

FIELD NOTES

Of the ^{re-}survey of the Base Line
 Lines of through Ranges 36 + 37 East

....., Willamette Meridian,
 Oregon, as surveyed by Harman D. Gradin
 U. S. Deputy Surveyor, under his Contract No. 452

dated June 16"....., 1882

Survey commenced, August 29"..... 1882

Survey completed, September 12"..... 1882

NAMES AND DUTIES OF ASSISTANTS.

....., Compassman.
Abraham Blanchard, Chainman.
Henry King, Chainman.
Albert Campbell, Chainman.
Henry Pinto, Chainman.
Geo. H. Huitt, Axeman.
, Axeman.
, Flagman.

316 PRELIMINARY OATHS OF ASSISTANTS:

We, Abraham Blanchard, Henry King,
Albert Campbell and Henry Pinto

do solemnly swear that we will faithfully execute the duties of Chain Carriers, 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 will assist in measuring, to the best of our skill and ability, and in accordance with the instructions given us in

the survey of the Base Line through
Ranges 36 and 37 East

Willamette Meridian, Oregon.

Abraham Blanchard, Chainman.

Henry King, Chainman.

Albert Campbell, Chainman.

Henry Pinto, Chainman.

Subscribed and sworn to before me, this twenty-ninth

day of August 1882

[SEAL.]

H. D. Gradon
Notary Public

We, J. Geo. W. Huitt, do solemnly swear

that we will well and truly perform the duties of Axemen 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 Base Line through
Ranges 36 + 37 East

Willamette Meridian, Oregon.

J. Geo. W. Huitt, Axeman.

Axeman.

Subscribed and sworn to before me, this twenty-ninth

day of August 1882

[SEAL.]

H. D. Gradon
Notary Public

Re-survey of the Base Line through Range 37 East

of T. _____

R. _____

Willamette Meridian, Oregon.

319

West

84.60

The field notes of the survey of the exterior lines of T. N. R 37 E. indicate the Base Line to be about 20.00 chs too long and in order to ascertain where the error exists, I start at the Cor. to Tps 1 N. R's 37 + 38 E. on the Base Line and run
in a hand line on the S. boundary of Sec. 36, at 40.00 chs I made careful search but could find no trace of $\frac{1}{4}$ sec. err., I continued my line and at
chs I found the old sec. err.
I continued my line N. and found the chaining on each mile to be about 4.00 chs too long per mile.
In order to establish corners at proper distances from the E. boundary, from which to start my subdivision, I made a re-survey of the line as follows:—

On the night of August 28th 1882 I took an observation on the star Polaris in accordance with instructions contained in the Manual of Surveying and drove pickets on the line thus established—

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Recovery of the Base Line through Range 34 East

of T. _____ R. _____

Survey commenced ^{Willamette Meridian, Oregon.} August 29th 1882 with a Burt's improved Solar compass. Before commencing this survey I test my compass on the line established last night and find it correct.

I commence at the Cor. to Tps 1 N.
R's 34 + 38 E. on the Base Line, which
is a post 4 ins square, marked

I, N. on N.

R 38 E. S, on E.

R 34 E. S 36 on N. faces, with 6 notches
on N. E + N. faces from which

A spruce 5 ins diam brass N. 60° W. 61 lks
dist. marked I, N. R 34 E. S 36 - B. D.

A spruce 5 ins diam brass N. 20° E. 58 lks
dist. marked I, N. R 38 E. S 31 - B. D.

A spruce 12 ins diam. brass S. 45° W. 20 lks
dist. marked I, S. R 34 E. S, - B. D.

West
I hence I run
on Base Line on S. boundary of Sec. 36
Va. $19\frac{1}{2}^{\circ}$ E.

Through timber

40.00 Set a basalt stone 14 x 12 x 3 ins, 9 ins in
the ground, for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on N.
face, from which

A spruce 4 ins diam. brass N. 20° W. 15 lks
dist. marked $\frac{1}{4}$ S. B. D.

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Resurvey of the Base Line through Range 54 E -

of T.

R.

321

Willamette Meridian, Oregon.

