Volume

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BOOK A-298

FIELD NOTES

OF THE RE SURVEY OF THE

EIGHTH STANDARD PARALLEL SOUTH

through

Range No. 14 West.

Of the Salt Lake Base and *Meridian,*

in the state of Utah.

AS SURVEYED BY

Harvey D. Heist, *United States Deputy Surveyor,*

Under his Contract No. 251, *dated* February 12, 1902, *189*

Re Survey commenced December 17, 1902, *189*

Re Survey completed December 18, 1902, *189*

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Re Survey — Lines — 6.00 ✓
" — Lines — 19.00 ✓

14

BOOK A-298

NAMES AND DUTIES OF ASSISTANTS.

Earl V. Woolley	Chainman
Edwin Higbee	"
William Walquist	"
George Wilson	"
John Kitchen	Roundman
Earl V. Woolley	"
James Potter	Axman
Oley Sorenson	Flagman

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1B

PRELIMINARY OATHS OF ASSISTANTS.

We, Earl V. Woolley, Edwin Higbee, William Walquist, and George Wilson do solemnly swear that we will well and faithfully execute the duties of chainmen; that we will level the chain over even and uneven ground, and plumb the tally pins, either by sticking or dropping the same; that we will report the true distances to all notable objects, and the true lengths 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 resurvey of Eighth Standard Parallel South, through R. 14 W. of the Salt Lake Base and Meridian, Utah.

Earl V Woolley, Chainman.
William Walquist, Chainman.
Edwin Higbee, Chainman.
George Wilson, Chainman.

Subscribed and sworn to before me this 17th. day of December, 1902., 189

SEAL

Harvey L. Kirst
U.S. Deputy Surveyor

We, John Kitchen and Earl V. Woolley do solemnly swear that we will well and truly perform the duties of moundmen in the establishment of corners, according to the instructions given us, to the best of our skill and ability, in the resurvey of the Eighth Standard Parallel South, through R. 14 W. of the Salt Lake Base and Meridian, Utah.

John Kitchen, Moundman.
Earl V Woolley, Moundman.

Subscribed and sworn to before me this 17th. day of December, 1902., 189

SEAL

Harvey L. Kirst
U.S. Deputy Surveyor

~~We~~, I, James Potter ~~and~~ do solemnly swear that ~~we~~ I will well and truly perform the duties of axman in the establishment of corners and other duties, according to instructions given ~~us~~ me, to the best of ~~our~~ my skill and ability, in the resurvey of the Eighth Standard Parallel South, through R. 14 W. of the Salt Lake Base and Meridian, Utah.

James Potter, Axman.
, Axman.

Subscribed and sworn to before me this 17th. day of December, 1902., 189

SEAL

Harvey L. Kirst
U.S. Deputy Surveyor

I, Oley Sorenson, 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 resurvey of the Eighth Standard Parallel South, through R. 14 W. of the Salt Lake Base and Meridian, Utah.

Oley Sorenson, Flagman.

Subscribed and sworn to before me this 17th. day of December, 1902., 189

SEAL

Harvey L. Kirst
U.S. Deputy Surveyor

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RESURVEY OF THE EIGHTH STANDARD PARALLEL SOUTH, through R.14 W.

CHAINS

Survey commenced, December 17, 1902, and executed with a W.&.L.E.Gurley, light mountain transit, No.-, with solar attachment. 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 verniers of the latitude and declination arc.

The instrument was examined, tested on the true meridian at Salt Lake City, found correct, and was approved by the surveyor general for Utah, May 26, 1902.

I examine the adjustments of the transit, and correct the level and collimation errors; then to test the solar apparatus, by comparing its indications, resulting from solar observations made during a.m. and p.m. hours with a meridian determined by observations on Polaris, I proceed as follows:

At the Standard Corner to Tp.40 S., Rs.13 and 14 W., in approximate Latitude 37° 17' 18"N., Longitude 113° 18' 43"W.; I set off 37° 17'N. on lat.arc; 23° 17'S., on decl.arc; and at 4 p.m., l.m.t., determine with the solar a true meridian and mark a point thereof, on a stone firmly set in the ground, 5 chs.N. of my station.

December 17, 1902.

December 18: At 1h.32m., a.m., l.m.t., I observe Polaris at western elongation, in accordance with the 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.

At 7 a.m., I lay off the azimuth of Polaris, 1° 31' to the east, and mark the meridian thus determined, by cutting a small groove in the stone set November 17, on which the meridian falls 0.4 ins. east of the mark

RESURVEY OF THE EIGHTH STANDARD PARALLEL SOUTH, through R.14 W., continued

CHAINS

determined by the solar.

At 8 a.m., l.m.t., I set off 37° 17'N. on lat. arc; 23° 19'S. on decl. arc; and mark a point in the meridian thus determined with the solar, by a cross on the stone already set 5 chs. N. of my station; this mark falls 0.4 ins. east of the meridian established by the Polaris observation.

The solar apparatus, by p.m. and a.m. observations, defines positions for meridians, respectively about 0' 26" west and 0' 21" east respectively of the meridian established by the Polaris observation; therefore, I conclude that the adjustments of the instrument are satisfactory.

The magnetic bearing of the true meridian at 8h. 30m. a.m. is N.15° 58'W.; the angle thus determined gives the magnetic declination 15° 58'W.

Preliminary to surveying the Eighth Standard Parallel South, I retrace the S.Bdy. of sec. 36.

From the cor. to Tp! 40 S., Rs. 13 and 14 W., heretofore described.

I run

West, on a blank line, along the S.Bdy. of sec. 36, at 30.00 chs. no trace can be found of the witness cor. to the stan. $\frac{1}{4}$ sec. cor., and at 80.00 chs. no trace can be found of the Stan. cor. to secs. 35 and 36.

I resurvey the 8th. Standard Parallel South, along the S.Bdy. of sec. 36, as follows:

From the Stan. cor. to Tp. 40 S., Rs. 13 and 14 W., heretofore described,

I run

West, on the tangent, resurveying along the S. side of sec. 36.

Over rocky land, descend.

1.00 Old road bears N. and S.

2.10 Ditch leading to Silver Reef, 5 lks. wide, 12 ins. deep,

ESURVEY OF THE EIGHTH STANDARD PARALLEL SOUTH, through R.14 W., continued.

CHAINS	
	course S.
9.00	Road, bears N. and S.
10.15	Spring branch, Leeds Creek, 2 lks. wide, ravine 75 ft. deep, course S.
	Ascend.
29.00	Begin abrupt ascent.
30.00	Set a red sandstone 20x8x6 ins., 15 ins. in the ground for reestablished witness cor. to stan. $\frac{1}{4}$ sec. cor., marked S.C. W.C. $\frac{1}{4}$ S. on N. face, and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor.
	Pits impracticable.
32.00	Begin ascent over red sandstone bluffs, bearing N.E. and S.W.
	Difference bet. measurement of 40.00 chs., by two sets of chainmen, is 8 lks; position of middle point
	By 1st. set 39.96 chs.
	By 2nd. set 40.04 chs.; the mean of which is
40.00	N. 0.002 chs. from the tangent,
	Falls on smooth surface of a sandstone ledge, I cut a cross, X, at exact point for reestablished stan. $\frac{1}{4}$ sec. cor., marked S.C. $\frac{1}{4}$ S. on N. side of cross, and raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor.
	Pits impracticable.
43.20	Top of ridge, 700 ft. above Leeds Creek, bears N.E. and S.W.
	Begin abrupt descent over broken ledges.
61.00	Bottom of ravine, 400 ft. below top of ridge, course S.
	Enter scattering cedar and pinon timber.
	Ascend.
	Difference between measurement of 80.00 chs., by two sets of chainmen is 12 lks., position of middle point
	By 1st. set, 80.06 chs.
	By 2nd. set, 79.94 chs.; the mean of which is
80.00	N. 0.008 chs. from the tangent.
	Set a sandstone 30x14 x4 ins., 23 ins. in the ground,

61/19

for reestablished stan.cor.to secs.35 and 36, marked S.C.on N., with 5 grooves on W.and 1 groove on E.faces, from which

A cedar 5 ins.diam., bears N.31° 30'E., 86 lks.dist., marked T.40 S. R.14 W. S.36 B.T.

A cedar 5 ins.diam., bears N.46°W., 44 lks.dist., marked T.40 S. R.14 W. S.35 B.T.

Land, rolling on 29.00 chs.

balance mountainous.

Soil, rocky 3rd.and 4th.rate.

Timber, scattering cedar and pinon on 19 chs.

Mountainous land on 61.00 chs.

December 18, 1902.

For general description, see book of subdivisions of T.40 S. R.14 W.

Harvey L. Hirst

U.S.DEPUTY SURVEYOR.

There being no notary public or other officer authorized to administer oaths, within a reasonable distance at the beginning or ending of this survey, in order tosave time and expense I administer the preliminary and final oaths myself.

Harvey L. Hirst

U.S.DEPUTY SURVEYOR

FINAL OATHS OF DEPUTY SURVEYOR AND HIS ASSISTANTS.

LIST OF NAMES.

A list of the names of the individuals employed by Harvey D.Heist, United States Deputy Surveyor, to assist in running, measuring, and marking the lines and corners described in the foregoing field notes of the re survey of the Eighth Standard Parallel South,through R.14 W. of the Salt Lake Base and Meridian,Utah. showing the respective capacities in which they acted:

Earl V.Woolley — William Walquist, *Chainman.*

EDwin Higbee — George Wilson, *Chainman.*

John Kitchen, *Moundman.*

Earl V.Woolley, *Moundman.*

James Potter, *Axman.*

, *Axman.*

Oley Sorenson, *Flagman.*

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted Harvey D.Heist, United States Deputy Surveyor, in re surveying all those parts or portions of the Eighth Standard Parallel South,through R.14 W. of the Salt Lake Base and meridian, in the state of Utah, which are represented in the foregoing field notes as having been surveyed by him and under his direction; and that said survey has been in all respects, to the best of our knowledge and belief, well and faithfully surveyed, and the corner monuments established, according to the instructions furnished by the United States Surveyor General for Utah.

Earl V. Woolley — William Walquist, *Chainman.*

Edwin Higbee — George Wilson, *Chainman.*

John Kitchen, *Moundman.*

Earl V Woolley, *Moundman.*

James Potter, *Axman.*

, *Axman.*

Oley Sorensen, *Flagman.*

Subscribed and sworn to before me this 18th. day of December, 1902., 189

SEAL

Harvey D. Heist
U.S. Deputy Surveyor

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FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I, Harvey D. Heist, United States Deputy Surveyor, do solemnly swear that, in pursuance of a contract received from Edward H. Anderson United States Surveyor General for Utah, bearing date of the 12th. day of February, 1902, 189 , 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 Utah, the Manual of Surveying Instructions, and the laws of the United States, re surveyed all those parts or portions of the Eighth Standard Parallel South, through R. 14 W. of the Salt Lake Base and meridian, in the state of Utah, which are represented in the foregoing field notes as having been re surveyed by me, and under my direction; and I do further solemnly swear that all the corners of said re survey 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 Utah, and in the specific manner described in the field notes, and that the foregoing are the original field notes of such re survey; and should any fraud be detected, I will suffer the penalty of perjury under the provisions of an Act of Congress approved August 8, 1846.

Harvey D. Heist
United States Deputy Surveyor.

Subscribed by said Harvey D. Heist, and sworn to before me this 26th day of March 1903, 189

Edward H. Anderson
Surveyor-General for Utah

SEAL

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah, February 26 1904, 189

The foregoing field notes of the re survey of the Eighth Standard Parallel South through Range 14 West of the Salt Lake Base and Meridian Utah

executed by Harvey D. Heist under his contract No. 251, dated February 12, 1902, 189 , having been critically examined, and the necessary corrections and explanations made, the said field notes, and the surveys they describe, are hereby approved.

Edward H. Anderson
United States Surveyor General

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

United States Surveyor General

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BOOK A-298

FILED
MAR 26 1903

FIELD NOTES

OF THE SURVEY OF THE

E-I-G-H-T-H S-T-A-N-D-A-R-D- P-A-R-A-L-L-E-L S-O-U-T-H

through

Range No. 14 west.

Of the Salt Lake Base and *Meridian,*

in the state of Utah.

AS SURVEYED BY

Harvey D. Heist, *United States Deputy Surveyor,*

Under his Contract No. 251, *dated* February 12, 1902, *189*

Survey commenced December 18, 1902, *189*

Survey completed December 19, 1902, *189*

6—151

Std — high 4-65-45
" low 14-55

BOOK A-298

NAMES AND DUTIES OF ASSISTANTS.

William Walquist	Chainman
Frank Bringhurst	"
Earl V. Woolley	"
Edwin Higbee	"
Frank Duffin	Moundman
John Kitchen	Axman
Herbert Riggs	Flagman

BOOK A-298

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Meanders Page.....

PRELIMINARY OATHS OF ASSISTANTS.

We, William Walquist, Frank Bringhurst, Earl V. Woolley and Edwin Higbe do solemnly swear that we will well and faithfully execute the duties of chainmen; that we will level the chain over even and uneven ground, and plumb the tally pins, either by sticking or dropping the same; that we will report the true distances to all notable objects, and the true lengths 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 Eighth Standard Parallel South, through Rs. 14 and 15 W. of the Salt Lake Base and Meridian, Utah.

William Walquist, Chainman.
Frank Bringhurst, Chainman.
Earl V. Woolley, Chainman.
Edwin Higbee, Chainman.

Subscribed and sworn to before me this 18th. day of December, 1902., 189

SEAL

Harvey L. Kent
U.S. Deputy Surveyor

~~We~~, I, Frank Duffin ~~and~~ do solemnly swear that ~~we~~ I will well and truly perform the duties of moundman in the establishment of corners, according to the instructions given ~~us~~ me to the best of ~~our~~ my skill and ability, in the survey of the Eighth Standard Parallel South, through Rs. 14 and 15 W. of the Salt Lake Base and Meridian, Utah.

Frank R. Duffin, Moundman.
, Moundman.

Subscribed and sworn to before me this 18th. day of December, 1902., 189

SEAL

Harvey L. Kent
U.S. Deputy Surveyor

~~We~~, I, John Kitchen ~~and~~ do solemnly swear that ~~we~~ I will well and truly perform the duties of axman in the establishment of corners and other duties, according to instructions given ~~us~~ me, to the best of ~~our~~ my skill and ability, in the survey of the Eighth Standard Parallel South, through Rs. 14 and 15 W. of the Salt Lake Base and Meridian, Utah.

John Kitchen, Axman.
, Axman.

Subscribed and sworn to before me this 18th. day of December, 1902., 189

SEAL

Harvey L. Kent
U.S. Deputy Surveyor

I, Herbert Riggs, 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 survey of the Eighth Standard Parallel South, through Rs. 14 and 15 W. of the Salt Lake Base and Meridian, Utah.

Herbert Riggs, Flagman.

Subscribed and sworn to before me this 18th. day of December, 1902., 189

SEAL

Harvey L. Kent
U.S. Deputy Surveyor

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EIGHTH STANDARD PARALLEL SOUTH, through RANGE 14 W.

CHAINS	
	Survey commenced, December 18, 1902, and executed with the instrument described in book Y of this survey. I know the instrument to be in adjustment, from recent observations made December 17 and 18 and recorded in book Y of this survey.
	At the re-established Stan.cor.to secs.35 and 36, heretofore described, I set off 37° 17'N.on lat.arc; 23° 22'S.on decl.arc; and at 2 p.m., l.m.t., determine with the solar a true meridian.
	I lay off from the meridian, an angle of 90°, from north to west, and run
	West, on the tangent, S.of sec.35.
	Over broken sandstone ledges, ascend through scattering cedar and pinon timber.
17.20	Top of spur, 200 ft.above cor., projects N.E.
	Descend.
24.50	Bottom of ravine, 150 ft.deep, course N.E.
	Ascend.
	Difference bet.measurement of 40.00 chs., by two sets of chainmen is 14 lks., position of middle point
	By 1st.set, 40.07 chs.
	By 2nd.set, 39.93 chs., the mean of which is
40.00	N.0.002 chs. from the tangent,
	Set a sandstone 18x12x6 ins., 12 ins.in the ground, for stan.¼ sec.cor., marked S.C.¼ on N.face,
	from which
	A pinon 6 ins.diam., bears N.19°E., 45 lks.dist., marked S C.½ S 35 B T
	A pinon 5 ins.diam., bears N.17°W., 70 lks.dist., marked S C.½ S 35.
56.50	Top of mountain ridge, 500 ft.above the stan.¼ sec. cor., bears N.and S.
	Descend.
59.00	Head of ravine, course N.W.
	Ascend.

EIGHTH STANDARD PARALLEL SOUTH, through RANGE 14 W., continued.

CHAINS	
62.20	Top of spur, projects N.
	Descend.
	Difference bet. measurement of 80.00 chs. by two sets of chainmen, is 20 lks., position of middle point
	By 1st. set, 79.90 chs.
	By 2nd. set, 80.10 chs., the mean of which is
80.00	N. 0.008 chs. from the tangent.
	Set a sandstone 24x11x8 ins., 18 ins. in the ground, for stan. cor. to secs. 34 and 35, marked S.C. on N., with 4 grooves on W. and 2 grooves on E. faces, from which
	A cedar 8 ins. diam., bears N. 37° E., 28 lks. dist., marked T. 40 S. R. 14 W. S. 35 B.T.
	A cedar 5 ins. diam., bears N. 61° W., 18 lks. dist., marked T. 40 S. R. 14 W. S. 34 B.T.
	Land mountainous.
	Soil rocky 4th. rate.
	Timber, scattering cedar and pinon.
	Mountainous land on 80.00 chs.
	S. 89° 59' W., on the tangent, S. of sec. 34.
	Over broken sandstone ledges, descend through scattering cedar and pinon timber.
	Difference bet. measurement of 40.00 chs., by two sets of chainmen is 18 lks., position of middle point
	By 1st. set, 40.09 chs.,
	By 2nd. set, 39.91 chs., the mean of which is
40.00	N. 1.7 lk. from the tangent,
	Set a sandstone 24x12x5 ins., 18 ins. in the ground, for stan. $\frac{1}{4}$ sec. cor., marked S.C. $\frac{1}{4}$ on N. face, from which
	A pinon 4 ins. diam., bears N. 68° E., 25 lks. dist., marked S C. $\frac{1}{4}$ S. 34 B T
	A cedar 9 ins. diam., bears N. 38° E., 63 lks. dist., marked S C. $\frac{1}{4}$ S. 34. B T.
	This cor. is 500 ft. below stan. cor. to secs. 34 and 35.

CHAINS	
75.00	Spring branch, 2 lks. wide, in bottom of ravine 300 ft. deep, course S.W.
	Ascend.
	Difference bet. measurement of 80.00 chs. by two sets of chainmen is 16 lks., position of middle point
	By 1st. set, 79.92 chs.,
	By 2nd. set, 80.08 chs., the mean of which is
80.00	N.3.1 lks. from the tangent,
	Top of spur, projects N.E.
	Set a sandstone 18x12x8 ins., 12 ins. in the ground, for stan. cor. to secs. 33 and 34, marked S.C. on N. with 3 grooves on E. and W. faces, and raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor.
	Pits impracticable.
	Land mountainous.
	Soil, rocky 3rd. and 4th. rate.
	Timber, scattering cedar and pinon.
	Mountainous land on 80.00 chs.
	December 18, 1902.
	December 19: At 8 a.m., l.m.t., I set off 37° 17'N. on lat. arc; 23° 21'S. on decl. arc; and determine a true meridian with the solar, at the stan. cor. to secs. 33 and 34.
	Thence I run
	S. 89° 58'W., on the tangent, S. of sec. 33.
	Over rocky land, descend through dense artemisia and oak.
4.00	Road, bears N.E. and S.W.
6.15	Spring branch, 1 lk. wide, course N.E.
	Ascend.
7.50	South end of spur, projecting S.
	Descend.
9.40	Same spring branch, 1 lk. wide, course S.E.

CHAINS

Ascend.

16.30 Irrigating ditch, 3 lks. wide, course S.

16.75 Stake fence, bears N. and S.

Enter cultivated land, belonging to William Roundy.

31.30 Stake fence, bears N. and S.

Leave cultivated land.

From this point the house of William Roundy bears S. 10.00 chs. dist.

Enter scattering cedar and pinon timber.

39.75 Top of spur, projects S.E.

Descend

Difference bet. measurement of 40.00 chs. by two sets of chainmen is 8 lks., position of middle point

By 1st. set, 40.04 chs.

By 2nd. set, 39.96 chs., the mean of which is

40.00 N. 4.7 lks. from the tangent.

Set a limestone 24x10x6 ins., 18 ins. in the ground, for stan. $\frac{1}{4}$ sec. cor., marked S.C. $\frac{1}{4}$ on N. face, from which

A pinon 8 ins. diam., bears N. 43° W., 62 lks. dist., marked S C. $\frac{1}{2}$ S 33. B T.

A pinon 6 ins. diam., bears N. 33° E., 89 lks. dist., marked S C. $\frac{1}{2}$ S 33. B T.

44.70 Bottom of ravine, 50 ft. deep, course S.E.

Begin abrupt ascent.

73.20 Top of ridge, 400 ft. above $\frac{1}{4}$ sec. cor., bears N. and S.

Descend.

Difference bet. measurement 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

80.00 N. 6.8 lks. from the tangent.

Set a sandstone 30x10x5 ins., 23 ins. in the ground for stan. cor. to secs. 32 and 33, marked S.C. on N., with 2 grooves on W. and 4 grooves on E. faces, from which

EIGHTH STANDARD PARALLEL SOUTH, through RANGE 14 W., continued.

CHAINS	
	A cedar 6 ins.diam., bears N.52°E., 36 lks.dist., marked T.40 S. R.14 W. S.33 B.T.
	A cedar 5 ins.diam., bears N.49°W., 34 lks.dist., marked T.40 S. R.14 W. S.32 B.T.
	Land mountainous.
	Soil, rocky on 65.45 chs. 3rd.rate.
	bottom land on 14.55 chs.1st.rate.
	Timber, scattering cedar and pinon.
	Mountainous land on 65.45 chs.
	S.89° 57'W., on the tangent, S.of sec.32.
	Over rocky land, descend through scattering oak, service berry and laurel brush, scattering cedar and pinon timber.
10.75	Bottom of canon, 300 ft.deep, course S.
	Begin abrupt ascent.
34.60	Top of ridge, 300 ft.above canon, bears N.15°W.and S.15°E.
	Descend abruptly over boulders.
	Difference bet.measurement 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	N.9¼ lks.from the tangent.
	Set a sandstone 24x10x10 ins., 18 ins.in the ground, for stan.¼ sec.cor., marked S.C.¼ .on N.face, from which
	A cedar 10 ins.diam., bears N.53°W., 46 lks.dist., marked S.C.¼ S.32 B.T.
	No other trees within limits, and raise a mound of stone 2 ft.base, 1½ ft.high, N.of cor.
	Pits impracticable.
50.70	Bottom of ravine 200 ft.deep, course S.
	Begin abrupt ascent.

EIGHTH STANDARD PARALLEL SOUTH, through RANGE 14 W., continued.

CHAINS

71.10 Top of ridge, bears N. and S.

Descend.

Difference bet. measurement of 80.00 chs. by two sets of chainmen is 14 lks. position of middle point

By 1st. set, 79.93 chs.

By 2nd. set, 80.07 chs., the mean of which is

80.00 N.12 lks. from the tangent.

Set a sandstone 24x12x3 ins., 18 ins. in the ground, for stan. cor. to secs. 31 and 32, marked S,C. on N., with 5 grooves on E. and 1 groove on W. faces, from which

A pinon 5 ins. diam., bears N.81°E., 28 lks. dist., marked T.40 S. R.14 W.S.32 B.T.

A cedar 5 ins. diam., bears N.25°W., 2 lks. dist., marked T.40 S. R.14 W.S.31 B.T.

Land mountainous.

Soil, rocky 3rd. rate.

Timber, scattering cedar and pinon.

Mountainous land on 80.00 chs.

December 19: At this cor. I set off 23° 23' S. on decl. arc; and at 11h. 57m. a.m., l.m.t., observe the sun on the meridian, the resulting lat. is 37° 17' N.

S.89° 56' W., on the tangent, S. of sec. 31.

Over rocky land, descend through scattering cedar and pinon timber.

.75 Bottom of ravine, 75 ft. deep, course S.W.

Ascend.

3.60 Top of rocky spur, projects S.

Begin abrupt descent.

12.75 Bottom of ravine, 300 ft. deep, course S.E.

Ascend.

24.00 Top of ridge, bears N. and S.

Begin abrupt descent.

36.00 Bottom of canon, 700 ft. deep, course S.10°E..

EIGHTH STANDARD PARALLEL SOUTH, through RANGE 14 W., continued.

CHAINS	
	Begin abrupt ascent.
	Difference bet. measurement of 40.00 chs. by two sets of chainmen is 18 lks., position of middle point
	By 1st. set, 40.09 chs.,
	By 2nd. set, 39.91 chs., the mean of which is
40.00	N. 15¼ lks. from the tangent.
	Set a sandstone 30x14x10 ins., 23 ins. in the ground, for stan. ¼ sec. cor., marked S.C. ¼ on N. face, from which
	A cedar 4 ins. diam., bears N. 4° W., 17 lks. dist., marked S C ¼ S 31 B T.
	No other trees within limits, and raise a mound of stone 2 ft. base, 1½ ft. high, N. of cor.
	Pits impracticable.
52.00	Top of ridge, bears N.W. and S.E.
	Begin abrupt descent.
78.50	Spring branch, 2 lks. wide in bottom of canon, 800 ft. deep, course S.E.
	Begin abrupt ascent.
	Difference between measurement of 80.00 chs. by two sets of chainmen is 22 lks., position of middle point
	By 1st. set, 79.89 chs.,
	By 2nd. set 80.11 chs., the mean of which is
80.00	N. 19 lks. from the tangent,
	Set a sandstone 20x12x8 ins., 15 ins. in the ground, for Standard Cor. to Tps. 40 S., Rs. 14 and 15 W., marked S.C. 40 S. on N.
	14 W. on E., and
	15 W. on W. face, with 6 grooves on N., E. and W. faces, from which
	A pinon 6 ins. diam., bears N. 13 E., 29 lks. dist., marked T. 40 S. R. 14 W. S. 31 B.T.
	A pinon 8 ins. diam., bears N. 30° W., 28 lks. dist., marked T. 40 S. R. 15 W. S. 31 B.T.
	No other trees within limits and raise a mound of

CHAINS

stone, 2 ft. base, 1½ ft. high, N. of cor.

Pits impracticable.

Land mountainous.

Soil, rocky 3rd. rate.

Timber, scattering cedar and pinon.

Mountainous land on 80.00 chs.

December 19, 1902.

For general description, see book of subdivisions of T.40 S. R.14 W.

For table of latitude and departures, see Boundaries of T.40 S. R.14 W.

Harvey L. Keist

U.S. DEPUTY SURVEYOR.

FINAL OATHS OF DEPUTY SURVEYOR AND HIS ASSISTANTS.

LIST OF NAMES.

A list of the names of the individuals employed by ______________________________ 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 ______________________________ showing the respective capacities in which they acted:

______________________________, *Chainman.*

______________________________, *Chainman.*

______________________________, *Moundman.*

______________________________, *Moundman.*

______________________________, *Axman.*

______________________________, *Axman.*

______________________________, *Flagman.*

For final affidavits see book T. 4 S. R. 15 W.

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted ______________________________ United States Deputy Surveyor, in surveying all those parts or portions of the ______________________________ of the ______________ meridian, ______________ of ______________, which are represented in the foregoing field notes as having been surveyed by him and under his direction; and that said survey has been in all respects, to the best of our knowledge and belief, well and faithfully surveyed, and the corner monuments established, according to the instructions furnished by the United States Surveyor General for ______________________________

______________________________, *Chainman.*

______________________________, *Chainman.*

______________________________, *Moundman.*

______________________________, *Moundman.*

______________________________, *Axman.*

______________________________, *Axman.*

______________________________, *Flagman.*

For final affidavit see book T. 4 S. R. 15 W.

Subscribed and sworn to before me this ______________ day of ______________, 189

SEAL

____

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FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I, _____ United States Deputy Surveyor, do solemnly swear that, in pursuance of a contract received from _____ United States Surveyor General for _____, bearing date of the _____ day of _____, 189 , 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 _____, the Manual of Surveying Instructions, and the laws of the United States, surveyed all those parts or portions of _____ _____ _____ _____ _____ of the _____ _____ meridian, in the _____ of _____, which are represented in the foregoing field notes as having been surveyed by me, and under my direction; and I do further solemnly swear that all the corners of said survey have been established and perpetuated in strict accordance with the Manual of Surveying Instructions and the special written instructions of the United States Surveyor General for _____ and in the specific manner described in the field notes, and that the foregoing are the original field notes of such survey; and should any fraud be detected, I will suffer the penalty of perjury under the provisions of an Act of Congress approved August 8, 1846.

_____

United States Deputy Surveyor.

Subscribed by said _____, and sworn to before me this _____ day of _____, 189

SEAL

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah, February 26, 1904 189

The foregoing field notes of the survey of the Eighth Standard Parallel South through Ranges 14 West of the Salt Lake Basal Meridian, Utah

executed by Stanley J. Heist under his contract No. 251, dated February 22, 1902, 189 , having been critically examined, and the necessary corrections and explanations made, the said field notes, and the surveys they describe, are hereby approved.

Edward H. Anderson

United States Surveyor General.

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

_____

United States Surveyor General.

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BOOK A-298

FILED

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25

FIELD NOTES

OF THE SURVEY OF THE

W-E-S-T B-O-U-N-D-A-R-Y

of

Township No.40 S., Range No.14 West.

Of the Salt Lake Base and *Meridian,*

in the state of Utah.

AS SURVEYED BY

Harvey D.Heist, *United States Deputy Surveyor,*

Under his Contract No. 251, *dated* February 12,1902. *189*

Survey commenced December,20,1902. *189*

Survey completed December 20,1902. *189*

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W. Bdy. Lots 2-54-50

Lots 25-50

3.00.00

BOOK A-298

NAMES AND DUTIES OF ASSISTANTS.

William Walquist	Chainman
Earl V. Woolley	"
Frank Duffin	Moundman
John Kitchen	Axman
Herbert Riggs	Flagman

For preliminary affidavits see Book T, Pg 40 S R13 W

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BOOK A-298

INDEX DIAGRAM.

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Meanders Page.....

PRELIMINARY OATHS OF ASSISTANTS.

WE, ... and .....
do solemnly swear that we will well and faithfully execute the duties of chainmen; that we will level the chain over even and uneven ground, and plumb the tally pins, either by sticking or dropping the same; that we will report the true distances to all notable objects, and the true lengths 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

.....

....., *Chainman.*

....., *Chainman.*

Subscribed and sworn to before me this .....
day of ....., 189

SEAL

WE, ... and .....
do solemnly swear that we will well and truly perform the duties of moundmen in the establishment of corners, according to the instructions given us, to the best of our skill and ability, in the survey of

.....

....., *Moundman.*

....., *Moundman.*

Subscribed and sworn to before me this .....
day of ....., 189

SEAL

WE, ... and .....
do solemnly swear that we will well and truly perform the duties of axmen in the establishment of corners and other duties, according to instructions given us, to the best of our skill and ability, in the survey of

.....

....., *Axman.*

....., *Axman.*

Subscribed and sworn to before me this .....
day of ....., 189

SEAL

I, ..., 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 survey of .....

....., *Flagman.*

Subscribed and sworn to before me this .....
day of ....., 189

SEAL

WEST BOUNDARY OF T.40 S.,R.14 W.

CHAINS	
	Survey commenced,December 20,1902,and executed with the instrument described in book Y of this survey. I know the instrument to be in adjustment,from recent observations made December 17 and 18,and recorded in book Y of this survey.
	I begin at the Standard Corner to Tp.40 S.,Rs.14 and 15 W.,heretofore described,in approximate Latitude 37° 17'18" N.,Longitude 113° 25'W.,
	At 8 a.m.,l.m.t.,I set off 37°17'N.on lat.arc;23° 22' S.on decl.arc,and determine a true meridian.
	Thence I run
	North,bet.secs.31 and 36.
	Over rocky land,descend through scattering cedar and pinon timber.
7.50	Spring branch,2 lks.wide,in bottom of canon,600 ft. deep,course S.E.
	Begin abrupt ascent.
25.50	Top of ridge,bears N.W.and S.E.
	Enter heavy cedar and pinon timber,bears N.W.and S.E.
	Descend.
40.00	Set a sandstone 18x10x10 ins.,12 ins.in the ground, for ¼ sec.cor.,marked ¼ .on W.face,from which
	A cedar 8 ins.diam.,bears N.47°E.,17 lks.dist., marked ¼ S.31 B.T.
	A pinon 10 ins.diam.,bears N.13°W.,52 lks.dist., marked ¼ S.36 B.T.
73.50	Bottom of ravine,100 ft.deep,course S.E.
	Ascend.
80.00	Top of ridge,bears N.W.and S.E.
	Set a sandstone 15x12x10 ins.,10 ins.in the ground, for cor.of secs.25-30-31 and 36,marked with 1 notch on S.and 5 notches on N.edges,from which
	A pinon 6 ins.diam.,bears N.32°E.,15 lks.dist., marked T.40 S. R.14W. S.30 B.T.

WEST BOUNDARY OF T.40 S.,R.14W.,continued.

CHAINS

A pinon 8 ins.diam.,bears S.74°E.,17 lks.dist., marked T.40 S. R.14W. S.31 B.T.

No other trees with in limits,and raise a mound of stone 2 ft.base,1½ ft.high,W.of cor.

Pits impracticable.

Land mountainous.

Soil,rocky 3rd.rate.

Heavy cedar and pinon timber on 54.50 chs.

North,bet.secs.25 and 30.

Descend over rocky land,through heavy cedar and pinon timber.

40.00 Set a sandstone 20x12x10 ins.,15 ins.in the ground, for ¼ sec.cor.,marked ¼ .on W.face,from which

A cedar 8 ins.diam.,bears N.24°E.,89 lks.dist., marked ¼ S.30 B.T.

A cedar 9 ins.diam.,bears N.47°W.,37 lks.dist., marked ¼ S.25 B.T.

45.00 Bottom of canon 600 ft.deep,course S.E.

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

Enter dense laurel,oak,service berry and scattering mahoganies.

Ascend over broken land.

80.00 Set a sandstone 18x12x8 ins.,12 ins.in the ground,for cor.of secs.19-24-25 and 30,marked with 2 notches on S.and 4 notches on N.edges,and raise a mound of stone,2 ft.base,1½ ft.high,W.of cor.

Pits impracticable.

This cor.is 200 ft.above bottom of canon.

Land mountainous.

Soil,rocky 3rd.rate.

Heavy cedar and pinon timber on 45.00 chs.

Mountainous land and dense undergrowth on 80.00 chs.

December 20: At this cor.I set off 23°23'S.on decl.

WEST BOUNDARY OF T.40 S.,R.14 W.,concluded.

BOUNDARIES OF T.40 S.,R.14 W.

Latitudes,departures and closing errors.

Line Designated	True Bearing	Distance	Latitudes N.	Latitudes S.	Departures E.	Departures W.
8th.Stan.Par.S.-	West	480.00	-	-		480.00
West Bdy. of T.40 S.,R.14 W.-	North	240.00	240.00	-		-
Bet.secs.						
18 & 19-	S.89°58'E.-	79.78	-	.05	79.78	-
" " 17 & 20-	N.89°57'E.-	79.98	.07	-	79.98	-
" " 16 & 17-	N.0° 03'W.-	80.00	80.00	-	-	.07
" " 9 & 16-	S.89°58'E.-	79.98	-	.05	79.98	-
" " 10 & 15-	East -	79.94	-	-	79.94	-
" " 10 & 11-	N.0° 01'W.-	80.00	80.00	-	-	.02
" " 2 & 11-	S.89°59'E.-	80.06	-	.02	80.06	-
" " 1 & 12-	N.89°58'E.-	80.02	.05	-	80.02	-
East Bdy.of T.40 S.,R.14 W.-	South	400.00	-	400.00	-	-
Convergency					.27	
			400.12	400.12	480.03	480.09
				400.12		480.03
Error in lat.and dep.				.00		.06

Harvey A. Reist

U.S.DEPUTY SURVEYOR.

WEST BOUNDARY OF T.40 S.,R.14 W.

CHAINS	
	arc,and at 11h.57'a.m.,l.m.t.,observe the sun on the meridian,the resulting lat.is 37°19'N.
	North,bet.secs.19 and 24.
	Over rocky land,ascend along a steep west slope, through dense oak,service berry and laurel brush,and scattering mahoganies.
40.00	Set a sandstone 15x10x10 ins.,10 ins.in the ground, for ¼ sec.cor.,marked ¼ .on W.face,and raise a mound of stone 2 ft.base,1½ ft.high,W.of cor.
	Pits impracticable.
80.00	Set a sandstone 24x12x10 ins.,18 ins.in the ground, for cor.of secs.13-18-19 and 24,marked with 3 notches on N.and S.edges,and raise a mound of stone,2 ft. base,1½ ft.high,W.of cor.
	Pits impracticable.
	This cor.is 800 ft.above the cor.of secs. 19-24-25 and 30.
	Land mountainous.
	Soil,rocky 3rd.rate.
	No timber.
	Mountainous land and dense undergrowth on 80.00 chs.
	Note: Within 20.00 chs.north of this cor.,are perpendicular sandstone ledges,several hundred feet high,and as the balance of this line falls in broken and worthless country,I abandon the line.
	December 20,1902.
	For general description,see Subdivisions of T.40 S.,R.14 W.

FINAL OATHS OF DEPUTY SURVEYOR AND HIS ASSISTANTS.

LIST OF NAMES.

A list of the names of the individuals employed by ..... , 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 .....

showing the respective capacities in which they acted:

....., *Chainman.*

....., *Chainman.*

....., *Moundman.*

....., *Moundman.*

....., *Axman.*

....., *Axman.*

....., *Flagman.*

For official field book 2 Sp H 5

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted ..... , United States Deputy Surveyor, in surveying all those parts or portions of the ..... of the ..... meridian, ... of ..... which are represented in the foregoing field notes as having been surveyed by him and under his direction; and that said survey has been in all respects, to the best of our knowledge and belief, well and faithfully surveyed, and the corner monuments established, according to the instructions furnished by the United States Surveyor General for

..., *Chainman.*

..., *Chainman.*

..., *Moundman.*

..., *Moundman.*

..., *Axman.*

..., *Axman.*

..., *Flagman.*

For official field book 2 Sp H 5

Subscribed and sworn to before me this ..... day of ....., 189

SEAL

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FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I, ... United States Deputy Surveyor, do solemnly swear that, in pursuance of a contract received from ..... United States Surveyor General for ..... bearing date of the ..... day of ..... 189 , 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 ....., the Manual of Surveying Instructions, and the laws of the United States, surveyed all those parts or portions of .....

..... of the ..... meridian, in the ..... of ....., which are represented in the foregoing field notes as having been surveyed by me, and under my direction; and I do further solemnly swear that all the corners of said survey have been established and perpetuated in strict accordance with the Manual of Surveying Instructions, and the special written instructions of the United States Surveyor General for ..... and in the specific manner described in the field notes, and that the foregoing are the original field notes of such survey; and should any fraud be detected, I will suffer the penalty of perjury under the provisions of an Act of Congress approved August 8, 1846.

United States Deputy Surveyor.

Subscribed by said ....., and sworn to before me this ..... day of ....., 189

SEAL

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL.

Salt Lake City, Utah, February 26 1904, 189

The foregoing field notes of the survey of the West Boundary of Township 40 South Range 14 West of the Salt Lake Base & Meridian, Utah

executed by Henry R. Reist under his contract No. 291, dated February 12 1902, 189 , having been critically examined, and the necessary corrections and explanations made, the said field notes, and the surveys they describes, are hereby approved.

Edward Rudolph

United States Surveyor General.

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

United States Surveyor General.

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BOOK A-298

FILED
MAR 26 1903

FIELD NOTES

OF THE SURVEY OF THE

S-U-B-D-I-V-I-S-I-O-N L-I-N-E-S

of

Township No.40 South, Range No.14 West.

Of the Salt Lake Base and *Meridian,*

in the state of Utah.

AS SURVEYED BY

Harvey D.Heist *United States Deputy Surveyor,*

Under his Contract No. 251, *dated* February 12,1902. *189*

Survey commenced December 20,1902. *189*

Survey completed December 31,1902. *189*

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45-00-00

BOOK A-298

NAMES AND DUTIES OF ASSISTANTS.

William Walquist	Chainman
George Wilson	"
Earl V. Woolley	Moundman
John Kitchen	"
James Potter	Axman
Oley Sorenson	Flagman

See preliminary affidavit in book W. pg. 105 & 159 W.

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BOOK A-298

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Meanders Page

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PRELIMINARY OATHS OF ASSISTANTS.

WE, ... and .....
do solemnly swear that we will well and faithfully execute the duties of chainmen; that we will level the chain over even and uneven ground, and plumb the tally pins, either by sticking or dropping the same; that we will report the true distances to all notable objects, and the true lengths 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

.....

....., *Chainman.*

....., *Chainman.*

Subscribed and sworn to before me this .....
day of ....., 189

.....

SEAL

.....

WE, ... and .....
do solemnly swear that we will well and truly perform the duties of moundmen in the establishment of corners, according to the instructions given us, to the best of our skill and ability, in the survey of

.....

....., *Moundman.*

....., *Moundman.*

Subscribed and sworn to before me this .....
day of ....., 189

.....

SEAL

.....

WE, ... and .....
do solemnly swear that we will well and truly perform the duties of axmen in the establishment of corners and other duties, according to instructions given us, to the best of our skill and ability, in the survey of

.....

....., *Axman.*

....., *Axman.*

Subscribed and sworn to before me this .....
day of ....., 189

.....

SEAL

.....

I, ..., 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 survey of .....

....., *Flagman.*

Subscribed and sworn to before me this .....
day of ....., 189

.....

SEAL

.....

SUBDIVISIONS OF T.40 S.,R.14 W.

Survey commenced, December 20,1902,and executed with a W.and L.E.Gurley light mountain transit,No.-,with solar attachment. 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 verniers of the latitude and declination arcs.

The instrument was examined,tested on the true meridian at Salt Lake City,Utah,found correct,and was approved by the surveyor general for Utah, May 26,1902.

I examine the adjustments of the transit and correct the level and collimation errors; then,to test the solar apparatus,by comparing its indications resulting from solar observations made during a.m. and p.m. hours,with a meridian determined by observations on Polaris,I proceed as follows:

At the re-established Stan.Cor.of secs.35 and 36, heretofore described,on the 8th.Stan.Par.South, in approximate Latitude 37° 17' 18"N., Longitude 113° 20'W.

At 4 p.m. I set off 37° 17' N.on lat.arc; 23° 21'S. on decl.arc,and mark the line determined by the solar on a stone firmly set in the ground,5 chs.N.of my station.

December 20,1902.

December 21:At 1h.20m,a.m.,l.m.t.,I observe Polaris at western 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.

At 7 a.m.,I lay off the azimuth of Polaris,1°31'to the east,and mark the meridian thus determined,by cutting a small groove in the stone set last evening,

SUBDIVISIONS OF T.40 S.,R.14 W.,continued.

CHAINS	
	on which the meridian falls 0.5 ins.east of the mark determined by the solar.
	At 8 a.m.,l.m.t.,I set off 37°17'N.on lat.arc;23°22' S.on decl.arc,and mark a point in the meridian thus determined with the solar,by a cross on the stone already set 5 chs.N.of my station;this mark falls 0.5 ins.east of the meridian established by the Polaris observation.
	The solar apparatus,by p.m.and a.m.observations, defines positions for meridians,respectively about 0'26" west and east of the meridian established by the Polaris observation ; therefore I conclude that the adjustments of the instrument are satisfactory.
	The magnetic bearing of the true meridian at 8h.30m. a.m.,is N.16° 00'W.,the angle thus determined gives the mean mag.decl.16° 00'E.
	From the Stan.Cor.of secs.35 and 36,I run
	N.0° 01'W.,bet.secs.35 and 36.
	Descend through dense artemisia,oak and laurel.
21.50	Bottom of ravine,150 ft.deep,course S.E.
	Ascend.
37.00	Begin abrupt ascent over sandstone ledges,bearing N.W.and S.E.
40.00	Point for ¼ sec.cor.falls on steep slope and cannot be set.
42.75	Top of ledges,200 ft.high,bear N.W.and S.E.
	Set a sandstone 24x12x6 ins.,18 ins.in the ground, for witness cor.to ¼ sec.cor.,marked W.C. ¼ .on W. face,and raise a mound of stone,2 ft.base,1½ ft.high W.of cor.
	Pits impracticable.
59.00	Top of ridge,bears N.W.and S.E.
	Begin abrupt descent.
68.25	Road,bears E.and W.
77.25	Leeds Creek,5 lks.wide,4 ins.deep,in canon,400 ft. deep,course S.E.

SUBDIVISIONS OF T.40 S.,R.14 W.,continued.

CHAINS	
	Ascend.
80.00	Falls on a trachyte boulder 6x6x3 ft.above ground, I cut a cross,X,at exact point for cor.of secs.25-26-35 and 36,marked 1 groove on S.and E.sides of cross,and raise a mound of stone,2 ft.base,1½ ft.high, W.of cor.
	Pits impracticable.
	Land mountainous.
	Soil,rocky 3rd.and 4th.rate.
	No timber.
	Mountainous land on 80.00 chs.
	East,on a random line,bet.secs.25 and 36.
40.00	Set temp.¼ sec.cor.
79.98	Intersect E.Bdy.of Tp.,5 lks.N.of the cor.of secs. 25 and 36,heretofore described.
	Note: From this cor.,Post No.4 of the Brundage Mining and Reduction Co's Millsite,4807 B.,in Harrisburg Mining District,bears S.7° 20'W., 37.47 chs.dist.,
	Thence I run N.89° 58'W.,on a true line, Bet.secs.25 and 36.
	Ascend over rocky land,through dense oak,service berry and laurel brush.
.30	Top of spur,projects S.
	Descend.
3.40	Hollow,50 ft.deep,course S.E.
	Ascend.
	Enter scattering cedar and pinon timber.
7.75	Top of spur,projects N. Descend.
9.60	Elbow in same hollow,course from N.W. to N.E.
	Ascend over broken land.
12.50	Old road,bears N.W.and S.E.

SUBDIVISIONS OF T.40 S.,R.14 W.,continued.

CHAINS.	
31.00	Begin abrupt ascent, over sandstone ledges bearing N.& S.
39.99	Set a sandstone 20x12x4 ins.,15 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.
	Pits impracticable.
	From this cor.,Post No.4,of the Wonder Millsite, 4807B,in Harrisburg Mining District, bears S.3° 49'W.,15.10 chs.dist.
48.40	Top of sandstone spur,300 ft.above the cor.of secs. 25 and 36,projects S.
	Begin abrupt descent.
50.50	Hollow,100 ft.below top of spur,course S.
	Begin abrupt ascent.
57.00	Top of spur,projects S.
	Begin abrupt descent.
64.50	Bottom of ravine,150 ft.deep,course S.
	Leave timber.
	Ascend.
79.98	The cor.of secs.25-26-35 and 36.
	Land mountainous.
	Soil,stony and rocky 3rd.and 4th.rate.
	Timber,scattering cedar and pinon on 61.10 chs.
	Mountainous land or dense undergrowth on 79.98 chs.
	December 21: At this cor.I set off 23° 25'S.on decl. arc,and at 11h.58' a.m.,l.m.t.,observe the sun on the meridian,the resulting lat.is 37°18'N.

N.0° 01'W.,bet.secs.25 and 26.

	Over rocky land,ascend through dense oak and service berry brush.
15.50	Top of rocky spur,projects E.,300 ft.above sec.cor.
	Begin abrupt descent.
29.00	Head of ravine,200 ft.below top of spur,course S.E.
	Begin abrupt ascent.
	Enter scattering cedar and pinon timber.

SUBDIVISIONS OF T.40 S.,R.14 W.,continued.

CHAINS	
40.00	Set a sandstone 28x15x10 ins.,21 ins.in the ground, for $\frac{1}{4}$ sec.cor.,marked $\frac{1}{4}$ on W.face,from which
	A cedar 5 ins.diam.,bears S.42° W.,33 lks.dist., marked $\frac{1}{4}$ S.26 B.T.
	No other trees within limits,and raise a mound of stone 2 ft.base,$1\frac{1}{2}$ ft.high,W.of cor.
	Pits impracticable.
43.00	Top of ridge,400 ft.above sec.cor.,bears N.E.and S.W.
	Enter heavy cedar and pinon timber,bears N.E.amd S.W.
	Descend.
51.90	Hollow,100 ft.deep,course W.
	Ascend.
56.50	Top of spur,projects W.
	Descend.
76.00	Bottom of ravine,200 ft.deep,course S.W.
	Ascend.
80.00	Set a sandstone,24x6x4 ins.,18 ins.in the ground, for cor.of secs.23-24-25 and 26,marked with 2 notches on S.and 1 notch on E.edges,from which
	A pinon 5 ins.diam.,bears N.72°E.,88 lks.dist., marked T.40 S. R.14 W. S.24 B.T.
	A cedar 5 ins.diam.,bears S.73°E.,1.00 ch.dist., marked T.40 S. R.14 W. S.25 B.T.
	A pinon 5 ins.diam.,bears S.65°W.,39 lks.dist., marked T.40 S. R.14 W. S.26 B.T.
	A cedar 5 ins.diam.,bears N.3°W.,85 lks.dist., marked T.40 S. R.14 W. S.23 B.T.
	Land mountainous.
	Soil,rocky 3rd.and 4th.rate.
	Heavy cedar and pinon timber on 37.00 chs.
	Mountainous land on 80.00 chs.

	S.89° 58'E.,on a random line,bet.secs.24 and 25.
40.00	Set temp.$\frac{1}{4}$ sec.cor.

SUBDIVISIONS OF T.40 S., R.14 W., continued.

CHAINS	
80.04	Intersect E.Bdy. of Tp., 3 lks. S. of the cor. of secs. 24 and 25, heretofore described.
	Thence I run
	N.89° 59'W., on a true line,
	Bet. secs. 24 and 25.
	Over rocky land ascend through dense oak, service berry brush and scattering cedar and pinon timber.
40.02	Set a sandstone 28x15x10 ins., 21 ins. in the ground, for ¼ sec. cor., marked ¼ . on N. face, from which A
	A cedar 10 ins. diam., bears N.28°W., 1.07 chs. dist., marked ¼ S.24 B.T..
	A pinon 8 ins. diam., bears S.35°W., 1.16 chs. dist., marked ¼ S.25 B.T.
41.25	Top of ridge, 500 ft. above the cor. of secs. 24 and 25, bears N. and S.
	Enter heavy cedar and pinon timber, bears N. and S.
	Descend.
76.00	Bottom of ravine, 200 ft. deep, course S.W.
	Ascend.
80.04	The cor. of secs. 23-24-25 and 26.
	Land mountainous.
	Soil, rocky 3rd. and 4th. rate.
	Heavy cedar and pinon on 38.75 chs.
	Mountainous land on 80.04 chs.
	December 21, 1902.

December 22: At 8 a.m., l.m.t., I set off 37° 19'N. on lat. arc; 23° 23'S. on decl. arc, and determine a true meridian with the solar, at the cor. of secs. 23-24-25 and 26.

Thence I run

N.0° 01'W., bet. secs. 23 and 24.

Over rocky land ascend through heavy cedar and pinon timber.

SUBDIVISIONS OF T.40 S.,R.14 W.,continued.

CHAINS	
27.00	Top of ridge,300 ft.above sec.cor.,bears N.W.and S.E.
	Begin abrupt descent.
32.00	Head of ravine 150 ft.below top of ridge,course N.E.
	Ascend.
40.00	Set a sandstone 20x18x6 ins.,15 ins.in the ground,
	for $\frac{1}{4}$ sec.cor.,marked $\frac{1}{4}$ .on W.face,from which
	A cedar 8 ins.in diam.,bears N.36°E.,24 lks.dist.,
	marked $\frac{1}{4}$ S.24 B.T.
	A cedar 10 ins.diam.,bears N.78°W.,54 lks.dist.,
	marked $\frac{1}{4}$ S.23 B.T.
67.00	Top of ridge,bears N.E.and S.W.
	Descend.
80.00	Set a sandstone 20x12x5 ins.,15 ins.in the ground,
	for cor.of secs.13-14-23 and 24,marked with 3 notches
	on S.and 1 notch on E.edges,and from which
	A cedar 3 ins.diam.,bears N.10°E.,8 lks.dist.,
	marked T.40 S. R.14 W. S.13 B.T.
	A cedar 3 ins.diam.,bears S.62°E.,45 lks.dist.,
	marked T.40 S. R.14 W. S.24 B.T.
	A cedar 4 ins.diam.,bears S.42°W.,27 lks.dist.,
	marked T.40 S. R.14 W. S.23 B.T.
	A cedar 5 ins.diam.,bears N.79°W.,74 lks.dist.,
	marked T.40 S. R.14 W. S.14 B.T.
	Land mountainous.
	Soil,rocky,3rd.and 4th.rate.
	Heavy cedar and pinon timber on 80.00 chs.
	Mountainous land and heavily timbered on 80.00 chs.

	S.89° 59'E.,on a random line,bet.secs.13 and 24.
40.00	Set temp.$\frac{1}{4}$ sec.cor.
80.06	Intersect E.Bdy.of Tp.,3 lks.N.of the cor.of secs.
	13 and 24,heretofore described.
	Thence I run
	N.89° 58'W.,on a true line,

SUBDIVISIONS OF T.40 S.,R.14 W.,continued.

CHAINS	
	Bet.secs.13 and 24.
	Over rocky land,ascend abruptly through scattering cedar and pinon timber.
8.00	Top of ridge,150 ft.above sec.cor.,bears N.W.and S.E.
	Descend.
22.00	Bottom of ravine,200 ft.deep,course S.E.
	Ascend.
40.03	Set a sandstone,15x10x10 ins.,10 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.
	Pits impracticable.
67.00	Top of ridge,500 ft.above sec.cor.,bears N.E.and S.W.
	Enter heavy cedarand pinon timber,bears N.Eand S.W.
	Descend.
80.06	The cor.of secs.13-14-23 and 24.
	Land mountainous.
	Soil,rocky 3rd.and 4th.rate.
	Heavy cedarand pinon timber on 13.00 chs.
	Mountainous land on 80.06 chs.

	N.0° 01'W.,bet.secs.13 and 14.
	Descend through heavy cedar and pinon timber.
7.00	Bottom of ravine,100 ft.deep,course S.W.
	Ascend.
16.00	Top of ridge,bears N.E.and S.W.
	Descend.
37.50	Bottom of ravine,100 ft.deep,course S.W.
	Ascend.
40.00	Set a sandstone 20x10x6 ins.,15 ins.in the ground,for ¼ sec.cor.,marked ¼ .on W.face,from which
	A cedar 3 ins.diam.,bears S.42°W.,8 lks.dist.,marked ¼ S.14 B.T.
	A cedar 3 ins.diam.,bears S.50°E.,23 lks.dist.marked ¼ S.13 B.T.
44.00	Top of spur,projects S.W.

SUBDIVISIONS OF T.40 S.,R.14 W.,continued.

CHAINS	
	Descend.
63.00	Bottom of ravine,200 ft.deep,course S.W.
	Leave heavy timber,bears N.E.and S.W.
	Enter dense oak,service berry,laurel,scattering cedar and pinon timber.
	Ascend.
80.00	Set a sandstone 20x8x6 ins.,15 ins.in the ground,for cor.of secs.11-12-13 and 14,marked with 4 notches on S.and 1 notch on E.edges,from which
	A pinon 4 ins.diam.,bears S.76°W.,27 lks.dist., marked T.40 S. R.14 W. S.14 B.T.
	No other trees within limits,and raise a mound of stone,2 ft.base,1½ ft.high,W.of cor.
	Pits impracticable.
	Land mountainous.
	Soil,stony 3rd.and 4th.rate.
	Heavy cedar and pinon timber on 63.00 chs.
	Mountainous land on 80.00 chs.
	December 22: At this cor.I set off 23° 25'S.on decl. arc,and at 11h. 58m.a.m.,l.m.t.,observe the sun on the meridian,the resulting lat.is 37° 21'N.

	S.89° 58'E.,on a random line,bet.secs.12 and 13.
40.00	Set temp.¼ sec.cor.
80.04	Intersect E.Bdy.of Tp.,5 lks.S.of the cor.of secs. 12 and 13,heretofore described.
	Thence I run
	West,on a true line,
	Bet.secs.12 and 13.
	Descend through dense oak,service,scattering cedar and pinon timber.
3.50	Head of ravine,course S.E.
	Begin abrupt ascent.
35.50	Top of ridge,600 ft.above sec.cor.,bears N.E.and S.W.

SUBDIVISIONS OF T.40 S.,R.14 W.,continued.

CHAINS	
	Descend.
40.02	Set a sandstone 15x10x8 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.
	Pits impracticable.
55.50	Bottom of ravine,200 ft.deep,course S.W.
	Ascend.
80.04	The cor.of secs.11-12-13 and 14.
	Land mountainous.
	Soil,rocky 3rd.and 4th.rate.
	Timber,scattering cedar and pinon.
	Mountainous land on 80.04 chs.
	N.0° 01'W.,bet.secs.11 and 12.
	Ascend through dense artemisia,oak,service berry brush,scattering cedar and pinon timber.
15.00	Top of spur ridge,projects E.
	Descend along steep N.E.slope.
	Leave timber.
40.00	Set a sandstone 18x8x8 ins.,12 ins.in the ground,for $\frac{1}{4}$ sec.cor.,marked $\frac{1}{4}$ .on W.face,and raise a mound of stone 2 ft.base,1½ ft.high,W.of cor.
	Pits impracticable.
52.00	Bottom of ravine,200 ft.deep,course S.E.
	Ascend over rocky and broken land.
80.00	Set a sandstone 24x12x10 ins.,18 ins.in the ground, for cor.of secs.1-2-11 and 12,marked with 5 notches on S.and 1 notch on E.edges,and raise a mound of stone 2 ft.base,1½ ft.high,W.of cor.
	Pits impracticable.
	This cor.is 400 ft.above the cor.of secs. 11-12-13 and 14.
	Land mountainous.
	Soil,rocky 3rd.and 4th.rate.
	Timber,scattering cedar and pinon on 15.00 chs.

SUBDIVISIONS OF T.40 S.,R.14 W.,continued.

CHAINS	
	Mountainous land on 80.00 chs.
	East,on a random line,bet.secs.1 and 12.
40.00	Set temp.$\frac{1}{4}$ sec.cor.
80.02	Intersect E.Bdy.of Tp.,5 lks.S.of the cor.of secs. 1 and 12,heretofore described.
	Thence I run
	S.89° 58'W.,on a true line,
	Bet.secs.1 and 12.
	Over rocky land,descend through dense artemisia,oak, service berry and laurel.
23.00	Bottom of canon 200 ft.deep,course S.E.
	Ascend.
40.01	Set a sandstone 15x10x10 ins.,10 ins.in the ground,for $\frac{1}{4}$ sec.cor.,marked $\frac{1}{4}$ .on N.face,and rai se a mound of stone 2 ft.base $1\frac{1}{2}$ ft.high,N.of cor.
	Pits impracticable.
57.50	Top of ridge,bears N.W.and S.E.
	Descend.
80.02	The cor.of secs.1-2-11 and 12.
	Land mountainous.
	Soil,rocky 3rd.and 4th.rate.
	No timber.
	Mountainous land and dense undergrowth on 80.02 chs.
	Note: Within 20.00 chs.of this cor.the land becomes steep and rocky,as the land north of this point is worthless and nearly inaccessible,I abandon the line here.
	December 22,1902.
	December 23: At 8 a.m.,l.m.t.,I set off 37° 17'N.on lat.arc;23° 22'S.on decl.arc,and determine a true meridian with the solar,at the Stan.Cor.of secs.

SUBDIVISIONS OF T.40 S.,R.14 W.,continued.

CHAINS

34 and 35,heretofore described on the Eighth Standard Parallel South.

Thence I run

N.0° 01'W.,bet.sec.34 and 35.

Descend over broken sandstone ledges,through scattering cedar and pinon timber.

21.50 Bottom of ravine,200 ft.below stan.cor.,course N.W.

Ascend.

36.00 Top of rocky spur,projects N.W.

Descend.

40.00 Falls on the smooth surface of a sandstone ledge,I cut a cross,X,at exact point for ¼ sec.cor.,marked ¼ .on W.side of cross,from which

A pinon 10 ins.diam.,bears S.4°W.,13 lks.dist., marked ¼ S.34 B.T.

A cedar 7 ins.diam.,bears S.29°E.,16 lks.dist., marked ¼ S.35 B.T.

59.00 Road,in bottom of ravine,150 ft.deep,course S.W.

Ascend through dense artemisia.oak,service berry and laurel brush.

75.00 Top of ridge,bears N.W.and S.E.

Descend.

80.00 Set a sandstone 24x12x4 ins.,18 ins.in the ground,for cor.of secs.26-27 34 and 35,marked with 1 notch on S.and 2 notches on E.edges,from which

A pinon 4 ins.diam.,bears S.17°E.,33 lks.dist., marked T.40 S. R.14 W. S.35 B.T.

A pinon 3 ins.diam.,bears N.67°W.,21 lks.dist., marked T.40 S. R.14 W. S.27 B.T.

No other trees within limits,and raise a mound of stone 2 ft.base,1½ ft.high,W.of cor.

Pits impracticable.

Land mountainous.

Soil,rocky 3rd and 4th.rate.

Timber,scattering cedar and pinon.

SUBDIVISIONS OF T.40 S.,R.14 W.,continued.

CHAINS	
	Mountainous land on 80.00 chs.
	East,on a random line,bet.secs.26 and 35.
40.00	Set temp.$\frac{1}{4}$ sec.cor.
80.08	Intersect N.and S.line,3 lks.N.of the cor.of secs. 25-26-35 and 36.
	Thence I run
	N.89° 59'W.,on a true line,
	Bet.secs.26 and 35.
	Ascend over rocky land,through dense artemisia,oak and service berry brush.
15.00	Top of spur,projects S.
	Descend.
17.10	Leeds Creek,5 lks.wide,10 ins.deep,in bottom of canon 200 ft.deep,course S.E.
	Ascend.
	Enter scattering cedar and pinon timber.
24.50	Road,bears N.W.and S.E.
40.04	Set a trachyte stone 20x12x4 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,1½ ft.high,N.of cor.
	Pits impracticable.
47.25	Top of ridge,bears N.W.and S.E.
	Descend.
63.25	Bottom of ravine,150 ft.deep,course S.E.
	Ascend.
80.08	The cor.of secs.26-27-34 and 35.
	Land mountainous.
	Soil,rocky 3rd.rate.
	Timber,scattering cedar and pinon.
	Mountainous land on 80.08 chs.
	December 23: At this cor.I set off 23° 25'S.on decl. arc,and at 11h. 59m.,a.m.,l.m.t.,observe the sun on the meridian,the resulting lat.is 37° 18'N.

SUBDIVISIONS OF T.40 S.,R.14 W.,continued.

CHAINS.

N.0° 01'W.,bet.secs.26 and 27.

Over rocky land ,descend through dense artemisia oak and scattering cedar and pinon timber.

27.00 Bottom of ravine,100 ft.deep,course S.E.

Ascend.

31.00 Top of ridge,bears N.W.and S.E.

Descend.

40.00 Set a sandstone 28x10x5 ins.,21 ins.in the ground, for ¼ sec.cor.marked ¼ .on W.face,from which

A cedar 6 ins.diam.,bears N.15°W.,57 lks.dist., marked ¼ S.27 B.T.

A cedar 9 ins.diam.,bears S.49°E.,65 lks.dist., marked ¼ S.26 B.T.

63.75 Leeds Creek,5 lks.wide,10 ins.deep,in bottom of canon, 400 ft.deep,course S.E.

Begin abrupt ascent.

80.00 Set a sandstone 30x12x10 ins.,23 ins.in the ground, for cor.of secs.22-23-26 and 27,marked with 2 notches on S.and E.edges,from which

A cedar 6 ins.diam.,bears N.81°E.,53 lks.dist., marked T.40 S. R.14 W. S.23 B.T.

A cedar 8 ins.diam.,bears S.5°E.,61 lks.dist., marked T.40 S. R.14 W. S.26 B.T.

A cedar 7 ins.diam.,bears S.82°W.,42 lks.dist., marked T.40 S. R.14 W. S.27 B.T.

A cedar 8 ins.diam.,bears N.71°W.,78 lks.dist., marked T.40 S. R.14 W. S.22 B.T.

Land mountainous.

Soil,rocky 3rd.rate.

Timber,scattering cedar and pinon.

Mountainous land on 80.00 chs.

S.89° 59'E.,on a random line,bet.secs.23 and 26.

40.00 Set temp.¼ sec.cor.

80.10 Intersect N.and S.line,5 lks.S.of the cor.of secs.

SUBDIVISIONS OF T.40 S.,R.4 W.,continued.

CHAINS	
	23-24-25 and 26.
	Thence I run
	S.89° 59'W.,on a true line.
	Bet.secs.23 and 26'
	Ascend through heavy cedar and pinon timber,over broken land.
3.00	Top of spur,projects S.
	Descend.
5.50	Hollow,50 ft.deep,course S.
	Ascend.
26.00	Top of ridge,bears N.E.and S.W.
	Descend.
40.05	Set a sandstone 24x12x5 ins.,18 ins.in the ground, for ¼ sec.cor.,marked ¼ .on N.face,from which
	A cedar 5 ins.diam.,bears N.23°W.,10 lks.dist., marked ¼ S.23 B.T.
	A cedar 3 ins.diam.,bears S.79°E.,8 lks.dist., marked ¼ S.26 B.T.
70.00	Spring branch,2 lks.wide,in bottom of ravine,300 ft. deep,course S.E.
	Begin abrupt ascent.
	Leave heavy timber,bears N.W.and S.E.
	Enter dense artemisia,oak and scattering cedar and pinon timber.
77.00	Top of spur,projects S.E.
	Descend.
80.10	The cor.of secs.22-23-26 and 27.
	Land mountainous.
	Soil,rocky 3rd.rate.
	Heavy cedar and pinon timber on 70.00 chs.
	Mountainous land on 80.10 chs.
	December 23,1902.

