F

4—679
(April 1933)

FIELD NOTES

OF THE SURVEY OF THE

DEPENDENT RESURVEY 1st STAN. PAR. N., S. BDY. T. 5 N., R. 39 E.

DEPENDENT RESURVEY OF THE EAST BOUNDARY OF T. 5 N., R. 38 E.

DEPENDENT RESURVEY OF SOUTH BDY. OF SEC. 36, T. 6 N., R. 38 E.

AND SUBDIVISION OF

TOWNSHIP 5 NORTH, RANGE 39 EAST.

Of the WILLAMETTE *Meridian,*

In the State of OREGON

EXECUTED BY

Otis O. Gould. U. S. Transitman.

Under special instructions dated April 11, *19* 29, *which provided for the surveys included under Group No.* 135, *bearing the approval of the Commissioner of the General Land Office under date of* May 13, 1929.

and assignment instructions dated May 19, 1932. June 27, 1935, *19*

Survey commenced Aug. 31, *19* 32

Survey completed Aug. 13, *19* 35.

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INDEX DIAGRAM.

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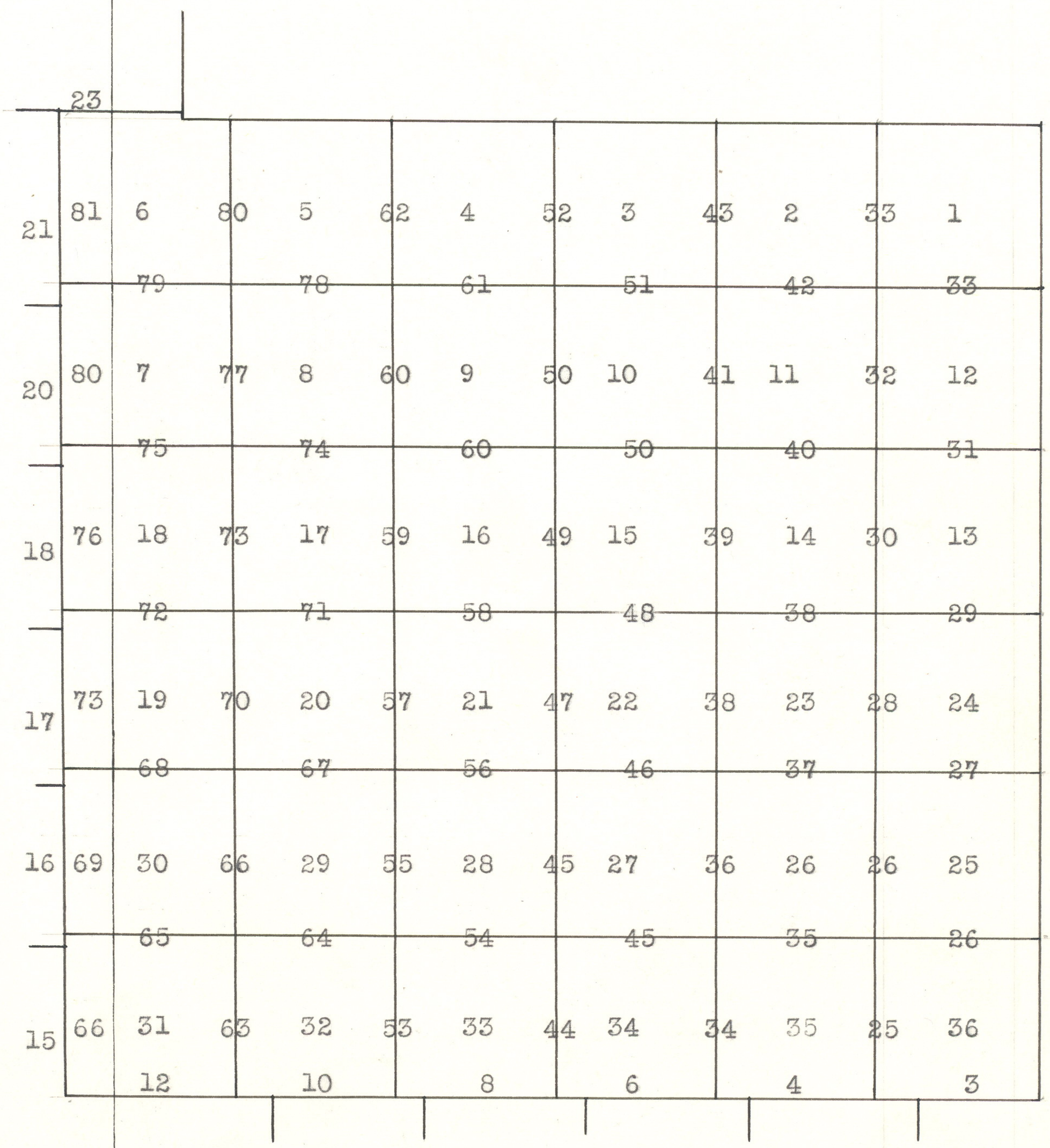
INDEX DIAGRAM

Township 5 North, Range 39 East.



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. Township 5 North, Range 39 East.

