

# HALLIBURTON

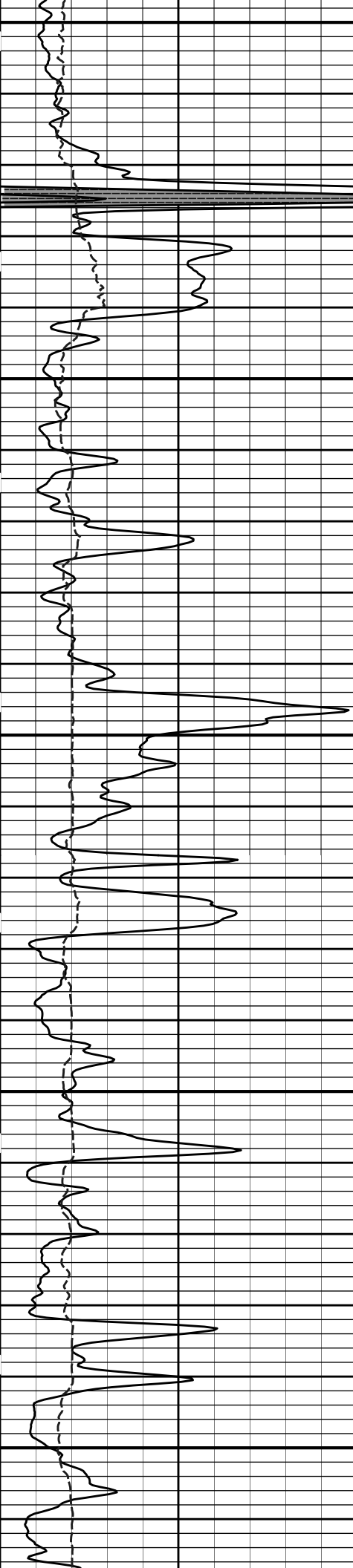
## MICROLOG

|                          |            |                         |                 |
|--------------------------|------------|-------------------------|-----------------|
| COMPANY                  |            | OXY USA INC.            |                 |
| WELL                     |            | GARDEN CITY I-1         |                 |
| FIELD                    |            | GARDEN CITY             |                 |
| COUNTY                   |            | FINNEY                  |                 |
| STATE                    |            | KANSAS                  |                 |
| Permanent Datum          |            | GL                      | Elev. 2941.1 ft |
| Log measured from        |            | KB                      | D.F. 2951.1 ft  |
| Drilling measured from   |            | KB                      | G.L. 2941.1 ft  |
| Date                     |            | 19-Jan-13               |                 |
| Run No.                  |            | ONE                     |                 |
| Depth - Driller          |            | 5095.00 ft              |                 |
| Depth - Logger           |            | 5010.0 ft               |                 |
| Bottom - Logged Interval |            | 4966                    |                 |
| Top - Logged Interval    |            | 3700                    |                 |
| Casing - Driller         |            | 8.625 in @ 1806.0 ft    | @               |
| Casing - Logger          |            | 1806.0 ft               |                 |
| Bit Size                 |            | 7.875 in                | @               |
| Type Fluid in Hole       |            | WATER BASED MUD         |                 |
| Density                  | Viscosity  | 9.2 ppq                 | 37.00 s/qt      |
| PH                       | Fluid Loss | 10.00 pH                | 10.4 cpm        |
| Source of Sample         |            | MUDDPT                  |                 |
| Rm @ Meas. Temperature   |            | 0.710 ohmm @ 65.00 degF | @               |
| Rmf @ Meas. Temperature  |            | 0.60 ohmm @ 65.00 degF  | @               |
| Rmc @ Meas. Temperature  |            | 0.820 ohmm @ 65.00 degF | @               |
| Source Rmf               | Rmc        | MEASURED                | MEASURED        |
| Rm @ BHT                 |            | 0.38 ohmm @ 127.0 degF  | @               |
| Time Since Circulation   |            | 10.0 hr                 |                 |
| Time on Bottom           |            | 19-Jan-13 05:18         |                 |
| Max. Rec. Temperature    |            | 127.0 degF @ 5010.0 ft  | @               |
| Equipment                | Location   | 10782954                | LIBERAL         |
| Recorded By              |            | S. INGERSOLL            |                 |
| Witnessed By             |            | P. DURRETT              |                 |

Fold here

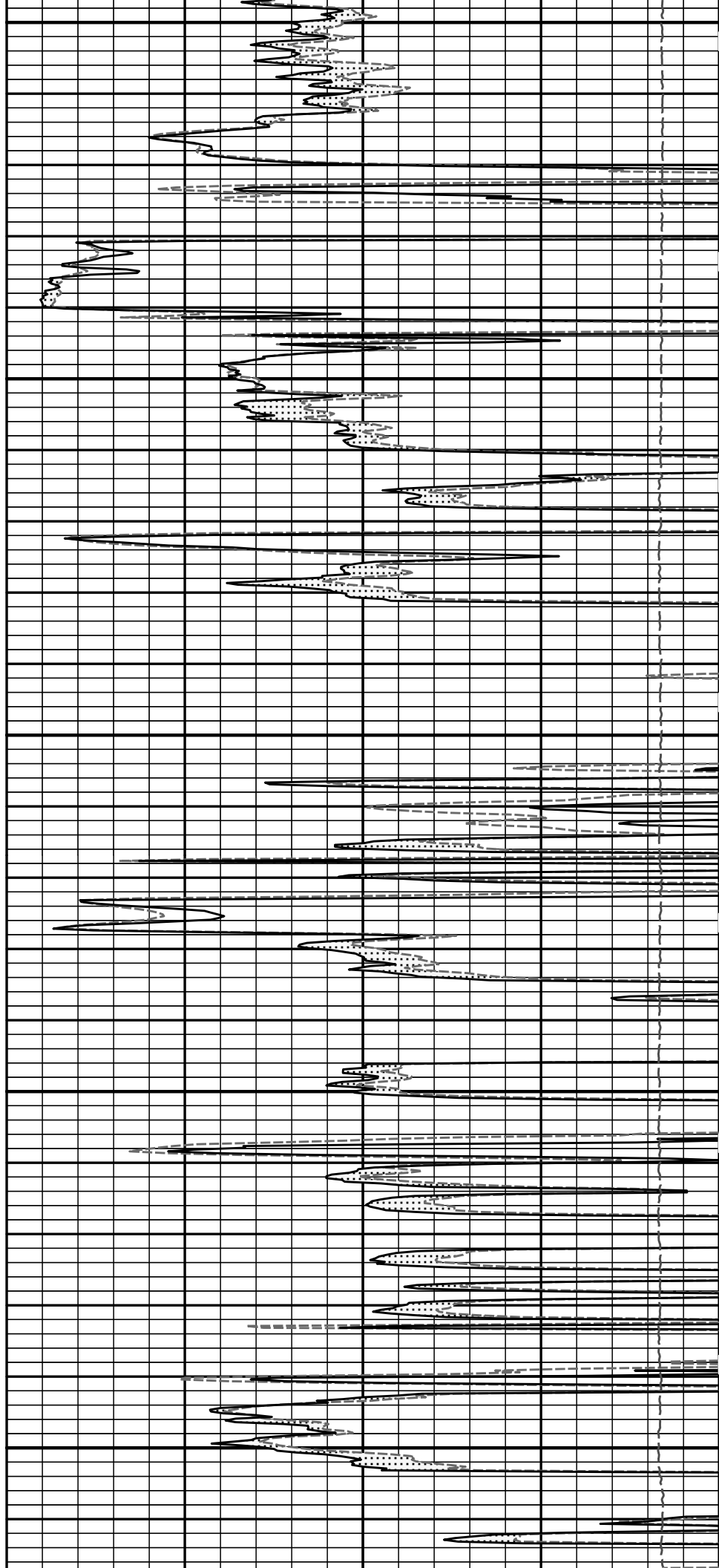
|                                         |            |   |  |                                |          |                            |                 |                                         |                 |          |  |
|-----------------------------------------|------------|---|--|--------------------------------|----------|----------------------------|-----------------|-----------------------------------------|-----------------|----------|--|
| Service Ticket No.: 900141137           |            |   |  | API Serial No.: 15055221930000 |          |                            |                 | PGM Version: WL INSITE R3.6.0 (Build 3) |                 |          |  |
| 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.                       |            | @ |  | @                              |          | ONE                        | ACRT            | N/A                                     | 1.5" S.O.       |          |  |
| Rmc @ Meas. Temp.                       |            | @ |  | @                              |          |                            | 10800784        |                                         |                 |          |  |
| Source Rmf                              | Rmc        |   |  |                                |          |                            |                 |                                         |                 |          |  |
| Rm @ BHT                                |            | @ |  | @                              |          |                            |                 |                                         |                 |          |  |
| Rmf @ BHT                               |            | @ |  | @                              |          |                            |                 |                                         |                 |          |  |
| Rmc @ BHT                               |            | @ |  | @                              |          |                            |                 |                                         |                 |          |  |
| EQUIPMENT DATA                          |            |   |  |                                |          |                            |                 |                                         |                 |          |  |
| GAMMA                                   |            |   |  | ACOUSTIC                       |          | DENSITY                    |                 |                                         | NEUTRON         |          |  |
| Run No.                                 | ONE        |   |  | Run No.                        | ONE      | Run No.                    | ONE             |                                         | Run No.         | ONE      |  |
| Serial No.                              | 10748374   |   |  | Serial No.                     | 10747684 | Serial No.                 | 10685803        |                                         | Serial No.      | 10755066 |  |
| Model No.                               | GTET       |   |  | Model No.                      | BSAT     | Model No.                  | SDLT            |                                         | Model No.       | DSNT     |  |
| Diameter                                | 3.625"     |   |  | No. of Cent.                   | 2        | Diameter                   | 5.3"            |                                         | Diameter        | 3.625"   |  |
| Detector Model No.                      | GTET       |   |  | Spacing                        | .5'      | Log Type                   | GAM-GAM         |                                         | Log Type        | NEU-NEU  |  |
| Type                                    | SCINT      |   |  |                                |          | Source Type                | CS-137          |                                         | Source Type     | AM-241BE |  |
| Length                                  | 8"         |   |  | LSA [Y/N]                      |          | Serial No.                 | 5073GW          |                                         | Serial No.      | DSN-436  |  |
| Distance to Source                      | N/A        |   |  | FWDA [Y/N]                     |          | Strength                   | 1.5 CI          |                                         | Strength        | 15 CI    |  |
| LOGGING DATA                            |            |   |  |                                |          |                            |                 |                                         |                 |          |  |
| GENERAL                                 |            |   |  | GAMMA                          |          | ACOUSTIC                   |                 | DENSITY                                 |                 | NEUTRON  |  |

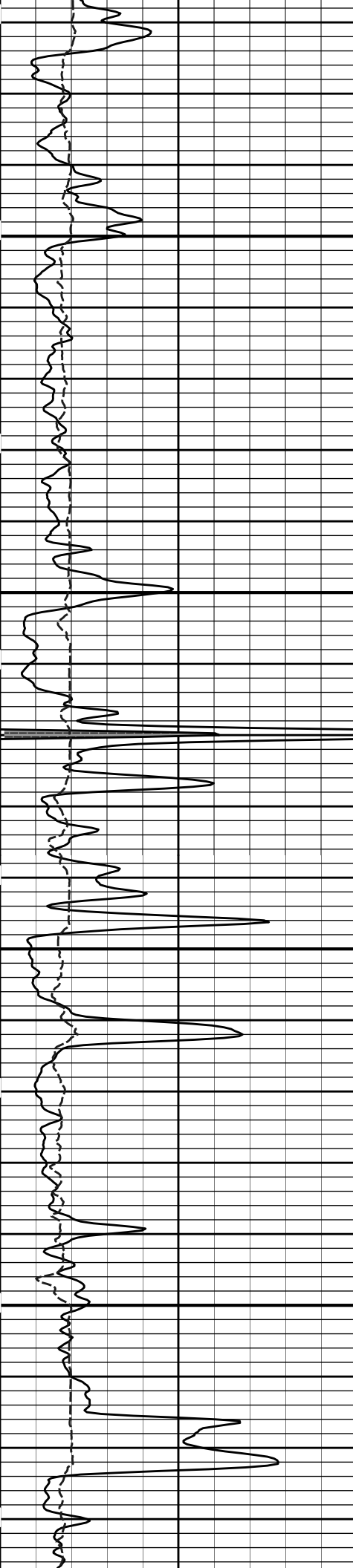
| GENERAL                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |       |      | GAMMA  | ACOUSTIC |     | DENSITY | NEUTRON |            |       |     |            |       |     |        |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|------|--------|----------|-----|---------|---------|------------|-------|-----|------------|-------|-----|--------|
| Run                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Depth |      | Speed  | Scale    |     | Scale   |         | Matrix     | Scale |     | Matrix     | Scale |     | Matrix |
| No.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | From  | To   | ft/min | L        | R   | L       | R       |            | L     | R   |            | L     | R   |        |
| ONE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 5010  | 1805 | REC    | 0        | 150 | 30      | -10     | 47.6 us/ft | 30    | -10 | 2.71 gm/cc | 30    | -10 | LIME   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |       |      |        |          |     |         |         |            |       |     |            |       |     |        |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |       |      |        |          |     |         |         |            |       |     |            |       |     |        |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |       |      |        |          |     |         |         |            |       |     |            |       |     |        |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |       |      |        |          |     |         |         |            |       |     |            |       |     |        |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |       |      |        |          |     |         |         |            |       |     |            |       |     |        |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |       |      |        |          |     |         |         |            |       |     |            |       |     |        |
| DIRECTIONAL INFORMATION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |       |      |        |          |     |         |         |            |       |     |            |       |     |        |
| Maximum Deviation @                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |       |      |        |          |     |         |         |            | KOP @ |     |            |       |     |        |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |       |      |        |          |     |         |         |            |       |     |            |       |     |        |
| Remarks: ANNULAR HOLE VOLUME CALCULATED FOR 5.5 INCH CASING.                                                                                                                                                                                                                                                                                                                                                                                                                                            |       |      |        |          |     |         |         |            |       |     |            |       |     |        |
| CHLORIDES REPORTED AT 14,000mg/L.                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |       |      |        |          |     |         |         |            |       |     |            |       |     |        |
| TD NOT REACHED DUE TO BOREHOLE CONDITIONS.                                                                                                                                                                                                                                                                                                                                                                                                                                                              |       |      |        |          |     |         |         |            |       |     |            |       |     |        |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |       |      |        |          |     |         |         |            |       |     |            |       |     |        |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |       |      |        |          |     |         |         |            |       |     |            |       |     |        |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |       |      |        |          |     |         |         |            |       |     |            |       |     |        |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |       |      |        |          |     |         |         |            |       |     |            |       |     |        |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |       |      |        |          |     |         |         |            |       |     |            |       |     |        |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |       |      |        |          |     |         |         |            |       |     |            |       |     |        |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |       |      |        |          |     |         |         |            |       |     |            |       |     |        |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |       |      |        |          |     |         |         |            |       |     |            |       |     |        |
| HALLIBURTON DOES NOT GUARANTEE THE ACCURACY OF ANY INTERPRETATION OF THE LOG DATA, CONVERSION OF LOG DATA TO PHYSICAL ROCK PARAMETERS OR RECOMMENDATIONS WHICH MAY BE GIVEN BY HALLIBURTON PERSONNEL OR WHICH APPEAR ON THE LOG OR IN ANY OTHER FORM. ANY USER OF SUCH DATA, INTERPRETATIONS, CONVERSIONS, OR RECOMMENDATIONS AGREES THAT HALLIBURTON IS NOT RESPONSIBLE EXCEPT WHERE DUE TO GROSS NEGLIGENCE OR WILLFUL MISCONDUCT, FOR ANY LOSS, DAMAGES, OR EXPENSES RESULTING FROM THE USE THEREOF. |       |      |        |          |     |         |         |            |       |     |            |       |     |        |
| HALLIBURTON                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |       |      |        |          |     |         |         |            |       |     |            |       |     |        |



