

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

COMPANY **SHAKESPEARE OIL CO.**  
 LEASE **Orkney-6-14**  
 FIELD **Chalk Buttes**  
 LOCATION **1920' F.V.L. 1600' FEL**  
 SEC **14 T1MSP 14S R0E 32W**  
 COUNTY **Logan STATE Kansas**

ELEVATIONS  
 KB 2818'  
 DF \_\_\_\_\_  
 GL 2808'

CONTRACTOR **HD Drilling Rig #2**  
 SPUD **7-3-14** COMP **7-17-14**  
 RTD **4:53:00** LTD **4:52:27**  
 MUD UP **3:50:00** TYPE MUD **Chemical**

SAMPLES SAVED FROM **3600'** to RTD  
 DRILLING TIME KEPT FROM **3600'** to RTD  
 SAMPLES EXAMINED FROM **3600'** to RTD

GEOLOGICAL SUPERVISION FROM **3700'** to RTD  
 GEOLOGIST ON WELL **Tim Priest**

FORMATION TOPS  
 Anhydrite **2270 (+550)**  
 Heebner **3784 (-966)**  
 Lansing **3822 (-1008)**  
 SARC **4069 (-1248)**  
 Fort Scott **4328 (-1513)**  
 Mississippi **4452 (-1654)**

SAMPLE  
 2270 (+548)  
 3787 (-969)  
 3826 (-1004)  
 4148 (-1331)  
 4331 (-1510)  
 4454 (-1656)

PRODUCTION **5 1/2" @ 4530'**  
 SURFACE \_\_\_\_\_  
 CONDUCTION **N/A**

CASING  
 From **KB**

Measurements Are All  
 From **KB**

By: **Weatherford**

ELECTRICAL SURVEYS  
 CND/D/SP/P/E

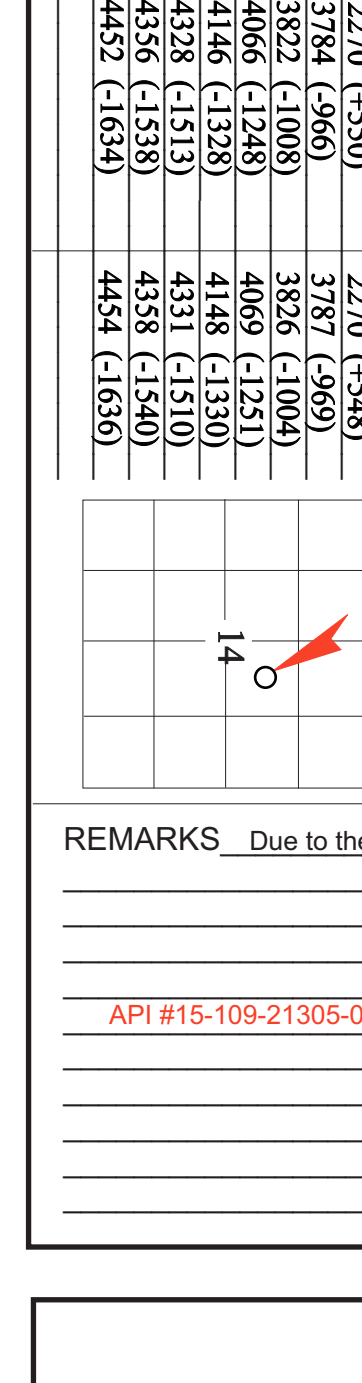
Micro

REMARKS Due to the log calculations it was decided to set production casing to further test the well.

Respectfully Submitted,

**Tim Priest**  
 Petroleum Geologist

API #15-109-21305-00-00



DEPTH	LITHOLOGY	DRILLING TIME IN MINUTES PER FOOT	SAMPLE DESCRIPTION	REMARKS
2270	Anhydrite	0.5	Anhydrite	2270(+548)
2292	Base/ Anhydrite	0.5	Base/ Anhydrite	2292(+526)
3787	Heebner	0.5	Heebner	3787(-969)
3806	Toronto	0.5	Toronto	3806(-988)
3822	Lansing	0.5	Lansing	3822(-1008)
3870	DST #1	0.5	DST #1 (3845'-3870')	30"-30"-30"-30" FF: Built to 10 in., no return FF: No blow, no return Rec: 30' OSM Fps: 15.20W/21-26# SIPs: 5138/505# HSPs: 1916/1856# BHT: 110 deg F
3870	DST #2	0.5	DST #2 (3891'-3916')	30"-30"-40"-26" FF: Built to 10 in., no return FF: 288 MW w/return of oil Fps: 16.87/90-148# SIPs: 1025/1024# HSPs: 1973/1888# BHT: 115 deg F
3977	Muncie Creek	0.5	Muncie Creek	3977(-1159)
3977	DST #3	0.5	DST #3 (3974'-4010')	30"-30"-45"-60" FF: BOB 28", no return FF: BOB 42", no return Rec: 330' MW Fps: 23-15W/117-177# SIPs: 388/388# HSPs: 2013/1822# BHT: 117 deg F
4069	Stark	0.5	Stark	4069(-1251)
4102	Hushpuckney	0.5	Hushpuckney	4102(-1284)
4102	DST #4	0.5	DST #4 (4099'-4135')	30"-30"-30"-30" FF: Died in 23', no return FF: No blow, no return Rec: 5' Mud Fps: 17-19W/18-19# SIPs: 502/413# HSPs: 2111/1023# BHT: 112 deg F
4148	B/K.C.	0.5	B/K.C.	4148(-1330)
4179	Marmaton	0.5	Marmaton	4179(-1361)
4240	DST #5	0.5	DST #5 (4240'-4295')	30"-30"-45"-60" FF: Built to 10 in., no return FF: Died in 25', no return Rec: 300' Mud, (boil opened) after hitting 916gpy Fps: 198-104W/155-154# SIPs: 1074/1055# HSPs: 2215/2100# BHT: 114 deg F
4276	Pawnee	0.5	Pawnee	4276(-1457)
4302	DST #6	0.5	DST #6 (4302'-4325')	30"-30"-30"-30" FF: BOB in 24", no return FF: BOB in 28", no return Rec: 105' QD; 245' WGM (10%G.S.W./85%N.M.), 183' Mud; 177' MW(60%W/40%M), Total Fluid: 505' Fps: 269-288W/292-323# SIPs: 390/390# HSPs: 2366/2157# BHT: 121 deg F
4312	Myrie Station	0.5	Myrie Station	4312(-1484)
4331	Fort Scott	0.5	Fort Scott	4331(-1513)
4327	DST #7	0.5	DST #7 (4327'-4355')	Hit bridge and tool opened. Decided to drill hole and log.
4358	Cherokee Shale	0.5	Cherokee Shale	4358(-1540)
4399	Johnson Zone	0.5	Johnson Zone	4399(-1581)
4454	Mississippi	0.5	Mississippi	4454(-1636)
4530	Total Depth	0.5	Total Depth	4530(-1712)