

Platted

East and West Bani
of Sec 10 out of limits

P.

P 89

Examined

FIELD NOTES

Of the Survey of Subdivisional Lines of

T. No. 4 North R. No. 27 East

Willamette Meridian, Oregon,

BY

Charles L. Campbell

Deputy Surveyor,

UNDER

Joint Contract No. 788 dated March 22, 1901

Survey commenced June, tenth, 1902

Survey completed June, seventeenth, 1902

Platted

Copied for Washington Sept. 20, 1902 - M. Austin

12987b200-1-1900

See page 47

10 90

Page 14

Mt of stone wanted

" 37

omission

47

See

FIELD NOTES

08 91

Of the survey of the *Subdivisional*

Lines of *Township No. 4 North, Range*

No. 32 East, Willamette Meridian, Oregon,

as surveyed by *Charles L Campbell*

U. S. Deputy Surveyor, under his contract No. *733*

dated *March 22*, 189*2*

Survey commenced *June, tenth*, 189*2*

Survey completed *June, seventeenth*, 189*2*

NAMES AND DUTIES OF ASSISTANTS.

Arthur Hiatt, Chainman.

Roy T. Campbell, Chainman.

....., Chainman.

....., Chainman.

James H. Stetson, Axman.

....., Axman.

....., Flagman.

91A

PRELIMINARY OATHS OF ASSISTANTS.

WE, Arthur Shatt and Roy T. Campbell
do solemnly swear that we will faithfully execute the duties of chainmen; that we will level the chain over even and uneven ground, and plumb the tally pins, either by sticking or dropping the same; that we will report the true distance to all notable objects, and the true length of all lines that we assist in measuring, to the best of our skill and ability, and in accordance with the instructions given us, in the survey of the Subdivisional
lines of T. M. & N. P. M. & C.
Willamette Meridian, Oregon.

Arthur Shatt, Chainman.
Roy T. Campbell, Chainman.
_____, Chainman.
_____, Chainman.

Subscribed and sworn to before me this twenty
day of June, 1892

[SEAL.]

Chas. L. Campbell
U. S. Dept. Surveyor

WE, James W. Stuterill
and _____
do solemnly swear that we will well and truly perform the duties of axmen, mound men, and flagman in the establishment of corners and other duties, according to instructions given us, and to the best of our skill and ability, in the survey of the Subdivisional
of T. M. & N. P. M. & C.
Willamette Meridian, Oregon.

James W. Stuterill, Axman.
William L. ..., Axman.
_____, Flagman.

Subscribed and sworn to before me this twenty
day of June, 1892

[SEAL.]

Chas. L. Campbell
U. S. Dept. Surveyor

9 1/2
91B

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REFERRING THE LINES TO THE PAGES OF THE FIELD NOTES.

T. *Wm. H. Wm.* R. *Wm. H. Wm.* C. *Wm. H. Wm.* Will. Mer.

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Meanders of _____ Pages _____ to _____

913/4
910

Subdivisions, F. & W., R. & E.

Chains

Survey commenced
 June 10, 1902 and
 executed with a W.
 L. C. Gurley improved
 solar compass No.
 210. The horizontal
 limb is provided
 with two double
 verniers placed
 opposite to each
 other, reading to
 single minutes
 of arc which is
 also the least
 count of the vernier
 of the latitude and
 declination arcs.

The instrument
 was examined,
 tested on the true
 meridian at The
 Dalles, Oregon found
 correct and was
 approved by Char.
 A. Schütz, D. C., May
 20, 1901 under

Subdivisions, T. 4 N., R. 27 E. - Con.

Chain authority given
him by the Sur-
veyor General for
Oregon May 7, 1901.

I examine the
adjustments of the
instrument and find
no level or collima-
tion errors; then
to test the solar
apparatus by com-
paring its indica-
tion, resulting
from solar obser-
vations made
during p. m. and a.
m. hours, with a
true meridian
determined by obser-
vations on Polaris,
I proceed as follows:

At my camp,
near the cor. of
secs. 26, 27, 24 and 25,
Township No. 4 N., Range
No. 27 E., latitude $45^{\circ} 48'$
N., longitude $118^{\circ} 13' W.$

Subdivisions T. 4 N., R. 37 E. - Con.

at $4^{\text{h}} - 30^{\text{m}}$ p. m., l. m.
 t., I set off $45^{\circ} - 48'$
 N. on the lat. arc;
 $23^{\circ} - 01'$ N. on the
 declination arc,
 determine a true
 meridian with
 the solar; and
 mark a point
 thus determined on
 a stone set firmly
 in the ground 5.00
 ch. N. of my
 station.

June 10, 1902.

June 11, 1902: At $2^{\text{h}} - 05^{\text{m}}$ a. m. by my
 watch which is
 correct with l. m. t.,
 I observe Polaris at
 eastern elongation,
 in accordance with
 Manual of Instruc-
 tions, and mark
 a point on the

2894

Subdivisions, T. & N. R. & C. Co.

Chain line thus determined on a plug driven in the ground 5.00 ch. N. of my station.

At 5^h 05^m a. m., l. m. t., I lay off the azimuth of Polaris 1° 48' to the west and mark the true meridian thus determined by cutting a small groove in the stone set 5.00 ch. N. of my station.

