



CCL VDL
GAMMA RAY
RADIAL BOND LOG

Company SHABLE USX AB 11-3
Well SHABLE USX AB 11-3
Field WATTENBERG
County WELD State COLORADO

Location: API #: 5-123-26947
Lat/Long: 40.593138 / -104.518668
SEC 11 TWP 7N RGE 64W
Permanent Datum GL Elevation 4875'
Log Measured From KB
Drilling Measured From KB
Other Services N/A
Elevation K.B. 4887'
D.F. 4886'
G.L. 4875'

Date 8-15-24
Run Number ONE
Depth Driller 8915'
Depth Logger 800'
Bottom Logged Interval 800'
Top Log Interval SURFACE
Open Hole Size 7.875"
Type Fluid H2O
Density / Viscosity 8.3#
Max. Recorded Temp. N/A
Estimated Cement Top SEE LOG
Time Well Ready 7.45AM
Time Logger on Bottom 8AM
Equipment Number UNIT 453
Location GREELEY, CO
Recorded By T. KASPER
Witnessed By T. DUNN

| Borehole Record | | | | Tubing Record | | | |
|-------------------|--------|------|----|---------------|--------|---------|--------|
| Run Number | Bit | From | To | Size | Weight | From | To |
| Casing Record | Size | | | | | | |
| Surface String | 8.625" | | | Wgt/Ft | | Top | Bottom |
| Prot. String | | | | 24# | | SURFACE | 736' |
| Production String | 5.5" | | | 17# | | SURFACE | 8905' |
| 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

