Volume

# #

R0416

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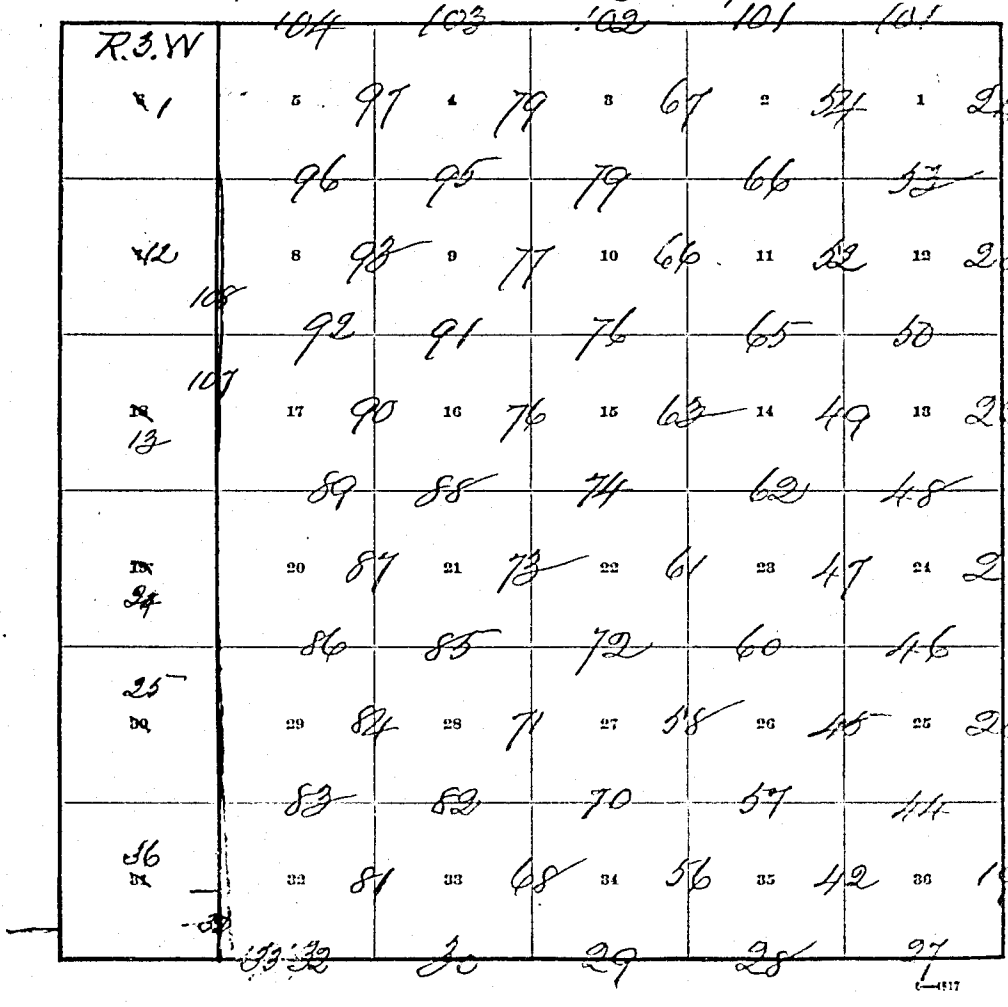
INDEX DIAGRAM.

Township 31 S., Range 2½ W



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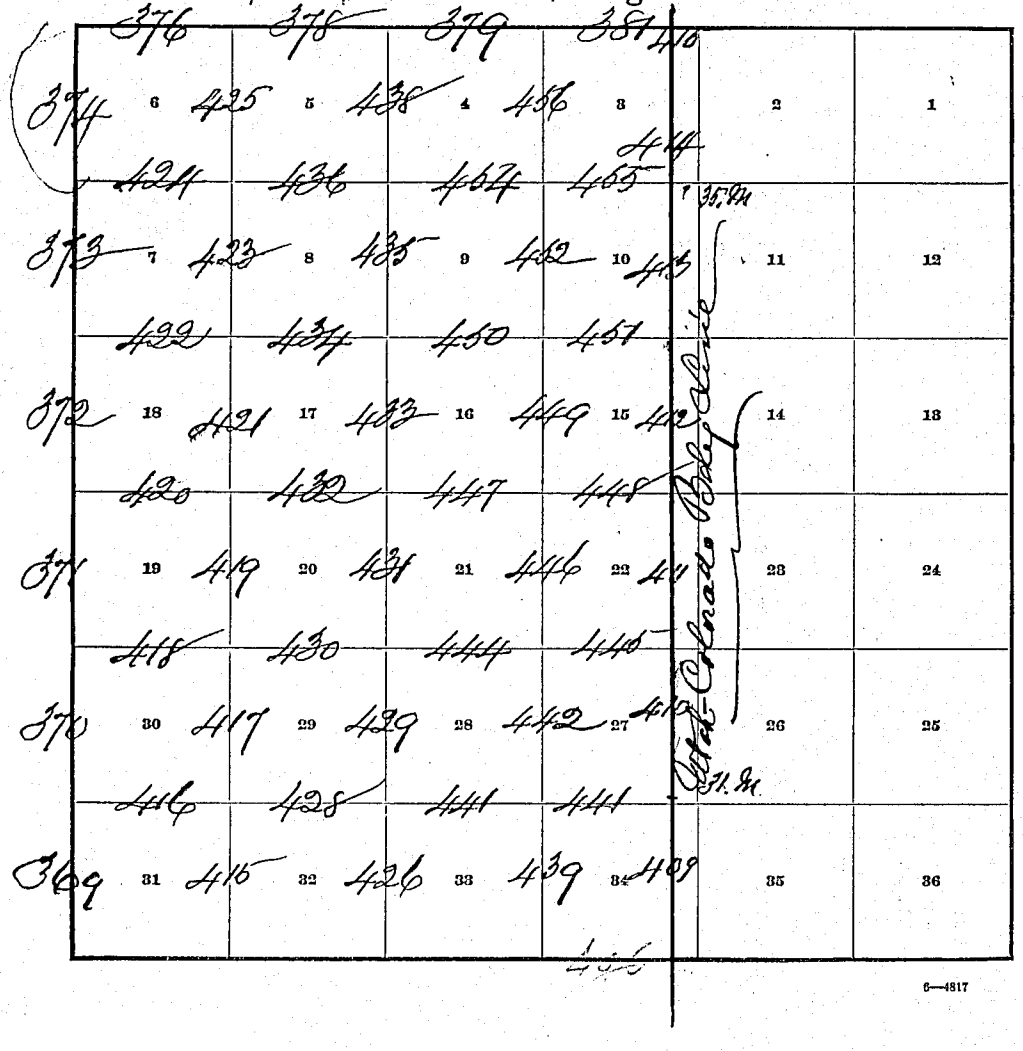

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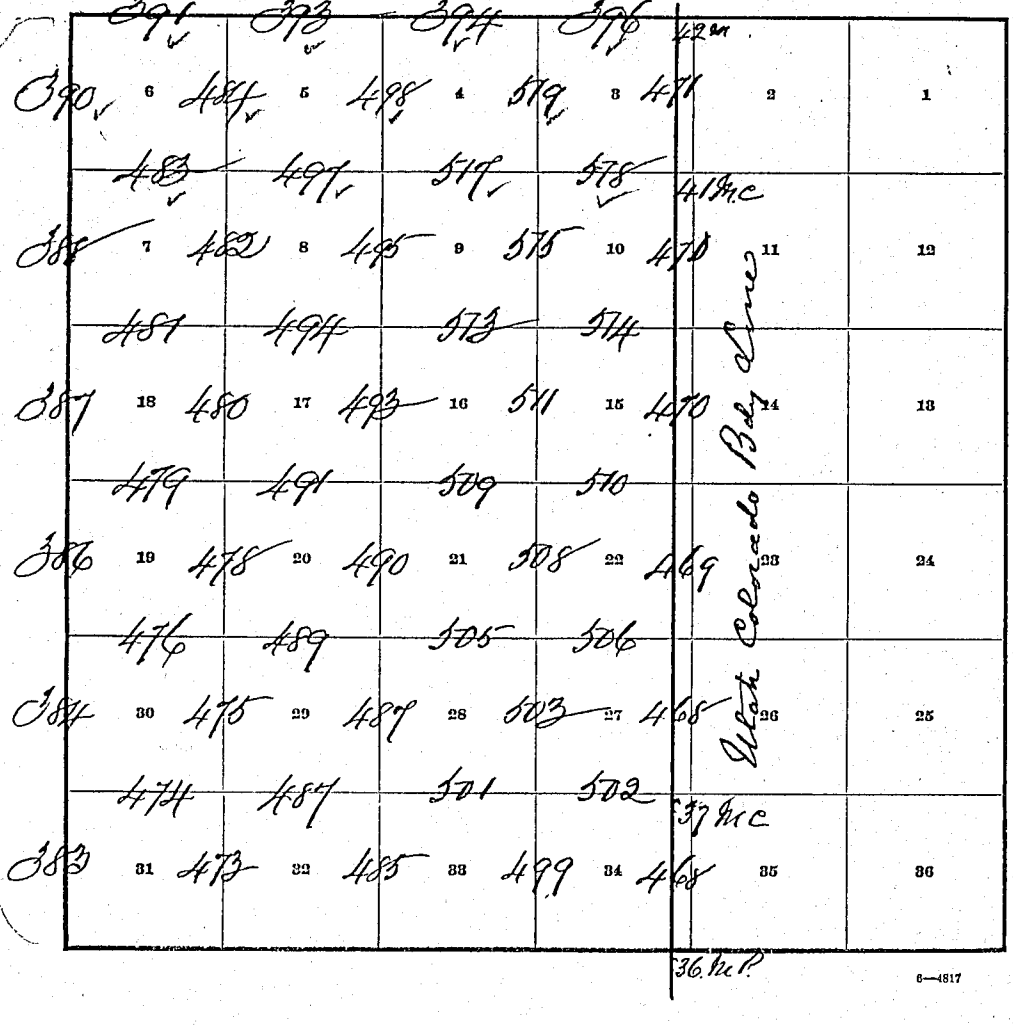

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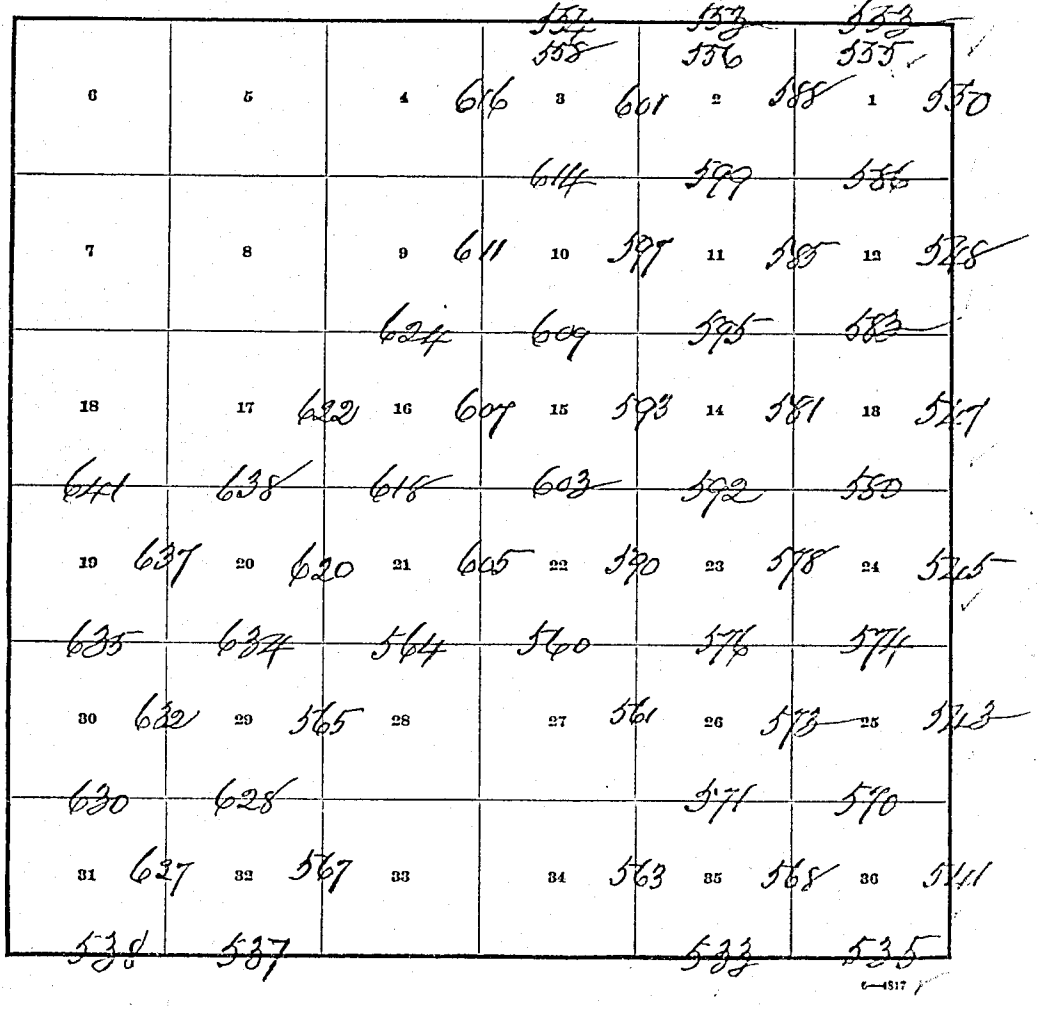

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BOOK A-416

Field Notes

OF THE SURVEY OF THE

SURVEY AND RETRACEMENT OF THE EAST BOUNDARY

AND

SURVEY OF THE SOUTH AND WEST BOUNDARIES

OF

TOWNSHIP 31 SOUTH, RANGE 24 WEST

Of the Salt Lake Base and *Meridian,*

In the State of Utah

EXECUTED BY

EDWARD R. BUNBURY

In the capacity of U. S. Surveyor, Transitman *under instructions dated* June 11, *1913, issued by the United States Surveyor General to govern surveys included in Group No.* 24, *which were approved by the Commissioner of the General Land Office,* Supervisor of Surveys June 17, *1913, pursuant to authority contained in the Act of Congress dated* , *191*

Survey commenced June 20, *1913*

Survey completed August 12, *1913*

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E. bdy. T. 31 S., R. 2½ W.

Chains. Survey commenced June 20, 1913, and executed with Young & Sons light mountain transit No. 8146, with Smith Solar attachment. The horizontal limb is provided with two double verniers placed opposite to each other reading to single minutes of arc, which is also the least count of the verniers of the latitude and declination arcs.

I examine the adjustments of the transit, and find them correct, then to test the solar apparatus, by comparing its indications, resulting from solar observations made during a. m. and p. m. hours, with a meridian determined by observations on Polaris, I proceed as follows, from my station in the NE. ¼ of sec. 16:

Tel. D.	Hor. Angle ° ' "	Watch time. h.	m.	s.
Star,	0 1 00	7	56	10
Flag,	0 0 00			
Star,	0 1 30	7	58	50
Tel. R.				
Star,	0 1 30	7	59	00
Flag,	0 0 00			
Star,	0 1 00	8	01	00
Mean,	0 1 15	7	58	45p.m.
Watch fast, l. m. t.,			28	08
L. M. T. of observation,		7	30	37p.m.

U. C. Polaris, June 20, 1913, . . 7h 36m a. m.
Reduction for longitude, ... 1.2
U. C. of Polaris at station, . . 7h 34.8m a. m.

Hour angle of Polaris 11h 55.7m

W. azimuth of Polaris, ... 0° 01' 00"
Angle E., star to flag, . . . 0 01 15
Flag bears, ...N. 0 00 15 E.

June 20, 1913.

June 21, 1913: At my station I set off 38° 08' N. on the lat. arc; 23° 28' N. on the decl. arc; and at 8h 1m, a. m., l. m. t., determine a meridian with the solar, which corresponds with the meridian as determined by observations on Polaris.

June 21, 1913: At my station I set off 38° 08' N. on the lat. arc; 23° 28' N. on the decl. arc; and at 4h 01m, p. m., l. m. t., determine a meridian with the solar, which corresponds with the meridian as determined by observation on Polaris.

June 21, 1913.

Chains.	
	June 28, 1913: At the cor. of Ts. 30 and 31 S., R. 2 W., which is a sandstone, 6x8x12 ins. above ground, firmly set, mkd. and witnessed as described by the surveyor general, I set off 38° 09' N. on the lat. arc; 23° 18' N. on the decl. arc; and at 9h 3m, a. m., l. m. t., determine a meridian with the solar.
	Thence I run
	South, on random line bet. Rs. 2 and 2½ W., setting temp. ¼ sec. cor and sec. cors. at intervals of 40.00 chs.
160.00	Set temp. cor. secs. 7, 12, 13 and 18.
	June 28, 1913.
	July 10, 1913: I establish the temp. cor. to T. 31 S., Rs. 2 and 2½ W., and in order to save a walk of four miles to the temp. cor. of secs. 7, 12, 13 and 18, set on June 28, 1913, I run North on random line from the temp. cor. of T. 31 S., Rs. 2 and 2½ W.
	July 10, 1913: At this cor. I set off 38° 04' N. on the lat. arc; 22° 15' N. on the decl. arc, and at 3h 5m, p. m., l. m. t., determine a meridian with the solar.
	North, on random line bet. Rs. 2 and 2½ W.
40.00	Set temp. ¼ sec. cor.
	July 10, 1913.
	July 11, 1913: At the temp. ¼ sec. cor. above referred to, I set off 38° 04' N. on the lat. arc; 22° 10' N. on the decl. arc; and at 8h 5m, a. m. l. m. t., determine a meridian with the solar.
	Continue North on random line bet. Rs. 2 and 2½ W., setting temp. ¼ sec. and sec. cors. at intervals of 40 chs.
	July 11, 1913: At the temp. ¼ sec. cor., bet. secs. 25 and 30, I set off 22° 8' N. on the decl. arc, and at apparent noon, observe the sun on the meridian, the resulting lat. is 38° 5' N.
	July 11, 1913.
	July 12, 1913: At the temp. cor. of secs. 19, 24, 25 and 30, T. 31 S., Rs. 2 and 2½ W., I set off 38° 5' N. on the lat, arc; 22° 2' N. on the decl. arc, and at 7h 5m, a. m., l. m. t., determine a meridian with the solar.
	North, on random line bet. Rs. 2 and 2½ W., setting temp.

E Bdy. T. 31 S., R. 2½ W.

Chains.	
	¼ sec. and sec. cors.at intervals of 40 chs.
320.80	From the temp. cor. of T. 31 S., Rs. 2 and 2½ W., I fall 43 lks. W. of the temp. cor. of secs. 7, 12, 13 and 18, set on July 28, 1913.

	I return to the temp. cor. of T. 31 S., Rs. 2 and 2½ W. and estab. permanent corner by setting an iron post, 3 ft. long, 3 ins. diam., 24 ins. in the ground, 43 lks. E. of the temp. Tp. cor., with brass cap mkd.

T 31 S
R 2½ W | R 2 W
S 36 | S 31
S 1 | S 6
T 32 S
1913

	Dig pits, 30x24x12 ins., on each line, E., and W., 4 ft., and N. of post, 8 ft. dist.; and raise a mound of earth, 5 ft. base, 2½ ft. high, N. of cor.
	From the true cor. I run
	North, on true line bet. secs. 31 and 36.
	Over mountainous land, covered with sage brush undergrowth.
8.40	Draw, 20 lks. wide, 15 lks. deep, drains E.; asc.
16.30	Road on top of ridge, 200 ft. above draw, bears E. and W.
38.50	Draw, 20 lks. wide, 10 ft. deep, drains NE.; 100 ft. below top of ridge; continue desc.
40.00	Set an iron post, 3 ft. long, 1 in. diam., 24 ins. in the ground, for ¼ sec. cor., with brass cap mkd.

¼
S 36 | S 31
1913

	Dig pits, 18x18x12 ins., N. and S. of post, 3 ft. dist., and raise a mound of earth, 3 ft. base, 1½ ft. high, W. of cor.
62.00	Start abrupt desc., bears E. and W.
65.00	Draw, 10 lks. wide, 3 ft. deep, 100 ft. below ¼ sec. cor., drains E.; asc. Scattering yellow pine timber along bottom.

E. Bdy. T. 31 S., R. 2½ W.

Chains.	
66.00	Asc. steep S. slope through dense scrub cedar and pinon timber, bears E. and W.
78.00	Top of ridge, bears E. and W., 300 ft. above draw; desc.
80.00	Set an iron post, 3 ft. long, 3 ins. diam., 24 ins. in the ground, with brass cap mkd.

T 31 S
R 2½ W | R 2 W
S 25 | S 30
S 36 | S 31
1913

From which

A pinon, 6 ins. diam., bears N. 39° 15' E., 59 lks. dist., mkd. T31S R2W S30 BT.

A pinon, 6 ins. diam., bears N. 4° 25' W., 53 lks. dist., mkd. T31S R2½W S 25 BT.

A pinon, 6 ins. diam., bears S. 62° 30' W., 46 lks. dist., mkd. T31S R2½W S36 BT.

A pinon, 6 ins. diam., bears S. 57° 30' E., 51 lks. dist., mkd. T31S R2W S31 BT.

Land, mountainous.

Soil, light gravel with coarse light gravel subsoil.

Timber, scrub cedar, pinon amd yellow pine.

Undergrowth, sage brush and service. Good grazing.

North, on true line bet. secs. 25 and 30.

Desc. over mountainous land covered with dense scrub cedar and pinon timber.

11.80	Draw, 10 lks. wide, 5 ft. deep, 400 ft. below top, drains E.; asc.
34.00	Top of ridge, 420 ft. above draw, bears E. and W.
34.70	Old road, bears E. and W.
40.00	Set an iron post, 3 ft. long, 1 in. diam., 24 ins. in the ground, for ¼ sec. cor., with brass cap mkd.

¼
S 25 | S 30
1913

From which

A cedar, 16 ins. diam., bears S. 36° W., 5 lks. dist.,

Chains	
	mkd. ¼ S 25 B T.
	A pinon 6 ins. in diam., bears N.74°30'E., 10 lks. dist., mkd. ¼ S 30 B T.
53.50	Wash, 10 lks. wide, 3 ft. deep, 300 ft. below top, drains E.
	Asc. slightly over spur of ridge projecting E.
72.75	Draw, 20 lks. wide, 5 ft. deep, drains E.; asc. over steep S. slope, through dense buck brush and slide rock.
80.00	Set an iron post, 3 ins. in diam., 36 ins. long, 24 ins. in the ground, mkd.

T 31 S
R 2½ W | R 2 W
S 24 | S 19
S 25 | S 30

1913

from which

A pinon 5 ins. diam. bears N.65°25'E., 60 lks. dist., marked T 31 S R 2 W S 19 B T.

A pinon 12 ins. diam. bears N.72°W., 21 lks. dist., marked T 31 S R 2½ W S 24 B T.

A pinon 7 ins. diam. bears S.27°W., 89 lks. dist., marked T 31 S R 2½ W S 25 B T.

A pinon 6 ins. diam. bears S.42°35'E., 70 lks. dist., marked T 31 S R 2 W S 30 B T.

Land, mountainous, with eastern exposure.

Soil, coarse gravel and slide rock. Rocky subsoil.

Timber, scrub cedar and pinon, with scattering yellow pine in the bottom of the ravines. Good grazing.

	North, bet. secs. 19 and 24.
	Asc. over mountainous land covered with dense scrub cedar and pinon timber.
8.00	Ridge, 440 ft. above bottom, bears E. and W., desc. grad.
22.50	Wash 20 lks. wide, 5 ft. deep, 275 ft. below ridge, drains E.; asc.
32.00	Spur, 120 ft. above draw, projects E.; desc.
38.20	Draw, 10 lks. wide, 2 ft. deep, 120 ft. below spur, drains N.30°E.; asc. gradually.
40.00	Set an iron post, 1 in. in diam., 36 ins. long, 24 ins. in the ground, mkd.

E. bdy. T. 31 S., R. 2½ W.

Chains	
	S ¼ 24 | S 19
	1913
	from which
	A cedar 10 ins. in diam., bears N.80°W., 25 lks. dist., mkd. ¼ S 24 B T.
	A cedar 14 ins. in diam., bears N.53°10'E., 36 lks. dist., mkd. ¼ S 19 B T.
48.00	Wash, 10 lks. wide, 3 ft. deep, drains NE.
50.00	Wash, 30 lks. wide, 2 ft. deep, drains E.; asc. abruptly.
62.50	Top of ridge, 330 ft. above wash, bears E. and W.; desc.
78.00	Bottom of desc., 480 ft. below top, bears E. and W.; continue over level bottom of Pole Creek Canon.
78.20	Pole Creek, with clear running water, 30 lks. wide, 3 ft. deep.
80.00	Set an iron post, 3 ins. in diam., 36 ins. long, 24 ins. in the ground, mkd.

T 31 S
R 2½ W \| R 2 W
S 13 \| S 18
S 24 \| S 19

1913

from which

A pinon, 18 ins. in diam., bears N.32°30'E., 250 lks. dist., mkd. T 31 S R 2 W S 18 B T.

A cottonwood, 12 ins. in diam., bears S.60°E., 130 lks. dist., mkd. T 31 S R 2 W S 19 B T.

A cottonwood, 12 ins. in diam., bears S.44°W., 136 lks. dist., mkd. T 31 S R 2½ W S 24 B T.

A cottonwood, 12 ins. in diam., bears N.62°W., 110 lks. dist., mkd. T 31 S R 2½ W S 13 B T.

Land, mountainous with eastern exposure.

Soil, coarse gravel and rocky, with rocky subsoil.

Timber, scrub cedar, pinon, yellow pine and cottonwood in Pole Creek Canon.

Undergrowth, service and buck brush. Good grazing.

	North, on a true line bet. secs. 13 and 18.
	Over mountainous land, covered with dense scrub cedar and pinon timber and service undergrowth.
0.50	Creek 20 lks. wide, 12 ft. deep with small stream of

Chains	
	clear running water, course E.
2.00	Start steep asc. over south slope, bears E. and W.
27.00	Top of ridge, 220 ft. above Pole Creek, bears E. and W., desc.
30.50	Draw, 10 lks. wide, 2 ft. deep, drains NE., 200 ft. below top of ridge; asc.
38.00	Top of spur projecting E., 100 ft. above draw; desc.
40.00	Set 1 in. iron post, 36 ins. long, 24 ins. in the ground, mkd. ¼ S 13 | S 18 1913 from which A pinon 8 ins. in diam., bears S.25°W., 19 lks. dist., mkd. ¼ S 13 B T. A pinon 10 ins. in diam., bears N.74°E., 15 lks. dist., mkd. ¼ S 18 B T.
44.00	Draw, 5 lks. wide, 2 ft. deep, drains E.; asc.
52.00	Spur, projecting E.; desc.
58.50	Draw, 5 lks. wide, 2 ft. deep, drains E.; asc.
66.00	Ridge, 200 ft. above draw, bears E. and W.; desc.
75.00	Draw, 20 lks. wide, 3 ft. deep, drains NE.; asc. leave timber.
80.00	Set an iron post, 3 ins. in diam., 36 ins. long, 24 ins. in the ground, mkd. T 31 S / R 2½ W | R 2 W / S 12 | S 7 / S 13 | S 18 1913
	Raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.
	Land, mountainous with eastern exposure.
	Soil, coarse gravel and rocky, with rocky subsoil.
	Timber, scrub cedar and pinon.
	Undergrowth, service and sage brush. Good grazing.
	North, on true line bet. secs. 7 and 12.
	Over mountainous land.
7.00	Top of steep asc., bears E. and W.; asc. grad. through scrub cedar and pinon timber.
16.00	Top ridge, bears E. and W., 100 ft. above cor.

E. bdy. T. 31 S., R. 2½ W.

Chains	
21.50	Draw, 10 lks. wide, 3 ft. deep, drains NE.; 115 ft. below top of ridge; asc.
32.00	Top of flat ridge, 230 ft. above draw, bears E. and W.; continue over same.
38.00	N. edge of flat ridge, bears E. and W.; desc.
40.00	Set an iron post, 1 in. in diam., 36 ins. long, 24 ins. in the ground, mkd.

S ¼ 12 | S 7

1913

No trees within limits suitable for bearing trees.

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

44.00	Draw, 10 lks. wide, 2 ft. deep, 150 ft. below top, drs. SE.; asc. over broken rocky slope.
50.60	Top of ridge, 270 ft. above draw, bears E. and W.; desc.
59.00	Draw, 15 lks. wide, 3 ft. deep, drains NE., 100 ft. below ridge; asc.
63.00	Ridge, 135 ft. above draw, bears E. and W.
68.00	Draw, 10 lks. wide, 2 ft. deep, drains E.; asc.
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, mkd.

T 31 S

R 2½ W | R 2 W

S 1 | S 6

S 12 | S 7

200 ft. above draw. 1913

No trees within limits suitable for bearing trees.

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

Land, mountainous, with southern exposure.

Soil, coarse light gravel with rocky subsoil.

Timber, scattering scrub cedar and pinon.

Undergrowth, service and buck brush. Good grazing.

North, on true line bet. secs. 1 and 6.

Over mountainous land covered with scattering scrub cedar and pinon timber.

3.00	Top ridge, bears E. and W.; desc.
8.00	Draw, 10 lks. wide, 2 ft. deep, drains NE., 160 ft. below top ridge.

Chains.	
12.50	Draw, 10 lks. wide, 3 ft. deep, drains SE.; asc.
27.00	Top of asc., bears NW. and SE., 160 ft. above draw; asc. gradually.
40.00	Set an iron post, 3 ft. long, 1 in. diam., 24 ins. in the ground, for ¼ sec. cor., with brass cap mkd.
	$S\ \frac{1}{4}\ 1 \mid S\ 6$
	1913
	Raise a mound of stone 2 ft. base, 1½ ft. high, W. of cor.
45.00	Top of ridge, bears E. and W.; desc.
52.00	Draw, 10 lks. wide, 2 ft. deep, drains NE., 150 ft. below top of ridge.
61.00	Top of ridge, bears E. and W., 60 ft. above draw; desc.
64.00	Draw, 20 lks. wide, 3 ft. deep, drains SE., 60 ft. below top of ridge; asc.
66.00	Ledge, 50 ft. high, bears NW. and SE. continue asc.
74.00	Top of abrupt asc., bears NW. and SE., 150 ft. above draw; asc. gradually.
80.81	The cor. of Ts. 30 and 31 S., R. 2 W.

From this corner I run

North, on retracement.

Asc. gradually through cedars.

20.56 Fall 29 lks. E. of the closing cor. of T 30 S., R. 2½ W., which is

A trachyte, 10x14x8 ins. above ground, loosely set, mkd. and witnessed as described by the surveyor general.

The course of this line is therefore N. 0° 49' W., and the dist. is 20.56 chs.

July 12, 1913.

Edward R Bamburg

U. S. Transitman.

For General Description, see Book of Subdivision of this Township.

South Boundary of T.31 S., R.2½ W.

Chains.

Survey commenced August 10, 1913, and executed with a Young and Sons light mountain transit No.8146, with solar attachment. The horizontal limb is provided with two double verniers placed opposite to each other, reading to single minutes of arc, which is also the least count of the verniers of the latitude and declination arcs.

The instrument was examined, tested on the true meridian at Salt Lake City, Utah, found correct, and was approved by the assistant supervisor of surveys for Utah, June 25, 1913.

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

At camp in SW. quarter of sec. 27, T.31 S., R.2½ W.; latitude 38° 05'N., longitude 112° 10'W.; I set off 38° 05'N. on the lat. arc; 15° 33'N. on the decl. arc; and at 4h 05m p.m. l.m.t., determine with the solar a meridian and mark a point thereof on a stake firmly driven in the ground 5 chs. N. of my station.

At 10h 17m p.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 on a stake driven in the ground 5 chs. N. of my station.

A two-chain tape and clinometer were used on all measurements of this work.

August 10, 1913.

August 11: At 6h 30m a.m. l.m.t., I lay off the azimuth of Polaris 1° 28' to the west, and mark the meridian thus determined by a cross on the stake set August 10, on which the meridian falls 0.3 ins. east of the mark

Chains.	
	determined by the solar.
	At 7h 05m a.m.l.m.t., I set off 38° 05'N.on the lat.arc; 15° 23'N.on the decl.arc; and mark a point in the meridian determined with the solar, by a cross on the stake already set 5 chs.N.of my station; this mark falls 0.3 ins.east of the meridian established by the Polaris observation.
	The solar apparatus by p.m.and a.m.observations defines positions for meridians, respectively about 0' 16" west and 0' 16" east of the meridian established by the Polaris observations; therefore I conclude that the adjustments of the instrument are satisfactory.
	The magnetic bearing of the true meridian at 7h 15m a.m. is N.16° 05'W.; the angle thus determined gives the mag.decl.16° 05'E.
	At 9h 35m a.m.l.m.t., I set off 38° 04' on the lat.arc; 15° 20'N.on the decl.arc; and determine a meridian with the solar at the cor.of Tp.31 S., Rs.2 and 2½ W. heretofore described. Thence I run
	West, on a true line along the S.boundary of sec.36,
	Over mountainous land; through scattering growth of pinion pine and cedars and medium undergrowth of sagebrush and scattering grass. Ascend.
28.00	Top of spur, 60 ft.above cor., projects N.65° E.
	Descend.
34.00	Ravine, 25 ft.below top of spur, drains N.65° E.
	Ascend.
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
	$\frac{S\ \frac{1}{4}\ 36}{1913}$
	No bearing trees available; therefore erect a mound of stone, 3 ft.base, 2 ft.high N.of cor.
	Cor.stands on E.slope of spur, 40 ft.above ravine.
47.00	Leave scattering timber, bears N.60° E., and S.60° W.
52.10	

South Boundary of T.31 S., R.2½ W.

Chains.	
52.10	Old road. bears NE. and SW.
54.50	Top of spur, 30 ft.above ¼ cor. projects N.65° E. Descend.
72.20	Ravine, 185 ft.below top of spur, heads 6 chs.S., and drs.N.Ascend.
80.00	Set an iron post, 3 ft.long, 3 ins.in dia., 24 ins.in the ground, for cor.of secs.35 and 36, with brass cap marked T 31 S | R 2½ W S 35 | S 36 1913 and erect a mound of stone 3 ft.base, 2½ ft.high W.of cor. Cor.stands on E.slope of spur, 50 ft.above ravine.
	Land, mountainous; soil stony on surface, 3 to 4 ins. deep, on a subsoil composed of loose rock, gravel, and sandy loam of medium texture; no timber; medium undergrowth of sagebrush and scattering grass.

West, along the south bdy.of sec.35,

Over mountainous land; through medium undergrowth of sagebrush and scattering grass. Ascend.

3.00	Top of spur, 80 ft.above sec.cor., projects NE. Descend.
29.50	Ravine, 100 ft.below top of spur, drs.N. Ascend.
36.00	Top of spur, 110 ft.above ravine, projects N.about 6 chs. Descend.
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 S 35 ¼ 1913 and erect a mound of stone 3 ft.base, 2½ ft.high N.of cor., 15 ft.below top of spur.

August 11: At this cor.I set off 15° 18'N. on the decl.

Chains.	
	arc; and at 12h 05m l.m.t., observe the sun on the meridian; the resulting latitude is 38° 04'.
44.50	Ravine, 20 ft. below ¼ cor. drs. N.
	Ascend.
51.00	Top of spur, 110 ft. above ravine, projects N. about 6 chs.
	Descend.
72.50	Enter dense growth of timber, aspen, cedar, spruce, and balsam; undergrowth, scattering, brs. N. 70°E. and S. 70° W.
80.00	Set an iron post, 3 ft. long, 3 ins. in dia., 24 ins. in the ground for cor. of secs. 34 and 35, with brass cap marked

T 31 S | R 2½ W.
S 34 | S 35

1913

from which

A spruce 6 ins. dia., bears N. 33° 15'E. 14 lks. dist., marked T 31 S R 2½ W S 35 B T

A spruce, 8 ins. dia., bears N. 72° 20'W. 20 lks. dist., marked T 31 S R 2½ W S 34 B T

65 ft. below top of spur.

Land, mountainous; soil, stony on surface, with sub-soil composed of loose rock and sandy loam of medium texture; timber, dense growth of spruce, aspen, balsam and cedar; scattering undergrowth of sagebrush and grass.

West on a true line along the south bdy. of sec. 34,

Over mountainous land; through dense growth of spruce, aspen, balsam, and cedars, and scattering undergrowth of sagebrush and grass. Descend into S. fork of Forest Canyon.

4.25	South fork of Forest Canyon Creek (dry), 35 ft. below sec. cor., drs. N. 70° E. Ascend.
7.50	Leave dense growth of timber; enter scattering growth of pinion pine and cedars, brs. N. 70°E. and S. 70° W.

South Boundary of T. 31 S., R. 2½ W.

Chains.
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

S 34
¼
1913

No bearing trees available; therefore erect a mound of stone, 3 ft. base, 2 ft. high N. of cor. 350 ft. above south fork of Forest Canyon creek bed.

58.00 Leave scattering growth of timber, brs. NE. and SW.

79.90 Enter dense growth of aspen brs. 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. 33 and 34, with brass cap marked

T 31 S | R 2½ W
S 33 | S 34

1913

from which

An aspen, 5 ins. dia., bears N. 65° 45' E. 5 lks. dist., marked T 31 S R 2½ W S 34 B T

An aspen, 5 ins. dia., bears N. 70° 25' W. 25 lks. dist., marked T 31 S R 2½ W S 33 B T

280 ft. above ¼ cor.

Land, mountainous; soil stony on surface, 3 ins. deep, with subsoil composed of coarse gravel and sandy loam of medium texture; timber, dense growth of aspen; undergrowth, scattering sagebrush and grass.

August 11, 1913.

August 12, 1913: At 8h 05m a. m. l. m. t., I set off 38° 04' on lat. arc; 15° 04' N. on the decl. arc; and determine a meridian with the solar at the cor. of secs. 33 and 34. Thence I run

West on a true line along the S. bdy. of sec. 33,

Over mountainous land; through dense growth of aspen and scattering undergrowth of sagebrush and grass.

Ascend.

Chains.	
1.50	Leave growth of aspen brs. N. and S.
23.00	Top of ridge, 250 ft. above sec. cor., brs N.65°E. and S. 65° W. Descend.
38.50	Enter scattering growth of aspen brs. NE. and SW.
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 S ¼ 33 1913 from which An aspen, 6 ins. dia., bears N.51° 35'W. 10 lks. dist., marked ¼ S 33 B T 70 ft. below top of ridge.
42.10	Ravine, 5 ft. below ¼ cor., brs. N.65° E. Ascend.
71.00	Top of ridge, 245 ft. above ravine, brs. NE. and SW. Descend.
78.50	Growth of aspen becomes dense, bears NE. and SW.
80.00	Set an iron post, 3 ft. long, 3 ins. in dia., 24 ins. in the ground, for cor. of secs. 32 and 33, with brass cap marked T 31 S | R 2½ W S 32 | S 33 1913 from which An aspen, 5 ins. dia., bears N.71° 05'E. 10 lks. dist., marked T 31 S R 2½ W S 33 B T An aspen, 6 ins. dia., bears N.64° 05'W. 16 lks. dist., marked T 31 S R 2½ W S 32 B T 100 ft. below top of ridge.

Land, mountainous; soil, stony on surface, 3 ins. deep, with subsoil composed of coarse gravel and sandy loam of medium tecture; timber dense growth of aspen; scattering undergrowth of wild rose and grass.

August 12: At this cor. I set off 15° 00'N. on the decl. arc; and at 12h 05m l.m.t., observe the sun on the meridian; the resulting latitude is 38° 04'.

South Boundary of T.31 S., R.2½ W.

Chains.

West on a random line along the S.bdy.of sec.32,

11.60 Set temp.cor.of T.32 S., Rs.2½ and 3 W.

Thence I run, along west boundary,

North on a random line, and at 39.56 chs.fall 5.70 chs. east of the cor.set for Tps.31 and 32 S., Rs.2 and 3 W., which is an iron post, 3 ins.dia., firmly set and marked and witnessed as described by the surveyor-general. I destroy all marks on this corner that pertain to R.2 W. I abandon random line, and, beginning at the cor.of Tps.31 and 32 S., R.3 W., I run

South on true line,

Over mountainous land; through dense growth of aspen and medium undergrowth of wild rose and scattering grass.

Descend.

9.60 Ravine, 95 ft.below cor., drains N.70° E.

Ascend.

27.55 Top of ridge, 145 ft.above ravine, bears N.60° E., and S.60° W. Descend.

39.56 Fall 5.70 chs.W.of temp.cor.

Set an iron post 3 ft.long, 3 ins.dia., 24 ins.in the ground, for cor.of Tps.31 and 32 S., R.2½ W., with brass cap marked

T 31 S | R 2½ W
S 32

S. 5
T 32 S | R 2½ W
1913

from which

An aspen, 7 ins.dia., bears N.82° 25'E. 26 lks. dist., marked T 31 S R 2½ W S 32 B T

An aspen, 6 ins.dia., bears S.41° 55'E. 31 lks. dist., marked T 32 S R 2½ W S 5 B T

50 ft.below top of ridge.

Land, mountainous; soil, stony on surface, 3 ins.deep, with subsoil of coarse gravel and sandy loam of medium texture; timber, dense growth of aspen; scattering undergrowth of wild rose and grass.

South Boundary of T.31 S., R.2½ W.

Chains.	
	East on true line along S.bdy.of sec.32,
	Descending, over mountainous land; through dense growth of aspen and scattering growth of wild rose and grass.
11.05	Ravine, drains N 60° E. Ascend.
17.30	The cor.of secs.32 and 33, 65 ft.above ravine.
	Land, mountainous; soil stony on surface, 3 ins.deep, with subsoil composed of coarse gravel and sandy loam of medium texture; timber, dense growth of aspen; scattering undergrowth of wild rose and grass.
	August 12, 1913.

T. 31 S., R. 2½ W.

Latitudes, departures and closing errors.

Lines Designated.	True Bearing.	Distances.	Latitudes. N.	Latitudes. S.	Departures. E.	Departures. W.
		chs.	chs.	chs.	chs.	chs.
N.Bdy.T31SR2½W.						
N. " Secs. 32, 29,20, and 17.	North.	319.56	319.56	.....	.....	.....
N.Bdy.Sec. 6.	N. 0°19'E.	40.00	40.00	.....	.22	.....
E. " " 8.	N. 0°15'E.	40.15	40.15	.....	.18	.....
E. " " 5.	N. 0°13'E.	40.00	40.00	.....	.15	.....
E. " " 5.	North.	62.16	62.16	.....	.....	.....
6th Std.Par. S.	S.89°45'E.	51.99	.....	.23	51.99	.....
" " " "	S.89°03'E.	41.55	.....	.69	41.54	.....
" " " "	N.89°57'E.	40.00	.03	.....	40.00	.....
" " " "	S.89°51'E.	40.13	.....	.11	40.13	.....
" " " "	S.89°49'E.	40.29	.....	.13	40.29	.....
" " " "	S.89°09'E.	40.42	.....	.60	40.41	.....
" " " "	N.88°37'E.	39.91	.96	.....	39.90	.....
" " " "	S.89°54'E.	41.41	.....	.07	41.41	.....
E.Bdy.T31SR2½W.	S. 0°49'E.	20.56	.....	20.56	.29	.....
E. " " " "	South.	480.81	.....	480.81	.....	.....
S. " " " "	West.	337.30	.....	.....	.....	337.30
Convergency,	. . . . .	. . .	.....	.....	.40	.....
			502.86	503.20	336.91	337.30
				502.86	Error	336.91
Error in latitude, . . .				.34	in dep.	.39

Edward R. Lambert

U. S. Transitman.

BOOK A-416

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 certificate of assistants see book "G" T.37 S., R.4 E.

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.Transitman see book "G" T. 37 S., R.4 E.

