

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 $\frac{1}{4}$ SECTIONS --- LOCATE $\frac{1}{4}$ SECTION (160 ACRES); THEN $\frac{1}{4}$ OR $\frac{1}{4}$ OF SECTION (40 ACRES); THEN $\frac{1}{4}$ OF $\frac{1}{4}$ OF $\frac{1}{4}$ OF SECTION (10 ACRES), WHICH GIVES THE WELL LOCATION TO THE NEAREST 10 ACRE TRACT

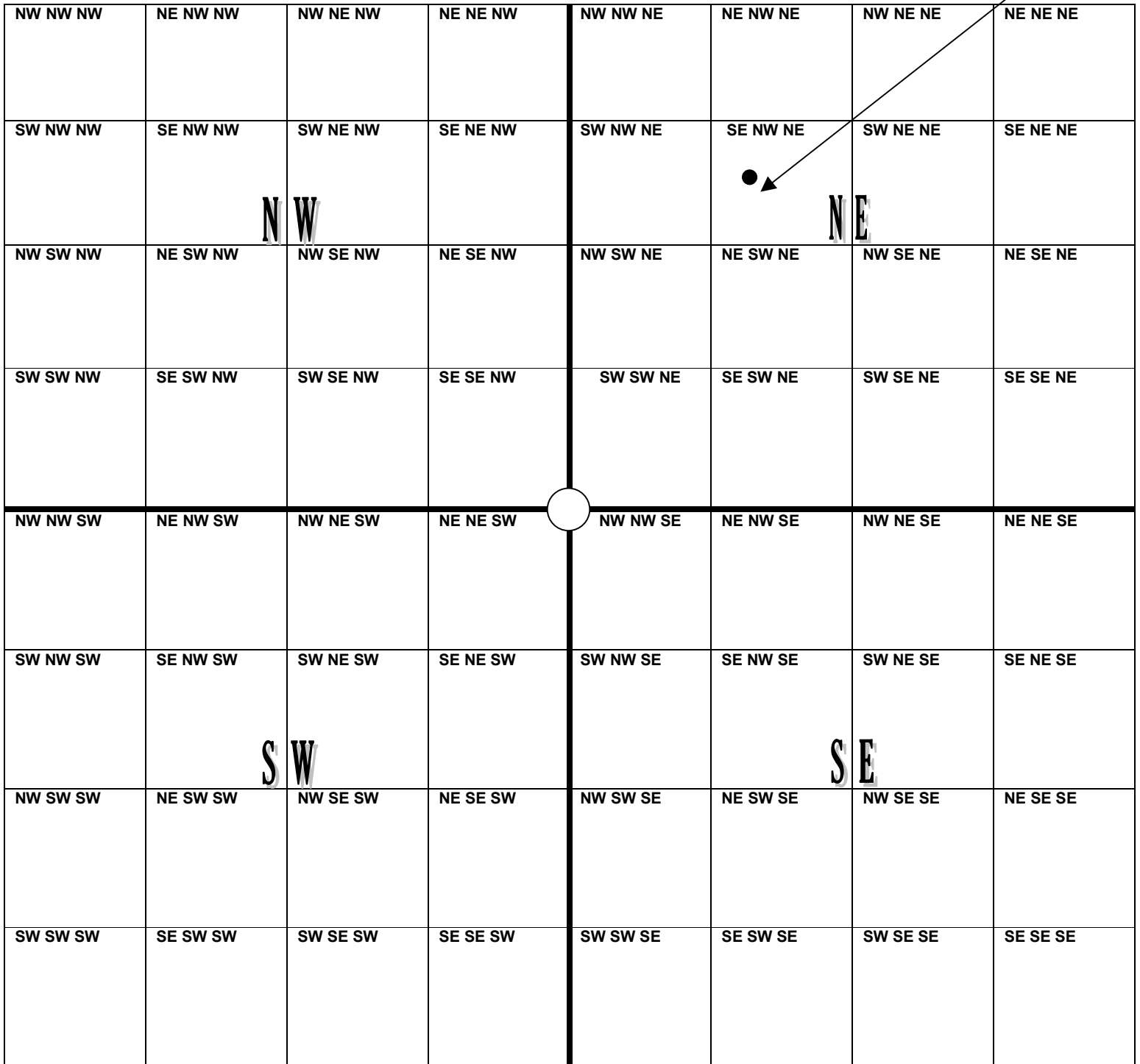
NW NW NW	NE NW NW	NW NE NW	NE NE NW	NW NW NE	NE NW NE	NW NE NE	NE NE NE
SW NW NW	SE NW NW	SW NE NW	SE NE NW	SW NW NE	SE NW NE	SW NE NE	SE NE NE
NW SW NW	NE SW NW	NW SE NW	NE SE NW	NW SW NE	NE SW NE	NW SE NE	NE SE NE
SW SW NW	SE SW NW	SW SE NW	SE SE NW	SW SW NE	SE SW NE	SW SE NE	SE SE NE
NW NW SW	NE NW SW	NW NE SW	NE NE SW	NW NW SE	NE NW SE	NW NE SE	NE NE SE
SW NW SW	SE NW SW	SW NE SW	SE NE SW	SW NW SE	SE NW SE	SW NE SE	SE NE SE
NW SW SW	NE SW SW	NW SE SW	NE SE SW	NW SW SE	NE SW SE	NW SE SE	NE SE SE
SW SW SW	SE SW SW	SW SE SW	SE SE SW	SW SW SE	SE SW SE	SW SE SE	SE SE SE

