

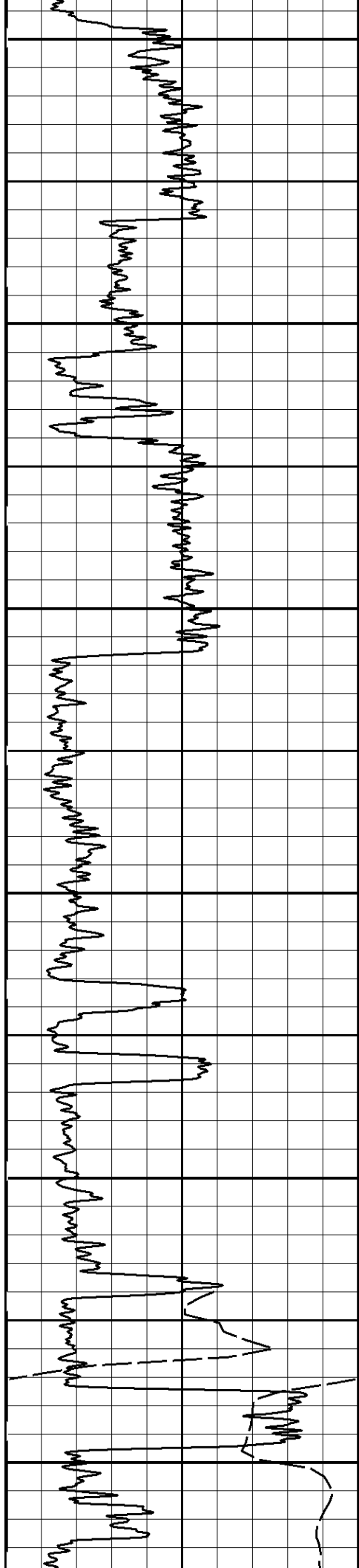
HALLIBURTON

ARRAY COMP RESISTIVITY
SPECTRAL DENSITY
DUAL SPACED NEUTRON
TRIPLE COMBO LOG

| | | | | | | | | | |
|--------------------------|--|-----------------|--|---------------------------------------|--|----------|--|---------------------------|--|
| COMPANY | | | | STORM CAT ENERGY (USA) OPERATING CORP | | | | | |
| WELL | | | | KAMALMAZ 2-13H | | | | | |
| FIELD | | | | B-43 | | | | | |
| COUNTY | | | | VAN BUREN | | | | | |
| STATE | | | | ARKANSAS | | | | | |
| Permanent Datum | | GL | | Sect. 13 | | Twp. 11N | | Rge. 17W | |
| Log measured from | | KB | | | | | | Elev. 1635.0 ft | |
| Drilling measured from | | KB | | | | | | 15.0 ft above perm. Datum | |
| Date | | 18-Jul-08 | | | | | | Elev. K.B. 1650.0 ft | |
| Run No. | | 1 | | | | | | D.F. 1649.0 ft | |
| Depth - Driller | | 997.0 ft | | | | | | G.L. 1635.0 ft | |
| Depth - Logger | | 997.0 ft | | | | | | | |
| Bottom - Logged Interval | | 987 | | | | | | | |
| Top - Logged Interval | | 100 | | | | | | | |
| Casing - Driller | | 9.625 in | | @ | | | | @ | |
| Casing - Logger | | 664.0 ft | | | | | | | |
| Bit Size | | 8.875 in | | @ | | | | @ | |
| Type Fluid in Hole | | WBM | | | | | | | |
| Density | | 9.1 ppg | | 1110.00 s/cft | | | | | |
| PH | | 9.60 pH | | 6.1 cphn | | | | | |
| Source of Sample | | FLOWLINE | | | | | | | |
| Rm @ Meas. Temperature | | 2.25 ohmm | | @ | | | | @ | |
| Rmf @ Meas. Temperature | | 1.95 ohmm | | @ | | | | @ | |
| Rmc @ Meas. Temperature | | 2.41 ohmm | | @ | | | | @ | |
| Source Rmf | | Rmc | | MEAS | | | | | |
| Rm @ BHT | | 2.12 ohmm | | @ | | | | @ | |
| Time Since Circulation | | 5.0 hr | | | | | | | |
| Time on Bottom | | 18-Jul-08 22:54 | | | | | | | |
| Max. Rec. Temperature | | 95.0 degF | | @ | | | | @ | |
| Equipment | | 336 | | FORT SMITH | | | | | |
| Recorded By | | WHITLOCK | | | | | | | |
| Witnessed By | | TOM MAJORS | | LISA REEVES | | | | | |

Fold here

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|--|--|--|--|--------------|--|--|--|--|------------------------------|--|--|--|--|----------------------------|--|--|--|--|---------------------------------------|--|--|--|--|---------------|--|--|--|--|-----------------|--|--|--|--|-------|--|--|--|--|
| Service Ticket No.: 6036952 | | | | | | | | | | API Serial No.: 03-141-10363 | | | | | | | | | | PGM Version: WL INSITE R2.2 (Build 2) | | | | | | | | | | | | | | | | | | | |
| CHANGE IN MUD TYPE OR ADDITIONAL SAMPLE | | | | | | | | | | | | | | | RESISTIVITY SCALE CHANGES | | | | | | | | | | | | | | | | | | | | | | | | |
| Date | | | | | Sample No. | | | | | | | | | | Type Log | | | | | Depth | | | | | Scale Up Hole | | | | | Scale Down Hole | | | | | | | | | |
| Depth-Driller | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Type Fluid in Hole | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Density | | | | | Viscosity | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Ph | | | | | Fluid Loss | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Source of Sample | | | | | | | | | | | | | | | RESISTIVITY EQUIPMENT DATA | | | | | | | | | | | | | | | | | | | | | | | | |
| Rm @ Meas. Temp | | | | | @ | | | | | @ | | | | | Run No. | | | | | Tool Type & No. | | | | | Pad Type | | | | | Tool Pos. | | | | | Other | | | | |
| Rmf @ Meas. Temp. | | | | | @ | | | | | @ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Rmc @ Meas. Temp. | | | | | @ | | | | | @ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Source Rmf | | | | | Rmc | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Rm @ BHT | | | | | @ | | | | | @ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Rmf @ BHT | | | | | @ | | | | | @ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Rmc @ BHT | | | | | @ | | | | | @ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| EQUIPMENT DATA | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| GAMMA | | | | | ACOUSTIC | | | | | DENSITY | | | | | NEUTRON | | | | | | | | | | | | | | | | | | | | | | | | |
| Run No. | | | | | Run No. | | | | | Run No. | | | | | Run No. | | | | | Run No. | | | | | | | | | | | | | | | | | | | |
| Serial No. | | | | | Serial No. | | | | | Serial No. | | | | | Serial No. | | | | | Serial No. | | | | | | | | | | | | | | | | | | | |
| Model No. | | | | | Model No. | | | | | Model No. | | | | | Model No. | | | | | Model No. | | | | | | | | | | | | | | | | | | | |
| Diameter | | | | | No. of Cent. | | | | | Diameter | | | | | Diameter | | | | | Diameter | | | | | | | | | | | | | | | | | | | |
| Detector Model No. | | | | | Spacing | | | | | Log Type | | | | | Log Type | | | | | Log Type | | | | | | | | | | | | | | | | | | | |
| Type | | | | | | | | | | Source Type | | | | | Source Type | | | | | Source Type | | | | | | | | | | | | | | | | | | | |
| Length | | | | | LSA [Y/N] | | | | | Serial No. | | | | | Serial No. | | | | | Serial No. | | | | | | | | | | | | | | | | | | | |
| Distance to Source | | | | | FWDA [Y/N] | | | | | Strength | | | | | Strength | | | | | Strength | | | | | | | | | | | | | | | | | | | |
| LOGGING DATA | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| GENERAL | | | | | GAMMA | | | | | ACOUSTIC | | | | | DENSITY | | | | | NEUTRON | | | | | | | | | | | | | | | | | | | |



