Casedhole Solutions

MICRO LOG

Company	RITCHIE EXPLORATION, INC.
Well	WING TRUST 23A #1
Field	WING
County	LOGAN
State	KANSAS

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Well WING TRUST 23A #1
Field WING
County LOGAN State KANSAS

Location: API # : 15-109-21452-00-00
W2 - SW - NE
2010' FNL & 2280' FEL
SEC 23 TWP 15S RGE 36W

Other Services: CNL/CDL, DIL

Permanent Datum	GROUND LEVEL	Elevation 3286
Log Measured From	KELLY BUSHING 5' A.G.L	
Drilling Measured From	KELLY BUSHING	

Elevation: K.B. 3291, D.F. 3289, G.L. 3286

Date	1-13-16		
Run Number	TWO		
Depth Driller	4900		
Depth Logger	4899		
Bottom Logged Interval	4897		
Top Log Interval	3600		
Casing Driller	8 5/8 @ 255		
Casing Logger	254		
Bit Size	7 7/8		
Type Fluid in Hole	CHEMICAL MUD	CHLORIDES 5,000 PPM	
Density / Viscosity	9.3/54		
pH / Fluid Loss	10.0/8.8		
Source of Sample	FLOWLINE		
Rm @ Meas. Temp	0.44 @ 83F		
Rmf @ Meas. Temp	0.33 @ 83F		
Rmc @ Meas. Temp	0.53 @ 83F		
Source of Rmf / Rmc	MEASUREMENT		
Rm @ BHT	0.29 @ 124F		
Time Circulation Stopped	2 HOURS		
Time Logger on Bottom			
Maximum Recorded Temperature	124F		
Equipment Number	3802		
Location	HAYS, KANSAS		
Recorded By	IAN MABB		
Witnessed By	JOHN GOLDSMITH		

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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 NABORS, HAYS, KS. (785) 628-6395
DIRECTIONS : OAKLEY, KS. - WEST ON HWY 40 TO HWY 25 - SOUTH TO DAKOTA RD. (3 MILES NORTH OF COUNTY LINE) - 4 1/2 MILE EAST - SOUTH INTO

Casedhole Solutions

MAIN SECTION

Database File	30952ddn8.db
Dataset Pathname	pass6.1
Presentation Format	_micro
Dataset Creation	Wed Jan 13 21:05:43 2016
Charted by	Depth in Feet scaled 1:240