- A spruce 4 ins diam. bears S. 45° E. 10 lks
dist. marked 1/4 S. B. D.
- 41.00 I could find no trace of the old 1/4 sec. cor.
A brook, 5 lks wide. runs S.
- 62.00 Top of ridge, about 500 ft. above brook,
course S.
- Descend about 400 ft. to
- 80.00 Set a basalt stone 20x12x8 ins, 15 ins in
the ground, for Section 35 & 36,
marked B. L. with 1 notch on E. and
5 notches on N. edges. from which
- A fir 6 ins diam. bears N. 4° E. 49 lks
dist. marked 1/4 N. R. 34 E. S. 36. B. D.
- A fir 22 ins diam. bears S. 85° N. 21 lks
dist. marked 1/4 S. R. 34 E. S. 2. B. D.
- A fir 24 ins diam. bears N. 45° N. 51 lks
dist. marked 1/4 N. R. 34 E. S. 35. B. D.
- The old sec cor. a badly decayed post,
bears N. 46° the dist. I destroy this post
and obliterate mark from bearing trees
- Land mountainous
Soil 3rd rate
Heavily timbered with fir & hemlock

Resurvey of the Base Line through Range 34 East

of T.

R.

322

Willamette Meridian, Oregon.

West	<p>on Base Line on S. boundary of Sec. 35 $\text{Va. } 19^\circ \text{ E.}$</p>
3,00	<p>Through timber A gulch, course N. N. W.</p>
30,00	<p>Top of ridge, about 300 ft. above gulch, course N. N. W.</p>
40,00	<p>Set a post 3 ft. long, 3 ins square, 24 ins in the ground, for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ S. B. I. on N. face, from which</p>
	<p>A tamarack 12 ins diam. bears N. 50° E. 10 cks dist., marked $\frac{1}{4}$ S. B. I.</p>
	<p>A fir 4 ins diam. bears S. 30° W. 35 cks dist., marked $\frac{1}{4}$ S. B. I.</p>
74,50	<p>I could find no trace of the old $\frac{1}{4}$ sec. cor. Bottom of canon, about 1500 ft. below ridge; N. fork of Meacham creek, 6 cks wide, runs N. N. W.</p>
	<p>Ascend about 100 ft</p>
80,00	<p>Set a post 4 ft. long, 4 ins square, 24 ins in the ground, for Cor. to Secs 34 + 35, marked</p>
	<p>B. L. I, N. R. 34 E. on N.</p>
	<p>S 35 on E. and S 34 on N. faces, with</p>

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Resurvey of the Base Line Through Range 37 East

of T.-----

R.-----

Willamette Meridian, Oregon.

323

2 notches on E. and 4 notches on N. face,
from which

A tamarack 11 ins diam bears N. 30° E. 26
lks dist. marked J, N. R 37 E. S 35. B. D.

A tamarack 10 ins diam bears S. 50° N. 14
lks dist. marked J, S. R 37 E. S 3. B. D.

A tamarack 6 ins diam bears N. 65° N. 13
lks dist. marked J, N. R 37 E. S 34. B. D.

The old see. cor. a badly decayed
post with 2 bearing trees, bears N.
9.17 chs dist. I obliterate all marks
on trees and post.

Land rough + mountainous
Soil sandy loam + stony 2 nd ₄₃ rd _{rate}
Heavily timbered with fir + tamarack

Resurvey of the Base Line through Range 34 East
of T. R.

Willamette Meridian, Oregon.

West

on Base Line on S. boundary of Sec. 34
Va. $19\frac{1}{2}^{\circ}$ E.

40.00

Ascend through timber
Set a basalt stone $15 \times 12 \times 6$ ins, 10 ins in
the ground, for $\frac{1}{4}$ sec. cor., marked B.L.
 $\frac{1}{4}$ on N. face, and raised a mound
of stone alongside.

The old $\frac{1}{4}$ sec. cor. a post with 2 bran-
-ing trees bears N. 12.22 chs dist. I
obliterate the marks on post & trees

47.50

Top of ridge, about 1500 ft. above sec. cor.,
course N.

73.50

Bottom of gulch, about 200 ft. below
ridge, course N.

80.00

Set a post 4 ft. long, 4 ins square, 24
ins in the ground, for cor. to Sec's 33 & 34
marked

B.L. T. N. R. 34 E. on N.

S 34 on E. end

S 33 on N. faces, with 3 notches on
E & N. faces, from which

A fir 30 ins diam. bears N. 10° E. 19 chs dist.

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Re-survey of the Base Line, through Range 34 East
of T. R. 325
Willamette Meridian, Oregon.

marked T, N. R 34 E. S 34. B. J.

A fir 24 ins diam bears S 15° E. 76 chs dist.
marked T, R 34 E. S 34. B. J.

A fir 18 ins diam, bears N. 40° W. 10 chs dist.
marked T, N. R 34 E. S 33. B. J.

