



Pioneer Energy Services

## Dual Compensated Porosity Log

|                        |                                      |                         |                           |
|------------------------|--------------------------------------|-------------------------|---------------------------|
| API No.                | 15-053-21,302-00-00                  |                         |                           |
| Company                | American Warrior, Inc.               |                         |                           |
| Well                   | Grubb Unit No. 2-5                   |                         |                           |
| Field                  | Stoltenberg                          |                         |                           |
| County                 | Ellsworth                            |                         |                           |
| State                  | Kansas                               |                         |                           |
| Location               | SE-NE-NE-SW<br>2296' FSL & 2611' FEL |                         |                           |
| Sec: 5                 | Twp: 16S                             | Rge: 10W                | Other Services<br>DIL/MEI |
| Permanent Datum        | Ground Level                         | Elevation 1835          | K.B. 1843                 |
| Log Measured From      | Kelly Bushing                        | 8 Ft. Above Perm. Datum | D.F. 1835                 |
| Drilling Measured From | Kelly Bushing                        |                         | G.L. 1835                 |

|                        |               |  |  |
|------------------------|---------------|--|--|
| Date                   | 1/19/14       |  |  |
| Run Number             | One           |  |  |
| Type Log               | CNL / CDL     |  |  |
| Depth Driller          | 3420          |  |  |
| Depth Logger           | 3420          |  |  |
| Bottom Logged Interval | 3399          |  |  |
| Top Logged Interval    | 2650          |  |  |
| Type Fluid In Hole     | Chemical      |  |  |
| Salinity, PPM CL       | 6.100         |  |  |
| Density                | 9.6           |  |  |
| Level                  | Full          |  |  |
| Max. Rec. Temp. F      | 110           |  |  |
| Operating Rig Time     | 3 1/2 Hours   |  |  |
| Equipment -- Location  | 108 Hays      |  |  |
| Recorded By            | J. Henrickson |  |  |
| Witnessed By           | Wyatt Urban   |  |  |

| Borehole Record |       |      |     | Casing Record |      |      |     |
|-----------------|-------|------|-----|---------------|------|------|-----|
| Run No.         | Bit   | From | To  | Size          | Wgt. | From | To  |
| One             | 12.25 | 00   | 343 | 8.625         | 23#  | 00   | 343 |
| Two             | 7.875 | 343  | TD  |               |      |      |     |
|                 |       |      |     |               |      |      |     |
|                 |       |      |     |               |      |      |     |
|                 |       |      |     |               |      |      |     |
|                 |       |      |     |               |      |      |     |
|                 |       |      |     |               |      |      |     |
|                 |       |      |     |               |      |      |     |
|                 |       |      |     |               |      |      |     |

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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 Log-Tech, Inc.  
(785) 625-3858

