

FIELD NOTES
PUBLIC SURVEY

563 . 3033

VOL. 400

1908

VOLUME 400.

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RECEIVED S. G. O.
FEB 16 1912
CHEYENNE, WYO.

BOOK No. C

RECEIVED S. G. O.
JAN 13 1909
CHEYENNE, WYO.

FIELD NOTES

OF the survey of

The 15th and 16th Sts. Parallel N. through Road 11, the lines of

Township from 1st of 1st of 1st 15th St. Parallel N. through

Range 104th to the survey and return of a portion of the 10th
Under Meridian East, through 1st 5th N. to 1st 10th and 105
West of the Sixth Principal Meridian in Wyoming.

and retraced

RE SURVEYED BY

Orant and Vance, United States Deputy Surveyors

Under contract No. 328, dated September 5, 1907

Survey commenced June 16, 1908

and retracement
Survey completed July 15, 1908

INDEXED

clw

Platted by _____, 190____

Copied for Washington by _____, 190____

Copied for Register by _____, 190____

Transcribed by Carrie C. Fowler, 1908
Jan

W.K.G.W.

J.H.L.

3685

NAMES AND DUTIES OF ASSISTANTS.

David L. Schaper Chainman.
Daniel J. Luttgen Chainman.
Charles H. Mendenhall Chainman.
Bruce E. Olmstead Chainman.

..... Axman.
Henry J. Trump Moundsman.

.....
Ben McNeil Flagman.
..... Flagman.
.....
.....
.....

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Township..... Range.....

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PRELIMINARY OATHS OF ASSISTANTS.

We, *David H. Schafer, Samuel J. Hutton,*
Charles A. Mendenhall and Bruce E.

and *Olmsted,*

do solemnly swear that we will well and faithfully execute the duties of chain carriers; that we will level the chain upon 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 instructions given us, in

the survey of the *12th and 13th Standard Parallel North*
through Range 104 N, the retracement of a portion of
the 12th Standard Parallel North, through Range
104 West, and the retracement and survey of a portion
of the 13th Guide Meridian West, through Townships
52 North, bet. Range 104 and 105 West

David H. Schafer, Chainman.

Samuel J. Hutton, Chainman.

Charles A. Mendenhall, Chainman.

Bruce E. Olmsted, Chainman.

Subscribed and sworn to before me this *16th*

day of *June*, 190*5*

Samuel W. Brent

U. S. Deputy Surveyor.

We, *G. Henry G. Trump*

do solemnly swear that we will well and truly perform the duties of
 axman and moundsman, in the establishment of corners, and other
 duties, according to instructions given ^{me} us and to the best of ^{my} our skill
 and ability, in the ^{re} survey of the *12th and 13th Standard*
Parallels North, through Range 104 West, the retrac-
ment of a portion of the old 13th Standard Parallel
North through Range 104 West, and the retracement
and recovery of a portion of the 13th Guide Meridian
West through Township 62 North, bet Ranges 104
and 105 West

, Axman.

Henry G. Trump

, Moundsman.

Subscribed and sworn to before me this

14th

day of

June

, 190*8*

Samuel W. Burnett

U. S. Deputy Surveyor.

I, Ben McNeill

do solemnly swear that I will well and truly perform the duties of
 flagman according to instructions given me, to the best of my skill and
 ability, in the ^{re} survey of the 12th and 13th Standard Par-
allels North, through Range 10d West; the retracement
of a portion of the old 13th Standard Parallel North
through Range 10d West; and the retracement and re-
survey of a portion of the 13th Guide Meridian West,
through Township 57 North, bet. Ranges 10d and 10e
West.

Ben McNeill, Flagman.

Subscribed and sworn to before me this 16th

day of June, 1908.

Samuel W. Brent

U. S. Deputy Surveyor.

[SEAL.]

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12th Standard Parallel North

31	32	33	34	35	36
11	7	9	6	4	3

T. 104 N

13th Standard Parallel North

31	32	33	34	35	36
20	19	17	16	14	13

Old 15th
Stand Par
North

31	32
23	23

134 6

T. 104 N

T. 52 N

24.25
13th Guide
Meridian N

Chains.

Resurvey of
13th Standard Parallel North,
through Range 10th West.

Survey commenced *June 16, 1908* and executed with a W. and L. E. Gurley solar compass.

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 latitude and declination arcs. The instrument was examined, tested on the true meridian at Cheyenne, found correct, and was approved by the surveyor general for Wyoming.

Near the stand. cor. of T₁ 53 N. R. 103 and 10th T.

latitude $44^{\circ}31'$ N., longitude $109^{\circ}19'$ W.; I set off $44^{\circ}31'$ N. on the lat. arc; $23^{\circ}23'22''$ on the decl. arc; and at $3^{\text{h}}05^{\text{m}}$ p. m., l. m. t., determine with the solar a meridian and mark a point thereof, on a stone firmly set in the ground, 5 chs. N. of the cor.

At $5^{\text{h}}47^{\text{m}}$ p. m., l. m. t., I observe Polaris at elongation, in accordance with Manual of Instructions, and mark a point in the line thus determined on a peg driven in the ground, 5 chs. N. of my station.

June 16, 1908

Summary of
13th Standard Parallel North,
through Range 10th West.

Chains.

June 17: At 7^h a. m., l. m. t., I lay off the azimuth of Polaris, 25° to the west., and mark the meridian thus determined, by cutting a small groove in the stone set June 16, on which the meridian falls 0.7 ins. east of mark determined by the solar.

At 7^h 15^m a. m., l. m. t., I set off $44^{\circ} 21' 71''$, on the lat. arc; $23^{\circ} 25' 71''$, on the dec. arc; and mark a point in the meridian determined with the solar, by a cross on the stone already set 5 chs. N. of my station; this mark falls 0.1 ins. east of the meridian line fixed by the Polaris observation. The solar apparatus, by p. m. and a. m. observations, defines positions for meridians established by the Polaris observations; therefore, I conclude that the adjustments of the instrument are satisfactory.

The magnetic bearing of the true meridian, at 7^h a. m.: is N. $18^{\circ} 36'$ W., the angle thus determined gives the mag. decl. $18^{\circ} 36'$ E.

TRANSCRIBED COPY OF
ORIGINAL FIELD NOTES

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Running of
Standard Parallel North,
through Range 104 West.

Chains

June 17: At 7^h a.m.l.m.t, I lay off the azimuth of Polaris, 25' to the West; and mark the meridian thus determined, by cutting a small groove in the stone set. June 16 On which the meridian falls 0.2 ins. east of the mark determined by the solar.

At 7^h 15^m a.m.l.m.t, I set off 44° 31' 7". on the lat. arc; 25° 25' N. on the decl. arc; and mark a point in the meridian determined with the solar, by a cross on the stone already set 5 chs. N. of my station; this mark falls 0.1 ins. east of the meridian established by the Polaris observation.

The solar apparatus, by p.m. and a.m. observations, defines positions for true meridians, established by the Polaris observations; herefore, I conclude that the adjustments of the instrument are satisfactory.

The magnetic bearing of the true meridian, at 7^h a.m.; is N. 7° 12' W., the angle thus determined gives the mag. decl. 15° 36' E.

Recovery of
12th Standard Parallel North,
through Range 104 West.

INDEXED
C. 100

July 18: At 5¹⁰ a. m., l. m. t., I set off
S. 10° 10' N., on the lat. arc; 21° 52' 11" on the decl.
arc; and determine a meridian with the solar, at the ^{stand} cor. of
Sp. 49 N., Re. 103 and 104 N., which I find
marked and witnessed as described by the sur-
veyor general.

Thence I run.

That is to say, as follows.

Over mountainous land exceptionally difficult to survey.
Ascend.

Intersect line 1, private land claim, Tract No. 137, at a
point 10.57 chs. North of cor. No. 2.

Difference bet. measurements of 40.00 chs., by two sets
of chainmen, is 06 lbs.; position of middle point

By 1st set, 40.00 chs.

By 2nd set 39.97 chs.; the mean of which is

40.00 Set a sand stone 30 x 11 x 4 ins., 15 ins. in the
ground for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on N. face; and raise a
mound of stone 2 ft. base, 1 $\frac{1}{2}$ ft. high, N. of cor.

Point of spur falls N. and descend.

That course N. 45° E. and ascend

Difference bet. measurements of 80.00 chs., by two sets
of chainmen, is 10 lbs.; position of middle point

By 1st set, 79.95 chs.

By 2nd set 80.05 chs.; the mean of which is

Resurvey of
 12th Standard Parallel North,
 through Range 104 West.

Chains.

80.00

Set a granite stone, 20 x 12 x 10 ins., 15 ins. in the ground, for standard cor. of secs. 35 and 36, marked S. C. on N.; with 7 grooves on E., and 5 grooves on

It faces, from which

A *fine*, 24 ins. dia., bears N. 28° E. "

429 lks. dist., marked T 49 N R 104 W S 36 B T.

A *fine*, 11 ins. dia., bears N. 15° 05' E. "

300 lks. dist., marked T 49 N R 104 W S 36 B T.

No tree available in sec. 35.

Land, mountainous.

Soil, rocky; 4th rate.

No Timber.

Mountainous land exceptionally difficult
 to survey 80.00 chs.

July 13: At this cor. I set off 21° 50' N.,
 on the decl. arc; and observe the sun on the meridian; the
 resulting lat. is 44° 10'.

Next on S. by sec. 35

Over mountainous land exceptionally
 difficult to survey.

Ascend.

0.25

Top of ridge bears N 40° E and Descend.

17.35

Enter timber land N. and S.

18.50

Gulch course N. 4. and ascend

Resurvey of
12th Standard Parallel North,
through Range 10th West.

Chains.

	<i>Tract</i>
75.97	Intersect line 3 - 4 private land claim, Lot No. 37 at a point 0.5 chs. North of cor. No. 3 and Set a granite stone 16 x 8 x 7 ins., 11 ins. in the ground for closing cor. of frac. sec. 35 marked
	CC on N., 37 on E.; with 6 grooves on N. face; from which
	A fine, 14 ins. dia., bears N. 74° 35' W. 55 lks. dist., marked T 49 N R 10 W S 35 B T.
37.70	To edge of rim rock bears N. W. and S. E.
37.55	Point of spur falls N. and descend.
	Difference bet. measurements of 40.00 chs., by two sets of chainmen, is 0.00 lks.; position of middle point
	By 1st set, 37.70 chs.
	By 2nd set 40.00 chs.; the mean of which is
40.00	Set a granite stone 16 x 12 x 6 ins., 10 ins. in the ground for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on N. face; from which
	A fine, 7 ins. dia., bears N. 45° E. 50 lks. dist., marked $\frac{1}{4}$ S 35 B T.
	A fine, 8 ins. dia., bears N. 3° 26' W. 50 lks. dist., marked $\frac{1}{4}$ S 35 B T.
44.85	Wire fence bears N. 70° W. and S. 70° E.
50.10	Wire fence bears N. 70° E. and S. 70° W.
53.80	Large timber bears N. 10° E. and S. 10° W.
55.90	Grat corner N. 15° E. and ascend
56.40	Wire fence bears N. 45° W. and S. 45° E.

Resurvey of
 12th Standard Parallel North,
 through Range 104 West.

Chains.

20.00 Point of spur falls *N* and descend.
 79.75 Enter scattering timber here *N. 10° N. and S. 10° E.*
 Difference bet. measurements of 80.00 chs., by two sets
 of chainmen, is 0.2 lks.; position of middle point

By 1st set, 80.01 chs.

By 2nd set 79.96 chs.; the mean of which is

80.00 Set a granite stone, 12 x 10 x 8 ins., 8 ins. in the
 ground, for standard cor. of secs. 34 and 35, marked

S.C. on N.; with 2 grooves on E., and 1 groove on
N. face, from which
 A spruce, 36 ins. dia., bears *N. 82° 45' E.*
 50 lks. dist., marked T 49 N R 104 W S 35 B T.

A spruce, 10 ins. dia., bears *N. 69° N.*
 111 lks. dist., marked T 49 N R 104 W S 34 B T.

Land, mountainous.

Soil, rocky; 4th rate.

Timber, *pine and spruce.*

Mountainous land exceptionally difficult
 to survey 80.00 [✓] chs.

July 13, 1908

July 14: At 9¹⁶ a. m., l. m. t., I set off
 21° 00' N., on the lat. arc; 21° 42' N. on the decl.
 arc; and determine a meridian with the ^{stand} solar, at the cor. of

secs. 34 and 35.

Thence I run.

West on S. by sec. 34.

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Chamney

12th Standard Parallel North,
through Range 104 West.

Chains

78.00

Point of spur falls *N* and descend.

79.25

Enter morning timber here N. 10° W. and S. 10° E.

Difference bet. measurements of 50.00 chs., by two sets of chainmen, is 08 lls.; position of middle point

By 1st set, 50.04 chs.

By 2nd set 77.96 chs.; the mean of which is

80.00

Set a *granite* stone, 12 x 10 x 8 ins., 8 ins. in the ground, for standard cor. of secs. 34 and 25, marked S.C. on N.; with 2 grooves on E., and 4 grooves on *W. face from which*

A *spike*, 36 ins. dia., bears *N. 84° 45' E* 20 lls. dist., marked T 49 N R 104 W S 35 B T.

A *spike*, 10 ins. dia., bears *N. 69° W* 111 lls. dist., marked T 49 N R 104 W S 34 B T.

Land, mountainous.

Soil, rocky; 4th rate.

Timber, *pine and spruce*

Mountainous land exceptionally difficult to survey 50.00 chs.

July 13, 1908

July 14: At 7¹⁵ a. m., l. m. t., I set off *40° 50'* N., on the lat. arc; *21° 42'* N. on the decl. arc; and determine a meridian with the solar, at the cor. of *sec. 34 and 35*

Thence I run.

then on S. by sec. 34

Over mountainous land exceptionally difficult to survey.

Through scattering timber
Descend.

8.00 Loose timber beam N. 60° E. and S. 50° W.

3.30 Gulch course N. 80° E and ascend.

11.00 Point of spur falls *N* and descend.

20.00 Gulch course $N. 30^{\circ} E$ and ascend.

38.30 Top of ridge bears *R. 45° E* and *S. 45° W* and descend.

By 1st set, 40.06 chs.

40.00 Set a granite stone 18 x 10 x 8 ins., 17 ins. in the
stand ground for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on N. face; and raise a
mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor.

By 1st set, 80.05% chs.

TRANSCRIBED COPY OF ORIGINAL FIELD NOTES 407

Resurvey of
1st Standard Parallel North,
through Range 104 West.

Chains.

Over mountainous land exceptionally
difficult to survey.

Through scattering timber

Descend.

8.00

Raise timber line $N. 80^{\circ} E$ and $S. 80^{\circ} W$

2.20

Gulch course $N. 70^{\circ} E$ and ascend.

11.00

Point of spur falls $N.$ and descend.

16.00

Gulch course $N. 30^{\circ} E$ and ascend.

32.30

Top of ridge bears $N. 40^{\circ} E$ and $S. 40^{\circ} W$ and descend.

Difference bet. measurements of 40.00 chs., by two sets
of chainmen, is 12 lks.; position of middle point

By 1st set, 40.06 chs.

By 2nd set 39.94 chs.; the mean of which is

40.00

Set a ^{granite} stone $18 \times 10 \times 8$ ins., 17 ins. in the
_{stand} ground for $\frac{1}{2}$ sec. cor., marked $\frac{1}{2}$ on $N.$ face; and raise a
_{S.C} mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high, $N.$ of cor.

57.55

Gulch course $N.$ and ascend.

64.00

July 14 At this ^{point} cor. I set off $24\frac{1}{2}^{\circ}$ $N.$,
on the decl. arc; and observe the sun on the meridian; the
resulting lat. is $44^{\circ} 10'$

74.25

Top of ridge bears $N. 30^{\circ} E$ and $S. 30^{\circ} W$ and descend.

