

T. 46 N., R. 28 E.

Chains

A portion of the East boundary of the Charles Sheldon Antelope Range lies along the 4th meridional section line of T. 46 N., R. 28 E. In order to reestablish this boundary it was found necessary to retrace and partially resurvey the west boundary and a portion of the north boundary of the township.

The retracements and resurveys in T. 46 N., R. 28 E. were executed with Buff & Buff light mountain solar transit, serial number 9210, the property of the General Land Office. For description, date of approval and field test of this instrument, together with the test of all minor equipment, see the field notes of the resurvey of the 9th Standard Parallel North, through ranges 26, 27 and 28 E., this group.

The geographic position of the standard cor. of secs. 32 and 33, T. 46 N., R. 28 E., is latitude $41^{\circ} 52' 15''$ N., and longitude $118^{\circ} 47' 00''$ W.

At this standard cor., October 9, 1940, at 3h 14m p.m., app.t., I make a series of three altitude observations of the sun for azimuth, each with the telescope in direct and reversed positions, observing opposite limbs of the sun and reading the horizontal deflection angle from the reestablished stan. cor. of secs. 31 and 32, T. 46 N., R. 28 E., to the W., SW. to the sun.

Observation	Telescope	Sun	Watch time	Vertical Angle	Horizontal Angle Cor. to Sun
1st	Direct		3h01m	$22^{\circ} 57' 00''$	$33^{\circ} 13' 00''$ to SW.
"	Reversed		3h09m	$22^{\circ} 46' 00''$	$32^{\circ} 31' 00''$ "
	Mean		3h05m	$22^{\circ} 51' 30''$	$32^{\circ} 52' 00''$ "
2nd	Direct		3h02m	$22^{\circ} 49' 00''$	$33^{\circ} 39' 00''$ "
"	Reversed		3h08m	$22^{\circ} 59' 00''$	$32^{\circ} 12' 00''$ "
	Mean		3h05m	$22^{\circ} 54' 00''$	$32^{\circ} 55' 30''$ "
3rd	Direct		3h03m	$23^{\circ} 13' 00''$	$32^{\circ} 52' 00''$ "
"	Reversed		3h07m	$22^{\circ} 37' 00''$	$33^{\circ} 01' 00''$ "
	Mean		3h05m	$22^{\circ} 55' 00''$	$32^{\circ} 56' 30''$ "

By 1st observation, cor. bears N. $89^{\circ} 56' 55''$ W.

By 2nd observation, cor. bears N. $89^{\circ} 56' 45''$ W.

By 3rd observation, cor. bears N. $89^{\circ} 57' 05''$ W.

Mean bearing S. bdy. sec. 32 N. $89^{\circ} 56' 55''$ W.

Declination of the sun mean period of observations $6^{\circ} 29' 02''$ S.

The observed magnetic variation is N. $20^{\circ} 00'$ E.

West Boundary of T. 46 N., R. 28 E.

Retracement and partial reestablishment of the survey executed by Hatch, Skinner and Preble, U. S. Deputy Surveyors, in 1874.

NOTE: The point for the NW. cor. of the township is determined by record distances from nearest original corners to S. and E. therefrom.

Beginning at the standard cor. of Ts. 46 N., Rs. 27 and 28 E., which is monumented with an iron post, 3 ins. diam., 6 ins. above ground, marked and witnessed as described in the field notes of the resurvey of a portion of the 9th Stan. Par. N., through Rs. 26, 27 and 28 E.

N. $0^{\circ} 38'$ E., bet. secs. 31 and 36.

Over gently rolling land, through medium dense greasewood and sagebrush.