

GEOLOGIST'S REPORT
DRILLING TIME AND SAMPLE LOG

COMPANY **SHAKESPARE OIL CO.** ELEVATIONS
 LEASE **SEWARDS-121** KG 3140'
 FIELD **Pine West** DF _____
 LOCATION **128° 51' E 181° 1' E** SEC _____
 SEC **21** T1MSP **16S** R0E **34W** GL **3132'**
 COUNTY **Scott** STATE **Kansas** Measurements Are All From **KB**

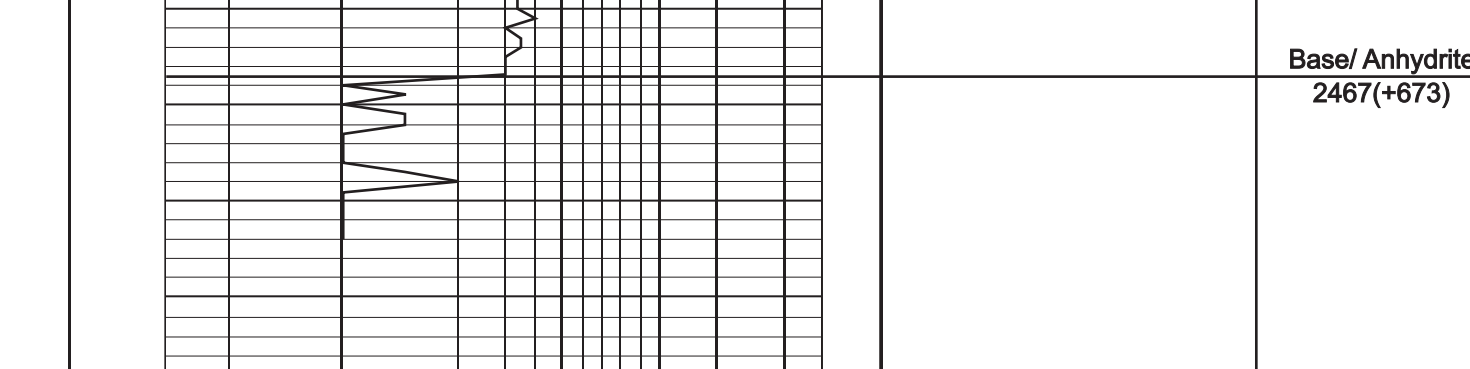
CONTRACTOR **Duke Drilling Rig 2**
 SPUD **7-26-16** COMP **8-6-16**
 RTD **4915'** LTD **4911'** CASING
 MUD UP **3500'** TYPE MUD **Chemical** CONDUCTION **N/A**
 SAMPLES SAVED FROM **3800'** to RTD SURFACE **8-5/8" @ 264'**
 DRILLING TIME KEPT FROM **3800'** to RTD PRODUCTION **None**
 SAMPLES EXAMINED FROM **3800'** to RTD ELECTRICAL
 GEOLOGICAL SUPERVISION FROM **3900'** to RTD CND/D/SP/P/E
 GEOLOGIST ON WELL **Tim Priest** Micro sonic
 By: **Weatherford**

FORMATION TOPS ELECTRIC LOG SAMPLE
 Anhydrite **2444 (+696)** **2449 (+691)**
 Heebner Shale **3996 (-856)** **3999 (-859)**
 Lansing **4038 (-898)** **4041 (-901)**
 Stark **4326 (-1186)** **4331 (-1191)**
 B/K.C. **4425 (-1285)** **4425 (-1285)**
 Fort Scott **4598 (-1458)** **4602 (-1462)**
 Cherokee Shale **4626 (-1486)** **4630 (-1490)**
 Mississippi **4836 (-1696)** **4837 (-1697)**