3800

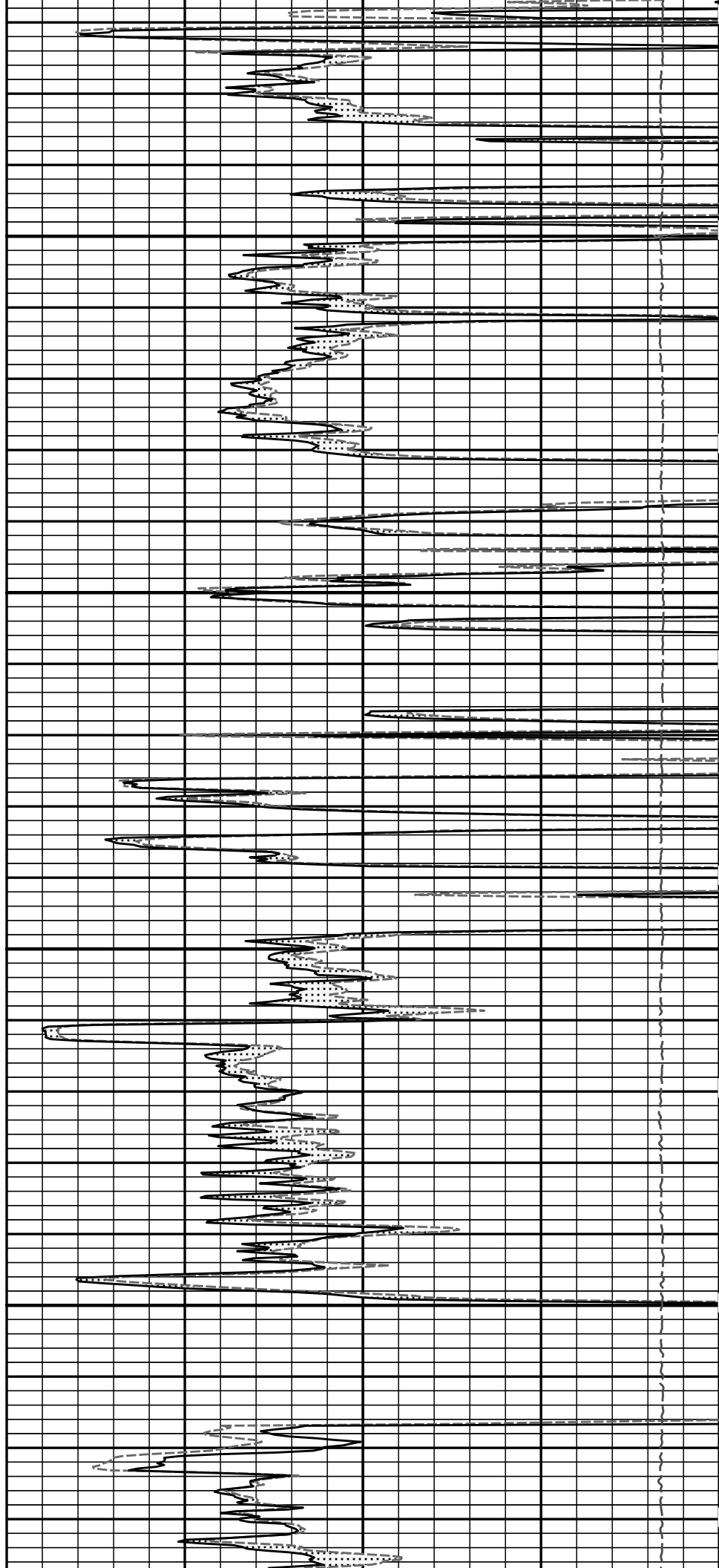
3900

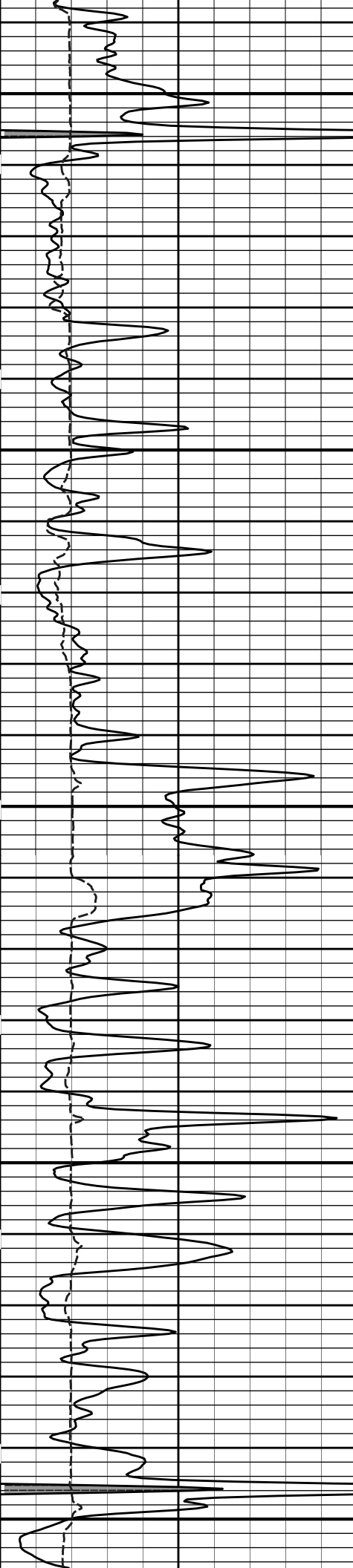




4000

4100

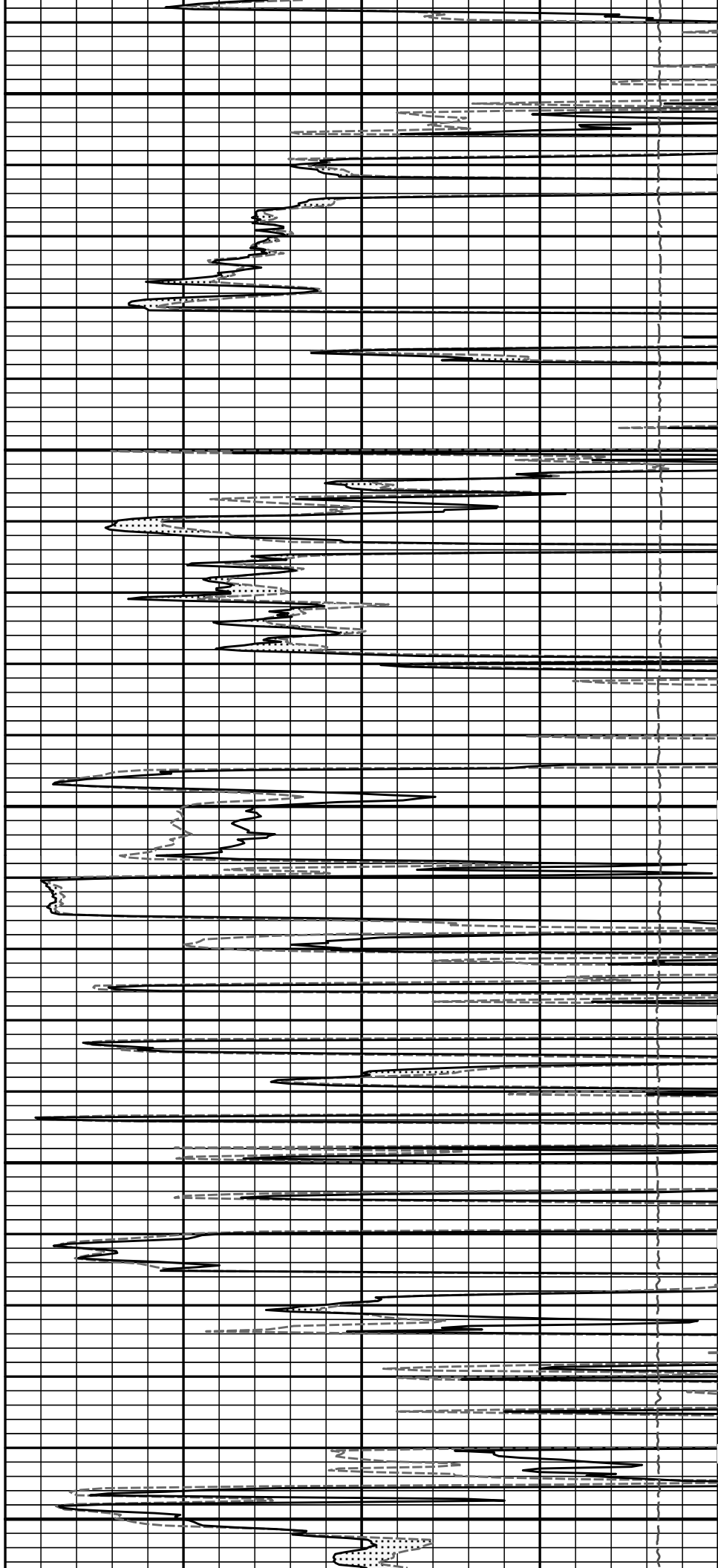


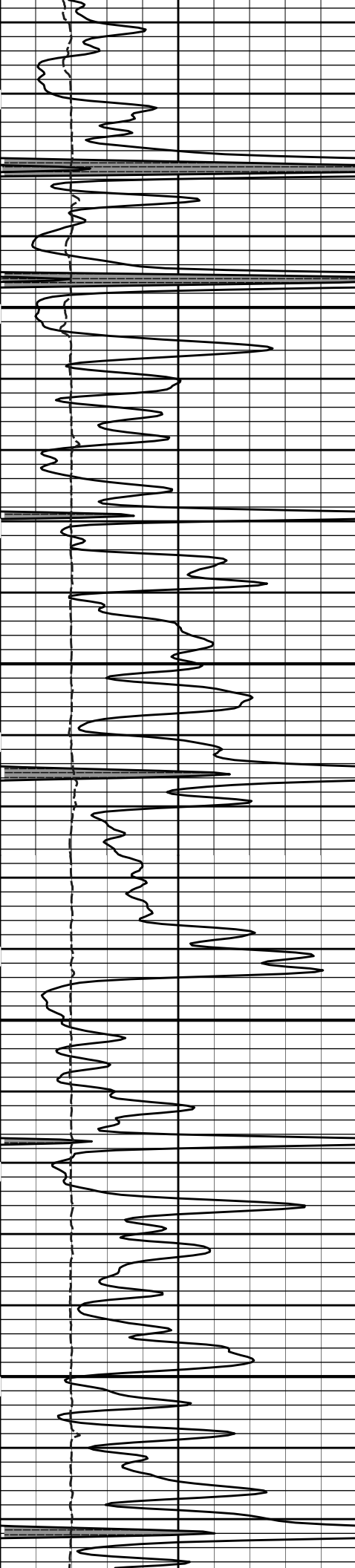


4200

4300

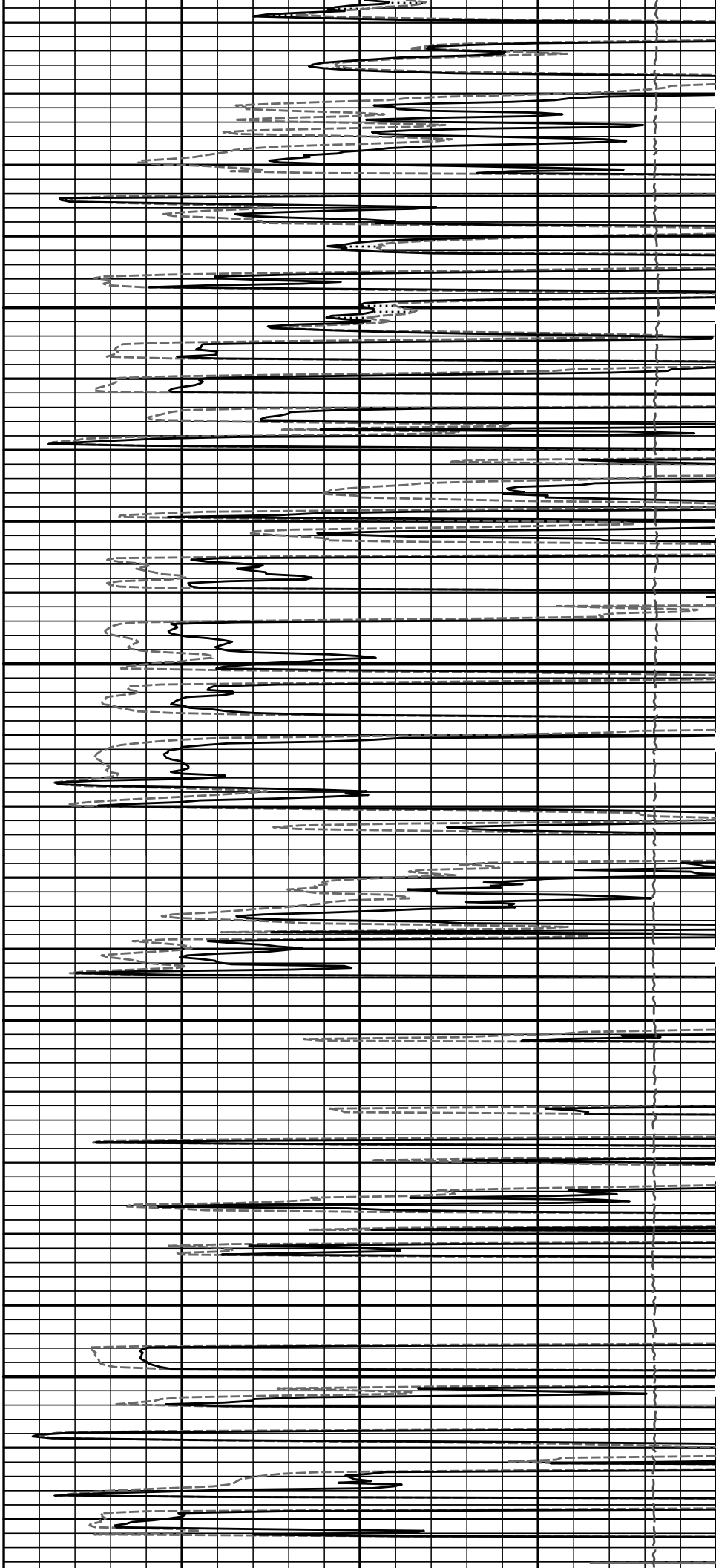
4400

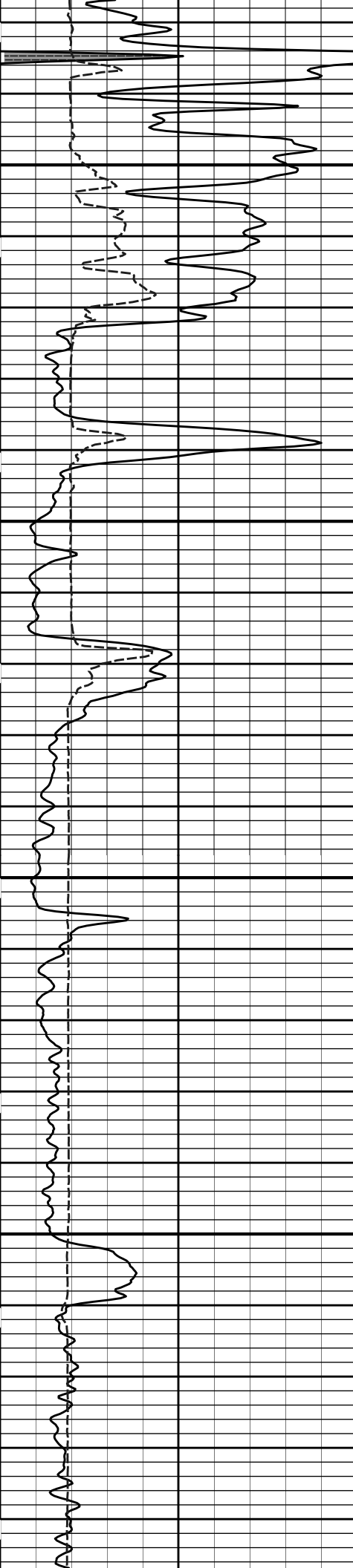




4500

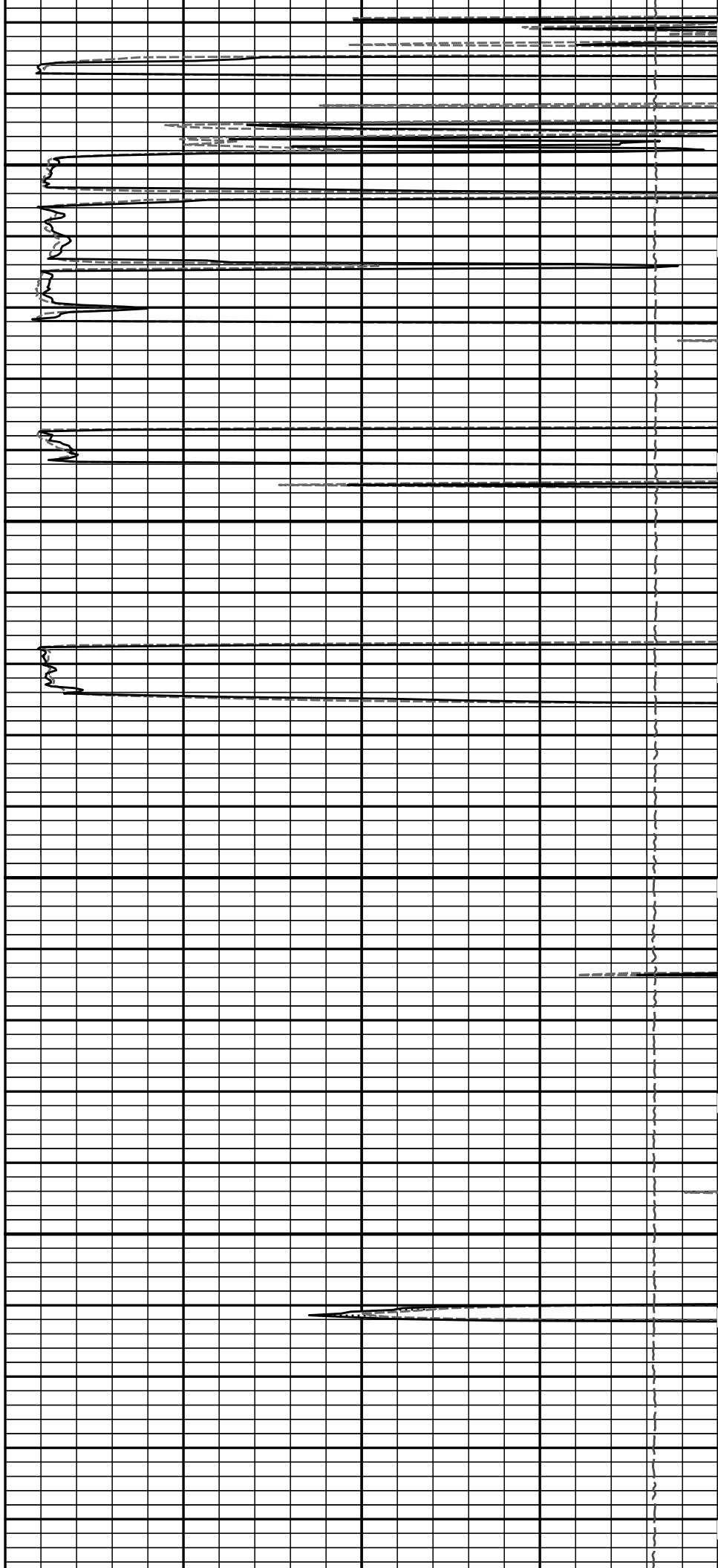
4600

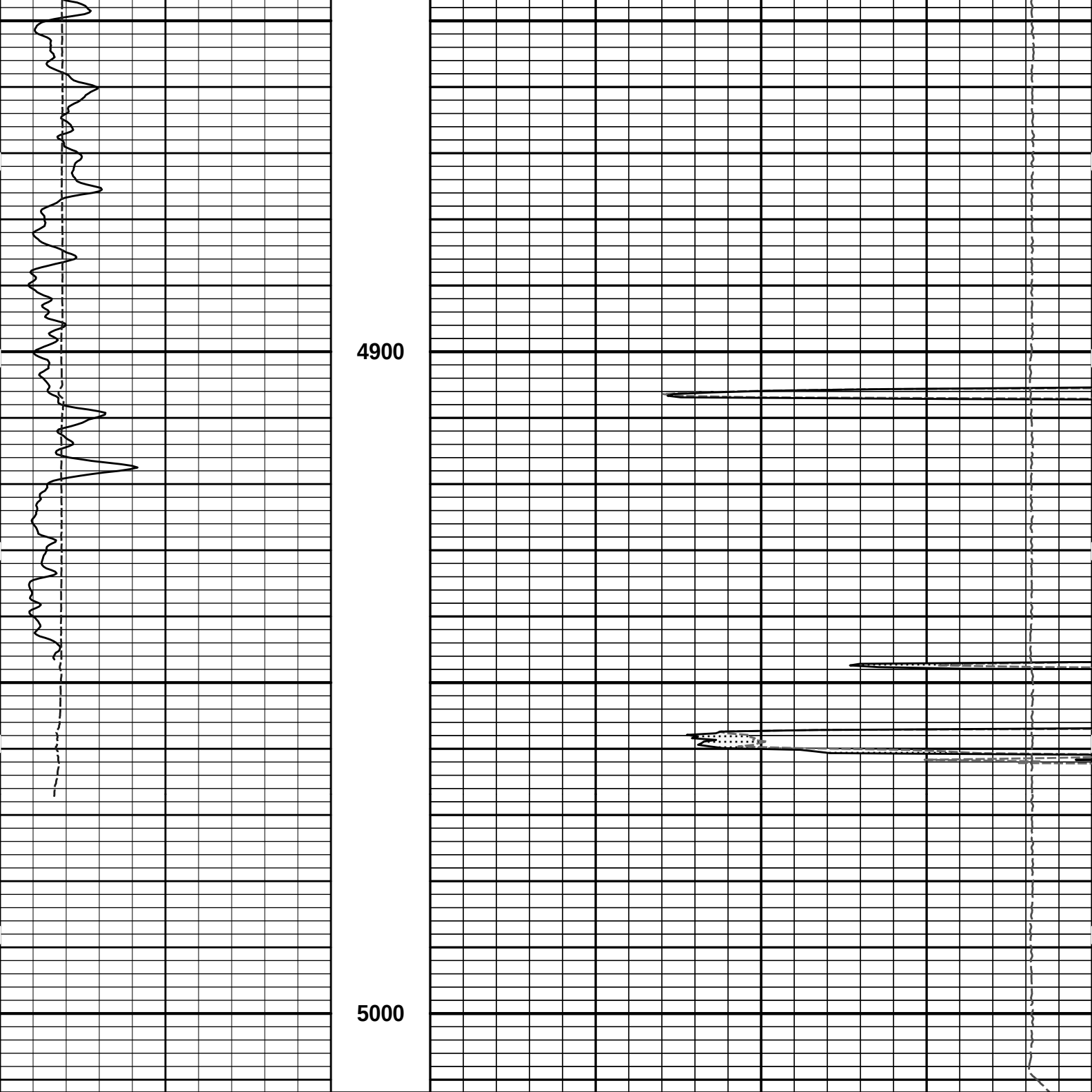




4700

4800





|   |           |     |              |     |                 |    |
|---|-----------|-----|--------------|-----|-----------------|----|
| 6 | Caliper   | 16  | 1 : 240      | 15K | Tension         | 0  |
|   | inches    |     | ft           |     | pounds          |    |
| 0 | Gamma API | 150 | Tension Pull | 0   | MicrologLateral | 20 |
|   | api       |     | 10           |     | ohm-metre       |    |
|   | SHALE     |     | Tension Pull | 0   | MicrologNormal  | 20 |
|   |           |     |              |     | ohm-metre       |    |
|   |           |     |              |     | PERMEABLE       |    |

HALLIBURTON

Plot Time: 19-Jan-13 09:06:26  
Plot Range: 3695 ft to 5011.92 ft  
Data: GARDEN\_CITY\_I-1\Well Based\GARDEN\_CITY\_I-1\_DETAIL\  
Plot File: \\LOCAL-IGARDEN\_CITY\_I-1\Well Based\MICROLOG\Microlog\_IQ\_5\_main\_lib



