

Resurvey East Boundary T. 19 N., R. 49 East.

1.

Chains

Survey commenced September 18, 1915 and executed with a Keuffel and Esser transit No. 20575, and a Young and Sons transit No. 8589.

These transits each have horizontal limbs provided with double verniers reading to single minutes of arc.

The instruments were examined, tested on the true meridian at Salt Lake City, Utah and approved by the Assistant Supervisor of Surveys.

I examine the level and collimation adjustments of the Keuffel and Esser transit and find them correct, then, to test the solar apparatus by comparing its indications resulting from the solar observations made during the a.m. and p.m. hours with the meridian determined by Polaris, I proceed as follows:

September 19, 1915: At my camp which is situated near the S. bdy. of sec. 4, T. 19 N., R. 49 E., in approximately latitude $39^{\circ} 33' N.$, approximately longitude $116^{\circ} 27' W.$, I set off $1^{\circ} 45\frac{1}{2}' N.$ on the decl. arc; $39^{\circ} 33' N.$ on the lat. arc and at 8h 00m, a.m., apparent time, I determine a meridian with the solar on the meridional line established by Polaris July 8, 1915, at this point. (See notes T. 20 N., R. 49 E.). The solar meridian thus determined falls 0.7 in. E. of the tack in the stake 5 chs. N. of my station.

The solar apparatus by a.m. and p.m. observations defines the position for meridians, respectively 0.6 in. E. and 0.5 in. W. of the meridian established by Polaris observations; therefore I conclude that the adjustments of the instrument are satisfactory.

The magnetic bearing of the true meridian is $N. 17^{\circ} 30' W.$ which gives the magnetic declination $17^{\circ} 30' E.$

Young and Sons transit No. 8589 was tested at the same time and in the same manner and the solar apparatus by a.m. and p.m. observations defines positions for meridians, respectively 0.7 in. E. and 0.6 in. W. of the meridian established by Polaris observations; therefore I conclude that the adjustments of the instrument are satisfactory.

RESURVEY EAST BOUNDARY T. 19 N., R. 49 EAST

Surveyed by H.W. Reppert.
The retracement of the E. bdy. of T. 19 N., R. 49 E. was made in conjunction with the survey of T. 20 N., R. 49 E. (See notes T. 20 N., R. 49 E.) and the corner of Ts. 19 and 20 N., Rgs. 49 and 50 E., re-established 6 miles N. of the cor. of Ts. 19 N., Rgs. 49 and 50 E. on the resurvey of the E. bdy. of T. 19 N., R. 49 E. I therefore proceed as follows:
Sept. 18, 1915: At 10h 00m, a.m., apparent time, I set off $2^{\circ} 6\frac{1}{2}' N.$ on the decl. arc; $39^{\circ} 29' N.$ on the lat. arc and determine a meridian with the solar at the cor. of Ts. 18 and 19 N., Rgs. 49 and 50 E., which is a cedar post, 4 ins. square, 6 ft. long, set in a mound of stone and properly marked.
I re-monument the corner by setting an iron post 3 ft. long, 3 ins. diam., 24 ins. in the ground, by the side of the cedar post, for cor. of T. 19 N., Rs. 49 and 50 E., with brass cap mkd.,

T 19 N	
R 49 E	R 50 E
S 36	S 31
1915	

and raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high N. of corner.