



SUPERIOR  
Hays,  
Kansas

## MICRO LOG

|                              |                                                    |                                           |                             |
|------------------------------|----------------------------------------------------|-------------------------------------------|-----------------------------|
| Company                      | MULL DRILLING COMPANY, INC.                        | Company                                   | MULL DRILLING COMPANY, INC. |
| Well                         | #2-16 DAVID                                        | Well                                      | #2-16 DAVID                 |
| Field                        | WILDCAT                                            | Field                                     | WILDCAT                     |
| County                       | NESS                                               | County                                    | NESS                        |
| State                        | KANSAS                                             | State                                     | KANSAS                      |
| Location:                    | AP1 # : 15-135-25376-0000<br>1113' FSL & 2136' FSL | Other Services<br>CDL/CNL/PE<br>DIL/SONIC |                             |
| Permanent Datum              | GROUND LEVEL                                       | Elevation                                 | 2456                        |
| Log Measured From            | KELLY BUSHING 5' A.G.L.                            |                                           |                             |
| Drilling Measured From       | KELLY BUSHING                                      |                                           |                             |
| SEC 16 TWP 17S RGE 23W       |                                                    |                                           |                             |
| Date                         | 4/17/12                                            |                                           |                             |
| Run Number                   | TWO                                                |                                           |                             |
| Depth Driller                | 4560                                               |                                           |                             |
| Depth Logger                 | 4562                                               |                                           |                             |
| Bottom Logged Interval       | 4540                                               |                                           |                             |
| Top Log Interval             | 3600                                               |                                           |                             |
| Casing Driller               | 8 5/8"@222'                                        |                                           |                             |
| Casing Logger                | 208                                                |                                           |                             |
| Bit Size                     | 7 7/8"                                             |                                           |                             |
| Type Fluid in Hole           | CHEMICAL MUD                                       | CHORIDES 4,900 PPM                        |                             |
| Density / Viscosity          | 9.6/53                                             |                                           |                             |
| pH / Fluid Loss              | 9.0/7.6                                            |                                           |                             |
| Source of Sample             | FLOWLINE                                           |                                           |                             |
| Rm @ Meas. Temp              | .800@78F                                           |                                           |                             |
| Rmt @ Meas. Temp             | .600@78F                                           |                                           |                             |
| Rmc @ Meas. Temp             | .960@78F                                           |                                           |                             |
| Source of Rmt / Rmc          | MEASUREMENT                                        |                                           |                             |
| Rm @ BHT                     | .516@78F                                           |                                           |                             |
| Time Circulation Stopped     | 4.5 HOURS                                          |                                           |                             |
| Time Logger on Bottom        | 8:15 A.M.                                          |                                           |                             |
| Maximum Recorded Temperature | 121F                                               |                                           |                             |
| Equipment Number             | 4010                                               |                                           |                             |
| Location                     | HAYS, KANSAS                                       |                                           |                             |
| Recorded By                  | JEFF LUEBBERS                                      |                                           |                             |
| Witnessed By                 | KEVIN KESSLER                                      |                                           |                             |

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All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs, damages, or expenses incurred or sustained by anyone resulting from any interpretation made by any of our officers, agents or employees. These interpretations are also subject to our general terms and conditions set out in our current Price Schedule.

### Comments

THANK YOU FOR USING SUPERIOR WELL SERVICE HAYS, KANSAS (785) 628-6395  
DIRECTIONS  
RANSOM, KS. (HWY 283 & 4 JUNCTION) 5S. TO "RD. 210", 1 1/2E., N. INTO

