



# Dual Compensated Porosity Log

Pioneer Energy Services

API No.

15-063-22, 105-00-00

Company H & C Oil Operating, Inc.  
Well Bentley-Rover Unit No.29-1  
Field Wildcat  
County Gove State Kansas

Location 2310' FNL & 2640' FEL

Sec: 29 Twp: 15S Rge: 27W

Other Services  
DIL/MEL

Permanent Datum Ground Level Elevation 2461  
Log Measured From Kelly Bushing 11 Ft. Above Perm. Datum  
Drilling Measured From Kelly Bushing

Elevation  
K.B. 2472  
D.F. 2461  
G.L. 2461

Date 8/1/2013

Run Number One

Type Log CNL / CDL

Depth Driller 4370

Depth Logger 4372

Bottom Logged Interval 4351

Top Logged Interval 3550

Type Fluid In Hole Chemical

Salinity, PPM CL 3,000

Density 9.4

Level Full

Max. Rec. Temp. F 120

Operating Rig Time 4 Hours

Equipment -- Location 17 Days

Recorded By C. Desaire

Witnessed By Marc Downing

Borehole Record

Casing Record

| Run No. | Bit   | From | To  | Size  | Wgt. | From | To  |
|---------|-------|------|-----|-------|------|------|-----|
| One     | 12.25 | 00   | 266 | 8.625 | 23#  | 00   | 266 |
| Two     | 7.875 | 266  | TD  |       |      |      |     |
|         |       |      |     |       |      |      |     |
|         |       |      |     |       |      |      |     |
|         |       |      |     |       |      |      |     |
|         |       |      |     |       |      |      |     |
|         |       |      |     |       |      |      |     |
|         |       |      |     |       |      |      |     |
|         |       |      |     |       |      |      |     |

<<< Fold Here >>>

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.