LOG RAN PER CUSTOMER REQUEST
ZERO PRESSURE APPLIED

FREE PIPE = 71.921

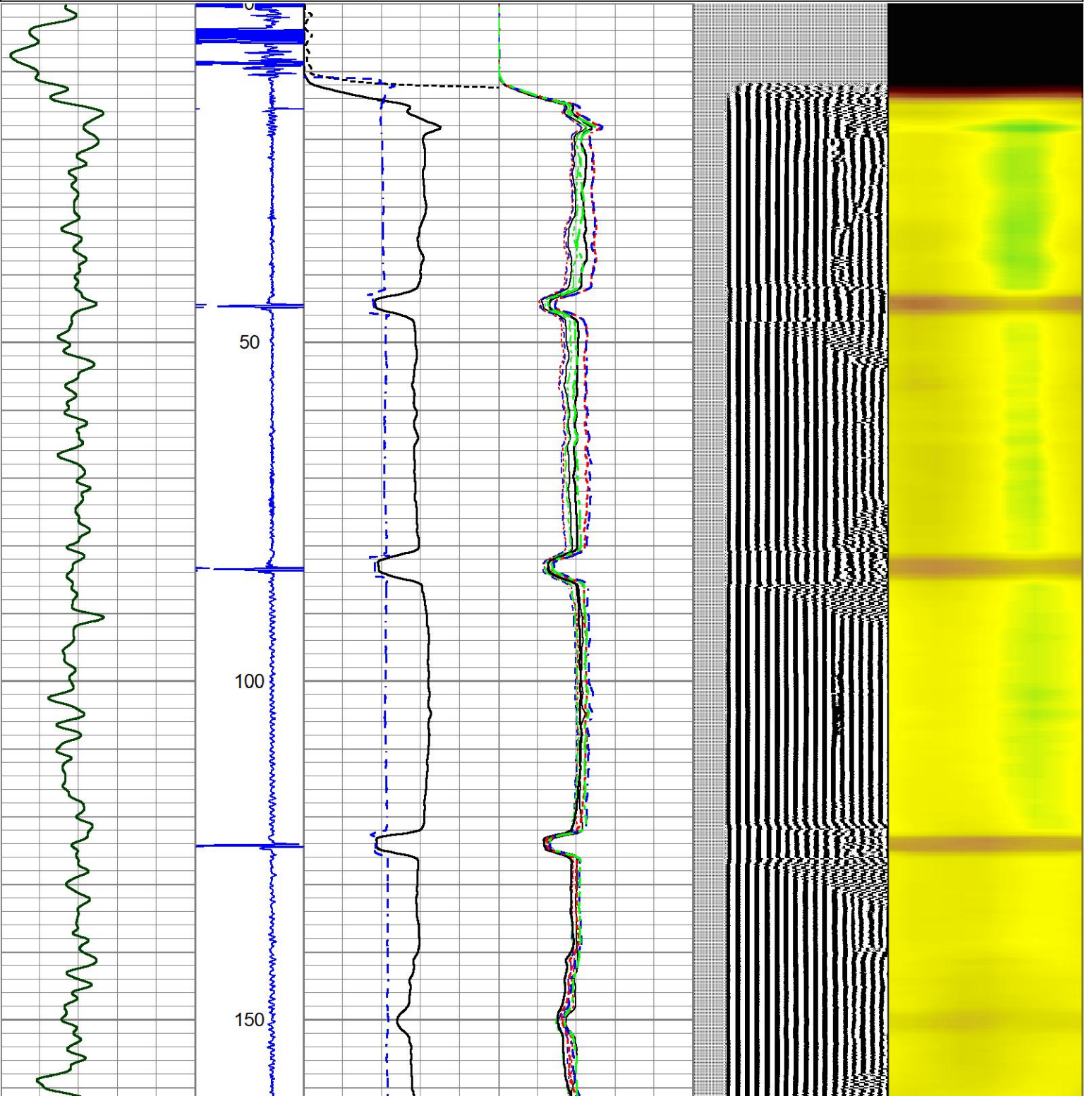
THANK YOU FOR USING JMR SERVICES

