**NABORS**
**COMPLETION & PRODUCTION SERVICES CO.**

# GAMMA RAY C.C.L.
# CEMENT BOND V.D.L.

Company PDC Energy
Well National Hog Farm 17-21
Field Wattenberg
County Weld
State CO

Company PDC Energy
Well National Hog Farm 17-21
Field Wattenberg
County Weld State CO

Location: API #: 05-123-20016
600' FNL & 2025' FWL
NE / NW
SEC 17 TWP 5N RGE 63W

Other Services

| | | | |
|---|---|---|---|
| Permanent Datum | GL | Elevation 4720' | Elevation<br>K.B.<br>D.F.<br>G.L. 4720' |
| Log Measured From | KB | | |
| Drilling Measured From | KB | | |

| | | | |
|---|---|---|---|
| Date | September 2, 2015 | | |
| Run Number | 1 | | |
| Depth Driller | 7429' | | |
| Depth Logger | 3400' | | |
| Bottom Logged Interval | 3400'-0' | | |
| Top Log Interval | | | |
| Casing Size | | | |
| Type Fluid | WATER | | |
| Max. Recorded Temp. | N/A | | |
| Estimated Cement Top | | | |
| Time Well Ready | | | |
| Time Logger On Bottom | | | |
| Unit Number | 923827 | | |
| Tool Size / ID Number | 1-11/16 Probe | | |
| Location | WCRs61+HWY388,E1,N1.1,NE8/10 | | |
| Recorded By | Meisner | | |
| Witnessed By | Cossio | | |

| Borehole Record | | | | Tubing Record | | | |
|---|---|---|---|---|---|---|---|
| Run Number | Bit | From | To | Size | Weight | From | To |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

| Casing Record | Size | Wgt/Ft | Top | Bottom |
|---|---|---|---|---|
| Surface String | | | | |
| Prot. String | | | | |
| Production String | 4.5" | | | |
| Liner | | | | |
| | | | | |