Difference bet. measurements of 80.00 chs., by two sets
of chainmen, is 11 lks.; position of middle point

By 1st set, 80.05 chs.

By 2nd set 79.95 chs.; the mean of which is

Resurvey of
15th Standard Parallel North,
through Range 104 West.

Chains.

50.00	Set a <i>granite</i> stone, 10 x 10 x 7 ins., 10 ins. in the ground, for standard cor. of secs. 33 and 34, marked S. C. on N.; with 3 grooves on E., and 3 grooves on W. face; and raise a mound of stone, 2 ft. base, 1½ ft. high N. of cor.
	Land, mountainous.
	Soil, rocky; 4th rate.
	Timber. <i>pine</i>
	Mountainous land exceptionally difficult to survey 50.00 chs.
	<i>Not on S. body, sec. 33.</i>
	Over mountainous land exceptionally difficult to survey.
	Descend.
5.35	Gulch course N. and ascend.
35.00	<i>Summit of high divide between N. E. and S. W. and descend.</i>
	Difference bet. measurements of 40.00 chs., by two sets of chainmen, is 09 fms.; position of middle point
	By 1st set, 40.00 chs.
	By 2nd set, 39.91 chs.; the mean of which is
40.00	Set a <i>conglomerate</i> stone 10 x 10 x 6 ins., 10 ins. in the ground for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on N. face; and raise a mound of stone 2 ft. base, 1½ ft. high, N. of cor.

Resurvey of
 12th Standard Parallel North,
 through Range 104 West.

Chains.

- 58.95 Gulch course *S* and ascend.
- 72.45 Point of spur falls *S 50° W* and descend *abruptly*
- Difference bet. measurements of 80.00 chs., by two sets of chainmen, is 06 lks.; position of middle point
- By 1st set, 79.97 chs.
- By 2nd set 80.00 chs.; the mean of which is
- 80.00 Set a *granite* stone, 17 x 10 x 7 ins., 12 ins. in the ground, for standard cor. of secs. 32 and 33, marked S. C. on N.; with 2 grooves on E; and 2 grooves on W. face; and raise a mound of stone, 2 ft. base, 1½ ft. high N. of cor.
- Land, mountainous.
- Soil, rocky; 4th rate.
- No* Timber.
- Mountainous land exceptionally difficult to survey 80.00 chs.

July 1st, 1905.

July 1st: At 7:30 a. m., l. m. t., I set off *July 1st* N., on the lat. arc; 21° 33' 11" on the decl. arc; and determine a meridian with the solar, at the ^{stand} cor. of sec. 32 and 33. Thence I run. *East on S. by sec. 32.*

Over mountainous land exceptionally difficult to survey.

Descend.

Resurvey of
12th Standard Parallel North,
through Range 104 West.

Chains.

13.90	Creek course $D \rightarrow N$ and ascend
27.00	Point of spur falls D and descend.
30.50	Descend abruptly, over slick rock bearing N and S .
	Difference bet. measurements of 40.00 chs., by two sets of chainmen, is 06 lks.; position of middle point
	By 1st set, 39.97 chs.
	By 2nd set 40.03 chs.; the mean of which is
40.00	Set a granite stone 16 x 10 x 7 ins., 11 ins. in the ground for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on N . face; and raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high, N . of cor.
41.75	Creek course $S. 30^{\circ} E$ and ascend
58.50	Point of spur falls D and descend.
68.50	Left scattering timber bears N and S .
71.50	Creek course D and ascend
	Difference bet. measurements of 80.00 chs., by two sets of chainmen, is 10 lks.; position of middle point
	By 1st set, 80.00 chs.
	By 2nd set 79.95 chs.; the mean of which is
80.00	Set a granite stone, 18 x 12 x 9 ins., 12 ins. in the ground, for standard cor. of secs. 31 and 32, marked S. C. on N.; with 5 grooves on E., and 1 grooved on N . face; from which
	A spur, 12 ins. dia., bears $N. 41^{\circ} 38' E$ 125 lks. dist., marked T 47 N R 10 W S 31 B T.
	A spur, 12 ins. dia., bears $N. 51^{\circ} 10' E$ 125 lks. dist., marked T 49 N R 10 W S 31 B T.

Resurvey of

12th Standard Parallel North,
through Range 10th West.

Chains.

Land, mountainous.

Soil, rocky; 4th rate.

Timber *pine and spruce*

Mountainous land exceptionally difficult
to survey 50.00 chs.

July 15. At this cor. I set off $21^{\circ}32'$ N.,
on the decl. arc; and observe the sun on the meridian; the
resulting lat. is $44^{\circ}10'27''$

Heat on S. body now 31.

Over mountainous land exceptionally
difficult to survey.

Through scattering timber
Ascend.

2.00 Point of spur falls *S* and descend.

10.00 *Break course S and ascend*

Difference bet. measurements of 40.00 chs., by two sets
of chainmen, is 0.6 lks.; position of middle point

By 1st set, 40.00 chs.

By 2nd set 39.97 chs.; the mean of which is

40.00 Set a *granite* stone $20 \times 10 \times 10$ ins., 15 ins. in the
ground for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on *N.* face, *from which*

A *pine*, 12 ins. dia., bears $N. 40^{\circ}10' N.$
70 lks. dist., marked $\frac{1}{4}$ S 31° B. T.

A *pine*, 15 ins. dia., bears $N. 17^{\circ} N.$
50 lks. dist., marked $\frac{1}{4}$ S 31° B. T.

Resurvey of
13th Standard Parallel North,
through Range 10th West.

Chains.

47.85	Leave corner D and ascend
77.80	North Fork of Piney Creek corner S. 45° E. and ascend
98.00	Leave timber line off N. and S.
110.00	Ascend abruptly over slide rock bearing N. and S.
126.00	Top of ridge bears N. N. and S. E. and descend. Leave slide rock bears N. N. and S. E.

Difference bet. measurements of 137.36 chs., by two sets
of chainmen, is 23 lks.; position of middle point

By 1st set, 137.24 chs.

By 2nd set, 137.47 chs.; the mean of which is

137.36	Intersect the 13th Guide Meridian West at a point 19.00 chs. North of the stand. cor. of Sp. 49 N. R. 104 and 105 W., which I find marked and intersected as de- scribed by the survey general, which cor. belongs to a cor. common to Sp. 49 N. R. 105 W. and Set a granite stone 12 x 12 x 10 in., 15 in. in the ground, for stand closing cor. of Sp. 49 N. R. 104 W. marked S. 49 N. or N. 49° 15' W. in E. with 6 grooves on N. face; and raise a mound of stone, 2 ft. base, 1½ ft. high, E. of cor.
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Land, mountainous.

Soil, rocky; 4th rate.

Timber, fine

Mountainous land exceptionally difficult

to survey 137.36 chs.

July 15, 1908

Resurvey of
1st Standard Parallel North,
through Range 104 West.

Chains.

June 17. At 8^h 30^m a. m., i. m. t., I set off
N., on the lat. arc; 23° 02' N. on the decl.
arc; and determine a meridian with the solar, at the ^{stand} cor. of
Sp. 55 N., Range and 104 W., which I find marked
and witnessed as described by the survey general.
Thence I run.

West on D. bdy. sec. 36.

Over mountainous land.

Ascend.

39.50 Top of ridge bears N. 10° E. and 0.10 N. and descend.

Difference bet. measurements of 10.00 chs., by two sets
of chainmen, is 0.2 lks.; position of middle point

By 1st set, 10.00 chs.

By 2nd set 39.98 chs.; the mean of which is

40.00 Set a ^{line} ^{stand} stone 18 x 12 x 7 ins., 12 ins. in the
ground for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on N. face; from which

A ^{fine} ^{stand} , 6 ins. dia., bears N. 10° 50' E.
28 lks. dist., marked $\frac{1}{4}$ S 36 B. T.

A ^{fine} ^{stand} , 4 ins. dia., bears N. 52° E.
96 lks. dist., marked $\frac{1}{4}$ S 36 B. T.

46.00 Point of spur falls N. and descend.

Enter scattering timber line N. and S.

55.00 Head of Gulch course S. E. and ascend. abruptly

62.80 Ridge of rim rock 30 ft. high bears N. 80° E. and 0.50 N.

68.00 Point of spur falls S. and descend. abruptly

71.60 Gulch course S. E. and ascend. abruptly

TRANSCRIBED COPY OF ORIGINAL FIELD NOTES

413

1st Standard Parallel North,
through Range 104 West.

Chains.

June 17: At 8^h 30^m a. m., l. m. t., I set off
44° 34' N., on the lat. arc; 25° 14' 11" on the decl.
arc; and determine a meridian with the solar, at the ^{stand} cor. of
Tps. 33 N., R. 103 and 104 W., which I find marked
and witnessed as described by the surveyor general.
Thence I run.

West on D. by m. 36.

Over mountainous land.

Ascend.

29.50 Top of ridge bears N. 10° E. and 10° W. and descend.

Difference bet. measurements of 4000 chs., by two sets
of chainmen, is 0.4 lks.; position of middle point

By 1st set, 4007 chs.

By 2nd set 3998 chs.; the mean of which is

4000

Set a ^{stand} line stone 18 x 12 x 7 ins., 17 ins. in the
ground for $\frac{1}{2}$ sec. cor., marked $\frac{1}{2}$ on N. face; from which

A ^{stand} fine, 6 ins. dia., bears N. 10° 58' W.
40 lks. dist.; marked $\frac{1}{2}$ S 36 B. T.

A ^{stand} fine, 4 ins. dia., bears N. 52° W.
96 lks. dist.; marked $\frac{1}{2}$ S 36 B. T.

46.00

Point of spur falls N. and descend.

Enter ascending timber line N. and E.

50.30

Head of Gulch course D. W. and ascend. slightly

64.80

2nd of fine road 20 ft. high line N. 10° E. and 10° W.

68.00

Point of spur falls and descend. slightly

71.00

Gulch course D. W. and ascend. slightly

Resurvey of

13th Standard Parallel North,
through Range 104 West.

Chains.

76.00 Point of ^{rocky} spur falls *D* and descend.
 Difference bet. measurements of 80.00 chs., by two sets
 of chainmen, is 08 lks.; position of middle point
 By 1st set, 80.04 chs.
 By 2nd set 79.96 chs.; the mean of which is

80.00 Set a *lime* stone, 15 x 10 x 6 ins., 10 ins. in the
 ground, for standard cor. of secs. 35 and 36, marked
 S. C. on N.; with 1 groove on E. and 5 grooves on
It faces; from which
 A *pine*, 6 ins. dia., bears N. 68° 40' E.
 58 lks. dist., marked T 53 N R 104 W S 36 B T.
 A *pine*, 7 ins. dia., bears N. 31° 34'
 36 lks. dist., marked T 53 N R 104 W S 35 B T.

Land, mountainous.

Soil, rocky; 4th rate.

Timber *pine*

Mountainous land 80.00 - chs.

Start on S. 36y. sec. 35

Over mountainous land.

Ascend.

high rocky

84.75 Top of *ridge* bears N 15° W and S 15° E and descend. *abruptly*
Some timber bears N 15° W and S 15° E

Difference bet. measurements of 40.00 chs., by two sets
 of chainmen, is 06 lks.; position of middle point

By 1st set, 40.03 chs.

By 2nd set 39.97 chs.; the mean of which is

Resurvey of

132 Standard Parallel North,

through Range 102 West.

Chains.

- 40.00 Set a *line* stone $17 \times 14 \times 5$ ins., 17 ins. in the
stand ^{S.C.} ground for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on N. face; from which
 A *pine*, 12 ins. dia., bears $N. 71^{\circ} E$
 25.7 lks. dist., marked $\frac{1}{4}$ S 35 B. T.
 A *pine*, 7 ins. dia., bears $N. 23^{\circ} 15' W$
 25.5 lks. dist., marked $\frac{1}{4}$ S 35 B. T.

June 17: At this cor. I set off $23^{\circ} 15' N.$,
 on the decl. arc; and observe the sun on the meridian; the
 resulting lat. is $41^{\circ} 31' N.$ ✓

48.00 Enter scattering timber between R and S.

75.00 Leave timber between R and S.

Difference bet. measurements of 80.00 chs., by two sets
 of chainmen, is 0.5 lks.; position of middle point

By 1st set, 79.97½ chs.

By 2nd set 80.02½ chs.; the mean of which is

- 80.00 Set a *line* stone, $18 \times 14 \times 5$ ins., 17 ins. in the
 ground, for standard cor. of secs. 32 and 33, marked
 S. C. on N.; with 2 grooves on E., and 2 grooves on
 W. face; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft.
 high N. of cor. from which
 A *pine*, 6 ins. dia., bears $N. 37^{\circ} E$
 10.9 lks. dist., marked T 53 N R 102 W S 35 B T.

No other tree available

Land, mountainous.

Soil, rocky; 4th rate.

Timber, *Pine*

Mountainous land 80.00 chs.

Resurvey of
13th Standard Parallel North,
through Range 104 West.

Chains.

West on S. ldy. sec. 24.
Over mountainous land.

Descend.

17.90 *Div. Road bears N. 70° W. and S. 20° E.*

78.46 *Gulch course S. 65° W. and ascend.*

Difference bet. measurements of 40.00 chs., by two sets
of chainmen, is 0.2 lks.; position of middle point

By 1st set, 39.98 chs.

By 2nd set 40.02 chs.; the mean of which is

40.00 *Set a granite stone 17 x 15 x 6 ins., 17 ins. in the
stand ground for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on N. face from which*

A cedar, 12 ins. dia., bears N 39° 35' E
100 lks. dist., marked $\frac{3}{4}$ S of B. T.

A pine, 12 ins. dia., bears N 37° 30' W
50 lks. dist., marked $\frac{1}{4}$ S of B. T.

118.865 *Rocky Gulch course S. W.*

154.10 *Inter. Creek 25 lks. wide; course S and ascend
abruptly.*

Leave mountainous land and

Enter mountainous land exceptionally

difficult to survey bears N and S

Difference bet. measurements of 80.00 chs., by two sets
of chainmen, is 10 lks.; position of middle point

By 1st set, 80.05 chs.

By 2nd set 79.95 chs.; the mean of which is

Recovery of
 13d. Standard Parallel North,
 through Range 104 West.

Chains.

50.00 Set a granite stone, 17 x 11 x 8 ins., 17 ins. in the ground, for standard cor. of secs. 33 and 32, marked S. C. on N.; with 3 grooves on E., and 3 grooves on W. face; and raise a mound of stone; 2 ft. base, 1½ ft. high N. of cor.

Land, mountainous.

Soil, rocky; 4th rate.

Timber.

Mountainous land exceptionally difficult to survey 25.90 chs.

Mountainous land 32.10 chs.

June 17, 1906

June 18; At 9^h 05^m a. m., l. m. t., I set off 23° 31' N., on the lat. arc; 23° 36' 30" on the decl. arc; and determine a meridian with the solar, at the ^{stand} cor. of secs. 33 and 32.

Thence I run.

West on S. by sec. 33.

Over mountainous land exceptionally difficult to survey.

Ascend.

20.00 Base of high rocky cliff bears N. and S. and Ascend abruptly.

29.00 Point of spur falls S. and descend abruptly.

Resurvey of
10th Standard Parallel North,
through Range 10th West.

Difference bet. measurements of 40.00 chs., by two sets of chainmen, is 09 lks.; position of middle point

By 1st set, 40.00 chs.

By 2nd set, 39.91 chs.; the mean of which is

40.00 Set a granite stone 15 x 11 x 6 ins., 10 ins. in the ground for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on N. face; from which

A for 24 ins. dia., bears N. 58° 30' W. 65 lks. dist., marked $\frac{1}{4}$ S 03 B. T.