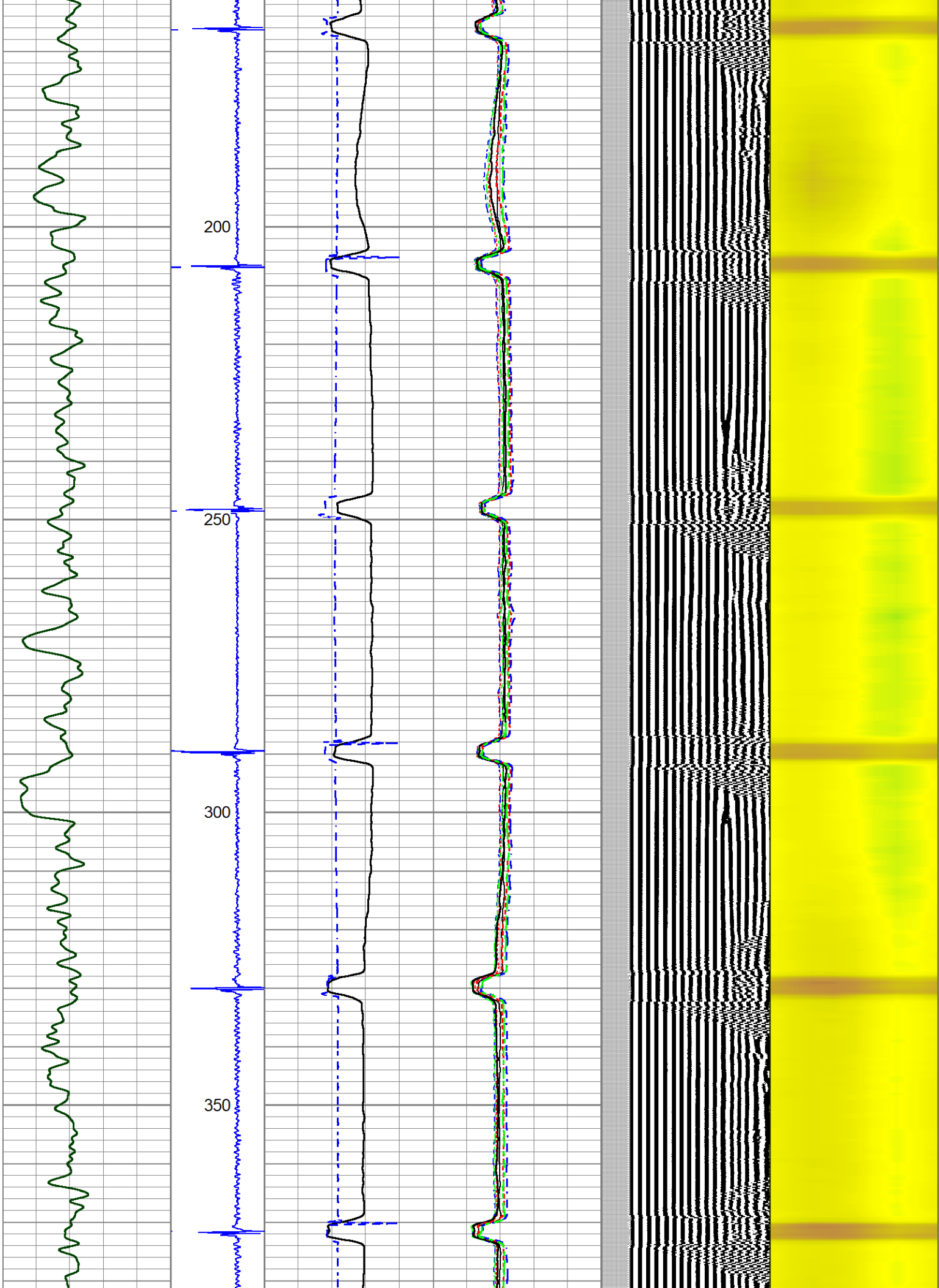


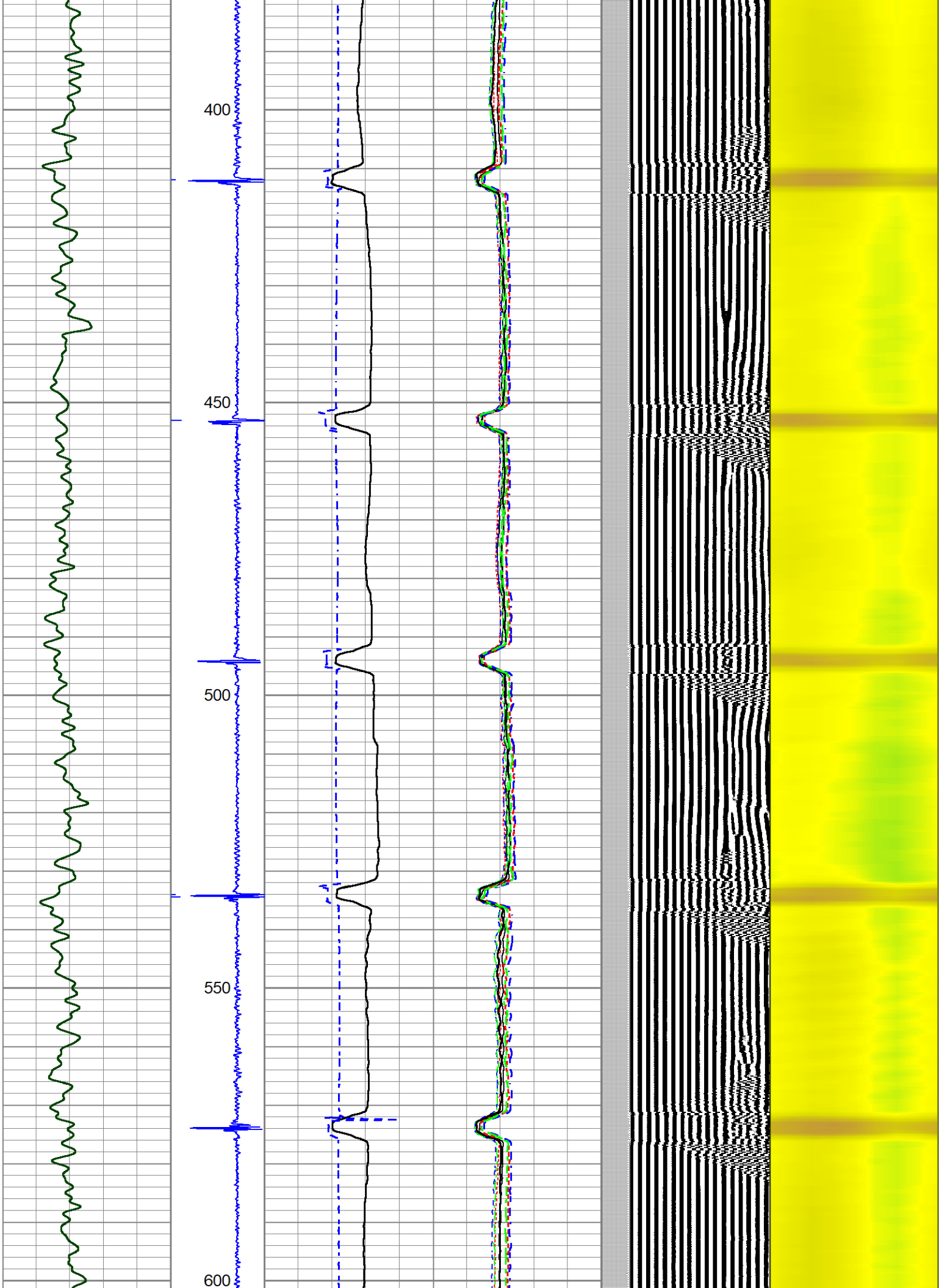
MAIN PASS

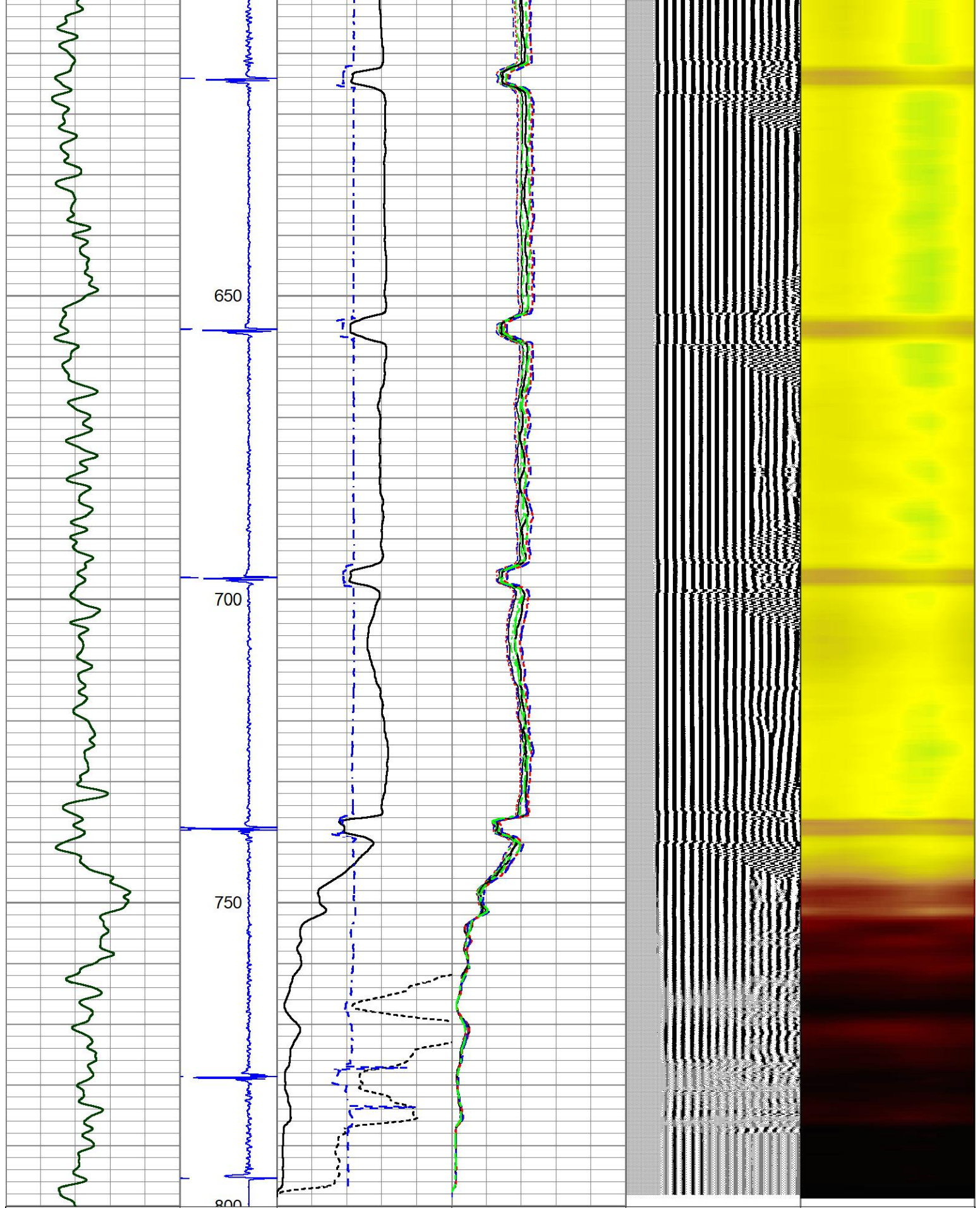
Database File 8-15-24 shable r7 rbl.db
 Dataset Pathname pass3
 Presentation Format rbl pres
 Dataset Creation Thu Aug 15 08:02:52 2024
 Charted by Depth in Feet scaled 1:240