June 10, 1902, on which the true meridian falls 0.1 in. west of the mark determined by the solar.

At 5^h 45^m a. m., l. m. t., I set off 45° - 48' N. on the lat. arc; 20° 04' N. on the decl.

Subdivisions, T. H. M., R. 37 C. - Com.

Chains arc; and mark a point in the true meridian, determined with the solar, by cutting a cross on the stone already set 5.00 ch. N. of my station; this mark falls 0.3 in. west of the true meridian established by Polaris observations. The solar observations by p.m. and a.m. observations define positions for true meridians respectively about $0^{\circ} 05''$ east and $0^{\circ} 16''$ west of the true meridian established by the Polaris observation, therefore, I conclude that the adjustments are

Subdivisions, T. 4 N., R. 37 E. - Cor.

Chains satisfactory.

This magnetic bearing of the true meridian at 9^h 00^m a. m., l. m. t., is $N. 21^{\circ} 15'$ W.; the angle thus determined, reduced by the table, gives the mean magnetic declination $21^{\circ} 10.5'$ East. June 11, 1902

June 12, 1902: At 8^h 10^m a. m., l. m. t. I set off $45^{\circ} 49'$ W. on the ~~lat.~~ arc; $28^{\circ} 04'$ W. on the decl. arc; and, determine a true meridian with the solar at the cor. of sec. 19, 24, 25 and 30 on the S. bdy. of the township, which

Subdivisions, T. 4 N., R. 27 E.

Chain is a stone 8 x 12 x 4 ins. above ground marked and witnessed as described by the surveyor General.

Thence I run N. on the E. bdy. of sec. 24; and at 40.01 chs., intersect the $\frac{1}{4}$ sec. cor.; and at 80.04 chs., fall 2 lbs. E. of the cor. of secs. 18, 19 and 24; therefore the line bears about N 0° 01' W.

From the cor. of secs. 19, 24, 25 and 20, I run S. 89° 52' W. on the S. bdy. of sec. 24; at 40.10 chs., fall 5 lbs. S. of the $\frac{1}{4}$ sec. cor.; and at 80.26 chs., fall 6 lbs. S. of the cor. of secs. 23, 24,

Subdivisions, T. 4 N., R. 37 E., Co. ...
 Chains 25 and 26; comes
 quantity the line
 bears $S 89^{\circ} 58' W$.
 Therefore the
 bearings and distances
 are within limits
 of those of the
 original field
 notes as stated
 by the surveyor
 General.

June 12, 1902

I commence at
 the cor. of runs
 23, 24, 25 and 26
 which is a stone
 18 x 12 x 5 in. loosely
 set in the ground
 and marked as
 described by the
 surveyor General.
 No trace of the
 S. E. bearing line
 can be found.
 A fir stump, 22
 in. diam., bears

Subdivisions, T. & M. P. & C.

S 86° W. and marked
as described by
the surveyor
general.

To reestablish this
cor. at the same
point as follows:

Set a basal stone
18 x 12 x 5 ins., 18½ ins.
in the ground,
for cor. of runs

23, 24, 25 and 26,
marked with 2
notches on the S.
and 1 notch on the
E. edge. No

take in limits.
Raise a mound
of stone, 3 ft. base,
2 ft. high, 16 lbs.
N. of cor., this
being the only
secure place.

A B. O. on a ledge
3 x 2 x 1 ft. above
ground, bears S.
60° W., 18 lbs. dist.

1800

Subdivisions, T. & M. R. & C.

Chain Hunter Run
N. 0° 01' W. bet. sec.
23 and 24.

Descent steep N.
slope of spur,
through old burn.

0. 25 Enter fir thicket
bear N. W. and S. E.

7. 50 Foot of ravine,
200 ft. deep, course
N. 35° E.

7. 55 Creek, 5-6 ft. wide,
course, course N.
35° E.

Ascend gradually
along steep E.
slope of moun-
tain.

11. 20 Leave fir thicket
bear N. E. and S. W.

15. 75 Descent along steep
E. slope into Elbow
Canyon.

15. 80 Trail, bear N. 70° W.
and S. 70° E.

24. 00 Enter scattering
timber bear N. and

Subdivisions, S. & N. R. & C. Co.
Chains N.

- 26.25 Enter heavy timber,
bear E. into N.
- 26.50 Foot of ravine, 50
ft. deep, course
N. 30° E.
- 31.00 Abrupt descent.
- 32.75 Foot of mountain,
1000 ft. below sec.
cor.
Over rolling bottom,
not subject to
inundation.
- 33.70 Elbow Creek, 10 lbs.
wide, pure cold
water, stony bottom,
course N. 40° W.
Ascend gradually
along N. slope
of mountain.
- 39.75 A spring branch,
2 lbs. wide, in
ravine, 50 ft. deep,
course N. 30° W.
Ascend steep bank.
- 40.00 The true point
for $\frac{1}{4}$ sec. cor. falls
4

Subdivisions T. 4 N., R. 37 E., Con.