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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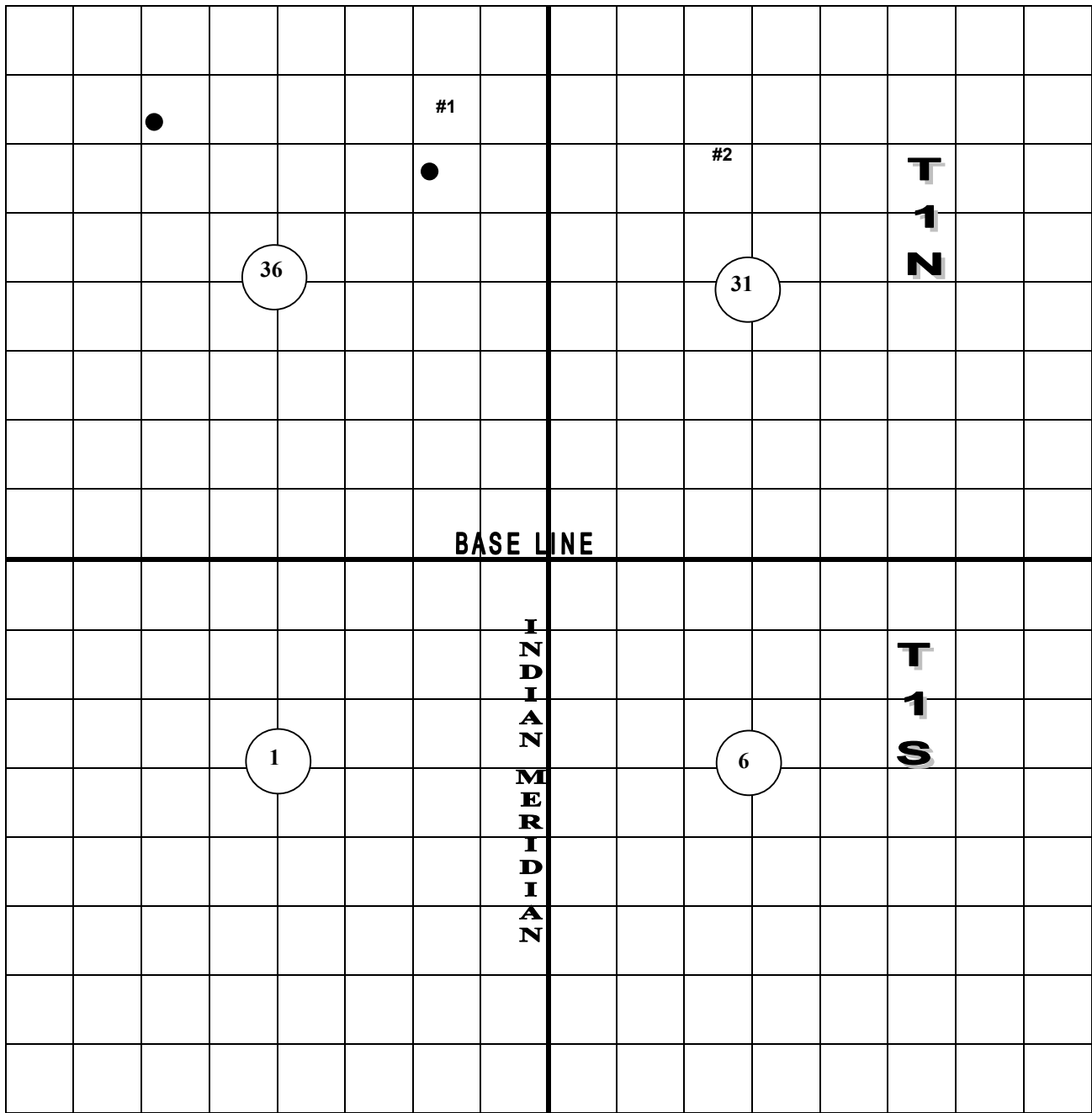
**WHEN PLOTTING WELL LOCATION TO THE NEAREST 10 ACRE TRACT
ON PLAT, THE LEGAL DESCRIPTION IS READ FROM RIGHT TO LEFT**

EXAMPLE: SE ¼ OF NW ¼ OF NE ¼



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.

