Volume

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R0405

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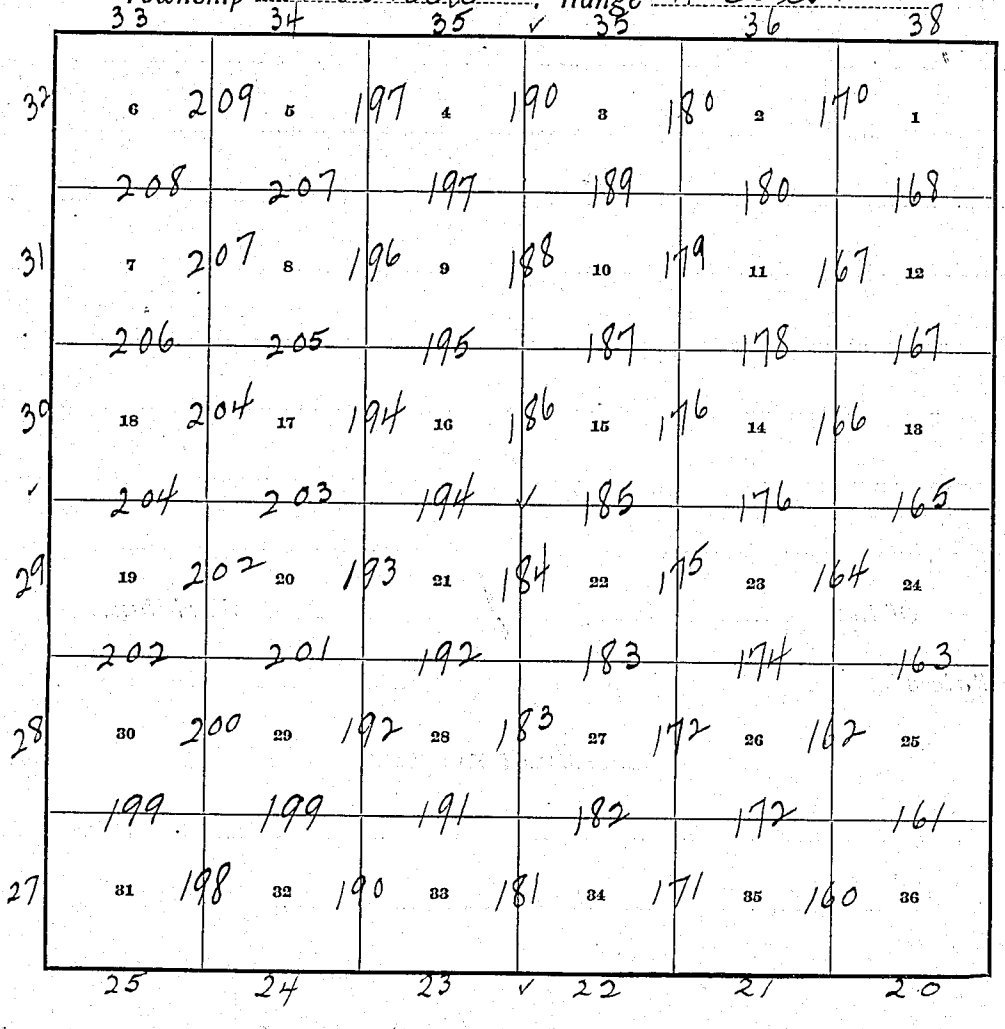
Township 2 South, Range 11 West



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FIELD NOTES

OF THE SURVEY OF THE

Of the ..... *Meridian,*

In the State of .....

EXECUTED BY

In the capacity of U. S. Surveyor...., under instructions dated....., 191...., issued by the United States Surveyor General to govern surveys included in Group No. ....., which were approved by the Commissioner of the General Land Office, ..., 191....

Survey commenced ....., *191....*

Survey completed ....., *191....*

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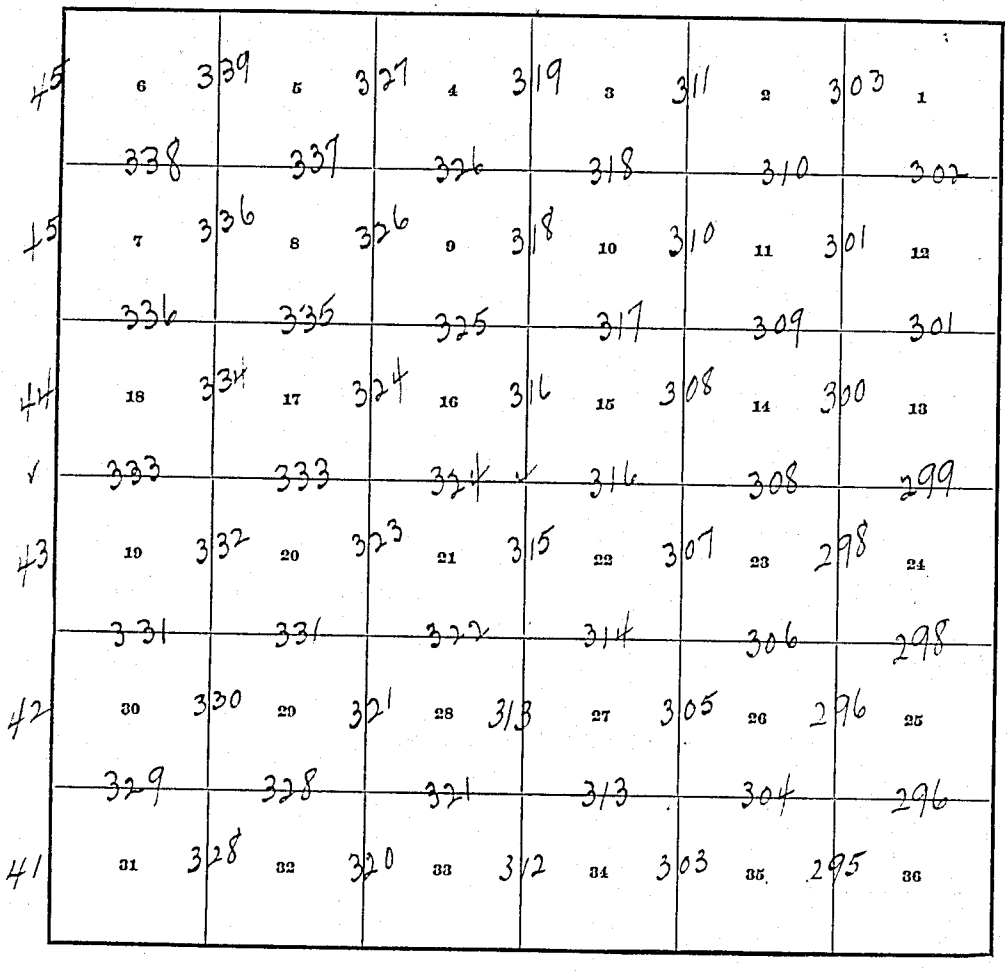
Township 1 South, Range 11 West



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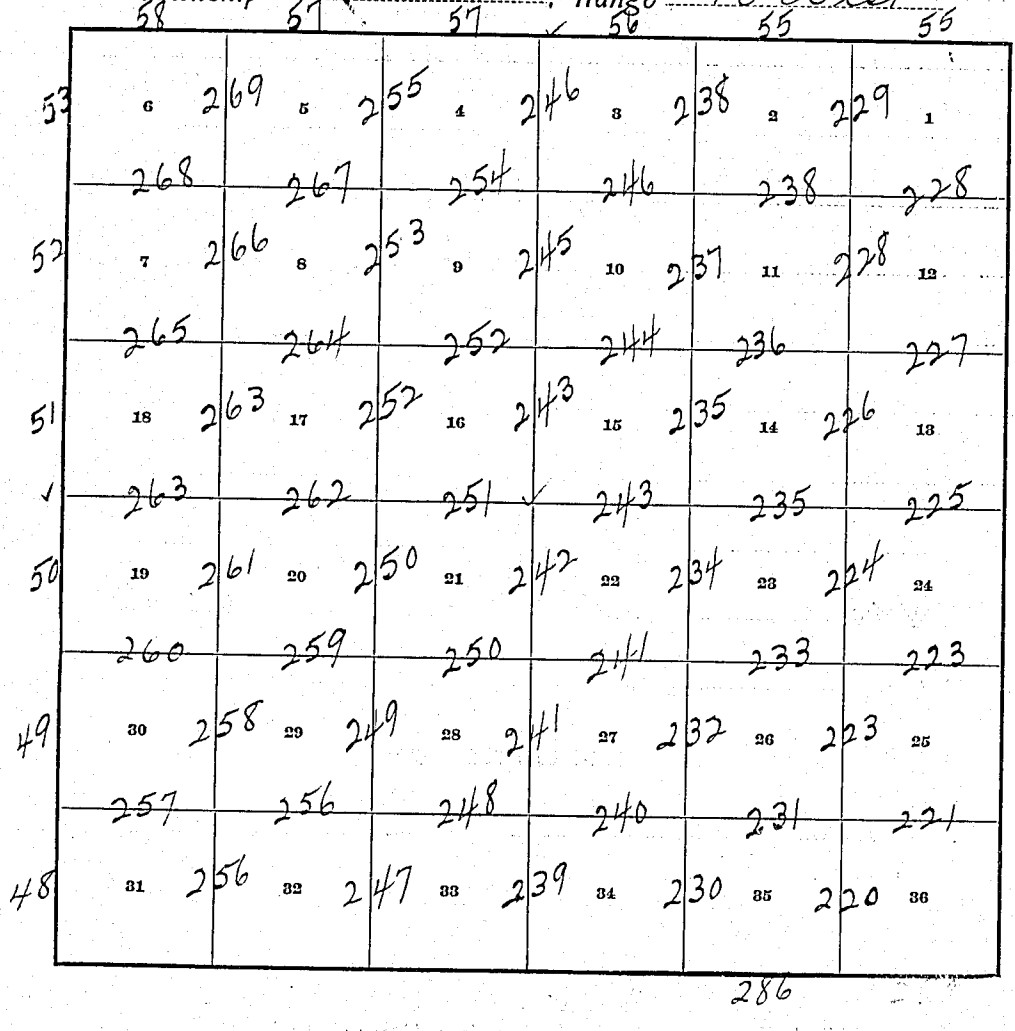

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FIELD NOTES

OF THE SURVEY OF THE

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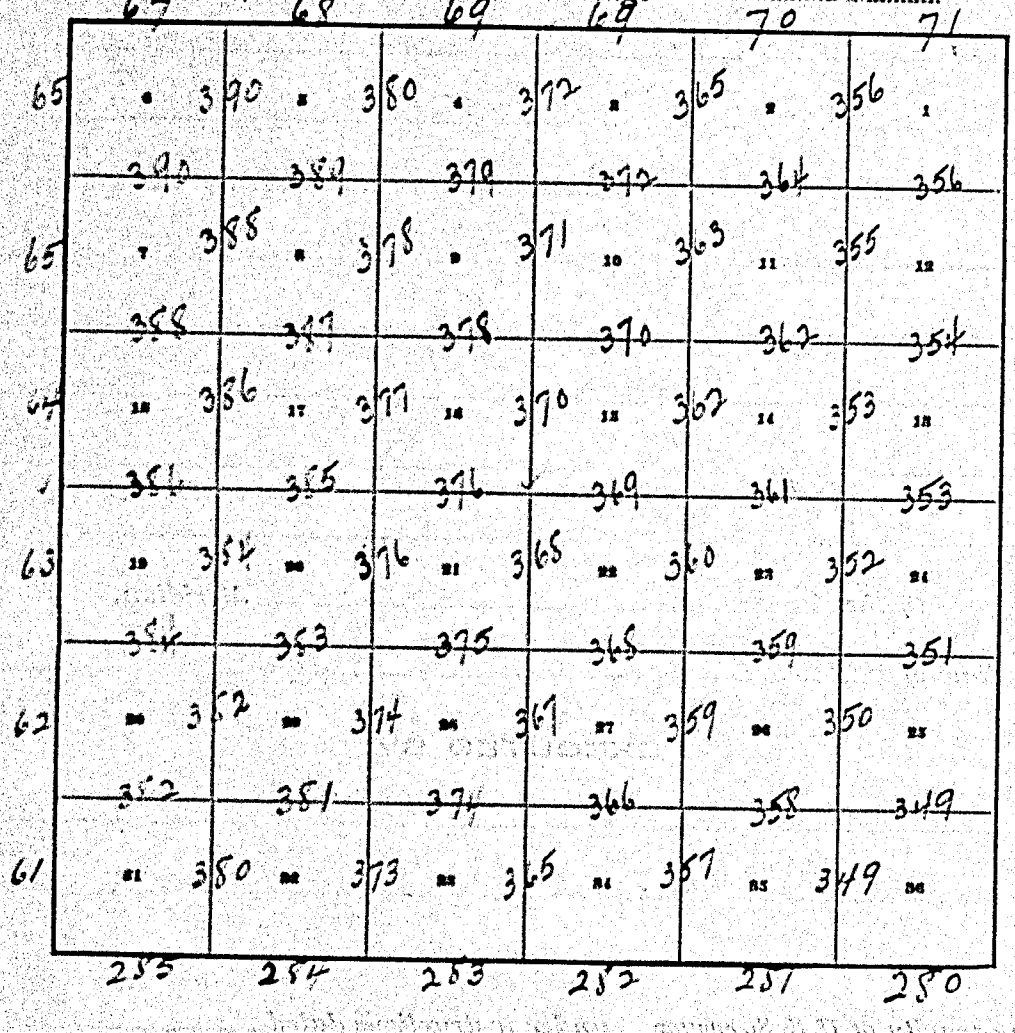

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FIELD NOTES

OF THE SURVEY OF THE

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Of the _____ *Meridian,*

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EXECUTED BY

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*In the capacity of U. S. Surveyor*___, *under instructions dated*_____, *191*___, *issued by the United States Surveyor General to govern surveys included in Group No.* _____, *which were approved by the Commissioner of the General Land Office,* _____, *191*___

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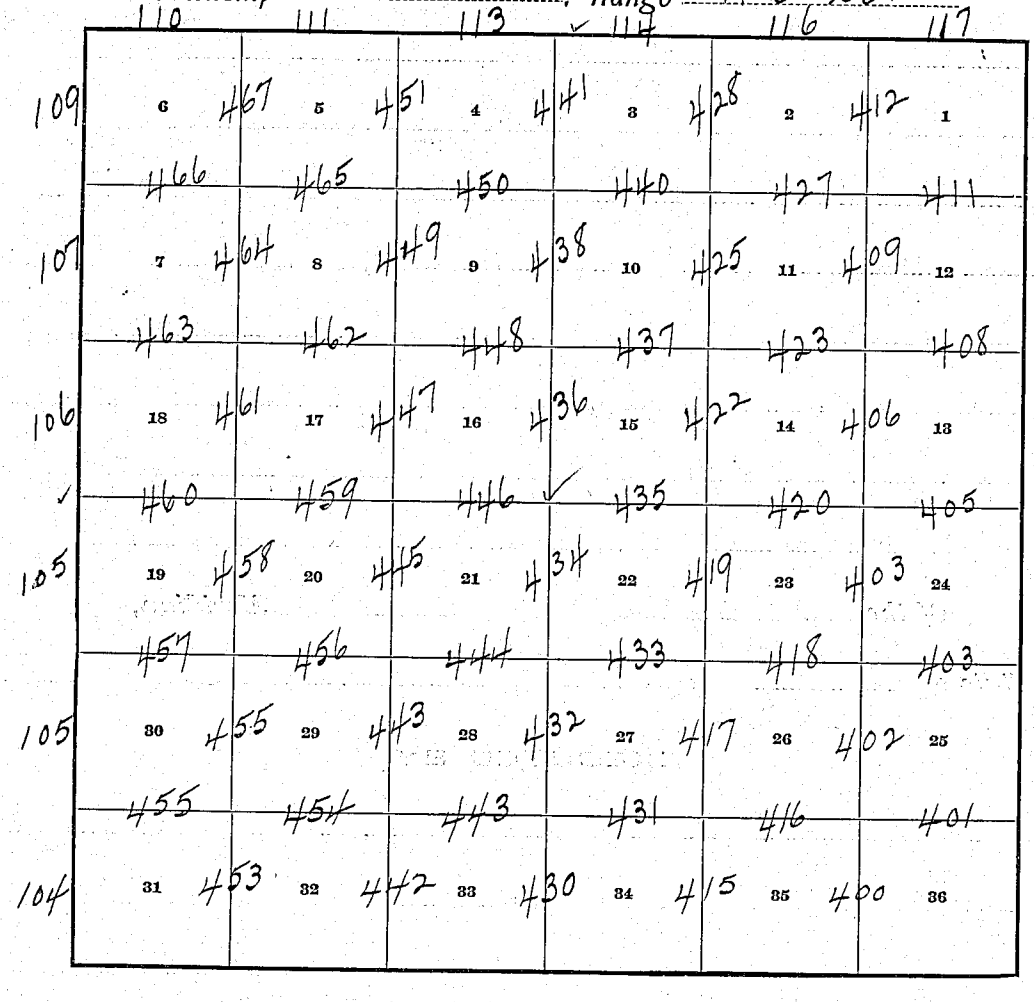

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OF THE SURVEY OF THE

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FIELD NOTES

OF THE SURVEY OF THE

Of the _____ *Meridian,*

In the State of _____

EXECUTED BY

*In the capacity of U. S. Surveyor*____, *under instructions dated*_____, *191*____, *issued by the United States Surveyor General to govern surveys included in Group No.* _____, *which were approved by the Commissioner of the General Land Office,* _____, *191*____

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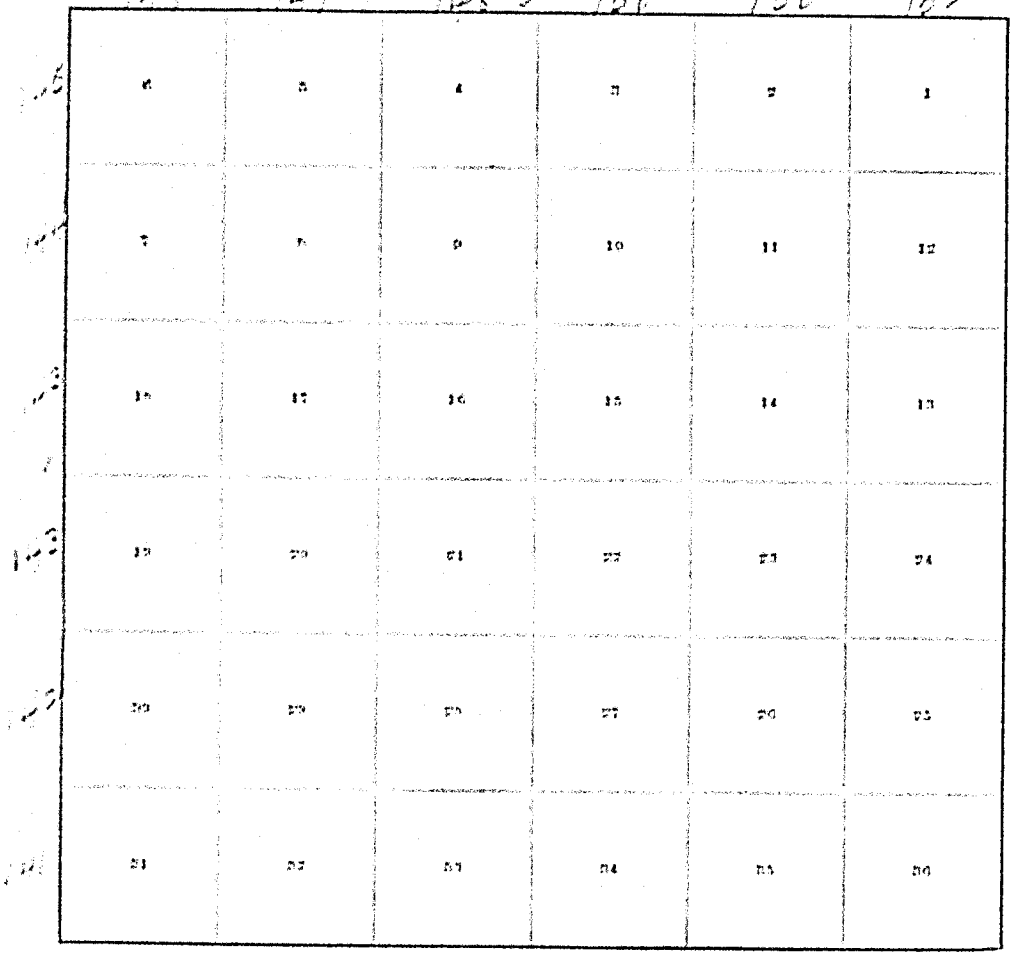
Township 3 North, Range 11 West



FIELD NOTES

OF THE SURVEY OF THE

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Group No. ....., which were approved by the Commissioner of the General Land
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BOOK A-405

A.

FIELD NOTES

OF THE SURVEY OF THE

SOUTH, WEST, AND NORTH BOUNDARIES TOWNSHIP 2 SOUTH, RANGE 11 WEST;

WEST BOUNDARY TOWNSHIP 1 SOUTH, RANGE 11 WEST;

WEST AND NORTH BOUNDARIES TOWNSHIP 1 NORTH, RANGE 10 WEST;

WEST AND NORTH BOUNDARIES TOWNSHIP 1 NORTH, RANGE 11 WEST;

WEST AND NORTH, AND RESURVEY OF EAST BOUNDARIES TP.2 NORTH, R.10 WEST;

WEST AND NORTH BOUNDARIES TOWNSHIP 2 NORTH, RANGE 11 WEST;

EST AND NORTH AND RETRACEMENT OF EAST BOUNDARIES TP.3 NORTH,R.10 WEST;

WEST AND NORTH BOUNDARIES TOWNSHIP 3 NORTH, RANGE 11 WEST

Of the SALT LAKE BASE AND *Meridian,*

In the State of U T A H.

EXECUTED BY

HOWARD W.MILLER

In the capacity of U. S. Surveyor, under instructions dated April 10, *191* 3, *issued by the United States Surveyor General to govern surveys included in Group No.* 21, *which were approved by the Commissioner of the General Land Office,* April 23, *191* 3, *pursuant to authority contained in the Act of Congress dated* ....., *191*...

Survey commenced May 4, *191* 3

Survey completed July 7, *191* 3.

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19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

6—151

chains

Survey commenced May 4 ,1913 and executed with a Young and Sons light mountain transit No.8147 , with solar attachment. The horizontal limb is provided with two double verniers placed opposite to each other and reading to single minutes of arc , which is also the least count of the verniers of the lat. and decl. arcs;

Use of the above instrument was approved by G.D.D. Kirkpatrick, Assistant Supervisor of Surveys in the assignment instructions dated April 21,1913,conditional upon satisfactory field test,the record of which follows:

I examine the adjustments of the instrument and find no errors, then , to test the solar attachment ,by comparing it's indications , resulting from solar observations made during a.m. and p.m. hours with a meridian determined by observations made on Polaris , I proceed as follows:

At camp , in the SE¼ SE¼ sec.14,T.2 S.,R.11 W., with my instrument set up on the meridian determined by observations on Polaris this a.m. with instrument No.7147; at 9h.30m. a.m.l.m.t.,I set off 40°38' on the lat. arc; 15°56'N., on the decl. arc ; and determine a meridian with the solar. The line thus determined falls 0.1 ins. to the west of the true meridian.

At 2h. 30m.p.m.l.m.t., I set off 40°38' on the lat.arc; 16°00'N., on the decl. arc; and determine a meridian with the solar. The line thus determined falls 0.1 ins. to the west of the true meridian. I therefore conclude that the adjustments of the instrument are satisfactory.

MEASUREMENTS

Steel tapes , 5 chs. long were used by both parties in the work completed in Group No.21 during the season , together with clinometers for determining slope angles and the reduced horizontal distances only appear in the official field notes. The tapes were tested on May 4 , comparison being made with a standard tape 1 ch. in length , kept and used for that purpose only.

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chains

I commence at the cor. of Tps. 2 and 3 S.,Rs.10 and 11 W., lat.40°36'N.;long.113°03'W., which is an iron post , 3 ins. in dia., 12 ins. above ground , firmly set , and marked and witnessed as described by the Surveyor General. At this cor. I observe Polaris in accordance with instructions in the Manual , at 7h.15m., 7h.25m. and 7h.30m.p.m. l.m.t., the respective bearings to a rock peak are N.29°46'W., N.29°49'W. and N.29°40'W.

Time of obsn. May 4 , 1913 ---------- 7h.15m.p.m.
U.C.Polaris May 4 reduced to long.113°09'W 10h.39m.a.m.
Time elapsed from U.C. to time of obsn. 8h.36m.
Hour angle of Polaris at obsn 8h.36m.
Azimuth of Polaris at obsn------ N.1°11'W.
May 4 , 1913.

May 5: At 8h.03m.a.m.l.m.t., I set off 40°36' on the lat. arc; 16°13'N., on the decl. arc; and determine a meridian with the solar. I find that the rock peak bears N.30°57'W. 30°57'-1°11' gives 29°46' the angle obtained in the Polaris observation.

The magnetic bearing of the true meridian at 8h.15 m.a.m. is N.17°29'W., the angle thus determined gives the magnetic decl. 17° 20'E.

From the tp. cor. already described, I run West , along S. bdy. T.2 S.,R.11 W., bet. secs. 1 and 36

Descend from rocky ridge , over mountainous land facing W., through short undergrowth of sage and shadscale.

10.00 Dry wash , 10 lks. wide , 3 ft. deep, 35 ft. below Tp. cor., course N.30°W. Base of ridge bears N.30°W. and S.30°E.

Enter undergrowth of greasewood , 2 to 4 ft. high. Thence over nearly level land sloping gently to the N.

23.00 Dry wash , 30 lks. wide , 3 ft. deep , course NW.

40.00 Set an iron post , 3 ft. long , 1 in. in dia., 26 ins. in the ground for ¼ sec. cor., with brass cap marked

$$\frac{\frac{1}{4}\ S\ 36}{S\ 1}$$
1913

raise a mound of stone , 2 ft. base , 1½ ft. high , N. of cor.

40.37 Wagon road , from Quincy Springs to Low and Clive , Utah

Survey of the S. bdy. of Tp. 2 S. R. 11 W.

Chains	
	bears N. and S.
58.50	Wagon road, Clive to Quincy Springs, bears N. and S.
	Leave greasewood, bears N. and S.
80.00	Set an iron post, 3 ft. long, 3 ins. in diam., 24 ins. in the ground, for cor. of secs. 1, 2, 35 and 36, with brass cap, mkd.

T 2 S. | R 11 W
S 35 | S 36
S 2 | S 1
T 3 S
1913

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, E. 10 chs., mountainous, on NW. exposure.

Soil, of poor quality, rocky and shallow on bedrock.

Land, W. 70 chs., nearly level, N. exposure.

Soil, light, fine, rather moist, clay loam, of good texture, 18 to 30 ins. deep on clay subsoil; affords good grazing and is suited to cultivation if watered.

No timber; undergrowth, shadscale, sage and greasewood.

W. bet. secs. 2 and 35.

Over nearly level land, draining N. and NW., through short undergrowth of shadscale and sagebrush.

25.00	Enter more rolling land, bears N. and S.
40.00	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd.

¼ S 35
S 2
1913

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.

40.75	Small, dry draw, course SW.; ascend gradually.
57.00	Ridge, with limestone outcropping on S. side, bears N. and S.; descend.
66.00	Base of ridge, about 50 ft. below top, bears N. and S.
	Thence over nearly level land.

Survey of the S. bdy. of Tp. 2 S. R. 11 W.

Chains	
80.00	Set an iron post, 3 ft. long, 3 ins. in diam., 24 ins. in the ground, for cor. of secs. 2, 3, 34 and 35, with brass cap, mkd.

T 2 S | R 11 W
S 34 | S 35
S 3 | S 2
T 2 S
1913

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, E. 57 chs., rolling; N. exposure.

Soil, light, fine, rather moist clay loam of good texture, 18 to 30 ins. deep on clay subsoil; suited to cultivation if watered.

Next 9 chs., land mountainous on rough, rocky W. slope.

Soil, very shallow and rocky clay on bedrock, not suited to cultivation.

W. 14 chs., land nearly level, W. exposure.

Soil, light, fine, warm, rather moist clay loam, 18 to 30 ins. deep on clay subsoil; suited to cultivation if watered.

The entire mile affords good grazing.

No timber; undergrowth, shadscale, and sagebrush.

W. bet. secs. 3 and 34.

Over nearly level land, draining W. and SW., through short undergrowth of shadscale and some sagebrush.

25.00	Enter more rolling land, bears N. and S., draining N.
32.70	Small, dry draw, course NW.; ascend.
34.50	Low ridge, bears N. and S.; descend gradually.
40.00	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd.

¼ S 34
S 3
1913

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.

65.00	Enter nearly level land, bears N. and S.

Survey of the S. bdy. of Tp. 2 S. R. 11 W.

Chains	
76.50	Dry wash, 25 lks. wide, 5 ft. deep, course NW.
80.00	Set an iron post, 3 ft. long, 3 ins. in diam., 24 ins. in the ground, for cor. of secs. 3, 4, 33 and 34, with brass cap, mkd.

T 2 S | R 11 W
S 33 | S 34
S 4 | S 3
T 3 S
1913

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, gently rolling or nearly level; general SW. exposure.

Soil, light, fine, warm, rather moist, baked clay loam, rather alkali, 8 to 16 ins. deep on stiff clay subsoil; affords little grazing.

No timber; undergrowth, shadscale and sagebrush, with a few greasewood.

W. bet. secs. 4 and 33.

Over nearly level land, draining nearly W., through short undergrowth of salt sage and shadscale.

40.00	Set an iron post, 3 ft. long, 1 in. in diam., 36 ins. in the ground, for ¼ sec. cor., with brass cap, mkd.

¼ S 33
S 4
1913

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.

50.60	Dry wash, 8 lks. wide, 2 ft. deep, course SW.
68.00	Enter more rolling land, bears N. and S.
80.00	Set an iron post, 3 ft. long, 3 ins. in diam., 24 ins. in the ground, for cor. of secs. 4, 5, 32 and 33, with brass cap, mkd.

T 2 S | R 11 W
S 32 | S 33
S 5 | S 4
T 3 S
1913

Chains

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, gently rolling or level; general W. and SW. exposure.

Soil, light, fine, dry, warm, sandy clay loam, of good texture, 18 to 30 ins. deep on clay subsoil; affords good grazing and is suited to cultivation if watered.

No timber; undergrowth, salt sage and shadscale.

May 5, 1913: At this cor., at app. noon, I set off 16°15' N. on the decl. arc, and observe the sun on the meridian. The resulting lat. is 40° 36' N.

W. bet. secs. 5 and 32.

Over gently rolling land, draining nearly W., through short undergrowth of shadscale and some salt sage.

20.00 Enter nearly level land, bears N. and S.

40.00 Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd.

¼ S 32
S 5
1913

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.

80.00 Set an iron post, 3 ft. long, 3 ins. in diam., 24 ins. in the ground, for cor. of secs. 5, 6, 31 and 32, with brass cap, mkd.

T 2 S	R 11 W
S 31	S 32
S 6	S 5

T 3 S
1913

dig pits, 18 x 18 x 12 ins., in each sec., 5½ ft. dist., and raise a mound of earth, 4 ft. bse, 2 ft. high, W. of cor.

Land, W. 20 chs., rolling; E. 60 chs., nearly level; general W. exposure.

Soil, light, fine, warm, rather moist, sandy clay, rather

Chains

alkali; affords little grazing.

No timber; undergrowth, shadscale, with some short greasewood and salt sage.

W. bet. secs. 6 and 31.

Over nearly level land, draining W., through short undergrowth of shadscale and salt sage, with a few greasewood.

40.00 Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd.

¼ S 31
S 6
1913

dig pits, 18 x 18 x 12 ins., E. and W. of post, 3 ft. dist., raise a mound of earth, 3½ ft. base, 1½ ft. high, N. of cor.

78.14 Allowing for convergency.

Set an iron post, 3 ft. long, 3 ins. in diam., 24 ins. in the ground, for cor. of Tps. 2 and 3 S., Rs. 11 and 12 W., with brass cap, mkd.

T 2 S
R 12 W | R 11 W
S 36 | S 31

S 1 | S 6
R 12 W | R 11 W
T 3 S
1913

dig pits, 24 x 24 x 12 ins., on each line, N., E. and W., 4 ft., and S. of post, 8 ft. dist., and raise a mound of earth, 5 ft. base, 2½ ft. high, S. of cor.

Land, nearly level; general W. exposure.

Soil, light, fine, dry, warm, clay, rather alkali; affords little grazing.

No timber; undergrowth shadscale and salt sage, with a few greasewood.

May 5, 1913

Howard W. Miller

U. S. Surveyor.

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Page

Survey of the W. bdy. of Tp. 2 S. R. 11 W.

Chains	
	Survey commenced May 6, 1913, at the cor. of Tps. 2 and 3 S. Rs. 11 and 12 W. For solar observation see test of instrument at cor. of Tps. 2 and 3 S., Rs. 10 and 11 W. Thence I run
	N. on range line along W. bdy. of Tp. 2 S. R. 11 W., bet. secs. 31 and 36.
	Ascending very gradually over nearly level land draining SW., through short undergrowth of shadscale and salt sage.
1.80	Old wagon road to Clive, Utah, bears NE. and SW.
40.00	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd.

¼ S 36 | S 31

1913

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.

May 6, 1913: At 7h 57m a.m., l.m.t., I set off 40° 36' N. on the lat. arc, and 16° 30' N. on the decl. arc, and determine a meridian with the solar at the ¼ sec. cor. bet. secs. 31 and 36.

62.00	Enter scattering greasewood, bears E. and W.
80.00	Set an iron post, 3 ft. long, 3 ins. in diam., 24 ins. in the ground, for cor. of secs. 25, 30, 31 and 36, with brass cap, mkd.

T 2 S

R 12 W | R 11 W

S 25 | S 30

S 36 | S 31

1913

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, nearly level; general SW. and W. exposure.

Soil, light, fine, dry, warm, sandy clay loam, of poor texture, 6 to 10 ins. deep, on hard baked clay subsoil,

Survey of the W. bdy. of Tp. 2 S. R. 11 W.

Chains	
	both soil and subsoil impregnated with alkali; affords very little grazing.
	No timber; undergrowth, shadscale, salt sage and a little greasewood.

	N. bet. secs. 25 and 30.
	Over nearly level land, draining SW., through short undergrowth of shadscale, salt sage and greasewood.
20.00	Leave greasewood. Enter rolling mountainous land, bears SW. 10 chs., and NE. 15 chs., thence SE. 25 chs. Ascend.
29.00	Spur, about 30 ft. above cor., projects SW. 10 chs.; desc.
36.00	Bottom of flat hollow, course W.; asc. gradually.
40.00	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd.
	¼ S 25 | S 30
	1913
	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.
55.00	Base of bench, bears NW. and SE.; ascend SW. slope.
67.60	Top of bench, about 40 ft. above ¼ sec. cor., bears NW. and SE.; descend gradually.
70.50	Dry wash, 20 lks. wide, 10-ft. deep, course SW. Ascend gradually over nearly level bench.
80.00	Set an iron post, 3 ft. long, 3 ins. in diam., 24 ins. in the ground, for cor. of secs. 19, 24, 25 and 30, with brass cap, mkd.
	T 2 S R 12 W | R 11 W S 24 | S 19 S 25 | S 30
	1913
	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, S. 20 chs., nearly level, N. 60 chs., rolling mountainous; general SW. exposure.
	Soil, light, fine, dry, warm, hard baked, clay loam, 6 to

Chains

10 ins. deep on stiff clay and gravel subsoil; both soil and subsoil impregnated with alkali; affords some grazing. No timber; undergrowth, shadscale, salt sage and greasewood.

N. bet. secs. 19 and 24.

Over rolling mountainous land, sloping SW., through short undergrowth of shadscale and salt sage. Ascending gradually.

17.70 Base of spur, bears NW. and SE.; asc. abruptly rough, rocky SW. slope, over rough mountainous land.

26.60 Rocky spur, about 100 ft. above sec. cor., projects SW. Desc. gradually along rocky W. slope of ridge to E.

30.70 Descend gradually NW. slope.

40.00 Set an iron post, 3 ft. long, 1 in. in diam., in a mound of earth and stone 4 ft. base, 26 ins. high, on account of underlying rock, for ¼ sec. cor., with brass cap, mkd.

¼ S 24 | S 19

1913

raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor. Corner stands in in head of hollow, about 75 ft. below spur, course SW.; ascend.

52.10 Rocky ridge, about 35 ft. above ¼ sec. cor., bears N. 20° E. and S. 35° E. Thence along top of W. side of ridge.

62.00 Ridge, bears NW. and SE.; desc. NE. slope.

76.00 Bottom of wide hollow, about 50 ft. below ridge, course E., heads about 10 chs. W. Leave mountainous land and ascend gradually over gentle SE. slope.

80.00 Set an iron post, 3 ft. long, 3 ins. in diam., 24 ins. in the ground, for cor. of secs. 13, 18, 19 and 24, with brass cap, mkd.

T 2 S

R 12 W | R 11 W

S 13 | S 18

S 24 | S 19

1913

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, rough and rolling mountainous; SW. exposure on S.

BOOK A-405

Chains	
	62 chs., and E. exposure on N. 18 chs.
	Soil, on bench land, loose, dry, sandy loam of good texture, mixed with gravel, on hard sand and gravel subsoil.
	Soil, on mountainous land, rocky, calcareous clay, shallow on rock.
	There is very little grazing in the mile.
	No timber; undergrowth, shadscale and salt sage.
	N. bet. secs. 13 and 18.
	Ascending gradually over rolling mountainous land, sloping NE., through short undergrowth of shadscale and salt sage.
9.50	Top of rocky spur, about 35 ft. above sec. cor., projects NE.; descend NW. slope.
16.00	Base of spur, bears NW. and SE. Leave mountainous land. Thence over nearly level land, through scattering greasewood.
23.00	Leave greasewood, bears E. and W.
40.00	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd.

¼ S. 13 | S. 18.

1913

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.

80.00	Set an iron post, 3 ft. long, 3 ins. in diam., 24 ins. in the ground, for cor. of secs. 7, 12, 13 and 18, with brass cap, mkd.

T 2 S.

R 12 W | R 11 W

S 12 | S 7

S 13 | S 18

1913

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, S. 16 chs., mountainous, general E. exposure.

Soil, gravelly and rocky clay on hard, dry clay and rock subsoil.

Survey of the W. bdy. of Tp. 2 S. R. 11 W.

Chains	
	N. 64 chs., nearly level land; general E. exposure. Soil, light, fine, dry, warm, baked, clay loam, 6 to 12 ins. deep on stiff clay subsoil, both impregnated with alkali. Very little grazing on the mile. No timber; undergrowth, shadscale, salt sage and greasewood.
	May 6, 1913: At this cor. I set off 16° 32' N. on the decl. arc, and at 11h 57m a.m., l.m.t., observe the sun on the meridian. The resulting lat. is 40° 39' N.
	N. bet. secs. 7 and 12. Over nearly level land, sloping gently E., through short undergrowth of shadscale and salt sage.
40.00	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd. ¼ S 12 | S 7 1913 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.
80.00	Set an iron post, 3 ft. long, 3 ins. in diam., 24 ins. in the ground, for cor. of secs. 1, 6, 7 and 12, with brass cap, mkd. T 2 S R 12 W | R 11 W S 1 | S 6 S 12 | S 7 1913 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; general E. exposure. Soil, light, fine, dry, warm, sandy clay loam of fair texture, 10 to 20 ins. deep on stiff clay subsoil, both impregnated with alkali; affords no grazing. No timber; undergrowth, shadscale and some salt sage.

Survey of the W. bdy. of Tp. 2 S. R. 11 W.

Chains

N. bet. secs. 1 and 6.

Over nearly level land, draining E, through short undergrowth of shadscale and some salt sage.

40.00 Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd.

¼ S-1 | S-6
1913

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.

55.00 Enter scattering greasewood, bears E. and W.

70.00 Leave greasewood, bears E. and W.

80.00 Set an iron post, 3 ft. long, 3 ins. in diam., 24 ins. in the ground, for cor. of Tps. 1 and 2 S., Rs. 11 and 12 W., with brass cap, mkd.

T 1 S	
R 12 W	R 11 W
S 36	S 31
S 1	S 6
R 12 W	R 11 W

1913
T 2 S

dig pits, 24 x 24 x 18 ins., on each line, N., E. and W., 4 ft., and S. of post, 8 ft. dist., and raise a mound of earth, 5 ft. base, 2½ ft. high, S. of cor.

Land, nearly level; general E. exposure.

Soil, light, fine, dry, warm, sandy clay loam, 10 to 20 ins. deep on stiff clay subsoil, both impregnated with alkali; affords no grazing.

No timber; undergrowth, shadscale, salt sage and greasewood.

May 6, 1913.

Howard W. Miller
U. S. Surveyor

-NORTH BOUNDARY OF T.2 S.,R.11 W.

May 6,1913: I commence at the cor. of Tps.1 and 2 S., R's. 10 and 11 W., in approximate lat. 40°41'N.,long.113°02'W., which is an iron post , 3 ins. in dia., 12 ins. above ground , firmly set and marked and witnessed as described by the surveyor General.

chains

With my instrument set up over this cor., at 7h.32m.p.m. l.m.t., observe Polaris in accordance with instructions in the Manual and mark the direction of the line thus determined on a peg driven in the ground N. of the cor.

Time of obsn. May 6,1913----------	7h.32m.p.m.
U.C.Polaris May 6 reduced to long.113°W.	10h.31m.a.m.
Time elapsed from U.C. to time of obsn.	9h.01m.
Hour angle of Polaris at obsn.	9h.01m.

Azimuth of Polaris ----1°03'W.

May 6,1913.

May 7: At 7h.40m.a.m. I lay off the azimuth of Polaris 1°03' to the E. and mark the true meridian thus determined on a peg set firmly in the ground N. of the cor.

At 7h.58m.a.m.l.m.t., I set off 40°41' on the lat. arc; 16°47'N., on the decl. arc; and determine a meridian with the solar. This line coincides with the Polaris meridian. The magnetic bearing of the true meridian at 8h.15m.a.m. is N.17°20'W., the angle thus determined gives the magnetic decl. 17°20'E.

From the tp. cor. already described , I run

West , on random line along the N. bdy. of T.2 S.,R.11 W., setting temp. ¼ sec. and sec. cors. at intervals of 40.00 chs. and at 477.24 chs. intersect W. bdy.of the tp. at the cor. of Tps. 1 and 2 S., R's. 11 and 12 W.

Thence I run

East, on true line bet. secs. 6 and 31

Descending very gradually over nearly level land sloping gently NE., through considerable short undergrowth of shadscale and salt sage.

37.24 Set an iron post , 3 ft. long , 1 in. in dia., 26 ins. in the ground for ¼ sec. cor., with brass cap marked

$$\frac{\frac{1}{4}\ S31}{S\ 6}$$
1913

dig pits , 18 x 18 x 12 ins., E. and W. of post , 3 ft. dist., raise a mound of earth , 3½ ft. base , 1½ ft. high N. of cor.

77.24 Set an iron post , 3 ft. long , 3 ins. in dia., 24 ins. in the ground for cor. of secs. 5 , 6 , 31 and 32 , with brass cap marked

chains

	T 1 S | R 11 W S 31 | S 32 --- S 6 | S 5 T 2 S 1913 dig pits, 18x18x12 ins., in each sec.,5½ ft. dist., raise a mound of earth 4 ft. base 2 ft. high , W. of cor. Land , nearly level , general NE. exposure. Soil , light , dry , fine , baked clay,10to 15 ins. deep on stiff clay sub-soil , both impregnated with alkali. No timber.,undergrowth shadscale and salt sage.
	East , on true line bet. secs. 5 and 32. Descend very gradually over nearly level land ,through short undergrowth of shadscale and some salt sage.
40.00	Set an iron post , 3 ft. long , 1 in. in dia., 26 ins. in the ground for ¼ sec. cor., with brass cap marked ¼ S 32 S 5 1913 dig pits , 18x 18x 12 ins., E. and W. of post 3 ft. dist., raise a mound of earth , 3½ ft. base , 1½ ft. high , N. of cor. Enter scattering greasewood , bears N. and S.
80.00	Set an iron post , 3 ft. long , 3 ins. in dia., 24 ins. in the ground for cor. of secs. 4 , 5, 32 and 33 , with brass cap marked T 1 S | R 11 W S 32 | S 33 --- S 5 | S 4 T 2 S 1913 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 , with general E. exposure. Soil , light , dry , fine , warm baked clay , 8 to 16 ins. deep, on stiff clay sub-soil; both impregnated with alkali No.timber; undergrowth , shadscale ,salt sage and greasewood.
	May 7 : At this cor. I set off 16°49'N., on the decl.

Survey of the N. bdy. of Tp. 2 S. R. 11 W.

Chains

arc, and at app. noon, observe the sun on the meridian. The resulting lat. is 40° 41' N.

E. on true line bet. secs. 4 and 33.

Over nearly level land, sloping gently E., through short undergrowth of shadscale, greasewood and some salt sage.

25.00 Leave greasewood, bears N. and S.

40.00 Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd.

$\frac{\frac{1}{4}\ S\ 33}{S\ 4}$
1913

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.

55.00 Enter greasewood, bears N. and S.

61.50 Wagon road, Clive to Quincy Springs, bears NW. and SE.

80.00 Set an iron post, 3 ft. long, 3 ins. in diam., 24 ins. in the ground, for cor. of secs. 3, 4, 33 and 34, with brass cap, mkd.

T 1 S | R 11 W
S 33 | S 34
S 4 | S 3

T 2 S
1913

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, nearly level; general E. and NE. exposure.

Soil, light, fine, dry, warm, baked clay, 8 to 16 ins. deep on stiff clay subsoil, both impregnated with alkali; affords no grazing.

No timber; undergrowth, shadscale, greasewood and some salt sage.

E. on true line bet. secs. 3 and 34.

Over nearly level land, draining NE., through short undergrowth of shadscale, greasewood and salt sage.

40.00 Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in

Chains

the ground, for ¼ sec. cor., with brass cap, mkd.

$$\frac{\frac{1}{4}\ S\ 34}{S\ 3}$$
1913

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.

55.00 Leave greasewood, bears NE. and SW.

61.40 Wagon road, Clive to Quincy Springs, bears NE. and SW.

62.00 Base of high ridge, bears NE. and SW. Ascend over mountainous land.

64.00 Top of broken limestone ledge, 30 ft. high, bears NW. and SE. Thence over land facing almost N.

80.00 Set an iron post, 3 ft. long, 3 ins. in diam., 24 ins. in the ground, for cor. of secs. 2, 3, 34 and 35, with brass cap, mkd.

T 1 S | R 11 W
S 34 | S 35
S 3 | S 2

T 2 S
1913

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, nearly level on W. 60 chs., and rolling mountainous on E. 20 chs.; general NE. and N. exposure.

Soil on W. 60 chs., light, fine, dry, warm, hard baked clay, 6 to 14 ins. deep on stiff clay subsoil, both impregnated with alkali; affords no grazing.

Soil on E. 20 chs., light, sandy clay loam of good texture, mixed with gravel, 16 to 30 ins. deep on gravel subsoil; affords fair grazing.

No timber; undergrowth, shadscale, greasewood and some salt sage.

E. on true line bet. secs. 2 and 35.

Over mountainous land sloping nearly N., through undergrowth of shadscale and some salt sage.

3.00 Dry wash, 15 lks. wide, in hollow, course NW. Ascend

Chains	
	abruptly over limestone ledges.
16.65	Top of ledges, bear N. 20° E. and S. 20° W.; continue to ascend.
29.25	Top of ridge, about 135 ft. above hollow, bears N. and S. Descend over rocky land, sloping NE. and E.
40.00	Set an iron post, 3 ft. long, 1 in. in diam., on surface rock, surrounded by a mound of stone, 4 ft. base, 2½ ft. high, for ¼ sec. cor., with brass cap, mkd.

¼ S 35
S 2
1913

raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor. Cor. stands about 90 ft. below top of ridge; continue to descend.

43.70	Dry hollow, about 100 ft. below ridge, course NE.; ascend abruptly.
44.90	Spur, about 40 ft. above hollow, projects N.; descend.
46.50	Dry hollow, 30 ft. deep, course N.; ascend.
55.00	Spur, projects N. Leave rocky land and descend.
72.00	Hollow, 35 ft. deep, course NW.; ascend.
75.50	Low spur, projets NW.; descend.
77.50	Wide hollow, 25 ft. deep, course NW.; ascend.
80.00	Set an iron post, 3 ft. long, 3 ins. in diam., 24 ins. in the ground, for cor. of secs. 1, 2, 35 and 36, with brass cap, mkd.

T 1 S | R 11 W
S 35 | S 36
S 2 | S 1
T 2 S
1913

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, mountainous; general NE. and NW. exposure.

Soil, on W. 55 chs., quite rocky clay, rich in lime, shallow on limestone bedrock; affords good grazing, but is otherwise worthless. Soil, on E. 25 chs., light, rich, warm, dry, sandy, clay loam of good texture, 12 to 24 ins. deep on clay and sand subsoil; affords good grazing.

Survey of the N. bdy. of Tp. 2 S. R. 11 W.

Chains	
	No timber; undergrowth, shadscale and salt sage.
	E. on true line bet. secs. 1 and 36.
	Ascending gradually over broken bench land, draining N., through short undergrowth of shadscale and salt sage.
2.50	Low spur, projects N.; descend.
6.30	Dry wash, 20 lks. wide, 7 ft. deep, in hollow, 35 ft. below spur, course NW.; ascend.
10.60	Enter bench, bears NW. and SE., about 35 ft. above hollow.
10.70	Wagon road, Quincy Springs to Clive, bears NW. and SE.
15.00	Edge of bench, bears NW. and SE.; descend.
19.90	Hollow, about 30 ft. deep, course NW.; ascend.
24.00	Flat spur, projects NW.; descend abruptly.
26.00	Dry hollow, about 30 ft. deep, course NW.; ascend.
30.00	Enter rolling bench, bears N. 30° W. and S. 30° E.
40.00	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., with brass cap, mkd. $\frac{\frac{1}{4}\ S\ 36}{S\ 1}$ 1913 dig pits, 18 x 18 x 18 ins., E. and W. of post, 3 ft. dist., and raise a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, N. of cor.
49.50	Leave bench, bears NW. and SE.; descend.
52.50	Dry hollow, about 35 ft. deep; course NW.; ascend.
55.00	Spur, about 30 ft. above hollow, projects NW.; descend abruptly.
57.00	Dry hollow, about 25 ft. deep, course NW.; ascend.
58.50	Spur, projects NW.; descend.
65.00	Large hollow, about 30 ft. below spur, course NW.; ascend.
70.60	Edge of bench, about 30 ft. above hollow, bears NW. and SE. Thence across bench.
80.00	The cor. of Tps. 1 and 2 S., Rs. 10 and 11 W. Land, broken bench land; general N. exposure. Soil, light, fine, sandy clay loam of good texture, 20 to 30 ins. deep, on moist clay and sand subsoil; affords good grazing, and the benches are suited to cultivation if watered.

No timber.

Undergrowth, shadscale and some salt grass.

May 7, 1913.

Boundaries of T.2 S., R.11 W.

Latitudes, Departures, and Closing Errors.

Lines Designated	True Bearing	Dist.	Latitudes, N.	Latitudes, S.	Departures. E.	Departures. W.
		chs.	chs.	chs.	chs.	chs.
South Boundary	West	478.14	.....	.....	.....	478.14
West Boundary	North	480.00	480.00	.....	.....	.....
North Boundary	East	477.24	.....	.....	477.24	.....
East Boundary	South	480.00	.....	480.00	.....	.....
Convergency					0.62	
Totals			480.00	480.00	477.86	478.14
Error in lat.			480.00 / 0.00		Error in dep.	477.86 / 0.28

General Description.

The lands in this township are about half mountainous, or rolling mountainous, and half level. The eastern half of the township is mountainous, consisting of bench lands below the Cedar Mountains to the E., with one rather high and quite rough range of mountains running N. and S. through the north half of the township, about two miles from the E. boundary. The soil on these bench lands is of good quality, and capable of producing good crops, if irrigated.

The western portion of the township, with the exception of a little mountainous land in secs. 19 and 30, consists of a low, level flat, with no perceptible drainage. This flat is part of the old lake bed; and the soil consists of hard baked, closely packed clay, impregnated with alkali. It affords very little grazing; and is otherwise worthless. The eastern half of the township affords excellent grazing.

There is no water in the township.

General Description T.2 S., R.11 W.

The stone outcroppings in the township are practically all blue limestone.

There are no settlers in this township. I found no indications of mineral in the township.

Howard W. Miller

U.S.Surveyor.

chains

Survey commenced May 25 , 1913 and executed with Young and Sons light mountain transit No.8147,with solar attachment. For description and test of instrument see page 1 of the notes of the subdivision of Tp.1 S.,R.11 W.

I begin at the cor. of Tps. 1 and 2 S.,Rs.11 and 12 W., heretofore described;in approximate lat.40° 41'N., long. 113° 19'W. Here at 8h.02m.p.m.l.m.t., I observe Polaris in accordance with instructions in the Manual , and mark the direction of the line thus determined on a stake , set firmly in the ground , about 5 chs. N. of the cor.

Time of obsn. May 25 ,1913 8h.02m.p.m.
U.C.Polaris May 25 reduced to long 113°19'W. 9h.17m.a.m.
Time elapsed from U.C.to time of obsn. 10h.45m.
Hour angle of Polaris at obsn. 10h.45m.
Azimuth of Polaris at obsn-----0°28'W

May 25 , 1913

May 26: At 7h.45m.a.m.I lay off the azimuth of Polaris 0° 28' to the west , and mark the true meridian thus determined by a nail driven in a wooden stake , set firmly in the ground about 5 chs. N. of the cor.

At 8h.00m.a.m.l.m.t., I set off 40° 41' on the lat. arc; 21°07'N., on the decl. arc ; and determine a meridian with the solar. The line thus determined coincides with the meridian determined by observations on Polaris.

The magnetic bearing of the true meridian 8h.15m.a.m. is N.17°20'W., the angle thus determined gives the magnetic decl. 17°20'E.

From the Tp.. cor. already described , I run North , on range line , bet. Rs.11 and 12 W.,through Tp. 1 S., bet. secs. 31 and 36

Over nearly level land draining gently N., through considerable short undergrowth of shadscale and some salt sage.

40.00 Set an iron post , 3 ft. long , 1 in. in dia., 26 ins. in the ground for ¼ sec. cor., with brass cap marked

¼S 36 S 31

1913

dig pits , 18 x 18 x 12 ins., N. and S. of post , 3 ft. dist., raise a mound of earth , 3½ ft. base , 1½ ft. high

chains	
	W. of cor.
80.00	Set an iron post , 3 ft. long , 3 ins. in dia., 24 ins. in the ground for cor. of secs. 25 , 30 , 31 and 36 , with brass cap marked

T 1 S
R 12 W | R 11 W
S 25 | S 30
S 36 | S 31

1913

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 , nearly level; general N. and NE. exposures.
Soil , light , fine , dry , closely packed clay , quite alkali 8 to 10 ins. deep , on hard baked clay sub-soil.
No timber.,undergrowth , shadscale and salt sage.

N. bet. secs. 25 and 30
Over nearly level land draining gently NE.,through considerable short undergrowth of shadscale with some scattering greasewood.

40.00 Set an iron post , 3 ft. long , 1 in. in dia., 24 ins. in the ground for ¼ sec. cor., with brass cap marked

¼ S25 | S 30

1913

dig pits , 18x 18x 12 ins., N. and S. of post , 3 ft. dist., raise a mound of earth , 3½ ft. base , 1½ ft. high W. of cor.

80.00 Set an iron post, 3 ft. long , 3 ins. in dia., 24 ins. in the ground for cor. of secs. 19, 24 , 25 and 30 , with brass cap marked

T 1 S
R 12 W | R 11 W
S24 | S 19
S 25 | S 30

1913

dig pits , 18x18x12 ins., in each sec.,5½ft. dist., raise a mound of earth , 4 ft. base , 2 ft. high , W. of cor.
Land , nearly level , general NE. exposure.
Soil , light , fine , dry , closely packed weak clay,quite alkali , 8 to 10 ins. deepon hard,baked clay sub-soil.

Chains	
	No timber; undergrowth, shadscale and greasewood.
	N. bet. secs. 19 and 24.
	Over nearly level land, draining gently NW., through considerable short undergrowth of shadscale and some salt sage.
7.70	Telegraph line, parallels railroad.
9.00	Telegraph line, parallels railroad.
9.60	W.P. Ry., center of track, bears N. 80° 02' W., and S. 80° 02' E.
10.60	Wagon road, parallels railroad.
12.10	Wagon road, bears E. and W.
12.80	Telephone line, parallels railroad.
22.20	Wagon road, bears NW. and SE.
28.80	Wagon road, bears NW. and SE.
40.00	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., with brass cap, mkd. $\frac{1}{4}$ S 24 | S 19 1913 dig pits, 18 x 18 x 12 ins., N. and S. of post, 3 ft. dist., and raise a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, W. of cor.
44.80	Wagon road, bears NW. and SE.
45.90	Wagon road, bears NE. and SW.
66.90	Wagon road, bears NE. and SW.
80.00	Set an iron post, 3 ft. long, 3 ins. in diam., 24 ins. in the ground, for cor. of secs. 13, 18, 19 and 24, with brass cap, mkd. T 1 S R 12 W | R 11 W S 13 | S 18 S 24 | S 19 1913 dig pits, 18 x 18 x 12 ins., in each sec., $5\frac{1}{2}$ ft. dist., and raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor.
	Land, nearly level; general NW. and W. exposure.
	Soil, light, fine, dry, weak, closely packed clay, quite alkali, 8 to 10 ins. deep on hard, baked clay subsoil.

Chains	
	No grazing in the mile.
	No timber; undergrowth, shadscale and salt sage.

	N. bet. secs. 13 and 18.
	Over nearly level land, draining SW., through considerable short undergrowth of shadscale and some scattering greasewood.
28.50	Ascend gradually over rolling land, SW. slope, of rocky, volcanic formation.
40.00	Set an iron post, 3 ft. long, 1 in. in diam.; only 4 ins. in the ground, on account of underlying rock, supported by a mound of stone, 4 ft. base, 2½ ft. high, for ¼ sec. cor., with brass cap, mkd.
	¼ S 13 | S 18 1913
	raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.
53.00	Top of spur, bears NW. and SE.; descend.
61.00	Bottom of basin, without outlet, 13.00 chs. wide, extending 3½ chs. W. and 20 chs. E. of line: ascend.
80.00	Set an iron post, 3 ft. long, 3 ins. in diam., 24 ins. in the ground, for cor. of secs. 7, 12, 13 and 18, with brass cap, mkd.
	T. 1 S. R 12 W | R 11 W S 12 | S 7 S 13 | S 18 1913
	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 and rolling; general SW. exposure.
	Soil, in S. 28.50 chs., light, fine, dry, weak, closely packed clay, quite alkali, 6 to 8 ins. deep on hard, baked clay subsoil. Soil on remainder of mile, shallow and rocky; affords no grazing.
	No timber; undergrowth, shadscale and greasewood.

	May 26, 1913: At this cor. I set off 21°08' N. on the decl. arc, and at app. noon, observe the sun on the meridian. The resulting lat. is 40° 44' N.

Survey of the W. Bdy. of Tp. 1 S., R. 11 W.

Chains	
	N. bet. secs. 7 and 12.
	Ascending rocky SE. slope, over broken mountainous land, draining SE.
17.00	Spur, bears NE. and SW. Thence over nearly level land.
29.00	Ascend over rocky SE. slope, volcanic formation.
40.00	Set an iron post, 3 ft. long, 1 in. in diam., on solid rock, supported by a mound of stone, 4 ft. base, 2½ ft. high, for ¼ sec. cor., with brass cap, mkd.
	¼ S 12 | S 7 1913
	raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.
49.00	Top of spur, bears NW. and SE.; descend.
51.70	Descend NE. slope.
80.00	Set an iron post, 3 ft. long, 3 ins. in diam., 24 ins. in the ground, for cor. of secs. 1, 6, 7 and 12, with brass cap, mkd.
	T 1 S R 12 W | R 11 W S 1 | S 6 S 12 | S 7 1913
	raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.
	Land, broken and mountainous; general E. exposure.
	Soil, shallow, rocky clay; affords little grazing.
	No timber; undergrowth, shadscale and greasewood.
	N. bet. secs. 1 and 6.
	Descending over rolling and broken mountainous land, quite rocky, draining NE., through considerable short undergrowth of shadscale and greasewood.
12.00	Dry gulch, about 20 ft. below cor., course NE.; ascend.
13.00	Low spur, projects NE; descend.
28.50	Dry wash, 40 lks. wide, 20 ft. deep, course SE.; ascend.
40.00	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd.
	¼ S 1 | S 6 1913
	raise a mound of stone, 2 ft. bass, 1½ ft. high, W. of cor.

Survey of the W. Bdy. of Tp. 1 S., R. 11 W.

Chains	
	Corner stands on SW. slope of spur or ridge.
49.50	Top of spur or ridge, bears NW. and SE.; descend gradually along W. slope of ridge.
78.75	Intersect Salt Lake Base Line, 5 lks. E. of standard cor. of Tp. 1 N. Rs. 11 and 12 W., previously described.
	At intersection,
	Set an iron post, 3 ft. long, 3 ins. in diam., only 4 ins. in the ground, on account of underlying rock, supported by a mound of stone, 4 ft. base, 2½ ft. high, for closing cor. of Tp. 1 S., Rs. 11 and 12 W., with brass cap, mkd.

T 1 N.
R 12 W | R 11 W
S 36 | S 31
CC
S 1 | S 6
R 12 W | R 11 W
1913

	raise a mound of stone, 2 ft. base, 1½ ft. high, S. of cor.
	Land, rolling and broken mountainous; general E. exposure in S. ½ mile and W. exposure in N. ½ mile.
	Surface, quite rocky.
	Soil, shallow, rocky clay, of poor quality; affords no grazing.
	No timber; undergrowth, shadscale and greasewood.
	May 26, 1913.

Latitudes, Departures and Closing Errors.

Line Designated	True Bear.	Dist.	Latitudes. North	Latitudes. South	Departures. East	Departures. West
N.bdy.T.1 S.,R.11 W.	West	476.77				476.77
W.bdy.T.1 S.,R.11 W.	South	478.75		478.75		
S.bdy.T.1 S.,R.11 W.	East	477.24			477.24	
E.bdy.T.1 S.,R.11 W.	North	479.30	479.30			
Convergency						0.62
			479.30	478.75	477.24	477.39
			478.75			477.24

Error in Latitude 0.55 Error in Departure 0.15

For general description see book "E."

Howard W. Miller
U. S. Surveyor.

Survey of the W. bdy. of Tp. 1 N. R. 10 W.

Chains

Survey commenced May 13, 1913, and executed with a Young and Son's mountain transit No. 8147, fitted with a Smith solar attachment. The horizontal circle of the transit is provided with two opposite, double verniers, reading to single minutes, which is also the least count of the lat. and decl. arcs.

Use of the above instrument was approved by G.D.D. Kirkpatrick, Ass't. Supervisor of Surveys in the assignment instructions dated April 21, 1913, conditional upon satisfactory field test, the record of which follows herewith.

Test of instrument.

I test the adjustments of my instrument and find no errors, then, to test the solar attachment, by comparing its indications, resulting from observations made during a.m. and p.m. hours, with a meridian determined by observation on Polaris, I proceed as follows:

May 13, 1913: At the standard cor. of Tp. 1 N., Rs. 10 and 11 W., which is an iron post, 3 ins. in diam., properly marked, set and witnessed, in lat. 40° 46' 04" N., and long. 113° 02' 25" W., at 4h 30m p.m., l.m.t., I set off 40° 46' N. on the lat. arc, and 18° 27' N. on the decl. arc, and determine a meridian with the solar. I mark the meridian thus determined by a nail driven in a wooden peg, set firmly in the ground, 5.00 chs. N.

At 7h 16m p.m., l.m.t., I observe Polaris in accordance with instructions in the Manual, and mark the line determined on a wooden peg, set firmly in the ground, 5.00 chs. N.

May 13, 1913.

May 14, 1913: At 7h 20m a.m., l.m.t., I lay off the azimuth of Polaris, 1° 00' to the E. The meridian thus determined agrees with the meridian determined by solar obsn. yesterday afternoon.

At 7h 30m a.m., l.m.t., I set off 40° 46' N. on the lat. arc, and 18° 36' N. on the decl. arc, and determine a meridian with the solar., which agrees with the two former meridians.

Chains

I therefore conclude that the adjustments of my instrument are satisfactory.

Steel tapes, five chains long, were used by both parties in all the field work on Group 21, together with clinometers for determining slope angles, and the reduced horizontal distances only, appear in the official field notes.

The tapes were tested frequently during the season, comparison being made with a standard tape, 1 chain in length, kept and used only for that purpose.

May 14, 1913: I commence at the standard cor. of Tps. 1 N., Rs. 10 and 11 W., and run

N. on range line, bet. Rs. 10 and 11 W., through Tp. 1 N., bet. secs. 31 and 36.

Ascending gradually over rolling mountainous land, facing SW., through considerable short undergrowth of shadscale, and some sagebrush.

40.00 Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd.

√ ¼ S 36 | S 31 √

1913

raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor. Cor. stands about 75 ft. above Tp. cor. to S.

65.40 Dry wash, in small hollow, 15 lks. wide, 3 ft. deep, course SW.

68.00 Enter rolling bench, bears NW. and SE.

75.10 Old wagon road, bears NW. and SE.

79.00 Ascend rocky SE. face of bench.

80.00 Set an iron post, 3 ft. long, 3 ins. in diam., only 12 ins. in the ground, on account of underlying rock, supported by a mound of stone, 4 ft. base, 1 ft. high, for cor. of secs. 25, 30, 31 and 36, with brass cap, mkd.

T 1 N.

√ R 11 W | R 10 W √

√ S 25 | S 30 √

S 36 | S 31

1913

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

Survey of the W. bdy. of Tp. 1 N. R. 10 W.

Chains

Land, rolling mountainous; general SW. exposure.

Soil, hard, dry, clay and gravel, quite rocky in places, of limestone formation, on rock and clay subsoil; affords no grazing.

No timber; undergrowth, shadscale and sagebrush.

N. bet. secs. 25 and 30.

Ascending rocky SW. slope of bench, over rolling mountainous land, draining W. and SW., through considerable short undergrowth of shadscale.

1.00 Top of bench, about 30 ft. above sec. cor., bears NW. and SE. Thence across bench, over numerous outcroppings of limestone.

19.00 Leave bench, bears NE. and SW.; descend NW. and N. slope.

25.00 A few scattering cedars on both sides of line.

40.00 Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., with brass cap, mkd.

$\frac{1}{4}$ S 25 | S 30

1913

dig pits, 18 x 18 x 12 ins., N. and S. of post, 3 ft. dist., and raise a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, W. of cor.

Cor. stands in small hollow, about 75 ft. below bench, course NW.

45.00 Low spur, projects NW.; desc.

47.80 Dry wash, 15 lks. wide, 5 ft. deep, course NW.; ascend.

55.00 Low spur, projects NW.; descend.

57.80 Dry wash, 15 lks. wide, 3 ft. deep, course NW.

Thence across numerous small washes draining NW., descending gradually.

80.00 Set an iron post, 3 ft. long, 3 ins. in diam., 24 ins. in the ground, for cor. of secs. 19, 24, 25 and 30, with brass cap, mkd.

T 1 N

R 11 W | R 10 W

S 24 | S 19

S 25 | S 30

1913

dig pits, 18 x 18 x 12 ins., in each sec., $5\frac{1}{2}$ ft. dist.,

Survey of the W. bdy. of Tp. 1 N. R. 10 W.

Chains	
	and raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor.
	Land, rolling mountainous; general W. and NW. exposure.
	Soil, fine, dry, hard baked clay, mixed with some gravel, and quite rocky in many places, quite alkali, on rocky and gravelly baked clay subsoil; affords a little grazing.
	Timber, a few scattering cedars; undergrowth, shadscale.
	N. bet. secs. 19 and 24.
	Over rolling mountainous land, draining NW., through considerable short undergrowth of shadscale.
19.30	Dry wash, 10 lks. wide, 4 ft. deep, course NW.
26.50	Dry wash, 8 lks. wide, 3 ft. deep, course NW.; asc.
30.00	Low spur, projects NW.; desc.
32.30	Dry wash, 30 lks. wide, 6 ft. deep, course NW.; ascend.
40.00	Set an iron post, 3 ft. long, 1 in. in diam., only 6 ins. in the ground, on account of underlying rock, supported by a mound of stone, 4 ft. base, to within 2 ins. of the top, for ¼ sec. cor., with brass cap, mkd.
	√ ½ S 24 | S 19 √
	1913
	raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.
42.00	Low spur, bears NW. and SE.; descend.
44.90	Dry wash, 8 lks. wide, 2 ft. deep, course NW.; ascend.
46.00	Low spur, projects NW.; descend.
48.90	Dry wash, 12 lks. wide, 5 ft. deep, course NW.; ascend.
53.00	Low spur, projects NW.; descend.
66.50	Dry wash, 20 lks. wide, 5 ft. deep, course NW.
80.00	Set an iron post, 3 ft. long, 3 ins. in diam., 24 ins. in the ground, for cor. of secs. 13, 18, 19 and 24, with brass cap, mkd.
	√ T 1 N √
	R 11 W | S 10 W
	√ S 13 | S 18 √
	√ S 24 | S 19 √
	1913
	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.

Survey of the W. bdy. of Tp. 1 N. R. 10 W.

Chains	
	Land, rolling mountainous, consisting of numerous small spurs and dry washes; general NW. exposure.
	Soil, light, fine, dry, warm, sandy loam and clay of good texture; 10 to 30 ins. deep on clay and gravel subsoil; affords some grazing.
	No timber; undergrowth, shadscale.
	N. bet. secs. 13 and 18.
	Over rolling land, draining NW., through considerable short undergrowth of shadscale.
14.70	Dry wash, 12 ft. wide, 3 ft. deep, course NW.
20.95	Wagon road, bears NW. and SE.
32.40	Dry wash, 1 ch. wide, 6 ft. deep, course NW.; ascend.
35.20	Low spur, bears NW. and SE.; descend.
39.00	Dry, rocky wash, 50 lks. wide, 12 ft. deep, course NW. Ascend gradually, gentle SW. slope.
40.00	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., with brass cap, mkd. $\frac{1}{4}$ S 13 | S 18 1913 raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Limestone outcroppings in the vicinity of this corner.
43.70	Dry, rocky wash, 30 lks. wide, 10 ft. deep, course W.
53.00	Ascend abruptly over SW. slope of rocky spur.
61.50	Top of spur, bears NW. and SE.; descend.
63.00	Descend abruptly N. slope.
68.80	Dry wash, 60 lks. wide, 25 ft. deep, course W.; ascend.
70.60	Spur, about 30 ft. high, bears E. and W.; descend.
71.50	Dry wash, 1 ch. wide, 20 ft. deep, course SW.; ascend.
78.40	Spur, about 80 ft. high, bears NE. and SW.; descend.
80.00	Set an iron post, 3 ft. long, 3 ins. in diam., 24 ins. in the ground, for cor. of secs. 7, 12, 13 and 18, with brass cap, mkd. T 1 N R 11 W | R 10 W S 12 | S 7 S 13 | S 18 1913 dig pits, 18 x 18 x 12 ins., in each sec., $5\frac{1}{2}$ ft. dist.,

Survey of the W. bdy. of Tp. 1 N. R. 10 W.

Chains	
	and raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor.
	Land, rolling mountainous, on broken NW. and SW. slopes; surface, rather rocky.
	Soil, light, fine, dry, sandy clay loam, of fair texture, but quite rocky in places, on clay and rock subsoil; affords some grazing.
	No timber; undergrowth, shadscale.

	May 14, 1913: At this cor. I set off 18° 38' N. on the decl. arc, and at 11h 56m a.m., l.m.t., I observe the sun on the meridian. The resulting lat. is 40° 49' N.
	N. bet. secs. 7 and 12.
	Over rolling, broken land, draining W., through considerable short undergrowth of shadscale and scattering cedar timber.
5.00	Enter heavy cedars, bears NW. and SE.
7.00	Dry wash, 30 lks. wide, 6 ft. deep, course NW.; ascend.
12.00	Spur, about 20 ft. high, bears E. and W.; descend.
18.00	Dry wash, 35 lks. wide, 10 ft. deep, course SW.; ascend.
	Leave timber, bears NE. and SW.
28.00	Enter scattering cedar timber, bears NW. and SE.
30.00	Low spur, bears NE. and SW.; descend.
36.50	Dry wash, 30 lks. wide, 10 ft. deep, course SW.; ascend.
40.00	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd.
	¼ S 12 | S 7
	1913
	raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.
45.00	Low spur, projects SW.; descend.
50.60	Dry wash, 30 lks. wide, 10 ft. deep, course SW.; ascend.
53.00	Leave timber, bears E. and W.
62.00	Low spur, projects SW.; descend.
66.50	Dry wash, 25 lks. wide, 8 ft. deep, course SW.; ascend.
72.00	Spur, about 30 ft. high, projects W.; descend.
80.00	Set an iron post, 3 ft. long, 3 ins. in diam., only 6 ins.

Chains	
	in the ground, on account of underlying rock, supported by a mound of stone, 4 ft. base, to within 2 ins. of the top, for cor. of secs. 1, 6, 7 and 12, with brass cap, mkd.
	T 1 N R 11 W | R 10 W S 1 | S 6 S 12 | S 7 1913
	raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.
	Land, broken and rolling; general SW. exposure.
	Soil, light, fine, dry, clay loam, quite rocky, on clay and rock subsoil; affords good grazing.
	Timber, cedars; undergrowth, shadscale.
	N. bet. secs. 1 and 6.
	Ascending rocky, broken SW. slope, over rolling mountainous land, through considerable short undergrowth of shadscale.
13.00	Rocky spur, about 80 ft. above sec. cor., bears NW. and SE.; descend abruptly.
22.60	Wagon road, bears NW. and SE.
25.90	Dry wash, 2 chs. wide, 20 ft. deep, course SW.; ascend through scattering cedar timber.
30.00	Spur, about 20 ft. high, projects SW.; descend.
36.80	Wagon road, bears NE. and SW.
37.60	Dry wash, 8 lks. wide, 3 ft. deep, course SW.
40.00	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd.
	¼ S 1 | S 6 1913
	raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.
43.00	Dry wash, 25 lks. wide, 6 ft. deep, course SW.
	Ascend gradually over W. slope of mountain.
85.10	Set temp. point for cor. of Tps. 1 and 2 N., Rs. 10 and 11 W.
	May 14, 1913.
85.15	Permanent cor. of Tps. 1 and 2 N., Rs. 10 and 11 W., determined and set at a later date, while running N. bdy. of Tp. 1 N. R. 10 W.
	Land, broken, rolling mountainous; general SW. and W. exposure.

Survey of the W. bdy. of Tp. 1 N. R. 10 W.

Chains

Soil, light, fine, dry, sandy clay loam of good texture, and rich in sand, but quite rocky in places, on gravel and rock subsoil; affords good grazing.

Timber, cedar; undergrowth, shadscale, with some greasewood.

General Description.

The lands in this Tp. are generally mountainous along the W. bdy., and for a distance of about 1 to 1½ miles into the Tp. from said bdy. This mountainous land is at the S. end of what is known as the Grassy Mountains.

The NW. point of the Cedar Mountains comes into the SE. corner of the Tp.

Sink Valley, which is practically level, and apparently has no outlet, lies N. and S., through the center of the Tp. The remainder of the Tp. is gently rolling land draining into Sink Valley.

The Tp. contains no water, but affords some very good winter grazing.

The station of Low, on the W.P. Ry. is in the SE. part of the Tp., but there are no settlers in the Tp.

Howard W. Miller
U. S. Surveyor.

Survey of the N. bdy. of Tp. 1 N. R. 10 W.

Chains	
	May 15, 1913: At 6h 56m a.m., l.m.t., I set off 40° 51' N. on the lat. arc, and 18° 49' N. on the decl. arc, and determine a meridian with the solar, at the cor. of Tps. 2 N., Rs. 9 and 10 W.
	Thence I run
	W. on true line, on S. bdy. of Tp. 2 N. R. 10 W., along the S. bdy. of sec. 36.
	Descending gradually over rolling land, sloping W., through considerable short undergrowth of shadscale.
3.03	The closing corner of Tps. 1 N., Rs. 9 and 10 W., which is an iron post, 3 ins. in diam., properly mkd., set and witnessed.
40.00	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd.
	¼ S 36 / 1913
	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.
41.00	Wagon road, bears NE. and SW.
80.00	Set an iron post, 3 ft. long, 3 ins. in diam., 24 ins. in the ground, for cor. of secs. 35 and 36, with brass cap, mkd.
	T 2 N | R 10 W S 35 | S 36. 1913
	dig pits 24 x 24 x 12 ins., in each sec., 6 ft. dist., and raise a mound of earth, 4 ft. base, 2 ft. high, N. of cor.
	Land, nearly level; general SW. exposure.
	Soil, light, fine, dry, sandy, clay loam, on hard, baked clay subsoil: affords some grazing.
	No timber; undergrowth, shadscale.
	W. on true line, along S. bdy. sec. 35.
	Over nearly level land, through considerable short undergrowth of shadscale.
40.00	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in

Chains	
	the ground, for ¼ sec. cor., with brass cap, mkd.
	1/4 S 35 1913
	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.
80.00	Set an iron post, 3 ft. long, 3 ins. in diam., 24 ins. in the ground, for cor. of secs. 34 and 35, with brass cap, mkd.
	T 2 N | R 10 W S 34 | S 35 1913
	dig pits, 24 x 24 x 12 ins., in each sec., 6 ft. dist., and raise a mound of earth, 4 ft. base, 2 ft. high, N. of cor.
	Land, nearly level.
	Soil, light, fine, dry, sandy clay, on hard, baked clay subsoil; affords no grazing.
	No timber; undergrowth, shadscale.
	W. on true line, along S. bdy. of sec. 34.
	Over nearly level land, through considerable short undergrowth of shadscale, with some salt sage.
40.00	Set an iron post, 3 ft. long, 1 in. in diam., 20 ins. in the ground, for ¼ sec. cor., with brass cap, mkd.
	1/4 S 34 1913
	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.
66.60	Low sand ridge, bears NW. and SE.
80.00	Set an iron post, 3 ft. long, 3 ins. in diam., 24 ins. in the ground, for cor. of secs. 33 and 34, with brass cap, mkd.
	T 2 N | R 10 W S 33 | S 34 1913
	dig pits, 24 x 24 x 12 ins., in each sec., 6 ft. dist., and raise a mound of earth, 4 ft. base, 2 ft. high, N. of cor.
	Land, nearly level.

Chains

Soil, light, fine, dry, baked, sandy clay, quite alkali, on hard, baked, clay subsoil; affords no grazing.
No timber; undergrowth, shadscale and some salt sage.

W. on true line, along S. bdy. of sec. 33.
Over very gently rolling land, draining NE., through considerable short undergrowth of shadscale.

23.40 Wagon road, bears NW. and SE.

40.00 Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for 1/4 sec. cor., with brass cap, mkd.

1/4 S 33 ✓
1913

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..

80.00 Set an iron post, 3 ft. long, 3 ins. in diam., 24 ins. in the ground, for cor. of secs. 32 and 33, with brass cap, mkd.

T 2 N | R 10 W
✓ S 32 | S 33 ✓
1913

raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor.
Land, gently rolling: general NE. exposure.
Soil, light, fine, dry, warm, sandy and clay loam, of good texture, on sand and clay subsoil; affords some grazing.
No timber; undergrowth shadscale, and some salt sage.

May 15, 1913: At this cor. I set off 18° ✓ 52' N. on the decl. arc, and at app. noon, observe the sun on the meridian. The resulting lat. is 40° ✓ 51' N.

W. on true line, along S. bdy. of sec. 32.
Ascending gradually over rolling and broken land, through considerable short undergrowth of shadscale and some salt sage.

18.80 Wagon road, bears NW. and SE.

40.00 Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for 1/4 sec. cor., with brass cap, mkd.

Survey of the N. bdy. of Tp. 1 N. R. 10 W.

Chains	
	$\frac{\frac{1}{4}\ S\ 32}{1913}$
	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.
50.00	Scattering limestone outcroppings in vicinity of this point.
65.65	Wagon road, bears NE. and SW.
77.00	Wash, 1 ch. wide, course N.
78.00	Foot of rocky mountain, bears N. 30° E. and S.; ascend abruptly, steep E. slope.
80.00	Set an iron post, 3 ft. long, 3 ins. in diam., 24 ins. in the ground, for cor. of secs. 31 and 32, with brass cap, mkd
	$\frac{T\ 2\ N\ \vert\ R\ 10\ W}{S\ 31\ \vert\ S\ 32}$
	$\frac{}{1913}$
	raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor., to avoid small wash, to N. of cor.
	Land, rolling and broken; general NE. and E. exposure.
	Soil, on E. 70 chs., light, fine, dry, warm, sandy loam mixed with some gravel, of good texture, on clay and gravel subsoil. Soil, on W. 10 chs., rocky clay and gravel on gravel subsoil. The entire mile affords fair grazing.
	No timber; undergrowth, shadscale and salt sage.
	W. on true line, along S. bdy. of sec. 31.
	Ascending abruptly over rocky, mountainous land, steep E. slope, through considerable short undergrowth of shadscale.
7.40	Top of spur, 200 ft. above sec. cor., bears NW. and SE.
	Descend.
13.40	Bottom of basin, 7.00 chs. wide; ascend abruptly E. slope.
25.40	Ridge or divide, bears NE. and SW.; descend NW. slope.
32.10	Wash, 20 lks. wide, 6 ft. deep, in dry drain, course SW.
	A few scattering cedars along wash.
	Ascend abruptly SE. slope.
36.00	Spur, bears N. and S.; descend.
38.00	Dry wash, 30 lks. wide, 6 ft. deep, course SE.; ascend.
40.00	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd.

Survey of the N. bdy. of Tp. 1 N. R. 10 W.

Chains

$\frac{\frac{1}{4}\ S\ 31}{1913}$

raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor.

44.50 Rocky spur, projects SW. Descend abruptly, steep, rocky SW. slope.

80.00 Wagon road at base of mountain, bears NW. and SE., about 600 ft. below top of mountain. A few scattering cedars along base of mountain. Descend gradually.

82.52 Intersect W. bdy. of Tp. 5 lks. N. of temp. cor. of Tps. 1 and 2 N., Rs. 10 and 11 W. I destroy temp. cor., and at intersection,

Set an iron post, 3 ft. long, 3 ins. in diam., only 10 ins. in the ground, on account of underlying rock, supported by a mound of stone, 4 ft. base, to within 3 ins. of the top, for cor. of Tps. 1 and 2 N., Rs. 10 and 11 W., with brass cap, mkd.

T 2 N
R 11 W | R 10 W
S 36 | S 31
S 1 | S 6
R 11 W | R 10 W
T 1 N
1913

raise a mound of stone, 3 ft. base, 2 ft. high, S. of cor.

Land, rough and mountainous, on steep E. and W. slopes. Surface covered with many calcareous sandstone boulders. Soil, rocky sand and gravel, shallow on bedrock; affords good grazing.

Timber, few scattering cedars; undergrowth, shadscale and some salt sage.

May 15, 1913.

For general description see book "C" of this survey.

Survey of the N. bdy. of Tp. 1 N. R. 10 W.

Table of Latitudes and Departures.

Line designated	True bearing.	True dist.	Latitudes North	Latitudes South	Departures East	Departures West
bdy.T.1 N.R.10 W.	North.	485.36 ✓	485.36	✓		
rom C.C. of E.bdy.						
) NE. cor. of Tp.	East.	3.03 ✓			3.03	✓
bdy. T.1 N.R.10 W.	West.	482.52 ✓				482.52 ✓
bdy. T.1 N.R.10 W.	South	485.15 ✓		485.15	✓	
bdy. T.1 N.R.10 W.	East.	480.17			480.17	
nvergency.						0.63
			485.36	485.15	483.20	483.15
			485.15		483.15	
		Error in Lat.----	0.21	in dep.	0.05	-

Howard W. Miller
U. S. Surveyor.

Chains

Survey commenced May 28, 1913, and executed with a Young and Son's mountain transit No. 8147, fitted with a Smith solar attachment; the horizontal circle of the instrument is provided with two, opposite, double verniers, reading to single minutes, which is also the least count of the lat. and decl. arcs.

Use of the above instrument was approved by G. D. D. Kirkpatrick, Ass't. Supervisor of Surveys, in the assignment instructions, dated April 21, 1913, conditional upon satisfactory field teste, the record of which follows herewith.

Test of instrument.

The instrument was tested with satisfactory results, May 21 and May 22, on a meridian determined by observation on Polaris, May 22, 1913, see page 1 of the notes of the subdivisional lines of Tp. 1 S. R. 11 W.

A further test of the instrument was made later, during the survey of the subdivisional lines of Tp. 1 N. R. 11 W., see page 1 of notes of Subdivision of said Tp.

Measurements.

Steel tapes, five chains long, were used by both parties in all the field work on Group 21, together with clinometers for determining slope angles, and the reduced horizontal distances only, appear in the official field notes.

The tapes were tested frequently during the season, comparison being made with a standard tape, 1 chain in length, kept and used only for that purpose.

I commence at the standard cor. of Tp. 1 N. Rs. 11 and 12 W., previously described.

May 28, 1913: Here at 9h a.m., l.m.t., I set off 40° 46' N. on the lat. arc, and 21° 27' N. on the decl. arc, and determine a meridian with the solar. Thence I run N. on range line, bet. Rs. 11 and 12 W., through Tp. 1 N., bet. secs. 31 and 36.

Chains	
	Over rolling land, draining NE., through considerable short undergrowth of shadscale.
4.00	Descend over rocky NW. slope, over lava boulders.
25.00	Base of ridge, bears NW. and SE. Thence over nearly level land.
40.00	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd.

¼ S 36 | S 31

1913

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.

Ascend very gradually, gentle SE. slope.

45.65	Dry wash, 20 lks. wide, 4 ft. deep, course SE.
58.50	Ascend S. slope of ridge.
70.30	Top of low ridge, bears NW. and SE.; descend gradually.
80.00	Set an iron post, 3 ft. long, 3 ins. in diam., only 4 ins. in the ground, on account of underlying rock, surrounded by a mound of stone, 4 ft. base, 20 ins. high, for cor. of secs. 25, 30, 31 and 36, with brass cap, mkd.

T 1 N

R 12 W | R 11 W

S 25 | S 30

S 36 | S 31

1913

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

Land, rolling, with some level land near center of mile; general E. and SE. exposure.

Soil, light, fine, dry, weak, clay, quite rocky and shallow on bedrock; affords no grazing.

No timber; undergrowth, shadscale.

N. bet. secs. 25 and 30.

Descending gently over rolling land, draining NE., through considerable short undergrowth of shadscale.

5.00	Low spur, projects E.; descend more abruptly N. slope.
13.00	Leave rocky and rolling land, bears NW. and SE. Thence over nearly level land, through considerable greasewood.
40.00	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in

Chains

the ground, for ¼ sec. cor., with brass cap, mkd.

¼ S 25	S 30
1913	

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.

80.00 Set an iron post, 3 ft. long, 3 ins. in diam., 24 ins. in the ground, for cor. of secs. 19, 24, 25 and 30, with brass cap, mkd.

T 1 N	
R 12 W	R 11 W
S 24	S 19
S 25	S 30
1913	

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, gently rolling and nearly level; general NE. exposure. Soil, S. 13 chs., very rocky and shallow clay on bedrock. Soil on remainder of mile is a light, fine, dry, weak, sandy clay, closely packed and slightly alkali, 6 to 8 ins. deep on hard, baked clay subsoil; affords no grazing. No timber; undergrowth, shadscale and greasewood.

N. bet. secs. 19 and 24.

Over nearly level land, through considerable short undergrowth of shadscale and greasewood.

40.00 Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd.

¼ S 24	S 19
1913	

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.

80.00 Set an iron post, 3 ft. long, 3 ins. in diam., 24 ins. in the ground, for cor. of secs. 13, 18, 19 and 24, with brass cap, mkd.

Chains

T 1 N
R 12 W | R 11 W
S 13 | S 18
S 24 | S 19
1913

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

Land, nearly level.

Soil, light, fine, dry, weak, sandy clay, 10 to 30 ins. deep on rocky subsoil; affords no grazing.

No timber; undergrowth, shadscale and greasewood.

N. bet. secs. 13 and 18.

Ascending over rolling land, through considerable short undergrowth of shadscale.

9.60 Top of low, rocky ridge, bears NE. and SW.; descend.

23.10 Dry wash, 20 lks. wide, 4 ft. deep, course NE. Thence over nearly level land.

40.00 Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd.

¼ S 13 | S 18
1913

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

80.00 Set an iron post, 3 ft. long, 3 ins. in diam., 24 ins. in the ground, for cor. of secs. 7, 12, 13 and 18, with brass cap, mkd.

T 1 N
R 12 W | R 11 W
S 12 | S 7
S 13 | S 18
1913

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 corner.

Land, gently rolling and nearly level; general E. exposure.

Soil, light, fine, dry, weak, sandy clay, slightly alkali, 10 to 60 ins. deep on rocky subsoil; affords no grazing.

No timber; undergrowth, shadscale.

May 28, 1913: At this cor. I set off 21° 28' N. on the decl. arc, and at app. noon observe the sun on the meridian. The resulting lat. is 40° 49' N.

Chains	
	N. bet. secs. 7 and 12.
	Over nearly level land, through considerable short undergrowth of shadscale.
30.00	Top of low spur, projects NE., about 20 ft. high.
40.00	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd. ¼ S 12 | S 7 1913 raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.
80.00	Set an iron post, 3 ft. long, 3 ins. in diam., 24 ins. in the ground, for cor. of secs. 1, 6, 7 and 12, with brass cap, mkd. T 1 N R 12 W | R 11 W S 1 | S 6 S 12 | S 7 1913 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, nearly level; general E. exposure.
	Soil, light, fine, dry, weak, closely packed clay, rather alkali, 6 to 8 ins. deep on hard, baked clay subsoil, which is 20 to 60 ins. deep on rocky subsoil; affords no grazing.
	No timber; undergrowth, shadscale.
	N. bet. secs. 1 and 6.
	Over level land, through considerable short undergrowth of shadscale.
40.00	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd. ¼ S 1 | S 6 1913 dig pits, 18 x 18 x 12 ins., N. and S. of post, 5 ft. dist., and raise a mound of earth, 3½ ft. base, 1½ ft. high, W. of cor.

Chains

85.15 Length of E. bdy. of Tp. 1 N. R. 11 W.

Set an iron post, 3 ft. long, 3 ins. in diam., 24 ins. in the ground, for cor. of Tps. 1 and 2 N., Rs. 11 and 12 W., with brass cap, mkd.

