



Pioneer Energy Services

## Dual Compensated Porosity Log

15-015-23,977-00-00

API No.

**Company** Range Oil Company, Inc.  
**Well** Breedlove A No.1  
**Field** Wildcat  
**County** Butler **State** Kansas

**Location** 1340' FSL & 4500' FEL

**Sec:** 30 **Twp:** 28S **Rge:** 8E

Other Services  
DIL  
BHCS

**Permanent Datum** Ground Level Elevation 1574  
**Log Measured From** Kelly Bushing 10 Ft. Above Perm. Datum  
**Drilling Measured From** Kelly Bushing

**Elevation**  
**K.B.** 1584  
**D.F.**  
**G.L.** 1574

Date	5/3/2013	
Run Number	One	
Type Log	CNL / CDL	
Depth Driller	3225	
Depth Logger	3225	
Bottom Logged Interval	3204	
Top Logged Interval	1600	
Type Fluid In Hole	Chemical	
Salinity, PPM CL	1,600	
Density	9.4	
Level	Full	
Max. Rec. Temp. F	108	
Operating Rig Time	3 1/2 Hours	
Equipment -- Location	17 Hays	
Recorded By	C. Desaire	
Witnessed By	John Washburn	Ken Wallace

**Borehole Record**

**Casing Record**

Run No.	Bit	From	To	Size	Wgt.	From	To
1	12.25	00	227	8.625	24#	00	227
2	7.875	227	3225				

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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.

