PSI

PRECISION SURVEY INSTRUMENTS

COMPENSATED NEUTRON LITHO-DENSITY LOG

Company: Rosebank Energy Ltd
Well: 22
Field: Rosebank
County: Shetland
State: Shetland
Country: Offshore
Location: Lat: 60° 46' 0.000" N, Long: 3° 0' 0.000" W
Permanent Datum: Mean Sea Level
Elevation: 0 m
Log Measured From: Rotary Table
Drilling Measured From: Rotary Table
Elevation: 0 m
Date: 25-Dec-11
Run Number: ONE
Depth Driller: 3000 m
Depth Logger: 3000 m
Bottom Logged Interval: 3000 m
Top Logged Interval: 2000 m
Casing Driller: 2000 m @ 0 m
Casing Logger: 2000 m @ 0 m
Bit Size: 17.5 in
Type Fluid in Hole: Seawater
Density: 1.03 g/cm³
Viscosity: 0 s
Fluid Loss: 0 ml
Source of Sample: Flowline
Rm @ Measured Temp: 0.1 ohmm @ 20 °C
Rmf @ Measured Temp: 0.1 ohmm @ 20 °C
Rmc @ Measured Temp: 0.1 ohmm @ 20 °C
Source of Rmf / Rmc: Calculated / Calculated
Rm @ BHT: 0.1 ohmm @ 20 °C
Time Since Circulation: 0 hrs
Max Recorded Temp: 20 °C
Equipment Number: PSI-DLL-1
Location: Lerwick
Recorded By: Mike Stanley
Witnessed By: Geoff Robinson

	Density	Neutron
Matrix	2.65 g/cm³	0 %
Fluid	1 g/cm³	100 %
Hole	1 g/cm³	100 %

Bulk Density Correction: 0.05 g/cm³
Neutron Porosity Correction: 0 %

Run No.	Bit Size (in)	Depth Driller (m)	Depth Logger (m)	Casing Driller (m)	Casing Logger (m)	Bottom Logged Interval (m)	Top Logged Interval (m)	Type Fluid in Hole	Density (g/cm³)	Viscosity (s)	Fluid Loss (ml)	Source of Sample	Rm @ Measured Temp	Rmf @ Measured Temp	Rmc @ Measured Temp	Source of Rmf / Rmc	Rm @ BHT	Time Since Circulation (hrs)	Max Recorded Temp (°C)	Equipment Number	Location	Recorded By	Witnessed By
ONE	17.5	3000	3000	2000 @ 0	2000 @ 0	3000	2000	Seawater	1.03	0	0	Flowline	0.1 @ 20	0.1 @ 20	0.1 @ 20	Calculated / Calculated	0.1 @ 20	0	20	PSI-DLL-1	Lerwick	Mike Stanley	Geoff Robinson

All data relative to ground level unless otherwise stated. All data measurements are recorded and accepted in accordance with the standard specifications and conditions of PSI. PSI does not guarantee the accuracy or correctness of any interpretation and shall 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. 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
Calls Pg 22
Thank you for using Phoenix Surveys!
AR # 20-12-324m3-D

Database File: 11444.db
Dataset Pathname: Run1
Presentation Format: dual
Dataset Creation: Sun Feb 19 15:39:46 2012
Charted by: Depth in Feet scaled 1:240

Density Caliper (in) 16 | Deep Resistivity (Ohmm) .2W(2) 2000 | Density Porosity (pu)
Gamma Ray (GAPI) 150 | Medium Resistivity (Ohmm) .2W(2) 2000 | Neutron Porosity (pu)
SP (mV) 50 | Shallow Resistivity (Ohmm) .2W(2) 2000 | Rt (Ohmm) 2000

Gamma Ray (GAPI) 150 | Deep Resistivity (Ohmm) .2W(2) 2000 | Density Porosity (pu)
SP (mV) 50 | Medium Resistivity (Ohmm) .2W(2) 2000 | Neutron Porosity (pu)
Shallow Resistivity (Ohmm) .2W(2) 2000 | Rt (Ohmm) 2000

Density Caliper (in) 16 | Deep Resistivity (Ohmm) .2W(2) 2000 | Density Porosity (pu)
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