

DETAILS

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 July 18, 1958, at Cor. No. 3 of the Grayhound lode, in latitude $40^{\circ}39'20''$ N., and longitude $116^{\circ}12'24''$ 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. 4 of the Grayhound lode southward SW. to the sun.

Mean time of observation, 105th meridian, daylight saving time ----- $4h8\frac{1}{2}m$ p.m.
 Declination of sun at mean time of observation ----- $20^{\circ}59'24.93''$ N.
 Mean observed vertical angle to sun's center ----- $44^{\circ}17'$
 Mean horizontal angle from reference point to sun's center ----- $48^{\circ}26'$ S-W
 True bearing to reference point ----- N. $51^{\circ}48'$ W.

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. 4859

Feet

GRAYHOUND LODE

At Cor. No. 1 of the Grayhound lode, identical with Cor. No. 2 of the Grayhound No. 1 and with the NW. Cor. of the amended location.

Set an iron post, 2 ins. diam., with a copper plate cap, 3 ft. above ground, surrounded by a mound of earth and stone, mkd. G-1, G1-2-4859; from which

The north $\frac{1}{4}$ corner of Sec. 14, T. 32 N., R. 51 E., M.D.M., bears N. $38^{\circ}08'33''$ W., 985.12 ft. dist.; a porphyry rock, 4 ins. by 9 ins. by 18 ins., mkd. $\frac{1}{4}$ on the south face, a rock mound 3 ft. north of corner.

No local bearing objects or bearing trees available.

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

300.0 Lode line, discovery point bears S. $38^{\circ}12'$ W., 850 ft. dist.

600.0 Cor. No. 2, identical with the NE. Cor. of the amended location.

Set an iron post, 2 ins. diam., with a copper plate cap, 3 ft. above ground, surrounded by a mound of earth and stone, mkd. G-2-4859.

No local bearing objects or bearing trees available.