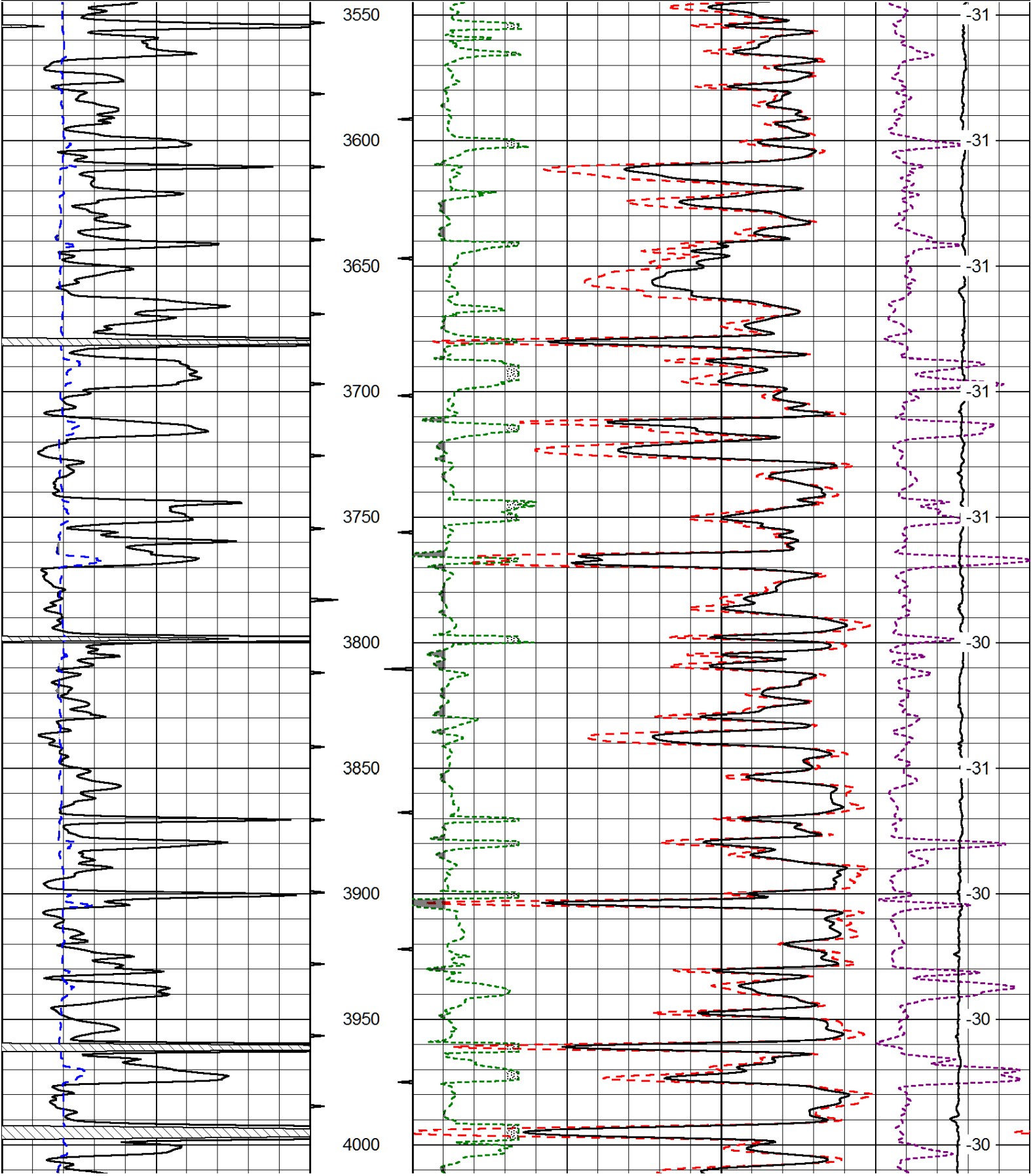
## Comments

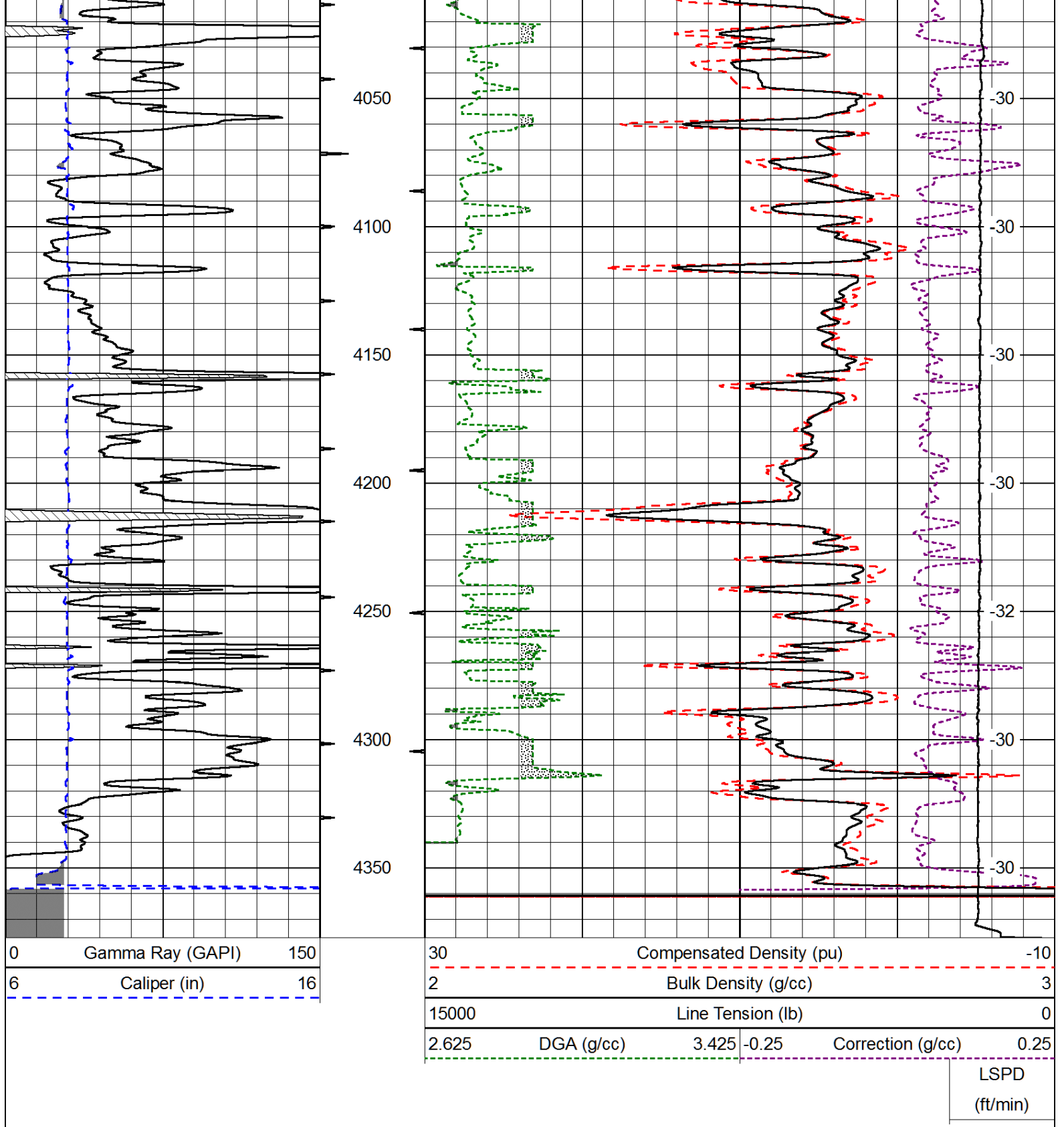
Thank you for using Log-Tech, Inc.  
(785) 625-3858

Pendennis KS, E Edge,  
N on Red Chief Rd to B Rd,  
1/2 WNW, N Into

|   |                  |     |
|---|------------------|-----|
| 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: hchd.db                     |  |  |  |
| Dataset Pathname: dil/hcstk                |  |  |  |
| Presentation Format: cndlspec              |  |  |  |
| Dataset Creation: Thu Aug 01 19:17:17 2013 |  |  |  |
| Charted by: Depth in Feet scaled 1:240     |  |  |  |

|   |                  |     |       |                                    |                                    |
|---|------------------|-----|-------|------------------------------------|------------------------------------|
| 0 | Gamma Ray (GAPI) | 150 | 30    | CNLS (pu)                          | -10                                |
| 6 | Caliper (in)     | 16  | 30    | Compensated Density (2.71 ma) (pu) | -10                                |
|   |                  |     | 2.625 | DGA (g/cc)                         | 3.425 -0.25 Correction (g/cc) 0.25 |
|   |                  |     | 10000 | Line Tension (lb)                  | 0                                  |

