

18-35-35 W

18-35-35 W

HOME TELEPHONE  
MU 4-3791

BUSINESS TELEPHONE  
AM 5-5608

V. JEAN TAYLOR  
CONSULTING PETROLEUM GEOLOGIST  
655 FOURTH NAT'L BANK BLDG.  
WICHITA 2, KANSAS

September 18, 1962

Re: Empire Drilling Company  
No. 1 G. H. Brown  
S4 24 Section 15, T 3 S, R 35 W  
Sedgwick County, Kansas

Empire Drilling Company  
655 Fourth National Bank Building  
Wichita, Kansas

OWLL

Comments:

Included are geologic and drilling time logs for the No. 1 Brown well. Samples were analyzed from 1500 feet and geologic interpretations given from approximately 1500 feet until the conclusion of drilling at 1540 feet. This was a 40 foot penetration of the Mississippian.

Geographic details were, in general, higher than in the two nearest wells that had been drilled in section 1 of T 3 S, R 35 W and section 27 of S 2 S, R 35 W, varying from 11 feet higher on the Lansing datum to 25 feet higher on the line 4 datum.

The Mississippian datum was encountered at 1530 (minus 1539) feet and was 42 feet higher than in the Sharruck well in section 1 of T 3 S, R 35 W.

Grill zone tests and core lithology are described in the secondary geologic and log. Subsequent electric log analysis and test data indicate six possible commercial zones in the Lansing-Seward City section, i.e., Zone 8, Zone 1A, Zone 1, Zone 2A, Zone 2B and the equivalent at the base of Zone 1. Electric log analysis indicates a zone in the Sherman Group at 1538 feet which would be tested prior to perforating Lansing and Seward City zones. All zones in the Cherokee Group and the Mississippian are considered water bearing and not commercial.

Recommendation was made to run casing to one of the thicker Cherokee sandstones for possible future water disposal and complete the well in the above mentioned Sherman zone.

Very truly yours,

V. Jean Taylor

VJT:rst  
Enclosures

**V. JEAN TAYLOR**  
CONSULTING PETROLEUM GEOLOGIST  
655 FOURTH NAT'L BANK BLDG.  
WICHITA 2, KANSAS

Empire Drilling Company  
No. 1 W. D. Hobson  
O/SW 34 Section 18, T 3 S, R 35 W  
Rawlins County, Kansas

Elevation: 3893 Kelly Boring

Depths are from Kelly boring.

- CATTLE 100 -

Shale	- Moderately brick red, with occasional light gray, fine crystalline, calcitic limestone streaks. Some green shale streaks.	3500 - 3618
Limestone	- Light gray to light buff, fine crystalline, very fossiliferous.	3630
Shale	- Brick red and gray green.	3656
Sandstone	- Light gray, fine grained.	3679
Shale	- Red brown.	3682
Limestone	- Light gray, fine crystalline, soft, very fossiliferous.	3694
Shale	- Red brown.	3696
Sandstone	- Red brown to brown, fine grained, soft, argillaceous.	3716
Shale	- Brick red.	3736
Limestone	- Light gray, fine crystalline, chalky, fossiliferous.	3762
Shale	- Red brown.	3764
Limestone	- Light gray, fine crystalline.	3773
Limestone	- Gray, dark gray and gray brown, fine crystalline.	3791
Shale	- Dark gray.	3799

AMIRE GROUP 3799 (minus 506) Schlumberger (minus 508)

Shale	- Brick red and gray green.	3799 - 3830
Limestone	- Green to buff, fine crystalline, very fossiliferous.	3839
Shale	- Red brown and gray.	3844
Limestone	- Gray buff, fine crystalline, fossiliferous.	3854
Shale	- Red brown.	3905
Limestone	- Gray to dark gray, fine crystalline.	3913
Limestone	- Gray buff, fine crystalline to granular, fossiliferous.	3919
Shale	- Red brown.	3929
Limestone	- Gray to gray brown, fine crystalline, with scattered traces of dead oil and asphaltic residues.	3943
Shale	- Red brown.	3954
Limestone	- Green to buff, fine crystalline to granular, with traces of glauconite.	3961
Shale	- Red brown and gray green.	3976
Limestone	- Green to light gray, fine crystalline, slightly chalky, with much dead oil and glauconite.	4000

