



FIELD NOTES

of

RETRACEMENT PORTION EAST BOUNDARY,

RETRACEMENT AND RESURVEY PORTION SOUTH BOUNDARY,

RETRACEMENT PORTION WEST BOUNDARY

and

RETRACEMENT AND SURVEY PORTION SUBDIVISIONAL LINES

in

TOWNSHIP NO. 2 SOUTH, RANGE NO. 34 EAST

Of the Willamette Meridian,

In the State of Oregon

EXECUTED BY

L. E. Wilkes

In the capacity of U. S. Surveyor..., under Special Instructions dated April 18, 191 7
issued by the United States Surveyor General to govern surveys included in Group
No. 38, which were approved by the Commissioner of the General Land
Office, May 10, 191 7, and Assignment Instructions dated Sept. 13, 191 7

Survey commenced October 10, 191 7

Survey completed October 18, 191 7

ACCEPTED BY THE HON. COMMISSIONER G. L. O. May 2. 1919

Township No. 2 South, Range No. 34 East

DATE DIAGRAM

Retracements, Resurveys and Surveys for Year 1917

	6	5	4	3	2	1
	7	8	9	10	11	12
	18	17	16	15	14	13
	19	20	21	22	23	24
	30	29	28	27	26	25
	South ³¹ Boundary ³² Umatilla ³³ Indian ³⁴ Reservation ³⁵					36
Oct. 16	Oct. 16	Oct. 18	Oct. 11	Oct. 17	Oct. 12	Oct. 11

East Boundary Umatilla Indian Reservation

Sept. 6, 1917: At 4h 0m a.m., I lay off the corner of
 Solaris 1° 27' to the west and mark the meridian thus de-
 termined on a peg driven in the ground, 5.00 chs. N. of
 my station.

Sept. 6, 1917.

Oct. 9, 1917: At 4h 0m p.m., I set off 48° 24' N. on
 the lat. arc; 6° 17' E. on the decl. arc; and determine
 with the solar meridian, which falls 0° 0' 30" west of
 the meridian determined by Solaris observation, Sept. 6.

Chains

This survey was made simultaneously and in connection with the survey that portion of this township within the original boundaries of the Umatilla Indian Reservation. Survey commenced Oct. 10, 1917 and executed with a Young and Sons light mountain transit No. 8585, with Smith solar attachment. The horizontal limb is provided with two double verniers placed opposite to each other, reading to single minutes of arc, which is also the least count of the verniers of the latitude and declination arcs.

The instrument was examined and approved by the Assistant Supervisor of Surveys for Oregon, May 3, 1917, subject to a satisfactory field test.

I examine the adjustments of the transit and find them correct; then, to test the solar apparatus by comparing its indications resulting from solar observations made during a.m. and p.m. hours with a meridian determined by observations on Polaris, I proceed as follows:

Sept. 5, 1917: At my camp near the $\frac{1}{4}$ cor. of secs. 13 and 14, lat. $45^{\circ}24'N.$, long. $118^{\circ}29'W.$, at 8h 37m p.m., l.m.t., I observe Polaris at eastern elongation in accordance with the Manual of Instructions and mark a point in the line thus determined on a peg driven in the ground, 5.00 chs. N. of my station.

Sept. 5, 1917.

Sept. 6, 1917: At 7h 0m a.m., I lay off the azimuth of Polaris $1^{\circ}37'$ to the west and mark the meridian thus determined on a peg driven in the ground, 5.00 chs. N. of my station.

Sept. 6, 1917.

Oct. 9, 1917: At 4h 0m p.m., l.m.t, I set off $45^{\circ}24'N.$ on the lat. arc; $6^{\circ}17'S.$ on the decl. arc; and determine with the solar a meridian, which falls $0^{\circ}0'30''$ west of the meridian determined by Polaris observation, Sept. 5,

Township No. 2 South, Range No. 34 East

Chains

1917.

Oct. 9, 1917.

