



RADIAL BOND LOG
GAMMA RAY
CCL

| | | | |
|------------------------|--------------------------------|--------|--|
| Company | BILL BARRETT CORPORATION | | |
| Well | 70 RANCH 04-63-03-4956CH | | |
| Field | WATTENBERG | | |
| County | WELD | State | COLORADO |
| Location: | SHL 1928' FSL & 234' FWL NW/SW | | API # : 05-123-37925 |
| Permanent Datum | SEC 3 | TWP 4N | RGE 63W |
| Log Measured From | K.B. 23' | | Elevation 4560' |
| Drilling Measured From | K.B. | | Elevation K.B. 4583' D.F. 4582' G.L. 4560' |

| | | | |
|------------------------|-------------|--|--|
| Date | 2-25-14 | | |
| Run Number | ONE | | |
| Depth Driller | 10982' | | |
| Depth Logger | 6580' | | |
| Bottom Logged Interval | 6577' | | |
| Top Log Interval | SURFACE | | |
| Open Hole Size | 8.75 | | |
| Type Fluid | WATER | | |
| Density / Viscosity | 1.0 | | |
| Max. Recorded Temp. | 201 | | |
| Estimated Cement Top | 106' | | |
| Time Well Ready | N/A | | |
| Time Logger on Bottom | N/A | | |
| Equipment Number | 4310 | | |
| Location | GREELEY CO. | | |
| Recorded By | N. BREHMER | | |
| Witnessed By | J. DAMRON | | |

| Borehole Record | | | | Tubing Record | | | |
|-------------------|--------|---------|--------|---------------|--------|--------|----|
| Run Number | Bit | From | To | Size | Weight | From | To |
| ONE | 24" | SURFACE | 80' | | | | |
| TWO | 13.5" | 80' | 831' | | | | |
| THREE | 8.75" | 831' | 6610' | | | | |
| FOUR | 6.125" | 6496' | 10982' | | | | |
| Casing Record | Size | | Wgt/Ft | Top | | Bottom | |
| Surface String | 9.625" | | 36# | 0' | | 830' | |
| Prot. String | | | | | | | |
| Production String | 7" | | 26# | 0' | | 6610' | |
| Liner | 4.5" | | 11.6# | 6498' | | 10982' | |

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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

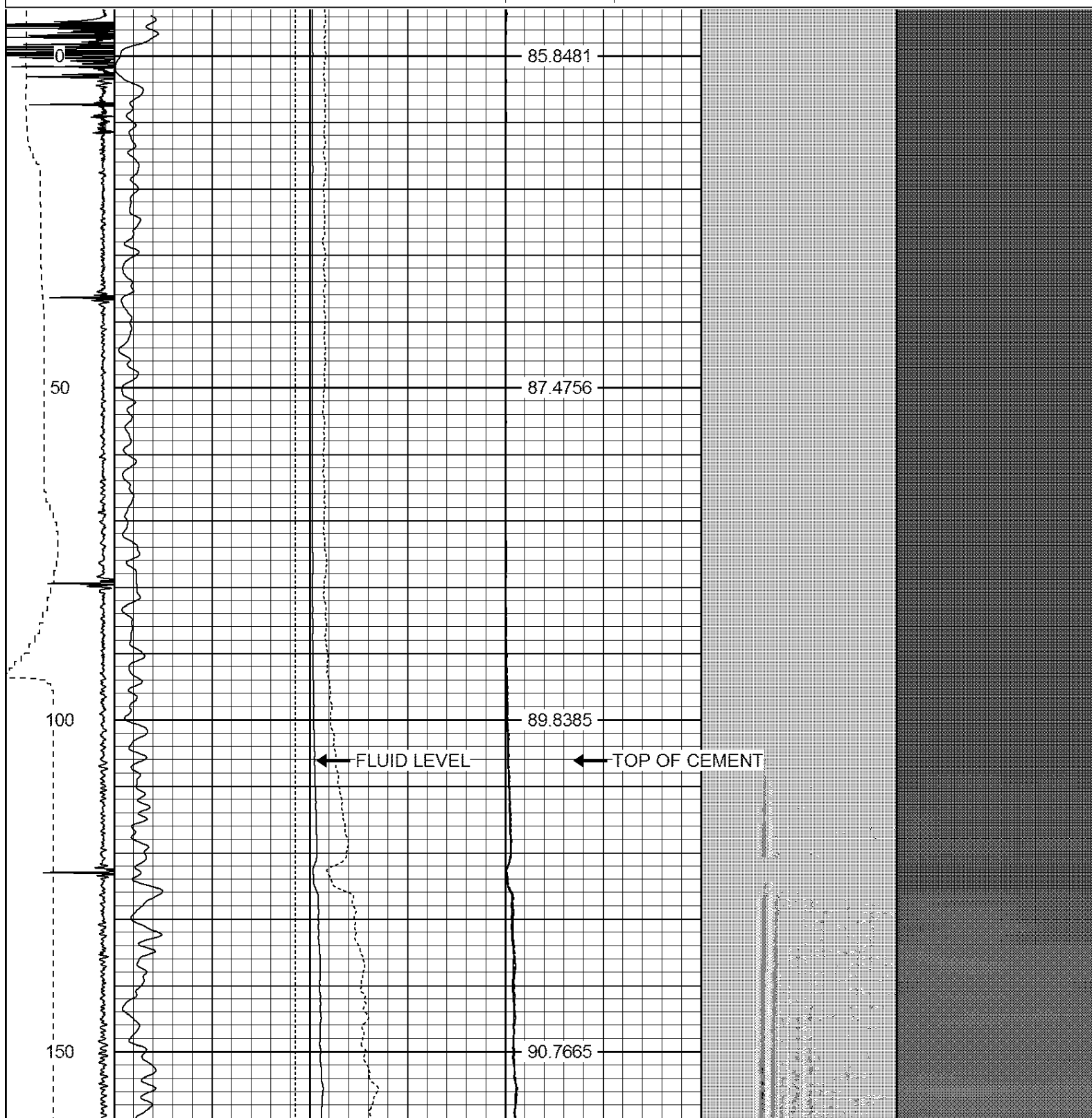
RAN CBL TO VERIFY CEMENT BOND
CORRELATED TO LINER HANGER @6498'
MARKER JOINT @5604'-5627'

THANK YOU FOR USING WARRIOR ENERGY SERVICES

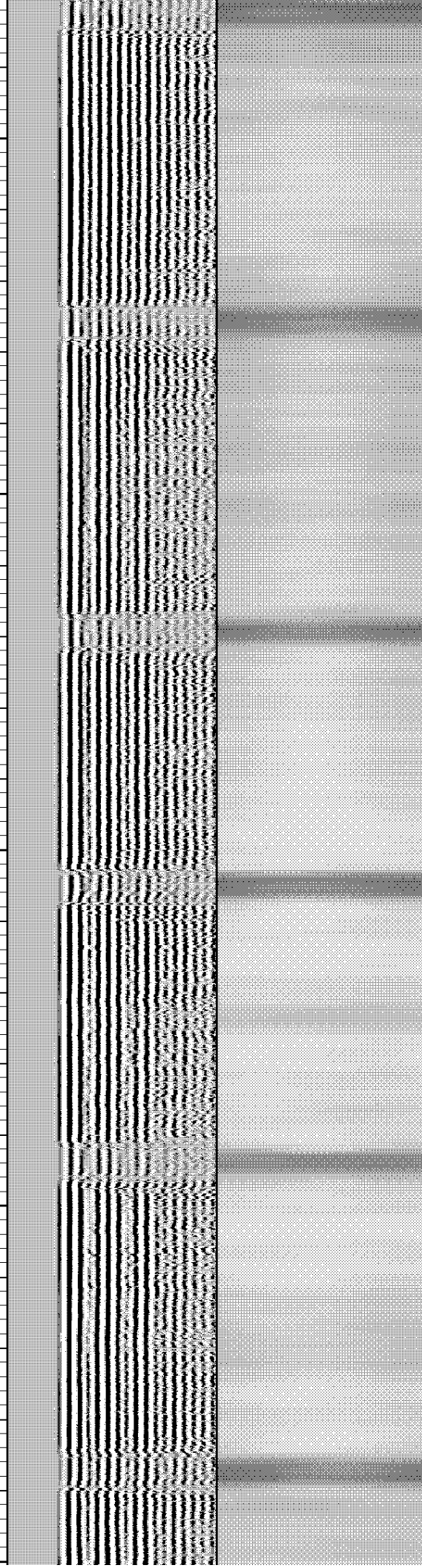
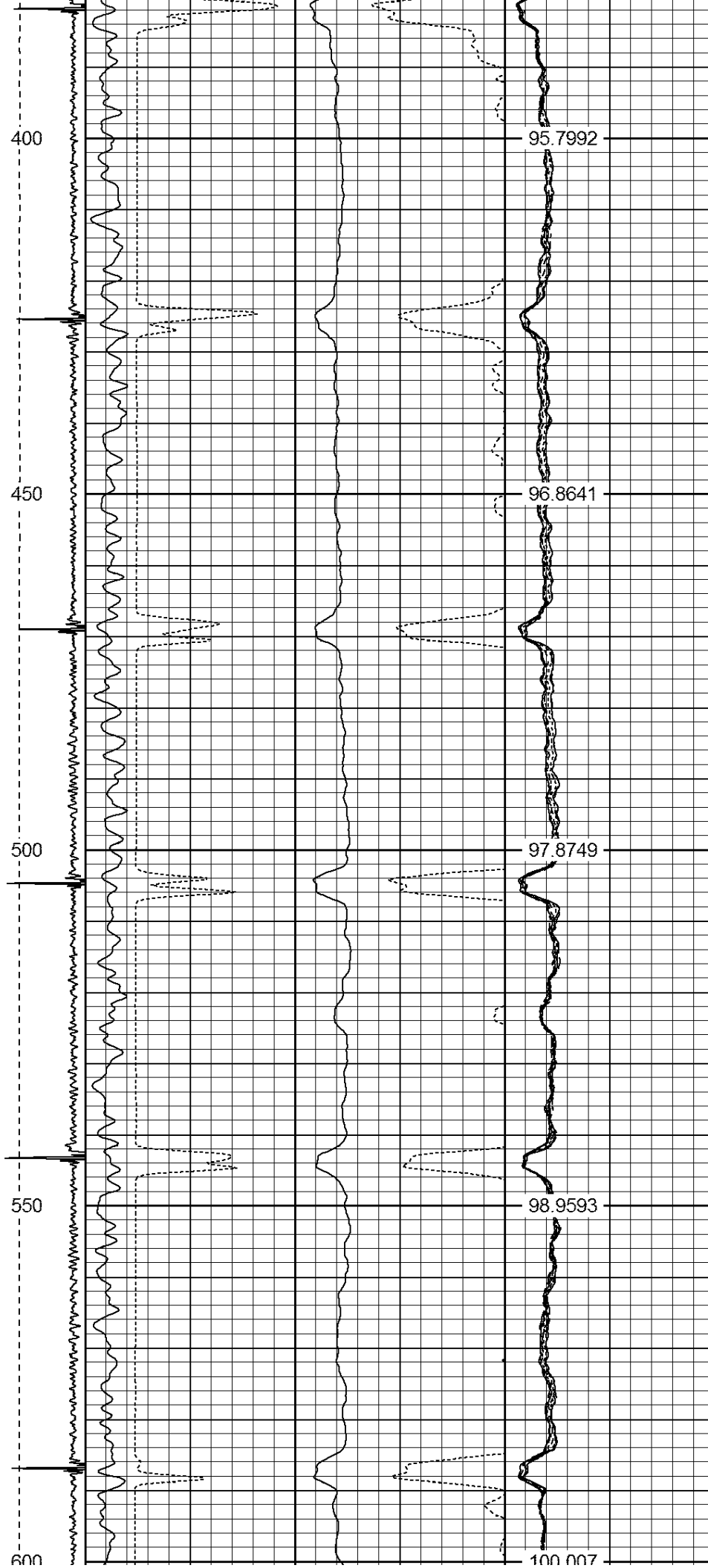
| Sensor | Offset (ft) | Schematic | Description | Len (ft) | OD (in) | Wt (lb) |
|--------|-------------|-----------|-------------|----------|---------|---------|
| | | | | | | |

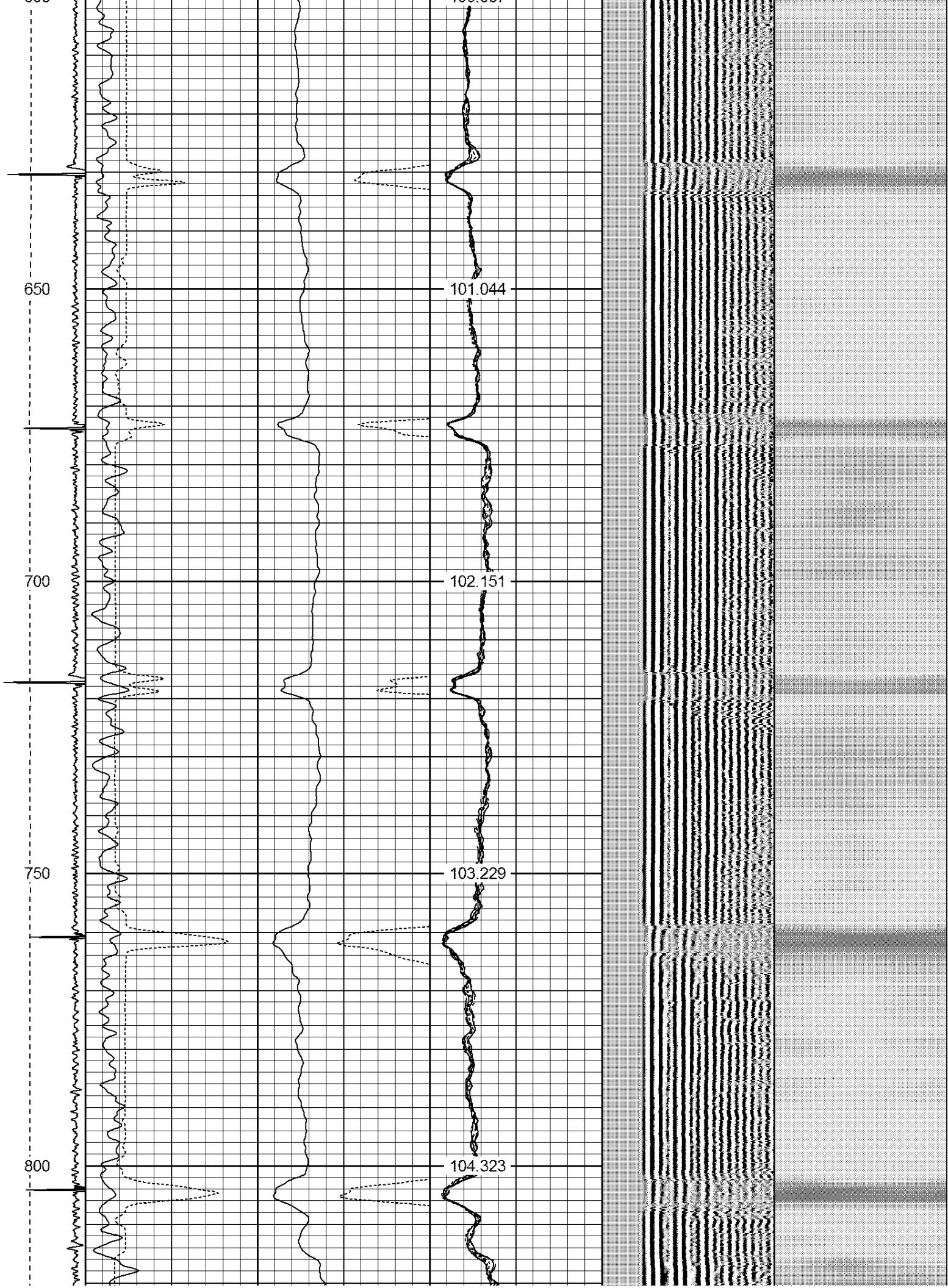
| | | | | | | |
|--|-------|--|--|------|------|-------|
| | | | PTS275 | 2.83 | 2.75 | |
| HEADVOLT | 16.13 | | | | | |
| IntTemp | 14.71 | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| WVF3FT | 11.46 | | RBT-Probe (Base) | 8.92 | 2.75 | 90.00 |
| WVFCAL | 11.46 | | Probe Radii Bond Tool with Digital Telemetry | | | |
| WVFS1 | 11.46 | | | | | |
| WVFS2 | 11.46 | | | | | |
| WVFS3 | 11.46 | | | | | |
| WVFS4 | 11.46 | | | | | |
| WVFS5 | 11.46 | | | | | |
| WVFS6 | 11.46 | | | | | |
| WVFS7 | 11.46 | | | | | |
| WVFS8 | 11.46 | | | | | |
| WVF5FT | 10.46 | | | | | |
| | | | | | | |
| CNLSC | 6.00 | | | | | |
| | | | | | | |
| CNSSC | 5.17 | | CNT-Probe_B (275) | 2.88 | 2.75 | 40.00 |
| | | | 6 bow centralizer | | | |
| | | | | | | |
| CCL | 3.64 | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| GR | 0.90 | | GR-Probe (275) | 4.33 | 2.75 | 30.00 |
| | | | Probe 2.75" | | | |
| Dataset: 70 ranch 04-63-03-4956ch.db: field/well/run1/pass4 Total Length: 18.96 ft Total Weight: 160.00 lb O.D. 2.75 in | | | | | | |

