



Pioneer Energy Services

## Dual Compensated Porosity Log

API No.	15-135-25492-00-00		
Company	Cobalt Energy, LLC		
Well	Miner Unit 'A' #1-27		
Field	McDonald NE		
County	Ness		
State	Kansas		
Location	2428' FSL & 1756' FEL		
Sec: 27	Twp: 18S	Rge: 24W	Other Services DIL
Permanent Datum	Ground Level	Elevation 2284	Elevation
Log Measured From	Kelly Bushing	5 Ft. Above Perm. Datum	K.B. 2289
Drilling Measured From	Kelly Bushing		D.F. 2284
			G.L. 2284

Date	10/26/2012		
Run Number	One		
Type Log	CNL / CDL		
Depth Driller	4365		
Depth Logger	4366		
Bottom Logged Interval	4345		
Top Logged Interval	3300		
Type Fluid In Hole	Chemical		
Salinity, PPM CL	3600		
Density	9.1		
Level	Full		
Max. Rec. Temp. F	122		
Operating Rig Time	3 Hours		
Equipment -- Location	91 Hays		
Recorded By	D. Schmidt		
Witnessed By	Robert Hendrix		

Borehole Record		Casing Record				
Run No	Bit From	To	Size	Wgt.	From	To
One	12.25	00	218	8.625	23#	00
Two	7.875	218	TD			218

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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.

