

## Resurvey of W. Bdy. of T.35 N., R. 46 E.

3.

Chains

with brass cap mkd:

$$\begin{array}{r} \frac{1}{4} \\ \hline S \ 31 \\ \hline S \ 6 \end{array}$$

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

Descend 50 ft. over cliffs.

52.60 Gulch, course S.5°E., ascend.

62.70 Top of spur, nose bears S.45°E., descend.

74.10 Base of spur, bears N.45°W. and S.45°E.

77.68 The cor. to Tp. 35 N., Rs. 45 and 46 E., previously  
described.

Land heavily rolling.

Soil, rocky, 3rd rate.

Undergrowth, sagebrush and bunchgrass.

No timber.

October 22, 1913.

The above mile was examined on Aug. 19, 1914, by  
Winfred A. Pray, U.S. Surveyor and found correct.

## Resurvey of W. Bdy. T.35 N., R. 46 E.

Surveyed by Winfred A. Pray,  
U.S. Surveyor.

Survey commenced Aug. 16, 1914, and executed with a  
Young and Sons transit No. 8518 with Smith solar attach-  
ment. The horizontal limb is provided with two double ver-  
niers reading to single minutes of arc, which is also the  
least count of the verniers of the latitude and declina-  
tion arcs. The instrument was approved by Assistant Sup-  
ervisor of Surveys G. D. D. Kirkpatrick.

I examine 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 taken during P.M. and A.M. hours with  
a meridian determined by observations on Polaris.

I proceed as follows:

At the cor. of Tps. 35 N., Rgs. 45 and 46 E., prev-  
iously described in the notes of Transitman Collins,  
latitude 40°51'N., longitude 116°50'W., I set off 40°51'N.  
on the latitude arc, 13°48'N. 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 station.

At 9 h 55 m P.M., l.m.t., I observe Polaris at eastern  
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.

August 16, 1914.

Aug. 17, 1914.

At 7 h A.M., l.m.t., I lay off the azimuth of Polaris  
1°32' to the west, and mark the meridian thus determined  
by cutting a small groove in the stone set Aug. 16th, on  
which the meridian falls 0.8 ins. west of the mark deter-  
mined by the solar.

At 8 h A.M., l.m.t., I set off 40°51'N. on the lat.  
arc, 13°35'N. 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 co-  
incides with the meridian established by the Polaris ob-  
servation.

The solar apparatus by P.M. and A.M. observations,  
defines positions for meridians, respectively about 0'41"  
east and coinciding with the meridian established by the  
Polaris observations; therefore I conclude that the ad-  
justments of the instrument are satisfactory.  
The magnetic bearing of the true meridian at 8 h 15 m  
A.M., is N.18°55'W., the angle thus determined gives the  
magnetic declination 18°55'E.