



Dual Compensated Porosity Log

Pioneer Energy Services

API No.

15-101-22,409-00-00

Company Flatirons Resources LLC.

Well Copenhaver #13-22

Field Wildcat

County Lane

State Kansas

Location

2310' FSL & 330' FWL

Sec: 22 Twp: 16 S Rge: 28 W

Other Services
DIL
MEL

Permanent Datum Ground Level Elevation 2683

Log Measured From Kelly Bushing 10 Ft. Above Perm. Datum

Elevation
K.B. 2693
D.F.
G.L. 2683

Date 11/28/2012

Run Number One

Type Log CNL / CDL

Depth Driller 4600

Depth Logger 4605

Bottom Logged Interval 4584

Top Logged Interval 3600

Type Fluid In Hole Chemical

Salinity, PPM CL 1500

Density 9.0

Level Full

Max. Rec. Temp. F 122

Operating Rig Time 4 Hours

Equipment -- Location 15 Days

Recorded By D Kerr

Witnessed By Clayton Erickson

Borehole Record

Casing Record

Run No. Bit From To Size Wgt. From To

1 12.25 00 225 8.625 24# 00 225

2 7.875 225 4600

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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.

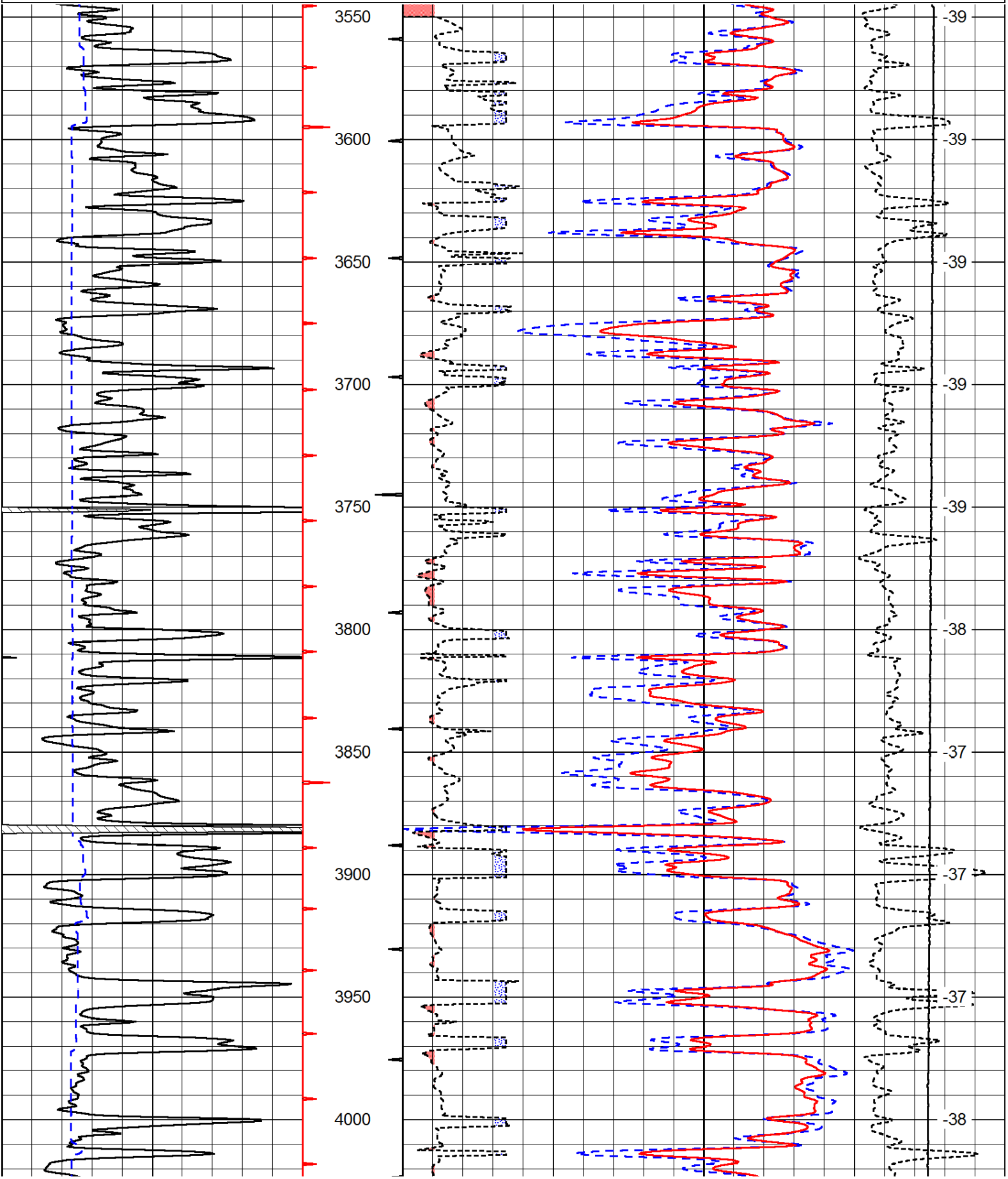
Comments

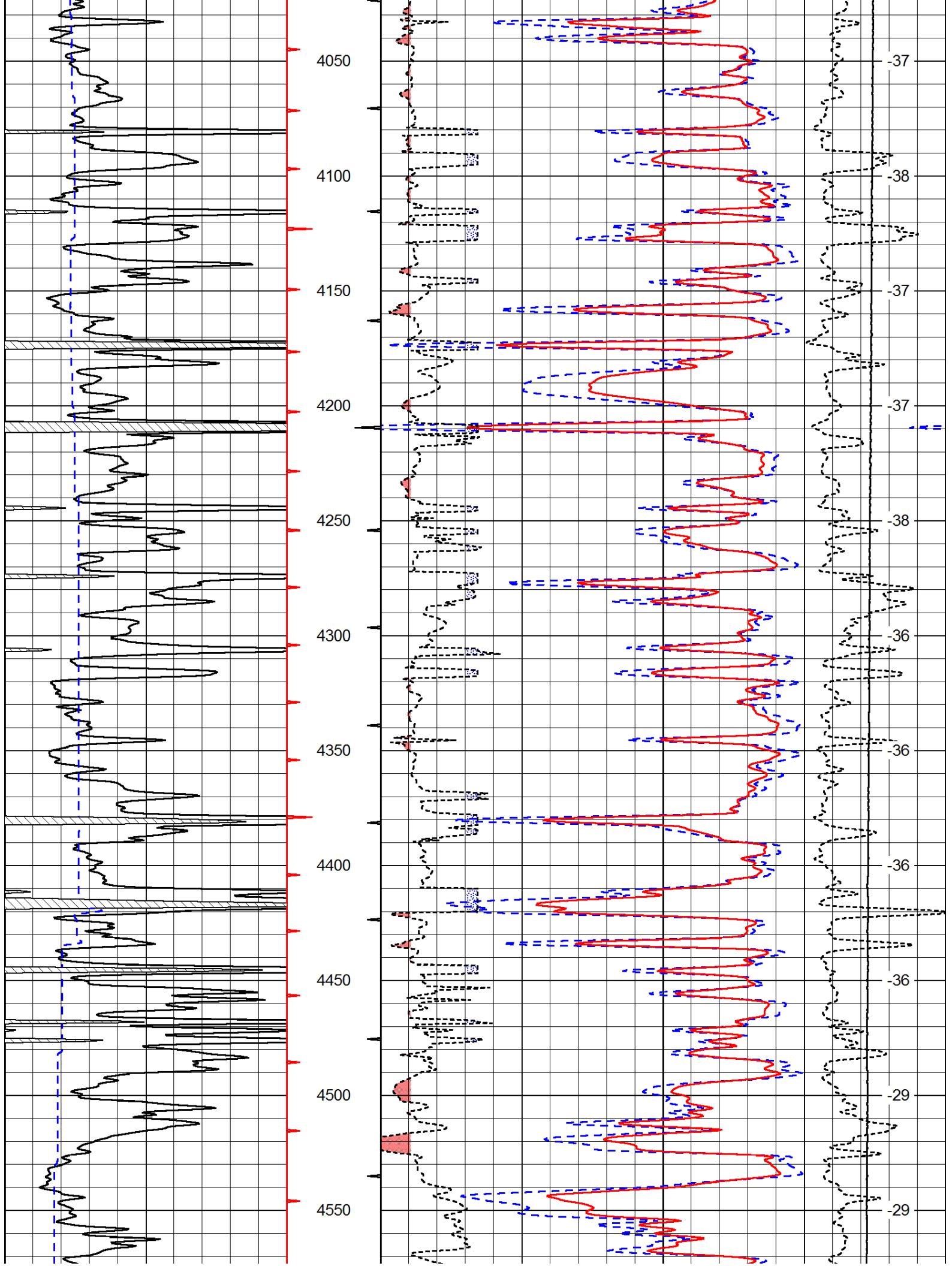
Thank you for using Pioneer Energy Services
www.pioneerres.com
785 625 3858
Shields KS, East to Loreda RD,
2 North, 3/4 East, Left at Y through Cattle Gate,
1 East North Into