SUBDIVISIONS OF T.40 S.,R.14 W.,continued.

CHAINS	
	December 24: At 8 a.m.,l.m.t.,I set off 37° 19'N.on lat.arc;23° 22'S.on decl.arc,and determine a true meridian with the solar,at the cor.of secs.22-23-26 and 27.
	Thence I run
	N.0° 01'W.,bet.secs.22 and 23.
	Over rocky land,ascend through dense artemisia,oak, service berry,laurel,scattering cedar and pinon timber.
3.00	Top of spur ridge,projects S.E.
	Begin abrupt descent.
24.25	Spring branch,2 lks.wide,in bottom of canon,400 ft. deep,course S.E.
	Leave timber.
	Ascend along steep west slope.
40.00	Set a sandstone 16x10x6 ins.,11 ins.in the ground, for ¼ sec.cor.,marked ¼ .on W.face,and raise a mound of stone 2 ft.base,1½ ft.high,W.of cor.
	Pits impracticable.
80.00	set a sandstone 18x12x6 ins.,12 ins.in the ground,for cor.of secs.14-15-22 and 23,marked with 3 notches on S.and 2 notches on E.edges,and raise a mound of stone 2 ft.base,1½ ft.high,W.of cor.
	Pits impracticable.
	Thic cor.is 400 ft.above bottom of canon.
	Land mountainous.
	Soil,rocky 3rd.rate.
	Timber,scattering cedar and pinon on 24.25 chs.
	Mountainous land on 80.00 chs.

	N.89°59'E.,on a random line,bet.secs.14 and 23.
40.00	Set temp.¼ sec.cor.
80.12	Intersect N.and S.line,5 lks.S.of the cor.of secs. 13-14-23 and 24.
	Thence I run

SUBDIVISIONS OF T.40 S.,R.14 W.,continued.

CHAINS	
	S.89° 57'W.,on a true line,
	Bet.secs.14 and 23.
	Descend through heavy cedar and pinon timber.
6.50	Bottom of ravine,100 ft.deep,course S.W.
	Ascend.
10.25	Top of spur,projects S.W.
	Descend.
30.00	Begin abrupt descent.
	Leave heavy timber,bears N.E.and S.W.
	Enter oak and scattering cedar and pinon timber.
40.06	Set a sandstone 28x12x8 ins.,21 ins.in the ground,for
	¼ sec.cor.,marked ¼ ..on N.face,from which
	A pinon 5 ins.diam.,bears S.48°W.,20 lks.dist.,marked
	¼ S.23 B.T.
	No other trees within limits,and raise a mound of
	stone 2 ft.base,1½ ft.high,N.of cor.
	Pits impracticable.
41.75	Bottom of ravine,300 ft.deep,course S.W.
	Begin abrupt ascent.
57.50	Top of spur,projects S.W.
	Begin abrupt descent.
	Leave timber.
80.12	The cor.of secs.14-15-22 and 23.
	Land mountainous.
	Soil,rocky 3rd.rate.
	Heavy cedar and pinon timber.on 30,00 chs.
	Mountainous land on 80.12 chs.
	N.0° 01'W.,bet.secs.14 and 15.
	Over rocky land,ascend along a steep west slope,
	through dense artemisia,oak,service berry and laurel
	brush.
40.00	Set a sandstone 15x10x10 ins.,10 ins.in the ground,
	for ¼ sec.cor.,marked ¼ ..on W.face,and raise a mound

SUBDIVISIONS OF T.40 S.,R.14 W.,continued.

CHAINS	
	of stone 2ft.base,1½ ft.high,W.of cor.
	Pits impracticable.
41.75	Top of spur,300 ft.above sec.cor.,projects S.W.
	Descend.
51.75	Bottom of ravine,150 ft.deep,cour se S.W.
	Ascend.
78.50	Top of ridge bears N.W and S.E.
	Descend.
80.00	Set a trachyte stone 15x10x10 ins.,10 ins.in the ground for cor.of secs.10-11-14 and 15,marked with 4 notches on S.and 2 notches on E.edges,and raise a mound of stone 2 ft.base,1½ ft.high,W.of cor.
	Pits impracticable.
	This cor.is 600 ft.above the cor.of secs.14-15-22 and 23.
	Land mountainous.
	Soil,rocky 3rd.rate.
	No timber.
	Mountainous land on 80.00 chs.
	N.89° 57'E.on a random line,bet.secs.11 and 14.
40.00	Set temp.½ sec.cor.
80.10	Intersect N.and S.line,7 lks.N.of the cor.of secs. 11-12-13 and 14.
	Thence I run
	West,on a true line,
	Bet.secs.11 and 14.
	Ascend through dense oak,service berry,laurel, scattering cedar and pinon timber.
2.00	Top of spur,projects S.
	Descend.
13.00	Bottom of ravine,100 ft.deep,course S.W.
	Ascend.
17.00	Top of spur,projects S.
	Descend.

SUBDIVISIONS OF T.40 S.,R.14 W.,continued.

CHAINS	
21.00	Bottom of ravine,250 ft.deep,course S.E.
	Leave timber.
	Ascend.abruptly.
27.75	Top of abrupt ascent,bears N.W.and S.E.
	Gradual ascent.
40.05	Set a trachyte stone,15x12x6 ins.,10 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.
	Pits impracticable.
63.50	Top of ridge,bears N.and S.
	Descend.
75.00	Bottom of ravine,100 ft.deep,course S.
	Ascend.
80.10	The cor.of secs.10-11-14 and 15.
	Land mountainous.
	Soil,rocky 3rd.rate.
	Timber,scattering cedar and pinon on 21.00 chs.
	Mountainous land on 80.10 chs.
	December 24: At this cor.I set off 23° 24'S.on decl. arc,and at 11h. 59m.,a.m.,l.m.t.,observe the sun on the meridian,the resulting lat.is 37° 21'N.
	N.0° 01'W.,bet.secs.10 and 11.
	Over rocky land,descend through dense artemisia,oak, laureland service berry brush.
40.00	Set a trachyte stone 16x12x10 ins.,11 ins.in the ground,for ¼ sec.cor.,marked ¼ .on W.face,and raise a mound of stone 2 ft.base,1½ ft.high,W.of cor.
	Pits impracticable.
52.00	Head of ravine,course S.E.
	Begin abrupt ascent.
80.00	Set a trachyte stone 20x12x10 ins.,15 ins.in the ground,for cor.of secs.2-3-10 and 11,marked with 5

SUBDIVISIONS OF T.40 S.,R.14 W.,continued.

CHAINS

notches on S.and 2 notches on E.edges,and raise a mound of stone 2 ft.base,1½ ft.high,W.of cor.

Pits impracticable.

This cor.is 500 ft.above the cor.of secs.10-11-14 and 15.

Land mountainous.

Soil,rocky 3rd.rate.

No timber.

Mountainous land on 80.00 chs.

East,on a random line,bet.secs.2 and 11.

40.00 Set temp.¼ sec.cor.

80.06 Intersect N.and S.line,3 lks.N.of the cor.of secs. 1-2-11 and 12.

Thence I run

N.89° 59'W.,on a true line,

Bet.secs.2 and 11.

Over rocky land,descend through dense artemisia,oak, service berry and laurel brush.

20.25 Head of ravine,course S.E.

Ascend.

34.00 Top of ridge,bears N.W.and S.E.

Descend.

40.03 Set a trachyte stone 12x10x8 ins.,8 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.

Pits impracticable.

48.00 Head of ravine,course S.E.

Ascend.

63.00 Top of ridge,bears N.and S.

Descend.

80.06 The cor.of secs.2-3-10 and 11.

Land rolling.

Soil,rocky 3rd.rate.

No timber.

SUBDIVISIONS OF T.40 S.,R.14 W.,continued.

CHAINS

Dense undergrowth on 80.06 chs.

NOTE:

On account of abrupt and broken land,I abandon the line here.

December 24,1902.

December 26: At 8 a.m.,l.m.t.,I set off 37° 17'W.on lat.arc;23° 19'S.on decl.arc,and determine a true meridian with the solar,at the Stan.Cor.of secs.33 and 34,on the Eighth Standard Parallel South, heretofore described.

Thence I run

N.0° 02'W.,bet.secs.33 and 34.

Descend through dense artemisia,service berry and oak brush.

5.00 Road,bears N.E.and S.W.

6.25 Spring branch,1 lk.wide,course N.E.

Ascend.

13.00 Begin abrupt ascent,bears N.E.and S.W.

Enter scattering cedar and pinon timber.

40.00 Set a sandstone 18x10x4 ins.,12 ins.in the ground, for ¼ sec.cor.,marked ¼ .on W.face,from which

A pinon 6 ins.diam.,bears N.15°E.,5 lks.dist., marked ¼ S.34 B.T.

A cedar 9 ins.diam.,bears S.16°W.,30 lks.dist., marked ¼ S.33 B.T.

80.00 Set a sandstone 24x12x9 ins.,18 ins.in the ground,for cor.of secs.27-28-33 and 34,marked with 1 notch on S.and 3 notches on E.edges,from which

A cedar 14 ins.diam.,bears N.38°E.,48 lks.dist., marked T.40 S. R.14 W. S.27 B.T.

A pinon 9 ins.diam.,bears S.19°E.,34 lks.dist.,marked T.40 S. R.14 W. S.34 B.T.

A pinon 6 ins.diam.,bears S.10°W.,20 lks.dist., marked T.40 S. R.14 W. S.33 B.T.

SUBDIVISIONS OF T.40 S.,R.14 W.,continued.

CHAINS

No other trees within limits,and raise a mound of stone 2 ft.base,1½ ft.high,W.of cor.

Pits impracticable.

This cor.is 600 ft.above the stan.cor.of secs. 33 and 34.

Land mountainous.

Soil,rocky 3rd.rate.

Timber scattering cedar and pinon.

Mountainous land on 80.00 chs.

East,on a random line,bet.secs.27 and 34.

40.00 Set temp.¼ sec.cor.

80.06 Intersect N.and S.line,7 lks.N.of the cor.of secs. 26-27-34 and 35.

Thence I run

N.89° 57'W.,on a true line,

Bet.secs.27 and 34.

Over rocky land,ascend through dense artemisia,oak, laurel,scattering cedar and pinon timber.

9.50 Top of ridge,bears N.W.and S.E.

Descend,over broken land.

40.03 Set a sandstone 32x8x6 ins.,24 ins,in the ground, for ¼ sec.cor.,marked ¼ on N.face,from which

A cedar 9 ins.diam.,bears S.25°W.,24 lks.dist., marked ¼ S.34 B.T.

A pinon 4 ins.diam.,bears N.50°E.,18 lks.dist., marked ¼ S.27 B.T.

64.50 Bottom of ravine,200 ft.deep,course S.

Begin abrupt ascent.

80.06 The cor.of secs.27-28-33 and 34.

Land mountainous.

Soil,rocky 3rd.rate.

Timber,scattering cedar and pinon.

Mountainous land and dense undergrowth on 80.06 chs.

December 26: At this cor.I set off 23° 21'S.on decl.

SUBDIVISIONS OF T.40 S.,R.14 W.,continued.

CHAINS	
	arc,and at 12 M.,l.m.t.,observe the sun on the meridian the resulting lat.is 37° 18'N.
	N.0° 02'W.,bet.secs.27 and 28.
	Ascend abruptly through dense artemisia,oak,scattering cedar and pinon timber.
28.00	Top of ridge,300 ft.above sec.cor.,bears N.W.and S.E.
	Descend.
37.00	Head of ravine,course N.E.
	Ascend.
40.00	Set a sandstone 18x12x6 ins.,12 ins.in the ground, for ¼ sec.cor.,marked ¼ on W.face,from which
	A pinon 4 ins.diam.,bears S.65°W.,32 lks.dist., marked ¼ S.28 B.T.
	A pinon 2 ins.diam.,bears N.79° E.,90 lks.dist., marked ¼ S.27 B.T.
44.00	Top of rocky spur,projects N.E.
	Begin abrupt descent.
70.50	Bottom of ravine,200 ft.deep,course S.E.
	Ascend.
75.00	Top of ridge,bears N.W.and S.E.
	Descend.
80.00	Set a sandstone 24x12x8 ins.,18 ins.in the ground, for cor.of secs.21-22-27 and 28,marked with 2 notches on S,and 3 notches on E.edges,and from which
	A cedar 7 ins.diam.,bears N.35°E.,62 lks.dist., marked T.40 S. R.14 W. S.22 B.T.
	A cedar 6 ins.diam.,bears S.39°E.,52 lks.dist., marked T.40 S. R.14 W. S.27 B.T.
	A cedar 6 ins.diam.,bears S.21°W.,93 lks.dist., marked T.40 S. R.14 W. S.28 B.T.
	No other trees within limits,and raise a mound of stone 2 ft.base,1½ ft.high,W.of cor.
	Pits impracticable.
	Land mountainous.

SUBDIVISIONS OF T.40 S.,R.14 W.,continued.

CHAINS

Soil,rocky 3rd.rate.

Timber,scattering cedar and pinon.

Mountainous land on 80.00 chs.

S.89° 57'E.,on a random line,bet.secs.22 and 27.

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

80.08 Intersect N.and S.line,5 lks.S.of the cor.of secs. 22-23-26 and 27.

Thence I run

N.89° 59'W.,on a true line,

Bet.secs.22 and 27.

Over rocky land descend abruptly through dense oak, artemisia,service berry,laurel,scattering cedar and pinon timber.

28.00 Leeds Creek,5 lks.wide,8 ins.deep,in bottom of canon, 400 ft.deep,course S.E.

Ascend over broken land.

40.04 Set a sandstone 18x12x4 ins.,12 ins.in the ground, for $\frac{1}{4}$ sec.cor.,marked $\frac{1}{4}$ .on N.face,from which

A cedar 9 ins.diam.,bears N.34°W.,3 lks.dist.,marked $\frac{1}{4}$ S.22 B.T.

A cedar 5 ins.diam.,bears S.84°E.,66 lks.dist., marked $\frac{1}{4}$ S.27 B.T.

80.08 The cor.of secs.21-22-27 and 28,800 ft.above Leeds Creek.

Land mountainous.

Soil,rocky 3rd.rate.

Timber,scattering cedar and pinon.

Mountainous land on 80.08 chs.

December 26,1902.

December 27: At 8 a.m.,l.m.t.,I set off 37° 19'N.on lat.arc; 23° 17'S.on decl.arc,and determine a true meridian with the solar,at the cor.of secs.21-22-27

SUBDIVISIONS OF T.40 S.,R.14 W.,continued.

CHAINS	
	and 28.
	Thence I run
	N.0° 02'W.,bet.secs.21 and 22.
	Over rocky land,descend through de nse artemisia,oak, and scattering cedar and pinon timber.
15.00	Bottom of ravine,100 ft.deep,course N.E.
	Ascend.
27.50	Top of spur,projects N.E. Leave timber.
	Descend.
40.00	Set a trachyte stone 16x14x10 ins.,11 ins.in the ground for ¼ sec.cor.,marked ¼ on W.face,and raise a mound of stone 2 ft.base,1½ ft.high,W.of cor.
	Pits impracticable.
43.00	Bottom of ravine,100 ft.deep,course E.
	Ascend.
49.00	Top of spur,projects E.
	Begin abrupt descent.
55.00	Leeds Creek,5 lks.wide,12 ins.deep,course S.E.in canon 400 ft.deep,course S.E.
	Begin abrupt ascent.
80.00	Set a trachyte stone 24x20x12 ins.,18 ins.in the ground for cor.of secs.15-16-21 and 22,marked
	40 S.on N.E.,and
	14 W.on S.E.face,and with 3 notches on S.and E.edges, and raise a mound of stone 2ft.base,1½ ft.high,W. of cor.
	Pits impracticable.
	Land mountainous.
	Soil,rocky 3rd.rate.
	Timber,scattering cedar and pinon on 27.50 chs.
	Mountainous land on 80.00 chs.

	S.89° 59'E.,on a random line,bet.secs.15 and 22.
40.00	Set temp.¼ sec.cor.
79.98	Intersect N.and S.line,5 lks.S.of the cor.of secs.

SUBDIVISIONS OF T.40 S.,R.14 W..continued.

CHAINS

14-15-22 and 23.

Thence I run

S.29° 59'W.,on a true line,

Bet.secs.15 and 22.

Descend abruptly through dense artemisia,oak,laurel and service berry brush.

9.75 Spring branch,2 lks.wide,in bottom of canon,400 ft. deep,course S.

Begin abrupt ascent.

28.60 Top of spur,projects S.

Descend.

39.99 Set a trachyte stone 16x16x8 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.

Pits impracticable.

44.00 Bottom of ravine,100 ft.deep,course S.E.

Ascend.

54.00 Top of ridge,bears N.W.and S.E.

Descend.

65.00 Bottom of ravine,150 ft.deep,course S.

Ascend.

68.50 Top of ridge,bears N.and S.

Begin abrupt descent.

79.98 The cor.of secs.15-16-21 and 22.

Land mountainous.

Soil,rocky 3rd,rate.

No timber.

Mountainous land on 79.98 chs.

December 27: At this cor.I set off 23° 19'S.on decl. arc;and at 12 M.,observe the sun on the meridian,the resulting lat.is 37° 20'N.

SUBDIVISIONS OF T.40 S.,R.14 W.,continued.

CHAINS	
	N.0° 02'W.,bet.secs.15 and 16.
	Ascend through dense artemisia,oak,service berry and laurel brush.
7.00	Top of spur,projects S.W.
	Begin abrupt descent.
40.00	Set a trachyte stone,15x10x8 ins.,10 ins.in the ground,for ¼ sec.cor.,marked ¼ on W.face,and raise a mound of stone 2ft.base,1½ ft.high,W.of cor.
	Pits impracticable.
40.25	Spring branch,3 lks.wide,in bottom of ravine,300 ft. deep,course S.W.
	Thence ascend along ravine,course S.over broken land.
80.00	Set a trachyte stone,24x12x10 ins.,18 ins.in the ground,for cor.of secs,9-10-15 and 16,marked with 4 notches on S.and 3 notches on E.edges,and raise a mound of stone 2 ft.base,1½ ft.high,W.of cor.
	Pits impracticable.
	Land mountainous.
	Soil,rocky 3rd.rate.
	No Timber.
	Mountainous land and dense undergrowth on 80.00 chs.

	N.89° 59'E.,on a random line,bet.secs.10 and 15.
40.00	Set temp.¼ sec.cor.
79.94	Intersect N.and S.line,3 lks.N.of the cor.of secs. 10-11-14 and 15.
	Thence I run
	West,on a true line,
	Bet.secs.10 and 15.
	Over rocky land,ascend through dense artemisia,oak, service berry and laurel brush.
.75	Top of ridge,bears N.W.and S.E.
	Descend.
6.50	Bottom of ravine,100 ft.deep,course S.

SUBDIVISIONS OF T.40 S.,R.14 W.,continued.

CHAINS

Ascend.

38.90 Top of ridge,bears N.E.and S.W.

Descend.

39.97 Falls on a trachyte boulder,6x5x4 ft.above the ground

I cut a cross,X,at exact point for ¼ sec.cor.,and mark ¼ .on N.side of cross,and raise a mound of stone 2 ft.base,1½ ft.high,N.of cor.

Pits impracticable.

47.50 Spring branch,1 lk.wide,in bottom of ravine,100 ft. deep,course S.W.

Ascend.

52.00 Top of spur,projects S.W.

Descend.

61.25 Spring branch,1 lk.wide,in bottom of ravine,200 ft. deep,course S.W.

Begin abrupt ascent.

70.00 Top of spur,projects S.W.

Begin abrupt descent.

79.00 Spring branch,3 lks.wide,in bottom of ravine,350 ft. deep,course S.

Ascend.

79.94 The cor.of secs.9-10-15 and 16.

Land mountainous.

Soil,rocky 3rd.rate.

No timber.

Mountainous land on 79.94 chs.

Note:

The country north of this cor.is rocky and broken therefore I abandon the line.

December 27,1902.

December 28: At 8 a.m.,l.m.t.,I set off 37°17'N.on lat.arc;23°.15'S.on decl.arc,and determine a true meridian with the solar,at the Standard Corner of

SUBDIVISIONS OF T.40 S.,R.14 W.,continued.

CHAINS	
	secs.32 and 33,heretofore described on the Eighth Standard Parallel South.
	Thence I run
	N.0° 03'W.,bet.secs.32 and 33.
	Over rocky land,ascend through dense artemisia,oak, service berry,scattering cedar and pinon timber.
14.35	Top of spur,projects S.W.
	From this point,the house belonging to William Harris bears N.23° 30'W.
	Descend.
35.00	Bottom of ravine,200 ft.deep,course S.W.
	Thence along bottom of ravine.
40.00	Falls on a trachyte boulder 6x4x4 ft.above ground, I cut a cross,Y,at exact point for ¼ sec.cor.,and mark ¼ .on W.side of cross,from which
	A cedar 12 ins.diam.,bears West,15 lks.dist.,marked ¼ S.32 B.T.
	A pinon 6 ins.diam.,bears N.88°E.,95 lks.dist., marked ¼ S.33 B.T.
45.00	Leave bottom of ravine,course from N.E.to S.
	Ascend.
72.00	Top of spur,projects S.W.
	Descend.
80.00	Set a trachyte stone,24x15x6 ins.,18 ins.in the ground,for cor.of secs.28-29-32 and 33,marked with 1 notch on S.and 4 notches on E.edges,from which
	A pinon 6 ins.diam.,bears N.40°E.,1.43 chs.dist., marked T.40 S. R.14 W. S.28 B.T.
	No other trees within limits,and raise a mound of stone 2 ft.base,1½ ft.high,W.of cor.
	Pits impracticable.
	Land rolling.
	Soil,rocky 3rd.rate.
	Timber,scattering cedar and pinon .

SUBDIVISIONS OF T.40 S.,R.14 W.,continued.

CHAINS	
	Dense undergrowth on 80.00 chs.
	From this cor.,the house belonging to William Harris,bears S.30°W.
	East,on a random line,bet.secs.28 and 33.
40.00	Set temp.¼ sec.cor.
80.04	Intersect N.and S.line,5 lks,S.of the cor.of secs. 27-28-33 and 34.
	Thence I run
	S.89° 58'W.,on a true line,
	Bet.secs.28 and 33.
	Over rocky land,ascend abruptly through dense artemisia,oak,scattering cedar and pinon timber.
10.50	Top of ridge,bears N.and S.
	Begin abrupt descent.
23.00	Enter bottom of canon,bears N.and S.
25.00	Spring branch,4 lks.wide,course S.
26.50	Leave bottom of canon,bears N.and S.
	Begin abrupt ascent.
40.02	Set a sandstone 18x14x4 ins.,12 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.
	Pits impracticable.
48.00	Top of ridge,bears N.E.and S.W.
	Begin abrupt descent.
68.00	Bottom of ravine,150 ft.deep,course S.W.
	Ascend.
76.00	Top of spur ridge,projects S.W.
	Descend.
80.04	The cor.of secs.28-29-32 and 33.
	Land mountainous.
	Soil,rocky 3rd.rate.
	Timber,scattering cedar and pinon.
	Mountainous land on 80.04 chs.

SUBDIVISIONS OF T.40 S.,R.14 W.,continued.

CHAINS	
	December 28: At this cor.I set off 23° 17'S.on decl. arc,and at 0h.1m.,p.m.,l.m.t.,observe the sun on the meridian,the resulting lat.is 37° 18'N.
	N.0° 03'W.,bet.secs.28 and 29.
	Over rocky land,descend through dense artemisia,oak, service berry,scattering cedar and pinon timber.
25.00	Hollow,50 ft.deep,course S.W.
	Ascend.
40.00	Set a sandstone 20x8x5 ins.,15 ins.in the ground, for ¼ sec.cor.,marked ¼ .on W.face,from which
	A cedar 5 ins.diam.,bears S.51°W.,20 lks.dist., marked ¼ S.29 B.T.
	A pinon 12 ins.diam.,bears N.20°E.,20 lks.dist., marked ¼ S.28 B.T.
40.50	Enter heavy cedar and pinon timber,bears N.W.and S.E.
71.70	Top of spur,projecting W.from a high knoll,5.00 chs. E.of line.
	Descend.
80.00	Set a sandstone 24x16x6 ins.,18 ins.in the ground, for cor.of secs.20-21-28 and 29,marked with 2 notches on S.and 4 notches on E.edges,from which
	A cedar 6 ins.diam.,bears N.2°E.,15 lks.dist., marked T.40 S. R.14 W. S.21 B.T.
	A cedar 6 ins.diam.,bears S.78°E.,8 lks.dist., marked T.40 S. R.14 W. S.28 B.T.
	A pinon 6 ins.diam.,bears S.12°W.,28 lks.dist., marked T.40 S. R.14 W.S.29 B.T.
	A pinon 8 ins.diam.,bears N.61°W.,19 lks.dist., marked T.40 S. R.14 W. S.20 B.T.
	Land rolling.
	Soil,rocky 3rd.rate.
	Heavy cedar and pinon timber on 39.50 chs.
	Heavily timbered or dense undergrowth on 80.00 chs.

SUBDIVISIONS OF T.40 S.,R.14 W.,continued.

CHAINS	
	N.89° 58'E.,on a random line,bet.secs.21 and 28.
40.00	Set temp.$\frac{1}{4}$ sec.cor.
79.98	Intersect N.and S.line,3 lks.N.of the cor.of secs. 21-22-27 and 28.
	Thence I run
	S.89° 59'W.,on a true line,
	Bet.secs.21 and 28.
	Ascend through dense artemisia,oak,scattering cedar and pinon timber.
12.00	Top of ridge,bears N.W.and S.E.
	Descend.
23.50	Bottom of ravine,100 ft.deep,course S.E.
	Ascend.
33.00	Top of ridge,bears N.and S.
	Descend.
39.99	Set a sandstone,15x12x8 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.
	Pits impracticable.
60.00	Bottom of ravine,200 ft.deep,course S.
	Ascend.
74.30	Top of ridge,bears N.and S.
	Begin abrupt descent.
79.98	The cor.of secs.20-21-28 and 29.
	Land mountainous.
	Soil,rocky 3rd.rate.
	Timber,scattering cedar and pinon.
	Mountainous land on 79.98 chs.
	December 28,1902.

December 29: At 8 a.m.,l.m.t.,I set off 37° 19'N.on lat.arc;23° 12'S.on decl.arc,and determine a true meridian with the solar,at the cor.of secs.20-21-28 and 29.

Thence I run

SUBDIVISIONS OF T.40 S.,R.14 W.,continued.

CHAINS	
	N.0° 03'W.,bet.secs.20 and 21.
	Descend through heavy cedar and pinon timber.
10.00	Hollow,50 ft.deep,course S.W.
	Leave heavy timber,bears N.E.and S.W.
	Enter dense artemisia,oak,service berry,laurel,
	scattering cedar and pinon timber.
	Ascend.
19.00	Top of ridge,bears N.W.and S.E.
	Descend. Leave timber.
39.00	Bottom of ravine,100 ft.deep,course S.E.
	Ascend.
40.00	Set a trachyte stone 24x15x10 ins.,18 ins.in the ground
	for $\frac{1}{4}$ sec.cor.,marked $\frac{1}{4}$ .on W.face,and raise a mound
	of stone 2 ft.base,$1\frac{1}{2}$ ft.high,W.of cor.
	Pits impracticable.
51.70	Top of spur,projects S.E.
	Descend.
66.00	Hollow,75 ft.deep,course S.E.
	Ascend.
80.00	Set a trachyte stone 18x10x10 ins.,12 ins.in the
	ground,for cor.of secs.16-17-20 and 21,marked with
	3 notches on S.and 4 notches on E.edges,and raise a
	mound of stone 2 ft.base,$1\frac{1}{2}$ ft.high,W.of cor.
	Pits impracticable.
	Land rolling.
	Soil,rocky 3rd.rate.
	Heavy cedar and pinon timber on 10.00 chs.
	Dense undergrowth or heavily timbered on 80.00 chs.
	N.89° 59'E.,on a random line,bet.secs.16 and 21.
40.00	Set temp.$\frac{1}{4}$ sec.cor.
79.96	Intersect N.and S.line,5 lks.N.of the cor.of secs.
	15-16-21 and 22.
	Thence I run
	N.89° 59'W.,on a true line,

SUBDIVISIONS OF T.40 S.,R.14 W.,continued.

CHAINS	
	Bet.sec.16.and 21.
	Descend abruptly through dense artemisia,oak,laurel, service berry,scattering cedar and pinon timber.
9.00	Leeds Creek,5 lks.wide,12 ins.deep,in bottom of canon 600 ft.deep,course S.E.
	This point is 3.00 chs.S.of the forks of two canons, coming from N.E.and N.W.
	Begin abrupt ascent.
34.00	Top of abrupt ascent,bears N.W.and S.E.
	Ascend.
39.98	Set a trachyte stone 24x14x6 ins.,18 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.
	Pits impracticable.
68.00	Top of ridge,800 ft.above bottom of canon,bears N.W.and S.E.
	Begin abrupt descent.
79.96	The cor.of secs.16-17-20 and 21.
	Land mountainous.
	Soil,rocky 3rd.rate.
	Timber cedar and pinon.
	Mountainous land on 79.96 chs.
	December 29: At this cor.I set off 23° 14'S.on decl. arc,and at 0h.2m.,p.m.,l.m.t.,observe the sun on the meridian,the resulting lat.is 37° 20'N.
	N.0° 03'W.,bet.secs.16 and 17.
	Ascend through dense artemisia,oak,service berry and laurel brush.
14.00	Top of ridge,bears N.W.and S.E.
	Begin abrupt descent.
40.00	Set a trachyte stone 24x12x6 ins.,18 ins.in the ground for ¼ sec.cor.,marked ¼ .on W.face,and raise a mound of stone 2 ft.base,1½ ft.high,W.of cor.

SUBDIVISIONS OF T.40 S.,R.14 W.,continued.

CHAINS	
	Pits impracticable.
43.50	Leeds Creek,3 lks.wide,in bottom of canon 600 ft.deep, course S.E.
	Ascend.
70.00	Begin abrupt ascent,bears N.E.and S.W.
80.00	Set a trachyte stone 15x12x10 ins.,10 ins.in the ground,for cor.of secs.8-9-16 and 17,marked with 4 notches on S.and E.edges,and raise a mound of stone 2 ft.base,1½ ft.high,W.of cor.
	Pits impracticable.
	Land mountainous.
	Soil,rocky 3rd.rate.
	No timber.
	Mountainous land.on 80.00 chs.

	S.89° 59'E.,on a random line,bet.secs.9 and 16.
40.00	Set temp.¼ sec.cor.
79.98	Intersect N.and S.line,3 lks.N.of the cor.of secs. 9-10-15 and 16.
	Thence I run
	N.89° 58'W.,on a true line,
	Bet.secs.9 and 16.
	Over rocky land,ascend through dense artemisia,oak, service berry and laurel brush.
39.99	Set a trachyte stone 15x12x12 ins.,10 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.
	Pits impracticable.
60.00	Begin abrupt ascent,bears N.E.and S.W.
79.96	The cor.of secs.8-9-16 and 17.
	This cor.is 800 ft above the cor.of secs.9-10-15 and 16.
	Land mountainous.
	Soil,rocky 3rd.and 4th.rate.
	No timber.

SUBDIVISIONS OF T.40 S.,R.14 W.,continued.

CHAINS

Mountainous land on 79.98 chs.

Note:
On account of abrupt mountains,I abandon the line here.

December 29,1902.

December 30: At 8a.m.,l.m.t.,I set off 37° 17'N.on lat.arc;23° 08'S.on decl.arc,and determine a true meridian with the solar,at the Standard Corner of secs.31 and 32,on the Eighth Standard Parallel South, heretofore described.

Thence I run

N.0° 03'W.,bet.secs.31 and 32.

Descend through heavy cedar and pinon timber.

1.75 Hollow,75 ft.deep,course S.W.

Ascend.

8.50 Top of spur ridge,projects S.W.

Leave heavy timber,bears N.E.and S.W.

Enter dense artemisia,oak,scattering cedar and pinon timber.

Descend.

34.00 Hollow,75 ft.deep,course S.W.

Ascend.

40.00 Set a sandstone 15x12x10 ins.,10 ins.in the ground, for ¼ sec.cor.,marked ¼ .on W.face,and raise a mound of stone 2 ft.base,1½ ft.high,W.of cor.

Pits impracticable.

54.00 Top of ridge,bears N.E.and S.W.

Begin abrupt descent.

77.00 Bottom of canon,600 ft.deep,course S.W.

Begin abrupt ascent.

80.00 Set a sandstone 28x15x5 ins.,21 ins.in the ground, for cor.of secs.29-30-31 and 32,marked with 1 notch on S.and 5 notches on E.edges,from which

SUBDIVISIONS OF T.40 S.,R.14 W.,continued.

NS	CHAINS	
		A pinon 6 ins.diam.,bears N.51°E.,18 lks.dist.,
		marked T140 S. R.14 W. S.29 B.T.
		A cedar 6 ins.diam.,bears S.83°E.,21 lks.dist.,
		marked T.40 S. R.14 W. S.32 B.T.
		A cedar 15 ins.diam.,bears S.64°W.,14 lks.dist.,
		marked T.40 S. R.14 W. S.31 B.T.
		A cedar 6 ins.diam.,bears N.73°W.,33 lks.dist.,
		marked T.40 S. R.14 W. S.30 B.T.
		Land mountainous.
		Soil,rocky 3rd.rate.
		Heavy cedar and pinon timber on 8.50 chs.
		Mountainous land on 80.00 chs.
		East,on a random line,bet.secs.29 and 32.
	40.00	Set temp.¼ sec.cor.
	80.02	Intersect N. and S.line,3 lks.S.of the cor.of secs.
		28-29-32 and 33.
		Thence I run
		S.39° 59'W.,on a true line,
		Bet.secs.29 and 32.
		Over rocky land,descend through dense artemisia,oak,
		service berry,scattering cedar and pinon timber.
	6.00	Bottom of ravine,150 ft.deep,course S.
		Ascend.
	9.00	Top of spur,projects S.
		Descend.
	31.50	Bottom of ravine,300 ft.deep,course S.E.
		Ascend.
	40.01	Set a sandstone 24x12x8 ins.,18 ins.in the ground,
		for ¼ sec.cor.,marked ¼ .on N.face,from which
		A pinon 5 ins.diam.,bears S.42°W.,21 lks.dist.,
		marked ¼ S.32 B.T.
		A cedar 8 ins.diam.,bears N.44°E.,11 lks.dist.,
		marked ¼ S.29 B.T.
	66.00	Top of ridge,500 ft.above bottom of ravine,bears

SUBDIVISIONS OF T.40 S.,R.14 W.,continued.

CHAINS	
	N.and S.
	Begin abrupt descent.
78.50	Bottom of canon,600 ft.deep,course S.W.
	Begin abrupt ascent.
80.02	The cor.of secs.29-30-31 and 32.
	Land mountainous.
	Soil,rocky 3rd.and 4th.rate.
	Timber,scattering cedar and pinon.
	Mountainous land on 80.02 chs.
	December 30: At this cor.I set off 23° 10'S.on decl. arc,and at 0h.2m.,p.m.,l.m.t.,observe the sun on the meridian,the resulting lat.is 37° 18'N.
	West,on a random line,bet.secs.30 and 31.
40.00	Set temp.$\frac{1}{4}$ sec.cor.
79.94	Intersect W.Bdy.of Tp.,3 lks.N.of the cor.of secs. 25-30-31 and 36,heretofore described.
	Thence I run
	N.89° 59'E.,on a true line,
	Bet.secs.30 and 31.
	Over rocky land,descend through scattering oak brush, cedar and pinon timber.
15.00	Bottom of canon,500 ft.deep,course S.E.
	Ascend.
26.00	Top of rocky spur,projects S.E.
	Begin abrupt descent.
39.94	Set a trachyte stone 28x12x12 ins.,21 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.
	Pits impracticable.
43.00	Bottom of canon,400 ft.deep,course S.
	Begin abrupt ascent.
61.50	Top of spur,projects S.
	Begin abrupt descent.

SUBDIVISIONS OF T.40 S.,R.14 W.,continued.

CHAINS	
79.94	. . . The cor.of secs.29-30-31 and 32.
	Land mountainous.
	Soil,rocky 3rd.and 4th.rate.
	Timber,scattering cedar and pinon.
	Mountainous land on 79.94 chs.
	N.0° 03'W.,bet.secs.29 and 30.
	Over rocky land,ascend along a steep east slope, along west side of canon,course S.,through scattering cedar and pinon timber.
40.00	Set a sandstone 15x10x8 ins.,10 ins.in the ground, for ¼ sec.cor.,marked ¼ on W.face,from which
	A cedar 8 ins.diam.,bears N.37°E.,18 lks.dist., marked ¼ S.29 B.T.
	A pinon 10 ins.diam.,bears N.16°W.,89 lks.dist., marked ¼ S.30 B.T.
72.00	Top of ridge,600 ft.above sec.cor.,bears N.E.and S.W.
	Leave timber.
	Descend.
80.00	Set a trachyte stone 18x12x8 ins.,12 ins.in the ground,for cor.of secs.19-20-29 and 30,marked with 2 notches on S.and 5 notches on E.edges,and raise a mound of stone 2 ft.base,1½ ft.high,W.of cor.
	Pits impracticable.
	Land mountainous.
	Soil,rocky 3rd.and 4th.rate.
	Timber,scattering cedar and pinon.
	Mountainous land on 80.00 chs.
	N.89° 59'E.,on a random line,bet.secs.20 and 29.
40.00	Set temp.¼ sec.cor.
80.00	Intersect N.and S.line,3 lks.S.of the cor.of secs. 20-21-28 and 29.
	Thence I run

SUBDIVISIONS OF T.40 S.,R.14 W.,continued.

CHAINS	
	S.89° 58'W.,on a true line,
	Bet.secs.20 and 29.
	Over rocky land,descend abruptly through heavy cedar and pinon timber.
10.00	Bottom of ravine,250 ft.deep,course S.
	Leave timber,bears N.and S.
	Enter dense artemisia.oak,service berry brush and laurel.
	Ascend.
40.00	Set a trachyte stone 16x10x8 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.
	Pits impracticable.
73.00	Top of ridge,800 ft.above bottom of ravine,bears N.E.and S.W.
	Descend.
80.00	The cor.of secs.19-20-29 and 30.
	Land mountainous.
	Soil,rocky 3rd.rate.
	Heavy cedar and pinon timber on 10.00 chs.
	Mountainous land on 80.00 chs.
	December 30,1902.

	December 31: At 8 a.m.,l.m.t.,I set off 37° 19'N. on lat.arc;23° 04'S.on decl.arc,and determine a true meridian,with the solar,at the cor.of secs.19-20-29 and 30.
	Thence I run
	S.89° 59'W.,on a random line,
	Bet.secs.19 and 30.
40.00	Set temp. ¼ sec.cor.
79.86	Intersect N.and S.line,5 lks.S.of the cor.of secs. 19-24-25 and 30,heretofore described.
	Thence I run

SUBDIVISIONS OF T.40 S.,R.14 W.,continued.

CHAINS	
	S.89° 59'E.,on a true line,
	Bet.secs.19 and 30.
	Over rocky land,ascend abruptly through dense artemisia oak,service berry and laurel brush.
24.50	Top of ridge,bears N.and S.,300 ft.above sec.cor.
	Begin abrupt descent.
39.86	Set a trachyte stone 15x10x8 ins.,10 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.
	Pits impracticable.
52.00	Bottom of canon,400 ft.deep,course S.W.
	Begin abrupt ascent.
79.86	The cor.of secs.19-20-29 and 30.
	Land mountainous.
	Soil,rocky 3rd.rate.
	No timber.
	Mountainous land on 79.86 chs.
	N.0° 03'W.,bet.secs.19 and 20.
	Over rocky land,descend through dense artemisia,oak, service berry and laurel brush.
36.00	Bottom of ravine,200 ft.below sec.cor.,course S.W.
	Begin abrupt ascent.
40.00	Set a trachyte stone 15x12x10 ins.,10 ins.in the ground,for ¼ sec.cor.,marked ¼ .on W.face,and raise a mound of stone 2 ft.base,1½ ft.high,W.of cor.
	Pits impracticable.
80.00	Set a trachyte stone 18x8x8 ins.,12 ins.in the ground,for cor.of secs.17-18-19 and 20,marked with 3 notches on S.and 5 notches on E.edges,and raise a mound of stone 2 ft.base,1½ ft.high,W.of cor.
	Pits impracticable.
	This cor.is 700 ft.above the cor.of secs,19-20-29 and 30.

SUBDIVISIONS OF T.40 S. R.14 W., continued.

CHAINS	
	Land mountainous.
	Soil,rocky 3rd.rate.
	No timber.
	Mountainous land on 80.00 chs.
	December 31: At this cor.I set off 23° 06'S.on decl. arc,and at 0h.3m.,p.m.,l.m.t.,observe the sun on the meridian,the resulting lat.is 37°20'N.
	N.89° 58'E.,on a random line,bet.secs.17 and 20.
40.00	Set temp.$\frac{1}{4}$ sec.cor.
79.98	Intersect N.and S.line,3 lks.S.of the cor.of secs. 16-17-20 and 21.
	Thence I run
	S.89° 57'W.,bet.secs.17 and 20.
	Over rocky land,descend through dense artemisia,oak, service berry and laurel brush.
15.50	Hollow,75 ft.deep,course S.E.
	Ascend.
35.50	Top of ridge,300 ft.above bottom of hollow,bears N.W.and S.E.
	Descend.
39.99	Set a trachyte stone 15x12x10 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.
	Pits impracticable.
56.00	Head of ravine,course S.E.
	Ascend.
69.00	Top of ridge,bears N.and S.
	Descend.
79.98	The cor.of secs.17-18-19 and 20.
	Land mountainous.
	Soil,rocky 3rd.and 4th.rate.
	No timber.
	Mountainousland and dense undergrowth on 79.98 chs.

SUBDIVISIONS OF T.40 S.,R.14 W.,continued.

CHAINS	
	N.89° 59'W.,on a random line,bet.secs.18 and 19.
40.00	Set temp.¼ sec.cor.
79.78	Intersect W.Bdy.of Tp.,3 lks.S.of the cor.of secs. 13-18-19 and 24,heretofore described.
	Thence I run
	S.89° 58'E.,on a true line,
	Bet.secs.18 and 19.
	Over rocky land,ascend abruptly through dense artemisia oak,service berry and laurel brush.
22.00	Top of ridge,200 ft.above sec.cor.,bears N.and S.
	Descend.
39.78	Set a trachyte stone 15x12x8 ins.,10 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. Pits impracticable.
45.00	Head of canon,course S.E.
	Ascend.
79.78	The cor.of secs.17-18-19 and 20.
	Land Mountainous.
	Soil,rocky 3rd.and 4th.rate.
	No timber.
	Mountainous land and dense undergrowth on 79.78 chs.
	Note: On account of high,rocky and broken land,I abandon the line here.
	December 31,1902.

GENERAL DESCRIPTION

This township is mountainous throughout,and is situated on the S.E.slope of the Pine Valley Mountains. The soil,with the exception of a few bottoms,is rocky,and in the south portion of the township is covered with a scattering growth of cedar and pinon timber.

The north end of the township extends on top of the Pine Valley mountains and on account of the broken

GENERAL DESCRIPTION T.40 S.,R.14 W.,concluded.

CHAINS

and worthless character of the land was not surveyed. No timber is found on the central portion of the township,this portion is covered with a dense growth of brush and grasses,making this a fair range. The township is watered by Leeds Creek and several springs.

There is one settler in this township viz:

William Harris is located in N.E.$\frac{1}{4}$ sec.32.

Land under cultivation 10 acres.

Value of improvements 300.00 dollars.

William W.Roundy bought the improvements of Elizabeth Wilkinson,these a re situated in

E.$\frac{1}{2}$ of sec.4,T.41 S.,R.14 W.and in

S.E.$\frac{1}{4}$ sec.33 T.40 S.,R.14 W.,

the improvements in this township are

Land under cultivation 5.00 acres.

Value of improvements,$100.00.

The rest of his improvements are given in the Subdivisions of T.41 S.,R.14 W.

There is no mineral land in this township.

Harvey M. Heist
U.S.DEPUTY SURVEYOR

NOTE:

There being no notary public or other officer authorized to administer oaths within a reasonable distance at the beginning or ending of this survey, in order to save time and expense,I administer the preliminary and final oaths for survey and resurvey of T.40 S.,R.14 W.,myself

Harvey M. Heist
U.S.DEPUTY SURVEYOR.

FINAL OATHS OF DEPUTY SURVEYOR AND HIS ASSISTANTS.

LIST OF NAMES.

A list of the names of the individuals employed by ..... 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 .....

showing the respective capacities in which they acted:

....., *Chainman.*

....., *Chainman.*

....., *Moundman.*

....., *Moundman.*

....., *Axman.*

....., *Axman.*

....., *Flagman.*

For final oath see book 2 pp 105 & 115 W.

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted ..... United States Deputy Surveyor, in surveying all those parts or portions of the ..... of the ..... meridian, ... of ....., which are represented in the foregoing field notes as having been surveyed by him and under his direction; and that said survey has been in all respects, to the best of our knowledge and belief, well and faithfully surveyed, and the corner monuments established, according to the instructions furnished by the United States Surveyor General for .....

....., *Chainman.*

....., *Chainman.*

....., *Moundman.*

....., *Moundman.*

....., *Axman.*

....., *Axman.*

....., *Flagman.*

For final oath see book 2 pp 105 & 115 W.

Subscribed and sworn to before me this .....
day of ....., 189

SEAL

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FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I, ..., United States Deputy Surveyor, solemnly swear that, in pursuance of a contract received from ..... United States Surveyor General for ....., bearing date of the ..... day of ....., 189 , I have well, faithfully, and truly, in my proper person, and in strict conformity with the instructions furnished by the United States Surveyor General for ....., the Manual of Surveying Instructions, and the laws of the United States, surveyed all those parts or portions of .....

.....

.....

.....

..... of the ..... meridian, in the ..... of ....., which are represented in the foregoing field notes as having been surveyed by me, and under my direction; and I do further solemnly swear that all the corners of said survey have been established and perpetuated in strict accordance with the Manual of Surveying Instructions, and the special written instructions of the United States Surveyor General for ..... and in the specific manner described in the field notes, and that the foregoing are the original field notes of such survey; and should any fraud be detected, I will suffer the penalty of perjury under the provisions of an Act of Congress approved August 8, 1846.

..... United States Deputy Surveyor

Subscribed by said ....., and sworn to before me this ..... day of ....., 189

SEAL

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah, February 26, 1904, 189

The foregoing field notes of the survey of The Subdivisional Lines of Township 40 South Range 14 West of the Salt Lake Base & Meridian, Utah

executed by Harvey D. Heist under his contract No. 251, dated February 12, 1902, 189 , having been critically examined, and the necessary corrections and explanations made, the said field notes, and surveys they describe, are hereby approved.

Edward H. Anderson
United States Surveyor General

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

..... United States Surveyor General

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FILED
MAR 26 1903
A.S.B.
A.C.

4—679.

Z 3
BOOK A-298

FIELD NOTES

OF THE SURVEY OF THE

S-U-B-D-I-V-I-S-I-O-N L-I-N-E-S

of

Township No.41 South, Range No.14 West.

of the Salt Lake Base and *Meridian,*

in the state of Utah.

AS SURVEYED BY

Harvey D. Heist, *United States Deputy Surveyor,*

Under his Contract No. 251. *dated* February 12, 1902. *189*

Survey commenced January 1, 1903. *189*

Survey completed January 1, 1903. *189*

4—14

Field Notes ✓

BOOK A-298

NAMES AND DUTIES OF ASSISTANTS.

William Walquist	Chainman
George Wilson	"
Earl V. Woolley	Moundman
John Kitchen	"
James Potter	Axman
Oley Sorenson	Flagman

In preliminary affidavit subbook No. Tp 405 R 13 W.

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BOOK A-298

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PRELIMINARY OATHS OF ASSISTANTS.

WE, ... and .....
do solemnly swear that we will well and faithfully execute the duties of chainmen; that we will level t
chain over even and uneven ground, and plumb the tally pins, either by sticking or dropping the same; t
we will report the true distances to all notable objects, and the true lengths of all lines that we assist
measuring, to the best of our skill and ability, and in accordance with instructions given us, in the survey

....., *Chainm*

....., *Chainm.*

Subscribed and sworn to before me this .....
day of ....., 189

SEAL

WE, ... and .....
do solemnly swear that we will well and truly perform the duties of moundmen in the establishm
of corners, according to the instructions given us, to the best of our skill and ability, in the survey

....., *Moundm*

....., *Moundm*

Subscribed and sworn to before me this .....
day of ....., 189

SEAL

WE, ... and .....
do solemnly swear that we will well and truly perform the duties of axmen in the establishment of corr
and other duties, according to instructions given us, to the best of our skill and ability, in the survey

....., *Axm*

....., *Axm*

Subscribed and sworn to before me this .....
day of ....., 189

SEAL

I, ..., do solemnly swear that I will well and t
perform the duties of flagman according to instructions given me, to the best of my skill and ability, in
survey of .....

....., *Flag*

Subscribed and sworn to before me this .....
day of ....., 189

SEAL

SUBDIVISIONS OF T.41 S.,R.14 W.

CHAINS	
	Survey commenced January 1: 1903,and executed with the instrument described in book B of this survey. I know the instrument to be in adjustment,from recent observations made December 20 and 21,1902,and recorded in book B of this survey.
	William W.Roundy ,a settler in this township,made application for a survey of T.40 S.,R.14 W.,believing his improvements were in that township.
	Upon surveying T.40 S. R.14 W.,I discover that his improvements are in sec.4,of T.41 S.,R.14 W.
	I therefore survey sec.4 as follows.
	I begin at the Stan.Cor.of secs.33 and 34,on the Eighth Standard Parallel South,heretofore described, which will also be the cor.of secs.3 and 4,T.41 S., R.14 W.
	At 8 a.m.,l.m.t.,I set off 23° 00'S.on decl.arc,and 37° 17'N.on lat.arc,and determine a true meridian with the solar.
	Thence I run
	South,on a true line,
	Bet.secs.3 and 4.
	Descend through dense artemisia,oak and service berry brush.
40.00	Set a sandstone 16x10x4 ins.,11 ins.in the ground, for ¼ sec.cor.,marked ¼ .on W.face,and raise a mound of stone 2 ft.base,1½ ft.high,W.of cor.
	Pits impracticable.
60.00	Bottom of ravine,400 ft.below Stan.Cor.,course S.W.
	Ascend along steep,W.slope.
80.00	Set a sandstone 18x12x8 ins.,12 ins.in the ground, for cor.of secs.3-4-9 and 10,marked with 5 notches on S.and 3 notches on E.edges,and raise a mound of stone 2 ft.base,1½ ft.high,W.of cor.
	Pits impracticable.
	Land mountainous.

SUBDIVISIONS OF T.41 S.,R.14 W.,continued.

CHAINS

Soil,rocky 3rd.rate.

No timber.

Mountainous land and dense undergrowth on 80.00 chs.

South,bet.secs.4 and 5.

I beginat the Stan.Cor.of secs.32 and 33, which is now also the cor.of secs.4 and 5,on the Eighth Standard Parallel South,heretofore described.

Ascend through dense artemisia,oak,service berry brush,scattering cedar and pinon timber.

25.00 Top of ridge,bears N.E.and S.W.

Descend.

36.00 Ascend.

40.00 Set a sandstone 16x10x8 ins.,11 ins.in the ground, for ¼ sec.cor.,marked ¼ .on W,face,from which

A cedar 4 ins.diam.,bears N.70°W.,88 lks.dist., marked ¼ S.5 B.T.

A cedar 3 ins.diam.,bears N.5°E.,72 lks.dist., marked ¼ S.4 B.T.

47.00 Top of same ridge,bears S.E.and N.W.

Descend.

60.00 Set a sandstone 24x12x6 ins.,18 ins.in the ground, for cor.of secs.4-5-8 and.9,marked with 5 notches on S.and 4 notches on E.edges,from which

A cedar 12 ins.diam.,bears N.10°E.,13 lks.dist., marked T.41 S. R.14 W. S.4 B.T.

A cedar 4 ins.diam.,bears S.55°E.,16 lks.dist, marked T.41 S. R.14 W. S.9 B.T.

A cedar 6 ins.diam.,bears S.2°W.,18 lks.dist., marked T.41 S. R.14 W. S.8 B.T.

No other trees within limits,and raise a mound of stone 3 ft.base,1½ ft.high,W.of cor.

Pits impracticable.

SUBDIVISIONS OF T.41S.,R.14 W.,continued.

CHAINS	
	Land rolling.
	Soil,stony 3rd.rate.
	Timber,scattering cedar and pinon.
	Dense undergrowth on 80.00 chs.
	January 1: At this cor.I set off 23° 02'S.on decl. arc,and at 0h.3m.,p.m.,l.m.t.,observe the sun on the meridian,the resulting lat.is 37° 16'N.

	From the cor.of secs.4-5-8 and 9,I run East,on a random line,bet.secs.4 and 9.
40.00	Set temp.$\frac{1}{4}$ sec'cor.
80.06	Intersect N.and S.line,5 lks.N.of the cor.of secs. 3-4-9 and 10.
	Thence I run
	N.89° 58'W.,on a true line,
	Bet.secs.4 and 9.
	Descend abruptly over rocky land.
3.00	Bottom of ravine,500 ft.deep,course S.
	Beginabrupt ascent.
30.00	Top of spur,600 ft.above bottom of ravine, projects N.
	Enter dense artemisia,oak,scattering cedar and pinon timber.
	Descend.
40.03	Set a sandstone 16x8x4 ins.,11 ins.in the ground, for $\frac{1}{4}$ sec.cor.,marked $\frac{1}{4}$ ..on N.face,from which
	A pinon 8 ins.diam.,bears N.71°E.,20 lks.dist., marked $\frac{1}{4}$ S.4 B.T.
	A cedar 5 ins.diam.,bears S.77°W.,54 lks.dist., marked $\frac{1}{4}$ S.9 B.T.
45.00	Hollow,75 ft.deep,course N.
	Ascend.
80.06	The cor.of secs.4-5-8 and 9.
	Land mountainous.
	Soil,sandy loam and rocky 2nd.and 4th.rate.

SUBDIVISIONS OF T.41 S.,R.14 W.,concluded.

CHAINS

Timber,scattering cedar and pinon.

Mountainous land or dense undergrowth on 80.06 chs.

January 1,1903.

General Description.

Section 4,has soil ranging from rich loam to rocky, about half the sec.is capable of producing abundant crops without irrigation,the balance is good grazing land.

All the arable land in this sec.can be irrigated by a spring branch,which flows into the sec.from the N. William W.RoundY is located in this sec.the location of his house is given in the notes of the Eighth Standard Parallel South,through R.14 W.,

Acres of land under cultivation 50.00

Value of improvements $1500.00

There is no mineral found in this sec.

There is no other settler in this Tp.and no possible chance of being any for some time.

Harvey H. Hind

U.S.DEPUTY SURVEYOR.

FINAL OATHS OF DEPUTY SURVEYOR AND HIS ASSISTANTS.

LIST OF NAMES.

A list of the names of the individuals employed by .....

..... 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 .....

..... showing the respective capacities in which they acted:

..... *Chainman.*

..... *Chainman.*

..... *Moundman.*

..... *Moundman.*

..... *Axman.*

..... *Axman.*

..... *Flagman.*

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted .....

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

..... of the .....

..... meridian, ... of ..... which are represented in the foregoing field notes as having been surveyed by him and under his direction; and that said survey has been in all respects, to the best of our knowledge and belief, well and faithfully surveyed, and the corner monuments established, according to the instructions furnished by the United States Surveyor General for .....

..... *Chainman.*

..... *Chainman.*

..... *Moundman.*

..... *Moundman.*

..... *Axman.*

..... *Axman.*

..... *Flagman.*

.....

Subscribed and sworn to before me this .....

day of ....., 189

SEAL

6—151

FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I, ..., United States Deputy Surveyor, ... solemnly swear that, in pursuance of a contract received from ..... United States Surveyor General for ..... 5 ....., bearing date of t ..... day of ....., 189 , I have well, faithfully, and truly, in my o proper person, and in strict conformity with the instructions furnished by the United States Survey General for ....., the Manual of Surveying Instructions, and the laws of t United States, surveyed all those parts or portions of .....

.....

.....

.....

.....of the.....

.....meridian, in the ..... of ....., which are represented in t foregoing field notes as having been surveyed by me, and under my direction; and I do further solem swear that all the corners of said survey have been established and perpetuated in strict accordance w the Manual of Surveying Instructions, and the special written instructions of the United States S General for ..... and in the specific manner described in the field notes, and t the foregoing are the original field notes of such survey; and should any fraud be detected, I will su the penalty of perjury under the provisions of an Act of Congress approved August 8, 1846.

United States Deputy Survey

Subscribed by said ..... , and sworn to before me this ..... day of ....., 189

SEAL

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah, February 26 1904, 189

The foregoing field notes of the survey of The Subdivisional lines of Township 41 South Range 14 West of the Salt Lake Base & Meridian, Utah

executed by Harvey F. Reid under his contract No. 251, dated February 12, 1902, 189 , having b critically examined, and the necessary corrections and explanations made, the said field notes, and surveys they describe, are hereby approved.

Edward M. Anderson

United States Surveyor Gene

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

United States Surveyor Gene

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4—679.

74

BOOK A-298

MAR 26 1903

FIELD NOTES

OF THE SURVEY OF THE

F-I-G-H-T-H S-T-A-N-D-A-R-D P-A-R-A-L-L-E-L S-O-U-T-H

through

Range No.15 West.

Of the Salt Lake Base and *Meridian,*

in the state of Utah,

AS SURVEYED BY

Harvey D.Hoist, *United States Deputy Surveyor,*

Under his Contract No. 251, *dated* February 12, 1902.

Survey commenced January 1,1903. *189*

Survey completed January 5,1903. *189*

6—151

6-19-30 ✓

9-8-5 ✓

NAMES AND DUTIES OF ASSISTANTS.

William Walquist	Chainman
Frank Bringhurst	"
Earl V. Woolley	"
Edwin Higbee	"
Frank Duffin	Moundman
John Kitchen	Axman
Herbert Riggs	Flagman

See preliminary affidavit see book Z Pg 40 S. Q.14.

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BOOK A-298

INDEX DIAGRAM.

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Meanders Page.....

PRELIMINARY OATHS OF ASSISTANTS.

WE, ... and .....
do solemnly swear that we will well and faithfully execute the duties of chainmen; that we will level chain over even and uneven ground, and plumb the tally pins, either by sticking or dropping the same; we will report the true distances to all notable objects, and the true lengths of all lines that we assi measuring, to the best of our skill and ability, and in accordance with instructions given us, in the surv

.....

....., *Chain*

....., *Chain*

Subscribed and sworn to before me this .....
day of ....., 189

SEAL

.....

.....

WE, ... and .....
do solemnly swear that we will well and truly perform the duties of moundmen in the establish of corners, according to the instructions given us, to the best of our skill and ability, in the surv

.....

....., *Mound*

....., *Mound*

Subscribed and sworn to before me this .....
day of ....., 189

SEAL

.....

.....

WE, ... and .....
do solemnly swear that we will well and truly perform the duties of axmen in the establishment of co and other duties, according to instructions given us, to the best of our skill and ability, in the su v

.....

....., *Ax*

....., *Ax*

Subscribed and sworn to before me this .....
day of ....., 189

SEAL

.....

.....

I, ..., do solemnly swear that I will well and perform the duties of flagman according to instructions given me, to the best of my skill and ability, i survey of .....

....., *Flag*

Subscribed and sworn to before me this .....
day of ....., 189

SEAL

.....

.....

EIGHTH STANDARD PARALLEL SOUTH, through RANGE 15 W.

Survey commenced January 1,1903, and executed with a W. and L.E. Gurley light mountain transit, No.-, with solar attachment. 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 verniers of the latitude and declination arc.

The instrument was examined, tested on the true meridian at Salt Lake City, found correct, and was approved by the surveyor general for Utah, May 26,1902.

I examine the adjustments of the transit and correct the level and collimation errors; then to test the solar apparatus, by comparing its indications resulting from solar observations made during a.m. and p.m. hours, with a meridian determined by observations on Polaris, I proceed as follows:

At the established Standard Corner to secs. 33 and 34, which is a trachyte stone 10x8x5 ins. above ground, marked as described by the surveyor general, on the Eighth Standard Parallel South, in approximate Latitude 37° 17'18" N., Longitude 113° 28' 30" W.

At 4 p.m., l.m.t., I set off 37° 17'N. on lat. arc; 22° 58'S. on decl. arc, and determine a true meridian with the solar, and mark a point in the line on a stone firmly set in the ground, 5 chs. N. of my station.

January 1,1902.

January 2: At 0h.38m., a.m., l.m.t, I observe Polaris at western elongation, in accordance with Manual of Instructions, and mark a point in the line thus determined, by a tack driven in a wooden peg set in the ground, 5.00 chs. N. of my station.

At 7 a.m., I lay off the azimuth of Polaris, 1° 31' to the east, and mark the meridian thus determined, by

EIGHTH STANDARD PARALLEL SOUTH, through RANGE 15 W., continued.

CHAINS	
	cutting a small groove in the stone set last evening, on which the meridian falls 0.4 ins. east of the mark determined by the solar.
	At 8 a.m., l.m.t., I set off 37° 17'N. on lat. arc; 22° 55'S. on decl. arc, and mark a point in the meridian thus determined with the solar, by a cross on the stone already set 5 chs. N. of my station; this mark falls 0.4 ins. east of the meridian established by the Polaris observation.
	The solar apparatus, by p.m. and a.m. observations, defines positions for meridians, respectively about 0' 21" west and east of the meridian established by the Polaris observation; therefore I conclude that the adjustments of the instrument are satisfactory.
	The magnetic bearing of the true meridian at 8h.30m. a.m., is N.16° 05'W., the angle thus determined gives the mean mag. decl. 16° 05'E.
	From the Stsn. Cor. of secs. 33 and 34, I run East, on a random line, along the Eighth Standard Parallel South, setting temp. Stan. ¼ sec. and sec. cors. at intervals of 40.00 chs.; and, at 258.35 chs., intersect the extension S. of the E. Bdy., 9.85 chs. S. of the Standard Cor. to Tps. 40 S., Rs. 14 and 15 W. heretofore described.
	Set a sandstone 18x14x8 ins., 12 ins. in the ground, for closing Standard Cor. for Tp. 40 S., R. 15 W., marked S.C. 40 S. on N. and C.C. 15 W. on W. face, with 6 grooves on N. and W. faces, from which
	A pinon 8 ins. diam., bears N.58°W., 11 lks. dist., marked T.40 S. R.15 W. S.36 B.T.
	I destroy all marks on the Standard Cor. of Tp. 40 S. Rs. 14 and 15 W., which pertain to R.15 W.
	January 2, 1902.

EIGHTH STANDARD PARALLEL SOUTH, through RANGE 15 W., continued.

CHAINS	
	January 3: At 8 a.m., l.m.t., I set off 37° 17'N. on lat. arc; 22° 50'S. on decl. arc, and determine a true meridian with the solar, at the closing Standard Cor. for Tp. 40 S., R. 15 W., heretofore described.
	I lay off from the meridian, an angle of 90°, from north to west, and run
	West, on the tangent, S. of secs. 36.
	Ascend abruptly over broken sandstone ledges, through scattering cedar and pinon timber.
17.75	Top of spur, projects S.E.
	Descend.
21.40	Head of ravine, course S.E.
	Ascend.
28.00	Top of ridge, 700 ft. above closing cor., bears N. and S.
	Descend.
	Difference bet. measurement of 40.00 chs., by two sets of chainmen is 10 lks., position of middle point
	By 1st. set, 39.95 chs.,
	By 2nd. set, 40.05 chs., the mean of which is
40.00	N. 0.2 lk. from the tangent.
	Set a sandstone 30x15x5 ins., 23 ins. in the ground, for Stan. ¼ sec. cor., marked S.C. ¼ . on N. face,
	from which
	A cedar 10 ins. diam., bears N. 22°E., 35 lks. dist., marked S.C. ¼ S. 36 B.T.
	A pinon 8 ins. diam., bears N. 38°W., 69 lks. dist., marked S.C. ¼ S. 36 B.T.
51.00	Bottom of ravine, 400 ft. deep, course S.
	Begin abrupt ascent.
67.00	Top of ridge, bears N.W. and S.E.
	Begin abrupt descent.
	Difference bet. measurement of 80.00 chs., by two sets of chainmen, is 12 lks., position of middle point
	By 1st. set, 79.94 chs.,
	By 2nd. set, 80.06 chs., the mean of which is

EIGHTH STANDARD PARALLEL SOUTH, through RANGE 15 W., continued.

CHAINS	
80.00	N.0.8 lk. from the tangent.
	Set a trachyte stone 18x12x8 ins., 12 ins. in the ground, for Stan. Cor. of secs. 35 and 36, marked with S.C. on N. and 1 groove on E. and 5 grooves on W. faces, from which
	A pinon 4 ins. diam., bears N.15°E., 60 lks. dist., marked T.40 S. R.15 W. S.36 B.T.
	No other trees within limits, and raise a mound of stone 2 ft. base, 1½ ft. high, N. of cor.
	Pits impracticable.
	Land mountainous.
	Soil, rocky, 3rd. and 4th. rate.
	Timber, scattering cedar and pinon.
	Mountainous land on 80.00 chs.
	S.89° 59'W. on the tangent, S. of sec. 35.
	Over rocky land, descend abruptly through scattering cedar and pinon timber.
5.50	Bottom of canon, 600 ft. deep, course S.E.
	Begin abrupt ascent.
36.00	Top of ridge, bears N. and S.
	Begin abrupt descent.
	Difference bet. measurement of 40.00 chs., by two sets of chainmen, is 8 lks., position of middle point
	By 1st. set, 39.96 chs.,
	By 2nd. set, 40.04 chs., the mean of which is
40.00	N.1.7 lks. from the tangent.
	Set a sandstone 24x14x9 ins., 18 ins. in the ground, for Stan. ¼ sec. cor., marked S.C. ¼ on N. face, from which
	A cedar 4 ins. diam., bears North, 30 lks. dist., marked S.C. ¼ S.35 B.T.
	A pinon 7 ins. diam., bears N.62°E., 35 lks. dist., marked S.C. ¼ S.35 B.T.