A for 12 ins. dia., bears N. 40° 10' W. 100 lks. dist., marked $\frac{1}{4}$ S 03 B. T.

58.50 Along S edge of timber line N E

74.00 Ridge edge of timber line N

Difference bet. measurements of 80.00 chs., by two sets of chainmen, is 11 lks.; position of middle point

By 1st set, 80.00 chs.

By 2nd set, 79.91 chs.; the mean of which is

80.00 Set a granite stone, 16 x 14 x 5 ins., 11 ins. in the ground, for standard cor. of secs. 37 and 38, marked S. C. on N.; with 4 grooves on E., and 2 grooves on W. face; and raise a mound of stone, 2 ft. base, 1 1/2 ft. high N. of cor.

Land, mountainous.

Soil, rocky; 4th rate.

Timber. *pine*

Mountainous land exceptionally difficult to survey 80.00 chs.

Resurvey of
 13th Standard Parallel North,
 through Range 10th West.

June 18: At this cor. I set off $20^{\circ} 36'$ N.,
 on the decl. arc; and observe the sun on the meridian; the
 resulting lat. is $44^{\circ} 31' 20''$

Next on S. by. sec. 38.
 Over mountainous land exceptionally
 difficult to survey.

Ascend.

10.75 Top of ridge bears N. and S. and descend. *abruptly*

17.00 Draw course S. and ascend.

32.00 Base of high argillaceous ledge bears N. and S.

35.00 Top of high conglomerate ledge bears N. and S.

Difference bet. measurements of 40.00 chs., by two sets
 of chainmen, is 12 lks.; position of middle point

By 1st set, 40.06 chs.

By 2nd set 39.94 chs.; the mean of which is

40.00 Set a granite stone $15 \times 10 \times 6$ ins., 10 ins. in the
 ground for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on N. face; and raise a
 mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor.

From which

A fence, 7 ins. dia., bears $N 60^{\circ} 30' E$

12 lks. dist., marked $\frac{1}{4}$ S or B. T. *Northern tree western limits*

40.04 Point of spur falls S. and descend. *over rough*

broken surface

50.00 Gulch course S. and ascend.

61.30 Point of spur falls S. and descend.

Summary of
 13th Standard Parallel North,
 through Range 10th West.

Chains.

62.00 Gulch course *D* and ascend.
 73.50 Point of spur falls *D* and descend.
 Difference bet. measurements of 80.00 chs., by two sets
 of chainmen, is 10 lks.; position of middle point
 By 1st set, 79.75 chs.
 By 2nd set 80.00 chs.; the mean of which is
 80.00 Set a granite stone, 11 x 11 x 9 ins., 10 ins. in the
 ground, for standard cor. of secs. 31 and 32, marked
 S. C. on N.; with 5 grooves on E., and 1 groove on
 N. face; from which
 A *fine* 8 ins. dia., bears *N. 82° 47' E.*
 22 lks. dist., marked T 53 N R 10 W S 32 B T.
 A *fine* 11 ins. dia., bears *N. 21° 20' E.*
 22 lks. dist., marked T 53 N R 10 W S 32 B T.
 No tin available in sec. 31.
 Land, mountainous.
 Soil, rocky; 4th rate.
 No Timber.
 Mountainous land exceptionally difficult
 to survey 80.00 chs.

Start on S. by sec. 31.

Over mountainous land exceptionally
 difficult to survey.

Ascend.

23.00 Point of ^{rocky} spur falls *D* and descend.

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Summary of
1st Standard Parallel North,
through Range 104 West.

64.00

Gulch course *D* and ascend.

73.50

Point of spur falls *D* and descend.

Difference bet. measurements of 80.00 chs., by two sets
of chainmen, is 10 lks.; position of middle point

By 1st set, 79.95 chs.

By 2nd set 80.00 chs.; the mean of which is

80.00

Set a *granite* stone, 14 x 11 x 9 ins., 10 ins. in the
ground, for standard cor. of secs. 31 and 32, marked
S. C. on N.; with 5 grooves on E., and 1 groove on

W. face; from which

A fine, 8 ins. dia., bears *N. 82° 47' E.*

22 lks. dist., marked T 53 N R 104 W S 32 B T.

A fine, 11 ins. dia., bears *N. 21° 46' E.*

24 lks. dist., marked T 53 N R 104 W S 32 B T.

No trees available in sec. 31.

Land, mountainous.

Soil, rocky; 4th rate.

No Timber.

Mountainous land exceptionally difficult
to survey 80.00 chs.

That is I lay in sec.

Over mountainous land exceptionally
difficult to survey.

Ascend.

22.00

Point of spur falls *D* and descend.

Resurvey of
13th Standard Parallel North.
through Range 10th West.

Chains.

- 32.00 Descend abruptly.
- 36.00 Enter timber land N and S
- Difference bet. measurements of 40.00 chs., by two sets of chainmen, is 06 lks.; position of middle point
- By 1st set, 39.97 chs.
- By 2nd set 40.03 chs.; the mean of which is
- 40.00 Set a granite stone 16 x 12 x 10 ins., 11 ins. in the ground for $\frac{1}{4}$ sec. cor., marked $\frac{30}{1}$ on N. face; from which
- A pine, 17 ins. dia., bears N. 12° 30' E. $\frac{30}{1}$ lks. dist., marked $\frac{30}{1}$ S 31, B. T.
- A pine, 16 ins. dia., bears N. 31° 25' W. $\frac{30}{1}$ lks. dist., marked $\frac{30}{1}$ S 31 B. T.
- 41.10 Creek on the side; course S 30° W
- 45.50 Leave timber land N and S
- 53.00 Enter heavy timber land N. and S.
- 54.45 Gulch course S
- 58.90 Creek on the side; course S and ascend
- 61.00 Top of ridge bears N. and S. and descend
- 62.80 Creek on the side; course S and ascend
- Difference bet. measurements of 80.00 chs., by two sets of chainmen, is 09 lks.; position of middle point
- By 1st set, 80.04 chs.
- By 2nd set 79.95 chs.; the mean of which is
- 80.00 Set a granite stone 16 x 9 x 6 ins., 11 ins. in the ground; for standard cor. of Tps. 33 N., R. 10 W. and 10th W., marked
- 80 33 N on N.,

Resurvey of
 13th Standard Parallel North,
 through Range 10th West.

10th W on E., and

105 W on W. face; with 0 grooves on N., E., and W. face;
 from which

A *pine*, 16 ins. dia., bears $N. 52^{\circ} 22' E.$ "
 37 lks. dist., marked T 53 N R 10th W S 31 B T.

A *pine*, 17 ins. dia., bears $N. 18^{\circ} 25' E.$ "
 110 lks. dist., marked T 53 N R 10th W S 31 B T.

No tree available in sec. 36, R. 105 N.

Land, mountainous.

Soil, rocky; 4th rate.

Timber. *pine*

Mountainous land exceptionally difficult
 to survey 80.00 chs.

June 15, 1908.

Retraiment of

Old 13th Standard Parallel North,

Chains.

through Range 104 West.

June 19: At 8^h 45^m a. m., l. m. t., I set off
 lat. $44^{\circ} 31'$ N., on the lat. arc; $23^{\circ} 27'$ N. on the decl.
 arc; and determine a meridian with the solar, at the closing
 cor. of Tps. 52 N., R. 104 and 105 W., which I find
 marked and witnessed as described by the survey
 general.

Thence I run.

West on S bdy. sec. 32.

35.70 The old stand. cor. of sec. 31 and 32, which I baton

West on S bdy. sec. 31

40.00 Am unable to find trace of 1/4 sec. cor.

50.00 Am unable to find trace of the stand. cor. of Tps.
 52 N., R. 104 and 105 W.
 near point

June 19: At this cor. I set off $23^{\circ} 27'$ N.,
 on the decl. arc; and observe the sun on the meridian; the
 resulting lat. is $44^{\circ} 31' 27''$

June 19, 1908

Retracement and recovery of
13th Guide Meridian West.

Chains.

through Tps. 52 N., bet. Rs. 104 and 105 W.

INDEXED
CWA

June 19, 1908.

From the true point for 1/2 sec. cor. bet. sec. 1 and 6, which point is 50 ch. N. of the corner cor. and which cor. I find marked and witnessed as described by the survey of general.

I run

North bet. secs. 1 and 6.
Over mountainous land exceptionally
difficult to survey.

Descend

Long break on the side, corner S E

50.90. The closing cor. of Tps. 52 N., Rs. 104 and 105 W., which I destroy. I also destroy the old 1/2 sec. cor. on S. bdy. of sec. 31, which I find 5.00 ch.

East of the closing cor. and
69.70. East of the corner, corner S E and S W
51.00. East of the corner, corner S E

95.57. I intersect the 13th Standard Parallel North at a point 5.07 ch. West of the stand. 1/2 sec. cor. on S. bdy. of sec. 31 and

Set a granite stone 22 x 12 x 8 in., 17 in. in the ground, for
closing cor. of Tps. 52 N., Rs. 104 and 105 W. marked
C. of 52 N. - S. 104 W. on E. and 105 W. on N., with
6 g. runs on S, E. and N. faces, from which
A. face, 6 ins. dia., bears S. 22° E.

62 lks. dist., marked T 52 N R 104 W S 6 B T.

A. face, 8 ins. dia., bears S. 22° 00' E.

67 lks. dist., marked T 52 N R 105 W S 1 B T.

TRANSCRIBED COPY OF ORIGINAL FIELD NOTES

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- Chains** Retracement and resurvey of **Ch**
13th Guide Meridian West.
through Tps. 52 N., bet. Rs.
104 and 105 W.
June 19, 1908.
From the true point for 1/4
sec. cor. bet. secs. 1 and 6,
which point is 50 lks. N. of
the witness cor. and which
cor. I find marked and
witnessed as described by the
surveyor general.
I run
North bet. secs. 1 and 6.
Over mountainous land
exceptionally difficult to
survey.
Descend.
- 30.90 Jim Creek 08 lks. wide, 3.
course S.E.
- 69.20 The closing cor. of Tp. 52
N., Rs. 104 and 105 W., which
I destroy. I also destroy
the old 1/4 sec. cor. on S.
bdy. of sec. 32, which I find
5.00 chs. East of the closing
cor. and
Enter timber bears N. 80° E.
and S. 80° W.
- 81.00 Creek 04 lks. wide; course
S.W.
- 85.57 Intersect the 13th Standard
Parallel North at a point
5.27 chs. West of the stand
1/4 sec. cor. on S. bdy. of
sec. 31 and
Set a granite stone 22 x 12 x
8 ins., 17 ins. in the
ground, for closing cor. of
Tps. 52 N., Rs. 104 and 105
W. marked C.C. 52 N. on S.,
104 W. on E., and 105 W. on
W., with 6 grooves on S., E.
and W. faces; from which
A pine, 6 ins. dia., bears S.
22° E., 62 lks. dist., marked
T 52 N R 104 W S 6 B.T.
A pine, 8 ins. dia., bears S.
42° 50' W. 67 lks. dist.,
marked T 52 N R 105 W S 1 B
T.

Retirement and recovery of
1st Guide Meridian West.

Chains.

through Tps. 5 & N., bet. Rs. 104 and 105 W.

Land, mountainous.

Soil, rocky; 4th rate.

Timber. *fine*

Mountainous land exceptionally difficult

to survey ^{85.57}~~4.27~~ chs.

June 19, 1908

June 19, 1908

Down the cor. of sec. 13 and 2d of 5 & N., R. 105 W.
previously changed from the cor. of sec. 13, 18, 19 and
2d.

Down

South to sec. 19 and 2d.

305

To Left Bank of North Fork of Shoreline River corner
E. line

Set a granite stone, 18 x 5 x 6 ins., 17 ins. in
the ground for meander cor. of frac. secs. 13 and 18,
marked M.C. 5 & N. on D., 10.4 It. on E. and 10.5 It. on
N., with 6 grooves on E. and N. faces, from which

A *pin*, 5 ins. dia., bears N. ^{M.C.} 58° 30' E.
16 lks. dist., marked T 5 & N R 105 W S 13 B T.

A *pin*, 7 ins. dia., bears N. ^{M.C.} 26° 30' E.
16 lks. dist., marked T 5 & N R 105 W S 13 B T.

OF TRANSCRIBED COPY OF ES ORIGINAL FIELD NOTES

425

Chains Retracement and resurvey of 13th Guide Meridian West. through Tps. 52 N., bet. Rs. 104 and 105 W.

Land, mountainous.

Soil, rocky; 4th rate.

Timber pine.

Mountainous land exceptionally difficult to survey 85.57 chs.

June 19, 1908

June 19, 1908

From the cor. of secs. 13 and 24 Tp. 52 N., R. 105 W., previously changed from the cor. of secs. 13, 18, 19 and 24.

I run

South bet. secs. 19 and 24.

3.85

To Left Bank of North Fork of Shoshone River course E. and Set a granite stone, 18 x 8 x 6 ins., 12 ins. in the ground for meander cor. of fracl. secs. 13 and 18, marked M.B. 52 N. on S., 104 W. on E. and 105 W. on W., with 6 grooves on E. and W. faces; from which

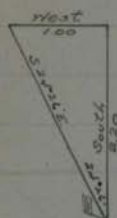
A pine, 5 ins. dia., bears N. $58^{\circ} 30'$ E., 184 lks. dist., marked T 52 N R 104 W S 18 N.C. B T.

A pine, 7 ins. dia., bears N. 46° W. 15 lks. dist., marked T 52 N R 105 W S 13 N.C. B T.

Retirement and recovery of
13th Guide Meridian West.

Chains.

through Tps. 57 N., bet. Rs. 104 and 105 W.



To determine the dist. across, I set a flag on line, on right bank; then measure a base, West $\therefore$ 100 chs. to a point, from which the flag bears $\text{Dir. } 45^\circ \text{ E.}$ from the flag the west end of the base bears $\text{N. } 45^\circ \text{ W.}$ $\therefore$ therefore, the dist. is $\tan. 45^\circ \times \text{base}$, or $2.701 \times 100 = 2.70$ chs.; making the whole distance from meander cor., 2.70 chs.

6.05 To flag on right bank of river.
Shovel Iron
Doubt

6.69 To base of back land bluff and right bank of North Fork of Shoshone River head

Set a *Shanett* stone, $11 \times 9 \times 5$ ins., 10 ins. in the ground for meander cor. of fract. secs. 13 and 18, marked MC. 57 N. on N, 104 H on E and 105 H on H, with 6 grooves on E and H faces; and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, S. of cor.

June 19, 1905.

TRANSCRIBED COPY OF ORIGINAL FIELD NOTES

426

- Chains** Retracement and resurvey of
13th Guide Meridian West.
through Tps. 52 N., bet. Rs.
104 and 105 W.
To determine the dist.
across, I set a flag on line,
on right bank; then measure a
base, West.; 1.00 ch. to a
point, from which the flag
bears S. $24^{\circ} 26'$ E., from the
flag the west end of the base
bears N. $24^{\circ} 26'$ W.;
therefore, the dist. is co
tan. $24^{\circ} 26'$ x base, or 2.201
x $1.00 = 2.20$ chs.; making
the whole distance from
meander cor., 2.20 chs.
- 6.05 To flag on right bank of
river
Thence I run
South
- 6.69 To base of bad land bluff and
right bank of North Fork of
Shoshone River and
Set a basalt stone, $14 \times 9 \times$
 5 ins., 10 ins. in the ground
for meander cor. of fractl.
secs. 13 and 18, marked M.C.
52 N. on W., 104 W. on E. and
105 W. on W., with 6 grooves
on E. and W. faces; and raise
a mound of stone, 2 ft. base,
 $1\frac{1}{2}$ ft. high, S. of cor.
June 19, 1908.

Names and duties of assistants.