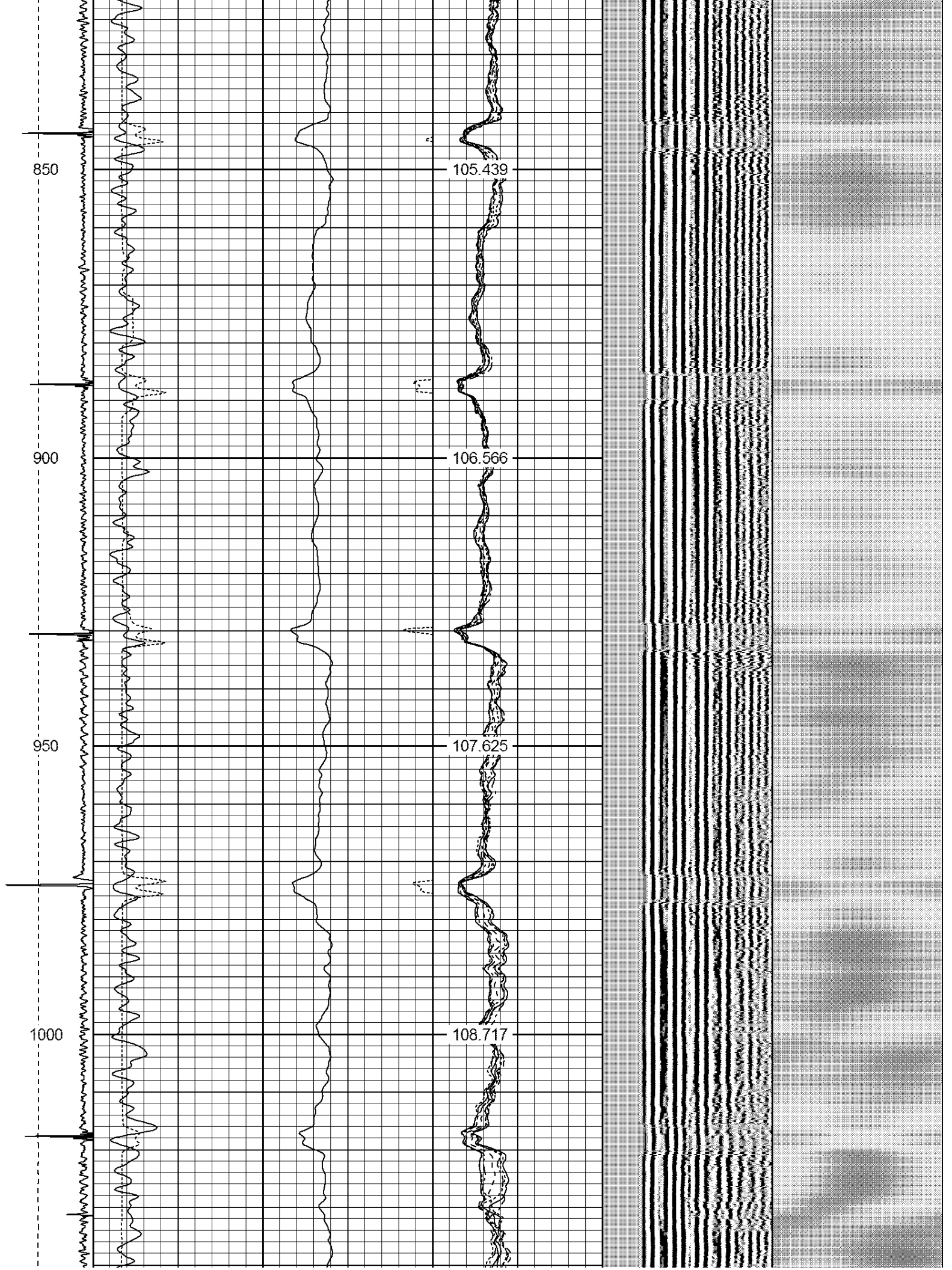
| | | | | | | | | | | | | | | | | | |
|------------------|-----|---|-----|-----------|-----|---|------------|-----|-------------------|-------|-----|---|-----|------|---|---|---|
| -9 | CCL | 1 | 200 | TT (usec) | 900 | 0 | AMP (mV) | 100 | 0 | AMPS1 | 100 | 200 | VDL | 1200 | 1 | Cement Map | 8 |
| LSPD (ft/min) | | | 0 | GR (GAPI) | 200 | 0 | AMPx5 (mV) | 20 | 0 | AMPS2 | 100 |  | | | 1 |  | |
| | | | 200 | GR (GAPI) | 400 | 0 | AMPS4 | 100 | 100 | | | | | | | | |
| 0 | 250 | | | | | | | | 0 | AMPS5 | 100 | | | | | | |
| ----- | | | | | | | | | 0 | AMPS6 | 100 | | | | | | |
| | | | | | | | | | 0 | AMPS7 | 100 | | | | | | |
| | | | | | | | | | 0 | AMPS8 | 100 | | | | | | |
| | | | | | | | | | IntTemp (degF) | | | | | | | | |

