 150                                      |  | 0.45 (V/V) -0.15               |                            |
| Bit Size (BS)                                     |  | DPHI for DOLO (DPHI_DOL)       |                            |
| (MM) 125 375                                      |  | 0.45 (V/V) -0.15               |                            |

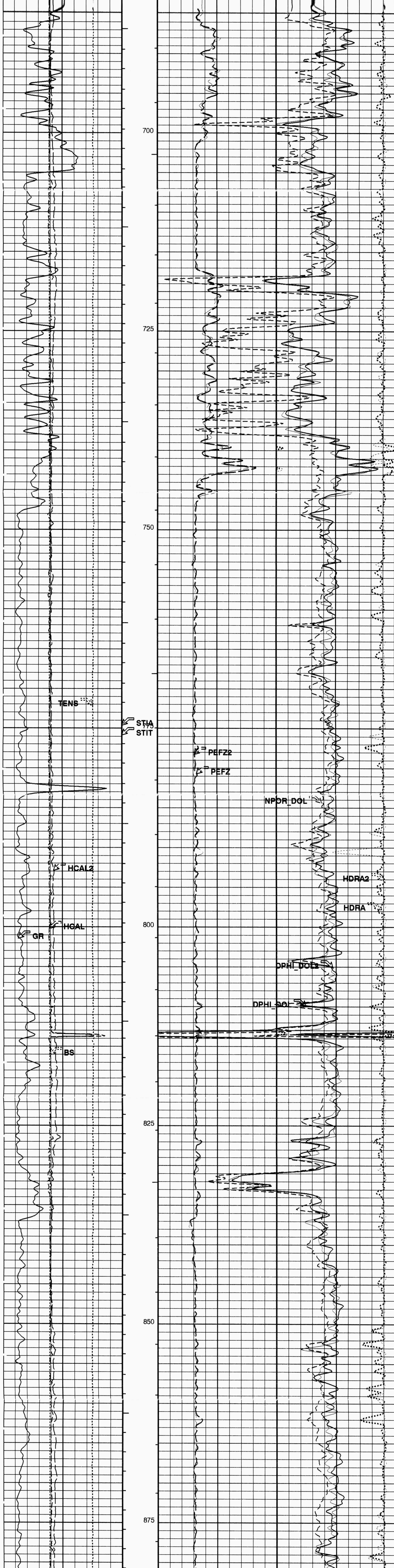
MAIN PASS: \*\*\* PEX - DUAL DENSITY POROSITY - DOLOMITE 2850 KG/M3 \*\*\*



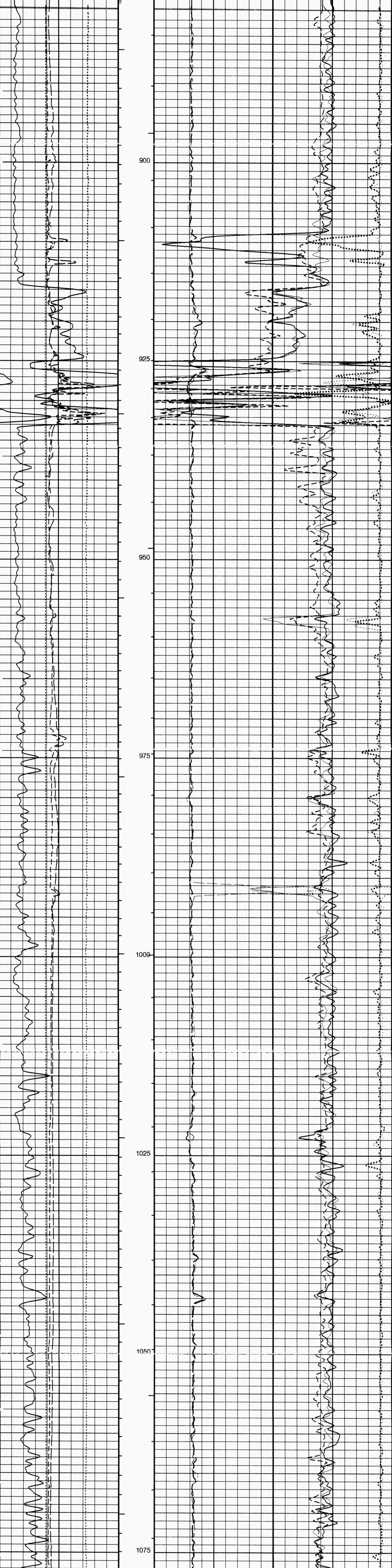




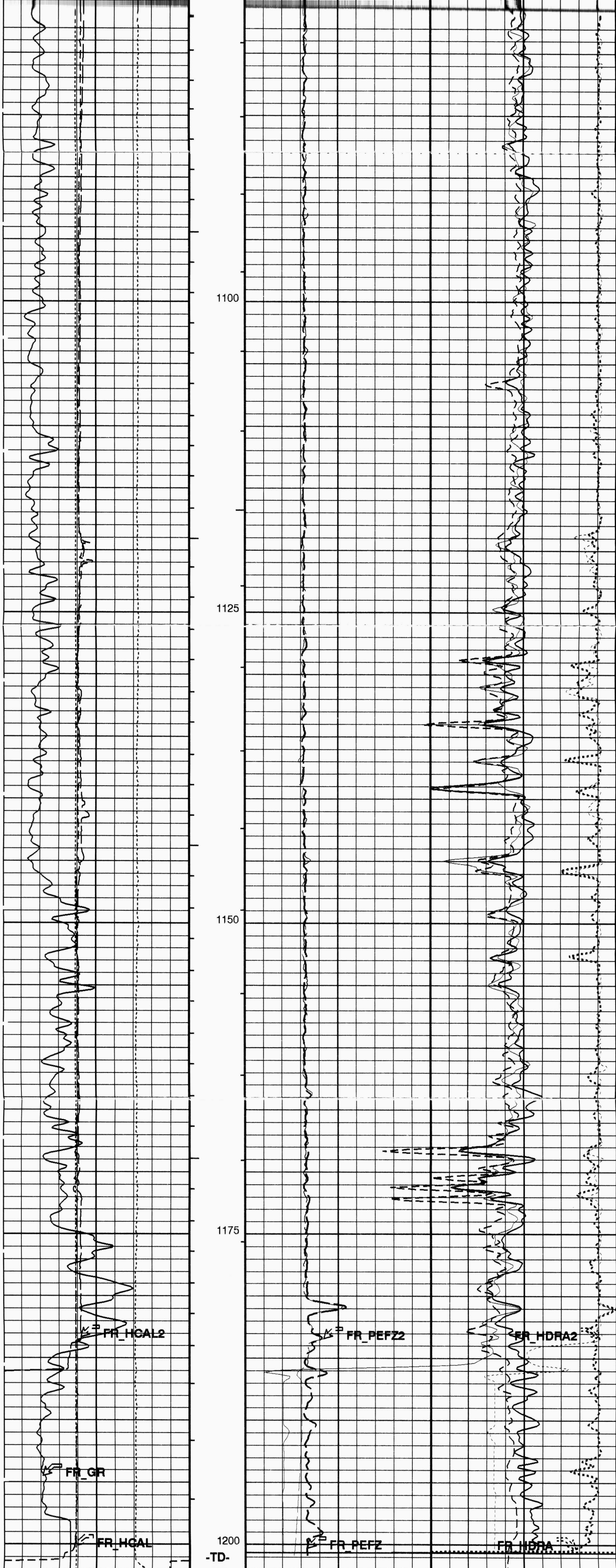












MAIN PASS: \*\*\* PEX - DUAL DENSITY POROSITY - DOLOMITE 2850 KG/M3 \*\*\*

|                              |  |     |                                |        |                            |
|------------------------------|--|-----|--------------------------------|--------|----------------------------|
| Bit Size (BS)<br>(MM)        |  | 375 | DPHI for DOLO (DPHI_DOL)       |        |                            |
|                              |  |     | 0.45                           | (V/V)  | -0.15                      |
| Gamma Ray (GR)<br>(GAPI)     |  | 150 | DPHI2 for DOLO (DPHI_DOL2)     |        |                            |
|                              |  |     | 0.45                           | (V/V)  | -0.15                      |
| Caliper (HCAL)<br>(MM)       |  | 375 | NPOR for DOLO (NPOR_DOL)       |        |                            |
|                              |  |     | 0.45                           | (V/V)  | -0.15                      |
| HILT Caliper (HCAL2)<br>(MM) |  | 375 | Std. Res. Formation Pe (PEFZ)  |        | Density Correction (HDRA)  |
|                              |  |     | 0                              | (----) | 10 450 (K/M3) -50          |
| Tension (TENS)<br>25000 (N)  |  | 0   | Std. Res. Formation Pe (PEFZ2) |        | Density Correction (HDRA2) |
|                              |  |     | 0                              | (----) | 10 450 (K/M3) -50          |

PIP SUMMARY

- └ Integrated Cement Volume Major Pip Every 1 M3
- └ Integrated Cement Volume Minor Pip Every 0.1 M3
- └ Integrated Hole Volume Major Pip Every 1 M3
- └ Integrated Hole Volume Minor Pip Every 0.1 M3

Time Mark Every 60 S

| Parameters                                               |                                                   |               |
|----------------------------------------------------------|---------------------------------------------------|---------------|
| DLIS Name                                                | Description                                       | Value         |
| HILTH-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                                     | 1000 K/M3     |
| FSAL                                                     | Formation Salinity                                | -50000 PPM    |
| FSCO                                                     | Formation Salinity Correction Option              | NO            |
| GCLF                                                     | Germany Coal-like Formation Option                | NO            |
| GDEV                                                     | Average Angular Deviation of Borehole from Normal | 0 DEG         |
| GGRD                                                     | Geothermal Gradient                               | 0.018227 DC/M |
| HSCD                                                     | Hole Size Correction Option                       | YES           |
| MCCO                                                     | Mud Cake Correction Option                        | NO            |
| MCOR                                                     | Mud Correction                                    | NATU          |
| MWCO                                                     | Mud Weight Correction Option                      | NO            |
| NAAC                                                     | HRDD APS Activation Correction                    | OFF           |
| NMT                                                      | HILT Nuclear Mud Type                             | NOBARITE      |
| NPRM                                                     | HRDD Processing Mode                              | HiRes         |
| NSAR                                                     | HRDD2 Depth Sampling Rate                         | 25.4 MM       |
| PTCO                                                     | Pressure/Temperature Correction Option            | NO            |
| SDAT                                                     | Standoff Data Source                              | SOCN          |
| SOCN                                                     | Standoff Distance                                 | 3.175 MM      |
| SOCO                                                     | Standoff Correction Option                        | YES           |
| HRLT-B: High Resolution Laterolog Array - B              |                                                   |               |
| BHS                                                      | Borehole Status                                   | OPEN          |
| GDEV                                                     | Average Angular Deviation of Borehole from Normal | 0 DEG         |
| GGRD                                                     | Geothermal Gradient                               | 0.018227 DC/M |
| HILTH2-FTB: High resolution Integrated Logging Tool-DTS2 |                                                   |               |
| 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                                     | 1000 K/M3     |
| FSCO                                                     | Formation Salinity Correction Option              | NO            |
| GCLF2                                                    | Germany Coal-like Formation Option                | NO            |
| GDEV                                                     | Average Angular Deviation of Borehole from Normal | 0 DEG         |
| GGRD                                                     | Geothermal Gradient                               | 0.018227 DC/M |
| HSCD                                                     | Hole Size Correction Option                       | YES           |
| MCCO                                                     | Mud Cake Correction Option                        | NO            |
| MCOR                                                     | Mud Correction                                    | NATU          |
| MWCO                                                     | Mud Weight Correction Option                      | NO            |
| NAAC2                                                    | HRDD2 APS Activation Correction                   | OFF           |
| NMT                                                      | HILT Nuclear Mud Type                             | NOBARITE      |
| NPRM2                                                    | HRDD2 Processing Mode                             | HiRes         |
| NSAR2                                                    | HRDD2 Depth Sampling Rate                         | 25.4 MM       |
| PTCO                                                     | Pressure/Temperature Correction Option            | NO            |
| SDAT                                                     | Standoff Data Source                              | SOCN          |
| SOCN                                                     | Standoff Distance                                 | 3.175 MM      |
| SOCO                                                     | Standoff Correction Option                        | YES           |
| HNCS-BA: Hostile Natural Gamma Ray Sonde                 |                                                   |               |
| BHS                                                      | Borehole Status                                   | OPEN          |



| Average Angular Deviation of Borehole from Normal |                                                   |            |      |
|---------------------------------------------------|---------------------------------------------------|------------|------|
| GDEV                                              | Geothermal Gradient                               | 0          | DEG  |
| GGRD                                              | Geothermal Gradient                               | 0.018227   | DC/M |
| SPVD                                              | DIR: Directional Survey Computation               |            |      |
| TIMD                                              | TVD of Starting Point                             | 0          | M    |
| TIVD                                              | Along-hole depth of Tie-in Point                  | 348        | M    |
|                                                   | TVD of Tie-in Point                               | 348        | M    |
|                                                   | HOLEV: Integrated Hole/Cement Volume              |            |      |
| BHS                                               | Borehole Status                                   | OPEN       |      |
| FCD                                               | Future Casing (Outer) Diameter                    | 177.8      | MM   |
| GDEV                                              | Average Angular Deviation of Borehole from Normal | 0          | DEG  |
| GGRD                                              | Geothermal Gradient                               | 0.018227   | DC/M |
| HVCS                                              | Integrated Hole Volume Caliper Selection          | HCAL/HCAL2 |      |
|                                                   | STI: Stuck Tool Indicator                         |            |      |
| LBFR                                              | Trigger for MAXIS First Reading Label             | TDL        |      |
| STKT                                              | STI Stuck Threshold                               | 1.524      | M    |
| TDD                                               | Total Depth - Driller                             | 1200.00    | M    |
| TDL                                               | Total Depth - Logger                              | 1201.00    | M    |
|                                                   | System and Miscellaneous                          |            |      |
| BS                                                | Bit Size                                          | 222.000    | MM   |
| BSAL                                              | Borehole Salinity                                 | -50000.00  | PPM  |
| CSIZ                                              | Current Casing Size                               | 244.500    | MM   |
| CWEI                                              | Casing Weight                                     | 53.57      | KG/M |
| DFD                                               | Drilling Fluid Density                            | 1180.00    | K/M3 |
| DO                                                | Depth Offset for Playback                         | 0.0        | M    |
| DORL                                              | Depth Offset for Repeat Analysis                  | 0.0        | M    |
| MST                                               | Mud Sample Temperature                            | 20.10      | DEGC |
| PP                                                | Playback Processing                               | RECOMPUTE  |      |
| RMFS                                              | Resistivity of Mud Filtrate Sample                | 0.1030     | OHMM |
| TD                                                | Total Depth                                       | 1201       | M    |