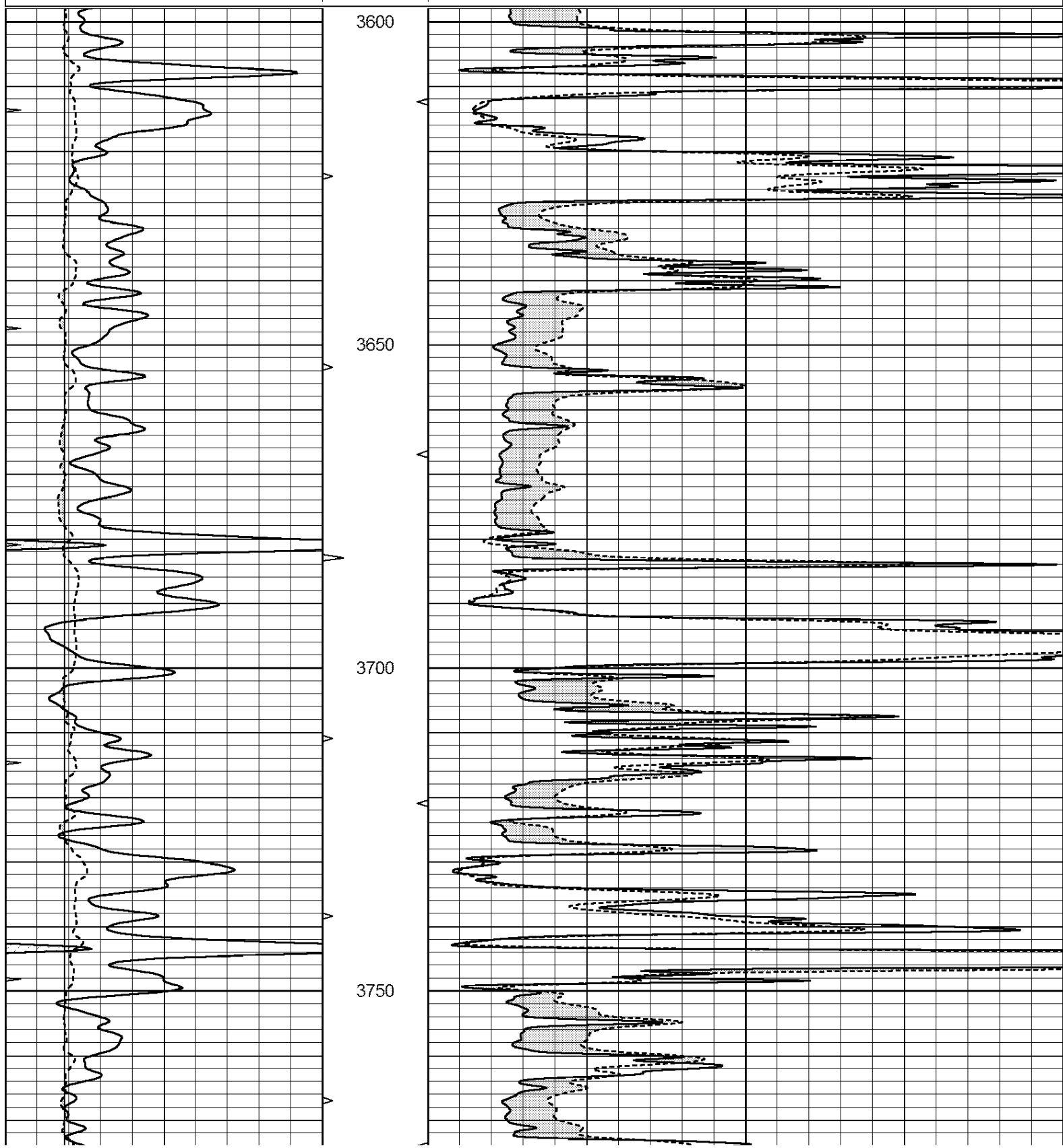


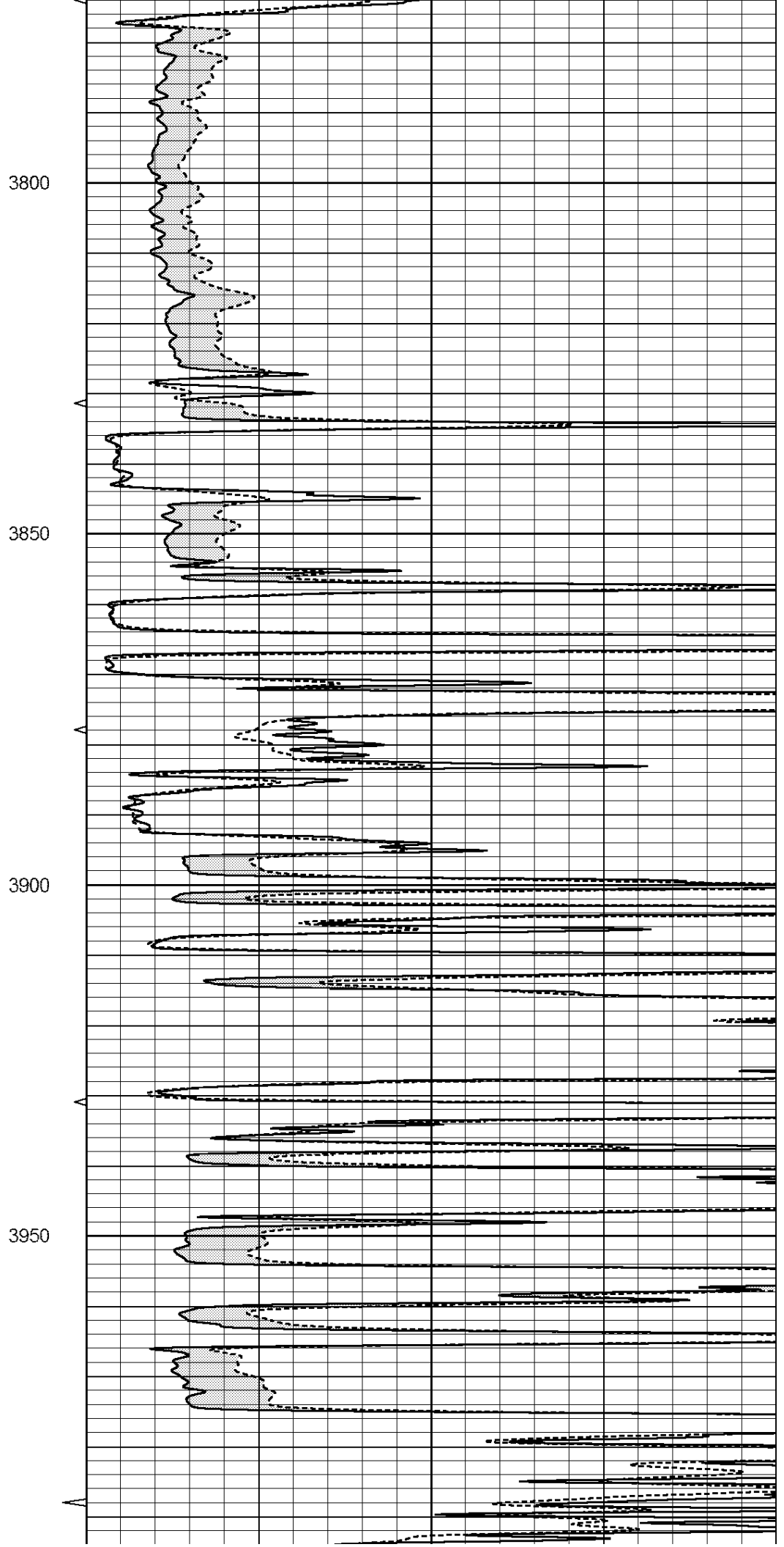
