



Casedhole Solutions

**COMPENSATED
DENSITY/NEUTRON
LOG**

| | | | |
|------------------------|---------------------------|----------------|-------------------------------------|
| Company | RAYMOND OIL COMPANY, INC. | Company | RAYMOND OIL COMPANY, INC. |
| Well | MEYERS #1 | Well | MEYERS #1 |
| Field | WILDCAT | Field | WILDCAT |
| County | LOGAN | County | LOGAN |
| State | KANSAS | State | KANSAS |
| Location: | SEC 24 TWP 14S RGE 33W | Location: | 33S FSL & 95S FWL |
| Permanent Datum | GROUND LEVEL | API # : | 15-109-21446-0000 |
| Log Measured From | KELLY BUSHING 5' A.G.L. | Other Services | DIL/MEL |
| Drilling Measured From | KELLY BUSHING | Elevation | K.B. 2722 D.F. 2720 G.L. 2717 |

| | |
|------------------------------|-------------------|
| Date | 12/18/15 |
| Run Number | ONE |
| Depth Driller | 4623 |
| Depth Logger | 4625 |
| Bottom Logged Interval | 4601 |
| Top Log Interval | 3250 |
| Casing Driller | 8 5/8" @ 260 |
| Casing Logger | 258 |
| Bit Size | 7 7/8" |
| Type Fluid in Hole | CHEMICAL MUD |
| Density / Viscosity | 9.3/57 |
| pH / Fluid Loss | 10.0/10.2 |
| Source of Sample | FLOWLINE |
| Rm @ Meas. Temp | .50 @ 60F |
| Rmt @ Meas. Temp | .37 @ 60F |
| Rmc @ Meas. Temp | .60 @ 60F |
| Source of Rmf / Rmc | MEASUREMENT |
| Rm @ BHT | .24 @ 122F |
| Time Circulation Stopped | 2 HOURS |
| Time Logger on Bottom | |
| Maximum Recorded Temperature | 122F |
| Equipment Number | 4010 |
| Location | HAYS, KANSAS |
| Recorded By | JASON CAPPELLUCCI |
| Witnessed By | MAX LOVELLY |

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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

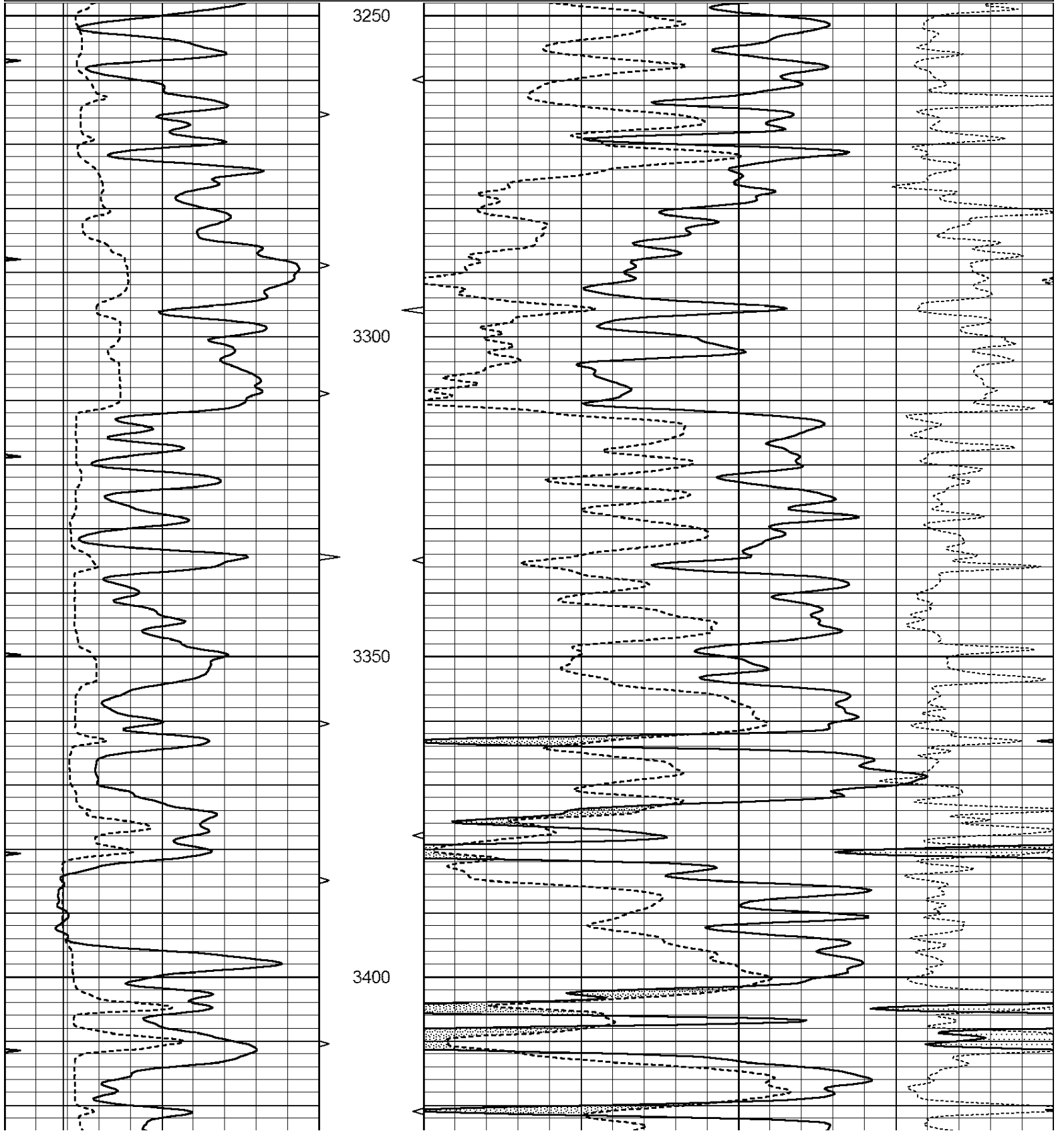
THANK YOU FOR USING CASEDHOLE SOLUTIONS, HAYS, KS. (785) 628-6395
DIRECTIONS:
OAKLEY, KS. - 22 SOUTH TO GOLD RD. - 4 1/2 WEST TO THE T - NORTH
TO JOG WEST - WEST TO JOG NORTH - NORTH TO NEXT CURVE
EAST INTO (STAY RIGHT AT Y AND CIRCLE AROUND TO THE NORTH)

