



# COMPENSATED DENSITY / NEUTRON LOG

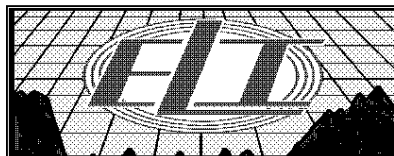
|                              |                                                                    |                      |                           |
|------------------------------|--------------------------------------------------------------------|----------------------|---------------------------|
| Company                      | C. G. OIL, INC.                                                    |                      |                           |
| Well                         | WEIGEL #1 OWWO                                                     |                      |                           |
| Field                        | AIR BASE                                                           |                      |                           |
| County                       | ELLIS                                                              | State                | KANSAS                    |
| Company                      | C. G. OIL, INC.                                                    |                      |                           |
| Well                         | WEIGEL #1 OWWO                                                     |                      |                           |
| Field                        | AIR BASE                                                           |                      |                           |
| County                       | ELLIS                                                              | State                | KANSAS                    |
| Location:                    | API # : 15-051-00756-0001<br>2310' FNL & 2310' FVL<br>SE - SE - NW |                      | Other Services<br>DIL/MEL |
| Permanent Datum              | GROUND LEVEL                                                       | Elevation            | 1944                      |
| Log Measured From            | KELLY BUSHING 10' A.G.L.                                           |                      |                           |
| Drilling Measured From       | KELLY BUSHING                                                      |                      |                           |
| SEC 22 TWP 13S RGE 16W       |                                                                    |                      |                           |
| Elevation                    |                                                                    |                      |                           |
| K.B. 1954                    |                                                                    |                      |                           |
| D.F. 1952                    |                                                                    |                      |                           |
| G.L. 1944                    |                                                                    |                      |                           |
| Date                         | 10/24/18                                                           |                      |                           |
| Run Number                   | ONE                                                                |                      |                           |
| Depth Driller                | 3438                                                               |                      |                           |
| Depth Logger                 | 3438                                                               |                      |                           |
| Bottom Logged Interval       | 3414                                                               |                      |                           |
| Top Log Interval             | 2800                                                               |                      |                           |
| Casing Driller               | 8 5/8"@239'                                                        |                      |                           |
| Casing Logger                | 243                                                                |                      |                           |
| Bit Size                     | 7 7/8"                                                             |                      |                           |
| Type Fluid in Hole           | CHEMICAL MUD                                                       | CHLORIDES 11,200 PPM |                           |
| Density / Viscosity          | 8.71110                                                            |                      |                           |
| pH / Fluid Loss              | 9.5/12.8                                                           |                      |                           |
| Source of Sample             | FLOWLINE                                                           |                      |                           |
| Rim @ Meas. Temp             | .950@70F                                                           |                      |                           |
| Rmf @ Meas. Temp             | .713@70F                                                           |                      |                           |
| Rmc @ Meas. Temp             | 1.14@70F                                                           |                      |                           |
| Source of Rmf / Rmc          | MEASUREMENT                                                        |                      |                           |
| Rim @ BHT                    | .599@111F                                                          |                      |                           |
| Time Circulation Stopped     | 2 HOURS                                                            |                      |                           |
| Time Logger on Bottom        | 11:45 A.M.                                                         |                      |                           |
| Maximum Recorded Temperature | 111F                                                               |                      |                           |
| Equipment Number             | 922339                                                             |                      |                           |
| Location                     | HAYS, KANSAS                                                       |                      |                           |
| Recorded By                  | JEFF LUEBBERS                                                      |                      |                           |
| Witnessed By                 | ROGER FISHER                                                       | RON SCHMIDTBERGER    | TERRY PIESKER             |

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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