These surveys were executed with a solar compass made by W. and L. E. Gurley, Serial No. U. S. G. S. 20, (used in 1932), and with a solar compass made by W. and L. E. Gurley, Serial No. "Memo B.", (used in 1935) both instruments were constructed in accordance with the standard specifications of the General Land Office. These instruments have a horizontal circle with a diameter of 5½ ins. with two double opposite verniers reading to single minutes; the sight vanes are 8 ins. long and are spaced 14 ins. apart. The instruments are equipped with Burt solar attachments, radius of latitude arcs 5½ ins. and of 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 on May 19, 1932, and on June 27, 1935. 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 Lallie steel tapes, 5 chs. in length, graduated every link for the first 100 lks., and the balance at intervals of 10 lks. The tapes were 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 the SW. cor. of the township as follows: latitude 45°52'N., and longitude 118°00'W.

August 13, 1932, in camp located near the cor. of secs. 4, 5, 8, and 9, at 10h 13m 00s p.m., l.m.t., or 10h 4m 50s p.m. by my watch, which reads correct 120 th 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. August 14, after sunrise, I lay off the azimuth of Polaris 1° 31' 36", and make a meridian mark on a peg, 26.64 lks. (17.58 ft.) to the west of the mean point in the line determined by the observation; I verify the angle by a vernier reading of the instrument.

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	58° 20' 00"
Reduced latitude	45° 55' 50"
Mean watch time of observation	11h 56m 24s
Watch slow of l.m.t.	8m 14s
Same, by reference to radio time signals and calculated difference in longitude	8m 10s

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Township 5 North, Range 39 East.

Chains	
	Every 30 min. from 6 to 10.30 a.m. and from 1.30 to 6 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°00'E. July 7, 1935, in camp heretofore described, the geographic position of which is latitude 45° 56'N., and longitude 117°57'30"W., I examined the adjustments of my instruments and proceeded with the usual field tests as follows: Every 30 min. from 6 to 10.30 a.m. and from 1.30 to 6 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° 00'E.
	Dependent Resurvey, Ist Stan. Par. N., S. Bdy. T. 5 N., R. 39 E.
	"Reestablishment of the surveys executed by Rufus S. Moore, U. S. Deputy Surveyor, in 1882."
	Random Line
	From the angle point of sec. 36, which was formerly the standard corner of Tps. 5 N., Rs. 39 and 40 E.
	West, retracing the S. bdy. of sec. 36.
40.00	Find no trace of the standard ¼ sec. cor. Set temp.
58.11	Find no evidence of the original closing cor. of secs. 1 and 2, T. 4 N., R. 39 E. Set temp.
80.00	Find no evidence of the original standard cor. of secs. 35 and 36. Set temp.
	West, retracing the S. bdy. of sec. 35.
41.41	Intersect the standard ¼ sec. cor. of sec. 35.
57.84	Fall 47 lks. N. of the closing cor. of secs. 2 and 3, T. 4 N., R. 39 E.
81.85	Fall 117 lks. N. of the original standard cor. of secs. 34 and 35.
	West, retracing the S. bdy. of sec. 34.
40.17	Fall 7 lks. N. of the original standard ¼ sec. cor. of sec. 34.
56.77	Find no evidence of the original closing cor. of secs. 3 and 4, T. 4 N., R. 39 E. Set temp.
80.17	Find no evidence of the original standard cor. of secs. 33 and 34. Set temp.
	West, retracing the S. bdy. of sec. 33.

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Dependent Resurvey, 1st Stan. Par. N., S. Bdy. T. 5 N., R. 39 E.

Chains	
40.35	Fall 23 lks. N. of the original standard ¼ sec. cor.
56.18	Find no evidence of the original closing cor. of secs. 4 and 5, T. 4 N., R. 39 E. Set temp.
80.48	Fall 40 lks. N. of the original standard cor. of secs. 32 and 33.
	West, retracing the S. bdy. of sec. 32.
40.18	Fall 22 lks. N. of the original standard ¼ sec. cor.
54.28	Find no evidence of the original closing cor. of secs. 5 and 6, T. 4 N., R. 39 E.
80.48	Fall 7 lks. N. of the original standard cor. of secs. 31 and 32.
	West, retracing the S. bdy. of sec. 31.
40.26	Fall 37 lks. N. of the original standard ¼ sec. cor.
79.41	Fall 26 lks. N. of the original standard cor. of Tps. 5 N., Rs. 38 and 39 E.

True Line.

I commence the dependent resurvey from the new standard cor. of Tps. 5 N., Rs. 39 and 40 E., as described in the field notes of T. 5 N., R. 40 E., of this group.

The geographic position of this cor. is latitude 45°52' N., and longitude 117°52½' W.

N.89°56'W., on true line along the S. bdy. of sec. 36.

Desc. 60 ft. over W. slope, through heavy second growth timber and dense undergrowth.

5.11 The original standard cor. of Tps. 4 N., Rs. 39 and 40 E., which is now an angle point for sec. 36, as described in the notes of T. 5 N., R. 40 E., of this group.

Thence

West, continuing measurements.

Continue to desc. 271 ft. over gradual W. slope.