_____ 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, June 14, 1916.

The foregoing field notes of the survey ~~of~~ and retracement of the east boundary and survey of the south and west boundaries of Township No. 31 South, Range No. 2½ West of the Salt Lake Base and Meridian, Utah,

executed by Edward R. Bunbury

under his special instructions dated June 11, 1913, having been critically examined, and the necessary corrections and explanations made, the said field notes, and the retracements and 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.

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Mar. 19, 1915.
P

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BOOK A-416

B.

FIELD NOTES

OF THE SURVEY OF THE

SUBDIVISION

AND

RETRACEMENT OF THE WEST BOUNDARY

OF

TOWNSHIP NO. 31 SOUTH, RANGE NO. 2½ WEST,

AND

RETRACEMENT OF THE SIXTH STANDARD PARALLEL SOUTH

THROUGH

RANGE NO. 2½ WEST

Of the SALT LAKE BASE AND *Meridian,*

In the State of UTAH

EXECUTED BY

JOSPEH C. THOMA AND EDWARD R. BUNBURY
AND
JOSEPH C. CLARK

and U.S. Transitmen

In the capacity of U. S. Surveyor, under instructions dated June 11, *1913, issued by the United States Surveyor General to govern surveys included in Group No.* 24, *which were approved by the* Supervisor of Surveys *Commissioner of the General Land Office,* June 17, *1913, pursuant to authority contained in the Act of Congress dated* ....., *191*

Survey commenced August 9, *1913*

Survey completed September 25, *1915.*

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BOOK A-416

INDEX DIAGRAM.

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6—151

Chains

Survey commenced August 9, 1913 and executed with a Young and Sons light mountain transit, No. 8477 with solar attachment. The horizontal limb is provided with two double verniers placed opposite to each other reading to single minutes of arc which is also the least count of the verniers of the latitude and declination arcs.

The instrument was examined, tested on the true meridian at Salt Lake City, Utah, found correct and was approved by the Assistant Supervisor of Surveys for Utah, June 14, 1913.

I examine the adjustments of the transit, find them correct; 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.

At camp in the SW. ¼ of sec. 27, T.31 S., R.2½ W.; latitude, 38° 05'N., longitude, 112° 10'W., I set off 38° 05'N., on the lat. arc; 15° 51'N., on the decl. arc; and at $3^h\ 05^m$ p.m.l.m.t., determine with the solar a meridian and mark a point thereof, on a stake firmly driven in the ground 5 chs. N. of my station.

At $10^h\ 21^m$ p.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 on a stake driven in the ground 5 chs. N. of my station.

August 9, 1913.

August 10, 1913: At $7^h\ 00^m$ a.m. l.m.t., I lay off the azimuth of Polaris, 1° 28' to the west and mark a point in the meridian thus determined by a cross on the stake set August 9, the same coinciding with the mark determined by the solar.

At $8^h\ 05^m$ a.m.l.m.t., I set off 38° 05'N., on the lat. arc; 15° 39'N., on the decl. arc; and mark a point in the meridian determined with the solar by a cross on the stake already set 5 chs. N. of my station; this mark co-

Chains

incides with the meridian established by the Polaris observation.

At 12h 05m l.m.t., I set off 15° 36'N., on the decl. arc and observe the sun on the meridian; the resulting latitude is 38° 05'N.

At 3h 05m p.m.l.m.t., I set off 38° 05'N., on the lat. arc; 15° 34'N., on the decl. arc; and determine a meridian with the solar; the meridian thus determined coincides with the meridian established by the Polaris observation.

The solar apparatus by p.m. and a.m. observations, defines positions for meridians, respectively coinciding with the meridian established by the Polaris observation; therefore I conclude that the adjustments of the instrument are satisfactory.

The magnetic bearing of the true meridian, at 3h 15m p.m. is N.16° 05'W. the angle thus determined gives the mag. decl. 16° 05'E. A 5 ch. tape and clinometer was used on all measurements of this work. August 10, 1913.

August 11, 1913: At 9h 05m a.m.l.m.t., I set off 38° 04' N., on the lat. arc; 15° 20'N., on the decl. arc; and determine a meridian with the solar at the cor. of secs. 35 and 36 on the S. bdy. of the Tp., heretofore described.

Thence I run N.0° 01'W., bet. secs. 35 and 36.

Over mountainous land through medium undergrowth of sage brush and scattering grass.

Descend.

S. Fork of

25.70 Dry wash in bottom of Forest Canyon, 350 ft. below sec. cor., 20 lks. wide, 1 ft. deep, drs. N.80°E.

26.00 Begin ascent of S. slope of spur, brs. N.80°E. and S.80°W. Enter dense growth of pinon pine and cedars and scattering undergrowth, brs. N.80°E. and S.80°W.

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

S35½ | S36

1913

Chains	
	No bearing trees available; erect a mound of stone, 3 ft. base, 2 ft. high, W. of cor.
	Cor. stands on top of spur, bare of timber, 80 ft. above point of ascent, projects SE.
	Descend through dense timber and scattering undergrowth.
45.00	Head of gulch, 40 ft. below ¼ cor., drs. SE.
	Ascend.
56.00	Top of ridge, 95 ft. above gulch, brs. E. and W.
	Descend.
60.00	Bottom of ravine, 35 ft. below top of ridge, drs. E.
	Ascend.
76.00	Top of ridge, 140 ft. above ravine, brs. E. and W.
	Descend.
80.00	Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground forcor. of secs. 25,26,35 and 36 with brass cap marked

T31S | R2½W
S26 | S25
S36 | S36
1913

from which

A pinon pine 12 ins. dia., bears N.66°E., 1.71 chs. dist., marked T 31 S R 2½ W S 25 B T.

A pinon pine 6 ins. dia., bears S.44°E., 86 lks. dist., marked T 31 S R 2½ W S 36 B T.

A pinon pine, 10 ins. dia., bears S.27°W., 1.69 chs. dist., marked T 31 S R 2½ W S 35 B T.

A pinon pine, 12 ins. dia., bears N.10°W., 2.82 chs. dist., marked T 31 S R 2½ W S 26 B T.

25 ft. below top of ridge.

Land, mountainous; soil, coarse gravel on surface 2 to 3 ins. deep with subsoil composed of gravel, loose rock and sandy loam of medium texture; timber, dense growth of pinon pine and cedars; scattering undergrowth of sage brush and grass.

August 11: Sky overcast at noon; unable to observe the sun for latitude.

Chains	
	East on a random line bet. secs. 25 and 36
40.00	Set temp. ¼ cor.
80.15	Intersect E. bdy. of the Tp., 3 lks. S. of the cor. of secs. 25,30,31 and 36 heretofore described.
	Thence I run
	S.89° 59'W., on a true line bet. secs. 25 and 36.
	Over mountainous land through dense growth of timber and scattering undergrowth.
	Descend.
4.15	Bottom of gulch, 10 lks. wide, 30 ft. below sec. cor., drs. N.10°E.
	Ascend.
40.07½	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground for ¼ sec. cor., with brass cap marked

S25
¼
S36
1913

from which

A pinon pine, 8 ins. dia., bears S.30°E., 15 lks. dist., marked ¼ S 36 B T.

A cedar, 8 ins. dia., bears N.67°W., 59 lks. dist., marked ¼ S 25 B T.

110 ft. above bottom of ravine.

Cease work for the day at 2-30 p.m. on account of heavy rain.

August 11, 1913.

August 12, 1913: At 8^h 05^m a.m. l.m.t., I set off 38° 05' N., on the lat. arc; 15° 04'N., on the decl. arc; and determine a meridian with the solar at the ¼ cor. of secs. 25 and 36.

	Thence I continue
	S.89° 59'W., on a true line bet. secs. 25 and 36.
41.00	Top of spur, 10 ft. above ¼ cor., projects NE.
	Descend.
50.15	Bottom of ravine, 50 ft. below top of spur, 10 lks. wide, drs. NE.
	Ascend.
56.00	Top of spur, 45 ft. above ravine, projects NE.

Chains	
	Descend.
60.15	Bottom of ravine, 55 ft. below top of spur, drs. NE.
	Ascend.
71.20	Top of spur, 240 ft. above ravine, projects NE.
	Descend.
80.15	The cor. of secs. 25,26,35 and 36.
	50 ft. below top of spur.
	Land, mountainous; soil, coarse gravel on surface 2 to 3 ins. deep with subsoil composed of gravel, loose rock and sandy loam of medium texture; timber, dense growth of pinon pine and cedars; scattering undergrowth of sage brush and grass.

N.0° 01'W. bet. secs. 25 and 26.

Over mountainous land through dense timber and scattering undergrowth.

Descend.

8.90 N. fork of Forest Canyon, 340 ft. below sec. cor., 20 lks. wide, drs. E.

Ascend.

30.35 Top of ridge, 365 ft. above Forest Canyon, brs. E. and W.

Descend.

Old pole road to Coyoto, brs. E. and W.

36.00 Bottom of ravine, 45 ft. below top of ridge, 10 lks. wide, drs. NE.

Continue N. on a near level line.

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

S26¼ | S25

1913

from which

A pinon pine, 12 ins. dia., bears S.80°E., 43 lks. dist., marked ¼ S 25 B T.

A pinon pine, 10 ins. dia., bears N.54°W., 96 lks. dist., marked ¼ S 26 B T.

46.00 Begin steep descent, brs. E. and W.

August 12: At this point I set off 15° 00'E., on the decl. arc; and at 12^h 05^m l.m.t., observe the sun on the meri-

Chains

dian; the resulting latitude is 38° 05½'.

58.50 Bottom of ravine, 280 ft. below point of descent, 15 lks. wide, drs. E.

Ascend.

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

T31 S S23	R2½W S24
S26	S25

1913

from which

A pinon pine, 8 ins. dia., bears N.34° 30'E., 61 lks. dist., marked T 31 S R 2½ W S 24 B T.

A pinon pine, 10 ins. dia., bears S.66° 30'E., 7 lks. dist., marked T 31 S R 2½ W S 25 B T.

A pinon pine, 12 ins. dia., bears S.31° 30'W., 1.50 chs. dist., marked T 31 S R 2½ W S 26 B T.

A pinon pine, 10 ins. dia., bears N.53°W., 75 lks. dist., marked T 31 S R 2½ W S 23 B T.

320 ft. above ravine.

Land, mountainous; soil, stony on surface; 4th rate; timber, dense growth of pinon pine and cedars; scattering undergrowth of sage brush and grass.

N.89° 59'E., on a random line bet. secs. 24 and 25.

40.00 Set temp. ¼ cor.

80.20 Intersect E. bdy. of the Tp., 9 lks. N. of the cor. of secs. 19,24,25 and 30 heretofore described.

Thence I run

N.89° 57'W., on a true line bet. secs. 24 and 25.

Over mountainous land through dense timber and scattering undergrowth.

Descend.

28.00 S. branch of Pole Canyon, 90 ft. below sec. cor., 30 lks. wide, drs. SE.

Ascend.

37.00 Top of ridge, 255 ft. above Pole Canyon, brs. NW. and SE.

Descend.

Chains	
40.10	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground for $\frac{1}{4}$ sec. cor., with brass cap marked S24 $\frac{1}{4}$ S25 1913 from which A pinon pine, 10 ins. dia., bears N.25°E., 77 lks. dist., marked $\frac{1}{4}$ S 24 B T. A pinon pine, 12 ins. dia., bears S.51°E., 70 lks. dist., marked $\frac{1}{4}$ S 25 B T. 30 ft. below top of ridge.
	August 12, 1913.
	August 13, 1913: At 8^h 05^m a.m.l.m.t., I set off 38° 06' N., on the lat. arc; 14° 45'N., on the decl. arc; and determine a meridian with the solar at the ¼ cor. of secs. 24 and 25.
	Thence I continue
	N.89° 57'W., on a true line bet. secs. 24 and 25.
80.20	The cor. of secs. 23,24,25 and 26. 450 ft. below $\frac{1}{4}$ cor. Land, mountainous; soil, stony on surface; 4th rate; timber, dense growth of pinon pine and cedars; scattering undergrowth of sage brush and grass.
	N.0° 01'W., bet. secs. 23 and 24. Over mountainous land through dense timber and scattering undergrowth.
	Ascend.
10.75	Top of ridge, 285 ft. above sec. cor., brs. E. and W.
	Descend.
24.00	S. branch of Pole Canyon, 310 ft. below top of ridge, brs. S.70°E.
	Ascend.
37.00	Top of ridge, 300 ft. above bottom of canyon, brs. E. and W.
	Descend.
40.00	Timber becomes scattering; undergrowth medium, brs. E. and W.

Chains

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

S23¼ | S24
1913

No bearing trees available; erect a mound of stone, 3 ft. base, 2 ft. high, W. of cor.

70 ft. below top of ridge.

44.00 Bottom of ravine, 90 ft. below ¼ cor., drs. E.

Ascend.

60.00 Top of ridge, 465 ft. above ravine, brs. E. and W.

Descend.

71.00 Bottom of ravine, 385 ft. below top of ridge, drs. SE.

Ascend.

78.00 Top of ridge, 240 ft. above ravine, brs. E. and W.

Descend.

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

T31S | R2½W
S14 | S13
S23 | S24
1913

No bearing trees available; erect a mound of stone, 3 ft. base, 2 ft. high, W. of cor.

50 ft. below top of ridge.

Land, mountainous; soil, stony on surface; 4th rate; timber, scattering growth of pinon pine and cedars; medium undergrowth of sage brush and scattering grass.

S.89° 57'E., on a random line bet. secs. 13 and 24.

40.00 Set temp. ¼ cor.

80.20 Intersect E. bdy. of the Tp., 7 lks. N. of the cor. of secs. 13,18,19 and 24, heretofore described.

August 13: At this cor. I set off 14° 42'N., on the decl. arc; and at 12h 05m l.m.t., observe the sun on the meridian; the resulting latitude is 38° 07'.

Thence I run

N.89° 54'W., on a true line bet. secs. 13 and 24.

Chains	
	Over broken mountainous land on a near level line through dense growth of timber and underbrush.
32.20	Bottom of Pole Canyon, drs. S.80°E.
	Timber becomes scattering and undergrowth medium, brs. NW. and SE.
40.10	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground for $\frac{1}{4}$ sec. cor., with brass cap marked
	S13 $\frac{1}{4}$ S24 1913
	No bearing trees available; erect a mound of stone, 3 ft. base, 2 ft. high, N. of cor.
54.20	Ascend breaks of canyon, brs. N. and S.
68.20	Top of breaks, 510 ft. above point of ascent, brs. N. and S.
	Continue ascent along N. slope of ridge,
80.20	The cor. of secs. 13,14,23 and 24.
	400 ft. above top of breaks.
	Land, mountainous; soil, stony on surface; 4th rate; timber, scattering growth of pinon pine and cedars; medium undergrowth of sage brush and scattering grass.
	August 13, 1 913.

	August 14,1913: At 8^h 05^m a.m.l.m.t., I set off 38° 07' N. on the lat. arc; 14° 27'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 mountainous land through dense timber and scattering undergrowth.
	Descend NE. slope of spur.
22.50	Bottom of Pole Canyon, 855 ft. below sec. cor., 2 chs. wide; running water 5 lks. wide, 2 ins. deep, drs. S.60° E.
	Ascend over slide rock.
40.00	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in

Chains	
	the ground for $\frac{1}{4}$ sec. cor., with brass cap marked S14$\frac{1}{4}$ | S13 1913
	No bearing trees available; erect a mound of stone, 3 ft. base, 2 ft. high, W. of cor.
	490 ft. above Pole Canyon.
48.00	Top of bluff, 280 ft. above $\frac{1}{4}$ cor., brs. N.60°W. and S. 60°E.
	Descend abruptly over sandstone ledges.
56.00	Bottom of descent, 75 ft. below top of bluff, brs. E. and W.
	Ascend.
63.00	Top of ridge, 90 ft. above bottom of descent, brs. E. and W.
	Continue across top of ridge on a near level line.
68.00	Enter dense growth of mahogany, brs. E. and W.
74.00	Leave dense growth of mahogany, brs. E. and W.
	Descend N. slope of ridge, brs. E. and SW. No timber through medium undergrowth of sage and rabbit brush.
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 T31S | R2$\frac{1}{2}$W S11 | S12 S14 | S13 1913
	and erect a mound of stone, 3 ft. base, 2 ft. high, W. of cor.
	55 ft. below point of descent.
	Land, mountainous; soil, coarse gravel on surface 2 to 3 ins. deep woth subsoil composed of coarse gravel and sandy loam of medium texture; dense timber; mediumundergrowth of sage brush, rabbit brush and scattering grass.
	August 14: At this cor. I set off 14° 24'N., on the decl. arc; and at 12^h 05^m l.m.t., observe the sun on the meridian; the resulting latitude is 38° 08'.

S.89° 54E., on a random line bet. secs. 12 and 13.

Chains	
40.00	Set temp. ¼ cor.
80.26	Intersect E. bdy. of the Tp., 19 lks. S. of the cor. of secs. 7,12,13 and 18 heretofore described.
	Thence I run
	S.89° 58'W., on a true line bet. secs. 12 and 13.
	Over mountainous land through dense timber and scattering undergrowth.
	Ascend.
28.25	Top of spur, 145 ft. above sec. cor., projects NE.
	Descend.
	Leave dense growth of timber; enter heavy undergrowth of mahogany and oak brush, brs. NE. and SW.
40.13	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground for ¼ sec. cor., with brass cap marked
	S12 ¼ S13 1913
	and erect a mound of stone, 3 ft. base, 2 ft. high, N. of cor.
44.25	Bottom of ravine, 160 ft. below top of spur, drs. E.
	Ascend.
78.75	Leave heavy undergrowth of mahogany and oak brush; enter medium undergrowth of sage, rabbit brush and scattering grass, brs. N. and S.
80.26	The cor. of secs. 11,12,13 and 14.
	265 ft. above bottom of ravine.
	Land, mountainous; soil, coarse gravel on surface 2 to 3 ins. deep with subsoil composed of coarse gravel and sandy loam of medium texture, dense timber, medium undergrowth of sage brush, rabbit brush and scattering grass.
	August 14, 1913.

August 15, 1913: At 8^h 34^m a.m. l.m.t., I set off 38° 08' N., on the lat. arc; 14° 09'N., on the decl. arc; and determine a meridian with the solar at the cor. of secs. 11, 12,13 and 14.

Thence I run

Chains	
	N.0° 01'W., bet. secs. 11 and 12.
	Over mountainous land through medium undergrowth.
	Descend.
5.00	Bottom of ravine, 40 ft. below sec. cor., drs. S.70°E.
	Ascend.
15.50	Top of spur, 120 ft. above ravine projects S.70°E.
	Descend.
	Enter dense growth of pinon pine and cedars and scattering undergrowth, brs. NW. and SE.
18.00	Bottom of ravine, 30 ft. below top of spur, drs. SE.
	Ascend.
36.00	Top of ridge, 220 ft. above ravine, brs. N.70°W. and S.70° E.
	Descend.
	Leave timber; enter medium undergrowth, brs. E. and W.
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 S11¼ | S12 / 1913 and erect a mound of stone, 3 ft. base, 2 ft. high, W. of cor.
	Cor. stands at bottom of descent, 35 ft. below the top of ridge, brs. N.70°W. and S.70°E.
	Continue N. across sage brush flat on a near level line.
76.00	Begin descent, brs. E. and W.
80.00	Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground for cor. of secs. 1,2,11 and 12 with brass cap marked T31S | R2½W / S2 | S1 / S11 | S12 / 1913 and erect a mound of stone, 3 ft. base, 2½ ft. high, W. of cor.
	30 ft. below point of descent.
	Land, mountainous; soil, rocky; 4th rate; medium undergrowth of sage brush, rabbit brush and scattering grass. Dense cedar and pinon pine 24.50 chs.

Chains	
	August 15: At this cor., I set off 14° 05'N., on the decl. arc and at 12^h 04^m l.m.t., observe the sun on the meridian; the resulting latitude is 38° 09'.

	N.89° 58'E., on a random line bet. secs. 1 and 12.
40.00	Set temp. ¼ cor.
80.22	Intersect E. bdy. of the TP., 12 lks. S. of the cor. of secs. 1,6,7 and 12 heretofore described.
	Thence I run
	S.89° 53'W., on a true line bet. secs. 1 and 12.
	Over mountainous land through dense timber and scattering undergrowth.
	Ascend.
24.20	Top of ridge, 210 ft. above sec. cor., brs. Nw. and SE.
	Descend.
	Leave timber; enter medium undergrowth, brs. NW. and SE.
40.11	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground for ¼ sec. cor., with brass cap marked
	S1 ¼ / S12 1913
	and erect a mound of stone, 3 ft. base, 2 ft. high, N. of cor.
44.20	Dry wash, 200 ft. below top of ridge, 10 lks. wide, 1 ft. deep, drs. S.80°E.
	Ascend.
80.22	The cor. of secs. 1,2,11 and 12.
	360 ft. above wash.
	Land, mountainous; soil, rocky; 4th rate; dense timber; medium undergrowth of sage brush, rabbit brush and scattering grass.
	August 15, 1913.

	August 16, 1913: At 8^h 34^m a.m.l.m.t., I set off 38° 09' N., on the lat. arc; 13° 49½'N., on the decl. arc; and determine a meridian with the solar at the cor. of secs. 1,2,11 and 12.

Chains	
	Thence I run
	N.0° 01'W., bet. secs. 1 and 2.
	Over mountainous land through medium undergrowth.
	Descend.
8.50	Dry wash, 65 ft. below sec. cor., 10 lks. wide, 1 ft. deep, drs. E.
	Ascend.
19.50	Top of ascent, 80 ft. above wash, brs. E. and W.
	Continue N. over sage brush bench land on a near level line.
39.00	Descend over ledges, brs. E. and W.
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 S2¼ | S1 1913 and erect a mound of stone, 3 ft. base, 2 ft. high, W. of cor.
	20 ft. below point of descent.
	August 16: At this cor., I set off 13° 46'N., on the decl. arc; and at 12h 04m ¾.m.t,, observe the sun on the meridian; the resulting latitude is 38° 09'.
41.20	Dry wash, 10 lks. wide, 1 ft. deep, 25 ft. below ¼ cor., drs. E. Ascend.
43.00	Top of ascent, 35 ft. above wash, brs. E. and W.
	Continue N. across top of mountain over rolling land.
100.76	Intersect Sixth Standard Parallel South, 1.84 chs.N.88°37'E. of the standard cor. of secs. 35 and 36 which is a sand stone, firmly set, marked and witnessed as heretofore described by the Surveyor General.
	Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground for C.C. of secs. 1 and 2 with brass cap marked T30S | R2½W S35 | S36 C C S 2 | S 1 1913 and erect a mound of stone, 3 ft. base, 2 ft. high, S. of cor.

Chains

Land, mountainous; soil, coarse gravel on surface 2 to 3 ins. deep with subsoil composed of gravel, stiff clay and sandy loam of medium texture; no timber; medium undergrowth of sage brush, rabbit brush and scattering grass.

August 16, 1913.

Jos. C. Thomas

U. S. Surveyor.

Survey commenced August 9, 1913 and executed with a Young and Sons light mountain transit, No. 8146 with solar attachment. The horizontal limb is provided with two double verniers placed opposite to each other reading to single minutes of arc which is also the least count of the verniers of the latitude and declination arcs.

The instrument was examined, tested on the true meridian at Salt Lake City, Utah, found correct and was approved by the Asst. Supervisor of Surveys for Utah, June 14,1913.

I examine the adjustments of the transit, find them correct; 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.

At camp in the SW. cor. of sec. 27, T.31 S.,R2½ W.; latitude, 38° 05'N., longitude, 112° 10'W., I set off 38°05' N., on the lat. arc; 15° 51'N., on the decl. arc; and at $3^h\ 05^m$ p.m.l.m.t., determine with the solar a meridian and mark a point thereof, on a stake firmly driven in the ground 5 chs. N. of my station.

At $10^h\ 21^m$ p.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 on a stake driven in the ground 5 chs. N. of my station.

August 9, 1913.

August 10, 1913: At $7^h\ 00^m$ a.m.l.m.t., I lay off the azimuth of Polaris, 1° 28' to the west and mark a point in

Chains	
	the meridian thus determined by a cross on the stake set August 9, the same coinciding with the mark determined by the solar.
	At 8h 05m a.m.l.m.t., I set off 38° 05'N., on the lat. arc; 15° 39'N., on the decl. arc; and mark a point in the meridian determined with the solar by a cross on the stake already set 5 chs. N. of my station; this mark coincides with the meridian established by the Polaris observation.
	At 12h 05m l.m.t., I set off 15° 36'N., on the decl. arc and observe the sun on the meridian; the resulting latitude is 38° 05'N.
	At 3h 05m p.m.l.m.t., I set off 38° 05'N., on the lat. arc; 15° 34'N., on the decl. arc; and determine a meridian with the solar, the meridian thus determined coincides with the meridian established by the Polaris observation.
	The solar apparatus by p.m. and a.m. observations, defines positions for meridians, respectively coinciding with the meridian established by the Polaris observation; therefore I conclude that the adjustments of the instrument are satisfactory.
	The magnetic bearing of the true meridian at 3h 15m p.m. is N.16° 05'W., the angle thus determined gives the mag. decl. 16° 05'E. A 2 ch. tape and clinometer was used on all measurements of this work. August 10, 1913.
	August 13, 1913: At 8h 05m a.m.l.m.t., I set off 38° 04' N., on the lat. arc; 14° 45'N., on the decl. arc; and determine a meridian with the solar at the cor. of secs. 34 and 35 on the S. bdy. of the Tp., heretofore described.
	Thence I run N.0° 01'W., bet. secs. 34 and 35.
	Over mountainous land through dense timber and medium undergrowth. Descend.
1.80	S. fork of Forest Canyon, 55 ft. below sec. cor.,drs.N70°E. Ascend.
3.50	Timber becomes scattering, brs. E. and W.
36.00	Top of ridge, 480 ft. above Forest Canyon, brs. S60°W. and E. Descend.
40.00	Set an iron post, 3 ft. long, 1 in. in dia., 36 ins. in

Chains	
	the ground for ¼ sec. cor., with brass cap marked S34¼ | S35 1913
	No bearing trees available; erect a mound of stone, 3 ft. base, 2 ft. high, W. of cor.
	Cor. stands on N. slope of ridge, 75 ft. below the top.
44.25	Bottom of ravine, 90 ft. below ¼ cor., drs. E. Ascend.
55.00	Top of ridge, 125 ft. above ravine, brs. S.60°W. and E. Descend.
76.75	N. fork, Forest Canyon, 330 ft. below top of ridge, drs. N.80°E. Heavy growth of spruce, aspen and balsam along bottom of canyon. Ascend.
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 T31S | R2½W S27 | S26 S34 | S35 1913 from which
	A pinon pine, 6 ins. dia., bears N.57° 15'E., 1.02 chs. dist., marked T 31 S R 2½ W S 26 B T.
	A pinon pine, 7 ins. dia., bears S.20° 40'E., 7 lks. dist., marked T 31 S R 2½ W S 35 B T.
	A pinon pine, 8 ins. dia., bears S.48° 50'W., 1.24 chs. dist., marked T 31 S R 2½ W S 34 B T.
	A pinon pine, 5 ins. dia., bears N.56° 15'W., 1.28 chs. dist., marked T 31 S R 2½ W S 27 B T.
	120 ft. above bottom of Forest Canyon.
	Land, mountainous; soil, coarse gravel on surface with sub-soil composed of loose rock and sandy loam of medium texture; timber, scattering growth of pinon pine and cedars; medium undergrowth of sage brush and scattering grass.
	East on a random line bet. secs. 26 and 35.
40.00	Set temp. ¼ cor.
80.04	Intersect N. and S. line, 14 lks. S. of the cor. of secs. 25,26,35 and 36.
	Thence I run S.89° 54'W., on a true line bet. secs. 26&35. Over mountainous land through scattering timber and medium undergrowth.
	Descend.
40.02	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in

Chains

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

S26
¼
S35
1913

from which

A yellow pine, 6 ins. dia., bears N.19° 30'E., 98 lks. dist., marked ¼ S 26 B T.

A pinon pine, 6 ins. dia.,bears S.14° 50'E., 27½ lks. dist., marked ¼ S 35 B T.

80 ft. below sec. cor.

August 13: At this cor., I set off 14° 42'W., on the decl. arc; and at $12^h\ 05^m$ l.m.t., observe the sun on the meridian; the resulting latitude is 38° 05'.

43.80 North fork of Forest Canyon (dry), 50 ft. below ¼ cor., drs. N.80°E. Heavy growth of spruce, aspen and yellow pine along creek bottom.

Ascend.

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

335 ft. above bottom of Forest Canyon.

Land, mountainous; soil, coarse gravel on surface 2 to 3 ins. deep with subsoil composed of loose rock and sandy loam of medium texture; timber, scattering growth of pinon pine and cedars; medium undergrowth of sage brush and scattering grass.

N.0° 01'W., bet. secs. 26 and 27.

Over mountainous land through scattering timber and medium undergrowth.

Ascend.

19.00 Top of ridge, 250 ft. above sec. cor., brs. E. and W.

Descend.

20.00 Leave scattering timber, brs. E. and W.

21.10 Old pole road to Coyote, brs. E. and W.

28.25 Bottom of ravine, 125 ft. below top of ridge, drs. N.60°E. Heads S.60°W., 8 chs. dist.

Ascend.

35.00 Top of spur, 65 ft. above ravine, projects N.70°E.,

Descend.

Chains	
40.00	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground for $\frac{1}{4}$ sec. cor., with brass cap marked S27$\frac{1}{4}$ | S26 1913 and erect a mound of stone, 3 ft. base, 2 ft. high, W. of cor. 60 ft. below top of spur.
40.25	Bottom of ravine, 5 ft. below $\frac{1}{4}$ cor., drs. E.
	Ascend.
45.00	Top of ridge, 70 ft. above ravine, brs. N.70°E. and S.70° W.
	Descend.
54.35	Bottom of ravine, 215 ft. below top of ridge, drs. N60°E.
	Ascend.
	Enter scant growth of pinon pine, cedars and aspen, brs. E. and W.
63.00	Top of spur, 110 ft. above ravine, projects E. about 10 chs.
	Descend.
69.75	Bottom of ravine, 60 ft. below top of spur, drs. E.
	Ascend.
74.00	Top of ridge, 90 ft. above ravine, brs. N.60°E. and S.60° W.
	Descend.
78.00	Bottom of ravine, 90 ft. below top of ridge, drs. N.60°E.
	Ascend.
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 T31S | R2$\frac{1}{2}$W S22 | S23 S27 | S26 1913 from which A pinon pine, 6 ins. dia., bears N.22° 50'E., 41 lks. dist., marked T 31 S R 2$\frac{1}{2}$ W S 23 B T. A pinon pine, 5 ins. dia., bears S.35° 10'E., 19 lks. dist., marked T 31 S R 2$\frac{1}{2}$ W S 26 B T.

Chains

A pinon pine, 7 ins. dia., bears S.58° 25'W., 88½ lks. dist., marked T 31 S R 2½ W S 27 B T.

A pinon pine, 6 ins. dia., bears N.37° 20'W., 31 lks. dist., marked T 31 S R 2½ W S 22 B T.

45 ft. above ravine.

Land, mountainous; soil, gravel on surface 2 to 3 ins. deep with subsoil composed of coarse gravel, loose rock and sandy loam of medium texture; timber, scant growth of pinon pine, cedars and aspen; medium undergrowth of sage brush and scattering grass.

August 13, 1913.

August 14, 1913: At 8h 05m a.m.l.m.t., I set off 38° 06' N., on the lat. arc; 14° 27'N., on the decl. arc; and determine a meridian with the solar at the cor. of secs. 22, 23,26 and 27.

Thence I run

N.89° 54'E., on a random line bet. secs. 23 and 26.

40.00 Set temp. ¼ cor.

79.95 Intersect N. and S. line, at the cor. of secs. 23,24,25 and 26.

Thence I run

S.89° 54'W., on a true line bet. secs. 23 and 26.

Over mountainous land through dense growth of timber and scattering undergrowth.

Ascend.

33.45 Top of spur, 170 ft. above sec. cor., projects S.

Descend.

Timber becomes scattering; undergrowth, medium, brs. N. and S.

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

S23
¼
S26
1913

from which

A pinon pine, 12 ins. dia., bears S.75° 40'W., 57 lks. dist., marked ¼ S 26 B T.

Chains	
	A pinon pine, 6 ins. dia., bears N.55° 35'W., 13 lks. dist., marked ¼ S 23 B T.
	50 ft. below top of spur.
49.20	Bottom of ravine, 45 ft. below ¼ cor., drs. N70°E.
	Ascend.
63.45	Top of spur, 210 ft. above ravine, projects N.60°E.
	Descend.
73.85	Bottom of ravine, 75 ft. below top of spur, drs. N.70°E.
	Ascend.
79.95	The cor. of secs. 22,23,26 and 27.
	70 ft. above ravine.
	Land, mountainous; soil, gravel on surface 2 to 3 ins. deep with subsoil composed of coarse gravel, loose rock and sandy loam of medium texture; timber, scattering growth of pinon pine, cedars and aspen; medium undergrowth of sage brush and scattering grass.

	N.0° 01'W., bet. secs. 22 and 23.
	Over mountainous land through scattering timber and medium undergrowth.
	Ascend.
6.50	Top of ridge, 145 ft. above sec. cor., brs. E. and W.
	Descend.
16.60	South fork of Pole Canyon, 380 ft. below top of ridge, drs. E.
	Ascend.
31.00	Top of ridge, 415 ft. above bottom of pole canyon, brs. N.60°E. and S.70°W.
	Descend.
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 S22¼ | S23 / 1913
	No bearing trees available; erect a mound of stone, 3 ft. base, 1½ ft. high, W. of cor.
	180 ft. below top of ridge.
	August 14: At this cor., I set off 14° 24'N., on the decl.

Chains	
	arc; and at 12h 05m l.m.t., observe the sun on the meridian; the resulting latitude is 38° 06½'.
43.80	Bottom of ravine, 85 ft. below ¼ cor., drs. E.
	Ascend.
67.00	Top of ridge, 300 ft. above ravine, brs. NE. and SW.
	Descend.
	Timber becomes very scattering, brs. E. and W.
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

T31S \| R2½W
S15 \| S14
S22 \| S23
1913

No bearing trees available; erect a mound of stone, 3 ft. base, 2 ft. high, W. of cor.

115 ft. below top of ridge.

Land, mountainous; soil, coarse gravel on surface 3 ins. deep with subsoil composed of coarse gravel and sandy loam of medium texture; timber, scamt growth of pinon pine, cedars and aspen; medium undergrowth of sage brush, grease wood and scattering grass.

	N.89° 54'E., on a random line bet. secs. 14 and 23.
40.00	Set temp. ¼ cor.
79.94	Intersect N. and S. line at the cor. of secs. 13,14,23 and 24.
	Thence I run
	S.89° 54'W., on atrue line bet. secs. 14 and 23.
	Over mountainous land through dense timber and scattering undergrowth. Descend.
4.00	Ridge, bears NW. and SE.
9.95	Bottom of ravine, 220 ft. below sec. cor., drs. S.75°E.
	Ascend.
39.97	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground for ¼ sec. cor., with brass cap marked

S14
¼
S23
1913

from which

Chains	
	A pinon pine, 6 ins. dia., bears N.29° 40'E.,45 lks. dist., marked $\frac{1}{4}$ S 14 B T.
	A pinon pine, 12 ins. dia., bears S.58° 40'W., 31 lks. dist., marked $\frac{1}{4}$ S 23 B T.
	270 ft. above ravine.
52.95	Timber becomes scattering; undergrowth, medium, brs. NE. and SW.
66.95	Top of ridge, 160 ft. above $\frac{1}{4}$ cor., brs. SW. and E.
	Descend.
79.94	The cor. of secs. 14,15,22 and 23.
	105 ft. below top of ridge.
	Land, mountainous; soil, coarse gravel on surface, 3 ins. deep with subsoil composed of coarse gravel and sandy loam of medium texture; timber, scant growth of pinon pine, cedars and aspen; medium undergrowth of sage brush, grease wood and scattering grass.

August 14, 1913.

Edward R Bunbury

U. S. Transitman.

	August 20, 1913: At 8^h 03^m a.m.l.m.t., I set off 38° 07' N., on the lat. arc; 12° 33'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° 01'W., bet. secs. 14 and 15.
	Over mountainous land through scattering timber and medium undergrowth.
	Ascend.
3.00	Top of ridge, 45 ft. above sec. cor., brs. NE. and SW.
	Descend.
10.00	Bottom of ravine, 130 ft. below top of ridge, 10 lks. wide, drs. NE.
	Ascend.
13.00	Top of spur, 50 ft. above ravine, projects NE.

Chains

Descent.

15.42 Dry wash, 10 lks. wide, 1 ft. deep, drs. N.70°E.

40 ft. below top of spur.

Continue N. on a near level line.

30.00 Begin abrupt descent into Pole Canyon, brs. NE. and SW. Timber becomes dense; undergrowth scattering, brs. NE. and SW.

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

S15½ | S14

1913

from which

A pinon pine, 12 ins. dia., bears S.77°E., 35 lks. dist., marked ¼ S 14 BT.

A cedar, 12 ins. dia., bears N.68°W., 6 lks. dist., marked ¼ S 15 B T.

400 ft. below point of abrupt descent.

42.50 Bottom of Pole Canyon, 100 ft. below ¼ cor., running water here, 5 lks. wide, 2 ins. deep, drs. E. Banks of canyon fringed with cottonwood timber.

45.00 Begin ascent of N. slope of Pole Canyon, brs. N.70°W. and S.70°E. Through scattering timber and heavy undergrowth.

72.00 Top of ascent, 325 ft. above Pole Canyon, brs. NW. and SE.

Continue N. over rocky bench land on a near level line.

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

T31S | R21W

S10 | S11

S15 | S14

1913

No bearing trees available; erect a mound of stone, 3 ft. base, 1 ft. high, W. of cor.

Land, mountainous; soil, stony on surface; 4th rate; timber, scattering growth of pinon pine and cedars; dense undergrowth of sage brush and scattering grass.

N.89° 54'E., on a random line bet. secs. 11 and 14.

Chains	
40.00	Set temp. $\frac{1}{4}$ cor.
80.04	Intersect N. and S. line, 7 lks. S. of the cor. of secs. 11,12,13 and 14.
	Thence I run
	S.89° 51'W., on a true line bet. secs. 11 and 14.
	Over mountainous land, through medium undergrowth.
	Descend.
4.05	Bottom of ravine, 55 ft. below sec. cor., drs. NE.
	Ascend.
17.05	Enter dense grove of mahogany, brs. N. and S.
32.05	Leave dense growth of mahogany, brs. N. and S.
40.02	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground for $\frac{1}{4}$ sec. cor., with brass cap marked
	S11 $\frac{1}{4}$ S14 1913
	and erect a mound of stone, 3 ft. base, 2 ft. high, N. of cor.
48.05	Top of ridge, 320 ft. above ravine, brs. NE. and SW.
	Descend.
53.55	Bottom of ravine, 85 ft. below top of ridge, drs. NE.
	Ascend
66.55	Top of ascent, 160 ft. above ravine, brs. N. and S.
	Continue W. on a near level line through scant growth of timber and dense undergrowth, brs. N. and S.
80.04	The cor. of secs. 10,11,14 and 15.
	Land, mountainous; soil, stony on surface; 4th rate; timber, scattering growth of pinon pine and cedars; dense undergrowth of sage brush and grass.
	August 20: At this cor., I set off 12° 29'N., on the decl. arc; and at 12^h 03^m l.m.t., observe the sun on the meridian; the resulting latitude is 38° 08'.

	N.0° 01'W., bet. secs. 10 and 11.
	Over mountainous land, through scant growth of timber and dense undergrowth.
	Continue across rocky bench land on gradual NE. slope.

Chains

22.90 Begin steep descent, brs. E. and SW.

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

S10¼ | S11

1913

No bearing trees available; erect a mound of stone 3 ft. base, 1½ ft. high, W. of cor.

48.00 Bottom of ravine, 375 ft. below point of steep descent, drs. S.70°E.

Ascend.

62.00 Top of ridge, 210 ft. above ravine, brs. NW. and SE.

Continue N. across top of ridge on a near level line.

68.00 Enter dense growth of aspen, brs. E. and W.

70.00 Leave dense growth of aspen, brs. E. and W.

77.00 Begin descent, brs. 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. 2,3,10 and 11 with brass cap marked

T31S | R2½W
S3 | S2

S10 | S11
1913

and erect a mound of stone, 3 ft. base, 2 ft. high, W. of cor.

20 ft. below point of descent.

Land, mountainous; soil, stony on surface; 4th rate; no timber; dense undergrowth of sage brush and scattering grass.

N.89° 51'E., on a random line bet. secs. 2 and 11.

40.00 Set temp. ¼ cor.

80.00 Intersect N. and S. line at the cor. of secs. 1,2,11 and 12.

Thence I run.....

S.89° 51'W., on a true line bet. secs. 2 and 11.

Over rolling land across top of mountain through dense undergrowth.

3.50 Dry wash, 15 lks. wide, 1 ft. deep, drs. NE.

Chains	
	Dense growth of spruce along bottom of wash, 2 chs. in width.
40.00	Set an iron post, 3 ft. long, 1 in. in dia,, 26 ins. in the ground for $\frac{1}{4}$ sec. cor., with brass cap marked S2 $\frac{1}{4}$ S11 1913 and erect a mound of stone, 3 ft. base, $1\frac{1}{2}$ ft. high, N. of cor.
80.00	The cor. of secs. 2,3,10 and 11. Land, mountainous; soil, stony on surface; 4th rate; no timber; dense undergrowth of sage brush and scattering grass.
	August 20, 1913.

	August 21, 1913: At 8^h 03^m a.m.l.m.t., I set off 38° 09' N., on the lat. arc; 12° 13'N., on the decl. arc; and determine a meridian with the solar at the cor. of secs. 2,3,10 and 11.
	Thence I run
	N.0° 01'W., bet. secs. 2 and 3.
	Over mountainous land through dense undergrowth.
	Descend.
9.00	Dry wash, 10 lks. wide, 1 ft. deep, drs. E.
	60 ft. below sec. cor.
	Ascend.
17.00	Top of ridge, 90 ft. above dry wash, brs. E. and W.
	Descend. Enter scattering timber, brs. E. and W.
27.00	Dry wash, 120 ft. below top of ridge, 10 lks. wide, 1 ft. deep, drs. E.
	Ascend.
37.45	Top of ascent, 105 ft. above wash, brs. E. and W.
	Leave scattering timber, brs. E. and W.
	Continue N. over rocky bench land on a near level line.
40.00	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground for $\frac{1}{4}$ sec. cor., with brass cap marked S3 $\frac{1}{4}$ | S2 1913

Chains

and erect a mound of stone, 3 ft. base, 1½ ft. high, W. of cor.

42.50 Enter scattering growth of aspen, brs. E. and W.

101.47 Intersect Sixth Standard Parallel South, 1.63 chs.S.89.49'E. the standard cor. of secs. 34 and 35, described on page 60, Retracement of the Sixth Standard Parallel South.

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

T30S | R2½W	
S34 | S35	
C	C
S 3	S 2

1913

No bearing trees available; erect a mound of stone, 3 ft. base, 2 ft. high, S. of cor.

Land, mountainous; soil, gravel on surface, 2 to 3 ins. deep with subsoil composed of gravel and sandy loam of medium texture; timber, scattering growth of aspen; dense undergrowth of sage brush, rabbit brush and scattering grass.

August 21: At this cor., I set off 12° 09'N., on the decl. arc; and at $12^h\ 03^m$ l.m.t., observe the sun on the meridian; the resulting latitude is 38° 10'.

August 21, 1913.