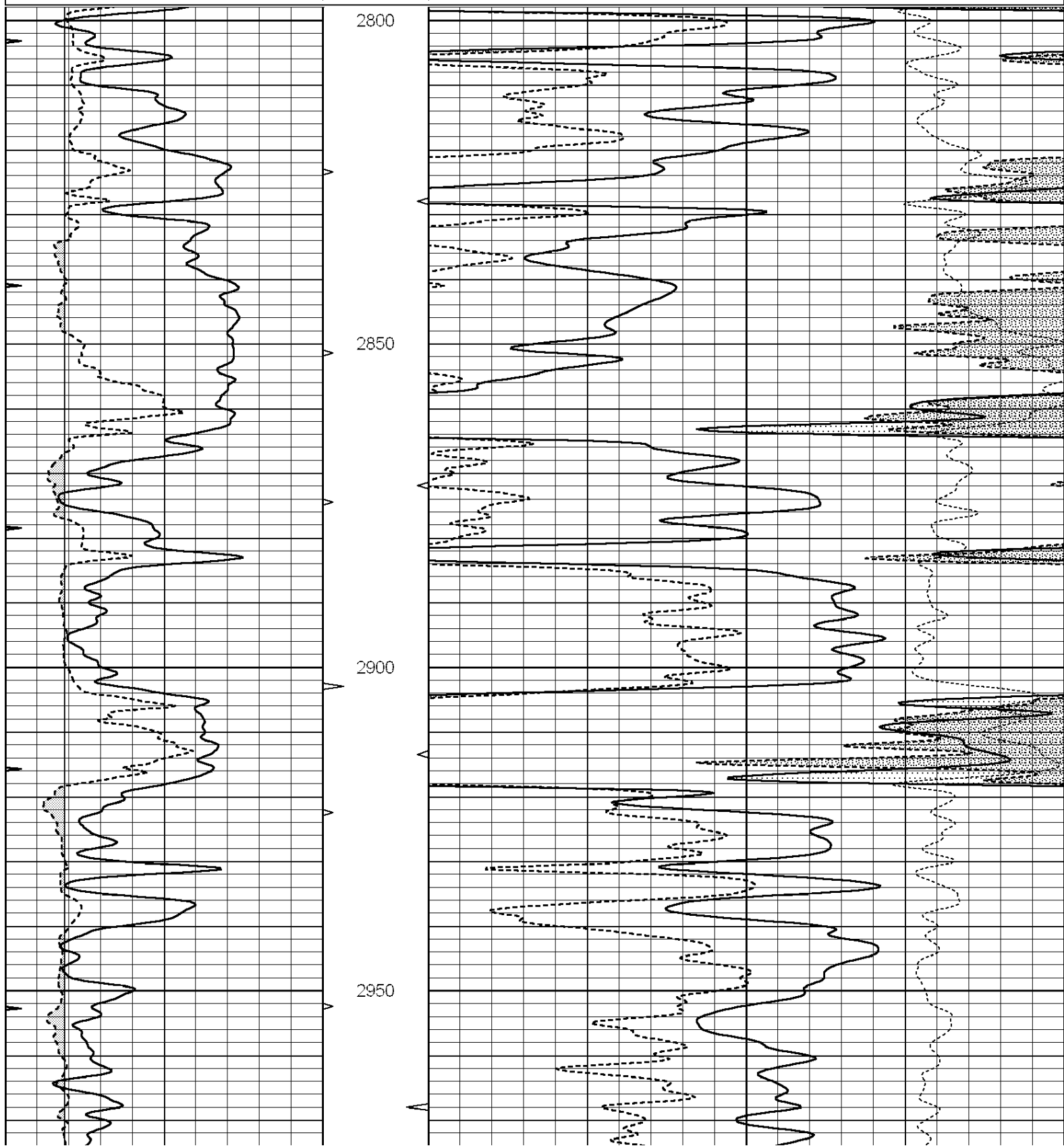
THANK YOU FOR USING ELI WIRELINE HAYS, KANSAS (785) 628-6395  
DIRECTIONS  
VICTORIA, KS., & I-70, N. TO "FAIRGROUND RD.", 3 1/4E., S. INTO

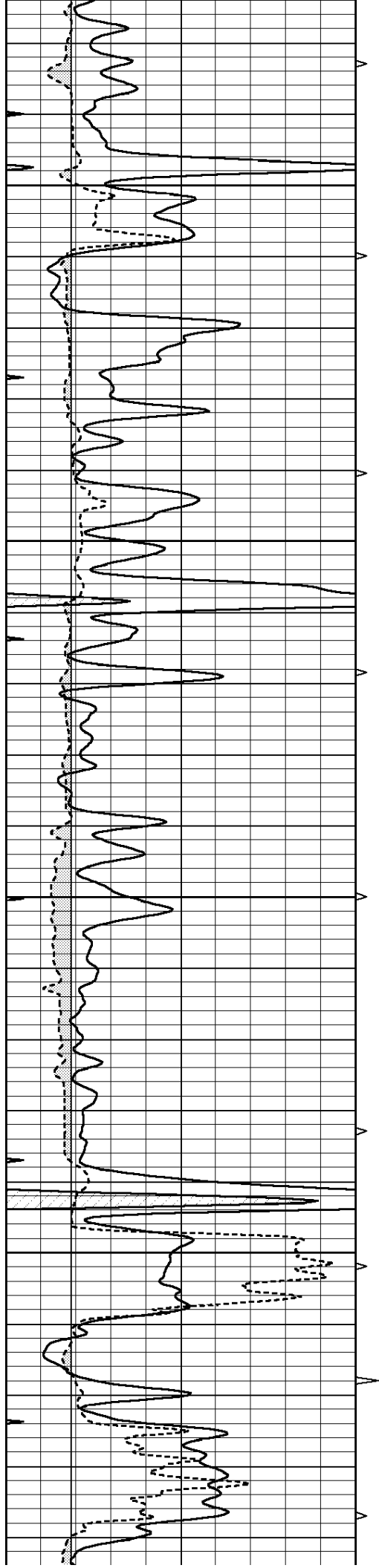


# MAIN SECTION

Database File: 2947ddn.db  
Dataset Pathname: pass3.6M  
Presentation Format: den\_neu  
Dataset Creation: Wed Oct 24 13:07:11 2018  
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   |                          |      |



