

**SHAKESPEARE OIL COMPANY, INC.**

**H-C #1-7A**

Hiawatha Prospect  
2035' FSL, 1501' FWL SW/4, Sec. 7-33S-41W  
Baca Co., CO  
API# 05-009-06680  
EGL 3732'; EKB 3743'

Wellsite Geologist:	Toby Eck	316-305-0572
Duke Drilling Toolpusher:	Ken McGuire	620-388-6505
Duke Drilling Rig #5:	Rig	620-793-0836

**DAILY DRILLING REPORT**

12/12/17      Begin moving equipment to new location. Pro-Stake staked new location 90' west of previous location. Total Lease prepared new location. Start moving equipment.

12/13/17      MIRU Duke Drilling Rig #5. Spud @ 5:00 pm.

12/14/17      Depth 515'. Drilled 17 1/2" hole to 600'. SHT @ 600' = 3/4<sup>0</sup>. Ran 3 jts csg, sat down @ 110' – could not work through bridge. TOH w/ csg. TIH w/ bit & DC, did not feel bridge, CTCH & TOH w/ bit. TIH w/ 3 jts csg, hit bridge, TOH w/ csg. TIH w/ bit & ream hole. CTCH for 30 min, TOH w/ bit.

12/15/17      Depth 600'. RU Wyoming Casing Crew. **Ran 14 jts new 13 3/8" 48# H-40 ERW STC R3 API csg., tally 595', set @ 592'.** Strapped 3 joints and all welded all collars. **RU Basic and cmt'd w/ 335 sx A-Serv Lite w/ 2% CaCl<sub>2</sub> & ¼# Polyflake (2.01 ft<sup>3</sup>/sx) and 150 sx Premium Plus w/ 2% CaCl<sub>2</sub> & ¼# Polyflake (1.34 ft<sup>3</sup>/sx), PD 6:45 am, cmt 70 bbls to pit.** WOC 12 hrs.

12/16/17      Depth 829'. Lost returns @ 1201'. "Dry" drill from 1201' to 1365'.

12/17/17      Depth 1365'. TOH to run 13 3/8" intermediate string. SHT @ 1365' = 1/4<sup>0</sup>. RU Wyoming Casing Crew. **Ran 32 jts new 8 5/8" 24# J-55 ERW STC R3 csg., tally 1339', set @ 1352'.** Strapped & welded first 4 joints and collars. **RU Basic and cmt'd w/ 150 sx Premium Plus w/ 2% CaCl<sub>2</sub> & ¼# Polyflake (1.34 ft<sup>3</sup>/sx), PD 9:15 am.** Two jts left out, tally 84.34'. WOC 12 hrs. NU 13 3/8" to 8 5/8" & BOP. Press. test BOP to 500# - held. Drill cmt. TIH w/ PDC bit. Start 7 7/8" hole @ 1:15 am. 12/18/17.

12/18/17      Depth 1675'. Displace @ 2990'.

12/19/17      Depth 3306'.

12/20/17      Depth 4474'. TOH for button bit. SHT @ 4474' = 1<sup>0</sup>. At 4496', lost approx. 220 bbls mud.

12/21/17 Depth 4642'.

12/22/17 Depth 4937'. RTD @ 4950'. TOH for logs. SHT @ 4950' = 1°. ***RU ELI to run Dual Induction, Compensated Density, Comp. Neutron & Microlog, LTD 4944'.*** RD ELI.

Due to the lack of quality shows and poor log characteristics, the decision was made to plug and abandon. ***Prepare to plug and abandon.***

Lay down DC's, DP, swivel & kelly. TIH w/ plugging stands.

12/23/17 RU Basic. ***Plug as follows: 40 sx @ 2930', 50 sx @ 1400', 40 sx @ 600', 15 sx @ 50', 5 sx in RH and 5 sx in MH, total 155 sx Class "H".*** PD @ 3:30 am. Clean pits for 3 hrs & tear down. Rig released @ 7:00 am.

### Comparison of Log Tops

Formation	SOCO H-C 1-7 7-33S-41W EKB 3743' Log	TXO Freshour 1 7-33S-41W EKB 3724' D&A	Mull Goff-Hume 1-8 8-33S-41W EKB 3710' D&A
Anhydrite	1462' (+2281')	1457' (+2267')	1439' (+2271')
Marmaton	4009' (-266')	3998' (-274')	3978' (-268')
Cherokee	4160' (-417')	4152' (-428')	4129' (-419')
Atoka	4424' (-681')	4411' (-687')	4396' (-686')
Morrow	4590' (847')	4562' (-838')	4543' (-833')
Morrow 'A' Sand	N/A	4566' (-842')	N/A
Morrow 'Purdy' Sd.	4728' (-985')	4708' (-984')	4708' (-998')
Middle Morrow	4863' (-1120')	DNR	4876' (-1166')
<b>Morrow to Md. Morrow</b>	<b>273'</b>	<b>N/A'</b>	<b>333'</b>