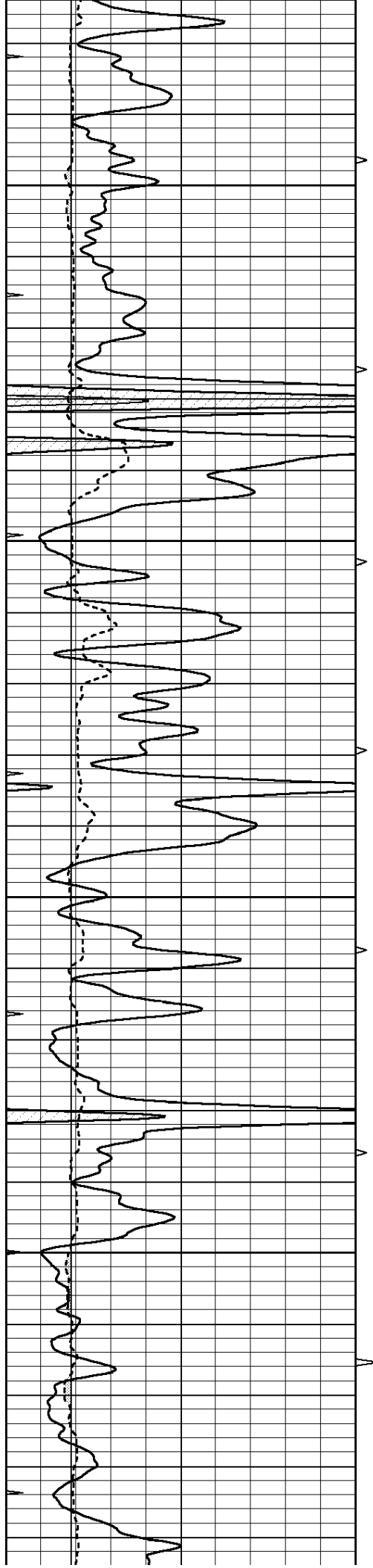
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