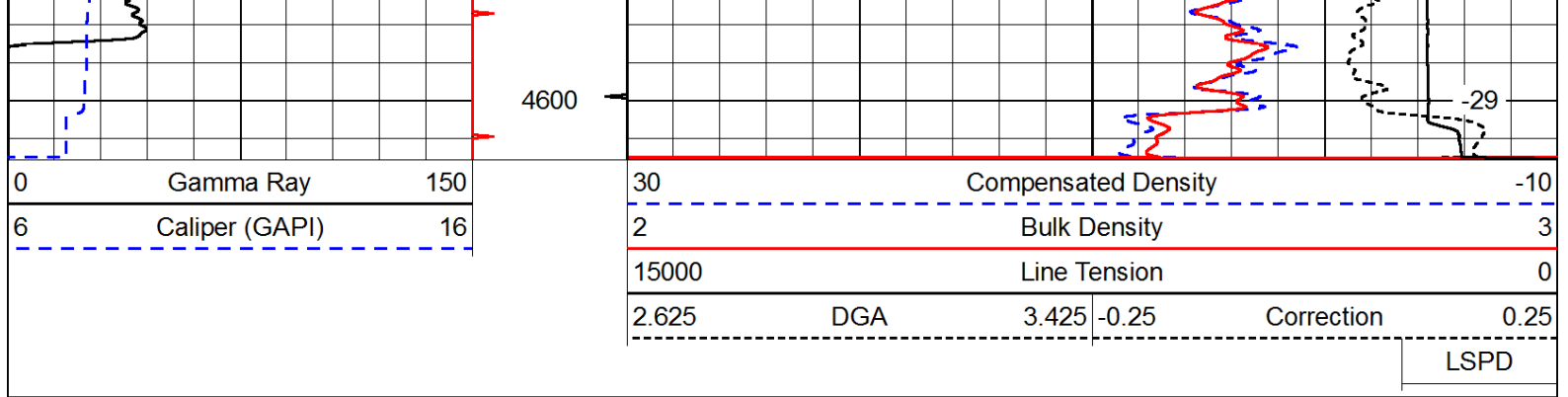
Database File: c:\warrior\data\flatirons_copenhaver #13-22\flatirons_copenhaver_1_32hd.db
Dataset Pathname: DIL/ftistk
Presentation Format: cdl
Dataset Creation: Wed Nov 28 16:32:15 2012
Charted by: Depth in Feet scaled 1:600

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\flatirons_copenhaver #13-22\flatirons_copenhaver_1_32hd.db
Dataset Pathname: DIL/ftistk
Presentation Format: cndlspec
Dataset Creation: Wed Nov 28 16:32:15 2012
Charted by: Depth in Feet scaled 1:240