200

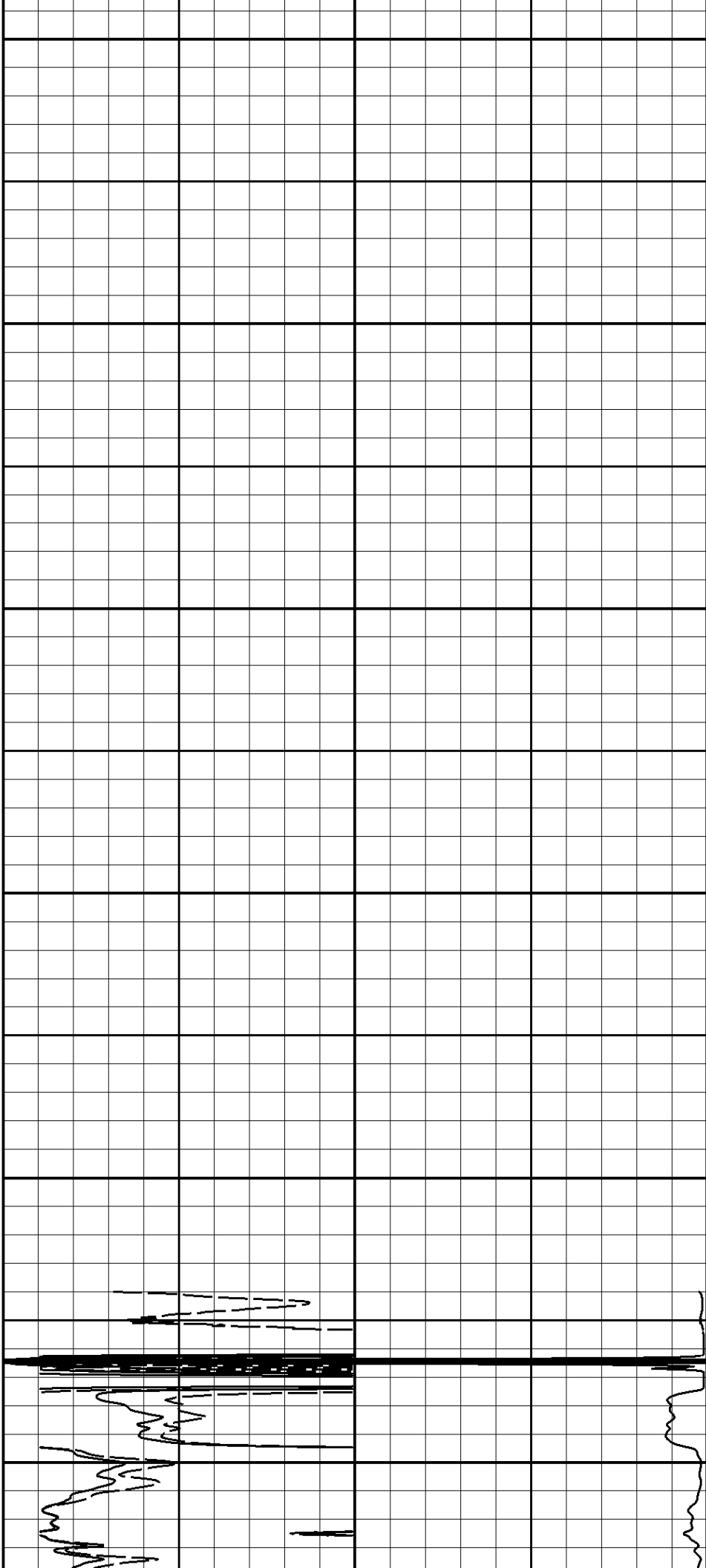
300

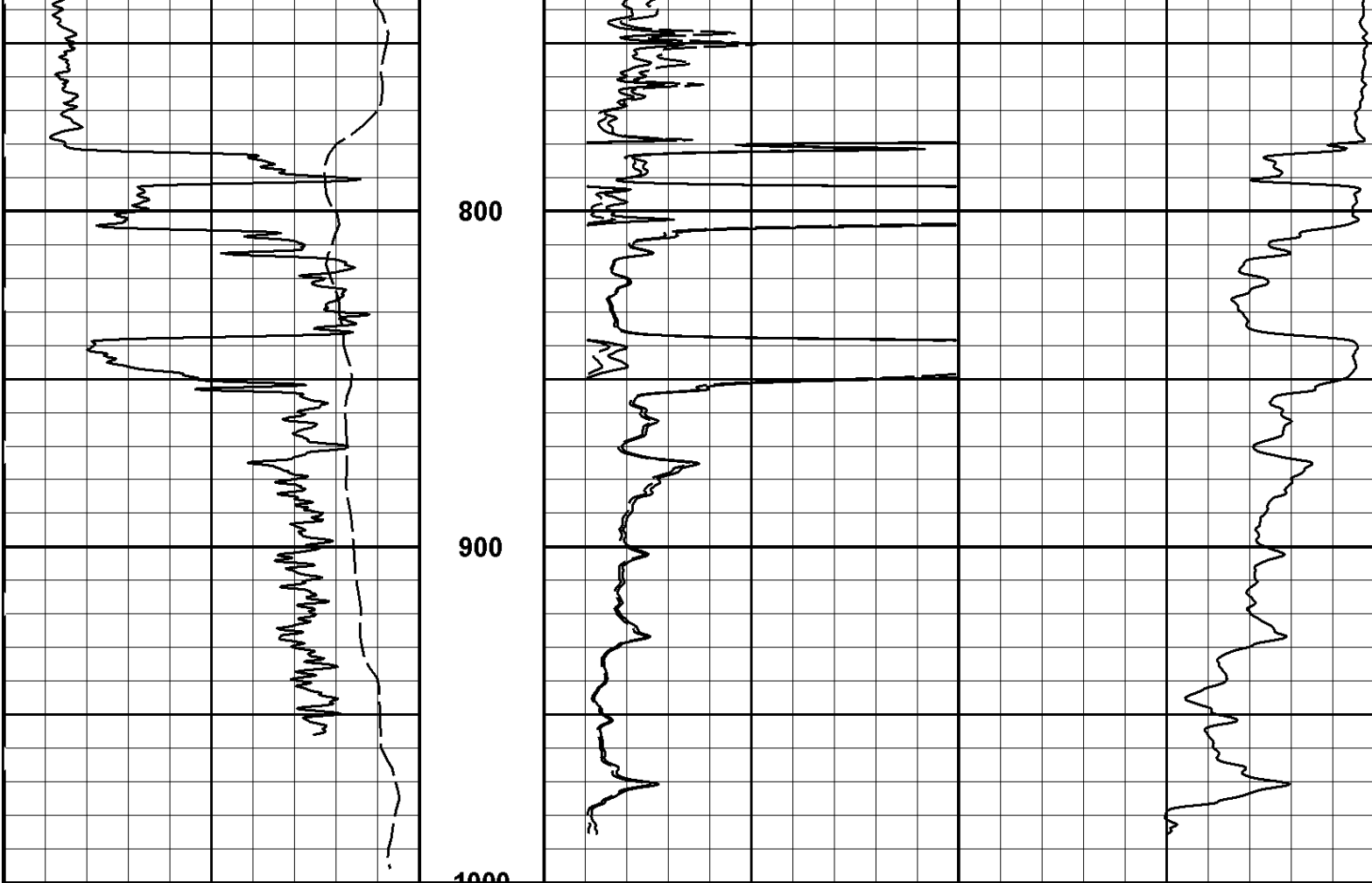
400

500

600

700





| | | | | | | | |
|---|-----------|-----|---------------|-----|---------------------------|-----|---|
| 0 | Gamma API | 150 | 1 : 600 ft | 0 | 20in Resistivity 2ft Res | 100 | |
| | api | | | | ohm-metre | | |
| | SP | | | 0 | 90in Resistivity 2ft Res | 100 | |
| | -]20[+ | | | | ohm-metre | | |
| | | | | 400 | 90in Conductivity 2ft Res | | 0 |
| | | | | | mmho per metre | | |