EIGHTH STANDARD PARALLEL SOUTH, through RANGE 15 W., continued.

CHAINS	
44.50	Bottom of ravine, 150 ft. deep, course S.W.
	Ascend.
50.00	Top of spur, projects S.
	Descend.
64.50	Bottom of ravine, 200 ft. deep, course S.
	Ascend.
71.25	Top of ridge, bears N. and S.
	Begin abrupt descent.
77.00	Foot of steep descent, bears N. and S.
	Enter bottom of Cottonwood Canon.
	Difference bet. measurement of 80.00 chs., by two sets of chainmen, is 14 lks., position of middle point
	By 1st. set, 79.93 chs.,
	By 2nd. set, 80.07 chs., the mean of which is
80.00	N. 3.1 lks. from the tangent.
	Set a trachyte stone 15x12x5 ins., 10 ins. in the ground, for Stan. Cor. of secs. 34 and 35, marked S.C. on N., with 2 grooves on E. and 4 grooves on W. faces, from which
	A cedar 6 ins. diam., bears N.70°E., 25 lks. dist., marked T.40 S. R.15 W. S.35 B.T.
	A cedar 6 ins. diam., bears N.16°W., 32 lks. dist., marked T.40 S. R.15 W. S.34 B.T.
	Land mountainous.
	Soil, rocky 3rd. and 4th. rate.
	Timber, scattering cedar and pinon.
	Mountainous land on 80.00 chs.
	January 3: At this cor. I set off 22° 51' S. on decl. arc, and at 0h.4m., p.m., l.m.t., observe the sun on the meridian, the resulting lat. is 37° 17' N.

	S.89° 58' W., on the tangent, S. of sec. 34.
	Descend through dense oak, service berry brush, scattering cedar and pinon timber.

EIGHTH STANDARD PARALLEL SOUTH, through RANGE 15 W., continued.

CHAINS	
2.00	Cottonwood Creek, 1 lk. wide, in bottom of canon, 600 ft. deep, course S.E.
	Ascend.
3.00	Leave canon.
	Begin abrupt ascent, over rocky land.
12.00	Top of ridge, bears N. and S.
	Descend.
22.50	Bottom of ravine, 200 ft. deep, course S.
	Ascend.
	Difference bet. measurement of 40.00 chs., by two sets of chainmen, is 16 lks., position of middle point,
	By 1st. set, 40.08 chs.,
	By 2nd. set, 39.92 chs., the mean of which is
40.00	N. 4.7 lks. from the tangent.
	Set a sandstone 15x8x5 ins., 10 ins. in the ground, for Stan. $\frac{1}{4}$ sec. cor., marked S.C. $\frac{1}{4}$ on N. face,
	from which
	A pinon 8 ins. diam., bears N. 81°E., 21 lks. dist., marked S.C. $\frac{1}{4}$ S.34 B.T.
	A pinon 12 ins. diam., bears N. 12°W., 27 lks. dist., marked S.C. $\frac{1}{4}$ S.34 B.T.
43.00	Top of ridge, bears N.W. and S.E.
	Descend,
51.00	Bottom of ravine, 200 ft. deep, course S.E.
	Ascend.
66.00	St. George Irrigating Canal, 5 lks. wide, 12 ins. deep, course S.
	Difference bet. measurement of 80.00 chs., by two sets of chainmen, is 12 lks., position of middle point
	By 1st. set, 79.94 chs.,
	By 2nd. set, 80.06 chs., the mean of which is
80.00	N. 6.8 lks. from the tangent.
	Set a sandstone 16x12x6 ins., 11 ins. in the ground, for Stan. Cor. of secs. 33 and 34, marked S.C. on N., with

EIGHTH STANDARD PARALLEL SOUTH, through RANGE 15 W., continued.

CHAINS	
	3 grooves on E. and W. faces, from which
	A pinon 6 ins. diam., bears N.41°E., 19 lks. dist.,
	marked T.40 S., R.15 W. S.34 B.T.
	A cedar 6 ins. diam., bears N.67°W., 12 lks. dist.,
	marked T.40 S. R.15 W. S.33 B.T.
	Land mountainous.
	Soil, rocky 3rd. and 4th. rate.
	Timber, scattering cedar and pinon.
	Mountainous land and dense undergrowth on 80.00 chs.
	January 3, 1903.

	January 4: Preliminary to surveying the balance of this line, I retrace along the S. sides of secs. 33, 32 31, on the Eighth Standard Parallel South,
	I proceed as follows:
	From the Stan. Cor. of secs. 33 and 34, heretofore described.
	At 8 a.m., l.m.t., I set off 37° 17' N. on lat. arc; 22° 44' S. on decl. arc, and determine a true meridian, with the solar,
	Thence I run
	West, on retracement line,
	along S. side sec. 33.
	As the old stan. $\frac{1}{4}$ sec. cors. on the S. Bdys. of secs. 33-32 and 31, will have to be destroyed, I do not get course and distance to them.
79.70	The Standard Cor. of secs. 32 and 33, which is a trachyte stone, 12x8x8 ins. above the ground, marked and witnessed as described by the surveyor general, bears S., 1.10 chs. dist.,
	The course of this line, is therefore S.89° 13' W., and the dist. 79.70.
	I offset over the cor., and run west, along the S. Bdy. of sec. 32.

EIGHTH STANDARD PARALLEL SOUTH, through RANGE 15 W., continued.

CHAINS

79.15 Intersect the Standard Cor. of secs. 31 and 32, which is a trachyte stone 16x12x8 ins., above the ground, marked and witnessed as described by the surveyor general.

The course of this line is therefore West, and the dist. 79.15 chs.

From the Stan. Cor. of secs. 31 and 32, I run west, on a retracement line, along the S. of sec. 31.

82.10 Intersect Pine Valley Guide Meridian, 14 lks. N. of the Standard Cor. of Tp. 40 S., Rs. 15 and 16 W., which is a trachyte stone 14x10x5 ins. above the ground, marked and witnessed as described by the surveyor general.

The course of this line is therefore S. 89° 54' W., and the dist. 82.10 chs.

January 4, 1902.

January 5: At 8 a.m., l.m.t., I set off 22° 38' S. on decl. arc; 37° 17' N. on lat. arc, and determine a true meridian with the solar, at Standard Cor. of secs. 33 and 34, set by me, Jan. 3, 1902.

Thence I run

West, on the tangent,

S. of sec. 33.

Over rocky land, ascend through heavy cedar and pinon timber.

11.00 Top of ridge, bears N.E. and S.W.

Descend.

16.15 Intersect closing cor. to secs. 3 and 4, T. 41 S., R. 15 W., which is a trachyte stone 9x8x6 ins., above ground, marked as described by the surveyor general.

18.35 Intersect Old stan. cor. of secs. 33 and 34, heretofore described, I destroy all marks on this cor., that pertain to T. 40 S., R. 15 W.

Thence I run

EIGHTH STANDARD PARALLEL SOUTH, through RANGE 15 W., continued.

CHAINS	
	S.89° 13'W., along the S. side of sec.33.
31.00	Road, bears N. and S., in bottom of ravine, 200 ft. deep, course S.
	Ascend.
	Difference bet. measurement of 40.00 chs. by two sets of chainmen, is 8 lks., position of middle point
	By 1st. set, 39.96 chs.
	By 2nd. set, 40.04 chs., the mean of which is
40.00	Set a trachyte stone 18x10x5 ins., 12 ins. in the ground, for Stan. $\frac{1}{4}$ sec. cor., marked S.C. $\frac{1}{4}$ on N., from which
	A cedar 5 ins. diam., bears N.27°E., 45 lks. dist., marked S.C. $\frac{1}{4}$ S.33 B.T.
	A pinon 3 ins. diam., bears N.11°W., 40 lks. dist., marked S.C. $\frac{1}{4}$ S.33 B.T.
	I destroy the old stan. $\frac{1}{4}$ sec. cor. set on the S. of sec.33.
55.00	Leave heavy timber, bears N. and S.
	Enter dense artemisia, oak, scattering cedar and pinon timber.
	Difference bet. measurement of 80.00 chs., by two sets of chainmen, is 6 lks., position of middle point
	By 1st. set, 80.03 chs.,
	By 2nd. set, 79.97 chs., the mean of which is
80.00	Set a trachyte stone 18x16x12 ins., 12 ins. in the ground, for Stan. Cor. of secs. 32 and 33, marked S.C. on N., with 4 grooves on E. and 2 grooves on W. faces, from which
	A cedar 5 ins. diam., bears N.40°W., 48 lks. dist., marked T.40 S. R.15 W. S.32 B.T.
	A cedar 5 ins. diam., bears N.84°E., 58 lks. dist., marked T.40 S. R.15 W. S.33 B.T.
	Land rolling and mountainous.
	Soil, rocky 3rd. rate.
	Heavy cedar and pinon timber on 55.00 chs.

EIGHTH STANDARD PARALLEL SOUTH, through RANGE 15 W, continued.

CHAINS	
	Heavily timbered or dense undergrowth on 80.00 chs.
	S.89° 13'W., along S.side of sec.32.
	Ascend through dense artemisia and scattering oak, cedar and pinon timber.
2.50	Top of ridge, bears N.and S.
	Descend over rolling land.
16.56	Intersect the closing cor.of secs.4 and 5. which is a trachyte stone 12x8x8 ins.above the ground marked as described by the surveyor general.
18.05	The old stan.cor.of secs.32 and 33, heretofore described, I destroy all marks on this cor.that pertain to T.40 S. R.15 W.
	Thence I run
	West, along S.side of sec.32.
	Difference bet.measurement of 40.00 chs.by two sets of chainmen is 4 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 trachyte stone 18x14x10 ins., 12 ins.in the ground, for stan.¼ sec.cor., marked S.C.¼ .on N.face, and raise a mound of stone 2 ft.base, 1½ ft.high, N. of cor.
	Pits impracticable.
	I destroy the old stan.¼ sec.cor., set on the S.side of sec.32.
42.50	Hollow, 75 ft.deep, course S.
	Ascend.
54.00	Top of ridge, bears N.and S.
	Descend.
	Difference bet.measurement of 80.00 chs.by two sets of chainmen, is 6 lks., position of middle point
	By 1st.set, 40.03 chs.
	By 2nd.set, 39.97 chs., the mean of which is
80.00	Set a trachyte stone 16x10x8 ins., 11 ins.in the

EIGHTH STANDARD PARALLEL SOUTH, through RANGE 15 W., continued.

CHAINS	
	ground, for stan.cor.of secs.31 and 32, marked S.C.on N., with 5 grooves on E.and 1 groove on W.faces, from which
	A cedar 8 ins.diam., bears N.10°W., 1.08 chs.dist., marked T.40 S. R.15 W. S.31 B.T.
	A cedar 6 ins.diam., bears N.70°E., 1.90 chs.dist., marked T.40 S. R.15 W. S.32 B.T.
	Land rolling.
	Soil, rocky 3rd.rate.
	Timber, scattering cedar and pinon.
	Dense undergrowth on 80.00 chs.
	January 5: At this cor.I set off 22° 39'S.on decl.arc, and at 0h. 6m., p.m., l.m.t., observe the sun on the meridian, the resulting lat.is 37° 17'N.
	West, along the S.side of sec.31.
	Over rolling land, descend through dense artemisia, and scattering cedar, pinon and oak.
15.79	Intersect the closing cor.of secs.5 and 6, T.41 S., R.15 W., which is a trachyte stone 15x12x8 ins.above ground, marked and witnessed as described by the surveyor general.
17.20	Intersect the old stan.cor.of secs.31 and 32, heretofore described, I destroy all marks on this cor., that pertain to T.40 S. R.15 W.
	Thence I run
	S.89° 54'W., along S.side of sec.31.
	Difference bet.measurement of 40.00 chs., by two sets of chainmen is 4 lks., position of middle point
	By 1st.set, 40.02 chs.,
	By 2nd.set, 39.98 chs., the mean of which is
40.00	Set a trachyte stone 15x15x15 ins., 10 ins.in the ground for stan.$\frac{1}{4}$ sec.cor., marked S.C.$\frac{1}{4}$ .on N.face, from which

EIGHTH STANDARD PARALLEL SOUTH, through RANGE 15 W.,

CHAINS	
	A cedar 5 ins.diam., bears N.68°W., 79 lks.dist., marked S.C.$\frac{1}{4}$ S.31 B.T.
	A cedar 8 ins.diam., bears N.38°E., 1.16 chs.dist., marked S.C. $\frac{1}{4}$ S.31 B.T.
	I destroy the old stan.$\frac{1}{4}$ sec.cor., set on the S.side of sec.31.
82.00	Top of lava ledges, 100 ft.high, bear N.and S.
	Begin abrupt descent.
	Leave timber.
85.00	Foot of ledges, bear N.and S.
	Descend.
96.89	Intersect the closing cor.for Tp.41 S., Rs.15 and 16 W., which is a trachyte stone 10x8x6 ins., above the ground, marked and witnessed as described by the surveyor general.
99.30	Intersect the Stan.cor.of Tp.40 S., Rs.15 and 16 W., on the Pine Valley Guide Meridian, heretofore described.
	Land rolling.
	Soil, stony 3rd.rate.
	Timber, scattering cedar and pinon on 82.00 chs.
	Dense undergrowth on 99.30 chs.
	January 5, 1903.

For latitude and departure table, see North Bdy.of T.40 S., R.15 W.

For general description, see, Subdivisions of T.40 S., R.15 W.

Harvey L. Heist

U.S.DEPUTY SURVEYOR.

There being no notary public or other officer authorized to administer oaths within a reasonable distance at the beginning or ending of this survey, in order to save time and expense, I administer the preliminary and final oaths, myself.

Harvey L. Heist

U.S.DEPUTY SURVEYOR.

FINAL OATHS OF DEPUTY SURVEYOR AND HIS ASSISTANTS.

LIST OF NAMES.

A list of the names of the individuals employed by Harvey D. Heist, 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 Eighth Standard Parallel South, through Rs. 14 and 15 W. of the Salt Lake Base and Meridian, Utah. showing the respective capacities in which they acted:

William Walquist, Frank Bringhurst, *Chainman.*

Earl V. Woolley, Edwin Higbee, *Chainman.*

Frank Duffin, *Moundman.*

, *Moundman.*

John Kitchen, *Axman.*

, *Axman.*

Herbert Riggs, *Flagman.*

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted Harvey D. Heist, United States Deputy Surveyor, in surveying all those parts or portions of the Eighth Standard Parallel South, through Rs. 14 and 15 W. of the Salt Lake Base and meridian, in the state of Utah, which are represented in the foregoing field notes as having been surveyed by him and under his direction; and that said survey has been in all respects, to the best of our knowledge and belief, well and faithfully surveyed, and the corner monuments established, according to the instructions furnished by the United States Surveyor General for Utah.

William Walquist, Frank Bringhurst, *Chainman.*

Earl V. Woolley, Edwin Higbee, *Chainman.*

Frank Duffin, *Moundman.*

, *Moundman.*

John Kitchen, *Axman.*

, *Axman.*

Herbert Riggs, *Flagman.*

Subscribed and sworn to before me this 5th. day of January, 1903, 189

SEAL

Harvey D. Heist
U.S. Deputy Surveyor

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J. C.

FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I, Harvey D. Heist, United States Deputy Surveyor solemnly swear that, in pursuance of a contract received from Edward H. Anderson United States Surveyor General for Utah, bearing date of 18th day of February, 1902, 189 , I have well, faithfully, and truly, in my proper person, and in strict conformity with the instructions furnished by the United States Surve General for Utah, , the Manual of Surveying Instructions, and the laws of United States, surveyed all those parts or portions of the Eighth Standard Parallel South, through Rs. 14 and 15 W.

of the Salt Lake Bas and meridian, in the state of Utah, which are represented in foregoing field notes as having been surveyed by me, and under my direction; and I do further solem swear that all the corners of said survey have been established and perpetuated in strict accordance w the Manual of Surveying Instructions, and the special written instructions of the United States Surve General for Utah, and in the specific manner described in the field notes, and the foregoing are the original field notes of such survey; and should any fraud be detected, I will s the penalty of perjury under the provisions of an Act of Congress approved August 8, 1846.

Harvey D. Heist
United States Deputy Surve

Subscribed by said Harvey D. Heist, and sworn to before me this 26th day of March 1902.

Edward H. Anderson
Surveyor-General for Uta

SEAL

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL.

Salt Lake City, Utah, March 26 1902.

The foregoing field notes of the survey of the Eighth Standard Parallel South through Ranges 15 West of the Salt Lake Base & Meridian, Utah

executed by Harvey D. Heist under his contract No. 251, dated February 12 1902 189 , having critically examined, and the necessary corrections and explanations made, the said field notes, and surveys they describe, are hereby approved.

Edward H. Anderson
United States Surveyor Gen

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

United States Surveyor Gen

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4—679.

BOOK A-298

FILED
MAR 26 1903

FIELD NOTES

OF THE SURVEY OF THE

R-E-T-R-A-C-E-M-E-N-T

of the

PINE VALLEY GUIDE MERIDIAN

between

Ranges No.15 and 16 West,

in

Township No.40 South

Of the the Salt Lake Base and *Meridian,*

in the state of Utah,

AS SURVEYED BY

Harvey D.Heist, *United States Deputy Surveyor,*

Under his Contract No. 251, *dated* February 12,1902. *189*

Retracement ~~*Survey*~~ *commenced* January 5,1903. *189*

Retracement ~~*Survey*~~ *completed* January 6,1903. *189*

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BOOK A-298

NAMES AND DUTIES OF ASSISTANTS.

William Walquist	Chainman
Frank Bringhurst	"
Earl V. Woolley	"
Edwin Higbee	"
Frank Duffin	Moundman
John Kitchen	Axman
Herbert Riggs	Flagman

BOOK A-298

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Meanders Page.....

PRELIMINARY OATHS OF ASSISTANTS.

We, William Walquist, Frank Bringhurst, Earl V. Woolley and Edwin High do solemnly swear that we will well and faithfully execute the duties of chainmen; that we will level the chain over even and uneven ground, and plumb the tally pins, either by sticking or dropping the same; that we will report the true distances to all notable objects, and the true lengths 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~~ retracement of the Pine Valley Guide Meridian, in T. 40 S., bet. Rs. 15 and 16 W. of the Salt Lake Base and Meridian, Utah.

William Walquist, Chainman
Frank Bringhurst, Chainman
Earl V. Woolley, Chainman
Edwin Higbee, Chainman

Subscribed and sworn to before me this 5th. day of January, 1903.

SEAL

Harry M. Reist
U.S. Deputy Surveyor.

~~We~~, I, Frank Duffin ~~and~~ do solemnly swear that ~~we~~ I will well and truly perform the duties of moundman in the establishment of corners, according to the instructions given ~~us~~ me, to the best of ~~our~~ my skill and ability, in the ~~survey~~ retracement of the Pine Valley Guide Meridian, in T. 40 S., bet. Rs. 15 and 16 W. of the Salt Lake Base and Meridian, Utah.

Frank Duffin, Moundman
, Moundman

Subscribed and sworn to before me this 5th. day of January, 1903.

SEAL

Harry M. Reist
U.S. Deputy Surveyor

~~We~~, I, John Kitchen ~~and~~ do solemnly swear that ~~we~~ I will well and truly perform the duties of axman in the establishment of corners and other duties, according to instructions given ~~us~~ me, to the best of ~~our~~ my skill and ability, in the ~~survey~~ retracement of the Pine Valley Guide Meridian, in T. 40 S., bet. Rs. 15 and 16 W. of the Salt Lake Base and Meridian, Utah.

John Kitchen, Axman
, Axman

Subscribed and sworn to before me this 5th. day of January, 1903.

SEAL

Harry M. Reist
U.S. Deputy Surveyor

I, Herbert Riggs, 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 retracement of the Pine Valley Guide Meridian, in T. 40 S., bet. Rs. 15 and of the Salt Lake Base and Meridian, Utah.

Herbert Riggs, Flagman

Subscribed and sworn to before me this 5th. day of January, 1903.

SEAL

Harry M. Reist
U.S. Deputy Surveyor

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RETRACEMENT OF THE

PINE VALLEY GUIDE MERIDIAN, in T.40 S., bet. Rs.15 and 16 W.

Survey commenced, January 5 1903, and executed with a W. and L.E. Gurley light mountain transit, No.-, with solar attachment. 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 verniers of the latitude and declination arcs.

The instrument was examined, tested on the true meridian at Salt Lake City, Utah, found correct, and was approved by the surveyor general for Utah, May 26, 1902.

I examine the adjustments of the transit and correct the level and collimation errors; then, to test the solar apparatus, by comparing its indications resulting from solar observations made during a.m. and p.m. hours, with a meridian determined by observations on Polaris, I proceed as follows:

At the Standard Cor. of Tp.40 S., Rs.15 and 16 W., heretofore described,

in approximate Latitude 37° 17' 18" N., Longitude 113° 31' W

At 4 p.m., I set off 37° 17' N. on lat. arc; 22° 36' S. on decl. arc, and mark the line determined by the solar on a stone firmly set in the ground, 5 chs. N. of my station.

January 5, 1903.

January 6: At 0h. 22m., a.m., l.m.t., I observe Polaris at western 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.

At 7 a.m., I lay off the azimuth of Polaris, 1° 31' to the east, and mark the meridian thus determined, by cutting a small groove in the stone set last evening,

RETRACEMENT OF THE

PINE VALLEY GUIDE MERIDIAN, in T.40 S., bet. Rs.15 and 16 W., continued

CHAINS	
	on which the meridian falls 0.4 ins. east of the mark determined by the solar.
	At 8 a.m., l.m.t., I set off 37° 17' N. on lat. arc; 22° 31' S. on decl. arc, and mark a point in the meridian thus determined with the solar, by a cross on the stone already set 5 chs. N. of my station; this mark falls 0.4 ins. east of the meridian established by the Polaris observation.
	The solar apparatus, by p.m. and a.m. observations, defines positions for meridians, respectively about 0' 21" west and east of the meridian established by the Polaris observation; therefore I conclude that the adjustments of the instrument are satisfactory.
	The magnetic bearing of the true meridian at 8h.30m. a.m., is N.16° 05' W., the angle thus determined gives the mean mag. decl. 16° 05' east.
	Preliminary to surveying the North Bdy. of this township, I retrace the west Bdy or Pine Valley Guide Meridian, as follows:
	From the Standard Cor. I run
	North, on retracement line,
	Bet. secs. 31 and 36.
	Ascend over steep, rocky west slope, through scattering cedar and pinon timber.
24.50	Top of spur, 150 ft. above Tp. cor., projects W.
	Descend.
39.00	Bottom of ravine, 100 ft. deep, course W.
	Ascend over broken lava ledges.
	Difference bet. measurement of 40.00 chs., by two sets of chainmen, is 10 lks., position of middle point
	By 1st. set, 40.05 chs.
	By 2nd. set, 39.95 chs., the mean of which is 40
40.00	The old ¼ sec. cor., which is a trachyte stone 15x10x4 ins. above ground, marked and witnessed as described by the surveyor, bears S.59° 41' E., 33 lks. dist.

RETRACEMENT OF THE

PINE VALLEY GUIDE MERIDIAN, in T.40 S., bet. Rs.15 and 16 W., continued.

CHAINS.

43.75 Top of spur, 300 ft. above Tp. cor, projects S.W.

Leave broken lava ledges.

Descend over rolling land through dense artemisia and scattering oak brush.

Difference bet. measurement of 80.00 chs., by two sets of chainmen. is 8 lks., position of middle point,

By 1st. set, 80.04 chs.

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

80.00 The cor. of secs. 25-30-31 and 36, which is a trachyte stone 14x8x4 ins. above the ground, marked and witnessed as described by the surveyor general, bears S.59° 41' E., 75 lks. dist.

The course of this line, is therefore N.0° 28' E., and the dist. 79.62 chs.

Land rolling and mountainous.

Soil, rocky and stony 3rd. rate.

Timber, scattering cedar and pinon.

Mountainous land or dense undergrowth on 79.62 chs.

From the cor. of secs. 25-30-31 and 36, I run

North, on retracement line,

Bet. secs. 25 and 30.

Over rocky land, descend through dense artemisia, scattering oak, cedar and and pinon timber.

4.35 Hollow, 50 ft. deep, course N.W.

Ascend.

7.00 Top of spur, projects N.W.

Descend.

20.75 Bottom of ravine, 200 ft. deep, course S.W.

Begin abrupt ascent.

34.00 Top of spur, projects S.W.

Descend.

Difference bet. measurement of 40.00 chs., by two sets of chainmen is 10 lks., position of middle point

RETRACEMENT OF THE

PINE VALLEY GUIDE MERIDIAN, in T.40 S., bet. Rs.15 and 16 W., continued.

CHAINS

By 1st. set, 39.95 chs.,

By 2nd. set, 40.05 chs., the mean of which is

40.00 The ¼ sec. cor., bet secs 25 and 30, which is a trachyte stone, 8x6x4 ins. above the ground, marked and witnessed as described by the surveyor general, bears S.19° 47' E., 14 lks. dist.

40.50 Hollow, 50 ft. deep, course S.W.

Ascend.

63.00 Top of spur, projects .W.

Descend.

65.00 Hollow, 75 ft. deep, course W.

Ascend.

73.00 Road, bears N.E. and S.W.

Difference bet. measurement of 80.00 chs., by two sets of chainmen, is 6 lks., position of middle point

By 1st. set 80.03 chs.,

By 2nd set. 79.97 chs., the mean of which is

80.00 The cor. of secs. 19-24-25 and 30, which is a trachyte stone 8x8x6 ins. above the ground, marked and witnessed as described by the surveyor general, bears S.19° 47' E., 28 lks. dist.

The course of this line is therefore N.0° 04' E., and the dist. 79.74 chs.

Land rolling.

Soil, stony 3rd. rate.

Timber, scattering cedar and pinon.

Dense undergrowth on 79.74 chs.

From the cor. of secs. 19-24-25 and 30, I run

North, on retracement line,

Bet. secs. 19 and 24.

Ascend through dense artemisia and scattering cedar and pinon timber.

.50 Road, bears N.E. and S.W.

RETRACEMENT OF THE

PINE VALLEY GUIDE MERIDIAN, in T.40 S., bet. Rs.15 and 16 W., continued.

CHAINS	
5.00	Top of ridge, bears N.E. and S.W.
	Descend.
14.00	Bottom of ravine, 150 ft. deep, course S.W.
	Ascend.
19.75	Top of spur, projects S.W.
	Descend.
26.00	Bottom of ravine, 150 ft. deep, course S.W.
	Ascend.
	Difference bet. measurement of 40.00 chs., by two sets of chainmen, is 12 lks., position of middle point
	By 1st. set, 39.94 chs.
	By 2nd. set, 40.06 chs., the mean of which is
40.00	The $\frac{1}{4}$ sec. cor., bet. secs. 19 and 24, which is a trachyte stone 10x8x6 ins. above the ground, marked and witnessed as described by the surveyor general, bears N.54° 55'W., 23 lks. dist.
48'00	Top of ridge, bears N.E. and S.W.
	Descend.
70.00	Bottom of ravine, 100 ft. deep, course S.W.
	Ascend.
76.00	Top of spur, projects S.W.
	Descend.
	Difference bet. measurement of 80.00 chs., by two sets of chainmen, is 12 lks., position of middle point,
	By 1st. set, 80.06 chs.,
	By 2nd. set, 79.94 chs., the mean of which is
80.00	The cor. of secs. 13-18-19 and 24, which is a trachyte stone 12x10x6 ins. above the ground, marked and witnessed as described by the surveyor general, bears N.54° 55'W., 45 lks. dist.
	The course of this line, is therefore, N.0° 16'W., and the dist. 80.26 chs.
	Land rolling.
	Soil, stony 3rd. rate.

RETRACEMENT OF THE

PINE VALLEY GUIDE MERIDIAN, in T.40 S., bet. Rs.15 and 16 W., continued.

CHAINS	
	Timber, scattering cedar and pinon.
	Dense undergrowth on 80.26 chs.
	January 6: At this cor. I set off 22° 33' S. on decl. arc, and at 0h. 6m., p.m., l.m.t., observe the sun on the meridian, the resulting lat. is 37° 20' N.

	From the cor. of secs. 13-18-19 and 24, I run North, on a retracement line, Bet. secs. 13 and 18.
	Over rocky land, descend through dense artemisia, scattering oak and cedar and pinon timber.
18.50	Bottom of ravine, 100 ft. deep, course S.W.
	Ascend.
22.50	Top of spur, projects S.W.
	Descend.
	Difference bet. measurement of 40.00 chs., by two sets of chainmen, is 8 lks., position of middle point
	By 1st. set, 40.04 chs.,
	By 2nd. set, 39.96 chs., the mean of which is
40.00	The ¼ sec. cor., bet. secs. 13 and 18, which is a trachyte stone 8x8x6 ins. above the ground, marked and witnessed as described by the surveyor general, bears N.22° 53' E., 25 lks. dist.
42.50	Bottom of ravine, 100 ft. deep, course S.W.
	Ascend.
62.50	Top of ridge, bears N.E. and S.W.
	Descend.
	Difference bet. measurement of 80.00 chs., by two sets of chainmen is 8 lks., position of middle point
	By 1st. set, 80.04 chs.,
	By 2nd. set, 79.96 chs., the mean of which is
80.00	The cor. of secs. 7-12-13 and 18, which is a trachyte stone 15x10x8 ins. above ground, marked and witnessed as described by the surveyor general, bears N.22° 53' E., 49 lks. dist.

RETRACEMENT OF THE

PINE VALLEY GUIDE MERIDIAN, in T.40 S., bet.Rs.15 and 16 W., continued.

CHAINS	
	The course of this line is therefore N.0° 08'E., and the dist.80.45 chs.
	Land rolling.
	Soil, rocky 3rd.rate.
	Timber, scattering cedar and pinon.
	Dense undergrowth on 80.45 chs.
	From the cor.of secs.7-12-13 and 18, I run North, on a retracement line, Bet.secs.7 and 12.
	Over rocky land, descend through dense artemisia, oak, scattering cedar and pinon timber.
7.25	Bottom of ravine, 150 ft.deep, course S.W.
	Ascend.
32.50	Top of spur, projects N.E.
	Descend.
	Difference bet.measurement of 40.00 chs., by two sets of chainmen is 10 lks., position of middle point,
	By 1st.set, 40.05 chs.,
	By 2nd.set, 39.95 chs., the mean of which is
40.00	The ¼ sec.cor., bet.secs.7 and 12, which is a trachyte stone 14x10x6 ins., above the ground, marked as described by the surveyor, general, N.20°34'W., 43 lks.dist.
	The course of this line is therefore N.0° 13'W., and the dist.40.40 chs.
	I continue my line.
64.00	Bottom of ravine, 100 ft.deep, course S.W.
	Ascend.
70.00	Top of spur, projects E.
	Descend.
74.80	Same ravine, 100 ft.deep, course S.E.
	Ascend.
	Difference bet.measurement of 80.00 chs., by two sets of chainmen is 12 lks., position of middle point
	By 1st.set, 80.06 chs.,

RETRACEMENT OF THE

PINE VALLEY GUIDE MERIDIAN, in T.40 S., bet. Rs.15 and 16 W., continued.

CHAINS	
	By 2nd. set, 79.94 chs., the mean of which is
80.00	The cor. of secs.1-6-7 and 12, which is a trachyte stone 10x6x6 ins. above the ground, marked and witnessed as described by the surveyor general, bears N.3° 15'W., 4.78 chs. dist.
	The course of this line is therefore N.0° 11'W., and the dist. 84.77 chs'
	Land rolling.
	Soil, stony 3rd. rate.
	Timber, scattering cedar and pinon.
	Dense undergrowth on 84.77 chs.

	From the cor. of secs.1-6-7 and 12, I run North, on a retracement line, Bet. secs.1 and 6.
	Over rocky land, through dense artemisia and oak, scattering cedar and pinon timber.
5.75	Top of spur, projects E.
	Descend.
8.00	Bottom of ravine, 100 ft. deep, course S.E.
	Ascend.
31.00	Top of ridge, bears E. and W.
	Descend.
	Difference bet. measurement of 40.00 chs., by two sets of chainmen, is 8 lks., position of middle point
	By 1st. set, 40.04 chs.
	By 2nd. set, 39.96 chs., the mean of which is
40.00	The ¼ sec. cor., bet. secs.1 and 6, which is a trachyte stone 12x8x6 ins. above the ground, marked as described by the surveyor general, bears S.62° 04'E., 75 lks. dist.
	The course of this line is therefore N.0° 57'E., and the dist. 39.65 chs.
	I offset over the ¼ sec. cor., and run

RETRACEMENT OF THE

PINE VALLEY GUIDE MERIDIAN, in T.40 S., bet. Rs.15 and 16 W. concluded.

CHAINS	
	North, on retracement line, bet. secs.1 and 6.
2.00	Hollow, 5o ft. deep, course W.
	Ascend.
38.00	Enter heavy cedar and pinon timber, bears N.W. and S.E.
	Difference bet. measurement of 40.00 chs., by two sets of chainmen, is 10 lks., position of middle point,
	By 1st. set, 39.95 chs.,
	By 2nd. set, 40.05 chs., the mean of which is
40.00	The cor. of Tps.39 and 40 S., Rs.15 and 16 W., which is a trachyte stone 10x8x6 ins. above the ground, marked and witnessed as described by the surveyor general, bears S.63° 26'E., 56 lks. dist.
	The course of this line is therefore N.0° 43'E., and the dist. 39.75 chs.
	Land rolling.
	Soil, stony 3rd. rate.
	Heavy cedar and pinon timber on 2.00 chs.
	Dense undergrowth on 79.40 chs.

January 6.1903.

For general description see, Subdivisions of T.40 S., R.15 W.

For table of latitude and departures see, North Bdy. of T.40 S., R.15 W.

Harvey D. Hirst

U.S. DEPUTY SURVEYOR.

There being no notary public or other officer authorized to administer oaths within a reasonable distance at the beginning or ending of this survey, in order to save time and expense, I administer the preliminary and final oaths myself.

Harvey D. Hirst

U.S. DEPUTY SURVEYOR.

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FINAL OATHS OF DEPUTY SURVEYOR AND HIS ASSISTANTS.

LIST OF NAMES.

A list of the names of the individuals employed by Harvey D.Heist, 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~~ retracement of the Pine Valley Guide Meridian, in T.40 S., bet.Rs.15 and 16 W. of the Salt Lake Base and Meridian, Utah.
showing the respective capacities in which they acted:

William Walquist, Frank Bringhurst, *Chainman.*

Earl V.Woolley, Edwin Higbee, *Chainman.*

Frank Duffin, *Moundman.*

Moundman.

John Kitchen, *Axman.*

Axman.

Herbert Riggs, *Flagman.*

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted Harvey D.Heist, United States Deputy Surveyor, in ~~surveying~~ retracing all those parts or portions of the Pine Valley Guide Meridian, in T.40 S., bet.Rs.15 and 16 W. of the Salt Lake Base and meridian, in the state of Utah, which are represented in the foregoing field notes as having been ~~surveyed~~ retraced by him and under his direction; and that said ~~survey~~ retracement has been in all respects, to the best of our knowledge and belief, well and faithfully surveyed, and the corner monuments established, according to the instructions furnished by the United States Surveyor General for Utah.

William Walquist, Frank Bringhurst, *Chainman.*

Earl V. Woolley, Edwin Higbee, *Chainman.*

Frank H. Duffin, *Moundman.*

Moundman.

John Kitchen, *Axman.*

Axman.

Herbert Riggs, *Flagman.*

Subscribed and sworn to before me this 6th day of January, 1903.

SEAL

Harvey D. Heist
U.S. Deputy Surveyor.

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FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I, Harvey D. Heist, United States Deputy Surveyor, solemnly swear that, in pursuance of a contract received from Edward H. Anderson United States Surveyor General for Utah, bearing date of 12th. day of February, 1902, I have well, faithfully, and truly, in my c proper person, and in strict conformity with the instructions furnished by the United States Survey General for Utah, the Manual of Surveying Instructions, and the laws of t United States, ~~surveyed~~ retraced all those parts or portions of

the Pine Valley Guide Meridian, in T.40 S., bet. Rs.15 and 16 W.

of the Salt Lake Base and meridian, in the state of Utah, which are represented in t foregoing field notes as having been ~~surveyed~~ retraced by me, and under my direction; and I do further solem swear that all the corners of said ~~survey~~ retracement have been established and perpetuated in strict accordance w the Manual of Surveying Instructions, and the special written instructions of the United States Surve General for Utah and in the specific manner described in the field notes, and t the foregoing are the original field notes of such ~~survey~~ retracement; and should any fraud be detected, I will s the penalty of perjury under the provisions of an Act of Congress approved August 8, 1846.

Harvey D. Heist
United States Deputy Surve

Subscribed by said Harvey D. Heist, and sworn to before me this 26th day of March 1903.

Edward H. Anderson
Surveyor General for Ut

SEAL

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah, February 26 1904, 189

The foregoing field notes of the ~~survey~~ retracement of the Pine Valley Guide Meridian in Township 40 South between Ranges 15 & 16 West of the Salt Lake Base & Meridian Utah

executed by Harvey D. Heist under his contract No. 251, dated February 12 1902, 189, having b critically examined, and the necessary corrections and explanations made, the said field notes, and ~~surveys~~ retracements they describe, are hereby approved.

Edward H. Anderson
United States Surveyor G

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

United States Surveyor Gene

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BOOK A-298

FILED
MAR 26 1903

FIELD NOTES

OF THE SURVEY OF THE

N-O-R-T-H B-O-U-N-D-A-R-Y

of

Township No.40 South, Range No.15 West.

Of the Salt Lake Base and *Meridian,*

in the state of Utah.

AS SURVEYED BY

Harvey D.Heist, *United States Deputy Surveyor,*

Under his Contract No. 251, *dated* February 10, 1902., *189*

Survey commenced January 7, 1903., *189*

Survey completed January 7, 1903., *189*

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BOOK A-298

NAMES AND DUTIES OF ASSISTANTS.

William Walquist	Chainman
Earl V. Woolley	"
Frank Duffin	Moundman
John Kitchen	Axman
Herbert Riggs	Flagman

Preliminary affidavit see book T. pp 405 & 1391

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PRELIMINARY OATHS OF ASSISTANTS.

WE, ... and .....
do solemnly swear that we will well and faithfully execute the duties of chainmen; that we will level
chain over even and uneven ground, and plumb the tally pins, either by sticking or dropping the same; t
we will report the true distances to all notable objects, and the true lengths of all lines that we assist
measuring, to the best of our skill and ability, and in accordance with instructions given us, in the survey
.....

..... , *Chainm*

..... , *Chain*

Subscribed and sworn to before me this .....
day of ....., 189

SEAL

WE, ... and .....
do solemnly swear that we will well and truly perform the duties of moundmen in the establis
of corners, according to the instructions given us, to the best of our skill and ability, in the survey
.....

..... , *Moundm*

..... , *Moundm*

Subscribed and sworn to before me this .....
day of ....., 189

SEAL

WE, ... and .....
do solemnly swear that we will well and truly perform the duties of axmen in the establishment of corn
and other duties, according to instructions given us, to the best of our skill and ability, in the survey
.....

..... , *Axm*

..... , *Axm*

Subscribed and sworn to before me this .....
day of ....., 189

SEAL

I, ..., do solemnly swear that I will well and tru
perform the duties of flagman according to instructions given me, to the best of my skill and ability, in t
survey of .....

..... , *Flagm*

Subscribed and sworn to before me this .....
day of ....., 189

SEAL

NORTH BOUNDARY OF T.40 S.,R.15 W.

CHAINS	
	SUrvey commenced,January 7,1903,and executed with the instrument described in book E of this survey.
	I know the instrument to be in adjustment,from recent observations made January 5 and 6,1903,and recorded in book E of this survey.
	The north east cor.of this township was not set,and knowing I cannot survey the entire N.Bdy.of this Tp. on account of the abrupt slopes of the Pine Valley Mountains,I proceed as follows:
	At 8 a.m.,l.m.t.,I set off 37° 22'30" N.on lat.arc; 22° 24'S.on decl.arc,and determine with the solar a true meridian,at the cor.of Tps.39 and 40 S.,Rs.15 and 16 W.,heretofore described.
	Thence I run,on a true line
	East,bet.secs.6 and 31.
	Over rocky land,ascend through heavy cedar and pinon timber.
12.00	Leave heavy timber,bears N.and S.
	Enter dense artemisia,oak,scattering cedar and pinon timber.
20.00	Top of spur,projects S.W.
	Descend.
25.00	Hollow,75 ft.deep,course S.W.
	Ascend.
32.00	Leave timber.
	Allowing for convergency
57.31	Set a trachyte stone 15x8x6 ins.,10 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.
	Pits impracticable.
60.00	Top of ridge,bears N.E.and S.W.
	Descend.
93.00	Begin abrupt descent,bears N.and S.
96.00	Bottom of ravine,100 ft.deep,course N.
	Ascend.

NORTH BOUNDARY OF T.40 S.,R.15 W.,continued.

CHAINS	
	Enter scattering cedar and pinon timber.
97.31	Set a trachyte stone 16x12x6 ins.,11 ins.in the ground,for cor.of secs.5-6-31 and 32,marked with 1 notch on W.and 5 notches on E.edges,from which
	A pinon 3 ins.diam.,bears S.89°W.,2.20 chs.dist., marked T.40 S. R.15 W. S.6 B.T.
	A pinon 5 ins.diam.,bears N.85°W.,2.00 chs.dist., marked T.39S. R.15 W. S.31 B.T.
	No other trees within limits,and raise a mound of stone 2 ft.base,1½ ft.high,W.of cor.
	Pits impracticable.
	Land rolling.
	Soil,stony 3rd.rate.
	Heavy cedar and pinon timber on 12.00 chs.
	Dense undergrowth on 97.31 chs.
	East,bet.secs.5 and 32.
	Over rocky land ascend through dense artemisia,oak, laurel,scattering cedar and pinon timber.
13.00	Top of spur,projects N.
	Descend.
18.00	Bottom of ravine,150 ft.deep,course from N.E.to N.W.
	Ascend.
24.75	Top of spur,projects N.
	Descend.
30.00	Hollow,75 ft.deep,course N.E.
	Ascend.
34.00	Top of ridge,bears N.E.and S.W.
	Leave timber.
	Descend.
40.00	Set a trachyte stone 16x12x8 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.
	Pits impracticable.
52.00	Enter scattering cedar and pinon timber.

NORTH BOUNDARY OF T.40 S.,R.15 W.,concluded.

CHAINS	
71.00	Bottom of canon,300 ft.deep,course S.W.
	Begin abrupt ascent over rocky land.
80.00	Set a trachyte stone 18x12x10 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 pinon 6 ins.diam.,bears N.47°E.,1.12 chs.dist., marked T.39 S. R.15 W. S.33 B.T.
	No other trees within limits,and raise a mound of stone 2 ft.base,1½ ft.high,W.of cor.
	Pits impracticable.
	Land rolling and broken.
	Soil,rocky 3rd.and 4th.rate.
	Timber,scattering cedar and pinon.
	Dense undergrowth on 80.00 chs.

NOTE

On account of broken,rocky and mountainous land, I abandon the line here.

January 7,1903.

For general Description,see Subdivisions of T.40 S.,R.15 W.

There being no notary public or other officer authorized to administer oaths,within a reasonable distance at the beginning or ending of this survey,in order to save time and expense I administer the preliminary and final oaths,myself.

Harry H. Kleist

U.S.DEPUTY SURVEYOR

BOUNDARIES OF T.40 S.,R.15 W.

Latitudes,departures and closing errors.

Line Designated	True Bearing	Distance	Latitudes N.	Latitudes S.	Departures E.	Departures W.
8th.Stan.Par.S. in T.40 S.R.15W.						
S.Bdy. secs. 36,35,34,&.33	West	258.35	-	-	-	258.35
S.Bdy.33 &.32	S.89°13'W.	79.70	-	1.10	-	79.70
" 32 &.31	West	79.15	-	-	-	79.15
" 31	S.89°54'W.	82.10	-	.14	-	82.10
Pine Valley Guide Meridian T.40 S.,R.16 W.						
E.Bdy.sec.36	N.0° 28'E.	79.62	79.62	-	.65	-
" " 25	N.0° 04'E.	79.74	79.74	-	.09	-
" " 24	N.0° 16'W.	80.26	80.26	-	-	.37
" " 13	N.0° 08'E.	80.45	80.45	-	.19	-
" " 12	N.0° 11'W.	84.77	84.77	-	-	.27
" " 1	N.0° 57'E.	39.65	39.65	-	.66	-
" " 1	N.0° 43'E.	39.75	39.75	-	.50	-
N.Bdy.T.40S.R. 15 W.	East	177.31	-	-	177.31	-
Bet.secs. 4 &.5	S.0° 05'E.	82.98	-	82.98	.12	-
" " 4 &.9	S.89°56'E.	80.08	-	.09	80.08	-
" " 9 &.10	S.0° 02'E.	80.00	-	80.00	.05	-
" " 10 &.15	N.89°59'E.	80.06	.02	-	80.06	-
" " 14 &.15	S.0° 01'E.	80.00	-	80.00	.02	-
" " 14 &.23	S.89°59'E.	80.04	-	.02	80.04	-
" " 13 &.24	East	80.10	-	-	80.10	-
East Bdy. T.40 S.R.15 W.	South	239.96	-	239.96	-	-
Convergency					.54	
			484.26	484.29	500.41	499.94
				484.26	499.94	
Error in lat.and dep.				.03	.47	

Harry W. Hirst

U.S.DEPUTY SURVEYOR

FINAL OATHS OF DEPUTY SURVEYOR AND HIS ASSISTANTS.

LIST OF NAMES.

A list of the names of the individuals employed by Harvey D.Heist, 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 N.Bdys. of T.40 S.,Rs.13 and 15 W.,and the W.Bdys.of T.40 S.,Rs.13 and 14 W. of the Salt Lake Base and Meridian,Utah, showing the respective capacities in which they acted:

William Walquist, *Chainman.*

Earl V.Woolley, *Chainman.*

Frank Duffin, *Moundman.*

, *Moundman.*

John Kitchen, *Axman.*

, *Axman.*

Herbert Riggs, *Flagman.*

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted Harvey D.Heist, United States Deputy Surveyor, in surveying all those parts or portions of the the N.Bdys.of T.40 S.,Rs.13 and 15 W., and the W.Bdys.of T.40 S.,Rs.13 and 14 W. of the Salt Lake Base and meridian, in the state of Utah, which are represented in the foregoing field notes as having been surveyed by him and under his direction; and that said survey has been in all respects, to the best of our knowledge and belief, well and faithfully surveyed, and the corner monuments established, according to the instructions furnished by the United States Surveyor General for Utah.

William Walquist, *Chainman.*

Earl V. Woolley, *Chainman.*

Frank Duffin, *Moundman.*

, *Moundman.*

John Kitchen, *Axman.*

, *Axman.*

Herbert Riggs, *Flagman.*

Subscribed and sworn to before me this 7th. day of January, 1903, 189

SEAL

Harvey D. Heist
U.S.Deputy Surveyor.

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FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I, Harvey D. Heist, United States Deputy Surveyor, solemnly swear that, in pursuance of a contract received from Edward I. Anderson United States Surveyor General for Utah, bearing date of 12th. day of February, 1902. 189 , I have well, faithfully, and truly, in my c proper person, and in strict conformity with the instructions furnished by the United States Surve General for Utah., the Manual of Surveying Instructions, and the laws of United States, surveyed all those parts or portions of the N.Bdys. of T.40 S., Rs.13 and W., and the W.Bdys. of T.40 S., Rs.13 and 14 W.

of the Salt Lake Bas and meridian, in the state of Utah, which are represented in foregoing field notes as having been surveyed by me, and under my direction; and I do further solem swear that all the corners of said survey have been established and perpetuated in strict accordance the Manual of Surveying Instructions, and the special written instructions of the United States Surve General for Utah, and in the specific manner described in the field notes, and t the foregoing are the original field notes of such survey; and should any fraud be detected, I will su the penalty of perjury under the provisions of an Act of Congress approved August 8, 1846.

Harvey D. Heist
United States Deputy Survey

Subscribed by said Harvey D. Heist, and sworn to before me this 26th day of March 1903, 189

Edward I. Anderson
Surveyor-General for Ut

SEAL

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah, February 26, 1904 189

The foregoing field notes of the survey of the North Boundary Township 40 South Range 15 West of the Salt Lake Base & Meridian, Utah

executed by Harvey D. Heist under his contract No. 251, dated February 12, 1902 189 , having be critically examined, and the necessary corrections and explanations made, the said field notes, and t surveys they describe, are hereby approved.

Edward I. Anderson
United States Surveyor Gene

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

United States Surveyor Gene

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BOOK A-298

FIELD NOTES

OF THE SURVEY OF THE

S-U-B-D-I-V-I-S-I-O-N L-I-N-E-S

of

Township No.40 S.,Range No.15 West.

Of the Salt Lake Base and *Meridian,*

in the state of Utah.

AS SURVEYED BY

Harvey D.Heist, *United States Deputy Surveyor,*

der his Contract No. 251, *dated* February 12,1902., *189*

rvey commenced January 7,1903., *189*

rvey completed January 19,1903., *189*

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Lights 49-58-34
Lines 44-10
Omitted 39.55

BOOK A-298

NAMES AND DUTIES OF ASSISTANTS.

William Walquist	Chainman
George Wilson	"
Earl V. Woolley	Moundman
John Kitchen	"
James Potter	Axman
Oley Sorenson	Flagman

For preliminary official see book W. Sp. 40 S. R. 13 W.

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BOOK A-298

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PRELIMINARY OATHS OF ASSISTANTS.

WE, ... and .....
do solemnly swear that we will well and faithfully execute the duties of chainmen; that we will level chain over even and uneven ground, and plumb the tally pins, either by sticking or dropping the same; we will report the true distances to all notable objects, and the true lengths of all lines that we assist measuring, to the best of our skill and ability, and in accordance with instructions given us, in the survey

.....

....., *Chainm*

....., *Chainm*

Subscribed and sworn to before me this .....
day of ....., 189

.....

SEAL

.....

WE, ... and .....
do solemnly swear that we will well and truly perform the duties of moundmen in the establishm of corners, according to the instructions given us, to the best of our skill and ability, in the survey

.....

....., *Mound*

....., *Mound*

Subscribed and sworn to before me this .....
day of ....., 189

.....

SEAL

.....

WE, ... and
do solemnly swear that we will well and truly perform the duties of axmen in the establishment of co and other duties, according to instructions given us, to the best of our skill and ability, in the survey

.....

....., *Axm*

....., *Axm*

Subscribed and sworn to before me this .....
day of ....., 189

.....

SEAL

.....

I, ..., do solemnly swear that I will well and t perform the duties of flagman according to instructions given me, to the best of my skill and ability, in survey of .....

....., *Flagm*

Subscribed and sworn to before me this .....
day of ....., 189

.....

SEAL

.....

SUBDIVISIONS OF T.40 S.,R.15 W.

CHAINS

Survey commenced January 7,1903,and executed with a W.&.L.E.Gurley light mountain transit,No.-,with solar attachment. 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 verniers of the latitude and declination arcs.

The instrument was examined,tested on the true meridian at Salt Lake City,found correst,and was approved by the surveyor general for Utah,May 26,1902.

I examine the adjustments of the transit and correct level and collimation errors;then to test the solar apparatus,by comparing its indications resulting from solar observations made during a.m.and p.m.hours with a meridian determined by observations on Polaris, I proceed as follows: At 4 p.m.,l.m.t.,

At the Standard Corner of secs.35 and 36,heretofore described,on the Eighth Standard Parallel South,in approximate latitude 37° 17' 18"N.,longitude 113° 26' W.,I set off 37°17'N.on lat.arc;22°22'S.on decl.arc, and mark the line determined by the solar on a stone firmly set in the ground,5 chs.N.of my station.

January 7,1903.

January 8: At 0h. 14m.,a.m.,l.m.t.,I observe Polaris at western 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.

At 7 a.m.,I lay off the azimuth of Polaris,1°31' to the east,and mark the meridian thus determined,by cutting a small groove in the stone set last evening on which the meridian falls 0.3 ins.east of the mark determined by the solar.

At 8 a.m.,l.m.t.,I set off 37°17'N.on lat.arc;22°16'

SUBDIVISIONS OF T.40 S.,R.15 W.,continued.

CHAINS	
	S.on decl.arc,and mark a point in the meridian thus determined with the solar,by a cross on the stone already set 5 chs.N.of my station;this mark falls 0.4 ins.east of the meridian established by the Polaris observation.
	The solar apparatus,by p.m.and a.m.observations, defines positions for meridians,respectively about 0' 16" west and 0' 21" east of the meridian established by the Polaris observation;therefore I conclude that the adjustments of the instrument are satisfactory.
	The magnetic bearing of the true meridian at 8h.30m. a.m.,is N.16° 05'W.,the angle thus determined gives the mean mag.decl.16° 05'east.
	From the standard cor.,I run
	N.0° 01'W.,bet.secs.35 and 36.
	Over rocky land,ascend abruptly through scattering cedar and pinon timber.
14.00	Top of ridge,200 ft.above stan.cor.,bears N.W.and S.E.
	Descend.
29.00	Head of ravine,course S.E.
	Begin abrupt ascent.
40.00	Set a sandstone 15x8x8 ins.,10 ins.in the ground, for ¼ sec.cor.,marked ¼ on W.face,from which
	A pinon 5 ins.diam.,bears N.18°E.,13 lks.dist., marked ¼ S.36 B.T.
	A pinon 6 ins.diam.,bears N.43°W.,12 lks.dist., marked ¼ S.35 B.T.
50.50	Top of ridge,700 ft.above stan.cor.,bears N.E.and S.W.
	Descend.
62.50	Bottom of ravine,150 ft.deep,course W.
	Ascend.
71.00	Top of spur,projects W.
	Descend.
80.00	Set a sandstone 20x14x4 ins.,15 ins.in the ground,

SUBDIVISIONS OF T.40 S.,R.15 W.,continued

CHAINS	
	for cor.of secs.25-26-35 and 36,marked with 1 notch on S.and E.edges,from which
	A pinon 12 ins.diam.,bears N.71° E.,6 lks.dist., marked T.40 S R 15 W S 25 B T.
	A pinon 5 ins.diam.,bears S.17°E.,44 lks.dist., marked T 40 S R 15 W S 36 B T.
	A cedar 15 ins.diam.,bears S.62°W.,21 lks.dist., marked T 40 S R 15 W S 35 B T.
	A pinon 5 ins.diam.,bears N.33°W.,28 lks.dist., T 40 S R 15 W S 26 B T.
	Land mountainous.
	Soil,rocky 4th.rate.
	Timber,scattering cedar and pinon.
	Mountainous land on 80.00 chs.
	East on a random line,bet.secs.25 and 36.
40.00	Set temp.$\frac{1}{4}$ sec.cor.
80.04	Intersect East bdy.of Tp.,9.90 chs.S.of the cor.of secs.25-30-31 and 36,heretofore described.
	I destroy all marks on this cor.that pertain to T.40 S.,R.15 W.
	Set a sandstone 15x12x10 ins.,10 ins.in the ground, for closing cor.to secs.25 and 36,marked C C on W., with 1 groove on S.and 5 grooves on N.faces, from which
	A pinon 8 ins.diam.,bears S.62°W.,85 lks.dist., marked T 40 S R 15 W S 36 B T.
	A cedar 9 ins.diam.,bears N.27°W.,29 lks.dist., marked T 40 S R 15 W S 25 B T.
	Thence I run
	West on a true line,
	Bet.secs.25 and 36.
	Over rocky land,ascend through scattering cedar and pinon timber.
28.00	Top of ridge,bears N.W.and S.E.

SUBDIVISIONS OF T.40 S.,R.15 W.,continued.

CHAINS	
	Begin abrupt descent.
38.00	Spring branch,1 lk.wide,in bottom of canon 500 ft. deep;course S.E.
	Begin abrupt ascent.
40.02	Set a sandstone 18x12x8 ins.,12 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.
	Pits impracticable.
66.00	Top of ridge,bears N.and S.
	Begin abrupt descent.
80.04	The cor.of secs.25-26-35 and 36.
	Land mountainous.
	Soil,rocky 4th.rate.
	Timber,scattering cedar and pinon.
	Mountainous land on 80.04 chs.
	January 8:At this cor.I set off 22° 18'S.on decl. arc,and at 0h.6m.,p.m.,l.m.t.,observe the sun on the meridian,the resulting lat.is 37° 18'N.
	N.0° 01'W.,bet.secs.25 and 26.
	Over rocky land,descend through scattering cedar and pinon timber.
31.00	Bottom of ravine,300 ft.deep,course S.W.
	Ascend.
40.00	Set a sandstone 15x10x10 ins.,10 ins.in the ground, for ¼ sec.cor.,marked ¼ on W.face,and raise a mound of stone 2 ft.base,1½ ft.high,W.of cor.
	Pits impracticable.
53.00	Top of ridge,400 ft.above bottom of ravine,bears N.E.and S.W.
	Begin abrupt descent.
80.00	Set a trachyte stone 12x12x8 ins.,8 ins.in the ground,for cor.of secs.23-24-25 and 26,marked with 2 notches on S.and 1 notch on E.edges,from which A pinon 4 ins.diam.,bears N.38°E.,1.60 chs.dist.,

SUBDIVISIONS OF T.40 S.,R.15 W.,continued.

CHAINS	
	marked T 40 S R 15 W S 24 B T.
	A cedar 3 ins.diam.,bears S.24°E.,33 lks.dist.,
	marked T 40 S R 15 W.S 25 B T.
	A cedar,3 ins.diam.,bears S.83°W.,19 lks.dist.,
	marked T. 40 S R 15 W S 26 B T.
	No other trees within limits;and raise a mound of stone,
	2 ft.base,1½ ft.high,W.of cor.
	Pits impracticable.
	Land,mountainous.
	Soil,rocky;fourth rate.
	Timber,scattering cedar and pinon.
	Mountainous land on 80.00 chs.
	January 8,1903.

	January 9:At 8 a.m.,l.m.t.,I set off 37° 19'N.on lat.
	arc,22° 08'S.on decl.arc,and determine a true meridian
	with the solar,at the cor.of secs.23-24-25 and 26.
	Thence I run,East ona random line,bet.secs.24 and 25.
40.00	Set temp.¼sec.cor.
80.08	Intersect East bdy.of Tp.,9.93 chs.S.of the cor.of
	secs.19-24-25 and 30,heretofore described.
	I destroy all marks on this cor.that pertain to
	T.40 S.,R.15 W.
	Set a trachyte stone 15x8x6 ins.,10 ins.in the ground,
	for closing cor.of secs.24 and 25,marked C C on W., with 2 grooves on S.and 4 grooves on N.faces, and raise a mound of stone 2 ft.base,1½ ft.high,
	W.of cor.
	Pits impracticable.
	Thence I run
	West,on a true line,
	Bet.secs.24 and 25.
	Over rocky land,descend abruptly through dense artemisia,oak,laurel,scattering cedar and pinon timber.
7.00	Bottom of canon,500 ft.deep,course S.

SUBDIVISIONS OF T.40 S.,R.15 W.

CHAINS	
	Begin abrupt ascent.
11.00	Top of spur,projects S.E.
	Descend.
17.00	Bottom of ravine,100 ft.deep,course S.E.
	Ascend.
40.04	Set a trachyte stone 24x10x6 ins.,18 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.
	Pits impracticable.
62.70	Top of ridge,bears N.and S.
	Begin abrupt descent.
80.08	The cor.of secs.23-24-25 and 26,400 ft.below top of ridge.
	Land mountainous.
	Soil,rocky 3rd.and 4th.rate.
	Timber,scattering cedar and pinon.
	Mountainous land and dense undergrowth on 80.08 chs.
	N.0° 01'W.,bet.secs.23 and 24.
	Over rocky land,descend through dense artemisia,oak, laurel,scattering cedar and pinon timber.
17.50	Bottom of ravine,300 ft.deep,course S.W.
	Begin abrupt ascent.
40.00	Top of ridge,bears N.E.and S.W.
	Set a sandstone 36x10x6 ins.,27 ins.in the ground, for ¼ sec.cor.,marked ¼ on W.face,from which
	A cedar 8 ins.diam.,bears N.82°E.,17 lks.dist., marked ¼ S.24 B.T.
	A pinon 10 ins.diam.,bears S.12°W.,1.01 chs.dist., marked ¼ S 23 B T.
	Leave timber.
	Descend.
58.00	Bottom of ravine,100 ft.deep,course N.W.
	Ascend.
73.00	Top of spur,projects W.

SUBDIVISIONS OF T.40 S.,R.15 W.,continued.

CHAINS	
	Descend.
80.00	Set a trachyte stone 24x12x5 ins.,18 ins.in the ground,for cor.of secs.13-14-23 and 24,marked with 3 notches on S.and 1 notch on E.edges,and raise a mound of stone 2 ft.base,1½ ft.high,W.of cor.
	Pits impracticable.
	Land mountainous.
	Soil,rocky 3rd.and 4th.rate.
	Timber,scattering cedar and pinon on 40.00 chs.
	Mountainous land and dense undergrowth on 80.00 chs.
	January 9:At this cor.I set off 22° 10'S.on decl. arc,and at 0h.7m.,p.m.,l.m.t.,observe the sun on the meridian,the resulting lat.is 37° 20'N.
	East,on a random line,bet.secs.13 and 24.
40.00	Set temp.¼ sec.cor.
80.10	Intersect E.bdy.of Tp.,9.89 chs.S.of the cor.of secs. 13-18-19 and 24,heretofore described.
	I destroy all marks on this cor.that pertain to T.40 S.,R.15 W.
	Set a trachyte stone 15x12x10 ins.,10 ins.in the ground, for closing cor.of secs.13 and 24,marked C C on W., with 3 grooves on N.and S.faces,and raise a mound of stone 2 ft.base,1½ ft.high,W.of cor.
	Pits impracticable.
	Thence I run
	West,on a true line,
	Bet.secs.13 and 24.
	Over rocky land ,descend abruptly through dense artemisia,oak and laurel brush.
16.00	Bottomof canon,300 ft.deep,course S.
	Begin abrupt ascent.
40.05	Set a trachyte stone,18x8x6 ins.,12 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 c or.

SUBDIVISIONS OF T.40 S.,R.15 W.

CHAINS	
	Pits impracticable.
61.00	Top of ridge,bears N.and S.
	Begin abrupt descent.
80.10	The cor.of secs.13-14-23 and 24,400 ft.below top of ridge.
	Land mountainous.
	Soil,rocky 3rd.and 4th.rate.
	No timber.
	Mountainous land and dense undergrowth on 80.10 chs.
	NOTE: On account of rocky,broken and steep country, I abandon the subdivision of this tier of secs. January 9,1903.
	January 10:At 8 a.m.,l.m.t.,I set off 37° 17'N.on lat.arc,23°00'S.on decl.arc,and determine a true meridian with the solar,at the Standard cor.of secs.34 and 35,heretofore described,on the Eighth Standard Parallel South.
	Thence I run N.0° 01'W.,bet.secs.34 and 35.
	Ascend in bottom of Cottonwood Canon,over rocky land, through dense oak,service berry and laurel brush, scattering cedar and pinon timber.
15.50	Leave canon,bears N.W.and S.E.
	Begin abrupt ascent.
40.00	Set a sandstone 15x10x8 ins.,10 ins.in the ground, for ¼ sec.cor.,marked ¼ on W.face,from which
	A pinon 10 ins.diam.,bears S.16°E.,25 lks.dist., marked ¼ S 35 B T.
	A pinon 8 ins.diam.,bears N.38°W.,24 lks.dist., marked ¼ S 34 B T.
67.00	Top of ridge,bears N.W.and S.E.,700 ft.above Stan.cor. Descend.
71.00	Begin ascent along east slope.
80.00	Set a sandstone 18x12x5 ins.,12 ins.in the ground, for cor.of secs.26-27-34 and 35,marked with 1 notch

CHAINS	
	on S.and 2 notches on E.edges,from which
	A pinon 5 ins.diam.,bears N.22°E.,39 lks.dist.,
	marked T.40 S. R.15 W. S.26 B.T.
	A cedar 5 ins.diam.,bears S.13°E.,14 lks.dist.,
	marked T.40 S. R.15 W. S.35 B.T.
	A pinon 8 ins.diam.,bears S.65°W.,52 lks.dist.,
	marked T.40 S. R.15 W. S.34 B.T.
	A pinon 10 ins.diam.,bears N.28°W.,25 lks.dist.,
	marked T.40 S. R.15 W. S.27 B.T.
	Land mountainous.
	Soil,rocky 3rd.and 4th.rate.
	Timber,scattering cedar and pinon.
	Mountainous land and dense undergrowth on 80.00 chs.
	East,on a random line,bet.secs.26 and 35.
40.00	Set temp.$\frac{1}{4}$ sec.cor.
80.04	Intersect N.and S.line,3 lks.S.of the cor.of secs. 25-26-35 and 36.
	Thence I run
	S.89° 59'W.,on a true line,
	Bet.secs.26 and 35.
	Over rocky land,descend through scattering cedar and pinon timber.
8.50	Bottom of ravine,400 ft.deep,course S.W.
	Ascend.
34.50	Top of rocky spur,projects S.
	Descend.
40.02	Set a sandstone 15x10x10 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.
	Pits impracticable.
44.00	Bottom of ravine,300 ft.deep,course S.E.
	Beginabrupt ascent.
67.00	Top of ridge,bears N.W.and S.E.
	Descend.

SUBDIVISIONS OF T.40 S.,R.15 W.,continued.

CHAINS
75.25 Bottom of ravine,100 ft.deep,course S.

