ORIGINAL

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15-141-20344

GEOLOGICAL REPORT

Steinle-Yarnell No. 3 (Twin) 100' West of NE-NE-SE Section 6, Twp. 10 South, Reg. 12 West Osborne County, Kansas

10.0 48.00 SVS: 0.0 TO 0.0 SVS: 0.0 SV

October 23, 1998

Leroy E. Tobias 19180 Mellard Rd. Bunker Hill, Kansas 67626

GEOLOGICAL REPORT:

Steinle-Yarnell No. 3 (Twin)

100' W of NE-NE-SE

6-10S-12W

Osborne County, Kansas

CONTRACTOR:

Vonfeldt Drilling Co. Rig No. 1

Russell, Kansas 67665

DRILLING COMMENCED:

October 16, 1998

DRILLING COMPLETED:

October 21, 1998

CASING RECORD:

8 5/8 set at 207' with 150 sx.

DRILLING TIME:

1' Intervals plotted and recorded from 2650' to

3100' R.T.D.

SAMPLES:

10' intervals from 2700' to 3100' R.T.D.

DRILL STEM TESTS:

3 by Trilobite Testing LLC

Hays, Kansas 67601

LOGS:

No logs were run on the Steinle-Yarnell No. 3

(Twin)

ELEVATION:

Kelly Bushing 1785'

Ground Level 1780'

Measurements from K.B.

FORMATION TOPS

(Sample Tops)

FORMATION	<u>DEPTH</u>	MINUS DATUM
*Anhydrite	898	+887
*Base-Anhydrite	933	+852
Topeka	2754	-969
Heebner	2986	-1201
Toronto	3009	-1224
Lansing-Kansas City	3043	-1258
"C" Zone Porosity	3090	-1305
Rotary Total Depth	3100	-1315
*Drillers Tops		

Lithology: Zones of Interest

Lansing-Kansas City

A Zone

LS; Buff, very poor crystalline porosity with a trace of stain. No free oil or odor.

Tested by D.S.T. No. 1

B Zone

LS; White, fossil crystalline porosity with spotty stain. Slightly chalky. Slight show of free oil but no odor.

Tested by D.S.T. No. 2

3090-98 C Zone LS; White, fair to poor oolicastic porosity with some spotty stain. Slight show of free oil and fair odor,

Tested by D.S.T. No. 3

DRILL STEM TESTS

Drill Stem Test No. 1 3019-3056 LKC "A" Zone

Time Interval: 30-30-30-30

Blow: 1st Open - Weak blow for 5 min.

2nd Open - no blow

Recovery: 1 foot of slightly oil specked mud

Pressures:

IHMP: 1476#

IFP: 22# - 22#

ISIP: 33#

FFP: 22# - 22#

FSIP: 22#

BHT: 94 F

FHMP: 1454#

Mud Properties:

Viscosity: 48 Weight: 9.0 Water loss: 8.0 cc.

Drill Stem Test No. 2 3053-3085 LKC "B" Zone

Time Interval: 30-60-30-60

Blow: 1st Open - surface blow building 1/8"

2nd Open - weak surface blow - died in 30 sec.

Recovery: 10 feet of mud with oil specks

Pressures:

IHMP: 1562#

IFP: 22# -22#

ISIP: 1153#

FFP: 33# - 33#

FSIP: 1121#

BHT: N.A.

FHMP: 1509#

Mud Properties:

Viscosity: 44 Weight: 9.0 Water loss: 9.2

DRILL STEM TESTS CON'T

Drill Stem Test No. 3 3082-3100 KLC "C" Zone

Time Interval: 30-60-30-60

Blow: 1st Open - 1/2" building to 2 1/2"

2nd Open -Surface blow building to 1 1/2"

Recovery: 60 feet of oil specked muddy water

85% water 15% mud trace of oil

Pressures:

IHMP: 1519#

IFP: 33# - 33#

ISIP: 1121#

FFP: 33# - 44#

BHT: 95 F

FSIP: 1050# FHMP: 1498#

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Mud Properties:

Viscosity: 46

Weight: 9.2 Water loss: 8.8

REMARKS AND RECOMMENDATIONS

The following table compares the Steinle-Yarnell No. 1 with the Steinle-Yarnell No. 3 (Twin).

, ,	Leroy E. Tobias Steinle-Yarnell No. 3 100'W of NE-NE-SE	Tobias & Shields Steinle-Yarnell NO. 1 NE-NE-SE
A.,.1	6-10S-12W	6-10S-12W
Anhydrite	+887	+890
Heebner Lansing-Kansas City	-1201 -1258	-1198 -1254
"C" Zone Porosity	-1238 -1305	
C Zone Follosity	-1303	-1302

After reviewing the table above, you will note that the Steinle-Yarnell No. 3 (Twin) ran 3-4 feet low to the Steinle-Yarnell No. 1 located 100' east.

All zones of possible production were tested separately including the C Zone which recovered gas and oil 100' east. The A & B Zone tests both recovered very little in the way of fluid and only very small amounts of oil. The "C" Zone test recovered 60 feet of muddy water with a few oil specks.

Based on the structural position with respect to the well 100' east and the rest of the dry holes drilled close by, it is my recommendation that the Steinle-Yarnell No.3 (Twin) be completed as a dry hole. The negative drill stem tests also confirm this.

DMS/das

Respectfully Submitted,

David M. Shumaker Petroleum Geologist