HALLIBURTON

Plot Time: 19-Jul-08 00:40:45
Plot Range: 100 ft to 1000 ft
Data: STORM_KAMALMAZ\Well Based\DAQ-0001-004\
Plot File: \\LOCAL-\\STORM_KAMALMAZ\0001 GTET-DSNT-SDLT-ACRT-CBGHD\COMBO\ACRT_2_main

2 INCH MAIN LOG

2 INCH MAIN LOG

HALLIBURTON

Plot Time: 19-Jul-08 00:40:45
Plot Range: 640 ft to 1000 ft
Data: STORM_KAMALMAZ\Well Based\DAQ-0001-004\
Plot File: \\COMBO\SEECO_TRIPLE_ML_IQ

5 INCH MAIN LOG

| Tension | | PERMEABLE | | | | | | | |
|---------|-----|-----------|---------|--------------------------|--------------------------|----------------|-----------------|------------------|------|
| 15K | 0 | | | | | | | | |
| pounds | | | | | | | | | |
| SHALE | 0 | MINOR 20 | 0.2 | 30in Resistivity 2ft Res | 2000 | | | | |
| | | ohmm | | ohm-metre | | | | | |
| 6 | 16 | 0 | MINV 20 | 0.2 | 60in Resistivity 2ft Res | 2000 | POROSITY | | |
| inches | | ohmm | | ohmm | | | | | |
| | | AHVT | 0.2 | 10in Resistivity 2ft Res | 2000 | 30 | DensityPorosity | | -10 |
| | | | | ohmm | | percent | | | |
| 0 | 150 | | BHVT | 0.2 | 20in Resistivity 2ft Res | 2000 | 30 | Neutron Porosity | |
| api | | | | ohmm | | percent | | | |
| SP | | 1 : 240 | | 0.2 | 90in Resistivity 2ft Res | 2000 | 0 | Pe | 10 |
| -120[+ | | ft | | ohmm | | | -0.25 | DensityCorr | 0.25 |
| | | | | | | barns/electron | gram per cc | | |

