



- EXPLANATION**
- Alluvium
  - Terrace deposits
  - Sanborn formation
  - Wellington formation
  - Nolans limestone
  - Odell shale and Winfield limestone undifferentiated
  - Doyle shale and Barnston limestone undifferentiated
  - Matfield shale and Wreford limestone undifferentiated
  - Speiser shale and Funston limestone undifferentiated
  - Blue Rapids shale and Crouse limestone undifferentiated
  - Early Creek shale and Rader limestone undifferentiated
  - Stearns shale and Beattie limestone undifferentiated
  - Ekridge shale and Grenola limestone undifferentiated
  - Roca shale and Red Eagle limestone undifferentiated
  - Johnson shale

- Contact
- Operated pit or quarry, 1949
- Prospect pit or quarry, 1949
- Chert gravel
- Limestone
- Shale
- Inclined letters indicate materials not tested

Vertical letters indicate materials listed in table 1 and their sample numbers

0.1 Quantity of material available in units of 10,000 cubic yards

|    |    |    |    |    |    |
|----|----|----|----|----|----|
| 6  | 5  | 4  | 3  | 2  | 1  |
| 7  | 8  | 9  | 10 | 11 | 12 |
| 18 | 17 | 16 | 15 | 14 | 13 |
| 19 | 20 | 21 | 22 | 23 | 24 |
| 30 | 29 | 28 | 27 | 26 | 25 |
| 31 | 32 | 33 | 34 | 35 | 36 |

TOWNSHIP DIAGRAM



Base from maps by the State Highway Commission of Kansas. Drainage from aerial photographs by U. S. Department of Agriculture

Geology by Melville R. Mudge, Claude W. Matthews, and John D. Wells, 1948

MAP SHOWING CONSTRUCTION MATERIALS AND GEOLOGY OF MORRIS COUNTY, KANSAS