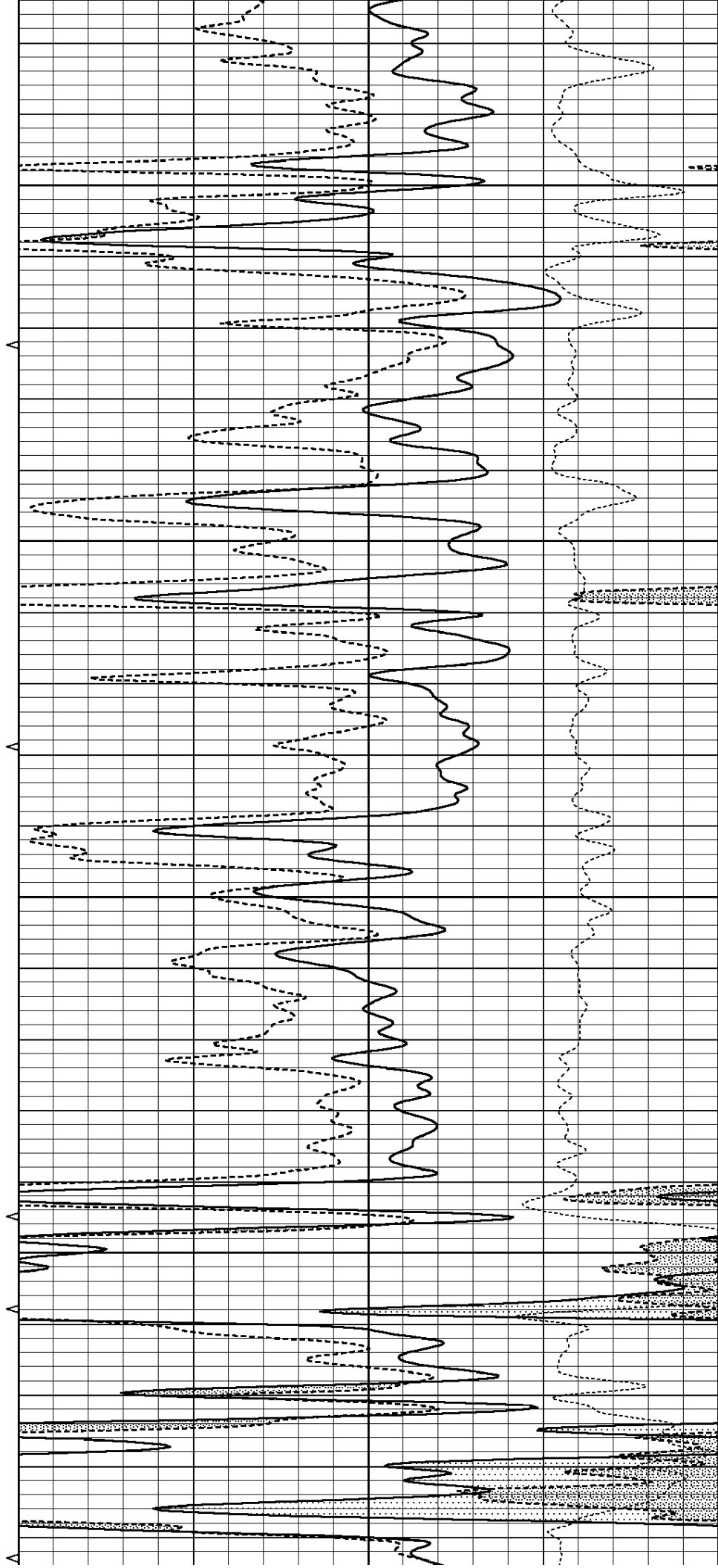


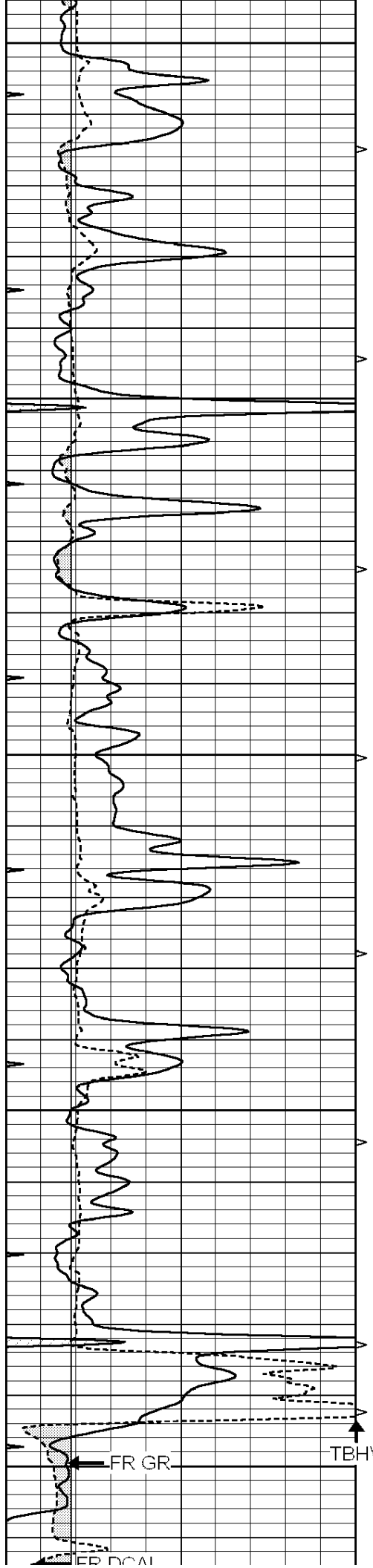
3000

3050

3100

3150





3200

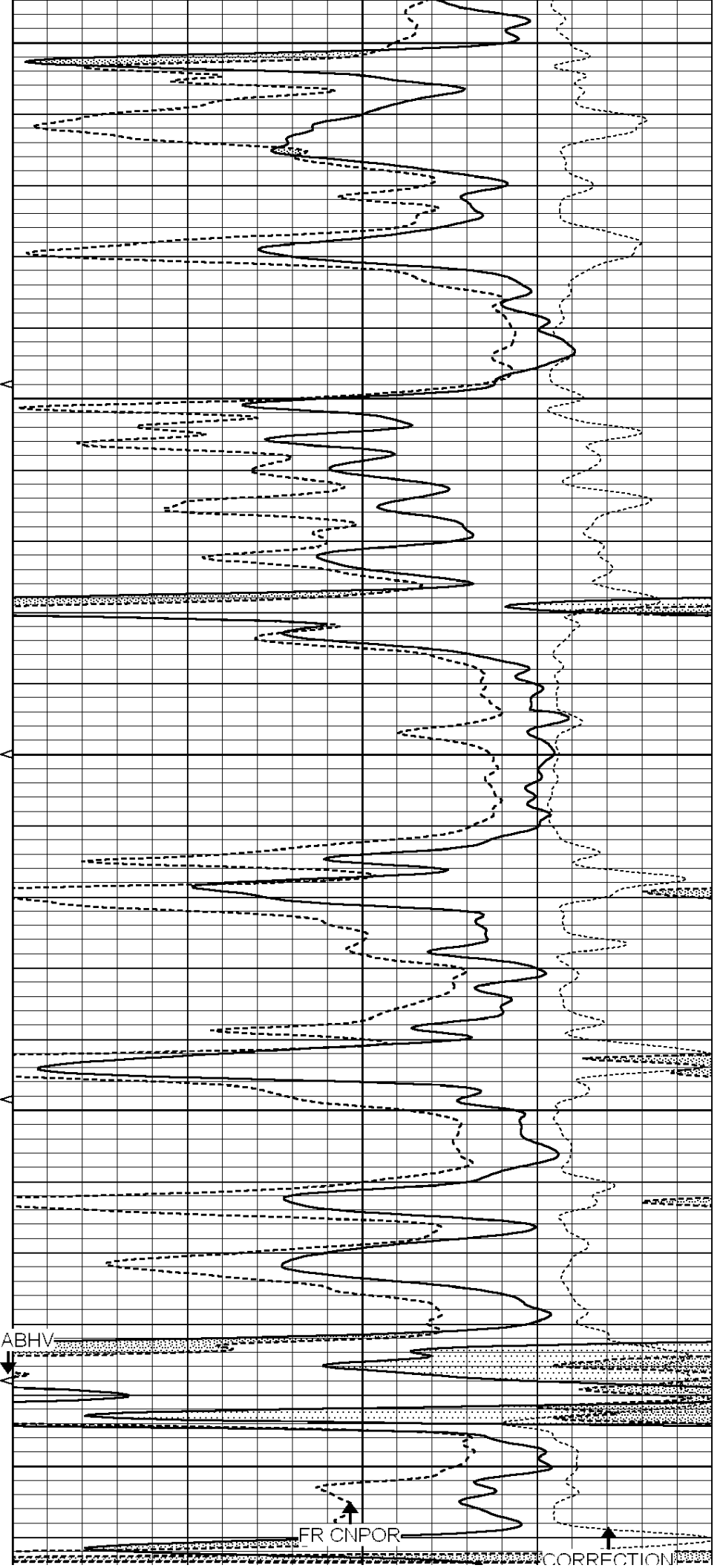
3250

3300

3350

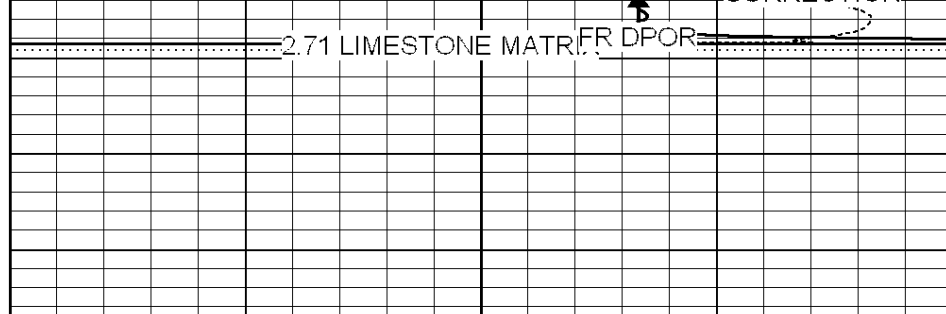
5.5" ABHV

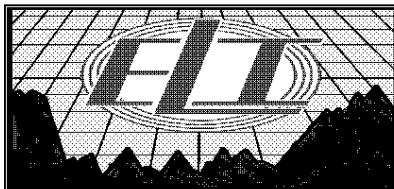
3400



FR CNPOR

CORRECTION

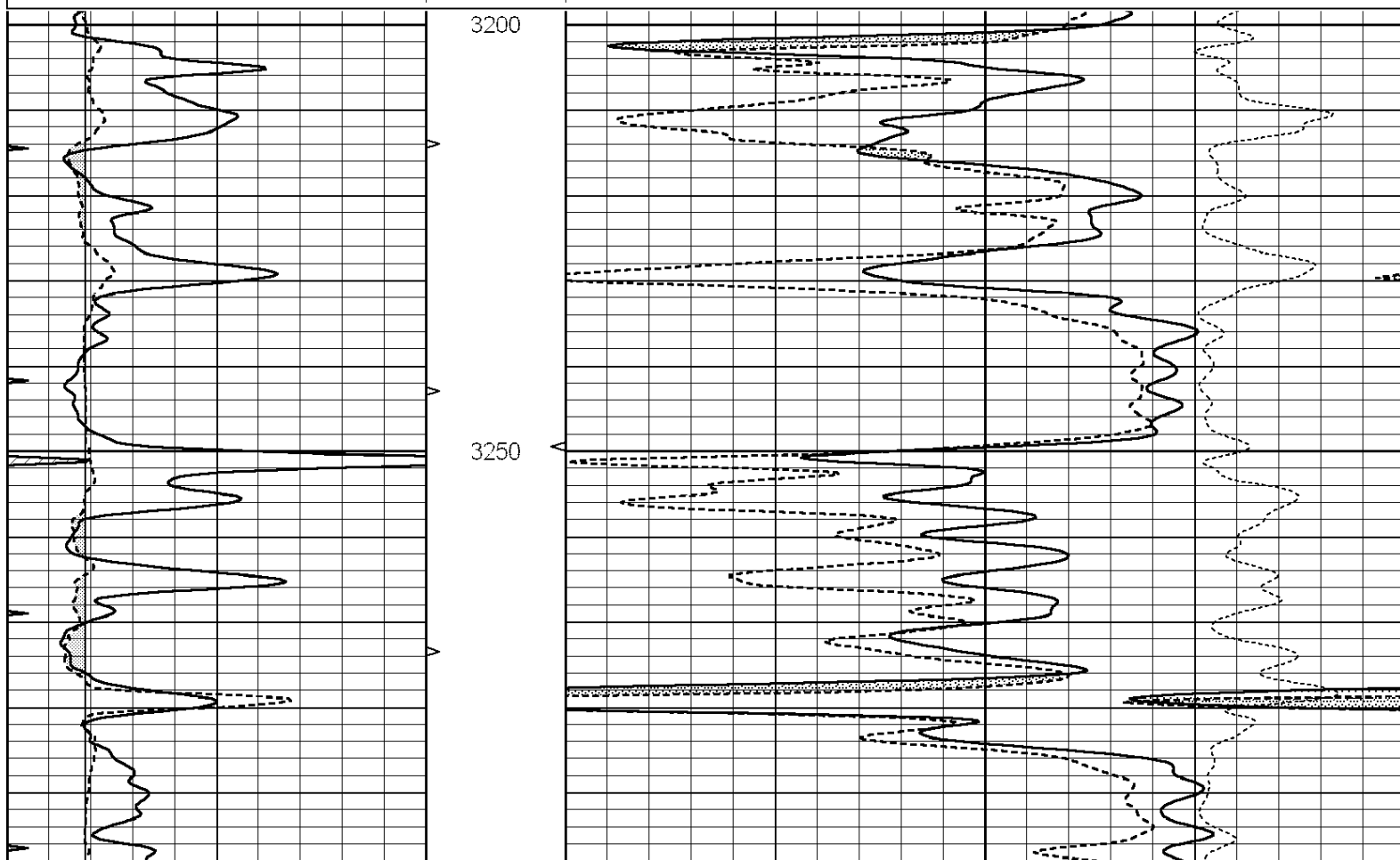
|                                                                                |                  |     |                                                                                  |      |                          |                   |      |
|--------------------------------------------------------------------------------|------------------|-----|----------------------------------------------------------------------------------|------|--------------------------|-------------------|------|
|  |                  |     |  |      |                          |                   |      |
| LTD 3438                                                                       |                  |     |                                                                                  |      |                          |                   |      |
| 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   |                          |                   |      |