Caliper SP

Gamma API

Tension

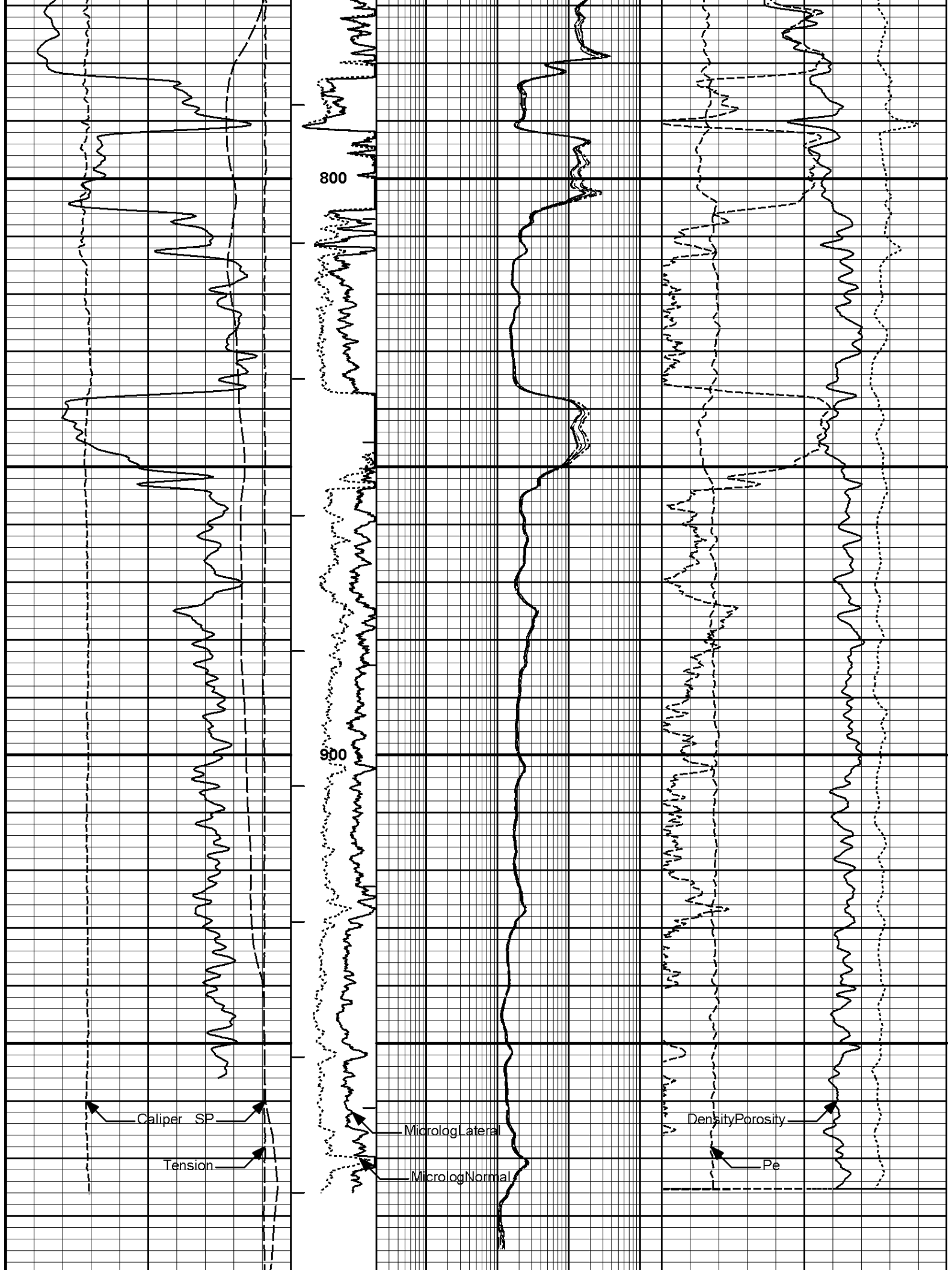
Microlog Lateral

Microlog Normal

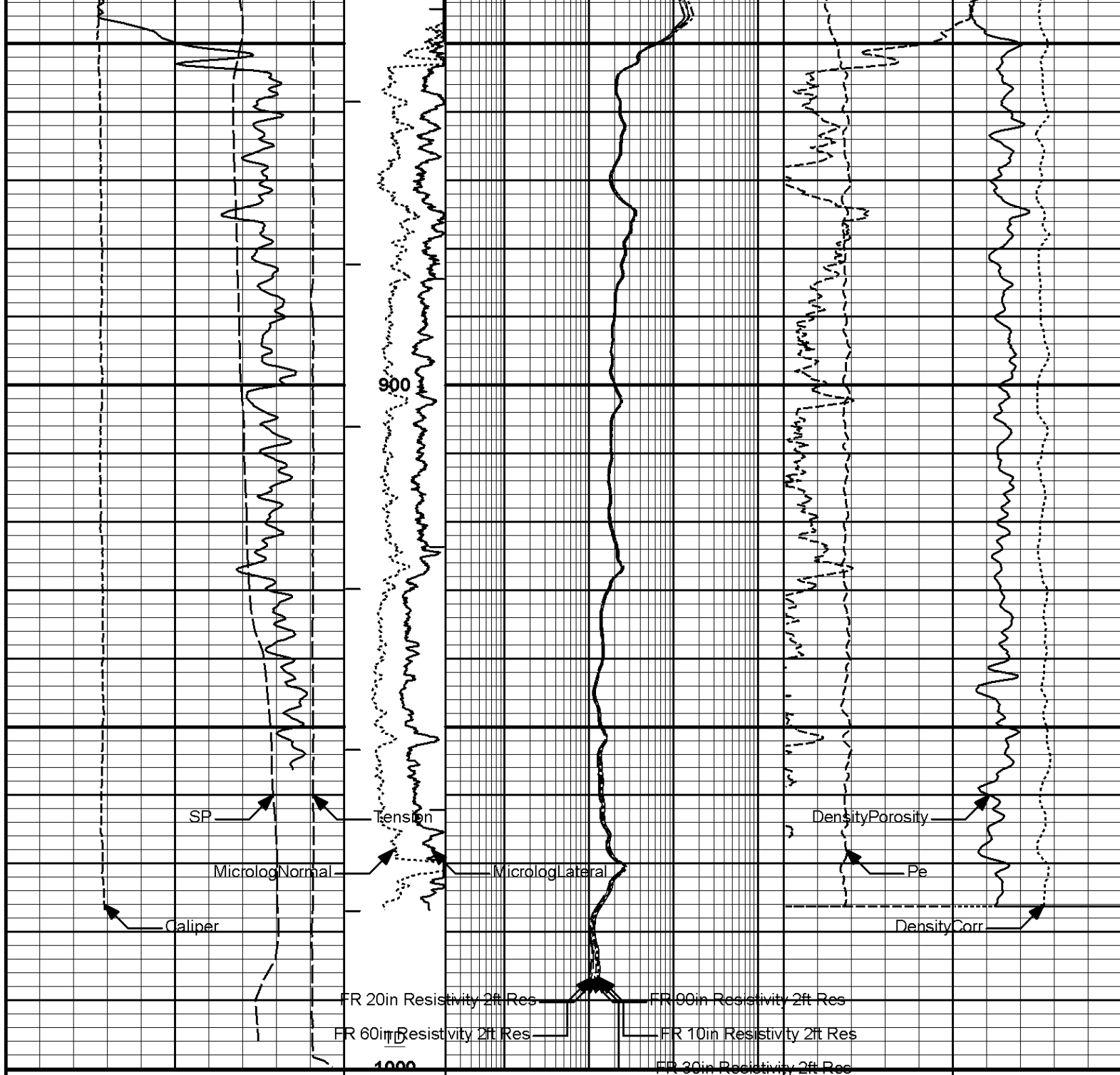
DensityPorosity

Neutron Porosity

DensityCorr







| | | | | | | | | | | | |
|-----------|--|--|---------------|-----|--------------------------|------|-----|------------------|----|-------------------|------|
| SP | | | 1 : 240 ft | 0.2 | 90in Resistivity 2ft Res | 2000 | 0 | Pe | 10 | -0.25 DensityCorr | 0.25 |
| -120[+] | | | | | | | | | | | |
| | | | BHVT | 0.2 | 20in Resistivity 2ft Res | 2000 | 30 | Neutron Porosity | | -10 | |
| Gamma API | | | | | | | | percent | | | |
| api | | | AHVT | 0.2 | 10in Resistivity 2ft Res | 2000 | 30 | DensityPorosity | | -10 | |
| | | | | | | | | percent | | | |
| Caliper | | | MINV 20 | 0.2 | 60in Resistivity 2ft Res | 2000 | 0 | POROSITY | | | |
| inches | | | | | | | | ohmm | | | |
| SHALE | | | MNOR 20 | 0.2 | 30in Resistivity 2ft Res | 2000 | 0 | | | | |
| | | | | | | | | ohmm | | | |
| Tension | | | PERMEABLE | | | | 15K | | | | |
| pounds | | | | | | | | | | | |

5 INCH MAIN LOG

REPEAT SECTION

HALLIBURTON

CALIBRATION REPORT

SURFACE TENSION SHOP CALIBRATION

| | | | |
|-------------------|---------------------------|-----------------------------|--------------------|
| Tool Name: | Depth Panel - PROT01 | Reference Calibration Date: | 12-Jan-08 20:09:44 |
| Engineer: | ALFRED CHILAMPATH | Calibration Date: | 13-Jan-08 19:31:38 |
| Software Version: | WL INSITE R2.0 (Build 22) | Calibration Version: | 1 |

SURFACE TENSION LOAD CELL

| Measurement | Load Cell Value | Measurement | Calibrated | Units |
|-------------|-----------------|-------------|------------|-------|
| Low | 421.00 | 34.45 | 0.00 | lbs |
| High | 1354.96 | 3252.36 | 3250.00 | lbs |

NATURAL GAMMA RAY TOOL SHOP CALIBRATION

| | | | |
|-------------------|--------------------------|-----------------------------|--------------------|
| Tool Name: | GTET - 11021039 | Reference Calibration Date: | 03-Jun-08 14:38:08 |
| Engineer: | COTHREN | Calibration Date: | 10-Jul-08 11:47:48 |
| Software Version: | WL INSITE R2.2 (Build 2) | Calibration Version: | 1 |

Calibrator Source S/N: 77

Calibrator API Reference:209.60 api

| Measurement | Measured | Calibrated | Units |
|-------------------------|----------|------------|-------|
| Background | 24.3 | 23.6 | api |
| Background + Calibrator | 239.9 | 233.2 | api |
| Calibrator | 208.9 | 209.6 | api |

NATURAL GAMMA RAY TOOL FIELD CALIBRATION

| | | | |
|-------------------|--------------------------|-----------------------------|--------------------|
| Tool Name: | GTET - 11021039 | Reference Calibration Date: | 10-Jul-08 11:47:48 |
| Engineer: | STEPHEN WEEKS | Calibration Date: | 10-Jul-08 11:50:46 |
| Software Version: | WL INSITE R2.2 (Build 2) | Calibration Version: | 1 |

Calibrator Source S/N: 77

Calibrator API Reference:209.60 api

| Field Verification | Shop | Field | Units |
|-------------------------|-------|-------|-------|
| Background | 23.6 | 23.3 | api |
| Background + Calibrator | 233.2 | 230.8 | api |
| Calibrator | 209.6 | 207.5 | api |

| Shop | Field | Difference | Tolerance |
|-------|-------|------------|-----------|
| 209.6 | 207.5 | 2.1 | +/- 9.00 |

DUAL SPACED NEUTRON SHOP CALIBRATION

DUAL SPACED NEUTRON SHOP CALIBRATION

Tool Name: DSNT - 11019641_PLEASE

Reference Calibration Date: 10-Jul-08 12:19:30

Engineer: STEPHEN WEEKS

Calibration Date: 10-Jul-08 12:35:07

Software Version: WL INSITE R2.2 (Build 2)

Calibration Version: 1

Logging Source S/N: DSN 194

Tank Serial Number: FTSM

Reference value assigned to Tank: 56.100

Snow Block S/N: 001

Calibration Tank Water Temperature: 73 degF

Min. Tool Housing Outside Diameter: 3.625 in

CALIBRATION CONSTANTS

| Measurement | Prev. Value | New Value | Control Limit On New Value |
|-------------|-------------|-----------|----------------------------|
| Gain: | 1.010 | 1.007 | 0.900 - 1.100 |

WATER TANK SUMMARY (Horizontal Water Tank)

| Measurement | Current Reading (Previous Coef.) | Calibrated (New Coef.) | Change | Control Limit On Change |
|-------------------|----------------------------------|------------------------|--------|-------------------------|
| Porosity (decg): | 0.2367 | 0.2358 | 0.0009 | +/- 0.0020 |
| Calibrated Ratio: | 10.59 | 10.56 | 0.031 | +/- 0.050 |

VERIFIER

| Measurement | Value | Control Limit |
|-----------------------------|--------|-------------------|
| Snow-Block Porosity (decg): | 0.0791 | 0.02000 - 0.09000 |