Format: PORO\_DOL
Vertical Scale: 1:240
Graphics File Created: 23-Feb-2008 18:53

| OP System Version: 15C0-309 |                   |        |               |
|-----------------------------|-------------------|--------|---------------|
| MCM                         |                   |        |               |
| HILTH-FTB                   | SRPC-3402-Q3_2007 | HRLT-B | 15C0-309      |
| HILTH2-FTB                  | SRPC-3402-Q3_2007 | HNGC-B | SPC-3530-NUCL |
| HNGS-BA                     | SPC-3530-NUCL     | DTC-H  | 15C0-309      |
| SPA-A                       | 9936              |        |               |

| Input DLIS Files  |                          |       |                                             |
|-------------------|--------------------------|-------|---------------------------------------------|
| DEFAULT           | TLD_MCFL_CNL_HRLA_011LUP | FN:17 | PRODUCER 23-Feb-2008 16:24 1202.4 M -13.7 M |
| Output DLIS Files |                          |       |                                             |
| DEFAULT           | TLD_MCFL_CNL_HRLA_013PUP | FN:21 | PRODUCER 23-Feb-2008 18:53                  |
| BACKUP            | TLD_MCFL_CNL_HRLA_013PUP | FN:22 | PRODUCER 23-Feb-2008 18:53                  |

| input DLIS Files |                          |       |                                             |
|------------------|--------------------------|-------|---------------------------------------------|
| DEFAULT          | TLD_MCFL_CNL_HRLA_013PUP | FN:21 | PRODUCER 23-Feb-2008 18:53 1202.4 M 301.4 M |

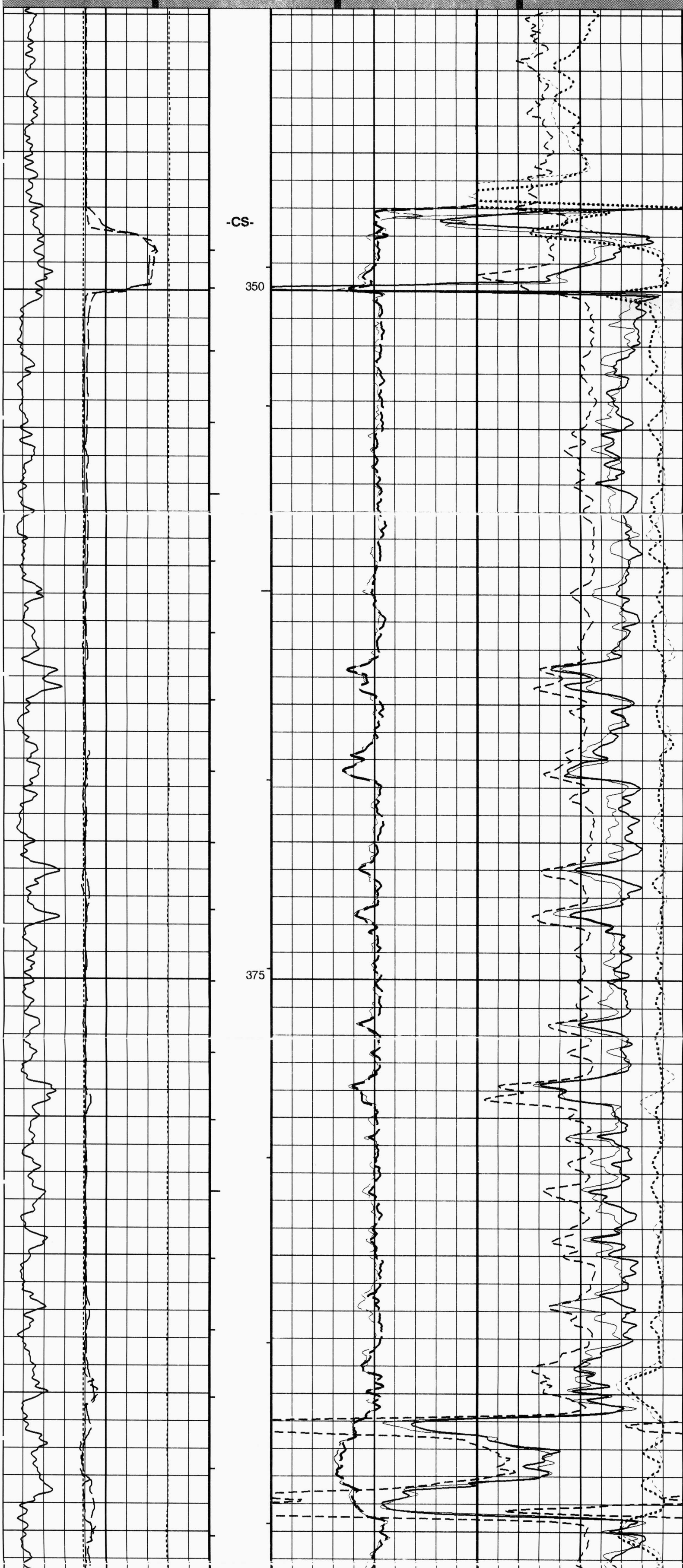
| Integrated Hole/Cement Volume Summary                              |  |  |  |
|--------------------------------------------------------------------|--|--|--|
| Hole Volume = 34.44 M3                                             |  |  |  |
| Cement Volume = 13.26 M3 (assuming 177.80 MM casing O.D.)          |  |  |  |
| Computed from 1200.9 M to 348.1 M using data channel(s) HCAL HCAL2 |  |  |  |

| OP System Version: 15C0-309 |                   |        |               |
|-----------------------------|-------------------|--------|---------------|
| MCM                         |                   |        |               |
| HILTH-FTB                   | SRPC-3402-Q3_2007 | HRLT-B | 15C0-309      |
| HILTH2-FTB                  | SRPC-3402-Q3_2007 | HNGC-B | SPC-3530-NUCL |
| HNGS-BA                     | SPC-3530-NUCL     | DTC-H  | 15C0-309      |
| SPA-A                       | 9936              |        |               |

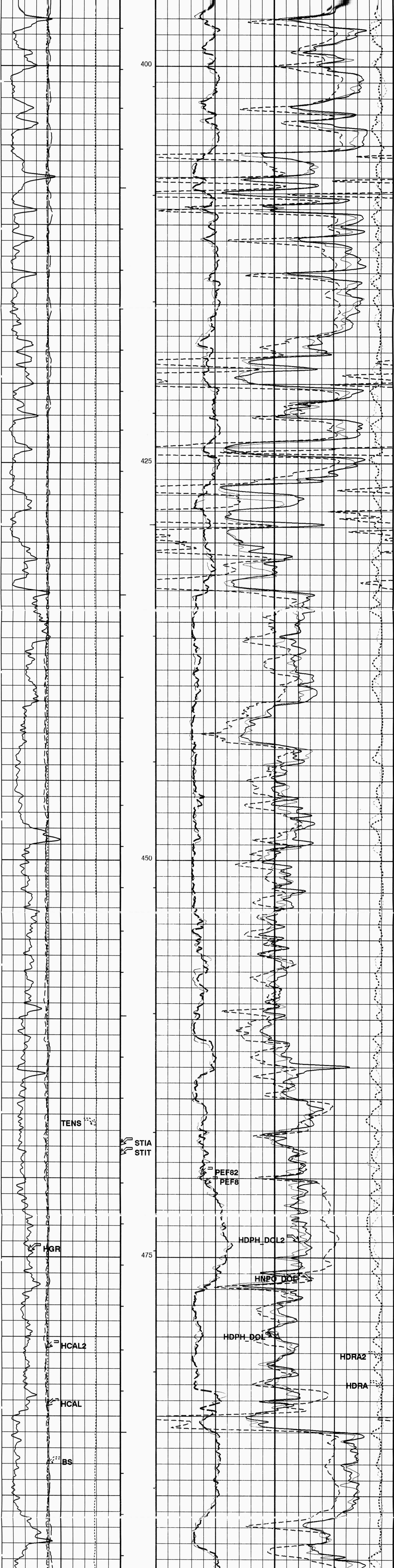
| PIP SUMMARY                                                                                                                                                                                                                    |  |  |  |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|
| <div> <div> Integrated Cement Volume Major Pip Every 1 M3 Integrated Cement Volume Minor Pip Every 0.1 M3 </div> <div> Integrated Hole Volume Major Pip Every 1 M3 Integrated Hole Volume Minor Pip Every 0.1 M3 </div> </div> |  |  |  |
| Time Mark Every 60 S                                                                                                                                                                                                           |  |  |  |

| Tension (TENS)       |        | H. Res. Formation Pe (PEF82) |       | Density Correction (HDRA2) |       |
|----------------------|--------|------------------------------|-------|----------------------------|-------|
| 25000                | (N)    | 0                            | (---- | 10                         | 450   |
|                      |        |                              |       | (K/M3)                     | -50   |
| Gamma Ray (HGR)      |        | H. Res. Formation Pe (PEF8)  |       | Density Correction (HDRA)  |       |
| 0                    | (GAPI) | 0                            | (---- | 10                         | 450   |
|                      |        |                              |       | (K/M3)                     | -50   |
| HILT Caliper (HCAL2) |        | HDPH2 for DOLO (HDPH_DOL2)   |       |                            |       |
| 125                  | (MM)   | 0.45                         | (V/V) |                            | -0.15 |
| Caliper (HCAL)       |        | HNPO for DOLO (HNPO_DOL)     |       |                            |       |
| 125                  | (MM)   | 0.45                         | (V/V) |                            | -0.15 |
| Bit Size (BS)        |        | HDPH for DOLO (HDPH_DOL)     |       |                            |       |
| 125                  | (MM)   | 0.45                         | (V/V) |                            | -0.15 |

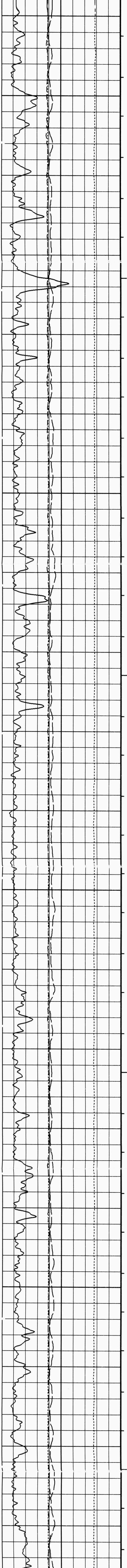
HIRES PASS: \*\*\* PEA - DUAL DENSITY POROSITY - DOLOMITE 2850 KG/M3 \*\*\*









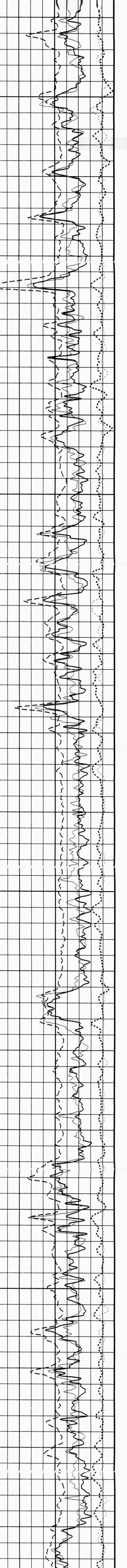
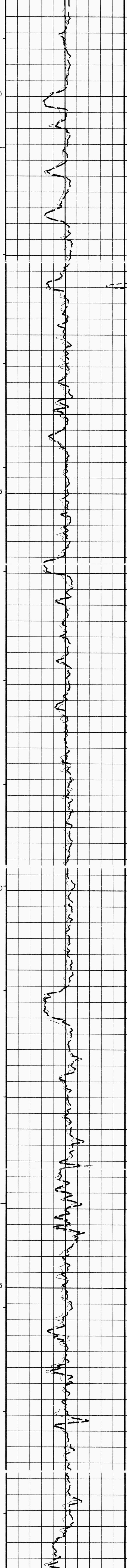