Jas. P. Thorne

U. S. Surveyor.

August 15, 1913: At $8^h\ 04^m$ a.m.l.m.t., I set off 38° 04' N., on the lat. arc; 14° 09'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 mountainous land through scant growth of aspen tim-

Chains	
	ber and medium undergrowth.
	Ascend.
12.00	Top of ridge, 110 ft. above sec. cor., brs. N.60°E. and S.60°W.
	Descend.
24.00	Bottom of ravine, 180 ft. below top of ridge, drs. NE.
	Ascend.
36.50	Top of spur, 150 ft. above ravine, projects E. about 10 chs.
	Descend.
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 S33¼ | S34 1913 No bearing trees available; erect a mound of stone, 3 ft. base, 2 ft. high, W. of cor. 45 ft. below top of spur.
42.75	Bottom of ravine, 40 ft. below ¼ cor., drs. E.
	Ascend.
61.00	Top of ridge, 200 ft. above ravine, brs. N.70°E. and S. 70°W.
	Descend.
79.50	North fork of Forest Canyon, 290 ft. below top of ridge; running water in bottom of same, 2 lks. wide, 1 in. deep, drs. E.
	Ascend.
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 T31S | R2½W S28 | S27 S33 | S34 1913 from which An aspen, 12 ins. dia., bears N.64° 30'E., 34½ lks. dist., marked T 31 S R 2½ W S 27 B T. An aspen, 15 ins. dia., bears S.46° 45'E., 16 lks. dist., marked T 31 S R 2½ W S 34 B T. An aspen, 8 ins. dia., bears S.36° 45'W., 10 lks..

Chains	
	dist., marked T 31 S R 2½ W S 33 B T.
	An aspen, 10 ins. dia., bears N.61° 15'W., 64 lks. dist., marked T 31 S R 2½ W S 28 B T.
	10 ft. above Forest Creek.
	Land mountainous; soil, coarse gravel on surface, 2 to 3 ins. deep with subsoil composed of coarse gravel and sandy loam of medium texture; timber, scattering growth of aspen; medium undergrowth of sage brush, grease wood, yellow top and scattering grass.
	August 15: At this cor. I set off 14° 05'N., on the decl. arc; and at 12h 04m l.m.t., observe the sun on the meridian; the resulting latitude is 38° 05'.
	East on a random line bet. secs. 27 and 34.
40.00	Set temp. ¼ cor.
79.94	Intersect N. and S. line, 5 lks. S. of the cor. of secs. 26,27,34 and 35.
	Thence I run.
	S.89° 58'W., on a true line bet. secs. 27 and 34.
	Over mountainous land through scattering timber and medium undergrowth.
	Ascend.
38.45	Top of spur, 300 ft. above sec. cor., projects S. about 6 chs.
	Descend.
39.97	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground for ¼ sec. cor., with brass cap marked S27 ¼ S34 1913
	No bearing trees available; erect a mound of stone, 3 ft. base, 1½ ft. high, N. of cor.
	10 ft. below top of spur.
51.95	Forest Creek, 50 ft. below ¼ cor; running water, 2 lks. wide, 1 in. deep, drs. S.80°E.
	Ascend gently along bottom of creek bed.
79.94	The cor. of secs. 27,28,33 and 34.

Chains	
	110 ft. above Forest Creek.
	Land, mountainous; soil, coarse gravel on surface, 2 to 3 ins. deep with subsoil composed of coarse gravel and sandy loam of medium texture; timber, scattering growth of aspen; medium undergrowth of sage brush, grease wood, yellow top and scattering grass.
	August 15, 1913.

	August 16, 1913: At 8^h 04^m a.m.l.m.t., I set off 38° 05' N., on the lat. arc; 13° 50'N., on the decl. arc; and determine a meridian with the solar at the cor. of secs. 27, 28,33 and 34.
	Thence I run.
	N.0° 02'W. bet. secs. 27 and 28.
	Over mountainous land through scattering timber and medium undergrowth.
	Ascend.
10.50	Top of ridge, 210 ft. above sec. cor., brs. E. and W.
	Descend.
12.10	Pole road to Coyoto, brs. E. and W.
14.50	Bottom of ravine, 50 ft. below top of ridge, drs. E.
	Ascend.
27.00	Top of ridge, 175 ft. above ravine, brs. N.60°E. and S.60° W.
	Descend.
40.00	Set an iron post, 3 ft. long, 1 in. indía., 26 ins. in the ground for ¼ sec. cor., with brass cap marked S28¼ | S27 / 1913
	No bearing trees available; erect a mound of stone, 3 ft. base, 2 ft. high, W. of cor.
	90 ft. below top of ridge.
46.00	Bottom of ravine, 100 ft. below ¼ cor., drs. N.70°E.
	Ascend.
59.00	Top of ridge, 100 ft. above ravine, brs. N.70°E. and S. 70°W.
	Descend.

Chains

78.10 South fork of Pole Canyon, 275 ft. below top of ridge, brs. N.80°E.

Ascend.

79.00 Leave scattering growth of timber, brs. E. and W.

80.00 Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground for cor. of secs. 21,22,27 and 28 with brass cap marked

T31S | S21	R2½W | S22
S28	S27

1913

from which

40 ft. An aspen, 17 ins. dia., bears S.10° 15'E., 1.55 chs. dist., marked T 31 S R 2½ W S 27 B T.

An aspen, 5 ins. dia., bears S.4°W., 1.62 chs. dist., marked T 31 S R 2½ W S 28 B T.

No other bearing trees available; erect a mound of stone, 3 ft. base, 2 ft. high, W. of cor.

40 ft. above Pole Canyon.

Land, mountainous; soil, coarse gravel on surface with subsoil composed of gravel, loose rock and sandy loam of medium texture; timber, scant undergrowth of aspen.; medium undergrowth of sage brush, scattering grease wood, yellow top and grass.

N.89° 58'E., on a random line bet. secs. 22 and 27.

40.00 Set temp. ¼ cor.

79.94 Intersect N. and S. line, 3 lks. S. of the cor. of secs. 22,23,26 and 27.

Thence I run

N.89° 57'E., on a true line bet. secs. 22 and 27.

Over mountainous land through scattering timber and medium undergrowth.

Ascend.

158.95 Top of ridge, 240 ft. above sec. cor., brs. N.80°E. and S.80°W.

Descend.

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

Chains	
	S22 ¼ S27 1913 from which
	An aspen, 5 ins. dia., bears N.82° 10'E., 86 lks. dist., marked ¼ S 22 B T.
	An aspen, 7 ins. dia., bears S.27°E., 1.27 chs. dist., marked ¼ S 27 B. T.
	Cor. stands in slight depression on NW. slope of ridge, 40 ft. below the top; depression brs. N.70°E.
	Ascend.
	August 16: At this cor., I set off 13° 46'N., on the decl. arc; and at 12h 04m l.m.t., observe the sun on the meridian; the resulting latitude is 38° 06'.
57.95	Top of spur, 35 ft. above ¼ cor., projects N. about 5 chs.
	Descend.
71.95	South fork of Pole Canyon, 90 ft. below top of spur, drs. N.80°E.
	Ascend.
79.94	The cor. of secs. 21,22,27 and 28.
	65 ft. above Pole Canyon.
	Land, mountainous; soil, coarse gravel on surface with subsoil composed of gravel, loose rock and sandy loam of medium texture; timber, scant growth of aspen; medium undergrowth of sage brush, scattering grease wood, yellow top and scattering grass.
	N. 0° 02'W. bet. secs. 21 and 22.
	Over mountainous land through dense undergrowth.
14.00	Top of ridge, 265 ft. above sec. cor., brs. N.70°E. and S.60°W.
	Descend.
26.00	Bottom of ravine, 170 ft. below top of ridge, drs. N.75°E.
	Ascend.
36.50	Top of spur, 180 ft. above ravine, projects N.75°E.
	Descend.
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

Chains	
	S21¼ | S22 1913
	and erect a mound of stone, 3 ft. base, 2 ft. high, W. of cor.
	30 ft. below top of spur.
41.90	Bottom of ravine, 20 ft. below ¼ cor. 1 drs. E.
	Ascend.
50.00	Top of ridge, 70 ft. above ravine, brs. N.65°E. and W.
	Descend.
65.50	Bottom of ravine, 125 ft. below top of ridge, drs. NE.
	Ascend.
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
	T31S | R2½W S16 | S15 S21 | S22 1913
	and erect a mound of stone, 3 ft. base, 2 ft. high, W. of cor.
	90 ft. above ravine.
	Land, mountainous; soil, stony on surface with subsoil composed of loose rock and sandy loam of medium texture; no timber; medium undergrowth of sage brush, grease wood, yellow top and scattering grass.
	August 16, 1913.

August 19, 1913: At 10^h 04^m a.m.l.m.t., I set off 38° 07' N., on the lat. arc; 12° 50'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 cor.

80.00 Intersect N. and S. line, 12 lks. N. of the cor. of secs. 14,15,22 and 23.

Thence I run

N.89° 58'W., on a true line bet. secs. 15 and 22.

Chains	
	Over mountainous land through very scant growth of timber and medium undergrowth.
	Ascend.
3.00	Top of ridge, 45 ft. above sec. cor., brs. NE. and SW.
	Descend.
8.75	Bottom of ravine, 35 ft. below top of spur, drs. NE.
	Ascend.
21.00	Top of ridge, 215 ft. above ravine, brs. NE. and W.
	Ascend along top of same.
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 S15 ¼ / S22 1913
	No bearing trees available; erect a mound of stone, 3 ft. base, 1½ ft. high, N. of cor.
	330 ft. above ravine.
44.00	Top of spur, 20 ft. above ¼ cor., projects SW.
	Descend.
61.25	Bottom of ravine, 100 ft. below top of spur, drs. NE.
	Ascend.
	Leave scant growth of timber, brs. NE. and SW.
80.00	The cor. of secs. 15,16,21 and 22.
	210 ft. above ravine.
	Land, mountainous; soil, stony on surface with subsoil composed of loose rock and sandy loam of medium texture; no timber; medium undergrowth of sage brush, grease wood, yellow top and scattering grass.
	August 19: At this cor., I set off 12° 48'N., on the decl. arc; and at 12^h 04^m l.m.t., observe the sun on the meridian; the resulting latitude is 38° 07'.
	Moved on fly camp from SW. quarter of sec. 27 to NE. quarter of sec. 16.

	August 20, 1913: At 8^h 03^m a.m.l.m.t., I set off 38° 07' N., on the lat. arc; 12° 33'N., on the decl. arc; and determine a meridian with the solar at the cor. of secs.

Chains

15,16,21 and 22.

Thence I run

N.0° 02'W. bet. secs. 15 and 16.

Over mountainous land through scant growth of aspen and medium undergrowth.

Ascend.

5.00 Top of ridge, 25 ft. above sec. cor., brs. NE. and SW.

Descend.

16.25 Bottom of ravine, 145 ft. below top of ridge, drs. NE.

Ascend.

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

S16¼ | S15

1913

No bearing trees available; erect a mound of stone, 3 ft. base, 1½ ft. high, W. of cor.

Cor. stands on top of spur,120 ft. above ravine, projects NE.

Descend.

52.50 Bottom of ravine, 140 ft. below ¼ cor., drs. N.10°E.

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

T31S | R2½W
S9	S10
S16	S15

1913

No bearing trees available; erect a mound of stone, 3 ft. base, 2 ft. high, W. of cor.

30 ft. above ravine.

Land, mountainous; soil, stony on surface with subsoil composed of loose rock and sandy loam of medium texture; timber, very scant growth of aspen; medium undergrowth of sage brush, grease wood and scattering grass.

S.89° 58'E., on a random line bet. secs. 10 and 15.

40.00 Set temp. ¼ cor.

Chains	
79.91	Intersect N. and S. line, 19 lks. N. of the cor. of secs. 10,11,14 and 15.
	Thence I run
	N.89° 50'W., on a true line bet. secs. 10 and 15.
	Over mountainous land through scattering timber and medium undergrowth.
	Ascend.
21.90	Top of spur, 45 ft.above sec. cor., projects SE.
	Descend.
39.95½	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground for ¼ sec. cor., with brass cap marked

S10
¼
S15
1913

from which

A cedar, 6 ins. dia., bears S.41° 25'E., 28 lks. dist., marked ¼ S 15 B T.

A pinon pine, 6 ins. dia., bears N.29° 50'W., 14 lks., dist., marked ¼ S 10 B T.

270 ft. below top of spur.

August 10: Sky overcast at noon; unable to observe the sun for latitude.

47.90	Leave scattering growth of pinon pine, cedars and mahogany; enter scant growth of aspen, brs. NW. and S.60°E.
51.90	Bottom of Pole Canyon and junction of ravine with same, 25 ft. below ¼ cor., drs. S.60°E.
	Ascend.
79.91	The cor. of secs. 9,10,15 and 16.
	495 ft. above bottom of Pole Canyon.
	Land, mountainous; soil, stony on surface with subsoil composed of loose rock and sandy loam of medium texture; timber, very scant growth of aspen; medium undergrowth of sage brush, grease wood and scattering grass.

N.0° 02'W. bet. secs. 9 and 10.

Over mountainous land through scattering timber and medium undergrowth.

Ascend.

Chains

2.50 Top of spur, 15 ft. above sec. cor., projects E.

Descend.

14.00 Bottom of N. fork of Pole Canyon, 205 ft. below top of spur, drs. E.

Ascend.

22.00 Top of spur, 250 ft. above Pole Canyon, projects SE.

Descend.

37.25 Bottom of ravine, 80 ft. below top of spur, drs. SE.

Ascend.

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

S9¼ | S10

1913

No bearing trees available; erect a mound of stone, 3 ft. base, 1½ ft. high, W. of cor.

35 ft. above ravine.

46.00 Timber becomes very scattering, brs. E. and W.

66.00 Top of ridge, 210 ft. above ¼ cor., brs. NW. and SE.

Descend.

76.00 Bottom of ravine, 50 ft. below top of ridge, drs. SE.

Ascend.

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

T31S | R2½W
S4 | S3
S9 | S10
1913

No bearing trees available; erect a mound of stone, 3 ft. base, 2 ft. high, W. of cor.

30 ft. above ravine.

Land, mountainous; soil, stony on surface with subsoil composed of loose rock and sandy loam of medium texture; timber, scattering growth of aspen; medium undergrowth of sage brush and scattering grass.

August 20, 1913.

Chains	
	August 21, 1913: At 8^h 03^m a.m.l.m.t., I set off 38° 09' N., on the lat. arc; 12° 13'N., on the decl. arc; and determine a meridian with the solar at the cor. of secs. 3,4,9 and 10.
	Thence I run S.89° 50'E., on a random line bet. secs. 3 and 10.
40.00	Set temp. ¼ cor.
79.86	Intersect N. and S. line, 14 lks. S. of the cor. of secs. 2,3,10 and 11.
	Thence I run
	N.89° 56'W., on a true line bet. secs. 3 and 10.
	Over mountainous land through very scant growth of timber and medium undergrowth.
	Ascend.
33.85	Top of ridge, 135 ft. above sec. cor., brs. N.75°W. and S.75°E.
	Descend.
39.93	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground for ¼ sec. cor., with brass cap marked S3 ¼ S10 1913
	No bearing trees available; erect a mound of stone, 3 ft. base, 1½ ft. high, N. of cor.
	10 ft. below top of ridge.
79.86	The cor. of secs. 3,4,9 and 10.
	160 ft. below ¼ cor.
	Land, mountainous; soil, stony on surface with subsoil composed of loose rock and sandy loam of medium texture; timber, very scant growth of aspen; medium undergrowth of sage brush and scattering grass.

	N.0° 02'W. bet. secs. 3 and 4.
	Over mountainous land through very scant growth of timber and medium undergrowth.
	Ascend.
26.00	Top of ridge, 210 ft. above sec. cor., brs. N.70°W. and

Chains and S.70°E.
Descend.

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

S4¼ | S3
1913

No bearing trees available; erect a mound of stone, 3 ft. base, 1½ ft. high, W. of cor.
110 ft. below top of ridge.

42.25 Bottom of ravine, 5 ft. below ¼ cor., drs. S.60°E., heads 6 chs. W.
Ascend.

56.00 Top of ridge, 70 ft. above ravine, brs. E. and W.
Descend.

64.00 Enter dense growth of timber; undergrowth, scattering, brs. SW. and E.
August 21: Sky overcast at noon; unable to observe the sun for latitude.

80.00 Bottom of ravine, 215 ft. below top of ridge, drs. N.70°E.
Ascend.

94.00 Top of spur, 165 ft. above ravine, projects E.
Descend.

101.60 Intersect Sixth Standard Parallel South, 2.11 chs. N.89°57'E. of standard cor. of secs. 33 and 34, described on page 61 of Retracement of the Sixth Standard Parallel South.
Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground for C. C. of secs. 3 and 4 with brass cap marked

T30S | R2½W
S33 | S34

S C 4 | C S 3
1913

from which
An aspen, 5 ins. dia., bears S.32° 55'E., 40½ lks. dist., marked T 31 S R 2½ W S 3 B T.
An aspen, 5 ins. dia., bears S.25° 20'W., 15 lks. dist., marked T 31 S R 2½ W S 4 B T.
30 ft. below top of spur.
Land, mountainous; soil, stony on surface with subsoil composed of loose rock and sandy loam of medium texture;

Chains	
	timber, dense growth of aspen, spruce and balsam; scattering undergrowth of sage brush and grass.
	August 21, 1913.

	August 18, 1913: At 8^h 04^m a.m.l.m.t., I set off 38° 04' N. on the lat. arc; 13° 12'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.
	Over mountainous land through dense growth of timber and scattering undergrowth.
	Descend.
7.00	Bottom of ravine, 120 ft. below sec. cor., drs. NE.
	Ascend.
26.00	Top of spur, 180 ft. above ravine, projects NE.
	Descend.
40.00	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground for $\frac{1}{4}$ sec. cor., with brass cap marked S32$\frac{1}{4}$ | S33 1913
	No bearing trees available; erect a mound of stone, 3 ft. base, 1$\frac{1}{2}$ ft. high, W. of cor.
	85 ft. below top of spur.
56.00	Bottom of ravine, 65 ft. below $\frac{1}{4}$ cor., drs. NE.
	Ascend.
60.00	Timber becomes very scattering; undergrowth, medium, brs. NW. and E.
70.00	Top of ridge, 170 ft. above ravine, brs. N.70°E. and S70° W.
	Descend.
73.00	Bottom of ravine, 20 ft. below top of ridge, drs. N.70°E.
	Ascend.
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

Chains

T31S | R2½W
S29 | S28
S32 | S33

1913

No bearing trees available; erect a mound of stone, 3 ft base, 2 ft. high, W. of cor.

35 ft. above ravine.

Land, mountainous; soil, coarse gravel on surface, 2 to 3 ins. deep with subsoil composed of coarse gravel and sandy loam of medium texture; timber, scant growth of aspen; medium undergrowth of sage brush and scattering yellow top and grass.

East on a random line bet. secs. 28 and 33.

40.00 Set temp. ¼ cor.

79.85 Intersect N. and S. line, 16 lks. N. of the cor. of secs 27,28,33 and 34.

Thence I run

N.89° 53'W., on a true line bet. secs. 28 and 33.

Over mountainous land through scant growth of timber and medium undergrowth.

Ascend.

34.00 Top of ridge, 510 ft. above sec. cor., brs. N.70°E. and S.70°W.

Descend.

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

S28
¼
S33

1913

No bearing trees available; erect a mound of stone, 3 ft base, 1½ ft. high, N. of cor.

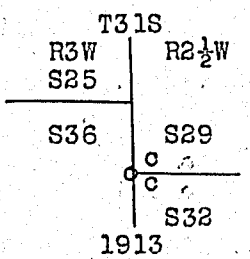
35 ft. below top of ridge.

August 18: At this cor., I set off 13° 08'N., on the decl. arc; and at $12^h\ 04^m$ l.m.t., observe the sun on the meridian; the resulting latitude is 38° 05'.

48.75 Old Pole road to Coyoto, brs. N.60°E. and S.60°W.

70.00 Bottom of ravine, 150 ft. below ¼ cor.,course NE.

Chains	
	Ascend.
79.85	The cor. of secs. 28,29,32 and 33.
	45 ft. above ravine.
	Land, mountainous; soil, coarse gravel on surface, 2 to 3 ins. deep with subsoil composed of coarse gravel and sandy loam of medium texture; timber, scant growth of aspen; medium undergrowth of sage brush and scattering yellow top and grass.
	West bet. secs. 29 and 32.
	Over mountainous land through scant growth of timber and medium undergrowth.
	Ascend.
8.00	Top of ridge, 55 ft. above sec. cor., brs. N.80°E. and S.70°W.
	Descend.
14.00	Timber becomes dense; undergrowth scattering, brs. N. and S.
17.45	Intersect W. bdy. of the Tp., 44 lks. N. of the ¼ cor. of secs. 31 and 36 which is a 1 in. iron post, firmly set, marked and witnessed as heretofore described by the Surveyor General.
	I destroy all marks on this post and bearing trees pertaining to T. 31 S.,R.2½ W., and set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground for C.C. of secs. 29 and 32 with brass cap marked



from which

An aspen, 6 ins. dia., bears N.66° 15'E., 19 lks. dist., marked T 31 S R 2½W S 29 B T.

An aspen, 7 ins. dia., bears S.60° 15'E., 8 lks. dist., marked T 31 S R 2½ W S 32 B T.

40 ft. below top of ridge.

Land, mountainous; soil, coarse gravel on surface 2 to

Chains

3 ins. deep with subsoil composed of loose rock and sandy loam of medium texture; timber, dense growth of aspen; scattering undergrowth of grass.

Note: I also destroy all marks on and at the cor. of secs. 25,30,31 and 36, pertaining to R. 2½ W.

August 18, 1913.

Edward R. Bunbury

U. S. Transitman.

August 18, 1913: At 9^h 04^m a.m. l.m.t., I set off 38° 05' N., on the lat. arc; 13° 11'N., on the decl. arc; and determine a meridian with the solar at the cor. of secs. 28,29,32 and 33.

Thence I run

N.0° 03'W., bet. secs. 28 and 29.

Over mountainous land through medium undergrowth.

Ascend.

4.00 Top of ridge, 40 ft. above sec. cor., brs. NE. and SW.

Descend.

26.00 Bottom of ravine, 530 ft. below top of ridge, drs. N.60°E.

Ascend.

38.00 Enter dense growth of aspen and scattering undergrowth, brs. NE. and SW.

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

S29¼ | S28

1913

from which

An aspen, 5 ins. dia., bears N.59° 20'E., 17 lks. dist., marked ¼ S 28 B T.

An aspen, 6 ins. dia., bears S.50° 40'W., 16 lks. dist., marked ¼ S 29 B T.

41.00 Leave dense growth of aspen; enter medium undergrowth, brs. NE. and SW.

54.00 Top of ridge, 420 ft. above ravine, brs. E. and W.

Chains	
	Descend.
62.00	Bottom of ravine, 160 ft. below top of ridge, brs. N.60°E.
	Ascend.
78.00	Top of ridge, 220 ft. above ravine, brs. NE. and SW.
	Descend.
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

T31S \| R2½W
S20 \| S21
S29 \| S28
1913

	and erect a mound of stone, 3 ft. base, 2 ft. high, W. of cor.
	30 ft. below top of ridge.
	Land, mountainous; soil, gravel on surface 2 to 3 ins. deep with subsoil composed of coarse gravel and sandy loam of medium texture; no timber; medium undergrowth of sage brush, yellow top and scattering grass.
	S.89° 53'E., on a random line bet. secs. 21 and 28.
40.00	Set temp. ¼ cor.
79.80	Intersect N. and S. line, 5 lks. N. of the cor. of secs. 21,22,27 and 28.
	Thence I run
	N.89° 51'W., on a true line bet. secs. 21 and 28.
	Over mountainous land through medium undergrowth.
	Ascend.
24.80	Top of ridge, 340 ft. above sec. cor., brs. N.70°E. and S.70°W.
	Descend.
39.90	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground for ¼ sec. cor., with brass cap marked

S21
¼
S28
1913

	and erect a mound of stone, 3 ft. base, 2 ft. high, N. of cor.

Chains

30 ft. below top of ridge.

40.80 Bottom of ravine, 10 ft. below ¼ cor., drs. N.70°E.

Ascend.

72.80 Top of ridge, 190 ft. above ravine, brs. N.70°E. and S. 70°W.

Descend.

79.80 The cor. of secs. 20,21,28 and 29.

15 ft. below top of ridge.

Land, mountainous; soil, gravel on surface 2 to 3 ins. deep with subsoil composed of coarse gravel and sandy loam of medium texture; no timber; medium undergrowth of sage brush, yellow top and scattering grass.

West bet. secs. 20 and 29.

Over mountainous land through medium undergrowth

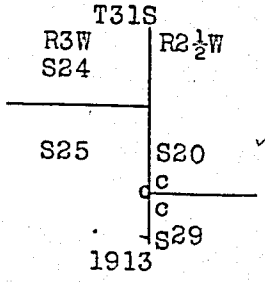
Descend.

10.60 Bottom of ravine, 110 ft. below sec. cor., drs. NE.

Ascend.

17.26 Intersect W. bdy. of the Tp., 50 lks. N. of the ¼ section corner of sections 25 and 30., which is an iron post, 1 in. in dia., 10 ins. above ground, firmly set, marked and witnessed as described by the Surveyor General.

I destroy all marks on this post pertaining to R.2½ W., and set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground for C.C. of secs. 20 and 29 with brass cap marked



and erect a mound of stone, 3 ft. base, 2 ft. high, E. of cor.

60 ft. above ravine.

Land, mountainous; soil, stony on surface with subsoil composed of loose rock and sandy loam of medium texture;

Chains	
	no timber; medium undergrowth of sage brush, yellow top and scattering grass.
	August 18: At this cor., I set off 13° 08'N., on the decl. arc; and at 12h 04m l.m.t., observe the sun on the meridian; the resulting latitude is 38° 06'.
	Note: I also destroy all marks on and at the cor. of secs. 19,24,25 and 30, pertaining to R.2½ W.
	N.0° 03'W. bet. secs. 20 and 21.
	Over mountainous land through medium undergrowth.
	Descend.
3.75	Bottom of ravine, 35 ft. below sec. cor., drs. NE.
	Ascend.
16.00	S. top of ridge or ascent, 145 ft. above ravine, brs. NE. and W.
	Continue N. on a near level line over top of ridge.
26.00	Enter dense growth of aspen and scattering undergrowth, brs. NE. and SW.
27.50	Leave dense growth of aspen; enter medium undergrowth, brs. NE. and SW.
30.00	Begin descent of N. slope of ridge, brs. NE. and SW.
40.00	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in ground, for ¼ sec. cor., with brass cap marked S20¼ | S21 / 1913 and erect a mound of stone, 3 ft. base, 1½ ft. high, W. of cor.
44.50	Bottom of ravine, 175 ft. below point of descent, drs. NE.
	Ascend.
60.00	Top of ridge, 165 ft. below ravine, brs. NE. and SW.
	Descend.
72.30	Bottom of ravine, 145 ft. below top of ridge, drs. NE.
	Ascend.
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

Chains	
	T31S R2½W S17 S16 S20 S21 1913
	and erect a mound of stone, 3 ft. base, 2 ft. high, W. of cor.
	50 ft. above ravine.
	Land, mountainous; soil, gravel on surface, 2 to 3 ins. deep with subsoil composed of loose rock and sandy loam of medium texture; no timber; medium undergrowth of sage brush, yellow top and scattering grass.
	S.89° 51'E., on a random line bet. secs. 16 and 21.
40.00	Set temp. ¼ cor.
79.76	Intersect N. and S. line, 7 lks. N. of the cor. of secs. 15,16,21 and 22.
	Thence I run
	N.89° 48'W., on atrue line bet. secs. 16 and 21.
	Over mountainous land through medium undergrowth.
	Ascend.
3.75	Top of ridge, 30 ft. above sec. cor., brs. NE. and SW.
	Descend.
17.75	Bottom of ravine, 110 ft. below top of ridge, drs. NE.
	Ascend.
33.25	Top of ridge, 105 ft. above ravine, brs. N.35°E. and S. 35°W.
	Descend.
39.88	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground for ¼ sec. cor., with brass cap marked S16 ¼ S21 1913
	and erect a mound of stone, 3 ft. base, 1½ ft. high, N. of cor.
43.75	Bottom of ravine, 70 ft. below top of ridge, drs. NE.
	Ascend.
59.75	Top of ridge, 110 ft. above ravine, brs. NE. and SW.
	Descend.

Chains	
69.00	Bottom of ravine, 80 ft. below top of ridge, drs. NE.
	Ascend.
79.76	The cor. of secs. 16,17,20 and 21.
	75 ft. above ravine.
	Land, mountainous; soil, gravel on surface, 2 to 3 ins. deep with subsoil composed of loose rock and sandy loam of medium texture; no timber; medium undergrowth of sage brush, yellow top and scattering grass.

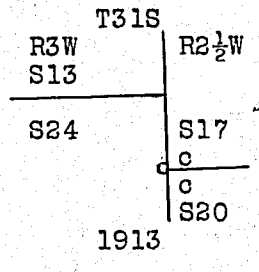
West bet. secs. 17 and 20.

Over mountainous land through medium undergrowth.

Ascend.

17.06 Intersect W. bdy. of the Tp., 28 lks. N. of the ¼ section corner of sections 19 and 24, which is an iron post, 1 in. in dia., 10 ins. above ground, firmly set, marked and witnessed as described by the Surveyor General.

I destroy all marks on this post pertaining to R.2½W., and set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground for C.C. of secs. 17 and 20 with brass cap marked



and erect a mound of stone, 3 ft. base, 2 ft. high, E. of cor.

205 ft. above sec. cor.

Land, mountainous; soil, stony on surface with subsoil composed of loose rock and sandy loam of medium texture; no timber; medium undergrowth of sage brush, yellow top and scattering grass.

Note: I also destroy all marks on and at the cor. of secs. 13,18,19 and 24, pertaining to R.2½ W.

August 18, 1913.

Chains	
	August 22, 1913: At 8h 03m a.m.l.m.t., I set off 38° 07' N., on the lat. arc; 11° 53' 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 mountainous land through medium undergrowth.
	Ascend.
6.00	Top of ridge, 55 ft. above sec. cor., brs. NE. and SW.
	Descend.
16.00	Bottom of ravine, 90 ft. below top of ridge, drs. NE.
	Ascend.
23.00	Enter dense growth of aspen and scattering undergrowth, brs. NE. and SW.
26.00	Leave dense growth of aspen; enter medium undergrowth, brs. NE. and SW.
36.00	Top of ridge, 240 ft. above ravine, brs. NE. and SW.
	Descend.
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 S17¼ | S16 1913 and erect a mound of stone, 3 ft. base, 1½ ft. high, W, of cor.
44.50	Bottom of ravine, 100 ft. below top of ridge, drs. NE.
	Ascend.
54.00	Enter dense growth of aspen and scattering undergrowth, brs. NE. and SW.
55.50	Leave dense growth of aspen; enter medium undergrowth, brs. NE. and SW.
60.00	Top of ridge, 185 ft. above ravine, brs. NW. and SE.
	Descend.
76.00	Enter dense growth of aspen and scattering undergrowth, brs. NE. and 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

Chains

T31S | R2½W	
S8	S9
S17	S16

1913

from which

An aspen, 10 ins. dia., bears N.50°E., 42 lks. dist., marked T 31 S R 2½ W S 9 B T.

An aspen, 8 ins. dia., bears S.31°E., 40 lks. dist., marked T 31 S R 2½ W S 16 B T.

An aspen, 8 ins. dia., bears S.59°W., 33 lks. dist., marked T 31 S R 2½ W S 17 B T.

An aspen, 10 ins. dia., bears N.28°W., 42 lks. dist., marked T 31 S R 2½ W S 8 B T.

140 ft. below top of ridge.

Land, mountainous; soil, stony on surface with subsoil composed of loose rock and sandy loam of medium texture; timber, dense growth of aspen; scattering undergrowth of buck brush, yellow top, sage brush and grass.

August 22: For latitude observation on this date see page 54 of this book.

August 22, 1913.

Jos. C. Young

U. S. Surveyor.

August 22, 1913: At 9^h 03^m a.m.l.m.t., I set off 38° 08' N., on the lat. arc; 11° 52'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° 48'E., on a random line bet. secs. 9 and 16.

40.00 Set temp. ¼ cor.

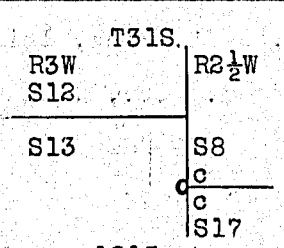
79.83 Intersect N. and S. line, 14 lks. N. of the cor. of secs. 9,10,15 and 16.

Thence I run N.89° 42'W., on a true line bet. secs. 9 and 16.

Over mountainous land through scattering timber and med-

Chains	
	ium undergrowth.
	Ascend.
4.00	Top of spur, 125 ft. above sec. cor., projects NE.
	Continue on ascent along N. slope of ridge.
39.91½	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground for ¼ sec. cor., with brass cap marked S9 ¼ S16 1913
	No bearing trees available; erect a mound of stone, 3 ft. base, 1½ ft. high, N. of cor.
	180 ft. above top of spur.
60.00	Enter dense growth of aspen and scattering undergrowth, brs. NE. and SW.
79.83	The cor. of secs. 8,9,16 and 17.
	160 ft. above ¼ cor.
	Land, mountainous; soil, stony on surface with subsoil composed of loose rock and sandy loam of medium texture; timber, dense growth of aspen; scattering undergrowth of buck brush, yellow top, sage brush and grass.
	West bet. secs. 8 and 17.
	Over mountainous land through dense growth of aspen and scattering undergrowth.
	Ascend.
4.00	Top of ridge, 30 ft. above sec. cor., brs. NE. and SW.
	Descend.
16.61	Intersect W. bdy. of the Tp., 14 lks. N. 0° 19' E. of the ¼ sec. cor. of secs. 13 and 18., which is an iron post, 1 in. in dia., 10 ins. above ground, firmly set, marked and witnessed as described by the Surveyor General.
	I destroy all marks on this post and bearing trees pertaining to R.2½W., and set an iron post, 3 ft. long, 2 in. ins. in dia., 24 ins. in the ground for C.C. of secs. 8 and 17 with brass cap marked

Chains



1913. from which

An aspen, 6 ins. dia., bears N.68° 25'E., 35 lks. dist., marked T 31 S.,R.2½ W S 8 B T.

An aspen, 7 ins. dia., bears S.43° 25'E., 19 lks. dist., marked T 31 S R 2½ W S 17 B T.

110 ft. below top of ridge.

Land, mountainous with W exposure; steep slope to the W. denuded of good soil; ridges to the E. east, washed on slopes with coarse gravel 2 to 3 ins. deep on a subsoil of loose rock, hard stiff clay and sandy loam of medium texture; timber, dense growth of aspen; scattering undergrowth of buck brush, sage brush and bunch grass.

August 22: Sky overcast at noon; unable to observe the sun for latitude.

Note: I also destroy all marks on and at the cor. of secs. 7,12,13 and 18, pertaining to R.2½ W.

August 22, 1913.

Edward R. Bamburg

U. S. Transitman.

August 22: For a.m. observation see page 50 of this book. N.0° 03'W. bet. secs. 8 and 9.

Over mountainous land through dense growth of aspen and scattering undergrowth.

Ascend.

1.75 Leave dense growth of aspen; enter medium undergrowth, brs. E. and W.

6.50 Top of ridge, 80 ft. above sec. cor., brs. NE. and SW. Descend.

20.00 Enter dense growth of aspen and scattering undergrowth, brs. E. and W.

34.00 Bottom of ravine, 220 ft. below top of ridge, drs. NW. Ascend.

Chains

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

S8¼ | S9

1913

from which

An aspen, 8 ins. dia., bears N.49°E., 9 lks. dist., marked ¼ S 9 B T.

An aspen, 8 ins. dia., bears S.76°W., 14 lks. dist., marked ¼ S 8 B T.

August 22: At this cor., I set off 11° 49'N., on the decl. arc; and at 12h 03m l.m.t., observe the sun on the meridian; the resulting latitude is 38° 08'.

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

T31S | R2½W
S5 | S4
S8 | S9
1913

No bearing trees, within limits large enough; erect a mound of stone, 3 ft. base, 2 ft. high, W. of cor. 110 ft. above ravine.

Land, mountainous; with W. exposure; drainage to the W., the W. slope of mountain very steep and denuded of good soil; good grazing on top of mountain; soil, gravel on surface 2 to 3 ins. deep with subsoil composed of coarse gravel and damp rich loam of medium texture; timber, dense growth of aspen; scattering undergrowth of buck brush, sage brush and grass.

August 22, 1913.

Jas. R. Young

U. S. Surveyor.

August 22, 1913: For observations on this date see pages 51 and 53 of this book; miles bet. secs. 9 and 10 and secs. 8 and 17.

S.89° 42'E., on a random line bet. secs. 4 and 9.

Chains	
40.00	Set temp. ¼ cor.
79.90	Intersect N. and S. line, 5 lks. S. of the cor. of secs. 3,4,9 and 10.
	Thence I run
	N.89° 44'W., on a true line bet. secs. 4 and 9.
	Over mountainous land through scattering timber and medium undergrowth.
	Descend.
3.00	Bottom of ravine, 30 ft. below sec. cor., drs. SE.
	Ascend.
10.00	Top of ridge, 50 ft. above ravine, brs. NW. and SE.
	Descend.
17.00	Bottom of ravine, 30 ft. below top of spur, drs. S.20°E.
	Ascend.
34.50	Enter dense growth of timber and scattering undergrowth, brs. N. and S.
38.00	Top of ridge, 190 ft. above ravine, brs. NW. and SE.
	Descend.
39.95	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground for ¼ sec. cor., with brass cap marked
	S4 ¼ / S9 1913 from which
	An aspen, 5 ins. dia., bears S.37° 10'W., 13 lks. dist., marked ¼ S 9 B T.
	An aspen, 6 ins. dia., bears N.20° 25'W., 6 lks. dist., marked ¼ S 4 B T.
	10 ft. below top of ridge.
54.00	Bottom of ravine, 55 ft. below ¼ cor., drs. SE.
	Ascend.
79.90	The cor. of secs. 4,5,8, and 9.
	105 ft. above bottom of ravine.
	Land, mountainous; W. exposure at the cor.; also drainage to the W., steep slope, rocky and denuded of good soil.
	Land, E. of cor., exposed and drains SE. with gravelly soil, 2 to 3 ins. deep on a subsoil of gravel and damp rich loam of medium texture; timber, scattering aspen and

Chains

spruce; undergrowth, medium sage brush, grease wood and scattering grass for 35.00 chs. Timber, dense and scattering undergrowth for 45.00 chs.

West bet. secs. 5 and 8.

Over mountainous land through dense growth of timber and scattering undergrowth.

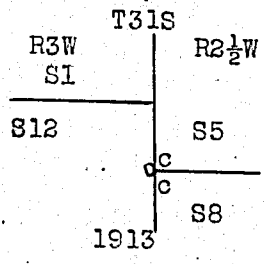
Ascend.

6.00 Top of ridge, 25 ft. above sec. cor., brs. N.15°W. and S.15°E.

Descend.

16.13 Intersect W. bdy. of the Tp., 14 lks. S. 0° 15'W. of the ¼ sec. corner of sections 7 and 12, which is an iron post, 1 in. in dia., 10 ins. above ground, firmly set, marked and witnessed as described by the Surveyor General.

I destroy all marks on this post and bearing trees pertaining to R.2½W., and set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground for C.C. of secs. 5 and 8 with brass cap marked



from which

An aspen, 7 ins. dia., bears S.18° 20'E., 44 lks. dist., marked T 31 S R 2½ W S 8 B T.

No other bearing trees available; erect a mound of stone, 3 ft. base, 2 ft. high, E. of cor.

20 ft. below top of ridge.

Land, mountainous with W. exposure; steep slope to the W., denuded of good soil; ridges to the east, washed on slopes; soil, coarse gravel on surface, 2 to 3 ins. deep on a subsoil of loose rock, hard stiff clay and damp rich loam of medium texture; timber, dense growth of aspen; scattering undergrowth of buck brush, sage brush and grass.

Chains.	
	Note: I also destroy all marks on and at the cor. of secs. 1, 6, 7 and 12, pertaining to R. 2½ W.
	August 22, 1913.
	Edward R Bumbury
	U. S. Transitman.
	August 22, 1913: For observations on this date see pages 50 and 54 of this book, miles bet. secs. 16 and 17 and secs. 8 and 9.
	N. 0° 03' W., bet. secs. 4 and 5.
	Over mountainous land through dense timber and scattering undergrowth.
	Ascend gradually.
1.00	Leave dense growth of timber; enter medium undergrowth, brs. E. and W.
20.00	Enter dense growth of aspen and scattering undergrowth, brs. E. and W.
26.00	Leave dense growth of aspen; enter medium undergrowth, brs. E. and W.
39.00	Enter dense growth of aspen and scattering undergrowth, brs. E. and W.
40.00	Set an iron post, 3 f t. long, 1 in. in diam., 26 ins. in the ground for ¼ sec. cor., with brass cap marked S5½ | S4 1913 from which
	An aspen, 10 ins. diam., bears N.53°E., 13 lks. dist., marked ¼ S 4 B T.
	An aspen, 8 ins. diam., bears N.39°W., 36 lks. dist., marked ¼ S 5 B T.
79.00	Point of steep descent, 200 ft. above sec. cor., brs. NE. and SW. Through dense growth of aspen, pinon pine and spruce and dense undergrowth of buck brush, oak and scat° tering grass.
102.21	Intersect the Sixth Standard Parallel South, S. 89° 45' E., 15.68 chs. from the closing cor., of T. 31 S., Rs. 2½ and 3 W., described on page 63, this book.

Chains. At point of intersection I set

An iron post, 3 ft. long, 3 ins. diam., 24 ins. in the ground for the closing cor. of secs. 4 and 5, with brass cap mkd.

T 30 S R 2½ W
S 32 | S 33
S 5 | S 4

1913

from which

An aspen, 6 ins. diam., bears S. 36° E., 29 lks. dist., marked T 31 S R 2½ W S 4 B T.

An aspen, 4 ins. diam., bears S. 23° 45' W., 20 lks. dist., marked T 31 S R 2½ W S 5 B T.

Corner established 650 ft. below top of steep desc.

Land, mountainous; exposure and drainage to the NW; steep slope to the NW. covered with dense undergrowth and denuded of good soil; soil, on top of mountain and S. of the 79.00 ch. point, gravel on surface 2 to 3 ins. deep on a subsoil of loose rock and damp rich loam of medium texture; dense growth of aspen and scattering undergrowth of sage brush and grass for 48.00 chs.; dense growth of aspen, pinon pine and spruce and dense undergrowth of buck brush, oak and scattering grass for 23.00 chs. Good grazing land on top of mountain.

August 22, 1913.

Jos. C. Stowe
U.S. Surveyor.

General Description.

This fractional township is located 7 miles west of Coyoto, Utah and takes in a strip of land that is known by the name of West Mountain.

The general slope of the S. and NE. sections of the Tp. is E. and SE. while the NW. section drains NW. and W. The character of the land is generally mountainous, the soil of which is gravel from 2 to 3 ins. deep on a subsoil od gravel, loose rock and sandy loam of medium texture. The SE. section of the township is covered with a scattering growth of pinon pine and cedars and a medium

Chains

undergrowth of sagebrush and scattering grass. The SW. section is covered with irregular patches of dense quaken aspen and medium undergrowth of sagebrush and scattering grass. The N. half of the township is generally covered with a dense growth of quaken aspen and scattering spruce and pinon pine and scattering undergrowth of sagebrush and nutritious grasses.

The township is unfit for agricultural purposes of any kind but good for cattle and sheep grazing throughout the season owing to the abundance of snow water in the spring of the year.

Good spring water is found the year around in the bottom of the N. fork of Forest Canyon which flows from N. center of sec. 33 to the N. center of sec. 34 where it sinks.

An old wagon road to Coyoto known as the Pole Road passes through secs. 33,28,27,26 and 25.

There are no improvements or settlers in the township or no indications of coal, oil or minerals.