T 2 N	
R 12 W S 36	R 11 W S 31
S 1	S 6
R 12 W	R 11 W

1T1N
1913

dig pits, 24 x 24 x 12 ins., on each line, N., E. and W. 4 ft., and S. of post, 8 ft. dist., and raise a mound of earth, 5 ft. base, 2½ ft. high, S. of cor.

Land, level.

Soil, light, fine, dry, weak, closely packed clay, rather alkali, 6 to 8 ins. deep on hard, baked clay subsoil; affords no grazing.

No timber; undergrowth, shadscale.

May 28, 1913.

NORTH BOUNDARY OF T. 1 N., R. 11 W.

Survey commenced May 30, 1913 and executed with Young and Sons light mountain transit No. 8147. For description of instrument and other relative data see page 1 of the notes of the W. bdy. of T. 1 N., R. 11 W.

I commence at the cor. of Tps. 1 and 2 N., Rs. 10 and 11 W., heretofore described in approximate lat. 40°51'N., long. 113°02' W.

At 9h. 14m. p.m. l.m.t., I observe Polaris in accordance with instructions in the Manual and mark the direction of the line thus determined on a stake driven firmly in the ground about 5 chs. N. of the cor.

Time of obsn. May 30, 1913---------- 9h.14m.p.m.

U.C. Polaris May 30, 1913 reduced to long. 113°02'W. 8h.57m.a.m.

Time elapsed from time of U.C. to obsn.	12h.17m.
subtract from	23h.56m.
Hour angle of Polaris at obsn.	11h.39m.

Azimuth of Polaris at obsn.----- 0°08'E.

chains

May 30 , 1913.

May 31: At 7 h. 00m. a.m., I lay off the azimuth of Polaris , 0°08' to the west, and mark the true meridian thus determined by a nail driven in a wooden peg set firmly in the ground , about 5 chs. N.

At 7h.30m.a.m.l.m.t., I set off 40° 51' on the lat. arc ; 21°54'N., on the decl. arc; and determine a meridian with the solar. The line thus determined agrees with the meridian determined by observations on Polaris.

The magnetic bearing of the true meridian at 7h.45m.a.m. is N.17°15'W., the angle thus determined gives the magnetic decl. 17°15'E.

From tp. cor. already described , I run

West , on random line along N. bdy. of T.1 N.,R.11 W., setting temp. ¼ sec. and sec. cors. at intervals of 40.00 chs. and at 479.65 chs., fall 15 lks. N. of the cor. of Tps.1 and 2 N., Rs.11 and 12 W. heretofore described. This falling amswers to a correction of 01' or 2½ lks. S. per mile counting from the NE. cor. of the Tp.

Therefore I run

N.89°59'E., on true line along N. bdy. of T.1 N.,R.11 W., bet sec. 6 and 31

Note: The instrument was in transit at noon preventing lat. observation.

Over level land , through considerable short undergrowth of shadscale and some salttsage,

39.65 Set an iron post , 3 ft. long , 1 in. in dia., 26 ins. in the ground for ¼ sec. cor., with brass cap marked

¼ S 31
S.6
1913

dig pits , 18 x 18 x 12 ins., E. and W. of post , 3 ft. dist., raise a mound of earth , 3½ ft. base., 1½ ft. high N. of cor.

chains	
79.65	Set an iron post , 3 ft. long , 3 ins. in dia., 24 ins. in the ground for cor. of secs. 5 , 6 , 31 and 32 , with brass cap marked T 2 N | R 11 W S 31 | S 32 S 6 | S 5 T 1 N 1913 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. Soil , light , fine , dry , weak , closely packed clay , rather alkali , 6 to 8 ins. deep on hard baked clay sub-soil ; affords no grazing. No timber ; undergrowth , shadscale and salt sage.
	N.89° 59'E., on true line bet. secs. 5 and 32. Over nearly level land draining SW., through considerable short undergrowth of shadscale , some salt sage and greasewood.
40.00	Set an iron post , 3 ft. long , 1 in. in dia., 26 ins. in the ground for ¼ sec. cor., with brass cap marked ¼ S 32 S 5 1913 dig pits , 18 x 18 x 12 ins., E. and W. of post , 3 ft. dist., raise a mound of earth , 3½ ft. base , 1½ ft. high , N. of cor.
80.00	Set an iron post , 3 ft. long , 3 ins. in dia., 24 ins. in the ground for cor. of secs. 4 , 5 , 32 and 33 with brass cap marked T 2 N | R 11 W S 32 | S 33 S 5 | S 4 T 1 N 1913 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 , nearly level ; general NW. exposure.

Chains

Soil, light, fine, dry, weak, closely packed clay, rather alkali, 6 to 8 ins. deep on hard, baked clay subsoil; affords no grazing.

No timber; undergrowth, shadscale, salt sage and greasewood.

N. 89° 59' E. on true line bet. secs. 4 and 33.

Over nearly level land, draining SW., through considerable short undergrowth of shadscale and salt sage, with some greasewood.

20.00 Very low ridge, about 8 ft. high, bears NE. and SW.

40.00 Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd.

$$\frac{\frac{1}{4}\ S\ 33}{S\ 4}$$
1913

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.

80.00 Set an iron post, 3 ft. long, 3 ins. in diam., 24 ins. in the ground, for cor. of secs. 3, 4, 33 and 34, with brass cap, mkd.

T 2 N. | R 11 W.
S 33 | S 34
S 4 | S 3

T 1 N.
1913

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, nearly level; general SW. exposure.

Soil, light, fine, dry, weak, closely packed clay, rather alkali, 6 to 10 ins. deep on hard, baked clay subsoil; affords no grazing.

No timber; undergrowth, shadscale, salt sage and greasewood.

N. 89° 59' E. on true line bet. secs. 3 and 34.

Over very gently rolling land, draining SW., through considerable short undergrowth of shadscale and salt sage.

40.00 Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in

Survey of the N. bdy. of Tp. 1 N. R. 11 W.

Chains	
	the ground, for ¼ sec. cor., with brass cap, mkd.
	¼ S 34 S 3 1913
	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.
57.00	Base of spur, bears NE. and SW.; ascend NW. and W. slope.
63.20	Spur, about 40 ft. above ¼ sec. cor., projects SW.; desc.
74.50	Dry wash, 20 lks. wide, 15 ft. deep, course SW.; ascend.
77.00	Low spur, projects SW.; descend gradually.
80.00	Set an iron post, 3 ft. long, 3 ins. in diam., 24 ins. in the ground, for cor. of secs. 2, 3, 34 and 35, with brass cap, mkd.
	T 2 N | R 11 W S 34 | S 35 S 3 | S 2 T 1 N 1913
	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, very gently rolling; general SW. exposure.
	Soil, light, fine, dry, weak, closely packed clay, rather alkali, 6 to 8 ins. deep on hard, baked clay subsoil; affords no grazing.
	No timber; undergrowth, shadscale and salt sage.
	N. 89° 59' E. on true line bet. secs. 2 and 35.
	Over very gently rolling land, draining SW., through considerable short undergrowth of shadscale and salt sage.
4.50	Dry wash, 15 lks. wide, 10 ft. deep, course SW.
40.00	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd.
	¼ S 35 S 2 1913
	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.

Survey of the N. bdy. of Tp. 1 N. R. 11 W.

Chains	
76.00	Wagon road, bears NW. and SE.
80.00	Set an iron post, 3 ft. long, 3 ins. in diam., 24 ins. in the ground, for cor. of secs. 1, 2, 35 and 36, with brass cap, mkd.

T 2 N | R 11 W
S 35 | S 36
S 2 | S 1
T 1 N
1913

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, gently rolling; general SW. exposure.

Soil, light, fine, dry, weak, closely packed clay, rather alkali, 6 to 8 ins. deep on hard, baked clay subsoil; affords no grazing.

No timber; undergrowth, shadscale and salt sage.

N. 89° 59' E. on true line bet. secs. 1 and 36.

Over gently rolling land, draining SW., through considerable short undergrowth of shadscale and salt sage.

10.00	Dry wash, 8 ft. deep, course SW.; ascend.
14.00	Low spur, 10 ft. high, bears NE. and SW.; descend.
18.40	Dry wash, 8 ft. deep, course SW.
33.35	Wagon road, bears NW. and SE.
40.00	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd.

¼ S 36
S 1
1913

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.

80.00	The cor. of Tps. 1 and 2 N., Rs. 10 and 11 W.

Land, gently rolling; general SW. exposure.

Soil, light, fine, dry, weak, closely packed clay, mixed with some gravel, 8 to 20 ins. deep on hard, baked clay subsoil; affords a little grazing.

Survey of the N. bdy. of Tp. 1 N. R. 11 W.

Chains

No timber; undergrowth, shadscale and salt sage.

May 31, 1913.

General Description.

The lands in this Tp. are practically all level, with the exception of a little mountainous land along the E. bdy. of the Tp.

The Tp. is a part of the old bed of Lake Bonneville and has no apparent drainage.

The soil in this Tp. is inclined to be more sandy than in the Tp. to the S., and affords more grazing, especially where the soil is sandy.

There is no water in the Tp. but it would afford good winter grazing.

There are no settlers in the Tp.

Table of Latitudes and Departures.

ine designated	True bearing.	Dist.	Latitudes. North	Latitudes. South	Departures. East	Departures. Wes
. bdy. T. 1 N. R. 11 W.	North	485.15	485.15			
. bdy. T. 1 N. R. 11 W.	S. 89° 59' W.	479.65		0.15		479
. bdy. T. 1 N. R. 11 W.	South	485.15		485.15		
. bdy. T. 1 N. R. 11 W.	East.	480.00			480.00	
onvergency.						0
			485.15	485.30	480.00	480
				485.15		480
	Error in Latitude			0.15	Error in Departure	0

Howard W Miller

U. S. Surveyor.

West boundary of T.2 N., R.10 W.

chains	
	Survey commenced June 6, 1913 and executed with a Young and sons light mountain transit No.8147, with solar attachment. For description and test of instrument see page "1" of this xxxxxx book.
	I examine the adjustments of the transit and find no level or collimation errors. The solar apparatus was tested June 4 and 5 on a Polaris meridian at the cor. of Tps. 1 and 2 N., Rs. 11 and 12 W.; description of said test recorded in the field notes of the W. bdy. of T.2 N., R.11 W., xxxxxx" of this survey, and found correct. I therefore know the instrument to be in adjustment and do not deem it necessary to make another Polaris test at the beginning of this survey.
	I begin at the cor. of Tps. 1 and 2 N., Rs. 10 and 11 W., in approximate lat. 40°51' N., longitude 113°02'W., heretofore described.
	At the above described cor. I set off 40°51' on the lat. arc; 22°39'N., on the decl. arc; and at 7 h. 28 m. a. m. l. m. t., determine a meridian with the solar.
	Thence I run
	North, bet. secs. 31 and 36
	Gradually ascend over rolling land draining SW., at base of high ridge, through short undergrowth of shadscale.
30.00	Wagon road, bears NW. and SE.
40.00	Set an iron post, 3 ft. long, 1 in. in dia., 24 ins. in the ground for ¼ sec. cor., with brass cap marked S 36¼ | S 31 1913 dig pits, 18 x 18 x 12 ins., N. and S. of post, 3 ft. dist., raise a mound of earth, 3½ ft. base, 1½ ft. high, W. of cor.
54.80	Wash, 5 lks. wide, 5 ft. deep, course SW.
59.60	Old wagon road to sheep camp, bears NE. and SW.
80.00	Set an iron post, 3 ft. long, 3 ins. in dia., 24 ins.

West boundary of T.2 N., R.10 W.

chains

in the ground for cor. of secs. 25, 30, 31 and 36, with brass cap marked

T 2 N	
R 11 W	R 10 W
S 25.	S 30
S 36	S 31

1913

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, rolling with a general SW. exposure.

Soil, sandy clay and gravelly, on hard, dry, sandy clay and gravel sub-soil; 3 rd. rate.

No timber.

Undergrowth, short shadscale and some salt sage.

North, bet. secs. 25 and 30.

Gradually ascend over rolling land sloping and draining SW., through short undergrowth of shadscale.

40.00 Set an iron post, 3 ft. long, 1 in. in dia., 24 ins. in the ground for ¼ sec. cor., with brass cap marked

S 25¼	S 30

1913

from which

A cedar, 10 ins. diam., bears N.23¾°E., 190 lks. dist., marked ¼ S 30 B T

A cedar, 8 ins. diam., bears N.8°W., 179 lks. dist., marked ¼ S 25 B T.

42.00 Wash, 20 lks. wide, 5 ft. deep, course SW. A few scattering cedars along wash.

47.60 Wash, 20 lks. wide, 3 ft. deep, course SW.

72.00 Wash, 10 lks. wide, 3 ft. deep, course SW.

80.00 Set an iron post, 3 ft. long, 3 ins. in dia., 24 ins. in the ground for cor. of secs. 19, 24, 25 and 30, with brass cap marked

West boundary of T.2 N., R.10 W.

chains

T 2 N
R 11 W | R 10 W
S.24 | S.19
S.25 | S 30

1913

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

Land , rolling with a general SW. exposure.

Soil , gravelly , sandy and rocky , on hard, dry , sandy and rocky sub-soil ; 4 th. rate.

No timber, except few scattering cedars.

Undergrowth , short shadscale.

North , bet. secs. 19 and 24.

Gradually ascend over rolling land sloping SW., through short undergrowth of shadscale and salt sage.

25.00 Base of mountain , bears NW. and SE.

Ascend abruptly over rocky SW. slope.

30.80 Spur , 50 ft. high , projects NW.

Descend.

33.00 Hollow , 40 ft. deep , course W.

Ascend.

36.00 Spur , 50 ft. high , projects SW.

Descend.

38.00 Hollow , 40 ft. deep , course SW.

~~Enter a few scattering cedar , bears E. and W.~~

Ascend.

40.00 Set an iron post , 3 ft. long , 1 in. in dia., 24 ins. in the ground for ¼ sec. cor., with brass cap marked

S 24¼ | S 19

1913

from which

A cedar, 19 ins. diam., bears S.16¼°E., 33 lks.

West boundary of T.2 N., R.10 W.

chains	
	dist., marked 1/4 S 19 B T
	A cedar , 5 ins. diam., bears N.62½°W., 27 lks.
	dist., marked 1/4 S 24 B T
42.00	Spur , projects NW.
	Descend abruptly.
47.40	Hollow , 75 ft. deep , course NW.
	Ascend abruptly.
53.40	Ridge , 190 ft. high , bears NW. and SE.
	Descend abruptly.
64.00	Hollow , 207 ft. deep , course SE.
	Ascend abruptly.
75.00	Spur , 120 ft. high , projects SW.
	Descend abruptly.
80.00	Point for cor. of secs. 13 , 18 , 19 and 24 falls in wash in bottom of hollow , where cor. would be washed away. No cor. set.
	Land , mountainous and rolling with a general SW. exposure on S. 53.40 chs., and E. exposure on N.26.60 chs.
	S. 25.00 chs. rolling land at base of mountain , remainder of mile rough and mountainous.
	Soil , rocky and gravelly on rocky sub-soil ; 4 th. rate.
	Timber , a few scattering scrub cedar on N. 42.00 chs.
	Undergrowth , short shadscale and salt sage.
	Mountainous or timbered land 55.00 chs.
	North , bet. secs. 13 and 18
	Over mountainous land , through scattering scrub cedar timber.
	Ascend from hollow.
.20	On W. side of wash in bottom of hollow.
	Set an iron post , 3 ft. long , 3 ins. in dia., 24 ins. in a mound of stone and earth, 4 ft. base , 2 ft. high for witness cor. to secs. 13 , 18 , 19 and 24 , with brass cap marked

chains

T 2 N
R 11 W | R 10 W
S 13 | S 18
WC
S 24 | S 19
1913

from which ,

A cedar , 12 ins. diam., bears N.42½°E.,108 lks. dist., marked W C T 2 N R 10 E S 18 B T

A cedar , 4 ins. diam., bears S.38¼°E.,87 lks. dist., marked W C T 2 N R 10 W S 19 B T

A cedar , 9 ins. diam., bears S.58¼°W.,70 lks. dist., marked W C T 2 N R 11 W S 24 B T

A cedar , 8 ins. diam., bears N.43°W.,15 lks. dist., marked W C T 2 N R 11 W S 13 B T.

Note:
on account of natural obstacles I am unable to set post in the ground.

June 6 : At this sec. cor., I set off 22°39'N., on the decl. arc ; and at 11 h. 58 m. a. m. l. m. t., observe the sun on the meridian ; the resulting lat. is 40°54'.

Ascend over SE. slope of ridge.

16.40 Ridge , 200 ft. above sec. cor., bears E. and W.

Descend abruptly over steep N. slope into canyon.

40.00 500 ft. below top of ridge.

Set an iron post , 3 ft. long , 1 in. dia., 12 ins. in the ground and 12 ins. in a mound of stone and earth , 4 ft. base , 1 ft. high , for ¼ sec. cor., with brass cap marked

S 13¼ | S 18
1913

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

Note:
On account of natural obstacles I am unable to set post more than 12 ins. in the ground.

Continue steep descent.

chains	
45.60	Road in bottom of canyon , bears E. and W.
45.80	Wash in canyon , 50 lks. wide , 5 ft. deep , 100 ft. below ¼ sec. cor., course E.
	Ascend abruptly.
61.40	Spur , 450 ft. above canyon , projects SE.
	Descend abruptly.
64.00	Hollow , 60 ft. deep , course SE.
	Ascend.
69.80	Spur , 50 ft. above hollow , projects SE.
	Descend.
72.00	Hollow , 50 ft. deep , course SE.
	Ascend.
76.00	Spur , 75 ft. high , projects SE.
	Descend 80 ft. to
80.00	Set an iron post , 3 ft. long , 3 ins. in dia., 24 ins. in a mound of stone and earth , 4 ft. base , 2 ft. high for cor. of secs. 7 , 12 , 13 and 18 , with brass cap marked

T 2 N
R 11 W | R 10 W
S 12 | S 7
S 13 | S 18
1913

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

Note:
On account of natural obstacles I am unable to set post in the ground.

Land , mountainous with steep N. and S. slopes of ridges and spurs into hollows draining E., land lying near the E. end of a long range of mountains which rise abruptly from the valley to the east.

Soil , rocky of volcanic formation on rocky sub-soil ; 4 th. rate.

Timber , some scattering scrub cedar.

Undergrowth , short shadscale.

Mountainous or timbered land , 80.00 chs.

chains	
	June 6 , 1913
	June 7 : At 8 h. 29 m. a. m. l. m. t., I set off 40° 55' on the lat. arc ; 22°45' N., on the decl.arc ; and determine a meridian with the solar at the cor. of secs. 7 , 12 , 13 and 18.
	Thence I run
	North , bet. secs. 7 and 12
	Over rough and broken mountains draining E., through scattering scrub cedar timber and undergrowth of short shadscale.
	Descend.
.30	Hollow , 15 ft. below sec. cor., course SE.
	Ascend abruptly.
6.50	Rocky spur , 137 ft. above hollow , projects NE.
	Gradually descend over NW. slope.
18.50	Descend abruptly over N. slope.
26.00	Bottom of hollow and large wash , 300 ft. below spur , course NE.
	Ascend.
35.90	Spur , 78 ft. above hollow , projects SE.
	Thence gradually descend over nearly E. slope.
39.90	Bottom of small gulch , drains SE.
	Ascend.
40.00	Set an iron post , 3 ft. long , 1 in. in dia., 24 ins. in the ground for $\frac{1}{4}$ sec. cor., with brass cap marked S $12\frac{1}{4}$ | S 7 1913
	from which
	A cedar , 16 ins. diam., bears S.35°E., 80 lks. dist., marked $\frac{1}{4}$ S 7 B T
	A cedar , 8 ins. diam., bears S.$69\frac{3}{4}$°W., 73 lks.

West boundary of T.2 N.,R.10 W.

chains

dist., marked $\frac{1}{4}$ S 12 B T.

47.40 Spur , 95 ft. above $\frac{1}{4}$ sec. cor., projects NE.

Descend abruptly.

54.60 Hollow , 70 ft. deep , course NE.

Ascend.

65.00 Spur , 95 ft. above hollow , projects NE.

Descend abruptly.

71.00 Bottom of large hollow , 300 ft. deep , course NE.

Ascend abruptly over rocky S. slope of spur.

80.00 225 ft. above hollow.

Set an iron post , 3 ft. long , 3 ins. in dia., 24 ins. in a mound of stone and earth , 4 ft. base , 2 ft. high for cor. of secs. 1 , 6 , 7 and 12 , with brass cap marked

T 2 N

R 11 W	R 10 W
S 1	S 6
S 12	S 7

1913

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

Note:

On account of natural obstacles I am unable to set post in the ground.

Land , rough and broken mountains with steep N. and S. slopes of ridges and spurs into deep rocky hollows draining E.

Soil , rocky and gravelly of limestone formation on rocky sub-soil ; 4 th. rate.

Timber , a few scattering scrub cedar.

Undergrowth , short shadscale.

Mountainous or timbered land , 80.00 chs.

North , bet. secs. 1 and 6.

Over rough and broken mountains draining E., through scattering scrub cedar timber and undergrowth of short shadscale .

West Boundary of T.2 N., R.10 W.

Chains.	
	Ascend 10 ft.to
1.00	Top of rocky limestone spur, projects N.80° E.
	Descend abruptly over ledges and rocks.
6.00	Bottom of gulch, 207 ft.deep, course NE.
	Ascend abruptly over rocky SE.slope of spur.
31.52	Top of spur, 445 ft.above gulch, projects NE.
	Descend abruptly over steep N.slope.
40.00	244 ft.below top of spur,
	Set an iron post, 3 ft.long, 1 in.in dia., 24 ins.in the ground, for ¼ sec.cor., with brass cap marked
	S 1 ¼ | S 6
	1913
	from which
	A cedar, 6 ins.diam., bears S.3½°E. 123 lks. dist., marked ¼ S 6 B T
	A cedar, 12 ins.diam., bears N.9½°W.155 lks. dist., marked ¼ S 1 B T
	June 7: At this ¼ sec.cor.I set off 22° 46' N.on the decl.arc; and at 11h 59m a.m.l.m.t., observe the sun on the meridian; the resulting lat.is 40° 56'
47.20	Bottom of large hollow, 100 ft.below ¼ sec.cor., course NE.
	Ascend abruptly.
51.00	Spur, 83 ft.above hollow, projects E.
	Thence over rolling land sloping E.
76.00	Descend over bank 10 ft.high.
76.50	Wash, 20 ft.deep, course NE.
80.00	Set an iron post, 3 ft.long, 3 ins.in dia., 24 ins.in the ground, for cor.of Tps.2 and 3 N., Rs.10 and 11 W., with brass cap marked
	T 3 N R 11 W | R 10 W S 36 | S 31 S 1 | S 6 R 11 W | R 10 W T 2 N 1913
	from which

West Boundary of T.3 N., R.10 W.

Chains.

A cedar, 7 ins.diam., bears N.41° E. 351 lks.dist. marked T 3 N R 10 W S 31 B T

A cedar, 5 ins.diam., bears S.8½°E., 5 lks.dist. marked T 2 N R 10 W S 6 B T

A cedar, 12 ins.diam., bears S.21¼°W.312 lks. dist., marked T 2 N R 11 W S 1 B T

A cedar, 10 ins.diam., bears N.83½°W.198 lks. dist., marked T 3 N R 11 W S 36 B T

Land, rough mountains, with steep N.and S.slopes of ridges and spurs into gulches draining E.

Soil, gravelly, rocky and some light, dry, clay on gravelly and rocky subsoil; 4th rate.

Timber, scattering scrub cedar.

Undergrowth, short shadscale and considerable bunch grass, good for grazing purposes.

Mountainous or timbered land 80.00 chs.

June 7, 1913.

Resurvey of the East Boundary of T.3 N., R.10 W.

Survey commenced June 10, 1913, and executed with a Young and Sons light mountain transit No.8147. For description and test of instrument see survey of the S. bdy.of Tp.2 S., R.11 W. of this survey.

I know the instrument to be in perfect adjustment by tests made on Polaris meridian at my camp near the ¼ sec.cor.bet.secs.15 and 16, T.3 N., R.11 W.

June 8:

I begin at the cor.of Tp.2 N., Rs.9 and 10 W., in approximate lat.40° 51' N.; longitude 113° 56' W.,which

chains

is a limestone 8 x 6 x 6 ins. above ground,firmly set , and marked and witnessed as described by the Surveyor General.

I destroy all traces of the old cor. and re-establish it at the same point as follows :

Set an iron post , 3 ft. long , 3 ins. in dia., 24 ins. in the ground for re-established cor. of tp. 2 N.,Rs. 9 and 10 W., with brass cap marked

T 2 N
R 10W | R 9 W
S 36 | S 31
T 1 N
1913

raise a mound of stone , 2 ft. base , 1½ ft. high , N. of cor.

At 9 h. 89 m. a. m. l. m. t., I set off 40°51' on the lat. arc ; 23°01'N., on the decl. arc ; and determine a meridian with the solar at the above described cor.

Thence I run

North , retracing bet. secs. 31 and 36

Over rolling land sloping W., covered with short under-growth of shadscale and salt sage.

25.80 Wagon road , bears NE. and SW.

40.16 Fall 2 lks. W. of the ¼ sec. cor., which is a limestone 12 x 8 x 8 ins. above ground , firmly set , and marked and witnessed as described by the Surveyor General.

I destroy all traces of the old cor. and re-establish it at the same point as follows:

Set an iron post , 3 ft. long , 1 in. in dia., 24 ins. in the ground for re-established ¼ sec. cor., with brass cap marked

S36¼ | S 31
1913

dig pits , 18 x 18 x 12 ins., N. and S. of post , 3 ft. dist., raise a mound of earth , 3½ ft. base , 1½ ft. high , W. of cor.

chains

The true bearing of this ½ mile is therefore N.0°02'E., and the distance is 40.16 chs.

From the ¼ sec. cor., I continue North.-

40.00 The cor. of secs. 25, 30, 31 and 36, which is a limestone, 12 x 10 x 10 ins., above ground, firmly set, and marked an witnessed as described by the Surveyor General.

I destroy all traces of the old cor., and re-establish it at the same point as follows :

Set an iron post, 3 ft. long, 3 ins. in dia., 24 ins. in the ground for re-established cor. of secs. 25, 30, 31 and 36, with brass cap marked

T 2 N
R.10.W | R 9.W
S 25 | S 30
S 36 | S 31
1913

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.

The true bearing of this ½ mile is therefore North, and the distance is 40.00 chs.

Land, rolling with general W. exposure.

Soil, light, dry, fine, warm sand, mixed with gravel on deep sandy and gravelly sub-soil ; 2 nd. rate.

No timber.

Undergrowth, short shadscale.

The ¼ sec. cor. bet. secs. 25 and 30 being plainly visible, I run for said cor.,

North, bet. secs. 25 and 30

Over rolling land sloping almost W., through short undergrowth of shadscale and salt sage.

40.00 Having now run 1½ miles of this boundary and finding it to be about 50 lks. long, it is apparent that the

chains

remainder of the bdy. N. of this point will increase in length about the same as the lines already retraced. In closing the subdivisional lines of T.2 N.,R.10 W., upon this boundary the fallings will be out of limits, I therefore proceed to set ¼ sec. and sec. cors. for 2 secs. and 2 quarters, referring to T.2 N.,R.10 W. only, at intervals of 40.00 chs., beginning at the cor. of secs. 25, 30, 31 and 36 heretofore described.

Therefore at this point, set an iron post, 3 ft. long, 1 in. in dia., 24 ins., in the ground for ¼ sec. cor. on the E. bdy. of sec. 25, T.2 N.,R.10 W., with brass cap marked

S 25¼

1913

dig pits, 18 x 18 x 12 ins., N. and S. of post, 3 ft. dist., raise a mound of earth, 3½ ft. base, 1½ ft. high, W. of cor.

40.30 The ¼ sec. cor., which is a limestone, 10 x 10 x 6 ins. above ground, firmly set, and marked and witnessed as described by the Surveyor General.

I destroy all traces of the old cor. and re-establish it at the same point as follows:

Set an iron post, 3 ft. long, 1 in. in dia., 24 ins. in the ground for re-established ¼ sec. cor., on the W. bdy. of sec. 30, T.2 N.,R.9 W., with brass cap marked

S 30¼

1913

dig pits, 18 x 18 x 12 ins., N. and S. of post, 3 ft. dist., raise a mound of earth, 3½ ft. base, 1½ ft. high, E. of cor.

The true bearing of this ½ mile is therefore North, and the distance is 40.30 chs.

The cor. of secs. 19, 24, 25 and 30 being plainly visible

Resurvey of the east boundary of T.2 N., R.10 W.

chains

I run for said cor.

North , with continuous chaining

80.00 Set an iron post , 3 ft. long , 3 ins. in dia., 24 ins. in the ground for cor. of secs. 24 and 25 on the E. bdy. of T.2 N., R.10 W., with brass cap marked

T 2 N
R 10 W
S 24 | R 9 W
S 25 |
1913

dig pits , 24 x 24 x 12 ins., in each sec., 6 ft. dist., raise a mound of earth , 4 ft. base , 2 ft. high , W. of cor.

80.43 The cor. of secs. 19 , 24 , 25 and 30 , which is a limestone , 12 x 12 x 8 ins., above ground , firmly set , and marked and witnessed as described by the Surveyor General.

I destroy all marks on old cor. pertaining to secs. 24 and 25 , and dig pits , 24 x 24 x 12 ins., in each sec., 6 ft. dist., raise a mound of earth , 4 ft. base , 2 ft. high , E. of cor.

The true bearing of this ½ mile is therefore North , and the dist. is 40.13 chs.

Land , rolling and nearly level with a general W. exposure.

Soil , light , dry , warm sandy loam , on deep sandy subsoil ; 1 st. rate.

No timber.

Undergrowth , short shadscale and salt sage.

June 10 : At this sec. cor., I set off 23°02' N., on the decl. arc ; and at 11 h. 59 m. a. m. l. m. t., observe the sun on the meridian ; the resulting lat. is 40° 53'.

The ¼ sec. cor. bet. secs. 19 and 24 being plainly visible , I run for said cor.

N.0°01'E.

Over rolling land covered with short undergrowth of

chains

shadscale.

39.57 A northing of 40.00 chs. from the cor. of secs. 24 and 25.
Set an iron post , 3 ft. long , 1 in. in dia., 24 ins.
in the ground for ¼ sec. cor. on the E. bdy. of sec.24 ,
T.2 N.,R.10 W., with brass cap marked

S 24¼

1913

dig pits , 18 x 18 x 12 ins., N. and S. of post , 3 ft.
dist., raise a mound of earth , 3½ ft. base , 1½ ft.
high , W. of cor.

40.07 The ¼ sec. cor. which is a limestone , 10 x 8 x 8 ins.
above ground , firmly set , and marked and witnessed
as described by the Surveyor General.
I destroy all traces of the old cor. and re-establish it
at the same point as follows:
Set an iron post , 3 ft. long , 1 in. in dia., 24 ins.
in the ground for re-established ¼ sec. cor. on the W.
bdy. of sec. 19 , T.2 N.,R.9 W., with brass cap marked

S 19 ¼

1913

dig pits , 18 x 18 x 12 ins., N. and S. of post , 3 ft.
dist., raise a mound of earth , 3½ ft. base , 1½ ft.
high , E. of cor.
The true bearing of this ½ mile is therefore N.0°01'E.,
and the distance is 40.07 chs.
The cor. of secs. 13 , 18 , 19 and 24 being plainly
visible , I run for said cor.
N.0°01'W., with continuous chaining

73.90 Wagon road , bears NW. and SE.

79.57 A northing of 80.00 chs. from the cor. of secs. 24 and 25.
Set an iron post , 3 ft. long , 3 ins. in dia., 24 ins.
in the ground for cor. of secs. 13 and 24 on the E.

chains

bdy. of T.2 N.,R.10 W., with brass cap marked

T 2 N
R 10 W | R 9 W
S 13 | S 24
1913

dig pits ,24 x 24 x 12 ins., in each sec., 6 ft. dist., raise a mound of earth , 4 ft. base , 2 ft. high , W. of cor.

80.22 The cor. of secs. 13 , 18 , 19 and 24 , which is a limestone , 10 x 8 x 6 ins. above ground , firmly set , and marked and witnessed as described by the Surveyor General.

I destroy all traces of old accessories to cor. and dig pits , 24 x 24 x 12 ins. in each sec., 6 ft. dist., raise a mound of earth , 4 ft. base , 2 ft. high , E. of cor.,for accessories to secs.18 and 19.

The true bearing of this ½ mile is therefore N.0°01'W., and the distance is 40.15 chs.

Land , nearly level with a gentle SW. exposure.

Soil , light , dry , warm sandy loam , on deep sandy loam sub-soil ; 1 st. rate.

No timber.

Undergrowth , short shadscale.

Excellent farming land if watered.

The ¼ sec. cor.bet. secs. 13 and 18 being plainly visible from the cor. of secs. 18 and 19 , I run for said cor. N.0°01'E., bet. secs. 13 and 18

Over nearly level land covered with short undergrowth of shadscale and salt sage.

5.40 Wagon road , bears NW. and SE.

39.35 A northing of 40.00 chs. from the cor. of secs. 13 and 24.

Set an iron post , 3 ft. long , 1 in. in dia., 24 ins. in the ground for ¼ sec. cor. on the E. bdy. of sec. 13 , T.2 N.,R.10 W., with brass cap marked

chains

S 13¼

1913

dig pits , 18 x 18 x 12 ins., N. and S. of post , 3 ft. dist., raise a mound of earth , 3½ ft. base , 1½ ft. high , W. of cor.

40.11 The ¼ sec. cor., which is a limestone , 6 x 6 x 6 ins. above ground , firmly set , marked and witnessed as described by the Surveyor General.

I destroy all traces of the old cor. and re-established it at the same point as follows :

Set an iron post , 3 ft. long , 1 in. in dia., 24 ins. in the ground for re-established ¼ sec. cor., on the W. bdy. of sec. 18 , T.2 N.,R.9 W., with brass cap marked

S 18¼

1913

dig pits , 18 x 18 x 12 ins., N. and S. of post , 3 ft. dist., raise a mound of earth , 3½ ft. base , 1½ ft. high , E. of cor.

The true bearing of this ½ mile is therefore N.0°01'E., and the distance is 40.11 chs.

The cor. of secs. 7 , 12 , 13 and 18 being plainly visible from this cor., I run for said cor., N.0°01'E., with continuous chaining.

79.35 A northing of 80.00 chs. from the cor. of secs. 13 and 24.

Set an iron post , 3 ft. long , 3 ins. in dia., 24 ins. in the ground for cor. of secs. 12 and 13 on the E. bdy. of T.2 N.,R.10 W., with brass cap marked

T 2 N

R 10 W | S 12 / S 13 | R 9 W

1913

chains

dig pits , 24 x 24 x 12 ins., in each sec., 6 ft. dist., raise a mound of earth , 4 ft. base , 2 ft. high , W. of cor.

80.25 The cor. of secs. 7 , 12 , 13 and 18 , which is a limestone ; 10 x 10 x 6 ins., above ground , firmly set , and marked and witnessed as described by the Surveyor General.

I destroy all traces of old accessories to cor. and re-establish same for cor. of secs. 7 and 18 on the W. bdy. of T.2 N.,R.9 W., as follows ;

Dig pits , 24 x 24 x 12 ins., in each sec., 6 ft. dist., raise a mound of earth , 4 ft. base , 2 ft. high , E. of cor.

The true bearing of this ½ mile is therefore N.0°01'E., and the distance is 40.14 chs.

Land , nearly level.

Soil , light , dry , warm sandy clay , slightly baked and containing some alkali on hard , dry clay subsoil ; 2 nd. rate.

No timber.

Undergrowth , short shadscale and salt sage.

The ¼ sec. cor. bet. secs. 7 and 12 being plainly visible from the cor. of secs. 7 and 18 , I run for said cor. N.0°01'W., bet. secs. 7 and 12

Over nearly level land covered with short undergrowth of shadscale.

21.10 Wagon road , bears NW. and SE.

39.10 A northing of 40.00 chs. from the cor. of secs. 12 and 13. Set an iron post , 3 ft. long , 1 in. in dia., 24 ins. in the ground for ¼ sec. cor. on the E. bdy. of sec. 12 T.2 N.,R.10 W., with brass cap marked

S 12 ¼

1913

chains

dig pits , 18 x 18 x 12 ins., N. and S. of post , 3 ft. dist., raise a mound of earth , 3½ ft. base , 1½ ft. high , W. of cor.

40.10 The ¼ sec. cor., which is a limestone , 8 x 7 x 6 ins. above ground , firmly set , and marked and witnessed as described by the Surveyor General.

I destroy all traces of the old cor. and re-establish it at the same point as follows:

Set an iron post , 3 ft. long , 1 in. in dia., 24 ins. in the ground for re-established ¼ sec. cor. on the W. bdy. of sec. 7 , T.2N.,R.9 W., with brass cap marked

S 7 ¼

1913

dig pits , 18 x 18 x 12 ins., N. and S. of post , 3 ft. dist., raise a mound of earth , 3½ ft. base , 1½ ft. high , E. of cor.

The true bearing of this ½ mile is therefore N.0°01'W., and the distance is 40.10 chs.

The cor. of secs. 1 , 6 , 7 and 12 being plainly visible from this cor., I run for said cor.

North , with continuous chaining

79.10 A northing of 80.00 chs. from the cor. of secs. 12 and 13.

Set an iron post , 3 ft. long , 3 ins. in dia., 24 ins. in the ground for cor. of secs. 1 and 12 , on the E. bdy. of T.2 N.,R.10 W., with brass cap marked

T 2 N

R 10 W | R 9 W

S 1

S 12

1913

dig pits , 24 x 24 x 12 ins., in each sec. 6 ft. dist. raise a mound of earth , 4 ft. base , 2 ft. high , W. of cor.

80.23 The cor. of secs. 1 , 6 , 7 and 12 , which is a limestone 8 x8 x 5 ins., above ground , firmly set , and marked

Resurvey of the east boundary of T.2 N.,R.10 W.

chains.

and witnessed as described by the Surveyor General.
I destroy all traces of old accessories to cor. and re-establish same for cor. of secs. 6 and 7 on the W. bdy. of T.2 N.,R.9 W., as follows ; Dig pits , 24 x 24 x 12 ins., in each sec., 6 ft. dist., raise a mound of earth , 4 ft. base , 2 ft. high , E. of cor.
The true bearing of this ½ mile is therefore North and the distance is 40.13 chs.
Land , nearly level with no perceptible drainage.
Soil , light , dry , fine , warm , sandy clay , slightly baked and containing some alkali on hard , dry clay sub-soil ; 2 nd. rate.
No timber.
Undergrowth , short shadscale.

The ¼ sec. cor., bet. secs. 1 and 6 being plainly visible from the cor. of secs. 6 and 7 on the W. bdy. of T.2 N. , R.9 W., I run for said cor.
N.0°01'E., bet. secs. 1 and 6 ,
Over nearly level land covered with short undergrowth of shadscale.
38.87 A northing of 40.00 chs. from the cor. of secs. 1 and 12.
Set an iron post , 3 ft. long , 1 in. in dia., 24 ins. in the ground for ¼ sec. cor. on the E. bdy. of sec.1 , T.2 N.,R.10 W., with brass cap marked

S 1¼
1913

dig pits , 18 x 18 x 12 ins., N. and S. of post , 3 ft. dist., raise a mound of earth , 3½ ft. base , 1½ ft. high , W. of cor.
40.11 The ¼ sec. cor., which is a limestone , 5 x 5 x 4 ins. above ground , firmly set , and marked and witnessed as

Resurvey of the East Boundary of T.3 N.R.10 W.

Chains.

described by the surveyor general.

I destroy all traces of the old cor., and re-establish it at the same point as follows:

Set an iron post, 3 ft.long, 1 in.in dia., 24 ins.in the ground, for re-established ¼ sec.cor.on the W.bdy.of sec.6, T.3 N.R.9 W., with brass cap marked

S 6 ¼
1913

dig pits 18 x 18 x 12 ins.N.and S.of post, 3 ft. dist. raise a mound of earth, 3½ ft.base, 1½ ft.high E.of cor.

The true bearing of this ½ mile is therefore N.0° 01'E. and the distance is 40.11 chs.

The cor.of Tps. 2 and 3 N., Rs.9 and 10 W. being plainly visible from this cor., I run for said cor.

North, with continuous chaining,

80.21 The cor.ofTps.2 and 3 N., Rs.9 and 10 W., which is a limestone 8 x 8 x 6 ins.above ground, firmly set and marked and witnessed as described by the surveyor general.

I destroy all traces of the old accessories to cor., and re-establish same as follows: Dig pits 24 x 24 x 12 ins. N., E., and W. 4 ft., and S.of stone 8 ft.dist.;raise a mound of earth 5 ft.base, 2½ ft.high S.of cor.

The true bearing of this ½ mile is therefore north and the distance is 40.10 chs.

Land, nearly level.

Soil, light, dry, fine, warm, sandy clay, slightly baked and mixed with some alkali, on hard, dry, clay subsoil; 2nd rate.

No timber.

Undergrowth, short shadscale.

North Boundary of T.2 N., R.10 W.

June 10: At the cor.of Tps.2 and 3 N., Rs.9 and 10 W., in approximate lat.40° 56'N., longitude 112° 56' W., I set off 40° 56' on the lat.arc; 23° 03'N.on the decl. arc; and at 4h 49m p.m.l.m.t., determine with the solar a meridian and mark a point thereof by a nail driven in a hub set firmly in the ground about.5.chs.N.of the cor.

At 8h 19m p.m.l.m.t., I make an hour angle observation on Polaris in accordance with the Manual of Instructions, and mark the direction of the line thus determined by a nail driven in a hub, set firmly in the ground about 5 chs.N.of the station.

Correct l.m.t. of obsn. June 10, 1913	8h 19m p.m.
U.C.Polaris June 10, corrected for longitude 112° 56'W.	8h 14m a.m.
Time of lower culmination of Polaris June 10,	8h 12m p.m.
Subtract Time argument	0h 07m
Azimuth of Polaris at observation	0° 02'E.

June 10, 1913.

June 11: At 6h 0m a.m.l.m.t., I lay off the azimuth of Polaris 0° 02' to the west, and find that this meridian falls on my solar meridian of June 10.

At 6h 59m a.m.l.m.t., I set off 40° 56' on the lat.arc; 23° 06'N.on the decl.arc; and determine a meridian with the solar. This meridian falls about 1' to the right of the Polaris meridian. I therefore conclude that the instrument is in perfect adjustment.

The magnetic decl.of the true meridian at 7h a.m. is N. 17° 15'W.; the angle thus determined gives the magnetic decl.17° 15'E.

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chains

Knowing from retracements and original surveys of other boundaries of T.2 N.,R.10 W., that the course of the N. bdy. will vary 5'to 10'from an E. and W. line , I run my random line on a course that I calculate will intersect the cor. of Tps. 2 and 3 N.,Rs.10 and 11 W. , and therefore keep my random line close to the true line of this survey.

I begin at the cor. of Tps. 2 and 3 N., Rs.9 and 10 W., heretofore described.

Thence I run

S.89°50'W., on a random line along the N. bdy. of T.2 N., R.10 W., setting temp. ¼ sec. and sec. cors. at intervals of 40.00 chs.; and , at 482.00 chs. intersect N. and S. line at the cor. of tps. 2 and 3 N.,Rs. 10 and 11 W., heretofore described. The true bearing of this line is therefore N.89°50'E.

Thence I run.

N.89°50'E., bet. secs. 6 and 31.

Over broken mountainous land draining E., through scattering scrub cedar timber and undergrowth of short shadscale.

Gradually descend.

20.00 Bottom of gulch , 40 ft. deep , course NE.

Ascend abruptly.

24.00 Leave cedar timber , bears N. and S.

24.20 Spur , 50 ft. above gulch , projects N.

Descend abruptly.

36.00 Base of steep descent 75 ft. below spur , bears N. and S.

Thence over land sloping E.

42.00 Set an iron post , 3 ft. long , 1 in. in dia., 12 ins. in the ground and 12 ins. in a mound of stone and earth 4 ft. base , 1 ft. high , for ¼ sec. cor., with brass cap marked

S 31
¼

S 6
1913

North boundary of T.2 N.,R.10 W.

chains

raise a mound of stone , 2 ft. base , 1½ ft. high , N. of cor.

Note:
On account of natural obstacles I am unable to set post more than 12 ins. in the ground.

47.70 Wagon road , bears NE. and SW.

81.90 Wagon road , bears N. and S.

82.00 Set an iron post , 3 ft. long , 3 ins. in dia., 24 ins. in the ground for cor. of secs. 5 , 6 , 31 and 32 , with brass cap marked

T 3 N | R 10 W S 31 | S 32	
S 6	S 5
T 2 N 1913	

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

Land , rough broken mountains on W. 36.00 chs. and rolling foot hills on E. 46.00 chs.. General drainage of country to the E.

Soil , gravelly , rocky and some light , dry , sand on gravelly and rocky sub-soil ; 3 rd. rate.

Timber , scrub cedar on W.24.00 chs.

Undergrowth , short shadscale. Some grass , good for grazing purposes.

Mountainous or timbered land 36.00 chs.

N.89°50'E., bet. secs. 5 and 32.

Gradually descend over gently rolling land sloping E., through short undergrowth of shadscale.

6.00 Wash , 20 lks. wide , 3 ft. deep , course SE.

9.90 Wagon road , bears N. and S.

40.00 Set an iron post , 3 ft. long , 1 in. in dia., 12 ins. in the ground and 12 ins. in a mound of stone and earth

chains

4 ft. base , 1 ft. high , for ¼ sec. cor., with brass cap marked

S 32
¼
S 5
1913

raise a mound of stone , 2 ft. base , 1½ ft. high , N. of cor.

Note:
On account of natural obstacles I am unable to set post more than 12 ins. in the ground.

44.00 Wash , 10 lks. wide , 5 ft. deep , course SE.

80.00 Set an iron post , 3 ft. long , 3 ins. in dia., 24 ins. in the ground for cor. of secs. 4 , 5 , 32 and 33 , with brass cap marked

T 3 N | R 10 W
S 32 | S 33
S 5 | S 4
T 2 N
1913

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 , gently rolling with a general E. exposure.

Soil , light , dry , warm sandy clay and gravelly on hard clay and gravel sub-soil ; 3 rd. rate.

No timber.

Undergrowth , short shadscale.

June 11 : At this sec, cor. I set off 23°06'N., on the decl. arc ; and at 11 h. 59 m. a. m. l. m. t., observe the sun on the meridian ; the resulting lat. is 40°56'

N.89°50'E., bet. secs. 4 and 33.

Over nearly level land draining S., through short undergrowth of shadscale.

40.00 Set an iron post , 3 ft. long , 1 in. in dia., 24 ins.

chains

in the ground for ¼ sec. cor., with brass cap marked

S 33
¼
S 4
1913

dig pits , 18 x 18 x 12 ins., E. and W. of post , 3 ft. dist., raise a mound of earth , 3½ ft. base , 1½ ft. high , N. of cor.

80.00 Set an iron post , 3 ft. long , 3 ins. in dia., 24 ins. in the ground for cor. of secs. 3 , 4 , 33 and 34 , with brass cap marked

T 3 N R 10 W
S 33 S 34
S 4 S 3
T 2 N
1913

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 .

Soil , light , dry , fine , warm sandy clay , slightly baked and mixed with alkali on hard , dry warm sandy clay sub-soil ; 2 nd. rate.

Undergrowth , short shadscale.

No timber.

N.89°50'E., bet. secs. 3 and 34

Gradually ascend over gently rolling land covered with short undergrowth of shadscale and scattering greasewood.

40.00 Set an iron post , 3 ft. long , 1 in. in dia., 24 ins. in the ground for ¼ sec. cor., with brass cap marked

S 34
¼
S 3
1913

chains

dig pits , 18 x 18 x 12 ins., E. and W. of post , 3 ft. dist., raise a mound of earth , 3½ ft. base , 1½ ft. high , N. of cor.

70.00 Begin ascent over low hill.

80.00 Set an iron post , 3 ft. long , 3 ins. in dia., 24 ins. in the ground for cor. of secs. 2 , 3 , 34 and 35 , with brass cap marked

T 3 N S 34	R 10 W S 35
S 3	S 2

T 2 N
1913

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 , gently rolling with a general SW. exposure.

Soil , light , dry , warm , sandy clay and gravel , slightly baked on hard , dry , clay sub-soil ; 2 nd. rate.

No timber.

Undergrowth , short shadscale and scattering greasewood.

N.89°50'E., bet. secs. 2 and 35.

Gradually ascend along SW. face of ridge , through short undergrowth of shadscale.

6.90 Top of low ridge , 30 ft. high , bears NW. and SE. about 7 chs.

Descend.

16.00 Base of hill , 30 ft. below top , bears NW. and SE.

Enter greasewood undergrowth about 3 ft. high.

Thence over nearly level land.

16.35 Wagon road ; bears NW. and SE.

40.00 Set an iron post , 3 ft. long , 1 in. in dia., 24 ins. in the ground for ¼ sec. cor., with brass cap marked

S 35
¼

S 2
1913

chains

dig pits , 18 x 18 x 12 ins., E. and W. of post , 3 ft. dist., raise a mound of earth , 3½ ft. base , 1½ ft. high , N. of cor.

80.00 Set an iron post , 3 ft. long , 3 ins. in dia., 24 ins. in the ground for cor. of secs. 1 , 2 , 35 and 36 , with brass cap marked

T 3 N | R 10 W
S 35	S 36
S 2	S 1

T 2 N
1913

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 with the exception of low hill on W.16.00chs.

Soil , light , dry , fine , warm sandy clay , baked hard on hard , dry clay sub-soil ; 2 nd. rate.

No timber.

Undergrowth , short shadscale and greasewood.

N.89°50'E., bet. secs. 1 and 36

Over nearly level land covered with short undergrowth of shadscale and scattering greasewood.

40.00 Set an iron post , 3 ft. long , 1 in. in dia., 24 ins. in the ground for ¼ sec. cor., with brass cap marked

S 36
¼

S 1
1913

dig pits , 18 x 18 x 12 ins., E. and W. of post , 3 ft. dist., raise a mound of earth , 3½ ft. base , 1½ ft. high , N. of cor.

73.10 Wagon road , bears N. and S.

80.00 The cor. of Tps. 2 and 3 N., Rs. 9 and 10 W.

Land , level.

North Boundary of T. 2 N., R. 10 W.

Chains

Soil, light, dry, warm sandy clay, baked hard, on hard dry clay subsoil; 2nd rate.

No timber.

Undergrowth, short shadscale and scattering greasewood about 3 ft. high.

June 11, 1913.

LATITUDES, DEPARTURES AND CLOSING ERRORS.

Line designated	True bearing	Distances	Latitudes N	Latitudes S	Departures E	Departures W
		Chs.	Chs.	Chs.	Chs.	Chs.
W. Bdy.	South	480.00		480.00		
S. Bdy.	East	482.52			482.52	
W. Bdy. T.2 N. R.9 W.						
Sec. 31, S. ½	N.0°02'E.	40.16	40.16		.02	
Sec. 31, N. ½	North	40.00	40.00			
Sec. 30, S. ½	North	40.30	40.30			
Sec. 30, N. ½	North	40.13	40.13			
Sec. 19, S. ½	N.0°01'E.	40.07	40.07		.01	
Sec. 19, N. ½	N.0°01'W.	40.15	40.15			.01
Sec. 18, S. ½	N.0°01'E.	40.11	40.11		.01	
Sec. 18, N. ½	N.0°01'E.	40.14	40.14		.01	
Sec. 7, S. ½	N.0°01'W.	40.10	40.10			.01
Sec. 7, N. ½	North	40.13	40.13			
Sec. 6, S. ½	N.0°01'E.	40.11	40.11		.01	
Sec. 6, N. ½	North	40.10	40.10			
N. Bdy.	S.89°50'W.	482.00		1.40		482.00
Convergency						.63
			481.50	481.40	482.58	482.65
			481.40			482.58
Error in latitude			.10			
Error in departure						.07

For general description see book "H" of this Survey.

Howard W. Miller

U. S. Surveyor.

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Page

Filed Apr.9, 1914.

West Boundary of T.2 N.,R.11 W.

chains

Survey commenced June 4 , 1913 and executed with a Young and sons light mountain transit No.8147 . For description and test of instrument see page 1 of this book.

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 established by observations on Polaris , I proceed as foloows:

At the cor. of Tps. 1 and 2 N., Rs. 11 and 12 W., heretofore described ; n approximate lat. 40°51'N.; longitude 113°08'W., I set off 40°51' on the lat. arc ; 22°29' N., on the decl. arc ; and , at 4 h. 28m p. m. l. m. t., determine a meridian with the solar , and mark a point thereof , by a nail driven in a peg , firmly set in the ground , about 5 chs. N. of the cor.

At 7 h. 46 m. p. m. l. m. t., I make an hour angle observation on Polaris in accordance with the Manual of Instructions , and mark the direction of the line thus determinedby driving a nail in a peg firmly set about 5 chs. N. of the station.

U.C.Polaris June 4 corrected for Long.	8h. 37m.a.m.
Equivalent to L.C. Polaris June 4	8h. 35m.p.m.
Time of observation June 4	7h. 46m.p.m.
Hour angle	0h. 49m.

Azimuth of Polaris at observation 0°21'W.

June 4 , 1913

June 5.: At 6 h. 58 m. a. m. l. m. t., I lay off the azimuth of Polaris 0°21' to the East and find that the Polaris meridian falls on the solar meridian of June 4.

At 7 h. 13 m. a. m. l. m. t., I set off 40°51' on the lat. arc ; 22°33'N.on the decl. arc ; and determine a meridian with the solar. This meridian also falls on the solar and Polaris meridians of June 4. I therefore conclude that the adjustments of the instrument are satisfactory., as both solar meridians from a. m. and

chains

and p. m. hours agree with the Polaris meridian.

The magnetic bearing of the true meridian at 7 h. 30 m. is N.17° 15W., the angle thus determined gives the magnetic decl. 17°15'E

From the tp. cor. already described

I run

North , bet. secs. 31 and 36

Over level land through short undergrowth of shadscale and some greasewood.

40.00 Set an iron post , 3 ft. long , 1 in, in dia., 24 ins. in the ground for $\frac{1}{4}$ sec. cor., with brass cap marked

S $\frac{1}{4}$ 36 | S 31

1913

dig pits , 18 x 18 x 12 ins., N. and S. of post , 3 ft. dist., raise a mound of earth , 3½ft. base , 1½ ft. high , W. of cor.

80.00 Set an iron post , 3 ft. long , 3 ins. in dia., 24 ins. in the ground for cor. of secs. 25 , 30 , 31 and 36 , with brass cap marked

T 2 N

R 12 W | R 11 W

S 25 | S 30

S 36 | S 31

1913

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.

Soil , light, dry , fine , warm sandy clay , on hard friable clay sub-soil ; 2.nd. rate.

No timber.

Undergrowth , short shadscale and some scattering greasewood.

West boundary of T.2 N.,R.11 W.

chains

North , bet. secs. 25 and 30

Over level land through greasewood and shadscale undergrowth.

40.00 Set an iron post , 3 ft. long , 1 in. in dia., 24 ins. in the ground for $\frac{1}{4}$ sec. cor., with brass cap marked

S $25\frac{1}{4}$ | S 30

1913

dig pits , 18 x 18 x 12 ins., N. and S. of post , 3 ft. dist., raise a mound of earth , $3\frac{1}{2}$ ft. base , $1\frac{1}{2}$ ft. high , W. of cor.

80.00 Set an iron post , 3 ft. long , 3 ins. in dia., 24 ins. in the ground for cor. of secs. 19 , 24 , 25 and 30 , with brass cap marked

T 2 N

R 12 W | R 11 W

S 24 | S 19

S 25 | S 30

1913

dig pits , 18 x 18 x 12 ins., in each sec., $5\frac{1}{2}$ ft. dist., raise a mound of earth , 4 ft. base , 2 ft. high , W. of cor.

Land , level with gentle S.exposure.

Soil , light , dry , sandy clay , slightly baked and mixed with alkali on a hard friable clay sub-soil ; 2 nd. rate.

No timber.

Undergrowth , considerable greasewood about 3 ft. high , and some short shadscale.

North , bet. secs. 19 and 24.

Gradually ascend over nearly level land , through short undergrowth of shadscale and some greasewood about 3 ft. high.

33.80 Wagon road , bears NW. and SE

40.00 Set an iron post , 3 ft. long , 1 in. in dia., 24 ins. in

West boundary of T.2 N., R.11 W.

chains

the ground for ¼ sec. cor., with brass cap marked

S 24¼ | S 19

1913

dig pits , 18 x 18 x 12 ins., N. and S. of post , 3 ft. dist., raise a mound of earth , 3½ ft. base , 1½ ft. high , W. of cor.

50.00 Leave greasewood undergrowth , bears E. and W.

80.00 Set an iron post , 3 ft. long , 3 ins. in dia., 24 ins. in the ground for cor. of secs. 13 , 18 , 19 and 24 , with brass cap marked

T 2 N
R 12 W | R 11 W
S 13 | S 18
S 24 | S 19

1913

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 , nearly level with gentle S. exposure.

Soil , light , dry , fine , warm sandy clay , slightly baked on deep sandy clay sub-soil ; 2 nd. rate.

No timber.

Undergrowth , short shadscale throughout the mile and considerable greasewood about 3 ft. high on S. 50 chs.

North , bet. secs. 13 and 18

Ascend over rolling mountainous land sloping SE., through short undergrowth of shadscale.

35.00 Spur , 70 ft. above sec. cor., projects SE.

Descend 30 ft. to

39.90 Hollow , drains SE.

Ascend.

40.00 Set an iron post , 3 ft. long , 1 in. in dia., 24 ins. in

chains

the ground for $\frac{1}{4}$ sec. cor., with brass cap marked

S $13\frac{1}{4}$ | S 18

1913

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

65.20 Spur , 75 ft. above hollow , projects SE.

Gradually descend.

70.00 Hollow , near head , 30 ft. deep , course SE.

Ascend.

75.50 Ridge , 175 ft. above sec. cor., bears NE. and SW.

Descend abruptly over rocky NW. slope.

80.00 Set an iron post , 3 ft. long , 3 ins. in dia., 24 ins. in a mound of stone and earth , 4 ft. base , 2 ft. high for cor. of secs. 7 , 12 , 13 and 18 , with brass cap marked

T 2 N
R 12 W | R 11 W
S 12 | S 7

S 13 | S 18

1913

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

Note:
On account of natural obstacles I am unable to set post in the ground.

Land , broken mountains with SE. exposure on S.75.50 chs. and NW. exposure on N.4.50 chs. Highest point of elevation about 175 ft. above surrounding country.

Soil , gravelly and rocky on rocky sub-soil ; 4 th. rate.

No timber.

Undergrowth , short shadscale and some bunch grass good for grazing purposes.

North , bet. secs. 7 and 12.

Descend over rough NW. slope of rocky ridge , through short undergrowth of shadscale

West boundary of T.2 N., R.11 W.

chains	
20.00	Hollow , 75 ft. below sec. cor., course NW.
	Ascend 30 ft. to
30.00	Low rocky spur , projects NW.
	Descend.
35.00	Small hollow , drains NW.
	Gradually ascend.
40.00	Set an iron post , 3 ft. long , 1 in. in dia., 24 ins. in the ground for $\frac{1}{4}$ sec. cor., with brass cap marked S $12\frac{1}{4}$ | S 7 1913 raise a mound of stone , 2 ft. base , $1\frac{1}{2}$ ft. high , W. of cor.
45.00	Low spur , projects NW.
55.00	Hollow , 30 ft. deep , course NW.
	Thence over land sloping gently NW. and cut by numereus washes.
70.00	Enter nearly level bench.
80.00	Edge of bench , bears NE. and SW.
	Set an iron post , 3 ft. long , 3 ins. in dia., 24 ins. in the ground for cor. of secs. 1 , 6 , 7 and 12 , with brass cap marked T 2 N R 12 W | R 11 W S 1 | S 6 S 12 | S 7 1913 raise a mound of stone , 2 ft. base , $1\frac{1}{2}$ ft. high , W. of cor.
	Land , mountainous , with a general NW. exposure.
	Soil , gravelly , rocky and some sand on gravelly and rocky sub-soil ; 3 rd. rate.
	No timber.
	Undergrowth , short shadscale and some bunchbgrassgood for grazing purposes.
	Mountainous land , 80.00 chs.

West boundary of T. 2 N., R. 11 W.

chains

June 5 : At this sec. cor., I set off 22°33' N., on the decl. arc ; and at 11 h. 58 m. a. m. l. m. t., observe the sun on the meridian ; the resulting lat. is 40°56'

North , bet. secs. 1 and 6.

Descend over mountainous land through dense undergrowth of sage brush.

20.00 Base of mountain , 75 ft. below sec. cor., bears NE. and SW.

Thence over nearly level land.

31.20 Dim wagon road , bears NE. and SW.

40.00 Set an iron post , 3 ft. long , 1 in. in dia., 24 ins. in the ground for ¼ sec. cor., with brass cap marked

S 1¼ | S 6

1913

dig pits , 18 x 18 x 12 ins., N. and S. of post , 3 ft. dist., raise a mound of earth , 3½ ft. base , 1½ ft. high , W. of cor.

80.00 Set an iron post , 3 ft. long , 3 ins. in dia., 24 ins. in the ground for cor. of Tps. 2 and 3 N., Rs. 11 and 12 W., with brass cap marked

T 3 N
R 12 W | R 11 W
S 36 | S 31

S 1 | S 6
R 12 W | R 11 W
T 2 N

1913

dig pits , 24 x 24 x 12 ins., N., E., and W. 4 ft., and S. of post , 8 ft. dist., raise a mound of earth , 5 ft. base , 2½ ft. high , S. of cor.

Land mountainous S.20 chs., rolling on N.60 chs.

Soil , mountainous part , generally gravelly and rocky while that of the level land or N.60 chs., is a light , dry , warm clay on dry friable clay sub-soil ; 2 nd. rate.

chains

No timber.

Undergrowth , short sage brush and a few scattering greasewood.

Mountainous land 20.00 chs.

June 5 , 1913

NORTH BOUNDARY OF T.2 N.,R.11 W.

June 13 : At 8 h.00 m. a. m. l. m. t., I set off 40°56' on the lat. arc ; 23°14' N., on the decl. arc ; and determine a meridian with the solar at the cor. of Tps. 2 and 3 N., Rs. 10 and 11 W.

Thence I run

West on a random line , along the N. bdy. of T.2 N.,R.11 W., setting temp. ¼ sec. and sec. cors. at intervals of 40.00 chs.

120.00 June 13: At this station I set off 23°14' N., on the decl. arc ; and at 12 h. 00 m. a. m. l. m. t., observe the sun on the meridian , the resulting lat. is 40°56'

240.00 Cease work

June 13 , 1913

June 14 : At 7 h. 30 m. a. m. l. m. t., I set off 40°56' on the lat. arc ; 23°17' N., on the decl. arc ; and determine a meridian with the solar at the above station.

Thence I continue

West , on a random line along the N. bdy. of T.2 N.,R.11 W. and at479.20 chs.,intersect N. and S. line 28 lks. S. of the cor. of Tps.2 and 3 N.,Rs. 11 and 12 W.,heretofore described. The falling answers to a correction of 0°02' , or 4⅔ lks. N. per mile , counting from the NE, cor. of the tp.; therefore I run

S.89°58'E., on true line bet. secs. 6 and 31

. North boundary of T.2 N., R.11 W.

chains	
	Over nearly level land , through short undergrowth of shadscale.
35.80	Dim wagon road , bears NE. and SW.
	Enter greasewood undergrowth about 3 ft. high , bears NE. and SW.
39.20	Set an iron post , 3 ft. long , 1 in. in dia., 24 ins. in the ground for $\frac{1}{4}$ sec. cor., with brass cap marked

S 31¼
S 6
1913

dig pits , 18 x 18 x 12 ins., E. and W. of post , 3 ft. dist., raise a mound of earth , 3½ft. base , 1½ ft. high , N. of cor.

46.80	Leave greasewood , enter rolling land , bears NE. and SW. Gradually ascend.
79.20	Set an iron post., 3 ft. long ,.3 ins. in dia., 24 ins. in the ground for cor. of secs. 5 , 6 , 31 and 32 , with brass cap marked

T 3 N | R 11 W
S 31	S 32.
S 6	S 5

T 2 N
1913

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

Land , rolling and nearly level , with a general NW. exposure.

Soil , light , clay and gravel on a hard , friable clay sub-soil ; 3 rd. rate.

No timber.

Undergrowth , short shadscale and some greasewood on 11.00 chs.

S,89° 58'E., bet. secs. 5 and 32.

North boundary of T.2 N.,R.11 W.

chains	
	Gradually ascend over rolling land through short undergrowth of shadscale.
15.40	Wash , 10 lks. wide , 3 ft. deep , course NW.
26.70	Wash , 10 lks. wide , 10 ft. deep , course NW.
40.00	Set an iron post , 3 ft. long , 1 in, in dia., 24 ins. in the ground for ¼ sec. cor., with brass cap marked S 32 ¼ S 5 1913 raise a mound of stone , 2 ft. base , 1½ ft. high , N. of cor.
40.50	Wash , 10 lks. wide , 4 ft. deep , course NW. Thence gradually ascend over land subject to floods.
48.50	Wagon road , bears NW. and S.20°E. June 14: At this station I set off 23°17' N., on the decl. arc.; and at 12 h. 00 m. a. m. l. m. t., observe the sun on the meridian.; the resulting lat. is 40°56'.
63.50	Wash , 60 lks. wide , 1 ft. deep , course S.85°W. Enter mountainous land , bears N. and S. Ascend abruptly.
71.00	Spur , 60 ft. high , projects NW. Descend abruptly.
76.00	Bottom of hollow and wash , 50 lks. wide , 3 ft. deep , 60 ft. below spur , course NW. Ascend abruptly.
80.00	Spur , 75 ft. above hollow , projects NW. Set an iron post , 3 ft. long , 3 ins. in dia., 24 ins. in the ground for cor. of secs. 4 , 5 , 32 and 33 , with brass cap marked T 3 N | R 11 W S 32 | S 33 S 5 | S 4 T 2 N 1913 raise a mound of stone , 2 ft. base , 1½ ft. high , W. of cor.

North boundary of T.2 N., R.11 W.

chains	
	Land , mountainous and rolling with a general NW. exposure.
	Soil , gravelly , rocky and some sandy on gravelly and rocky sub-soil ; 4 th. rate.
	No timber.
	Undergrowth , short shadscale.
	Mountainous land , 17.50 chs.
	S.89°58'E., bet. secs. 4 and 33
	Over broken mountainous land through short undergrowth of shadscale and a fewscattering scrub cedar trees.
	Descend.
1.40	Hollow , 30 ft. below sec. cor., course NW.
	Ascend gradually over W. face of mountain.
34.00	Base of steep ascent , bears N. and S.
	Ascend abruptly over ledges and boulders.
39.75	Top of steep ascent and ledges , 300 ft. above sec. cor., bears N. and S.
	Gradually ascend.
40.00	Set an iron post , 3 ft. long , 1 in. in dia., 24 ins. in a mound of stone and earth , 4 ft. base ,2 ft. high , for $\frac{1}{4}$ sec. cor., with brass cap marked
	$\frac{S\ 33\ \frac{1}{4}}{S\ 4}$
	1913
	raise a mound of stone , 2 ft. base , $1\frac{1}{2}$ ft. high , N. of cor.
	Note: On account of natural obstacles I am unable to set post in the ground.
41.00	Spur , projects SW.
	Descend abruptly over ledges.
45.05	Hollow , 100 ft. deep , course SW.
	Ascend abruptly.
50.60	Spur , 60 ft. high , projects SW.
	Descend abruptly.

North boundary of T.2 N.,R.11 W.

chains

55.60 Hollow , 100 ft. deep , course SW.

Ascend abruptly.

67.20 Ridge , 200 ft. above hollow , bears NE. and SW.

Descend abruptly.

70.90 Hollow , 100 ft. deep , course S.

Ascend abruptly.

80.00 Ridge , 100 ft. above hollow , bears N. and S.

Set an iron post , 3 ft. long , 3 ins. in dia., 24 ins. in the ground for cor. of secs. 3 , 4 , 33 and 34 , with brass cap marked

T 3 N S 33	R 11 W S 34
S 4	S 3

T 2 N

1913

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

Land , rough mountainous with a general W. drainage.

Soil , rocky and gravelly on rocky sub-soil ; 4 th. rate.

Timber , a few scattering scrub cedar.

Undergrowth , short shadscale.

Mountainous or timbered land 80.00 chs..

S.89°58'E., bet. secs. 3 and 34

Over rough mountainous land through scattering scrub cedar and pinon timber and undergrowth of shadscale.

Descend 70 ft. to

4.00 Hollow , drains SE.

Ascend abruptly 160 ft. to

7.50 Spur , projects S.

Descend abruptly 160 ft. to

16.70 Hollow , drains SW.

Ascend abruptly 250 ft. to

34.00 Spur , projects NW.

chains

Descend abruptly.

37.50 Hollow , 60 ft. below spur , course NW.

Ascend abruptly.

40.00 Set an iron post , 3 ft. long , 1 in. in dia., 24 ins. in the ground for $\frac{1}{4}$ sec. cor., with brass cap marked

S $34\frac{1}{4}$

S 3
1913

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

49.00 Top of high mountain ridge , 100 ft. above $\frac{1}{4}$ sec. cor., bears N. and S.

Enter dense scrub cedar timber , bears N. and S.

Descend.

63.20 Hollow , 150 ft. below ridge , course NE.

Ascend.

66.50 Low spur , projects N.

Gradually descend.

79.50 Hollow , drains SE.

Ascend.

80.00 Set an iron post , 3 ft. long , 3 ins. in dia., 24 ins. in the ground for cor. of secs. 2 , 3 , 34 and 35 , with brass cap marked

T 3 N S 34	R 11 W S 35
S 3	S 2

T 2 N
1913

from which

A cedar , 12 ins. diam., bears N.52°E.,70 lks. dist., marked T 3 N R 11 W S 35 B T

A cedar , 10 ins. diam., bears S.$16\frac{3}{4}$°E., 87 lks. dist., marked T 2 N R 11 W S 2 B T

A cedar , 8 ins. diam., bears S.$64\frac{1}{4}$°W., 65 lks. dist., marked T 2 N R 11 W S 3 B T

A cedar , 11 ins. diam., bears N.$63\frac{1}{2}$°W., 96 lks. dist., marked T 3 N R 11 W S 34 B T

North boundary of T.2 N., R.11 W.

chains	
	Land , rough mountains with steep E. and W. slopes of ridges into canyons draining S. on W.49.00 chs. and NE. on E.31.00 chs.
	Soil , gravelly , rocky and some sandy clay on a hard clay and rock sub-soil ; 4 th. rate.
	Timber , scrub cedar and some pinon.
	Undergrowth , short shadscale and some sage brush.
	Mountainous and timbered land , 80.00 chs.
	S.89°58'E., bet. secs. 2 and 35.
	Over rough mountainous land through dense scrub cedar and pinon timber and undergrowth of sage brush,
	Ascend.
2.00	Low spur , projects S.
	Descend abruptly.
4.00	Main hollow , 30 ft. deep , course NE.
	Ascend 100 ft to.
12.40	Spur , projects N.
	Descend 50 ft. to
15.90	Hollow , drains N.
	Ascend 90 ft. to
19.20	Spur , projects N.
	Descend 30 ft. to
21.50	Hollow , drains N.
	Ascend 40 ft. to
26.60	Spur , projects N.20°W.
	Descend 120 ft. to.
37.40	Hollow , drains NW.
	Ascend 50 ft. to
40.00	Set an iron post , 3 ft. long , 1 in. in dia., 24 ins. in the ground for $\frac{1}{4}$ sec. cor., with brass cap marked S 35 $\frac{1}{4}$ S 2 1913 raise a mound of stone , 2 ft. base , 1½ ft. high , N.

North boundary of T.2 N.,R.11 W.

chains	
	of cor.
63.30	Top of high mountain ridge , 200 ft. above ¼ sec. cor., bears N.20°W. and S.20°E.
	Descend abruptly over steep E. slope.
80.00	450 ft. below top of ridge.
	Set an iron post , 3 ft. long , 3 ins. in dia., 12 ins. in the ground and 12 ins. in a mound of stone and earth , 4 ft. base , 1 ft. high , for cor. of secs. 1 , 2 , 35 and 36 , with brass cap marked

T 3 N | R 11 W
S 35	S 36
S 2	S 1

T 2 N
1913

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

Note:
On account of natural obstacles I am unable to set post more than 12 ins. in the ground.

Land , rough mountainous with steep E. and W. slopes of ridges into hollows draining NE.

Soil , gravelly and rocky with some rich mountain soil on gravelly rocky and sand sub-soil ; 3 rd. rate.

Timber , scrub cedar and pinon.

Undergrowth , short sage brush and some rich bunch grass good for grazing purposes.

Mountainous and timbered land , 80.00 chs.

S.89°58'E. bet. secs. 1 and 36

Over broken mountainous land draining NE., through scrub cedar and pinon timber and undergrowth of short sage brush,

Descend

2.00 Hollow , near head , drains NE.

. North boundary of T.2 N.,R.11 W.

chains

. Gradually ascend

12.45 Top of high spur , projects NE.

Descend abruptly 150 ft. to

21.70 Hollow , from SW. drains E.

Thence down hollow.

27.70 Mouth of hollow , from SE.

33.50 Hollow turns SE.

Ascend.

36.35 Spur , 50 ft. high projects SE.

Descend abruptly 50 ft. to

40.00 On S. side of wash in hollow.

Set an iron post , 3 ft. long , 1 in. in dia., 24 ins. in a mound of stone and earth , 4 ft. base , 2 ft. high , for $\frac{1}{4}$ sec. cor., with brass cap marked

$$\frac{S\ 36\frac{1}{4}}{S\ 1}$$
$$1913$$

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

Note:
On account of natural obstacles I am unable to set post in the ground.

Gradually descend.

45.00 Bottom of hollow , drains SE. 5 chs., thence E.

Gradually ascend over broken ground.

55.30 Spur , projects SE.

Descend abruptly 60 ft. to.

63.00 Mouth of hollow , drains NE.

Gradually descend 30 ft. to

80.00 The cor. of Tps.2 and 3 N.,Rs. 10 and 11 W.

Land , rough mountains with general E. exposure.

Soil ; gravelly and rocky on rocky sub-soil ; 4 th.rate

Timber , scrub cedar and pinon.

Undergrowth , short sage brush and some rich bunch grass good for grazing purposes.

North boundary of T.2 N.,R.11 W.

chains

Mountainous or timbered land , 80.00 chs.

June 14 , 1913

BOUNDARIES OF T.2 N., R.11 W.

LATITUDES , DEPARTURES AND CLOSING ERRORS.

Lines designated	True bearing	Distances.	Latitudes N.	Latitudes S.	Departures. E.	Departures. W.
		chs.	chs.	chs.	chs.	chs.
E. bdy. T.2N.,R.11W.	South	480.00		480.00.		
S.bdy. T.2N.,R.11W.	S.89°59'W.	479.65.		.14		479.65
W. bdy. T.2 N.,R.11W.	North	480.00.	480.00.			
N. bdy. T.2N.,R.11W.	S.89°58'E.	479.20.		.28	479.20	
Convergency					.63	
Totals.			480.00	480.42	479.83	479.65
			480.00		479.65	

Error in latitude------ .42

Error in departure------- .18

For general description see book "G" of this survey.

Howard W. Miller

U. S. Surveyor.

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Page

Filed Apr. 9, 1914.

1. Retracement of the east boundary of T. 3 N., R. 10 W.

chains

Survey commenced June 25, 1913 and executed with a Young and sons light mountain transit No, 8147. For description and test of instrument see page "1" of this bookey. I examine the adjustments of the transit and correct the level and collimation errors.

Having observed Polaris at the cor. of Tps. 2 and 3 N., Rs. 9 and 10 W. on June 10, (notes of this observation recorded on page 76" of this bookey) I proceed to retrace this boundary as follows :

At 8 h. a. m. l. m. t., I place my transit over the cor. of Tps. 2 and 3 N., Rs. 9 and 10 W., direct the telescope to the nail in the hub set in the ground about 5 chs. N., during the progress of the observation on Polaris June 10, and deflect the azimuth of Polaris 3' to the West.

Thence I run North, retracing bet. secs. 31 and 36.

39.99 Fall 4 lks. W. of the ¼ sec. cor., which is an iron post, 1 in. in dia., 12 ins. above ground, firmly set, properly marked and witnessed.

The true bearing of this ½ mile is therefore N. 0° 03' E., and the distance is 39.99 chs.

From my point 4 lks. W. of the ¼ sec. cor. I continue North

39.98 Fall 7 lks. W. of the cor. of secs. 25, 30, 31 and 36, which is an iron post, 3 ins. in dia., 12 ins. above ground, firmly set, properly marked and witnessed.

The true bearing of this ½ mile is therefore N. 0° 03' E., and the distance is 39.98 chs.

From my point 7 lks. W. of the cor. of secs. 25, 30, 31 and 36, I run

North, bet. secs. 25 and 30

40.00 Fall 11½ lks. W. of the ¼ sec. cor., which is an iron post

chains	
	1 in. in dia., 12 ins. above ground , firmly set , properly marked and witnessed.
	The true bearing of this ½ mile is therefore N.0°04'E., and the distance is 40.00 chs.
	From my point 11½ lks. W. of the ¼ sec. cor., I continue North
40.00	Fall 15½ lks. W. of the cor. of secs. 19 , 24 , 25 and 30 , which is an iron post , 3 ins. in dia., 12 ins. above ground , properly marked and witnessed.
	The true bearing of this ½ mile is therefore N.0°03'E., and the distance is 40.00 chs.

	From my point 15½ lks. W. of the cor. of secs. 19 , 24 , 25 and 30 , I run North , retracing bet. secs. 19 and 24
40.01	Fall 21 lks. W. of the ¼ sec. cor., which is an iron post , 1 in. in dia., 12 ins. above ground., firmly set , properly marked and witnessed.
	The true bearing of this ½ mile is therefore N.0°05'E., and the distance is 40.01 chs.
	From my point 21 lks. W. of the ¼ sec. cor., I continue North
40.00	Fall 28 lks. W. of the cor. of secs. 13 , 18 , 19 and 24 , which is an iron post , 3 ins. in dia., 12 ins. above ground , firmly set , properly marked and witnessed.
	The true bearing of this ½ mile is therefore N.0°06'E., and the distance is 40.00 chs.

	From my point 28 lks. W. of the cor. of secs. 13 , 18 , 19 and 24 , I run North , retracing bet. secs. 13 and 18
40.00	Fall 34½ lks. W. of the ¼ sec. cor. which is an iron post , 1 in. in dia., 12 ins. above ground , firmly set , properly marked and witnessed.

chains

The true bearing of this ½ mile is therefore N.0°06'E., and the distance is 40.00 chs.

From my point 34½ lks. W. of the ¼ sec. cor., I continue North.

39.98 Fall 44½ lks. W. of the cor. of secs. 7 , 12 , 13 and 18 which is an iron post , 3 ins. in dia., 12 ins. above ground , firmly set , properly marked and witnessed.

The true bearing of this ½ mile is therefore N.0°09'E., and the distance is 39.98 chs.

From my point 44½ lks. W. of the cor. of secs. 7 , 12 , 13 and 18 , I run

North , retracing bet. secs. 7 and 12

40.04 Fall 54 lks. W. of the ¼ sec. cor., which is an iron post , 1 in. in dia., 12 ins. above ground , firmly set , properly marked and witnessed.

The true bearing of this ½ mile is therefore N.0°09'E., and the distance is 40.04 chs.

From my point 54 lks. W. of the ¼ sec. cor., I continue North

40.00 Fall 68 lks. W. of the cor. of secs. 1 , 6 , 7 and 12 which is an iron post , 3 ins. in dia., 12 ins. above ground , firmly set , properly marked and witnessed.

The true bearing of this ½ mile is therefore N.0°12'E., and the distance is 40.00 chs.

From my point 68 lks. W. of the cor. of secs. 1 , 6 , 7 and 12 , I run

North , retracing bet. secs. 1 and 6

39.99 Fall 78 lks. W. of the ¼ sec. cor., which is an iron post , 1 in. in dia., 12 ins. above ground , firmly set , properly marked and witnessed.

The true bearing of this ½ mile is therefore N.0°09'E., and the distance is 39.99 chs.

chains	
	From my point , 78 lks. W. of the ¼ sec. cor., I continue North.
39.93	Fall 88 lks. W. of the cor. of Tps. 3 and 4 N., Rs. 9 and 10 W., which is an iron post , 3 ins. in dia., 12 ins. above ground, firmly set, properly marked and witnessed.
	The true bearing of this ½ mile is therefore N.0°09'E. and the distance is 39.93 chs.
	June 25, 1913

WEST BOUNDARY OF T.3 N.,R.10 W.

Survey commenced June 30 , and executed with a Young and sons transit No.8147. For description and test of instrument see page 1 of this ~~xxxxxx~~ book. I know the instrument to be in perfect adjustment by recently testing it upon a Polaris meridian at my camp near the cor. of secs. 16, 17, 20 and 21. I will , however test the instrument upon the same meridian at the close of the survey of this boundary.

At 7 h. 03 m. a. m. l. m. t., I set off 40°56' on the lat. arc ; 23°13'N., on the decl. arc ; and determine a meridian with the solar at the cor. of Tps. 2 and 3 N., Rs. 10 and 11 W. heretofore described.

Thence I run North , bet. secs. 31 and 36

Over rolling mountainous land sloping E., through scattering scrub cedar timber and undergrowth of short shadscale

12.70	Gulch , 30 ft. deep , course N.70°E.
24.20	Gulch , 50 ft. deep , course E.
30.10	Road , bears NW. and SE.
33.30	Ascend abruptly.
36.30	Top of spur , projects SW., 5 chs.
	Gradually descend over gentle NW. slope.
40.00	Set an iron post , 3 ft. long , 1 in. in dia., 24 ins. in

chains	
	the ground for ¼ sec: cor:, with brass cap marked S 36¼ | S 31 1913
	raise a mound of stone , 2 ft. base , 1½ ft. high , W. of cor.
50.40	Gulch , 70 ft. deep , course E.
	Ascend
63.90	Spur , 60 ft. high , projects N.50°E.
	Thence over land sloping almost E.
67.90	Begin gradual descent over land sloping N.
80.00	50 ft. below spur.
	Set a limestone , 28 x 18 x 12 ins., 21 ins. in the ground for cor. of secs. 25 , 30 , 31 and 36 , marked with 5 notches on N. and 1 notch on S. edge ; raise a mound of stone , 2 ft. base , 1½ ft. high , W. of cor.
	Land , mountainous with a general E. exposure.
	Soil , gravelly , rocky and some light dry sandy clay on hard gravel and clay sub-soil ; 3 rd. rate.
	Timber , a few scattering cedar:
	Undergrowth , short shadscale and scattering patches of bunch grass ; good for grazing purposes.
	Mountainous land , 80.00 chs.

	North , bet. secs. 25 and 30
	Gradually descend over mountainous land sloping almost E., through short undergrowth of shadscale and scattering scrub cedar timber.
12.50	Bottom of small gulch and wash , 50 lks. wide , 1 ft. deep , 30 ft. below sec. cor., course NE.
	Ascend.
38.00	Spur , 50 ft. above gulch , projects NE.
	Descend.
40.00	Set an iron post , 3 ft. long , 1 in. in dia., 24 ins. in

chains

the ground for ¼ sec. cor., with brass cap marked

S 25½ | S 30

1913

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

41.00 Gulch , 20 ft. deep , course SE.

Ascend.

56.20 Spur , 75 ft. above gulch , projects SE.

Descend.

65.70 Gulch , 100 ft. below spur , course E.

Ascend abruptly.

70.00 Top of flat spur , projects E.

75.00 Descend.

78.70 Gulch , 50 ft. below spur , course SE.

Ascend.

80.00 Set a limestone , 18 x 6 x 6 ins., 12 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 , 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 , mountainous with a general E. exposure.

Soil , light , dry , warm sandy clay , gravelly and some rocks on hard , dry clay and gravel sub-soil ; 3 rd. rate.

Timber , a few scattering scrub cedar on S.½ mile.

Undergrowth , short shadscale and some bunch grass , good for grazing purposes.

Mountainous land , 80.00 chs.

North , bet. secs. 19 and 24

Gradually ascend over mountainous land facing SE., through short undergrowth of shadscale.

4.00 Ascend abruptly over S. slope of ridge.

15.00 Top of ridge , 100 ft.above sec. cor., bears NW. and SE

West boundary of T.3 N., R.10 W.

chains	
	Thence gradually descend along top of E. slope of ridge.
36.80	Same ridge , bears NE. and SW.
	Descend.
40.00	On NW. slope.
	Set an iron post., 3 ft. long , 1 in. in dia., 24 ins. in the ground for ¼ sec. cor., with brass cap marked
	S 24¼ | S 19
	1913
	dig pits , 18 x 18 x 12 ins., N. and S. of post , 3 ft. dist., raise a mound of earth , 3½ ft. base , 1½ ft. high , W. of cor.
49.50	Bottom of gulch and wash , 25 lks. wide , 50 ft. below ¼ sec. cor., course NE,
	Thence gradually ascend over broken land sloping E.
62.00	Wagon road , bears N.30°E. and S.30°W.
73.80	Top of flat spur , near NE. point .
	Gradually descend.
80.00	Set a limestone , 24 x 18 x 6 ins., 18 ins. in the ground for cor. of secs. 13 , 18 x 19 and 24 , marked with 3 notches on N. and 3 notches on S. edge ; raise a mound of stone , 2 ft. base , 1½ ft. high , W. of cor.
	Land , mountainous with a general E. exposure.
	Soil , gravelly , stony and rocky with scattering patches of light , dry clay on gravelly and rocky sub-soil ; 4 the rate.
	No timber.
	Undergrowth , short shadscale and scattering bunch grass.
	Mountainous land , 80.00 chs.
	North , bet. secs. 13 and 18
	Gradually descend over mountainous land facing N., through short undergrowth of shadscale.
40.00	110 ft. below sec. cor.
	Set an iron post , 3 ft. long , 1 in. in dia., 24 ins.

chains	
	in the ground for ¼ sec. cor., with brass cap marked S 13¼ | S 18 / 1913 dig pits ; 18 x 18 x 12 ins., N. and S. of post, 3 ft. dist., raise a mound of earth, 3½ ft. base , 1½ ft. high , W. of cor.
58.40	Base of mountain , 50 ft. below ¼ sec. cor., bears E. and W.
	Thence over nearly level land.
80.00	Set a limestone , 24 x 8 x 6 ins., 18 ins. in the ground for cor. of secs. 7 , 12 , 13 and 18 , marked with 2 notches on N. and 4 notches on S. edge ; 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 , mountainous and level having a general N. exposure.
	Soil of mountainous part , gravelly and rocky mixed with considerable light , dry , warm sandy clay , on gravelly and clay sub-soil ; 3 rd. rate. Soil of level land , light , dry , fine sandy loam on sandy and gravelly sub-soil ; 1st. rate.
	No timber.
	Undergrowth , short shadscale and considerable short bunch grass.
	Mountainous land , 58.40 chs.
	June 30 : At this sec. cor., I set off 33°12' N., on the decl. arc ; and at 12 h. 03 m. p. m. l. m. t., observe the sun on the meridian ; the resulting lat. is 40°59'.

	North , bet. secs. 7 and 12 ----------
	Gradually descend over nearly level land sloping N., through short undergrowth of shadscale.
11.40	East from line , 3.68 chs., is a large granite stone marked "B on N., R.10W. on E., T. on S. and R 11 W on W. face. This is probably a cor. on the boundary line

chains	
	between Box Elder and Tooele counties.
24.50	Wagon road , bears N.80°W. and S.80°E.
40.00	Set an iron post , 3 ft. long , 1 in. in dia., 24 ins. in the ground for ¼ sec. cor., with brass cap marked S 12¼ | S 7 1913 raise a mound of stone , 2 ft. base , 1½ ft. high , W. of cor.
42.60	Wagon road , bears N.60°W. and S.60°E.
67.90	Large wash and base of descent , course W. Gradually ascend.
71.20	Wagon road , bears NE. and SW.
80.00	On rocky S. slope. The point for cor. of secs. 1 , 6 , 7 and 12 falls on a flat rock , about 4 ft. in diam., on which I Cut a cross (+) at the cor. point for secs. 1 , 6 , 7 and 12 , with 1 notch N. and 5 notches S. of cross , raise a mound of stone , 2 ft. base , 1½ ft. high , W. Of cor. Land rolling with a general NW. drainage. Soil , light , fine , dry , warm sandy clay , and gravel on hard , dry sandy clay and gravel sub-soil ; 2 nd. rate. Some rocky soil on N.5 chs. Undergrowth , short shadscale and some bunch grass.

North , bet. secs. 1 and 6

Over mountainous land covered with short undergrowth of of shadscale.

Ascend.

10.70	Spur , 50 ft. above sec. cor., projects SW. Gradually descend.
17.70	Hollow , 50 ft. below spur , course W. Ascend over SW. slope of spur.

chains	
31.70	Top of spur , 150 ft. above hollow , projects S.5°E.
	Gradually descend over NE. slope.
40.00	Set an iron post , 3 ft. long , 1 in. in dia., 24 ins. in the ground for $\frac{1}{4}$ sec. cor., with brass cap marked
	S $1\frac{1}{4}$ | S 6
	1913
	raise a mound of stone, 2 ft. base , $1\frac{1}{2}$ ft. high , W. of cor.
59.60	Road and bottom of hollow ; 75 ft. below top of spur ; bears NW. and SE., hollow drains SE.
	Ascend.
75.30	Ridge , 75 ft. above hollow , bears NE. and SW.
	Gradually descend.
80.00	Set an iron post , 3 ft. long , 3 ins. in dia., 24 ins. in a mound of earth and stone , 4 ft. base , 2 ft. high for cor. of Tps. 3 and 4 N.,Rs. 10 and 11 W., with brass cap marked
	T 4 N R 11 W | R 10 W S 36 | S 31 S 1 | S 6 R 11 W | R 10 W T 3 N.
	1913
	raise a mound of stone, 3 ft. base , 2 ft. high , S. of cor.
	Note : On account of natural obstacles I am unable to set post in the ground.
	Land , mountainous with NE. and SW. slopes of ridges.
	Soil , gravelly , rocky and some light , dry , fine , warm sandy clay on hard gravelly and clay sub-soil ; 3rd rate.
	No timber.
	Undergrowth , short shadscale and considerable bunch grass.
	Mountainous land , 80.00 chs.

North boundary of T.3 N.,R.10 W.

chains

June 30 : At my camp which is situated near the cor. of secs. 16 , 17 , 20 and 21 , T.3 N.,R.10 W., I place my transit over the Polaris meridian established June 28 , during the progress of the survey of the subdivision of T.3 N.,R.10 W. For notes of this observation see book "I" of this survey.

At 5 h. 03 m. p. m. l. m. t., I set off 40°59' on the lat. arc ; 23°12' N., on the decl arc ; and determine a meridian with the solar at the above described station. This meridian falls on the Polaris meridian determined June 28.