Ascend.

80.04 The cor.of secs.26-27-34 and 35.

Land mountainous.

Soil,rocky 3rd.and 4th.rate.

Timber,scattering cedar and pinon.

Mountainous land on 80.04 chs.

January 10: At this cor.I set off 22° 01'S.on decl. arc,and at 0h.7m.,p.m.,l.m.t.,observe the sun on the meridian,the resulting lat.is 37° 18'N.

N.0° 01'W.,bet.secs.26 and 27.

Over rocky land,ascend through dense oak,laurel,scattering cedar and pinon timber.

7.00 Top of ridge,bears N.and S.W.

Thence along top of ridge.

Leave timber.

35.00 Junction of ridge bearing N.E.and S.W.with ridge, bearing S.

Descend.

40.00 Set a trachyte stone 15x8x6 ins.,10 ins.in the ground,for ¼ sec.cor.,marked ¼ .on W.face,and raise a mound of stone 2 ft.base,1½ ft.high,W.of cor.

Pits impracticable.

46.00 Bottom of ravine,150 ft.deep,course S.W.

Ascend.

55. 0 Top of spur,projects S.W.

Descend.

76.00 Hollow,50 ft.deep,course S.W.

Ascend.

80.00 Set a trachyte stone 16x12x7 ins.,11 ins.in the ground,for cor.of secs.22-23-26 and 27,marked with 2 notches on S.and 2 notches on E.edges,and raise a mound of stone 2 ft.base,1½ ft.high,W.of cor.

Pits impracticable.

SUBDIVISIONS OF T.40 S.,R.15 W.,continued.

CHAINS	
	Land mountainous.
	Soil,rocky 3rd.and 4th,rate.
	Timber,scattering cedar and pinon on 9.00 chs.
	Mountainous land and dense undergrowth on 80.00 chs.
	N.89° 59'E.,on a random line,bet.secs.23 and 26.
40.00	Set temp.$\frac{1}{4}$ sec'cor.
80.06	Intersect N.and S.line,3 lks.S.of the cor.of secs. 23-24-25 and 26.
	Thence I run
	S.89° 58'W.,on a true line,
	Bet.secs.23 and 26.
	Over rocky land,descend through dense oak,laurel, scattering cedar and pinon timber.
8.50	Bottom of ravine,350 ft.deep,course S.W.
	Begin abrupt ascent.
26.00	Top of ridge,bears N.E.and S.W.
	Descend.
40.03	Set a sandstone 15x12x8 ins.,10 ins.in the ground, for $\frac{1}{4}$ sec.cor.,marked $\frac{1}{4}$ .on N.face,from which
	A cedar 3 ins.diam.,bears N.34°E.,6 lks.dist., marked $\frac{1}{4}$ S.23 B.T.
	A cedar 12 ins.diam.,bears S.29°E.,86 lks.dist., marked $\frac{1}{4}$ S.26 B.T.
54.00	Bottom of ravine,200 ft.deep,course S.W.
	Ascend.
64.50	Top of ridge,bears N.E.and S.W.
	Descend. Leave timber.
78.75	Head of hollow,course S.W.
	Ascend.
80.06	The cor.of secs.22-23-26 and 27.
	Land mountainous.
	Soil,rocky 3rd.and 4th.rate.
	Timber,scattering cedar and pinon on 64.50 chs.
	Mountainous land and dense undergrowth on 80.06 chs.

January 10,1903

SUBDIVISIONS OF T.40 S.,R.15 W.,continued.

CHAINS	
	January 11: At 8 a.m.,l.m.t.,I set off 37° 19'N.on lat.arc;21° 50'S.on decl.arc,and determine a true meridian with the solar,at the cor.of secs.22-23-26 and 27.
	Thence I run
	N.0° 01'W.,bet.secs.22 and 23.
	Over rocky land,ascend through dense artemisia,oak and laurel brush.
4.00	Top of ridge,bears N.E.and S.W.
	Begin abrupt descent.
40.00	Set a trachyte stone 18x10x8 ins.,12 ins.in the ground,for ¼ sec.cor.,marked ¼ .on W.face,and raise a mound of stone 2 ft.base,1½ ft.high,W.of cor.
	Pits impracticable.
43.00	East fork of Cottonwood Creek,6 lks.wide,5 ins.deep, in bottom of canon 400 ft.deep,course S.W.
	Begin abrupt ascent.
63.00	Top of spur,projects E.
	Descend.
74.00	Bottom of ravine,100 ft.deep,course S.E.
	Ascend.
80.00	Set a trachyte stone 15x15x6 ins.,10 ins.in the ground,for cor.of secs.14-15-22 and 23,marked with 3 notches on S.and 2 notches on E.edges,and raise a mound of stone 2 ft.base,1½ ft.high,W.of cor.
	Pits impracticable.
	Land mountainous.
	Soil,rocky 3rd.and 4th.rate.
	No timber.
	Mountainous land and dense undergrowth on 80.00 chs.

	N.89° 58'E.,on a random line,bet.secs.14 and 23.
40.00	Set temp.¼ sec.cor.
80.04	Intersect N.and S.line,7 lks.N.of the cor.of secs. 13-14-23 and 24.

CHAINS	
	Thence I run
	N.89° 59'W.,on a true line,
	Bet.secs.14 and 23.
	Over rocky land,descend through dense artemisia,oak, service berry and laurel brush.
8.50	Bottom of ravine,200 ft.deep,course S.W.
	Ascend.
23.00	Top of spur,projects S.W.
	Descend.
37.00	Bottom of ravine,200 ft.deep,course S.W.
	Ascend.
40.02	Set a trachyte stone 18x10x10 ins.,12 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.
	Pits impracticable.
58.00	Top of spur,projects S.
	Begin abrupt descent.
70.00	East fork of Cottonwood Creek,5 lks.wide,6 ins.deep, in bottom of canon,500 ft.deep,course S.
	Ascend.
78.00	Top of rocky spur,projects S.
	Descend.
80.04	The cor.of secs.14-15-22 and 23.
	Land mountainous.
	Soil,rocky 3rd.and 4th.rate.
	No timber.
	Mountainous land and dense undergrowth on 80.04 chs.
	January 11: At this cor.I set off 21° 52'S.on decl. arc,and at 0h.8m.,p.m.,l.m.t.,observe the sun on the meridian,the resulting lat.is 37° 20'N.
	N.0° 01'W.,bet.secs.14 and 15.
	Over rocky land,ascend through dense artemisia,oak, service berry and laurel brush.

CHAINS

15.00 Top of ridge,bears N.W.and S.E.

Descend.

24.00 Bottom of ravine,150 ft.deep,course S.E.

Begin abrupt ascent.

40.00 Set a trachyte stone 15x10x8 ins.,10 ins.in the ground,for ¼ sec.cor.,marked ¼ .on W.face,and raise a mound of stone 2 ft.base,1½ ft.high,W.of cor.

Pits impracticable.

60.00 Set a trachyte stone 18x12x10 ins.,12 ins.in the ground,for cor.of secs.10-11-14 and 15,marked with 4 no notches on S.and 2 notches on E.edges,and raise a m mound of stone 2 ft.base,1½ ft.high,W.of cor.

Pits impracticable.

This cor.is 1200 ft.above the cor.of secs.14-15 22 and 23.

Land mountainous.

Soil,rocky 4th.rate.

No timber.

Mountainous land and dense undergrowth on 80.00 chs.

NOTE:

On account of rocky,broken and steep mountains, I abandon the line here.

January 11,1903.

January 12: At 8 a.m.,l.m.t.,I set off 27° 17'W.on lat.arc:51° 42'E.on decl.arc,and determine a true meridian with the solar,at the Standard Cor.of secs. 33 and 34,heretofore described,on the Eighth Standard Parallel South.

Thence I run

N.0° 02'W.,bet.secs.33 and 34.

Over rocky land,ascend through heavy cedar and pines timber.

19.50 Top of ridge,bears N.E.and S.W.

Descend.

SUBDIVISIONS OF T.40 S.,R.15 W.,continued.

CHAINS	
	Leave heavy timber,bears N.E.and S.W.
	Enter dense artemisia,oak,scattering cedar and pinon timber.
35.00	Road,bears N.E.and S.W.,in bottom of ravine,200 ft. deep,course S.W.
	Ascend.
40.00	Set a sandstone 16x10x5 ins.,11 ins.in the ground, for $\frac{1}{4}$ sec.cor.,marked $\frac{1}{4}$ .on W.face,and raise a mound of stone 2 ft.base,$1\frac{1}{2}$ ft.high,W.of cor.
	Pits impracticable.
44.00	Top of ridge,bears N.E.and S.W.
	Descend.
51.00	Begin ascent.
66.00	Top of same ridge,bears N.W.and S.E.
	Enter heavy cedar and pinon timber,bears N.W.and S.E.
	Descend.
78.50	Bottom of hollow,75 ft.deep,course E.
	Ascend.
80.00	Set a sandstone 28x12x10 ins.,21 ins.in the ground, for cor.of secs.27-28-33 and 34,marked with 1 notch on S.and 3 notches on E.edges,from which
	A cedar 6 ins.diam.,bears N.44°E.,16 lks.dist., marked T.40 S. R.15 W. S.27 B.T.
	A cedar 15 ins.diam.,bears S.8°E.,85 lks.dist., marked T.40 S. R.15 W. S.34 B.T.
	A pinon 4 ins.diam.,bears S.79°W.,70 lks.dist., marked T.40 S. R.15 W. S.33 B.T.
	A cedar 12 ins.diam.,bears N.30°W.,63 lks.dist., marked T.40 S. R.15 W. S.28 B.T.
	Land mountainous.
	Soil,stony 3rd.rate.
	Heavy cedar and pinon timber on 33.50 chs.
	Mountainous land and heavily timbered or dense undergrowth on 80.00chs.

SUBDIVISIONS OF T.40 S.,R.15 W.,continued.

CHAINS	
	East,on a random line,bet.secs.27 and 34.
40.00	Set temp.$\frac{1}{4}$ sec.cor.
80.02	Intersect N.and S.line,3 lks.S.of the cor.of secs. 26-27-34 and 35.
	Thence I run
	S.89° 59'W.,on a true line,
	Bet.secs.27 and 34.
	Over rocky land,ascend through dense oak,laurel, scattering cedar and pinon timber.
2.00	Top of ridge,bears N.and S.
	Descend.
7.00	Bottom of ravine,150 ft.deep,course S.W.
	Ascend.
12.00	Top of rocky spur,projects S.
	Begin abrupt descent.
25.00	Cottonwood Creek,1 lk.wide,in bottom of canon,600 ft. deep,course S.E.
	Ascend.
31.00	St.George Canal,5 lks.wide,12 ins.deep,heads in Cottonwood Creek,6.00 chs.N.,course S.
	Begin abrupt ascent.
40.01	Set a trachyte stone 15x12x8 ins.,10 ins.in the ground,for $\frac{1}{4}$ sec.cor.,marked $\frac{1}{4}$ .on N.face,from which
	A pinon 12 ins.diam.,bears N.46°W.,81 lks.dist., marked $\frac{1}{4}$ S.27 B.T.
	A pinon 8 ins.diam.,bears S.29°W.,34 lks.dist., marked $\frac{1}{4}$ S.34 B.T.
55.00	Top of ridge,bears N.and S.
	Begin abrupt descent.
72.00	Bottom of ravine,300 ft.deep,course S.
	Ascend.
80.02	The cor.of secs.27-28-33 and 34.
	Land mountainous.
	Soil,rocky 3rd.and 4th.rate.
	Timber,scattering cedar and pinon.

SUBDIVISIONS OF T.40 S.,R.15 W.,continued.

CHAINS	
	Mountainous land and dense undergrowth on 70.02 chs.
	January 12: At this cor.I set off 21° 43'S.on decl. arc,and at 0h.8m.,p.m.,l.m.t.,observe the sun on the meridian,the resulting lat.is 37° 18'N.
	N.0° 02'W.,bet.secs.27 and 28.
	Ascend through heavy cedar and pinon timber.
5.00	Top of spur,projects E.
	Descend.
12.00	Bottom of ravine,100 ft.deep,course S.E.
	Ascend.
18.25	Top of spur,projects S.E.
	Descend.
33.00	Bottom of ravine,100 ft.deep,course S.E.
	Ascend.
38.00	Top of spur,projects S.E.
	Descend.
40.00	Set a sandstone 24x7x4 ins.,18 ins.in the ground, for ¼ sec.cor.,marked ¼ .on W.face,from which
	A cedar 8 ins.diam.,bears S.32°W.,18 lks.dist., marked ¼ S.28 B.T.
	A pinon 6 ins.diam.,bears N.29°E.,35 lks.dist., marked ¼ S.27 B.T.
54.00	Bottom of ravine,150 ft.deep,course S.E.
	Ascend.
80.00	Set a trachyte stone 15x10x8 ins.,10 ins.in the ground,for cor.of secs.21-22-27 and 28,marked with 2 notches on S.and 3 notches on E.edges from which
	A cedar 10 ins.diam.,bears N.0° 30'E.,6 lks.dist., marked T.40 S.R.15 W. S.22 B.T.
	A cedar 5 ins.diam.,bears S.39°E.,11 lks.dist., marked T.40 S. R.15 W. S.27 B.T.
	A cedar 4 ins.diam.,bears S 56° W.,6 lks.dist., marked T.40 S. R.15 W. S.28 B.T.
	A cedar 8 ins.diam.,bears N.30°W.,63 lks.dist.,

SUBDIVISIONS OF T.40 S.,R.15 W.,continued.

CHAINS	
	marked T.40 S. R.15 W. S.21 B.T.
	Land mountainous.
	Soil,stony 3rd.rate.
	Heavy cedar and pinon timber on80.00 chs.
	Mountainous land and heavily timbered on 80.00 chs.
	N.89° 59'E.,on a random line,bet.secs.22 and 27.
40.00	Set temp.$\frac{1}{4}$ sec.cor.
80.02	Intersect N.and S.line,3 lks.N.of the cor.of secs. 22-23-26 and 27.
	Thence I run
	West,on a true line,
	Bet.secs.22 and 27.
	Over rocky land,ascend through dense artemisia,oak and service berry brush.
2.00	Top of ridge,bears N.E.and S.W.
	Beginabrupt descent.
10.00	East Fork of Cottonwood Creek,5 lks.wide,4 ins.deep, in bottom of canon,400 ft.deep,course S.W.
	Ascend.
35.00	Top of ridge,bears N.and S.
	Enter scattering cedar and pinon timber.
	Begin abrupt descent.
40.01	Set a sandstone 15x10x8 ins.,10 ins.in the ground, for $\frac{1}{4}$ sec.cor.,marked $\frac{1}{4}$ .on N.face,from which
	A pinon 6 ins.diam.,bears N.71°E.,14 lks.dist., marked $\frac{1}{4}$ S.22 B.T.
	A cedar 6 ins.diam.,bears S.78°W.,27 lks.dist., marked $\frac{1}{4}$ S.27 B.T.
47.00	West Fork of Cottonwood Creek,2 lks.wide,4 ins.deep, in bottom of canon,400 ft.deep,course S.E.
	Begin abrupt ascent.
60.50	Top of ridge,bears N.and S.
	Descend.

SUBDIVISIONS OF T.40 S.,R.15 W.,continued.

CHAINS	
69.00	Bottom of ravine,150 ft.deep,course S.
	Enter heavy cedar and pinon timber,bears N.and S.
	Ascend.
80.02	The cor.of secs.21-22-27 and 28.
	Land mountainous.
	Soil,stony and rocky 3rd.and 4th.rate.
	Heavy cedar and pinon timber on 11.00 chs.
	Mountainous land and dense undergrowth on 80.02 chs.
	January 12,1903.

	January 13: At 8 a.m.,l.m.t.,I set off 37° 19'N.on lat.arc;21° 32'S.on decl.arc,and determine a true meridian with the solar,at the cor.of secs.21-22-27 and 28.
	Thence I run
	N.0° 02'W.,bet.secs.21 and 22.
	Ascend through heavy cedar and pinon timber.
8.00	Leave timber,bears N.E.and S.W.
	Enter dense artemisia,oak and laurel brush.
24.00	Top of ridge,bears N.W.and S.E.
	Descend.
34.50	Hollow,85 ft.deep,course S.E.
	Ascend.
40.00	Set a trachyte stone 16x14x8 ins.,11 ins.in the ground,for ¼ sec.cor.,marked ¼ .on W.face,and raise a mound of stone 2 ft.base,1½ ft.high,W.of cor.
	Pits impracticable.
44.00	Top of spur,600 ft.above sec.cor.,projects E.
	Descend over broken land.
80.00	Set a trachyte stone 18x12x6 ins.,12 ins.inthe ground for cor.of secs.15-16-21 and 22,marked
	40 S.on N.E.,and
	15 W.on S.E.face,and with 3 notches on S.and E.edges, and raise a mound fo stone 2 ft.base,1½ ft.high,W.of

SUBDIVISIONS OF T.40 S.,R.15 W.,continued.

CHAINS	
	cor.
	Pits impracticable.
	Land mountainous.
	Soil,stony and rocky 3rd.and 4th.rate.
	Heavy cedar and pinon timber on 8.00 chs.
	Mountainous land,heavily timbered or dense undergrowth on 80.00 chs.
	East,on a random line,bet.secs.15 and 22.
40.00	Set temp.$\frac{1}{4}$ sec.cor.
80.08	Intersect N.and S.line,3 lks.N.of the cor.of secs. 14-15-22 and 23.
	Thence I run
	N.89° 59'W.,on a true line,
	Bet.secs.15 and 22.
	Over rocky land,descend through dense artemisia,oak, service berry and laurel brush.
1.50	Bottom of ravine,100 ft.deep,course S.E.
	Begin abrupt ascent.
36.00	Top of ridge,400 ft.above sec.cor.,bears N.and S.
	Enter scattering cedar and pinon timber.
	Descend.
40.04	Point for $\frac{1}{4}$ sec.cor.,falls on a sandstone boulder, 4x3x3 ft.above the ground,I cut a cross,X,at exact point for $\frac{1}{4}$ sec.cor.,and mark $\frac{1}{4}$ .on N.side of cross, from which
	A cedar 8 ins.diam.,bears S.17°E.,17 lks.dist., marked $\frac{1}{4}$ S.22 B.T.
	A pinon 4 ins.diam.,bears N.30°E.,13 lks.dist., marked $\frac{1}{4}$ S.15 B.T.
46.00	West Fork of Cottonwood Creek,1 lk.wide,in bottom of canon,700 ft.deep,course S.
	Leave timber.
	Begin abrupt ascent.
80.08	The cor.of secs.15-16-21 and 22.
	600 ft.above bottom of canon.

SUBDIVISIONS OF T.40 S.,R.15 W.,continued.

CHAINS	
	Land mountainous.
	Soil,rocky 3rd.and 4th.rate.
	Timber,scattering cedar and pinon on 10.00 chs.
	Mountainous land and dense undergrowth on 80.08 chs.
	N.0° 02'W.,bet.secs.15 and 16.
	Over rocky land,descend through dense artemisia,oak, service berry and laurel brush.
17.00	Bottom of ravine,100 ft.deep,course S.E.
	Begin abrupt ascent.
40.00	Falls on a trachyte boulder 10x6x2 ft.above ground, I cut a cross,X,at exact point for ¼ sec.cor.,and mark ¼ .on W.face,and raise a mound of stone 2 ft. base,1½ ft.high,W.of cor.
	Pits impracticable.
45.00	Top of ridge,800 ft.above sec.cor.,bears N.E.and S.W.
	Enter scattering mahoganies.
	Descend.
69.00	Bottom of ravine,150 ft.deep,course S.W.
	Ascend.
79.00	Top of spur,projects S.W.
	Descend.
80.00	Set a trachyte stone 24x14x8 ins.,18 ins.in the ground,for cor.of secs.9-10-15 and 16,marked with 4 notches on S.and 3 notches on E.edges,and raise a mound of stone 2 ft.base,1½ ft.high,W.of cor.
	Pits impracticable.
	Land mountainous.
	Soil,rocky 3rd,and 4th.rate.
	Mountainous land and dense undergrowth on 80.00 chs.
	January 13: At this cor.I set off 21° 33'S.on decl. arc,and at 0h.9m.,p.m.,l.m.t.,observe the sun on the meridian,the resulting lat.is 37° 21'N.

SUBDIVISIONS OF T.40 S.,R.15 W.,continued.

CHAINS

S.89° 59'E.,on a random line,bet.secs.10 and 15.

40.00 Set temp.¼ sec.cor.

39.06 Intersect N.and S.line,5 lks.S.of the cor.of secs. 10-11-14 and 15.

Thence I run

S.89° 59'W.,on a true line,

Bet.secs.10 and 15.

Over.rocky land,ascend abruptly through dense artemisia oak,service berry and laurel brush.

36.00 Top of ridge,600 ft.above sec.cor.,bears N.E.and S.W.

Begin abrupt descent.

40.03 Set a trachyte stone 16x10x8 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.

Pits impracticable.

70.00 Bottom of ravine,200 ft.deep,course S.W.

Ascend.

79.00 Top of spur,projects S.W.,Descend.
80.06 The cor.of secs.9-10-15 and 16.
Land mountainous.

Soil,rocky 3rd.and 4th.rate.

No timber.

Mountainous land and dense undergrowth on 80.06 chs.

N.0° 02'W.,bet.secs.9 and 10.

Over rocky land,descend through dense artemisia,oak, service berry,laurel and scattering mahoganies.

6.50 Ravine,100 ft.deep,course S.W.

Ascend.

14.50 Top of ridge,bears N.E.and S.W.

Begin abrupt descent.

27.00 Bottom of ravine,200 ft.deep,course N.W.

Ascend.

34.25 Top of spur,projects W.

Begin abrupt descent.

39.00 Spring branch,2 lks.wide,in bottom of canon,400 ft.

SUBDIVISIONS OF T.40 S.,R.15 W.,continued.

CHAINS	
	deep,course S.W.
	Beginabrupt ascent.
40.00	Set a trachyte stone 18x6x6 ins.12 ins.in the ground,for ¼ sec.cor.,marked ¼ .on W.face,and raise a mound of stone 2 ft.base,1½ ft.high,W.of cor.
	Pits impracticable.
50.00	Top of rocky spur,500 ft.above bottom of canon, projects S.W.
	Begin abrupt descent.
68.50	Spring branch,2 lks.wide,in bottom of canon,400 ft. deep,course S.W.
	Ascend.
75.00	Begin ascent along top of spur,projecting S.
80.00	Top of spur,projects S.
	Set a trachyte stone 18x14x10 ins.,12 ins.in the ground,for cor.of secs.3-4-9 and 10,marked with 5 notches on S.and 3 notches on E.edges,and raise a mound of stone 2 ft.base,1½ ft.high,W.of cor.
	Pits impracticable.
	Land mountainous.
	Soil,rocky 3rd.and 4th.rate.
	No timber.
	Mountainous land and dense undergrowth on 80.00 chs.
	NOTE: On account of high,rocky,broken and steep mountains,I abandon the line here. January 13,1903.

The S.Bdy.of sec.33,on the Eighth Standard Parallel South,being out of limits for course,I establish a Sectional Correction Line,as follows:

January 14: At 8 a.m.,l.m.t.,I set off 37° 18'N.on lat.arc;21° 22'S.on declarc,and determine a true meridian with the solar,at the cor.of secs.27-28-33 and 34.

SUBDIVISIONS OF T.40 S.,R.15 W.,continued.

CHAINS	
	Thence I run
	West,on a Sectional Correction Line,
	Bet.secs.28 and 33.
	Ascend,through heavy cedar and pinon timber.
8.50	Top of ridge,bears N.W.and S.E.
	Descend.
28.00	Bottom of ravine,150 ft.deep,course S.E.
	Leave heavy timber,bears N.W.and S.E.
	Enter dense artemisia,oak,service berry and laurel brush,scattering cedar and pinon timber.
	Begin abrupt ascent.
40.00	Set a trachyte stone 30x16x9 ins.,23 ins.in the ground,for $\frac{1}{4}$ sec.cor.,marked $\frac{1}{4}$ .on N.face,from which
	A cedar 4 ins.diam.,bears N.51°W.,20 lks.dist., marked $\frac{1}{4}$ S.28 B.T.
	A cedar 5 ins.diam.,bears S.61°W.,32 lks.dist., marked $\frac{1}{4}$ S.33 B.T.
63.00	Top of ridge,600 ft.above sec.cor.,bears N.W.and S.E.
	Descend.
80.00	Set a trachyte stone 28x16x16 ins.,21 ins.in the ground,for cor.of secs.28-29-32 and 33,marked with 1 notch on S.and 4 notches on E.edges,from which
	A pinon 3 ins.diam.,bears N.10°E.,16 lks.dist., marked T.40 S. R.15 W. S.28 B.T.
	A pinon 5 ins.diam.,bears S.41°E.,92 lks.dist., marked T.40 S. R.15 W. S.33 B.T.
	A pinon 4 ins.diam.,bears S.28°W.,46 lks.dist., marked T.40 S. R.15 W. S.32 B.T.
	A pinon 3 ins.diam.,bears N.18°W.,45 lks.dist., marked T.40 S. R.15 W. S.29 B.T.
	Land mountainous.
	Soil,stony and rocky 3rd.and 4th.rate.
	Heavy cedar and pinon timber on 28.00 chs.
	Mountainous land,heavily timbered or dense undergrowth on 80.00 chs.

CHAINS	
	West,on a Sectional Correction Line,
	Bet.secs.29 and 32.
	Descend,through dense artemisia,oak,service berry and laurel brush,scattering cedar and pinon timber.
2.50	Head of ravine,course S.W.
	Ascend.
8.50	Top of ridge,bears N.E.and S.W.
	Begin abrupt descent.
22.50	Bottom of ravine,150 ft.deep,course S.W.
	Ascend.
37.00	Top of ridge,bears N.E.and S.W.
	Enter heavy cedar and pinon timber,bears N.E.and S.W.
	Descend.
40.00	Set a trachyte stone 16x8x4 ins.,11 ins.in the ground,for ¼ sec.cor.,marked ¼ .on N.face,from which
	A cedar 10 ins.diam.,bears N.10°W.,16 lks.dist., marked ¼ S.29 B.T.
	A pinon 8 ins.diam.,bears S.59°W.,28 lks.dist., marked ¼ S.32 B.T.
80.00	Set a trachyte stone 24x18x10 ins.,18 ins.in the ground,for cor.of secs.29-30-31 and 32,marked with 1 notch on S.and 5 notches on E.edges,from which
	A cedar 5 ins.diam.,bears N.42°E.,93 lks.dist., marked T.40 S. R.15 W. S.29 B.T.
	A cedar 5 ins.diam.,bears S.51°E.,45 lks.dist., marked T.40 S. R.15 W. S.32 B.T.
	A cedar 8 ins.diam.,bears S.76°W.,76 lks.dist., marked T.40 S. R.15 W. S.31 B.T.
	A cedar 5 ins.diam.,bears N.12°W.,26 lks.dist., marked T.40 S. R.15 W. S.30 B.T.
	This cor.is 400 ft.below top of ridge.
	Land mountainous.
	Soil,stony and rocky 3rd.and 4th.rate.
	Heavy cedar and pinon timber on 43.00 chs.
	Dense undergrowth, Mountainous land or heavily timbered on 80.00 chs.

SUBDIVISIONS OF T.40 S.,R.15 W.,continued.

CHAINS	
	January 14: At this cor.I set off 21° 23'S.on decl arc,and at 0h.9m.,p.m.,l.m.t.,observe the sun on the meridian,the resulting lat.is 37° 18'N.
	Knowing the line bet.secs.30 and 31,will not close within the limits on the W.Bdy.of thE Tp.,I run West,on a Sectional Correction Line, Bet.secs.30 and 31.
	Descend through heavy cedar and pinon timber.
34.50	Hollow,50 ft.deep,course S.W.
	Ascend.
40.00	Set a trachyte stone 24x12x6 ins.,18 ins.in the ground.for ¼ sec.,marked ¼ .on N.face,from which
	A cedar 12 ins.diam.,bears S.14° W.,10 lks.dist., marked ¼ S.31 B.T.
	A pinon 4 ins.diam.,bears N.38°W.,60 lks.dist., marked ¼ S.30 B.T.
54.00	Top of ridge,bears N.E.and S.W.
	Descend.
	Leave heavy timber,bears N.E.and S.W.
	Enter dense artemisia,oak,scattering cedar and pinon timber.
97.00	Bottom of ravine,100 ft.deep,course N.W.
	Ascend.
98.60	Intersect Pine Valley Guide Meridian,N.0° 4'E.,1.30 chs.dist.from the cor.of secs.25-30-31 and 36, heretofore described.
	I destroy all marks on this cor.that pertain to T.40 S.,R.15 W.
	Set a trachyte stone 15x12x6 ins.,10 ins.in the ground,for closing cor.of secs.30 and 31,marked C.C. on E.with 1 groove on S.and 5 grooves on N.faces, from which
	A cedar 5 ins.diam.,bears N.48°E.,42 lks.dist., marked T.40 S. R.15 W. S.30 B.T.

SUBDIVISIONS OF T.40 S.,R.15 W.,continued.

CHAINS	
	A cedar 4 ins.diam.,bears S.81°E.,57 lks.dist.,
	marked T.40 S. R.15 W. S.31 B.T.
	This cor.is 600 ft.below the cor.of secs.29-30-31 and 32.
	Land mountainous.
	Soil,rocky and stony 3rd.and 4th.rate.
	Heavy cedar and pinon timber on 54.00 chs.
	Mountainous land,heavily timbered or dense undergrowth on 98.60 chs.
	January 14,1903.

	January 15: At 8 a.m.,l.m.t.,I set off 37° 18'N.on
	lat.arc;21° 11'S.on decl.arc,and determine a true
	meridian with the solar,at the cor.of secs.28-29-32
	and 33,heretofore described.
	Thence I run
	S.0° 03'E.,on a random line,bet.secs.
	32 and 33.
40.00	Set temp.¼ sec.cor.
81.00	Intersect Eighth Standard Parallel South,2 lks.E.of
	the Standard Cor.of secs.32 and 33,heretofore described.
	Thence I run
	N.0° 02'W.,on a true line,
	bet.secs.32 and 33.
	Over rolling land,ascend through dense artemisia,oak
	service berry brush,scattering cedar and pinon
	timber.
6.00	Top of ridge,bears N.E.and S.W.
	Descend.
13.00	Begin rolling ascent.
40.00	Top of same ridge,bears N.W.and S.E.
	Descend.
41.00	Set a trachyte stone 18x16x9 ins.,12 ins.in the
	ground,for ¼ sec.cor.,marked ¼ . .on W.face,from which
	A cedar 5 ins.diam.,bears S.39°W.,51 lks.dist.,

SUBDIVISIONS OF T.40 S.,R.15 W.,continued.

CHAINS	
	marked ¼ S.32 B.T.
	A cedar 8 ins.diam.,bears S.55°E.,75 lks.dist.,
	marked ¼ S.33 B.T.
48.00	Bottom of ravine 100 ft.deep,course S.E.
	Ascend,over broken land.
81.00	The cor.of secs.28-29-32 and 33.
	500 ft.above the Stan.Cor.
	Land mountainous.
	Soil,stony and rocky.
	Scattering cedar and pinon timber.
	Mountainous land and dense undergrowth on 81.00 chs.

	From the cor.of secs.28-29-32 and 33,I run
	N.0° 03'W.,bet.secs.28 and 29.
	Over rocky land,ascend through dense artemisia,oak,
	service berry ,laurel brush,scattering cedar and
	pinon timber.
4.75	Top of knoll,on ridge bearing N.E.and S.W.
	Begin abrupt descent.
10.00	Bottom of ravine,150 ft.deep,course W.
	Ascend.
17.00	Top of rocky spur,projects W.
	Descend.
40.00	Set a trachyte stone 18x12x10 ins.,12 ins.in the
	ground,for ¼ sec.cor.,marked ¼ .on W.face,from which
	A cedar 3 ins.diam.,bears S.10°E.,1.64 chs.dist.,
	marked ¼ S.28 B.T.
	A cedar 8 ins.diam.,bears N.89°W.,1.86 chs.dist.,
	marked ¼ S.29 B.T.
54.00	Bottom of ravine,150 ft.deep,course S.W.
	Ascend.
80.00	Set a trachyte stone 15x12x8 ins.,10 ins.in the
	ground,for cor.of secs.20-21-28 and 29,marked with
	2 notches on S.and 4 notches on E.edges,and raise a

SUBDIVISIONS OF T.40 S.,R.15 W.,continued.

CHAINS	
	mound of stone 2 ft.base,1½ ft.high,W.of cor.
	Pits impracticable.
	Land mountainous.
	Soil,rocky 3rd.and 4th.rate.
	Timber,scattering cedar and pinon.
	Mountainous land and dense undergrowth on 80.00 chs.
	January 15: At this cor.I set off 21° 12'S.on decl. arc,and at 0h.9m.,p.m.,l.m.t.,observe the sun on the meridian,the resulting lat.is 37° 19'N.
	East,on a random line,bet.secs.21 and 28.
40.00	Set temp.¼ sec.cor.
30.08	Intersect N.and S.line,9 lks.N.of the cor.of secs. 21-22-27 and 28.
	Thence I run
	N.29° 50'W.,on a true line,
	Bet.secs.21 and 28.
	Over rocky land,ascend through heavy cedar and pinon timber.
34.00	Top of rocky spur,projects S.
	Leave timber,bears N.and S.
	Enter dense artemisia,service berry,oak and laurel brush.
	Descend.
39.00	Bottom of ravine,100 ft.deep,course S.E.
	Begin abrupt ascent.
40.04	Set a trachyte stone 16x14x6 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.
	Pits impracticable.
57.00	Top of ridge,800 ft.above sec.cor.,bears N.E.and S.W.
	Begin abrupt descent.
76.00	Bottom of ravine,100 ft.deep,course S.
	Ascend.

SUBDIVISIONS OF T.40 S.,R.15 W.,continued.

CHAINS	
80.08	The cor.of secs.20-21-28 and 29.
	Land mountainous.
	Soil,rocky 3rd.and 4th.rate.
	Heavy cedar and pinon timber on 34.00 chs.
	Mountainous land,heavily timbered or dense undergrowth on 80.08 chs.
	N.0° .03'W.,bet.secs.20 and 21.
	Ascend through dense artemisia,oak,service berry,
	laurel brush,scattering cedar and pinon timber.
4.00	Top of ridge,bears N.E.and S.W.
	Descend.
10.00	Hollow,100 ft.deep,course W.
	Begin abrupt ascent.
17.00	Top of rocky spur,projects W.
	Descend.
36.00	Bottom of ravine,150 ft.deep,course S.W.,Leave timber.
	Ascend.
40.00	Top of ridge,bears N.E.and S.W.
	Set a trachyte stone 24x10x10 ins.,18 ins.in the
	ground,for $\frac{1}{4}$ sec.cor.,marked $\frac{1}{4}$ ...on W.face,and raise
	a mound of stone 2 ft.base,$1\frac{1}{2}$ ft.high,W.of cor.
	Pits impracticable.
65.00	Bottom of ravine,200 ft.deep,course S.W.
	Begin abrupt ascent.
80.00	Top of ridge,bears N.E.and S.W.
	Set a trachyte stone 15x12x12 ins.,10 ins.in the
	ground,for cor.of secs.16-17-20 and 21,marked with
	3 notches on S.and 4 notches on E.edges,and raise a
	mound of stone 2 ft.base,$1\frac{1}{2}$ ft.high,W.of cor.
	Pits impracticable.
	Land mountainous.
	Soil,rocky 3rd.and 4th.rate.
	Timber,scattering cedar and pinon on 36.00 chs.
	Mountainous land and dense undergrowth on 80.00 chs.
	January 15,1903.

SUBDIVISIONS OF T.40 S.,R.15 W.,continued.

CHAINS	
	January 16:At 8 a.m.,l.m.t.I set off 37°20'N.on lat. arc;21°01'S.on decl.arc,and determine a true meridian with the solar,at the cor.of secs.16-17-20 and 21. Thence I run
	S.89° 56'E.on a random line,bet.secs.16 and 21.
40.00	Set temp.¼ sec.cor.
80.04	Intersect N.and S.line,3 lks.N.of the cor.of secs.
	15-16-21 and 22.Thence I run
	N.89° 55'W.,on a true line,bet.secs.16 and 21.
	Over rocky land,ascend abruptly through dense oak,
	artemisia,service berry and laurel brush.
28.00	Top of ridge,500 ft.above sec.cor.,bears N.E.and S.W.
	Descend.
38.00	Bottom of ravine,100 ft.deep,course S.W.
	Ascend.
40.02	Set a trachyte stone 14x9x5 ins.,9 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.
	Pits impracticable.
80.04	Top of ridge,bears N.E.and S.W.
	The cor.of secs.16-17-20 and 21.
	Land mountainous.
	Soil,rocky 3rd.and 4th.rate.
	No timber.
	Mountainous land and dense undergrowth on 80.04 chs.

N.0° 03'W.,bet.secs.16 and 17.

	Over rocky land descend through dense artemisia,oak,
	service berry and laurel brush.
40:00	Set a trachyte stone 28x12x12 ins.,21 ins.in the
	ground,for ¼ sec.cor.,marked ¼ .on W.face,and raise
	a mound of stone 2 ft.base,1½ ft.high,W.of cor.
	Pits impracticable.
65.00	Wagon road,bears E.and W.
70.50	Wire fence,bears N.W.and S.E.
73.00	Wire fence,bears E.and W.
78.00	Enter cultivated land,bears N.W.and S.E.

SUBDIVISIONS OF T.40 S.,R.15 W.,continued.

CHAINS	
80.00	Set a trachyte stone 28x15x5 ins.,21 ins.in the ground for cor.of secs.8-9-16 and 17,marked with 4 notches on S.and E.edges,and raise a mound of stone 2 ft. base,1½ ft.high,W.of cor.
	Pits impracticable.
	Land rolling.
	Soil,sandy loam on 15.00 chs.2nd.rate.
	balance stony and rocky 3rd.and 4th.rate.
	No timber.
	Dense undergrowth on 78.00 chs.
	S.89° 55'E.,on a random line,bet.secs.9 and 16.
40.00	Set temp.¼ sec.cor.
80.06	Intersect N.and S.line,3 lks.N.of the cor.of secs. 9-10-15 and 16.
	Thence I run
	N.89° 54'W.,on a true line,
	Bet.secs.9 and 16.
	Over rocky land,descend abruptly through dense oak, artemisia,service berry,laurel brush,scattering mahoganies.
7.00	Bottom of ravine,150 ft.deep,course S.W.
	Ascend.
25.00	Top of rocky spur,projects S.W.
	Begin abrupt descent.
40.03	Set a trachyte stone 24x12x8 ins.,18 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.
	Pits impracticable.
43.00	Pole fence,bears N.and S.
	Leave rocky land.
	Over level land.
46.00	The frame house belonging to Herman Gubler,bears S. 1.00 ch.dist.

SUBDIVISIONS OF T.40 S.,R.15 W.,continued.

CHAINS	
47.00	The rock house belonging to B.Blake,bears N.,10.00 chs.dist.
51.00	Pole fence,bears N.and S.
53.00	Enter cultivated land,bears N.and S.
67.25	Wire fence,bears N.and S.
80.06	The cor.of secs.8-9-16 and 17.
	Land level and mountainous.
	Soil,sandy loam on 36.00 chs.,2nd.rate.
43.00 / 37.00	balance rocky 3rd.rate.
	No timber.
	Mountainous land or dense undergrowth on 43.00 chs.

N.0° 03'W.,bet.secs.8 and 9.

	Over level cultivated land.
5.00	Wire fence,bears N.E.and S.W.
	Leave cultivated land.
	Descend.
	Enter dense artemisia and scattering oak brush.
8.00	Wagon road,bears E.and W.
17.00	Hollow,75 ft.deep,course N.W.
	Ascend.
22.00	Top of spur,projects W.
	Descend.
26.50	Road,bears N.E.and S.W.,in hollow,75 ft.deep,course S.W.
	Ascend.
38.50	Top of ridge,bears N.W.and S.E.
	Begin abrupt descent.
40.00	Falls on a trachyte boulder 8x5x5 ft.above ground, I cut a cross,X,at exact point for ¼ sec.cor.,and mark ¼ .on W.side of cross,and raise a mound of stone 2 ft.base,1½ ft.high,W.of cor.
	Pits impracticable.
	From this cor.,the log house belonging to W.J.B.Carter

SUBDIVISIONS OF T.40 S.,R.15 W.,continued.

CHAINS	
	bears N.80°E.
42.25	Spring branch,2 lks.wide,in bottom of canon,300 ft. deep,course N.80° W.
	Begin abrupt ascent.
56.00	Top of spur,projects W.
	From this point the house belonging to W.J.B.Carter, bears S.69°E.
	Descend.
65.00	Bottom of ravine,100 ft.deep,course S.W.
	Ascend.
80.00	Set a trachyte stone 18x12x10 ins.,12 ins.in the ground,for cor.of secs.4-5-8 and 9.marked with 5 notches on S.and 4 notches on E.edges,and raise a mound of stone 2 ft.base,1½ ft.high,W.of cor.
	Pits impracticable.
	Land rolling and mountainous.
	Soil,sandy loam,on 10.00 chs.,2nd.rste.
	balance stony 3rd.rate.
	No timber.
	Mountainous or dense undergrowth on 75.00 chs.
	January 16:At this cor.I set off 21°07'S.on decl.and at 0h.10m.,p.m.,l.m.t.,observe the sun on the meridian the resulting lat.is 37° 22'N.
	S.89° 54'E.,on a random line,bet.secs.4 and 9.
40.00	Set temp.¼ sec.cor.,
80.08	Intersect N.and S.line,5 lks.S.of the cor.of secs. 3-4-9 and 10.
	Thence I run
	N.89° 56'W,on a true line,
	Bet.secs.4 and 9.
	Over rocky land,descend through dense artemisia,oak, service berry,laurel brush and scattering mountain mahoganies.
18.00	Bottom of canon,300 ft.deep,course S.W.
	Ascend.
34.00	Top of ridge,bears N.E.and S.W.
	Descend.

SUBDIVISIONS OF T.40 S.,R.15 W.,continued.

CHAINS	
40.04	Set a trachyte stone 18x6x6 ins.,12 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. Pits impracticable.
42.00	Hollow,75 ft.deep,course S.W.
	Ascend.
45.50	Top of spur,projects S.W.
	Descend.
53.00	Bottom of ravine,150 ft.deep,course S.W.
	Ascend.
72.00	Begin descent.
80.08	The cor.of secs.4-5-8 and 9.
	Land mountainous.
	Soil,rocky 3rd.and 4th.rate.
	No timber.
	Mountainous land and dense undergrowth on 80.08 chs.
	N.0° 03'W.,on a random line,bet.secs.4 and 5.
40.00	Set temp.¼ sec.cor.
82.98	Intersect N.Bdy.of Tp.,5 lks.E.of the cor.of secs. 4-5-32 and 33,heretofore described.
	Thence I run
	S.0° 05'E.,on a true line,
	Bet.secs.4 and 5.
	Over rocky land,descend through scattering oak brush, mahoganies and cedar and pinon timber.
4.00	Bottom of ravine,150 ft.deep,course S.W.
	Begin abrupt ascent.
24.50	Top of spur,projects S.W.
	Descend.
34.00	Bottom of ravine,100 ft.deep,course W.
	Ascend.
38.00	Top of ridge,bears N.E.and S.W.
	Begin abrupt descent.
42.98	Set a trachyte stone 15x12x6 ins.,10 ins.in the

SUBDIVISIONS OF T.40 S.,R.15 W.,continued.

CHAINS	
	ground,for ¼ sec.cor.,marked ¼ .on W.face,from which
	A pinon 5 ins.diam.,bears S.81°W.,39 lks.dist.,
	marked ¼ S.5 B.T.
	A pinon 5 ins.diam.,bears, S.53°E.,78 lks.dist.,
	marked ¼ S.4 B.T.
69.00	Bottom of ravine,300 ft.deep,course S.W.
	Begin abrupt ascent.Leave timber.
80.50	Top of chur,projects W.
82.98	The cor.of secs.4-5-8 and 9.
	Land mountainous.
	Soil,rocky 3rd.and 4th.rate.
	Timber,scattering cedar and pinon on 69.00 chs.
	Mountainous land and dense undergrowth on 82.98 chs.
	January 16,1903.

January 17: At 8 a.m.,l.m.t.,I set off 37° 18'N.on the lat.arc;20° 49'S.on the decl.arc,and determine a true meridian with the solar,at the cor.of secs.29-30-31 and 32.heretofore described.

Thence I run

S.0° 03'E.,on a random line,bet.secs.31 and 32.

40.00	Set temp.¼ sec.cor.
81.12	Intersect Eighth Standard Parallel South,3 lks.W. of the Standard Cor.of secs.31 and 32,heretofore described.

Thence I run

N.0° 04'W.,on a true line,

Bet.secs.31 and 32.

Over rolling land,ascend through dense artemisia,oak, service berry brush,scattering cedar and pinon timber.

41.12	Set a trachyte stone 18x14x6 ins.,12 ins.in the ground,for ¼ sec.cor.,marked ¼ .on W.face,from which
	A cedar 6 ins.diam.,bears S.67°E.,15 lks.dist.,
	marked ¼ S.32 B.T.

SUBDIVISIONS OF T.40 S.,R.15 W.,continued.

CHAINS	
	A cedar 5 ins.diam.,bears N.76°W.,34 lks.dist., marked ¼ S.31 B.T.
49.00	Enter heavy cedar and pinon timber,bears E.and W.
81.12	The cor.of secs.29-30-31 and 32.
	Land rolling.
	Soil,stony 3rd.rate.
	Heavy cedar and pinon timber on 32.12 chs.
	Heavily timbered or dense undergrowth on 81.12 chs,
	N.0° 03'W.,bet.secs.29 and 30.
	Ascend through heavy cedar and pinon timber.
8.00	Top of ridge,bears E.and W.
	Leave timber,bears E.and W.
	Descend.
10.00	Top of lava ledges,bear E.and W.
	Begin abrupt descent.
31.25	Bottom of ravine,250 ft.deep,course N.W.
	Ascend.
40.00	Set a trachyte stone 24x12x6 ins.,18 ins.in the ground,for ¼ sec.cor.,marked ¼ .on W.face,and raise a mound of stone 2 ft.base,1½ ft.high,W.of cor.
	Pits impracticable.
49.00	Top of rocky spur,projects W.
	Descend.Enter scattering cedar and pinon timber.
63.50	Bottom of canon,400 ft.deep,course S.W.
	Begin abrupt ascent over broken lava ledges,bearing N.E.and S.W.
74.00	Top of ledges,bear N.E.and S.W.
	Ascend.
79.00	Top of ridge,bears N.E.and S.W.
	Descend.
80.00	Set a trachyte stone 18x10x4 ins.,12 ins.in the ground,for cor.of secs.19-20-29 and 30,marked with 2 notches on S.and 5 notches on E.edges,from which

SUBDIVISIONS OF T.40 S.,R.15 W.,continued.

CHAINS	
	A cedar 3 ins.diam.,bears N. 8°E.,1.15 chs.dist., marked T.40 S. R.15 W. S.20 B.T.
	A cedar 4 ins,diam.,bears S.2°E.,80 lks.dist., marked T.40 S. R.15 W. S.29 B.T.
	A cedar 8 ins.diam.,bears S.61°W.,37 lks.dist., marked T.40 S. R.15 W. S.30 B.T.
	A cedar 4 ins.diam.,bears N.71°W.,49 lks.dist., marked T.40 S. R.15 W. S.19 B.T.
	Land mountainous.
	Soil,stony and rocky 3rd.and 4th.rate.
	Heavy cedar and pinon timber on 8.00 chs.
	Mountainous land on 80.00 chs.
	January 17: At this cor.I set off 20° 50'S.on the decl.arc,and at 0h.10m.,p.m.,l.m.t.,observe the sun on the meridian,the resulting lat.is 37° 19'N.
	East,on a random line,bet.secs.20 and 29.
40.00	Set temp.$\frac{1}{4}$ sec.cor.
80.16	Intersect N.and S.line,14 lks.N.of the cor.of secs. 20-21-28 and 29.
	Thence I run
	N.89° 54'W.,on a true line,
	Bet.secs.20 and 29.
	Ascend through dense artemisia,oak,ans scattering cedar and pinon timber.
2.00	Top of ridge,bears N.E.and S.W.
	Begin abrupt descent over rocky land.
35.00	Bottom of canon,350 ft.deep,course S.W.
	Begin abrupt ascent over broken lava ledges,bearing N.E.and S.W.
40.08	Set a trachyte stone 15x12x6 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.
	Pits impracticable.

SUBDIVISIONS OF T.40 S.,R.15 W.,continued.

CHAINS	
60.00	Top of lava ledges,300 ft.above bottom of canon, bear N.E.and S.W.
	Ascend.
74.00	Top of ridge,bears N.E.and S.W.
	Descend.
80.16	The cor.of secs.19-20-29 and 30.
	Land mountainous.
	Soil,rocky 3rd.and 4th.rate.
	Timber,scattering cedar and pinon.
	Mountainous land and dense undergrowth on 80.16 chs.
	Knowing the line bet.secs.19 and 30,will not close within the limits on the W.Bdy. of the Tp,I run West,on a true line, Bet.secs.19 and 30.
	Over rolling land,descend through dense artemisia, oak,service berry brush and scattering cedar and pinon timber.
40.00	Set a trachyte stone 15x14x6 ins.,10 ins.in the ground,for ¼ sec.cor.,marked ¼ .on N.face,from which
	A cedar 2 ins.diam.,bears N.31°W.,72 lks.dist., marked ¼ S.19 B.T.
	A cedar 2 ins.diam.,bears S.43°W.,1.11 chs.dist., marked ¼ S.30 B.T.
69.00	Bottom of ravine,100 ft.deep,course S.W.
	Ascend.
90.00	Wagon road,bears N.E.and S.W.
96.85	Wagon road,bears N.E.and S.W.
98.46	Intersect Pine Valley Guide Meridian,1.50 chs.N.0°16'W.of cor.of secs.19-24-25 and 30,heretofore described.
	I destroy all marks on this cor.that pertain to T.40 S. R.15 W.
	Set a trachyte stone 18x14x10 ins.,12 ins.in the ground,for closing cor.of secs.19 and 30,marked C.C.

SUBDIVISIONS OF T.40 S.,R.15 W.,continued.

CHAINS	
	on E.,with 2 grooves on S.and 4 grooves on N.faces, and raise a mound of stone 2 ft.base,1½ ft.high,E. of cor.
	Pits impracticable.
	Land rolling.
	Soil,stony 3rd.rate.
	Timber,scattering cedar and pinon.
	Dense undergrowth on 98.46 chs.
	N.0° 03'W.,bet.secs.19 and 20.
	Over rolling land,descend through dense artemisia, oak,service berry brush and scattering cedar and pinon timber.
20.25	Bottom of ravine,100 ft.deep,course W.
	Ascend.
40.00	Set a trachyte stone 18x12x7 ins.,12 ins.in the ground;for ¼ sec.cor.,marked ¼ .on W.face,from which
	A cedar 5 ins.diam.,bears N.9°E.,35 lks.dist., marked ¼ S.20 B.T.
	A cedar 5 ins.diam.,bears S.75°W.,24 lks.dist., marked ¼ S.19 B.T.
52.00	Top of ridge,bears E.and W.
	Descend.
62.00	Bottom of ravine,course W.,100 ft.deep,
	Ascend.
72.00	Top of ridge,bears E.and W.
	Descend.
80.00	Set a trachyte stone 20x10x10 ins.,15 ins.in the ground,for cor.of secs.17-18-19 and 20,marked with 3 notches on S.and 5 notches on E.edges,from which
	A cedar 4 ins.diam.,bears N.60°W.,93 lks.dist., marked T.40 S. R.15 W. S.18 B.T.
	No other trees within limits,and raise a mound of stone 2 ft.base,1½ ft.high,W.of cor.

SUBDIVISIONS OF T.40 S.,R.15 W.,continued.

CHAINS	
	Pits impracticable.
	Land rolling.
	Soil,stony 3rd.rate.
	Timber,scattering cedar and pinon.
	Dense undergrowth on 80.00 chs.
	January 17,1903.

	January 18: At 8 a.m.,l.m.t.,I set off 37° 20'N.on lat.arc;20° 37'S.on decl.arc,and determine a true meridian with the solar,at the cor.of secs.17-18-19 and 20.
	Thence I run
	S.89° 54'E.,on a random line,bet.secs. 17 and 20.
40.00	Set temp.$\frac{1}{4}$ sec.cor.
80.20	Intersect N.and S.line,5 lks.N.of the cor.of secs. 16-17-20 and 21.
	Thence I run
	N.89° 52'W.,on a true line,
	Bet.secs.17 and 20.
	Descend through dense artemisia,oak and service berry brush.
3.00	Begin ascent.
5.50	Top of ridge,bears N.W.and S.E.
	Descend over rolling land.
23.00	Enter scattering cedar and pinon timber.
40.10	Set a trachyte stone 16x8x4 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.
	Pits impracticable.
80.20	The cor.of secs.17-18-19 and 20.
	This cor.is 500 ft.below the cor.of secs.16-17-20 and 21.
	Land mountainous.
	Soil,stony 3rd.rate.

CW1133 Timber,scattering cedar and pinon on 57.00 chs.
Mountainous land and dense undergrowth on 80.80 chs.

Knowing the line,bet.secs.18 and 19,will not close within limits on the W.Bdy.of the Tp.,I run

West,on a true line,

Bet.secs.18 and 19.

Over rolling land,descend through dense artemisia, oak,service berry brush and scattering cedar and pinon timber.

33.00 Wagon road,bears N.E.and S.W.

40.00 Set a trachyte stone 15x12x8 ins.,10 ins.in the ground,for ¼ sec.cor.,marked ¼ ..on N.face,from which
A cedar 6 ins.diam.,bears S.75°W.,30 lks.dist., marked ¼ T.19 B.T.
A cedar 8 ins.diam.,bears N.34°W.,20 lks.dist., marked ¼ S.18 B.T.

41.60 Bottom of ravine,100 ft.deep,course S.W.
Ascend.

43.00 Top of spur,projects S.W.
Descend.

46.50 Bottom of same ravine,course N.W.
Ascend.

47.50 Top of spur,projects N.
Descend.

49.00 Bottom of an e ravine,course W.
Thence along bottom of ravine,

52.50 Bottom of ravine,150 ft.deep,course S.W.
Begin abrupt ascent.

60.00 Leave timber.

61.00 Top of ridge,bears N.E.and S.W.
Descend.

71.50 Bottom of ravine,100 ft.deep,course S.W.
Ascend.

83.00 Top of ridge,bears N.E.and S.W.

SUBDIVISIONS OF T.40 S.,R.15 W.,continued.

CHAINS	
	Descend.
98.77	Intersect Pine Valley Guide Meridian,N.0° 03'E.,1.70 chs.dist.from the cor.of secs.13-18-19 and 24,heretofore described.
	I destroy all marks on this cor.that pertain to T.40 S.,R.15 W.
	Set a trachyte stone 20x12x10 ins.,15 ins.in the ground,for closing cor.of secs.18 and 19.marked C.C. on E.,with 3 grooves on N.and S.faces,and raise a mound of stone 2 ft.base,1½ ft.high,E.of cor.
	Pits impracticable.
	Land mountainous.
	Soil,stony 3rd.rate.
	Timber,scattering cedar and pinon on 60.00 chs.
	Mountainous land and dense undergrowth on 98.77 chs.
	January 18: At this cor.I set off 20° 38'S.on decl. arc,and at 0h.10m.,p.m.,l.m.t.,observe the sun on the meridian,the resulting lat.is 37° 20'N.
	N.0° 03'W.,bet.secs.17 and 18.
	Descend through dense artemisia,oak,service berry brush and scattering cedar and pinon timber.
13.00	Bottom of ravine,150 ft.deep,course N.W.
	Ascend.
18.00	Top of spur,projects W.
	Descend.
23.00	Bottom of ravine,100 ft.deep,course S.W.
	Ascend.
33.25	Wagon road,bears N.E.and S.W.
40.00	Set a trachyte stone 18x10x6 ins.,12 ins.in the ground,for ¼ sec.cor.,marked ½ .on W.face,and raise a mound of stone 2 ft.base,1½ ft.high,W.of cor.
	Pits impracticable.

SUBDIVISIONS OF T.40 S.,R.15 W.,continued.

CHAINS	
42.20	Wagon road,bears N.E.and S.W.
58.00	Top of ridge,bears E.and W.
	Descend.
75.00	Bottom of ravine,100 ft.deep,course W.
	Ascend.
80.00	Set a trachyte stone 15x12x10 ins.,10 ins.in the ground,for cor.of secs.7-8-17 and 18,marked with 4 notches on S.and 5 notches on E.edges,from which
	A cedar 6 ins.diam.,bears N.35°E.,35 lks.dist., marked T.40 S. R.15 W. S.8 B.T.
	A cedar 5 ins.diam.,bears S.29°E.,93 lks.dist., marked T.40 S. R.15 W. S.17 B.T.
	A cedar 3 ins.diam.,bears S.47°W.,50 lks.dist., marked T.40 S. R.15 W. S.18 B.T.
	A cedar 5 ins.diam.,bears N.13°W.,54 lks.dist., marked T.40 S. R.15 W. S.7 B.T.
	Land rolling.
	Soil,stony 3rd.rate.
	Timber,scattering cedar and pinon.
	Dense undergrowth on 80.00 chs.

	S.89° 52'E.,on a random line,bet.secs.8 and 17.
40.00	Set temp.½ sec.cor.
80.18	Intersect N.and S.line,3 lks,N.of the cor.of secs. 8-9-16 and 17.
	Thence I run N.89° 51'W.,on a true line, Bet.secs.8 and 17.
	Over cultivated land.
.10	Leave cultivated land,bears N.and S.
	Enter dense artemisia and oak brush.
	Ascend.
1.25	Wire fence,bears N.and S.
14.75	Top of spur,projects N.E.
	Descend.

SUBDIVISIONS OF T.40 S.,R.15 W.,continued.

CHAINS	
29.50	Wagon road,bears N.E.and S.W.
34.60	Hollow,75 ft.deep,course N.
	Ascend.
37.50	Top of ridge,bears N.and S.
	Descend.
40.09	Set a trachyte stone 24x10x8 ins.,18 ins.in the ground,for ¼ sec.cor.,marked ¼ .on N.face,from which
	A cedar 6 ins.diam.,bears N.62°E.,29 lks.dist., marked ¼ S.8 B.T.
	A cedar 5 ins.diam.,bears S.74°W.,18 lks.dist., marked ¼.S.17.B.T.
80.18	The cor.of secs.7-8-17 and 18.
	Land rolling.
	Soil,stony 3rd.rate.
80.08/.10	Timber,scattering cedar and pinon.
	Dense undergrowth on 80.08 chs.

Knowing the line bet.secs.7 and 18,will not close within limits on the W.Bdy.of the Tp.,I run

West on a true line,

Bet.secs.7 and 18.

	Descend through dense artemisia,oak,service berry brush and scattering cedar and pinon timber.
11.50	Bottom of ravine,150 ft.deep,course S.W.
	Ascend.
40.00	Set a trachyte stone 14x10x5 ins.,9 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.
	Pits impracticable.
62.00	Top of ridge,bears N.E.and S.W.
	Descend.
94.00	Leave timber.
98.49	Intersect Pine Valley Guide Meridian,1.22 chs.N.0° 11'W.,of the cor.of secs.7-12-13 and 18,heretofore

SUBDIVISIONS OF T.40 S.,R.15 W.,continued.

CHAINS	
	described.
	I destroy all marks on this cor.that pertain to T.40 S.,R.15 W.
	Set a trachyte stone 15x10x4 ins.,10 ins.in the ground,for closing cor.of secs.7 and 18,marked C.C. on E.,with 4 grooves on S.and 2 grooves on N.faces, and raise a mound of stone 2 ft.base,1½ ft.high,E. of cor.
	Pits impracticable.
	Land rolling.
	Soil,stony 3rd.rate.
	Timber,scattering cedar and pinon timber on 94.00 chs.
	Dense undergrowth on 98.49 chs.
	January 18,1903.

	January 19: At 8 a.m.,l.m.t,I set off 37° 21'N.on lat.arc;20° 25'S.on decl.arc,and determine a true meridian with the solar,at the cor.of secs.7-8-17 and 18.
	Thence I run
	N.0° 03'W.,bet.secs.7 and 8.
	Ascend through dense artemisia,oak,service berry brush and scattering cedar and pinon timber.
5.00	Top of spur,projects W.
	Descend.
16.00	Bottom of ravine,100 ft.deep,course S.W.
	Ascend.
36.00	Top of ridge,bears N.E.and S.W.
	Descend. Leave timber.
40.00	Set a trachyte stone 15x8x8 ins.,10 ins.in the ground,for ¼ sec.cor.,marked ¼ .on W.face,and raise a mound of stone 2 ft.base,1½ ft.high,W.of cor.
	Pits impracticable.
52.00	Begin abrupt descent,bears N.E.and S.W.

SUBDIVISIONS OF T.40 S.,R.15 W.,continued.

CHAINS	
57.25	Bottom of canon,400 ft.deep,course S.W.
	Begin abrupt ascent.
65.00	Top of abrupt ascent,bears N.E.and S.W.
	Ascend.
80.00	Set a trachyte stone,15x12x7 ins.,10 ins.in the ground,for cor.of secs.5-6-7-and 8,marked with 5 notches on S.and E.edges,and raise a mound of stone 2 ft.ba se,1½ ft.high,W.of cor.
	Pits impracticable.
	Land mountainous.
	Soil,stony and rocky 3rd.and 4th.rate.
	Scattering cedar and pinon timber on 36.00 chs.
	Mountainous land and dense undergrowth on 80.00 chs.
	S.89° 51'E.,on a random line,bet.secs.5 and 8.
40.00	Set temp.¼ sec.cor.
80.08	Intersect N.and S.line,14 lks.S.of the cor.of secs. 4-5-8 and 9.
	Thence I run
	N.89° 57'W.,on a true line,
	Bet.secs.5 and 8.
	Over rolling land descend through dense artemisia, oak,service berry brush and scattering mahoganies.
33.00	Bottom of ravine 250 ft.deep,course S.W.
	Ascend.
36.50	Top of spur,projects S.W.
	Descend.
40.04	Set a trachyte stone 14x8x6 ins.,10 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.
	Pits impracticable.
43.50	Bottom of canon,300 ft.deep,course S.W.
	Begin abrupt ascent.
51.00	Top of steep ascent,bears N.E.and S.W.

SUBDIVISIONS OF T.40 S.,R.15 W.,continued.

CHAINS.	
	Ascend.
64.00	Top of spur,projects S.
	Descend.
80.08	The cor.of secs.5-6-7 and 8.
	Land mountainous.
	Soil,stony and rocky 3rd.and 4th.rate.
	No timber.
	Mountainous land and dense undergrowth on 80.08 chs.
	January 19: At this cor.,I set off 20° 26'S.on decl. arc,and at 0h.11m.,p.m.,l.m.t.,observe the sun on the meridian,the resulting lat.is 37° 21'N.
	Knowing the line bet.secs.6 and 7,will not close within limits,on the W.Bdy.of the Tp.,I run West,on a true line, Bet.sec.6 and 7.
	Over rolling land,descend through dense artemisia, oak and service berry brush.
39.00	Enter scattering cedar and pinon timber.
40.00	Set a trachyte stone 14x12x7 ins.,10 ins.in the ground,for ¼ sec.cor.,marked ¼ .on N.face,from which
	A cedar 4 ins.diam.,bears S.80°E.,59 lks.dist., marked ¼ S.7 B.T.
	A cedar 4 ins.diam.,bears N.22°E.,1.06 chs.dist., marked ¼ S.6 B.T.
53.00	Bottom of ravine,150 ft.deep,course S.W.
	Ascend.
73.00	Top of spur,projects S.W.
	Descend.
90.00	Bottom of ravine,150 ft.deep,course S.E.
	Leave timber.
	Ascend.
98.70	Intersect Pine Valley Guide Meridian,3.55 chs.,S.0° 11'E.,of the cor.of secs.1-6-7 and 12,heretofore

SUBDIVISIONS OF T.40 S.,R.15 W.,continued.

CHAINS	
	described.
	Idestroy all marks on this cor.that pertain to T.40 S.,R.15 W.
	Set a trachyte stone 18x8x5 ins.,12 ins.in the ground for closing cor.of secs.6 and 7,marked C.C.on E., with 5 grooves on S.and 1 groove on N.faces,and raise a mound of stone 2 ft.base,1½ ft.high,E.of cor.
	Pits impracticable.
	Land mountainous.
	Soil,stony and rocky 3rd.and 4th.rate.
	Scattering cedar and pinon timber on 51.00 chs.
	Mountainous land and dense undergrowth on 98.70 chs.
	N.0° 03'W.,on a random line,bet.secs.5 and 6.
40.00	Set temp.¼ sec.cor.
82.96	Intersect N.Bdy.of Tp.,7 lks.E.of the cor.of secs. 5-6-31 and 32.,heretofore described.
	Thence I run
	S.0° 06'E.,on a true line,
	Bet.secs.5 and 6.
	Ascend through dense artemisia,oak and service berry brush.
5.00	Top of spur,projects W.
	Descend.
12.00	Bottom of ravine,100 ft.deep,course N.W.
	Begin abrupt ascent.
39.50	Top of ridge,500 ft.above sec.cor.,bears E.and W.
	Descend.
42.96	Set a trachyte stone 24x8x6 ins.,18 ins.in the ground,for ¼ sec.cor.,marked ¼ .on W.face,and raise a mound of stone 2 ft.base,1½ ft.high,W.of cor.
	Pits impracticable.
82.96	The cor.of secs.5-6-7 and 8.
	300 ft.below topof ridge.
	Land mountainous.

SUBDIVISIONS OF T.40 S.,R.15 W.,concluded.

Soil,stony and rocky 3rd.and 4th.rate.

No timber.

Mountainous land and dense undergrowth on 82.96 chs.

January 19,1903.

