COUNTY SURVEYOR'S RECORD, DOUGLAS COUNTY, OREGON

BUSHONG & CO. PORTLAND, ORE. 87545

Survey No. *Made on* Oct 19,20, 1923	*Survey No.* *Made on*
In Town. 29 S *Range* 3 W *Sec.* 32	*In Town.* *Range* *Sec.*
Made for Thomas Hatfield	*Made for*
Purpose of Establishing lines and corners on south boundary of his property in center of section 32. SURVEYOR: C.W.Springer CHAINMAN: N.E.Richardson also see C.S. 6/29 F.N. "LL"	*Purpose of*

Began the survey at the section corner common to sec. 32 & 33 T 29 S R 3 W and sec. 4 & 5 T 30 S R 3W WM Ore. which I re-established from th stump of the only remaining BT called for in the Gov't Field Notes. This stump bears S 8° W 108 lks. The lower blaze marked BT was all the identification left but the scribe marks were plain and a Mr. Remic Fate had previously told us th e section corner was near a fence corner of his. Re-established this corner by driving and iron pin ¾"x24" in ground and marking new BTs as follows; 12" B. Oak S 60°15' W 168.9 feet, A 10" Ash S 52°45' E 178.0 ft., A 10" Alder N 42° 10' E 17.7 ft., A 6" Ash N 7° 50' W 210.7 ft. Thence startod a transit traverse line in a westerly direction but taking a Solar Observaestion as follows:

Date Oct. 19, 1923. Time 3:00 PM. Instrument set at Section corner, FS on a black snag mag. course of N 80°30' W.

#1. Hort. Angle L 50°13', Vert. Angle 23°56' , Mag C. to Sun S 50°20' W
#2. " " L 49°09', " " 23°18' , " " " " S 51°30' W

Formulae; Cos Q equals Tan Alt x Tan Lat - Sin Dec x Sec Alt x Sec Lat

Dec. of Sun Greenwich Noon Oct 19, 1923 S 9°42.5'
Diff 11 hrs x H.C. 54.5" equals 599.5" --- 10.0'
Time of Obs. 3:00 PM Oct 19, 1923 ------- S 9°52.5'

Lat. of Base line equals 45°31' less corr. for 29 Twp x 5.217' equals 151.293' equals 2°31' . 45°31' less 2° 31' equals Lat of Obs as 43°00'

Refraction Correction equals minus 2'.

#1 Tan Alt 23°54' - .44314 Sec Alt 23°54' -- 1.0938
x " Lat 43°00' - .93252 x " Lat 43°00' -- 1.3673
.41324 1.4956

Sin Dec 9°52.5' - .17150
x 1.4956
.2565 .2565
Cos Q equals .56974 equals S 47°57' W
plus 50°13'
Bearing of black snag N 81°50' W

#2 Tan Alt 23°16' - .42998 Sec Alt 23°16' - 1.0885
x " Lat 43°00' - .93252 x " Lat 43°00' - 1.3673
.40096 1.4883

Sin Dec 9°52.5' - .17150
x 1.4883
.25524 .25524
Cos Q equals .55620 equals S 48°59' W
plus 49°09'
Bearing of black snag equals N 81°52' W

Average of obs. equals N 81°51' W . From the black snag I turned L 10°25' to my traverse line making the true bearing as S 87°44' W. The traverse follows
Sec cor com to 4,5,32,33, S 87°44' W 1083.1 ft to #1, S 87°44'W 104.7 ft. to #2, S 87°44'W 141.7 ft to #3, S 87°44'W 549.6 ft tp #4, North 1.0 ft to #4A S 87°44'W 178.5 ft to #5, N2°16' W 77.6 ft to #6, West 87.6 ft to #7, West 153.6 ft t #8, West 58.0 ft to #9, West 59.0 ft to #10, West 130.8 ft to #11, S 81°57'W 101.2 ft to ¼ sec cor between sec 32 T 29 S R3W and Sec 5 T 30 S R3W WM Ore. which I re-established from stump of one original BT called for as an Oak 15" dia bearing N 82°E 270 lks. No trace of the other BT remains and since both trees were so nearly in the East I used the statement of Mr. Remic Fate as to his fence being between the Oak witness trees in determining that this tree was in the north section (SEC32). The BT and its scribe marks were plain but the top of this tree was down and the stump so bdly rotted that after resetting cor I did not use this for one of the witness trees. I therefore reestablished this corner by driving an iron pin ¾"x 24" in ground and set a cedar stake 4"x4"x36 from which A Fir 22" dia bears S 45°E 13.7 ft. A Fir 24 " dia bears N 60°30' E 43.0 ft. I then turned true North and ran a blazed compass line for some distance. Byc computation I found the true course bet the Sec cor common to sec's 4,5,32, 33 and the ¼ sec cor bet secfs 5 and 32 to be S 89°37' W 2663.4 feet. I then established the 1/16 cor midway between them and drove an iron pin ¾" x 24" in ground an set an Oak stake 4"x4"x 36" from which A Cedar 16" dia bears N 30°15'W 60.9 ft and a Fir 46" dia bears N 61°15' W 112.7 feet. I then turned to a true North course and ran a compass line and blazed it for some distance. This completed the survey. Angles were read fromthe transit vernier and chaining was done partly by horizontal method and partly by angle method. The true line was blazed thru on the section line from the ¼ cor to the 1/16 cor. Between there and the section is an open field. With the needle set at a variation of 21°45' a great deal of flucuation was noticed from true bearings.

Filed Oct 27, 1923
in Co Surveyors Office