# 5 INCH MAIN LOG

# HALLIBURTON

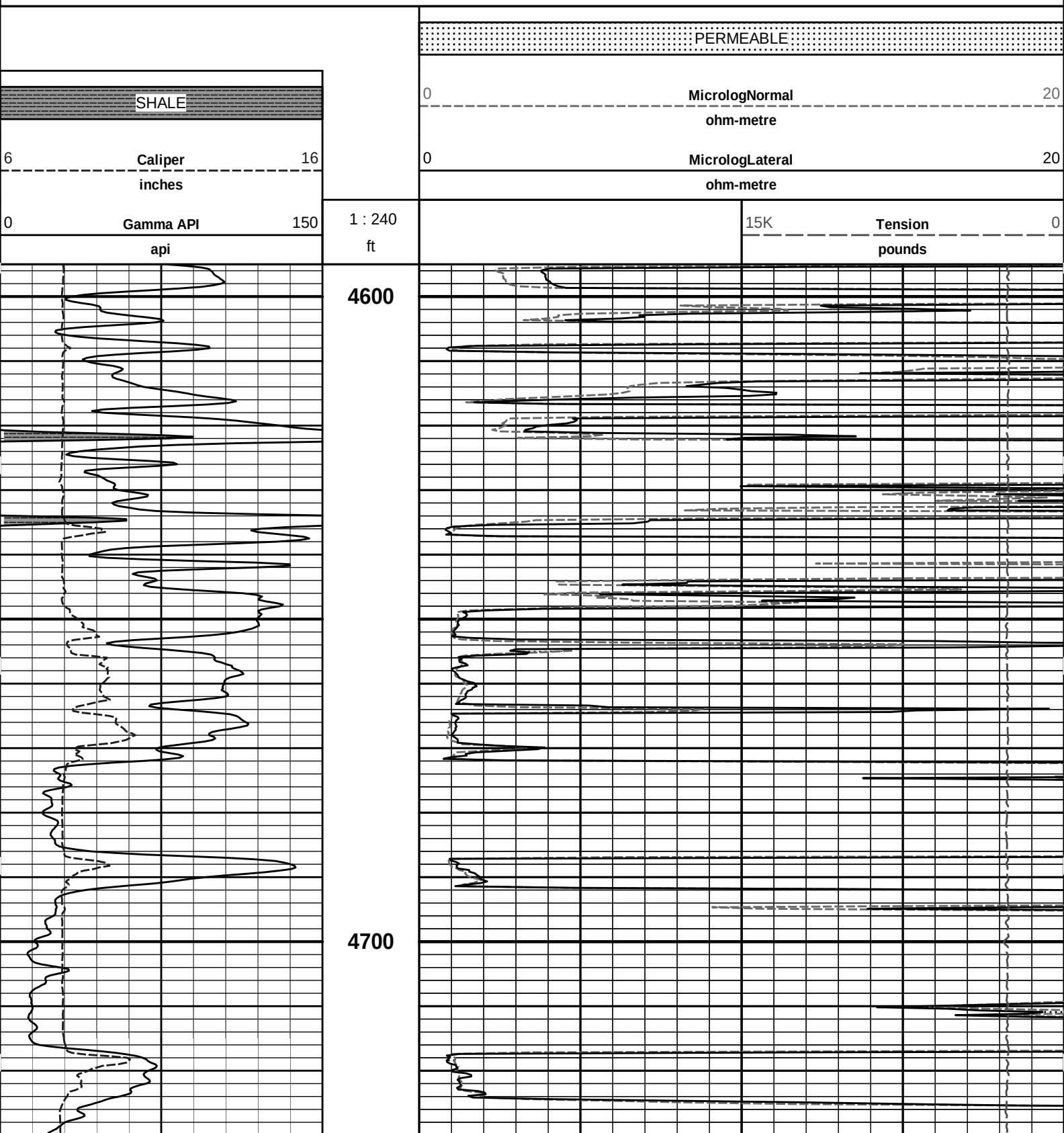
Plot Time: 19-Jan-13 09:06:26

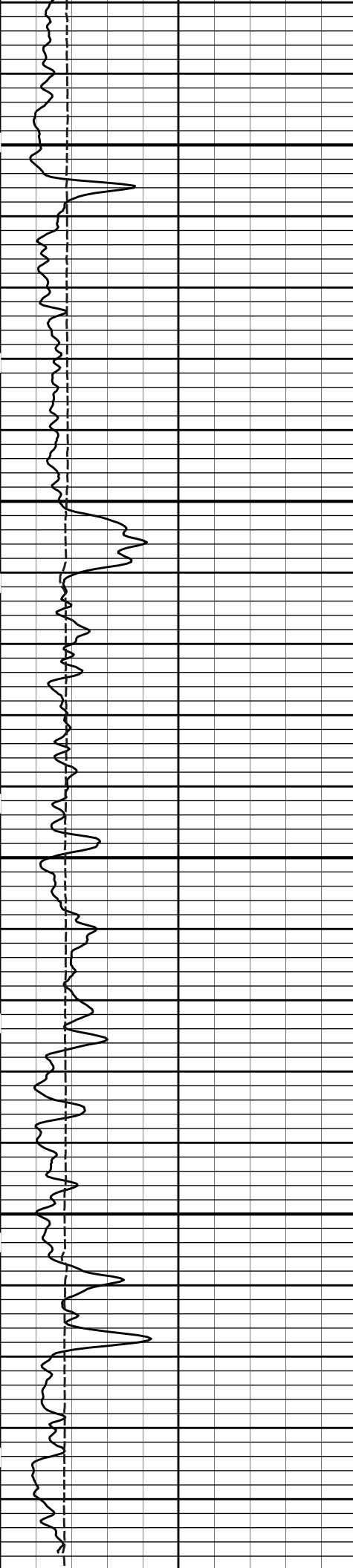
**Plot Range: 4595 ft to 5012.83 ft**

Data: GARDEN\_CITY\_I-1\Well Based\15055221930000GARDENCITY\_I-1REP\

Plot File: \\-LOCAL-\\GARDEN\_CITY\_I-1\\Well Based\\MICROLOG\\Microlog\_IQ\_5\_rep.lib

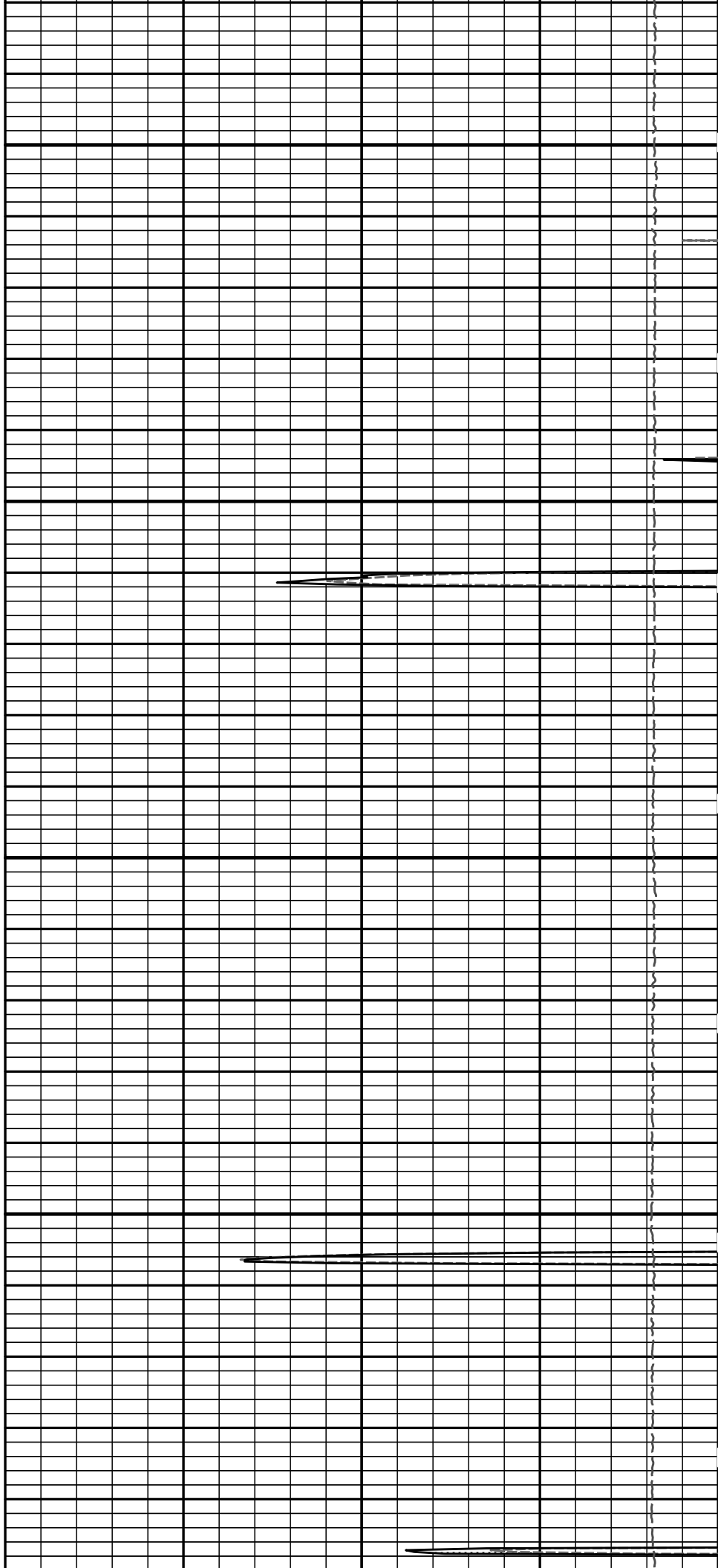
## REPEAT SECTION

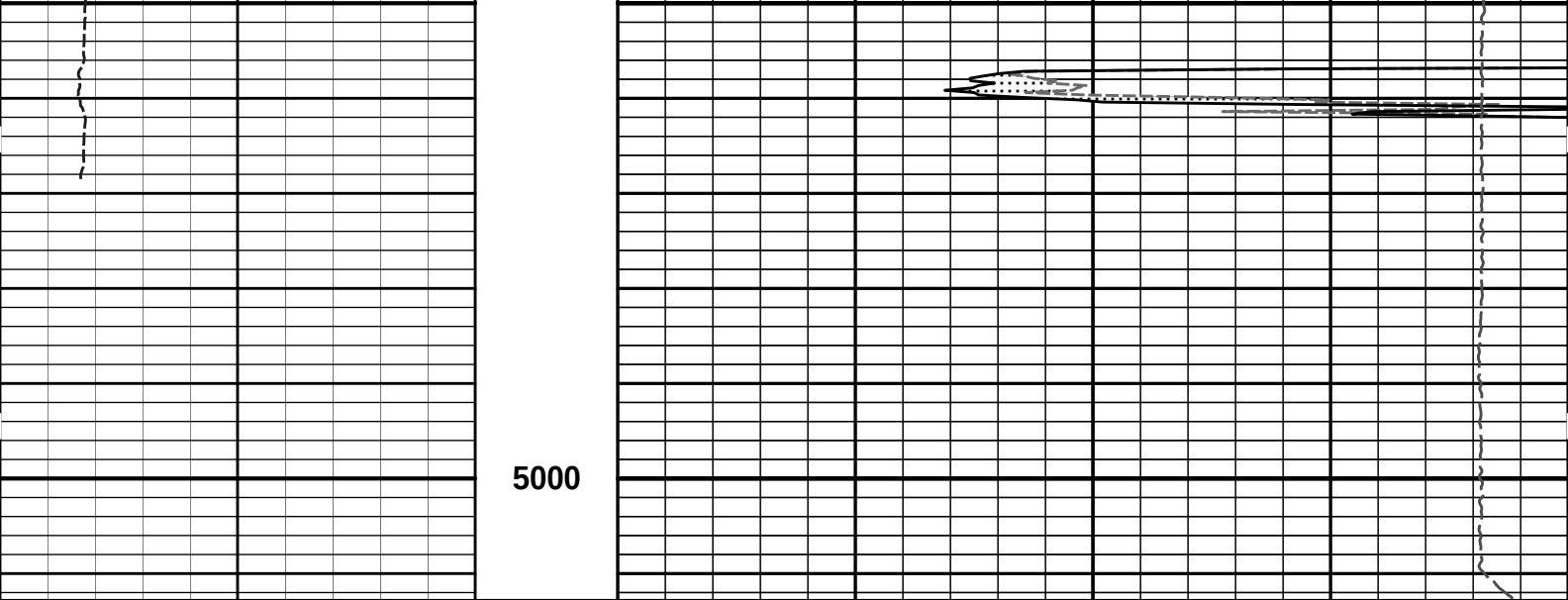




4800

4900





|   |           |     |         |     |                 |    |
|---|-----------|-----|---------|-----|-----------------|----|
| 0 | Gamma API | 150 | 1 : 240 | 15K | Tension         | 0  |
|   | api       |     | ft      |     | pounds          |    |
| 6 | Caliper   | 16  |         | 0   | MicrologLateral | 20 |
|   | inches    |     |         |     | ohm-metre       |    |
|   | SHALE     |     |         | 0   | MicrologNormal  | 20 |
|   |           |     |         |     | ohm-metre       |    |
|   |           |     |         |     | PERMEABLE       |    |

HALLIBURTON

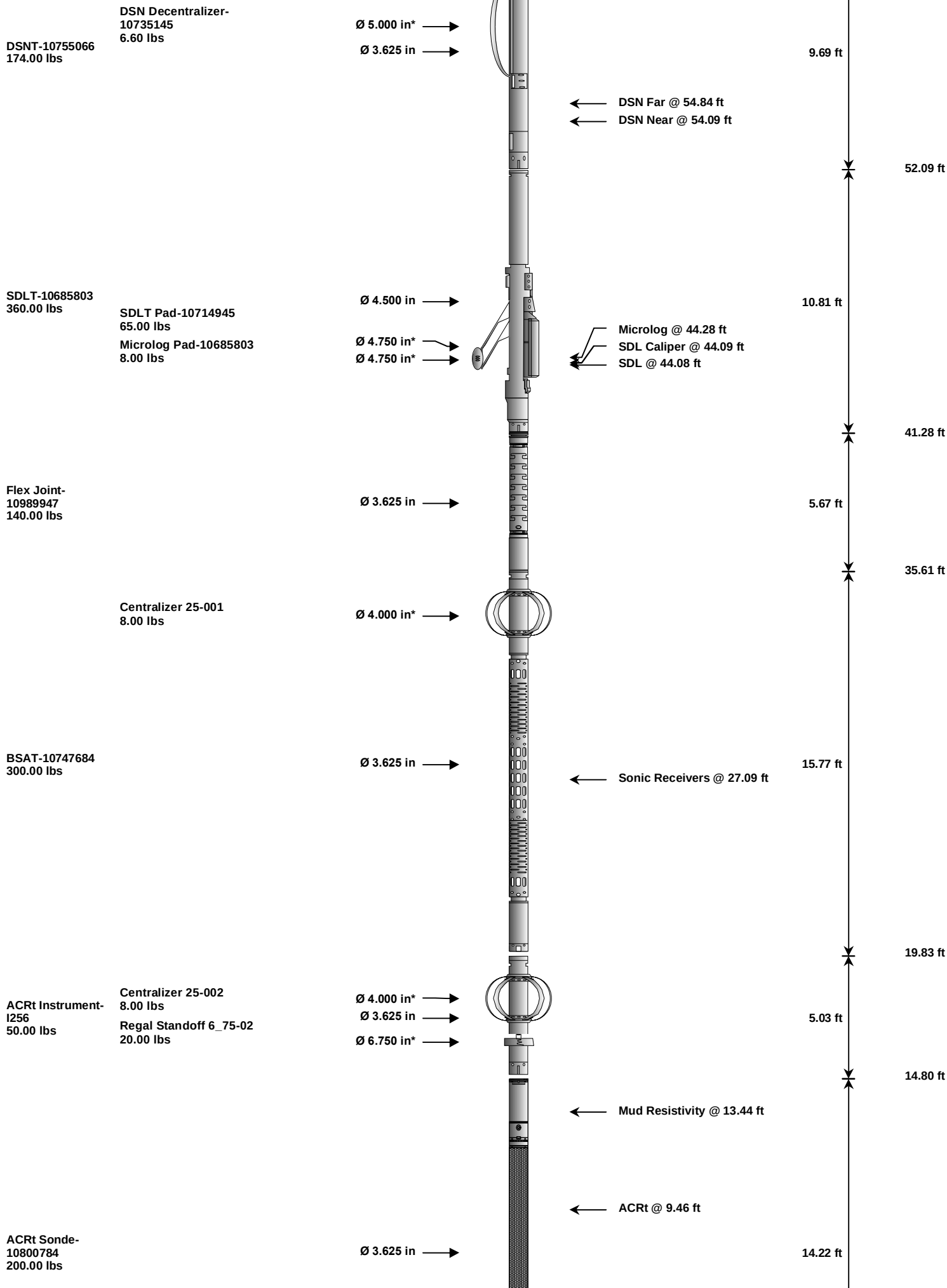
Plot Time: 19-Jan-13 09:06:29  
Plot Range: 4595 ft to 5012.83 ft  
Data: GARDEN\_CITY\_I-1\Well Based\15055221930000GARDENCITY\_I-1REP\  
Plot File: \\-LOCAL-IGARDEN\_CITY\_I-1\Well Based\MICROLOG\Microlog\_IQ\_5\_rep\_lib