Jos. C. Young

U. S. Surveyor.

Edward P. Lemburg

U. S. Transitman.

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Page

Chains.	
	Survey commenced August 21, 1913, and executed with Young & Sons light mountain transit No. 8477 with Smith solar attachment. For description and test of instrument, see page 1 of this book.
	August 21, 1913: At the std. cor. of secs. 34 and 35, T. 30 S., R. 2½ W., which is a sandstone, 8x12x12 ins. above ground, firmly set, mkd. and witnessed as described by the surveyor general, I set off 38° 09' 30" N. on the lat. arc; 12° 12' N. on the decl. arc, and at 8h 30m, a. m., l. m. t., determine a meridian with the solar.
	Thence I run
	East, retracing the Sixth Standard Parallel on the S. bdy. of secs 35.
	Desc. over mountainous land, covered with sagebrush and greasewood, and scattering cedar and piñon timber.
40.29	Fall 13 lks. N. of the ¼ sec. cor., which is a sand stone, 12x12x12 ins. above ground, firmly set; mkd. and witnessed as described by the surveyor general.
	The true bearing of this half mile is therefore S. 89° 49' E., and the dist. is 40.29 chs.
	I contimue my random line East, with continuous chaining.
80.71	Fall 72 lks. N. of the cor. of secs. 35 and 36, previously described.
	The true bearing of this half mile is therefore S. 89° 09' E., and the dist. is 40.42 chs.
	August 21: Raining at noon.
	East, from the cor. of secs. 35 and 36, retracing the Sixth Std. Par. S. on S. bdy. sec. 36.
	Desc. over mountainous land, through sagebrush, greasewood and scattering scrub cedar and piñon timber.
39.90	Fall 96 lks. S. of the std. ¼ sec. cor., which is a sandstone, 10x12x18 ins. above ground, firmly set; mkd. and witnessed as described by the surveyor general.
	The true bearing of this half mile is therefore N. 88° 37'

Chains.	
	E., and the dist. is 39.91 chs.
	I continue my line East, with continuous chaining.
81.31	Fall 89 lks. S. of the closing cor. of T. 30 S., R. 2½ W., previously described.
	The bearing of this half mile is therefore S. 89° 54' E., and the dist. is 41.41 chs.
	Land, mountainous and broken.
	Soil, clay and stony.
	Undergrowth, sagebrush and greasewood.
	Timber, scattering scrub cedar and piñon.

August 21, 1913.

Jos. C. Thoma

U. S. Surveyor.

August 21, 1913: At 3h, p. m., l. m. t., I set off 38° 9' 30" N. on the lat. arc; 12° 7' N. on the decl. arc, and determine a meridian with the solar, at the cor. of secs. 33 and 34, T. 30 S., R. 2½ W., which is

A sandstone, 5x12x8 ins. above ground, firmly set, mkd. and witnessed as described by the surveyor general.

Thence I run

East, retracing the Sixth Standard Parallel South, on the S. bdy. of sec. 34.

Desc. over mountainous land, through sagebrush, wild rose bushes, scattering grass, dense aspen, spruce and balsam timber.

16.00 Leave dense timber, bears N. and SE., enter scattering timber.

40.00 Fall 3 lks. S. of the std. ¼ sec. cor., which is

A sandstone, 14x14x6 ins. above ground, firmly set; mkd. and witnessed as described by the surveyor general.

The true bearing of this half mile is therefore N. 89° 57' E., and the dist. is 40.00 chs.

I continue my line East, with continuous measurement.

80.13 Fall 7 lks. N. of the cor. of secs. 34 and 35, previously described.

Chains.

The true bearing of this half mile is therefore S. 89° 51' E., and the dist. is 40.13 chs.

Land, mountainous.

Soil, stony.

Timber, aspen, spruce and balsam.

Undergrowth, sage, wild rose bushes and grass.

Good grazing.

August 21, 1913.

Edward P. Bumbery

U. S. Transitman.

For description and test of instrument, see book of Subdivision of T. 31 S., R. 1 W., this Group.

September 25, 1915: I set off 38° 10' N. on the lat. arc; 0° 34' S. on the decl. arc; and at 8 a. m., l. m. t., determine a meridian with the solar, at the std. cor. of secs. 33 and 34, T. 30 S., R. 2½ W., heretofore described.

Thence I run

West, retracing the Sixth Std. Par. South, on the S. bdy. of sec. 33.

Asc. gradually over rolling mountainous land, through dense aspen and spruce timber, buck brush and mohogany.

15.00 Ridge, bears NE. and SW., 15 ft. above std. sec. cor.; desc. gradually.

25.00 Hollow drains NE., 45 ft. below top of ridge; asc. grad.

41.54 Fall 68 lks. S. of the std. ¼ sec. cor., which is A sandstone, 23x14x7 ins. lying on the ground, mkd. ¼ on one face. Mound of stone N. I set this stone firmly in the ground with ¼ to the N.

The true course of this half mile is therefore S. 89° 03' E. and the dist. is 41.55 chs.

I offset over std. ¼ sec. cor. and run

West, on retracement.

Continue gradual asc.

3.65 Ridge, bears NE. and SW., 70 ft. above std. ¼ sec. cor.; desc.

Chains.

3.75 Ledge, 70 ft. high, bears N. 25° E. and SW.; desc. abruptly over large boulders and slide rock, through dense spruce and aspen timber, young aspen and spruce, buck and service brush and mohogany.

38.45 A point 80 chs. from the std. cor. of secs. 33 and 34. After diligent search, I am unable to find any evidence of the std. cor. of secs. 32 and 33.

40.00 After diligent search, I am unable to find any evidence of the std. cor. of secs. 32 and 33.

44.10 Draw, drains N., 640 ft. below top of ledge; asc.

45.60 Spur projects N., 20 ft. above draw; desc.

51.99 Fall 379 lks. S. of the closing cor., of T. 31 S., Rs. 2½ and 3 W., set by Stewart and Stewart, U. S. Surveyors under Group 8, Utah, which is

An iron post, 3 ins. diam., firmly set in mound of stone, mkd.

T 30 S
S 36 | S 31

S 1 | S 6
R 3 W | R 2 W
T 31 S
1911

Witnessed as described by the surveyor general.

69.30 Fall 31 lks. S. of the std. cor. to T. 30 S., Rs. 2½ and 3 W., which is

A sand stone, 15x14x7 ins., firmly set in mound of stone, mkd. with 6 notches on N., W. and E. edges, SC on N. face.

The true course of the line bet. the std. ¼ sec. cor. for sec. 33, and the std. Tp. cor. is N. 89° 45' W., and the dist. is 69.30 chs.

I destroy all marks on the closing cor. of T. 31 S., Rs. 2½ and 3 W., set by Stewart and Stewart, and at the point of intersection of the range line bet. Rgs. 2½ and 3 W. and the Sixth Std. Par. S., or 3.55 chs. S. of above described closing cor., and S. 89° 45' E., 17.31 chs. from the std. cor. to T. 30 S., Rgs. 2½ and 3 W.,

Set an iron post, 3 ft. long, 3 ins. diam., 24 ins. in

Chains.

the ground for the closing cor. for T. 31 S., Rs. 2½ and 3 W., with brass cap mkd.

T 30 S	
R 3 W S 36	R 2½ W S 33
S 1 R 3 W T 31 S	S 5 R 2½ W

1915

from which

A spruce, 8 ins. diam., bears S. 30° E.,
20 lks. dist., mkd. T31SR2½WS5CCBT.

An aspen, 4 ins. diam., bears S. 40° W.,
15 lks. dist., mkd. T31SR3WS1CCBT.

This makes the dist. bet. the cor. of secs. 1 and 12, T. 31 S., R. 3 W., and the closing cor., bet. Rs. 2½ and 3 W., on the Sixth Std. Par. S., 62.16 chs.

Land, mountainous.

Soil, light gravel and stony in the E. half; dark loam, decayed vegetation and stony in the W. half.

Timber, dense aspen and spruce.

Undergrowth, young aspen and spruce, buck and service brush, and mohogany.

Good grazing. Northwestern exposure. Volcanic formation.

September 25, 1915.

Jos. C. Stowe.

U. S. Surveyor.

Jos. C. Clark
U. S. Transitman

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Page

Chains.	
	Retracement commenced September 24, 1915, and executed with Buff & Buff Transit No. 9218, with Smith solar attachment. For description and test of instrument, see book of Subdivision of T. 31 S., R. 1 W., this Group.
	September, 24, 1915: At 8h a. m., l. m. t., I set off 38° 8' N. on the lat. arc; 0° 10' S., on the decl. arc, and determine a meridianwith the solar, at the ½ sec. cor. for sec. 13, T. 31 S., R. 3 W., which is
	An iron post, 1 in. diam., 12 ins. above ground, firmly set., mkd. and witnessed as described by the surveyor general.
	Thence I run
	North, retracing the line bet. Rs. 2½ and 3 W., from the ½ sec. cor., above described.
	Desc. over mountainous land, through dense aspen timber.
.14	The closing cor. bet. secs. 8 and 17, T. 31 S., R. 2½ W., heretofore described.
7.00	Leave dense timber, bears NW. and SE., enter open hollow.
10.00	Hollow, drains W.; asc.
25.50	Ridge, bears NW. and SE.; desc.
40.00	Fall 22 lks. W. of the cor. of secs. 12 and 13, T. 31 S., R. 3 W., which is
	An iron post, 3 ins. diam., 24 ins. above ground, firmly set., mkd. and witnessed as described by the surveyor general.
	The course of this half mile is therefore N. 0° 19' E., and the dist. is 40.00 chs.
	Land, rolling mountainous.
	Soil, light gravel and decayed vegetation.
	Timber, aspen and spruce.
	Undergrowth, young aspen and spruce with an occasional patch of oak and service brush, scattering grass.
	Good grazing.

	I off set over cor. and run

Retracement of the W. Bdy. T. 31 S., R. 2½ W.

Chains.	
	North, retracing the line bet. Rs. 2½ and 3 W.
	Over rolling mountainous land, through dense aspen timber.
1.00	Hollow, drains W.; asc.
14.50	Top of ridge, bears N. 15° E. and S. 15° W.; desc.
40.15	Fall 17 lks. W. of the ¼ sec. cor., for Sec. 12, T. 31 S. R. 3 W., which is
	An iron post, 1 in. diam., 10 ins. above ground, firmly set., mkd. and witnessed as described by the surveyor general.
	Offset over cor. and run North, retracing the N. half.
3.00	Bottom of hollow, drains S. 30° W.; asc.
40.00	Fall 15 lks. W. of the cor. of secs. 1 and 12, T. 31 S., R. 3 W., which is
	An iron post, 2 ins. diam., 12 ins above ground, firmly set, mkd. and witnessed as described by the surveyor general.
	The course of the South half of this mile is therefore N. 0° 15' E., and the dist. is 40.15 chs.
	The course of the North half of this mile is therefore N. 0° 13' E., and the dist. is 40.00 chs.

September 24, 1915.

Jas. C. Young

U. S. Surveyor.

4—GSO

BOOK A-416

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 certificate of assistants see book "G" T.37 S., R.4 E., and book "M" T.33 S , R.1 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—2764

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 U.S.Transitmen, see book: "G" T.37 S., R.4 E. and book "M" T.33 S., R.1 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, June 14, 1916.

The foregoing field notes of the survey of the subdivisional lines and retracement of the west boundary of Township No. 31 South, Range No. 2½ West, and retracement of the sixth standard parallel south, through Range No. 2½ West, of the Salt Lake Base and Meridian, Utah,

executed by Jos. C. Thoma, Edward R. Bunbury and Joseph C. Clark under ~~his~~ special instructions dated June 11, 1913, having been critically examined, and the necessary corrections and explanations made, the said field notes, and the retracements and 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.

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BOOK A-416

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U.S. SURVEYOR GENERAL'S OFFICE
APR 16 1914
SALT LAKE CITY, UTAH

E.R. C.

J.W.E.

FIELD NOTES

OF THE SURVEY OF THE

SUBDIVISION

AND

RETRACEMENT AND RESURVEY OF EAST AND NORTH BOUNDARIES

OF

TOWNSHIP 34 SOUTH, RANGE 1 WEST

Of the SALT LAKE BASE AND *Meridian,*

In the State of UTAH

EXECUTED BY

JOSEPH C. THOMA AND EDWARD R. BUNBURY

and Transitman

In the capacity of U. S. Surveyor, under instructions dated June 11, *1913,* and Supplemental Special Instructions dated July 9, 1913 *issued by the United States Surveyor General to govern surveys included in Group No.* 24, *which were approved by the* ~~Commissioner of the General Land~~ Supervisor of Surveys and by the Comr. G.L.O. July 19, 1913, respectively. *Office,* June 17, *1913, pursuant to authority contained in the Act of Congress dated* ....., *191*....

Survey commenced August 27, *1913*

Survey completed October 6, *1913*

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BOOK A-416

INDEX DIAGRAM.

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31	32	33	34	35	36

6—151

Chains

Survey commenced August 27, 1913, and executed with a Young and Sons light mountain transit, No. 8146, with solar attachment. The horizontal limb is provided with two double verniers placed opposite to each other reading to single minutes of arc, which is also the least count of the verniers of the latitude and declination arcs.

The instrument was examined, tested on the true meridian at Salt Lake City, Utah, found correct and was approved by the Assistant Supervisor of Surveys for Utah, June 25,1913.

I examine the adjustments of the transit, find them correct; 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.

At camp in the NE. quarter of sec. 27, T.34 S.,R.1 W.; latitude 37° 50'N., longitude 111° 56'W.; I set off 37° 50' N. on the lat. arc; 10° 03'N.;on the decl. arc; and at $4^h\ 01^m$ p. m. l. m. t., determine with the solar a meridian and mark a point thereof, on a stake firmly driven in the ground 5 chs. N. of my station.

At $9^h\ 11^m$ p.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 on a stake driven in the ground 5 chs. N. of my station.

August 27, 1913.

August 28: At $6^h\ 30^m$ a.m. l.m.t., I lay off the azimuth of Polaris, 1° 28' to the west and mark a point in the meridian thus determined by a cross on the stake set August 27, on which the meridian falls 0.3 lns. east of the mark determined by the solar.

At $7^h\ 01^m$ a.m. l.m.t.,I set off 37° 50'N. on the lat. arc; 9° 50'N., on the decl. arc; and mark a point in the meridian determined with the solar by a cross on the stake already set 5 chs. N. of my station;this mark falls 0.3

Chains

ins. east of the meridian established by the Polaris observation.

The solar apparatus by p. m. and a. m. observations, defines positions for meridians, respectively about 0' 16" west and 0° 16' east of the meridian established by the Polaris observations; therefore, I conclude that the adjustments of the instrument are satisfactory.

The magnetic bearing of the true meridian, at 7^h 15^m a. m. is N.16° 05'W.; the angle thus determined gives the mag. decl. 16° 05'E. A two ch. tape and clinometerwere used on all measurements of this work.

Preliminary to proceeding with the subdivision of this township, I retrace and run random lines as follows:

At 9^h 31^m a. m. l.m.t., I set off 37° 49'N., on the lat. arc; 9° 47' N., on the decl. arc; and determine a meridian with the solar at the cor. Tps. 34 and 35 S.Rs. 1E. and 1 W., which is an iron post No. 8, firmly set, marked and witnessed as described ~~heretofore~~ by the Surveyor General.

Thence I retrace

West on the S. bdy. of the Tp. along the south bdy. of sec. 36; and at 39.27 chs. intersect the ¼ sec. cor.; and at 79.23 chs. fall 4 lks. N. of U. S. Forest Reserve Boundary Post No. 7, which is an iron post, firmly set, marked and witnessed as described heretofore by the Surveyor General. Therefore the line bears West 39.27 chs. and S.89° 57'W.39.96 chs.

August 28: At this cor. I set off 9° 45' N., on the decl. arc; and at 12^h 01^m l.m.t., observe the sun on the meridian; the resulting latitude is 37° 49'.

N.0° 01'W., on a random line bet. secs. 35 and 36.

40.00 Set temp. ¼ cor.

80.00 Set temp. point for cor. of secs. 25,26,35 and 36.

August 28, 1913.

August 29, 1913: AT 9^h01^m a.m. l.m.t., I set off 37° 49' on the lat. arc; 9° 26' N., on the decl. arc; and determine a meridian with the solar at the temp. cor. of secs.

Chains	
	25,26,35 and 36.
	Thence I run
	East, on a random line bet. secs. 25 and 36.
40.00	Set temp. ¼ cor.
79.62	Intersect E. bdy. of the Tp. 1.30 chs. N. of cor.of secs. 25,30,31 and 36.

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

I retrace

South bet. secs. 31 and 36; at 40.00 chs. I find no traces of ¼ sec. cor. and at 78.70 chs. , fall 2½ lks. east of the cor. of Tps. 34 and 35 S., Rs. 1E and 1W., heretofore described. Therefore the line bears S.0° 01'W.

(This line afterward established north 80.00 chs.in resurvey of the E.bdy.of Tp.)

From a temp. point for the re-established cor. of secs. 25,30,31 and 36, I run a sectional correction line

West, bet. secs. 25 and 36.

Over mountainous land, through dense growth of yellow pine and scatttering cedars and medium undergrowth of oak and scattering undergrowth of laurel, sage brush and grass.

Ascend.

31.00 Top of spur, 250 ft. above sec. cor., projects NE. about 8 chs.

Descend.

36.50 Ravine, 105 ft. below top of spur, drs. N.70°E.

Ascend.

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

S25
¼
S36
1913

from which

A cedar, 7 ins. dia., bears N.70°E.,1.18 chs.dist., marked ¼ S 25 B T.

A pine, 7 ins. dia., bears S.80°E., 82 lks. dist., marked ¼ S 36 B T.

Cor. stands on E. slope of spur, 55 ft. above ravine.

Chains	
	August 29: At this cor. I set off 9° 23' N., on the decl. arc; and at 12h 01m l.m.t., observe the sun on the meridian; the resulting latitude is 37° 49'.
75.25	Top of spur, 325 ft. above ¼ cor., projects N. about 5 chs.
	Descend.
77.50	Ravine, 50 ft. below top of spur, heads 5 chs. S., drs. NE.
	Ascend.
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

T34SR1W
S26 | S25
S35 | S36
1913

from which

A pine, 24 ins. dia., bears N.53° 30'E., 44 lks. dist., marked T 34 S R 1 W S 25 B T.

A pine, 16 ins. dia., bears S.65° 50'E., 26 lks. dist., marked T 34 S R 1 W S 36 B T.

A pine, 20 ins. dia., bears S.63° 35'W., 41 lks. dist., marked T 34 S R 1 W S 35 B T.

A pine, 24 ins. dia., bears N.13°W., 69 lks. dist., marked T 34 S R 1 W S 26 B T.

30 ft. above ravine.

Land,mountainous; soil, stony on surface 3 to 4 ins. deep with subsoil composed of coarse gravel and sandy loam of medium texture; timber, dense growth of yellow pine and scattering cedars; medium undergrowth of oak and scattering undergrowth of laurel, sage brush and grass.

August 29, 1913.

September 11, 1913; At 9h 27m a.m. l.m.t., I set off 37° 49' on the arc; 4° 38' N., on the decl. arc; and at the cor. of secs. 25,26,35 and 36 determine a meridian with the solar.

Thence I run

S.0°01'E.onatrue line, bet. secs. 35 and 36.

Chains	
	Over mountainous land, through dense growth of yellow pine and scattering cedars and medium undergrowth of laurel, sage brush and scattering grass.
	Ascend.
4.25	Top of ridge, 65 ft. above sec. cor., brs. E. and W.
	Descend.
32.30	Creek, 340 ft. below top of ridge; running water, 3 lks. wide, 2 ins. deep, drs. E.
	Ascend over series of small rolling hills.
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 S35 ¼ S36 1913 from which A pine, 5 ins. dia., bears N.8° 30'E., 30 lks. dist., marked ¼ S 36 B T. A pine, 7 ins. dia., bears N.58°E., 83 lks. dist., marked ¼ S 35 B T.
	15 ft. above creek.
41.00	Dry wash, 10 lks. wide, 3 ft. deep drs. E.
	20 ft. below ¼ cor.
	Ascend.
80.00	Intersect S. bdy. of the Tp., 77 lks. W. of U. S. Forest Reserve Boundary Post No. 7, heretofore described. as described by the Surveyor General. Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground for C.C. of secs. 35 and 36, with brass cap marked T34S R1W S35 S36 CC S2 S1 T35S R1W 1913 from which A pine, 18 ins. dia., bears N.70°E., 54 lks. dist., marked T 34 S R1 W S36 B T. A pine, 30 ins. dia., bears N.45°W., 64 lks. dist., marked T 34 S R 1 W S 35 B T.
	550 ft. above dry wash.
	Land, mountainous; soil, stony on surface 3 to 4 ins. deep with subsoil composed of coarse gravel and sandy loam of

Chains

medium texture; timber, dense growth of yellow pine and scattering cedars; medium undergrowth of oak, laurel and scattering grass.

September 11: At this cor. I set off 4° 35' N., on the decl. arc; and at 11^h 57^m l.m.t., observe the sun on the meridian; the resulting latitude is 37° 49'.

September 11, 1913.

August 29, 1913:

West, on a sectional correction line bet. secs. 26 and 35.

Over mountainous land, through dense growth of yellow pine and scattering cedars and medium undergrowth of oak, scattering laurel, wild rose and grass.

Ascend.

30.00 Top of spur, 210 ft. above sec. cor., projects N.

Descend. Enter growth of aspen timber, brs. N. and S.

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

S26
¼
S35
1913

from which

An aspen, 5 ins. dia., bears S.68°E., 11 lks. dist., marked ¼ S 35 B T.

An aspen, 5 ins. dia., bears N.43°W., 15 lks. dist., marked ¼ S 26 B T.

60 ft. below top of spur.

44.25 Ravine, 25 ft. below ¼ cor., drs. N.70°E.

Ascend.

Timber becomes scattering, brs. NE. and 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

T34S	R1W
S27	S26
S34	S35

1913

from which

A pine, 6 ins. dia., bears N.21°E., 33 lks. dist., marked T34 S R 1 W S 26 B T.

Chains	
	A pine, 7 ins. dia., bears S.35° 25'E., 24 lks. dist., marked T 34 S R 1 W S 35 B T.
	A pine, 8 ins. dia., bears S.64° 10'W., 35 lks. dist. marked T 34 S R 1 W S 34 B T.
	A pine, 7 ins. dia., bears N.48° 05'W., 20 lks. dist., marked T 34 S R 1 W S 27 B T.
	Cor. stands on E. slope of mountain, 735 ft. above ravine.
	Land, mountainous; soil, coarse gravel on surface with subsoil composed of loose lime rock and sandy loam of medium texture; timber, scattering growth of yellow and balsam pine, aspen and cedars; medium undergrowth of oak, scattering laurel, wild rose and grass.
	August 29, 1913.

	August 30, 1913; At 9^h 00^m a.m. l.m.t., I set off 37° 49' on the lat. arc; 9°05' N., on the decl. arc; and determine a meridian with the solar at the cor. of secs. 26,27,34 and 35.
	Thence I run
	S.0° 01'E., bet. secs. 34 and 35.
	Over mountainous land, through medium growth of aspen, balsam, spruce and yellow pine and medium undergrowth of oak, laurel and scattering grass.
	Ascend.
6.50	Top of ridge, 155 ft. above sec. cor., brs E. and W.
	Descend.
27.75	Creek, running water, 3 lks. wide, 3ins. deep, drs. E. 510 ft. below top of ridge.
	Ascend.
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 S34¼ | S35 1913 from which
	An aspen, 7 ins. dia., bears N.4°E., 14 lks. dist., marked ¼ S 35 B T.
	An aspen, 6 ins. dia., bears N.43°W., 4 lks. dist.,

Chains

marked + S 34 B T.

Cor. stands on N. slope of spur, 320 lt. above creek.

41.50 Top of spur, 10 lt. above + cor., projects E.

Descend.

50.00 Creek, running water, 1 lk. wide, 1½ ins. deep, 40 rt. below top of spur, brs. NE.

Ascend.

76.00 Top of ridge, 700 rt. above creek, brs. E. and W.

Descend.

79.91 Intersect S. bdy. of the Tp., 71 lks. W. of U. S. Forest Reserve Boundary Post No. 6, marked and witnessed as described by the Surveyor General.

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

T34S	R1W
S34	S35
CC	
S3	S2
T35S	R1W
1913	

from which

A balsam, 12 ins. dia., bears N.41° 30'E., 1.33 chs. dist., marked T 34 S R 1 W S 35 B T.

A balsam, 6 ins. dia., bears N.76°W., 45 lks. dist., marked T 34 S R 1 W S 34 B T.

170 lt. below top of ridge.

Land, mountainous; soil, stony on surface 3 to 4 ins. deep with subsoil composed of coarse gravel and sandy loam of medium texture; timber, medium growth of aspen, balsam, spruce and yellow pine; medium undergrowth of oak, laurel and scattering grass.

August 30: Sky over-cast at noon therefore unable to observe for latitude.

August 30, 1913.

September 5,1913; At 8h 29m a.m. l.m.t., I set off 37° 49' on the lat. arc; 6°54' E., on the decl. arc; and determine a meridian with the solar at the cor. of secs. 26,27,34 and 35.

Thence I run

Chains	
	West on a sectional correction line bet. secs. 27 and 34. Over mountainous land, through medium growth of spruce, balsam, aspen and yellow pine and medium undergrowth of oak, wild rose, buck brush and scattering grass, Ascend.
18.00	Top of east rim of mountain, 465 ft. above sec. cor., brs. N. and S. Timber becomes dense; undergrowth, scattering, brs. N. and S. Continue across top of mountain.
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 S27 ¼ S34 1913 from which A balsam, 6 ins. dia., bears N.56° 40'E., 23 lks. dist., marked ¼ S 27 B T. A balsam, 8 ins. dia., bears S.14° 25'W., 10 lks. dist., marked ¼ S 34 B T.
56.50	West rim of mountain, brs. N. and SW. Descend.
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 T34S R1W S28 | S27 S33 | S34 1913 from which An aspen, 9 ins. dia., bears N.79° 30'E., 25 lks. dist., marked T 34 S R 1 W S 27 B T. An aspen, 7 ins. dia., bears S.29° 55'E., 49 lks. dist., marked T 34 S R 1 W S 34 B T. A balsam, 6 ins. dia., bears S.12° 10'W., 15 lks. dist., marked T 34 S R 1 W S 33 B T. A balsam, 6 ins. dia., bears N.55° 55'W., 25 lks. dist., marked T 34 S R 1 W S 28 B T. Cor. stands on W. slope of mountain, 425 ft. below the top.

Chains	
	Land, mountainous; soil, stony on surface 3 to 4 ins. deep with subsoil composed of loose rock and sandy loam of medium texture; timber, dense growth of aspen, spruce, balsam and yellow pine; scattering undergrowth of buck brush and grass.
	September 5: Sky over-cast at noon therefore unable to observe the sun for latitude.
	September 5, 1913.

	September 6, 1913: At 7^h 59^m a.m.l.m.t., I set off 37° 49' on the lat. arc; 6° 33' N., on the decl. arc; and determine a meridian with the solar at the cor. of secs. 27,28,33 and 34.
	Thence I run
	S.0° 02'E., bet. secs. 33 and 34.
	Over mountainous land, through dense growth of aspen, balsam and spruce and scattering undergrowth of buck brush and grass.
	Ascend.
40.00	Set an iron post, 3 ft. long, 1 in. in dia., 12 ins. in the ground to solid rock and erect a mound of stone, 3 ft. base, 1½ ft. high, around post for ¼ sec. cor., with brass cap marked
	S33¼ | S34
	1913
	from which
	A spruce, 10 ins. dia., bears S.46°E., 53 lks. dist., marked ¼ S 34 B T.
	A spruce, 14 ins. dia., bears N.59° 25'W., 16 lks. dist., marked ¼ S 33 B T.
	520 ft. above sec. cor.
44.00	Top of spur, 80 ft. above ¼ cor., projects W.
	Descend.
56.25	Ravine, 70 ft. below top of spur, heads 4 chs. SE. and drs. NW.
	Ascend.
61.50	Top of ridge, 85 ft. above ravine, brs. NE. and W.
	Descend.

Chains	
79.65	Intersect S. bdy. of the Tp., 92 lks. W. of U. S. Forest Reserve Boundary Post No. 5, firmly set, marked and witnessed as described by the Surveyor General. Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground for C.C. of secs. 33 and 34, with brass cap marked T34S | R1W S33 | S34 C C S4 | S3 T35S | R1W 1913 from which A balsam, 8 ins. dia., bears N.66°E., 6 lks. dist., marked T 34 S R 1 W S 34 B T. A balsam, 6 ins. dia., bears N.43°W., 36 lks. dist., marked T 34 S R 1 W S 33 B T. 50 ft. below top of ridge. Land, mountainous; soil, stony on surface 3 to 4 ins. deep with subsoil composed of loose rock, fine gravel and sandy loam of medium texture; timber, dense growth of aspen, balsam, spruce and yellow pine; scattering undergrowth of buck brush and grass. September 6: Sky over-cast at noon therefore unable to observe the sun for latitude. September 6, 1913.

	September 8, 1913: At 7h 58m a.m. l.m.t., I set on 37° 49' on the lat. arc; 5°48' N., on the decl. arc; and determine a meridian with the solar at the cor. of secs. 27,28,33 and 34. Thence I run West on a sectional correction line bet. secs. 28 and 33. Over mountainous land, through dense growth of aspen, spruce, balsam and yellow pine; and scattering undergrowth of buck brush and grass. Descend.
20.25	Ravine, 340 ft. below sec. cor., drs. NE. Ascend.
34.00	Top of spur, 190 ft. above ravine, projects N.

Chains	
	Descend.
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 S28 ¼ S33 1913 from which A balsam, 7 ins. dia., bears N.6°E., 10 lks. dist., marked ¼ S 28 B T. A balsam, 12 ins. dia., bears S.9°W., 10 lks. dist., marked ¼ S 33 B T.
	30 ft. below top of spur.
47.00	Timber becomes scattering, brs. N. and SW.
58.10	Ravine, 325 ft. below ¼ cor., drs. N.
	Ascend.
79.00	Top of spur, 315 ft. above ravine, projects N.
	Descend.
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 T34S | R1W S29 | S28 S32 | S33 1913 from which A spruce, 6 ins. dia., bears N.85° 30'E., 31 lks. dist., marked T 34 S R 1 W S 28 B T. A spruce, 6 ins. dia., bears S.16° 10'E., 40 lks. dist., marked T 34 S R 1 W S 33 B T. A spruce, 6 ins. dia., bears S.30° 10'W., 41 lks. dist., marked T 34 S R 1 W S 32 B T. A spruce, 7 ins. dia., bears N.45° 30'W., 42 lks. dist., marked T 34 S R 1 W S 29 B T.
	Cor. stands on W. slope of spur, 15 ft. below the top. Land, mountainous; soil, stony on surface with subsoil composed of loose rock and stiff yellow clay; timber, scattering growth of spruce, balsam, aspen and yellow pine; medium undergrowth of buck brush and scattering grass. September 8; sky over-cast at noon therefore unable to observe the sun for latitude.
	September 8, 1913.

Chains	
	September 22, 1913; At 8^h 23^m a.m. l.m.t., I set off 37° 49' on the lat. arc; 0° 25' E., on the decl. arc; and determine a meridian with the solar at the cor. of secs. 28,29,32 and 33.
	Thence I run
	S. 0°,03'E., bet. secs. 32 and 33.
	Over mountainous land, through dense growth of spruce, yellow pine, balsam and aspen and medium undergrowth of laurel, buck brush and scattering grass.
	Ascend.
37.50	Top of ridge, 360 ft. above sec. cor., brs. E. and W.
	Descend.
	Timber becomes scattering, brs. E. and W.
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
	S32¼ | S33 1913
	from which
	A spruce, 14 ins. dia., bears S.70°E., 26 lks. dist., marked ¼ S 33 B T.
	No other bearing trees available therefore erect a mound of stone, 3 ft. base, 2 ft. high, W. of cor.
	140 ft. below top of ridge.
79.40	Intersect S. bdy. of the Tp., 60 lks. W. of U.S. Forest Reserve Boundary Post No. 4, firmly set, marked and witnessed as described by the Surveyor General.
	Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground for C.C. of secs. 32 and 33, with brass cap marked
	T34S R1W S32 | S33 CC S5 | S4 T35S | R1W 1913
	from which
	A spruce, 10 ins. dia., bears N.38° 30'E., 45 lks. dist., marked T 34 S R 1 W S 33 B T.
	A spruce, 6 ins. dia., bears N.25°W., 35 lks. dist., marked T 34 S R 1 W S 32 B T.
	400 ft. below ¼ cor.
	Land, mountainous; soil, stony on surface 3 to 4 ins.

Chains	
	deep with subsoil composed of loose rock and red stiff clay; timber, scattering growth of spruce, yellow pine, balsam and aspen; medium undergrowth of laurel, buck brush and scattering grass.
	September 22: Sky overcast at noon therefore unable to observe the sun for latitude.
	September 22, 1913.

	Sepeember 23, 1913: At 8^h 23^m a.m. l.m.t., I set ori 37° 49'E., on the lat. arc; 0° 01' N., on the decl. arc; and determine a meridian with the solar at the cor. of secs. 28,29,32 and 33.
	Thence I run
	Went on a sectional correction line bet. secs. 29 and 32. Over mountainous land, through dense growth of spruce, balsam, aspen and yellow pine and medium undergrowth of laurel, buck brush and scattering grass.
	Descend.
16.00	Ravine, 385 ft. below sec. cor., ars. N.
	Ascend.
29.50	Top of spur, 305 ft. above ravine, projects NW.
	Descend.
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 S29 / ¼ / S32 / 1913 from which
	A balsam, 6 ins. dia., bears N.15°E., 47 lks. dist., marked ¼ S 29 B T.
	A cedar, 8 ins. dia., bears S.40°W., 26 lks. dist., marked ¼ S 32 B T.
	275 ft. below top of spur.
52.20	Bottom of ravine, 275 ft. below ¼ cor., ars. N.35°W.
	Ascend.
61.50	Top of spur, 180 ft. above bottom of ravine, projects N.35°W.
	Descend.

Chains	
74.00	Timber becomes scattering, brs. N. and S.
80.00	Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground for cor. of secs. 29,30.31 and 32, with brass cap marked T34S R1W S30 | S29 S31 | S32 1913 from which A pine, 6 ins. dia., bears N.81° 30'E., 98 lks. dist., marked T 34 S R 1 W S 29 B T A pine, 8 ins. dia., bears S.49°E., 87 lks. dist., marked T 34 S R 1 W S 32 B T. No other bearing trees available, therefore erect a mound of stone, 3 ft. base, 2½ ft. high, W. of cor. 250 ft. below top of spur. Land, mountainous; soil, stony on surface 3 to 4 ins. deep with subsoil composed of sandy loam of medium texture and loose rock; timber, scattering growth of yellow pine, spruce , balsam and cedars; medium undergrowth of buck brush, rabbit brush, oak, laurel and scattering grass. September 23: At this cor., I set off 09°03' S., on the decl. arc; and at $11^h\ 53^m$ l.m.t., observe the sun on the meridian; the resulting latitude is 37° 49'.

	S.0° 03'E., bet. secs. 31 and 32. Over mountainous land, through scattering growth of yellow pines, spruce and balsam and medium undergrowth of buck brush, rabbit brush,oak, laurel and scattering grass Descend.
1.80	Ravine, 20 ft. below sec. cor., brs. NW. Ascend.
28.50	Top of ridge, 400 ft. above ravine, brs. NW60°W. and S. 70°E. Descend.
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 S31½ | S32 1913 from which

Chains

A pine, 7 ins. dia., bears N.84°E., 37 lks. dist., marked ¼ S 32 B T.

A spruce, 10 ins. dia., bears N.27° 30'W., 51 lks. dist., marked ¼ S31 B T.

55 ft. below top of ridge.

54.10 Ravine, 250 ft. below ¼ cor., ars. SW.

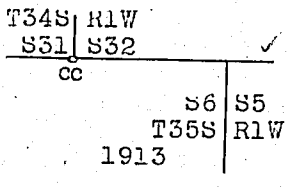
Ascend.

62.00 Top of spur, 110 ft. above ravine, projects W.

Descend.

79.45 Intersect S. bdy. of the TP. 65 lks. W. of U. S. Forest Reserve Boundary Post No. 3, firmly set, marked and witnessed as described by the Surveyor General.

Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground for C.C. of secs. 31 and 32, with brass cap marked



from which

A spruce, 6 ins. dia., bears N.40°E., 6 lks. dist. marked T 34 S R 1 W S 32 B T.

A spruce, 6 ins. dia., bears N.62°W., 7 lks. dist., marked T 34 S R 1 W S 31 B T.

120 ft. below top of spur.

Land, mountainous; soil, stony on surface with subsoil composed of loose rock and sandy loam of medium texture; timber, scattering growth of yellow pine, spruce, balsam and cedars; medium undergrowth of buck brush, rabbit brush, oak, laurel and scattering grass.

September 23, 1913.

September 24, 1913: At 7^h 52^m a.m. l.m.t., I set off 37° 49' N., on the lat. arc; 0° 22'S., on the decl. arc; and determine a meridian with the solar at the cor. of secs. 29, 30, 31 and 32.

Thence I run

West, on a sectional correction line, bet. secs. 30 and 31.

Chains	
	Over mountainous land, through scattering growth of yellow pine, spruce, balsam and cedars and medium undergrowth of buck brush, rabbit brush, laurel and scattering grass.
	Descend.
1.90	Ravine, 15 lt. below sec. cor., drs. NW.
	Ascend.
16.00	Top of spur, 80 ft. above ravine, projects NW.
	Descend.
26.75	Ravine, 90 ft. below top of spur, drs. N.15°W.
	Ascend.
38.00	Top of spur, 95 ft. above ravine, projects N.15°W.
	Descend.
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 S30 / ¼ / S31 1913 from which
	A pine, 7 ins. dia., bears S.25° 30'W., 2.08 chs. dist., marked ¼ S 31 B T.
	A pine, 6 ins. dia., bears N.26° 50'W., 1.37 chs. dist., marked ¼ S 30 B T.
	30 ft. below top of spur.
48.00	Ravine, 85 ft. below ¼ cor., drs. N.
	Ascend.
60.00	Top of spur, 110 ft. above ravine, projects N.
	Descend gently.
74.18	Intersect W. bdy. of the Tp., 8.35 chs. N. of the temp. cor., secs. 25 and 36 set on this day and permanently on Sept.27, 1913, at the same point as heretofore described. Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground for C.C. of secs. 30 and 31, with brass cap marked

T34S
S30
C C
S31
S25
S36
R2W R1W
1913 from which

A pine, 12 ins. dia., bears N.30°E., 22 lks. dist., marked T 34 S R1 W S 30 B T.

Chains

A pine, 10 ins. dia., bears S.64° 55'E., 86 lks. dist., marked T 34 S R 1 W S 31 B T.

25 ft. below top of spur.

Land, mountainous; soil, stony on surface 3 to 4 ins. deep with subsoil composed of coarse gravel and sandy loam of medium texture; timber, scattering growth of yellow pine, spruce, balsam, and cedars; medium undergrowth of buck brush, laurel, rabbit brush and scattering grass.

September 24, 1913.

Edward R Bunbury

U. S. Transitman.

Survey commenced September 1, 1913, and executed with a Young and Sons light mountain transit, No. 8477, with solar attachment. The horizontal limb is provided with two double verniers placed opposite to each other reading to single minutes of arc, which is also the least count of the verniers of the latitude and declination arcs.

The instrument was examined, tested on the true meridian at Salt Lake City, Utah, found correct and was approved by the Assistant Supervisor of Surveys for Utah, June 14, 1913.

I examine the adjustments of the transit, find them correct; 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.

At camp in the NE. quarter of Sec. 27, T 34 S., R.1 W.; latitude, 37° 50'N., longitude, 111° 56'W., I set off 37° 50'N., on the lat. arc; 8°16'N., on the decl. arc; and at $3^h\ 30^m$ p.m.l.m.t., determine with the solar a meridian and mark a point thereof, on a stake firmly driven in the ground 5 chs. N. of my station.

September 1, 1913.

September 2: At $7^h\ 00^m$ a.m. l.m.t., I lay off the azimuth

Chains	
	of Polaris, 1° 28' to the west, and mark a point in the line thus determined by driving a nail in a stake firmly set in the ground, 5 chs. N. of my station.
	At 7h 30m a.m.l.m.t., I set off 37° 50'N. on the lat. arc 8° 02'N., on the decl. arc; and determine a meridian with the solar. The meridian thus determined coincides with the meridian established by the Polaris observations The solar apparatus, by p.m. and a.m. observations defines positions for meridians, respectively ; coinciding with the meridian established by the Polaris observations; therefore I conclude that the adjustments of the instrument are satisfactory.
	The magnetic bearing of the true meridian, at 7h 45m a.m. is N.16° 05'W.; the angle thus determined gives the magnetic decl. 16° 05'E. A 5 ch. tape and clinometer were used on all measurements of this work.
	September 2, 1913.
	September 5, 1913: At 8^h 29^m a.m. l.m.t., I set off 37° 49'N. on the lat. arc; 6° 54'N., on the decl. arc; and determine a meridian with the solar at the cor. of secs. 25,26;35 and 36; heretofore described.
	Thence I run
	N.0° 01'W., bet. secs. 25 and 26.
	Over mountainous land, through medium growth of yellow pine and dense undergrowth of scrub oak, scattering laurel and grass.
	Ascend.
2.10	Top of spur, 25 ft. above sec. cor., projects E.
	Descend.
12.50	Draw, 125 ft. below top of spur, drs. NE.
	Ascend.
21.35	S. edge or top of ridge, 100 ft. above draw, brs. E. and W.
	Continue N. across top of ridge.
36.60	N. top of ridge, brs. E. and W.
	Descend.
39.55	Bottom of draw, running water, 4 lks. wide, 3 ins. deep,

Chains

30 ft. below N. top of ridge, drs. E.

Ascend.

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

S26 ¼ | S25

1913

No bearing trees available therefore I erect a mound of stone, 3 ft. base, 2 ft. high, W. of cor.

Cor. stands on S. slope of spur, 20 ft. above bottom of draw.

44.55 Top of spur, 25 ft. above ¼ cor., projects E.

Descend.

45.80 Bottom of draw, running water, 4 lks. wide, 3 ins. deep, 15 ft. below top of spur, drs. E.

Ascend.

58.00 Top of ridge, 50 ft. above bottom of draw, brs. E. and W.

Descend.

65.37 Telephone line, Winder to Escalante, brs. NW. and SE.

77.90 Draw, 75 ft. below top of ridge, drs. E.

Ascend.

Leave growth of yellow pine, brs. E. and W.

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

T34S | R1W
S23 | S24
S26 | S25
1913

and erect a mound of stone, 3 ft. base, 2 ft. high, W. of cor.

Land, mountainous; soil, stony on surface 3 to 4 ins. deep with subsoil composed of coarse gravel and sandy loam of medium texture; no timber; dense undergrowth of scrub oak, wild rose and scattering grass.

September 5: Sky overcast at noon therefore unable to observe the sun for latitude.

Heavy rain prevented further work on this day.

September 5, 1913.

Chains	
	September 6: At 8^h 28^m a.m. l.m.t., I set off 37° 50' N., on the lat. arc; 6° 32'N., on the decl. arc; and determine a meridian with the solar at the cor. of secs. 23,24, 25 and 26.
	Thence I run
	East on a random line bet. secs. 24 and 25.
40.00	Set temp. ¼ cor.
79.90	Intersect E. bdy. of the Tp., 23 lks. S. of the cor. of secs. 19,24,25 and 30, heretofore described.
	Thence I run
	S.89° 50'W., on a true line bet. secs. 24 and 25.
	Over mountainous land, through dense growth of yellow pine and scattering cedars and pinion pine and medium undergrowth of sage brush, oak, laurel and scattering grass.
	Ascend.
6.25	Top of ridge, 40 ft. above sec. cor., brs. N. and S.
	Descend.
19.00	Creek, running water, 4 lks. wide, 2 ins. deep, 125 ft. below top of ridge, drs. SE.
	Thence continue W. along bottom land on a near level line.
22.50	Old pole road, brs. N. and S.
28.10	Creek, running water, 4 lks. wide, 2 ins. deep, drs. SE.
	Ascend E. slope of spur.
39.95	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground for ¼ sec. cor., with brass cap marked
	S24 / ¼ / S25 / 1913
	No bearing trees available therefore erect a mound of stone, 3 ft. base, 2 ft. high, N. of cor.
	Cor. stands on E. slope of spur, 105 ft. above creek.
65.90	Top of spur, 110 ft. above ¼ cor., projects S.
	Descend.
68.25	Wagon road, Winder to Escalante, brs. NW. and SE.
72.00	Ravine, 45 ft. below top of spur, drs. SE.
	Ascend gently across flat.
	Leave growth of timber, brs. N. and S.