PASS/FAIL SUMMARY

| | |
|-------------------|--------|
| Background Check: | Passed |
| Gain-Range Check: | Passed |
| Snow-Block Check: | Passed |

DUAL SPACED NEUTRON FIELD CALIBRATION

Tool Name: DSNT - 11019641_PLEASE

Reference Calibration Date: 10-Jul-08 12:35:07

Engineer: STEPHEN WEEKS

Calibration Date: 10-Jul-08 12:36:26

Software Version: WL INSITE R2.2 (Build 2)

Calibration Version: 1

Logging Source S/N: DSN 194

Snow Block S/N: 001

NEUTRON FIELD-CHECK SUMMARY

| | Shop | Field | Difference | Control Limit On Change |
|-----------------------------|--------|--------|------------|-------------------------|
| Snow-Block Porosity (decg): | 0.0791 | 0.0801 | 0.0010 | +/- 0.0150 |

PASS/FAIL SUMMARY

| | |
|------------------------|--------|
| Block Change Check: | Passed |
| Snow Block Stat Check: | Passed |
| Temperature Check: | Passed |

MICRO LOG SHOP CALIBRATION

Tool Name: SDLT - I641M491P881

Reference Calibration Date: 06-May-08 14:19:49

Engineer: STEPHEN WEEKS

Calibration Date: 19-Jun-08 14:19:37

Software Version: WL INSITE R2.2 (Build 2)

Calibration Version: 1

CALIBRATION COEFFICIENT SUMMARY

| Measurement | Micro Log Normal | | Micro Log Lateral | | Units |
|----------------------|------------------|------------|-------------------|------------|-------|
| | Measured | Calibrated | Measured | Calibrated | |
| Tool Zero | -0.07 | -0.52 | 0.00 | -0.00 | ohmm |
| Calibration Point #1 | 0.46 | 0.00 | 0.01 | 0.00 | ohmm |
| Calibration Point #2 | 20.53 | 20.00 | 20.10 | 20.00 | ohmm |
| Internal Reference | 19.99 | 19.46 | 20.09 | 19.99 | ohmm |

| Measurement | Micro Log Normal | | Micro Log Lateral | | Units |
|----------------------|------------------|--|-------------------|--|-------|
| | Tool Value | | Tool Value | | |
| Tool Zero | 2.65 | | 0.50 | | V |
| Calibration Point #1 | 144.06 | | 1.90 | | V |
| Calibration Point #2 | 5567.77 | | 7110.98 | | V |
| Internal Reference | 5421.29 | | 7108.86 | | V |

| MICRO LOG FIELD CHECK | | | |
|-----------------------|--------------------------|-----------------------------|--------------------|
| Tool Name: | SDLT - I641M491P881 | Reference Calibration Date: | 19-Jun-08 14:19:37 |
| Engineer: | STEPHEN WEEKS | Calibration Date: | 19-Jun-08 14:20:02 |
| Software Version: | WL INSITE R2.2 (Build 2) | Calibration Version: | 1 |

| Measurement | Micro Log Normal | | Micro Log Lateral | | Units |
|--------------------|------------------|-------|-------------------|-------|-------|
| | Shop | Field | Shop | Field | |
| Tool Zero | -0.52 | -0.53 | -0.00 | -0.01 | ohmm |
| Internal Reference | 19.46 | 19.48 | 19.99 | 20.01 | ohmm |

| Summary | | | | |
|------------------|-------|-------|------------|-----------|
| Signal | Shop | Field | Difference | Tolerance |
| Microlog Normal | 19.46 | 19.48 | -0.020 | +/- 0.80 |
| Microlog Lateral | 19.99 | 20.01 | -0.020 | +/- 0.80 |

| SPECTRAL DENSITY SHOP CALIBRATION | | | |
|-----------------------------------|--------------------------|-----------------------------|--------------------|
| Tool Name: | SDLT - I641M491P881 | Reference Calibration Date: | 19-Jun-08 11:25:44 |
| Engineer: | WHITLOCK | Calibration Date: | 17-Jul-08 12:55:45 |
| Software Version: | WL INSITE R2.2 (Build 2) | Calibration Version: | 1 |

| | | |
|----------------------------|--|--------------------|
| Logging Source S/N: 5155gw | | |
| Aluminum Block S/N: FTSM | | Density: 2.581g/cc |
| Magnesium Block S/N: FTSM | | Density: 1.687g/cc |

| DENSITY CALIBRATION SUMMARY | | | |
|-----------------------------|----------------|-----------|---------------|
| Measurement | Previous Value | New Value | Control Limit |
| Near Bar Gain | 0.9948 | 0.9863 | 0.90 - 1.10 |
| Near Dens Gain | 0.9839 | 0.9805 | 0.90 - 1.10 |
| Near Peak Gain | 0.9880 | 1.0055 | 0.90 - 1.10 |
| Near Lith Gain | 0.9862 | 1.0093 | 0.90 - 1.10 |
| Far Bar Gain | 1.0036 | 0.9988 | 0.90 - 1.10 |
| Far Dens Gain | 0.9927 | 0.9922 | 0.90 - 1.10 |
| Far Peak Gain | 0.9910 | 0.9904 | 0.90 - 1.10 |
| Far Lith Gain | 0.9706 | 0.9707 | 0.90 - 1.10 |
| | | | |
| Near Bar Offset | 0.1252 | 0.2058 | NONE |
| Near Dens Offset | 0.1941 | 0.2263 | NONE |
| Near Peak Offset | 0.1309 | -0.0179 | NONE |
| Near Lith Offset | 0.1212 | -0.0766 | NONE |
| Far Bar Offset | -0.0075 | 0.0415 | NONE |
| Far Dens Offset | 0.0609 | 0.0692 | NONE |
| Far Peak Offset | 0.0275 | 0.0411 | NONE |
| Far Lith Offset | 0.0275 | 0.0411 | NONE |

| | | | |
|----------------------|---------|---------|------------|
| Far Peak Offset | 0.0375 | 0.0411 | NONE |
| Far Lith Offset | 0.1487 | 0.1423 | NONE |
| Near Bar Background | 1178.03 | 1173.68 | 700 - 1450 |
| Near Dens Background | 388.32 | 386.98 | 230 - 480 |
| Near Peak Background | 169.21 | 167.63 | 100 - 210 |
| Near Lith Background | 209.13 | 209.75 | 125 - 260 |
| Far Bar Background | 568.89 | 566.00 | 450 - 900 |
| Far Dens Background | 222.15 | 219.81 | 175 - 345 |
| Far Peak Background | 87.89 | 87.98 | 70 - 140 |
| Far Lith Background | 90.99 | 91.52 | 75 - 145 |

CALIBRATION BLOCK SUMMARY

| Measurement | Current Reading (Previous Coef) | Calibrated (New Coef) | Change | Control Limit On Change |
|----------------|------------------------------------|--------------------------|--------|----------------------------|
| MAGNESIUM | | | | |
| Density (g/cc) | 1.687 | 1.687 | 0.000 | +/- 0.015 |
| Pe | 2.606 | 2.598 | -0.008 | +/- 0.150 |
| ALUMINUM | | | | |
| Density (g/cc) | 2.582 | 2.581 | -0.001 | +/- 0.01500 |
| Pe | 3.114 | 3.161 | 0.047 | +/- 0.150 |

TOOL SUMMARY

| Measurement | Near Detector | | Far Detector | |
|----------------------------|---------------|----------------|--------------|----------------|
| | Value | Control Limits | Value | Control Limits |
| QUALITY | | | | |
| Background | -0.0020 | +/- 0.0110 | -0.0011 | +/- 0.0140 |
| Magnesium Block | 0.0003 | +/- 0.0110 | -0.0005 | +/- 0.0140 |
| Aluminum Block | 0.0007 | +/- 0.0110 | 0.0018 | +/- 0.0140 |
| Resolution | 9.03 | 6.00 - 11.50 | 8.92 | 6.00 - 11.50 |
| Internal Verifier(B+D+P+L) | 1938 | 1200 - 2700 | 965 | 800 - 1700 |

