

E
4-679
(April 1933)

FIELD NOTES

OF THE SURVEY OF THE

RETRACEMENT AND DEPENDENT RESURVEY OF THE OREGON AND WASHINGTON

STATE BOUNDARY FROM 51 MILE 48 CHAIN MONUMENT TO 46 MILE

MONUMENT, INDEPENDENT RESURVEY OF THE SOUTH BOUNDARY,

DEPENDENT RESURVEY OF THE WEST BOUNDARY,

and the

SUBDIVISIONAL LINES OF TOWNSHIP 6 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

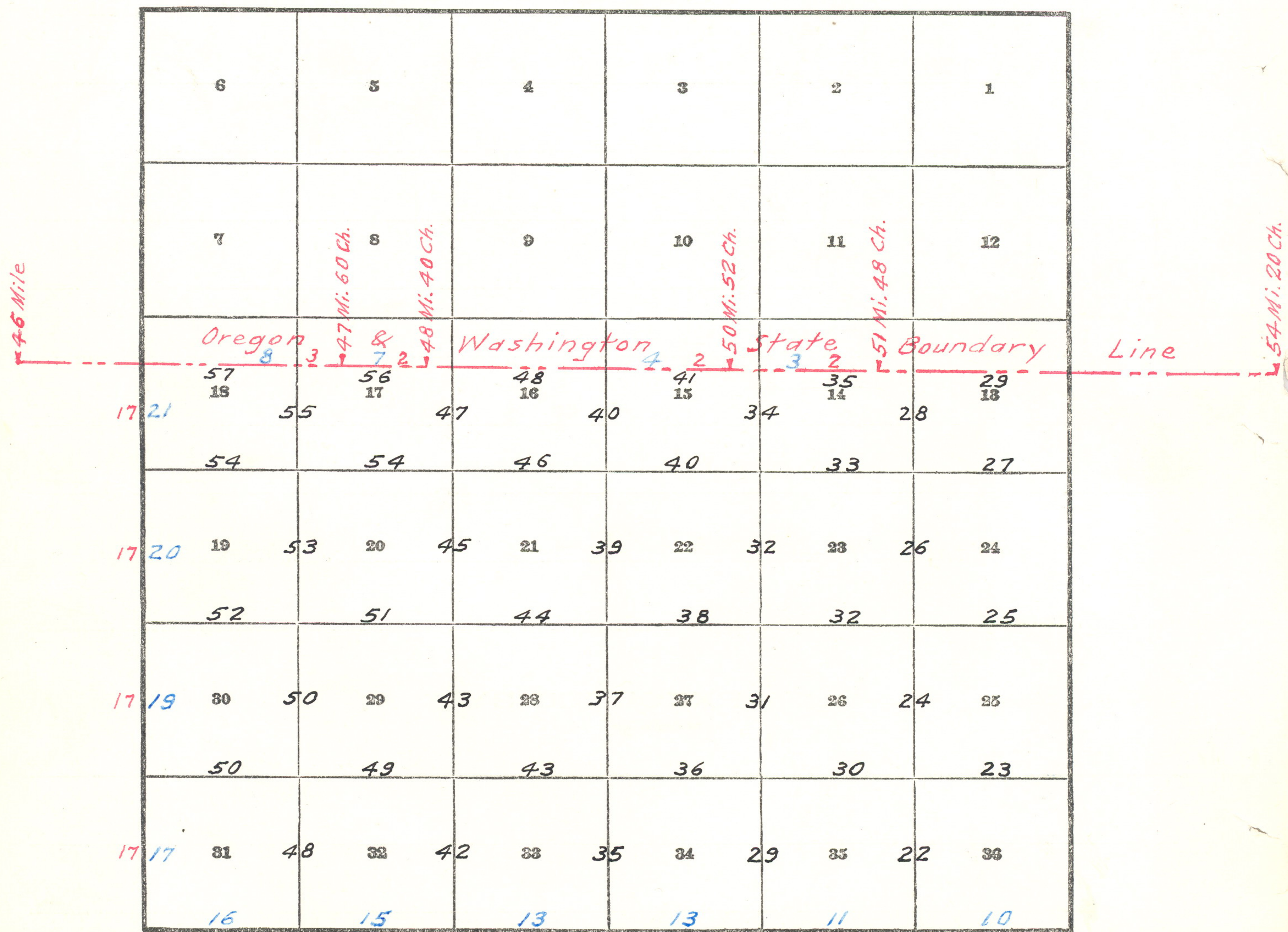
and assignment instructions dated May 19, 19 32.

Survey commenced Aug. 1, 19 32.

Survey completed Sept. 13, 19 32.

INDEX DIAGRAM.

Township 6 North, Range 39 East.



6-151

- Retracements indexed in Red.
- Resurveys indexed in Blue.
- Original surveys indexed in Black.

Township 6 North, Range 39 East.

The retracement and dependent resurvey of the Oregon and Washington state boundary through range 39 east, the retracement and resurvey of the west boundary, independent resurvey of the south boundary and subdivisional lines of fractional township 6 north, range 39 east, were executed with a Burt solar compass made by W. and L. E. Gurley, serial No. 20, U. S. G. S., constructed in accordance with the standard specifications of the General Land Office. The horizontal circle has a diameter of $5\frac{3}{4}$ ins., with opposite double verniers reading to single minutes; the sight vanes have a length of 8 ins. and a spread of 14 ins. The instrument is equipped with a Burt solar attachment; radius of latitude arc 5.4 ins., and decl. arc $4\frac{3}{4}$ ins., each with verniers reading to single minutes.

The observations in camp; on Polaris for the 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 $4\frac{1}{2}$ inches, with two 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 $2\frac{1}{2}$ ins., and of decl. arc $3\frac{1}{2}$ ins., each with verniers reading to single minutes. The instruments were in good condition, having been placed in satisfactory adjustment prior to the beginning of the survey, and tested and found free from appreciable error, were approved by the district cadastral engineer on May 19, 1932. I examined all the instrumental adjustments before making the field tests hereinafter recorded.

The direction of all lines was 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 1 ch. steel tape 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 T. 5 N., R. 39 E., as follows: latitude $45^{\circ}52'N.$, and longitude $118^{\circ}00'W.$

July 23, 1932, in camp located near the center of sec. 25, at 11h 35m 07s p. m., l. m. t., or 11h 26m 40s p. m. by my watch, which reads correct 120th meridian time as determined by radio signal 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. July 24, after sunrise, I lay off the azimuth of Polaris $1^{\circ}31'44''$, and make a meridian mark on a second peg, 26.68 lks. (17.61 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	-----	63° 50' 30"
Reduced latitude	-----	45° 58' 03"
Mean watch time of observation	-----	11h 57m 52s
Watch slow of L. m. t.	-----	8m 27s

Township 6 North, Range 39 East.

Same, by reference to radio time signals and calculated difference in longitude ----- 8m 27s.

Every 30 minutes 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 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° 50' E.

Chains Resurvey of Part of the Oregon and Washington Boundary

"Dependent resurvey, reestablishment of the surveys executed by Daniel G. Major, Astronomer and Surveyor, in 1864"

Retracement

From the 51 mile 48 ch. monument, on the Oregon and Washington boundary.

West, retracing the Oregon and Washington boundary.

1.13 Fall 2 lks. S. of the $\frac{1}{4}$ sec. cor. of sec. 14, T. 6 N., R. 39 E., established under group No. 130, Washington.

41.13 Fall 77 lks. S. of the cor. of secs. 14 and 15, T. 6 N., R. 39 E., established under group No. 130, Washington.

78.90 Fall 146 lks. S. of the 50 mile 52 chain monument.

This line is N. 88° 56' W., 78.91 chs.

