

Resurvey of 8th Std. Par. N., thru R. 26 E.

1.

Chains

Survey commenced Nov. 10, 1912, and executed with a Young and Sons transit No. 3538, with solar attachment. The horizontal limb is provided with two double verniers reading to single minutes of arc, and placed opposite each other, this reading is also the least count of the verniers of the latitude and declination arcs.

The instrument was examined, tested on the true meridian at Reno, found correct, and was approved by the Surveyor General for Nevada June 10, 1912. I reexamine the adjustments of the transit and correct the level and collimation errors, then to test the solar apparatus by comparing its indications resulting from solar observations made during P.M. and A.M. hours with a meridian determined by observation on Polaris I proceed as follows:

At the Standard corner of T.41 N., Rs. 25 and 26 E., which is an iron post firmly set in the ground of the dimensions, and marked and witnessed as described by the Surveyor General, latitude 41°22'N., longitude 119°6'W., I set off 41°22'N. on the lat. arc, 17°12'S. on the decl. arc, and at 4 h P.M., l.m.t., determine a meridian with the solar and mark a point thereof on a stone firmly set in the ground 5 chs. N. of my corner.

Nov. 10, 1912.

The above Tp. Cor. was set by Jas. D. Archer Nov. 19, 1910, and is thus described by him:

The old standard cor. of T.41 N., Rs. 25 and 26 E. is a stone 18x14x5 ins. above ground, mkd. and witnessed as described by the Surveyor General. I destroy all trace of old Standard Tp. cor. and re-establish it at the same point as follows: Set an iron post 3 ft. long, 3 ins. diam., 24 ins. in the ground for Std. Cor. of T.41 N., Rs. 25 and 26 E., with brass cap mkd:

T 41 N  
R25 | R26E  
S36 | S31  
-----  
1910

and raise a mound of stone 2 ft. base, 1½ ft. high N. of cor.

Nov. 11, 1912.

At 4 h 5 m A.M., l.m.t., I observe Polaris at western elongation in accordance with Manual of Instructions and mark a point in the line thus determined on a peg driven in the ground 5 chs. N. of my station.

At 8 h A.M., l.m.t., I lay off the azimuth of Polaris 1°32' to the east and mark the meridian thus determined by cutting a small groove in the stone set Nov. 10, 1912, on which the meridian falls 0.4 ins. E. of the mark determined by the solar.

At 8 h 10 m A.M., l.m.t., I set off 41°22'N. on the lat. arc, 17°22'S. on the decl. arc and mark a point in the meridian determined with the solar by a cross on the stone already set 5 chs. N. of my station, this mark falls 0.3 ins. E. of the meridian established by the Polaris observation.

The solar apparatus by P.M. and A.M. observations defines positions for meridians, respectively about 21" W. and 16" E. of the meridian established by the Polaris observations, therefore I conclude that the adjustments of the instrument are satisfactory.

The magnetic bearing of the true meridian at 8 h 20 m A.M. is 18°50'W., the angle thus determined gives the mag. decl. 18°50'E.

From the Standard Cor. of T.41 N., Rs. 25 and 26 E., I re-survey the S. bdy. as follows:

S. 89°59'E. south of sec. 31.

10.80  
20.10

Steep descent from rim rock bearing NW. and SE.  
Creek, course northerly, 4 lks. wide.