Oct. 10, 1917: At 8h 0m a.m., l.m.t., I set off $45^{\circ}24'N$. on the lat. arc; $6^{\circ}33'S$. on the decl. arc; and determine with the solar a meridian, which falls $0^{\circ}0'20''$ west of the meridian determined by Polaris observation, Sept. 5, 1917.

The solar apparatus by p.m. and a.m. observations defines positions for the meridian, which vary less than 1' of arc from the meridian determined by Polaris observation; therefore, I conclude that the adjustments of the instrument are satisfactory.

The instrument was maintained in good adjustment throughout the survey. Latitude and meridian observations were taken daily, weather permitting.

Measurements were made with a 5,00 ch. steel tape, compared with a Chesterman standard 66 ft. steel tape and found correct. All measurements were made on the slope; angles read with an Abney clinometer and all distances reduced to the horizontal, which alone appears in these notes.

Note: Several cors. herein are monumented by stones because more iron posts were required than had been anticipated, and to procure another shipment would have involved the loss of much time and materially increased the cost.

Retracement Portion East Bdy., T. 2 S., R. 34 E.

Commence at the cor. of secs. 13, 18, 19 and 24, on the E. bdy. of the Tp., which is a cross (X) on a volcanic stone in place, 5x3x1 ft. above ground, witnessed as described by the surveyor general.

From this cor. the closing cor. of secs. 13 and 18, on the E. bdy. of the original Umatilla Indian Reservation, bears $N.0^{\circ}11'E.$, 17.08 chs. dist.

Thence

South, retracing bet. secs. 19 and 24.

Over rolling land, through heavy timber and medium under-

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Retracement Portion East Bdy., T. 2 S., R. 34 E.

Chains

growth, along fence.

40.24 Fall 16 lks. E. of the point for $\frac{1}{4}$ sec. cor., located by reference to the bearing trees as described by the surveyor general. I perpetuate this cor., as follows: at the exact cor. point

Set an iron post, 3 ft. long, 1 in. diam., 12 ins. in the ground to bedrock and 14 ins. in a mound of stone, for $\frac{1}{4}$ sec. cor., with brass cap marked

$\frac{1}{4}$
S24 | S19
1917

from which

A pine, 20 ins. diam., bears N.73°30'E., 83 lks. dist., marked $\frac{1}{4}$ S B T (Old B.T.)

A pine, 20 ins. diam., bears N.81°30'W., 164 lks. dist., marked $\frac{1}{4}$ S B T (Old B.T.)

The true course and distance of this line to the $\frac{1}{4}$ sec. cor. is S.0°14'W., 40.24 chs.

From the $\frac{1}{4}$ sec. cor.

South, continuing my measurements

43.50 Leave rolling land; descend steep S. slope.

Leave fence, course W.

54.20 Dry gulch, 310 ft. below top of ascent, course W.; ascend 50 ft. to

56.70 Top of low ridge, slopes W.; descend 200 ft. to

60.70 Dry gulch, course W.; ascend 100 ft. to

64.05 Top of spur, slopes W.; descend SW. slope, 210 ft. to

79.95 Fall 84 lks. E. of the cor. of secs. 19, 24, 25 and 30, which is an old post set in a mound of stone, marked and witnessed as described by the surveyor general, except that the tree in Sec. 19 is now dead and fallen. I perpetuate this cor., as follows: at the exact cor. point

Set an iron post, 3 ft. long, 2 ins. diam., 24 ins. in the ground, for cor. of secs. 19, 24, 25 and 30, with brass cap marked

T2S
R34E | R35E
S24 | S19
S25 | S30
1917

Chains

from which

A fir, 8 ins. diam., bears N.28°30'E., 36 lks. dist.,
marked T 2 S R 35 E S 19 B T. (New B.T.)

A fir, 40 ins. diam., bears S.79°E., 44 lks. dist.,
marked T 2 S R 35 E S 30 B T (Old B.T.)

A fir, 24 ins. diam., bears S.68°W., 108 lks. dist.,
marked T 2 S R 34 E S 25 B T. (Old B.T.)

A fir, 10 ins. diam., bears N.12°W., 141 lks. dist.,
marked T 2 S R 34 E S 24 B T (Old B.T.)