40.00 Set an iron post, 3 ft. long, 1 in. diam., 27 ins. in the ground, for standard ¼ sec. cor., with brass cap marked

S C
¼ S 36

1932

from which

A spruce, 14 ins. diam., bears N.24°E., 48 lks. dist., marked ¼ S 36 S C B T.

A fir, 18 ins. diam., bears N.46°W., 52 lks. dist., marked ¼ S 36 S C B T.

Continue to desc. 59 ft. over gradual W. slope.

55.80 Spring branch, 2 lks. wide, course NW.; continue to desc. 55 ft. over gradual NW. slope.

63.90 Proportionate point for the closing cor. of secs. 1 and 2,

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Dependent Resurvey, 1st Stan. Par. N., S. Bdy. of T. 5 N., R. 39 E.

Chains	
	T. 4 N., R. 39 E.
	Set an iron post, 3 ft. long, 2 ins. diam., 27 ins. in the ground, for closing cor. of secs. 1 and 2, with brass cap marked T5N R39E S 36 S 2 | S 1 T4N | R39E C C 1932 from which
	A fir, 10 ins. diam., bears S.43°E., 18 lks. dist., marked T 4 N R 39 E S 1 C C B T.
	A fir, 16 ins. diam., bears S.13°W., 20 lks. dist., marked T 4 N R 39 E S 2 C C B T.
	Continue to desc. 182 ft. over SW. slope.
64.90	Trail, bears N. and S.
73.70	Creek, 3 lks. wide, course S.; asc. 130 ft. over SE. slope.
80.00	Set an iron post, 3 ft. long, 2 ins. diam., 27 ins. in the ground, for standard cor. of secs. 35 and 36, with brass cap marked S C T5N | R39E S35 | S36 1932 from which
	A tamarack, 6 ins. diam., bears N.16½°E., 66 lks. dist., marked T 5 N R 39 E S 36 S C B T.
	A tamarack, 8 ins. diam., bears N.53°W., 79 lks. dist., marked T 5 N R 39 E S 35 S C B T.
	Land, mountainous. Soil, sandy loam; 3rd rate. Timber, fir, pine, spruce and tamarack. Undergrowth, alder, willow, laurel, huckleberry, mountain ash, fern, salal, syringa, Oregon grape, vinemaple, and buck brush.
	West, on true line, on the S. bdy. of sec. 35.
	Asc. 150 ft. over gradual broken SE. slope, through heavy second growth timber and dense undergrowth.
5.00	Spring branch, 1 lk. wide, course SE.
23.70	Top of ascent, bears NE. and SW.; thence along gradual S. slope.
40.00	Set an iron post, 3 ft. long, 1 in. diam., 27 ins. in the ground, for standard ¼ sec. cor., with brass cap marked S C ¼ S 35 1932 from which
	A fir, 44 ins. diam., bears N.32°E., 113 lks. dist.,

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Dependent Resurvey, 1st Stan. Par. N., S. Bdy. T. 5 N., R. 39 E.

Chains	
	marked ¼ S 35 S C B T.
	A fir, 30 ins. diam., bears N.33°W., 63 lks. dist., marked ¼ S 35 S C B T.
46.52	The original standard ¼ sec. cor. of sec. 35, determined by reference to the record bearing and distance to the old SE. bearing tree., No trace of other old bearing trees.
	I now change this cor. to an angle point.
	At point for cor.
	Set an iron post, 3 ft. long, 1 in. diam., 27 ins. in the ground, for angle point, with brass cap marked A P T5N T39E S 35 1932
	from which
	A spruce stump, 34 ins. diam., bears S.15°E., 16 lks. dist., marked S C ¼ S. (Obliterate marks.) (Old B. T.)
	A fir, 12 ins. diam., bears N.42½°E., 23 lks. dist., marked A P S 35 B T. (New B. T.)
	A fir, 24 ins. diam., bears N.67°W., 36 lks. dist., marked A P S 35 B T. (New B. T.)
	Thence
	S.88°21'W., continuing measurements.
	Asc. 49 ft. over gradual SE. slope.
53.50	Top of ascent, bears NE. and SW.; thence along S. slope.
60.00	Top of descent, bears NW. and SE.; desc. 51 ft. over SW. slope.
62.96	The original closing cor. of secs. 2 and 3, T. 4 N., R. 39 E., determined by reference to the record bearing and distance to two of the original bearing trees.
	At point for cor.
	Set an iron post, 3 ft. long, 2 ins. diam., 27 ins. in the ground, for closing cor. of secs. 2 and 3, with brass cap marked T5N R39E S 35 S 3 | S 2 T4N | R39E C C 1932
	from which
	A fir, 22 ins. diam., bears S.71°W., 44 lks. dist., marks grown over. (Old B. T.)
	A dead fir, 44 ins. diam., (not pine, 28 ins. diam.) bears N.40°W., 48 lks. dist., marked T 5 N R 39 E S 35 B T. (Old B. T.) Obliterate marks.
	A fir, 24 ins. diam., bears S.64°E., 130 lks. dist., marked T 4 N R 39 E S 2 C C B T. (New B. T.)