500

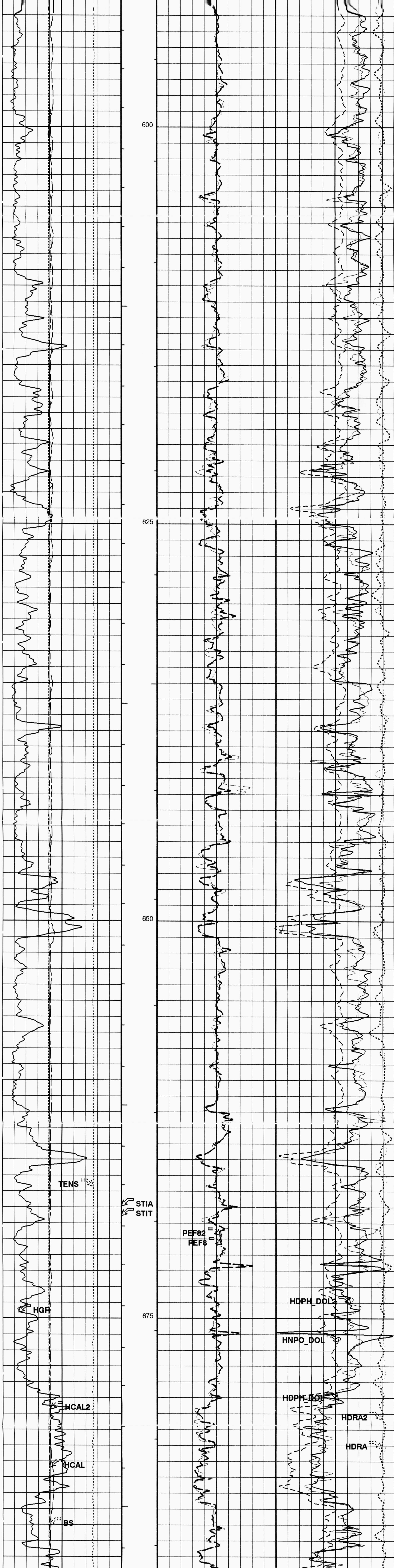
525

550

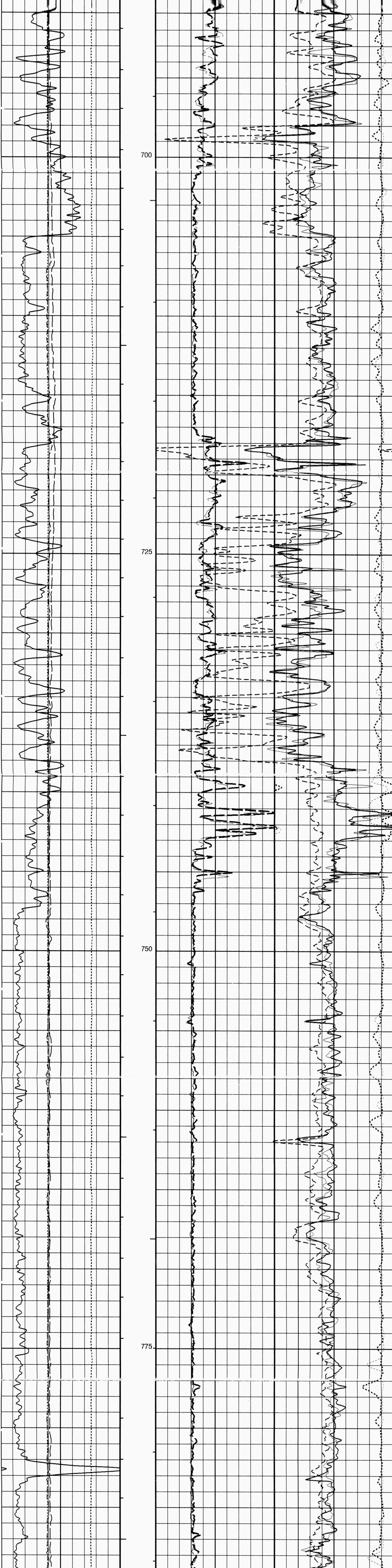
575



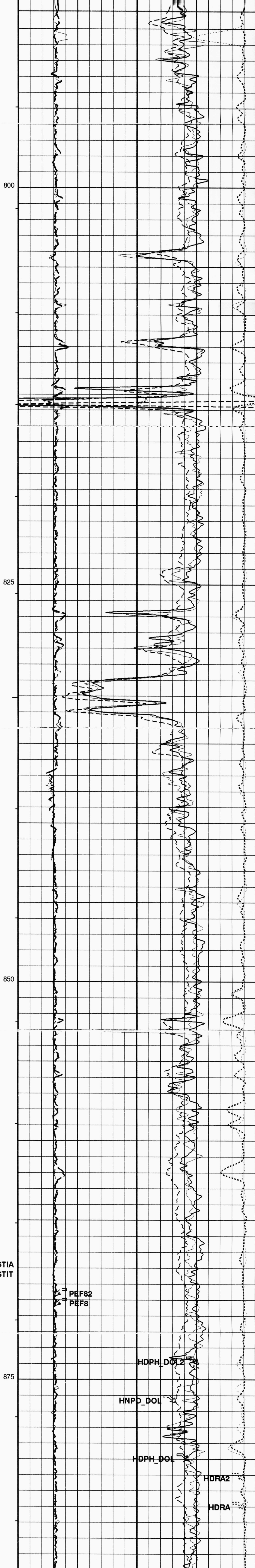
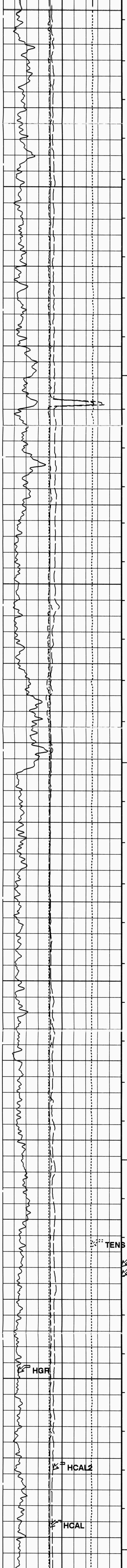




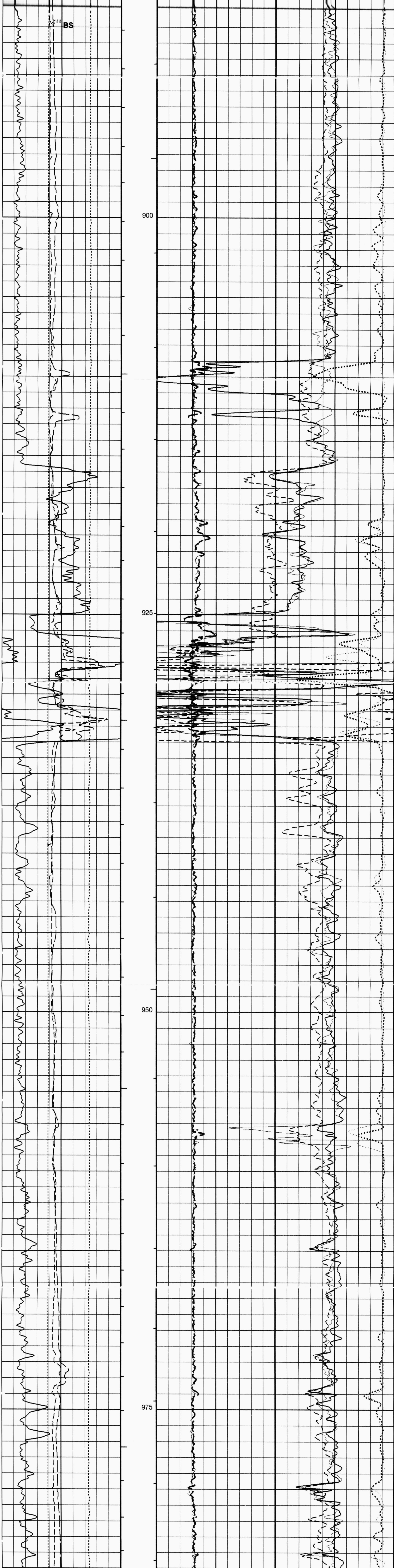




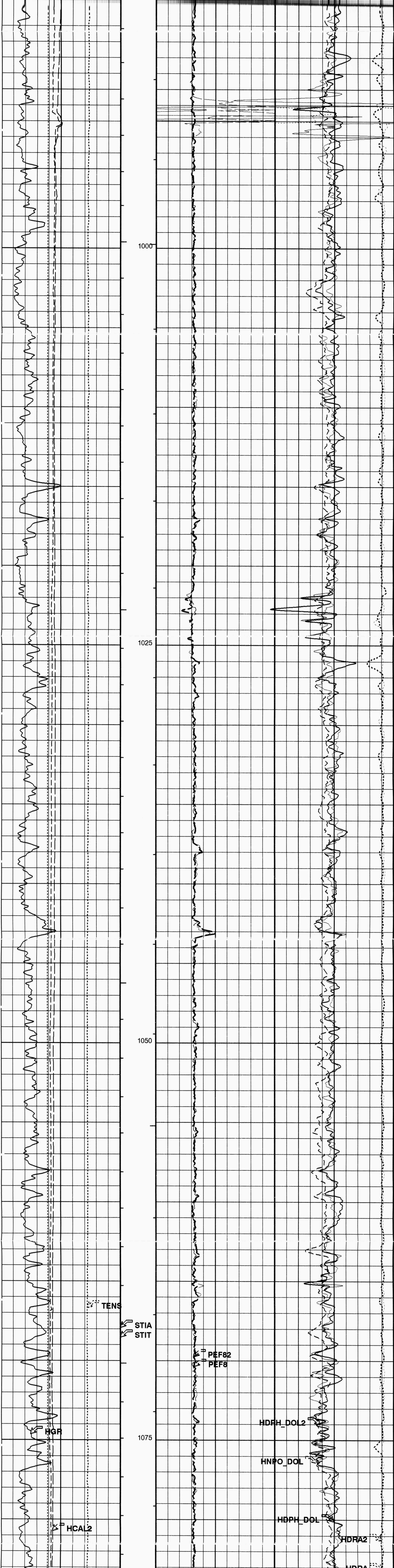




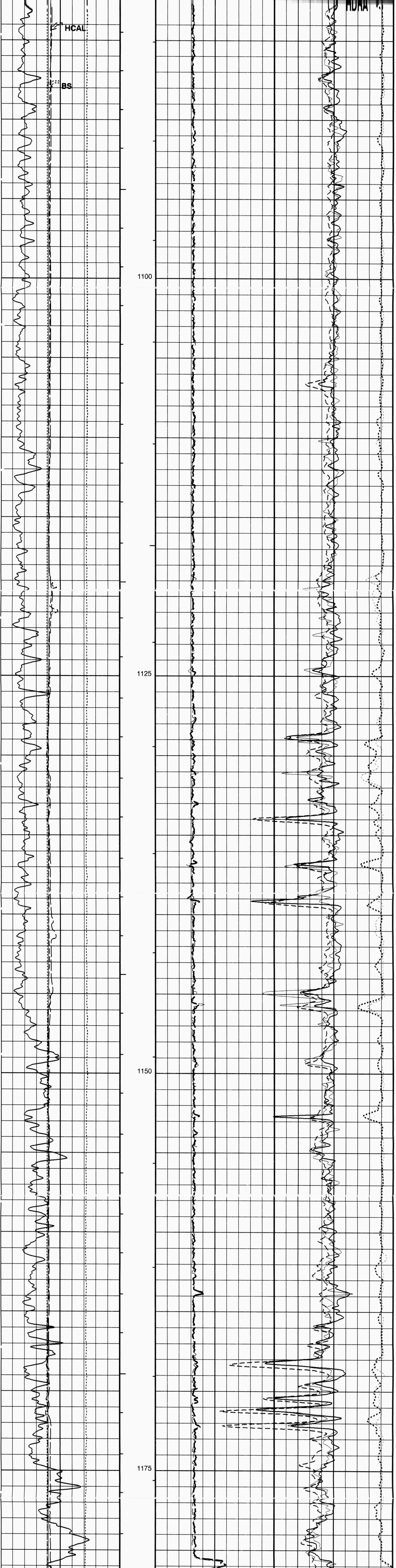




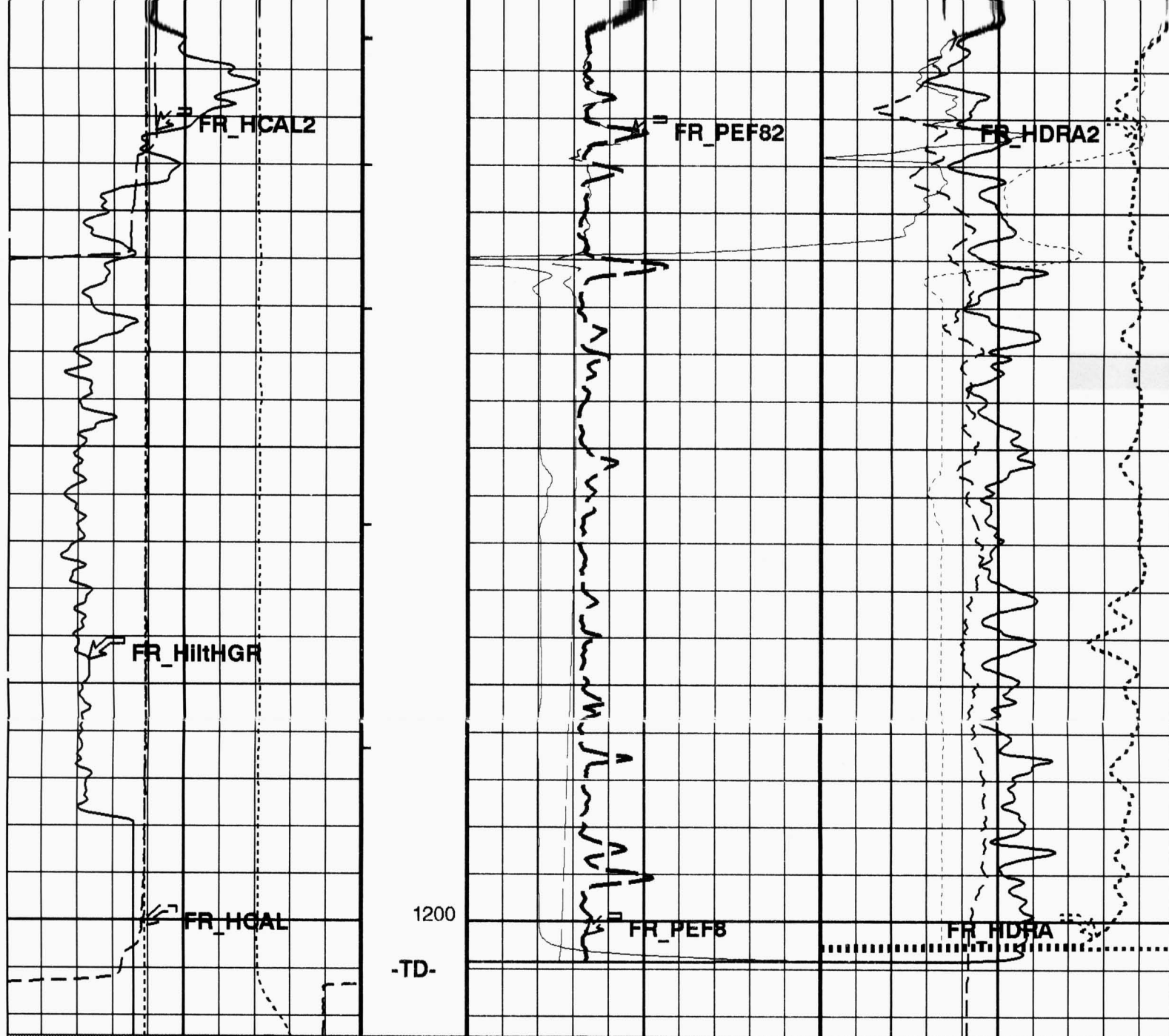












HIRES PASS: \*\*\* PEX - DUAL DENSITY POROSITY - DOLOMITE 2850 KG/M3 \*\*\*

|                       |  |           |                              |  |      |        |        |
|-----------------------|--|-----------|------------------------------|--|------|--------|--------|
| Bit Size (BS)<br>(MM) |  | 375       | HDPH for DOLO (HDPH_DOL)     |  | 0.45 | (V/V)  | -0.15  |
| Caliper (HCAL)        |  | 375       | HNPO for DOLO (HNPO_DOL)     |  | 0.45 | (V/V)  | -0.15  |
| HILT Caliper (HCAL2)  |  | 375       | HDPH2 for DOLO (HDPH_DOL2)   |  | 0.45 | (V/V)  | -0.15  |
| Gamma Ray (HGR)       |  | 150       | H. Res. Formation Pe (PEF8)  |  | 0    | (----  | 10 450 |
| Tension (TENS)        |  | 0         | Density Correction (HDRA)    |  | 0    | (K/M3) | -50    |
|                       |  | 25000 (N) | H. Res. Formation Pe (PEF82) |  | 0    | (K/M3) | -50    |
|                       |  | 0         |                              |  | 0    |        |        |

#### PIP SUMMARY

- Integrated Cement Volume Major Pip Every 1 M3
- Integrated Cement Volume Minor Pip Every 0.1 M3
- Integrated Hole Volume Major Pip Every 1 M3
- Integrated Hole Volume Minor Pip Every 0.1 M3

