



Dual Compensated Porosity Log

Pioneer Energy Services

API No.

15-065-24046-00-00

Company **Cobalt Energy, LLC**
Well **Wasinger Trust A #1-21**
Field **N/A**
County **Graham** State **Kansas**

Location **910' FSL & 1718' FWL**
Sec: **21** Twp: **8S** Rge: **22W**

Other Services
DIL
MEI/BHCS

Permanent Datum **Ground Level** Elevation **2184**
Log Measured From **Kelly Bushing** 5 Ft. Above Perm. Datum
Drilling Measured From **Kelly Bushing**

Elevation
K.B. 2189
D.F.
G.L. 2184

Date **06/10/2014**

Run Number **One**

Type Log **CNL / CDL**

Depth Driller **3710**

Depth Logger **3707**

Bottom Logged Interval **3686**

Top Logged Interval **3100**

Type Fluid In Hole **Chemical**

Salinity, PPM CL **1400**

Density **8.8**

Level **Full**

Max. Rec. Temp. F **115**

Operating Rig Time **6 Hours**

Equipment -- Location **91 Hays**

Recorded By **M. Beougher**

Witnessed By **D. Schmidt**

Corey Baker

Borehole Record

Casing Record

Run No. Bit From To Size Wgt. From To

1 12.25 00 221 8.625 24# 00 221

2 7.875 221 3710

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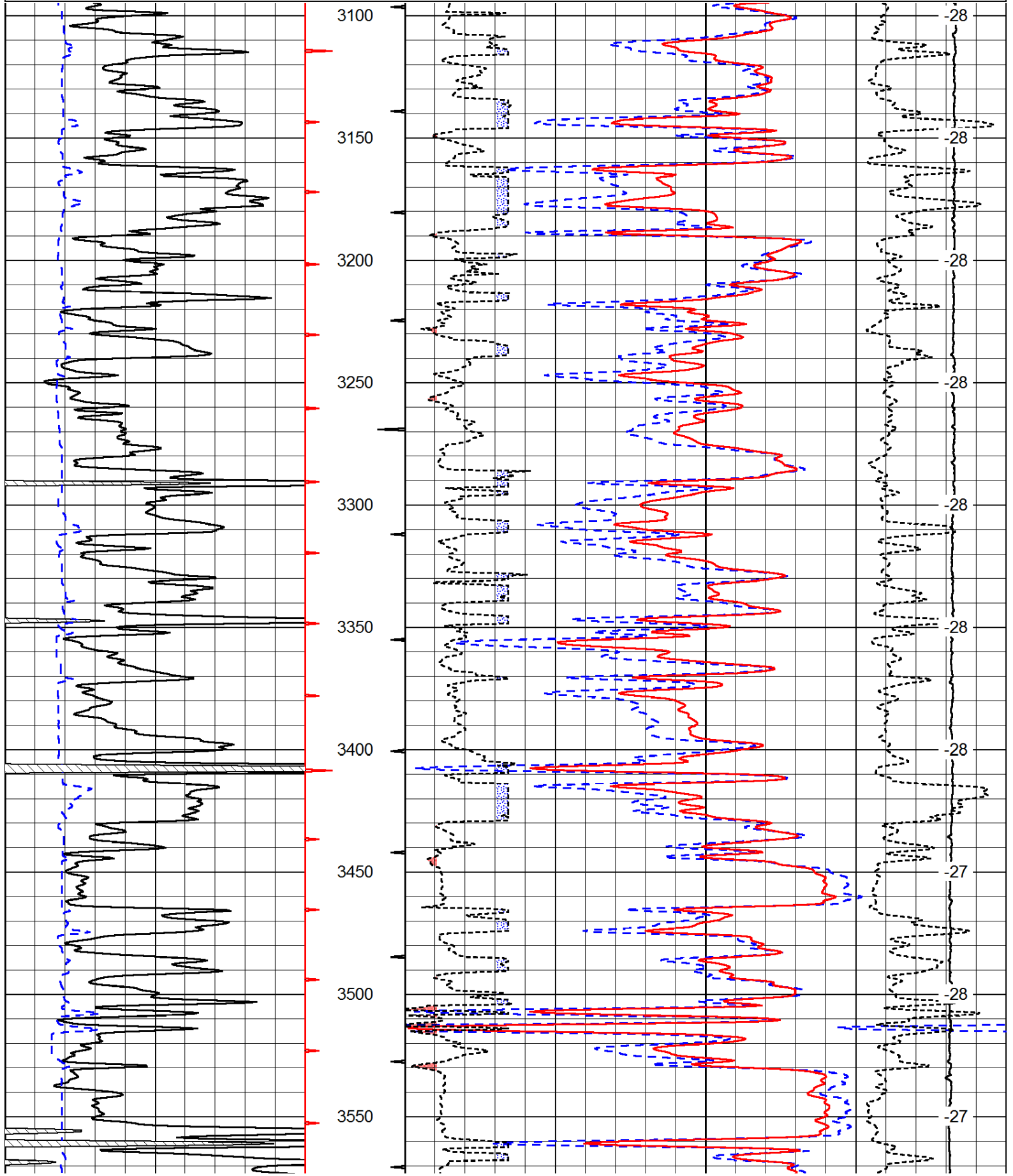
All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs, 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.