The true course and distance of this line from the $\frac{1}{4}$ sec.
cor. is S.1°13'W., 39.76 chs.

The true line N.1°13'E. from this cor. will cross a dry
creek bed, course NW. at 4.00 chs.

Land, rolling and mountainous.

Soil, light volcanic ash on basalt rocks, 2nd rate.

Timber, pine and fir.

Undergrowth, young pine, fir and willow.

South, retracing bet. secs. 25 and 30.

Ascend steep broken NE. slope, through heavy timber and
medium undergrowth, 500 ft. to

21.90 Fall 11 lks. E. of a fir tree, 40 ins. diam., marked with
2 notches on N. and S. sides.

Ascend 60 ft. to

28.80 Top of ascent; across bench land, bears NE. and SW.

40.25 Fall 6 lks. W. of the point for $\frac{1}{4}$ sec. cor., located by
reference to the bearing trees as described by the surveyor
general, except that the westerly tree is now dead. I
perpetuate this cor., as follows: at the exact cor. point

Set an iron post, 3 ft. long, 1 in. diam., 26 ins. in the
ground, for $\frac{1}{4}$ sec. cor., with brass cap marked

$\frac{1}{4}$
S25 | S30
1917

from which

A tamarack, 18 ins. diam., bears N.87°E., 30 lks.

440 Retracement Portion East Bdy., T. 2 S., R. 34 E.

Chains

dist., marked $\frac{1}{4}$ S B T (Old B.T.)

A fir, 7 ins. diam., bears S.59°W., 18 lks. dist.,

marked $\frac{1}{4}$ S 25 B T (New B.T.)

The true course and distance of this line to the $\frac{1}{4}$ sec. cor. is S.0°05'E., 40.25 chs.

From the $\frac{1}{4}$ -sec. cor.

South, continuing my measurements

Descend 85 ft. to

51.25 Dry gulch, course NE.; ascend 145 ft. to

59.81 Top of ascent; across bench land, bears E. and W.

63.31 A pine tree, 24 ins. diam., marked with 2 notches on N. and S. sides, bears West, 5 lks. dist.

80.50 Intersect the cor. of secs. 25, 30, 31 and 36, which is a fir tree, 18 ins. diam., now dead and fallen, marked and witnessed as described by the surveyor general. I perpetuate this cor., as follows: at the exact cor. point Set an iron post, 3 ft. long, 2 ins. diam., 24 ins. in the ground, for cor. of secs. 25, 30, 31 and 36, with brass cap marked.

T2S	
R34E	R35E
S25	S30
S36	S31
1917	

from which

A fir, 24 ins. diam., bears N.39°E., 45 lks. dist., marked T 2 S R 35 E S 30 B T (Old B.T.)

A fir, 20 ins. diam., bears S.65°E., 16 lks. dist., marked T 2 S R 35 E S 31 B T (Old B.T.)

A fir, 10 ins. diam., bears S.18°30'W., 69 lks. dist., marked T 2 S R 34 E S 36 B T (New B.T.)

A fir, 30 ins. diam., bears N.58°30'W., 40 lks. dist., marked T 2 S R 34 E S 25 B T (Old B.T.)

The true course and distance of this line from the $\frac{1}{4}$ sec. cor. is South, 40.25 chs.

Land, mountainous and rolling.

Soil, shallow light volcanic ash on basalt, 2nd rate.

Chains

Timber, fir, pine and tamarack.

Undergrowth, pine, willow, service berry and ninebark.

South, retracing line bet. secs. 31 and 36.

Over mountainous land, through heavy timber and medium undergrowth.

40.24 Intersect the point for 1/4 sec. cor., located by reference to the bearing trees as described by the surveyor general, except that the SE. tree is now dead. I perpetuate this cor., as follows: at the exact cor. point

Set a volcanic stone, 20x12x10 ins., 16 ins. in the ground, for 1/4 sec. cor., marked 1/4 36 on W. and 31 on E. face; from which

A tamarack, 16 ins. diam., bears N.66°45'W., 67 lks.

dist., marked 1/4 S B T (Old B.T.)