June 30 . 1913

July 1: With my instrument occupying the position as described above , I set off 40°59' on the lat. arc ; 23°09'N., on the decl. arc ; and at 7 h. 03 m. a. m. l. m. t., determine with the solar a meridian. This meridian falls about 1' to the right of the Polaris meridian. By a. m. and p. m. observations the instrument does not vary more than 1' from the true Polaris meridian , I therefore conclude that the instrument is in adjustment.

I begin at the cor. of Tps. 3 and 4 N.,Rs. 9 and 10 W.,, heretofore described in approximate lat 41°02' N., longitude 112° 56'W.,

Thence I run

S.89°50' W., on a random line along the N. bdy. of T. 3 N., R.10 W., setting temp. $\frac{1}{4}$ sec. and sec. cors. at intervals of 40.00 chs., and , at 481.90 chs. intersect N. and S. line at the cor. of Tps. 3 and 4 N.,Rs. 10 and 11 W. (This random line was run on a computed course as all of the other boundaries of the township have been previously surveyed by me and knowing that A due West random line would be a great distance from the final

chains	
	true line of said boundary.) . As there is no falling at this tp. cor., the true bearing of this township line is therefore N.89°50'E.; I begin at the cor. of Tps.3 and 4 N.,Rs. 10 and 11 W.
	Thence I run
	N.89°50'E., bet. secs. 6 and 31
	Over mountainous land covered with short undergrowth of shadscale.
	Gradually ascend over gentle NW. slope.
11.90	Top of ridge , 30 ft. above tp. cor., bears NE. and SW.
	Thence gradually descend over broken land sloping S.
41.90	Set an iron post , 3 ft. long , 1 in. in dia., 8 ins. in the ground and 16 ins. in a mound of stone and earth , 4 ft. base , 16 ins. high , for ¼ sec. cor., with brass cap marked S 31 / ¼ S 6 1913 raise a mound of stone , 2 ft. base , 1½ ft. high , N. of cor.
	Note: On account of natural obstacles , I am unable to set post more than 8 ins. in the ground.
44.90	Gulch , 60 ft. deep , course S.
	Gradually ascend over rocky land sloping nearly S.
81.90	75 ft. above gulch.
	Set a limestone , 16 x 18 x 15 ins., 10 ins. in the ground for cor. of secs. 5 , 6 , 31 and 32 , marked with 5 notches on E. and 1 notch on W. edge , raise a mound of stone , 2 ft. base , 1½ ft. high , W. of cor.
	Land , mountainous with NW. exposure on W.11.90 chs. and general S. exposure on E.70.00 chs.
	Soil , gravelly and rocky of volcanic formation on gravelly and rocky sub-soil ; 4 th. rate.
	No timber.
	Undergrowth , short shadscale and some short bunch grass.

chains

Mountainous land , 81.90 chs.

N.89°50'E., bet. secs. 5 and 32.

Over mountainous land covered with short undergrowth of shadscale.

Ascend over rocky SW. face of ridge.

10.40 Top of flat ridge , 50 ft. above sec. cor., bears NW. and SE.

Thence over nearly level land on top of ridge.

23.40 Leave ridge , bears NE. and SW.

Descend abruptly over nearly E. slope.

35.00 Base of steep descent , bears NE. and SW.

Gradually descend.

38.70 Wagon road , bears NE. and SW.

40.00 Set an iron post , 3 ft. long , 1 in. dia., 24 ins. in the ground for $\frac{1}{4}$ sec. cor., with brass cap marked

S 32
$\frac{1}{4}$

S 5
1913

raise a mound of stone , 2 ft. base , 1½ ft. high , N. of cor.

40.50 Head of gulch , draining country to NW., course SE.

Gradually ascend,

53.60 Spur , 50 ft. high , projects S.

Thence gradually descend over broken land sloping SE.

80.00 Set a limestone 24 x 12 x 6 ins.; 8ins. in the ground and supported by a small mound of stone and earth for cor. of secs. 4 , 5 , 32 and 33 , marked with 4 notches on E. and 2 notches on W. edge , raise a mound of stone 2 ft. base , 1½ ft. high , W. of cor.

Note:
On account of underlying rock I am unable to set stone the required distance in ground.

Land , mountainous with SW. exposure on W. 10.40 chs.

chains

and general SE. exposure on E. 56.60 chs. Remainder of mile nearly level land on top of ridge.---

Soil , gravelly and rocky on rocky sub-soil ; 4 th. rate.

No timber.

Undergrowth , short shadscale and scattering patches of bunch grass.

Mountainous land , 80.00 chs.

N.89°50'E., bet. secs. 4 and 33

Gradually descend over rolling mountainous land sloping SE., through short undergrowth of shadscale.

20.00 Wagon road , bears N.15°W. and S.15°E.

37.00 Wide hollow , 40 ft. below sec. cor., course S.

Gradually ascend.

40.00 At base of sharp rocky ridge , bears N. and S.

Set an iron post , 3 ft. long , 1 in. in dia., 12 ins. in the ground and 12 ins. in a mound of stone and earth 4 ft. base , 1 ft. high , for $\frac{1}{4}$ sec. cor., with brass cap marked

S 33
$\frac{1}{4}$

S 4
1913

raise a mound of stone , 2 ft. base , 1½ ft. high , N. of cor.

Note: On account of natural obstacles I am unable to set post more than 12 ins. in the ground.

Ascend abruptly 75 ft. to

44.20 Top of sharp rocky ridge , bears N.20°E. and S.20°W.

Descend abruptly over E. slope.

57.00 Base of ridge , 150 ft. below top , bears N.20°E. and S.20°W.

Thence over nearly level land.

64.60 Wagon road , bears NE. and SW.

chains

80.00 Set an iron post , 3 ft. long , 3 ins. in dia.; 24 ins. in the ground for cor. of secs. 3 , 4 , 33 and 34 , with brass cap marked

T 4 N | R 10 W
S 33	S 34
S 4	S 3
T 3 N
1913

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 , mountainous and level with a general S. drainage.

Mountainous part having E. and W. slopes of ridges.

Soil of mountainous land , generally gravelly and rocky on gravelly and rocky sub-soil ; 4 th. rate. Soil of level land , light , dry , warm sandy clay mixed with small gravel on deep , dry sand sub-soil ; 1 st. rate.

No timber.

Undergrowth , short shadscale and considerable short bunch grass.

Mountainous land , on W. 57.00 chs.

July 1 : At this sec. cor., I set off 23°08'N., on the decl. arc ; and at 12 h. 03 m. p. m. l. m. t., observe the sun on the meridian ; the resulting lat. is 41°02'.

N.89°50'E., bet. secs. 3 and 34

Gradually ascend over nearly level land covered with short undergrowth of shadscale and salt sage.

40.00 Set an iron post , 3 ft. long , 1 in. in dia., 24 ins. in the ground for ¼ sec. cor., with brass cap marked

S 34
¼

S 3
1913

dig pits , 18 x 18 x 12 ins., E. and W. of post , 3 ft. dist., raise a mound of earth , 3½ ft. base , 1½ ft. high

North boundary of T.3 N.,R.10 W.

chains

N. of cor.

80.00 Set an iron post , 3 ft. long , 3 ins. in dia., 24 ins. in the ground for cor. of secs. 2 , 3 , 34 and 35 , with brass cap marked

T 4 N R 10 W	
S 34	S 35
S 3	S 2
T 3 N	

1913

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 , gently rolling with general S. exposure.

Soil , light , dry , fine , warm sandy clay , mixed with gravel on deep sandy sub-soil ; 1 st. rate.

No timber.

Undergrowth , short shadscale and salt sage.

N.89°50'E., bet. secs. 2 and 35

Gradually ascend over nearly level land covered with short undergrowth of shadscale and salt sage.

6.60 Base of mountain , bears NW. and SE.

Ascend abruptly over rough land sloping SW.

35.90 Top of mountain and junction of ridges , 125 ft. above base , bears N.,SE. and SW.

Descend abruptly over rocky E. slope.

40.00 60 ft. below top of ridge.

Set an iron post , 3 ft. long , 1 in. in dia., 24 ins. in a mound of stone and earth , 4 ft. base , 2 ft. high for ¼ sec. cor., with brass cap marked

S 35
¼

S 2
1913

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

North boundary of T.3 N.,R.10 W.

chains

of cor.

Note:
On account of natural obstacles I am unable to set post in the ground.

Continue steep descent.

46.30 Base of steep descent , 75 ft. below ¼ sec. cor,, bears NW. and SE.

Thence gradually descend over rolling bench land sloping NE.

80.00 Set an iron post , 3 ft. long , 3 ins. in dia., 24 ins. ins. in the ground for cor. of secs. 1 , 2 , 35 and 36 with brass cap marked

T 4 N R 10 W S 35	S 36
S 2	S 1

T 3 N
1913

dig pits , 18 x 18 x 12 ins., ineach sec., 5½ ft. dist., raise a mound of earth , 4 ft. base , 2 ft. high , W. of cor.

Land , rolling and mountainous.; W. 6.60 chs. and E. 33.70 chs. rolling land., remainder of mile mountainous. Land of entire mile having a SW. exposure on W.35.90 chs. and NE. exposure on E. 44.10 chs.

Soil , gravelly and light , dry sandy clay , on gravelly sub-soil ; 3 rd. rate. Considerable rocky soil on mountainous part.

No timber.

Undergrowth , short shadscale , salt sage and considerable bunch grass.

Mountainous land , 80.00 chs.

N.89°50'E., bet. secs. 1 and 36

Gradually descend over rolling bench land sloping NE., through short undergrowth of shadscale and salt sage.

10.00 Leave bench , bears NW. and SE.

chains	
	Descend over NE. slope.
25.00	Base of bench , bears NW. and SE., 50 ft. below top.
	Thence across large hollow draining N.
29.90	Wagon road , bears NW. and SE.
	Gradually ascend.
40.00	Set an iron post 3 ft. long , 1 in. in dia., 24 ins. in the ground for $\frac{1}{4}$ sec. cor., with brass cap marked S 36 $\frac{1}{4}$ S 1 1913 dig pits , 18 x 18 x 12 ins., E. and W. of post , 3 ft. dist., raise a mound of earth , 3½ ft. base , 1½ ft. high , N. of cor.
45.50	Wagon road , bears N80°W. and S.80°E.
49.90	Wagon road , bears NE. and SW.
53.50	Wagon road , bears NE. and SW.
63.80	Wagon road , bears NW. and SE.
80.00	The cor. of Tps. 3 and 4 N.,Rs.9 and 10 W., heretofore described.
	Land , rolling with E. and W. slopes into large hollow draining N.
	Soil , light , dry , fine , warm sandy clay , on deep , dry , sandy and gravelly sub-soil ; 2nd. rate.
	No timber.
	Undergrowth , short shadscale and salt sage.

July 1 , 1913

Note: Stone corners were set on this survey where it was impracticable to set iron posts.

Latitudes , departures and closing errors.

Lines designated.	True bearing.	Distances. chs.	Latitudes N. chs.	Latitudes S. chs.	Departures. E. chs.	Departures. W. chs.
W. bdy.	South	480.00		480.00		
S. bdy.	N.89°50'E.	482.00	1.40		482.00	
E.BDY.						
Sec.36,S.½	N.0°03'E.	39.99	39.99			.04
" N.½	N.0°03'E.	39.98	39.98			.04
" 25,S.½	N.0°04'E.	40.00	40.00			.05
" ,N.½	N.0°03'E.	40.00	40.00			.04
" 24 ,S.½	N.0°05'E.	40.01	40.01			.05
" ,N.½	N.0°06'E.	40.00	40.00			.07
" 13 ,S.½	N.0°06'E.	40.00	40.00			.07
" ,N.½	N.0°09'E.	39.98	39.98			.10
" 12 ,S.½	N.0°09'E.	40.04	40.04			.10
" ,N.½	N.0°12'E.	40.00	40.00			.14
" 1 ,S.½	N.0°09'E.	39.99	39.99			.10
" ,N.½	N.0°09'E.	39.93	39.93			.10
N. bdy	S.89°50'W.	481.90		1.40		481.90
Convergency						.63
			481.32	481.40	482.90	482.53
				481.32	482.53	
Error inlat.				.08		
Error in departure						.37

For general description see book "I" of this survey.

Howard W. Miller

U. S. Surveyor.

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Page

EPF. 123

West Boundary of T.3 N., R.11 W.

CHAINS

Survey commenced July 3, 1913 and executed with a Young and sons light mountain transit No. 8147, with solar attachment. For description and test of instrument see page "1" of this book.

I examine the adjustments of the transit and correct the level and collimation errors. I know the solar apparatus to be in perfect adjustment by tests made on a Polaris meridian at my camp which is situated near the cor. of secs. 16, 17, 20 and 21, T.3 N., R.10 W., June 30 and July 1. This meridian was established by an hour angle observation made on Polaris June 28, the notes of this observation being recorded in the subdivision of T.3 N., R.10 W., book "I" of this survey.

I begin at the cor. of Tps. 2 and 3 N., Rs. 11 and 12 W., in approximate lat. 40°56'N.; longitude 113°09'W.

At 9 h. 04 m. a. m. l. m. t., I set off 40°56' on the lat. arc; 23°00'N., on the decl. arc; and determine a meridian with the solar at the above described cor.

Thence I run

North, bet. secs. 31 and 36

Over level land covered with scattering short undergrowth of shadscale.

40.00 Set an iron post, 3 ft. long, 1 in. in dia., 24 ins. in the ground for ¼ sec. cor., with brass cap marked

S 36 ¼	S 31

1913

dig pits, 18 x 18 x 12 ins., N. and S. of post, 3 ft. dist., raise a mound of earth, 3½ ft. base, 1½ ft. high W. of cor.

80.00 Set an iron post, 3 ft. long, 3 ins. in dia., 24 ins. in the ground for cor. of secs. 25, 30, 31 and 36, with brass cap marked

T 3 N.

R 12 W	R 11 W
S 25	S 30
S 36	S 31

1913

chains

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.

Soil , light ; dry , fine , warm sandy clay , baked hard and mixed with alkali on hard , damp , friable clay sub-soil ; 3 rd. rate.

No timber.

Undergrowth , scattering short shadscale.

North , bet. secs. 25 and 30

Over level land covered with short undergrowth of shadscale.

40.00 Set an iron post , 3 ft. long , 1 in. in dia., 24 ins. in the ground for ¼ sec. cor., with brass cap marked

S 25¼ | S 30

1913

dig pits , 18 x 18 x 12 ins., N. and S. of post , 3 ft. dist., raise a mound of earth , 3½ ft. base , 1½ ft. high , W. of cor.

80.00 Set an iron post , 3 ft. long , 3 ins. in dia., 24 ins. in the ground for cor. of secs. 19 , 24 , 25 and 30 , with brass cap marked

T 3 N

R 12 W	R 11 W
S 24	S 19
S 25	S 30

1913

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.

Soil ; light , dry , fine , warm sandy clay , baked hard and containing some alkali on hard , damp , friable clay sub-soil ; 3 rd. rate

West Boundary of T.3 N., R.11 W.

chains

No timber.

Undergrowth , short shadscale.

North , bet. secs. 19 and 24.

Over level land covered with short undergrowth of shadscale.

40.00 Set an iron post , 3 ft. long , 1 in. in dia., 24 ins. in the ground for ¼ sec. cor., with brass cap marked

S 24¼ | S 19

1913

dig pits , 18 x 18 x 12 ins., N. and S. of post , 3 ft. dist., raise a mound of earth , 3½ ft. base , 1½ ft. high , W. of cor.

80.00 Set an iron post , 3 ft. long , 3 ins. in dia., 24 ins. in the ground for cor. of secs. 13 , 18 , 19 and 24 with brass cap marked

T 3 N

R 12 W | R 11 W

S 13 | S 18

S 24 | S 19

1913

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.

Soil , light , dry , fine , warm sandy clay , slightly baked and containing some alkali on hard , moist , ~~sticky claysub-soil ; 3 rd. rate.~~

No timber.

Undergrowth , short shadscale.

North , bet. secs. 13 and 18

Over level land covered with short undergrowth of

chains shadscale.

40.00 Set an iron post , 3 ft. long , 1 in. in dia., 24 ins. in the ground for ¼ sec. cor., with brass cap marked

S 13¼ | S 18

1913

dig pits , 18 x 18 x 12 ins., N. and S. of post , 3 ft. dist., raise a mound of earth , 3½ ft. base , 1½ ft. high , W. of cor.

80.00 Set an iron post , 3 ft. long , 3 ins. in dia., 24 ins. in the ground for cor. of secs. 7 , 12 , 13 and 18 , with brass cap marked

T 3 N

R 12 W | R 11 W

S 12 | S 7

S 13 | S 18

1913

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.

Soil , light , dry , warm sandy clay , slightly baked and mixed with alkali on hard , moist , sticky clay sub-soil ; 3 rd. rate.

No timber.

Undergrowth , short shadscale.

July 3 : At this sec. cor., I set off 22°59'N., on the decl. arc ; and at 12 h. 04 m. p. m. l. m. t., observe the sun on the meridian ; the resutling lat. is 41°00'.

North , bet. secs. 7 and 12

Over level land covered with short undergrowth of shadscale.

40.00 Set an iron post , 3 ft. long , 1 in. in dia., 24 ins. in the ground for ¼ sec. cor., with brass cap marked

S 12¼ | S 7

1913

North Boundary of T.3 N.,R.11 W.

chains

dig pits , 18 x 18 x 12 ins., N. and S. of post , 3 ft. dist., raise a mound of earth , 3½ ft. base , 1½ ft. high , W. of cor.

80.00 Set an iron post , 3 ft. long , 3 ins. in dia., 24 ins. in the ground for cor. of secs. 1 , 6 , 7 and 12 , with brass cap marked

T 3 N
R 12 W | R 11 W
S 1 | S 6
S 12 | S 7

1913

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.

Soil , light , dry , warm sandy clay , slightly baked and mixed with alkali on hard , moist clay sub-soil ; 3 rd. rate.

No timber.

Undergrowth , short shadscale.

North ; bet. secs.1 and 6

Over nearly level land covered with short undergrowth of shadscale and scattering greasewood.

40.00 On top of lone clay and gypsum hill.

Set an iron post , 3 ft. long , 1 in. in dia., 24 ins. in the ground for ¼ sec. cor., with brass cap marked

S 1¼ | S 6

1913

dig pits , 18 x 18 x 12 ins., N. and S. of post , 3 ft. dist., raise a mound of earth , 3½ ft. base , 1½ ft. high , W. of cor.

50.00 The SW. end of a lone rocky ridge , about 200 ft. high , bears E. about 15 chs.

West boundary of T.3 N.,R.11 W.

chains

80.00 Set an iron post, 3 ft. long, 3 ins. in dia., 24 ins. in the ground for cor. of Tps. 3 and 4 N.; Rs. 11 and 12 W., with brass cap marked

T 4 N R 12 W S 36	R 11 W S 31
S 1 R 12 W T 3 N	S 6 R 11 W

1913

dig pits, 24 x 24 x 12 ins., N., E. and W. 4 ft. and S. of post 8 ft. dist., raise a mound of earth, 5 ft. base, 22 ft. high, S. of cor.

Land, level and a small strip of rolling land near middle of mile.

Soil, light, fine, dry warm sandy clay, slightly baked containing some alkali and gypsum on clay and gypsum sub-soil; 2 nd. rate.

No timber.

Undergrowth, short shadscale and scattering greasewood.

July 3, 1913

NORTH BOUNDARY OF T.3 N.,R.11 W.

July 7: At 8 h. 05 m. a. m. l. m. t., I set off 41°02' on the lat. arc, 22°38' N., on the decl. arc; and determine a meridian with the solar at the cor. of Tps. 3 and 4 N., Rs. 10 and 11 W., heretofore described.

Thence I run

West, on a random line along the N. bdy. of T.3 N.,R.11 W., setting temp. ¼ sec. and sec. cors. at intervals of 40.00 chs.; and, at 478.37 chs., intersect N. and S. line, 13.1ks. S. of the cor. of Tps. 3 and 4 N., Rs. 11 and 12 W. heretofore described. The falling answers to a correction of 0°01' or 2.1ks. N. per mile counting from the NE. cor. of the tp., therefore I run

North boundary of T. 3 N., R. 11 W.

chains

S. 89°59'E., on true line bet. secs. 6 and 31

Over slightly rolling land covered with short undergrowth of shadscale and salt sage.

38.37 Set an iron post, 3 ft. long, 1 in. in dia., 24 ins. in the ground for ¼ sec. cor., with brass cap marked

S 31
¼
S 6
1913

dig pits, 18 x 18 x 12 ins., E. and W. of post, 3 ft. dist., raise a mound of earth, 3½ ft. base, 1½ ft. high, N. of cor.

60.00 The E. end of a rocky ridge, bears S. about 25 chs.

78.37 Set an iron post, 3 ft. long, 3 ins. in dia., 24 ins. in the ground for cor. of secs. 5, 6, 31 and 32, with brass cap marked

T 4 N | R 11 W	
S 31 | S 32	
S 6 | S 5	
T 3 N	

1913

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, slightly rolling.

Soil, light, dry, fine, warm, sandy clay on hard, moist, friable clay sub-soil; 2 nd. rate.

No timber.

Undergrowth, short shadscale and salt sage.

S. 89°59'E., bet. secs. 5 and 32.

Over nearly level land covered with short shadscale, salt sage and scattering greasewood undergrowth.

40.00 Set an iron post, 3 ft. long, 1 in. in dia., 24 ins. in the ground for ¼ sec. cor., with brass cap marked

chains

S 32
¼
S 5
1913

dig pits , 18 x 18 x 12 ins., E. and W. of post , 3 ft. dist., raise a mound of earth , 3½ ft. base , 1½ ft. high , N. of cor.

80.00 Set an iron post , 3 ft. long , 3 ins. in dia., 24 ins. in the ground for cor. of secs. 4 , 5 , 32 and 33 , with brass cap marked

T 4 N | R 11 W
S 32 | S 33
S 5 | S 4
T 3 N
1913

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.

Soil , light , dry , sandy clay , mixed with alkali on hard , dry friable clay sub-soil ; 2 nd. rate.

No timber.

Undergrowth , short shadscale , salt sage and scattering greasewood.

July 7 : At this sec. cor., I set off 22°37'N., on the decl. arc ; and at 12 h. 05 m. p. m. l. m. t., observe the sun on the meridian ; the resulting lat. is 41°02'

S.89°59'E., bet. secs. 4 and 33.

Over level land covered with dense undergrowth of greasewood.

16.60 Wagon road , and base of mountain , bears N.10°W. and S.10°E.

Leave level land and greasewood undergrowth , ascend abruptly over W. slope of ridge through scattering undergrowth of shadscale.

23.00 Top of flat ridge , 50 ft. above base , bears N. and S.

chains

Gradually descend.

40.00 Set an iron post , 3 ft. long , 1 in. in dia., 24 ins. in the ground for $\frac{1}{4}$ sec. cor., with brass cap marked

S 33
$\frac{1}{4}$

S 4
1913

raise a mound of stone , 2 ft. base , 1½ ft. high , N. of cor.

41.70 Wash in wide hollow , 20 lks. wide , 15 ft. deep , course NW.

Ascend over NW. slope , 75 ft. to

63.20 Top of spur , projects N.

Gradually descend over NE. slope.

80.00 Set an iron post , 3 ft. long , 3 ins. in dia., 24 ins. in the ground for cor. of secs. 3 , 4 , 33 and 34 , with brass cap marked

T 4 N S 33	R 11 W S 34
S 4	S 3

T 3 N

1913

raise a mpund of stone , 2 ft. base , 1½ ft. high , W. of cor.

Land , level and mountainous.

W. 16.60 chs. level land. Soil , light , dry , warm sandy clay , slightly baked on hard , dry sandy clay sub-soil 2 nd. rate.

E. 63.40 chs. mountainous land with general N. exposure. Soil , gravelly and rocky of limestone formation on hard , gravel and rocky sub-soil ; 4 th. rate.

No timber.

Undergrowth , short shadscale and greasewood. Greasewood undergrowth on W. 16.60 chs.

Mountainous land , 63.40 chs.

North boundary of T.3 N., R.11 W.

chains	
	S.89°59'E., bet. secs. 3 and 34
	Gradually descend over broken land sloping NE., through short undergrowth of shadscale.
40.00	Set an iron post , 3 ft. long , 1 in. in dia., 24 ins. in the ground for ¼ sec. cor., with brass cap marked S 34 ¼ S 3 1913 dig pits , 18 x 18 x 12 ins., E. and W. of post , 3 ft. dist., raise a mound of earth , 3½ ft. base , 1½ ft. high , N. of cor.
40.50	Wagon road , bears N.80°W. and S.80°E.
76.50	Wash , 20 lks. wide , 4 ft. deep , course NE.
	Thence over rolling land.
80.00	Set an iron post , 3 ft. long , 3 ins. in dia., 24 ins. in the ground for cor. of secs. 2 , 3 , 34 and 35 , with brass cap marked T 4 N | R 11 W S 34 | S 35 S 3 | S 2 T 3 N 1913 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 , broken with a general NE. exposure.
	Soil , gravelly , hard clay and rocky on hard , dry clay and gravel sub-soil ; 3 rd. rate.
	No timber.
	Undergrowth , short shadscale. Some grass good for grazing purposes.
	S.89°59'E., bet. secs. 2 and 35
	Over rolling land draining N., through short undergrowth

chains

of shadscale and scattering greasewood.

0.25 Wash , 15 lks. wide , 2 ft. deep , course NE.

15.70 Wagon road , bears N.10°E. and S.10°W.

28.00 The point for the ¼ sec. cor. will fall in large wash. All points nearer the true cor pointthan this falls on land subject to over flow , therefore at this point , I perpetuate cor. on safe ground as follows :

Set an iron post , 3 ft. long , 1 in. in dia., 24 ins. in the ground for witness cor. to the ¼ sec. cor., with brass cap marked

T 4 N R 11 W
S 35
———
S 2
T 3 N R 11 W
1913

dig pits , 18 x 18 x 12 ins., E. and W. of post , 3 ft. dist., raise a mound of earth , 3½ ft. base , 1½ ft. high , N. of cor.

Thence over land subject to overflow.

40.00 Point for ¼ sec. cor. falls in wash , 25 lks. wide , 2 ft. deep , course NW. Cor.not set.

52.00 Leave land subject to overflow.

Thence over gently rolling land.

80.00 Set an iron post , 3 ft. long , 3 ins. in dia., 24 ins. in the ground for cor. of secs. 1 , 2 , 35 and 36 , with brass cap marked

T 4 N	R 11 W
S 35	S 36
S 2	S 1
T 3 N	

1913

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 , rolling with general NW. drainage.

Soil , light , dry , fine , warm sandy clay and gravelly

chains

on hard clay and gravel sub-soil ; 3 rd. rate.

No timber.

Undergrowth , short shadscale and scattering greasewood.

S.89°59'E., bet. secs. 1 and 36.

Over rolling land sloping SW., through short undergrowth of shadscale.

2.00 Base of mountain , bears NW. and SE.

Ascend abruptly over rocky SW. slope.

27.00 Top of steep ascent , 175 ft. above sec. cor., thence gradually ascend over nearly W. slope.

40.00 Set an iron post , 3 ft. long , 1 in. in dia., 24 ins. in a mound of stone and earth , 4 ft. base , 2 ft. high , for $\frac{1}{4}$ sec. cor., with brass cap marked

S 36
$\frac{1}{4}$

S 1
1913

raise a mound of stone , 2 ft. base , 1½ ft. high , N. of cor.

Note:
On account of natural obstacles I am unable to set post in the ground.

40.50 Top of ridge , bears NW. and SE.

Gradually descend.

65.00 Hollow , 50 ft. deep , course NW.

Ascend.

80.00 The cor. of Tps. 3 and 4 N., Rs. 10 and 11 W.

Land , mountainous , sloping SW. on W. 40.50 chs. and N. on E. 39.50 chs.

Soil , gravelly and rocky on rocky sub-soil ; 4 th. rate.

No timber,

Undergrowth , short shadscale.

Mountainous land , 80.00 chs.

July 7,1913

BOUNDARIES OF T.3 N.R.11 W.

Latitudes, Departures, and Closing Errors.

Lines	Designated	True Bearing	Distances	Latitudes, N.	Latitudes, S.	Departures. E.	Departures. W.
			chs.	chs.	chs.	chs.	chs.
E.Bdy.		South	480.00	.....	480.00	.....	.....
S.Bdy.		N.89°58'W.	479.20	.28	.....	.....	479.20
W.Bdy.		North	480.00	480.00	.....	.....	.....
N.Bdy.		S.89°59'E.	478.37	.....	.13	478.37	.....
Comvergency						.63	
				480.28	480.13	479.00	479.20
				480.13			479.00
	Error in latitude,			.15			
	Error in departure						.20

For general description see book "J" of this survey.

Howard W. Miller.
U.S.Surveyor.

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BOOK A-405

CERTIFICATE OF ASSISTANTS.

We, the undersigned, hereby certify upon honor that we assisted, to the best of our skill and ability, ..., U. S. Surveyor, during the periods and in the capacities ated opposite our several signatures, in surveying all those parts or portions of .....

or certificate of assistants see book "J"T.3 N.R.11 W.

of the ..... Meridian, in the State of .....

which are represented in the foregoing field notes as having been executed 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 executed.

NAME.	PERIOD OF SERVICE.		CAPACITY.
	BEGUN.	ENDED.	

Subscribed and certified to before me on the dates of the final service as shown above.

.....

U. S. Surveyor.

FINAL OATH OF UNITED STATES SURVEYOR.

I, ...; U. S. Surveyor, do solemnly swear that, in pursuance of special instructions received from the U. S. Surveyor General for .....; bearing date of the ..... day of ....., 191 , I have well, faithfully, and truly, in my own proper person, and in strict conformity with said instructions, the Manual of Surveying Instructions, and the laws of the United States, surveyed all those parts or portions of .....

.....

.....

For final oath of U.S.Surveyor see book "J" T.3 N.R.11 W.

.....

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

..... Meridian, in the State of ....., which are represented in the foregoing field notes as having been executed 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 U. S. 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.

.....

U. S. Surveyor.

Subscribed by said ....., and sworn to before me this ..... day of ....., 191

SEAL

.....

.....

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah, April 5, 1915.

The foregoing field notes of the survey of South, West, and North boundaries of Township 2 South, Range 11 West; West boundary Township 1 South, Range 11 West; West and North boundaries Township 1 North, Ranges 10 and 11 West; West and North, and Res. of East boundaries Township 2 North, Range 10 West; West and North boundaries Townships 2 and 3 North, Range 11 West; and West and North and Retracement of East boundaries Township 3 North, Range 10 West, of the Salt Lake Base and Mer., Utah executed by Howard W. Miller under his special instructions dated April 10, 1913, having been critically examined, and the necessary corrections and explanations made, the said field notes, and the retracements, resurveys and surveys they describe, are hereby approved.

N. C. Petersen

U. S. 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.

.....

U. S. Surveyor General.

6—2761

4—679

U. S. Surveyor General's Office
MAR 19 1914
SALT LAKE CITY, UTAH.

BOOK A-405
Book "B"

FIELD NOTES

OF THE SURVEY OF THE

SUBDIVISION

OF

T. 2 S., R. 11 W.

Of the SALT LAKE BASE AND *Meridian,*

In the State of UTAH

EXECUTED BY

Howard W. Miller
&
Robert E. Clark

and Transitman

In the capacity of U. S. Surveyor, under instructions dated April 10, *191*3, *issued by the United States Surveyor General to govern surveys included in Group No.* 21, *which were approved by the Commissioner of the General Land Office,* April 23, *191*3, *pursuant to authority contained in the Act of Congress dated* ....., *191*....

Survey commenced May 4, *191*3

Survey completed May 12, *191*3

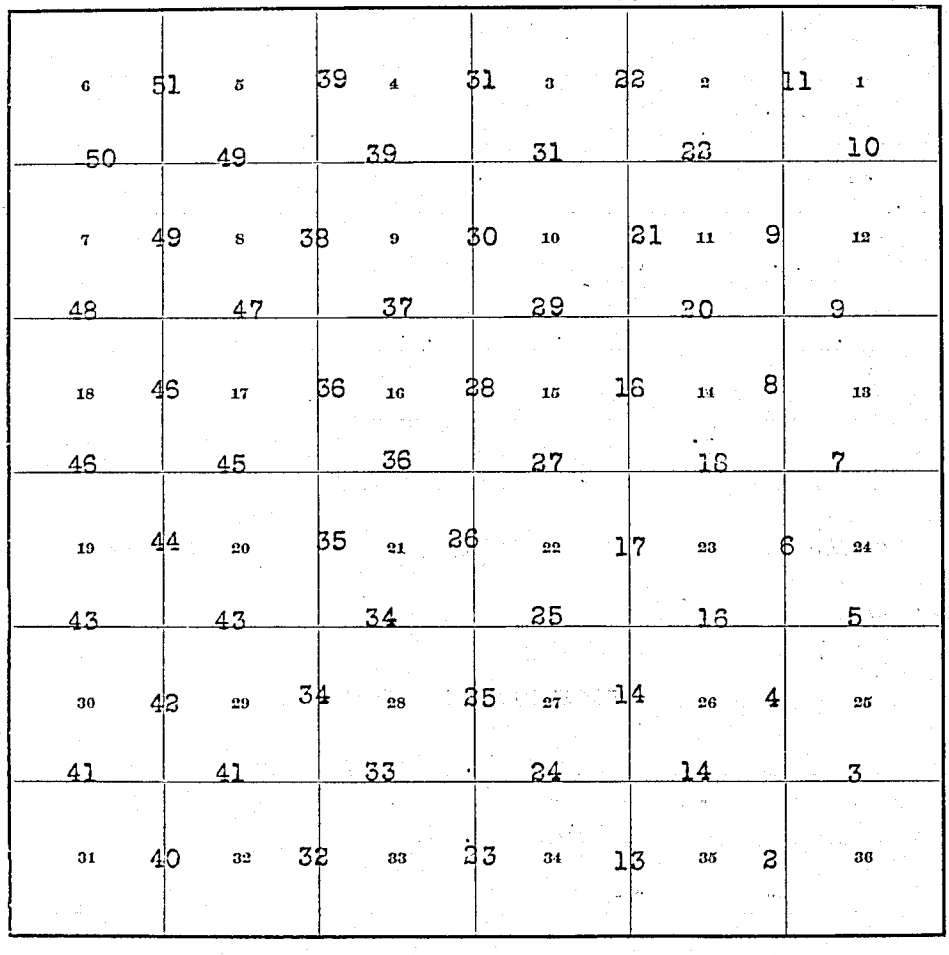
6—151

59-68-50

BOOK A-405

INDEX DIAGRAM.

Township 2 South, *Range* 11 West S.L.B.& M.



6—151

Survey of the subdivisional lines of Tp. 2 S. R. 11 W.

Chains

Survey commenced May 4, 1913, and executed with a Young and Son's mountain transit No. 8147, used by Howard W. Miller, U.S.Surveyor, and a Young and Son's mountain transit No. 7147, used by Robert E. Clark, U.S.Transitman. For description and test of transit No. 8147 see page 1, of the survey of the S. bdy. of Tp. 2 S. R. 11 W. Transit No. 7147 is fitted with a Smith solar attachment. The horizontal circle of the transit is fitted with two, opposite, double verniers, reading to single minutes of arc, which is also the least count of the lat. and decl. arcs.

Use of the above instruments was approved by G. D. D. Kirkpatrick, Ass't. Supervisor of Surveys in the assignment instructions dated April 21, 1913, conditional upon satisfactory field test, the record of which follows herewith.

Test of instrument No. 7147.

I examine the adjustments of the instrument and find no errors, then, to test the adjustment of the solar attachment, 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 camp in the SE¼ SE¼, sec. 14, Tp. 2 S. R. 11 W., May 4, 1913: with my instrument set up over the S. end of the meridian later established, at 4h 45m a.m., l.m.t., I commence following the eastern progress of Polaris, and when the star reaches its maximum position in azimuth, and begins to recede, I mark the line thus determined by a tack driven in a wooden peg, set firmly in the ground, 5.00 chs. N. of my station.

At 8h 30m a.m., I lay off the azimuth of Polaris, 1° 31.6' to the W., and mark the true meridian thus determined by a tack driven in a wooden peg set firmly in the ground, to the W. of the one set earlier this a.m.

At 9h 30m a.m., l.m.t., I set off 40° 38' N. on the lat. arc, and 15° 56' N. on the decl. arc, and determine a

Chains

meridian with the solar. The line thus determined falls 0.2 ins. to the east of the true meridian.

At 2h 30m p.m., l.m.t., I set off 40° 38' N. on the lat. arc, and 16° 00' N. on the decl. arc, and determine a meridian with the solar. The line thus determined coincides with the true meridian. I therefore conclude that the instrument is in satisfactory adjustment.

Measurements.

Steel tapes, five chains long, were used on Group 21, together with clinometers for determining slope angles, and the reduced horizontal distances only, appear in the official field notes.

The tapes were tested on May 4, 1913, comparison being made with a standard tape, 1 chain in length, kept and used only for that purpose.

May 4, 1913.

Lines run by Robert E. Clark, U.S.Transitman.

I commence at the cor. of secs. 1, 2, 35 and 36, on the S. bdy. of the Tp., previously described.

May 5, 1913; Here at 9h a.m., l.m.t., I set off 40° 36' N. on the lat. arc, and 16° 13' N. on the decl. arc, and determine a meridian with the solar.

Thence I run

N. 0° 01' W. bet. secs. 35 and 36.

Descending very gradually gently rolling N. slope, through considerable short undergrowth of shadscale and salt sage.

40.00 Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd.

¼ S 35 | S 36

1913

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.

Cor. stands in head of a small, dry swale, course W. Ascend gradually.

Survey of the subdivisional lines of Tp. 2 S. R. 11 W.

Chains	
42.20	Wagon road, Clive to Quincy Springs, bears NW. and SE.
	Descend very gradually N. slope.
49.10	S. bank of dry gulch, 20 ft. deep, course W.
57.10	N. bank of gulch. Ascend gradually.
61.10	Small, rock point, projects SW., limestone outcropping.
	Ascend very gradually over slightly rolling land.
80.00	Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground, for cor. of secs. 25, 26, 35 and 36, with brass cap, mkd.

T 2 S	R 11 W
S 26	S 25
S 35	S 36

1913

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.

A. cedar 6. ins. in diam., bears N. 0° 21' W., 4.40 chs. dist., mkd. BT T 2 S R 11 W S 26
Land, gently rolling; SW. exposure.

Soil, light, fine, dry, warm, sandy, clay loam, mixed with a little gravel, 3 ft. deep on clay and gravel subsoil; suited to cultivation if watered and affords a little grazing.

Timber, a few scrub cedars on either side of line.

Undergrowth, shadscale and salt sage.

E. on random line bet. secs. 25 and 36.

40.00	Set temp. ¼ sec. cor.
80.10	Intersect E. bdy. of Tp. 5 lks. N. of cor. of secs. 25, 30, 31 and 36, which is an iron post, 3 ins. in diam., properly marked, set and witnessed.
	Thence I run
	N. 89° 58' W. on true line bet. secs. 25 and 36.
	Ascending gradually over mountainous land, through considerable short undergrowth of shadscale and salt sage.
5.75	Limestone outcrop on top of ridge bearing N. and S.
	Ridge flattens out into bench about 2 chs. N.
	Descend abruptly rocky W. slope.
7.10	Foot of abrupt descent, about 45 ft. below top of ridge.

Survey of the subdivisional lines of Tp. 2 S. R. 11 W.

Chains	
	Leave mountainous land and descend over gently rolling land sloping W.
13.30	Limestone outcropping. Descend very gradually.
19.00	Limestone outcropping. Clump of cedars about 6 chs. N.
40.05	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd. ¼ S 25 ✓ S 36 1913 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.
57.30	Wagon road, Quincy Springs to Low and Clive, bears N. and SE.
80.10	The cor. of secs. 25, 26, 35 and 36. Land, E. 20 chs. mountainous; remainder of mile gently rolling; general W. exposure. Surface of E. 20 chs., quite stony. Soil, W. 60 chs., light, fine, dry, warm, sandy clay loam, 3 to 5 ft. deep on clay and gravel subsoil; affords a little grazing. No timber; undergrowth, shadscale and salt sage.
	N. 0° 01' W. bet. secs. 25 and 26. Descend over rolling land, through considerable short undergrowth of shadscale and salt sage.
5.50	Dry arroyo, 1 ch. wide, 10 ft. deep, course S. 80° W. Ascend gradually.
16.00	Limestone outcropping.
26.00	Low, rocky point, projects W.; desc. gradually.
40.00	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd. ¼ S 26 | S 25 1913 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.
59.00	Wagon road, bears NE. and SW.

Survey of the subdivisional lines of Tp. 2 S. R. 11 W.

Chains	
68.00	Head of small, dry swale, course SW.; asc. gradually.
80.00	Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground, for cor. of secs. 23, 24, 25 and 26, with brass cap, mkd.

T 2 S | R 11 W
S 23 | S 24
S 26 | S 25
1913

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, gently rolling; SW. exposure.

Soil, light, fine, dry, warm, sandy loam of fair texture, 2 to 3 ft. deep on gravel subsoil; affords little grazing.

No timber; undergrowth, shadscale and salt sage.

S. 89° 58' E. on random line bet. secs. 24 and 25.

40.00	Set temp. ¼ sec. cor.
80.08	Intersect E. bdy. of Tp., 5 lks. N. of cor. of secs. 19, 24, 25 and 30, which is an iron post, 3 ins. in diam., properly marked, set and witnessed.

Thence I run

N. 89° 56' W. on true line bet. secs. 24 and 25.

Descend abruptly over mountainous land, through scattering cedar timber.

0.50	Dry gulch, course S.; ascend abruptly.
3.90	Top of abrupt ascent, 80 ft. above gulch. Leave timber.

Thence across broken S. and SE. slope, through considerable short undergrowth of shadscale and salt sage.

30.20	Rocky ridge, about 150 ft. above sec. cor., bears N. 30° W. and SE.; descend abruptly.
40.04	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd.

¼ S 24
S 25
1913

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.

Chains	
	Descend gradually, broken SW. slope, over numerous outcroppings of limestone.
61.00	Leave mountainous land. Descend gradually over rolling SW. slope.
68.60	Wagon road, Quincy Springs to Low and Clive, bears N.20°W. and SE.
80.08	The cor. of secs. 23, 24, 25 and 26.
	Land, E. 61 chs., broken and mountainous; surface rocky. Remainder of mile rolling land; general W. and SW. exposure.
	Soil, E. 61 chs., sandy clay, quite rocky; W. 19 chs., sandy clay, mixed with gravel, 3 ft. deep on gravel subsoil; affords little grazing.
	Timber, cedar; undergrowth, shadscale and salt sage.

	May 5, 1913: Here at app. noon, I set off 16° 15' N. on the decl. arc, and observe the sun on the meridian. The resulting lat. is 40° 37' N.
	N. 0° 01' W. bet. secs. 23 and 24.
	Ascend gradually over rolling land, through considerable short undergrowth of shadscale and salt sage.
38.00	Descend gradually NW. slope, 25 ft. into wide, flat drain, course SW.
39.60	Ascend gradually.
40.00	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd.
	¼ S 23 | S 24
	1913
	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.
44.00	Ascend very gradually.
60.00	Pass through a few scattering cedars, bear E. and W.
73.20	Top of sand knoll, on top of low ridge, bearing E. and W. Descend gradually.
74.50	Dry arroyo, 15 ft. deep, course S. 10° W.; asc. gradually.

Survey of the subdivisional lines of Tp. 2 S. R. 11 W.

Chains	
76.00	Ascend very gradually S. and SW. slope.
80.00	Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground, for cor. of secs. 13, 14, 23 and 24, with brass cap, mkd.
	T 2 S | R 11 W S 14 | S 13 S 23 | S 24 1913
	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, gently rolling; S. and SW. exposure.
	Soil, light, fine, dry, warm, very sandy clay, 3 to 5 ft. deep on gravel subsoil; affords poor grazing.
	Timber, cedar; undergrowth, shadscale and salt sage.
	S. 89° 56' E. on random line bet. secs. 13 and 24.
40.00	Set temp. ¼ sec. cor.
80.08	Intersect E. bdy. of Tp. at cor. of secs. 13, 18, 19 and 24, which is an iron post, 3 ins. in diam., properly mkd., set and witnessed. Thence I run
	N. 89° 56' W. on true line bet. secs. 13 and 24.
	Ascend gradually over rolling land, through considerable short undergrowth of shadscale and salt sage.
20.00	Ridge, about 40 ft. above cor., bears N. 30° E., and S. 15° W.; descend very gradually.
40.04	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd.
	¼ S 13 S 24 1913
	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.
52.00	Ascend very gradually.
60.00	Descend gradually W. and SW. slope.
69.00	Wagon road, Low to Quincy Springs, bears N. and S.
80.08	The cor. of secs. 13, 14, 23 and 24.
	Land, rolling; W. and SW. exposure.

Survey of the subdivisional lines of Tp. 2 S. R. 11 W.

Chains

Soil, light, fine, dry, warm, sandy, clay loam, 2 to 4 ft. deep on clay and gravel subsoil; affords fair grazing. No timber; undergrowth, shadscale and salt sage.

May 5, 1913. Robert E. Clar[illegible]
U. S. Transit[illegible]

Lines run by Howard W. Miller, U.S. Surveyor.

May 8, 1913: At 6h 57m a.m., l.m.t., I set off 40° 38' N. on the lat. arc, and 17° 03' N. on the decl. arc, and determine a meridian with the solar, at the cor. of secs. 13, 14, 23 and 24. Thence I run

N. 0° 01' W. bet. secs. 13 and 14.

Ascend gradually over rolling land, sloping SW., through considerable short undergrowth of shadscale and salt sage.

40.00 Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd.

¼ S 14 | S 13

1913

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.

43.00 Top of ridge, and divide, about 600 ft. above valley to the W., bears E. and W.

Thence descend gradually over E. and NE. slope.

80.00 Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground, for cor. of secs. 11, 12, 13 and 14, with brass cap, mkd.

T 2 S | R 11 W
S 11 | S 12
S 14 | S 13

1913

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 rolling, draining SW. on S. 43 chs., and NE. on N. 37 chs.

Soil, light, fine, dry, warm, rich, sandy clay loam, 2 to 4 ft. deep on sand and clay subsoil; affords good grazing.

Survey of the subdivisional lines of Tp. 2 S. R. 11 W.

Chains	
	No timber; undergrowth, shadscale, salt sage and a few scattering greasewood.
	S. 89° 56' E. on random line bet. secs. 12 and 13.
40.00	Set temp. ¼ sec. cor..
80.05	Intersect E. bdy. of Tp. at cor. of secs. 7, 12, 13 and 18, which is an iron post, 3 ins. in diam., properly marked, set and witnessed. Thence I run
	N. 89° 56' W. on true line bet. secs. 12 and 13.
	Over rolling land, draining and sloping N., through considerable short undergrowth of shadscale, salt sage and greasewood.
0.35	Wagon road, Low to Quincy Springs, bears NE. and SW.
16.45	Old wagon road, Clive to Quincy Springs, bears NW. and SE.
40.02½	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd.
	¼ S 12 / S 13 / 1913
	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.
69.00	Enter heavy greasewood, bears NW. and SE.
74.00	Leave greasewood, bears NW. and SE.
80.05	The cor. of secs. 11, 12, 13 and 14.
	Land, rolling; NE. exposure.
	Soil, light, fine, dry, sandy clay loam, 2 to 3 ft. deep, on rather moist sand and clay subsoil; affords good grazing.
	No timber; undergrowth, shadscale, salt sage and greasewood.
	N. 0° 01' W. bet. secs. 11 and 12.
	Descend very gradually over rolling land, sloping NE., through considerable short undergrowth of shadscale and salt sage.
23.00	Dry wash in wide, open hollow, 13 lks. wide, 4 ft. deep, about 70 ft. below divide, course NE.; ascend very gradually.

Survey of the subdivisional lines of Tp. 2 S. R. 11 W.

Chains	
40.00	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd. ¼ S 11 | S 12 / 1913 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.
60.00	Base of rocky point, bears NE. and SW.; ascend.
72.00	Top of E. slope of spur, about 50 ft. above base, projects NE. 1 chain. Limestone outcroppings on both sides of line. Descend 40 ft. over rocky NE. slope.
80.00	Set an iron post, 3 ft. long, 2 ins. in diam., only 12 ins. in the ground, on account of underlying rock, surrounded by a substantial mound of stone, 4 ft. base, 1½ ft. high, for cor. of secs. 1, 2, 11 and 12, with brass cap, mkd. T 2 S | R 11W / S 2 | S 1 / S 11 | S 12 / 1913 raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor. Corner stands on E. slope of rocky outcroppings. Land, S. 60 chs. rolling, N. 20 chs. mountainous and rocky; general NE. exposure. Soil, S. 60 chs., light, fine, dry, warm, rich, sandy clay loam, 2 to 4 ft. deep, on sandy subsoil. Soil on N. 20 chs., quite shallow and rocky on bedrock. No timber; undergrowth shadscale and salt sage. Good grazing throughout the mile.

	S. 89° 56' E. on random line bet. secs. 1 and 12.
40.00	Set temp. ¼ sec. cor.
79.98	Intersect E. bdy. of Tp. 4 lks. N. of cor. of secs. 1, 6, 7 and 12, which is an iron post, 3 ins. in diam., properly marked, set and witnessed. Thence I run N. 89° 54' W. on true line bet. secs. 1 and 12. Over broken bench lands, draining N., through considerable short undergrowth of shadscale and salt sage, and some greasewood.

Survey of the subdivisional lines of Tp. 2 S. R. 11 W.

Chains	
	Ascending abruptly NE. face of hollow.
0.70	Top of W. side of hollow, bears NW. and SE., 20 ft. above sec. cor. Thence over rolling bench.
21.00	Leave bench, bears NW. and SE.; descend abruptly.
24.50	Dry wash in hollow, 40 ft. below bench, course NW.; ascend.
27.20	Top of W. side of hollow, bears NW. and SE. Thence over rolling bench.
39.30	Wagon road, Clive to Quincy Springs, bears NW. and SE.
39.99	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd. $\frac{\frac{1}{4}\ S\ 1}{S\ 12}$ 1913 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.
54.30	Begin abruptly descend into hollow, bears NW. and SE.
57.50	Dry wash, 10 lks. wide, 4 ft. deep, in bottom of hollow, 50 ft. deep, course N.; ascend 50 ft. to
59.00	Top of W. side of hollow, bears N. and S.; ascend gradually.
79.98	The cor. of secs. 1, 2, 11 and 12.
	Land, rolling bench cut by steep hollows; general North exposure.
	Soil, light, fine, dry, warm, sandy clay loam, mixed with some gravel, 2 to 4 ft. deep on moist sand and clay subsoil; affords good grazing.
	No timber; undergrowth, shadscale, salt sage and some greasewood.
	May 8, 1913: Here at app. noon, I set off 17° 05' N. on the decl. arc, and observe the sun on the meridian. The resulting lat. is 40° 40' N.
	N. 0° 01' W. on random line bet. secs. 1 and 2.
40.00	Set temp. ¼ sec. cor.
79.97	Intersect N. bdy. of Tp. at the cor. of secs. 1, 2, 35 and 36, previously described, Thence I run

Survey of the subdivisional lines of Tp. 2 S. R. 11 W.

Chains	
	S. 0° 01' E. on true line bet. secs. 1 and 2.
	Over rolling mountainous land, draining N., through considerable short undergrowth of shadscale and salt sage.
	Descending from spur.
5.30	Dry hollow, course NW.; ascend 20 ft. to
10.00	Low spur, projects NE.; descend.
11.60	Same hollow, course NE.; ascend.
16.40	Spur, projects NW.; descend.
22.00	Enter same hollow, course NW. thence in hollow.
25.40	Leave hollow, from SE.
28.00	Same hollow, course NE.; ascend.
39.97	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd.
	¼ S 2 | S 1
	1913
	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. Limestone outcroppings about 1 chs. W.
48.00	Spur, about 50 ft. above hollow, projects NE.; descend.
57.50	Dry wash, 25 lks. wide, 20 ft. deep, in hollow, course NE.; ascend.
70.00	Spur, about 50 ft. high, projects NE.; descend 40 ft. to
75.00	Dry wash, 20 lks. wide, 4 ft. deep, in hollow, course NE.; ascend.
79.97	The cor. of secs. 1, 2, 11 and 12.
	Land, rolling mountainous; general N. and NE. exposure.
	Soil, light, fine, dry, warm, sandy clay loam of fair texture, 2 to 6 ft. deep on sand and clay subsoil; affords good grazing.
	No timber; undergrowth, shadscale and salt sage.

May 8, 1913.

Howard W. Miller

U. S. Surveyor.

Survey of the subdivisional lines of Tp. 2 S. R. 11 W.

Chains

Lines run by R. E. Clark, U.S.Transitman.

May 6, 1913: At 8h a.m., l.m.t., I set off 40° 36' N. on the lat. arc, and 16° 30' N. on the decl. arc, and determine a meridian with the solar, at the cor. of secs. 2, 3, 34 and 35, on the S. bdy. of the Tp. heretofore described. Thence I run N. 0° 02' W. bet. secs. 34 and 35.

Over gently rolling land, through considerable short undergrowth of shadscale and salt sage.

20.00 Top of small sand hill; ascend very gradually.

40.00 Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd.

¼ S 34 | S 35

1913

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.

The N. end of a low ridge, with solid limestone surface bears S. 65° E., about 14 chs. dist.

61.00 Wagon road, Clive to Quincy Springs, bears E. and W.

64.00 Small, dry hollow, course W.

73.00 Dry arroyo, 20 lks. wide, 8 ft. deep, course S. 70° W. Ascend.

80.00 Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground, for cor. of secs. 26, 27, 34 and 35, with brass cap, mkd.

T 2 S | R 11 W

S 27 | S 26

S 34 | S 35

1913

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, gently rolling; general W. and NW. exposure.

Soil, light, fine, dry, warm, sandy clay and loam, mixed with some fine gravel, 3½ to 5 ft. deep on gravel subsoil.

Affords very little grazing.

No timber; undergrowth, shadscale and salt sage.

Survey of the subdivisional lines of Tp. 2 S. R. 11 W.

Chains	
	E. on random line bet. secs. 26 and 35.
40.00	Set temp. ¼ sec. cor.
80.00	Intersect N. and S. line 2 lks. N. of cor. of secs. 25, 26, 35 and 36. Thence I run
	N. 89° 59' W. on true line bet. secs. 26 and 35.
	Descend very gradually over rolling land, through considera short undergrowth of shadscale and salt sage, along S. side of dry arroyo.
20.50	Left bank of dry arroyo, 20 lks. wide, 8 ft. deep, course S. 80° W. Thence along arroyo.
25.50	Left bank of arroyo, course N. 60° W.
32.30	Same arroyo, course S. 65° W.; ascend gradually.
40.00	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd.
	¼ S 26 S 35 1913
	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, W. of cor.
	From this point, monument on top of peak, bears N. 11°55' W
44.90	Top of low ridge, or water shed, bears NE. and SW.; descend gradually.
62.90	Forks of dry gulch, course S. 70° W., from N. 15° E. and NE. Thence along gulch bottom.
65.80	Leave gulch and descend very gradually along N. side of gulch.
80.00	Cor. of secs. 26, 27, 34 and 35.
	Land, gently rolling; general W. exposure.
	Soil, light, fine, dry, warm, sandy clay loam, mixed with some fine gravel, 3 ft. deep on gravel subsoil; affords very little grazing.
	No timber; undergrowth, shadscale and salt sage.
	N. 0° 02' W. bet. secs. 26 and 27.
	Over gently rolling land, through considerable short undergrowth of shadscale and salt sage; ascending gradually.

Survey of the subdivisional lines of Tp. 2 S. R. 11 W.

Chains	
4.50	Top of low knoll at end of low ridge, bearing N. Ascend gradually along W. slope, over small, dry arroyos draining W.
27.90	Limestone outcroppings.
32.00	Top of ascent, about 60 ft. above sec. cor. Thence over bench.
40.00	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd.

¼ S 27 | S 26

1913

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.

49.20	Wagon road, Clive to Quincy Springs, bears E. and W.
53.40	Descend abruptly N. slope.
55.50	Dry gulch, about 50 ft. deep, course N. 80° W.; ascend abruptly.
57.40	Top of ascent, bears E. and W. Thence across small flat ridge or mesa, bearing E. and W.
61.10	Descend abruptly N. slope.
63.10	Dry gulch, about 25 ft. deep, course W.; asc. abruptly.
65.00	Top of ascent, bears E. and W. Thence ascending over mountainous land, sloping S. and SW.
80.00	Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground, for cor. of secs. 22, 23, 26 and 27, with brass cap, mkd.

T 2 S | R 11 W

S 22 | S 23

S 27 | S 26

1913

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, rolling mountainous; general W. and SW. exposure.

Soil on S. ½ mile, sandy clay and sharp gravel, on N. ½ mile, light, fine, dry, warm, sandy clay of good texture, 2 to 3 ft. deep on gravel subsoil. Very little grazing.

Survey of the subdivisional lines of Tp. 2 S. R. 11 W.

Chains

No timber; undergrowth, shadscale and salt sage.

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

40.00 Set temp. ¼ sec. cor.

78.60 Intersect N. and S. line at cor. of secs. 23, 24, 25 and 26. Thence I run

N. 89° 59' W. on true line bet. secs. 23 and 26.

Over gently rolling land, sloping SW., through considerable low undergrowth of shadscale and salt sage.

29.30 Descend gradually.

33.00 Dry gulch, about 20 ft. below cor., course SW.

Thence over nearly level land.

37.40 Descend abruptly W. slope.

39.70 Dry gulch, about 40 ft. deep, course SW.; ascend abruptly E. slope.

39.95 Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd.

$$\frac{\frac{1}{4}\ S\ 23}{S\ 26}$$
1913

raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor.

40.75 Top of ascent, bears NE. and SW. Thence over nearly level mesa land.

56.00 Descend abruptly NW. slope.

58.50 Dry gulch, about 50 ft. deep, course S. 30° W.; asc. abruptly E. slope.

59.70 Top of ascent. Thence over rolling mountainous land, sloping E. and SW.

79.00 The cor. of secs. 22, 23, 26 and 27.

Land, rolling and mountainous: general SW. exposure.

Soil, light, fine, dry, warm, sandy clay, 2 to 4 ft. deep, on gravel subsoil; affords no grazing.

No timber; undergrowth shadscale and salt sage.

May 6, 1913: At this cor. I set off 16° 32' E. on the decl. arc, and at ast. noon, observe the sun on the meridian. The resulting lat. is 40° 37' N.

Survey of the subdivisional lines of Tp. 2 S. R. 11 W.

Chains.	
	N. 0° 02' W. bet. secs. 22 and 23.
	Ascend over mountainous land, S. slope, through scattering undergrowth of shadscale.
12.00	Ascend abruptly S. slope.
26.60	Top of ascent, about 275 ft. above cor. Thence across small flat.
36.00	Old beach line, bears E. and W.; descend abruptly N. slope.
40.00	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd.

¼ S 22 | S 23

1913

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

Descend more gradually N. slope.

46.40	Descend abruptly over numerous small points and gulches draining NW.
52.50	Dry gulch, about 250 ft. below ¼ sec. cor., course W.
	Ascend abruptly S. and SW. slope.
65.20	Old beach line, bears E. and W. Thence across small flat.
68.00	Ascend very abruptly rocky S. slope.
78.00	Ascend gradually.
80.00	Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground, for cor. of secs. 14, 15, 22 and 23, with brass cap, mkd.

T 2 S | R 11 W

S 15 | S 14

S 22 | S 23

1913

raise a mound of stone, 3 ft. base, 2 ft. high, W. of cor.

Monument on top of peak, bears N. 40° 08' E. 6.00 chs. dist.

Corner stands about 600 ft. above sec. cor. to S.

Land, mountainous on steep N. and S. slopes; general W. exposure.

Soil, sandy clay and gravel, quite rich in lime, and very rocky; affords no grazing.

No timber; undergrowth, shadscale.

Survey of the subdivisional lines of Tp. 2 S. R. 11 W.

Chains	
	S. 89° 59' E. on random line bet. secs. 14 and 23.
40.00	Set temp. ¼ sec. cor.
80.02	Intersect N. and S. line, 5 lks. S. of cor. of secs. 13, 14, 23 and 24. Thence I run S. 89° 59' W. on true line bet. secs. 14 and 23. Ascend gradually over rolling land, sloping S., through considerable short undergrowth of shadscale and salt sage.
40.01	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd. "¼ S 14 / S 23 / 1913" raise a mound of stone, 2½ ft. base, 2 ft. high, N. of cor.
57.00	Ascend abruptly over mountainous land, steep E. slope, through scattering undergrowth of shadscale.
64.50	Top of abrupt ascent, about 150 ft. above sec. cor. Thence over broken S. slope.
80.02	The cor. of secs. 14, 15, 22 and 23. Land, E. 57 chs., rolling on gentle S. slope; W. 23 chs., mountainous on steep E. and S. slope, with rocky surface. Soil, E. 57 chs., light, fine, dry, warm, sandy, clay loam, 2 to 3 ft. deep on gravel subsoil; W. 23 chs., sandy clay and gravel, rich in lime, and rather rocky. Poor grazing throughout the mile. No timber: undergrowth, shadscale and salt sage. May 6, 1913.
	May 8, 1913: At 7h a.m., l.m.t., I set off 40° 39' N. on the lat. arc, and 17° 03' N. on the decl. arc, and determine a meridian with the solar, at the cor. of secs. 14, 15, 22 and 23. Thence I run N. 0° 02' W. bet. secs. 14 and 15. Ascending gradually over mountainous land, through scatteri undergrowth of shadscale.
4.10	Descend abruptly steep NW. slope.
14.50	Dry gulch, about 220 ft. below cor., course N. 70° W.

Survey of the subdiyisional lines of Tp. 2 S. R. 11 W.

Chains	
	Ascend abruptly.
17.00	Spur, about 70 ft. above gulch, projects W.; descend.
19.00	Dry gulch, about 30 ft. deep, course S. 80° W.; asc. abruptly.
23.45	Edge of flat ridge, about 200 ft. above gulch, bears E. and W. Thence across flat topped ridge.
27.15	Edge of flat ridge, bears E. and W.; desc. abruptly, N. slope.
37.50	Dry gulch, about 300 ft. below ridge, course W.; ascend abruptly.
40.00	Set an iron post, 3 ft. long, 1 in. in diam., only 18 ins. in the ground, on account of underlying rock, surrounded by a substantial mound of stone, for ¼ sec. cor., with brass cap, mkd. $\frac{1}{4}$ S 15 | S 14 / 1913 raise a mound of stone, 2 ft. base, 2 ft. high, W. of cor.
42.70	Spur, about 100 ft. above gulch, projects W. Line runs between two perpendicular ledges bearing N. and S.
44.70	Descend abruptly steep N. slope.
47.50	Old beach line, bears E. and W.
50.00	Descend abruptly from beach line.
54.00	Dry gulch, about 80 ft. below beach line, course W. Ascend abruptly.
57.00	Edge of old beach line, bears E. and W.
58.00	Ascend abruptly from beach line over limestone ledge bearing N. 5° E.
60.50	Top of ledge, about 70 ft. above beach line; descend gradually.
65.50	Descend abruptly N. slope.
66.50	Old beach line, about 70 ft. below ledge, bears E. and W.
67.80	Descend abruptly from beach line, heavy N. slope.
74.00	Dry gulch, about 130 ft. below beach line, course W.; ascend abruptly.
77.90	Limestone ledge, bears N. 10° E. and S. 10° W. on top of spur, falling W., about 60 ft. above gulch. Descend gradually to corner.

Survey of the subdivisional lines of Tp. 2 S. R. 11 W.

Chains	
80.00	Set an iron post, 3 ft. long, 2 ins. in diam., only 18 ins. in the ground, on account of underlying rock, supported by a substantial mound of stone, for cor. of secs. 10, 11, 14 and 15, with brass cap, mkd. T 2 S | R 11 W S 10 | S 11 S 15 | S 14 1913 raise a mound of stone, 3 ft. base, 2 ft. high, W. of cor. Land, rough and mountainous, along steep W. face of mountai Surface very rocky, ledges of silicious limestone dip 30° to the W. Soil, shallow clay and gravel, quite stony and of poor quality; affords poor grazing. No timber; undergrowth shadscale and some greasewood.
	N. 89° 59' E. on random line bet. secs. 11 and 14.
40.00	Set temp. ¼ sec. cor.
80.04	Intersect N. and S. line, 7 lks. S. of cor. of secs. 11, 12, 13 and 14. Thence I run S. 89° 56' W. on true line bet. secs. 11 and 14. Ascending gradually over rolling mountainous land, through considerable short undergrowth of shadscale and greasewood.
40.02	Set an iron post, 3 ft. long, 1 in. in diam., only 14 ins. in the ground, on account of underlying rock, supported by a mound of stone, 4 ft. base, 1½ ft. high, for ¼ sec. cor., with brass cap, mkd. ¼ S 11 S 14 1913 raise a mound of stone, 2 ft. base, 2 ft. high, N. of cor.
42.90	Ridge, about 75 ft. above cor., bears N. and S. 20° W. Descend gradually.
53.70	Descend abruptly over mountainous land, along broken W. and SW. slope.
80.04	The cor. of secs. 10, 11, 14 and 15. Land, E. 53.70 chs., rolling mountainous on moderate slopes. W, 26.30 chs., rough and mountainous on stoep W. and SW. slopes.

Survey of the subdivisional lines of Tp. 2 S. R. 11 W.

Chains

Soil, E.½ mile, light, fine, dry, warm, rich, sandy loam; W.½ mile, clay and gravel. Good grazing throughout mile. No timber; undergrowth shadscale and greasewood.

N. 0° 02' W. bet. secs. 10 and 11.

Descend abruptly over broken mountainous land.

5.00 Dry gulch, about 70 ft. below cor., course W.; ascend.

9.00 Top of limestone ledge, bears N. 10° E. and S. 10° W.

Descend gradually along ledges.

18.00 Foot of ledges, about 70 ft. below top. Thence ascending gradually over rolling, rocky land.

36.00 Top of ascent, bears E. and W.; descend gradually.

40.00 Set an iron post, 3 ft. long, 1 in. in diam., only 14 ins. in the ground, on account of underlying rock, supported by a mound of stone, 4 ft. base, 1½ ft. high, for ¼ sec. cor., with brass cap, mkd.

¼ S 10 | S 11

1913

raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor. Thence over rolling foothills; W. exposure, about 5 chs. W. of steep ledges bearing N. and S.

80.00 Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground, for cor. of secs. 2, 3, 10 and 11, with brass cap, mkd.

T 2 S | R 11 W

S 3 | S 2

S 10 | S 11

1913

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

Land, S. 18 chs., rough and mountainous; N. 62 chs., rolling foothills; general W. exposure.

Surface of S.½ mile, quite rocky.

Soil, shallow gravel and clay; affords no grazing.

No timber; undergrowth, shadscale and greasewood.

May 8, 1913: At this corner I set off 17° 05' N. on the decl. arc, and at app. noon, observe the sun on the meridian.

Chains	
	The resulting lat. is 40° 40' N.
	N. 89° 56' E. on random line bet. secs. 2 and 11.
40.00	Set temp. ¼ sec. cor.
80.04	Intersect N. and S. line 16 lks. N. of cor. of secs. 1, 2, 11 and 12. Thence I run
	N. 89° 57' W. on true line bet. secs. 2 and 11.
	Over rolling mountainous land, E. exposure, through considerable short undergrowth of shadscale and salt sage.
40.02	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd.
	¼ S 2 / S 11 / 1913
	dig pits, 18 x 18 x 12 ins., E. and W. of post, 2 ft. dist., and raise a mound of earth, 3½ ft. base, 1½ ft. high, N. of cor.
	Ascend abruptly E. slope, over mountainous land.
44.30	Ridge, about 100 ft. above sec. cor., bears N. and S.
	Descend abruptly broken W. and SW. slope.
66.20	Enter old beach line, bears W. and S. Thence along beach.
68.70	Leave old beach line, bears NW. and SE.: desc. abruptly.
80.04	The cor. of secs. 2, 3, 10 and 11.
	Land, E.½ rolling mountainous, E. exposure; soil, light, fine, dry, warm, sandy, clay loam of good texture.
	Land, W.½ rough and mountainous, general W. exposure.
	Soil, clay and gravel of poor quality.
	Good grazing throughout the mile.
	No timber: undergrowth, shadscale and salt sage.
	N. 0° 02' W. on random line bet. secs. 2 and 3.
40.00	Set temp. ¼ sec. cor.
80.02	Intersect N. bdy. of Tp. 7 lks. W. of cor. of secs. 2, 3, 34 and 35, heretofore described. Thence I run
	S. 0° 01' W. on true line bet. secs. 2 and 3.
	Ascending gradually over rocky, rolling foothills; NW. exposure, through considerable short undergrowth of

Survey of the subdivisional lines of Tp. 2 S. R. 11 W.

Chains	
	shadscale, salt sage and greasewood.
40.02	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd. ¼ S 3 | S 2 / 1913
	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.
70.90	Limestone ledge, perpendicular, 4 chs. long, 3ft. wide and 6ft high, bearing N. and S., bears E. 30 lks. dist.
80.02	The cor. of secs. 2, 3, 10 and 11.
	Land, rocky, rolling foothills: general W. and NW. exposure.
	Soil, clay and gravel of poor quality: affords little grazing.
	No timber: undergrowth, shadscale, salt sage and greasewood.
	May 8, 1913.

May 7, 1913: At 8h a.m., l.m.t., I set off 40° 30' N. on the lat. arc, and 16° 47' 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 the Tp., previously described.

Thence I run

N. 0° 02' W. bet. secs. 33 and 34.

Over nearly level land, with general W. and NW. exposure, through considerable short undergrowth of shadscale and salt sage.

1.40	Dry arroyo, 15 lks. wide, 5 ft. deep, course W.
40.00	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd. ¼ S 33 | S 34 / 1913
	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.
80.00	Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground, for cor. of secs. 27, 28, 33 and 34, with

Chains

brass cap, mkd.

T 2 S	R 11 W
S 28	S 27
S 33	S 34

1913

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, nearly level; general W. and SW. exposure.

Soil, light, fine, weak, sandy clay, impregnated with alkali; affords very little grazing.

Undergrowth short shadscale and some salt sage.

No timber.

E. on random line bet. secs. 27 and 34.

40.00 Set temp. ¼ sec. cor.

80.00 Intersect N. and S. line 3 lks. S. of cor. of secs. 26, 27, 34 and 35. Thence I run S. 89° 59' W. on true line bet. secs. 27 and 34.

Descend gradually over rolling land, sloping W., through considerable short undergrowth of shadscale and salt sage.

12.00 Dry arroyo, 10 lks. wide, 7 ft. deep, course NW. Descend very gradually over nearly level land.

19.50 Wagon road, Clive to Quincy Springs, bears NW. and SE.

40.00 Set an iron post, 3 ft. long, 1 in. in diam., 36 ins. in the ground, for ¼ sec. cor., with brass cap, mkd.

¼ S 27
S 34
1913

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.

80.00 The cor. of secs. 27, 28, 33 and 34.

Land, rolling in E. 12 chs., W. 68 chs., nearly level; general W. exposure.

Soil, light, fine, dry, weak, sandy clay, slightly alkali, 3 ft. deep on gravel subsoil; affords very little grazing.

No timber; undergrowth, shadscale and salt sage.

Survey of the subdivisional lines of Tp. 2 S. R. 11 W.

Chains

N. 0° 02' W. bet. secs. 27 and 28.

Over nearly level land, W. exposure, through considerable short undergrowth of shadscale and salt sage.

40.00 Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd.

¼ S 28 | S 27

1913

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.

80.00 Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground, for cor. of secs. 21, 22, 27 and 28, with brass cap, mkd.

T 2 S. | R 11 W.
S 21 | S 22
S 28 | S 27

1913

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, nearly level; general W. exposure.

Soil, light, fine, dry, weak, sandy clay loam, slightly alkali, 2 to 3 ft. deep on gravel subsoil: affords very little grazing.

No timber; undergrowth, shadscale and salt sage.

May 7, 1913: At this cor. I set off 16° 49' N. on the decl. arc, and at app. noon observe the sun on the meridian. The resulting lat. is 40° 38' N.

N. 89° 59' E. on random line bet. secs. 22 and 27.

40.00 Set temp. ¼ sec. cor.

80.00 Intersect N. and S. line, 3 lks. N. of cor. of secs. 22, 23, 26 and 27. Thence I run

W. on true line bet. secs. 22 and 27.

Descending gradually over broken mountainous land, sloping S., through considerable short undergrowth of shadscale and salt sage.

Survey of the subdivisional lines of Tp. 2 S. R. 11 W.

Chains	
9.20	Descend abruptly, rocky W. slope.
28.00	Foot of abrupt descent, about 175 ft. below corner, bears N. and S. Thence over nearly level land, W. exposure.
31.75	Wagon road, Clive to Quincy Springs, bears N. 10° W. and SE.
40.00	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd. ¼ S 22 / S 27 1913 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.
43.60	Wagon road, Clive to Quincy Springs, bears N. 30° W. and S. 30° E.
80.00	The cor. of secs. 21, 22, 27 and 28. Land, E. 28 chs., mountainous, S. and W. exposure; surface rocky. W. 52 chs., nearly level land; general W. exposure. Soil, E. 28 chs., sandy clay and gravel; W. 52 chs., light, fine, dry, warm, weak, sandy clay, slightly alkali; affords very little grazing. No timber; undergrowth, shadscale and salt sage.

N. 0° 02' W. bet. secs. 21 and 22.

Over nearly level land, draining NW., through considerable short undergrowth of shadscale and salt sage; descending very gradually.

40.00	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd. ¼ S 21 | S 22 1913 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.
80.00	Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground, for cor. of secs. 15, 16, 21 and 22, with brass cap, mkd.

Survey of the subdivisional lines of Tp. 2 S. R. 11 W.

Chains

T 2 S. | R 11 W.
S 16 | S 15
S 21 | S 22
1913

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, nearly level; general NW. exposure.

Soil, light, fine, weak, sandy, clay loam, on rather moist sand and clay subsoil; affords very little grazing.

No timber; undergrowth, shadscale, and salt sage.

May 7, 1913.

Robert E. Clark.
U.S. Transitman.

Lines run by Howard W. Miller, U.S.Surveyor.

May 9, 1913: At 6h 56m a.m., l.m.t., I set off 40° 39' N. on the lat. arc, and 17° 19' N. on the decl. arc, and determine a meridian with the solar, at the cor. of secs. 15, 16, 21 and 22. Thence I run

E. on random line bet. secs. 15 and 22.

40.00 Set temp. ¼ sec. cor.

79.95 Intersect N. and S. line at the cor. of secs. 14, 15, 22 and 23. Thence I run

West on true line bet. secs. 15 and 22.

Ascending over rough, mountainous land, draining SW.

0.85 Ridge, 15 ft. above cor., bears NE. and SE.; descend NW. slope.

3.00 Hollow, near head, 50 ft. below ridge, course NW.; ascend.

6.00 Rocky ridge, bears N. 3.00 chs., and S.: descend abruptly over limestone ledges facing W.

10.00 Base of ledges, bears N. and S.; descend abruptly over rocky W. face of mountain.

23.00 Base of mountain, 800 ft. below ridge, bears N. and S. Descend very gradually over nearly level land, W. exposure.

39.97½ Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd.

¼ S 15
S 22
1913

Survey of the subdivisional lines of Tp. 2 S. R. 11 W.

Chains	
	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.
46.55	Wagon road, Clivo to Quincy Srrings, bears N. and S.
68.60	Wagon road, Clive to Quincy Springs, bears N. and S.
79.95	The cor. of secs. 15, 16, 21 and 22.
	Land, mountainous and level. E. 23 chs., over rough, mountainous land; W. exposure and with a steep W. slope. Soil, rocky, of limestone formation on rock subsoil. W. 56.95 chs., land, nearly level valley, with W. exposure and draining N. Soil, light, dry, weak, gravelly clay, slightly alkali, on hard, dry clay and sand subsoil. A little grazing throughout the mile. No timber; undergrowth, shadscale.
	N. 0° 02' W. bet. secs. 15 and 16.
	Over nearly level land, draining N., through considerable short undergrowth of shadscale.
2.00	Enter dense, high greasewood.
40.00	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd. ¼ S 16 | S 15 / 1913
	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.
80.00	Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground, for cor. of secs. 9, 10, 15 and 16, with brass cap, mkd. T 2 S | R 11 W / S 9 | S 10 / S 16 | S 15 / 1913
	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; general N. exposure.

Survey of the subdivisional lines of Tp. 2 S. R. 11 W.

Chains	
	Soil, light, fine, dry, weak, sandy clay, rather alkali, on hard, baked,--sand-and-clay-subsoil; affords no grazing. No timber; undergrowth, shadscale and greasewood.
	E. on random line bet. secs. 10 and 15.
40.00	Set temp. ¼ sec. cor.
79.95	Intersect N. and S. line 9 lks. N. of cor. of secs. 10, 11, 14 and 15. Thence I run N. 89° 56' W. on true line bet. secs. 10 and 15. Descending abruptly steep W. slope, over mountainous land, draining W., through considerable short undergrowth of shadscale.
6.30	Base of steep descent, bears N. and S.; descend gradually.
28.80	Dry hollow, about 125 ft. below sec. cor., course SW. Ascend.
36.80	Rocky point, about 50 ft. above hollow, bears N. and S. Descend abruptly over limestone ledges.
39.97½	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd. ¼ S 10 / S 15 / 1913. raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor. Cor. stands about 80 ft. below top of point.
40.00	Base of mountain, bears N. and S. Thence over nearly level land, W. exposure.
45.30	Wagon road, Clive to Quincy Springs, bears NE. and S.
60.00	Enter dense, high greasewood, bears N. and S.
66.30	Wagon road, Clive to Quincy Springs, bears NW. and SE.
79.95	The cor. of secs. 9, 10, 15 and 16. Land, E. 40 chs., broken and mountainous; W. exposure. Soil, very rocky and shallow clay of limestone formation, on limestone bedrock; W. 39.95 chs., nearly level land, W. exposure, drains N. Soil, light, fine, dry, weak, clay, rather alkali, on hard baked clay subsoil. The east ½ mile affords fair grazing. No grass on W. ½ mile.

Survey of the subdivisional lines of Tp. 2 S. R. 11 W.

Chains

No timber; undergrowth, shadscale and greasewood.

May 9, 1913: At this cor. I set off 17° 22' N. on the decl. arc, and observe the sun on the meridian at app. noon. The resulting lat. is 40° 39' N.

N. 0° 02' W. bet. secs. 9 and 10.

Over rolling land, draining NW., through considerable short undergrowth of shadscale and greasewood.

40.00 Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd.

¼ S 9 | S 10

1913

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.

60.00 Low, shifting sand ridge, bears N. 10° E. and SW.

Descend 10 ft. to

66.00 Small, dry swale, course W.; ascend 15 ft. to

72.50 Same sand ridge, bears NW. and SE.

Descend gradually.

80.00 Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground, for cor. of secs. 3, 4, 9 and 10, with brass cap, mkd.

T 2 S	R 11 W
S 4	S 3
S 9	S 10

1913

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, rolling; general NW. exposure.

Soil, on S. 60 chs., light, fine, dry, weak, sandy clay, rather alkali, on hard baked sand and clay subsoil; N. 20 chs., loose, shifting sand, on same subsoil; affords no grazing.

No timber; undergrowth, greasewood and shadscale.

Survey of the subdivisional lines of Tp. 2 S. R. 11 W.

Chains	
	S. 89° 56' E. on random line bet. secs. 3 and 10.
40.00	Set temp. ¼ sec. cor.
80.00	Intersect N. and S. line 7 lks. S. of cor. of secs. 2, 3, 10 and 11. Thence I run
	N. 89° 59' W. on true line bet. secs. 3 and 10.
	Descending over broken, mountainous land, draining W., through considerable short undergrowth of shadscale.
16.00	Dry hollow, about 50 ft. below cor., course SW.; ascend.
22.50	Rocky point, about 50 ft. above hollow, bears S. 3 chs., and N.; descend.
26.00	Dry hollow, about 55 ft. deep, course NW.; ascend.
31.50	Rocky ridge, capped with limestone, bears N. 3 chs., and S.: descend abruptly over ledges.
37.20	Foot of mountain, 125 ft. below ridge, bears N. and S. Thence over nearly level land.
37.50	Wagon road, Clive to Quincy Springs, bears N. and S.
40.00	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd.

¼ S 3
S 10
1913

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.

Enter greasewood, bears N. and S.

65.50	Wagon road, Clive to Quincy Springs, bears NW. and SE.
80.00	The cor. of secs. 3, 4, 9 and 10.

E. 37.20 chs., land mountainous; W. exposure. Soil, rocky clay of limestone formation, shallow on limestone bedrock.

W. 42.80 chs., land nearly level, draining N. Soil, light, fine, dry, weak, sandy clay, rather alkali, on hard, baked sand and clay subsoil. Some grazing on E. 37.20 chs.

No timber; undergrowth, shadscale and some greasewood.

	N. 0° 02' W. on random line bet. secs. 3 and 4.
40.00	Set temp. ¼ sec. cor.
79.96	Intersect N. bdy. of Tp. at cor. of secs. 3, 4, 33 and 34, heretofore described.

Thence I run

Survey of the subdivisional lines of Tp. 2 S. R. 11 W.

Chains	
	S. 0° 02' E. on true line bet. secs. 3 and 4.
	Over nearly level land, through considerable short undergrowth of shadscale and scattering greasewood.
13.90	Wagon road, Clive to Quincy Springs, bears NW. and SE.
38.00	Enter dense greasewood.
39.96	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd.
	¼ S 4 | S 3
	1913
	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.
75.00	Enter rolling, sandy land.
79.96	The cor. of secs. 3, 4, 9 and 10.
	Land, nearly level and rolling.
	Soil, light, fine, dry, weak, sandy clay, rather alkali, on hard, baked clay subsoil; affords very little grazing.
	No timber; undergrowth, shadscale and greasewood.
	May 9, 1913.
	Howard W. Miller
	U. S. Surveyor.

Lines run by Robert E. Clark, U.S. Transitman.

May 9, 1913: At 8h a.m., l.m.t., I set off 40° 36' N. on the lat. arc, and 17° 19' N. on the decl. arc, and determine a meridian with the solar, at the cor. of secs. 4, 5, 32 and 33, on S. bdy. of Tp., previously described. Thence I run

N. 0° 03' W. bet. secs. 32 and 33.

Descending gradually over gently rolling land, sloping NE., through considerable short undergrowth of shadscale and salt sage.

36.00	Descend abruptly 10 ft. Thence over level land, sloping W.
40.00	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd.
	¼ S 32 | S 33
	1913

Survey of the subdivisional lines of Tp. 2 S. R. 11 W.

Chains	
	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.
56.00	Ascend abruptly 10 ft. Thence over nearly level land.
80.00	Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground, for cor. of secs. 28, 29, 32 and 33, with brass cap, mkd.

T 2 S | R 11 W
S 29 | S 28
S 32 | S 33
1913

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, gently rolling, nearly level; general W. and NW. exposure.
Soil, light, fine, dry, weak, sandy clay, rather alkali, 3 ft. deep on gravel subsoil; affords no grazing.
No timber; undergrowth, shadscale and salt sage.

	E. on random line bet. secs. 28 and 33.
40.00	Set temp. ¼ sec. cor.
80.04	Intersect N. and S. line 2 lks. N. of cor. of secs. 27, 28, 33 and 34. Thence I run
	N. 89° 59' W. on true line bet. secs. 28 and 33.
	Over nearly level land, draining W., through considerable short undergrowth of shadscale and salt sage.
40.02	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd.

¼ S 28
S 33
1913

	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.
80.04	The cor. of secs. 28, 29, 32 and 33.
	Land, nearly level; general W. exposure.
	Soil, light, fine, dry, weak, sandy clay, rather alkali, on hard, baked sand and clay subsoil; affords no grazing.
	No timber; undergrowth, shadscale and salt sage.

Survey of the subdivisional lines of Tp. 2 S. R. 11 W.

Chains	
	N. 0° 03' W. bet. secs. 28 and 29.
	Over gently rolling land, draining N., through considerable short undergrowth of shadscale and greasewood.
40.00	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd.
	¼ S 29 | S 28 1913
	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.
80.00	Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground, for cor. of secs. 20, 21, 28 and 29, with brass cap, mkd.
	T 2 S | R 11 W S 20 | S 21 S 29 | S 28 1913
	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, gently rolling; general N. exposure.
	Soil, light, fine, dry, weak, sandy clay, rather alkali, on hard, baked sand and clay subsoil; affords no grazing.
	No timber; undergrowth, shadscale and greasewood.
	S. 89° 59' E. on random line bet. secs. 21 and 28.
40.00	Set temp. ½ sec. cor.
80.12	Intersect N. and S. line 5 lks. N. of cor. of secs. 21, 22, 27 and 28. Thence I run
	N. 89° 57' W. on true line bet. secs. 21 and 28.
	Over nearly level land, through considerable short undergrowth of shadscale, greasewood and salt sage.
40.06	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd.
	¼ S 21 S 28 1913
	dig pits, 18 x 18 x 12 ins., E. and W. of post, 3 ft.

Survey of the subdivisional lines of Tp. 2 S. R. 11 W.

Chains

dist., and raise a mound of earth, 3½ ft. base, 1½ ft. high, N. of cor.

80.12 The cor. of secs. 20, 21, 28 and 29.

Land, nearly level; general N. exposure.

Soil, light, fine, dry, weak, sandy clay, rather alkali, on hrad, baked sand and clay subsoil; affords no grazing.

No timber; undergrowth, shadscale, greasewood and salt sage.

May 9, 1913: At this cor. I set off 17° 22' N. on the decl. arc, and at app. noon, observe the sun on the meridian. The resulting lat. is 40° 38' N.

N. 0° 03' W. bet. secs. 20 and 21.

Over nearly level land, draining N., through considerable short undergrowth of shadscale and greasewood.

40.00 Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd.

¼ S 20 | S 21

1913

dig pits, 18 x 18 x 12 ins., N. and S. of post, 5 ft. dist., and raise a mound of earth, 3½ ft. base, 1½ ft. high, W. of cor.

65.00 Leave greasewood and enter dead shadscale, bears NE. and SW.

80.00 Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground, for cor. of secs. 16, 17, 20 and 21, with brass cap, mkd.

T 2 S | R 11 W

S 17 | S 16

S 20 | S 21

1913

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; general N. exposure.

Soil, light, fine, dry, weak, clay, rather alkali, on hard,

Survey of the subdivisional lines of Tp. 2 S. R. 11 W.

Chains	
	baked clay subsoil; affords no grazing.
	No timber; undergrowth greasewood and shadscale.
	S. 89° 57' E. on random line bet. secs. 16 and 21.
40.00	Set temp. ¼ sec. cor.
80.10	Intersect N. and S. line at cor. of secs. 15, 16, 21 and 22. Thence I run
	N. 89° 57' W. on true line bet. secs. 16 and 21.
	Over rolling land, draining N., through considerable short undergrowth of shadscale.
3.10	Enter greasewood, bears NE. and SW.
17.10	Low sand ridge, bears N. and S.
40.05	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd.
	¼ S 16 S 21 1913
	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.
42.15	Leave greasewood and enter burned and dead shadscale, bears NE. and SW.
80.10	The cor. of secs. 16, 17, 20 and 21.
	Land, rolling and nearly level; general N. exposure.
	Soil, light, fine, dry, weak, sandy clay, rather alkali, on hard, baked clay subsoil; affords no grazing.
	No timber; undergrowth, shadscale and greasewood.

May 9, 1913.

Robert E. Clark.
U.S. Transitman

Lines run by Howard W. Miller, U.S.Surveyor.

May 10, 1913: At 7h 56m a.m., l.m.t., I set off 40° 39' N. on the lat. arc, and 17° 35' N. on the decl. arc, and determine a meridian with the solar at the cor. of secs. 16, 17, 20 and 21. Thence I run

N. 0° 03' W. bet. secs. 16 and 17.

Over nearly level land, draining very gradually N., through

Survey of the subdivisional lines of Tp. 2 S. R. 11 W.

Chains	
	considerable short undergrowth of dead shadscale.
40.00	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd.
	¼ S 17 | S 16
	1913
	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.
76.30	Wagon road to Clive, bears NE. and SW.
80.00	Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground, for cor. of secs. 8, 9, 16 and 17, with brass cap, mkd.
	T 2 S | R 11 W S 8 | S 9 S 17 | S 16
	1913
	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, nearly level; general N. exposure.
	Soil, light, fine, dry, weak, clay, rather alkali, on hard, baked clay subsoil; affords no grazing.
	No timber; undergrowth shadscale.
	S. 89° 57' E. on random line bet. secs. 9 and 16.
40.00	Set temp. ¼ sec. cor.
80.07	Intersect N. and S. line 2 lks. S. of cor. of secs. 9, 10, 15 and 16. Thence I run
	N. 89° 58' W. on true line bet. secs. 9 and 16.
	Over rolling land, sloping gently N., through considerable short undergrowth of greasewood and shadscale.
17.80	Low, shifting sand ridge, 15 ft. high, bears N. and S.
	Thence over nearly level land.
40.03½	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd.
	¼ S 9 / S 16
	1913

Chains

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.

45.00 Leave greasewood, bears NE. and SW.

77.30 Wagon road to Clive, bears NE. and SW.

80.07 The cor. of secs. 8, 9, 16 and 17.

Land, level and rolling; general N. exposure.

Soil, light, fine, dry, weak, sandy clay, rather alkali, on hard baked clay subsoil; affords a little grazing.

No timber; undergrowth, greasewood and shadscale.

N. 0° 03' W. bet. secs. 8 and 9.

Over nearly level land, sloping gently N., through scattering short undergrowth of dead shadscale.

40.00 Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd.

¼ S 8 | S 9

1913

dig pits, 18 x 18 x 12 ins., N. and S. of post, 3 ft. dist., and raise amound of earth, 3½ ft. base, 1½ ft. high, W. of cor.

80.00 Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground, for cor. of secs. 4, 5, 8 and 9, with brass cap, mkd.

T 2 S | R 11 W

S 5 | S 4

S 8 | S 9

1913

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, nearly level; general N. exposure.

Soil, light, fine, dry, weak, clay, rather alkali, on hard, baked clay subsoil; affords no grazing.

No timber; undergrowth, short, dead shadscale.

May 10, 1913: At this cor. I set off 17° 38' N. on the decl.

Survey of the subdivisional lines of Tp. 2 S. R. 11 W.