| | | | | | | | | | | | | | | | | | | |
|---|-----------|-----|----|------|---|-----|-------------|-----|---|-------|-----|-----|------------|------|---|------------|---|--|
| 0 | GR (GAPI) | 200 | -4 | DCCL | 1 | 0 | AMP (mV) | 100 | 0 | AMPS1 | 150 | 200 | VDL (usec) | 1200 | 1 | Cement Map | 8 | |
| | | | | | | 0 | AMPx10 (mV) | 10 | 0 | AMPS2 | 150 | | | | | | | |
| | | | | | | 350 | TT (usec) | 250 | 0 | AMPS3 | 150 | | | | | | | |
| | | | | | | | | | 0 | AMPS4 | 150 | | | | | | | |
| | | | | | | | | | 0 | AMPS5 | 150 | | | | | | | |
| | | | | | | | | | 0 | AMPS6 | 150 | | | | | | | |
| | | | | | | | | | 0 | AMPS7 | 150 | | | | | | | |
| | | | | | | | | | 0 | AMPS8 | 150 | | | | | | | |









0 GR (GAPI) 200 -4 DCCL 1 0 AMP (mV) 100 0 AMPS1 150 200 VDL (usec) 1200 1 Cement Map 8

0 AMPx10 (mV) 10 0 AMPS2 150

350 TT (usec) 250 0 AMPS3 150

0 AMPS4 150

0 AMPS5 150

Cement Map 8



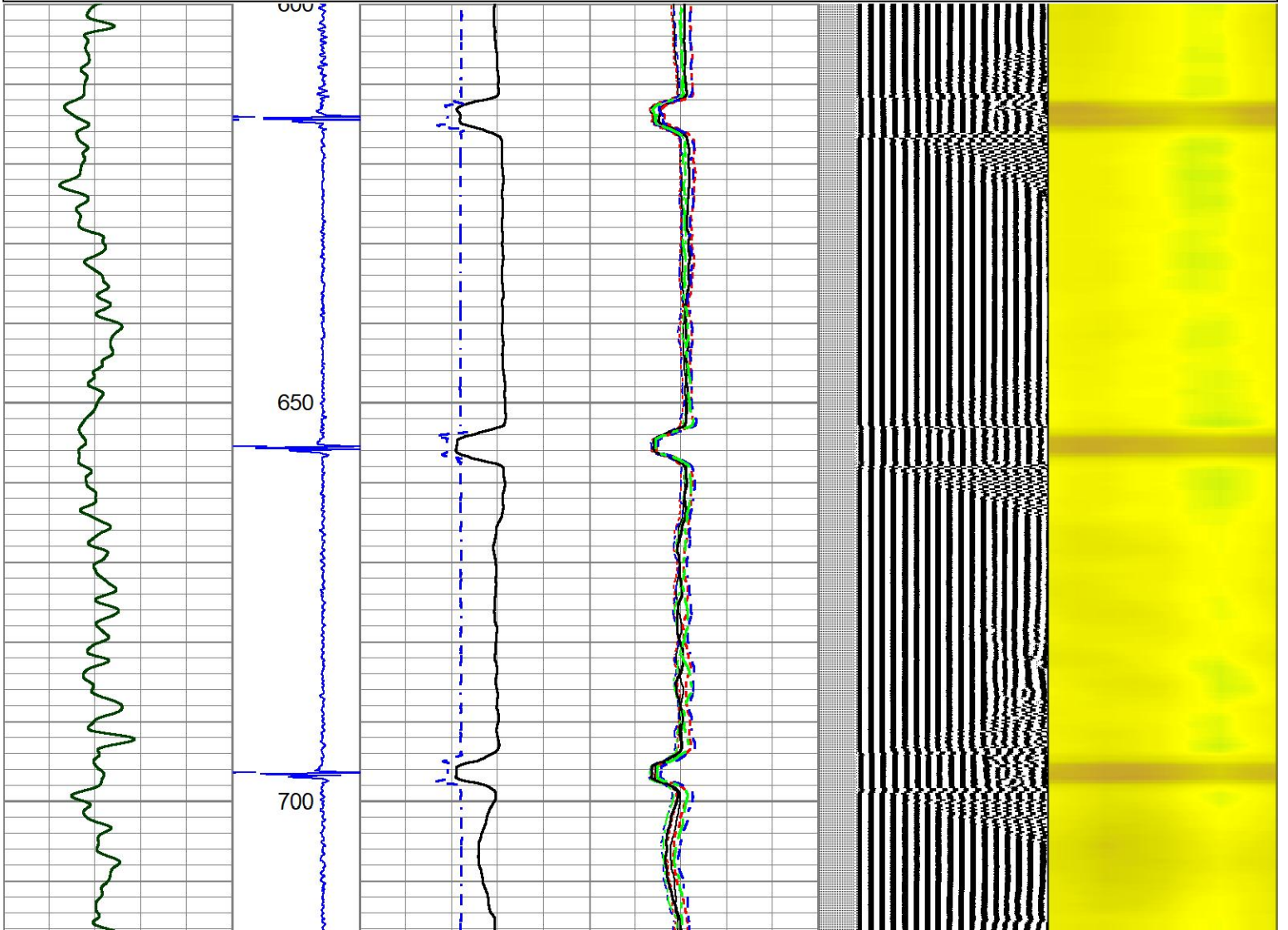
| | | |
|---|-------|-----|
| 0 | AMPS5 | 150 |
| 0 | AMPS6 | 150 |
| 0 | AMPS7 | 150 |
| 0 | AMPS8 | 150 |