Time Mark Every 60 S

#### Parameters

| DLIS Name                                                | Description                                       | Value      |      |
|----------------------------------------------------------|---------------------------------------------------|------------|------|
| HILTH-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                                     | 1000       | K/M3 |
| FSAL                                                     | Formation Salinity                                | -50000     | PPM  |
| FSCO                                                     | Formation Salinity Correction Option              | NO         |      |
| GCLF                                                     | Germany Coal-like Formation Option                | NO         |      |
| GDEV                                                     | Average Angular Deviation of Borehole from Normal | 0          | DEG  |
| GGRD                                                     | Geothermal Gradient                               | 0.018227   | DC/M |
| HSCO                                                     | Hole Size Correction Option                       | YES        |      |
| MCCO                                                     | Mud Cake Correction Option                        | NO         |      |
| MCOR                                                     | Mud Correction                                    | NATU       |      |
| MWCO                                                     | Mud Weight Correction Option                      | NO         |      |
| NAAC                                                     | HRDD APS Activation Correction                    | OFF        |      |
| NMT                                                      | HILT Nuclear Mud Type                             | NOBARITE   |      |
| NPRM                                                     | HRDD Processing Mode                              | HiRes      |      |
| NSAR                                                     | HRDD Depth Sampling Rate                          | 25.4       | MM   |
| PTCO                                                     | Pressure/Temperature Correction Option            | NO         |      |
| SDAT                                                     | Standoff Data Source                              | SOCN       |      |
| SOCN                                                     | Standoff Distance                                 | 3.175      | MM   |
| SOCO                                                     | Standoff Correction Option                        | YES        |      |
| HRLT-B: High Resolution Laterolog Array - B              |                                                   |            |      |
| BHS                                                      | Borehole Status                                   | OPEN       |      |
| GDEV                                                     | Average Angular Deviation of Borehole from Normal | 0          | DEG  |
| GGRD                                                     | Geothermal Gradient                               | 0.018227   | DC/M |
| HILTH2-FTB: High resolution Integrated Logging Tool-DTS2 |                                                   |            |      |
| 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                                     | 1000       | K/M3 |
| FSCO                                                     | Formation Salinity Correction Option              | NO         |      |
| GCLF2                                                    | Germany Coal-like Formation Option                | NO         |      |
| GDEV                                                     | Average Angular Deviation of Borehole from Normal | 0          | DEG  |
| GGRD                                                     | Geothermal Gradient                               | 0.018227   | DC/M |
| HSCO                                                     | Hole Size Correction Option                       | YES        |      |
| MCCO                                                     | Mud Cake Correction Option                        | NO         |      |
| MCOR                                                     | Mud Correction                                    | NATU       |      |
| MWCO                                                     | Mud Weight Correction Option                      | NO         |      |
| NAAC2                                                    | HRDD2 APS Activation Correction                   | OFF        |      |
| NMT                                                      | HILT Nuclear Mud Type                             | NOBARITE   |      |
| NPRM2                                                    | HRDD2 Processing Mode                             | HiRes      |      |
| NSAR2                                                    | HRDD2 Depth Sampling Rate                         | 25.4       | MM   |
| PTCO                                                     | Pressure/Temperature Correction Option            | NO         |      |
| SDAT                                                     | Standoff Data Source                              | SOCN       |      |
| SOCN                                                     | Standoff Distance                                 | 3.175      | MM   |
| SOCO                                                     | Standoff Correction Option                        | YES        |      |
| HNCS-BA: Hostile Natural Gamma Ray Sonde                 |                                                   |            |      |
| BHS                                                      | Borehole Status                                   | OPEN       |      |
| GDEV                                                     | Average Angular Deviation of Borehole from Normal | 0          | DEG  |
| GGRD                                                     | Geothermal Gradient                               | 0.018227   | DC/M |
| DIR: Directional Survey Computation                      |                                                   |            |      |
| SPVD                                                     | TVD of Starting Point                             | 0          | M    |
| TIMD                                                     | Along-hole depth of Tie-in Point                  | 348        | M    |
| TIVD                                                     | TVD of Tie-in Point                               | 348        | M    |
| HOLEV: Integrated Hole/Cement Volume                     |                                                   |            |      |
| BHS                                                      | Borehole Status                                   | OPEN       |      |
| FCD                                                      | Future Casing (Outer) Diameter                    | 177.8      | MM   |
| GDEV                                                     | Average Angular Deviation of Borehole from Normal | 0          | DEG  |
| GGRD                                                     | Geothermal Gradient                               | 0.018227   | DC/M |
| HVCS                                                     | Integrated Hole Volume Caliper Selection          | HCAL/HCAL2 |      |
| STI: Stuck Tool Indicator                                |                                                   |            |      |
| LBFR                                                     | Trigger for MAXIS First Reading Label             | TDL        |      |
| STKT                                                     | STI Stuck Threshold                               | 1.524      | M    |
| TDD                                                      | Total Depth - Driller                             | 1200.00    | M    |
| TDL                                                      | Total Depth - Logger                              | 1201.00    | M    |
| System and Miscellaneous                                 |                                                   |            |      |
| BS                                                       | Bit Size                                          | 222.000    | MM   |
| BSAL                                                     | Borehole Salinity                                 | -50000.00  | PPM  |
| CSIZ                                                     | Current Casing Size                               | 244.500    | MM   |
| CWEI                                                     | Casing Weight                                     | 53.57      | KG/M |
| DFD                                                      | Drilling Fluid Density                            | 1180.00    | K/M3 |
| DO                                                       | Depth Offset for Playback                         | 0.0        | M    |
| MST                                                      | Mud Sample Temperature                            | 20.10      | DEGC |
| PP                                                       | Playback Processing                               | NORMAL     |      |
| RMFS                                                     | Resistivity of Mud Filtrate Sample                | 0.1030     | OHMM |
| TD                                                       | Total Depth                                       | 1201       | M    |

Format: HIRES\_DOL Vertical Scale: 1:120

Graphics File Created: 23-Feb-2008 19:43

#### OP System Version: 15C0-309

MCM

|            |                   |        |               |
|------------|-------------------|--------|---------------|
| HILTH-FTB  | SRPC-3402-Q3_2007 | HRLT-B | 15C0-309      |
| HILTH2-FTB | SRPC-3402-Q3_2007 | HNGC-B | SPC-3530-NUCL |
| HNCS-BA    | SPC-3530-NUCL     | DTC-H  | 15C0-309      |
| SPA-A      | 9939              |        |               |

#### Input DLIS Files

|         |                          |       |          |                   |          |         |
|---------|--------------------------|-------|----------|-------------------|----------|---------|
| DEFAULT | TLD_MCFL_CNL_HRLA_013PUP | FN:21 | PRODUCER | 23-Feb-2008 18:53 | 1202.4 M | 301.4 M |
|---------|--------------------------|-------|----------|-------------------|----------|---------|

| Calibration and Check Summary                                                                                  |         |        |        |       |        |       |       |
|----------------------------------------------------------------------------------------------------------------|---------|--------|--------|-------|--------|-------|-------|
| Measurement                                                                                                    | Nominal | Master | Before | After | Change | Limit | Units |
| High resolution Integrated Logging Tool-DTS Wellsite Calibration - Stab Measurement Summary                    |         |        |        |       |        |       |       |
| Before: 22-Feb-2008 10:39                                                                                      |         |        |        |       |        |       |       |
| BS Window Ratio                                                                                                | 0.7422  | N/A    | 0.7431 | N/A   | N/A    | N/A   | CPS   |
| BS Window Sum                                                                                                  | 29980   | N/A    | 30020  | N/A   | N/A    | N/A   |       |
| SS Window Ratio                                                                                                | 0.4866  | N/A    | 0.4868 | N/A   | N/A    | N/A   |       |
| SS Window Sum                                                                                                  | 12830   | N/A    | 12820  | N/A   | N/A    | N/A   | CPS   |
| LS Window Ratio                                                                                                | 0.2997  | N/A    | 0.2984 | N/A   | N/A    | N/A   | CPS   |
| LS Window Sum                                                                                                  | 1524    | N/A    | 1522   | N/A   | N/A    | N/A   |       |
| High resolution Integrated Logging Tool-DTS Wellsite Calibration - Photo-multiplier High Voltages Calibrations |         |        |        |       |        |       |       |
| Before: 22-Feb-2008 10:39                                                                                      |         |        |        |       |        |       |       |
| BS PM High Voltage (Command)                                                                                   | 1366    | N/A    | 1359   | N/A   | N/A    | N/A   | V     |
| SS PM High Voltage (Command)                                                                                   | 1294    | N/A    | 1303   | N/A   | N/A    | N/A   | V     |
| LS PM High Voltage (Command)                                                                                   | 1244    | N/A    | 1249   | N/A   | N/A    | N/A   | V     |
| High resolution Integrated Logging Tool-DTS Wellsite Calibration - Crystal Quality Resolutions Calibration     |         |        |        |       |        |       |       |
| Before: 22-Feb-2008 10:39                                                                                      |         |        |        |       |        |       |       |
| BS Crystal Resolution                                                                                          | 10.62   | N/A    | 10.61  | N/A   | N/A    | N/A   | %     |
| SS Crystal Resolution                                                                                          | 9.106   | N/A    | 9.391  | N/A   | N/A    | N/A   | %     |
| LS Crystal Resolution                                                                                          | 8.132   | N/A    | 8.035  | N/A   | N/A    | N/A   | %     |
| High resolution Integrated Logging Tool-DTS Wellsite Calibration - MCFL Calibration                            |         |        |        |       |        |       |       |
| Before: 22-Feb-2008 10:34                                                                                      |         |        |        |       |        |       |       |
| Raw B0 Resistivity                                                                                             | 3875    | N/A    | 3882   | N/A   | N/A    | N/A   | OHMM  |
| Raw B1 Resistivity                                                                                             | 3830    | N/A    | 3836   | N/A   | N/A    | N/A   | OHMM  |
| Raw B2 Resistivity                                                                                             | 3830    | N/A    | 3837   | N/A   | N/A    | N/A   | OHMM  |
| High resolution Integrated Logging Tool-DTS Wellsite Calibration - HILT Caliper Calibration                    |         |        |        |       |        |       |       |
| Before: 22-Feb-2008 10:32                                                                                      |         |        |        |       |        |       |       |
| HILT Caliper Zero Measurement                                                                                  | 200.0   | N/A    | 184.6  | N/A   | N/A    | N/A   | MM    |
| HILT Caliper Plus Measurement                                                                                  | 306.0   | N/A    | 303.3  | N/A   | N/A    | N/A   | MM    |
| High resolution Integrated Logging Tool-DTS Wellsite Calibration - Detector Calibration                        |         |        |        |       |        |       |       |
| Before: 22-Feb-2008 13:39                                                                                      |         |        |        |       |        |       |       |
| Gamma Ray Background                                                                                           | 30.00   | N/A    | 10.57  | N/A   | N/A    | N/A   | GAPI  |
| Gamma Ray (Jig - Bkg)                                                                                          | 180.7   | N/A    | 180.7  | N/A   | N/A    | 16.43 | GAPI  |
| Gamma Ray (Calibrated)                                                                                         | 162.0   | N/A    | 162.0  | N/A   | N/A    | 15.00 | GAPI  |
| High resolution Integrated Logging Tool-DTS Wellsite Calibration - Zero Measurement                            |         |        |        |       |        |       |       |
| Master: 15-Jan-2008 15:00 Before: 22-Feb-2008 13:32                                                            |         |        |        |       |        |       |       |
| CNTC Background                                                                                                |         | 26.64  | 26.88  | N/A   | N/A    | 3.996 | CPS   |
| CFTC Background                                                                                                |         | 26.42  | 27.40  | N/A   | N/A    | 3.963 | CPS   |
| High resolution Integrated Logging Tool-DTS Wellsite Calibration - Ratio Measurement                           |         |        |        |       |        |       |       |
| Master: 15-Jan-2008 15:00                                                                                      |         |        |        |       |        |       |       |
| Thermal Near Corr. (Tank)                                                                                      | 5800    | 6123   | N/A    | N/A   | N/A    | N/A   | CPS   |
| Thermal Far Corr. (Tank)                                                                                       | 2400    | 2592   | N/A    | N/A   | N/A    | N/A   | CPS   |



High resolution Integrated Logging Tool-DTS Wellsite Calibration - Accelerometer Calibration

Before: 23-Feb-2008 14:50  
Z-Axis Acceleration 9.810 N/A 9.811 N/A N/A N/A M/S2

High resolution Integrated Logging Tool-DTS Master Calibration - Inversion results

Master: 15-Feb-2008 14:33  
Rho Aluminum 2596 2598 -- -- -- -- K/M3  
Rho Magnesium 1686 1687 -- -- -- -- K/M3  
Pe Aluminum 2.570 2.555 -- -- -- --  
Pe Magnesium 2.650 2.616 -- -- -- --

High resolution Integrated Logging Tool-DTS Master Calibration - Deviation Summary

Master: 15-Feb-2008 14:33  
BS Average Deviation 0 0.4449 -- -- -- -- %  
BS Max Deviation 0 1.303 -- -- -- -- %  
SS Average Deviation 0 0.2374 -- -- -- -- %  
SS Max Deviation 0 0.6135 -- -- -- -- %  
LS Average Deviation 0 0.6376 -- -- -- -- %  
LS Max Deviation 0 1.442 -- -- -- -- %

High Resolution Laterolog Array - B Wellsite Calibration - HRLT M01

Before: 23-Feb-2008 14:50  
HRLT M0-M1 Voltage Plus - 0 0 N/A -321.1 N/A N/A 9.681 UV  
HRLT M0-M1 Voltage Plus - 1 0 N/A -368.7 N/A N/A 9.681 UV  
HRLT M0-M1 Voltage Plus - 2 0 N/A -338.6 N/A N/A 9.681 UV  
HRLT M0-M1 Voltage Plus - 3 0 N/A -337.3 N/A N/A 9.681 UV  
HRLT M0-M1 Voltage Plus - 4 0 N/A -324.0 N/A N/A 9.681 UV  
HRLT M0-M1 Voltage Plus - 5 0 N/A -327.7 N/A N/A 9.681 UV  
HRLT M0-M1 Voltage Plus - 6 0 N/A 359.4 N/A N/A 9.681 UV  
HRLT M0-M1 Voltage Plus - 7 0 N/A -322.7 N/A N/A 9.681 UV

High Resolution Laterolog Array - B Wellsite Calibration - HRLT M12

Before: 23-Feb-2008 14:50  
HRLT M1-M2 Voltage Plus - 0 0 N/A 1765 N/A N/A 53.42 UV  
HRLT M1-M2 Voltage Plus - 1 0 N/A 2019 N/A N/A 53.42 UV  
HRLT M1-M2 Voltage Plus - 2 0 N/A 1851 N/A N/A 53.42 UV  
HRLT M1-M2 Voltage Plus - 3 0 N/A 1846 N/A N/A 53.42 UV  
HRLT M1-M2 Voltage Plus - 4 0 N/A 1777 N/A N/A 53.42 UV  
HRLT M1-M2 Voltage Plus - 5 0 N/A 1800 N/A N/A 53.42 UV  
HRLT M1-M2 Voltage Plus - 6 0 N/A -1976 N/A N/A 53.42 UV  
HRLT M1-M2 Voltage Plus - 7 0 N/A 1781 N/A N/A 53.42 UV

