



Pioneer Energy Services

Dual Compensated Porosity Log

15-179-21,346-00-00

API No.

Company **Cobalt Energy, LLC**
 Well **Marx "A" #1-24**
 Field **Allodium**
 County **Sheridan** State **Kansas**

Location **833' FSL & 763' FEL**

Sec: **24** Twp: **6S** Rge: **26W**

Other Services
DIL

Permanent Datum **Ground Level** Elevation **2598**
 Log Measured From **Kelly Bushing** **5** Ft. Above Perm. Datum
 Drilling Measured From **Kelly Bushing**

Elevation
K.B. **2603**
D.F. **2598**
G.L. **2598**

Date	1/8/2014
Run Number	One
Type Log	CNL / CDL
Depth Driller	3933
Depth Logger	3932
Bottom Logged Interval	3911
Top Logged Interval	3400
Type Fluid In Hole	Chemical
Salinity, PPM CL	1500
Density	9.1
Level	Full
Max. Rec. Temp. F	115
Operating Rig Time	2 1/2 Hours
Equipment -- Location	108 Hays
Recorded By	J. Long
Witnessed By	Paul Gunzelman

Borehole Record				Casing Record			
Run No.	Bit	From	To	Size	Wgt.	From	To
1	12.25	00	316	8.625	24#	00	316
2	7.875	316	3933				

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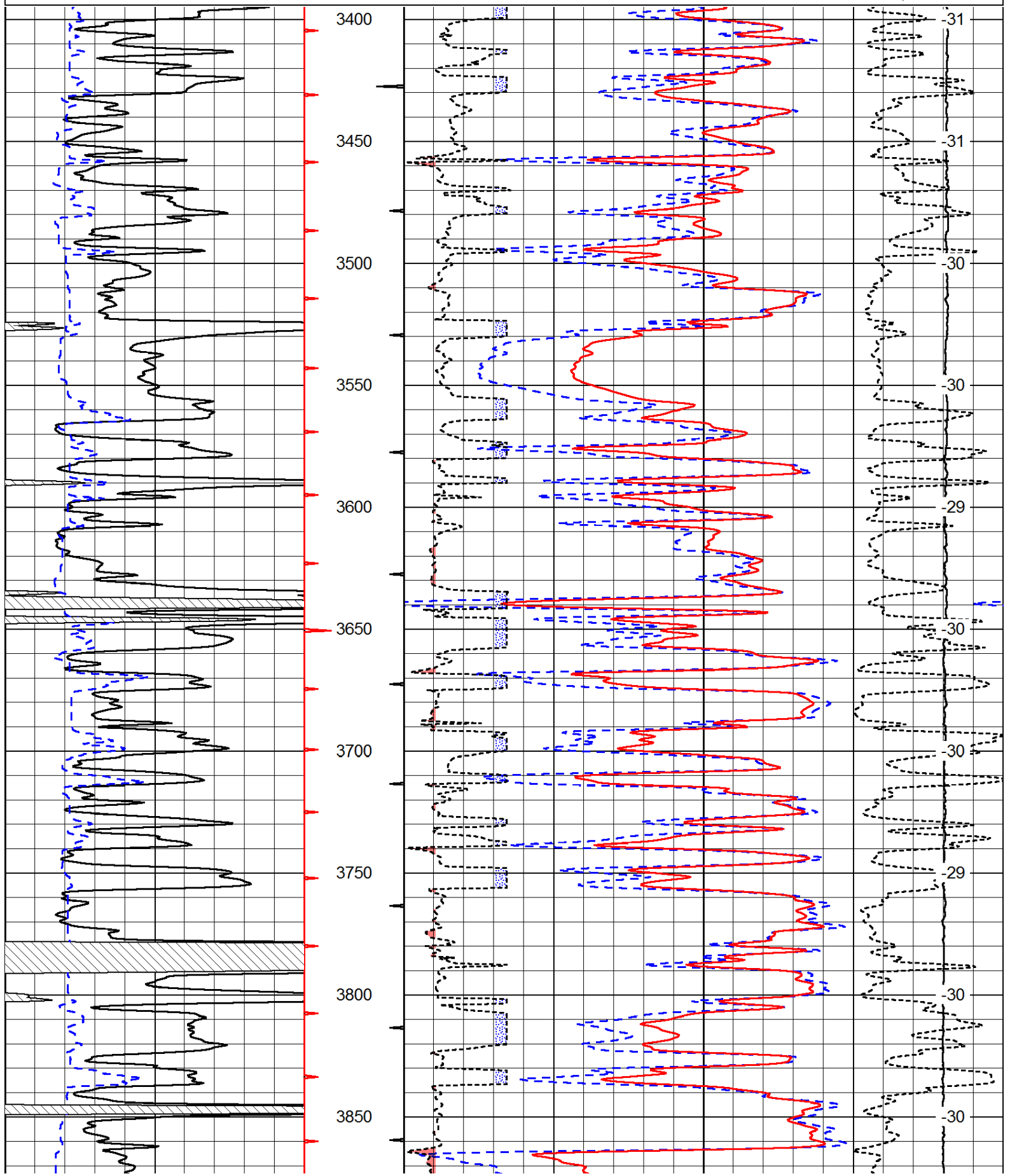
All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs,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