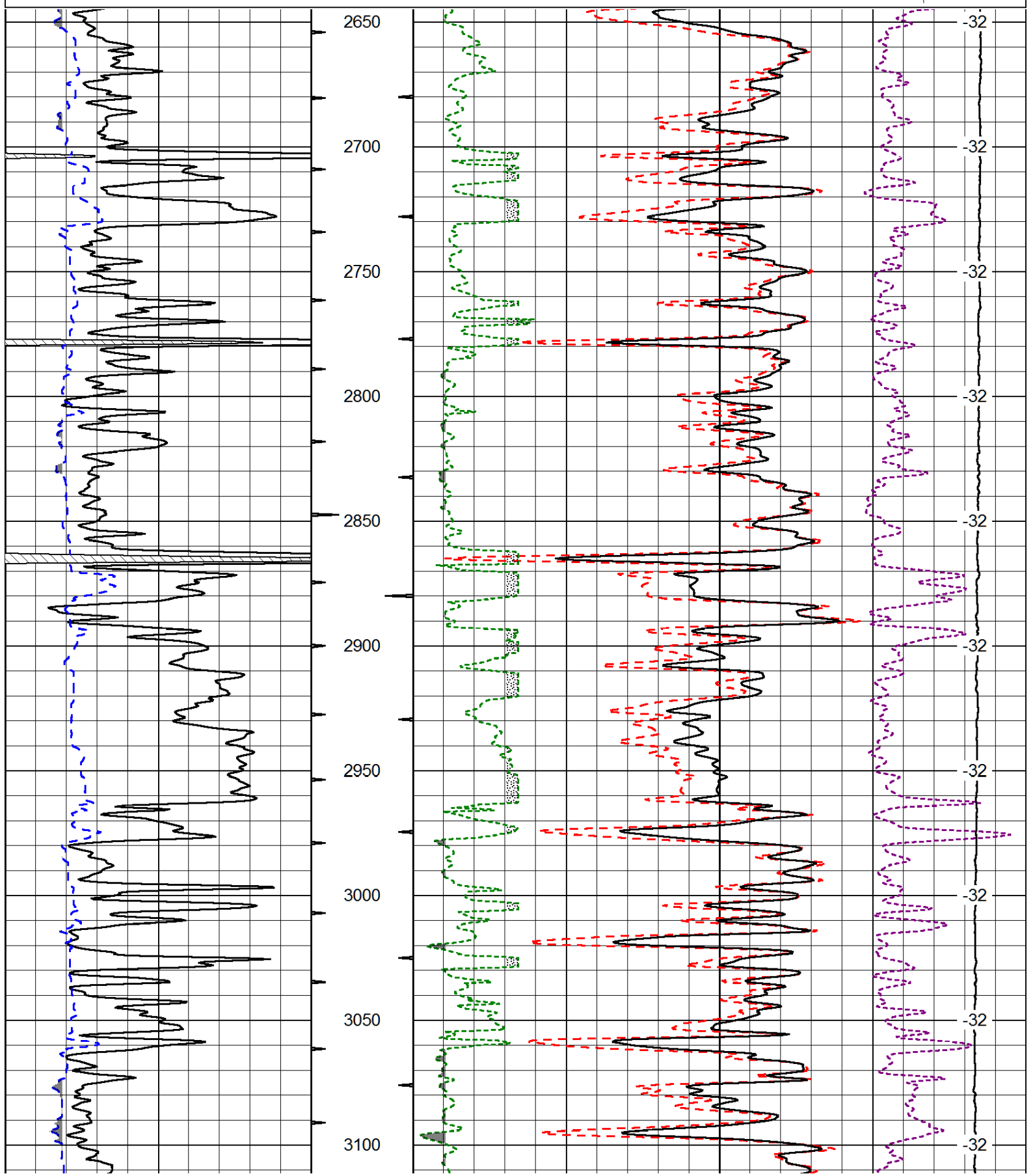
Wilson Kansas  
10 South, 1 1/2 East, North Into at Tank Batteries