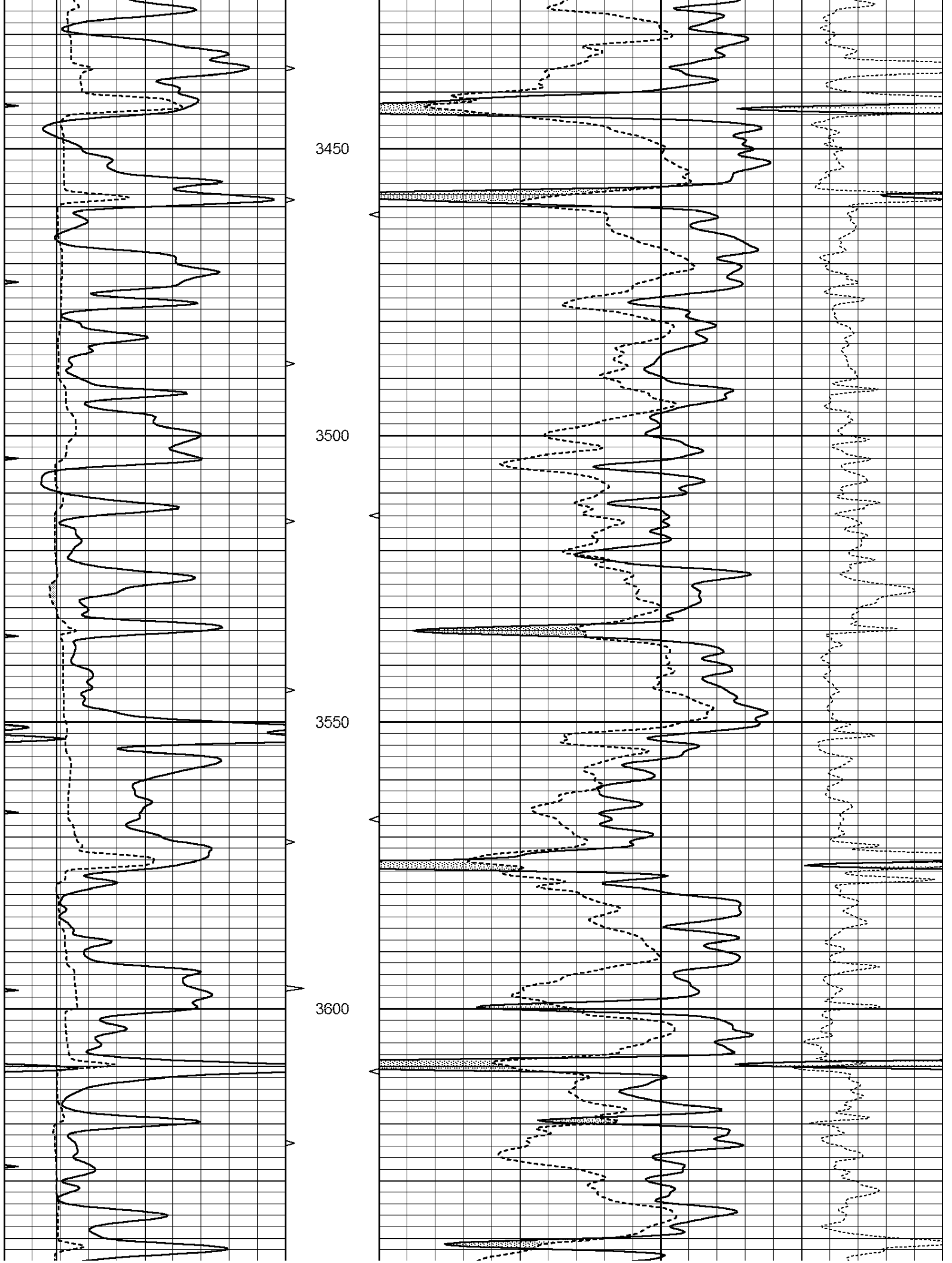


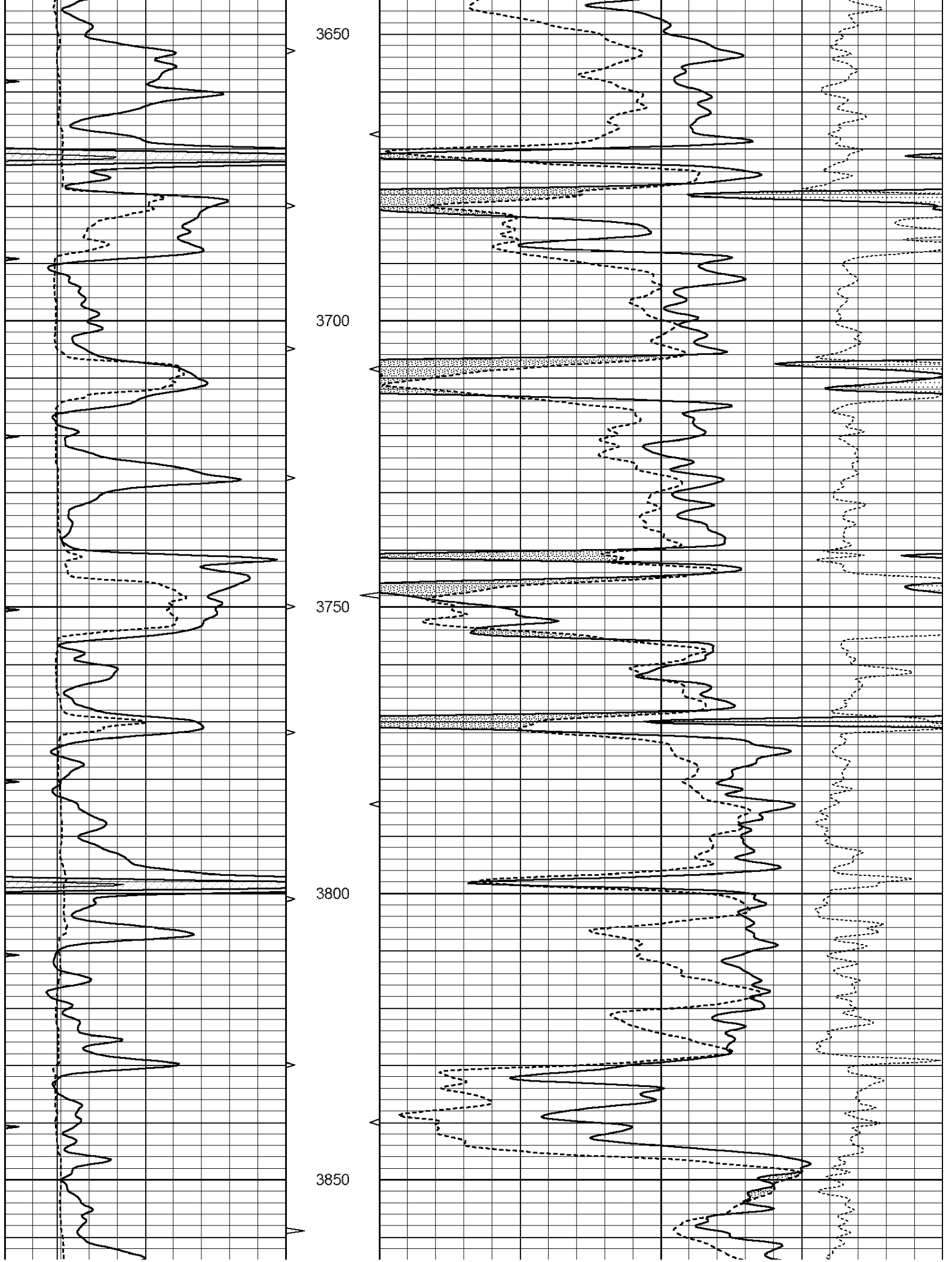
MAIN SECTION

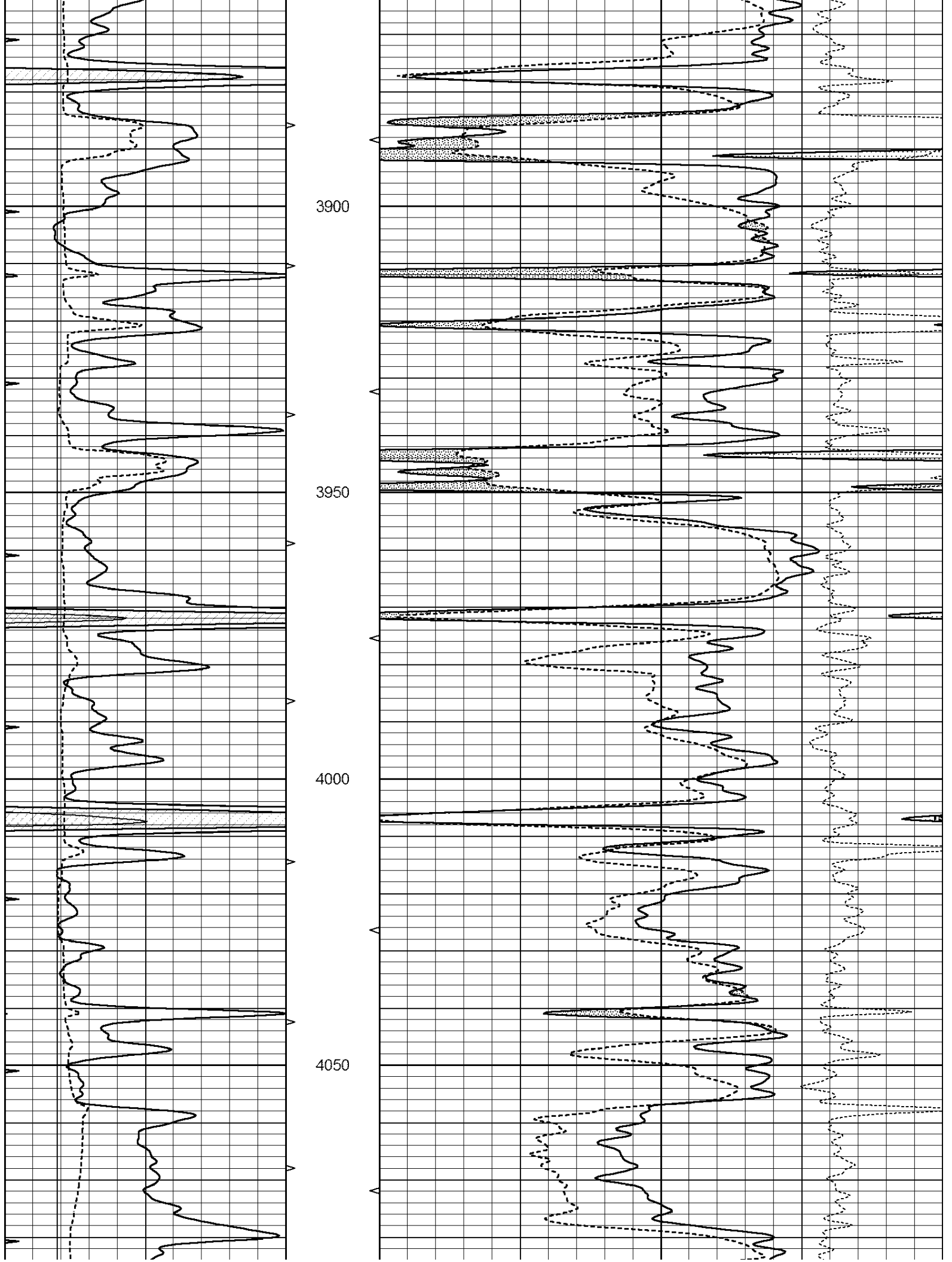
Database File: 30889ddn.db
 Dataset Pathname: pass3.1
 Presentation Format: den_neu