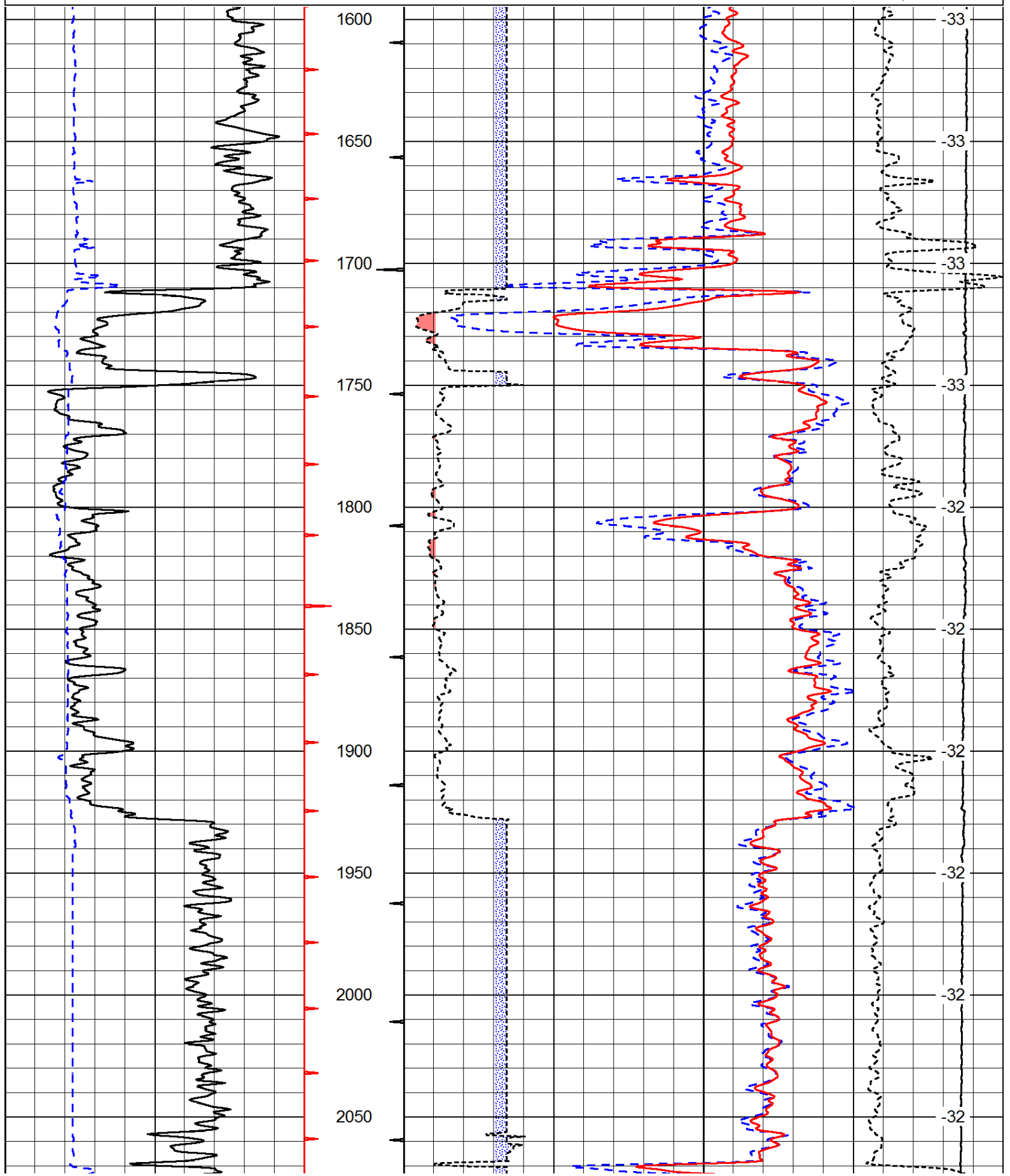
**Comments**

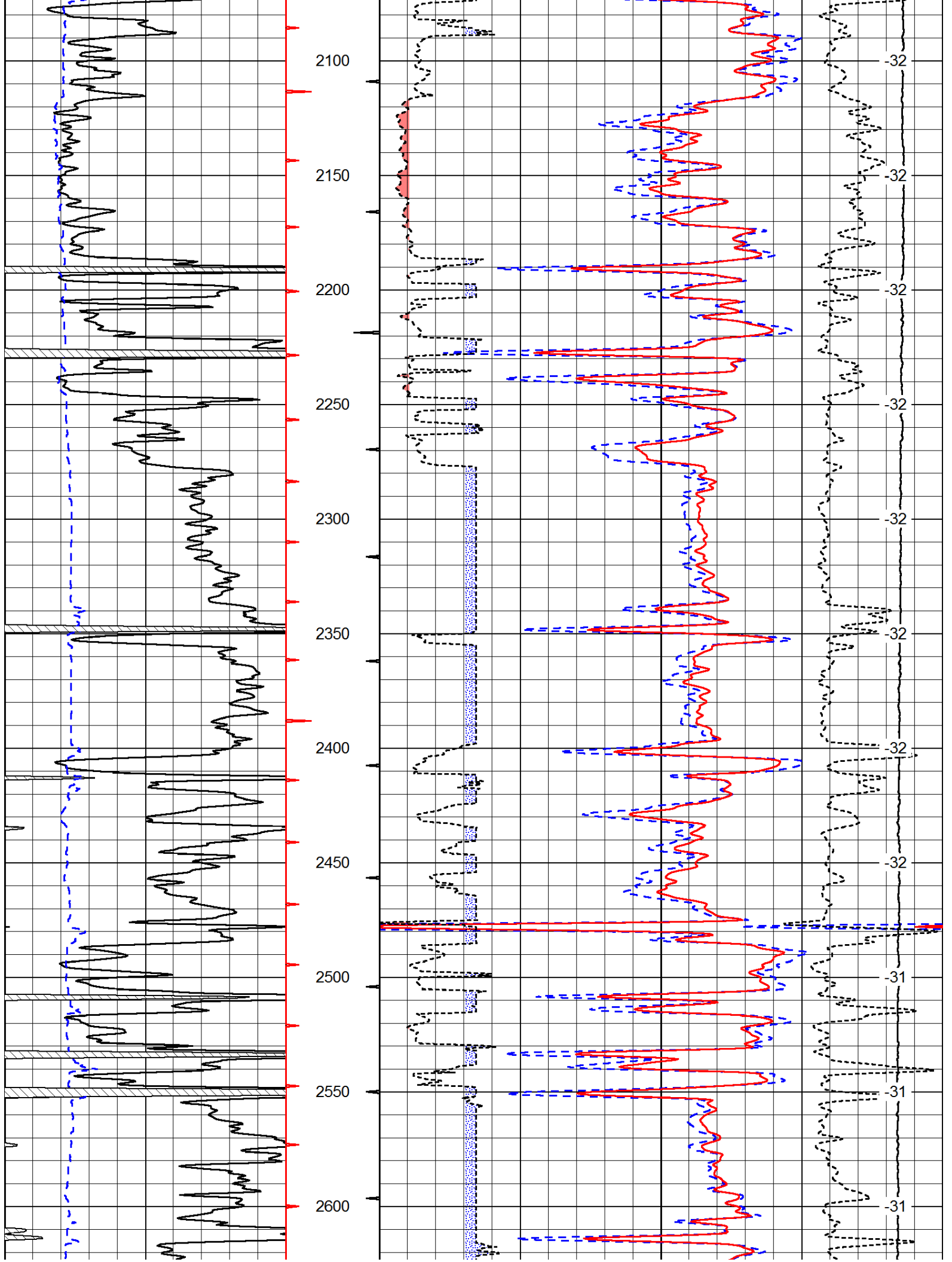
Thank you for using Pioneer Energy Services  
[www.pioneerenergy.com](http://www.pioneerenergy.com)  
 785 625 3858  
 Augusta KS, 17 E to Stony Creek Rd,  
 7 S to 180 Rd, 4 E to Tank Batt, E Side thru cttl grd, 1/2 N,  
 W thru gate, 3/4 N

