**Schlumberger**

Company: **BP EXPLORATION (ALASKA), INC.**

Well: **MT. ELBERT–01** **FINAL**
Field: **MILNE POINT UNIT**
Borough: **NORTH SLOPE** State: **ALASKA**

Borough: NORTH SLOPE
Field: MILNE POINT UNIT
Location: 1242' FNL & 4183' FEL
Well: MT. ELBERT–01
Company: BP EXPLORATION (ALASKA), INC.

# ELECTROMAGNETIC PROPAGATION TOOL
# EPT LOG
## 14–FEB–2007

LOCATION

1242' FNL & 4183' FEL
AT SURFACE

Elev.: K.B. 54.8 ft
G.L. 21.4 ft
D.F. 54.8 ft

Permanent Datum: MEAN SEA LEVEL Elev.: 0 ft
Log Measured From: KELLY BUSHING 54.8 ft above Perm. Datum
Drilling Measured From: KELLY BUSHING

| API Serial No. | Section | Township | Range |
|---|---|---|---|
| 50–029–23302–00 | 30 | 13N | 11E |

| | | | |
|---|---|---|---|
| Logging Date | 14–Feb–2007 | | |
| Run Number | ONE | | |
| Depth Driller | 3000 ft | | |
| Schlumberger Depth | 2996 ft | | |
| Bottom Log Interval | 2950 ft | | |
| Top Log Interval | 1952 ft | | |
| Casing Driller Size @ Depth | 9.625 in @ 1954 ft | @ | |
| Casing Schlumberger | 1952 ft | | |
| Bit Size | 8.750 in | | |
| Type Fluid In Hole | OIL BASED MUD | | |
| MUD Density / Viscosity | 9.4 lbm/gal / 79 s | | |
| MUD Fluid Loss / PH | | | |
| MUD Source Of Sample | NA | | |
| RM @ Measured Temperature | @ | @ | |
| RMF @ Measured Temperature | @ | @ | |
| RMC @ Measured Temperature | @ | @ | |
| Source RMF / RMC | NA / NA | | |
| RM @ MRT / RMF @ MRT | @ 38 / @ 38 | @ / @ | |
| Maximum Recorded Temperatures | 38 degF | | |
| Circulation Stopped / Time | 13–Feb–2007 / 15:30 | | |
| Logger On Bottom / Time | 14–Feb–2007 / 11:30 | | |
| Unit Number / Location | 2266 / PRUDHOE BAY | | |
| Recorded By | B.PHILPOTT | | |
| Witnessed By | TIM COLLET | | |

| |
|---|
| 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 |
| MUD Density / Viscosity |
| MUD Fluid Loss / PH |
| MUD Source Of Sample |
| RM @ Measured Temperature |
| RMF @ Measured Temperature |
| RMC @ Measured Temperature |
| Source RMF / RMC |
| RM @ MRT / RMF @ MRT |
| Maximum Recorded Temperatures |
| Circulation Stopped / Time |
| Logger On Bottom / Time |
| Unit Number / Location |
| Recorded By |
| Witnessed By |

# DEPTH SUMMARY LISTING

Date Created: 15–FEB–2007 17:17:07

## Depth System Equipment

| Depth Measuring Device | | Tension Device | | Logging Cable | |
|---|---|---|---|---|---|
| Type: | IDW–JA | Type: | CMTD–B/A | Type: | 7–46P–XS |
| Serial Number: | 2656 | Serial Number: | 2699 | Serial Number: | 3001 |
| Calibration Date: | 13–JAN–2007 | Calibration Date: | 12–JAN–2007 | Length: | 14200.00 FT |
| Calibrator Serial Number: | 18 | Calibrator Serial Number: | 265 | Conveyance Method: | Wireline |
| Calibration Cable Type: | 7–46P–XS | Calibration Gain: | 0.92 | Rig Type: | LAND |
| Wheel Correction 1: | –6 | Calibration Offset: | 539.00 | | |
| Wheel Correction 2: | –2 | | | | |

## Depth Control Parameters

Log Sequence: First Log In the Well

Rig Up Length At Surface:
Rig Up Length At Bottom:
Rig Up Length Correction:
Stretch Correction:
Tool Zero Check At Surface:

## Depth Control Remarks

1. PRIMARY DEPTH CONTROL USED
2.
3.
4.
5.
6.

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

| OTHER SERVICES1 | | OTHER SERVICES2 |
|---|---|---|
| OS1: | RT SCANNER, TLD | OS1: |
| OS2: | HGNS, DSI, PPC, OBMI | OS2: |
| OS3: | CMR, HNGS, ECS | OS3: |
| OS4: | MDT | OS4: |
| OS5: | | OS5: |

| REMARKS: RUN NUMBER 1 | REMARKS: RUN NUMBER 2 |
|---|---|

RT SANNER RAN IN COMPUTE OBM STANDOFF, WITH TWO 1.5" STANDOFFS.
RT SCANNER LOGGED IN 3_BholeCorr_BasicLogs_RadialProcessing Mode.
TRIPLE LITHODENSITY TOOL LOGGED IN VERY HIGH RESOLUTION.
COMPENSATED NEUTRON TOOL, ELECTROMAGNETIC PROPAGTION TOOL, ELEMENTAL CAPTURE SPECTROSCOPY SONDE,
AND COMBINABLE MAGNETIC RESONANCE TOOL RAN WITH 180 DEG BOWSPRINGS FOR ECCENTRALIZATION.
DIPOLE SONIC TOOL LOGGED IN ANISOTROPY, P & S , UPPER DIPOLE AND LOWER DIPOLE MODES.
RAN WITH 2 POWERED POSITIONING CALIPERS FOR CENTRALIZATION
COMBINABLE MAGNETIC RESONANCE TOOL LOGGING MODE: OIL BASED MUD DEPTH LOG– B MODE
ECHO SPACING: 200 US, NUMBER OF ECHOES: 600, T2 CUTOFF: 33 MSEC
MODULAR DYNAMIC TESTER RAN WITH TWO PACKERS, SIX 450 CC'S SAMPLE CHAMBERS, ONE GL SAMPLE CHAMBER AND
ONE 1 GL CHAMBER WITH TANNER GAS TO PREVENT FLOW LINE FREEZING.
MDT SAMPLES WERE TAKEN AT 2012', 2025', 2036', 2047', 2151' AND 2061'. UNABLE TO RETRIEVE SAMPLES AT
2032', AND 2039' DUE TO LOST SEALS.
MDT TOTAL PUMPED OUT TIME: 865 MINS.
AFE# GS 2420H33
RIG: DOYON 14
CREW: J.CAPEN, D.COLE, D.WEATHERS, T.RAUBINGER

| RUN 1 | | | RUN 2 | | |
|---|---|---|---|---|---|
| SERVICE ORDER #: | | 11638614 | SERVICE ORDER #: | | |
| PROGRAM VERSION: | | 14C0–302 | PROGRAM VERSION: | | |
| FLUID LEVEL: | | | FLUID LEVEL: | | |
| LOGGED INTERVAL | START | STOP | LOGGED INTERVAL | START | STOP |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

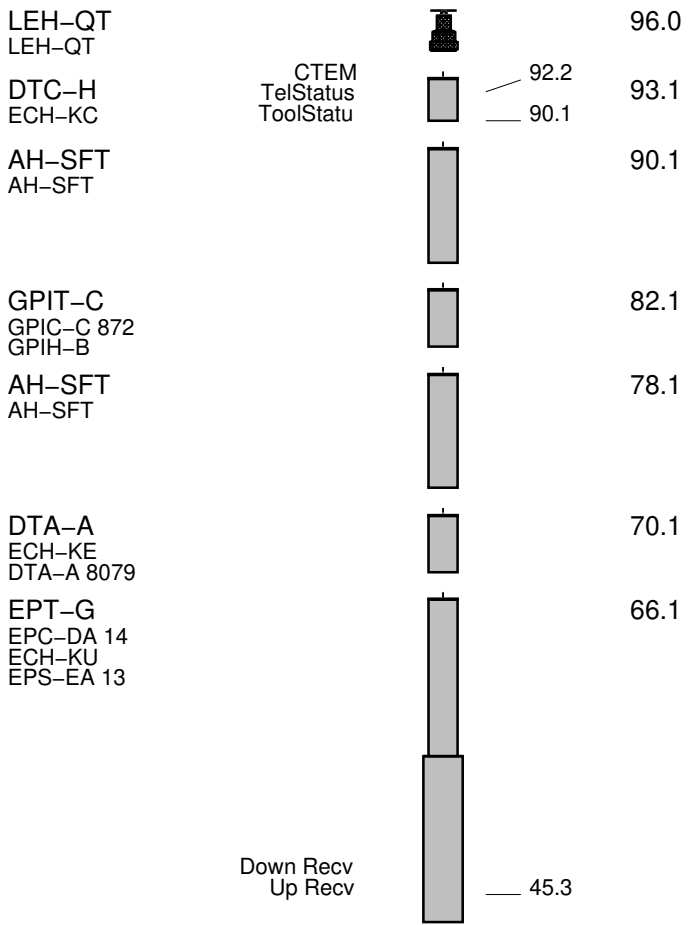
# EQUIPMENT DESCRIPTION

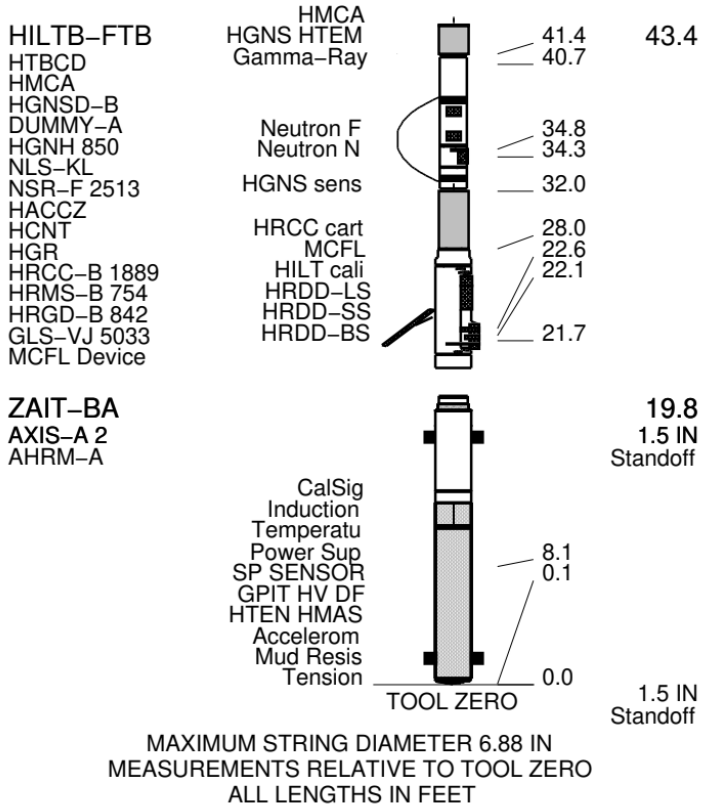
RUN 1 | RUN 2

## SURFACE EQUIPMENT

GSR–U/Y
NCT–B
CNB–AB
NCS–VB
WITM (DTS)–A

## DOWNHOLE EQUIPMENT






| | (in) OD | (in) ID | (ft) MD | MT ELBERT | | (ft) MD | (in) OD | (in) ID | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | 0.0 | 9.625 | | Casing String |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | 1954.0 | 9.625 | | Casing Shoe |
| | | | | | 1954.0 | 8.750 | | Borehole Segment |

Schlumberger

# MAIN PASS

MAXIS Field Log

**Company: BP Alaska Drilling and Wells** **Well: MT ELBERT**

## Input DLIS Files

| | | | | | | |
|---|---|---|---|---|---|---|
| DEFAULT | AIT_TLD_MCFL_CNL_022LUP | FN:27 | PRODUCER | 14-Feb-2007 10:04 | 2994.0 FT | 1859.0 FT |

## Output DLIS Files

| | | | | | | |
|---|---|---|---|---|---|---|
| DEFAULT | AIT_TLD_MCFL_CNL_030PUP | FN:43 | PRODUCER | 14-Feb-2007 13:08 | 2994.0 FT | 1873.0 FT |
| MTE | AIT_TLD_MCFL_CNL_030PUP | FN:44 | PRODUCER | 14-Feb-2007 13:08 | 2994.0 FT | 1873.0 FT |

## OP System Version: 14C0-302

MCM

| | | | |
|---|---|---|---|
| ZAIT-BA | SPC-3254-ZAIT-B | HILTB-FTB | SPC-3254-ZAIT-B |
| EPT-G | SRPC-3243-Q4_2006 | DTA-A | SKK-3248-EDTCB |
| GPIT-C | SRPC-3243-Q4_2006 | DTC-H | SRPC-3243-Q4_2006 |

