

Ely #3 Drilling Report

Hartman Oil Co., Inc.
Ely #3
 814'FS & 335'FW
 Section 27-21S-34W
 Finney County, Kansas
 #15-055-22,486

KB: 2967
 GL: 2962

Reference Well A: *J. Ely Ely #1 SE SW Sec 27-21S-34W**

Reference Well B: *HOC Gobleman "C" #1 E/2 NW SE Sec 27-21S-34W*

**very old Radioactivity Log; tops difficult to pick; may not be reliable*

<u>A:</u>				<u>B:</u>			
<u>SAMPLE TOPS</u>				<u>ELECTRIC LOG TOPS</u>			
Heebner	3764 (-797)	+8	+2	Heebner	3770 (-803)	+2	-4
Toronto	3780 (-813)	+14	+1	Toronto	3788 (-821)	+6	-7
Lansing	3807 (-840)	+13	+1	Lansing	3816 (-849)	+4	-8
Mun Creek	4004 (-1037)	+15	-2	Mun Creek	4017 (-1050)	+2	-15
Stark	4148 (-1181)	-8	-19	Stark	4148 (-1181)	-8	-19
Hush	4186 (-1219)	flat	-13	Hush	4193 (-1226)	-7	-20
B/KC	4278 (-1311)	-9	-23	B/KC	4277 (-1310)	-8	-22
Marmaton	4300 (-1333)	-10	-19	Marmaton	4298 (-1331)	-8	-17
Marm Lwr A	4317 (-1350)	-13	-26	Marm Lwr A	4318 (-1351)	-14	-27
Pawnee	4382 (-1415)	-12	-23	Pawnee	4391 (-1424)	-21	-32
Ft. Scott	4418 (-1435)	-12	-21	Ft. Scott	4416 (-1449)	-26	-35
Cherokee	4442 (-1475)	-18	-27	Cherokee	4431 (-1464)	-7	-18
Morrow Sh	4626 (-1659)	-17	-39	Morrow Sh	4622 (-1655)	-13	-35
Mississippian	4650 (-1683)	-20	-39	Mississippian	4648 (-1681)	-18	-37
St. Gen	4650 (-1683)	-20	-39	St. Gen	4648 (-1681)	-18	-37
St. Louis "B"	4748 (-1781)	-19	-54	St. Louis "B"	4762 (-1795)	-33	-68
RTD	4820 (-1853)			LTD	4820 (-1853)		

Sample Shows and Drill Stem Tests:

7am 4-30-18: Drilling ahead 3852' – Lansing B zone....

Lansing "H": *Circulate 4020'*

Limestone, cream; fossiliferous; finely oolitic; poor to fair pinpoint porosity; barren; no show of free oil; no odor.

Lansing "I": *Circulate 4054'*

Limestone, cream-gray; oolitic; poor to fair oolitic porosity; barren; no show of free oil; fair to strong odor; no stain in dry sample.

Wiper trip at 4054'...pulled 40 stands...circulated one hour...

back to drilling 9:00pm...wiper trip was tight...

Lansing Upper "I":

Circulate 4076'

Limestone, cream; fossiliferous and oolitic; poor to fair pinpoint porosity; light brown subsaturated to saturated stain; slight show of free oil – rare gas bubbles on break; fair pungent odor; dull yellow fluorescence; milky cut. *Will look at show on the log...*

No shows in Lansing "J"...encountered very thick oolitic zone (46') compared to surrounding wells...

No shows in Lansing Upper "L" or Lower "L" zones....

7am 5-1-18: Drilling ahead 4239' – Lansing Lower "L" zone....

Marmaton Altamont Lower "A":

Circulate 4326'

DST #1

Limestone, cream; large vugular porosity – some with secondary crystalline growth; fracture porosity; dolomitic; good amount golden brown spotty to saturated stain; slight show of free oil – active gas bubbles on break; poor to fair odor; bright yellow fluorescence; milky cut. *7' drilling break*

Demonstration of Diamond Testing P.O.R.T.A.L. System; will use Diamond's infinite bucket system allowing all open and shut in flows to build beyond the conventional 12"=BOB system. Both measurements will be displayed.

DST #1:

Diamond Testing Co., Inc.

Lower Altamont "A":

Michael Carroll; Tester

4310-4326

Conventional

P.O.R.T.A.L System

1st Op: Weak ¼" Blow

1st Op: .25"/30 min

No Blowback

Blowback 0"/45 min

2nd Op: No Blow

2nd Op: 0"/30 min

No Blowback

Blowback 0"/45 min

Rec:

10' SOCM (2%O, 98%M)

IFP: 14-21#/30"

ISIP: 533#/45"

FFP: 23-25#/30"

FSIP: 334#/45"

Pipe Strap at 4326': .98 Short to Board

7am 5-2-18: Drilling ahead 4375' – Lower Marmaton section....

Cherokee Lime:

Limestone, cream-tan; very oolitic; poor to fair pinpoint porosity; several pieces medium to dark brown saturated stain; very slight show of free oil; slight odor; dull yellow fluorescence; milky cut.

Will stop at 4500'; short trip 5-6 stands; come out for straddle test...DST #2 covering Lansing Upper "T" zone...

Short trip pulled tight....pulled 12 stands...

DST #2:

Lansing Upper "T":

4050-4066 (straddle)

Running dual packers on above and below test interval...bottom packer is 4066...bottom dual is 4071...tail pipe for straddle will be 429'.

Diamond Testing Co., Inc.

Michael Carroll; Tester

Conventional

1st Op: 2 1/2" Blow

No Blowback

2nd Op: 3/4" Blow

No Blowback

P.O.R.T.A.L System

1st Op: 2.5"/60 min

Blowback 0"/45 min

2nd Op: .75"/60 min

Blowback 0"/60 min

Rec:

125' WCM (22%W, 78%M)

IFP: 17-49#/60"

ISIP: 875#/45"

FFP: 50-72#/60"

FSIP: 867#/60"

Chlorides: 48,000 ppm

7am 5-3-18: CTCH at 4500' after straddle test....

No shows in Mississippian St. Louis "B"....

7am 5-4-18: Drilling ahead 4788' – cutting rathole for logs....

After reviewing the electric log calculations with Halliburton engineer Scott Carr, it is recommended that the Ely #3 be plugged and abandoned due to negative electric log calculations and low structural position. All major pay zones have been drill stem tested or condemned through electric log calculations. All pay zones in the Ely #3 appear to be water bearing and non-commercial.

FINAL REPORT