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

Respectfully Submitted,
 Tim Priest
 Petroleum Geologist

API #15-171-21174-00-00



DEPTH	LITHOLOGY	DRILLING TIME IN MINUTES PER FOOT	SAMPLE DESCRIPTION	REMARKS
2450	Anhydrite	0.5	Anhydrite	2449(+691)
2450	Anhydrite	0.5	Base/ Anhydrite	2467(+673)
3800	Shale	1.0	Ls crm-lt gry, fos, chky, dnse	
3800	Shale	1.0	Sh grn-gry	
3800	Shale	1.0	Ls crm-gry moldf, fos, sli chky, p-f int xtl-pp por, NS	
3800	Shale	1.0	Sh grm-gry	
3800	Shale	1.0	Ls crm-gry moldf, fos, sli chky, p-f int xtl-pp por, NS	
3800	Shale	1.0	Sh blk, carb	
3800	Shale	1.0	Sh/SS red-gry, fn-med grn, p sort, sli friable, NS	
3800	Shale	1.0	Ls crm-tan-gry, fn xtl, arg in prt no vis por	
3800	Shale	1.0	Sh grm-gry, calc	
3800	Shale	1.0	Sh blk, carb	
3800	Shale	1.0	Ls crm-lt gry, fos, chky, p-f int xtl & int frag por, NS	
3800	Shale	1.0	Ls crm, vfn xtl, chty, dnse	
3800	Shale	1.0	Sh red-maroon	
3800	Shale	1.0	Ls crm-tan, fn xtl, fos, f int xtl-pp por, NS	
3800	Shale	1.0	Ls crm-tan, fn xtl, fos, p-f int xtl-pp por, NS	
3800	Shale	1.0	Sh blk, carb	Heebner 3999 (-859)
3800	Shale	1.0	Sh gry-dk gry, calc	
3800	Shale	1.0	Ls crm-lt gry, fn xtl, fos, v chky, f int xtl-pp por, NS	Toronto 4012 (-872)
3800	Shale	1.0	Ls crm-lt gry, vfn xtl, sli chty, dnse	
3800	Shale	1.0	Sh red-grn-gry, calc	Lansing 4041 (-901)
3800	Shale	1.0	Ls crm-lt gry, fn xtl, fos, chky, f int xtl & int frag por, NS	
3800	Shale	1.0	Ls crm-lt gry, fn xtl, fos-sli ool, chky, f int xtl & int frag por, NS	
3800	Shale	1.0	Sh gry-dk gry	
3800	Shale	1.0	Ls crm-lt gry, vfn xtl, dnse	
3800	Shale	1.0	Ls crm-lt gry, fn xtl, fos-sub ool, chky, p-f pp-vug por, NS	
3800	Shale	1.0	Sh grm-gry	
3800	Shale	1.0	Ls crm, fn xtl, fos, v chky, p-f int xtl-pp por, NS	
3800	Shale	1.0	Ls crm-lt gry, vfn xtl, sli chky, sli chty, dnse	
3800	Shale	1.0	Sh blk, carb	
3800	Shale	1.0	Ls crm-lt gry, vfn xtl, dnse	
3800	Shale	1.0	Ls crm-lt gry, fn xtl, fos, chky, p int xtl-pp por, NS	
3800	Shale	1.0	Sh grm-gry	
3800	Shale	1.0	Ls crm-lt gry, vfn xtl, dnse	
3800	Shale	1.0	Ls crm-lt gry, fn xtl, fos-ool, chky, p-f int frag por, NS	
3800	Shale	1.0	Sh gry-dk gry	
3800	Shale	1.0	Ls crm-lt gry, fn xtl, fos, chky, p int xtl por, NS	
3800	Shale	1.0	Ls crm-lt gry, fn xtl, ool, chky, fgd ooc por, NS	
3800	Shale	1.0	Ls crm-lt gry, vfn xtl, dnse	
3800	Shale	1.0	Ls crm-tan, fn xtl, fos, chky, p int xtl por, NS	
3800	Shale	1.0	Ls crm-lt gry, fn xtl, fos, chky, p-f int xtl-pp por, NS	
