

T. 22 S., R. 62 E.

## Chains

Survey commenced October 7, 1942, and executed with Gurley solar transit No. 38123 and Buff and Buff solar transit No. 17994, property of the General Land Office. The instruments are equipped with the Smith solar attachment and full vertical circle; the horizontal limbs are provided with two double verniers placed opposite to each other and reading to single minutes of arc, which is also the least count of the verniers of the vertical circles, and of the latitude and declination arcs. The instruments were approved for use on this survey by the district cadastral engineer, conditional upon satisfactory field tests. The instruments were in good condition at the commencement of this survey, and were tested and found free from any appreciable error.

The country over which the lines were extended being open, the solar attachments were not used. All azimuths in the record are referred to true meridians determined by observations upon Polaris or direct observations upon the sun during the progress of the survey; the bearings of the lines were determined by deflection angles, and the lines carried forward by fore and back sights. The measurements were made with Lallie steel tapes, 5 chains in length, graduated every link for the first 100 links, and thereafter at intervals of 10 links. The tapes were tested by comparison with a Lufkin standard steel tape one chain long and found correct. The measurements were made on the slope, and the vertical angle of each interval was ascertained by clinometers in good adjustment; the horizontal equivalents are entered in the field note 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 are reestablished at proportionate positions, based on the record of the original survey. The retracement data were thoroughly verified and only the true line notes are given herein.

The approximate geographic position of the southeast corner of the township is as follows: latitude  $35^{\circ} 59' N.$  and longitude  $114^{\circ} 59' 30'' W.$

Dependent Resurvey of the South Boundary of T. 22 S., R. 62 E.

Reestablishment of surveys executed by T. A. Magee,  
Deputy Surveyor, in 1883.

November 9, 1942, at the corner of Tps. 22 and 23 S., Rs. 62 and 63 E., in approximate latitude  $35^{\circ} 59' N.$ , longitude  $114^{\circ} 59' 30'' W.$ , at  $0^h 42.2^m$  p.m., l.m.t., or  $0^h 22^m 16^s$  p.m. by my watch, which carries correct 120th meridian standard time, I make an hour angle observation upon Polaris east of the meridian, two each with the telescope in direct and reversed positions, reading the deflection angle from a well defined reference point on a rocky peak about  $\frac{1}{4}$  miles northwesterly, in the direction east to Polaris.

Mean horizontal angle from reference point,	
east to Polaris	38° 03.7'
Azimuth of Polaris at observation	0° 39.7'
True bearing of reference point	N. 37° 24' W.

The cor. of Tps. 22 and 23 S., Rs. 62 and 63 E., is an iron post, 3 ins. diam., properly set, marked, and witnessed as described in the official record of the 1931 resurvey of T. 22 S., R. 63 E.

Thence

N.  $89^{\circ} 31' W.$ , bet. secs. 1 and 36.

Over rolling land, through short undergrowth; gradually ascending 50 ft. to  $\frac{1}{4}$  sec. cor.