

T. 15 S., R. 50 E.

Survey commenced March 28, 1942, and executed with Gurley solar transit No. 262684, light mountain model, with U-shaped standards, 5.65 inch horizontal limb, 4.5 inch vertical circle, and improved Smith solar attachment. The horizontal limb is provided with two double verniers placed opposite to each other and reading to single minutes of arc, which is also the least count of the vertical circle. This instrument was in good condition and having been placed in satisfactory adjustment prior to the initiation of the survey, and having been tested and found free from appreciable error, was approved by the district cadastral engineer on March 25, 1942.

Transit lines were carried forward from meridians established on line by Polaris observations, taking the mean of direct and reversed sights at each station and checking all deflections by repetition of angles. The bearings of the lines was checked at the conclusion of the survey by an altitude observation on the sun for azimuth.

Measurements were made on the slope, the vertical angle obtained by clinometer readings, and the necessary corrections made. Horizontal distances only are entered in these notes. A Lallie 5 chain tape, tested and found correct, was used for all measurements.

March 28, 1942, at the original cor. of Ts. 15 and 16 S., Rs. 49 and 50 E., M.D.Mer., Nevada, in longitude $116^{\circ} 24'$ W. and approx. latitude $36^{\circ} 35'$ N., as derived from state map, I make a meridian observation of the sun for latitude, observing the altitude of the sun's lower limb, reversing the transit and observing the altitude of the sun's upper limb:

Apparent time of observation, noon	. . . . .	12h	00m	00s
Mean observed altitude	. . . . .	56°	22'	00"
Reduced latitude	. . . . .	36°	37'	20" N.

At the same station and the same date, at 3hr 07m 14s p.m., l.m.t., I make an hour angle observation on Polaris, west of the meridian, three each with the telescope in direct and reversed positions, reading the horizontal deflection angles from a sharply defined ledge on skyline about 10 miles north, in the direction N-W to Polaris:

Watch time (adjusted to correct 120° meridian standard time by radio signal)	2h	53m	02s	p.m.
Mean horizontal angle from Polaris to mark	0°	20'	08"	
Azimuth of Polaris	0°	34'	24"	W.
True bearing	N. 0°	14'	16"	W.

SURVEY OF A PORTION OF THE WEST BOUNDARY OF T. 15 S., R. 50 E.

The original cor. of Ts. 15 and 16 S., Rs. 49 and 50 E. is a basalt rock, 10 x 8 x 7 ins., mkd. 6 notches on the four edges, firmly set in a small embedded mound of stones, and with a small mound of stone to the south. At point for cor., Set an iron post, 3 ft. long, 3 ins. diam., 27 ins. in the ground, with the original corner rock deposited at the base, for cor. of Ts. 15 and 16 S., Rs. 49 and 50 E., with brass cap mkd.

T15S	
R49E	R50E
S 36	S 31
S 1	S 6
T16S	
1942	

raise a mound of
stone, 3 ft. base, 2 ft. high, S. of cor.

Beginning at the above cor.,

North, bet. secs. 31 and 36,

Over nearly level desert land having very gentle SW. slope and drainage, thru scattering undergrowth.