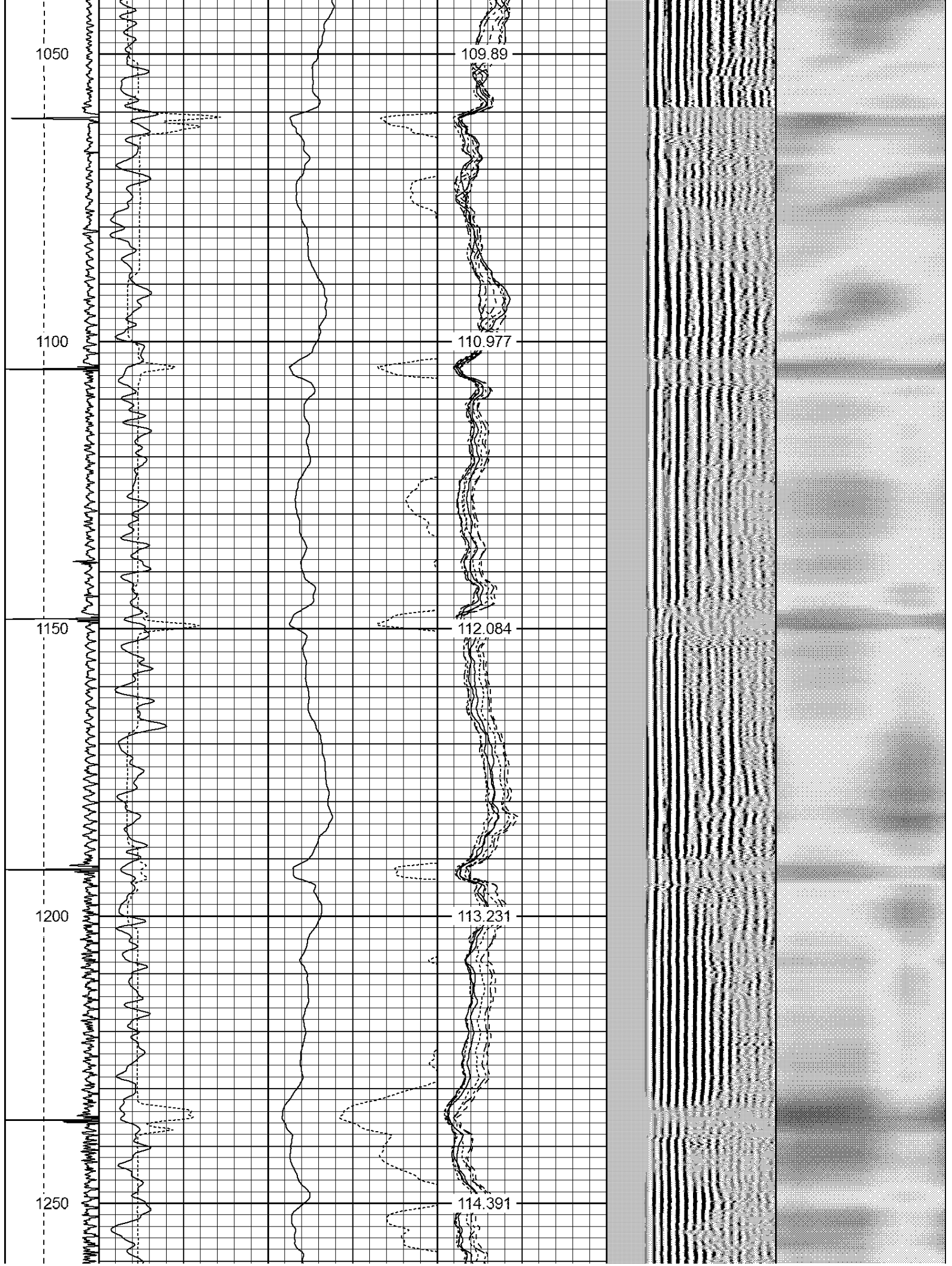


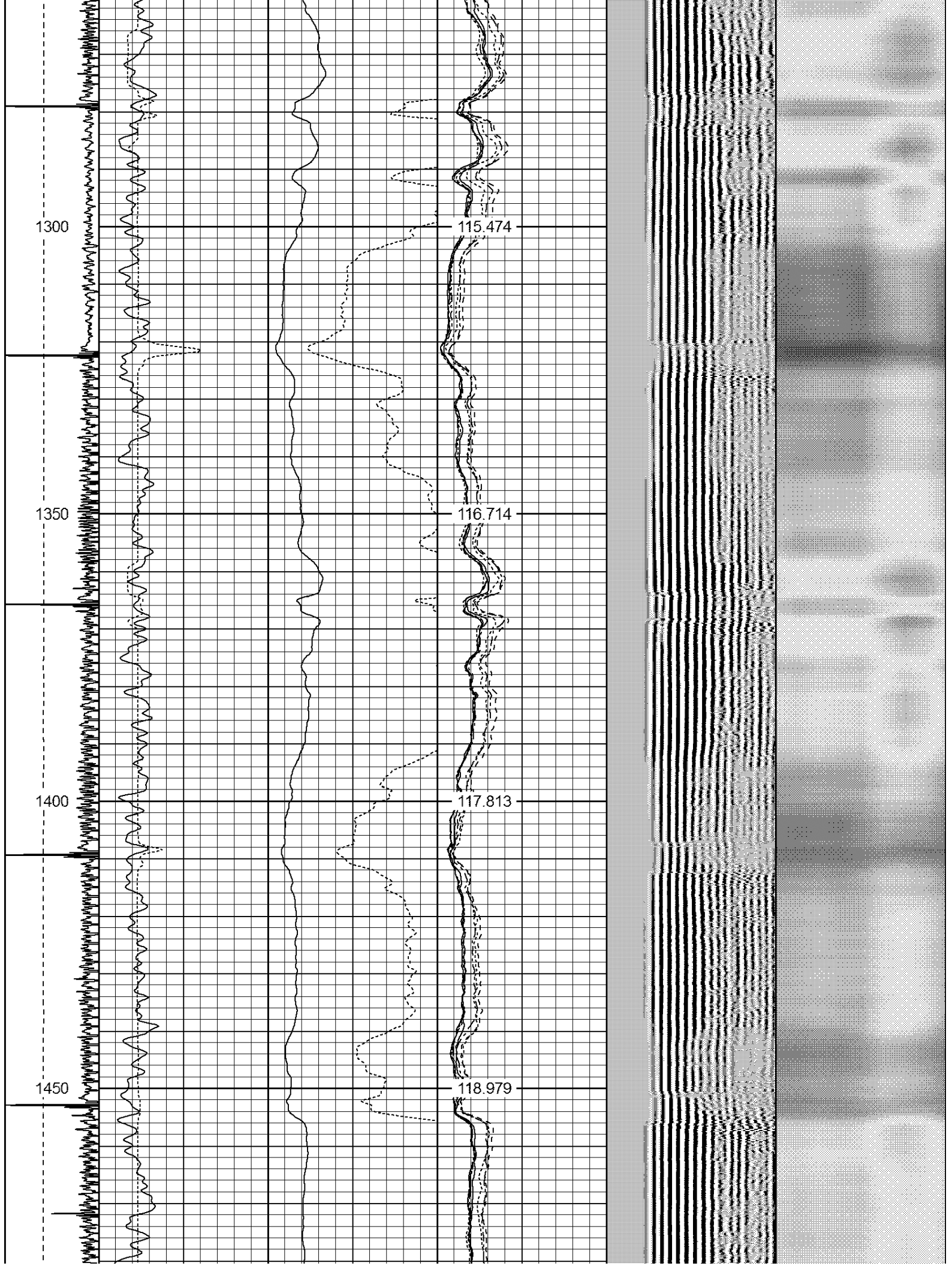


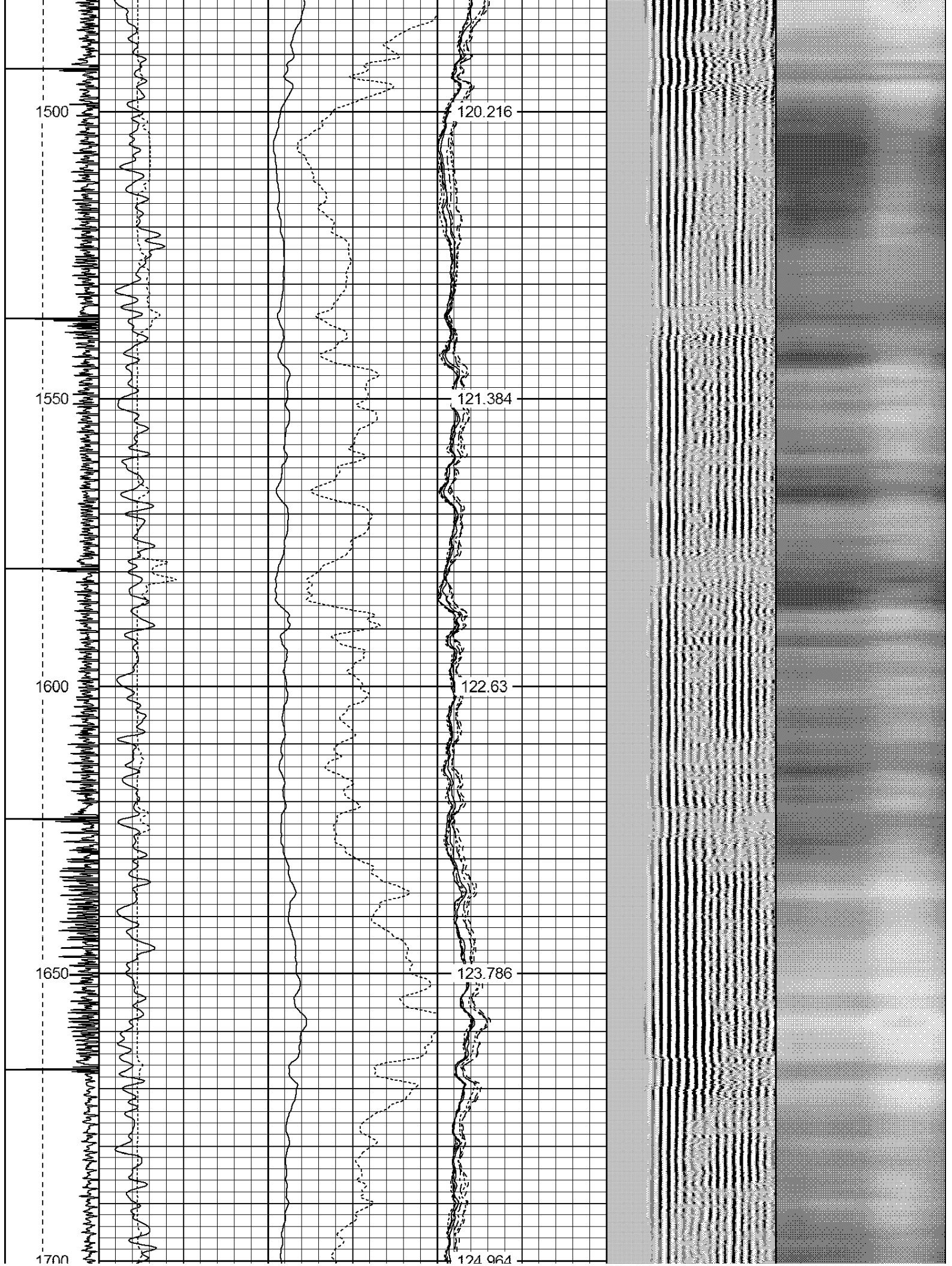


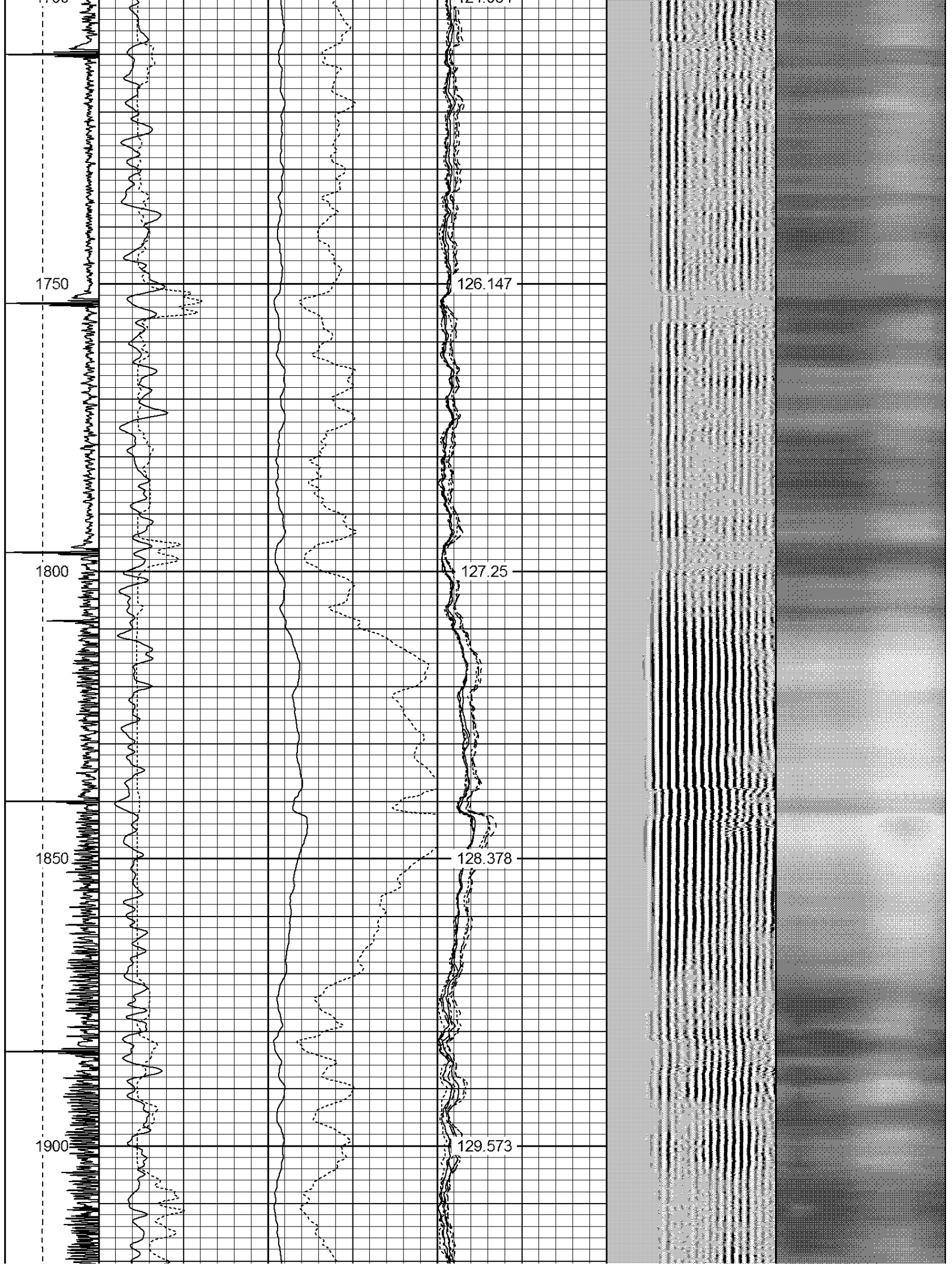


