Company	Tullow Oil plc
Well	Ebenezer-1
Field	Tweedsmuir
Block	PL 090
County	Offshore
State	Offshore
Country	Offshore
Surface Location	Lat: 58.0000000 Long: 0.0000000
Permanent Datum	Mean Sea Level
Log Measured From	Rotary Table
Drilling Measured From	Rotary Table
Elevation	Kb: 0.00 Gl: 0.00 Df: 0.00
Date	2-Jun-2010
Run Number	ONE
Depth Reference	Driller's Depth
Depth Offset	0.00
Max Logged Depth	1,000.00
Casing Driller	0.00
Casing Logger	0.00
Bit Size	0.00
Fluid Type	Seawater
Density	1.03
Viscosity	0.00
Fluid Loss	0.00
Max Rec Temp	0.00
Equipment	Sonic
Location	Sonic
Recorded By	Sonic
Witnessed By	Sonic

Comments

Logged with Sonic tool.
Tool Serial Number: 0000-0000-0000
Sonic Log Quality: Fair
Tool Error Flag: Not Applicable
Tool Error Description: None

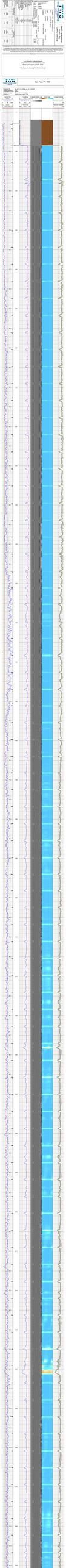
Sonic Log

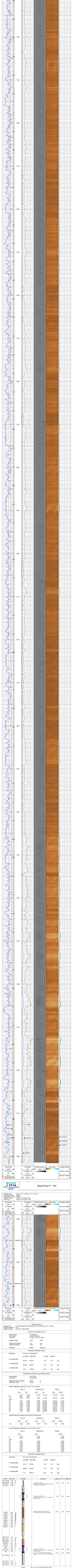
Scale: 1" = 100'

Sonic Log
Company: Tullow Oil plc
Well: Ebenezer-1
Field: Tweedsmuir
Block: PL 090
County: Offshore
State: Offshore
Country: Offshore
Surface Location: Lat: 58.0000000 Long: 0.0000000
Permanent Datum: Mean Sea Level
Log Measured From: Rotary Table
Drilling Measured From: Rotary Table
Elevation: Kb: 0.00 Gl: 0.00 Df: 0.00
Date: 2-Jun-2010
Run Number: ONE
Depth Reference: Driller's Depth
Depth Offset: 0.00
Max Logged Depth: 1,000.00
Casing Driller: 0.00
Casing Logger: 0.00
Bit Size: 0.00
Fluid Type: Seawater
Density: 1.03
Viscosity: 0.00
Fluid Loss: 0.00
Max Rec Temp: 0.00
Equipment: Sonic
Location: Sonic
Recorded By: Sonic
Witnessed By: Sonic

Comments
Logged with Sonic tool.
Tool Serial Number: 0000-0000-0000
Sonic Log Quality: Fair
Tool Error Flag: Not Applicable
Tool Error Description: None

Sonic Log
Scale: 1" = 100'




