

Survey No. 920

CHAINS
Feet

This survey was executed with a light mountain solar transit made by W. and L. E. Gurley, Serial No. 461265, 1946 model, with horizontal limb 5 ins. diam., having two double opposite verniers, and full vertical circle, $4\frac{1}{2}$ ins. diam., having one double vernier; the verniers read to one minute of arc. The instrument is equipped with the latest model solar unit.

All azimuths in this field note record were determined by the solar attachment, which together with the transit was maintained in perfect adjustment. The indications of the solar attachment were frequently compared with the following described meridian established by observation on the star Polaris and found to be correct.

June 24, 1953, at Cor. No. 1 Hard Times lode, in lat. $42^{\circ}43'$ N., and long. $123^{\circ}14\frac{1}{2}'$ W., as determined from an accurate map, at 4h 44m 56s a.m., l.m.t., or 4h 57m 54s a.m., by my watch which reads correct Pacific Standard Time as compared with radio time signals, I make a series of four observations on Polaris at eastern elongation for azimuth, making two settings each in a direct and reversed position, sighting on a stake placed 300 ft. N. by my transit. The resulting azimuth of Polaris is N. $1^{\circ}18'11''$ E., which verifies the azimuth of my reference point.

The lines were measured with a Dietzgen steel tape, 300 ft. in length, graduated every foot with an add scale of tenths and hundredths of a foot. This tape was compared with a Lufkin standard tape and found to be correct before beginning the survey.

All lines of this survey were run by direct methods.

HARD TIMES LODGE

At Cor. No. 1. of the Hard Times lode

Set a diorite stone, 28 x 10 x 8 ins., 18 ins. in the ground, and in a mound of stone to top, mkd. HT-1-920; from which

The $\frac{1}{4}$ sec. cor. of secs. 11 and 12, T. 33 S., R. 5 W., Willamette Meridian, Oregon, bears S. $66^{\circ}57'$ W., 1529.66 ft. dist., a granite stone, 10 x 8 ins., firmly set flush with top of ground, mkd. $\frac{1}{4}$ on W. face, from which the original bearing trees:

A Douglas fir, 36 ins. diam., bears S. 54° E., 18 ft. dist., with blaze healed.

An incense cedar, 18 ins. diam., bears N. $23\frac{1}{2}^{\circ}$ W., 22.4 ft. dist., with scribe marks $\frac{1}{4}$ S uncovered.

Against N. side of stone, set an iron pipe, 3 ft. long, $1\frac{1}{2}$ ins. diam., 28 ins. in the ground, mkd. RS33.

A yew, 6 ins. diam., bears S. $58\frac{1}{4}^{\circ}$ E., 29.0 ft. dist., mkd. HT-1-920 BT.

An incense cedar, 60 ins. diam., bears S. $0^{\circ}30'$ E., 9.0 ft. dist., mkd. HT-1-920 BT.

A corner of the location bears N. 69° W., 39.8 ft. dist.

The magnetic declination is $21^{\circ}57'$ E.

Thence N. $63^{\circ}22'$ E.

- 52.00 A creek, 1 ft. wide, course NW.
- 372.00 Center of placer cut, 20 ft. wide, 10 ft. deep, bears N. 30° W., and S. 30° E.
- 475.00 West bank of placer cut, 25 ft. deep, bears N. 35° W. and S. 35° E.
- 566.00 East bank of placer cut, bears N. 35° W. and S. 35° E.