David D. Schaffer	Chairman
Samuel J. Lutter	Chairman
Charles A. Mendenhall	Chairman
Bence E. Olmstead	Chairman
Henry J. Swamp	Moundman
Ben McNeil	Flagman

For next complete test of instrument see Book *D*

Samuel H. Beunt

U. S. Deputy Surveyor

FINAL OATHS FOR SURVEYS.

LIST OF NAMES.

A list of the names of the individuals employed by _____

Samuel H. Bunt

United States Deputy Surveyor, to assist in running, measuring, and marking the lines and corners described in the foregoing field notes of the survey of ^{re} *the 12th and 13th Standard Parallels North,*

through Range 104 West; the retracement of a portion of the old 15th Standard Parallel North through Range 104 West; and the retracement and resurvey of a portion of the 13th Guide Meridian West through Townships 82 North, bet. Ranges 104 and 105

West of the Sixth Principal Meridian, in Wyoming, showing the respective capacities in which they acted.

David L. Schepfer, Chainman.

Samuel J. Sutton, Chainman.

Charles R. Mendonhall, Chainman.

Bruce E. Olsonstead, Chainman.

, Axman.

Henry S. Trump, Moundsman.

Benj. McNeil, Flagman.

FINAL OATHS OF ASSISTANTS.

We hereby certify that we assisted

Samuel H. Brunt

United States Deputy Surveyor, in surveying all those parts or portions

of the 12th and 13th Standard Parallels North, through Range 104 West; the retracement of a portion of the old 13th Standard Parallel North through Range 104 West; and the retracement and survey of a portion of the 13th Guide Meridian West, through Townships 22 North, let Ranges 104 and 105

West of the Sixth Principal Meridian in Wyoming, which are represented in the foregoing field notes as having been ^{re and retraced} surveyed by him and under his direction; and that said ^{re and retracement} survey has been in all respects, to the best of our knowledge and belief, well and faithfully ^{re} surveyed, and retraced

and the corner monuments established, according to the instructions furnished by the United States Surveyor-General for Wyoming.

David H. Schafer, Chairman.

Samuel J. Huston, Chairman.

Charles R. Mendenhall, Chairman.

Bruce E. Olmsted, Chairman.

Arman.

Henry F. Trump, Moundsman.

Ben McNeil, Flagman.

Subscribed and sworn to before me this

15th

day of

July

, 1908

Samuel W. Bunt

U. S. Deputy Surveyor

FINAL OATH OF U. S. DEPUTY SURVEYOR.

I,

Samuel H. Bunt

United States Deputy Surveyor, do solemnly swear that in pursuance of instructions received from

Alpheus P. Lanson

United States Surveyor-General for Wyoming, bearing date of the

5th

day of

September

, 1907

I have well, faithfully, and truly, in my own proper person, and in strict conformity with the instructions furnished by the United States Surveyor-General

for Wyoming, the Manual of Surveying Instructions and the laws of the United States, ^{re} surveyed all those parts or portions of ^{the}

12th and 13th Standard Parallel North, through Range 104th, the retracement of a portion of the old 13th Standard Parallel North, through Range 104th West, and the retracement and resurvey of a portion of the 13th Guide Meridian West through Townships 52 North, bet. Ranges 104th and 105th

West of the Sixth Principal Meridian in Wyoming, as are represented in the foregoing field notes as having been ^{re} surveyed ^{re and retraced} by me and under my directions; and I do further solemnly swear that all the corners of said ^{re} surveys have been established and perpetuated in strict accordance with the Manual of Surveying Instructions and the special written instructions of the United States Surveyor-General for Wyoming, and in the specific manner described in the field notes, and that the foregoing are the true field notes of such ^{re} surveys, ^{and retracements}

Samuel W. Brent

United States Deputy Surveyor.

Subscribed and sworn to before me this

5th

day of September, 1908

John R. Coe

U. S. COMMISSIONER.

CODY, WYOMING.

430

-434

U. S. Surveyor-General's Office,

CHEYENNE, WYOMING,

February 8, 1911

The foregoing Field Notes of the survey of the 12th and 13th Stand Parallel N. through R. 104 W.; the retracement of a portion of the 13th Stand Parallel N. and the retracement of a portion of the 13th Guide Meridian W. through Sp. 52 N., Sect. Rs. 104 and 105 West of the Sixth Principal Meridian in the State of Wyo-

ming, executed by Grant & Lance

U. S. Deputy Surveyor, under their contract

No. 328 dated September 5, 1907

having been critically examined and the necessary correc-

tions and explanations made, the said Field Notes and the

surveys they describe are hereby approved

Alpheus P. Johnson

U. S. Surveyor-General for Wyoming.

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JAN 13 1909
CHEYENNE, WYO.

BOOK No. 5

FIELD NOTES

OF the resurvey of

The North bdrs of Tps 42, 50 and lines of

Township 51 North, Range 104

Range _____

West of the Sixth Principal Meridian in Wyoming.

RESURVEYED BY

INDEXED
Clwa

Brunt and Vance United States
Deputy Surveyors

Under contract No. 328, dated September 5, 1907

The Survey commenced June 1, 1908

The Survey completed June 24, 1908

Platted by _____

_____, 190____

Copied for Washington by _____

_____, 190____

Copied for Register by _____

_____, 190____

Transcribed by Carrie E Fowler

January, 1908

OK. G. W.

T. R. L.

3687

NAMES AND DUTIES OF ASSISTANTS.

Charles A. Mandenhall.....Chainman.

Bruce E. Olmstead.....Chainman.

Nat. L. Niff.....Axman.

William L. Niff.....Moundsman.

Earl Newbark.....Flagman.

.....Flagman.

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Township..... Range.....

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18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

PRELIMINARY OATHS OF ASSISTANTS.

We, Charles A. Mendenhall and Bruce E. Olmstead

and

do solemnly swear that we will well and faithfully execute the duties of chain carriers; that we will level the chain upon 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 instructions given us, in

the survey of the north boundaries of Township 49, 50 and 51 North, Range 104 West

Charles A. Mendenhall, Chairman.

Bruce E. Olmstead, Chairman.

_____, Chairman.

_____, Chairman.

Subscribed and sworn to before me this 25th

day of May, 1905.

Albert S. Vance

U. S. Deputy Surveyor.

We, Nat H. Neff and William L. Pfeiffer

do solemnly swear that we will well and truly perform the duties of
axman and moundsman, in the establishment of corners, and other
duties, according to instructions given us and to the best of our skill
and ability, in the ¹⁶survey of the north boundaries of Town-
ships 49, 50 and 51 North, Range 104 West

Nat H. Neff, Axman.
William L. Pfeiffer, Moundsman.

Subscribed and sworn to before me this 25th
day of May, 1908.

Albert D. Vance

U. S. Deputy Surveyor.

I, Earl Newkirk

do solemnly swear that I will well and truly perform the duties of
flagman according to instructions given me, to the best of my skill and
ability, in the ^{re} survey of North boundaries of Township

49, 50 and 51, North Range 104 West

Earl Newkirk, Flagman.

Subscribed and sworn to before me this 25th

day of May, 1905

Albert D. Vance

U. S. Deputy Surveyor

[SEAL.]

Pages 564 + 565
are blank.

INDEX.

13th Stand Parallel N

West

T.52 N

01 02 03 04 05 06
38 + 37 + 36 + 35 + 32 + 30
6 5 4 3 2 1

Meridian

T.51 N

01 02 03 04 05 06
26 + 24 + 21 + 19 + 18 + 17
6 5 4 3 2 1

Guide

T.50 N

01 02 03 04 05 06
12 + 11 + 8 + 7 + 5 + 3
6 5 4 3 2 1

13th

T.49 N

20 13

13th Stand Parallel S

Resurvey of

Chains.

North boundary of Tp. 49 N., R. 104 W.

Survey commenced *June 1, 1908* and executed with a W. and L. E. Gurley solar compass.

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 latitude and declination arcs. The instrument was examined, tested on the true meridian at Cheyenne, found correct, and was approved by the surveyor general for Wyoming.

Near the *1st* cor. lat. *arc* 19 and 20, on the E. *limb* of Sp. 49 N., R. 104 W.

latitude *44° 12'* N., longitude *109° 18'* W.; I set off *44° 12'* N., on the lat. arc; *22° 07' N* on the decl. arc; and at *4⁰⁰* p.m., l.m.t., determine with the solar a meridian and mark a point thereof, on a stone firmly set in the ground, 5 chs. N. of the cor.

At *9⁰⁰* p.m., l.m.t., I observe Polaris at elongation, in accordance with Manual of Instructions, and mark a point in the line thus determined on a peg driven in the ground, 5 chs. N. of my station.

June 1, 1908

TRANSCRIBED COPY OF ORIGINAL FIELD NOTES

567

Chains Resurvey of North boundary of
Tp. 49 N., R. 104 W.
Survey commenced June 1, 1908
and executed with a W. and L.E.
Gurley solar compass.
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
latitude and declination arcs.
The instrument was examined,
tested on the true meridian at
Cheyenne, found correct, and was
approved by the surveyor general
for Wyoming.

Near the $\frac{1}{4}$ sec. cor. bet.
secs. 19 and 24, on the E. bdy.
of Tp. 49 N., R. 104 W.
latitude $44^{\circ} 12' N.$, longitude
 $109^{\circ} 18' W.$; I set off $44^{\circ} 12'$
 $N.$, on the lat. arc; $22^{\circ} 07' N.$
on the decl. arc; and at 4 h 0 m
p.m., l.m.t., determine with the
solar a meridian and mark a
point thereof, on a stone firmly
set in the ground, 5 chs. N. of
the cor.

At 9 h 06 m p.m., l.m.t., I
observe Polaris at elongation,
in accordance with Manual of
Instructions, and mark a point
in the line thus determined on a
peg driven in the ground, 5 chs.
N. of my station.

June 1, 1908.

Resurvey of

Chains.

North boundary of Tp. 47 N., R. 10 W.

June 2 : At 8^h a. m., l.m.t., I lay off the azimuth of Polaris, 05° to the west, and mark the meridian thus determined, by cutting a small groove in the stone set June 1, on which the meridian falls 0.1 ins. east of mark determined by the solar.

At 8^h 05^m a. m., l.m.t., I set off $44^{\circ} 12' N.$ on the lat. arc; $22^{\circ} 12' N.$ on the dec. arc; and mark a point in the meridian determined with the solar, by a cross on the stone already set 5 chs. N. of my station; this mark falls 0.1 ins. east of the meridian established by the Polaris observation. The solar apparatus, by p.m. and a.m. observations, defines positions for meridians established by the Polaris observations; therefore, I conclude that the adjustments of the instrument are satisfactory.

The magnetic bearing of the true meridian, at 8^h a.m.; is N. $17^{\circ} 45'$ W., the angle thus determined gives the mag. decl. $17^{\circ} 45'$ E.

Remains of

Chains.

North boundary of Tp. 49 N., R. 30 W.

June 23: At 7⁴⁵ a. m., l. m. t., I set off
 22° 15' N., on the lat. arc; 22° 30' N on the decl.
 arc; and determine a meridian with 11 g. solar, at the cor. of
 34th 49 and 50 N., R. 103 and 104 W., which I
 find marked and witnessed as described by the
 surveyor general.

Thence I run.

West lat. sec. 1 and 36.

Over mountainous land exceptionally
 difficult to survey.

Ascend abruptly.

7.75 Top of ridge bears N. W. and S. E. and descend. abruptly
 15.00 Creek course S. W. and ascend abruptly

28.30 Intersect line 1 - 4 private land claim, ^{Tract} Lot No. 38
 at a point 18.78 chs. North of cor. No. 4 and

Set a granite stone 17 x 10 x 7 ins., 4 ins. in
 the ground for closing cor. of fract. sec. 1 and 36
 marked

C C on E., 38 on W.; with 4 grooves on N. and S.
 face; raise a mound of stone 2 ft. base, 1½ ft. high, E.
 of cor.

46.00 Set a granite stone 16 x 10 x 6 ins., 11 ins. in the
 ground for ¼ sec. cor., marked ¼ on N. face; and raise a
 mound of stone 2 ft. base, 1½ ft. high, N. of cor.

46.00 Descend abruptly.

51.00 To ridge of new rock bears N. and S.

Chains.

North boundary of Tp. 49 N., R. 104 W.

- 54.50 To base of cliff bears N and S.
Enter sparring timber and slide rock bears N and S.
- 79.00 Enter fallen timber bears N and S.
- 80.00 Set a granite stone 15 x 8 x 7 ins., 10 ins. in the ground, for cor. of secs. 1, 7, 35 and 36, marked with 5 notches on S. and 1 notch on E. edge; from which
- A pine, 5 ins. dia., bears N. 53° 04' E., 63 lks. dist., marked T 50 N R 104 W S 36 B T.
- A pine, 8 ins. dia., bears S. 53° E., 112 lks. dist., marked T 49 N R 104 W S 1 B T.
- A pine, 7 ins. dia., bears S. 62° 4', 73 lks. dist., marked T 49 N R 104 W S 2 B T.
- A pine, 6 ins. dia., bears N. 72° 04', 60 lks. dist., marked T 50 N R 104 W S 35 B T.

Land, mountainous.

Soil, rocky; 4th rate.

Timber, pine

Mountainous land exceptionally difficult to survey 80.00 chs. ✓

June 23: At this cor. I set off 22 21' N., on the decl. arc; and observe the sun on the meridian; the resulting lat. is 42° 15' 27". ✓

Resurvey of

Chains.

North boundary of Tp. 49 N., R. 102 W.

West lot, sec. 7 and 35.

Over mountainous land exceptionally difficult to survey.

Descend abruptly.

Through live, dead and fallen timber.

3.58 Trail bears N 30° E and S 30° E

11.88 Creek on the side; course N 60° E

16.80 East fork of Rock Creek 15 lbs wide; course N 30° E and ascend abruptly

21.00 Enter heavy timber line N 30° E and S 30° E

26.00 Point of spur falls N. and descend.

28.30 Intersect line 3 - 4 private land claim, Lot No. 38 at a point 18.75 chs. North of cor. No. 3 and Set a granite stone 20 x 14 x 7 ins., 15 ins. in the ground for closing cor. of frac. secs. 7 and 35 marked

CC on N., 38 on E.; with 6 grooves on N. and O

face, from which

A spruce, 12 ins. dia., bears S. 16° 30' E 25 lks. dist., marked T 49 N R 102 W S 35 B T.

A spruce, 8 ins. dia., bears N. 11° 00' E 18 lks. dist., marked T 50 N R 102 W S 35 B T.

29.60 Creek on the side; course N. and ascend

33.00 Point of spur falls N. and descend.

40.00 Set a sand stone 14 x 14 x 4 ins., 10 ins. in the ground for 1/4 sec. cor., marked 1/4 on N. face; from which

Resurvey of

Chains.

North boundary of Tp. 29 N., R. 10 W.

A spruce, 14 ins. dia., bears S. 45° E.
 63 lks. dist., marked $\frac{1}{4}$ S 2 B. T.

A spruce, 12 ins. dia., bears N. 45° W.
 65 lks. dist., marked $\frac{1}{4}$ S 35 B. T.

53.00 Lower timber line N. and S.

55.00 Enter heavy timber line N. and S.

50.00 Set a granite stone 14 x 11 x 6 ins., 10 ins.
 in the ground, for cor. of secs. 2, 3, 34 and 35,
 marked with 7 notches on S. and 7 notches on E. edge;
 from which

A red fir, 18 ins. dia., bears N. 30° 20' E.
 50 lks. dist., marked T 50 N R 10 W S 35 B T.

A balsam, 9 ins. dia., bears S. 39° 30' E.
 33 lks. dist., marked T 49 N R 10 W S 3 B T.

A red fir, 10 ins. dia., bears S. 30° 20' W.
 29 lks. dist., marked T 49 N R 10 W S 3 B T.

