4—679
(April 1933)

349

A

UNITED STATES
DEPARTMENT OF THE INTERIOR
GENERAL LAND OFFICE

FIELD NOTES

of the

Dependent Resurvey of Part of South Boundary

Dependent Resurvey of Part of West Boundary

Dependent Resurvey of Part of Subdivisions of

Township 4 North, Range 38 East

and

Retracement of 3 Subdivision ½ Miles in

Township 3 North, Range 38 East.

Of the Willamette *Meridian,*

In the State of Oregon.

EXECUTED BY

Otis O. Gould, Surveyor.

Under special instructions dated July 11, *19*39, *which provided for the surveys included under Group No.* 234, *bearing the approval of the Commissioner of the General Land Office under date of* July 27, 1939. *and assignment instructions dated* July 26, *19*39.

Survey commenced August 5, *19*39.

Survey completed August 22, *19*39.

U. S. GOVERNMENT PRINTING OFFICE 6—151

ACCEPTED BY THE HON. COMMISSIONER

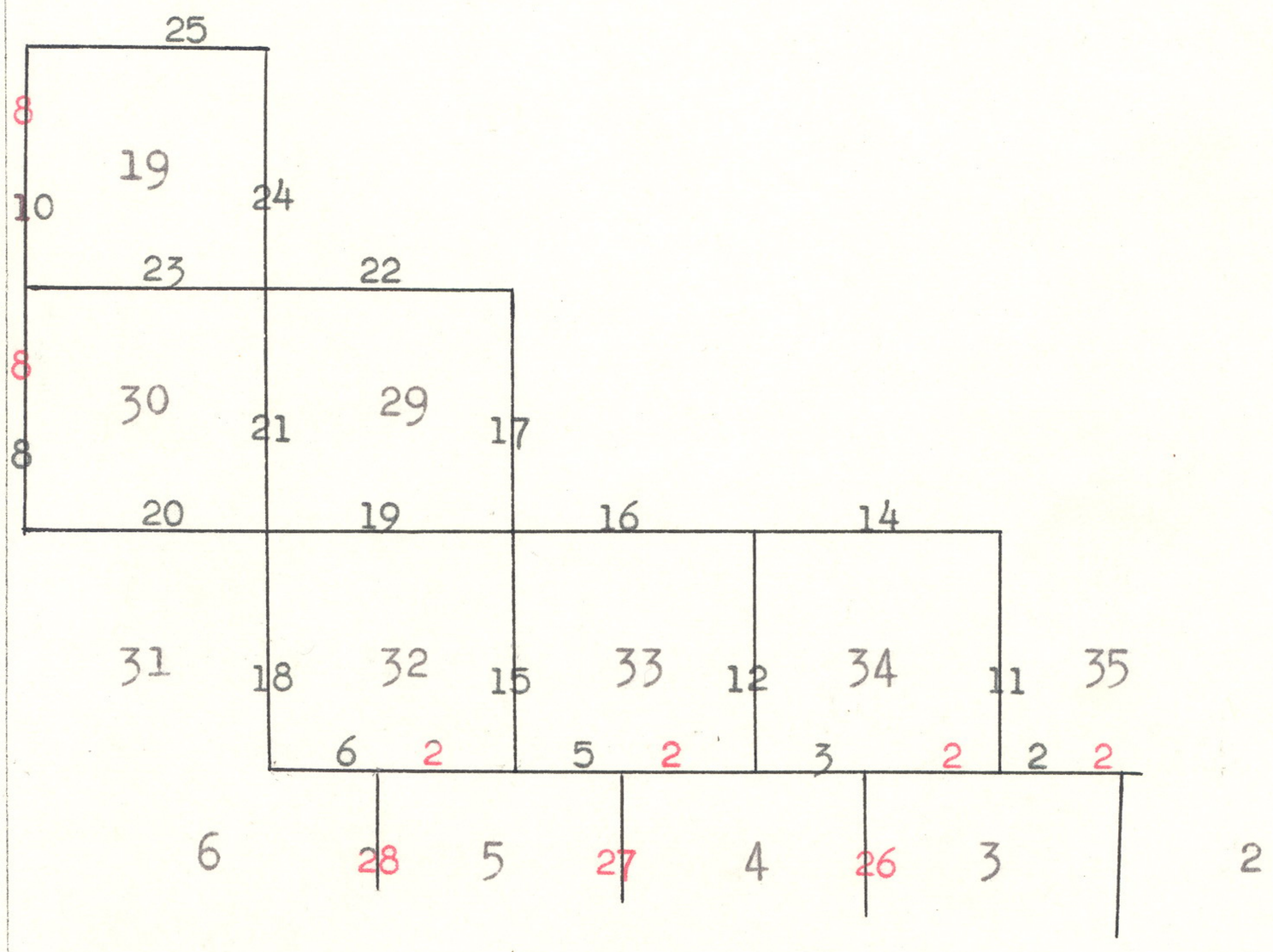
INDEX DIAGRAM.