Chains	
79.90	The cor. of secs. 23,24,25 and 26.
	Land, mountainous; soil, stony on surface 3 to 4 ins. deep with subsoil composed of coarse gravel and sandy loam of medium texture; no timber; dense undergrowth of scrub oak, wild rose and scattering grass.
	September 6: Sky overcast at noon therefore unable to observe the sun for latitude.
	Heavy rain in p.m. prevented further work this day.
	September 6, 1913.

September 8, 1913: At 8^h 28^m a.m. l.m.t., I set off 37° 50'N., on the lat. arc; 5° 47'N., on the decl. arc; and determine a meridian with the solar at the cor. of secs. 23,24,25 and 26.

Thence I run

N.0° 01'W., bet. secs. 23 and 24.

Over mountainous land, through dense undergrowth of scrub oak, wild rose and scattering grass.

Ascend.

3.50	Top of bench, brs. E. and W. 15 ft. above sec. cor.
	Ascend, gradually over rolling bench land.
4.30	Wagon road, Winder to Escalante, brs. NW. and SE.
9.50	Ravine, 15 ft. deep, drs. SE.
	Enter dense growth of spruce and yellow pine, brs. NW. and SE.
20.50	Dry wash, 10 lks. wide, 1 ft. deep, drs. S.20°W. Ascend.
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 S23½ | S24 1913 from which
	A pine, 24 ins. dia., bears S.70°E., 33 lks. dist., marked ¼ S24 B.T.
	A pine, 24 ins. dia., bears N.22°W., 64 lks. dist., marked ¼ S 23 B T.
	Cor. stands on S. slope of ridge, 360 ft. above sec. cor.
46.00	Top of ridge, 50 ft. above ¼ cor., brs. E. and W. Descend.
54.00	Ravine, 40 ft. below top of ridge, drains SE.

Chains	
67.00	Top of spur, 215 ft. above ¼ cor., projects SE.
	Descend.
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

T34S | R1W
S14 | S13
S23 | S24
1913

from which

A pine, 10 ins. dia., bears N.40°E., 75 lks. dist., marked T 34 S R 1 W S 13 B T.

A pine, 6 ins. dia., bears S.70°E., 60 lks., dist., marked T 34 S R 1 W S 24 B T.

A pine, 10 ins. dia., bears S.35°W., 46 lks., dist., marked T 34 S R 1 W S 23 B T.

A pine, 30 ins. dia., bears N.45°W., 1.09 chs. dist., narked T 34 S R 1 W S 14 B T.

200 ft. below top of spur.

Land, mountainous; soil, stony on surface 2 to 3 ins. deep with subsoil composed of loose rock and sandy loam of medium texture; timber, dense growth of spruce and yellow pine; medium undergrowth of scrub oak, wild rose, and scattering grass.

September 8: Sky overcast at noon therefore unable to observe the sun for latitude.

Heavy rain in p.m. prevented further work this day.

September 8, 1913.

September 11, 1913: At $9^h\ 57^m$ a.m.l.m.t., I set off 37° 51' on the lat. arc; 4° 37'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° 50'E., on a random line bet. secs. 13 and 24.

40.00	Set temp. ¼ cor.
79.86	Intersect E. bdy. of the Tp., 9 lks. N. of cor. of secs. 13,18,19 and 24, heretofore described.

Thence I run

Chains

S.89° 54'W., on a true line bet. secs. 13 and 24.

Over mountainous land, through dense growth of spruce and yellow pine and medium undergrowth of scrub oak, wild rose And scattering grass.

Ascend gently.

4.00 Begin steep ascent, 15 ft. above sec. cor., brs. N. and S.

20.00 Top of steep ascent, 165 ft. above point of steep ascent, brs. N. and S.

Continue , over rolling bench land.

39.00 Enter dense oak thicket, brs. N. and S.

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

S13
¼
S24
1913

from which

A spruce, 12 ins. dia., bears N.25°E., 1.11 chs. dist., marked ¼ S 13 B T.

A spruce, 12 ins. dia., bears S.20°E., 1.55 chs. dist., marked ¼ S 24 B T.

September 11: At this cor. I set off 4° 35'N., on the decl arc; and at 11^h 57^m l.m.t., observe the sun on the meridian; the resulting latitude is 37° 51'.

41.00 Leave dense oak thicket, brs. N. and S.

43.50 Hall Creek, running water, 6 lks. wide, 3 ins. deep, drs. S.

45.00 Old pole road, brs. N. and S.

77.00 Descend into ravine, brs. N. and S.

77.92 Ravine, 20 ft. deep, drs. S.30°E.

Ascend.

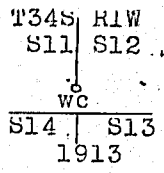
78.86 The cor. of secs. 13,14,23 and 24.

Land, mountainous; soil, stony on surface 2 to 3 ins. deep with subsoil composed of loose rock and sandy loam of medium texture; timber, dense growth of spruce and yellow pine; medium undergrowth of scrub oak, wild rose and scattering grass.

September 11, 1913.

Chains	
	September 13, 1913: At 8^h 26^m a.m. l.m.t., I set off 37° 51'N., on the lat. arc; 3° 53'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 mountainous land, through dense growth of spruce and yellow pine and medium undergrowth of scrub oak, wild rose and scattering grass.
	Descend.
2.20	Ravine, 25 ft. deep, drs. SE.
	Ascend.
26.00	Top of steep ascent, 400 ft. above ravine, brs. NW. and SE.
	Continue gradual ascent.
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 S 14¼ | S 13 1913 from which
	A white pine, 16 ins. dia., bears N.35° 30'E., 59 lks., dist., marked ¼ S 13 B T.
	A spruce, 24 ins. dia., bears N.77°W., 50 lks. dist., marked ¼ S 14 B T.
	Cor. stands on S. slope of bench, 190 ft. above top of steep ascent.
50.00	Enter dense growth of aspen; undergrowth scattering, brs. E. and W.
52.00	Top of ascent, 195 ft. above ¼ cor.
	Continue over bench land.
55.00	Leave dense growth of aspen, brs. E. and W.
64.00	Enter dense growth of aspen; undergrowth scattering, brs. E. and W.
70.00	Begin gradual descent, brs. E. and W.
78.70	Hall Creek, running water, 6 lks. wide, 3 ins. deep, drs. SE. 40 ft. below point of descent.
	Ascend.
80.00	Point falls near bed of Hall Creek where it is impractic-

Chains	
	able to set post.
80.40	Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground for W.C. to secs. 11,12,13 and 14, with brass cap marked



from which,

An aspen, 8 ins. dia., bears N.40°E., 13 lks. dist., marked W C T S34 S R 1 W S 12 B T.

An aspen 8 ins. dia., bears S.23°E., 5 lks. dist., marked W C T 34 S R 1 W S 13 B T.

An aspen, 10 ins. dia., bears S.59°W., 18 lks. dist., marked W C T 34 S R 1 W S 14 B T.

An aspen, 6 ins. dia., bears N.14°W., 17 lks. dist., marked W C T 34 S R 1 W S 11 B T.

6 ft. above Hall Creek.

Land, mountainous; soil, stony on surface 3 to 4 ins. deep with subsoil composed of loose rock and sandy loam of medium texture; timber, dense growth of aspen; scattering undergrowth of buck brush and grass.

September 13: Sky overcast at noon therefore unable to observe the sun for latitude.

Rain in p.m. preventing further work this day.

September 13, 1913.

September 15, 1913: At 7^h 55^m a.m.l.m.t., I set off 37° 52' on the lat. arc; 3° 08'N., on the decl. arc; and determine a meridian with the solar at the true cor. point for secs. 11,12,13 and 14 which is 40 lks. S. of the W.C. of secs. 11,12,13 and 14.

Thence I run

N.89° 54'E., on a random line bet. secs. 12 and 13.

40.00	Set temp. ¼ cor.
80.00	Intersect E. bdy. of the Tp.,19 lks. N. of cor. of secs. 7,12,13 and 18, heretofore described.

Thence I run

N.89° 58'W., on a true line bet. secs. 12 and 13.

Chains	
12.00	Leave dense growth of aspen, brs. E. and W.
14.00	Old road, brs. E. and W.
16.00	Old corral, brs. W., 1 ch. dist.
18.00	Enter dense growth of aspen, brs. E. and W.
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 S11 ¼ | S12 1913 from which An aspen, 5 ins. dia., bears S.80°E., 16 lks. dist., marked ¼ S 12 B T. An aspen, 5 ins. dia., bears S.68°W., 9 lks. dist., marked ¼ S 11 B T. 300 ft. above sec.cor.
52.00	Top of Griffin Mountain, 500 ft. above ¼ cor., brs. NE. and SW.
	Continue S. over level top of mountain, through dense growth of aspen, spruce, balsam and yellow pine and scattering undergrowth of grass.
78.50	Head of draw, brs. SE.
80.00	Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground for cor. of secs. 1,2,11 and 12, with brass cap marked T34S R1W S2 | S1 S11 | S12 1913 from which A balsam, 10 ins. dia., bears N.31°E., 37 lks. dist., marked T 34 S R 1 W S 1 B T. A yellow pine, 8 ins. dia., bears S.44° 30'E., 22 lks dist., marked T 34 S R 1 W S 12 B T. A spruce, 8 ins. dia., bears S.47° 30'W., 7 lks. dist., marked T 34 S R 1 W S 11 B T. An aspen, 8 ins. dia., bears N.64°W., 44 lks. dist., marked T 34 S R 1 W S 2 B T.
	Land, mountainous; soil, gravel on surface 2 ins. deep, with subsoil composed of coarse gravel and sandy loam of medium texture; timber, dense growth of aspen, spruce, balsam and yellow pine; scattering undergrowth of grass.

Chains	
	Over mountainous land, through scattering growth of aspen, spruce and yellow pine and scant undergrowth of scattering oak and grass.
	Descend over SW. slope of Griffin Mountain; very rocky.
12.00	Enter dense growth of spruce and quaking aspen, brs. N. and S.
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 S12 ¼ S13 1913 from which
	An aspen, 6 ins. dia., bears S.23°W., 20 lks. dist., marked ¼ S 13 B T.
	An aspen, 6 ins. dia., bears N.68°W., 16 lks. dist., marked ¼ S 12 B T.
	400 ft. below sec. cor.
44.45	Old pole road, brs. NW. and SE.
46.50	Creek, running water, 4 lks. wide, 2 ins. deep, drs. S.
	40 ft. below ¼ cor.
	Continue on a near level line.
48.60	Creek, running water, 5 lks. wide, 2 ins. deep, drs. S.
	Ascend.
80.00	True point for cor. of secs. 11, 12, 13, and 14.
	110 ft. above creek.
	Land, mountainous; soil, stony on surface 3 to 4 ins. deep with subsoil composed of loose rock and sandy loam of medium texture; timber, dense growth of aspen; scattering undergrowth of buck brush and grass.
	September 15: At this cor. I set off 3° 03' N., on the decl. arc; and at 11h 55m l.m.t., observe the sun on the meridian; the resulting latitude is 37° 52'.

N.0° 01'W., bet. secs.11 and 12.

Over mountainous land, through dense growth of aspen and scattering undergrowth of buck brush and grass.

Ascend gently.

Chains	
	September 15, 1913.
	September 16, 1913: At 8^h 25^m a.m.l.m.t., I set off 37° 53'N. on the lat. arc; 2° 44'N., on the decl. arc; and determine a meridian with the solar at the cor. of secs. 1,2,11 and 12.
	Thence I run.
	S.89° 58'E. on a random line bet. secs. 1 and 12.
40.00	Set temp. ¼ cor.
80.00	Intersect E. bdy. of the Tp. at the cor. of secs. 1,6,7 and 12, heretofore described.
	Thence I run
	N.89° 58'W., on a true line bet. secs. 1 and 12.
	Over level top of Griffin Mountain, through dense growth of aspen, spruce, balsam and yellow pine and medium undergrowth of grass.
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 S1 ¼ S12 1913
	Thick growth of aspen here too small for bearing trees, therefore erect a mound of stone, 3 ft. base, 2 ft. high, N. of cor.
60.25	Leave level top of mountain and descend into ravine, brs. N. and S.
70.00	Ravine, 75 ft. below top of mountain, drs. S.
	Ascend.
71.55	Old pole road, brs. N. and S.
78.00	Top of ascent or top of Griffin mountain, 60 ft. above ravine, brs. N.30°E. and S.30°W.
	Continue over level top of mountain.
80.00	The cor. of secs. 1,2,11 and 12.
	Land, mountainous; soil, gravel on surface 2 ins. deep with subsoil composed of coarse gravel and sandy loam of medium texture; timber, dense growth of aspen, spruce, balsam and yellow pine; scattering undergrowth of grass.

Chains	
	September 16: At this cor. I set off 2° 40'N.,,on the decl. arc; and at 11h 55m l.m.t., observe the sun on the meridian; the resulting latitude is 37° 53'.
	N.0° 01'W., on a random line bet. secs. 1 and 2.
40.00	Set temp. ¼ cor. [illegible]
79.96	Intersect N. bdy. of the Tp., 19 lks. W. of the cor. of secs. 1,2,35 and 36, heretofore described.
	Thence I run
	S.0° 07'W., on a true line bet. secs. 1 and 2.
	Over level top of Griffin Mountain, through dense growth of aspen, spruce, balsam and yellow pine and medium undergrowth of grass.
39.96	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground for ¼ sec. cor., with brass cap marked S2¼ | S1 1913 from which
	An aspen, 10 ins. dia., bears N.35°E., 4 lks. dist., marked ¼ S 1 B T.
	An aspen, 8 ins. dia., bears N.45°W., 26 lks. dist., marked ¼ S 2 B T.
79.96	The cor. of secs. 1,2,11 and 12.
	Land, mountainous; soil, gravel on surface 2 ins. deep with subsoil composed of coarse gravel and sandy loam of medium texture; timber, dense growth of aspen, spruce, balsam and yellow pine; scattering undergrowth of grass.
	September 16, 1913.
	September 9, 1913: At 7h 57m a.m.l.m.t., I set off 37° 49'N., on the decl. arc; 5° 25'N., on the decl. arc; and determine a meridian with the solar at the cor. of secs. 26,27,34 and 35.
	Thence I run
	N.0° 01'W., bet. secs. 26 and 27.
	Over mountainous land, through dense growth of aspen and spruce, scattering yellow and balsam pine and medium undergrowth of oak,laurel,wild rose and scattering grass.

Chains	
	Descend.
9.00	Bottom of ravine, 234 ft. deep, drs. E.
	Ascend.
19.00	Top of ridge, 280 ft. high, brs. N.60°E. and SW.
	Descend.
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 S27 ¼ | S26 1913 Thick growth of quaking aspen, too small for bearing trees, therefore erect a mound of stone, 3 ft. base, 2 ft. high, W. of cor.
46.00	Bottom of canyon, 240 ft. below top of ridge, drs. E.
	Ascend over perpendicular ledges.
53.50	Top of ridge, 280 ft. high, brs. E. and W.
	Descend.
60.00	Bottom of ravine, 35 ft. deep, drs. E.
	Ascend.
72.20	Top of spur, 455 ft. high, projects NE.
	Descend gradually.
78.70	Telephone line, Winder to Escalante, brs. E. and W.
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 T34S | R1W S22 | S23 S27 | S26 1913 from which A white pine, 8 ins. dia., bears N.26°E., 35 lks. dist., marked T 34 S R 1 W S 23 B T. A spruce, 18 ins. dia., bears S.22°E., 66 lks. dist., marked T 34 S R 1 W S 26 B T. A white pine, 10 ins. dia., bears S.50°W., 54 lks. dist., marked T 34 S R 1 W S 27 B T. A spruce, 24 ins. dia., bears N.54°W., 51 lks. dist., marked T 34 S R 1 W S 22 B T. 30 ft. below top of spur. Land, mountainous; soil, stony on surface 2 to 3 ins. deep with subsoil composed of coarse gravel and sandy

Chains	
	loam of medium texture; timber, dense growth of aspen and spruce, scattering yellow and balsam pine; medium undergrowth of oak, laurel, wild rose and scattering grass.
	September 9: At this cor. I set off 5° 21'N., on the decl. arc; and at 11^{h} 57^{m} l.m.t., observe the sun on the meridian; the resulting latitude is 37° 50'.
	East, on a random line bet. secs. 23 and 26.
40.00	Set temp. ¼ cor.
80.00	Intersect N. and S. line, 3 lks. S. of cor. of secs. 23, 24, 25 and 26.
	Thence I run
	S.89° 59'W., on a true line bet. secs. 23 and 26.
	Over rolling, slightly ascending land, through dense undergrowth of oak, wild rose and scattering grass.
8.00	Dry wash, 20 lks. wide, 1 ft. deep, drs. S.50°E.
	Enter dense growth of aspen and spruce and scattering yellow and balsam pine, brs. N. and S.
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
	S23 ¼ S26 1913
	and erect a mound of stone, 3 ft. base, 2 ft. high, N. of cor.
48.00	Dry wash, 20 lks. wide, 1 ft. deep, drs. S.50°E.
	Ascend.
80.00	The cor. of secs. 22, 23, 26 and 27.
	120 ft. above wash.
	Land, mountainous; soil, stony on surface 2 to 3 ins. deep with subsoil composed of coarse gravel and sandy loam of medium texture; timber, dense growth of aspen and spruce, scattering yellow and balsam pine; medium undergrowth of oak, laurel, wild rose and scattering grass.
	September 9, 1913.

Chains	
	September 10, 1913: At 8^h 27^m a.m.l.m.t., I set off 37° 50'N., on the lat. arc; 5° 01½'N., on the decl. arc; and determine a meridian with the solar at the cor. of secs. 22,23,26 and 27.
	Thence I run
	N.0° 01'W., bet. secs. 22 and 23.
	Over mountainous land, through dense growth of aspen, spruce, scattering yellow and balsam pine and medium undergrowth of oak, laurel, wild rose and scattering grass.
	Descend.
10.00	Bottom of ravine, 220 ft. deep, drs. E.
	Ascend.
16.00	Top of ascent or S. edge of ridge, 130 ft. above ravine, brs. E. and W.
	Continue over top of ridge on a near level line.
19.45	Wagon road, Winder to Escalante, brs. NW. and SE.
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
	S22½ | S23
	1913 from which
	An aspen, 10 ins. dia., bears N.69°E., 10 lks. dist., marked ¼ S 23 B T.
	An aspen, 10 ins. dia., bears S.49°W., 30 lks. dist., marked ¼ S 22 B T.
47.30	Small stream of water, 3 lks. wide, 1 in. deep, drs. E.
63.00	E. edge of ridge, brs. NE. and SW.
	Descend over lime stone ledges.
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
	T34S | R1W S15 | S14 S22 | S23 1913 from which
	An aspen, 9 ins. dia., bears N.68°E., 49 lks. dist., marked T 34 S R 1 W S 14 B T.
	A white pine, 16 ins. dia., bears S.39°E., 67 lks. dist., marked T 34 S R 1 W S 23 B T.

Chains	
	An aspen, 10 ins. dia., bears S.12°W., 69 lks. dist., marked T 34 S R 1 W S 22 B T.
	A white pine, 10 ins. dia., bears N.83°W., 1.33 chs. dist., marked T 34 S R 1 W S 15 B T.
	85 ft. below N. top of ridge.
	Land, mountainous; soil, stony on surface 2 to 3 ins. deep with subsoil composed of coarse gravel and sandy loam of medium texture; timber, dense growth of aspen, spruce and scattering yellow and balsam pine; medium undergrowth of oak, laurel, wild rose and scattering grass.
	September 10: At this cor., I set off 4° 58'N., on the decl. arc; and at 11^h 57^m l.m.t., observe the sun on the meridian; the resulting latitude is 37° 51'.

	N.89° 59'E., on a random line bet. secs. 14 and 23.
40.00	Set temp. ¼ cor.
80.10	Intersect N. and S. line 7 lks. N. of cor. of secs. 13, 14, 23 and 24.
	Thence I run
	N.89° 58'W., on a true line bet. secs. 14 and 23.
	Over mountainous land, through dense growth of aspen, spruce, scattering yellow and balsam pine and medium undergrowth of oak, laurel, wild rose and scattering grass.
	Ascend.
13.00	Top of ascent, 40 ft. above sec. cor., brs. N. and S.
	Continue on a near level line.
36.00	Point of descent, brs. N. and S.
	Leave growth of timber; enter heavy undergrowth of oak, brs. N. and S.
40.05	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground for ¼ sec. cor., with brass cap marked $\frac{S14}{\frac{1}{4}}$ / $\frac{S23}{1913}$ and erect a mound of stone, 3 ft. base, 2 ft. high, N. of cor.
	25 ft. below point of descent.
48.00	Draw, 30 ft. below ¼ cor., drs. SE.

Chains

Enter dense growth of aspen, spruce, scattering yellow and balsam pine and medium undergrowth of oak, laurel, wild rose and scattering grass, brs. N. and S.

Ascend.

80.10 The cor. of secs. 14,15,22 and 23.

240 ft. above draw.

Land, mountainous; soil, stony on surface 2 to 3 ins. deep with subsoil composed of coarse gravel and sandy loam of medium texture; timber, dense growth of aspen, spruce and scattering yellow and balsam pine; medium undergrowth of oak, wild rose, laurel and scattering grass.

September 10, 1913.

Jos. C. Shaw

U. S. Surveyor.

September 13, 1913: At 8^h 56^m a.m.l.m.t., I set off 37° 51'E., on the lat. arc; 3° 53'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° 01'W., bet. secs. 14 and 15.

Over mountainous land through dense growth of aspen, spruce and balsam and medium undergrowth of buck brush, oak, scattering maple and grass.

Ascend.

11.50 Timber becomes scattering, brs. NW. and SE.

36.50 Enter lava bed, brs. NW. and SE.

39.00 Leave lava bed, brs. NW. and SE.

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

S15½ | S14

1913

from which

An aspen, 6 ins. dia., bears S.61° 30'E., 7 lks. dist., marked ¼ S 14 B T.

An aspen, 5 ins. dia., bears N.82°W., 14 lks. dist., marked ¼ S 15 B T.

520 ft. above sec. cor.

Chains	Notes
47.00	Enter lava bed, brs. E. and W.
55.00	Leave lava bed, brs. E. and W.
	Enter dense growth of timber, brs. E. and W.
66.00	Timber becomes scattering, brs. NW. and SE.
	Enter lava bed and broken ledges, brs. NW. and SE.
73.50	Top of ledges, 355 ft. above ¼ cor., brs. N.10°E. and S. 10°W.
	Descend.
80.00	Point falls on perpendicular ledge where it is impossible to set sec. cor.
80.00	Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground for W. C. to the cor. of secs. 10,11,14 and 15, with brass cap marked

T34S R1W
S10 | S11
WC
S15 | S14
1913

from which

A spruce, 8 ins. dia., bears N.88° 30'E., 35 lks. dist., marked W C T 34 S R 1 W S 11 B T.

No other bearing trees available therefore erect a mound of stone, 3 ft. base, 2 ft. high, W. of cor.

10 ft. below top of ledges.

Land, mountainous; soil, stony on surface 3 to 4 ins. deep with subsoil composed of loose rock and sandy loam of medium texture; timber, scattering growth of aspen, spruce and balsam; scattering undergrowth of buck brush, oak and grass

September 13: Sky overcast at noon therefore unable to observe the sun for latitude.

Heavy rain in P.M. preventing further work this day.

September 13, 1913.

September 14, 1913: At 6h 55m a.m.l.m.t., I set off 3° 22'E., on the lat. arc; 3° 07'E., on the decl. arc; and determine a meridian with the solar at the same corrections for secs. 10,11,14 and 15, 22 lks. E. of the W.C.

Thence I run

Chains	
	S.89° 58'E., on a random line bet. secs. 11 and 14.
40.00	Set temp. ¼ cor.
79.90	Intersect N. and S. line, 28 lks. S. of the cor. of secs. 11,12,13 and 14.
	Thence I run
	S.89° 50'W., on a true line bet. secs. 11 and 14.
	Over mountainous land, through dense growth of aspen, spruce and balsam and scattering undergrowth of buck brush, laurel and grass.
	Descend.
1.00	Hall Creek, 10 ft. below sec. cor., running water, 6 lks. wide, 3 ins. deep, drs. S.10°E.
	Ascend through dense growth of aspen.
39.95	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground for ¼ sec. cor., with brass cap marked S11 ¼ S14 1913 from which
	A balsam, 7 ins. dia., bears S.7° 05'W., 13 lks. dist., marked ¼ S 14 B T.
	A balsam, 7 ins. dia., bears N.55° 05'W., 5 lks. dist., marked ¼ S 11 B T.
	400 ft. above Hall Creek.
	Continue W. along the SE. slope of Griffin mountain over a series of low rolling ridges and spurs.
	September 15: At this cor. I set off 3° 03'N., on the decl. arc; and at 11^h 55^m l.m.t., observe the sun on the meridian; the resulting latitude is 37° 52'.
59.40	Top of rocky knoll, 50 ft. high.
67.00	Enter broken ledges, brs. NE. and SW.
70.90	Timber becomes scattering, brs. NE. and SW.
72.00	Leave broken ledges, brs. NE. and SW.
	Ascend.
77.70	Top of rocky spur, 220 ft. high, projects S.
	Descend.
79.90	The true cor. point for secs. 10,11,14 and 15.
	85 ft. below top of spur.

Chains	
	Land, mountainous; soil, stony on surface 3 to 4 ins. deep with subsoil composed of loose rock and sandy loam of medium texture; timber, scattering growth of aspen, spruce and balsam; scattering undergrowth of buck brush, oak and grass.
	September 15, 1913.

	September 16, 1913; At 7h 55m a.m. l.m.t., I set off 37° 52'N., on the lat. arc; 2° 45'N., on the decl. arc; and determine a meridian with the solar at the W.C. of secs. 10,11,14 and 15, counting dist. from true cor. point.
	Thence I run
	N.0° 01'W., bet. secs. 10 and 11.
	Over mountainous land, through scattering growth of aspen, spruce and balsam; and scattering undergrowth of buck brush, oak and grass.
	Ascend gently.
3.00	Enter dense growth of timber, brs. NE. and SW.
19.50	Top of Griffin Mountain, 195 ft. above sec. cor., brs. NW. and SE.
	Continue N., along flat top of Griffin Mountain.
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 S10¼ | S11 1913 from which An aspen, 8 ins. dia., bears S.5° 35'E., 37 lks. dist., marked ¼ S 11 B T. An aspen, 6 ins. dia., bears S.24° 05'W., 14 lks. dist., marked ¼ S 10 B T.
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 T34S | R1W S3 | S2 --- S10 | S11 1913 from which A balsam, 12 ins. dia., bears N.25° 30'E., 60 lks. dist., marked T 34 S R 1 W S 2 B T. A balsam, 7 ins. dia., bears S.70°E., 35 lks.

Chains	
	dist., marked T 34 S R 1 W S 11 B T.
	A balsam, 6 ins. dia., bears S.50° 05'W., 1.15 chs. dist., marked T 34 S R 1 W S 10 B T.
	A spruce, 10 ins. dia., bears N.22° 30'W., 60 lks. dist., marked T 34 S R 1 W S 3 B T.
	Land, mountainous; soil, gravel on surface with subsoil composed of loose rock and sandy loam; timber, dense growth of aspen, spruce and balsam; scattering undergrowth of buck brush and grass.
	September 16: At this cor. I set off 2° 40'N., on the decl. arc; and at 11^h 55^m l.m.t., observe the sun on the meridian; the resulting latitude is 37° 53'.
	N.89° 50'E., on a random line bet. secs. 2 and 11.
40.00	Set temp. ¼ cor.
79.86	Intersect N. and S. line, 23 lks. N. of the cor. of secs. 1,2,11 and 12.
	Thence I run
	West. on a true line bet. secs. 2 and 11.
	Over flat top of Griffin Mountain, through dense growth of aspen, spruce and balsam and scattering undergrowth of buck brush and grass.
39.93	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground for ¼ sec. cor., with brass cap marked S2 ¼ S11 1913 from which
	An aspen, 6 ins. dia., bears S.80° 45'E., 1.02 chs. dist., marked ¼ S 11 B T.
	A balsam, 7 ins. dia., bears N.34° 45'W., 65 lks. dist., marked ¼ S 2 B T.
43.85	Leave timber, undergrowth, medium, brs. NW. and S.
48.85	Enter dense growth of timber and scattering undergrowth, brs, N. and S.
67.35	Leave timber; undergrowth, medium, brs. NE. and SW.
76.60	Enter dense growth of timber and scattering undergrowth, brs. N. and SE.

Chains	
79.86	The cor. of secs. 2,3,10 and 11. Land, mountainous; soil, gravel on surface with subsoil composed of loose rock and sandy loam of medium texture; timber, dense growth of aspen, spruce and balsam; scattering undergrowth of buck brush and grass. September 16, 1913.
	September 17, 1913: At 8^h 55^m a.m.l.m.t., I set off 37° 53'N., on the lat. arc; 2° 20'N., on the decl. arc; and determine a meridian with the solar at the cor. of secs. 2,3,10 and 11, heretofore described. Thence I run N.0° 01'W., on a random line bet. secs. 2 and 3.
40.00	Set temp. ¼ cor.
80.12	Intersect N. bdy. of the Tp., 30.1lks. E. of the cor. of secs. 2,3,34 and 35, heretofore described. Thence I run S.0° 14'E., on a true line bet. secs. 2 and 3. Over flat top of Griffin Mountain, through dense growth of aspen, spruce and balsam and scattering undergrowth of buck brush, wild rose and scattering grass.
40.12	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground for ¼ sec. cor., with brass cap marked S3¼ | S2. 1913 from which An aspen, 6 ins. dia., bears N.39° 30'E., 25 lks. dist., marked ¼ S 2 B T. A spruce, 7 ins. dia., bears N.70°W., 34 lks. dist., marked ¼ S 3 B T.
	September 17: At this cor. I set off 2° 17'N., on the decl. arc; and at 11^h 55^m l.mt., observe the sun on the meridian; the resulting latitude is 37° 53'.
80.12	The cor. of secs. 2,3,10 and 11. Land, mountainous; soil, gravel on surface with subsoil composed of loose rock and sandy loam of medium texture; timber, dense growth of aspen, spruce and balsam; undergrowth, scattering buck brush and grass.

Chains	
	September 17, 1913.
	September 9, 1913: At 8h 27m a.m.l.m.t., I set off 37° 49'N., on the lat. arc; 5° 24½'N., on the decl. arc; and determine a meridian with the solar at the cor. of secs. 27,28,33 and 34.
	Thence I. run
	N.0° 02'W., bet. secs. 27 and 28.
	Over mountainous land, through dense growth of spruce, balsam, yellow pine and aspen and medium undergrowth of laurel, buck brush and scattering grass.
	Descend.
29.00	Ravine, 375 ft. below sec. cor., drs. NW.
	Ascend.
37.00	Top of spur, 80 ft. above ravine, projects 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 S28¼ | S27 1913 from which A balsam, 7 ins. dia., bears N.47°E., 50 lks. dist., marked ¼ S 27 B T. A spruce, 8 ins. dia., bears S.25°W., 17 lks. dist., marked ¼ S 28 B T.
	55 ft. below top of spur.
62.80	Sweetwater canyon, 405 ft. below ¼ cor., drs. N.70°W.
	Ascend.
64.90	Telephone line, Winder to Escalante, brs. N.80°W. and S. 80°E.
68.00	Wagon road, 45 ft. above Sweetwater Canyon, Winder to Escalante, brs. E. and W.
75.00	Top of spur, 100 ft. above wagon road, projects SW.
	Descend.
80.00	Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground for cor. of secs. 21,22,27 and 28, with brass cap marked T34S R1W S21 | S22 S28 | S27 1913 from which

Chains	
	A yellow pine, 12 ins. dia., bears N.41° 25'E., 14 lks. dist., marked T 34 S R 1 W S 22 B T.
	A spruce, 14 ins. dia., bears S.28° 45'E., 14 lks. dist., marked T 34 S R 1 W S 27 B T.
	A yellow pine, 9 ins. dia., bears S.37° 40'W., 51 lks. dist., marked T 34 S R 1 W S 28 B T.
	A yellow pine, 10 ins. dia., bears N.64° 40'W., 52 lks. dist., marked T 34 S R 1 W S 21 B T.
	15 ft. below top of spur.
	Land, mountainous; soil, stony on surface 2 to 3 ins. deep with subsoil composed of coarse gravel and sandy loam of medium texture; timber, dense growth of yellow pine, spruce, balsam and aspen; medium undergrowth of laurel, buck brush and scattering grass.
	September 9: At this cor. I set off 5° 21'N., on the decl. arc; and at 11h 57m l.m.t., observe the sun on the meridian; the resulting latitude is 37° 50'.
	East, on a random line bet. secs. 22 and 27.
40.00	Set temp. ¼ cor.
80.04	Intersect N. and S. line, 28 lks. N. of cor. of secs. 22,23,26 and 27.
	Thence I run
	N.89° 48'W., on a true line bet. secs. 22 and 27.
	Over mountainous land, through dense growth of yellow pine, spruce, balsam and aspen and medium undergrowth of laurel, buck brush and scattering grass.
	Ascend.
9.30	Wagon road, Winder to Escalante, brs. NE. and SW.
22.05	Top of divide, 430 ft. above sec. cor., brs. N. and S.
	Descend.
28.30	Ravine, 130 ft. below top of divide, drs. S.
	Ascend.
33.05	Top of spur, 40 ft. above ravine, projects S.
	Descend.
40.02	Set an iron post, 3 ft. long, 1 in. im dia., 26 ins. in the ground for ¼ sec. cor., with brass cap marked

Chains	
	S22 / ¼ / S27 / 1913 from which
	A balsam, 10 ins. dia., bears S.42°E., 56 lks. dist., marked ¼ S 27 B T.
	A yellow pine, 30 ins. dia., bears N.20°W., 76 lks. dist., marked ¼ S 22 B T.
	Cor. stands on W. slope of spur, 65 ft. below the top.
80.04	The cor. of secs. 21,22,27 and 28.
	505 ft. below ¼ cor.
	Land, mountainous; soil, stony on surface 2 to 3 ins. deep with subsoil composed of coarse gravel and sandy loam of medium texture; timber, dense growth of yellow pine, spruce, balsam and aspen; medium undergrowth of laurel, buck brush and scattering grass.
	September 9, 1913.

	September 10, 1913: At 8^h 27^m a.m.l.m.t., I set off 37° 50'N., on the lat. arc; 5° 01½'N., on the decl. arc; and determine a meridian with the solar at the cor. of secs. 21,22,27 and 28.
	Thence I run
	N.0° 02'W., bet. secs. 21 and 22.
	Over mountainous land, through dense growth of yellow pine, balsam, spruce and aspen and medium undergrowth of laurel, buck brush and scattering grass.
	Ascend.
38.25	S. rim of table mountain, 900 ft. above sec. cor., brs. E. and W.
	Continue N., along level top of mountain.
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
	S21¼ | S22 / 1913 from which
	An aspen, 8 ins. dia., bears N.60°E., 6 lks. dist., marked ¼ S 22 B T.
	An aspen, 6 ins. dia., bears N.68°W., 13 lks. dist., marked ¼ S 21 B T.

Chains	
73.00	N. rim of table mountain, brs. E. and W.
	Descend into Horse Creek canyon.
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

T34S R1W

S16	S15
S21	S22

1913

from which

A balsam, 6 ins. dia., bears N.56°E., 54 lks. dist., marked T 34 S R 1 W S 15 B T.

A balsam, 5 ins. dia., bears S.3° 45'E., 31 lks. dist., marked T 34 S R 1 W S 22 B T.

A balsam, 6 ins. dia., bears S.77° 10'W., 31 lks. dist., marked T 34 S R 1 W S 21 B T.

A balsam, 6 ins. dia., bears N.17° 15'W., 81 lks. dist. marked T 34 S R 1 W S 16 B T.

190 ft. below top of rim of mountain.

Land, mountainous; soil, gravel on surface 2 to 3 ins. deep with subsoil composed of coarse gravel and sandy loam of medium texture; timber, dense growth of yellow pine, balsam, spruce and aspen; medium undergrowth of laurel, buck brush and scattering grass.

September 10: At this cor. I set off 4° 58'N., on the decl. arc; and at 11^h 57^m l.m.t., observe the sun on the meridian; the resulting latitude is 37° 51'.

S.89° 48'E., on a random line bet. secs. 15 and 22.

40.00	Set temp. $\frac{1}{4}$ cor.
79.91	Intersect N. and S. line, at the cor. of secs. 14,15,22 and 23,

Thence I run

N.89° 48'W., on a true line bet. secs. 15 and 22.

Over mountainous land, through dense growth of aspen, balsam, spruce and yellow pine and medium undergrowth of buck brush, laurel, oak and scattering grass.

Ascend.

4.90	Foot of ledges, brs. N. and S.

Chains	
7.90	Top of ledges, brs. N. and S.
9.10	Top of divide, 485 ft. above sec. cor., brs. N. and S.
	Descend.
25.00	Horse Creek (dry), 305 ft. below top of divide, 10 lks. wide, 6 ins. deep, drs. SW.
	Ascend.
28.95	Top of spur, 50 ft. above Horse Creek, projects S.
	Descend.
39.95½	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground for ¼ sec. cor., with brass cap marked
	S15 / ¼ / S22 / 1913 from which
	A spruce, 12 ins. dia., bears S.7°E., 40 lks. dist., marked ¼ S 22 B T.
	A spruce, 30 ins. dia., bears N.18°W., 52 lks. dist., marked ¼ S 15 B T.
	155 ft. below top of spur.
53.10	Horse Creek, 205 ft. below ¼ cor., running water, 1 lk. wide, 1 in. deep, drs. N.60°W.
	Ascend.
79.91	The cor. of secs. 15,16,21 and 22.
	260 ft. above Horse Creek.
	Land, mountainous; soil, gravel on surface 2 to 3 ins. deep with subsoil composed of coarse gravel and sandy loam of medium texture; timber, dense growth of yellow pine, balsam, spruce and aspen; medium undergrowth of laurel, buck brush and scattering grass.
	September 10, 1913.

September 18, 1913: At 8^h 24^m a.m.l.m.t., I set off 37° 51'N., on the decl. arc; 1° 58'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 mountainous land, through dense growth of aspen,

Chains	
	spruce, balsam and scattering yellow pine and scattering undergrowth of buck brush, oak and grass.
	Descend.
8.00	Spring, 1 lk. wide, 1 in. deep, drs. NE.
27.30	Horse Creek, 510 ft. below sec. cor., running water, 2 lks. wide, 1 in. deep, drs. N.70°W.
	Ascend.
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 S16¼ | S15 1913 from which
	A yellow pine, 24 ins. dia., bears S.45° 30'E., 51 lks. dist., marked ¼ S 15 B T.
	A yellow pine, 20 ins. dia., bears N.86°W., 63 lks. dist., marked ¼ S 16 B T.
	90 ft. above Horse Creek.
44.50	Timber becomes scattering, brs. E. and W.
69.00	Top of spur, 315 ft. above ¼ cor., projects W.
	Descend.
77.10	Creek, 190 ft. below top of spur, running water, 3 lks. wide, 3 ins. deep, drs. 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 T34S R1W S9 | S10 S16 | S15 1913 from which
	An aspen, 7 ins. dia., bears N.36° 45'E., 1.55 chs. dist., marked T 34 S R 1 W S 10 B T.
	A yellow pine, 26 ins. dia., bears S.18° 15'E., 1.42 chs. dist., marked T 34 S R 1 W S 15 B T.
	A yellow pine, 24 ins. dia., bears S.9° 15'W., 81 lks. dist., marked T 34 S R 1 W S 16 B T.
	An aspen, 8 ins. dia., bears N.50° 35'W., 71 lks. dist., marked T 34 S R 1 W S 9 B T.
	35 ft. above creek.

Chains	
	Land, mountainous; soil, gravel on surface 2 to 3 ins. deep with subsoil composed of coarse gravel and damp stiff clay; timber, scattering growth of aspen, yellow pine, spruce and balsam; scattering undergrowth of buck brush, oak and grass.
	September 18: At this cor., I set off 1° 54'N., on the decl. arc; and at $11^h 54^m$ l.m.t., observe the sun on the meridian; the resulting latitude is 37° 52'.
	S.89° 48'E., on a random line bet. secs. 10 and 15.
40.00	Set temp. ¼ cor.
80.10	Intersect N. and S. line, 16 lks. S. of cor. of secs. 10,11,14 and 15.
	Thence I run
	N.89° 55'W., on a true line bet. secs. 10 and 15.
	Over mountainous land, through scattering growth of aspen, spruce, balsam and yellow pine and scattering undergrowth of buck brush, oak and grass.
	Descend over ledges.
1.10	Foot of ledges, 50 ft. below sec. cor., brs. N. and S.
24.10	Small round lake, 3 chs. in dia., brs. N. 2 chs. dist.
40.05	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground for ¼ sec. cor., with brass cap marked S10 / ¼ / S15 1913 from which An aspen, 7 ins. dia., bears S.62°W., 26 lks. dist. marked ¼ S 15 B T. An aspen, 8 ins. dia., bears N.20°W., 28 lks. dist. marked ¼ S 10 B T.
	440 ft. below foot of ledges.
59.20	Creek, 400 ft. below ¼ cor., running water, 3 lks. wide, 2 ins. deep, drs. SW.
	Continue on descent along SW. slope of Griffin Mountain.
80.10	The cor. of secs. 9,10,15 and 16.
	430 ft. below creek.
	Land, mountainous; soil, gravel on surface 2 to 3 ins.

Chains	
	deep with subsoil composed of coarse gravel and damp stiff clay; timber, scattering growth of aspen, yellow pine, spruce and balsam; scattering undergrowth of buck brush, oak and grass.
	September 18, 1913.
	September 19, 1913: At 8^h 54^m a.m.l.m.t., I set off 37° 52'N., on the latitude arc; 1° 34'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 mountainous land, through scattering growth of aspen, yellow pine, spruce and balsam and scattering undergrowth of buck brush, wild rose, oak and grass.
	Ascend.
22.90	Top of spur, 300 ft. above sec. cor., projects SW.
	Descend.
27.00	Ravine, 110 ft. below top of spur, drs. SW.
	Ascend.
37.00	Perpendicular lime stone ledge, 75 ft. high, projects W.
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 S9¼ | S10 1913 from which
	A spruce, 24 ins. dia., bears S.50°E., 71 lks. dist., marked ¼ S 10 B T.
	A spruce, 20 ins. dia., bears N.18°W., 44 lks. dist., marked ¼ S 9 B T.
	400 ft. above ravine.
	September 19: At this cor. I set off 1° 31'N., on the decl. arc; and at 11^h 54^m l.m.t., observe the sun on the meridian; the resulting latitude is 37° 52'.
41.50	Enter lava bed, brs. E. and W.
58.50	Leave lava bed, brs. E. and W.
70.00	Top of spur, 225 ft. above ¼ cor., projects W.
	Descend.

Chains

80.00 Set an iron post, 3 ft. long, 2 ins. dia., 24 ins. in the ground for cor. of secs. 3,4,9 and 10, with brass cap marked

T34S R1W
S4 | S3
S9 | S10
1913

from which

A spruce, 12 ins. dia., bears N.82°E., 35 lks. dist., marked T 34 S R 1 W S 3 B T.