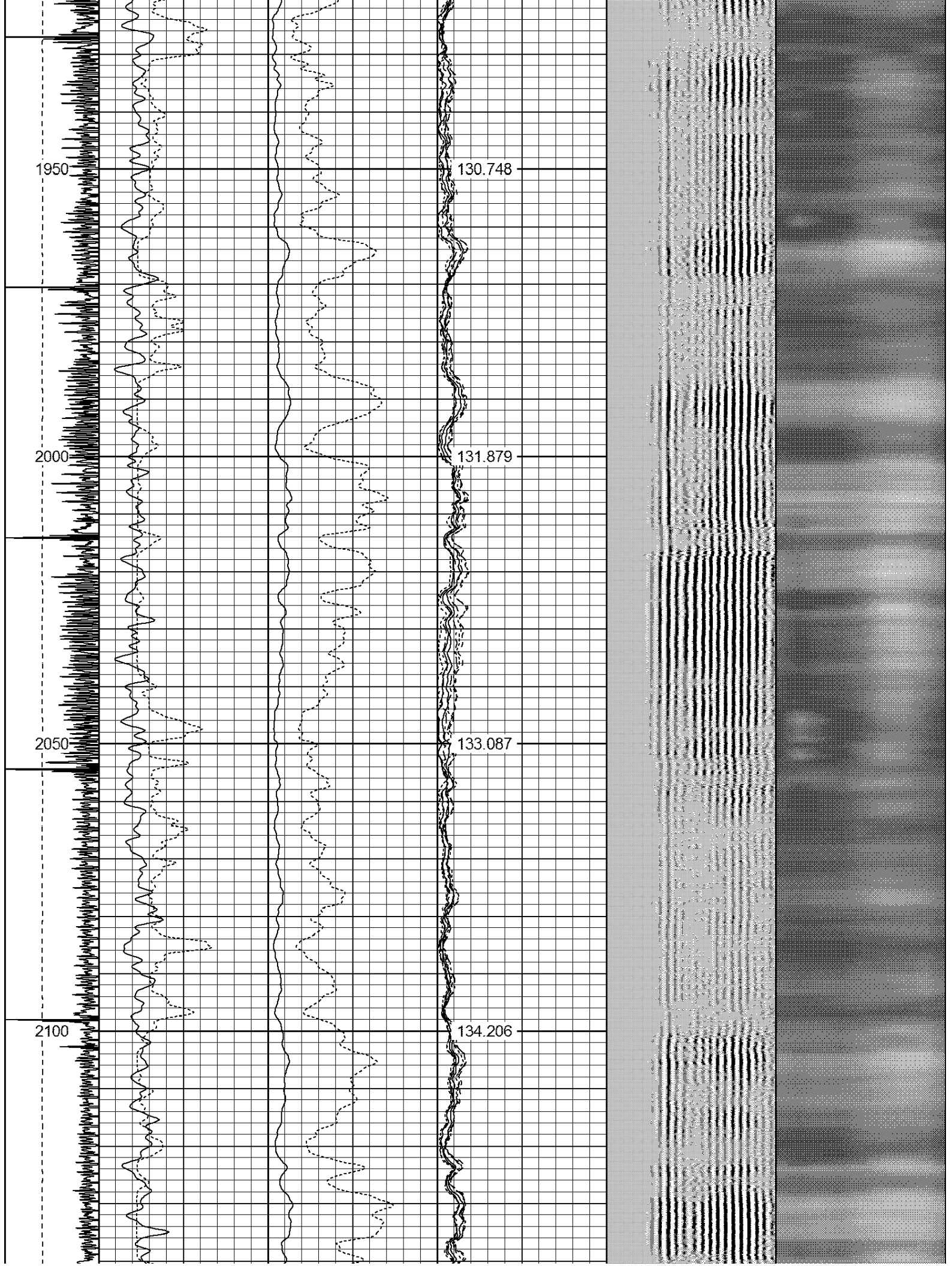




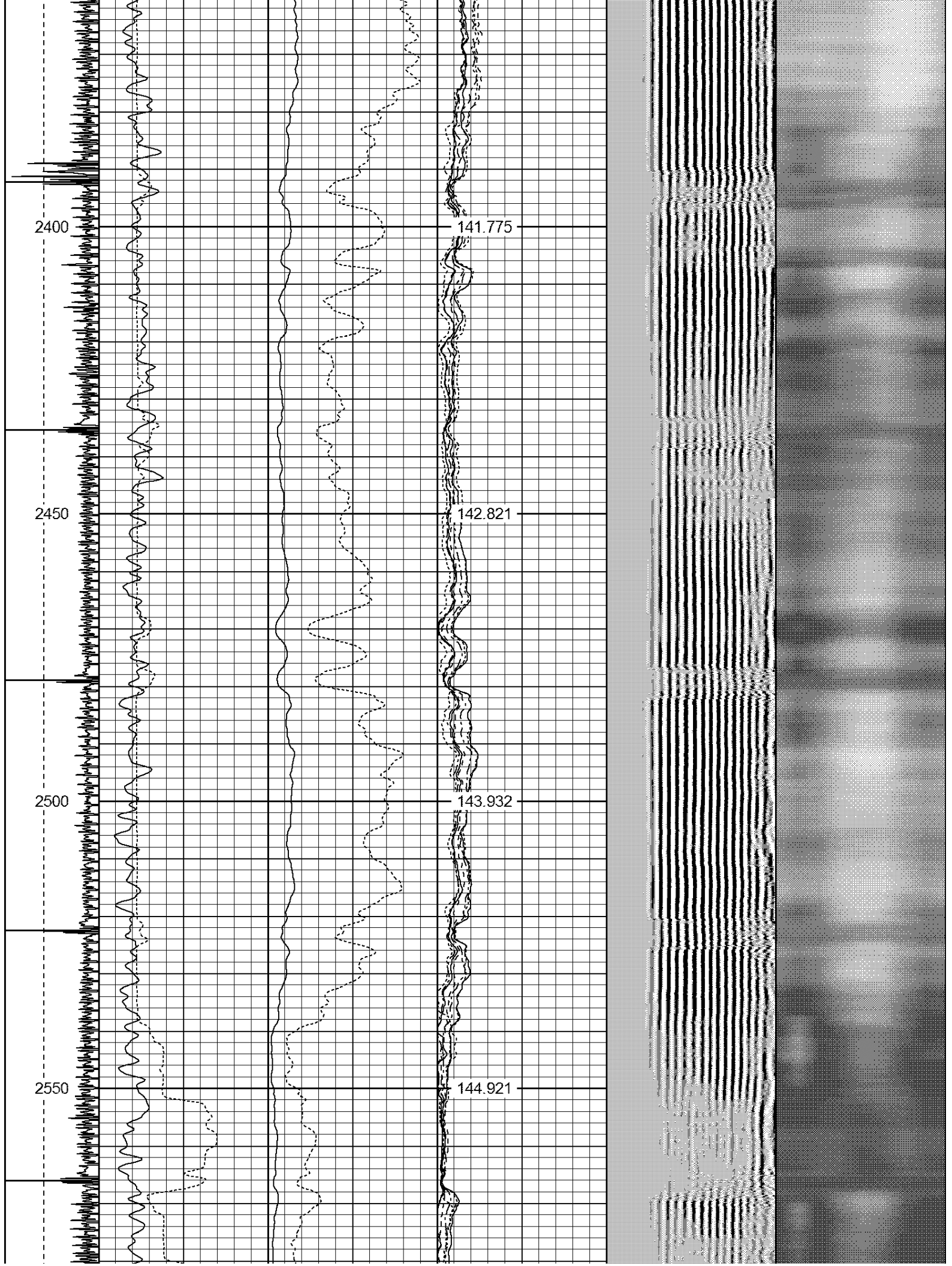


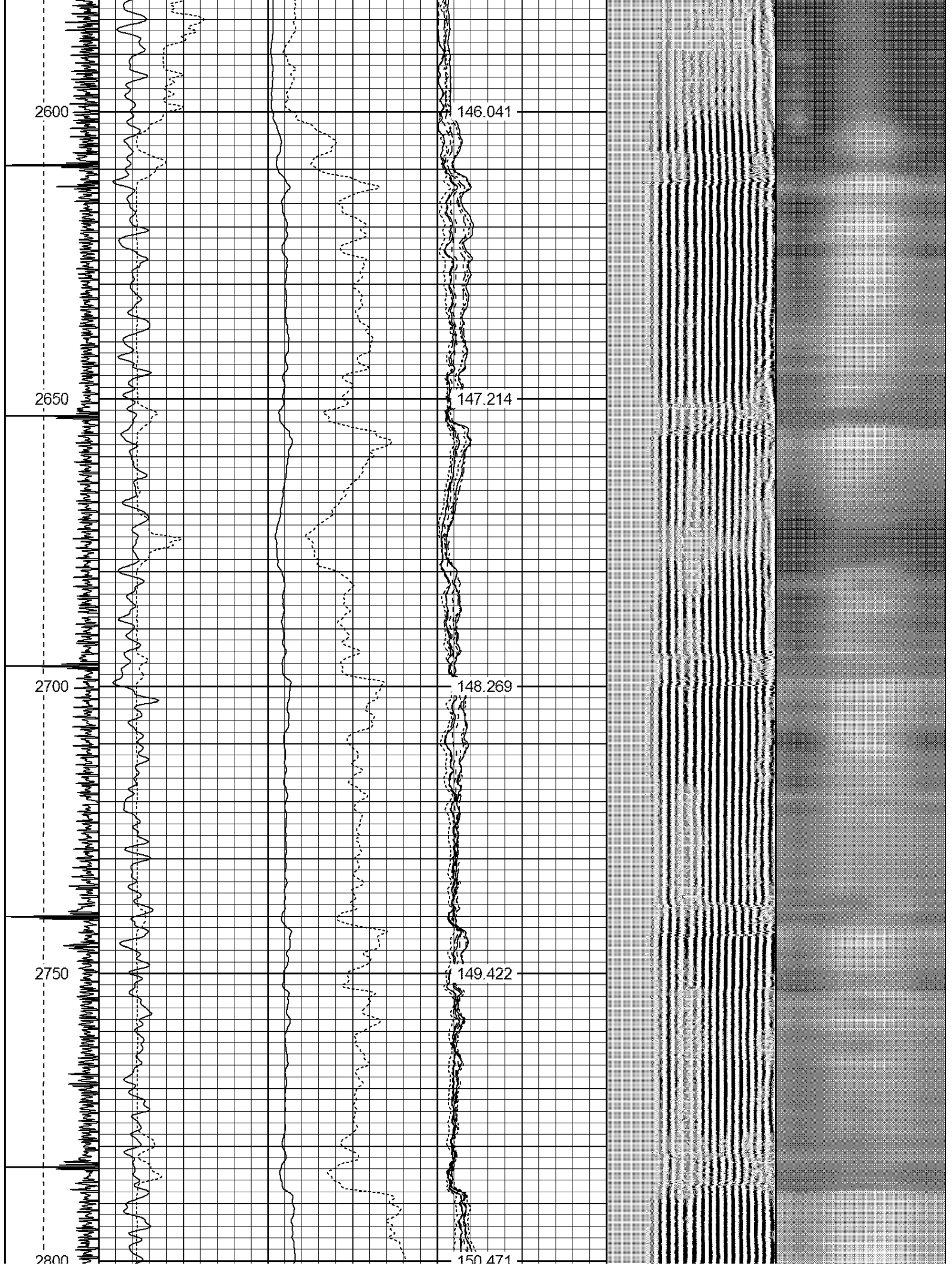




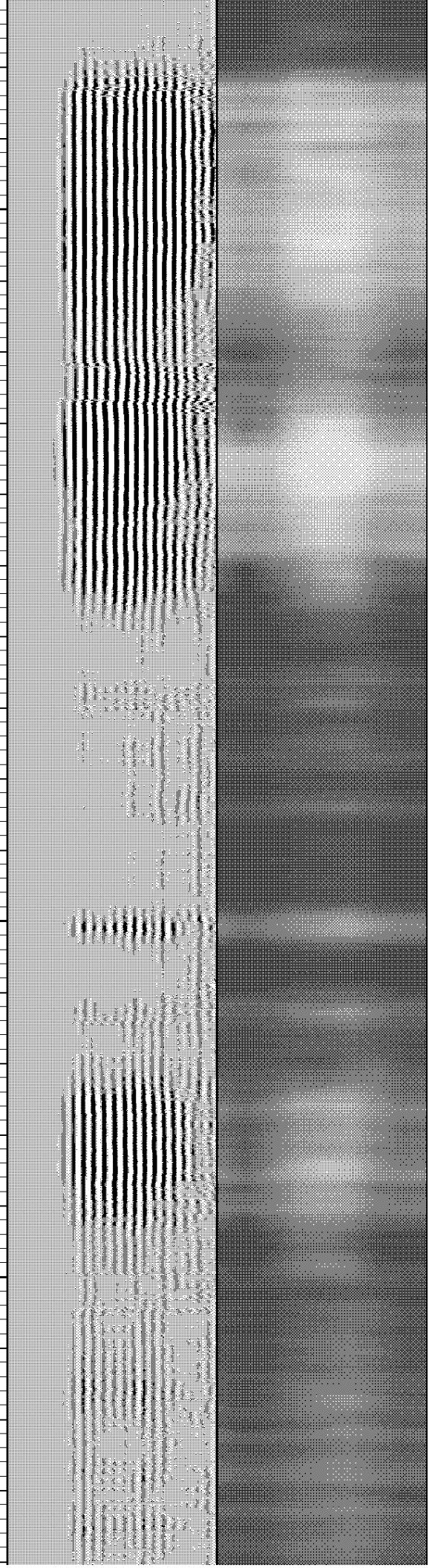
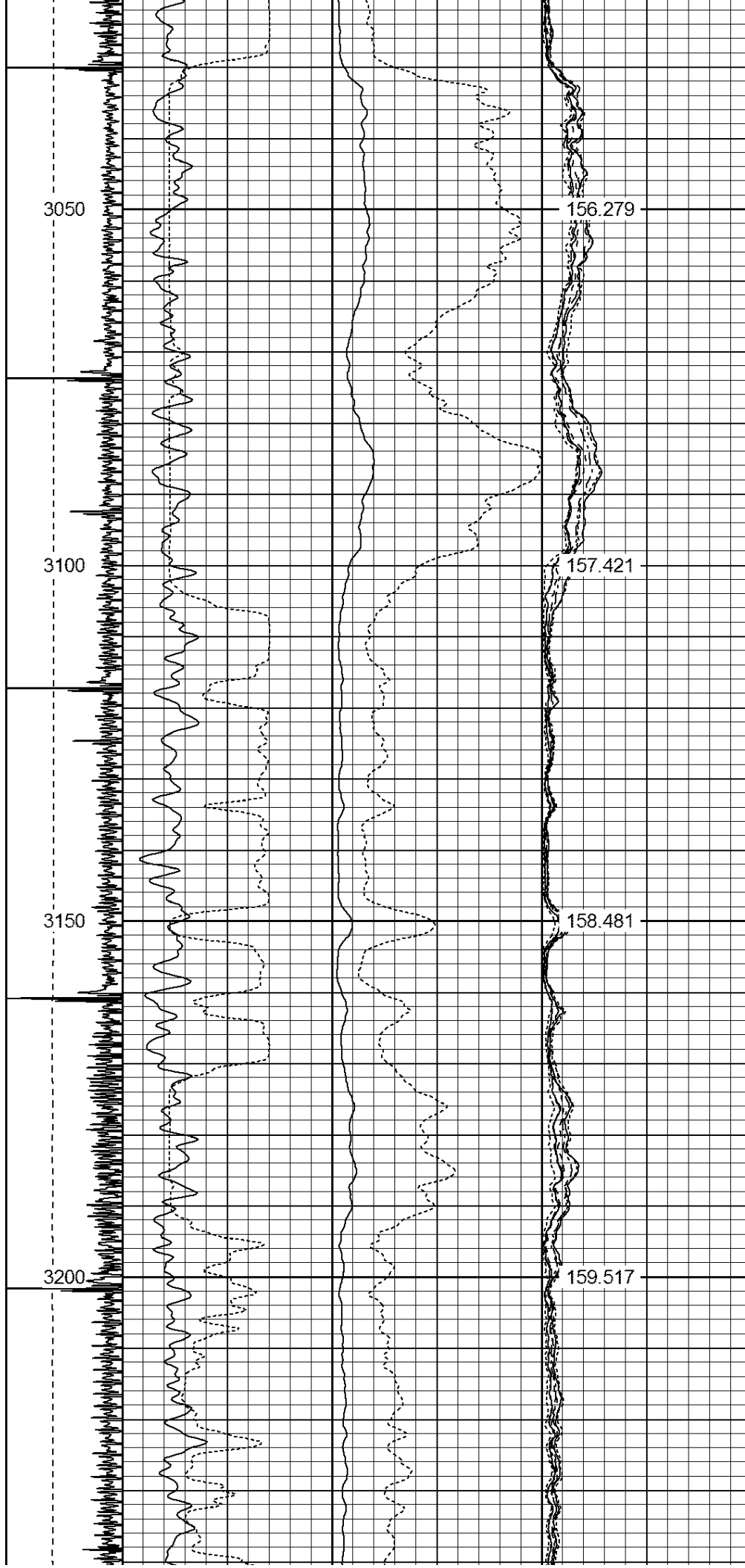