Township ----------, *Range* ----------

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
31	32	33	34	35	36

INDEX DIAGRAM.

Township 4 North, Range 38 East.



Retracements indexed in Red.

Dependent Resurveys indexed in Black.

U. S. GOVERNMENT PRINTING OFFICE 6—8155

Township 4 North, Range 38 East.

Chains

These surveys were executed with a solar compass made by W. and L. E. Gurley, Serial No. "Memo "B", constructed in accordance with the standard specifications of the General Land Office. The horizontal circle has a diameter of 5½ ins. with double opposite verniers reading to single minutes; the sight vanes are 8 ins. long and are spaced 14 ins. apart. The instrument is equipped with a Burt solar attachment, radius of latitude arc 5½ ins. and declination arc 4½ ins., each with single verniers reading to single minutes.

The observations in camp. on Polaris for establishment of the meridian, and the altitude observations on the sun on the meridian to verify the latitude and the reading of my watch, were executed with a light mountain solar transit made by Buff and Buff, Serial No. 9987, constructed in accordance with the standard specifications of the General Land Office. The horizontal circle has a diameter of 4½ ins., with double opposite verniers reading to single minutes; the vertical circle has a diameter of 4 ins., with one double vernier reading to single minutes; the telescope has fixed stadia wires, ratio 1:132 with focal constant of 1.2 lks. The instrument is equipped with improved Smith solar attachment; radius of latitude arc 2½ ins., and declination arc 3½ ins., each with verniers reading to single minutes. The instruments were in good condition, having been placed in satisfactory adjustment prior to beginning the survey, and tested and found free from appreciable error; were approved by the district cadastral engineer July 26, 1939. I examined all the instrumental adjustments before making the field tests hereinafter recorded.

The directions of all lines were determined by solar compass method. The measurements were made with a Lallie steel tape, 5 chs. in length, graduated every link for the first 100 lks., and the balance at intervals of 10 lks. The tape was tested by comparison with a Lufkin standard and found correct. The measurements were made on the slope, and the vertical angle of each interval was ascertained by a clinometer in good adjustment; the horizontal equivalents are entered in the field note record.

The data furnished with the special instructions gives the geographic position for cor. of secs. 34 and 35 only, on S. bdy. of the Tp. as follows; latitude 45° 46½'N., and longitude 118° 02½'W.

Aug. 3, 1939, in camp located near the ¼ sec. cor. of secs. 32 and 33, T. 4 N., R. 38 E., at 10h 59m 35s p.m. l. m.t., or 10h 51m 55s p.m. by my watch, which reads correct 120th meridian time as determined by radio signals, I observe Polaris at eastern elongation, making two sights each with the telescope in direct and reversed positions, and place a tack at the mean point, on a peg driven firmly in the ground 10 chs. N. After sunrise, I lay off the azimuth of Polaris 1° 29' 29" and make a meridian mark on a peg 25.73 lks. (16.98 ft.) to the west of the mean point in the line determined by the observations; I verify the angle by a vernier reading of the instrument.