 Dataset Creation: Fri Dec 18 03:23:53 2015 by Calc Open-Cased 090629
 Charted by: Depth in Feet scaled 1:240

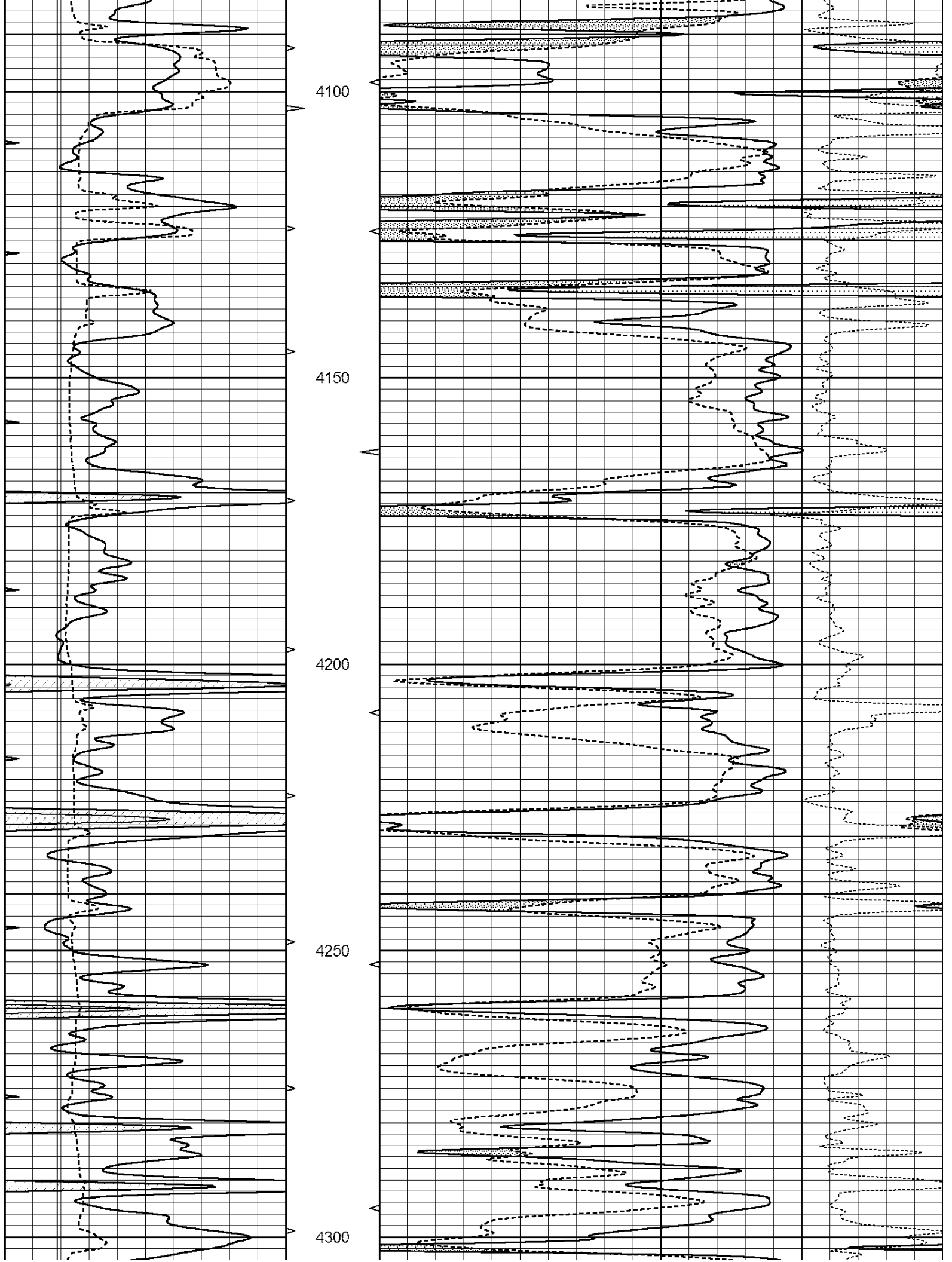
| | | | | | | |
|---|------------------|-----|----------|------|--------------------------|------|
| 0 | GAMMA RAY (GAPI) | 150 | ABHV | 30 | COMPENSATED DENSITY (pu) | -10 |
| 6 | CALIPER (in) | 16 | 10 (ft3) | 0 30 | COMPENSATED NEUTRON (pu) | -10 |
| 0 | MINMK | 20 | TBHV | | -0.25 CORRECTION (g/cc) | 0.25 |
| | | | 0 (ft3) | 10 | | |