GENERAL DESCRIPTION

This township is situated on the south west slope and foothills of the Pine Valley Mountains,and the land is broken by many canons and ravines.

The soil,with the exception of several bottoms,is rocky and is covered with a dense growth of oak, artemisia,service berry,laurel and mahogany brush, in the higher portions and with dense undergrowth and scattering cedar and pinon timber on the lower portions of the townships.

Nearly over the entire township a rich growth of nutritious grasses may be found which makes this an excellent range.

On the bottom land,crops may be produced with irrigation.

The township is watered by Cottonwood Creek,which water is used for irrigating in the vicinity of St. George,and by several springs along the mountain

The northeast portion of the township,extends to the top of the Pine Valley Mountains,the land is rocky, abrupt and broken,and is practically worthless, therefore I did not survey it.

There is no mineral found in this township.

The settlers in this township are:

W.J.B.Carter is located in N.W.$\frac{1}{4}$ sec.9

Acres of land under cultivation 5.00.

Value of improvements $400.00.

Herman Gubler and Benjamin Blake have a joint claim

GENERAL DESCRIPTION OF T.40 S.,R.15 W.,concluded.

located in S.W.$\frac{1}{4}$ sec.9,N.W.$\frac{1}{4}$ sec.16,S.E.$\frac{1}{4}$ sec.8,and N.E.$\frac{1}{4}$ sec.17.

Land under cultivation 60.00 acres.

Value of improvements $1200.00.

Harvey dl. Reid

U.S.DEPUTY SURVEYOR

NOTE:

There being no notary public or other officer authorized to administer oaths within a reasonable distance at the beginning or ending of this survey, in order to save time and expense,I administer the preliminary and final oaths for retracement and survey of T.40 S.,R.15 W.myself.

Harvey dl. Reid

U.S.DEPUTY SURVEYOR.

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FINAL OATHS OF DEPUTY SURVEYOR AND HIS ASSISTANTS.

LIST OF NAMES.

A list of the names of the individuals employed by HARVEY D. HEIST 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 Subdivisions of T.40 S., Rs.13-14 & 15 W., & T.41 S., R.14 W. the Salt Lake Base and Meridian, Utah, showing the respective capacities in which they acted:

WILLIAM WALQUIST	*Chainman.*
GEORGE WILSON	*Chainman.*
EARL V. WOOLLEY	*Moundman.*
JOHN KITCHEN	*Moundman.*
JAMES POTTER	*Axman.*
	Axman.
OLEY SORENSON	*Flagman.*

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted Harvey D. Heist, United States Deputy Surveyor, in surveying all those parts or portions of the the Subdivisions of T.40 S., Rs.13-14 & 15 W., and T.41 S., R.14 W. of the Salt Lake Base and meridian, in the state of Utah, which are represented in the foregoing field notes as having been surveyed by him and under his direction; and that said survey has been in all respects, to the best of our knowledge and belief, well and faithfully surveyed, and the corner monuments established, according to the instructions furnished by the United States Surveyor General for UTAH.

William Walquist	*Chainman.*
George Wilson	*Chainman.*
John Kitchen	*Moundman.*
Earl V. Woolley	*Moundman.*
James Potter	*Axman.*
	Axman.
Oley Sorenson	*Flagman.*

Subscribed and sworn to before me this 19th day of January, 1903, 189

SEAL

Harvey D. Heist
U. S. Deputy Surveyor
U.S. Deputy Surveyor

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FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I, Harvey D. Heist, United States Deputy Surveyor, solemnly swear that, in pursuance of a contract received from Edward H. Anderson United States Surveyor General for Utah, bearing date of 12th. day of February, 1902. 189 , I have well, faithfully, and truly, in my proper person, and in strict conformity with the instructions furnished by the United States Surveyor General for Utah, the Manual of Surveying Instructions, and the laws of the United States, surveyed all those parts or portions of the Subdivisions of T. 40 S., Rs. 13-14 & 15 W., and T. 41 S., R. 14 W. of the Salt Lake Base and Meridian, in the state of Utah, which are represented in the foregoing field notes, as having been surveyed by me, and under my direction; and I do further solemnly swear that all the corners of said survey have been established and perpetuated in strict accordance with the Manual of Surveying Instructions, and the special written instructions of the United States Surveyor General for Utah, and in the specific manner described in the field notes, and that the foregoing are the original field notes of such survey; and should any fraud be detected, I will suffer the penalty of perjury under the provisions of an Act of Congress approved August 8, 1846.

Harvey D. Heist
United States Deputy Surveyor

Subscribed by said Harvey D. Heist, and sworn to before me this 26th day of March 1903, 189

Edward H. Anderson
Surveyor General for Utah

SEAL

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah, February 26 1902, 189

The foregoing field notes of the survey of the subdivisional lines Township 40 South Range 15 West of the Salt Lake Base & Meridian, Utah

executed by Harvey D. Heist under his contract No. 251, dated February 12, 1902, 189 , having been critically examined, and the necessary corrections and explanations made, the said field notes, and the surveys they describe, are hereby approved.

Edward H. Anderson
United States Surveyor General

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

United States Surveyor General

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BOOK A-293

FIELD NOTES

OF THE SURVEY OF THE

[illegible] Exterior of Township [illegible] N., R. [illegible] West,

of

Range [illegible] West

[illegible] Meridian,

[illegible]

AS SURVEYED BY

[illegible] Deputy Surveyor, United States Deputy Surveyor,

[illegible] Contract No. [illegible] Dated [illegible] 1903

[illegible] commenced [illegible] 1903

[illegible] completed [illegible] 1903

[illegible]

BOOK A-298

NAMES AND DUTIES OF ASSISTANTS.

Hyrum Millward	Chainman
Robt. R. Halladay	"
Orson A. Johnson	Mounduman
Lionel J. Stookey	"
Lincoln S. Stookey	Flagman

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BOOK A-298

INDEX DIAGRAM.

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Meanders Page.....

PRELIMINARY OATHS OF ASSISTANTS.

WE, Hyrum Millward and Robt. D. Halladay, do solemnly swear that we will well and faithfully execute the duties of chainmen; that we will lev chain over even and uneven ground, and plumb the tally pins, either by sticking or dropping the same; we will report the true distances to all notable objects, and the true lengths of all lines that we measuring, to the best of our skill and ability, and in accordance with instructions given us, in the sur East Bdy of Tps. 6, 7 & 8 S. R. 17 W. Salt Lake Bas Meridian

Hyrum Millward, Chain
Robert D. Halladay, Chai

Subscribed and sworn to before me this 28 day of June 1903, 189-

SEAL

Alonzo J. Stookey
U. S. Dep. Surveyor

WE, Orson A. Johnson and Lionel J. Stookey do solemnly swear that we will well and truly perform the duties of moundmen in the establi of corners, according to the instructions given us, to the best of our skill and ability, in the sur East Bdy of Tps. 6, 7 & 8 S. R. 17 W. Salt Lake Base & Meridian.

Orson A. Johnson, Moun
Lionel J. Stookey, Moun

Subscribed and sworn to before me this 28 day of June 1903, 189

SEAL

Alonzo J. Stookey
U. S. Deputy Surv

WE, ... and .....
do solemnly swear that we will well and truly perform the duties of axmen in the establishment of c and other duties, according to instructions given us, to the best of our skill and ability, in the sur

..... A
..... A

Subscribed and sworn to before me this ..... day of ....., 189

SEAL

I, Lincoln C. Stookey, do solemnly swear that I will well and perform the duties of flagman according to instructions given me, to the best of my skill and ability, survey of East Bdy of Tps. 6, 7 & 8 S. R. 17 W. Salt L Base & Meridian.

Lincoln C. Stookey, Fl

Subscribed and sworn to before me this 28 day of June 1903, 189

SEAL

Alonzo J. Stookey
U. S. Dep. Surveyor

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East Bdy. T. 8 S. R. 17 W.

Survey commenced June 28. 1903 and executed with a W. & L. E. Gurley Light Mountain Transit, 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 verniers of the latitude and declination arcs. The instrument was examined tested on the true meridian at Salt Lake City, found correct and was approved by the Surveyor General for Utah May 29. 1903. I examine the adjustment of the transit and correct the level and collimation errors.

Finding it practically impossible to run the range line through Tps. 8. 7 & 6 S. bet. Rs 17 & 18 W. as instructed, on account of very rough and precipitous intervening mountains, therefore I begin at the established cor. of Tps 8 & 9 S. Rs 16 & 17 W. which is a limestone 12 X 8 X 8 ins. above ground marked and witnessed as described by the Surveyor General in latitude 40° 04' 19" N. longitude 113° 41' 56" W. I observe Polaris at 1h 08m. A. M. L.M.T. at eastern elongation in accordance with the Manual of Instructions & mark the line thus determined by a tack driven into a wooden plug 5.00 chs. N. of my station June 28. at 7 a. m. I lay off the Azimuth of Polaris 1° 35' to the west and mark the true meridian thus determined by driving a tack into a wooden plug firmly set in the ground west of the

point established last night.
The magnetic bearing of the true meridian is N. 14°15' W. which reduced by the table on page 100 of the Manual gives the mean magnetic declination N. 17°10' E.
Begin at the cor. of Tps. 8 & 9 S. R16 & 17
Thence as before described.
Thence Run
N. on true line bet. secs. 31 & 36
Over almost level land through dense shadscale and greasewood undergrowth.
40.00 Set a quartzite stone 4x7x6 ins. 8 ins. in the ground for 1/4 sec. cor. marked 1/4 on W. face; dig pits 18x18x12 ins N. & S. of stone 3 ft. dist. and raise a mound of earth 3½ ft base 1½ ft. high W. of cor.
80.00 Set a granite stone 15x8x6 ins. 10 ins. in the ground for cor. of secs. 25, 30, 31 & 36 marked 5 notches on the N. & 1 notch on the S. edge; raise a mound of stone 2 ft. base 1½ ft high W. of cor.
Pits impracticable
Land almost level
Soil sand and gravel 2nd & 3rd rate.
No timber
Land covered with dense undergrowth 80.00 chs.

N. on true line bet. secs. 25 & 30,
Over almost level land through dense shadscale and greasewood undergrowth.
40.00 Set a quartzite stone 12x7x6 ins. 8 ins. in the ground for 1/4 sec. cor. marked 1/4 on W. face dig pits 18x18x12 ins N. & S. of stone 3 ft. dist and raise a mound of earth 3½ ft. base 1½ ft. high W. of cor.
69.00 Enter alkali flat bear N. 45° E. and S. 45° W.
80.00 Set a quartzite stone 15x12x10 inches

69/11

East Bdy T. 8 S R 17 W.

10 ins. in the ground for cor. of secs 19, 24, 25 & 30; marked 2 notches on S & 4 notches on W. edges; raise a mound of stone 2 ft base 1½ ft. high W. of cor.
Pits impracticable
Land almost level
Soil, clay sand and gravel 3rd rate
No timber
Land covered with dense under-growth 69 chs.

N. on true line bet secs. 19 & 24
Over level alkali flat.
21.00 Leave alkali flat bears E & W. enter dense shadescale and greasewood undergrowth bears E. and W.
40.00 Set quartzite stone 15x6x6 ins. 10 ins. in the ground for ¼ sec. cor. marked ¼ on W. face; dig pits 18x18x12 ins. N and S. of stone 3 ft. dist. and raise a mound of earth 3½ ft base 1½ ft high W. of cor.
68.00 Enter alkali flat bears E & W.
80.00 Set a granite stone 15x10x10 ins
47.
33 10 ins in the ground for cor. of secs. 13, 18, 19 & 24 marked 3 notches on N & S edges, dig pits 18x18x12 ins in each sec. 5½ ft dist. and raise a mound of earth 4 ft base 2 ft high W. of cor.
Land almost level
Soil sand and gravel, 3rd rate
No timber
Land covered with dense undergrowth
47.00 chs.

N. on true line bet secs. 13 & 18
Over almost level alkali flat.
40.00 Set a granite stone 12x7x6 ins. 8 ins in the ground for ¼ sec. cor. marked

East Bdy T 8 S R 17 W.

1/4 on W. face; dig pits 18 X 18 X 12 ins N & S of stone 3 ft. dist. and raise a mound of earth 3½ ft base 1½ ft high N. of cor.

50.00 Leave alkali flat bears E & W. enter dense shadscale and greasewood undergrowth bears E & W.

54.00 W lifting road. bears E & W.

72.00 Leave dense undergrowth. bears E & W Enter alkali flat bears E & W.

80.00
22
58

Set a granite stone 18 X 8 X 6 ins. 12 ins in the ground for cor. of secs 7, 12, 13 & 18. marked 4 notches on S & 2 notches on W edges; dig pits 18 X 18 X 12 ins in each sec. 5½ ft dist. and raise a mound of earth 4 ft base 2 ft high N. of cor.

Land almost level.
Soil sand clay & gravel 5 cts
No timber
Land covered with dense undergrowth
22.00 chs.

Non true line bet. secs 7 & 12
Over level alkali flat.

12.40 Leave alkali flat bears E & W. and enter dense shadscale & greasewood undergrowth, bears E & W.

40.00 Set a quartzite stone 12 X 7 X 6 ins. 8 ins in the ground for 1/4 sec. cor. marked 1/4 on W. face; dig pits 18 X 18 X 12 ins. W & S. of stone 3 ft dist; and raise a mound of earth 3½ ft base 1½ ft high N. of cor.

80.00
67.60
12.40

Set a limestone 15 X 12 X 4 ins. 10 ins. in the ground for cor of secs 1, 6, 7 & 12 marked 5 notches on S. and 1 notch on W. edges; dig pits 18 X 18 X 12 ins. in each sec. 5½ ft dist. and raise a mound of earth 4 ft base 2 ft high N. of cor.

East Bdy. T 8 S. R 17 W.

Land almost level
Soil sand and gravel 3rd rate
No timber
Land covered with dense undergrowth 67.60 chs.

From true line bet. secs 1 & 6.
Over almost level land, though dense shadscale and greasewood undergrowth.

40.00 Set a quartzite stone 12X7X6 ins 8 ins. in the ground for 1/4 sec. cor. marked 1/4 on W. face; dig pits 18X18X12 ins N. & S. of stone 3 ft. dist. and raise a mound of earth 3½ ft base 1½ ft high W. of cor.

61.00 Leave dense undergrowth bears E & W. enter salt weed flat, vegetation becomes very scarce.

80.00 Set a quartzite stone 15X6X6 ins. 10 ins in the ground for cor of Tps 7 & 8 S. Rgs 16 & 17 W. marked 7 S. on N. E.; 17 W. on S. E.; 8 S. on S. W. & 16 W. on N. W. faces; with 6 notches on each edge; dig pits 24X24X12 ins N. E. & W. 4 ft. S. of stone 8 ft. raise a mound of earth 5 ft base 2½ ft high S. of cor.

61/19

Land almost level
Soil gravel, sand & saline. 3rd rate
No timber
Land covered with dense undergrowth
61.00 chs.

June 28. 1903.

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East Bdy. T. 7 S. R. 17 W.

Survey commenced June 29. 1903. for description of transit etc. see Book E.

From the cor. of Tps. 7 & 8 S. Rgs. 16 & 17 W. as established by my off. and heretofore described

Thence Dist.

N. on true line bet. secs. 31 & 36.

Over level saline ground, covered with numerous small knolls.

40.00 Set a quartzite stone 12 x 7 x 6 ins. 8 ins in the ground for 1/4 sec. cor.; marked 1/4 on W. face; dig pits 18 x 18 x 12 ins. N. & S. of stone 3 ft. dist. and raise a mound of earth 3/2 ft. base 1½ ft. high W. of cor.

75.00 Enter Great American Desert, bears N. 35° W. & S. 35° E.

80.00 Set a quartzite stone 12 x 10 x 8 ins 8 ins. in the ground for cor. of secs. 25, 30, 31 & 36. marked 1 notch on S. & 5 notches on N. edges; dig pits 18 x 18 x 12 ins. in each sec. 5½ ft. dist. and raise a mound of earth 4 ft. base 2 ft. high W. of cor.

Land level

Soil saline 3° rate

No timber.

N. on true line bet. secs. 25 & 30.

Over level desert.

40.00 Set a quartzite stone 12 x 7 x 6 ins. 8 ins in the ground for 1/4 sec. cor. marked 1/4 on W. face; dig pits 18 x 18 x 12 ins. N. & S. of stone 3 ft. dist. and raise a mound of earth 3½ ft base 1½ ft. high W. of cor.

80.00 Set a quartzite stone 12 x 7 x 6 ins. 8 ins in the ground for cor. of secs 19, 24, 25 & 30. marked 2 notches on S. & 4 notches on N. edges; dig

pits 18 x 18 x 12 ins. in each sec. 5½ ft. dist. and raise a mound of earth 4 ft. base 2 ft. high N. of cor.
Land level.
Soil saline. 2" rate
No timber.

Upon true line bet. secs. 19 & 24.
Over level desert.
40.00 Set a quartzite stone 12 x 7 x 6 ins. 8 ins in the ground for 1/4 sec. cor. marked 1/4 on N. face; dig pits 18 x 18 x 12 ins. N. & S. of stone 3 ft. dist. and raise a mound of earth 3½ ft base 1½ ft. high N. of cor.
80.00 Set a granite stone 15 x 8 x 6 ins. 10 ins. in the ground for cor. of secs. 13, 18, 19 & 24. marked 3 notches on N. & S. edges; dig pits 18 x 18 x 12 ins. in each sec. 5½ ft. dist. and raise a mound of earth 4 ft. base 2 ft. high N. of cor.
Land level.
Soil saline. 2" rate
No timber.

Upon true line bet secs. 13 & 18.
Over level desert.
40.00 Set a granite stone 15 x 6 x 6 ins 10 ins. in the ground for 1/4 sec. cor. marked 1/4 on N. face; dig pits 18 x 18 x 12 ins. N. & S. of stone 3 ft. dist. and raise a mound of earth 3½ ft base 1½ ft high N. of cor.
80.00 Set a granite stone 15 x 8 x 6 ins. 10 ins. in the ground for cor. of secs. 7, 12, 13 & 18. marked 4 notches on S. and 2 notches on N. edges; dig pits 18 x 18 x 12 ins. in each sec. 5½ ft. dist. and raise a mound of earth 4 ft. base 2 ft. high N. of cor.

East Bdy T 7 S R 17 W.

Land level
Soil saline 2" rate
No timber

N on true line bet secs 7 & 12.
Over level desert
40.00 Set a quartzite stone 12 x 8 x 6 ins. 8 ins. in the ground for 1/4 sec. cor marked 1/4 on W. face; dig pits 18 x 18 x 12 ins. N. & S. of stone 3 ft. dist. raise a mound of earth 3½ ft. base 1½ ft. high W. of cor.
80.00 Set a granite stone 18 x 8 x 5 ins. 12 ins. in the ground for cor. of secs. 1. 6. 7 & 12. marked 5 notches on S. & 1 notch on N. edges; dig pits 18 x 18 x 12 ins. in each sec. 5½ ft dist. and raise a mound of earth 4 ft base 2 ft. high W. of cor.
Land level
Soil saline 2" rate
No timber.

N. on true line bet. secs. 1 & 6.
Over level desert.
40.00 Set a granite stone 12 x 8 x 6 ins. 8 ins. in the ground for 1/4 sec. cor. marked 1/4 on W face; dig pits 18 x 18 x 12 ins N & S. of stone 3 ft. dist. and raise a mound of earth 3½ ft. base 1½ ft high W. of cor.
80.00 Set a granite stone 18 x 10 x 8 ins. 12 ins in the ground for cor. of Tps 6 & 7 S. Rgs 16 & 17 W. marked 6 S on N.E. 16 W. on S.E.; 7 S. on S.W. and 17 W. on N.W. faces; with 6 notches on each edge; dig pits 24 x 24 x 12 ins. on each line N.E. & W. 4 ft and S. of stone 8 ft dist. & raise a mound of earth 5 ft base 2½ ft high S. of cor.
Land level
Soil saline 2" rate. No timber June 29/1903

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East Bdy. T 6 S R 17 E

Survey commenced June 29 1903. for description of traverse see Field Bk.
From the cor. of T.s 6 & 7 S. Rgs 16 & 17
N.gs established by myself and hereto fore described
Thence Drew
N. on true line bet secs. 31 & 36
Over level desert
40.00 Set a quartzite stone 12 x 7 x 6 ins. 8 ins in the ground for 1/4 sec. cor. marked 1/4 on W. face; dig pits 18 x 18 x 12 ins. E. & S. of stone 3 ft. dist and raised a mound of earth 3½ ft. base 1½ ft. high N. of cor.
80.00 Set a granite stone 15 x 10 x 6 ins. 10 ins. in the ground for cor. of secs. 25, 30, 31 & 36. marked 1 notch on S. and 5 notches on N. edges; dig pits 18 x 18 x 12 ins in each section 5½ ft dist & raise a mound of earth 4 ft base 2 ft. high N. of cor.
Land level
Soil saline & rate
No timber

N. on true line bet secs 25 & 30
Over level desert
40.00 Set a granite stone 15 x 8 x 6 ins. 10 ins. in the ground for 1/4 sec. cor. marked 1/4 on W. face; dig pits 18 x 18 x 12 ins. N. & S. of stone 3 ft dist. and raise a mound of earth 3½ ft base 1½ ft. high N. of cor.
80.00 Set a granite stone 15 x 8 x 6 ins. 10 ins. in the ground for cor. of secs 19, 24, 25 & 30. marked 2 notches on S. & 4 notches on N. edges; dig pits 18 x 18 x 12 ins. in each sec. 5½ ft dist. and raise a mound of earth 4 ft base 2 ft high N. of cor.

Land level.
Soil saline 2" rate
No timber.

Run true line bet. secs. 19 & 24.
Over level desert.
40.00 Set a granite stone 12 x 8 x 6 ins. 8 ins. in the ground for 1/4 sec. cor. marked 1/4 on W. face; dig pits 18 x 18 x 12 ins. N. & S. of stone 3 ft. dist. and raise mound of earth 3 1/4 ft. base 1 1/2 ft. high W. of cor.
80.00 Set a granite stone 15 x 8 x 8 ins. 10 ins. in the ground for cor. of secs. 13, 18, 19 & 24 marked 3 notches on N. & S. edges; dig pits 18 x 18 x 12 ins. in each sec. 5 1/4 ft. dist. and raise a mound of earth 4 ft. base 2 ft. high W. of cor.
Land level
Soil saline 2" rate
No timber

Run true line bet. secs. 13 & 18.
Over level desert.
40.00 Set a quartzite stone 12 x 7 x 6 ins. 8 ins. in the ground for 1/4 sec. cor. marked 1/4 on W. face; dig pits 18 x 18 x 12 ins. N. & S. of stone 3 ft. dist. and raise a mound of earth 3 1/4 ft. base 1 1/2 ft. high W. of cor.
80.00 Set a quartzite stone 12 x 8 x 6 ins. 8 in. in the ground for cor. of secs. 7, 12, 13 & 18 marked 4 notches on S. and 2 notches on N. edges; dig pits 18 x 18 x 12 ins. in each sec. 5 1/4 ft. dist. and raise a mound of earth 4 ft. base 2 ft. high W. of cor.
Land level
Soil saline 2" rate
No timber.

East Boundary T6 S R17 W.

N. on true line, bet. secs. 7 & 12
Over level desert
40.00 Set a quartzite stone 12x7x6 ins. 8 ins. in the ground for 1/4 sec. cor. marked 1/4 on W. face; dig pits 18x18x12 ins N. & S. of stone 3 ft. dist and raise a mound of earth 3½ ft base 1½ ft high W. of cor.
80.00 Set a white quartzite stone 12x8x6 ins. 8 ins. in the ground for cor. of secs 1, 6, 7 & 12. marked 5 notches on S. & 1 notch on N. edges; dig pits 18x18x12 ins. in each sec. 5½ ft. dist. and raise a mound of earth 4 ft base 2 ft high W. of cor.
Land level
Soil saline 2" rate
No timber.

N. on true line bet. secs. 1 & 6
Over level desert
40.00 Set a quartzite stone 12x7x6 ins. 8 ins. in the ground for 1/4 sec. cor. marked 1/4 on W. face; dig pits 18x18x12 ins N. & S. of stone 3 ft dist. and raise a mound of earth 3½ ft base 1½ ft. high W. of cor.
80.00 Set a granite stone 15x7x7 ins. 10 ins. in the ground for closing cor. of Tps 6 S. Rgs 16 & 17 W. marked C C 6 S. on S, 16 W. on E. and 17 W. on W. faces, with 6 grooves on S. E & W. faces; dig pits 30x24x12 ins. crosswise on each line E & W. 4 ft W. & S. of stone 8 ft. dist and raise a mound of earth 5 ft base 2½ ft. high S. of cor.
Land level
Soil saline 2" rate
No timber

June 29. 1903.

General Description

On township 8 this line passes over land almost level and very gently rolling.

The soil is mainly sand and gravel interspersed with gall. The whole of the distance through range 6 W is embraced in the Great American Desert.

Alonzo J. Stokes
U.S. Dep. Surveyor

FINAL OATHS OF DEPUTY SURVEYOR AND HIS ASSISTANTS.

LIST OF NAMES.

A list of the names of the individuals employed by Alonzo J. Stookey, 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 East Bdy Tps 6, 7 & 8 S. R 17 W. Salt Lake Base & Meridian, showing the respective capacities in which they acted:

Hyrum Millward, Chainman.
Robt. D. Halladay, Chainman.
Orson A. Johnson, Moundman.
Lionel J. Stookey, Moundman.
, Axman.
, Axman.
Lincoln A. Stookey, Flagman.

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted Alonzo J. Stookey, United States Deputy Surveyor, in surveying all those parts or portions of the East Bdy of Tps 6, 7 & 8 S. R 17 W. of the Salt Lake Base & meridian, State of Utah, which are represented in the foregoing field notes as having been surveyed by him and under his direction; and that said survey has been in all respects, to the best of our knowledge and belief, well and faithfully surveyed, and the corner monuments established, according to the instructions furnished by the United States Surveyor General for Utah

Hyrum Millward, Chainman.
Robert D. Halladay, Chainman.
Orson A. Johnson, Moundman.
Lionel J. Stookey, Moundman.
, Axman.
, Axman.
Lincoln A. Stookey, Flagman.

Subscribed and sworn to before me this 9th day of July 1903, ~~189~~

SEAL

Alonzo J. Stookey
U.S. Dep. Surveyor

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FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I, Alonzo J. Stookey, United States Deputy Surveyor, solemnly swear that, in pursuance of a contract received from Edward H. Anderson United States Surveyor General for Utah, bearing date of 6th day of May 1902, 189 , I have well, faithfully, and truly, in my proper person, and in strict conformity with the instructions furnished by the United States Surv General for Utah, the Manual of Surveying Instructions, and the laws of United States, surveyed all those parts or portions of East Boundary Tps 6, 7 & 8 S. R. 17 W.

of the Salt Lake Second meridian, in the State of Utah, which are represented in foregoing field notes as having been surveyed by me, and under my direction; and I do further sole swear that all the corners of said survey have been established and perpetuated in strict accordance the Manual of Surveying Instructions, and the special written instructions of the United States Su General for Utah and in the specific manner described in the field notes, and the foregoing are the original field notes of such survey; and should any fraud be detected, I will s the penalty of perjury under the provisions of an Act of Congress approved August 8, 1846.

Alonzo J. Stookey
United States Deputy Su

Subscribed by said Alonzo J. Stookey, and sworn to before me this 17th day of September 1903

Edward H. Anderson
U. S. Surveyor General
Utah

SEAL

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah, November 30 1903.

The foregoing field notes of the survey of The East Boundary of Towns 6, 7 & 8 South Range 17 West of the Salt Lake Base & Meridian, Utah

executed by Alonzo J. Stookey under his contract No. 252, dated May 6, 1902, 189 , having critically examined, and the necessary corrections and explanations made, the said field notes, and surveys they describe, are hereby approved.

Edward H. Anderson
United States Surveyor Ge

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

United States Surveyor Ge

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BOOK A-298

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FIELD NOTES

OF THE SURVEY OF THE

First Standard Parallel South

Through

Ranges 17 & 18 West

of the Salt Lake Base and Meridian,

State of Utah,

AS SURVEYED BY

Alonzo Southerland, United States Deputy Surveyor,

Under his Contract No. [illegible], dated Sep 6, 190[illegible], 189

Survey commenced June 30, 1903, 189

Survey completed July 1, 1903, 189

	Length	Gain
Through 16 W		37.85'
" 17 "		6 00.00'
" 18 "	5 60.30'	19.70'
	5 60.30	6 71.52'

BOOK A 298

NAMES AND DUTIES OF ASSISTANTS.

Hyman Millward	Boatman
Robt. D. Halliday	"
Orson A. Johnson	"
Lionel J. Stokes	"
Orson A. Johnson	Mounted man
Lionel J. Stokes	"
Lincoln A. Stokes	Flagman

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BOOK A-298

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PRELIMINARY OATHS OF ASSISTANTS.

We, Hyrum Millward, Robt. D. Halladay, Orson A. Johnson & Lionel J. Stookey do solemnly swear that we will well and faithfully execute the duties of chainmen; that we will lev chain over even and uneven ground, and plumb the tally pins, either by sticking or dropping the same we will report the true distances to all notable objects, and the true lengths of all lines that we measuring, to the best of our skill and ability, and in accordance with instructions given us, in the su First Standard Parallel S. Through Rs 17 & 18 W. S. Salt Lake Base and Meridian.

Orson A. Johnson
Lionel J. Stookey

Hyrum Millward, Chai
Robert D. Halladay, Chai

Subscribed and sworn to before me this 28 day of June 1903, ~~189~~

SEAL

Alonzo J. Stookey
U.S. Dep. Surveyor

We, Orson A. Johnson and Lionel J. Stookey do solemnly swear that we will well and truly perform the duties of moundmen in the establis of corners, according to the instructions given us, to the best of our skill and ability, in the su First Standard Parallel S. through Rs 17 & 18 W. S. Salt Lake Base & Meridian.

Orson A. Johnson, Mou
Lionel J. Stookey, Moun

Subscribed and sworn to before me this 28 day of June 1903, 189

SEAL

Alonzo J. Stookey
U.S. Dep. Surveyor

We, ... and
do solemnly swear that we will well and truly perform the duties of axmen in the establishment of and other duties, according to instructions given us, to the best of our skill and ability, in the su

..... A
..... A

Subscribed and sworn to before me this ..... day of ....., 189

SEAL

I, Lincoln A. Stookey, do solemnly swear that I will well and perform the duties of flagman according to instructions given me, to the best of my skill and ability, survey of First Standard Parallel S. through Rs 17 & 18

Lincoln A. Stookey, Fla

Subscribed and sworn to before me this 28 day of June 1903, 189

SEAL

Alonzo J. Stookey
U.S. Dep. Surveyor

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First Standard Parallel S. through R. 16 W.

Survey commenced June 30, 1903 for description of tract etc. see Book A
At the closing cor. of T. 6 & R. 16 & 17
I as established by myself and heretofore described & observe Polaris at 1h 00m a.m. l.m.t. at eastern elongation in accordance with the Manual of Instructions and mark the line thus determined by driving a tack into a wooden plug 5.00 chs W. of my station.
June 30. at 7. a.m. I lay off the azimuth of Polaris 1°35' to the westward mark the true meridian thus determined by driving a tack into a wooden plug firmly set in the ground west of the point established last night.
The magnetic bearing of the true meridian is N. 17°16' W. which reduced by the tables on page 100 of the Manual gives the mean magnetic declination 17°11' E.
From the true meridian I lay off an angle of 90° to the N. and run W. on tangent to sec. 31. T. 5 S. R. 16 W.
Over level desert.
Difference bet. measurements of 51.83 chs by two sets of chainmen is 14 lks.
Position of middle point
By 1st set 51.85 chs
By 2nd set 51.81 chs. the mean of which is
51.83 N. 0.21 ft from tangent
Set a granite stone 15x8x8 ins. 10 ins. in the ground for standard cor. of T. 5 S. R. 16 & 17 W. marked S.C.
T. 5 S. on S.
16 W. on E. and
17 W. on W. faces with 6 grooves on N. E. & W. faces dig pits 30x24x12

First Standard Parallel S. Through R. 17 W.

ins. crosswise on each line E. & W.
4 ft. and N. of stone 8 ft. dist. and
raise a mound of earth 5 ft. base
3½ ft. high N. of cor.
Land level desert
Soil saline 2" rate
No vegetation.

From the standard cor. of T. 5 S. R. 16 & 17
W. just described
Thence Run
W. on tangent S. of sec. 36. T. 5 S. R. 17 W.
Over level desert
Difference bet. measurements of 40.00 chs.
by two sets of chainmen is 6 lks
Position of middle point
By 1" set 39.97 chs.
By 2" set 40.03 chs. the mean of which is
40.00 N. 0.14 ft from tangent
Set a quartzite stone 12 x 7 x 6 ins
8 ins. in the ground for standard
1/4 sec. cor. marked S. C. 1/4 on N. face
dig pits 18 x 18 x 12 ins E. & W. of
stone 3 ft. dist and raise a mound
of earth 3½ ft. base 1½ ft. high
N. of cor.
Difference bet. measurements of 80.00
chs. by two sets of chainmen is 8 lks
position of middle point
By 1" set 79.96 chs.
By 2" set 80.04 chs. the mean of which is
80.00 N. 0.57 ft. from tangent
Set a granite stone 15 x 8 x 8 ins
10 ins. in the ground for standard
cor. of secs. 35 & 36. marked S. C. on
N. with 1 groove on E. & 5 grooves on
W. faces. dig pits 24 x 18 x 12 ins.
crosswise on each line E. & W. 3 ft
and N. of stone 7 ft dist and
raise a mound of earth 4 ft
base 2 ft. high N. of cor

Land level desert
Soil saline 2" rate
No vegetation

S.89°59' W. on tangent S. of sec. 35
Over level desert
Difference bet. measurements of
40.06 chs. by two sets of chainmen is 8 lks.
position of middle point
By 1" set 40.04 chs.
By 2" set 39.96 chs. the mean of which is
40.00 N. 1.37 ft. from tangent
Set a granite stone 15x6x6 ins.
10 ins in the ground for
standard 1/4 sec. cor. marked
S.C. 1/4 on N. face; dig pits
18x18x12 ins. E. & W. of stone 3 ft.
dist. and raise a mound of
earth 3½ ft. base 1½ ft. high
N. of cor.
Difference bet. measurements of 80.00 chs
by two sets of chainmen is 10 lks.
position of middle point
By 1" set 80.05 chs
By 2" set 79.95 chs. the mean of which is
80.00 N. 2.37 ft. from tangent
Set a granite stone 15x8x7 ins. 10
ins in the ground for standard
cor. of secs 34 & 35. marked S.C. on
N. with 0 grooves on E. & 4 grooves on
W. faces; dig pits 24x18x12 ins.
crosswise on each line E. & W. 3 ft.
and N. of stone 7 ft. dist. and raise a
mound of earth 4 ft. base 2 ft.
high N. of cor.
Land level desert
Soil saline, 2" rate
No vegetation

S.89°58' W. on tangent S. of sec. 34
Over level desert

Difference bt. measurements of 40.00 chs
by two sets of chainmen is 2 lks.
Position of middle point:
By 1" set 40.01 chs.
By 2" set 39.99 chs. the mean of which is
40.00 N. 3.54 ft. from tangent.
Set a granite stone 12X8X6 ins. 8
ins. in the ground for standard
1/4 sec. cor. marked S.C. 1/4 on N. face
dig pits 18X18X12 ins. E. & W. of
stone 3 ft. dist. and raise a mound
of earth 3 ft. base 1½ ft. high N. of cor.
Difference bt. measurements of 80.00 chs
by two sets of chainmen 4 lks.
Position of middle point
By 1" set 80.02 chs.
By 2" set 79.98 chs. the mean of which is
80.00 N. 5.09 ft. from tangent
Set a granite stone 15X8X8 ins. 10
ins. in the ground for standard
cor. of secs. 33 & 34 marked S.C. on
N. with 3 grooves on E. & W. faces;
dig pits 24X18X12 ins. crosswise
on each line, E. & W. 3 ft.
and N. of stone 7 ft. and raise a
mound of earth 4 ft. base 2 ft.
high N. of cor.
Land level desert
Soil saline. 2" rate
No vegetation

S. 87°57' W. on tangent S. of sec. 33.
Over level desert
Difference of measurements of 40.00
chs. by two sets of chainmen 4 lks.
Position of middle point
By 1" set 39.98 chs.
By 2" set 40.02 chs. the mean of which is
40.00 N. 6.93 ft. from tangent
Set a granite stone 15X6X6 ins.
10 ins. in the ground for standard

1/4 sec. cor. marked S.C. 1/4 on N. face;
dig pits 18 X 18 X 12 ins E & W of stone
3 ft. dist. and raise a mound of
earth 3 1/2 ft. base 1 1/2 ft. high N. of cor.
Difference bet. measurements of 80.00
chs. by two sets of chainmen is 8 lks.
position of middle point
By 1" set 79.96 chs
By 2" set 80.04 chs. the mean of which is
80.00 N. 9.06 ft. from tangent.
Set a granite stone 15 X 8 X 6 ins. 10
ins. in the ground for standard
cor. of secs. 32 & 33. marked S. C. on N.
with 4 grooves on E. & 2 grooves on
W. faces; dig pits 24 X 18 X 12 ins.
crosswise on each line, E & W.
3 ft. and N. of stone 7 ft. dist. and
raise a mound of earth 4 ft
base 2 ft. high N. of cor.
Land level desert
Soil saline, 2" rate
No vegetation.

S. 87°56' W. on tangent S. of sec 32.
Over level desert.
Difference bet. measurements of
40.00 chs. by two sets of chainmen 3 lks.
position of middle point.
By 1" set 40.01 chs
By 2" set 39.99 chs. the mean of which is
40.00 N. 11.46 ft. from tangent
Set a quartzite stone 15 X 6 X 6 ins. 10
ins in the ground for standard
1/4 sec. cor. marked S.C. 1/4 on N. face
dig pits 18 X 18 X 12 ins E & W. of stone
3 ft. dist. raise a mound of earth
3 1/2 ft. base 1 1/2 ft. high N. of cor.
Difference bet measurements of 80.00
chs. by two sets of chainmen 6 lks.
position of middle point
By 1" set 80.03 chs.

First Standard Parallel S. through R 17 W.

	By 2" set 79.97 chs. the mean of which is
80.00	N. 14.15 ft. from tangent
	Set a granite stone 15 X 8 X 6 ins. 10 ins.
	in the ground for standard
	cor. of sec. 31 & 32. marked S.C. on N. with
	5 grooves on the E & 1 groove on the
	W. faces; dig pits 24 X 18 X 13 ins crossing
	on each line E & W. 3 ft. and N. of
	stone 7 ft. dist. and raise a
	mound of earth 4 ft base 2 ft
	high N. of cor.
	Land level desert
	Soil, saline 2" rate
	No vegetation.
	S. 87° 56' W. on tangent S. of sec. 31.
	Open level desert.
	Difference bt. measurements of 40.00
	chs. by two sets of chainmen 6 lks.
	position of middle point
	By 1" set 39.94 chs
	By 2" set 40.03 chs. the mean of which is
40.00	N. 17.11 ft. from tangent
	Set a granite stone 12 X 7 X 6 ins. 8
	ins in the ground for standard
	1/4 sec. cor. marked S.C. 4 on N.
	face; dig pits 18 X 18 X 13 ins. E & W. of
	stone 3 ft. dist. and raise a mound
	of earth 3 1/2 ft base 1 1/2 ft. high N. of
	cor.
	Difference bt. measurements of 80.00
	chs. by two sets of chainmen 10 lks.
	position of middle point
	By 1" set 79.95 chs
	By 2" set 80.05 chs. the mean of which is
80.00	N. 20.36 ft. from tangent
	Set a granite stone 18 X 6 X 6 ins
	12 ins. in the ground for
	standard cor. of S. 5 & R. 17 & 18
	W. marked S.C. 5 S. on N.
	17 W. on E and

18 ft. on ft. faces; with 6 grooves on
N. E. & W. faces: dig pits 30×24×12
ins. otherwise in each line
E & W. 4 ft. & N. of stone 8 ft. dist.
and raise a mound of earth
5 ft. base 2½ ft. high N. of cov.
Same treatment
Soil saline 2" rain
No regulation.

June 30. 1903.

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PAGE

Survey commenced July 1. 1903. for description of transit etc. see Book A.
At the standard cor. of T. 5 S. R. 17 & 18 W. as established by myself and heretofore described. I observe Polaris at 0h 56m a.m. l.m.t. at eastern elongation in accordance with the Manual of Instructions and mark the line thus determined by a tack driven in a wooden plug 5.00 chs. N. of my station.
July 1. at 7 a.m. I lay off the Azimuth of Polaris 1°35' to the west and mark the true meridian thus determined by driving a tack into a wooden plug firmly set in the ground W. of the point established last night.
The magnetic bearing of the true meridian is N. 17°18' W. which reduced by the table on page 100 of the Manual gives the mean magnetic declination N. 17°12' E.
I lay off from the true meridian an angle of 90° to the west and run
West on the tangent S. of sec 36.
Over level desert.
19.70 Leave desert bear N. & S. and enter dense greasewood winding south.
Difference bet. measurements of 40.00 chs. by two sets of chainmen is 4 lks. position of middle point
By 1st set 40.02 chs
" 2nd set 39.98 chs. the mean of which is
40.00 N. 0.14 ft. from tangent
Set a limestone 12x8x6 ins. 8 ins. in the ground for standard 1/4 sec. cor. marked S.C. 1/4 on N. face, deg pits

First Standard Parallel South Through Range 18 W.

18x18x12 ins. E & W. of stone 3 ft. dist and raise a mound of earth 3½ ft base 1½ ft high N. of cor.
From the point the S.E. cor. of Earl John Bengtsons field bears N.2° E. 9.95 chs dist.
N.E. cor. of field bears N.25° E. about 25 chs dist.
House bears N. 73°15' W.
Difference bet. measurements of 80.00 chs. by two sets of chainmen, is 6 lks; position of middle point
By 1st set 80.03 chs
" 2nd set 79.97 chs, the mean of which is
80.00 N.0.57 ft from the tangent
Set a quartzite stone 12x10x6 ins 8 ins in the ground for standard cor. of secs 35 & 36 marked S.C. on N. with 1 groove on E & 5 grooves on W. faces, dig pits 24x16x12 ins. crosswise on each line E & W. 3 ft N. of stone 4 ft. dist. and raise a mound of earth 4 ft base 2 ft. high N. of cor.
Land almost level
Soil saline and sandy loam 1st & 2nd rate
No timber
Land covered with dense undergrowth
60.39 chs.
From this point Earl John Bengtsons house bears N.22° W. about 15 chs dist.
The S.W. cor. of his field bears N.37° W.

S.89°59' W. on tangent S. of sec. 35.
Over almost level land, through dense saquinaw and quasewood under-growth.
10.80 Road bears N.70° E & S.70° W.
14.40 Waterditch 4 ft. wide, drains N.70° E.
Difference bet. measurements of 40.09 chs by two sets of chainmen is 6 lks; position

of middle point
By 1" set 39.97 chs.
By 2" set 40.03 chs. the mean of which is
40.00 N. 1.27" ft. from tangent.
Set a quartzite stone 12X8X6 ins 8
ins. in the ground for standard
1/4 sec. cor. marked S.C. 1/4 on N. face
dig pits 18X18X12 ins E & W. of stone
3 ft. dist and raise a mound of
earth 3 1/2 ft. base 1 1/2 ft. high N
of cor.
Difference bet. measurements of 80.00
chs. by two sets of chainmen is 8 lks.
position of middle point
By 1" set 80.04 chs
By 2" set 79.96 chs.; the mean of which is
80.00 N. 2.27" ft from tangent
Set a limestone 18X6X5 ins. 18 ins
in the ground for standard cor
of secs. 34 & 35, marked S.C. on N.
with 2 grooves on E & 4 grooves on
W. face. dig pits 24X18X12 ins cross
wise on each line E. & W. 3 ft N
of stone 7 ft. dist and raise a mound
of earth 4 ft. base 2 ft. high N. of cor.
Land almost level
Soil sandy loam. 1st rate
No timber
Land covered with dense under-
growth 80.00 chs.

S. 87° 58 1/2' on tangent S. of sec. 34
Over almost level land through
dense sagebrush, greasewood and
shadscale undergrowth.
Difference in measurements
of 40.00 chs. by two sets of chainmen
is 4 lks. Position of middle point
40.00 N. 3.54 ft. from tangent
Set a quartzite stone 15X6X5 ins
10 ins in the ground for standard

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First Standard Parallel S. Through R 18 W.

Difference of measurements of two sets of chainmen is 4 lks; position of middle point. 80.00 chs
Pg 1" set 80.02 chs
Pg 2" set 79.98 chs the mean of which is
80.00 N 9.06 ft. from tangent
Set a quartzite stone 18X7X5 ins. 12 ins in the ground for standard cor. of sec. 32 & 33. marked S.C. on N. with 4 grooves on E & 2 grooves on W. faces; dig pits 24X18X18 ins excavating each line E. & W. 3 ft. and N. & S. 1 ft. deep and raise a mound of earth 4 ft base 2 ft. high N. of cor.
Sandstone bed rock
Soil, sand & gravel 2 ft.
Not timbered
Sand covered with dense undergrowth 80.00 chs.

S. 89° 56' W. on tangent S. of sec 32.
Over slightly rolling ground through dense undergrowth and shadscale, smaller growth.
Difference of measurements of 40.00 chs. by two sets of chainmen is 4 lks position of middle point
Pg 1" set 39.98 chs.
Pg 2" set 40.02 chs. the mean of which is
40.00 N 11.46 ft. from tangent
Set a quartzite stone 15X6X5 ins 10 ins in the ground for standard 1/4 sec. cor. marked S.C. 1/4 on N. face; dig pits 18X18X12 ins E. & W. of stone 30 ft. deep and raise a mound of earth 3 1/2 ft base 1 1/2 ft high N. of cor.
Difference in measurements of 80.00
50.57 Sally Shurp and Isaac Wright
chs. by two sets of chainmen 6 lks
position of middle point

First Standard Parallel S. R 18 W

By 1" set 80.03 chs
By 2" set 79.97 chs. the mean of which is
80.00 N 14.15 ft. from tangent
Set a quartzite stone 15 X 8 X 5 ins. 10 ins.
in the ground for standard cor. of
secs 31 & 32. marked S.C. on N. with 5
grooves on E. and 1 groove on W. faces
dig pits 24 X 18 X 18 ins crosswise on
each line E & W. 3 ft. N of stone 7 ft.
dist. and raise a mound of earth
4 ft. base 2 ft high N. of cor.
Land gently rolling
Soil sandy 2" rate
No timber
Land covered with dense under-
growth 80.00 chs.

S. 89° 56' W. on tangent S. of sec 31.
Over slightly rolling land. though
dense greasewood and shadscale
undergrowth.
Difference of measurements of 40.00 chs
by two sets of chainmen 6 lks;
position of middle point.
By 1" set 40.03 chs.
By 2" set 39.97 chs. the mean of which is
40.00 N. 17.11 ft from tangent
Set a quartzite stone 15 X 8 X 5 ins. 10 ins.
in the ground for standard 1/4 sec
cor, marked S.C. 1/4 on N. face; dig
pits 18 X 18 X 18 ins E & W. of stone 3 ft
dist. and raise a mound of earth
3 1/2 ft. base 1 1/2 ft. high N. of cor.
Difference in measurements
of 80.00 chs by two sets of chainmen
is 8 lks.; position of middle point
By 1" set 80.04 chs
By 2" set 79.96 chs. the mean of which is
80.00 N. 20.36 ft from tangent
Set a limestone 18 X 6 X 6 ins 12 ins.
in the ground for standard cor

First Standard Parallel S. Through R. 18 W.

S. T. 5 S. Rs. 18 & 19 W. marked
S. C. 5 Non W.
18 W. on E. and
19 W. on W. faces; dig pits 30 x 24 x 12
ins. crosswise on each line E. & W.
4 ft. W. of stone 8 ft. and raise a
mound of earth 5 ft. base 2½ ft.
high N. of cor.
Land slightly rolling
Soil sandy "B" rate
No timber.
Land covered with dense
undergrowth 80.00 chs.

July 1, 1903.

General Description

Through range 17 this line runs the entire distance over the Great American Desert which is a level waste, in most places entirely destitute of vegetation, not for lack of moisture for it is often so wet as to render travel across it almost impossible, but its desert character is due to the great amount of salt, alkali, and other minerals with which the soil is impregnated.

Through range 18 the land is almost level, or very gently rolling, having a northeasterly trend. It is covered with a more or less dense growth of sagebrush, shadscale and greasewood undergrowth.

Alonzo J. Stookey
U. S. Dep. Surveyor

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FINAL OATHS OF DEPUTY SURVEYOR AND HIS ASSISTANTS.

LIST OF NAMES.

A list of the names of the individuals employed by Alonzo J. Stookey, 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 First Standard Parallel S. through Rs. 17 & 18 W. Salt Lake Base and Meridian.

Showing the respective capacities in which they acted:

Hyrum Millward, Robt. D. Halladay, Chainman.
Orson A. Johnson, Lionel J. Stookey, Chainman.
Orson A. Johnson, Moundman.
Lionel J. Stookey, Moundman.
, Axman.
, Axman.
Lincoln A. Stookey, Flagman.

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted Alonzo J. Stookey, United States Deputy Surveyor, in surveying all those parts or portions of the First Standard Parallel S. through Rs. 17 & 18 W. of the Salt Lake Base meridian, State of Utah, which are represented in the foregoing field notes as having been surveyed by him and under his direction; and that said survey has been in all respects, to the best of our knowledge and belief, well and faithfully surveyed, and the corner monuments established, according to the instructions furnished by the United States Surveyor General for Utah.

Hyrum Millward, Chainman.
Robert D. Halladay, Chainman.
Orson A. Johnson, Moundman.
Lionel J. Stookey, Moundman.
, Axman.
, Axman.
Lincoln A. Stookey, Flagman.

Subscribed and sworn to before me this 9th day of July 1905, 189

Alonzo J. Stookey
U. S. Dep. Surveyor.

SEAL

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FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I, Alonzo J. Stookey, United States Deputy Surveyor, do solemnly swear that, in pursuance of a contract received from Edward H. Anderson United States Surveyor General for Utah, bearing date of the 1st day of May 1902 ~~189~~, 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 Utah, the Manual of Surveying Instructions, and the laws of the United States, surveyed all those parts or portions of the First Standard Parallel Through Ranges 17 & 18 West

of the Salt Lake Base and Meridian, in the State of Utah, which are represented in the foregoing field notes as having been surveyed by me, and under my direction; and I do further solemnly swear that all the corners of said survey have been established and perpetuated in strict accordance with the Manual of Surveying Instructions, and the special written instructions of the United States Surveyor General for Utah and in the specific manner described in the field notes, and that the foregoing are the original field notes of such survey; and should any fraud be detected, I will suffer the penalty of perjury under the provisions of an Act of Congress approved August 8, 1846.

Alonzo J. Stookey
United States Deputy Surveyor

Subscribed by said Alonzo J. Stookey, and sworn to before me this 17th day of September 1903

Edward H. Anderson
U. S. Surveyor General for Utah.

SEAL

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah, December 30 1903 189

The foregoing field notes of the survey of the First Standard Parallel North through Ranges 17 & 18 West of the Salt Lake Base and Meridian, Utah

executed by Alonzo J. Stookey under his contract No. 52, dated May 1 1902 189, having been critically examined, and the necessary corrections and explanations made, the said field notes, and the survey they describe, are hereby approved.

Edward H. Anderson
United States Surveyor General

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

United States Surveyor General

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BOOK A-298

FILED

SEP 16 1903

FIELD NOTES

OF THE SURVEY OF THE

West, east & North Boundary of Township 5 south

of

Range 18 West

Of the Salt Lake *Base and Meridian,*

State of Utah

AS SURVEYED BY

Alonzo J. Stockey, *United States Deputy Surveyor,*

Under his Contract No. 252, *dated* May 6, 1903, *189*

Survey commenced July 2, 1903, *189*

Survey completed July 3, 1903, *189*

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	bearing	chains
West Bdy	3.64.00'	2-16-00'
East "		6-00-00'
North "		5-79-34'

BOOK A-298

NAMES AND DUTIES OF ASSISTANTS.

Hyram Millward	Rhaumman
Robt D. Halladay	"
Orson A. Johnson	Mounduman
Lionel J. Stookey	"
Lincoln A. Stookey	Flagman

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BOOK A-298

INDEX DIAGRAM.

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Meanders Page.....

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PRELIMINARY OATHS OF ASSISTANTS.

WE, Hyrum Millward and Robt. N. Halladay do solemnly swear that we will well and faithfully execute the duties of chainmen; that we will level the chain over even and uneven ground, and plumb the tally pins, either by sticking or dropping the same; that we will report the true distances to all notable objects, and the true lengths 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 West, East and North Boundary T. 5 S. R. 18 W. Salt Lake Base & Meridian

Hyrum Millward, Chainman

Robert N. Halladay, Chainman.

Subscribed and sworn to before me this 28 day of June 1903, 189

SEAL

Alonzo J. Stookey
U.S. Dep. Surveyor

WE, Orson A. Johnson and Lionel J. Stookey do solemnly swear that we will well and truly perform the duties of moundmen in the establishment of corners, according to the instructions given us, to the best of our skill and ability, in the survey of West, East & North Boundary T. 5 S. R. 18 W. Salt Lake Base and Meridian

Orson A. Johnson, Moundman

Lionel J. Stookey, Moundman

Subscribed and sworn to before me this 28 day of June 1903, 189

SEAL

Alonzo J. Stookey
U.S. Dep. Surveyor

WE, ... and .....
do solemnly swear that we will well and truly perform the duties of axmen in the establishment of corners and other duties, according to instructions given us, to the best of our skill and ability, in the survey of .....

....., Axman.

....., Axman.

Subscribed and sworn to before me this ..... day of ....., 189

SEAL

I, Lincoln A. Stookey, 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 survey of N. S. & N. Bdy. T. 5 S. R. 18 W. Salt Lake Base and Meridian

Lincoln A. Stookey, Flagman.

Subscribed and sworn to before me this 28 day of June 1903, 189

SEAL

Alonzo J. Stookey
U.S. Dep. Surveyor

6—151

Mont Bdy. T5S R18W.

Survey commenced July 2 1903 for description of transit etc. see Book C.

At the standard cor. of Tps 5 S Rgs 18 and 19 W. as established by myself and heretofore described I observe Polaris at 9h 52m a. m. & mark at eastern elongation in accordance with the Manual of Instructions and mark the line thus determined by a tack driven in a wooden plug 5.00 chs. N. of my station.

July 3 at 7 a.m. I lay off the azimuth of Polaris 1°35' to the west and mark the true meridian thus determined by driving a tack into a wooden plug firmly set in the ground west of the point established last night.

The magnetic bearing of the true meridian is N 17°17' W. which reduced by the table on page 100 of the Manual gives the mean magnetic declination 17°11' E.

I begin at the standard cor. of Tps 5 S. Rs 18 and 19 W. heretofore described

Thence run

N. on true line bet. secs 31 & 36.

Over slightly rolling bench land through dense shadscale and greasewood undergrowth.

40.00 Set a quartzite stone 15 x 6 x 6 ins. 10 ins. in the ground for 1/4 sec. cor. marked 1/4 on W. face, dig pits 18 x 18 x 12 ins. N. & S. of stone 3 ft. dept. and raise a mound of earth 3½ ft. base 1½ ft. high N. of cor.

80.00 Set a limestone 18 x 7 x 5 ins. 12 ins. in the ground for cor. of secs 25. 30. 31 & 36. marked 1 notch on S. and 5 notches on N. edges, dig pits.

18x18x12 ins. in each section 5½ ft dist and raise a mound of earth 4 ft. base 2 ft high W. of cor.
Land almost level
Soil sand and gravel 2" rate
No timber
Land covered with dense undergrowth
80.00 chs.

N. on true line bet. secs. 25 & 30.
Over almost level land, through dense shadscale & greasewood undergrowth.
11.60 Salt Spring road, bears N. 50° W. & S. 50° E.
40.00 Set a quartzite stone 15x6x6 ins 10 ins. in the ground for ¼ sec. cor. marked ¼ on W. face; dig pits 18x18x12 ins. N. & S. of stone 3 ft. dist. & raise a mound of earth 3½ ft. base 1½ ft. high W. of cor.
80.00 Set a quartzite stone 18x6x5 ins. 12 ins. in the ground for cor. of secs. 19, 24, 25 & 30. marked 2 notches on S. & 4 notches on N. edges; dig pits 18x18x12 ins. in each sec. 5½ ft dist. and raise a mound of earth 4 ft. base 2 ft high W. of cor.
Land almost level.
Soil sand and gravel, 2" rate
No timber
Land covered with dense undergrowth
80.00 chs.

N. on true line bet. secs 19 & 24
Over almost level land, through dense shadscale and greasewood undergrowth
40.00 Set a quartzite stone 15x6x6 ins 10 ins. in the ground for ¼ sec. cor. marked ¼ on W. face; dig

West Bdy. T. 5 S. R. 18 W.

pits 18×18×12 ins. N. & S. of stone 3 ft dist. raise a mound of earth 3½ ft base 1½ ft. high N. of cor.
80.00 Set a quartzite stone 18×6×6 ins. 12 ins. in the ground for cor. of secs. 13, 18, 19 & 24. Marked 3 notches on N. & S. edges; dig pits 18×18×12 ins in each sec 5½ ft. dist. raise a mound of earth 4 ft. base 2 ft. high N. of cor.
Land almost level
Soil sand and gravel 2d rate
No timber
Land covered with dense undergrowth
80.00 chs.

N. on town line bet. secs. 13 & 18.
Over almost level land, though dense shadscale and greasewood undergrowth.
40.00 Set a quartzite stone 18×6×6 ins. 10 ins in the ground for 1/4 sec. cor. marked 1/4 on W. face; dig pits 18×18×12 ins. N. & S. of stone 3 ft. dist and raise a mound of earth 3½ ft base 1½ ft. high N. of cor.
64.00 Leave dense undergrowth bears E. & W. under salt weed flat.
80.00 Set a quartzite stone 18×6×6 ins 12 ins. in the ground for cor. to secs. 12, 13 & 18, marked 2 notches on N. and 2 notches on S. edges; dig pits 18×18×12 ins. in each sec. 5½ ft. dist. and raise a mound of earth 4 ft base 2 ft high N. of cor.
Land gently rolling & level
Soil, sand gravel & saline, 3d rate
No timber
Land covered with dense under-growth 64.00 chs.

N. on time line bet. secs 7 & 12.
Over level land

West Bdy. T5S R18W.

40.00 Set a quartzite stone 15X6X6 ins 10 ins in the ground for 1/4 sec. cor. marked 1/4 on W. face: dig pits 18X18X12 ins. N. & S. of stone 3 ft. dist. & raise a mound of earth 3½ ft base 1½ ft. high W. of cor.

80.00 Set a quartzite stone 18X6X6 ins 12 ins in the ground for cor of secs 1. 6. 7 & 12 marked 1 notche on N. 5 notches on S. edges; dig pits 18X18X12 ins in each sec. 5½ ft. dist. and raise a mound of earth 4 ft. base 2 ft high W. of cor.
Land level.
Soil saline, 2" rate
No timber

Run true line bet secs 1 & 6.
Over level land.

40.00 Set a quartzite stone 15X6X4 ins 10 ins. in the ground for 1/4 sec. cor. marked 1/4 on W. face: dig pits 18X18X12 ins N. & S. of stone 3 ft. dist. and raise a mound of earth 3½ ft base 1½ ft high W. of cor.

54.00 Leave saltwood & all other vegetation bears E. & W. enter desert.

80.00 Set a limestone 18X6X6 ins 12 ins in the ground for cor of Secs 4 & 5 S. Rgs 18 & 19 W. marked 4 S. on N.E., 18 W. on S.E., 5 S. on S.W. and 19 W. on N.W. face with 6 notches on each edge: dig pits 24X24X12 ins on each line N. & W. 4 ft. & S. of stone 8 ft. dist. and raise a mound of earth 5 ft. base 2½ ft. high S. of cor.
Land level desert
Soil saline 2" rate
No timber.

July 2. 1903.

East Bdy. T5S R18W.

I begin at the standard cor. of Tp 5 S Rs 17 & 18 W. as established by myself & heretofore described, in approximate latitude 40°19'59" N. longitude 113°49'42" W.

Thence Run

N. on true line bet secs. 31 & 36.

Over level desert

40.00 Set a granite stone 12 X 8 X 6 ins 8 ins. in the ground for 1/4 sec. cor. marked 1/4 on W. face; dig pits 18 X 18 X 12 ins. N. & S. of stone 3 ft. dist. and raise a mound of earth 3½ ft. base 1½ ft. high W. of cor.

80.00 Set a granite stone 15 X 8 X 7 ins 10 ins. in the ground for cor. of secs 25. 30. 31 & 36 marked 5 notches on N. & 1 notch on S. edge; dig pits 18 X 18 X 12 ins. in each sec. 5½ ft. dist. and raise a mound of earth 4 ft base 2 ft high W. of cor.

Sand. level desert

Soil, saline, 2" rate

No timber

N. on true line bet secs 25 & 30

Over level desert

40.00 Set a granite stone 12 X 8 X 6 ins 8 ins. in the ground for 1/4 sec. cor. marked 1/4 on W. face; dig pits 18 X 18 X 12 ins. N. & S. of stone 3 ft. dist. & raise a mound of earth 3½ ft base 1½ ft high W. of cor.

80.00 Set a granite stone 12 X 8 X 7 ins. 8 ins. in the ground for cor. of secs. 19. 24. 25 & 30 marked with 4 notches on N. & 2 notches on S. edge; dig pits 18 X 18 X 12 ins. in each sec. 5½ ft. dist. and raise a mound of earth 4 ft. base 2 ft high W. of cor.

Sand. level desert

Soil saline, 2" rate

No timber

N. on true line bet. secs. 19 & 24.
Over level desert.

40.00 Set a granite stone 12 x 7 x 6 ins. 8 ins. in the ground for 1/4 sec. cor. marked 1/4 on W. face; dig pits 18 x 18 x 12 ins. N. & S. of stone 3 ft. dist. and raise a mound of earth 3½ ft. base 1½ ft. high W. of cor.

80.00 Set a granite stone 15 x 7 x 6 ins. 10 ins. in the ground for cor. of secs. 13, 18, 19 & 24, marked 3 notches on N. & S. edges, dig pits 18 x 18 x 12 ins. in each sec. 5½ ft. dist. and raise a mound of earth 4 ft. base 2 ft. high W. of cor.

Land, level desert.
Soil saline 2nd rate.
No timber.

N. on true line bet. secs. 13 & 18.
Over level desert.

40.00 Set a conglomerate stone 15 x 6 x 6 ins. 10 ins. in the ground for 1/4 sec. cor. marked 1/4 on W. face; dig pits 18 x 18 x 12 ins. N. & S. of stone 3 ft. dist. & raised a mound of earth 3½ ft. base 1½ ft. high W. of cor.

80.00 Set a conglomerate stone 15 x 7 x 7 ins. 10 ins. in the ground for cor. of secs. 7, 12, 13 & 18, marked with 2 notches on N. & 4 notches on S. edges; dig pits 18 x 18 x 12 ins. in each sec. 5½ ft. dist. and raise a mound of earth 4 ft. base 2 ft. high W. of cor.

Land, level desert.
Soil saline, 2nd rate.
No timber.

N. on true line bet. secs. 7 & 12.
Over level desert.

East Bdy. T5S R18W.

40.00 Set a granite stone 15X6X6 ins 10 ins. in the ground for 1/4 sec. cor. marked 1/4 on W. face; dig pits 18X18X12 ins N. & S. of stone 3 ft dist. and raise a mound of earth 3½ ft. base 1½ ft. high W. of cor.

80.00 Set a granite stone 15X7X6 ins. 10 ins in the ground for cor. of secs. 1, 6, 7 & 12 marked 5 notch on W. and 1 notches on S. edges; dig pits 18X18X12 ins in each sec. 5½ ft. dist. and raise a mound of earth 4 ft. base 2 ft. high W. of cor.

Land level desert
Soil saline. 2" rate
No timber.

N. on true line bet. secs 1 & 6.
Over level desert.

40.00 Set quartzite stone 15X6X6 ins. 10 ins in the ground for 1/4 sec. cor marked 1/4 on W. face; dig pits 18X18X12 ins. N. & S. of stone 3 ft. dist. and raise a mound of earth 3½ ft base 1½ ft high W. of cor.

80.00 Set a quartzite stone 18X8X6 ins 12 ins in the ground for cor of Tps 4 & 5 S. Rs 17 & 18 W. marked 4 S. on N. E.,
17 W. on S. E.
5 S. on S. W. and
18 W. on N. W. faces; with 6 notches on each edge; dig pits 24X24X12 ins on each line W. E. & N. 4 ft. and S. of stone 8 ft. and raise a mound of earth 5 ft base 2½ ft. high S. of cor.

Land level desert.

East Bdy T5S. R18E.

Soil saline 2" rate
No timber.

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PAGE

North Bdy T5S. R18W.

July 3, 1903 I began at the cor. of Tps. 4 & 5 S. Rs. 17 & 18 W. as established by myself and heretofore described. Thence I run
West on random line along N. bdy T5S R18W. setting temp. 1/4 sec. & sec. cors. at intervals of 40.00 chs. and at 47.9.34 chs intersect the range line 1.50 chs. S. of the cor. of Tps 4 & 5 S Rgs 18 & 19 W. as established by myself and heretofore described
The falling answers to a correction of 0°11", or 2.5 lks. N. per mile counting from the N. E. cor. of the Tp.; therefore I run
S. 89°49' E. bet secs. 6 & 31
Over level desert.
39.34 Set a quartzite stone 12 X 7 X 6 ins. 8 ins. in the ground for 1/4 sec. cor. marked 1/4 on N. face, dig pits 18 X 18 X 12 ins. E & W. of stone 3 ft dist. and raise a mound of earth 3 ft base 1½ ft. high N. of cor.
79.34 Set a limestone 15 X 7 X 6 ins. 10 ins in the ground for cor. of secs 5, 6, 31 & 32 marked with 5 notches on E. & 1 notch on N. edge; dig pits 18 X 18 X 12 ins in each sec. 5½ ft. dist. and raise a mound of earth 4 ft base 2 ft. high N. of cor.
Land level desert
Soil saline 2nd rate
No timber.

