



Microresistivity Log

Pioneer Energy Services

API No.	Company Cobalt Energy, LLC Well Wasinger Trust A #1-21 Field N/A County Graham State Kansas				
15-065-24046-00-00	Location	910' FSL & 1718' FWL		Other Services CNL/CDL DIL/BHCS	
	Sec: 21	Twp: 8S	Rge: 22W	Elevation K.B. 2189 D.F. G.L. 2184	
	Permanent Datum	Ground Level	Elevation 2184		
Log Measured From	Kelly Bushing	5	Ft. Above Perm. Datum		
Drilling Measured From	Kelly Bushing				
Date	06/10/2014				
Run Number	Two				
Depth Driller	3710				
Depth Logger	3707				
Bottom Logged Interval	3706				
Top Log Interval	3100				
Casing Driller	8.625 @ 221				
Casing Logger	219				
Bit Size	7.875				
Type Fluid in Hole	Chemical				
Salinity,ppm CL	1400				
Density / Viscosity	8.8	59			
pH / Fluid Loss	11.5	6.4			
Source of Sample	Flowline				
Rm @ Meas. Temp	0.95 @ 57				
Rmf @ Meas. Temp	0.71 @ 57				
Rmc @ Meas. Temp	1.28 @ 57				
Source of Rmf / Rmc	Charts				
Rm @ BHT	0.47 @ 115				
Operating Rig Time	6 Hours				
Max Rec. Temp. F	115				
Equipment Number	91				
Location	Hays				
Recorded By	M. Beougher		D. Schmidt		
Witnessed By	Corey Baker				

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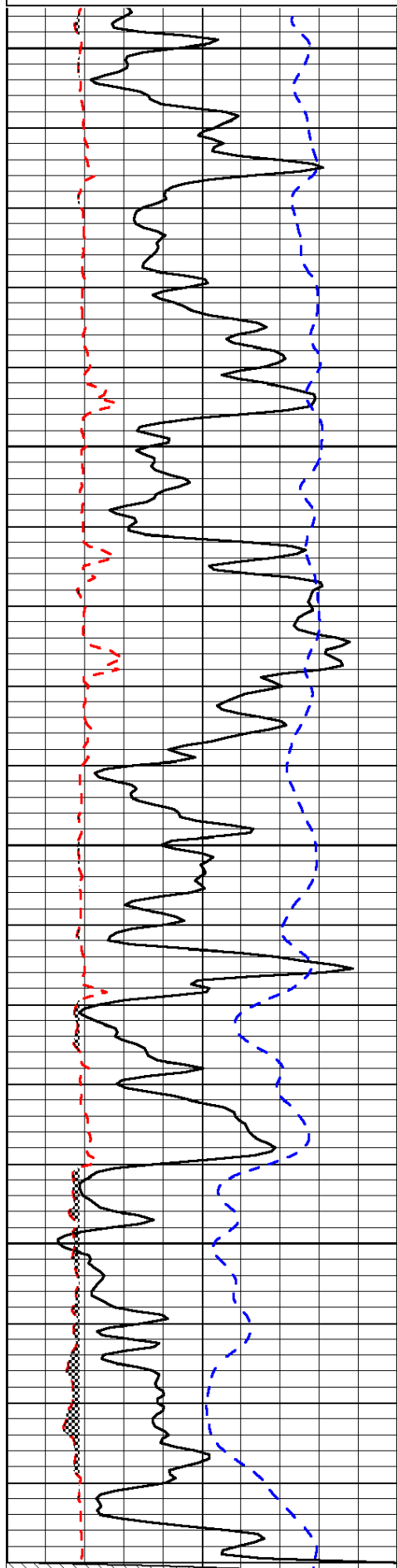
All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs, 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: micro
Dataset Creation: Tue Jun 10 10:58:16 2014
Charted by: Depth in Feet scaled 1:240

Charted by: Depth in Feet scaled 1:2.15		
0	Gamma Ray	150
6	Micro Log Caliper (GAPI)	16
-200	SP (mV)	0