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Dependent Resurvey, 1st Stan. Par. N., S. Bdy. T. 5 N., R. 39 E.

Chains	
64.90	Spring branch, 1 lk. wide, course S.; asc. 115 ft. over broken SE. slope.
78.15	Dry creek bed, 3 lks. wide, course SW.
80.01	Set an iron post, 3 ft. long, 2 ins. diam., 27 ins. in the ground, for standard cor. of secs. 34 and 35, with brass cap marked

S C
T5N | R39E
S34 | S35

1932

from which

A fir, 26 ins. diam., bears N.29°E., 106 lks. dist., marked T 5 N R 39 E S 35 S C B T.

A fir, 8 ins. diam., bears N.64°W., 8 lks. dist., marked T 5 N R 39 E S 34 S C B T.

Land, mountainous.
Soil, sandy loam; 3rd rate.
Timber, fir, spruce, tamarack and pine.
Undergrowth, alder, laurel, willow, vinemaple, mountain ash, huckleberry, Oregon grape, fern, buck brush and salal.

S.88°21'W., on true line on S. bdy. of sec. 34.

Asc. 145 ft. over SE. slope, through heavy second growth timber and dense undergrowth.

6.97	The original standard cor. of secs. 34 and 35, determined by reference to the record bearing and distance to the original NE. bearing tree.

I now change this cor. to an angle point.

At point for cor.

Set an iron post, 3 ft. long, 1 in. diam., 27 ins. in the ground, for angle point, with brass cap marked

A P
T5N R39E
S 34

1932

from which

A tamarack snag, 40 ins. diam., bears N.65°E., 4 lks. dist., marked S C T 5 N R 39 E S 35 B T. (Old B. T.) Obliterate marks.

A fir, 6 ins. diam., bears N.33½°E., 51 lks. dist., marked A P S 34 B T. (New B. T.)

A fir, 12 ins. diam., bears N.11°W., 49 lks. dist., marked A P S 34 B T. (New B. T.)

Thence

S.89°54'W., continuing measurements.

Continue to asc. 42 ft. over SE. slope.

11.90	Small rounding spur, slopes S.; desc. 138 ft. over SW. slope.

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Dependent Resurvey, 1st Stan. Par. N., S. Bdy. T. 5 N., R. 39 E.

Chains

18.85 Dry creek bed, 7 lks. wide, course SE.; asc. 426 ft. over E. slope, changing to NE. slope.

36.30 Top of steep ascent, bears NW. and SE.; continue to asc. 43 ft. over gradual E. slope.

40.00 Set an iron post, 3 ft. long, 1 in. diam., 20 ins. in the ground to solid rock and in a mound of stone to top, for standard ¼ sec. cor., with brass cap marked

S C
¼ S 34

1932

from which

A pine, 8 ins. diam., bears N.42°E., 24 lks. dist., marked ¼ S 34 S C B T.

A fir, 14 ins. diam., bears N.50°W., 43 lks. dist., marked ¼ S 34 S C B T.

Continue over rolling land.

45.17 Spring, on line, drains S.

47.14 The original standard ¼ sec. cor. of sec. 34, determined by reference to the record bearing and distance to the original bearing tree.

I now change this cor. to an angle point.

At point for cor.

Set an iron post, 3 ft. long, 1 in. diam., 27 ins. in the ground, for angle point, with brass cap marked

A P
T5N R39E
S 34

1932

from which

A spruce snag, 36 ins. diam., bears N.13°W., 16 lks. dist., marked S C ¼ S B T. (Old B. T.) Obliterate marks.

A pine, 8 ins. diam., bears N.15°E., 123 lks. dist., marked A P S 34 B T. (New B. T.)

A pine, 9 ins. diam., bears N.32°W., 58 lks. dist., marked A P S 34 B T. (New B. T.)

Thence

S.89°53'W., continuing measurements.

52.55 Spring branch, 1 lk. wide, course NE.; asc. 100 ft. over gradual broken E. slope.

53.60 Same spring branch, 1 lk. wide, course SE.

63.81 Proportionate point for the closing cor. of secs. 3 and 4, T. 4 N., R. 39 E.

Set an iron post, 3 ft. long, 2 ins. diam., 27 ins. in the ground, for closing cor. of secs. 3 and 4, with brass cap marked

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Dependent Resurvey of 1st Stan. Par. N., S. Bdy. T. 5 N., R. 39 E.