A spruce, 8 ins. dia., bears S.32° 30'E., 18 lks. dist., marked T 34 S R 1 W S 10 B T.

A spruce,9 ins. dia., bears S.20°W., 21 lks. dist., marked T 34 S R 1 W S 9 B T.

A balsam, 14 ins. dia., bears N.22° 30'W., 17 lks. dist., marked T 34 S R 1 W S 4 B T.

300 ft. below top of spur.

Land, mountainous; soil, stony on surface 2 to 3 ins. deep with subsoil composed of coarse gravel and sandy loam of medium texture; timber, scattering growth of aspen, yellow pine, spruce and balsam; scattering undergrowth of buck brush, wild rose, oak and grass.

September 19, 1913.

Edward P. Bamburg

U. S. Transitman.

September 20, 1913: At 8^h 24^m a.m.l.m.t., I set off 37° 53'N., on the lat. arc; 1° 11'N., on the decl. arc; and determine a meridian with the solar at the cor. of secs. 3,4,9 and 10.

Thence I run

S.89° 55'E., on a random line bet. secs. 3 and 10.

40.00 Set temp. ¼ cor.

79.86 Intersect N. and S. line, 12 lks. N. of cor. of secs. 2, 3,10 and 11.

Thence I run

N.89° 50'W., on a true line bet. secs. 3 and 10.

Over mountainous land, through dense growth of aspen,

Chains	
	spruce, balsam and scattering yellow pine and scattering undergrowth of buck brush and grass.
	Along level top of Griffin Mountain.
35.00	Timber becomes scattering, brs. N. and S.
39.93	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground for $\frac{1}{4}$ sec. cor., with brass cap marked S3 $\frac{1}{4}$ S10 1913 No bearing trees available therefore erect a mound of stone, 3 ft. base, 2 ft. high, N. of cor.
74.00	Leave top of Griffin Mountain, brs. NE. and S.
	Descend.
79.86	The cor. of secs. 3,4,9 and 10.
	Land, mountainous; soil, stony on surface 2 to 3 ins. deep with subsoil composed of coarse gravel and sandy loam of medium texture; timber, scattering growth aspen, yellow pine, spruce and balsam; scattering undergrowth of buck brush, wild rose, oak and grass.
	September 20: At this cor., I set off 1° 07'N., on the decl. arc; and at $11^h 54^m$ l.m.t., observe the sun on the meridian; the resulting latitude is 37° 53'.

	N.0° 02'W., on a random line bet. secs. 3 and 4.
40.00	Set temp. $\frac{1}{4}$ cor.
79.90	Intersect N. bdy. of the Tp., 17 lks. E. of the cor. of secs. 3,4,33 and 34, heretofore described.
	Thence I run
	S.0° 09'E., on a true line bet. secs. 3 and 4.
	Over mountainous land, through scattering growth of aspen, yellow pine, spruce and balsam and scattering undergrowth of buck brush, wild rose, oak and grass.
	Ascend.
4.00	Top of round bare knoll, 50 ft. high.
20.00	Bottom of draw, 140 ft. deep, drs. W.
	Ascend.
26.00	Top of ridge, 40 ft. high, brs. E. and W.

Chains	
	Descend.
39.90	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground for ¼ sec. cor., with brass cap marked S4½ | S3 1913 No bearing trees available, therefore erect a mound of stone, 3 ft. base, 2 ft. high, W, of cor. Cor. stands on S. slope of ridge, 80 ft. below top of ridge.
43.50	Spring, 30 ft. below ¼ cor., 2 lks. wide, 1 in. deep, drs. W.
	Ascend.
52.00	Top of spur, 200 ft. high, projects NE.
	Descend.
69.50	Creek, 150 ft. deep, running water, 5 lks. wide, 2 ins. deep, drs. NW.
	Ascend.
79.90	The cor. of secs. 3,4,9 and 10. Land, mountainous; soil, stony on surface 2 to 3 ins. deep with subsoil composed of coarse gravel and sandy loam of medium texture; timber, scattering growth of aspen, yellow pine, spruce and balsam; scattering undergrowth of buck brush, wild rose, oak and grass.
	September 20, 1913.

September 22, 1913: At 8^h 23^m a.m.l.m.t., I set off 37° 49'N., on the lat. arc; 0° 25'N., on the decl. arc; and determine a meridian with the solar at the cor. of secs, 28,29,32 and 33.

Thence I run

N.0° 03'W., bet. secs. 28 and 29.

Over mountainous land, through dense growth of spruce, balsam, aspen and yellow pine and scattering undergrowth of buck brush and grass.

Descend.

39.20 Head of spring, 120 ft. below sec. cor., drs. W.

Continue N., over low rolling hills.

Chains	
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 S29½ | S28 1913 from which A spruce, 2½ ft. dia., bears S.53°E., 43 lks. dist., marked ¼ S 28 B T. A spruce, 2½ ft. dia., bears S.51°W., 22 lks. dist., marked ¼ S 29 B T.
46.60	Rail fence, brs. N.85°W. and S.85°E.
51.00	Small stream, 2 lks. wide, 1 in. deep, drs. W.
54.00	Sweetwater Creek, 6 lks. wide, 2 ins. deep, drs. W.
55.00	Telephone line, Winder to Escalante, brs. E. and W.
56.60	Rail fence, brs. NE. and SW. From this point, Forestry Station, brs. E., 12 chs. dist.
59.70	Wagon road, Winder to Escalante, brs. NE. and SW.
80.00	Set an iron post, 3 ft. long, 1 in. in dia., 24 ins. in the ground for cor. of secs. 20,21,28 and 29, with brass cap marked T34S R1W S20 | S21 S29 | S28 1913 from which A pine, 14 ins. dia., bears N.33° 30'E., 56 lks. dist., marked T 34 S R 1 W S 21 B T. A pine, 24 ins. dia., bears S.10°E., 41 lks. dist., marked T 34 S R 1 W S 28 B T. A spruce, 8 ins. dia., bears S.15°W., 67 lks. dist., marked T 34 S R 1 W S 29 B T. A pine, 9 ins. dia., bears N.81° 30'W., 34 lks. dist., marked T 34 S R 1 W S 20 B T.

Land, low rolling hills; soil, stony on surface 2 to 3 ins. deep, with subsoil composed of gravel and sandy loam of medium texture; timber, dense growth of spruce, balsam, aspen, and yellow pine; medium undergrowth of buck brush and scattering grass.

September 22: Sky overcast at noon so unable to observe the sun for latitude.

Rain in p.m. prevented further work this day.

Chains	
	Sept. 23, 1913:
	At 8h 23m a.m.l.m.t., I set off 37° 50'N., on the lat. arc; 0° 01'N., on the decl. arc; and determine a meridian with the solar at the cor. of secs. 20,21,28 and 29.
	Thence I run
	East, on a random line bet. secs. 21 and 28.
40.00	Set temp. ¼ cor.
79.96	Intersect N. and S. line 23 lks. S. of cor. of secs. 21, 22,27 and 28.
	Thence I run
	S.89° 50'W., on a true line bet. secs. 21 and 28.
	Over low rolling hills along the S. slope of mountain, through dense growth of yellow pine, spruce, balsam and aspen and medium undergrowth of laurel, buck brush and scattering grass.
	Descend.
5.00	Draw, 55 ft. below sec. cor., drs. SW.
	Ascend.
8.00	Top of spur, 75 ft. above draw, projects SW.
	Descend.
14.10	Draw, 100 ft. below top of spur, drs. S.
	Ascend.
19.00	Top of spur, 105 ft. above draw, projects S.
	Descend.
27.60	Ravine, 115 ft. below top of spur, drs. S.
	Ascend.
32.50	Top of spur, 95 ft. above ravine, projects S.
	Descend.
38.30	Dry wash, 115 ft. below top of spur, 20 lks. wide, 1 ft. deep, drs. S.10°W.
	Ascend.
39.92	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground for ¼ sec. cor., with brass cap marked

$$\frac{S21}{\frac{1}{4}}$$

$$\frac{S28}{1913}$$

from which

A pine, 14 ins. dia., bears N.49°E., 22 lks. dist., marked ¼ S 21 B T.

A pine, 12 ins. dia., bears S.27°E., 33 lks. dist.,

Chains	
	marked ¼ S 28 B T.
	30 ft. above wash.
	September 23: At this cor., I set off 0° 03'S., on the decl. arc; and at 11^{h} 53^{m} l.m.t., observe the sun on the meridian; the resulting latitude is 37° 50'.
45.50	Top of spur, 105 ft. above ¼ cor., projects S.
	Descend.
50.00	Dry wash, 120 ft. below top of spur, 6 lks. wide, 1 ft. deep, drs. S.
	Ascend gently.
58.00	Point of steep ascent, 215 ft. above wash, brs. N. and S.
67.00	Top of spur, 180 ft. above point of steep ascent, projects S.
	Descend.
71.50	Dry wash, 10 lks. wide, 1 ft. deep, drs. SW.
	90 ft. below top of spur.
	Ascend.
76.00	Top of spur, 90 ft. above dry wash, projects S.
	Descend.
77.10	Ravine, 25 ft. below top of spur, drs. S.
	Ascend.
79.00	Top of ascent, 30 ft. above ravine, brs. N. and S.
	Continue W. on a level line.
79.96	The cor. of secs. 20,21,28 and 29.
	Land, low rolling hills; soil, stony on surface 2 to 3 ins. deep, with subsoil composed of gravel and sandy loam of medium texture; timber, dense growth of spruce, balsam, aspen and yellow pine; medium undergrowth of buck brush and scattering grass.

	N.0° 03'W., bet. secs. 20 and 21.
	Over mountainous land, through dense growth of spruce, balsam, aspen and yellow pine and medium undergrowth of buck brush and grass.
	Ascend gradually.
22.00	Abrupt descent into canyon, brs. E. and W.
33.50	Bottom of ravine, 235 ft. deep, drs. SW.
	Ascend.

Chains	
35.00	A natural bridge, 25 ft. long, 4 ft. wide, 50 ft. high, brs. W. 1 ch. dist.
40.00	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground dor ¼ sec. cor., with brass cap marked S20½ | S21 1913 from which A pine, 12 ins. dia., bears N.62° 30'E., 17 lks. dist., marked ¼ S 21 B T. A pine, 12 ins. dia., bears S.45°W., 18 lks. dist., marked ¼ S 20 B T.
	September 23, 1913.
	September 24, 1913: At 8^h 22^m a.m.l.m.t., I set off 37° 51'N., on the lat. arc; 0° 22'S., on the decl. arc; and determine a meridian with the solar at the ¼ cor. of secs. 20 and 21. Thence I continue N.0° 03'W., bet. secs. 20 and 21.
59.85	Top of ridge, 400 ft. high, brs. E. and W. Descend.
69.00	Ravine, 220 ft. below top of ridge, drs. NW. Ascend.
72.00	Top of spur, 25 ft. above top of ravine spur, projects W. Descend.
79.00	Ravine, 55 ft. deep, drs. NW. Ascend.
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 T34S | R1W S17 | S16 S20 | S21 1913 from which A cross mark on sandstone ledges, bears N.46° 30'E., 95 lks. dist. as a witness mark in sec. 16. incorrect mark A pine, 9 ins. dia., bears S.62° 30'E., 1.14 chs. dist., marked T 34 S R 1 W S 21 B T. A pine, 8 ins. dia., bears S.77°W., 91 lks. dist., marked T 34 S R 1 W S 20 B T.

Chains	
	A pine, 12 ins. dia., bears N.19° 30'W., 14 lks. dist., marked T 34 S R 1 W S 17 B.T.
	5 ft. above ravine.
	Land, mountainous; soil, stony on surface 2 to 3 ins. deep with subsoil composed of loose rock and sandy loam of medium texture; timber, dense growth of spruce, balsam, aspen and yellow pine; medium undergrowth of buck brush and scattering grass.

	N.89° 50'E., on a random line bet. secs. 16 and 21.
40.00	Set temp. ¼ cor.
79.96	Intersect N. and S. line, 26 lks. N. of cor. of secs. 15, 16, 21 and 22.
	September 24: At this cor., I set off 0° 26'S., on the decl. arc; and at 11^h 52^m l.m.t., observe the sun on the meridian; the resulting latitude is 37° 51'.
	Thence I run
	N.89° 59'W., on a true line bet. secs. 16 and 21.
	Over mountainous land, through dense growth of spruce, balsam, aspen and yellow pine and medium undergrowth of buck brush and scattering grass.
	Ascend.
7.25	Top of ridge, 180 ft. above sec, cor., brs. N.15°E. and S.15°W.
.05	Descend.
21.05	Small stream, 5 lks. wide, 1 in. deep, 365 ft. below top of ridge, drs, NW.
	Descend.
33.50	Open swale, 195 ft. below stream, 2 chs. wide, 1 ft. deep, drs. NE.
	Ascend.
39.98	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground for ¼ sec. cor., with brass cap marked
	$\frac{S16}{\frac{1}{4}}$ / $\frac{S21}{1913}$ from which
	A pine, 8 ins. dia., bears S.30°E., 29 lks. dist., marked ¼ S 21 B T.

Chains	
	A spruce, 24 ins. dia., bears N.64°W., 16 lks. dist., marked ¼ S 16 B.T.
	60 ft. above swale.
57.00	Top of steep ascent, 545 ft. above ¼ cor., brs. N. and S.
	Ascend E. face of ridge.
62.00	Top of ridge, 160 ft. above top of steep ascent, brs. N. and S.
	Descend over limestone ledges.
63.40	Perpendicular limestone bluff, 75 ft. high, brs. N. and S.
78.80	Ravine, 555 ft. below top of ridge, brs. SW.
	Ascend.
79.96	The cor. of secs. 16, 17, 20 and 21.
	25 ft. above ravine.

Land, mountainous; soil, stony on surface 2 to 3 ins. deep with subsoil composed of loose rock and sandy loam of medium texture; timber, dense growth of spruce, balsam, aspen and yellow pine; medium undergrowth of buck brush and scattering grass.

September 24, 1913.

October 1, 1913: At $8^h\ 20^m$ a.m.l.m.t., I set off 37° 51' N. on the lat. arc; 3° 06' S., 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 mountainous land through dense growth of spruce, balsam, aspen and yellow pine; and medium undergrowth of buck brush and scattering grass.

	Ascend.
5.00	Top of spur, 70 ft. above sec. cor., projects SW.
	Descend.
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

S17¼ | S16

1913

ffom which

Chains	
	A balsam, 10 ins. dia., bears S.9° 30'E., 37 lks. dist., marked ¼ S 16 B T.
	A pine, 30 ins. dia., bears S.78° 30'W., 11 lks. dist., marked ¼ S 17 B T.
45.75	Bottom of draw, 50 lks. wide, 120 ft. below top of spur, drs. NW.
	Ascend.
53.00	Top of ridge, 45 ft. above draw, brs. E. and W.
	Descend.
80.00	Set an iron post, 3 ft. long, 1 in. in dia., 24 ins. in the ground for cor. of secs. 8,9,16 and 17, with brass cap marked

T34S R1W
S8 | S9
S17 | S16
19 13

from which

An aspen, 4 ins. dia., bears N.17° 30'E., 11 lks. dist., marked T 34 S R 1 W S 9 B T.

An aspen, 12 ins. dia., bears S.41°E., 25 lks. dist., marked T34 S R 1 W S 16 B T.

A balsam, 10 ins. dia., bears S.59°W., 37 lks. dist., marked T 34 S R 1 W S 17 B T.

An aspen, 5 ins. dia., bears N.69°W., 24 lks. dist., marked T 34 S.R 1 W S 8 B T.

110 ft. below top of ridge.

Land, mountainous; soil, stony on surface 3 to 4 ins. deep with subsoil composed of loose rock and sandy loam of medium texture; timber, dense growth of spruce, balsam, aspen and yellow pine; medium undergrowth of buck brush, oak and scattering grass.

October 1, 1913: At this cor. I set off 3° 10'S., on the decl. arc; and at $11^h\ 50^m$ l.m.t., observe the sun on the meridian; the resulting latitude is 37° 52'.

	S.89° 59'E., on a random line bet. secs. 9 and 16.
40.00	Set temp. ¼ cor.
79.96	Intersect N. and S. line 19 lks. S. of the cor. of secs.

Chains	
	9,10,15 and 16.
	Thence I run
	S.89° 53'W., on a true line bet. secs. 9 and 16.
	Over mountainous land through scattering growth of aspen, yellow pine, spruce and balsam and scattering undergrowth of buck brush, oak and grass.
	Descend.
20.00	Draw, 2 chs. wide, 50 ft. deep, drs. SW.
	Continue , on a near level line along the bottom of the N. slope of Horse Creek canyon.
39.98	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground for $\frac{1}{4}$ sec. cor., with brass cap marked S9 $\frac{1}{4}$ S16 1913 from which A pine, 14 ins. dia., bears N.47°E., 58 lks. dist., marked $\frac{1}{4}$ S 9 B T. A cedar, 10 ins. dia., bears S.25°W., 38 lks. dist., marked $\frac{1}{4}$ S 16 B T.
55.00	Leave timber; undergrowth becomes dense, brs. NW. and SE.
67.50	Horse Creek, 6 lks. wide, 3 ins. deep, drs. NW.
	Ascend NE. slope of spur.
68.00	Enter timber and scattering undergrowth, brs. NW. and SE.
79.96	The cor. of secs. 8,9,16 and 17.
	Land, mountainous; soil, stony on surface 3 to 4 ins. deep with subsoil composed of loose rock and sandy loam of medium texture; timber, dense growth of spruce, balsam, aspen and yellow pine; medium undergrowth of buck brush, oak and scattering grass.
	October 1, 1913.
	October 2, 1913: At 8^h 20^m a.m. l.m.t., I set off 37°52' N. on the lat. arc; 3° 29'S., on the decl. arc; and determine a meridian with the solar at the cor. of secs. 8, 9,16 and 17.
	Thence I run

Chains	
	N.0° 03'W. bet. secs. 8 and 9.
	Over mountainous land through dense growth of spruce, balsam, aspen and yellow pine and medium undergrowth of buck brush, oak and scattering grass.
	Descend.
2.00	Leave growth of dense timber; enter dense undergrowth, brs. E. and W.
4.35	Horse Creek, 10. lks. wide, 3 ins. deep, drs. W.
	30 ft. below sec. cor.
	Ascend gently over series of broken foot hills.
5.90	Old wagon road, brs. E. and W.
	Enter dense growth of timber and scattering undergrowth, brs. E. and W.
40.00	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground for $\frac{1}{4}$ sec. cor., with brass cap marked S8$\frac{1}{4}$ | S9 1913 from which
	A pine, 12 ins. dia., bears N.44°E., 91 lks. dist., marked $\frac{1}{4}$ S 9 B T.
	A pine, 12 ins. dia., bears N.60°W., 75 lks. dist., marked $\frac{1}{4}$ S 8 B T.
69.15	NE. fork of Horse Creek (dry), drs. SW.
	Ascend SE. slope of ridge.
80.00	Set an iron post, 3 ft. long, 1 in. in dia., 24 ins. in the ground for cor. of secs. 4,5,8 and 9 with brass cap marked T34S | R1W S5 | S4 S8 | S9 1913 from which
	A pine, 12 ins. dia., bears N.36°E., 1.15 chs. dist., marked T 34 S R 1 W S 4 B T.
	A pine, 12 ins. dia., bears S.47°E., 50 lks. dist., marked T 34 S R 1 W S 9 B T.
	A pine, 14 ins. dia., bears S.38° 30'W., 14 lks. dist., marked T 34 S R 1 W S 8 B T.
	A pine, 14 ins. dia., bears N.59°W., 61 lks. dist., marked T 34 S R 1 W S 5 B T.

Chains	
	120 ft. above NE. fork of Horse Creek.
	Land, mountainous; soil, stony on surface 3 to 4 ins. deep with subsoil composed of loose rock and sandy loam of medium texture; timber, dense growth of spruce, balsam, aspen and yellow pine; scattering undergrowth of buck brush, oak and scattering grass.
	October 2: Sky overcast at noon therefore unable to observe the sun for latitude.
	N.89° 53'E., on a random line bet. secs. 4 and 9.
40.00	Set temp. $\frac{1}{4}$ cor.
80.08	Intersect N. and S. line 40 lks. N. of the cor. of secs. 3,4,9 and 10.
	Thence I run
	N.89° 50'W., on a true line bet. secs, 4 and 9.
	Over mountainous land through scattering timber and undergrowth.
	Descend NW. slope of mountain.
40.04	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground for $\frac{1}{4}$ sec. cor., with brass cap marked

S4
$\frac{1}{4}$
S9
$_1$913 from which

A pine, 14 ins. dia., bears N.15° 30'E., 33 lks. dist., marked $\frac{1}{4}$ S 4 B T.

A balsam, 6 ins. dia., bears S.6°E., 17 lks. dist., marked $\frac{1}{4}$ S 9 B T.

Continue descent through dense growth of timber and scattering undergrowth, brs. N. and S.

October 2, 1913.

October 3, 1913: At 8^h 19^m a.m. l.m.t., I set off 37° 53' N., on the lat. arc; 3° 52'S., on the decl. arc; and determine a meridian with the solar at the $\frac{1}{4}$ cor. for secs. for 4 and 9.

Thence I continue

N.89° 50'W., on a true line bet. secs. 4 and 9.

Chains	
45.00	Draw, 320 ft. below sec, cor., drs. N.
	Ascend.
46.50	Top of spur, 35 ft. high, projects NW.
	Descend.
60.00	NE. fork of Horse Creek (dry), drs. SW.
	90 ft. below top of spur.
	Ascend.
80.08	The cor. of secs. 4,5,8 and 9.
	185 ft. above Horse Creek.
	Land, mountainous; soil, stony on surface 3 to 4 ins. deep with subsoil composed of loose rock and sandy loam of medium texture; timber, dense growth of spruce, balsam, aspen and yellow pine; scattering undergrowth of buck brush, oak and grass.

N0° 03'W., on a random line bet. secs, 4 and 5.

40.00	Set temp. $\frac{1}{4}$ cor.
80.05	Intersect the N. bdy. of the Tp.16 lks. E. of the cor. of secs. 4,5,32 and 33 heretofore described.

Thence I run

S.0° 10'E., on a true line bet. secs. 4 and 5.

Over mountainous land through scattering timber and medium undergrowth.

From corner, across flat to

9.05	Birch Creek, 5 lks. wide, 2 ins. deep, drs. W.
	Ascend limestone ledges along N. slope of ridge.
32.55	Top of limestone ledge, 125 ft. above creek, brs. N30°E. and S.30°W.
	Descend.
40.05	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground for $\frac{1}{4}$ sec. cor., with brass cap marked

S5¼ | S4

1913

No bearing trees available; erect a mound of stone, 3 ft. base, 2 ft. high, W. of cor.

40.60	Limestone ledge, 25 ft. high, brs. E. and W.

Chains	
68.00	Bottom of draw, 115 ft. below top of ridge, drs. SW.
	Ascend ridge through dense growth of timber and scattering undergrowth, brs. NE. and SW.
73.50	Top of ridge, 45 ft. above draw, brs. NE. and SW.
	Descend.
80.05	The cor. of secs. 4,5,8 and 9.
	70 ft. below top of ridge.
	Land, mountainous; soil, stony on surface 3 to 4 ins. deep with subsoil composed of loose rock and sandy loam of medium texture; timber, dense growth of spruce, balsam, aspen and yellow pine; scattering undergrowth of buck brush, oak and scattering grass.
	October 3: Sky overcast therefore unable to observe the sun for latitude.
	October 3, 1913.

September 25, 1913: At $8^h\ 22^m$ a.m. l.m.t., I set off 37° 49'N., on the lat. arc; 0° 45½'S., on the decl. arc; and determine a meridian with the solar at the cor. of secs. 29,30,31 and 32.

Thence I run

N.0° 03'W. bet. secs. 29 and 30.

Over mountainous land through scattering growth of yellow pine, spruce, balsam and cedars and medium undergrowth of buck brush, rabbit brush, oak , laurel and scattering grass.

Descend gently accross bottom of draw.

3.00	Dry wash in bottom of draw, 5 ft. below sec. cor., 5 lks. wide, 1 ft. deep, drs. S.40°W.
	Continue , over series of low rolling ridges bearing E. and W.
11.00	Head of draw, drs. S.40°W.
	Ascend.
19.00	Top of ridge, 25 ft. high, brs. E. and W.
	Descend.
21.50	Bottom of descent, brs. E. and W.
	Ascend.

Chains	
24.00	Top of ridge, 20 ft. high, brs. E. and W.
	Continue , on a near level line.
34.00	Begin descent of N. slope of ridge, brs. E. and W.
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 S30¼ | S29 / 1913 from which
	A pine, 6 ins. dia., bears N.40°E., 57 lks. dist., marked ¼ S 29 B T.
	A pine, 6 ins. dia., bears S.28°W., 17 lks. dist., marked ¼ S 30 B T.
	130 ft. below point of descent.
52.30	Foot of descent or N. slope of ridge, 270 ft. below ¼ cor., brs. E. and W.
	Continue , on a near level line, across Sweetwater Canyon.
55.50	Dry wash, 15 lks. wide, 1 ft. deep, drs. NW.
	Telephone line, Winder to Escalante, brs. E. and W.
58.50	Sweetwater Creek, 5 lks. wide, 2 ins. deep, drs. NW.
60.90	Wagon road, Winder to Escalante, brs. E. and W.
65.70	Begin ascent, brs. NW. and SE.
73.10	Top of small ridge, 185 ft. high, brs. NW. and SE.
	Descend.
77.00	Small gulch, 85 ft. below top of ridge, drs. W.
	Ascend.
80.00	Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground for cor. of secs. 19,20,29 and 30 with brass cap marked T34S | R1W / S19 | S20 / S30 | S29 / 1913 from which
	A pine, 14 ins. dia., bears N.3°E., 1.18 chs. dist., marked T 34 S R 1 W S 20 B T.
	A pine, 12 ins. dia., bears S.17°E., 1.40 chs. dist., marked T 34 S R 1 W S 29 B T.
	A pine, 36 ins. dia., bears S.7°W., 1.21 chs. dist., marked T 34 S R 1 W S 30 B T.

Chains	
	A pine, 30 ins. dia., bears N.23°W., 1.24 chs. dist., marked T 34 S R 1 W S 19 B T.
	30 ft. above gulch.
	From this cor. the NE. cor. of J. R. Campbell's homestead bears S.54° 03'W., 15.44 chs. dist.
	Land, mountainous; soil, stony on surface 2 to 3 ins. deep with subsoil composed of coarse gravel and sandy loam of medium texture; timber, scattering growth of yellow pine, spruce, balsam and cedars; medium undergrowth of buck brush, rabbit brush, oak, laurel and scattering grass.
	September 25: At this cor. I set off 0° 50'S., on the decl. arc; and at 11^h 52^m l.m.t., observe the sun on the meridian; the resulting latitude is 37° 50'.

	East on a random line bet. secs. 20 and 29.
40.00	Set temp. ¼ cor.
79.90	Intersect N. and S. line 3 lks. S. of the cor. of secs. 20,21,28 and 29.
	Thence I run
	S.89° 59'W., on a true line bet. secs, 20 and 29.
	Over mountainous land through dense growth of timber and medium undergrowth.
	Descend.
27.50	Draw, 75 ft. deep, drs. S.
	Ascend.
36.00	Top of ridge, 105 ft. high, brs. N. and S.
	Descend.
39.95	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground for ¼ sec. cor., with brass cap marked
	S20 / ¼ / S29 / 1913 from which
	A pine, 36 ins. dia., bears S.48°W., 91 lks. dist., marked ¼ S 29 B T.
	A pine, 12 ins. dia., bears N.1° 30'W., 82 lks. dist., marked ¼ S 20 B T.

Chains	
45.50	Draw, 85 ft. below top of ridge, drs. S.
	Ascend.
57.00	Top of spur, 120 ft. above draw, projects S.
	Descend.
63.11	Draw, 40 ft. below top of spur, drs. S.
	Ascend.
66.00	Top of spur, 30 ft. above draw, projects S.
	Descend.
	Timber becomes scattering, brs. N. and S.
74.00	Draw, 45 ft. below top of spur, drs. S.
	Ascend.
77.15	Top of spur, 25 ft. above draw, projects S.
	Ascend.
79.90	The cor. of secs. 19,20,29 and 30.
	10 ft. below top of spur.
	Land, mountainous; soil, stony on surface 2 to 3 ins. deep with subsoil composed of coarse gravel and sandy loam of medium texture; timber, scattering growth of yellow pine, spruce, balsam and cedars; medium undergrowth of buck brush, rabbit brush, oak, laurel and scattering grass.
	September 25, 1913.

September 26, 1913. At 8^h 21^m a.m.l.m.t., I set off 37° 50'N., on the lat. arc; 1° 09'S., on the decl. arc; and determine a meridian with the solar at the cor. of secs. 19,20,29 and 30.

Thence I run

West bet. secs. 19 and 30.

Over low rolling foot hills, through scattering timber and undergrowth.

10.00	Dry wash, 75 lks. wide, 1 ft. deep, drs. S.
	Ascend.
	Leave scattering growth of timber, brs. N. and S. Enter dense undergrowth.
20.00	Top of low spur, projects S.
	Descend.

Chains	
30.00	Dry wash, 50 lks. wide, 1 ft. deep, drs. SW.
	Ascend.
40.00	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground for $\frac{1}{4}$ sec. cor., with brass cap marked S19 $\frac{1}{4}$ S30 1913 and erect a mound of stone, 3 ft. base, 2 ft. high, N. of cor.
43.60	Top of low spur, projects S.
	Descend.
	Enter scattering growth of timber and medium undergrowth, brs. N. and S.
61.50	Draw, 50 lks. wide, drs. SW.
	Ascend.
71.70	Top of low spur, projects S.
	Descend.
74.12	Intersect W. bdy. of the Tp., 8.47 chs. N. of temp. cor. of secs. 24 and 25, set on Sept. 25 and permanently set on Oct. 1, at the same point heretofore described. Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground for C.C. of secs. 19 and 30 with brass cap marked T34S S19 cc S30 S24 S25 R2W R1W 1913 from which

A pine, 68ins. dia., bears N.78° 45'E., 2.18 chs. dist., marked T 34 S R 1 W S 19 B T.

A pinon pine, 8 ins. dia., bears S.88° 55'E., 2.65 chs. dist., marked T 34 S R 1 W S 30 B T.

Land, mountainous; soil, stony on surface with subsoil composed of red clay and sandy loam of medium texture; timber, scattering growth of cedars, yellow and pinon pine; medium undergrowth of rabbit brush and scattering grass.

Chains	
	September 26: At this cor. I set off 1° 13'S., on the decl. arc; and at 11h 51m l.m.t., observe the sun on the meridian; the resulting latitude is 37° 50'.
	T
	N. 0° 03'W., bet. secs. 19 and 20.
	Over mountainous land through scattering growth of timber and medium undergrowth.
	Ascend.
2.00	Top of small spur, 10 ft. above sec. cor., projects SW.
	Descend.
4.00	Dry wash, 20 lks. wide, 1 ft. deep, drs. SW.
	Ascend.
	Enter dense growth of timber and scattering undergrowth, brs. NE.and SW.
32.00	Top of spur, 260 ft. above wash, projects SE.
	Descend.
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 S19¼ | S20 1913 from which A pine, 9 ins. dia., bears S.54°E., 58 lks. dist., marked ¼ S 20 B T. A pine, 8 ins. dia., bears N.78°W., 42 lks. dist., marked ¼ S 19 B T. 20 ft. below top of spur.
49.00	Bottom of draw, 30 ft. below ¼ cor., drs. W.
	Ascend rocky slope of ridge.
61.90	Top of ridge, 415 ft. above draw, brs. E. and W.
	Descend.
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 T34S | R1W S18 | S17 S19 | S20 1913 from which A pine, 6 ins. dia., bears N.57°E., 37 lks. dist., marked T 34 S R 1 W S 17 B T.

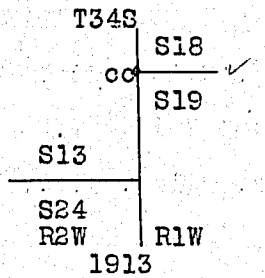
Chains	
	A quaken aspen, 8 ins. dia., bears S.64°E., 10 lks. dist., marked T 34 S R 1 W S 20 B T.
	A pine, 6 ins. dia., bears S.66°W., 29 lks. dist., marked T 34 S R 1 W S 19 B T.
	A pine, 8 ins. dia., bears N.80°W., 25 lks. dist., marked T 34 S R 1 W S 18 B T.
	435 ft. below top of ridge.
	Land, mountainous; soil, stony on surface 2 to 3 ins. deep with subsoil composed of coarse gravel and sandy loam of medium texture; timber, dense growth of spruce, balsam, aspen and yellow pine; scattering undergrowth of buck brush and scattering grass.
	September 26, 1913.

	September 27, 1913: At 7^h 51^m a.m.l.m.t., I set off 37° 51'N., on the lat. arc; 1° 32'S., 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° 59'E., on a random line bet. secs. 17 and 20.
40.00	Set temp. $\frac{1}{4}$ cor.
79.86	Intersect N. and S. line at the cor. of secs. 16,17,20 and 21.
	Thence I run
	S.89° 59'W., on a true line bet. secs. 17 and 20.
	Over mountainous land through dense growth of timber and scattering undergrowth.
	Descend gently.
1.00	Bottom of ravine, 5 ft. below cor., drs.NW. Ascend.
7.00	Top of ascent, 30 ft. above ravine, r., brs. NW. and SE.
	Descend.
7.30	Bottom of ravine, 15 ft. deep, drs. NW.
	Ascend.
12.20	Top of spur, 135 ft. high, projects N.
	Descend.
16.60	Ravine, drs. NW.
	Ascend.
38.25	Top of spur, 175 ft. high, projects N.

Chains	
	Descend.
39.93	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground for $\frac{1}{4}$ sec. cor., with brass cap marked S17 $\frac{1}{4}$ S20 1913 from which A pine, 11 ins. dia., bears S.65°E., 11 lks. dist., marked $\frac{1}{4}$ S 20 B T. A pine, 12 ins. dia., bears N.59°W., 50 lks. dist., marked $\frac{1}{4}$ S 17 B T.
49.00	Dry wash, 20 lks. wide, 1 ft. deep, 210 ft. below top of spur, drs. NW.
	Ascend gently over series of low rolling hills bearing NW. and SE.
69.00	Dry wash, 15 lks. wide, 1 ft. deep, drs. NW.
	Ascend.
79.86	The cor. of secs. 17,18,19 and 20.
	60 ft. above dry wash.
	Land, mountainous; soil, stony on surface 2 to 3 ins. deep with subsoil composed of coarse gravel and sandy loam of medium texture; timber, dense growth of spruce, balsam, aspen and yellow pine; scattering undergrowth of buck brush and grass.
	September 27: At this cor. I set off 1° 36'S., on the decl. arc; and at 11^h 51^m l.m.t., observe the sun on the meridian; the resulting latitude is 37° 51'.

	West bet. secs. 18 and 19.
	Over mountainous land through dense growth of timber and scattering undergrowth.
	Ascend.
40.00	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground for $\frac{1}{4}$ sec. cor., with brass cap marked S18 $\frac{1}{4}$ S19 1913 ffom which

Chains	
	A pine, 12 ins. dia., bears N.61°E., 14 lks. dist., marked ¼ S 18 B T.
	A pine, 6 ins. dia., bears S.51°W., 22 lks. dist. marked ¼ S 19 B T.
58.00	Top of ascent, 465 ft. above sec. cor., brs. NW. and SE.
	Descend gently.
73.84	Intersect W. bdy. of the TP., 8.60 chs. N. of the temp. cor. of secs. 13 and 24; set permanently on Oct. 1, 1913 as heretofore described.
	Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground for C.C. of secs. 18 and 19 with brass cap marked



from which

A pine, 14 ins. dia., bears N.59°E., 19 lks. dist., marked T 34 S R 1 W S 18 B T.

A pine, 2 ft. dia., bears S.43°E., 20 lks. dist., marked T 34 S R 1 W S 19 BT.

60 ft. below top of ascent.

Land, mountainous; soil, stony on surface with subsoil composed of loose rock, gravel and sandy loam of medium texture; timber, dense growth of cedars, yellow and pinon pine; scattering undergrowth of sage brush, laurel and grass.

September 27, 1913.

October 4, 1913: At 8^h 19^m a.m. l.m.t., I set off 37° 51' N., on the lat. arc; 4° 15½'S., 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° 03'W., bet. secs. 17 and 18.

Over mountainous land through dense growth of timber and scattering undergrowth.

Descend.

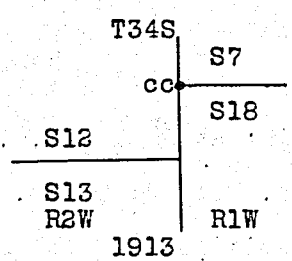
Chains	
0.50	Draw, 10 ft. below sec. cor., drs. W.
	Ascend.
8.00	Top of spur, 40 ft. high, projects SW.
	Descend.
10.50	Bottom of draw, drs. SW.
	Ascend S. slope of ridge.
38.00	Top of ridge, 250 ft. high, brs. E. and W.
	Descend.
40.00	Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground for $\frac{1}{4}$ sec. cor., with brass cap marked S18 $\frac{1}{4}$ | S17 1913 from which A spruce, 8 ins. dia., bears S.43°E., 31 lks. dist. marked $\frac{1}{4}$ S 17 B T. A spruce, 8 ins. dia., bears N.21°W., 14 lks. dist. marked $\frac{1}{4}$ S 18 B T.
65.00	Bottom of draw, drs. NE.
	Ascend.
68.50	Top of ridge, 65 ft. high, brs. NE. and SW.
	Descend.
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 T34S | R1W S7 | S8 S18 | S17 1913 from which A pine, 14 ins. dia., bears N.80°E., 79 lks. dist., marked T 34 S R 1 W S 8 B T. A pine, 18 ins. dia., bears S.66° 30'E., 78 lks. dist., marked T 34 S R 1 W S 17 B T. A pine, 20 ins. dia., S.53° 30'W., 30 lks. dist., marked T 34 S R 1 W S 18 B T. A pine, 16 ins. dia., bears N.30°W., 54 lks., dist., marked T 34 S R 1 W S 7 BT.
	120 ft. below top of ridge.
	Land, mountainous; soil stony on surface; 4th rate; timber, dense growth of spruce, balsam, aspen. cedars, yel-

Chains	
	low and pinon pine; scattering undergrowth of buck brush, oak and grass.
	N.89° 59'E., on a random line bet. secs. 8 and 17.
40.00	Set temp. $\frac{1}{4}$ cor.
80.04	Intersect N. and S. line, 9 lks. S. of the cor. of secs. 8,9,16 and 17.
	Thence I run
	S.89° 55'W., on a true line bet. secs. 8 and 17.
	Over mountainous land through dense growth of timber and scattering undergrowth.
	Ascend.
36.25	Top of spur, 210 ft. above sec. cor,, projects NW.
	Descend.
40.02	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground for $\frac{1}{4}$ sec. cor., with brass cap marked $\frac{S8}{\frac{1}{4}}$ / $\frac{S17}{1913}$ from which
	A spruce, 2 ft. dia., bears S22°E., 84 lks. dist., marked $\frac{1}{4}$ S 17 B T.
	A pine, 10 ins. dia., bears N.10°W., 66 lks. dist., marked $\frac{1}{4}$ S8 B T.
	October 4: At this cor. I set off 4° 19'S., on the decl. arc; and at 11^h 49^m l.m.t., observe the sun on the meridian; the resulting latitude is 37° 52'.
55.00	Bottom of descant, 125 ft. below top of spur, drs. NW.
	Continue across flat through scattering timber and dense undergrowth.
56.00	Dry wash, 15 lks. wide, 1 ft. deep, drs. NW.
63.75	Point of ascent through dense timber and scattering undergrowth, brs. NE. and SW.
67.00	Top of spur, 35 ft. above point of ascent, projects NE.
	Descend.
80.04	The cor. of secs. 7,8,17 and 18.
	160 ft. below top of spur.
	Land, mountainous; soil, stony on surface; 4th rate;

Chains	
	timber, dense growth of spruce, balsam, aspen, cedars, yellow and pinon pine; scattering undergrowth of buck brush, oak and grass.
	October 4, 1913.
	October 7, 1913: At 8^h 18^m a.m.l.m.t., I set off 37° 52' N. on the lat. arc; 5° 25'S., on the decl. arc; and determine a meridian with the solar at the cor. of secs. 7,8,17 and 18.
	Thence I run
	West bet. secs. 7 and 18.
	Over mountainous land through dense growth of timber and scattering undergrowth.
	Descend.
11.70	Draw, 55 ft. below sec. cor., drs. NE.
	Ascend.
13.95	Top of ascent, 10 ft. above draw, brs. NE. and SW.
	Continue , on a near level line over rolling land.
38.50	Ascend ridge, brs. NE. and SW.
40.00	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground for $\frac{1}{4}$ sec. cor., with brass cap marked S7 $\frac{1}{4}$ S18 1913 from which
	A pine, 12 ins. dia., bears N.63°E., 53 lks. dist., marked $\frac{1}{4}$ S 7 B T.
	A pine, 26 ins. dia., bears S.62° 30'W., 44 lks. dist., marked $\frac{1}{4}$ S 18 B T.
	October 7: At this cor: I set off 5° 29'S., on the decl. arc; and at 11^h 48^m l.m.t., observe the sun on the meridian; the resulting latitude is 37° 52'.
42.00	Top of ridge, 80 ft. high, brs. NE. and SW.
	Descend.
73.73	Intersect W. bdy. of the Tp., 8.75 chs. N. of the cor. of secs. 12 and 13 heretofore described.
	Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground for C.C. of secs. 7 and 18 with brass cap

Chains

marked



from which

A spruce, 10 ins. dia., bears N.40°E., 75 lks. dist., marked T 34 S R 1 W S 7 B T.

A pine, 30 ins. dia., bears S.79°E., 43 lks. dist., marked T 34 S R 1 W S 18 B T.

140 ft. below top of ridge.

Land, mountainous; soil, stony on surface 3 to 4 ins. deep with subsoil composed of loose rock and sandy loam of medium texture; timber, dense growth of cedars, yellow, and pinon pine; scattering undergrowth of sage brush, buck brush and grass.

October 7, 1913.

October 4, 1913: For observations on this date see pages 71 and 73 of this book bet. secs. 17 and 18 and 8 and 17.

From the cor. of secs. 7,8,17 and 18.

I run

N.0° 03'W., bet. secs. 7 and 8.

Over mountainous land through dense timber and scattering undergrowth.

Descend.

17.00 Dry wash in bottom of draw, 75 ft. below sec. cor., 15 lks. wide, 1 ft. deep, N70°W.

Ascend.

37.00 Top of small spur, 40 ft. high, projects NE.

Leave dense timber; enter dense undergrowth, brs. E. and W.

Descend.

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

S7$\frac{1}{4}$ | S8

1913

Chains

and erect a mound of stone, 3 ft. base, 2 ft. high, W. of cor.

October 4, 1913.

October 6, 1913: At 8^h 18^m a.m.l.m.t., I set off 37° 52' N., on the lat. arc; 5° 01½'S., on the decl. arc; and determine a meridian with the solar at the ¼ cor. of secs. 7 and 8.

Thence I continue

N.0° 03'W., bet. secs. 7 and 8.

41.30 Dry wash, 20 lks. wide, 10 ft. deep, drs. W.

Continue , on a near level line across flat through dense undergrowth of rabbit brush.

49.10 Horse Creek, 4 lks. wide, 3 ins. deep, drs. NW.

50.10 Old wagon road, brs. E. and W.

53.75 Ascend out of Horse Creek canyon, brs. E. and W., over broken sandstone ledges through scattering timber and medium undergrowth.

58.00 Top of ridge, 65 ft. high, brs. E. and W.

Descend.

69.00 Bottom of draw, 35 ft. below top of ridge, drs. SW.

Ascend.

