

Township 27 South, Range 7 West

(MEISSER)

CHAINS

Survey commenced May 6, 1924. and executed with a Burt solar compass made by W. and L.E.Gurley, No.11950, and Youngs and Sons Transit No. 8485, with Smith solar attachment, both instruments are the property of the U.S. General Land Office. The instruments are provided with two double verniers placed opposite to each other and reading to single minutes of arc. The latitude arcs of both instruments and the declination arc of the transit read to single minutes and the declination arc of the compass reads to half minutes of arc. Unless otherwise specified, all azimuth determinations are accomplished with the solar attachment.

The instruments were examined, tested, and approved by the Assistant Supervisor of Surveys, conditional upon satisfactory field examination and test in Assignment Instructions dated April 18, 1924.

May 6, 1924; At my camp in Sec. 1, T. 28 S., R.8 W., W.M., Oregon, in Latitude $43^{\circ}09'N.$, longitude $123^{\circ}36'W.$, I examine the adjustments of the instruments and correct all errors, then to test the solar apparatus by comparing their indications resulting from a.m. and p.m. hourly observations with the true meridian determined by observations on Polaris, I proceed as follows:

At 4h 0m p.m., app. t., I set off $43^{\circ}09'N.$ on the lat. arc; $16^{\circ}41\frac{1}{2}'N.$ on the decl. arc; and determine a meridian with the solar and mark a point thereof on a peg driven firmly in the ground, 5 chs. N. of my station.

May 7, 1924: At 4h 37m a.m., l.m.t., I observe Polaris at eastern elongation, making four observations, two each with the telescope in direct and reverse positions and mark a point in the mean line thus determined on a peg driven firmly in the ground, 5 chs. N.

At 7h 50m a.m., I lay off the azimuth of Polaris, $1^{\circ}31'$ to the west and find the meridian thus determined coincides with the meridian established yesterday with the solar.