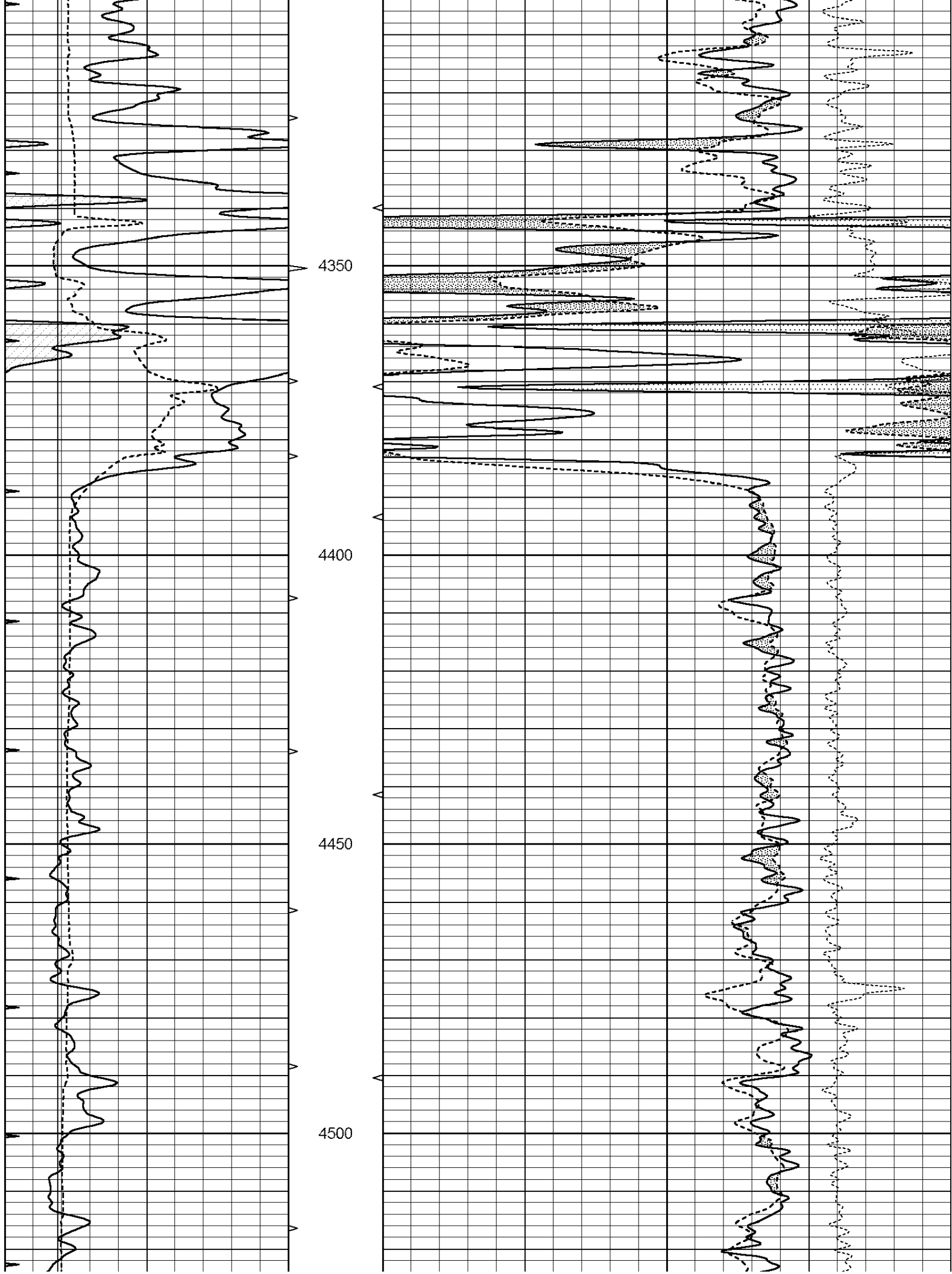


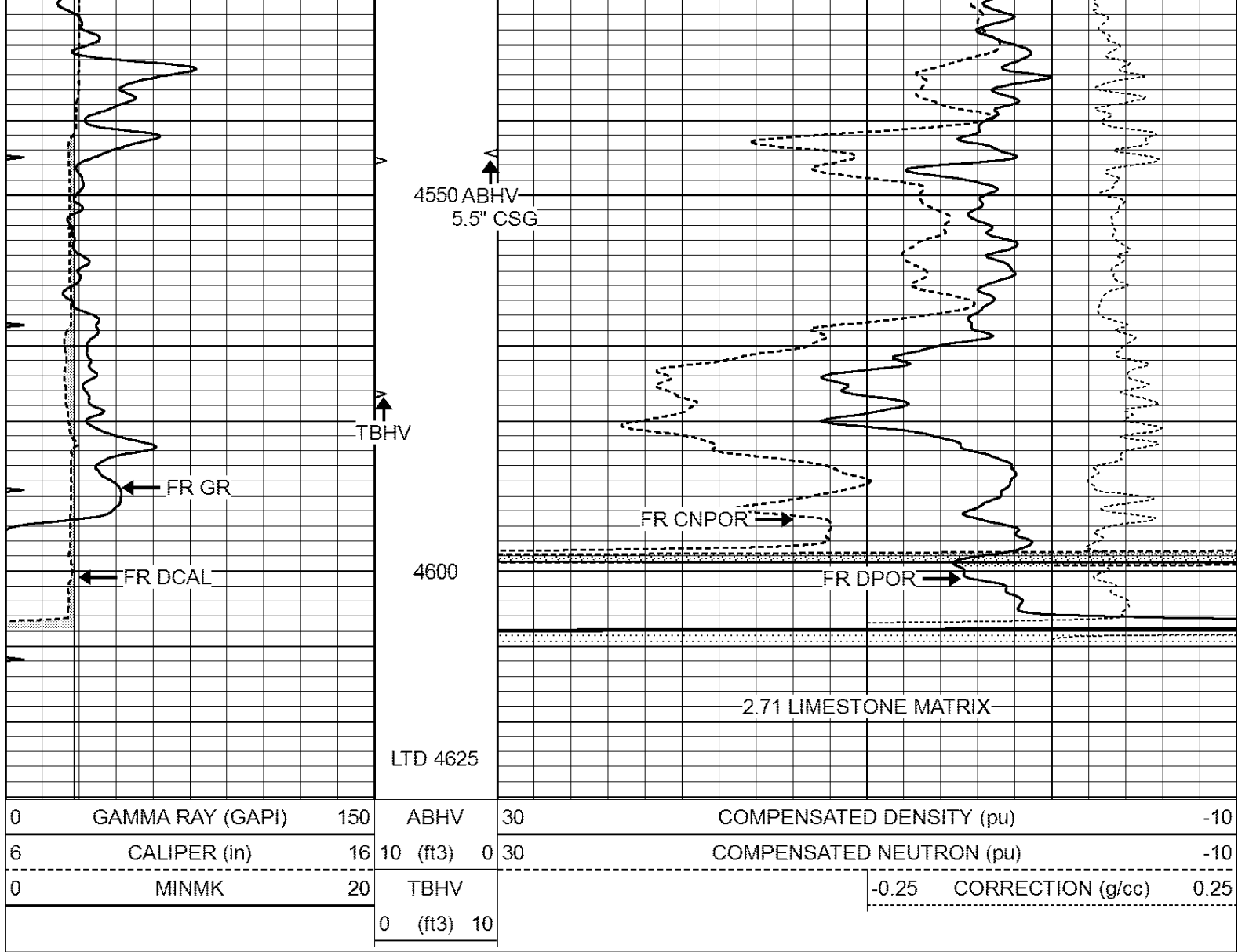










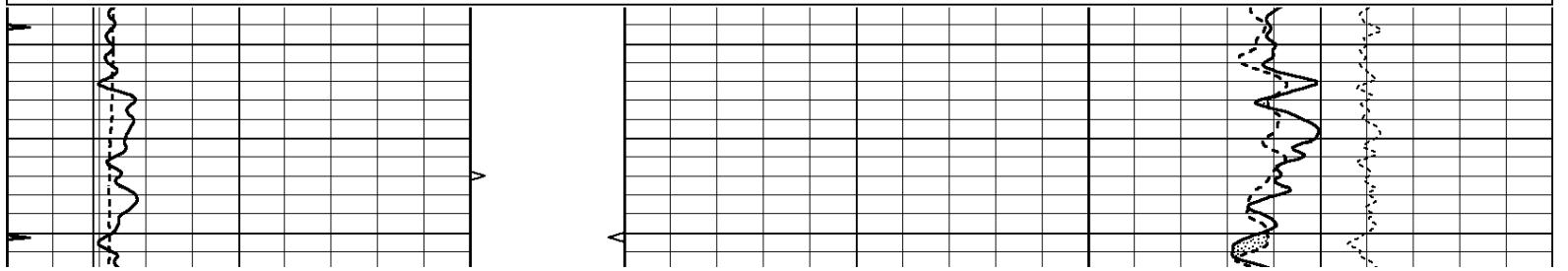


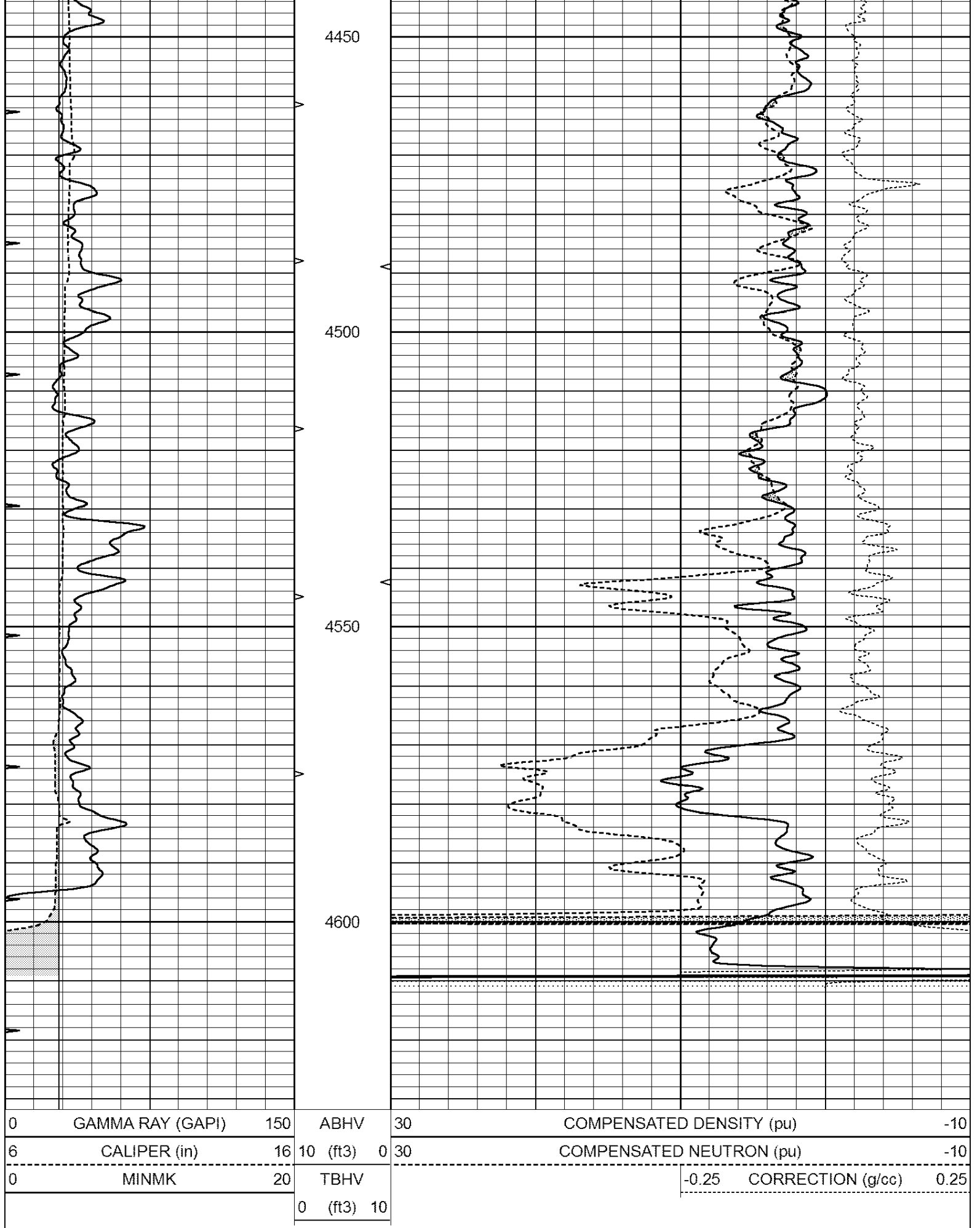
**Casedhole
Solutions**

REPEAT SECTION

Database File: 30889ddn.db
 Dataset Pathname: pass2.2
 Presentation Format: den_neu
 Dataset Creation: Fri Dec 18 02:57:37 2015 by Calc Open-Cased 090629
 Charted by: Depth in Feet scaled 1:240

| | | | | | | |
|---|------------------|-----|----------|------|--------------------------|------|
| 0 | GAMMA RAY (GAPI) | 150 | ABHV | 30 | COMPENSATED DENSITY (pu) | -10 |
| 6 | CALIPER (in) | 16 | 10 (ft3) | 0 30 | COMPENSATED NEUTRON (pu) | -10 |
| 0 | MINMK | 20 | TBHV | | -0.25 CORRECTION (g/cc) | 0.25 |
| | | | 0 (ft3) | 10 | | |





Dual Induction Calibration Report

Serial-Model: PROBE8-DILG
 Surface Cal Performed: Sun May 10 19:54:09 2015
 Downhole Cal Performed: Mon Jul 28 11:08:27 2008
 After Survey Verification Performed: Mon Jul 28 11:08:27 2008

