

**GEOLOGIST'S REPORT**  
**DRILLING TIME AND SAMPLE LOG**

COMPANY **SHAKESPEARE OIL CO.** ELEVATIONS  
 LEASE **Nightengale 1-15** KG 3088'  
 FIELD **Wildcat** DF \_\_\_\_\_  
 LOCATION **1307 FSL, 6407 FEL** GL 3079'  
 SEC **15** T15SP **17S** R0E **34W**  
 COUNTY **Scott** STATE **Kansas** Measurements Are All From **KB**

CONTRACTOR **HD Rig #3** From **KB**  
 SPUD **1-5-16** COMP **1-16-16**  
 RTD **4965'** LTD **4963'** CASING  
 MUD UP **3600'** TYPE MUD **Chemical** CONDUCTOR **N/A**  
 SURFACE **8-5/8" @ 264'**  
 PRODUCTION **None**

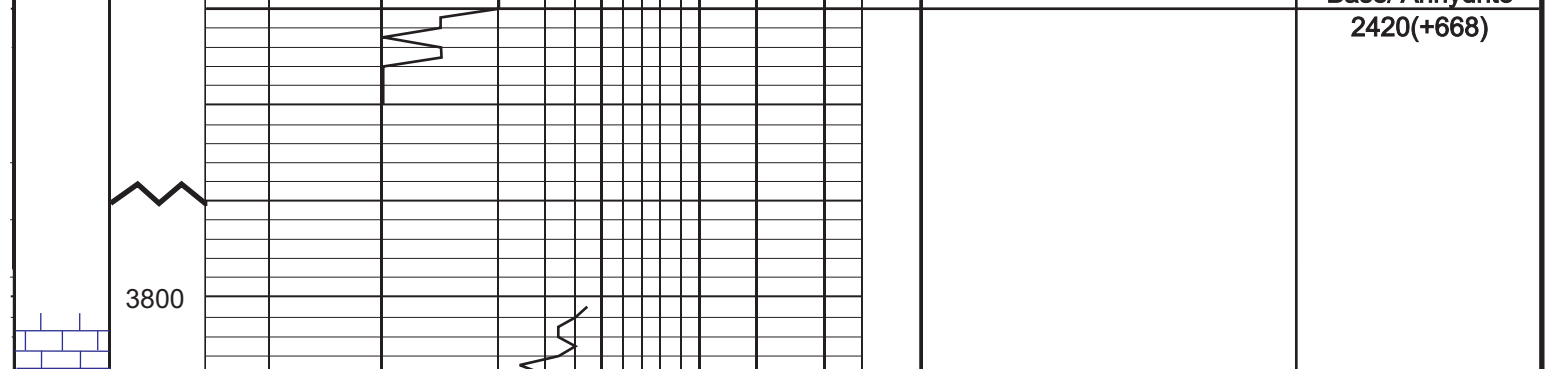
SAMPLES SAVED FROM **3800'** to RTD  
 DRILLING TIME KEPT FROM **3800'** to RTD  
 SAMPLES EXAMINED FROM **3800'** to RTD

GEOLOGICAL SUPERVISION FROM 3900' to RTD  
 GEOLOGIST ON WELL **Tim Priest** By: **Weatherford**

FORMATION TOPS ELECTRIC LOG SAMPLE  
 Anhydrite **2398 (+690)** 2400 (+688)  
 Heebner Shale **3982 (-894)** 3984 (-896)  
 Lansing **4028 (-940)** 4027 (-939)  
 SARC **4326 (-1238)** 4330 (-1242)  
 B/K.C. **4425 (-1337)** 4427 (-1339)  
 Fort Scott **4614 (-1526)** 4616 (-1528)  
 Cherokee Shale **4884 (-1796)** 4886 (-1798)  
 Mississippian

REMARKS Due to the lack of shows and negative drillstem test, it was decided to plug and abandon the well.  
 Respectfully Submitted,  
 Tim Priest  
 Petroleum Geologist

API #15-171-21165-00-00



DRILLING TIME IN MINUTES PER FOOT  
 Rate of Penetration Decreases

DEPTH  
 LITHOLOGY

SAMPLE DESCRIPTION

REMARKS

Anhydrite 2400(+688)

Base/ Anhydrite 2420(+688)