3800	Shale	1.0	Sh gry-dk gry	
3800	Shale	1.0	Ls gry, vfn xtl, dnse	Muncie Creek 4228 (-1088)
3800	Shale	1.0	Sh blk, carb	
3800	Shale	1.0	Ls lt gry, vfn xtl, chty, dnse	
3800	Shale	1.0	Sh red-gry, calc	
3800	Shale	1.0	Ls crm, fos, v chky, p-f int xtl & int frag por, NS	
3800	Shale	1.0	Ls crm-tan, vfn xtl, sli chty, dnse	
3800	Shale	1.0	Sh blk, carb	
3800	Shale	1.0	Ls crm-tan, vfn xtl, chty, dnse	
3800	Shale	1.0	Sh lt gry-gry	
3800	Shale	1.0	Ls crm-tan, vfn xtl, chty, dnse	
3800	Shale	1.0	Ls crm-lt gry, fn xtl, fos-ool, sli chky, p int xtl & int frag por, NS	
3800	Shale	1.0	Ls tan-gry, vfn xtl, dnse	
3800	Shale	1.0	Sh grm-gry	
3800	Shale	1.0	Ls crm-lt gry, vfn xtl, dnse	
3800	Shale	1.0	Ls crm-tan, fn xtl, ool, chky, p-f int ool-ool por, NS	
3800	Shale	1.0	Sh blk, carb	Stark 4331 (-1191)
3800	Shale	1.0	Ls crm-lt gry, fn xtl, fos, chky, p-f int xtl & int frag por, NS	
3800	Shale	1.0	Ls crm-tan, vfn xtl, dnse	
3800	Shale	1.0	Ls crm-gry, fn xtl, fos, v chky, p-f int xtl & int frag por, NS	
3800	Shale	1.0	Ls tan-gry, vfn xtl, dnse	
3800	Shale	1.0	Sh blk, carb	Hushpuckney 4377 (-1237)
3800	Shale	1.0	Ls tan, vfn xtl, dnse	
3800	Shale	1.0	Sh gry-dk gry	
3800	Shale	1.0	Ls crm-lt gry, vfn xtl, dnse	
3800	Shale	1.0	Ls crm-tan, vfn xtl, arg in prt	
3800	Shale	1.0	Sh gry-dk gry	
3800	Shale	1.0	Sh blk, carb	
3800	Shale	1.0	Ls crm, mic xtl, dnse	B/K.C. 4425 (-1285)
3800	Shale	1.0	Ls crm-tan, vfn xtl, dnse	
3800	Shale	1.0	Sh gry-dk gry, calc in prt	
3800	Shale	1.0	Sh var col, silty	
3800	Shale	1.0	Sh gry-dk gry, calc	
3800	Shale	1.0	Ls crm-lt gry, fn xtl, fos-sli ool, chky, p-f int frag por w/few vugs, sptd stn, SSFO, sli odor, dull-f fluor	DST # 1 (4447-4485) IF: Died in 25', no return FF: No flow, no return Rec: 20' Mud Fps: 158/103# HSPs: 2238/2202# BHT: 117 deg F
3800	Shale	1.0	Ls crm-tan, f-vfn xtl, fos, p-f int xtl-pp por w/few vugs, sptd stn, SSFO, sli odor, dull fluor	Marmaton 4478 (-1338) DST # 2 (4482-4505) Piston Failure
3800	Shale	1.0	Ls crm-tan, vfn xtl, dnse	
3800	Shale	1.0	Ls crm-lt gry, fn xtl, fos, sli chky, p-f int frag por w/scat vugs, sptd-sli sat stn, SSFO, f odor, dull-f fluor	DST # 3 (4447-4505) 30'-60'-30'-60' IF: Died in 14', no return FF: No flow, no return Rec: 20' Mud w/scom of oil Fps: 52.5/1954-50# SIPs: 1528/65# HSPs: 2281/2295# BHT: 117 deg F
3800	Shale	1.0	Ls crm-lt gry, fn xtl, fos, chky, p-f int xtl-pp por, sptd-sli sat stn, SSFO, sli odor, v dull fluor	DST # 4 (4500'-4545) 30'-60'-30'-60' IF: Died in 10', no return FF: No flow, no return Rec: 15' OSM Fps: 53.5/1952-47# SIPs: 128/48# HSPs: 2296/2229# BHT: 115 deg F