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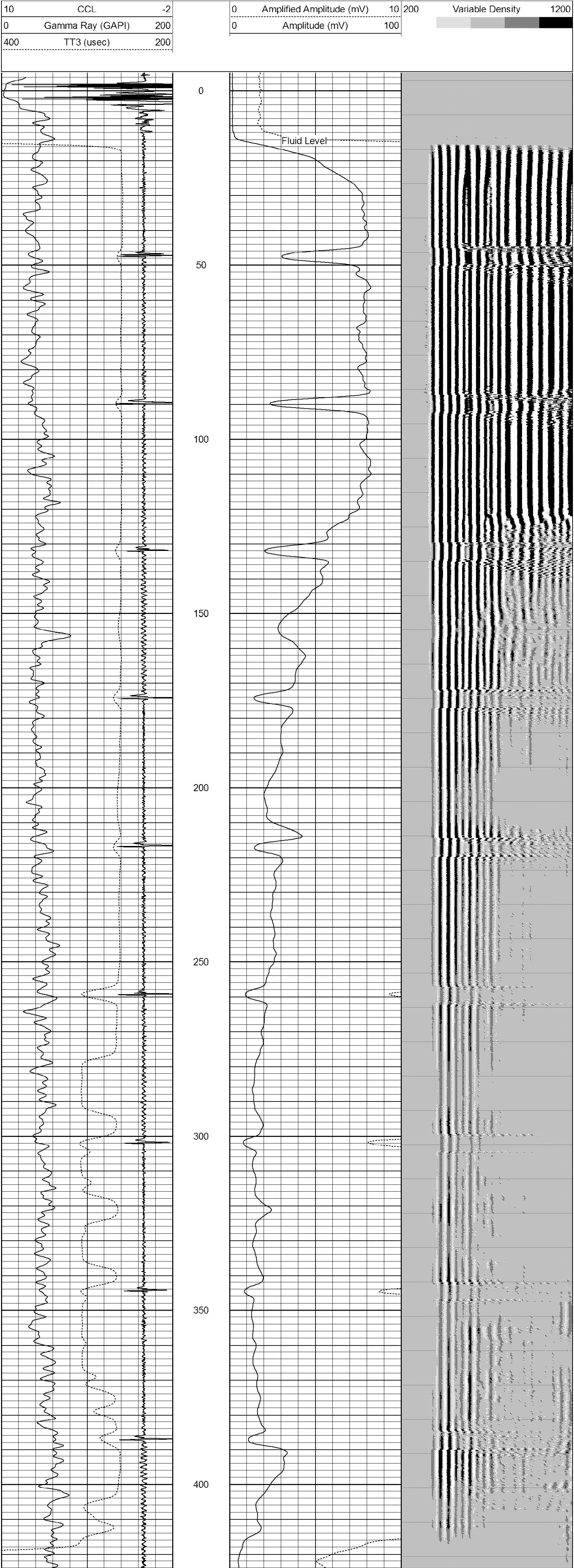
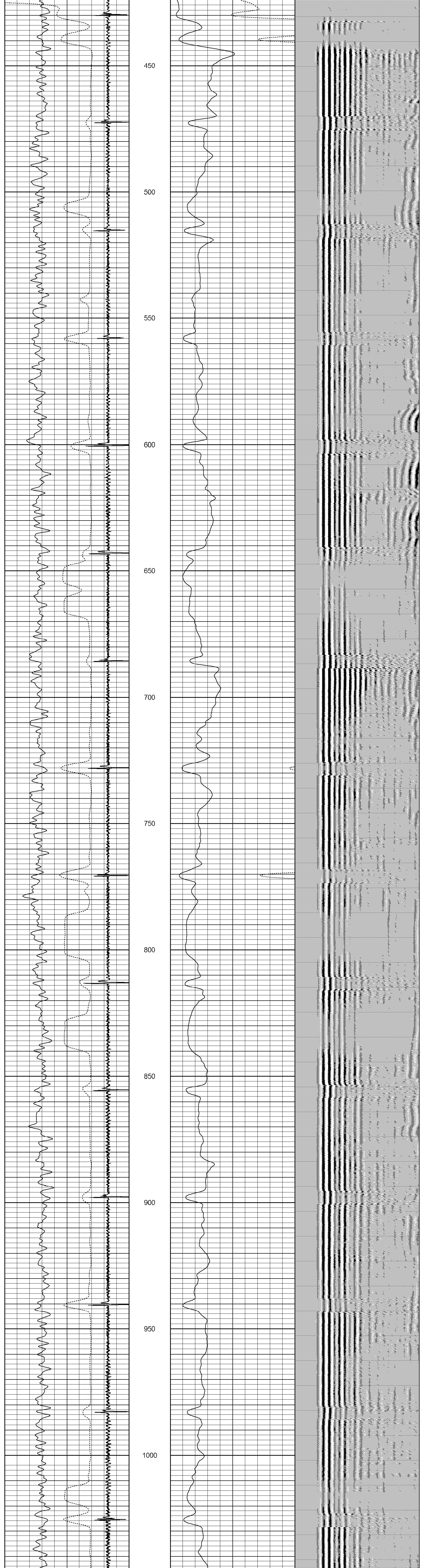
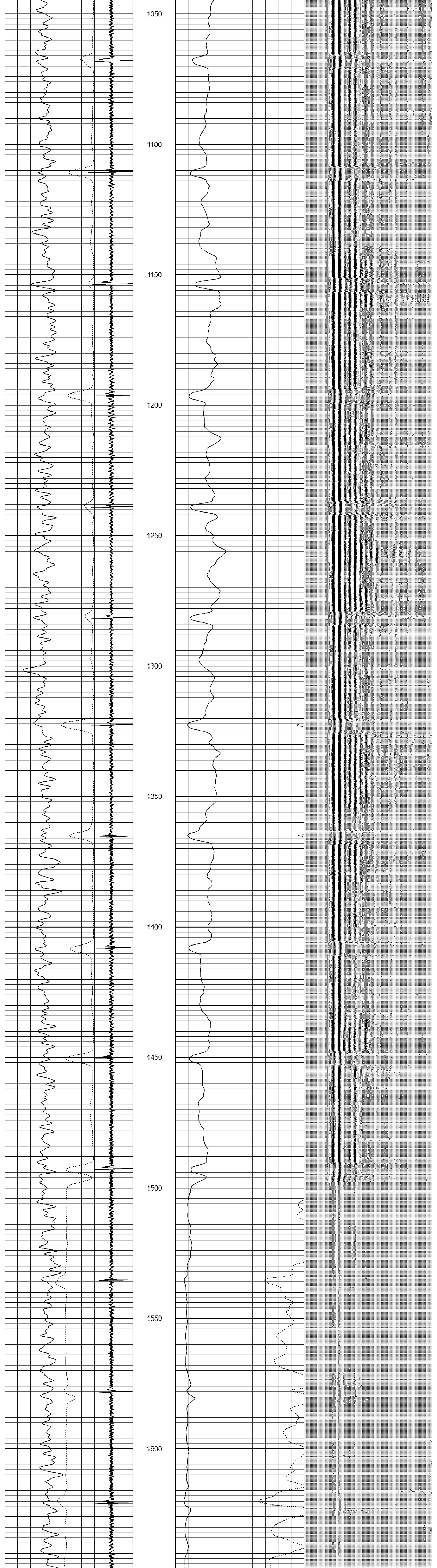
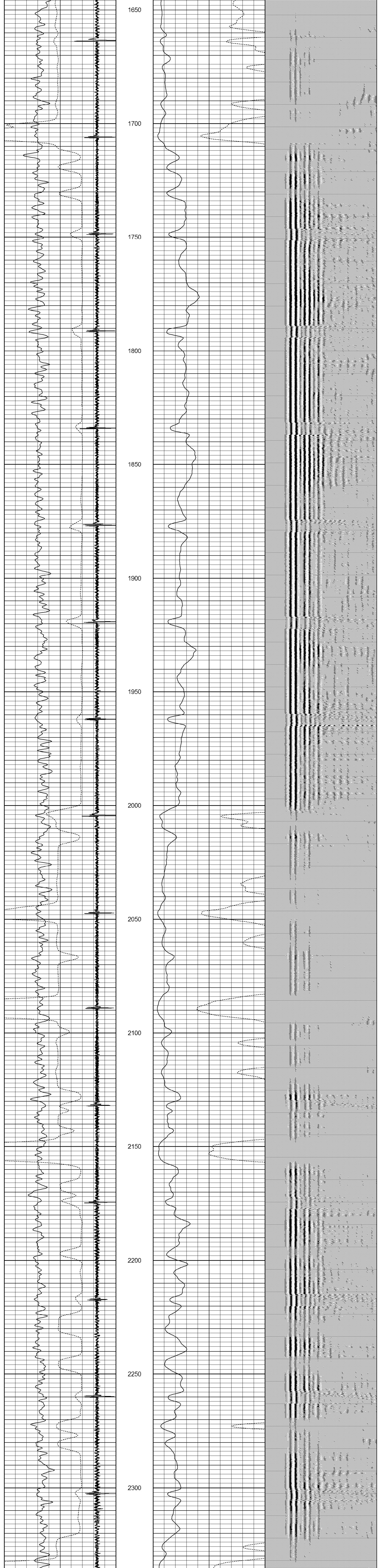