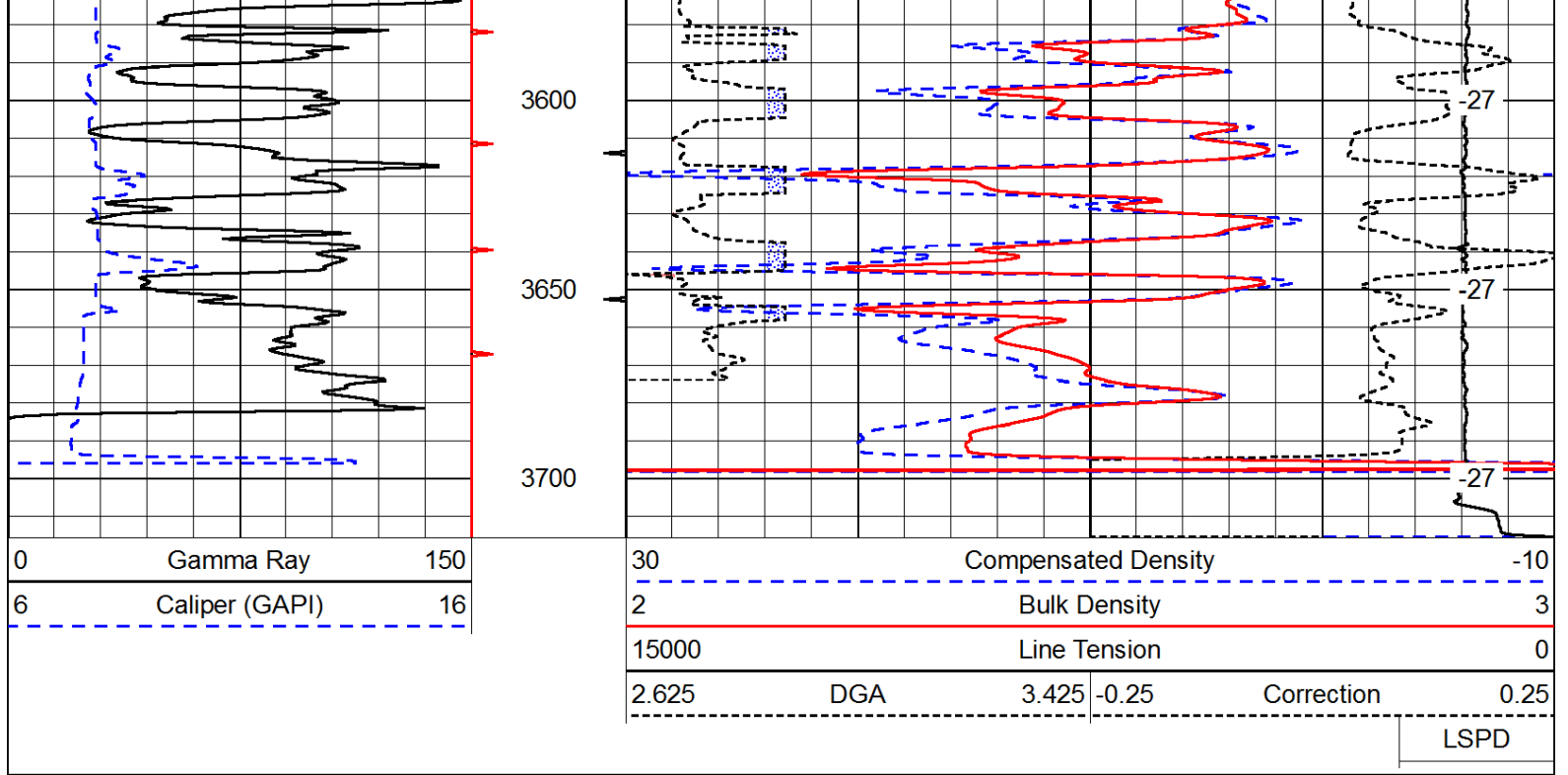
Comments

Thank you for using Pioneer Energy Services
www.pioneerres.com
785 625 3858
Hill City,
South to Rd 4392, East to TH Ave,
South to O Rd, 1 1/4 East,
North into

Database File: c:\warrior\data\cobalt_wasinger trust a #1-21\cobalt_wasinger_1-21hd.db
Dataset Pathname: dil/costack
Presentation Format: cdl
Dataset Creation: Tue Jun 10 10:58:16 2014
Charted by: Depth in Feet scaled 1:600

Charted by: Depth in Feet scaled 1:600					
0	Gamma Ray	150	30	Compensated Density	-10
6	Caliper (GAPI)	16	2	Bulk Density	3
			15000	Line Tension	0
			2.625	DGA	3.425
			-0.25	Correction	0.25
			LSPD		





Database File: c:\warrior\data\cobalt_wasinger trust a #1-21\cobalt_wasinger_1-21hd.db
Dataset Pathname: dil/costack
Presentation Format: cndlspec
Dataset Creation: Tue Jun 10 10:58:16 2014
Charted by: Depth in Feet scaled 1:240