- on measure ground.
- 40.006 Set a basalt, 24 x 12 x 5 in., 15 in. in the ground for H. C. 1st sec. cor. marked H. C., $\frac{1}{4}$ on the N. face.
From which
A tamarack, 10 in. diam., bears N. 27° 30' E., 17 lks. dist., marked H. C., $\frac{1}{4}$ S. 24, D. S.
- A tamarack, 10 in. diam., bears N. 60° 45' W., 91 lks. dist., marked H. C., $\frac{1}{4}$ S. 20, D. S.
- 44.40 Ravine, 50 ft. deep, course N. 50° W.
- 45.05 Trail, bears N. 10° W. and S. 10° E.
Enter scattering timber, bears N. W. and S. E.
- 60.00 Ridge point, 400 ft. above creek,

Subdivisions, T. & N., R. & C.

Chains bear N.

Note - I erect a flag at this point for a test sight from one of the high ridges visible to the N.

descend through dense undergrowth bear E. and N. W. into deep ravine.

64.50

64.50 Ravine, 200 ft.

deep, course N. ascend along steep N. slope of mountain.

80.00

Set a pine post 4 ft. long, 6 in. sq. & drive in the ground, struck rock hard raised a mound of stone around, for cor. of

sec. 10, 14, 20 and 24, marked

T. & N., S. 10 on N. C., R. & C., S. 24 on S. C.,

Subdivisions, S. & N., R. & C. - Con.

Chains S. 20 on S. W., and
S. 14 on N. W. faces,
with 3 notches
on S. and 1 notch
on C. edges.

From which

A pine, 16 in.

diam, bears

N. 40° W, 2 1/2 ch.

dist, marked

S. & N., R. & C. S. 14,

R. S.

*Rowed in and
some, by
B. S. D. D. D. D.
D. S. D. D. D. D.
D. S. D. D. D. D.
D. S. D. D. D. D.*

No other trees in
limits.

Land, mountainous.

Soil, gravel and
rock; 4th rate

timber, fir, tamar-
ack, pine, alder
spruce and wild
cherry.

Undergrowth, moun-
tain laurel, small
fir and huckle-
berry.

Mountainous lands,
8000 ch.

Subdivisions, T. & N., R. 01 & C.
 Chain June 18, 1902: At
 this sec. cor., I
 set off $200-05'$ N. on
 the decl. arc;
 and at $0^h-0.5^m$ p.m.,
 l.m.t., observe the
 sun on the
 meridian, the
 resulting latitude
 is $45^{\circ}49'$ which is
 about $0.2'$ greater
 than the proper
 lat.

N. $89^{\circ}02'$ C. on a random
 line bet. sec. 10
 and 24.

4000 Set temp. $\frac{1}{4}$ sec. cor.
 80.06 Intercept C body of
 the Sp. 14 lbs. S.
 of the cor. of sec.
 08, 18, 19 and 24, which
 is a stone, $4 \times 10 \times 8$
 ins. above ground
 marked and
 witnessed as

Subdivisions, T. & N., R. 10 & C.

Chain described by the
surveyor General.
Thence run
S 89° 46' W. on a true
line bet. sec. 10
and 24.

Ascend steep S.
W. mountain side.

30.25 Enter scattering
timber, bear
N. and S.

34.00 Enter heavy timber,
bear N. 20° W. and S.
20° E.

37.25 Foot of mountain,
1000 ft. below
sec. cor.

37.30 Creek, 5 lbs. wide,
pure water, stony
bottom, course
N. 20° W.

Ascend gradually
along N. slope of
mountain.

39.25 Top of small
divide, 200 ft. above
creek, bear N. and S.

Subdivisions, T. & N., R. & C.

Described.

3995 Creek, 3/4 m. wide, swift current, pure water, stony bottom, course N. 10° E.

As usual.

4018 Set an iron line, 24 x 15 x 5 in., 15 in. in the ground, for 1/4 sec. cor., marked 1/4 on the N. face.

From which a tamarack, 12 in. diam., bears S. 65° W., 20 lbs. dist., marked 1/4 S. 24, R. S.

A tamarack, 10 in. diam., bears N. 58° W., 24 lbs. dist., marked 1/4 S. 13, R. S.

4025 Trail, bears N. and S. 20° W.

4625 As usual steep E.

Subdivisions, T. H. N., D. & C.

slope of ridge.

47.25 Have heavy timber
bare N. and S.

Thence through
old burn, scat-
tering live timber.

48.75 Have old burn
and scattering
timber, bare N. and
S.

56.25 Summit of divide,
500 ft. above creek,
bare N. and S.
descend steep N.
slope into Elbow
Canyon.

50.86 The cor. of sec.
13, 14, 25 and 24.
Land, mountainous.
Soil, sandy loam
and gravelly; 1st
galt and 1st rate
timber, lamaraok,
fir, pine, alder,
wild cherry and
spruce.
Mountainous land,

Subdivisions, I. H. R. & C.
Chains 50.00 chs.

June 13, 1902: At
4-10³⁰ p. m., l. m.
t. set off $45^{\circ} 49'$
on the lat. arc;
 $20^{\circ} 09'$ N. on the decl.
arc; and determine
a true meridian
with the solar
at the cor. of
sec. 13, 14, 20 and
24.

Thence run
N. $0^{\circ} 01'$ W. bet. sec.
13 and 14.