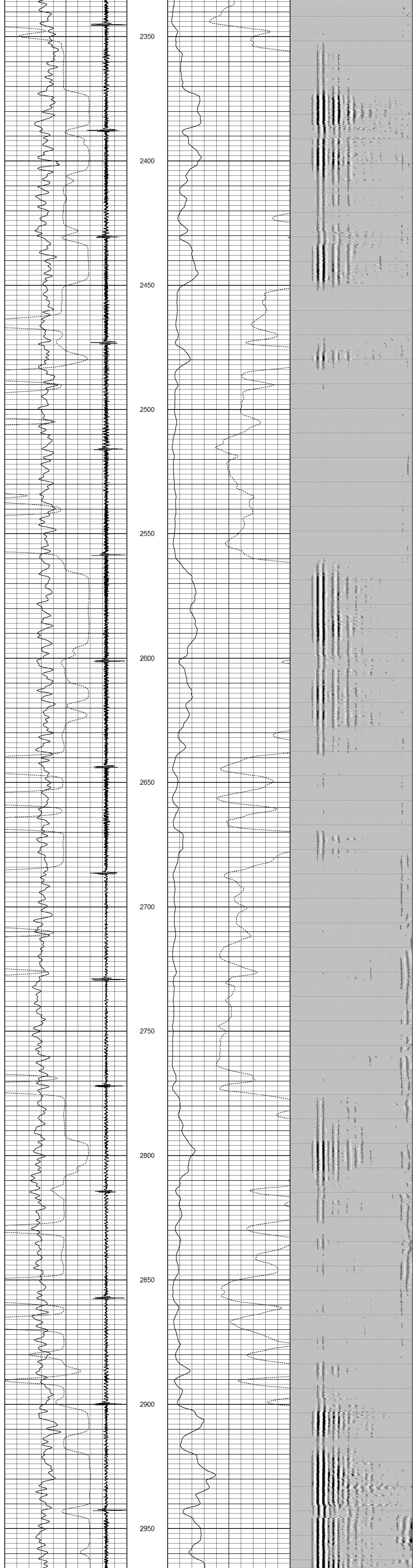
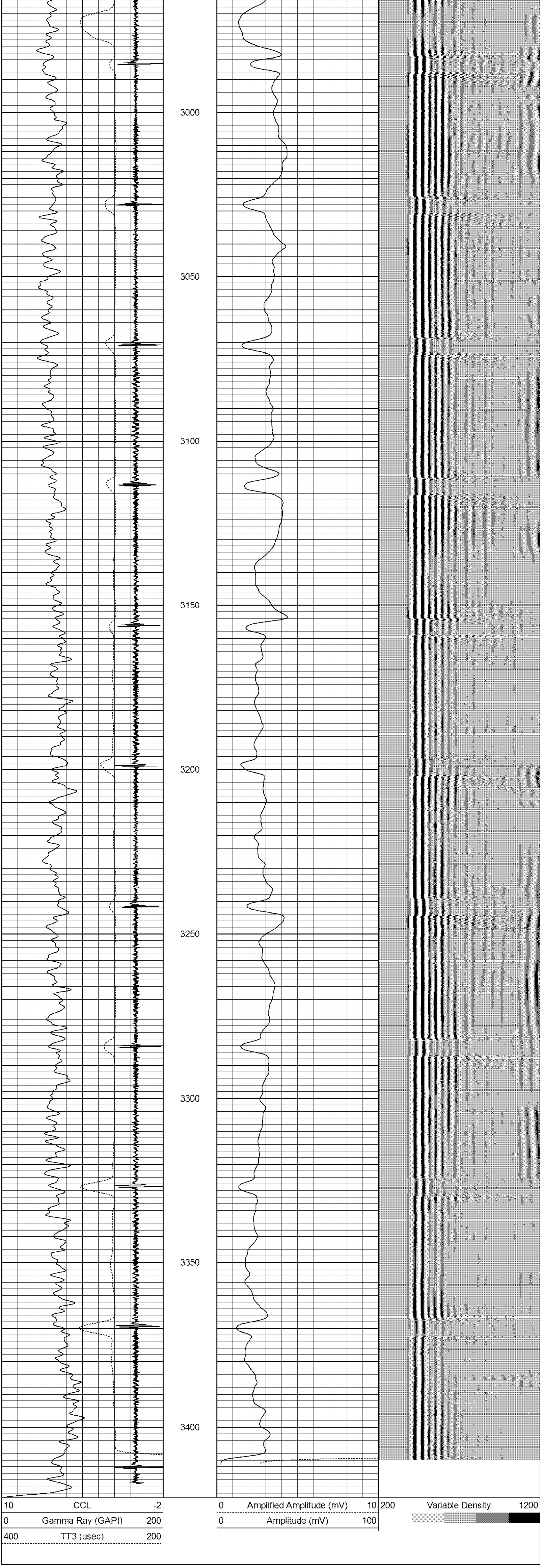
All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs, 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

| | |
|---|---|
| Database File: | pdcnhf2117.db |
| Dataset Pathname: | pass1 |
| Presentation Format: | noble en |
| Dataset Creation: | Wed Sep 02 07:34:47 2015 by Log 7.0 B1 |
| Charted by: | Depth in Feet scaled 1:240 |