Chains	
	T5N R39E S 34 S 4 | S 3 T4N | R39E C C 1932 from which A pine, 9 ins. diam., bears S.31°E., 38 lks. dist., marked T 4 N R 39 E S 3 C C B T. A fir, 10 ins. diam., bears S.33°W., 12 lks. dist., marked T 4 N R 39 E S 4 C C B T.
	Continue to asc. 73 ft. over E. slope.
80.00	Set an iron post, 3 ft. long, 2 ins. diam., 27 ins. in the ground, for standard cor. of secs. 33 and 34, with brass cap marked S C T5N | R39E S33 | S34 1932 from which A pine, 8 ins. diam., bears N.56°E., 75 lks. dist., marked T 5 N R 39 E S 34 S C B T. A pine, 11 ins. diam., bears N.61°W., 23 lks. dist., marked T 5 N R 39 E S 33 S C B T.
	Land, mountainous. Soil, sandy loam, 3rd rate. Timber, fir, spruce, pine and tamarack. Undergrowth, alder, mountain ash, laurel, willow, vine-maple, salal, huckleberry, fern, Oregon grape and buck brush.
	S.89°53'W., on true line on the S. bdy. of sec. 33.
	Asc. 10 ft. over gradual E. slope, through heavy second growth timber and dense undergrowth.
12.00	Flat topped ridge, bears N. and S.; desc. 242 ft. over gradual W. slope.
36.60	Intermittent stream, 2 lks. wide, course S.; asc. 30 ft. over E. slope.
40.00	Set an iron post, 3 ft. long, 1 in. diam., 27 ins. in the ground, for standard ¼ sec. cor., with brass cap marked S C ¼ S 33 1932 from which A tamarack, 30 ins. diam., bears N.7°E., 70 lks. dist., marked ¼ S 33 S C B T. A pine, 6 ins. diam., bears N.14°W., 60 lks. dist., marked ¼ S 33 S C B T.
	Continue to asc. 147 ft. over E. slope.
46.60	Dirt road, bears N. and S., on ridge, bears N. and S.; continue over rolling land.
47.49	The original standard ¼ sec. cor. of sec. 33, determined by reference to the record bearings and distances to the original bearing trees. I now change this cor. to an angle point. At point for cor. Set an iron post, 3 ft. long, 1 in. diam., 20 ins. in the ground to solid rock and in a mound of stone to top,

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Dependent Resurvey, 1st Stan. Par. N., S. Bdy. T. 5 N., R. 39 E.

Chains

for angle point, with brass cap marked

A P
T5N R39E
S 33

1932

from which

A fir stump, 22 ins. diam., bears S.6°E., 14 lks. dist., no marks. (Old B. T.)

A fir, 22 ins. diam., bears N.12°W., 68 lks. dist., marked S C ¼ S B T. I alter marks to read A P S 33 B.T. (Old B. T.)

A fir, 12 ins. diam., bears N.69°E., 24 lks. dist., marked A P S 33 B T. (New B. T.)

Thence

S.89°45'W., continuing measurements.

Desc. 270 ft. over W. slope.

63.37 Proportionate point for the closing cor. of secs. 4 and 5, T. 4 N., R. 39 E.

Set an iron post, 3 ft. long, 2 ins. diam., 27 ins. in the ground, for closing cor. of secs. 4 and 5, with brass cap marked

T5N R39E
S 33

S 5	S 4
T4N	R39E
C	C

1932

from which

A fir, 24 ins. diam., bears S.85°E., 28 lks. dist., marked T 4 S R 39 E S 4 C C B T.

A fir, 16 ins. diam., bears S.86°W., 302 lks. dist., marked T 4 S R 39 E S 5 C C B T.

Continue to desc. 282 ft. over W. slope.

80.00 Set an iron post, 3 ft. long, 2 ins. diam., 27 ins. in the ground, for standard cor. of secs. 32 and 33, with brass cap marked

S C

T5N	R39E
S32	S33

1932

from which

A pine, 7 ins. diam., bears N.26°E., 83 lks. dist., marked T 5 N R 39 E S 33 S C B T.

A pine, 10 ins. diam., bears N.25°W., 106 lks. dist., marked T 5 N R 39 E S 32 S C B T.

Land, mountainous.
Soil, sandy loam; 3rd rate.
Timber, fir, pine, spruce and tamarack.
Undergrowth, alder, mountain ash, laurel, willow, salal, Oregon grape, fern, vinemaple, buck brush and huckleberry.

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Dependent Resurvey, 1st Stan. Par. N., S. Bdy. T. 5 N., R. 39 E.

Chains	
	S.89°45'W., on true line on the S. bdy. of sec. 32.
	Desc. 30 ft. over W. slope, through heavy second growth timber and dense undergrowth.
3.60	Trail, bears N. and S.
5.60	Creek, 3 lks. wide, course S.; asc. 10 ft. over E. slope.
7.62	The original standard cor. of secs. 32 and 33, determined by reference to the record bearings and distances to the old bearing trees.
	I now change this cor. to an angle point.
	At point for cor.
	Set an iron post, 3 ft. long, 1 in. diam., 27 ins. in the ground, for angle point, with brass cap marked
	A P T5N R39E S 32
	1932
	from which
	A spruce snag, 18 ins. diam., bears N.18°E., 17 lks. dist., marked S C T 5 N R 39 E S 32 B T. (Old B. T.)
	A spruce stump, 34 ins. diam., bears N.32°W., 41 lks. dist., marked S C T 5 N R 39 E S 32 B T. (Old B. T.)
	A spruce stump, 26 ins. diam., bears S.67°E., 27 lks. dist., no marks. (Old B. T.)
	A pine, 7 ins. diam., bears N.30°E., 35 lks. dist., marked A P S 32 B T. (New B. T.)
	A fir, 14 ins. diam., bears N.36°W., 46 lks. dist., marked A P S 32 B T. (New B. T.)
	Obliterate the marks on the old original bearing trees.
	Thence
	S.89°41'W., continuing measurements.
	Continue to asc. 47 ft. over E. slope.
22.10	Small flat topped spur, slopes S.; desc. 10 ft. over W. slope.
26.60	Dry creek bed, 3 lks. wide, course S.; asc. 70 ft. over E. slope.
40.00	Set an iron post, 3 ft. long, 1 in. diam., 27 ins. in the ground, for standard ¼ sec. cor., with brass cap marked
	S C ¼ S 32
	1932
	from which
	A pine, 10 ins. diam., bears N.62°E., 274 lks. dist., marked ¼ S 32 S C B T.
	A pine, 7 ins. diam., bears N.55°W., 131 lks. dist., marked ¼ S 32 S C B T.