REPEAT SECTION

HALLIBURTON

TOOL STRING DIAGRAM REPORT

| Description                        | Overbody Description | O.D.         | Diagram | Sensors @ Delays      | Length  | Accumulated Length |          |
|------------------------------------|----------------------|--------------|---------|-----------------------|---------|--------------------|----------|
| Cable Head-<br>PROT01<br>30.00 lbs |                      | Ø 3.625 in → |         |                       | 1.92 ft | 75.95 ft           |          |
| SP Sub-11441709<br>60.00 lbs       |                      | Ø 3.625 in → |         | ← SP @ 72.26 ft       | 3.74 ft | 74.03 ft           |          |
|                                    |                      |              |         |                       |         |                    | 70.30 ft |
| GTET-10748374<br>165.00 lbs        |                      | Ø 3.625 in → |         | ← GammaRay @ 64.23 ft | 8.52 ft | 61.78 ft           |          |



| Cabbage Head-<br>TRK954<br>10.00 lbs                                |                                                       | Ø 3.625 in<br>Ø 6.000 in |              |  | 0.58 ft<br><br>0.00 ft  |                      |
|---------------------------------------------------------------------|-------------------------------------------------------|--------------------------|--------------|----------------------------------------------------------------------------------|-------------------------|----------------------|
| Mnemonic                                                            | Tool Name                                             | Serial Number            | Weight (lbs) | Length (ft)                                                                      | Accumulated Length (ft) | Max.Log. Speed (fpm) |
| CH                                                                  | Standard OH Cable Head                                | PROT01                   | 30.00        | 1.92                                                                             | 74.03                   | 300.00               |
| SP                                                                  | SP Sub                                                | 11441709                 | 60.00        | 3.74                                                                             | 70.30                   | 300.00               |
| GTET                                                                | Gamma Telemetry Tool                                  | 10748374                 | 165.00       | 8.52                                                                             | 61.78                   | 60.00                |
| DSNT                                                                | Dual Spaced Neutron                                   | 10755066                 | 174.00       | 9.69                                                                             | 52.09                   | 60.00                |
| DCNT                                                                | DSN Decentralizer                                     | 10735145                 | 6.60         | 5.13                                                                             | * 55.42                 | 300.00               |
| SDLT                                                                | Spectral Density Tool                                 | 10685803                 | 360.00       | 10.81                                                                            | 41.28                   | 60.00                |
| SDLP                                                                | Density Insite Pad                                    | 10714945                 | 65.00        | 2.55                                                                             | * 43.49                 | 60.00                |
| MICP                                                                | Microlog Pad                                          | 10685803                 | 8.00         | 1.00                                                                             | * 43.78                 | 60.00                |
| FLEX                                                                | Flex Joint                                            | 10989947                 | 140.00       | 5.67                                                                             | 35.61                   | 300.00               |
| BSAT                                                                | Borehole Sonic Array Tool                             | 10747684                 | 300.00       | 15.77                                                                            | 19.83                   | 60.00                |
| OBCEN                                                               | Centralizer - 25 in. Overbody                         | 001                      | 8.00         | 2.08                                                                             | * 32.78                 | 300.00               |
| ACRt                                                                | Array Compensated True Resistivity Instrument Section | I256                     | 50.00        | 5.03                                                                             | 14.80                   | 300.00               |
| RSOF                                                                | Regal Standoff 6.75in                                 | 02                       | 20.00        | 0.52                                                                             | * 16.05                 | 300.00               |
| OBCEN                                                               | Centralizer - 25 in. Overbody                         | 002                      | 8.00         | 2.08                                                                             | * 16.96                 | 300.00               |
| ACRt                                                                | Array Compensated True Resistivity Sonde Section      | 10800784                 | 200.00       | 14.22                                                                            | 0.58                    | 300.00               |
| CBHD                                                                | Cabbage Head                                          | TRK954                   | 10.00        | 0.58                                                                             | 0.00                    | 300.00               |
| Total                                                               |                                                       |                          | 1,604.60     | 75.95                                                                            |                         |                      |
| * Not included in Total Length and Length Accumulation.             |                                                       |                          |              |                                                                                  |                         |                      |
| Data: GARDEN_CITY_I-1\0001 SP-GTET-DSNT-SDLT-FLEX-BSAT-ACRT-CH\IDLE |                                                       |                          |              |                                                                                  |                         |                      |
| Date: 19-Jan-13 03:42:54                                            |                                                       |                          |              |                                                                                  |                         |                      |

| HALLIBURTON       |           |          |                                                       |         |       |
|-------------------|-----------|----------|-------------------------------------------------------|---------|-------|
| PARAMETERS REPORT |           |          |                                                       |         |       |
| Depth ((ft))      | Tool Name | Mnemonic | Description                                           | Value   | Units |
| TOP               |           |          |                                                       |         |       |
|                   | SHARED    | BS       | Bit Size                                              | 7.875   | in    |
|                   | SHARED    | UBS      | Use Bit Size instead of Caliper for all applications. | No      |       |
|                   | SHARED    | MDBS     | Mud Base                                              | Water   |       |
|                   | SHARED    | MDWT     | Borehole Fluid Weight                                 | 9.200   | ppg   |
|                   | SHARED    | WAGT     | Weighting Agent                                       | Natural |       |
|                   | SHARED    | BSAL     | Borehole salinity                                     | 0.00    | ppm   |
|                   | SHARED    | FSAL     | Formation Salinity NaCl                               | 0.00    | ppm   |
|                   | SHARED    | KPCT     | Percent K in Mud by Weight?                           | 0.00    | %     |
|                   | SHARED    | RMUD     | Mud Resistivity                                       | 1.000   | ohmm  |
|                   | SHARED    | TRM      | Temperature of Mud                                    | 75.0    | degF  |
|                   | 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                                      | 5095.00 | ft    |
|                   | SHARED    | BHT      | Bottom Hole Temperature                               | 120.0   | degF  |
|                   | SHARED    | SVTM     | Navigation and Survey Master Tool                     | NONE    |       |
|                   | SHARED    | AZTM     | High Res Z Accelerometer Master Tool                  | GTET    |       |
|                   | SHARED    | TEMM     | Temperature Master Tool                               | NONE    |       |
|                   | SHARED    | BHSM     | Borehole Size Master Tool                             | NONE    |       |

|                 |      |                                              |                |      |
|-----------------|------|----------------------------------------------|----------------|------|
| SHARED          | DRHM | Borehole Size Master Foot                    | NONE           |      |
| Rwa / CrossPlot | XPOK | Process Crossplot?                           | Yes            |      |
| Rwa / CrossPlot | FCHO | Select Source of F                           | Automatic      |      |
| Rwa / CrossPlot | AFAC | Archie A factor                              | 0.6200         |      |
| Rwa / CrossPlot | MFAC | Archie M factor                              | 2.1500         |      |
| Rwa / CrossPlot | RMFR | Rmf Reference                                | 0.10           | ohmm |
| Rwa / CrossPlot | TMFR | Rmf Ref Temp                                 | 75.00          | degF |
| Rwa / CrossPlot | RWA  | Resistivity of Formation Water               | 0.05           | ohmm |
| Rwa / CrossPlot | ADP  | Use Air Porosity to calculate CrossplotPhi   | No             |      |
| GTET            | GROK | Process Gamma Ray?                           | Yes            |      |
| GTET            | GRSO | Gamma Tool Standoff                          | 0.000          | in   |
| GTET            | GEOK | Process Gamma Ray EVR?                       | No             |      |
| GTET            | TPOS | Tool Position for Gamma Ray Tools.           | Eccentered     |      |
| DSNT            | DNOK | Process DSN?                                 | Yes            |      |
| DSNT            | DEOK | Process DSN EVR?                             | No             |      |
| DSNT            | NLIT | Neutron Lithology                            | Limestone      |      |
| DSNT            | DSNO | DSN Standoff - 0.25 in (6.35 mm) Recommended | 0.250          | 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            | LHWT | Logging Horizontal Water Tank?               | No             |      |
| SDLT            | CLOK | Process Caliper Outputs?                     | Yes            |      |
| SDLT Pad        | DNOK | Process Density?                             | Yes            |      |
| SDLT Pad        | DNOK | Process Density EVR?                         | No             |      |
| SDLT Pad        | CB   | Logging Calibration Blocks?                  | No             |      |
| SDLT Pad        | SPVT | SDLT Pad Temperature Valid?                  | Yes            |      |
| SDLT Pad        | DTWN | Disable temperature warning                  | No             |      |
| SDLT Pad        | DMA  | Formation Density Matrix                     | 2.710          | g/cc |
| SDLT Pad        | DFL  | Formation Density Fluid                      | 1.000          | g/cc |
| Microlog Pad    | MLOK | Process MicroLog Outputs?                    | Yes            |      |
| BSAT            | MBOK | Compute BCAS Results?                        | Yes            |      |
| BSAT            | FLLO | Frequency Filter Low Pass Value?             | 5000           | Hz   |
| BSAT            | FLHI | Frequency Filter High Pass Value?            | 27000          | Hz   |
| BSAT            | DTFL | Delta -T Fluid                               | 189.00         | uspf |
| BSAT            | DTMT | Delta -T Matrix Type                         | User define    |      |
| BSAT            | DTMA | Delta -T Matrix                              | 47.60          | uspf |
| BSAT            | DTSH | Delta -T Shale                               | 100.00         | uspf |
| BSAT            | SPEQ | Acoustic Porosity Equation                   | Wylie          |      |
| ACRt Sonde      | RTOK | Process ACRt?                                | Yes            |      |
| ACRt Sonde      | MNSO | Minimum Tool Standoff                        | 1.50           | in   |
| ACRt Sonde      | TCS1 | Temperature Correction Source                | FP Lwr & FP Up |      |
| ACRt Sonde      | TPOS | Tool Position                                | Free Hanging   |      |
| ACRt Sonde      | RMOP | Rmud Source                                  | Mud Cell       |      |
| ACRt Sonde      | RMIN | Minimum Resistivity for MAP                  | 0.20           | ohmm |
| ACRt Sonde      | RMIN | Maximum Resistivity for MAP                  | 200.00         | ohmm |
| ACRt Sonde      | THQY | Threshold Quality                            | 0.50           |      |
| ACRt Sonde      | MRFX | Fixed mud resistivity                        | 2000           | ohmm |

BOTTOM

CALIBRATION REPORT

NATURAL GAMMA RAY TOOL SHOP CALIBRATION

|                   |                            |                             |                    |
|-------------------|----------------------------|-----------------------------|--------------------|
| Tool Name:        | GTET - 10748374            | Reference Calibration Date: | 19-Dec-12 08:49:49 |
| Engineer:         | T. HYDE                    | Calibration Date:           | 17-Jan-13 13:03:23 |
| Software Version: | WL INSITE R3.6.0 (Build 3) | Calibration Version:        | 1                  |

Calibrator Source S/N: TB-185  
Calibrator API Reference:228.00 api  
Equivalent Calibrator API Reference:232.0 api

| Measurement             | Measured | Calibrated | Units |
|-------------------------|----------|------------|-------|
| Background              | 47.0     | 47.4       | api   |
| Background + Calibrator | 277.4    | 279.4      | api   |
| Calibrator              | 230.4    | 232.0      | api   |

NATURAL GAMMA RAY TOOL FIELD CALIBRATION

|                   |                            |                             |                    |
|-------------------|----------------------------|-----------------------------|--------------------|
| Tool Name:        | GTET - 10748374            | Reference Calibration Date: | 17-Jan-13 13:03:23 |
| Engineer:         | T. HYDE                    | Calibration Date:           | 17-Jan-13 13:06:37 |
| Software Version: | WL INSITE R3.6.0 (Build 3) | Calibration Version:        | 1                  |

Calibrator Source S/N: TB-185  
Calibrator API Reference:228.00 api  
Equivalent Calibrator API Reference:232.0 api

| Field Verification      | Shop  | Field | Units |
|-------------------------|-------|-------|-------|
| Background              | 47.4  | 47.8  | api   |
| Background + Calibrator | 279.4 | 282.5 | api   |
| Calibrator              | 232.0 | 234.7 | api   |

| Shop  | Field | Difference | Tolerance |
|-------|-------|------------|-----------|
| 232.0 | 234.7 | -2.7       | +/- 9.00  |

DENSITY CALIPER SHOP CALIBRATION

|                   |                            |                             |                    |
|-------------------|----------------------------|-----------------------------|--------------------|
| Tool Name:        | SDLT - 10685803            | Reference Calibration Date: | 18-Jan-13 09:58:36 |
| Engineer:         | T. HYDE                    | Calibration Date:           | 18-Jan-13 10:03:41 |
| Software Version: | WL INSITE R3.6.0 (Build 3) | Calibration Version:        | 1                  |
| Host Tool Name:   | DSNT - 10755066            |                             |                    |

CALIBRATION COEFFICIENTS

| Measurement | Previous Value | New Value    | Control Limit On New Value |
|-------------|----------------|--------------|----------------------------|
| Pad Offset  | -4650.98       | -4634.87     | -7000.00 - -1000.00        |
| Pad Gain    | 0.0003964      | 0.0003949    | 0.000200 - 0.000600        |
| Arm Offset  | -2226.61       | -2519.31     | -5000.00 - 3000.00         |
| Arm Gain    | 0.0005361      | 0.0005659    | 0.000300 - 0.000700        |
| Arm Power   | -0.000006657   | -0.000008059 | -0.000010000 - 0.000010000 |