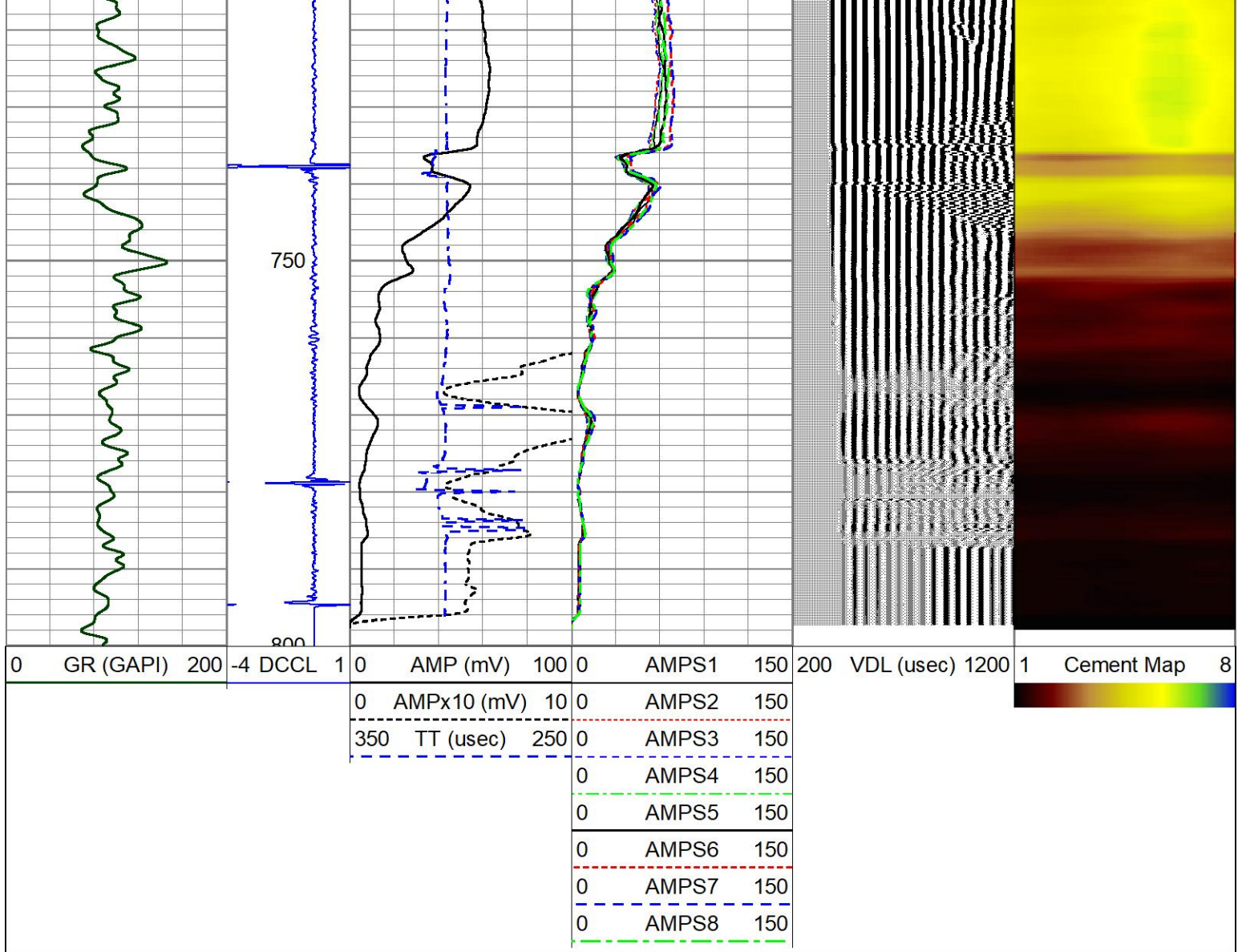


REPEAT PASS

Database File 8-15-24 shable r7 rbl.db
 Dataset Pathname pass2
 Presentation Format rbl pres
 Dataset Creation Thu Aug 15 07:58:35 2024
 Charted by Depth in Feet scaled 1:240

| | | | | | | | | | | | | | | | | | |
|---|-----------|-----|----|------|---|-----|-------------|-----|---|-------|-----|-----|------------|------|---|------------|---|
| 0 | GR (GAPI) | 200 | -4 | DCCL | 1 | 0 | AMP (mV) | 100 | 0 | AMPS1 | 150 | 200 | VDL (usec) | 1200 | 1 | Cement Map | 8 |
| | | | | | | 0 | AMPx10 (mV) | 10 | 0 | AMPS2 | 150 | | | | | | |
| | | | | | | 350 | TT (usec) | 250 | 0 | AMPS3 | 150 | | | | | | |
| | | | | | | | | | 0 | AMPS4 | 150 | | | | | | |
| | | | | | | | | | 0 | AMPS5 | 150 | | | | | | |
| | | | | | | | | | 0 | AMPS6 | 150 | | | | | | |
| | | | | | | | | | 0 | AMPS7 | 150 | | | | | | |
| | | | | | | | | | 0 | AMPS8 | 150 | | | | | | |





Log Variables

DatabaseC:\ProgramData\Warrior\Data\8-15-24 shable r7 rbl.db
 Dataset field/well/run1/pass3/_vars_

Top - Bottom

| | | | | | | | |
|-----------------------|------------------------|----------------------|---------------------|-------------------------|--------------------|--------------------|-------------------------|
| BOREID in 7.875 | BOTTEMP degF 100 | CASEOD in 5.5 | CASETHCK in 0 | CASEWGHT lb/ft 17 | MAXAMPL mV 0 | MINAMPL mV 1 | MINATTN db/ft 0.8 |
| PERFS No | PPT usec 0 | SRFTEMP degF 0 | TDEPTH ft 0 | | | | |

Calibration Report