The old sec. cor. a post with 2
bearing trees bears N. 13.00 chs
dist. I obliterate the marks
on post & trees

Land rough & mountainous

Soil sandy loam 2nd rate

Heavily timbered with fir & tamaracs

Dense undergrowth of mountain Laurel

Re-survey of the Base Line, through Range 34 East

326

of T.

R.

Willamette Meridian, Oregon.

West

on Base Line on S. boundary of Sec. 33
 Var. $20\frac{1}{4}^{\circ}$ E.

Ascend through timber

10.00

Top of ridge, about 100 ft. above cor., course N. W.

32.50

A spring branch, 2 lbs wide, runs N. W.

40.00

Set a post 3 ft. long, 3 ins square, 24 ins
 in the ground, for $\frac{1}{4}$ sec. cor. marked $\frac{1}{4}$ S. B.D.
 on N. face, from which

A fir 7 ins diam. bears N. 45° E. 16 lbs dist.
 marked $\frac{1}{4}$ S. B.D.

A fir 3 ins diam. bears S. 50° W. 17 lbs dist.
 marked $\frac{1}{4}$ S. B.D.

80.00

I could find no trace of the old $\frac{1}{4}$ sec. cor.
 Set a post 4 ft. long, 4 ins square, 24 ins
 in the ground, for cor. to Secs 32 + 33,
 marked

B.L. 31 N. R. 34 E. on N.

S 33 on E. and

S 32 on N. faces, with 4 notches

on E. + 2 notches on N. faces, from which

A tamarack 15 ins diam. bears N. 55° E. 15 lbs
 dist. marked 31 N. R. 34 E. S 33. B.D.

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Re-survey of the Base Line through Range 37 East -
of T. R. 327
Willamette Meridian, Oregon.

A fir 10 ins diam base S. 17° W. 26 lbs
diam. marked J. S. R 37 E. S 35 - B. D.

A tamarack 14 ins diam base N. 40° W. 26 lbs
diam. marked J. N. R 37 E. S 32 - B. D.

The old see cr. a badly decayed post
base N. 16.93 chs diam. I destroy this
post also the marks on old bearing
trees, 3 tamaracks

Land mountainous
Soil sandy loam 2nd rate
Heavily timbered with fir & tamarack
Dense undergrowth of young fir and
tamarack

Re-survey of the Base Line through Range 37 East

328

of T. ⁻¹⁰⁻

R.

Willamette Meridian, Oregon.

West

on Base Line on S. boundary of Sec. 32
 Va 20 1/2° E.

Through timber

1.00

A brook 4 lks wide, run N.W.

40.00

Set a post 3 ft. long, 3 ins square, 24 ins in
 the ground, for 1/4 sec. cor., marked ^{B.L.} 1/4 S. on N.
 face, from which

A fir 12 ins diam, bear N. 68° W. 15 lks
 dist., marked 1/4 S. B.L.

A fir 8 ins diam, bear S. 80° W. 32 lks
 dist., marked 1/4 S. B.L.

The old 1/4 sec. cor., a badly decayed
 post bear N. 19.38 the dist. I destroy
 this post also the marks on old
 bearing trees, a fir & pine

50.50

To top of ridge, course N.W.

78.00

Bottom of canon, about 600 ft. below
 ridge, course N.W.

78.50

Dry bed of creek, 25 lks wide, run N.W.

80.00

Set a post 4 ft. long, 4 ins square, 24 ins in
 the ground, for Cor. to Secs 31 & 32, marked
 B.L. J, N. R 34 E, on N.

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Re-survey of the Base Line, through Range 37 East
of T. R. 329

Willamette Meridian, Oregon.

S 32 on E. end

S 31 on N. faces, with 5 notches on E.
and 1 notch on N. faces, from which

A fir 10 ins diam. bears N. 80° E. 50 lbs
dist. marked S, N. R 37 E. S 32. B. D.

A pine 10 ins diam. bears S. 50° E. 46 lbs dist.
marked S, S. R 37 E. S 6. B. D.

A fir 7 ins diam. bears N. 20° N. 72 lbs.
dist. marked S, N. R 37 E. S 31. B. D.

The old rec-en. a post bears N.
22.60 the dist. I destroy this post
also the marks on old bearing trees
3 firs -

Land mountainous
Soil good sate

Heavily timbered with fir, pine
stamaraed

Dense undergrowth of fir, pine
stamaraed

Re-survey of the Base Line through Range 37 East
 of T. ¹² R.

Willamette Meridian, Oregon.