Ascend along steep
W. slope of moun-
tain.

1,500 Ridge point, 25 ft.
above sec. cor.,
bear E. and W.

Thence over small
ridge and ravine
on steep W. slope
of mountain.

Subdivisions, T. 4 N., R. 3 E. - Con.

- 33.705 divide bet Elbow
Canyon and Tamarack
Basin, 500 ft. above
sec. cor., bear N.
W. and S. E.
descend steep
W. slope into
Tamarack Basin.
- 34.75 Enter dense thicket
of fir and Tamarack,
Bear N. 70° W. and
S. 70° E.
- 38.20 Abrupt descent
over bluffs and
slides.
- 40.00 The point for $\frac{1}{4}$
sec. cor. falls
on a ledge, 2 x 2 x
1 ft. above ground.
Mark a cross
at the exact
cor. point for $\frac{1}{4}$
sec. cor. and mark
 $\frac{1}{4}$ on N. side of cross.
From which
a fir, 10 in.
diam., bears

Subdivisions, T. H. R. & C. - Cont.

Chains

S. 82° 30' E., 42

lbs. dist.

marked $\frac{1}{4}$ S. 13,

B. S.

A fir, 5 in. diam.

bears N. 70° W., 21

lbs. dist., marked

$\frac{1}{4}$ S. 14, B. S.

46.75

46.75

Foot of abrupt

descent, 500 ft. below

46.80

46.80

summit of ridge.

Creek, 10 lbs. wide,

course N. 00° W.

Ascend over spur

bet Tamarack Basin

and Walla Walla

River.

47.50

47.50

Leave thicket, and

enter very scat-

tering timber, bears

E. and W.

59.20

59.20

Top of spur, 500

ft. above creek,

bears N. W. and S. E.

Descent steep N.

slope into Walla

Walla Canyon.

Subdivisions, S. 4 N. R. 37 E. Con.

- 66.10 Perpendicular bluffs
150 ft high, bears
C. and N.
- 66.25 Foot of mountain,
1800 ft. below
sec. cor.
Over sandy bottom,
subject to inun-
dation.
- 66.90 Halla Halla River,
50 lbs. wide, pure
water, swift
current, stony
bottom, course
S. 70° W.
Over sandy bot-
tom subject to
inundation.
- 68.90 Pack trail, bears
C. and N.
- 69.25 Leave bottom
land, bears C. and
N., and ascend steep
S. slope of moun-
tain.
- 71.25 Leave timber,
bears C. and N.

Subdivisions, T. & N. R. & C.

5000 Set an ironstone
 80 x 10 x 6 in., $22\frac{1}{2}$
 in. in the ground
 for cor. of sec.
 11, 12, 13 and 14, marked
 with 4 notches on
 the T. and 1 notch
 on the C. edge.

Darker mound of
 stone, 4 ft. base,
 3 ft. high, N. of
 cor. Dite im-
 practicable.

Land, mountainous.
 Soil, sandy loam
 and stony; 1st and
 4th rd.

Timber, fir, tamar-
 arack, pine, alder
 and cottonwood.

Mountainous land,
 5000 ac.

June 13, 1902.

N. 89° 46' E. on a
 sandy line

Subdivisions, S. 4 N. R. 37 E. - Con.
 Chain bet. sec. 12 and

13.

4000 Set temp. $\frac{1}{4}$ sec.
 cor.

80.48 Intersect of body
 of the S. 4 N. R. 37 E.
 of the cor. of
 sec. 12, 10 and
 15, which is a
 stone, 4 x 12 x 5 in.
 above ground,
 marked and
 witnessed or
 described by the
 surveyor General
 Thunber & run
 S. 89° 37' W. on a
 true line bet.
 sec. 12 and 13.
 across N.W. face
 of mountain,
 through very
 scattering timber.
 29.00 Ravine 300 ft. deep,
 course N. 10° W.
 Thence along
 steep N. slope

Subdivisions T. 4 N. R. 37 C.

over ridge and
ravine into the
Walla Walla Can-
yon.

40.2 $\frac{1}{4}$ ft. ironstone,
18 x 10 x 5 in., 5 in.
in ground, struck
rock, and raised
mound of stone
around, for $\frac{1}{4}$ sec.
cor., marked

$\frac{1}{4}$ on the N. face.
Raise mound of
stone, 2 ft. base, $1\frac{1}{2}$
ft. high, N. of cor.
Pit impracticable.

57.5-0 Foot of mountain
1500 ft. below
sec. cor.

Thence over sandy
bottom of Walla
Walla River, sub-
ject to inundation.

60. B. Walla Walla River,
50 lbs. wide, 8 ft.
deep, swift cur-
rent, course

Subdivisions, T. 4 N., R. 3 E.

- Chains S. 20° W. Ascend.
- 60.85 Pack trail, bears
N. 20° E. and S. 20° W.
- 60.90 Foot of perpendicular
bluffs, 20 ft. high, bear
N. and S.
Ascend along steep
bluffy S. slope
of mountain.
- 77.25 Ridge point, 350
ft. above creek,
bears N. and S.
descend.
- 79.00 Over bluffs, 15-
20 ft. high, bear
N. and S.
- 80.48 The cor. of sec.
11, 12, 13 and 14.
Land, mountainous.
Soil, stony; red
and 4th. rate.
Timber, scattering
pine, fir, alder
and cottonwood.
Mountainous
land, 80.24 ch.