High Resolution Laterolog Array - B Wellsite Calibration - HRLT M23

Before: 23-Feb-2008 14:50  
HRLT M2-M3 Voltage Plus - 0 0 N/A 1749 N/A N/A 53.42 UV  
HRLT M2-M3 Voltage Plus - 1 0 N/A 2018 N/A N/A 53.42 UV  
HRLT M2-M3 Voltage Plus - 2 0 N/A 1851 N/A N/A 53.42 UV  
HRLT M2-M3 Voltage Plus - 3 0 N/A 1849 N/A N/A 53.42 UV  
HRLT M2-M3 Voltage Plus - 4 0 N/A 1772 N/A N/A 53.42 UV  
HRLT M2-M3 Voltage Plus - 5 0 N/A 1795 N/A N/A 53.42 UV  
HRLT M2-M3 Voltage Plus - 6 0 N/A -1963 N/A N/A 53.42 UV  
HRLT M2-M3 Voltage Plus - 7 0 N/A 1781 N/A N/A 53.42 UV

High Resolution Laterolog Array - B Wellsite Calibration - HRLT V34

Before: 23-Feb-2008 14:50  
HRLT A3-A4 Voltage Plus - 0 0 N/A 68930 N/A N/A 2100 UV  
HRLT A3-A4 Voltage Plus - 1 0 N/A 79220 N/A N/A 2100 UV  
HRLT A3-A4 Voltage Plus - 2 0 N/A 72960 N/A N/A 2100 UV  
HRLT A3-A4 Voltage Plus - 3 0 N/A 73170 N/A N/A 2100 UV  
HRLT A3-A4 Voltage Plus - 4 0 N/A 70140 N/A N/A 2100 UV  
HRLT A3-A4 Voltage Plus - 5 0 N/A 71070 N/A N/A 2100 UV  
HRLT A3-A4 Voltage Plus - 6 0 N/A -75920 N/A N/A 2100 UV  
HRLT A3-A4 Voltage Plus - 7 0 N/A 70000 N/A N/A 2100 UV

High Resolution Laterolog Array - B Wellsite Calibration - HRLT V45

Before: 23-Feb-2008 14:50  
HRLT A4-A5 Voltage Plus - 0 0 N/A 68800 N/A N/A 2100 UV  
HRLT A4-A5 Voltage Plus - 1 0 N/A 79010 N/A N/A 2100 UV  
HRLT A4-A5 Voltage Plus - 2 0 N/A 72780 N/A N/A 2100 UV  
HRLT A4-A5 Voltage Plus - 3 0 N/A 73000 N/A N/A 2100 UV  
HRLT A4-A5 Voltage Plus - 4 0 N/A 69990 N/A N/A 2100 UV  
HRLT A4-A5 Voltage Plus - 5 0 N/A 70920 N/A N/A 2100 UV  
HRLT A4-A5 Voltage Plus - 6 0 N/A -75720 N/A N/A 2100 UV  
HRLT A4-A5 Voltage Plus - 7 0 N/A 70000 N/A N/A 2100 UV

High Resolution Laterolog Array - B Wellsite Calibration - HRLT V56

Before: 23-Feb-2008 14:50  
HRLT A5-A6 Voltage Plus - 0 0 N/A 69210 N/A N/A 2100 UV  
HRLT A5-A6 Voltage Plus - 1 0 N/A 79600 N/A N/A 2100 UV  
HRLT A5-A6 Voltage Plus - 2 0 N/A 73290 N/A N/A 2100 UV  
HRLT A5-A6 Voltage Plus - 3 0 N/A 73480 N/A N/A 2100 UV  
HRLT A5-A6 Voltage Plus - 4 0 N/A 70410 N/A N/A 2100 UV  
HRLT A5-A6 Voltage Plus - 5 0 N/A 71340 N/A N/A 2100 UV  
HRLT A5-A6 Voltage Plus - 6 0 N/A -76280 N/A N/A 2100 UV  
HRLT A5-A6 Voltage Plus - 7 0 N/A 70000 N/A N/A 2100 UV

High Resolution Laterolog Array - B Wellsite Calibration - HRLT VTP

Before: 23-Feb-2008 14:50  
HRLT Torpedo-M0 Voltage - 0 0 N/A -68600 N/A N/A 2100 UV  
HRLT Torpedo-M0 Voltage - 1 0 N/A -79280 N/A N/A 2100 UV  
HRLT Torpedo-M0 Voltage - 2 0 N/A -73020 N/A N/A 2100 UV  
HRLT Torpedo-M0 Voltage - 3 0 N/A -73260 N/A N/A 2100 UV  
HRLT Torpedo-M0 Voltage - 4 0 N/A -70220 N/A N/A 2100 UV  
HRLT Torpedo-M0 Voltage - 5 0 N/A -71150 N/A N/A 2100 UV  
HRLT Torpedo-M0 Voltage - 6 0 N/A 75910 N/A N/A 2100 UV  
HRLT Torpedo-M0 Voltage - 7 0 N/A -70000 N/A N/A 2100 UV

High Resolution Laterolog Array - B Wellsite Calibration - HRLT VBD

Before: 23-Feb-2008 14:50  
HRLT Bridle#9-M0 Voltage - 0 0 N/A -68580 N/A N/A 2100 UV  
HRLT Bridle#9-M0 Voltage - 1 0 N/A -79240 N/A N/A 2100 UV  
HRLT Bridle#9-M0 Voltage - 2 0 N/A -72990 N/A N/A 2100 UV  
HRLT Bridle#9-M0 Voltage - 3 0 N/A -73230 N/A N/A 2100 UV  
HRLT Bridle#9-M0 Voltage - 4 0 N/A -70220 N/A N/A 2100 UV  
HRLT Bridle#9-M0 Voltage - 5 0 N/A -71150 N/A N/A 2100 UV  
HRLT Bridle#9-M0 Voltage - 6 0 N/A 75880 N/A N/A 2100 UV  
HRLT Bridle#9-M0 Voltage - 7 0 N/A -70000 N/A N/A 2100 UV

High Resolution Laterolog Array - B Wellsite Calibration - HRLT ISO

Before: 23-Feb-2008 14:50  
HRLT Source Current Plus - 0 0 N/A 286.2 N/A N/A 8.520 UA  
HRLT Source Current Plus - 1 0 N/A 281.1 N/A N/A 8.520 UA  
HRLT Source Current Plus - 2 0 N/A 281.1 N/A N/A 8.520 UA  
HRLT Source Current Plus - 3 0 N/A 281.1 N/A N/A 8.520 UA  
HRLT Source Current Plus - 4 0 N/A 281.1 N/A N/A 8.520 UA  
HRLT Source Current Plus - 5 0 N/A 281.1 N/A N/A 8.520 UA  
HRLT Source Current Plus - 6 0 N/A 281.1 N/A N/A 8.520 UA  
HRLT Source Current Plus - 7 0 N/A 281.1 N/A N/A 8.520 UA

High Resolution Laterolog Array - B Wellsite Calibration - HRLT MV

Before: 23-Feb-2008 14:50  
HRLT Vertical Voltage Pl - 0 0 N/A -323.0 N/A N/A 9.681 UV  
HRLT Vertical Voltage Pl - 1 0 N/A -361.3 N/A N/A 9.681 UV  
HRLT Vertical Voltage Pl - 2 0 N/A -331.3 N/A N/A 9.681 UV  
HRLT Vertical Voltage Pl - 3 0 N/A -328.4 N/A N/A 9.681 UV  
HRLT Vertical Voltage Pl - 4 0 N/A -312.8 N/A N/A 9.681 UV  
HRLT Vertical Voltage Pl - 5 0 N/A -331.8 N/A N/A 9.681 UV  
HRLT Vertical Voltage Pl - 6 0 N/A 366.8 N/A N/A 9.681 UV  
HRLT Vertical Voltage Pl - 7 0 N/A -322.7 N/A N/A 9.681 UV

High resolution Integrated Logging Tool-DTS2 Wellsite Calibration - Stab Measurement Summary

Before: 22-Feb-2008 13:21  
BS2 Window Ratio 0.7383 N/A 0.7364 N/A N/A N/A  
BS2 Window Sum 26790 N/A 26850 N/A N/A N/A CPS  
SS2 Window Ratio 0.4880 N/A 0.4877 N/A N/A N/A  
SS2 Window Sum 12320 N/A 12280 N/A N/A N/A CPS  
LS2 Window Ratio 0.2973 N/A 0.3011 N/A N/A N/A  
LS2 Window Sum 1478 N/A 1470 N/A N/A N/A CPS

High resolution Integrated Logging Tool-DTS2 Wellsite Calibration - Photo-multiplier High Voltages Calibrations

Before: 22-Feb-2008 13:21  
BS2 PM High Voltage (Command) 1403 N/A 1390 N/A N/A N/A V  
SS2 PM High Voltage (Command) 1315 N/A 1297 N/A N/A N/A V  
LS2 PM High Voltage (Command) 1334 N/A 1323 N/A N/A N/A V

High resolution Integrated Logging Tool-DTS2 Wellsite Calibration - Crystal Quality Resolutions Calibration

Before: 22-Feb-2008 13:21  
BS2 Crystal Resolution 11.04 N/A 10.88 N/A N/A N/A %  
SS2 Crystal Resolution 9.034 N/A 9.371 N/A N/A N/A %  
LS2 Crystal Resolution 8.323 N/A 8.459 N/A N/A N/A %

High resolution Integrated Logging Tool-DTS2 Wellsite Calibration - MCFL2 Calibration

Before: 22-Feb-2008 13:13  
Raw B0 Resistivity 3875 N/A 3842 N/A N/A N/A OHMM  
Raw B1 Resistivity 3830 N/A 3815 N/A N/A N/A OHMM  
Raw B2 Resistivity 3830 N/A 3819 N/A N/A N/A OHMM

High resolution Integrated Logging Tool-DTS2 Wellsite Calibration - HILT2 Caliper Calibration

Before: 22-Feb-2008 13:09  
HILT2 Caliper Zero Measurement 200.0 N/A 176.5 N/A N/A N/A MM  
HILT2 Caliper Plus Measurement 306.0 N/A 290.3 N/A N/A N/A MM

High resolution Integrated Logging Tool-DTS2 Master Calibration - Inversion results

Master: 22-Feb-2008 12:27  
Rho Aluminum 2596 2601 -- -- -- -- K/M3  
Rho Magnesium 1696 1686 -- -- -- -- K/M3  
Pe Aluminum 2.570 2.561 -- -- -- --  
Pe Magnesium 2.650 2.617 -- -- -- --

High resolution Integrated Logging Tool-DTS2 Master Calibration - Deviation Summary

Master: 22-Feb-2008 12:27  
BS2 Average Deviation 0 0.2741 -- -- -- -- %  
BS2 Max Deviation 0 1.036 -- -- -- -- %  
SS2 Average Deviation 0 0.3589 -- -- -- -- %  
SS2 Max Deviation 0 1.416 -- -- -- -- %  
LS2 Average Deviation 0 0.5074 -- -- -- -- %  
LS2 Max Deviation 0 1.283 -- -- -- -- %

Hostile Natural Gamma Ray Sonde Wellsite Calibration - Detector 1 Check

Master: 4-Jan-2008 9:55 Before: 22-Feb-2008 14:24  
Na 511 Peak Loc 40.00 39.78 39.66 N/A N/A 1.000  
Na 511 Peak Res 15.50 15.38 14.95 N/A N/A 2.000 %  
High Voltage 1150 1258 1238 N/A N/A N/A V  
Na 1785 Peak Loc 142.6 143.7 143.5 N/A N/A 7.000  
Na 1785 Peak Res 8.500 8.442 7.671 N/A N/A 2.000 %  
Temperature 15.50 22.14 13.05 N/A N/A N/A DEGC  
Na Count Rate 45.00 35.30 33.55 N/A N/A 8.000 CPS

Hostile Natural Gamma Ray Sonde Wellsite Calibration - Detector 2 Check

Master: 4-Jan-2008 9:55 Before: 22-Feb-2008 14:24  
Na 511 Peak Loc 40.00 39.66 39.58 N/A N/A 1.000  
Na 511 Peak Res 15.50 14.86 16.08 N/A N/A 2.000 %  
High Voltage 1150 1273 1255 N/A N/A N/A V  
Na 1785 Peak Loc 142.6 142.7 143.1 N/A N/A 7.000  
Na 1785 Peak Res 8.500 8.234 8.070 N/A N/A 2.000 %  
Temperature 15.50 21.49 12.34 N/A N/A N/A DEGC  
Na Count Rate 45.00 35.28 33.40 N/A N/A 8.000 CPS

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

Master: 4-Jan-2008 9:55 Before: 22-Feb-2008 14:24  
Coincidence Count Rate Ratio 1.000 1.001 1.004 N/A N/A 0.05000

Hostile Natural Gamma Ray Sonde Master Calibration - Detector 1 Calibration

Master: 4-Jan-2008 9:50  
Na 511 Peak Set Point 40.00 41.00 -- -- -- --  
Th Peak Loc 209.6 211.0 -- -- -- --  
Th Peak Res 7.000 6.765 -- -- -- --  
Background Count Rate 142.5 82.05 -- -- -- -- CPS  
Gain Ratio 1.000 1.009 -- -- -- --

Hostile Natural Gamma Ray Sonde Master Calibration - Detector 2 Calibration

Master: 4-Jan-2008 9:50  
Na 511 Peak Set Point 40.00 41.00 -- -- -- --  
Th Peak Loc 209.6 211.2 -- -- -- --  
Th Peak Res 7.000 7.094 -- -- -- --  
Background Count Rate 142.5 80.00 -- -- -- -- CPS  
Gain Ratio 1.000 1.013 -- -- -- --

The GLS-VJ source activity is acceptable.

The HGNS Neutron Master Calibration was done with the following parameters :

NCT-B Water Temperature 19.4 DEGC.  
Thermal Housing Size 85.750 MM.  
NSR-F serial number 5196

The GLS-VJ2 source activity is acceptable.



