

# USGS Quadrangle Maps

By Chuck Marcum

The United States Geological Survey has been making Quadrangle maps since 1882. The older maps are an excellent source for finding spots to hunt. You can locate old school-houses, churches, house sites, and even ghost towns on them. The USGS divided the country up into quadrangles which are bounded by latitude and longitude lines. The three most common types of quadrangle maps are the 30, 15, and 7.5 minutes series. The example that I am using is a cropped piece of the 1916 30 Minute Claremore Quadrangle Map.

The whole map includes all of the topography (physical features) between 30 minutes of latitude and 30 minutes of longitude or about 28 miles wide and 34 miles long. Which is about 952 square miles. That is a whole lot of area with a tremendous amount of hunting potential. The newer 15 minute quadrangles covers 14 miles x 17 miles which is half of the area of the 30 minute maps and the newest 7.5 minute quads covers 7 miles x 8 1/2 miles. They made each newer map bigger to show more detail which made them more accurate. The 30 and 15 minute maps were put on 16 1/2" x 20" paper sheets and the 7.5 minute maps are on 22" x 27" sheets. Each quadrangle map was named for a nearby town, city, or landmark. The 30 minute quads were made in the late 1800s through the mid teens. The 15 minute quads from the teens through the early 50s and the 7.5 quads were made from the early 50s through the 1970s, with some being photo revised through the early 1980s.

In the margins of the maps are the township numbers, range numbers, latitude, longitude, and names of the adjacent quadrangle maps.

On the bottom of the map you will find the scale, contour interval, the date the map was made, and other map data. Houses are represented by black squares, schools are black squares with flags on the top of them, churches are black squares with crosses on top, good roads are solid double lines while trail roads are double dashed lines. These are just some of the map symbols. An interesting one on the example map are the crossed picks in the town of Hickory. They symbolize a mine or quarry.

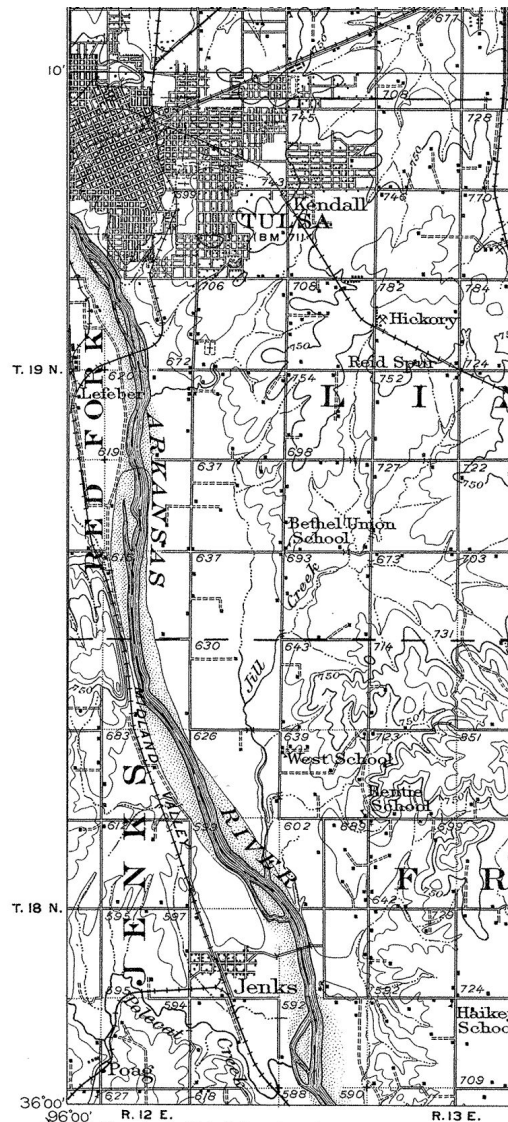
Each square on the map represents a square mile or section of land. The 30 minute quad doesn't have the numbers in the section like some 15 minute or all 7.5 minute quadrangles have. Some of the 30 minute ones do have a diagram of the sections in the township on the bottom of the map. The township and range numbers in the margins line up with the middle of the township diagram. What I like doing instead of counting sections like I used to, is overlaying a cropped piece of an old map on top of a newer 7.5 minute map with the section numbers on it.

DIAGRAM OF TOWNSHIP

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

The newest 7.5 minute quads are good reference maps as far as showing topographic features such as water and terrain. The contour lines showing terrain gives you a 3D like picture of hills, mountains, and valleys. The lines also have elevations on them. Contour lines that are spread apart show a gentle slope, ones that are closer together are a steeper slope, and lines almost on top of each other indicate a cliff. Vegetation is represented by green and updated items are purple. All of this will tell you more about your hunt site. Since these maps haven't been updated in over 20 years a lot of the houses, roads, and other features are gone or new features have been built.

Sometimes I have found that the accuracy of some house sites are off as much as 300 to 500 feet on the older 30 and 15 minute quads, still that is usually close enough to use your experience and detector to find your spot. Every map that you can get and learn to use will give you more of an advantage to find those productive relic or coin hunting sites.



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 R.B. Marshall, Chief Geographer.  
 Sledge Tatum, Geographer in charge.  
 Topography by R.W. Berry.  
 Control by C.F. Urquhart, H.L. Caldwell, C.B. Odell,  
 W.S.D. Moore, A.F. Hassan, and J.P. Thayer.  
 Surveyed in 1913-1914.