

Township 19 South, Range 55 East

Chains	<p>The south, west, and north boundaries and the subdivision of the township were surveyed by Theodore Binge, Deputy Surveyor, in 1881. The east boundary of the township was surveyed by E. B. Monroe, Deputy Surveyor, in 1869 and was dependently resurveyed under Group 147 in 1934.</p> <p>The following field notes are those of a dependent resurvey of a portion of the south, west, and north boundaries and a portion of the subdivision of T. 19 S., R. 55 E.</p> <p>Survey commenced May 2, 1942, and executed with Gurley solar transit No. 262684, with 5.65 inch horizontal limb, 4.5 inch vertical circle, and improved Smith solar attachment. The horizontal limb is 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 vertical circle. This instrument was in good condition and having been placed in satisfactory adjustment prior to the initiation of the survey, and having been tested and found free from error, was approved by the district cadastral engineer on April 17, 1942.</p> <p>Measurements were made with a Lallie steel tape 5 chains in length, graduated every link for the first 100 links and thereafter at intervals of 10 links. The tape was tested and found correct by comparison with a Lufkin standard steel tape 1 chain in length. Measurements were made on the slope, the vertical angle obtained by the mean reading of two clinometers maintained in good adjustment and condition. The horizontal distances only are entered in the notes.</p> <p>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.</p> <p>Transit lines were carried forward by fore and back sights and the bearings of the lines determined by deflection angles from true meridians determined by observations upon Polaris and direct observations upon the sun throughout the progress of the survey. The initial observation follows:</p> <p>May 2, 1942, at the cor. of secs. 4, 5, 8 and 9, in approximate latitude 36° 19' N., and longitude 115° 49' W., at 5:00 p.m., P. W. T., or 4:00 p.m., P. S. T., I observe the altitude of the sun for azimuth, making 8 observations, 4 each with the telescope in direct and reversed positions, observing opposite limbs of the sun, and reading the horizontal deflection angle from the sun to a flag on the random line, 6.00 chs. South of the corner.</p> <table><tr><td>Mean observed altitude of the sun</td><td>30° 21'</td></tr><tr><td>Azimuth of the sun</td><td>87° 15' 45"</td></tr><tr><td>Mean horizontal deflection angle</td><td>86° 29' 45"</td></tr><tr><td>True bearing of flag</td><td>S. 0° 46' W.</td></tr></table> <p>The approximate geographic position of the SE. cor. of sec. 31 is 36° 15' N. latitude, and 115° 50.5' W. longitude.</p>	Mean observed altitude of the sun	30° 21'	Azimuth of the sun	87° 15' 45"	Mean horizontal deflection angle	86° 29' 45"	True bearing of flag	S. 0° 46' W.
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	Dependent Resurvey, Portion of the South Bdy., T. 19 S., R. 55 E.								
	Reestablishment of the Survey Executed by Theodore Binge, Deputy Surveyor, in 1881.								