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Dependent Resurvey, 1st Stan. Par. N., S. Bdy. T. 5 N., R. 39 E.

Chains	
	Continue to asc. 15 ft. over E. slope.
45.19	Telephone line, bears N. and S.
45.40	Skyline Road, bears N. and SW.
47.80	The original standard ¼ sec. cor. of sec. 32, determined by reference to the record bearings and distances to the old bearing trees.
	I now change this cor. to an angle point.
	At point for cor.
	Set an iron post, 3 ft. long, 1 in. diam., 27 ins. in the ground, for angle point, with brass cap marked
	A P T5N R39E S 32 1932
	from which
	A fallen spruce snag, 15 ins. diam., bears N.10°W., 23 lks. dist., old marks weathered off. (Old B. T.)
	A fallen fir snag, 16 ins. diam., bears S.2°W., 22 lks. dist., marked S C ¼ S B T. (Old B. T.) Obliterate marks.
	A pine, 7 ins. diam., bears N.26°E., 17 lks. dist., marked A P S 32 B T. (New B. T.)
	A pine, 7 ins. diam., bears N.72½°W., 12 lks. dist., marked A P S 32 B T. (New B. T.)
	Thence
	N.89°47'W., continuing measurements.
	Continue over rolling land, bears N. and S.
52.00	Bottom of slope, bears N. and S.; asc. 45 ft. over E. slope.
57.30	Ridge, bears N.20°E., and S.20°W.; desc. 116 ft. over NW. slope.
62.01	Proportionate point for the closing cor. of secs. 5 and 6, T. 4 N., R. 39 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
	T5N R39E S 32 S 6 | S 5 T4N | R39E C C 1932
	from which
	A fir, 12 ins. diam., bears S.27°E., 36 lks. dist., marked T 4 N R 39 E S 5 C C B T.
	A fir, 8 ins. diam., bears S.48°W., 43 lks. dist., marked T 4 N R 39 E S 6 C C B T.
	Continue to desc. 350 ft. over NW. slope.

U. S. GOVERNMENT PRINTING OFFICE: 1931 16—8155

Dependent Resurvey, 1st Stan. Par. N., S. Bdy. T. 5 N., R. 39 E.

Chains

80.00 Set an iron post, 3 ft. long, 2 ins. diam., 27 ins. in the ground, for standard cor. of secs. 31 and 32, with brass cap marked

S C
T5N | R39E
S31 | S32

1932

from which

A fir, 14 ins. diam., bears N.27°E., 51 lks. dist., marked T 5 N R 39 E S 32 S C B T.

A fir, 28 ins. diam., bears N.81°W., 265 lks. dist., marked T 5 N R 39 E S 31 S C B T.

Land, mountainous.
Soil, sandy loam, rocky; 3rd and 4th rate.
Timber, fir, pine, spruce and tamarack.
Undergrowth, alder, huckleberry, laurel, mountain ash, Oregon grape, fern, willow, salal, buck brush, syringa and vinemaple.

N.89°47'W., on true line on the S. bdy. of sec. 31.

Desc. 130 ft. over NW. slope, through heavy timber and dense undergrowth.

5.70 Ravine, course N.; asc. 31 ft. over NE. slope.

8.10 The original standard cor. of secs. 31 and 32, determined by reference to the record bearings and distances to the original bearing trees.

I now change this cor. to an angle point.

At point for cor.

Set an iron post, 3 ft. long, 1 in. diam., 27 ins. in the ground, for angle point, with brass cap marked

A P
T5N R39E
S 31

1932

from which

A fir snag, 10 ins. diam., bears N.59°E., 18 lks. dist., marked S C T 5 N R 39 E S 32 B T. (Old B. T.)

A fir stump, 6 ins. diam., bears S.12°E., 30 lks. dist., no marks. (Old B. T.)

A fallen fir snag, 25 ins. diam., bears N.38°W., 24 lks. dist., marked S C T 5 N R 39 E S 31 B T. (Old B. T.)

A fir, 8 ins. diam., bears N.33°E., 38 lks. dist., marked A P S 31 B T. (New B. T.)

A fir, 12 ins. diam., bears N.6½°W., 56 lks. dist., marked A P S 31 B T. (New B. T.)

Obliterate the marks on old original bearing trees.