PIP SUMMARY

Time Mark Every 60 S

Tension (TENS)
10000 (LBF) 0

HILT Caliper (HCAL)
6 (IN) 16

Gamma Ray (GR)
0 (GAPI) 150

Tool/Tot. Drag From D3T to STIA

EPT Far Voltage Down (FVD)
–5 (V) 0

EPT Attenuation (EATT)
0 (DB/M) 1000

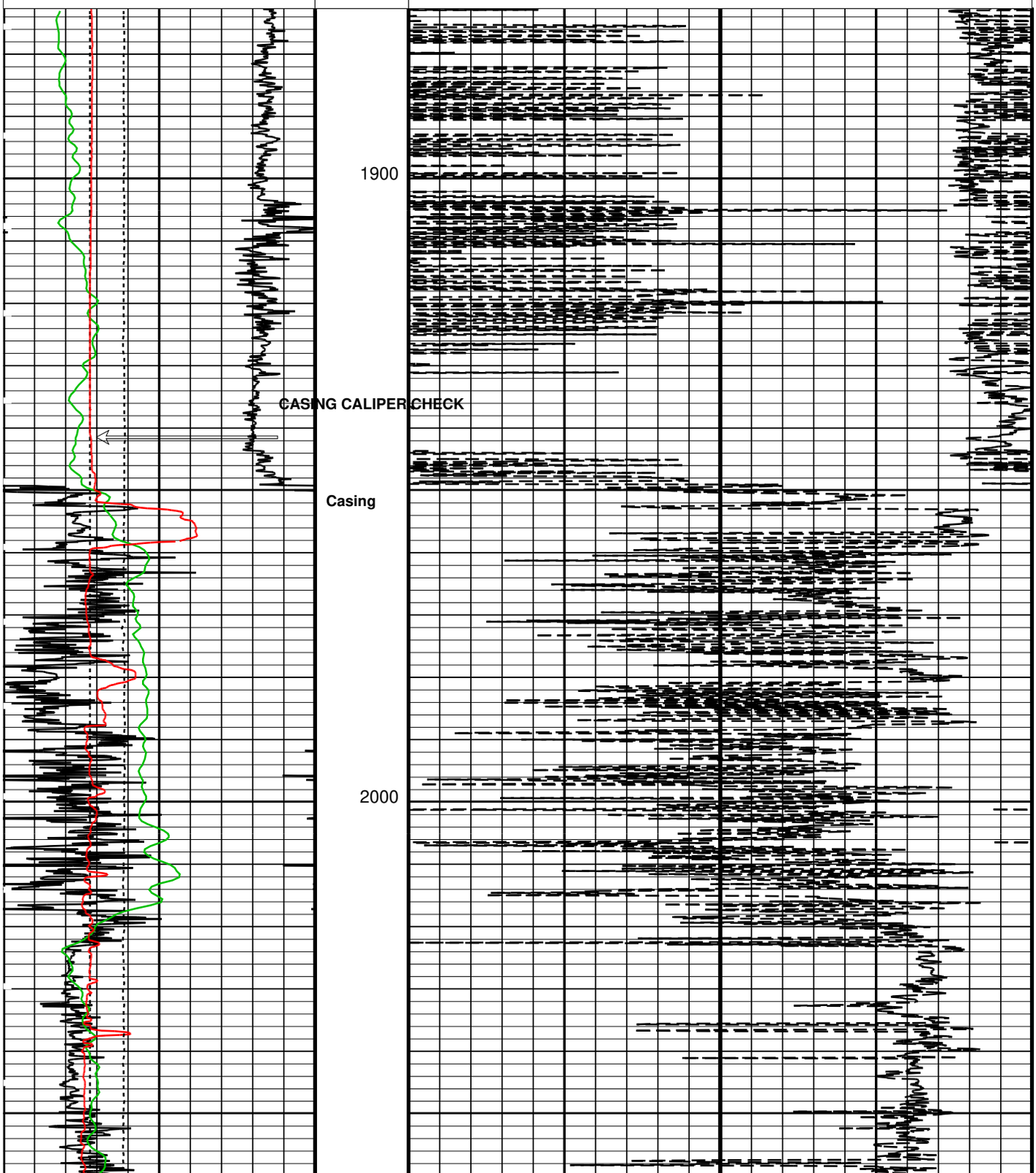
Cable Drag From STIA to STIT

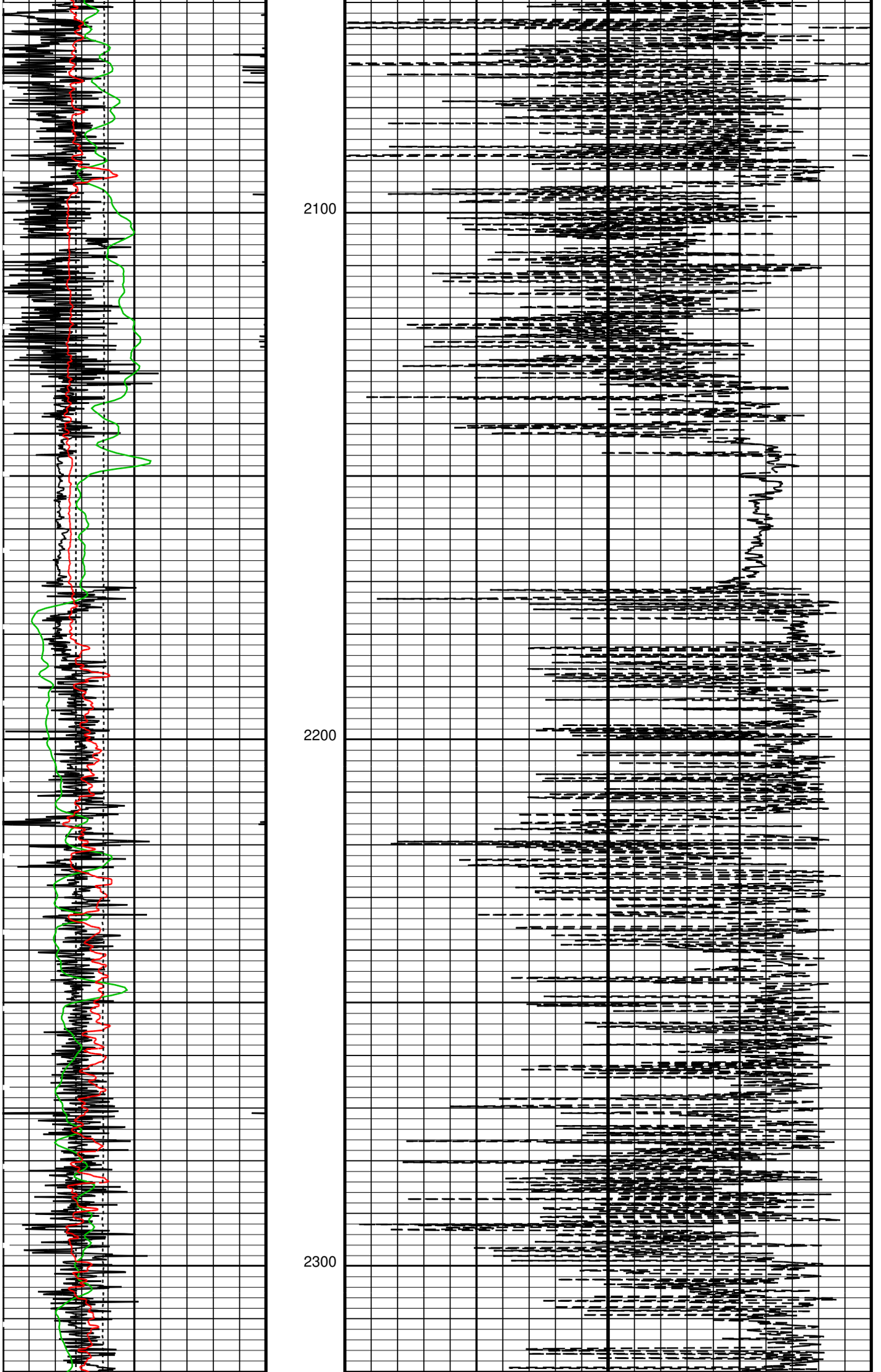
EPT Far Voltage Up (FVU)
–5 (V) 0

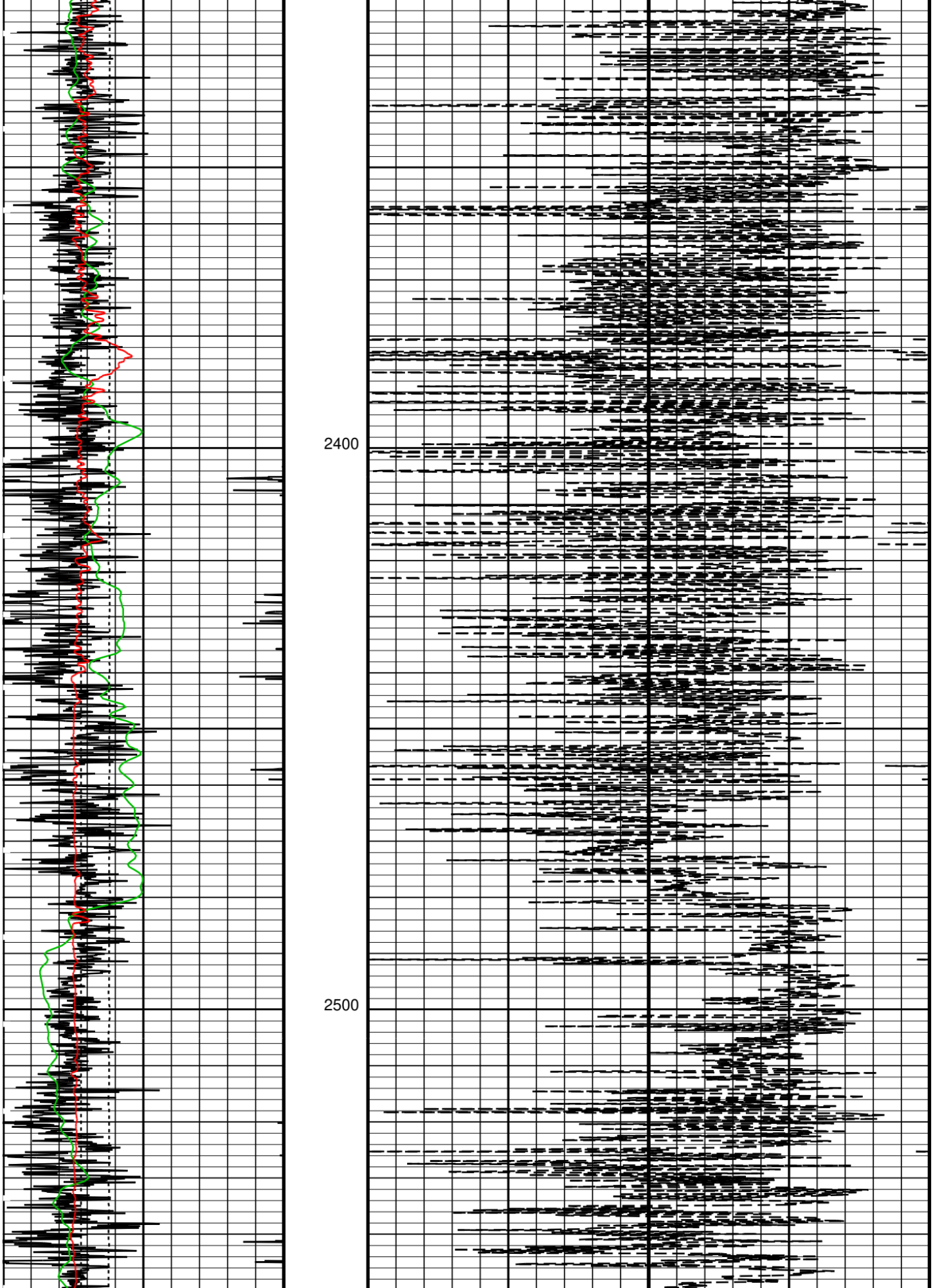
Bit Size (BS)
6 (IN) 16

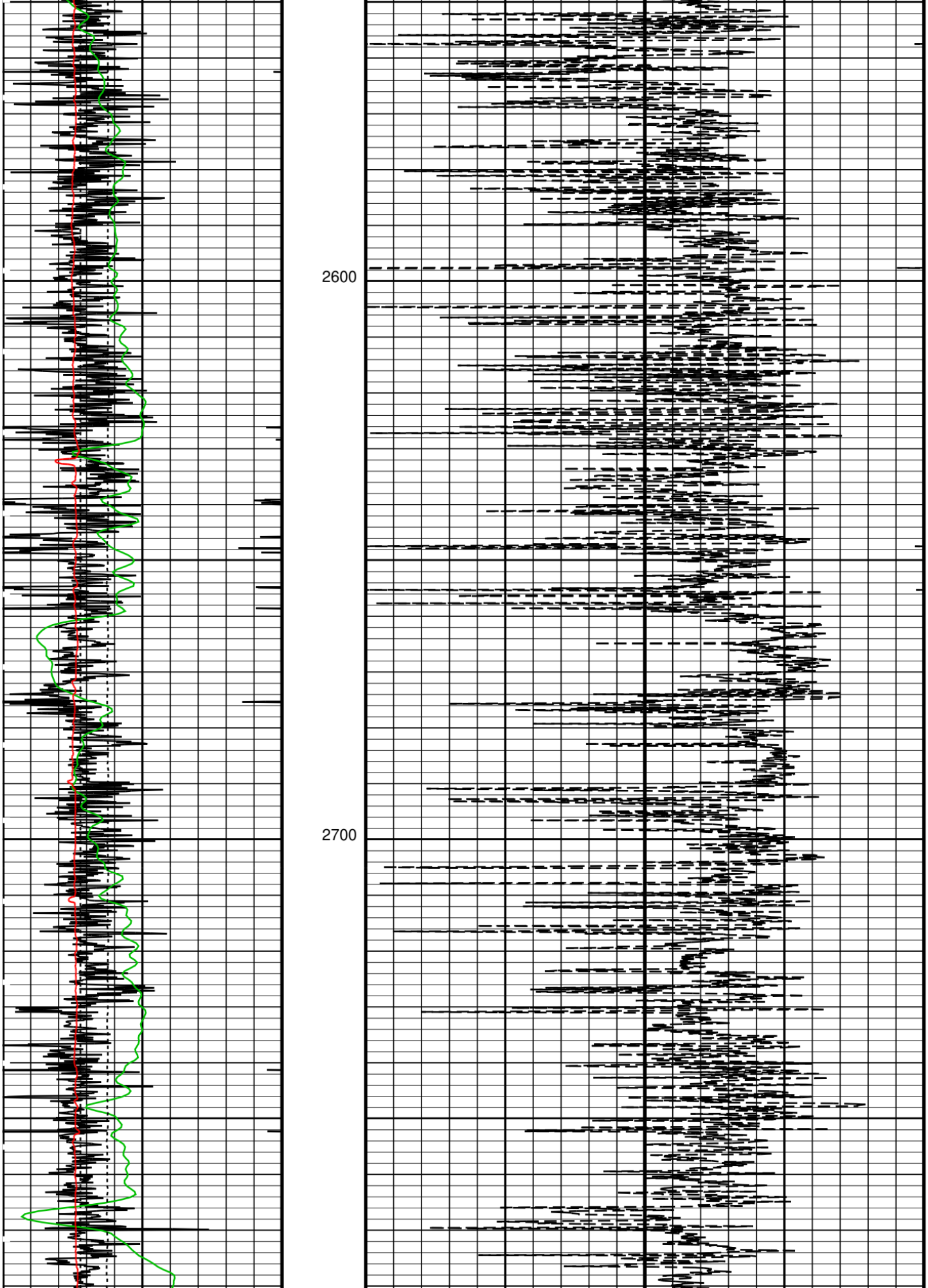
Stuck Stretch (STIT)
0 (F) 50

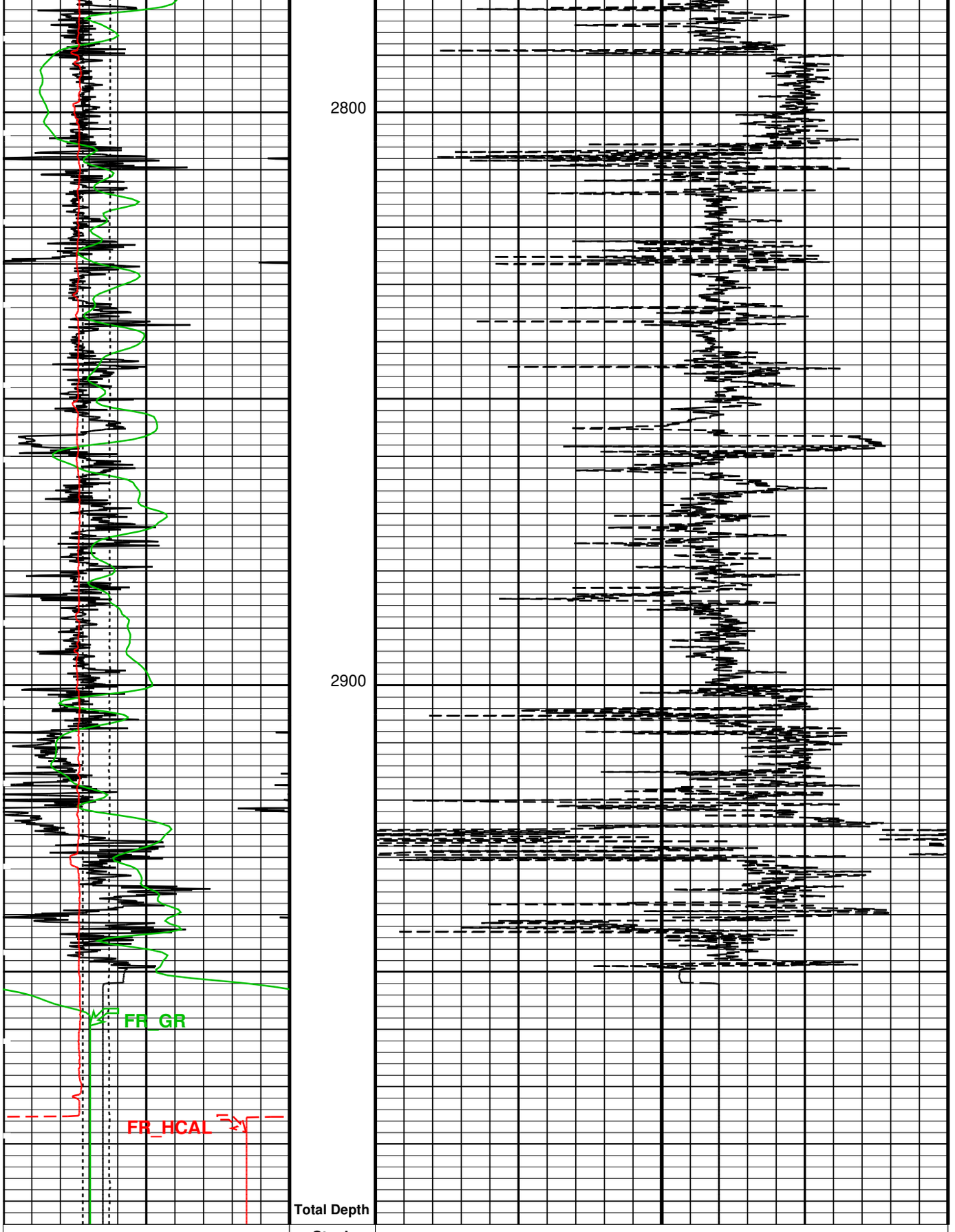
EPT Time of Propagation (TPL)
25 (NS/M) 5




2100
2200
2300


2400
2500


2600
2700




| | | |
|---|---|---|
| Bit Size (BS) 6 (IN) 16 | Stuck Stretch (STIT) 0 (F) 50 | EPT Time of Propagation (TPL) 25 (NS/M) 5 |
| EPT Attenuation (EATT) 0 (DB/M) 1000 | Cable Drag From STIA to STIT | EPT Far Voltage Up (FVU) –5 (V) 0 |
| Gamma Ray (GR) 0 (GAPI) 150 | Tool/Tot. Drag From D3T to STIA | EPT Far Voltage Down (FVD) –5 (V) 0 |
| HILT Caliper (HCAL) 6 (IN) 16 | | |

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

PIP SUMMARY

Time Mark Every 60 S

## Parameters

| DLIS Name | Description | Value | |
|---|---|---|---|
| | ZAIT–BA: 3–D Array Induction Tool – ZAIT–B | | |
| BHT | Bottom Hole Temperature (used in calculations) | 212 | DEGF |
| GGRD | Geothermal Gradient | 0.01 | DF/F |
| GTSE | Generalized Temperature Selection | HSTS_HTEM | |
| SHT | Surface Hole Temperature | 68 | DEGF |
| TRIRT | 3D Rotation Selector | NorTH | |
| | HILTB–FTB: High resolution Integrated Logging Tool–DTS | | |
| BHT | Bottom Hole Temperature (used in calculations) | 212 | DEGF |
| GGRD | Geothermal Gradient | 0.01 | DF/F |
| GTSE | Generalized Temperature Selection | HSTS_HTEM | |
| SHT | Surface Hole Temperature | 68 | DEGF |
| | EPT–G: Electromagnetic Propagation – G | | |
| BHT | Bottom Hole Temperature (used in calculations) | 212 | DEGF |
| EAOR | EPT Antenna Orientation | ENDFIRE | |
| GGRD | Geothermal Gradient | 0.01 | DF/F |
| GTSE | Generalized Temperature Selection | HSTS_HTEM | |
| SHT | Surface Hole Temperature | 68 | DEGF |
| TPM | EPT Time of Propagation Matrix | 7.2 | NS/M |
| | STI: Stuck Tool Indicator | | |
| LBFR | Trigger for MAXIS First Reading Label | TDL | |
| STKT | STI Stuck Threshold | 2.5 | FT |
| TDD | Total Depth – Driller | 3000.00 | FT |
| TDL | Total Depth – Logger | 3000.00 | FT |
| | DIR: Directional Survey Computation | | |
| SPVD | TVD of Starting Point | 0 | FT |
| TIMD | Along–hole depth of Tie–in Point | 0 | FT |
| TIVD | TVD of Tie–in Point | 0 | FT |
| | System and Miscellaneous | | |
| BS | Bit Size | 8.750 | IN |
| DO | Depth Offset for Playback | 0.0 | FT |
| DORL | Depth Offset for Repeat Analysis | 0.0 | FT |
| PP | Playback Processing | NORMAL | |
| TD | Total Depth | 3000 | FT |

Format: EPT_FORMAT Vertical Scale: 5" per 100' Graphics File Created: 14–Feb–2007 13:09

## OP System Version: 14C0–302

MCM

| | | | |
|---|---|---|---|
| ZAIT–BA | SPC–3254–ZAIT–B | HILTB–FTB | SPC–3254–ZAIT–B |
| EPT–G | SRPC–3243–Q4_2006 | DTA–A | SKK–3248–EDTCB |
| GPIT–C | SRPC–3243–Q4_2006 | DTC–H | SRPC–3243–Q4_2006 |

## Input DLIS Files

| | | | | | | |
|---|---|---|---|---|---|---|
| DEFAULT | AIT_TLD_MCFL_CNL_022LUP | FN:27 | PRODUCER | 14–Feb–2007 10:04 | 2994.0 FT | 1859.0 FT |

## Output DLIS Files

| | | | | |
|---|---|---|---|---|
| DEFAULT | AIT_TLD_MCFL_CNL_030PUP | FN:43 | PRODUCER | 14–Feb–2007 13:08 |
| MTE | AIT_TLD_MCFL_CNL_030PUP | FN:44 | PRODUCER | 14–Feb–2007 13:08 |

Schlumberger

# REPEAT SECTION

MAXIS Field Log

Company: BP Alaska Drilling and Wells Well: MT ELBERT

## Input DLIS Files

| | | | | | | |
|---|---|---|---|---|---|---|
| DEFAULT | AIT_TLD_MCFL_CNL_023LUP | FN:29 | PRODUCER | 14–Feb–2007 11:31 | 2664.0 FT | 1864.0 FT |

## Output DLIS Files

| | | | | | | |
|---|---|---|---|---|---|---|
| DEFAULT | AIT_TLD_MCFL_CNL_029PUP | FN:41 | PRODUCER | 14–Feb–2007 13:06 | 2662.0 FT | 1879.0 FT |
| MTE | AIT_TLD_MCFL_CNL_029PUP | FN:42 | PRODUCER | 14–Feb–2007 13:06 | 2662.0 FT | 1879.0 FT |

# OP System Version: 14C0–302

MCM

| | | | |
|---|---|---|---|
| ZAIT–BA | SPC–3254–ZAIT–B | HILTB–FTB | SPC–3254–ZAIT–B |
| EPT–G | SRPC–3243–Q4_2006 | DTA–A | SKK–3248–EDTCB |
| GPIT–C | SRPC–3243–Q4_2006 | DTC–H | SRPC–3243–Q4_2006 |

