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2021 FOREST
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L.D. Drilling Co.
Golden Belt No. 1
C-SE-NE Section 23-22s-14w
Stafford County, Kansas

23-22-14W

5 1/2" PRODUCTION CASING SET

KCC
JUL 5 1994

CONTRACTOR: Company Tools

COMMENCED: 2-29-92

COMPLETED: 3-7-92

ELEVATIONS: 1930' K.B.; 1925' G.L.

CASING PROGRAM: Surface - 8 5/8" set @ 302'
Production - 5 1/2" @ 3869'

SAMPLES: Samples saved and examined from 3200' to the Rotary Total Depth.

DRILLING TIME: One (1) ft. drilling time recorded by driller 3200' to the Rotary Total Depth.

MEASUREMENTS: All depths measured from the Kelly Bushing.

FORMATION TESTING: There were four (4) drill stem tests run by Diamond Testing.

ELECTRIC LOG: By Wire-Tech; Radiation-Guard, Caliper.

FORMATION	LOG DEPTH	SUB-SEA DATUM
Anhydrite	816	+1114
Heebner	3300	-1370
Toronto	3321	-1391
Brown Lime	3429	-1499
Lansing	3442	-1512
Base Kansas City	3663	-1733
Viola	3718	-1788
Simpson	3757	-1827
Arbuckle	3812	-1882
Rotary Total Depth	3872	-1942

(All samples corrected to the electric log measurements.)

SAMPLE ANALYSIS, SHOWS OF OIL, TESTING DATA, ETC.

LANSING SECTION

3444-3449' 'A' Zone — Limestone; oolitic to oocastic poor oocastic porosity. Trace spotty stain. No free oil, no odor in fresh samples.

3461-3471' 'B' Zone — Limestone; cream to grey, fossiliferous scattered fossil-cast porosity. Spotty black stain. Trace free oil, faint odor in fresh samples.

3483-3488' 'D' Zone — Limestone; cream, fossiliferous, chalky. Spotty golden stain. Trace free oil and faint odor in fresh samples.

3510-3514' 'F' Zone — Limestone; cream to white, oolitic to fossiliferous fair fossil-cast porosity. Fair to good stain and saturation. Show of free oil and odor in fresh samples.
(PERFORATE)

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DRILL STEM TEST #1 3484-3570'
Lansing ('D'-'E' & 'F' Zones)

Open: I.F. 45"
F.F. 45"

Blow: Fair decreasing.

Recovery: 250' gas
120' oil cut mud
120' gassy water

Pressure: ISIP 966# (45")
FSIP 927# (45")
FP (40-53)# - (90-124)#
HSH 1710-1690#

3530-3558' 'G' Zone — Limestone; white to grey. Fine to medium crystalline to sub-oocastic. Chalky in part. No shows of oil.

3563-3573' 'H' Zone — Limestone; cream to grey. Oolitic to fossiliferous chalky. Poor visible porosity. Spotty stain, weak show of free oil, questionable odor in fresh samples.

3581-3588' 'I' Zone — Limestone; white to grey. Oolitic to sub-oocastic. Poor porosity. Trace spotty dark black to brown stain. Show of free oil and faint odor in fresh samples.

3595-3598'
3602-3606' 'J' Zone — Limestone; white to grey. Fossiliferous to oocastic, chalky. Fair to good porosity. Good stain and saturation. Fair show of free oil, good odor in fresh samples.
(PERFORATE)

DRILL STEM TEST #2 3572-3615'
('I' & 'J' Zones)

Open: I.F. 45"
F.F. 45"

Blow: Strong - decreasing to good.

Recovery: 900 feet gas
90 feet oil and gas cut mud
60 feet slightly oil cut mud
250 feet gassy water, with show of oil.

Pressure: ISIP 1025# (45")
FSIP 1025# (45")
FP (60-112) - (150-220)#
HSH 1803-1780#

3629-3638' 'K' Zone — Limestone; cream to white. Oolitic. Highly chalky. Dark black to brown stain and saturation. Fair show of free oil and good odor in fresh samples.
(PERFORATE)

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DRILL STEM TEST #3 3616-3640'
('K' Zone)

Open: I.F. 45"
F.F. 45"

Blow: Fair

Recovery: 40 feet oil cut mud

Pressure:

ISIP	622#
FSIP	590#
FP	(48-50) - (54-54)#
HSH	1788-1767#

VIOLA SECTION

3718-3757' Chert; white to grey, boney. Traces of grey semi-tripolitic chert. Scattered porosity in leached areas. Spotty brown to golden stain. Weak show of free oil, no odor.

SIMPSON SECTION

3757-3812' Shale; pale green to grey. Traces of white to greenish, fine grained, calcareous, glauconitic, phosphatic, argillaceous sand. Poorly sorted. Poor porosity. No shows of oil.

ARBUCKLE SECTION

3812-3825' Dolomite; white to grey, fine to medium crystalline highly cherty. White to tan finely oolitic chert. Poor porosity. Dark black spotty stain, weak show of free oil (heavy, dark black, tarry). Fair odor.

DRILL STEM TEST #4 3752-3817'
(Arbuckle 0'-7')

Open: I.F. 30"
F.F. 30"

Blow: Weak 20", flush tool on F.F. No help.

Recovery: 20' Mud

Pressure:

ISIP	100# (30")
FSIP	118# (30")
FP	(70-74) - (102-110)#
HSH	1843-1826#

3825-3842' Dolomite; cream to white finely crystalline to dense, cherty. Decrease in show of oil and odor. Abundant green grey shale.

3842-3858' Dolomite; white, finely crystalline to dense, cherty. Poor porosity. Now shows. Abundant white boney chert and green shale.

3858-3872' Dolomite as above; slight increase in white medium crystalline with poor inter-crystalline porosity. Abundant chert and shale as above. No show of oil.

ROTARY TOTAL DEPTH 3870' (-1940)
ELECTRIC LOG TOTAL DEPTH 3872' (-1942)

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REMARKS:

During drilling the #1 Golden Belt was compared structurally to the abandoned Magnolia Petroleum #1 Gore, 330 feet south and 330 feet east. The #1 Golden Belt encountered the Lansing seven (7) feet high and the Arbuckle was eleven (11) feet low.

RECOMMENDATION:

On the basis of the favorable structural position and the positive results of the Drill Stem Tests, it was recommended by all parties involved that 5 1/2" production casing be set and cemented and the following zones to be tested through perforations.

1)	Lansing 'K' Zone	3629-3638'
2)	Lansing 'J' Zone	3602-3606'
3)	Lansing 'F' Zone	3510-3514'

Respectfully submitted,

James C. Musgrove
Petroleum Geologist

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AMERICAN ASSOCIATION OF PETROLEUM GEOLOGISTS
CERTIFIED PETROLEUM GEOLOGIST
J. C. MUSGROVE
1627
1917

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