Thence

U. S. GOVERNMENT PRINTING OFFICE: 193 C—8155

Dependent Resurvey, 1st Stan. Par. N., S. Bdy. T. 5 N., R. 39 E.

Chains	
	S.89°28'W., continuing measurements.
8.70	Spur, slopes NW.; desc. 750 ft. over W. slope, changing to NW. slope.
40.00	Set an iron post, 3 ft. long, 1 in. diam., 6 ins. in the ground to solid rock and in a mound of stone to top, for standard ¼ sec. cor., with brass cap marked S C ¼ S 31 1932 from which A fir, 6 ins. diam., bears N.51°E., 44 lks. dist., marked ¼ S 31 S C B T. A fir, 20 ins. diam., bears N.16°W., 33 lks. dist., marked ¼ S 31 S C B T.
	Continue to desc. 161 ft. over NW. slope.
48.36	The original standard ¼ sec. cor. of sec. 31, which is a basalt stone, 20x10x6 ins., firmly set, marked S C ¼ on N. face.
	I now change this cor. to an angle point.
	At point for cor.
	Set an iron post, 3 ft. long, 1 in. diam., 8 ins. in the ground to solid rock and in a mound of stone to top, for angle point, with brass cap marked A P T5N R39E S 31 1932 from which A yellow pine, stump, 44 ins. diam., bears N.20°E., 10 lks. dist., marked S C ¼ S B T. (Old B. T.) A yellow pine snag, 20 ins. diam., bears S.70°E., 162 lks. dist., marked S C ¼ S B T. (Old B. T.) A pine, 8 ins. diam., bears N.32°E., 71 lks. dist., marked A P S 31 B T. (New B. T.) A pine, 22 ins. diam., bears N.52°W., 71 lks. dist., marked A P S 31 B T. (New B. T.)
	Obliterate the marks on the old cor. stone and on the old bearing trees.
	Thence
	N.89°50'W., continuing measurements.
	Continue to desc. 264 ft. over SW. slope.
61.60	Spur, slopes SW.; continue to desc. 354 ft. over NW. slope.
72.70	Ravine, course NW.; asc. 36 ft. over NE. slope.
74.70	Spur, slopes N.; desc. 68 ft. over NW. slope.
76.68	South Fork of the Walla Walla River Trail, bears NE. and SW.

U. S. GOVERNMENT PRINTING OFFICE: 1931 6—8155

Dependent Resurvey, 1st Stan. Par. N., S. Bdy. T. 5 N., R. 39 E.

Chains	
78.48	South Fork of the Walla Walla River, 30 lks. wide, course SW.; asc. 50 ft. over SE. slope.
80.00	Set an iron post, 3 ft. long, 2 ins. diam., 18 ins. in the ground to solid rock and in a mound of stone to top, for cor. of lots 7 and 8, with brass cap marked S30 7 | 8 1932 from which A fir, 20 ins. diam., bears N.30°E., 101 lks. dist., marked L 8 S 31 B T. A fir, 26 ins. diam., bears N.64°W., 62 lks. dist., marked L 7 S 31 B T. Continue to asc. 221 ft. over SE. slope.
87.51	The original standard cor. of Tps. 5 N., Rs. 38 and 39 E., which is a yellow pine, 42 ins. diam., marked S C T 5 N on N., R 39 E S 31 on E., and R 38 E S 36 on W. side. from which A fir, 14 ins. diam., bears N.41°E., 37 lks. dist., marks grown over. (Old B. T.) A pine, 24 ins. diam., bears N.20°W., 13 lks. dist., marked T 5 N R 38 E S 36 S C B T. (Old B. T.) This is the original cor. established by George S. Pershin under contract No. 304, in 1879. No evidence was found of the cor. reestablished by Rufus S. Moore, under contract No. 437, in 1882.

Land, mountainous.
Soil, sandy loam, rocky; 3rd and 4th rate.
Timber, fir, pine, spruce and tamarack.
Undergrowth, vinemaple, alder, willow, huckleberry, rose, laurel, mountain ash, Oregon grape and buck brush.

Dependent Resurvey of East Bdy. of T. 5 N., R. 38 E.

"Reestablishment of the surveys executed by Rufus S. Moore, U. S. Deputy Surveyor, in 1882, and independently resurveyed by William E. and George R. Campbell, U. S. Deputy Surveyors in 1899."

	From the standard cor. of Tps. 5 N., Rs. 38 and 39 E. North, retracing the line bet. secs. 31 and 36.
40.53	Fall 35 lks. W. of the old ¼ sec. cor.
79.47	Fall 35 lks. W. of the cor. of secs. 25, 30, 31, and 36. North, retracing bet. secs. 25 and 30.
40.00	Find no evidence of the old ¼ sec. cor. Set temp.
80.02	Intersect the cor. of secs. 19, 24, 25, and 30. North, retracing bet. secs. 19 and 24.

U. S. GOVERNMENT PRINTING OFFICE: 193 6—8155

. Township 5 North, Range 39 East.

GENERAL DESCRIPTION.