Chains	
	arc, and at app. noon, observe the sun on the meridian. The resulting lat. is 40° 39' N.
	S. 89° 58' E. on random line bet. secs. 4 and 9.
40.00	Set temp. ¼ sec. cor.
79.99	Intersect N. and S. line 3 lks. S. of cor. of secs. 3, 4, 9 and 10. Thence I run
	N. 89° 59' W. on true line bet. secs. 4 and 9.
	Over nearly level land, sloping gently N., through considerable short undergrowth of shadscale and greasewood.
39.99½	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd.
	¼ S 4 / S 9 / 1913
	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.
	Corner stands in dim wagon road to Clive, bears NE. and SW.
65.00	Leave greasewood, bears N. and S.
79.99	The cor. of secs. 4, 5, 8 and 9.
	Land, nearly level; general N. exposure.
	Soil, light, fine, dry, weak, sandy clay and loam, rather alkali, on hard, baked clay and sand subsoil; affords no grazing.
	No timber; undergrowth, shadscale and greasewood.
	N. 0° 03' W. on random line bet. secs. 4 and 5.
40.00	Set temp. ¼ sec. cor.
79.87	Intersect N. bdy. of Tp. at cor. of secs. 4, 5, 32 and 33, heretofore described. Thence I run
	S. 0° 03' E. on true line bet. secs. 4 and 5.
	Over nearly level land, through short undergrowth of shadscale.
39.87	Set an iron post, 3 ft. long, 1 im. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd.
	¼ S 5 | S 4 / 1913

Survey of the subdivisional lines of Tp. 2 S. R. 11 W.

Chains

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.

79.87 The cor. of secs. 4, 5, 8 and 9.

Land, nearly level.

Soil, light, fine, dry, weak, clay, rather alkali, on hard, baked clay subsoil; affords no grazing.

No timber; undergrowth, shadscale, mostly dead.

May 10, 1913.

Howard W. Miller

U. S. Surveyor.

Lines run by Robert E. Clark, U.S. Transitman.

May 10, 1913: At 8h a.m., l.m.t., I set off 40° 36' N. on the lat. arc, and 17° 35' N. on the decl. arc, and determine a meridian with the solar, at the cor. of secs. 5, 6, 31 and 32, on S. bdy. of the Tp., previously described

Thence I run

N. 0° 04' W. bet. secs. 31 and 32.

Over nearly level land, through rather scattering short undergrowth of shadscale and greasewood.

40.00 Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd.

¼ S 31 | S 32

1913

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.

80.00 Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground, for cor. of secs. 29, 30, 31 and 32, with brass cap, mkd.

T 2 S	R 11 W
S 30	S 29
S 31	S 32

1913

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.

Survey of the subdivisional lines of Tp. 2 S. R. 11 W.

Chains	
	Land, nearly level.
	Soil, light, fine, dry, weak, sandy clay, rather alkali, on hard, dry, baked clay subsoil; affords no grazing.
	No timber; undergrowth, shadscale and greasewood, mostly dead.

	E. on random line bet. secs. 29 and 32.
40.00	Set temp. ¼ sec. cor.
79.96	Intersect N. and S. line, at cor. of secs. 28, 29, 32 and 33. Thence I run
	West, on true line bet. secs. 29 and 32.
	Over gently rolling land, sloping gently N., through considerable short undergrowth of shadscale and greasewood.
39.98	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd.
	¼ S 29 / S 32 / 1913
	dig pits, 1o. x 1o 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.
60.00	Thence across nearly level alkali flat.
79.96	The cor. of secs. 29, 30, 31 and 32.
	Land, E. 60 chs., gently rolling, W. 20 chs., level.
	General N. exposure.
	Soil, light, fine, dry, warm, weak, sandy clay, rather alkali, on hard, baked clay subsoil; affords little grazing.
	No timber; undergrowth, shadscale and greasewood.

	W. on random line bet. secs. 30 and 31.
40.00	Set temp. ¼ sec. cor.
78.00	Intersect W. bdy. of Tp. 1 lk. N. of cor. of secs. 25, 30, 31 and 36, heretofore described. Thence I run
	East on true line bet. secs. 30 and 31.
	Over level land, rather alkali, through considerable short undergrowth of shadscale and greasewood.
38.00	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in

Survey of the subdivisional lines of Tp. 2 S. R. 11 W.

Chains	
	the ground, for ¼ sec. cor., with brass cap, mkd. ¼ S 30 ✓ S 31 1913
	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.
50.75	Wagon road to Clive, bears NE. and SW.
78.00	The cor. of secs. 29, 30, 31 and 32.
	Land, level.
	Soil, light, fine, dry, weak, sandy clay loam, rather alkali, on hard, baked clay subsoil; affords no grazing.
	No timber; undergrowth, shadscale and greasewood.
	N. 0° 04' W. bet. secs. 29 and 30.
	Over slightly rolling land, sloping gently NE., through considerable short undergrowth of shadscale, greasewood and salt sage.
40.00	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ½ sec. cor., with brass cap, mkd. ¼ S 30 | S 29 ✓ 1913
	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. Thence over level alkali flat.
42.80	Wagon road to Clive, bears N. 30° E. and S. 30° W.
80.00	Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground, for cor. of secs. 19, 20, 29 and 30, with brass cap, mkd. T. 2 S. | R. 11 W. S. 19 | S. 20 S. 30 | S. 29 1913
	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, S. ½ gently rolling; N. ½ nearly level.
	Soil, light, fine, dry, weak, sandy clay, rather alkali, on

Survey of the subdivisional lines of Tp. 2 S. R. 11 W.

Chains	
	hard, baked clay subsoil; affords poor grazing.
	No timber; undergrowth, shadscale, salt sage and greasewood, mostly dead.

	May 10, 1913: At this cor. I set off 17° 38' N. on the decl. arc, and at app. noon, observe the sun on the meridian. the resulting lat. is 40° 37' N.
	E. on random line bet. secs. 20 and 29.
40.00	Set temp. ¼ sec. cor.
79.96	Intersect N. and S. line 5 lks. S. of cor. of secs. 20, 21, 28 and 29. Thence I run
	S. 89° 58' W. on true line bet. secs. 20 and 29.
	Over nearly level land, through considerable short undergrowth of shadscale, greasewood and salt sage.
28.00	Low, shifting sand dune, bears N. and S.
39.98	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd.
	¼ S 20 / S 29 / 1913
	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.
61.00	Wagon road, to Clive, bears NE. and SW.
79.96	The cor. of secs. 19, 20, 29 and 30.
	Land, nearly level; general N. exposure.
	Soil, light, fine, dry, weak, sandy clay, rather alkali, on hard, packed clay subsoil; affords no grazing.
	No timber; undergrowth, shadscale, greasewood and salt sage.
	May 10, 1913.
	May 12, 1913: At 7h 30m a.m., l.m.t., I set off 40° 38' N. on the lat. arc, and 18° 07' N. on the decl. arc, and determine a meridian with the solar, at the cor. of secs. 19, 20, 29 and 30. Thence I run
	W. on random line bet. secs. 19 and 30.
40.00	Set temp. ¼ sec. cor.

Survey of the subdivisional lines of Tp. 2 S. R. 11 W.

Chains	
77.82	Intersect W. bdy. of Tp: at cor. of secs. 19, 24, 25 and 30, heretofore described. Thence I run
	East on true line bet. secs. 19 and 30.
	Ascend gradually over rolling-land, through some short undergrowth of shadscale and salt sage; W. exposure.
9.10	Ascend abruptly W. slope, over mountainous land, over limestone ledges and boulders.
14.70	Foot of limestone ledge, bears N. and S. Asc. over ledge.
16.60	Top of ledge, 35 ft. high, on top of ridge, 300 ft. above cor., bears N. and S.; descend abruptly steep, rocky E. and NE. slope.
37.82	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for 1/4 sec. cor., with brass cap, mkd.
	1/4 S 19 / S 30 / 1913
	raise a mound of stone, 3 ft. base, 2 ft. high, N. of cor.
41.80	Foot of mountain, about 300 ft. below top, bears N. and S. Thence over nearly level land.
77.82	The cor. of secs. 19, 20, 29 and 30.
	Land, W.9 chs., and E. 36 chs., gently rolling, nearly level, remainder of mile rough and mountainous.
	Soil on level portion, light, fine, dry, weak, sandy clay, quite alkali, on hard, baked clay subsoil; remainder is a weak, rocky clay. Very little grazing on the mile.
	No timber; undergrowth, shadscale and salt sage, with a little greasewood and rabbit brush.

	N. 0° 04' W. bet. secs. 19 and 20.
	Over nearly level land, through short undergrowth of shadscale and salt sage, mostly dead.
40.00	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for 1/4 sec. cor., with brass cap, mkd.
	1/4 S 19 | S 20 / 1913
	dig pits, 18 x 18 x 12 ins., N. and S. of post, 3 ft.

Survey of the subdivisional lines of Tp. 2 S. R. 11 W.

Chains	
	dist., and raise a mound of earth, 3½ ft. base, 1½ ft. high, W. of cor.
80.00	Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground, for cor. of secs. 17, 18, 19 and 20, with brass cap, mkd.

T 2 S. | R 11 W.
S 18 | S 17
S 19 | S 20
1913

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, no perceptible drainage.

Soil, light, fine, dry, weak, sandy clay, quite alkali, on hard, baked clay subsoil; affords no grazing.

No timber; undergrowth, shadscale and salt sage, mostly dead.

Robert E. Clark.
U. S. Transitman

Lines run by Howard W. Miller, U.S.Surveyor.

May 12, 1913: At 8h 27m a.m., l.m.t., I set off 40° 39' N. on the lat. arc, and 18° 06' N. on the decl. arc, and determine a meridian with the solar, at the cor. of secs. 17, 18, 19 and 20. Thence I run

N. 89° 58' E. on random line bet. secs. 17 and 20.

40.00	Set temp. ¼ sec. cor.
79.99	Intersect N. and S. line at the cor. of secs. 16, 17, 20 and 21. Thence I run

S. 89° 58' W. on true line bet. secs. 17 and 20.

Over nearly level land, through considerable short undergrowth of shadscale and salt sage.

33.00	Wagon road to Clive, bears N. 15° E. and S. 15° W.
39.99½	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd.

½ S 17
S 20
1913

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.

Survey of the subdivisional lines of Tp. 2 S. R. 11 W.

Chains	
	high, N. of cor.
79.99	The cor. of secs. 17, 18, 19 and 20.
	Land, nearly level, with gentle N. exposure.
	Soil, light, fine, dry, weak, sandy clay, quite alkali, on hard, baked sand and clay subsoil; affords no grazing.
	No timber; undergrowth, shadscale, salt sage and some greasewood.
	Howard W. Miller
	U. S. Surveyor.
	Lines run by Robert E. Clark, U.S. Transitman.
	W. on random line bet. secs. 18 and 19.
40.00	Set temp. ¼ sec. cor.
77.73	Intersect W. bdy. of Tp. at cor. of secs. 13, 18, 19 and 24, heretofore described. Thence I run
	East on true line bet. secs. 18 and 19.
	Over rolling land, sloping gently E., through considerable short undergrowth of shadscale, mostly dead.
20.00	Base of mountain, bears N. and S. Enter nearly level land with gentle NE. slope.
37.73	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd.
	¼ S 18 / S 19 / 1913
	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.
77.73	The cor. of secs. 17, 18, 19 and 20.
	Land, rolling and nearly level; general NE. exposure.
	Soil, light, fine, dry, weak, sandy clay, quite alkali, on hard, baked clay subsoil; affords no grazing.
	No timber; undergrowth, shadscale and some white sage, mostly dead.
	Robert E. Clark.
	U. S. Transitman.
	Lines run by Howard W. Miller, U.S. Surveyor.
	N. 0° 04' W. bet. secs. 17 and 18.
	Over nearly level land, sloping gently NE., through

Survey of the subdivisional lines of Tp. 2 S. R. 11 W.

Chains

considerable short undergrowth of shadscale and greasewood, mostly dead.

40.00 Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd.

¼ S 18 | S 17

1913

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.

80.00 Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground, for cor. of secs. 7, 8, 17 and 18, with brass cap, mkd.

T 2 S | R 11 W
S 7 | S 8
S 18 | S 17
1913

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, nearly level; general NE. exposure.

Soil, light, fine, dry, weak, sandy clay, quite alkali, on hard, baked sand and clay subsoil; affords no grazing.

No timber; undergrowth, shadscale and greasewood, mostly dead.

N. 89° 58' E. on random line bet. secs. 8 and 17.

40.00 Set temp. ¼ sec. cor.

79.96 Intersect N. and S. line, 12 lks. N. of cor. of secs. 8, 9, 16 and 17. Thence I run

N. 89° 57' W. on true line bet. secs. 8 and 17.

Over level land, no perceptible drainage, through considerable short undergrowth of shadscale and salt sage, much of which is dead.

39.98 Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd.

¼ S 8
S 17
1913

Chains

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.

79.96 The cor. of secs. 7, 8, 17 and 18.

Land level, no perceptible drainage.

Soil, closely packed, light, fine, dry, weak, sandy clay, quite alkali, on hard, baked clay subsoil; affords no grazing.

No timber; undergrowth, shadscale and salt sage, much of which is dead.

Howard W. Miller
U. S. Surveyor.

Lines run by Robert E. Clark, U.S.Transitman.

W. on random line bet. secs. 7 and 18.

40.00 Set temp. ¼ sec. cor.

77.55 Intersect W. bdy. of Tp. 2 lks. S. of cor. of secs. 7, 12, 13 and 18, heretofore described. Thence I run S. 89° 59' E. on true line bet. secs. 7 and 18.

Over level land, through some short undergrowth of shadscale and salt sage.

37.55 Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd.

$$\frac{\frac{1}{4}\ S\ 7}{S\ 18}\ \sqrt{}$$
1913

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.

79.55 Cor. of secs. 7, 8, 17 and 18.

Land, level, no perceptible drainage.

Soil, closely packed, light, fine, dry, weak, sandy clay, quite alkali, on hard, baked clay subsoil; affords no grazing.

No timber; undergrowth, shadscale and salt sage, about ½ of which is dead.

Survey of the subdivisional lines of Tp. 2 S. R. 11 W.

Chains	
	N. 0° 04' W. bet. secs. 7 and 8.
	Over level land, through some short undergrowth of shadscale and salt sage.
40.00	Set an iron post, 3 ft. long, 1 in. in diam., 20 ins. in the ground, for ¼ sec. cor., with brass cap, mkd.
	¼ S 7 | S 8 1913
	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.
80.00	Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground, for cor. of secs. 5, 6, 7 and 8, with brass cap, mkd.
	T 2 S | R 11 W S 6 | S 5 S 7 | S 8 1913
	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, no perceptible drainage.
	Soil, closely packed, light, fine, dry, weak, clay, quite alkali, on hard, baked clay subsoil: affords no grazing.
	No timber: undergrowth short shadscale and salt sage, much of which is dead.

Lines run by Howard W. Miller, U.S.Surveyor.

	S. 89° 57' E. on random line bet. secs. 5 and 8.
40.00	Set temp. ¼ sec. cor.
79.96	Intersect N. and S. line, 5 lks. S. of cor. of secs. 4, 5, 8 and 9. Thence I run
	N. 89° 59' W. on true line bet. secs. 5 and 8.
	Over level land, through some short undergrowth of shadscale and salt sage.
39.98	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd.
	¼ S 5 S 8 1913

Survey of the subdivisional lines of Tp. 2 S. R. 11 W.

Chains	
	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.
79.96	Land level, no perceptible drainage. The cor. of secs. 5, 6, 7 and 8. Soil, closely packed, light, fine, dry, weak, sandy clay, quite alkali, on hard, baked clay subsoil; affords no grazing. No timber; undergrowth, shadscale and salt sage, much of which is dead.
	N. 89° 59' W. on random line bet. secs. 6 and 7.
40.00	Set temp. ¼ sec. cor.
77.37	Intersect W. bdy. of Tp. 11 lks. N. of cor. of secs. 1, 6, 7 and 12, heretofore described. Thence I run N. 89° 56' E. on true line bet. secs. 6 and 7. Over level land, through some short undergrowth of shadscale and salt sage.
37.37	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd. ¼ S 6 / S 7 / 1913 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.
77.37	The cor. of secs. 5, 6, 7 and 8. Land level, no perceptible drainage. Soil, closely packed, light, fine; dry, weak, sandy clay, quite alkali, on hard, baked clay subsoil; affords no grazing. No timber; undergrowth, shadscale and salt sage, much of which is dead.

May 12, 1913.

Robert E. Clark,

U. S. Deputy Surveyor

Survey of the subdivisional lines of Tp. 2 S. R. 11 W.

Chains

Lines run by Howard W. Miller, U.S.Surveyor.

N. 0° 04' W. on random line bet. secs. 5 and 6.

40.00 Set temp. ¼ sec. cor.

79.87 Intersect N. bdy. of Tp. at cor. of secs. 5, 6, 31 and 32, heretofore described. Thence I run

S. 0° 04' E. on true line bet. secs. 5 and 6.

Over level land, through considerable short undergrowth of shadscale and salt sage.

39.87 Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd.

¼ S 6 | S 5

1913

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.

79.87 The cor. of secs. 5, 6, 7 and 8.

Land level, no perceptible drainage.

Soil, closely packed, light, fine, dry, weak, sandy clay, quite alkali, on hard, baked clay subsoil: affords no grazing.

No timber; undergrowth, short shadscale and salt sage, much of which is dead.

May 12, 1913.

Howard W. Miller

U. S. Surveyor.

General Description.

The lands in this Tp. are about ⅔ mountainous and ⅓ level. There is one ridge running N. and S. through secs. 2, 11 and 14, which is quite high and steep, and broken by many limestone ledges on the W. face. This ridge is from 800 to 1000 ft. above the valley to the W. The E. side of the ridge breaks down more gently to a high, rolling bench land. This bench land lies along the W. foot of the Cedar Mountains, and forms the foothills of this range. The soil on this bench land is a loose, light, sandy,

clay loam, rich in lime, and produces a fair growth of nutritious native grasses, with an abundance of white or salt sage, both of which make excellent forage for stock. The soil on this land is capable of producing abundant crop if watered, and might even be dry farmed with moderate success.

There is no water in the Tp., but the eastern portion has evidently been used for a winter range, for which it is very well adapted, although the territory has been pastured to such an extent that it does not produce nearly its full measure of feed.

There are a few scrub cedar trees in the eastern portion, which are of no commercial value.

The western half of the Tp. consists of a large, level valley, which, at the southern end, seems to drain to the N but toward the NW. and W. part of the Tp. there is apparantly no drainage whatever. This valley is part of the old bed of Lake Bonneville. The old beach lines of this lake are quite prominent on the mountain in the easter part of the Tp., in some places as many as five distinct beach lines being distinguishable. The upper, and most prominent of these, being the only one noted in the field notes.

The soil in the valley is mostly a light, fine, dry, weak closely packed, sandy clay, rather strongly impregnated with alkali, and of poor quality. The subsoil, or what appears to be the subsoil, is a hard, baked clay of apparently the same formation as the upper soil, but much more closely packed

The valley supports a scant growth of salt or white sage, and grass in places, which might be used for grazing, otherwise it is worthless.

The entire Tp. supports a fairly dense growth of shadscale and some greasewood. In large areas of the valley, this undergrowth is dead, having been burned out by the rain

waters standing on it.

This fact of there being no drainage, and the water standing on the surface until evaporated would prevent farming even if it were possible to get water onto the land.

There are no settlers in the Tp.

Howard W. Miller
U. S. Surveyor.

Robert E Clark
U. S. Transitman.

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Page

4—080

BOOK A-405

CERTIFICATE OF ASSISTANTS.

We, the undersigned, hereby certify upon honor that we assisted, to the best of our skill and ability, ..., U. S. Surveyor, during the periods and in the capacities tated opposite our several signatures, in surveying all those parts or portions of .....

For certificates of assistants see book "J" T.3 N.R.11 W.

the ..... Meridian, in the State of .....

hich are represented in the foregoing field notes as having been executed by him, and under his direc-on; and that said survey has been, in all respects, to the best of our knowledge and belief, well and ithfully executed.

NAME.	PERIOD OF SERVICE.		CAPACITY.
	BEGUN.	ENDED.	

Subscribed and certified to before me on the dates of the final service as shown above.

.....

6—2764

U. S. Surveyor.

FINAL OATH OF UNITED STATES SURVEYOR.

I, ..., U. S. Surveyor, do solemnly swear that, in pursuance of special instructions received from the U. S. Surveyor General for ..... bearing date of the ..... day of ....., 191 , I have well, faithfully, and trul in my own proper person, and in strict conformity with said instructions, the Manual of Surveyin Instructions, and the laws of the United States, surveyed all those parts or portions of .....

For final oaths of U.S.Surveyor and Transitman see book "J" T.3 N. R.11 W.

..... of the ..... Meridian, in the State of ....., which are represented i the foregoing field notes as having been executed by me, and under my direction; and I do furthe solemnly swear that all the corners of said survey have been established and perpetuated in strict accord ance with the Manual of Surveying Instructions, and the special written instructions of the U. S. Surveyo General for ..... and in the specific manner described in the field notes, and tha the foregoing are the original field notes of such survey.

.....
U. S. Surveyor.

Subscribed by said ....., and sworn to before me this ..... day of ....., 191 .

SEAL

.....

.....

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah, April 5, 191 5.

The foregoing field notes of the survey of the Subdivisional lines of Township No.2 South, Range No.11 West of the Salt Lake Base and Meridian, Utah,

executed by Howard E.Miller and Robert E.Clark their under his special instructions dated April 10, 1913 , having been critically examined, and the necessary corrections and explanations made, the said field notes, and the surveys they describe, are hereby approved.

M. C. Thorsen
U. S. 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.

.....
U. S. Surveyor General.

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Page

4—679

BOOK A-405

Book "C"

FIELD NOTES

OF THE SURVEY OF THE

SUBDIVISION

OF

T.1 N., R.10 W.

Of the SALT LAKE BASE AND *Meridian,*

in the State of UTAH

EXECUTED BY

Howard W. Miller

&

Robert E. Clark

in the capacities of U. S. Surveyor and Transitman, *under instructions dated* April 10, *191*3, *issued by the United States Surveyor General to govern surveys included in Group No.* 21, *which were approved by the Commissioner of the General Land Office,* April 23, *191*3, *pursuant to authority contained in the Act of Congress dated* ....., *191*...

Survey commenced May 13, *191*3

Survey completed May 20, *191*3

6—151

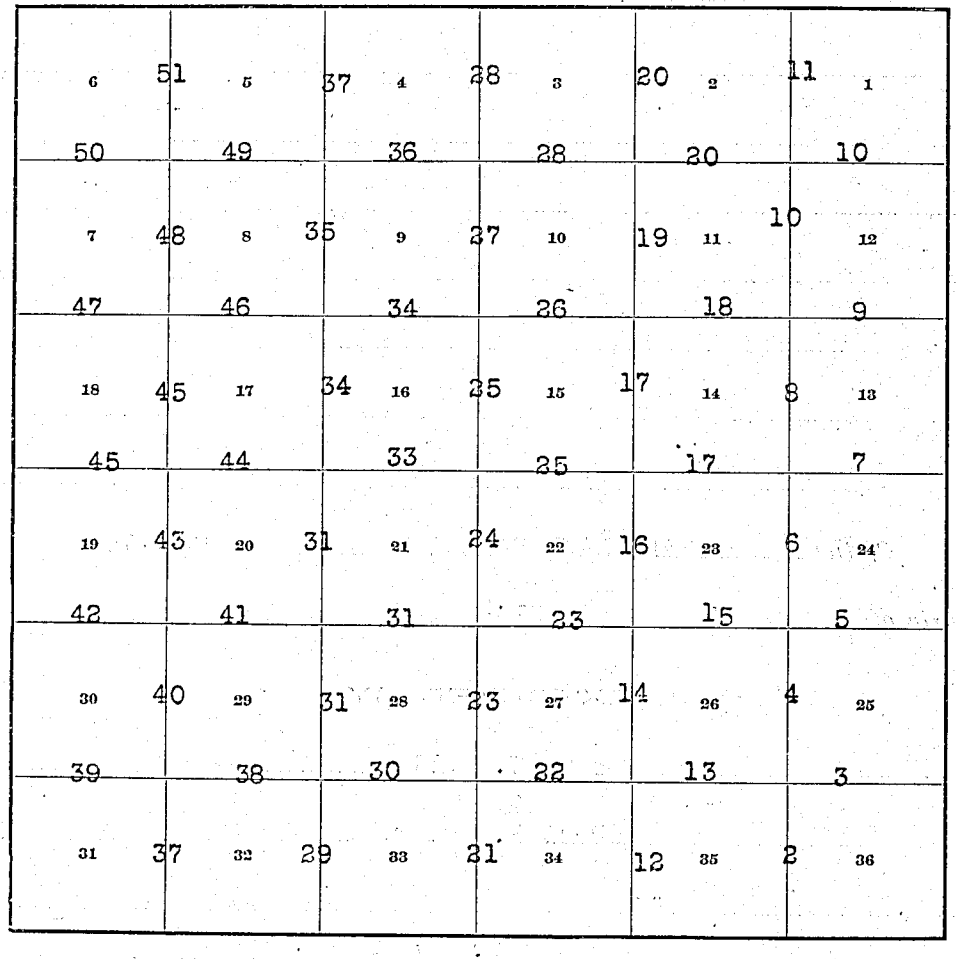
subc — 60-25-77 closings 0-16-33

U. S. Surveyor General's Office
MAR 19 1914
SALT LAKE CITY, UTAH.

BOOK A-405

INDEX DIAGRAM.

Township 1 North, *Range* 10 West S.L.B.& M.



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Survey of the subdivisional lines Of Tp.1 N.,R.10 W.

chains

Survey commenced May 13 , 1913 and executed with Young and Sons. light mountain transits Nos. 8147 and 7147 , with solar attachments.

Use of the above instruments was approved by G. D. D. Kirkpatrick, Ass't.Supervisor of Surveys ,in the assignment instructions dated April 10,1913, conditional upon satisfactory field tests , the record of which follows:

For description and test of instrument No.8147 ,used by Howard W. Miller , U. S. Surveyor ,see page 1 , of the field notes of the W. bdy. of T.1 N.,R.10 W.

Young and Sons light mountain transit used by Robert E. Clark , U.S.Transitman , is fitted with a Smith solar attachment. The instrument is provided with two opposite double verniers , reading to single minutes of arc , which is also the least count of the verniers of the lat. and decl. arcs.

Test of instrument No. 7147.

I examine the adjustments of my instrument and find no errors , then to test the adjustments of the solar attachment by comparing its indications resulting from 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 secs. 35 and 36 on the S. bdy. of the Tp., which is an iron post , 3 ins. in dia., properly set , marked and witnessed ; approximate lat. 40°46'N.; long. 113°02'W ; at 4h.30m.p.m.l.m.t., I set off 40°46' on the lat. arc ; 18° 27'N., on the decl. arc ; and determine a meridian with the solar and mark the line thus determined by a tack , driven in a wooden peg , set firmly in the ground , 4 chs. N.

At 7 h. 52 m. p. m. l. m. t., I observe Polaris in accordance with instructions in the Manual and mark the direction of the line thus determined on a stake ,set 4 chains N.

Time of obsn. May 13,1913---------- 7h.52m.p.m.
U.C.Polaris May 13 reduced to long.113°02'W.10h. 04.m.a.m.
Time elapsed from U.C.to time of obsn 9h. 48m. ✓

Survey of the Subdivisional lines of T.1 N.,R.10 W.

chains

Hour angle of Polaris at obsn. 9h.48m.
Azimuth of Polaris at obsn. 0°49'W.
May 13 , 1913

May 14: At 8h.a.m. I lay off the azimuth of Polaris , 0°49' to the east , which line coincides with the meridian determined May 13 , by solar observation.

At 8h.15m.a.m.l.m.t., I set off 40° 46' on the lat. arc ; 18° 36'N., on the decl. arc ; and determine a meridian with the solar. The line thus determined falls 0.1 ins. to the west of the Polaris meridian. T herefore conclude that the adjustments of my instrument are satisfactory.

Measurements

Steel tapes , 5 chs. in length were used by both parties in the field work on Group No. 21 , together with clinometer for determining slope angles , and the reduced horizontal distances only , appear in the official field notes. The tapes were tested frequently during the season , comparison being made with a standard steel tape , 1 chain in length , kept and used for that purpose only.

From the standard cor. of secs. 35 and 36 already described , at 8 h. 30m. a. m. I deflect from the meridian determined by observations on Polaris , at this point , and run

N.0°01' W., bet. secs. 35 and 36

Descend gradually over mountainous land , along W. breaks of Cedar Mountains , through scattering cedar timber and dense low undergrowth of shadscale , salt sage , chico sage brush and rabbit brush.

4.00 Descend abruptly NW. slope.

6.00 Dry gulch , about 70 ft. below cor., course W.; Ascend abruptly.

11.90 Ascend more gradually.

15.50 Descend over numerous small spurs and gulches draining NW.

40.00 Set an iron post , 3 ft. long , 1 in. in dia., 26 ins. in the ground for ¼ sec. cor., with brass cap marked

¼ S 35 | S 36
1913

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

Survey of the subdivisional lines of Tp. 1 N. R. 10 W.

Chains	
	From this cor. the chimney on Low station bears N. 34° 19' W.
	Chimney on section house No. 1 bears N. 38° 02' W.
	Chimney on section house No. 2 bears N. 39° 43' W.
58.00	Ascend gradually W. slope.
71.00	Perpendicular ledge of blue limestone, 25 ft. high, bears N. 20° W. and S. 20° E.
80.00	Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground, for cor. of secs. 25, 26, 35 and 36, with brass cap, mkd.

T 1 N | R 10 W
S 26 | S 25
S 35 | S 36
1913

raise a mound of stone, 2½ ft. base, 2 ft. high, W. of cor.
From this corner, chimney on Low station bears N. 71° 20' W.
Chimney on section house No. 1 bears N. 80° 11' W.
Chimney on section house No. 2 bears N. 82° 56' W.
Land, mountainous; general W. and NW. exposure.
Soil, shallow gravel and clay, quite rocky; affords good grazing.
Timber, scrub cedars; undergrowth, shadscale, salt sage, chico, sagebrush and rabbit brush.

E. on random line bet. secs. 25 and 36.

40.00 Set temp. ¼ sec. cor.

May 14, 1913: At this point I set off 18°/38' N. on the decl. arc, and at app. noon, observe the sun on the meridian. The resulting lat. is 40°/47' N.

79.98 Intersect E. bdy. of Tp. 5 lks. S. of cor. of secs. 25, 30, 31 and 36, which is an iron post, 3 ins. in diam., properly mkd., set and witnessed.

Thence I run

S. 89° 58'/W. on true line bet. secs. 25 and 36.

Descending abruptly over mountainous land, through scattering cedar timber and some undergrowth of shadscale and sagebrush.

Survey of the subdivisional lines of Tp. 1 N. R. 10 W.

Chains

9.60 Dry gulch, about 75 ft. below cor., course N.; ascend E. slope.

13.80 Ascend very abruptly, rocky E. slope.

29.80 Top of perpendicular ledge of blue limestone, 75 ft. high, bears N. and S.; ascend gradually.

30.68 Ridge, about 1000 ft. above gulch, and 1600 ft. above Low station, bears N. and S.

From this point, monument on top of peak bears S. 9° 34' W

Descend over perpendicular ledge, 25 ft. high, bearing N. and S. Thence descend precipitous W. slope, over numero limestone ledges, bearing N. and S.

39.99 Set an iron post, 3 ft. long, 1 in. in diam., on solid rock, supported by a mound of stone, 4 ft. base, 2½ ft. high, for ¼ sec. cor., with brass cap, mkd.

$$\frac{\frac{1}{4}\ S\ 25}{S\ 36}$$
1913

raise a mound of stone, 3 ft. base, 2 ft. high, N. of cor. Cor. stands 50 lks. W. of foot of perpendicular ledge, 30 ft. high, bearing N. and S.

65.30 Dry gulch, about 1000 ft. below ridge, course N. 60° W. Ascend abruptly.

70.00 Spur, about 150 ft. above gulch, projects NW.; descend abruptly over ledges.

78.20 Foot of perpendicular ledge, 30 ft. high, bears N. and S.

79.98 The cor. of secs. 25, 26, 35 and 36.

Land, rough and mountainous; surface, very rocky.

E. 30 chs., E. and N. exposure; W. 50 chs., steep W. exposure.

Soil, very shallow and rocky, disintegrated limestone; affords fair grazing, but is otherwise worthless.

Timber, scrub cedar; undergrowth, shadscale and sagebrush.

May 14, 1913.

May 15, 1913: At 7h 00m a.m., l.m.t., I set off 40°47' N. on the lat. arc, and 18°49' N. on the decl. arc, and determine a meridian with the solar, at the cor. of secs. 25, 26, 35 and 36. Thence I run

Survey of the subdivisional lines of Tp. 1 N. R. 10 W.

Chains	
	N. 0° 01' W. bet. secs. 25 and 26.
	Descending over rolling foothills, through considerable short undergrowth of shadscale, sagebrush and chico, and scattering cedar timber.
4.70	Descend abruptly N. slope.
7.50	Mouth of dry gulch, course W.; ascend abruptly.
18.50	Top of abrupt ascent. Thence over nearly level bench; sloping W., about 2.00 chs. W. of ledge, 60 ft. high.
23.50	Descend N. and NE. slope.
30.00	Dry gulch, course NW.; continue to descend gradually.
38.00	Dry wash, 20 lks. wide, 4 ft. deep, course N. 15° W.
40.00	Set an iron post, 3 ft. long, 1 in. in diam., 20 ins. in the ground, for ¼ sec. cor., with brass cap, mkd. ¼ S 26 | S 25 1913 raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.
48.50	Dry wash, 30 lks. wide, 6 ft. deep, course NW. Descend gradually NW. slope, over numerous small, dry washes.
	Leave timber, bears E. and W.
71.20	Dim wagon road, bears NE. and SW.
80.00	Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground, for cor. of secs. 23, 24, 25 and 26, with brass cap, mkd. T 1 N | R 10 W S 23 | S 24 S 26 | S 25 1913 raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.
	Land, rolling foothills, cut by numerous dry washes.
	General W. and NW. exposure.
	Soil, light, fine, dry, sandy clay, mixed with rocks and gravel; affords fair grazing.
	Timber, cedar; undergrowth, shadscale, sagebrush and chico.
	N. 89° 58' E. on random line bet. secs. 24 and 25.
40.00	Set temp. ¼ sec. cor.
80.06	Intersect E. bdy. of Tp. 2 lks. N. of cor. of secs. 19, 24, 25 and 30, which is an iron post, 3 ins. in diam., properly mkd., set and witnessed. Thence I run
	S. 89° 59' W. on true line bet. secs. 24 and 25.

Survey of the subdivisional lines of Tp. 1 N. R. 10 W.

Chains	
	Ascend gradually over rolling foothills, sloping N., throu dense undergrowth of shadscale, sagebrush and chico, and some rabbit brush,
23.30	Descend gradually SW. slope. Enter scattering cedar timber
37.00	Dry wash, 20 lks. wide, 5 ft. deep, course NW.
	Descend gradually NW. slope.
40.03	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd. $\frac{\frac{1}{4}\ S\ 24}{S\ 25}$ / 1913 raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor Cedar 10 ins. in diam., bears N. 18° 30' E., 33 lks. dist. mkd. BT ¼ S 24.
	No trees fit for marking in sec. 25.
50.00	Leave timber, bears N. and S.
80.06	The cor. of secs. 23, 24, 25 and 26.
	Land, rolling foothills; N. and NW. exposure.
	Surface, quite rocky on W. ½ mile.
	Soil, light, fine, dry, sandy clay, mixed with rocks and gravel; affords fair grazing.
	Timber, cedar: undergrowth, shadscale, sagebrush, chico and rabbit brush.
	N. 0° 01' W. bet. secs. 23 and 24.
	Descend gradually over gently rolling land, sloping NW., through considerable short undergrowth of shadscale.
20.85	Telegraph line, bears N. 32° 41' E., and S. 32° 41' W.
22.12	Center of W.P.Ry. track, at N. end of curve, bears N. 32° 41' E. from curve.
27.85	Telegraph line, bears N. 32° 41' E. and S. 32° 41' W.
28.70	Telephone line, bears N. 32° 41' E. and S. 32° 41' W.
40.00	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd. $\frac{\frac{1}{4}\ S\ 23 \mid S\ 24}{}$ 1913 raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.
55.00	Wagon road, Low to Dell, Utah, bears N. 30° E. and S. 30° W

Survey of the subdivisional lines of Tp. 1 N. R. 10 W.

Chains	
55.70	Wagon road, Clive to Dell, Utah, bears N. 30° E. and S. 30° W.
80.00	Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground, for cor. of secs. 13, 14, 23 and 24, with brass cap, mkd.

T 1 N | R 10 W.
S 14 | S 13
S 23 | S 24.
1913

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, gently rolling; general NW. exposure.

Soil, light, fine, dry, warm, sandy clay of good texture, mixed with gravel, 20 to 40 ins. deep on gravel subsoil; affords fair grazing.

No timber; undergrowth, shadscale.

N. 89° 59' E. on random line bet. secs. 13 and 24.

40.00 Set temp. ¼ sec. cor.

80.06 Intersect E. bdy. of Tp. at cor. of secs. 13, 18, 19 and 24, which is an iron post, 3 ins. in diam., mkd., set and witnessed properly. Thence I run S. 89° 59' W. on true line bet. secs. 13 and 24.

Descend very gradually over gently rolling land, sloping SW., through considerable short undergrowth of shadscale and some rabbit brush.

12.06 Telephone line, bears N. 70° E. and S. 70° W.

15.00 Dry wash, 30 lks. wide, 20 ft. deep, course NW. Thence over rolling sandy land, draining NW.

19.66 Telegraph line, bears N. 78° 45' E., and S. 78° 45' W.

23.28 Center of W.P.Ry. track, bears N. 78° 45' E., and S. 78° 45' W.

38.26 Telegraph line, bears N. 78° 45' E. and S. 78° 45' W.

38.40 Sandy wash, 20 ft. below track, course N.; asc. SE. slope.

40.03 Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd.

¼ S 13
S 24
1913

Survey of the subdivisional lines of Tp. 1 N. R. 10 W.

Chains	
	raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor
47.36	U.S.L.M. No. 1, which is a cedar post 8 ft. long, 6 ins. square, set in a mound of stone, 6 x 5 ft. base, 4 ft. high, mkd. U.S.L.M. No. 1 on NW. face, bears N. 8 lks. dis Monument on peak, bears S. 5° 14' E.
47.90	Ridge, about 75 ft. above ¼ sec. cor., bears NE. and SW. Descend abruptly W. slope, over bare limestone face of hil
53.00	Foot of hill, about 100 ft. below top, bears NE. and SW. Thence descend gradually over rolling W. slope.
55.10	Wagon road, Low to Dell, bears N. 30° E. and S. 20° W.
80.06	The cor. of secs. 13, 14, 23 and 24. Land, gently rolling; general N. and W. exposure. Soil, mostly sandy, mixed with some clay and gravel W. of the ¼ sec. cor.; affords excellent grazing. No timber; undergrowth, shadscale and rabbit brush.

N. 0° 01' W. bet. secs. 13 and 14.

Over gently rolling land, sloping to N. and W., through considerable short undergrowth of shadscale and salt sage.

7.00	Wagon road, bears N. 75° W. and S. 75° E.
29.40	Wagon road, bears NW. and SE.
40.00	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd.

¼ S 14 | S 13

1913

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.

May 15, 1913: At this cor. I set off 18° 52' N. on the decl. arc, and at app. noon observe the sun on the meridian. The resulting lat. is 40° 49' N.

80.00	Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground, for cor. of secs. 11, 12, 13 and 14, with brass cap, mkd.

Survey of the subdivisional lines of Tp. 1 N. R. 10 W.

Chains

T 1 N	R 10 W
S 11	S 12
S 14	S 13

1913

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, gently rolling; general W. and NW. exposure.

Soil, light, fine, dry, warm, sandy, clay loam of good texture, 20 to 30 ins. deep on clay and gravel subsoil; affords fair grazing.

No timber; undergrowth, shadscale and salt sage.

N. 89° 59' E. on random line bet. secs. 12 and 13.

40.00 Set temp. ¼ sec. cor.

80.00 Intersect E. bdy. of Tp. 5 lks. S. of cor. of secs. 7, 12, 13 and 18, which is an iron post, 3 ins. in diam., properly mkd., set and witnessed. Thence I run S. 89° 57' W. on true line bet. secs. 12 and 13.

Descend very gradually over gently rolling land, sloping NW., through considerable short undergrowth of shadscale and salt sage.

12.70 Wagon road, Low to Dell, bears N. 25° E. and S. 25° W.

14.90 Wagon road, bears N. and S.

40.00 Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd.

¼ S 12
S 13

1913

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.

62.00 Dry wash, 30 lks. wide, 10 ft. deep, course NW.

64.50 Wagon road, bears N. 60° W. and S. 60° E.

80.00 The cor. of secs. 11, 12, 13 and 14.

Land, gently rolling; general NW. exposure.

Soil, light, fine, dry, sandy, clay loam of good texture, 30 to 40 ins. deep on clay and gravel subsoil; affords fair grazing.

Survey of the subdivisional lines of Tp. 1 N. R. 10 W.

Chains

No timber; undergrowth, shadscale and salt sage.

N. 0° 01' W. bet. secs. 11 and 12.

Over nearly level land, sloping very gently to NW., through considerable short undergrowth of shadscale and some salt sage.

12.20 Wagon road, bears NW. and SE.

40.00 Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd.

¼ S 11 | S 12

1913

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.

69.00 Wagon road, bears N. 25° E. and S. 25° W.

80.00 Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground, for cor. of secs. 1, 2, 11 and 12, with brass cap, mkd.

T 1 N | R 10 W
S 2 | S 1
S 11 | S 12

1913

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, nearly level; general NW. exposure.

Soil, light, fine, dry, warm, sandy, clay loam, rather alkali, on hard, baked clay subsoil; affords fair grazing.

No timber; undergrowth, shadscale and salt sage.

N. 89° 57' E. on random line bet. secs. 1 and 12.

40.00 Set temp. ¼ sec. cor.

80.04 Intersect E. bdy. of Tp. at cor. of secs. 1, 6, 7 and 12, which is an iron post, 3 ins. in diam., properly mkd., set and witnessed. Thence I run

S. 89° 57' W. on true line bet. secs. 1 and 12.

Descending very gradually over gently rolling land, sloping W., through considerable short undergrowth of shadscale and some salt sage.

Survey of the subdivisional lines of Tp. 1 N. R. 10 W.

Chains	
40.02	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd. ¼ S 1 S 12 1913 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.
69.55	Wagon road, bears N. 25° E. and S. 25° W.
80.04	The cor. of secs. 1, 2, 11 and 12. Land, E. ½ mile, gently rolling; W. ½ mile, nearly level. General W. exposure. Soil, light, fine, dry, warm, sandy clay, of fair texture, rather alkali, on closely packed sand and clay subsoil; affords little grazing. No timber; undergrowth, shadscale and salt sage.
	N. 0° 01' W. on true line bet. secs. 1 and 2. Over practically level land, through some short undergrowth of shadscale, salt sage and few scattering greasewood.
40.00	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd. ¼ S 2 | S 1 1913 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.
85.37	Intersect N. bdy. of Tp. 3.41 chs. W. of cor. of secs. 35 and 36, heretofore described. At intersection Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground, for closing cor. of fracl. secs. 1 and 2, with brass cap, mkd. T 2 N | R 10 W S 35 | S 36 C C S 2 | S 1 T 1 N 1913 dig pits, 24 x 18 x 12 ins., crosswise on each line., E. and W. 3 ft., and S. of post, 7 ft. dist., and raise a mound of earth, 4 ft. base, 2 ft. high, S. of cor.

Survey of the subdivisional lines of Tp. 1 N. R. 10 W.

Chains	
	Land, level.
	Soil, light, fine, dry, baked, sandy clay, rather alkali, on hard, baked clay subsoil; affords no grazing.
	No timber; undergrowth, very scrubby shadscale, salt sage and some greasewood.
	May 15, 1913. Robert E. Clark U.S. Transitman
	Lines run by Howard W. Miller, U.S.Surveyor.
	May 16 1913: At 7h 56m a.m., l.m.t., I set off 40° 46' N. on the lat. arc, and 19° 04' N. on the decl. arc, and determine a meridian with the solar, at the standard cor. of secs. 34 and 35, Tp. 1 N. R. 10 W., which is an iron post, 3 ins. in diam., properly mkd., set and witnessed.
	Thence I run
	N. 0° 02' W. bet. secs. 34 and 35.
	Over rolling land, draining NW., through considerable shor undergrowth of shadscale.
9.00	Dry wash, 20 lks. wide, 5 ft. deep, course NW.; ascend.
10.50	Low spur, bears NW. and SE.; descend.
12.00	Dry wash, 18 lks. wide, 4 ft. deep, course NW.; ascend.
30.90	Low spur, bears NW. and SE.; descend.
34.90	Dry wash, 20 lks. wide, 5 ft. deep, course NW.
36.90	Borrow pit of W.P.Ry., 8 ft. deep, bears N. 43° E. and S. 43° W.
37.40	Telegraph line, bears N. 43° 03' E. and S. 43° 03' W.
38.40	Center of W.P.Ry. track, at a curve, the tan. to which bears N. 43° 03' E. and S. 43° 03' W.
	Wagon road crosses Ry. at a point N. 32° 08' E. from here.
40.00	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd.
	¼ S 34 | S 35
	1913
	raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.
40.65	Wagon road, parallels Ry. track.
40.67	Telegraph line, parallels Ry. track.
51.10	Dry wash, 20 lks. wide, 4 ft. deep, course NW.

Survey of the subdivisional lines of Tp. 1 N. R. 10 W.

Chains	
58.30	Wagon road, Clive to Low, bears NE. and SW.
59.10	Dry wash, 20 lks. wide, 4 ft. deep, course NW.
62.00	Enter dense greasewood, bears NE. and SW.
72.20	Telephone line, bears NE. and SW.
72.70	Low sand ridge, bears NE. and SW.
73.50	Leave dense and continue in scattering greasewood.
80.00	Set an iron post, 3 ft. long, 3 ins. in diam., 24 ins. in the ground, for cor. of secs. 26, 27, 34 and 35, with brass cap, mkd.

T 1 N | R 10 W	
S 27	S 26
S 34	S 35

1913

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, rolling; general NW. exposure.

Soil, light, fine, dry, sandy, clay loam, of fair texture, on dry sand and clay subsoil; affords good grazing.

No timber; undergrowth, shadscale and greasewood.

The cor. of secs. 25, 26, 35 and 36, being plainly visible, I run for said corner.

S. 89° 57' E. on random line bet. secs. 26 and 35.

40.00 Set temp. ¼ sec. cor.

80.20 Intersect N. and S. line at cor. of secs. 25, 26, 35 and 36.

Thence I run

N. 89° 57' W. on true line bet. secs. 26 and 35.

Descend abruptly over rocky, broken mountainous land, over NW. slope, through considerable short undergrowth of shadscale.

20.20 Base of mountain, bears N. and S. Thence descending more gradually over rolling NW. slope. Enter some greasewood.

31.30 Wagon road, bears NE. and SW.

38.82 W.P.Ry. borrow pit, drains SW.

39.13 Telegraph line, parallels Ry. track.

40.10 Point for ¼ sec. cor. falls on Ry. embankment, where it would be liable to destruction. I therefore continue my line.

Survey of the subdivisional lines of Tp. 1 N. R. 10 W.

Chains	
40.28	Center of W.P.Ry. track, bears N. 24°.15' E., and S. 24° 15.W., curve starts.1ch. S. Station house and section houses are located by intersecting bearings taken from line bet. secs. 35 and 36.
40.95	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for witness ¼ sec. cor., with brass cap, mkd. T 1 N | R 10 W / S 36 | S 35 / 1913 raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor.
42.10	Telegraph line, parallels Ry. track.
47.80	Dry wash, 8 lks. wide, 3 ft. deep, course NW.
48.60	Wagon road, Low to Quincy Springs, bears NE. and SW.
50.50	Wagon road, Low to Clive, bears NE. and SW.
65.20	Enter dense greasewood, bears N. and S.
65.70	Dry wash, 10 lks. wide, 3 ft. deep, course NW.
66.35	Telephone line, bears NE. and SW.
80.20	The cor. of secs. 26, 27, 34 and 35,
	Land, rolling and broken mountainous; general NW. exposure.
	Soil, light, fine, dry, sandy, clay loam of fair texture on rolling land, very rocky, weak clay on rough portion; affords good grazing.
	No timber; undergrowth, shadscale and greasewood.

	N. 0° 02' W. bet. secs. 26 and 27.
	Over rolling land, draining NW., through considerable short undergrowth of shadscale and some greasewood.
11.50	Sand ridge, 15 ft. high, bears NW. and SE.
17.50	Wagon road, bears NE. and SW.
30.45	Cross roads, bear NE. and SW., and NW. and SE.
40.00	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd. ¼ S 27. | S 26 / 1913 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.

Survey of the subdivisional lines of Tp. 1 N. R. 10 W.

Chains	
43.70	Wagon road, bears NE. and SW.
48.70	Wagon road, bears NW. and SE.
70.20	Wagon road, bears NW. and SE.
80.00	Set an iron post, 3 ft. long, 2 in. in diam., 24 ins. in the ground, for cor. of secs. 22, 23, 26 and 27, with brass cap, mkd.

T 1 N | R 10 W
S 22 | S 23
S 27 | S 26
1913

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, rolling; general NW. exposure.

Soil, light, fine, dry, warm, sandy loam, of good texture and great depth; affords good grazing.

No timber; undergrowth, shadscale and greasewood.

The cor. of secs. 23, 24, 25 and 26, being plainly visible, I run for said corner.

S. 89° 53' E. on random line bet. secs. 23 and 26.

40.00	Set temp. ¼ sec. cor.
80.20	Intersect N. and S. line at the cor. of secs. 23, 24, 25 and 26. Thence I run

N. 89° 53' W. on true line bet. secs. 23 and 26.

Descending gradually over gently rolling land, draining NW., through considerable short undergrowth of shadscale and some greasewood.

6.83	Telegraph line, parallels Ry. track.
7.50	Center of W.P.Ry. track, bears NE. and SW.
10.10	Wagon road, bears N. and S.
10.20	Telegraph line, parallels Ry. track.
12.80	Telephone line, bears NE. and SW.
20.20	Dry wash, 1 ch. wide, 30 ft. deep, course NW.
28.00	Wagon road, Low to Dell, bears NW. and SE.
29.30	Low ridge, 15 ft. high, bears N. and S.
34.55	Wagon road, bears NE. and SW.

Survey of the subdivisional lines of Tp. 1 N. R. 10 W.

Chains

40.10 Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd.

¼ S 23
S 26
1913

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.

42.60 Wagon road, bears NW. and SE.

51.40 Wagon road, bears NE. and SW.

65.20 Low sand ridge, 8 ft. high, bears NE. and SW.

80.20 The cor. of secs. 22, 23, 26 and 27.

Land, gently rolling; general NW. exposure.

Soil, light, fine, dry, sandy loam of good texture, mixed with some gravel in E. 20 chs.; affords good grazing.

No timber; undergrowth, shadscale and some greasewood.

May 16, 1913: At this corner, I set off 19° 06' N. on the decl. arc, and at 11h 56m a.m., l.m.t., Observe the sun on the meridian. The resulting lat. is 40° 48' N.

N. 0° 02' W. bot. secs. 22 and 23.

Over gently rolling land, sloping NW., through considerable short undergrowth of shadscale.

40.00 Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd.

¼ S 22 | S 23
1913

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.

70.00 Enter ground strongly impregnated with alkali.

80.00 Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground, for cor. of secs. 14, 15, 22 and 23, with brass cap, mkd.

T 1 N | R 10 W
S 15 | S 14
S 22 | S 23
1913

Survey of the subdivisional lines of Tp. 1 N. R. 10 W.

Chains	
	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, gently rolling; general NW. exposure.
	Soil, light, fine, dry, sandy, clay loam, strongly impregnated with alkali in the N. 10 chs., on hard, baked clay subsoil: affords little grazing.
	No timber; undergrowth, shadscale.
	S. 89° 53' E. on random line bet. secs. 14 and 23.
40.00	Set temp. ¼ sec. cor.
80.23	Intersect N. and S. line 2 lks. N. of cor. of secs. 13, 14, 23 and 24. Thence I run
	N. 89° 52' W. on true line bet. secs. 14 and 23.
	Over nearly level land, draining gently to the NW., through considerable short undergrowth of shadscale.
40.11½	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd.
	¼ S 14 / S 23 / 1913
	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.
61.63	Wagon road, bears NW. and SE.
80.23	The cor. of secs. 14, 15, 22 and 23.
	Land, nearly level; general NW. exposure.
	Soil, light, fine, dry, weak, sandy clay, rather alkali, on hard, baked clay subsoil; affords little grazing.
	No timber; undergrowth, shadscale.
	N. 0° 02' W. bet. secs. 14 and 15.
	Over nearly level land, draining gently NW., through considerable short undergrowth of shadscale.
18.50	Wagon road, bears NW. and SE.
20.30	Wagon road, bears NE. and SW.
40.00	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd.

Survey of the subdivisional lines of Tp. 1 N. R. 10 W.

Chains

¼ S 15	S 14

1913

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.

52.00 Wagon road, bears NW. and SE.

72.50 Wagon road, bears NW. and SE.

80.00 Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground, for cor. of secs. 10, 11, 14 and 15, with brass cap, mkd.

T 1 N	R 10 W
S 10	S 11
S 15	S 14

1913

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, nearly level; general NW. exposure.

Soil, light, fine, dry, weak, clay, rather alkali, on hard baked clay subsoil; affords no grazing.

No timber; undergrowth, shadscale.

May 16, 1913.

May 19, 1913: At 7h 56m a.m., l.m.t., I set off 40° 49' N. on the lat. arc, and 19° 45' N. on the decl. arc, and determine a meridian with the solar, at the cor. of secs. 10, 11, 14 and 15.

The cor. of secs. 11, 12, 13 and 14, being plainly visible I run for said corner,

N. 89° 51' W. on random line bet. secs. 11 and 14.

40.00 Set temp. ¼ sec. cor.

80.00 Intersect N. and S. line at cor. of secs. 11, 12, 13 and 14. Thence I run

N. 89° 51' W. on true line bet. secs. 11 and 14.

Over gently rolling land, draining NW., through considerabl short undergrowth of shadscale.

82.00 Wagon road, bears NW. and SE.

Survey of the subdivisional lines of Tp. 1 N. R. 10 W.

Chains	
40.15	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd. ¼ S 11 | S 14 1913 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.
42.55	Wagon road, bears NE. and SW.
58.80	Ascend very gradually, gentle SE. slope.
80.30	Enter alkali land, bears N. and S. The cor. of secs. 10, 11, 14 and 15. Land, very gently rolling; SE. exposure in W. 37.75 chs., and NW. exposure in E. 42.55 chs. Soil, light, fine, dry, weak, sandy, clay loam, quite alkali in W. 21 chs., on hard, baked clay subsoil; affords a little grazing. No timber; undergrowth, shadscale.
	N. 0° 02' W. bet. secs. 10 and 11. Over nearly level land, draining very gently SE., through considerable short undergrowth of shadscale.
40.00	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd. ¼ S 10 | S 11 1913 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.
58.00	Wagon road, bears NW. and SE.
80.00	Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground, for cor. of secs. 2, 3, 10 and 11, with brass cap, mkd. T 1 N | R. 10 W S 3 | S 2 S 10 | S 11 1913 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.

Survey of the subdivisional lines of Tp. 1 N. R. 10 W.

Chains	
	Land, nearly level; general SE. exposure.
	Soil, light, fine, dry, rich, sandy loam of good texture, on rather moist sand and clay subsoil; affords no grazing.
	No timber; undergrowth, shadscale.
	The cor. of secs. 1, 2, 11 and 12 being plainly visible I run for said cor.,
	S. 89° 51' E. on random line bet. secs. 2 and 11.
40.00	Set temp. ¼ sec. cor.
80.30	Intersect N. and S. line at the cor. of secs. 1, 2, 11 and 12. Thence I run:
	N. 89° 51' W. on true line bet. secs. 2 and 11.
	Over nearly level land, through considerable short undergrowth of shadscale.
40.15	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd.
	¼ S 2 / S 11 / 1913
	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.
80.30	The cor. of secs. 2, 3, 10 and 11.
	Land, nearly level.
	Soil, light, fine, dry, weak, sandy clay, rather alkali, on hard, baked clay subsoil; affords no grazing.
	No timber; undergrowth, shadscale.
	N. 0° 02' W. on true line bet. secs. 2 and 3.
	Over nearly level land, through considerable short undergrowth of shadscale.
40.00	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd.
	¼ S 3 | S 2 / 1913
	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.

Survey of the subdivisional lines of Tp. 1 N. R. 10 W.

Chains	
85.15	Intersect N. bdy. of Tp. 3.41 chs. W. of cor. of secs. 34 and 35 heretofore described. At intersection Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground, for closing cor. of fracl. secs. 2 and 3, with brass cap, mkd.

T 2 N | R 10 W
S 34 | S 35

C C

S 3 | S 2
T 1 N
1913

dig pits, 18 x 18 x 12 ins., crosswise on each line, E. and W., 3 ft. and S. of post, 7 ft. dist., and raise a mound of earth, 4 ft. base, 2 ft. high, S. of cor.

Land, level.

Soil, light, fine, dry, sandy, clay loam, of fair texture, slightly alkali, on hard, baked, clay subsoil; affords no grazing.

No timber; undergrowth, shadscale.

May 19, 1913: Here I set off 19° 46' N. on the decl. arc, and at 11h 56m a.m., l.m.t., observe the sun on the meridian. The resulting lat. is 40° 51' N.

Howard W. Miller
U. S. Surveyor

Lines run by Robert E. Clark, U.S.Transitmen.

May 16, 1913: At 7h 30m a.m., l.m.t., I set off 40° 46' N. on the lat. arc, and 19° 04' N. on the decl. arc, and determine a meridian with the solar, at the standard cor. of secs. 33 and 34, Tp. 1 N. R. 10 W., which is an iron post, 3 ins. in diam., properly mkd., set and witnessed.

Thence I run

N. 0° 02' W. bet. secs. 33 and 34.

Over gently rolling land, sloping NW., through considerable short undergrowth of shadscale and salt sage.

9.10	Wagon road, Low to Clive, bears NE. and SW.
29.00	Telephone line bears NE. and SW.
40.00	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd.

¼ S 33 | S 34

1913

Survey of the subdivisional lines of Tp. 1 N. R. 10 W.

Chains

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.

80.00 Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground, for cor. of secs. 27, 28, 33 and 34, with brass cap, mkd.

T 1 N	R 10 W
S 28	S 27
S 33	S 34

1913

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, gently rolling; general NW. exposure.

Soil, light, fine, dry, sandy clay of good texture, on sand and clay subsoil; affords good grazing.

No timber; undergrowth, shadscale and salt sage.

E. on random line bet. secs. 27 and 34.

40.00 Set temp. ¼ sec. cor.

79.94 Intersect N. and S. line 7 lks. S. of cor. of secs. 26, 27 34 and 35. Thence I run

S. 89° 57' W. on true line bet. secs. 27 and 34.

Descend very gradually over gently rolling land, draining NW., through considerable short undergrowth of shadscale.

39.97 Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd.

¼ S 27
S 34

1913

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.

41.55 Wagon road, bears N. 25° E. and S. 25° W.

44.20 Wagon road, bears N. and S.

79.94 The cor. of secs. 27, 28, 33 and 34.

Land, very gently rolling; NW. exposure.

Soil, light, fine, dry, warm, sandy, clay, slightly alkali of good texture; affords fair grazing.

Survey of the subdivisional lines of Tp. 1 N. R. 10 W.

Chains	
	No timber; undergrowth, shadscale.
	N. 0° 02' W. bet. secs. 27 and 28.
	Over nearly level land, sloping very gently to the NW., through considerable short undergrowth of shadscale and some salt sage.
35.00	Wagon road, bears N. 75° W. and S. 75° E.
40.00	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd. ¼ S 28 | S 27 / 1913 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.
80.00	Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground, for cor. of secs. 21, 22, 27 and 28, with brass cap, mkd. T 1 N | R 10 W / S 21 | S 22 / S 28 | S 27 / 1913 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, nearly level; general NW. exposure.
	Soil, light, fine, dry, sandy clay of fair texture, on clay and sand subsoil; affords fair grazing.
	No timber; undergrowth shadscale and salt sage.
	May 16, 1913: At this cor. I set off 19° 06' N. on the decl. arc, and at app. noon, observe the sun on the meridian. The resulting lat. is 40° 48' N.
	N. 89° 57' E. on random line bet. secs. 22 and 27.
40.00	Set temp. ¼ sec. cor.
79.98	Intersect N. and S. line at cor. of secs. 22, 23, 26 and 27.
	Thence I run
	S. 89° 57' W. on true line bet. secs. 22 and 27.

Survey of the subdivisional lines of Tp. 1 N. R. 10 W.

Chains	
	Descending very gradually over nearly level land, draining NW., through considerable short undergrowth of shadscale and some salt sage.
9.00	Wagon road, bears NW. and SE.
32.50	Wagon road, bears N. and S.
39.99	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd. ¼ S 22 S 27 1913 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.
79.98	The cor. of secs. 21, 22, 27 and 28. Land, nearly level; general NW. exposure. Soil, light, fine, dry, weak, sandy clay, slightly alkali, on hard, baked clay subsoil; affords little grazing. No timber; undergrowth, shadscale and salt sage.
	N. 0° 02' W. bet. secs. 21 and 22. Over nearly level land, through considerable short undergrowth of shadscale and some salt sage.
40.00	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd. ¼ S 21 | S 22 1913 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.
80.00	Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground, for cor. of secs. 15, 16, 21 and 22, with brass cap, mkd. T 1 N | R 10 W S 16 | S 15 S 21 | S 22 1913 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.

Survey of the subdivisional lines of Tp. 1 N. R. 10 W.

Chains	
	Land, nearly level.
	Soil, light, fine, dry, weak, sandy clay, rather alkali, on hard, baked clay subsoil; affords little grazing.
	No timber; undergrowth, shadscale and salt sage.
	N. 89° 57' E. on random line bet. secs. 15 and 22.
40.00	Set temp. ¼ sec. cor.
79.99	Intersect N. and S. line 5 lks. S. of cor. of secs. 14, 15, 22 and 23. Thence I run
	S. 89° 55' W. on true line bet. secs. 15 and 22.
	Descending very gently over nearly level land, sloping very gently to the W., through considerable short undergrowth of shadscale and salt sage.
13.50	Wagon road, bears N. and S.
39.99½	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd.
	¼ S 15 / S 22 / 1913
	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, 1⅓ ft. high, N. of cor.
76.80	Wagon road, bears NW. and SE.
79.99	The cor. of secs. 15, 16, 21 and 22.
	Land, nearly level; general W. exposure.
	Soil, light, fine, dry, warm, sandy clay of good texture, slightly alkali, on sand and clay subsoil: affords fair grazing.
	No timber; undergrowth, shadscale and salt sage.
	N. 0° 02' W. bet. secs. 15 and 16.
	Over nearly level land, draining gently S. and E., through considerable short undergrowth of shadscale and salt sage.
3.70	Wagon road, bears NW. and SE.
40.00	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd.
	¼ S 16 | S 15 / 1913

Survey of the subdivisional lines of Tp. 1 N. R. 10 W.

Chains	
	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.
80.00	Set an iron post , 3 ft. long, 2 ins. in diam., 24 ins. in the ground, for cor. of secs. 9, 10, 15 and 16, with brass cap, mkd.

T 1 N | R 10 W
S 9 | S 10
S 16 | S 15
1913

	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, nearly level; general S. and E. exposure.
	Soil, light, fine, dry, warm, sandy clay of fair texture, slightly alkali, on sand and clay subsoil: affords little grazing.
	No timber; undergrowth, shadscale and salt sage.

	N. 89° 55' E. on random line bet. secs. 10 and 15.
40.00	Set temp. ¼ sec. cor.
79.97	Intersect N. and S. line at cor. of secs. 10, 11, 14 and 1
	Thence I run
	S. 89° 55' W. on true line bet. secs. 10 and 15.
	Over nearly level land, sloping gently to E., through considerable short undergrowth of shadscale and salt sage.
1.80	Wagon road, bears N. 60° W. and S. 60° E.
39.98½	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd.

¼ S 10
S 15
1913

	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.
53.20	Wagon road, bears N. 60° W. and S. 60° E.
75.70	Dry wash, 40 lks. wide, 4 ft. deep, course SE.
79.97	The cor. of secs. 9, 10, 15 and 16.

Survey of the subdivisional lines of Tp. 1 N. R. 10 W.

Chains

Land, nearly level; general E. exposure.

Soil, light, fine, dry, warm, sandy clay, of fair texture, slightly alkali, on hard clay subsoil; affords little grazing.

No timber; undergrowth, shadscale and salt sage.

May 16, 1913.
Robert E. Clark.
U.S. Transitman

Lines run by Howard W. Miller, U.S. Surveyor.

May 19, 1913: Deflecting from the solar line carried to this cor. by Mr. Clark, on May. 16, '13, from the cor. of secs. 9, 10, 15 and 16, I run

N. 0° 02' W. bet. secs. 9 and 10.

Over gently rolling land, sloping SE., through considerable short undergrowth of shadscale and some salt sage.

3.20 Dry wash, 40 lks. wide, 5 ft. deep, course SE.

6.10 Wagon road, bears NW. and SE.

35.25 Dry wash, 50 lks. wide, 8 ft. deep, course SE.

40.00 Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd.

¼ S 9 | S 10

1913

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.

54.70 Dry wash, 40 lks. wide, 10 ft. deep, course NE.

80.00 Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground, for cor. of secs. 3, 4, 9 and 10, with brass cap, mkd.

T 1 N | R 10 W
S 4 | S 3
S 9 | S 10

1913

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, gently rolling; general SE. exposure.

Chains	
	Soil, light, fine, dry, sandy; clay loam of good texture, on sand and clay subsoil; affords fair grazing.
	No timber: undergrowth, shadscale and salt sage.
	N. 89° 55' E. on random line bet. secs. 3 and 10.
40.00	Set temp. ¼ sec. cor.
79.97	Intersect N. and S. line at cor. of secs. 2, 3, 10 and 11.
	Thence I run
	S. 89° 55' W. on true line bet. secs. 3 and 10.
	Over gently rolling land, sloping gently to SE., through considerable short undergrowth of shadscale and salt sage
24.70	Wagon road, bears NW. and SE.
39.98½	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd.
	¼ S 3 / S 10 / 1913
	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.
79.97	The cor. of secs. 3, 4, 9 and 10.
	Land, gently rolling; general SE. exposure.
	Soil, light, fine, dry, sandy, clay loam of good texture, on sand and clay subsoil; affords fair grazing.
	No timber; undergrowth, shadscale and salt sage.
	N. 0° 02' W. on true line bet. secs. 3 and 4.
	Over gently rolling land, draining NE., through considera short undergrowth of shadscale and some salt sage.
29.00	Wagon road, bears NW. and SE.
40.00	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd.
	¼ S 4 | S 3 / 1913
	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.

Survey of the subdivisional lines of Tp. 1 N. R. 10 W.

Chains	
50.05	Wagon road, bears NW. and SE.
85.28	Intersect N. bdy. of Tp. 3.40 chs. W. of the cor. of secs. 33 and 34heretofore described . At intersection Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground, for closing cor. of fracl. secs. 3 and 4, with brass cap, mkd.

T 2 N. | R 10 W.
S. 33 | S 34
CC
S 4 | S 3
T 1 N.
1913

dig pits, 24 x 18 x 12 ins., crosswise on each line, E. and W. of post, 3 ft., and S. of post, 7 ft. dist., and raise a mound of earth, 4 ft. base, 2 ft. high, S. of cor.
Land, gently rolling; general NE. exposure.
Soil, light, fine, dry, sandy, clay loam, of good texture, on sand and clay subsoil; affords little grazing.
No timber; undergrowth, shadscale and salt sage.

May 19, 1913.

May 17, 1913: AT 7h 56m a.m., l.m.t., I set off 40° 46' N. on the lat. arc, and 19° 18' N. on the decl. arc, and determine a meridian with the solar, at the standard cor. of secs. 32 and 33, Tp. 1 N. R. 10 W., which is an iron post, 3 ins. in diam., properly mkd., set and witnessed.
Thence I run
N. 0° 03' W. bet. secs. 32 and 33.
Over gently rolling land, sloping SW., through considerable short undergrowth of shadscale and salt sage.

22.80	Top of low spur or ridge, about 60 ft. above sec. cor., bears N. 70° W. and S. 70° E.
23.35	Wagon road, on ridge, bears N. 70° W. and S. 70° E. Descend abruptly NE. slope.
29.00	Foot of ridge, 60 ft. below top, bears NW. and SE. Thence over very gently rolling land draining E.
40.00	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., with brass cap, mkd.

Survey of the subdivisional lines of Tp. 1 N. R. 10 W.

Chains

¼ S 32	S 33
1913	

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.

43.00 Wagon road, bears N. 60° W. and S. 60° E.

80.00 Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground, for cor. of secs. 28, 29, 32 and 33, with brass cap, mkd.

T 1 N	R 10 W
S 29	S 28
S 32	S 33
1913	

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, gently rolling: general E. exposure.

Soil, light, fine, dry, sandy, clay loam, of good texture on sand and clay subsoil; affords good grazing.

No timber; undergrowth, shadscale and salt sage.

E. on random line bet. secs. 28 and 33.

40.00 Set temp. ¼ sec. cor.

80.02 Intersect N. and S. line 2 lks. S. of cor. of secs. 27, 28, 33 and 34. Thence I run

S. 89° 59' W. on true line bet. secs. 28 and 33.

Over gently rolling land, sloping gently to N. and NE., through considerable short undergrowth of shadscale and salt sage.

40.01 Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd.

¼ S 28
S 33
1913

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.

80.02 The cor. of secs. 28, 29, 32 and 33.

Land, gently rolling; general N. exposure.

Survey of the subdivisional lines of Tp. 1 N. R. 10 W.

Chains

Soil, light, fine, dry, sandy clay, of fair texture, slightly alkali, on sand and clay subsoil; affords fair grazing.

No timber; undergrowth, shadscale and salt sage.

N. 0° 03' W. bet. secs. 28 and 29.

Ascending very gradually over rolling land, sloping E., through considerable short undergrowth of shadscale and salt sage.

Point for ¼ sec. cor. will fall in small wash, course E. I therefore perpetuate this corner as follows:

39.86 Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for witness ¼ sec. cor., with brass cap, mkd.

WC¼
T 1 N | R 10 W
S 29 | S 28

1913

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.

40.00 Point for ¼ sec. cor. in wash. No cor. set.

49.00 Wagon road, bears E. and W.

80.00 Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground, for cor. of secs. 20, 21, 28 and 29, with brass cap, mkd.

T 1 N | R 10 W
S 20 | S 21
S 29 | S 28

1913

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, gently rolling; general E. exposure.

Soil, light, fine, dry, sandy, clay loam, of good texture, slightly alkali, on sand and clay subsoil; affords good grazing.

No timber; undergrowth, shadscale and salt sage.

N. 89° 59' E. on random line bet. secs. 21 and 28.

40.00 Set temp. ¼ sec. cor.

Survey of the subdivisional lines of Tp. 1 N.R. 10 W.

Chains

50.00 Intersect N. and S. line 5 lks. N. of cor. of secs. 21, 28, 27 and 28. Thence I run

N. 89° 59' W. on true line bet. secs. 21 and 28.

Over gently rolling land, draining E., through considerabl short undergrowth of shadscale and salt sage.

40.00 Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd.

¼ S 21
S 28
1913

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.

80.00 The cor. of secs. 20, 21, 28 and 29.

Land, very gently rolling; general E. exposure.

Soil, light, fine, dry, warm, sandy clay, slightly alkali, of fair texture, on sand and clay subsoil; affords fair grazing.

No timber; undergrowth, shadscale and salt sage.

N. 0° 03' W. bet. secs. 20 and 21.

Over gently rolling land, draining E., through considerabl short undergrowth of shadscale and salt sage.

25.00 Ascend gradually over rolling, SE. slope.

40.00 Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd.

¼ S 20 | S 21
1913

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.

71.00 Dry wash, 75 lks. wide, 25 ft. deep, course S. 60° E.

80.00 Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground, for cor. of secs. 16, 17, 20 and 21, with brass cap, mkd.

T 1 N | R 10 W
S 17 | S 16
S 20 | S 21
1913

Survey of the subdivisional lines of Tp. 1 N., R. 10 W.

Chains

dig pits, 18 x 18 x 12 ins., in each sec., 5 ft. dist., and raise a mound of earth, 4 ft. base, 2 ft. high, W. of corner.

Land, rolling; general E. and SE. exposure.

Soil, light, fine, dry, warm, sandy, clay loam of good texture, slightly alkali, on gravel subsoil: affords little grazing.

No timber; undergrowth, shadscale and salt sage.

May 17, 1913: At this cor. I set off 19° 20' N. on the decl. arc, and at app. noon, observe the sun on the meridian. The resulting lat. is 40° 49' N.

S. 89° 59' E. on random line bet. secs. 16 and 21.

40.00 Set temp. ¼ sec. cor.

79.94 Intersect N. and S. line at cor. of secs. 15, 16, 21 and 22. Thence I run

N. 89° 59' W. on true line bet. secs. 16 and 21.

Over gently rolling land, sloping SE., through considerable short undergrowth of shadscale.

39.97 Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd.

¼ S 16
S 21
1913

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.

Ascend 35 ft. onto bench.

43.30 Top of bench, bears N. and S. Thence across rolling bench, sloping SE.

51.50 Dry wash, 30 lks. wide, 12 ft. deep, course SE.

79.94 The cor. of secs. 16, 17, 20 and 21.

Land, rolling; general SE. exposure.

Soil, light, fine, dry, warm, sandy, clay loam of good texture, slightly alkali, on clay and gravel subsoil:

No timber: undergrowth, shadscale.

Survey of the subdivisional lines of Tp. 1 N. R. 10 W.

Chains

N. 0° 03' W. bet. secs. 16 and 17.

Over gently rolling land, sloping SE., through considerabl
short undergrowth of shadscale and salt sage.

40.00 Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in
the ground, for ¼ sec. cor., with brass cap, mkd.

¼ S 17 | S 16
1913

dig pits, 18 x 18 x 12 ins., N. and S. of post, 3 ft. dis
and raise a mound of earth, 3½ ft. base, 1½ ft. high,
W. of cor.

80.00 Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in
the ground, for cor. of secs. 8, 9, 16 and 17, with brass
cap, mkd.

T 1 N | R 10 W
S 8 | S 9
S 17 | S 16
1913

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, gently rolling ; general SE. exposure.

Soil, light, fine, dry, warm, sandy, clay loam of good
texture, slightly alkali, on sand and gravel subsoil:
affords fair grazing.

No timber; undergrowth, shadscale and salt sage.

May 17, 1913.

May 20, 1913: At 7h 56m a.m., l.m.t., I set off 40° 49' N
on the lat. arc, and 19° 57' N. on the decl. arc, and
determine a meridian with the solar, at the cor. of secs.
8, 9, 16 and 17. Thence I run
S. 89° 59' E. on random line bet. secs. 9 and 16.

40.00 Set temp. ¼ sec. cor.

79.90 Intersect N. and S. line 2 lks. N. of cor. of secs. 9, 10
15 and 16. Thence I run
N. 89° 58' W. on true line bet. secs. 9 and 16.

Over gently rolling land, draining SE., through considera
short undergrowth of shadscale and salt sage.

Survey of the subdivisional lines of Tp. 1 N. R. 10 W.

Chains	
36.00	Dry hollow, 2 chs. wide, 20 ft. deep, course SE.
39.95	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd. $\frac{\frac{1}{4}\ S\ 9}{S\ 16 \mid 1913}$ 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.
44.00	Low spur, bears NW. and SE.; continue to asc. gradually.
72.10	Wagon road, bears NW. and SE.
79.90	The cor. of secs. 8, 9, 16 and 17. Land, gently rolling; general SE. exposure. Soil, light, fine, dry, sandy, clay loam of good texture, on sand and gravel subsoil; affords poor grazing. No timber; undergrowth, shadscale and salt sage.

N. 0° 03' W. bet. secs. 8 and 9.

Over gently rolling land, draining SE., through considerable short undergrowth of shadscale and salt sage.

7.60	Wagon road, bears NW. and SE.
24.85	Wagon road, bears NW. and SE.
37.80	Dry wash, 1 ch. wide, 10 ft. deep, course NE.; ascend.
39.60	Spur, 30 ft. high, bears NW. and SE.; descend.
40.00	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd. $\frac{\frac{1}{4}\ S\ 8 \mid S\ 9}{1913}$ 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.
41.00	Dry hollow, 1 ch. wide, 20 ft. deep, course SE.; ascend.
44.50	Spur, bears NW. and SE.; descend.
56.20	Dry wash, 3 chs. wide, 30 ft. deep, course SE.; ascend.
80.00	Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground, for cor. of secs. 4, 5, 8 and 9, with brass cap, mkd.

Survey of the subdivisional lines of Tp. 1 N. R. 10 W.

Chains

T 1 N	R 10 W
S 5	S 4
S 8	S 9

1913

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, gently rolling; general SE. exposure.

Soil, light, fine, dry, sandy, clay loam of good texture, on sand and gravel subsoil; affords fair grazing.

No timber; undergrowth, shadscale and salt sage.

S. 89° 58' E. on random line bet. secs. 4 and 9.

40.00 Set temp. ¼ sec. cor.

79.85 Intersect N. and S. line, 2 lks. N. of cor. of secs. 3, 4, 9 and 10. Thence I run

N. 89° 57' W. on true line bet. secs. 4 and 9.

Ascending very gradually over gently rolling land, draining E., through considerable short undergrowth of shadscale and salt sage.

39.92½ Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd.

¼ S 4
S 9

1913

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.

79.85 The cor. of secs. 4, 5, 8 and 9.

Land, gently rolling; general E. exposure.

Soil, light, fine, dry, sandy, clay loam of good texture, on sand and gravel suboil; affords good grazing.

No timber; undergrowth, shadscale and sagebrush.

May 20, 1913: At this cor. I set off 19° 59' N. on the de arc, and at app. noon, observe the sun on the meridian. The resulting lat. os 40° 50' N.

Survey of the subdivisional lines of Tp. 1 N. R. 10 W.

Chains	
	N. 0° 03' W. on true line bet. secs. 4 and 5.
	Ascending gradually over rolling land, draining SE., through considerable short undergrowth of shadscale and salt sage.
13.00	Dry wash, 50 lks. wide, 10 ft. deep, course SE.
21.00	Low spur, bears E. and W.: descend gradually NE. slope.
38.50	Dry wash, 30 lks. wide, 8 ft. deep, course NE.
40.00	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd.

¼ S 5 | S 4

1913.

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.

62.40	Wagon road, bears NW. and SE.
70.00	Wagon road, bears NW. and SE.
73.00	Dry wash, 30 lks. wide, 8 ft. deep, course NE.
85.22	Intersect N. bdy. of Tp. 3.22 chs. W. of cor. of secs. 32 and 33. heretofore described. At intersection Set an iron post, 3 ft. long, 3 ins. in diam., 24 ins. in the ground, for closing cor. of fracl. secs. 4 and 5, with brass cap, mkd.

T 2 N. | R 10 W.
S 32 | S 33

C C

S 5 | S 4

T 1 N.
1913

dig pits, 24 x 18 x 12 ins., crosswise on each line, E. and W. 3 ft., and S. of post, 7 ft. dist., and raise a mound of earth, 4 ft. base, 2 ft. high, S. of cor.

Land, gently rolling: general E. exposure.

Soil, light, fine, dry, sandy, clay loam of good texture, on sand and gravel subsoil: affords fair grazing.

No timber; undergrowth, shadscale and salt sage.

Howard W. Miller
U. S. Surveyor.

Lines run by Robert E. Clark, U.S.Transitman.

May 17, 1913: At 8h 00m a.m., l.m.t., I set off 40° 46' N. on the lat. arc, and 19° 18' N. on the decl. arc, and determine a meridian with the solar, at the standard cor.

Survey of the subdivisional lines of Tp. 1 N. R. 10 W.

Chains	
	of secs. 31 and 32, Tp. 1 N. R. 10 W., which is an iron post, 3 ins. in diam., properly mkd., set and witnessed. Thence I run
	N. 0° 04' W. bet. secs. 31 and 32.
	Ascending gradually over rolling land, sloping SE., throu considerable short undergrowth of shadscale.
25.00	Top of bench, bears NW. and SE.; ascend very gradually over bench.
40.00	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd.
	¼ S 31 | S 32
	1913
	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.
80.00	Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground, for cor. of secs. 29, 30, 31 and 32, with brass cap, mkd.
	T 1 N | R 10 W
	S 30 | S 29
	S 31 | S 32
	1913
	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, rolling; general SE. exposure.
	Soil, light, fine, dry, sandy, clay loam, mixed with some fine gravel, of fair texture, on gravel subsoil; affords good grazing.
	No timber; undergrowth, shadscale.

	E. on random line bet. secs. 29 and 32.
40.00	Set temp. ¼ sec. cor.
80.00	Intersect N. and S. line at cor. of secs. 28, 29, 32 and 33. Thence I run
	W. on true line bet. secs. 29 and 32.
	Ascend gradually over gently rolling land, draining SE., through considerable short undergrowth of shadscale.

Survey of the subdivisional lines of Tp. 1 N. R. 10 W.

Chains	
40.00	Set an iron post, 3 ft. long, 1 in. in diam., only 6 ins. in the ground, on account of underlying rock, supported by a mound of stone, 4 ft. base, to within 3 ins. of top, for ¼ sec. cor., with brass cap, mkd. $\frac{\frac{1}{4}\ S\ 29}{S\ 32}$ 1913 raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor. From this cor., U.S.L.M. No. 1, which is a cedar post, 8 ins. sq., 4 ft. above mound of stone, firmly set in a mound of stone, 5 ft. base, 1½ ft. high, mkd. U S L M No. 1, Elias R. Hatch, Blackfoot Idaho, bears S. 8° 02' E., 38.06 chs. dist.
41.00	Foot of bench, bears NW. and SE.; ascend abruptly E. face of bench.
53.00	Edge of bench, 50 ft. above ¼ sec. cor., bears NW. and SE.; ascend gradually over rolling bench, sloping SE.
58.80	Wagon road, bears NW. and SE,
80.00	The cor. of secs. 29, 30, 31 and 32.
	Land, rolling; general SE. exposure.
	Soil, light, fine, dry, sandy, clay loam, quite rich in sand and mixed with some fine gravel, on gravel subsoil. Affords good grazing.
	No timber; undergrowth, shadscale.
	W. on random line bet. secs. 30 and 31.
40.00	Set temp. ¼ sec. cor.
79.83	Intersect W. bdy. of Tp. 12 lks. S. of cor. of secs. 25, 30, 31 and 36, heretofore described. Thence I run S. 89° 55' E. on true line bet. secs. 30 and 31.
	Ascending gradually SW. slope, over rolling land, through considerable short undergrowth of shadscale.
34.80	Ridge, bears NW. and SE.; desc. gradually NE. slope.
39.83	Set an iron post, 3 ft. long, 1 in. in diam., only 14 ins. in the ground, on account of underlying rock, supported by a substantial mound of stone, 3 ft. base, 1½ ft. high, for ¼ sec. cor., with brass cap, mkd.

Survey of the subdivisional lines of Tp. 1 N. R. 10 W.

Chains	
	$\frac{\frac{1}{4}\ S\ 30}{S\ 31}$ 1913
	raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor
70.00	Edge of bench, bears NE. and SW. Descend abruptly SE. slo
72.00	Foot of bench, 30 ft. below top, bears NE. and SW.
	Thence over rolling bench, sloping SE.
79.83	The cor. of secs. 29, 30, 31 and 32.
	Land, rolling; general S. exposure.
	Soil, light, fine, dry sandy, clay loam of good texture,
	mixed with gravel, 10 to 30 ins. deep on rocky subsoil;
	affords good grazing.
	No timber; undergrowth, shadscale.

	May 17, 1913: At this cor. I set off 19° 20' E. on the de
	arc, and at app. noon, observe the sun on the meridian.
	The resulting lat. is 40° 47' N.

	N. 0° 04' W. bet. secs. 29 and 30.
	Ascending gradually over rolling land, sloping SE., throu
	considerable short undergrowth of shadscale.
5.50	Foot of bench, bears NE. and SW.; ascend abruptly.
8.00	Top of bench, 30 ft. above sec. cor., bears NE. and SW.
	Thence ascending gradually across bench.
18.00	Top of 2nd bench, 20 ft. above 1st bench, bears E. and W.
	Descend very gradually.
24.00	N. edge of bench, bears E. and W.; descend abruptly N.
	slope, 75 ft. to
26.60	Wagon road, at foot of bench, bears E. and W.; desc. grad
39.50	Head of dry gulch, 1 ch. wide, 15 ft. deep, course NW.
	Ascend.
40.00	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in
	the ground, for ¼ sec. cor., with brass cap; mkd.
	$\frac{\frac{1}{4}\ S\ 30 \mid S\ 29}{1913}$
	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.

Survey of the subdivisional lines of Tp. 1 N. R. 10 W.

Chains	
41.50	Spur, about 30 ft. high, projects W.; descend.
46.50	Small dry gulch, course NE.; ascend.
47.00	Low spur, projects NE.; descend.
47.60	Wagon road, bears NE. and SW.
52.00	Small, dry gulch, about 40 ft. below spur, course NE.; asc.
57.20	Low spur, projects NE.; descend.
63.00	Small, dry gulch, 20 ft. below spur, course NE.; ascend.
70.00	Enter scattering cedar timber, bears NE. and SW.
73.00	Low spur, projects NE.: ascend very gradually.
80.00	Set an iron post, 3 ft. long, 2 ins. in diam., only 8 ins. in the ground, on account of underlying rock, surrounded by a mound of stone, 4 ft. base, 2 ft. high, for cor. of secs. 19, 20, 29 and 30, with brass cap, mkd.

T 1 N | R 10 W
S 19 | S 20
S 30 | S 29
1913

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

Land, rolling and broken; general E. exposure.

Soil, light, fine, dry, sandy, clay loam, mixed with gravel, rather rocky, 6 to 30 ins. deep on bedrock; affords good grazing.

Timber, cedar: undergrowth, shadscale.

E. on random line bet. secs. 20 and 29.

40.00 Set temp. ¼ sec. cor.

80.02 Intersect N. and S. line 2 lks. N. of cor. of secs. 20, 21, 28 and 29. Thence I run

N. 89°59' W. on true line bet. secs. 20 and 29.

Ascending gradually over rolling land, sloping SE., through considerable short undergrowth of shadscale.

34.00 Enter more broken ground. Ascend gradually over rolling, broken E. slope.

40.01 Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd.

¼ S 20
S 29
1913

Survey of the subdivisional lines of Tp. 1 N. R. 10 W.

Chains	
	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.
80.02	The cor. of secs. 19, 20, 29 and 30.
	Land, rolling and broken; general E. exposure.
	Soil, light, fine, dry, sandy, clay loam, of good texture, 10 to 30 ins. deep on clay and gravel subsoil, quite rocky in W. 10 chs.; affords good grazing.
	No timber; undergrowth, shadscale.
	May 17, 1913.
	May 19, 1913: At 8h a.m., l.m.t., I set off 40° 48' N. on the lat. arc, and 19° 45' N. on the decl. arc, and determine a meridian with the solar, at the cor. of secs. 19, 20, 29 and 30. Thence I run
	N. 89° 55' W. on random line bet. secs. 19 and 30.
40.00	Set temp. ¼ sec. cor.
79.76	Intersect W. bdy. of Tp. 2 lks. S. of cor. of secs. 19, 24, 25 and 30, heretofore described. Thence I run
	S. 89° 54' E. on true line bet. secs. 19 and 30.
	Ascending gradually over rolling mountainous land, draining W., through scattering cedar timber and dense undergrowth of shadscale and sagebrush.
39.76	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd.
	¼ S 19 / S 30 / 1913
	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:
46.30	Edge of flat ridge, bears N. and S. Thence across flat top of ridge.
49.30	Wagon road, bears N. and S.
55.10	Edge of ridge, bears N. and S.; descend gradually E. slope
60.00	Dry gulch, course SE.; ascend abruptly.

Survey of the subdivisional lines of Tp. 1 N. R. 10 W.

Chains	
62.00	Descend abruptly E. slope.
79.76	The cor. of secs. 19, 20, 29 and 30.
	Land, rolling mountainous; W. 46.30 chs., gentle W. slope, E. 24.66 chs., broken E. slope, remainde of mile, flat topped ridge.
	Soil, sandy clay and gravel, 10 to 30 ins. deep on gravel subsoil; affords good grazing.
	Timber, scattering cedars; undergrowth, shadscale and sagebrush.
	N. 0° 04' W. bet. secs. 19 and 20.
	Over rolling mountainous land, draining E. and SE., through dense undergrowth of shadscale, sagebrush and rabbit-brush. Ascending gradually.
10.70	Dry wash, 30 lks. wide, 10 ft. deep, course E.
14.30	Descend gradually.
19.00	Dry wash, 30 lks. wide, 10 ft. deep, course S. 85° E.
	Ascend gradually.
21.00	Descend gradually NE. slope.
24.30	Descend abruptly N. slope.
27.30	Dry gulch, 35 ft. deep, course S. 70° E.; ascend abruptly.
28.40	Low spur, projects E.; descend.
30.40	Dry gulch, 30 ft. deep, course SE.; ascend abruptly.
35.00	Thence over nearly level bench.
40.00	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., with brass cap, mkd.
	$\frac{1}{4}$ S 19 | S 20
	1913
	dig pits, 18 x 18 x 12 ins., N. and S. of post, 3 ft. dist., and raise a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, W. of cor.
45.00	Ascend gradually SE. slope.
80.00	Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground, for cor. of secs. 17, 18, 19 and 20, with brass cap, mkd.
	T 1 N | R 10 W
	S 18 | S 17
	S 19 | S 20
	1913

Survey of the subdivisional lines of Tp. 1 N. R. 10 W.

Chains

dig pits, 18 x 18 x 18 ins., in each sec., 5½ ft. dist., and raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor.

Land, rolling mountainous: general E. exposure.

Soil, light, fine, dry, sandy, clay loam of good texture, mixed with some fine gravel, 10 to 30 ins. deep on gravel subsoil: affords good grazing.

No timber; undergrowth, shadscale, sagebrush and rabbit brush.

S. 89° 59' E. on random line bet. secs. 17 and 20.

40.00 Set temp. ¼ sec. cor.

80.07 Intersect N. and S. line at cor. of secs. 16, 17, 20 and 21. Thence I run

N. 89° 59' W. on true line bet. secs. 17 and 20.

Over rolling mountainous land, draining SE., through considerable short undergrowth of shadscale and salt sage

10.10 Bottom of wide hollow, course SE.; ascend gradually.

30.30 Ascend abruptly.

40.05½ Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd.

¼ S 17
S 20
1913

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

Corner stands on brow of hills, bears N. and S.

Ascend rather abruptly over rocky, rolling hills.

45.10 Dry wash, 30 lks. wide, 35 ft. deep, course S. 85° E.

55.07 Lone cedar tree, 1 ft. in diam., blazed for line tree.

65.00 Thence over gently rolling land, sloping E.

80.07 The cor. of secs. 17, 18, 19 and 20.

Land, rolling mountainous: general E. and SE. exposure.

Soil, light, fine, dry, sandy, clay loam of good texture, mixed with fine gravel, 10 to 30 ins. deep on gravel subsoil: affords fair grazing.