High resolution Integrated Logging Tool-DTS / Equipment Identification

Primary Equipment:

HILT high-Resolution Mechanical Sonde  
HILT Rxo Gamma-ray Device  
HILT Micro Cylindrically Focused Log Dev  
GR Logging Source  
HILT High Res. Control Cartridge  
HILT Gamma-Ray Neutron Sonde-DTS  
HGNS Gamma-Ray Device  
HGNS Neutron Detector with Alpha Source

HRMS - H 4719  
HRGD - H 4751  
MCFL - H  
GLS - VJ 5041  
HRCC - H 4722  
HGNS - H 4738  
HGR -  
HCNT - H

Auxiliary Equipment:

Neutron Calibration Tank  
Gamma Source Radioactive  
HGNS Housing

NCT - B  
GSR - U/Y 11  
HGNH - 3811

High resolution Integrated Logging Tool-DTS Wellsite Calibration

Stab Measurement Summary

| Phase  | BS Window Ratio                                    | Value  | Phase  | SS Window Ratio                                    | Value  | Phase  | LS Window Ratio                                    | Value  |
|--------|----------------------------------------------------|--------|--------|----------------------------------------------------|--------|--------|----------------------------------------------------|--------|
| Before |                                                    | 0.7431 | Before |                                                    | 0.4888 | Before |                                                    | 0.2994 |
|        | 0.7051 (Minimum) 0.7422 (Nominal) 0.7793 (Maximum) |        |        | 0.4642 (Minimum) 0.4888 (Nominal) 0.5131 (Maximum) |        |        | 0.2848 (Minimum) 0.2997 (Nominal) 0.3147 (Maximum) |        |
| Phase  | BS Window Sum CPS                                  | Value  | Phase  | SS Window Sum CPS                                  | Value  | Phase  | LS Window Sum CPS                                  | Value  |
| Before |                                                    | 30020  | Before |                                                    | 12820  | Before |                                                    | 1522   |
|        | 28480 (Minimum) 29980 (Nominal) 31480 (Maximum)    |        |        | 12190 (Minimum) 12830 (Nominal) 13470 (Maximum)    |        |        | 1448 (Minimum) 1524 (Nominal) 1600 (Maximum)       |        |

Before: 22-Feb-2008 10:39

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 |                                              | 1359  | Before |                                              | 1303  | Before |                                              | 1249  |
|        | 1286 (Minimum) 1366 (Nominal) 1466 (Maximum) |       |        | 1194 (Minimum) 1294 (Nominal) 1394 (Maximum) |       |        | 1144 (Minimum) 1244 (Nominal) 1344 (Maximum) |       |

Before: 22-Feb-2008 10:39

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 |                                                 | 10.61 | Before |                                                 | 9.391 | Before |                                                 | 8.035 |
|        | 9.623 (Minimum) 10.62 (Nominal) 11.62 (Maximum) |       |        | 8.106 (Minimum) 9.106 (Nominal) 10.11 (Maximum) |       |        | 7.132 (Minimum) 8.132 (Nominal) 9.132 (Maximum) |       |

Before: 22-Feb-2008 10:39

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 |                                              | 3882  | Before |                                              | 3836  | Before |                                              | 3837  |
|        | 3565 (Minimum) 3875 (Nominal) 4185 (Maximum) |       |        | 3524 (Minimum) 3830 (Nominal) 4136 (Maximum) |       |        | 3524 (Minimum) 3830 (Nominal) 4136 (Maximum) |       |

Before: 22-Feb-2008 10:34

High resolution Integrated Logging Tool-DTS Wellsite Calibration

HILT Caliper Calibration

| Phase  | HILT Caliper Zero Measurement MM                | Value | Phase  | HILT Caliper Plus Measurement MM                | Value |
|--------|-------------------------------------------------|-------|--------|-------------------------------------------------|-------|
| Before |                                                 | 184.6 | Before |                                                 | 303.3 |
|        | 150.0 (Minimum) 200.0 (Nominal) 250.0 (Maximum) |       |        | 229.5 (Minimum) 306.0 (Nominal) 382.5 (Maximum) |       |

Before: 22-Feb-2008 10:32

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 |                                             | 10.57 | Before |                                                 | 180.7 | Before |                                                 | 162.0 |
|        | 0 (Minimum) 30.00 (Nominal) 120.0 (Maximum) |       |        | 164.3 (Minimum) 180.7 (Nominal) 197.2 (Maximum) |       |        | 147.0 (Minimum) 162.0 (Nominal) 177.0 (Maximum) |       |

Before: 22-Feb-2008 13:39

High resolution Integrated Logging Tool-DTS Wellsite Calibration

Zero Measurement

| Phase  | CNTC Background CPS                             | Value | Phase  | CFTC Background CPS                             | Value |
|--------|-------------------------------------------------|-------|--------|-------------------------------------------------|-------|
| Master |                                                 | 26.64 | Master |                                                 | 26.42 |
| Before |                                                 | 26.88 | Before |                                                 | 27.40 |
|        | 5.000 (Minimum) 26.64 (Nominal) 40.00 (Maximum) |       |        | 5.000 (Minimum) 26.42 (Nominal) 40.00 (Maximum) |       |

Master: 15-Jan-2008 15:00

Before: 22-Feb-2008 13:32

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 |                                              | 6123  | Master |                                              | 2592  | Master |                                                 | 2.362 |
|        | 4700 (Minimum) 5800 (Nominal) 6900 (Maximum) |       |        | 1900 (Minimum) 2400 (Nominal) 2900 (Maximum) |       |        | 2.120 (Minimum) 2.159 (Nominal) 2.540 (Maximum) |       |

Master: 15-Jan-2008 15:00

High resolution Integrated Logging Tool-DTS Wellsite Calibration

Accelerometer Calibration

| Phase  | Z-Axis Acceleration M/S2                        | Value |
|--------|-------------------------------------------------|-------|
| Before |                                                 | 9.811 |
|        | 9.610 (Minimum) 9.810 (Nominal) 10.01 (Maximum) |       |

Before: 23-Feb-2008 14:50

High resolution Integrated Logging Tool-DTS Master Calibration

Inversion results

| Phase  | Rho Aluminum K/M3                               | Value | Phase  | Rho Magnesium K/M3                              | Value |
|--------|-------------------------------------------------|-------|--------|-------------------------------------------------|-------|
| Master |                                                 | 2596  | Master |                                                 | 1687  |
|        | 2596 (Minimum) 2596 (Nominal) 2606 (Maximum)    |       |        | 1676 (Minimum) 1686 (Nominal) 1696 (Maximum)    |       |
| Phase  | Pe Aluminum                                     | Value | Phase  | Pe Magnesium                                    | Value |
| Master |                                                 | 2.555 | Master |                                                 | 2.616 |
|        | 2.470 (Minimum) 2.570 (Nominal) 2.670 (Maximum) |       |        | 2.550 (Minimum) 2.650 (Nominal) 2.750 (Maximum) |       |

Master: 15-Feb-2008 14:33

High resolution Integrated Logging Tool-DTS Master Calibration

Deviation Summary

| Phase  | BS Average Deviation %                         | Value  | Phase  | SS Average Deviation %                       | Value  | Phase  | LS Average Deviation %                       | Value  |
|--------|------------------------------------------------|--------|--------|----------------------------------------------|--------|--------|----------------------------------------------|--------|
| Master |                                                | 0.4449 | Master |                                              | 0.2374 | Master |                                              | 0.6376 |
|        | -0.6000 (Minimum) 0 (Nominal) 0.6000 (Maximum) |        |        | -1.000 (Minimum) 0 (Nominal) 1.000 (Maximum) |        |        | -1.500 (Minimum) 0 (Nominal) 1.500 (Maximum) |        |
| Phase  | BS Max Deviation %                             | Value  | Phase  | SS Max Deviation %                           | Value  | Phase  | LS Max Deviation %                           | Value  |
| Master |                                                | 1.303  | Master |                                              | 0.6135 | Master |                                              | 1.442  |
|        | -1.600 (Minimum) 0 (Nominal) 1.600 (Maximum)   |        |        | -2.500 (Minimum) 0 (Nominal) 2.500 (Maximum) |        |        | -3.500 (Minimum) 0 (Nominal) 3.500 (Maximum) |        |

Master: 15-Feb-2008 14:33

High resolution Integrated Logging Tool-DTS Master Calibration

Zero Measurement

| Phase  | CNTC Background CPS                             | Value | Phase  | CFTC Background CPS                             | Value |
|--------|-------------------------------------------------|-------|--------|-------------------------------------------------|-------|
| Master |                                                 | 26.64 | Master |                                                 | 26.42 |
|        | 5.000 (Minimum) 26.64 (Nominal) 40.00 (Maximum) |       |        | 5.000 (Minimum) 26.42 (Nominal) 40.00 (Maximum) |       |

Master: 15-Jan-2008 15:00

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 |                                              | 6123  | Master |                                              | 2592  | Master |                                                 | 2.362 |
|        | 4700 (Minimum) 5800 (Nominal) 6900 (Maximum) |       |        | 1900 (Minimum) 2400 (Nominal) 2900 (Maximum) |       |        | 2.120 (Minimum) 2.159 (Nominal) 2.540 (Maximum) |       |

Master: 15-Jan-2008 15:00

High Resolution Laterolog Array - B / Equipment Identification

Primary Equipment:

HRLT Sonde

HRLS - B 1704

Auxiliary Equipment:

HRLT lower Housing  
HRLT Lower Cartridge  
HRLT upper Housing  
HRLT Upper Cartridge

HRLH - B 763  
HRLC - B 951  
HRLH - B 1716  
HRUC - B 1714

High Resolution Laterolog Array - B Wellsite Calibration

HRLT M01

| Idx | Phase  | HRLT M0-M1 Voltage Plus UV    | Value  | Nominal | Maximum | Minimum |
|-----|--------|-------------------------------|--------|---------|---------|---------|
| 0   | Before |                               | -321.1 | -322.7  | -280.7  | -379.7  |
| 1   | Before |                               | -368.7 | -322.7  | -280.7  | -379.7  |
| 2   | Before |                               | -338.6 | -322.7  | -280.7  | -379.7  |
| 3   | Before |                               | -337.3 | -322.7  | -280.7  | -379.7  |
| 4   | Before |                               | -324.0 | -322.7  | -280.7  | -379.7  |
| 5   | Before |                               | -327.7 | -322.7  | -280.7  | -379.7  |
| 6   | Before |                               | 359.4  | 322.7   | 379.7   | 280.7   |
| 7   | Before |                               | -322.7 | -322.7  | -280.7  | -379.7  |
|     |        | (Minimum) (Nominal) (Maximum) |        |         |         |         |

Before: 23-Feb-2008 14:50

High Resolution Laterolog Array - B Wellsite Calibration

HRLT M12

| Idx | Phase  | HRLT M1-M2 Voltage Plus UV    | Value | Nominal | Maximum | Minimum |
|-----|--------|-------------------------------|-------|---------|---------|---------|
| 0   | Before |                               | 1765  | 1781    | 2095    | 1549    |
| 1   | Before |                               | 2019  | 1781    | 2095    | 1549    |
| 2   | Before |                               | 1851  | 1781    | 2095    | 1549    |
| 3   | Before |                               | 1846  | 1781    | 2095    | 1549    |
| 4   | Before |                               | 1777  | 1781    | 2095    | 1549    |
| 5   | Before |                               | 1800  | 1781    | 2095    | 1549    |
| 6   | Before |                               | -1976 | -1781   | -1549   | -2095   |
| 7   | Before |                               | 1781  | 1781    | 2095    | 1549    |
|     |        | (Minimum) (Nominal) (Maximum) |       |         |         |         |

Before: 23-Feb-2008 14:50

High Resolution Laterolog Array - B Wellsite Calibration

HRLT M23

| Idx | Phase  | HRLT M2-M3 Voltage Plus UV | Value | Nominal | Maximum | Minimum |
|-----|--------|----------------------------|-------|---------|---------|---------|
| 0   | Before |                            | 1749  | 1781    | 2095    | 1549    |
| 1   | Before |                            | 2018  | 1781    | 2095    | 1549    |
| 2   | Before |                            | 1851  | 1781    | 2095    | 1549    |
| 3   | Before |                            | 1849  | 1781    | 2095    | 1549    |
| 4   | Before |                            | 1772  | 1781    | 2095    | 1549    |



|                               |        |  |       |       |       |       |
|-------------------------------|--------|--|-------|-------|-------|-------|
| 5                             | Before |  | 1795  | 1781  | 2095  | 1549  |
| 6                             | Before |  | -1963 | -1781 | -1549 | -2095 |
| 7                             | Before |  | 1781  | 1781  | 2095  | 1549  |
| (Minimum) (Nominal) (Maximum) |        |  |       |       |       |       |
| Before: 23-Feb-2008 14:50     |        |  |       |       |       |       |

| High Resolution Laterolog Array - B Wellsite Calibration |        |                            |        |         |         |         |
|----------------------------------------------------------|--------|----------------------------|--------|---------|---------|---------|
| HRLT V34                                                 |        |                            |        |         |         |         |
| Idx                                                      | Phase  | HRLT A3-A4 Voltage Plus UV | Value  | Nominal | Maximum | Minimum |
| 0                                                        | Before |                            | 68930  | 70000   | 82360   | 60900   |
| 1                                                        | Before |                            | 79220  | 70000   | 82360   | 60900   |
| 2                                                        | Before |                            | 72960  | 70000   | 82360   | 60900   |
| 3                                                        | Before |                            | 73170  | 70000   | 82360   | 60900   |
| 4                                                        | Before |                            | 70140  | 70000   | 82360   | 60900   |
| 5                                                        | Before |                            | 71070  | 70000   | 82360   | 60900   |
| 6                                                        | Before |                            | -75920 | -70000  | -60900  | -82360  |
| 7                                                        | Before |                            | 70000  | 70000   | 82360   | 60900   |
| (Minimum) (Nominal) (Maximum)                            |        |                            |        |         |         |         |
| Before: 23-Feb-2008 14:50                                |        |                            |        |         |         |         |

| High Resolution Laterolog Array - B Wellsite Calibration |        |                            |        |         |         |         |
|----------------------------------------------------------|--------|----------------------------|--------|---------|---------|---------|
| HRLT V45                                                 |        |                            |        |         |         |         |
| Idx                                                      | Phase  | HRLT A4-A5 Voltage Plus UV | Value  | Nominal | Maximum | Minimum |
| 0                                                        | Before |                            | 68800  | 70000   | 82360   | 60900   |
| 1                                                        | Before |                            | 79010  | 70000   | 82360   | 60900   |
| 2                                                        | Before |                            | 72780  | 70000   | 82360   | 60900   |
| 3                                                        | Before |                            | 73000  | 70000   | 82360   | 60900   |
| 4                                                        | Before |                            | 69990  | 70000   | 82360   | 60900   |
| 5                                                        | Before |                            | 70920  | 70000   | 82360   | 60900   |
| 6                                                        | Before |                            | -75720 | -70000  | -60900  | -82360  |
| 7                                                        | Before |                            | 70000  | 70000   | 82360   | 60900   |
| (Minimum) (Nominal) (Maximum)                            |        |                            |        |         |         |         |
| Before: 23-Feb-2008 14:50                                |        |                            |        |         |         |         |