From the monument,

West, retracing the Oregon and Washington boundary.

2.23 Fall 1 lk. S. of the $\frac{1}{4}$ sec. cor. of sec. 15, T. 6 N., R. 39 E., established under group No. 130, Washington.

42.23 Fall 14 lks. S. of the cor. of secs. 15 and 16, T. 6 N., R. 39 E., established under group No. 130, Washington.

82.23 Fall 27 lks. S. of the $\frac{1}{4}$ sec. cor. of sec. 16, T. 6 N., R. 39 E., established under group No. 130, Washington.

122.23 Fall 39 lks. S. of the cor. of secs. 16 and 17, T. 6 N., R. 39 E., established under group No. 130, Washington.

155.17 Fall 50 lks. S. of the 48 mile 40 chain monument.

This line is N. 89° 49' W., 155.17 chs.

From the monument,

West, retracing the Oregon and Washington boundary.

7.06 Fall 2 lks. S. of the $\frac{1}{4}$ sec. cor. of sec. 17, T. 6 N., R. 39 E., established under group No. 130, Washington.

44.50 Fall 14 lks. S. of the 47 mile 60 chain monument.

This line is N. 89° 49' W., 44.50 chs.

From the monument,

Resurvey of Part of the Oregon and Washington boundary.

Chains						
	West, retracing the Oregon and Washington boundary.					
2.56	Fall 1 lk. S. of the cor. of secs. 17 and 18, T. 6 N., R. 39 E., established under group No. 130, Washington.					
42.56	Fall 14 lks. S. of the $\frac{1}{4}$ sec. cor. of sec. 18, T. 6 N., R. 39 E., established under group No. 130, Washington.					
76.80	Find no trace of the old closing cor. of Tps. 6 N., Rs. 38 and 39 E., Oregon.					
82.56	Fall 26 lks. S. of cor. of lots 4 and 5 of sec. 18, T. 6 N., R. 39 E.; established under group No. 130, Washington.					
102.66	Fall 33 lks. S. of the closing cor. of Tps. 6 N., Rs. 38 and 39 E.; established under group No. 130, Washington.					
134.86	Fall 43 lks. S. of the 46 mile monument.					
	----- True line.					
	Note: For retracement and resurvey of the Oregon and Washington boundary bet. the 54 mile 20 chain monument and the 51 mile 48 chain monument, see field notes of T. 6 N., R. 40 E., of this group.					
	I commence the resurvey from the reestablished 51 mile 48 chain monument, on the Oregon and Washington boundary, as described in the field notes of T. 6 N., R. 40 E., of this group.					
	N. 88° 56' W., on a true line from the 51 mile 48 chain monument.					
	Desc. 15 ft. over SW. slope, through timber and brush.					
1.13	The $\frac{1}{4}$ sec. cor. of sec. 14 only, established under group 130, Washington, which is an iron post, 1 in. diam., protruding 10 ins. above ground, with brass cap marked					
	<table border="0"> <tr><td style="text-align: center;">W</td></tr> <tr><td style="text-align: center;">-----</td></tr> <tr><td style="text-align: center;">$\frac{1}{4}$ S 14</td></tr> <tr><td style="text-align: center;">0</td></tr> <tr><td style="text-align: center;">1931</td></tr> </table>	W	-----	$\frac{1}{4}$ S 14	0	1931
W						

$\frac{1}{4}$ S 14						
0						
1931						
	from which,					
	A lodgepole pine, 9 ins. diam., bears N. 59 $\frac{1}{4}$ ° E., 182 lks. dist., marked $\frac{1}{4}$ S 14 B T.					
	A lodgepole pine, 10 ins. diam., bears N. 75° W., 64 lks. dist., marked $\frac{1}{4}$ S 14 B T.					
	Continue to desc. 185 ft. over general W. slope.					
6.90	Round Butte Trail, bears N. 35° W., and SE.					
14.68	Milk Creek, 2 lks. wide, course S., from NE.; asc. 135 ft. over rolling SE. slope.					
26.96	Point for the $\frac{1}{4}$ sec. cor. of sec. 14 only, determined as hereinafter set forth.					
	Continue to asc. 80 ft. over SE. slope.					
27.75	Trail, bears NE. and SW.					
28.25	Enter opening, bears N. and S.					
34.55	Enter scattering timber, bears N. and S.					

Resurvey of Part of the Oregon and Washington Boundary.

Chains

41.14 The cor. of secs. 14 and 15 only, established under group No. 130, Washington, which is an iron post, 2 ins. diam., protruding 6 ins. above ground, with brass cap marked

W
T6N | R39E
S15 | S14

0
1931

from which,

A fir, 8 ins. diam., bears N. 24 1/2° E., 106 lks. dist., marked T 6 N R 39 E S 14 B T.

A fir, 8 ins. diam., bears N. 36 3/4° W., 65 lks. dist., marked T 6 N R 39 E S 15 B T.

Continue to asc. 155 ft. over SE. slope.

47.00 Skyline Road, bears N. 15° E., and S. 15° W.

56.40 Ridge, bears NW. and SE.; desc. 75 ft. over SW. slope.

66.79 Point for the closing cor. of secs. 14 and 15, determined as hereinafter set forth.

Continue to desc. 80 ft. over SW. slope.

75.70 Trail, bears NE. and SW.

78.15 Ridge between North Fork of the Wenaha River and Mill Creek, bears N. and S.; thence along S. slope.

78.50 Enter rocky opening, bears NW. and SE.

78.91 The 50 mile 52 chain monument, on Oregon and Washington boundary, which has been perpetuated under group No. 130, Washington, and now is an iron post, 3 ins. diam., set in the original mound of stone to top, with brass cap marked.

50M 52C

W
S 14 | S 14
O

1931

from which

A lodgepole pine, 12 ins. diam., bears N. 84 3/4° E., 74 lks. dist., marked 50 M 52 C W B T.

A lodgepole pine, 8 ins. diam., bears S. 48 1/2° E., 91 lks. dist., marked 50 M 52 C O B T.

A fir, 10 ins. diam., bears S. 86 3/4° W., 274 lks. dist., marked 50 M 52 C O B T.

A fir, 12 ins. diam., bears N. 46 3/4° W., 91 lks. dist., marked 50 M 52 C W B T.

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

N. 89° 49' W., on a true line, from the 50 mile 52 chain monument.

Desc. 20 ft. over SW. slope.

Resurvey of Part of the Oregon and Washington Boundary.

Chains

2.23 The 1/4 sec. cor. of sec. 15 only, established under group No. 130, Washington, which is an iron post, protruding 21 ins. above ground, set in a mound of stone to top, with brass cap marked

1/4 S 15

0 1931

from which,

A fir, 9 ins. diam., bears N. 15 3/4 E., 106 lks. dist., marked 1/4 S 15 B T.

A yellow pine, 12 ins. diam., bears N. 29 3/4 W., 277 lks. dist., marked 1/4 S 15 B T.

Continue to desc. 755 ft. over broken SW. slope.

7.25 Leave rocky opening, bears N. and S., enter timber and brush.

27.92 Point for the 1/4 sec. cor. of sec. 15 only, determined as hereinafter set forth.

Continue to desc. 100 ft. over W. slope.

30.85 Dry bed of stream, 3 lks. wide, course NW.; enter dense undergrowth, bears NW. and SE.; desc. 95 ft. over broken NW. slope.

