



Shakespeare Oil Company, Inc.
202 West Main Street
Salem, IL 62881

WELL-SITE GEOLOGICAL and DRILLING REPORT

API # 15-083-21941-0000

Geologist on well: A. Tobias Eck

OPERATOR	Shakespeare Oil Company, Inc.	COMM.	7/29/17	COMP.	8/5/17	ELEVATION	KB: 2274'
LEASE	Stoecker	WELL No.	1-13	RTD.	4700'	LTD.	4699'
LOCATION	385' FNL & 340' FWL	DRILLING TIME KEPT FROM	3800'	to	TD	GL:	2263'
Sec.	13	Twp.	24S	Rge.	23W	SAMPLES EXAMINED FROM	3800'
COUNTY	Hodgeman	STATE	Kansas	GEOLOGICAL SUPERVISION FROM	3800'	to	TD
CONTRACTOR	Duke Drilling Co. Rig #5	MUD UP	3406'	MUD TYPE	Chemical		

Formation Record

FORMATION	TOP DATUM	LOG DATUM	SAMPLE TOP DATUM	COMPARISON	STRUCTURAL
Stone Corral	1421'	+853'	1423'	+851'	+10'
Heebner	3859'	-1585'	3863'	-1589'	+19'
Lansing	3957'	-1683'	3962'	-1688'	+22'
Stark	4225'	-1951'	4227'	-1953'	+18'
Marmaton	4308'	-2034'	4307'	-2033'	+6'
Pawnee	4439'	-2165'	4444'	-2170'	+27'
Fort Scott	4486'	-2212'	4483'	-2209'	+16'
Mississippian	4576'	-2302'	4576'	-2302'	+19'

OPEN-HOLE LOGS DIL, CDL/CNL w/ PE, MEL

[WEATHERFORD]

24S-23W

CASING RECORD
SURFACE 8-5/8" @ 225'

PRODUCTION D&A

REFERENCE WELL FOR STRUCTURAL COMPARISON
Shaffer #1 (SW SE NE 14-24S-23W)

DRILLING CHRONOLOGY, DST's and GENERAL INFO
DETAILED DAILY DRILLING and MUD INFO @ BOTTOM OF LOG

BIT RECORD						GENERAL INFO	
NO.	SIZE	MAKE	TYPE	DEPTH OUT	FEET	HOURS	
1	12 1/4	RR	Varel	225'	225'	1 1/4	
2	7 7/8	Logic 5-14S	PDC	3689'	3464'	43 1/4	
3	7 7/8	JZ HA-20Q	Cone	4700'	1011'	50 1/4	

DUKE DRILLING COMPANY
RIG #5
Toolpusher- KEN MCGUIRE

Drilling with 40k-42k lbs on bit and 70-80 RPM
18 collars (6.25"x2.25")- 527'
Pumping 60 spm -345 gpm - 1000-1100 psi @ standpipe

DAILY STATUS		DRILL-STEM TEST RECORD	
DATE	Depth/Activity	DST #1- 4581-95' (Mississippi) 30"-30"-30"-30"	
7/29/17	SPUD		
7/31/17	Drilling/ 946'		
8/1/17	Drilling/ 2305'		
8/2/17	Drilling/ 3600'		
8/3/17	Drilling/ 4040'		
8/4/17	TOH for DST #1		
8/5/17	Logging/ 4700'		

DST run by Tribolite Testing, Inc.
Chart at bottom of Log

Remarks and Recommendations

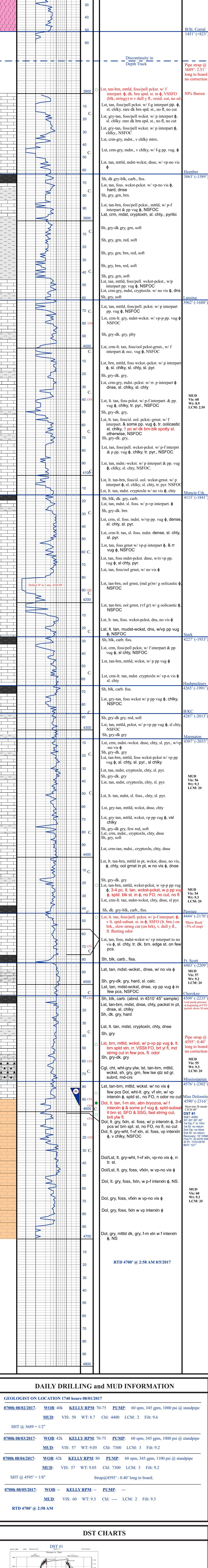
10' wet and dry samples were evaluated from 3800'. Based on sample, drill-stem test, and electric log evaluations, the Stoecker #1-13 will be plugged and abandoned.

08/05/2017
Respectfully submitted,
A. Tobias Eck
Shakespeare Oil Company, Inc.

Basic Legend

Basic Lithologies		Hydrocarbon Shows	
	Limestone		Slight or Residual Show
	Sandstone		Fair Oil Show
	Dolomite		Strong Oil Show
	Chert		Gas Show
	Shale		
	Carbonaceous Shale		
	Siltstone		
	Anhydrite		

(Industry-Standard symbols and abbreviations)



DAILY DRILLING and MUD INFORMATION

GEOLOGIST ON LOCATION 1740 hours 08/01/2017

0700h 08/02/2017- WOB: 40k KELLY RPM: 70-75 PUMP: 60 spm, 345 gpm, 1000 psi @ standpipe
MUD: VIS: 50 WT: 8.7 Chl: 4400 LCM: 2 Filt: 9.6
SHT @ 3689' = 1/2°

0700h 08/03/2017- WOB: 42k KELLY RPM: 70-75 PUMP: 60 spm, 345 gpm, 1000 psi @ standpipe
MUD: VIS: 57 WT: 9.05 Chl: 7300 LCM: 3 Filt: 9.2

0700h 08/04/2017- WOB: 42k KELLY RPM: 80 PUMP: 60 spm, 345 gpm, 1100 psi @ standpipe
MUD: VIS: 57 WT: 9.05 Chl: 7300 LCM: 3 Filt: 9.2
SHT @ 4595' = 1/8° Strap@4595' - 0.40' long to board.

0700h 08/05/2017- WOB: -- KELLY RPM: -- PUMP: ---
MUD: VIS: 60 WT: 9.3 Chl: --- LCM: 2 Filt: 9.3
RTD 4700' @ 2:58 AM

DST CHARTS