| High Resolution Laterolog Array - B Wellsite Calibration |        |                            |        |         |         |         |
|----------------------------------------------------------|--------|----------------------------|--------|---------|---------|---------|
| HRLT V56                                                 |        |                            |        |         |         |         |
| Idx                                                      | Phase  | HRLT A5-A6 Voltage Plus UV | Value  | Nominal | Maximum | Minimum |
| 0                                                        | Before |                            | 69210  | 70000   | 82360   | 60900   |
| 1                                                        | Before |                            | 79600  | 70000   | 82360   | 60900   |
| 2                                                        | Before |                            | 73290  | 70000   | 82360   | 60900   |
| 3                                                        | Before |                            | 73480  | 70000   | 82360   | 60900   |
| 4                                                        | Before |                            | 70410  | 70000   | 82360   | 60900   |
| 5                                                        | Before |                            | 71340  | 70000   | 82360   | 60900   |
| 6                                                        | Before |                            | -76280 | -70000  | -60900  | -82360  |
| 7                                                        | Before |                            | 70000  | 70000   | 82360   | 60900   |
| (Minimum) (Nominal) (Maximum)                            |        |                            |        |         |         |         |
| Before: 23-Feb-2008 14:50                                |        |                            |        |         |         |         |

| High Resolution Laterolog Array - B Wellsite Calibration |        |                                 |        |         |         |         |
|----------------------------------------------------------|--------|---------------------------------|--------|---------|---------|---------|
| HRLT VTP                                                 |        |                                 |        |         |         |         |
| Idx                                                      | Phase  | HRLT Torpedo-M0 Voltage Plus UV | Value  | Nominal | Maximum | Minimum |
| 0                                                        | Before |                                 | -68600 | -70000  | -60900  | -82360  |
| 1                                                        | Before |                                 | -79280 | -70000  | -60900  | -82360  |
| 2                                                        | Before |                                 | -73020 | -70000  | -60900  | -82360  |
| 3                                                        | Before |                                 | -73260 | -70000  | -60900  | -82360  |
| 4                                                        | Before |                                 | -70220 | -70000  | -60900  | -82360  |
| 5                                                        | Before |                                 | -71150 | -70000  | -60900  | -82360  |
| 6                                                        | Before |                                 | 75810  | 70000   | 82360   | 60900   |
| 7                                                        | Before |                                 | -70000 | -70000  | -60900  | -82360  |
| (Minimum) (Nominal) (Maximum)                            |        |                                 |        |         |         |         |
| Before: 23-Feb-2008 14:50                                |        |                                 |        |         |         |         |

| High Resolution Laterolog Array - B Wellsite Calibration |        |                                  |        |         |         |         |
|----------------------------------------------------------|--------|----------------------------------|--------|---------|---------|---------|
| HRLT VBD                                                 |        |                                  |        |         |         |         |
| Idx                                                      | Phase  | HRLT Bridge#9-M0 Voltage Plus UV | Value  | Nominal | Maximum | Minimum |
| 0                                                        | Before |                                  | -68580 | -70000  | -60900  | -82360  |
| 1                                                        | Before |                                  | -79240 | -70000  | -60900  | -82360  |
| 2                                                        | Before |                                  | -72990 | -70000  | -60900  | -82360  |
| 3                                                        | Before |                                  | -73230 | -70000  | -60900  | -82360  |
| 4                                                        | Before |                                  | -70220 | -70000  | -60900  | -82360  |
| 5                                                        | Before |                                  | -71150 | -70000  | -60900  | -82360  |
| 6                                                        | Before |                                  | 75880  | 70000   | 82360   | 60900   |
| 7                                                        | Before |                                  | -70000 | -70000  | -60900  | -82360  |
| (Minimum) (Nominal) (Maximum)                            |        |                                  |        |         |         |         |
| Before: 23-Feb-2008 14:50                                |        |                                  |        |         |         |         |

| High Resolution Laterolog Array - B Wellsite Calibration |        |                             |       |         |         |         |
|----------------------------------------------------------|--------|-----------------------------|-------|---------|---------|---------|
| HRLT ISO                                                 |        |                             |       |         |         |         |
| Idx                                                      | Phase  | HRLT Source Current Plus UA | Value | Nominal | Maximum | Minimum |
| 0                                                        | Before |                             | 286.2 | 284.0   | 334.1   | 247.0   |
| 1                                                        | Before |                             | 281.1 | 281.1   | 330.7   | 244.4   |
| 2                                                        | Before |                             | 281.1 | 281.1   | 330.7   | 244.4   |
| 3                                                        | Before |                             | 281.1 | 281.1   | 330.7   | 244.4   |
| 4                                                        | Before |                             | 281.1 | 281.1   | 330.7   | 244.4   |
| 5                                                        | Before |                             | 281.1 | 281.1   | 330.7   | 244.4   |
| 6                                                        | Before |                             | 281.1 | 281.1   | 330.7   | 244.4   |
| 7                                                        | Before |                             | 281.1 | 281.1   | 330.7   | 244.4   |
| (Minimum) (Nominal) (Maximum)                            |        |                             |       |         |         |         |
| Before: 23-Feb-2008 14:50                                |        |                             |       |         |         |         |

| High Resolution Laterolog Array - B Wellsite Calibration |        |                               |        |         |         |         |
|----------------------------------------------------------|--------|-------------------------------|--------|---------|---------|---------|
| HRLT MV                                                  |        |                               |        |         |         |         |
| Idx                                                      | Phase  | HRLT Vertical Voltage Plus UV | Value  | Nominal | Maximum | Minimum |
| 0                                                        | Before |                               | -323.0 | -322.7  | -280.7  | -379.7  |
| 1                                                        | Before |                               | -361.3 | -322.7  | -280.7  | -379.7  |
| 2                                                        | Before |                               | -331.3 | -322.7  | -280.7  | -379.7  |
| 3                                                        | Before |                               | -326.4 | -322.7  | -280.7  | -379.7  |
| 4                                                        | Before |                               | -312.8 | -322.7  | -280.7  | -379.7  |
| 5                                                        | Before |                               | -331.8 | -322.7  | -280.7  | -379.7  |
| 6                                                        | Before |                               | 366.8  | 322.7   | 379.7   | 280.7   |
| 7                                                        | Before |                               | -322.7 | -322.7  | -280.7  | -379.7  |
| (Minimum) (Nominal) (Maximum)                            |        |                               |        |         |         |         |
| Before: 23-Feb-2008 14:50                                |        |                               |        |         |         |         |

| High resolution Integrated Logging Tool-DTS2 / Equipment Identification |           |      |  |
|-------------------------------------------------------------------------|-----------|------|--|
| Primary Equipment:                                                      |           |      |  |
| HILT2 high-Resolution Mechanical Sonde                                  | HRMS - H2 | 3983 |  |
| HILT2 Rxo Gamma-ray Device                                              | HRGD - H2 | 4709 |  |
| HILT2 Micro Cylindrically Focused Log De                                | MCFL - H2 |      |  |
| GR Logging Source                                                       | GLS - VJ2 | 1984 |  |
| HILT2 High Res. Control Cartridge                                       | HRCC - H2 | 3990 |  |
| HILT2 HTBC DTS mode                                                     | HTBC - H2 | 3733 |  |
| HTBC2 Communication Assembly DTS Mode                                   | HMCA - H  | 3733 |  |
| Auxiliary Equipment:                                                    |           |      |  |

| High resolution Integrated Logging Tool-DTS2 Wellsite Calibration |  |                     |                     |                     |        |  |                     |                     |                     |        |  |                     |                     |                     |
|-------------------------------------------------------------------|--|---------------------|---------------------|---------------------|--------|--|---------------------|---------------------|---------------------|--------|--|---------------------|---------------------|---------------------|
| Stab Measurement Summary                                          |  |                     |                     |                     |        |  |                     |                     |                     |        |  |                     |                     |                     |
| Phase                                                             |  | BS2 Window Ratio    |                     | Value               | Phase  |  | SS2 Window Ratio    |                     | Value               | Phase  |  | LS2 Window Ratio    |                     | Value               |
| Before                                                            |  |                     |                     | 0.7364              | Before |  |                     |                     | 0.4877              | Before |  |                     |                     | 0.3011              |
|                                                                   |  | 0.7014<br>(Minimum) | 0.7383<br>(Nominal) | 0.7753<br>(Maximum) |        |  | 0.4636<br>(Minimum) | 0.4880<br>(Nominal) | 0.5124<br>(Maximum) |        |  | 0.2824<br>(Minimum) | 0.2973<br>(Nominal) | 0.3122<br>(Maximum) |
| Phase                                                             |  | BS2 Window Sum CPS  |                     | Value               | Phase  |  | SS2 Window Sum CPS  |                     | Value               | Phase  |  | LS2 Window Sum CPS  |                     | Value               |
| Before                                                            |  |                     |                     | 26850               | Before |  |                     |                     | 12280               | Before |  |                     |                     | 1470                |
|                                                                   |  | 25450<br>(Minimum)  | 26790<br>(Nominal)  | 28130<br>(Maximum)  |        |  | 11710<br>(Minimum)  | 12320<br>(Nominal)  | 12940<br>(Maximum)  |        |  | 1405<br>(Minimum)   | 1478<br>(Nominal)   | 1552<br>(Maximum)   |
| Before: 22-Feb-2008 13:21                                         |  |                     |                     |                     |        |  |                     |                     |                     |        |  |                     |                     |                     |

| High resolution Integrated Logging Tool-DTS2 Wellsite Calibration                               |  |                   |  |                                                                                                 |  |                   |  |                                                                                                  |  |                   |  |
|-------------------------------------------------------------------------------------------------|--|-------------------|--|-------------------------------------------------------------------------------------------------|--|-------------------|--|--------------------------------------------------------------------------------------------------|--|-------------------|--|
| Photo-multiplier High Voltages Calibrations                                                     |  |                   |  |                                                                                                 |  |                   |  |                                                                                                  |  |                   |  |
| Phase BS2 PM High Voltage (Command) ▾ Value                                                     |  |                   |  | Phase SS2 PM High Voltage (Command) ▾ Value                                                     |  |                   |  | Phase LS2 PM High Voltage (Command) ▾ Value                                                      |  |                   |  |
| Before  1390 |  |                   |  | Before  1297 |  |                   |  | Before  1323 |  |                   |  |
| 1303<br>(Minimum)                                                                               |  | 1403<br>(Nominal) |  | 1503<br>(Maximum)                                                                               |  | 1215<br>(Minimum) |  | 1315<br>(Nominal)                                                                                |  | 1415<br>(Maximum) |  |
| 1234<br>(Minimum)                                                                               |  | 1334<br>(Nominal) |  | 1434<br>(Maximum)                                                                               |  |                   |  |                                                                                                  |  |                   |  |
| Before: 22-Feb-2008 13:21                                                                       |  |                   |  |                                                                                                 |  |                   |  |                                                                                                  |  |                   |  |

| High resolution Integrated Logging Tool-DTS2 Wellsite Calibration |                          |                    |                    |        |                          |                    |                    |        |                          |                    |                    |
|-------------------------------------------------------------------|--------------------------|--------------------|--------------------|--------|--------------------------|--------------------|--------------------|--------|--------------------------|--------------------|--------------------|
| Crystal Quality Resolutions Calibration                           |                          |                    |                    |        |                          |                    |                    |        |                          |                    |                    |
| Phase                                                             | BS2 Crystal Resolution % |                    | Value              | Phase  | SS2 Crystal Resolution % |                    | Value              | Phase  | LS2 Crystal Resolution % |                    | Value              |
| Before                                                            |                          |                    | 10.88              | Before |                          |                    | 9.371              | Before |                          |                    | 8.459              |
|                                                                   | 10.04<br>(Minimum)       | 11.04<br>(Nominal) | 12.04<br>(Maximum) |        | 8.084<br>(Minimum)       | 9.084<br>(Nominal) | 10.08<br>(Maximum) |        | 7.323<br>(Minimum)       | 8.323<br>(Nominal) | 9.323<br>(Maximum) |
| Before: 22-Feb-2008 13:21                                         |                          |                    |                    |        |                          |                    |                    |        |                          |                    |                    |

| High resolution Integrated Logging Tool-DTS2 Wellsite Calibration |  |                         |                   |                   |  |        |  |                         |                   |                   |  |        |  |                         |                   |                   |  |
|-------------------------------------------------------------------|--|-------------------------|-------------------|-------------------|--|--------|--|-------------------------|-------------------|-------------------|--|--------|--|-------------------------|-------------------|-------------------|--|
| MCFL2 Calibration                                                 |  |                         |                   |                   |  |        |  |                         |                   |                   |  |        |  |                         |                   |                   |  |
| Phase                                                             |  | Raw B0 Resistivity OHMM |                   | Value             |  | Phase  |  | Raw B1 Resistivity OHMM |                   | Value             |  | Phase  |  | Raw B2 Resistivity OHMM |                   | Value             |  |
| Before                                                            |  |                         |                   | 3642              |  | Before |  |                         |                   | 3815              |  | Before |  |                         |                   | 3819              |  |
|                                                                   |  | 3565<br>(Minimum)       | 3875<br>(Nominal) | 4195<br>(Maximum) |  |        |  | 3524<br>(Minimum)       | 3830<br>(Nominal) | 4136<br>(Maximum) |  |        |  | 3524<br>(Minimum)       | 3830<br>(Nominal) | 4136<br>(Maximum) |  |
| Before: 22-Feb-2008 13:13                                         |  |                         |                   |                   |  |        |  |                         |                   |                   |  |        |  |                         |                   |                   |  |

| High resolution Integrated Logging Tool-DTS2 Wellsite Calibration |  |                                   |                 |        |  |                                   |                 |  |  |
|-------------------------------------------------------------------|--|-----------------------------------|-----------------|--------|--|-----------------------------------|-----------------|--|--|
| HILT2 Caliper Calibration                                         |  |                                   |                 |        |  |                                   |                 |  |  |
| Phase                                                             |  | HILT2 Caliper Zero Measurement MM | Value           | Phase  |  | HILT2 Caliper Plus Measurement MM | Value           |  |  |
| Before                                                            |  |                                   | 176.5           | Before |  |                                   | 290.3           |  |  |
|                                                                   |  | 150.0 (Minimum)                   | 200.0 (Nominal) |        |  | 229.5 (Minimum)                   | 306.0 (Nominal) |  |  |



|                           |           |           |           |           |           |
|---------------------------|-----------|-----------|-----------|-----------|-----------|
| (Minimum)                 | (Nominal) | (Maximum) | (Minimum) | (Nominal) | (Maximum) |
| Before: 22-Feb-2008 13:09 |           |           |           |           |           |