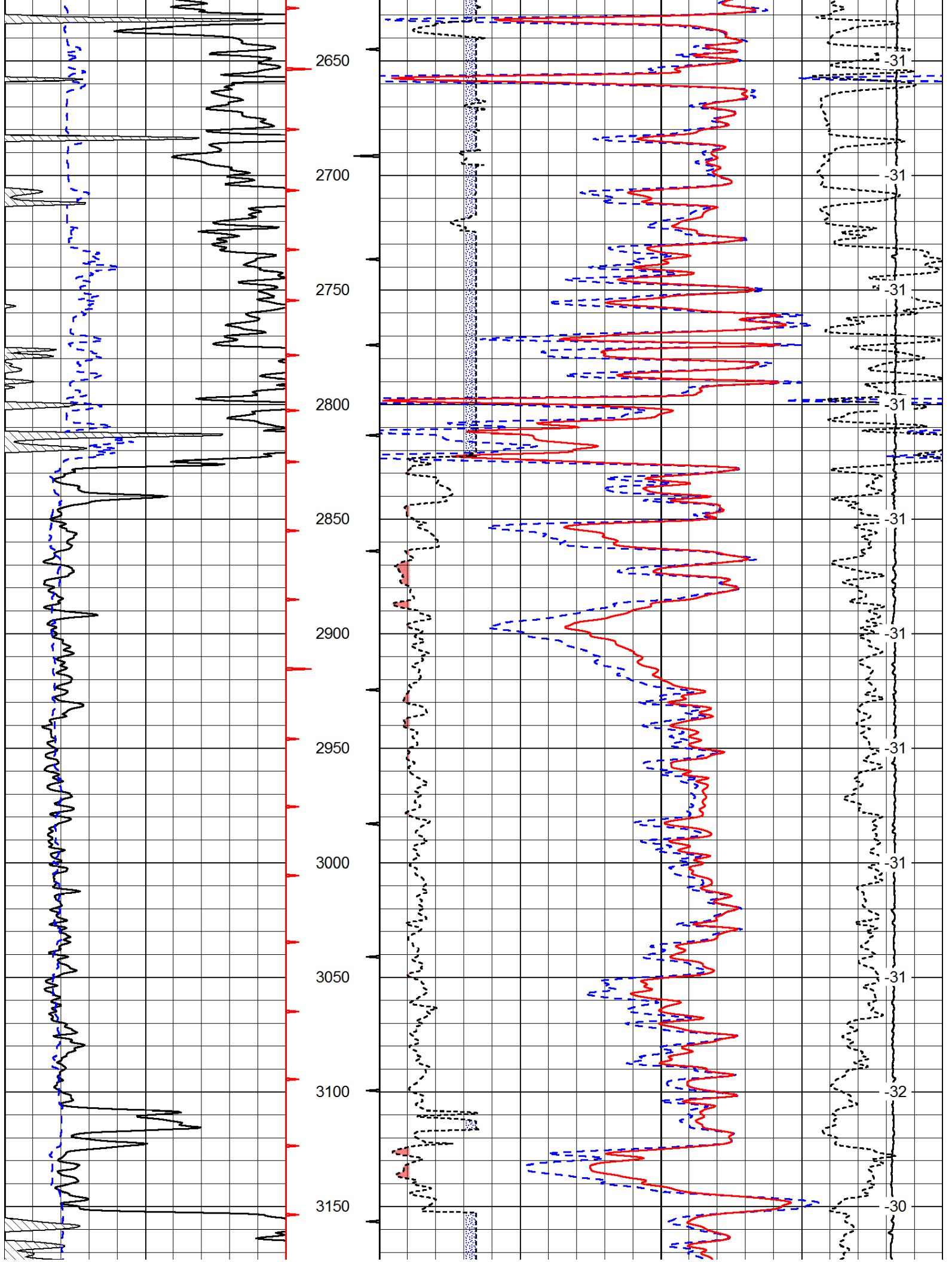
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 Dataset Pathname: dil/rngstk  
 Presentation Format: cdl  
 Dataset Creation: Sat May 04 00:51:57 2013  
 Charted by: Depth in Feet scaled 1:600