39.29 Spring branch, 2 lks. wide, course NW.; asc. 30 ft. over broken NE. slope.

42.23 The cor. of secs. 15 and 16 only, established under group No. 130, Washington, which is an iron post, 2 ins. diam., protruding 6 ins. above ground, with brass cap marked

W T6N R39E S16 S15

0 1931

from which,

A fir, 30 ins. diam., bears N. 87 E., 30 lks. dist., marked T 6 N R 39 E S 15 B T.

A fir, 24 ins. diam., bears N. 24 W., 29 lks. dist., marked T 6 N R 39 E S 16 B T.

Continue to asc. 130 ft. over broken NE. slope.

57.65 Spur, slopes NW.; desc. 220 ft. over broken NW. slope.

64.70 Spring branch, 1 lk. wide, course N. 30 W.; enter heavy timber, bears NW. and SE.; asc. 110 ft. over broken NE. slope.

67.96 Point for the closing cor. of secs. 15 and 16, determined as hereinafter set forth.

Continue to asc. 165 ft. over broken NE. slope.

82.23 The 1/4 sec. cor. of sec. 16 only, established under group No. 130, Washington, which is an iron post, 1 in. diam., protruding 8 ins. above ground, with brass cap marked

W 1/4 S 16

0 1931

Resurvey of Part of the Oregon and Washington Boundary.

Chains

from which,
A fir, 10 ins. diam., bears N.60°E., 12 lks. dist.,
marked $\frac{1}{4}$ S 16 B T.

A fir, 12 ins. diam., bears N.77°E., 87 lks. dist.,
marked $\frac{1}{4}$ S 16 B T.

Continue to asc. 10 ft. over NE. slope.

82.80 Ridge, bears NW. and SE., enter scattering timber and
undergrowth; desc. 605 ft. over rugged SW. slope.

95.45 Enter heavy timber, bears N. and S.

105.15 Spring branch, 4 lks. wide, course NW.; asc. 35 ft. over
NE. slope.

107.00 Spur, slopes NW.; desc. 5 ft. over NW. slope.

107.87 Point for the $\frac{1}{4}$ sec. cor. of sec. 16 only, determined as
hereinafter set forth.

Continue to desc. 10 ft. over NW. slope.

108.10 Mill Creek, 5 lks. wide, course NE.; asc. 505 ft. over E.
slope.

115.23 Enter scattering timber and dense undergrowth, bears N.
and S.

122.23 The cor. of secs. 16 and 17 only, established under group
No. 130, Washington, which is an iron post, 2 ins. diam.,
protruding 8 ins. above ground, with brass cap marked

W	
T6N	R39E
S17	S16

O

1931

from which,

A fir, 13 ins. diam., bears N.3 $\frac{1}{2}$ °E., 304 lks. dist.,
marked T 6 N R 39 E S 16 B T.

A fir, 18 ins. diam., bears N.38 $\frac{1}{2}$ °W., 168 lks. dist.,
marked T 6 N R 39 E S 17 B T.

Continue to asc. 285 ft. over E. slope.

128.15 Spur, slopes SE.; continue to asc. 215 ft. over SE. slope.

132.00 Enter grassy opening, bears N. and S.

138.70 Spur, slopes SE.; desc. 75 ft. over broken SW. slope.

141.75 Leave grassy opening, bears N. and S.

146.23 Asc. 25 ft. over SE. slope.

147.78 Point for the closing cor. of secs. 16 and 17, determined
as hereinafter set forth.

Continue to asc. 300 ft. over SE. slope.

152.50 Enter grassy opening, bears NW. and SE.

155.17 The 48 mile 40 chain monument, on the Oregon and Washing-
ton boundary, which has been perpetuated under group No.
130, Washington, and now is an iron post, 3 ins. diam.,
set 36 ins. in the original mound of stone, with brass
cap marked.

Resurvey of Part of the Oregon and Washington Boundary.

Chains

48 M 40 C
 W
 0
 1931

from which,

A fir, 20 ins. diam., bears N. 79½° E., 310 lks. dist., marked 48 M 40 C W B T.

A fir, 24 ins. diam., bears S. 62¼° E., 244 lks. dist., marked 48 M 40 C O B T.

A fir, 16 ins. diam., bears S. 89¼° W., 173 lks. dist., marked 48 M 40 C O B T.

A fir, 16 ins. diam., bears N. 41¼° W., 365 lks. dist., marked 48 M 40 C W B T.

This monument stands on summit of Paradise Ridge, which bears N. and S.

Land, mountainous.
 Soil, sandy loam, rocky; 3rd rate.
 Timber, fir, pine, spruce and tamarack.
 Undergrowth, huckleberry, willow, alder, currant, elder, thimbleberry, mountain ash, service, Oregon grape, rose, sumac, mountain laurel, vinemaple and syringa.

N. 89° 49' W., on a true line from the 48 mile 40 chain monument.
 Desc. 260 ft. over SW. slope, through scattering timber and brush.

0.88 Paradise Ridge Trail, bears N. and S.

1.70 Enter heavy timber, bears N. and S.

7.06 The ¼ sec. cor. of sec. 17 only, established under group No. 130, Washington, which is an iron post, 1 in. diam., protruding 6 ins. above ground, with brass cap marked

W
 ¼ S 17
 0
 1931

from which,

A spruce, 14 ins. diam., bears N. 29° E., 17 lks. dist., marked ¼ S 17 B T.

A fir, 8 ins. diam., bears N. 74° W., 37 lks. dist., marked ¼ S 17 B T.

Continue to desc. 325 ft. over broken SW. slope.

18.31 Ravine, course S. 30° W.; asc. 195 ft. over broken SE. slope.

29.10 Enter rocky opening, bears N. and S.

29.90 Spur, slopes S.; desc. 50 ft. over SW. slope.

32.67 Point for the ¼ sec. cor. of sec. 17 only, determined as hereinafter set forth.

Continue to desc. 135 ft. over broken SW. slope.

44.50 The 47 mile 60 chain monument, on the Oregon and Washington boundary, which has been perpetuated under group No.

Resurvey of Part of the Oregon and Washington Boundary.

Chains

130, Washington, and now is an iron post, 3 ins. diam., set 36 ins. in the original mound of stone, with brass cap marked

47 M 60 C

W
0

1931

from which

A stunted fir, 12 ins. diam., bears N. 35½° E., 79 lks. dist., marked 47 M 60 C W B T.

A fir, 8 ins. diam., bears S. 19° E., 120 lks. dist., marked 47 M 60 C O B T.

A fir, 10 ins. diam., bears S. 66¾° W., 200 lks. dist., marked 47 M 60 C O B T.

A fir, 12 ins. diam., bears N. 45½° W., 137 lks. dist., marked 47 M 60 C W B T.

Land, mountainous.

Soil, sandy loam, rocky; 3rd rate.

Timber, fir, pine, spruce and tamarack.

Undergrowth, huckleberry, salal, vinemaple, Oregon grape, mountain laurel, mountain mahogany, mountain ash, rose, syringa and fern.

N. 89° 49' W., on a true line, from the 47 mile 60 chain monument.

0.05 Ridge, bears N. 60° E. and S. 60° W.

Desc. 80 ft. over broken NW. slope.

2.00 Enter timber and brush, bears NE. and SW.

2.56 The cor. of secs. 17 and 18 only, established under group No. 130, Washington, which is an iron post, 2 ins. diam., protruding 8 ins. above ground, with brass cap marked

W
T6N | R39E
S18 | S17

0

1931

from which

A fir, 12 ins. diam., bears N. 62° E., 42 lks. dist., marked T 6 N R 39 E S 17 B T.

A fir, 16 ins. diam., bears N. 50° W., 15 lks. dist., marked T 6 N R 39 E S 18 B T.