PIP SUMMARY

Time Mark Every 60 S

Tension (TENS)
10000 (LBF) 0

HILT Caliper (HCAL)
6 (IN) 16

Gamma Ray (GR)
0 (GAPI) 150

Tool/Tot. Drag From D3T to STIA

EPT Far Voltage Down (FVD)
–5 (V) 0

EPT Attenuation (EATT)
0 (DB/M) 1000

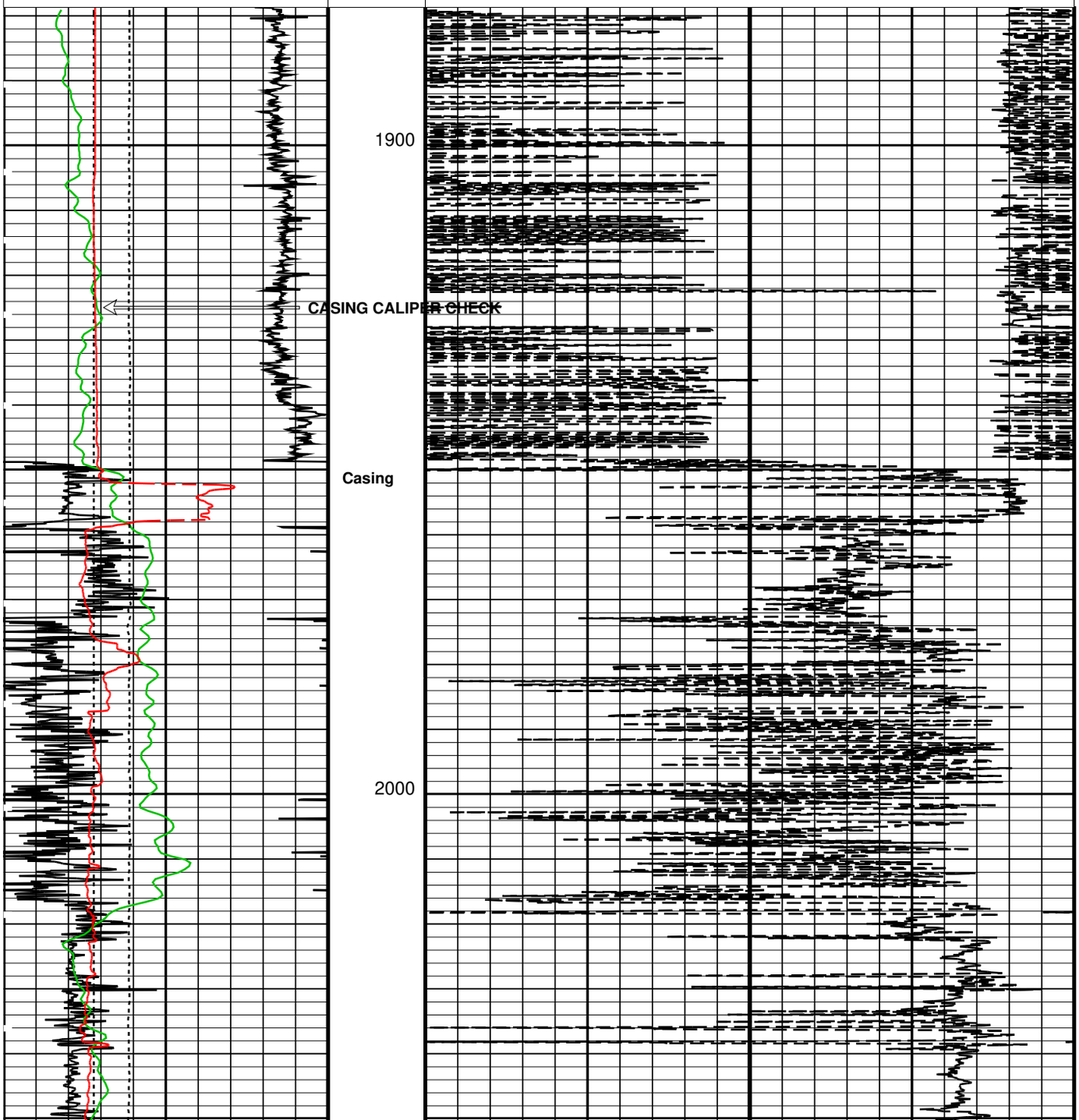
Cable Drag From STIA to STIT

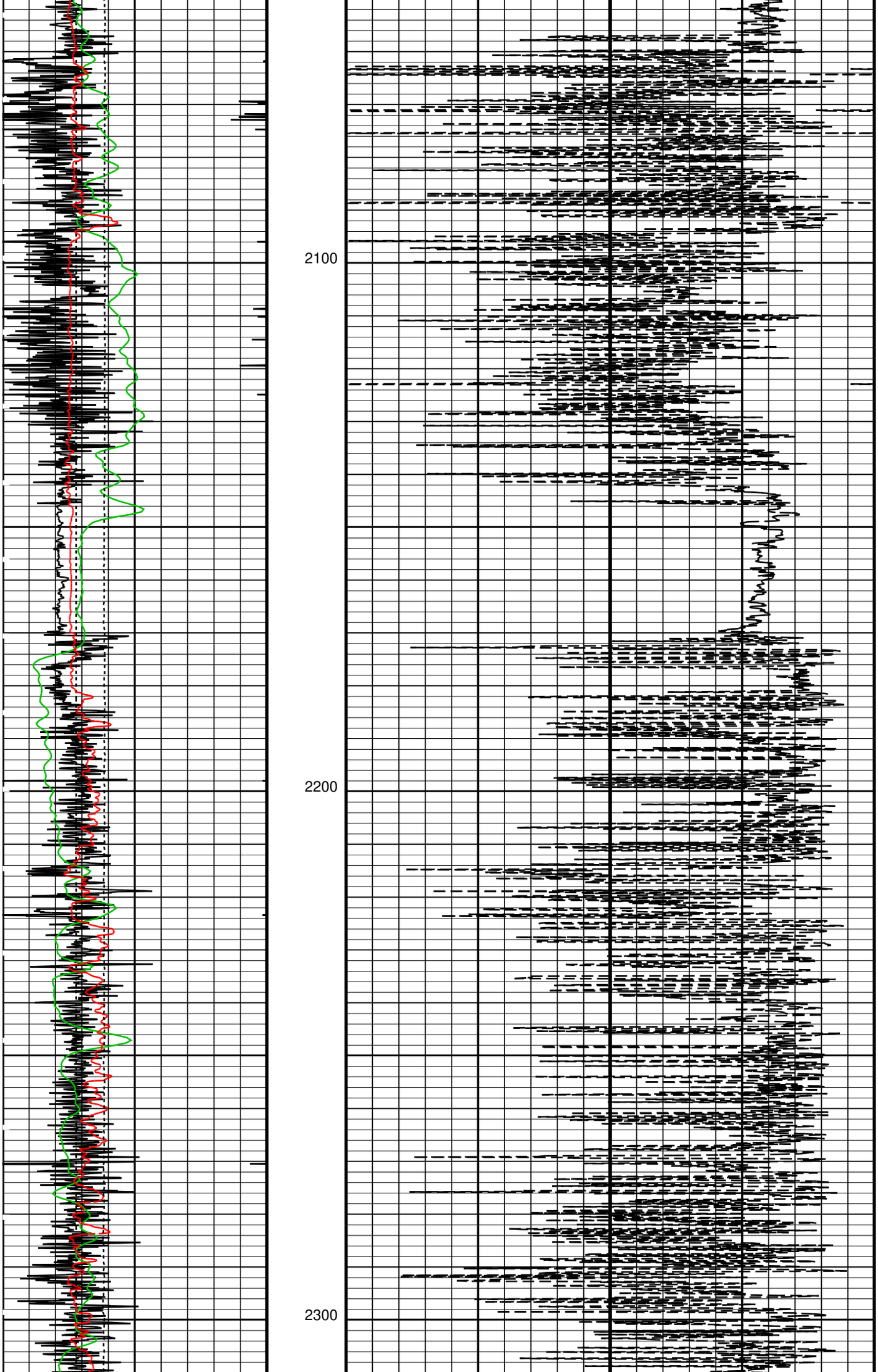
EPT Far Voltage Up (FVU)
–5 (V) 0

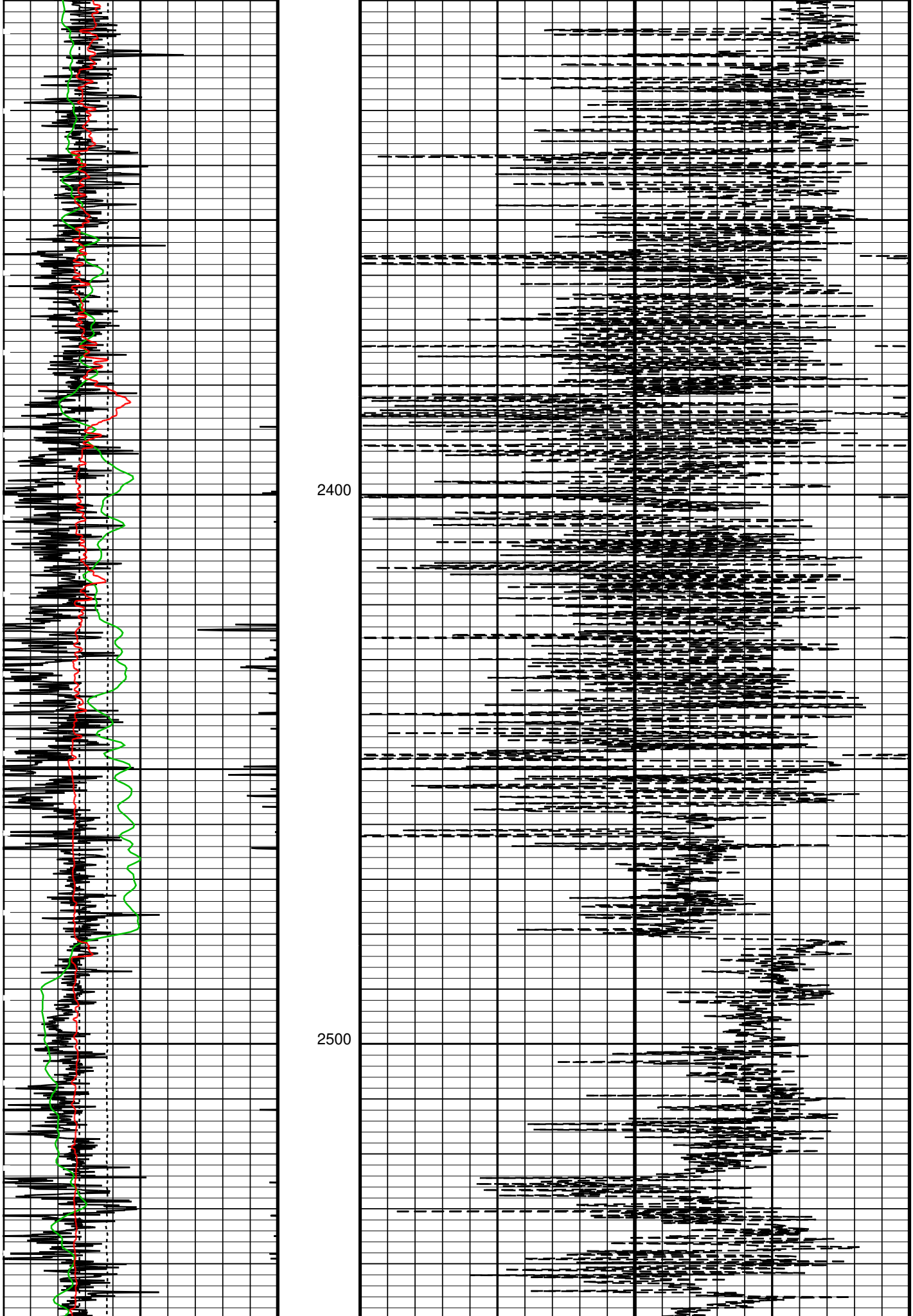
Bit Size (BS)
6 (IN) 16

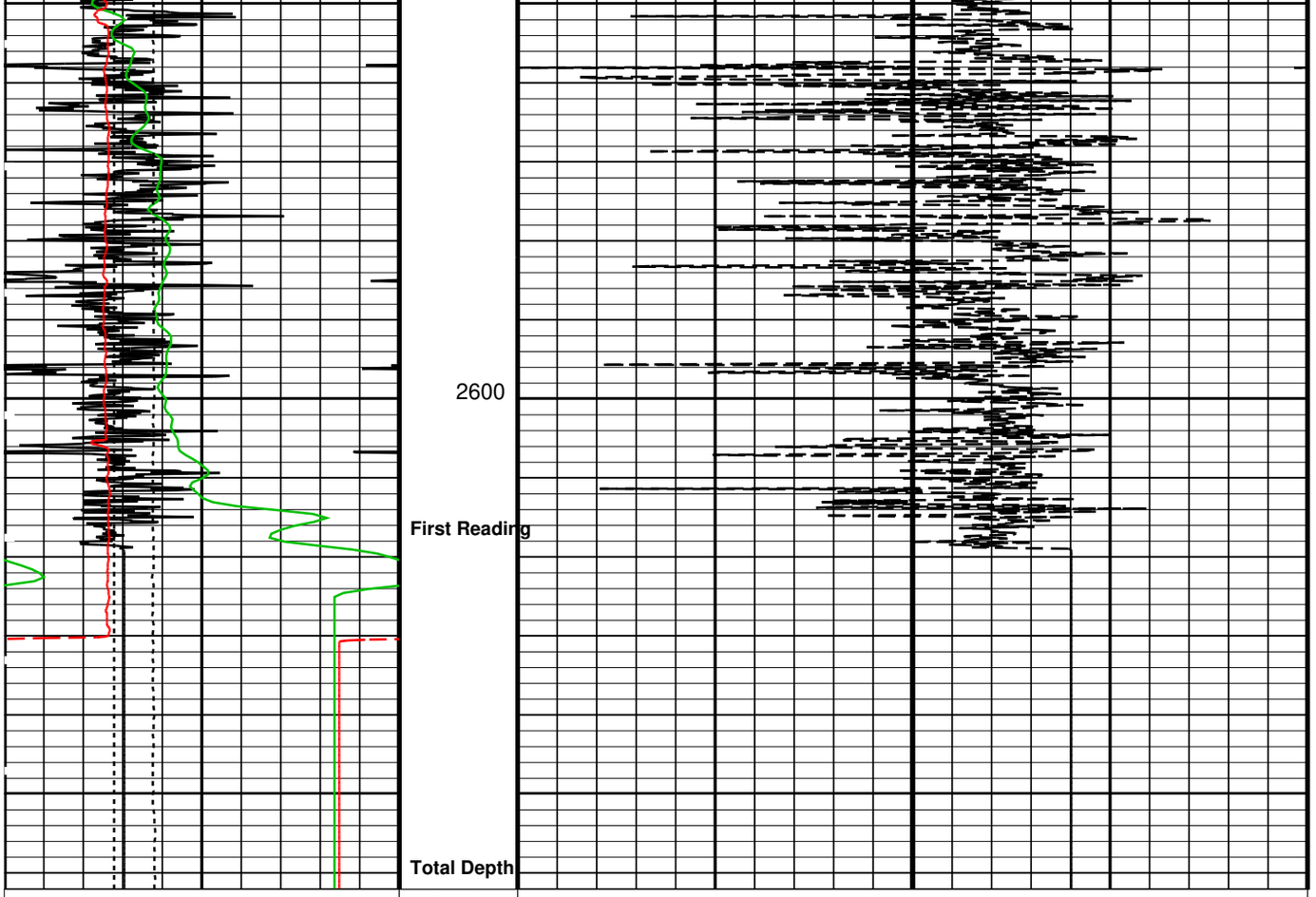
Stuck Stretch (STIT)
0 (F) 50

EPT Time of Propagation (TPL)
25 (NS/M) 5




2100
2200
2300


2400
2500




| | | |
|---|---|---|
| Bit Size (BS) 6 (IN) 16 | Stuck Stretch (STIT) 0 (F) 50 | EPT Time of Propagation (TPL) 25 (NS/M) 5 |
| EPT Attenuation (EATT) 0 (DB/M) 1000 | Cable Drag From STIA to STIT | EPT Far Voltage Up (FVU) −5 (V) 0 |
| Gamma Ray (GR) 0 (GAPI) 150 | Tool/Tot. Drag From D3T to STIA | EPT Far Voltage Down (FVD) −5 (V) 0 |
| HILT Caliper (HCAL) 6 (IN) 16 | | |
| Tension (TENS) 10000 (LBF) 0 | | |

PIP SUMMARY

Time Mark Every 60 S

## Parameters

| DLIS Name | Description | Value | |
|---|---|---|---|
| | ZAIT−BA: 3−D Array Induction Tool − ZAIT−B | | |
| BHT | Bottom Hole Temperature (used in calculations) | 212 | DEGF |
| GGRD | Geothermal Gradient | 0.01 | DF/F |
| GTSE | Generalized Temperature Selection | HSTS_HTEM | |
| SHT | Surface Hole Temperature | 68 | DEGF |
| TRIRT | 3D Rotation Selector | NorTH | |
| | HILTB−FTB: High resolution Integrated Logging Tool−DTS | | |
| BHT | Bottom Hole Temperature (used in calculations) | 212 | DEGF |
| GGRD | Geothermal Gradient | 0.01 | DF/F |
| GTSE | Generalized Temperature Selection | HSTS_HTEM | |
| SHT | Surface Hole Temperature | 68 | DEGF |
| | EPT−G: Electromagnetic Propagation − G | | |
| BHT | Bottom Hole Temperature (used in calculations) | 212 | DEGF |
| EAOR | EPT Antenna Orientation | ENDFIRE | |
| GGRD | Geothermal Gradient | 0.01 | DF/F |
| GTSE | Generalized Temperature Selection | HSTS_HTEM | |
| SHT | Surface Hole Temperature | 68 | DEGF |
| TPM | EPT Time of Propagation Matrix | 7.2 | NS/M |
| | STI: Stuck Tool Indicator | | |
| LBFR | Trigger for MAXIS First Reading Label | TDL | |
| STKT | STI Stuck Threshold | 2.5 | FT |
| TDD | Total Depth − Driller | 3000.00 | FT |
| TDL | Total Depth − Logger | 3000.00 | FT |
| | DIR: Directional Survey Computation | | |
| SPVD | TVD of Starting Point | 0 | FT |
| TIMD | Along−hole depth of Tie−in Point | 0 | FT |
| TIVD | TVD of Tie−in Point | 0 | FT |

System and Miscellaneous

| | | | |
|---|---|---|---|
| BS | Bit Size | 8.750 | IN |
| DO | Depth Offset for Playback | −2.0 | FT |
| PP | Playback Processing | NORMAL | |
| TD | Total Depth | 3000 | FT |

**Format: EPT_FORMAT** **Vertical Scale: 5" per 100'** **Graphics File Created: 14−Feb−2007 13:06**

## OP System Version: 14C0−302

**MCM**

| | | | |
|---|---|---|---|
| ZAIT−BA | SPC−3254−ZAIT−B | HILTB−FTB | SPC−3254−ZAIT−B |
| EPT−G | SRPC−3243−Q4_2006 | DTA−A | SKK−3248−EDTCB |
| GPIT−C | SRPC−3243−Q4_2006 | DTC−H | SRPC−3243−Q4_2006 |

## Input DLIS Files

| | | | | | | |
|---|---|---|---|---|---|---|
| DEFAULT | AIT_TLD_MCFL_CNL_023LUP | FN:29 | PRODUCER | 14−Feb−2007 11:31 | 2664.0 FT | 1864.0 FT |

## Output DLIS Files

| | | | | |
|---|---|---|---|---|
| DEFAULT | AIT_TLD_MCFL_CNL_029PUP | FN:41 | PRODUCER | 14−Feb−2007 13:06 |
| MTE | AIT_TLD_MCFL_CNL_029PUP | FN:42 | PRODUCER | 14−Feb−2007 13:06 |

Schlumberger

# CALIBRATIONS

MAXIS Field Log

Calibration and Check Summary

| Measurement | Nominal | Master | Before | After | Change | Limit | Units |
|---|---|---|---|---|---|---|---|
| 3−D Array Induction Tool − ZAIT−B Wellsite Calibration − Electronics Calibration Check − Thru Cal Mag. & Phase | | | | | | | |
| Master: 29−Jan−2007 15:32 Before: 14−Feb−2007 7:52 | | | | | | | |
| Thru Cal Magnitude − 0 | 0 | 1.345 | 1.353 | N/A | N/A | N/A | MM/M |
| Thru Cal Magnitude − 1 | 0 | 1.336 | 1.360 | N/A | N/A | N/A | MM/M |
| Thru Cal Magnitude − 2 | 0 | 1.387 | 1.441 | N/A | N/A | N/A | MM/M |
| Thru Cal Magnitude − 3 | 0 | 3.071 | 3.094 | N/A | N/A | N/A | MM/M |
| Thru Cal Magnitude − 4 | 0 | 3.051 | 3.109 | N/A | N/A | N/A | MM/M |
| Thru Cal Magnitude − 5 | 0 | 3.167 | 3.295 | N/A | N/A | N/A | MM/M |
| Thru Cal Magnitude − 6 | 0 | 2.477 | 2.496 | N/A | N/A | N/A | MM/M |
| Thru Cal Magnitude − 7 | 0 | 2.461 | 2.508 | N/A | N/A | N/A | MM/M |
| Thru Cal Magnitude − 8 | 0 | 2.559 | 2.663 | N/A | N/A | N/A | MM/M |
| Thru Cal Magnitude − 9 | 0 | 1.623 | 1.651 | N/A | N/A | N/A | MM/M |
| Thru Cal Magnitude − 10 | 0 | 1.634 | 1.684 | N/A | N/A | N/A | MM/M |
| Thru Cal Magnitude − 11 | 0 | 1.796 | 1.880 | N/A | N/A | N/A | MM/M |
| Thru Cal Magnitude − 12 | 0 | 3.239 | 3.260 | N/A | N/A | N/A | MM/M |
| Thru Cal Magnitude − 13 | 0 | 3.221 | 3.279 | N/A | N/A | N/A | MM/M |
| Thru Cal Magnitude − 14 | 0 | 3.346 | 3.477 | N/A | N/A | N/A | MM/M |
| Thru Cal Magnitude − 15 | 0 | 2.606 | 2.652 | N/A | N/A | N/A | MM/M |
| Thru Cal Magnitude − 16 | 0 | 2.624 | 2.704 | N/A | N/A | N/A | MM/M |
| Thru Cal Magnitude − 17 | 0 | 2.884 | 3.019 | N/A | N/A | N/A | MM/M |
| Thru Cal Magnitude − 18 | 0 | 0.8449 | 0.8511 | N/A | N/A | N/A | MM/M |
| Thru Cal Magnitude − 19 | 0 | 0.8402 | 0.8561 | N/A | N/A | N/A | MM/M |
| Thru Cal Magnitude − 20 | 0 | 0.8631 | 0.8988 | N/A | N/A | N/A | MM/M |
| Thru Cal Magnitude − 21 | 0 | 3.452 | 3.513 | N/A | N/A | N/A | MM/M |
| Thru Cal Magnitude − 22 | 0 | 3.476 | 3.582 | N/A | N/A | N/A | MM/M |
| Thru Cal Magnitude − 23 | 0 | 3.821 | 4.000 | N/A | N/A | N/A | MM/M |
| Thru Cal Magnitude − 24 | 0 | 1.224 | 1.234 | N/A | N/A | N/A | MM/M |
| Thru Cal Magnitude − 25 | 0 | 1.217 | 1.241 | N/A | N/A | N/A | MM/M |
| Thru Cal Magnitude − 26 | 0 | 1.250 | 1.303 | N/A | N/A | N/A | MM/M |
| Thru Cal Magnitude − 27 | 0 | 3.452 | 3.513 | N/A | N/A | N/A | MM/M |
| Thru Cal Magnitude − 28 | 0 | 3.476 | 3.582 | N/A | N/A | N/A | MM/M |
| Thru Cal Magnitude − 29 | 0 | 3.821 | 3.999 | N/A | N/A | N/A | MM/M |
| Thru Cal Magnitude − 30 | 0 | 1.223 | 1.233 | N/A | N/A | N/A | MM/M |
| Thru Cal Magnitude − 31 | 0 | 1.216 | 1.241 | N/A | N/A | N/A | MM/M |
| Thru Cal Magnitude − 32 | 0 | 1.250 | 1.302 | N/A | N/A | N/A | MM/M |
| Thru Cal Magnitude − 33 | 0 | 0.9808 | 0.9991 | N/A | N/A | N/A | MM/M |
| Thru Cal Magnitude − 34 | 0 | 0.9876 | 1.018 | N/A | N/A | N/A | MM/M |
| Thru Cal Magnitude − 35 | 0 | 1.071 | 1.123 | N/A | N/A | N/A | MM/M |
| Thru Cal Magnitude − 36 | 0 | 1.447 | 1.459 | N/A | N/A | N/A | MM/M |
| Thru Cal Magnitude − 37 | 0 | 1.439 | 1.468 | N/A | N/A | N/A | MM/M |
| Thru Cal Magnitude − 38 | 0 | 1.474 | 1.538 | N/A | N/A | N/A | MM/M |
| Thru Cal Magnitude − 39 | 0 | 1.178 | 1.200 | N/A | N/A | N/A | MM/M |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Thru Cal Magnitude – 40 | 0 | 1.186 | 1.223 | N/A | N/A | N/A | MM/M |
| Thru Cal Magnitude – 41 | 0 | 1.286 | 1.348 | N/A | N/A | N/A | MM/M |
| Thru Cal Magnitude – 42 | 0 | 2.090 | 2.109 | N/A | N/A | N/A | MM/M |
| Thru Cal Magnitude – 43 | 0 | 2.079 | 2.121 | N/A | N/A | N/A | MM/M |
| Thru Cal Magnitude – 44 | 0 | 2.129 | 2.221 | N/A | N/A | N/A | MM/M |
| Thru Cal Phase – 0 | 0 | −174.6 | −167.5 | N/A | N/A | N/A | DEG |
| Thru Cal Phase – 1 | 0 | −170.2 | −162.6 | N/A | N/A | N/A | DEG |
| Thru Cal Phase – 2 | 0 | −177.4 | −160.7 | N/A | N/A | N/A | DEG |
| Thru Cal Phase – 3 | 0 | −176.6 | −169.7 | N/A | N/A | N/A | DEG |
| Thru Cal Phase – 4 | 0 | −172.3 | −164.8 | N/A | N/A | N/A | DEG |
| Thru Cal Phase – 5 | 0 | −179.4 | −163.0 | N/A | N/A | N/A | DEG |
| Thru Cal Phase – 6 | 0 | 177.8 | −175.0 | N/A | N/A | N/A | DEG |
| Thru Cal Phase – 7 | 0 | −177.9 | −170.2 | N/A | N/A | N/A | DEG |
| Thru Cal Phase – 8 | 0 | 175.0 | −168.3 | N/A | N/A | N/A | DEG |
| Thru Cal Phase – 9 | 0 | −72.00 | −67.24 | N/A | N/A | N/A | DEG |
| Thru Cal Phase – 10 | 0 | −60.73 | −55.93 | N/A | N/A | N/A | DEG |
| Thru Cal Phase – 11 | 0 | −72.15 | −60.62 | N/A | N/A | N/A | DEG |
| Thru Cal Phase – 12 | 0 | −174.8 | −167.6 | N/A | N/A | N/A | DEG |
| Thru Cal Phase – 13 | 0 | −170.5 | −162.9 | N/A | N/A | N/A | DEG |
| Thru Cal Phase – 14 | 0 | −177.6 | −161.0 | N/A | N/A | N/A | DEG |
| Thru Cal Phase – 15 | 0 | −72.38 | −67.60 | N/A | N/A | N/A | DEG |
| Thru Cal Phase – 16 | 0 | −61.11 | −56.30 | N/A | N/A | N/A | DEG |
| Thru Cal Phase – 17 | 0 | −72.56 | −61.03 | N/A | N/A | N/A | DEG |
| Thru Cal Phase – 18 | 0 | −174.3 | −167.1 | N/A | N/A | N/A | DEG |
| Thru Cal Phase – 19 | 0 | −170.0 | −162.4 | N/A | N/A | N/A | DEG |
| Thru Cal Phase – 20 | 0 | −177.4 | −160.7 | N/A | N/A | N/A | DEG |
| Thru Cal Phase – 21 | 0 | −72.91 | −68.14 | N/A | N/A | N/A | DEG |
| Thru Cal Phase – 22 | 0 | −61.64 | −56.85 | N/A | N/A | N/A | DEG |
| Thru Cal Phase – 23 | 0 | −73.08 | −61.54 | N/A | N/A | N/A | DEG |
| Thru Cal Phase – 24 | 0 | −177.2 | −170.2 | N/A | N/A | N/A | DEG |
| Thru Cal Phase – 25 | 0 | −172.9 | −165.4 | N/A | N/A | N/A | DEG |
| Thru Cal Phase – 26 | 0 | 179.7 | −163.7 | N/A | N/A | N/A | DEG |
| Thru Cal Phase – 27 | 0 | −72.91 | −68.13 | N/A | N/A | N/A | DEG |
| Thru Cal Phase – 28 | 0 | −61.64 | −56.84 | N/A | N/A | N/A | DEG |
| Thru Cal Phase – 29 | 0 | −73.11 | −61.57 | N/A | N/A | N/A | DEG |
| Thru Cal Phase – 30 | 0 | −177.2 | −170.2 | N/A | N/A | N/A | DEG |
| Thru Cal Phase – 31 | 0 | −172.9 | −165.4 | N/A | N/A | N/A | DEG |
| Thru Cal Phase – 32 | 0 | 179.7 | −163.7 | N/A | N/A | N/A | DEG |
| Thru Cal Phase – 33 | 0 | −76.79 | −71.95 | N/A | N/A | N/A | DEG |
| Thru Cal Phase – 34 | 0 | −65.38 | −60.53 | N/A | N/A | N/A | DEG |
| Thru Cal Phase – 35 | 0 | −77.45 | −65.80 | N/A | N/A | N/A | DEG |
| Thru Cal Phase – 36 | 0 | 176.7 | −176.1 | N/A | N/A | N/A | DEG |
| Thru Cal Phase – 37 | 0 | −179.0 | −171.3 | N/A | N/A | N/A | DEG |
| Thru Cal Phase – 38 | 0 | 173.6 | −169.7 | N/A | N/A | N/A | DEG |
| Thru Cal Phase – 39 | 0 | −76.61 | −71.77 | N/A | N/A | N/A | DEG |
| Thru Cal Phase – 40 | 0 | −65.22 | −60.37 | N/A | N/A | N/A | DEG |
| Thru Cal Phase – 41 | 0 | −77.31 | −65.65 | N/A | N/A | N/A | DEG |
| Thru Cal Phase – 42 | 0 | 177.4 | −175.4 | N/A | N/A | N/A | DEG |
| Thru Cal Phase – 43 | 0 | −178.3 | −170.6 | N/A | N/A | N/A | DEG |
| Thru Cal Phase – 44 | 0 | 174.2 | −169.0 | N/A | N/A | N/A | DEG |