- SAMPLE LOG -

Sandstone - Brick red, fine grained, very argillaceous. 4020

TOPPER 4020 (minus 787) Schlumberger (minus 784)

Limestone - Light gray, fine crystalline, slightly chalky, with trace  
 of glauconite and asphaltic residues. 4020 - 4035  
 Shale - Red brown and brick red, soft. 4036

DEER CREEK 4054 (minus 761) Schlumberger (minus 765)

Limestone - Gray, fine to dense crystalline. 4054 - 4082  
 Limestone - Gray, fine crystalline, argillaceous. 4083  
 Shale - Dark gray. 4121

CREAD 4121 (minus 828) Schlumberger (minus 831)

Limestone - Gray to brown, fine crystalline, fossiliferous. 4121 - 4143  
 Limestone - Gray brown, fine to dense crystalline. 4144

HERRER 4164 (minus 871) Schlumberger (minus 869)

Shale - Black, carbonaceous. 4164 - 4167  
 Limestone - Gray brown, fine crystalline. 4171

DUNGLAS SANDSTONE 4171 (minus 878) Schlumberger (minus 884)

Sandstone - Gray, fine grained. 4171 - 4185  
 Shale - Red brown and gray. 4202

LANSING-KANSAS CITY GROUP Undifferentiated 4202 (minus 909)  
 Schlumberger (minus 916)

Limestone - Light gray to white, fine to dense crystalline, with  
 traces of free oil in poor to fair, fossil and inter-  
 oolitic porosity. 4202 - 4228  
 Sandstone - Light gray to gray, fine grained, with free oil in  
 part. No odor, slight taste. 4239  
 Shale - Red brown and gray. 4241  
 Limestone - (Zone 2A) Light gray to white, fine to dense crystalline,  
 with scattered stain in poor fossil porosity. 4284  
 Shale - Red brown. 4292  
 Limestone - Brown gray, fine crystalline. 4296  
 Shale - Red brown and gray. 4315  
 Limestone - (Zone 5) Light gray, fine crystalline, slightly fossilif-  
 erous and slightly chalky. 4340  
 Shale - Red brown, gray and black. 4346  
 Limestone - Gray brown, fine crystalline, slightly fossiliferous. 4349  
 Shale - Red brown. 4358  
 Limestone - (Zone 6) Light gray, fine crystalline, slightly chalky. 4371

- SAMPLE LOG -

Shale	- Red brown and gray.	4373
Limestone	- Cream to gray, fine crystalline, fossiliferous, with fair to good porosity, trace of free oil, faint odor, and good taste.	4326 4322
Shale	- Red brown and gray.	
Limestone	- (Zone 7) Cream to gray, fine crystalline, fossiliferous, with good porosity in part, trace of free oil, and faint odor.	4417 4422
Shale	- Red brown and gray.	
Limestone	- Cream to light buff, fine crystalline to dense, slightly fossiliferous, with fair stain in fair fossil and fracture porosity. Good taste. No odor.	4435 4437
Shale	- Red brown and gray.	
Limestone	- Light gray, fine crystalline, with trace of light stain in part.	4448
Shale	- Red brown and gray.	4457
Limestone	- Cream to light gray, fine crystalline.	4470

BASE KANSAS CITY 4470 (minus 4478) Schlumberger (minus 4480)