A tamarack, 6 ins. diam., bears S.50°E., 20 lks. dist.,

marked 1/4 S 31 B T (New B.T.)

The true course and distance of this line to the 1/4 sec. cor. is South, 40.24 chs.

From the 1/4 sec. cor.

South, continuing my measurements

60.74 Daly wagon road, bears NE. and SW.; this road follows the approximate summit of the Blue Mountains, which at this point is flat and not well defined.

80.47 Intersect the cor. of Tps. 2 and 3 S., Rs. 34 and 35 E., which is an old post, marked and witnessed as described by the surveyor general. I perpetuate this cor., as follows: at the exact cor. point

Set a volcanic stone, 28x20x12 ins., 12 ins. in the ground to bedrock and 9 ins. in a mound of stone, for cor. of Tps. 2 and 3 S., Rs. 34 and 35 E., marked with 6 notches on each edge; from which

A fir, 16 ins. diam., bears N.72°15'E., 72 lks. dist., marked T 2 S R 35 E S 31 B T (Old B.T.)

A fir, 18 ins. diam., bears S.42°30'E., 50 lks. dist.,

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Retracement Portion East Bdy., T. 2 S., R. 34 E.

Chains

marked T 3 S R 35 E S 6 B T (Old B.T.)

A fir, 20 ins. diam., bears S.14°30'W., 56 lks. dist.,

marked T 3 S R 34 E S 1 B T (Old B.T.)

A fir, 24 ins. diam., bears N.50°W., 300 lks. dist.,

marked T 2 S R 34 E S 36 B T (New B.T.)

At this cor. the lat. is 45°21'N., long, 118°28'W., mag.

decl. 19°30'E.

The true course and distance of this line from the 1/4 sec.

cor. is South, 40.23 chs.

Land, rolling bench.

Soil, light shallow loam on basalt rock, 3rd rate.

Timber, fir, pine and balsam.

Undergrowth, balsam, fir and willow.

Retracement and Resurvey Portion South Bdy., T. 2 S., R. 34 E.

From the cor. of Tps. 2 and 3 S., Rs. 34 and 35 E.

West, retracing bet. secs. 1 and 36.

Over high rolling bench land, through heavy timber and medium undergrowth.

40.08 Fall 20 lks. N. of the 1/4 sec. cor., which is a basalt stone, firmly set, marked and witnessed as described by the surveyor general.

The true course and distance of this line to the 1/4 sec. cor. is S.89°43'W., 40.08 chs.

From the 1/4 sec. cor.

West, continuing my measurements

80.09 Fall 50 lks. N. of the cor. of secs. 1, 2, 35 and 36, which is a stake, firmly set in the ground, not marked, but witnessed as described by the surveyor general. I perpetuate this cor., as follows: at the exact cor. point Set an iron post, 3 ft. long, 2 ins. diam., 24 ins. in the ground, for cor. of secs. 1, 2, 35 and 36, with brass cap marked

T2S	R34E
S35	S36
S2	S1
T3S	R34E
1917	

This portion of the township lies on the summit of the Blue Mountains. The soil is light volcanic ash, very shallow over basalt and is good for grazing. It is nearly all timbered with scattering yellow pine, fir, tamarack and balsam, not of commercial value. The land is principally valuable for grazing. There are no settlers.

Oct. 18, 1917.

L. E. Wilkes.
U. S. Surveyor

For Final Certificate of U. S. Surveyor, see Book "C"

APPROVAL

Office of U. S. Surveyor General,
Portland, Oregon, August 26, 1918.

The foregoing field notes of the Retracement Portion East Bdy., Retracement and Resurvey Portion South Bdy., Retracement Portion West Bdy. and Retracement and Survey Portion Subdivisional Lines in Township No. 2 South, Range No. 34 East of the Willamette Meridian, Oregon, executed by L. E. Wilkes, U. S. Surveyor, under his special instructions dated April 18, 1917, having been critically examined, and the necessary corrections and explanations made, the said field notes, and the surveys they describe, are hereby approved.

Edward deWitt
U. S. Surveyor General