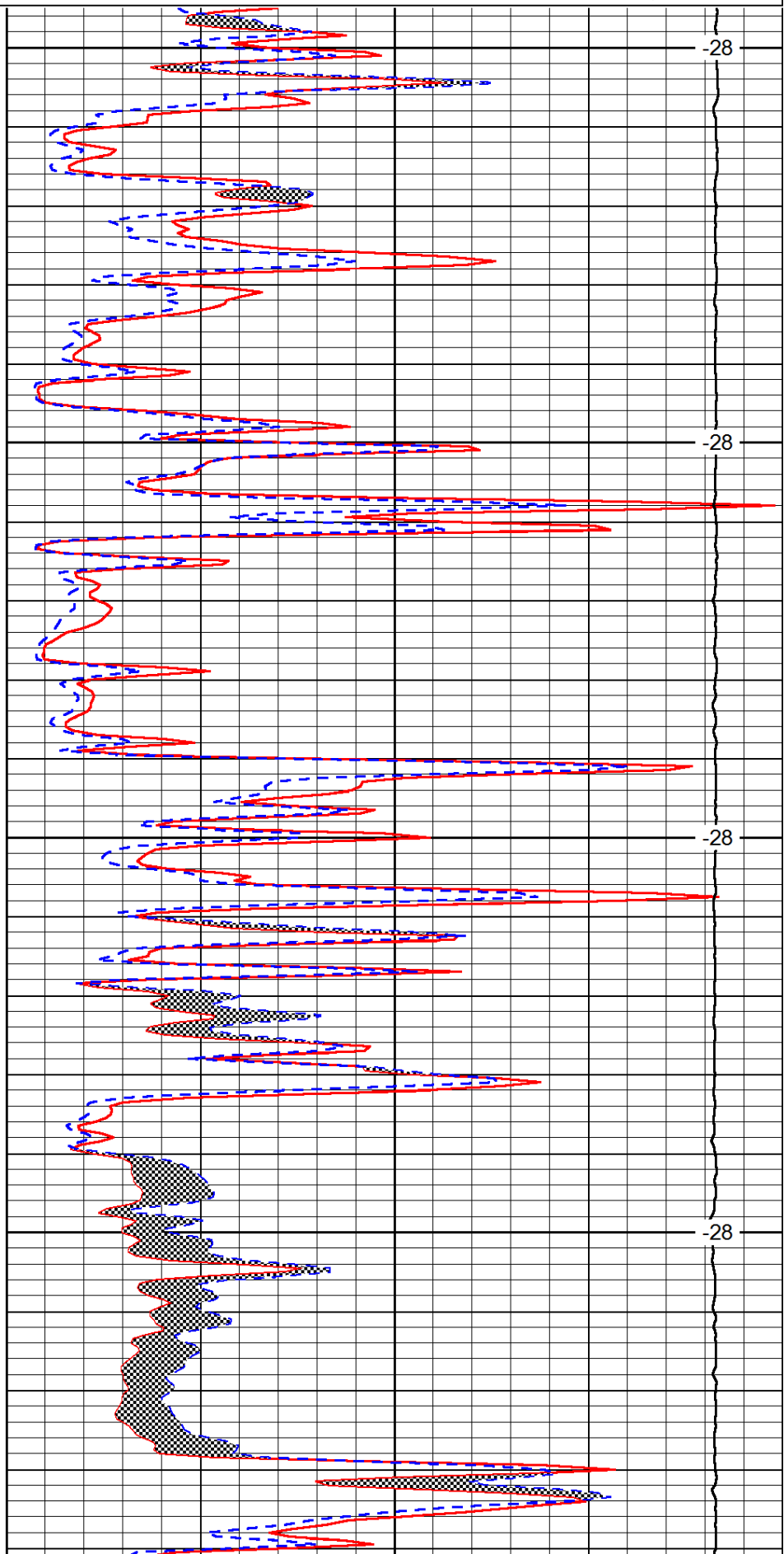
3100

3150

3200

3250

0	Micro Inverse 1 X 1	40
0	Micro Normal 2"	40
15000	Line Weight	0



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