Aug. 4, 1939, in order to verify the latitude of this station and the reading of my watch, I make a meridian observation of the sun, first setting on the lower limb and noting the transit of the west limb, then after reversal of the instrument, setting on the upper limb and noting the transit of the east limb as follows:

Mean observed altitude	61° 33' 30"
Reduced latitude	45° 47' 00"
Mean watch time of observation	11h 58m 20s
Watch slow of l.m.t.	7m 40s
Same, by reference to radio time signals and calculated difference in longitude	7m 40s

Every 30 min. from 7 to 10.30 a.m. and from 1.30 to 5

Township 4 North, Range 38 East.

Chains	
	p.m., I make proper settings on the arcs of the solar attachment and ascertain that the resulting orientation of the instrument, when compared with the meridian established by Polaris observation, has a maximum error of less than 1' 30". I repeat the tests of the arcs daily by noon observation and verify the meridional indications at frequent intervals throughout the survey. The observed magnetic declination is 21° E.
	Dependent Resurvey of Part of S. Bdy. of T. 4 N., R. 38 E.
	"Reestablishment of the surveys executed by George S. Pershin, Deputy Surveyor, in 1879 and partially retraced and resurveyed by John W. Kimbrell, Deputy Surveyor, in 1903."
	Retracement.
	From the ¼ sec. cor. of sec. 35 only, on S. bdy. of Tp. West, along the S. bdy. of sec. 35.
2.65	Fall 3 lks. S. of the closing cor. of secs. 2 and 3.
40.00	Find no evidence of the cor. of secs. 34 and 35 only. Set temp. cor.
	From the temp. cor. of secs. 34 and 35 only. West, along the S. bdy. of sec. 34.
38.84	Fall 90 lks. S. of the ¼ sec. cor. of sec. 34 only.
42.29	Fall 77 lks. S. of the closing cor. of secs. 3 and 4.
78.99	Fall 32 lks. S. of the cor. of secs. 33 and 34 only.
	From the cor. of secs. 33 and 34 only. West, along the S. bdy. of sec. 33.
40.27	Fall 9 lks. N. of the ¼ sec. cor. of sec. 33 only.
43.12	Fall 17 lks. N. of the closing cor. of secs. 4 and 5.
80.80	Fall 15 lks. N. of the cor. of secs. 32 and 33 only.
	From the cor. of secs. 32 and 33 only. West, along the S. bdy. of sec. 32.
40.44	Fall 5 lks. S. of the ¼ sec. cor. of sec. 32 only.
42.40	Intersect the closing cor. of secs. 5 and 6.
80.78	Fall 28 lks. S. of the cor. of secs. 31 and 32 only.
	True Line.
	I commence the dependent resurvey at the ¼ sec. cor. of sec. 35 only, on the S. bdy. of the Tp., which is a fir, 16 ins. diam., with old blazes grown over. I uncover and obliterate S 2 from the S. side of this tree.
	from which
	A fir, 16 ins. diam., bears North, 70 lks. dist., marks grown over. (Old B. T.)
	A pine, 12 ins. diam., bears S.12°W., 35 lks. dist., marked ¼ S B T. Obliterate marks. (Old B. T.)
	A fir, 18 ins. diam., bears N.30°W., 69 lks. dist., marked ¼ S 35 B T. (New B.T.)
	The geographic position of this corner is latitude 45° 46½'N., and longitude 118° 02'W.
	Thence
	N.89°21'W., on true line along the S. bdy. of sec. 35.
	Desc. 140 ft. over SW. slope, through heavy timber and dense undergrowth.

U. S. GOVERNMENT PRINTING OFFICE 6—8155

Dependent Resurvey of Part of W. Bdy. of T. 4 N., R. 38 E.