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

T34S | R1W	
S6	S5
S7	S8

1913

from which.

A pinon pine, 20 ins. dia., bears N.81°E., 63 lks. dist., marked T 34 S R 1 W S 5 B T.

A pinon pine, 12 ins. dia., bears S.13° 30'E., 50 lks. dist., marked T 34 S R 1 W S 8 B T.

A pinon pine, 16 ins. dia., bears S.60°W., 66 lks. dist., marked T 34 S R 1 W S 7 B T.

A cedar, 11 ins. dia., bears N.62°W., 16 lks. dist., marked T 34 S R 1 W S 6 B T.

110 ft. above draw.

Land, mountainous; soil, stony on surface; 4th rate;

Chains	
	timber, scattering growth of pinon, yellow pine and cedars; scattering undergrowth of sage brush, laurel and grass.
	N.89° 55'E., on a random line bet. secs. 5 and 8.
40.00	Set temp. $\frac{1}{4}$ cor.
80.04	Intersect N. and S. line, 11 lks. N. of the cor. of secs. 4,5,8 and 9.
	Thence I run
	West on a true line bet. secs. 5 and 8.
	Over mountainous land through dense timber and scattering undergrowth.
	Ascend.
9.00	Top of ridge, 80 ft. above sec. cor., brs. N. and S.
	Descend.
14.00	Ravine, 55 ft. deep, drs. S.
	Ascend.
34.00	Top of ridge, 105 ft. above ravine, brs. N. and S.
	Descend.
36.00	Bottom of draw, 30 ft. deep, 10 lks. wide, drs. S.
	Ascend.
39.10	Top of ridge, 50 ft. above draw, brs. N. and S.
	Descend.
	Growth of timber becomes scattering, brs. N. and S.
40.02	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground for $\frac{1}{4}$ sec. cor., with brass cap marked S5 $\frac{1}{4}$ S8 1913
	No bearing trees available: erect a mound of stone, 3 ft. base, 2 ft. high, N. of cor.
42.25	Bottom of draw, 35 ft. below top of ridge, 10 lks. wide, drs. S.
	Ascend.
55.00	Top of ridge, 105 ft. above draw, brs. N. and S.
	Descend.
80.04	The cor. of secs. 5,6,7 and 8.

Chains

130 ft. below top of ridge.

Land, mountainous; soil, stony on surface; 4th rate; timber, scattering growth of pinon, yellow pine and cedars; scattering undergrowth of laurel, sage brush and grass.

October 6: At this cor., I set off 5° 06'S., on the decl. arc; and at 11^h 48^m l.m.t., observe the sun on the meridian; the resulting latitude is 37° 53'.

October 6, 1913.

Jos. C. Thoma

U. S. Surveyor.

October 6, 1913. For observations on this date see pages 19 and 21 of the book containing the resurvey of the E. and N. bdys. of this Tp. bet. secs. 5 and 32 and 6 and 31.

At 2^h 18^m p.m.l.m.t., I set off 37° 53'N., on the lat. arc; 5° 07½'S., on the decl. arc; and determine a meridian with the solar at the cor. of secs. 5,6,7 and 8.

Thence I run

West bet, secs. 6 and 7.

Over mountainous land through scattering growth of timber and scattering undergrowth.

Descend.

24.20 Hollow, 290 ft. below sec. cor., drs. SW.

Ascend.

34.30 Top of spur, 110 ft. above hollow, projects S. about 6 chs.

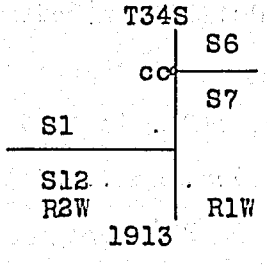
Descend.

39.30 Leave scattering growth of timber; enter dense undergrowth, brs. N.70°W. and S.70°E.

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

S6
¼
S7
1913 from which

Chains	
	A pinon pine, 12 ins. dia., bears N.60°E., 70 lks. dist., marked ¼ S 6 B T.
	A cedar, 14 ins. dia., bears S.54° 30'W., 48 lks. dist., marked ¼ S 7 B T.
	110 ft. below top of spur.
41.30	Foot of descent, 40 ft. below ¼ cor.
	Continue across flat.
52.10	Old wagon road, brs. N.70°W. and S.70°E.
55.20	Horse Creek, 4 lks. wide, 3 ins. deep, drs. N.70°W.
63.30	Foot of ascent, brs. N.70°W. and S.70°E.
	Enter scattering growth of timber, brs. N.7 0°W. and S. 70°E.
73.70	Intersect W. bdy. of the Tp., 8.75 chs. N. of the cor. of secs. 1 and 12 heretofore described.
	Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground for C.C. of secs. 6 and 7 with brass cap marked



from which

A pinon pine, 10 ins. dia., bears N.35°E., 80 lks. dist., marked T 34 S R 1 W S 6 B T.

A spruce, 14 ins. dia., bears S.75°E., 34 lks. dist., marked T 34 S R 1 W S 7 B T.

85 ft. above foot of ascent.

Land, mountainous; soil, stony 3 to 4 ins. deep with subsoil composed of loose rock and sandy loam of medium texture; timber, scattering growth of spruce, balsam, cedars and pinon pine; scattering undergrowth of laurel, sage brush and grass.

October 6, 1913.

Edward R. Bunbury

U. S. Transitman.

Chains	
	October 6, 1913: For observations on this date see pages 76 and 78 of this book , miles bet. secs. 6 and 7 and 5 and 8.
	N.0° 03'W., on a random line bet.. secs,. 5 and 6.
40.00	Set temp. $\frac{1}{4}$ cor.
79.96	Intersect N. bdy. of the Tp., 12 lks. E. of the cor. of secs. 5,6,31 and 32 heretofore described.
	Thence I run
	S.0° 08'E., on a true line bet.. secs. 5 and 6.
	Over mountainous land, through scattering timber and undergrowth.
4.70	Descend.
4.70	Birch Creek, 4 lks. wide, 2 ins. deep, drs. W.
	20 ft. below sec. cor.
	Ascend.
18.85	Top of ridge, 80 ft. above creek, brs. E. and W.
	Descend.
37.95	Draw, 25 lks. wide, 110 ft below top of ridge, drs. NW.
	Ascend.
39.96	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground for $\frac{1}{4}$ sec. cor., with brass cap marked S6$\frac{1}{4}$ | S5 1913 from which
	A pine, 10 ins. dia., bears S.60°E., 45 lks. diat., marked $\frac{1}{4}$ S 5 B T.
	A cedar, 12 ins. dia., bears S.70°W., 7 lks. dist., marked $\frac{1}{4}$ S 6 B T.
43.95	Top of ridge, 85 ft. above draw, brs. E. and W.
	Descend.
56.95	Bottom of steep descent, 160 ft. below top of ridge, brs. E. and W.
	Descend gently.
62.45	Ravine, 20 ft. deep, drs. W.
	Ascend gently.
76.95	Top of low ridge, 40 ft. high, brs. E. and W.
	Descend.
79.96	The cor. of secs. 5,6,7 and 8.

Chains

35 ft. below top of ridge.

Land, mountainous; soil, stony on surface; 4th rate; timber, scattering growth of pinon pine, yellow pine and cedars; scattering undergrowth of sage brush, laurel and grass.

October 6, 1913.

Jos. C. Thoma

U. S. Surveyor.

GENERAL DESCRIPTION:

This township lies on top and on either side of the main divide between the Colorado River on the east and the Sevier River on the west. The general slope of the land, and its exposure being to the east and to the west. The land ranges from rolling hills along the western boundary, with ridges averaging about 40 ft. high, to rough mountainous land with ridges from 200 to 700 ft. high, two miles east of the west boundary. The land from the main divide, east, slopes abruptly to the east, the ridges averaging about 100 ft. high in the south east quarter of the township along the east boundary, to about 1000 ft. high along the east boundary in the north east quarter.

The land is covered with a dense growth of yellow pine, spruce, aspen, cedar and pinon timber, of marketable value. A greater part of the timber has scrub oak undergrowth from 1 to 10 ft. high.

The soil is mostly a dark loam, and rocky, especially on the canon slopes, while in the bottom of the canons the soil is of a rich dark loam capable of farming where the bottom of the canons are wide enough to permit agriculture.

Considerable clear cool running water and numerous springs of clear cool water were found.

The Forest Service telephone line runs east and west

through the southern portion of the township, connecting with the ranger's station located in Sec. 28. The station consists of a frame house and log barn, with about 35 acres of fenced pasture

The main wagon road from Minder, Utah, to the west, and Escalante, Utah, to the east, runs east and west through the southern postion of the township; and is a good mountain road. There is a dim pole road running north along Hall Creek, which road is steep and rocky, very little grading having been done on the same. There is another dim pole road running along Horse Creek in the NE. quarter of the township, which is of the same character as the one along Hall Creek, but not so steep.

There is one settler in the township, John R. Campbell, located in the northern half of sec. 30, along Sweetwater Creek. Mr. Campbell has a frame cabin, barn, and corral, with about 1½ miles of wire fence, and about 35 acres under cultivation. The improvements amounting to approximately $1000.

No indication of oil or mineral was found in this township.

Jos. C. Young

U. S. Surveyor.

Edward R. Bunbury

U. S. Transitman.

Resurvey of the E. bdy. of T.34 S.,R.1 W., Salt Lake Meridian.

Chains

Survey commenced September 1, 1913, and executed with a Young and Sons light mountain transit , No.8477 , with solar attachment . The horizontal limb is provided with two double verniers placed opposite to each other read to single minutes of arc, which is also the least count of the verniers of the latitude and declination arcs. The instrument was examined, tested on the true meridian at Salt Lake City, Utah, found correct and was approved by the Assistant Supervisor of Surveys for Utah, June 14, 1913.

I examine the adjustments of the transit, find them correct; 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.

At camp in the NE. of sec. 27, T.34 S., R.1 W.; latitude 37° 50' N., longitude 111° 56' W.; I set off 37° 50' N. on the lat. arc; 8° 16' N., on the decl. arc; and at 3^h 30^m p.m. l.m.t., determine with the solar a meridian and mark a point thereof, on a stake firmly driven in the ground 5 chs. N. of my station.

At 8^h 51^m p.m. l.m.t., I observe Polaris at eastern elongation, in accordance with the Manuel of Instructions and mark a point in the line thus determined on a stake driven in the ground 5 Chs. N. of my station.

2 ch. tapes and clinometers were used on all measurements of this work. September 1, 1913.

September 2: At 7^h 00^m a.m. l.m.t., I lay off the azimuth of Polaris, 1° 28' to the west, and mark a point in the meridian thus determined by driving a nail in a stake firmly set in the ground, 5 chs. N. of my station.

At 7^h 30^m a.m. l.m.t., I set off 37° 50'N. on the lat. arc, 8° 02' N., on the decl. arc; and determine a meridian with the solar. The meridians thus determined by solar observations coincide with the meridian established by the Polaris observation.

The solar apparatus, by p. m. and a. m. observations de-

Chains	
	fines positions for meridians, respctively, coinciding with the meridian established by Polaris observations; therefore I conclude that the adjustments of the instruments are satisfactory.
	The magnetic bearing of the true meridian, at 7^h 45^m a.m. is N.16° 05'W.; the angle thus determined gives the magnetic decl. 16° 05'E.
	At 9^h 30^m a.m. l.m.t., I set on 37° 49' N., on the lat. arc; 7° 59' N., on the decl. arc; and determine a meridian with the solar at the cor. of Tps. 34 and 35 S.,Rs 1 E. and 1 W., heretofore described.
	Thence I run on a resurvey
	North, along the Salt Lake Meridian, bet. secs. 31 and 36.
	Over mountainous land, through dense growth of yellow pine, cedars and pinion pine and medium undergrowth of oak and scattering laurel and grass.
	Ascend.
16.00	Top of ridge, 240 ft. above sec. cor., brs. E. and W.
	Descend.
34.00	Foot of ridge and descent, 470 ft. below the top, brs. E. and W.
	Continue N. over series of small rolling hills.
39.40	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground for W.C. to the ¼ sec. cor., with brass cap marked

T34S
R1W | R1E
S36 | S31
W C
¼
1913

from which

A yellow pine, 6 ins. dia., bears N.87° 30'E., 18 lks. dist., marked W C ¼ S 31 B T.

A yellow pine, 24 ins. dia., bears N.58°W., 60 lks. dist., marked W C ¼ S 36 B T.

September 2: Sky overcast at noon, therefore unable to observe the sun for latitude.

Difference bet. measurements of 40.00 chs., by two sets of chainmen, is 6 lks.; position of middle point

Resurvey of the E. bdy. of T.34 S.,R.1 W., Salt Lake Meridian.

Chains	
	By 1st set, 40.03 chs.
	By 2nd set,39.97 chs.; the mean of which is
40.00	True point for ¼ cor.
40.00	After diligent search no signs or the old cor. are found. Point cor.
	Creek, running water, 3 lks. wide, 2 ins. deep, drs. E.
46.75	Dry wash,10 lks. wide 4 ft. deep, drs. E.
	Leave series of small rolling hills.
	Ascend ridge.
60.00	Top of ridge, 220 ft. above dry wash, brs. E. and W.
	Descend.
67.50	Ravine, 95 ft. below top of ridge, drs. E.
	Ascend.
71.50	Top of spur, 50 ft. above ravine, projects E.
	Descend.
78.50	Fall 2½ lks. W. of old cor. of secs. 25,30,31 and 36, which I destroy all traces of.
	Difference between measurements of 80.00 chs., by two sets of chainmen, is 10 lks.; position of middle point
	By 1st set, 80.05 chs.
	By 2nd set, 79.95 chs.; the mean of which is
80.00	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

T34S
R1W | R1E
S25 | S30
S36 | S31

1913

from which

A yellow pine, 30 ins. dia., bears N.46°E., 1.32 chs. dist., marked T 34 S R 1 E S 30 B T.

A yellow pine, 20 ins. dia., bears S.66°E., 1.72 chs. dist., marked T 34 S R 1 E S 31 B T.

A yellow pine, 22 ins. dia., bears S.34°W., 1.04 chs. dist., marked T 34 S R 1 W S 36 B T.

A yellow pine, 20 ins. dia., bears N.3°W., 1.32 chs. dist., marked T 34 S R 1W S 25 B T.

240 ft. below top of spur.

Land, mountainous; soil, stony on surface 2 to 3 ins. deep with subsoil composed of loose rock and sandy loam

Chains	
	of medium texture; timber, dense growth of yellow pine, cedars and pinion pine; medium undergrowth of oak and scattering laurel and grass.
	September 2, 1913.
	September 3, 1913; At 8^h 29^m a.m. l.m.t., I set off 37° 49' N. on the dat. arc; 7° 38½' N., on the decl. arc; and determine a meridian with the solar at the cor. of secs. 25,30,31 and 36.
	Thence I run on a resurvey
	North, along the Salt Lake Meridian, bet. secs. 25 and 30.
	Over mountainous land, through dense growth of yellow pine, cedars and pinion pine; and medium undergrowth of oak and scattering laurel, sage brush and grass.
	Descend.
2.05	Creek, running water, 3 lks. wide, 2 ins. deep, 25 ft. below sec. cor., drs. E.
	Ascend.
14.00	Top of ridge, 155 ft. above creek, brs. E. and W.
	Descend.
23.60	Telephone line, Winder to Escalante, brs. NW. and SE.
30.00	Creek, running water, 3 lks wide, 3 ins. deep, 135 ft. below top of ridge, drs. E.
	Ascend.
34.25	Wagon road, Winder to Escalante, brs. E. and W.
37.90	Fall 7 lks. W. of old ¼ sec. cor., which I destroy all traces of.
	Difference bet. measurements of 40.00 chs., by two sets of chainmen, is 4 lks.; position of middle point
	By 1st set, 40.02 chs.
	By 2nd set, 39.98 chs., the mean of which is
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
	S25¼ | S30
	1913
	No bearing trees available therefore, erect a mound of

Resurvey of the E. bdy. of T.34 S.,R.1 W., Salt Lake Meridian.

Chains	
	stone, 3 ft. base, 2 ft. high, W. of cor.
	Cor. stands on top of ridge, 135 ft. above creek, brs. E. and W.
	Descend.
45.80	Creek, running water, 4 lks. wide, 3 ins. deep, 135 ft. below ¼ cor., drs. E.
	Ascend.
77.70	Fall 12 lks. E. of old cor., of secs. 19, 24, 25 and 30. I destroy all traces of same.
	Difference between measurements of 80.00 chs., by two sets of chainmen, is 6 lks.; position of middle point
	By 1st set, 80.02 chs.
	By 2nd set, 79.96 chs.; the mean of which is
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

T34S
R1W | R1E
S24 | S19
S25 | S30
1913

from which

A pine, 7 ins. dia., bears N.70°E., 10 lks. dist., marked T 34 S R 1 E S 19 B T.

A cedar, 8 ins. dia., bears S.19°E., 39 lks. dist., marked T 34 S R 1 E S 30 B T.

A pine, 7 ins. dia., bears S.23° 30'W., 22 lks. dist., marked T 34 S R 1 W S 25 B T.

A pine, 8 ins. dia., bears N.31° 30'W., 17 lks. dist., marked T 34 S R 1 W S 2 4 B T.

475 ft. above creek.

Land, mountainous; soil, gravel on surface 2 ins. deep with subsoil composed of fine gravel and sandy loam of medium texture; timber, medium growth of cedars, pinion pine and yellow pine; medium undergrowth of sage brush, oak, laurel and scattering grass.

September 3,: At this cor., I set off 7° 35'N., on the decl. arc; and at 11^h 59^m l.m.t., observe the sun on the meridian; the resulting latitude is 37° 50'.

Chains	Resurvey
	North, along the Salt Lake Meridian, bet. secs. 19 and 24.
	Over mountainous land, through growth of cedars, pinion and yellow pine and medium undergrowth of sage brush, oak, laurel and scattering grass.
	Ascend.
14.00	Timber becomes scattering, brs. NW. and SE..
24.00	Top of ridge, 260 ft. above sec. cor., brs. NE. and SW.
	Descend.
36.90	Fall 20 lks. E. of old mound of stone which is the only trace of old ¼ cor. found. I destroy same.
	Difference bet. measurements of 40.00 chs., by two sets of chainmen is 4 lks.; position of middle point
	By 1st set, 39.98 chs.
	By 2nd set, 40.02 chs., the mean of which is
40.00	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground for ¼ sec. cor., with brass cap marked S24¼ | S19 1913 from which
	A yellow pine, 20 ins. dia., bears N.15° 35'E., 1.05 chs. dist., marked ¼ S 19 B T.
	A yellow pine, 7 ins. dia., bears S.40° 20'W., 50 lks. dist., marked ¼ S 24 B T.
	30 ft. below top of ridge.
44.35	Ravine, 20 ft. below ¼ cor., heads 4 chs. E. and drs. SW.
	Ascend.
45.00	Enter dense growth of yellow pine, brs. E. and W.
76.90	Fall 78 lks. E. of old cor. of secs. 13,18,19 and 24.
	I destroy all traces of the old cor.
	Difference between measurements of 80.00 chs., by two sets of chainmen, is 6 lks.; position of middle point
	By 1st set, 80.03 chs.
	By 2nd set, 79.97 chs.; the mean of which is
80.00	Set 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

Chains	
	T34S R1W | R1E S13 | S18 --- S24 | S19 1913 from which
	A yellow pine, 6 ins. dia., bears N.45°E., 62 lks. dist., marked T 34 S R 1 E S 18 B T.
	A yellow pine, 22 ins. dia., bears S.54°E., 93 lks. dist., marked T 34 S R 1 E S 19 B T.
	A yellow pine, 20 ins. dia., bears S.5°W., 81 lks. dist., marked T 34 S R 1 W S 24 B T.
	A yellow pine, 8 ins. dia., bears N.85°W., 86 lks. dist., marked T 34 S R 1 W S 13 B T.
	490 ft. above ravine.
	Land, mountainous; soil, gravel on surface 2 ins. deep with subsoil composed of fine gravel and sandy loam of medium texture; timber, dense growth of yellow pine and scattering cedars and pinion pine; medium undergrowth of sage brush, oak, laurel and scattering grass.
	September 3, 1913.

	September 4, 1913; At 8^h 59^m a.m. l.m.t., I set off 37° 51' N. on the lat. arc; 7° 16' N., on the decl. arc; and determine a meridian with the solar at the cor. of secs. 13,18,19 and 24.
	Thence I run on a resurvey
	North, along the Salt Lake Meridian, bet. secs. 13 and 18.
	Over mountainous land, through dense growth of yellow pine, scattering cedars and pinion pine and medium undergrowth of oak and scattering laurel, sage brush and grass.
0.00	Ascend.
2.00	Timber becomes scattering, brs. NE. and W.
	Enter dense undergrowth of oak brush, brs. NE. and W.
4.25	Top of spur, 60 ft. above sec. cor., projects E.
	Descend.
13.80	Ravine, 90 ft. below top of spur, heads 8 chs. W. and drs. SE.

Chains

Ascend.

26.50 Enter dense growth of aspen and yellow pine, brs. E. and W.

Difference bet. measurements of 40.00 chs., by two sets of chainmen is 4 lks.; position of middle point

By 1st set, 39.98 chs.

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

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

S13¼ | S18

1913

from which

An aspen, 6 ins. dia., bears S.35°E., 23 lks. dist., marked ¼ S 18 B T.

An aspen, 6 ins. dia., bears N.73°W., 9 lks. dist., marked ¼ S 13 B T.

625 ft. above ravine.

All indications of old cor. have disappeared.

76.31 Fall 68 lks. E. of old cor. of secs. 7,12,13 and 18.

I destroy all traces of old cor.

77.75 Timber becomes scattering, brs. E. and W.

Enter bed of slide rock, brs. E. and W.

Difference between measurements of 80.00 chs., by two sets of chainmen, is 9 lks.; position of middle point

By 1st set, 80.04 chs.

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

80.00 Set an iron post, 3 ft. long, 3 ins. in dia., 24 ins. in slide rock for cor. of secs. 7,12,13 and 18 with brass cap marked

T34S

R1W | R1E

S12 | S7

S13 | S18

1913

No bearing trees available therefore I erect a mound of stone, 3 ft. base, 2 ft. high, W. of cor.

Cor. stands on S. slope of Griffin Mountain, 600 ft. above ¼ cor.

Land, mountainous; soil, stony; 4th rate; timber, scatter-

Chains	
	ing growth of aspen, spruce and yellow pine; scant undergrowth of scattering oak and grass.
	September 4: At this cor. I set off 7° 13'E., on the decl. arc; and at 11^h 59^m l.m.t., observe the sun on the meridian; the resulting latitude is 37° 52'.
	North, along the Salt Lake Meridian, bet. secs. 7 and 12.
	Over mountainous land; through scattering growth of aspen, spruce and yellow pine and scant undergrowth of oak and grass.
	Ascend over bed of slide rock.
8.50	Leave slide rock; growth of aspen becomes dense, brs. E. and W.
12.00	Top of ascent or Griffin Mountain, elev., 455 ft. above sec. cor., brs. NW. and E.
	Continue N. along top of mountain.
	Enter dense growth of aspen, balsam and spruce and scattering undergrowth of oak, wild rose and grass, brs. NW. and E.
28.75	Timber becomes scattering, brs. NE. and W.
	Difference bet. measurements of 40.00 chs., by two sets of chainmen is 10 lks.; position of middle point
	By 1st set, 40.05 chs.
	By 2nd set, 39.95 chs., the mean of which is
40.00	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground for ¼ sec. cor., with brass cap marked S12¼ | S7 / 1913 from which
	An aspen, 6 ins. dia., bears S.53°E., 7 lks. dist., marked ¼ S 7 B T.
	An aspen, 6 ins. dia., bears N.45°W., 53 lks. dist., marked ¼ S 12 B T.
	All indications of old cor. have disappeared.
40.50	Enter dense growth of aspen, balsam and spruce, brs. E. and W.
50.00	Enter path of cyclone, brs. NE. and SW.
60.00	Leave path of cyclone, brs. NE. and SW.

Chains

76.03 Fall 1.41 chs. E. of old cor. of secs. 1,6,7 and 12, all traces of which, I destroy.

Difference between measurements of 80.00 chs., by two sets of chainmen is 2 lks.; position of middle point

By 1st set, 80.01 chs.

By 2nd set, 79.99 chs.; the mean of which is

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

T34S	
R1W	R1E
S1	S6
S12	S7

1913

from which

A spruce, 8 ins. dia., bears N.14°E., 1.23 chs. dist., marked T 34 S R 1 E S 6 B T.

A spruce, 14 ins. dia., bears S.88°E., 2.93 chs. dist., marked T 34 S R 1 E S 7 B T.

A spruce, 8 ins. dia., bears S.18° 30'W., 2.94 chs. dist., marked T 34 S R 1 W S 12 B T.

A spruce, 12 ins. dia.; bears N.36°W., 88 lks. dist., marked T 34 S R 1 W S 1 B T.

Land, mountainous; soil, rich sandy loam of medium texture; timber, dense growth of aspen and scattering balsam and spruce; medium undergrowth of grass.

September 4, 1913.

September 12, 1913; At 8^h 57^m a.m.l.m.t., I set off 37° 53' N., on the lat. arc; 4° 15'N., on the decl. arc, and determine a meridian with the solar at the cor. of secs. 1,6,7 and 12.

Thence I run

North, along the Salt Lake Meridian, bet. secs. 1 and 6.

Over flat top of Griffin Mountain, through dense growth of aspen and scattering spruce and balsam and medium undergrowth of grass.

34.00 Timber becomes scattering, brs. NE. and W.

35.95 Fall 1.76 chs. E. of old ¼ sec. cor.

I destroy all traces of same.

Chains	
	Difference bet. measurements of 40.00 chs., by two sets of chainmen is 3 lks. ; position of middle point
	By 1st. set, 40.02 chs.
	By 2nd set, 39.99 chs.; the mean of which is
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
	S 1¼ | S 6
	1913
	from which
	An aspen, 9 ins. dia., bears N.16°E., 3.35 chs. dist., marked ¼ S 6 B T.
	A balsam, 12 ins. dia., bears N.6°W., 3.10 chs. dist., marked ¼ S 1 B T.
43.00	Enter dense growth of aspen, spruce and balsam, brs. SE. and SW.
60.10	Old pole road, brs. NE. and W.
76.40	Fall 1.56 chs. E. of old cor. of Tps. 33 and 34 S., Rs. 1 E. & 1 W. I destroy all traces of old Tp. cor.
	Difference bet. measurements of 80.00 chs., by two sets of chainmen is 4 lks.; position of middle point
	By 1st set, 80.02 chs.
	By 2nd set, 79.98 chs., the mean of which is
80.00	Set an iron post, 3 ft. long, 3 ins. in dia., 24 ins. in the ground for the cor. of Tps. 33 and 34 S., Rs. 1 E. and 1 W., with brass cap marked
	T 33 S R 1 W | R 1 E S 36 | S 31 S 1 | S 6 R 1 W | R 1 E T 34 S 1913
	from which
	An aspen, 8 ins. dia., bears N.62°E., 41 lks. dist., marked T 33 S R 1 E S 31 B T.
	A spruce, 6 ins. dia., bears S.63°E., 50 lks. dist., marked T 34 S R 1 E S 6 B T.
	An aspen, 7 ins. dia., bears S.9° 30'W., 50 lks. dist., marked T 34 S R 1 W S 1 B T.
	A balsam, 14 ins. dia., bears N.35°W., 68 lks. dist. marked T 33 S R 1 W S 36 B T.

Chains

Land, mountainous; soil, sandy loam of medium texture and loose rock; timber, dense geowth of aspen, spruce and balsam; medium undergrowth of grass.

September 12: Sky overcast at noon; therefore unable to observe the sun for latitude.

September 12, 1913.

Jos. C. Thoma
U. S. Surveyor.

Edward R. Bunbury
U. S. Transitman.

Resurvey of the N. bdy. of T.34 S., R.1 W.

September 12, 1913; from the cor. of Tps. 33 and 34 S., Rs. 1 E. and 1 W., just established, I resurvey West, along the N. bdy. of the Tp. bet. secs. 1 and 36.

Across flat top of mountain, through dense growth of aspen, balsam and spruce; and medium undergrowth of grass.

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

S 36
¼
S 1
1913

from which

A spruce, 12 ins. dia., bears N.31°E., 8 lks. dist., marked ¼ S 36 B T.

An aspen, 10 ins. dia., bears S.82°W., 6 lks. dist., marked ¼ S 1 B T.

All traces of old ¼ cor. have disappeared.

58.25 Leave timber, brs. NW. and S.

Small lake, brs. S., 2 chs. dist.

62.15 Old pole road, brs. N. and S.

65.50 Enter dense growth of timber, brs. NE. and S.

76.67 Fall 5.10 chs., N. of old cor. of secs. 1,2,35 and 36. I destroy all traces of old cor.

Timber becomes scattering, brs. NE. and SW.

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

Chains	
	cap marked T33S | R1W S35 | S36 S2 | S1 T34S | R1W 1913 from which A spruce, 14 ins. dia., bears N.82° 30'E., 1.84 chs. dist., marked T 33 S R 1 W S 36 B T. A spruce, 14 ins. dia., bears S.3°E., 92 lks. dist., marked T 34 S.R 1 W S 1 B T. NO other bearing trees available therefore I erect a mound of stone, 3 ft. base, 2½ ft. high, W. of cor. Land, mountainous; soil, stony on surface 2 to 3 ins. deep with subsoil composed of loose rock and sandy loam of medium texture; timber, scattering growth of aspen, spruce and balsam; medium undergrowth of grass.
	Resurvey West, along the N. bdy. of the Tp., bet. secs. 2 and 35. Across open flat top of mountain through medium undergrowth of grass.
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 S35 ¼ S2 1913 and dig pits 18x18x12 ins., E. and W. of post 3 ft. dist. and raise a mound of earth, 3 ft. base, 2 ft. high, N. of cor. All traces of old ¼ sec. cor. have disappeared.
74.00	Enter dense growth of aspen, spruce, and balsam, brs. N. and S.
76.27	Fall 3.65 chs. N. of old cor. of secs. 2,3,34 and 35. Indestroy all traces of old sec. 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 T33S | R1W S34 | S35 S3 | S2 T34S | R1W 1913 from which

Chains

A spruce, 10 ins. dia., bears N.34° 50'E., 17 lks. dist., marked T 33 S R 1 W S 35 B T.

A spruce, 10 ins. dia., bears S.39°E., 44 lks. dist., marked T 34 S R 1 W S 2 B T.

A balsam, 21 ins. dia., bears S.27° 50'W., 21 lks. dist., marked T 34 S R 1 W S 3 B T.

A spruce, 7 ins. dia., bears N.71° 40'W., 40 lks. dist., marked T 33 S R 1 W S 34 B T.

Land, mountainous; soil, stony on surface 2 to 3 ins. deep with subsoil composed of coarse gravel and sandy loam of medium texture; timber, dense growth of aspen, spruce and balsam; scattering undergrowth of buck brush, wild rose and grass.

September 13, 1913.

September 17, 1913: At 8^h 55^m a.m. l.m.t., I set off 37° 54'N., on the lat. arc:; 2° 20'N., on the decl. arc; and determine a meridian with the solar at the cor. of secs. 2,3,34 and 35.

Thence I resurvey

West, along the N. bdy. of the Tp., bet. secs. 3 and 34.

Accross flat top of mountain, through dense growth of aspen, spruce and balsam and scattering undergrowth of buck brush, wild rose and grass.

4.50 Rim of mountain or point of steep descent, brs. N. and S.

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

S34
¼
S3
1913

from which

A balsam, 8 ins. dia., bears N.40°E., 13 lks. dist., marked ¼ S 34 B T.

A spruce, 10 ins. dia., bears S.62°W., 21 lks. dist., marked ¼ S 3 B T.

525 ft. below point of steep descent.

All traces of old ¼ cor. have disappeared.

September 17: A t this cor. I set off 2° 17'N., on the

Chains	
	decl. arc and at 11h 55m l,m.t., observe the sun on the meridian; the resulting latitude is 37° 54'.
74.10	Ravine, 490 ft. below ¼ cor., heads 8 chs. SE. and drs. NW.
	Ascend.
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

T33S S33	R1W S34
S4 T34S	S3 R1W

1913

from which

An aspen, 7 ins. dia., bears N 44°E., 14 lks. dist., marked T 33 S R 1 W S 34 B T.

An aspen, 8 ins. dia., bears S.38°E., 37 lks. dist., marked T 34 S R 1 W S 3 B T.

An aspen, 6 ins. dia., bears S.34°W., 28 lks. dist., marked T 34 S R 1 W S 4 B T.

An aspen, 8 ins. dia., bears N.20° 30'W., 15 lks. dist., marked T 33 S R 1 W S 33 B T.

72 ft. above ravine.

After diligent search found no traces of old sec. cor. Land, mountainous; soil, gravel on surface with subsoil composed of sandy loam of medium texture; timber, medium growth of aspen, spruce and balsam; medium undergrowth of buck brush, wild rose and grass.

September 17, 1913.

Jos. P. Young

U. S. Surveyor.

Survey commenced September 23, 1913 and executed with a Young and Sons light mountain transit, No. 8146, with solar attachment. The horizontal limb is provided two double verniers placed opposite to each other reading to single minutes of arc, which is also the least count of the verniers of the latitude and declination arcs.

Chains

The instrument was examined, tested on the true meridian at Salt Lake City, Utah, found correct and was approved by the Assistant Supervisor of Surveys for Utah, June 25, 1913.

I examine the adjustments of the transit, find them correct; 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.

At camp in the NE. quarter of sec. 30, T.34S.,R.1W.; latitude, 37° 50'N., longitude, 112° 00' W.; I set off 37° 50'N., on the lat. arc; 0° 19'S., on the decl. arc; and at 3h 52m p.m. l.m.t, determine a meridian with the solar and mark a point thereof on a stake firmly driven in the ground, 5 chs. N. of my station.

At 7^h 25^m p.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 on a stake driven in the ground 5 chs. N. of my station.

September 23, 1913.

September 24: At 6^h 30^m a.m. l.m.t., I lay off the azimuth of Polaris, 1° 28' to the west and mark the meridian thus determined by a cross on the stake set September 23, on which the meridian falls 0.3 ins. east of the mark determined by the solar.

At 6^h 52^m a.m.l.m.t., I set off 37° 50' N., on the lat. arc;0° 19'S., on the decl. arc; and mark a point in the meridian determined with the solar, by a cross on the stake already set 5 chs. N. of my station; this mark falls 0.3 ins. east of the meridian established byy the Polaris observation.

The solar apparatus by p.m. and a,m, observations, defines positions for meridians, respectively about 0' 16" west and 0' 16" east of the meridian established by the Polaris observations; therefore, I conclude that the adjustments of the instrument are satisfactory.

Chains	
	The magnetic bearing of the true meridian at 7^h 00^m a.m. is N.16° 05'W.; the angle thus determined gives the magnetic decl. 16° 05'E.
	September 24, 1913.
	October 4, 1913; At 9^h 19^m a.m. l.m.t., I set off 37° 54' N., on the lat. arc; 4° 16½'S., on the decl. arc; and determine a meridian with the solar at the cor. of secs. 3,4,33 and 34.
	Thence I resurvey
	West, along the N. bdy. of the Tp., bet. secs. 4 and 33.
	Over mountainous land, through scattering growth of aspen, spruce and balsam and medium undergrowth of buck brush, sage brush, oak and scattering grass.
	Ascend.
1.25	Top of spur, 30 ft. above sec. cor., projects N.
	Descend.
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 S33 ¼ S4 1913 from which
	A spruce, 12 ins. dia., bears S.24°W., 1.49 chs. dist., marked ¼ S 4 B T.
	A spruce, 24 ins. dia., bears N.66° 30'W., 1.49 chs. dist., marked ¼ S 33 B T.
	Cor. stands on W. slope of spur, 525 ft. below the top.
	All traces of old ¼ cor. have disappeared.
46.65	Birch Creek, 80 ft. below ¼ cor., running water, 4 lks. wide, 4 ins. deep, drs. S.80°W.
	Descend gradually along N. side of canyon.
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 T33S | R1W S32 | S33 S5 | S4 T34S | R1W 1913 from which

Chains	
	A yellow pine, 36 ins. dia., bears N.84° 10'E., 13 lks. dist., marked T 33 S R 1 W S 33 B T.
	A yellow pine, 24 ins. dia., bears S.40° 55'E., 55 lks. dist., marked T 34 S R 1 W S 4 B T.
	A yellow pine, 20 ins. dia., bears S.78° 25'W., 87 lks. dist., marked T 34 S R 1 W S 5 B T.
	A cedar, 10 ins. dia., bears N.12° 20'W., 69 lks. dist., marked T 33 S R 1 W S 32 B T.
	155 lt. below Birch Creek crossing.
	Land, mountainous; soil, gravel on surface 2 ins. deep with subsoil composed of sandy loam of medium texture and loose lime rock; timber, scattering growth of spruce, balsam, yellow pine and aspen; medium undergrowth of buck brush, sage brush, oak and scattering grass.
	All traces of old sec. cor. have disappeared.
	October 4: At this cor. I set off 4° 19'S., on the decl. arc; and at 11h 49m l.m.t., observe the sun on the meridian; the resulting latitude is 37° 54'.
	West, along the N. bdy. of the Tp. bet. secs. 5 and 32. Over mountainous land, through scattering growth of spruce, balsam, yellow pine, aspen and cedars and medium undergrowth of buck brush, sage brush and scattering grass.
	Descend.
12.00	Old cabin, brs. S., 1 ch. dist.
23.75	Ravine, 240 lt. below sec. cor., drs. SW. 2 chs. into Birch Creek.
	Ascend.
40.00	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground for $\frac{1}{4}$ sec. cor., with brass cap marked $\frac{S32}{\frac{1}{4}}$ / $\frac{S5}{1913}$ from which
	A pine, 8 ins. dia., bears N.20° 30'E., 34 lks. dist., marked $\frac{1}{4}$ S 32 B T.
	A pine, 12 ins. dia., bears S.24°W., 33 lks.

Chains	
	dist., marked ¼ S 5 B T.
	50 ft. above ravine.
	All traces of old ¼ cor. have disappeared.
	October 4, 1913.
	October 6, 1913: At 8^h 18^m a.m. l.m.t., I set off 37° 54'N. on the lat. arc; 5°02'S., on the decl. arc; and determine a meridian with the solar at the ¼ cor. of secs. 5 and 32.
	Thence I continue
	West bet secs. 5 and 32.
43.00	Top of spur, 50 ft. above ¼ cor., projects SW.
	Descend.
50.00	Creek, 120 ft. below top of spur, running water, 2 lks. wide, 2 ins. deep, drs. S.25°W.
	Ascend.
55.50	Top of spur, 25 ft. above creek, projects S.
	Descend.
80.00	Set an iron post, 3 ft. long, 3 ins. in dia., 10 ins. in the ground to solid rock and erect a mound of stone 3 ft. base, 15 ins. high, around post for cor. of secs. 5,6,31 and 32 with brass cap marked.

T33S | S31	R1W | S32
S6 | T34S	S5 | R1W

1913

from which

A cedar, 10 ins. dia., bears N.59° 50'E., 1.00 ch. dist., marked T 33 S R 1 W S 32 B T.

A pine, 12 ins. dia., bears N.24° 15'W., 1.04 chs. dist., marked T 33 S R 1 W S 31 B T.

No other bearing trees available therefore I erect a mound of stone, 3 ft. base, 2 ft. high, W. of cor.

All traces of old sec. cor., have disappeared.

305 ft. below top of spur.

Land, mountainous; soil, stony on surface 3 to 4 ins. deep with subsoil composed of loose rock and sandy loam of medium texture; timber, scattering growth of spruce, balsam, yellow pine, aspen and cedars; medium undergrowth of buck brush, sage brush, and scattering grass.

Chains	
	West along the N. bdy. of the Tp., bet. secs. 6 and 31.
	Over mountainous land, through scattering growth of pinion and yellow pine, cedars and scattering undergrowth of buck brush, sage brush and grass.
	Descend.
1.25	Ravine, 15 ft. below sec. cor., drs. S. 3 chs. into Birch Creek.
	Ascend,
7.00	Top of spur, 30 ft. above ravine, projects S.
	Descend.
29.50	Ravine, 125 ft. below top of spur, drs. S.60°W.
	Ascend.
40.00	Set an iron post, 3 ft. long, 1 in. india., 12 ins. in the ground to solid rock and erect a mound of stone 3 ft. base, 14 ins. high, around post for ¼ sec. cor., with brass cap marked

S31
¼
S6
1913

from which

A yellow pine, 14 ins. dia., bears N.26°E., 22 lks. dist., marked ¼ S 31 B T.

A yellow pine, 16 ins. dia., bears S.65°W., 49 lks. dist., marked ¼ S 6 B T.

	All traces of old ¼ cor. have disappeared.
	30 ft. above ravine.
47.50	Top of spur, 45 ft. above ¼ cor., projects S. about 6 chs.
	Descend.
73.37	Intersect W. bdy. of Tp., 5.73 chs. N. of the cor. of Tps. 33 and 34 S., R.2 W., which is an iron post, firmly set, marked and witnessed as heretofore described.
	Set an iron post, 3 ft. long, 3 ins. in dia., 24 ins. in the ground for C.C. of Tps. 33 and 34 S.,R.1 W., with brass cap marked

T33S
R2W R1W
C S31
C
S36 S6
S1
R2W R1W
T34S

Chains

A yellow pine, 8 ins. dia., bears N.15° 40'E., 64 lks. dist., marked T 33 S R 1 W S 31 B T.

A pinion pine, 12 ins. dia., bears S.69° 50'E., 69 lks. dist., marked T 34 S R1 W S 6 B T.

180 ft. below top of spur.

Land, mountainous; soil, stony on surface 3 to 4 ins. deep with subsoil composed of coarse gravel and sandy loam of medium texture; timber, scattering growth of pinion pine, yellow pine and cedars; scattering undergrowth of buck brush, sage brush and grass.

October 6: At this cor., I set off 5° 06'S., on the decl. arc and at 11^h 48^m l.m.t., observe the sun on the meridian; the resulting latitude is 37° 54'.

October 6, 1913.

Edward R Bunbury

U. S. Transitman.

Latitudes, departures and closing errors.

Line designated	True bearing.	Dist.	Latitudes North	Latitudes South	Departures East	Departures West
West bdy.	N.0° 02'W.	473.86	473.86			.27
" "	N.0°27'W.	5.73	5.73			.04
North bdy.	East	473.37			473.37	
East bdy.	South	480.00		480.00		
South bdy.	West	39.27				3927
" "	S.89° 57'W.	39.96		.04		3996
" "	West	395.01				39501
Convergency					.56	
			479.59	480.04	473.93	474.55
				479.59		473.93

Error in lat..45 In dep..62

Jos C. Shoup

U. S. Surveyor.

Edward R Bunbury

U. S. Transitman.

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Page

BOOK A-416

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 certificate of assistants see book "G" T.37 S., R.4 E.

.....

.....

.....

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 oaths of U.S.Surveyor and U.S.Transitman see book "G" T.27 S.R.4 E.

..... 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, June 14, 191 6

The foregoing field notes of the survey of the subdivisional lines and retracement and resurvey of the south and east boundaries of Township No.34 South, Range No.1 West, of the Salt Lake Base and Meridian, Utah,

executed by their Joseph C.Thoma and Edward R.Bunbury under his special instructions dated June 11, 1913 and supplemental special instructions dated July 9, 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

Filed April 22, 1915.

Refiled January 15, 1916.

4—679

BOOK A-416

Corrected

Miles FIELD NOTES

OF THE ~~SURVEY OF THE~~

DEPENDENT RESURVEY OF THE EAST AND SOUTH BOUNDARIES AND SUBDIVISION,

SURVEY OF MEANDERS OF DUCHESNE RIVER,

AND

RETRACEMENT OF WEST, NORTH, AND FRACTIONAL EAST BOUNDARIES

OF

TOWNSHIP 3 SOUTH, RANGE 4 WEST

Of the Uinta Special Base and *Meridian,*

In the State of Utah

EXECUTED BY

RALPH GENTRY

In the capacity of U. S. Surveyor, under instructions dated April 18, *1914, issued by the United States Surveyor General to govern surveys included in Group No.* 30, *which were approved by the* Supervisor of Surveys ~~Commissioner of the General Land Office,~~ April 19, *1914, pursuant to authority contained in the Act of Congress dated* ..... *191*...