A red fir, 20 ins. dia., bears N. 45° 30' W.
 30 lks. dist., marked T 50 N R 10 W S 3 B T.

Land, mountainous.

Soil, rocky; 4th rate.

Timber. fir, pine, spruce and balsam

Mountainous land exceptionally difficult
 to survey 50.00 chs.

June 23, 1908

Resurvey of

North boundary of Tp. 49 N., R. 10 W.

Chains.

June 1st: At 9^h 30^m a. m., i. m. t., I set off
 $44^{\circ} 15'$ N., on the lat. arc; $22^{\circ} 28'$ N on the decl.
 arc; and determine a meridian with the solar, at the cor. of
 secs., 8, 3, 3rd and 35.

Thence I run.

West bet. secs 3 and 35.

Over mountainous land exceptionally
 difficult to survey.

Descend, through heavy timber

17.00 Leave timber leave N. and S.

18.00 Enter heavy timber leave N. and S.

31.00 Descend abruptly. over white rock and fallen timber

37.65 Middle Fork of Rock Creek course N. 10° E. and
 ascend40.00 Set a granite stone 24 x 9 x 8 ins., 18 ins. in the
 ground for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on N. face; from whichA spruce, 12 ins. dia., bears N 19° E.37 lks. dist., marked $\frac{1}{4}$ S 3rd B. T.A spruce, 8 ins. dia., bears S 72° E.13 lks. dist., marked $\frac{1}{4}$ S 3rd B. T.

June 1st: ^{near} At this cor. I set off $22^{\circ} 28'$ N.,
 on the decl. arc; and observe the sun on the meridian; the
 resulting lat. is $44^{\circ} 15'$ N.

54.50 Point of spur falls N. and descend abruptly

68.65 Gulch course N. 20° E. and ascend.

79.00 Leave timber leave N. and S.

Chains.

North boundary of Tp. 49 N., R. 104 W.

80.00 Set a granite stone 16 x 9 x 7 ins., 11 ins. in the ground, for cor. of secs. 3, 1, 23 and 34, marked with 3 notches on ^NE. and 3 notches on E. edge;

from which

A pine, 10 ins. dia., bears N. 30° 30' E., 13.1 lks. dist., marked T 50 N R 104 W S 34 B T.

A pine, 8 ins. dia., bears S. 55° 30' E., 12.5 lks. dist., marked T 49 N R 104 W S 3 B T.

A pine, 6 ins. dia., bears S. 40° 30' E., 34.6 lks. dist., marked T 49 N R 104 W S 2 B T.

A pine, 9 ins. dia., bears N. 5° 30' E., 21.5 lks. dist., marked T 50 N R 104 W S 33 B T.

This cor. is situated on a point of spur falling N.

Land, mountainous.

Soil, rocky; 4th rate.

Timber, pine, spruce and balsam

Mountainous land exceptionally difficult to survey 80.00 chs.

Next bet. sec. 4 and 33.

Over mountainous land exceptionally difficult to survey.

Descend abruptly.

3.00 Enter timber line N. and S.

11.55 Creek crosses N. 10° E.

Thence over broken rocky surface.

TRANSCRIBED COPY OF ORIGINAL FIELD NOTES

574

- Chains** **Resurvey of North boundary of**
 Tp. 49 N., R. 104 W.
- 80.00** **Set a granite stone 16 x 9 x**
 7 ins., 11 ins. in the
 ground, for cor. of secs. 3,
 4, 33 and 34, marked with 3
 notches on W. and 3 notches
 on E. edges; from which
 A pine, 10 ins. dia., bears
 N. 33° 30' E., 134 lks.
 dist., marked T 50 N R 104 W
 S 34 B T.
 A pine, 8 ins. dia., bears S.
 85° 30' E., 125 lks. dist.,
 marked T 49 N R 104 W S 3 B
 T.
 A pine, 6 ins., dia., bears
 S. 43° 30' W., 366 lks.
 dist., marked T 49 N R 104 W
 S 4 B T.
 A pine, 9 ins. dia., bears N.
 3° 20' W., 215 lks. dist.,
 marked T 50 N R 104 W S 33 B
 T.
 This cor. is situated on a
 point of spur falling N.
 Land, mountainous.
 Soil, rocky; 4th rate.
 Timber, pine, spruce and
 balsam
 Mountainous land
 exceptionally difficult to
 survey 80.00 chs.
- West bet. secs 4 and 33.**
 Over mountainous land
 exceptionally difficult to
 survey.
 Descend abruptly.
- 3.00** **Enter timber bears N. and S.**
11.85 **Creek course N. 10° E.**
 Thence over broken rocky
 surface.

Chains

North boundary of Tp. 29 N., R. 10 W.

- 13.75 Great corner N. E. and ascends.
- 20.00 Set a granite stone, 16 x 8 x 5 ins., 11 ins. in the ground
for 1/2 an acre, marked below N. face; from which
A pine, 9 ins. dia., bears S 68° 10' W
24.7 fks. dist., marked S 8° 33' B. T.
- A pine, 6 ins. dia., bears N 56° 10' W
103 fks. dist., marked S 33° B. T.
- 26.00 Point of spur falls N and descend.
- Enter heavy timber bears N and S.
- 27.60 Intersect line 1-2 private land claim, Tract No. 20, at a
point 2.07 chs. North of cor. No. 2 and
Set a granite stone 16 x 13 x 11 ins., 11 ins. in
the ground for closing cor. of tract. secs. 21 and 23
marked
C.C. on E., also on N. with 6 grooves on N and
S faces, from which
A pine, 16 ins. dia., bears S 23° 30' E.
38 fks. dist., marked T 29 N R 10 W S 23 BT.
- A pine, 28 ins. dia., bears N 30° E.
1/20 fks. dist., marked T 29 N R 10 W S 33 BT.
- 28.00 Enter scattering timber bears N and S.
- 29.60 Intersect line 1-2 private land claim, Tract No. 20, at a
point 2.07 chs. North of cor. No. 13
Set a granite stone 15 x 11 x 8 ins., 10 ins. in
the ground for closing cor. of tract. secs. 24 and 26
marked
C.C. on N., also on E., with 6 grooves on N and S.

TRANSCRIBED COPY OF ORIGINAL FIELD NOTES

575

- Chains Resurvey of North boundary of
Tp. 49 N., R. 104 W.
- 13.75 Creek course N.E. and ascend.
- 40.00 Set a granite stone, 16 x 8 x 5
ins., 11 ins. in the ground for
1/4 sec. cor., marked 1/4 on N.
face; from which
A pine, 9 ins. dia., bears S.
88° 10' W. 297 lks. dist.,
marked 1/4 S 4 B.T.
A pine, 6 ins. dia., bears N.
56° 10' W. 83 lks. dist., marked
1/4 S 33 B. T.
- 44.00 Point of spur falls N. and
descend.
Enter heavy timber bears N. and
S.
- 47.60 Intersect line 1-2 private land
claim, Tract No. 40, at a point
2.02 chs. North of cor. No. 2
and
Set a granite stone 16 x 13 x 11
ins., 11 ins. in the ground for
closing cor. of fracl. secs. 4
and 33 marked
C.C. on E., 40 on W.; with 6
grooves on N. and S. faces; from
which
A pine, 16 ins. dia., bears S.
23° 30' E., 38 lks. dist.,
marked T 49 N R 104 W S 4 BT.
A fir, 28 ins. dia., bears N.
20° E., 70 lks. dist., marked T
50 N R 104 W S 33 BT.
- 62.00 Enter scattering timber bears N.
and S.
- 67.60 Intersect line 3-4 private land
claim, Tract No. 40, at a point
2.20 chs. North of cor. No. 3.
Set a granite stone 15 x 11 x 8
ins., 10 ins. in the ground for
closing cor. of fracl. secs. 4
and 33 marked
C.C. on W., 40 on E.; with 6
grooves on N. and S.

Chains

North boundary of Tp. 49 N., R. 101 W.

fence, from which

A. *pine*, 8 ins. dia., bears S. 51° 4' E.
20 lks. dist., marked T 49 N R 101 W S 4 BT.

A. *pine*, 13 ins. dia., bears N. 68° 10' E.
29 lks. dist., marked T 50 N R 101 W S 33 BT.

8000 Set a granite stone 15 x 8 x 7 ins., 1 1/2 ins.
in the ground, for cor. of secs. 4, 5, 37 and 38,
marked with 2 notches on ^NE. and 1 notch on E. edge;

from which

A. *pine*, 8 ins. dia., bears N. 28° 30' E.
80 lks. dist., marked T 50 N R 101 W S 33 BT.

A. *pine*, 7 ins. dia., bears S. 51° 30' E.
76 lks. dist., marked T 49 N R 101 W S 4 BT.

A. *pine*, 11 ins. dia., bears S. 67° E.
78 lks. dist., marked T 49 N R 101 W S 5 BT.

A. *pine*, 9 ins. dia., bears N. 36° E.
95 lks. dist., marked T 50 N R 101 W S 37 BT.

Land, mountainous.

Soil, rocky; 4th rate.

Timber, *pine*, *aspens*, *fir*, and *balcon*.

Mountainous land, exceedingly difficult to survey
8000000.

June 24, 1908.

TRANSCRIBED COPY OF ORIGINAL FIELD NOTES

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Chains	Resurvey of North boundary of Tp. 49 N., R. 104 W. faces; from which A pine, 8 ins. dia., bears S. 56° W. 40 lks. dist., marked T 49 N R 104 W S 4 BT. A pine, 13 ins. dia., bears N. 3° 10' W. 29 lks. dist., marked T 50 N R 104 W S 33 BT.	Cha
80.00	Set a granite stone 18 x 8 x 7 ins., 12 ins. in the ground, for cor. of secs. 4, 5, 32 and 33, marked with 2 notches on W. and 4 notches on E. edges; from which A pine, 8 ins. dia., bears N. 28° 30' E., 80 lks. dist., marked T 50 N R 104 W S 33 BT.	19
	A pine, 7 ins., dia., bears S. 51° 30' E., 76 lks. dist., marked T 49 N R 104 W S 4 BT.	29
	A pine, 9 ins. dia., bears N. 36° W. 95 lks. dist., marked T 50 N R 104 W S 32 BT.	40
	Land, mountainous. Soil, rocky; 4th rate. Timber, pine, spruce, fire and balsam. Mountainous land exceptionally difficult to survey 80.00 chs. June 4, 1908.	

Runway of

Chains.

North boundary of Tp. 49 N., R. 10 W.

June 5. At 10^h 0^m a. m., 1. m. t., I set off
 $22^{\circ}15' N.$, on the lat. arc; $22^{\circ}32' N$ on the decl.
 arc; and determine a meridian with the solar, at the cor. of
 secs., 4, 5, 32 and 33.

Thence I run.

West bet. sec. 5 and 33.

Over mountainous land exceptionally
 difficult to survey.

Descend abruptly. through timber.

17.05 Creek 100 yds wide; course N and descend abruptly
 Enter heavy timber here N and S.

29.00 Point of spur falls N and descend. over slide rock
 Enter scattering timber here N and S.

40.00 The point for $\frac{1}{2}$ sec. cor. falls in West Fork of Creek.
 Creek 200 yds wide; course N $35^{\circ} E$. Therefore at a point
 500 yds E of true point for $\frac{1}{2}$ sec. cor. S

Set a granite stone 10 x 11 x 7 ins., 12 ins. in the
 witness cor. ^{N.C.}
 ground for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on N. face; from which

A ^{N.C.} ~~from~~ 6 ins. dia., bears N $52^{\circ} E$
 37 lks. dist., marked $\frac{1}{4}$ S 32 B. T.

A ^{N.C.} ~~from~~ 10 ins. dia., bears S $31^{\circ} 15' E$
 77 lks. dist., marked $\frac{1}{4}$ S 5 B. T.

40.75 Ascend abruptly. over slide rock here N $35^{\circ} E$ and S $30^{\circ} N$.
 Enter heavy timber here N $35^{\circ} E$ and S $30^{\circ} N$.

45.00 June 5. At this ^{point} cor. I set off $22^{\circ}35' N.$,
 on the decl. arc; and observe the sun on the meridian; the
 resulting lat. is $44^{\circ}15' 22''$.

OF TRANSCRIBED COPY OF ES ORIGINAL FIELD NOTES

577

Chains Resurvey of North boundary of
Tp. 49 N., R. 104 W.

June 5: At 10 h 0 m a.m.,
l.m.t., I set off $44^{\circ} 15'$ N., on
the lat. arc; $22^{\circ} 34'$ N. on the
decl. arc; and determine a
meridian with the solar, at the
cor. of secs., 4, 5, 32 and 33.
Thence I run

West bet. secs 5 and 32.

Over mountainous land
exceptionally difficult to
survey.

Descend abruptly, through
timber.

19.05 Creek 10 lks. wide; course N.
and ascend abruptly.

Enter heavy timber bears N. and
S.

29.00 Point of spur falls N. and
descend over slide rock.

Enter scattering timber bears N.
and S.

40.00 The point for $1/4$ sec. cor.
falls in West Fork of Rock Creek
20 lks. wide; course N. 35° E.
Therefore at a point 50 lks. E.
of true point for $1/4$ sec. cor.
I

Set a granite stone $18 \times 11 \times 7$
ins., 12 ins. in the ground for
witness cor to $1/4$ sec. cor.,
marked W.C. $1/4$ on N. face; from
which

A pine, 6 ins. dia., bears N.
 52° E., 37 lks. dist., marked
 $1/4$ S 32 W.C. B. T.

A pine, 14 ins. dia., bears S.
 $31^{\circ} 15'$ E. 77 lks. dist., marked
 $1/4$ S 5 W. C. B. T.

40.25 Ascend abruptly, over slide rock
bears N. 35° E. and S. 35° W.
Enter heavy timber bears N. 35°
E. and S. 35° W.

42.00 June 5: At this point, I set
off $22^{\circ} 35'$ N., on the decl.
arc; and observe the sun on the
meridian; the resulting lat. is
 $44^{\circ} 15'$ N.

Resurvey of

Chains.

North boundary of Tp. 49 N., R. 104 W.

80.00 Set a granite stone 15 x 10 x 6 ins., 10 ins. in the ground, for cor. of secs. 5, 6, 31 and 32, marked with 1 notches on S. and 5 notches on E. edge;

from which

A pine, 16 ins. dia., bears N. 75° E., 35 lks. dist., marked T 50 N R 104 W S 32 B T.

A pine, 10 ins. dia., bears S. 75° 30' E., 25 lks. dist., marked T 49 N R 104 W S 5 B T.

A pine, 15 ins. dia., bears S. 39° 30' W., 65 lks. dist., marked T 49 N R 104 W S 6 B T.

A pine, 8 ins. dia., bears N. 30° W., 20 lks. dist., marked T 50 N R 104 W S 31 B T.

Land, mountainous.

Soil, rocky; 4th rate.

Timber, pine and spruce

Mountainous land exceptionally difficult to survey 80.00 chs.

Next let. run 6 and 31

Over mountainous land exceptionally difficult to survey.

Ascend abruptly, over slide rock through heavy timber. 25.00 Point of spur falls N 50° E. and descend abruptly over a series of rocky ledges bearing N 50° E. off S 50° W.

40.00 Set a granite stone 15 x 11 x 5 ins., 12 ins. in the ground for 1/2 sec. cor., marked 1/2 on N. face; from which

Resurvey of

579

North boundary of Tp. 49 N., R. 102 W.

Chains.

A *fine*, 12 ins. dia., bears S. 50° 15' W.
200 lks. dist., marked 1/4 S 6 B. T.

A *fine*, 9 ins. dia., bears N. 11° W.
97 lks. dist., marked 1/4 S 31 B. T.

