OKLAHOMA WATER RESOURCES BOARD

LEGAL DESCRIPTIONS

STUDY MATERIAL

FOR DRILLING

GROUNDWATER WELLS

AND

MONITORING WELLS

(ALSO INCLUDES GROUNDWATER TEST HOLES, OBSERVATION WELLS,
HEAT EXCHANGE WELLS AND GEOTECHNICAL BORINGS)
PLOTTING WELL LOCATION

WHEN PLOTTING WELL LOCATION ON PLAT, READ THE LEGAL DESCRIPTION FROM RIGHT TO LEFT (OR LARGEST TO SMALLEST). STARTING AT RIGHT OF PORTION OF LEGAL DESCRIPTION GIVING ¼ SECTIONS --- LOCATE ¼ SECTION (160 ACRES); THEN ¼ OR ¼ OF SECTION (40 ACRES); THEN ¼ OF ¼ OF ¼ OF SECTION (10 ACRES), WHICH GIVES THE WELL LOCATION TO THE NEAREST 10 ACRE TRACT
A typical section showing the various ten-acre tracts and their location within that section. According to the Oklahoma Groundwater Law, each groundwater well location must be described to the nearest ten-acre tract.
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OKLAHOMA WATER RESOURCES BOARD
LEGAL DESCRIPTION MAP

#1  SW ¼ NE ¼ NE ¼  
    Section 36  Township 01N  Range 01WIM

#2  NW ¼ SE ¼ NW ¼  
    Section 31  Township 01N  Range 01EIM
The UNITED STATES LAND SURVEY SYSTEM is cartographically represented by lines running North and South and lines running East and West. These lines are approximately 31,680 feet (6 miles) apart. The intersections of these lines form a matrix which creates boundaries to parcels of land usually containing 36 square miles each called Congressional Townships. Each Congressional Township is identified by numbers representing the parcel's place from the intersection of the BASE LINES and either of the principal MERIDIAN LINES.

Oklahoma has two land survey systems. The system covering the major portion of the State extends north and south from the Base line near the southern boundary of Oklahoma and east and west from the Indian Meridian. The second system describes the panhandle only. It's numbering extends north and south from a Base line which lies nearly parallel to, and as much as 300 feet north of the southern border of the panhandle therefore leaving “township one south” (T-1-S) only a small strip of land along the north side of sections one through six of each range. The numbering also extends east from the Cimarron Meridian which is also the west border of the panhandle.

Parcels proceeding East and West from the principal meridians are called RANGES and their place is labeled “Range X East of either principal Meridian (or West of the Indian Meridian).” Those proceeding North and South from the Base lines are called Townships and their place is labeled Township X North (or South). For convenience, this is usually abbreviated to read T-X-N(S) and R-X-EIM (WIM). The numbering from the Cimarron Meridian is always East and is expressed as ECM (See Drawings at right)

LAND MEASURE
A ROD = 16.5 feet
A CHAIN = 100 Links, 66 feet or 4 rods
A MILE = 320 rods, 80 chains or 5280 sq. feet
A SQUARE ROD = 272 1/4 sq. ft.
An ACRE contains 43,650 sq. ft.
An ACRE contains 160 square rods.
An ACRE is about 208 3/4 sq. ft.
An ACRE is 8 rods wide by 20 rods long or any two numbers of rods whose product is 160 sq. rods.
A SECTION (sq. mi.) 640 acres.