Database File 8-15-24 shable r7 rbl.db
 Dataset Pathname pass3
 Dataset Creation Thu Aug 15 08:02:52 2024

Gamma Ray Calibration Report

Serial Number: GCL004_base
 Tool Model: GCL004
 Performed: (Not Performed)

Calibrator Value: 1.0 GAPI

| | | |
|---------------------|--------|----------|
| Background Reading: | 0.0 | cps |
| Calibrator Reading: | 1.0 | cps |
| Sensitivity: | 1.0000 | GAPI/cps |

Segmented Cement Bond Log Calibration Report

| | |
|------------------------------|-----------|
| Serial Number: | FW2001-30 |
| Tool Model: | HTRCB-275 |
| Calibration Casing Diameter: | 5.500 in |
| Calibration Depth: | 25.717 ft |

Master Calibration, performed Thu Aug 15 07:35:14 2024:

| | Raw (v) | | Calibrated (mv) | | Results | |
|-----|---------|-------|-----------------|--------|---------|--------|
| | Zero | Cal | Zero | Cal | Gain | Offset |
| 3' | -0.001 | 0.979 | 0.000 | 71.921 | 73.385 | 0.090 |
| CAL | -0.002 | 0.982 | | | | |
| 5' | -0.002 | 0.925 | 0.000 | 71.921 | 77.611 | 0.145 |
| SUM | | | | | | |
| S1 | -0.002 | 0.976 | 0.000 | 71.921 | 73.531 | 0.162 |
| S2 | -0.002 | 0.986 | 0.000 | 71.921 | 72.742 | 0.174 |
| S3 | -0.002 | 0.992 | 0.000 | 71.921 | 72.291 | 0.176 |
| S4 | -0.002 | 0.986 | 0.000 | 71.921 | 72.820 | 0.149 |
| S5 | -0.002 | 0.992 | 0.000 | 71.921 | 72.364 | 0.114 |
| S6 | -0.002 | 0.941 | 0.000 | 71.921 | 76.296 | 0.154 |
| S7 | -0.002 | 0.904 | 0.000 | 71.921 | 79.317 | 0.188 |
| S8 | -0.002 | 0.917 | 0.000 | 71.921 | 78.296 | 0.140 |