Township 5 north, range 39 east is located in the Umatilla National Forest Reserve, on the summit of the Blue Mountains in the northeastern part of Oregon. The elevation of the highest ridges of the township and along the Skyline Road is about 6,000 ft. above sea level. The South Fork of the Walla Walla River, has an elevation of about 3,000 ft. above sea level, where it leaves the township on the south boundary of sec. 31. The South Fork of the Wenaha River, has an elevation of about 3,500 ft. above sea level, where it leaves the township on the east boundary of sec. 13. The slopes along these two rivers are exceptionally rough and broken, but on some of the higher points on the township the land is only rolling. The soil is of a clayish sandy loam composition and on the steeper slopes is very rocky. This soil produces an abundance of grass even on the steep slopes, that are not covered with a dense growth of brush. Most of the timber is second growth with the exception of a few patches of old growth timber that the fires of many years ago did not burn over. Some scattering old growth timber was left standing throughout the township, making it impossible to distinguish the exact line of demarcation between the second growth and old growth timber. This timber consists of fir, pine, spruce, tamarack and yew. The undergrowth consists of huckleberry, alder, laurel, willow, mountain ash, thorn, Oregon grape, syringa, rose, fern, buck brush, vinemaple and salal.

The east half of the township drains into the South Fork of the Wenaha River and the west half drains into the South Fork of the Walla Walla River. Neither of these streams are large enough to be meandered. The township is well watered and although there are no lakes many different small springs are found throughout the township.

Bone Springs Lookout Station is located near the south centeral part of section 28. The buildings of this lookout station are on the highest point of this township. Skyline Road extends through the central part of the township in a north and south direction. Lookout Mountain Road extends from this road in a easterly direction through the southeastern part of the township. This road connects with the Troy Road about 7 miles east of the township. A road loops through section 6. This road leads to Walla Walla, Washington, about 35 miles distant in a northwesterly direction, and also joins the Skyline Road in township 6 north, range 39 east. There is also a road extending south from this road along the top of Yellow Jacket Ridge, for a distance of about 3 miles. There are several good pack trail extending to all parts of the township.

Part of the bottom land of the South Fork of the Walla Walla River is reserved for a cattle range but the remainder furnishes range for about 6,000 head of sheep during the summer months.

No settlers are located in this township.

No mineral was noted in this township.

The average of a number of readings over all parts of the township gives a value of 21°30'E. for the mean magnetic declination. There is a range of 5° in local attraction.

U. S. GOVERNMENT PRINTING OFFICE: 1934 6—8155

4—680
(August, 1926)

FIELD ASSISTANTS.

NAMES.	CAPACITY.
For 1932.	
Leonel R. Davidson	Principal assistant.
Richard Ganong	Chainman.
Earl Gould	Truckdriver and axeman.
Norman Prendergast	Axeman.
Harold Gould	Cornerman.
Glen Johnson	Axeman.
for 1935.	
John C. Greiner	Principal assistant.
Victor Miller	Chainman.
Paul Jelley	Axeman.
Robert Coffman	Axeman.
Edward Graves	Cornerman.
George Dawson	Truckdriver and chainman.

6—2764

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CERTIFICATE OF UNITED STATES SURVEYOR.

I, Otis O. Gould. U. S. Transitman., ~~U. S. Surveyor,~~ hereby certify upon honor that, in pursuance of special instructions received from the District Cadastral Engineer for Oregon. bearing date of the 11th day of April, 1929, I have well, faithfully, and truly in my own proper person, and in strict conformity with said instructions, the Manual of Surveying Instructions, and the laws of the United States, surveyed all those parts or portions of the dependent resurvey of 1st stan. par. N., S. bdy. T. 5 N., R. 39 E.; dependent resurvey of the east boundary of T. 5 N., R. 38 E.; dependent resurvey of south bdy. of sec. 36, T. 6 N., R. 38 E., and subdivision of township 5 north, range 39 east. 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 all the corners of said survey have been established and perpetuated in strict accordance with the Manual of Surveying Instructions, and the special written instructions of the District Cadastral Engineer for Oregon. and in the specific manner described in the field notes, and that the foregoing are the original field notes of such survey.

Portland, Oregon.
Feb. 4, 1936.

Otis O. Gould.
U. S. Transitman. ~~U. S. Surveyor.~~

APPROVAL.

OFFICE OF U. S. SUPERVISOR OF SURVEYS,

DENVER, COLORADO MAR 30 1936, 19

The foregoing field notes of the Dependent Resurvey of First Standard Parallel North, S. Bdy. T. 5 N., R. 39 E.; Dependent Resurvey of the E. Bdy. of T. 5 N., R. 38 E.; Dependent Resurvey of S. bdy. of sec. 36, T. 6 N., R. 38 E., and the Survey of the Subdivisions of Township No. 5 North, Range No. 39 East, of the Willamette Meridian, Oregon,

executed by Otis O. Gould, U. S. Transitman

under his special instructions dated April 11, 1929, having been critically examined, and the necessary corrections and explanations made, the said field notes, and the surveys they describe, are hereby approved.

U. S. Supervisor of Surveys.

~~I certify that the foregoing transcript of the field notes of the above-described surveys in ..... , has been correctly copied from the original notes on file in this office.~~

~~*U. S. Supervisor of Surveys.*~~