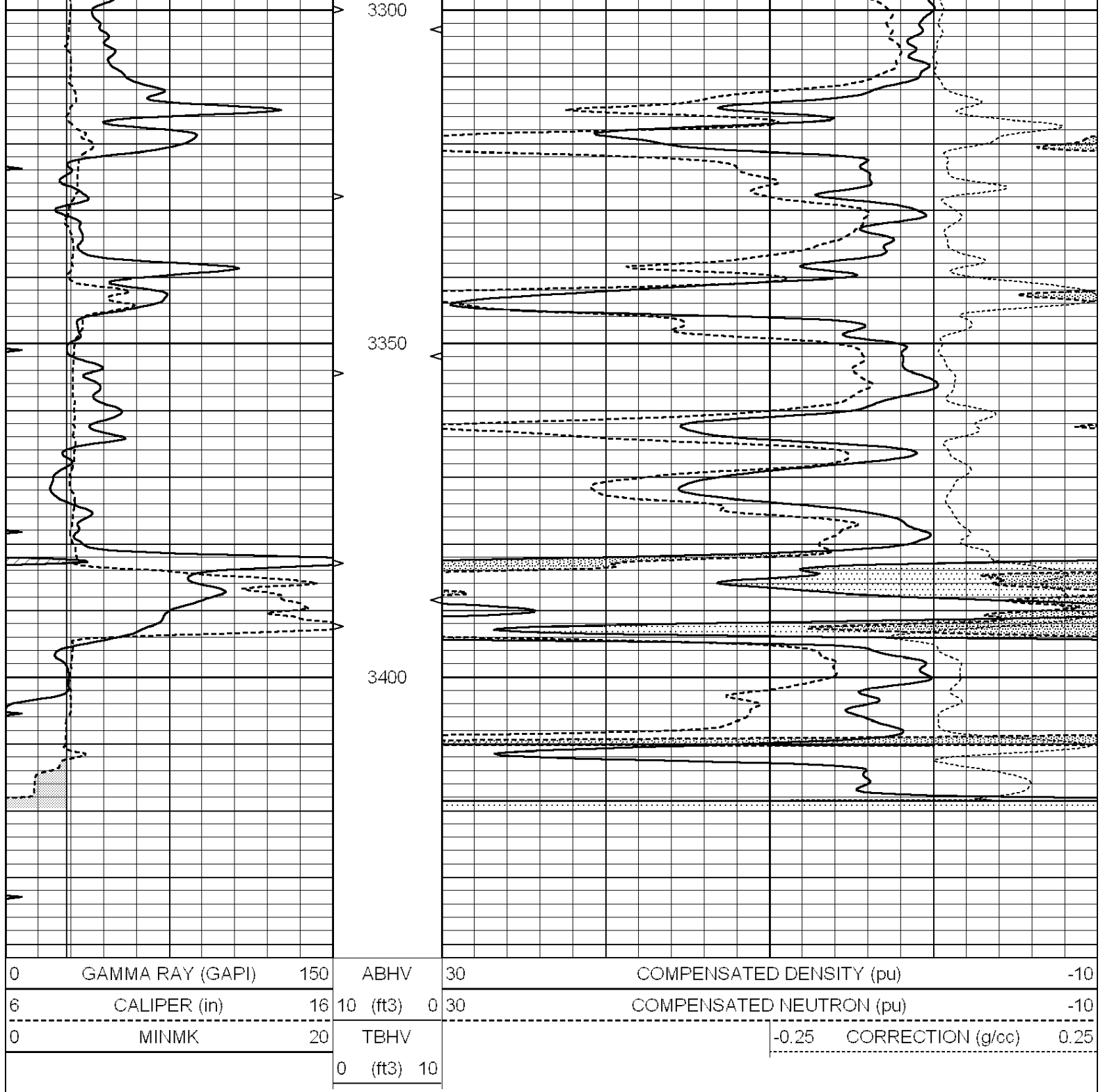


# REPEAT SECTION

Database File: 2947ddn.db  
 Dataset Pathname: pass2.4  
 Presentation Format: den\_neu  
 Dataset Creation: Wed Oct 24 11:56:11 2018 by Calc SOC 120430  
 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   |                          |                        |





| Calibration Report                   |     |                                            |     |            |   |
|--------------------------------------|-----|--------------------------------------------|-----|------------|---|
| Database File:                       |     | 1598ddn.db                                 |     |            |   |
| Dataset Pathname:                    |     | pass4                                      |     |            |   |
| Dataset Creation:                    |     | Wed Aug 30 02:13:00 2017 by Log SOC 120430 |     |            |   |
| Dual Induction Calibration Report    |     |                                            |     |            |   |
| Serial-Model:                        |     | PROBE7-DILG                                |     |            |   |
| Surface Cal Performed:               |     | Wed Aug 30 00:06:33 2017                   |     |            |   |
| Downhole Cal Performed:              |     | Mon Jul 28 12:02:56 2008                   |     |            |   |
| After Survey Verification Performed: |     | Mon Jul 28 12:02:56 2008                   |     |            |   |
| Surface Calibration                  |     |                                            |     |            |   |
|                                      |     | Readings                                   |     | References |   |
|                                      |     |                                            |     | Results    |   |
| Loop:                                | Air | Loop                                       | Air | Loop       | h |