S. 89°49' E. bet. secs 5 & 32.
Over level desert.
40.00 Set quartzite stone 15 X 6 X 6 ins. 10 ins. in the ground for 1/4 sec. cor. marked 1/4 on N. face; dig pits 18 X 18 X 12 ins. E. & W. of stone 3 ft dist. and raise a mound of earth

North Bay T. 5 S R 18 W.

3½ ft. base 1½ ft. high W. of cor.
80.00 Set a limestone 15×10×6 ins. 10 ins in the ground for cor. of secs 4, 5, 32 & 33, marked 4 notches on S & 2 notches on W. edges; dig pits 18×18×12 ins. in each sec. 5½ ft. dist. and raise a mound of earth 4 ft base 2 ft high W. of cor
Land level desert
Soil saline, 2" rate
No timber

S. 89° 49' E. bet. secs. 4 & 33.
Over level desert.
40.00 Set a porphyry stone 15×10×6 ins. 10 ins. in the ground for 1/4 sec. cor. marked 1/4 on N. face. dig pits 18×18×12 ins. E & W. of stone 3 ft dist. and raise a mound of earth 3½ ft base 1½ ft high W. of cor.
80.00 Set a porphyry stone 15×8×8 ins 10 ins. in the ground for cor of secs. 3, 4, 33 & 34, marked 3 notches on E & W. edges; dig pits 18×18×12 ins. in each sec. 5½ ft. dist & raise a mound of earth 4 ft. base 2 ft high W. of cor.
Land level desert
Soil saline, 2" rate
No timber

S. 89° 49' E. bet. secs. 3 & 34
Over level desert.
40.00 Set a porphyry stone 12×10×6 ins. 8 ins. in the ground for 1/4 sec. cor. marked 1/4 on N. face; dig pits 18×18×12 ins E. & W. of stone 3 ft. dist. and raise a mound of earth 3½ ft. base 1½ ft high W. of cor.
80.00 Set a porphyry stone 15×10×6 ins 10 ins in the ground for cor. of secs 2, 3, 34 & 35 marked 2 notches on E. & 4 notches on W. edges; dig

North Bdy T. 5 S R. 18 W.

pits 18×18×12 ins in each sec. 5½ ft. dist. & raise a mound of earth 4 ft. base 2 ft. high N. of cor.
Land, level desert.
Soil, saline 2nd rate
No timber.

S. 89° 49' E. bet secs 2 & 35
Over level desert.
40.00 Set limestone 15×6×6 ins. 10 ins in the ground for 1/4 sec. cor. marked 1/4 on N. face; dig pits 18×18×12 ins. E & W. of stone 3 ft. dist. and raise a mound of earth 3½ ft. base 1½ ft. high N. of cor.
80.00 Set a porphyry stone 15×8×7 ins 10 ins in the ground for cor. of secs. 1, 2, 35 & 36. marked 1 notch on E & 5 notches on N. edge. dig pits 18×18×12 ins in each sec. 5½ ft. dist. and raise a mound of earth 4 ft. base 2 ft. high N. of cor.
Land, level desert
Soil, saline, 2nd rate
No timber

S. 89° 49' E. bet secs 1 & 36.
Over level desert.
40.00 Set a porphyry stone 12×8×6 ins 8 ins in the ground for 1/4 sec cor. marked 1/4 on N. face, dig pits 18×18×12 ins. E. & W. of stone 3 ft. dist. and raise a mound of earth 3½ ft. base 1½ ft. high N. of cor.
80.00 The cor. of Tps 4 & 5 S Rs 17 & 18 W.
Land level desert
Soil saline 2nd rate
No timber. July 3. 1903.

For General Description see notes on subdivisions T.5 S. R.18 W.

Alonzo J. Stokes
U.S. Dep. Surveyor

Boundaries of T.5 S. R.18 W.

Latitudes, Departures and Closing Errors.

Line Designated	Bearing	Dist.	Latitudes N.	Latitudes S.	Departures E.	Departures W.
		Chs	Chs	Chs	Chs	Chs
1st Std Par. S.	West	480.				480.00
N. bdy T.5 S R 18 W.	S 87° 47' E	479.34		1.50	479.34	
W. bdy T.5 S R 18 W.	North	480.	480.00			
E. bdy T.5 S R 18 W.	South	480		480.00		
Convergence					.62	
Totals			480.00	481.50	479.96	480.00
				480.00		479.96
Error in Lat				1.50	Error in Dep	.04

FINAL OATHS OF DEPUTY SURVEYOR AND HIS ASSISTANTS.

LIST OF NAMES.

A list of the names of the individuals employed by Alonzo J. Stookey, 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 East & West Parallels, T. 5 S. R. 1 W. Boise Meridian, showing the respective capacities in which they acted:

Hyrum Millward ..... Chainman.
Robt. D. Halladay ..... Chainman.
Orson A. Johnson ..... Moundman.
Lionel J. Stookey ..... Moundman.
..... Axman.
..... Axman.
Lincoln A. Stookey ..... Flagman.

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted Alonzo J. Stookey, United States Deputy Surveyor, in surveying all those parts or portions of the West Bach and East Parallels T. 5 S. R. 1 W. of the Salt Lake Meridian, State of Utah, which are represented in the foregoing field notes as having been surveyed by him and under his direction; and that said survey has been in all respects, to the best of our knowledge and belief, well and faithfully surveyed, and the corner monuments established, according to the instructions furnished by the United States Surveyor General for Utah.

Hyrum Millward ..... Chainman.
Robert D. Halladay ..... Chainman.
Orson A. Johnson ..... Moundman.
Lionel J. Stookey ..... Moundman.
..... Axman.
..... Axman.
Lincoln A. Stookey ..... Flagman.

Subscribed and sworn to before me this 7 day of July 1902 189

SEAL

Alonzo J. Stookey
U. S. Deputy Surveyor

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FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I, Alonzo J. Stookey, United States Deputy Surveyor, do solemnly swear that, in pursuance of a contract received from Edward H. Anderson United States Surveyor General for Utah, bearing date of the 6th day of May 1902, ~~189~~, I have well, faithfully, and truly, in my proper person, and in strict conformity with the instructions furnished by the United States Surveyor General for Utah, the Manual of Surveying Instructions, and the laws of the United States, surveyed all those parts or portions of West, East and North Bdy of T5S R18W

of the Salt Lake Base and meridian, in the State of Utah, which are represented in the foregoing field notes as having been surveyed by me, and under my direction; and I do further solemnly swear that all the corners of said survey have been established and perpetuated in strict accordance with the Manual of Surveying Instructions, and the special written instructions of the United States Surveyor General for Utah and in the specific manner described in the field notes, and that the foregoing are the original field notes of such survey; and should any fraud be detected, I will suffer the penalty of perjury under the provisions of an Act of Congress approved August 8, 1846.

Alonzo J. Stookey
United States Deputy Surveyor.

Subscribed by said Alonzo J. Stookey, and sworn to before me this 17th day of September, 1903

Edward H. Anderson
U.S. Surveyor-General
for Utah.

SEAL

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah, November 30 1903, 189

The foregoing field notes of the survey of the subdivisional lines of Township 5 South Ranges 8 West of the Salt Lake Base & Meridian, Utah

executed by Alonzo J. Stookey under his contract No 252, dated May 6 1902, ~~189~~, having been critically examined, and the necessary corrections and explanations made, the said field notes, and the surveys they describe, are hereby approved.

Edward H. Anderson
United States Surveyor General

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

United States Surveyor General

6—151

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BOOK A-298

FILED

SEP 16 1903

FIELD NOTES

E.C.

OF THE SURVEY OF THE

Subdivisions of Township 5 South

of

Range 10 West

Of the Salt Lake Base and *Meridian,*

State of Utah

AS SURVEYED BY

Alonzo J. Stookey *United States Deputy Surveyor,*

Under his Contract No. 258 *dated* May 6, 1903 *189*

Survey commenced July 4, 1903. *189*

Survey completed July 9, 1903 *189*

	m.	s.	lks.	
Lat.	30	25	42	✓
Lon.	29	44	24	✓
	59.	79.	70.	

BOOK A-298

NAMES AND DUTIES OF ASSISTANTS.

Hyram Millard	Chainman
Robt R. Halliday	"
Orson A. Johnson	Rodman
Lionel J. Stokes	"
Lancelot A. Stokes	Flagman

6—151

BOOK A-298

INDEX DIAGRAM.

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Meanders Page

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PRELIMINARY OATHS OF ASSISTANTS.

WE, Hyrum Millward and Robt. D. Halladay, do solemnly swear that we will well and faithfully execute the duties of chainmen; that we will level chain over even and uneven ground, and plumb the tally pins, either by sticking or dropping the same; that we will report the true distances to all notable objects, and the true lengths 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 Subdivisions of T 5 S R 1 E W. Salt Lake Base and Meridian.

Hyrum Millward, Chainman.
Robert D. Halladay, Chain.

Subscribed and sworn to before me this 28 day of June, 1893.

SEAL

Alonzo J. Stookey
U.S. Dep. Surveyor

WE, Orson A. Johnson and Lionel J. Stookey, do solemnly swear that we will well and truly perform the duties of moundmen in the establishment of corners, according to the instructions given us, to the best of our skill and ability, in the survey of Subdivisions of T 5 S R 1 E W. Salt Lake Base and Meridian.

Orson A. Johnson, Moundman.
Lionel J. Stookey, Moundman.

Subscribed and sworn to before me this 28 day of June, 1893.

SEAL

Alonzo J. Stookey
U.S. Dep. Surveyor.

WE, ... and .....
do solemnly swear that we will well and truly perform the duties of axmen in the establishment of corners and other duties, according to instructions given us, to the best of our skill and ability, in the survey of .....

....., Axman.
....., Axman.

Subscribed and sworn to before me this ..... day of ....., 189

SEAL

I, Lincoln C. Stookey, 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 survey of Subdivisions of T 5 S R 1 E W. Salt Lake Base and Meridian.

Lincoln C. Stookey, Flagman.

Subscribed and sworn to before me this 28 day of June, 1893.

SEAL

Alonzo J. Stookey
U.S. Dep. Surveyor

6—151

Subdivisions T 58 R 18 W.

Survey commenced July 4. 1903. for description of transit see Book A. & commence at the standard cor. of secs. 35 & 36 on the S. bdy of the Tp as established by myself and heretofore described.

Thence Drew

N. 0°01' W. bet. secs 35 & 36.

Over level sandy loam, through dense greasewood undergrowth

9.68 Crossing Bengston's fence. bears N. 87° E & S. 87° W. enter field

38.57 Leave field fence bears N. 52° E. & S. 52° W. From this point the N. W. cor. of field bears S. 52° W. 1.50 chs. dist.

40.00 Set a quartzite stone 18 x 10 x 4 ins. 12 ins in the ground for 1/4 sec. cor. marked 1/4 on W. face: dig pits 18 x 18 x 12 ins. N. & S. of stone 3 ft. dist and raise a mound of earth 3½ ft. base 1½ ft. high W. of cor.

58.50 Leave greasewood undergrowth bears E. & W. enter saltweed flat.

From this point what might be called the N. cor. of Bengston's field bears N. 83°15' E. about 22.00 chs dist.

Bearing of N. E. side of field about N. 66° W. & S. 66° E.

80.00
58.50
21.50 Set a quartzite stone 18 x 6 x 4 ins. 12 ins in the ground for cor of secs. 25, 26, 35 & 36 marked 1 notch on S. & E. edges. dig pits 18 x 18 x 12 ins. in each sec. 5½ ft. dist. & raise a mound of earth 4 ft base 2 ft high W. of cor.

Land level & gently rolling

Soil, loam, gravel & saline 1" & 2" rate

No timber

Land covered with dense undergrowth 58.50 chs.

E. on random line bet secs. 25 & 36.
40.00 Set temp. 1/4 sec. cor.
80.00 Intersect E. bdy of Tp. 20 lks N. of cor. of secs. 25. 30. 31 & 36. as established by myself and heretofore described.
Thence run
N. 89° 51' W. on true line bet secs. 25 & 36.
Over level desert
34.00 Leave desert bears N. & S.
40.00 Set a quartzite stone 15 x 6 x 6 ins. 10 ins in the ground for 1/4 sec. cor. marked 1/4 on N. face; dig pits 18 x 18 x 12 ins. E & W of stone 3 ft dist. and raise a mound of earth 3½ ft base 1½ ft. high N. of cor.
80.00 The cor. of secs 25. 26. 35 & 36.
Sand level desert or gently rolling
Soil. saline & sand. 2" rain
No timber.

N. 0° 01' W. on true line bet secs 25 & 26.
Over gently rolling sand.
40.00 Set a quartzite stone 15 x 6 x 6 ins. 10 ins. in the ground for 1/4 sec. cor. marked 1/4 on N. face; dig pits 18 x 18 x 12 ins. N. & S. of stone 3 ft. dist. raise a mound of earth 3½ ft base 1½ ft high W. of cor.
80.00 Set a quartzite stone 15 x 6 x 6 ins 10 ins in the ground for cor. of secs 23. 24. 25 & 26 marked 2 notches on S. & 1 notch on E. edge; dig pits 18 x 18 x 12 ins. in each sec. 5½ ft. dist. and raise a mound of earth 4 ft base 2 ft. high W. of cor.
Sand gently rolling
Soil. sand and saline
No timber.

S. 89° 51' E. on random line bet secs 24 & 25
40.00 Set temp 1/4 sec. cor.
80.00 Intersect E. bdy of Tp. 2 lks N. of cor. secs

Subdivisions T5S R18W.

19.24.25 & 30 as established by myself & heretofore described
Thence run
N.89°50' W. on true line bet secs 24 & 25
Over level desert
40.00 Set a quartzite 12x7x6 ins. 8 ins in the ground for 1/4 sec. cor. marked 1/4 on N. face; dig pits 18x18x12 ins. E & W. of stone 3 ft. dist. and raise a mound of earth 3½ ft. base 1½ ft high N. of cor.
76.00 Leave desert bears N 45° W & S 45° E. enter rolling sand.
80.00 The cor. of secs 23, 24, 25 & 26.
Sand level & very gently rolling
Soil saline with sand. 2" rate
No timber

N. 0°01' W. bet. secs. 23 & 24
Over rolling sand
3.00 Leave sand, enter level desert bears N 45° W & S 45° E.
40.00 Set a quartzite stone 15x8x6 ins. 10 ins. in the ground for 1/4 sec. cor. marked 1/4 on W. face; dig pits 18x18x12 ins. N & S. of stone 3 ft dist. and raise a mound of earth 3½ ft. base 1½ ft. high W. of cor.
80.00 Set a quartzite stone 15x7x6 ins. 10 ins in the ground for cor of secs 13, 14, 23 & 24 marked 3 notches on S & 1 notch on E. edges; dig pits 18x18x12 ins. in each sec. 5½ ft dist. and raise a mound of earth 4 ft. base 2 ft high W. of cor.
Sand level desert
Soil saline 2" rate
No vegetation.

S.89°50' E. on random line bet secs 13 & 24
40.00 Set temp 1/4 sec. cor.

80.02 Intersect E. bdy of Tp 4 lks S. of the cor. of secs. 13, 18, 19 & 24 as established by myself and heretofore described.
Thence Dr'gn.
N. 89° 52' W. on true line bet. secs 13 & 24
Over level desert
40.01 Set a quartzite stone 12 x 8 x 6 ins. 8 ins in the ground for 1/4 sec. cor. marked 1/4 on W. face; dig pits 18 x 18 x 12 ins. E & W. of stone 3 ft. dist. and raise a mound of earth 3 1/2 ft. base 1 1/2 ft. high W. of cor.
80.02 The cor. of secs 13, 14, 23 & 24.
Land level desert.
Soil saline. 2" rate
No vegetation.

N. 0° 01' W. on true line bet. secs 13 & 14
Over level desert.
40.00 Set a quartzite stone 12 x 7 x 6 ins. 8 ins in the ground for 1/4 sec. cor. marked 1/4 on W. face; dig pits 18 x 18 x 12 ins N. & S. of stone 3 ft. dist. & raise a mound of earth 3 1/2 ft. base 1 1/2 ft. high W. of cor.
80.00 Set a quartzite stone 15 x 6 x 6 ins. 10 ins in the ground for cor. of secs 11, 12, 13 & 14 marked 4 notches on the S. & 1 notch on E. edges, dig pits 18 x 18 x 12 ins. in each sec. 5 1/2 ft. dist & raise a mound of earth 4 ft. base 3 ft. high W. of cor.
Land level desert
Soil saline 2" rate
No vegetation.

S. 89° 52' E. on random line bet. secs 13 & 18
40.00 Set temp 1/4 sec. cor.
80.00 Intersect E. bdy of Tp. 2 lks S. of the cor. of secs. 7, 12, 13 & 18 as established by myself and heretofore described.
Thence Dr'gn
N. 89° 53' W. on true line bet. secs 12 & 13

Subdivisions T5S R18W.

Over level desert
40.00 Set a quartzite stone 12×8×6 ins 8 ins. in the ground for 1/4 sec. cor. marked 1/4 on N. face; dig pits 18×18×12 ins E. & W. of stone 3 ft. dist. and raise a mound of earth 3½ ft base 1½ ft high N. of cor.
80.00 The cor. of secs. 1.12.13 & 14
Sand level desert
Soil saline. 2" rate
No vegetation.

N. 0°01' W. on true line bet secs 11 & 12
Over level desert
40.00 Set a quartzite stone 15×7×6 ins. 10 ins in the ground for 1/4 sec. cor. marked 1/4 on N. face; dig pits 18×18×12 ins. N & S. of stone 3 ft. dist. and raise a mound of earth 3½ ft base 1½ ft. high N. of cor.
80.00 Set a quartzite stone 15×7×6 ins 10 ins. in the ground for cor. of secs 1.2.11 & 12. marked 5 notches on S. and 1 notch on E. edges; dig pits 18×18×12 ins. in each sec. 5½ ft. dist. and raise a mound of earth 4 ft. base 2 ft high N. of cor.
Sand level desert
Soil saline 2" rate
No vegetation

S. 89°53' E. on random line bet secs 1 & 12
40.00 Set temp 1/4 sec. cor.
79.94 Intersect E. bdy of Tp. 14 lks S. of cor. of secs 1, 6, 7 & 12. as established by myself and heretofore described.
Thence Run
N. 89°59' W. on true line bet secs 1 & 12.
Over level desert.

Subdivisions of T 8 S R 18 W.

39.97 Set a quartzite stone 12 X 8 X 6 ins. 8 ins. in the ground for 1/4 sec. cor. marked 1/4 on N. face; dig pits 18 X 16 X 12 ins. E & W. of stone 3 ft. dist. and raise a mound of earth 3 1/2 ft. base 1 1/2 ft. high N. of cor.

79.94 The cor. of secs 1, 2, 11 & 12.
Land level desert
Soil saline 2" rate
No vegetation

N. 0°01' W. on random line bet secs 1 & 2.

40.00 Set temp 1/4 sec. cor.

79.98 Intersect N. bdy. of Tp. 10 lks E. of cor of secs 1, 2, 35 & 36, as established by myself and heretofore described
Thence run
S. 0°25' E. on true line bet secs 1 & 2.
Over level desert.

39.98 Set a quartzite stone 12 X 7 X 6 ins. 8 ins in the ground for 1/4 sec cor. marked 1/4 on N. face; dig pits 18 X 18 X 12 ins. N & S. of stone 3 ft dist. and raised a mound of earth 3 1/2 ft base 1 1/2 ft high N. of cor.

79.98 The cor. of secs 1, 2, 11 & 12.
Land level desert
Soil saline 2" rate
No vegetation

July 4, 1903.

From the standard cor. of secs 34 & 35 on S. bdy of the Tp. as established by myself and heretofore described
Thence run
N. 0°02' W. on true line, bet secs 34 & 35
Over level land, through dense greasewood undergrowth

40.00 Set a quartzite stone 15 X 8 X 5 ins 10 ins. in the ground for 1/4 sec. cor. marked 1/4 on N. face; dig pits.

18 x 18 x 12 ins N & S. of stone 3 ft. dist.
and raise a mound of earth 3½
ft base 1½ ft high N. of cor.
80.00 Set a quartzite stone 15 x 7 x 6 ins. 10
ins in the ground for cor. of secs.
26. 27. 34 & 35. marked 1 notch on S. &
2 notches on E. edges. dig pits
18 x 18 x 12 ins in each sec. 5½ ft. dist.
and raise a mound of earth 4 ft base
2 ft high N. of cor.
Land almost level
Soil sandy. 1" & 2" rate
No timber
Land covered with dense undergrowth
80.00 chs.

E. on random line bet secs 26 & 35
40.00 Set temp ¼ sec. cor.
80.00 Intersect the N & S line 18 lks S. of cor. of
secs 25. 26. 35 & 36
Thence Drury
S. 89° 52' W on true line bet secs 26 & 35
Over level land. through dense
greasewood undergrowth
40.00 Set a quartzite stone 12 x 6 x 6 ins. 8
ins in the ground for ¼ sec. cor.
marked 1/4 on S. providing pits
18 x 18 x 12 ins. E & W. of stone 3 ft dist
and raise a mound of earth 3½
ft base 1½ ft. high N. of cor.
80.00 The cor. of secs. 26. 27. 34 & 35
Land level
Soil sandy 1" & 2" rate
No timber
Land covered with dense under-
growth 80.00 chs.

N. 0° 02' W. bet. secs. 26 & 27
Over almost level land. through
greasewood and shadscale undergrowth
40.00 Set a quartzite stone 15 x 6 x 6 ins.

10 ins in the ground for 1/4 sec. cor. marked 1/4 on N. face; dig pits 18 X 18 X 12 ins. N & S. of stone 3 ft. dist. and raise a mound of earth 3 1/2 ft. base 1 1/2 ft high N. of cor.

80.00 Set a quartzite stone 15 X 8 X 7 ins 10 ins. in the ground for cor. of secs 22. 23 26 & 27 marked 3 notches on S. & E. edges; dig pits 18 X 18 X 12 ins. in each section 5 1/2 ft. dist. and raise a mound of earth 4 ft base 2 ft high N. of cor.

Land level or very gently rolling

Soil sandy 2" rate

No timber

Land covered with dense under-growth 80.00 chs.

N. 89° 52' E. on random line bet. secs 23 & 26

40.00 Set temp 1/4 sec. cor.

79.96 Intersect N. & S. line 18 lks N. of cor. of secs. 23. 24. 25 & 26.

Thence Run

N. on true line bet. secs 23 & 26

Over gently rolling land, through dense shadscale and greasewood undergrowth.

39.98 Set a quartzite stone 12 X 8 X 6 ins. 8 ins. in the ground for 1/4 sec. cor. marked 1/4 on N. face; dig pits 18 X 18 X 12 ins E & W. of stone 3 ft. dist. and raise a mound of earth 3 1/2 ft. base 1 1/2 ft. high N. of cor.

79.96 The cor. of secs 22. 23. 26 & 27.

Land gently rolling or level

Soil sandy 2 to 3" rate

No timber

Land covered with dense under-growth 79.96 chs.

Subdivisions T5 S. R 18 W.

N. 0° 03' W. bet secs. 22 & 23.
Over level land through dense
shadscale & greasewood undergrowth
40.00 Set a quartzite stone 15 x 7 x 6 ins.
10 ins. in the ground for 1/4 sec
cor. marked 1/4 on W. face; dig pits
18 x 18 x 12 ins. N & S. of stone 3 ft. dist &
raise a mound of earth 3½ ft base
1½ ft. high N. of cor.
80.00 Set a quartzite stone 15 x 6 x 6 ins.
15 ins. in the ground for cor
of secs 14, 15, 22 & 23. marked 3 notches
on the S. & 2 notches on the E.
edges; dig pits 18 x 18 x 12 ins in each
sec. 5½ ft. dist & raise a mound
of earth 4 ft base 2 ft. high N. of
cor.
Land level or gently rolling
Soil sandy & saline 2" & 3" rate
No timber
Land covered with dense under-
growth 80.00 chs.

E. on random line bet secs. 14 & 23.
40.00 Set temp 1/4 sec. cor.
80.00 Intersect N. & S. line 10 lks S. of cor.
of secs 13, 14, 23 & 24.
Thence Run
S 87° 56' W on true line bet secs 14 & 23.
Over level desert
40.00 Set a quartzite stone 12 x 8 x 6 ins. 8 ins
in the ground for 1/4 sec. cor. marked
1/4 on N. face; dig pits 18 x 18 x 12 ins. E.
& W. of stone 3 ft. dist & raise a mound
of earth 3½ ft base 1½ ft. high N. of cor.
41.00 Leave desert, enter dense greasewood
and shadscale undergrowth bear
N. & S.
80.00 The cor. of secs 14, 15, 22 & 23.
39.00 Land level & gently rolling
41.00 Soil sandy & saline 2 & 3" rate.

No timber
Land covered with dense undergrowth
39.00 chs.

N. 0°03' W. bet secs 14 & 15
Over rolling sandy land, through dense shadscale and greasewood undergrowth
40.00 Set a quartzite, 12 x 10 x 5 ins. 8 ins. in the ground for 1/4 sec. cor. marked 1/4 on W. face; dig pits 18 x 18 x 12 ins. N. & S. of stone 3 ft. dist and raise a mound of earth 3 1/2 ft base 1 1/2 ft high W. of cor.
50.00 Leave sand and dense undergrowth enter level desert. Bearc N. 45° W. & S. 45° E.
80.00 Set a quartzite, 15 x 8 x 6 ins 10 ins.
50.00 in the ground for cor. of secs
30.00 10, 11, 14 & 15 marked 4 notches on the S. & 2 notches on the E edges; dig pits 18 x 18 x 12 ins in each sec. 5 1/2 ft. dist and raise a mound of earth 4 ft. base 3 ft. high W. of cor.
Land level and rolling
Soil saline & sand, 3" & 8" rate
No timber
Land covered with dense undergrowth 50.00 chs.

N. 87° 56' E. on random line bet secs 11 & 14.
40.00 Set temp 1/4 sec. cor.
80.00 Intersect N. & S. line at cor. of secs 11, 12, 13 & 14
Thence Run
S. 87° 56' W. on true line bet secs 11 & 14
Over level desert
40.00 Set a quartzite stone 15 x 7 x 6 ins 10 ins. in the ground for 1/4 sec. cor. marked 1/4 on W. face; dig

Subdivisions of T 5 S R 10 W.

pits 18 x 18 x 12 ins. E & W. of stone 3 ft dist. and raise a mound of earth 3½ ft base 1½ ft high N. of cor.
80.00 The cor. of secs 10, 11, 14 & 15
Land level
Soil saline and sandy 11" rate
No vegetation.

N. 0° 03' W. bet. secs 10 & 11
Over level desert
40.00 Set a quartzite stone 14 x 7 x 6 ins. 9 ins in the ground for ¼ sec. cor. marked ¼ on W. face; dig pits 18 x 18 x 12 ins. N & S of stone 3 ft. dist. & raise a mound of earth 3½ ft base 1½ ft high W. of cor.
80.00 Set a quartzite stone 15 x 8 x 7 ins. 10 ins. in the ground for cor. of secs 2, 3, 10 & 11. marked 5 notches on S & 2 notches on E. edges; dig pits 18 x 18 x 12 ins. in each sec. 5½ ft. dist. & raise a mound of earth 2 ft base 2 ft high W. of cor.
Land level desert
Soil saline, 2" rate
No vegetation.

N. 89° 56' E. on random line bet. secs 2 & 11
40.00 Set temp ¼ sec. cor.
79.92 Intersect N & S. line at the cor. of secs 1, 2, 11 & 12.
Thence down
S. 89° 56' W. on true line bet secs 2 & 11
Over level desert
39.96 Set a lookout stone 12 x 8 x 7 ins. 8 ins. in the ground for ¼ sec. cor. marked ¼ on N. face; dig pits 18 x 18 x 12 ins. E & W. of stone 3 ft. dist. & raise a mound of earth 3½ ft base 1½ ft high W. of cor.
79.92 The cor. of secs 2, 3, 10 & 11.

Subdivisions T.5 S. R.18 W.

Sand level desert
Soil saline 2" rate
No vegetation.

N. 0°02' W. on random line bet. secs 2 & 3.
40.00 Set temp. 1/4 sec cor.
80.00 Intersect N. bdy of Tp. 20 lks. E. of the cor. of secs 2, 3, 34 & 35 as established by myself and heretofore described
Thence Run
S. 0°11' E. on true line bet. secs 2 & 3.
Over level desert
40.00 Set a porphyry stone 15X8X6 ins. 10 ins. in the ground for 1/4 sec. cor. marked 1/4 on N. face; dig pits 18X18X12 ins N & S of stone 3 ft. dist & raise a mound of earth 3½ ft base 1½ ft high N. of cor.
80.00 The cor. of secs 2, 3, 10 & 11.
Sand level desert
Soil saline 3" rate
No timber.

From the standard cor. of secs 33 & 34 on S. bdy. of Tp. as established by myself and heretofore described
Thence Run
N. 0°02' W. bet. secs 33 & 34.
Over almost level land, though dense greasewood & shadscale under-growth.
40.00 Set a quartzite stone 12X8X6 ins. 8 ins. in the ground for 1/4 sec. cor. marked 1/4 on N. face; dig pits 18X18X12 ins N & S of stone 3 ft. dist. and raise a mound of earth 3½ ft. base 1½ high N. of cor.
80.00 Set a quartzite stone 15X8X6 ins. 10 ins in the ground for cor. of secs 27, 28, 33 & 34 marked 1 notch

on S. & 3 notches on E. edges; dig pits 18X18X12 ins in each sec. 5½ ft. dist. and raise a mound of earth 4 ft. base 2 ft. high N. of cor.
Land level
Soil sand and clay 3rd rate
No timber
Land covered with dense under-growth 80.00 chs.

E. on random line bet. secs 27 & 34
40.00 Set temp ¼ sec. cor.
80.00 Intersect N. & S. line 24 lks. N. of cor. of secs 26.27.34 & 35
Thence Given
N. 87°50' W. on true line bet. secs. 27 & 34.
Over level land through dense grasswood & shadscale underwoods
40.00 Set a quartzite stone 12X8X6 ins. 8 ins. in the ground for ¼ sec. cor. marked ¼ on N. face; dig pits 18X18X12 ins. E. & W. of stone 3 ft. dist. and raise a mound of earth 3½ ft. base 1½ ft high N. of cor.
80.00 The cor. of secs 27.26.33 & 34
Land level
Soil sandy, 3rd rate
No timber.
Land covered with dense under-growth 80.00 chs.

N. 0°02' W. bet. secs. 27 & 28
Over gently rolling land through dense grasswood and shadscale underwoods.
40.00 Set a quartzite stone 12X8X6 ins. 8 ins. in the ground for ¼ sec cor. marked ¼ on N. face; dig pits 18X18X12 ins N. & S. of stone 3 ft dist. & raise a mound of earth 3½ ft base 1½ ft. high

W. of cor.
80.00 Set a limestone 12×8×6 ins. 8 ins in the ground for cor. of secs. 21. 22. 27 & 28 marked 2 notches on S & 3 notches on E. edges; dig pits 18×18×12 ins. in each sec. 5½ ft. dist. and raise a mound of earth 4 ft base 2 ft high W. of cor.
Land level and gently rolling
Soil sandy 2" rate
No timber
Land covered with dense undergrowth
80.00 chs.

S. 89° 50' E. on random line bet secs. 22 & 27
40.00 Set temp. ¼ sec. cor.
80.00 Intersect the W. & S. line 24 lks S. of cor. of secs. 22, 23, 26 & 27.
Thence Run
N. on true line bet secs. 22 & 27
Over gently rolling land, through dense greenwood and shadscale undergrowth.
40.10 Set a quartzite stone 15×8×6 ins. 10 ins. in the ground for ¼ sec. cor. marked ¼ on N. face; dig pits 18×18×12 ins. E & W. of stone 3 ft dist. and raise a mound of earth 3¼ ft base 1½ ft high N. of cor.
80.00 The cor. of secs. 21. 22. 27 & 28
Land gently rolling
Soil sandy 2" rate
No timber
Land covered with dense undergrowth 80.00 chs.

N. 0° 02' W. bet secs. 21 & 22
Over gently rolling land, through dense greenwood & shadscale undergrowth.

Subdivisions of T5S R18W.

40.00 Set a quartzite stone 15x8x6 ins 10 ins in the ground for 1/4 sec. cor. marked 1/4 on W. face; dig pits 18x18x12 ins W. & S. of stone 3 ft. dist. and raise a mound of earth 3½ ft base 1½ ft high W. of cor.

-80.00 Set a limestone 15x8x6 ins. 10 ins in the ground for cor. of secs. 15, 16, 21 & 22. marked T5S. on S.W. & R18W. on N.W. faces, with 3 notches on S. & E. edges; dig pits 18x18x12 ins. in each sec 5½ ft. dist. and raise a mound of earth 4 ft base 2 ft high W. of cor.

Land gently rolling

Soil sandy 2" rate.

Land covered with dense undergrowth 80.00 chs.

E. on random line bet secs 15 & 22

40.00 Set temp 1/4 sec. cor.

80.10 Intersect W. & S. line at the cor of secs 14, 15, 22 & 23

Thence Econ

W. on true line bet secs. 15 & 22

Over very slightly rolling sandy land and dense greasewood undergrowth

40.05 Set a quartzite stone 12x7x6 ins. 8 ins in the ground for 1/4 sec. cor. marked 1/4 on W. face; dig pits 18x18x12 ins S. & W. of stone 3 ft dist. & raise a mound of earth 3½ ft. base 1½ ft high W. of cor.

-80.10 The cor. of secs. 15, 16, 21 & 22.

Land level and gently rolling

Soil saline and sandy 2" rate

Land covered with dense undergrowth 80.10 chs.

July 5. 1903

July 6. 1903. at the cor of secs 15, 16, 21 & 22 I observe Polaris at 8h. 36m. a.m. l.m.t at eastern elongation in accordance with the Manual of Instructions and mark the line thus determined by a tack driven in a wooden plug 5.00 chs N. of my station. July 6 at 7 a.m. I lay off the azimuth of Polaris 1°35' to the west and mark the true meridian thus determined

Subdivisions T5 S R18W.

by driving a tack into a wooden plug firmly set in the ground west of the point established last night.
The magnetic bearing of the true meridian is is N. 17°17' W. which reduced by the table on page 100 of the Manual gives the mean magnetic declination N. 17°41' E.
From the cor. of secs 15.16.21 & 22
Thence Dr.
N. 0°03' W. bet. secs 15 & 16
Over gently rolling land through dense greasewood undergrowth.
40.00 Set a quartzite stone 15x7x6 ins. 10 ins in the ground for 1/4 sec cor marked 1/4 on W. face; dig pits 18x18x12 ins N. & S. of stone 3 ft. dist. and raise a mound of earth 3/4 ft. base 1½ ft high W. of cor.
50.00 Leave sandy soil and dense undergrowth bears N. 45° W. & S. 45° E. enter level desert.
80.00 Set a quartzite stone 18x6x6 ins. 12 ins.
50.50 in the ground for cor. of secs 9.10.15 &
30.41 16. marked 4 notches on N. & 3 notches on E. edges; dig pits 18x18x12 ins in each sec. 5½ ft. dist. and raise a mound of earth 4 ft base 2 ft high W. of cor.
Land gently rolling and level
Soil sand and saline 3" rate
No timber
Land covered with dense undergrowth
50.00 chs

E. on random line bet secs 10 & 15.
40.32 Set temp 1/4 sec. cor.
80.06 Intersect the N. & S. line 15 lks S. of the cor. of secs 10.11.14 & 15
Thence Dr.
S. 87°54' W. on true line bet. secs 10 & 15
Over level desert
40.03 Set a quartzite stone 15x7x6 ins. 10 ins in the ground for 1/4 sec. cor. marked 1/4 on W. face; dig pits 18x18x12 ins

Subdivisions of T5SR18W.

E & W. of stone 3 ft dist. and raise a mound of earth 3½ ft base 1½ ft. high N. of cor.
80.06 The cor. of secs 9.10.15 & 16.
Sand level desert
Soil saline 2" rate
No vegetation.

N. 0° 02' W. bet. secs 9 & 10
Over level desert.
40.00 Set a quartzite stone 12 x 7 x 6 ins 8 ins. in the ground for ¼ sec. cor. marked ¼ on N. face; dig pits 18 x 18 x 12 ins. E & W. of stone 3 ft. dist. and raise a mound of earth 3½ ft. base 1½ ft high N. of cor.
80.00 Set a quartzite stone 18 x 7 x 6 ins 12 ins in the ground for cor. of secs 3.4.9 & 10. marked 5 notches on S & 3 notches on E. edges; dig pits 18 x 18 x 12 ins. in each dir. 5½ ft. dist. and raise a mound of earth 4 ft. base 2 ft. high N. of cor.
Sand level desert
Soil saline 2" rate
No vegetation.

N. 89° 51' E. on random line bet secs 3 & 10.
40.00 Set tenth ¼ Sec. cor.
80.12 Intersect the N & S. line at the cor. of secs. 2, 3, 10 & 11.
Thence Drum
S. 89° 54' W. on true line bet secs 3 & 10.
Over level desert.
40.06 Set a sandstone 15 x 8 x 5 ins 10 ins in the ground for ¼ sec. cor. marked ¼ on N. face; dig pits 18 x 18 x 12 ins. E. & W. of stone

Subdivisions T5 S R18 W.

3 ft dist. and raise a mound of earth
3½ ft base 1½ ft. high N. of cor.
80.12 The cor. of secs 3, 4, 9 & 10.
Land level desert
Soil saline, 3" rale
No vegetation

N. 0° 02' W. on random line bet secs 3 & 4
40.00 Set temp ¼ sec. cor.
80.08 Intersect N. bdy of Tp 16 Rge 18 W. of cor. of secs 3, 4, 33 & 34 as established by my self and hereto fore described.
Thence Run
S. 0° 05' W. on true line bet secs 3 & 4.
Over level desert
40.08 Set a sandstone 15 x 7 x 5 ins. 10 ins in the ground for ¼ sec. cor. marked ¼ on W. face; dig pits 18 x 18 x 12 ins N. & S. of stone 3 ft. dist. and raise a mound of earth 3½ ft. base 1½ ft high N. of cor.
80.08 The cor. of sec 3, 4, 9 & 10
Land level desert
Soil saline 2" rale
No vegetation.

July 6. 1903.

From the standard cor. of secs 32, 33 & 4 on S. bdy of Tp. as established by my self and hereto fore described.
Thence Run
N. 0° 03' W. bet secs 32 & 33
Over almost level bench land, through dense shadscale and greasewood undergrowth
40.00 Set a porphyry stone 12 x 8 x 6 ins 8 ins in the ground for ¼ sec. cor marked ¼ on W. face; dig pits 18 x 18 x 12 ins. N. & S. of stone 3 ft. dist. and raise a mound of earth 3½ ft base 1½ ft high N. of cor.

Subdivisions of T5 S. R18 W.

80.00 Set a limestone 15x6x6 ins 10 ins. in the ground for cor. of secs 28.29.32 & 33 marked 1 notch on S. & 4 notches on E. edges; dig pits 18x18x12 ins. in each sec. 3½ ft. dist. raise a mound of earth 4 ft. base 2 ft. high W. of cor.
Land gently rolling
Soil sandy 2" rate
No timber.
Land covered with dense under-growth 80.00 chs.

E. on random line bet. secs 28 & 33
40.00 Set temp. ¼ sec. cor.
80.00 Intersect N & S. line at cor. of secs 27.28.33 & 34
Thence Down
N. on true line bet secs 28 & 33.
Over gently rolling land, through dense grass wood land shad scale undergrowth.
40.00 Set a porphyry stone 12x7x6 ins. 8 ins. in the ground for ¼ sec. cor. marked ¼ on N. face; dig pits 18x18x12 ins E & W. of stone 3 ft dist. raise a mound of earth 3½ ft. base 1½ ft. high N. of cor
80.00 The cor. of secs. 28.29.32 & 33.
Land gently rolling
Soil sandy 2" rate
No timber
Land covered with dense under-growth 80.00 chs.

N. 0° 03' W. bet. secs 28 & 29
Over gently rolling land, through dense grass wood land shad-scale undergrowth
40.00 Set a porphyry stone 10x8x6 ins. 8 ins. in the ground for ¼ sec cor. marked ¼ on N. face, dig

pits 18×18×12 ins. N. & S. of stone and raise a mound of earth 3½ ft base 1½ ft high N. of cor.

80.00 Set a porphyry stone 12×8×8 ins. 8 ins in the ground for cor. of secs 20, 21, 28 & 29 marked 2 notches on S. & 4 notches on E. edges; dig pits 18×18×12 ins. in each sec. 5½ ft. dist. and raise a mound of earth 4 ft base 2 ft. high N. of cor.

Land gently rolling

Soil sandy, 2d rate

No timber

Land covered with dense under-growth 80.00 chs.

E. on random line bet secs 21 & 28

40.00 Set temp ¼ sec. cor.

80.00 Intersect N. & S. line 15 lks S. of cor. of secs. 21, 22, 27 & 28

Thence Run

S. 87° 54' W. on true line bet secs 21 & 28

Over gently rolling land, through dense greasewood & shadscale undergrowth

40.00 Set a porphyry stone 12×8×6 ins 8 ins in the ground for ¼ sec cor. marked ¼ on N. face; dig pits 18×18×12 ins E. & W. of stone 3 ft. dist. and raise a mound of earth 3½ ft. base 1½ ft high N. of cor.

80.00 The cor. of secs. 20, 21, 28 & 29.

Land gently rolling

Soil land, 2d rate

No timber

Land covered with dense undergrowth 80.00 chs.

N. 0° 03' W. bet. secs 20 & 21.

Over gently rolling land, through dense greasewood and shadscale undergrowth

40.00 Set a porphyry stone 15×8×5 ins. 10 ins

in the ground for 1/4 sec. cor. marked
1/4 on W. face dig pits 18×18×12 ins N.
& S. of stone 3 ft. dist. and raise a
mound of earth 3½ ft. base 1½ ft
high W. of cor.
-80.00 Set a quartzite stone 18×6×5 ins 12
ins in the ground for cor. of secs
16.17.20 & 21 marked 3 notches on S. & 4
notches on E. edges; dig pits 18×18×12
ins in each sec. 5½ ft. dist. and
raise a mound of earth 4 ft base
2 ft. high W. of cor.
Land gently rolling
Soil sandy 3" rate
No timber
Land covered with dense under
growth 80.00 chs.

N. 89°54' E. on random line bet secs 16 & 21
40.00 Set temp. 1/4 sec. cor.
80.00 Intersect N & S. line 10 lks N. of cor. of secs
15, 16, 21 & 22.
Thence Down
S. 89°58' W. on true line bet secs 16 & 21
Over gently rolling land, through
dense grass & brush and sandscale
undergrowth.
40.00 Set a quartzite stone 18×6×6 ins
10 ins in the ground for 1/4 sec.
cor. marked 1/4 on N. face; dig pits
18×18×12 ins E. & W. of stone 3 ft dist
and raise a mound of earth
3½ ft. base 1½ ft. high N. of cor.
-80.00 The cor. of secs. 16.17.20 & 21.
Land gently rolling
Soil sandy 3" rate
No timber
Land covered with dense
undergrowth 80.00 chs.

N. 0°03' W. bet secs 16 & 17.

Subdivisions of T5S R18W.

Over slightly rolling land, through dense growth of brush shadscale undergrowth

40.00 Set a sandstone stone 15x8x6 ins. 10 ins. in the ground for 1/4 sec. cor. marked 1/4 on N. face; dig pits 18x18x12 ins N. & S. of stone 3 ft dist. and raise a mound of earth 3½ ft base 1½ ft. high N. of cor.

78.00 Leave undergrowth, and enter level desert bare N 75° W. & S 75° E.

80.00 Set a sandstone stone 15x8x6 ins. 10 ins. in the ground for cor. of secs. 8, 9, 16 & 17. marked 4 notches on S. & E. edges; dig pits 18x18x12 ins. in each sec. 5½ ft dist. & raise a mound of earth 4 ft base 2 ft high N. of cor.

78.00
2.00

Land gently rolling & level
Soil sandy, 2" rate
No timber
Land covered with dense undergrowth 78 chs.

N. 89° 58' E. on random line bet secs 9 & 16

40.00 Set level 1/4 sec. cor.

80.02 Intersect N. & S. line at the cor. of secs 9, 10, 15 & 16.

Thence Down
S. 89° 58' W. on true line bet. secs. 9 & 16
Over level desert

40.01 Set a sandstone stone 12x8x6 ins 8 ins. in the ground for 1/4 sec. cor. marked 1/4 on N. face; dig pits 18x18x12 ins E. & W. of stone 3 ft dist. and raise a mound of earth 3½ ft base 1½ ft high N. of cor.

80.02 The cor. of secs 8, 9, 16 & 17.

Land level desert
Soil saline 2" rate No vegetation

Subdivisions of T 5 S. R 18 W.

N 0°03' W. bet secs 8 & 9
Over level desert
40.00 Set a porphyry stone 12 x 7 x 6 ins. 8 ins. in the ground for 1/4 sec. cor. marked 1/4 on N. face; dig pits 18 x 18 x 12 ins. N. & S. of stone 3 ft. dist. and raise a mound of earth 3½ ft. base 1½ ft. high N. of cor.
80.00 Set a porphyry stone 18 x 6 x 5 ins. 12 ins. in the ground for cor. of secs 4, 5, 8, & 9 marked 5 notches on S & 4 notches on E. edges; dig pits 18 x 18 x 12 ins. in each sec. 5½ ft. dist. and raise a mound of earth 4 ft base 2 ft high N. of cor.
Land level desert
Soil saline, 2" rate
No vegetation.

N 89°58' E. on random line bet secs 4 & 9.
40.00 Set temp 1/4 sec. cor.
79.94 Intersect N. & S. line 5 lks N. of cor. of secs 3, 4, 9 & 10
Fence Line
N. on true line bet secs. 4 & 9
Over level desert.
39.97 Set a porphyry stone 15 x 6 x 5 ins. 10 ins. in the ground for 1/4 sec. cor. marked 1/4 on N. face; dig pits 18 x 18 x 12 ins. E. & W. of stone 3 ft. dist. and raise a mound of earth 3½ ft. base 1½ ft. high N. of cor.
79.94 The cor. of secs 4, 5, 8 & 9.
Land level desert
Soil saline 2" rate
Vegetation scarce

N. 0°03' W. on random line bet secs. 4 & 5

Subdivisions of T 5 S R 18 W.

40.00 Set temp ¼ sec cor.
80.00 Intersect N. bdy of Tp 33 chs E. of cor. of secs 4, 5, 32 & 33 as established by myself and hereinafter described.
Thence Dum
S. 0° 13' E. on true line bet. secs 4 & 5
Over level desert
40.00 Set a bothhyry stone 15 X 7 X 5 ins 10 ins in the ground for ¼ sec cor. marked ¼ on N. face; dig hole 18 X 18 X 12 ins N. & S. of stone 3 ft dist. and raise a mound of earth 3½ ft base 1½ ft high N. of cor.
80.00 The cor. of secs 4, 5, 8 & 9.
Sand level desert
Soil calcareous
No vegetation.
July 7, 1903.

From the standard cor. of secs 31 & 32 on S. bdy of the Tp. as established by myself and heretofore described
Thence Dum
N. 0° 04' W. bet secs 31 & 32.
Over gently rolling land, through dense shadscale and greasewood undergrowth.
32.10 Salt Spring road bears N. 60° W. & 60° E.
40.00 Set a sandstone 15 X 8 X 6 ins 10 ins in the ground for ¼ sec. cor. marked ¼ on N. face; dig hole 18 X 18 X 12 ins N. & S. of stone 3 ft dist. and raise a mound of earth 3½ ft base 1½ ft high N. of cor.
80.00 Set a bothhyry stone 12 X 10 X 6 ins. 8 ins in the ground for cor. of secs 29, 30, 31 & 32. marked 1 notch on S. & 5 notches on E. edges dig hole 18 X 18 X 12 ins in each sec. 5½ ft. dist. and raise a mound of earth 4 ft base 2 ft.

high W. of cor.
Land gently rolling
Soil sandy gravel, 3" rate
No timber
Land covered with dense under-
growth 80.00 chs.

E. on random line bet secs 29 & 32
40.00 Set temp 1/4 sec. cor.
80.00 Intersect W. & S. line 10 chs S. of cor. of
secs 28, 29, 32 & 33.
Thence Drum
S 89°56' W. on true line bet secs 29 & 32
Over gently rolling land, through
dense shadscale and greasewood
undergrowth
140.00 Set a hickory stone 12X8X6 ins
8 ins. in the ground for 1/4 sec
cor. marked 1/4 on W. faces, in
pits 18X18X12 ins E & W. of stone
3 ft dist. and raise a mound
of earth 3½ ft. base 1½ ft high W.
of cor.
80.00 The cor. of secs 29, 30, 31 & 32.
Land gently rolling
Soil sandy 3" rate
No timber
Land covered with dense under
growth 80.00 chs.

N. on random line bet secs 30 & 31.
40.00 Set temp 1/4 sec. cor.
80.00 Intersect the W. bdy of T. at the
cor. of secs 25, 30, 31 & 36 as established
by myself and heretofore described
Thence Drum
E. on true line bet secs 30 & 31.
Over almost level land, through
dense shadscale & greasewood
undergrowth
Left spring road bears S. 60° W. 4 chs. 60° E.
140.00 Set a sandstone 12X8X6 ins

Subdivision of T. 5 S. R. 18 W.

	E. ins in the ground for 1/4 sec. cor. marked 1/4 on W. face; dig pits 18 X 18 X 12 ins E. & W. of stone 3 ft dist.; and raise a mound of earth 3½ ft base 1½ ft high N. of cor.
80.00	The cor. of secs 29, 30, 31 & 32.
	Land gently rolling Soil sandy 2" rate No timber Land covered with dense undergrowth 80.00 chs.
	N. 0° 04' W. bet secs 29 & 30 Over almost level land, through dense shadscale and greasewood undergrowth
40.00	Set a hickory stone 18 X 16 X 5 ins. 12 ins in the ground for 1/4 sec. cor marked 1/4 on W. face; dig pits 18 X 18 X 12 ins N. & S. of stone 3 ft dist.; raise a mound of earth 3½ ft base 1½ ft. high N. of cor.
80.00	Set a hickory stone 15 X 8 X 6 ins. 10 ins in the ground for cor of secs 19, 20, 29 & 30, marked 2 notches on the S. and 5 notches on the E. edge; dig pits 18 X 18 X 12 ins in each sec 5½ ft dist. and raise a mound of earth 4 ft base 2 ft high N. of cor.
	Land gently rolling Soil, sand and gravel 2" rate No timber Land covered with dense shadscale and greasewood undergrowth 80.00 chs
	N. 89° 56' E. on random line bet secs 20 & 29.
+0.00	Set temp 1/4 sec. cor.
80.00	Intersect the N. & S. line 10 lks N. of the cor. of secs. 20, 21, 28 & 29

Subdivisions of T5S R18W.

Spence & Dunn
N. on true line bet. secs. 20 & 29
Over gently rolling land, through
dense oak, ash and chaparral
undergrowth.
40.00 Set a hickory stone 12x7x6 ins. 8
ins. in the ground for 1/4 sec cor.
marked 1/4 on N. face, dig pits 18x18x12
ins. E & W. of stone 3 ft dist; and
raise a mound of earth 3½ ft
base 1½ ft. high N. of cor.
50.00 The cor. of secs. 17, 20, 29 & 30
Land gently rolling
Soil sand and gravel 2nd rate
No timber
Land covered with dense under-
growth 82.20 chs.

N. on random line bet secs 19 & 30
40.00 Set temp 1/4 sec. cor.
79.96 Intersect the W. bdy of Th. at the cor
of secs. 19, 24, 25 & 30, as established
by meas. and bearings described
Spence & Dunn
E. on true line bet. secs 19 & 30
Over slightly rolling land, through
dense chaparral and grass wood
undergrowth
39.96 Set a hickory stone 12x8x6 ins.
8 ins in the ground for 1/4 sec.
cor. marked 1/4 on N. face, dig pits
18x18x12 ins. E & W. of stone 3 ft. dist
and raise a mound of earth
3½ ft base 1½ ft high N. of cor.
79.96 The cor. of secs 19, 20, 29 & 30
Land gently rolling
Soil sand and gravel 2nd rate
No timber
Land covered with dense
undergrowth 79.96 chs.

N. 0°04' W. bet secs. 19 & 20
Over almost level land, through dense shadscale and greasewood undergrowth
40.00 Set a porphyry stone 15X7X5 ins. 10 ins in the ground for 1/4 sec. cor. marked 1/4 on W. face; dig pits 18X18X12 ins N & S. of stone 3 ft dist. and raise a mound of earth 3½ ft base 1½ ft. high W. of cor.
80.00 Set a porphyry stone 18X7X6 ins 12 ins in the ground for cor of secs. 17, 18, 19 & 20, marked 3 notches on the S. & 5 notches on the E. edges. dig pits 18X18X12 ins in each sec. 5½ ft. dist. and raise a mound of earth 4 ft base 2 ft high W. of cor.
Land almost level
Soil sandy 2nd rate
No timber
Land covered with dense under-growth 80.00 ch

July 8. 1903.

E. on random line bet. secs 17 & 20
40.00 Set temp 1/4 sec. cor.
80.00 Intersect the N & S. line at cor. of secs 16, 17, 20 & 21.
Thence Run
N. on true line bet. secs 17 & 20
Over gently rolling land, through dense shadscale and greasewood undergrowth
40.00 Set a porphyry stone 12X8X6 ins 8 ins. in the ground for 1/4 sec. cor. marked 1/4 on N. face; dig pits 18X18X12 ins E & W. of stone 3 ft. dist and raise a mound of earth 3½ ft. base 1½ ft high W. of cor
80.00 The cor. of secs 17, 18, 19 & 20.

Subdivisions of T5 S. R18 W.

Land gently rolling
Soil sandy 3rd rate
No timber
Land covered with dense under-
growth 80.00 chs.

N. on random line bet. secs 18 & 19.
40.00 Set temp. 1/4 sec. cor.
79.90 Intersect the W. bdy. of Tp. at the
cor. of secs. 13, 18, 19 & 24 as established
by myself and heretofore described
Spence Drum
E. on true line bet. secs. 18 & 19.
Over gently rolling land, through
dense shadscale and greasewood
undergrowth.
39.90 Set a porphyry stone 12X8X6 ins
8 ins. in the ground for 1/4 sec.
cor. marked 1/4 on N. face; dig
pits 18X18X12 ins E & W. of stone 3 ft.
dist and raise a mound of earth
3 1/2 ft. base 1 1/2 ft. high N. of cor.
79.90 The cor. of secs 17, 18, 19 & 20.
Land gently rolling
Soil sandy, 2nd rate
No timber
Land covered with dense undergrowth
79.90 chs.

N. 0° 04' W. bet. secs. 17 & 18.
Over gently rolling ground, through
dense shadscale and greasewood
undergrowth
40.00 Set a porphyry stone 18X6X6 ins.
12 ins. in the ground for 1/4 sec.
cor. marked 1/4 on N. face; dig pits
18X18X12 ins. N & S of stone 3 ft. dist.
and raise a mound of earth
3 1/2 ft base 1 1/2 ft high N. of cor.
80.00 Set a porphyry stone 18X6X6 ins
12 ins. in the ground for cor.

of secs. 7, 8, 17 & 18 marked 4 notches on S & 5 notches on E edges. dig pits 18 X 18 X 12 ins. in each sec. 3½ ft. dist. and raise a mound of earth 4 ft. base 2 ft. high N. of cor.
Land gently rolling & level
Soil sandy and saline. 2" rate
No timber
Land covered with dense under-growth 80.00 chs.

E. on random line bet secs. 8 & 17.
40.00 Set temp. ¼ sec. cor.
80.00 Intersect the N. & S. line 4 lks. S. of cor. of secs. 8, 9, 16 & 17.
Thence Q.um
S. 89° 58' W. on true line bet secs. 8 & 17
Over level desert
40.00 Set a porphyry stone 15 X 8 X 5 ins. 18 ins. in the ground for ¼ sec. cor. marked ¼ on N. face. dig pits 18 X 18 X 12 ins. E. & W. of stone 3 ft. dist. and raise a mound of earth 3½ ft. base 1½ ft. high N. of cor.
80.00 Cor. of secs. 7, 8, 17 & 18.
Land level desert
Soil saline 2" rate
No vegetation.

N. on random line bet secs. 7 & 18
40.00 Set temp. ¼ sec. cor.
79.86 Intersected N. bdy. of Tp. 23 lks. S. of the cor. of secs. 7, 12, 13 & 18 as established by myself and hereafter described
Thence Q.um
S. 89° 50' E. on true line bet secs. 7 & 18
Over level desert
39.86 Set a porphyry stone 15 X 8 X 5 ins. 10 ins. in the ground for ¼ sec. cor. marked ¼ on N. face dig pits 18 X 18 X 12 ins. E. & W. of stone

3 ft dig and raise a mound of earth 3½ ft. base 1½ ft. high N. of cor.
79.86 The cor. of secs 7, 8, 17 & 18.
Land level desert
Soil saline 2" rate
Vegetation scarce.

N. 0°04' W. bet secs 7 & 8
Leaving dense undergrowth and hassing over level desert.
40.00 Set a hobbing stone 12x10x8 ins. 8 ins in the ground for ¼ sec cor. marked ¼ on N. face; dig pits 18x18x12 ins. N & S. of stone 3 ft. dig. and raise a mound of earth 3½ ft. base 1½ ft. high N. of cor.
80.00 Set a hobbing stone 18x7x5 ins. 12 ins. in the ground for cor. of secs 5, 6, 7 & 8. marked 5 notches on S. & E. edges; dig pits 18x18x12 ins. in each sec. 3½ ft. dig.; raise a mound of earth 4 ft base 2 ft. high N. of cor.
Land level desert
Soil saline
Vegetation very scarce.

N. 87°58' E. on random line bet secs 5 & 8
40.00 Set temp ¼ sec. cor.
79.84 Intersect the N & S. line at the cor. of secs 4, 5, 8 & 9.
Thence run
S. 89°58' W. on true line bet. secs 5 & 8
Over level desert.
39.93 Set a hobbing stone 15x8x5 ins. 10 ins. in the ground for ¼ sec. cor. marked ¼ on N. face; dig pits 18x18x12 ins. E & W. of stone

3 ft dist. and raise a mound of earth
3½ ft base 1½ ft high N. of cor.
79.84 The cor. of secs 5, 6, 7 & 8.
Land level desert
Soil saline 2" rate
No vegetation.

N. 89° 50' W. on random line bet
secs 6 & 7.
40.00 Set temp 1/4 sec. cor.
79.90 Intersect the W. bdy of Tp at the cor
of secs. 1, 6, 7 & 12 as established by
myself and heretofore described
Thence Run
S. 89° 50' E. on true line bet secs
6 & 7.
Over level desert.
39.90 Set a porphyry stone 12 x 9 x 5 ins
8 ins. in the ground for 1/4 sec. cor
marked 1/4 on W. face; dig pits
18 x 18 x 12 ins E. & W. of stone 3 ft. dist.
and raise a mound of earth 3½
ft base 1½ ft high N. of cor.
79.90 The cor. of secs 5, 6, 7 & 8.
Land level desert
Soil saline 2" rate
No vegetation.

N. 0° 04' W. on random line bet secs
5 & 6.
40.00 Set temp 1/4 sec cor.
80.10 Intersect the W. bdy of Tp 33 lks
E. of the cor of secs 5, 6, 31 & 32 as estab-
lished by myself and heretofore
described
Thence Run
S. 0° 18' E. on true line bet. secs. 5 & 6
Over level desert.
40.10 Set a porphyry stone 15 x 8 x 5 ins
10 ins. in the ground for 1/4 sec.
cor. marked 1/4 on W. face; dig.

pits 18x18x18 ins N. & S. of stone 3 ft. dist. and raise a mound of earth 3½ ft base 1½ ft. high W. of cor.

80.10 The cor. of secs. 5.6.7 & 8
Land level desert.
Soil saline 3rd rate
No vegitation.

July 9. 1903.

General Description.

This township contains some land that may be classed as first rate lying in secs 35 & 36, the remainder is of fair quality except for its saline nature.

About one half of the township, the north east portion lies in the "Great American Desert" and is in the main destitute of vegitation.

The remainder is covered with a more or less dense growth of sagebrush, greasewood and shadscale undergrowth.

The township is very poorly watered, there being no springs situated thereon and no streams of water, except "Deep Creek", and the waters of that stream reach it only in times of high water.

Carl John Bengston who resides on Sec. 35 & 36 is the only settler in the township.

The other parties who made application for survey John A. Erickson and Hilda Erickson are in the northern part of T. 6 S. R. 18 W. where they hold ranching property of considerable value and extent.

I find no indications of mineral in this township.

The waters of Deep Creek mentioned

above do not reach this township in any bed or channel, but spread out in a flood plain in secs. 35 and 36.

Alonzo J. Stookey
U.S. Deputy Surveyor

There being no notary public or other officer authorized to administer oaths within a reasonable distance at the beginning or ending of the survey, in order to save time and expense, I administer the preliminary and final oaths myself.

Alonzo J. Stookey
U.S. Deputy Surveyor

FINAL OATHS OF DEPUTY SURVEYOR AND HIS ASSISTANTS.

LIST OF NAMES.

A list of the names of the individuals employed by Alonzo J. Stookey, 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 Subdivisions of Tp. 5 S. R. 18 W. Salt Lake Base and Meridian showing the respective capacities in which they acted:

Hyrum Millward, Chainman.
Robt. D. Halladay, Chainman.
Orson A. Johnson, Moundman.
Lionel J. Stookey, Moundman.
, Axman.
, Axman.
Lincoln A. Stookey, Flagman.

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted Alonzo J. Stookey, United States Deputy Surveyor, in surveying all those parts or portions of the Subdivisions of T. 5 S. R. 18 W. of the Salt Lake Base meridian, State of Utah, which are represented in the foregoing field notes as having been surveyed by him and under his direction; and that said survey has been in all respects, to the best of our knowledge and belief, well and faithfully surveyed, and the corner monuments established, according to the instructions furnished by the United States Surveyor General for

Hyrum Millward, Chainman.
Robert D. Halladay, Chainman.
Orson A. Johnson, Moundman.
Lionel J. Stookey, Moundman.
, Axman.
, Axman.
Lincoln A. Stookey, Flagman.

Subscribed and sworn to before me this 9th day of July, 1897.

SEAL

Alonzo J. Stookey
U.S. Dep. Surveyor

6—151

FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I, Alonzo J. Stookey, United States Deputy Surveyo solemnly swear that, in pursuance of a contract received from Order [illegible] United States Surveyor General for Utah, bearing date o 6 day of May 1902, ~~189~~, I have well, faithfully, and truly, in my proper person, and in strict conformity with the instructions furnished by the United States Su General for Utah, the Manual of Surveying Instructions, and the laws o United States, surveyed all those parts or portions of the subdivisional lines of T. 5 S. R. 18 W.

of the S. L. B. & M. Second meridian, in the State of Utah, which are represented i foregoing field notes as having been surveyed by me, and under my direction; and I do further solc swear that all the corners of said survey have been established and perpetuated in strict accordance the Manual of Surveying Instructions, and the special written instructions of the United States Su General for Utah and in the specific manner described in the field notes, m the foregoing are the original field notes of such survey; and should any fraud be detected, I will the penalty of perjury under the provisions of an Act of Congress approved August 8, 1846.

Alonzo J. Stookey
United States Deputy Sur.

Subscribed by said Alonzo J. Stookey, and sworn to before me this 17th day of September, 1903

Edward H. Anderson
U. S. Surveyor General for Utah

SEAL

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah, November 30 1903, i

The foregoing field notes of the survey of the subdivisional lines of Township 5 South Range 18 West of the Salt Lake Base & Meridian, Utah

executed by Alonzo J. Stookey under his contract No. 252, dated May 6 1902, ~~189~~, having critically examined, and the necessary corrections and explanations made, the said field notes, or surveys they describe, are hereby approved.

Edward H. Anderson
United States Surveyor Ge

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

United States Surveyor G

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BOOK A-298

FILED

NOV 9 1903

FIELD NOTES

OF THE Re SURVEY OF THE

Guide Meridian

through T. 8 N.

bet Rs 14 & 15 W

Of the Salt Lake Base and Meridian,

State of Utah

AS SURVEYED BY

Alfredo H. Talamantes and John W. Dougall United States Deputy Surveyors

Under ~~his~~ their Contract No. 262, dated March 23, 1903

Survey commenced May 4, 1903

Survey completed May 5, 1903

S. 41 61

NAMES AND DUTIES OF ASSISTANTS.

M. L. Crandall Jr.	Chainman
J. I. Robbins.	Chainman
Geo. M. P. Dougall.	Chainman.
James S. Houtz.	Chainman.
Hilbur I. Rowland	Rodman
Ralph A. Greeseck	Flagman.

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BOOK A-298

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Meanders Page .....

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PRELIMINARY OATHS OF ASSISTANTS.

W. L. Crandall, Jr. ——— Geo. M. P. Dougall

WE, J. D. Robbins, and James S. Hoaty,

do solemnly swear that we will well and faithfully execute the duties of chainmen; that we will level the chain over even and uneven ground, and plumb the tally pins, either by sticking or dropping the same; that we will report the true distances to all notable objects, and the true lengths 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 resurvey of Guide Meridian through T. 8 N., bet. R's 14 and 15 W. of the S. L. B. and M.

W. L. Crandall, Jr. Geo. M. P. Dougall, Chainmen

J. D. Robbins James S. Hoaty, Chain. T

Subscribed and sworn to before me this 25 day of April 1903, 189

SEAL

Hugh M. Dougall
Notary Publ.