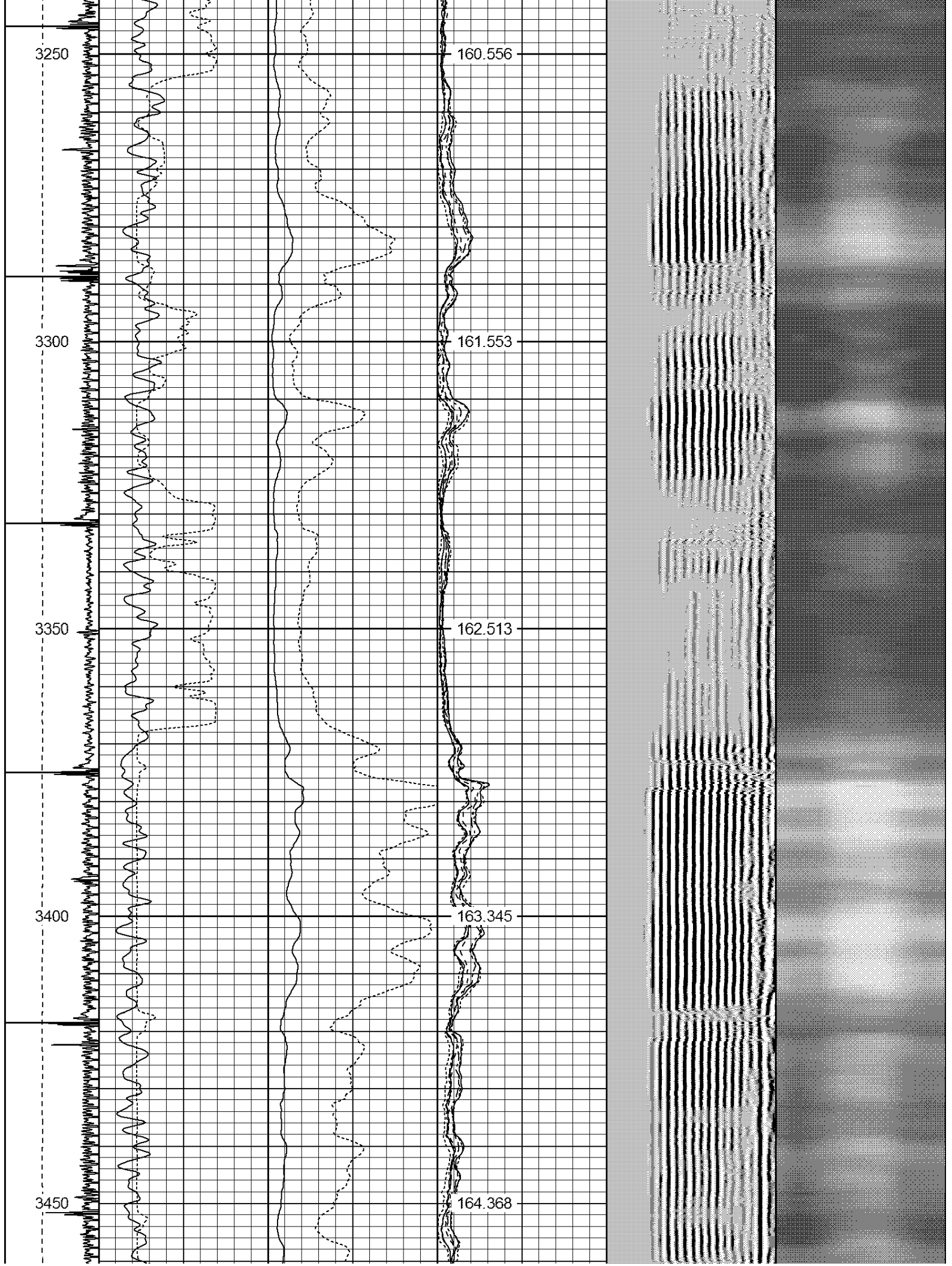


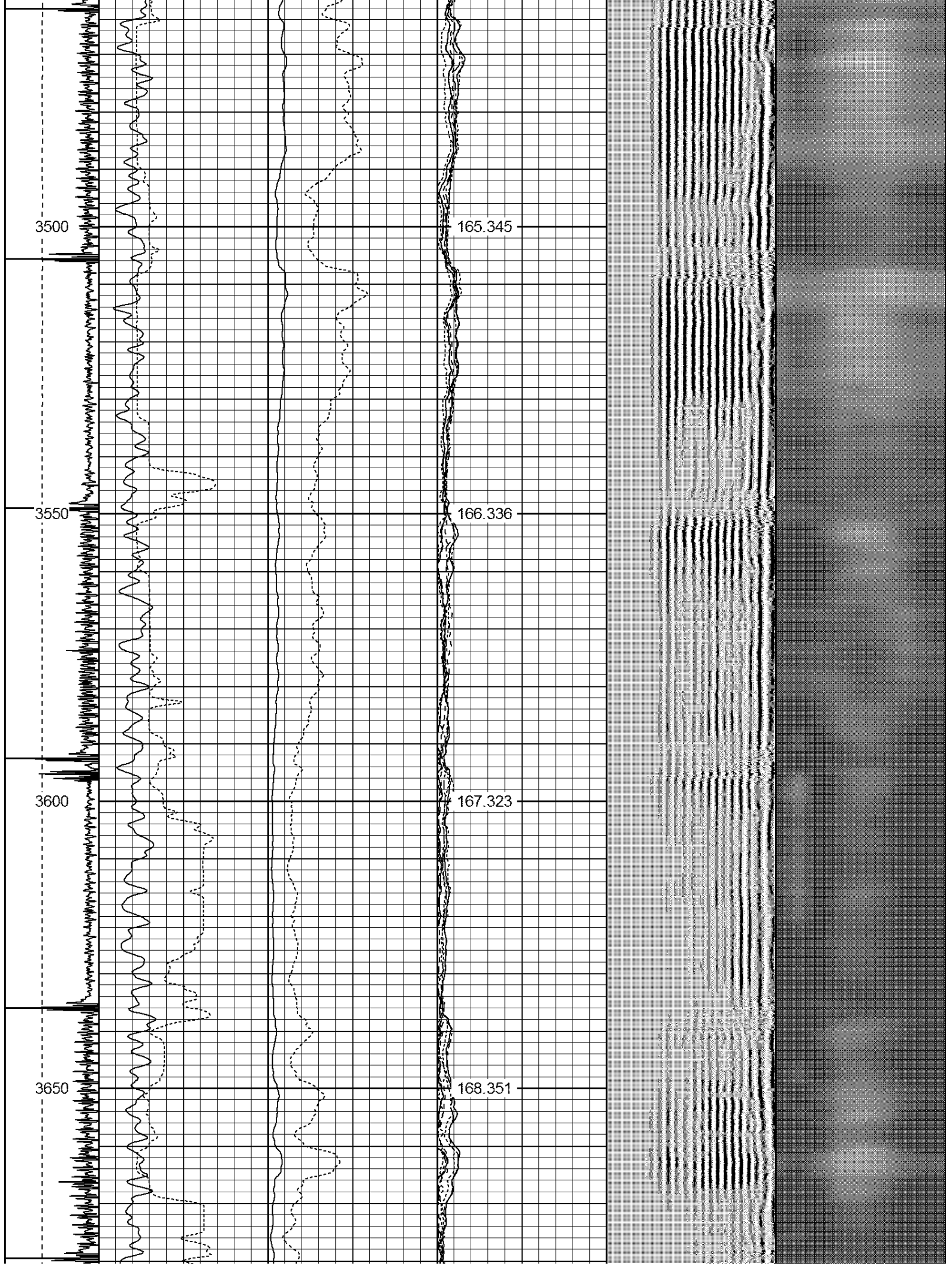


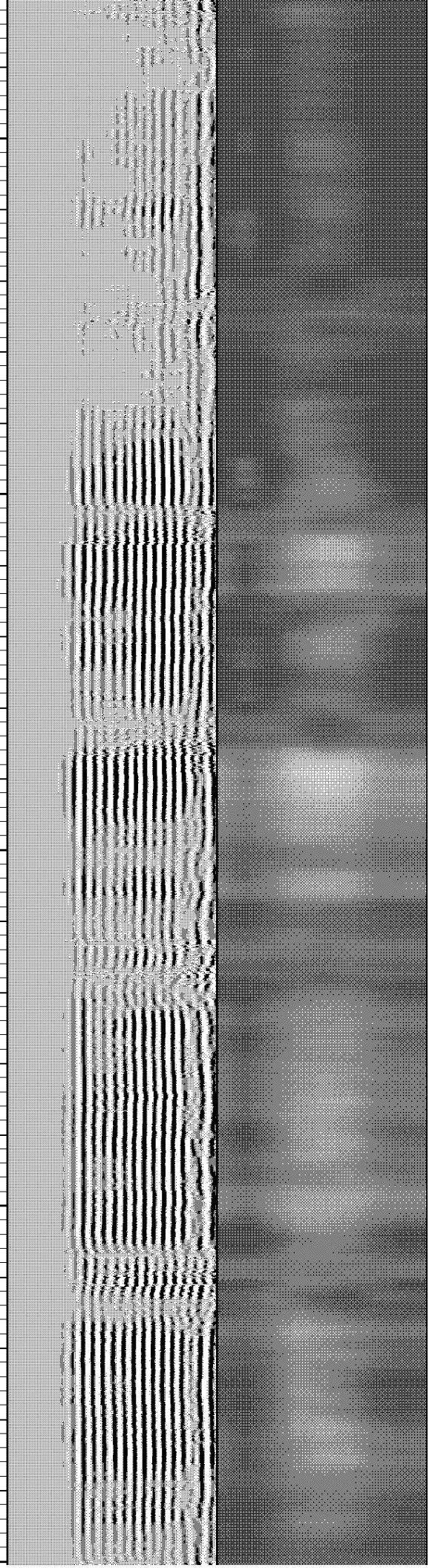
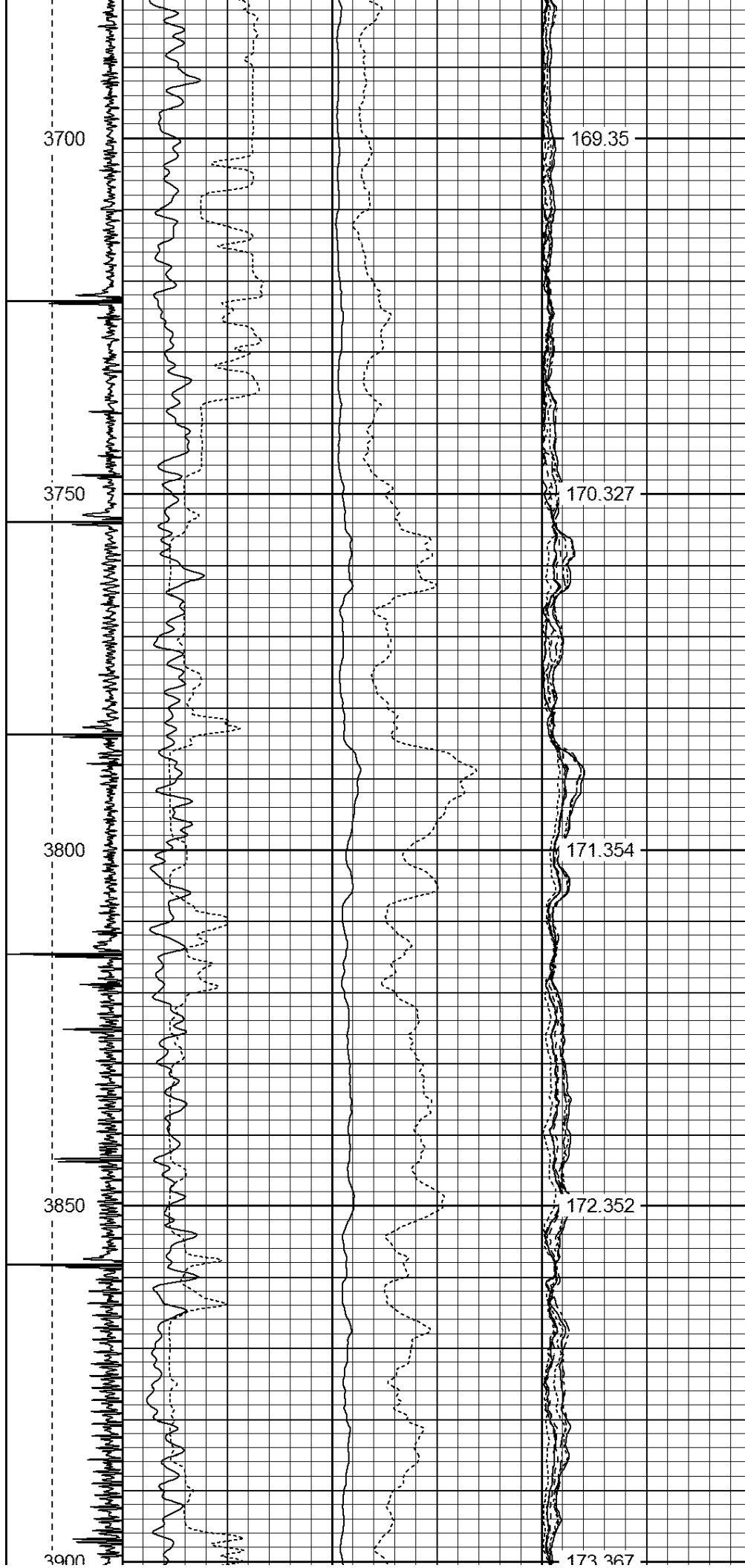


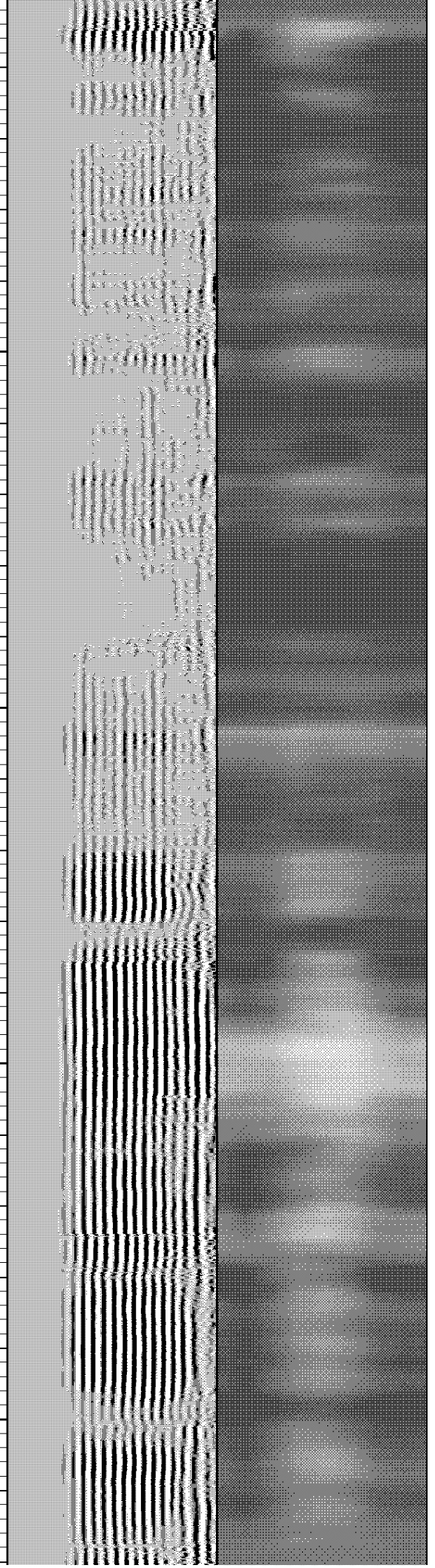
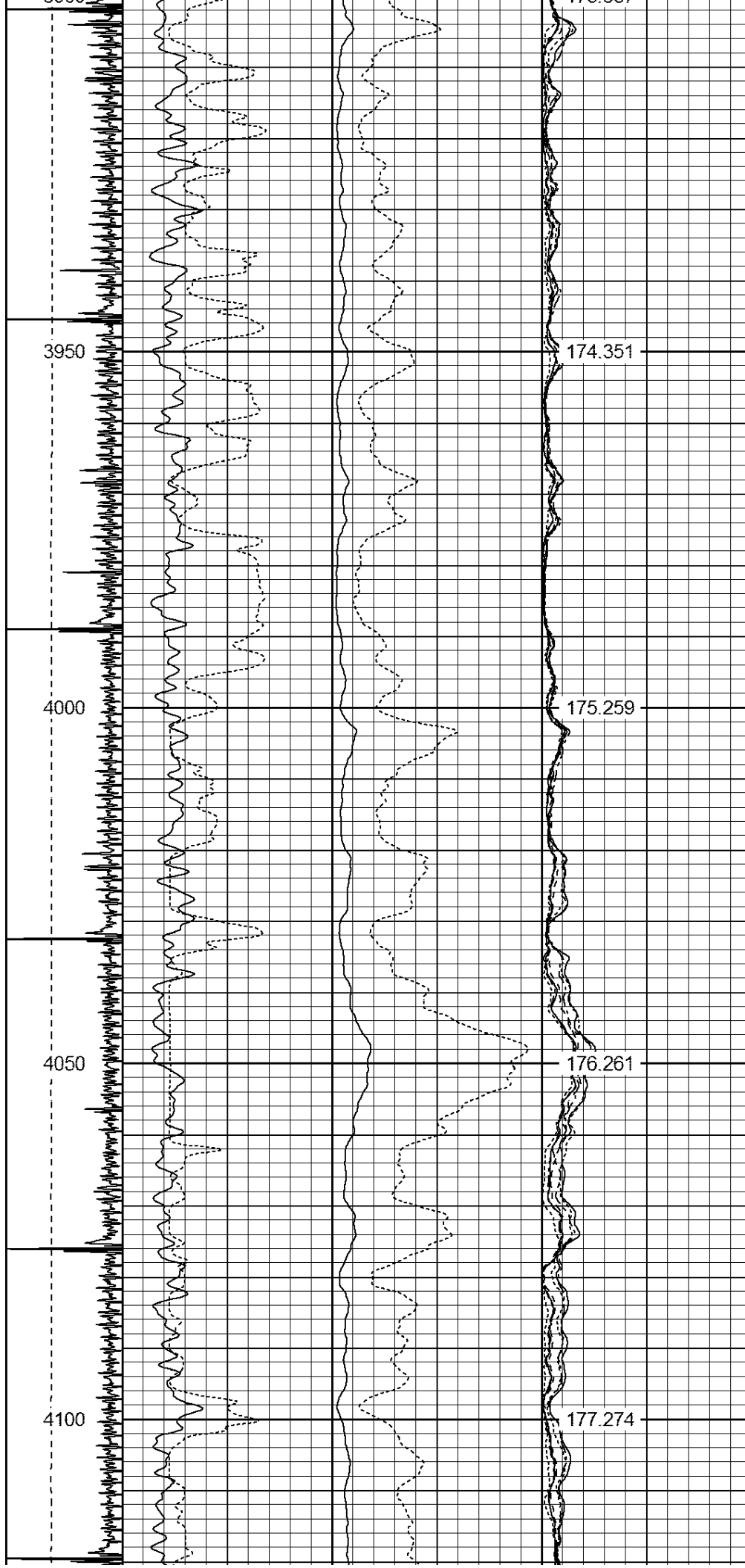