Chains	
	"Reestablishment of the surveys executed by George S. Pershin, Deputy Surveyor, in 1879 and partially resurveyed by Robert F. Omeg, Deputy Surveyor, in 1905".
	Retracement.
	From the cor. of secs. 25, 30, 31, and 36, on the W. bdy. of the Tp.
	North, bet. secs. 25 and 30.
40.40	Fall 23 lks. W. of the ¼ sec. cor.
80.24	Fall 50 lks. W. of the cor. of secs. 19, 24, 25, and 30.
	From the cor. of secs. 19, 24, 25, and 30.
	North, bet. secs. 19 and 24.
40.12	Fall 38 lks. W. of the ¼ sec. cor.
79.31	Fall 48 lks. W. of the cor. of secs. 13, 18, 19, and 24.
	True Line.
	I commence the dependent resurvey at the cor. of secs. 25, 30, 31, and 36, on the W. bdy. of the Tp., which is the rotten remains of old stake, bearing traces of incomplete scribe marks.
	At point for cor.
	Set an iron post, 3 ft. long, 2 ins. diam., 27 ins. in the ground, with the marked stake deposited at the base, for cor. of secs. 25, 30, 31, and 36, with brass cap marked

T4N
R37E | R38E
S25 | S30
S36 | S31
1939

from which

A tamaraek, 24 ins. diam., bears N.10°E., 27 lks. dist., marks grown over. (Old B. T.)

A rotten fir stump, 10 ins. diam., bears S.48°E., 29 lks. dist., with no visible marks. (Old B. T.)

A rotten fir stump, 14 ins. diam., bears S.52°W., 53 lks. dist., with no visible marks. (Old B. T.)

A fir, 16 ins. diam., bears N.45°W., 34 lks. dist., marks grown over. (Old B. T.)

A fir, 14 ins. diam., bears S.38°E., 55 lks. dist., marked T 4 N R 38 E S 31 B T. (New B. T.)

A fir, 12 ins. diam., bears S.66°W., 40 lks. dist., marked T 4 N R 37 E S 36 B T. (New B. T.)

	Thence
	N.0°20'E., on true line bet. secs. 25 and 30.
	Asc. 10 ft. over gradual SW. slope, through heavy timber and dense undergrowth.
14.70	Telephone line, bears NE. and W.
20.09	Fence, bears E. and W.
25.00	Fence, bears N.20°W. and S.20°E.
25.50	Top of descent, bears E. and W.; desc. 250 ft. over gradual

U. S. GOVERNMENT PRINTING OFFICE 6—8155

Dependent Resurvey of Part of W. Bdy. of T. 4 N., R. 38 E.

Chains	
	N. slope.
27.50	Fence, bears E. and W.
28.50	Highway, (Weston to Tollgate), bears N.70°W. and S.70°E.
28.90	Fence, bears N.70°W. and S.70°E.
31.00	House, bears E., about 100 lks. dist.
31.50	House, bears E., about 200 lks. dist.
32.00	House, bears E., about 250 lks. dist.
33.50	House, bears E., about 200 lks. dist.,
33.50	House, bears E., about 250 lks. dist.
33.50	House, bears W., about 50 lks. dist.
33.80	House, bears W., about 25 lks. dist.
40.40	The ¼ sec. cor., which is a basalt stone, 14x12x8 ins., firmly set, marked ¼ on W. face.
	At point for cor.
	Set an iron post, 3 ft. long, 1 in. diam., 16 ins. in the ground to bedrock, with the original stone deposited at the base, and in a mound of stone to top, for ¼ sec. cor., with brass cap marked
	¼
	S25 | S30
	1939
	from which
	A fir, 28 ins. diam., bears N.19½°E., 38 lks. dist., marked ¼ S 30 B T. (Old B. T.)
	A fir, 18 ins. diam., bears N.45½°W., 39 lks. dist., marks grown over. (Old B. T.)
	Thence
	N.0°23'E., continuing measurements.
	Desc. 496 ft. over N. slope.
54.30	Creek, 3 lks. wide, course W.; asc. 443 ft. over S. slope.
66.45	Spur, slopes S.70°W.; desc. 408 ft. over NW. slope.
66.50	Leave heavy timber and dense undergrowth, bears E. and W., enter scattering timber and undergrowth.
80.24	The cor. of secs. 19, 24, 25, and 30, which is a dead and fallen fir tree, 14 ins. diam., with marks grown over.
	At point for cor.
	Set an iron post, 3 ft. long, 2 ins. diam., 27 ins. in the ground, for cor. of secs. 19, 24, 25, and 30, with brass cap marked

