TIM PRIEST
Petroleum Geologist
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GEOLOGIST'S REPORT
DRILLING TIME AND SAMPLE LOG

COMPANY SHAKESPEARE OIL CO.
LEASE Bahm 1-16
FIELD Wildcat
LOCATION 2375' FNL 1320' FEL
SEC 16 TWSP 16S RGE 34W
COUNTY Scott STATE Kansas
CONTRACTOR HD Rig 2
SPUD 1-28-14 COMP 2-9-14
RTD 4880' LTD 4882'
MUD UP 3500' TYPE MUD Chemical
SAMPLES SAVED FROM 3800' to RTD
DRILLING TIME KEPT FROM 3800' to RTD
SAMPLES EXAMINED FROM 3800' to RTD
GEOLOGICAL SUPERVISION FROM 3900' to RTD
GEOLOGIST ON WELL Tim Priest

ELEVATIONS
KB 3143'
DF
GL 3133'
Measurements Are All From KB

CASING
CONDUCTOR N/A
SURFACE 8-5/8" @ 263'
PRODUCTION None

ELECTRICAL SURVEYS
CND;D/SP;P.E.
Micro, sonic
By:Weatherford

FORMATION TOPS	ELECTRIC LOG	SAMPLE
Anhydrite	2474 (+675)	2471 (+672)
Heebner Shale	4008 (-865)	4006 (-863)
Lansing	4050 (-907)	4050 (-907)
Stark	4326 (-1183)	4325 (-1182)
BKC	4421 (-1278)	4419 (-1276)
Fort Scott	4597 (-1452)	4595 (-1454)
Cherokee Shale	4625 (-1482)	4624 (-1481)
Mississippian	4803 (-1660)	4804 (-1661)

16

REMARKS Due to the lack of shows and negative drill stem tests, it was decided to plug and abandon the well.

Respectfully Submitted,

API #15-171-21016-00-00

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Petroleum Geologist

LEGEND
Anhydrite | Sandstone | Limestone | Shale | Carb Sh | Cherty LS | Chert | Dolomite

LITHOLOGY | DEPTH | DRILLING TIME IN MINUTES PER FOOT (Rate of Penetration Decreases →; .5 1.0 5 10 15 20 30) | SAMPLE DESCRIPTION | REMARKS

Anhydrite 2471(+672)

Base/ Anhydrite 2491(+652)

Ls crm-gry motld, fos, sli chky, p-f int xtl-pp por, NS
Sh blk, carb
Sh/SS red-gry, fn-med grn, p sort, friable, NS
Ls crm-tan-gry, fn xtl, arg in prt no vis por
Sh grn-gry, calc
Ls tan, vfn xtl, sli fos, dnse
Sh blk, carb
Ls crm-lt gry, fos, chky, p-f int xtl & int frag por, NS
Ls crm, vfn xtl, chty, dnse
Sh red-maroon
Ls crm-tan, fn xtl, fos, p-f int xtl-pp por, NS
Ls crm-tan, fn xtl, fos, f int xtl-pp por, NS

Heebner 4006 (-863)

Sh blk, carb
Sh gry-dk gry, calc

Toronto 4023 (-880)

Ls crm-lt gry, fn xtl, fos, v chky, f int xtl-pp por, NS
Ls crm-lt gry, vfn xtl, sli chty, dnse
Sh red-grn-gry, calc

Lansing 4050 (-907)

Ls crm-lt gry, fn xtl, fos, chky, f int xtl & int frag por, NS
Ls crm-lt gry, fn xtl, fos-sli ool, chky, f int xtl & int frag por, NS
Sh gry-dk gry
Sh grn-gry
Ls crm-lt gry, fn xtl, fos-sub ool, chky, p-f int xtl-pp por, NS
Sh red-grn
Ls crm, fn xtl, fos, v chky, p-f int xtl-pp por, NS
Ls crm-lt gry, vfn xtl, sli chky, dnse
Ls crm, fn xtl, fos, chky, p-f int xtl-pp por, sptd stn on few pcs, VSSFO, no odor, sli fluor
Sh blk, carb
Ls crm-lt gry, vfn xtl, dnse
Ls crm-lt gry, fn xtl, sli fos, chky, p-f int xtl-pp por, NS
Sh grn-gry
Ls crm-lt gry, fn xtl, fos-ool, si chky, f int frag por, sptd stn, VSSFO, no odor, dull-f fluor
CFS
Sh gry-dk gry
Ls crm-lt gry, fn xtl, fos-ool, chky, p-f int frag por, NS
Ls crm-lt gry, vfn xtl, dnse
Ls crm-tan, fn xtl, fos, chky, p int xtl por, NS
Ls crm-lt gry, fn xtl, fos, chky, p-f int xtl-pp por, NS
Sh gry-dk gry
Ls gry, vfn xtl, dnse

Muncie Creek 4235 (-1092)

Sh blk, carb
Ls lt gry, vfn xtl, chty, dnse
Sh red-gry, calc
Ls crm, fos-ool, chky, p-f int frag-ooc por, NS
CFS
Ls crm-tan, vfn xtl, sli chty, dnse
Ls crm-tan, fn xtl, fos, dnse
Sh blk, carb
Sh lt gry-gry
Ls crm-tan, vfn xtl, chty, dnse
Ls crm-lt gry, fn xtl, fos-ool, sli chky, p-f int xtl & int frag por, NS
CFS
Ls tan-gry, vfn xtl, dnse
Sh grn-gry
Ls lt gry, mic xtl, dnse
Ls crm-lt gry, fn xtl, fos, chky, p-f int xtl-pp por, NS
CFS