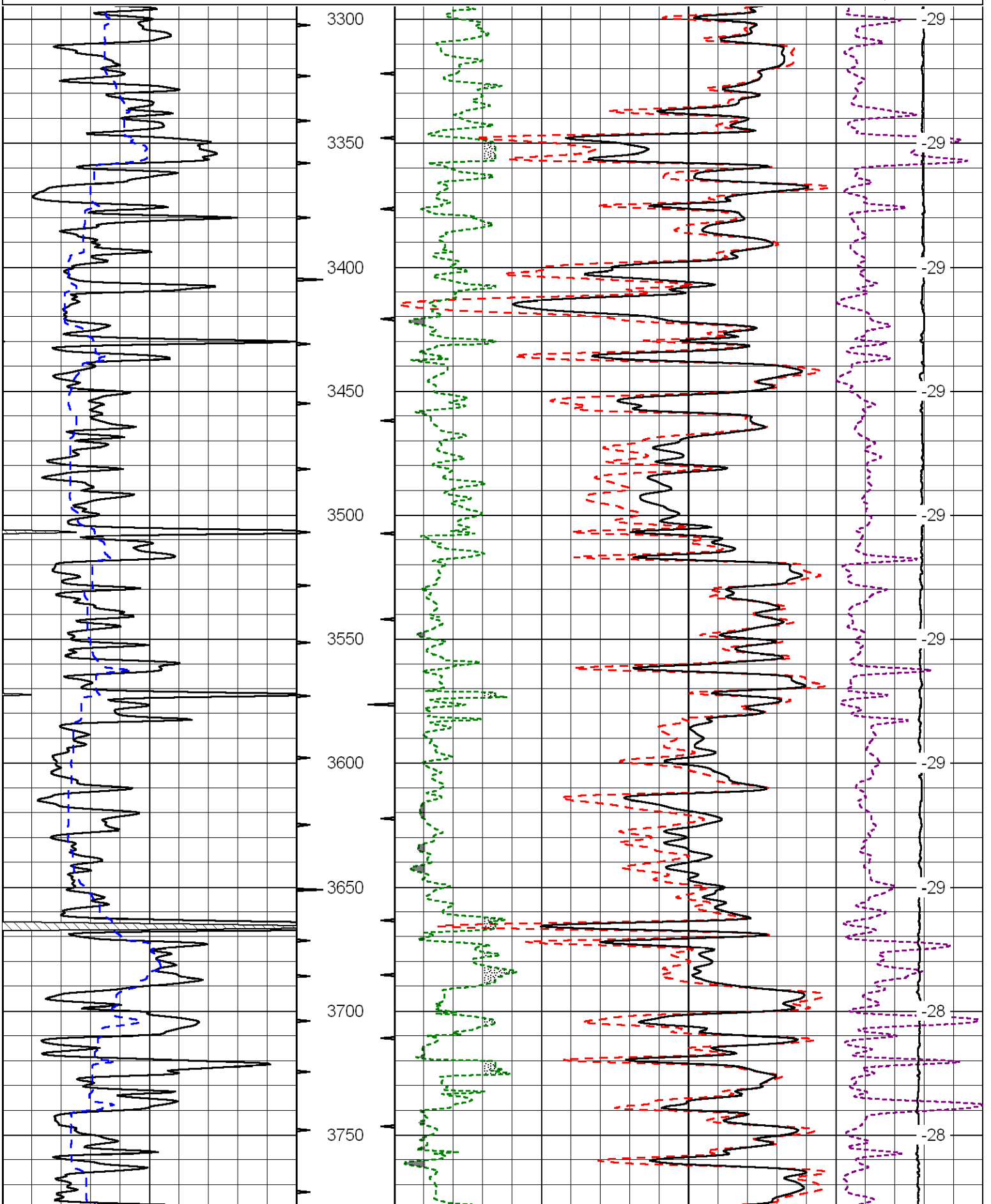
Comments

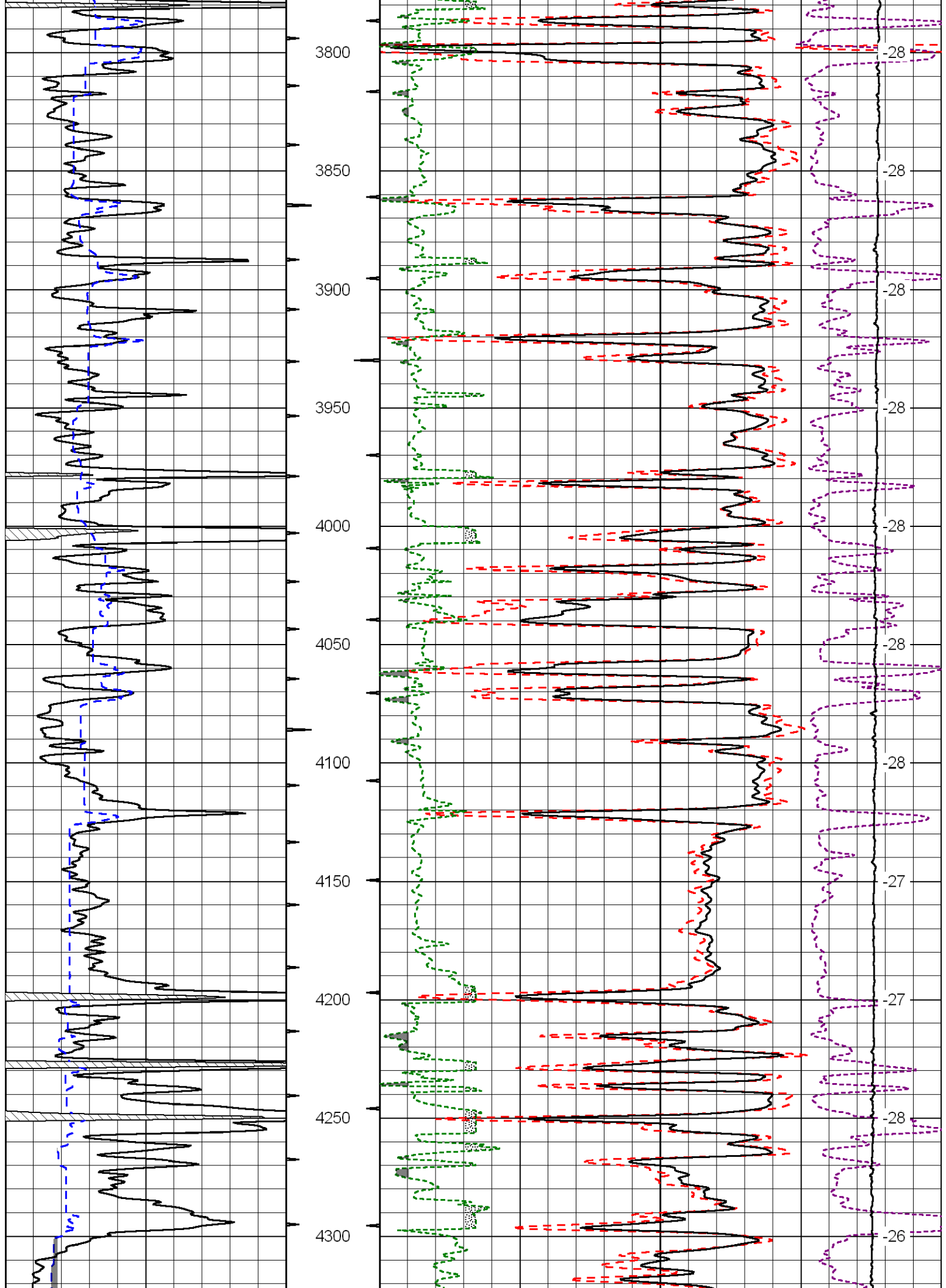
Thank you for using Log-Tech, Inc.  
 (785) 625-3858  
 Ness City (West edge),  
 2 West to P Rd, 1/3 North,  
 West into

