



Dual Compensated Porosity Log

Pioneer Energy Services

API No.

15-009-25,828-00-00

Company **Hupfer Operating, Inc.**
Well **Knop #A - 2**
Field **Chase - Silica**
County **Barton** State **Kansas**

Location **1560' FSL & 2065' FEL**
Sec: **32** Twp: **19 S** Rge: **11 W**

Other Services
DIL
MEI/BHCS

Permanent Datum **Ground Level** Elevation **1779**
Log Measured From **Kelly Bushing** 8 Ft. Above Perm. Datum
Drilling Measured From **Kelly Bushing**

Elevation
K.B. 1787
D.F. 1779
G.L. 1779

Date **5/29/2013**

Run Number **One**

Type Log **CNL / CDL**

Depth Driller **3366**

Depth Logger **3366**

Bottom Logged Interval **3345**

Top Logged Interval **2600**

Type Fluid In Hole **Chemical**

Salinity, PPM CL **5600**

Density **9.1**

Level **Full**

Max. Rec. Temp. F **112**

Operating Rig Time **4 1/2 Hours**

Equipment -- Location **91 Hays**

Recorded By **D. Martin**

Witnessed By **Kurt Talbott**

Borehole Record

Casing Record

Run No.	Bit	From	To	Size	Wgt.	From	To
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1	12.25	00	262	8.625	24#	00	262
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2	7.875	262	3366				
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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.

