

Dependent Resurvey, Portions of North and South Boundaries
and Subdivision, T. 18 N., R. 65 E.

Chains

The survey of the west boundary of the township, together with a portion of the south boundary, a portion of the north boundary and a portion of the subdivision, was made by E. B. Monroe and A. G. Bateman, Deputy Surveyors, in 1872 under Contract No. 48.

The following field notes are those of a dependent resurvey of one mile of the south boundary, $1\frac{1}{2}$ miles of the north boundary and 8 miles of the subdivision.

The resurvey was commenced July 21, 1943 and executed with Young and Sons solar transit No. 8395 and Buff and Buff solar transit No. 17994. The instruments were equipped with full vertical circles and Smith type telescopic solar attachments and were the property of the United States.

The country over which the lines were extended was generally open and the solar attachments were used only in a minor capacity for reading fallings, bearing trees, etc. The directions of lines were determined by sustained angulation carried forward from meridians determined by direct solar and Polaris observations. One of these observations is shown below.

Measurements were made with narrow steel tapes 5 chs. long which were compared with a Lufkin standard steel tape 1 chain long and found correct. All measurements were made on the slope and the slope distances reduced to their true horizontal equivalents, which alone appear in this record.

Preliminary to the resurvey, the lines of the original survey were retraced and diligent search was made for all original corners. Identified corners of the original survey were restored in their original positions. All lost corners were reestablished at proportionate positions based on the record of the original survey. The retracement data was thoroughly verified, and only the true line notes are given herein.

The geographic position of the southwest corner of the township, determined by township line traverse from Group 278 surveys in T. 18 N., R. 60 E. is latitude $39^{\circ} 22' 40''$ N., and longitude $114^{\circ} 42' 49''$ W., checked by traverse from U.S.G.S. triangulation station "Ely!"

August 9, 1943, at the corner of secs. 5, 6, 31 and 32, on the S. bdy. of T. 18 N., R. 65 E., I make an altitude observation of the sun for azimuth, making 6 observations, three each with the telescope in direct and reversed positions, observing opposite limbs of the sun, and reading the deflection angle to the sun from a prominent point on the horizon about 10 miles to the north.

Watch time of observation, Pacific War Time	3:21 p.m.
Mean observed vertical angle	$48^{\circ} 56\frac{1}{4}'$
Mean horizontal angle	$113^{\circ} 19' 45''$
Azimuth of the sun	$66^{\circ} 18' 50''$
True bearing of reference point	N. $0^{\circ} 21' 25''$ W.

Dependent Resurvey, Portion of the S. Bdy., T. 18 N., R. 65 E.

Reestablishment of the Survey Executed by
E. B. Monroe and A. G. Bateman, Deputy Surveyors, in 1872.

Beginning at the original corner of secs. 5, 6, 31 and 32, on the S. bdy. of T. 18 N., R. 65 E., which is marked by an old, imbedded mound of stone.

At the corner point