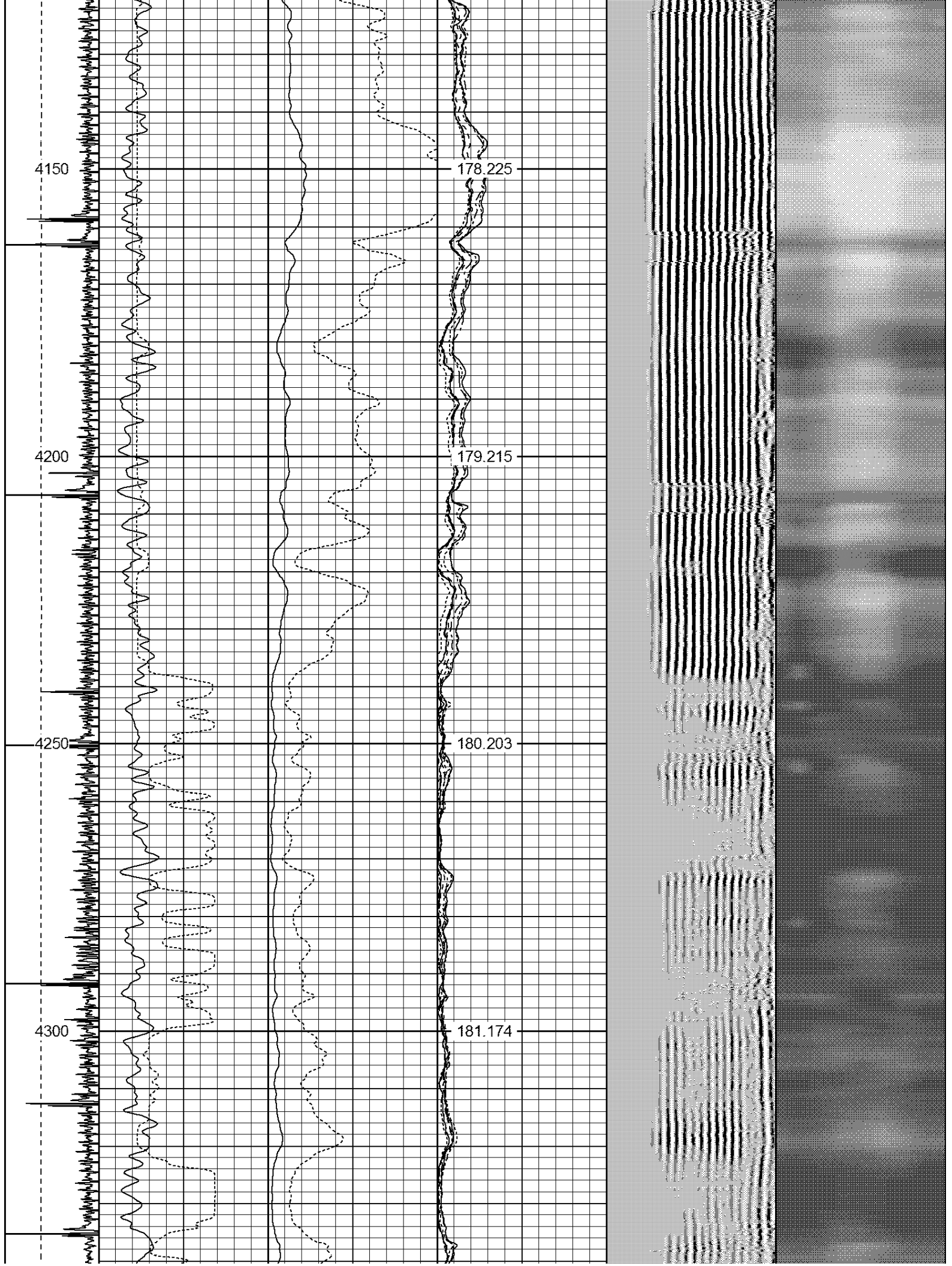


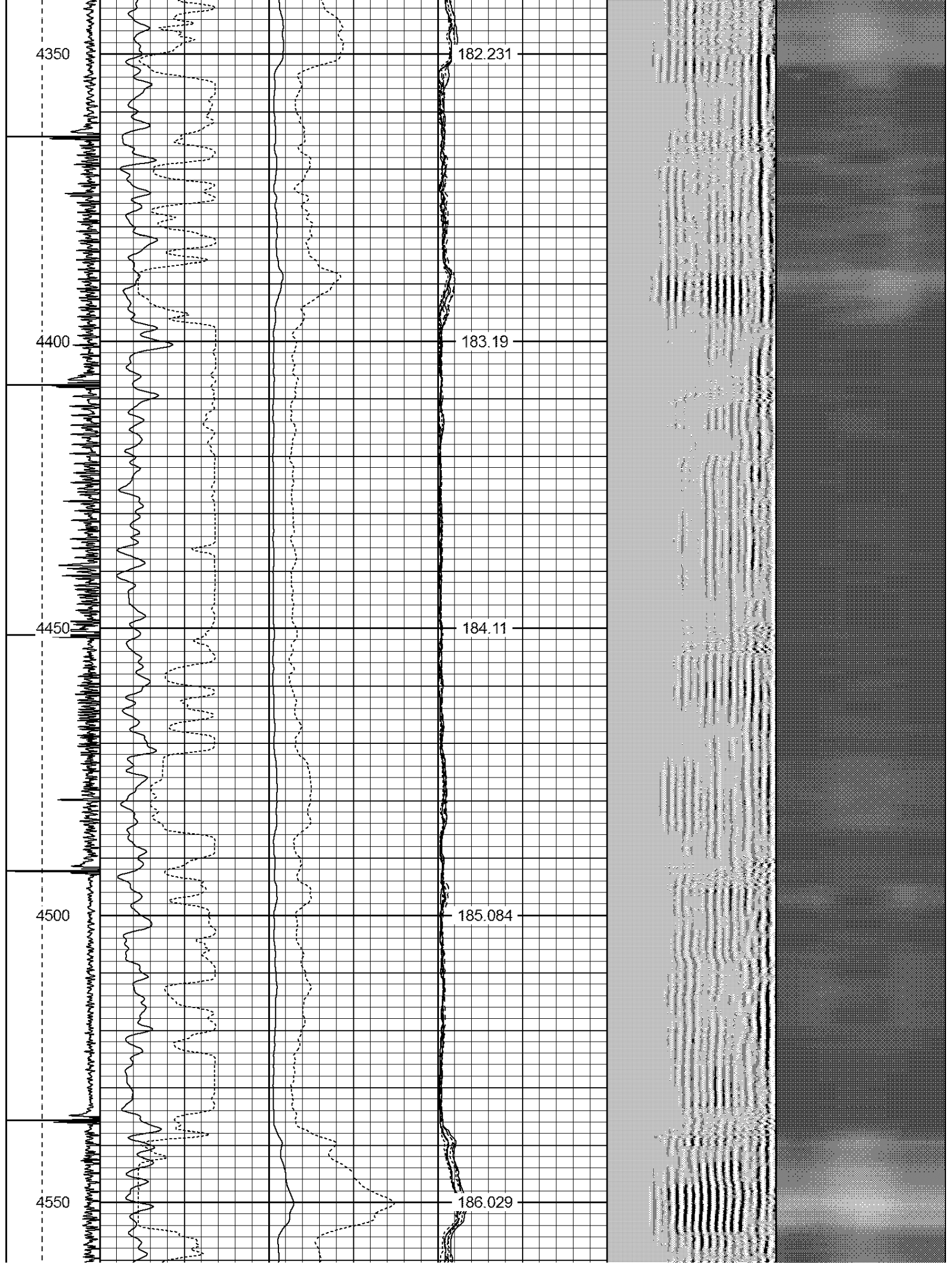


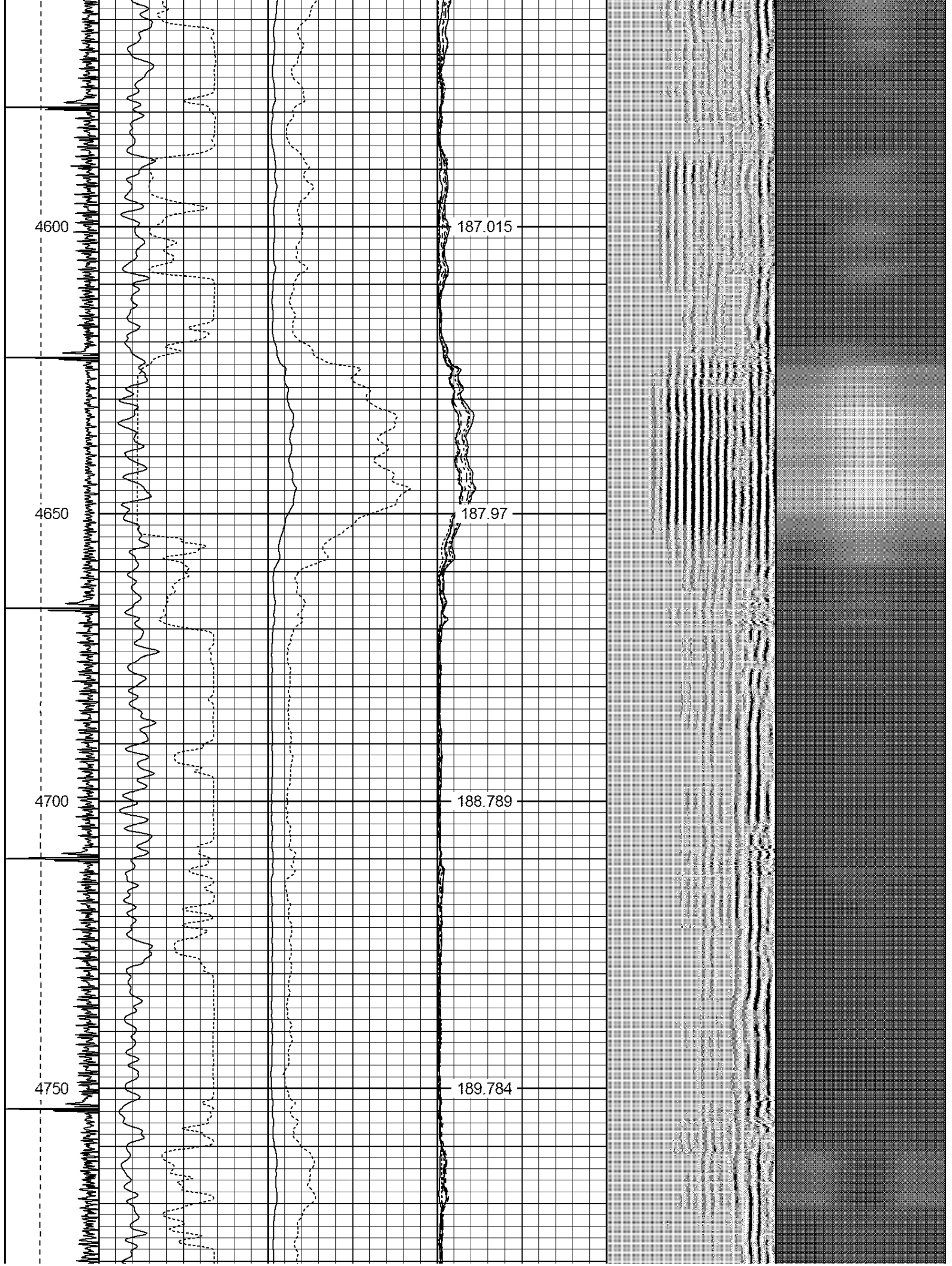


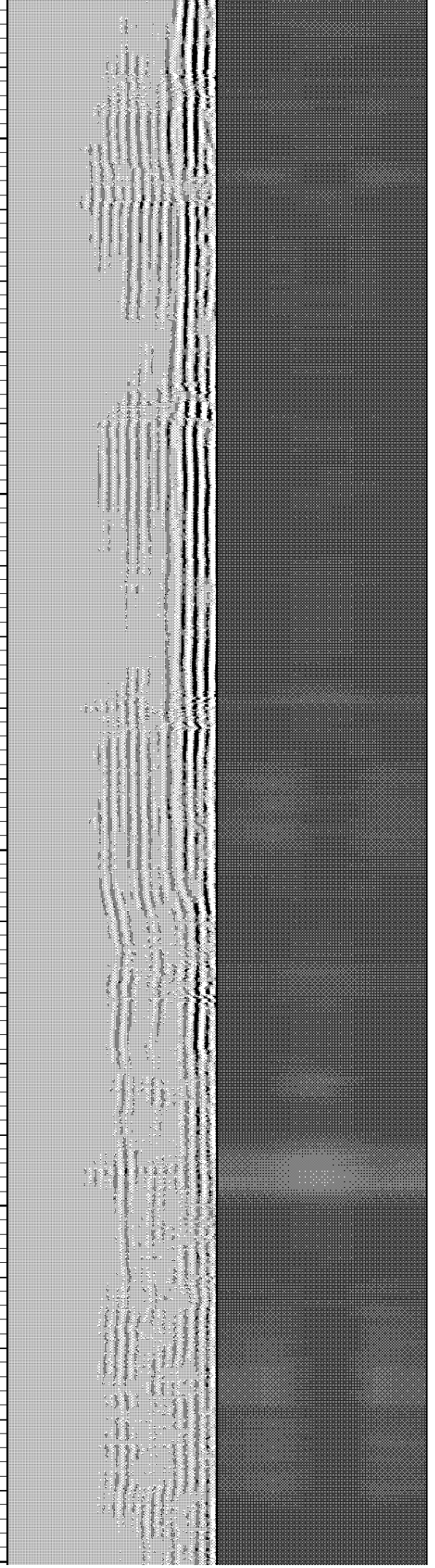
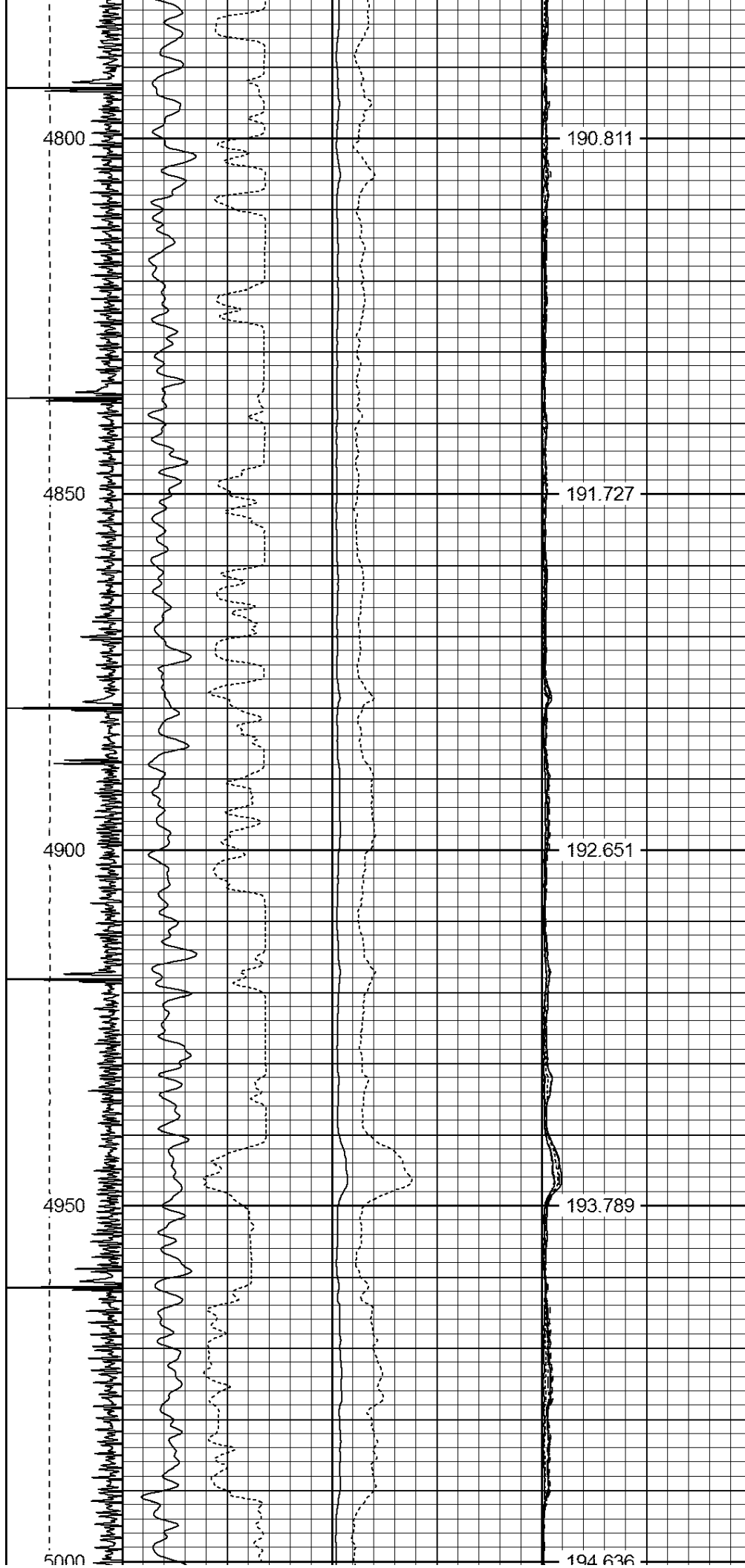


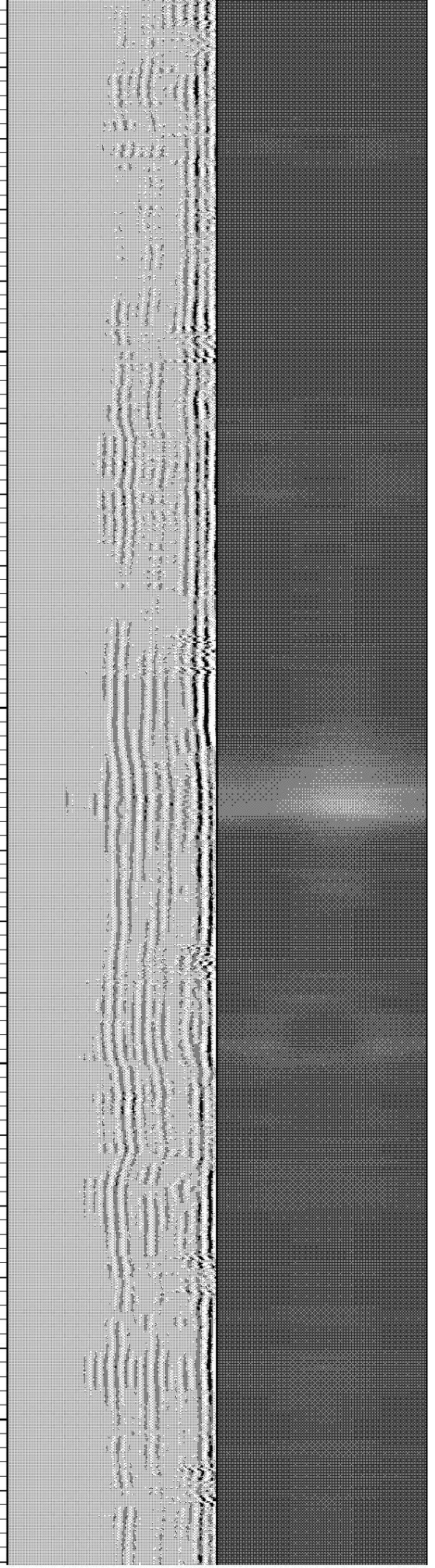
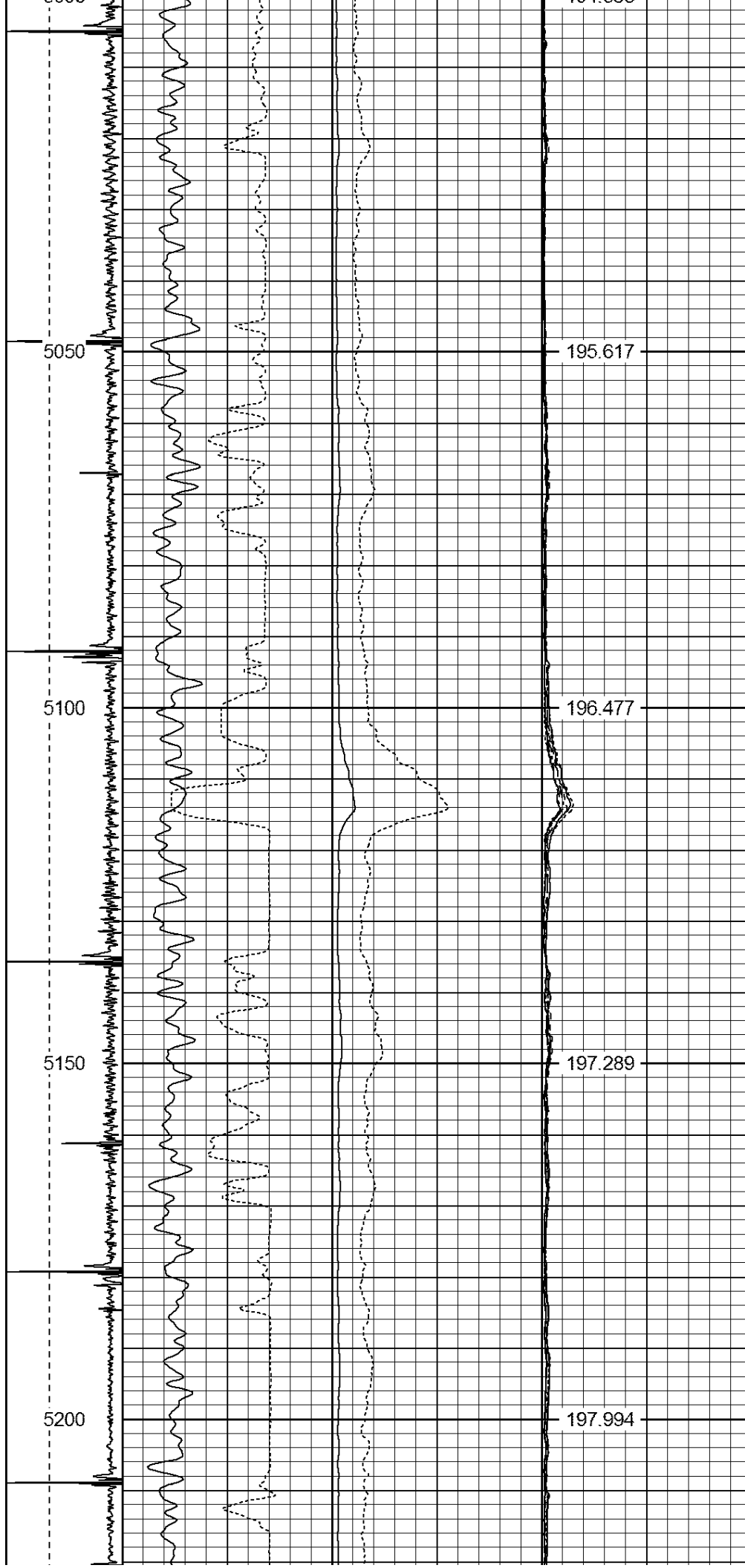


