

Eureka Drilling Company &
Adair Oil Company
Babson #5
945' FNL & 150' FWL of SE/4
Section 9-25-11E
Greenwood County, Kansas
E1. 1134 K.B.

Comm: 11-5-71
Comp: 11-21-71
Contractor: Eureka Drilling Co.
7" @ 950 W/25 SX
4½" @ 1692 W/75 SX

Geological Report

- | | | | |
|--|-------------|------|-------|
| | KANSAS CITY | 1091 | (+43) |
|--|-------------|------|-------|
- 1170-95: Limestone, white, fine crystalline, good inter-crystalline porosity. No show of oil. Severe loss circulation was encountered while drilling through this zone.
- | | | | |
|--|------------------|------|--------|
| | BASE KANSAS CITY | 1288 | (-154) |
| | LENAPAH | 1405 | (-271) |
| | ALTAMONT | 1432 | (-298) |
- 1432-50: Limestone, gray, fine crystalline, trace of undeveloped fossiliferous porosity. No show of oil.
- 1450-59: Sand, gray, fine grained quartzitic and tight.
- | | | | |
|--|---------------------|------|--------|
| | PAWNEE LIME | 1511 | (-371) |
| | FORT SCOTT LIME | 1551 | (-417) |
| | CHEROKEE SHALE | 1589 | (-455) |
| | UPPER CHEROKEE SAND | 1615 | (-481) |
- 1615-33: Sand, gray, fine grained, soft and porous. Trace of fluorescence and free oil in the top few feet. 95% barren. This sand was drill stem tested in the Babson #4, SE-SE-NE of 9-25-11 and gave up 570 feet of saltwater. Since this sand was one foot lower than in the Babson #4 it was not tested in this well.
- | | | | |
|--|---------------------|------|--------|
| | LOWER CHEROKEE SAND | 1690 | (-556) |
|--|---------------------|------|--------|
- 1690-98: Sand, white, fine grained, sub-angular, quartzitic. Some fair porosity and much loose sand grains. Good odor, good saturation and good fluorescence. Structurally this sand was found to be eight feet lower than in the Babson #1, approximately one location north.

Geological Report contd.

DST #1: 1666-98: Open 30 minutes, shut in 30 minutes, open 30 minutes, shut in 30 minutes. Very weak intermittent blow for 35 minutes. Tool plugged. Recovered 65 feet of oil cut mud. Some free oil.
IBHP= 160# FBHP=160#

Severe lost circulation was encountered in the Douglas Sand, Lansing and Kansas City formations. As a result the mud system was full of lost circulation material at the time of the drill stem test and resulted in the plugging of the tool.

Although, the drill stem test was not a positive one, considerable information was gained from the pressure recording charts. These charts were given to Mr. Cecil King, General Manager of Western Testing Company for his evaluation. Mr. King came to the following conclusions:

1. The bottom hole pressures are reliable.
2. The formation would give up fluid under normal conditions. Fluid fillup would be approximately 350 feet.
3. The formation appears to have fair permeability.
4. The charts did not indicate that we were, as yet, close to water.

As a result of sample examination and Mr. King's interpretation of the drill stem test information it was decided to set production casing to test this well.

Sherrill Compton
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Geologist

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Figures indicate bottom of formations:

shale & lime	520
sand	745
sand & shale	800
lime	940
shale	1091
lime	1101
shale	1145
shale & lime	1158
lime	1288
shale	1405
lime	1414
shale	1432
lime	1450
sand	1459
shale	1511
lime	1522
shale	1551
lime	1589
shale	1615
sand	1623
shale	1690
sand	1698
RTD	1698

Sample tops:

KANSAS CITY	1091	(+43)
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LENAPAH	1405	(-271)
ALTAMONT	1432	(-298)
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CHEROKEE SHALE	1589	(-455)
CHEROKEE SAND	1690	(-556)
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