

## SURVEY NO. 4862

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Feet

This survey was made with K & E transit No. 101986, with horizontal limb 6 ins. in diam., having double opposite verniers, and full vertical circle 5 ins. diam., having one double vernier, the horizontal vernier reads to twenty seconds of arc and the vertical vernier reads to one minute of arc; the reticule is arranged to center the sun for direct solar observations. The instrument was in good condition at the time of the survey and all adjustments were in good order.

All azimuths in this record were determined by the method of deflection angles referred to the meridian determined by the following observation:

On March 31, 1959, at Cor. No. 1 of the Grayhound No. 6 lode in latitude  $40^{\circ}39'38''$  N., and longitude  $116^{\circ}12'20''$  W., I made a series of six altitude observations upon the sun for azimuth at approximate equal time intervals, three each with the telescope in direct and reversed positions, and reading the horizontal angle from the reference point, Cor. No. 2 of the Grayhound No. 6 lode, Southward SW. to the sun:

Mean time of observation, 105th meridian, standard time -----	10:34 $\frac{1}{4}$ A.M.
Declination of sun at mean time of observation -----	$4^{\circ}03'40''$ N.
Mean observed vertical angle of sun's center -----	$49^{\circ}26'40''$
Mean horizontal angle from reference point to sun's center -----	$21^{\circ}05'$ S-W
True bearing of reference point -----	S. $51^{\circ}48'$ E.

The lines were measured with a Lufkin steel tape 500 ft. in length, graduated every foot, the end feet in tenths and hundredths; this tape was compared with a Lufkin standardized steel tape at the time of beginning the survey, and found correct:

All lines and connections of this survey were run by direct methods.

The magnetic variation observed at each corner of the survey gave a uniform value of  $17^{\circ}30'$  East.

## SURVEY NO. 4862

Feet

## GRAYHOUND NO. 3 LODGE

At Cor. No. 1 of the Grayhound No. 3 lode, identical with Cor. No. 4 of Sur. No. 4859, Grayhound No. 2 lode, claimant herein.

An iron post, 2 ins. diam., 3 ft. above ground, surrounded by a mound of earth and stone, with a copper plate cap marked G2-4-4859 to which I add the marks G3-1-4862, from which

The  $\frac{1}{4}$  cor. between secs. 11 and 14, T. 32 N., R. 51 E., M.D.M. bears N.  $24^{\circ}41'21''$  E., 3301.17 ft. dist.; a porphyry rock, 4 ins. by 9 ins., mkd.  $\frac{1}{4}$  on the south face; a rock mound 3 ft. north of the corner.

No local bearing objects or bearing trees available.

Thence S.  $51^{\circ}48'$  E.

95.00 Center of road, bears N.  $38^{\circ}$  E. and S.  $38^{\circ}$  W.

300.00 Lode line, discovery bears S.  $28^{\circ}12'$  W., 100 ft. dist.

520.00 Center of road, bears N.  $30^{\circ}$  E. and S.  $45^{\circ}$  W.