3800	Shale	1.0	Ls tan-gry, vfn xtl, dnse	
3800	Shale	1.0	Ls tan-gry, vfn xtl, arg in prt	
3800	Shale	1.0	Ls crm-tan-lt gry, vfn xtl, sli chty, dnse	
3800	Shale	1.0	Sh blk, carb	
3800	Shale	1.0	Ls crm-lt gry, vfn xtl, sli chty, dnse	
3800	Shale	1.0	Sh gry	
3800	Shale	1.0	Ls crm-lt gry, vfn xtl, sli chty, dnse	Pawnee 4558 (-1418)
3800	Shale	1.0	Ls crm-lt gry, vfn xtl, sli chty, dnse	
3800	Shale	1.0	Ls tan, vfn xtl, fos, chty, dnse	
3800	Shale	1.0	Sh blk, carb	
3800	Shale	1.0	Ls crm-tan-gry, vfn xtl, fos-ool, sli chty, dnse	Myric Station 4592 (-1452)
3800	Shale	1.0	Ls crm-tan-gry, vfn xtl, fos-ool, sli chty, dnse	Fort Scott 4602 (-1462)
3800	Shale	1.0	Ls crm-tan-gry, fos-sli ool, chky, p int xtl-pp por, NS	
3800	Shale	1.0	Ls crm-gry, vfn xtl, sli chty, dnse	
3800	Shale	1.0	Sh blk, carb	
3800	Shale	1.0	Ls gry-tan, fn xtl, fos, chky, f-gd int xtl & int frag por, NS	
3800	Shale	1.0	Ls gry, mic xtl, dnse	
3800	Shale	1.0	Sh dk gry	
3800	Shale	1.0	Sh blk, carb	
3800	Shale	1.0	Ls tan-gry, mic xtl, chty, dnse	
3800	Shale	1.0	Sh tan-gry, carb	
3800	Shale	1.0	Ls tan-gry, mic xtl, chty, dnse	
3800	Shale	1.0	Sh grm-gry-dk gry	
3800	Shale	1.0	Ls tan, mic xtl, dnse	Johnson Zone 4672 (-1632)
3800	Shale	1.0	Ls tan-gry, vfn xtl, sli fos, dnse	
3800	Shale	1.0	Sh dk gry	
3800	Shale	1.0	Ls crm-lt gry, fn xtl, fos, chky, p-f int xtl-pp por, NS	
3800	Shale	1.0	Ls crm-lt gry, fn xtl, fos, chky, p int xtl-pp por, NS	
3800	Shale	1.0	Ls tan-gry, mic xtl, chty, dnse	
3800	Shale	1.0	Sh dk gry	
3800	Shale	1.0	Ls crm-lt gry, fn xtl, fos, chky, p int xtl-pp por, NS	
3800	Shale	1.0	Ls tan-gry, vfn xtl, dnse	
3800	Shale	1.0	Ls tan-gry, mic xtl, dnse	
3800	Shale	1.0	Ls crm-lt gry, vfn xtl, fos, sli chty, sli chky, dnse	
3800	Shale	1.0	Sh grm-dk gry-maroon	
3800	Shale	1.0	Sh grm-gry-maroon, silty	
3800	Shale	1.0	Sh grm-gry-maroon, silty	
3800	Shale	1.0	Sh var col, silty, pyritic	
3800	Shale	1.0	Sh var col, silty, a few grns of lt gry SS	
3800	Shale	1.0	SS lt gry, fn-med grn, poor sorted, friable, NS	
3800	Shale	1.0	Ls crm-tan, fn xtl, chky, sandy, dnse	Mississippi 4837 (-1697)
3800	Shale	1.0	Ls crm-lt gry, mic xtl, dnse	
3800	Shale	1.0	Ls crm-tan, vfn xtl, dnse	
3800	Shale	1.0	Ls crm-lt gry, vfn xtl, chky, dnse	
3800	Shale	1.0	Ls crm-lt gry, vfn xtl, v chky, dnse	
3800	Shale	1.0	Total Depth 4915' (-1775)	