PIONEER
Pioneer Energy Services

HIGH RESOLUTION INDUCTION GAMMAY RAY GAURD LOG-SP

Company Bonanza Creek Energy Operating Co. LLC
Well State Seventy Holes 11-14-3HNB
Field Wattenberg
County Weld State Colorado

Location: API # : 05123388200000
SHL: 364' FNL & 635' FWL
NW NW
SEC 3 TWP 4N RGE 62W

Other Services
None

Permanent Datum	GL Elevation 4534
Log Measured From	KB
Drilling Measured From	KB

Elevation
K.B. 4551
D.F. 4550
G.L. 4534

Company	Bonanza Creek Energy Operating Co. LLC		
Well	State Seventy Holes 11-14-3HNB		
Field	Wattenberg		
County	Weld		
State	Colorado		
Date	April 10, 2014		
Run Number	1		
Depth Driller	5637		
Depth Logger	5145		
Bottom Logged Interval	5145		
Top Log Interval	Casing		
Casing Driller	465		
Casing Logger	465		
Bit Size	8-3/4"		
Type Fluid in Hole	Chem Gel		
Density / Viscosity	9.3 / 48		
pH / Fluid Loss	9.1 / 6.8		
Source of Sample	Flowline		
Rm @ Meas. Temp	2.75 @ 70 F		
Rmf @ Meas. Temp	2.20 @ 70 F		
Rmc @ Meas. Temp	3.26 @ 70 F		
Source of Rmf / Rmc	Measure / Calc		
Rm @ BHT	1.1 @ 170 F		
Time Circulation Stopped	1430		
Time Logger on Bottom	2000		
Maximum Recorded Temperature	170 F		
Equipment Number	49		
Location	Brighton, CO		
Recorded By	Matt Gill		
Witnessed By	Sam Mares		

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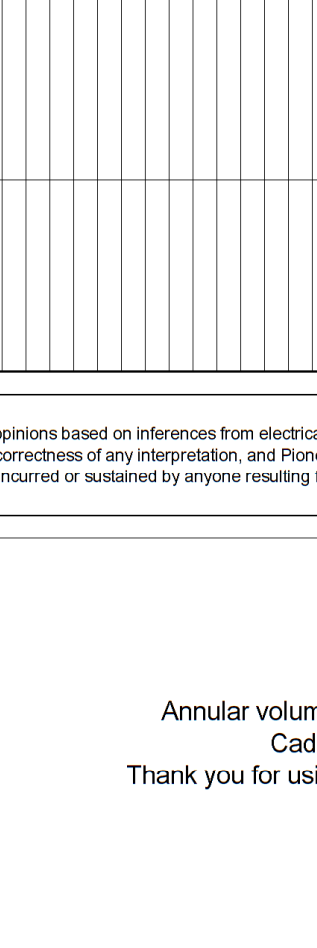
All interpretations are opinions based on inferences from electrical or other measurements and Pioneer Wireline Services, LLC cannot and does not guarantee the accuracy or correctness of any interpretation, and Pioneer Wireline Services, LLC will not be liable or responsible for any loss, costs, damages, or expenses incurred or sustained by anyone resulting from any interpretation made by any of our officers, agents or employees.

Comments

Annular volume calculated for 7" casing
Cade Drilling Rig 26
Thank you for using Pioneer Energy Services.



Sensor	Offset (ft)	Description	Len (ft)	OD (in)	Wt (lb)
		CHD (~0)	2.00	3.50	30.00
		GR-PSI (939)	2.92	3.50	40.00
GR	0.00				
RLL3	-4.02				
		DIL-PSI (1011)	18.25	3.75	175.00
CILD	-11.47				
CILM	-14.92				
SP	-18.92				

Dataset: 13531.db: field/well/run1/final
Total Length: 23.17 ft
Total Weight: 245.00 lb
O.D. 3.75 in

Database File: 13531.db
Dataset Pathname: final
Presentation Format: dilin5
Dataset Creation: Thu Apr 10 20:37:14 2014
Charted by: Depth in Feet scaled 1:600

Database File: 13531.db
Dataset Pathname: final
Presentation Format: dil
Dataset Creation: Thu Apr 10 20:37:14 2014
Charted by: Depth in Feet scaled 1:240

Calibration Report

Database File: 13531.db
Dataset Pathname: pass1
Dataset Creation: Thu Apr 10 19:35:55 2014 by Log 0

Dual Induction Calibration Report

Serial-Model: 1011-PSI
Surface Cal Performed:

	Readings		References			Results	
Loop:	Air	Loop	Air	Loop		m	b
Deep	0.000	1.000	0.000	1.000	mmho/m	0.510	-28.000
Medium	0.000	1.000	0.000	1.000	mmho/m	0.440	-28.000

Gamma Ray Calibration Report

Serial Number:	939	
Tool Model:	PSI	
Performed:	Sat Apr 05 19:17:16 2014	
Calibrator Value:	1.0	GAPI
Background Reading:	0.0	cps
Calibrator Reading:	1.0	cps
Sensitivity:	0.6200	GAPI/cps