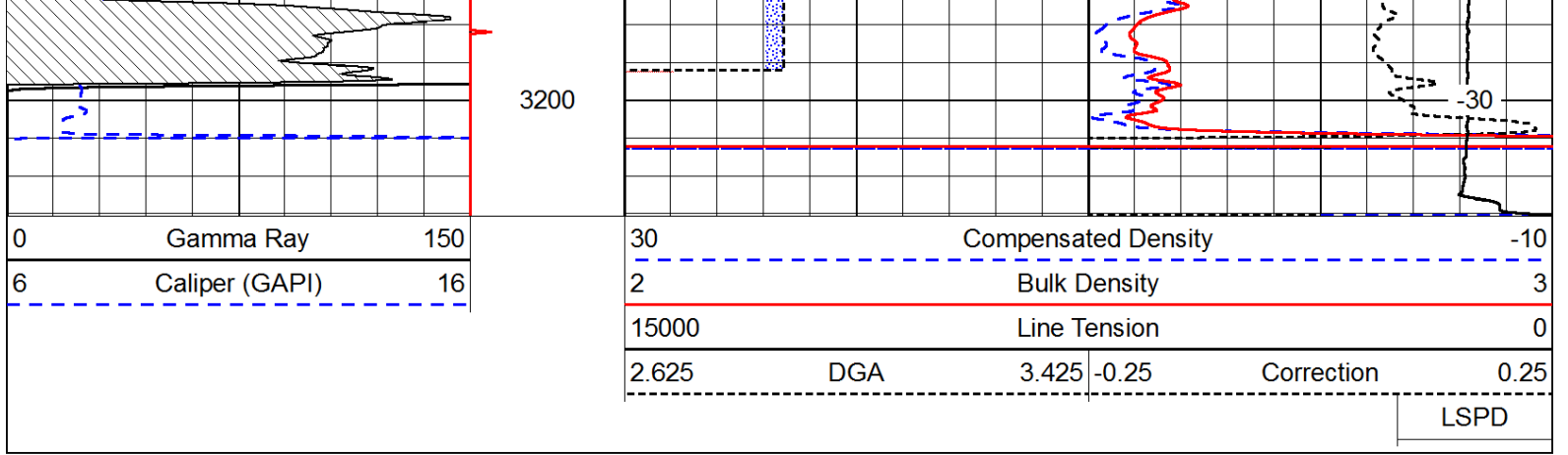
0	Gamma Ray	150
6	Caliper (GAPI)	16

30	Compensated Density		-10
2	Bulk Density		3
15000	Line Tension		0
2.625	DGA	3.425	-0.25
Correction			0.25
LSPD			









Database File: c:\warrior\data\range\_breedlove a #1\rangehd.db  
 Dataset Pathname: dil/rngstk  
 Presentation Format: cndlspec  
 Dataset Creation: Sat May 04 00:51:57 2013  
 Charted by: Depth in Feet scaled 1:240