121.95 Cross at the wide; course N. and ascends abruptly.
Enter scattering timber bears N. and S.

126.00 Along N. edge of rim rock bears N. 80° E. and S. 80° W.

128.00 Descend abruptly. Over slide rock bearing N. 80° E. and
S. 80° W.

130.60 Cross at the wide; course N. W.

132.05 Cross at the wide; course N. 30° W. and ascend

136.50 Intersect the 15th Tangle Mountain Trail at a point
15.65 chs. N. of the cor. of Sp. 49 and 50 N. R. 102
and 105 W. which I find marked and witnessed as
described by the surveyor general. I also change this
cor. to a far corner to Sp. 49 and 50 N. R. 105 W.
and

Set a granite stone, 15 x 9 x 6 ins. 10 ins. in the ground, for
closing cor. of Sp. 49 and 50 N. R. 102 W. marked
60° 10' E. on E, 49° N. on S, and 50° N. on N, with
6 grooves on N. and S faces; from which

A *fine*, 11 ins. dia., bears N. 62° 15' E.
188 lks. dist., marked T 50 N R 102 W S 31 B. T.

A *fine*, 10 ins. dia., bears S. 71° 40' E.
167 lks. dist., marked T 49 N R 102 W S 6 B. T.

Resurvey of

Chains.

North boundary of Tp. 19 N., R. 10 W.

Land, mountainous.

Soil, rocky; 4th rate.

Timber, *pine and spruce*Mountainous land exceptionally difficult
to survey 136.50 chs.*June 5, 1908.*

$$\begin{array}{r}
 56 \\
 29 \overline{) 1650} \\
 \underline{58} \\
 7 \\
 \underline{70} \\
 0
 \end{array}$$

7

showing intersections with private land claims line.

Chains

July 1: At 4⁵⁵ a. m., 1. m. t., I set off
 N. on the lat. arc; 25° 25' 77" on the decl.
 arc; and determine a meridian with the solar, at the 1st sec.
 cor. bet. sec. 19 and 74, which I find marked and
 embraced as described by the design general.

Thence I run

North bet. sec. 19 and 74.

9.55 Intersect line 2-3 private land claim, Tract No. 49, at a
 point 5.97 chs. East of cor. No. 3 and

Set a granite stone 14 x 12 x 10 ins., 17 ins. in
 the ground for closing cor. of fract. secs. 19 and 74
 marked

C C on S. 1/2 49 on N. 1/2; with 6 grooves on East &
 face; raise a mound of stone 2 ft. base, 1 1/2 ft. high,
 S. of cor.

29.55 Intersect line 1-7 private land claim, Tract No. 49, at a
 point 6.00 chs. East of cor. No. 7 and

Set a granite stone 22 x 12 x 9 ins., 17 ins. in
 the ground for closing cor. of fract. secs. 19 and 74
 marked

C C on N. 1/2 49 on S. 1/2; with 6 grooves on East &
 face; raise a mound of stone 2 ft. base, 1 1/2 ft. high, N.
 of cor.

Samuel H. Denut.
 U. S. Deputy Surveyor.

July 8, 1908.

TRANSCRIBED COPY OF ORIGINAL FIELD NOTES

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- Chains East boundary of Tp. 49 N., R. 104 W. showing intersections with private land claim lines. July 8: At 4 h 05 m p.m., l.m.t., I set off $44^{\circ} 12'$ N. on the lat. arc; $22^{\circ} 28'$ N. on the decl. arc; and determine a meridian with the solar, at the $1/4$ sec. cor. bet. secs. 19 and 24, which I find marked and witnessed as described by the surveyor general. Thence I run North bet. secs. 19 and 24.
- 9.55 Intersect line 2-3 private land claim, Tract No. 49, at point 5.97 chs. East of cor. No. 3 and Set a granite stone 18 x 14 x 10 ins., 12 ins. in the ground for closing cor. of fracl. secs. 19 and 24 marked C C on S., 49 on N; with 6 grooves on E. and W. faces, raise a mound of stone 2 ft. base, 1-1/2 ft. high, S. of cor.
- 29.55 Intersect line 1-7 private land claim, Tract No. 49, at a point 6.00 chs. East of cor. No. 7 and Set a granite stone 22 x 14 x 9 ins., 17 ins. in the ground for closing cor. of fracl. secs. 19 and 24 marked C C on N., 49 on S.; with 6 grooves on E. and W. faces; raise a mound of stone 2 ft. base, 1-1/2 ft. high, N. of cor. July 8, 1908.

Samuel W. Brunt
U.S. Deputy Surveyor.

Soundings of Sp. 29.77 R. 10.2 H.

Latitudes, departures, and closing errors.

Line designated	Line bearing	Distance	Latitude				Departure	
			N	S	E	W		
15 th Wh. and Black North	North	587.56'					587.56'	
10 th Black North	North	79.46'	79.46'					
North by W. 81	East	107.50'			107.50'			
North by W. 81.22 and 24	North	57.00'	57.00'					0.27'
North by W. 6	North	156.57'					156.57'	
15 th Black North	North	79.46'	79.46'					
North by W. 81.22 and 24	East	107.50'			107.50'			
East by S. 70.22 and 24	East	107.50'			107.50'			
Closing error							0.27'	
Total			156.57'	156.57'	107.50'	107.50'		
Error in lat.					0.27'			
Error in dep.						0.27'		

Resurvey of

Chains.

North boundary of Tp. 50 N., R. 104 W.

June 7: At 7^h 30^m a. m., l. m. t., I set off
 22° 0' N., on the lat. arc; 22° 47' N. on the decl.
 arc; and determine a meridian with the solar, at the cor. of

Sps. 50 and 51 N., R. 103 and 104 W., which I find
 marked and witnessed as described by the survey
 general.

Thence I run.

West, lat. sec. 1 and 36.

Over mountainous land.

Descend.

- 2.60 Bull Creek course N. 70° W.
- 15.70 Burn Road bears N. and S.
- 21.50 Head of Gulch course N. and ascend.
- 25.60 Top of ridge bears N. 10° W. and S. 10° E. and descend.
- 28.30 Intersect line S. of private land claim, ^{Lat} No. 96, at a
 point 18.78 chs. N. 0° 16' E. of cor. No. 3.
- 40.00 Set a sand stone 18 x 14 x 4 ins., 14 ins. in the
 ground for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on N. face; and raise a
 mound of stone 2 ft. base, 1 $\frac{1}{2}$ ft. high, 22° of cor.
- 57.00 Gulch course N. and ascend.
- 79.40 Wire fence bears N. and S.
- 80.00 Set a sand stone 15 x 10 x 4 ins., 10 ins.
 in the ground, for cor. of secs. 1, 2, 34 and 36,
 marked with 5 notches on S. and 1 notches on E. edge;
 and raise a mound of stone 2 ft. base, 1 $\frac{1}{2}$ ft. high W. of
 cor.

Resurvey of

Chains.

North boundary of Tp. 50 N., R. 10 W.

Land, mountainous.
sandy and arid
 Soil, rocky; 4th rate.
 No Timber.

Mountainous land 50.00 - chs.

Fast let. sec. 2 and 35.

Over mountainous land.

Descend.

17.60 Leave mountainous land and

Enter mountainous land exceptionally
 difficult to survey bears N. and S.

22.60 Hillier Creek course N. E. and ascend abruptly.

28.12 Intersect line 3 - 4 private land claim, ^{Tract} Lot No. 37
 at a point 5.7 chs. N. of cor. No. 3 and
 Set a sand stone 20 x 12 x 6 ins., 15 ins. in
 the ground for closing cor. of frac. secs. 2 and 35
 marked

CC on N., 37 on E.; with 6 grooves on N. and S.
 faces; raise a mound of stone 2 ft. base, 1½ ft. high, N.
 of cor.

32.30 Top of bad land butte and descend abruptly
 40.00 Set a granite stone 18 x 8 x 7 ins., 12 ins. in the

ground for ¼ sec. cor., marked ¼ on N. face; from which

A pine, 14 ins. dia., bears N. 18° E.
 107 lks. dist., marked ¼ S. 35 B. T.

A pine, 11 ins. dia., bears S. 35° W.
 76 lks. dist., marked ¼ S. 2 B. T.

Clearing

Chains

North boundary of Tp. 50 N., R. 10 W.

41.00

June 7 : At this ^{point} cor. I set off $22^{\circ}47'N.$ on the decl. arc; and observe the sun on the meridian, the resulting lat. is $44^{\circ}20'N.$

44.55

Follow course $N.$ and ascend abruptly.

50.00

Set a granite stone $16 \times 9 \times 6$ ins., 11 ins. in the ground, for cor. of secs. 2, 3, 34 and 35, marked with $\times$ notches on E. and γ notches on E. edge; and raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high W. of cor. from whicha pine, 10 ins. dia., bears S. $32^{\circ}30'W.$, 100 lbs. dist., marked T 50 N R 10 W S 3 BT.

No other tree available.

Land, mountainous.

Soil, rocky; 4th rate.

No timber.

Mountainous land exceptionally difficult to survey
67.50 chs.

Mountainous land 17.60 chs.

Next bet. sec. 3 and 34.

On mountainous land exceptionally difficult to survey.

Ascend abruptly.

62.00

Ascend abruptly.

40.00

Set a sandstone $16 \times 12 \times 6$ ins., 11 ins. in the ground for $\frac{1}{2}$ sec. cor., marked 1 on $N.$ face; and raise mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high, $N.$ of cor.

TRANSCRIBED COPY OF ORIGINAL FIELD NOTES

585

- Chains Resurvey of North boundary of
Tp. 50 N., R. 104 W.
- 41.00 June 7: At this point I set off
22° 47' N., on the decl. arc;
and observe the sun on the
meridian; the resulting lat. is
44° 20' N.
- 48.55 Gulch course N. and ascend
abruptly.
- 80.00 Set a granite stone 16 x 9 x 6
ins., 11 ins. in the ground, for
cor. of secs. 2, 3, 34 and 35,
marked with 4 notches on N. and
2 notches on E. edge; and raise
a mound of stone 2 ft. base, 1-
1/2 ft. high W. of cor. from
which
A pine, 10 ins. dia., bears S.
32° 30' W., 183 lks. dist.,
marked T 50 N R 104 W S 3 BT.
No other trees available.
Land, mountainous.
Soil, rocky; 4th rate.
No timber.
Mountainous land exceptionally
difficult to survey 62.40 chs.
Mountainous land 17.60 chs.
- West bet. secs. 3 and 34.
Over mountainous land
exceptionally difficult to
survey.
Ascend abruptly.
- 14.00 Descend abruptly.
- 40.00 Set a sand stone 16 x 12 x 6
ins., 11 ins. in the ground for
1/4 sec. cor., marked 1/4 on N.
face; and raise a mound of stone
2 ft. base, 1-1/2 ft. high, N.
of cor.

Chain

North boundary of Tp. 50 N., R. 10 W.

- 47.30 Intersect line 1-4 private land claim, Tract No. 39, at a point 18.80 chs. $10^{\circ} 05' 6''$ of cor. No. 1, and
- Set a granite stone $15 \times 14 \times 6$ ins., 10 ins. in the ground for closing cor. of tract, secs. 3 and 34 marked
- C.C. on E., 39 on N., with 6 grooves on N. and S. faces raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high, E. of cor.
- 60.00 Road bears N. N. and S. E.
- 60.55 Wire fence bears N. N. and S. E.
- 61.10 Beckman Creek with side, course N. N. and Ascend abruptly.
- 67.23 Intersect line 5-6 private land claim, Tract No. 39, at a point 1.87 chs. $170^{\circ} 07'$ of cor. No. 5.
- 75.00 Point of spur falls N. N. and descends abruptly over rocky surface.
- 80.00 Set a granite stone $16 \times 10 \times 8$ ins., 11 ins. in the ground, for cor. of secs. 3, 4, 33 and 34, marked with 3 notches on ^{N.} 8. and 3 notches on E. edge; and raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high W. of cor.
- Land, mountainous.
- Soil, rocky; 4th rate.
- No timber.
- Mountainous land exceptionally difficult to survey 80.00 ch.

TRANSCRIBED COPY OF ORIGINAL FIELD NOTES

586

- Chains** Resurvey of North boundary of
Tp. 50 N., R. 104 W.
- 47.30 Intersect line 1-2 private
land claim, Tract No. 39, at
a point 18.80 chs. S. $0^{\circ} 05'$
E. of cor. No. 1, and
Set a granite stone 15 x 12 x
6 ins., 10 ins. in the ground
for closing cor. of fractl.
secs. 3 and 34 marked
C C on E., 3' on W.; with 6
grooves on N. and S. faces;
raise a mound of stone 2 ft.
base, 1-1/2 ft. high, E. of
cor.
- 60.00 Road bears N.W. and S.E.
- 60.55 Wire fence bears N.W. and
S.E.
- 61.10 Bellknap Creek 15 lks. wide;
course N.W. and
Ascend abruptly.
- 67.23 Intersect line 5-6 private
land claim, Tract No. 39, at
a point 1.82 chs. N. $0^{\circ} 07'$ W.
of cor. No. 5.
- 78.00 Point of spur falls N.W. and
descend abruptly over rocky
surface.
- 80.00 Set a granite stone 16 x 10 x
8 ins., 11 ins. in the
ground, for cor. of secs. 3,
4, 33 and 34, marked with 3
notches on W. and 3 notches
on E. edge; and raise a mound
of stone 2 ft. base, 1-1/2
ft. high W. of cor.
Land, mountainous.
Soil, rocky; 4th rate.
No timber.
Mountainous land
exceptionally difficult to
survey 80.00 chs.

Resurvey of

North boundary of Tp. 50 N., R. 10 W.

Chains.

June 8: At 8^h 10^m 3. m., 1. m. t., I set off
 44° 20' N., on the lat. arc; 22° 55' N on the decl.
 arc; and determine a meridian with the solar, at the cor. of
 sec's., 3, 4, 5, 33 and 34.

Thence I run,

West lat. sec. 4 and 33.

Over mountainous land exceptionally
 difficult to survey.

Descend abruptly.

3.00 Base of abrupt descent bears N. and S.

Leave mountainous land exceptionally
 difficult to survey and

Enter rolling land bears N. and S.

11.58 Wire fence bears N. E. and O. H.

14.53 Body Valley Mill Road bears N. E. and S. H.

15.68 Wire fence bears N. E. and S. H.

Enter cultivated field bears N. E. and O. H.

27.46 Intersect line 3-4 private land claim, Tract No. 7th, at a
 point 1.98 chs. 70° 04' N. of cor. No. 3.

27.58 Wire fence bears N. and S.

40.00 Set a granite stone 16 x 9 x 7 ins., 11 ins. in the
 ground for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on N. face; and raise a
 mound of stone 2 ft. base, 1 $\frac{1}{2}$ ft. high, N. of cor.

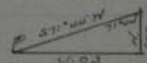
45.46 Wire fence bears N. and S.

Leave cultivated field bears N. and S.

Resurvey of

Chains.

North boundary of Tp. 50 N., R. 102 W.

- 47.20 Intersect line 5-6 private land claim, Tract No. 74, at a point 7.14 chs. $N 0^{\circ} 05' E$ of cor. No. 5.
- 53.75 Descend abruptly.
- 56.40 To Right Bank of South Fork of Shoshone River
course N E and
- Set a granite stone, 17 x 10 x 5 ins., 17 ins. in the ground for meander cor. of frac. secs. 4 and 33, marked M.C. 104 N on N, 51 N on N and 50 N on D, with 6 grooves on N and D faces, from which
A cottonwood, 12 ins. dia., bears $N 11^{\circ} 05' E$ 65 lks. dist., marked T 51 N R 102 W S 33 B T.
- A cottonwood, 10 ins. dia., bears D. $3^{\circ} 4'$ 64 lks. dist., marked T 50 N R 102 W S 4 B T.
- To determine the dist. across, I set a flag on line, on left bank; then measure a base, North; 1.00 chs. to a point, from which the flag bears $S 71^{\circ} 44' E$; from the flag the north. end of the base bears $N 71^{\circ} 44' E$; therefore, the dist. is $\tan. 71^{\circ} 44' \times \text{base}$, or $3.03 \times 1.00 = 3.03$ chs.; making the whole distance from meander cor., 3.03 ch.
- 
- 57.43 To Left Bank of South Fork of Shoshone River
course N E and
- Set a granite stone, 20 x 10 x 7 ins., 15 ins. in the ground for meander cor. of frac. secs. 4 and 33, marked M.C. 104 N on E, 50 N on D and 51 N on N, with 6 grooves on N and D faces, from which

Runway of

North boundary of Tp. 50 N., R. 100 W.