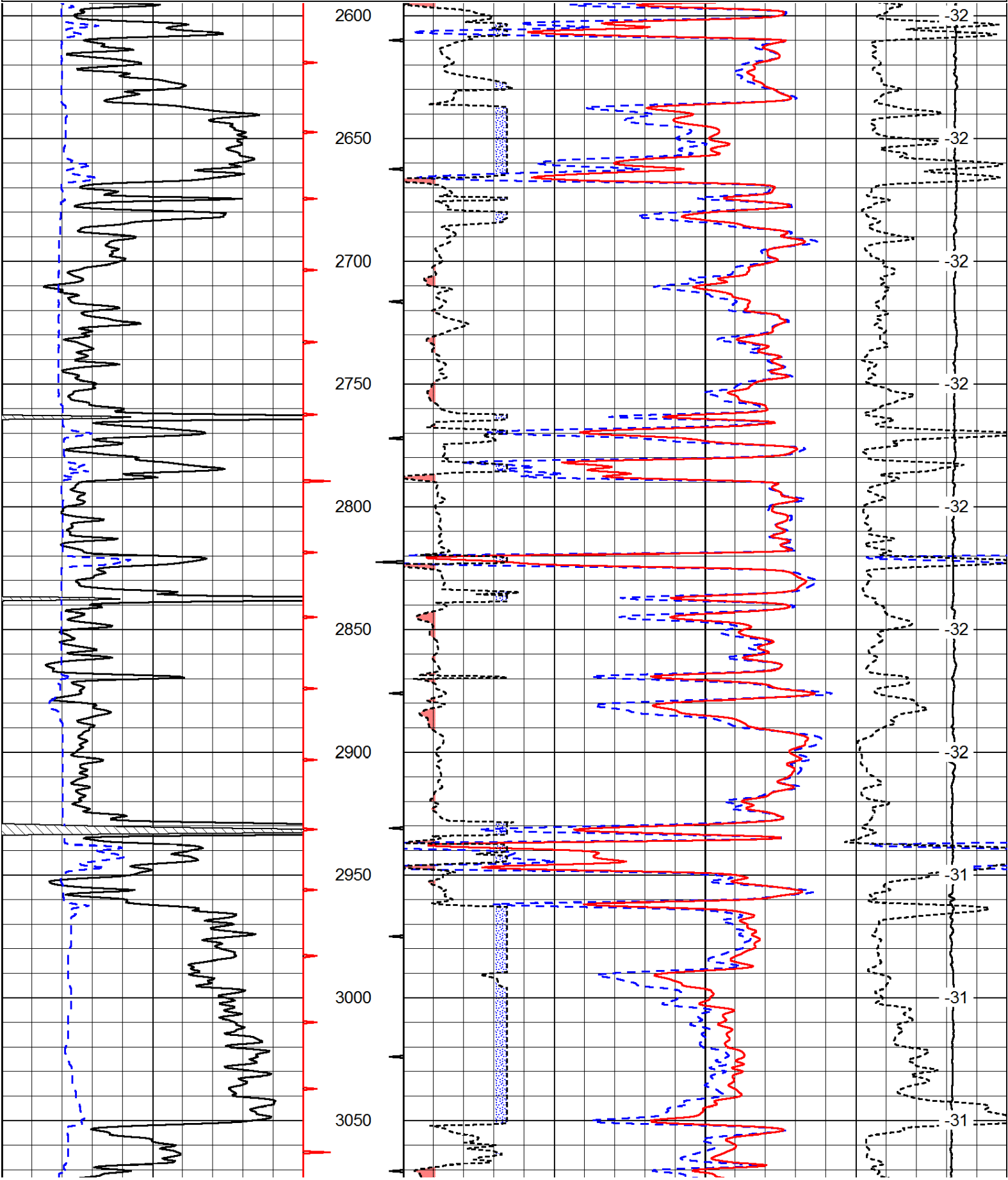
Comments

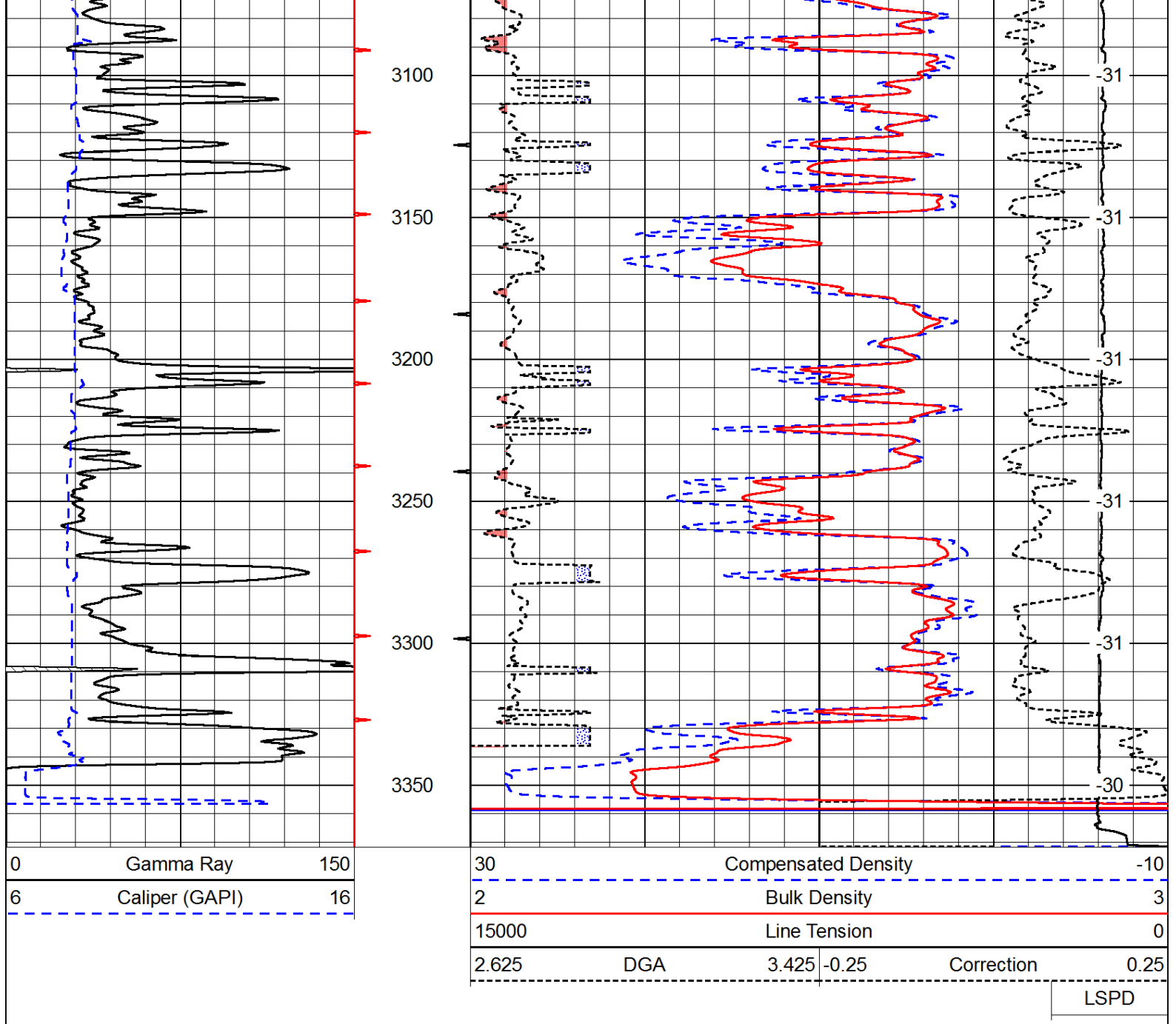
Thank you for using Pioneer Energy Services
www.pioneerres.com
785 625 3858
Ellinwood, KS
East Edge of town, S across RR tracks,
E Into

Database File: c:\warrior\data\hupfer_knop #a - 2\hupfer_knop_a-2hd.db
Dataset Pathname: dil/hupstk
Presentation Format: cdl
Dataset Creation: Thu May 30 00:01:22 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\hupfer_knop #a - 2\hupfer_knop_a-2hd.db
Dataset Pathname: dil/hupstk
Presentation Format: cndlspec
Dataset Creation: Thu May 30 00:01:22 2013
Charted by: Depth in Feet scaled 1:240

