

**W. VERNON HESS**  
 PETROLEUM GEOLOGIST  
 801 CENTRAL BUILDING  
 WICHITA, KANSAS

Kewanee Oil Company #1 Burnett  
 SW-SE-SW 22-28-25W  
 Ford County, Kansas  
 Elevations: 2514 cement marker.

Contractor: Graham-Michalis  
 Commenced: July 5, 1958  
 Completed: August 8, 1958  
 8 5/8" casing at 344.

Geological formations and zones of porosity as determined by sample examination, drilling time and Schlumberger log correlation, are listed in accordance with coring data. Drilling mud analyses were made by Faroid gas detector and operator from the surface to the depth of 4300 feet. Drilling operations, operation of Faroid gas detector, and sample examinations were completed on location from 4300 to the total depth of 6200, by Vernon Hess, geologist.

Sample and drilling time formations tops. Schlumberger log tops.

<u>Stens corral Anhydrite</u> 1830 (4084)	1820 (4094)
<u>Topsa</u> 3793 (-1179)	3793 (-1179)
<u>Hebner</u> 4262 (-1068)	4266 (-1072)
<u>Toronto</u> 4300 (-1000)	4300 (-1000)
<u>Douglas</u> 4326 (-1712)	4322 (-1708)
<u>Linnac</u> 4389 (-1775)	4386 (-1778)

- 4514-18 Limestone, white, soft, fossiliferous, fair vuggy porosity, no show.
- 4604-10 Limestone, white, part oolitic, fair porosity, no show.
- 4686-38 Limestone, white, oolitic and oolitic, good porosity, no show.
- 4737-50 Limestone, white, finely crystalline, soft, fossiliferous, part oolitic, cherty, fair porosity, no show.
- 4737-40 Limestone, white, finely crystalline, soft, fossiliferous, part oolitic, cherty, fair porosity, no show.
- 4742-44 Limestone, white, finely crystalline, soft, fossiliferous, part oolitic, cherty, fair porosity, no show.
- 4758-54 Limestone, white, finely crystalline, soft, fossiliferous, part oolitic, cherty, with good porosity, no show.
- 4793-4908 Limestone, white, finely crystalline, soft, fossiliferous, part oolitic, cherty with good porosity, no show.
- |                                      |              |
|--------------------------------------|--------------|
| <u>Base Kansas City</u> 4824 (-2209) | 4820 (-2206) |
| <u>Marionton</u> 4831 (-2217)        | 4830 (-2215) |
- 4879-88 Limestone, buff, coarse crystalline, fossiliferous, poor porosity, no show.

Continued:

Keweenaw #1 Burnett.

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- 4975-84 Limestone, buff, coarse crystalline, fossiliferous, poor porosity, no show.  
 8018-28 Limestone, buff, crystalline, fossiliferous, cherty, poor porosity, no show.

Pennsylvanian Conglomerate 5173 (-2569) 5170 (-2553)

5173-89 Variegated limestone and shale, with brown clay shale, trace weathered sandy shale.

Diamond Core #1: 5180-85.8. Recovered 3½ feet.

5180-81 Weathered red, brown, green clay shales.

5181-83.8 Weathered red, brown, green clay shales with weathered red, brown chert fragments.

Diamond Core #2: 5183.8-87.8. Recovered 2½ feet.

5183.8-87.8 Weathered variegated shale and chert.

Diamond Core #3: 5187.8-5220. Recovered 32 feet.

5187.8-58.5 Weathered green, red clay shales and brown chert nodules.

5188.5-5220 Limestone, light gray, finely crystalline, to dense with few thin partings of light green shale and sandy limestone, no porosity, no stain.

Mississippi limestone 5188 (-2574) 5186 (-2772)

5310-20 Limestone, buff, crystalline, soft, part dolomitic, pseudo-calcitic, slight porosity in dolomite.

5388-82 Limestone, white crystalline, soft, fossiliferous, chert white, shaley, poor porosity, no show.

Spargen 5420

5514-53 Dolomite white, gray, finely crystalline, trace glauconite, good vuggy porosity, no show.

Warpaw 5560

Orange 5748

Viola 6081 (-3437) 6081 (-3437)

6081-6190 Dolomite white suresic, chert, gray, white, blocky, fair porosity, no show.

Simpson 6190 (-3578) 6190 (-3578)

6190-6208 Dolomite tan, buff, suresic with green, maroon shale and smoky chert.

6208-18 Sand, coarse grained, quartzitic, glauconitic and pyritic, fair porosity, no show.

Continued:

Kewanee #1 Burnett.

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6218-6229 Dolomite, buff, gray, sucresic to dense, shale green carbon, sandy.

Artuckle 6229 (-3615)

6229 (-3615)

6229-6260 Dolomite, tan, buff, dense to coarse crystalline, good raggy porosity, no show.

R.T.B. 6260 (-3666)

6273 (-3660)

REMARKS

As previously indicated, no shows of oil or gas were found at any horizon in the Burnett #1, either by Mercid Ind Logger, sample analyses or core examination. Porosity was indicated in the Topeka, Lansing, lower Mississippi, Viola and Artuckle formations, however, all porosity zones appear water bearing. No porosity or staining was developed in the Conglomerate or in the upper part of the Mississippi formation, as determined by Diamond Cores #1, #2 and #3.

Structural position of the Burnett #1 on the Mississippi line, relative to other deep tests in the area, is 116 feet lower than the Kewanee #1 Convent, a dry hole 14 miles to the north, 63 feet higher than the Deep Rock #1 Raymond, a dry hole 6 miles to the south and 47 feet lower than the Seigel #1 Lata, a dry hole approximately 7 miles southwest.

As no further shows of oil or gas were indicated following examination of the electric log, the test was plugged and abandoned.

*W. Vernon Hess*

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