Subdivisions, J. & H. R. & C. Co.

June 15: At 10^h 00^m
 a.m. l.m.t. I set
 off 45° 50' on the
 lat. arc; 28° 15'
 N. on the decl.
 arc; and deter-
 mine a true
 meridian with
 the solar at the
 cor. of sec. 11, 12, 13
 and 14.

Thence run
 N. 0° 01' W. bet. sec.
 11 and 12, on random.

Accord sleep
 slope

4000 Set limf. 1 sec. cor.

7994 Intersect C. and W.
 line 00 eke. C.

of the cor. of sec
 1, 2, 11 and 12, which
 is a post, 4 in. sq,
 1½ ft. above ground
 marked and
 witnessed as
 described by the
 surveyor General.

Subdivisions, T. & H. R. & C.
 Chains Thence & run
 S. 0° 14' W. on a
 true line bet.
 sec. 11 and 12.
 descend S. W. slope
 of mountain,
 through scattering
 timber.

9.25 Leave timber,
 bear E. and W.
 19.00 descend steep S.
 slope of moun-
 tain into Holla
 Holla Canyon.
 4.000 Left an Ironstone,
 15 x 10 x 5 in. in
 mound of stone,
 for $\frac{1}{4}$ sec. cor.,
 marked $\frac{1}{4}$ on
 the W. slope face
 Raise mound of
 stone, 2 ft. wide,
 1 $\frac{1}{2}$ ft. high, S. W.
 of cor., this being
 the most secure
 place. Pile
 impracticable.

Subdivisions, T. 4 N., R. 37 E., Co. 1

Chain Thence descend
steep S. slope,
over small ridges
and ravines.

70.00 Ridge point, bear
N. N. and S. E.
descend over bluffs
and slides.

79.94 The cor. of sec.
11, 12, 13 and 14.

Land mountainous.
Soil, stony; high
gale.

Timber, scattering
fir and pine.

Mountainous
land, 79.24 ch.

At this sec. cor.,
I set off $20^{\circ} - 15'$ by
the dial arc, and
at $12^{\text{h}} 00^{\text{m}}$ a.m., l.m.
to observe the sun
on the meridian,
the resulting lat.
is $45^{\circ} - 50'$, which
is 0.3 less than
the proper lat.

1830
v
till here

Subdivisions, S. 4 N. R. 37 E. - Con.
Chain The cor.

of sec. 14, 15, 22 and
23 which is a post
4 in. sq., marked
as per instructions
instead of a boreall
stone or staked
by the surveyor
General. From
which

A pine 24 in.
diam., bears N.
37° E., 284 lbs. dist
marked S. 4 N. R.
37 E., S. 14, R. 37.

A pine, 48 in.
diam., bears S.
8° 30' E., 73 lbs.
dist., marked
S. 4 N. R. 37 E., S.
22, R. 37.

A pine, 12 in.
diam., bears S.
86° W., 100 lbs.
dist., marked
S. 4 N. R. 37 E., S.
22, R. 37.

Subdivisions T. 4 N., R. 37 E.
 Chain from this sec.
 cor., I run
 S. 89° 44' E. on a
 random line
 bet. sec. 14 and 23.
 4000 Left temp. 1 sec. cor.
 8160 Intersect N. and S.
 line 60 lbs. N. of
 the cor. of sec.
 13, 14, 23 and 24 es-
 tablished by me
 June 13, 1902.

Thence I run
 N. on a true line
 bet. sec. 14 and 23.
 descend steep
 N. slope of moun-
 tain into Elbow
 Canyon.

9.25 Enter timber, bare
 N. and S.

9.50 Foot of mountain,
 500 ft. below sec.
 cor.

9.55 Creek in Elbow
 Canyon, swift
 current, slony

Subdivisions, T. 4 N., R. 33 E., Co.

bottom, 10 lbs.
wider, courses N.
10° W.

- 9.55- Around E. slope of mountain.
- 9.75- Pack trail, bears N. and S.
- 11.31 Ravine, 25 ft. deep, course N. 60° W.
- 13.00 Leave heavy timber bears N. and S. Steeper ascent
- 4.160 Set a basalt stone, 15 x 12 x 6 ins., 10 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ of the N. face. which
- A pine, 25 ins. diam., bears S. 88° W., 227 lbs. dist., marked $\frac{1}{4}$ S. 23, B. S.
- A pine, 15 ins. diam., bears N. 65°-30' W., 240 lbs.

Subdivisions T. 4 N. R. 07 E. - Cont.

dist, marked $\frac{1}{4}$

S. 14, R. 7

- 47.00 Top of ridge, 1000 ft. above creek, bear N. and S. descend into canyon.
- 49.00 Enter heavy timber and dense undergrowth, bear N. and S.
- 54.75 Ravine, 15 ft. deep, bear N. 80° W. Ascend over spur.
- 57.25 Top of spur, 50 ft. high, bear N. and S.
- 69.00 Ravine, 50 ft. deep, bear N. W.
- 72.55 Creek, 5 lbs. wide, pure water, sandy bottom, course N. 10° E. Ascend steep E. slope of ridge.
- 73.00 Leave heavy timber bear N. and S. thence through

Subdivisions, T. 4 N., R. 37 E., C. 10.