3−D Array Induction Tool − ZAIT−B Wellsite Calibration − Electronics Calibration Check − Auxilliary
Master: 29−Jan−2007 15:32 Before: 14−Feb−2007 7:52

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Array Induction SPA Plus | 0.8360 | 0.8436 | 0.8438 | N/A | N/A | N/A | V |
| Array Induction SPA Zero | 0 | −0.0007702 | −0.0008165 | N/A | N/A | N/A | V |
| Array Induction Temperature Pl | 0.9798 | 0.9906 | 0.9911 | N/A | N/A | N/A | V |
| Array Induction Temperature Ze | 0 | −0.001124 | −0.001144 | N/A | N/A | N/A | V |
| Array Induction CalSig Plus | 5.000 | 5.015 | 5.016 | N/A | N/A | N/A | V |
| Array Induction CalSig Zero | 0 | −0.01105 | −0.01124 | N/A | N/A | N/A | V |
| Array Induction Volt Plus | 5.000 | 5.014 | 5.016 | N/A | N/A | N/A | V |
| Array Induction Volt Zero | 0 | −0.01105 | −0.01124 | N/A | N/A | N/A | V |

3−D Array Induction Tool − ZAIT−B Wellsite Calibration − Sonde Error Correction
Master: 29−Jan−2007 15:32

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| R Sonde Error Correction – 0 | 0 | 20.92 | N/A | N/A | N/A | N/A | MM/M |
| R Sonde Error Correction – 1 | 0 | 754.2 | N/A | N/A | N/A | N/A | MM/M |
| R Sonde Error Correction – 2 | 0 | −1325 | N/A | N/A | N/A | N/A | MM/M |
| R Sonde Error Correction – 3 | 0 | 33.96 | N/A | N/A | N/A | N/A | MM/M |
| R Sonde Error Correction – 4 | 0 | 154.4 | N/A | N/A | N/A | N/A | MM/M |
| R Sonde Error Correction – 5 | 0 | 85.67 | N/A | N/A | N/A | N/A | MM/M |
| R Sonde Error Correction – 6 | 0 | 63.31 | N/A | N/A | N/A | N/A | MM/M |
| R Sonde Error Correction – 7 | 0 | 148.3 | N/A | N/A | N/A | N/A | MM/M |
| R Sonde Error Correction – 8 | 0 | 90.72 | N/A | N/A | N/A | N/A | MM/M |
| R Sonde Error Correction – 9 | 0 | −492.9 | N/A | N/A | N/A | N/A | MM/M |
| R Sonde Error Correction – 10 | 0 | 18.30 | N/A | N/A | N/A | N/A | MM/M |
| R Sonde Error Correction – 11 | 0 | −119.2 | N/A | N/A | N/A | N/A | MM/M |
| R Sonde Error Correction – 12 | 0 | −6.887 | N/A | N/A | N/A | N/A | MM/M |
| R Sonde Error Correction – 13 | 0 | −394.3 | N/A | N/A | N/A | N/A | MM/M |
| R Sonde Error Correction – 14 | 0 | 65.79 | N/A | N/A | N/A | N/A | MM/M |
| R Sonde Error Correction – 15 | 0 | 52.97 | N/A | N/A | N/A | N/A | MM/M |
| R Sonde Error Correction – 16 | 0 | 87.06 | N/A | N/A | N/A | N/A | MM/M |
| R Sonde Error Correction – 17 | 0 | −85.69 | N/A | N/A | N/A | N/A | MM/M |
| R Sonde Error Correction – 18 | 0 | −264.4 | N/A | N/A | N/A | N/A | MM/M |
| R Sonde Error Correction – 19 | 0 | 2.997 | N/A | N/A | N/A | N/A | MM/M |
| R Sonde Error Correction – 20 | 0 | −67.21 | N/A | N/A | N/A | N/A | MM/M |
| R Sonde Error Correction – 21 | 0 | −2.146 | N/A | N/A | N/A | N/A | MM/M |
| R Sonde Error Correction – 22 | 0 | −171.0 | N/A | N/A | N/A | N/A | MM/M |
| R Sonde Error Correction – 23 | 0 | 2.315 | N/A | N/A | N/A | N/A | MM/M |
| R Sonde Error Correction – 24 | 0 | 43.68 | N/A | N/A | N/A | N/A | MM/M |
| R Sonde Error Correction – 25 | 0 | 57.55 | N/A | N/A | N/A | N/A | MM/M |
| R Sonde Error Correction – 26 | 0 | −78.64 | N/A | N/A | N/A | N/A | MM/M |
| R Sonde Error Correction – 27 | 0 | −324.3 | N/A | N/A | N/A | N/A | MM/M |
| R Sonde Error Correction – 28 | 0 | 6.777 | N/A | N/A | N/A | N/A | MM/M |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| R Sonde Error Correction – 29 | 0 | −20.82 | N/A | N/A | N/A | N/A | MM/M |
| R Sonde Error Correction – 30 | 0 | 11.65 | N/A | N/A | N/A | N/A | MM/M |
| R Sonde Error Correction – 31 | 0 | −333.3 | N/A | N/A | N/A | N/A | MM/M |
| R Sonde Error Correction – 32 | 0 | 48.80 | N/A | N/A | N/A | N/A | MM/M |
| R Sonde Error Correction – 33 | 0 | 5.421 | N/A | N/A | N/A | N/A | MM/M |
| R Sonde Error Correction – 34 | 0 | −1.054 | N/A | N/A | N/A | N/A | MM/M |
| R Sonde Error Correction – 35 | 0 | 124.1 | N/A | N/A | N/A | N/A | MM/M |
| R Sonde Error Correction – 36 | 0 | −319.1 | N/A | N/A | N/A | N/A | MM/M |
| R Sonde Error Correction – 37 | 0 | 6.994 | N/A | N/A | N/A | N/A | MM/M |
| R Sonde Error Correction – 38 | 0 | 0.5654 | N/A | N/A | N/A | N/A | MM/M |
| R Sonde Error Correction – 39 | 0 | 1.085 | N/A | N/A | N/A | N/A | MM/M |
| R Sonde Error Correction – 40 | 0 | −323.3 | N/A | N/A | N/A | N/A | MM/M |
| R Sonde Error Correction – 41 | 0 | 15.87 | N/A | N/A | N/A | N/A | MM/M |
| R Sonde Error Correction – 42 | 0 | −0.8276 | N/A | N/A | N/A | N/A | MM/M |
| R Sonde Error Correction – 43 | 0 | 0.7432 | N/A | N/A | N/A | N/A | MM/M |
| R Sonde Error Correction – 44 | 0 | 47.85 | N/A | N/A | N/A | N/A | MM/M |
| R Sonde Error Correction – 45 | 0 | −15.48 | N/A | N/A | N/A | N/A | MM/M |
| R Sonde Error Correction – 46 | 0 | −9.021 | N/A | N/A | N/A | N/A | MM/M |
| R Sonde Error Correction – 47 | 0 | −31.66 | N/A | N/A | N/A | N/A | MM/M |
| R Sonde Error Correction – 48 | 0 | 11.94 | N/A | N/A | N/A | N/A | MM/M |
| R Sonde Error Correction – 49 | 0 | −17.19 | N/A | N/A | N/A | N/A | MM/M |
| R Sonde Error Correction – 50 | 0 | 18.09 | N/A | N/A | N/A | N/A | MM/M |
| R Sonde Error Correction – 51 | 0 | 5.572 | N/A | N/A | N/A | N/A | MM/M |
| R Sonde Error Correction – 52 | 0 | 8.875 | N/A | N/A | N/A | N/A | MM/M |
| R Sonde Error Correction – 53 | 0 | 59.44 | N/A | N/A | N/A | N/A | MM/M |
| R Sonde Error Correction – 54 | 0 | −2.308 | N/A | N/A | N/A | N/A | MM/M |
| R Sonde Error Correction – 55 | 0 | −1.336 | N/A | N/A | N/A | N/A | MM/M |
| R Sonde Error Correction – 56 | 0 | −1.396 | N/A | N/A | N/A | N/A | MM/M |
| R Sonde Error Correction – 57 | 0 | 0.9340 | N/A | N/A | N/A | N/A | MM/M |
| R Sonde Error Correction – 58 | 0 | 1.078 | N/A | N/A | N/A | N/A | MM/M |
| R Sonde Error Correction – 59 | 0 | 6.561 | N/A | N/A | N/A | N/A | MM/M |
| R Sonde Error Correction – 60 | 0 | 4.802 | N/A | N/A | N/A | N/A | MM/M |
| R Sonde Error Correction – 61 | 0 | 5.034 | N/A | N/A | N/A | N/A | MM/M |
| R Sonde Error Correction – 62 | 0 | 26.23 | N/A | N/A | N/A | N/A | MM/M |
| R Sonde Error Correction – 63 | 0 | −2.579 | N/A | N/A | N/A | N/A | MM/M |
| R Sonde Error Correction – 64 | 0 | 29.50 | N/A | N/A | N/A | N/A | MM/M |
| R Sonde Error Correction – 65 | 0 | −15.76 | N/A | N/A | N/A | N/A | MM/M |
| R Sonde Error Correction – 66 | 0 | −19.63 | N/A | N/A | N/A | N/A | MM/M |
| R Sonde Error Correction – 67 | 0 | −0.2565 | N/A | N/A | N/A | N/A | MM/M |
| R Sonde Error Correction – 68 | 0 | 3.726 | N/A | N/A | N/A | N/A | MM/M |
| R Sonde Error Correction – 69 | 0 | −6.196 | N/A | N/A | N/A | N/A | MM/M |
| R Sonde Error Correction – 70 | 0 | −0.5899 | N/A | N/A | N/A | N/A | MM/M |
| R Sonde Error Correction – 71 | 0 | 22.25 | N/A | N/A | N/A | N/A | MM/M |
| R Sonde Error Correction – 72 | 0 | 0.3745 | N/A | N/A | N/A | N/A | MM/M |
| R Sonde Error Correction – 73 | 0 | 1.286 | N/A | N/A | N/A | N/A | MM/M |
| R Sonde Error Correction – 74 | 0 | −1.035 | N/A | N/A | N/A | N/A | MM/M |
| R Sonde Error Correction – 75 | 0 | −1.570 | N/A | N/A | N/A | N/A | MM/M |
| R Sonde Error Correction – 76 | 0 | 2.299 | N/A | N/A | N/A | N/A | MM/M |
| R Sonde Error Correction – 77 | 0 | 1.771 | N/A | N/A | N/A | N/A | MM/M |
| R Sonde Error Correction – 78 | 0 | 0.7233 | N/A | N/A | N/A | N/A | MM/M |
| R Sonde Error Correction – 79 | 0 | 0.7604 | N/A | N/A | N/A | N/A | MM/M |
| R Sonde Error Correction – 80 | 0 | 10.68 | N/A | N/A | N/A | N/A | MM/M |
| R Sonde Error Correction – 81 | 0 | −15.45 | N/A | N/A | N/A | N/A | MM/M |
| R Sonde Error Correction – 82 | 0 | −8.384 | N/A | N/A | N/A | N/A | MM/M |
| R Sonde Error Correction – 83 | 0 | −11.00 | N/A | N/A | N/A | N/A | MM/M |
| R Sonde Error Correction – 84 | 0 | 13.94 | N/A | N/A | N/A | N/A | MM/M |
| R Sonde Error Correction – 85 | 0 | −15.01 | N/A | N/A | N/A | N/A | MM/M |
| R Sonde Error Correction – 86 | 0 | 4.540 | N/A | N/A | N/A | N/A | MM/M |
| R Sonde Error Correction – 87 | 0 | −0.8786 | N/A | N/A | N/A | N/A | MM/M |
| R Sonde Error Correction – 88 | 0 | 2.126 | N/A | N/A | N/A | N/A | MM/M |
| R Sonde Error Correction – 89 | 0 | 3.597 | N/A | N/A | N/A | N/A | MM/M |
| R Sonde Error Correction – 90 | 0 | −12.18 | N/A | N/A | N/A | N/A | MM/M |
| R Sonde Error Correction – 91 | 0 | −2.645 | N/A | N/A | N/A | N/A | MM/M |
| R Sonde Error Correction – 92 | 0 | −1.279 | N/A | N/A | N/A | N/A | MM/M |
| R Sonde Error Correction – 93 | 0 | 2.192 | N/A | N/A | N/A | N/A | MM/M |
| R Sonde Error Correction – 94 | 0 | −10.83 | N/A | N/A | N/A | N/A | MM/M |
| R Sonde Error Correction – 95 | 0 | 1.041 | N/A | N/A | N/A | N/A | MM/M |
| R Sonde Error Correction – 96 | 0 | 0.9281 | N/A | N/A | N/A | N/A | MM/M |
| R Sonde Error Correction – 97 | 0 | 0.2935 | N/A | N/A | N/A | N/A | MM/M |
| R Sonde Error Correction – 98 | 0 | 3.097 | N/A | N/A | N/A | N/A | MM/M |
| R Sonde Error Correction – 99 | 0 | −41.39 | N/A | N/A | N/A | N/A | MM/M |
| R Sonde Error Correction – 100 | 0 | 15.87 | N/A | N/A | N/A | N/A | MM/M |
| R Sonde Error Correction – 101 | 0 | −6.421 | N/A | N/A | N/A | N/A | MM/M |
| R Sonde Error Correction – 102 | 0 | −11.33 | N/A | N/A | N/A | N/A | MM/M |
| R Sonde Error Correction – 103 | 0 | −45.67 | N/A | N/A | N/A | N/A | MM/M |
| R Sonde Error Correction – 104 | 0 | −0.1936 | N/A | N/A | N/A | N/A | MM/M |
| R Sonde Error Correction – 105 | 0 | 1.150 | N/A | N/A | N/A | N/A | MM/M |
| R Sonde Error Correction – 106 | 0 | −1.690 | N/A | N/A | N/A | N/A | MM/M |
| R Sonde Error Correction – 107 | 0 | −2.731 | N/A | N/A | N/A | N/A | MM/M |
| R Sonde Error Correction – 108 | 0 | −40.59 | N/A | N/A | N/A | N/A | MM/M |
| R Sonde Error Correction – 109 | 0 | 3.576 | N/A | N/A | N/A | N/A | MM/M |
| R Sonde Error Correction – 110 | 0 | −0.6722 | N/A | N/A | N/A | N/A | MM/M |
| R Sonde Error Correction – 111 | 0 | −3.843 | N/A | N/A | N/A | N/A | MM/M |
| R Sonde Error Correction – 112 | 0 | −42.31 | N/A | N/A | N/A | N/A | MM/M |
| R Sonde Error Correction – 113 | 0 | −0.1958 | N/A | N/A | N/A | N/A | MM/M |
| R Sonde Error Correction – 114 | 0 | 1.999 | N/A | N/A | N/A | N/A | MM/M |
| R Sonde Error Correction – 115 | 0 | −0.4481 | N/A | N/A | N/A | N/A | MM/M |
| R Sonde Error Correction – 116 | 0 | 2.266 | N/A | N/A | N/A | N/A | MM/M |
| X Sonde Error Correction – 0 | 0 | 5052 | N/A | N/A | N/A | N/A | MM/M |
| X Sonde Error Correction – 1 | 0 | 8939 | N/A | N/A | N/A | N/A | MM/M |
| X Sonde Error Correction – 2 | 0 | −103.9 | N/A | N/A | N/A | N/A | MM/M |
| X Sonde Error Correction – 3 | 0 | 2129 | N/A | N/A | N/A | N/A | MM/M |
| X Sonde Error Correction – 4 | 0 | 830.1 | N/A | N/A | N/A | N/A | MM/M |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| X Sonde Error Correction – 5 | 0 | −295.1 | N/A | N/A | N/A | N/A | MM/M |
| X Sonde Error Correction – 6 | 0 | 700.2 | N/A | N/A | N/A | N/A | MM/M |
| X Sonde Error Correction – 7 | 0 | 567.0 | N/A | N/A | N/A | N/A | MM/M |
| X Sonde Error Correction – 8 | 0 | −25.51 | N/A | N/A | N/A | N/A | MM/M |
| X Sonde Error Correction – 9 | 0 | −220.7 | N/A | N/A | N/A | N/A | MM/M |
| X Sonde Error Correction – 10 | 0 | −581.3 | N/A | N/A | N/A | N/A | MM/M |
| X Sonde Error Correction – 11 | 0 | 994.5 | N/A | N/A | N/A | N/A | MM/M |
| X Sonde Error Correction – 12 | 0 | 1033 | N/A | N/A | N/A | N/A | MM/M |
| X Sonde Error Correction – 13 | 0 | −632.1 | N/A | N/A | N/A | N/A | MM/M |
| X Sonde Error Correction – 14 | 0 | 101.5 | N/A | N/A | N/A | N/A | MM/M |
| X Sonde Error Correction – 15 | 0 | −554.7 | N/A | N/A | N/A | N/A | MM/M |
| X Sonde Error Correction – 16 | 0 | −705.2 | N/A | N/A | N/A | N/A | MM/M |
| X Sonde Error Correction – 17 | 0 | 221.6 | N/A | N/A | N/A | N/A | MM/M |
| X Sonde Error Correction – 18 | 0 | −380.3 | N/A | N/A | N/A | N/A | MM/M |
| X Sonde Error Correction – 19 | 0 | −278.9 | N/A | N/A | N/A | N/A | MM/M |
| X Sonde Error Correction – 20 | 0 | 485.0 | N/A | N/A | N/A | N/A | MM/M |
| X Sonde Error Correction – 21 | 0 | 513.5 | N/A | N/A | N/A | N/A | MM/M |
| X Sonde Error Correction – 22 | 0 | −557.7 | N/A | N/A | N/A | N/A | MM/M |
| X Sonde Error Correction – 23 | 0 | 48.64 | N/A | N/A | N/A | N/A | MM/M |
| X Sonde Error Correction – 24 | 0 | −300.7 | N/A | N/A | N/A | N/A | MM/M |
| X Sonde Error Correction – 25 | 0 | −369.9 | N/A | N/A | N/A | N/A | MM/M |
| X Sonde Error Correction – 26 | 0 | 74.67 | N/A | N/A | N/A | N/A | MM/M |
| X Sonde Error Correction – 27 | 0 | 722.8 | N/A | N/A | N/A | N/A | MM/M |
| X Sonde Error Correction – 28 | 0 | −93.67 | N/A | N/A | N/A | N/A | MM/M |
| X Sonde Error Correction – 29 | 0 | 251.6 | N/A | N/A | N/A | N/A | MM/M |
| X Sonde Error Correction – 30 | 0 | −837.1 | N/A | N/A | N/A | N/A | MM/M |
| X Sonde Error Correction – 31 | 0 | 829.5 | N/A | N/A | N/A | N/A | MM/M |
| X Sonde Error Correction – 32 | 0 | 442.1 | N/A | N/A | N/A | N/A | MM/M |
| X Sonde Error Correction – 33 | 0 | −174.6 | N/A | N/A | N/A | N/A | MM/M |
| X Sonde Error Correction – 34 | 0 | −100.0 | N/A | N/A | N/A | N/A | MM/M |
| X Sonde Error Correction – 35 | 0 | −78.95 | N/A | N/A | N/A | N/A | MM/M |
| X Sonde Error Correction – 36 | 0 | 421.2 | N/A | N/A | N/A | N/A | MM/M |
| X Sonde Error Correction – 37 | 0 | −48.20 | N/A | N/A | N/A | N/A | MM/M |
| X Sonde Error Correction – 38 | 0 | 122.2 | N/A | N/A | N/A | N/A | MM/M |
| X Sonde Error Correction – 39 | 0 | −417.3 | N/A | N/A | N/A | N/A | MM/M |
| X Sonde Error Correction – 40 | 0 | 470.6 | N/A | N/A | N/A | N/A | MM/M |
| X Sonde Error Correction – 41 | 0 | 227.7 | N/A | N/A | N/A | N/A | MM/M |
| X Sonde Error Correction – 42 | 0 | −78.56 | N/A | N/A | N/A | N/A | MM/M |
| X Sonde Error Correction – 43 | 0 | −45.15 | N/A | N/A | N/A | N/A | MM/M |
| X Sonde Error Correction – 44 | 0 | −9.689 | N/A | N/A | N/A | N/A | MM/M |
| X Sonde Error Correction – 45 | 0 | 2082 | N/A | N/A | N/A | N/A | MM/M |
| X Sonde Error Correction – 46 | 0 | 368.4 | N/A | N/A | N/A | N/A | MM/M |
| X Sonde Error Correction – 47 | 0 | 780.9 | N/A | N/A | N/A | N/A | MM/M |
| X Sonde Error Correction – 48 | 0 | −416.4 | N/A | N/A | N/A | N/A | MM/M |
| X Sonde Error Correction – 49 | 0 | 1985 | N/A | N/A | N/A | N/A | MM/M |
| X Sonde Error Correction – 50 | 0 | 139.9 | N/A | N/A | N/A | N/A | MM/M |
| X Sonde Error Correction – 51 | 0 | 784.0 | N/A | N/A | N/A | N/A | MM/M |
| X Sonde Error Correction – 52 | 0 | −98.90 | N/A | N/A | N/A | N/A | MM/M |
| X Sonde Error Correction – 53 | 0 | −19.65 | N/A | N/A | N/A | N/A | MM/M |
| X Sonde Error Correction – 54 | 0 | 1017 | N/A | N/A | N/A | N/A | MM/M |
| X Sonde Error Correction – 55 | 0 | 188.6 | N/A | N/A | N/A | N/A | MM/M |
| X Sonde Error Correction – 56 | 0 | 388.1 | N/A | N/A | N/A | N/A | MM/M |
| X Sonde Error Correction – 57 | 0 | −209.3 | N/A | N/A | N/A | N/A | MM/M |
| X Sonde Error Correction – 58 | 0 | 968.0 | N/A | N/A | N/A | N/A | MM/M |
| X Sonde Error Correction – 59 | 0 | 72.00 | N/A | N/A | N/A | N/A | MM/M |
| X Sonde Error Correction – 60 | 0 | 391.0 | N/A | N/A | N/A | N/A | MM/M |
| X Sonde Error Correction – 61 | 0 | −48.64 | N/A | N/A | N/A | N/A | MM/M |
| X Sonde Error Correction – 62 | 0 | 2.136 | N/A | N/A | N/A | N/A | MM/M |
| X Sonde Error Correction – 63 | 0 | 635.4 | N/A | N/A | N/A | N/A | MM/M |
| X Sonde Error Correction – 64 | 0 | −951.4 | N/A | N/A | N/A | N/A | MM/M |
| X Sonde Error Correction – 65 | 0 | 180.9 | N/A | N/A | N/A | N/A | MM/M |
| X Sonde Error Correction – 66 | 0 | 918.5 | N/A | N/A | N/A | N/A | MM/M |
| X Sonde Error Correction – 67 | 0 | 611.6 | N/A | N/A | N/A | N/A | MM/M |
| X Sonde Error Correction – 68 | 0 | 30.84 | N/A | N/A | N/A | N/A | MM/M |
| X Sonde Error Correction – 69 | 0 | 286.1 | N/A | N/A | N/A | N/A | MM/M |
| X Sonde Error Correction – 70 | 0 | −46.72 | N/A | N/A | N/A | N/A | MM/M |
| X Sonde Error Correction – 71 | 0 | 18.34 | N/A | N/A | N/A | N/A | MM/M |
| X Sonde Error Correction – 72 | 0 | 262.4 | N/A | N/A | N/A | N/A | MM/M |
| X Sonde Error Correction – 73 | 0 | −472.1 | N/A | N/A | N/A | N/A | MM/M |
| X Sonde Error Correction – 74 | 0 | 86.88 | N/A | N/A | N/A | N/A | MM/M |
| X Sonde Error Correction – 75 | 0 | 457.0 | N/A | N/A | N/A | N/A | MM/M |
| X Sonde Error Correction – 76 | 0 | 250.6 | N/A | N/A | N/A | N/A | MM/M |
| X Sonde Error Correction – 77 | 0 | 17.22 | N/A | N/A | N/A | N/A | MM/M |
| X Sonde Error Correction – 78 | 0 | 139.4 | N/A | N/A | N/A | N/A | MM/M |
| X Sonde Error Correction – 79 | 0 | −23.30 | N/A | N/A | N/A | N/A | MM/M |
| X Sonde Error Correction – 80 | 0 | 16.27 | N/A | N/A | N/A | N/A | MM/M |
| X Sonde Error Correction – 81 | 0 | 315.8 | N/A | N/A | N/A | N/A | MM/M |
| X Sonde Error Correction – 82 | 0 | 586.9 | N/A | N/A | N/A | N/A | MM/M |
| X Sonde Error Correction – 83 | 0 | 112.2 | N/A | N/A | N/A | N/A | MM/M |
| X Sonde Error Correction – 84 | 0 | −578.9 | N/A | N/A | N/A | N/A | MM/M |
| X Sonde Error Correction – 85 | 0 | 295.3 | N/A | N/A | N/A | N/A | MM/M |
| X Sonde Error Correction – 86 | 0 | −83.63 | N/A | N/A | N/A | N/A | MM/M |
| X Sonde Error Correction – 87 | 0 | 7.633 | N/A | N/A | N/A | N/A | MM/M |
| X Sonde Error Correction – 88 | 0 | −185.6 | N/A | N/A | N/A | N/A | MM/M |
| X Sonde Error Correction – 89 | 0 | 20.93 | N/A | N/A | N/A | N/A | MM/M |
| X Sonde Error Correction – 90 | 0 | 84.33 | N/A | N/A | N/A | N/A | MM/M |
| X Sonde Error Correction – 91 | 0 | 298.5 | N/A | N/A | N/A | N/A | MM/M |
| X Sonde Error Correction – 92 | 0 | 55.94 | N/A | N/A | N/A | N/A | MM/M |
| X Sonde Error Correction – 93 | 0 | −297.9 | N/A | N/A | N/A | N/A | MM/M |
| X Sonde Error Correction – 94 | 0 | 74.61 | N/A | N/A | N/A | N/A | MM/M |
| X Sonde Error Correction – 95 | 0 | −40.80 | N/A | N/A | N/A | N/A | MM/M |
| X Sonde Error Correction – 96 | 0 | 3.809 | N/A | N/A | N/A | N/A | MM/M |
| X Sonde Error Correction – 97 | 0 | −91.97 | N/A | N/A | N/A | N/A | MM/M |
| X Sonde Error Correction – 98 | 0 | 14.05 | N/A | N/A | N/A | N/A | MM/M |
| X Sonde Error Correction – 99 | 0 | 152.7 | N/A | N/A | N/A | N/A | MM/M |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| X Sonde Error Correction – 100 | 0 | –416.8 | N/A | N/A | N/A | N/A | MM/M |
| X Sonde Error Correction – 101 | 0 | –42.07 | N/A | N/A | N/A | N/A | MM/M |
| X Sonde Error Correction – 102 | 0 | 450.4 | N/A | N/A | N/A | N/A | MM/M |
| X Sonde Error Correction – 103 | 0 | 156.3 | N/A | N/A | N/A | N/A | MM/M |
| X Sonde Error Correction – 104 | 0 | –17.73 | N/A | N/A | N/A | N/A | MM/M |
| X Sonde Error Correction – 105 | 0 | –3.397 | N/A | N/A | N/A | N/A | MM/M |
| X Sonde Error Correction – 106 | 0 | 24.17 | N/A | N/A | N/A | N/A | MM/M |
| X Sonde Error Correction – 107 | 0 | 55.88 | N/A | N/A | N/A | N/A | MM/M |
| X Sonde Error Correction – 108 | 0 | 126.8 | N/A | N/A | N/A | N/A | MM/M |
| X Sonde Error Correction – 109 | 0 | –220.5 | N/A | N/A | N/A | N/A | MM/M |
| X Sonde Error Correction – 110 | 0 | –21.33 | N/A | N/A | N/A | N/A | MM/M |
| X Sonde Error Correction – 111 | 0 | 234.5 | N/A | N/A | N/A | N/A | MM/M |
| X Sonde Error Correction – 112 | 0 | 128.4 | N/A | N/A | N/A | N/A | MM/M |
| X Sonde Error Correction – 113 | 0 | –4.797 | N/A | N/A | N/A | N/A | MM/M |
| X Sonde Error Correction – 114 | 0 | –1.614 | N/A | N/A | N/A | N/A | MM/M |
| X Sonde Error Correction – 115 | 0 | 14.76 | N/A | N/A | N/A | N/A | MM/M |
| X Sonde Error Correction – 116 | 0 | 8.951 | N/A | N/A | N/A | N/A | MM/M |