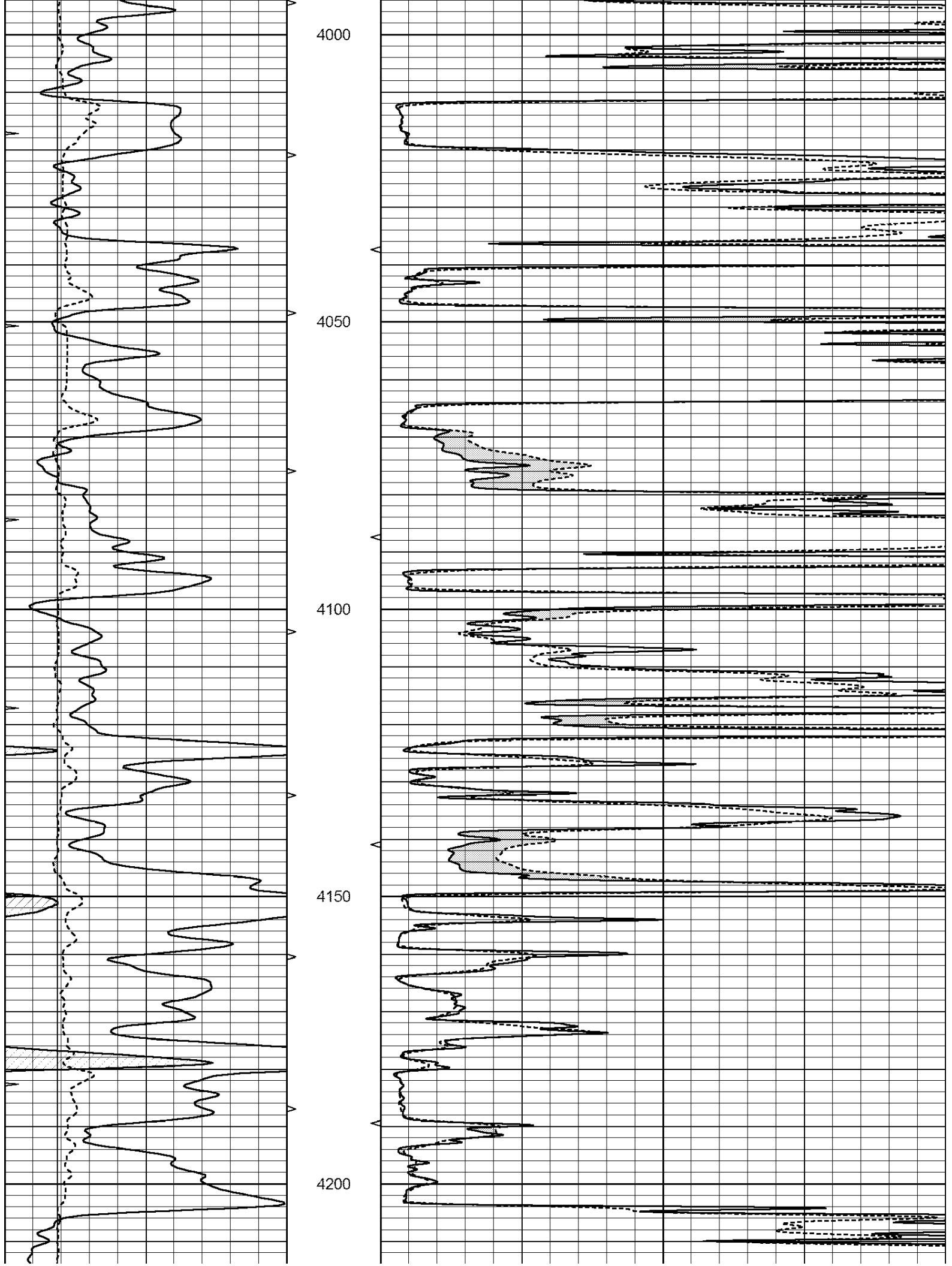
# MAIN SECTION