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                    | 0.00   | +/- 0.20                   |

|  |                                       |       |       |        |          |
|--|---------------------------------------|-------|-------|--------|----------|
|  | Medium Ring (in)                      | 3.76  | 3.75  | -0.01  | +/- 0.20 |
|  | RING DIAMETER:                        |       |       |        |          |
|  | Small Ring (in)                       | 6.54  | 6.50  | -0.04  | +/- 0.20 |
|  | Medium Ring (in)                      | 8.22  | 8.25  | 0.03   | +/- 0.20 |
|  | Large Ring (in)                       | 14.94 | 15.00 | 0.06   | +/- 0.20 |
|  | PASS/FAIL SUMMARY                     |       |       |        |          |
|  | Calibration-Coefficients Range Check: |       |       | Passed |          |
|  | Ring-Measurement Check:               |       |       | Passed |          |
|  | PASS/FAIL SUMMARY                     |       |       |        |          |
|  | Calibration-Coefficients Range Check: |       |       | Passed |          |

|                            |                            |  |  |                             |                    |
|----------------------------|----------------------------|--|--|-----------------------------|--------------------|
| MICRO LOG SHOP CALIBRATION |                            |  |  |                             |                    |
| Tool Name:                 | Microlog Pad - 10685803    |  |  | Reference Calibration Date: | 18-Dec-12 11:10:27 |
| Engineer:                  | T. HYDE                    |  |  | Calibration Date:           | 18-Jan-13 10:08:15 |
| Software Version:          | WL INSITE R3.6.0 (Build 3) |  |  | Calibration Version:        | 1                  |
| Host Tool Name:            | DSNT - 10755066            |  |  |                             |                    |

|  |                                 |                                |            |                                 |            |       |
|--|---------------------------------|--------------------------------|------------|---------------------------------|------------|-------|
|  | CALIBRATION COEFFICIENT SUMMARY |                                |            |                                 |            |       |
|  | Measurement                     | Micro Log Normal               |            | Micro Log Lateral               |            | Units |
|  |                                 | Measured                       | Calibrated | Measured                        | Calibrated |       |
|  | Tool Zero                       | -0.06                          | -0.05      | -0.00                           | 0.01       | ohmm  |
|  | Calibration Point #1            | -0.02                          | 0.00       | -0.01                           | 0.00       | ohmm  |
|  | Calibration Point #2            | 20.02                          | 20.00      | 20.01                           | 20.00      | ohmm  |
|  | Internal Reference              | 20.08                          | 20.06      | 20.16                           | 20.14      | ohmm  |
|  |                                 |                                |            |                                 |            |       |
|  | Measurement                     | Micro Log Normal<br>Tool Value |            | Micro Log Lateral<br>Tool Value |            | Units |
|  | Tool Zero                       | 2.22                           |            | 2.13                            |            | V     |
|  | Calibration Point #1            | 14.47                          |            | 0.24                            |            | V     |
|  | Calibration Point #2            | 5262.91                        |            | 6820.77                         |            | V     |
|  | Internal Reference              | 5278.27                        |            | 6869.97                         |            | V     |

|                       |                            |  |  |                             |                    |
|-----------------------|----------------------------|--|--|-----------------------------|--------------------|
| MICRO LOG FIELD CHECK |                            |  |  |                             |                    |
| Tool Name:            | Microlog Pad - 10685803    |  |  | Reference Calibration Date: | 18-Jan-13 10:08:15 |
| Engineer:             | T. HYDE                    |  |  | Calibration Date:           | 18-Jan-13 10:08:48 |
| Software Version:     | WL INSITE R3.6.0 (Build 3) |  |  | Calibration Version:        | 1                  |

|  |                    |                  |       |                   |           |       |
|--|--------------------|------------------|-------|-------------------|-----------|-------|
|  | Measurement        | Micro Log Normal |       | Micro Log Lateral |           | Units |
|  |                    | Shop             | Field | Shop              | Field     |       |
|  | Tool Zero          | -0.05            | -0.04 | 0.01              | -0.00     | ohmm  |
|  | Internal Reference | 20.06            | 20.06 | 20.14             | 20.15     | ohmm  |
|  | Summary            |                  |       |                   |           |       |
|  | Signal             | Shop             | Field | Difference        | Tolerance |       |
|  | Microlog Normal    | 20.06            | 20.06 | 0.00              | +/- 0.80  |       |
|  | Microlog Lateral   | 20.14            | 20.15 | -0.01             | +/- 0.80  |       |

|                                |                            |  |  |                             |                    |
|--------------------------------|----------------------------|--|--|-----------------------------|--------------------|
| SDLT CALIPER FIELD CALIBRATION |                            |  |  |                             |                    |
| Tool Name:                     | SDLT - 10685803            |  |  | Reference Calibration Date: | 18-Jan-13 10:03:41 |
| Engineer:                      | T. HYDE                    |  |  | Calibration Date:           | 18-Jan-13 10:05:50 |
| Software Version:              | WL INSITE R3.6.0 (Build 3) |  |  | Calibration Version:        | 1                  |

|  |                         |                  |       |                   |           |                  |
|--|-------------------------|------------------|-------|-------------------|-----------|------------------|
|  | MEASURED CALIPER VALUES |                  |       |                   |           | Control Limit On |
|  | Measurement             | Micro Log Normal |       | Micro Log Lateral |           |                  |
|  |                         | Shop             | Field | Shop              | Field     | Units            |
|  | Tool Zero               | -0.05            | -0.04 | 0.01              | -0.00     | ohmm             |
|  | Internal Reference      | 20.06            | 20.06 | 20.14             | 20.15     | ohmm             |
|  | Summary                 |                  |       |                   |           |                  |
|  | Signal                  | Shop             | Field | Difference        | Tolerance |                  |
|  | Microlog Normal         | 20.06            | 20.06 | 0.00              | +/- 0.80  |                  |
|  | Microlog Lateral        | 20.14            | 20.15 | -0.01             | +/- 0.80  |                  |