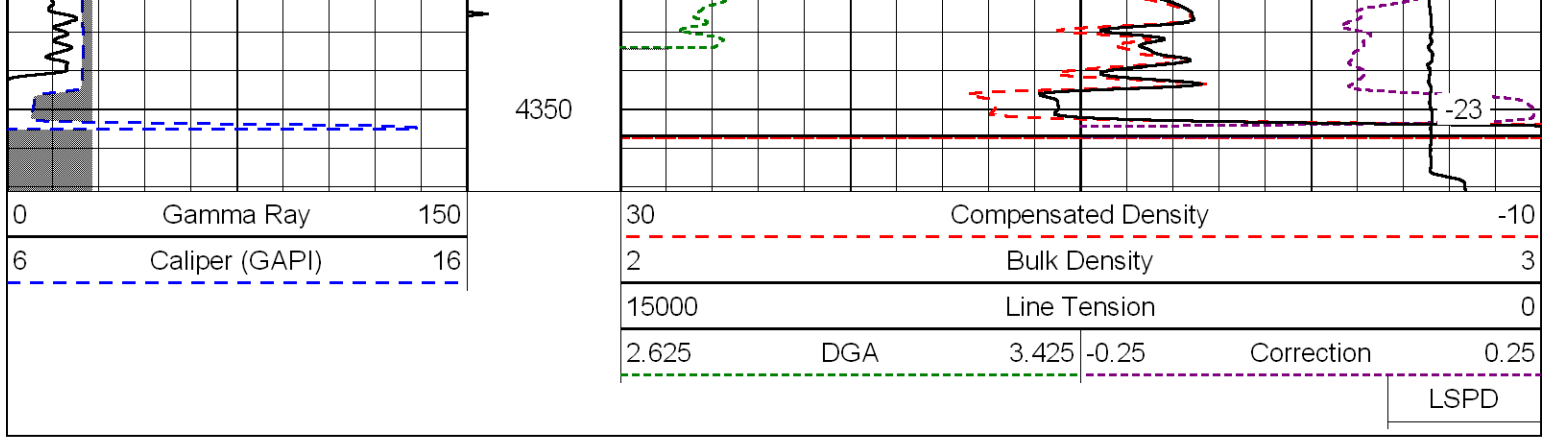
Database File: cobalt\_102612hd.db  
 Dataset Pathname: dil/cobstack  
 Presentation Format: cdl  
 Dataset Creation: Fri Oct 26 14:23:18 2012  
 Charted by: Depth in Feet scaled 1:600

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: cobalt\_102612hd.db  
 Dataset Pathname: dil/cobstack  
 Presentation Format: cndlspec  
 Dataset Creation: Fri Oct 26 14:23:18 2012  
 Charted by: Depth in Feet scaled 1:240