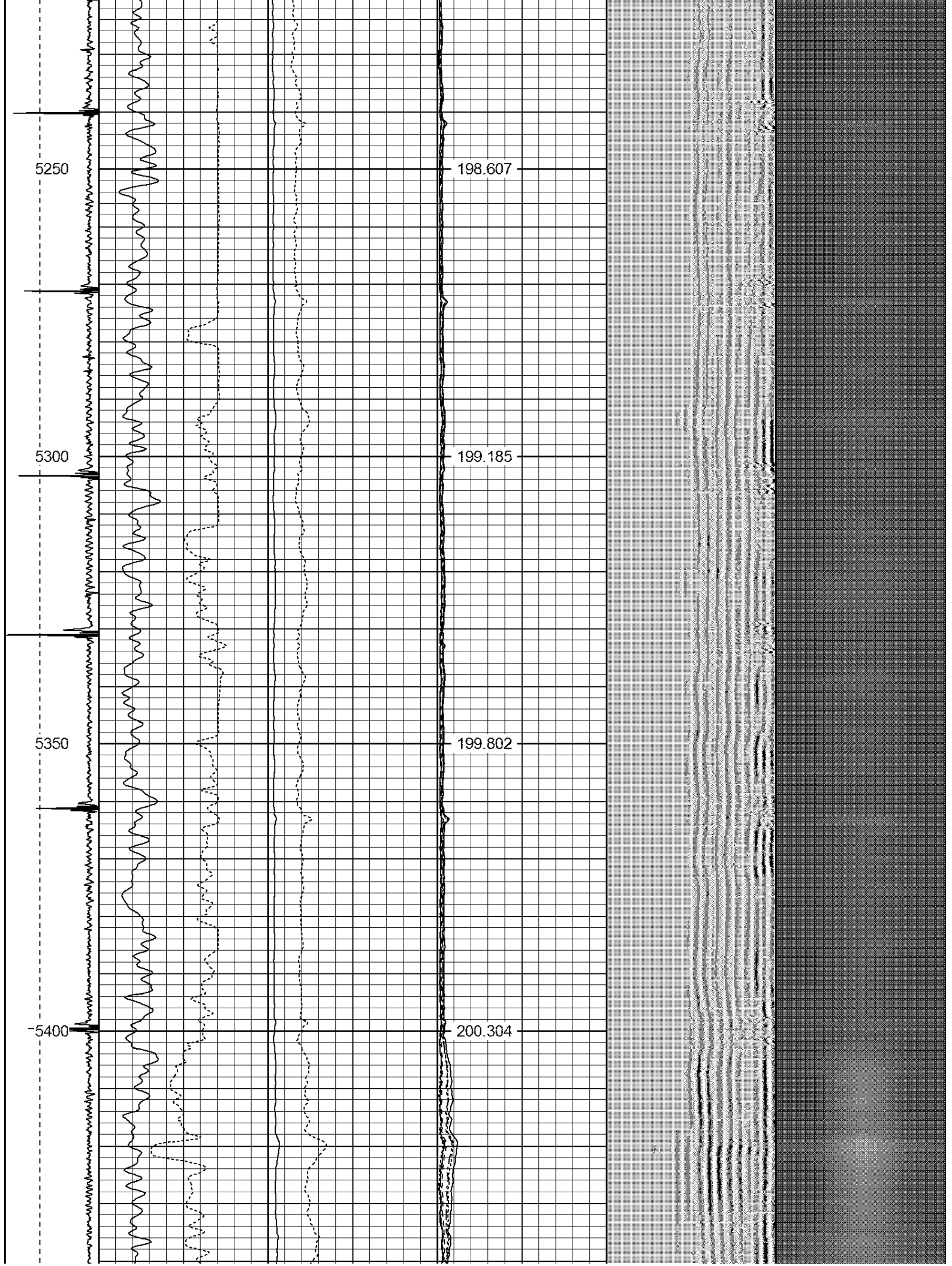


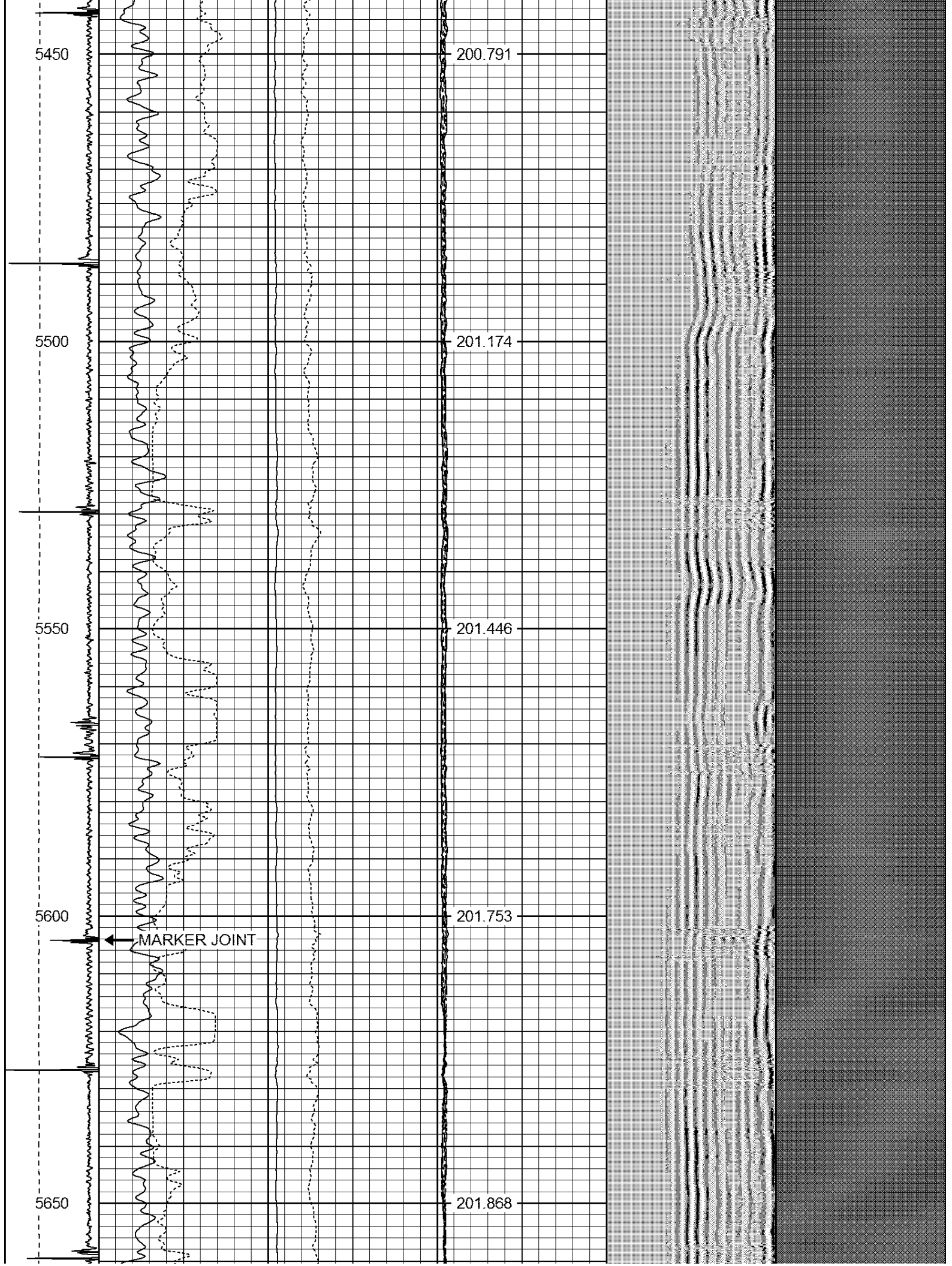


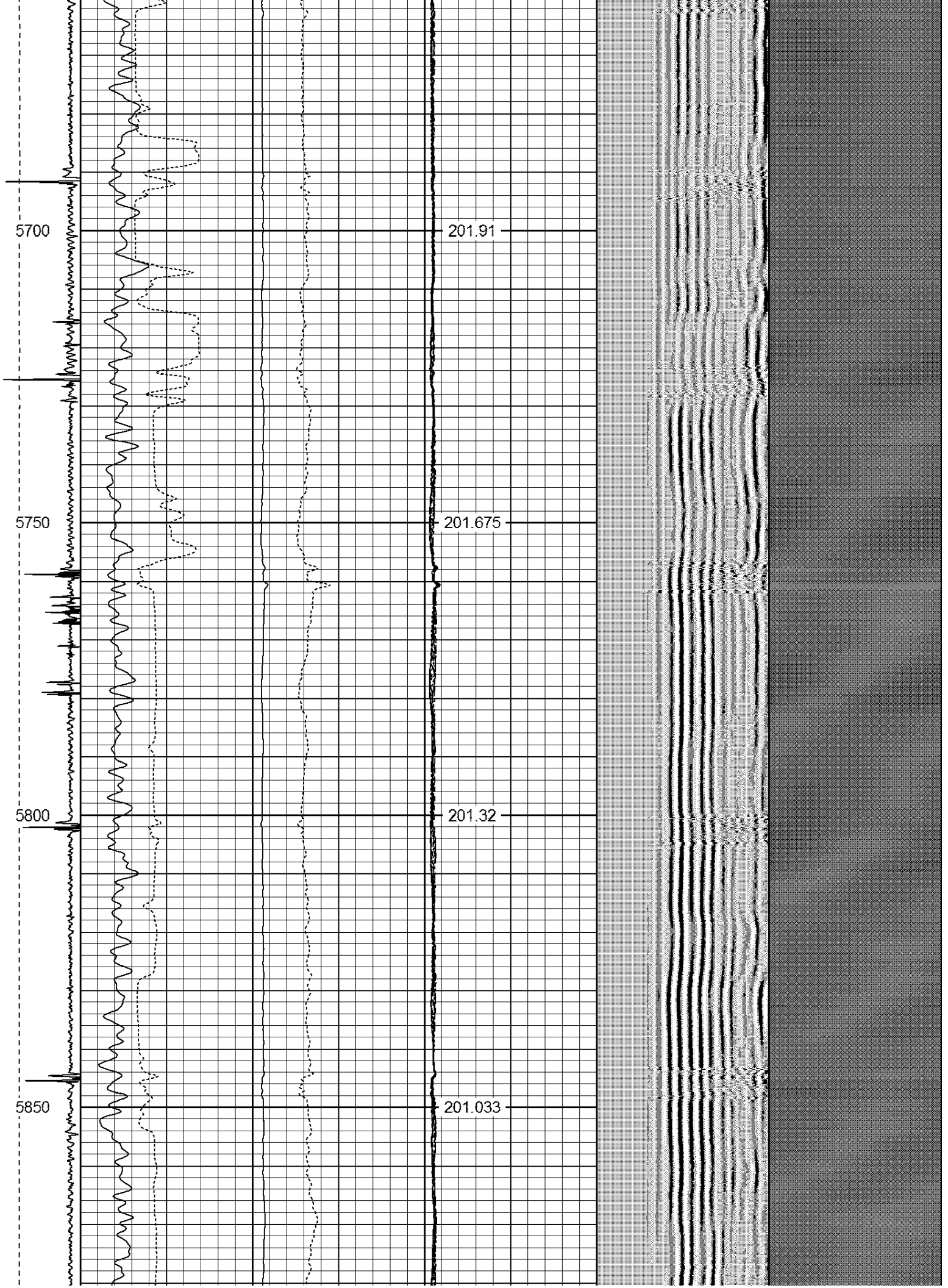


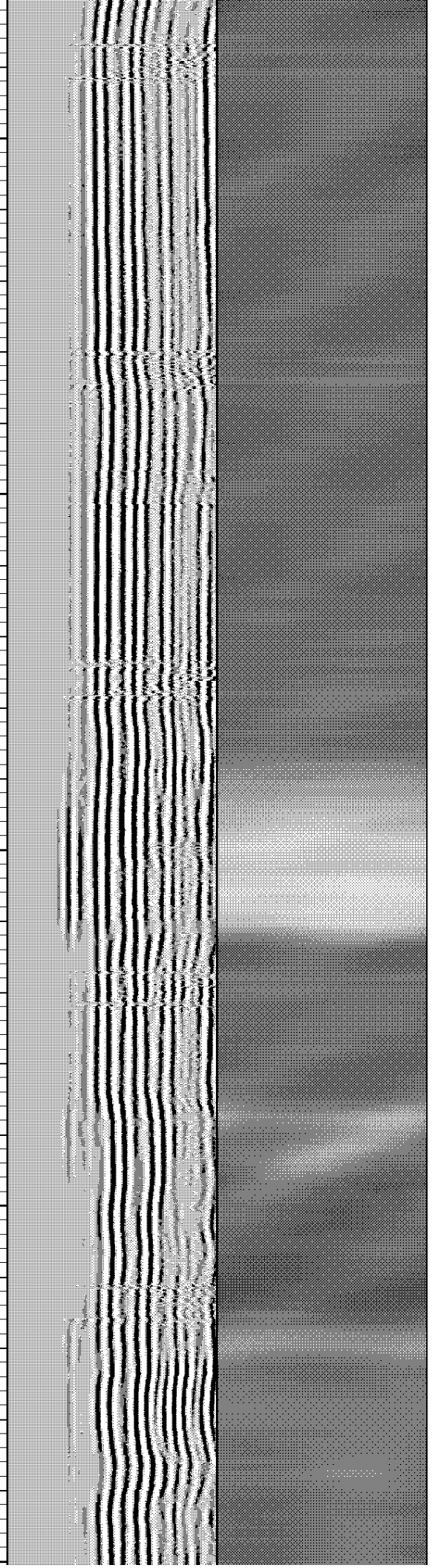
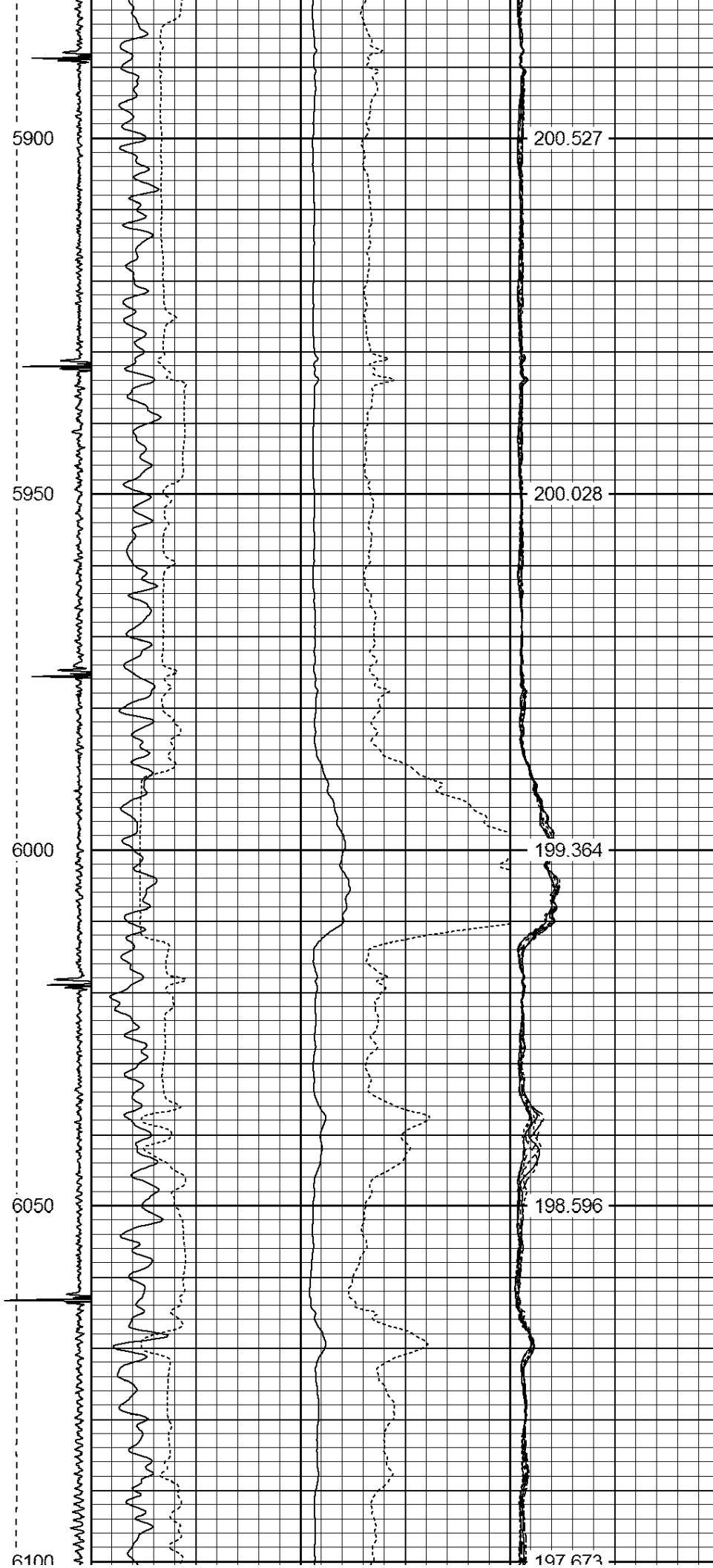


