Exteriors of Tps. 31 and 32 N., Rs. 66 and 67 E.

Chains

Dependent resurvey executed with Buff and Buff solar transit No. 9983 and Young and Sons solar transit No. 8518, property of the General Land Office, each equipped with full vertical circle equipped with double vernier reading to single minutes of arc. The horizontal limb of each transit is equipped with two double verniers reading to single minutes of arc. The instruments were in good condition and, having been placed in satisfactory adjustment prior to the beginning of the survey and tested and found free from appreciable error, were approved by the district cadastral engineer in assignment instructions dated September 20, 1939.

The controlling meridian was established by observation upon Polaris, the bearings of the lines of the resurvey were deflected from the meridian by repetition of angles and carried forward by transit line, taking the mean of direct and reversed sights at each instrument station. The bearings of the lines of the resurvey were verified by numerous Polaris observations throughout the progress of the resurvey.

Measurements were made with Lallie steel tapes, 5 chs. in length, each tape is 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 and found correct. Measurements were made on the slope, the vertical angles were determined by clinometers in good adjustment; the field notes show the horizontal equivalents.

The lines of the original survey were retraced and diligent search made for all original corners. Identified original corners were remonumented in their original positions and missing corners restored by proportionate methods, based upon the record of the original survey. The retracement data was thoroughly verified and only the true line notes are given herein.

October 8, 1939, at the standard cor. of Tps. 31 N., Rs. 66 and 67 E., in approximate latitude 40° 31' N., Longitude 114° 27' W., Polaris was observed at eastern elongation, sighting on the star until its motion is vertical only, making four readings, two each with the telescope in direct and reversed positions, and placed a tack at the mean point on a peg firmly driven in the ground 10 chs. north.

October 9th 1939, I lay off the azimuth of Polaris, 1° 20.8' on a second peg to the west. The accuracy of the angle was verified by the method of repetitions.

Dependent Resurvey of the Sixth Standard Parallel North, along the South Boundary of T. 31 N., R. 66 E.

Reestablishment of surveys executed by Smyles and Preble, Deputy Surveyors, in 1881.

Begin the resurvey at the standard corner of Tps. 31 N., Rs. 65 and 66 E., which is a juniper post, 2 ins. square, 2 ft. long, firmly set, and mkd. with 6 notches on N., E. and W. edges and TXXXIN RLXVIE on NE. face and RLXVE on NW. face.

At point for corner

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