High resolution Integrated Logging Tool–DTS Wellsite Calibration – Stab Measurement Summary
Before: 10–Feb–2007 15:02

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| BS Window Ratio | 0.7349 | N/A | 0.7374 | N/A | N/A | N/A | |
| BS Window Sum | 9792 | N/A | 9820 | N/A | N/A | N/A | CPS |
| SS Window Ratio | 0.4651 | N/A | 0.4690 | N/A | N/A | N/A | |
| SS Window Sum | 9029 | N/A | 9013 | N/A | N/A | N/A | CPS |
| LS Window Ratio | 0.2965 | N/A | 0.2934 | N/A | N/A | N/A | |
| LS Window Sum | 1124 | N/A | 1116 | N/A | N/A | N/A | CPS |

High resolution Integrated Logging Tool–DTS Wellsite Calibration – Photo–multiplier High Voltages Calibrations
Before: 10–Feb–2007 15:02

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| BS PM High Voltage (Command) | 1609 | N/A | 1640 | N/A | N/A | N/A | V |
| SS PM High Voltage (Command) | 1801 | N/A | 1801 | N/A | N/A | N/A | V |
| LS PM High Voltage (Command) | 2044 | N/A | 2044 | N/A | N/A | N/A | V |

High resolution Integrated Logging Tool–DTS Wellsite Calibration – Crystal Quality Resolutions Calibration
Before: 10–Feb–2007 15:02

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| BS Crystal Resolution | 11.86 | N/A | 11.90 | N/A | N/A | N/A | % |
| SS Crystal Resolution | 11.06 | N/A | 11.10 | N/A | N/A | N/A | % |
| LS Crystal Resolution | 10.33 | N/A | 10.44 | N/A | N/A | N/A | % |

High resolution Integrated Logging Tool–DTS Wellsite Calibration – MCFL Calibration
Before: 10–Feb–2007 15:09

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Raw B0 Resistivity | 3875 | N/A | 3880 | 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 | 3834 | N/A | N/A | N/A | OHMM |

High resolution Integrated Logging Tool–DTS Wellsite Calibration – HILT Caliper Calibration
Before: 10–Feb–2007 15:00

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| HILT Caliper Zero Measurement | 8.000 | N/A | 7.114 | N/A | N/A | N/A | IN |
| HILT Caliper Plus Measurement | 12.00 | N/A | 11.30 | N/A | N/A | N/A | IN |

High resolution Integrated Logging Tool–DTS Wellsite Calibration – Detector Calibration
Before: 10–Feb–2007 15:03

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Gamma Ray Background | 30.00 | N/A | 21.37 | N/A | N/A | N/A | GAPI |
| Gamma Ray (Jig – Bkg) | 167.2 | N/A | 167.2 | N/A | N/A | 15.20 | GAPI |
| Gamma Ray (Calibrated) | 153.5 | N/A | 153.5 | N/A | N/A | 15.00 | GAPI |

High resolution Integrated Logging Tool–DTS Wellsite Calibration – Zero Measurement
Master: 22–Jan–2007 16:01 Before: 10–Feb–2007 15:01

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| CNTC Background | 29.72 | 29.72 | 30.01 | N/A | N/A | 4.458 | CPS |
| CFTC Background | 28.66 | 28.66 | 30.65 | N/A | N/A | 4.299 | CPS |

High resolution Integrated Logging Tool–DTS Wellsite Calibration – Ratio Measurement
Master: 22–Jan–2007 16:01

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Thermal Near Corr. (Tank) | 5800 | 5739 | N/A | N/A | N/A | N/A | CPS |
| Thermal Far Corr. (Tank) | 2400 | 2396 | N/A | N/A | N/A | N/A | CPS |
| CNTC/CFTC (Tank) | 2.159 | 2.396 | N/A | N/A | N/A | N/A | |

High resolution Integrated Logging Tool–DTS Wellsite Calibration – Accelerometer Calibration
Before: 14–Feb–2007 7:52

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Z–Axis Acceleration | 32.19 | N/A | 32.25 | N/A | N/A | N/A | F/S2 |

High resolution Integrated Logging Tool–DTS Master Calibration – Inversion results
Master: 22–Jan–2007 21:16

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Rho Aluminum | 2.596 | 2.596 | –– | –– | –– | –– | G/C3 |
| Rho Magnesium | 1.686 | 1.689 | –– | –– | –– | –– | G/C3 |
| Pe Aluminum | 2.570 | 2.568 | –– | –– | –– | –– | |
| Pe Magnesium | 2.650 | 2.611 | –– | –– | –– | –– | |

High resolution Integrated Logging Tool–DTS Master Calibration – Deviation Summary
Master: 22–Jan–2007 21:16

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| BS Average Deviation | 0 | 0.3577 | –– | –– | –– | –– | % |
| BS Max Deviation | 0 | 0.8287 | –– | –– | –– | –– | % |
| SS Average Deviation | 0 | 0.4003 | –– | –– | –– | –– | % |
| SS Max Deviation | 0 | 0.7964 | –– | –– | –– | –– | % |
| LS Average Deviation | 0 | 0.7110 | –– | –– | –– | –– | % |
| LS Max Deviation | 0 | 1.165 | –– | –– | –– | –– | % |

Electromagnetic Propagation – G Wellsite Calibration – Electronics Calibration
Before: 14–Feb–2007 7:55

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| EATT Electronics | 500.0 | N/A | 503.5 | N/A | N/A | N/A | DB/M |
| TPL Electronics | 11.35 | N/A | 11.33 | N/A | N/A | N/A | NS/M |

General Purpose Inclinometer Wellsite Calibration – CROUZET ACCELEROMETER PROM HAS BEEN READ CORRECTLY
Before: 14–Feb–2007 7:56

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| TEMPERATURE REFERENCE : | N/A | N/A | 68 | N/A | N/A | N/A | DEGF |
| YEAR OF CALIBRATION : | N/A | N/A | 4 | N/A | N/A | N/A | |
| MONTH OF CALIBRATION : | N/A | N/A | 5 | N/A | N/A | N/A | |
| SERIAL NUMBER : | N/A | N/A | 877 | N/A | N/A | N/A | |

General Purpose Inclinometer Wellsite Calibration – CROUZET MAGNETOMETER PROM HAS BEEN READ CORRECTLY
Before: 14–Feb–2007 7:56

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| TEMPERATURE REFERENCE : | N/A | N/A | 66 | N/A | N/A | N/A | DEGF |
| YEAR OF CALIBRATION : | N/A | N/A | 2 | N/A | N/A | N/A | |
| MONTH OF CALIBRATION : | N/A | N/A | 3 | N/A | N/A | N/A | |
| SERIAL NUMBER : | N/A | N/A | 487 | N/A | N/A | N/A | |

The GLS–VJ source activity is acceptable.

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

NCT–B Water Temperature 73.0 DEGF.
Thermal Housing Size 3.375 IN.
NSR–F serial number 2513

3–D Array Induction Tool – ZAIT–B / Equipment Identification

Primary Equipment:

| | | |
|---|---|---|
| Rm/SP Bottom Nose | AHRM – A | |
| 3–D Array Induction Sonde | AXIS – A | 2 |

Auxiliary Equipment:

3–D Array Induction Tool – ZAIT–B Wellsite Calibration
Electronics Calibration Check – Thru Cal Mag. & Phase

| Idx | Phase | Value | Thru Cal Magnitude MM/M | Nominal | Value | Thru Cal Phase DEG | Nominal |
|---|---|---|---|---|---|---|---|
| 0 | Master | 1.345 | | 1.456 | –174.6 | | 0 |
| | Before | 1.353 | | | –167.5 | | |
| 1 | Master | 1.336 | | 1.456 | –170.2 | | 0 |
| | Before | 1.360 | | | –162.6 | | |
| 2 | Master | 1.387 | | 1.456 | –177.4 | | 0 |
| | Before | 1.441 | | | –160.7 | | |
| 3 | Master | 3.071 | | 3.352 | –176.6 | | 0 |
| | Before | 3.094 | | | –169.7 | | |
| 4 | Master | 3.051 | | 3.352 | –172.3 | | 0 |
| | Before | 3.109 | | | –164.8 | | |
| 5 | Master | 3.167 | | 3.352 | –179.4 | | 0 |
| | Before | 3.295 | | | –163.0 | | |
| 6 | Master | 2.477 | | 2.680 | 177.8 | | 0 |
| | Before | 2.496 | | | –175.0 | | |
| 7 | Master | 2.461 | | 2.680 | –177.9 | | 0 |
| | Before | 2.508 | | | –170.2 | | |
| 8 | Master | 2.559 | | 2.680 | 175.0 | | 0 |
| | Before | 2.663 | | | –168.3 | | |
| 9 | Master | 1.623 | | 1.956 | –72.00 | | 0 |
| | Before | 1.651 | | | –67.24 | | |
| 10 | Master | 1.634 | | 1.956 | –60.73 | | 0 |
| | Before | 1.684 | | | –55.93 | | |
| 11 | Master | 1.796 | | 1.956 | –72.15 | | 0 |
| | Before | 1.880 | | | –60.62 | | |
| 12 | Master | 3.239 | | 3.537 | –174.8 | | 0 |
| | Before | 3.260 | | | –167.6 | | |
| 13 | Master | 3.221 | | 3.537 | –170.5 | | 0 |
| | Before | 3.279 | | | –162.9 | | |
| 14 | Master | 3.346 | | 3.537 | –177.6 | | 0 |
| | Before | 3.477 | | | –161.0 | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| 15 | Master | 2.606 | 3.100 | −72.38 | | 0 |
| | Before | 2.652 | | −67.60 | | |
| 16 | Master | 2.624 | 3.100 | −61.11 | | 0 |
| | Before | 2.704 | | −56.30 | | |
| 17 | Master | 2.884 | 3.100 | −72.56 | | 0 |
| | Before | 3.019 | | −61.03 | | |
| 18 | Master | 0.8449 | 0.9359 | −174.3 | | 0 |
| | Before | 0.8511 | | −167.1 | | |
| 19 | Master | 0.8402 | 0.9359 | −170.0 | | 0 |
| | Before | 0.8561 | | −162.4 | | |
| 20 | Master | 0.8631 | 0.9359 | −177.4 | | 0 |
| | Before | 0.8988 | | −160.7 | | |
| 21 | Master | 3.452 | 4.081 | −72.91 | | 0 |
| | Before | 3.513 | | −68.14 | | |
| 22 | Master | 3.476 | 4.081 | −61.64 | | 0 |
| | Before | 3.582 | | −56.85 | | |
| 23 | Master | 3.821 | 4.081 | −73.08 | | 0 |
| | Before | 4.000 | | −61.54 | | |
| 24 | Master | 1.224 | 1.362 | −177.2 | | 0 |
| | Before | 1.234 | | −170.2 | | |
| 25 | Master | 1.217 | 1.362 | −172.9 | | 0 |
| | Before | 1.241 | | −165.4 | | |
| 26 | Master | 1.250 | 1.362 | 179.7 | | 0 |
| | Before | 1.303 | | −163.7 | | |
| 27 | Master | 3.452 | 4.081 | −72.91 | | 0 |
| | Before | 3.513 | | −68.13 | | |
| 28 | Master | 3.476 | 4.081 | −61.64 | | 0 |
| | Before | 3.582 | | −56.84 | | |
| 29 | Master | 3.821 | 4.081 | −73.11 | | 0 |
| | Before | 3.999 | | −61.57 | | |
| 30 | Master | 1.223 | 1.362 | −177.2 | | 0 |
| | Before | 1.233 | | −170.2 | | |
| 31 | Master | 1.216 | 1.362 | −172.9 | | 0 |
| | Before | 1.241 | | −165.4 | | |
| 32 | Master | 1.250 | 1.362 | 179.7 | | 0 |
| | Before | 1.302 | | −163.7 | | |
| 33 | Master | 0.9808 | 1.220 | −76.79 | | 0 |
| | Before | 0.9991 | | −71.95 | | |
| 34 | Master | 0.9876 | 1.220 | −65.38 | | 0 |
| | Before | 1.018 | | −60.53 | | |
| 35 | Master | 1.071 | 1.220 | −77.45 | | 0 |
| | Before | 1.123 | | −65.80 | | |
| 36 | Master | 1.447 | 1.635 | 176.7 | | 0 |
| | Before | 1.459 | | −176.1 | | |
| 37 | Master | 1.439 | 1.635 | −179.0 | | 0 |
| | Before | 1.468 | | −171.3 | | |
| 38 | Master | 1.474 | 1.635 | 173.6 | | 0 |
| | Before | 1.538 | | −169.7 | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| 39 | Master | 1.178 | 1.464 | −76.61 | | 0 |
| | Before | 1.200 | | −71.77 | | |
| 40 | Master | 1.186 | 1.464 | −65.22 | | 0 |
| | Before | 1.223 | | −60.37 | | |
| 41 | Master | 1.286 | 1.464 | −77.31 | | 0 |
| | Before | 1.348 | | −65.65 | | |
| 42 | Master | 2.090 | 2.353 | 177.4 | | 0 |
| | Before | 2.109 | | −175.4 | | |
| 43 | Master | 2.079 | 2.353 | −178.3 | | 0 |
| | Before | 2.121 | | −170.6 | | |
| 44 | Master | 2.129 | 2.353 | 174.2 | | 0 |
| | Before | 2.221 | | −169.0 | | |
| | | 60.00 % (Minimum) (Nominal) 140.0 % (Maximum) | | Nom −180.0 (Minimum) (Nominal) Nom + 180.0 (Maximum) | | |

Master: 29−Jan−2007 15:32 Before: 14−Feb−2007 7:52

3−D Array Induction Tool − ZAIT−B Wellsite Calibration

Electronics Calibration Check − Auxilliary

| Phase | Array Induction SPA Plus V | Value | Phase | Array Induction SPA Zero V | Value |
|---|---|---|---|---|---|
| Master | | 0.8436 | Master | | −0.0007702 |
| Before | | 0.8438 | Before | | −0.0008165 |
| | 0.7570 (Minimum) 0.8360 (Nominal) 0.9150 (Maximum) | | | −0.05000 (Minimum) 0 (Nominal) 0.05000 (Maximum) | |

| Phase | Array Induction Temperature Plus V | Value | Phase | Array Induction Temperature Zero V | Value |
|---|---|---|---|---|---|
| Master | | 0.9906 | Master | | −0.001124 |
| Before | | 0.9911 | Before | | −0.001144 |
| | 0.8800 (Minimum) 0.9798 (Nominal) 1.076 (Maximum) | | | −0.05000 (Minimum) 0 (Nominal) 0.05000 (Maximum) | |

| Phase | Array Induction CalSig Plus V | Value | Phase | Array Induction CalSig Zero V | Value |
|---|---|---|---|---|---|
| Master | | 5.015 | Master | | −0.01105 |
| Before | | 5.016 | Before | | −0.01124 |
| | 4.500 (Minimum) 5.000 (Nominal) 5.500 (Maximum) | | | −0.05000 (Minimum) 0 (Nominal) 0.05000 (Maximum) | |

| Phase | Array Induction Volt Plus V | Value | Phase | Array Induction Volt Zero V | Value |
|---|---|---|---|---|---|
| Master | | 5.014 | Master | | −0.01105 |
| Before | | 5.016 | Before | | −0.01124 |
| | 4.500 (Minimum) 5.000 (Nominal) 5.500 (Maximum) | | | −0.05000 (Minimum) 0 (Nominal) 0.05000 (Maximum) | |