U. S. GOVERNMENT PRINTING OFFICE 6—8155

362

Dependent Resurvey of Part of W. Bdy. of T. 4 N., R. 38 E.

Chains	
	T4N R37E | R38E S24 | S19 S25 | S30 1939
	from which
	A dead fir, 14 ins. diam., bears S.66°E., 22 lks. dist., marked T 4 N R 38 E S 30 B T. (Old B. T.)
	A fir stump, 12 ins. diam., bears S.27°W., 17 lks. dist.; marked B T. (Old B. T.)
	A fir stump, 14 ins. diam., bears N.60°W., 46 lks. dist., marked T 4 N R 37 E S 24 B T. (Old B. T.)
	A fir, 6 ins. diam., bears N.32¼°E., 20 lks. dist., marked T 4 N R 38 E S 19 B T. (New B. T.)
	A fir, 6 ins. diam., bears S.64½°E., 12 lks. dist., marked T 4 N R 38 E S 30 B T. (New B. T.)
	A fir, 6 ins. diam., bears S.38½°W., 20 lks. dist., marked T 4 N R 37 E S 25 B T. (New B. T.)
	A fir, 6 ins. diam., bears N.59½°W., 44 lks. dist., marked T 4 N R 37 E S 24 B T. (New B. T.)
	Land, mountainous; Soil, rocky loam; 3rd rate. Timber, fir, pine, spruce, and tamarack. Undergrowth, alder, willow, huckleberry, vinemaple, Oregon grape, and fern.
	N.0°33'E., bet. secs. 19 and 24.
	Desc. 55 ft. over NW. slope, through scattering timber and undergrowth.
1.00	Creek, 5 lks. wide, course W.; asc. 526 ft. over SW. slope.
18.90	Spur, slopes N.70°W.; desc. 553 ft. over N. slope.
33.40	Creek, 3 lks. wide, course N.80°W.; asc. 140 ft. over SW. slope.
40.12	The ¼ sec. cor., which is a basalt stone, 20x12x6 ins., frimly set in a mound of stone, marked ¼ on W. face.
	At point for cor.
	Set an iron post, 3 ft. long, 1 in. diam., 14 ins. in the ground to bedrock, with the original stone deposited at the base, and in a mound of stone to top, for ¼ sec. cor., with brass cap marked ¼ S24 | S19 1939
	from which
	A point of rock, 8 ft. high, bears N.30°E., 16 lks. dist., marked X B O. (Old B. O.)
	No bearing trees available.

U. S. GOVERNMENT PRINTING OFFICE 6—8155

Dependent Resurvey of Part of W. Bdy. of T. 4 N., R. 38 E.

Chains	
	Thence N.0°09'E., continuing measurements.
	Along W. slope.
40.30	Spur, slopes N.70°W.; desc. 290 ft. over N. slope.
49.40	Creek, 1 lk. wide, course N.70°W.; asc. 103 ft. over SW. slope.
56.30	Spur, slopes W.; desc. 339 ft. over NW. slope.
66.20	Creek, 3 lks. wide, course W.; asc. 528 ft. over SW. slope.
79.31	The cor. of secs. 13, 18, 19, and 24, which is a basalt stone, 14x12x6 ins., firmly set, marked with 3 grooves on N. and S. faces.
	At point for cor.
	Set an iron post, 3 ft. long, 2 ins. diam., 27 ins. in the ground, with the original stone deposited at the base, for cor. of secs. 13, 18, 19, and 24, with brass cap marked

T4N.
R37E | R38E
S13 | S18
S24 | S19
1939

	raise a mound of stone, 3 ft. base, 2 ft. high, W. of cor.
	No bearing trees available.
	Land, mountainous.
	Soil, rocky loam; 3rd rate.
	Timber, fir, pine, spruce, and tamarack.
	Undergrowth, alder, willow, huckleberry, and vinemaple.