No timber: undergrowth, shadscale and salt sage.

May 10, 1917: At this cor. I set off 10° 46' E. on the dec

Survey of the subdivisional lines of Tp. 1 N. R. 10 W.

Chains	
	arc, and at app. noon, observe the sun on the meridian. The resulting lat. is 40° 49' N.

	N. 89° 54' W. on random line bet. secs. 18 and 19.
40.00	Set temp. ¼ sec. cor.
79.61	Intersect W. bdy. of Tp. 12 lks. S. of cor. of secs. 13, 18, 19 and 24, heretofore described. Thence I run S. 89° 49' E. on true line bet. secs. 18 and 19. Ascending gradually over gently rolling bench land, through considerable short undergrowth of shadscale and salt sage.
11.70	Wagon road, bears N. and S.
39.61	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd. ¼ S 18 / S 19 / 1913 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.
50.60	Ascend abruptly W. slope.
56.60	Top of bench, about 75 ft. above 1st bench, bears N. and S. Ascend gradually over rolling bench.
64.20	Wagon road, bears N. and S.
69.00	Wagon road, bears N. 30° E. and S. 30° W.
79.61	The cor. of secs. 17, 18, 19 and 20. Land, rolling bench; general W. exposure. Soil, light, fine, dry, sandy clay of good texture, mixed with fine gravel, 10 to 30 ins. deep on sand and gravel subsoil; affords good grazing. No timber; undergrowth, shadscale and salt sage.

	N. 0° 04' W. bet. secs. 17 and 18. Ascending gradually over gently rolling bench land, through considerable short undergrowth of shadscale and salt sage.
1.50	Wagon road, bears N. 80° E. and S. 80° W.
32.00	Ascend abruptly SE. slope, covered with calcareous sandstone boulders, showing strong iron stain.

Survey of the subdivisional lines of Tp. 1 N. R. 10 W.

Chains

40.00 Set an iron post, 3 ft. long, 1 in. in diam., only 4 ins. in the ground, on account of underlying rock, supported by a mound of stone, 4 ft. base, 2½ ft. high, for ¼ sec. cor., with brass cap, mkd.

¼ S 18	S 17
1913	

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

43.00 Top of divide, bears SW. and NE., about 10 chs.

43.60 Descend abruptly into dry hollow or pothole, 50 ft. deep, about 6.00 chs. wide, E. and W., and 13.00 chs. long, N. and S., without outlet. Thence across pothole.

53.55 Ascend abruptly out of pothole.

57.65 Ascend gradually.

73.00 Top of divide, bears SE. and NW. about 5.00 chs.

75.35 Descend abruptly 75 ft. over N. face of bench, brow of which extends SE., and NW. about 4 chs., thence N. 60° E.

80.00 Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground, for cor. of secs. 7, 8, 17 and 18, with brass cap, mkd.

T. 1 N.	R. 10 W.
S 7	S 8
S 18	S 17
1913	

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

Land, gently rolling benches; general S. exposure.

Soil, light, fine, sandy, clay, mixed with gravel, and quite rocky in places; affords good grazing.

No timber; undergrowth, shadscale and salt sage.

S. 89° 59' E. on random line bet. secs. 8 and 17.

40.00 Set temp. ¼ sec. cor.

80.11 Intersect N. and S. line 2 lks. N. of cor. of secs. 8, 9, 16 and 17. Thence I run

N. 89° 58' W. on true line bet. secs. 8 and 17.

Ascend gradually over rolling land, sloping E., through considerable short undergrowth of shadscale and salt sage.

30.10 Dry wash, 20 lks. wide, 8 ft. deep, course NE.

chains	
40.05½	Set an iron post , 3 ft. long , 1 in. in dia., 26 ins. in the ground for ¼ sec. cor., with brass cap marked ¼ S 8 S 17 1913 dig pits , 18 x 18 x 12 ins., E. and W. of post , 3 ft. dist., raise a mound of earth , 3½ ft. base , 1½ ft. high , N. of cor.
67.90	Gradually ascend over eastern slope.
80.11	The cor. of secs, 7 , 8 , 17 and 18. Land , rolling , general E. exposure. Soil , light , fine , dry , sandy clay , mixed with gravel , and quite rocky in places ; affords good grazing. No timber ; undergrowth , shadscale and salt sage. May 19 , 1913.

	May 20,1913: At 9 h. a. m. l. m. t., I set off 40° 50' on the lat. arc ; 19°58'N., on the decl. arc ; and determine a meridian with the solar at the cor. of secs. 7 , 8 , 17 and 18 Thence I run N.89° 49'W., on a random line bet. secs. 7 and 18
40.00	Set temp. ¼ sec. cor.
79.61	Intersect W. bdy. of the tp. at the cor. of secs. 7 , 12 , 13 and 18 heretofore described. Thence I run S.89°49'E., on true line bet. secs. 7 and 18 Descending gradually over mountainous land , through considerable short undergrowth of shadscale and some rabbit brush.
7.60	Ascend gradually west slope.
17.60	Ascend abruptly W.slope through scattering cedar timber.
25.10	Ascend gradually W. slope.
31.30	Wagon road , bears N. and S.
39.61	Set an iron post , 3 ft. long , 1 in. in dia., only 4 ins. in the ground , on account of underlying rock , supported by a mound of stone , 4 ft. base , 20 ins. high , for ¼ sec. cor., with brass cap marked

chains	
	¼ S 7 S 18 1913 raise a mound of stone , 2 ft. base , 1½ ft. high , N.of co
63.10	Ascend gradually W. slope.
	Leave timber , bears N. and S.
68.10	Top of divide , about 200 ft. above sec. cor.,bears N. and S.
	Descend.
70.50	Wagon road , bears N.15°E. and S.15°W.
79.61	The cor. of secs. 7 , 8 17 and 18
	Land mountainous , sloping E. and W. from divide at 68.10 c
	Soil , sandy clay and gravel , quite rocky throughout the mile.; affords good grazing.
	Timber , cedars: undergrowth ,shadscale and rabbit brush
	N.0°04'W., bet. secs. 7 and 8
	Over broken rolling land sloping E., through considerable short undergrowth of shadscale and salt sage.
20.80	Enter scattering scrub cedar timber , bears NE. and SW.
35.30	Limestone ledge , 50 ft. long ,projecting 20 ft. out of the ground , bears N.
40.00	Set an iron post , 3 ft. long , 1 in. in dia., 26 ins. in the ground for ¼ sec. cor., with brass cap marked ¼ S 7 | S 8 1913 dig pits , 18 x 18 x 12 ins., N. and S. of post , 3 ft. dist., raise a mound of earth , 3½ ft. base , 1½ ft. high , W. of cor.
55.00	Limestone ledge or outcrop , 20 ft. high , 60 ft. long , 2.00 chs. E. of line.
	Descend rapidly over small spurs and washes draining NE,
63.80	Descend gradually.
80.00	Set an iron post , 3 ft. long , 2 ins., in dia., 24 ins. in the ground for cor. of secs. 5 , 6 , 7 and 8 , with brass cap marked

Survey of the subdivisional lines of Tp. 1 N. R. 10 W.

Chains

T 1 N	R 10 W
S 6	S 5
S 7	S 8.

1913

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, rolling: general E. and NE. exposure.

Soil, light, fine, sandy clay and gravel, rather rocky, throughout the mile; affords good grazing.

Timber, cedars; undergrowth, shadscale and salt sage.

Robert E. Clark,
U. S. Transitman

Lines run by Howard W. Miller, U.S.Surveyor.

S. 89° 58' E. on random line bet. secs. 5 and 8.

40.00 Set temp. ¼ sec. cor.

80.05 Intersect N. and S. line 9 lks. S. of cor. of secs. 4, 5, 8 and 9. Thence I run

S. 89° 58' W. on true line bet. secs. 5 and 8.

Over rolling land, draining SE., through considerable short undergrowth of shadscale and salt sage.

10.20 Wagon road, bears NE. and SW.

28.00 Dry wash, 30 lks. wide, 4 ft. deep, course NE.; ascend.

37.00 Spur, about 40 ft. high, bears SE. and NW.; descend abruptly.

38.90 Dry wash, 10 lks. wide, 3 ft. deep, in draw, 30 ft. below spur, 5 chs. wide, course SE.

40.02½ Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd.

¼ S 5
S 8
1913

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.

Thence up draw.

49.00 Leave draw and ascend gradually. NE. slope.

50.50 Low spur, projects NW.; descend.

54.00 Same wash as above, course NE.; ascend.

57.00 Spur, bears NE. and SW.; descend.

Survey of the subdivisional lines of Tp. 1 N. R. 10 W.

Chains	
62.50	Dry wash, 30 lks. wide, 12 ft. deep, course SE.; ascend.
64.00	Low spur, bears SE. and NW.; descend.
65.30	Dry wash, 60 lks. wide, 30 ft. deep, course SE.; ascend.
72.00	Spur, bears SE. and NW.; ascend very gradually.
80.05	The cor. of secs. 5, 6, 7 and 8.
	Land, rolling; general E. exposure.
	Soil, light, fine, dry, sandy, clay loam of good texture, slightly rocky in places; affords good grazing.
	Timber, a few scattering cedars in washes; undergrowth, shadscale and salt sage.

May 20, 1913.

Howard W. Miller
U. S. Surveyor

Lines run by Robert E. Clark, U.S. ~~Transitman.~~

N. 89° 49' W. on random line bet. secs. 6 and 7.

40.00	Set temp. ¼ sec. cor.

May 20:
Instrument in transit at noon, prevents lat. observation.

79.42	Intersect W. bdy. of Tp. 2 lks. N. of cor. of secs. 1, 6, 7 and 12, heretofore described. Thence I run
	S. 89° 50' E. on true line bet. secs. 6 and 7.
	Ascending abruptly over mountainous land, through scatteri cedar timber and considerable short undergrowth of shadsca and sagebrush.
16.40	Rocky brow of hill, 60 ft. above sec. cor., bears N. and S. Thence across flat bench.
16.45	Wagon road, bears NW. and SE.
20.40	Ascend gradually W. slope.
29.42	Wagon road, bears N. 50° W. and S. 50° E.
33.20	Wagon road, bears S. 80° E. and W.
39.42	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd.

$$\frac{\frac{1}{4}\ S\ 6}{S\ 7}$$
1913

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. hig N. of cor.

45.80	Wagon road, bears NE. and W.

Survey of the subdivisional lines of Tp. 1 N. R. 10 W.

Chains	
59.40	Wagon road, on top of divide, bears N. and S.; descend abruptly.
64.40	Foot of abrupt descent, bears N. and S. Thence across small bench.
71.40	Descend abruptly E. slope.
79.42	The cor. of secs. 5, 6, 7 and 8.
	Land, mountainous. W. exposure W. of divide, and E. exposure E. of divide.
	Soil, light, fine, sandy clay, mixed with gravel and rock; affords fair grazing.
	Timber, few scattering cedars; undergrowth, shadscale and sagebrush.
	N. 0° 04' W. on true line bet. secs. 5 and 6.
	Ascending gradually over mountainous land, through few scattering cedars and considerable short undergrowth of shadscale:
6.50	Ascend abruptly, SE. slope.
7.70	Descend abruptly NE. slope.
9.70	Dry gulch, course SE.; ascend abruptly.
12.65	Brow of bench, bears E. and W. Thence across nearly level bench.
29.35	Wagon road, bears N. 20° E. and S. 20° W.
32.65	Ascend gradually S. slope.
40.00	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd.
	¼ S 6 | S 5
	1913
	raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.
40.40	Dry wash, 20 lks. wide, 8 ft. deep, course E.: ascend.
44.70	Descend abruptly.
46.70	Dry wash, 60 lks. wide, 40 ft. deep, course SE.; ascend.
52.60	Edge of bench, bears E. and W. Thence across nearly level bench.
69.55	Descend abruptly N. slope of bench.
70.55	Dry gulch, 40 ft. below bench, course NE.; ascend abruptly.

Survey of the subdivisional lines of Tp. 1 N. R. 10 W.

Chains

71.58 descend gradually along steep, rocky E. slope of mountain.

85.34 Intersect N. bdy. of Tp. 3.19 chs. W. of cor. of secs. 31 and 32 heretofore described. At intersection

Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground, for closing cor. of fracl. secs. 5 and 6, with brass cap, mkd.

T 2 N | R 10 W
S 31 | S 32
CC
S 6 | S 5
T 1 N
1913

raise a mound of stone, 2 ft. base, 1½ ft. high, S. of cor.

Land, mountainous; general E. exposure.

Soil, shallow, sandy clay, mixed with gravel and rock; affords little grazing.

Timber, scattering cedars; undergrowth, shadscale.

May 20, 1913. Robert E. Clark
U.S. Transitman

General Description.

The lands in this Tp. are rolling and mountainous in character, with the exception of Sink Valley, which lies N. and S. through the E. central part of the Tp.

The NW. point of the Cedar Mountains projects into the extreme SE. portion of the Tp., in secs. 24, 25 and 36. This point is extremely rough and rugged, being a series of huge limestone ledges, and is too rough and rocky for agriculture, or even grazing purposes, except along the foothills.

The flat topped ridge, or bench, which runs N. and S. through the Tp., about a mile from the W. bdy., is the extreme E. end of the Grassy Mountains. The land W. of this ridge is too rough to permit of much cultivation, but affords excellent grazing in many places. The ridge breaks off abruptly to the E. for a short distance, and then breaks off gently in a series of gently rolling benches, sloping E. These benches produce a generally

abundant growth of grass and salt or white sage, suitable for grazing purposes. The soil is a light, fine, dry, Lacustrine clay, rather rich in sand, and of good texture, from 10 to 40 ins. deep on sand and gravel subsoil. The soil is slightly alkali but would produce abundant crops if irrigated.

The soil in Sink Valley is of about the same formation as that on the benches, but much more closely packed, and contains a greater per cent of alkali, and less sand. This soil is probably of great depth, but at a distance of from 6 to 10 ins. from the surface it is so closely packed and baked so hard as to present a noticeably different appearance, and forms what is practically a subsoil, and has been treated as such in the notes. This valley has no apparent drainage, and rain water, being unable to penetrate the soil, lies on the surface until it evaporates, making it undesriable for agricultural purposes.

The lower part of the valley supports a scant growth of grass and salt sage, suitable for grazing purposes. The entire Tp. supports a dense growth of shadscale.

There is no water in the Tp. but it forms an excellent winter range.

The Tp. is crossed by many wagon roads, most of which are simply trails made by sheep wagons going to and from thier winter camps.

The W.P.Ry. enters the Tp. on the S. bdy. of sec. 34, and leaves on the W. bdy. of sec. 13. Low, a station on this road, lies just N. of the ¼ sec. cor. bet. secs. 26 and 35.

There are no settlers in the Tp.

The Special Instructions note two placer claims and U.S. Location Monuments, to which they were tied. A sketch and description of these claims and monuments was given.

"Low Pass No. 1 Placer" Sur. No. 5622, in Unorganized

Mining District, Toole Co., Utah, was believed to be situated in Tp. 1 N. R. 11 W., and was tied to U.S.L.M. No. 3. There was no mining claim or U.S.L.M. found in Tp. 1 N. R. 11 W., but the U.S.L.M., mkd. No. 1, which was tied in in sec. 13, Tp. 1 N. R. 10 W., lies practically on what is known as "Low Pass" and is probably the monument intended for U.S. Location Monument No. 3.

"Walnut No. 4 Placer, Sur. No. 5583, in Unorganized Mining District, Tooele Co., Utah, was believed to be situated in Tp. 1 S. R. 11 W., and was tied to U.S. Location Monument No. 2.

The only other U.S.L.M. found on Group 21 was the one in sec. 32, Tp. 1 N. R. 10 W., which was tied in. This monument was also marked U.S.L.M. No. 1, but as it occupies about the proper relative position from the U.S.L.M. in sec. 13, it is probably the monument intended for U.S. Location Monument No. 2.

Howard W. Miller
U. S. Surveyor

Robert C. Clark
U. S. Draughtsman

BOOK A-405

CERTIFICATE OF ASSISTANTS.

We, the undersigned, hereby certify upon honor that we assisted, to the best of our skill and ability, ..., U. S. Surveyor, during the periods and in the capacities tated opposite our several signatures, in surveying all those parts or portions of .....

For certificates of assistants see book "J" T.3 N.R.11 W.

f the ..... Meridian, in the State of .....

hich are represented in the foregoing field notes as having been executed 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 aithfully executed.

NAME.	PERIOD OF SERVICE.		CAPACITY.
	BEGUN.	ENDED.	

Subscribed and certified to before me on the dates of the final service as shown above.

.....

U. S. Surveyor.

BOOK A-405

FINAL OATH OF UNITED STATES SURVEYOR.

I, _____, U. S. Surveyor, do solemnly swear that, in pursuance of special instructions received from the U. S. Surveyor General for _____ bearing date of the _____ day of _____, 191 , I have well, faithfully, and truly, in my own proper person, and in strict conformity with said instructions, the Manual of Surveying Instructions, and the laws of the United States, surveyed all those parts or portions of _____

For final oaths of U.S. Surveyor and Transitman see book "J" T.3 N., R.11 W.

_____ of the _____ Meridian, in the State of _____, which are represented in the foregoing field notes as having been executed 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 U. S. 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.

_____
U. S. Surveyor.

Subscribed by said _____, and sworn to before me this _____ day of _____, 191

SEAL

_____

_____

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah, April 5, 191 5

The foregoing field notes of the survey of the Subdivisional lines of Township No. 1 North, Range No. 10 West of the Salt Lake Base and Meridian, Utah

executed by their Howard W. Miller and Robert E. Clark under ~~his~~ special instructions dated April 10, 191 3, having been critically examined, and the necessary corrections and explanations made, the said field notes, and the surveys they describe, are hereby approved.

L. C. Thorsen
U. S. 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.

_____
U. S. Surveyor General.

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BOOK A-405
Book "D"

U. S. Surveyor General's Office
APR 9 1914
SALT LAKE CITY, UTAH.

FIELD NOTES

OF THE SURVEY

AND RETRACEMENT

OF THE

SALT LAKE BASE LINE THROUGH RANGES 10 AND 11 WEST

Of the SALT LAKE BASE AND *Meridian,*

In the State of UTAH

EXECUTED BY

Howard W. Miller

In the capacity of U. S. Surveyor, under instructions dated April 10, *191*3, *issued by the United States Surveyor General to govern surveys included in Group No.* 21, *which were approved by the Commissioner of the General Land Office,* May 12, 1913, respectively April 23 and ~~1913~~, *pursuant to authority contained in the Act of Congress dated* ....., *191*...

Survey commenced May 16, *1913*

Survey completed May 31, *1913*

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BOOK A-405

INDEX DIAGRAM.

Salt Lake Base line Range 11 west

Township 1 S xxxRangexxx

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19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

Retracement of Base line R.10 W., page 8

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Survey of the Salt Lake Base Line, through R. 11 W.

Chains

Survey commenced May 21, 1913, and executed with a Young and Soule mountain transit No. 8147, fitted with a Smith solar attachment. The horizontal circle of the instrument is provided with two opposite, double verniers, reading to single minutes, which is also the least count of the verniers of the latitude and declination arcs.

Use of the above instrument was approved by G. D. D. Kirkpatrick, Ass't. Supervisor of Surveys in the assignment instructions, dated April 21, 1913, conditional upon satisfactory field test, the record of which follows herewith.

Test of instrument.

I examine the adjustments of my instrument and find no errors, then, to test the solar attachment, by comparing its indications, resulting from observations made during a.m. and p.m. hours, with a meridian determined by observation on Polaris, I proceed as follows:

May 21, 1913: At the standard cor. of Tp. 1 N. Rs. 10 and 11 W., previously described, in lat. 40° 46' 04" N., and long. 113° 08' 25" W., at 8h 00m a.m., l.m.t., I set off 40° 46' N. on the lat. arc, and 20° 10' N. on the decl. arc, and determine a meridian with the solar. The line thus determined agrees with the meridian determined by observation on Polaris, at this point on May 13, 1913.

The afternoon observation, which appears in the body of the notes following, was made on the tangent line deflected from this Polaris meridian, and agree with said tangent.

I therefore conclude that the adjustments of my instrument are satisfactory.

Measurements.

Steel tapes, five chains long, were used by both parties in all the field work on Group 21, together with clinometers for determining slope angles, and the reduced horizontal distances only, appear in the official field notes.

The tapes were tested frequently during the season, comparison being made with a standard tape, 1 chain in

Survey of the Salt Lake Base Line, through R. 11 W.

Chains	
	length, kept and used only for that purpose.
	I commence at the standard cor. of Tp. 1 N. Rs. 10 and 11 W., and deflecting from the Polaris meridian previously established at this point, I run
	W. on tan. on Salt Base Line, through R. 11 W., along the S. bdy. of sec. 36.
	Descending gradually over rolling mountainous land, through considerable short undergrowth of shadscale and salt sage.
3.18	The closing corner of Tp. 1 S., Rs. 10 and 11 W.
13.00	Dry gulch, about 50 ft. below standard Tp. cor., course SW.
	Begin ascent over SE. face of ridge.
	Difference bet. measurements of 40.00 chs. by two sets of chainmen is 0 lks.
40.00	Set an iron post, 3 ft. long, 1 in. in diam., on solid rock, surrounded by a mound of stone, 4 ft. base, 2½ ft. high, for standard ¼ sec. cor., with brass cap, mkd.
	S 36 / ¼ / 1913
	raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor.
40.25	Top of rock ridge, capped with limestone, about 125 ft. above gulch, bears N. 20° W. and S. 20° E.
	Descend abruptly over ledge.
50.50	Dry hollow, about 130 ft. below ridge, course SW.; ascend abruptly.
55.00	Spur, about 75 ft. above hollow, projects SW.; descend.
68.30	Wagon road at base of mountain, bears NW. and SE., about 50 ft. below last spur. Thence over nearly level land.
	Difference bet. measurements of 80.00 chs. by two sets of chainmen is 0 lks., position of middle point,
	By 1st set, 80.03 chs.,
	By 2nd set, 79.97 chs., the mean of which is
80.00	N., 1 lk. from tangent,
	Set an iron post, 3 ft. long, 3 ins. in diam., 24 ins. in the ground, for standard cor. of secs. 35 and 36, with brass cap, mkd.
	T 1 N | R 11 W / S 35 | S 36 / 1913

Survey of the Salt Lake Base Line, through R. 11 W.

Chains	
	dig pits, 24 x 18 x 12 ins., crosswise on each line, E. and W. 3 ft., and N. of post, 7 ft. dist., and raise a mound of earth, 4 ft. base, 2 ft. high, N. of cor. Land, mountainous and rolling; SE. exposure on E. 40.25 chs. and SW. exposure on W. 39.75 chs. Soil, on E. 68.30 chs., rocky and gravelly clay on rock and gravel subsoil. Soil on W. 11.70 chs., light, fine, dry, closely packed clay, rather alkali, 8 to 10 ins. deep, on hard, baked clay and sand subsoil: affords fair grazing, throughout the mile. No timber; undergrowth, shadscale and salt sage.
	S. 89° 59' W. on tan. along S. bdy. of sec. 35. Over nearly level land, sloping very gently to the S., through considerable short undergrowth of shadscale.
39.00	Enter few scattering greasewood, bears N. and S.
	Difference bet. measurements of 40.00 chs. by two sets of chainmen is 1 lks.; position of middle point, By 1st set, 40.00½ chs.,
40.00	By 2nd set, 39.99½ chs.; the mean of which is N. 2 lks. from tangent, Set an iron post, 3 ft. long, 1 in. in diam., 20 ins. in the ground, for standard ¼ sec. cor., with brass cap, mkd. S 35 / ¼ / 1913
	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.
	Difference bet. measurements of 80.00 chs., by two sets of chainmen is 1 lk.; position of middle point, By 1st set, 79.99½ chs.,
80.00	By 2nd set, 80.00½ chs.: the mean of which is N. 4 lks. from tangent, Set an iron post, 3 ft. long, 3 ins. in diam., 24 ins. in the ground, for standard cor. of secs. 34 and 35, with brass cap, mkd. T 1 N | R 11 W / S 34 | S 35 / 1913

Chains	
	dig pits, 24 x 18 x 12 ins., crosswise on each line, E. and W. 3 ft., and N. of post, 7 ft. dist., and raise a mound of earth, 4 ft. base, 2 ft. high, N. of cor.
	Land, nearly level; general S. exposure.
	Soil, light, fine, dry, closely packed clay, quite alkali, 8 to 12 ins. deep, on hard, baked clay and sand subsoil: affords no grazing.
	No timber; undergrowth, shadscale, and some greasewood.
	S. 89° 58' W. on tan. along S. bdy. of sec. 34.
	Over nearly level land, sloping very gently to the S., through considerable short undergrowth of shadscale, with a few scattering greasewood.
	Difference bet. measurements of 40.00 chs. by two sets of chainmen is 0 lks.
40.00	N. 5 lks. from tan., set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for standard $\frac{1}{4}$ sec. cor., with brass cap, mkd.
	S. 34 $\frac{1}{4}$ 1913
	dig pits, 18 x 18 x 12 ins., E. and W. of post, 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. measurements of 80.00 chs. by two sets of chainmen is 1 lk.; position of middle point,
	By 1st set, 80.00$\frac{1}{2}$ chs.,
	By 2nd set, 79.99$\frac{1}{2}$ chs.; the mean of which is
80.00	N. 8 lks. from tan, set an iron post, 3 ft. long, 3 ins. in diam., 24 ins. in the ground, for standard cor. of secs. 33 and 34, with brass cap, mkd.
	T. 1 N. | R. 11 W. S. 33 | S. 34 1913
	dig pits, 24 x 18 x 12 ins., crosswise on each line, E. and W. 3 ft., and N. of post, 7 ft. dist., and raise a mound of earth, 4 ft. base, 2 ft. high, N. of cor.
	Land, nearly level; general S. exposure.

Survey of the Salt Lake Base Line, through R. 11 W.

Chains	
	Soil, light, fine, dry, closely packed clay, quite alkaline, 8 to 10 ins. deep, on hard, baked, sand and clay subsoil; affords no grazing.
	No timber; undergrowth, shadscale, and some greasewood.
	S. 89° 57' W. on tan. along S. bdy. of sec. 33.
	Over nearly level land, sloping very gently to the S., through considerable short undergrowth of shadscale, greasewood and some salt sage.
	Difference bet. measurements of 40.00 chs. by two sets of chainmen, is 1 lk.; position of middle point,
	By 1st set, 40.00½ chs.,
	By 2nd set, 39.99½ chs.: the mean of which is
40.00	N. 11 lks. from tan., set an iron post, 3 ft. long, 1 in in diam., 26 ins. in the ground, for standard ¼ sec. cor., with brass cap, mkd.
	S 33. / 1913
	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.
	Difference bet. measurements of 80.00 chs. by two sets of chainmen is 1 lk., position of middle point,
	By 1st set, 79.99½ chs.,
	By 2nd set, 80.00½ chs.: the mean of which is
80.00	N. 14 lks. from tan., set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground, for standard cor. of secs. 32 and 33, with brass cap, mkd.
	T 1 N | R 11 W / S 32 | S 33 / 1913
	dig pits, 24 x 18 x 12 ins., crosswise on each line, E. and W. 3 ft., and N. of post, 7 ft. dist., and raise a mound of earth, 4 ft. base, 2 ft. high, N. of cor.
	Land, nearly level; general S. exposure.
	Soil, light, fine, dry, closely packed, clay, quite alkali, 8 to 10 ins. deep, on hard, baked, clay and sand subsoil; affords no grazing.

Survey of the Salt Lake Base Line, through R. 11 W.

Chains	
	No timber; undergrowth, shadscale and greasewood, with some salt sage.
	May 21, 1913: At this cor. I set off 20° 11' E. on the declination arc, and at 11h 56m a.m., l.m.t., observe the sun on the meridian. The resulting lat. is 40° 46' N.
	S. 89° 56' W. on tan., along S. bdy. of sec. 32.
	Over level land, through considerable short undergrowth of shadscale and some salt sage.
	Difference bet. measurements of 40.00 chs. by two sets of chainmen is 0 lks.
40.00	N. 18 lks. from tan., set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for standard ¼ sec. cor., with brass cap, mkd.
	S 32 1913
	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.
	Difference bet. measurements of 80.00 chs. by two sets of chainmen is 0 lks.
80.00	N. 22 lks. from tan., set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground, for standard cor. of secs. 31 and 32, with brass cap, mkd.
	T 1 N | R 11 W S 31 | S 32 1913
	dig pits, 24 x 18 x 12 ins., crosswise on each line, E. and W. 3 ft., and N. of post, 7 ft. dist., and raise a mound of earth, 4 ft. base, 2 ft. high, N. of cor.
	Land, level.
	Soil, light, fine, dry, closely packed, clay, quite alkali, 6 to 8 ins. deep on hard, baked clay subsoil: affords no grazing.
	No timber; undergrowth, shadscale and some salt sage.

Survey of the Salt Lake Base Line, through R. 11 W.

Chains	
	S. 89° 56' W. on tan., along S. bdy. of sec. 31.
	Over nearly level land, sloping very gently to the E., through considerable short undergrowth of shadscale, with some salt sage.
	Difference bet. measurements of 40.00 chs. by two sets of chainmen is 0 lks.
40.00	N. 27 lks. from tan., set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for standard ¼ sec. cor., with brass cap, mkd.
	S 31 / 1 / 1913
	dig pits, 18 x 18 x 18 ins., N. and W. of post, 3 ft. dist., and raise a mound of earth, 3½ ft. base, 1½ ft. high, N. of cor.

	May 21, 1913: At this cor., at 2h 15m p.m., l.m.t., I set off 40° 46' W. on the lat. arc, and 89° 13' W. on the decl. arc, and determine a meridian with the solar. The line thus determined agree with the tan. line, S. 89° 56' W.

54.00	Enter mountainous land, bears NW. and NE. Ascend E. slope.
77.00	Top of ridge, 90 ft. above foot, bears N. and S. Descend gradually.
	Difference bet. measurements of 80.00 chs., by two sets of chainmen is 0 lks.
80.00	N. 32 lks. from tan., set an iron post, 3 ft. long, 2 ins. in diam., only 6 ins. in the ground, on account of underlying rock, supported by a mound of stone, 4 ft. base, 2 ft. high, for standard cor. of Tp. 1 N., Rs. 11 and 12 W., with brass cap, mkd.
	T 1 N / R 12 W | R 11 W / S 36 | S 31 / 1913
	raise a mound of stone, 5 ft. base, 3 ft. high, N. of cor.
	Land, level and mountainous; general E. exposure.
	Soil, on E. 54 chs., light, fine, dry, closely packed, clay and sand, quite alkali, 8 to 10 ins. deep on hard,

Survey of the Salt Lake Base Line, through R. 11 W.

Chains.

baked clay subsoil. Soil, on W. 26 chs., shallow and quite rocky. No grazing in the mile.

No timber; undergrowth, shadscale and some greasewood.

May 21, 1913.

Howard W. Miller
U. S. Surveyor.

Re-tracement of a portion of the Salt Lake Base Line through R. 10 W.

Lines run by Robert E. Clark, U.S.Transitman.

May 16, 1913: At the standard cor. of secs. 35 and 36, I deflect from a Polaris meridian previously established at this point, and run W., re-tracing Salt Lake Base Line, along the S. bdy. of sec. 35, and at

40.10 Intersect ¼ sec. cor., an iron post, 1 in. in diam., proper mkd., set and witnessed.

80.17 Intersect standard cor. of secs. 34 and 35, an iron post, 3 ins. in diam., properly mkd., set and witnessed.

Robert E. Clark.
U. S. Transitman.

4—080

BOOK A-405

CERTIFICATE OF ASSISTANTS.

We, the undersigned, hereby certify upon honor that we assisted, to the best of our skill and ability, ..., U. S. Surveyor, during the periods and in the capacities stated opposite our several signatures, in surveying all those parts or portions of .....

For certificates of assistants see book "J" T.3 N.R.11 W.

.....

.....

.....

.....

.....

of the ..... Meridian, in the State of .....

which are represented in the foregoing field notes as having been executed 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 executed.

NAME.	PERIOD OF SERVICE.		CAPACITY.
	Began.	Ended.	

Subscribed and certified to before me on the dates of the final service as shown above.

.....

6—276 *U. S. Surveyor.*

FINAL OATH OF UNITED STATES SURVEYOR.

I, _____, U. S. Surveyor, do solemnly swear that, in pursuance of special instructions received from the U. S. Surveyor General for _____ bearing date of the _____ day of _____, 191 , I have well, faithfully, and truly, in my own proper person, and in strict conformity with said instructions, the Manual of Surveying Instructions, and the laws of the United States, surveyed all those parts or portions of _____

For final oath of U.S. Surveyor see book "J" T.3 N.R.11 W.

_____ of the _____ Meridian, in the State of _____, which are represented in the foregoing field notes as having been executed 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 U. S. 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.

_____

U. S. Surveyor.

Subscribed by said _____, and sworn to before me this _____ day of _____, 191

SEAL

_____

_____

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah, April 5, 1915.

The foregoing field notes of the Survey and retracement of the Salt Lake Base line, through Ranges 10 and 11 West of the Salt Lake Meridian,

executed by Howard W. Miller under his special instructions dated April 10, 1913, having been critically examined, and the necessary corrections and explanations made, the said field notes, and the surveys they describe, are hereby approved.

C. C. Thossen

U. S. 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.

_____

U. S. Surveyor General.

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4—679

BOOK A-405
Book "D"

U. S. Surveyor General's Office
MAR 19 1914
SALT LAKE CITY, UTAH.

FIELD NOTES

OF THE SURVEY OF THE

SUBDIVISION

OF

T. 1 S., R. 11 W.

Of the SALT ALKE BASE AND *Meridian,*

In the State of UTAH

EXECUTED BY

Howard W. Miller
&
Robert E. Clark

and Transitman

In the capacity of U. S. Surveyor, under instructions dated April 10, *1913, issued by the United States Surveyor General to govern surveys included in Group No.* 21, *which were approved by the Commissioner of the General Land Office,* April 25 and May 13 *1913, pursuant to authority contained in the Act of Congress dated* ....., *191*..

respectively

Survey commenced May 22, *1913*

Survey completed May 27 *1913*

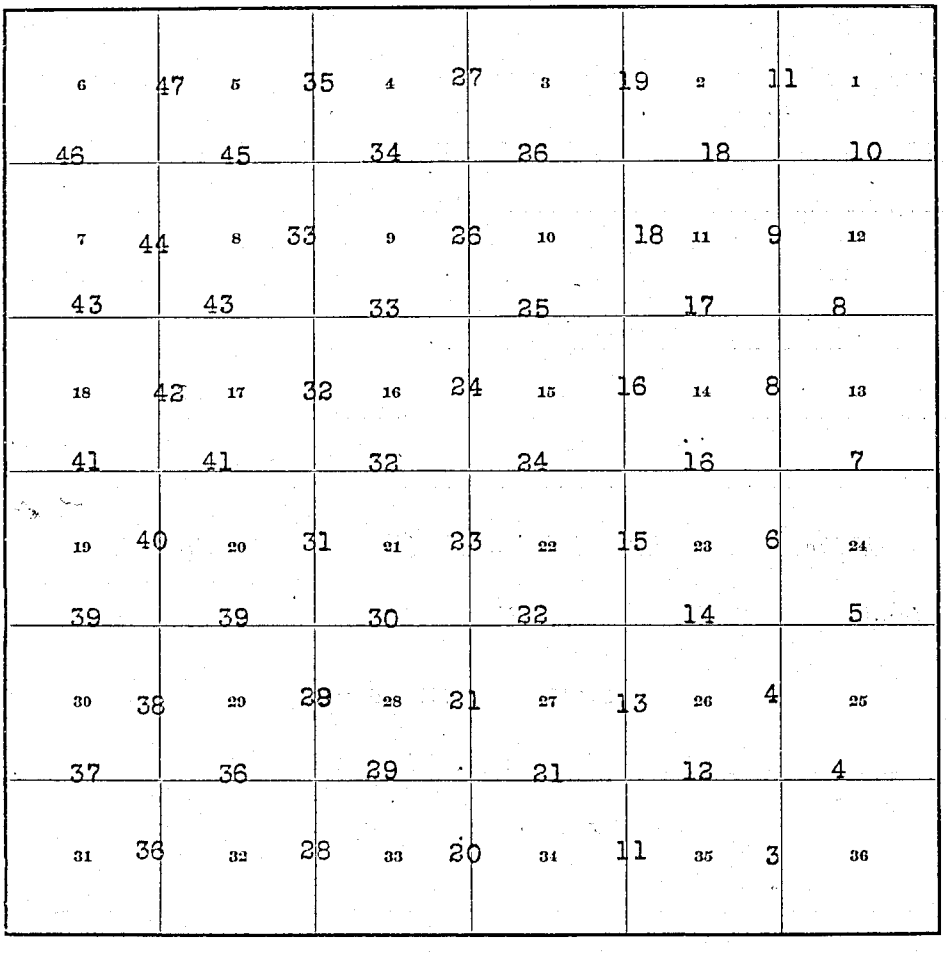
6—151

59-61-29

BOOK A-405

INDEX DIAGRAM.

Township 1 South, *Range* 11 West S.L.B.& M.



6—151

Survey of the subdivisional lines of Tp. 1 S. R. 11 W.

Chains

Survey commenced May 22, 1913, and executed with Young and Son's mountain transits, Nos. 8147 and 7147, fitted with Smith solar attachments. The horizontal circle of each transit is provided with opposite, double verniers, reading to single minutes, which is also the least count of the verniers of the lat. and decl. arcs.

Use of the above instruments was approved by G. D. D. Kirkpatrick, Ass't. Supervisor of Surveys, in the assignment instructions, dated April 21, 1913, conditional upon satisfactory field test, the record of which follows, herewith:

Test of Instrument No. 8147, used by Howard W. Miller, U. S. Surveyor.

I test the adjustments of my instrument and find no errors. Then to test the solar attachment, by comparing its indications, resulting from observations made during a.m. and p.m. hours, with a meridian determined by observation on Polaris, I proceed as follows:

May 21, 1913: At camp, in the NE¼ NE¼, sec. 29, Tp. 1 S. R. 11 W., with my transit set up over the S. end of the meridian later established, at 4h 00m p.m., l.m.t., I set off 40° 42' N. on the lat. arc, and 20° 14' N. on the decl. arc, and determine a meridian with the solar. I mark the line thus determined by a nail driven in a wooden peg, set firmly in the ground, 5.00 chs. N. of my station.

May 21, 1913.

May 22, 1913: With my transit occupying the same position as yesterday p.m., at 3h 30m a.m., l.m.t., I commence following the eastern progress of Polaris, and when the star reaches its maximum position in azimuth, and begins to recede, I mark the line thus determined on a stake, set firmly in the ground, 5.00 chs. N. of my station.

At 7h 30m a.m., I lay off the azimuth of Polaris, 1° 31.2' to the west. The true meridian thus determined agrees with the meridian determined by solar obsn. yesterday p.m.

At 8h 00m a.m., l.m.t., I set off 40° 42' N. on the lat. arc, and 20° 22' N. on the decl. arc, and determine a

Survey of the subdivisional lines of Tp. 1 S. R. 11 W.

Chains

meridian with the solar. The line thus determined agrees with the meridian determined by obsn. on Polaris.

I therefore conclude that the adjustments of my instrument are satisfactory.

The magnetic bearing of the true meridian at 8h.30m.a.m. is N.17°28'W., the angle thus determined gives the magnetic decl.17°20'E.

Test of Instrument No. 7147, used by Robert E. Clark, U. S. Transitman.

I test the adjustments of my instrument and find no error. Then to test the adjustments of the solar attachment, by comparing its indications, resulting from observations made during a.m. and p.m. hours, with a meridian determin by observation on Polaris, I proceed as follows:

May 21, 1913: At camp in the NE¼ NE¼, sec. 29, Tp. 1 S. R. 11 W., with my transit set up over a point 10 lks. S. of the position occupied by instrument No. 8147, at 4h 00 p.m., l.m.t., I set off 40° 42' N. on the lat. arc, and 20° 14' N. on the decl. arc, and determine a meridian with the solar. The line thus determined agrees with the meridian determined with Instrument No. 8147.

May 21, 1913.

May 22, 1913: With my transit occupying the same position as yesterday p.m., at 8h 00m a.m., l.m.t., I set off 40° N. on the lat. arc, and 20° 22' N. on the decl. arc, and determine a meridian with the solar. The line thus determined agrees with the meridian determined by observation on Polaris.

I therefore conclude that the adjustments of my instrument are satisfactory.

Measurements.

Steel tapes, five chains long, were used by both parties in all the field work on Group 21, together with clinomet for determining slope angles, and the reduced horizontal distances only, appear in the official field notes.

Survey of the subdivisional lines of Tp. 1 S. R. 11 W.

Chains	
	The tapes were tested frequently during the season, comparison being made with a standard tape, 1 chain in length, kept and used only for that purpose.

	Lines run by Howard W. Miller, U.S.Surveyor.
	I commence at the cor. of secs. 1, 2, 35 and 36, on S. bdy. of the Tp., previously described.
	May 22, 1913: Here at 8h 56m a.m., l.m.t., I set off 40° 41' N. on the lat. arc, and 20° 22' N. on the decl. arc, and determine a meridian with the solar.
	Thence I run
	N. 0° 01' W. bet. secs. 35 and 36.
	Descending gradually over rolling land, draining NW., through considerable short undergrowth of shadscale and salt sage.
10.90	Dry gulch, about 50 ft. below cor., course NW.; ascend.
20.00	Spur, bears NW. and SE.; descend.
22.60	Wagon road, bears NW. and SE.
	Enter scattering greasewood, bears NW. and SE.
32.50	Dry gulch, about 30 ft. below spur, course NW.; ascend.
40.00	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd.
	¼ S 35 | S 36
	1913
	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.
	Descend very gradually.
75.00	Dry wash, 20 lks. wide, 8 ft. deep, course NW.
80.00	Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground, for cor. of secs. 25, 26, 35 and 36, with brass cap, mkd.
	T 1 S | R 11 W
	S 26 | S 25
	S 35 | S 36
	1913
	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.

Survey of the subdivisional lines of Tp. 1 S. R. 11 W.

Chains	
	Land, gently rolling; general NW. exposure.
	Soil, light, fine, dry, rich, sandy loam of good texture, 10 to 40 ins. deep, on clay and gravel subsoil; affords good grazing.
	No timber; undergrowth, shadscale, salt sage and greasewo
	E. on random line bet. secs. 25 and 36.
40.00	Set temp. ¼ sec. cor.
80.05	Intersect E. bdy. of Tp. 3 lks. N. of cor. of secs. 25, 30, 31 and 36, which is an iron post, 3 ins. in diam., properly mkd., set and witnessed. Thence I run N. 89° 59' W. on true line bet. secs. 25 and 36.
	Over very gently rolling land, sloping NW., through considerable short undergrowth of shadscale and salt sage.
4.65	Wagon road, bears NW. and SE.
8.05	Dry gulch, about 30 ft. deep, course NW.; continue to descend gradually.
40.02½	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd.
	¼ S 25 S 36 1913
	dig pits, 18 x 18 x 12 ins., E. and W. of post, 3 ft. dist., and raise a mound of earth, 3⅓ ft. base, 1½ ft. high, N. of cor.
75.15	Wagon road, bears NW. and SE.
80.05	The cor. of secs. 25, 26, 35 and 36.
	Land, gently rolling; general NW. exposure.
	Soil, light, fine, dry, rich, sandy loam of good texture, 10 to 40 ins. deep on clay and gravel subsoil; affords good grazing.
	No timber; undergrowth, shadscale and salt sage.
	N. 0° 01' W. bet. secs. 25 and 26.
	Descending gradually over gently rolling land, sloping NW. through considerable short undergrowth of shadscale and some salt sage.

Survey of the subdivisional lines of Tp. 1 S. R. 11 W.

Chains	
3.45	Wagon road, bears NW. and SE.
23.70	Wagon road, bears NE. and SW.
36.00	Enter dense greasewood, bears NW. and SE.
40.00	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd. ¼ S 26 | S 25 / 1913 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.
44.00	Leave greasewood, bears NW. and SE.
50.00	Wagon road, bears E. and W.
52.00	Wagon road, bears NW. and SE.
80.00	Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground, for cor. of secs. 23, 24, 25 and 26, with brass cap, mkd. T 1 S | R 11 W / S 23 | S 24 / S 26 | S 25 / 1913 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, gently rolling; general NW. exposure.

Soil, light, fine, dry, sandy, clay loam, of poor texture, 8 to 14 ins. deep, on hard, baked, sand and clay subsoil; affords little grazing.

No timber; undergrowth, shadscale, salt sage and greasewood.

	S. 89° 59' E. on random line bet. secs. 24 and 25.
40.00	Set temp. ¼ sec. cor.
80.06	Intersect E. bdy. of Tp. 2 lks. N. of cor. of secs. 19, 24, 25 and 30, which is an iron post, 3 ins. in diam., properly mkd., set and witnessed.

May 22, 1913: At this cor. I set off 20° 23' N. on the decl. arc, and at 11h 56m a.m., l.m.t. observe the sun on the meridian. The resulting lat. is 40° 43' N.

Survey of the subdivisional lines of Tp. 1 S. R. 11 W.

Chains	
	Thence I run
	N. 89° 58' W. on true line bet. secs. 24 and 25.
	Descend very gradually over gently rolling land, sloping NW., through considerable short undergrowth of shadscale
7.05	Wagon road, bears NE. and SW.
40.03	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd.
	¼ S 24 / S 25 / 1913
	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.
55.00	Dry wash, 30 lks. wide, 6 ft. deep, course NE.
80.06	The cor. of secs. 23, 24, 25 and 26.
	Land, gently rolling; general NW. exposure.
	Soil, light, fine, dry, weak, sandy, clay loam of poor texture, on hard, baked clay subsoil; affords some grazin
	No timber; undergrowth, shadscale.
	N. 0° 01' W. bet. secs. 23 and 24.
	Descend very gradually over gently rolling land, sloping NW., through considerable short undergrowth of shadscale and salt sage.
12.00	Telegraph line, parallels railroad track.
12.80	Center of W.P.Ry., track bears N. 61° 30' E., and S. 61°
14.60	Telegraph line, parallels railroad track.
19.20	Wagon road, parallels railroad track.
40.00	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd.
	¼ S 23 | S 24 / 1913
	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.
80.00	Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground, for cor. of secs. 13, 14, 23 and 24, with

Survey of the subdivisional lines of Tp. 1 S. R. 11 W.

Chains

brass cap, mkd.

T 1 S. | R 11 W.
S 14 | S 13
S 23 | S 24
1913

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, gently rolling; general NW. exposure.

Soil, light, fine, dry, weak, sandy, clay loam of poor texture, 8 to 12 ins. deep on hard, baked sand and clay subsoil; affords no grazing.

No timber; undergrowth, shadscale and salt sage.

S. 89° 58' E. on random line bet. secs. 13 and 24.

40.00 Set temp. ¼ sec. cor.

80.10 Intersect E. bdy. of Tp. 5 lks. N. of cor. of secs. 13, 18, 19 and 24, which is an iron post, 3 ins. in diam., properly mkd., set and witnessed. Thence I run N. 89° 56' W. on true line bet. secs. 13 and 24.

Descending very gradually over nearly level land, sloping NW., through considerable short undergrowth of shadscale and salt sage.

40.05 Set an iron post, 3 ft. long, 1 in. in diam., 36 ins. in the ground, for ½ sec. cor., with brass cap, mkd.

¼ S 13
S 24
1913

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. 13, 14, 23 and 24.

Land, nearly level; general NW. exposure.

Soil, light, fine, dry, weak, sandy, clay loam of poor texture, 8 to 14 ins. deep on hard, baked sand and clay subsoil; affords no grazing.

No timber; undergrowth, shadscale and salt sage.

May 22, 1913.

Survey of the subdivisional lines of Tp. 1 S., R. 11 W.

Chains	
	May 23, 1913: At 7h 56m a.m., l.m.t., I set off 40° 43' N on the lat. arc, and 20° 34' N. on the decl. arc, and determine a meridian with the solar, at the cor. of secs. 13, 14, 23 and 24. Thence I run
	N. 0° 01' W. bet. secs. 13 and 14.
	Over nearly level land, draining NW., through considerabl short undergrowth of shadscale.
10.80	Wagon road, Clive to Low, bears NE. and SW.
38.75	Dim wagon road, bears NE. and SW.
38.80	Telephone line, bears NE. and SW.
40.00	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ½ sec. cor., with brass cap, mkd.
	¼ S 14 | S 13
	1913
	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.
80.00	Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground, for cor. of secs. 11, 12, 13 and 14, with brass cap, mkd.
	T 1 S | R 11 W
	S 11 | S 12
	S 14 | S 13
	1913
	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, nearly level; general NW. exposure.
	Soil, light, fine, dry, weak, sandy; clay loam, of fair texture, 10 to 20 ins. deep, on hard, baked clay subsoil; affords no grazing.
	No timber; undergrowth, shadscale.
	S. 89° 56' E. on random line bet. secs. 12 and 13.
40.00	Set temp. ½ sec. cor.
80.06	Intersect E. bdy. of Tp. 12 lks. N. of cor. of secs. 7, 12, 13 and 18, which is an iron post, 3 ins. in diam., properly mkd., set and witnessed. Corner stands under

Survey of the subdivisional lines of Tp. 1 S. R. 11 W.

Chains	
	telephone line, bearing NE. and SW.
	Thence I run
	N. 89° 51' W. on true line bet. secs. 12 and 13.
	Descend very gradually over nearly level land, draining NW., through considerable short undergrowth of shadscale and salt sage.
16.05	Dim wagon road, bears NE. and SW.
40.03	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ½ sec. cor., with brass cap, mkd.
	½ S 12 / S 13 / 1913
	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.
80.06	The cor. of secs. 11, 12, 13 and 14.
	Land, nearly level; general NW. exposure.
	Soil, light, fine, dry, warm, sandy, clay loam of fair texture, on hard, baked, alkali clay subsoil; affords no grazing.
	No timber; undergrowth, shadscale and salt sage.
	N. 0° 01' W. bet. secs. 11 and 12.
	Descending very gradually over nearly level land, through considerable short undergrowth of shadscale.
12.30	Wagon road, bears NE. and SW.
40.00	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd.
	½ S 11 | S 12 / 1913
	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.
80.00	Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground, for cor. of secs. 1, 2, 11 and 12, with brass cap, mkd.

Survey of the subdivisional lines of Tp. 1 S. R. 11 W.

Chains	
	T 1 S. | R 11 W. S 2 | S 1 S 11 | S 12 1913
	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, nearly level; general NW. exposure.
	Soil, light, fine, dry, weak, sandy, clay, 6 to 10 ins. deep, on hard, dry, baked, alkali subsoil; affords no grazing.
	No timber; undergrowth, shadscale.

	S. 89° 51' E. on random line bet. secs. 1 and 12.
40.00	Set temp. ¼ sec. cor.
80.06	Intersect E. bdy. of Tp. 2 lks. N. of cor. of secs. 1, 6, 7 and 12, which is an iron post, 3 ins. in diam., properly mkd., set and witnessed. Thence I run
	N. 89° 50' W. on true line bet. secs. 1 and 12.
	Descending very gradually over nearly level land, sloping NW., through considerable short undergrowth of shadscale.
40.03	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd.
	¼ S 1 S 12 1913
	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.
80.06	The cor. of secs. 1, 2, 11 and 12.
	Land, nearly level; general NW. exposure.
	Soil, light, fine, dry, closely packed, weak, clay, 6 to 10 ins. deep on hard, baked, alkali subsoil; affords no grazing.
	No timber; undergrowth, shadscale.

	May 23, 1913: At the above cor. I set off 20° 35' N. on the decl. arc, and at app. noon observe the sun on the meridian. The resulting lat. is 40° 45' N.

Survey of the subdivisional lines of Tp. 1 S. R. 11 W.

Chains

N. 0° 01' W. on true line bet. secs. 1 and 2.

Ascending very gently over nearly level land, through considerable short undergrowth of shadscale and a little salt sage.

40.00 Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ½ sec. cor., with brass cap, mkd.

¼ S 2 | S 1

1913

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.

78.96 Intersect Salt Lake Base Line, 3.35 chs. W. of the standard cor. of secs. 35 and 36, Tp. 1 N. R. 11 W., previously described. At intersection,

Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground, for closing cor. of secs. 1 and 2, with brass cap, mkd.

T 1 N | R 11 W
S 35 | S 36

CC

S 2 | S 1
T 1 S | R 11 W

1913

dig pits, 24 x 18 x 12 ins., crosswise on each line, E. and W. 3 ft., and S. of post, 7 ft. dist., and raise a mound of earth, 4 ft. base, 2 ft. high, S. of cor.

Land, nearly level; general NW. exposure.

Soil, light, fine, dry, closely packed, weak clay, rather alkali, on hard, baked clay subsoil; affords no grazing.

No timber; undergrowth, shadscale and salt sage.

May 23, 1913.

Howard W. Miller

U. S. Surveyor

Lines run by Robert E. Clark, U.S.Transitman.

May 22, 1913: AT 9h a.m., l.m.t., I set off 40° 41' N. on the lat. arc, and 20°22' N. on the decl. arc, and determine a meridian with the solar at the cor. of secs. 2, 3, 34 and 35, on S. bdy. of Tp., previously described.

Thence I run

N. 0° 02' W. bet. secs. 34 and 35.

Chains	
	Over gently rolling land, draining W., through considerable short undergrowth of shadscale and salt sage, with some greasewood.
24.00	Wagon road, bears N. 80° E. and S. 80° W.
40.00	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd. ¼ S 34 | S 35 1913 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.
	Thence over nearly level land.
64.20	Dry wash, 20 lks. wide, 12 ft. deep, course S. 30° W.
80.00	Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground, for cor. of secs. 26, 27, 34 and 35, with brass cap, mkd. T 1 S | R 11 W S 27 | S 26 S 34 | S 35 1913 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, gently rolling and level; general W. exposure.
	Soil, light, fine, dry, sandy clay loam, slightly alkali, but of fair texture, on sand and clay subsoil; affords little grazing.
	No timber; undergrowth, shadscale and salt sage with a little greasewood.
	E. on random line bet. secs. 26 and 35.
40.00	Set temp. ¼ sec. cor.
80.06	Intersect N. and S. line, 5 lks. S. of cor. of secs. 25, 26, 35 and 36. Thence I run
	S. 89° 58' W. on true line bet. secs. 26 and 35.
	Over nearly level land, draining W., through considerable short undergrowth of shadscale and salt sage and some greasewood.

Survey of the subdivisional lines of Tp. 1 S. R. 11 W.

Chains	
3.55	Small, dry arroyo, 3 ft. wide, 2 ft. deep, course NW.
40.03	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., with brass cap, mkd. $\frac{\frac{1}{4} \text{ S } 26}{\text{S } 35}$ 1913 dig pits, 18 x 18 x 12 ins., E. and W. of post, 3 ft. dist., and raise a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, N. of cor.
59.05	Wagon road, bears NW. and SE.
80.06	The cor. of secs. 26, 27, 34 and 35. Land, nearly level; general W. exposure. Soil, light, fine, dry, sandy, clay loam of fair texture, slightly alkali, on sand and clay subsoil; affords little grazing. No timber; undergrowth, shadscale and salt sage and some greasewood.

N. 0° 02' W. bet. secs. 26 and 27.
Over level land, through considerable short undergrowth of shadscale and salt sage.

16.40	Wagon road, bears NW. and SE.
23.00	Wagon road, bears N. 35° W. and S. 35° E.
33.80	Wagon road, bears N. 80° W. and S. 80° E.
40.00	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., with brass cap, mkd. $\frac{\frac{1}{4} \text{ S } 27 \mid \text{S } 26}{\quad\quad 1913}$ dig pits, 18 x 18 x 12 ins., N. and S. of post, 3 ft. dist., and raise a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, W. of cor.
45.00	Wagon road, bears NE. and SW.
47.90	Dry wash, 25 lks. wide, 15 ft. deep, course SW.
48.60	Telegraph line, parallels railroad.
49.40	Center of W.P.Ry. track, bears N. 61° 30' E., and S. 61°30'W.
50.65	Telegraph line, paralleles railroad.
57.90	Wagon road, bears E. and W.
80.00	Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground, for cor. of secs. 22, 23, 26 and 27, with

Survey of the subdivisional lines of Tp. 1 S. R. 11 W.

Chains

brass cap, mkd.

T 1 S	R 11 W
S 22	S 23
S 27	S 26

1913

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, light, fine, dry, sandy, clay, of fair texture, slightly alkali, on sand and gravel subsoil; affords no grazing.

No timber; undergrowth, shadscale and salt sage.

May 22, 1913: At this cor. I set off 20° 33' N. on the decl. arc, and at app. noon, observe the sun on the meridi
The resulting lat. 40° 43' N.

N. 89° 58' E. on random line bet. secs. 23 and 26.

40.00 Set temp. ¼ sec. cor.

80.06 Intersect N. and S. line 3 lks.S. of cor. of secs. 23, 24, 25 and 26. Thence I run

S. 89° 57' W. on true line bet. secs. 23 and 26.

Over nearly level land, draining NW., through considerable short undergrowth of shadscale and salt sage.

22.20 Telegraph line, parallels railroad.

23.75 Center of W.P.Ry. track, bears N. 61° 30' E. and S. 61° 30' W.

27.05 Telegraph line, parallels railroad track.

33.35 Wagon road, parallels railroad track.

40.03 Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd.

¼ S 23
S 26
1913

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.

Survey of the subdivisional lines of Tp. 1 S. R. 11 W.

Chains	
80.06	The cor. of secs. 22, 23, 26 and 27.
	Land, nearly level; general NW. exposure.
	Soil, light, fine, dry, sandy, clay loam of fair texture, slightly alkali, on sand and clay subsoil; affords fair grazing.
	No timber; undergrowth, shadscale and salt sage.
	N. 0° 02' W. bet. secs. 22 and 23.
	Over level land, through considerable short undergrowth of shadscale and salt sage and some greasewood.
39.45	Wagon road, Clive to Low, bears NE. and SW.
39.70	Wagon road, Clive to Low, bears NE. and SW.
40.00	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., with brass cap, mkd.
	$\frac{1}{4}$ S 22 | S 23
	1913
	dig pits, 18 x 18 x 12 ins., N. and S. of post, 3 ft. dist., and raise a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, W. of cor.
77.70	Dim wagon road, bears N. 65° E. and S. 65° W.
77.80	Telephone line, bears N. 65° E. and S. 65° W.
80.00	Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground, for cor. of secs. 14, 15, 22 and 23, with brass cap, mkd.
	T 1 S | R 11 W
	S 15 | S 14
	S 22 | S 23
	1913
	dig pits, 18 x 18 x 12 ins., in each sec., $5\frac{1}{2}$ ft. dist., and raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor.
	Land, level.
	Soil, light, fine, dry, sandy, clay loam of fair texture, slightly alkali, on hard, baked clay subsoil; affords little grazing.
	No timber; undergrowth, shadscale, salt sage and greasewood.

Survey of the subdivisional lines of Tp. 1 S. R. 11 W.

Chains	
	N. 89° 57' E. on random line bet. secs. 14 and 23.
40.00	Set temp. ¼ sec. cor.
80.06	Intersect N. and S. line, 4 lks. S. of cor. of secs. 13, 14, 23 and 24. Thence I run
	S. 89° 55' W. on true line bet. secs. 14 and 23.
	Over level land, through considerable short undergrowth of shadscale and salt sage and some greasewood.
16.55	Wagon road, Clive to Low, bears NE. and SW.
40.03	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd.
	¼ S 14 / S 23 / 1913
	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.
75.35	Dim wagon road, bears N. 65° E. and S. 65° W.
75.75	Telephone line, bears N. 60° E. and S. 60° W.
80.06	The cor. of secs. 14, 15, 22 and 23.
	Land, level.
	Soil, light, fine, dry, closely packed, weak, clay, slight alkali, on hard, baked clay subsoil; affords little grazi
	No timber; undergrowth, shadscale, salt sage and greasewo
	May 22, 1913.

May 23, 1913: At 8h 20m a.m., l.m.t., I set off 40° 43' N. on the lat. arc, and 20° 34' N. on the decl. arc, and determine a meridian with the solar at the cor. of secs. 14, 15, 22 and 23. Thence I run

N. 0° 02' W. bet. secs. 14 and 15.

Over level land, through considerable short undergrowth of shadscale and greasewood.

40.00 Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd.

¼ S 15 | S 14 / 1913

dig pits, 18 x 18 x 12 ins., N. and S. of post, 3 ft.

Survey of the subdivisional lines of Tp. 1 S. R. 11 W.

Chains	
	dist., and raise a mound of earth, 3½ ft. base, 1½ ft. high, W. of cor.
69.50	Wagon road, bears E. and W.
80.00	Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground, for cor. of secs. 10, 11, 14 and 15, with brass cap, mkd.

T 1 S. | R 11 W.
S 10 | S 11
S 15 | S 14
1913

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, light, fine, dry, closely packed, weak clay, 6 to 10 ins. deep on hard, baked, alkali, clay subsoil; affords no grazing.

No timber; undergrowth, shadscale and greasewood.

	N. 89° 55' E. on random line bet. secs. 11 and 14.
40.00	Set temp. ¼ sec. cor.
80.06	Intersect N. and S. line, 5 lks. N. of cor. of secs. 11, 12, 13 and 14. Thence I run

S. 89° 57' W. on true line bet. secs. 11 and 14.

Over level land, through considerable short undergrowth of shadscale, salt sage and greasewood.

40.03	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd.

¼ S 11
S 14
1913

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.

42.15	Wagon road, bears N. 65° E. and S. 65° W.
80.06	The cor. of secs. 10, 11, 14 and 15.

Land, level.

Soil, light, fine, dry, weak, closely packed clay, rather alkali, 6 to 10 ins. deep on hard, baked clay subsoil; affords no grazing.

Survey of the subdivisional lines of Tp. 1 S. R. 11 W.

Chains

No timber; undergrowth, shadscale, salt sage and greasewo

N. 0° 02' W. bet. secs. 10 and 11.

Over level land, through considerable short undergrowth o
shadscale, salt sage and greasewood.

40.00 Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., with brass cap, mkd.

$\frac{1}{4}$ S 10 | S 11

1913

dig pits, 18 x 18 x 12 ins., N. and S. of post, 3 ft. dist., and raise a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, W. of cor.

May 23, 1913: Here at app. noon, I set off 20° 35' N. on the decl. arc, and observe the sun on the meridian.
The resulting lat. is 40° 45' N.

80.00 Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground, for cor. of secs. 2, 3, 10 and 11, with brass cap, mkd.

T 1 S | R 11 W
S 3 | S 2
S 10 | S 11

1913

dig pits, 18 x 18 x 12 ins., in each sec., $5\frac{1}{2}$ ft. dist., and raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor.

Land, level.

Soil, light, fine, dry, weak, closely packed clay, rather alkali, 6 to 10 ins. deep on hard, baked clay subsoil; affords no grazing.

No timber; undergrowth, shadscale, salt sage and greasewo

N. 89° 57' E. on random line bet. secs. 2 and 11.

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

80.09 Intersect N. and S. line, 2 lks. S. of cor. of secs. 1, 2, 11 and 12. Thence I run

S. 89° 56' W. on true line bet. secs. 2 and 11.

Survey of the subdivisional lines of Tp. 1 S. R. 11 W.

Chains	
	Over level land, sloping gently NW., through considerable short undergrowth of shadscale, salt sage and greasewood.
17.00	Dry arroyo, 5 ft. wide, 3 ft. deep, course N. 60° W.
40.04½	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd.
	¼ S 2 / S 11 / 1913
	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.
80.09	The cor. of secs. 2, 3, 10 and 11.
	Land, nearly level; general NW. exposure.
	Soil, light, fine, dry, weak, closely packed clay, rather alkali, 6 to 8 ins. deep on hard, baked clay subsoil; affords no grazing.
	No timber; undergrowth, shadscale, salt sage and greasewood.
	N. 0° 02' W. bet. secs. 2 and 3.
	Over level land, through considerable short undergrowth of shadscale, salt sage and greasewood.
40.00	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd.
	¼ S 3 | S 2 / 1913
	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.
79.04	Intersect Salt Lake Base Line, 3.39 chs. W. of the standard cor. of secs. 34 and 35, previously described. At intersection Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground, for closing cor. of secs. 2 and 3, with brass cap, mkd.
	T 1 N | R 11 W / S 34 | S 35 / CC / ¼ S 3 | S 2 / T 1 S | R 11 W / 1913
	dig pits, 24 x 18 x 12 ins., crosswise on each line, E.

Survey of the subdivisional lines of Tp. 1 S. R. 11 W.

Chains

and W. 3 ft., and S. of post, 7 ft. dist., and raise a mound of earth, 4 ft. base, 2 ft. high, S. of cor.

Land, level.

Soil, light, fine, dry, weak, closely packed clay, rather alkali, 6 to 8 ins. deep, on hard, baked clay subsoil; affords no grazing.

No timber; undergrowth, shadscale, salt sage and greasewo

May 23, 1913. Robert E. Clark
U.S. Deputy Surveyor

Lines run by Howard W. Miller, U.S. Surveyor.

May 24, 1913: At 6h 57m a.m., l.m.t., I set off 40° 41' N on the lat. arc, and 20° 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., previously described.

Thence I run

N. 0° 02' W. bet. secs. 33 and 34.

Over nearly level land, draining N., through considerable short undergrowth of shadscale and greasewood and some salt sage.

40.00 Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd.

¼ S 33 | S 34

1913

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.

80.00 Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground, for cor. of secs. 27, 28, 33 and 34, with brass cap, mkd.

T 1 S | R 11 W
S 28 | S 27
S 33 | S 34

1913

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, nearly level; general N. exposure.

Survey of the subdivisional lines of Tp. 1 S. R. 11 W.

Chains	
	Soil, light, fine, dry, closely packed, sandy loam of fair texture, on sanf and clay subsoil; affords no grazing. No timber; undergrowth, shadscale, greasewood and salt sage.
	E. on random line bet. secs. 27 and 34.
40.00	Set temp. ¼ sec. cor.
80.04	Intersect N. and S. line at cor. of secs. 26, 27, 34 and 35.
	Thence I run
	W. on true line bet. secs. 27 and 34.
	Over nearly level land, draining N., through considerable short undergrowth of shadscale, greasewood and salt sage.
40.02	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd.
	¼ S 27 / S 34 / 1913
	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.
80.04	The cor. of secs. 27, 28, 33 and 34.
	Land, nearly level; general N. exposure.
	Soil, light, fine, dry, closely packed, sandy loam of fair texture, 8 to 10 ins. deep on hard, baked clay subsoil; affords no grazing.
	No timber; undergrowth, shadscale, greasewood and salt sage.
	N. 0° 02' W. bet. secs. 27 and 28.
	Over nearly level land, draining N., through considerable short undergrowth of shadscale, greasewood and salt sage.
26.65	Wagon road, bears NW. and SE.
40.00	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd.
	¼ S 28 | S 27 / 1913
	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.

Survey of the subdivisional lines of Tp. 1 S. R. 11 W.

Chains	
46.20	Wagon road, parallels railroad.
46.60	W.P.Ry. borrow pit, drains W.
47.40	Telegraph line, parallels railroad.
48.05	Center of W. P. Ry. track, bears N. 80° 02' W. and S. 80° 02' E.
50.10	Telegraph line, parallels railroad.
56.10	Wagon road, bears NE. and SW.
76.80	Wagon road, Clive to Low, bears NE. and SW.
80.00	Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground, for cor. of secs. 21, 22, 27 and 28, with brass cap, mkd.

T 1 S | R 11 W
S 21 | S 22
S 28 | S 27
1913

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, nearly level; general N. exposure.

Soil, light, fine, dry, closely packed clay, slightly alkali, 8 to 10 ins. deep on hard, baked clay subsoil: affords no grazing.

No timber: undergrowth, shadscale, greasewood and salt sage

E. on random line bet. secs. 22 and 27.

40.00	Set temp. ¼ sec. cor.
80.04	Intersect N. and S. line 1 lk. N. of cor. of secs. 22, 23, 26 and 27. Thence I run

W. on true line bet. secs. 22 and 27.

Over level land, through considerable short undergrowth of shadscale and greasewood and some salt sage.

40.02	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd.

¼ S 22
S 27
1913

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.

Survey of the subdivisional lines of Tp. 1 S. R. 11 W.

Chains	
67.25	Wagon road, Clive to Low, bears NE. and SW.
80.04	The cor. of secs. 21, 22, 27 and 28.
	Land, level.
	Soil, light, fine, dry, weak, closely packed clay, rather alkali, 6 to 8 ins. deep on hard, baked clay subsoil; affords no grazing.
	No timber; undergrowth, shadscale, greasewood and salt sage.

	N. 0° 02' W. bet. secs. 21 and 22.
	Over level land, through considerable short undergrowth of shadscale and greasewood and some salt sage.
36.75	Dim wagon road, bears NE. and SW.
36.85	Telephone line, bears NE. and SW.
40.00	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd.
	¼ S 21 | S 22
	1913
	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.
80.00	Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground, for cor. of secs. 15, 16, 21 and 22, with brass cap, mkd.
	T 1 S | R 11 W
	S 16 | S 15
	S 21 | S 22
	1913
	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, light, fine, dry, weak, closely packed clay, 8 to 10 ins. deep on hard, baked clay subsoil; soil and subsoil, rather alkali; affords no grazing.
	No timber; undergrowth, shadscale, greasewood and salt sage.

	May 24, 1913: At this cor. I set off 20° 46' N. on the decl. arc, and at app. noon observe the sun on the meridian.

Survey of the subdivisional lines of Tp. 1 S. R. 11 W.

Chains	
	The resulting lat. is 40° 43' N.
	E. on random line bet. secs. 15 and 22.
40.00	Set temp. ¼ sec. cor.
80.04	Intersect N. and S. line 1 lk. N. of cor. of secs. 14, 15, 22 and 23. Thence I run
	W. on true line bet. secs. 15 and 22.
	Over nearly level land, draining N., through considerable short undergrowth of shadscale and scattering greasewood and salt sage.
40.02	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass can, mkd.
	¼ S 15 S 22 1913
	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.
80.04	The cor. of secs. 15, 16, 21 and 22.
	Land, nearly level; general N. exposure.
	Soil, light, fine, dry, weak, closely packed clay, rather alkali, 6 to 8 ins. deep on hard, baked clay subsoil; affords no grazing.
	No timber; undergrowth, shadscale, greasewood and salt sage
	N. 0° 02' W. bet. secs. 15 and 16.
	Over nearly level land, draining N., through considerable short undergrowth of shadscale and scattering greasewood and salt sage.
40.00	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ½ sec. cor., with brass cap, mkd.
	¼ S 16 | S 15 1913
	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.
48.90	Old wagon road, bears NE. and SW.

Survey of the subdivisional lines of Tp. 1 S. R. 11 W.

Chains	
80.00	Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground, for cor. of secs. 9, 10, 15 and 16, with brass cap, mkd. T 1 S | R 11 W S 9 | S 10 S 16 | S 15 1913 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, nearly level; general N. exposure. Soil, light, fine, dry, weak, closely packed clay, rather alkali, 6 to 8 ins. deep on hard, baked clay subsoil; affords no grazing. No timber; undergrowth, shadscale, greasewood and salt sage.
	E. on random line bet. secs. 10 and 15.
40.00	Set temp. ¼ sec. cor.
80.06	Intersect N. and S. line 3 lks. N. of cor. of secs. 10, 11, 14 and 15. Thence I run N. 89° 59' W. on true line bet. secs. 10 and 15. Over nearly level land, draining N., through considerable short undergrowth of shadscale, greasewood and salt sage.
40.03	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd. ¼ S 10 S 15 1913 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.
80.06	The cor. of secs. 9, 10, 15 and 16. Land, nearly level; general N. exposure. Soil, light, fine, dry, weak, closely packed clay, rather alkali, 6 yo 8 ins. deep on hard, baked clay subsoil; affords no grazing. No timber; undergrowth, shadscale, greasewood and salt sage. May 24, 1913.

Survey of the subdivisional lines of Tp. 1 S. R. 11 W.

Chains	
	May 27, 1913: At 6h. 57m a.m., l.m.t., I set off 40° 44' E. on the lat. arc, and 21° 17' N. on the decl. arc, and determine a meridian with the solar at the cor. of secs. 9, 10, 15 and 16. Thence I run
	N. 0° 02' W. bet. secs. 9 and 10.
	Over nearly level land, draining S., through considerable short undergrowth of shadscale and greasewood.
40.00	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd.
	¼ S 9 | S 10
	1913
	dig pits, 18 x 18 x 12 ins., N. and S. of post, 7 ft. dist., and raise a mound of earth, 3½ ft. base, 1½ ft. high, W. of cor.
80.00	Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground, for cor. of secs. 3, 4, 9 and 10, with brass cap, mkd.
	T 1 S | R 11 W.
	S 4 | S 3
	S 9 | S 10
	1913
	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, nearly level; general S. exposure.
	Soil, light, fine, dry, weak, closely packed clay, rather alkali, 6 to 8 ins. deep on hard, baked clay subsoil: affords no grazing.
	No timber; undergrowth, shadscale and greasewood.
	S. 89° 59' E. on random line bet. secs. 3 and 10.
40.00	Set temp. ¼ sec. cor.
80.04	Intersect N. and S. line at the cor. of secs. 2, 3, 10 and 11. Thence I run
	N. 89° 59' W. on true line bet. secs. 3 and 10.
	Over nearly level land, draining N., through considerable short undergrowth of shadscale and greasewood.

Survey of the subdivisional lines of Tp. 1 S. R. 11 W.

Chains	
40.02	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd. ¼ S 3 / S 10 1913 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.
80.04	The cor. of secs. 3, 4, 9 and 10. Land, nearly level; general N. exposure. Soil, light, fine, dry, weak, closely packed clay, rather alkali, 6 to 8 ins. deep on hard, baked clay subsoil; affords no grazing. No timber; undergrowth, shadscale and greasewood.
	N. 0° 02' W. on true line bet. secs. 3 and 4. Over level land, through considerable short undergrowth of shadscale and greasewood.
40.00	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd. ¼ S 4 | S 3 1913 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.
78.96	Intersect Salt Lake Base Line, 3.41 chs. W. of the standard cor. of secs. 33 and 34, previously described. At intersection, Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground, for closing cor. of secs. 3 and 4, with brass cap, mkd. T 1 N | R 11 W S 33 | S 34 CC S 4 | S 3 T 1 S | R 11 W 1913 dig pits, 24 x 18 x 12 ins., crosswise on each line, E. and W., 3 ft., and S. of post, 7 ft. dist., and raise a mound of earth, 4 ft. base, 2 ft. high, S. of cor. Land, level.

Survey of the subdivisional lines of Tp. 1 S. R. 11 W.

Chains	
	Soil, light, fine, dry, weak, closely packed clay, rather alkali, 6 to 8 ins. deep on hard, baked clay subsoil; affords no grazing.
	No timber; undergrowth, shadscale and greasewood.
	Howard W. Miller U. S. Surveyor.
	Lines run by Robert E. Clark, U.S. Transitman.
	May 24, 1913: At 7h 00m a.m., l.m.t., I set off 40° 41' E. on the lat. arc, and 20° 45' N. on the decl. arc, and determine a meridian with the solar at the cor. of secs. 4, 5, 32 and 33, on S. bdy. of Tp., previously described.
	Thence I run
	N. 0° 03' W. bet. secs. 32 and 33.
	Over level land, through considerable short undergrowth of shadscale, greasewood and salt sage.
40.00	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd.
	¼ S 32 | S 33 1913
	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.
69.50	Old road, Clive to Quincy Springs, bears NE. and SE.
80.00	Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground, for cor. of secs. 28, 29, 32 and 33, with brass cap, mkd.
	T 1 S | R 11 W S 28 | S 29 S 32 | S 33 1913
	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, light, fine, dry, weak, closely packed clay, rather alkali, 6 to 8 ins. deep on hard, baked clay subsoil: affords no grazing.
	No timber; undergrowth, shadscale, greasewood and salt sage.

Survey of the subdivisional lines of Tp. 1 S. R. 11 W.

Chains	
	E. on random line bet. secs. 28 and 33.
40.00	Set temp. ¼ sec. cor.
80.06	Intersect N. and S. line 5 lks. N. of cor. of secs. 27, 28, 33 and 34. Thence I run
	N. 89° 58' W. on true line bet. secs. 28 and 33.
	Over level land, through considerable short undergrowth of shadscale and greasewood.
40.03	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd.
	¼ S 28 / S 33 / 1913
	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.
80.06	The cor. of secs. 28, 29, 32 and 33.
	Land, level.
	Soil, light, fine, dry, weak, closely packed clay, rather alkali, 6 to 8 ins. deep on hard, baked clay subsoil; affords no grazing.
	No timber; undergrowth, shadscale and greasewood.
	N. 0° 03' W. bet. secs. 28 and 29.
	Over level land, through considerable short undergrowth of shadscale, greasewood and salt sage.
40.00	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd.
	¼ S 29 | S 28 / 1913
	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.
60.20	Telegraph line, parallels railroad.
60.90	Wagon road, parallels railroad.
61.45	Telegraph line, parallels railroad.
62.10	Center of W. P. Ry. track, bears N. 80° 02' W. and S. 80° 02' E.
63.50	Wagon road, Clive to Low, parallels railroad.

Survey of the subdivisional lines of Tp. 1 S. R. 11 W.

Chains	
73.50	Dim wagon road, bears N. 70° E. and S. 70° W.
75.90	Telephone line, bears N. 60° E. and S. 60° W.
80.00	Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground, for cor. of secs. 20, 21, 28 and 29, with brass cap, mkd.

T 1 S | R 11 W.
S 20 | S 21
S 29 | S 28
1913

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.

From a point at 62.10 chs. on this line,
W. end of Clive switch bears N. 79° 55' W.
Chimney on W. section house bears N. 77° 02' W.
Chimney on E. section house bears N. 76° 47' W.

Land, level.

Soil, light, fine, dry, weak, closely packed clay, rather alkali, 6 to 8 ins. deep on hard, baked clay subsoil; affords no grazing.

No timber; undergrowth, shadscale, greasewood and salt sage

S. 89° 58' E. on random line bet. secs. 21 and 28.

40.00	Set temp. ¼ sec. cor.
80.12	Intersect N. and S. line 5 lks. S. of cor. of secs. 21, 22, 27 and 28. Thence I run

W. on true line bet. secs. 21 and 28.

Over nearly level land, through considerable short undergrowth of shadscale, greasewood and salt sage.

40.06	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd.

¼ S 21
S 28
1913

dig pits, 18 x 18 x 12 ins., E. and W. of post, 7 ft. dist., and raise a mound of earth, 3½ ft. base, 1½ ft. high, N. of cor.

72.23	Telephone line and dim wagon road, bear N. 60° E. and S. 60° W.

Survey of the subdivisional lines of Tp. 1 S. R. 11 W.

Chains	
80.12	The cor. of secs. 20, 21, 28 and 29. Land, nearly level. Soil, light, fine, dry, weak, closely packed clay, rather alkali, 6 to 8 ins. deep on hard, baked clay subsoil; affords no grazing. No timber; undergrowth, shadscale, greasewood and salt sage.
	May 24, 1913: Here I set off 20° 46' N. on the decl. arc, and at app. noon observe the sun on the meridian. The resulting lat. is 40° 43' N.
	N. 0° 03' W. bet. secs. 20 and 21. Over gently rolling land, through considerable short undergrowth of shadscale, greasewood and salt sage.
40.00	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd. ¼ S 20 | S 21 1913 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.
80.00	Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground, for cor. of secs. 16, 17, 20 and 21, with brass cap, mkd. T. 1 S | R 11 W S 17 | S 16 S 20 | S 21 1913 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, very gently rolling. Soil, light, fine, dry, weak, closely packed clay, rather alkali, 6 to 8 ins. deep on hard, baked clay subsoil; affords no grazing. No timber; undergrowth, shadscale, greasewood and salt sage.

Survey of the subdivisional lines of Tp. 1 S. R. 11 W.

Chains	
	E. on random line bet. secs. 16 and 21.
40.00	Set temp. ¼ sec. cor.
80.16	Intersect N. and S. line 2 lks. S. of cor. of secs. 15, 16, 21 and 22. Thence I run S. 89° 59' W. on true line bet. secs. 16 and 21. Over nearly level land, through considerable short undergrowth of shadscale, greasewood and salt sage.
40.08	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd. ¼ S 16 / S 21 1913
	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.
80.16	The cor. of secs. 16, 17, 20 and 21. Land, nearly level. Soil, light, fine, dry, weak, closely packed clay, rather alkali, 6 to 8 ins. deep on hard, baked clay subsoil; affords no grazing. No timber; undergrowth, shadscale, greasewood and salt sag
	N. 0° 03' W. bet. secs. 16 and 17.
29.60	Old wagon road, bears N. 80° E. and S. 80° W.
40.00	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd. ¼ S 17 | S 16 1913
	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.
80.00	Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground, for cor. of secs. 8, 9, 16 and 17, with brass cap, mkd. T 1 S | R 11 W S 8 | S 9 S 17 | S 16 1913
	dig pits, 18 x 18 x 12 ins. in each sec., 5½ ft. dist.,

Survey of the subdivisional lines of Tp. 1 S. R. 11 W.

Chains	
	and raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor.
	Land, nearly level.
	Soil, light, fine, dry, weak, closely packed clay, rather alkali, 6 to 8 ins. deep on hard, baked clay subsoil; affords no grazing.
	No timber; undergrowth, shadscale, greasewood and salt sage.
	N. 89° 59' E. on random line bet. secs. 9 and 16.
40.00	Set temp. ¼ sec. cor.
80.22	Intersect N. and S. line at cor. of secs. 9, 10, 15 and 16.
	Thence I run
	S. 89° 59' W. on true line bet. secs. 9 and 16.
	Over level land, through considerable short undergrowth of shadscale, greasewood and salt sage.
40.11	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass can, mkd.
	¼ S 9 S 16 1913
	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.
80.22	The cor. of secs. 8, 9, 16 and 17.
	Land, level.
	Soil, light, fine, dry, weak, closely packed clay, rather alkali, 6 to 8 ins. deep on hard, baked clay subsoil; affords no grazing.
	No timber; undergrowth, shadscale, greasewood and salt sage.
	May 24, 1913. Robert E. Clark. U. S. Transitman
	Lines run by Howard W. Miller, U.S.Surveyor.
	N. 0° 03' W. bet. secs. 8 and 9.
	Over nearly level land, through considerable short undergrowth of shadscale and scattering greasewood.
40.00	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in

Survey of the subdivisional lines of Tp. 1 S. R. 11 W.

Chains

the ground, for ¼ sec. cor., with brass cap, mkd.

¼ S 8 | S 9

1913

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.

80.00 Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground, for cor. of secs. 4, 5, 8 and 9, with brass cap, mkd.

T 1 S | R 11 W

S 5 | S 4

S 8 | S 9

1913

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, nearly level.

Soil, light, fine, dry, weak, closely packed clay, rather alkali, 6 to 8 ins. deep on hard, baked clay subsoil; affords no grazing.

No timber; undergrowth, shadscale and greasewood.

N. 89° 59' E. on random line bet. secs. 4 and 9.

40.00 Set temp. ¼ sec. cor.

80.24 Intersect N. and S. line 2 lks. N. of cor. of secs. 3, 4, 9 and 10. Thence I run

W. on true line bet. secs. 4 and 9.

Over level land, through considerable short undergrowth of shadscale and greasewood.

40.12 Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd.

¼ S 4

S 9

1913

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.

80.24 The cor. of secs. 4, 5, 8 and 9.

Survey of the subdivisional lines of Tp. 1 S. R. 11 W.

Chains

Land, level.

Soil, light, fine, dry, weak, closely packed clay, rather alkali, 6 to 8 ins. deep on hard, baked clay subsoil; affords no grazing.

No timber; undergrowth, shadscale and greasewood.

May 27, 1913: Here I set off 21° 18' N. on the decl. arc, and at 11h 57m l.m.t., observe the sun on the meridian. The resulting lat. is 40° 45' N.

N. 0° 03' W. on true line bet. secs. 4 and 5.

Over level land, through considerable short undergrowth of shadscale and greasewood.

40.00 Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd.

¼ S 5 | S 4

1913

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.

78.95 Intersect Salt Lake Base Line, 3.73 chs. W. of the standard cor. of secs. 32 and 33, previously described. At intersection Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground, for closing cor. of secs. 4 and 5, with brass cap, mkd.

T 1 N | R 11 W
S 32 | S 33
CC
S 5 | S 4
T 1 S | R 11 W
1913

dig pits, 24 x 18 x 12 ins., crosswise on each line, E. and W., 3 ft., and S. of post, 7 ft. dist., and raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor.

Land, level.

Soil, light, fine, dry, weak, closely packed clay, rather alkali, 6 to 8 ins. deep on hard, baked clay subsoil; affords no grazing.

No timber; undergrowth, shadscale and greasewood.

Howard W. Weber

U. S. Surveyor

Survey of the subdivisional lines of Tp. 1 S. R. 11 W.

Chains	
	Lines run by Robert E. Clark, U.S.Transitman.
	May 26, 1913: At 7h 20m a.m., l.m.t., I set off 40° 41' N. on the lat. arc, and 21° 07' N. on the decl. arc, and determine a meridian with the solar at the cor. of secs. 5, 6, 31 and 32, on S. bdy. of Tp., previously described. Thence I run
	N. 0° 04' W. bet. secs. 31 and 32.
	Over level land, through considerable short undergrowth of shadscale, greasewood and salt sage.
40.00	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd.
	¼ S 31 | S 32
	1913
	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.
80.00	Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground, for cor. of secs. 29, 30, 31 and 32, with brass cap, mkd..
	T 1 S | R 11 W
	S 30 | S 29
	S 31 | S 32
	1913
	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, light, fine, dry, weak, closely packed clay, rather alkali, 6 to 8 ins. deep on hard, baked clay subsoil; affords no grazing.
	No timber; undergrowth, shadscale, greasewood and salt sage
	E. on random line bet. secs. 29 and 32.
40.00	Set temp. ¼ sec. cor.
79.97	Intersect N. and S. line 3 lks. N. of cor. of secs. 28, 29, 32 and 33. Thence I run
	N. 89° 59' W. on true line bet. secs. 29 and 32.
	Over level land, through considerable short undergrowth

Survey of the subdivisional lines of Tp. 1 S. R. 11 W.

Chains	
	of shadscale, greasewood and salt sage.
10.10	Dim wagon road, bears N. 65° W. and S. 65° E., Clive to Quincy Springs.
39.98½	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass can, mkd.
	¼ S 29 S 32 1913
	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.
79.97	The cor. of secs. 29, 30, 31 and 32.
	Land, level.
	Soil, light, fine, dry, weak, closely packed clay, rather alkali, 6 to 8 ins. deep on hard, baked clay subsoil; affords no grazing.
	No timber; undergrowth, shadscale, greasewood and salt sage.
	W. on random line bet. secs. 30 and 31.
40.00	Set temp. ¼ sec. cor.
77.10	Intersect W. bdy. of Tp. at cor. of secs. 25, 30, 31 and 36, previously described. Thence I run
	E. on true line bet. secs. 30 and 31.
	Over level land, through considerable short undergrowth of shadscale and salt sage.
37.10	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd.
	¼ S 30 S 31 1913
	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.
77.10	The cor. of secs. 29, 30, 31 and 32.
	Land, level.
	Soil, light, fine, dry, weak, closely packed clay, rather alkali, 6 to 8 ins. deep on hard, baked clay subsoil; affords no grazing.
	No timber; undergrowth, shadscale and salt sage.

Survey of the subdivisional lines of Tp. 1 S. R. 11 W.

Chains	
	N. 0° 04' W. bet. secs. 29 and 30.
	Over level land, through considerable short undergrowth of shadscale, salt sage and greasewood.
40.00	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd.
	¼ S 30 | S 29
	1913
	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.
74.20	Telegraph line, parallels railroad.
74.90	Wagon road, parallels railroad.
75.45	Telegraph line, parallels railroad.
76.15	Center of W.P.Ry. track, bears N. 80° 02' W. and S. 80° 02
77.80	Wagon road, paralleles railroad track.
79.40	Telephone line, parallels railroad track.
80.00	Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground, for cor. of secs. 19, 20, 29 and 30, with brass cap, mkd.
	T 1 S. | R 11 W
	S 19 | S 20
	S 30 | S 29
	1913
	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, light, fine, dry, weak, closely packed clay, rather alkali, 6 to 8 ins. deep on hard, baked clay subsoil; affords no grazing.
	No timber; undergrowth, shadscale, greasewood and salt sag
	Instrument in transit prevents latitude observation.
	From this corner the W. end of Clive switch, bears S. 47° 42' E.
	Chimney on W. section house, bears S. 77° 30' E.

Survey of the Subdivisional Lines of Tp. 1 S., R.11 W.

Chains	
	S.89°59'E. on random line bet. secs. 20 and 29.
40.00	Set temp. ¼ sec. cor.
79.94.	Intersect N. and S. line 2 lks. S. of cor. of secs. 20, 21, 28 and 29. Thence I run
	W. on true line bet. secs. 20 and 29.
	Over nearly level land draining W., through considerable short undergrowth of shadscale, greasewood and salt sage.
21.00	Wagon road, bears N.75°W. and S.75°E.
39.97	Set an iron post 3 ft. long, 1 in. in diam., 26 ins. in the ground for ½ sec. cor. with brass cap mkd.
	¼ S 20 S 29 1913
	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.
	Chimney on W. section house bears S.57°04'E.
	Chimney on E. section house bears S.58°25'E.
79.94	The cor. of secs. 19, 20, 29 and 30.
	Land, nearly level; general W. exposure.
	Soil, light, fine, dry, weak, closely packed clay, rather alkali, 6 to 8 ins. deep, on hard, baked clay subsoil; affords no grazing.
	No timber; undergrowth, shadscale, greasewood and salt sage.
	W. on random line bet. secs. 19 and 30.
40.00	Set temp. ¼ sec. cor.
76.99	Intersect W. bdy. of Tp. 3 lks. S. of cor. of secs. 19, 24, 25 and 30, previously described. Thence I run
	S.89°59'E. on true line bet. secs. 19 and 30.
	Over level land, through considerable short undergrowth of shadscale and greasewood.
36.99	Set an iron post 3 ft. long, 1 in. in diam., 26 ins. in the ground for ¼ sec. cor. with brass cap mkd.
	¼ S 19 S 30 1913
	dig pits 18x18x12 ins. E. and W. of post 3 ft. dist., and raise a mound of earth, 3½ ft. base, 1½ ft. high

Chains

N. of cor.

43.89 Telegraph line, parallels railroad.

50.69 Telegraph line, and wagon road, parallels railroad.

55.19 Center of W.P.Ry. track, bears N.80°02'W.and S.80°02'E.

73.54 Telephone line parallels railroad.

76.99 The cor. of secs. 19, 20, 29 and 30.

Land, level.

Soil, light, fine, dry, weak, closely packed clay, rather alkali, 6 to 8 ins. deep on hard, baked clay subsoil; affords no grazing.

No timber; undergrowth, shadscale and greasewood.