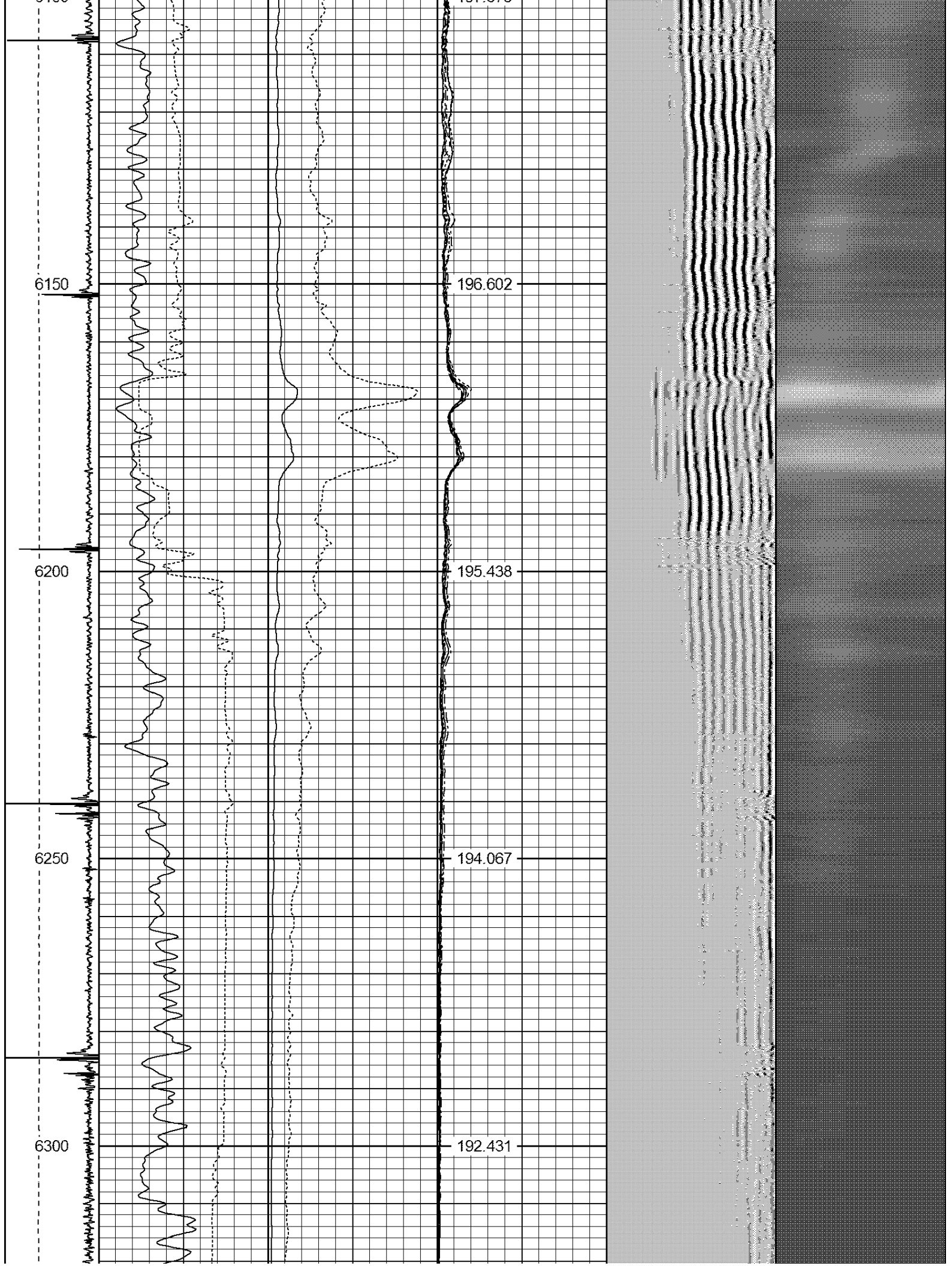


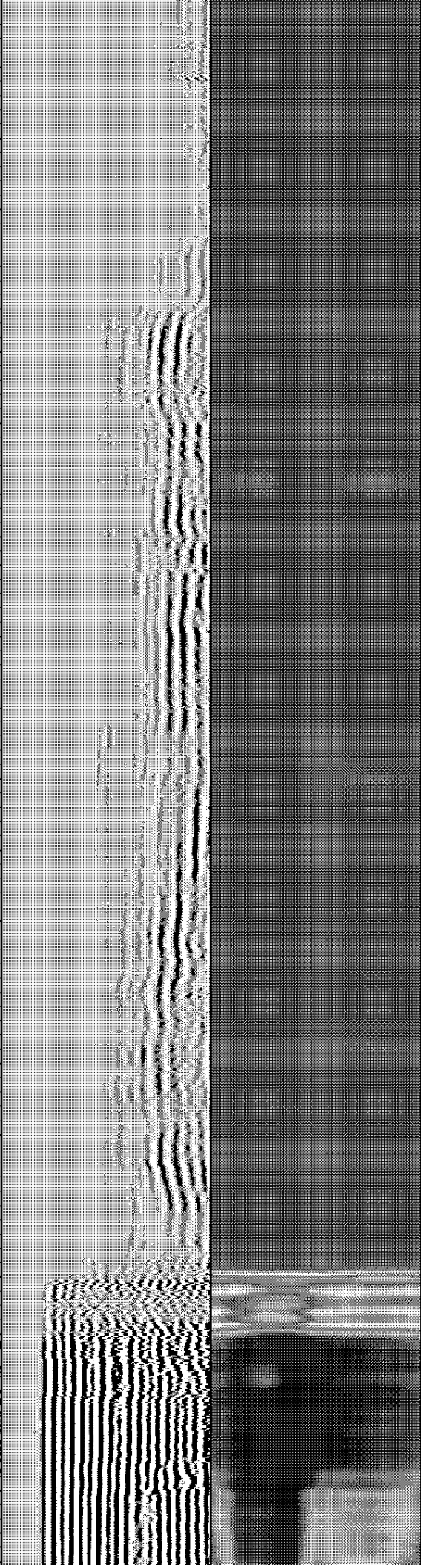
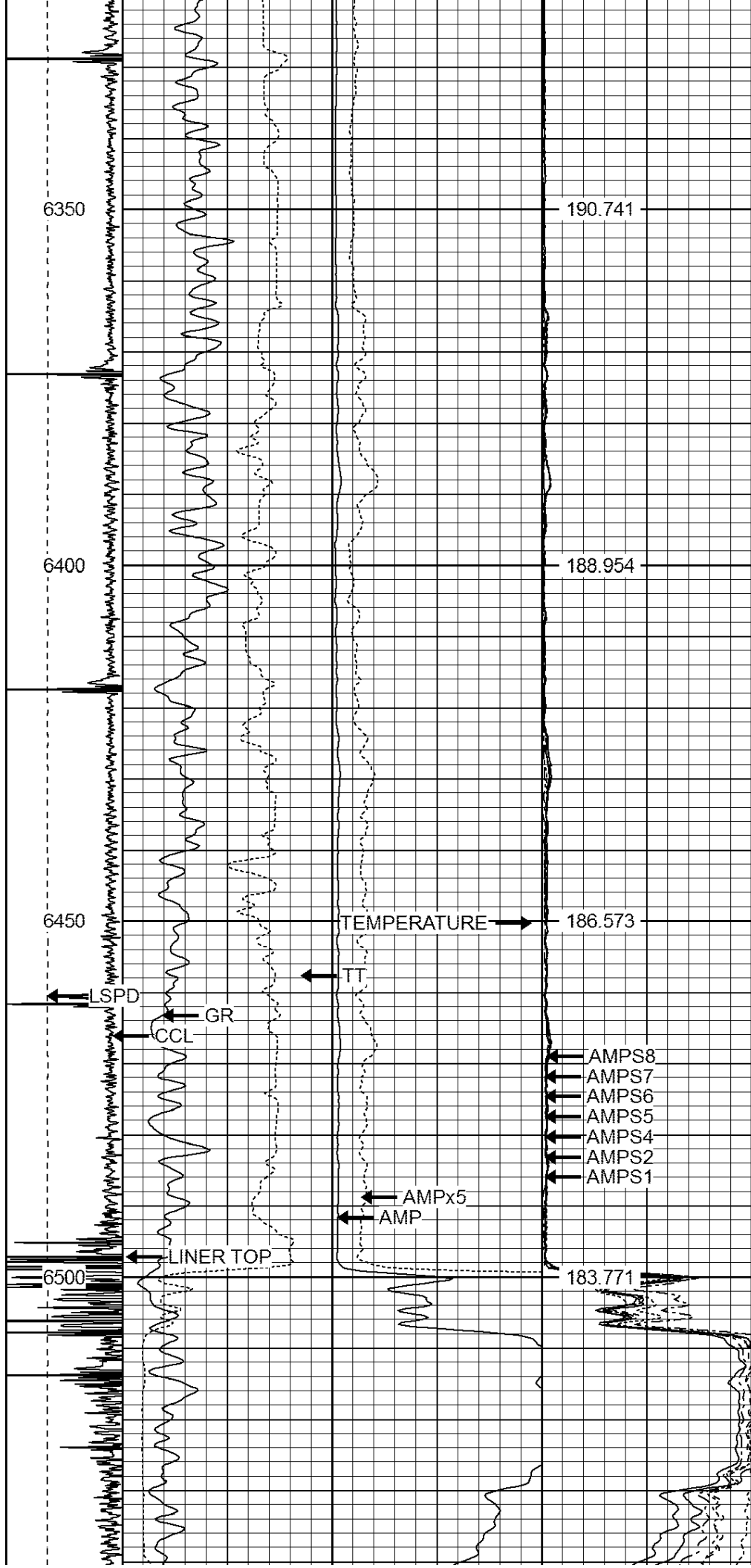


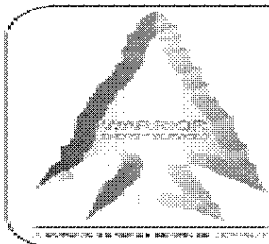
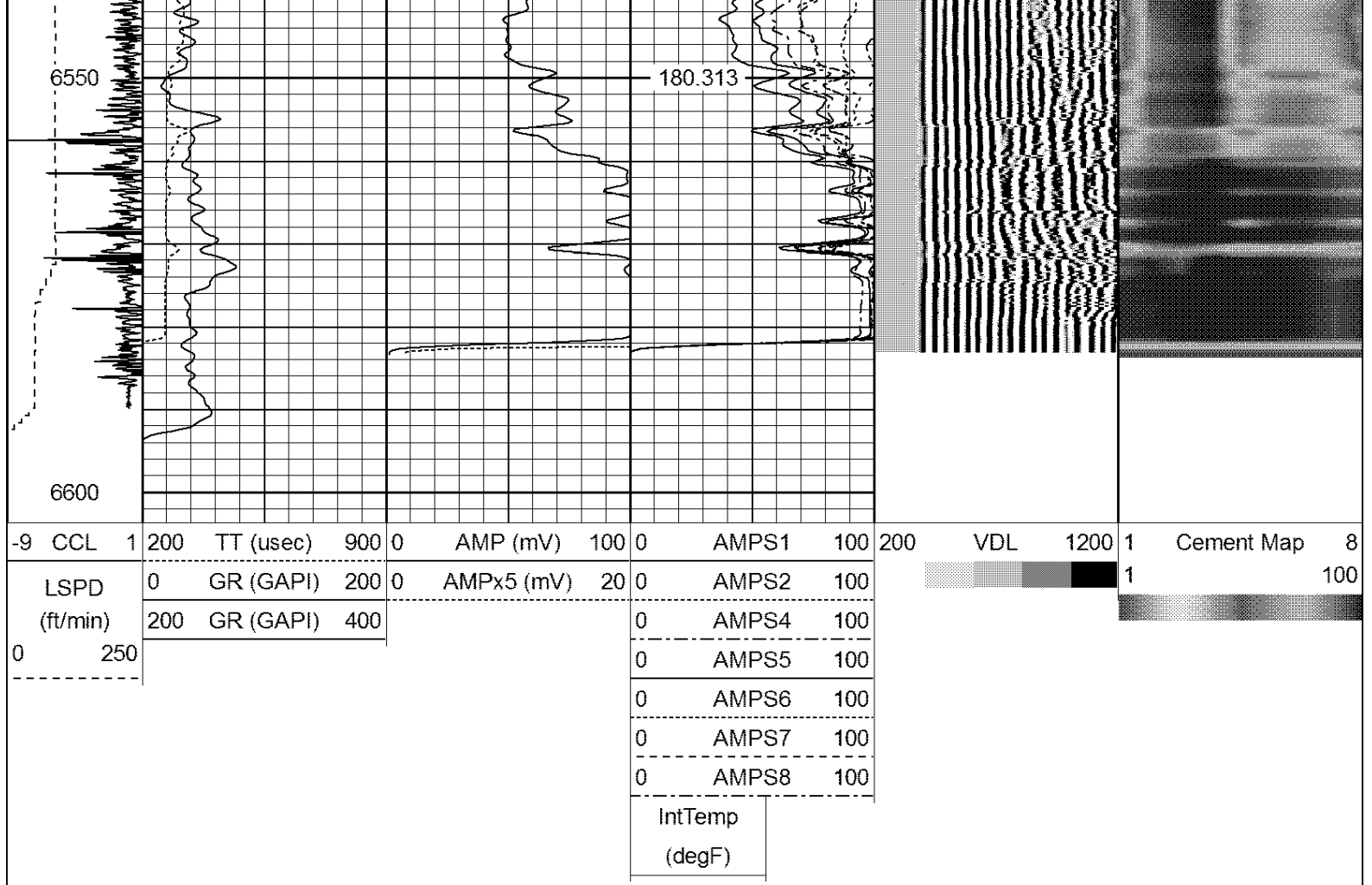












WARRIOR
ENERGY SERVICES

Company **BILL BARRETT CORPORATION**

Well **70 RANCH 04-63-03-4956CH**

Field **WATTENBERG**

County **WELD**

State **COLORADO**