Dependent Resurvey of Part of Subdivision of T. 4 N., R. 38 E.

"Reestablishment of the surveys of secs. 29, 30, 32, 33, and 34, executed by Frank W. Campbell, Deputy Surveyor, in 1883 and sec. 19 executed by Robert F. Omeg, Deputy Surveyor in 1905."

	I commence the dependent resurvey of the subdivisions at the cor. of secs. 34 and 35, on the S. bdy. of the Tp., heretofore described.
	Thence N.0°13'E., on true line bet. secs. 34 and 35.
	Asc. 414 ft. over SW. slope, through scattering timber and undergrowth.
18.00	Spur, slopes SE.; desc. 20 ft. over rolling NE. slope.
29.75	Dim dirt road, bears NW. and SE.
40.17	The ¼ sec. cor., which is a basalt stone, 12x10x6 ins., firmly set, marked ¼ on W. face.
	At point for cor.

U. S. GOVERNMENT PRINTING OFFICE 6—8155

4—673b

381

Retracement of 3 Subdivision ½ Miles in T. 3 N., R. 38 E.

Chains

marks grown over. (Old B. T.)

I leave the two bearing trees intact for accessories to the new closing cor. of secs. 5 and 6.

29.76 Intersect the S. bdy. of T. 4 N., R. 38 E.

Set an iron post, 3 ft. long, 2 ins. diam., 27 ins. in the ground, for closing cor. of secs. 5 and 6, with brass cap marked

T4NR38E
S32
S 6 | S 5
T3N | R38E
C C
1939

from which

A fir, 14 ins. diam., bears S.65°E., 32 lks. dist., marks grown over. (Old B. T.)

A spruce, 16 ins. diam., bears S.26½°W., 39 lks. dist., marks grown over. (Old B. T.)

From point of intersection the ¼ sec. cor. of sec. 32 only, bears S.89°40'E., 1.96 chs. dist., heretofore described.

Land, rolling.
Soil, sandy loam; 2nd rate.
Timber, fir, pine, spruce, and tamarack.
Undergrowth, alder, willow, vinemaple, and huckleberry.

FINAL TEST OF SOLAR ATTACHMENT.

Aug. 21: At camp near the ¼ sec. cor. of secs. 32 and 33, on the meridian heretofore described, 8h 00m a.m., app. t., I set off 45°47'N., on the lat arc; 12°18'N., on the decl. arc; and orient the instrument with the solar; the line of sight agrees with the meridian established by Polaris observation.

At 3h 00m p.m., app. t., I set off 45°47'N., on the lat. arc; 12°12'N., on the decl. arc; and repeat the test of the solar; the line of sight agrees with the meridian established by Polaris observation.

GENERAL DESCRIPTION.

The fractional part of Township 4 North, Range 38 East, shown in the foregoing field notes lies either on top or near the top of the Blue Mountains. The average elevation is about 5,000 ft. above sea level. The western parts of sections 19 and 30 slope toward Elbow Canyon and are very rough and steep. Lookingglass Creek flows near the south boundaries of sections 33 and 34 and this part of the township is also rough and broken. The remainder of the township is rolling with some parts almost level. The soil on the rolling top land is a coarse sandy loam, but the steeper places are very rocky. The timber consists of fir, pine, spruce, tamarack, and yew. Very few of these trees are exceptionally large owing to forest fires in the past. The undergrowth consists of alder, willow, vinemaple, huckleberry, fern, and Oregon grape.

Setions 19 and 30 drain in a westerly direction toward Elbow Canyon. Sections 32, 33, and 34, are drained by the Lookingglass Creek and its tributaries. This stream is about 7 lks. in width where it leaves the township.