N.0°04'W. bet. secs. 19 and 20.

Over nearly level land, sloping very gently S., through considerable short undergrowth of shadscale and greasewood.

4.50 Wagon road, bears NE. and SW.

19.70 Wagon road, bears N.80°W. and S.80°E.

40.00 Set an iron post 3 ft. long, 1 in. in diam., 26 ins. in the ground for ¼ sec. cor. with brass cap mkd.

¼ S 19 | S 20
1913

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 an iron post 3 ft. long, 2 ins.in diam., 24 ins.in the ground for cor. of secs. 17, 18, 19 and 20 with brass cap mkd.

T 1 S | R 11 W
S 18 | S 17

S 19 | S 20
1913

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, nearly level: general S. exposure.

Soil, light, fine, dry, weak, closely packed clay, rather alkali, 6 to 8 ins. deep on hard, baked clay subsoil; affords no grazing.

Survey of the subdivisional lines of Tp. 1 S. R. 11 W.

Chains	
	No timber; undergrowth, shadscale and greasewood.
	May 26, 1913.
	E. on random line bet. secs. 17 and 20.
40.00	Set temp. ¼ sec. cor.
79.88	Intersect N. and S. line, at cor. of secs. 16, 17, 20 and 21. Thence I run
	W. on true line bet. secs. 17 and 20.
	Over gently rolling land, draining SE., through considerable short undergrowth of shadscale, greasewood and salt sage.
39.94	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd.
	¼ S 17 / S 20 / 1913
	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.
79.88	The cor. of secs. 17, 18, 19 and 20.
	Land, gently rolling; general SE. exposure.
	Soil, light, fine, dry, weak, closely packed clay, rather alkali, 6 to 8 ins. deep on hard, baked clay subsoil; affords no grazing.
	No timber; undergrowth, shadscale, greasewood and salt sage.
	May 27, 1913: At 8h 00m a.m., l.m.t., I set off 40° 43' N. on the lat. arc, and 21° 17' N. on the decl. arc, and determine a meridian with the solar at the cor. of secs. 17, 18, 19 and 20. This meridian checks with the line just run bet. secs. 17 and 20. Thence I run
	N. 89° 59' W. on random line bet. secs. 18 and 19.
40.00	Set temp. ¼ sec. cor.
76.86	Intersect W. bdy. of Tp. 2 lks. S. of cor. of secs. 13, 18, 19 and 24, previously described. Thence I run
	S. 89° 58' E. on true line bet. secs. 18 and 19.
	Ascending very gently over gently rolling land, sloping SW., through considerable short undergrowth of shadscale and greasewood.

Survey of the subdivisional lines of Tp. 1 S. R. 11 W.

Chains	
36.86	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd. ¼ S 18 | S 19 1913 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.
40.85	Wagon road, bears N. 75° E. and S. 75° W.
42.75	Wagon road, bears N. 75° E. and S. 75° W.
46.85	Descend very gradually gentle SE. slope, 10 ft.
47.95	Wagon road, bears NE. and SW.
57.05	Wagon road, bears N. 80° E. and S. 80° W.
76.86	The cor. of secs. 17, 18, 19 and 20. Land, gently rolling; general S. exposure. Soil, light, fine, dry, weak, closely packed clay, rather alkali, and mixed with some fine gravel, 6 to 8 ins. deep on hard, baked clay and gravel subsoil; affords no grazing No timber; undergrowth, shadscale and greasewood.

N. 0° 04' W. bet. secs. 17 and 18.

Over nearly level land, draining S., through considerable short undergrowth of shadscale, greasewood and salt sage.

10.00	Wagon road, bears E. and W.
40.00	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd. ¼ S 18 | S 17 1913 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.
48.00	Ascend very gradually, gentle SE. slope.
80.00	Set an iron post, 3 ft. long, 1 in. in diam., 24 ins. in the ground, for cor. of secs. 7, 8, 17 and 18, with brass cap, mkd. T 1 S | R 11 W S 7 | S 8 S 18 | S 17 1913 dig pits, 18 x 18 x 12 ins., in each sec., 5½ ft. dist., a raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor.

Survey of the subdivisional lines of Tp. 1 S. R. 11 W.

Chains	
	Land, nearly level and gently rolling; general S. exposure.
	Soil, light, fine, dry, weak, closely packed clay, rather alkali, 6 to 8 ins. deep on hard, baked clay subsoil; affords no grazing.
	No timber; undergrowth, shadscale, greasewood and salt sage.
	May 27, 1913: At the cor. of secs. 7, 8, 17 and 18, I set off 21° 18' N. on the decl. arc, and at app. noon observe the sun on the meridian. The resulting lat. is 40° 44' N. Thence I run
	E. on random line bet. secs. 8 and 17.
40.00	Set temp. ½ sec. cor.
79.86	Intersect N. and S. line at cor. of secs. 8, 9, 16 and 17. Thence I run
	W. on true line bet. secs. 8 and 17.
	Ascending gradually over gently rolling land, sloping SE., through considerable short undergrowth of shadscale and greasewood.
39.93	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ½ sec. cor., with brass cap, mkd.
	½ S 8 S 17 1913
	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.
58.00	Enter low rolling hills, bear N. and S.
69.85	Low swell or ridge, bears N. and S.; descend gently.
79.86	The cor. of secs. 7, 8, 17 and 18.
	Land, gently rolling; general SE. exposure.
	Soil, light, fine, dry, weak, closely packed clay, slightly alkali, 6 to 8 ins. deep on hard, baked clay subsoil; affords no grazing.
	No timber; undergrowth, shadscale and greasewood.
	N. 89° 58' W. on random line bet. secs. 7 and 18.
40.00	Set temp. ½ sec. cor.
76.73	Intersect W. bdy. of Tp. 2 lks. S. of cor. of secs. 7, 12, 13 and 18, previously described. Thence I run

Survey of the subdivisional lines of T. 1 S., R. 11 W.

Chains	
	S. 89° 57' E. on true line bet. secs. 7 and 18.
	Ascending gradually over rolling land, through considerab short undergrowth of shadscale and greasewood.
11.70	Low ridge, bears N. 20° W. and S. 20° E.; desc. abruptly.
16.70	Thence over nearly level land.
36.73	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd.
	¼ S. 7 / S 18 / 1913
	raise a mound of stone, 2 ft. base, 1½ ft. high, N. of co
41.50	Descend abruptly 10 ft. to.
42.90	Thence over gently rolling land.
76.73	The cor. of secs. 7, 8, 17 and 18.
	Land, rolling; general S. and SE. exposure.
	Soil, light, fine, dry, sandy clay, mixed with gravel and volcanic rock; affords no grazing.
	No timber; undergrowth, shadscale and greasewood.

	N. 0° 04' W. bet. secs. 7 and 8.
	Ascending gradually over rolling land, through considerab short undergrowth of shadscale and greasewood.
15.00	Ascend more abruptly SW. slope.
20.00	Ascend rocky SW. slope.
30.00	Top of rocky hill, about 60 ft. high, bears NW. and SE. Descend abruptly, NE. slope.
40.00	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd.
	¼ S. 7 | S 8 / 1913
	raise a mound of stone, 2 ft. base, 1½ ft. high, W. of co Thence over nearly level land.
80.00	Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground, for cor. of secs. 5, 6, 7 and 8, with brass cap, mkd.
	T 1 S. | R. 11 W. S 6 | S 5 S. 7 | S. 8. 1913
	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

Survey of the subdivisional lines of Tp. 1 S. R. 11 W.

Chains	
	Land, rolling and nearly level.
	Soil, in S. ½ mile, light, fine, dry, sandy clay loam, mixed with gravel and volcanic rock. In N. ½ mile the soil is light, fine, dry, weak, closely packed clay, rather alkali, 6 to 8 ins. deep on hard, baked clay subsoil.
	No grazing on the mile.
	No timber; undergrowth, shadscale and greasewood.

Robert E. Clark
U. S. Surveyor

Lines run by Howard W. Miller, U.S.Surveyor.

On May 27, 1913: I run

E. on random line bet. secs. 5 and 8.

40.00 Set temp. ¼ sec. cor.

79.84 Intersect N. and S. line 2 lks. N. of cor. of secs. 4, 5, 8 and 9. Thence I run

N. 89° 59' W. on true line bet. secs. 5 and 8.

Over nearly level land, draining NE., through considerable short undergrowth of shadscale.

39.92 Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd.

$$\frac{\frac{1}{4}\ S\ 5}{S\ 8}$$
1913

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.

79.84 The cor. of secs. 5, 6, 7 and 8.

Land, nearly level; general NE. exposure.

Soil, light, fine, dry, weak, closely packed clay, slightly alkali, 6 to 8 ins. deep on hard, baked clay subsoil: affords no grazing.

No timber; undergrowth, shadscale.

May 27, 1913.

Howard W. Miller
U. S. Surveyor.

Survey of the subdivisional lines of Tp. 1 S. R. 11 W.

Chains	
	Lines run by Robert E. Clark, U.S.Transitman.
	May 27, 1913: From the cor. of secs. 5, 6, 7 and 8, I run
	N. 89° 57' W. on random line bet. secs. 6 and 7.
40.00	Set temp. ¼ sec. cor.
76.60	Intersect W. bdy. of Tp. 2 lks. S. of cor. of secs. 1, 6,
	7 and 12, heretofore described. Thence I run
	S. 89° 56' E. on true line bet. secs. 6 and 7.
	Ascending very gradually over gently rolling land, drainin
	NE., and sloping W. at this point, through considerable
	short undergrowth of shadscale and salt sage.
6.60	Ascend abruptly rocky, W. slope.
20.60	Ridge, about 75 ft. above sec. cor., bears N. and S.; desc
	abruptly, rocky E. slope.
26.60	Descend gradually.
31.60	Descend E. slope of knoll.
36.60	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in
	the ground, for ½ sec. cor., with brass cap, mkd.
	$\frac{\frac{1}{4}\ S\ 6}{S\ 7}$
	1913
	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.
56.60	Thence over very gently rolling, nearly level land.
76.60	The cor. of secs. 5, 6, 7 and 8.
	Land, rolling mountainous; general E. exposure.
	Soil, light, fine, dry, sandy clay, mixed with gravel and
	volcanic rock; affords no grazing.
	No timber; undergrowth, shadscale and salt sage.
	May 27, 1913.
	Robert E. Clark
	U.S. Transitman
	Lines run by Howard W. Miller, U.S.Surveyor.
	May 28, 1913: At 7h 57m a.m., l.m.t., I set off 40° 45' N.
	on the lat. arc, and 21° 27' N. on the decl. arc, and
	determine a meridian with the solar at the cor. of secs.
	5, 6, 7 and 8.
	Thence I run

Survey of the subdivisional lines of Tp. 1 S. R. 11 W.

Chains

N. 0° 04' W. on true line bet. secs. 5 and 6.

Over nearly level land, through considerable short undergrowth of shadscale.

40.00 Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd.

¼ S 6 | S 5

1913

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.

78.93 Intersect Salt Lake Base Line 3.60 chs. W. of the standard cor. of secs. 31 and 32, previously described. At intersection Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground, for closing cor. of secs. 5 and 6, with brass cap, mkd.

T. 1 N. | R. 11 W
S 31 | S 32
CC
S 6 | S 5
T. 1 S. | R. 11 W
1913

dig pits, 24 x 18 x 12 ins., crosswise on each line, E. and W., 3 ft., and S. of post, 7 ft. dist., and raise a mound of earth, 4 ft. base, 2 ft. high, S. of cor.

Land, nearly level.

Soil, light, fine, dry, weak, closely packed clay, rather alkali, 6 to 8 ins. deep on hard, baked clay subsoil; affords no grazing.

No timber; undergrowth, shadscale.

May 27, 1913.

Howard W. Miller

U. S. Surveyor.

General Description.

The lands in this Tp. are practically all level, with the exception of some rolling mountainous land, along the N.½ of the W. bdy., and a little in the extreme NE. and SE. corners of the Tp.

The Western Pacific Ry. enters the Tp. on the W. bdy. of sec. 19, on a tangent bearing S. 80° 02' E., to the eastern

part of sec. 27, where it turns N. 61° 30' E., and leaves the Tp. on the E. bdy. of sec. 24.

The place on this railroad, in the NE¼ sec. 29, noted as Clive is merely a couple of section houses. There is no depot or agent at this place. There are no settlers in the Tp.

The entire Tp. is so nearly level that it would be difficult to say in which direction the general drainage runs, in fact there seems to be no drainage to the Tp.

The entire Tp. is part of the old bed of Lake Bonneville

The soil over nearly the whole Tp. is a light, fine, dry weak, closely packed clay, of Lacustrine type, more or les impregnated with alkali. The first 6 or 8 ins. of the soil has weathered and air slacked, and contains sufficient decomposed vegetable matter as to give it a different appearance from the soil immediately underneath, although it seems to be of the same quality and type. This lower strata of soil, or subsoil as it is called in the notes, is very closely packed and baked hard.

The entire Tp. is covered with a dense growth of shadsca and considerable greasewood, with sufficient salt or whit sage to furnish a little winter grazing.

There is no water in the Tp.
There is no indication of mineral in the tp.

Howard W Miller
U. S. Surveyor.

Robert E. Clark
U. S. Transitman

4—GSO

BOOK A-405

CERTIFICATE OF ASSISTANTS.

We, the undersigned, hereby certify upon honor that we assisted, to the best of our skill and ability, ..., U. S. Surveyor, during the periods and in the capacities stated opposite our several signatures, in surveying all those parts or portions of .....

For certificates of assistants see book "J" T.3 N.R.11 W.

of the ..... Meridian, in the State of .....

which are represented in the foregoing field notes as having been executed 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 executed.

NAME.	PERIOD OF SERVICE.		CAPACITY.
	BEGUN.	ENDED.	

Subscribed and certified to before me on the dates of the final service as shown above.

.....

U. S. Surveyor.

6—2761

FINAL OATH OF UNITED STATES SURVEYOR.

I, _____, U. S. Surveyor, do solemnly swear that, in pursuan
of special instructions received from the U. S. Surveyor General for _____
bearing date of the _____ day of _____, 191 , I have well, faithfully, and tru
in my own proper person, and in strict conformity with said instructions, the Manual of Surveyi
Instructions, and the laws of the United States, surveyed all those parts or portions of _____
_____
_____

For final oaths of U.S.Surveyor and Transitman see book "J" T.3 N.R.
11 W.

_____ of the _____
_____ Meridian, in the State of _____, which are represented
the foregoing field notes as having been executed by me, and under my direction; and I do furth
solemnly swear that all the corners of said survey have been established and perpetuated in strict acco
ance with the Manual of Surveying Instructions, and the special written instructions of the U. S. 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.

_____
U. S. Surveyor

Subscribed by said _____, and sworn to before me this _____ day of _____, 191

SEAL

_____

_____

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah, April 5, 1915

The foregoing field notes of the survey of the subdivisional lines of Township No.1 South, Range No.11 West, of the Salt Lake Base and Meridian, Utah,

_____
_____
_____
_____
_____

executed by their Howard W.Miller and Robert E.Clark
under ~~his~~ special instructions dated April 10, 1913, having be
critically examined, and the necessary corrections and explanations made, the said field notes, and t
surveys they describe, are hereby approved.

_____
U. S. 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.

_____
U. S. Surveyor General.

6—2761

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Page

U. S. Surveyor General's Office
MAR 19 1914
SALT LAKE CITY, UTAH.

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BOOK A-405

Book "F"

FIELD NOTES

OF THE SURVEY OF THE

SUBDIVISION

OF

T. 1 N., R. 11 W.

Of the SALT LAKE BASE AND *Meridian,*

In the State of UTAH

EXECUTED BY

Howard W. Miller
&
Robert E. Clark

and Transitman

In the capacity of U. S. Surveyor, under instructions dated April 10, *191*3, *issued by the United States Surveyor General to govern surveys included in Group No.* 21, *which were approved by the Commissioner of the General Land Office,* April 23, *1913, pursuant to authority contained in the Act of Congress dated* ....., *191*....

Survey commenced May 29, *1913*

Survey completed June 4, *1913*

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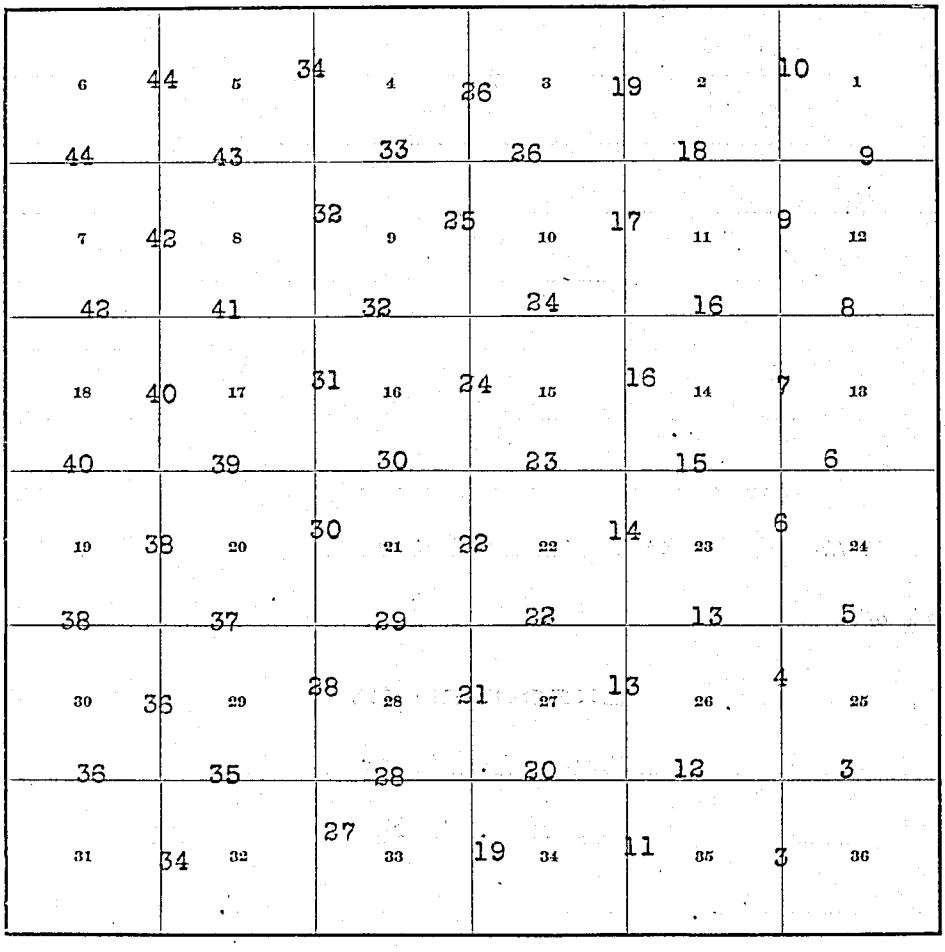
BOOK A-405

INDEX DIAGRAM.

Township 1 North, *Range* 11 West S.L.B.& M.



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Survey of the subdivisional lines of Tp. 1 N.,R.11 W.

chains

Survey commenced May 29,1913 and executed with Young and Sons light mountain transits Nos. 8147 and 7147 , with solar attachments. The horizontal limbs are provided with two double verniers , placed opposite to each other and reading to single minutes of arc ; which is also the least count of the verniers of the lat. and decl. arcs.

Use of the above instruments was approved by G.D.D. Kirkpatrick , Ass't.Supervisor of Surveys in the assignment instructions dated April 21,1913 , conditional upon satisfactory field tests , the record of which follows:

Test of Instruments.

Instrument No.8147 used by Howard W. Miller , U.S.Surveyor

I examine the adjustments of my instrument and find no errors. Then to test the solar apparatus by comparing it's 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:

June 1: At 8h.a.m.l.m.t., with my instrument set up over the S. end of the Polaris meridian determined by observations May 28 , at mycamp in the SW¼SW¼ sec.15 , T.1 N.,R.11 W., I set off 40°49' on the lat. arc ; 22°03' N. on the decl. arc; and determine a meridian with the solar. The line thus determined falls 0.1 ins. west of the true meridian.

At 3h.p.m.l.m.t., I set off 40°49' on the lat. arc ; 22°05'N., on the decl. arc ; and determine a meridian with the solar. The line thus determined agrees with the Polaris meridian. I therefore conclude that the adjustments of the instrument are satisfactory.

Instrument No.7147 , Used by Robert E. Clark ,U.S.Transitman.

I test the adjustment of my transit and find no errors. Then to test the solar attachment , by comparing it's indications resulting from solar observations made during a.m. and p.m. hours, with a meridian determined by observations made on Polaris , I proceed as follows:

May 28: At camp , in the SW¼ SW¼ sec. 15 , T.1 N.,R.11 W.

At 7h.37m.p.m.l.m.t., I observe Polaris in accordance

chains

with instructions in the Manual ; and mark the direction of the line thus determined on a stake firmly set in the ground about 5 chs. N.

Time of observation May 28,1913---------- 7h.37m.p.m.
U.C.Polaris May 28, reduced to long.113°W. 9h.05m.a.m.
Time elapsed from U.C. to time of Obsn. 10h.32m.
Hour angle of Polaris at obsn. 10h.32m.
Azimuth of Polaris at obsn.---0°33'W.

May 28,1914.

Junel: With my instrument set up over a point 10 lks.due S. of the S. end of the Polaris meridian , at 8h.00m.a.m. l.m.t., I set off 40°49' on the lat. arc ; 22°03'N., on the decl. arc; and determine a meridian with the solar. The line thus determined agrees with the Polaris meridian At 3h.00m.p.m.l.m.t., I set off 40°49' on the lat. arc ; 22°05'N., on the decl.arc; and determine a meridian with the solar. The line thus determined falls 0.1 ins. to the east of the Polaris meridian. I therefore conclude that the adjustments of my instrument are satisfatory.

Measurements

Steel tapes , 5 chs. long , were used by both parties on all the field work in Group No. 21 , together with clinometers for determining slope angles , and the reduced horizontal distances only , appear in the official field notes. The tapeswere tested frequently during the season, comparison being made with a standard tape , 1 chain in length , kept and used for that purposes.

Lines run by Robert E.Clark , U.S.Transitman.

May 29: At 7h.20m.a.m.l.m.t., I set off 40°46' on the lat. arc ; 21° 36.5' N., on the decl. arc ; and determine a meridian with the solar at the standard cor. of secs. 35 and 36 , Tp.1 N., R.11 W., heretofore described

Thence I run

Survey of the subdivisional lines of Tp. 1 N. R. 11 W.

Chains	
	N. 0° 01' W. bet. secs. 35 and 36.
	Ascending gradually over rolling land, sloping W., through considerable short undergrowth of shadscale and salt sage, with considerable greasewood.
13.70	Wagon road, bears N. 20° W. and S. 20° E.
26.00	Ascend abruptly W. slope of rocky ridge, bearing N. 30° W. and S. 30° E.
40.00	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd.

¼ S 35 | S 36

1913

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

47.50	Descend abruptly NW. slope.
49.00	Dry gulch, about 30 ft. deep, course S. 80° W. Ascend abruptly.
67.50	Top of spur, projecting SW. from main ridge. Thence nearly level to
78.00	Junction of spurs, projecting SW. and NW. Descend gradually.
80.00	Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground, for cor. of secs. 25, 26, 35 and 36, with brass cap, mkd.

T 1 N | R 11 W

S 26 | S 25

S 35 | S 36

1913

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, rolling; general W. exposure.

Soil, light, sandy clay and gravel, rather rocky in places; affords little grazing.

No timber; undergrowth, shadscale, salt-sage and greasewood.

	E. on random line bet. secs. 25 and 36.
40.00	Set temp. ¼ sec. cor.
80.09	Intersect E. bdy. of Tp. 12 lks. S. of cor. of secs. 25, 30, 31 and 36. heretofore described, Thence I run S. 89° 55' W. on true line bet. secs. 25 and 36.

Survey of the subdivisional lines of Tp. 1 N. R. 11 W.

Chains	
	Descending gradually over rocky, mountainous land, draining W. and SW., through considerable short undergrowth of shadscale and salt sage.
1.60	Thence nearly level.
8.80	Wagon road, bears NW. and SE.
18.70	Top of small limestone knoll; descend gradually along S. side of ridge, bearing E. and W.
40.04½	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd. ¼ S 25 S 36 1913 raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor. Cor stands on top of low spur, projecting SW. from ridge to the N..
	Continue to descend gradually along S. side of ridge.
80.09	The cor. of secs. 25, 26, 35 and 36.
	Land, mountainous; surface rocky; general SW. exposure.
	Soil, rocky and gravelly clay, rather shallow on bedrock; affords very little grazing.
	No timber; undergrowth, shadscale and salt sage.
	N. 0° 01' W. bet. secs. 25 and 26.
	Descending gradually over rolling mountainous land, sloping W., through considerable short undergrowth of shadscale and salt sage.
40.00	Set an iron post, 3 ft. long, 1 in. in diam., only 18 ins. in the ground, on account of underlying rock, surrounded by a mound of stone, 4 ft. base, 1½ ft. high, for ¼ sec. cor., with brass cap, mkd. ¼ S 26 | S 25 1913 raise a mound of stone, 3 ft. base, 2 ft. high, W. of cor.
61.00	Dry arroyo, 10 ft. wide, 4 ft. deep, course NW.
64.00	Dry arroyo, 20 ft. wide, 10 ft. deep, course NW.
74.00	Small, dry gulch, course NW.; ascend abruptly.
75.00	Descend gradually W. slope.

Survey of the subdivisional lines of Tp. 1 N. R. 11 W.

Chains	
80.00	Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground, for cor. of secs. 23, 24, 25 and 26, with brass cap, mkd. T 1 N | R 11 W S 23 | S 24 S 26 | S 25 1913 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, rolling mountainous; general W. exposure. Soil, sandy clay and gravel, rather rocky in places, rather shallow on bedrock; affords little grazing. No timber; undergrowth, shadscale and salt sage.
	N. 89° 55' E. on random line bet. secs. 24 and 25.
40.00	Set temp. ¼ sec. cor.
	May 29, 1913: Here at app. noon I set off 21° 38' N. on the decl. arc, and observe the sun on the meridian. The resulting lat. is 40° 48' N.
80.10	Intersect E. bdy. of Tp. 2 lks. N. of cor. of secs. 19, 24, 25 and 30 heretofore described. Thence I run S. 89° 56' W. on true line bet. secs. 24 and 25. Descending gradually over gently rolling land, draining W. and NW., through considerable short undergrowth of shadscale and salt sage.
40.05	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd. ¼ S 24 S 25 1913 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.
47.60	Dry arroyo, course N. 80° W.
69.70	Dry gulch, about 12 ft. deep, course NW.; continue to desc.

Survey of the subdivisional lines of Tp. 1 N. R. 11 W.

Chains	
80.10	The cor. of secs. 23, 24, 25 and 26.
	Land, gently rolling; general W. exposure.
	Soil, light, fine, dry sandy clay, mixed with some gravel, of fair texture, but slightly alkali; affords little grazi
	No timber; undergrowth, shadscale and salt sage.
	N. 0° 01' W. bet. secs. 23 and 24.
	Over gently rolling land, sloping W., through considerable short undergrowth of shadscale and salt sage.
16.00	Small, dry gulch, 10 ft. deep, course W.
40.00	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd.
	¼ S 23 | S 24
	1913
	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.
50.00	Dry arroyo, 10 ft. deep, course W.
55.50	Dry arroyo, 9 ft. deep, course W.
80.00	Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground, for cor. of secs. 13, 14, 23 and 24, with brass cap, mkd.
	T 1 N | R 11 W S 14 | S 13 S 23 | S 24 1913
	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, gently rolling; general W. exposure.
	Soil, light, fine, dry, sandy clay, slightly alkali, on dry sand and clay subsoil; affords little grazing.
	No timber; undergrowth, shadscale and salt sage.
	N. 89° 56' E. on random line bet. secs. 13 and 24.
40.00	Set temp. ¼ sec. cor.
80.11	Intersect E. bdy. of Tp. at cor. of secs. 13, 18, 19 and 24 heretofore described Thence I run

Survey of the subdivisional lines of Tp. 1 N. R. 11 W.

Chains	
	S. 89° 56' W. on true line bet. secs. 13 and 24.
	Descending gradually over gently rolling land, sloping NW., through considerable short undergrowth of shadscale and salt sage.
40.05½	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd.
	¼ S 13 S 24 1913
	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.
42.60	Dry arroyo, 10 ft. deep, course NW.
80.11	The cor. of secs. 13, 14, 23 and 24.
	Land, gently rolling; general NW. exposure.
	Soil, light, fine, dry, weak, sandy clay, slightly alkali, on hard sand and clay subsoil; affords fair grazing.
	No timber; undergrowth, shadscale and salt sage.
	N. 0° 01' W. bet. secs. 13 and 14.
	Descending gradually over gently rolling land, sloping NW., through considerable short undergrowth of shadscale and salt sage and some greasewood.
40.00	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd.
	¼ S 14 | S 13 1913
	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.
54.00	Descend abruptly.
54.60	Dry gulch, about 15 ft. deep, course NW.; ascend abruptly.
62.00	Descend gradually NW. slope.
80.00	Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground, for cor. of secs. 11, 12, 13 and 14, with brass cap, mkd.

Survey of the subdivisional lines of Tp. 1 N. R. 11 W.

Chains	
	T 1 N | R 11 W S 11 | S 12 S 14 | S 13 1913 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, gently rolling; general NW. exposure. Soil, light, fine, dry, sandy clay of fair texture, on sand and clay subsoil; affords fair grazing. No timber; undergrowth, shadscale, salt sage and greasewood May 29, 1913.
	June 2,1913 N. 89° 56' E. on random line bet. secs. 12 and 13.
40.00	Set temp. ¼ sec. cor.
80.12	Intersect E. bdy. of Tp. at cor. of secs. 7, 12, 13 and 18. heretofore described. Thence I run S. 89° 56' W. on true line bet. secs. 12 and 13. Ascending gradually over mountainous land, through considerable short undergrowth of shadscale and salt sage.
4.25	Top of small, limestone capped ridge, bearing N. and S. Descend abruptly rocky W. slope.
15.10	Foot of abrupt descent, bears N. and S. Descend gradually over gently rolling land.
19.90	Wagon road, bears N. 10° W. and S. 10° E.
40.06	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd. ¼ S 12 S 13 1913 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.
80.12	The cor. of secs. 11, 12, 13 and 14. Land, mountainous and gently rolling; general W. exposure. Soil, light, fine, sandy clay, of good texture, on sand and clay subsoil; affords no grazing. No timber; undergrowth, shadscale and salt sage.

Survey of the subdivisional lines of Tp. 1 N. R. 11 W.

Chains	
	June 2, 1913: At the cor. of secs. 11, 12, 13 and 14, I set off 22° 12' N. on the decl. arc, and at apr. noon, observe the sun on the meridian. The resulting lat. is 40° 50' N.
	Thence I run
	N. 0° 01' W. bet. secs. 11 and 12.
	Over gently rolling land, sloping W., through considerable short undergrowth of shadscale and salt sage.
22.00	Dry arroyo, 30 ft. wide, 4 ft. deep, course W.
27.00	Dry arroyo, 15 ft. wide, 4 ft. deep, course W.
40.00	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd.
	¼ S 11 | S 12 1913
	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.
67.00	Small, dry arroyo, course W.
79.85	Small, dry arroyo, course W.
80.00	Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground, for cor. of secs. 1, 2, 11 and 12, with brass cap, mkd.
	T 1 N | R 11 W S 2 | S 1 S 11 | S 12 1913
	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, gently rolling; general W. exposure.
	Soil, light, loose sand, with some light, fine, dry clay, slightly alkali; affords no grazing.
	No timber; undergrowth, shadscale and salt sage.
	N. 89° 56' E. on random line bet. secs. 1 and 12.
40.00	Set temp. ¼ sec. cor.
80.11	Intersect E. bdy. of Tp. 5 lks. N. of cor. of secs. 1, 6, 7 and 12 heretofore described. Thence I run

Survey of the subdivisional lines of Tp. 1 N., R. 11 W.

Chains	
	S. 89° 58' W. on true line bet. secs. 1 and 12.
	Descending over mountainous land, draining W., through few scattering cedars and considerable short undergrowth of shadscale and salt sage.
10.10	Dry gulch, about 50 ft. below cor., course N. 75° W.: asc.
21.50	Limestone ridge, 30 ft. above gulch, bears S. 40 chs., and W. 6.60 chs.
28.10	Ridge turns S. at this point. Descend abruptly W. slope.
37.00	Foot of ridge and edge of mountainous land, bears N. and S. Leave timber, bears N. and S. Thence over gently rolling land.
38.10	Wagon road, bears N. and S.
40.05½	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd.
	¼ S 1 / S 12 / 1913
	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.
80.11	The cor. of secs. 1, 2, 11 and 12.
	Land, mountainous and rolling; general W. exposure.
	Soil, light, fine, dry, quite sandy clay, mixed with gravel and quite rocky in E. ½ mile: affords little grazing.
	Timber, scattering scrub cedars; undergrowth, shadscale and salt sage.

	The cor. of secs. 1, 2, 35 and 36, on N. bdy. of Tp. being in plain view, I run for it,
	N. 0° 01' E. on true line bet. secs. 1 and 2.
	Over nearly level land, draining SW., through considerable short undergrowth of shadscale.
5.00	Dry wash, 30 lks. wide, 5 ft. deep, course W.
31.00	Dry wash, 10 lks. wide, 4 ft. deep, course W.
40.00	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd.
	¼ S 2 | S 1
	1913

Survey of the subdivisional lines of Tp. 1 N. R. 11 W.

Chains	
	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.
41.00	Dry wash, 5 lks. wide, 2 ft. deep, course SW.
75.00	Dry wash, 20 lks. wide, 4 ft. deep, course SW.
78.20	Wagon road, bears NW. and SE.
85.03	The cor. of secs. 1, 2, 35 and 36, on N. bdy. of Tp. heretofore described. Land, gently rolling; general W. exposure. Soil, light, fine, dry, very sandy, clay, slightly alkali, of considerable depth on sand and clay subsoil; affords no grazing. No timber; undergrowth, shadscale. June 2,1913 Robert E. Clark U.S. Transitman

Lines run by Howard W. Miller, U.S.S.

May 29, 1913: At 8h a.m., l.m.t., I set off 40° 46' N. on the lat. arc, and 21° 36' N. on the decl. arc, and determine a meridian with the solar at the standard cor. of secs. 34 and 35, on S. bdy. of Tp., previously described.

Thence I run

N. 0° 02' W. bet. secs. 34 and 35.

Over rolling land, draining SW., through considerable short undergrowth of shadscale and some greasewood.

40.00	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd. ¼ S 34 | S 35 1913
	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.
73.50	Descend over bench 15 ft. high, bearing NE. and SW.
80.00	Set an iron post, 3 ft. long, 2 ins. in diam., 26 ins. in the ground, for cor. of secs. 26, 27, 34 and 35, with brass cap, mkd. T 1 N | R 11 W S 27 | S 26 S 34 | S 35 1913

Chains	
	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.
	Cor. stands in small hollow or swale, draining SW.
	Land, gently rolling; general SW. exposure.
	Soil, light, fine, dry, closely packed, sandy clay, 6 to 8 ins. deep on hard, baked clay subsoil; affords no grazing
	No timber; undergrowth, shadscale and greasewood.
	E. on random line bet. secs. 26 and 35.
40.00	Set temp. ¼ sec. cor.
80.05	Intersect N. and S. line 7 lks. N. of cor. of secs. 25, 26, 35 and 36. Thence I run
	N. 89° 57' W. on true line bet. secs. 26 and 35.
	Descending over numerous small ledges bearing NW. and SE., over mountainous land, draining SW., through considerable short undergrowth of shadscale and some greasewood.
22.00	Foot of ledge 40 ft. high, bears NW. and SE.
	Descend gradually.
24.55	Dim wagon road, bears NW. and SE.
34.00	Dry wash, 30 lks. wide, 10 ft. deep, course SW. Thence over gently rolling land.
40.02½	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor.; with brass cap, mkd.
	¼ S 26 S 35 1913
	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.
74.00	Sand ridge, 20 ft. high, bears NW. and SE.
80.05	The cor. of secs. 26, 27, 34 and 35.
	Land, mountainous and gently rolling; general SW. exposure.
	Soil, light, fine, dry, clay mixed with gravel, and quite sandy in western part and very rocky in E. 30 chs.; affords no grazing.
	No timber; undergrowth, shadscale and greasewood.

Survey of the subdivisional lines of Tp. 1 N. R. 11 W.

Chains	
	N. 0° 02' W. bet. secs. 26 and 27.
	Over gently rolling land, draining SW., through considerable short undergrowth of shadscale and some greasewood.
40.00	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd.
	¼ S 27 | S 26 1913
	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.
80.00	Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground, for cor. of secs. 22, 23, 26 and 27, with brass cap, mkd.
	T 1 N | R 11 W S 22 | S 23 S 27 | S 26 1913
	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, gently rolling; general SW. exposure.
	Soil, light, fine, dry, weak, closely packed clay, rather alkali, 6 to 8 ins. deep on hard, baked clay subsoil; affords no grazing.
	No timber; undergrowth, shadscale and greasewood.
	S. 89° 57' E. on random line bet. secs. 23 and 26.
40.00	Set temp. ¼ sec. cor.
80.04	Intersect N. and S. line 2 lks. S. of cor. of secs. 23, 24, 25 and 26. Thence I run
	N. 89° 58' W. on true line bet. secs. 23 and 26.
	Descending gradually over rolling land, draining NW., through considerable short undergrowth of shadscale and salt sage.
18.50	Dry wash, 30 lks. wide, 10 ft. deep, course NW.; ascend gradually.
29.00	Low spur, bears NW. and SE.
	Point for ¼ sec. cor. will fall in dry wash where it is unsafe to set corner. I therefore perpetuate this cor. as follows.

Survey of the subdivisional lines of Tp. 1 N. R. 11 W.

Chains	
38.24	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for witness ¼ sec. cor., with brass cap, mkd. T 1 N R 11 W / WC ¼ S 23 / S 26 / 1913 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.
40.02	Point for ¼ sec. cor., in dry wash, 20 lks. wide, 10 ft. deep, course NW.; No cor. set. Ascend gradually.
44.00	Low spur, bears NW. and SE.
80.04	The cor. of secs. 22, 23, 26 and 27.
	May 29, 1913: Here I set off 21° 37' N., on the decl. arc, and at app. noon observe the sun on the meridian. The resulting lat. is 40° 49' N.
	Land, rolling; general NW. exposure. Soil, light, fine, dry, sandy, clay loam of good texture, on clay and gravel subsoil; affords no grazing. No timber; undergrowth, shadscale and salt sage.
	N. 0° 02' W. bet. secs. 22 and 23. Over rolling land, draining NW., through considerable short undergrowth of shadscale.
36.50	Dry wash, 20 lks. wide, 8 ft. deep, course NW.
40.00	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd. ¼ S 22 | S 23 / 1913 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.
80.00	Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground for cor. of secs. 14, 15, 22 and 23, with brass cap, mkd.

Survey of the subdivisional lines of Tp. 1 N. R. 11 W.

Chains

T 1 N | R 11 W
S 15 | S 14.
S 22 | S 23.
1913

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, gently rolling; general NW. exposure.
Soil, light, fine, dry, sandy, clay loam of good texture, on sand, gravel and clay subsoil; affords no grazing.
No timber; undergrowth, shadscale.

S. 89° 58' E. on random line bet. secs. 14 and 23.

40.00 Set temp. ¼ sec. cor.

80.05 Intersect N. and S. line 2 lks: S. of cor. of secs. 13, 14, 23 and 24. Thence I run
N. 89° 59' W. on true line bet. secs. 14 and 23.
Over rolling land, draining NW., through considerable short undergrowth of shadscale and salt sage, and some greasewood.

14.00 Low sand ridge, bears NW. and SE.

30.00 Dry wash, 20 lks. wide, 8 ft. deep, course NW.

39.00 Sand ridge, 15 ft. high, bears NW. and SE.

40.02½ Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd.

¼ S 14
S 23
1913

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.

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

Land, rolling; general NW. exposure.
Soil, light, fine, dry, very sandy, clay of fair texture, quite deep on clay and sand subsoil; affords no grazing.
No timber; undergrowth, shadscale, salt sage and greasewood.

May 29, 1913.

Howard W. Miller
U. S. Surveyor

Survey of the subdivisional lines of Tp. 1 N. R. 11 W.

Chains	
	Lines run by Robert E. Clark, U.S. Transitman.
	June 2, 1913: At 7h a.m., l.m.t., I set off 40° 49' N. on the lat. arc, and 22° 11' N. on the decl. arc, and determine a meridian with the solar at the cor. of secs. 14, 15, 22 and 23. Thence I run
	N. 0° 02' W. bet. secs. 14 and 15.
	Over low, rolling sand hills, through considerable short undergrowth of shadscale and greasewood and salt sage.
30.00	Enter heavy greasewood undergrowth, 4 to 6 ft. high, bears NE. and SW.
40.00	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd.
	¼ S 15 | S 14 1913
	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.
80.00	Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground, for cor. of secs. 10, 11, 14 and 15, with brass cap, mkd.
	T 1 N | R 11 W S 10 | S 11 S 15 | S 14 1913
	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, rolling sand hills.
	Soil, light, fine, loose sand of considerable depth on clay subsoil; affords little grazing.
	No timber; undergrowth, greasewood, shadscale and salt sage
	S. 89° 59' E. on random line bet. secs. 11 and 14.
40.00	Set temp. ¼ sec. cor.
80.04	Intersect N. and S. line 5 lks. N. of cor. of secs. 11, 12, 13 and 14. Thence I run
	N. 89° 57' W. on true line bet. secs. 11 and 14.

Survey of the subdivisional lines of Tp. 1 N. R. 11 W.

Chains	
	Over gently rolling land, sloping W., through considerable short undergrowth of shadscale and salt sage, with some rather high greasewood.
40.02	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd. ¼ S 11 S 14 1913 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.
80.04	The cor. of secs. 10, 11, 14 and 15. Land, gently rolling; general W. exposure. Soil, light, fine, loose sand, mixed with some clay, of considerable depth on clay and sand subsoil; affords little grazing. No timber; undergrowth, shadscale, salt sage and greasewood.
	N. 0° 02' W. bet. secs. 10 and 11.
	Over gently rolling land, sloping W., through dense undergrowth of greasewood and considerable short undergrowth of shadscale and salt sage.
40.00	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd. ¼ S 10 | S 11 1913 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.
70.00	Dry wash, 3 ft. deep, course S. 80° W.
80.00	Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground, for cor. of secs. 2, 3, 10 and 11, with brass cap, mkd. T 1 N | R 11 W. S 3 | S 2 S 10 | S 11 1913 dig pits, 18 x 18 x 12 ins., in each sec., 5½ ft. dist.,

Survey of the subdivisional lines of Tp. 1 N. R. 11 W.

Chains	
	and raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor.
	Land, gently rolling; general W. exposure.
	S. half mile consists of low sand hills; N. half mile is more nearly level.
	Soil, on S. ½, light, fine, loose sand, of considerable depth on sand and clay subsoil; affords some grazing.
	Soil, on N. ½, light, fine, dry, weak, closely packed clay, mixed with some sand near surface; 8 to 12 ins. deep on hard, baked, alkali, clay subsoil; affords no grazing.
	No timber; undergrowth, greasewood, shadscale and salt sag
	The corner of secs. 1, 2, 11 and 12, being in plain view, I run for it,
	S. 89° 59' E. on random line for distance only, bet. secs. 2 and 11.
40.00	Set temp. ¼ sec. cor.
80.08	Intersect cor. of secs. 1, 2, 11 and 12. Thence I run
	N. 89° 59' W. on true line bet. secs. 2 and 11.
	Over nearly level land, sloping W., through considerable short undergrowth of shadscale and salt sage.
11.00	Dry wash, 4 ft. deep, course SW.
40.04	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ½ sec. cor., with brass cap, mkd.
	½ S 2 S 11 1913
	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.
40.25	Dry wash, 10 lks. wide, 3 ft. deep, course S. 15° W.
67.50	Dry wash, 8 lks. wide, 4 ft. deep, course S. 60° W.
75.00	Dry wash, 10 lks. wide, 3 ft. deep, course S. 60° W.
80.08	The cor. of secs. 2, 3, 10 and 11.
	Land, nearly level; general W. exposure.
	Soil, light, fine, dry, weak, sandy clay, closely packed and slightly alkali, 8 to 10 ins. deep on hard, baked clay subsoil; affords no grazing.

Survey of the subdivisional lines of Tp. 1 N. R. 11 W.

Chains	
	No timber; undergrowth, shadscale and salt sage.
	June 2, 1913. Robert E. Clark. U. S. Transitman.
	Lines run by Howard W. Miller, U. S. Surveyor.
	From the cor. of secs. 2, 3, 10 and 11, the cor. of secs. 2, 3, 34 and 35, on N. bdy. of Tp. being in plain view, on June 3, 1913, I run
	N. 0° 03' E. on true line bet. secs. 2 and 3.
	Over nearly level land, through consoderable short undergrowth of shadscale and salt sage.
40.00	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ½ sec. cor., with brass cap, mkd. ½ S 3 | S 2 / 1913
	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.
72.00	Dry wash, 8 ft. deep, course SW.; ascend.
82.30	Spur, about 20 ft. high, bears SW. and NE.
85.00	Intersect N. bdy. of Tp. at cor. of secs. 2, 3, 34 and 35. heretofore described
	Land, nearly level.
	Soil, light, fine, dry, weak, sandy clay, closely packed and rather alkali, 8 to 14 ins. deep on hard, baked clay subsoil; affords no grazing.
	No timber; undergrowth, shadscale and salt sage.
	June 3, 1913 Howard W. Miller U. S. Surveyor.
	Lines run by Robert E. Clark, U. S. Transitman.
	May 31, 1913: At 8h 00m a.m., l.m.t., I set off 40° 46' N. on the lat. arc, and 21° 54' N. on the decl. arc, and determine a meridian with the solar at the standard cor. of secs. 33 and 34, on S. bdy. of Tp., previously described.
	Thence I run
	N. 0° 02' W. bet. secs. 33 and 34.
	Over nearly level land, through considerable short undergrowth of shadscale and some greasewood.

Survey of the subdivisional lines of Tp. 1 N. R. 11 W.

Chains

40.00 Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd.

¼ S 33 | S 34

1913

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.

Cor. stands on top of small sand bank, bearing NW. and SE.

80.00 Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground, for cor. of secs. 27, 28, 33 and 34, with brass cap, mkd.

T 1 N | R 11 W
S 28 | S 27
S 33 | S 34

1913

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, very gently rolling.

Soil, light, fine, dry, weak, sandy clay, closely packed and rather alkali, 8 to 12 ins. deep on hard, baked clay and sand subsoil; affords no grazing.

No timber; undergrowth, shadscale and greasewood.

E. on random line bet. secs. 27 and 34.

40.00 Set temp. ¼ sec. cor.

79.98 Intersect N. and S. line 4 lks. S. of cor. of secs. 26, 27, 34 and 35. Thence I run

S. 89° 58' W. on true line bet. secs. 27 and 34.

Over gently rolling land, draining W., through considerable short undergrowth of shadscale and salt sage and rather dense greasewood, 2 to 4 ft. high.

39.99 Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd.

¼ S 27
S 34
1913

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. N. of cor.

Survey of the subdivisional lines of Tp. 1 N. R. 11 W.

Chains	
62.00	Center of N. side of small, natural reservoir, 4 chs. square, and 10 ft. deep, formed by sand ridges.
79.98	The cor. of secs. 27, 28, 33 and 34.
	Land, gently rolling; general W. exposure.
	Soil, light, fine, dry, weak, sandy clay, closely packed and slightly alkali, 8 to 30 ins. deep on hard, baked, clay and sand subsoil; affords little grazing.
	No timber; undergrowth, shadscale, greasewood and salt sage.
	N. 0° 02' W. bet. secs. 27 and 28.
	Over gently rolling land, sloping W., through considerable short undergrowth of shadscale and some greasewood.
40.00	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd.
	¼ S 28 | S 27
	1913
	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.
80.00	Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground, for cor. of secs. 21, 22, 27 and 28, with brass cap, mkd.
	T 1 N | R 11 W
	S 21 | S 22
	S 28 | S 27
	1913
	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, gently rolling; general W. exposure.
	Soil, light, fine, dry, weak, sandy clay, closely packed and rather alkali, 6 to 20 ins. deep on hard, baked clay and sand subsoil; affords no grazing.
	No timber; undergrowth, shadscale and greasewood.
	May 31: Instrument in transit at noon, prevents lat. observation.

Survey of the subdivisional lines of Tp. 1 N. R. 11 W.

Chains	
	N. 89° 58' E. on a random line bet. secs. 22 and 27.
40.00	Set temp. ¼ sec. cor.
80.00	Intersect N. and S. line 2 lks. N. of cor. of secs. 22, 23, 26 and 27. Thence I run
	S. 89° 59' W. on true line bet. secs. 22 and 27.
	Over gently rolling land, draining W., through considerable short undergrowth of shadscale and salt sage.
15.70	Low sand ridge, bears N. 5° W., and S. 15° E.
40.00	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd.
	¼ S 22 S 27 1913
	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.
80.00	The cor. of secs. 21, 22, 27 and 28.
	Land, gently rolling; general W. exposure.
	Soil, light, fine, dry, weak, sandy clay, closely packed and rather alkali, 6 to 20 ins. deep on hard, baked clay and sand subsoil; affords no grazing.
	No timber; undergrowth, shadscale and salt sage.
	N. 0° 02' W. bet. secs. 21 and 22.
	Over gently rolling land, draining NW., through considerable short undergrowth of shadscale and salt sage.
40.00	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd.
	¼ S 21 | S 22 1913
	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.
80.00	Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground, for cor. of secs. 15, 16, 21 and 22, with brass cap, mkd.

Survey of the subdivisional lines of Tp. 1 N. R. 11 W.

Chains

T 1 N.	R 11 W
S 16	S 15
S. 21	S. 22

1913

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, nearly level; general NW. exposure.

Soil, light, fine, dry, weak, closely packed, very sandy clay, rather alkali, on hard, baked sand and clay subsoil; affords no grazing.

No timber; undergrowth, shadscale and salt sage.

N. 89° 59' E. on random line bet. secs. 15 and 22.

40.00 Set temp. ¼ sec. cor.

79.97 Intersect N. and S. line at the cor. of secs. 14, 15, 22 and 23. Thence I run

S. 89° 59' W. on true line bet. secs. 15 and 22.

Over nearly level land, through considerable short undergrowth of shadscale and greasewood.

39.98½ Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd.

¼ S 15
S 22
1913

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.

79.97 The cor. of secs. 15, 16, 21 and 22.

Land, nearly level; general W. exposure.

Soil, light, fine, dry, weak, sandy, closely packed clay, rather alkali, on hard, baked clay and sand subsoil; affords no grazing.

No timber; undergrowth, shadscale and greasewood.

May 31, 1913.

Robert C. Clark
U. S. Transitman

Survey of the subdivisional lines of Tp. 1 N., R. 11 W.

Chains.	
	Lines run by Howard W. Miller, U.S.Surveyor.
	June 3, 1913: At 7h a.m., l.m.t., I set off 40° 49' N. on the lat. arc, and 22° 19' N. on the decl. arc, and determine a meridian with the solar at the cor. of secs. 15, 16, 21 and 22. Thence I run
	N. 0° 02' W. bet. secs. 15 and 16.
	Over nearly level land, through considerable short undergr of shadscale and greasewood.
40.00	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd.

¼ S 16 | S 15

1913

	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.
80.00	Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground, for cor. of secs. 9, 10, 15 and 16, with brass cap, mkd.

T 1 N | R 11 W

S 9 | S 10

S 16 | S 15

1913

	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, nearly level.
	Soil, light, fine, dry, weak, closely packed, sandy clay, rather alkali, on hard, baked sand and clay subsoil; affords no grazing.
	No timber; undergrowth, shadscale and greasewood.
	The cor. of secs. 10, 11, 14 and 15 being in plain view I run for said corner.
	N. 89° 56' E. on random line bet. secs. 10 and 15.
40.00	Set temp. ¼ sec. cor.
79.94	Intersect cor. of secs. 10, 11, 14 and 15. Thence I run
	S. 89° 56' W. on true line bet. secs. 10 and 15.
	Over level land, through dense undergrowth of shadscale and greasewood.

Survey of the subdivisional lines of Tp. 1 N. R. 11 W.

Chains	
39.97	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd. ¼ S 10 S 15 1913 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.
79.94	The cor. of secs. 9, 10, 15 and 16. Land, level. Soil, light, fine, dry, weak, closely packed clay, 6 to 8 ins. deep on hard, baked clay subsoil; affords no grazing. No timber; undergrowth, shadscale and greasewood.
	N. 0° 02' W. bet. secs. 9 and 10. Over level land, through dense undergrowth of shadscale and greasewood.
40.00	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass ca , mkd. ¼ S 9 | S 10 1913 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.
80.00	Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground, for cor. of secs. 3, 4, 9 and 10, with brass cap, mkd. T 1 N | R 11 W S 4 | S 3 S 9 | S 10 1913 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, light, fine, dry, weak, closely packed clay, rather alkali, 6 to 8 ins. deep on hard, baked clay subsoil; affords no grazing. No timber; undergrowth, shadscale, greasewood and salt sage.

Survey of the subdivisional lines of Tp. 1 N. R. 11 W.

Chains

The cor. of secs. 2, 3, 10 and 11, being in plain view, I run for said corner.

N. 89° 55' E. on random line bet. secs. 3 and 10.

40.00 Set temp. ¼ sec. cor.

79.93 The cor. of secs. 2, 3, 10 and 11. Thence I run S. 89° 55' W. on true line bet. secs. 3 and 10.

Over gently rolling land, through dense undergrowth of shadscale, greasewood and salt sage.

39.96½ Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd.

¼ S 3
S 10
1913

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.

79.93 The cor. of secs. 3, 4, 9 and 10.
Land, gently rolling.

Soil, light, fine, dry, weak, sandy clay, 10 to 20 ins. deep on hard, baked clay subsoil; affords no grazing.

No timber; undergrowth, shadscale, greasewood and salt sage.

June 3, 1913: Here I set off 22° 19' N. on the decl. arc, and at app. noon observe the sun on the meridian.

The resulting lat. is 40° 50' N.

The cor. of secs. 3, 4, 33 and 34, on N. bdy. of Tp. being in plain view, I run for said cor.

N., on true line bet. secs. 3 and 4.

Over gently rolling land, through dense undergrowth of short shadscale and salt sage and some greasewood.

40.00 Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd.

¼ S 4 | S 3
1913

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.

Survey of the subdivisional lines of Tp. 1 N. R. 11 W.

Chains	
50.00	Dry wash, 10 ft. deep, course SW.; ascend.
55.00	Spur, 20 ft. high, bears NE. and SW.; descend.
61.00	Dry wash, 12 ft. deep, course SW.; ascend gradually.
85.10	Intersect N. bdy. of Tp. at cor. of secs. 3, 4, 33 and 34. heretofore described Land, gently rolling. Soil, light, fine, dry, weak, closely packed sand and clay, rather alkali, 6 to 12 ins. deep on hard, baked clay subsoil: affords no grazing. No timber; undergrowth, shadscale, salt sage and greasewood. June 3, 1913.

June 2, 1913: At 8h 00m a.m., l.m.t., I set off 40° 46' N. on the lat. arc, and 22° 11' N. on the decl. arc, and determine a meridian with the solar at the standard cor. of secs. 32 and 33 on S. bdy. of Tp. heretofore described
Thence I run
N. 0° 03' W. bet. secs. 32 and 33.

Over level land, through considerable short undergrowth of shadscale and salt sage.

40.00 Set an iron post, 4 ft. long, 1 in. in diam., 26 ins. in the ground, for ½ sec. cor., with brass cap, mkd.

¼ S 32 | S 33

1913

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.

80.00 Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground, for cor. of secs. 28, 29, 32 and 33, with brass cap, mkd.

T 1 N | R 11 W
S 29 | S 28
S 32 | S 33

1913

dig pits, 18 x 18 x 12 ins., in each sec., 5½ ft. dist., and raise a mond of earth, 4 ft. base, 2 ft. high, W. of cor.

Land, level.

Survey of the subdivisional lines of Tp. 1 N. R. 11 W.

Chains	
	Soil, light, fine, dry, weak, closely packed clay, rather alkali, 6 to 8 ins. deep on hard, baked clay subsoil; affords no grazing.
	No timber; undergrowth, shadscale and salt sage.
	E. on random line bet. secs. 28 and 33.
40.00	Set temp. ¼ sec. cor.
80.04	Intersect N. and S. line 2 lks. S. of cor. of secs. 27, 28, 33 and 34. Thence I run
	S. 89° 59' W. on true line bet. secs. 28 and 33.
	Over gently rolling land, through considerable short undergrowth of shadscale.
30.00	Leave rolling and enter level land, bears NE. and SW.
40.02	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd.
	¼ S 28 / S 33 / 1913.
	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.
80.04	The cor. of secs. 28, 29, 32 and 33.
	Land, level and gently rolling.
	Soil, light, fine, dry, weak, closely packed clay, rather alkali, 6 to 8 ins. deep on hard, baked clay subsoil; affords no grazing.
	No timber; undergrowth, shadscale.
	N. 0° 03' W. bet. secs. 28 and 29.
	Over level land, through considerable short undergrowth of shadscale.
40.00	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd.
	¼ S 29 | S 28 / 1913
	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.

Survey of the subdivisional lines of Tp. 1 N. R. 11 W.

Chains	
80.00	Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground, for cor. of secs. 20, 21, 28 and 29, with brass cap, mkd. T 1 N | R 11 W S 20 | S 21 S 29 | S 28 1913 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, light, fine, dry, weak, closely packed clay, rather alkali, 6 to 8 ins. deep on hard, baked clay subsoil; affords no grazing. No timber; undergrowth, shadscale.
	N. 89° 59' E. on random line bet. secs. 21 and 28.
40.00	Set temp. ¼ sec. cor.
80.03	Intersect N. and S. line 2 lks. N. of cor. of secs. 21, 22, 27 and 28. Thence I run W. on true line bet. secs. 21 and 28. Over nearly level land, through considerable short undergrowth of shadscale and greasewood.
40.01½	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd. ¼ S 21 S 28 1913 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.
80.03	The cor. of secs. 20, 21, 28 and 29. Land, nearly level. Soil, light, fine, dry, weak, closely packed clay, rather alkali, 6 to 12 ins. deep on hard, baked clay subsoil: affords no grazing. No timber; undergrowth, shadscale and greasewood.

Survey of the subdivisional lines of Tp. 1 N. R. 11 W.

Chains	
	N. 0° 03' W. bet. secs. 20 and 21.
	Over level land, through considerable short undergrowth of shadscale.
40.00	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd.
	¼ S 20 | S 21
	1913
	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.
80.00	Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground, for cor. of secs. 16, 17, 20 and 21, with brass cap, mkd.
	T 1 N | R 11 W S 17 | S 16 S 20 | S 21 1913
	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, light, fine, dry, weak, closely packed clay, rather alkali, 6 to 12 ins. deep on hard, baked clay subsoil: affords no grazing.
	No timber; undergrowth, shadscale.

	June 2, 1913: Here I set off 22° 12' N. on the decl. arc, and at app. noon observe the sun on the meridian.
	The resulting lat. is 40° 48' N.

	E. on random line bet. secs. 16 and 21.
40.00	Set temp. ½ sec. cor.
80.00	Intersect N. and S. line 7.1lks. S. of cor. of secs. 15, 16, 21, and 22. Thence I run
	S. 89° 57' W. on true line bet. secs. 16 and 21.
	Over level land, through considerable short undergrowth of shadscale and greasewood.

Survey of the subdivisional lines of Tp. 1 N. R. 11 W.

Chains	
40.00	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd.
	¼ S 16 / S 21 / 1913
	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.
80.00	The cor. of secs. 16, 17, 20 and 21.
	Land, level.
	Soil, light, fine, dry, weak, closely packed clay, rather alkali, 6 to 14 ins. deep on hard, baked clay subsoil: affords no grazing.
	No timber; undergrowth, shadscale and greasewood.
	N. 0°. 03' W. bet. secs. 16 and 17.
	Over level land, through considerable short undergrowth of shadscale and some salt sage.
40.00	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd.
	¼ S 17 | S 16 / 1913
	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.
80.00	Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground, for cor. of secs. 8, 9, 16 and 17, with brass cap, mkd.
	T 1 N | R 11 W / S 8 | S 9 / S 17 | S 16 / 1913
	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, light, fine, dry, weak, closely packed clay, rather alkali, 6 to 8 ins. deep on hard, baked clay subsoil: affords no grazing.

Chains	
	No timber; undergrowth, shadscale and salt sage.
	June 2, 1913.
	June 4, 1913: At 8h a.m., l.m.t., I set off 40° 49' N. on the lat. arc, and 22° 26' N. on the decl. arc, and determine a meridian with the solar at the cor. of secs. 8, 9, 16 and 17. Thence I run
	N. 89° 57' E. on random line bet. secs. 9 and 16.
40.00	Set temp. ¼ sec. cor.
79.96	Intersect N. and S. line 2 lks. S. of cor. of secs. 9, 10, 15 and 16. Thence I run
	S. 89° 56' W. on true line bet. secs. 9 and 16.
	Over level land, through dense undergrowth of shadscale and greasewood.
39.98	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap mkd.
	¼ S 9 S 16 1913
	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.
79.96	The cor. of secs. 8, 9, 16 and 17.
	Land, level.
	Soil, light, fine, dry, weak, closely packed clay, rather alkali, 6 to 8 ins. deep on hard, baked clay subsoil; affords no grazing.
	No timber; undergrowth, shadscale and greasewood.
	N. 0° 03' W. bet. secs. 8 and 9.
	Over nearly level land, through short undergrowth of shadscale and scattering greasewood.
40.00	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd.
	¼ S 8 | S 9 1913
	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.

Survey of the subdivisional lines of Tp. 1 N. R. 11 W.

Chains	
	high, W. of cor.
80.00	Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground, for cor. of secs. 4, 5, 8 and 9, with brass cap, mkd.
	T 1 N. R 11 W S 5 S 4 S 8 S 9 1913
	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, nearly level.
	Soil, light, fine, dry, weak, closely packed clay, rather alkali, 6 to 8 ins. deep on hard, baked clay subsoil: affords no grazing.
	No timber: undergrowth, shadscale and greasewood.
	N. 89° 56' E. on random line bet. secs. 4 and 9.
40.00	Set temp. ½ sec. cor.
79.96	Intersect N. and S. line at cor. of secs. 3, 4, 9 and 10.
	Thence I run
	S. 89° 56' W. on true line bet. secs. 4 and 9.
	Over nearly level land, through considerable short undergrowth of shadscale.
35.00	Enter dense greasewood, bears N. and S.
39.98	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ½ sec. cor., with brass cap, mkd.
	¼ S 4 S 9 1913
	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.
50.00	Leave dense, thence through scattering greasewood.
79.96	The cor. of secs. 4, 5, 8 and 9.
	Land, nearly level.
	Soil, light, fine, dry, weak, closely packed, rather alkali clay, 6 to 8 ins. deep on hard, baked clay subsoil: affords no grazing.
	No timber; undergrowth, shadscale, greasewood and salt

Survey of the subdivisional lines of Tp. 1 N. R. 11 W.

Chains	
	N. 0° 03' W. on random line bet. secs. 4 and 5.
40.00	Set temp. ½ sec. cor.
85.22	Intersect N. bdy. of Tp. 5 lks. W. of cor. of secs. 4, 5, 32 and 33 heretofore described. Thence I run S. 0° 01' E. on true line bet. secs. 4 and 5. Over nearly level land, through dense undergrowth of greasewood and shadscale.
35.70	Leave greasewood, bears E. and W.
45.22	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd. ¼ S 5 | S 4 1913 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.
85.22	The cor. of secs. 4, 5, 8 and 9. Land, nearly level. Soil, light, fine, dry, weak, closely packed clay, rather alkali, 6 to 8 ins. deep on hard, baked clay subsoil: affords no grazing. No timber; undergrowth, shadscale and greasewood.

June4,1913

Howard W. Miller
U. S. Surveyor.

Lines run by Robert E. Clark, U.S.Transitman.

June 3, 1913: At 7h a.m., l.m.t., I set off 40° 46' N. on the lat. arc, and 22° 19' N. on the decl. arc, and determine a meridian with the solar at the standard cor. of secs. 31 and 32 on S. bdy. of Tp. heretofore described. Thence I run N. 0° 04' W. bet. secs. 31 and 32.

Over level land, through considerable short undergrowth of shadscale and salt sage.

40.00	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd. ¼ S 31 | S 32 1913

Survey of the subdivisional lines of Tp. 1 N. R. 11 W.

Chains	
	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.
80.00	Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground, for cor. of secs. 29, 30, 31 and 32, with brass cap, mkd. T 1 N | R 11 W S 30 | S 29 S 31 | S 32 1913
	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, light, fine, dry, weak, closely packed clay, rather alkali, 6 to 8 ins. deep on hard, baked clay subsoil; affords no grazing.
	No timber; undergrowth, shadscale and salt sage.
	E. on random line bet. secs. 29 and 32.
40.00	Set temp. ¼ sec. cor.
79.92	Intersect N. and S. line 8 lks. N. of cor. of secs. 28, 29, 32 and 33. Thence I run
	N. 89° 57' W. on true line bet. secs. 29 and 32.
	Over level land, through short, mostly dead undergrowth of shadscale and greasewood.
39.96	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd. ¼ S 29 S 32 1913
	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.
79.92	The cor. of secs. 29, 30, 31 and 32.
	Land, level.
	Soil, light, fine, dry, weak, closely packed clay, rather alkali, 6 to 8 ins. deep on hard, baked clay subsoil;

Survey of the subdivisional lines of Tp. 1 N. R. 11 W.

Chains	
	affords no grazing.
	No timber; undergrowth, shadscale and greasewood.
	The cor. of secs. 25, 30, 31 and 36, on W. bdy. of Tp. being in plain view, I run for it,
	S. 89° 58' W. on true line bet. secs. 30 and 31.
	Over level land, through considerable short undergrowth of shadscale and greasewood.
40.00	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd.
	¼ S 30 / S 31 / 1913
	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.
77.00	Ascend rocky E. slope 25 ft.
79.98	Intersect the W. bdy. of Tp. at cor. of secs. 25, 30, 31 and 36.heretofore described
	Land, nearly level.
	Soil, light, fine, dry, weak, closely packed clay, rather alkali, on hard, baked clay and sand subsoil; affords no grazing.
	No timber; undergrowth shadscale and greasewood.
	N. 0° 04' W. bet. secs. 29 and 30.
	Over level land, through considerable short undergrowth of dead shadscale.
40.00	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ½ sec. cor., with brass cap, mkd.
	¼ S 30 | S 29 / 1913
	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.

Survey of the subdivisional lines of Tp. 1 N. R. 11 W.

Chains	
80.00	Set an iron post, 3 ft. long, .2 ins. in diam., 24 ins. in the ground, for cor. of secs. 19, 20, 29 and 30, with brass cap, mkd. T 1 N | R 11 W S 19 | S 20 S 30 | S 29. 1913 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, light, fine, dry, weak, closely packed clay, rather alkali, 6 to 8 ins. deep on hard, baked clay subsoil: affords no grazing. No timber; undergrowth, shadscale.
	June 3, 1913: Here I set off 22° 19' N. on the lat. arc, and at app. noon observe the sun on the meridian. The resulting lat. is 40° 48' N.
	S. 89° 57' E. on random line bet. secs. 20 and 29.
40.00	Set temp. ¼ sec. cor.
79.97	Intersect N. and S. line 7 lks. S. of cor. of secs. 20, 21, 28 and 29. Thence I run W. on true line bet. secs. 20 and 29. Over level land, through considerable short undergrowth of shadscale and salt sage, mostly dead.
39.98½	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd. ¼ S 20 S 29 1913 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.
79.97	The cor. of secs. 19, 20, 29 and 30. Land, level. Soil, light, fine, dry, weak, closely packed clay, rather

Survey of the subdivisional lines of Tp. 1 N. R. 11 W.

Chains	
	alkali, 6 to 8 ins. deep on hard, baked clay subsoil; affords no grazing.
	No timber; undergrowth, shadscale and salt sage.
	The cor. of secs. 19, 24, 25 and 30, on W. bdy. of Tp. being in plain view, I run for it,
	W. on true line bet. secs. 19 and 30.
	Over nearly level land, through considerable short undergrowth of shadscale and salt sage, mostly dead.
40.00	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd.
	¼ S 19 / S 30 / 1913
	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.
79.92	Intersect W. bdy. of Tp. at cor. of secs. 19, 24, 25 and heretofore described
	Land, nearly level.
	Soil, light, fine, dry, weak, closely packed clay, rather alkali, 6 to 8 ins. deep on hard, baked clay subsoil; aff no grazing.
	No timber; undergrowth, shadscale and salt sage.
	N. 0° 04' W. bet. secs. 19 and 20.
	Over level land, through considerable short undergrowth of shadscale and salt sage, mostly dead.
40.00	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd.
	¼ S 19 | S 20 / 1913
	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.
80.00	Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground, for cor. of secs. 17, 18, 19 and 20, with brass cap, mkd.

Survey of the subdivisional lines of Tp. 1 N. R. 11 W.

Chains

T 1 N	R 11 W
S 18	S 17
S 19	S 20.

1913

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, light, fine, dry, weak, closely packed clay, rather alkali, 6 to 8 ins. deep on hard, baked clay subsoil; affords no grazing.

No timber; undergrowth, shadscale and salt sage.

E. on random line bet. secs. 17 and 20.

40.00 Set temp. ¼ sec. cor.

79.94 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 true line bet. secs. 17 and 20.

Over level land, through considerable short undergrowth of shadscale and salt sage.

39.97 Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd.

¼ S 17
S 20
1913

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.

79.94 The cor. of secs. 17, 18, 19 and 20.

Land, level.

Soil, light, fine, dry, weak, closely packed clay, rather alkali, 6 to 8 ins. deep on hard, baked clay subsoil: affords no grazing.

No timber; undergrowth, shadscale and salt sage.

June 3, 1913.

June 4, 1913: At 8h a.m., l.m.t., I set off 40° 49' N. on the lat. arc, and 22° 26' N. on the decl. arc, and determine a meridian with the solar at the cor. of secs. 17,18,19 and 20. Thence I run

Survey of the subdivisional lines of Tp. 1 N. R. 11 W.

Chains	
	W. on random line bet. secs. 18 and 19.
40.00	Set temp. ¼ sec. cor.
79.89	Intersect W. bdy. of Tp. 7 lks. N. of cor. of secs. 13, 18, 19 and 24. heretofore described. Thence I run N. 89° 57' E. on true line bet. secs. 18 and 19. Over nearly level land, sloping S., through considerable short undergrowth of shadscale and salt sage.
16.90	Ascend gradually SW. slope.
21.90	Top of ridge, anout 80 ft. above sec. cor., bears N. 35° W. and S. 30° E.; descend abruptly.
30.00	Foot of descent, 125 ft. below top of ridge, bears NW. and SE. Thence over level land.
39.89	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd. ¼ S 18 / S 19 / 1913 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.
79.89	The cor. of secs. 17, 18, 19 and 20. Land, level and mountainous; surface rocky on slopes of ri Soil, light, fine, dry, weak, closely packed clay, rather alkali, 6 to 8 ins. deep on hard, baked clay subsoil; affords no grazing. No timber; undergrowth, shadscale and salt sage.
	N. 0° 04' W. bet. secs. 17 and 18. Over level land, through considerable short undergrowth of shadscale and salt sage, and some greasewood.
40.00	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd. ¼ S 18 | S 17 / 1913 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.

Survey of the subdivisional lines of Tp. 1 N. R. 11 W.

Chains	
80.00	Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground, for cor. of secs. 7, 8, 17 and 18, with brass cap, mkd. T 1 N | R 11 W S 7 | S 8 S 18 | S 17 1913 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, light, fine, dry, weak, closely packed clay, rather alkali, 6 to 8 ins. deep on hard, baked clay subsoil; affords no grazing. No timber; undergrowth, shadscale, salt sage and greasewood.
	N. 89° 58' E. on random line bet. secs. 8 and 17.
40.00	Set temp. ¼ sec. cor.
79.92	Intersect N. and S. line 5 lks. N. of cor. of secs. 8, 9, 16 and 17. Thence I run
	W. on true line bet. secs. 8 and 17.
	Over level land, through considerable short undergrowth of shadscale and salt sage, mostly dead.
39.96	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd. ¼ S 8 S 17 1913 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.
79.92	The cor. of secs. 7, 8, 17 and 18. Land, level. Soil, light, fine, dry, weak, closely packed clay, rather alkali, 6 to 8 ins. deep on hard, baked clay subsoil; affords no grazing. No timber; undergrowth, shadscale and salt sage.

Survey of the subdivisional lines of Tp. 1 N. R. 11 W.

Chains	
	June 4. 1913: Here I set off 22° 27' N. on the decl. arc, and at app. noon observe the sun on the meridian. The resulting lat. is 40° 50' N.
	The cor. of secs. 7, 12, 13 and 18, on W. bdy. of Tp. being in plain view, I run for it,
	N. 89° 58' W. on true line bet. secs. 7 and 18.
	Over level land, through considerable short undergrowth of shadscale and salt sage.
40.00	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd.
	¼ S 7 S 18 1913
	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.
	Thence over gently rolling land, E. exposure.
79.86	Intersect W. bdy. of Tp. at cor. of secs. 7, 12, 13 and 18. heretofore described
	Land, E. ½ mile, level; W. ½ mile, gently rolling; E. exposu
	Soil, light, fine, dry, weak, closely packed clay, rather alkali, 6 to 8 ins. deep on hard, baked clay subsoil; affords no grazing.
	No timber; undergrowth, shadscale and salt sage.
	N. 0° 04' W. bet. secs. 7 and 8.
	Over level land, through considerable short undergrowth of shadscale and salt sage.
40.00	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd.
	¼ S 7 | S 8 1913
	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.
80.00	Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground, for cor. of secs. 5, 6, 7 and 8, with brass cap, mkd.

Survey of the subdivisional lines of Tp. 1 N. R. 11 W.

Chains

T. 1 N	R 11 W.
S 6	S 5
S. 7	S 8

1913

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, light, fine, dry, weak, closely packed, clay, rather alkali, 6 to 8 ins. deep on hard, baked clay subsoil; affords no grazing.

No timber; undergrowth, shadscale and salt sage.

June 4,1913

Robert E. Clark.
U. S. Transitman.

Lines run by Howard W. Miller, U.S.Surveyor. June 4,1913.

E. on random line bet. secs. 5 and 8.

40.00 Set temp. ¼ sec. cor.

79.90 Intersect N. and S. line 2 lks. N. of cor. of secs. 4, 5, 8 and 9. Thence I run

N. 89° 59' W. on true line bet. secs. 5 and 8.

Over nearly level land, through dense undergrowth of short shadscale and scattering greasewood.

39.95 Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd.:

¼ S 5
S 8
1913

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.

79.90 The cor. of secs. 5, 6, 7 and 8.

Land, level.

Soil, light, fine, dry, weak, closely packed clay, rather alkali, 6 to 8 ins. deep on hard, baked clay subsoil; affords no grazing.

No timber; undergrowth, shadscale and greasewood.

June 4,1913

Howard W Miller
U. S. Surveyor.

Survey of the subdivisional lines of Tp. 1 N. R. 11 W.

Chains	
	Lines run by Robert E. Clark, U. S. Transitman, June 4, 1913.
	N. 89° 58' W. on random line bet. secs. 6 and 7.
40.00	Set temp. ¼ sec. cor.
79.81	Intersect W. bdy. of Tp. 5 lks. N. of cor. of secs. 1, 6, 7 and 12 heretofore described
	E. on true line bet. secs. 6 and 7.
	Over level land, through considerable short undergrowth of shadscale and salt sage.
39.81	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd.
	¼ S 6 / S 7 / 1913
	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.
79.81	The cor. of secs. 5, 6, 7 and 8.
	Land, level.
	Soil, light, fine, dry, weak, closely packed clay, rather alkali, 6 to 8 ins. deep on hard, baked clay subsoil: affords no grazing.
	No timber: undergrowth, shadscale and salt sage.
	June 4, 1913.
	Robert E. Clark, U. S. Transitman.

	Lines run by Howard W. Miller, U.S.Surveyor. June 4, 1913.
	N. 0° 04' W. bet. secs. 5 and 6 on random line.
40.00	Set temp. ¼ sec. cor.
85.23	Intersect N. bdy. of Tp. 6 lks. E. of cor. of secs. 5, 6, 31 and 32 heretofore described, Thence I run
	S. 0° 07' E. on true line bet. secs. 5 and 6.
	Over level land, through considerable short undergrowth of shadscale and salt sage.
45.23	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap, mkd.
	¼ S 6 | S 5 / 1913

Survey of the subdivisional lines of Tp. 1 N. R. 11 W.

Chains

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.

85.23 The cor. of secs. 5, 6, 7 and 8.

Land, level.

Soil, light, fine, dry, weak, closely packed clay, rather alkali, 6 to 8 ins. deep on hard, baked clay subsoil: affords no grazing.

No timber; undergrowth, shadscale and salt sage.

June 4, 1913.

Howard W. Miller
U. S. Surveyor.

General Description.

The lands in this Tp. are generally level with the exception of the two E. ranges of sections, which are rolling, with a general westerly drainage. This rolling portion consists mainly of low sand hills or dunes along the W. foot of the Grassy Mountains. These hills produce a fair growth of native grasses, but as there is no water in the Tp., they are valuable only for winter grazing.

The remainder of the Tp. is practically level and has no apparent drainage.

The entire Tp. is a part of the old bed of Lake Bonneville.

The soil is generally a light, fine, dry, weak, closely packed clay, containing a varying amount of sand, and all more or less impregnated with alkali.. The top 6 or 8 ins. of the soil has been air slacked and weathered and contains a slight amount of vegetable matter, giving it a different appearance from the underlying soil. This lower strata of soil has been noted as a subsoil, although it is apparently the same class and grade of soil as the upper strata, only more closely packed. There is no indication of mineral.

There are no settlers in the Tp.

Howard W. Miller
U. S. Surveyor.

Robert C. Clark
U. S. Transitman.

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Page

BOOK A-405

CERTIFICATE OF ASSISTANTS.

We, the undersigned, hereby certify upon honor that we assisted, to the best of our skill and ability, ..., U. S. Surveyor, during the periods and in the capacities ted opposite our several signatures, in surveying all those parts or portions of .....

or certificates of assistants see book "J" T.3 N.R.11 W.

.....

.....

.....

.....

the ..... Meridian, in the State of .....

ich are represented in the foregoing field notes as having been executed by him, and under his direc-n; and that said survey has been, in all respects, to the best of our knowledge and belief, well and thfully executed.

NAME.	PERIOD OF SERVICE.		CAPACITY.
	BEGUN.	ENDED.	

Subscribed and certified to before me on the dates of the final service as shown above.

6—2761

U. S. Surveyor.

FINAL OATH OF UNITED STATES SURVEYOR.

I, _____, U. S. Surveyor, do solemnly swear that, in pursuance of special instructions received from the U. S. Surveyor General for _____ bearing date of the _____ day of _____, 191 , I have well, faithfully, and truly, in my own proper person, and in strict conformity with said instructions, the Manual of Surveying Instructions, and the laws of the United States, surveyed all those parts or portions of _____

For final oaths of U.S.Surveyor and Transitman see book "J" T.3 N. R.11 W.

_____ of the _____ Meridian, in the State of _____, which are represented in the foregoing field notes as having been executed 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 U. S. 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.

_____
U. S. Surveyor.

Subscribed by said _____, and sworn to before me this _____ day of _____, 191

SEAL

_____

_____

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah, April 5 , 1915.

The foregoing field notes of the survey of the Subdivisional lines of Township No.1 North, Range No.11 West of the Salt Lake Base and Meridian, Utah

executed by Howard W.Miller and Robert E.Clark their under ~~his~~ special instructions dated April 10, 1913; having been critically examined, and the necessary corrections and explanations made, the said field notes, and the surveys they describe, are hereby approved.

_____
U. S. 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.

_____
U. S. Surveyor General.

6—2761

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4—679

BOOK A-405

Book "G"

U. S. Surveyor General's Office
APR 9 1914
SALT LAKE CITY, UTAH.
397

FIELD NOTES

OF THE SURVEY OF THE

SUBDIVISION

OF

T.2 N., R.11 W.

Of the SALT LAKE BASE AND *Meridian,*

the State of UTAH

EXECUTED BY

Howard W. Miller
&
Robert E. Clark

the capacity of U. S. Surveyor and Transitman *under instructions dated* April 10, *191*3,

ued by the United States Surveyor General to govern surveys included in

oup No. 21, *which were approved by the Commissioner of the General Land*

ce, April 23, *191*3, *pursuant to authority contained in the Act of*

ngress dated ....., *191*....

Survey commenced June 5, *191*3

Survey completed June 17, *191*3

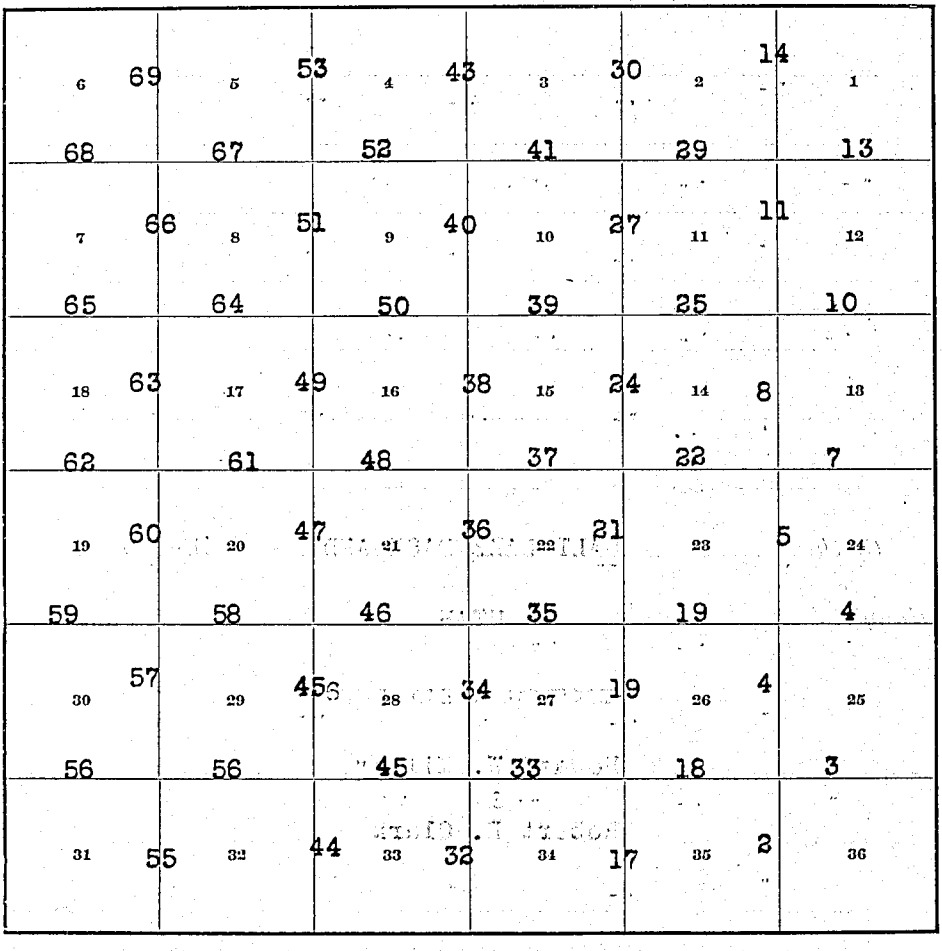
6—151

59-77-59

BOOK A-405

INDEX DIAGRAM.

Township 2 North, *Range* 11 west



6—151

Subdivision of T.2 N., R.11 W.

chains

Survey commenced June 5 , 1913 and executed with a Young and sons light mountain transit No.7147. For description and test of instrument see book "A" of this survey.

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 made on Polaris , I proceed as follows :

At my camp which is situated near the ¼ sec. cor . bet. secs. 15 and 16 in this tp., approximate lat. 40°54'N.; longitude 113°05'W.; I set off 40°54' on the lat. arc ; 22°36'N., on the decl. arc ; and , at 4 h. 58 m. p. m. l. m. t., determine with the solar a meridian and mark a point thereof , by a nail driven in a peg , set firmly in the ground about 5 chs. N. of the station.

June 5 , 1913

June 6 : At 2 h. 36 m. a. m. l. m. t., I observe Polaris at eastern elongation , in accordance with the Manual of Instructions , and mark a point in the line thus determined , by a nail driven in a peg set firmly in the ground , about 5 chs. N. of the station.

At 6 h. 30 m. a.m. l. m. t., I lay off the azimuth of Polaris , 1°32' to the west , and find that the true Polaris meridian falls on the solar meridian of June 5.

At 6.h. 43 m. a. m. l. m. t., I set off 40°54' on the lat. arc ; 22°39' N., on the decl. arc ; and determine a meridian with the solar. This meridian falls about 1' to the east of the true meridian established by observations on Polaris.

The p. m. meridian established with the solar agrees with the true Polaris meridian and the a. m. meridian falls about 1' to the right. This error being so small I therefore conclude that the adjustments of the instrument are satisfactory.

Subdivision of T.2 N.,R.11 W.

chains

The magnetic bearing of the true meridian at 7 h. am. is N.17°20'W., the angle thus determined gives the magnetic decl.,17°20'E.

From the cor. of secs. 1 , 2 , 35 and 36 on the S. bdy. of the tp., heretofore described , I run N.0°01'W., bet. secs. 35 and 36.

Gradually ascend over rolling ground sloping SW., through short undergrowth of shadscale and salt sage.

12.40 Wash , 10 lks. wide , 4 ft. deep , course SW.

25.60 Wash , 10 lks. wide , 6 ft. deep , course SW.

39.50 Wash , 10 lks. wide , 4 ft. deep , course SW.

40.00 Set an iron post , 3 ft. long , 1 in. in dia., 24 ins. in the ground for $\frac{1}{4}$ sec. cor., with brass cap marked

S 35 $\frac{1}{4}$ | S36

1913

dig pits , 18 x 18 x 12 ins., N. and S. of post , 3 ft. dist., raise a mound of earth , 3½ft. base , 1½ ft. high , W. of cor.

46.10 Wagon road , bears NW. and SE.

46.15 Wash , 15 lks. wide , 6 ft. deep , course SW.

50.00 Same wagon road , bears NE. and SW.

51.90 Wash , 8 lks. wide , 4 ft. deep , course SW. Same wagon road , bears NW. and SE.

76.00 Wash , 6 lks. wide , 3 ft. deep , course SW.

80.00 Set an iron post , 3 ft. long , 2 ins. in dia., 24 ins. in the ground for cor. of secs. 25 , 26 , 35 and 36 with brass cap marked

T 2 N | R 11 W
S 26 | S 25

S 35 | S 36

1913

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.

Subdivision of T.2 N.,R.11 W.

chains	
	of cor.
	Land rolling with a SW. exposure and cut by numerous washes.
	Soil , light sandy clay and gravel on gravelly sub-soil ; 2 nd. rate.
	No timber.
	Undergrowth , short shadscale and somesalt sage.

	N.89°59'E., on a random line bet. secs. 25 and 36
40.00	Set temp. $\frac{1}{4}$ sec. cor.
80.08	Intersect E. bdy. of the tp. 1 lk . S. of the cor. of secs. 25 , 30 , 31 and 36 heretofore described.
	Thence
	S.89°59'W., on true line bet. secs. 25 and 36
	Gradually descend over rolling land through short undergrowth of shadscale and salt sage.
7.00	Wagon road , bears N. and S.10°W.
40.04	Set an iron post , 3 ft. long , 1 in. in dia., 24 ins. in the ground for $\frac{1}{4}$ sec. cor., with brass cap marked
	S $\frac{25}{\frac{1}{4}}$
	S 36
	1913
	dig pits , 18 x 18 x 12 ins., E. and W. of post , 3 ft. dist., raise a mound of earth , 3½ft. base , 1½ ft. high , N., of cor.
45.10	Wash , 25 ft. deep , course SW.
50.60	Wash , 15 ft. deep , course SW.
69.10	Wash , 30 lks. wide , 6 ft. deep , course SW.
77.60	Wash , 8 lks. wide , 3 ft. deep , course SW.
80.08	The cor. of secs. 25 , 26 , 35 and 36.
	Land , rolling with W. and SW. exposure.
	Soil , light , dry , warm sandy clay and fine gravel on clay and gravel sub-soil ; 2 nd. rate.
	No timber.

chains Undergrowth , short shadscale and some salt sage.

N.0°01'W., bet. secs. 25 and 26

Gradually ascend over rolling land covered with short undergrowth of shadscale and salt sage.

30.00 Gulch , 20 ft. deep , course SW.

40.00 Set an iron post , 3 ft. long , 1 in. in dia., 24 ins. in the ground for $\frac{1}{4}$ sec. cor., with brass cap marked

S 26 $\frac{1}{4}$ | S 25

1913

dig pits , 18 x 18 x 12 ins., N. and S. of post , 3 ft. dist., raise a mound of earth , 3½ft. base , 1½ ft. high , W. of cor.

June 6 : At this $\frac{1}{4}$ sec. cor., I set off 23°40'N., on the decl. arc ; and at 11 h. 58 m. a. m. l. m. t., observe the sun on the meridian ; the resulting lat. is 40°53'.

62.30 Wagon road , bears NW. and SE. Small hollow , drains SW.

80.00 Set an iron post , 3 ft. long , 2 ins. in dia., 24 ins. in the ground for cor. of secs. 23 , 24 , 25 and 26 with brass cap marked

T 2 N \| R 11 W
S 23 \| S 24

S 26 \| S 25

1913

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 , rolling with general SW. exposure.

Soil , gravelly and sandy clay on gravel and sand sub-soil ; 3 rd. rate.

No timber.

Undergrowth , short shadscale and some salt sage.

N.89°59'E., on a random line bet. secs. 24 and 25

Subdivision of T.2 N.,R.11 W.

chains	
40.00	Set temp. ¼ sec. cor.
80.08	Intersect E. bdy. of the tp. at the cor. of secs. 19 , 24 , 25 and 30 heretofore described.
	Thence
	S.89°59'W.,on true line bet. secs. 24 and 25
	Over rolling land sloping SW., through short undergrowth of shadscale and salt sage.
	Gradually descend.
17.75	Wagon road , bears N.20°E. and S.10°W.
20.10	Wash , 10 lks. wide , 6 ft. deep , course SW.
40.04	Set an iron post , 3 ft. long , 1 in. in dia., 24 ins. in the ground for ¼ sec. cor., with brass cap marked S 24 ¼ S 25 1913
	dig pits , 18 x 18 x 12 ins., E. and W. of post, 3 ft. dist., raise a mound of earth , 3½ft. base , 1½ ft. high , N. of cor.
40.30	Wash , 6 ft. deep , course SW.
50.80	Small hollow , 15 ft. deep , drains SW.
80.08	The cor. of secs. 23 , 24 , 25 and 26
	Land rolling , with a general SW. slope.
	Soil , fine gravel , some rocky and sandy clay on gravel and clay sub-soil ; 3 rd. rate.
	No timber.
	Undergrowth , short shadscale and some salt sage.