Master: 29−Jan−2007 15:32 Before: 14−Feb−2007 7:52

3−D Array Induction Tool − ZAIT−B Wellsite Calibration

Sonde Error Correction

| Idx | Value | R Sonde Error Correction MM/M | Value | X Sonde Error Correction MM/M |
|---|---|---|---|---|
| 0 | 20.92 | | 5052 | |
| | | −2105 (Minimum) 351.3 (Nominal) 2808 (Maximum) | | −33300 (Minimum) 0 (Nominal) 33300 (Maximum) |
| 1 | 754.2 | | 8939 | |
| | | −5042 (Minimum) 500.9 (Nominal) 6044 (Maximum) | | −37570 (Minimum) 0 (Nominal) 37570 (Maximum) |
| 2 | −1325 | | −103.9 | |
| | | −2575 (Minimum) −1399 (Nominal) −222.3 (Maximum) | | −2478 (Minimum) 0 (Nominal) 2478 (Maximum) |
| 3 | 33.96 | | 2129 | |
| | | −2398 (Minimum) −112.1 (Nominal) 2174 (Maximum) | | −7332 (Minimum) 0 (Nominal) 7332 (Maximum) |
| 4 | 154.4 | | 830.1 | |
| | | −1421 (Minimum) 124.3 (Nominal) 1670 (Maximum) | | −6457 (Minimum) 0 (Nominal) 6457 (Maximum) |
| 5 | 85.67 | | −295.1 | |
| | | −563.7 (Minimum) 64.70 (Nominal) 693.1 (Maximum) | | −619.1 (Minimum) 0 (Nominal) 619.1 (Maximum) |
| 6 | 63.31 | | 700.2 | |
| | | −2295 (Minimum) −206.4 (Nominal) 1882 (Maximum) | | −5708 (Minimum) 0 (Nominal) 5708 (Maximum) |
| 7 | 148.3 | | 567.0 | |
| | | −1367 (Minimum) 138.2 (Nominal) 1644 (Maximum) | | −2991 (Minimum) 0 (Nominal) 2991 (Maximum) |
| 8 | 90.72 | | −25.51 | |
| | | −811.7 (Minimum) 141.5 (Nominal) 1095 (Maximum) | | −372.1 (Minimum) 0 (Nominal) 372.1 (Maximum) |
| 9 | −492.9 | | −220.7 | |
| | | −3068 (Minimum) −97.15 (Nominal) 2874 (Maximum) | | −4300 (Minimum) 0 (Nominal) 4300 (Maximum) |
| 10 | 18.30 | | −581.3 | |

| | | | | | | |
|---|---|---|---|---|---|---|
| | −798.0 (Minimum) | 1.896 (Nominal) | 801.8 (Maximum) | −12390 (Minimum) | 0 (Nominal) | 12390 (Maximum) |
| 11 | −119.2 | | | 994.5 | | |
| | −770.9 (Minimum) | 23.35 (Nominal) | 817.6 (Maximum) | −4594 (Minimum) | 0 (Nominal) | 4594 (Maximum) |
| 12 | −6.887 | | | 1033 | | |
| | −734.3 (Minimum) | 14.37 (Nominal) | 763.0 (Maximum) | −11510 (Minimum) | 0 (Nominal) | 11510 (Maximum) |
| 13 | −394.3 | | | −632.1 | | |
| | −2770 (Minimum) | −241.5 (Nominal) | 2287 (Maximum) | −2410 (Minimum) | 0 (Nominal) | 2410 (Maximum) |
| 14 | 65.79 | | | 101.5 | | |
| | −570.4 (Minimum) | 31.47 (Nominal) | 633.4 (Maximum) | −4653 (Minimum) | 0 (Nominal) | 4653 (Maximum) |
| 15 | 52.97 | | | −554.7 | | |
| | −2241 (Minimum) | −108.3 (Nominal) | 2024 (Maximum) | −5251 (Minimum) | 0 (Nominal) | 5251 (Maximum) |
| 16 | 87.06 | | | −705.2 | | |
| | −1029 (Minimum) | 43.50 (Nominal) | 1116 (Maximum) | −6660 (Minimum) | 0 (Nominal) | 6660 (Maximum) |
| 17 | −85.69 | | | 221.6 | | |
| | −471.1 (Minimum) | −41.64 (Nominal) | 387.8 (Maximum) | −287.3 (Minimum) | 0 (Nominal) | 287.3 (Maximum) |
| 18 | −264.4 | | | −380.3 | | |
| | −3236 (Minimum) | −34.30 (Nominal) | 3167 (Maximum) | −1971 (Minimum) | 0 (Nominal) | 1971 (Maximum) |
| 19 | 2.997 | | | −278.9 | | |
| | −508.2 (Minimum) | −31.06 (Nominal) | 446.1 (Maximum) | −8843 (Minimum) | 0 (Nominal) | 8843 (Maximum) |
| 20 | −67.21 | | | 485.0 | | |
| | −990.0 (Minimum) | 78.40 (Nominal) | 1147 (Maximum) | −2886 (Minimum) | 0 (Nominal) | 2886 (Maximum) |
| 21 | −2.146 | | | 513.5 | | |
| | −332.1 (Minimum) | 27.84 (Nominal) | 387.8 (Maximum) | −7605 (Minimum) | 0 (Nominal) | 7605 (Maximum) |
| 22 | −171.0 | | | −557.7 | | |
| | −1710 (Minimum) | −171.8 (Nominal) | 1367 (Maximum) | −1006 (Minimum) | 0 (Nominal) | 1006 (Maximum) |
| 23 | 2.315 | | | 48.64 | | |
| | −700.5 (Minimum) | −7.184 (Nominal) | 686.2 (Maximum) | −2778 (Minimum) | 0 (Nominal) | 2778 (Maximum) |
| 24 | 43.68 | | | −300.7 | | |
| | −2238 (Minimum) | −131.8 (Nominal) | 1975 (Maximum) | −4019 (Minimum) | 0 (Nominal) | 4019 (Maximum) |
| 25 | 57.55 | | | −369.9 | | |
| | −888.1 (Minimum) | 60.98 (Nominal) | 1010 (Maximum) | −3802 (Minimum) | 0 (Nominal) | 3802 (Maximum) |
| 26 | −78.64 | | | 74.67 | | |
| | −568.8 (Minimum) | −98.79 (Nominal) | 371.2 (Maximum) | −150.9 (Minimum) | 0 (Nominal) | 150.9 (Maximum) |
| 27 | −324.3 | | | 722.8 | | |
| | −2660 (Minimum) | −247.8 (Nominal) | 2164 (Maximum) | −1619 (Minimum) | 0 (Nominal) | 1619 (Maximum) |
| 28 | 6.777 | | | −93.67 | | |
| | −311.9 (Minimum) | 19.89 (Nominal) | 351.7 (Maximum) | −4748 (Minimum) | 0 (Nominal) | 4748 (Maximum) |
| 29 | −20.82 | | | 251.6 | | |
| | −238.9 (Minimum) | −0.7571 (Nominal) | 237.4 (Maximum) | −1927 (Minimum) | 0 (Nominal) | 1927 (Maximum) |
| 30 | 11.65 | | | −837.1 | | |
| | −263.8 (Minimum) | −8.173 (Nominal) | 247.5 (Maximum) | −3768 (Minimum) | 0 (Nominal) | 3768 (Maximum) |
| 31 | −333.3 | | | 829.5 | | |
| | −1851 (Minimum) | −192.8 (Nominal) | 1465 (Maximum) | −1400 (Minimum) | 0 (Nominal) | 1400 (Maximum) |
| 32 | 48.80 | | | 442.1 | | |
| | −186.8 (Minimum) | 22.62 (Nominal) | 232.0 (Maximum) | −1526 (Minimum) | 0 (Nominal) | 1526 (Maximum) |
| 33 | 5.421 | | | −174.6 | | |
| | −1101 (Minimum) | 55.12 (Nominal) | 1211 (Maximum) | −3024 (Minimum) | 0 (Nominal) | 3024 (Maximum) |
| 34 | −1.054 | | | −100.0 | | |
| | −186.5 (Minimum) | −4.793 (Nominal) | 176.9 (Maximum) | −2838 (Minimum) | 0 (Nominal) | 2838 (Maximum) |
| 35 | 124.1 | | | −78.95 | | |
| | −462.5 (Minimum) | 63.86 (Nominal) | 590.2 (Maximum) | −107.3 (Minimum) | 0 (Nominal) | 107.3 (Maximum) |
| 36 | −319.1 | | | 421.2 | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | −1876 (Minimum) | −385.5 (Nominal) | 1105 (Maximum) | | −902.5 (Minimum) | 0 (Nominal) | 902.5 (Maximum) | |
| 37 | 6.994 | | | | −48.20 | | | |
| | −239.6 (Minimum) | 19.09 (Nominal) | 277.8 (Maximum) | | −4148 (Minimum) | 0 (Nominal) | 4148 (Maximum) | |
| 38 | 0.5654 | | | | 122.2 | | | |
| | −95.40 (Minimum) | 8.103 (Nominal) | 111.7 (Maximum) | | −1441 (Minimum) | 0 (Nominal) | 1441 (Maximum) | |
| 39 | 1.085 | | | | −417.3 | | | |
| | −232.3 (Minimum) | −11.60 (Nominal) | 209.1 (Maximum) | | −3221 (Minimum) | 0 (Nominal) | 3221 (Maximum) | |
| 40 | −323.3 | | | | 470.6 | | | |
| | −840.1 (Minimum) | −332.1 (Nominal) | 175.8 (Maximum) | | −790.7 (Minimum) | 0 (Nominal) | 790.7 (Maximum) | |
| 41 | 15.87 | | | | 227.7 | | | |
| | −30.50 (Minimum) | 11.77 (Nominal) | 54.00 (Maximum) | | −881.0 (Minimum) | 0 (Nominal) | 881.0 (Maximum) | |
| 42 | −0.8276 | | | | −78.56 | | | |
| | −1086 (Minimum) | 50.67 (Nominal) | 1188 (Maximum) | | −1840 (Minimum) | 0 (Nominal) | 1840 (Maximum) | |
| 43 | 0.7432 | | | | −45.15 | | | |
| | −199.6 (Minimum) | −7.273 (Nominal) | 185.1 (Maximum) | | −1624 (Minimum) | 0 (Nominal) | 1624 (Maximum) | |
| 44 | 47.85 | | | | −9.689 | | | |
| | −1.100 (Minimum) | 46.99 (Nominal) | 95.10 (Maximum) | | −91.40 (Minimum) | 0 (Nominal) | 91.40 (Maximum) | |
| 45 | −15.48 | | | | 2082 | | | |
| | −173.4 (Minimum) | 2.034 (Nominal) | 177.5 (Maximum) | | −2138 (Minimum) | 0 (Nominal) | 2138 (Maximum) | |
| 46 | −9.021 | | | | 368.4 | | | |
| | −374.2 (Minimum) | −10.87 (Nominal) | 352.5 (Maximum) | | −2357 (Minimum) | 0 (Nominal) | 2357 (Maximum) | |
| 47 | −31.66 | | | | 780.9 | | | |
| | −183.8 (Minimum) | −15.64 (Nominal) | 152.5 (Maximum) | | −986.0 (Minimum) | 0 (Nominal) | 986.0 (Maximum) | |
| 48 | 11.94 | | | | −416.4 | | | |
| | −261.9 (Minimum) | 2.156 (Nominal) | 266.2 (Maximum) | | −2252 (Minimum) | 0 (Nominal) | 2252 (Maximum) | |
| 49 | −17.19 | | | | 1985 | | | |
| | −178.2 (Minimum) | −0.6614 (Nominal) | 176.9 (Maximum) | | −2148 (Minimum) | 0 (Nominal) | 2148 (Maximum) | |
| 50 | 18.09 | | | | 139.9 | | | |
| | −65.70 (Minimum) | 8.816 (Nominal) | 83.30 (Maximum) | | −626.5 (Minimum) | 0 (Nominal) | 626.5 (Maximum) | |
| 51 | 5.572 | | | | 784.0 | | | |
| | −166.5 (Minimum) | 2.130 (Nominal) | 170.8 (Maximum) | | −1981 (Minimum) | 0 (Nominal) | 1981 (Maximum) | |
| 52 | 8.875 | | | | −98.90 | | | |
| | −52.80 (Minimum) | 3.754 (Nominal) | 60.30 (Maximum) | | −1243 (Minimum) | 0 (Nominal) | 1243 (Maximum) | |
| 53 | 59.44 | | | | −19.65 | | | |
| | −235.6 (Minimum) | 32.53 (Nominal) | 300.6 (Maximum) | | −41.10 (Minimum) | 0 (Nominal) | 41.10 (Maximum) | |
| 54 | −2.308 | | | | 1017 | | | |
| | −95.30 (Minimum) | −9.750 (Nominal) | 75.80 (Maximum) | | −1088 (Minimum) | 0 (Nominal) | 1088 (Maximum) | |
| 55 | −1.336 | | | | 188.6 | | | |
| | −134.6 (Minimum) | −5.565 (Nominal) | 123.5 (Maximum) | | −1366 (Minimum) | 0 (Nominal) | 1366 (Maximum) | |
| 56 | −1.396 | | | | 388.1 | | | |
| | −27.40 (Minimum) | −6.454 (Nominal) | 14.50 (Maximum) | | −540.6 (Minimum) | 0 (Nominal) | 540.6 (Maximum) | |
| 57 | 0.9340 | | | | −209.3 | | | |
| | −137.9 (Minimum) | −0.5576 (Nominal) | 136.8 (Maximum) | | −1274 (Minimum) | 0 (Nominal) | 1274 (Maximum) | |
| 58 | 1.078 | | | | 968.0 | | | |
| | −78.10 (Minimum) | −9.827 (Nominal) | 58.50 (Maximum) | | −1071 (Minimum) | 0 (Nominal) | 1071 (Maximum) | |
| 59 | 6.561 | | | | 72.00 | | | |
| | −18.10 (Minimum) | 5.923 (Nominal) | 29.90 (Maximum) | | −340.7 (Minimum) | 0 (Nominal) | 340.7 (Maximum) | |
| 60 | 4.802 | | | | 391.0 | | | |
| | −65.40 (Minimum) | 0.3248 (Nominal) | 66.00 (Maximum) | | −1250 (Minimum) | 0 (Nominal) | 1250 (Maximum) | |
| 61 | 5.034 | | | | −48.64 | | | |
| | −32.10 (Minimum) | 3.359 (Nominal) | 38.80 (Maximum) | | −691.8 (Minimum) | 0 (Nominal) | 691.8 (Maximum) | |
| 62 | 26.23 | | | | 2.136 | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | −9.800 (Minimum) | 27.57 (Nominal) | 64.90 (Maximum) | −32.90 (Minimum) | 0 (Nominal) | 32.90 (Maximum) |
| 63 | −2.579 | | | 635.4 | | |
| | −56.30 (Minimum) | 0.6343 (Nominal) | 57.60 (Maximum) | −770.3 (Minimum) | 0 (Nominal) | 770.3 (Maximum) |
| 64 | 29.50 | | | −951.4 | | |
| | −86.20 (Minimum) | −0.04571 (Nominal) | 86.10 (Maximum) | −1478 (Minimum) | 0 (Nominal) | 1478 (Maximum) |
| 65 | −15.76 | | | 180.9 | | |
| | −51.90 (Minimum) | −4.624 (Nominal) | 42.60 (Maximum) | −621.1 (Minimum) | 0 (Nominal) | 621.1 (Maximum) |
| 66 | −19.63 | | | 918.5 | | |
| | −171.8 (Minimum) | −2.056 (Nominal) | 167.7 (Maximum) | −1581 (Minimum) | 0 (Nominal) | 1581 (Maximum) |
| 67 | −0.2565 | | | 611.6 | | |
| | −45.00 (Minimum) | 0.1900 (Nominal) | 45.40 (Maximum) | −751.4 (Minimum) | 0 (Nominal) | 751.4 (Maximum) |
| 68 | 3.726 | | | 30.84 | | |
| | −42.10 (Minimum) | 3.956 (Nominal) | 50.00 (Maximum) | −476.3 (Minimum) | 0 (Nominal) | 476.3 (Maximum) |
| 69 | −6.196 | | | 286.1 | | |
| | −27.40 (Minimum) | 0.6414 (Nominal) | 28.70 (Maximum) | −517.0 (Minimum) | 0 (Nominal) | 517.0 (Maximum) |
| 70 | −0.5899 | | | −46.72 | | |
| | −42.00 (Minimum) | 3.171 (Nominal) | 48.30 (Maximum) | −935.7 (Minimum) | 0 (Nominal) | 935.7 (Maximum) |
| 71 | 22.25 | | | 18.34 | | |
| | −87.80 (Minimum) | 11.76 (Nominal) | 111.3 (Maximum) | −62.10 (Minimum) | 0 (Nominal) | 62.10 (Maximum) |
| 72 | 0.3745 | | | 262.4 | | |
| | −24.60 (Minimum) | −2.297 (Nominal) | 20.00 (Maximum) | −375.5 (Minimum) | 0 (Nominal) | 375.5 (Maximum) |
| 73 | 1.286 | | | −472.1 | | |
| | −57.60 (Minimum) | 2.100 (Nominal) | 61.80 (Maximum) | −1185 (Minimum) | 0 (Nominal) | 1185 (Maximum) |
| 74 | −1.035 | | | 86.88 | | |
| | −12.70 (Minimum) | −1.704 (Nominal) | 9.300 (Maximum) | −356.7 (Minimum) | 0 (Nominal) | 356.7 (Maximum) |
| 75 | −1.570 | | | 457.0 | | |
| | −78.00 (Minimum) | −3.031 (Nominal) | 71.90 (Maximum) | −1247 (Minimum) | 0 (Nominal) | 1247 (Maximum) |
| 76 | 2.299 | | | 250.6 | | |
| | −16.10 (Minimum) | −1.311 (Nominal) | 13.50 (Maximum) | −374.3 (Minimum) | 0 (Nominal) | 374.3 (Maximum) |
| 77 | 1.771 | | | 17.22 | | |
| | −12.80 (Minimum) | 2.693 (Nominal) | 18.20 (Maximum) | −321.8 (Minimum) | 0 (Nominal) | 321.8 (Maximum) |
| 78 | 0.7233 | | | 139.4 | | |
| | −11.50 (Minimum) | 1.215 (Nominal) | 13.90 (Maximum) | −333.1 (Minimum) | 0 (Nominal) | 333.1 (Maximum) |
| 79 | 0.7604 | | | −23.30 | | |
| | −13.40 (Minimum) | 3.431 (Nominal) | 20.30 (Maximum) | −581.6 (Minimum) | 0 (Nominal) | 581.6 (Maximum) |
| 80 | 10.68 | | | 16.27 | | |
| | −16.30 (Minimum) | 11.00 (Nominal) | 38.30 (Maximum) | −39.20 (Minimum) | 0 (Nominal) | 39.20 (Maximum) |
| 81 | −15.45 | | | 315.8 | | |
| | −67.80 (Minimum) | −6.064 (Nominal) | 55.70 (Maximum) | −330.3 (Minimum) | 0 (Nominal) | 330.3 (Maximum) |
| 82 | −8.384 | | | 586.9 | | |
| | −75.70 (Minimum) | 0.09571 (Nominal) | 75.90 (Maximum) | −805.0 (Minimum) | 0 (Nominal) | 805.0 (Maximum) |
| 83 | −11.00 | | | 112.2 | | |
| | −42.90 (Minimum) | −3.401 (Nominal) | 36.10 (Maximum) | −191.7 (Minimum) | 0 (Nominal) | 191.7 (Maximum) |
| 84 | 13.94 | | | −578.9 | | |
| | −56.30 (Minimum) | 0.3271 (Nominal) | 57.00 (Maximum) | −782.3 (Minimum) | 0 (Nominal) | 782.3 (Maximum) |
| 85 | −15.01 | | | 295.3 | | |
| | −56.50 (Minimum) | −5.537 (Nominal) | 45.40 (Maximum) | −319.1 (Minimum) | 0 (Nominal) | 319.1 (Maximum) |
| 86 | 4.540 | | | −83.63 | | |
| | −16.30 (Minimum) | 0.7314 (Nominal) | 17.80 (Maximum) | −149.5 (Minimum) | 0 (Nominal) | 149.5 (Maximum) |
| 87 | −0.8786 | | | 7.633 | | |
| | −7.600 (Minimum) | −0.1829 (Nominal) | 7.200 (Maximum) | −242.5 (Minimum) | 0 (Nominal) | 242.5 (Maximum) |
| 88 | 2.126 | | | −185.6 | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | −10.50 (Minimum) | 0.3700 (Nominal) | 11.30 (Maximum) | | −214.9 (Minimum) | 0 (Nominal) | 214.9 (Maximum) | |
| 89 | 3.597 | | | | 20.93 | | | |
| | −26.20 (Minimum) | 2.383 (Nominal) | 30.90 (Maximum) | | −116.1 (Minimum) | 0 (Nominal) | 116.1 (Maximum) | |
| 90 | −12.18 | | | | 84.33 | | | |
| | −30.60 (Minimum) | −9.587 (Nominal) | 11.50 (Maximum) | | −105.7 (Minimum) | 0 (Nominal) | 105.7 (Maximum) | |
| 91 | −2.645 | | | | 298.5 | | | |
| | −38.50 (Minimum) | −1.329 (Nominal) | 35.80 (Maximum) | | −471.2 (Minimum) | 0 (Nominal) | 471.2 (Maximum) | |
| 92 | −1.279 | | | | 55.94 | | | |
| | −17.00 (Minimum) | −2.254 (Nominal) | 12.50 (Maximum) | | −118.0 (Minimum) | 0 (Nominal) | 118.0 (Maximum) | |
| 93 | 2.192 | | | | −297.9 | | | |
| | −27.10 (Minimum) | 1.459 (Nominal) | 30.00 (Maximum) | | −441.4 (Minimum) | 0 (Nominal) | 441.4 (Maximum) | |
| 94 | −10.83 | | | | 74.61 | | | |
| | −28.40 (Minimum) | −9.228 (Nominal) | 10.00 (Maximum) | | −100.3 (Minimum) | 0 (Nominal) | 100.3 (Maximum) | |
| 95 | 1.041 | | | | −40.80 | | | |
| | −11.80 (Minimum) | 1.184 (Nominal) | 14.20 (Maximum) | | −100.9 (Minimum) | 0 (Nominal) | 100.9 (Maximum) | |
| 96 | 0.9281 | | | | 3.809 | | | |
| | −4.600 (Minimum) | 0.5421 (Nominal) | 5.700 (Maximum) | | −141.1 (Minimum) | 0 (Nominal) | 141.1 (Maximum) | |
| 97 | 0.2935 | | | | −91.97 | | | |
| | −6.400 (Minimum) | 0.8419 (Nominal) | 8.100 (Maximum) | | −179.1 (Minimum) | 0 (Nominal) | 179.1 (Maximum) | |
| 98 | 3.097 | | | | 14.05 | | | |
| | −29.10 (Minimum) | 3.875 (Nominal) | 36.80 (Maximum) | | −42.70 (Minimum) | 0 (Nominal) | 42.70 (Maximum) | |
| 99 | −41.39 | | | | 152.7 | | | |
| | −208.6 (Minimum) | −22.42 (Nominal) | 163.7 (Maximum) | | −228.8 (Minimum) | 0 (Nominal) | 228.8 (Maximum) | |
| 100 | 15.87 | | | | −416.8 | | | |
| | −110.1 (Minimum) | 6.030 (Nominal) | 122.1 (Maximum) | | −941.8 (Minimum) | 0 (Nominal) | 941.8 (Maximum) | |
| 101 | −6.421 | | | | −42.07 | | | |
| | −40.50 (Minimum) | −1.784 (Nominal) | 36.90 (Maximum) | | −177.8 (Minimum) | 0 (Nominal) | 177.8 (Maximum) | |
| 102 | −11.33 | | | | 450.4 | | | |
| | −218.8 (Minimum) | −8.666 (Nominal) | 201.5 (Maximum) | | −932.5 (Minimum) | 0 (Nominal) | 932.5 (Maximum) | |
| 103 | −45.67 | | | | 156.3 | | | |
| | −201.5 (Minimum) | −21.74 (Nominal) | 158.0 (Maximum) | | −189.7 (Minimum) | 0 (Nominal) | 189.7 (Maximum) | |
| 104 | −0.1936 | | | | −17.73 | | | |
| | −20.20 (Minimum) | 0.1186 (Nominal) | 20.50 (Maximum) | | −173.1 (Minimum) | 0 (Nominal) | 173.1 (Maximum) | |
| 105 | 1.150 | | | | −3.397 | | | |
| | −13.60 (Minimum) | 1.554 (Nominal) | 16.70 (Maximum) | | −123.5 (Minimum) | 0 (Nominal) | 123.5 (Maximum) | |
| 106 | −1.690 | | | | 24.17 | | | |
| | −6.300 (Minimum) | 0.1929 (Nominal) | 6.600 (Maximum) | | −93.30 (Minimum) | 0 (Nominal) | 93.30 (Maximum) | |
| 107 | −2.731 | | | | 55.88 | | | |
| | −19.70 (Minimum) | −1.369 (Nominal) | 17.00 (Maximum) | | −145.3 (Minimum) | 0 (Nominal) | 145.3 (Maximum) | |
| 108 | −40.59 | | | | 126.8 | | | |
| | −61.80 (Minimum) | −39.44 (Nominal) | −17.10 (Maximum) | | −174.6 (Minimum) | 0 (Nominal) | 174.6 (Maximum) | |
| 109 | 3.576 | | | | −220.5 | | | |
| | −28.80 (Minimum) | 2.697 (Nominal) | 34.20 (Maximum) | | −490.4 (Minimum) | 0 (Nominal) | 490.4 (Maximum) | |
| 110 | −0.6722 | | | | −21.33 | | | |
| | −11.70 (Minimum) | −1.231 (Nominal) | 9.200 (Maximum) | | −104.4 (Minimum) | 0 (Nominal) | 104.4 (Maximum) | |
| 111 | −3.843 | | | | 234.5 | | | |
| | −57.50 (Minimum) | −3.492 (Nominal) | 50.50 (Maximum) | | −491.5 (Minimum) | 0 (Nominal) | 491.5 (Maximum) | |
| 112 | −42.31 | | | | 128.4 | | | |
| | −67.40 (Minimum) | −39.27 (Nominal) | −11.10 (Maximum) | | −150.1 (Minimum) | 0 (Nominal) | 150.1 (Maximum) | |
| 113 | −0.1958 | | | | −4.797 | | | |
| | −10.40 (Minimum) | 0.8598 (Nominal) | 12.10 (Maximum) | | −103.3 (Minimum) | 0 (Nominal) | 103.3 (Maximum) | |
| 114 | 1.999 | | | | −1.614 | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | −3.100 (Minimum) | 2.525 (Nominal) | 8.100 (Maximum) | | −66.30 (Minimum) | 0 (Nominal) | 66.30 (Maximum) |
| 115 | −0.4481 | | | | 14.76 | | | |
| | | −3.200 (Minimum) | 0.4010 (Nominal) | 4.000 (Maximum) | | −66.00 (Minimum) | 0 (Nominal) | 66.00 (Maximum) |
| 116 | 2.266 | | | | 8.951 | | | |
| | | −27.70 (Minimum) | 1.505 (Nominal) | 30.70 (Maximum) | | −57.80 (Minimum) | 0 (Nominal) | 57.80 (Maximum) |