|                         |                                       |                            |       |                   |                             |                    |
|-------------------------|---------------------------------------|----------------------------|-------|-------------------|-----------------------------|--------------------|
| MEASURED CALIPER VALUES |                                       |                            |       |                   |                             |                    |
|                         | Calibration-Coefficients Range Check: |                            |       | Passed            |                             |                    |
|                         | Ring-Measurement Check:               |                            |       | Passed            |                             |                    |
|                         | PASS/FAIL SUMMARY                     |                            |       |                   |                             |                    |
|                         | Calibration-Coefficients Range Check: |                            |       | Passed            |                             |                    |
|                         | MICRO LOG FIELD CHECK                 |                            |       |                   |                             |                    |
|                         | Tool Name:                            | Microlog Pad - 10685803    |       |                   | Reference Calibration Date: | 18-Jan-13 10:08:15 |
|                         | Engineer:                             | T. HYDE                    |       |                   | Calibration Date:           | 18-Jan-13 10:08:48 |
|                         | Software Version:                     | WL INSITE R3.6.0 (Build 3) |       |                   | Calibration Version:        | 1                  |
|                         | Measurement                           | Micro Log Normal           |       | Micro Log Lateral |                             | Units              |
|                         |                                       | Shop                       | Field | Shop              | Field                       |                    |
|                         |                                       |                            |       |                   |                             |                    |
|                         | Tool Zero                             | -0.05                      | -0.04 | 0.01              | -0.00                       | ohmm               |
|                         | Internal Reference                    | 20.06                      | 20.06 | 20.14             | 20.15                       | ohmm               |
|                         | Summary                               |                            |       |                   |                             |                    |
|                         | Signal                                | Shop                       |       | Field             |                             | Tolerance          |
|                         |                                       |                            |       | Difference        |                             |                    |
|                         | Microlog Normal                       | 20.06                      | 20.06 | 0.00              | +/- 0.80                    |                    |
|                         | Microlog Lateral                      | 20.14                      | 20.15 | -0.01             | +/- 0.80                    |                    |
|                         | MEASURED CALIPER VALUES               |                            |       |                   |                             |                    |
|                         | Calibration-Coefficients Range Check: |                            |       | Passed            |                             |                    |
|                         | Ring-Measurement Check:               |                            |       | Passed            |                             |                    |
|                         | PASS/FAIL SUMMARY                     |                            |       |                   |                             |                    |
|                         | Calibration-Coefficients Range Check: |                            |       | Passed            |                             |                    |
|                         | MICRO LOG FIELD CHECK                 |                            |       |                   |                             |                    |
|                         | Tool Name:                            | Microlog Pad - 10685803    |       |                   | Reference Calibration Date: | 18-Jan-13 10:08:15 |
|                         | Engineer:                             | T. HYDE                    |       |                   | Calibration Date:           | 18-Jan-13 10:08:48 |
|                         | Software Version:                     | WL INSITE R3.6.0 (Build 3) |       |                   | Calibration Version:        | 1                  |
|                         | Measurement                           | Micro Log Normal           |       | Micro Log Lateral |                             | Units              |
|                         |                                       | Shop                       | Field | Shop              | Field                       |                    |
|                         |                                       |                            |       |                   |                             |                    |
|                         | Tool Zero                             | -0.05                      | -0.04 | 0.01              | -0.00                       | ohmm               |
|                         | Internal Reference                    | 20.06                      | 20.06 | 20.14             | 20.15                       | ohmm               |
|                         | Summary                               |                            |       |                   |                             |                    |
|                         | Signal                                | Shop                       |       | Field             |                             | Tolerance          |
|                         |                                       |                            |       | Difference        |                             |                    |
|                         | Microlog Normal                       | 20.06                      | 20.06 | 0.00              | +/- 0.80                    |                    |
|                         | Microlog Lateral                      | 20.14                      | 20.15 | -0.01             | +/- 0.80                    |                    |
|                         | MEASURED CALIPER VALUES               |                            |       |                   |                             |                    |
|                         | Calibration-Coefficients Range Check: |                            |       | Passed            |                             |                    |
|                         | Ring-Measurement Check:               |                            |       | Passed            |                             |                    |
|                         | PASS/FAIL SUMMARY                     |                            |       |                   |                             |                    |
|                         | Calibration-Coefficients Range Check: |                            |       | Passed            |                             |                    |
|                         | MICRO LOG FIELD CHECK                 |                            |       |                   |                             |                    |
|                         | Tool Name:                            | Microlog Pad - 10685803    |       |                   | Reference Calibration Date: | 18-Jan-13 10:08:15 |
|                         | Engineer:                             | T. HYDE                    |       |                   | Calibration Date:           | 18-Jan-13 10:08:48 |
|                         | Software Version:                     | WL INSITE R3.6.0 (Build 3) |       |                   | Calibration Version:        | 1                  |
|                         | Measurement                           | Micro Log Normal           |       | Micro Log Lateral |                             | Units              |
|                         |                                       | Shop                       | Field | Shop              | Field                       |                    |
|                         |                                       |                            |       |                   |                             |                    |
|                         | Tool Zero                             | -0.05                      | -0.04 | 0.01              | -0.00                       | ohmm               |
|                         | Internal Reference                    | 20.06                      | 20.06 | 20.14             | 20.15                       | ohmm               |
|                         | Summary                               |                            |       |                   |                             |                    |
|                         | Signal                                | Shop                       |       | Field             |                             | Tolerance          |
|                         |                                       |                            |       | Difference        |                             |                    |
|                         | Microlog Normal                       | 20.06                      | 20.06 | 0.00              | +/- 0.80                    |                    |
|                         | Microlog Lateral                      | 20.14                      | 20.15 | -0.01             | +/- 0.80                    |                    |
|                         | MEASURED CALIPER VALUES               |                            |       |                   |                             |                    |
|                         | Calibration-Coefficients Range Check: |                            |       | Passed            |                             |                    |
|                         | Ring-Measurement Check:               |                            |       | Passed            |                             |                    |
|                         | PASS/FAIL SUMMARY                     |                            |       |                   |                             |                    |
|                         | Calibration-Coefficients Range Check: |                            |       | Passed            |                             |                    |
|                         | MICRO LOG FIELD CHECK                 |                            |       |                   |                             |                    |
|                         | Tool Name:                            | Microlog Pad - 10685803    |       |                   | Reference Calibration Date: | 18-Jan-13 10:08:15 |
|                         | Engineer:                             | T. HYDE                    |       |                   | Calibration Date:           | 18-Jan-13 10:08:48 |
|                         | Software Version:                     | WL INSITE R3.6.0 (Build 3) |       |                   | Calibration Version:        | 1                  |
|                         | Measurement                           | Micro Log Normal           |       | Micro Log Lateral |                             | Units              |
|                         |                                       | Shop                       | Field | Shop              | Field                       |                    |
|                         |                                       |                            |       |                   |                             |                    |
|                         | Tool Zero                             | -0.05                      | -0.04 | 0.01              | -0.00                       | ohmm               |
|                         | Internal Reference                    | 20.06                      | 20.06 | 20.14             | 20.15                       | ohmm               |
|                         | Summary                               |                            |       |                   |                             |                    |
|                         | Signal                                | Shop                       |       | Field             |                             | Tolerance          |
|                         |                                       |                            |       | Difference        |                             |                    |
|                         | Microlog Normal                       | 20.06                      | 20.06 | 0.00              | +/- 0.80                    |                    |
|                         | Microlog Lateral                      | 20.14                      | 20.15 | -0.01             | +/- 0.80                    |                    |
|                         | MEASURED CALIPER VALUES               |                            |       |                   |                             |                    |
|                         | Calibration-Coefficients Range Check: |                            |       | Passed            |                             |                    |
|                         | Ring-Measurement Check:               |                            |       | Passed            |                             |                    |
|                         | PASS/FAIL SUMMARY                     |                            |       |                   |                             |                    |
|                         | Calibration-Coefficients Range Check: |                            |       | Passed            |                             |                    |
|                         | MICRO LOG FIELD CHECK                 |                            |       |                   |                             |                    |
|                         | Tool Name:                            | Microlog Pad - 10685803    |       |                   | Reference Calibration Date: | 18-Jan-13 10:08:15 |
|                         | Engineer:                             | T. HYDE                    |       |                   | Calibration Date:           | 18-Jan-13 10:08:48 |
|                         | Software Version:                     | WL INSITE R3.6.0 (Build 3) |       |                   | Calibration Version:        | 1                  |
|                         | Measurement                           | Micro Log Normal           |       | Micro Log Lateral |                             | Units              |
|                         |                                       | Shop                       | Field | Shop              | Field                       |                    |
|                         |                                       |                            |       |                   |                             |                    |
|                         | Tool Zero                             | -0.05                      | -0.04 | 0.01              | -0.00                       | ohmm               |
|                         | Internal Reference                    | 20.06                      | 20.06 | 20.14             | 20.15                       | ohmm               |
|                         | Summary                               |                            |       |                   |                             |                    |
|                         | Signal                                | Shop                       |       | Field             |                             | Tolerance          |
|                         |                                       |                            |       | Difference        |                             |                    |
|                         | Microlog Normal                       | 20.06                      | 20.06 | 0.00              | +/- 0.80                    |                    |
|                         | Microlog Lateral                      | 20.14                      | 20.15 | -0.01             | +/- 0.80                    |                    |
|                         | MEASURED CALIPER VALUES               |                            |       |                   |                             |                    |
|                         | Calibration-Coefficients Range Check: |                            |       | Passed            |                             |                    |
|                         | Ring-Measurement Check:               |                            |       | Passed            |                             |                    |
|                         | PASS/FAIL SUMMARY                     |                            |       |                   |                             |                    |
|                         | Calibration-Coefficients Range Check: |                            |       | Passed            |                             |                    |
|                         | MICRO LOG FIELD CHECK                 |                            |       |                   |                             |                    |
|                         | Tool Name:                            | Microlog Pad - 10685803    |       |                   | Reference Calibration Date: | 18-Jan-13 10:08:15 |
|                         | Engineer:                             | T. HYDE                    |       |                   | Calibration Date:           | 18-Jan-13 10:08:48 |
|                         | Software Version:                     | WL INSITE R3.6.0 (Build 3) |       |                   | Calibration Version:        | 1                  |
|                         | Measurement                           | Micro Log Normal           |       | Micro Log Lateral |                             | Units              |
|                         |                                       | Shop                       | Field | Shop              | Field                       |                    |
|                         |                                       |                            |       |                   |                             |                    |
|                         | Tool Zero                             | -0.05                      | -0.04 | 0.01              | -0.00                       | ohmm               |
|                         | Internal Reference                    | 20.06                      | 20.06 | 20.14             | 20.15                       | ohmm               |
|                         | Summary                               |                            |       |                   |                             |                    |
|                         | Signal                                | Shop                       |       | Field             |                             | Tolerance          |
|                         |                                       |                            |       | Difference        |                             |                    |
|                         | Microlog Normal                       | 20.06                      | 20.06 | 0.00              | +/- 0.80                    |                    |
|                         | Microlog Lateral                      | 20.14                      | 20.15 | -0.01             | +/- 0.80                    |                    |
|                         | MEASURED CALIPER VALUES               |                            |       |                   |                             |                    |
|                         | Calibration-Coefficients Range Check: |                            |       | Passed            |                             |                    |
|                         | Ring-Measurement Check:               |                            |       | Passed            |                             |                    |
|                         | PASS/FAIL SUMMARY                     |                            |       |                   |                             |                    |
|                         | Calibration-Coefficients Range Check: |                            |       | Passed            |                             |                    |
|                         | MICRO LOG FIELD CHECK                 |                            |       |                   |                             |                    |
|                         | Tool Name:                            | Microlog Pad - 10685803    |       |                   | Reference Calibration Date: | 18-Jan-13 10:08:15 |
|                         | Engineer:                             | T. HYDE                    |       |                   | Calibration Date:           | 18-Jan-13 10:08:48 |
|                         | Software Version:                     | WL INSITE R3.6.0 (Build 3) |       |                   | Calibration Version:        | 1                  |
|                         | Measurement                           | Micro Log Normal           |       | Micro Log Lateral |                             | Units              |
|                         |                                       | Shop                       | Field | Shop              | Field                       |                    |
|                         |                                       |                            |       |                   |                             |                    |
|                         | Tool Zero                             | -0.05                      | -0.04 | 0.01              | -0.00                       | ohmm               |
|                         | Internal Reference                    | 20.06                      | 20.06 | 20.14             | 20.15                       | ohmm               |
|                         | Summary                               |                            |       |                   |                             |                    |
|                         | Signal                                | Shop                       |       | Field             |                             | Tolerance          |
|                         |                                       |                            |       | Difference        |                             |                    |
|                         | Microlog Normal                       | 20.06                      | 20.06 | 0.00              | +/- 0.80                    |                    |
|                         | Microlog Lateral                      | 20.14                      | 20.15 | -0.01             | +/- 0.80                    |                    |
|                         | MEASURED CALIPER VALUES               |                            |       |                   |                             |                    |
|                         | Calibration-Coefficients Range Check: |                            |       | Passed            |                             |                    |
|                         | Ring-Measurement Check:               |                            |       | Passed            |                             |                    |
|                         | PASS/FAIL SUMMARY                     |                            |       |                   |                             |                    |
|                         | Calibration-Coefficients Range Check: |                            |       | Passed            |                             |                    |
|                         | MICRO LOG FIELD CHECK                 |                            |       |                   |                             |                    |
|                         | Tool Name:                            | Microlog Pad - 10685803    |       |                   | Reference Calibration Date: | 18-Jan-13 10:08:15 |
|                         | Engineer:                             | T. HYDE                    |       |                   | Calibration Date:           | 18-Jan-13 10:08:48 |
|                         | Software Version:                     | WL INSITE R3.6.0 (Build 3) |       |                   | Calibration Version:        | 1                  |
|                         | Measurement                           | Micro Log Normal           |       | Micro Log Lateral |                             | Units              |
|                         |                                       | Shop                       | Field | Shop              | Field                       |                    |
|                         |                                       |                            |       |                   |                             |                    |
|                         | Tool Zero                             | -0.05                      | -0.04 | 0.01              | -0.00                       | ohmm               |
|                         | Internal Reference                    | 20.06                      | 20.06 | 20.14             | 20.15                       | ohmm               |
|                         | Summary                               |                            |       |                   |                             |                    |
|                         | Signal                                | Shop                       |       | Field             |                             | Tolerance          |
|                         |                                       |                            |       | Difference        |                             |                    |
|                         | Microlog Normal                       | 20.06                      | 20.06 | 0.00              | +/- 0.80                    |                    |
|                         | Microlog Lateral                      | 20.14                      | 20.15 | -0.01             | +/- 0.80                    |                    |
|                         | MEASURED CALIPER VALUES               |                            |       |                   |                             |                    |
|                         | Calibration-Coefficients Range Check: |                            |       | Passed            |                             |                    |
|                         | Ring-Measurement Check:               |                            |       | Passed            |                             |                    |
|                         | PASS/FAIL SUMMARY                     |                            |       |                   |                             |                    |
|                         | Calibration-Coefficients Range Check: |                            |       | Passed            |                             |                    |
|                         | MICRO LOG FIELD CHECK                 |                            |       |                   |                             |                    |
|                         | Tool Name:                            | Microlog Pad - 10685803    |       |                   | Reference Calibration Date: | 18-Jan-13 10:08:15 |
|                         | Engineer:                             | T. HYDE                    |       |                   | Calibration Date:           | 18-Jan-13 10:08:48 |
|                         | Software Version:                     | WL INSITE R3.6.0 (Build 3) |       |                   | Calibration Version:        | 1                  |
|                         | Measurement                           | Micro Log Normal           |       | Micro Log Lateral |                             | Units              |
|                         |                                       | Shop                       | Field | Shop              | Field                       |                    |
|                         |                                       |                            |       |                   |                             |                    |
|                         | Tool Zero                             | -0.05                      | -0.04 | 0.01              | -0.00                       | ohmm               |
|                         | Internal Reference                    | 20.06                      | 20.06 | 20.14             | 20.15                       | ohmm               |
|                         | Summary                               |                            |       |                   |                             |                    |
|                         | Signal                                | Shop                       |       | Field             |                             | Tolerance          |
|                         |                                       |                            |       | Difference        |                             |                    |
|                         | Microlog Normal                       | 20.06                      | 20.06 | 0.00              | +/- 0.80                    |                    |
|                         | Microlog Lateral                      | 20.14                      | 20.15 | -0.01             | +/- 0.80                    |                    |
|                         | MEASURED CALIPER VALUES               |                            |       |                   |                             |                    |
|                         | Calibration-Coefficients Range Check: |                            |       | Passed            |                             |                    |
|                         | Ring-Measurement Check:               |                            |       | Passed            |                             |                    |
|                         | PASS/FAIL SUMMARY                     |                            |       |                   |                             |                    |
|                         | Calibration-Coefficients Range Check: |                            |       | Passed            |                             |                    |
|                         | MICRO LOG FIELD CHECK                 |                            |       |                   |                             |                    |
|                         | Tool Name:                            | Microlog Pad - 10685803    |       |                   | Reference Calibration Date: | 18-Jan-13 10:08:15 |
|                         | Engineer:                             | T. HYDE                    |       |                   | Calibration Date:           | 18-Jan-13 10:08:48 |
|                         | Software Version:                     | WL INSITE R3.6.0 (Build 3) |       |                   | Calibration Version:        | 1                  |
|                         | Measurement                           | Micro Log Normal           |       | Micro Log Lateral |                             | Units              |
|                         |                                       | Shop                       | Field | Shop              | Field                       |                    |
|                         |                                       |                            |       |                   |                             |                    |
|                         | Tool Zero                             | -0.05                      | -0.04 | 0.01              | -0.00                       | ohmm               |
|                         | Internal Reference                    | 20.06                      | 20.06 | 20.14             | 20.15                       | ohmm               |
|                         | Summary                               |                            |       |                   |                             |                    |
|                         | Signal                                | Shop                       |       | Field             |                             | Tolerance          |
|                         |                                       |                            |       | Difference        |                             |                    |
|                         | Microlog Normal                       | 20.06                      | 20.06 | 0.00              | +/- 0.80                    |                    |
|                         | Microlog Lateral                      | 20.14                      | 20.15 | -0.01             | +/- 0.80                    |                    |
|                         | MEASURED CALIPER VALUES               |                            |       |                   |                             |                    |
|                         | Calibration-Coefficients Range Check: |                            |       | Passed            |                             |                    |
|                         | Ring-Measurement Check:               |                            |       | Passed            |                             |                    |
|                         | PASS/FAIL SUMMARY                     |                            |       |                   |                             |                    |
|                         | Calibration-Coefficients Range Check: |                            |       | Passed            |                             |                    |
|                         | MICRO LOG FIELD CHECK                 |                            |       |                   |                             |                    |
|                         | Tool Name:                            | Microlog Pad - 10685803    |       |                   | Reference Calibration Date: | 18-Jan-13 10:08:15 |
|                         | Engineer:                             | T. HYDE                    |       |                   | Calibration Date:           | 18-Jan-13 10:08:48 |
|                         | Software Version:                     | WL INSITE R3.6.0 (Build 3) |       |                   | Calibration Version:        | 1                  |
|                         | Measurement                           | Micro Log Normal           |       | Micro Log Lateral |                             | Units              |
|                         |                                       | Shop                       | Field | Shop              | Field                       |                    |
|                         |                                       |                            |       |                   |                             |                    |
|                         | Tool Zero                             | -0.05                      | -0.04 | 0.01              | -0.00                       | ohmm               |
|                         | Internal Reference                    | 20.06                      | 20.06 | 20.14             | 20.15                       | ohmm               |
|                         | Summary                               |                            |       |                   |                             |                    |
|                         | Signal                                | Shop                       |       | Field             |                             | Tolerance          |
|                         |                                       |                            |       | Difference        |                             |                    |
|                         | Microlog Normal                       | 20.06                      | 20.06 | 0.00              | +/- 0.80                    |                    |
|                         | Microlog Lateral                      | 20.14                      | 20.15 | -0.01             | +/- 0.80                    |                    |
|                         | MEASURED CALIPER VALUES               |                            |       |                   |                             |                    |
|                         | Calibration-Coefficients Range Check: |                            |       | Passed            |                             |                    |
|                         | Ring-Measurement Check:               |                            |       | Passed            |                             |                    |
|                         | PASS/FAIL SUMMARY                     |                            |       |                   |                             |                    |
|                         | Calibration-Coefficients Range Check: |                            |       | Passed            |                             |                    |
|                         | MICRO LOG FIELD CHECK                 |                            |       |                   |                             |                    |
|                         | Tool Name:                            | Microlog Pad - 10685803    |       |                   | Reference Calibration Date: | 18-Jan-13 10:08:15 |
|                         | Engineer:                             | T. HYDE                    |       |                   | Calibration Date:           | 18-Jan-13 10:08:48 |
|                         | Software Version:                     | WL INSITE R3.6.0 (Build 3) |       |                   | Calibration Version:        | 1                  |
|                         | Measurement                           | Micro Log Normal           |       | Micro Log Lateral |                             | Units              |
|                         |                                       | Shop                       | Field | Shop              | Field                       |                    |
|                         |                                       |                            |       |                   |                             |                    |
|                         | Tool Zero                             | -0.05                      | -0.04 | 0.01              | -0.00                       | ohmm               |
|                         | Internal Reference                    | 20.06                      | 20.06 | 20.14             | 20.15                       | ohmm               |
|                         | Summary                               |                            |       |                   |                             |                    |
|                         | Signal                                | Shop                       |       | Field             |                             | Tolerance          |
|                         |                                       |                            |       | Difference        |                             |                    |
|                         | Microlog Normal                       | 20.06                      | 20.06 | 0.00              | +/- 0.80                    |                    |
|                         | Microlog Lateral                      | 20.14                      | 20.15 | -0.01             | +/- 0.80                    |                    |
|                         | MEASURED CALIPER VALUES               |                            |       |                   |                             |                    |
|                         | Calibration-Coefficients Range Check: |                            |       | Passed            |                             |                    |
|                         | Ring-Measurement Check:               |                            |       | Passed            |                             |                    |
|                         | PASS/FAIL SUMMARY                     |                            |       |                   |                             |                    |
|                         | Calibration-Coefficients Range Check: |                            |       | Passed            |                             |                    |
|                         | MICRO LOG FIELD CHECK                 |                            |       |                   |                             |                    |
|                         | Tool Name:                            | Microlog Pad - 10685803    |       |                   | Reference Calibration Date: | 18-Jan-13 10:08:15 |
|                         | Engineer:                             | T. HYDE                    |       |                   | Calibration Date:           | 18-Jan-13 10:08:48 |
|                         | Software Version:                     | WL INSITE R3.6.0 (Build 3) |       |                   | Calibration Version:        | 1                  |
|                         | Measurement                           | Micro Log Normal           |       | Micro Log Lateral |                             | Units              |
|                         |                                       | Shop                       | Field | Shop              | Field                       |                    |
|                         |                                       |                            |       |                   |                             |                    |
|                         | Tool Zero                             | -0.05                      | -0.04 | 0.01              | -0.00                       | ohmm               |
|                         | Internal Reference                    | 20.06                      | 20.06 | 20.14             | 20.15                       | ohmm               |
|                         | Summary                               |                            |       |                   |                             |                    |
|                         | Signal                                | Shop                       |       | Field             |                             | Tolerance          |
|                         |                                       |                            |       | Difference        |                             |                    |
|                         | Microlog Normal                       | 20.06                      |       |                   |                             |                    |