	N.0°01'W., bet. secs. 23 and 24
	Gradually ascend over rolling land through short undergrowth of shadscale and sage brush.
10.00	Small hollow , 14 ft. deep , course S.5°W.
30.00	Small hollow , lined with a few scattering cedars , drains SW.
40.00	At base of mountain , bears NE. and SW

Subdivision of T.2 N., R.11 W.

chains

Set an iron post , 3 ft. long , 1 in. in dia., 24 ins.in the ground for $\frac{1}{4}$ sec. cor., with brass cap marked

S 23 $\frac{1}{4}$ | S 24

1913

dig pits , 18 x 18 x 12 ins., N. and S. of post , 3 ft. dist., raise a mound of earth , 3½ft. base , 1½ ft. high , W. of cor.

Ascend rapidly.

42.30 Wagon road , bears N.30°E. and S.30°W.

Ascend abruptly.over rocky mountain side,

74.00 Ridge , 250 ft. above $\frac{1}{4}$ sec. cor., bears NW. and E.

Descend abruptly.

77.40 Gulch , 125 ft. below ridge , course S.80°E.

Ascend 30 ft. to

80.00 Set an iron post , 3 ft. long , 2 ins. in dia., 12 ins. in the ground and 12 ins.in a mound of stone and earth , 4 ft. base , 1 ft. high , for cor. of secs. 13 , 14 , 23 and 24 , with brass cap marked

T 2 N R 11 W
S 14 | S 13
S 23 | S 24

1913

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

Note:
On account of natural obstacles I am unable to set post more than 12 ins. in the ground.

Land ; S½ rolling hills with S. exposure. N.½ , rough mountains with steep N. and S. slopes.

Soil , generally gravelly , sandy and mixed with some rocks on gravelly and rocky sub-soil ; 3 rd. rate.

No timber.

Undergrowth , short shadscale and some sage brush . Some bunch grass good for grazing purposes.

Mountainous land , 40.00 chs.

June 6 , 1913

Subdivision of T.2 N., R.11 W.

chains	
	June 7 : At 7 h. 59 m. a. m. l. m. t., I set off 40°54' on the lat. arc ; 22°46'N., on the decl. arc ; and determine a meridian with the solar at the cor. of secs. 13 , 14 , 23 and 24
	Thence I run
	N.89°59'E., on a random line bet. secs. 13 and 24
40.00	Set temp. ¼ sec. cor.
80.00	Intersect E. bdy. of the tp. 7 lks. N. of the true cor. point of secs.13 , 18 , 19 and 24 heretofore described
	Thence
	N.89°58'W., on true line bet. secs. 13 and 24
	Over mountainous land through scattering cedar and pinon timber and undergrowth of shadscale.
	Ascend abruptly from hollow.
2.35	Spur , 60 ft. high , projects S.
	Descend abruptly.
6.60	Hollow , 50 ft. deep , course S.5°E.
	Ascend abruptly 200 ft. to
12.60	Ridge , bears N.10°W. and S.10°E.
	Descend.
19.00	Hollow, drains S.
	Ascend abruptly 80 ft. to
22.00	Spur , projects S.
	Descend abruptly
26.40	Base of spur , bears N. and S.
	Leave cedar and pinon timber , thence over rolling land sloping S.
40.00	Set an iron post , 3 ft. long , 1 in. in dia., 24 ins. in the ground for ¼ sec. cor., with brass cap marked

S 13
¼

S 24
1913

dig pits , 18 x 18 x 12 ins., E. and W. of post , 3 ft.

Subdivision of T.2 N ,R.11 W.

chains	
	dist., raise a mound of earth , 3½ ft. base , 1½ ft. high , N. of cor.
42.80	Low spur , bears N. and S.
56.00	Wagon road , bears N.60°W. and S.60°E.
63.55	Base of mountain , bears NE. and SW.
	Ascend abruptly over blue limestone ledges.
69.30	Top of spur , projects S.
	Descend abruptly.
74.00	Gulch , drains S.
	Thence over land facing almost S.
80.00	The cor. of secs. 13 , 14 , 23 and 24
	Land , mountainous draining S., with steep E. and W. slopes of ridges.
	Soil , rocky , gravelly , and some sandy clay near center of mile on sub-soil of gravel and rocks ; 3 rd. rate.
	Timber , scattering scrub cedar and pinon on E. 26.40 chs.
	Undergrowth , short shadscale and some bunch grass good for grazing purposes.
	Mountainous or timbered land 80.00 chs.

	N.0°01'W., bet. secs. 13 and 14
	Ascend abruptly over rocky mountainous land facing SE., through scattering scrub cedar and pinon timber and undergrowth of short shadscale.
9.40	Ascend more gradually.
14.30	Top of divide and ridge , 225 ft. above sec. cor., bears E. and W.
	Descend abruptly.
22.50	Hollow ,120 ft. deep , drains E.
	Ascend abruptly along S. side of hollow.
32.80	Top of ridge and divide , 100 ft. above hollow , bears SE. and W.
	Descend abruptly
39.80	Hollow , 80 ft. deep., course E.

Subdivision of T.2 N.,R.11 W.

chains	
	Ascend.
40.00	Set an iron post , 3 ft. long , 1 in. in dia., 24 ins. in the ground for $\frac{1}{4}$ sec. cor., with brass cap marked S $\frac{1}{4}$ 14 | S 13 1913 raise a mound of stone , 2 ft. base , 1½ ft. high , W. of cor.
43.00	Spur , 70 ft. high , projects N.80°E.
	Descend.
47.00	Hollow , 50 ft. deep , course E.
	Ascend abruptly.
51.00	Spur , 60 ft. high , projects N.80°E.
	Descend abruptly
55.20	Hollow , 40 ft. deep , course NE.
	Thence ascend over low point about 15 ft. high.
59.50	Small hollow , drains E.
	Ascend abruptly.
67.20	Ridge , 115ft. high , bears SE. 15 chs. and NW.
	Descend abruptly.
72.20	Hollow , 115 ft. deep , course S.60°E.
	Ascend abruptly
78.30	Spur , 100 ft. high , projects SE.
	Gradually descend.
80.00	Set an iron post , 3 ft. long , 2 ins. in dia., 12 ins. in the ground and 12 ins. in a mound of stone and earth 4 ft. base , 1 ft. high , for cor. of secs. 11 , 12 , 13 and 14 , with brass cap marked T 2 N | R 11 W S 11 | S 12 S 14 | S 13 1913 raise a mound of stone , 2 ft. base , 1½ ft. high , W. of cor.
	Note: on account of natural obstacles I am unable to set post

chains	
	more than 12 ins. in the ground.
	Land, rough broken mountains with steep N. and S. slopes of ridges and spurs into hollows draining E.
	Soil, gravelly, sandy and rocky on rocky sub-soil; 4 th. rate,
	Timber, scattering scrub cedar.
	Undergrowth, short shadscale and considerable bunch grass good for grazing purposes.
	Mountainous land, 80.00 chs.
	June 7: At this sec. cor., I set off 22°40'N., on the decl. arc; and at 11 h. 59 m. a. m. l. m. t., observe the sun on the meridian; the resulting lat. is 40°54'.

	S.89°58'E., on a random line bet. secs. 12 and 13.
40.00	Set temp. ¼ sec. cor.
80.12	Intersect E. bdy. of the tp. 9 lks. S. of the cor. of secs. 7, 12, 13 and 18, heretofore described.
	Thence
	S.89°58'W., on true line bet. secs. 12 and 13.
	Over rough mountainous land covered with scattering scrub cedar and pinon timber and undergrowth of shadscale.
	Ascend abruptly.
8.70	Ridge, 160 ft. above sec. cor., bears N. and S.
	Descend abruptly.
13.10	Head of gulch; 50 ft. below ridge, bears N. and S.
	Ascend.
17.90	Ridge and divide, bears N.75°W. and S.75°E. Gulches head from both sides of ridge.
	Ascend abruptly over series of blue limestone ledges.
27.10	Top of blue limestone hog back, 200 ft. above divide, bears N.6 chs. to main ridge and S.
	Descend abruptly over ledges,
35.00	Gulch, 160 ft. deep, course S.
	Ascend abruptly.
40.06	Set an iron post, 3 ft. long, 1 in. in dia., 24 ins. in

Subdivision of T. 2 N., R. 11 W.

Chains	
	a mound of stone and earth 4 ft. base, 2 ft. high for ¼ sec.cor. with brass cap marked S 12 ¼ S 13 1913 raise a mound of stone 2 ft. base, 1½ ft. high N. of cor.
	Note: On account of natural obstacles I am unable to set post in the ground.
41.30	Rocky spur, 100 ft. above gulch, projects S.
	Descend abruptly.
56.30	Short gulch, drains S.
	Ascend abruptly.
62.70	Spur, 70 ft. above gulch, projects S.
	Descend abruptly 100 ft. to
76.00	Hollow, drains S.
	Ascend abruptly 75 ft. to
80.12	The cor. of secs. 11, 12, 13 and 14.
	Land, broken and rough mountainous with steep E. and W. slopes of ridges and spurs into gulches and hollows.
	Soil, rocky of limestone formation on rocky subsoil; 4th rate.
	Timber, scattering scrub cedar and pinon, 80.00 chs.
	Undergrowth, short shadscale and some bunch grass, good for grazing purposes.
	Land mountainous 80.12 chs.
	June 7, 1913.

June 14: At 8h 00m a.m.,l.m.t., I set off 40.55' on the lat. arc; 23°17'N. on the decl. arc; and determine a meridian with the solar at the cor. secs. 11, 12, 13 and 14.

Thence I run

N.0°01'W. bet. secs. 11 and 12.

Subdivision of T. 2 N., R. 11 W.

Chains	
	Over rough and broken mountains covered with scattering scrub cedar and pinon timber and undergrowth of shadscale.
	Descend along W. side of hollow.
6.00	Mouth of gulch from the W. 100 ft. below sec. cor., course E.
	Gradually ascend along W. side of main hollow.
26.00	Cross main hollow, drains S.5°E.
	Gradually ascend along E. side.
40.00	50 ft. above bottom of hollow.
	Set an iron post 3 ft. long, 1 in. in dia., 24 ins. in the ground for ¼ sec. cor. with brass cap marked S 11 | S 12 ¼ 1913 raise a mound of stone 2 ft. base, 1½ ft. high W. of cor.
67.00	Top of divide and ridge, 1200 ft. above the valley to the east, bears N.15°W. and S.15°E.
	Descend.
72.00	Head of hollow, drains E.
	Ascend abruptly.
79.59	Spur projects E.
	Descend.
80.00	Set an iron post 3 ft. long, 2 ins. in dia., 24 ins. in a mound of stone and earth 4 ft. base, 2 ft. high for cor. of secs. 1, 2, 11 and 12 with brass cap marked T. 2 N. | R. 11 W. S 2 | S 1 S 11 | S 12 1913 raise a mound of stone 2 ft. base, 1½ ft. high W. of cor.
	Note:
	On account of natural obstacles I am unable to set post

Subdivision of T.2 N.,R.11 W.

chains	
	in the ground.
	Land mountainouswith NE. and SW slopes of ridges into hollows draining S. and E.
	Soil , rocky , gravelly and some sand on gravelly and rocky sub-soil ; 4 th. rate.
	Timber , scattering scrub cedar and pinon.
	Undergrowth , short shadscale and some bunch grass , good for grazing purposes.
	Land mountainous xxxxxxxxxxxxxxxxxxxx80.00 chs.

	N.89°58'E., on a random line bet. secs. 1 and 12
40.00	Set temp. $\frac{1}{4}$ sec. cor.
80.20	Intersect E. bdy. of the tp. 5 lks. N. of the cor. of secs. 1 , 6 , 7 and 12 heretofore described
	Thence
	West , on true line bet. secs. 1 and 12
	Over mountainous land covered with scattering scrub cedar and pinon timber and undergrowth of shadscale.
	Ascend abruptly over top of rocky limestone spur projecting E.
14.10	Top of limestone hog back , 200 ft. above sec. cor., bears N.5 chs. and S.12 chs.
	Descend abruptly.
21.20	Hollow , 150 ft. deep , course SE.
	Ascend abruptly.
29.40	Ridge , bears NE. and SW.
	Thence over series of small ridges and hollows.
40.10	Set an iron post , 3 ft. long , 1 in. in dia., 24 ins. in a mound of stone and earth , 4 ft. base , 2 ft. high for $\frac{1}{4}$ sec. cor., with brass cap marked
	$\frac{S\ 1}{\frac{1}{4}}$
	S 12
	1913
	raise a mound of stone , 2 ft. base , 1½ ft. high , N.

Subdivision of T.3 N.,R.11 E.

chains

of cor.

Note:
On account of natural obstacles I am unable to set post in the ground.

53.70 Bottom of main hollow , 150 ft. deep , course NE.4 chs. thence E.

Ascend.

64.70 Spur , projects S.

Descend.

69.70 Hollow , 100 ft. deep , course SE.

Ascend abruptly 100 ft. to

80.20 The cor. of secs. 1 , 2 , 11 and 12

Land rough mountains with general E. exposure.

Soil , rocky and gravelly of limestone formation on rocky sub-soil ; 4 th. rate.

Timber , scattering cedar and pinon.

Undergrowth , short shadscale and bunch grass , good for grazing purposes.

Land mountainous 80.20 chs.

Note: I was enroute from one transit station to another at noon , therefore I was unable to make the required test for lat.

N.0°01'W., on a random line bet. secs. 1 and 2

40.00 Set temp. ¼ sec. cor.

79.85 Intersect N. bdy. of the tp. 6 lks. E. of the cor. of secs. 1 , 2 , 35 and 36 , heretofore described.

Thence

S.0°03'E., bet. secs. 1 and 2

Over rough and broken mountainous land through scattering scrub cedar timber and undergrowth of sage brush.

Descend

1.50 Hollow , near head , drains NE.

Ascend abruptly over steep N. face of high mountain peak.

Subdivision of T.2 N., R.11 W.

Chains.	
22.05	Top of peak and highest point in range of mountains.
	From this peak ridges and spurs project in E., NE., and NW.directions.
	Descend abruptly over S.face of peak covered with loose slide rock.
39.85	500 ft.below top,
	Set an iron post, 3 ft.long, 1 in.in dia., 24 ins.in a mound of stone and earth, 4 ft.base, 2 ft.high, for $\frac{1}{4}$ sec.cor., with brass cap marked
	S $\frac{1}{4}$ 2 | S 1 1913
	raise a mound of stone, 2 ft.base, $1\frac{1}{2}$ ft.high W.of cor.
	Note: On account of natural obstacles I am unable to set post in the ground.
	Continue steep descent.
44.40	Hollow, 150 ft.below $\frac{1}{4}$ sec.cor., drains E.
	Ascend abruptly.
62.65	Top of sharp rocky limestone ridge, 250 ft.above hollow, bears N.80° E. and S.80° W.
	Descend abruptly.
70.85	Hollow, 160 ft.deep, course SE.
	Ascend abruptly.
79.85	150 ft.above hollow.
	The cor.of secs.1,2,11, and 12.
	Land, rough and broken mountains with steep N.and S. slopes of ridges into hollows draining E.
	Soil, loose slide rock, gravelly and some light clay, on rocky subsoil; 4th rate.
	Timber, scattering scrub cedar.
	Undergrowth, short shadscale and considerable bunch grass; good for grazing purposes.
	Mountainous 79.85 chs.

Subdivision of T.2 N., R.11 W.

June 14, 1913.

Robert E. Clark

U.S.Transitman.

Survey commenced June 8, 1913, and executed with a Young and Sons light mountain transit No.8147, for description and test of instrument see book "A" of this survey.

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 made on Polaris, I proceed as follows:

A Polaris meridian has been established at my camp near the $\frac{1}{4}$ sec.cor.bet.secs.15 and 16. For complete description of the method of obtaining this meridian see page 1.

June 8: I set my instrument over the above meridian, set off 40° 54' on the lat.arc; 22° 51'N.on the decl.arc; and at 6h 59m a.m.l.m.t., determine a meridian with the solar. This meridian falls on the Polaris meridian. I make numerous other solar observations during the morning, and at no time did the solar meridians differ more than 1' from the Polaris meridian.

At 11h 59m a.m.l.m.t., I set off 22° 52'N.on the decl. arc; and observe the sun on the meridian; the resulting lat.is 40° 54'.

At 4h 59m p.m.l.m.t. I set off 40° 54' on the lat.arc; 22° 54'N, on the decl.arc; and determine a meridian with the solar. This meridian falls 1' to the left of the Polaris meridian. During the afternoon I make several other solar observations and find that the majority of them fall on the Polaris meridian.The solar apparatus by a.m.and p.m.observations defines positions

chains

meridians that practically agree with the Polaris meridian , I thereofre conclude that the adjustments of the instrument are satisfactory.
For mag. dec. see page 2.

June 8 , 1913

June 9 : At 7 h. 29 m. a. m. l. m. t., I set off 40°51' on the lat. arc ; 22°56' N., on the decl. arc ; and determine a meridian with the solar at the cor. of secs. 2 , 3 , 34 and 35 on the S. bdy. of the tp. heretofore described.

Thence I run

N.0°02'W., bet. secs. 34 and 35.

Gradually ascend over rolling land through short undergrowth of shadscale and salt sage.

40.00 Set an iron post , 3 ft. long , 1 in. in dia., 24 ins. in the ground for ¼ sec. cor., with brass cap marked

S 34 ¼ | S 35

1913

dig pits , 18 x 18 x 12 ins., N. and S. of post , 3 ft. dist., raise a mound of earth , 3½ft. base , 1½ ft. high , W. of cor.

47.95 Wagon road , bears NW. and SE. Crosses wash , 10 lks. wide , 3 ft. deep , course SW.

60.20 Wash , 10 lks. wide , 4 ft. deep , course SW.

80.00 Set an iron post , 3 ft. long , 2 ins. in dia., 24 ins. in the ground for cor. of secs. 26 , 27 , 34 and 35 with brass cap marked

T 2 N | R 11 W
S 27 | S 26

S 34 | S 35

1913

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.

chains

of cor.

Land rolling with a general SW. exposure.

Soil , light , sandy clay and gravel on deep clay and gravel sub-soil ; 2 nd. rate.

No timber.

Undergrowth , short shadscale and some salt sage.

N.89°59'E., on a random line bet. secs. 26 and 35

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

79.97 Intersect N. and S. line 7 lks. N. of the cor. of secs. 25 , 26 , 35 and 36

Thence

N.89°58'W., on true line bet. secs. 26 and 35.

Gradually descend over gently rolling land sloping SW. and covered with short undergrowth of shadscale.

22.47 Wagon road , bears NW. and SE.

39.98½ Set an iron post , 3 ft. long , 1 in. in dia., 24 ins. in the ground for $\frac{1}{4}$ sec. cor., with brass cap marked

$$\frac{S\ 26}{\frac{1}{4}}$$

S 35

1913

raise a mound of stone , 2 ft. base , 1½ ft. high , N. of cor.

51.07 Wash , 15 lks. wide , 4 ft. deep , course SW.

68.00 Wash , 20 lks. wide , 10 ft. deep , course SW.

79.97 The cor. of secs. 26 , 27 , 34 and 35

Land , rolling with gentle SW. exposure.

Soil , gravelly , sandy and light , dry , clay on a hard sub-soil of gravel and clay ; 2 nd. rate.

No timber.

Undergrowth , short shadscale.

Subdivision of T.2 N.,R.11 W.

chains

N.0°02'W., bet. secs. 26 and 27

Gradually ascend over rolling land covered with short shadscale.

19.30 Wash , 20 lks. wide , 10 ft. deep , course SW.

27.20 Wash , 10 lks. wide , 5 ft. deep , course SW.

40.00 Set an iron post , 3 ft. long , 1 in. in dia., 24 ins. in the ground for $\frac{1}{4}$ sec. cor., with brass cap marked

S 27 $\frac{1}{4}$ | S 26

1913

dig pits , 18 x 18 x 12 ins., N. and S. of post , 3 ft. dist., raise a mound of earth , 3 ft. base , $1\frac{1}{2}$ ft. high , W. of cor.

59.40 Wash , 10 lks. wide , 8 ft. deep , course SW.

62.40 Wagon road ,bears NW. and SE.

80.00 Set an iron post , 3 ft. long , 2 ins. in dia., 24 ins. in the ground for cor. of secs. 22 , 23 , 26 and 27 , with brass cap marked

T 2 N | R 11 W
S 22	S 23
S 27	S 26

1913

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

Land , rolling with a general SW. exposure.

Soil , gravelly and sandy on a light , dry , friable clay sub-soil ; 2 nd. rate.

No timber.

Undergrowth , short shadscale. Some good bunch grass , valuable for grazing purposes.

S.89°58'E., on a random line bet. secs. 23 and 26

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

80.00 Intersect N. and S. line , 5 lks. N. of the cor. of secs. 23 , 24 , 25 and 26

Subdivision of T.2 N.,R.11 W.

chains	
	Thence
	N.89°56'W., on true line bet. secs. 23 and 26
	Over rolling land draining S., through short undergrowth of shadscale.
	Descend.
1.40	Wash , 30 ft. below sec. cor., course SW.
6.50	Wagon road , bears N. and SW.
13.60	Wash , 25 lks. wide , 12 ft. deep , course SE.
	Enter mountainous land , bears N. and S.
	Ascend over E. slope of ridge.
37.00	Ridge , 50 ft. high , bears N. and S.
	Gradually descend.
40.00	Set an iron post , 3 ft. long , 1 in. in dia., 24 ins. in a mound of stone and earth , 4 ft. base , 2 ft. high , for $\frac{1}{4}$ sec. cor., with brass cap marked
	S 23 $\frac{1}{4}$ S 26 1913
	raise a mound of stone , 2 ft. base , $1\frac{1}{2}$ ft. high , N. of cor.
	Note: On account of natural obstacles I am unable to set post in the ground.
47.00	Base of ridge , bears NW. and SE.
	Thence over broken ground sloping S.
54.60	Wagon road , bears NW. and SE.
61.50	Wash , 20 lks. wide 10 ft. deep , course SW.
63.60	Wash , 10 lks. wide , 3 ft. deep , course SW.
80.00	The cor. of secs. 22 , 23 , 26 and 27.
	Land , broken , lying at the S. point of ridge,
	Soil , gravelly , rocky and clay on gravelly and rocky sub-soil ; 3 rd. rate.
	No timber.
	Undergrowth , short shadscale and some bunch grass.
	June 9: At this sec. cor., I set off 22°57' N., on the decl

chains

arc ; and at 11 h. 59 m. a. m. l. m. t., observe the sun on the meridian ; the resulting lat. is 40°53'

N.0°02'W., bet. secs. 22 and 23

Ascend over broken ground covered with short undergrowth of shadscale.

18.00 Wagon road , bears NW. and SE.

20.00 Begin ascent over mountainous land , bears NW. and SE.

26.30 Top of rocky knoll.

Descend.

33.80 Gulch , 30 ft. deep , course SW.

Thence over broken land.

40.00 Set an iron post , 3 ft. long , 1 in. in dia., 24 ins. in the ground for $\frac{1}{4}$ sec. cor., with brass cap marked

S 22 $\frac{1}{4}$ | S 23

1913

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

45.70 Gulch , 20 ft. deep , course SW.

Ascend.

65.30 Spur , 50 ft. high , projects SW.

Descend.

72.00 Hollow , 30 ft. deep , course SW.

Ascend.

80.00 Set an iron post , 3 ft. long , 2 ins. in dia., 24 ins. in the ground for cor. of secs. 14 , 15 , 22 and 23 , with brass cap marked

T 2 N \| R 11 W
S 15 \| S 14

S 22 \| S 23

1913

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

Land , low broken mountains draining SW.

Subdivision of T.2 N., R.11 W.

chains	
	Soil , gravelly , rocky and some sandy clay , on gravelly and sandy sub-soil ; 3 rd. rate.
	No timber.
	Undergrowth , short shadscale and some bunch grass good for grazing purposes.
	Mountainous land , 80.00 chs.
	Note: On account of terrific wind storm I cease work this day at 3 p. m.
	June 9 , 1913

	June 12 : At 7 h. 30 m. a. m. l. m. t., I set off 40°54' on the lat. arc ; 23°10' N., on the decl. arc ; and determine a meridian with the solar at the cor. of secs. 14 , 15 , 22 and 23
	Thence I run
	S.89°56'E., on a random line bet. secs. 14 and 23
40.00	Set temp. ¼ sec. cor.
80.04	Intersect N. and S. line , 9 lks. S. of the cor. of secs. 13 , 14 , 23 and 24.
	Thence
	West , on true line bet. secs. 14 and 23.
	Over broken rocky mountainous land , through short undergrowth of shadscale.
	Descend 30 ft. to
2.00	Hollow , drains SE.
	Ascend.
4.25	Ridge , 60 ft. high , bears NW. and SE.
	Descend.
13.10	Hollow , 40 ft. deep, course S.
	Ascend.
18.50	Spur , 75 ft. high , projects SE.
	Descend.
21.00	Head of hollow , drains S.
	Ascend.
23.50	Spur , 90 ft. high , projects SW.

Subdivision of T.2 N.,R.11 W.

chains	
	Descend.
28.80	Hollow , 120 ft. deep , course SW.
	Ascend.
33.00	Spur , 90 ft. high , projects SW.
	Descend.
36.90	Hollow , 30 ft. deep , course S.
	Ascend.
40.02	Set an iron post , 3 ft. long , 1 in. in dia., 12 ins. in the ground and 12 ins. in a mound of stone and earth , 4 ft. base , 1 ft. high , for $\frac{1}{4}$ sec. cor., with brass cap marked S 14 $\frac{1}{4}$ S 23 1913 raise a mound of stone , 2 ft. base , $1\frac{1}{2}$ ft. high , N. of cor.
	Note: On account of natural obstacles I am unable to set post more than 12 ins. in the ground.
44.50	Ridge , 110 ft. high , bears N. and S.
	Descend.
51.30	Hollow , 120 ft. deep , course SW.
	Ascend.
56.90	Spur , 110 ft. high , projects SW.
	Descend.
68.30	Hollow , 120 ft. deep , course SW.
	Thence over land sloping S.
80.04	The cor. of secs. 14 , 15 , 22 and 23.
	Land , rough , broken mountains with steep E. and W. slopes of ridges and spurs into hollows draining S.
	Soil , gravelly , sandy and some rocky on gravelly and rocky sub-soil ; 3 rd. rate.
	No timber.
	Undergrowth , short shadscale and some bunch grass , good for grazing purposes.

Subdivision of T. 2 N.,R.11 W.

chains	
	Mountainous land , 80.04 chs.

	N.0°02'W., bet. secs. 14 and 15.
	Ascend over mountainous land covered with short undergrowth of shadscale and scattering scrub cedar and pinon timber.
17.00	Spur , 50 ft. above sec. cor., projects SW.
	Descend.
23.00	Hollow , 50 ft. deep , course SW.
	Ascend.
28.55	Spur , 60 ft. high , projects SE.
	Descend
30.90	Same hollow , 60 ft. deep , course SE.
	Ascend.
39.00	Spur , 80 ft. high , projects W.
	Descend.
40.00	Set an iron post , 3 ft. long , 1 in. in dia., 24 ins. in the ground for ¼ sec. cor., with brass cap marked S 15 | S 14 ¼ 19 | 13 raise a mound of stone , 2 ft. base , 1½ ft. high , W. of cor.
42.00	Same hollow , 50 ft. deep , course SW.
	Ascend.
52.66	Ridge , 140 ft. above hollow , bears NE. and SW.
	Descend.
57.50	Head of hollow , drains SW.
	Ascend.
61.50	Spur , 90 ft. high , projects SW.
	Descend.
64.70	Head of hollw , drains. W.
	Ascend.
72.45	Spur , 100 ft. high , projects W.
	Descend.
75.30	Head of hollow , drains SW.

Subdivision of T.2 N.,R.11 W.

chains	
	Ascend
80.00	On steep S. slope.
	Set an iron post , 3 ft. long , 2 ins. in dia., 24 ins. in the ground for cor. of secs. 10 , 11 , 14 and 15 , with brass cap marked

T 2 N.	R 11 W
S 10	S 11
S 15	S 14

1913

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

Land , rough mountainous with steep N. and S. slopes of ridges into hollows draining SW.

Soil , gravelly and rocky on rocky sub-soil ; 4 th. rate.

Timber , a few scattering scrub cedar and pinon.

Undergrowth , short shadscale and some bunch grass , good for grazing.

Mountainous or timbered land 80.00 chs.

June 12 : At this sec. cor., I set off 23°10' N., on the decl. arc ; and at 12 h 00 m. a. m. l. m. t., observe the sun on the meridian ; the resulting lat is 40°54'.

East , on a random line bet. secs. 11 and 14

40.00 Set temp. ¼ sec. cor.

80.05 Intersect N. and S. line 5 lks. N. of the cor. of secs. 11 , 12 , 13 and 14.

Thence

N.89°58'W., on true line bet. secs. 11 and 14.

Over mountainous land covered with scattering scrub cedar and pinon timber and undergrowth of shadscale.

Ascend.

2.25 Spur , 25 ft. above sec. cor., projects SE.

Descend.

6.45 Hollow , 70 ft. deep , course SE.

Ascend.

Subdivision of T.2 N.,R.11 W.

chains

30.10 Spur , 120 ft. above hollow , projects SE.

Descend.

34.25 Head of hollow , 65 ft. below spur , course SE.

Ascend 50 ft. to.

40.02½ Set an iron post , 3 ft. long , 1 in. in dia., 24 ins. in the ground for ¼ sec. cor., with brass cap marked

S 11
¼
S 14
1913

raise a mound of stone , 2 ft. base , 1½ ft. high , N. of cor.

54.45 Top of ridge and divide , 150 ft. above ¼ sec. cor., bears N. and S. A peak about 100 ft. above this point , bears S. about 8 chs.

Descend abruptly.

65.55 Hollow , 200 ft. below ridge , course S.30°W.

Ascend abruptly.

70.60 Spur , 120 ft. high , projects S.

Descend

72.75 Hollow , 30 ft. deep , course S.

Ascend.

75.60 Ridge , 60 ft. above hollow , bears NE. and S.

Descend abruptly 125 ft. to

80.05 The cor. of secs. 10 , 11 , 14 and 15

Land rough mountainous with E. and W. exposures from divide at 54.45 chs.

Soil , rocky , gravelly and some clay on clay and rocky sub-soil ; 3 rd. rate.

Timber , scattering scrub cedar and pinon.

Undergrowth , short shadscale and considerable rich bunch grass , good for grazing purposes.

Land mountainous or timbered 80.05 chs.

June 12 ,.1913

Subdivision of T.2 N.,R.11 W.

chains	
	June 16 : At 8 h. 00 m. a. m. l. m. t., I set off 40°55' on the lat. arc ; 23°22' N., on the decl. arc ; and determine a meridian with the solar at the cor. of secs. 10 , 11 , 14 and 15
	Thence I run
	N.0°02'W., bet. secs. 10 and 11.
	Over rough mountainous land , through scattering scrub cedar and pinon timber and undergrowth of short shadscale.
	Ascend abruptly.
3.20	Spur , 120 ft. high , projects SW.
	Descend.
11.10	Hollow , 120 ft. deep , course SW.
	Ascend.
17.40	Spur , 100 ft. high , projects SW.
	Descend.
23.30	Hollow , 90 ft. deep , course SW.
	Ascend abruptly.
30.00	Ridge , 160 ft. high , bears NE. and SW.
	Descend.
32.50	Hollow , 50 ft. deep , course NW.
	Ascend.
35.70	Spur , 40 ft. high , projects NW.
	Descend.
38.80	Hollow , 60 ft. deep , course NW.
	Ascend
40.00	On SW. slope.
	Set an iron post , 3 ft. long , 1 in. in dia., 24 ins. in the ground for $\frac{1}{4}$ sec. cor., with brass cap marked

$$\frac{S\ 10}{\frac{1}{4}} \Big| S\ 11$$

1813

from which

A cedar , 10 ins. diam., bears N.83½°E., 130 lks. dist., marked $\frac{1}{4}$ S 11 B T

chains	
	A cedar, 8 ins. diam., bears N.42½°W., 104 lks. dist., marked ¼ S 10 B T
45.00	Spur, 35 ft. high, projects NW.
	Descend.
53.80	Hollow, 60 ft. deep, course NW.
	Ascend.
59.30	Spur, 40 ft. high, projects NW.
	Descend.
66.40	Hollow, 30 ft. deep, course W.
	Ascend.
75.50	Low spur, projects W.
	Descend.
78.00	Bottom of main hollow, drains SW.
	Ascend.
80.00	Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground for cor. of secs. 2, 3, 10 and 11, with brass cap marked

T 2 N S 3	R 11 W S 2
S 10	S 11

1913

from which

A cedar, 8 ins. diam., bears N.78½°E., 306 lks. dist., marked T 2 N R 11 W S 2 B T

A cedar, 14 ins. diam., bears S.79¼°E., 365 lks. dist., marked T 2 N R 11 W S 11 B T

No tree in sec. 10

A cedar, 14 ins. diam., bears N.70°W., 316 lks. dist. marked T 2 N R 11 W S 3 B T.

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

Land, rough mountainous with steep N. and S. slopes of ridges and spurs into hollows draining SW.

Soil, gravelly, rocky and some sand on gravelly and rocky sub-soil; 3 rd. rate.

Subdivision of T.2 N., R.11 W.

chains	
	Timber, scattering scrub cedar and pinon.
	Undergrowth , short shadscale and considerable bunch grass , good for grazing purposes.
	Land mountainous 80.00 chains.

	S.89°58' E., on a random line bet. secs. 2 and 11
40.00	Set temp. $\frac{1}{4}$ sec. cor.
79.97	Intersect N. and S. line 9 lks. S. of the cor. of secs. 1 , 2 , 11 and 12
	Thence
	S.89°58'W., on true line bet. secs. 2 and 11
	Over broken mountainous land draining S. and W., through scattering scrub cedar timber and short undergrowth of shadscale.
	Ascend 30 ft. to.
11.30	High ridge , bears N. and S.
	Descend abruptly.
11.70	Hollow , 90 ft. deep , course SW.
	Ascend.
15.00	Spur , 100 ft. high , projects SE.
	Descend.
21.70	Hollow , 30 ft. deep , course SW.
	Ascend.
24.50	Spur , 40 ft. high , projects SW.
	Descend.
31.50	Main hollow , 420 ft. below high ridge , course SE.
	Ascend abruptly.
39.98½	140 ft. above hollow.
	Set an iron post , 3ft. long , 1 in. in dia., 24 ins. in the ground for $\frac{1}{4}$ sec. cor., with brass cap marked
	$\frac{S\ 2}{\frac{1}{4}}$
	S 11
	1913
	from which

chains

A cedar , 18 ins. diam., bears S.67½°W., 137 lks. dist., marked ¼ S 11 B T

A cedar , 8 ins, diam., bears N.45½°W., 93 lks. dist., marked ¼ S 2 B T

June 16: At this ¼ sec. cor., I set off 23°22' N., on the decl. arc ; and at 12 h. 00 m. a. m. l. m. t., observe the sun on the meridian ; the resulting lat. is 40°55'.

44.80 Top of ridge and divide , 30 ft. above ¼ sec. cor., bears N. and S.

Descend.

58.00 Hollow , 250 ft. below ridge , course NW.

Ascend.

62.80 Spur , 30 ft. high , projects NW.

Descend.

77.90 Bottom of main hollow , course SW.

Ascend

79.97 The cor. of secs. 2 , 3 , 10 and 11.

Land , rough mountainous , with steep E. and W. slopes of ridges into hollows draining SW. and SE.

Soil , loose rocks , gravelly and some sandy clay on gravelly , rocky and sandy sub-soil ; 3 rd. rate.

Timber , scattering scrub cedar and pinon.

Undergrowth , short shadscale and considerable bunch grass good for grazing purposes.

Mountainous or timbered land , 79.97 chs.

N0°02'W., bet. secs. 2 and 3 on random line.

40.00 Set temp. ¼ sec. cor.

80.10 Intersect N. bdy. of the tp, 3 lks. E. of the cor. of secs. 2 , 3 , 34 and 35 heretofore described.

Thence

S.0°03'E., on true line bet. secs. 2 and 3

Over mountainous land through scattering scrub cedar timber and undergrowth of sage brush

Subdivision of T.2 N.,R.11 W.

chains	
	Descend.
.85	Hollow , drains SE.2 chs., thence NE.
	Ascend.
1.70	Low spur , projects NE. 1 ch.
	Descend.
3.10	Hollow , 25 ft. deep , course NE.
	Ascend.
13.30	Top of ridge and divide , 75 ft. above hollow , bears E. and W.
	Descend 75 ft. to.
20.10	Hollow , drains SE.
	Ascend.
34,90	Spur , 60 ft. high , projects E.
	Descend.
29.70	Hollow , 50 ft. deep , course SE.
	Ascend
34.10	Spur , 40 ft. high , projects E.
	Descend.
37.50	Hollow , 60 ft. deep , course E.
	Ascend abruptly.
40.10	Set an iron post , 3 ft. long , 1 in. in dia., 24 ins. in the ground for ¼ sec. cor., with brass cap marked

S ¼ 3 | S 2

1913

from which

A cedar , 11 ins. diam., bears S.79°E.,171 lks. dist., marked ¼ S 2 B T

A cedar , 7 ins. diam., bears N.82°W., 108 lks. dist., marked ¼ S 3 B T

42.10	Spur , 75 ft. above hollow , projects SE.
	Gradually descend along S. slope.
58.80	Hollow , 120 ft. below spur , course SW.
	Ascend.
62.10	Same spur , 20 ft. above hollow , projects SW.
	Descend.

chains

67.50 Hollow , 60 ft. below spur , course SE.

Ascend.

71.00 Spur , 50 ft. high , projects SE.

Descend.

80.10 60 ft. below spur.

The cor. of secs. 2 , 3 , 10 and 11.

Land , mountainous , with steep N. and S. slopes of ridges into hollows draining NE. on N. 13.30 chs. and SE. on remainder of mile.

Soil , gravelly , sandy clay and some rocky on gravelly and clay sub-soil ; 3 rd. rate.

Timber , scattering scrub cedar and pinon.

Undergrowth , short shadscale and considerable bunch grass good for grazing purposes.

Mountainous or timbered land 80.10 chs.

June. 16 , 1913

Howard O'Miller

U. S. Surveyor

June 9 : 7 h. 58 m. a. m. l. m. t., I set off 40°51' on the lat. arc ; 22°56' N., on the decl. arc ; and determine a meridian with the solar at the cor. of secs. 3 , 4 , 33 and 34 on the S. bdy. of the tp. heretofore described.

Thence I run

N.0°02'W., bet. secs. 33 and 34.

Gradually ascend over slightly rolling ground through short undergrowth of shadscale.

40.00 Set an iron post , 3 ft. long , 1 in. in dia., 24 ins. in the ground for $\frac{1}{4}$ sec. cor., with brass cap marked

S $\frac{33}{4}$ | S 34

1913

chains

dig pits , 18 x 18 x 12 ins., N. and S. of post , 3 ft. dist., raisea mound of earth , 3½ft. base , 1½ ft. high , W. of cor.

70.00 Wash , 8 lks. wide , 4 ft. deep , course SW.

80.00 Set an iron post , 3 ft. long , 2 ins. in dia., 24 ins. in the ground for cor. of secs. 27 , 28 , 33 and 34 , with brass cap marked

T 2 N S 28	R 11 W S 27
S 33	S 34

1913

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 , gently rolling with SW. exposure.

Soil , light , fine , dry , sandy clay , slightly baked and mixed with alkali on hard dry clay sub-soil ; 2 nd. rate.

No timber.

Undergrowth , short shadscale and some white sage.

N.89°59'E., on a random line bet. secs. 27 and 34

40.00 Set temp. ¼ sec. cor.

79.95 Intersect N. and S. line 1 lk. S. of the cor. of secs. 26 , 27 , 34 and 35

Thence

S.89°59'W., on true line bet. secs. 27 and 34.

Gradually descend over rolling ground through short under-growth of shadscale and white sage.

35.15 Wash , 8 lks. wide , 4 ft. deep , course SW.

39.97½ Set an iron post , 3 ft. long , 1 in. in dia. 24 ins. in the ground for ¼ sec. cor., with brass cap marked

S 27
¼
S 34
1913

chains	
	dig pits , 18 x 18 x 12 ins., E. and W. of post , 3 ft. dist., raise a mound of earth , 3½ft. base , 1½ ft. high , N. of cor.
67.65	Wash , 12 lks. wide , 6 ft. deep , course SW.
79.90	Wagon road , bears NW. and SE.
79.95	The cor. of secs. 27 , 28 , 33 and 34.
	Land , slightly rolling hills , S. exposure.
	Soil , light , fine , sandy clay and gravel on clay and gravelly sub-soil ; 2 nd. rate.
	No timber.
	Undergrowth , short shadscale and white sage.

	N.0°02'W., bet. secs. 27 and 28
	Gradually ascend over rolling land through short undergrowth of shadscale and salt sage.
.10	Wagon road , bears NW. and SE.
40.00	Set an iron post , 3 ft. long , 1 in. in dia., 24 ins. in the ground for ¼ sec. cor., with brass cap marked S 28 | S 27 ¼ 1913 raise a mound of stone , 2 ft. base , 1½ ft. high , W. of cor.
44.10	Wash , 8 lks. wide , 4 ft. deep , course SW.
75.00	Wash , 15 lks. wide , 6 ft. deep , course SW.
80.00	Set an iron post , 3 ft. long , 2 ins. in dia., 12 ins. in the ground and 12 ins. in a mound of stone and earth , 4 ft. base , 1 ft. high for cor. of secs. 21 , 22 , 27 and 28 , with brass cap marked T 2 N | R 11 W S 21 | S 22 --- S 28 | S 27 1913 raise a mound of stone , 2 ft. base , 1½ ft. high , W. of cor.
	Note:

Subdivision of T.2 N., R.11 W.

chains	
	On account of natural obstacles I am unable to set post more than 12 ins. in the ground.
	Land , slightly rolling hills with SW.exposure.
	Soil , light , fine , dry , sandy clay and gravel on clay and gravelly sub-soil ; 2 nd. rate.
	No timber.
	Undergrowth , short shadscale and some salt sage,
	June 9 : At this sec. cor. I set off 23°57' N., on the decl. arc ; and at 11 h. 59 m. a. m. l. m. t., observe the sun on the meridian ; the resulting lat. is 40°52'

	N.89°59'E., on a random line bet. secs. 22 and 27
40.00	Set temp. ¼ sec. cor.
79.94	Intersect N. and S. line , 5 lks. S. of the cor. of secs. 22 , 23, 26 and 27
	Thence
	S.89°57'W., on true line bet. secs. 22 and 27
	Gradually descend over rolling land , through short undergrowth of shadscale and salt sage.
14.50	Wagon road , bears NW. and SE.
39.97	Set an iron post , 3 ft. long , 1 in. in dia., 24 ins. in the ground for ¼ sec. cor., with brass capmarked S 22 ¼ S 27 1913 dig pits , 18 x 18 x 12 ins., E. and W. of post , 3 ft. dist., raise a mound of earth , 3½ft. base , 1½ ft. high , N. of cor.
55.00	Wash , 15 lks. wide , 4 ft. deep , course SW.
61.30	Wash , 20 lks. wide , 6 ft. deep , course SW.
78.60	Wash , 10 lks. wide , 2 ft. deep , course SW.
79.94	The cor. of secs. 21 , 22 , 27 and 28.
	Land , slightly rolling SW. exposure.
	Soil , light , dry , sandy clay and gravel on dry clay sub-soil ; 2 nd. rate.

chains	
	No timber.
	Undergrowth , short shadscale and salt sage.
	N.0°02'W., bet. secs. 21 and 22
	Ascend over rolling hills covered with short undergrowth of shadscale and salt sage.
5.00	Wash , 20 lks. wide , 5 ft. deep , course S.15°W.
27.10	Wash , 25 lks. wide , 10 ft. deep , course SW.
40.00	Set an iron post , 3 ft. long , 1 in. in dia., 24 ins. in the ground for $\frac{1}{4}$ sec. cor., with brass cap marked S 21 $\frac{1}{4}$ | S 22 1913 raise a mound of stone , 2 ft. base , 1½ ft. high , W. of cor.
42.50	Wash , 20 lks. wide , 10 ft. deep , course S.5°W.
67.00	Begin steeper ascent.
75.00	Wagon road , bears NW. and S.85°E.
76.00	Small gulch , drains SW.
80.00	Set an iron post , 3 ft. long , 2 ins. in dia., 24 ins. in the ground for cor. of secs. 15 , 16 , 21 and 22 , with brass cap marked T 2 N | R 11 W S 16 | S 15 S 21 | S 22 1913 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 ; rolling hills with S. exposure.
	Soil ; light sandy clay and gravel on clay sub-soil ; 2 nd rate.
	No timber.
	Undergrowth , short shadscale and some salt sage.
	June 9 , 1913

Subdivision of T.2 N.,R.11 W.

chains	
	June 10 : At 7 h. 59 m. a. m. l. m. t., I set off 40°54' on the lat. arc ; 23°01' N., on the decl. arc ; and determine a meridian with the solar at the cor. of secs. 15 , 16 , 21 and 22.
	Thence I run
	N.89°57'E., on a random line bet. secs. 15 and 22
40.00	Set temp. ¼ sec. cor.
79.90	Intersect N. and S. line , 7 lks. N. of the cor. of secs. 14 , 15 , 22 and 23 .
	Thence
	West , on true line bet. secs. 15 and 22.
	Over mountainous land , through short undergrowth of shadscale.
	Descend over land facing W.
4.30	Gulch , 60 ft. deep , course SW.
	Ascend over bank of gulch , thence descend.
34.90	Gulch , 15 ft. deep , course SW.
36.30	Gulch , 25 ft. deep , course SW.
39.95	Set an iron post , 3 ft. long , 1 in. in dia., 24 ins. in the ground for ¼ sec. cor., with brass cap marked S ¼ 15 S 22 1913 dig pits , 18 x 18 x 12 ins., E. and W. of post , 3 ft. dist., raise a mound of earth , 3½ft. base , 1½ ft. high , N. of cor.
48.10	Large wash , 70 lks. wide , 8 ft. deep , course S.30°W.
	Ascend.
62.90	Wagon road , bears N. and S.
70.00	Ascend abruptly.
74.80	Top of rocky limestone ridge , 100 ft. high , bears N. and S.
	Descend abruptly.
79.50	Small gulch , drains SW.
79.90	The cor. of secs. 15 , 16 , 21 and 22

chains	
	Land , broken mountains cut by numerous washes draining S.
	Soil , gravelly and rocky of limestone formation om rocky sub-soil ; 3 rd. rate.
	No timber.
	Undergrowth , short shadscale.
	Mountainous land ,. 79.90 chs.

	N.0°02'W., bet. secs. 15 and 16.
	Ascend over rolling mountainous land covered with short undergrowth of shadscale and sage brush.
21.00	Top of ridge , 110 ft. above sec. cor., bears NE. and SW. 5 chs.
	Thence along top of W. side of ridge.
40.00	Set an iron post , 3 ft. long , 1 in. in dia., 24 ins. in the ground for $\frac{1}{4}$ sec. cor., with brass cap marked S $\frac{1}{4}$ 16 | S 15 1913 from which A cedar , 4 ins. diam., bears N.64½°W., 71 lks. dist., marked $\frac{1}{4}$ S 16 B T dig pits , 18 x 18 x 12 ins., N. and S. of post , 3 ft. dist., raise a mound of earth , 3½ft. base , 1½ ft. high , W. of cor. No other trees within limits.
50.00	Thence over numerous washes and spurs.
66.00	Descend abruptly.
76.00	Gulch , 70 ft. deep , course W.
	Ascend.
80.00	Set an iron post , 3 ft. long , 2 ins. in dia., 24 ins. in the ground for cor. of secs. 9 , 10 , 15 and 16 , with brass cap marked T 2 N | R 11 W S 9 | S 10 S 16 | S 15 1913

chains	
	raise a mound of stone , 2 ft. base , 1½ ft. high , W. of cor.
	Land , mountainous , W. exposure.
	Soil , gravelly , rocky , shale and some clay on gravelly and clay sub-soil ; 3 rd. rate.
	Timber , a few scattering cedar.
	Undergrowth , short shadscale and some sage brush.
	Mountainous land , 80.00 chs.
	June 10 : At this sec. cor., I set off 23°02' N., on the decl. arc ; and at 11 h. 59 m. a. m. l. m. t., observe the sun on the meridian , the resulting lat. is 40°55'
	June 10 , 1913
	June 16 : At 7 h. 30 m. a. m. l. m. t., I set off 40°55' on the lat. arc ; 23°22' N., on the decl. arc ; and determine a meridian with the solar at the cor. of secs. 9 , 10 , 15 and 16
	Thence I run
	East , on a random line bet. secs. 10 and 15
40.00	Set temp. ¼ sec. cor.
79.97	Intersect N. and S. line 2 lks. N. of the cor. of secs. 10 , 11 , 14 and 15
	Thence
	N.89°59'W., on true line bet. secs. 10 and 15
	Over mountainous land , through scattering scrub cedar and undergrowth of shadscale.
	Gradually descend along S. side of spur.
6.50	Top of spur , projects W.
	Descend abruptly.
32.00	Bottom of main hollow , 175 ft. below spur ; course SW.
	Ascend abruptly.
39.28½	Set an iron post , 3 ft. long , 1 in. in dia., 12 ins. in the ground and 12 ins. in a mound of stone and earth , 4 ft. base , 1 ft. high , for ¼sec. cor., with brass cap marked

chains

S 10
¼
S 15
1913

raise a mound of stone , 2 ft. base , 1½ ft. high , N. of cor.

Note:
On account of natural obstacles I am unable to set post more than 12 ins. in the ground.

41.30 Top of ridge , 150 ft. high , bears NE. and S.

Descend abruptly.

52.00 Base of steep descent , gradually descend.

55.00 Wagon road , bears N. and S.

60.80 Main gulch , course from N.30°E. to S.75°W.

From this point gulch breaks abruptly down W. face of mountain through rocky canyon.

Descend abruptly.

79.97 The cor. of secs. 9 , 10 , 15 and 16.

Land , mountainous draining SW., with steep E. and W. slope of ridges.

Soil , sandy clay , gravelly and rocky on clay and rock sub-soil ; 3 rd. rate.

Timber , scattering cedar.

Undergrowth , short shadscale.

Mountainous land 79.97 chs.

N.0°02'W., bet. secs. 9 and 10

Over rocky mountainous land draining W., through scattering scrub cedar timber and undergrowth of shadscale.

Ascend.

16.75 Top of rocky limestone ridge , bears NE. and SW.

Descend abruptly.

36.70 Bottom of gulch , 80 ft. deep , course SW.

Ascend abruptly.

40.00 Set an iron post , 3 ft. long , 1 in. in dia., 24 ins. in the ground for ¼ sec. cor., with brass cap marked

Subdivision of T.2 N., R.11 W.

chains

S 9 | S 10
1/4
1913

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

49.00 Top of limestone ridge , bears NE. and SW

Gradually descend.

61.00 Mouth of gulch , course SW.

Ascend abruptly.

76.80 Ridge , bears NE. and SW.

Descend abruptly.

80.00 Set an iron post , 3 ft. long , 2 ins. in dia., 12 ins. in the ground and 12 ins. in a mound of stone and earth , 4 ft. base , 1 ft. high , for cor. of secs. 3 , 4 , 9 and 10 , with brass cap marked

T 2 N | R 11 W
S 4 | S 3
S 9 | S 10
1913

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

Note:
On account of natural obstacles I am unable to set post more than 12 ins. in the ground.

Land , mountainous W. exposure., cut by numerous gulches.

Soil , gravelly and rocky of limestone formation on gravel and clay sub-soil ; 3 rd. rate.

Timber , scattering ceadr.

Undergrowth , short s hadscale.

Mountainous land, 80.00 chs.

S.89° 59'E., on a random line bet. secs. 3 and 10

40.00 Set temp. ¼ sec. cor..

80.00 Intersect N. and S. line 2 lks. N. of the cor. of secs. 2 , 3 , 10 and 11

Thence

Subdivision of T.2 N., R.11 W.

chains	
	N.89°58'W., on true line bet. secs. 3 and 10
	Over rough mountainous land , through scattering scrub cedar timber and undergrowth of shadscale.
	Ascend.
30.20	Top of ridge , 400 ft. above sec. cor., bears N. and SW.
	Descend abruptly.
40.00	Set an iron post , 3 ft. long , 1 in. in dia., 24 ins. in a mound of stone and earth , 4 ft. base , 2 ft. high , for $\frac{1}{4}$ sec. cor., with brass cap marked S 3 $\frac{1}{4}$ S.10 1913 raise a mound of stone , 2 ft. base , 1½ ft. high , N. of cor.
	Note: On account of natural obstacles I am unable to set post in the ground.
41.60	Gulch , 100 ft. deep , course SW.
	Thence over land facing S.
51.00	Gulch , 100 ft. deep , course S.20°E.
	Ascend abruptly.
63.00	Top of ridge ; bears NE. and SW.
	Descend abruptly.
80.00	400 ft. below ridge.
	The cor. of secs. 3 , 4 , 9 and 10
	Land , rough mountainous draining SW., with steep E. and W. slopes of ridges.
	Soil , gravelly , rocky and some sandy clay , on sandy and gravelly sub-soil ; 3 rd. rate.
	Timber , scattering scrub cedar.
	Undergrowth , short shadscale. Some bunch grass , good for grazing purposes.
	Mountainous land , 80.00 chs.
	June 16 : At this sec. cor., I set off 23°22' N., on the decl. arc ; and at 12 h. 00 m. a . m. l. m. t., observe the sun on the meridian ; the resulting lat. is 40°56'.

Subdivision of T. 2 N., R.11 W.

chains	
	N.0°02'W., on a random line bet. secs. 3 and 4
40.00	Set temp. ¼ sec. cor.
80.00	Intersect N. bdy. of the tp. 12 lks. E. of the cor. of secs. 3 , 4 , 33 and 34 , heretofore described.
	Thence
	S.0°07'E., on true line bet. secs. 3 and 4.
	Over mountainous land descending along top of ridge through scattering scrub cedar timber and undergrowth of shadscale.
16.50	Gulch , 100 ft. deep , course W.
	Gradually descend along E. side of gulch.
25.00	Same gulch , course S.10°E.
	Thence along W. side of gulch.
40.00	Set an iron post , 3 ft. long , 1 in. in dia., 24 ins. in the ground for ¼ sec. cor., with brass cap marked S ¼ 4 | S 3 1913 from which A pinon , 6 ins. diam., bears S.13°E., 107 lks. dist., marked ¼ S 3 B T A cedar , 8 ins. diam., bears S.31½°W., 121 lks. dist., marked ¼ S 4 B T
40.60	Same gulch , course S.10°W.
	Thence along E. side of gulch.
72.50	Gulch , course S.80°W.
	Ascend
80.00	The cor. of secs. 3 , 4 , 9 and 10
	Land mountainous draining S. and W., the greater part of the mile following along the bottom of a large gulch.
	Soil , gravelly , rocky and some sand on rocky sub-soil; 4 th. rate.
	Timber , some scattering scrub cedar.
	Undergrowth , short shadscale. Some bunch grass , good for grazing purposes.
	Mountainous land , 80.00 chs.

Subdivision of T.2 N.,R.11 W.

chains

June 16 , 1913

June 11 : At 7 h. 59 m. a. m. l. m. t., I set off 40°51' on the lat. arc ; 23°06' N., on the decl. arc ; and determine a meridian with the solar at the cor. of secs. 4 , 5 , 32 and 33 on the S. bdy. of the tp. heretofore described.

Thence I run

N.0°03'W., bet. secs. 32 and 33.

Over nearly level land , through short undergrowth of shadscale and scattering greasewood.

40.00 Set an iron post , 3 ft. long , 1 in. in dia., 24 ins. in the ground for $\frac{1}{4}$ sec. cor., with brass cap marked

S 32 $\frac{1}{4}$ | S 33

1913

dig pits , 18 x 18 x 12 ins., N. and S. of post , 3 ft. dist., raise a mound of earth , 3½ft. base , 1½ ft. high , W. of cor.

80.00 Set an iron post , 3 ft. long , 2 ins. in dia., 24 ins. in the ground for cor. of secs. 28 , 29 , 32 and 33 , with brass cap marked

T 2 N | R 11 W	
S 29	S 28
S 32	S 33

1913

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.

Soil , light , fine , dry , sandy clay , slightly baked and mixed with alkali on hard , friable clay sub-soil; 2 nd. rate.

Subdivision of T.2 N.,R.11 W.

chains	
	No timber.
	Undergrowth , short shadscale and some greasewood .

	N.89°59'E., on a random line bet. secs. 28 and 33
40.00	Set temp. $\frac{1}{4}$ sec. cor.
79.96	Intersect N. and S. line 1 lk. N. of the cor. of secs. 27 , 28 , 33 and 34
	Thence
	S.89°59'W., on true line bet. secs. 28 and 33
	Over nearly level land covered with short undergrowth of shadscale and salt sage.
39.98	Set an iron post , 3 ft. long , 1 in. in dia., 24 ins. in the ground for $\frac{1}{4}$ sec. cor., with brass cap marked S 28 $\frac{1}{4}$ S 33 1913 dig pits , 18 x 18 x 12 ins., E. and W. of post , 3 ft. dist., raise a mound of earth , 3½ ft. base , 1½ ft. high , N. of cor.
79.96	The cor. of secs. 28 , 29 , 32 and 33
	Land gently rolling sloping SW.
	Soil , light , dry , fine , warm sandy clay , slightly baked and mixed with alkali on a hard , dry , friable clay sub-soil ; 2 nd. rate.
	No timber.
	Undergrowth , short shadscale and some salt sage.

	N.0°03'W., bet. secs. 28 and 29
	Gradually ascend over gently rolling ground covered with short undergrowth of shadscale.
24.50	Wash , 20 lks. wide , 3 ft. deep , course W.
40.00	Set an iron post , 3 ft. long , 1 in. in dia., 24 ins. in the ground for $\frac{1}{4}$ sec. cor., with brass cap marked

chains

S ¼ 29 | S 28

1913

dig pits , 18 x 18 x 12 ins., N. and S. of post , 3 ft. dist., raise a mound of earth , 3½ft. base , 1½ ft. high , W. of cor.

40.50 Wagon raod , bears NW. and SE.

Begin ascent over rolling hills.

52.50 Ascend abruptly.

62.30 Top of limestone ridge , 80 ft. high , bears NE. and S.30°W

Descend abruptly.

79.15 Wash , 15 lks.wide , 4 ft. deep , course W.

80.00 Set an iron post , 3 ft. long , 2 ins. in dia., 24 ins. in the ground for cor. of secs. 20 , 21 , 28 and 29 , with brass cap marked

T 2 N	R 11 W
S 20	S 21
S 29	S 28

1913

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 , rolling hills with general SW. exposure.

Soil , gravelly , sandy clay and some rocky on hard , dry clay and gravel sub-soil ; 3 rd.rate.

No timber.

Undergrowth , short shadscale and salt sage.

N.89°59'E., on a random line bet. secs. 21 and 28

40.00 Set temp. ¼ sec. cor.

79.92 Intersect N. and S. line at the cor. of secs. 21 , 22 , 27 and 28.

Thence

S.89°59'W., on true line bet. secs. 21 and 28.

Gradually descend over rolling hills sloping SW., through

Subdivision of T.2 N.,R.11 W.

chains

short undergrowth of shadscale and some salt sage.

1.20 Wash , 1 ch. wide , 6 ft. deep , course SW.

24.45 Wash , 60 lks. wide , 6 ft. deep , course S.60°W.

33.00 Wash , 1 ch. wide , 2 ft. deep , course SW.

39.96 Set an iron post , 3 ft. long , 1 in. in dia., 24 ins. in the ground for $\frac{1}{4}$ sec. cor., with brass cap marked

$$\frac{S\ 21\ \frac{1}{4}}{S\ 28}$$

1913

raise a mound of stone , 2 ft. base , 1½ ft. high ., N. of cor.

June 11 : At this $\frac{1}{4}$ sec. cor., I set off 23°06' N., on the decl. arc ; and at 11 h. 59 m. a. m. l. m. t., observe the sun on the meridian ; the resulting lat. is 40°53'.

79.92 The cor. of secs. 20 , 21 , 28 and 29.

Land , rolling hills with SW. exposure.

Soil , gravelly and sandy clay on hard , dry clay and gravel sub-soil ; 2 nd, rate.

No timber.

Undergrowth , short shadscale and some salt sage,

N.0°03'W., bet. secs. 20 and 21

Gradually ascend over rolling hills , covered with short undergrowth of shadscale and salt sage.

15.00 Wash , 20 lks. wide , 4 ft. deep , course W.

40.00 Set an iron post , 3 ft. long , 1 in. in dia., 24 ins. in the ground for $\frac{1}{4}$ sec. cor., with brass cap marked

$$S\ \frac{20}{\frac{1}{4}} \mid S\ 21$$

1913

dig pits , 18 x 18x 12 ins., N. and S. of post , 3 ft. dist., raise a mound of earth , 3½ft. base , 1½ ft.

Subdivision of T.2 N.,R.11 W.

chains

high , W. of cor.

38.10 Wash , 30 lks. wide , 5 ft. deep , course SW.

78.80 Wash , 30 lks. wide , 8 ft. deep , course SW.

80.00 Set an iron post , 3 ft. long , 2 ins. in dia., 24 ins. in the ground for cor. of secs. 16 , 17 , 20 and 21 with brasscap marked

T 2 N S 17	R 11 W S 16
S 20	S 21

1913

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

Land , rolling hills with W. exposure.

Soil , sandy clay and gravel on cly and gravel sub-soil ; 2 nd. rate.

No timber.

Undergrowth , short shadscale and some salt sage.

N.89°59'E., bet. secs. 16 and 21, on random line,

40.00 Set temp. ¼ sec. cor.

79.90 Intersect N. and S. line 2 lks. S. of the cor. of secs. 15 , 16 , 21 and 22

Thence

S.89°58'W., on true line bet. secs. 16 and 21

Gradually descend over rolling bench land covered with short undergrowth of salt sage and shadscale.

18.00 Wagon road , bears NW. and SE.

30.00 Top of ridge , bears SW. and extends onto bench NE. Descend abruptly.

39.25 Set an iron post , 3 ft. long , 1 in. in dia., 24 ins. in a mound of stone and earth , 4 ft. base , 2 ft. high , for ¼ sec. cor., with brass cap marked

S 16
¼
S 21
1913

Subdivision of T. 2 N., R. 11 W.

chains

raise a mound of stone , 2 ft. base , 1½ ft. high , N. of cor.

Note:
On account of natural obstacles I am unable to set post in the ground.

50.00 Base of bench and ridge , 150 ft. below top , bears N. and S.

Gradually descend.

69.00 Wash , 30 lks. wide , 3 ft. deep , course SW.

79.00 Wash , 30 lks. wide , 8 ft. deep , course SW.

79.80 The cor. of secs. 16 , 17 , 20 and 21.

Land , rolling hills , with a general W. exposure.

Soil , sandy clay , gravelly and some rocky on dry sub-soil of clay and gravel ; 3 rd. mte.

No timber.

Undergrowth , short salt sage and shadscale.

June 11 , 1913

June 13 : At 7 h. 30 m. a. m. l. m. t., I set off 40°54' on the lat. arc ; 23°14' N., on the decl. arc ; and determine a meridian with the solar at the cor. of secs. 16 , 17 , 20 and 21

Thence I run

N.0°03'W., bet. secs. 16 and 17

Gradually ascend over rolling hills , covered with short undergrowth of shadscale , white sage and salt sage.

24.00 Gulch , 150 lks. wide , 20 ft. deep , course SW.

38.00 Wash , 20 lks. wide , 4 ft. deep , course SW.

40.00 Set an iron post , 3 ft. long , 1 in. in dia., 12 ins. in the ground and 12 ins. in a mound of stone , 4 ft. base 1 ft. high , for ¼ sec. cor., with brass cap marked

S ¼ 17 | S 16

1913

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

Subdivision of T.2 N.,R.11 W.

chains	
	of cor.
	Note: On account of natural obstacles I am unable to set post more than 12 ins. in the ground.
47.50	Wash , 40 lks. wide , 6 ft. deep , course SW.
80.00	Set an iron post , 3 ft. long , 2 ins. in dia., 24 ins. in the ground for cor. of secs. 8 , 9 , 16 and 17 , with brass cap marked T 2 N | R 11 W S 8 | S 9 S 17 | S 16 1913
	raise a mound of stone , 2 ft. base , 1½ ft. high , W. of cor.
	Land , rolling hills with S. and SW. exposure.
	Soil , sandy clay , gravelly and rocky on dry clay and gravel sub-soil ; 3 rd. rate.
	No timber.
	Undergrowth , short shadscale , salt sage and white sage.
	N.89°58'E., on random line bet, secs. 9 and 16
40.00	Set temp. ¼ sec. cor.
80.00	Intersect N. and S. line 5 lks. N. of the cor. of secs. 9 , 10 , 15 and 16
	Thence
	West , on true line bet. secs. 9 and 16.
	Over mountainous land covered with short shadscale undergrowth .
	Descend.
3.65	Gulch , drains S.
	Ascend.
6.00	Top of limestone spur , projects S.60°W.
	Descend.
11.50	Base of spur , 70 ft. below top and leave mountainous land , bears N. and S.

Subdivision of T.2 N., R.11 W.

chains	
	Thence over rolling hills draining S.
29.30	Wagon road , bears NE. and SW.
40.00	Set an iron post , 3 ft. long , 1 in. in dia., 24 ins. in the ground for ¼ sec. cor., with brass cap marked

S 9
¼
———
S 16
1913

dig pits , 18 x 18 x 12 ins., E. and W. of post , 3 ft. dist., raise a mound of earth , 3½ ft. base , 1½ ft. high , N. of cor.

80.00	The cor. of secs. 8 , 9 , 16 and 17
	Land , mountainous and rolling hills with a general S. and W. exposure.
	Soil , gravelly , rocky , loose shale and some sand on gravelly and rocky sub-soil ; 3 rd. rate.
	Timber ., a few scattering scrub cedar on both sides of line.
	Undergrowth , short shadscale , salt sage and white sage.
	Mountainous land , E. 11.50 chs.

June 13, 1913.

[signature]

U. S. Transitman.

June 17 : At 7 h. 01 m. a. m. l. m. t., I set off 40°55' on the lat. arc ; 23°24' N., on the decl. arc ; and determine a meridian with the solar at the cor. of secs. 8 , 9 , 16 and 17.

Thence I run

N.0°03'W., bet. secs. 8 and 9

Gradually ascend over rolling land covered with short undergrowth of shadscale.

4.20	Wash, 3 ft.deep, 15 lks.wide,drains SW.

chains

40.00 Set an iron post , 3 ft. long , 1 in. in dia., 24 ins. in the ground for $\frac{1}{4}$ sec. cor., with brass cap marked

S 8 | S 9
$\frac{1}{4}$ |
1913

dig pits , 18 x 18 x 12 ins., N. and S. of post , 3 ft. dist., raise a mound of earth , 3½ft. base , 1½ ft. high , W. of cor.

59.00 Wash , 20 lks. wide , 2 ft. deep , course SW.

80.00 Set an iron post , 3 ft.long , 2 ins. in dia., 24 ins. in the ground for cor. of secs. 4 , 5 , 8 and 9 , with brass cap marked

T 2 N S 5	R 11 W S 4
S 8	S 9

1913

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 rolling , with a general S. exposure.

Soil , sandy , gravelly and some loose rocks on dry , friable clay and gravel sub-soil ; 3 rd.rate.

No timber.

Undergrowth , short shadscale.

East , on a random line bet. secs. 4 and 9

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

79.99 Intersect N. and S. line 7 lks. S. of the cor. of secs. 3 , 4 , 9 and 10

Thence

S.89°57'W., on true line bet. secs. 4 and 9.

Over broken mountainous land , through scattering scrub cedar timber and short undergrowth of shadscale.

Descend.

19.30 Gulch , 60 ft. below sec. cor., course SW.

Subdivision of T.2 N., R.11 W.

chains	
	Ascend
28.00	Spur , 70 ft. above gulch , projects S.
	Descend.
31.50	Hollow , 60 ft. deep , course S.
	Ascend.
34.00	Spur , 40 ft. high , projects S.
	Descend.
39.99½	Set an iron post , 3 ft. long , 1 in. in dia., 24 ins. in the ground for ¼ sec. cor., with brass cap marked S ¼ 4 S 9 1913 raise a mound of stone , 2 ft. base , 1½ ft. high , N. of cor.
52.00	Base of mountain , bears NW.and SE.
	Thence over rolling land.
71.30	Wagon road , bears NW. and SE.
79.99	The cor. of secs. 4 , 5 , 8 and 9.
	Land , mountainous and rolling , with a general S. and SW. exposure.
	Soil , gravelly , rocky , sandy and some clay on sand and gravel sub-soil ; 3 rd. rate.
	Timber , a few scattering scrub cedar.
	Undergrowth , short shadscale.
	Mountainous land , 52.00 chs.

	N.0°03'W., on a random line bet. secs. 4 and 5
40.00	Set temp ¼ sec. cor.
80.03	Intersect N. bdy. of the tp. 9 lks. E. of the cor. of secs. 4 , 5 , 32 and 33 heretofore described.
	Thence
	S.0°07'E., on true line bet. secs. 4 and 5.
	Over broken land draining NW., through short undergrowth of shadscale.

Subdivision of T.2 N.,R.11 W.

chains	
	Descend.
2.50	Hollow , 40 ft. below sec. cor., course NW.
	Ascend abruptly.
9.70	Spur , 60 ft. high , projects NW.
	Descend.
17.50	Hollow , 50 ft. deep , course NW.
	Ascend.
28.00	Spur , 50 ft. high , projects NW.
	Descend.
31.20	Hollow , 50 ft. deep , course NW.
	Ascend.
40.03	Set an iron post , 3 ft. long , 1 in. in dia., 24 ins. in the ground for $\frac{1}{4}$ sec. cor., with brass cap marked S $\frac{1}{4}$ 5 | S 4 1913 dig pits , 18 x 18 x 12 ins., N. and S. of post , 3 ft. dist., raise a mound of earth , $3\frac{1}{2}$ ft. base , $1\frac{1}{2}$ ft. high , W. of cor.
48.00	Spur , 60 ft. high , projects NW.
	Descemd.
60.00	Wash , 30 lks. wide , 2 ft. deep , course W.
	Thence over rolling land sloping S.
74.30	Wagon road , bears NW. and SE.
80.03	The cor. of secs. 4 , 5 , 8 and 9.
	Land broken and rolling , draining NW. on N. 60.00 chs. and S. on S. 20.03 chs.
	Soil , gravelly , rocky and hard clay on N.60 chs., and generally a light clay and gravel on S. 20 chs., sub-soil , generally gravelly and sandy clay ; 3 rd. rate.
	Timber , a few scattering scrub cedar on both sides of line
	Undergrowth , short shadscale.
	June 17: At this sec. cor., I set off 23°24' N., on the 3 decl. arc ; and at 12 h. 01 m. p. m. l. m. t., observe the sun on the meridian ; the resulting lat is 40°56'

Subdivision of T.2 N.,R.11 W.

chains

Howard M. Miller

U. S. Surveyor.

June 12 : At 8 h. 00 m. a. m. l. m. t., I set off 40°51' on the lat. arc ; 23°10' N., on the decl. arc ; and determine a meridian with the solar at 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 nearly level land covered with short shadscale , scattering greasewood and salt sage.

40.00 Set an iron post , 3 ft. long , 1 in. in dia., 24 ins. in the ground for ¼ sec. cor., with brass cap marked

S 31 | S 32
¼
1913

dig pits , 18 x 18 x 12 ins., N. and S. of post , 3 ft. dist., raise a mound of earth , 3½ft. base , 1½ ft. high , W. of cor.

80.00 Set an iron post , 3 ft. long , 3 ins. in dia., 24 ins. in the ground for cor. of secs. 29 , 30 , 31 and 32 , with brass cap marked

T 2 N | R 11 W
S 30 | S 29

S 31 | S 32
1913

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 , nearly level.

Soil , light , fine , dry , warm sandy clay , slightly baked and mixed with alkali on hard , friable clay subsoil ; 3 rd. rate.

chains

No timber.

Undergrowth , short shadscale , salt sage and greasewood.

N.89°59'E., on a random line bet. secs. 39 and 32

40.00 Set temp. ¼ sec. cor.

80.00 Intersect N. and S. line , 2 lks. N. of the cor. of secs. 28 , 29 , 32 and 33.

Thence

West , on true line bet. secs. 29 and 32.

Over nearly level land covered with considerable short undergrowth of shadscale , salt sage and greasewood.

40.00 Set an iron post, 3 ft. long , 1 in. in dia., 24 ins. in the ground for ¼ sec. cor., with brass cap marked

S 29
¼
S 32
1913

dig pits , 18 x 18 x 12 ins., E. and W. of post., 3 ft. dist., raise a mound of earth , 3½ft. base , 1½ ft. high , N. of cor.

80.00 The cor. of secs. 29 , 30 , 31 and 32.

Land , level.

Soil , light , fine , dry , sandy clay , slightly baked and mixed with alkali on hard , friable clay sub-soil ; 2 nd. rate.

No timber.

Undergrowth , considerable short shadscale and greasewood 2 to 3 ft. high.

S.89°59'W., on a random line bet. secs. 30 and 31

40.00 Set temp. ¼ sec. cor.

79.80 Intersect W. bdy. of the tp. 7 lks. S. of the cor. of secs. 25 , 30 , 31 and 36 heretofore described.

Subdivision of T.2 N.,R.11 W.

chains

Thence

S.89°58'E., on true line bet. secs. 30 and 31

Over nearly level land covered with short undergrowth of shadscale , salt sage and scattering greasewood.

39.60. Set an iron post , 3 ft. long , 1 in. in dia., 24 ins. in the ground for ¼ sec. cor., with brass cap marked

S 30
¼
S 31
1913

dig pits , 18 x 18 x 12 ins., E. and W. of post , 3 ft. dist., raise a mound of earth , 3 ft. base , 1½ ft. high , N. of cor.

79.60 The cor. of secs. 29 , 30 , 31 and 32.

Land , level.

Soil , light , fine , dry , sandy clay , slightly baked and mixed with alkali , on hard , friable clay sub-soil ; 2 nd. rate.

No timber.

Undergrowth , short shadscale , salt sage and scattering greasewood , 2 to 3 ft. high.

N.0°04'W., bet. secs. 29 and 30

Over nearly level land covered with short undergrowth of shadscale and considerable greasewood.

40.00 Set an iron post , 3 ft. long , 1 in. in dia., 24 ins. in the ground for ¼ sec. cor., with brass cap marked

S 30 | S 29
¼
1913

dig pits , 18 x 18 x 12 ins., N. and S. of post , 3 ft. dist., raise a mound of earth , 3½ ft. base , 1½ ft. high , W. of cor.

80.00 Set an iron post ,3 ft. long , 2 ins. in dia., 24 ins. in the ground for. cor. of secs. 19 , 30 , 29 and 30 with brass cap marked

Subdivision of T.2 N.,R.11 W.

chains

T 2 N S.19	R 11 W S 20
S 30	S 29

1913

dig pits , 18 x 18 x 12 ins., in each sec., 5½ ft. dist., raisea mound of earth , 4 ft. base , 2 ft. high , W. of cor.

Note:
Cor stands in the center of a dim wagon road bearing NW. and SE. This road is not prominent enough to require setting a witness cor.

Land , level.

Soil , light , fine , dry , warm , sandy clay , slightly baked and mixed with alkali on hard , friable clay sub-soil ; 2 nd. rate.

No timber.

Undergrowth , short shadscale , salt sage and dense greasewood , 2 to 3 ft. high.

June 12 : At this sec. cor., I set off 23°10' N., on the decl. arc ; and at 12 h. 00 m. a . m. l. m. t., observe the sun on the meridian ; the resulting lat. is 40°53'.

East , on a random line bet. secs. 20 and 29

40.00 Set temp. ¼ sec. cor.

80.04 Intersect N. and S. line 5 lks. S. of the cor. of secs. 20, 21 , 28 and 29.

Thence

S.89°58'W., on true line bet. secs. 20 and 29.

Gradually descend over rolling land covered with short undergrowth of shadscale and salt sage.

13.00 Leave rolling land , thence over nearly level land.

19.00 Wash , 12 lks. wide , 2 ft. deep , course S.30°W.

40.02 Set an iron post , 3 ft/ long , 1 in. in dia., 24 ins. in the ground for ¼ sec. cor., with brass cap marked

Subdivision of T.2 N.,R.11 W.

chains	
	S 20 / ¼ / S 29 1913
	dig pits , 18 x 18 x 12 ins., E. and W. of post , 3 ft. dist., raise a mound of earth , 3½ft. base , 1½ ft. high , N. of cor.
47.50	Wash , 12 lks. wide , 3 ft. deep , course S.5°W.
60.04	The cor. of secs. 19 , 20 , 29 and 30.
	Land , W. 60. chs., nearly level land with NW. exposure , E.13.04 chs., rolling land W. exposure.
	Soil , light , dry , fine , warm sandy clay , slightly baked and mixed with alkali ; 2 nd rate. Some gravelly soil on E.13 chs.
	No timber.
	Undergrowth , short shadscale and salt sage.

	N.89°58'W., on a random line bet. secs. 19 and 30
40.00	Set temp. ¼ sec. cor.
79.52	Intersect W. bdy. of the tp. 2 lks. N. of the cor. of secs. 19 , 24 , 25 and 30 heretofore described.
	Thence
	S.89°58'E., on true line bet. secs. 19 and 30.
	Over level land covered with short undergrowth of shadscale , salt sage and some greasewood.
39.52	Set an iron post , 3 ft. long , 1 in. in dia., 24 ins. in the ground for ¼ sec. cor.,with brass cap marked
	S 19 / ¼ / S 30 1913
	dig pits , 18 x 18 x 12 ins., E. and W. of post , 3 ft. dist., raise a mound of earth , 3½ft. base , 1½ ft. high , N. of cor.
79.52	The cor. of secs. 19 , 20 , 29 and 30.

Subdivision of T.2 N.,R.11 W.

chains	
	Land , level.
	Soil , light , dry , fine , warm sandy clay , slightly baked and mixed with alkali on hard , dry clay sub-soil ; 2 nd. rate.
	No timber.
	Undergrowth , considerable short shadscale and some greasewood , 2 to 4 ft. high.
	June 12 , 1913
	June 13 : For solar observation see line bet. secs. 16 and 17.
	At the cor. of secs. 19 , 20 , 29 and 30 , I set off 23°14' N., on the decl. arc ; and at 12 h. 00 m. a. m. l. m. t., observe the sun on the meridian ; the resulting lat. is 40°53'
	Thence I run
	N.0°04'W., bet. secs. 19 and 20.
	Over nearly level land covered with short undergrowth of shadscale , salt sage and scattering greasewood , 2 to 4 ft. high.
33.00	Wash , 20 lks. wide ,2 ft. deep , course SW.
40.00	Set an iron post , 3 ft. long , 1 in. in dia., 24 ins. in the ground for $\frac{1}{4}$ sec. cor., with brass cap marked S $19\frac{1}{4}$ | S 20 1913 dig pits , 18 x 18 x 12 ins., N. and S. of post , 3 ft. dist., raise a mound of earth , 3½ ft. base , 1½ ft. high , W. of cor.
64.50	Wash , 15 lks. wide , 4 ft. deep , course SW.
80.00	Set an iron post , 3 ft. long , 2 ins. in dia., 24 ins. in the ground for cor. of secs. 17 , 18 , 19 and 20 with brass cap marked

Subdivision of T.2 N., R.11 W.

chains

T 2 N	R 11 W
S 18	S 17
S 19	S 20

1913

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 , nearly level.

Soil , light , dry , fine , sandy clay , slightly baked and mixed with alkali on hard , dry clay sub-soil ; 2 nd. rate.

No timber.

Undergrowth , short shadscale , salt sage and some greasewood.

N.89°58'E., on a random line bet. secs. 17 and 20

40.00 Set temp. ¼ sec. cor.

80.04 Intersect N. and S. line 2 lks. N. of the cor. of secs. 16 , 17 , 20 and 21.

Thence

S.89°59'W., on true line bet. secs. 17 and 20.

Over rolling land draining SW. and covered with short undergrowth of shadscale , salt sage and white sage.

22.50 Wash , 30 lks. wide , 5 ft. deep , course SW.

30.80 Wash , 12 lks. wide , 3 ft. deep , course SW.

40.02 Set an iron post , 3 ft. long , 1 in. in dia., 24 ins. in the ground for ¼ sec. cor., with brass cap marked

S 17
¼
S 20

1913

dig pits , 18 x 18 x 12 ins., E. and W. of post , 3 ft. dist., raise a mound of earth , 3½ft. base , 1½ ft. high , N. of cor.

56.50 Wash , 15 lks. wide , 6 ft. deep , course SW.

chains	
80.04	The cor. of secs. 17 , 18 , 19 and 20
	Land , rolling with SW. exposure.
	Soil , light , dry , fine sandy clay mixed with gravel on hard clay and gravel sub-soil ; 2 nd. rate.
	No timber.
	Undergrowth , short shadscale , salt sage and white sage.

	N.89°59'W., on a random line bet. secs. 18 and 19
40.00	Set temp. $\frac{1}{4}$ sec. cor.
79.38	Intersect W. bdy. of the tp. at the cor. of secs. 13 , 18 , 19 and 24 , heretofore described
	Thence
	S.89°59'E., on true line bet. secs. 18 and 19
	Over nearly level ground covered with short undergrowth of shadscale.
39.38	Set an iron post , 3 ft. long , 1 in. in dia., 24 ins. in the ground for $\frac{1}{4}$ sec. cor., with brass cap marked
	S 18 / $\frac{1}{4}$ / S 19 / 1913
	dig pits , 18 x 18 x 12 ins., E. and W. of post , 3 ft. dist., raise a mound of earth , 3½ft. base , 1½ ft. high , N. of cor.
57.18	Wash , 10 lks. wide , 5 ft. deep , course SW.
79.38	The cor. of secs, 17 , 18 , 19 and 20.
	Land , gently rolling draining SW.
	Soil , light , dry , fine , warm sandy clay , slightly baked and mixed with alkali on hard , friable clay sub-soil ; 2 nd. rate.
	No timber.
	Undergrowth , short shadscale.
	June 13 , 1913

Subdivision of T. 2 N., R. 11 W.

chains	
54	June 17 : At 8 h. 01 m. a. m. l. m. t., I set off 40°54' on the lat. arc ; 23°24' N., on the decl. arc ; and determine a meridian with the solar at the cor. of secs. 17 , 18 , 19 and 20.
	Thence I run
	N. 0°04' W., bet. secs. 17 and 18.
	Over rolling land covered with short undergrowth of short shadscale and salt sage.
15.00	Ascend onto small bench , 15 ft. high.
17.80	Descend into large gulch , about 8 chs. wide and 20 ft. deep , draining S. 10° W.
29.00	Wash in bottom of gulch , course S. 20° W.
40.00	Set an iron post , 3 ft. long , 1 in. in dia., 24 ins. in the ground for $\frac{1}{4}$ sec. cor., with brass cap marked S $\frac{1}{4}$ 18 | S 17 1913 dig pits , 18 x 18 x 12 ins., N. and S. of post , 3 ft. dist., raise a mound of earth , 3½ ft. base , 1½ ft. high , W. of cor.
45.00	Leave gulch , thence along slightly rolling bench.
61.00	Enter gulch , 5 chs. wide , 15 ft. deep , course S. 10° E.
	Thence follow along E. side of gulch.
80.00	Set an iron post , 3 ft. long , 2 ins. in dia., 24 ins. in the ground for cor. of secs. 7 , 8 , 17 and 18 , with brass cap marked T 2 N | R 11 W S 7 | S 8 S 18 | S 17 1913 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 , rolling , cut by gulches draining SW.
	Soil , light , dry , fine , sandy clay mixed with alkali and gravel on hard clay and gravel sub-soil ; 2 nd, rate.

Subdivision of T.3 N.,R.11 W.

chains	
	No timber.
	Undergrowth , short shadscale and salt sage.

	N.89°59¼E., on a random line bet. secs. 8 and 17
40.00	Set temp. ¼ sec. cor.
80.06	Intersect N. and S. line 5 lks. S. of the cor. of secs. 8 , 9 , 16 and 17.
	Thence
	S.89°57'W., on true line bet. secs. 8 and 17
	Over rolling ground sloping SW., through short undergrowth of shadscale , white sage and salt sage.
7.00	Wash , 1 ch. wide , 1 ft. deep , course SW.
40.03	Set an iron post , 3 ft. long , 1 in. in dia., 24 ins. in the ground for ¼ sec. cor., with brass cap marked
	S ¼ 8 / S 17 / 1913
	dig pits , 18 x 18 x 12 ins.,E. and W. of post , 3 ft. dist., raise a mound of earth , 3½ft. base , 1½ ft. high , N. of cor.
80.06	The cor. of secs. 7 , 8 , 17 and 18
	Land , rolling with SW. exposure.
	Soil , light , dry , fine sandy clay and gravel on clay and gravel sub-soil ; 2 nd. rate.
	No timber.
	Undergrowth , short shadscale , white sage ,and salt sage.

	N.89°59'W., on a random line bet. secs. 7 and 18.
40.00	Set temp. ¼ sec. cor.
79.34	Intersect W. bdy. of the tp. 9 lks. S. of the cor. of secs. 7 , 12 , 13 and 18 heretofore described
	Thence.

Subdivision of T.2 N.,R.11 W.

chains	
	S.89°55'E., on true line bet. secs. 7 and 18.
	Over mountainous land , through short undergrowth of shadscale , and salt sage.
	Ascend abruptly over NW. face of ridge.
4.40	Top of ridge , 75 ft. above sec. cor., bears NE. and SW.
	Descend over E. slope of mountain.
39.34	250 ft. below top of ridge ,
	Set an iron post , 3 ft. long , 1 in. in dia., 12 ins. in the ground and 12 ins. in a mound of stone and earth , 4 ft. base , 1 ft. high , for $\frac{1}{4}$ sec. cor., with brass cap marked
	$\frac{S\ 7}{\frac{1}{4}}$
	S 18
	1913
	raise a mound of stone , 2 ft. base , $1\frac{1}{2}$ ft. high , N. of cor.
	Note: On account of natural obstacles I am unable to set post more than 12 ins. in the ground.
41.00	Base of mountain , bears N.20°E. and S.20°W.
	Thence over rolling land cut by numerous washes.
76.60	Gulch , 5 chs. wide , 20 ft. deep , course S.10°W.
79.34	The cor. of secs. 7 , 8 , 17 and 18
	Land , mountainous on W. 41.00 chs. and rolling on E. 38.34 chs. General drainage NW. on W. 4.40 chs. and S. on E. 74.90 chs.
	Soil , gravelly , rocky and some sandy clay on gravel and clay sub-soil ; 3 rd. rate.
	Undergrowth , short shadscale and salt sage,
	No timber.
	Mountainous land , 41.00 chs.
	June 17 : At this sec. cor., I set off 23°25' N., on the decl arc ; and at 12 h. 01 m. a. m. l. m. t., observe the sun on the meridian ; the resulting lat. is 40°55'

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chains	
	N.0°04'W., bet. secs. 7 and 8
	Gradually ascend along bottom of gulch 5 chs. wide , 15 ft. deep ; through short undergrowth of shadscale and salt sage.
38.00	Leave gulch at a point whereit is 1 ch. wide , 10 ft. deep , course from NW. to S.10°W.
40.00	Set an iron post , 3 ft. long , 1 in. in dia., 24 ins. in the ground for $\frac{1}{4}$ sec. cor., with brass cap marked S $\frac{1}{4}$ 7 | S 8 1913 dig pits , 18 x 18 x 12 ins., N. and S. of post , 3 ft. dist., raise a mound of earth , 3½ft. base , 1½ ft. high , W. of cor.
	Ascend over rolling ground sloping S.
67.00	Top of low ridge and divide , bears N.85°E. and S.85°W.
	Old road on top of ridge , bears N.85°E. and S.85°W.
	Gradually descend over N. slope.
80.00	Set an iron post , 3 ft. long , 2 ins. in dia., 24 ins. in the ground for cor. of secs. 5 , 6 , 7 and 8 , with brass cap marked T 2 N | R 11 W S 6 | S 5 S 7 | S 8 1913 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 , rolling with N. and S. slopes from low divide at 67.00 chs.
	Soil , light , fine dry sandy clay and gravel containing a considerable amount of alkali on hard gravel and clay sub-soil ; 3 rd. rate.
	No timber.

Subdivision of T.2 N.,R.11 W.

chains

Undergrowth , considerable short shadscale and salt sage.

Robert E. Clark

U. S. Transitman.

June 17 : For solar observation see line bet. secs. 8 and 9.

N.89°57'E., on a random line bet. secs. 5 and 8.

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

80.16 Intersect N. and S. line 9 lks. N. of the cor. of secs. 4 , 5 , 8 and 9

Thence

N.89°59'W., on true line bet. secs. 5 and 8

Gradually ascend over rolling land sloping nearly S., through short undergrowth of shadscale and salt sage,

30.00 Top of low ridge and divide , bears NE. and S.70°W.

Old road on top of ridge , bears NE. and S.70°W.

Gradually descend over gentle N. slope.

40.08 Set an iron post , 3 ft. long , 1 in. in dia., 24 ins. in the ground for $\frac{1}{4}$ sec. cor., with brass cap marked

$$\frac{S\ 5}{\frac{1}{4}}$$

$$\frac{}{S\ 8}$$

1913

dig pits , 18 x 18 x 12 ins., E. and W. of post , 3 ft. dist., raise a mound of earth , 3½ft. base , 1½ ft. high , N. of cor.

80.16 The cor. of secs. 5 , 6 , 7 and 8.

Land , rolling , draining S. from low divide on E. 30 chs., and N. and NW. on W. 50.16 chs.

Soil , gravelly , and sandy clay , very hard and dry on hard , dry , clay and gravel sub-soil; 3 rd. rate.

No timber.

Undergrowth , short shadscale and salt sage.

Subdivision of T.2 N.,R.11 W.

chains	
	Howard W. Miller U. S. Surveyor.
	June 17:
	N.89°55'W., on a random line bet. secs. 6 and 7.
40.00	Set temp. $\frac{1}{4}$ sec. cor.
79.29	Intersect W. bdy. of the tp. 2 lks. N. of the cor. of secs. 1 , 6 , 7 and 12 heretofore described.
	Thence
	S.89°56'E., on true line bet. secs. 6 and 7.
	Ascend over rocky W. face of ridge , through scattering short undergrowth of shadscale and salt sage.
35.89	Top of rocky limestone ridge , 200 ft. above sec. cor., bears N. and S.
	Descend abruptly.
39.29	Set an iron post , 3 ft. long , 1 in. in dia., 24 ins. in the ground for $\frac{1}{4}$ sec. cor., with brass cap marked S 6 $\frac{1}{4}$ S 7 1913 raise a mound of stone , 2 ft. base , 1½ ft. high , N. of cor.
43.20	Gulch , 175 ft. deep , course NW.
	Ascend abruptly.
61.20	Ridge , 150 ft. high , bears N. and SW.
	Descend 125 ft. to.
79.29	The cor. of secs. 5 , 6 , 7 and 8
	Land , mountainous with steep E. and W. slopes of ridges into gulches draining N. and NW.
	Soil , gravelly , rocky and clay of limestone formation on hard clay and gravel sub-soil ; 4 th. rate.
	No timber.
	Undergrowth , short shadscale and salt sage.
	Mountainous land , 79.29 chs.