~~WE,~~ I Wilbur J. Rowland ~~and~~

do solemnly swear that ~~we~~ I will well and truly perform the duties of moundman in the establishment of corners, according to the instructions given ~~us~~ me, to the best of ~~our~~ my skill and ability, in the resurvey Guide Meridian through T. 8 N. bet. R's 14 and 15 W. of the S. L. B. Utah.

Wilbur J. Rowland, Moundman

, Mounda

Subscribed and sworn to before me this 25 day of April 1903, 189

SEAL

Hugh M. Dougall
Notary Public

WE, ——— and ———

do solemnly swear that we will well and truly perform the duties of axmen in the establishment of corners and other duties, according to instructions given us, to the best of our skill and ability, in the survey

———, Axm

———, Axmen

Subscribed and sworn to before me this ——— day of ———, 189

SEAL

———

———

I, Ralph A. Groesbeck, 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 resurvey of Guide Meridian through T. 8 N., bet. R's 14 and 15 W. of the S. L. B. and M. Utah.

Ralph A. Groesbeck, Flag.

Subscribed and sworn to before me this 25 day of April 1903, 189

SEAL

Hugh M. Dougall
Notary Public

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Guide Meridian through T. 8 N.

Resurvey commenced May 4, 1903 and executed with a W. and L. E. Burley light mountain transit with solar attachment. The horizontal limb having two double verniers placed opposite to each other and reading to single minutes of arc. The instrument was examined, tested on the true meridian at Salt Lake City, found correct and was approved by the Surveyor General for Utah. April 30, 1903.

I examined the adjustments of the transit and corrected the level and collimation errors; then to test the solar apparatus, by comparing its indications resulting from solar observations made during p. m. and a. m. hours, with a meridian determined by observation on Polaris.

I proceed as follows

At the cor of Tps 7 and 8 N. Rs 14 and 15 W. heretofore described and in lat. 41°23' N. long. 113°51' W. I set off 41°23' N. on the lat arc. 15°51' N. on the decl. arc. and at 4h 00m p. m. l. m. t. determine with the solar a true meridian and mark a point thereof on a plug driven in the ground 5.00 chs. N. of cor.

May 4, 1903: At 15h 36' p. m. l. m. t. observe Polaris at lower culmination in accordance with the Manual of Instructions. and marked the true meridian thus determined by a small nail driven in the hub already set 5.00 chs N. of cor. on which the true meridian falls 0.2 lks. W. of the mark determined

Guide Meridian through T. 8 N.

Chains by the solar.

May 4, 1903.

May 5, 1903; At 8h 00m a. m. l. m. t., I set off 41°23' N. on the lat arc, 16°03' N. on the decl. arc, and mark a point on the meridian determined with the solar by a pencil mark on the stake set 5.00 chs N. of cor; this mark falls 0.2 lks W. of the meridian established by the Polaris observation.
The solar apparatus by p. m. and a. m. observations defines positions for meridians, respectively about 0'11" east, and 0'11" west of the meridian established by the Polaris observations; therefore I conclude that the adjustments of the instrument are satisfactory.
The magnetic bearing of the true meridian at 8h 00m a. m. is N. 17°30' W. the angle thus determined gives the mag. decl 17°30' East.

Preliminary to commencing the survey of T7 N., R 15 W. I proceed as follows
From the cor of Tps 7 and 8 N. Rs. 14 and 15 W. heretofore described. I run north on a blank line on west bdy. of sec. 31; at 40.13 chs. I find the 1/4 sec. cor., 10 lks W. of line. The cor. is nearly obliterated but pits and mound visible. At 80.20 chs I find traces of pits and mound 19 lks W. of line, but no cor; therefore I continue my line north, and find no part of W. bdy of Tp. in alinement and that many of the corners are nearly obliterated.

Guide Meridian through T. 8 N.

Chains	At 6 miles 1.61 chs intersect 2nd Standard Parallel North 16 chs East of standard cor. of Tps. 9 N. Rs 14 and 15 W., which is a post badly decayed but pits and mound discernible.
	May 5, 1903. At this cor. I set off 16°05' N. on decl. arc. and at 12h 00m m. l. m. t. observe the sun on the meridian; the resulting lat. is 41°28' N.
	Therefore I return to the cor. of Tps. 7 and 8 N. Rs 14 and 15 W. heretofore described and resurvey Guide Meridian as follows
	Knowing from blank line previously run that course of line bet. sec. corners is N. 0°08' W. I run
	N. 0°08' W. bet. secs 31 and 36.
	over level land.
	Difference between measurements of 40.10 chs., by two sets of chainmen, is 10 lks.; position of middle point
	By 1st set, 40.05 chs.
	By 2nd set, 40.15 chs.; the mean of which is
40.10	Intersect old 1/4 sec. cor. which is nearly destroyed, there being only the stump of post and traces of pits and mound visible.
	Reestablish cor as follows
	Set a pine post 4 ft. long, 3 ins. sq. with quart of charcoal 36 ins. in the ground for 1/4 sec. cor. marked 1/4 S 36 on W. face and 31 on E. face; dig pits 18 x 18 x 12 ins., N. and S. of post 3 ft. dist. and raise a mound of earth, 3 1/2 base, 1 1/2 ft. high W. of cor.
	Difference bet. measurements of 80.20 chs., by two sets of chainmen is 8 lks.; position of middle point
	By 1st set, 80.24 chs
	By 2nd set 80.16 chs.; the mean of which is
80.20	Intersect point of old cor. of secs. 25, 30, 31 and 36. I being able to identify

Boise Meridian through T 8 N.

Chains came by old pits and mound.
Reestablish cor. as follows
Set a pine post 4 ft. long, 4 ins sq.
with quart of charcoal 36 ins in the
ground, for cor. of secs. 25, 30, 31 and 36.
marked
T 8 N S 30 on N.E.,
R 14 W S 31 on S E
S 36 on S W., and
S 25 on N. W face; with 1 notch on S. and
5 notches on N. edge; dig pits, 18 X 18 X 12 ins
in each sec., 3 1/2 ft. diet.; and raise a
mound of earth, 4 ft. base, 2 ft. high W.
of cor.
Land, level.
Soil: alkali; 4th rate.
Timber.

Knowing from blank line previously
run that course of line bet. secs. 25 and
30 is N. 0° 13' W.
I run
N. 0° 13' W. bet secs. 25 and 30.
Over level land.
Difference bet. measurements of 40.11
chs by two sets of chainmen is 4 lks
position of middle point
By 1st set it is 40.09
By 2nd set it is 40.13 the mean of which is
40.11 Intersect point of old 1/4 sec. cor. which
I am able to identify by old pits and
mound still intact.
Reestablish cor. as follows
Set a pine post 3 1/2 ft. long, 3 ins. sq.
with quart of charcoal 30 ins in the
ground for 1/4 sec. cor. marked 1/4 S 25
on W. face, and 30 on E. face; dig pits
18 X 18 X 12 ins., N. and S. of post; 3 ft diet; and
raise a mound of earth, 3 1/2 ft. base 1 1/2 ft.

Guide Meridian through T. 8 N.

Chains	high N. of cor.
	Difference bet measurements of 80.28 chs. by two sets of chainmen is 2 lks.
	position of middle point
	By 1st set 80.29 chs
	By 2nd set 80.27 chs; the mean of which is
80.28	Intersect stump of old post with
	pits and mound
	Reestablish cor as follows
	Set a pine post 4 ft. long, 4 x 4 ins.
	sq. with quart of charcoal 36 ins.
	in the ground for cor of secs. 19, 24, 25
	and 30. marked
	T 8 N S 19 on N E.,
	R 14 W S 30 on S E.,
	S 25 on S W., and
	S 24 on N W., face; with 2 notches on
	S. and 4 notches on N. edge; dig pits
	18 x 18 x 12 ins. in each sec. 5½ ft. dist;
	and raise a mound of earth, 4 ft.
	base, 2 ft. high W. of cor.
	Land, level
	Soil, alkali; 4th rate.
	No timber.

	Knowing from blank line previously
	run that course of line bet secs.
	19 and 24. is N 0° 11' W.
	I run
	N. 0° 11' W. bet secs. 19 and 24.
	over level land.
	Difference between measurements of
	40.20 chs. by two sets of chainmen is
	6 lks; position of middle point
	By 1st set 40.23 chs
	By 2nd set 40.17 chs; the mean of which is
40.20	Intersect point of old 1/4 sec. cor. which
	I identify by old pits and mound.
	Reestablish cor as follows

Boise Meridian through T. 8 N.

Chains	Set a porphyry stone 6X6X16 ins; 11 ins in the ground for 1/4 sec. cor. marked 1/4 on N. face; dig pits, 18X18X12 ins., N. and S. of stone, 3 ft. diet.; and raise a mound of earth, 3 1/2 ft. base 1 1/2 ft. high N. of cor. Difference between measurements of 80.41 chs by two sets of chainmen is 10 lks. position of middle point By 1st set 80.36 chs By 2nd set 80.46 chs; the mean of which is
80.41	Intersect point of original sec. cor. which I identify by old pits and mound. Reestablish cor as follows Set a quartzite stone 16X10X8 ins; 11 ins in the ground, for cor. of secs. 13, 18, 19 and 24, marked with 3 notches on S. and 3 notches on N. edge; dig pits, 18X18X12 ins., in each sec. 3 1/2 ft. diet.; and raise a mound of earth, 4 ft. base 2 ft. high, N. of cor. Land. level. Soil, alkali; 4th rate. No timber.
	Moving from blank line previously run that course of line bet secs 13 and 18 is N. 0° 05' W. I run N. 0° 05' W. bet secs. 13 and 18. Over level land.
10.00	Enter scattering greasewood. Difference between measurements of 40.25 chs by two sets of chainmen is 4 lks. position of middle point By 1st set 40.23 chs By 2nd set 40.27 chs; the mean of which is
40.25	Find old post badly decayed but pits intact.

Guide Meridian through T. 8 N.

Chains	
	Reestablish cor as follows Set a quartzite stone 6X8X16 ins; 11 ins, in the ground for 1/4 sec. cor. marked 1/4 on N. face; dig pits 18X18X12 ins; N. and S. of stone, 3 ft. dist; and raise a mound of earth, 3 1/2 ft. base, 1 1/2 ft. high N. of cor. Difference between measurements of 80.50 chs by two sets of chainmen is 8 lks. position of middle point By 1st set 80.46 chs By 2nd set 80.54 chs, the mean of which is
80.50	Intersect old cor of secs. 7, 12, 13, and 18, which is a pine post 4X4 ins, 12 ins, above ground properly marked, but pits and mound nearly obliterated. dig pits 18X18X12 ins. in each sec. 5 1/2 ft. dist, and raise a mound of earth 4 ft. base, 2 ft. high N. of cor Land, level. Soil, alkali; 4th rate. In timber.
	Knowing from blank line previously run that course of line bet secs. 7 and 12 is N. 0° 22' E. I run N 0° 22' E. bet secs. 7 and 12. over level land and through scattering greasewood. Difference between measurements of 40.22 chs. by two sets of chainmen is 2 lks. position of middle point By 1st set 40.21 chs By 2nd set 40.23 chs; the mean of which is
40.22	Intersect old 1/4 sec. cor. properly marked but pits and mound nearly obliterated; dig pits 18X18X12 ins; N. and S. of stone, 3 ft. dist; and raise a mound of earth

Bride Meridian through T. 8 N.

Chains	3½ ft. base 1½ ft. high, N. of cor.
	Difference between measurements of 80.22 chs by two sets of chainmen is 6 lks. position of middle point
	By 1st set 80.19 chs
	By 2nd set 80.25 chs; the mean of which is
80.22	Intersect point for cor. of secs. 1, 6, 7, and 12 which I identify by pits, and traces of mound.
	Reestablish cor as follows
	Set a quartzite stone 8 X 10 X 16 ins; 11 ins in the ground for cor of secs. 1, 6, 7 and 12. marked with 3 notches on S. and 1 notch on N. edge; dig pits, 18 X 18 X 12 ins., in each sec. 3½ ft. dist; and raise a mound of earth, 4 ft. base, 2 ft. high, N. of cor.
	Land, level.
	Soil; alkali; 4th rate.
	Timber.
	Knowing from blank line previously run that course of line bet. secs 1 and 6 is N. 0°22' E.
	I run
	N. 0°22' E. bet. secs 1 and 6.
	Over level land.
3.00	Leave scattering greasewood.
25.50	Road from Terrace to Graniteville bears N. N. and S. E.
	Difference between measurements of 40.00 chs by two sets of chainmen is 4 lks. position of middle point
	By 1st set 39.98 chs
	By 2nd set 40.02 chs; the mean of which is
40.00	Intersect point for ¼ sec. cor. which I identify by pits, and traces of mound
	Reestablish cor as follows
	Set a lime stone 6 X 12 X 18 ins; 12 ins. in

Guide Meridian through T. 8 N.

Chains. the ground for 1/4 sec. cor. marked 1/4 on N. face; dig pits 18 X 18 X 12 ins; N. and S. of stone 3 ft. dist; and raise a mound of earth, 3 1/2 ft. base, 1 1/2 ft. high. N. of cor.

Cor. is on spur projects S. N. Descend.

50.00 Head of draw drains westerly. Ascend

59.00 Spur projects westerly. Descend

79.80 Dry wash drains westerly. Ascend.

Difference between 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

80.00 Intersect 2nd Standard Parallel north at the Standard cor of Tps. 9 N. Rs 14 and 15 W. which is a pine post badly decayed but pits and mound discernible.

Reestablish cor as follows

Set a limestone 24 X 20 X 4 ins; 18 ins in the ground for Standard cor of Tps. 9 N. Rs 14 and 15 W. marked S.C. on N. 14 on E. and 15 on W. face; with 6 grooves on N, E, and W. faces; dig pits 30 X 24 X 12 ins: crosswise on each line E. and W. 4 ft. and

40/40 N. of stone 8 ft. dist; and raise a mound of earth 5 ft. base, 2 1/2 ft. high N. of cor.

Land, level,

Soil, alkali; and rocky; 4th rate.

No timber.

Mountainous land 40.00 chs

May 5, 1903.

General Description.

For general description see notes of subdivision of T 8 N., R. 14 W.

Alfredo R Talamantes
US Deputy Surveyor

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FINAL OATHS OF DEPUTY SURVEYOR AND HIS ASSISTANTS.

LIST OF NAMES.

A list of the names of the individuals employed by Alfredo R. Talamantes, United States Deputy Surveyor, to assist in running, measuring, and marking the lines and corners described in the foregoing field notes of the re-survey of Guide Meridian through T8N. bet. R's 14 and 15W. of the Salt Lake Base and Meridian. Utah, showing the respective capacities in which they acted:

W. L. Crandall Jr., Chainman.
J. I. Robbins, Chainman.
Geo. W. P. Dougall, Chainman. ~~Moundman.~~
James S. Hoxty, Chainman. ~~Moundman.~~
Hilbur I. Rowland, Moundman. ~~Axman.~~
, Axman.
Ralph A. Groesbeck, Flagman.

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted Alfredo R. Talamantes, United States Deputy Surveyor, in re-surveying all those parts or portions of the Guide Meridian through T8N. bet R's 14 and 15W. of the Salt Lake Base and meridian, State of Utah, 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 surveyed, and the corner monuments established, according to the instructions furnished by the United States Surveyor General for Utah.

Geo. W. P. Dougall — W. L. Crandall, Jr., Chainman.
James S. Hoxty — J. I. Robbins, Chainman.
Hilbur I. Rowland, Moundman.
, Moundman.
, Axman.
, Axman.
Ralph A. Groesbeck, Flagman.

Subscribed and sworn to before me this 6 day of July 1913, 189

SEAL

Hugh Lee Dougall
Notary Public

FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I, Alfredo R. Talamantes United States Deputy Surveyor, do solemnly swear that, in pursuance of a contract received from Edward H. Anderson United States Surveyor General for the State of Utah, bearing date of the 23 day of March 1903, 189 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 the State of Utah, the Manual of Surveying Instructions, and the laws of the United States, surveyed all those parts or portions of the Gila & Salt Meridian Township 8 North between Ranges 14 & 15 West

of the Salt Lake Base and meridian, in the State of Utah, which are represented in the foregoing field notes as having been surveyed by me, and under my direction; and I do further solemnly swear that all the corners of said survey have been established and perpetuated in strict accordance with the Manual of Surveying Instructions, and the special written instructions of the United States Surveyor General for the State of Utah and in the specific manner described in the field notes, and that the foregoing are the original field notes of such survey; and should any fraud be detected, I will suffer the penalty of perjury under the provisions of an Act of Congress approved August 8, 1846.

Alfredo R. Talamantes
United States Deputy Surveyor.

Subscribed by said Alfredo R. Talamantes and sworn to before me this 9th day of November 1903 189

Edward H. Anderson
U. S. Surveyor General
Utah

SEAL

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah, March 5, 1904 189

The foregoing field notes of the survey of the Gila & Salt Meridian Township 8 North between Ranges 14 & 15 West of the Salt Lake Base & Meridian, Utah

executed by Alfredo R. Talamantes & John N. Dougall under ~~his~~ their contract No. 262, dated March 23 1903, 189 , having been critically examined, and the necessary corrections and explanations made, the said field notes, and the surveys they describe, are hereby approved.

Edward H. Anderson
United States Surveyor General.

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

United States Surveyor General.

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BOOK A-298

E. L.

FIELD NOTES

OF THE re SURVEY OF THE

2nd Standard Parallel North

through

Range 14 West

Of the Salt Lake Base and Meridian,

State of Utah

AS SURVEYED BY

Alfredo R. Talamantes and John W. Dougall United States Deputy Surveyors.

under ~~his~~ their Contract No. 262, dated March 23, 1903.

Survey commenced May 6, 1903.

Survey completed May 6, 1903.

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NAMES AND DUTIES OF ASSISTANTS.

W. L. Randall	Chainman
J. J. Robbins	Chainman
Geo. M. P. Dougall	Chainman
James S. Hartz	Chainman
Wilbur O. Barbard	Groundman
Ralph C. Groesbeck	Flagman

BOOK A-298

INDEX DIAGRAM.

Township 8 North, *Range* 14 West

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Meanders Page

1

PRELIMINARY OATHS OF ASSISTANTS.

We, M. L. Crandall Jr. J. J. Robbins and Rev. M. P. Dougall James S. Hardy do solemnly swear that we will well and faithfully execute the duties of chainmen; that we will level the chain over even and uneven ground, and plumb the tally pins, either by sticking or dropping the same; that we will report the true distances to all notable objects, and the true lengths 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 ~~s~~ survey of 2nd Standard Parallel North through R. 14 W. of the S. L. B. and M. Uta.

M. L. Crandall Jr., Chainman.
Rev M P Dougall, Chainman.
J J Robbins, Chainman.
James S. Hardy, Chainman.

Subscribed and sworn to before me this 25 day of April 1913, 189 } Hugh M Dougall Notary Public

SEAL

~~We~~ I, Wilbur J. Rowland and ..... do solemnly swear that ~~we~~ I will well and truly perform the duties of moundman in the establishment of corners, according to the instructions given ~~us~~ me, to the best of ~~our~~ my skill and ability, in the ~~s~~ survey of 2nd Standard Parallel North through R. 14 W. of the S. L. B. and M. Utah.

Wilbur J Rowland, Moundman.
....., Moundman.

Subscribed and sworn to before me this 25 day of April 1913 } Hugh M Dougall Notary Public

SEAL

We, ... and ..... do solemnly swear that we will well and truly perform the duties of axmen in the establishment of corners and other duties, according to instructions given us, to the best of our skill and ability, in the survey of

....., Axman.
....., Axman.

Subscribed and sworn to before me this ..... day of ....., 189 }

SEAL

I, Ralph A. Groesbeck, 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 ~~s~~ survey of 2nd Standard Parallel North through R. 14 W. of the S. L. B. and M. Utah.

Ralph A. Groesbeck, Flagman.

Subscribed and sworn to before me this 25 day of April 1913, 189 } Hugh M Dougall Notary Public

SEAL

6—151

2nd Standard Parallel N. through R. 14 W.

Resurvey commenced May 6, 1903. and executed with a W. and L. E. Gurley light mountain Transit with polar attachment; the horizontal limb having two double verniers placed opposite to each other and reading to single minutes of arc.
For complete test of polar apparatus, see book A.
Preliminary to commencing subdivision of T. 7 N. R. 15 W. I proceed as follows May 6, 1903; at the standard cor. of Tps. 9 N. Rs 14 and 15 W. heretofore described, in lat 41° 28' N. long 113° 31' W. I set off 41° 28' N. on the lat arc. 16° 25' N. on the decl. arc, and at 7h 30m a.m. l.m.t. determine with the solar a true meridian.
Thence I run east, on a blank line on S. bdy of sec. 31, and at 39.51 chs fall 48 lks. S. of old standard 1/4 sec. cor. which is a volcanic stone 9 x 8 x 6 ins above ground, marked as described by the surveyor general, but not properly witnessed. At 79.78 chs fall 1.02 chs S. of old pits and mound which I identify as point for old standard cor. of secs. 31 and 32.
Therefore I continue my line east and find no part of 2nd Standard Parallel N. through R. 14 W. in alinement and many of the old corners obliterated, only pits and traces of mound being discernible.
At 481.04 chs intersect N. and S. line 6.50 chs. S. of Standard cor. of Tps. 9 N. Rs 13 and 14 W. the same being a volcanic stone 8 x 9 x 6 ins above ground marked and witnessed as described by the surveyor general.
May 6, 1903: At this cor I set off 16° 22' N.

Chains	
	on the decl. arc. and at $12^h 00^m$ m. l. m. t. observe the sun on the meridian, the resulting lat. is 41° 28' N.
	Therefrom I return to the Standard cor. of Tps 9 N. Rs. 14 and 15 W. heretofore described, and resurvey the 2nd Standard Parallel N. through R. 14 W. as follows
	May 6, 1903: At $2^h 00^m$ p. m. l. m. t. I set off 16° 24' N. on lat. arc 21° 42' N. on decl. arc. and determine a meridian with the solar.
	Thence I run
	East on S. bdy sec. 31.
	Over mountainous land, descending.
6.00	Ravine drains S. N. descend.
	Difference bet. measurements of 39.51 chs by two sets of chainmen is 4 lks.
	Position of middle point
	By 1st set 39.49 chs
	By 2nd set 39.53 chs, the mean of which is
39.51	Set 40 lks S. of old Standard 1/4 sec. cor. which is a volcanic stone 9 x 8 x 6 ins, above ground, marked as described by the surveyor general but not properly witnessed; dig pits 18 x 18 x 12 ins E. and W. of stone, 3 ft. dist; and raise a mound of earth 3½ ft. base, 1½ ft. high N. of cor.
	The course of line bet. corners is therefore N. 89° 26' E. and dist. 39.51 chs.
	From point 40 lks S. of Standard 1/4 sec. cor.
	I continue my line East.
41.80	Top of ridge trees N. E. and S. W.
	Descend.
50.00	Foot of descent.
	Difference bet. measurements of 79.78 chs by two sets of chainmen is 6 lks. position of middle point
	By 1st set. 79.75 chs.

2nd Standard Parallel N. through R. 14 W.

Chains 79.78	By 2nd set. 79.81 chs; the mean of which is
	Fact 1.02 chs. S. of Standard cor. of secs.
	31 and 32, which I identify by old
	pits and mound still intact.
30/24.78	Reestablish cor. as follows.
	Set a limestone 14 x 8 x 6 ins; 10 ins
	in the ground for Standard cor
	of secs 31 and 32, marked S.C. on N.
	with 3 grooves on E. and 1 groove
	on W. face; dig pits 24 x 18 x 12 ins,
	crossing on each line E. and W.
	3 ft. and N. of stone 7 ft. dist; and
	raise a mound of earth 4 ft. base
	2 ft. high N. of cor.
	Course of line bet corners is therefore
	N. 89° 07' E. and dist. 40.28 chs.
	Land, mountainous.
	Soil, stony and alkali; 4th rate.
	Timber,
	Mountainous land 30.00 chs.

	From Standard cor. of secs. 31 and 32,
	as reestablished, I run
	East on S. bdy sec. 32.
	Over level land.
	Difference bet. measurements of
	39.94 chs. by two sets of chainmen
	is 8 lks. position of middle point
	By 1st set. 39.90 chs
	By 2nd set. 39.98 chs; the mean of which is
39.94	Fact 70 lks S. of old Standard 1/4 sec.
	cor. which is a limestone 4 x 8 x 6 ins
	above ground, marked as described
	by the surveyor general but not
	properly witnessed; dig pits 18 x 18 x 12
	ins, E. and W. of stone 3 ft. dist; and
	raise a mound of earth 3 1/2 ft. base
	1 1/2 ft. high N. of cor.
	Course of line bet cors is therefore N. 89° 00' E.

2nd Standard Parallel N. through R. 14 E.

Chains	
	and dist, 39.94 chs.
	Difference bet. measurements of 80.00 chs by two sets of chainmen is 2 lks.
	position of middle point
	By 1st set 79.99 chs
	By 2nd set 80.01 chs. the mean of which is
80.00	Fall 1.39 chs. S. of old Standard cor of secs. 32 and 33 which is a pine post 4x4 ins, 12 ins. above ground, post badly decayed; marked and witnessed as described by the surveyor general.
	Reestablish cor as follows
	Set a porphyry stone 16x10x6 ins 11 ins. in the ground for Standard cor of secs. 32 and 33 marked S.C. on N. with 4 grooves on E. and 2 grooves on W. face; dig pits 24x18x12 ins. crosswise on each line E. and W. 8 ft. dist; and N. of stone 7 ft. dist, and raise a mound of earth 4 ft. base, 2 ft. high N. of cor.
	Course of line bet corners is therefore N. 89° 00' E. and dist 40.07 chs.
	Land, level.
	Soil, alkali; 4th rate.
	Timber.
	From Standard cor of secs. 32 and 33 as reestablished run east on S. bdy sec 33.
	Over level land.
	Difference bet. measurements of 40.24 chs is 10 lks; position of middle point:
	By 1st set 40.19 chs
	By 2nd set 40.29 chs, the mean of which is
40.24	Fall 46 lks. S of old Standard 1/4 sec. cor. which is a pine post 4x4 ins; 12 ins. above ground badly decayed, but

2nd Standard Parallel N. through R. 14 W.

Chains.	marked as described by the surveyor general. Pits and mound nearly obliterated.
	Reestablish cor as follows.
	Set a porphyry stone 6x8x14 ins; 10 ins. in the ground for Standard 1/4 sec. cor. marked S.C. 1/4 on N. face; dig pits 18x18x12 ins; E. and W. of stone 3 ft. dist; and raise a mound of earth 3 1/2 ft. base, 1 1/2 ft. high N. of cor.
	Course of line bet corners is therefore N. 89° 21' E. and dist. 40.24 chs.
	Difference bet. measurements of 80.61 chs by two sets of chainmen is 4 lks: position of middle point By 1st set 80.59 chs
	By 2nd set 80.63 chs: the mean of which is
80.61	Fall 91 lks S. of old Standard cor of secs 33 and 34 which is a pine post badly decayed lying on ground. exact position determined by traces of original pits and mound.
	Reestablish cor as follows
	Set a granite stone 6x6x15 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; dig pits 24x18x12 ins crosswise on back line E. and W. 3 ft. dist and N. of stone 7 ft. dist; and raise a mound of earth 4 ft. base 2 ft. high N. of cor.
	Course of line bet. corners is therefore N. 89° 21' E. and dist. 40.38 chs.
	Land, level,
	Soil, alkali: 4th rate.
	No timber.

From Standard cor of secs. 33 and 34.

Chains. as re-established. I pass
East on S. bdy sec 34.
over level land.
Difference bet. measurements of 40.09 chs
by two sets of chainmen is 6 lks.
Position of middle point
By 1st set 40.06 chs
By 2nd set 40.12 chs; the mean of which is
40.09 Fall 35 lks S. of old Standard 1/4 sec.
cor. which is a badly decayed fence
post 3 X 3 ins, 12 ins above ground
marked as described by the Surveyor
General. Pits and mound nearly obliterated
Reestablish cor as follows
Set a porphyry stone 5 X 7 X 15 ins;
(alongside of post) 10 ins in the ground
for Standard 1/4 sec. cor. marked 1/4 on
N. face; dig pits 18 X 18 X 12 ins; E. and W.
of stone 3 ft. dist; and raise a mound
of earth 3 1/2 ft. base, 1 1/2 ft. high N. of cor.
Course of line bet. corners is therefore
N. 89° 13' E. and dist, 40.10 chs.
Difference bet. measurements of 80.18 chs
by two sets of chainmen is 2 lks.
Position of middle point
By 1st set 80.17 chs
By 2nd set 80.19 chs; the mean of which is
80.18 Fall 1.10 chs S. of old Standard cor. of
secs. 34 and 35; the position of which I
identify by pits and traces of mound
Reestablish cor as follows
Set a porphyry stone 6 X 6 X 15 ins, 10 ins
in the ground for Standard cor. of
secs. 34 and 35. marked S. C. on N.
with 2 grooves on E. and 4 grooves on
W. face; dig pits 24 X 18 X 12 ins. crossing
on each line E. and W. 3 ft. dist, and
N. of stone 7 ft. dist; and raise a mound
of earth 4 ft. base, 2 ft. high N. of cor.
The course of line bet. corners is therefore
N. 89° 27' E. and dist. 40.09 chs.

2nd Standard Parallel N. through R 14 W.

Chains	
	Land, level. Soil, alkali; 4th rate. No timber.
40.29	From Standard cor. of secs. 34 and 35 as reestablished. Run East on S. bdy of sec 35. Over level land. Difference bet. measurements of 40.29 chs by two sets of chainmen is 8 lks: position of middle point By 1st set 40.25 chs. By 2nd set 40.33 chs; the mean of which is Fall 43 lks S. of old Standard 1/4 sec. cor. which is a pine post. 3 x 3 ins; 12 ins. above ground badly decayed but marked as described by the surveyor general. Pits and mound nearly obliterated. Reestablish cor as follows. Set a porphyry stone 6 x 6 x 15 ins; 10 ins in the ground for Standard 1/4 sec. cor. marked S. C. 1/4 on N. face; dig pits 18 x 18 x 12 ins; E. and W. of stone. 3 ft. dist; and raise a mound of earth 3 1/2 ft. base, 1 1/2 ft. high N. of cor. Course of line bet corners is therefore N. 89° 23' E. and dist 40.29 chs.
80.38	Difference bet. measurements of 80.38 chs. by two sets of chainmen is 10 lks. position of middle point By 1st set 80.33 chs By 2nd set 80.43 chs; the mean of which is Fall 97 lks S. of old Standard cor. of secs. 35 and 36. which is a pine post 4 x 4 ins; 12 ins. above ground, badly decayed but marked as described by the Surveyor General Pits and mound nearly obliterated.

Chain Reestablish cor as follows
Set a porphyry stone 6x7x13 ins: 9 ins
in the ground for Standard cor of
secs. 35 and 36 marked S.C. on N. with
1 grove on E. and 3 groves on W. face;
dig pits 24x18x12 ins, centered on
each line, 3 ft. dist, and N. of stone
7 ft. dist; and raise a mound of earth
4 ft. base, 2 ft. high N. of cor.
The course of line bet. corners is
therefore N. 89° 14' E. and dist 40.10 chs.
Land, level.
Soil, alkali; 4 ft, rate.
Fr timber.

From Standard cor of secs 35 and
36 as reestablished. Trav
East on S. bdy sec 36.
Over level land.
Difference bet. measurements of
40.00 chs by two sets of chainmen
is 4 lks. Position of middle point
By 1st set 39.98 chs
By 2nd set 40.02 chs; the mean of which is
40.10 Reset 38 lks S. of old Standard 1/4 sec. cor
which is a pine post 4x4 ins, 3 ft. long.
lying on ground. exact cor point was
determined by traces of old pits and
mound.
Reestablish cor as follows
Set a porphyry stone 6x8x12 ins: 8 ins
in the ground for Standard 1/4 sec.
cor. marked S.C. 1/4 on N. face; dig pits
18x18x12 ins. E. and W. of stone, 3 ft. dist
and raise a mound of earth 3 1/2 ft.
base, 1 1/2 ft. high N. of cor.
Course of line bet. sec. cors is therefore
N. 89° 10' E. and dist 40.00 chs.
Difference bet measurements of 40.14 chs

2nd Standard Parallel N. through R. 14 W.

Chains	
	by two sets of chainmen is 6 chs
	position of middle point
	By 1st set 80.11 chs
	By 2nd set 80.17 chs: the mean of which is
80.14	Fall 1.21 chs S. of old Standard cor.
	of Tps 9 N. Rs 13 and 14 W. which is a
	volcanic stone 8 x 9 x 6 ins. above
	ground; marked and witnessed as
	described by the surveyor general.
	Course of line set corners is therefore
	N. 89° 56' E. and dist. 40.15 chs.
	Land, level.
	Soil, alkali; 4th rate.
	No timber.
	May 6, 1903.
	General Description.
	For general description see notes
	of subdivision of T 8 N. R. 14 W.
	Alfred W. Talamantes
	U S Deputy Surveyor

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FINAL OATHS OF DEPUTY SURVEYOR AND HIS ASSISTANTS.

LIST OF NAMES.

A list of the names of the individuals employed by Alfredo R. Talamantes, 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 2nd Standard Parallel North through R. 14 W. of the S. L. B. & M. Utah, showing the respective capacities in which they acted:

M. L. Crandall Jr. — Geo. H. P. Dougall, Chainman.
J. J. Robbins — James S. Hovey, Chainman.
Wilbur J. Rowland, Moundman.
, Moundman.
, Axman.
, Axman.
Ralph A. Groesbeck, Flagman.

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted Alfredo R. Talamantes, United States Deputy Surveyor, in surveying all those parts or portions of the 2nd Standard Parallel North through R. 14 W. of the Salt Lake Base and meridian, State of Utah, which are represented in the foregoing field notes as having been surveyed by him and under his direction; and that said survey has been in all respects, to the best of our knowledge and belief, well and faithfully surveyed, and the corner monuments established, according to the instructions furnished by the United States Surveyor General for Utah.

Geo. H. P. Dougall — M. L. Crandall Jr., Chainman.
James S. Hovey — J. J. Robbins, Chainman.
Wilbur J. Rowland, Moundman.
, Moundman.
, Axman.
Ralph A. Groesbeck, Axman.
, Flagman.

Subscribed and sworn to before me this 6 day of July 1903 189

SEAL

Geo. H. P. Dougall
Notary Public

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FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I, Alfredo R. Talamantes, United States Deputy Surveyor, do solemnly swear that, in pursuance of a contract received from Edward H. Anderson United States Surveyor General for The State of Utah, bearing date of the 23rd day of March 1903, 189, 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 The State of Utah, the Manual of Surveying Instructions, and the laws of the United States, resurveyed all those parts or portions of The Second Standard Parallel North through Range 14 West

of the Salt Lake Base and meridian, in the State of Utah, which are represented in the foregoing field notes as having been resurveyed by me, and under my direction; and I do further solemnly swear that all the corners of said resurvey 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 The State of Utah and in the specific manner described in the field notes, and that the foregoing are the original field notes of such resurvey; and should any fraud be detected, I will suffer the penalty of perjury under the provisions of an Act of Congress approved August 8, 1846.

Alfredo R. Talamantes
United States Deputy Surveyor.

Subscribed by said Alfredo R. Talamantes and sworn to before me this 9th day of September 1903, 189

Edward H. Anderson
U. S. Surveyor-General for Utah

SEAL

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah, March 5, 1904, 189

The foregoing field notes of the resurvey of The Second Standard Parallel North through Range 14 West of the Salt Lake Base and Meridian, Utah

executed by Alfredo R. Talamantes and John W. Donegall under their contract No. 262, dated March 23, 1903, 189, having been critically examined, and the necessary corrections and explanations made, the said field notes, and the resurveys they describe, are hereby approved.

Edward H. Anderson
United States Surveyor General

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

_____
United States Surveyor General

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BOOK A-298

E. L.

FIELD NOTES

OF THE Re SURVEY OF THE

North Boundary
of
T. 7 N. - R. 15 W.

Of the Salt Lake Base and Meridian,
State of Utah

AS SURVEYED BY

Alfredo R. Talamantes and John W. Dougall, United States Deputy Surveyors

Under ~~his~~ their Contract No. 262, dated March 23 1903, ~~189~~

Survey commenced May 7 1903, ~~189~~

Survey completed May 8 1903, ~~189~~

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Resurvey 6-01-88

NAMES AND DUTIES OF ASSISTANTS.

Geo. M. P. Dougall	Chainman
James S. Hortz	Chainman
Wilbur J. Rowland	Marker
Ralph A. Gwyther	Flagman

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BOOK A-298

INDEX DIAGRAM.

Township 7 North, *Range* 15 West

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Meanders Page

PRELIMINARY OATHS OF ASSISTANTS.

WE, Geo. M. P. Dougall and James S. Hoult

do solemnly swear that we will well and faithfully execute the duties of chainmen; that we will level chain over even and uneven ground, and plumb the tally pins, either by sticking or dropping the same; that we will report the true distances to all notable objects, and the true lengths 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 resurvey of N. Bdy. T. 7 N., R. 15 W. of the Salt Lake Base and Meridian Utah

Geo. M. P. Dougall, Chainman

James S. Hoult, Chainman

Subscribed and sworn to before me this 25 day of April 1903

SEAL

Hugh M. Dougall
Notary Public

WE, Wilbur J. Rowland and

do solemnly swear that we will well and truly perform the duties of moundman in the establishment of corners, according to the instructions given us, to the best of our skill and ability, in the resurvey of N. Bdy. T. 7 N., R. 15 W. of the Salt Lake Base and Meridian Utah.

Wilbur J. Rowland, Moundman

, Moundman

Subscribed and sworn to before me this 25 day of April 1903

SEAL

Hugh M. Dougall
Notary Public

WE, and

do solemnly swear that we will well and truly perform the duties of axmen in the establishment of corners and other duties, according to instructions given us, to the best of our skill and ability, in the survey

, Axman

, Axman

Subscribed and sworn to before me this day of , 189

SEAL

I, Ralph A. Groesbeck, 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 resurvey of N. Bdy. T. 7 N., R. 15 W. of the Salt Lake Base and Meridian Utah.

Ralph A. Groesbeck, Flagman

Subscribed and sworn to before me this 25 day of April 1903

SEAL

Hugh M. Dougall
Notary Public

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Resurvey of North Bdy. T 7 N., R. 15 W.

Resurvey commenced May 7, 1903, and executed with a W. and L. E. Burley light mountain transit with solar attachment. The horizontal limb having two double verniers placed opposite to each other and reading to single minutes of arc.

The instrument was examined and tested on the true meridian at Salt Lake City, found correct, and was approved by the surveyor general for Utah April 30, 1903.

I examine the adjustments of the transit and correct the level and collimation errors; then to test the solar apparatus by comparing its indications resulting from solar observations made during a. m. and p. m. hours with a meridian determined by observation on Polaris I proceed as follows.

At the cor. of Tps 7 and 8 N. Rs 15 and 16 W. which is a quartzite stone 8 x 7 x 3 ins above ground firmly set and marked and witnessed as described by the surveyor general. In latitude 41° 23' N., longitude 113° 37' W. I set off 41° 23' N. on lat arc. 16° 43' N. on decl. arc. and at 4h 00m p. m. l. m. t. determine with the solar a true meridian and mark a point thereof on a plug driven in the ground 5.00 chs N. of cor.

May 7, 1903. At 10h 34m p. m. l. m. t. I observe Polaris at the lower culmination in accordance with the Manual of Instructions and mark the true meridian thus determined by a small nail driven in the lint already set 5.00 chs N. of

Resurvey of North Bdy. T7N., R.15W.

Chains	
	the cor.; on which the true meridian falls 0.2 ins. W. of the mark determined by the solar. May 7, 1903.
	May 8, 1903. At 8h 00m a.m. l.m.t. I set off 41° 23' N. on the lat. arc, 16° 54' N. on the decl. arc. and mark a point on the true meridian thus determined, with the solar, by a pencil mark on the stake set 5.00 chs N. of cor.
	This mark falls 0.1 ins W. of the true meridian established by the Polaris observation. The solar apparatus by p.m. and a.m. observation, defines position for meridian 0' 11" E. and 0' 5" W. of the true meridian established by the Polaris observations, therefore I conclude that the adjustments of the instrument are satisfactory.
	The magnetic bearing of the true meridian at 8h 20m a.m. is N. 17° 30' W. The angle thus determined gives the mag. decl. 17° 30' E.
	Preliminary to beginning the subdivision of this Tp. I proceed as follows From the cor. of Tps 7 and 8 N. Rs 15 and 16 W. heretofore described I run East on a blank line set secs. 6 and 31. Over level land.
40.18	Fall 12 lks S. of old 1/4 sec. cor. which was almost destroyed. Found old stump and traces of pits; mound entirely destroyed.
80.39	Fall 23 lks S. of old cor. of secs. 5, 6, 31 and 32. which was almost destroyed. Found old remnant of stake, traces of pits

Resurvey of North Bdy. T7 N., R. 15 W.

Chains

and mound.
Course of this line bet. sec. corners is therefore N. 89° 50' E.
Land, level.
Soil, alkali; 4th rate.
No timber.

Therefore I continue my line East and find no part of the N. bdy. of Tp. in alinement and that many of the corners are nearly obliterated.
At 6 miles 1.88 chs. intersect N. and S. line 1.40 chs. south of cor of Tps. 7 and 8 N. Rs 14 and 15 W. the same being a stake badly decayed but plainly marked with 6 notches on each edge.
May 8, 1903: At this cor. I set off 16° 58' N. on decl. arc. and at 12h 00m m. l. m. t. observe the sun on the meridian the resulting lat. is 41° 23' N.
I return to the cor of Tps 7 and 8 N. Rs 15 and 16 W. heretofore described and resurvey the N. bdy of Tp. as follows
Knowing from blank line run that course between all corners is N. 89° 50' E.
May 8, 1903: At 2h 00m p. m. l. m. t. I set off 41° 23' N. on lat arc. 16° 58' N. on decl arc; and determine the meridian at cor last mentioned above.
Thence I run
N. 89° 50' E. bet. secs. 6 and 31.
Over level land.
40.18 Intersect old stump of post and traces of pits; mound destroyed.
Reestablish cor. as follows
Set a quartzite stone 6 X 6 X 14 ins; 9 ins in the ground for 1/4 sec. cor. marked 1/4 on N. face; dig pits 18 X 18 X 12 ins. E. and W. of stone, 3 ft. dist; and raise a mound of earth 3 1/2 ft. base

Resurvey of North Bdy. T. 7 N., R. 15 W.

Chains	1½ ft. high N. of cor.
80.39	Intersect old stump of post and traces of pits; mound destroyed. Reestablish cor as follows Set a quartzite stone 8 X 8 X 14 ins; 10 ins in the ground for cor of secs. 5, 6, 31 and 32. marked with 1 notch on W. and 5 notches on E. edge; dig pits 18 X 18 X 12 ins.; in each sec. 3½ ft. dist, and raise a mound of earth 4 ft. base, 2 ft. high W. of cor. Land, level. Soil, alkali; 4th rate. Rotimber.
	From cor of secs. 5, 6, 31 and 32. Run N. 89° 50' E. bet secs. 5 and 32. Over level land.
40.13	Intersect old stump of post and traces of pits; mound destroyed. Reestablish cor as follows Set a quartzite stone 4 X 8 X 16 ins; 11 ins in the ground for ¼ sec. cor. marked ¼ on N. face; dig pits 18 X 18 X 12 ins. E. and W. of stone; 3 ft dist; and raise a mound of earth, 3½ ft. base, 1½ ft. high N. of cor.
80.32	Intersect old stump of post and traces of pits; mound destroyed. Reestablish cor as follows Set a quartzite stone 5 X 7 X 16 ins, 17 ins in the ground for cor. of secs. 4, 5, 32 and 33. marked with 2 notches on W. and 4 notches on E. edge; dig pits 18 X 18 X 12 ins; in each sec. 3½ ft dist; and raise a mound of earth 4 ft base, 2 ft. high N. of cor. Land, level. Soil, alkali; 4th rate. Rotimber.

Resurvey of North Bdy. T. 7 N., R. 15 W.

N. 89° 50' E. 60 lks, secs. 4 and 33.
Over level land
40.09 Intersect old stumps of post and traces of pits; mound destroyed
Reestablish cor as follows
Set a quartzite stone 5 X 7 X 16 ins.; 12 ins. in the ground for 1/4 sec. cor marked 1/4 on N. face; dig pits 18 X 18 X 12 ins.; E. and W. of stone 3 ft. dist.; and raise a mound of earth, 3 1/2 ft. base, 1 1/2 ft. high N. of cor.
80.23 Intersect old stumps of post and traces of pits; mound destroyed
Reestablish cor as follows
Set a quartzite stone 5 X 6 X 18 ins.; 12 ins. in the ground for cor. of secs. 3, 4, 33 and 34, marked with 3 notches on N. and 3 notches on E. edge; dig pits 18 X 18 X 12 ins.; in each sec. 3 1/2 ft. dist.; and raise a mound of earth, 4 ft. base, 3 ft. high N. of cor.
Land, level,
S.-it, alkali; 4 th rate.
No timber.

N. 89° 50' E. 60 lks, sec. 3 and 34.
Over level land.
40.13 Intersect old stumps of post and traces of pits; mound destroyed
Reestablish cor as follows
Set a quartzite stone 3 X 10 X 17 ins.; 11 ins. in the ground for 1/4 sec. cor. marked 1/4 on N. face; dig pits 18 X 18 X 12 ins.; E. and W. of stone, 3 ft. dist.; and raise a mound of earth, 3 1/2 ft. base, 1 1/2 ft. high N. of cor.
80.24 Intersect old stumps of post and traces of pits; mound destroyed
Reestablish cor as follows

Recovery of North Bdy T. 7 N., R. 15 W.

Chains	Set a quartzite stone 6X8X14 ins; 10 ins in the ground for cor. of secs. 2, 3, 34 and 35. marked with 4 notches on W. and 2 notches on E. edge; dig pits 18X18X12 ins in each sec. 3½ ft. dist; and raise a mound of earth. 4 ft. base, 2 ft. high N. of cor. Land, level. Soil, alkali; 4th rate. No timber.
	N. 89° 50' E. bet secs 2 and 35. Area level land.
40.14	Intersect old stump of post and traces of pits; mound destroyed Reestablish cor as follows Set a quartzite stone 5X6X17 ins; 11 ins in the ground for 1/4 sec. cor. marked 1/4 on N. face; dig pits 18X18X12 ins; E. and W. of stone, 3 ft. dist; and raise a mound of earth 3½ ft. base, 1½ ft. high N. of cor.
80.35	Intersect old stump of post and traces of pits; mound destroyed. Reestablish cor as follows Set a quartzite stone 4X8X18 ins; 12 ins. in the ground for cor of secs 1, 2, 35 and 36. marked with 3 notches on W. and 1 notch on E. edge; dig pits 18X18X12 ins, in each sec. 3½ ft. dist. and raise a mound of earth, 4 ft. base 2 ft. high N. of cor. Land, level. Soil, alkali; 4th rate. No timber.
	N. 89° 50' E. bet secs 1 and 36.

Resurvey of North Bdy. T. 7 N. R. 15 W.

Chains	
	Over level land.
40.14	Intersect old stumps of posts and traces of pits; mound destroyed. Reestablish cor as follows
	Set a quartzite stone 6 x 9 x 12 ins, 8 ins. in the ground for 1/4 sec. cor marked 1/4 on N. face, dig pits 18 x 18 x 12 ins, E. and W. of stone 3 ft. dist. and raise a mound of earth 8 1/2 ft. base, 1 1/2 ft. high N. of cor
80.35	Intersect old stumps of posts and traces of pits; mound destroyed. Reestablish cor as follows
	Set a quartzite stone 8 x 8 x 16 ins; 11 ins. in the ground for cor of Secs. 3 and 4 T. 7 N., 14 and 15 R. 15 W. marked
	4 N on N. E., 7 N in S. W., and 15 W. on N. W. face; with 6 notches on each edge; dig pits 2 1/2 x 2 1/2 x 12 ins in each side of the N., E., and W. 1/4 ft. and S. of stone 8 ft. dist; and raise a mound of earth 3 ft. base; 2 1/2 ft. high S. of cor.
	Land, level
	Soil, alkali; 1/16 rate.
	Timber.
	May 8, 1903

General Description.

For general description see notes of subdivision of T. 7 N. R. 15 W.

Alfredo M. Galamantes
U. S. Deputy Surveyor

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FINAL OATHS OF DEPUTY SURVEYOR AND HIS ASSISTANTS.

LIST OF NAMES.

A list of the names of the individuals employed by Alfredo R. Talamantes, United States Deputy Surveyor, to assist in running, measuring, and marking the lines and corners described in the foregoing field notes of the re survey of N. Bdy. T. 7 N., R 15 W. of the Salt Lake Base and Meridian Utah showing the respective capacities in which they acted:

Geo. M. P. Dougall, Chainman.
James S. Hously, Chainman.
Hilbur D. Rowland, Moundman.
, Moundman.
, Axman.
, Axman.
Ralph A. Groesbeck, Flagman.

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted Alfredo R. Talamantes, United States Deputy Surveyor, in re surveying all those parts or portions of the N. Bdy. T 7 N., R 15 W. of the Salt Lake Base and meridian, State of Utah, 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 Utah

Geo. M. P. Dougall, Chainman.
James S. Hously, Chainman.
Hilbur D. Rowland, Moundman.
, Moundman.
, Axman.
, Axman.
Ralph A. Groesbeck, Flagman.

Subscribed and sworn to before me this 6 day of July 1903

SEAL

Hugh M. Dougall
Notary Public

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FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I, Alfredo R. Talamantes, United States Deputy Surveyor, do solemnly swear that, in pursuance of a contract received from Edward H. Anderson United States Surveyor General for the State of Utah, bearing date of the 23 day of March 1903, 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 the State of Utah, the Manual of Surveying Instructions, and the laws of the United States, surveyed all those parts or portions of the North Boundary of Township 7 North Range 15 West of the Salt Lake Base and Meridian, in the State of Utah, which are represented in the foregoing field notes as having been surveyed by me, and under my direction; and I do further solemnly swear that all the corners of said survey have been established and perpetuated in strict accordance with the Manual of Surveying Instructions, and the special written instructions of the United States Surveyor General for the State of Utah and in the specific manner described in the field notes, and that the foregoing are the original field notes of such survey; and should any fraud be detected, I will suffer the penalty of perjury under the provisions of an Act of Congress approved August 8, 1846.

Alfredo R. Talamantes
United States Deputy Surveyor

Subscribed by said Alfredo R. Talamantes, and sworn to before me this 20th day of October 1903, 189

Edward H. Anderson
U. S. Surveyor General for Utah

SEAL

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah, March 5, 1904, 189

The foregoing field notes of the survey of the North Boundary of Township 7 North Range 15 West of the Salt Lake Base & Meridian Utah

executed by Alfredo R. Talamantes & John W. Dougall under his contract No. 3031, dated March 23 1903, 189, having been critically examined, and the necessary corrections and explanations made, the said field notes, and the surveys they describe, are hereby approved.

Edward H. Anderson
United States Surveyor General

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

United States Surveyor General

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BOOK A-298

E. L.

FIELD NOTES

OF THE SURVEY OF THE

Guide Meridian
through T. 7 N.
between
R's 14 and 15 W

Of the Salt Lake Base and Meridian,
State of Utah

AS SURVEYED BY

Alfredo R. Talamantes and John W. Dougall, United States Deputy Surveyors

under ~~his~~ their Contract No. 262, dated March 23 1903, ~~189~~

Survey commenced May 9, 1903, ~~189~~

Survey completed May 9, 1903, ~~189~~

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NAMES AND DUTIES OF ASSISTANTS.

John W. Chase	Chainman
Geo. M. P. Dougall	Chainman
William W. Evans	Chainman
James S. Houtz	Chainman
Wilber J. Rowland	Monumman
Ralph A. Gorsbeck	Flagman

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PRELIMINARY OATHS OF ASSISTANTS.

WE, John W Chase and William W. Evans, Geo. M. P. Dougall and James S. Hoarty,

do solemnly swear that we will well and faithfully execute the duties of chainmen; that we will level the chain over even and uneven ground, and plumb the tally pins, either by sticking or dropping the same; that we will report the true distances to all notable objects, and the true lengths 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

Guide Meridian through Tp. 7 N. bet R's 14 and 15 W. of the Salt Lake Base and Meridian, Utah.

John W Chase, William W. Evans, Chainmen.
Geo. M. P. Dougall, James S. Hoarty, Chainmen.

Subscribed and sworn to before me this 25 day of April 1893

SEAL

Haughton Dougall
Notary Public

~~WE~~ I, Wilbur J. Rowland and

do solemnly swear that ~~we~~ I will well and truly perform the duties of moundman in the establishment of corners, according to the instructions given ~~us~~ me, to the best of ~~our~~ my skill and ability, in the survey of

Guide Meridian through Tp. 7 N. bet R's 14 and 15 W. of the Salt Lake Base and Meridian, Utah.

Wilbur J. Rowland, Moundman
, Moundman

Subscribed and sworn to before me this 25 day of April 1893, 189

SEAL

Haughton Dougall
Notary Public

WE, and

do solemnly swear that we will well and truly perform the duties of axmen in the establishment of corners and other duties, according to instructions given us, to the best of our skill and ability, in the survey of

, Axman
, Axman

Subscribed and sworn to before me this day of , 189

SEAL

I, Ralph A. Goesbeck, 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 survey of Guide Meridian through Tp. 7 N. bet R's 14 and 15 W. of the Salt Lake Base and Meridian, Utah.

Ralph A. Goesbeck, Flagman

Subscribed and sworn to before me this 25 day of April 1893, 189

SEAL

Haughton Dougall
Notary Public

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Guide Meridian through Tps 7 N., bet. R's 14 and 15 W.

Chains	Survey commenced May 9, 1903 and executed with a Y. and L. E. Gurley light mountain transit with Solar attachment. The horizontal limb having two double verniers placed opposite each other and reading to single minutes of arc. For a complete test of solar apparatus see book C. Set 8h 00m a. m. l. m. t. I set off 41°23' N. on the lat. arc. 17°15' N. on the decl. arc and determine with the solar a true meridian at the cor. of Tps 7 and 8 N., R's 14 and 15 W. For a complete description of which see notes of resurvey of N. bdy of T. 7 N., R. 15 W. Knowing from length of next bdy, of Tp. 7 N. R. 15 W. as furnished me by the surveyor General for Utah. and by retracement of N. bdy of T. 7 N., R. 15 W. that the length of E. bdy of Tp. 7 N., R. 15 W. will be 6 miles 9.90 chs. I run South bet. secs 1 and 6. over level land. Difference between measurement of 49.90 chs. by two sets of chainmen is 4 chs. position of middle point By 1st set 49.88 chs. By 2nd set 49.92 chs. the mean of which is
49.90	Set a quartzite stone 6 x 10 x 14 ins. 9 ins. in the ground for 1/4 sec. cor. marked 1/4 on W. face; dig pits 18 x 18 x 12 ins. N. and S. of stone 3 ft. dist.; and raise a mound of earth 3½ ft base, 1½ ft high W. of cor. Difference between measurement of 89.90 chs by two sets of chainmen is 6 chs. position of middle point By 1st set 89.87 chs.

Guide meridian through T. 7 N. and let R's 14 and 15 E.

Chains	
	By 2nd set 89.93 chs. the mean of which is
89.90	Set a quartzite stone 6X10X14 ins., 7 ins in the ground for cor of secs. 1, 6, 7, and 12, marked with 1 notch on N. and 3 notches on S. edge; dig pits 18X18X12 ins. in each sec. 5½ ft. diet.; and raise a mound of earth 4 ft. base, 2 ft high N. of cor.
	Land, level.
	Soil, alkali; + ch, rate.
	In timber.
	South let, secs 7 and 12.
	Over level land.
	Difference let measurement of 40.00 chs by two sets of chainmen is 4 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 quartzite stone 6X10X14 ins, 10 ins in the ground for ¼ sec. cor. marked ¼ on N. face; dig pits 18X18X12 ins, N. and S. of stone 3 ft. diet; and raise a mound of earth 3½ ft. base, 1½ ft high N. of cor.
	Difference let. measurement of 80.00 chs by two sets of chainmen is 6 lks.
	Position of middle point
	By 1st set 79.97 chs.
	By 2nd set 80.03 chs. the mean of which is
80.00	Set a quartzite stone 5X6X17 ins. 12 ins in the ground for cor. of secs. 7, 12, 13; and 18 marked 2 notches on N. and 4 notches on S. edge; dig pits, 18X18X12 ins. in each sec. 5½ ft diet; and raise a mound of earth 4 ft. base, 2 ft high, N.

Guide Meridian through Tp. 7 N. bet. R's 14 and 15 West.

Chains	
	of cor. Land, level. Soil, alkali; 4th rate. No timber.
	South bet secs 13 and 18. Over level land Difference between measurement of 40.00 chs by two sets of chainmen is 4 lks, position of middle point By 1st set 40.02 chs By 2nd set 39.98 chs the mean of which is
40.00	Set a quartzite stone 5X3X14 ins, 10 ins in the ground for 1/4 sec. cor. marked 1/4 on W. face; dig pits 18X18X12 ins N. and S. stand 3 ft. dist; and raise a mound of earth 3 1/2 ft. base 1 1/2 ft. high. N. of cor. Difference between measurement of 80.00 chs. by two sets of chainmen is 4 lks, position of middle point By 1st set 80.02 chs By 2nd set 79.98 chs, the mean of which is
80.00	Set a quartzite stone 5X10X14 ins; 9 ins in the ground for cor of secs. 13, 18, 19, and 24 marked, with 3 notches on N. and S. edges; dig pits; 18X18X12 ins in each sec. 5 1/2 ft. dist; and raise a mound of earth 4 ft. base 2 ft. high N. of cor. Land, level. Soil, alkali; 4th rate. No timber.
	South bet secs. 19 and 24

Guide Meridian through Tp. 7 N. bet R's 14 and 15 West.

Chains	Over level land.
	Difference bet. measurement of 40.00 chs by two sets of chainmen is 4 lks
	position of middle point
	By 1st set 40.02 chs
	By 2nd set. 39.98 chs the mean of which is
40.00	Set a quartzite stone 4X6X13 ins; 9 ins in the ground for 1/4 sec. cor. marked 1/4 on N. face; dig pits 18X18X12 ins, N. and S. of stone 3 ft. dist; and raise a mound of earth $3\frac{1}{2}$ ft base $1\frac{1}{2}$ ft. high N. of cor.
	Difference bet measurement of 80.00 chs by two sets of chainmen is 6 lks.
	position of middle point
	By 1st set 80.03 chs.
	By 2nd set 79.97 chs the mean of which is
80.00	Set a quartzite stone 4X10X14 ins, 9 ins in the ground for cor. of secs. 19, 24, 25 and 30 marked with 4 notches on N. and 2 notches on S. edge; dig pits 18X18X12 ins in each sec $3\frac{1}{2}$ ft. dist; and raise a mound of earth 4 ft base, 2 ft high. N. of cor.
	Land, level.
	Soil, alkali; 4th rate.
	No timber.
	South bet secs. 25 and 30
	Over level land.
21.00	Telegraph line bears N. 81° W. and S. 81° E.
22.09	Middle of single track of Central Pacific Ry known as the Lucin Cut-Off bears N. 81° W. and S. 81° E.
	Difference bet. measurement of 40.00 chs by two sets of chainmen is 4 lks.

Bride Meridian through T. 7 N. bet. R's 14 and 15 West.

Chains	
	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 quartzite stone 4X8X16 ins, 11 ins. in the ground for 1/4 sec. cor. marked 1/4 on W. face; dig pits 18X18X12 ins. N. and S. of stone. 3 ft. dist, and raise a mound of earth 8 1/2 ft. base 1 1/2 ft. high W. of cor. Difference bet. measurement of 80.00 chs by two sets of chainmen is 6 lks. Position of middle point By 1st set 79.97 chs, By 2nd set 80.03 chs. the mean of which is
80.00	Set a quartzite stone 5X7X15 ins, 10 ins in the ground for cor. of secs. 25, 30, 31 and 36. marked with 3 notches on N. and 1 notch on S. edge; dig pits 18X18X12 ins in each, etc. 3 1/2 ft. dist; and raise a mound of earth 4 ft base, 2 ft high W. of cor. Land, level. Soil, alkali; 4th rate No mines.
	South bet. secs. 31 and 36. Over level land. Difference bet. measurement of 40.00 chs by two sets of chainmen is 2 lks. Position of middle point By 1st set 40.01 chs. By 2nd set 39.99 chs. the mean of which is
40.00	Set a quartzite stone 8X8X14 ins, 10 ins in the ground for 1/4 sec. cor. marked 1/4 on N. face; dig pits 18X18X12 ins.

Guide Meridian through T. 7 N. bet. R's 14 and 15 W. bet.

Chains	N. and S. of stone, 3 ft. dist; and raise a mound of earth $3\frac{1}{2}$ ft. base $1\frac{1}{2}$ ft. high W. of cor.
	Difference bet. measurement of 80.00 chs by two sets of chainmen is 4 lks the position of middle point By 1st set 80.02 chs By 2nd set 79.98 chs the mean of which is
80.00	Set a quartzite stone 6 X 8 X 16 ins; 11 ins. in the ground for cor. of T's 6 and 7 N., R's 14 and 15 W. marked 7 N. on N. E., 14 W. on S. E., 6 N. on S. W. and 15 W. on N. W. face. with 6 notches on each edge; dig pits 24 X 24 X 14 ins on each line N. E. and W. 4 ft. and S. of stone 8 ft. dist; and raise a mound of earth 3 ft. base, $2\frac{1}{2}$ ft. high S. of cor.
	Land, level,
	Soil, alkali; 4th rate.
	Notches.

May 9, 1903.

General Description

For general description see notes of subdivision of T. 7 N. R. 15 W.

Alfredo R. Talamantes
U. S. Deputy Surveyor

FINAL OATHS OF DEPUTY SURVEYOR AND HIS ASSISTANTS.

LIST OF NAMES.

A list of the names of the individuals employed by Alfredo R. Talamantes, 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 Guide Meridian through T. 7 N., bet R's 14 and 15 W. of the Salt Lake Base and Meridian, Utah. showing the respective capacities in which they acted:

John W. Chase — William H. Evans, Chainman.
Geo. M. P. Dougall — James S. Hoaty, Chainman.
Wilbur J. Rowland, Moundman.
Moundman.
Axman.
Axman.
Ralph A. Groesbeck. Flagman.

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted Alfredo R. Talamantes, United States Deputy Surveyor, in surveying all those parts or portions of the Guide Meridian through T. 7 N., bet R's 14 and 15 W. of the Salt Lake Base and meridian, State of Utah, which are represented in the foregoing field notes as having been surveyed by him and under his direction; and that said survey has been in all respects, to the best of our knowledge and belief, well and faithfully surveyed, and the corner monuments established, according to the instructions furnished by the United States Surveyor General for Utah.

John W. Chase — William H. Evans, Chainman.
Geo. M. P. Dougall — James S. Hoaty, Chainman.
Wilbur J. Rowland, Moundman.
Moundman.
Axman.
Axman.
Ralph A. Groesbeck, Flagman.

Subscribed and sworn to before me this 6 day of July 1907 1889

SEAL

Hugh M. Dougall
Notary Public

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FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I, Alfredo R. Talamantes, United States Deputy Surveyor, solemnly swear that, in pursuance of a contract received from Edward H. Anderson United States Surveyor General for the State of Utah, bearing date of t 28th day of March 1903, I have well, faithfully, and truly, in my c proper person, and in strict conformity with the instructions furnished by the United States Survey General for the State of Utah, the Manual of Surveying Instructions, and the laws of t United States, surveyed all those parts or portions of the Uinta Meridian Township 7 North between Ranges 14 & 15 West, of the Salt Lake Base & Meridian, in the State of Utah, which are represented in t foregoing field notes as having been surveyed by me, and under my direction; and I do further solem swear that all the corners of said survey have been established and perpetuated in strict accordance the Manual of Surveying Instructions, and the special written instructions of the United States Surve General for the State of Utah, and in the specific manner described in the field notes, and t the foregoing are the original field notes of such survey; and should any fraud be detected, I will s the penalty of perjury under the provisions of an Act of Congress approved August 8, 1846.

Alfredo R. Talamantes
United States Deputy Surve

Subscribed by said Alfredo R. Talamantes, and sworn to before me this 28th day of October 1903.

Edward H. Anderson
U.S. Surveyor General for Utah

SEAL

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL.

Salt Lake City, Utah, March 5, 1904.

The foregoing field notes of the survey of the Uinta Meridian Township 7 North between Ranges 14 & 15 West of the Salt Lake Base & Meridian, Utah

executed by Alfredo R. Talamantes and John W. Dougall under his contract No. 262, dated March 28, 1903, having b critically examined, and the necessary corrections and explanations made, the said field notes, and surveys they describe, are hereby approved.

Edward H. Anderson
United States Surveyor Gene

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

United States Surveyor Gene.

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BOOK A-293

FIELD NOTES

OF THE SURVEY OF THE

South Boundary
of
T 7 N – R 15 W

Of the Salt Lake Base and Meridian,
State of Utah

AS SURVEYED BY

Alfredo R. Talamantes & John W. Dorgan, United States Deputy Surveyors

Under ~~his~~ their Contract No. 262, dated March 23 1903, ~~189~~

Survey commenced May 9 1903, ~~189~~

Survey completed May 9 - 1903, ~~189~~

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NAMES AND DUTIES OF ASSISTANTS.

Geo M P Dougall	Chainman
James S. Hoity	Chainman
Wilbur J Rowland	Mounduman
Ralph A. Gwesbeck	Flagman

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BOOK A-298

INDEX DIAGRAM.

Township 7 North, *Range* 15 West

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30	29	28	27	26	25
31	32	33	34	35	36
1	2	2	3	3	4

Meanders Page

PRELIMINARY OATHS OF ASSISTANTS.