|           |        |       |   |       |         |        |         |         |
|-----------|--------|-------|---|-------|---------|--------|---------|---------|
| Loop:     | Air    | Loop  |   | Air   | Loop    |        | m       | b       |
| Deep      | -0.014 | 0.629 | V | 0.000 | 400.000 | mmho/m | 620.000 | 0.000   |
| Medium    | 0.039  | 0.728 | V | 0.000 | 464.000 | mmho/m | 675.000 | -44.000 |
| Internal: | Zero   | Cal   |   | Zero  | Cal     |        | m       | b       |
| Deep      | 0.011  | 0.610 | V | 0.000 | 400.000 | mmho/m | 667.135 | -7.256  |
| Medium    | 0.005  | 0.712 | V | 0.000 | 464.000 | mmho/m | 655.677 | -3.102  |

|                      |          |        |        |            |          |        |         |       |
|----------------------|----------|--------|--------|------------|----------|--------|---------|-------|
| Downhole Calibration |          |        |        |            |          |        |         |       |
|                      | Readings |        |        | References |          |        | Results |       |
|                      | Zero     | Cal    |        | Zero       | Cal      |        | m'      | b'    |
| Deep                 | 0.000    | 0.000  | mmho/m | 14.508     | 388.384  | mmho/m | 1.000   | 0.000 |
| Medium               | 0.000    | 0.000  | mmho/m | 166.367    | 504.400  | mmho/m | 1.000   | 0.000 |
| LL3                  |          | 7.500  | V      |            | 1400.000 | Ohm-m  |         |       |
|                      |          | 0.000  | V      |            | 20.000   | Ohm-m  |         |       |
|                      |          | -7.200 | V      |            | 4000.000 | 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 |         |       |

|                                  |  |  |  |  |  |  |  |  |
|----------------------------------|--|--|--|--|--|--|--|--|
| Litho Density Calibration Report |  |  |  |  |  |  |  |  |
| Serial: 002      Model: PRB      |  |  |  |  |  |  |  |  |