Chains very scattering
timber.

81.60 Intersect N. and S.
line 97 lbs. S. of
the cor. of sec.
14, 15, 22 and 23,
described heretofore
at point of inter-
section set a
pine post, 6 in.
sq., $3\frac{1}{2}$ ft. long,
 $2\frac{1}{2}$ ft. in the
ground for closing
cor. of sec. 14 and
23, marked C. C.,
T. 4 N., R. 37 E. on E.,
S. 23 on S. and
S. 14 on the N.
face; with a
groove on the
E. and 3 grooves
on the S. face.
From which
a pine, 48 in.
diam., bears N.
 $16^{\circ} 30'$ E., 25 lbs.
dist., marked

Subdivisions, T. 4 N., R. 37 E.

T. 4 N., R. 37 E., S. 14
D. 3.

Q pine, 16 in.

diam, bears S 68°

E., 92 lbs. dist.

marked T. 4 N.,

R. 37 E., S. 20, D. 3.

I destroy all marks
of the old cor. per-
taining to the
survey E.

Land, mountainous.

Soil, gravelly loam
and stony, red
and 4th rate.

Timber, lamarack,
fir, pine and
alder.

Undergrowth, moun-
tain laurel, huckle-
berry and small
fir.

Mountainous land,
51.60 ac.

June 15, 1902.

Subdivisions, T. 4 N., R. 8 E.

Chain from the old
 cor. of sec. 10 and
 22, from
 N. 0°-02' W. bet. sec.
 14 and 10.

Ascend gradually
 along E. slope
 through scattering
 timber

6.25 Ridge point, bears
 N. E., S. W.

Ascend through
 heavy fir and
 tamarack timber
 bears N. E. and S. W.

17.25 Foot of ravine, 200
 ft. deep, course
 N. 00° E.

Ascend gradually
 along E. slope of
 spur.

19.00 Leave timber
 bears N. E. and S. W.

40.00 Hit an ironstone
 20 x 15 x 6 in., 10 in.
 in the ground,
 struck rock, raise

Subdivisions, T. 4 N. R. 37 E. Cont.

mound of stone
around, for $\frac{1}{4}$ sec.
cor., marked $\frac{1}{4}$ on
the N. face.

Raise mound of
stone, 8 ft. base,
2 ft. high, N. of cor.
Pile impracticable.

42.00 Ridge point, base
N. E. and S. W. around.

43.00 Enter dense under-
growth, base N. E.
and S. W.

51.75 Leave dense under-
growth base E.
and W.

Brink of precipitous
descent into Walla
Walla Canyon, im-
passable ground.

Offset as follows:

West 600 ch.; then

run N. 0° 02' W.

on offset line

for 700 ch.

Thence E. 600 ch.

to the true line.

128

Subdivisions, T. 4 N. R. 37 E.

Through scattering
timber and dense
undergrowth.

7375

Foot of mountain,
1000 ft. below sec.
cor.

Left bank of Walla
Walla River, 500 yds.
wide, 5 ft. deep,
swift current, pure
cold water, stony
bottom, course
S 70° W.

Over sandy bottom
not subject to
inundation.

Pack trail, course
E. and W.

Across steep S.
slope of moun-
tain.

8000

Set an ironstone
15 x 12 x 8 in. 10 in.
in the ground
struck rock, raise
mound of stone
around, for cor.

Subdivisions, S. 4 N. R. 37 E. - Cont.

of sec. 10, 11, 14 and
15, marked with
4 notches on the S
and 2 notches on
E. edge. From
which

A fir 36 ins. diam.
bears S. 38° W., 81 lbs.
dist., marked S.
4 N. R. 37 E., T. 15, B. T.

A fir 20 ins. diam.
bears N. 20° W. 18
lbs. dist., marked
S. 4 N. R. 37 E., T. 19,
B. T.

No other trees in
limits. Mound
and pits imprac-
ticable on account
of steep slope.
Sand, mouldstone
soil, stony and
gravelly; with and
red slate.
Timber, tamarack,
fir, pine and
collumwood.

Subdivisions, T. 4 N. R. 2 E.

Undergrowth, mown
tanned laurel, huckle
berry, wild rose
and buck brush.
Mountainous land
8000 ft.

E. on a random
line bet. sec. 11
and 14.

4000

8124

Set temp. $\frac{1}{4}$ sec. cor.
Entered T. and S.
line 61 lbs. N. of
the cor. of sec.
11, 12, 13 and 14, estab-
lished by me
June 1, 1902.

Three Orms
H. on a true line
bet. sec. 11 and 14.
Ascend along steep
S. slope of moun-
tain over ridges
and ravines.

3100

Foot of ravine 100
ft. deep, course S. 10° E.

Subdivisions, T. & N. R. & E. - Con.

Top of promontory
400 ft. high, bears
N. and N. S.

Perpendicular bluffs
50 ft. high, bear
N. and S.