PASS/FAIL SUMMARY

| | |
|--------------------------------|--------|
| Background Quality Check: | Passed |
| Background Range Check: | Passed |
| Background Resolution Check: | Passed |
| Background Verification Check: | Passed |
| Magnesium Quality Check: | Passed |
| Aluminum Quality Check: | Passed |
| Gains Check: | Passed |
| Changes in Calibration Blocks: | Passed |

SPECTRAL DENSITY FIELD CHECK

| | | | |
|-------------------|--------------------------|-----------------------------|--------------------|
| Tool Name: | SDLT - I641M491P881 | Reference Calibration Date: | 17-Jul-08 12:55:45 |
| Engineer: | WHITLOCK | Calibration Date: | 17-Jul-08 13:00:56 |
| Software Version: | WL INSITE R2.2 (Build 2) | Calibration Version: | 1 |

Aluminum Block S/N: FTSM Density: 2.581g/cc
Magnesium Block S/N: FTSM Density: 1.687g/cc
Pad Temperature: 92.9 degF

DENSITY FIELD CALIBRATION SUMMARY

| Measurement | Shop | Field | Change | Control Limit +/- |
|--------------------|----------|----------|--------|-------------------|
| Near (B+D+P+L) cps | 1938.035 | 1942.381 | 4.346 | 17.602 |

| | | | | |
|--------------------|---------|---------|--------|--------|
| Near (B+D+P+L) cps | 965.313 | 959.156 | -6.157 | 16.717 |
| Near Resolution | 9.03 | 8.97 | -0.060 | 0.50 |
| Far Resolution | 8.83 | 8.92 | -0.090 | 1.00 |

PASS/FAIL SUMMARY

| | |
|-------------------------|--------|
| Bkg Quality Check: | Passed |
| Bkg Resolution Check: | Passed |
| Bkg Verification Check: | Passed |

DENSITY CALIPER SHOP CALIBRATION

| | | | |
|-------------------|--------------------------|-----------------------------|--------------------|
| Tool Name: | SDLT - I641M491P881 | Reference Calibration Date: | 19-Jun-08 13:54:58 |
| Engineer: | STEPHEN WEEKS | Calibration Date: | 19-Jun-08 14:00:29 |
| Software Version: | WL INSITE R2.2 (Build 2) | Calibration Version: | 1 |

CALIBRATION COEFFICIENTS

| Measurement | Previous Value | New Value | Control Limit On New Value |
|-------------|----------------|--------------|----------------------------|
| Pad Offset | -1325.72 | -1351.53 | -7000.00 - -1000.00 |
| Pad Gain | 0.0003703 | 0.0003721 | 0.000200 - 0.000600 |
| Arm Offset | -1439.58 | -1318.67 | -5000.00 - 3000.00 |
| Arm Gain | 0.0005279 | 0.0005114 | 0.000300 - 0.000700 |
| Arm Power | -0.000006744 | -0.000005785 | -0.000010 - 0.000010 |

The ring diameter is computed from: DIAMETER = PAD EXTENSION + ARM EXTENSION + TOOL DIAMETER

Tool Diameter: 4.50 in

CALIBRATION RINGS

| Measurement | Current Reading (Previous Coeff.) | Calibrated (New Coeff.) | Change | Control Limit On New Value |
|------------------|-----------------------------------|-------------------------|---------|----------------------------|
| PAD EXTENSION: | | | | |
| Small Ring (in) | 2.00 | 2.00 | 0.0000 | +/- 0.200 |
| Medium Ring (in) | 3.74 | 3.75 | 0.0100 | +/- 0.200 |
| RING DIAMETER: | | | | |
| Small Ring (in) | 6.50 | 6.500 | 0.0000 | +/- 0.200 |
| Medium Ring (in) | 8.29 | 8.250 | -0.0400 | +/- 0.200 |
| Large Ring (in) | 15.03 | 15.000 | -0.0300 | +/- 0.200 |

PASS/FAIL SUMMARY

| | |
|---------------------------------------|--------|
| Calibration-Coefficients Range Check: | Passed |
| Ring-Measurement Check: | Passed |

PASS/FAIL SUMMARY

| | |
|---------------------------------------|--------|
| Calibration-Coefficients Range Check: | Passed |
|---------------------------------------|--------|

SDLT CALIPER FIELD CALIBRATION

| | | | |
|-------------------|--------------------------|-----------------------------|--------------------|
| Tool Name: | SDLT - I641M491P881 | Reference Calibration Date: | 19-Jun-08 14:00:29 |
| Engineer: | STEPHEN WEEKS | Calibration Date: | 19-Jun-08 14:01:49 |
| Software Version: | WL INSITE R2.2 (Build 2) | Calibration Version: | 1 |

MEASURED CALIPER VALUES

| Measurement | Shop | Field | Change | Control Limit On New Value |
|---------------|-------|-------|--------|----------------------------|
| Pad Extension | 3.75 | 3.76 | 0.01 | +/- 0.10 |
| Ring Diameter | 8.250 | 8.25 | 0.00 | +/- 0.15 |

PASS/FAIL SUMMARY

| | |
|----------------------|--------|
| Pad Extension Check: | Passed |
| Diameter Check: | Passed |

ARRAY COMPENSATED TRUE RESISTIVITY SHOP CALIBRATION

Tool Name: ACRT - 90148387-e094-s142

Reference Calibration Date: 19-Jun-08 15:10:35

Engineer: STEPHEN WEEKS

Calibration Date: 11-Jul-08 16:03:43

Software Version: WL INSITE R2.2 (Build 2)

Calibration Version: 1

TYPICAL GAIN RANGE

| Subarray | R12KHz | | | R36KHz | | | R72KHz | | |
|----------|--------|----------|-------|--------|----------|-------|--------|----------|-------|
| | Lower | (mmho/m) | Upper | Lower | (mmho/m) | Upper | Lower | (mmho/m) | Upper |
| A1 (80") | 0.95 | 1.0137 | 1.05 | 0.95 | 1.0112 | 1.05 | 0.95 | 1.0086 | 1.05 |
| A2 (50") | 0.95 | 1.0170 | 1.05 | 0.95 | 1.0118 | 1.05 | 0.95 | 1.0084 | 1.05 |
| A3 (29") | 0.95 | 1.0054 | 1.05 | 0.95 | 0.9992 | 1.05 | 0.95 | 0.9948 | 1.05 |
| A4 (17") | 0.95 | 1.0161 | 1.05 | 0.95 | 1.0041 | 1.05 | 0.95 | 1.0011 | 1.05 |
| A5 (10") | N/A | N/A | N/A | 0.95 | 0.9930 | 1.05 | 0.95 | 0.9919 | 1.05 |
| A6 (6") | N/A | N/A | N/A | 0.95 | 0.9971 | 1.05 | 0.95 | 0.9954 | 1.05 |

TYPICAL SONDE OFFSET RANGE

| Subarray | R12KHz | | | R36KHz | | | R72KHz | | |
|----------|--------|----------|-------|--------|----------|-------|--------|----------|-------|
| | Lower | (mmho/m) | Upper | Lower | (mmho/m) | Upper | Lower | (mmho/m) | Upper |
| A1 (80") | -3 | 0.797 | -1 | -6 | -3.696 | -2 | -6 | -5.566 | -2 |
| A2 (50") | -6 | -1.361 | -2 | -6 | -4.118 | -2 | -6 | -4.577 | -2 |
| A3 (29") | -27 | -13.029 | -9 | -9 | -3.697 | -3 | -9 | -3.703 | -3 |
| A4 (17") | -180 | -110.948 | -60 | -45 | -35.158 | -15 | -39 | -26.987 | -13 |
| A5 (10") | N/A | N/A | N/A | -150 | -96.337 | -50 | -90 | -47.162 | -30 |
| A6 (6") | N/A | N/A | N/A | 175 | 253.719 | 525 | 90 | 134.540 | 270 |