| Measurement          | Shop | Field | Change | Control Limit On New Value |
|----------------------|------|-------|--------|----------------------------|
| Pad Extension        | 3.75 | 3.75  | 0.00   | +/- 0.10                   |
| Ring Diameter        | 8.25 | 8.21  | -0.04  | +/- 0.15                   |
| PASS/FAIL SUMMARY    |      |       |        |                            |
| Pad Extension Check: |      |       | Passed |                            |
| Diameter Check:      |      |       | Passed |                            |

| CALIBRATION SUMMARY                                                                             |       |       |       |            |                          |       |
|-------------------------------------------------------------------------------------------------|-------|-------|-------|------------|--------------------------|-------|
| Sensor                                                                                          | Shop  | Field | Post  | Difference | Tolerance                | Units |
| GTET-10748374                                                                                   |       |       |       |            |                          |       |
| Gamma Ray Calibrator                                                                            | 232.0 | 234.7 | ----- | -2.7       | +/- 9.00                 | api   |
| SDLT-10685803                                                                                   |       |       |       |            |                          |       |
| Pad Extension                                                                                   | 3.75  | 3.75  | ----- | 0.00       | +/-0.10                  | in    |
| Ring Diameter                                                                                   | 8.25  | 8.21  | ----- | 0.04       | +/-0.15                  | in    |
| Microlog Pad-10685803                                                                           |       |       |       |            |                          |       |
| MicroLog Normal                                                                                 | 20.06 | 20.06 | ----- | 0.00       | +/-0.80                  | ohmm  |
| MicroLog Lateral                                                                                | 20.14 | 20.15 | ----- | -0.01      | +/-0.80                  | ohmm  |
| Data: GARDEN_CITY_I-1\10001 SP-GTET-DSNT-SDLT-FLEX-BSAT-ACRT-CH\005 19-Jan-13 05:18 Up @5011.8f |       |       |       |            | Date: 19-Jan-13 06:33:58 |       |

| HALLIBURTON                      |                                                         |            |             |                    |
|----------------------------------|---------------------------------------------------------|------------|-------------|--------------------|
| INPUTS, DELAYS AND FILTERS TABLE |                                                         |            |             |                    |
| Mnemonic                         | Input Description                                       | Delay (ft) | Filter Type | Filter Length (ft) |
| Depth Panel                      |                                                         |            |             |                    |
| TENS                             | Tension                                                 | 0.00       | NO          |                    |
| SP Sub                           |                                                         |            |             |                    |
| PLTC                             | Plot Control Mask                                       | 72.25      | NO          |                    |
| SP                               | Spontaneous Potential                                   | 72.25      | BLK         | 1.250              |
| SPR                              | Raw Spontaneous Potential                               | 72.25      | NO          |                    |
| SPO                              | Spontaneous Potential Offset                            | 72.25      | NO          |                    |
| GTET                             |                                                         |            |             |                    |
| TPUL                             | Tension Pull                                            | 64.23      | NO          |                    |
| GR                               | Natural Gamma Ray API                                   | 64.23      | TRI         | 1.750              |
| GRU                              | Unfiltered Natural Gamma Ray API                        | 64.23      | NO          |                    |
| EGR                              | Natural Gamma Ray API with Enhanced Vertical Resolution | 64.23      | W           | 1.416 , 0.750      |
| ACCZ                             | Accelerometer Z                                         | 0.00       | BLK         | 0.083              |
| DEVI                             | Inclination                                             | 0.00       | NO          |                    |
| DSNT                             |                                                         |            |             |                    |
| TPUL                             | Tension Pull                                            | 53.99      | NO          |                    |
| RNDS                             | Near Detector Telemetry Counts                          | 54.09      | BLK         | 1.417              |
| RFDS                             | Far Detector Telemetry Counts                           | 54.84      | TRI         | 0.583              |
| DNTT                             | DSN Tool Temperature                                    | 54.09      | NO          |                    |
| DSNS                             | DSN Tool Status                                         | 53.99      | NO          |                    |
| ERND                             | Near Detector Telemetry Counts EVR                      | 54.09      | BLK         | 0.000              |
| ERFD                             | Far Detector Telemetry Counts EVR                       | 54.84      | BLK         | 0.000              |
| ENTM                             | DSN Tool Temperature EVR                                | 54.09      | NO          |                    |
| SDLT                             |                                                         |            |             |                    |

|            |                                               |       |     |       |
|------------|-----------------------------------------------|-------|-----|-------|
| TPUL       | Tension Pull                                  | 44.09 | NO  |       |
| PCAL       | Pad Caliper                                   | 44.09 | TRI | 0.250 |
| ACAL       | Arm Caliper                                   | 44.09 | TRI | 0.250 |
| BSAT       |                                               |       |     |       |
| TPUL       | Tension Pull                                  | 27.09 | NO  |       |
| STAT       | Status                                        | 27.09 | NO  |       |
| DLYT       | Delay Time                                    | 27.09 | NO  |       |
| SI         | Sample Interval                               | 27.09 | NO  |       |
| TXRX       | Raw Telemetry 10 Receivers                    | 27.09 | NO  |       |
| FRMC       | Tool Frame Count                              | 27.09 | NO  |       |
| GMOD       | Gain processing mode                          | 19.83 | NO  |       |
| ACRt Sonde |                                               |       |     |       |
| TPUL       | Tension Pull                                  | 2.97  | NO  |       |
| F1R1       | ACRT 12KHz - 80in R value                     | 9.22  | BLK | 0.000 |
| F1X1       | ACRT 12KHz - 80in X value                     | 9.22  | BLK | 0.000 |
| F1R2       | ACRT 12KHz - 50in R value                     | 6.72  | BLK | 0.000 |
| F1X2       | ACRT 12KHz - 50in X value                     | 6.72  | BLK | 0.000 |
| F1R3       | ACRT 12KHz - 29in R value                     | 5.22  | BLK | 0.000 |
| F1X3       | ACRT 12KHz - 29in X value                     | 5.22  | BLK | 0.000 |
| F1R4       | ACRT 12KHz - 17in R value                     | 4.22  | BLK | 0.000 |
| F1X4       | ACRT 12KHz - 17in X value                     | 4.22  | BLK | 0.000 |
| F1R5       | ACRT 12KHz - 10in R value                     | 3.72  | BLK | 0.000 |
| F1X5       | ACRT 12KHz - 10in X value                     | 3.72  | BLK | 0.000 |
| F1R6       | ACRT 12KHz - 6in R value                      | 3.47  | BLK | 0.000 |
| F1X6       | ACRT 12KHz - 6in X value                      | 3.47  | BLK | 0.000 |
| F2R1       | ACRT 36KHz - 80in R value                     | 9.22  | BLK | 0.000 |
| F2X1       | ACRT 36KHz - 80in X value                     | 9.22  | BLK | 0.000 |
| F2R2       | ACRT 36KHz - 50in R value                     | 6.72  | BLK | 0.000 |
| F2X2       | ACRT 36KHz - 50in X value                     | 6.72  | BLK | 0.000 |
| F2R3       | ACRT 36KHz - 29in R value                     | 5.22  | BLK | 0.000 |
| F2X3       | ACRT 36KHz - 29in X value                     | 5.22  | BLK | 0.000 |
| F2R4       | ACRT 36KHz - 17in R value                     | 4.22  | BLK | 0.000 |
| F2X4       | ACRT 36KHz - 17in X value                     | 4.22  | BLK | 0.000 |
| F2R5       | ACRT 36KHz - 10in R value                     | 3.72  | BLK | 0.000 |
| F2X5       | ACRT 36KHz - 10in X value                     | 3.72  | BLK | 0.000 |
| F2R6       | ACRT 36KHz - 6in R value                      | 3.47  | BLK | 0.000 |
| F2X6       | ACRT 36KHz - 6in X value                      | 3.47  | BLK | 0.000 |
| F3R1       | ACRT 72KHz - 80in R value                     | 9.22  | BLK | 0.000 |
| F3X1       | ACRT 72KHz - 80in X value                     | 9.22  | BLK | 0.000 |
| F3R2       | ACRT 72KHz - 50in R value                     | 6.72  | BLK | 0.000 |
| F3X2       | ACRT 72KHz - 50in X value                     | 6.72  | BLK | 0.000 |
| F3R3       | ACRT 72KHz - 29in R value                     | 5.22  | BLK | 0.000 |
| F3X3       | ACRT 72KHz - 29in X value                     | 5.22  | BLK | 0.000 |
| F3R4       | ACRT 72KHz - 17in R value                     | 4.22  | BLK | 0.000 |
| F3X4       | ACRT 72KHz - 17in X value                     | 4.22  | BLK | 0.000 |
| F3R5       | ACRT 72KHz - 10in R value                     | 3.72  | BLK | 0.000 |
| F3X5       | ACRT 72KHz - 10in X value                     | 3.72  | BLK | 0.000 |
| F3R6       | ACRT 72KHz - 6in R value                      | 3.47  | BLK | 0.000 |
| F3X6       | ACRT 72KHz - 6in X value                      | 3.47  | BLK | 0.000 |
| RMUD       | Mud Resistivity                               | 12.76 | BLK | 0.000 |
| F1RT       | Transmitter Reference 12 KHz Real Signal      | 2.97  | BLK | 0.000 |
| F1XT       | Transmitter Reference 12 KHz Imaginary Signal | 2.97  | BLK | 0.000 |
| F2RT       | Transmitter Reference 36 KHz Real Signal      | 2.97  | BLK | 0.000 |
| F2XT       | Transmitter Reference 36 KHz Imaginary Signal | 2.97  | BLK | 0.000 |

|                                                                                                |                                               |       |                          |       |
|------------------------------------------------------------------------------------------------|-----------------------------------------------|-------|--------------------------|-------|
| F3RT                                                                                           | Transmitter Reference 72 KHz Real Signal      | 2.97  | BLK                      | 0.000 |
| F3XT                                                                                           | Transmitter Reference 72 KHz Imaginary Signal | 2.97  | BLK                      | 0.000 |
| TFPU                                                                                           | Upper Feedpipe Temperature Calculated         | 2.97  | BLK                      | 0.000 |
| TFPL                                                                                           | Lower Feedpipe Temperature Calculated         | 2.97  | BLK                      | 0.000 |
| ITMP                                                                                           | Instrument Temperature                        | 2.97  | BLK                      | 0.000 |
| TCVA                                                                                           | Temperature Correction Values Loop Off        | 2.97  | NO                       |       |
| TIDV                                                                                           | Instrument Temperature Derivative             | 2.97  | NO                       |       |
| TUDV                                                                                           | Upper Temperature Derivative                  | 2.97  | NO                       |       |
| TLDV                                                                                           | Lower Temperature Derivative                  | 2.97  | NO                       |       |
| TRBD                                                                                           | Receiver Board Temperature                    | 2.97  | NO                       |       |
| SDLT Pad                                                                                       |                                               |       |                          |       |
| TPUL                                                                                           | Tension Pull                                  | 44.08 | NO                       |       |
| NAB                                                                                            | Near Above                                    | 43.90 | BLK                      | 0.920 |
| NHI                                                                                            | Near Cesium High                              | 43.90 | BLK                      | 0.920 |
| NLO                                                                                            | Near Cesium Low                               | 43.90 | BLK                      | 0.920 |
| NVA                                                                                            | Near Valley                                   | 43.90 | BLK                      | 0.920 |
| NBA                                                                                            | Near Barite                                   | 43.90 | BLK                      | 0.920 |
| NDE                                                                                            | Near Density                                  | 43.90 | BLK                      | 0.920 |
| NPK                                                                                            | Near Peak                                     | 43.90 | BLK                      | 0.920 |
| NLI                                                                                            | Near Lithology                                | 43.90 | BLK                      | 0.920 |
| NBAU                                                                                           | Near Barite Unfiltered                        | 43.90 | BLK                      | 0.250 |
| NLIU                                                                                           | Near Lithology Unfiltered                     | 43.90 | BLK                      | 0.250 |
| FAB                                                                                            | Far Above                                     | 44.26 | BLK                      | 0.250 |
| FHI                                                                                            | Far Cesium High                               | 44.26 | BLK                      | 0.250 |
| FLO                                                                                            | Far Cesium Low                                | 44.26 | BLK                      | 0.250 |
| FVA                                                                                            | Far Valley                                    | 44.26 | BLK                      | 0.250 |
| FBA                                                                                            | Far Barite                                    | 44.26 | BLK                      | 0.250 |
| FDE                                                                                            | Far Density                                   | 44.26 | BLK                      | 0.250 |
| FPK                                                                                            | Far Peak                                      | 44.26 | BLK                      | 0.250 |
| FLI                                                                                            | Far Lithology                                 | 44.26 | BLK                      | 0.250 |
| PTMP                                                                                           | Pad Temperature                               | 44.09 | BLK                      | 0.920 |
| NHV                                                                                            | Near Detector High Voltage                    | 43.49 | NO                       |       |
| FHV                                                                                            | Far Detector High Voltage                     | 43.49 | NO                       |       |
| ITMP                                                                                           | Instrument Temperature                        | 43.49 | NO                       |       |
| DDHV                                                                                           | Detector High Voltage                         | 43.49 | NO                       |       |
| Microlog Pad                                                                                   |                                               |       |                          |       |
| TPUL                                                                                           | Tension Pull                                  | 44.28 | NO                       |       |
| MINV                                                                                           | Microlog Lateral                              | 44.28 | BLK                      | 0.750 |
| MNOR                                                                                           | Microlog Normal                               | 44.28 | BLK                      | 0.750 |
| Data: GARDEN_CITY_I-110001 SP-GTET-DSNT-SDLT-FLEX-BSAT-ACRT-CH1005 19-Jan-13 05:18 Up @5011.8f |                                               |       | Date: 19-Jan-13 06:32:27 |       |

|             |                 |          |        |
|-------------|-----------------|----------|--------|
| COMPANY     | OXY USA INC.    |          |        |
| WELL        | GARDEN CITY I-1 |          |        |
| FIELD       | GARDEN CITY     |          |        |
| COUNTY      | FINNEY          | STATE    | KANSAS |
| HALLIBURTON |                 | MICROLOG |        |