Shale	- Red brown.	4479
Limestone	- Cream to buff, fine crystalline to dense, fossiliferous in part.	4490
Shale	- Red brown and gray green.	4502
Limestone	- Light gray, fine crystalline, slightly argillaceous.	4536
Limestone	- Gray brown, fine to dense crystalline.	4540
Limestone	- Light gray, fine crystalline, argillaceous as above.	4554
Shale	- Red brown and gray green.	4555
Limestone	- Cream to buff, fine crystalline, fossiliferous, possible light spotted stain (cave?). No odor or free oil.	4579
Shale	- Red brown and gray green.	4598
Limestone	- Gray to cream, fine crystalline to dense.	4608
Shale	- Red brown and gray green.	4611
Limestone	- Gray to buff, fine crystalline to granular, fossiliferous.	4618
Shale	- Red brown and gray.	4622
Limestone	- Light gray to gray, fine crystalline. One piece with good stain and good porosity (probably cave).	4641
Shale	- Black, carbonaceous, and red brown and gray.	4651
Limestone	- Light gray to buff, fine crystalline to granular, with trace of light spotted stain in very poor porosity.	4659
Limestone	- Light gray, fine crystalline, chalky in part.	4672
Shale	- Red brown and gray.	4675
Limestone	- Gray to buff, fine crystalline, fossiliferous.	4683
Sandstone	- Light gray, medium sub-round to sub-angular grained, with included carbonaceous material and glauconite.	4689

CHEROKEE GROUP 4689 (minus 4696) Schlumberger (minus 4691)

Shale	- Gray green and maroon.	4696
Sandstone	- Light gray, coarse grained, poorly sorted, with poor to fair consolidation.	4701

- 1111111111 -

Shale	- Gray green and maroon.	1796
Sandstone	- Gray, medium to coarse grained, sub-angular to sub-round.	1797
Shale	- Red brown and gray green.	1798
Sandstone	- Gray, medium to coarse grained, tight.	1799
Shale	- Maroon, red brown and gray green.	1800
Sandstone	- Gray, medium to coarse grained, consolidated in part.	1801
Shale	- Red brown and gray green.	1802
Sandstone	- Fine, medium to coarse grained, sub-angular to sub-round, consolidated.	1803
Shale	- Red brown and gray green.	1804
Sandstone	- Gray, coarse, sub-angular to sub-round.	1805
Sandstone	- Gray, fine grained.	1806
Shale	- Predominately gray green and maroon, with streaks of poorly sorted sandstone.	1807

1111111111 4852 (minus 1557) Schlumberger (minus 1559)

Dolomite	- Gray to buff, fine grained, slightly porous.	1808 - 1810
Limestone	- Gray, fine crystalline, very fossiliferous, slightly cherty, dolomitic.	1810

ROTARY TOTAL DEPTH 1820

SCHLUMBERGER TOTAL DEPTH 1891

- DR #1 1199-1220 (Zone 1) 30 minute IHP 78%. Tool open one hour. Weak blow for 15 minutes. Recovered 30 feet of mud. IFF 15%. FFP 31%. 30 minute FHP 36%. Bottom hole temperature 126°.
- DR #2 1225-1255 (Sandstone below Zone 1) 30 minute IHP 1130%. Tool open one hour. Fair blow throughout. Recovered 50 feet of heavily oil cut mud. IFF 7%. FFP 36%. 30 minute FHP 1062%. Bottom hole temperature 127°.
- DR #3 1260-1282 (Zone 2A) 30 minute IHP 531%. Tool open one hour. Very weak blow throughout. Recovered 25 feet of very slightly oil cut mud. IFF 1%. FFP 28%. FHP 51%. Bottom hole temperature 127°.
- DR #4 1377-1405 (Zone 6A) 30 minute IHP 1281%. Tool open one hour. Strong blow throughout. Recovered 100 feet of gas and 190 feet of heavily oil and gas cut mud. IFF 31%. FFP 86%. 30 minute FHP 1173%. Bottom hole temperature 130°.
- DR #5 1405-1440 (Zone 7 and 7A) 30 minute IHP 1268%. Tool open one hour. Strong blow throughout. Recovered 120 feet of very heavily oil and gas cut mud, 105 feet of clean oil (36 gr. at 80°), and 15 feet of water (probably filtrate). IFF 31%. FFP 111%. 30 minute FHP 1157%. Bottom hole temperature 134°.
- DR #6 1538-1571 (Marathon) 30 minute IHP 157%. Tool open one half hour. Weak blow for six minutes. Recovered ten feet of mud with slight oil stain. IFF 12%. FFP 23%. 30 minute FHP 36%. Bottom hole temperature 134°.