- 330
- West on Base Line of S. boundary of Sec. 31
 Va. $20\frac{1}{2}^{\circ}$ E
- Ascend mountain
- 29.00 Top of ridge, about 600 ft. above sea level.
 course S-E -
- 40.00 Set a baralt line 19 x 10 x 7 in 14 in
 in the ground, for $\frac{1}{4}$ sec. cr., marked ^{B.D.} $\frac{1}{4}$ on
 N. face from which
 A cherry 3 in diam. bears N. 50° E. 15 lb
 dist., marked $\frac{1}{4}$ S. B.D. -
 no other tree within limits and raised
 a mound of stones along side
 The old $\frac{1}{4}$ sec. cr., a badly decayed
 post, bears N. 23° 10 the dist. I
 destroy the post and obliterate the
 marks on old bearing trees
- 46.50 Bottom of gulch, about 200 ft. below ridge.
 course S-E -
- 103.45 The Cor. to Twp 1 N., R. 36 & 37 E.
 which is a post 4 in square, marked
 S 31 T, N. 37 E. on N.E.
 S 36 T, N. R. 36 E. on N.W. with 6 notches

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Re-survey of the Base Line. Through Range 37 East
of T. R. 331

Willamette Meridian, Oregon.

- on N. E. + W. edges. from which
- A hemlock 14 in diam. bears N. 10° E. 46 loc
dist. marked J. N. R 37 E. S 31. B. J.
 - A hemlock 12 in diam. bears N. 20° W. 22 loc
dist. marked J. N. R 36 E. S 36. B. J.
 - A hemlock 10 in diam bears S. 35° W. 26 loc
dist. marked J. S. R 36 E. S 1. B. J.

Land mountainous

Soil 2nd + 3rd rate

Heavily timbered with fir, tamarac
spruce

August 29th 1882

— General Description —

This line runs along the north slope
of the Blue Mountains. The townships
on each side are rough & broken, but
contain large groves of fir, tamarac
spruce timber of fair quality and some
streams of pure, clear water.

Herward D. Graden

U. S. Deputy Surveyor

FINAL OATHS FOR SURVEYS.

A list of the names of the individuals employed by Arman D. Gradin, U. S. Deputy Surveyor, to assist in running, measuring and marking the lines and corners described in the foregoing field notes of the survey of the Base Line through Ranges 36 + 37 lines of East Willamette Meridian, Oregon, showing the respective capacities in which they acted :

- Abraham Blanchard, Compassman.
- Henry King, Chainman.
- Albert Campbell, Chainman.
- Henry Pinto, Chainman.
- Geo. W. Huitt, Axeman.
- _____, Axeman.
- _____, Flagman.

FINAL OATHS OF ASSISTANTS

We hereby certify that we assisted Arman D. Gradin, U. S. Deputy Surveyor, in surveying all those parts or portions of the resurvey of the Base Line through Ranges 36 + 37 East

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.

- _____, Compassman.
- Abraham Blanchard, Chainman.
- Henry King, Chainman.
- Albert Campbell, Chainman.
- Henry Pinto, Chainman.
- Geo. W. Huitt, Axeman.
- _____, Axeman.
- _____, Flagman.

Subscribed and sworn to before me, this twenty fourth day of September 1882

[SEAL.]

Arman D. Gradin
Notary Public

FINAL OATH OF DEPUTY SURVEYOR.

I, Heruan D. Gradin

United States Deputy Surveyor do solemnly swear that in pursuance of in-

structions received from James C. Tolman

U. S. Surveyor General for Oregon, bearing date of the 16th

day of June, 1882 I have well, faith-
fully and truly, in my own proper person, and in strict conformity with
the instructions furnished by the U. S. Surveyor General for Oregon, the
Surveying Manual, and the laws of the United States, surveying all those

parts or portions of the Base Line
through Ranges 36 + 37 East

Willamette Meridian, in the State of Oregon, as are represented in the fore-
going 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 Surveying Manual,
printed instructions, 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 pro-
visions of an Act of Congress approved August 8, 1846.

Heruan D. Gradin
U. S. Deputy Surveyor.

Subscribed and sworn to before me, this 22^d

day of December 1882

Bamford Robt
Notary Public

Office U. S. Surveyor General,Portland, Oregon, *March 31,* 188*3*

The following Field Notes of the Survey of the resurvey
of the Base Line through Ranges
36 and 37 E., Will. Meridian,
Oregon

executed by *Herman D. Gradon*

under his Contract No. *457*, dated *June*
16th 188*2*, having been critically examined, the

necessary corrections and explanations made, the said field notes
and the survey they describe, are hereby approved.

James C. Tolman
Surveyor General.