0 GAMMA RAY (GAPI) 150 | ABHV 10 (ft3) 0 | 0 MEL1.5 (Ohm-m) 40
6 CALIPER (in) 16 | TBHV 0 (ft3) 10 | 0 MEL2.0 (Ohm-m) 40

0 GAMMA RAY (GAPI) 150 | ABHV 10 (ft3) 0 | 0 MEL1.5 (Ohm-m) 40
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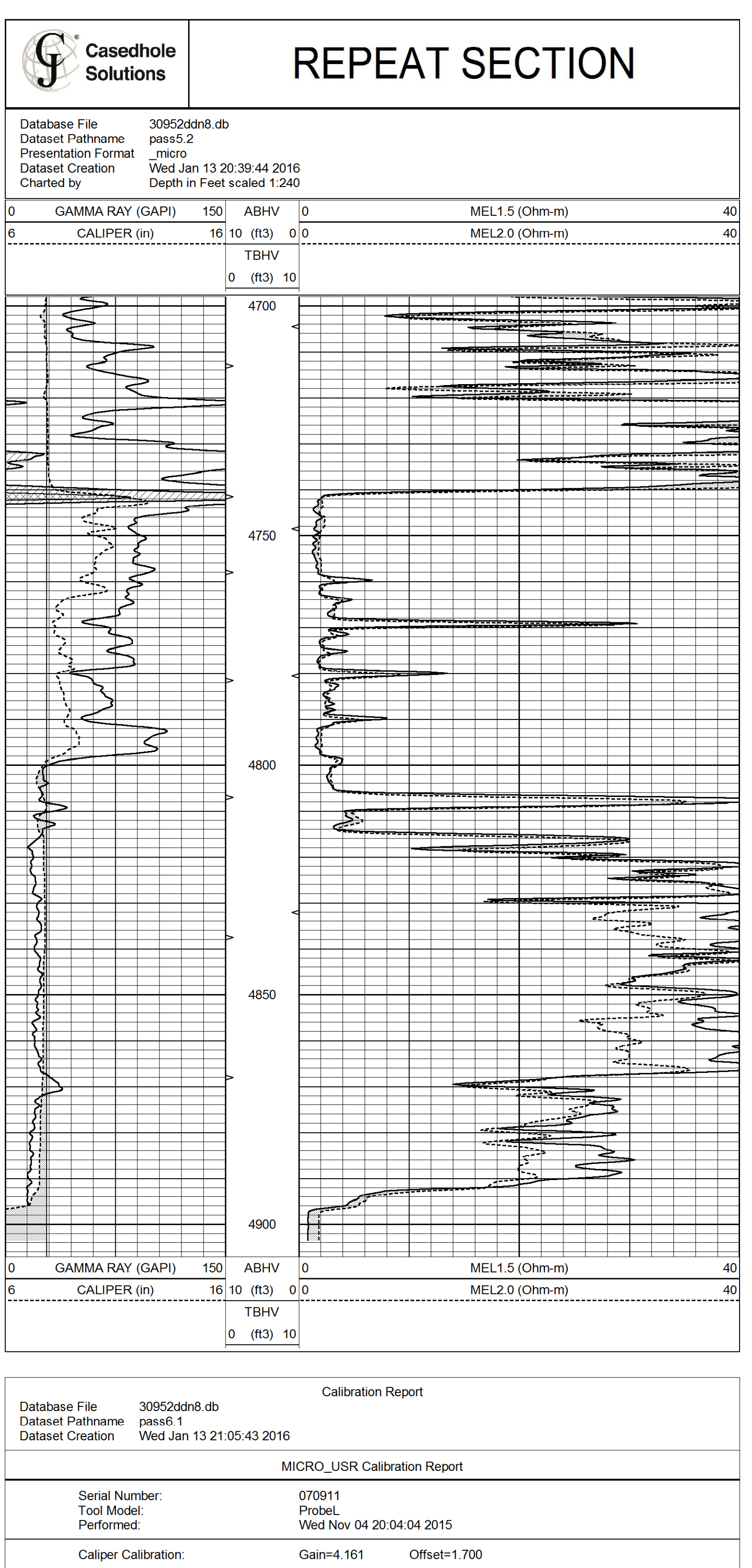
REPEAT SECTION

Database File	30952ddn8.db
Dataset Pathname	pass5.2
Presentation Format	_micro
Dataset Creation	Wed Jan 13 20:39:44 2016
Charted by	Depth in Feet scaled 1:240

0 GAMMA RAY (GAPI) 150 | ABHV 10 (ft3) 0 | 0 MEL1.5 (Ohm-m) 40
6 CALIPER (in) 16 | TBHV 0 (ft3) 10 | 0 MEL2.0 (Ohm-m) 40



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6 CALIPER (in) 16 | TBHV 0 (ft3) 10 | 0 MEL2.0 (Ohm-m) 40

Calibration Report

Database File	30952ddn8.db
Dataset Pathname	pass6.1
Dataset Creation	Wed Jan 13 21:05:43 2016

MICRO_USR Calibration Report

Serial Number:	070911	
Tool Model:	ProbeL	
Performed:	Wed Nov 04 20:04:04 2015	
Caliper Calibration:	Gain=4.161	Offset=1.700
	Low Cal	High Cal
References	8.000	14.000
Readings	1.333	2.775
1.5" Calibration:	Gain=33.000	Offset=0.000
	Low Cal	High Cal
References	0.000	20.000
Readings	0.004	0.843
2" Calibration:	Gain=30.000	Offset=0.650
	Low Cal	High Cal
References	0.000	20.000
Readings	0.021	0.810

Microlog Calibration Report

Serial-Model:	070911-ProbeL
Performed:	Sat Apr 11 01:13:01 2015

	Readings			References			Results	
	Zero	Cal		Zero	Cal		m	b
Normal	0.0002	0.4836	V	0.0000	10.0000	Ohm-m	20.6908	-0.0051
Inverse	0.0018	0.6297	V	0.0000	10.0000	Ohm-m	15.9263	-0.0282
Caliper	0.0000	1.0000	V	0.0000	1.0000	in	1.0000	0.0000

Gamma Ray Calibration Report

Serial Number:	7	
Tool Model:	Probe1	
Performed:	Wed Nov 04 20:14:31 2015	
Calibrator Value:	1.0	GAPI
Background Reading:	0.0	cps
Calibrator Reading:	1.0	cps
Sensitivity:	0.4000	GAPI/cps