Master: 29−Jan−2007 15:32

3−D Array Induction Tool − ZAIT−B Master Calibration

Electronics Calibration Check − Thru Cal Mag. & Phase

| Idx | Phase | Value | Thru Cal Magnitude MM/M | Nominal | Value | Thru Cal Phase DEG | Nominal |
|---|---|---|---|---|---|---|---|
| 0 | Master | 1.345 | | 1.456 | −174.6 | | 0 |
| 1 | Master | 1.336 | | 1.456 | −170.2 | | 0 |
| 2 | Master | 1.387 | | 1.456 | −177.4 | | 0 |
| 3 | Master | 3.071 | | 3.352 | −176.6 | | 0 |
| 4 | Master | 3.051 | | 3.352 | −172.3 | | 0 |
| 5 | Master | 3.167 | | 3.352 | −179.4 | | 0 |
| 6 | Master | 2.477 | | 2.680 | 177.8 | | 0 |
| 7 | Master | 2.461 | | 2.680 | −177.9 | | 0 |
| 8 | Master | 2.559 | | 2.680 | 175.0 | | 0 |
| 9 | Master | 1.623 | | 1.956 | −72.00 | | 0 |
| 10 | Master | 1.634 | | 1.956 | −60.73 | | 0 |
| 11 | Master | 1.796 | | 1.956 | −72.15 | | 0 |
| 12 | Master | 3.239 | | 3.537 | −174.8 | | 0 |
| 13 | Master | 3.221 | | 3.537 | −170.5 | | 0 |
| 14 | Master | 3.346 | | 3.537 | −177.6 | | 0 |
| 15 | Master | 2.606 | | 3.100 | −72.38 | | 0 |
| 16 | Master | 2.624 | | 3.100 | −61.11 | | 0 |
| 17 | Master | 2.884 | | 3.100 | −72.56 | | 0 |
| 18 | Master | 0.8449 | | 0.9359 | −174.3 | | 0 |
| 19 | Master | 0.8402 | | 0.9359 | −170.0 | | 0 |
| 20 | Master | 0.8631 | | 0.9359 | −177.4 | | 0 |
| 21 | Master | 3.452 | | 4.081 | −72.91 | | 0 |
| 22 | Master | 3.476 | | 4.081 | −61.64 | | 0 |
| 23 | Master | 3.821 | | 4.081 | −73.08 | | 0 |
| 24 | Master | 1.224 | | 1.362 | −177.2 | | 0 |
| 25 | Master | 1.217 | | 1.362 | −172.9 | | 0 |
| 26 | Master | 1.250 | | 1.362 | 179.7 | | 0 |
| 27 | Master | 3.452 | | 4.081 | −72.91 | | 0 |
| 28 | Master | 3.476 | | 4.081 | −61.64 | | 0 |
| 29 | Master | 3.821 | | 4.081 | −73.11 | | 0 |
| 30 | Master | 1.223 | | 1.362 | −177.2 | | 0 |
| 31 | Master | 1.216 | | 1.362 | −172.9 | | 0 |
| 32 | Master | 1.250 | | 1.362 | 179.7 | | 0 |
| 33 | Master | 0.9808 | | 1.220 | −76.79 | | 0 |
| 34 | Master | 0.9876 | | 1.220 | −65.38 | | 0 |
| 35 | Master | 1.071 | | 1.220 | −77.45 | | 0 |
| 36 | Master | 1.447 | | 1.635 | 176.7 | | 0 |
| 37 | Master | 1.439 | | 1.635 | −179.0 | | 0 |
| 38 | Master | 1.474 | | 1.635 | 173.6 | | 0 |
| 39 | Master | 1.178 | | 1.464 | −76.61 | | 0 |
| 40 | Master | 1.186 | | 1.464 | −65.22 | | 0 |
| 41 | Master | 1.286 | | 1.464 | −77.31 | | 0 |
| 42 | Master | 2.090 | | 2.353 | 177.4 | | 0 |
| 43 | Master | 2.079 | | 2.353 | −178.3 | | 0 |
| 44 | Master | 2.129 | | 2.353 | 174.2 | | 0 |
| | | 60.00 % (Minimum) | (Nominal) 140.0 % (Maximum) | | Nom −180.0 (Minimum) | (Nominal) Nom + 180.0 (Maximum) | |

Master: 29−Jan−2007 15:32

## 3–D Array Induction Tool – ZAIT–B Master Calibration

### Electronics Calibration Check – Auxilliary

| Phase | Array Induction SPA Plus V | Value | Phase | Array Induction SPA Zero V | Value |
|---|---|---|---|---|---|
| Master | | 0.8436 | Master | | –0.0007702 |
| | 0.7570 (Minimum) / 0.8360 (Nominal) / 0.9150 (Maximum) | | | –0.05000 (Minimum) / 0 (Nominal) / 0.05000 (Maximum) | |

| Phase | Array Induction Temperature Plus V | Value | Phase | Array Induction Temperature Zero V | Value |
|---|---|---|---|---|---|
| Master | | 0.9906 | Master | | –0.001124 |
| | 0.8800 (Minimum) / 0.9798 (Nominal) / 1.076 (Maximum) | | | –0.05000 (Minimum) / 0 (Nominal) / 0.05000 (Maximum) | |

| Phase | Array Induction CalSig Plus V | Value | Phase | Array Induction CalSig Zero V | Value |
|---|---|---|---|---|---|
| Master | | 5.015 | Master | | –0.01105 |
| | 4.500 (Minimum) / 5.000 (Nominal) / 5.500 (Maximum) | | | –0.05000 (Minimum) / 0 (Nominal) / 0.05000 (Maximum) | |

| Phase | Array Induction Volt Plus V | Value | Phase | Array Induction Volt Zero V | Value |
|---|---|---|---|---|---|
| Master | | 5.014 | Master | | –0.01105 |
| | 4.500 (Minimum) / 5.000 (Nominal) / 5.500 (Maximum) | | | –0.05000 (Minimum) / 0 (Nominal) / 0.05000 (Maximum) | |