Subdivision of T.2 N., R.11 W.

chains	
	June 17 , 1913
	Robert E. Clark
	U. S. Transitman.
	N.0°04'W., on a random line bet. secs. 5 and 6
40.00	Set temp. $\frac{1}{4}$ sec. cor.
80.14	Intersect N. bdy. of the tp. 12 lks. W. of the cor. of secs. 5 , 6 , 31 and 32 heretofore described.
	Thence
	S.0°01'W., on true line bet. secs. 5 and 6.
	Ascend over rolling land sloping N., through short undergrowth of shadscale and salt sage.
8.75	Wash , 15 lks. wide , 3 ft. deep , course NW.
15.15	Wash , 15 lks. wide , 3 ft. deep , course NW.
25.15	Wash , 20 lks. wide 6 ft. deep , course NW.
40.14	Set an iron post , 3 ft. long , 1 in. in dia., 24 ins. in the ground for $\frac{1}{4}$ sec. cor., with brass cap marked
	S 6 | S 5 $\frac{1}{4}$ 1913
	raise a mound of stone , 2 ft. base , $1\frac{1}{2}$ ft. high , W. of cor.
60.65	Wash , 25 lks. wide , 10 ft. deep , course NW.
80.14	The cor. of secs. 5 , 6 , 7 and 8.
	Land , rolling with a general N. exposure.
	Soil , light , blue sandy clay and gravel , very hard and dry on hard and dry clay and gravel sub-soil ; 3 rd. rate.
	No timber.
	Undergrowth , short shadscale and salt sage,
	June 17 , 1913
	Howard W. Miller
	U. S. Surveyor.

General Description.

This township contains nearly every variety of land , from level desert lands to high and rough mountains.

The mountainous portion of this township which comprises the NE. ¼ of the township , consists of masses of ridges and spurs with steep slopes , rising abruptly from the valley and drain E. and W. from the high divide which extends in a N. and S. direction through secs., 2 , 11 , 14 , 23 and 24. These mountainous are covered with a scattering growth of scrub cedar trees which are of no commercial value. The soil is generally rocky and gravelly of limestone and volcanic formation with enough sandy soil to support an abundant growth of rich bunch grass.

From the base of the mountains which extend through the township in a NW. and SE. direction from sec. 25 to sec. 18 , the land slopes gently to the SW., toward the Great American Desert , the east edge of which starts about 2 miles W. of the W. bdy. of this tp.. The soil at the base of the mountain is generally gravelly , but furthur towards the valley it becomes a light , dry , fine , warm sandy clay , slightly baked and containing a small amount of alkali. This land could be used for farming purposes , but irrigation would be necessary to produce crops on account of the little rain fall the country is supplied with,

A short growth of short shadescale , salt sage and white sage brush undergrowth is found on the entire township and in secs, 29 , 30 , 31 and 32 a considerable amount of greasewood is found.

In secs. 15 , 22 and 23 slight indications of iron ore exist but not enough to warrant any of the land being set aside as mineral lands.

The township is chiefly adapted for the grazing of sheep during the winter months., not being able to use it during the summer on account of the scarcity of water. The mountainous part of the township is well adapted

General Description.

for this purpose , although a considerable amount of grass is found on the lower lands.

There is no water in this township.

There are no settlers in the township.

Howard W. Miller

U.S.Surveyor.

Robert E. Clark

U. S. Transitman.

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Page

4—080

BOOK A-405

CERTIFICATE OF ASSISTANTS.

We, the undersigned, hereby certify upon honor that we assisted, to the best of our skill and ability, ..., U. S. Surveyor, during the periods and in the capacities stated opposite our several signatures, in surveying all those parts or portions of .....

For certificates of assistants see book "J" T.3 N.R.11 W.

of the ..... Meridian, in the State of .....

which are represented in the foregoing field notes as having been executed 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 executed.

NAME.	PERIOD OF SERVICE.		CAPACITY.
	BEGUN.	ENDED.	

Subscribed and certified to before me on the dates of the final service as shown above.

.....

U. S. Surveyor.

6—2761

BOOK A-403

FINAL OATH OF UNITED STATES SURVEYOR.

I, _____, U. S. Surveyor, do solemnly swear that, in pursuance of special instructions received from the U. S. Surveyor General for _____ bearing date of the _____ day of _____, 191 , I have well, faithfully, and truly, in my own proper person, and in strict conformity with said instructions, the Manual of Surveying Instructions, and the laws of the United States, surveyed all those parts or portions of _____

For final oaths of U.S.Surveyor and Transitman see book "J" T.3 N. R.11 W.

_____ of the _____ Meridian, in the State of _____, which are represented in the foregoing field notes as having been executed 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 U. S. 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.

_____

U. S. Surveyor.

Subscribed by said _____, and sworn to before me this _____ day of _____, 191

SEAL

_____

_____

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah, April 5, 191 5.

The foregoing field notes of the survey of the Subdivisional lines of Township No.2 North, Range No.11 West, of the Salt Lake Base and Meridian, Utah,

executed by their Howard W.Miller and Robert E.Clark under ~~his~~ special instructions dated April 10, 191 3, having been critically examined, and the necessary corrections and explanations made, the said field notes, and the surveys they describe, are hereby approved.

_____

U. S. 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.

_____

U. S. Surveyor General.

6—2761

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U. S. Surveyor General's Office
APR 9 1914
SALT LAKE CITY, UTAH.

BOOK A-405

Book "H"

new FIELD NOTES

OF THE SURVEY OF THE

SUBDIVISION

OF

T.2 N.,R.10 W.

Of the SALT LAKE BASE AND *Meridian,*

In the State of UTAH

EXECUTED BY

Howard W.Miller

and

Robert E.Clark

and Transitman

In the capacity of U. S. Surveyor, under instructions dated April 10, *1913, issued by the United States Surveyor General to govern surveys included in Group No.* 21, *which were approved by the Commissioner of the General Land Office,* April 23, *191 3, pursuant to authority contained in the Act of Congress dated* ....., *191*....

Survey commenced June 18, *191 3*

Survey completed June 28, *191 3*

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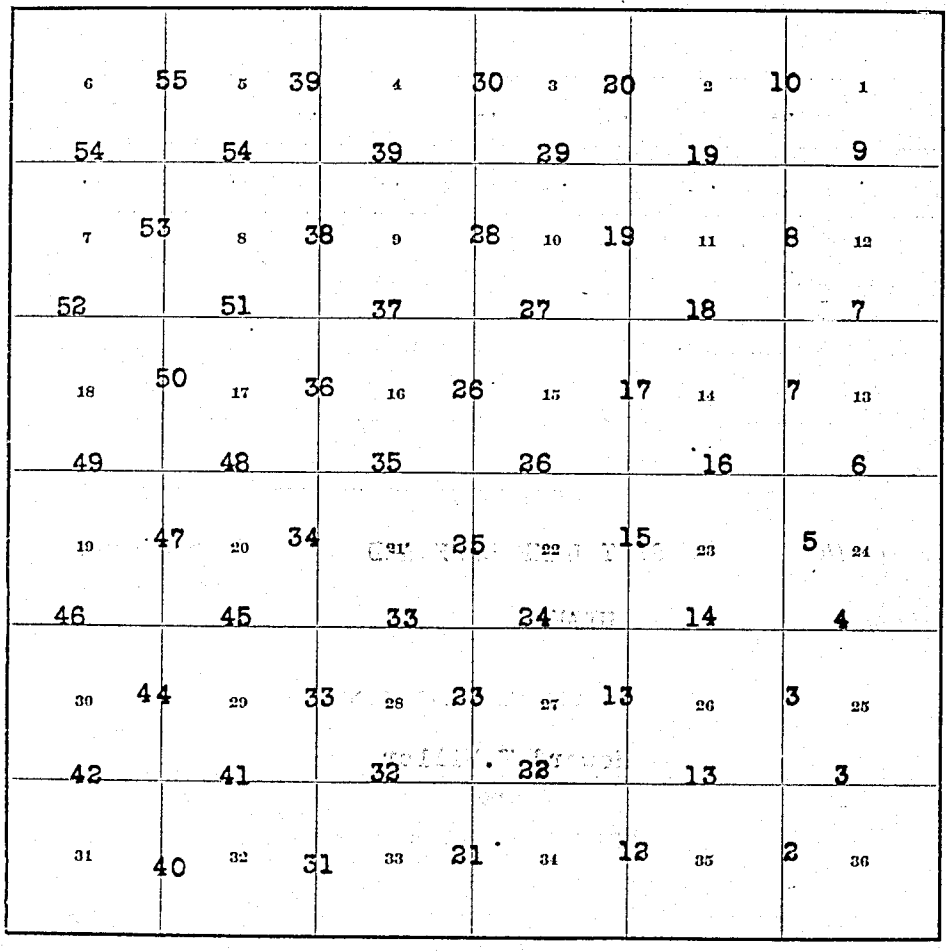
Subdivisions 20-16-25

BOOK A-405

INDEX DIAGRAM.

Township 2 north, *Range* 10 west



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chains

Survey commenced June 18 , 1913 and executed with Young and sons light mountain transit No. 7147. For description and test of instrument see book "A" of this survey.

Iexamine 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 established by observations made on Polaris I proceed as follows:

At the cor. of secs. 35 and 36 on the S. bdy. of the tp., heretofore described , in approximate lat. 40°51'N., longitude 112° 56' W., I set off 40° 51' on the lat. arc ; 23°26' N., on the decl. arc ; and at 4 h. 31 m. p. m. l. m. t., determine with the solar a meridian , and mark a point thereof , by a nail driven in a hub set firmly in the ground , 5 chs. N. of the cor.

At 7 h.00 m. p. m. by my watch which carries correct l. m. t. I make an hour angle observation on Polaris in accordance with the Manual of Instructions and mark the direction of the line thus determined by a nail driven in a hub set firmly in the ground , about 5 chs. N. of the cor.

U. C. Polaris June 18 corrected for long.	7h. 43m.a.m.
Time of L.C.polaris June 18	7h. 41m.p.m.
Time of obsn.	7 h.00m.p.m.
Subtract	0h. 41 m.
Azimuth of Polaris at obsn. ----------0° 16' W.	

June 18 , 1913

June 19: At 7 h. 00 m. a. m. l. m. t., I lay off the azimuth of Polaris 0°16'to the E,, which meridian falls on the meridian established with the solar June 18.

At 7 h. 31 m. a. m. l. m. t., I set off 40° 51' on the lat. arc ; 23°27' N., on the decl. arc ; and determine a meridian with the solar , this meridian also falls on the meridian established by observations made on Polaris

chains

and with the solar of June 18. I therefore conclude that the adjustments of the instrument are satisfactory.

The magnetic bearing of the true meridian at 7 h. 45 m. am l. m. t., is N 17° 15' W., the angle thus determined gives the magnetic decl. 17°15' E.

From the cor. of secs. 35 and 36 already described, I run

N.0° 01' W., bet. secs. 35 and 36

Over nearly level land through short undergrowth of shadscale and white sage.

40.00 Set an iron post , 3 ft. long , 1 in. in dia., 24 ins. in the ground for $\frac{1}{4}$ sec. cor., with brass cap marked

$S\ 35\ \frac{1}{4}$ | S 36

1913

dig pits , 18 x 18 x 12 ins., N. and S. of post , 3 ft. dist., raise a mound of earth , 3½ft. base , 1½ ft. high , W. of cor.

80.00 Set an iron post , 3 ft. long , 2 ins. diam , 24 ins. in the ground for cor. of secs. 25 , 26 , 35 and 36 , with brass cap marked

T 2 N | R 10 W
S 26 | S 25

S 35 | S 36

1913

dig pits , 18 x 18 x 12 ins., in each sec., 5½ ft. dist., raise a mound of earth , 4 ft. base , 3 ft. high , W. of cor.

Land , nearly level ,gentle S. exposure.

Soil , fine sandy clay , slightly baked and mixed with alkali on hard dry clay and sand sub-soil ; 2 nd. rate.

No timber.

chains	
	Undergrowth , short shadscale and white sage.
	No grazing.
	Poor farming if watered.
	East , on a random line bet. secs. 25 and 36
40.00	Set temp. $\frac{1}{4}$ sec. cor.
80.00	Intersect E. bdy. of the tp. 26 lks. S. of the cor. of secs. 25 , 30 , 31 and 36 heretofore described.
	Thence
	S.89°49'W., on true line bet. secs. 25 and 36
	Gradually descend over rolling sandy ground sloping W.
20.00	Leave rolling ground , thence over nearly level land.
28.50	Wagon road ,bears N. and S.
40.00	Set an iron post , 3 ft. long , 1 in. in dia., 24 ins. in the ground for $\frac{1}{4}$ sec. cor., with brass cap marked $\frac{S\ 25}{\frac{1}{4}}$ S 36 1913 dig pits , 18 x 18 x 12 ins., E. and W. of post , 3 ft. dist., raise a mound of earth , 3½ft. base , 1½ ft. high , N. of cor.
80.00	The cor. of secs. 25 , 26 , 35 and 36.
	Land , E. 20 chs., slightly rolling sloping W. W. 60 chs. nearly level land.
	Soil , light , fine sandy clay , slightly baked and mixed with alkali on a hard , dry sub- soil of clay ; 2 nd. rate.
	No timber.
	Undergrowth , short shadscale and white sage.
	No grazing.
	N.0° 01'W., bet. secs. 25 and 26

chains

Over nearly level land covered with short undergrowth of white sage and shadscale.

40.00 Set an iron post , 3 ft. long , 1 in. in dia., 24 ins. in the ground for $\frac{1}{4}$ sec. cor., with brass cap marked

S $\frac{1}{4}$ 26 | S 25

1913

dig pits 18 x 18 x 12 ins., N. and S. of post , 3 ft. dist., raise a mound of earth , 3½ ft. base , 1½ ft. high , W. of cor.

80.00 Set an iron post , 3 ft. long , 2 ins. in dia., 24 ins. in the ground for cor. of secs. 23 , 24 , 25 and 26 ,with brass cap marked

T 2 N | R 10 W
S 23 | S 24
S 26 | S 25

1913

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 , sloping gently S.

Soil , light , fine , dry sandy clay , on a hard , baked clay and alkali sub-soil ; 2 nd. rate.

No timber.

Undergrowth , short white sage and shadscale.

No grazing.

N.89° 49' E., on a random line bet. secs. 24 and 25

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

80.00 Intersect E. bdy. of the tp. 2 lks. N. of the cor. of secs. 24 and 25 , heretofore described.

Thence

S. 89° 50' W., on true line bet. secs. 24 and 25.

Over gently rolling land sloping gently W.

28.50 Wagon road , bears N. and S.

40.00 Set an iron post , 3 ft. long , 1 in. in dia., 24 ins. in

. Subdivision of T.2 N.,R. 10 W.

chains	
	the ground for $\frac{1}{4}$ sec. cor., with brass cap marked S 24 / $\frac{1}{4}$ / S 25 1913
	dig pits , 18 x 18 x 12 ins., E. and W. of post , 3 ft. dist., raise a mound of earth , 3½ft. base , 1½ ft. high , N. of cor.
80.00	The cor. of secs. 23 , 24 , 25 and 26.
	Land gently rolling draining S.
	Soil , light , fine , dry , sandy clay , slightly baked and mixed with alkali on a hard , baked clay sub-soil; 2 nd. rate.
	No timber.
	Undergrowth , white sage and shadscale.

	N.0°01'W., bet. secs. 23 and 24
	Gradually ascend over nearly level ground , through short undergrowth of shadscale and white sage.
40.00	Set an iron post , 3 ft. long , 1 in. in dia., 24 ins. in the ground for $\frac{1}{4}$ sec. cor., with brass cap marked S 23 / $\frac{1}{4}$ | S 24 1913
	dig pits , 18 x 18 x 12 ins., N. and S. of post , 3 ft. dist., raise a mound of earth , 3½ft. base , 1½ ft. high , W. of cor.
80.00	Set an iron post , 3 ft. long , 2 ins. in dia., 24 ins. in the ground for cor. of secs. 13 , 14 , 23 and 24 , with brass cap marked T 2 N | R 10 W S 14 | S 13 S 23 | S 24 1913
	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.

chains

Land , level.

Soil , light , fine , dry , sandy clay , slightly baked and mixed with alkali on a hard , baked clay sub-soil ; 2 nd. rate. Poor farming if watered.

No timber.

Undergrowth., short white sage brush and shadscale.

June 19 : At this sec. cor., I set off 23° 26' N.,on the decl. arc ; and at 12 h. 01 m. p. m. l. m. t., observe the sun on the meridian ; the resulting lat. is 40°54'

N.89° 50' E., on a random line bet. secs. 13 and 24

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

79.98 Intersect E. bdy. of the tp. at the cor. of secs. 13 and 24 , heretofore described.

Thence

S. 89° 50' W., on true line bet. secs.13 and 24 .

Over nearly level land through short undergrowth of shadscale , white sage and some greasewood.

17.48 Wagon road , bears NW. and SE

23.98 Wagon road , bears N.10°E. and S.10°W.

39.99 Set an iron post , 3 ft. long , 1 in. in dia., 24 ins. in the ground for $\frac{1}{4}$ sec. cor., with brass cap marked

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

$$S\ 24$$

1913

dig pits , 18 x 18 x 12 ins.,.E. and W. of post , 3 ft. dist., raise a mound of earth , 3½ft. base , 1½ ft. high , N. of cor.

79.98 The cor. of secs. 13 , 14 , 23 and 24.

Land nearly level with gentle W. exposure.

Soil , fine sandy clay , 6 to 8 ins. deep , on friable clay sub-soil , slightly baked and slightly alkali ; 2 nd. rate.

No timber.

Undergrowth , short shadscale , white sage and some greasewood.

chains

N.0°01'W., bet. secs. 13 and 14.

Over nearly level land through short undergrowth of shadscale and white sage and some greasewood.

21.50 Wagon road , bears NW. and SE.

40.00 Set an iron post , 3 ft. long , 1 in. in dia., 24 ins.in the ground for ¼ sec. cor., with brass cap marked

S ¼ 14 | S 13

1913

dig pits , 18 x 18 x 12 ins., N. and S. of post , 3 ft. dist., raise a mound of earth , 3 ft. base., 1½ ft. high, W. of cor.

80.00 Set an iron post , 3 ft. long , 2 ins. in dia., 24 ins, in the ground for cor. of secs. 11 , 12 , 13 and 14 , with brass cap marked

T 2 N | R 10 W
S 11	S 12
S 14	S 13

1913

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.

Soil ,fine sandy clay , about 8 ins. deep , on friable clay sub-soil slightly baked and mixed with alkali., 2 nd. rate.

No timber.

Undergrowth , short shadscale , white sage and some greasewood.

N.89° 50'E., on a random line bet. secs. 12 and 13

40.00 Set temp. ¼ sec. cor.

79.98 Intersect E. bdy. of the tp. at the cor. of secs. 12 and 13 , heretofore described.

Thence

S. 89° 50' W., on true line bet. secs. 12 and 13

chains

Over nearly level land through short undergrowth of shadscale and white sage.

19.73 Wagon road , bears N.15°E. and S.15°W.

39.99 Set an iron post , 3 ft. long , 1 in. in dia., 24 ins. in the ground for ¼ sec. cor., with brass cap marked

S 12
¼
S 13
1913

dig pits , 18 x 18 x 12 ins., E. and W. of post , 3 ft. dist., raise a mound of earth , 3½ ft. base , 1½ ft. high, N. of cor.

71.73 Wagon road , bears N.30°W. and S.30°E.

79.98 The cor. of secs. 11 , 12 , 13 and 14

Land level with a general S. and W. exposure.

Soil , fine sandy clay slightly baked and alkali , on friable clay sub-soil ; 2 nd. rate.

Undergrowth , short shadscale and some white sage.

No grazing. No timber.

June 19 , 1913

June 21 : For solar observation see line bet. secs. 15 and 16.

N.0°01'W., bet. secs. 11 and 12

Over nearly level land through short undergrowth of shadscale and white sage.and some greasewood.

19.50 Road , bears N.20°W. and SE.

40.00 Set an iron post , 3 ft. long , 1 in. in dia., 24 ins. in the ground for ¼ sec. cor., with brass cap marked

S 11 | S 12
¼
1913

dig pits , 18 x 18 x 12 ins., N. and S. of post , 3 ft. dist., raise a mound of earth , 3½ ft. base , 1½ ft. high , W. of cor.

80.00 Set an iron post , 3 ft. long , 2 ins. in dia., 24 ins.

Subdivision of T.2 N.,R.10 W.

chains	
	in the ground for cor. of secs. 1 , 2 , 11 and 12 , with brass cap marked
	T 2 N | R 10 W S 2 | S 1 --- S 11 | S 12 1913
	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.
	Soil , fine sandy clay , very dry , and mixed with much alkali , on a hard clay sub-soil ; 2 nd. rate.
	No timber.
	Undergrowth , short shadscale and some white sage and greasewood.
	N.89°50'E., on random line bet. secs. 1 and 12
40.00	Set temp. ¼ sec. cor.
79.93	Intersect E. bdy. of the tp. 2 lks. S. of the cor. of secs. 1 and 12 , heretofore described.
	Thence
	S.89°49'W., on true line bet. secs. 1 and 12
	Over nearly level land through short undergrowth of shadscale and some greasewood.
9.73	Wagon road , bears N.10°E. and S.10°W.
39.96½	Set an iron post , 3 ft. long , 1 in. in dia., 24 ins. in the ground for ¼ sec. cor., with brass cap marked
	S 1 ¼ --- S 12 1913
	dig pits , 18 x 18 x 12 ins., E. and W. of post , 3 ft. dist., raise a mound of stone , 3½ft. base , 1½ ft. high , N. of cor.
62.13	Wagon road , bears NW. and SE.
79.93	The cor. of secs. 1 , 2 , 11 and 12.
	Land , level.

Subdivision of T.2 N.,R.10 W.

chains	
	Soil , light , fine , dry , warm sandy clay , baked hard and slightly alkali on clay sub-soil ; 2 nd. rate.
	No timber.
	Undergrowth , considerable short shadscale , mostly dead , with a few live greasewood.

	N.0°01'W., on a random line bet. secs. 1 and 2
40.00	Set temp. $\frac{1}{4}$ sec. cor.
81.23	Intersect N. bdy. of the tp. 9 lks. E. of the cor. of secs. 1 , 2 , 35 and 36 heretofore described
	Thence
	S.0°05'E., on true line bet. secs. 1 and 2
	Over nearly level land through short undergrowth of shadscale and white sage.
41.23	Set an iron post , 3 ft. long , 1 in. in dia., 24 ins. in the ground for $\frac{1}{4}$ sec. cor., with brass cap marked S 2 $\frac{1}{4}$ | S 1 1913 dig pits , 18 x 18 x 12 ins., N. and S. of post , 3 ft. dist., raise a mound of earth , 3½ft. base , 1½ ft. high W. of cor.
	June 21: At this $\frac{1}{4}$ sec. cor., I set off 23° 27' N., on the decl. arc ; and at 12 h. 01 m. p. m. l. m. t., observe the sun on the meridian ; the resulting lat. is 40° 56'.
65.03	Wagon road , bears NW. and SE.
81.23	The cor. of secs. 1 , 2 , 11 and 12
	Land level.
	Soil , light , fine , dry , warm sandy clay mixed with alkali on a hard dry sub-soil of clay ; 2 nd. rate.
	No timber.
	Undergrowth , considerable short shadscale and some scattering greasewood.

Robert E. Clark.
U.S. Transitman

chains

U.S.Transit

Survey commenced June 18 , 1913 and executed with a Young and sons light mountain transit No. 8147. For description and test of instrument see book "A" of this survey.

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

At my camp which is situated near the cor. of secs. 15 , 16 , 21 and 22 , in approximate latitude 40°54' N., longitude 113° 59' W., I set off 40° 54' on the lat. arc ;23° 26' N., on the decl.arc ; and at 5 h. 01 m. p. m. l. m. t., determine with the solar a meridian and mark a point thereof , by a nail driven in a peg set firmly in the ground , about 5 chs. N. of my station.

At 7 h. 11 m. p. m. l. m. t., I make an hour angle observation on Polaris in accordance with the Manual of Instructions and mark the direction of the line thus determined by a nail driven ih a peg set firmly in the ground , 5 chs. N. of the station.

U.C.Polaris June 18 ,1913 corrected for long.	7 h. 43 m.
Time of lower C. of Polaris June 18	7 h. 41 m.
Time of observation	7 h 11 m.
Subtract from L.C.	0 h. 30 m.
Azimuth of Polaris at obsn.	0° 12' W.

June 18 , 1913

June 19 : At 6 h. 30 m. a. m. l. m. t., I lay off the azimuth of Polaris 0°12' to the east and note that this meridian falls on the meridian determined with the solar June 18..

chains.

At 7 h. 01 m. a. m. l. t., I set off 40° 54' on the lat. arc ; 23° 27' N., on the decl. arc ; and determine a meridian with the solar. This meridian falls 1' to the right of the true meridian established by observations on Polaris.

The positions for meridians established by observations with the solar practically agree with the meridian established by observations on Polaris , I therefore conclude that the adjustments of the instrument are satisfactory,

The magnetic bearing of the true meridian , at 7 h. 16 m. a. m. l. m. t., is N.17°15'W., the angle thus determined gives the magnetic decl. 17°15'E.

From the cor. of secs. 34 and 35 on the S. bdy. of the tp. heretofore described.

I run

N.0° 02'W., bet. secs. 34 and 35.

Over nearly level land , through short undergrowth of shadscale and salt sage.

40.00 Set an iron post , 3 ft. long , 1 in. in dia., 24 ins. in the ground for $\frac{1}{4}$ sec. cor., with brass cap marked

S $\frac{34}{\frac{1}{4}}$ | S 35

1913

dig pits , 18 x 18 x 12 ins., N. and S., of post , 3 ft. dist., raise a mound of earth , 3½ft. base , 1½ ft. high , W. of cor.

80.00 Set an iron post , 3 ft. long , 2 ins. in dia., 24 ins. in the ground for cor. of secs. 26 , 27 , 34 and 35 with brass cap marked

T 2 N | R 10 W
S 27 | S 26
S 34 | S 35

1913

dig pits , 18 x 18 x 12 ins., in each sec , 5½ ft. dist.

chains

raise a mound of earth , 4 ft. base , 2 ft. high , W. of cor.

Land , level.

Soil , light , fine , dry , warm sandy clay mixed with some alkali on a hard , dry , friable clay sub-soil ; 2 nd. rate.

No timber.

Undergrowth , short shadscale mostly dead and some live salt sage.

East , on a random line bet. secs. 26 and 35

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

80.02 Intersect N. and S. line , 2 lks. N. of the cor. of secs. 25 , 26 , 35 and 36

Thence

N.89° 59' W., on true line bet. secs. 26 and 35

Over nearly level land through short undergrowth of shadscale and white sage.

40.01 Set an iron post , 3 ft. long , 1 in. in dia., 24 ins. in the ground for $\frac{1}{4}$ sec. cor., with brass cap marked

S 26
$\frac{1}{4}$

S 35
1913

dig pits , 18 x 18 x 12 ins., E. and W. of post , 3 ft. dist., raise a mound of earth , 3½ft. base , 1½ ft. high , N. of cor.

80.02 The cor. of secs. 26 , 27 , 34 and 35

Land , level.

Soil , sandy , and friable clay mixed with some alkali on hard , dry , baked clay sub-soil ; 2 nd. rate.

No timber.

Undergrowth , short shadscale and some white sage.

N.0° 02'W., bet. secs. 26 and 27

chains

Over level land , through short undergrowth of shadscale and white sage.

40.00 Set an iron post , 3 ft. long , 1 in. in dia., 24 ins. in the ground for $\frac{1}{4}$ sec. cor., with brass cap marked

S $\frac{1}{4}$ 27 | S 26

1913

dig pits , 18 x 18 x 12 ins., N. and S. of post , 3 ft. dist., raise a mound of earth , 3½ft. base , 1½ ft. high , W. of cor.

80.00 Set an iron post , 3 ft. long , 2 ins. in dia., 24 ins. in the ground for cor. of secs. 22 , 23 , 26 and 27 , with brass cap marked

T 2 N | R 10 W
S 22 | S 23
S 27 | S 26
1913

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.

Soil , sandy and friable clay , very dry on a hard baked clay and alkali sub-soil ; 2 nd. rate.

No timber.

Undergrowth , short shadscale and some white sage.

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

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

79.98 Intersect N. and S. line , 2 lks. S. of the cor. of secs. 23 , 24 , 25 and 26 ,

Thence

West , on true line bet. secs. 23 and 26

Over level land , through short undergrowth of shadscale and some salt sage,

39.99 Set an iron post , 3 ft. long , 1 in. in dia., 24 ins. in the ground for $\frac{1}{4}$ sec. cor., with brass cap marked

chains

S 23 1/4
S 26
1913

dig pits , 18 x 18 x 12 ins., E. and W. of post , 3 ft. dist., raise a mound of earth , 3½ft. base , 1½ ft. high , N. of cor.

79.98 The cor. of secs, 22 , 23 , 26 and 27.

Land , level.

Soil , sandy and friable clay mixed with alkali on a hard , dry , warm clay sub-soil ; 2 nd rate.

Undergrowth , short shadscale amd some white sage.

N.0°02'W., bet. secs. 22 and 23

Over nearly level land through short shadcale and white sage undergrowth.

40.00 Set an iron post , 3 ft. long , 1 in. in dia., 24 ins. in the ground for ¼ sec. cor., with brass cap marked

S 22 1/4 | S 23
1913

dig pits , 18 x 18 x 12 ins., N. and S. of post , 3 ft. dist., raise a mound of earth , 3½ft. base , 1½ ft. high , W. of cor.

80.00 Set an iron post , 3 ft. long , 2 ins. in dia., 24 ins. in the ground for cor. of secs. 14 , 15 ,22 and 23 , with brass cap marked

T 2 N | R 10 W
S 15 | S 14
S 22 | S 23
1913

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

chains

Soil , light , fine , dry , friable clay mixed with alkali ; slightly baked on a hard dry sub-soil of clay ; 2 nd. rate.

No timber,

Undergrowth , short shadscale and white sage.

June 19 : At this sec. cor., I set off 23° 27' N., on the decl. arc ; and at 12 h. 01 m. p. m. l. m. t., observe the sun on the meridian ; the resulting lat. is 40°54'

East , on a random line bet. secs. 14 and 23

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

79.92 Intersect N. and S. line at the cor. of secs. 13 , 14 , 23 and 24

Thence

West , on true line bet. secs. 14 and 23.

Over nearly level land through short undergrowth of shadscale , white sage and some greasewood.

39.96 Set an iron post , 3 ft. long , 1 in. in dia., 24 ins. in the ground for $\frac{1}{4}$ sec. cor., with brass cap marked

$$\frac{S\ 14\ \frac{1}{4}}{S\ 23\ 1913}$$

dig pits , 18 x 18 x 12 ins., E. and W. of post , 3 ft. dist., raise a mound of earth , $3\frac{1}{2}$ ft. base , $1\frac{1}{2}$ ft. high , N. of cor.

75.00 Leave greasewood undergrowth , bears N. and S.

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

Land nearly level , having a slight S. exposure.

Soil , light , fine , dry , friable clay mixed with alkali on a hard clay sub-soil ; 2 nd. rate.

No timber.

Undergrowth , short shadscale and white sage , mostly dead with some live greasewood about 2 ft. high on E.75.00 chs.

Subdivision of T.2 N.,R.10 W.

chains

N.0°02'W., bet. secs, 14 and 15
Over nearly level land , through short undergrowth of shadscale and salt sage.

40.00 Set an iron post , 3 ft. long , 1 in. in dia., 24 ins. in the ground for $\frac{1}{4}$ sec. cor., with brass cap marked

S 15 | S 14
$\frac{1}{4}$
1913

dig pits , 18 x 18 x 12 ins., N. and S. of post , 3 ft. dist., raise a mound of earth , 3 ft. base , 1½ ft. high , W. of cor.

48.10 Wagon road , bears NW. and SE

60.00 Base of low ridge , bears NW. and SE

Ascend over S. slope to

65.50 Top of ridge , 35 ft. above base , bears NW. and SE.

Descend 35 ft. to

75.00 Base of ridge , bears NW. and SE

Thence over level land.

80.00 Set an iron post , 3 ft. long , 2 ins. in dia., 24 ins. in the ground for cor. of secs. 10 , 11 , 14 and 15 , with brass cap marked

T 2 N | R 10 W
S 10 | S 11
S 15 | S 14
1913

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 , S. 60.00 and N.5 chs., nearly level , remainder of mile consists of low SE. point of ridge.

Soil , light , fine , dry , warm friable clay , slightly baked and mixed with some alkali , on a hard , baked clay ;sub-soil ; 2 nd. rate.

No timber

Subdivision of T.2 N.,R.10 W.

chains

Undergrowth , short shadscale and some salt sage.

Some grass good for grazing purposes on ridge.

East , on random line bet. secs. 11 and 14

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

79.88 Intersect N. and S. line at the cor. of secs. 11 , 12 , 13 and 14

Thence

West , on true line bet. secs. 11 and 14

Over nearly level land through short undergrowth of shadscale and white sage.

20.00 Enter greasewood undergrowth , about 3 ft. high , bears N. and S

39.94 Set an iron post , 3 ft. long , 1 in. in dia., 24 ins. in the ground for $\frac{1}{4}$ sec. cor., with brass cap marked

$$\frac{S\ 11}{\frac{1}{4}}$$

$$S\ 14$$

1913 .

dig pits , 18 x 18 x 12 ins., E. and W. of post , 3 ft. dist., raise a mound of earth , 3½ ft. base , 1½ ft. high N. of cor.

65.00 Leave greasewood undergrowth , bears N. and S.

79.88 The cor. of secs. 10 , 11 , 14 and 15

Land level.

Soil , light , fine , dry , warm friable clay slightly baked and mixed with alkali on a hard clay sub-soil ; 2 nd. rate.

No timber.

Undergrowth , short shadscale and white sage mostly dead and some greasewood..

Some good grass for grazing purposes.

June 19 , 1913

chains

Howard W. Miller

U. S. Surveyor.

June 21: For solar observation see line bet. secs. 15 and 16.

N.0°02'W., bet. secs. 10 and 11

Over nearly level ground , through short undergrowth of shadscale , white sage and some greasewood.

40.00 Set an iron post , 3 ft. long , 1 in. in dia., 24 ins. in the ground for $\frac{1}{4}$ sec. cor., with brass cap marked

S $\frac{1}{4}$ 10 | S 11

1913

dig pits , 18 x 18 x 12 ins., N. and S. of post , 3 ft. dist ., raise a mound of earth , 3½ft. base , 1½ ft. high, W. of cor.

80.00 Set an iron post , 3 ft. long , 2 ins. in dia., 24 ins. in the ground for cor. of secs. 2 , 3 , 10 and 11 , with brass cap marked

T 2 N | R 10 W
S 3 | S 2

S 10 | S 11

1913

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.

Soil , light , fine , dry , sandy clay mixed with alkali on hard , dry , baked clay sub-soil ; 2 nd. rate.

No timber.

Undergrowth , short shadscale , greasewood and white sage.

No grazing.

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

chains

40.00 Set temp. ¼ sec. cor.

79.93 Intersect N. and S. line , 5 lks. S. of the cor. of secs. 1 , 2 , 11 and 12

Thence

S.89°58'W., on true line bet. secs. 2 and 11

Over nearly level land through dense undergrowth of greasewood , shadscale and white sage.

38.53 Wagon road , bears NW. and SE

39.96½ Set an iron post , 3 ft. long , 1 in. in dia., 24 ins. in the ground for ¼ sec. cor., with brass cap marked

S 2
¼
S 11
1913

dig pits , 18 x 18 x 12 ins., E. and W. of post , 3 ft. dist., raise a mound of earth , 3½ ft. base , 1½ ft. high , W. of cor.

79.93 The cor. of secs. 2 , 3 , 10 and 11

Land , nearly level.

Soil , light , dry , fine , sandy clay , mixed with alkali and slightly baked , on a hard sub-soil of clay ; 2 nd. rate.

No timber.

Undergrowth , greasewood , white sage and some dead shadscale.

N.0°03'W., on random line bet. secs. 2 and 3

40.00 Set temp. ¼ sec. cor.

81.01 Intersect N. bdy. of the tp. 14 lks. E. of the cor. of secs. 2 , 3 , 34 and 35 heretofore described

Thence

S.0°08'E., on true line bet. secs. 2 and 3

Gradually descend over S. slope of low ridge , through short undergrowth of shadscale and scattering greasewood.

Subdivision of T.2 N.,R.10 W.

chains	
5.00	Base of ridge bears NW. and SE.
	Thence over nearly level ground.
41.01	Set an iron post , 3 ft. long , 1 in. in dia., 24 ins. in the ground for $\frac{1}{4}$ sec. cor., with brass cap marked S 3 | S 2 $\frac{1}{4}$ 1913 dig pits , 18 x 18 x 12 ins., N. and S. of post , 3 ft. dist., raise a mound of earth , 3½ft. base , 1½ ft. high , W. of cor.
81.01	The cor. of secs. 2 , 3 , 10 and 11
	Land level and rolling. N. 5 chs. rolling land sloping S., remainder of mile level ground.
	Soil , light , fine , dry , sandy clay mixed with alkali and slightly baked , on hard dry clay sub-soil ; 2 nd. rate.
	No timber.
	Undergrowth , greasewood and shadscale.
	June 21 , 1913

June 20: At 8 h. 31 m. a. m. l. m. t., I set off 40° 51' on the lat. arc ; 23° 27' N., on the decl. arc ; and determine a meridian with the solar at the cor. of secs. 33 and 34 on the S. bdy. of the tp. heretofore described.

Thence I run

N.0°02'W., bet. secs.33 and 34

Over rolling land draining S., through short undergrowth of shadscale and white sage.

40.00	Set an iron post , 3 ft. long , 1 in. in dia., 24 ins. in the ground for $\frac{1}{4}$ sec. cor., with brass cap marked

chains

S 33 | S 34
1/4

1913

dig pits , 18 x 18 x 12 ins., N. and S. of post , 3 ft. dist., raise a mound of earth , 3½ ft. base , 1½ ft. high , W. of cor.

80.00 Set an iron post , 3 ft. long , 2 ins. in dia., 24 ins. in the ground for cor. of secs. 27 , 28 , 33 and 34 with brass cap marked

T 2 N | R 10 W
S 28 | S 27

S 33 | S 34

1913

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 rolling with a gentle S. exposure.

Soil , light , fine,dry , sandy clay slightly baked and mixed with alkali on a hard , dry sub-soil of clay.,2 nd. rate. Badger diggings show a gypsum formation about , 4 ft. under the surface.

No timber.

Undergrowth , shadscale and salt sage.

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

40.00 Set temp. ¼ sec. cor.

79.93 Intersect N. and S. line at the cor. of secs. 26 , 27 , 34 and 35

Thence

West , on true line bet. secs. 27 and 34

Gradually ascend over rolling ground through short undergrowth of shadscale and white sage.

39.96½ Set an iron post , 3 ft. long , 1 in. in dia., 24 ins. in the ground for ¼ sec. cor., with brass cap marked

Subdivision of T.2 N.,R.10 W.

chains

S 27
1/4
S 34
1913

dig pits , 18 x 18 x 12 ins., E. and W. of post , 3 ft. dist., raise a mound of earth , 3½ft. base , 1½ ft. high N. of cor.

46.00 Top of low ridge , 40 ft. above sec. cor., bears N. and S. Gradually descend over gentle W. slope.

79.93 The cor. of secs. 27 , 28 , 33 and 34.

Land rolling with gentle E. exposure on E. 46.00 chs., and W. exposure on W. 33.93 chs.

Soil , light , fine sandy clay , mixed with alkali and slightly baked on hard clay sub-soil ; 2 nd. rate.

No timber.

Undergrowth , shadscale and white sage,

N.0°02'W., bet. secs. 27 and 28

Over nearly level ground , through short undergrowth of shadscale and white sage.

40.00 Set an iron post , 3 ft. long , 1 in. in dia., 24 ins. in the ground for ¼ sec. cor., with brass cap marked

S 28 | S 27
1/4
1913

dig pits , 18 x 18 x 12 ins., N. and S., of post , 3 ft. dist., raise a mound of earth , 3½ft. base , 1½ ft. high W. of cor.

80.00 Set an iron post , 3 ft. long , 2 ins. in dia., 18 ins. in the ground and 6 ins. in a mound of earth and stone for cor. of secs. 21 , 22 , 27 and 28 , with brass cap marked

T 2 N | R 10 W
S 21 | S 22

S 28 | S 27
1913

chains

dig pits , 18 x 18 x 12 ins., in each sec., 5½ ft. dist., raise a mound of earth , 4 ft. base , 3 ft. high , W. of cor.

Note:
On account of hard gypsum sub-soil I am unable to set post more than 18 ins. in the ground.

Land nearly level.

Soil , light , fine , dry sandy clay , mixed with alkali and slightly baked , 12 to 18 ins. deep , on hard sub-soil of gypsum ; 3 rd. rate.

No timber.

Undergrowth , shadscale and white sage.

June 20 : At this sec. cor., I set off 23° 27' N., on the decl. arc ; and at 12 h. 01 m. p. m. l. m. t., observe the sun on the meridian ; the resulting lat. is 40°53',

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East , on a random line bet. secs. 22 and 27

40.00 Set temp. ¼ sec. cor.

80.01 Intersect N. and S. line at the cor. of secs. 22 , 23 , 26 and 27

Thence

West , on true line bet. secs. 22 and 27

Gradually ascend over gently rolling land sloping E., through short undergrowth of shadscale.

40.00½ On top of low ridge , bears N. and S.

Set an iron post , 3 ft. long , 1 in. in dia., 24 ins. in the ground for ¼ sec, cor., with brass cap marked

S 22
¼

S 27
1913

dig pits , 18 x 18 x 12 ins., E. and W. of post , 3 ft. dist., raise a mound of earth , 3½ft. base , 1½ ft. high , N. of cor.

Gradually descend over gentle W. slope.

80.01 The cor. of secs. 21 , 22 , 27 and 28

. Subdivision of T.2 N.,R.10 W.

chains

Land , rolling , E. exposure on E.½ mile and W. exposure on W.½ mile.

Soil , fine sandy clay , mixed with alkali and slightly baked , on a hard gypsum sub-soil ; 3 rd. rate.

No timber.

Undergrowth , shadscale.

N.0°02'W., bet. secs. 21 and 22

Over gently rolling land through short undergrowth of shadscale and white sage.

40.00 Set an iron post , 3 ft. long , 1 in. in dia., 24 ins. in the ground for ¼ sec. cor., with brass cap marked

S 21 | S 22
¼
1913

dig pits , 18 x 18 x 12 ins., N. and S. of post , 3 ft. dist., raise a mound of earth , 3½ ft. base , 1½ ft. high , W. of cor.

80.00 Set an iron post , 3 ft. long , 2 ins. in dia., 24 ins. in the ground for cor. of secs. 15 , 16 , 21 and 22 , with brass cap marked

T 2 N | R 10 W
S 16 | S 15

S 21 | S 22
1913

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 , nearly level with gentle N. exposure.

Soil , light , fine , dry , sandy clay , mixed with alkali and slightly baked on hard sub-soil of gypsum ; 3 rd. rate.

No timber.

Undergrowth , short shadscale and white sage.

Subdivision of T.2 N.,R.10 W.

CHAINS	
	East , on a random line bet. secs. 15 and 22
40.00	Set temp. $\frac{1}{4}$ sec. cor.
80.05	Intersect N. and S. line 7 lks. S., of the cor. of secs. 14 , 15 , 22 and 23
	Thence
	S.89°57'W., on true line bet. secs. 15 and 22
	Over nearly level land , through short undergrowth of shadscale.
40.02½	Set an iron post , 3 ft. long , 1 in. in dia., 24 ins. in the ground for $\frac{1}{4}$ sec. cor., with brass cap marked
	S 15 / $\frac{1}{4}$ / S 22 / 1913
	dig pits , 18 x 18 x 12 ins., E. and W. of post , 3 ft. dist., raise a mound of earth , 3½ft. base , 1½ ft. high , N. of cor.
80.05	The cor. of secs. 15 , 16 , 21 and 22.
	Land , level.
	Soil , light , fine , dry, warm sandy clay , mixed with alkali and slightly baked , on hard clay sub-soil ; 2 nd. rate.
	No timber.
	Undergrowth , short shadscale.
	June 20 , 1913

June 21 : At 7 h. 01m. a. m. l. m. t., I set off 40°54' on the lat. arc ; 23° 28' N., on the decl. arc ; and determine a meridian with the solar at the cor. of secs. 15 , 16 , 21 and 22

Thence I run

N.0°02'W., bet. secs. 15 and 16.

Over nearly level land through scattering short undergrowth of shadscale and white sage.

Subdivision of T.2 N.,R.10 W.

chains	
40.00	Set an iron post , 3 ft. long , 1 in. in dia., 24 ins. in the ground for $\frac{1}{4}$ sec. cor., with brass cap marked S $\frac{1}{4}$ 16 | S 15 1913 dig pits , 18 x 18 x 12 ins., N. and S. of post , 3 ft. dist., raise a mound of earth , 3½ ft. base , 1½ ft. high , W. of cor.
80.00	Set an iron post , 3 ft. long , 2 ins. in dia., 24 ins. in the ground for cor. of secs. 9 , 10 , 15 and 16 , with brass cap marked T 2 N | R 10 W S 9 | S 10 S 16 | S 15 1913 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.
	Soil , light , fine , dry , sandy clay , slightly baked , on hard , dry sub-soil of clay ; 2 nd. rate.
	No timber.
	Undergrowth , short shadscale and some white sage.
	N.89°57'E., on a random line bet. secs. 10 and 15
40.00	Set temp. $\frac{1}{4}$ sec. cor.
80.06	Intersect N. and S. line , 6 lks. S. of the cor. of secs. 10 , 11 , 14 and 15
	Thence
	S.89°54'W., on true line bet. secs. 10 and 15
	Over nearly level land through short undergrowth of shadscale.
10.05	Base of ridge ; bears NW. and SE
	Gradually ascend over NW. slope of low ridge.

chains

29.00 Top of ridge 50 ft. above base , bears N.10°E. and SE.
Gradually descend over SE. slope.

35.00 Base of ridge , bears NW. and SE
Thence over level ground.

40.03 Set an iron post , 3 ft. long , 1 in. in dia., 24 ins. in the ground for ¼ sec. cor., with brass cap marked

$$\frac{S\ 10}{\frac{1}{4}}$$

S 15
1913

dig pits , 18 x 18 x 12 ins., E. and W. of post , 3 ft. dist., raise a mound of earth , 3½ft. base , 1½ ft. high N. of cor.

53.00 Wagon road , bears NW., and SE.

80.06 The cor. of secs. 9 , 10 , 15 and 16.

Land , level on E. 10 chs. and W. 45 chs. Rolling hills on remainder of mile.

Soil , light , fine , dry , sandy clay slightly baked and mixed with alkali on a hard gypsum sub-soil about 2 ft. unddr surface.

No timber.

Undergrowth , short shadscale.

Robert E. Chaok.

U. S.Transitman

June 24: For solar observation see line bet. secs. 16 and 21.

N.0°02'W., bet. secs. 9 and 10

Over nearly level land with a gentle SE. exposure , through scattering undergrowth of short shadscale and white sage.

13.80 Wagon road , bears NW. and SE.

40.00 Set an iron post , 3 ft. long , 1 in. in dia., 24 ins. in the ground for ¼ sec. cor., with brass cap marked

Subdivision of T.2 N.,R.10 W.

chains

S 9 | S 10
1/4
1913

dig pits , 18 x 18 x 12 ins., N. and S. of post , 3 ft. dist., raise a mound of earth , 3½ft. base , 1½ ft. high , W. of cor.

80.00 Set an iron post , 3 ft. long , 2 ins. in dia., 24 ins. in the ground for cor. of secs. 3 , 4 , 9 and 10 , with brass cap marked

T 2. N | R 10 W
S 4 | S 3
S 9 | S 10
1913

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.

Soil , light , fine , dry , warm sandy clay slightly baked and mixed with alkali on a hard moist sub-soil of clay; 2 nd. rate.

No timber.

Undergrowth , short shadscale , mostly all dead.

June 24 : At this sec. cor., I set off 23° 26' N., on the decl. arc ; and at 12 h. 02 m. p. m. l. m. t., observe the sun on the meridian ; the resulting lat. 40° 55'

N.89°54'E., on a random line bet. secs. 3 and 10

40.00 Set temp. ¼ sec. cor.

80.05 Intersect N. and S. line at the cor. of secs. 2 , 3 , 10 and 11

Thence

S.89°54'W., on true line bet. secs. 3 and 10

Subdivision of T.2 N.,R.10 W.

chains	
	Over nearly level land , through short undergrowth of shadscale and white sage.
25.05	Base of low ridge , bears N. and S.
	Ascend.
27.75	Top of low ridge , 30 ft. high , bears N. and S.
	Gradually descend.
32.05	Base of ridge. , bears N. and S.
	Thence over nearly level ground.
40.02½	Set an iron post , 3 ft. long , 1 in. in dia., 24 ins. in the ground for ¼ sec. cor., with brass cap marked S ¼ 3 S 10 1913 dig pits , 18 x 18 x 12 ins., E. and W. of post , 3 ft. dist., raise a mound of earth , 3½ ft. base , 1½ ft. high , N. of cor.
80.05	The cor. of secs. 3 , 4 , 9 and 10.
	Land level and rolling hill.
	Soil , dry , baked sandy clay mixed with alkali on a hard clay sub-soil ; 3 rd. rate.
	No timber.
	Undergrowth , short shadscale and some white sage.
	N.0°02'W., on random line bet. secs. 3 and 4
40.00	Set temp. ¼ sec. cor.
80.94	Intersect N. bdy. of the tp., 2 lks. W. of the cor. of secs. 3 , 4 , 33 and 34 heretofore described
	Thence
	S.0°01'E., on true line bet. secs. 3 and 4
	Over nearly level land through short undergrowth of shadscale and white sage.
40.94	Set an iron post , 3 ft. long , 1 in. in dia., 24 ins. in the ground for ¼ sec. cor., with brass cap marked S ¼ 4 | S 3 1913

chains

dig pits , 18 x 18 x 12 ins., N. and S. of post , 3 ft. dist., raise a mound of earth , 3½ft. base , 1½ ft. high , W. of cor.

80.94 The cor. of secs. 3 , 4 , 9 and 10.

Land , level.

Soil , hard , baked sandy clay , mixed with alkali on a hard , dry clay sub-soil ; 2 nd. rate.

No timber

Undergrowth , short shadscale and some white sage.

June 24 , 1913

June 23: At 8 h. 02 m. a. m. l. m. t., I set off 40°51' on the lat. arc ; 23° 27' N., on the decl. arc ; and determine a meridian with the solar at the cor. of secs. 32 and 33 on the S. bdy. of the tp. heretofore described.

Thence I run

N.0°03'W., bet. secs. 32 and 33

Gradually descend over rolling land sloping NE., through short undergrowth of shadscale and salt sage.

40.00 Set an iron post , 3 ft. long , 1 in. in dia., 24 ins. in the ground for ¼ sec. cor., with brass cap marked

S 32 ¼	S 33

1913

dig pits , 18 x 18 x 12 ins., N. and S. of post , 3 ft. dist., raise a mound of earth , 3½ft. base , 1½ ft. high , W. of cor.

43.00 Wash , 5 lks. wide , 5 ft. deep , course NE.

78.50 Wash , 20 lks. wide , 1 ft. deep , course NE.

80.00 Set an iron post , 3 ft. long , 2 ins. in dia., 24 ins. in the ground for cor. of secs. 28 , 29 , 32 and 33 , with brass cap marked

T 2 N S 29	R 10 W S 28
S 32	S 33

1913

Subdivision of T.2 N.,R.10 W.

chains	
	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 , rolling with gentle NE. exposure.
	Soil , gravelly , mixed with dry , fine , warm clay , on clay sub-soil ; 2 nd. rate.
	No timber.
	Undergrowth , short shadscale and some white sage.
	East , on a random line bet. secs. 28 and 33
40.00	Set temp. ¼ sec. cor.
80.05	Intersect N. and S. line , 2 lks. S. of the cor. of secs. 27 , 28 , 33 and 34
	Thence
	S.89° 59'W., on true line bet. secs. 28 and 33
	Gradually ascend over rolling land sloping NE., through short undergrowth of shadscale.
40.02½	Set an iron post , 3 ft. long , 1 in. in dia., 24 ins. in the ground for ¼ sec. cor., with brass cap marked
	S 28 ¼ S 33 1913
	dig pits , 18 x 18 x 12 ins., E. and W. of post , 3 ft. dist., raise a mound of earth , 3½ft. base , 1½ ft. high N. of cor.
78.45	Wagon road , bears N.20°W. and S.20°E.
79.25	Wash , 20 lks. wide , 2 ft. deep , course NE.
80.05	The cor. of secs. 28 , 29 , 32 and 33
	Land , rolling with gentle NE. exposure.
	Soil , light , fine , dry , warm sandy clay mixed with some gravel and alkali on hard , dry , clay sub-soil ; 2 nd, rate.
	No timber.
	Undergrowth , short shadscale.

Subdivision of T. 2 N., R. 10 W.

chains

N.0°03'W., bet. secs. 28 and 29

Over gently rolling land through scattering undergrowth of shadscale.

3.20 Wagon road , bears NW. and SE.

20.00 Wash , 10 lks. wide , 5 ft. deep , course NE.

40.00 Set an iron post , 3 ft. long , 1 in. in dia., 24 ins. in the ground for ¼ sec. cor., with brass cap marked

S 29 | S 28
¼
1913

dig pits , 18 x 18 x 12 ins., N. and S. of post , 3 ft. dist., raise a mound of earth , 3½ft. base , 1½ ft. high , W. of cor.

80.00 Set an iron post , 3 ft. long , 2 ins. in dia., 24 ins. in the ground for. cor. of secs. 20 , 21 , 28 and 29 , with brass cap marked

T 2 N | R 10 W
S 20 | S 21
S 29 | S 28
1913

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 gently rolling with E. and N. exposure.

Soil , gravelly and light , fine , dry , warm sandy clay, slightly baked and mixed with alkali on clay sub-soil ; 2 nd. rate.

No timber.

Undergrowth shadscale , and some short grass , good for grazing purposes.

N.89°59'E., on a random line bet. secs. 21 and 28

40.00 Set temp. ¼ sec. cor.

Subdivision of T. 2 N., R. 10 W.

chains

80.01 Intersect N. and S. line, 5 lks. N. of the cor. of secs. 21, 22, 27 and 28.

Thence

N.89°59'W., on true line bet. secs. 21 and 28

Over nearly level land through short undergrowth of shadscale and some white sage.

40.00½ Set an iron post, 3 ft. long, 1 in. in dia., 24 ins. in the ground for ¼ sec. cor., with brass cap marked

S 21
¼
S 28
1913

dig pits, 18 x 18 x 12 ins., E. and W. of post, 3 ft. dist., raise a mound of earth, 3½ft. base, 1½ ft. high N. of cor.

80.01 The cor. of secs. 20, 21, 28 and 29

Land, nearly level.

Soil, light, fine, dry, warm sandy clay, mixed with some alkali on a hard, dry, clay sub-soil; 2 nd. rate.

No timber.

Undergrowth, short shadscale and some white sage.

N.0°03'W., bet. secs. 20 and 21

Over gently rolling land with NE. exposure through short undergrowth of shadscale.

40.00 Set an iron post, 3 ft. long, 1 in. in dia., 24 ins. in the ground for ¼ sec. cor., with brass cap marked

S 20 | S 21
¼
1913

dig pits, 18 x 18 x 12 ins., N. and S. of post, 3 ft. dist., raise a mound of earth, 3½ft. base, 1½ ft. high, W. of cor.

June 23: The sky is overcast at noon, observations for

chains

lat. are impossible.

80.00 Set an iron post , 3 ft. long , 2 ins. in dia., 24 ins. in the ground for cor. of secs. 16 , 17 , 20 and 21 , with brass cap marked

T 2 N S 17	R 10 W S 16
S 20	S 21

1913

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 , gently rolling.

Soil , light , fine , dry , warm , sandy clay , slightly baked and mixed with alkali , on friable clay sub-soil ; 2 nd. rate.

No timber.

Undergrowth , short shadscale.

Heavy storm of rain at 1:30 p. m. prevents field work for the remainder of the day.

June 23 , 1913

June 24 : At 8 h. 03 m. a. m. l. m. t., I set off 40°54' on the lat. arc ; 23°26' N., on the decl. arc ; and determine a meridian with the solar at the cor. of secs. 16 , 17 , 20 and 21

Thence I run

S.89°59'E., on a random line bet. secs. 16 and 21

40.00 Set temp. ¼ sec. cor.

80.02 Intersect N. and S. line at the cor. of secs. 15 , 16 , 21 and 22.

Thence

N.89°59'W., on true line bet. secs. 16 and 21

Over nearly level land through short undergrowth of

chains

shadscale and some white sage.

40.01 Set an iron post , 3 ft. long , 1 in. in dia., 24 ins. in the ground for $\frac{1}{4}$ sec. cor., with brass cap marked

$$\frac{S\ 16}{\frac{1}{4}}$$
$$S\ 21$$
$$1913$$

dig pits , 18 x 18 x 12 ins., E. and W. of post , 3 ft. dist., raise a mound of earth , 3½ft. base , 1½ ft. high , N. of cor.

48.70 Wash , 15 lks. wide , 5 ft. deep , course SE.

80.02 The cor. of secs. 16 , 17 , 20 and 21

Land, gently rolling with gentle NE. exposure,

Soil , light dry , clay and gravel slightly baked and mixed with some alkali ,on friable clay and gravel sub-soil ; 2 nd. rate.

No timber.

Undergrowth , short shadscale and some white sage.

N.0°03'W., bet. secs. 16 and 17

Over gently rolling land sloping E., through short undergrowth of shadscale and white sage.

20.00 Wash , 10 lks. wide , 3 ft. deep , course SE.

40.00 Set an iron post , 3 ft. long , 1 in. in dia., 24 ins. in the ground for $\frac{1}{4}$ sec. cor., with brass cap marked

$$\frac{S\ 17 \mid S\ 16}{\frac{1}{4}}$$
$$1913$$

dig pits , 18 x 18 x 12 ins., N. and S. of post , 3 ft. dist., raise a mound of earth , 3½ft. base , 1½ ft. high , W. of cor.

75.00 Wash , 25 lks. wide , 5 ft. deep , course SE

80.00 Set an iron post , 3 ft. long , 2 ins. in dia., 24 ins. in the ground for cor. of secs. 8 , 9 , 16 and 17 , with brass cap marked

chains

T 2 N | R 10 W
S 8 | S 9
S 17 | S 16

1913

dig pits , 18 x 18 x 12 ins., in each sec., 5 ½ ft. dist., raise a mound of earth , 4 ft. base , 2 ft. high , W. of cor.

Land , gently rolling with E. exposure,

Soil , light , dry , fine , sandy clay , slightly baked and mixed with alkali on a hard , baked clay sub-soil ; 2 nd. rate.

No timber.

Undergrowth , short shadscale and some white sage.

S.89° 59' E., on a random line bet. secs. 9 and 16

40.00 Set temp. ¼ sec. cor.

80.01 Intersect N. and S. line , 7 lks. N. of the cor. of secs. 9 , 10 , 15 and 16

Thence

N.89° 56'W., on true line bet. secs. 9 and 16

Gradually ascend over gently rolling land , through short undergrowth of shadscale.

40.00½ Set an iron post , 3 ft. long , 1 in. in dia., 24 ins. in the ground for ¼ sec. cor., with brass cap marked

S 9
¼
S 16
1913

dig pits , 18 x 18 x 12 ins., E. and W. of post , 3 ft. dist., raise a mound of earth , 3½ft. base , 1½ ft. high , N. of cor.

80.01 The cor. of secs. 8 , 9 , 16 and 17

Land gently rolling with gentle E.exposure.

Soil , light , friable clay , slightly baked and mixed with alakli on hard , dry clay sub-soil ; 2 nd. rate.

No timber

chains

Undergrowth , short shadscale.

Some good grass for grazing purposes.

Howard W Miller

U. S. Surveyor.

June 27: For solar observation see line bet. secs. 8 and 17.

N.0°03 'W., bet. secs. 8 and 9

Over gently rolling land through short undergrowth of short shadscale and salt sage.

40.00 Set an iron post , 3 ft. long , 1 in. in dia., 24 ins. in the ground for $\frac{1}{4}$ sec. cor., with brass cap marked

S 8 $\frac{1}{4}$ | S 9

1913

dig pits , 18 x 18 x 12 ins., N. and S. of post , 3 ft. dist., raise a mound of earth , 3½ft. base , 1½ ft. high , W. of cor.

45.30 Wagon road , bears S.60°E. and W.

55.40 Wagon road , bears NW. and SE.

80.00 Set an iron post , 3 ft. long , 2 ins. in dia., 24 ins. in the ground for cor. of secs. 4 , 5 , 8 and 9 , with brass cap marked

T 2 N | R 10 W
S 5 | S 4

S 8 | S 9

1913

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 , gemtly rolling with E. exposure.

Soil , fine , dry , sandy clay loam , on clay sub-soil ; 2 nd. rate.

No timber.

Subdivision of T.2 N.,R. 10 W.

chains

Undergrowth , short shadscale and salt sage.

June 27: At this sec, cor., I set off 23°21' N., on the decl. arc ; and at 12 h. 02 m. p. m. l. m. t., observe the sun on the meridian ; the resulting lat. is 40 56'.

S.89°56'E., on a random line bet. secs. 4 and 9

40.00 Set temp. ¼ sec. cor.

79.97 Intersect N. and S. line at the cor. of secs. 3 , 4 , 9 and 10

Thence

N.89°56'W., on true line bet. secs. 4 and 9

Over nearly level land through short undergrowth of shadscale

39.98½ Set an iron post , 3 ft. long , 1 in. in dia., 24 ins. in the ground for ¼ sec. cor., with brass cap marked

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

S 9

1913

dig pits , 18 x 18 x 12 ins., E. and W. of post , 3 ft. dist., raise a mound of earth , 3½ft. base , 1½ ft. high , N. of cor.

79.97 The cor. of secs. 4 , 5 , 8 and 9

Land , gently rolling , sloping E.

Soil , light , fine , dry , sandy clay , slightly baked and mixed with alkali on a hard friable clay sub-soil; 2 nd. rate.

No timber.

Undergrowth , short shadscale.

N.0°03'W., on a random line bet. secs. 4 and 5

40.00 Set temp. ¼ sec. cor.

80.60 Intersect N. bdy. of the tp. 7 lks. E. of the cor. of secs. 4 , 5 , 32 and 33 heretofore described

chains

Thence

S.0°06'E., on true line bet. secs. 4 and 5.

Over gently rolling land through short undergrowth of shadscale and salt sage.

21.40 Wash , 10 lks. wide , 2 ft. deep , course SE.

33.20 Wash , 30 lks. wide , 6 ft. deep , course SE

40.60 Set an iron post , 3 ft. long , 1 in. in dia., 24 ins. in the ground for ¼ sec. cor., with brass cap marked

S ¼ 5 | S 4

1913

dig pits , 18 x 18 x 12 ins., N. and S. of post , 3 ft. dist., raise a mound of earth , 3½ ft. base , 1½ ft. high , W. of cor.

80.60 The cor. of secs. 4 , 5 , 8 and 9.

Land gently rolling with gentle SE.drainage.

Soil ,fine sandy clay loam , on clay sub-soil ; 2 nd. rate.

No timber.

Undergrowth ,short shadscale and salt sage.

Good farming land if watered.

June 27 , 1913

June 23 ; At 8 h. 02 m. a. m. l. m. t., I set off 40°51' on the lat. arc ; 23°27' N., on the decl. arc ; and determine a meridian with the solar at the cor. of secs. 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 mountainous land along E. side of ridge , 80 ft. below old beach line and 700 ft. above valley to the east.

40.00 Set an iron post , 3 ft. long , 1 in. in dia., 12 ins. in the ground and 12 ins. in a mound of stone and earth , 4 ft. base , 1 ft. high , for ¼ sec. cor., with brass cap marked

Subdivision of T.2 N.,R.10 W.

chains	
	S $\frac{1}{4}$ 31 | S 32 1913 raise a mound of stone , 2 ft. base , 1½ ft. high , W. of cor.
	Note: On account of natural obstacles I am unable to set post more than 12 ins. in the ground.
	Begin gradual descent.
55.00	Begin abrupt descent.
62.80	Bottom of gulch , course E.
	Ascend gradually.
66.50	Descend gradually over small washes.
71.60	Descend abruptly.
72.20	Wash , 20 lks. wide , course E.
	Ascend abruptly.
73.40	Gradually descend over small washes.
80.00	Set an iron post , 3 ft. long , 2 ins. in dia., 34 ins. in the ground for cor. of secs. 29 , 30 , 31 and 32 , with brass cap marked T 2 N | R 10 W S 30 | S 29 S 31 | S 32 1913 raise a mound of stone , 2 ft. base , 1½ ft. high , W. of cor.
	Land , rough E. slope of mountain.
	Soil , gravelly and rocky on rocky and sandy sub-soil ; 3 rd. rate.
	Timber , a few scattering cedar and pinon.
	Undergrowth , short shadscale and sage brush.
	Mountainous land 80.00 chs.

June 24 : At 8 h. 02 m. a. m. l. m. t., I set off 40°53' on the lat. arc ; 23° 27' N., on the decl. arc ; and determine a meridian with the solar at the cor. of secs.

chains

29 , 30 , 31 and 32

Thence I run

East , on a random line bet. secs. 29 and 32

40.00 Set temp. ¼ sec. cor.

80.07 Intersect N. and S. line at the cor. of secs. 28 , 29 , 32 and 33

Thence

West , on true line bet. secs. 29 and 32.

Gradually ascend over land facing E., at base of high ridge , through short undergrowth of shadscale.

40.03½ Set an iron post , 3 ft. long , 1 in. in dia., 12 ins. in the ground and 12 ins. in a mound of stone and earth 4 ft. base , 1 ft. high , for ¼ sec. cor., with brass cap marked

S 29
¼
S 32
1913

dig pits , 18 x 18 x 12 ins., E. and W. of post , 3 ft. dist., raise a mound of earth , 3½ft. base., 1½ft.a high, N. of cor. 2 ft

Note:
On account of natural obstacles I am unable to set post more than 12 ins. in the ground.

41.87 Wagon road , bears NW. and SE.

48.07 Wash , 15 lks. wide , 2 ft. deep , course NE.

80.07 The cor. of secs. 29 , 30 , 31 and 32

Land , slightly rolling with a gradual E. slope of about 4°.

Soil , sandy clay and gravelly on sandy gravel and some rocky sub-soil ; 3 rd. rate.

No timber.

Undergrowth , short shadscale.

June 23:

West , on a random line bet. secs. 30 and 31

40.00 Set temp. ¼ sec. cor.

Subdivision of T.2 N.,R.10 W.

chains	
82.55	Intersect W. bdy. of the tp. 7 lks. S. of the cor. of secs. 25 , 30 , 31 and 36 heretofore described.
	Thence
	S.89°57'E., on true line bet. secs. 30 and 31
	Over rolling mountainous land sloping W., through short undergrowth of shadscale.
	Gradually ascend.
5.00	Base of mountain , bears N. and S.
	Ascend abruptly over W. slope.
42.55	Top of spur , 275 ft. above sec. cor.,projects S.20°W.
	Set an iron post , 3 ft. long , 1 in. in dia., 6 ins. in the ground and 18 ins. in a mound of stone and earth , 4 ft. base , 1½ ft. high for ¼ sec. cor., with brass cap marked
	$\frac{S\ 30}{\frac{1}{4}}$ / S 31 / 1913
	raise a mound of stone , 2 ft. base , 1½ ft. high , N. of cor.
	Note: On account of natural obstacles I am unable to set post more than 6 ins. in the ground.
	June 23: The sky is overcast at noon , observations for lat. are impossible.
	Descend.
48.55	Gulch , near head , drains SW.
	Ascend 100 ft. to
51.25	Top of high ridge , bears NW. and S.
	Descend abruptly over E. face of ridge into valley.
52.00	Enter sandstone slide rock., bears N. and S.
61.55	Leave slide rock , bears N. and S.
	Descend more gradually.
83.55	The cor. of secs. 29 , 30 , 31 and 32
	Land rough mountainous , with steep E. and W. slopes of ridges into valleys from high divide.
	Soil , gravelly and rocky on rocky sub-soil ; 4 th. rate.

chains

Timber , a few scattering cedar.

Undergrowth , short shadscale.

Mountainous land , 82.55 chs.

At 1:30 p. m. heavy storm of rain prevents field work for remainder of day.

June 23 , 1913

June 24:

N.0°04'W., bet. secs. 29 and 30

Over rolling land at base of high mountain ridge , through short undergrowth of shadscale and sage brush.

39.00 Wash , 30 lks. wide , 3 ft. deep , course E.

40.00 Set an iron post , 3 ft. long , 1 in. in dia., 6 ins. in the ground and 18ins. in a mound of stone and earth , 4 ft. base , 1½ ft. high , for ¼ sec. cor., with brass cap marked

S ¼ 30 | S 29

1913

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

Note:
On account of natural obstacles I am unable to set post more than 6 ins. in the ground.

45.10 Wash , 20 lks. wide , 5 ft. deep , course E.

54.00 Wash , 30 lks. wide , 9 ft. deep , course E.

80.00 Set an iron post , 3 ft. long 2 ins. in dia., 6 ins. in the ground and 18 ins. in a mound of stone and earth , 4 ft. base , 1½ ft. high , for cor. of secs. 19 , 20 , 29 and 30 , with brass cap marked

T 2 N | R 10 W
S 19 | S 20

S 30 | S 29

1913

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

chains

Note:
On account of natural obstacles I am unable to set post more than 6 ins. in the ground.

Land , rolling with an east slope of about 3°.

Soil , light , fine sandy clay and gravelon gravelly and rocky sub-soil ; 3 rd. rate.

No timber.

Undergrowth , short shadscale and sage brush.

June 24: At this sec. cor., I set off 23° 26' N., on the decl. arc; and at 12 h. 02 m. p. m. l. m. t., observe the sun on the meridian , the resulting lat. is 40° 53'.

East , on a random line bet. secs. 20 and 29.

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

80.09 Intersect N. and S. line 5 lks. S. of the cor. of secs. 20 , 21 , 28 and 29.

Thence

S.89°58'W., on true line bet. secs. 20 and 29.

Gradually ascend over rolling land sloping E., through short undergrowth of shadscale and white sage.

24.00 Wagon road , bears N. and S.15°E.

40.04½ Set an iron post , 3 ft. long , 1 in. in dia., 24 ins. in the ground for $\frac{1}{4}$ sec. cor., with brass cap marked

$$\frac{S\ 20}{\frac{1}{4}}$$
$$\frac{}{S\ 29}$$
$$1913$$

raise a mound of stone , 2 ft. base , 1½ ft. high . N of cor.

55.00 Wash , 20 lks. wide , 6 ft. deep , course N.80°E.

78.90 Wagon road , bears N. and S.

80.09 The cor. of secs. 19 , 20 , 29 and 30.

Land rolling , sloping E.

Soil , light dry clay and fine gravel on gravelly and sandy sub-soil ; 3 rd. rate.

No timber

Subdivision of T.2 N.,R.10 W.

chains	
	Undergrowth , short shadscale and some white sage.
	N.89°57'W., on a random line bet. secs. 19 and 30
40.00	Set temp. $\frac{1}{4}$ sec. cor.
82.58	Intersect W. bdy. of the tp.9 lks. N. of the cor. of secs. 19 , 24 , 25 and 30 heretofore described.
	Thence
	N.89°59'E., on true line bet. secs. 19 and 30
	Gradually ascend over rolling mountainous covered with considerable short shadscale undergrowth .
10.00	Ascend abruptly steep W. slope of mountain.
24.30	Top of ridge and divide , 500 ft. above sec. cor., bears N. and S.
	Descend abruptly over Steep E. slope covered with slide rock.
42.58	Set an iron post , 3 ft. long 1 in. in dia., 12 ins. in the ground and 12 ins. in a mound of stone and earth , 4 ft. base , 1 ft. high for $\frac{1}{4}$ sec. cor., with brass cap marked $\frac{S\ 19}{\frac{1}{4}}$ S 30 1913 raise a mound of stone , 2 ft. base , 1½ ft. high , N. of cor.
	Note: On account of natural obstacles I am unable to set post more than 12 ins. in the ground.
	Leave slide rock.
52.00	Dry gulch , 400 ft. below ridge , course S,80°E.
	Ascend abruptly
54.60	Low spur , course SE.
	Descend.
82.58	The cor. of secs. 19 , 20 , 29 and 30.
	Land rough and mountainous with steep E. and W. slopes from high divide.
	Soil , rocky , gravelly and clay on rocky sub-soil ; 4 th.

chains

rate.

Timber , a few scattering scrub cedar on both sides of line.

Undergrowth , short shadscale..

Mountainous land 82.58 chs.

June 24 , 1913

June 25: At 8 h. 02 m. a. m. l. m. t., I set off 40°55' on the lat. arc ; 23° 25' N., on the decl. arc ; and determine a meridian with the solar at the cor. of secs. 19 , 20 , 29 and 30

Thence I run

N.0°04'W., bet. secs. 19 and 20

Over rolling land sloping E., through short undergrowth of sage brush and shadscale.

4.00 Wagon road , bears N.20°W. and S.20°E.

40.00 Set an iron post , 3 ft. long , 1 in. in dia., 18 ins. in the ground and 6 ins. in a mound of stone for ¼ sec. cor. with brass cap marked

S 19 | S 20
¼ |
1913

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

Note:
On account of underlying rock I am unable to set post more tham 18 ins. in the ground.

48.00 Wash , 30 lks. wide , 15 ft. deep , course E.

79.00 Large wash , 80 lks. wide , 15 ft. deep , course N.80°E.

80.00 Set an iron post , 3 ft. long , 2 ins. in dia., 24 ins. in the ground for cor. of secs. 17., 18 , 19 and 20 , with brass cap marked

T 2 N | R 10 W
S 18 | S 17

S 19 | S 20
1913

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

chains	
	Land rolling with an east exposure.
	Soil , sandy clay and gravel on sandy and gravelly sub-soil ; 3 rd. rate..
	No timber.
	Undergrowth , sage brush and shadscale.

	N.89°58'E., on a random line bet. secs. 17 and 20
40.00	Set temp. $\frac{1}{4}$ sec. cor.
79.96	Intersect N. and S. line 2 lks. S. of the cor. of secs. 16 , 17 , 20 and 21
	Thence
	S.89°57'W., on true line bet. secs. 17 and 20
	Gradually ascend over gently rolling land sloping E., through short undergrowth of shadscale and white sage.
28.96	Wagon road , bears N. and S.
39.98	Set an iron post , 3 ft. long , 1 in. in dia., 18 ins. in the ground and 6 ins. in a mound of stone for $\frac{1}{4}$ sec. cor. with brass cap marked
	S 17 $\frac{1}{4}$ S 20 1913
	raise a mound of stone , 2 ft. base , 1½ ft. high , N. of cor.
	Note: On account of natural obstacles I am unable to set post more than 18 ins. in the ground.
70.00	Descend gradually.
75.00	Gulch , 1 ch. wide , 15 ft. deep , course N.80°E.
	Ascend
79.96	The cor. of secs. 17., 18 , 19 and 20.
	Land rolling with E. exposure.
	Soil , fine sandy clay and gravel on sandy and gravelly sub-soil ; 3 rd. rate.
	No timber.
	Undergrowth , short shadscale.
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chains	
	S.89°59'W., on a random line bet. secs. 18 and 19
40.00	Set temp. ¼ sec. cor.
82.53	Intersect W. bdy. of the tp. 2 lks. N. of the true cor. point of secs. 13 , 18 , 19 and 24 heretofore described.
	Thence
	N.89°58'E., on true line bet. secs. 18 and 19
	Ascend abruptly from bottom of hollow over mountainous land through scattering scrub cedar timber and undergrowth of shadscale.
4.70	Spur , 75 ft. above cor. point , projects SE.
	Descend abruptly.
9.65	Gulch , 50 ft. deep , course S.
	Ascend abruptly.
17.15	Top of peak on ridge , 40 ft. above gulch , bears N. and S.
	June 25: At this station , I set off 23°34'N., on the decl. arc ; and at 12 h. 02 m. p. m. l. m. t., observe the sun on the meridian ; the resulting lat. is 40°54'.
	Descend abruptly.
42.53	Set an iron post , 3 ft. long , 1 in. in dia., 12 ins. in the ground and 12 ins. in a mound of stone and earth , 4 ft. base , 1 ft. high for ¼ sec. cor., with brass cap marked
	S 18 / ¼ / S 19 / 1913
	raise a mound of stone , 2 ft. base , 1½ ft. high , N. of cor.
	Note: On account of natural obstacles I am unable to set post more than 12 ins. in the ground.
	Cor. stands on brow of hill , E. slope.
67.50	Base of mountain , bears N. and S.
	Gradually descend over rolling land. Leave scattering cedar.
68.00	Wagon road , bears N.10°W. and S.
72.50	Wash , 30 lks. wide , 15 ft. deep , course N.75°E.

chains	
82.53	The cor. of secs. 17 , 18 , 19 and 20
	W. 67.50 chs., rough mountainous land with steep E. and W. slopes from divide at 17.15 chs.; E. 12.53 chs., rolling land with gradual E. slope.
	Soil , rocky , gravelly and clay of poor quality on rocky sub-soil ; 4 th. rate.
	Timber , a few scattering cedar on W.67.50 chs.
	Undergrowth , short shadscale.
	Mountainous land 67.50 chs.

	N.0°04'W., bet. secs. 17 and 18
	Over rolling land sloping E., through short undergrowth of sage brush and shadscale.
3.00	Gulch , 1 ch. wide , 15 ft. deep , course E.
9.60	Gulch , 60 lks. wide , 15 ft. deep , course E.
22.50	Gulch , 1 ch. wide , 22 ft. deep , course E.
40.00	Set an iron post , 3 ft. long , 1 in. in dia., 24 ins. in the ground for $\frac{1}{4}$ sec. cor., with brass cap marked S $\frac{1}{4}$ 18 | S 17 1913 raise a mound of stone , 2 ft. base , 1½ ft. high , W. of cor.
53.80	Wash , 50 lks. wide , 10 ft. deep , course S.75°E.
80.00	Set an iron post , 3 ft. long , 2 ins. in dia., 24 ins. in the ground for cor. of secs. 7 , 8 , 17 and 18 , with brass cap marked T 2 N | R 10 W S 7 | S 8 S 18 | S 17 1913 raise a mound of stone , 2 ft. base , 1½ ft. high , W. of cor.
	Land , rolling with an east exposure.

Subdivision of T.2 N.,R.10W.

chains

Soil , gravelly , and sandy clay on gravel and rock sub-soil ; 4 th. rate.

No timber.

Undergrowth , short shadscale and sage brush.

June 25 , 1913

June 27 : At 7 h. 03 m. a. m. l. m. t., I set off 40°55' on the lat. arc ; 23°22'N., on the decl. arc; and determine a meridian with the solar at the cor. of secs. 7 , 8 , 17 and 18.

Thence I run

N.89°57'E., on a random line bet.secs. 8 and 17.

40.00 Set temp. ¼ sec. cor.

79.96 Intersect N. and S. 5 lks. N. of the cor. of secs. 8 , 9 , 16 and 17.

Thence

S.89°59'W., on true line bet. secs. 8 and 17

Gradually ascend over gently rolling land sloping E., through short undergrowth of shadscale.

12.00 Wash , 15 lks. wide , 4 ft. deep , course SE.

26.95 Wagon road , bears NW. and SE.

39.98 Set an iron post , 3 ft. long , 1 in. in dia., 24 ins. in the ground for ¼ sec. cor., with brass cap marked

$$\frac{S\ 8}{\frac{1}{4}}$$

S 17
1913

dig pits , 18 x 18 x 12 ins., E. and W. of post , 3 ft. dist., raise a mound of earth , 3½ft. base , 1½ ft. high , N. of cor.

55.00 Wash , 20 lks. wide , 4 ft. deep , course N.60°E.

79.96 The cor. of secs. 7 , 8 , 17 and 18.

Land , rolling , sloping E.

Soil , light , dry , fine sandy clay and gravel on gravel and clay sub-soil ; 3 rd. rate.

No timber

Subdivision of T.2 N.,R.10 W.

chains	
	Undergrowth , short shadscale.
	S.89°58'W., on random line bet. secs. 7 and 18
40.00	Set temp. $\frac{1}{4}$ sec. cor.
82.37	Intersect W. bdy. of the tp. 5 lks. S. of the cor. of secs. 7 , 12 , 13 and 18 , heretofore described
	Thence
	East , on true line bet. secs. 7 and 18
	Over rough mountainous land facing E.,descending over series of small limestone ledges through scattering scrub cedar timber and considerable short undergrowth of shadscale.
17.37	Base of mountain , bears NW. and SE. Leave cedar timber.
	Thence gradually descend over rolling land sloping E.
20.87	Wagon road , bears NW. and SE.
42.37	Set an iron post , 3 ft. long , 1 in.in dia., 24 ins. in the ground for $\frac{1}{4}$ sec. cor., with brass cap marked $\frac{S\ 7}{\frac{1}{4}}$ / $\frac{S\ 18}{1913}$ dig pits , 18 x 18 x 12 ins., E. and W. of post , 3 ft. dist., raise a mound of earth , $3\frac{1}{2}$ ft. base , $1\frac{1}{2}$ ft. high , N. of cor.
52.77	Wash , 20 lks. wide , 10 ft. deep , course NE.
	Gradually ascend.
57.77	Descend gradually.
66.77	Wash , 25 lks. wide , 12 ft. deep , course S.75°E.
82.37	The cor. of secs. 7 , 8, 17 and 18
	W. 17.37 chs.rough mountainous land , E.65.00 chs. rolling land with E. exposure.
	Soil , rocky of limestone formation on W.17.37 chs. and light , fine dry , clay and gravel on E. 65.00 chs ; 3 rd.mate.
	Timber , a few scrub cedar on W. 17.37 chs.
	Undergrowth , short shadscale.

Subdivision of T.2 N.,R.10 W.

chains

Mountainous land , 17.37 chs.

June 28: At 8 h. 03 m. a. m. l. m. t., I set off 40°55' on the lat. arc ; 23°19' N., on the decl. arc ; and determine a meridian with the solar at the cor. of secs. 7 , 8 , 17 and 18 .

Thence I run

N.0°04' W., bet. secs. 7 and 8

Over slightly rolling land sloping E., through short undergrowth of shadscale and salt sage.

40.00 Set an iron post , 3 ft. long , 1 in. in dia., 24 ins. in the ground for $\frac{1}{4}$ sec. cor., with brass cap marked

S $\frac{1}{4}$ 7 | S 8

1913

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

41.10 Wash , 25 lks. wide , 10 ft. deep , course E.

52.40 Wash , 20 lks. wide , 8 ft. deep , course S.75°E.

79.40 Wash , 20 lks. wide , 5 ft. deep , course SE.

80.00 Set an iron post , 3 ft. long , 2 ins. in dia., 24 ins. in the ground for cor. of secs. 5 , 6 , 7 and 8 , with brass cap marked

T 2 N | R 10 W
S 6 | S 5

S 7 | S 8

1913

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

Land slightly rolling cut by washes draining E.

Soil , fine , dry sandy clay and gravel on hard gravel and clay sub-soil ; 3 rd. rate.

No timber.

Undergrowth , short shadscale and some salt sage.

CHAINS	
	N.89°59'E., on a random line bet. secs. 5 and 8
40.00	Set temp. ¼ sec. cor.
79.84	Intersect N. and S. line 2 lks. N. of the cor. of secs. 4 , 5 , 8 and 9.
	Thence
	West , on true line bet. secs. 5 and 8.
	Gradually ascend over gently rolling land sloping E., through short undergrowth of shadscale and salt sage.
27.80	Wagon road , bears NW. and SE.
39.92	Set an iron post , 3 ft. long , 1 in. in dia., 24 ins. in the ground for ¼ sec. cor., with brass cap marked S 5 ¼ S 8 1913 dig pits , 18 x 18 x 12 ins., E. and W. of post , 3 ft. dist., raise a mound of earth , 3½ft. base , 1½ ft. high N. of cor.
47.70	Wagon road , bears N.15°W. and S.
79.84	The cor. of secs. 5 , 6 , 7 and 8.
	Land gently rolling with E. exposure.
	Soil ; light , fine , dry sandy clay loam and gravel on clay and gravel sub-soil ; 2 nd. rate.
	No timber.
	Undergrowth , short shadscale and salt sage.

	West , on a random line bet. secs. 6 and 7.
40.00	Set temp. ¼ sec. cor.
82.35	Intersect W. bdy. of the tp. at the cor. of secs. 1 , 6 , 7 and 12 heretofore described
	Thence
	East , on true line bet. secs. 6 and 7
	Over rough mountainous land covered with considerable short undergrowth of shadscale.
	Descend abruptly over E. face of spur covered with limestone outcropping.

chains.

17.45 Base of mountain , 275 ft. below sec. cor., bears NW. and SE.

Thence gradually descend over rolling land sloping E.

32.15 Wagon road , bears NE. and SW.

42.35 Set an iron post , 3 ft. long , 1 in. in dia., 24 ins. in the ground for $\frac{1}{4}$ sec. cor., with brass cap marked

S 6
$\frac{1}{4}$

S 7
1913

raised a mound of stone , 2 ft. base , 1½ ft. high , N. of cor.

68.55 Wash , 1 ch. wide , 15 ft. deep , course S.75°E.

83.35 The cor. of secs. 5 , 6 , 7 and 8.

Land , rough mountainous on W. 17.45 chs., and rolling on E., 64.90 chs., having a general E. exposure.

Soil of mountainous portion is generally rocky of limestone formation , while that of the rolling part is gravelly , rocky and mixed with some light clay ; 3 rd. rate.

No timber.

Undergrowth , short shadscale and some short bunch grass which affords good grazing.

June 28 : At this sec. cor., I set off 23°18' N., on the decl. arc ; and at 12 h. 03 m. p. m. l. m. t., observe the sun on the meridian ; the resulting lat. is 40°56'

N.0°04'W., on a random line bet. secs. 5 and 6

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

80.42 Intersect N. bdy. of the tp. 21 lks. E. of the cor. of secs. 5 , 6 , 31 and 32 heretofore described

Thence

S.0°13'E., on true line bet. secs. 5 and 6

chains	
	Over rolling land sloping gently east through short undergrowth of shadscale and salt sage.
3.52	Wagon road , bears N.3°W. and S.40°E.
17.32	Wash , 2 chs. wide , 10 ft. deep , course E.
29.82	Wash, 1 ch. wide , 10 ft. deep , course E.
40.42	Set an iron post , 3 ft. long , 1 in. in dia., 24 ins. in the ground for $\frac{1}{4}$ sec. cor., with brass cap marked S6 $\frac{1}{4}$ | S5 1913 raise a mound of stone , 2 ft. base , 1½ ft. high , W. of cor.
80.42	The cor. of secs. 5 , 6, 7 and 8.
	Land , rolling , sloping E.
	Soil , light , dry , fine , warm sandy clay mixed with gravel on clay and gravelly sub-soil ; 3 rd. rate.
	No timber.
	Undergrowth , short shadscale and some salt sage.
	Some short bunch grass good for grazing purposes.

June 28 , 1913

Robert E. Clark

U. S. Transitman.

Subdivision of T. 2 N. R. 10 W.

GENERAL DESCRIPTION

The lands in this Tp. are generally level or gently rolling, lying as they do in Skull Valley. The west range of sections only, is quite rough and mountainous, lying along the steep breaks of the Grassy Mountains.

These breaks and the rolling benches or foothills to immediately to the E., are the most valuable lands in the Tp., producing a fairly abundant growth of native grasses.

The level, or valley portion of the Tp. is of very little value, producing a very scant growth of grass, and salt or white sage, suitable for grazing purposes.

The entire Tp., with the exception of a few of the highest points along the western range of sections, is part of the old bed of Lake Bonneville, and has no apparent drainage.

The soil is a light, fine, dry, weak, closely packed clay, rather alkali, somewhat weathered and air slacked for the first 6 or 8 ins., and then very hard and baked.

The soil contains an increasingly large amount of sand and gravel as you approach the west bdy., making it more porous, and enabling it to support a correspondingly heavier growth of grass.

The entire Tp. supports a dense growth of short shadscale, with some salt or white sage and greasewood.

There are no settlers in the Tp.
Find no indications of mineral in this tp.

Howard W. Miller
U. S. Surveyor.

Robert E. Clark.
U. S. Transitman.

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Page

4—680

BOOK A-405

CERTIFICATE OF ASSISTANTS.

We, the undersigned, hereby certify upon honor that we assisted, to the best of our skill and ability, ..., U. S. Surveyor, during the periods and in the capacities stated opposite our several signatures, in surveying all those parts or portions of .....

For certificates of assistants see book "J" T.3 N.R.11 W.

of the ..... Meridian, in the State of .....

which are represented in the foregoing field notes as having been executed 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 executed.

NAME.	PERIOD OF SERVICE.		CAPACITY.
	BEGUN.	ENDED.	

Subscribed and certified to before me on the dates of the final service as shown above.

.....

U. S. Surveyor.

6—2761

FINAL OATH OF UNITED STATES SURVEYOR.

I, _____, U. S. Surveyor, do solemnly swear that, in pursuance of special instructions received from the U. S. Surveyor General for _____ bearing date of the _____ day of _____, 191 , I have well, faithfully, and truly, in my own proper person, and in strict conformity with said instructions, the Manual of Surveying Instructions, and the laws of the United States, surveyed all those parts or portions of _____

For final oaths of U.S.Surveyor and Transitman see book "M" T.3 N.R. 11 W.

_____ of the _____ Meridian, in the State of _____, which are represented in the foregoing field notes as having been executed 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 U. S. 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.

_____
U. S. Surveyor.

Subscribed by said _____, and sworn to before me this _____ day of _____, 191

(SEAL)

_____

_____

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah, April 5, 1915.

The foregoing field notes of the survey of the Subdivisionnl lines of Township No.2 North, Range No.10 East, of the Salt Lake Base and Meridian, Utah

executed by Howard W.Miller and Robert E.Clark their under his special instructions dated April 10, 191 3, having been critically examined, and the necessary corrections and explanations made, the said field notes, and the surveys they describe, are hereby approved.

U. S. 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.

_____
U. S. Surveyor General.