|                    |            |             |         |                                    |  |           |  |      |
|--------------------|------------|-------------|---------|------------------------------------|--|-----------|--|------|
| Master Calibration |            |             |         | Performed Mon Aug 21 11:27:42 2017 |  |           |  |      |
|                    | Background | Magnesium   |         | Aluminum                           |  | Sandstone |  |      |
| Window 1           | 837.1      | 10632.5     |         | 2945.1                             |  | 12110.1   |  | cps  |
| Window 2           | 772.0      | 9117.4      |         | 2570.1                             |  | 10197.3   |  | cps  |
| Window 3           | 631.7      | 4669.0      |         | 1481.9                             |  | 5042.9    |  | cps  |
| Window 4           | 187.0      | 187.5       |         | 185.9                              |  | 189.9     |  | cps  |
| Long Space         | 0.0        | 8345.4      |         | 1798.1                             |  | 9425.3    |  | cps  |
| Short Space        | 1.1        | 1927.9      |         | 1285.9                             |  | 2050.2    |  | cps  |
| Rho                |            | 1.7100      |         | 2.5960                             |  | 1.3800    |  | g/cc |
| Pe                 |            | 0.0000      |         | 2.5700                             |  | 1.5500    |  |      |
| Rib Angle          | : 45.2     | Rib Slope   | : 1.008 | Density/Spine Ratio                |  | : 0.558   |  |      |
| Spine Angle        | : 75.2     | Spine Slope | : 3.790 | Spine Intercept                    |  | : -19.6   |  |      |

|                            |     |        |  |                                    |  |        |  |      |
|----------------------------|-----|--------|--|------------------------------------|--|--------|--|------|
| Before Survey Verification |     |        |  | Performed Wed Dec 31 18:00:00 1969 |  |        |  |      |
| Window 1                   | 0.0 | 0.0    |  | 0.0                                |  | 0.0    |  | cps  |
| Window 2                   | 0.0 | 0.0    |  | 0.0                                |  | 0.0    |  | cps  |
| Window 3                   | 0.0 | 0.0    |  | 0.0                                |  | 0.0    |  | cps  |
| Window 4                   | 0.0 | 0.0    |  | 0.0                                |  | 0.0    |  | cps  |
| Long Space                 | 0.0 | 0.0    |  | 0.0                                |  | 0.0    |  | cps  |
| Short Space                | 0.0 | 0.0    |  | 0.0                                |  | 0.0    |  | cps  |
| Measured Rho               |     | 0.0000 |  | 0.0000                             |  | 0.0000 |  | g/cc |
| Measured Correction        |     | 0.0000 |  | 0.0000                             |  | 0.0000 |  | g/cc |
| Measured Pe                |     |        |  | 0.0000                             |  | 0.0000 |  |      |

|                           |  |  |  |                                    |  |  |  |  |
|---------------------------|--|--|--|------------------------------------|--|--|--|--|
| After Survey Verification |  |  |  | Performed Wed Dec 31 18:00:00 1969 |  |  |  |  |
|---------------------------|--|--|--|------------------------------------|--|--|--|--|

|                     |     |        |        |        |      |
|---------------------|-----|--------|--------|--------|------|
| Window 1            | 0.0 | 0.0    | 0.0    | 0.0    | cps  |
| Window 2            | 0.0 | 0.0    | 0.0    | 0.0    | cps  |
| Window 3            | 0.0 | 0.0    | 0.0    | 0.0    | cps  |
| Window 4            | 0.0 | 0.0    | 0.0    | 0.0    | cps  |
| Long Space          | 0.0 | 0.0    | 0.0    | 0.0    | cps  |
| Short Space         | 0.0 | 0.0    | 0.0    | 0.0    | cps  |
| Measured Rho        |     | 0.0000 | 0.0000 | 0.0000 | g/cc |
| Measured Correction |     | 0.0000 | 0.0000 | 0.0000 | g/cc |
| Measured Pe         |     |        | 0.0000 | 0.0000 |      |

|                                        |
|----------------------------------------|
| Compensated Neutron Calibration Report |
|----------------------------------------|

|                |        |
|----------------|--------|
| Serial Number: | 070808 |
| Tool Model:    | Probe  |

| PRE-SURVEY VERIFICATION |          |          |        |  |
|-------------------------|----------|----------|--------|--|
| Detector                | Readings | Measured | Target |  |
| Short Space             | cps      |          |        |  |
| Long Space              | cps      | pu       | pu     |  |

| POST-SURVEY VERIFICATION |          |          |        |  |
|--------------------------|----------|----------|--------|--|
| Detector                 | Readings | Measured | Target |  |
| Short Space              | cps      |          |        |  |
| Long Space               | cps      | pu       | pu     |  |

|                              |
|------------------------------|
| Gamma Ray Calibration Report |
|------------------------------|

|                     |                          |          |
|---------------------|--------------------------|----------|
| Serial Number:      | 070558                   |          |
| Tool Model:         | OPEN_GR                  |          |
| Performed:          | Wed May 31 00:09:32 2017 |          |
| Calibrator Value:   | 1.0                      | GAPI     |
| Background Reading: | 0.0                      | cps      |
| Calibrator Reading: | 1.0                      | cps      |
| Sensitivity:        | 0.2800                   | GAPI/cps |