Master: 29–Jan–2007 15:32

## 3–D Array Induction Tool – ZAIT–B Master Calibration

### Sonde Error Correction

| Idx | Value | R Sonde Error Correction MM/M | | | Value | X Sonde Error Correction MM/M | | |
|---|---|---|---|---|---|---|---|---|
| 0 | 20.92 | –2105 (Minimum) | 351.3 (Nominal) | 2808 (Maximum) | 5052 | –33300 (Minimum) | 0 (Nominal) | 33300 (Maximum) |
| 1 | 754.2 | –5042 (Minimum) | 500.9 (Nominal) | 6044 (Maximum) | 8939 | –37570 (Minimum) | 0 (Nominal) | 37570 (Maximum) |
| 2 | –1325 | –2575 (Minimum) | –1399 (Nominal) | –222.3 (Maximum) | –103.9 | –2478 (Minimum) | 0 (Nominal) | 2478 (Maximum) |
| 3 | 33.96 | –2398 (Minimum) | –112.1 (Nominal) | 2174 (Maximum) | 2129 | –7332 (Minimum) | 0 (Nominal) | 7332 (Maximum) |
| 4 | 154.4 | –1421 (Minimum) | 124.3 (Nominal) | 1670 (Maximum) | 830.1 | –6457 (Minimum) | 0 (Nominal) | 6457 (Maximum) |
| 5 | 85.67 | –563.7 (Minimum) | 64.70 (Nominal) | 693.1 (Maximum) | –295.1 | –619.1 (Minimum) | 0 (Nominal) | 619.1 (Maximum) |
| 6 | 63.31 | –2295 (Minimum) | –206.4 (Nominal) | 1882 (Maximum) | 700.2 | –5708 (Minimum) | 0 (Nominal) | 5708 (Maximum) |
| 7 | 148.3 | –1367 (Minimum) | 138.2 (Nominal) | 1644 (Maximum) | 567.0 | –2991 (Minimum) | 0 (Nominal) | 2991 (Maximum) |
| 8 | 90.72 | –811.7 (Minimum) | 141.5 (Nominal) | 1095 (Maximum) | –25.51 | –372.1 (Minimum) | 0 (Nominal) | 372.1 (Maximum) |
| 9 | –492.9 | –3068 (Minimum) | –97.15 (Nominal) | 2874 (Maximum) | –220.7 | –4300 (Minimum) | 0 (Nominal) | 4300 (Maximum) |
| 10 | 18.30 | –798.0 (Minimum) | 1.896 (Nominal) | 801.8 (Maximum) | –581.3 | –12390 (Minimum) | 0 (Nominal) | 12390 (Maximum) |
| 11 | –119.2 | –770.9 (Minimum) | 23.35 (Nominal) | 817.6 (Maximum) | 994.5 | –4594 (Minimum) | 0 (Nominal) | 4594 (Maximum) |
| 12 | –6.887 | –734.3 (Minimum) | 14.37 (Nominal) | 763.0 (Maximum) | 1033 | –11510 (Minimum) | 0 (Nominal) | 11510 (Maximum) |
| 13 | –394.3 | –2770 (Minimum) | –241.5 (Nominal) | 2287 (Maximum) | –632.1 | –2410 (Minimum) | 0 (Nominal) | 2410 (Maximum) |
| 14 | 65.79 | –570.4 (Minimum) | 31.47 (Nominal) | 633.4 (Maximum) | 101.5 | –4653 (Minimum) | 0 (Nominal) | 4653 (Maximum) |
| 15 | 52.97 | –2241 (Minimum) | –108.3 (Nominal) | 2024 (Maximum) | –554.7 | –5251 (Minimum) | 0 (Nominal) | 5251 (Maximum) |
| 16 | 87.06 | –1029 (Minimum) | 43.50 (Nominal) | 1116 (Maximum) | –705.2 | –6660 (Minimum) | 0 (Nominal) | 6660 (Maximum) |
| 17 | –85.69 | –471.1 (Minimum) | –41.64 (Nominal) | 387.8 (Maximum) | 221.6 | –287.3 (Minimum) | 0 (Nominal) | 287.3 (Maximum) |
| 18 | –264.4 | | | | –380.3 | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | −3236 (Minimum) | −34.30 (Nominal) | 3167 (Maximum) | | −1971 (Minimum) | 0 (Nominal) | 1971 (Maximum) | |
| 19 | 2.997 | | | | −278.9 | | | |
| | −508.2 (Minimum) | −31.06 (Nominal) | 446.1 (Maximum) | | −8843 (Minimum) | 0 (Nominal) | 8843 (Maximum) | |
| 20 | −67.21 | | | | 485.0 | | | |
| | −990.0 (Minimum) | 78.40 (Nominal) | 1147 (Maximum) | | −2886 (Minimum) | 0 (Nominal) | 2886 (Maximum) | |
| 21 | −2.146 | | | | 513.5 | | | |
| | −332.1 (Minimum) | 27.84 (Nominal) | 387.8 (Maximum) | | −7605 (Minimum) | 0 (Nominal) | 7605 (Maximum) | |
| 22 | −171.0 | | | | −557.7 | | | |
| | −1710 (Minimum) | −171.8 (Nominal) | 1367 (Maximum) | | −1006 (Minimum) | 0 (Nominal) | 1006 (Maximum) | |
| 23 | 2.315 | | | | 48.64 | | | |
| | −700.5 (Minimum) | −7.184 (Nominal) | 686.2 (Maximum) | | −2778 (Minimum) | 0 (Nominal) | 2778 (Maximum) | |
| 24 | 43.68 | | | | −300.7 | | | |
| | −2238 (Minimum) | −131.8 (Nominal) | 1975 (Maximum) | | −4019 (Minimum) | 0 (Nominal) | 4019 (Maximum) | |
| 25 | 57.55 | | | | −369.9 | | | |
| | −888.1 (Minimum) | 60.98 (Nominal) | 1010 (Maximum) | | −3802 (Minimum) | 0 (Nominal) | 3802 (Maximum) | |
| 26 | −78.64 | | | | 74.67 | | | |
| | −568.8 (Minimum) | −98.79 (Nominal) | 371.2 (Maximum) | | −150.9 (Minimum) | 0 (Nominal) | 150.9 (Maximum) | |
| 27 | −324.3 | | | | 722.8 | | | |
| | −2660 (Minimum) | −247.8 (Nominal) | 2164 (Maximum) | | −1619 (Minimum) | 0 (Nominal) | 1619 (Maximum) | |
| 28 | 6.777 | | | | −93.67 | | | |
| | −311.9 (Minimum) | 19.89 (Nominal) | 351.7 (Maximum) | | −4748 (Minimum) | 0 (Nominal) | 4748 (Maximum) | |
| 29 | −20.82 | | | | 251.6 | | | |
| | −238.9 (Minimum) | −0.7571 (Nominal) | 237.4 (Maximum) | | −1927 (Minimum) | 0 (Nominal) | 1927 (Maximum) | |
| 30 | 11.65 | | | | −837.1 | | | |
| | −263.8 (Minimum) | −8.173 (Nominal) | 247.5 (Maximum) | | −3768 (Minimum) | 0 (Nominal) | 3768 (Maximum) | |
| 31 | −333.3 | | | | 829.5 | | | |
| | −1851 (Minimum) | −192.8 (Nominal) | 1465 (Maximum) | | −1400 (Minimum) | 0 (Nominal) | 1400 (Maximum) | |
| 32 | 48.80 | | | | 442.1 | | | |
| | −186.8 (Minimum) | 22.62 (Nominal) | 232.0 (Maximum) | | −1526 (Minimum) | 0 (Nominal) | 1526 (Maximum) | |
| 33 | 5.421 | | | | −174.6 | | | |
| | −1101 (Minimum) | 55.12 (Nominal) | 1211 (Maximum) | | −3024 (Minimum) | 0 (Nominal) | 3024 (Maximum) | |
| 34 | −1.054 | | | | −100.0 | | | |
| | −186.5 (Minimum) | −4.793 (Nominal) | 176.9 (Maximum) | | −2838 (Minimum) | 0 (Nominal) | 2838 (Maximum) | |
| 35 | 124.1 | | | | −78.95 | | | |
| | −462.5 (Minimum) | 63.86 (Nominal) | 590.2 (Maximum) | | −107.3 (Minimum) | 0 (Nominal) | 107.3 (Maximum) | |
| 36 | −319.1 | | | | 421.2 | | | |
| | −1876 (Minimum) | −385.5 (Nominal) | 1105 (Maximum) | | −902.5 (Minimum) | 0 (Nominal) | 902.5 (Maximum) | |
| 37 | 6.994 | | | | −48.20 | | | |
| | −239.6 (Minimum) | 19.09 (Nominal) | 277.8 (Maximum) | | −4148 (Minimum) | 0 (Nominal) | 4148 (Maximum) | |
| 38 | 0.5654 | | | | 122.2 | | | |
| | −95.40 (Minimum) | 8.103 (Nominal) | 111.7 (Maximum) | | −1441 (Minimum) | 0 (Nominal) | 1441 (Maximum) | |
| 39 | 1.085 | | | | −417.3 | | | |
| | −232.3 (Minimum) | −11.60 (Nominal) | 209.1 (Maximum) | | −3221 (Minimum) | 0 (Nominal) | 3221 (Maximum) | |
| 40 | −323.3 | | | | 470.6 | | | |
| | −840.1 (Minimum) | −332.1 (Nominal) | 175.8 (Maximum) | | −790.7 (Minimum) | 0 (Nominal) | 790.7 (Maximum) | |
| 41 | 15.87 | | | | 227.7 | | | |
| | −30.50 (Minimum) | 11.77 (Nominal) | 54.00 (Maximum) | | −881.0 (Minimum) | 0 (Nominal) | 881.0 (Maximum) | |
| 42 | −0.8276 | | | | −78.56 | | | |
| | −1086 (Minimum) | 50.67 (Nominal) | 1188 (Maximum) | | −1840 (Minimum) | 0 (Nominal) | 1840 (Maximum) | |
| 43 | 0.7432 | | | | −45.15 | | | |
| | −199.6 (Minimum) | −7.273 (Nominal) | 185.1 (Maximum) | | −1624 (Minimum) | 0 (Nominal) | 1624 (Maximum) | |
| 44 | 47.85 | | | | −9.689 | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | −1.100 (Minimum) | 46.99 (Nominal) | 95.10 (Maximum) | −91.40 (Minimum) | 0 (Nominal) | 91.40 (Maximum) |
| 45 | −15.48 | | | 2082 | | |
| | −173.4 (Minimum) | 2.034 (Nominal) | 177.5 (Maximum) | −2138 (Minimum) | 0 (Nominal) | 2138 (Maximum) |
| 46 | −9.021 | | | 368.4 | | |
| | −374.2 (Minimum) | −10.87 (Nominal) | 352.5 (Maximum) | −2357 (Minimum) | 0 (Nominal) | 2357 (Maximum) |
| 47 | −31.66 | | | 780.9 | | |
| | −183.8 (Minimum) | −15.64 (Nominal) | 152.5 (Maximum) | −986.0 (Minimum) | 0 (Nominal) | 986.0 (Maximum) |
| 48 | 11.94 | | | −416.4 | | |
| | −261.9 (Minimum) | 2.156 (Nominal) | 266.2 (Maximum) | −2252 (Minimum) | 0 (Nominal) | 2252 (Maximum) |
| 49 | −17.19 | | | 1985 | | |
| | −178.2 (Minimum) | −0.6614 (Nominal) | 176.9 (Maximum) | −2148 (Minimum) | 0 (Nominal) | 2148 (Maximum) |
| 50 | 18.09 | | | 139.9 | | |
| | −65.70 (Minimum) | 8.816 (Nominal) | 83.30 (Maximum) | −626.5 (Minimum) | 0 (Nominal) | 626.5 (Maximum) |
| 51 | 5.572 | | | 784.0 | | |
| | −166.5 (Minimum) | 2.130 (Nominal) | 170.8 (Maximum) | −1981 (Minimum) | 0 (Nominal) | 1981 (Maximum) |
| 52 | 8.875 | | | −98.90 | | |
| | −52.80 (Minimum) | 3.754 (Nominal) | 60.30 (Maximum) | −1243 (Minimum) | 0 (Nominal) | 1243 (Maximum) |
| 53 | 59.44 | | | −19.65 | | |
| | −235.6 (Minimum) | 32.53 (Nominal) | 300.6 (Maximum) | −41.10 (Minimum) | 0 (Nominal) | 41.10 (Maximum) |
| 54 | −2.308 | | | 1017 | | |
| | −95.30 (Minimum) | −9.750 (Nominal) | 75.80 (Maximum) | −1088 (Minimum) | 0 (Nominal) | 1088 (Maximum) |
| 55 | −1.336 | | | 188.6 | | |
| | −134.6 (Minimum) | −5.565 (Nominal) | 123.5 (Maximum) | −1366 (Minimum) | 0 (Nominal) | 1366 (Maximum) |
| 56 | −1.396 | | | 388.1 | | |
| | −27.40 (Minimum) | −6.454 (Nominal) | 14.50 (Maximum) | −540.6 (Minimum) | 0 (Nominal) | 540.6 (Maximum) |
| 57 | 0.9340 | | | −209.3 | | |
| | −137.9 (Minimum) | −0.5576 (Nominal) | 136.8 (Maximum) | −1274 (Minimum) | 0 (Nominal) | 1274 (Maximum) |
| 58 | 1.078 | | | 968.0 | | |
| | −78.10 (Minimum) | −9.827 (Nominal) | 58.50 (Maximum) | −1071 (Minimum) | 0 (Nominal) | 1071 (Maximum) |
| 59 | 6.561 | | | 72.00 | | |
| | −18.10 (Minimum) | 5.923 (Nominal) | 29.90 (Maximum) | −340.7 (Minimum) | 0 (Nominal) | 340.7 (Maximum) |
| 60 | 4.802 | | | 391.0 | | |
| | −65.40 (Minimum) | 0.3248 (Nominal) | 66.00 (Maximum) | −1250 (Minimum) | 0 (Nominal) | 1250 (Maximum) |
| 61 | 5.034 | | | −48.64 | | |
| | −32.10 (Minimum) | 3.359 (Nominal) | 38.80 (Maximum) | −691.8 (Minimum) | 0 (Nominal) | 691.8 (Maximum) |
| 62 | 26.23 | | | 2.136 | | |
| | −9.800 (Minimum) | 27.57 (Nominal) | 64.90 (Maximum) | −32.90 (Minimum) | 0 (Nominal) | 32.90 (Maximum) |
| 63 | −2.579 | | | 635.4 | | |
| | −56.30 (Minimum) | 0.6343 (Nominal) | 57.60 (Maximum) | −770.3 (Minimum) | 0 (Nominal) | 770.3 (Maximum) |
| 64 | 29.50 | | | −951.4 | | |
| | −86.20 (Minimum) | −0.04571 (Nominal) | 86.10 (Maximum) | −1478 (Minimum) | 0 (Nominal) | 1478 (Maximum) |
| 65 | −15.76 | | | 180.9 | | |
| | −51.90 (Minimum) | −4.624 (Nominal) | 42.60 (Maximum) | −621.1 (Minimum) | 0 (Nominal) | 621.1 (Maximum) |
| 66 | −19.63 | | | 918.5 | | |
| | −171.8 (Minimum) | −2.056 (Nominal) | 167.7 (Maximum) | −1581 (Minimum) | 0 (Nominal) | 1581 (Maximum) |
| 67 | −0.2565 | | | 611.6 | | |
| | −45.00 (Minimum) | 0.1900 (Nominal) | 45.40 (Maximum) | −751.4 (Minimum) | 0 (Nominal) | 751.4 (Maximum) |
| 68 | 3.726 | | | 30.84 | | |
| | −42.10 (Minimum) | 3.956 (Nominal) | 50.00 (Maximum) | −476.3 (Minimum) | 0 (Nominal) | 476.3 (Maximum) |
| 69 | −6.196 | | | 286.1 | | |
| | −27.40 (Minimum) | 0.6414 (Nominal) | 28.70 (Maximum) | −517.0 (Minimum) | 0 (Nominal) | 517.0 (Maximum) |
| 70 | −0.5899 | | | −46.72 | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | −42.00 (Minimum) | 3.171 (Nominal) | 48.30 (Maximum) | | −935.7 (Minimum) | 0 (Nominal) | 935.7 (Maximum) |
| 71 | 22.25 | | | | 18.34 | | | |
| | | −87.80 (Minimum) | 11.76 (Nominal) | 111.3 (Maximum) | | −62.10 (Minimum) | 0 (Nominal) | 62.10 (Maximum) |
| 72 | 0.3745 | | | | 262.4 | | | |
| | | −24.60 (Minimum) | −2.297 (Nominal) | 20.00 (Maximum) | | −375.5 (Minimum) | 0 (Nominal) | 375.5 (Maximum) |
| 73 | 1.286 | | | | −472.1 | | | |
| | | −57.60 (Minimum) | 2.100 (Nominal) | 61.80 (Maximum) | | −1185 (Minimum) | 0 (Nominal) | 1185 (Maximum) |
| 74 | −1.035 | | | | 86.88 | | | |
| | | −12.70 (Minimum) | −1.704 (Nominal) | 9.300 (Maximum) | | −356.7 (Minimum) | 0 (Nominal) | 356.7 (Maximum) |
| 75 | −1.570 | | | | 457.0 | | | |
| | | −78.00 (Minimum) | −3.031 (Nominal) | 71.90 (Maximum) | | −1247 (Minimum) | 0 (Nominal) | 1247 (Maximum) |
| 76 | 2.299 | | | | 250.6 | | | |
| | | −16.10 (Minimum) | −1.311 (Nominal) | 13.50 (Maximum) | | −374.3 (Minimum) | 0 (Nominal) | 374.3 (Maximum) |
| 77 | 1.771 | | | | 17.22 | | | |
| | | −12.80 (Minimum) | 2.693 (Nominal) | 18.20 (Maximum) | | −321.8 (Minimum) | 0 (Nominal) | 321.8 (Maximum) |
| 78 | 0.7233 | | | | 139.4 | | | |
| | | −11.50 (Minimum) | 1.215 (Nominal) | 13.90 (Maximum) | | −333.1 (Minimum) | 0 (Nominal) | 333.1 (Maximum) |
| 79 | 0.7604 | | | | −23.30 | | | |
| | | −13.40 (Minimum) | 3.431 (Nominal) | 20.30 (Maximum) | | −581.6 (Minimum) | 0 (Nominal) | 581.6 (Maximum) |
| 80 | 10.68 | | | | 16.27 | | | |
| | | −16.30 (Minimum) | 11.00 (Nominal) | 38.30 (Maximum) | | −39.20 (Minimum) | 0 (Nominal) | 39.20 (Maximum) |
| 81 | −15.45 | | | | 315.8 | | | |
| | | −67.80 (Minimum) | −6.064 (Nominal) | 55.70 (Maximum) | | −330.3 (Minimum) | 0 (Nominal) | 330.3 (Maximum) |
| 82 | −8.384 | | | | 586.9 | | | |
| | | −75.70 (Minimum) | 0.09571 (Nominal) | 75.90 (Maximum) | | −805.0 (Minimum) | 0 (Nominal) | 805.0 (Maximum) |
| 83 | −11.00 | | | | 112.2 | | | |
| | | −42.90 (Minimum) | −3.401 (Nominal) | 36.10 (Maximum) | | −191.7 (Minimum) | 0 (Nominal) | 191.7 (Maximum) |
| 84 | 13.94 | | | | −578.9 | | | |
| | | −56.30 (Minimum) | 0.3271 (Nominal) | 57.00 (Maximum) | | −782.3 (Minimum) | 0 (Nominal) | 782.3 (Maximum) |
| 85 | −15.01 | | | | 295.3 | | | |
| | | −56.50 (Minimum) | −5.537 (Nominal) | 45.40 (Maximum) | | −319.1 (Minimum) | 0 (Nominal) | 319.1 (Maximum) |
| 86 | 4.540 | | | | −83.63 | | | |
| | | −16.30 (Minimum) | 0.7314 (Nominal) | 17.80 (Maximum) | | −149.5 (Minimum) | 0 (Nominal) | 149.5 (Maximum) |
| 87 | −0.8786 | | | | 7.633 | | | |
| | | −7.600 (Minimum) | −0.1829 (Nominal) | 7.200 (Maximum) | | −242.5 (Minimum) | 0 (Nominal) | 242.5 (Maximum) |
| 88 | 2.126 | | | | −185.6 | | | |
| | | −10.50 (Minimum) | 0.3700 (Nominal) | 11.30 (Maximum) | | −214.9 (Minimum) | 0 (Nominal) | 214.9 (Maximum) |
| 89 | 3.597 | | | | 20.93 | | | |
| | | −26.20 (Minimum) | 2.383 (Nominal) | 30.90 (Maximum) | | −116.1 (Minimum) | 0 (Nominal) | 116.1 (Maximum) |
| 90 | −12.18 | | | | 84.33 | | | |
| | | −30.60 (Minimum) | −9.587 (Nominal) | 11.50 (Maximum) | | −105.7 (Minimum) | 0 (Nominal) | 105.7 (Maximum) |
| 91 | −2.645 | | | | 298.5 | | | |
| | | −38.50 (Minimum) | −1.329 (Nominal) | 35.80 (Maximum) | | −471.2 (Minimum) | 0 (Nominal) | 471.2 (Maximum) |
| 92 | −1.279 | | | | 55.94 | | | |
| | | −17.00 (Minimum) | −2.254 (Nominal) | 12.50 (Maximum) | | −118.0 (Minimum) | 0 (Nominal) | 118.0 (Maximum) |
| 93 | 2.192 | | | | −297.9 | | | |
| | | −27.10 (Minimum) | 1.459 (Nominal) | 30.00 (Maximum) | | −441.4 (Minimum) | 0 (Nominal) | 441.4 (Maximum) |
| 94 | −10.83 | | | | 74.61 | | | |
| | | −28.40 (Minimum) | −9.228 (Nominal) | 10.00 (Maximum) | | −100.3 (Minimum) | 0 (Nominal) | 100.3 (Maximum) |
| 95 | 1.041 | | | | −40.80 | | | |
| | | −11.80 (Minimum) | 1.184 (Nominal) | 14.20 (Maximum) | | −100.9 (Minimum) | 0 (Nominal) | 100.9 (Maximum) |
| 96 | 0.9281 | | | | 3.809 | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | −4.600 (Minimum) | 0.5421 (Nominal) | 5.700 (Maximum) | | −141.1 (Minimum) | 0 (Nominal) | 141.1 (Maximum) | |
| 97 | 0.2935 | | | | −91.97 | | | |
| | −6.400 (Minimum) | 0.8419 (Nominal) | 8.100 (Maximum) | | −179.1 (Minimum) | 0 (Nominal) | 179.1 (Maximum) | |
| 98 | 3.097 | | | | 14.05 | | | |
| | −29.10 (Minimum) | 3.875 (Nominal) | 36.80 (Maximum) | | −42.70 (Minimum) | 0 (Nominal) | 42.70 (Maximum) | |
| 99 | −41.39 | | | | 152.7 | | | |
| | −208.6 (Minimum) | −22.42 (Nominal) | 163.7 (Maximum) | | −228.8 (Minimum) | 0 (Nominal) | 228.8 (Maximum) | |
| 100 | 15.87 | | | | −416.8 | | | |
| | −110.1 (Minimum) | 6.030 (Nominal) | 122.1 (Maximum) | | −941.8 (Minimum) | 0 (Nominal) | 941.8 (Maximum) | |
| 101 | −6.421 | | | | −42.07 | | | |
| | −40.50 (Minimum) | −1.784 (Nominal) | 36.90 (Maximum) | | −177.8 (Minimum) | 0 (Nominal) | 177.8 (Maximum) | |
| 102 | −11.33 | | | | 450.4 | | | |
| | −218.8 (Minimum) | −8.666 (Nominal) | 201.5 (Maximum) | | −932.5 (Minimum) | 0 (Nominal) | 932.5 (Maximum) | |
| 103 | −45.67 | | | | 156.3 | | | |
| | −201.5 (Minimum) | −21.74 (Nominal) | 158.0 (Maximum) | | −189.7 (Minimum) | 0 (Nominal) | 189.7 (Maximum) | |
| 104 | −0.1936 | | | | −17.73 | | | |
| | −20.20 (Minimum) | 0.1186 (Nominal) | 20.50 (Maximum) | | −173.1 (Minimum) | 0 (Nominal) | 173.1 (Maximum) | |
| 105 | 1.150 | | | | −3.397 | | | |
| | −13.60 (Minimum) | 1.554 (Nominal) | 16.70 (Maximum) | | −123.5 (Minimum) | 0 (Nominal) | 123.5 (Maximum) | |
| 106 | −1.690 | | | | 24.17 | | | |
| | −6.300 (Minimum) | 0.1929 (Nominal) | 6.600 (Maximum) | | −93.30 (Minimum) | 0 (Nominal) | 93.30 (Maximum) | |
| 107 | −2.731 | | | | 55.88 | | | |
| | −19.70 (Minimum) | −1.369 (Nominal) | 17.00 (Maximum) | | −145.3 (Minimum) | 0 (Nominal) | 145.3 (Maximum) | |
| 108 | −40.59 | | | | 126.8 | | | |
| | −61.80 (Minimum) | −39.44 (Nominal) | −17.10 (Maximum) | | −174.6 (Minimum) | 0 (Nominal) | 174.6 (Maximum) | |
| 109 | 3.576 | | | | −220.5 | | | |
| | −28.80 (Minimum) | 2.697 (Nominal) | 34.20 (Maximum) | | −490.4 (Minimum) | 0 (Nominal) | 490.4 (Maximum) | |
| 110 | −0.6722 | | | | −21.33 | | | |
| | −11.70 (Minimum) | −1.231 (Nominal) | 9.200 (Maximum) | | −104.4 (Minimum) | 0 (Nominal) | 104.4 (Maximum) | |
| 111 | −3.843 | | | | 234.5 | | | |
| | −57.50 (Minimum) | −3.492 (Nominal) | 50.50 (Maximum) | | −491.5 (Minimum) | 0 (Nominal) | 491.5 (Maximum) | |
| 112 | −42.31 | | | | 128.4 | | | |
| | −67.40 (Minimum) | −39.27 (Nominal) | −11.10 (Maximum) | | −150.1 (Minimum) | 0 (Nominal) | 150.1 (Maximum) | |
| 113 | −0.1958 | | | | −4.797 | | | |
| | −10.40 (Minimum) | 0.8598 (Nominal) | 12.10 (Maximum) | | −103.3 (Minimum) | 0 (Nominal) | 103.3 (Maximum) | |
| 114 | 1.999 | | | | −1.614 | | | |
| | −3.100 (Minimum) | 2.525 (Nominal) | 8.100 (Maximum) | | −66.30 (Minimum) | 0 (Nominal) | 66.30 (Maximum) | |
| 115 | −0.4481 | | | | 14.76 | | | |
| | −3.200 (Minimum) | 0.4010 (Nominal) | 4.000 (Maximum) | | −66.00 (Minimum) | 0 (Nominal) | 66.00 (Maximum) | |
| 116 | 2.266 | | | | 8.951 | | | |
| | −27.70 (Minimum) | 1.505 (Nominal) | 30.70 (Maximum) | | −57.80 (Minimum) | 0 (Nominal) | 57.80 (Maximum) | |

Master: 29−Jan−2007 15:32

High resolution Integrated Logging Tool−DTS / Equipment Identification

| | | |
|---|---|---|
| **Primary Equipment:** | | |
| HILT high−Resolution Mechanical Sonde | HRMS − B | 754 |
| HILT Rxo Gamma−ray Device | HRGD − B | 842 |
| HILT Micro Cylindrically Focused Log Dev | MCFL − | |
| GR Logging Source | GLS − VJ | 5033 |
| HILT High Res. Control Cartridge | HRCC − B | 1889 |
| HILT Gamma−Ray Neutron Sonde−DTS | HGNS − B | |
| HGNS Gamma−Ray Device | HGR − | |
| HGNS Neutron Detector with Alpha Source | HCNT − | |
| **Auxiliary Equipment:** | | |
| HGNS Housing | HGNH − | |
| Neutron Calibration Tank | NCT − B | |
| Gamma Source Radioactive | GSR − U/Y | |

## 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 | | 0.7374 | Before | | 0.4690 | Before | | 0.2934 |
| 0.6981 (Minimum) | 0.7349 (Nominal) | 0.7716 (Maximum) | 0.4419 (Minimum) | 0.4651 (Nominal) | 0.4884 (Maximum) | 0.2817 (Minimum) | 0.2965 (Nominal) | 0.3113 (Maximum) |
| **Phase** | **BS Window Sum CPS** | **Value** | **Phase** | **SS Window Sum CPS** | **Value** | **Phase** | **LS Window Sum CPS** | **Value** |
| Before | | 9820 | Before | | 9013 | Before | | 1116 |
| 9303 (Minimum) | 9792 (Nominal) | 10280 (Maximum) | 8578 (Minimum) | 9029 (Nominal) | 9481 (Maximum) | 1067 (Minimum) | 1124 (Nominal) | 1180 (Maximum) |

Before: 10–Feb–2007 15:02

## 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 | | 1640 | Before | | 1801 | Before | | 2044 |
| 1509 (Minimum) | 1609 (Nominal) | 1709 (Maximum) | 1701 (Minimum) | 1801 (Nominal) | 1901 (Maximum) | 1944 (Minimum) | 2044 (Nominal) | 2144 (Maximum) |

Before: 10–Feb–2007 15:02

## 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 | | 11.90 | Before | | 11.10 | Before | | 10.44 |
| 10.86 (Minimum) | 11.86 (Nominal) | 12.86 (Maximum) | 10.06 (Minimum) | 11.06 (Nominal) | 12.06 (Maximum) | 9.330 (Minimum) | 10.33 (Nominal) | 11.33 (Maximum) |

Before: 10–Feb–2007 15:02

## 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 | | 3880 | Before | | 3836 | Before | | 3834 |
| 3565 (Minimum) | 3875 (Nominal) | 4185 (Maximum) | 3524 (Minimum) | 3830 (Nominal) | 4136 (Maximum) | 3524 (Minimum) | 3830 (Nominal) | 4136 (Maximum) |

Before: 10–Feb–2007 15:09

## High resolution Integrated Logging Tool–DTS Wellsite Calibration

### HILT Caliper Calibration

| Phase | HILT Caliper Zero Measurement IN | Value | Phase | HILT Caliper Plus Measurement IN | Value |
|---|---|---|---|---|---|
| Before | | 7.114 | Before | | 11.30 |
| 6.000 (Minimum) | 8.000 (Nominal) | 10.00 (Maximum) | 9.000 (Minimum) | 12.00 (Nominal) | 15.00 (Maximum) |

Before: 10–Feb–2007 15:00

## 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 | | 21.37 | Before | | 167.2 | Before | | 153.5 |
| 0 (Minimum) | 30.00 (Nominal) | 120.0 (Maximum) | 152.0 (Minimum) | 167.2 (Nominal) | 182.4 (Maximum) | 138.5 (Minimum) | 153.5 (Nominal) | 168.5 (Maximum) |

Before: 10–Feb–2007 15:03

## High resolution Integrated Logging Tool–DTS Wellsite Calibration

### Zero Measurement

| Phase | CNTC Background CPS | Value | Phase | CFTC Background CPS | Value |
|---|---|---|---|---|---|
| Master | | 29.72 | Master | | 28.66 |
| Before | | 30.01 | Before | | 30.65 |
| 5.000 (Minimum) | 29.72 (Nominal) | 40.00 (Maximum) | 5.000 (Minimum) | 28.66 (Nominal) | 40.00 (Maximum) |

Master: 22–Jan–2007 16:01 Before: 10–Feb–2007 15:01

## 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 | | 5739 | Master | | 2396 | Master | | 2.396 |
| 4700 (Minimum) | 5800 (Nominal) | 6900 (Maximum) | 1900 (Minimum) | 2400 (Nominal) | 2900 (Maximum) | 2.120 (Minimum) | 2.159 (Nominal) | 2.540 (Maximum) |

Master: 22–Jan–2007 16:01

## High resolution Integrated Logging Tool–DTS Wellsite Calibration

### Accelerometer Calibration

| Phase | Z–Axis Acceleration F/S2 | Value |
|---|---|---|
| Before | | 32.25 |
| 31.53 (Minimum) | 32.19 (Nominal) | 32.84 (Maximum) |

Before: 14–Feb–2007 7:52

High resolution Integrated Logging Tool–DTS Master Calibration

Inversion results

| Phase | Rho Aluminum G/C3 | | | Value | Phase | Rho Magnesium G/C3 | | | Value |
|---|---|---|---|---|---|---|---|---|---|
| Master | | | | 2.596 | Master | | | | 1.689 |
| | 2.586 (Minimum) | 2.596 (Nominal) | 2.606 (Maximum) | | | 1.676 (Minimum) | 1.686 (Nominal) | 1.696 (Maximum) | |
| Phase | Pe Aluminum | | | Value | Phase | Pe Magnesium | | | Value |
| Master | | | | 2.568 | Master | | | | 2.611 |
| | 2.470 (Minimum) | 2.570 (Nominal) | 2.670 (Maximum) | | | 2.550 (Minimum) | 2.650 (Nominal) | 2.750 (Maximum) | |

Master: 22–Jan–2007 21:16

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 | | | | 0.3577 | Master | | | | 0.4003 | Master | | | | 0.7110 |
| | –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 | | | | 0.8287 | Master | | | | 0.7964 | Master | | | | 1.165 |
| | –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: 22–Jan–2007 21:16

High resolution Integrated Logging Tool–DTS Master Calibration

Zero Measurement

| Phase | CNTC Background CPS | | | Value | Phase | CFTC Background CPS | | | Value |
|---|---|---|---|---|---|---|---|---|---|
| Master | | | | 29.72 | Master | | | | 28.66 |
| | 5.000 (Minimum) | 29.72 (Nominal) | 40.00 (Maximum) | | | 5.000 (Minimum) | 28.66 (Nominal) | 40.00 (Maximum) | |

Master: 22–Jan–2007 16:01

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 | | | | 5739 | Master | | | | 2396 | Master | | | | 2.396 |
| | 4700 (Minimum) | 5800 (Nominal) | 6900 (Maximum) | | | 1900 (Minimum) | 2400 (Nominal) | 2900 (Maximum) | | | 2.120 (Minimum) | 2.159 (Nominal) | 2.540 (Maximum) | |

Master: 22–Jan–2007 16:01

Electromagnetic Propagation – G / Equipment Identification

Primary Equipment:

| | | |
|---|---|---|
| EPT–G ENDFIRE Sonde | EPS – EA | 13 |
| EPT Cartridge – DA | EPC – DA | 14 |

Auxiliary Equipment:

| | |
|---|---|
| Electronics Cartridge Housing | ECH – KU |

Electromagnetic Propagation – G Wellsite Calibration

Electronics Calibration

| Phase | EATT Electronics DB/M | | | Value | Phase | TPL Electronics NS/M | | | Value |
|---|---|---|---|---|---|---|---|---|---|
| Before | | | | 503.5 | Before | | | | 11.33 |
| | 400.0 (Minimum) | 500.0 (Nominal) | 600.0 (Maximum) | | | 10.85 (Minimum) | 11.35 (Nominal) | 11.85 (Maximum) | |

Before: 14–Feb–2007 7:55

General Purpose Inclinometer / Equipment Identification

Primary Equipment:

| | | |
|---|---|---|
| GPIT Cartridge – C | GPIC – C | 872 |

Auxiliary Equipment:

| | |
|---|---|
| GPIT Housing | GPIH – B |

DTS Telemetry Tool / Equipment Identification

Primary Equipment:

| | |
|---|---|
| DTC–H Auxiliary Cartridge | DTCH – A |
| DTC–H Telemetry Cartridge | DTCH – A |

Auxiliary Equipment:

| | |
|---|---|
| DTCH Telemetry Cartridge Housing | ECH – KC |

Company: **BP EXPLORATION (ALASKA), INC.**

Schlumberger

Well: **MT. ELBERT–01**
Field: **MILNE POINT UNIT**
Borough: **NORTH SLOPE**
State: **ALASKA**

**FINAL**

ELECTROMAGNETIC PROPAGATION TOOL
EPT LOG
14–FEB–2007