Internal Reference Calibration, performed Thu Aug 15 07:36:23 2024:

| | Raw (v) | | Calibrated (v) | | Results | |
|-----|---------|-------|----------------|-------|---------|--------|
| | Zero | Cal | Zero | Cal | Gain | Offset |
| CAL | -0.001 | 0.982 | -0.002 | 0.982 | 1.001 | -0.001 |

Air Zero Calibration, performed (Not Performed):

| | Raw (v) | | Calibrated (v) | | Results | |
|-----|---------|--|----------------|--|---------|--------|
| | Zero | | Zero | | | Offset |
| 3' | 0.000 | | 0.000 | | | 0.000 |
| 5' | 0.000 | | 0.000 | | | 0.000 |
| SUM | | | | | | |
| S1 | 0.000 | | 0.000 | | | 0.000 |
| S2 | 0.000 | | 0.000 | | | 0.000 |
| S3 | 0.000 | | 0.000 | | | 0.000 |
| S4 | 0.000 | | 0.000 | | | 0.000 |
| S5 | 0.000 | | 0.000 | | | 0.000 |
| S6 | 0.000 | | 0.000 | | | 0.000 |
| S7 | 0.000 | | 0.000 | | | 0.000 |
| S8 | 0.000 | | 0.000 | | | 0.000 |


































Inclinometer Calibration Report

| | | | | |
|------------|-----------------|------------|----------|-----------|
| Performed: | (Not Performed) | | | |
| | Low Read. | High Read. | Low Ref. | High Ref. |

X Accelerometer

| | | | | | |
|-----------------|------|------|------|------|-----|
| | 0.00 | 1.00 | 0.00 | 1.00 | gee |
| Y Accelerometer | 0.00 | 1.00 | 0.00 | 1.00 | gee |
| Z Accelerometer | 0.00 | 1.00 | 0.00 | 1.00 | gee |

| Sensor | Offset (ft) | Schematic | Description | Length (ft) | O.D. (in) | Weight (lb) |
|-------------|-------------|-----------|--|-------------|-----------|-------------|
| GCT_FMWR | 24.36 | | <p>CENT-BC275-0000 Probe 2.75" Bowspring Centralizer</p> <p>RBT8-HTRCB-275 (FW2001-30) Probe 2.75" High Temperature RADII 8 Sector Bond Tool w/ external temperature</p> <p>CENT-BC275-0000 Probe 2.75" Bowspring Centralizer</p> <p>GCacc-GCL004 (GCL004_base) Probe High Temp Gamma Ray - CCL (6 Magnet) w/ Temp</p> | 2.83 | 2.75 | 24.00 |
| mSec_Count | 24.36 | | | | | |
| RBT_Status | 24.36 | | | | | |
| Error_Ct | 24.36 | | | | | |
| RBT_HV | 22.09 | | | | | |
| RBT_ACCZ | 14.69 | | | | | |
| RBT_ACCY | 14.69 | | | | | |
| RBT_ACCX | 14.69 | | | | | |
| WVFSYNC | 14.69 | | | | | |
| WVFS8 | 14.69 | | | | | |
| WVFS7 | 14.69 | | | | | |
| WVFS6 | 14.69 | | | | | |
| WVFS5 | 14.69 | | | | | |
| WVFS4 | 14.69 | | | | | |
| WVFS3 | 14.69 | | | | | |
| WVFS2 | 14.69 | | | | | |
| WVFS1 | 14.69 | | | | | |
| WVFCAL | 14.69 | | | | | |
| WVF3FT | 14.69 | | | | | |
| WVF5FT | 13.69 | | | | | |
| GCT_HV | 7.61 | | | | | |
| CCL\$2 | 6.31 | | | | | |
| CCL\$1 | 6.31 | | | | | |
| GCT_Temp | 5.43 | | | | | |
| GCT_IntTemp | 2.00 | | | | | |

| | | | | | | |
|---|------|---|---|------|------|------|
| GR | 1.75 |  |                                 | 0.33 | 1.38 | 1.00 |
| <p>Dataset: 8-15-24 shable r7 rbl.db: field/well/run1/pass3 Total length: 24.36 ft Total weight: 141.00 lb O.D.: 2.75 in</p> | | | | | | |