Desc. 600 ft. over broken NW. slope.

22.50 Along broken N. slope.

28.22 Point for the closing cor. of secs. 17 and 18, determined as hereinafter set forth.

31.25 Spur, slopes N.; enter scattering timber and dense undergrowth, bears N. and S.; desc. 470 ft. over broken NW. slope.

42.56 The ¼ sec. cor. of sec. 18 only, established under group No. 130, Washington, which is an iron post, 1 in. diam., protruding 8 ins. above ground, with brass cap marked

Resurvey of Part of the Oregon and Washington Boundary.

Chains	W <u>1/4 S 18</u> 0 1931	from which
		A fir, 14 ins. diam., bears N.69°E., 30 lks. dist., marked 1/4 S 18 B T.
		A fir, 12 ins. diam., bears N.32°W., 40 lks. dist., marked 1/4 S 18 B T.
		Continue to desc. 360 ft. over broken NW. slope.
51.35		Enter grassy opening, bears N. and S.
57.65		Ridge, bears N.60°W., and S.60°E.; continue to desc. 100 ft. over broken SW. slope.
68.22		Point for the 1/4 sec. cor. of sec. 18 only, determined as hereinafter set forth.
		Continue to desc. 355 ft. over broken SW. slope.
67.50		Enter heavy timber and scattering undergrowth, bears NW. and SE.
73.98		Proportionate point for the closing cor. of Tps. 6 N., Rs. 38 and 39 E., determined as hereinafter set forth.
		Thence over rolling bottom land.
79.55		Creek, 10 lks. wide, course S.; asc. 75 ft. over SE. slope.
82.45		Spur, slopes SW.; desc. 5 ft. over SW. slope.
82.56		The cor. of lots 4 and 5 of sec. 18 only, established under group No. 130, Washington, which is an iron post, 1 in. diam., protruding 10 ins. above ground, with brass cap marked
	W <u>1/5 S 18</u> 0 1931	from which
		A fir, 14 ins. diam., bears N.70°E., 56 lks. dist., marked L 4 S 18 B T.
		A fir, 18 ins. diam., bears N.53°W., 35 lks. dist., marked L 5 S 18 B T.
		Continue to desc. 105 ft. over SW. slope.
86.95		Paradise Creek, 15 lks. wide, course N.35°W.; over bottom land.
89.85		Leave bottom land, bears NW. and SE.; asc. 265 ft. over broken NE. slope.
102.66		The closing cor. of Tps. 6 N., Rs. 38 and 39 E.; on summit of spur, which slopes N.15°E. This cor. was established under group No. 130, Washington, and is an iron post, 3 ins. diam., protruding 12 ins. above ground, and in a mound of stone to top, with brass cap marked
	W CC T6N <u>R38E R39E</u> <u>S13 S18</u> 0 1931	

Resurvey of Part of the Oregon and Washington Boundary.

Chains

from which

A fir, 14 ins. diam., bears N.47°E., 31 lks. dist., marked T 6 N R 39 E S 18 C C B T.

A fir, 14 ins. diam., bears N.31½°W., 36 lks. dist., marked T 6 N R 39 E S 13 C C B T.

Desc. 115 ft. over NW. slope.

105.75 Asc. 205 ft. over broken NE. slope.

111.45 Spur, slopes N.; along broken N. slope.

120.75 Spur, slopes N.20°W.; desc. 115 ft. over NW. slope.

124.80 Ravine, course N.; asc. 210 ft. over broken NE. slope.

134.86 The 46 mile monument, on the Oregon and Washington boundary, which has been perpetuated under group No. 130, Washington, and now is an iron post, 3 ins. diam., set 36 ins. in the original mound of stone to top, with brass cap marked

46 M

W

0

1931

from which

A fir, 20 ins. diam., bears N.10°E., 56 lks. dist., marked 46 M W B T.

A fir, 32 ins. diam., bears S.26°E., 44 lks. dist., marked 46 M O B T.

A fir, 24 ins. diam., bears S.6°W., 20 lks. dist., marked 46 M O B T.

A fir, 7 ins. diam., bears N.5°W., 17 lks. dist., marked 46 M W B T.

This monument stands on summit of spur, which slopes N.

Land, mountainous and level.

Soil, sandy loam, rocky; 3rd rate.

Timber, fir, pine, spruce and tamarack.

Undergrowth, alder, vinemaple, Oregon grape, rose, sumac, cherry, mountain mahogany, mountain laurel, mountain ash and syringa.

Independent Resurvey of the South Bdy. of T. 6 N., R. 39 E.

"Independent resurvey, superseding the survey executed by Rufus S. Moore, U. S. Deputy Surveyor in 1882."

Beginning at the cor. of Tps. 5 and 6 N., Rs. 39 and 40 E., in latitude 45°57'N., and longitude 117°52'31"W.; as described in T. 5 N., R. 40 E., of this group.

West, bet. secs. 1 and 36.

Asc. 120 ft. over SE. slope, through timber and brush.

5.00 Spur, slopes S.; desc. 80 ft. over SW. slope.

Resurvey of the West Boundary of T. 6 N., R. 39 E.

Chains

40.02

Mid point on the W. bdy. of sec. 19, later determined.

Set an iron post, 3 ft. long, 1 in. diam., 27 ins. in the ground, for $\frac{1}{4}$ sec. cor. of sec. 19 only, with brass cap marked.

$\frac{1}{4}$ S 19

1932

from which

A pine, 40 ins. diam., bears N.65°E., 450 lks. dist., marked $\frac{1}{4}$ S 19 B T.

A fir, 15 ins. diam., bears S.36°E., 169 lks. dist., marked $\frac{1}{4}$ S 19 B T.

Continue to asc. 195 ft. over SW. slope.

56.00

Ridge, bears N.50°W., and S.50°E.; desc. 640 ft. over broken NE. slope.

75.48

Proportionate point,

Set an iron post, 3 ft. long, 2 ins. diam., 12 ins. in the ground to solid rock, and in a mound of stone to top, for cor. of secs. 13 and 24 only, with brass cap marked

T6N	T6N
S13	R39E
S24	
R38E	S19

1932

from which

A fir, 9 ins. diam., bears S.60°W., 21 lks. dist., marked T 6 N R 38 E S 24 B T.

A fir, 6 ins. diam., bears N.74°W., 19 lks. dist., marked T 6 N R 38 E S 13 B T.

Continue to desc. 100 ft. over NE. slope.

80.04

Point for the closing cor. of secs. 18 and 19, determined as hereinafter set forth.

Land, mountainous.
Soil, rocky loam; 3rd rate.

Timber, fir, pine, spruce and tamarack.
Undergrowth, huckleberry, salal, vinemaple, willow, alder, mountain mahogany, mountain laurel, mountain ash, rose, syringa and fern.

N.4°15'W., on the W. bdy. of sec. 18.

Desc. 350 ft. over broken NE. slope, through timber and dense brush.

33.30

Spur, slopes NE.; continue to desc. 30 ft. over N. slope.

34.43

Proportionate point,

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 $\frac{1}{4}$ sec. cor. of sec. 13 only, with brass cap marked

$\frac{1}{4}$ S 13

1932

Resurvey of the West Boundary of T. 6 N., R. 39 E.

Chains

from which

A fir, 18 ins. diam., bears S.60°W., 117 lks. dist.,
marked $\frac{1}{4}$ S 13 B T.
A fir, 20 ins. diam., bears N.82°W., 126 lks. dist.,
marked $\frac{1}{4}$ S 13 B T.

Continue to desc. 250 ft. over N. slope.