From foot of bluffs
descend into deep
canyon.

41.24 Left an ironstone,
28 x 10 x 10 in., 2 in.
in the ground,
for $\frac{1}{4}$ red. cor., marked
1 on the N. face.

Raise mound of
stone, 4 ft. base,
3 ft. high, N. of cor.
Pilot impracticable.
Only very scattering
timber, bears N.
and S.

Foot of canyon
500 ft. below prom-
ontory.

Crevice, 2 ft. wide,
swift current, stony
bottom, course

Subdivisions, T. 4 N. R. 8 E.

S. 20 W. Ascend
descend along steep
S. slope of Iron-
mine into Walla
Walla Canyon.

St. 24 Intersect W. and S.
line 61 ch. S. of
the cor. of sec.
10, 11, 14 and 15.
At point of inter-
section set an
iron stone 40 x 12 x 5
in., 24 in. in the
ground, struck
rock, raise mound
of stone around
for closing corner
of sec. 11 and 14,
marked C. C. on
the C. face, with
4 grooves on the
W. and 2 grooves
on the E. face.
No trees in limits
of line. Raise
mound of stone,
2 ft. base, $1\frac{1}{2}$ ft. high,

Subdivisions, T. 4 N., R. 37 E., Co. Con.
 E. of cor. Pite impr.
 practicable.
 Land, mountainous.
 Soil, stony; 4th
 rate.
 Timber, a few scat-
 tering pine.
 Mountainous land
 81.24 cts.

June 16: At 3^h 10^m
 p. m., l. m. t., set
 off 45° 55' on the
 lat. arc; 28° 20'
 on the decl. arc;
 and at the cor.
 of sec. 10 and 15.
 Determine a true
 meridian with
 the solar.
 Thence run
 S. 89° 46' W. on a
 random line bet.
 sec. 10 and 15.
 4000. Let temp. 1 sec. cor.
 80.28 Interest 4 and 1.

Subdivisions, T. & N. R. & C.

Chains line 14 lbs. N. of
the cor. of sec.
9, 10, 10 and 10 which
is a stone, 7x12x8
ins. above ground
marked and
witnessed as described
by the surveyor
General.

Thence Run

N. 89° 40' E. on a
true line bet.
sec. 10 and 10.

Ascend W. slope
of spur, through
scattering timber.

2.00 Top of spur 1800
ft. above river.

Descend steep N.
E. slope of moun-
tain into Walla
Walla Canyon -

40.14 Set a basalt stone
15x10x8 ins. 5 ins.
in ground, struck
rocks, raise mound
of stone around,

Subdivision, T. 4 N., R. 2 E.

For $\frac{1}{4}$ sec. cor.,
marked $\frac{1}{4}$ on the
N. face. ⁴ Raise
mound of stone,
2 ft. base, $1\frac{1}{2}$ ft. high
N. of cor. Pile in-
practicable.

57.85- Creek, 50 lbs. wide, in
ravine, 200 ft. deep,
course $\approx 10^\circ$ E.

Ascend over spur.

59.75- Top of spur, 200
ft. high, bare N. and

descend along steep
N. slope into Walla
Walla Canyon.

> 1.00 Foot of mountain,
2000 ft. below sec.
cor.

> 1.00 Over stony bottom
not subject to
inundation.

> 3.80 Left bank of the
Walla Walla River,
50 lbs. wide, 3 ft.
deep, swift current.

Subdivisions, T. & N. R. & E.

Chains stony bottom,
course N. 60° W.
Over sandy bottom
land not subject
to inundation.

7710 Pack trail, base
C. and N. 60° W.

7750 Ascent along steep
S. slope of mountain.

8024 The cor. of sec. 10
and 15.

Land, mountainous.
Soil, sandy loam
and stony, 1st
and 4th rate.
Timber, scattering
tamarack, fir, pine,
alder and cotton
wood.

Mountainous land
8024 ch.

Overcast at noon
prevented taking
the lat.

June 16, 1902

Subdivisions, T. 4 N., R. 8 E.

Chains June 17, 1902: at
7^h 10^m a.m. l.m.t.
Set off 45° 50' on
the lat. arc; 28° 20'
on the decl. arc;
and determine
a true meridian
with the solar
at the cor. of sec.
10 and 10.

Thence I run
N. 0° 02' W. on a
random line bet.
sec. 10 and 11.

40.00 Set temp. line cor.
→ 7.81 Intersect E. and W.
79.90 line 20 lbs. W. of
the cor. of sec.
2, 3, 10 and 11, which
is a post, 4 in. sq,
in mound of
stone and marked
as described by
the surveyor
general.

Thence I run
S. 0° 07' W. on a true

Subdivisions, T.H.H. Road E.

line bet. sec.
10 and 11.

descend steep
S. slope of moun-
tain into Walla
Walla Canyon.

4000 Set an iron stone,
20x10x0 in., 10 in.
in the ground,
for $\frac{1}{4}$ sec. cor.,
marked $\frac{1}{4}$ of the
W. face. $\frac{1}{4}$ Raise
mound of stone,
2 ft. base, $1\frac{1}{2}$ ft.
high, W. of cor.

Site impracticable.