Ls crm-tan, fn xtl, fos, chky, f-gd int xtl & int frag por, NS

Sh gry

Ls crm-tan, fn xtl, sil fos, chky, arg in prt

Sh blk, carb

SS lt gry, vfn gm, friable, w/gry Sh

Ls crm-tan, fn xtl, sil fos, chky, arg in prt

Ls crm-tan-gry, fn xtl, fos, chky, p-f int xtl-pp por, NS

Ls crm-t gry, vfn xtl, dnse

Sh gry-blk

Ls crm-tan, fn xtl, fos, chky, f-gd int xtl-pp por, NS

Ls crm-t gry, vfn xtl, sli chty, dnse

Ls crm-t gry, fn xtl, fos, chky, f int xtl por, NS

Ls crm-t gry, fn xtl, dnse

Ls crm-t gry, fn xtl, fos, p-f int xtl-pp por, NS

Sh blk, carb

Sh gry-dk gry, calc

Ls crm-t gry, fn xtl, fos, chky, p-f int xtl-pp por, NS

Ls crm, fn xtl, fos, v chky, p-f int xtl-pp por, NS

Sh grn-gry

Ls crm-t gry, fos, chky, p-f int xtl por, NS

Ls crm, fn xtl, ool, v chky, p-f int xtl & int ool por, NS

Sh red-gry

Ls crm-t gry, fn xtl, fos, p-f int xtl-pp por, NS

Sh gry

Ls crm-t gry, vfn xtl, sli chty, dnse

Ls crm-t gry, fn xtl, chky, p int xtl por, NS

Ls crm-t gry, fn xtl, chky, p int xtl por, NS

Sh grn-gry

Ls crm-t gry, vfn xtl, fos, chky, dnse

Sh gry-dk gry

Ls crm-t gry, fn xtl, fos, sli chky, p-f int xtl-pp por w/scat vugs, NS

Ls crm-tan, fn xtl, ool, chky, f int xtl & ooc por, NS

Ls crm-t gry, fn xtl, sli chty, dnse

Ls crm-t gry, fn xtl, fos, chky, p int xtl-pp por, NS

Ls crm-t gry, vfn xtl, chty, dnse

Ls crm-t gry, fn xtl, fos, chky, p-f int xtl-pp por, NS

Ls crm-t gry, vfn xtl, chty, dnse

Sh blk, carb

Ls lt gry, vfn xtl, dnse

Ls crm-tan, fn xtl, ool, p-f int ool-ooc por, NS

Ls crm-t gry, vfn xtl, sli chty, dnse

Ls crm-t gry, fn xtl, fos, chky, p int xtl-pp por, NS

Ls tan-gry, vfn xtl, sli chty, dnse

Ls crm-t gry, fn xtl, fos, chky, arg in prt, p int xtl-pp por, NS

Ls crm-t gry, vfn xtl, sli chty, dnse

Ls crm, fn xtl, fos, chky, p-int xtl-pp por, NS

Ls crm-t gry, vfn xtl, sli chty, dnse

Ls crm-t gry, fn xtl, ool, chky, f-gd int xtl & ooc por, NS

Ls gry, vfn xtl, sli chty, dnse

Sh blk, carb

Ls crm-t gry, fn xtl, arg in prt, most dnse

Ls gry, vfn xtl, sli chty, dnse

Ls tan-gry, fn xtl, ool, chky, f int xtl & int ool por, scat ooc por, NS

Ls crm-gry, fn xtl, fos, chky, p-f int xtl-pp por, NS

Sh blk, carb

Ls tan-gry, vfn xtl, dnse

Sh gry

Ls crm-t gry, fn xtl, chky, arg in prt

Ls lt gry-gry, vfn xtl, dnse

Ls crm-gry, fn xtl, fos, chky, p int xtl-pp por w/scat vugs, NS

Sh blk, carb

Sh dk gry

Ls crm-t gry, fn xtl, ool, chky, p-f int xtl-int ool por, NS

Sh dk gry-blk

Sh var col, silty, sandy

Ls crm-t gry, vfn xtl, sli chky, dnse

Ls crm-t gry, mic xtl, dnse

Ls crm-t gry, mic xtl, dnse

Ls crm-t gry, fn-xtl, fos-ool, p int ool & pp por, spdt-sli sat stn on few pcs, VSSFO, v sli odor, dull fluor

Sh gry-dk gry

Ls crm-t gry, vfn xtl, dnse

Ls crm-t gry, vfn xtl, dnse

Ls crm-t gry, vfn xtl, arg in prt

Ls crm-tan, fn xtl, chky, arg in prt, no vis por

Ls crm-tan, vfn xtl, sli chty, dnse

Sh blk, carb

Ls lt gry-gry, vfn xtl, sli ool, dnse

Sh blk, carb

Ls tan-gry mtd, fn xtl, ool, dnse

Sh grn-gry-dk gry

Ls crm-gry, fn xtl, fos, sli chty, mostly dnse

Sh blk, carb

Ls crm-tan-gry mtd, fn xtl, fos, chky, p-f int frag por, NS

Sh grn-gry

Ls crm-t gry, vfn xtl, dnse

Ls tan-gry, vfn xtl, w/int bed blk carb Sh

Sh gry-dk gry

Ls crm-t gry, vfn xtl, dnse

Sh grn-gry

Ls crm-t gry, vfn xtl, dnse

Ls crm-gry, fn xtl, sli fos, sli chty, dnse

Ls crm-tan-gry, fn xtl, sli fos, sli chky, no vis por

Ls crm-tan-gry, fn xtl, sli fos, sli chky, no vis por

? Sh var col

Ls tan-gry, mic xtl, dnse

SS clear-grn, fn-coarse gm, friable, NS, w/gm Sh

Sh var col

Sh gry-dk gry

Sh var col, w/lt gry fn gm SS

SS clear-lt gry, fn gm, fria, NS

Sh var col, silty

Sh gry-dk gry, silty

Ls crm-tan, fn xtl, sli chky, sandy, dnse

SS clear, med-coarse-loose large grns, sub ang, NS

Ls crm-t gry, sandy, sli chky, dnse

Ls crm-tan, vfn xtl, sli dnse

Ls crm-t gry, vfn xtl, sli sandy, sli chky, dnse

Ls tan, mic xtl, dnse

Ls crm-t gry, vfn xtl, dnse

Ls crm-t gry, vfn xtl, chky, dnse

Total Depth 4965' (-1877)

Marmaton 4477 (-1389)

DST # 1 (4448'-4500')

30' 300-300' 30'

FF: No blow, no return

Flow: 5' OSM w/fo on top

Fps: 28-36W/56-40H

SI/PS: 635a/537f

MS/PS: 2261/18221#

BHT: 113 deg F

Muncie Creek 4230 (-1142)

Stark Shale 4330 (-1242)

Hushpuckney Shale 4377 (-1289)

B/K.C. 4427 (-1339)

Pawnee 4564 (-1476)

Myric Station 4601 (-1513)

Fort Scott 4616 (-1528)

Cherokee Shale 4642 (-1554)

Johnson Zone 4690 (-1602)

Mississippian 4886 (-1798)