40.11 A point 40.00 chs. in northing from the closing cor. of
secs. 18 and 19, later determined.

Set an iron post, 3 ft. long, 1 in. diam., 27 ins. in the
ground, for $\frac{1}{4}$ sec. cor. of sec. 18 only, with brass cap
marked

$\frac{1}{4}$ S 18

1932

from which

A fir, 10 ins. diam., bears N.36°E., 15 lks. dist.,
marked $\frac{1}{4}$ S 18 B T.

A fir, 14 ins. diam., bears S.45°E., 27 lks. dist.,
marked $\frac{1}{4}$ S 18 B T.

Continue to desc. 245 ft. over N. slope.

45.10 Creek, 6 lks. wide, course W.; thence over flat.

46.32 Intersect the Oregon and Washington boundary at the pro-
portionate point for the closing cor.

Set an iron post, 3 ft. long, 3 ins. diam., 27 ins. in
the ground, for closing cor. of Tps. 6 N., Rs. 38 and 39
E., with brass cap marked

W N

S18 | S13

R38E | R39E

T6N

1932

from which

A fir, 9 ins. diam., bears S.32°E., 11 lks. dist.,
marked T 6 N R 39 E S 13 C C B T.

A fir, 10 ins. diam., bears S.63°W., 33 lks. dist.,
marked T. 6 N R 38 E S 18 C C B T.

From this point the 46 mile monument on the Oregon and
Washington boundary, bears N.89°49'W., 60.88 chs. dist.,
previously described.

Land, mountainous.

Soil, sandy loam, rocky; 3rd rate.

Timber, fir, pine, spruce and tamarack.

Undergrowth, huckleberry, salal, willow, vinemaple, rose,
mountain laurel, mountain mahogany, alder and Oregon
grape.

Subdivision of T. 6 N., R. 39 E.

I commence the subdivisional survey at the cor. of secs.
1, 2, 35, and 36, on the S. bdy. of the Tp., herein-
before described.

N.0°01'W., bet. secs. 35 and 36.

Subdivision of T. 6 N., R. 39 E.

Chains

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

N. 0° 01' W., bet. secs. 13 and 14.

Asc. 30 ft. over S. slope, through timber and brush.

0.94 Round Butte Trail, bears E. and W.

1.30 Ridge, bears NW. and SE.; desc. 145 ft. over NE. slope.

19.00 Small ravine, course E.; asc. 50 ft. over SE. slope.

23.40 Spur, slopes E.; desc. 245 ft. over broken NE. slope.

36.80 Ravine, course E.; asc. 75 ft. over SE. slope.

39.30 Spur, slopes E.; desc. 20 ft. over NE. slope.

40.00 Set an iron post, 3 ft. long, 1 in. diam., 27 ins. in the ground, for $\frac{1}{4}$ sec. cor., with brass cap marked

S14 | S13

1932

from which

A fir, 30 ins. diam., bears N. 37° E., 69 lks. dist., marked $\frac{1}{4}$ S 13 B T.

A fir, 20 ins. diam., bears N. 66° W., 86 lks. dist., marked $\frac{1}{4}$ S 13 B T.

Continue to desc. 30 ft. over NE. slope.

42.80 Spring branch, 1 lk. wide, course NE.; asc. 150 ft. over SE. slope.

44.97 Intersect the Oregon and Washington boundary.

Set an iron post, 3 ft. long, 2 ins. diam., 20 ins. in the ground to solid rock, and in a mound of stone to top, for closing cor. of secs. 13 and 14, with brass cap marked

W N
S14 | S13
T6NR39E

C C
1932

from which

A fir, 7 ins. diam., bears S. 86° E., 8 lks. dist., marked T 6 N R 39 E S 13 C C B T.

A fir, 8 ins. diam., bears S. 83 $\frac{1}{2}$ ° W., 114 lks. dist., marked T 6 N R 39 E S 14 C C B T.

From this point the 51 mile 48 chain monument on the Oregon and Washington boundary, bears N. 89° 54' W., 12.87 chs. dist., as described in the field notes of T. 6 N., R. 40 E., of this group.

Land, mountainous.
Soil, sandy loam, rocky; 3rd rate.

Subdivision of T. 6 N., R. 39 E.

Chains

Timber, fir, pine, spruce and tamarack.
Undergrowth, huckleberry, salal, vinemaple, alder, mountain laurel, mountain ash, mountain mahogany and Oregon grape.

To complete the survey of sec. 13, I go to the cor. of secs. 13 and 14 only, established under group No. 130, Washington, and described in the field notes of T. 6 N., R. 40, E., of this group, and run

S.89°54'E., along the Oregon and Washington boundary.

14.13 Mid point on the N. bdy. of sec. 13.

Set an iron post, 3 ft. long, 1 in. diam., 27 ins. in the ground, for $\frac{1}{4}$ sec. cor. of sec. 13 only, with brass cap marked

$\frac{1}{4}$ S13

from which

A fir, 50 ins. diam., bears S.40°E., 49 lks. dist., marked $\frac{1}{4}$ S 13 B T.

A fir, 10 ins. diam., bears S.14°E., 69 lks. dist., marked $\frac{1}{4}$ S 13 B T.

Thence from the cor. of secs. 2, 3, 34, and 35 on the S. bdy. of the Tp. N.0°02'W., bet. secs. 34 and 35.

Asc. 225 ft. over SE. slope, through timber and brush.

5.00 Spur, slopes S.70°E.; desc. 60 ft. over NE. slope.

10.60 Ravine, course E.; asc. 145 ft. over SE. slope.

17.00 Spur, slopes E.; desc. 115 ft. over NE. slope.

21.25 Ravine, course E.; asc. 270 ft. over broken SE. slope.

37.40 Spur, slopes E.; desc. 110 ft. over NE. slope.

40.00 Set an iron post, 3 ft. long, 1 in. diam., 18 ins. in the ground to solid rock, and in a mound of stone to top, for $\frac{1}{4}$ sec. cor., with brass cap marked

S34 | S35

from which,

A fir, 26 ins. diam., bears S.72°E., 37 lks. dist., marked $\frac{1}{4}$ S 35 B T.

A fir, 28 ins. diam., bears N.50°W., 13 lks. dist., marked $\frac{1}{4}$ S 34 B T.

Continue to desc. 165 ft. over NE. slope.

43.90 Ravine, course S.65°E.; asc. 260 ft. over SE. slope.

49.90 Spur, slopes E.; desc. 75 ft. over NE. slope.

54.10 Ravine, course E.; asc. 95 ft. over SE. slope.

Subdivision of T. 6 N., R. 39 E.

Chains

Asc. 55 ft. over broken SE. slope, through timber and brush.

7.90 Spur, slopes S.; desc. 310 ft. over SW. slope.

21.00 Milk Creek, 1 lk. wide, course SE.; asc. 455 ft. over SE. 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 1/4 sec. cor., with brass cap marked

S14
1/4 S23

1932

from which

A fir, 14 ins. diam., bears N. 57° E., 35 lks. dist., marked 1/4 S 14 B T.

A fir, 14 ins. diam., bears S. 50° E., 21 lks. dist., marked 1/4 S 23 B T.

Continue to asc. 100 ft. over gradual SE. slope.

57.40 Ridge, bears N. and S.; desc. 475 ft. over W. slope.

76.50 Ravine, course S.; asc. 120 ft. over E. slope.

80.00 The cor. of secs. 14, 15, 22, and 23.

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

N. 0° 02' W., bet. secs. 14 and 15.

Desc. 60 ft. over NE. slope, through timber and brush.