| High resolution Integrated Logging Tool-DTS2 Master Calibration |                    |                    |                    |        |                    |                    |                    |
|-----------------------------------------------------------------|--------------------|--------------------|--------------------|--------|--------------------|--------------------|--------------------|
| Inversion results                                               |                    |                    |                    |        |                    |                    |                    |
| Phase                                                           | Rho Aluminum K/M3  |                    | Value              | Phase  | Rho Magnesium K/M3 |                    | Value              |
| Master                                                          |                    |                    | 2601               | Master |                    |                    | 1686               |
|                                                                 | 2566<br>(Minimum)  | 2596<br>(Nominal)  | 2606<br>(Maximum)  |        | 1676<br>(Minimum)  | 1686<br>(Nominal)  | 1696<br>(Maximum)  |
| Phase                                                           | Pe Aluminum        |                    | Value              | Phase  | Pe Magnesium       |                    | Value              |
| Master                                                          |                    |                    | 2.561              | Master |                    |                    | 2.617              |
|                                                                 | 2.470<br>(Minimum) | 2.570<br>(Nominal) | 2.670<br>(Maximum) |        | 2.550<br>(Minimum) | 2.650<br>(Nominal) | 2.750<br>(Maximum) |
| Master: 22-Feb-2008 12:27                                       |                    |                    |                    |        |                    |                    |                    |

| High resolution Integrated Logging Tool-DTS2 Master Calibration |                         |           |        |           |                         |           |        |
|-----------------------------------------------------------------|-------------------------|-----------|--------|-----------|-------------------------|-----------|--------|
| Deviation Summary                                               |                         |           |        |           |                         |           |        |
| Phase                                                           | BS2 Average Deviation % |           | Value  | Phase     | SS2 Average Deviation % |           | Value  |
| Master                                                          |                         |           | 0.2741 | Master    |                         |           | 0.3569 |
| -0.6000                                                         | 0                       | 0.6000    |        | -1.000    | 0                       | 1.000     |        |
| (Minimum)                                                       | (Nominal)               | (Maximum) |        | (Minimum) | (Nominal)               | (Maximum) |        |
| Phase                                                           | BS2 Max Deviation %     |           | Value  | Phase     | SS2 Max Deviation %     |           | Value  |
| Master                                                          |                         |           | 1.036  | Master    |                         |           | 1.416  |
| -1.600                                                          | 0                       | 1.600     |        | -2.500    | 0                       | 2.500     |        |
| (Minimum)                                                       | (Nominal)               | (Maximum) |        | (Minimum) | (Nominal)               | (Maximum) |        |
| Phase                                                           | LS2 Average Deviation % |           | Value  | Phase     | LS2 Max Deviation %     |           | Value  |
| Master                                                          |                         |           | 0.5074 | Master    |                         |           | 1.283  |
| -1.500                                                          | 0                       | 1.500     |        | -3.500    | 0                       | 3.500     |        |
| (Minimum)                                                       | (Nominal)               | (Maximum) |        | (Minimum) | (Nominal)               | (Maximum) |        |
| Master: 22-Feb-2008 12:27                                       |                         |           |        |           |                         |           |        |

| Hostile Natural Gamma Ray Cartridge - B / Equipment Identification |            |     |
|--------------------------------------------------------------------|------------|-----|
| Primary Equipment:                                                 |            |     |
| HNGC Cartridge                                                     | HNGC - B 4 | 405 |
| Auxiliary Equipment:                                               |            |     |
| HNGC Housing                                                       | HNGH - A   | 346 |

| Hostile Natural Gamma Ray Sonde / Equipment Identification |           |      |
|------------------------------------------------------------|-----------|------|
| Primary Equipment:                                         |           |      |
| HNGS Sonde                                                 | HNGS - BA | 163  |
| Auxiliary Equipment:                                       |           |      |
| HNGS Sonde Housing                                         | HNSH - BA | 160  |
| Gamma Source Radioactive                                   | GSR - U   | 1237 |

| 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                                               |                   |  | 39.78              | Master             |                    |  | 15.38              | Master |                           |                    | 1258               |                     |  |  |                    |                    |  |
| Before                                               |                   |  | 39.66              | Before             |                    |  | 14.95              | Before |                           |                    | 1238               |                     |  |  |                    |                    |  |
| 37.50<br>(Minimum)                                   |                   |  | 40.00<br>(Nominal) | 43.50<br>(Maximum) |                    |  | 12.00<br>(Minimum) |        |                           | 15.50<br>(Nominal) | 19.00<br>(Maximum) | 900.0<br>(Minimum)  |  |  | 1150<br>(Nominal)  | 1600<br>(Maximum)  |  |
| Phase                                                | Na 1785 Peak Loc  |  | Value              | Phase              | Na 1785 Peak Res % |  | Value              | Phase  | Temperature DEGC          |                    | Value              |                     |  |  |                    |                    |  |
| Master                                               |                   |  | 143.7              | Master             |                    |  | 8.442              | Master |                           |                    | 22.14              |                     |  |  |                    |                    |  |
| Before                                               |                   |  | 143.5              | Before             |                    |  | 7.671              | Before |                           |                    | 13.05              |                     |  |  |                    |                    |  |
| 135.0<br>(Minimum)                                   |                   |  | 142.6<br>(Nominal) | 150.3<br>(Maximum) |                    |  | 7.000<br>(Minimum) |        |                           | 8.500<br>(Nominal) | 11.00<br>(Maximum) | -28.89<br>(Minimum) |  |  | 15.50<br>(Nominal) | 60.00<br>(Maximum) |  |
| Phase                                                | Na Count Rate CPS |  | Value              |                    |                    |  |                    |        |                           |                    |                    |                     |  |  |                    |                    |  |
| Master                                               |                   |  | 35.30              |                    |                    |  |                    |        |                           |                    |                    |                     |  |  |                    |                    |  |
| Before                                               |                   |  | 33.55              |                    |                    |  |                    |        |                           |                    |                    |                     |  |  |                    |                    |  |
| 10.00<br>(Minimum)                                   |                   |  | 45.00<br>(Nominal) |                    |                    |  |                    |        |                           |                    |                    | 100.0<br>(Maximum)  |  |  |                    |                    |  |
| Master: 4-Jan-2008 9:55                              |                   |  |                    |                    |                    |  |                    |        | Before: 22-Feb-2008 14:24 |                    |                    |                     |  |  |                    |                    |  |

| 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                                               |                   |  | 39.66     | Master    |                    |  | 14.86 | Master    |                  |                           | 1273  |       |           |           |
| Before                                               |                   |  | 39.58     | Before    |                    |  | 16.08 | Before    |                  |                           | 1255  |       |           |           |
| 37.50                                                |                   |  | 40.00     | 43.50     | 12.00              |  |       | 15.50     | 19.00            | 900.0                     |       |       | 1150      | 1600      |
| (Minimum)                                            |                   |  | (Nominal) | (Maximum) | (Minimum)          |  |       | (Nominal) | (Maximum)        | (Minimum)                 |       |       | (Nominal) | (Maximum) |
| Phase                                                | Na 1785 Peak Loc  |  | Value     | Phase     | Na 1785 Peak Res % |  | Value | Phase     | Temperature DEGC |                           | Value |       |           |           |
| Master                                               |                   |  | 142.7     | Master    |                    |  | 8.234 | Master    |                  |                           | 21.49 |       |           |           |
| Before                                               |                   |  | 143.1     | Before    |                    |  | 8.070 | Before    |                  |                           | 12.34 |       |           |           |
| 135.0                                                |                   |  | 142.6     | 150.3     | 7.000              |  |       | 8.500     | 11.00            | -28.89                    |       |       | 15.50     | 60.00     |
| (Minimum)                                            |                   |  | (Nominal) | (Maximum) | (Minimum)          |  |       | (Nominal) | (Maximum)        | (Minimum)                 |       |       | (Nominal) | (Maximum) |
| Phase                                                | Na Count Rate CPS |  | Value     |           |                    |  |       |           |                  |                           |       |       |           |           |
| Master                                               |                   |  | 35.28     |           |                    |  |       |           |                  |                           |       |       |           |           |
| Before                                               |                   |  | 33.40     |           |                    |  |       |           |                  |                           |       |       |           |           |
| 10.00                                                |                   |  | 45.00     |           |                    |  |       |           |                  |                           |       | 100.0 |           |           |
| (Minimum)                                            |                   |  | (Nominal) | (Maximum) |                    |  |       |           |                  |                           |       |       |           |           |
| Master: 4-Jan-2008 9:55                              |                   |  |           |           |                    |  |       |           |                  | Before: 22-Feb-2008 14:24 |       |       |           |           |

| Hostile Natural Gamma Ray Sonde Wellsite Calibration |                              |           |
|------------------------------------------------------|------------------------------|-----------|
| Ratio Of Detector 1 To Detector 2                    |                              |           |
| Phase                                                | Coincidence Count Rate Ratio | Value     |
| Master                                               |                              | 1.001     |
| Before                                               |                              | 1.004     |
| 0.9500                                               | 1.000                        | 1.050     |
| (Minimum)                                            | (Nominal)                    | (Maximum) |
| Master: 4-Jan-2008 9:55                              |                              |           |
| Before: 22-Feb-2008 14:24                            |                              |           |

| Hostile Natural Gamma Ray Sonde Master Calibration |                                                                                     |  |       |           |                                                                                     |  |       |           |                                                                                       |  |       |
|----------------------------------------------------|-------------------------------------------------------------------------------------|--|-------|-----------|-------------------------------------------------------------------------------------|--|-------|-----------|---------------------------------------------------------------------------------------|--|-------|
| Detector 1 Calibration                             |                                                                                     |  |       |           |                                                                                     |  |       |           |                                                                                       |  |       |
| Phase                                              | Na 511 Peak Set Point                                                               |  | Value | Phase     | Th Peak Loc                                                                         |  | Value | Phase     | Th Peak Res %                                                                         |  | Value |
| Master                                             |  |  | 41.00 | Master    |  |  | 211.0 | Master    |  |  | 6.765 |
| 38.00                                              |                                                                                     |  |       | 201.0     |                                                                                     |  |       | 5.000     |                                                                                       |  |       |
| (Minimum)                                          |                                                                                     |  |       | (Minimum) |                                                                                     |  |       | (Minimum) |                                                                                       |  |       |
| 40.00                                              |                                                                                     |  |       | 209.6     |                                                                                     |  |       | 7.000     |                                                                                       |  |       |
| (Nominal)                                          |                                                                                     |  |       | (Nominal) |                                                                                     |  |       | (Nominal) |                                                                                       |  |       |
| 43.00                                              |                                                                                     |  |       | 218.3     |                                                                                     |  |       | 9.000     |                                                                                       |  |       |
| (Maximum)                                          |                                                                                     |  |       | (Maximum) |                                                                                     |  |       | (Maximum) |                                                                                       |  |       |
| Phase                                              | Background Count Rate CPS                                                           |  | Value | Phase     | Gain Ratio                                                                          |  | Value |           |                                                                                       |  |       |
| Master                                             |  |  | 82.05 | Master    |  |  | 1.009 |           |                                                                                       |  |       |
| 10.00                                              |                                                                                     |  |       | 0.9400    |                                                                                     |  |       |           |                                                                                       |  |       |
| (Minimum)                                          |                                                                                     |  |       | (Minimum) |                                                                                     |  |       |           |                                                                                       |  |       |
| 142.5                                              |                                                                                     |  |       | 1.000     |                                                                                     |  |       |           |                                                                                       |  |       |
| (Nominal)                                          |                                                                                     |  |       | (Nominal) |                                                                                     |  |       |           |                                                                                       |  |       |
| 265.0                                              |                                                                                     |  |       | 1.060     |                                                                                     |  |       |           |                                                                                       |  |       |
| (Maximum)                                          |                                                                                     |  |       | (Maximum) |                                                                                     |  |       |           |                                                                                       |  |       |
| Master: 4-Jan-2008 9:50                            |                                                                                     |  |       |           |                                                                                     |  |       |           |                                                                                       |  |       |

| Hostile Natural Gamma Ray Sonde Master Calibration |                           |  |       |           |             |  |       |           |               |  |       |
|----------------------------------------------------|---------------------------|--|-------|-----------|-------------|--|-------|-----------|---------------|--|-------|
| Detector 2 Calibration                             |                           |  |       |           |             |  |       |           |               |  |       |
| Phase                                              | Na 511 Peak Set Point     |  | Value | Phase     | Th Peak Loc |  | Value | Phase     | Th Peak Res % |  | Value |
| Master                                             |                           |  | 41.00 | Master    |             |  | 211.2 | Master    |               |  | 7.094 |
| 38.00                                              |                           |  |       | 201.0     |             |  |       | 5.000     |               |  |       |
| (Minimum)                                          |                           |  |       | (Minimum) |             |  |       | (Minimum) |               |  |       |
| 40.00                                              |                           |  |       | 209.6     |             |  |       | 7.000     |               |  |       |
| (Nominal)                                          |                           |  |       | (Nominal) |             |  |       | (Nominal) |               |  |       |
| 43.00                                              |                           |  |       | 218.3     |             |  |       | 9.000     |               |  |       |
| (Maximum)                                          |                           |  |       | (Maximum) |             |  |       | (Maximum) |               |  |       |
| Phase                                              | Background Count Rate CPS |  | Value | Phase     | Gain Ratio  |  | Value |           |               |  |       |
| Master                                             |                           |  | 80.00 | Master    |             |  | 1.013 |           |               |  |       |
| 10.00                                              |                           |  |       | 0.9400    |             |  |       |           |               |  |       |
| (Minimum)                                          |                           |  |       | (Minimum) |             |  |       |           |               |  |       |
| 142.5                                              |                           |  |       | 1.000     |             |  |       |           |               |  |       |
| (Nominal)                                          |                           |  |       | (Nominal) |             |  |       |           |               |  |       |
| 265.0                                              |                           |  |       | 1.060     |             |  |       |           |               |  |       |
| (Maximum)                                          |                           |  |       | (Maximum) |             |  |       |           |               |  |       |
| Master: 4-Jan-2008 9:50                            |                           |  |       |           |             |  |       |           |               |  |       |

| DTS Telemetry Tool / Equipment Identification |          |       |
|-----------------------------------------------|----------|-------|
| Primary Equipment:                            |          |       |
| DTC-H Auxiliary Cartridge                     | DTCH - A | 9397  |
| DTC-H Telemetry Cartridge                     | DTCH - A | 9397  |
| Auxiliary Equipment:                          |          |       |
| DTCH Telemetry Cartridge Housing              | ECH - KC | 10485 |

Company: PETRO-CANADA

Well: PETRO-CANADA BLACKWATER KWIJKA M-59

Field: KWIJKA

Province: NORTHWEST TERRITORIES

\*\*\*MD\*\*\*

Schlumberger

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