



# RUPE OIL COMPANY, INC.

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## GEOLOGICAL REPORT

Rupe Oil Company, Inc.  
#2-19 City of Stockton  
NW-NE-NW Sec. 19-7S-17W  
(Bottom Hole Location)  
262' E of NW-NE-NW  
(Surface Location)

February 10, 1983

Elevation: 1776 GL  
1784 KB

Geologist: James L. Crisler  
Commenced: January 28, 1983  
Completed: February 7, 1983  
Contractor: KANDRILCO, Ltd.  
Casing Record: 13-3/8" Conductor at 98' with 125 sx.  
Class 'A', 2% Gel, 3% CaCl.  
8-5/8" Surface at 1237' with 250 sx.  
Halliburton Lite, 3% CaCl, followed by  
250 sx. Class 'A' 2% Gel, 3% CaCl.  
5-1/2" Production at 3379' with 150 sx.  
50-50 Pozmix, 2% Gel, 18% Salt, 0.75%  
CFR-2, and 1/4# Flocele.  
7-7/8"  
Hole Size: 10' from 2700' to RTD  
Samples: 1' from 2700' to RTD  
Drill Time: GR-N, Guard, & Caliper  
Electric Log: None  
Drill Stem Tests: 3380' (3350' TVD) RTD  
Total Depth: 3375' (3345' TVD) LTD  
(TVD - True Vertical Depth)

### Formation Tops and Significant Shows (All Measurements from Kelly Bushing) Adjusted Depths for Directional Hole

	<u>Drill Time</u> <u>Samples</u>	<u>TVD</u>	<u>Electric</u> <u>Log</u>	<u>TVD</u>
Anhydrite	1223 (+561)	---	1219 (+565)	---
B/Anhydrite	----	---	1252 (+532)	---
Topeka	----	---	2725	2717 (-933)
Heebner	2946	2933 (-1149)	2940	2927 (-1143)

Toronto	2969	2955 (-1171)	2963	2949 (-1165)
Lansing	2991	2977 (-1193)	2984	2970 (-1186)
B/KC	3226	3202 (-1418)	3220	3196 (-1412)
Marmaton	3236	3212 (-1428)	3231	3207 (-1423)
Arbuckle	3296	3269 (-1485)	3294	3267 (-1483)
RTD	3380	3350 (-1566)	3375	3345 (-1561)

Lansing  
3082-3088  
(3064-3070 TVD)

Limestone, light grey, fine grained crystalline, fossiliferous, scattered oolites with interoolitic porosity, stain, and fair show.

Hepler SS.  
3226-3231  
(3202-3207 TVD)

Sand, clear, medium-grained, grading downward from a thin oolitic lime. Good intercrystalline porosity, gilsonite and a good show of free oil.

Arbuckle  
3294-3302  
(3267-3275 TVD)

Dolomite, cream, sucrosic with scattered oolites. Poor interoolitic porosity with stain, but no show.

Arbuckle  
3302-3352  
(3275-3323 TVD)

Dolomite, cream, fine to medium grained crystalline, scattered intercrystalline porosity with stain and a fair show of oil.

#### Discussion and Recommendation

The #2-19 City of Stockton is a development well which lies in the Northwest of the Riffe Pool. The well is in the midst of three producing wells. To the North is the Arbuckle producing A & M Oil Company's #1 Lowry, approximately 100' West of SW-SE-SW of Section 18-7S-17W. To the Southeast is the C C & S Oil Operations, Inc. #1 D/W/J, approximately 150' Southwest of E/2-NE-NW of Section 19-7S-17W, also a good Arbuckle producer. To the West is the Rupe Oil Company, Inc. #1-19 City of Stockton, approximately NE-NW-NW of Section 19-7S-17W, which, though it is structurally about even with the #1 D/W/J and the #2-19 on the Arbuckle is a very marginal producer in this zone.

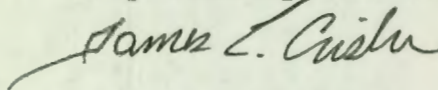
The #2-19 City of Stockton ran even to low from the Heebner through the Marmaton section in comparison with the #1-19 and 1' low to 8' high when compared to the #1 Lowry. This gives the #2-19 a favorable structural position, but the #1-19 shows that the porosity development that is required for commercial productivity in this area is not always present.



The #2-19 City of Stockton had shows in the Toronto, Lansing 'G', 'I', and 'K', a basal Missourian sand, the lower most Cherokee, and the Arbuckle. No tests were run. The Toronto had only a poor show and calculated wet on the log. The Lansing 'G' had a good show, good porosity, and calculated very good on the log. This zone also is found, but not reportedly tested, in the surrounding wells. The Lansing 'I' and 'K' zones had good shows but poor porosity, poor log calculations, and were not favorably noticed in the surrounding wells. The Basal Missourian sand has had good shows through a wide spread area, but not tested and not with the most favorable log calculations. The lime in the lower Cherokee has not given up a show in any other well, but calculated well with a fair show. The Arbuckle lacked porosity through the first 8 feet, but fair to good porosity developed with good shows lower in the section.

Due to the production history of the area, it is recommended that pipe be set and the Arbuckle perforated and tested. It is further recommended that the Lansing 'G' and the Basal Missourian sand be considered before abandoning the well.

Respectfully submitted,



James L. Crisler  
Geologist

JLC/dag