Operator: TGP Rocky Mountain LLC
Well: Ute Tribal 2-1-B
Field: Bluebell
County: Uintah
State: Utah
Date: 10/14/2010
Time: 14:00
Depth Scale: 1:240
Depth Reference: Kelly Bushing
Elevation: KB 5,112 ft, GL 5,087 ft
Logging Company: Weatherford Laboratories
Logging Engineer: Jeff Hall
Unit Number: 3
Log Type: Mud Gas
Gas Detector: Chromatograph
Sample Interval: 30 ft
Sample Method: Ditch
Sample Quality: Good
Mud Type: Water Based
Mud Weight: 8.4 - 8.6 ppg
Viscosity: 26 - 28 sec
Chlorides: 1,000 - 1,500 mg/l
Bit Size: 7 7/8 in
Bit Type: Hughes HC506ZX
Total Depth: 10,100 ft
Casing Shoe: 2,500 ft
Casing Size: 9 5/8 in
Casing Weight: 36 lb/ft
Casing Grade: J-55
Casing Type: Surface
Casing Condition: Good
Casing Cement: Cemented to surface
Hole Condition: Good
Hole Fluid: Water Based
Equipment Failure: None
Personnel: Jeff Hall, Ryan Hall
Comments: Drilling with water. Mud logging from 2,500' to TD. Gas detector calibrated to 1,000 units full scale.
Total Gas
Chromatograph
Lithology
Drilling Rate
Drilling Torque
Total Gas
Chromatograph
Lithology
Drilling Rate
Drilling Torque
Formation Tops
Wasatch Formation
Top of Wasatch
Top of Chapita Wells
Top of Uinta
Top of Green River
Top of Mahogany
Top of Douglas Creek
Top of Black Shale
Top of Castle Peak
Top of Uteland Butte
Top of Wasatch
Top of Chapita Wells
Top of Uinta
Top of Green River
Top of Mahogany
Top of Douglas Creek
Top of Black Shale
Top of Castle Peak
Top of Uteland Butte
Total Depth (Logger): 10,100 ft
Total Depth (Driller): 10,100 ft
Bottom Hole Temperature: 185 °F
Interpretation Summary
No significant hydrocarbon shows were encountered in this well.
Formation Evaluation Summary
Top Formation Depth Datum Elevation Thickness Lithology
Wasatch Formation 4,500 ft 612 ft Sandstone, Shale
Top of Wasatch 4,500 ft 612 ft Sandstone, Shale
Top of Chapita Wells 5,112 ft 0 ft Sandstone, Shale
Top of Uinta 5,112 ft 0 ft Sandstone, Shale
Top of Green River 5,112 ft 0 ft Sandstone, Shale
Top of Mahogany 5,112 ft 0 ft Sandstone, Shale
Top of Douglas Creek 5,112 ft 0 ft Sandstone, Shale
Top of Black Shale 5,112 ft 0 ft Sandstone, Shale
Top of Castle Peak 5,112 ft 0 ft Sandstone, Shale
Top of Uteland Butte 5,112 ft 0 ft Sandstone, Shale
Total Gas Summary
Total Gas Range 0 - 1,000 units
Average Background Gas 0 units
Peak Gas 1,000 units
Chromatograph Summary
Methane (C1) 1,000 units
Ethane (C2) 0 units
Propane (C3) 0 units
Isobutane (iC4) 0 units
Butane (nC4) 0 units
Isopentane (iC5) 0 units
Pentane (nC5) 0 units
Hexane (C6) 0 units
Heptane (C7) 0 units
Lithology Summary
Sandstone 100 %
Shale 100 %
Drilling Parameters Summary
Average Drilling Rate 0 ft/hr
Average Torque 0 ft-lb
Max Torque 0 ft-lb
Formation Tops Summary
Top Formation Depth Datum Elevation Thickness Lithology
Wasatch Formation 4,500 ft 612 ft Sandstone, Shale
Top of Wasatch 4,500 ft 612 ft Sandstone, Shale
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Top of Castle Peak 5,112 ft 0 ft Sandstone, Shale
Top of Uteland Butte 5,112 ft 0 ft Sandstone, Shale
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Total Gas
Chromatograph
Lithology
Drilling Rate
Drilling Torque
Formation Tops
Wasatch Formation
Top of Wasatch
Top of Chapita Wells
Top of Uinta
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Top of Douglas Creek
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Chromatograph Summary
Methane (C1) 1,000 units
Ethane (C2) 0 units
Propane (C3) 0 units
Isobutane (iC4) 0 units
Butane (nC4) 0 units
Isopentane (iC5) 0 units
Pentane (nC5) 0 units
Hexane (C6) 0 units
Heptane (C7) 0 units
Lithology Summary
Sandstone 100 %
Shale 100 %
Drilling Parameters Summary
Average Drilling Rate 0 ft/hr
Average Torque 0 ft-lb
Max Torque 0 ft-lb
Formation Tops Summary
Top Formation Depth Datum Elevation Thickness Lithology
Wasatch Formation 4,500 ft 612 ft Sandstone, Shale
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