U. S. GOVERNMENT PRINTING OFFICE 6—8155

4—673b

382

Township 4 North, Range 38 East.

Chains	
	Langdon Lake is located in the southeast ¼ of section 32. This lake was formed by damming Lookingglass Creek, and contains some 60 or 70 acres. This lake is not meanderable on account of its being an artificial lake. A highway from Weston to Elgin, by way of Tollgate, extends through parts of sections 30, 31, 32, and 33. The Skyline Road, starting at Tollgate, extends through sections 33 and 34, thence through the entire Blue Mountains to Dayton, Washington. McIntyre Lookout Road extends through sections 19 and 30. Target Meadow Road, extends north from the Tollgate through section 33. Several other minor roads lead to different parts of this fractional township. Lookingglass Trail follows the entire course of Lookingglass Creek. Tollgate often referred to as Langdon Lake is a summer resort. Several stores, a dance hall, hotel, Tollgate Ranger Station, a Civilians Conservation Corps camp, and a large number of houses have been constructed at this resort. The Blue Mountain Ski Club have several buildings and a skiing course located near the central part of section 33. McIntyre Lookout Station is located near the central part of section 19. An old sawmill is located near the west-central part of section 29. Hill's camp is located in the west-central part of section 30. A number of other buildings are also located on this fractional township. No mineral was noted in this fractional township. The average of a number of readings over all parts of the township gives a value of 21°00'E. for the mean magnetic declination. There is a range of 6° in local attraction.

4—680
(Revised May 1934)

FIELD ASSISTANTS

NAMES	CAPACITY
Dick Tscheu	Principal Assistant.
Ford Peterson	Chainman.
George F. Dawson, Jr.	Truckdriver.
James P. Greiner	Axeman.
Virgil Grover	Axeman.
Charles Walker	Flagman.
William Doescher	Cornerman.
Richard Fields	Cornerman.
Henry Tyler	Cornerman.

6—8412

384

CERTIFICATE OF ~~UNITED STATES~~ SURVEYOR

I, Otis O. Gould, Surveyor, HEREBY CERTIFY upon honor that, in pursuance of special instructions bearing date of the 11th day of July, 1939 received from the district cadastral engineer for Oregon, with assignment instructions dated July 26, 1939, I have ~~surveyed~~ dependently resurveyed part of the South and West boundaries and part of the subsivisions of T. 4 N., R. 38 E., retraced 3 subdivisional ½ miles of T. 3 N., R. 38 E.

of the Willamette Meridian, in the State of Oregon., which are represented in the foregoing field notes as having been executed by me and under my direction; and that said survey has been made in strict conformity with said instructions, the Manual of Instructions for the Survey of the Public Lands of the United States, and in the specific manner described in the foregoing field notes.

Portland, Oregon.
March 21, 1939.

Otis O. Gould
Surveyor.

CERTIFICATE OF APPROVAL

OFFICE OF ~~U.S.~~ SUPERVISOR OF SURVEYS,
DENVER, COLORADO AUG 16 1940, 19

The foregoing field notes of ~~the survey of~~ the dependent resurvey of part of south and west boundaries and part of subdivisions of T. 4 N., R. 38 E., and retracement of 3 subdivision ½ miles in T. 3 N., R. 38 E. of the Willamette Meridian, Oregon.

executed by Otis O. Gould, Surveyor.,
under special instructions dated July 11, 1939, and assignment instructions dated July 26, 1939, having been critically examined, and the necessary corrections made prior to their certification by the engineer, the said field notes, and the survey therein described, are hereby approved.

Frank A. Gunson
~~U.S.~~ *Supervisor of Surveys.*

~~CERTIFICATE OF TRANSCRIPT~~

I CERTIFY that the foregoing transcript of the field notes of the above-described surveys in ----------, is a true copy of the ~~original~~ field notes on file in the public survey office.

U.S. Supervisor of Surveys.

U. S. GOVERNMENT PRINTING OFFICE: 1934 6—8412