Stark 4325 (-1182)

Sh blk, carb
Sh gry-dk gry
Ls tan-gry, vfn xtl, dnse
Ls crm-lt gry, fn xtl, fos, chky, p-f int xtl & int frag por, NS
Ls tan-gry, vfn xtl, dnse
Ls crm-gry, fn xtl, fos, v chky, p-f int xtl & int frag por, NS

Hushpuckney 4369 (-1226)

Sh blk, carb
Ls tan, vfn xtl, dnse
Sh gry-dk gry
Ls crm-lt gry, vfn xtl, dnse
Ls crm-gry, fn xtl, sli dolo, p int xtl por, NS
Ls crm-lt gry, fn xtl, p-f int xtl-pp por, NS
Sh blk, carb
Ls crm, mic xtl, dnse

B/K.C. 4419 (-1276)

Sh gry-dk gry
Ls lt gry, fn xtl, fos, sli chky, p int xtl & int frag por, NS
Ls crm-tan, vfn xtl, arg in prt
Sh var col, silty, calc in prt
Sh var col, silty
Ls crm-tan, vfn xtl, dnse
Sh gry-dk gry, calc

Marmaton 4466 (-1323)

Ls crm-lt gry, fn xtl, fos, sli chky, p int xtl-pp por, NS
DST#1
Ls lt gry-gry, vfn xtl, dnse, w/ int bed gry Sh
Ls crm-lt gry, fn xtl, fos-ool, p-f int frag por w/few vugs, sptd-sli sat stn, SSFO, sli odor, dull fluor
CFS
Sh red-grn-gry

DST # 1
(4451'-4500')
30"-30"-45"-60"
IF: Surface blow, no return
FF: Surface blow, no return
Rec: 65' OSM
Fps: 20-33#/35-48#
SIPs: 1210#/1211#
HSPs: 2194#/2171#
BHT: 109 deg F

Ls crm-tan-brn, mic xtl, dnse
Sh red-maroon-gry
Ls crm-lt gry, vfn xtl, fos, sli chky, dnse, w/gry Sh
Ls gry, mic xtl, dnse
Ls tan-gry, fn xtl, fos-ool, chky, p-f int frag por, NS
CFS
Sh blk, carb
Ls tan-gry, vfn xtl, arg in prt

Pawnee 4544 (-1401)

Ls crm-tan, fn-vfn xtl, fos, sli chky, p int xt-pp por, w/gry Sh
Ls crm-tan-lt gry, vfn xtl, sli chty, dnse
Ls crm-tan, fn-vfn xtl, fos, sli chky, p-f int xt-pp por, NS
Ls crm-lt gry, vfn xtl, sli chty, dnse
Sh blk, carb
Sh gry-dk gry, calc in prt

Myric Station 4586 (-1443)

Ls tan, vfn xtl, fos, chty, dnse
Sh blk, carb

Fort Scott 4595 (-1452)

Ls crm-tan-gry, vfn xtl, sli ool in prt, no vis por, NS
Ls tan-gry, vfn xtl, sli fos, sli chty, dnse
CFS
Sh grn-gry
Ls crm-gry, vfn xtl, sli chty, dnse

Cherokee Shale 4624 (-1481)

Sh blk, carb
Ls gry-tan, fn xtl, fos, chky, f-gd int xtl & int frag por, NS
Sh dk gry
Ls gry, mic xtl, dnse
Sh blk, carb
Ls tan-gry, mic xtl, chty, dnse
Sh blk, carb
Ls tan, mic xtl, dnse
Sh grn-gry-dk gry

Johnson Zone 4667 (-1524)

Ls tan-gry, mic xtl, dnse
Ls crm-tan-lt gry, vfn xtl, p int xtl & p-f pp-vug por, sptd-sli sat stn, SFO, f odor, dull fluor
Ls crm-tan-gry, vfn xtl, chty, dnse
DST#2
Sh gry-blk
Ls crm-tan-gry, vfn xtl, sli chty, dnse
Ls crm-lt gry, fn xtl, p int xtl-pp por, sptd stn on 2pcs, SSFO, (floating), sli odor, dull fluor
Ls crm-tan-gry, vfn xtl, dnse
CFS

DST # 2
(4648'-4725')
30"-30"-30"-30"
IF: Died in 20", no return
FF: No blow, no return
Rec: 15' OSM
Fps: 24-29#/27-29#
SIPs: 174#/89#
HSPs: 2301#/2256#
BHT: 108 deg F

Var col shale & silts, calc
Sh var col
SS lt gry-lt grn, fn grn, well cement, sli fria, NS
SS lt gry, fn-med grn, f-p cem, sli fria, NS
SS lt gry, fn-med grn, well cement, sli fria, NS w/int bed gry shale
Sh var col, silty-sli sandy

Mississippian 4804 (-1661)

Ls crm-lt gry, vfn xtl, dnse, w/ fn-coarse grn SS inclus
Ls crm-tan, mic xtl, sli chky, dnse
Ls crm-lt gry, vfn xtl, v chky, dnse
Ls crm-lt gry, vfn xtl, chky, dnse

Total Depth
4880' (-1737)