TRANSMITTER CURRENT GAIN

| Signal | Lower | R | Upper |
|--------|-------|--------|-------|
| 12K | 0.75 | 0.8337 | 1.4 |
| 36K | 1.0 | 1.2706 | 2.4 |
| 72K | 1.25 | 1.4762 | 2.5 |

R-MUD VERIFICATION

| Signal | Lower (ohm-m) | Measured (ohmm) | Upper (ohm-m) |
|----------|---------------|-----------------|---------------|
| Mud Cell | 0.95 | 1.005 | 1.05 |

CALIBRATION SUMMARY

| Sensor | Shop | Field | Post | Difference | Tolerance | Units |
|-------------------------|----------|----------|-------|------------|---------------|-------|
| Depth Panel-PROT01 | | | | | | |
| Tension Zero | 0.00 | ----- | ----- | 0.00 | ----- | lbs |
| Tension Cal | 3250.00 | ----- | ----- | 0.00 | ----- | lbs |
| GTET-11021039 | | | | | | |
| Gamma Ray Calibrator | 209.6 | 207.5 | ----- | 2.1 | +/- +/- 9.0 | api |
| DSNT-11019641_PLEASE | | | | | | |
| Snow-Block Porosity | 0.0791 | 0.0801 | ----- | -0.0010 | +/- +/-0.0150 | decp |
| SDLT-I641M491P881 | | | | | | |
| Near(B+D+P+L) | 1938.035 | 1942.381 | ----- | -4.346 | +/-17.602 | cps |
| Far(B+D+P+L) | 965.313 | 959.156 | ----- | 6.157 | +/-16.717 | cps |
| CALIPER RING 1 | 8.250 | 8.25 | ----- | 0.000 | +/-0.15 | in |
| ACRt-90148387-e094-s142 | | | | | | |
| Mud Cell | 1.005 | ----- | ----- | 0.000 | ----- | ohmm |

Data: STORM_KAMALMAZ\0001 GTET-DSNT-SDLT-ACRT-CBGHD\IDLE

Date: 18-Jul-08 22:36:00

PARAMETERS REPORT

| Depth (ft) | Tool Name | Mnemonic | Description | Value | Units |
|---------------|-----------|----------|---|----------------|-------|
| TOP | | | | | |
| | SHARED | BS | Bit Size | 8.875 | in |
| | SHARED | UBS | Use Bit Size instead of Caliper for all applications. | No | |
| | SHARED | MDWT | Borehole Fluid Weight | 9.500 | ppg |
| | SHARED | RMUD | Mud Resistivity | 2.000 | ohmm |
| | SHARED | TRM | Temperature of Mud | 75.0 | degF |
| | SHARED | OBM | Oil Based Mud System? | No | |
| | SHARED | CSD | Logging Interval is Cased? | No | |
| | SHARED | ICOD | AHV Casing OD | 5.500 | in |
| | SHARED | ST | Surface Temperature | 75.0 | degF |
| | SHARED | TD | Total Well Depth | 10000.00 | ft |
| | SHARED | BHT | Bottom Hole Temperature | 200.0 | degF |
| | GTET | GROK | Process Gamma Ray? | Yes | |
| | GTET | GRSO | Gamma Tool Standoff | 0.000 | in |
| | GTET | GEOK | Process Gamma Ray EVR? | No | |
| | DSNT | DNOK | Process DSN? | Yes | |
| | DSNT | DEOK | Process DSN EVR? | No | |
| | DSNT | NLIT | Neutron Lithology | Limestone | |
| | DSNT | DNSO | DSN Standoff - 0.25 in (6.35 mm) Recommended | 0.000 | in |
| | DSNT | DNTP | Temperature Correction Type | None | |
| | DSNT | DPRS | DSN Pressure Correction Type | None | |
| | DSNT | SHCO | View More Correction Options | No | |
| | DSNT | UTVD | Use TVD for Gradient Corrections? | No | |
| | DSNT | | Logging Horizontal Water Tank? | No | |
| | SDLT | DNOK | Process Density? | Yes | |
| | SDLT | DNOK | Process Density EVR? | No | |
| | SDLT | AD | Is Hole Air Drilled? | No | |
| | SDLT | CB | Use Calibration Blocks? | No | |
| | SDLT | SPVT | SDLT Pad Temperature Valid? | Yes | |
| | SDLT | DTWN | Disable temperature warning | No | |
| | SDLT | MDTP | Weighted Mud Correction Type? | Barite | |
| | SDLT | DMA | Formation Density Matrix | 2.710 | g/cc |
| | SDLT | DFL | Formation Density Fluid | 1.000 | g/cc |
| | SDLT | CLOK | Process Caliper Outputs? | Yes | |
| | SDLT | MLOK | Process MicroLog Outputs? | Yes | |
| | ACRt | RTOK | Process ACRt? | Yes | |
| | ACRt | CIND | Casing Indicator Enabled? | Yes | |
| | ACRt | RECE | Relative Caliper Error | 0 | % |
| | ACRt | MNSO | Minimum Tool Standoff | 1.50 | in |
| | ACRt | RMC | Use RM Calculated for BHC? | No | |
| | ACRt | TSEL | Calculate Temperature for Rmud Correction? | No | |
| | ACRt | LTNM | Acrt Lateral Normalization | None | |
| | ACRt | UTC | Use Temperature Correction | Yes | |
| | ACRt | TCS1 | Temperature Correction Source | FP Lwr & FP Up | |
| | ACRt | TPOS | Tool Position | Standoff | |
| | ACRt | BHCM | Borehole Compensation Type | Conventional | |
| | ACRt | RMIN | Minimum Resistivity for MAP | 0.20 | ohmm |
| | ACRt | RMIN | Maximum Resistivity for MAP | 200.00 | ohmm |
| | ACRt | REC6 | Record 6 in curves in ADI? | No | |
| BOTTOM | | | | | |

HALLIBURTON**TOOL STRING DIAGRAM REPORT**

| Description | O.D. | Diagram | Sensors @ Delays | Length | Accumulated Length |
|---------------------------------------|------------------------------|---------|---|----------|--------------------|
| Cable Head-PROT01 30.00 lbs | Ø 3.625 in → | | | 1.92 ft | 50.85 ft |
| GTET-11021039 165.00 lbs | Ø 3.625 in → | | ← GammaRay @ 42.87 ft | 8.52 ft | 48.93 ft |
| DSNT-11019641_PLEASE 174.00 lbs | Ø 3.625 in → | | ← DSN Far @ 33.47 ft ← DSN Near @ 32.72 ft | 9.69 ft | 40.41 ft |
| SDLT-I641M491P881 360.00 lbs | Ø 4.500 in → Ø 4.750 in → | | SDL Microlog @ 22.91 ft SDL Caliper @ 22.73 ft SDL @ 22.72 ft | 10.81 ft | 30.72 ft |
| ACRt-90148387-e094-s142 250.00 lbs | Ø 3.625 in → | | ← Mud Resistivity @ 13.52 ft ← ACRt @ 9.54 ft | 19.25 ft | 19.91 ft |

