TIM PRIEST
PETROLEUM GEOLOGIST
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PetroNium Geologist

GEOLOGIST REPORT
DRILLING TIME AND SAMPLE LOG

LEASE: Bulldog 1 (Bulldog 1-1)
LOCATION: 500' FNL, 1500' FEL
COUNTY: Grant STATE: Kansas
API#: 15-067-21,714
SPUD: 4/8/14 COMP: 4/18/14
MAIN EQ.: BMR 7000 MOTOR: BMR 4 HP RTD
DRILLING TIME KEPT FROM: 3800' to TD
SAMPLE CUTS: 10' from 3800' to TD
GEOLOGICAL SUPERVISION: PAUL MORE RTD
FORMATION TOPS: ELECTRICAL LOG
DATUM: KB 3196' FT
ELEVATIONS: GL 3186' FT
KB: 10' FT ABOVE GL
CASING: Surface: 8 5/8" @ 280'
ELECTRICAL LOG: Nabors Wireline
Logged: 4/17/14
Logger: Mr. Bob Hoffman
Operator: Mr. Bob Hoffman
Logging Co.: Nabors Wireline
Logging Type: Dual Induction, Density/Neutron, Sonic, Micro
Log Depth: 3800' to 4800'
Log Scale: 2" = 100'
Log Quality: Good
Log Comments: Good log, good porosity, good shows

REMARKS:

Respectfully Submitted,

API #15-067-21,714(Bulldog 1-1)

Tim Priest
Petroleum Geologist

LEGEND

Formation Top | Sample Shows | Drilling Break | Gas Shows | Lithology | Sample Description | Chart | Remarks

DRILLING TIME IN MINUTES PER FOOT
Max=Penetration Rate

DEPTH | SAMPLE DESCRIPTION | REMARKS

Anhydrite 2462(+734)

Base Anhydrite 2501(+695)

Topeka 4040' (-844)

Heebner 4223' (-1027)

Lansing 4266' (-1070)

Muncie Creek 4398' (-1202)

Stark Shale 4501' (-1305)

Hushpuckney Shale 4538' (-1342)

BKC 4583' (-1387)

Marmaton 4602' (-1406)

Pawnee 4711' (-1515)

Myrick Station 4747' (-1551)

Fort Scott 4763' (-1567)

Cherokee Shale 4800' (-1604)

Johnson Zone 4848' (-1652)

Mississippian 4884' (-1688)
Total Depth

4871' (-1675)

Log Tops & Korrel Ratio Calculations

Top Lansing: 4266' (-1070)
Top Kansas City: 4398' (-1202)
Top Marmaton: 4602' (-1406)
Top Pawnee: 4711' (-1515)
Top Myrick Station: 4747' (-1551)
Top Fort Scott: 4763' (-1567)
Top Cherokee: 4800' (-1604)
Top Johnson: 4848' (-1652)
Top Mississippian: 4884' (-1688)

Korrel Ratio Calculations

Top Lansing: 4266' (-1070)
Top Kansas City: 4398' (-1202)
Top Marmaton: 4602' (-1406)
Top Pawnee: 4711' (-1515)
Top Myrick Station: 4747' (-1551)
Top Fort Scott: 4763' (-1567)
Top Cherokee: 4800' (-1604)
Top Johnson: 4848' (-1652)
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