

Retracement of W. Bdy. of T. 34 N., R. 61 E.

1.

Chains

Survey commenced August 12, 1915, and executed with a W. & L.E. Gurley explorer's transit with Burt Solar attachment. The horizontal limb is provided with two double verniers placed opposite to each other, reading to single minutes of arc, which is also the least count of the latitude and declination arcs.

The instrument was approved by the Asst. Supervisor of Surveys for Nevada and Utah.

Sept. 14, 1915: The instrument being in adjustment I test the solar as follows:

At my camp which is located at the $\frac{1}{4}$ sec. cor. of secs. 13 and 14, latitude $40^{\circ}51'N.$, longitude $115^{\circ}04'W.$, I set off $40^{\circ}51'N.$ on the lat. arc; $3^{\circ}34'N.$ on the decl. arc, and determine a meridian with the solar at 4 h 0 m, p.m., l.m.t. On the line thus determined, at about 5 chs. N. of my station, I drive a stake firmly in the ground and mark a point on the top of the stake, exactly on the solar meridian.

At 8 h 02 m, p.m., l.m.t., I observe Polaris at eastern elongation in accordance with the Manual of Instructions. I lay off the azimuth of Polaris $1^{\circ}31'$ to the W., and mark a point in this meridian, by driving a small nail in the stake already set about 5 chs. N. of my station. This meridian falls $1\frac{1}{2}'$ to the right of the solar meridian.

Sept. 14, 1915.

Sept. 15, 1915: At 7 h 0 m, a.m., l.m.t., I set off $40^{\circ}51'N.$ on the lat. arc; $3^{\circ}21'N.$ on the decl. arc; and determine a meridian with the solar. This meridian falls $1'$ to the left of the Polaris meridian.

The magnetic declination at 7 h 10 m, a.m., is $18^{\circ}02'E.$ All lines were measured with a 5 chain steel tape. In the measurements taken along the slopes, the slope angles were read with a clinometer, and the distances were reduced to the horizontal.

August 27, 1915: At the cor. of Ts. 34 and 35 N., Rs. 60 and 61 E., I set off $40^{\circ}53'N.$ on the lat. arc; $10^{\circ}18\frac{1}{2}'N.$ on the decl. arc, and at 9 h 0 m, a.m., l.m.t., determine a meridian with the solar.

Thence South on a retracement between secs. 1 and 6.

40.00 After diligent search I find no evidence of the old $\frac{1}{4}$ sec. cor.

80.00 After diligent search I find no evidence of the old cor. of secs. 1, 6, 7 and 12.

I continue South on a retracement between secs. 7 and 12. Find no evidence of the old $\frac{1}{4}$ sec. cor. after a diligent search.

40.00 After diligent search I find no evidence of the old cor. of secs. 7, 12, 13 and 18.

22.00 Continue south on a retracement between secs. 13 and 18. End of days work. Set a temp. cor.

August 27, 1915.

August 28, 1915: At the above 22.00 chain point, I set off $40^{\circ}51'N.$ on the lat. arc; $9^{\circ}57\frac{1}{2}'N.$ on the decl. arc, and at 9 h 0 m, a.m., l.m.t., determine a meridian with the solar.

I continue south on a retracement.

40.00 Find no evidence of the old $\frac{1}{4}$ sec. cor.