

Survey No. 4831

This survey was made with a Leitz Mining Transit No. 9886 with horizontal limb 5 ins. diam., having two double opposite verniers and full vertical circle 5 ins. diam., having one double vernier; the verniers reading to one minute of arc. The instrument was in good condition at the time of the survey and all adjustments were in good order. All azimuths of this record were determined by the method of deflection angles referred to the meridian as determined by the following observation:

On May 13, 1952, at Cor. No. 3, Charmain Mill Site in latitude $38^{\circ}52'30''N.$ and longitude $117^{\circ}55'W.$, I make a series of four altitude observations on the sun, reading the horizontal angles left from a foresight on Cor. No. 2, Charmain Mill Site.

Mean time of observation Mtn. Std. Time2:45 PM
 Declination of sun at mean time of observation $18^{\circ}32'20''N$
 Mean Vert. angle to sun's center, less Rfr $56^{\circ}06'20''$
 Mean horizontal angle left to sun's center $28^{\circ}14'$
 True bearing Cor. No. 3 to Cor. No. 2 $N.89^{\circ}39'W.$

The lines were measured with a Lufkin Steel tape 660 ft. long, with terminal feet graduated to tenths and hundredths and a new K & E steel tape 6 ft. long graduated to tenths and hundredths. Both tapes were compared with a standard K & E 100 ft. tape at the beginning of the survey and found correct.

All lines of this survey were run by direct method as all points were accessible.

The magnetic variation observed at each corner of the survey gave a uniform value of $18^{\circ}00'E.$

Feet

CHARMAIN MILL SITE

Beginning at Cor. No. 1, Charmain Mill Site.

Set an iron pipe 2 ins. diam., 4 ft. long, 18 ins. in the ground in mound of stone, with copper cap mkd. C. MS.-1-4831; from which

The $W\frac{1}{4}$ cor. of sec. 27, T. 12 N., R. 36 E., M.D.M., bears $N.52^{\circ}39'W.$, 1720.8 ft. dist., a limestone rock 6 x 8 ins. showing 10 ins. above ground with mound of stone alongside, mkd. $\frac{1}{4}$ on W. face.

No bearing objects available.

Thence $N.50^{\circ}55'E.$

Along side of 50 ft. paved mine road.

373.3

Cor. No. 2.

Set an iron pipe 2 ins. diam., 4 ft. long, 18 ins. in the ground in mound of stone, with copper cap mkd. C. MS.-2-4831.

No bearing objects available.

Thence $S.89^{\circ}39'E.$

245.1

Intersect west right-of-way line of State Highway No. 23 on slight curve, course at crossing $N.10^{\circ}E.$

251.1

Cor. No. 3.

Set an iron pipe 2 ins. diam., 4 ft. long, 18 ins. in the ground in mound of stone, with copper cap mkd. C. MS.-3-4831.

No bearing objects available.

Thence $S.12^{\circ}59'W.$