Chains.

A cottonwood, 9 ins. dia., bears S. 70° 10' W. 50 lks. dist., marked T 50 N R 100 W S 4 B T.

A cottonwood, 11 ins. dia., bears N. 60° 30' W. 122 lks. dist., marked T 51 N R 100 W S 33 B T.

Over rolling land.

Through scattering timber.

Ascend gradually.

67.91 Intersect line 5-6 private land claim, Tract No. 45, at a point 18.05 chs. S. 60° 02' E of cor. No. 146.

69.15 Gordon Creek 80 lks. wide; course N. E. and Ascend gradually.

Leave timber line N. W. and S. E.

79.00 Leave rolling land and

Enter mountainous land bears N. and S.

Ascend abruptly.

80.00 Set a granite stone 16 x 8 x 6 ins., 11 ins.

in the ground, for cor. of secs. 4, 5, 32 and 33,

marked with 2 notches on S. and 1 notch on E. edge;

and raise a mound of stone 2 ft. base, 1½ ft. high W. of

cor. From this cor. Mr. Dutcher's line bears

N. 77° E, 3.20 ch. dist.

Land, mountainous and rolling

Soil, sandy, loam and stony; 2nd and 3rd rate.

No timber. cottonwood

Mountainous land 4.00 chs.

Remains of

Chains.

North boundary of Tp. 50 N., R. 100 W.

Heat late sec. 5 and 37.

Over mountainous land.

Ascend abruptly.

3.00 Point of spur falls N. E. and descend.

6.70 Jordan Creek 77th mile; course N. E. and

Ascend gradually.

Leave mountainous land and

Enter rolling land bears N. E. and S. W.

7.91 Intersect line 5 - 6 private land claim, ^{Tract} Lot No. 16

at a point 7.14 chs. N. 0° 01' N. of cor. No. 5 and

Set a granite stone 16 x 12 x 9 ins., 11 ins. in the ground for closing cor. of frac. sec. 5 and 37 marked

C C on N., 16 on E.; with 6 grooves on N. and S. faces, raise a mound of stone 2 ft. base, 1 1/2 ft. high, N.

of cor. from which

A cottonwood, 12 ins. dia., bears S. 76° N.

10 lks. dist., marked T. 50 N. R. 100 W. S. 5 B. T.

No other tree available.

11.08 Wire fence bears N. and S.

Leave rolling land and

Enter mountainous land bears N. and S.

Descend.

12.56 Jordan Creek 77th mile; course S. E. and

Ascend abruptly.

Remedy of

North boundary of Tp. 50 N., R. 10 W.

Chains

- 19.00 Leave mountainous land and
Enter rolling land bears *N. N. and S. E.*
- 27.96 Intersect line 1 - 2 private land claim, ^{Tract} Lot No. 73
at a point ~~2.2~~ chs. *North* of cor. No. 7 and
Set a *granite* stone 17 x 10 x 6 ins., 12 ins. in
the ground for closing cor. of frac. secs. 5 and 32
marked
C C on E., 73 on N.; with 6 grooves on *North*
face; raise a mound of stone 2 ft. base, 1 1/2 ft. high, E.
of cor.
- 46.00 Set a *granite* stone 14 x 10 x 6 ins., 10 ins. in the
ground for 1/2 sec. cor., marked 1/2 on N. face; and raise a
mound of stone 2 ft. base, 1 1/2 ft. high, N. of cor.
- 47.57 Intersect line 3 - 4 private land claim, Tract No. 73, at a
point 2.00 chs. *North* of cor. No. 7/3.
- 48.45 Wire fence bears *N. and S.*
- 79.10 Gulch course *S* and ascend.
Leave rolling land and
Enter mountainous land bears *N. and S.*
- 80.00 Set a *granite* stone 18 x 8 x 6 ins., 12 ins.
in the ground, for cor. of secs. 5, 6, 31 and 32,
marked with 5 notches on ^{NE}E. and 1 notch on ^WW edge;
and raise a mound of stone 2 ft. base, 1 1/2 ft. high W. of
cor.

Resurvey of

Chains.

North boundary of Tp. 50 N., R. 100 W.

Land, *mountainous and rolling*

Soil, sandy, loam and stony; 2nd and 3rd rate.

No timber.

Mountainous land 15.52 chs.

June 5: At this cor. I set off 23° 53' N.,
on the decl. arc; and observe the sun on the meridian; the
resulting lat. is 44° 20' N.

Test lat. was 6 and 31.

Over mountainous land

Ascend.

13.75 Point of spur falls D E and descend. *abruptly over*
bad lands

Leave mountainous land and

Enter mountainous land exceptionally

difficult to survey bears N H and D E

17.10 Gulch course D and ascend. *abruptly*

26.60 Point of spur falls D E and descend. *abruptly*

27.66 Intersect line 3-1 private land claim, Tract No. 48, at a
point 11.56 chs. South of cor. No. 1.

33.60 Gulch course D E and ascend. *abruptly*

39.72 Perpendicular cliff 15 ft. High

40.00 Set a granite stone 12 x 10 x 7 ins., 10 ins. in the
ground for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on N. face; and raise a
mound of stone 2 ft. base, 1 $\frac{1}{2}$ ft. high, N. of cor.

The cor. is situated on a narrow ledge bearing

North boundary of Tp. 50 N., R. 10 W.

Chains.

- 71.5° E. and S. 5° N.
- 40.05 Impervious cliff 20 ft. High bears N. 5° E. and S. 5° N.
- 43.75 Descend abruptly.
- 47.85 Gulch course S. E. and ascend. *abruptly*
- 57.70 Point of spur falls S. E. and descend. *abruptly*
- 62.35 Gulch course S. E. and ascend.
- Leave mountainous land exceptionally difficult to survey and
- Enter mountainous land bears N. N. W. and S. E.
- 67.79 Intersect line 3 - 4 private land claim, ^{Tract} Lot No. 129 at a point 7.5 chs. South of cor. No. 1 and
- Set a sand stone 16 x 12 x 7 ins., 11 ins. in the ground for closing cor. of frack. secs. 2 and 3, marked
- C C on N., 19 on E.; with 2 grooves on N. and S. face; raise a mound of stone 2 ft. base, 1½ ft. high, N. of cor.
- 73.60 Gulch course S. and ascend.
- 102.00 Descend.
- 121.00 East Fork of Iron Creek 15 chs. wide, course S. 15° E. and descend
- 135.70 Small branch course N. 70° E.
- 137.00 Intersect the 10th Guide Meridian West at a point 19.19 chs. North of the cor. of Tps. 50 and 51 N., R. 10 W. and 105 N. which I find marked and witnessed as described by the surveyor general. I also change

Resurvey of

Chains.

North boundary of Tp. 50 N., R. 106 W.

the cor. to a cor. common to Sp. 50 and 51 N.,
R. 106 W. and

Set a granite stone, 16 x 14 x 8 ins., 11 ins. into the ground,
for opening cor. of Sp. 50 and 51 N., R. 106 W.

Marked by a 6 in. iron pipe, 50 N. on S. and 51 N. on
N. with 6 grooves on N., S. and E. faces;
and raise a mound of stone, 2 ft. base, 2 1/2 ft. high,
E. of cor.

Land, mountainous.

Soil, rocky; 4th rate.

No Timber.

Mountainous land exceptionally difficult
to survey 45.60[✓] chs.

Mountainous land 55.51[✓] chs.

June 8, 1908.

Boundaries of Sp. 50 N. R. 104 H.

Latitude, departure and closing error.

Line designated	Line bearing	Distance	Latitude				Departure	
			N	S	E	W		
South by Sp. 50 N. R. 104 H.	North	536.50						536.50
1 st Guide Marker North	North	387.60	387.60					
2 nd Guide Marker North	N. 0° 03' H.	59.05	59.05					0.03
3 rd Guide Marker North	N. 0° 10' H.	59.16	59.16					0.11
4 th Guide Marker North	North	19.19	19.19					
North by Sp. 50 N. R. 104 H.	East	537.00			537.00			
East by Sp. 50 N. R. 104 H.	South	536.00			536.00			
Closing error							0.71	
Total			178.99	178.99	537.00	536.00		
					0.71	0.36		
Error in lat.					0.01			
Error in dep.						0.51		

Chains

North boundary of Tp. 51 N., R. 10 W.

June 21: At 9^h 30^m a. m. t., I set off
 44° 26' N. on the lat. arc; 23° 28' N. on the decl.
 arc; and determine a meridian with the solar, at the cor. of
 Tps. 51 and 52 N., Rs. 103 and 104 W., which I find
 marked and witnessed as described by the surveyed
 general.

Thence I run

East bet. sec. 1 and 36

Over mountainous land.

Through dense undergrowth.

Through timber.

Descend

0.06 Oak corner S. H. and ascend

1.16 Leave dense undergrowth leave N. 10° E. and S. 10° W.

26.00 Intersect line 1-2 private land claim, Tract No. 40, at a
 point 6.58 chs. North of cor. No. 1 and

Set a lime stone 15 x 10 x 5 ins., 10 ins. in
 the ground for closing cor. of tract, sec. 1 and 36
 marked

CC on E. 40 W. H. with 6 grooves on N. and
 S. face; from which

10 ft. dist., 8 ins. dia., bears S. 1° 30' E.

23 lbs. dist., marked T 52 NR 104 W S 36 BT.

10 ft. dist., 10 ins. dia., bears N. 78° 30' W.

11 lbs. dist., marked T 52 NR 104 W S 36 BT.

Leave timber leave N. and S.

Resurvey of

Chains.

North boundary of Tp. 51 N., R. 106 W.

40.00 Set a sand stone $17 \times 14 \times 5$ ins., 14 ins. in the ground for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on N. face; and raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor.

Descend.

52.00 Leave mountainous land and
Enter mountainous land exceptionally
difficult to survey bears N. and S.

60.00 Great corner O. H.

69.50 Great corner S. 30° W. and around abruptly

80.00 Set a sand stone $16 \times 10 \times 6$ ins., 11 ins. in the ground, for cor. of secs. 1, 2, 35 and 36, marked with S notches on S. and / notches on E. edge; and raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high W. of cor.

Land, mountainous.

Soil, rocky; 4th rate.

Timber, *fine and juniper*

Mountainous land exceptionally difficult
to survey 28.00 chs.

Mountainous land or land covered with
dense undergrowth 52.00 chs.

June 1881 At this cor. I set off $23^{\circ} 28'$ N.,
on the decl. arc; and observe the sun on the meridian; the
resulting lat. is $42^{\circ} 26'$ N.

Chains.

North boundary of Tp. 51 N., R. 102 W.

Tract bet. sec. 2 and 35.

Over mountainous land exceptionally
difficult to survey.

Descend abruptly. over conglomerate cliffs.

17.50 Creek crosses D.E. and ascends

26.00 Intersect line S. of private land claim, Tract No. 40, at a
point 6.88 chs. North of cor. No. 3. which point
falls on an abrupt slope.26.35 Set a granite stone 20 x 10 x 8 ins., 15 ins. in
the ground for ^{witness cor. to} closing cor. of frac. sec. 2 and 35
markedNCC C on N, 40 on E.; with 6 grooves on N. and S.
face; raise a mound of stone 2 ft. base, 1½ ft. high, N
of cor.

29.00 Point of spur falls S. 45° E. and descend. abruptly

32.90 Creek crosses D.E. and ascends abruptly
Enter timber line N. and D.E.40.00 Set a granite stone 15 x 8 x 6 ins., 10 ins. in the
ground for ¼ sec. cor., marked ¼ on N. face; from which
A pine, 12 ins. dia., bears S. 23° 30' E.
77 lks. dist., marked ¼ S 2 B. T.A pine, 10 ins. dia., bears N. 70° E. N.
47 lks. dist., marked ¼ S 35 B. T.

43.00 Point of spur falls S.E. and descend. abruptly

North boundary of Tp. 51 N., R. 10 W.

Set a granite stone $16 \times 13 \times 6$ ins., 11 ins. ^{weight of stone}
in the ground, for cor. of secs. 2, 3, 32 and 33,
marked with 2 notches on ^N and 2 notches on E. edge,

from which

A pine, 7 ins. dia., bears N. $55^{\circ} 20' E$
127 lks. dist., marked T 52 NR 10 W S 32 BT.

A pine, 6 ins. dia., bears S. $53^{\circ} E$
110 lks. dist., marked T 51 NR 10 W S 2 BT.

A pine, 6 ins. dia., bears S. $57^{\circ} 10' E$
97 lks. dist., marked T 51 NR 10 W S 3 BT.

A pine, 8 ins. dia., bears N. $45^{\circ} E$
129 lks. dist., marked T 52 NR 10 W S 32 BT.

Land, mountainous.

Soil, rocky; 4th rate.

Timber, pine.

Mountainous land, exceptionally difficult to survey
5000 ch.

June 21, 1908.

June 22: At 10^h 0^m on the lat. arc, I set off
23° 27' N. on the lat. arc; 23° 27' N. on the decl.
arc; and determine a meridian with the solar; at the cor. of
secs. 2, 3, 32 and 33.

Thence I run

Next lat. sec. 3 and 32.

TRANSCRIBED COPY OF ORIGINAL FIELD NOTES

599

80.00 Resurvey of North boundary of
Tp. 51 N., R. 104 W.
Set a granite stone 16 x 10 x 6
ins., 11 ins. in mound of stone
for cor. of secs. 2, 3, 34 and
35, marked with 4 notches on W.
and 2 notches on E. edge from
which
A pine, 7 ins. dia., bears N.
53° 20' E., 127 lks. dist.,
marked T 52 N R 104 W S 35 BT.
A pine, 6 ins. dia., bears S.
53° E., 110 lks. dist., marked T
51 N R 104 W S 2 BT.
A pine, 6 ins. dia., bears S.
57° 40' W., 97 lks. dist.,
marked T. 51 N R 104 W S 3 BT.
A pine, 8 ins. dia., bears N.
25° W., 199 lks. dist., marked T
52 N R 104 W S 34 BT.
Land, mountainous
Soil, rocky; 4th rate.
Timber, pine.
Mountainous land exceptionally
difficult to survey 80.00 chs.
June 21, 1908.

June 22: At 10 h 0 m a.m.,
l.m.t., I set off 44° 26' N. on
the lat. arc; 23° 27' N. on the
decl. arc; and determine a
meridian with the solar, at the
cor. of secs. 2, 3, 34 and 35.
Thence I run
West bet. secs. 3 and 34.

Recovery of

Chains

North boundary of T₅.sec. N., R. 10. W.

Over mountainous lands exceptionally difficult to survey.

Descend abruptly over conglomerate cliff and rocks.

Through timber.

12.00 Creek on the side; course S. 10° W.

14.60 Creek on the side; course S.

17.85 Creek on the side; course N. E.

20.15 Creek on the side; course S. 10° E. and ascends abruptly.

20.00 Set a granite stone 16 x 12 x 6 ins., 11 ins. in the ground, for the cor. marked 1st as N. from, from which

A pine, 7 ins. dia., bears N. 10° E.

72 lks. dist., marked M S. B. T.

A pine, 14 ins. dia., bears S. 50° E.

28 lks. dist., marked M S. B. T.