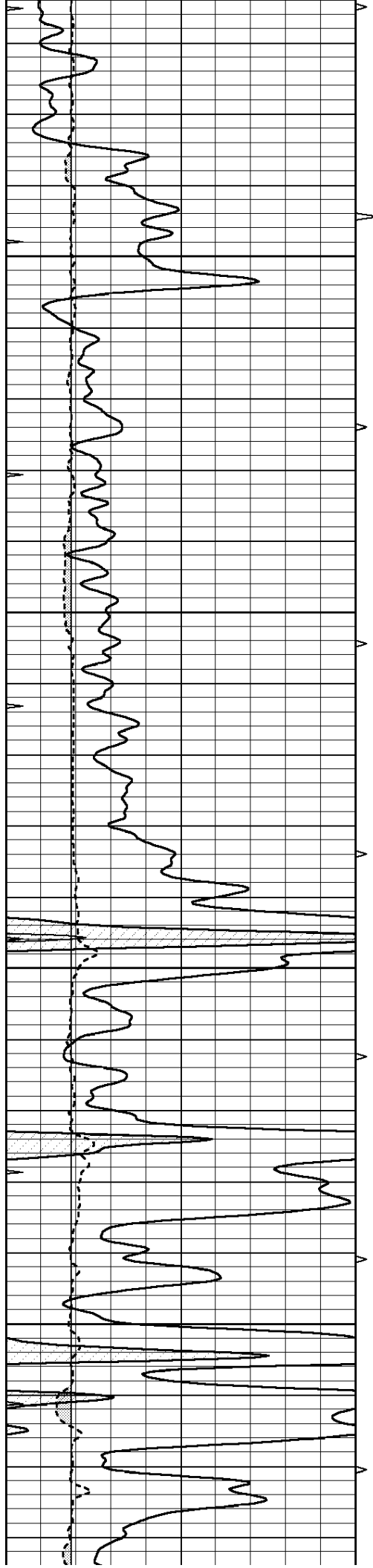
Database File: 408626pe.db  
Dataset Pathname: pass6.7  
Presentation Format: micro  
Dataset Creation: Tue Apr 17 11:39:21 2012  
Charted by: Depth in Feet scaled 1:240