GARVIN COUNTY



R1 WIM R1 EIM

LEGAL DESCRIPTION MAP

#1 SW 1/4 NE 1/4 NE 1/4 Section 36 Township 01N Range 01WIM

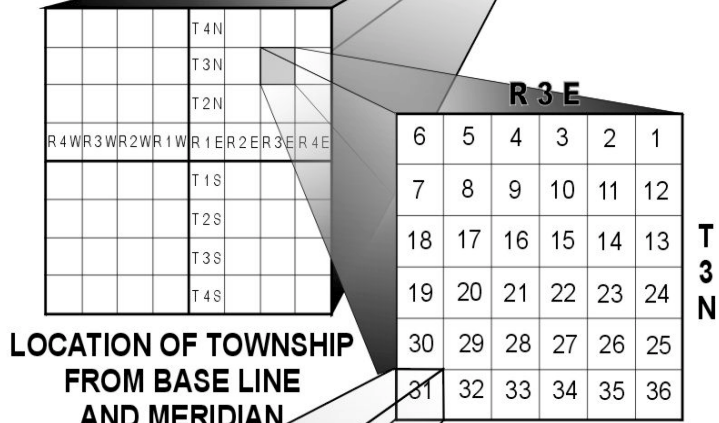
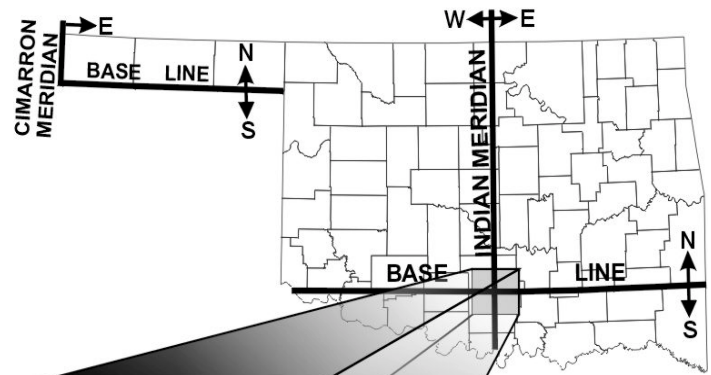
#2 NW 1/4 SE 1/4 NW 1/4 Section 31 Township 01N Range 01EIM

UNITED STATES LAND SURVEY SYSTEM

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)



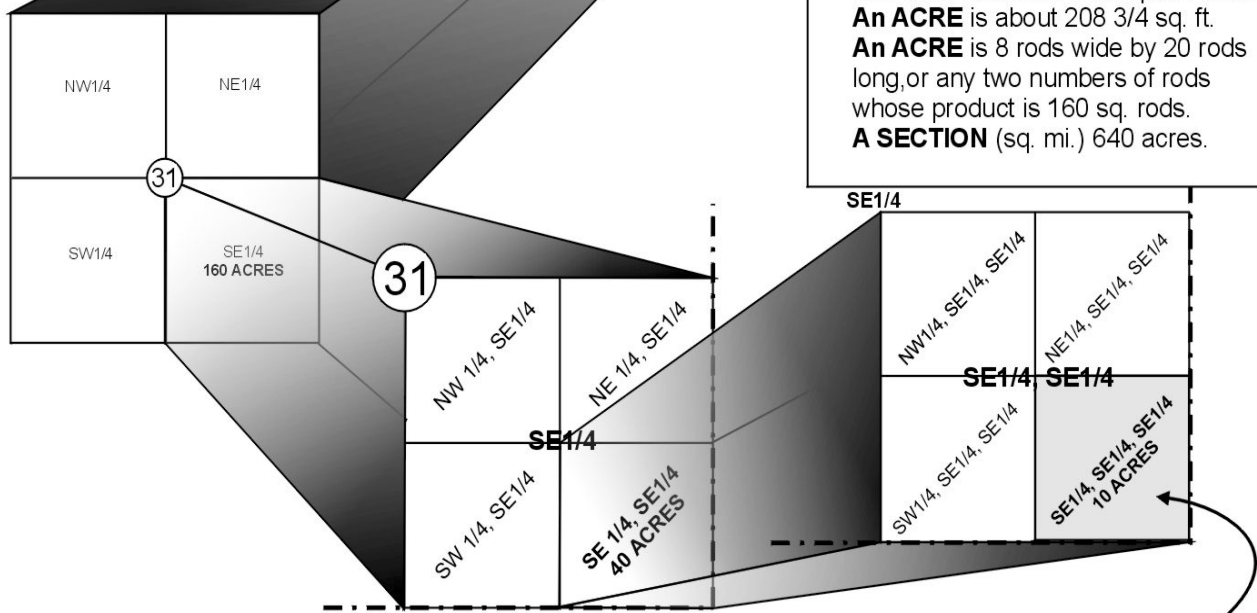
LOCATION OF TOWNSHIP FROM BASE LINE AND MERIDIAN

R 3 E					
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
T 3 N					

SECTION NUMBERING IN A TOWNSHIP

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.



SE1/4, SE1/4, SE1/4 Sec. 31, T3N, R3EIM