Cabbage Head-CABBAGE
10.00 lbs

Ø 3.625 in
Ø 6.000 in



← SP @ 1.94 ft

0.66 ft
0.66 ft
0.00 ft

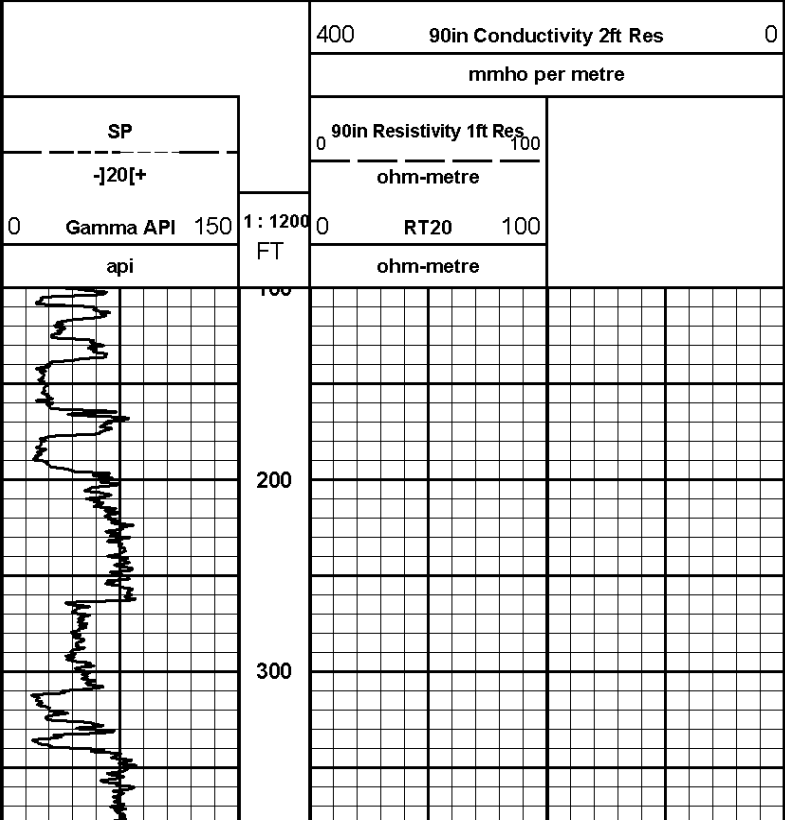
| Mnemonic | Tool Name | Serial Number | Weight (lbs) | Length (ft) | Accumulated Length (ft) | Max.Log. Speed (fpm) |
|--|------------------------------------|--------------------|--------------|-------------|-------------------------|---|
| CH | Cable Head | PROT01 | 30.00 | 1.92 | 48.93 | 300.00 |
| GTET | Natural Gamma Ray Tool | 11021039 | 165.00 | 8.52 | 40.41 | 60.00 |
| DSNT | Dual Spaced Neutron | 11019641_PLEASE | 174.00 | 9.69 | 30.72 | 60.00 |
| SDLT | Spectral Density Tool | I641M491P881 | 360.00 | 10.81 | 19.91 | 60.00 |
| ACRT | Array Compensated True Resistivity | 90148387-e094-s142 | 250.00 | 19.25 | 0.66 | 300.00 |
| SP | SP Ring | PROTO1 | 5.00 | 0.25 | 1.94 | 300.00 |
| CBHD | Cabbage Head 6" | CABBAGE | 10.00 | 0.66 | 0.00 | 300.00 |
| Total | | | 994.00 | 50.85 | | |
| | | | | | | * Not included in Total Length and Length Accumulation. |
| Data: STORM_KAMALMAZ\0001 GTET-DSNT-SDLT-ACRT-CBGHD\IDLE | | | | | | Date: 18-Jul-08 22:41:49 |

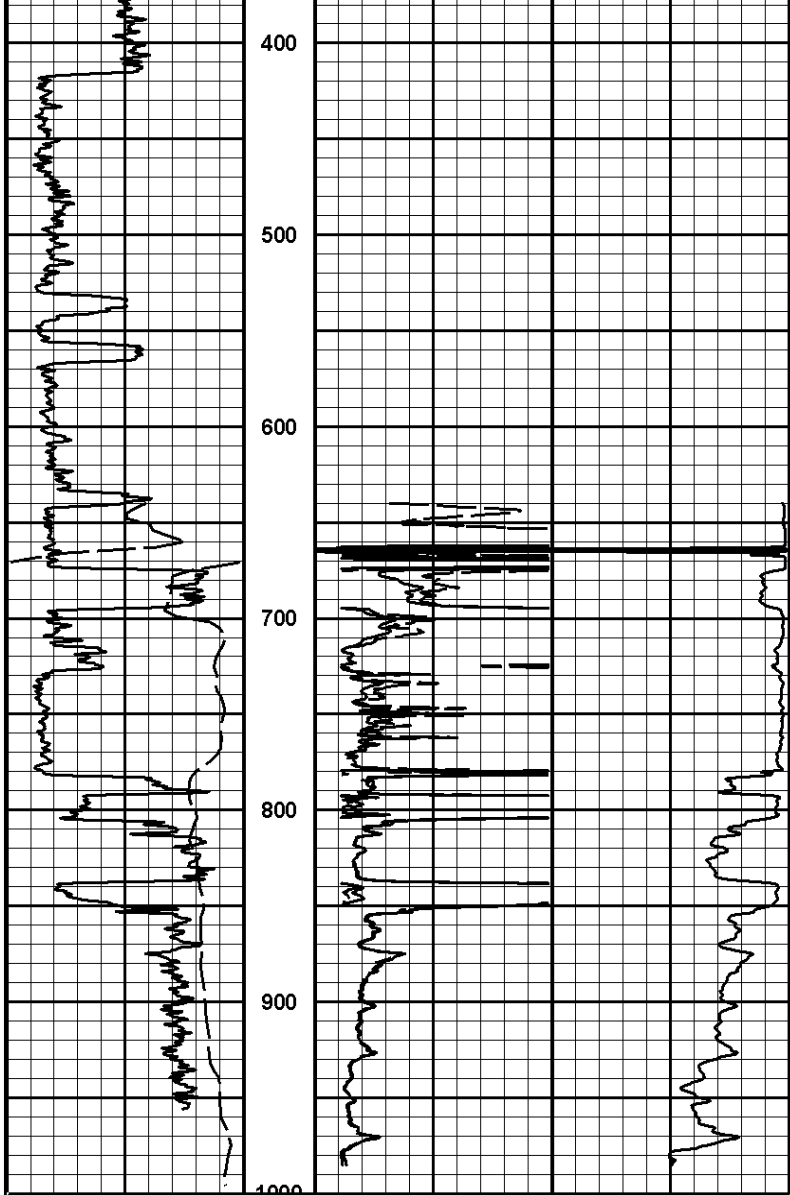
HALLIBURTON

Plot Time: 19-Jul-08 00:40:50
Plot Range: 100 ft to 1000 ft
Data: STORM_KAMALMAZ\Well Based\DAQ-0001-004\
Plot File: \\LOCAL-STORM_KAMALMAZ\0001 GTET-DSNT-SDLT-ACRT-CBGHD\COMBO\ACRT_1_main

1 INCH MAIN LOG

1 INCH CORRELATION LOG





| | | | | | | | |
|---|-----------|-----|---------|-----|---------------------------|-----|--|
| 0 | Gamma API | 150 | 1: 1200 | 0 | RT20 | 100 | |
| | api | | FT | | ohm-metre | | |
| | SP | | | 0 | 90in Resistivity 1ft Res | 100 | |
| | -]20[+ | | | | ohm-metre | | |
| | | | | 400 | 90in Conductivity 2ft Res | 0 | |
| | | | | | mmho per metre | | |

HALLIBURTON

Plot Time: 19-Jul-08 00:40:51

Plot Range: 100 ft to 1000 ft

Data: STORM_KAMALMAZIWell Based\DAQ-0001-004\

Plot File: \\LOCAL-STORM_KAMALMAZI0001\GTE\T-DSNT-SDLT-ACRT-CBGHD\COMBO\ACRT_1_main

1 INCH MAIN LOG

1 INCH CORRELATION LOG