



PHOENIX SURVEYS, INC.  
HIGH RESOLUTION INDUCTION  
COMPENSATED DENSITY  
COMPENSATED NEUTRON

Company	Bonanza Creek Energy Inc.			Location	1360 FSL & 1320 FEL NW SE		
Well	Antelope 33-31			Well	Antelope 33-31		
Field	Wattenberg			Field	Wattenberg		
County	Weld			County	Weld		
	State/Province				Colorado		
Other Services	None			Location	1360 FSL & 1320 FEL NW SE		
Log Measured From	KB			Log Measured From	KB		
Drilling Measured From	KB			Drilling Measured From	KB		
Date	May 27, 2011			Date	May 27, 2011		
Run Number	1			Run Number	1		
Depth (m)	6700			Depth (m)	6700		
Bottom Log Material	Casing			Bottom Log Material	Casing		
Top Log Material	Casing			Top Log Material	Casing		
Casing Driller	434			Casing Driller	434		
Bit Size	7-7/8"			Bit Size	7-7/8"		
Type Fluid in Hole	Polymer Gel			Type Fluid in Hole	Polymer Gel		
Initial Density	8.5 / 10.4			Initial Density	8.5 / 10.4		
Source of Sample	Flowline			Source of Sample	Flowline		
Rm @ Mass Temp	3.85 @ 67 F			Rm @ Mass Temp	3.85 @ 67 F		
Rm @ Mass Temp	2.92 @ 67 F			Rm @ Mass Temp	2.92 @ 67 F		
Source of Rm / RmC	4.31 @ 67 F			Source of Rm / RmC	4.31 @ 67 F		
Rm @ Bulk Temp	Massana / CMC			Rm @ Bulk Temp	Massana / CMC		
Rm @ Bulk Temp	1.35 @ 195 F			Rm @ Bulk Temp	1.35 @ 195 F		
Time Logger on Bottom	1800:00:11			Time Logger on Bottom	1800:00:11		
Maximum Recorded Temperature	195 F			Maximum Recorded Temperature	195 F		
Equipment Number	49			Equipment Number	49		
Location	Brighton, CO			Location	Brighton, CO		
Unvised By	Ian Harris			Unvised By	Ian Harris		
Recorded By	John Adams			Recorded By	John Adams		

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

Annular volume calculated for 4.5" casing  
Drilling Rig Fort 5  
Thank you for using Phoenix Surveys!!  
API #: 05-123-32885-00  
No Repeat Due To Hole Conditions