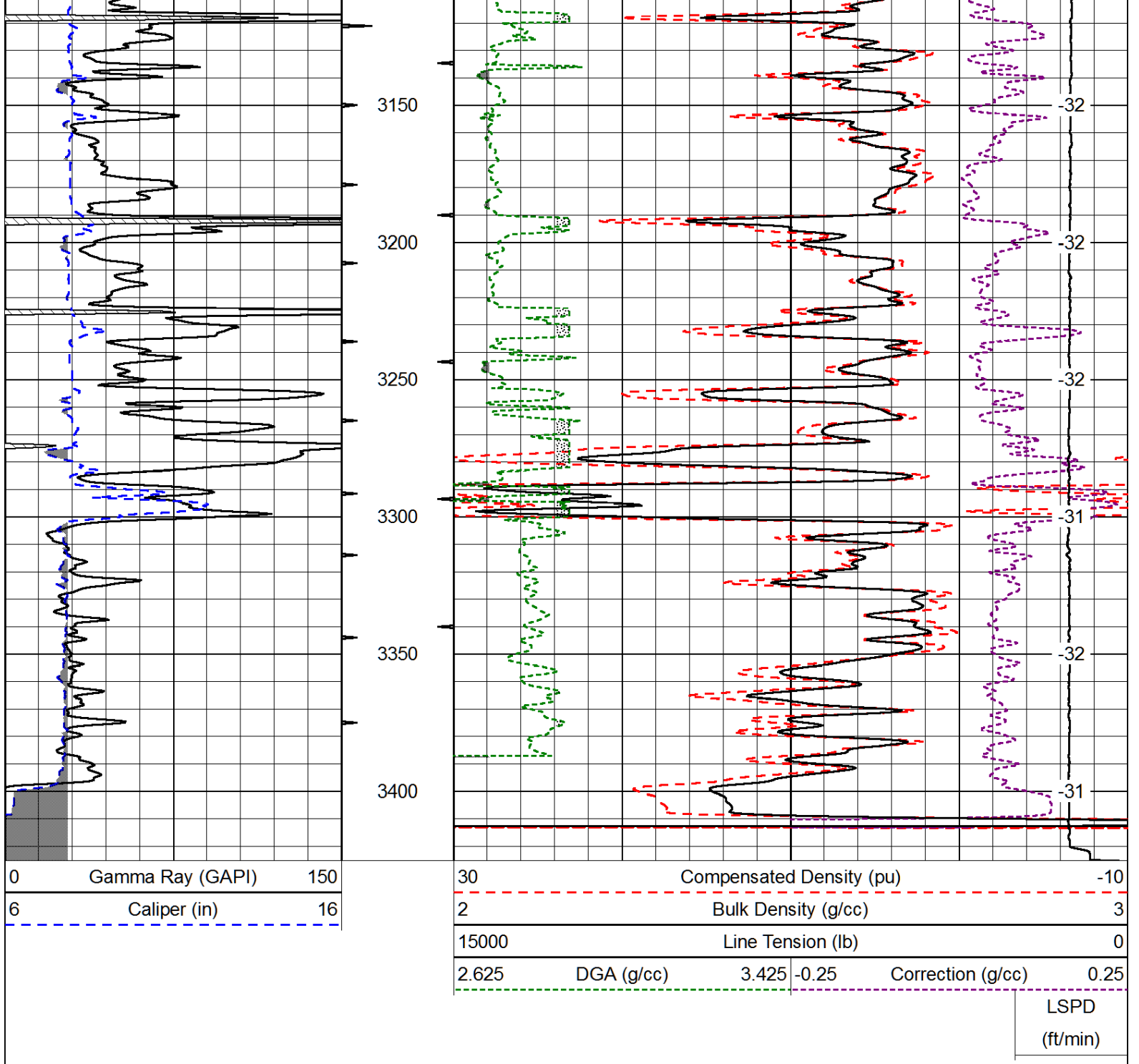
Database File: american\_warrior\_grubb\_unit\_2\_5hd.db  
 Dataset Pathname: DIL/awstk  
 Presentation Format: cdl  
 Dataset Creation: Sun Jan 19 05:13:33 2014  
 Charted by: Depth in Feet scaled 1:600

|   |                  |     |
|---|------------------|-----|
| 0 | Gamma Ray (GAPI) | 150 |
| 6 | Caliper (in)     | 16  |

|       |                          |       |       |
|-------|--------------------------|-------|-------|
| 30    | Compensated Density (pu) |       | -10   |
| 2     | Bulk Density (g/cc)      |       | 3     |
| 15000 | Line Tension (lb)        |       | 0     |
| 2.625 | DGA (g/cc)               | 3.425 | -0.25 |
|       | Correction (g/cc)        |       | 0.25  |

LSPD  
(ft/min)





Database File: american\_warrior\_grubb\_unit\_2\_5hd.db  
 Dataset Pathname: DIL/awstk  
 Presentation Format: cndlspec  
 Dataset Creation: Sun Jan 19 05:13:33 2014  
 Charted by: Depth in Feet scaled 1:240