5.40 Ravine, course SE.; asc. 510 ft. over gradual broken SW. slope, changes to SE.

38.70 Skyline Road, bears NE. and SW.

40.00 Set an iron post, 3 ft. long, 1 in. diam., 18 ins. in the ground to solid rock, and in a mound of stone to top, for 1/4 sec. cor., with brass cap marked.

1/4

S15 S14

1932

from which

A fir, 20 ins. diam., bears N. 26° E., 11 lks. dist., marked 1/4 S 14 B T.

A fir, 10 ins. diam., bears N. 50° W., 18 lks. dist., marked 1/4 S 15 B T.

Continue to asc. 30 ft. over gradual S. slope.

45.89 Intersect the Oregon and Washington boundary.

Set an iron post, 3 ft. long, 2 ins. diam., 20 ins. in the ground to solid rock, and in a mound of stone to top,

Subdivision of T. 6 N., R. 39 E.

Chains

for closing cor. of secs. 14 and 15, with brass cap marked

W N
S15 | S14
T6NR39E
C C
1932

from which

A fir, 6 ins. diam., bears S.28°E., 33 lks. dist., marked T 6 N R 39 E S 14 C C B T.

A pine, 8 ins. diam., bears S.68½°W., 102 lks. dist., marked T 6 N R 39 E S 15 C C B T.

From this point the 50-mile 52 chain monument, on the Oregon and Washington boundary, bears N.88°56'W., 12.12 chs. dist., previously described.

Land, mountainous.

Soil, sandy loam, rocky; 3rd rate.

Timber, fir, pine, spruce and tamarack.

Undergrowth, huckleberry, vinemaple, alder, rose, Oregon grape, mountain mahogany, mountain laurel and buck brush.

To complete the survey of sec. 14, I go to the cor. of secs. 14 and 15 only, established under group No. 130, Washington, as hereinbefore described, and run S.88°56'E., along the Oregon and Washington boundary.

14.18 Mid point on the N. bdy. of sec. 14.

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 ¼ sec. cor. of sec. 14 only, with brass cap marked

W N
¼ S 14

1932

from which,

A pine, 8 ins. diam., bears S.33¼°E., 45 lks. dist., marked ¼ S 14 B T.

A pine, 14 ins. diam., bears S.47½°W., 85 lks. dist., marked ¼ S 14 B T.

From the cor. of secs. 3, 4, 33, and 34, on the S. bdy. of the Tp.

N.0°03'W., bet. secs. 33 and 34.

Asc. 480 ft. over S. slope, through timber and brush.

11.10 Continue to asc. 355 ft. over SE. slope.

20.70 Spur, slopes E.; desc. 130 ft. over NE. slope.

32.00 Head of ravine, course E.; asc. 115 ft. over SE. 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 ¼ sec. cor., with brass cap marked

Subdivision of T. 6 N., R. 39 E.

Chains	S. 89° 40' E., on a random line bet. secs. 15 and 22.
40.00	Set temp. 1/4 sec. cor.
79.92	Intersect N. and S. line, 5 lks. S. of the cor. of secs. 14, 15, 22, and 23.
	Thence
	N. 89° 42' W., on a true line bet. secs. 15 and 22.
	Asc. 210 ft. over SE. slope, through timber and brush.
11.30	Spur, slopes S. 20° E.; desc. 40 ft. over SW. slope.
19.00	Ravine, course SE.; asc. 440 ft. over E. slope.
31.90	Top of east Milk Shake, (a round topped hill) desc. 85 ft. over SW. slope.
39.96	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 1/4 sec. cor., with brass cap marked
	S15 4 S22
	1932
	from which
	A fir, 12 ins. diam., bears N. 58° W., 31 lks. dist., marked 1/4 S 15 B T.
	A fir, 10 ins. diam., bears S. 65° W., 20 lks. dist., marked 1/4 S 22 B T.
40.70	Bottom of descent, bears N. and S.; asc. 110 ft. over gradual SE. slope.
46.40	Trail, bears NE. and SW.
48.75	Telephone line, bears NE. and SW.
53.50	Top of west Milk Shake, (a round topped hill) desc. 300 ft. over W. slope.
66.50	Skyline Road, bears NE. and SW.; continue to desc. 345 ft. over broken NW. slope.
79.92	The cor. of secs. 15, 16, 21, and 22.
	Land, mountainous. Soil, sandy loam, rocky; 3rd rate. Timber, fir, pine, spruce and tamarack. Undergrowth, huckleberry, alder, vine maple, willow, rose, mountain laurel, mountain ash, Oregon grape, buck brush and syringa.
	N. 0° 03' W., bet. secs. 15 and 16.
	Desc. 205 ft. over broken NW. slope, through timber and brush.
17.40	Ravine, course W.; asc. 160 ft. over SW. slope.
25.00	Spur, slopes W.; desc. 100 ft. over NW. slope.
31.80	Small spur, slopes NW.; desc. 275 ft. over N. slope.
40.00	Set an iron post, 3 ft. long, 1 in. diam., 27 ins. in the ground, for 1/4 sec. cor., with brass cap marked

Subdivision of T. 6 N., R. 39 E.

Chains

on the

S16 | S15

1932

A fir, 30 ins. diam., bears S.15°E., 24 lks. dist., marked 1/4 S 15 B T.

A fir, 14 ins. diam., bears S.18°W., 50 lks. dist., marked 1/4 S 16 B T.

Continue to desc. 220. ft. over N. slope.

45.70 Intersect the Oregon and Washington boundary.

Set an iron post, 3 ft. long, 2. ins. diam., 27 ins. in the ground, for closing cor. of secs. 15 and 16, with brass cap marked

W N
S16 | S15
T6NR39E

C C

1932

from which

A fir, 60 ins. diam., bears S.70°E., 261 lks. dist., marked T 6 N R 39 E S 15 C C B T.

A fir, 36 ins. diam., bears S.75°W., 28 lks. dist., marked T 6 N R 39 E S 16 C C B T.

From this point, the 50 mile 52 chain monument on the Oregon and Washington boundary, bears S.89°49'E., 67.96 chs. dist., previously described.

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

To complete the survey of sec. 15, I go to the cor. of secs. 15 and 16 only, established under group No. 130 Washington, as hereinbefore described and run

S.89°49'E., along the Oregon and Washington boundary.

14.31 Mid point on the N. bdy. of sec. 15.

Set an iron post, 3 ft. long, 1 in. diam., 27 ins. in the ground, for 1/4 sec. cor. of sec. 15 only, with brass cap marked

W N

1/4 S 15

1932

from which

A fir, 26 ins. diam., bears S.18°E., 236 lks. dist., marked 1/4 S 15 B T.

A fir, 20 ins. diam., bears S.16°W., 203 lks. dist., marked 1/4 S 15 B T.

Subdivision of T. 6 N., R. 39 E.

Chains

A fir, 12 ins. diam., bears S. 77° E., 148 lks. dist., marked 1/4 S 21 B T.

A fir, 10 ins. diam., bears N. 50° W., 29 lks. dist., marked 1/4 S 16 B T.

Continue to asc. 40 ft. over NE. slope.

41.20 Small spur, slopes N.; desc. 230 ft. over NW. slope.

56.80 Ravine, course N.; asc. 380 ft. over NE. slope.

68.68 Telephone line, bears NW. and SE.

70.10 Trail, bears NW. and SE.

72.80 Paradise ridge, bears NW. and SE.; thence along broken S. slope.

77.70 Spur, slopes S.; desc. 90 ft. over SW. slope.

79.80 The cor. of secs. 16, 17, 20, and 21. Land, mountainous. Soil, sandy loam, rocky; 3rd rate. Timber, fir, pine, spruce, tamarack and yew. Undergrowth, mountain ash, alder, willow, huckleberry, rose, vinemaple, salal, Oregon grape, buck brush, fern, thimbleberry and service.