June 24: At this cor. I set off $23^{\circ} 27'$ N., on the decl. arc; and observe the sun on the meridian; the resulting lat. is $44^{\circ} 26' N.$

60.40 Summit of high divide bears N. and S. and descend.

67.00 Enter heavy timber bears N. and S.

78.00 Enter scattering timber bears N. and S.

80.00 Set a granite stone 16 x 10 x 8 ins., 11 ins. in the ground, for cor. of sec. 3, 14, 23 and 34, marked with 3 notches on S. and 3 notches on E. edge;

from which

A pine, 14 ins. dia., bears N. $74^{\circ} 30'$ E.

11 lks. dist., marked T. S. N. R. 10. W. S. B. T.

TRANSCRIBED COPY OF ORIGINAL FIELD NOTES

600

- Chains** **Resurvey of North boundary of
Tp. 51 N., R. 104 W.
Over mountainous land
exceptionally difficult to
survey.
Descend abruptly over
conglomerate cliff and rocks.
Through timber**
- 12.00** **Creek 05 lks wide; course S.
10° W.**
- 16.60** **Creek 06 lks. wide; course S.**
- 17.85** **Creek 05 lks. wide; course
N.E.**
- 20.15** **Creek 07 lks. wide; course S.
80° E. and ascend abruptly.**
- 40.00** **Set a granite stone, 16 x 12
x 6 ins., 11 ins. in the
ground, for 1/4 sec. cor.,
marked 1/4 on N. face; from
which
A pine, 7 ins. dia., bears N.
40° E. 72 lks. dist., marked
1/4 S 34 B.T.
A pine, 12 ins. dia., bears
S. 50° E. 28 lks. dist.,
marked 1/4 S 3 B.T.
June 22: At this cor. I set
off 23° 27' N., on the decl.
arc; and observe the sun on
the meridian; the resulting
lat. is 44° 26' N.**
- 60.20** **Summit of high divide bears
N. and S. and descend.**
- 62.00** **Enter heavy timber bears N.
and S.**
- 78.00** **Enter scattering timber bears
N. and S.**
- 80.00** **Set a granite stone 16 x 10 x
8 ins., 11 ins. in the
ground, for cor. of secs. 3,
4, 33 and 34, marked with 3
notches on W. and 3 notches
on E. edge; from which
A pine, 12 ins. dia., bears
N. 76° 30' E., 11 lks. dist.,
marked T 52 N R 104 W S 34
BT.**

Resurvey of

Chains.

North boundary of Tp. 51 N., R. 10 W.

A *pine*, 4 ins. dia., bears S. 36° E.
21 lks. dist., marked T 51 N R 10 W S 3 B T.

A *pine*, 7 ins. dia., bears S. 43° 20' E.
68 lks. dist., marked T 51 N R 10 W S 4 B T.

A *pine*, 8 ins. dia., bears N. 48° 30' E.
47 lks. dist., marked T 51 N R 10 W S 3 B T.

Land, mountainous.

Soil, rocky; 4th rate.

Timber, *pine*

Mountainous land exceptionally difficult
to survey 80.00 chs.

June 22, 1908

June 20 At 7¹⁰ - a. m., 1. m. t., I set off
48° 30' N., on the lat. arc; 23° 27' on the decl.
arc; and determine a meridian with the solar, at the cor. of
secs. 3, 4, 33 and 34.

Thence I run.

West lat. sec. 4 and 33.

Over mountainous land exceptionally
difficult to survey.

Descend abruptly over lower rocks and boulders
Through timber

40.00 Set a granite stone 15 x 10 x 6 ins., 10 ins. in the
ground for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on N. face, from which

Reamer J.

Chains.

North boundary of Tp. 57 N., R. 106 W.

A balsam, 6 ins. dia., bears $N 66^{\circ} 30' E$

54 lks. dist., marked $\frac{1}{4} S 33 B. T.$

A balsam, 7 ins. dia., bears $S 9^{\circ} E$

1st lks. dist., marked $\frac{1}{4} S 11 B. T.$

Ascend.

47.25 Point of spur falls $N 60^{\circ} N$ and descend. abruptly

75.50 Creek crosses $N 10^{\circ} N$ and ascend

Same timber bears $N 10^{\circ} N$ and $S 10^{\circ} E$

78.00 Descend.

80.00 Set a granite stone 12 x 10 x 5 ins., 10 ins.

in ground of stone

in the ground, for cor. of secs. 1, 5, 32 and 33,

marked with 2 notches on S. and 11 notches on E. edge;

and raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high W. of

cor. from which

A pine, 14 ins. dia., bears $N. 47^{\circ} 45' E$

275 lks. dist., marked T 52 N R 106 W S 33 B T.

No other trees available

Land, mountainous.

Soil, rocky; 4th rate.

Timber, pine and balsam

Mountainous land exceptionally difficult

to survey 80 00 chs.

June 23: At this cor. I set off $23^{\circ} 27' N.$,
on the decl. arc; and observe the sun on the meridian; the
resulting lat. is $41^{\circ} 26' N.$

Resurvey of

Chains.

North boundary of Tp. 51 N., R. 10 W.

Start bet. sec. 5 and 32

Over mountainous land exceptionally difficult to survey.

Descend abruptly, over loose rocks and boulders

17.60 Run Road bears $N 70^{\circ} W$ and $S 50^{\circ} E$

19.15 Cross corner $N. H.$

29.75 Enter dense undergrowth bears N and S

31.10 Britisher track course N and ascend.

31.85 Leave dense undergrowth leave N and S

Ascend abruptly.

40.00 Set a granite stone $16 \times 10 \times 6$ ins., 11 ins. in the ground for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on N . face; from which

A pine, 12 ins. dia., bears $S 35^{\circ} 50' W$
172 lks. dist., marked $\frac{1}{4} S$ & B. T.

A pine, 8 ins. dia., bears $N 51^{\circ} 10' W$
220 lks. dist., marked $\frac{1}{4} S$ & B. T.

44.30 Road bears N and S .

50.00 Set a granite stone $20 \times 15 \times 8$ ins., 15 ins. in the ground, for cor. of secs. 5, 6, 31 and 32, marked with 1 notches on S . and 5 notches on E . edge; and raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high W . of cor.

Land, mountainous.

Soil, rocky; 4th rate.

No Timber.

Mountainous land exceptionally difficult to survey 80.00 chs.

June 23, 1908

Resurvey of

Chains.

North boundary of Tp. 51 N., R. 104 W.

June 24: At 9⁰⁰ a. m., l. m. t., I set off
 $44^{\circ} 26'$ N., on the lat. arc; $23^{\circ} 26'$ N. on the decl.
 arc; and determine a meridian with the solar, at the cor. of
 secs., 5, 6, 31 and 32.

Thence I run.

West lot sec. 6 and 31.

Over mountainous land exceptionally
 difficult to survey.

Ascend.

40.00 Set a granite stone $16 \times 8 \times 7$ ins., 11 ins. in the
 ground for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on N. face; and raise a
 mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor.

58.00 Road bears N. 30° E. and S. 20° E.

Descend.

97.10 Wire fence bears N. and S.

113.00 White Creek crosses N. 30° E. and ascends

138.10 I intersect the 13th Guide Meridian West at a point
 16.57 ch. N. of the true point for cor. of Tps. 51 and 52
 N. R. 104 and 105 W. I find the true cor. for this
 Tp. cor. 30 ch. E. of the true point marked and
 untraced as described by the surveyor general. I also
 change this untraced cor. to a untraced cor. common
 to Tps. 51 and 52 North R. 105 W. and
 set a granite stone, $18 \times 16 \times 8$ in., 13 in. in the ground,
 for defining cor. of Tps. 51 and 52 N. R. 104 W.,
 marked C. C. 104 W. E., S. 1 N. on S. and S. 2 N. on N.

TRANSCRIBED COPY OF ORIGINAL FIELD NOTES

- Chains Resurvey of North boundary of Ch
Tp. 51 N., R. 104 W.
June 24: At 9 h 05 m a.m.,
l.m.t., I set off $44^{\circ} 26' N.$,
on the lat. arc; $23^{\circ} 27' N.$
on the decl. arc; and
determine a meridian with the
solar, at the cor. of secs.
5, 6, 31 and 32.
Thence I run
West bet. secs. 6 and 31.
Over mountainous land
exceptionally difficult to
survey.
Ascend.
- 40.00 Set a granite stone 16 x 8 x
7 ins., 11 ins. in the
ground, for $1/4$ sec. cor.,
marked $1/4$ on N. face; and
raise a mound of stone 2 ft.
base, $1-1/2$ ft. high, N. of
cor.
- 58.00 Road bears N. $20^{\circ} W.$ and S.
 $20^{\circ} E.$
- 97.10 Wire fence bears N. and S.
- 113.00 Whit Creek course N. $25^{\circ} W.$
and ascend
- 138.43 Intersect the 13th Guide
Meridian West at a point
 16.57 chs. N. of the true
point for cor. of Tps. 51 and
52 N., Rs. 104 and 105 W., I
find the witness cor. for
this Tp. cor. 20 lks. E. of
the three point marked and
witnessed as described by the
surveyor general. I also
change this witness cor. to a
witness cor. common to Tps.
51 and 52 North R. 105 W. and
Set a granite stone, 18 x 14
x 5 ins., 12 ins. in the
ground, for closing cor. of
Tps. 51 and 52 N., R. 104 W.,
marked C.C. 104 W. on E., 51
N. on S. and 52 N. on N.,

Survey of

Claims

North boundary of Tp. 55 N., R. 10 W.

with 6 corners on N. line E. corner
and raise a mound of stone, 2 ft. base, 1 1/4 ft. high
E. of cor.

From this on Co. No. 45. bears S. 20° E. 22.55 ch.
dist.

Land, mountainous.

Soil, rocky; 4th rate.

No timber.

Mountainous land; exceptionally difficult to survey
138.45 ch.

June 2nd: At this cor. I set off 23° 26' N.,
on the decl. arc; and observe the sun on the meridian; the
resulting lat. is 42° 26' 37".

June 2nd 1905.

TRANSCRIBED COPY OF ORIGINAL FIELD NOTES

605

Chains Resurvey of North boundary of
Tp. 51 N., R. 104 W.
with 6 grooves on N., S. and E.
faces, and raise a mound of
stone, 2 ft. base, 1-1/2 ft.
high, E. of cor.
From this cor. Cor. No. 6/47
bears S. $0^{\circ} 16'$ E. 33.88 chs.
dist.
Land, mountainous.
Soil, rocky; 4th rate.
No timber.
Mountainous land exceptionally
difficult to survey 138.43 chs.
June 24: At this cor. I set off
 $23^{\circ} 26'$ N., on the decl. arc;
and observe the sun on the
meridian; the resulting lat. is
 $44^{\circ} 26'$ N.
June 24, 1908.

✓

Soundings of Sp. 51 N. P. Road

Paltitudes, departure and closing error

Line designated	Line being	Distance	Paltitudes		Departure	
			N	S	E	W
Double by Sp. 51 N. P. Road	West	553.00				553.00
1st Line Main West	North	60.81	60.81			
2nd Line Main West	North	57.30	57.30			57.30
3rd Line Main West	North	59.90	59.90			59.90
4th Line Main West	North	557.58	557.58			
North by Sp. 51 N. P. Road	East	558.00			558.00	
Double by Sp. 51 N. P. Road	West	558.00		558.00		
Closing error					0.71	
Total			557.58	557.58	558.00	557.58
			558.00		557.58	
Error in lat.			0.00			
Error in dep.					0.71	

Boundaries of Sp 52 N, R 104 W

Latitude, departure and closing errors.

Line designated	Direction	Distance	Bearing				Departure
			N	S	E	W	
South by Sp 52 N, R 104 W	West	538.40				538.40	
13th Parallel North	North	507.00	507.00				
13th Standard Parallel North	East	507.83			507.83		
East by Sp 52 N, R 104 W	South	508.00		508.00			
Cumulative						0.21	
Totals			507.00	508.00	507.83	538.40	
			508.00		507.83		
Errors in lat.			1.00				
Errors in dep.						0.18	

Names and duties of assistants.

Charles A. Mendonhall	Chairman
Bruce E. Olmstead	Chairman
Nat. L. Neff	Assessor
William L. Gaiffer	Maintenance
Earl Newkirk	Flagman

For next complete test of instrument see Book F :

Allet L. Vance

U. S. Deputy Surveyor.

FINAL OATHS FOR SURVEYS.

LIST OF NAMES.

A list of the names of the individuals employed by _____

Albert D. Vance

United States Deputy Surveyor, to assist in running, measuring, and marking the lines and corners described in the foregoing field notes of the survey of *the north boundaries of Townships 29th 50 and 51 North, Range 10th East*

West of the Sixth Principal Meridian, in Wyoming, showing the respective capacities in which they acted.

Charles A. Mendenhall, Chainman.

Bruce E. Olmstead, Chainman.

_____, Chainman.

_____, Chainman.

Nat. L. Huff, Azman.

William L. Huffer, Moundsman.

Earl Newkirk, Flagman.

FINAL OATHS OF ASSISTANTS.

We hereby certify that we assisted _____

Albert D. Vance

United States Deputy Surveyor, in ^{re} surveying all those parts or portions

of the north boundaries of Townships 19, 50 and 51

North Range 10 st

West of the Sixth Principal Meridian in Wyoming, which are represented in the foregoing field notes as having been ^{re} surveyed by him and under his direction; and that said ^{re} survey has been in all respects, to the best of our knowledge and belief, well and faithfully ^{re} surveyed,

and the corner monuments established, according to the instructions furnished by the United States Surveyor-General for Wyoming.

Charles A. Wenderhall, Chainman.

Bruce E. Olmsted, Chainman.

_____, Chainman.

_____, Chainman.

Wm. H. H. H., Axman.

William H. H. H., Moundsman.

Earl Newkirk, Flagman.

Subscribed and sworn to before me this *14th*

day of *September*, 190*8*.

Albert D. Vane

U. S. Deputy Surveyor

FINAL OATH OF U. S. DEPUTY SURVEYOR.

I, *Albert D. Vane*

United States Deputy Surveyor, do solemnly swear that in pursuance of instructions received from

Alpheus P. Hanson

United States Surveyor-General for Wyoming, bearing date of the

5th day of *September*, 190*7*, I have well, faith-

fully, and truly, in my own proper person, and in strict conformity

with the instructions furnished by the United States Surveyor-General

for Wyoming, the Manual of Surveying Instructions and the laws of the United States, ^{re} surveyed all those parts or portions of ~~the~~

*north boundaries of Townships 19, 20 and 21 North,
Range 10 East*

West of the Sixth Principal Meridian in Wyoming, as are represented in the foregoing field notes as having been ^{re} surveyed by me and under my directions; and I do further solemnly swear that all the corners of said ^{re} surveys have been established and perpetuated in strict accordance with the Manual of Surveying Instructions and the special written instructions of the United States Surveyor-General for Wyoming, and in the specific manner described in the field notes, and that the foregoing are the true field notes of such ^{re} surveys.

Albert Wand

United States Deputy Surveyor.

Subscribed and sworn to before me this

5th

day of *September*, 190*8*

John K. Coe

U. S. COMMISSIONER.

U. S. Surveyor-General's Office,

CHEYENNE, WYOMING,

February 8, 1911

The foregoing Field Notes of the ^{2d} surveys of the
north boundaries of Townships
49, 50 and 51 North,
Range 104

West of the Sixth Principal Meridian in the State of Wyo-
ming, executed by Brant & Vance

U. S. Deputy Surveyor, under their contract
No. 328 dated September 5, 1907

having been critically examined and the necessary correc-
tions and explanations made, the said Field Notes and the
surveys they describe are hereby approved.

A. S. Brown

U. S. Surveyor-General for Wyoming.

622

615-621
Blank