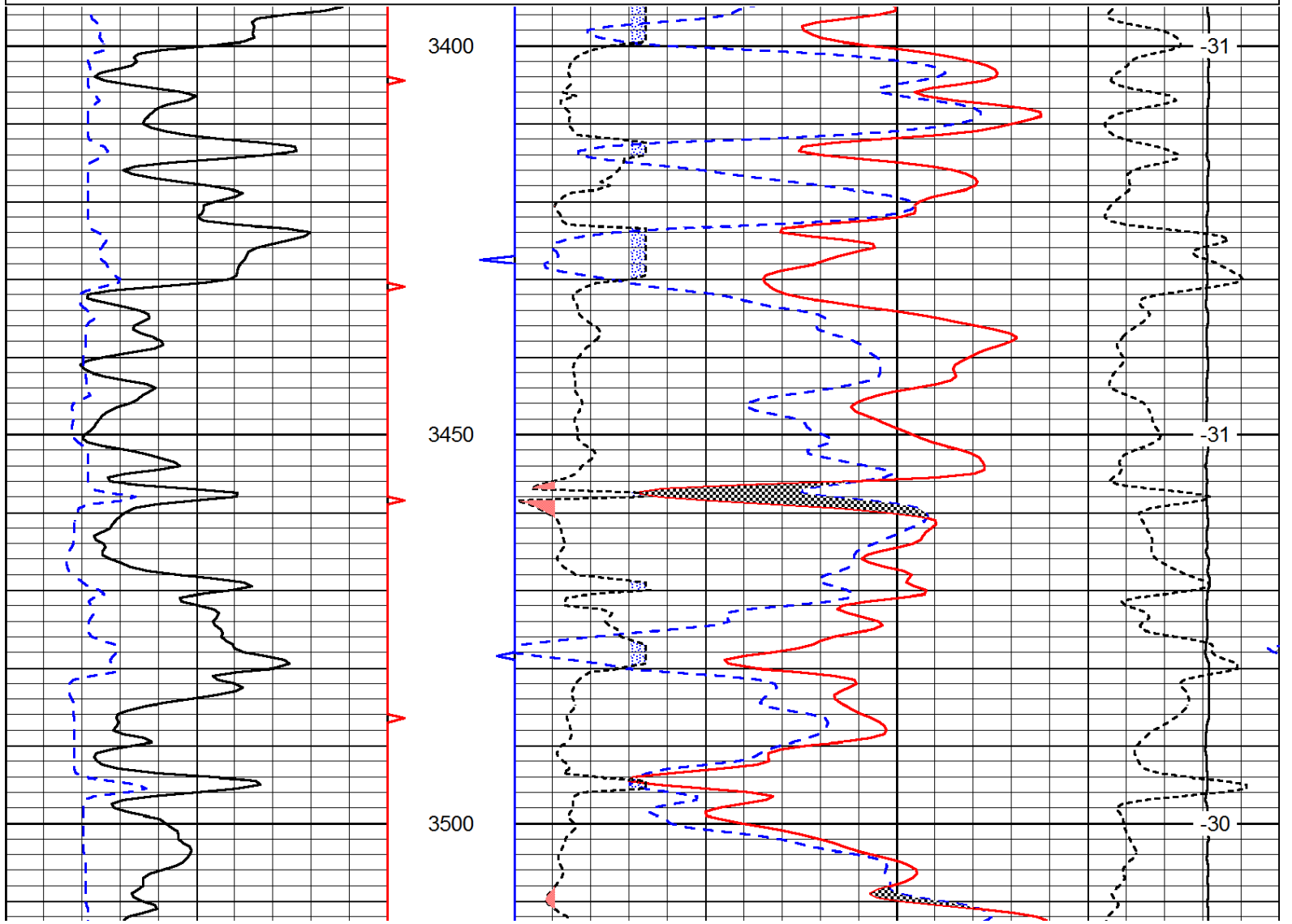
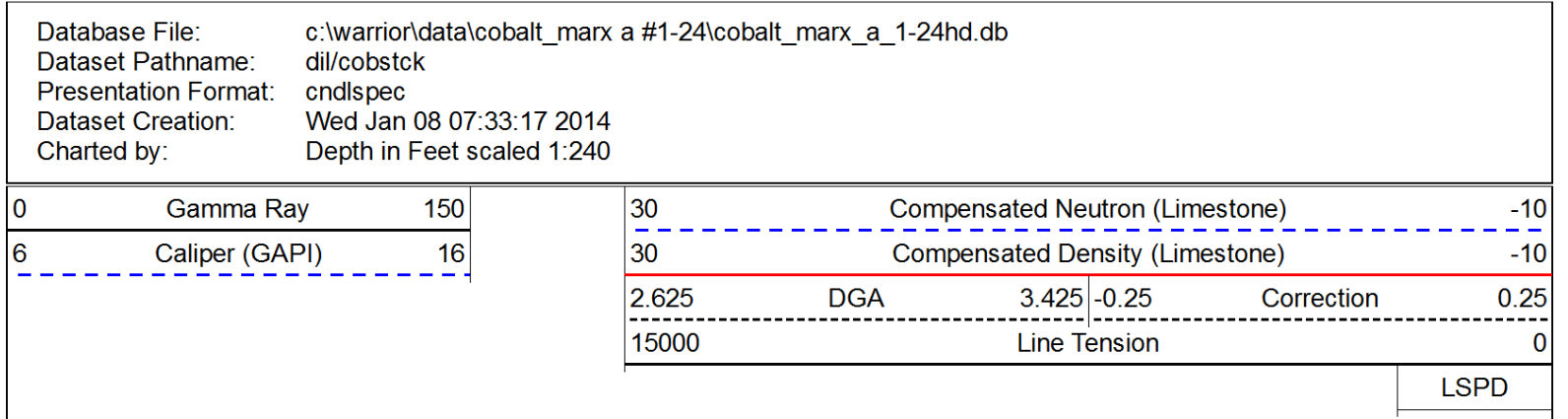
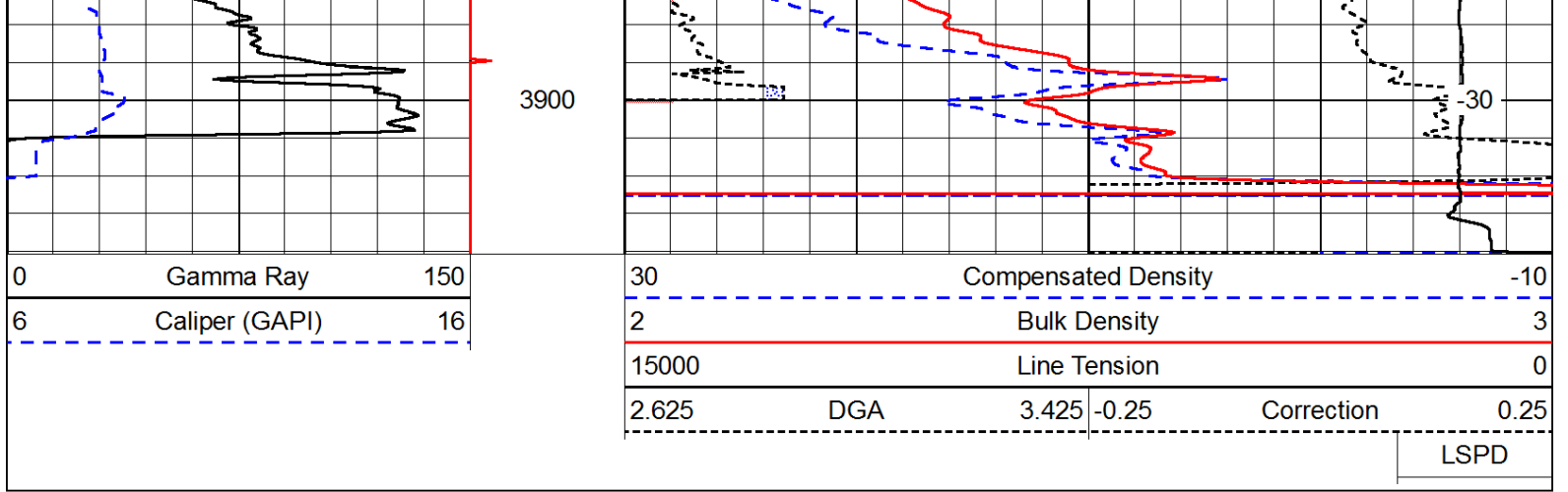
Comments

Thank you for using Pioneer Energy Services
 www.pioneerres.com
 785 625 3858
 Studley, 11 1/8 North, West Into

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





2.025	DCA	3.425	-0.25	Correction	0.25
15000		Line Tension			0
				LSPD	