N. 0° 04' W., bet. secs. 16 and 17.

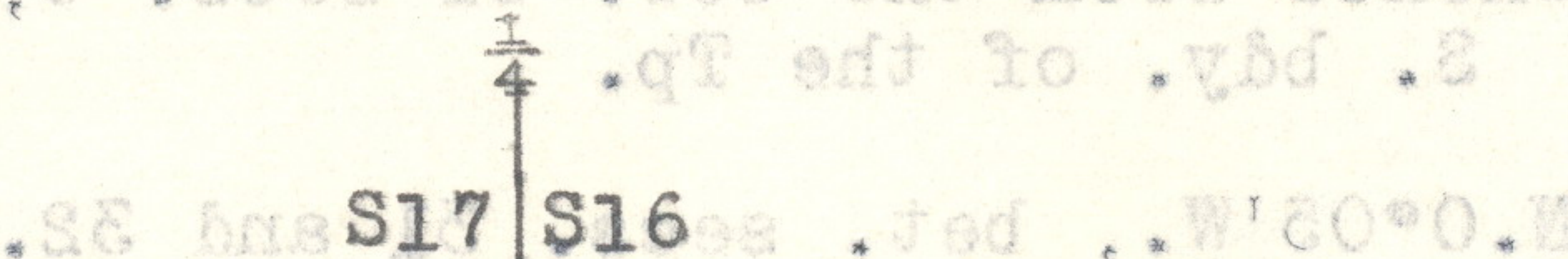
Asc. 160 ft. over SW. slope, through timber and brush.

6.60 Paradise Ridge, bears NW. and SE.; desc. 530 ft. over broken NE. slope.

6.67 Trail, bears NW. and SE.

8.85 Telephone line, bears NW. and SE.

40.00 Set an iron post, 3 ft. long, 1 in. diam., 27 ins. in the ground, for 1/4 sec. cor., with brass cap marked



from which

A fir, 12 ins. diam., bears S. 52° E., 18 lks. dist., marked 1/4 S 16 B T.

A fir, 24 ins. diam., bears S. 46° W., 31 lks. dist., marked 1/4 S 17 B T.

40.30 Ravine, course E.; asc. 45 ft. over SE. slope.

43.60 Top of ascent, bears E. and W.; thence along E. slope.

46.12 Intersect the Oregon and Washington boundary.

Set an iron post, 3 ft. long, 2 ins. diam., 15 ins. in the ground to solid rock, and in a mound of stone to top, for closing cor. of secs. 16 and 17, with brass cap marked

W N
S17 | S16
T6NR39E
C C

1932

Subdivision of T. 6 N., R. 39 E.

Chains

A fir, 18 ins. diam., bears S. 77° E., 148 lks. dist., from which

A fir, 26 ins. diam., bears S. 61° E., 89 lks. dist., marked $\frac{1}{4}$ S 16 B T.

A fir, 36 ins. diam., bears S. 25° W., 110 lks. dist., marked T. 6 N. R. 39 E. S. 17. C. B. T.

From this point the 48 mile 40 chain monument, on the Oregon and Washington boundary, bears N. 89° 49' W., 7.39 chs. dist., previously described.

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

To complete the survey of sec. 16, I go to the cor. of secs. 16 and 17, only, established under group No. 130, Washington, and hereinbefore described, and run S. 89° 49' E., along the Oregon and Washington boundary.

14.36 Midpoint on the N. bdy. of sec. 16.
Set an iron post, 3 ft. long, 1 in. diam., 27 ins. in the ground, for $\frac{1}{4}$ sec. cor. of sec. 16 only, with brass cap marked

160 ft. over SW. slope, through timber and brush.
1932
from which

A fir, 14 ins. diam., bears S. 23° E., 59 lks. dist., marked $\frac{1}{4}$ S 16 B T.

A fir, 26 ins. diam., bears S. 30° W., 149 lks. dist., marked $\frac{1}{4}$ S 16 B T.

Thence from the cor. of secs. 5, 6, 31, and 32, on the S. bdy. of the Tp.

N. 0° 05' W., bet. secs. 31 and 32.

Along gradual E. slope, through timber and brush.

7.00 Dim trail, bears NW. and SE.

19.50 New road, (under construction), bears NE. and SW., on ridge, bears NE. and SW.; desc. 320 ft. over NW. slope.

36.50 Ravine, course W.; asc. 65 ft. over SW. slope.

40.00 Set an iron post, 3 ft. long, 1 in. diam., 27 ins. in the ground, for $\frac{1}{4}$ sec. cor., with brass cap marked

Intersect the Oregon and Washington boundary.
1932
from which

A fir, 16 ins. diam., bears S. 31° E., 84 lks. dist., marked $\frac{1}{4}$ S 32 B T.

Subdivision of T. 6 N., R. 39 E.

Chains
6.20 Asc. 170 ft. over SE. slope

11.00 Spur, slopes S.; desc. 375 ft. over SW. slope.

21.55 Creek, 7 lks. wide, course NW.; asc. 500 ft. over NE. slope.

40.00 Set an iron post, 3 ft. long, 1 in. diam., 27 ins. in the ground, for $\frac{1}{4}$ sec. cor., with brass cap marked

S18
 $\frac{1}{4}$ S19
1932

from which

A fir, 12 ins. diam., bears N.33°E., 9 lks. dist., marked $\frac{1}{4}$ S 18 B T.

A fir, 10 ins. diam., bears S.69°W., 29 lks. dist., marked $\frac{1}{4}$ S 19 B T.

Continue to asc. 25 ft. over NE. slope.

42.18 Intersect the W. bdy. of the Tp.

Set an iron post, 3 ft. long, 2 ins. diam., 12 ins. in the ground to solid rock, and in a mound of stone to top, for closing cor. of secs. 18 and 19, with brass cap marked

T6N	T6N
S13	S18
R38E	R39E

1932

from which

A fir, 9 ins. diam., bears N.38°E., 31 lks. dist., marked T 6 N R 39 E S 18 C C B T.

A fir, 10 ins. diam., bears S.72°E., 5 lks. dist., marked T 6 N R 39 E S 19 C C B T.

From this point the cor. of secs. 13 and 24, T. 6 N., R. 38 E., bears S.4°15'E., 456 lks. dist., previously described.

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

Thence from the cor. of secs. 17, 18, 19, and 20.
N.0°05'W., bet. secs. 17 and 18.
Desc. 300 ft. over NW. slope, through timber and brush.

9.00 Creek, 1 lk. wide, course SW.; asc. 170 ft. over SE. slope.

14.00 Spring branch, 1 lk. wide, course SE.; continue to asc. 820 ft. over broken SW. slope.

40.00 Set an iron post, 3 ft. long, 1 in. diam., 27 ins. in the ground, for $\frac{1}{4}$ sec. cor., with brass cap marked

Subdivision of T. 6 N., R. 39 E.

Chains

$\frac{1}{4}$ S 18 | S 17 $\frac{1}{4}$
 1932

from which

A fir, 10 ins. diam., bears S.35°E., 65 lks. dist., marked $\frac{1}{4}$ S 17 B T.

A fir, 14 ins. diam., bears S.22°W., 46 lks. dist., marked $\frac{1}{4}$ S 18 B T.

Continue to asc. 10 ft. over SW. slope.