Surface Calibration

| Loop: | Readings | | | References | | | Results | |
|-----------|----------|-------|---|------------|---------|--------|---------|---------|
| | Air | Loop | | Air | Loop | | m | b |
| Deep | 0.015 | 0.648 | V | 0.000 | 400.000 | mmho/m | 620.000 | 0.000 |
| Medium | 0.029 | 0.796 | V | 0.000 | 464.000 | mmho/m | 590.000 | -12.000 |
| Internal: | Zero | Cal | | Zero | Cal | | m | b |
| Deep | 0.017 | 0.657 | V | 0.000 | 400.000 | mmho/m | 625.153 | -10.619 |
| Medium | 0.016 | 0.757 | V | 0.000 | 464.000 | mmho/m | 625.992 | -9.739 |

Downhole Calibration

| | Readings | | | References | | | Results | |
|--------|----------|--------|--------|------------|----------|--------|---------|-------|
| | Zero | Cal | | Zero | Cal | | m' | b' |
| Deep | 0.000 | 0.000 | mmho/m | 2.011 | 405.777 | mmho/m | 1.000 | 0.000 |
| Medium | 0.000 | 0.000 | mmho/m | 7.590 | 503.393 | mmho/m | 1.000 | 0.000 |
| LL3 | | 7.500 | V | | 1500.000 | Ohm-m | | |
| | | 0.000 | V | | 20.000 | Ohm-m | | |
| | | -7.200 | V | | 3800.000 | mmho-m | | |

After Survey Verification

| | Readings | | | Targets | | | Results | |
|--------|----------|-------|--------|---------|-------|--------|---------|-------|
| | Zero | Cal | | Zero | Cal | | m' | b' |
| Deep | 0.000 | 0.000 | mmho/m | 0.000 | 0.000 | mmho/m | 0.000 | 0.000 |
| Medium | 0.000 | 0.000 | mmho/m | 0.000 | 0.000 | mmho/m | 0.000 | 0.000 |
| LL3 | | 1.000 | Ohm-m | | 1.000 | Ohm-m | | |
| | | 0.000 | Ohm-m | | 0.000 | Ohm-m | | |
| | | 1.000 | mmho-m | | 1.000 | mmho-m | | |

Compensated Density Calibration Report

Serial-Model: GEAR5-GEARHART
 Source / Verifier: /
 Master Calibration Performed: Sun Dec 06 13:45:22 2015
 Before Survey Verification Performed:
 After Survey Verification Performed:

Master Calibration

| | Density | | Far Detector | | Near Detector | |
|---------------------|---------|------|-----------------------------|--------|---------------|--|
| | | | | | | |
| Magnesium | 1.710 | g/cc | 798.83 | 465.02 | cps | |
| Aluminum | 2.570 | g/cc | 178.16 | 323.19 | cps | |
| Spine Angle = 76.37 | | | Density/Spine Ratio = 0.557 | | | |
| | Size | | Reading | | | |
| Small Ring | 7.00 | in | 1.47 | V | | |
| Large Ring | 14.00 | in | 3.01 | V | | |

Before Survey Verification

| | | | | |
|--|---------------|------|-----------------|------|
| | <u>Target</u> | | <u>Measured</u> | |
| | | g/cc | | g/cc |
| | | g/cc | | g/cc |
| | | g/cc | | g/cc |

| | | | | |
|---------------------------|---------------|------|-----------------|------|
| After Survey Verification | | | | |
| | <u>Target</u> | | <u>Measured</u> | |
| | | g/cc | | g/cc |
| | | g/cc | | g/cc |
| | | g/cc | | g/cc |

Compensated Neutron Calibration Report

| | |
|----------------|----|
| Serial Number: | 61 |
| Tool Model: | G |

| | | | | | | |
|-------------|-------------|----------|-----|--------|-----|---------------|
| CALIBRATION | | | | | | |
| | Detector | Readings | | Target | | Normalization |
| | Short Space | 1.00 | cps | 1.00 | cps | 1.0000 |
| | Long Space | 1.00 | cps | 1.00 | cps | 1.0000 |

| | | | | | | |
|-------------------------|-------------|----------|-----|----------|--|--------|
| PRE-SURVEY VERIFICATION | | | | | | |
| | Detector | Readings | | Measured | | Target |
| 1) | Short Space | | cps | | | |
| | Long Space | | cps | pu | | pu |
| 2) | Short Space | | cps | | | |
| | Long Space | | cps | pu | | |
| 3) | Short Space | | cps | | | |
| | Long Space | | cps | pu | | |

| | | | | | | |
|--------------------------|-------------|----------|-----|----------|--|--------|
| POST-SURVEY VERIFICATION | | | | | | |
| | Detector | Readings | | Measured | | Target |
| 1) | Short Space | | cps | | | |
| | Long Space | | cps | pu | | pu |
| 2) | Short Space | | cps | | | |
| | Long Space | | cps | pu | | pu |
| 3) | Short Space | | cps | | | |
| | Long Space | | cps | pu | | pu |

Gamma Ray Calibration Report

| | |
|---------------------|--------------------------|
| Serial Number: | GR6 |
| Tool Model: | OPEN |
| Performed: | Thu Nov 12 05:47:01 2015 |
| Calibrator Value: | 150.0 GAPI |
| Background Reading: | 0.0 cps |
| Calibrator Reading: | 276.0 cps |
| Sensitivity: | 0.4500 GAPI/cps |