WE, Geo M Dougall and James S. Houtz

do solemnly swear that we will well and faithfully execute the duties of chainmen; that we will level chain over even and uneven ground, and plumb the tally pins, either by sticking or dropping the same; that we will report the true distances to all notable objects, and the true lengths of all lines that we assist measuring, to the best of our skill and ability, and in accordance with instructions given us, in the survey of S. Bdy. T. 7 N., R 15 W.; E. and N. Bdy's T 6 N., R 14 W.; E. Bdy. T 8 N., R 14 W. and N. Bdy. T 7 N., R 13 W. of the Salt Lake Base and Meridian.

Geo M Dougall, Chainman

James S. Houtz, Chainman

Subscribed and sworn to before me this 25 day of April 1903, 189

SEAL

Hugh M Dougall
Notary Public

~~WE,~~ I Wilbur I Rowland ~~and~~

do solemnly swear that ~~we~~ I will well and truly perform the duties of moundman in the establishment of corners, according to the instructions given ~~us~~ me, to the best of ~~our~~ my skill and ability, in the survey of S. Bdy. T 7 N., R 15 W.; E. and N. Bdy's T. 6 N., R 14 W.; E. Bdy. T 8 N., R 14 W. and N. Bdy. T 7 N., R 13 W. of the Salt Lake Base and Meridian.

Wilbur I Rowland, Moundman

, Moundman

Subscribed and sworn to before me this 25 day of April 1903, 189

SEAL

Hugh M Dougall
Notary Public

WE, and

do solemnly swear that we will well and truly perform the duties of axmen in the establishment of corners and other duties, according to instructions given us, to the best of our skill and ability, in the survey

, Axman

, Axman

Subscribed and sworn to before me this day of , 189

SEAL

I, Rolph A. Groesbeck, 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 survey of S. Bdy. T 7 N., R 15 W.; E. and N. Bdy's T 6 N., R 14 W.; E. Bdy. T 8 N. and N. Bdy. T 7 N., R 13 W. of the Salt Lake Base and Meridian.

Rolph A. Groesbeck, Flagman

Subscribed and sworn to before me this 25 day of April 1903, 189

SEAL

Hugh M Dougall
Notary Public

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South Boundary of T 7 N - R 15 W

chs.

Survey commenced May, 9, 1903. and executed with a W & L. E. Gurley transit with solar attachment. The horizontal limb having two double verniers placed opposite to each other and reading to single minutes of arc. For a complete test of solar apparatus see book. C

At 2h 00m p.m. l.m.t. I set off 41° 17' N on the lat. arc 17° 13' N on the decl. arc. and determined with the solar a true meridian at the cor of T's 6 and 7 N., R's 14 and 15 W. For a description of which see notes on Guide Mer. through Tp 7 N., R's 14 & 15 W. book "D".

Thence 9 mm

West on random line, along S bdy of T 7 N - R 15 W setting temp. 1/4 sec and sec cors. at intervals of 40.00 chs.; and at 483.12 chs intersect the West boundry at Tp. cor. for T's 6 and 7 N - R's 15 and 16 W which is a quartzite stone 8 x 6 x 4 ins 4 ins. above ground marked and witnessed as described by the surveyor general. Thence 9 mm East bet. secs 6 and 31

43.12 Set a quartzite stone 6 x 6 x 1½ ins 9 ins in the ground for 1/4 sec cor Marked 1/4 on N face, dig pits 18 x 18 x 12 ins E and W of stone 3 ft dist and raise a mound of earth 3½ ft base 1½ ft high N of cor

83.12 Set a quartzite stone 5 x 12 x 18 ins 12 ins in the ground for cor of secs. 5, 6, 31 and 32 marked 1 notch on W and 5 notches on E. edge dig pits 18 x 18 x 12 ins in each sec. 5½ ft dist. and raise a mound of earth 4 ft base 2 ft high W. of cor.

Land level
Soil alkali 4th rate
No timber

South Boundary of T 7N-R15W

Chs	
	East bet. secs. 5 and 32 Over level land
40.00	Set a quartzite stone 5x7x15 ins 10 ins in the ground for 1/4 sec. cor. marked 1/4 on N face dig pits 18x18x12 ins. E. and W. of stone 3 ft. dist. and raise a mound of earth 3 1/2 ft base 1 1/2 ft high N of cor.
80.00	Set a quartzite stone 6x8x16 ins 11 ins in the ground for cor of secs. 4, 5, 32 and 33 marked 2 notches on W and 4 notches on E edge; dig pits 18x18x12 ins in each sec. 5 1/2 ft. dist. and raise a mound of earth 4 ft base 2 ft high W of cor. Land level Soil alkali 4th rate No timber
	East bet. secs. 4 and 33 Over level land
40.00	Set a quartzite stone 7x18x12 ins 8 ins in the ground for 1/4 sec cor. marked 1/4 on N face dig pits 18x18x12 ins E. and W. of stone 3 ft dist. and raise a mound of earth 3 1/2 ft. base 1 1/2 ft high N of cor.
80.00	Set a Pine post 4 ft long 4 ins. sq. with quart of charcoal 36 ins in the ground for cor of secs. 3, 4, 33 and 34 marked. T7N S 34 m NE R15W S 3 m SE T6N S 4 m SW S 33 m NW face with 3 notches on W and 3 notches on E edge; dig pits 18x18x12 ins.; in each sec. 5 1/2 ft. dist.; and raise a mound of earth, 4 ft. base 2 ft. high. W of Cor. Land Level Soil Alkali 4th rate

South Boundary of T 7N - R 15 W

chs.	
	No timber.
	East bet. secs. 3 and 34 Over level land.
40.00	Set a pine post 3½ ft long 3x4 ins with quart of charcoal 30 ins. in the ground for 1/4 sec. cor. marked 1/4 S 34 on N face and 3 on S. face; dig pits 18x18x12 E. and W. of post 3 ft. dist.; and raise a mound of earth 3½ ft base, 1½ ft. high, N of cor.
80.00	Set a pine post 4 ft long 4 ins sq. with quart of charcoal 36 ins in the ground for cor. of secs 2, 3, 34 and 35. marked T 7 N S 35 on N.E. R 15 W S 2 on S.E. T 6 N S 3 on S.W and S 34 on N.W. face with 4 notches on W and 2 notches on E edge: dig pits 18x18x12 in each sec 5½ ft dist.; and raise mound of earth 4 ft base 2 ft high W. of cor. Land level Soil alkali 4th rate No timber
	East bet secs. 2 and 35. Over level land
40.00	Set a pine post 3½ ft long 3x4 ins with quart of charcoal 30 ins in ground; for 1/4 sec. cor. marked 1/4 S 35 on N face and 2 on S face; dig pits 18x18x12 ins E and W of post 3 ft dist., and raise mound of earth 3½ ft base 1½ ft. high N of cor.

South Boundary Ts 7N-R15W

Chs	
80.00	Set a pine post 4 ft long 4 ins sq. with quart of charcoal 36 ins in ground for cor to Secs. 35, 36, 1 and 2 marked T7N S36 NE R15W S 1 on SE T6N S 2 on SW and S 35 on N.W. face with 5 notches on W and 1 notch on E edge: dig pits 18x18x12 ins in each sec., 5½ ft. dist.; and raise a mound of earth, 4 ft base 2 ft. high W. of cor. Land level: Soil alkali 4th rate No timber
	East bet. secs. 1 and 36 Over level land
40.00	Set a pine post 3½ ft long 3x4 ins with quart of charcoal 24 ins in the ground for 1/4 sec. cor. marked 1/4 S.36 on N face and 1 on S face; dig pits 18x18x12 ins E and W of post, 3 ft dist. and raise a mound of earth, 3½ ft. base, 1½ ft. high N of cor.
80.00	The cor to Tps. 6 and 7N., Rs 14 and 15 W. Land level Soil alkali 4th rate No timber

May 9 1903.

Latitudes, Departures, and Closing Errors.

Line designated	True Bearing	Dist	Latitudes N	Latitudes S	Departures E	Departures W
		Chs.	Chs.	Chs.	Chs.	Chs.
W.Bdy. T.7N, R15W.	North	488.50	488.50			
N.Bdy. T.7N, R15W.	N89°50'E	481.88	1.40		481.88	
Guide Meridian	South	489.90		489.90		
S.Bdy. T.7N, R.15W	West	483.12				483.12
Convergency					0.63	
Totals			489.90	489.90	482.51	483.12
			489.90			482.51
Error in Lat.			.00		Error in Dep	0.61

South Boundary Ts 7N-R15W

General Description
For general description see notes of subdivision of T7N-R15W

Alfredo R Talamantes
U.S. Deputy Surveyor

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FINAL OATHS OF DEPUTY SURVEYOR AND HIS ASSISTANTS.

LIST OF NAMES.

A list of the names of the individuals employed by ....., 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 ..... showing the respective capacities in which they acted.

....., *Chainman.*

....., *Chainman.*

....., *Moundman.*

....., *Moundman.*

....., *Axman.*

....., *Axman.*

....., *Flagman.*

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted ....., United States Deputy Surveyor, in surveying all those parts or portions of the ..... of the ..... meridian, ... which are represented in the foregoing field notes as having been surveyed by him and under his direction; and that said survey has been in all respects, to the best of our knowledge and belief, well and faithfully surveyed, and the corner monuments established, according to the instructions furnished by the United States Surveyor General for .....

....., *Chainman.*

....., *Chainman.*

....., *Moundman.*

....., *Moundman.*

....., *Axman.*

....., *Axman.*

....., *Flagman.*

.....

Subscribed and sworn to before me this .....
day of ....., 190

SEAL

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FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I, ..., United States Deputy Surveyor, do solemnly swear that, in pursuance of a contract received from ....., bearing date of the United States Surveyor General for ..... day of ....., 190 , 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 ....., the Manual of Surveying Instructions, and the laws of the United States, surveyed all those parts or portions of ..... of the ..... meridian, in the ..... of ....., which are represented in the foregoing field notes as having been surveyed by me, and under my direction; and I do further solemnly swear that all the corners of said survey have been established and perpetuated in strict accordance with the Manual of Surveying Instructions, and the special written instructions of the United States Surveyor General for ..... and in the specific manner described in the field notes, and that the foregoing are the original field notes of such survey; and should any fraud be detected, I will suffer the penalty of perjury under the provisions of an Act of Congress approved August 8, 1846.

United States Deputy Surveyor.

Subscribed by said ....., and sworn to before me this ..... day of ....., 190

SEAL

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah, March 8th 1904, 190

The foregoing field notes of the survey of Hickson & Brandegee Township 7 North Range 15 East of the Salt Lake Base and Meridian, Utah

executed by Alfred A. Valamanos and John W. Dougall under his contract No. 262, dated March 23 1903, 190 , having been critically examined, and the necessary corrections and explanations made, the said field notes, and the surveys they describe, are hereby approved.

Edward H. Ruddock
United States Surveyor General.

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

United States Surveyor General.

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BOOK A-298

FIELD NOTES

OF THE SURVEY OF THE

Subdivision of
T 7 N., R 15 W

in the Salt Lake Base and Meridian,
State of Utah

AS SURVEYED BY

Fredo A Telemaires & John H. Dryall, United States Deputy Surveyors

Under ~~the~~ Contract No. 262, dated March 28 1903, ~~189~~

Survey commenced . . May 10, 1903, ~~189~~

Survey completed . . May 13, 1903, 189

NAMES AND DUTIES OF ASSISTANTS.

Geo. M. P. Dougall Chainman
James S. Hontz Chainman
Wilbur J. Rowland Marksman
Ralph A. Gwesbeck Flagman

INDEX DIAGRAM.

Township 7 N., Range 15 W.

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433	433	425	419	414	408
19 432	20 424	21 419	22 413	23 407	24 379
432	431	424	418	412	407
30 431	29 423	28 418	27 412	26 406	25 380
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INDEX DIAGRAM.

Township 7 North, *Range* 15 West

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29		29		21.		15.		10.		4.	
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28		27		20		14.		8.		3.	
30	27.	29	19.	28	14.	27	8.	26	2.	25	
26.		25.		19.		13.		7		2.	
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PRELIMINARY OATHS OF ASSISTANTS.

WE, Geo M P Dougall and James S. Hart

do solemnly swear that we will well and faithfully execute the duties of chainmen; that we will leve chain over even and uneven ground, and plumb the tally pins, either by sticking or dropping the same; we will report the true distances to all notable objects, and the true lengths of all lines that we measuring, to the best of our skill and ability, and in accordance with instructions given us, in the su the subdivision of T 7N-R15W; T5N-R15W T6N-R14W T5N-R1 and T7N-R13W of the Salt Lake Base and Meridian Utah

Geo M P Dougall, Chair

James S. Hart, Chai

Subscribed and sworn to before me this 25 day of April 1903, 189

SEAL

Hugh M. Dougal
Notary Public

~~WE~~, I Wilbur I. Rowland ~~and~~

do solemnly swear that ~~we~~ I will well and truly perform the duties of moundman in the establish of corners, according to the instructions given ~~us~~ me, to the best of ~~our~~ my skill and ability, in the su the subdivision of T 7N-R15W; T5N-R15W T6N-R14W T5N-R14W and T7N-R13W of the Salt Lake Base and Meridian, Utah

Wilbur I. Rowland Mound

, Mound

Subscribed and sworn to before me this 25 day of April 1903, 189

SEAL

Hugh M. Dougal
Notary P

WE, and

do solemnly swear that we will well and truly perform the duties of axmen in the establishment of c and other duties, according to instructions given us, to the best of our skill and ability, in the su

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Subscribed and sworn to before me this day of , 189

SEAL

I, Ralph A. Groesbeck, do solemnly swear that I will well and perform the duties of flagman according to instructions given me, to the best of my skill and ability, survey of the subdivision of T7N-R15W; T5N-R15W; T6N-R14W; T5N-R 1, and T7N-R13W of the Salt Lake Base and Meridian Utah

Ralph A. Groesbeck, F

Subscribed and sworn to before me this 25 day of April 1903, 189

SEAL

Hugh M. Dougal
Notary Public

6—151

Subdivision of T 7N., R 15W

Chains	
	Survey commenced May 10 1903 and executed with a Wand L.S. Gurley light mountain transit with solar attachment. The horizontal limb having two double verniers placed opposite to each other and reading to single minutes of arc. For a complete test of solar apparatus see Book C. At 8 hr 00 m a.m. l.m.t. I set off 41°17'N in the lot inc. 17°26'N on the decl. arc. and determine with the solar a true meridian at the cor of secs. 1, 2, 35 and 36 for a description of which see notes in S. bdy. of T7N., R15W Book E. Thence I run N0°01'W bet. secs 35 and 36 Over level land
40.00	Set a pine post 4 ft. long 4 ins. sq. with a quart of charcoal 36 ins in the ground for ¼ sec cor. marked ¼ S35 on W face and 36 on E face; dig pits 18x18x12 ins N and S of post 3 ft dist.; and raise a mound of earth 3½ ft base 1½ ft. high W of cor.
80.00	Set a pine post 3 ft. long 4 ins sq. with a quart of charcoal 24 ins in the ground for cor. of secs. 25, 26, 35 and 36 marked T7N. S25 on NE R15W S36 on SE S35 on SW and S26 on NW face with 1 notch on S and E edges dig pits 18x18x12 ins in each sec. 5½ ft. dist.; and raise a mound of earth 4 ft base 2 ft high W of cor Level land Soil alkali 4th rate No timber

Subdivision of T 7 N., R 15 W

Chains East on a random line bet secs. 25 and 36
40.00 Set a temp 1/4 sec. cor.
79.96 Intersect E bdy of Tp. 4 lks S of cor of secs. 25, 30 31 and 36 Leave Tpn described
Thence Tnn
S 89°58' W on a true line bet. secs. 25 and 36
Over level land
39.98 Set a pine post 3 ft long 3x4 ins with a quart of charcoal 24 ins. in the ground for 1/4 sec. cor. marked 1/4 S 25 on N face and S 36 on S face: dig pits 18x18x12 ins E and W of post 3 ft dist.; and raise a mound of earth 3½ ft base 1½ ft high N of cor.
79.96 The cor of secs 25, 26, 35 and 36.
Land level
Soil alkali 4th rate
No timber

N 0°01' W bet secs 25 and 26
Over level land
40.00 Set a pine post 3 ft long 3 ins sq with a quart of charcoal 24 ins in the ground for 1/4 sec. cor. marked 1/4 S 26 on W face and S 25 on E face: dig pits 18x18x12 ins N and S of post 3 ft. dist.; and raise a mound of earth 3½ ft. base 1½ ft high W of cor.
69.50 Middle of single track Central Pacific railroad known as Lucin Cut-Off bears N 81° W and S 81° E
70.30 Telegraph line bears N 81° W and S 81° E
80.00 Set a quartzite stone 4x8x16 ins 11 ins in the ground, for cor of secs. 23, 24, 25 and 26 marked 2 notches on S and notch on E edge dig pits 18x18x12 ins in each sec. 5½ ft. dist.; and raise a mound of earth 4 ft base 2 ft high W of cor.
Land level
Soil alkali 4th rate
No timber

Subdivision of T 7 N., R 15 W

Chains	
	N 89°58' E on a random line bet. secs. 24 and 25
40.00	Set a temp 1/4 sec cor.
79.91	Intersect E bdy of Tp. 2 lks S of cor of secs 19, 24, 25 and 30 heretofore described
	Thence Inun
	S 89°57' W on a true line bet. secs 24 and 25
	Cntr level land
39.95	Set a quartzite stone 6x8x14 ins. 9 ins in the ground for 1/4 sec cor marked 1/4 on N face dig pits 18 x 18 x 12 ins E and W of stone 3 ft. dist.; and raise a mound of earth 3 1/2 ft base 1 1/2 ft high N of cor
79.91	The cor of secs 23, 24, 25 and 26
	Land level
	Soil alkali 4th rate
	No timber

	N 0°01' W bet secs. 23 and 24.
	Cntr level land
40.00	Set a quartzite stone 6x6x14 ins 9 ins in the ground for 1/4 sec cor. marked 1/4 on N face. dig pits, 18 x 18 x 12 ins N and S of stone 3 ft dist.; and raise a mound of earth 3 1/2 ft base 1 1/2 ft. high W of cor.
80.00	Set a quartzite stone 4x8x16 ins 11 ins in the ground for cor of secs 13, 14, 23 and 24 marked 3 notches on S and 1 notch on E edge. dig pits 18 x 18 x 12 ins in each sec. 5 1/2 ft. dist.; and raise a mound of earth 4 ft base 2 ft high W of cor.
	Land level
	Soil alkali 4th rate
	No timber
	May. 10 At this cor I set off 17°28' N on the decl arc. and at 12 h 3 m p.m. l.m.t. observe the sun on the meridian the resulting lat is 41°26' N.

Subdivision of T 7 N., R 15 W

Chains	
	N 89°57' E. on a random line bet. secs. 13 and 24
40.00	Set a temp. 1/4 sec. cor.
79.96	Intersect E bdy of Tp. 2 lks N of cor of secs. 13 18, 19, and 24 heretofore described
	Thence Run
	S 89°58' W on a true line bet. secs. 13 and 24
	Over level land
39.98	Set a quartzite stone 4x10x14 ins. 9 ins in the ground for 1/4 sec cor. marked 1/4 on N face: dig pits 18x18x12 ins E and W of stone 3 ft. dist.; and raise a mound of earth 3½ ft base 1½ ft high N of cor.
79.96	The cor of secs. 13, 14, 23, and 24
	Land level
	Soil alkali; 4th rate
	No timber

	N 0°01' W bet. secs 13 and 14
	Over level land
40.00	Set a quartzite stone 6x12x16 ins 11 ins in the ground for 1/4 sec. cor. marked 1/4 on W face dig pits 18x18x12 ins N and S of stone 3 ft. dist.; and raise a mound of earth 3½ ft. base 1½ ft high W of cor.
80.00	Set a quartzite stone 8x8x14 ins 9 ins in the ground for cor. of secs. 11, 12, 13 and 14 marked 4 notches on S and 1 notch on E edge dig pits 18x18x12 ins in each sec 5½ ft. dist. and raise a mound of earth 4 ft. base 2 ft. high on W of cor
	Land level
	Soil alkali 4th rate
	No timber

Subdivision of T 7N-R 15W

Chs.	N 89°58'E on a random line bet secs. 12 and 13
40.00	Set temp. 1/4 sec. cor.
80.00	Intersect E bdy. Tp. 4 lks N of cor of sec 7, 12, 13 and 18 line before described Thence I run West on a true line bet. secs. 12 and 13
40.00	Set a quartzite stone 6 x 6 x 14 ins 9 ins in the ground for 1/4 sec. cor.; marked 1/4 on N face, dig pits 18 x 18 x 12 ins E and W of stone; 3 ft. dist; and raise a mound of earth 3½ ft base 1½ ft high N of cor.
80.00	The cor of sec's 11, 12, 13 and 14 Land level Soil alkali 4th rate No timber
	N0°01'W. Bet. secs. 11 and 12 Over level land
40.00	Set a quartzite stone 6 x 6 x 14 ins 9 ins in the ground; for 1/4 sec cor, marked 1/4 on W face, dig pits 18 x 18 x 12 ins N and S of stone 3 ft. dist.; and raise a mound of earth 3½ ft base 1½ ft high W of cor.
80.00	Set a quartzite stone 8 x 10 x 16 ins 12 ins in the ground for cor of sec's 1, 2, 11 and 12 marked 5 notches on S and 1 notch on E edges dig pits 18 x 18 x 12 ins in each sec. 5½ ft dist; and raise a mound of earth 4 ft base 2 ft high W of cor. Land level Soil alkali 4th rate No timber

Subdivision of T 7 N - R 15 W

lbs.	East on a random line bet. secs 1 and 12
40.00	Set temp. 1/4 sec. cor.
79.95	Intersect E bdy of Tp. at cor of secs. 1, 12 6, and 7. here to fore described
	Thence I run
	West on true line bet secs 1 and 12
	Over level land
39.98	Set a quartzite stone 5 x 7 x 15 ins 10 ins in the ground for 1/4 sec. cor. marked 1/4 on N face; dig pits 18 x 18 x 12 ins E and W of stone 3 ft dist and raise a mound of earth 3 1/2 ft base 1 1/2 ft high N of cor.
79.95	The cor of secs 1, 2, 11 and 12
	Land level
	Soil alkali 4th rate
	No timber

	N 0° 01' W on a random line bet. secs. 1 and 2
40.00	Set temp. 1/4 sec. cor.
89.69	Intersect N. bdy of Tp. 34 lks E of cor of secs. 1, 2, 35 and 36 Heretofore described
	Thence I run
	S 0° 14' E on true line bet secs 1 and 2
	Over level land
49.69	Set a quartzite stone 5 x 8 x 15 ins 10 ins in the ground for 1/4 sec. cor. marked 1/4 on W face dig pits N and S of stone 3 ft dist, and raise a mound of earth 3 1/2 ft base 1 1/2 ft high W of cor.
89.69	The cor of secs 1, 2, 11 and 12
	Land level
	Soil alkali 4th rate
	No timber

May 10, 1903.

Subdivision of T7N-R15W

Chs.	May 11 at the cor. of secs 2, 3, 34, and 35, on S bdy. of the Tp. heretofore disembed set off 41°11'N on the lat. sec 17°41' N on the decl. arc and at 7h 30' a.m. I met determine a meridian with the color Sun 9 min N0°02'W bet. secs. 34 and 35
	Over level land
40.00	Set a pine post 4 ft long 3 ins sq. with quart of charcoal 36 ins in the ground, for 1/4 sec. cor. marked 1/4 S 34 on W. face and 35 on east face. dig pits 18x18x12 ins N. and south of post 3 ft dist; and raise a mound of earth 3 1/2 ft base 1 1/2 ft high W of cor.
80.00	Set a pine post 4 ft long 4 ins sq. with quart of charcoal 36 ins in the ground for cor of secs 26, 27, 34, and 35, marked T7N S26 on N.E. R15W S35 on S.E. S34 on S.W. and S27 on N.W. face with 1 notch on S and 2 notches on E edges; dig pits 18x18x12 ins in each sec 5 1/2 ft dist. and raise a mound of earth 4 ft base 2 ft high, W. of cor. Land level Soil alkali 4th rate No timber
	East on a random line bet secs 26 and 35
40.00	Set temp. 1/4 sec cor
79.93	Intersect N and S line, at cor of secs 25, 26, 35 and 36: thence 9 min West on a true line bet. secs. 26 and 35 Over level land
39.96	Set a pine post 3 ft long 4 ins sq. with quart of charcoal 24 ins in the ground for 1/4 sec. cor. marked 1/4 S 26 on N face and 35 on S face dig pits

Subdivision of T7N-R15W

Chs.	18x18x12 ins E and W of post 3 ft dist; and raise a mound of earth 3½ ft base 1½ ft high N of cor.
79.93	To cor of secs 26, 27, 34 and 35 Land level Soil alkali 4th rate No timber
	N0°02'W. bet. secs. 26 and 27 Over rolling land
40.00	Set a quartzite stone 5x6x17 ins 12 ins in the ground for ¼ sec cor.; marked ¼ on W face; dig pits 18x18x12 ins N and S of stone 3 ft dist; and raise a mound of earth 3½ ft. base 1½ ft. high; west of cor.
80.00	Set a quartzite stone 5x6x17 ins 12 ins in the ground for cor of secs 22, 23, 26, and 27 marked 2 notches on S and 2 notches on E. edges. dig pits 18x18x12 ins in each sec. 5½ ft distant and raise a mound of earth 4 ft. base 2 ft high W. of cor Land level Soil alkali 4th rate No timber
	East on a random line bet secs. 23 and 26.
40.00	Set a temp. ¼ sec. cor.
79.96	Intersect N and S line 2 chs. S of cor of secs 23, 24, 25, and 26 thence I run S89°59'W on a true line bet secs. 23 and 26 Over level land

Subdivision of T 7 N., R 15 W

chains	
39.98	Set a quartzite stone 6x8x14 ins 9 ins in the ground for 1/4 sec cor marked 1/4 on N face: dig pits 18x18x12 ins E and W of stone 3 ft. dist.; and raise a mound of earth 3½ ft. base 1½ ft high N of cor.
69.54	Telegraph line bears N 81° W and S 81° E
76.00	The middle of the single track of Central Pacific railroad bears N 81° W and S 81° E
79.96	The cor of sec's. 22, 23, 26 and 27
	Land level
	Soil alkali 4th rate
	No timber

	No. 02 West sec's. 22 and 23
	Cor level land
0.41	Middle of single track of Central Pacific railroad known as the Lucin Cut Off bears N 81° W and S 81° E
1.33	Telegraph line bears N 81° W and S 81° E
40.00	Set a quartzite stone 6x10x16 ins 11 ins in the ground for 1/4 sec cor marked 1/4 on W face: dig pits 18x18x12 ins N and S of stone 3 ft dist: and raise a mound of earth 3½ ft. base 1½ ft high W of cor.
80.00	Set a quartzite stone 5x6x17 ins 12 ins in the ground for cor. of sec's. 14, 15, 22 and 23 marked 3 notches on S and 2 notches on E edge: dig pits 18x18x12 ins in each sec. 5½ ft dist: and raise a mound of earth 4 ft base 2 ft: high W of cor.
	Land level
	Soil alkali 4th rate
	No timber

Subdivision of T 7 N., R 15 W

Chains
N 89°59' E on a rundown line bet secs. 14 and 23
40.00 Set a temp 1/4 sec. cor.
80.00 Intersect N and S lines 2 chs E of cor of secs 13, 14, 23, and 24
Thence 3 mm
West on a true line bet. secs. 14 and 23
Over level land
40.00 Set a quartzite stone 4x10x14 ins 9 ins in the ground for 1/4 sec. cor. marked 1/4 on N face: dig pits 18x18x12 ins E and W of stone 3 ft. dist.; and raise a mound of earth 3½ ft. base 1½ ft. high N of cor
80.00 The cor. of secs. 14, 15, 22, and 23
Land level
Soil alkali 4th rate
No timber

May 11: At 9h 00m a.m. l m t. I set off 41° 20' N on the lat. arc 17° 42' N on the decl arc and determine a meridian with the solar at the cor. of secs. 14, 15, 22, and 23
Thence 3 mm
N 0°02' W bet secs 14 and 15
Over level land
40.00 Set a quartzite stone 6x12x14 ins 9 ins in the ground for 1/4 sec. cor. marked 1/4 on W face dig pits 18x18x12 ins N and S of stone 3 ft dist.; and raise a mound of earth 3½ ft base 1½ ft high W of cor.
80.00 Set a quartzite stone 8x10x16 ins 11 ins. in the ground for cor. of secs. 10, 11, 14 and 15 marked 4 notches on S and 2 notches on E edge dig pits 18x18x12 ins in each sec 5½ ft. dist. and raise a mound of earth 4 ft base 2 ft high W of cor.
Land level
Soil alkali 4th rate
No timber

Subdivision of T. 7 N., R 15 W

chains.	
	East on a random line bet secs. 11 and 14.
40.00	Set a temp. 1/4 sec cor.
79.95	Intersect N and S line ~~2 chs 8 yds~~ of secs. 11, 12, 13 and 14
	Thence I run
	~~N 89° 55'~~ on a true line bet secs 11 and 14
	~~Over~~ level land
39.97	Set a quartzite stone 5 x 7 x 15 ins 10 ins in the ground for 1/4 sec. cor. marked 1/4 on N face: dig pits 18 x 18 x 12 ins E and W of stone 3 ft dist: and raise a mound of earth 3 1/2 ft. base 1 1/2 ft high N of cor.
79.95	The cor of secs. 10, 11, 14 and 15
	Land level
	Soil alkali 4th rate
	No timber

	N 0°02' W bet. secs. 10 and 11
	Over level land
40.00	Set a quartzite stone 6 x 8 x 14 ins 9 ins in the ground for 1/4 sec cor marked 1/4 on W face: dig pits 18 x 18 x 12 ins N and S of stone 3 ft dist and raise a mound of earth 3 1/2 ft base 1 1/2 ft high W of cor.
80.00	Set a quartzite stone 6 x 8 x 16 ins 11 ins. in the ground for cor of secs. 2, 3, 10 and 11. marked 5 notches on S and 2 notches on E edge: dig pits 18 x 18 x 12 ins in each sec. 5 1/2 ft. dist: and raise a mound of earth 4 ft base 2 ft high W of cor.
	Land level
	Soil alkali 4 rate
	No timber
	May 11-1903 at this cor I set off 17°44' N on the decl. arc: and at 12h 00m m l m t observe the sun on the meridian: the resulting lat is 41°22' N.

Subdivision of T 7 N., R 15 W

Chains	S 89°39' E on a random line bet secs 2 and 11
40.00	Set a temp 1/4 sec. cor.
79.90	Intersect N and S line 2 lks S of cor of secs. 1, 2, 11 and 12
	Thence I run
	West on a true line bet. secs. 2 and 11
	Over level land
39.95	Set a quartzite stone 4 x 10 x 16 ins 11 ins in the ground for 1/4 sec cor marked 1/4 on N face dig pits 18 x 18 x 12 ins E and W of stone 3 ft dist and raise a mound of earth 3½ ft base 1½ ft. high N of cor
79.90	The cor of secs 2, 3, 10, and 11.
	Land level
	Soil alkali: 4th rate
	No timber

	Knowing from previous retracement of N bdy of Tp that sec 2 will not close within the prescribed limits
	I run from cor of secs. 2, 3, 10, and 11
	N 0°02' W on a true line bet. secs. 2 and 3
	Over level land.
40.00	Set a quartzite 6 x 8 x 16 ins 11 ins in the ground for 1/4 sec. cor. marked 1/4 on W face: dig pits 18 x 18 x 12 ins N and S of stone 3 ft. dist: and raise a mound of earth 3½ ft. base 1½ ft. high W of cor.
89.49	Intersect N bdy of Tp. 8 lks N of cor of secs 2, 3, 34, and 35 Lost for described
	Set a quartzite stone 6 x 8 x 14 ins 9 ins in the ground for closing cor. of secs 2 and 3 marked C.C. on S; with 2 grooves on E and 4 grooves on W face: dig pits 24 x 18 x 12 ins crosswise on each line E and W 3 ft. and S of stone 7 ft. dist: and raise a mound of earth 4 ft. base 2 ft high S of cor.
	We obliterate all marks on the old cor pertaining to secs 2 and 3
	Land level
	Soil alkali 4th rate
	No timber

Subdivision of T. 7 N., R. 15 W.

66.5	May 11, At 2h 00m p.m. l.m.t. I set off 41°17' N on the lat. arc: 17°45' N on the decl. arc; and determine a meridian with the solar at the cor. of secs. 3, 4 33 and 34. on S bdy of Tp. bet. Tps. 6 & 7 N. Hence I run N. 0°08' W bet. secs 33 and 34 Over level land
40.00	Set a quartzite stone 5 x 7 x 15 ins 10 ins in the ground for 1/4 sec cor marked 1/4 on W face dig pits 18 x 18 x 12 ins on N side of stone 3 ft dist.; and raise a mound of earth 3 1/2 ft base 1 1/2 ft high W of cor.
80.00	Set a quartzite stone 3 x 12 x 16 ins 11 ins in the ground for cor of secs 27, 28, 33 and 34 marked 1 notch on S and 3 notches on E edges dig pits 18 x 18 x 12 ins in each sec. 5 1/2 ft dist. and raise a mound of earth 4 ft. base 2 ft. high W of cor. Land level soil alkali 4th rate No timber
	Past on a random line bet secs 27, and 34
40.00	Set a temp. 1/4 sec. cor.
80.04	Intersect N and S lines at cor of secs 26, 27, 34, and 35. thence I run on a true line bet secs 27, and 34.
40.02	Set a quartzite stone 5 x 7 x 15 ins 10 ins in the ground for 1/4 sec cor marked 1/4 on N face dig pits 18 x 18 x 12 ins. E and W. of stone 3 ft dist; and raise a mound of earth 3 1/2 ft base 1 1/2 ft high N of cor.
80.04	The cor of secs 27, 28, 33, and 34 Land level Soil alkali 4th rate

Subdivision of T 7N., R 15W

Chs.	
	No timber
	N 0°02' W bet secs 27 and 28
	Over level land
40.00	Set a quartzite stone 5x5x14 ins 9 ins in the ground for 1/4 sec cor marked 1/4 on W face dig pits 18x18x12 ins N and S of stone 3 ft dist.; and raise a mound of earth 3½ ft base 1½ ft high W. of cor.
80.00	Set a quartzite stone 3x12x16 ins 11 ins in the ground for cor of secs 21, 22, 27 and 28 marked 2 notches on S and 3 notches on E edges dig pits 18x18x12 ins in each sec. 5½ ft. dist.; and raise a mound of earth 4 ft. base 2 ft. high W. of cor.
	Land level
	Soil alkali 4th rate
	No timber
	S 89°58' E on a random line bet. secs. 22 and 27
40.00	Set a temp 1/4 sec. cor.
80.00	Intersect N and S lines thru cor of secs 22, 23, 26 and 27
	Thence I run
	West on a true line bet secs 22 and 27
40.00	Set a quartzite stone 4x10x13 ins 9 ins in the ground for 1/4 sec cor. marked 1/4 on N face dig pits 18x18x12 ins E and W of stone 3 ft dist.; and raise a mound of earth 3½ ft base 1½ ft high N of cor.
80.00	The cor of secs 21, 22, 27 and 28
	Land level
	Soil alkali 4th rate
	No timber

Subdivision of T. 7 N. - R. 15 W.

chs.

N 0°02' W bet secs 21 and 22
Over level land

11.90 Middle of the single track of the Central Pacific Railroad known as the Lucin Cutoff bears N 81° W and S 81° E

12.82 Telegraph line bears N 81° W and S 81° E

40.00 Set a quartzite stone 5 x 7 x 15 ins 10 ins in the ground for 1/4 sec cor. marked 1/4 on W face dig pits 18-18-12 ins N and S of stone 3 ft dist.; and raise a mound of earth 3½ ft base 1½ ft. high W of cor.

80.00 Set a quartzite stone 8 x 8 x 16 ins 11 ins in the ground for cor of secs 15, 16, 21, and 22. marked
T 7 N S 15 N.E.
R 15 W S 22 m S.E.
S 21 m S.W. and
S 16 m N.W. face with 3 notches on S and E edges dig pits 18 x 18 x 12 ins in each sec 5½ ft. dist.; and raise a mound of earth, 4 ft base 2 ft high W of cor.
Land level
Soil alkali & sate
No timber

East on a random line bet secs. 15 and 22

40.00 Set a temp 1/4 sec. cor.

79.98 Intersect N and S line ~~2 miles~~ cor of secs. 14, 15, 22, and 23.
Thence S 1 mm
S 89° 59' W on a true line bet. secs. 15 and 22
Over level land

39.99 Set a quartzite stone 5 x 7 x 15 ins 10 ins in the ground for 1/4 sec cor marked 1/4 on N face ~~dig pits 18-18-12 ins~~ E and W of stone 3 ft dist.; and raise a mound of earth 3½ ft base 1½ ft high N of cor.

Subdivision of T. 7 N., R. 15 W.

Chs.	
79.98	The cor of secs. 15, 16, 21, and 22 Land level Soil alkali 4th rate. No timber
	N 0°02' W. Bet secs 15 and 16 Over level land
40.00	Set a quartzite stone 8 x 12 x 16 ins 11 ins in the ground for 1/4 sec. cor. marked 1/4 on W face dig pits 18 x 18 x 12 ins N and S of stone 3 ft dist; and raise a mound of earth 3½ ft base 1½ ft high W of cor.
80.00	Set a quartzite stone 8 x 10 x 14 ins 9 ins in the ground for cor of secs. 9, 10, 15, and 16. marked 4 notches on S and 3 notches on E edges dig pits 18 x 18 x 12 ins in each sec. 5½ ft dist and raise a mound of earth 4 ft base 2 ft. high W. of cor. Land level Soil alkali 4th rate No timber
	N 89°59' E. on a random line bet secs 10 and 15
40.00	Set a temp. 1/4 sec. cor.
80.00	Intersect N and S Line 2 chs N of cor of secs 10, 11, 14, and 15 Thence 2 min West on a true line bet secs. 10 and 15 Over level land
40.00	Set a quartzite stone 7 x 8 x 16 ins 11 ins in the ground for 1/4 sec. cor. marked 1/4 on N face dig pits 18 x 18 x 12 ins E and W of stone 3 ft dist; and raise a mound of earth 3½ ft base 1½ ft high N of cor.
80.00	The cor of secs. 9, 10, 15, and 16

Subdivision of T. 7N.; - R. 15W.

lbs.	Land level Soil alkali 4th rate No timber
	N 0°02'W bet secs 9 and 10 Over level land
40.00	Set a quartzite stone 4x10x15 ins 10 ins. in the ground for 1/4 sec. cor. marked 1/4 on W face dig pits 18x18x12 ins N and S of stone 3 ft dist.; and raise a mound of earth 3½ ft base 1½ ft high W of cor.
80.00	Set a quartzite stone 4x8x16 ins 11 ins in the ground for cor of secs. 3, 4, 9, and 10 marked 5 notches on S and 3 notches on E edges dig pits 18x18x12 ins in each sec. 5½ ft. dist.; and raise a mound of earth 4 ft base 2 ft high W of cor. Land Level: Soil alkali 4th rate No timber
	East on a random line bet secs 3 and 10
40.00	Set a temp. 1/4 sec. cor.
80.03	Intersect N and S lines 5 lks N cor of secs 2, 3, 10, and 11 Lists for described Thence I run N 89°58' W on a true line bet secs 3 and 10
40.01	Set a quartzite stone 4x8x16 ins 11 ins in the ground for 1/4 sec cor. marked 1/4 on N face dig pits 18x18x12 ins E and W of stone 3 ft dist; and raise a mound of earth 3½ ft base 1½ ft high N of cor.
80.03	The cor of secs. 3, 4, 9, and 10 Land level Soil alkali 4th rate No timber

Subdivision of T 7N- R 15 W.

chs. Knowing from previous retracement of N bdy of Tp. that sec 3 will not close within the prescribed limits. I run from cor of secs 3, 4, 9, and 10
N 0°02' W on a true line bet. secs 3 and 4
40.00 Set a redwood post 3 ft long 4 ins sq. with qtr cut of charcoal 24 ins in the ground for 1/4 sec cor marked 1/4 S 4 on W face and 3 on E face dig pits 18 x 18 x 12 ins N and S of post 3 ft dist. and raise a mound of earth 3½ ft base 1½ ft. high W of cor.
89.33 Intersect N bdy of Tp. 1.10 chs. N 88°50' E of cor of secs. 3, 4, 33, and 34. here to fore described
Set a quartzite stone 5 x 7 x 16 ins 11 ins in the ground for closing cor. of secs 3 and 4 marked C C on S.; with 3 grooves on E and W. faces dig pits 24 x 18 x 12 ins crosswise on each line E and W, 3 ft. and S of stone 7 ft. dist.; and raise a mound of earth 4 ft. base 2 ft. high S of cor.
We obliterate all marks on old cor. pertaining to secs, 3 and 4
Land level
Soil alkali 4th rate
No timber

May 11, 1903.

May 12; At 8h 00m a.m. l.m.t. I set off 41°17' on the lat. arc; 13°54½' N on the decl. arc; and determine a meridian with the solar at the cor. of secs 4, 5, 32, and 33. ~~on South bdy. of Tp.~~ ~~here to fore~~ described
Thence I run
N 0°03' W bet secs 32 and 33
Cor level land
40.00 Set a quartzite stone 4 x 7 x 18 ins 12 ins in the ground for 1/4 sec cor.

Subdivision of T. 7 N.; R. 15 W.

marked 1/4 on W. face dig pits 18 x 18 x 12 ins N and S of stone 3 ft dist.; and raise a mound of earth 3½ ft. base 1½ ft high W of cor.

80.00 Set a quartzite stone 5 x 7 x 16 ins 11 ins in the ground for cor. of secs 28, 29, 32 and 33. marked 1 notch on S, and 4 notches on E, edges dig pits 18 x 18 x 12 ins in each sec. 5½ ft. dist and raise a mound of earth 4 ft. base 2 ft high W of cor.

Land level
Soil alkali 4th rate
No timber

East on a random line bet. secs. 28 and 33

40.00 Set a temp: 1/4 sec. cor

80.00 Intersect N and S line at 18 lks N of cor to secs. 27, 28, 33 and 34 thence I run

N 89°52' W matrix line bet secs 28 & 33

40.00 Set a quartzite stone 4 x 9 x 14 ins 9 ins in the ground for 1/4 sec cor marked 1/4 on N face dig pits 18 x 18 x 12 ins S and W. of stone 3 ft. dist.; and raise a mound of earth 3½ ft base 1½ ft high N of cor.

80.00 To cor of secs 28, 29, 32 and 33

Land Level
Soil alkali 4th rate
No timber

N 0°03' W bet secs 28 and 29
Our level land

40.00 Set a quartzite stone 5 x 7 x 15 ins 10 ins

Subdivision of T. 7 N.; - R. 15 W.

Chs.	in the ground for 1/4 sec. cor, marked 1/4 on west face dig pits 18x18x12 ins. N and S of stone 3 ft dist. and raise a mound of earth 3½ ft. base 1½ ft high W of cor.
80.00	Set a quartzite stone 5x8x14 ins 9 ins in the ground for cor of secs 20, 21, 28, and 29, marked 2 notches on S and 4 notches on E. edges. dig pits 18x18x12 ins in each sec. 5½ ft dist; and raise a mound of earth 4 ft base 2 ft high W of cor.
	Land level
	Soil alkali 4th rate
	No timber
	S 89°52' E on a Random line bet secs 21 and 28
40.00	Set a temp 1/4 sec. cor
79.98	Intersect N and S line 14 lks S of cor of secs 21, 22, 27 and 28 thence I run N 89°58' W on a true line bet secs. 21 and 28
	Over level land
39.99	Set a lime stone 5x8x13 ins 9 ins in the ground for 1/4 sec. cor. marked 1/4 on N face dig pits 18x18x12 ins E and W of stone 3 ft dist and raise a mound of earth 3½ ft base 1½ ft high N of cor.
79.98	The cor of secs. 20, 21, 28 and 29
	Land level
	Soil alkali, 4th rate
	No timber
	N 0°03' W bet secs 20 and 21
	Over level land

Subdivision of T 7N-R 15 W

Chs.	
22.50	Middle of single track of the Central Pacific Railroad known as the Lucin Cut Off bears N 81° W and S 81° E
24.00	Telegraph line bears N 81° W and S 81° E
40.00	Set a quartzite stone 5x10x13 ins 9 ins. in the ground for 1/4 sec cor marked 1/4 on W face dig pits 18x18x12 ins N and S of stone 3 ft dist; and raise a mound of earth 3½ ft base 1½ ft high W of cor.
80.00	Set a quartzite stone 5x8x14 ins 9 ins in the ground for cor of secs. 16, 17, 20, and 21. marked 3 notches on the S and 4 notches on E edges dig pits 18x18x12 ins in each sec 5½ ft. dist; and raise a mound of earth 4 ft base 2 ft high W of cor.
	Land level Soil alkali: 4th rate No timber

	S 89°58' E. on a random line bet secs. 16 and 21
40.00	Set a temp 1/4 sec cor
80.00	Intersect N and S line 5 lks S of cor of secs 15, 16, 22 and 21
	Thence I run West on a true line bet secs 16 and 21 Over level land
40.00	Set a quartzite stone 6x6x16 ins. 11 ins. in the ground for 1/4 sec. cor. marked 1/4 on N face. dig pits 18x18x12 ins E and W of stone 3 ft dist; and raise a mound of earth 3½ ft base 1½ high N of cor.

Subdivision of T. 7 N., R. 15 W.

Chs.	
80.00	The cor of secs 16, 17, 20 and 21 Land level Soil alkali 4 rate No timber
	N 0°03' W bet secs 16 and 17 Over level land
40.00	Set a quartzite stone 8 x 8 x 13 ins 9 ins in the ground for 1/4 sec cor marked 1/4 on W face dig pits 18x18x12 ins 18 ft S of stone 3 ft dist and raise a mound of earth 3½ ft base 1½ ft high W of cor.
80.00	Set a quartzite stone 6 x 8 x 18 ins 12 ins in the ground for cor of secs 8, 9, 16, and 17 marked 4 notches on S and E edges. dig pits 18 x 18 x 12 ins. in each sec. 5½ ft dist; and raise a mound of earth 4 ft base 2 ft high W. of cor Land level Soil alkali 4th rate No timber
	East on a random line bet secs 9 and 16
40.00	Set a temp. 1/4 sec. cor.
80.00	Intersect N and S lines 5 lks x cor of secs 9, 10, 15 and 16 heretofore described Thence Run N 89°58' W on a true line bet secs 9 and 16 Over level land
40.00	Set a quartzite stone 5 x 8 x 13 ins 9 ins in the ground for 1/4 sec cor

Subdivision of T. 1 N., R 15 W.

Chs.	marked 1/4 on N face dig pits 18x 18x12 ins E and W of stone 3 ft. dist.; and raise a mound of earth 3½ ft base 1½ ft high W of cor.
80.00	The cor of secs. 8, 9, 16 and 17. Land level Soil alkali 4th rate No timber
	May 12: at the cor of secs 8, 9, 16 and 17, I set off 17°59' N., on the decl arc and at 12h 03m 5s a. m. I observe the sun on the meridian; the resulting lat. is 41°21', which is about the proper lat. N 0°03' W bet secs 8 and 9 Cor level land
40.00	Set a quartzite stone 4x10x14 ins 9 ins in the ground for 1/4 sec. cor. marked 1/4 on W face dig pits 18x18x 12 ins N and S of stone 3 ft dist.; and raise a mound of earth 3½ ft. base 1½ ft high W of cor.
80.00	Set a quartzite stone 6x8x16 ins 11 ins in the ground for cor of secs. 4, 5, 8, and 9 marked 5 notches on S. and 4 notches on E edges: dig pits 18x18x12 ins. in each sec. 5½ ft. dist.; and raise a mound of earth 7 ft. base 2 ft. high W of cor. Land level Soil Alkali 4th rate No timber
	S 89°58' E on a random line bet secs.

Subdivision of T 7 N - R 15 W

Chs.	
	4 and 9
40.00	Set a temp. 1/4 sec. cor.
79.90	Intersect N and S line 12 lks S cor of secs. 3, 4, 9, and 10. Lines to for described Hence Run
	S 89°57' W on a true line bet. secs 4 and 9
39.95	Set a quartzite stone 5 x 8 x 14 ins 10 ins in the ground for 1/4 sec. cor. marked 1/4 on N face dig pits 18 x 18 x 12 ins E and W. of stone 3 ft. dist.; and raise a mound of earth 3½ ft base 1½ ft high N of cor.
79.90.	The cor of secs. 4, 5, 8, and 9.
	Land level
	Soil Alkali 4th rate
	No timber

	Knowing from previous retracement of N bdy. of Tp. that sec. 4 will not close within the prescribed limits. Run from cor of secs. 4, 5, 8, and, 9
	N 0°03' W on a true line bet secs 4 and 5 Over level land.
40.00	Set a pine post 4 ft long 4 ins sq. with a quart of charcoal 36 ins in the ground for 1/4 sec. cor. marked 1/4 S 5 on west face and S. 4 on E face dig pits 18 x 18 x 12 ins N and S of post 3 ft dist; and raise a mound of earth 3½ ft base 1½ ft. high W of cor.
88.81	Intersect N bdy of Tp 1.47 chs N 89°50' E of cor of secs 4, 5, 32, and 33. Lines to for described. Set a quartzite stone 4 x 8 x 16 ins 11 ins in the ground for closing cor of secs 4 and 5 marked. C C on S.; with 2 grooves on W and 4 grooves on E. faces. Dig pits 24 x 18 x 12 ins. crosswise on each line E and W 3 ft. dist and S of stone 7 ft dist; and raise a mound of earth 4 ft base 2 ft.

Subdivision of T 7 N., - R 14 W

Chs.	
	high S of cor We obliterate all marks on old cor. pertaining to secs 4 and 5 Land level Soil alkali 4th rate No timber May 12, 1903
	May 13, 1903: at 8h 00m a.m. l.m.t. I set up 41°17' on the lat arc; 18°12' N on the decl. arc. and determine a meridian with the solar to the cor. of secs. 5, 6 31 and 32 on the S. bdy. of the Tp. heretofore described Thence I run N 0°04' W bet secs 31 and 32 Over level land
40.00	Set a quartzite stone 8 x 10 x 16 ins 11 ins. in the ground for 1/4 sec. cor. marked 1/4 on W face dig pits 18 x 18 x 12 ins N and S of stone 3 ft dist and raise a mound of earth 3½ ft base 1½ ft high W of cor.
80.00	Set a quartzite stone 4 x 8 x 18 ins 12 ins in the ground for cor of secs. 29, 30, 31, and 32 marked 1 notch on S and 5 notches on E edges dig pits 18 x 18 x 12 ins in each sec. 5½ ft dist.; and raise a mound of earth 4 ft base 2 ft high W. of cor. Land level Soil alkali 4th rate No timber
	East on a random line bet secs. 29 and 32

Subdivision of T 7 N., R 15 W

Chs	
40.00	Set a temp. 1/4 sec cor.
79.98	Intersect N and S line between cor of sec's 28, 29, 32, and 33 heretofore described
	Thence I run
	N 89° 59' W on a true line bet secs. 29 and 32
	Over level land
39.99	Set a quartzite stone 4 x 8 x 16 ins 11 ins in the ground for 1/4 sec cor marked 1/4 on N face dig pits 18 x 18 x 12 ins E and W of stone 3 ft dist.; and raise a mound of earth 3 1/2 ft base 1 1/2 ft high N of cor.
79.98	The cor of secs 29, 30, 31 and 32
	Land level
	Soil alkali 4th rate
	No timber

	West on a random line bet sec's 30 and 31
40.00	Set a temp. 1/4 sec cor.
82.91	Intersect W. bdy. of Tp & cor of secs 25, 30, 31 and 36 which is a line stone 4 x 5 ins 6 ins above ground marked and witnessed as described by the surveyor general. Thence I run E on
	East on a true line bet secs 30 and 31
	Over level land
42.91	Set a quartzite stone 5 x 7 x 16 ins 11 ins. in the ground for 1/4 sec cor. marked 1/4 on N face dig pits 18 x 18 x 12 ins E and W of stone 3 ft dist.; and raise a mound of earth 3 1/2 ft. base 2 ft high N of cor
82.91	The cor of secs 29, 30, 31 and 32
	Land level
	Soil alkali 4th rate
	No timber

Subdivision of T 7N., R 15W.

Chs.	
	N 0°04'W bet secs. 29 and 30
	Over level land
40.00	Set a quartzite stone 5x8x13 ins 9 ins in the ground for 1/4 sec cor marked 1/4 on the W. face dig pits 18x18x12 ins N and S of stone 3 ft. dist. and raise a mound of earth 3½ ft base 1½ ft high W of cor.
80.00	Set a quartzite stone 8x8x16 ins 11 ins in the ground for cor of secs 19, 20, 29, and 30 marked 2 notches on S and 5 notches on E edges: dig pits 18x18x12 ins in each sec. 5½ ft dist, and raise a mound of earth 4 ft base 2 ft. high W of cor.
	Land level
	Soil alkali 4th rate
	No timber
	S 89°59'E on a random line bet secs 20 and 29.
40.00	Set a temp 1/4 sec cor.
80.00	Intersect N and S line 2 chs S of cor of secs 20, 21, 28, and 29 bet for described
	Hence run
	West on a true line bet secs 20 and 29
40.00	Set a quartzite stone 4x10x13 ins 9 ins in the ground for 1/4 sec. cor. marked 1/4 on N face dig pits 18x18x12 ins E and W of stone 3 ft dist; and raise a mound of earth 3½ ft. base 1½ ft high N of cor.
80.00	The cor of secs. 19, 20, 29 and 30
	Land level
	Soil alkali 4th rate.
	No timber

Subdivision of T 7 N - R 15 W

Chs.	
	West on a random line bet secs. 19 and 30.
40.00	Set a temp. 1/4 sec cor.
82.50	Intersect W bdy of Tp 3 lks N. of cor of secs. 19, 24, 25, and 30 which is a lime stone 5 x 6 x 6 ins above the ground, marked and witnessed as described by the surveyor general.
	Thence Train
	N 89° 59' E on a true line bet secs 19 and 30
	Over level land.
42.50	Set a quartzite stone 5 x 8 x 14 ins 9 ins in the ground for 1/4 sec cor marked 1/4 on N face dig pits 18 x 18 x 12 ins E. and W. of stone 3 ft dist and raise a mound of earth 3 1/2 ft base 1 1/2 ft. high N of cor.
82.50	The cor of secs 19, 20, 29, and 30
	Land level
	Soil alkali 4th rate
	No timber

	N 0° 04' W bet secs 19, and 20.
	Over level land
34.42	Middle of single track of the Central Pacific Railroad, known as the Lucin Cutoff bears N 81° W and S 81° E
35.41	Telegraph line bears N 81° W and S 81° E
40.00	Set a quartzite stone 6 x 6 x 14 ins 9 ins in the ground for 1/4 sec. cor. marked 1/4 on W face dig pits N and S of stone 3 ft dist. and raise a mound of earth 3 1/2 ft base 1 1/2 ft high W. of cor.
80.00	Set a quartzite stone 4 x 8 x 16 ins 11 ins in the ground for cor of secs. 17, 18, 19, and 20 marked 3 notches on S and 5 notches on E edges; dig

Subdivision of T 7 N - R 15 W

Chains	
	pits 18 x 18 x 12 ins each sec 5½ ft dist; and raise a mound of earth 4 ft. base 2 ft. high W. of cor. Land level Soil alkali 4th. rate No timber-
	May 13 of this cor I set 78 18 1/2 in the decline and at 12h 0m 0s m.l.mt. observe the sun on the meridian the resulting lat is 41½° N.
	East on a random line bet. secs. 17 and 20.
40.00	Set a temp. 1/4 sec cor.
80.05	Intersect N and S line 5 lks S of cor. of secs. 16, 17, 20, and 21. Thence I run S 89°58' W on a true line bet secs 17 and 20 Over level land
40.03	Set a quartzite stone 6 x 6 x 14 ins 9 ins in the ground for 1/4 sec. cor. marked 1/4 on N face dig pits 18 x 18 x 12 ins E and W of stone 3 ft dist and raise a mound of earth 3½ ft base 1½ ft high N of cor.
80.05	The cor of secs 17, 18, 19, and 20. Land level Soil alkali; 4th rate No timber
	S 89°59' W on a random line bet secs. 18 and 19
40.00	Set a temp 1/4 sec. cor.
82.39	Intersect W. bdy of the Tp. 3 lks S of cor of secs 13, 18, 19, and 24, which is a lime stone 3 x 5 x 6 ins obv ground marked and witnessed as described by the surveyor general Thence I run

Subdivision of T. 7 N., R. 15 W.

Chs.	
	East on a true line bet. secs 18, and 19. Over level land.
42.39	Set a quartzite stone 5 x 9 x 12 ins 8 ins in the ground for 1/4 sec. cor. marked 1/4 on N face. dig pits 18 x 18 x 12 ins E and W. of stone 3 ft dist; and raise a mound of earth 3½ ft. base 1½ ft. high N of cor.
82.39	The cor of secs. 17, 18, 19, and 20 Land level Soil alkali 4th rate No timber
	N 0°04' W bet. secs. 17 and 18 Over level land
40.00	Set a quartzite stone 5 x 8 x 14 ins 9 ins. in the ground for 1/4 sec. cor. marked 1/4 on W. face dig pits 18 x 18 x 12 ins N. and S. of stone. 3 ft. dist; raise a mound of earth 3½ ft. base 1½ ft. high W of cor.
80.00	Set a quartzite stone 4 x 7 x 18 ins 12 ins in the ground for cor of secs 7, 8, 17, and 18. marked 4 notches on S and 5 notches on E edges dig pits 18 x 18 x 12 ins. in each sec. 5½ ft. dist; and raise a mound of earth 4 ft. base 2 ft. high W of cor. Land level Soil alkali 4th rate No timber
	N 89°58' E. on a random line bet. secs. 8 and 17

Subdivision of T. 7 N., R. 15 W.

Chs.	
40.00	Set a temp. 1/4 sec. cor.
80.08	Intersect N and S line 5th N cor of secs 8, 9, 16 and 17
	Thence S 0 min
	West on a true line bet secs 8 and 17
	Over level land
40.04	Set a quartzite stone 8 x 8 x 13 ins 9 ins in the ground for 1/4 sec. cor. marked 1/4 on N face dig pits 18 x 18 x 12 ins E and W of stone 3 ft. dist.; and raise a mound of earth 3 1/2 ft base 1 1/2 ft. high N of cor.
80.08	The cor. of secs 7, 8, 17 and 18
	Land level
	Soil alkali 4th rate.
	No timber

	West on a random line bet secs 7 and 18
40.00	Set a temp. 1/4 sec. cor.
82.30	Intersect W. bdy. of Tp. 6th N cor. of secs. 7, 12, 13, and 18 which is a lime stone 8 x 6 x 6 ins above ground. marked and witnessed as described by the surveyor general.
	Thence S 0 min:
	N 89° 38' E on a true line bet secs 7 and 18
	Over level land
42.30	Set a quartzite stone 6 x 8 x 16 ins 11 ins in the ground for 1/4 sec. cor. marked 1/4 on N face; dig pits 18 x 18 x 12 ins E. and W. of stone 3 ft dist.; and raise a mound of earth 3 1/2 ft. base 1 1/2 ft high N of cor.
82.30	The cor of secs. 7, 8, 17 and 18
	Land level
	Soil alkali 4th rate.

Subdivision of T. 7N.-R. 15W.

Chs.	
	No timber
	N 0°04'W bet secs 7 and 8
40.00	Set a quartzite stone 6 x 6 x 14 ins 9 ins in the ground for 1/4 sec cor marked 1/4 on W face dig pits 18 x 18 x 12 ins N and S of stone 3 ft dist. and raise a mound of earth 3½ ft base 1½ ft high W of cor.
80.00	Set a quartzite stone 4 x 8 x 16 ins 11 ins in the ground for cor of secs. 5, 6, 7, and 8. dig pits 18 x 18 x 12 ins in each sec. 5½ ft. dist., and raise a mound of earth 4 ft base 2 ft. high W. of cor.
	Land Level
	Soil alkali 4th rate
	No timber
	East on a random line bet secs 5, and 8.
40.00	Set a temp. 1/4 sec. cor.
80.10	Intersect N and S line 7 lks cor of secs 4, 5, 8, and 9. heretofore described
	Thence Num
	S 89°57'W on a true line bet. secs. 5 and 8
	Over level land
40.05	Set a Pine Post 4 ft long 4 ins sq. with a quart of charcoal 36 ins in the ground for 1/4 sec. cor. marked 1/4 S 5 on N face and S 8 on S. face dig pits 18 x 18 x 12 ins E and W of post 3 ft. dist.; and raise a mound of earth 3½ ft base 1½ ft high N of cor.
80.10	The cor of secs 5, 6, 7, and 8.
	Land level
	Soil alkali 4th rate.

Subdivision of T. 7 N., R. 15 W.

Chs.	
	No timber
	S 88°38' W. on a random line bet secs. 6 and 7
40.00	Set a temp 1/4 sec cor
82.19	Intersect W. bdy of the Tp. 7 N. 15 W. cor of secs 1, 6, 7 and 12 which is a lime stone 8 x 6 x 5 ins above ground. marked and witnessed as described by the Surveyor general
	Thence I run
	N 89°55' E on a true line bet secs. 6 and 7
42.19	Set a quartzite stone 6 x 8 x 14 ins 9 ins. in the ground for 1/4 sec. cor marked 1/4 on N. face. dig pits 18 x 18 x 12 ins E and W. of stone 3 ft. dist; and raise a mound of earth 3 1/2 ft. base 1 1/2 ft. high N. of cor.
82.19	The cor of secs 5, 6, 7 and 8.
	Land level
	Soil alkali 4th rate
	No timber
	Knowing from previous retracement of N bdy. of the Tp. that sec 5 will not close within the prescribed limits I run from cor of secs 5, 6, 7 and 8
	N 0°04' W on a true line bet secs 5 and 6.
	Over level land
40.00	Set a redwood post 4 ft long 4 ins sq. with a quart of charcoal 36" in the ground for 1/4 sec cor. marked 1/4 S 6 on W and S 5 on East face. dig pits 18 x 18 x 12 ins N and S of post 3 ft dist; and raise a mound of earth 3 1/2 ft.

Subdivision of T. 7 N., - R. 15 W.

Chs.
88.27

base 1½ ft high W of cor.
Intersect N bdy. of the Tp. 1.64 chs N 89°50' E
for cor of secs 5, 6, 31, and 32 due to fire
described
Set a quartzite stone 6 x 6 x 16 ins
11 ins in the ground for closing cor.
of secs 5 and 6 marked C.C. on S.; with
1 groove on W and 5 grooves on E faces. dig
pits 24 x 18 x 12 ins crosswise on each
line E and W, 3 ft. and S of stone 7 ft.
dist.; and raise a mound of earth 4 ft.
base 2 ft. high S of cor.
We obliterate all marks on old cor. per-
taining to secs 5, and 6.
Land level
Soil alkali; 4th rate
No timber

May 13 - 1903

General Description

The land contained in this township
is nearly level
The soil consists of clay covered with
a deposit of alkali
The soil is moist and water heavily
charged with alkali salts can be found
within 2 to 10 feet of the surface
No vegetation exists upon this Tp.
The Central Pacific Rail Road known
as the Lucin Cut-Off crosses this Tp.
in a South easterly and North westerly
direction
There are no indications of mineral on
this Tp. There are no settlers in the township

Alfredo R. Palamantes
U.S. Deputy Surveyor

FINAL OATHS OF DEPUTY SURVEYOR AND HIS ASSISTANTS.

LIST OF NAMES.

A list of the names of the individuals employed by _____

_____, 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 _____

_____

showing the respective capacities in which they acted:

_____, *Chainman.*

_____, *Chainman.*

_____, *Moundman.*

_____, *Moundman.*

_____, *Axman.*

_____, *Axman.*

_____, *Flagman.*

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted _____

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

_____

_____

_____ of the _____

_____ meridian, _____ of _____, which are represented in the foregoing field notes as having been surveyed by him and under his direction; and that said survey has been in all respects, to the best of our knowledge and belief, well and faithfully surveyed, and the corner monuments established, according to the instructions furnished by the United States Surveyor General for _____

_____, *Chainman.*

_____, *Chainman.*

_____, *Moundman.*

_____, *Moundman.*

_____, *Axman.*

_____, *Axman.*

_____, *Flagman.*

_____

Subscribed and sworn to before me this _____ day of _____, 189

SEAL

_____

_____

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FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I, ..., United States Deputy Surveyor, d
solemnly swear that, in pursuance of a contract received from
United States Surveyor General for ....., bearing date of t
..... day of ....., 189 , I have well, faithfully, and truly, in my ow
proper person, and in strict conformity with the instructions furnished by the United States Survey
General for ....., the Manual of Surveying Instructions, and the laws of th
United States, surveyed all those parts or portions of

.....

.....

.....

..... of the

..... meridian, in the ..... of ....., which are represented in t
foregoing field notes as having been surveyed by me, and under my direction; and I do further solemn
swear that all the corners of said survey have been established and perpetuated in strict accordance w
the Manual of Surveying Instructions, and the special written instructions of the United States Survey
General for ..... and in the specific manner described in the field notes, and th
the foregoing are the original field notes of such survey; and should any fraud be detected, I will sum
the penalty of perjury under the provisions of an Act of Congress approved August 8, 1846.

.....

United States Deputy Surveyo

Subscribed by said ....., and sworn to before me
this ..... day of 189

.....

SEAL

.....

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah, March 5 1904, 189

The foregoing field notes of the survey of The subdivisional lines of
Township 7 South Range 15 West of the Salt Lake Base
and Meridian, Utah

.....

.....

.....

.....

executed by Alfredo R. Salamantes and John H. Dougall
under his contract No. 260, dated March 23 1903, 189 , having b
critically examined, and the necessary corrections and explanations made, the said field notes, and t
surveys they describe, are hereby approved.

Edward M. Anderson

United States Surveyor Gene

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

.....

United States Surveyor Ge

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