41.95 Spur, slopes N.70°W.; desc. 195 ft. over NW. slope.

46.00 Intersect the Oregon and Washington boundary.

Set an iron post, 3 ft. long, 2 ins. diam., 27 ins. in the ground, for closing cor. of secs. 17 and 18, with brass cap marked

W N
 S 18 | S 17
 T 6 N R 39 E
 C C
 1932

from which

A fir, 18 ins. diam., bears S.51°E., 19 lks. dist., marked T 6 N R 39 E S 17 C C B T.

A fir, 18 ins. diam., bears S.43°W., 55 lks. dist., marked T 6 N R 39 E S 18 C C B T.

From this point the 47 mile 60 chain monument on the Oregon and Washington boundary, bears S.89°49'E., 28.22 chs. dist., previously described.

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

To complete the survey of sec. 17, I go to the 47 mile 60 chain monument on the Oregon and Washington boundary, and run S.89°49'E., along the Oregon and Washington boundary.

11.83 Mid point on the N. bdy. of sec. 17.

Set an iron post, 3 ft. long, 1 in. diam., 27 ins. in the ground, for $\frac{1}{4}$ sec. cor. of sec. 17 only, with brass cap marked

W N
 $\frac{1}{4}$ S 17

from which

A fir, 10 ins. diam., bears S.48°W., 51 lks. dist., marked $\frac{1}{4}$ S 17 B T.

A fir, 14 ins. diam., bears S.81°W., 57 lks. dist., marked $\frac{1}{4}$ S 17 B T.

Subdivision of T. 6 N., R. 39 E.

Chains

To complete the survey of sec. 18, I go to the closing cor. of Tps. 6 N., Rs. 38 and 39 E., and run

S. 89° 49' E., along the Oregon and Washington boundary

5.76 40.00 chs. in departure west of the closing cor. of secs. 17 and 18.

Set an iron post, 3 ft. long, 1 in. diam., 27 ins. in the ground, for $\frac{1}{4}$ sec. cor. of sec. 18 only, with brass cap marked

W N
 $\frac{1}{4}$ S 18

1932

from which

A fir, 14 ins. diam., bears S. 37° E., 23 lks. dist., marked $\frac{1}{4}$ S 18 B T.

A fir, 14 ins. diam., bears S. 59° W., 48 lks. dist., marked $\frac{1}{4}$ S 18 B T.

FINAL TEST OF SOLAR ATTACHMENT.

Sept. 13, 1932: in camp located near the cor. of secs. 4, 5, 8, and 9, T. 5 N., R. 39 E., in latitude 45° 56' N., longitude 117° 57' 30" W., at 7h 0m a.m., app. t., I set off 45° 56' N., on the lat. arc; 3° 47' 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 4h 0m p. m., app. t., I set off 45° 56' N., on the lat. arc; 3° 37' 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.

Fractional township 6 north, range 39 east, is located entirely within the Umatilla National Forest. The general elevation of the township is about 5000 ft. above sea level; the summit of the main divide or along the Skyline Road is about 1,000 ft. higher. The elevation of the Round Butte Trail and of Paradise Ridge is about the same as along the Skyline Road. The northwest cor. of the township is set at an elevation of about 3,000 ft. above sea level and is the lowest elevation in the township. Most of this township is very rough and stony. The soil is of a sandy loam composition and in most parts is very rocky. The timber in most parts of this township is of a second growth variety. Very few trees are found with a diameter of over 3 feet. In some places the trees even have a stunted look and it is doubtful if they will ever grow very large. This timber is all too far from market to have any commercial value at this time.

This township has no large streams but is well watered by many small streams in all parts. This township is located so near the highest part of the mountains that it drains in every direction.

The most important development at the present time is the Skyline Road, extending NE. and SW., through the central part of this township. A new road is under construction that turns off the Skyline Road in sec. 28, loops through sec. 29, 32, and 31, and will eventually join a road in Mill Creek leading to Walla Walla, Wash. There are also several good trails; Round Butte Trail in the northeastern part, Paradise Ridge Trail, in the north-

Township 6 North, Range 39 East.

central part, and a trail leading to the Price Guard Station in sec. 32. This Guard Station is located on the headwaters of the South Fork of the Walla Walla River in the southern part of sec. 32. Price Guard Station is located in one of the most beautiful spots in the Blue Mountain Range.

The western part of this township comes within the watershed of the city of Walla Walla, Wash., and no one is allowed to enter without a permit. Several thousand head of sheep are grazed annually during the summer months in the eastern part of this fractional township.

The average of a considerable number of readings over all parts of the township gives a value of 21°45'E., for the mean magnetic declination. There is a range of over 10° in local attraction.

1932

from which

A fir, 14 ins. diam., bears S. 37° E., 23 lks. dist., marked 1/2 S 18 B T.

A fir, 14 ins. diam., bears S. 52° W., 48 lks. dist., marked 1/2 S 18 B T.

FINAL TEST OF SOLAR ATTACHMENT.

Sept. 13, 1932: in camp located near the cor. of sec. 4, 5, 8, and 9, T. 5 N., R. 39 E., in latitude 45° 55' N., longitude 117° 37' 30" W., at 7:00 a.m., app. 1 set up on the lat. arc; 3° 47' 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 4:00 p.m., app. 1 set off 45° 55' N., on the lat. arc; 3° 37' 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.

Fractional township 6 north, range 39 east, is located entirely within the Umatilla National Forest. The general elevation of the township is about 5000 ft. above sea level; the summit of the main divide or along the Skyline Road is about 1,000 ft. higher. The elevation of the Round Butte Trail and of Paradise Ridge is about the same as along the Skyline Road. The northwest cor. of the township is set at an elevation of about 3,000 ft. above sea level and is the lowest elevation in the township. Most of this township is very rough and stony. The soil is of a sandy loam composition and in most parts is very rocky. The timber in most parts of this township is of a second growth variety. Very few trees are found with a diameter of over 3 feet. In some places the trees even have a stunted look and it is doubtful if they will ever grow very large. This timber is all too far from market to have any commercial value at this time. This township has no large streams but is well watered by many small streams in all parts. This township is located so near the highest part of the mountains that it drains in every direction. The most important development at the present time is the Skyline Road, extending NE. and SW., through the central part of this township. A new road is under construction that turns off the Skyline Road in sec. 32, loops through sec. 29, 32, and 31, and will eventually join a road in Mill Creek leading to Walla Walla, Wash. There are also several good trails; Round Butte Trail in the northeastern part, Paradise Ridge Trail, in the north-

4-680
(August, 1926)

FIELD ASSISTANTS.

NAMES.	CAPACITY.
Leonel R. Davidson	1st Chainman.
Richard Ganong	2nd Chainman.
Earl Gould	Cornerman.
Harold Gould	Axeman.
Norman Prendergast	Axeman.
Willis Powers	Axeman.
Glenn H. Johnson	2nd Chainman.

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 retracement and dependent resurvey of part of the Oregon and Washington boundary, the independent resurvey of the south boundary, the dependent resurvey of the west boundary and the subdivisional lines of township 6 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, Ore.
Mar. 15, 1933.

Otis O. Gould
U. S. Surveyor

APPROVAL.

OFFICE OF U. S. SUPERVISOR OF SURVEYS,

DENVER, COLORADO MAR 30 1936, 19

The foregoing field notes of the retracement and Dependent Resurvey of the Oregon and Washington State Boundary from 51 Mile 48 Chain Monument to 46 Mile Monument; Independent Resurvey of the South Boundary; Dependent Resurvey of the West Boundary, and the survey of the Subdivisional Lines of Township No. 6 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.

Grant H. Armon
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.~~