|   |                  |     |            |   |                |    |
|---|------------------|-----|------------|---|----------------|----|
| 0 | GAMMA RAY (GAPI) | 150 | ABHV       | 0 | MEL1.5 (Ohm-m) | 40 |
| 6 | CALIPER (in)     | 16  | 10 (ft3) 0 | 0 | MEL2.0 (Ohm-m) | 40 |
| 0 | MINMK            | 20  | TBHV       |   |                |    |
|   |                  |     | 0 (ft3) 10 |   |                |    |







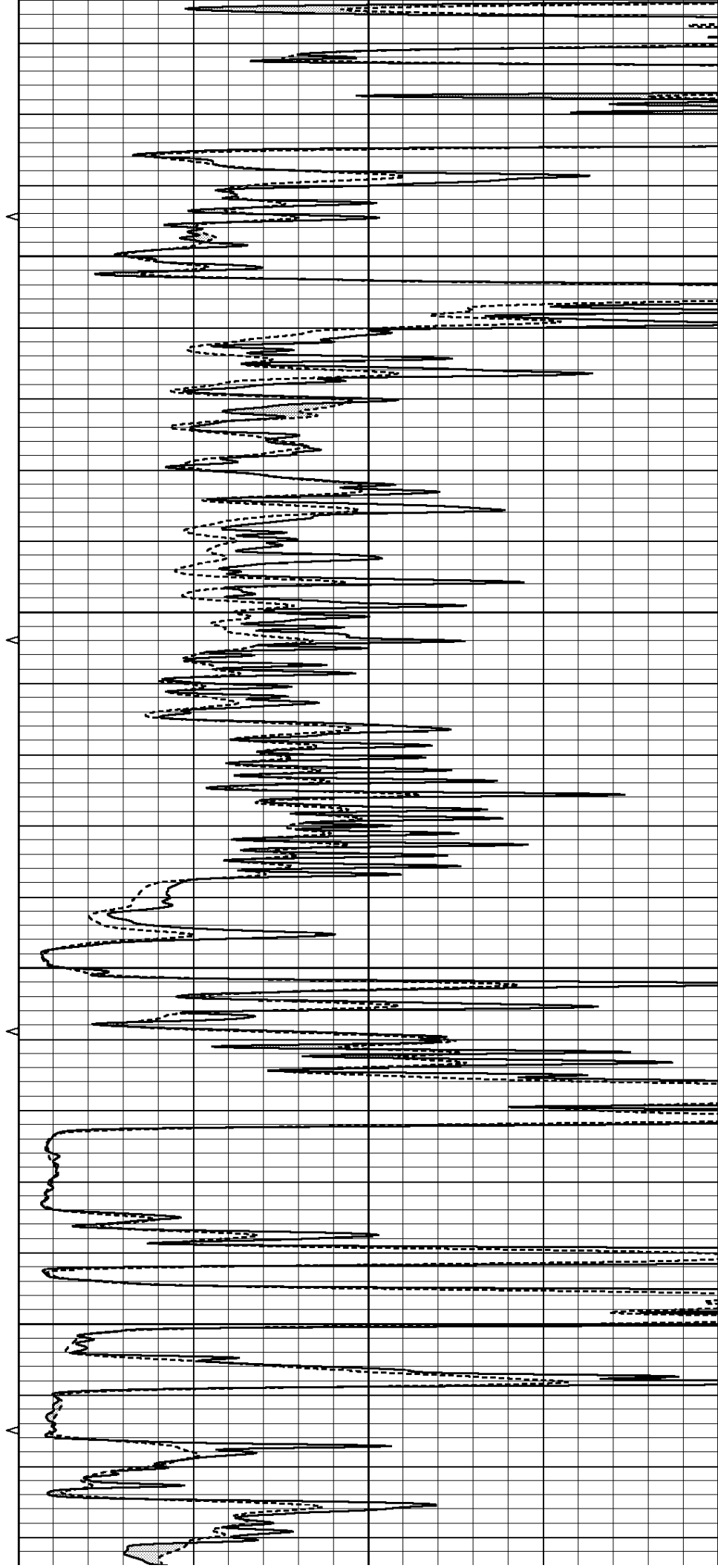


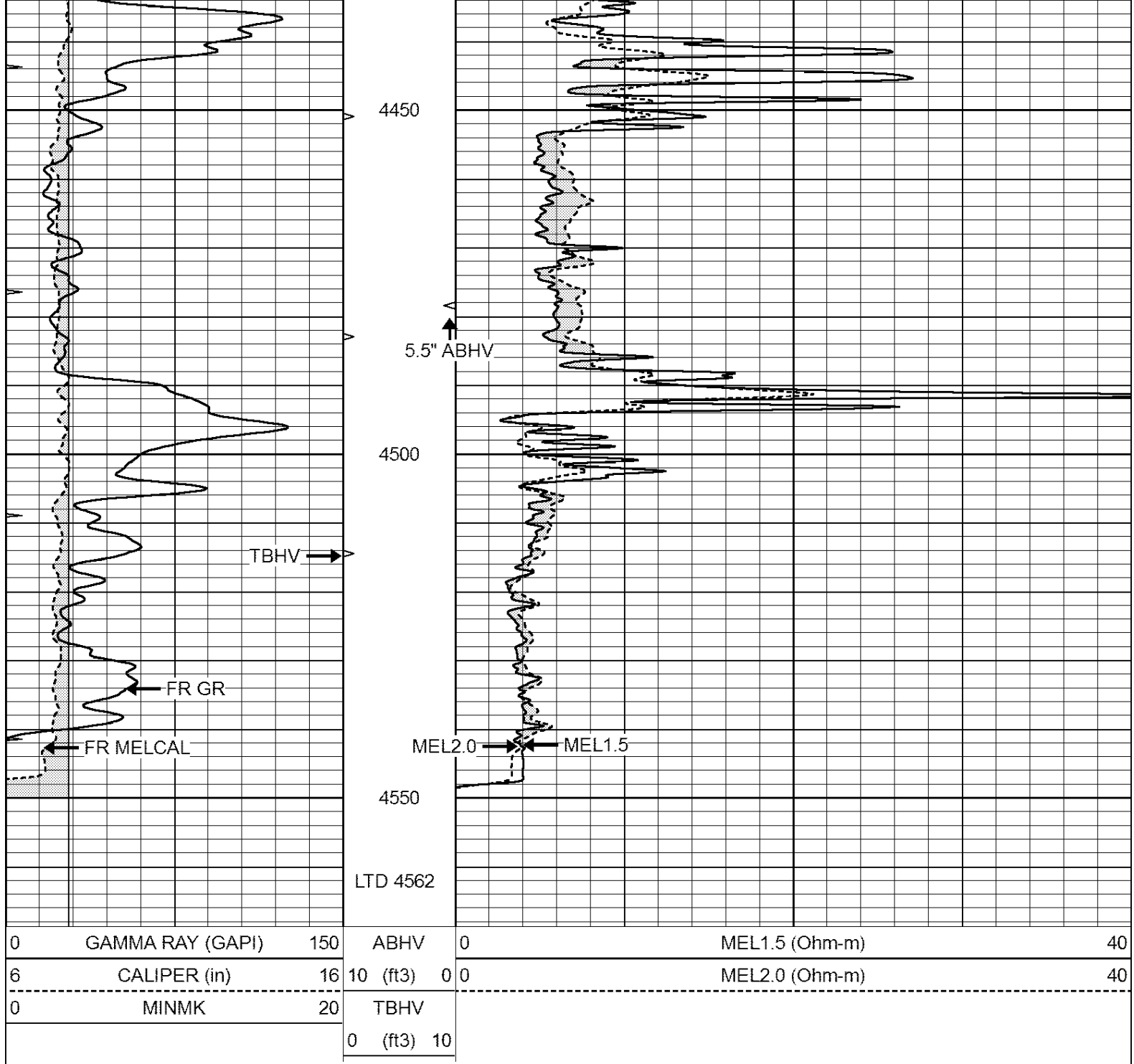
4250

4300

4350

4400



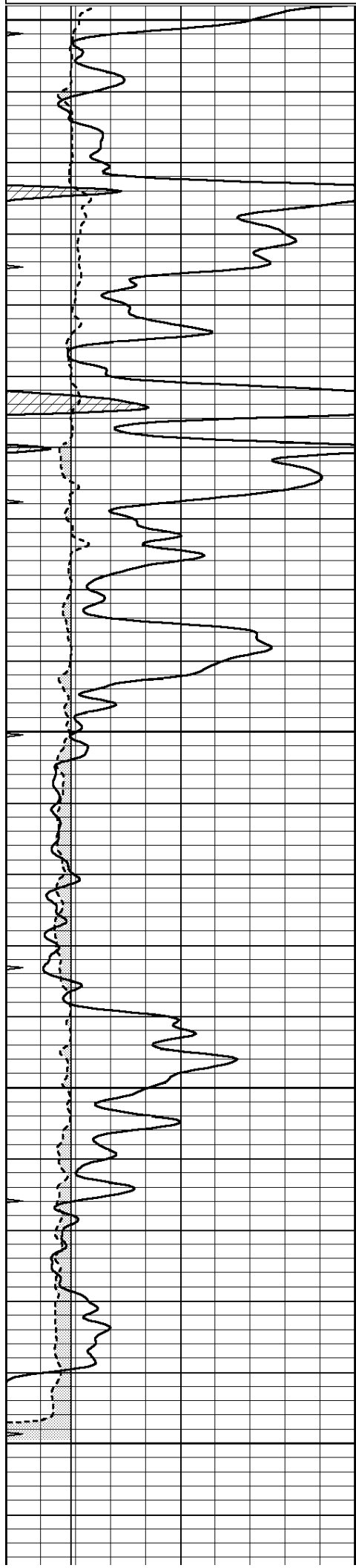


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# REPEAT SECTION

Database File: 408626pe.db  
 Dataset Pathname: pass5.4  
 Presentation Format: micro  
 Dataset Creation: Tue Apr 17 11:12:23 2012  
 Charted by: Depth in Feet scaled 1:240

|   |                  |     |          |     |                |    |
|---|------------------|-----|----------|-----|----------------|----|
| 0 | GAMMA RAY (GAPI) | 150 | ABHV     | 0   | MEL1.5 (Ohm-m) | 40 |
| 6 | CALIPER (in)     | 16  | 10 (ft3) | 0 0 | MEL2.0 (Ohm-m) | 40 |
| 0 | MINMK            | 20  | TBHV     |     |                |    |
|   |                  |     | 0 (ft3)  | 10  |                |    |



