

Mineral Survey No. 5047

FEET

This survey was made with a Hewlett-Packard Electronic Total Station, Model No. 3820A, Serial No. 1650A00201, which utilizes electronic horizontal and vertical circles that display measured horizontal and zenith angles directly in degrees, minutes, and seconds. All lines of this survey were measured with this instrument which uses a laser beam to measure the slope dist. from the instrument toward a reflector located at the point to be measured. The slope dist. is reduced to hor. dist. within the instrument by an electronic computing device and displays the hor. dist. directly to the nearest one thousandth of a ft. The instrument was tested and calibrated on a base line of known length before and after this survey was completed and found to be in good adjustment during the time that this survey was executed.

Bearings referred to in this record were determined by the average of two hor. angle measurements, one with the telescope in the dir. position, and one with the telescope in the rev. position. These angles were referred to the meridian by the following observations:

April 10, 1990 at Cor. No. 2 of the TUSC No. 50 lode, at latitude $40^{\circ}48'10''$ N., and longitude $116^{\circ}14'14''$ W., elevation approximately 5,550 ft. above sea level, barometric pressure 22.8 ins. of mercury, and temperature 46° F., make a series of eight observations on the sun for azimuth at approximately equal time intervals, four each with the telescope in the dir. position and rev. position, observing the horizontal angle right from Cor. No. 1 of the TUSC No. 50 lode and the zenith angle to the center of the sun.

Mean time of observation
(120th meridian (P.S.T.) = $7:44:35.4$ A.M.
Declination of the sun at
mean time of observation = $N. 8^{\circ}00'43.6''$
Mean observed zenith angle
to the sun's center = $62^{\circ}31'07.7''$
Mean horizontal angle right
from Cor. No. 1 of the
TUSC No. 50 lode to the
sun's center = $15^{\circ}23'03.1''$
True bearing to Cor. No. 1
of the TUSC No. 50 lode = $N. 88^{\circ}34'02''$ E.

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

The magnetic declination observed at each cor. gave a uniform value of $17^{\circ}30'$ E.

TUSC NO. 51 LODE

At Cor. No. 1 of the TUSC No. 51 lode.

Set an iron post, 24 ins. long, 2 ins. diam., 18 ins. in the ground, with a $3\frac{1}{4}$ ins. diam. aluminum cap mkd. T51-1-5047; situated within the patented $NW\frac{1}{4}$ Sec. 27, T. 34 N., R. 51 E., M.D.M.; from which