5100 Steeper descent
over bluffs and
slides.

7500 More gradual
descent.

~~7781~~ The cor. of sec.
10 and 15.

7990

Land, mountainous.
Soils, stony; $\frac{1}{4}$ if
rare.
No timber.

Subdivisions, T. 4 N., R. 37 E., Co. 4

Chains Mountainous
 land, $\frac{79,900}{77,816}$ chs.
 June 17, 1902.

General Description.

This fractional township is very rough and mountainous. There are several fertile pieces of land in tamarack basin and along the Walla Walla River, but on the whole the land is suitable only for grazing purposes. The entire region is covered with a nutritious growth of bunch grass. Timber is very

Subdivisions, T. 4 N., R. 2 E.

scarce. In addition to Tamarack Basin in secs. 10 and 24, there are several patches of heavy timber in secs. 14 and 23. Other sections are covered with a scattering growth of pine, fir, tamarack. Cottonwood is found along the Walla Walla River.

The country is well watered by the Walla Walla River and its tributaries.

There are two homesteads in section 11, and several pre-emptive claims in other sections.

No one authorized to administer oaths.

Subdivisions, T. H. R. & C. - Con.

other than myself,
is available, with-
out great delay and
expense; therefore I
administer the
required preliminary
and final oaths.

Chas. L. Campbell,
U. S. Dept. Surveyor

FINAL OATHS FOR SURVEYS.

A list of the names of the individuals employed by Charles L. Campbell, U. S. Deputy Surveyor, to assist in running, measuring, and marking the lines and corners described in the foregoing field notes of the surveys of the Subdivisional lines of T. M. & M. R. M. & C., Willamette Meridian, Oregon, showing the respective capacities in which they acted :

- Arthur Hiatt, Chainman.
- Roy T. Campbell, Chainman.
- _____ , Chainman.
- _____ , Chainman.
- James H. Stutville, Axman.
- _____ , Axman.
- _____ , Flagman.

FINAL OATHS OF ASSISTANTS.

We hereby certify that we assisted Chas. L. Campbell, U. S. Deputy Surveyor, in surveying all those parts or portions of the Subdivisional lines of T. M. & M. R. M. & C., Willamette Meridian, Oregon, as are represented in the foregoing field notes as having been surveyed by him and under his direction ; and that said survey has been in all respects to the best of our knowledge and belief, well and faithfully surveyed, and the corner monuments established according to the instructions furnished by the U. S. Surveyor-General of Oregon :

- Arthur Hiatt, Chainman.
- Roy T. Campbell, Chainman.
- _____ , Chainman.
- _____ , Chainman.
- James H. Stutville, Axman.
- _____ , Axman.
- _____ , Flagman.

Subscribed and sworn to before me, this seventeenth day of June, 1902

[SEAL.]

Charles L. Campbell
U. S. Deputy Surveyor

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AHH 144A

State of Oregon)
) ss.

County of Wallowa)

I, C.H. Zurcher, County Clerk of wallowa
County, Oregon, and ex-officio Clerk of the Circuit Court in and
for said County and State, do hereby certify that on June 27, 1902
I was ex-officio Clerk of the Circuit Court, for the State of
Oregon, in and for wallowa County.

Witness my hand and the Seal of the Circuit Court affixed
this 1st. day of Oct., 1902.

C.H. Zurcher
.....
County Clerk.

And ex-officio Clerk of the Circuit Court.

Handwritten scribbles at the bottom of the page.

FINAL OATH OF DEPUTY SURVEYOR.

145

I, *Charles L Campbell*, United States Deputy Surveyor, do solemnly swear that in pursuance of instructions received from *Robert A. Holersham*, U. S.

Surveyor-General for Oregon, bearing date of the *Third*

day of *April*, ¹⁹⁰¹~~1897~~, I have well, faithfully, and truly, in my own proper person, and in strict conformity with the instructions furnished by the U. S. Surveyor-General for Oregon, the Manual of Surveying Instructions, and the laws of the United States, surveyed

all those parts or portions of *Subdivisions*

T. M. & N. P. No. 2 & C.

Willamette Meridian, in the State of Oregon, which are represented in the foregoing field notes as having been surveyed by me and under my directions; and I do further solemnly swear 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 U. S. Surveyor-General for Oregon, and in the specific manner described in the field notes, and that the foregoing are the true field notes of such survey; and should any fraud be detected, I will suffer the penalty of perjury, under the provisions of an act of Congress approved August 8, 1846.

Charles L Campbell
U. S. Deputy Surveyor.

Subscribed by said *Charles L Campbell*, U. S.

Deputy Surveyor, and sworn to before me this *27*

day of *June*, 189*2*

C. H. Purcher Clerk
By C. M. Lockwood Deputy

Office of U. S. Surveyor-General,

PORTLAND, OREG., *March 4*, 18*903*

The foregoing field notes of the survey of the

*Subdivisional Lines of
Township 4 North Range
37 East Will. Mer Oregon*executed by *Charles L. Campbell*
*U S Deputy Surveyor*under his contract No. *733*, dated*March 22^d*, 18*901*, having been critically examined,

and the necessary corrections and explanations made, the said field

notes and the surveys they describe, are hereby approved.

Kenneth Melburn

U. S. Surveyor-General.