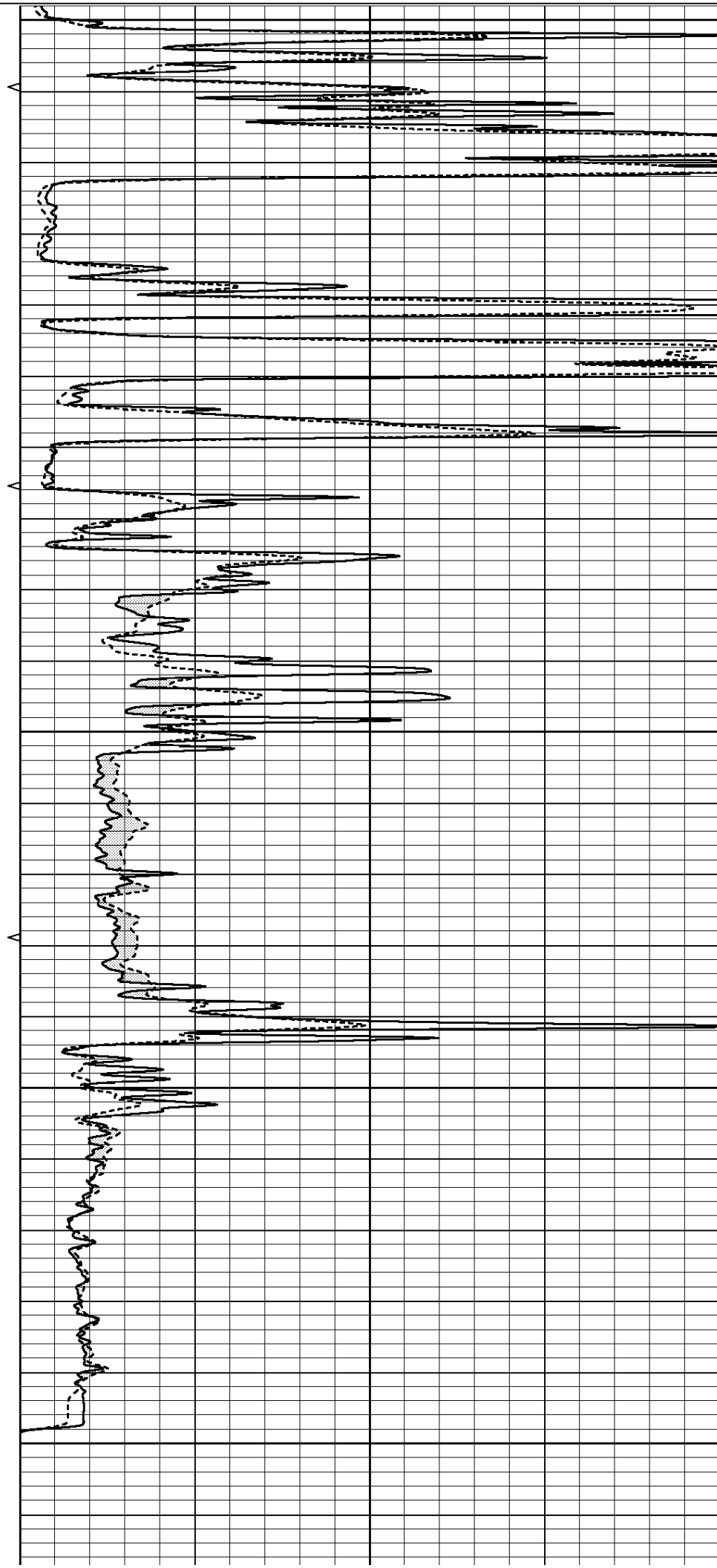
4350

4400

4450

4500

4550



|   |                  |     |            |   |                |    |
|---|------------------|-----|------------|---|----------------|----|
| 0 | GAMMA RAY (GAPI) | 150 | ABHV       | 0 | MEL1.5 (Ohm-m) | 40 |
| 6 | CALIPER (in)     | 16  | 10 (ft3) 0 | 0 | MEL2.0 (Ohm-m) | 40 |
| 0 | MINMK            | 20  | TBHV       |   |                |    |
|   |                  |     | 0 (ft3) 10 |   |                |    |

| Calibration Report           |                          |               |  |
|------------------------------|--------------------------|---------------|--|
| Database File:               | 408626pe.db              |               |  |
| Dataset Pathname:            | pass6.7                  |               |  |
| Dataset Creation:            | Tue Apr 17 11:39:21 2012 |               |  |
| MICRO Calibration Report     |                          |               |  |
| Serial Number:               | MICRO5                   |               |  |
| Tool Model:                  | PROBE                    |               |  |
| Performed:                   | Tue Apr 17 10:50:07 2012 |               |  |
| Caliper Calibration:         | Gain=2.892               | Offset=-0.742 |  |
| References                   | Low Cal                  | High Cal      |  |
| Readings                     | 8.200                    | 14.500        |  |
|                              | 3.092                    | 5.270         |  |
| 1.5" Calibration:            | Gain=22.000              | Offset=0.000  |  |
| References                   | Low Cal                  | High Cal      |  |
| Readings                     | 0.000                    | 20.000        |  |
|                              | -0.002                   | 0.981         |  |
| 2" Calibration:              | Gain=41.000              | Offset=-0.600 |  |
| References                   | Low Cal                  | High Cal      |  |
| Readings                     | 0.000                    | 20.000        |  |
|                              | 0.002                    | 0.898         |  |
| Gamma Ray Calibration Report |                          |               |  |
| Serial Number:               | GR4                      |               |  |
| Tool Model:                  | OPEN                     |               |  |
| Performed:                   | Tue Apr 17 10:50:05 2012 |               |  |
| Calibrator Value:            | 200.0                    | GAPI          |  |
| Background Reading:          | 0.0                      | cps           |  |
| Calibrator Reading:          | 189.0                    | cps           |  |
| Sensitivity:                 | 2.3000                   | GAPI/cps      |  |