Survey commenced May 1, *1914*

Survey completed July 3, *1914*

6—151

BOOK A-416

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Township 3 South, *Range* 4 West

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6—151

RETRACEMENT

WEST BOUNDARY OF T. 3 S., R. 4 W.

Survey commenced May 1, 1914, and executed with a Young & Sons light mountain transit, No. 8584, with Smith solar attachment. The horizontal limb is provided with two double verniers placed opposite to each other, reading to single minutes of arc, which is also the least count of the verniers of the latitude and declination arcs.

The instrument was approved for use in this survey by Mr. G. D. D. Kirkpatrick, assistant supervisor of surveys.

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

At the cor. of Tps. 3 and 4 S., Rs. 4 and 5 W., which is a limestone 3 x 10 x 4 ins. above ground, firmly set, marked and witnessed as described by the surveyor general; approximate latitude 40°11'N., longitude 110° 25'W.; I set off 40°11' on the lat. arc; 15°04'N., on the decl. arc; and, at 3h 57m p.m., l.m.t., determine with the solar a meridian and mark a point thereof, on a peg set firmly in the ground, about 5 chs. N. of the cor.

May 1, 1914.

May 2: At 4h 53m 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, on a peg set firmly in the ground, about 5 chs. N. of my station.

At 7h 30m a.m., l.m.t., I lay off the azimuth of Polaris 1°30' to the west, and find that this meridian falls on the meridian determined with the solar May 1.

RETRACEMENT

WEST BOUNDARY OF T. 3 S., R. 4 W.

Chains

At 7h 57m a.m., l.m.t., I set off 40°11' on the lat. arc; 15°16'N. on the decl. arc; and determine a meridian with the solar; this meridian falls approximately 1' to the left of the Polaris meridian and the meridian determined with the solar.

The solar apparatus, by a. m. and p. m. observations, defines positions for meridians that agree with the Polaris meridian and 1' to the left of the Polaris meridian; therefore, I conclude that the adjustments of the instrument are satisfactory.

The magnetic bearing of the true meridian, at 8h 13m a.m., is N.16°15'W.; the angle thus determined gives the mag. decl. 16°15'E.

A steel tape 2 chs. long was used in all measurements in the field, together with a clinometer for determining slope angles, and the reduced horizontal distances only appear in the official field notes. The tape was tested, comparison being made with a standard tape, 1 ch. long, kept and used for that purpose.

I re-establish Tp. cor. as follows:

Set an iron post, 3 ft. long, 3 ins. in diam., 24 ins. in the ground, alongside old cor., for cor. of Tps. 3 and 4 S., Rs. 4 and 5 W., with brass cap marked

T 3 S
R 5 W | R 4 W
S 36 | S 31

S 1 | S 6
R 5 W | R 4 W
T 4 S

1914

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

Thence

North, retracing bet. secs. 31 and 36;

Over gently rolling bench land, through Charles Dickinson's alfalfa field.

.49 Cor. of fence, 3½ lks. W. of line, bears N., S. and W.

RETRACEMENT

WEST BOUNDARY OF T. 3 S., R. 4 W.

Chains	
14.15	Leave field and fence, bearing N.60°E. and S.70°20'W.
14.94	Canal, 15 lks. wide, flows N.60°E.
	Ascend S. slope of bench, through scattering shadscale, yellow top and very scattering grass.
20.10	Fall 2½ lks. W. of the 1/16 cor., which is a cobble-stone 8 x 6 x 6 ins. above ground, firmly set, properly marked, and witnessed as described by the surveyor general.
	From this cor. the SW. cor. of P. Walston's house bears N.18°18'E., 3.48 chs.
	From point 2½ lks. W. of cor., I continue North
20.96	Log cabin and stable on line.
39.74	Wagon road, Duchesne to Bonita, Utah, bears N.5°E. and S.5°W.
40.26	Fall 6 lks. W. of the ¼ sec. cor., which is a hard sand-stone 6 x 6 x 8 ins. above ground, firmly set, properly marked, and witnessed as described by the surveyor general. I re-establish cor. as follows:
	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, alongside of old cor., for ¼ sec. cor. with brass cap marked
	S 36 | S 31
	1914
	and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.
	The true bearing of this half mile is N.0°05'E., and the distance 40.26 chs.
	From a point 6 lks. W. of the ¼ sec. cor., I continue North
70.00	The SW. cor. of George Bowers' cabin, 15 x 24 ft., bears N.30°07'E.
70.20	Road, bears N.5°W. and S.5°E.
80.38	Fall 13 lks. W. of the cor. of secs. 25, 30, 31 and 36, which is a quartzite stone 6 x 8 x 4 ins. above ground,

Chains	
	firmly set, properly marked, and witnessed as described by the surveyor general. I re-establish cor. as follows:
	Set an iron post, 3 ft. long, 3 ins. in diam., 24 ins. in the ground, alongside of old cor., for cor. of secs. 25, 30, 31 and 36, with brass cap marked
	T 3 S R 5 W | R 4 W S 25 | S 30 S 36 | S 31 1914
	and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.
	The true bearing of this half mile is therefore N.0°06' E., and the distance 40.12 chs.
	Land, gently rolling benches, with S. exposure.
	Soil, light, dry, warm sandy loam, mixed with gravel, 10 to 15 ins. deep, on hard pan subsoil; 1st rate.
	Undergrowth, shadscale, yellow top and scattering grass.
	From this cor. George Bowers' house bears N.78°E. 6.74 chs.
	From a point 13 lks. W. of the cor. of secs. 25, 30, 31 and 36, I run
	North, retracing bet. secs. 25 and 30.
	Ascend gradually over gently rolling bench land, through undergrowth of shadscale and scattering grass.
17.27	Corner of fence, 72 lks. E. of line, bears N.
20.00	Foot of bench, bears NW. and SE. Ascend.
24.57	Road, bears N.5°E. and S.5°W. Parallels line.
28.50	Top of bench, bears NW. and SE.; thence over rolling land.
35.12	Cor. of fence, 71 lks. E. of line, bears N., E. and S.
40.05	Fall 21 lks. W. of the ¼ sec. cor., which is a quartzite stone, 3 x 6 x 6 ins. above ground, firmly set, and

Chains

marked and witnessed as described by the surveyor general. I re-establish cor. as follows:

Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, alongside of old cor., for ¼ sec. cor., with brass cap marked

S 25 ¼ | S 30

1914

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

The true bearing of this half mile is therefore N.0°07' E., and the distance 40.05 chs.

From this ¼ sec. cor. the SE. cor. of Barlow's cabin, 20 x 22 ft., bears N.75°20'W., 1.75 chs. dist.; cor. of fence bearing N., E. and S., bears east, 46 lks. dist.; cor. of Barlow's fence bearing N. and W., bears west, 46½ lks. dist.

From a point 21 lks. W. of the ¼ sec. cor., I continue North

42.61 The NE. cor. of Barlow's fence, 21 lks. W. of line, bears S. and W.

60.14 Cor. of fence, 70 lks. E. of line, bears N., E. and S.

80.18 Fall 26 lks. W. of the cor. of secs. 19, 24, 25 and 30, which is a sandstone 2 x 14 x 12 ins. above ground, firmly set, and marked and witnessed as described by the surveyor general. I re-establish cor. as follows:

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

T 3 S
R 5 W | R 4 W
S 24 | S 19
S 25 | S 30

1914

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

The true bearing of this half mile is therefore N.0°04'

RETRACEMENT

WEST BOUNDARY OF T. 3 S., R. 4 W.

Chains

E., and the distance 40.13 chs.

From this section cor. the NW. cor. of cabin, 14 x 16 ft., bears S.50°45'E., 1.62 chs. dist.; cor. of fence bearing N.88°E. and S., bears S.44°10'E., 72 lks. dist.; the SE. cor. of Henry Bottom's house, 14½ x 12½ ft., bears N.29°35'W., 3.04 chs. dist.; cor. of fence bearing N. and W., bears west 45 lks. dist.

May 2: At this cor. I set off 15°18'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°12'.

From a point 26 lks. W. of the cor. of secs. 19, 24, 25 and 30, I run

North, retracing bet. secs. 19 and 24,

Over gently rolling bench land, through undergrowth of sagebrush and shadscale:

4.00 Cor. of fence 19 lks. W. of line bears N., S. and W.

16.00 Enter small swale, draining SW.

25.25 Bottom of swale, drains W.

27.70 Cor. of fence. 70 lks. N. of line, bears N. No wire on fence.

40.05 Fall 28 lks. W. of the ¼ sec. cor., which is a hard sandstone 6 x 16 x 10 ins. above ground, firmly set, and marked and witnessed as described by the surveyor general. I re-establish cor. as follows:

Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, alongside of old cor., for ¼ sec. cor., with brass cap marked

S 24 | S 19

1914

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

The true bearing of this half mile is therefore N.0°02' E., and the distance 40.05 chs.

From the ¼ sec. cor. the SW. cor. of Charles Brown's

Chains	
	cabin, 14 x 18 ft., bears N.51°45'E., 3.12 chs. dist.
	From a point 28 lks. W. of the ¼ sec. cor., I continue North
43.50	Top of bench, bears NW. and SE.
70.00	The SE. cor. of A. J. Peterson's house, 16½ x 16½ ft., bears N.67°25'W., 2.44 chs. dist.
80.12	Fall 33 lks. W. of the cor. of secs. 13, 18, 19 and 24, which is a hard sandstone 6 x 18 x 14 ins. above ground, firmly set, and marked and witnessed as described by the surveyor general. I re-establish cor. as follows:
	Set an iron post, 3 ft. long, 3 ins. in diam., 24 ins. in the ground, alongside of old cor., for cor. of secs. 13, 18, 19 and 24, with brass cap marked

T 3 S
R 5 W | R 4 W
S 13 | S 18
S 24 | S 19

1914

	and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.
	The true bearing of this half mile is therefore N.0°04' E., and the distance 40.07 chs.
	From this sec. cor. the SW. cor. of Thompson's house, 18 x 30 ft., bears N.42°40'E., 2.24 chs. dist.; cor. of fence bears N.44°E., 63 lks. dist. No wire on fence.
	Land, rolling bench land.
	Soil, light, dry, warm sandy loam, mixed with gravel, 12 to 15 ins. deep on hard pan subsoil; 2nd rate.
	No timber.
	Undergrowth, sagebrush and shadscale.
	From a point 33 lks. W. of the cor. of secs. 13, 18, 19 and 24, I run North, retracing bet. secs. 13 and 18,

RETRACEMENT

WEST BOUNDARY OF T. 3 S., R. 4 E.

Chains

Over gently rolling bench land, through undergrowth of medium sagebrush, shadscale and grass.

40.12 Fall 32 lks. W. of the ¼ sec. cor., which is a cobblestone 4 x 6 x 6 ins. set in a mound of stone, properly marked and witnessed as described by the surveyor general. I re-establish cor. as follows:

Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, alongside of old cor., for ¼ sec. cor., with brass cap marked

S 13 | S 18
¼
1914

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

The true bearing of this half mile is therefore N.0°01' W., and the distance 40.12 chs.

From this ¼ sec. cor. cabin bears N.53°50'E., 4.59 chs. dist. Size of cabin, 18½ x 18½ ft.

From a point 32 lks. W. of the ¼ sec. cor., I continue North

80.08 Fall 21 lks. W. of the cor. of secs. 7, 12, 13 and 18, which is a cobblestone 4 x 10 x 8 ins. above ground, firmly set, properly marked and witnessed as described by the surveyor general. I re-establish cor. as follows:

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

T 3 S
R 5 W | R 4 W
S 12	S 7
S 13	S 18

1914

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

The true bearing of this half mile is therefore N.0°10' W., and the distance 39.96 chs.

RETRACEMENT

WEST BOUNDARY OF T. 3 S., R. 4 W.

Chains

From this sec. cor. the SW. cor. of John Clark's cabin, 12 x 12 ft., bears N.27°05'E., 5.44 chs. dist.; cor. of fence bearing N. and E. bears N.44°15'E., 65 lks. dist.

Land, gently rolling bench.

Soil, red sand and sandy loam, fine and dry, mixed with gravel on sandy loam subsoil; 1st rate.

No timber.

Undergrowth, medium sagebrush, shadscale and grass.

May 2, 1914.

May 4: At 7h 57m a.m., l.m.t., I set off 40°14' on the lat. arc; 15°51'N. on the decl. arc; and determine a meridian with the solar at a point 21 lks. W. of the cor. of secs. 7, 12, 13 and 18.

Thence

North, retracing bet. secs. 7 and 12,

Over gently rolling bench land, through medium undergrowth of sagebrush, shadscale and scattering grass.

34.65 Canal, 20 lks. wide, drains E.

40.00 Cor. of fence, bears E., 42 lks. dist.

40.01 Fall 25 lks. W. of the $\frac{1}{4}$ sec. cor., which is a quartzite stone 6 x 8 x 4 ins., set in a mound of stone, properly marked and witnessed as described by the surveyor general. I re-establish cor. as follows:

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

$$\frac{S\ 12}{1914} \Big| S\ 7$$

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

The true bearing of this half mile is therefore N.0°03' E., and the distance 40.01 chs.

From a point 25 lks. W. of the $\frac{1}{4}$ sec. cor., I continue

RETRACEMENT

WEST BOUNDARY OF T. 3 S., R. 4 W.

Chains	
	North
59.18	The NW. cor. of Joe Morrison's cabin, 12 x 14 ft., bears S.78°50'E., 2.41 chs. dist.,
79.93	Fall 45 lks. W. of the cor. of secs. 1, 6, 7 and 12, which is a cobblestone 12 x 10 x 8 ins. set in a mound of stone, properly marked and witnessed as described by the surveyor general. I re-establish cor. as follows:
	Set an iron post, 3 ft. long, 3 ins. in diam., 24 ins. in the ground, alongside of old cor., for cor. of secs. 1, 6, 7 and 12, with brass cap marked

T 3 S
R 5 W | R 4 W
S 1 | S 6

S 12 | S 7

1914

	and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.
	The true bearing of this half mile is therefore N.0°17' E., and the distance 39.92 chs.
	From this cor. the SW. cor. of cabin 14 x 16 ft. bears N.38°45'E., 2.75 chs. dist.; cor. of wire fence bearing E. and N., bears N.51°20'E., 50 lks. dist.
	Land, gently rolling bench land.
	Soil, sandy loam, fine and rather dry, on sandy loam subsoil; 1st rate.
	No timber.
	Undergrowth, sage, shadscale and grass.
	From a point 45 lks. W. of the cor. of secs. 1, 6, 7 and 12, I run
	North, retracing bet. secs. 1 and 6,
	Over gently rolling bench, through undergrowth of sage-brush, shadscale and scattering grass.
.20	Road, bears E. and W.
19.50	Cor. of wire fence 26 lks. E., bears N. and W.

RETRACEMENT

WEST BOUNDARY OF T. 3 S., R. 4 W.

Chains

20.72 The SE. cor. of cabin, 12 x 12 ft., bears W., 1.43 chs. dist.

39.92 Cor. of wire fence bearing S. and W., bears E., 25 lks. dist.

Fall 40 lks. W. of the ¼ sec. cor., which is a quartzite stone 12 x 10 x 6 ins., lying on the ground, marked ¼ on one face.

Set stone 8 ins. in the ground and set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, alongside of stone, for ¼ sec. cor., with brass cap marked

S 1 | S 6
¼

1914

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

The true bearing of this half mile is therefore N.0°04' W., and the distance 39.92 chs.

From point on line 40 lks. W., cor. of wire fence bearing N., E. and S., bears E., 97 lks. dist.

From a point 40 lks. W. of cor., I continue North

59.89 Cor. of fence bears E., 98 lks. dist. Wire fence bears E. and S. from cor., and posts are set for fence to N.

79.76 Fall 46 lks. W. of the cor. of Tps. 2 and 3 S., Rs. 4 and 5 W., which is a gray sandstone 10 x 8 x 3 ins. above ground, firmly set, properly marked and witnessed as described by the surveyor general. I re-establish cor. as follows:

Set an iron post, 3 ft. long, 3 ins. in diam., 24 ins. in the ground, alongside of old cor., for cor. of Tps. 2 and 3 S., Rs. 4 and 5 W., with brass cap marked

T 2 S
R 5 W | R 4 W
S 36 | S 31

S 1 | S 6
R 5 W | R 4 W
T 3 S

1914

RETRACEMENT

WEST BOUNDARY OF T. 3 S., R. 4 W.

Chains

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

The true bearing of this half mile is therefore N.0°05' E., and the distance 39.84 chs.

From this cor., cor. of wire fence bears N.43°45'E., .64 lks. dist.

Land, rolling bench.

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

No timber.

Undergrowth, sage, shadscale and scattering grass.

The corners were re-established on this line May 27, 1914.

RETRACEMENT

NORTH BOUNDARY OF T. 3 S., R. 4 W.

From the cor. of Tps. 2 and 3 S., Rs. 4 and 5 W., I retrace

N.89°37'E., bet. secs. 6 and 31,

Over gently rolling bench land, through medium undergrowth of sagebrush, shadscale and scattering grass.

.30 Road, bears N. and S.

18.47 Road, bears SW. and E., parallel to line.

40.28 Fall 6 lks. N. of the ¼ sec. cor., which is a hard sandstone 18 x 12 x 4 ins., lying on the ground, marked ¼ on one face; traces of pits and mound of earth. I re-establish this cor. May 28, as follows: Set stone cor. 12 ins. in the ground with ¼ on N. face, and set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, alongside of old cor., for ¼ sec. cor. on the N. bdy. of sec. 6, T. 3 S., R. 4 W., with brass cap marked

RETRACEMENT

NORTH BOUNDARY OF T. 3 S., R. 4 W.

Chains

S¼ 6
1914

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.

The true bearing of this half mile is therefore N.89° 42'E., and the distance 40.28 chs.

From this cor. the E. end row of posts for fence bears N. 68 lks. SW. cor. of cabin 12 x 14½ ft. bears N.35°45'E., 1.50 chs. dist.

May 4: At this ¼ sec. cor. I set off 15°54'W. on the decl. arc; and at 11h 57m a.m., l.m.t., observe the sun on the meridian; the resulting lat. is 40°16'.

From a point 6 lks. N. of the ¼ sec. cor., I continue N.89°37'E.

80.23 Fall 50 lks. N. of the cor. of secs. 5 and 6, which is a sandstone 10 x 6 x 3 ins. above ground, firmly set and marked and witnessed as described by the surveyor general. I re-establish this cor. May 28, as follows:

Set an iron post, 3 ft. long, 3 ins. in diam., 24 ins. in the ground, alongside of old cor., for cor. of secs. 5 and 6, on the N. bdy. of T. 3 S., R. 4 W., with brass cap marked

T 2 S R 4 W

S 6 | S 5

T 3 S
1914

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, W. of cor.

The true bearing of this half mile is therefore S.89° 45'E., and the distance 39.95 chs.

Land, gently rolling bench.

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

No timber.

RETRACEMENT

NORTH BOUNDARY OF T. 3 S., R. 4 E.

Chains	
	Undergrowth, sagebrush, shadscale and scattering grass.
	From a point 50 lks. N. of the cor. of secs. 5 and 6, I run
	N.89°37'E., retracing bet. secs. 5 and 32.
	Over gently rolling bench land, through medium undergrowth of sagebrush, greasewood and scattering grass.
1.55	Road, bears N.15°E. and S.15°W.
34.84	Road, bears NW. and SE.
40.44	Fall 15 lks. N. of the ¼ sec. cor., which is a sandstone 12 x 12 x 5 ins. above ground, firmly set, and marked and witnessed as described by the surveyor general. I re-establish this cor. May 28, as follows:
	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, alongside of old cor., for ¼ sec. cor., with brass cap marked
	$\frac{\text{S } \frac{1}{4} \text{ 5}}{1914}$
	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.
	The true bearing of this half mile is therefore N.89° 07'E., and the distance 40.44 chs.
	From a point 15 lks. N. of the ¼ sec. cor., I continue N.89°37'E.
70.00	Begin ascent onto bench, bearing N. and S.
75.00	Top of bench, 35 ft. above base, bears N. and S. Thence over bench.
80.89	Fall 16 lks. N. of the cor. of secs. 4 and 5, which is a sandstone 10 x 10 x 6 ins. above ground, firmly set, properly marked and witnessed as described by the surveyor general. I re-establish cor. May 28, as follows:
	Set an iron post, 3 ft. long, 3 ins. in diam., 24 ins.

RETRACEMENT

NORTH BOUNDARY OF T. 3 S., R. 4 W.

Chains	
	..in the ground, alongside of old cor.; for cor. of secs. 4 and 5, with brass cap marked . T 2 S R.4 W / S 5 | S 4 / T 3 S 1914
	and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.
	The true bearing of this half mile is therefore N.89° 38'E., and the distance 40.44 chs.
	Land, gently rolling benches.
	Soil, light, fine, dry sandy loam mixed with some loose rock and gravel, 15 to 20 ins. deep on hard pan and sandy loam subsoil; 2nd rate.
	No timber.
	Undergrowth, sagebrush, greasewood and scattering grass.
	From a point 16 lks. N. of the cor. of secs. 4 and 5, I run
	N.89°37'E., retracing bet. secs. 4 and 33,
	Over gently rolling bench land, through undergrowth of medium sage, shadscale and very scattering grass.
2.25	Fall 16 lks. N. of the closing cor. of secs. 32 and 33, which is a quartzite stone 14 x 8 x 5 ins. above ground, firmly set, properly marked, and witnessed as described by the surveyor general; mound of stone N. of cor.
18.75	Road, bears NW. and SE.
37.00	Road, bears NW. and SE.
37.50	Enter very scattering cedar timber, undergrowth more scattering, bears NW. and SE.
40.00	Begin descent over rolling hills, bearing NW. and SE.
40.56	Fall 25 lks. N. of the ¼ sec. cor., which is a hard sandstone, 10 x 8 x 5 ins. above ground, firmly set, properly marked, and witnessed by

RETRACEMENT

NORTH BOUNDARY OF T. 3 S., R. 4 W.

Chains	
	A cedar 10 ins. diam., bearing N.54°15'W., 29 lks. dist., marked ¼ S 33 B T.
	A cedar 6 ins. diam., bearing S.44°15'E., 74 lks. dist., marked ¼ S 4 B T.
	May 28 I re-establish this cor. as follows:
	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, alongside of old cor., for ¼ sec. cor., with brass cap marked
	¼ S 4 1914
	The true bearing of this half mile is therefore N.89°45'E. and the distance 40.56 chs.
	May 4, 1914.
	May 5: At 7h 57m a.m., l.m.t., I set off 40°16' on the lat. arc; 16°09'N. on the decl. arc; and determine a meridian with the solar at a point 25 lks. N. of the ¼ sec. cor. bet. secs. 4 and 33.
	Thence I continue
	N.89°37'E.
48.50	Ravine, 50 ft. below ¼ sec. cor., drains SE.
	Ascend 20 ft. to
51.50	Point, falls S. Descend 25 ft. to
55.00	Same ravine, drains NE. Ascend 20 ft. to
57.30	Point, falls N. Descend 15 ft. to
65.00	Ravine, drains SE.
80.82	Fall 24 lks. N. of the cor. of secs. 3 and 4, which is a trachyte stone 12 x 10 x 6 ins. above ground, firmly set, properly marked, and witnessed by
	A cedar 7 ins. diam., bearing S.59°E., 58 lks. dist., marked T 3 S R 4 W S 3 B T.
	A cedar 6 ins. diam., bearing S.24°W., 81 lks. dist., marked T 3 S R 4 W S 4 B T.
	May 28 I re-establish this cor. as follows:

RETRACEMENT

NORTH BOUNDARY OF T. 3 S., R. 4 W.

Chains	
	Set an iron post, 3 ft. long, 3 ins. in diam., 24 ins. in the ground, alongside of old cor., for cor. of secs. 3 and 4, with brass cap marked T 2 S R 4 W S 4 | S 3 T 3 S 1914
	The true bearing of this half mile is therefore N.89°36' E., and the distance 40.26 chs.
	Cor. stands on top of ascent, 30 ft. above ravine.
	Land, rolling bench and hills.
	Soil, light, dry, warm sandy loam, mixed with coarse gravel, on gravelly and sandy subsoil; 2nd rate.
	Timber, a few scattering pinon pines and cedars.
	Undergrowth, sage, shadscale and scattering grass.
	From a point 24 lks. N. of the cor. of secs. 3 and 4, I retrace N.89°37'E., on the N. bdy. of sec. 3,
	Over rolling hills, through scattering pinon and cedar timber and undergrowth of sagebrush and scattering grass.
1.45	Ravine, 20 ft. below cor., drains NE. Ascend.
1.84	Fall 24 lks. N. of the closing cor. of secs. 33 and 34, which is a quartzite stone 12 x 6 x 6 ins. above ground, firmly set, properly marked, and witnessed by A cedar 8 ins. diam., bearing N.67°W., 69½ lks. dist., marked T 2 S R 4 W S 33 B T. A cedar 5 ins. diam., bearing N.24°15'E., 4½ lks. dist., marked T 2 S R 4 W S 34 B T.
3.00	Top of ascent on S. side of ravine, 35 ft. above same. Descend 55 ft. to
10.10	Ravine, drains SE. Ascend 45 ft. to
11.90	Top of spur, bears NW. and SE. Descend 95 ft. to

RETRACEMENT

NORTH BOUNDARY OF T. 3 S., R. 4 W.

Chains

39.94 Fall 38 lks. N. of the ¼ sec. cor., which is a limestone 8 x 6 x 3 ins. above ground, firmly set, properly marked, and witnessed by

A cedar 8 ins. diam., bearing S.57°15'W., 109 lks. dist., marked ¼ S 3 B T.

A cedar stump 5 ins. diam., bearing N.7°E., 52 lks. dist., marked ¼ S 34 B T.

May 28 I re-establish this cor. as follows:

Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, alongside of old cor., for ¼ sec. cor., with brass cap marked

¼
S 3
1914

The true bearing of this half mile is therefore N.89° 49'E., and the distance 39.94 chs.

From a point 38 lks. N. of the ¼ sec. cor., I continue N.89°37'E.

43.15 Ravine, 15 ft. below cor., drains SE. Ascend.

63.75 Spur, 85 ft. above ravine, projects SW.

Thence along S. slope of spur.

80.39 Fall 39 lks. N. of the cor. of secs. 2 and 3, which is a quartzite stone 4 x 4 x 3 ins., lying on the ground, marked 3 notches on one edge and one notch on opposite edge. No accessories to cor.

May 28 I re-establish this cor. as follows:

Reset stone 2 ins. in the ground and set an iron post, 3 ft. long, 3 ins. in diam., 24 ins. in the ground, alongside of cor., for cor. of secs. 2 and 3, with brass cap marked

T 2 S R 4 W

S 3 | S 2

T 3 S
1914

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

RETRACEMENT

NORTH BOUNDARY OF T. 3 S., R. 4 W.

Chains	
	W. of cor.
	The true bearing of this half mile is therefore N.89° 38'E., and the distance 40.45 chs.
	Land, rolling hills.
	Soil, blue clay, shale rock and rocky on clay and rocky subsoil; 4th rate.
	Timber, scattering cedar.
	Undergrowth, scattering sage and grass.
	May 5: At this cor. I set off 16°11'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°16'.
	From a point 39 lks. N. of the cor. of secs. 2 and 3, I run
	N.89°37'E., retracing the N. bdy. of sec. 2,
	Over rolling hills, through very scattering cedar timber and very scattering undergrowth of sage and Brigham tea.
1.10	Fall 39 lks. N. of the closing cor. of secs. 34 and 35, T. 2 S., R. 4 W., which is a limestone 14 x 12 x 4 ins. above ground, firmly set, properly marked, and witnessed as described by the surveyor general.
	From a point 39 lks. N. of the closing cor., I continue N.89°37'E.
37.75	Ravine, 75 ft. below cor., drains SE.
40.11	Fall 40 lks. N. of the ¼ sec. cor., which is a gray sandstone 10 x 8 x 4 ins., set in a mound of stone, properly marked and witnessed as described by the surveyor general. I re-establish this cor. May 28 as follows; which will hereafter be regarded as an angle point:
	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, alongside of old cor., for ¼ sec. cor., with brass cap marked

RETRACEMENT

NORTH BOUNDARY OF T. 3 S., R. 4 W.

Chains	
	and raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor.
	The true bearing of this half mile is therefore N.89° 38'E., and the distance 40.11 chs.
	From a point 40 lks. N. of the ¼ sec. cor., I continue N.89°37'E.
42.50	Spur, 75 ft. above cor., projects S. Descend 65 ft. to
48.25	Draw, drains S. Ascend 85 ft. to
54.00	Spur, projects SE. Gradually descend 95 ft. to
71.55	Ravine, drains S.35°E. Ascend 15 ft. to
80.52	Fall 17 lks. S. of the old cor. of secs. 1, 2, 35 and 36 (which should have been destroyed by previous deputy surveyor), which is a gray sandstone 12 x 10 x 10 ins. above ground, firmly set, properly marked and witnessed as described by the surveyor general.
	Note: Closing cors. have been set on this bdy. for secs. 35 and 36 to the N. and secs. 1 and 2 to the S., and this cor., therefore, does not refer to any secs., but guides in alinement of this line only.
	I re-establish cor. for angle point as follows:
	Set an iron post, 3 ft. long, 3 ins. in diam., 24 ins. in the ground, alongside of old cor., for angle point, with brass cap marked
	T 2 S R 4 W AP T 3 S R 4 W 1914
	and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.
	The true bearing of this half mile is therefore N.88°48' E., and the distance 40.42 chs.
	Land, rolling hills.
	Soil, blue clay and sandy on sandy and clay subsoil; 3rd rate.
	Timber, a few scattering cedars.
	Undergrowth, very scattering sage and Brigham tea.
	May 5, 1914.

RETRACEMENT

NORTH BOUNDARY OF T. 3 S., R. 4 W.

Chains	
	May 6: At 7h 57m a.m., l.m.t., I set off 40°16' on the lat. arc; 16°25'E. on the decl. arc; and determine a meridian with the solar at a point 17 lks. S. of the last mentioned angle point cor.
	Thence
	N.89°37'E., retracing along the N. bdy. of sec. 1,
	Over rolling hills, through very scattering cedar timber and very scattering undergrowth of sage, shadscale and grass.
.60	Fall 17 lks. S. of the closing cor. of secs. 35 and 36, T. 2 S., R. 4 W., which is a sandstone 8 x 8 x 6 ins. above ground, firmly set, properly marked and witnessed as described by the surveyor general.
	From a point 17 lks. S. of the closing cor., I continue N.89°37'E.
1.20	Fall 17 lks. S. of the closing cor. of secs. 1 and 2, T. 3 S., R. 4 W., which is the center of a mound of stone. Unable to find marked stone. I re-establish cor. as follows:
	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 marked

T 2 S | R 4 W.
S 35 | S 36
C C
S 2 | S 1
T 3 S
1914

	and raise a mound of stone, 2 ft. base, 1½ ft. high, S. of cor.
	From a point 17 lks. S. of the closing cor., I continue N.89°37'E.
4.10	Spur, 55 ft. above cor., projects S. Descend 40 ft. to
12.35	Draw, drains S. Ascend 260 ft. to
38.90	Top of rocky spur, projects S. Descend.
40.40	Fall 12 lks. S. of the ¼ sec. cor., which is a sandstone 12 x 6 x 6 ins. above ground, firmly set, properly

RETRACEMENT

NORTH BOUNDARY OF T. 3 S., R. 4 W.

Chains	
	marked and witnessed by
	A cedar 8 ins. diam. bearing N.77°E., 29 lks. dist., marked ¼ S 36 B T.
	A cedar 8 ins. diam., bearing S.25°E., 28½ lks. dist., marked ¼ S 1 B T.
	I re-establish this cor. May 28 as follows:
	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap marked
	S 36 ¼ S 1 1914
	Note: This cor. will be regarded as an angle point only. The true bearing of this half mile is therefore N.89°41' E., and the distance 40.40 chs.
	From a point 12 lks. S. of the ¼ sec. cor., I continue N.89°37'E.
41.00	Draw, 20 ft. below cor., drains SE.
	Ascend gradually.
64.00	Foot of ledges, 200 ft. above ravine, bears NW. and SE.
	Abrupt ascent.
64.94	Top of same, 50 ft. high, bears NW. and SE.
	Thence over mountain.
80.69	Fall 15 lks. S. of the cor. of Tps. 2 and 3 S., Rs. 3 and 4 W., which is a sandstone 18 x 12 x 6 ins. set in a mound of stone, properly marked and witnessed as described by the surveyor general. I re-establish cor. May 28 as follows:
	Set an iron post, 3 ft. long, 3 ins. in diam., 24 ins. in the ground, alongside of old cor., for cor. of Tps. 2 and 3 S., Rs. 3 and 4 W., with brass cap marked
	T 2 S R 4 W | R 3 W S 36 | S 31 S 1 | S 6 R 4 W | R 3 W T 3 S 1914
	and raise a mound of stone, 2 ft. base, 1½ ft. high, S. of cor.

RETRACEMENT

NORTH BOUNDARY OF T. 3 S., R. 4 W.

Chains	
	The true bearing of this half mile is therefore N.89°34' E., and the distance 40.29 chs.
	Land, rolling and broken hills.
	Soil, sandy and loose rock on sandy and rocky subsoil; 4th rate.
	Timber, very scattering cedar.
	Undergrowth, scattering sagebrush, shadscale and grass.
	May 6: At this cor. I set off 16°27'E. on the decl. arc; and at 11h 57m a.m., l.m.t., observe the sun on the meridian; the resulting lat. is 40°16'.

RETRACEMENT

EAST BOUNDARY OF T. 3 S., R. 4 W.

Chains	
	May 6, 1914: From the cor. of Tps. 2 and 3 S., Rs. 3 and 4 W., I run South, retracing bet. secs. 1 and 6,
	Over rocky mountain, through scattering cedar timber and very scattering undergrowth of sagebrush and Brigham tea.
9.10	Leave mountain, bearing N.80°W. and S.80°E.
	Descend steep rocky slope.
15.30	Ravine, 205 ft. below top of bench, drains SW. Ascend 30 ft. to
17.50	Spur, projects SW. Descend 170 ft. to
35.98	Fall 6½ lks. E. of witness cor. to ¼ sec. cor., which is a sandstone 10 x 8 x 6 ins. above ground, firmly set, marked ¼ on W. face (W C. omitted), with mound of stone W.
	I re-establish witness cor. as follows:
	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, alongside of old cor., for witness cor. to ¼ sec. cor. on the W. bdy. of sec. 6, T. 3 S., R. 3 W., with brass cap marked

RETRACEMENT

EAST BOUNDARY OF T. 3 S., R. 4 W.

Chains	
	T 3 S R 4 W. R 3 W WC ½ S 6 1914
	and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.
	The true bearing of this half mile is therefore S.0°06' W., and the distance 35.98 chs.
	From a point 6½ lks. E. of the witness cor., I continue South
45.30	Ravine, 150 ft. below cor., drains S.30°E.
	Ascend 30 ft. to
48.10	Top of ascent, on W. side of ravine.
	Descend 30 ft. to
50.45	Ravine and wash, 8 lks. wide, 5 ft. deep, drains SW.
	Thence over rolling hills.
60.80	Same wash, 15 lks. wide, 7 ft. deep, drains SE.
64.80	Rock cabin, 14 x 14 ft., bears N.66°45'W. 3.09 chs. dist.
67.60	Wash, 40 lks. wide, 15 ft. deep, drains S.80°E.
	Leave timber, bearing E. and W. Ascend gradually.
72.65	Wagon road to Fort Duchesne, bears E. and W.
75.10	Fall 17 lks. E. of the cor. of secs. 6 and 7, on the W. bdy. of T. 3 S., R. 3 W., which is a sandstone 12 x 10 x 3 ins., lying on the ground, marked 1 notch on one edge and 5 notches on opposite edge. No accessories to cor.
	I re-establish cor. as follows:
	Reset stone in the ground and set an iron post, 3 ft. long, 3 ins. in diam., 24 ins. in the ground, alongside of old cor., for cor. of secs. 6 and 7, on the W. bdy. of T. 3 S., R. 3 W., with brass cap marked
	T 3 S R 3 W. S 6 S 7 1914

Chains

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

The true bearing of this half mile is therefore S. 0° 09' W., and the distance 39.12 chs.

Land, broken and rolling hills.

Soil, hard, dry, blue clay and gravel on clay and gravelly subsoil; 3rd rate.

Timber, scattering cedar.

Undergrowth, sagebrush and Brigham tea.

May 6, 1914.

May 7: At 7h 56m a.m., l.m.t., I set off 40° 15' on the lat. arc; 16° 43' W. on the decl. arc; and determine a meridian with the solar at a point 17 lks. E. of the cor. of secs. 6 and 7.

Thence

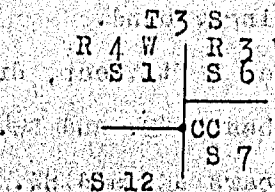
S. 0° 48' E., retracing bet. secs. 7 and 12,

Over rolling hills, through medium undergrowth of shadscale and sagebrush and very scattering grass.

.85 Wash, 6 lks. wide, 4 ft. deep, drains S. 80° E.

3.60 Fall, 17 lks. E. of the closing cor. of secs. 1 and 12, on the E. bdy. of T. 3 S., R. 4 W., which is a sandstone 14 x 10 x 4 ins. above ground, firmly set, properly marked and witnessed as described by the surveyor general. I re-establish cor. as follows:

Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground, alongside of old cor., for closing cor. of secs. 1 and 12, T. 3 S., R. 4 W., with brass cap marked



1914

Dig pits 24 x 18 x 12 ins., crosswise on each line, N. and S. 3 ft., and W. of post, 7 ft. dist.; and

Chains	
	raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor.
	From a point 17 lks. E. of the closing cor., I continue S.0°48'E.
10.00	Foot of descent, bears E. and W. Thence over rolling land.
28.15	Wash, 6 lks. wide, 2 ft. deep, drains N.65°E.
39.44	Fall 12 lks. E. of the ¼ sec. cor., which is a sandstone 16 x 10 x 4 ins. set in a mound of stone, properly marked and witnessed as described by the surveyor general. I re-establish cor. as follows:
	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, alongside of old cor., for ¼ sec. cor., with brass cap marked
	S 12 / ¼ | S 7
	1914
	and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.
	The true bearing of this half mile is therefore S.0°52' E., and the distance 39.44 chs.
	From a point 12 lks. E. of the ¼ sec. cor., I continue S.0°10'E.
47.35	Wagon road to Duchesne, Utah, bears NE. and SW.
58.00	Descend into rocky ravine, bearing NE. and SW.
59.40	Bottom of ravine, 60 ft. deep, drains NE., heads 6 chs. SW. Ascend.
60.70	Top of ascent, S. side of ravine, bears NE. and SW.
68.70	Descend rocky slope, bearing NE. and SW.
72.00	Foot of descent, 60 ft. below top.
	Thence over rolling ground.
78.35	Wash, 8 lks. wide, 2 ft. deep, drains NE.
80.10	Foot of ascent, bears NE. and SW. Ascend 70 ft. to
83.60	Top of ascent, bears NE. and SW.
	Thence over rolling foothills.
83.63	Fall 12 lks. E. of the cor. of secs. 7, 12, 13 and 18,

Chains

which is a sandstone 12 x 8 x 8 ins. above ground, firmly set, properly marked and witnessed as described by the surveyor general. I re-establish cor. as follows:

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

T 3 S
R 4 W | R 3 W
S 12 | S 7
S 13 | S 18

1914

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

The true bearing of this half mile is therefore S.0°10' E., and the distance 44.19 chs.

Land, rolling hills.

Soil, blue clay and gravelly on clay and rocky subsoil; 4th rate.

No timber.

Undergrowth, sagebrush, shadscale and grass.

From the cor. of secs. 7, 12, 13 and 18, I run South, retracing bet. secs. 13 and 18.

40.00 No trace of ¼ sec. cor. can be found. I continue my line south, making careful searches at intervals of 40 chs. for sec. and ¼ sec. cors.

80.00 May 7: At this station I set off 16°45'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°13'.

160.00 Cease work.

May 7, 1914.

May 8: At 7h 56m a.m., l.m.t., I set off 40°12' on the lat. arc; 16°59'N., on the decl. arc; and determine a meridian with the solar at the 160-ch. point.

Thence I continue

South, retracing bet. secs. 13 and 18.

RETRACEMENT

EAST BOUNDARY OF T. 3 S., R. 4 W.

Chains	
196.95	Fall 52 lks. W. of the ¼ sec. cor. bet. secs. 25 and 30, which is a cobblestone 10 x 4 x 3 ins., lying on the ground in a small mound of stone, marked ¼ on one face. I reset stone in the ground and set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, alongside of old cor., for ¼ sec. cor., with brass cap marked S 25 ¼ | S 30 1914 and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.
	The true bearing of the line bet. the cor. of secs. 7, 12, 13 and 18 and the ¼ sec. cor. bet. secs. 25 and 30 is S.0°09'E., and the distance is 196.95 chs. I re-survey said line, setting proper cors. at proportionate distances.
	From the ¼ sec. cor., I run
	South, retracing the S. half mile bet. secs. 25 and 30.
40.00	No trace of the cor. of secs. 25, 30, 31 and 36 can be found.
	I therefore continue
	South, making careful searches at intervals of 40 chs. for ¼ sec. and sec. cors.
120.00	May 8: At this station I set off 17°01'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°11'.
120.72	Fall 35 lks. W. of the cor. of Tps. 3 and 4 S., Rs. 3 and 4 W., which is a cobblestone 16 x 10 x 8 ins., lying on the ground, marked 6 notches on 2 sides. No accessories to cor.
	I re-establish cor. as follows:
	Set stone in ground and set an iron post, 3 ft. long, 3 ins. in diam., 24 ins. in the ground, alongside of old cor., for cor. of Tps. 3 and 4 S., Rs. 3 and 4 W., with brass cap marked

RETRACEMENT

EAST BOUNDARY OF T. 3 S., R. 4 W.

Chains

T 3 S
R 4 W | R 3 W
S 36 | S 31
S 1 | S 6
R 4 W | R 3 W
T 4 S
1914

from which

A cottonwood 8 ins. diam. bears N.71°15'E., 20 lks. dist., marked T 3 S R 3 W S 31 B T.

A cottonwood 6 ins. diam. bears S.4°E., 21½ lks. dist., marked T 4 S R 3 W S 6 B T.

A cottonwood 7 ins. diam. bears S.72°30'W., 40½ lks. dist., marked T 4 S R 4 W S 1 B T.

A cottonwood 8 ins. diam. bears N.42°15'W., 14½ lks. dist., marked T 3 S R 4 W S 36 B T.

The true bearing of this line bet. the ¼ sec. cor. bet. secs. 25 and 30 and the cor. of Tps. 3 and 4 S., Rs. 3 and 4 W. is S.0°10'E., and the distance is 120.72 chs. I resurvey this line, setting cors. at proportionate distances.

May 8, 1914.

DEPENDENT RESURVEY

EAST BOUNDARY OF T. 3 S., R. 4 W.

May 26: At 6h 57m a.m., l.m.t., I set off 40°14' on the lat. arc; 21°04'N. on the decl. arc; and determine a meridian with the solar at the cor. of secs. 7, 12, 13 and 18.

Thence

S.0°09'E., resurveying bet. secs. 13 and 18,

Over rolling foothills, through undergrowth of sagebrush, shadscale and very scattering grass.

9.90 Descend into very rocky ravine, bearing NE. and SW.

12.00 Bottom of ravine, 60 ft. deep, drains NE., heads 5 chs. SW. Ascend 60 ft. to

DEPENDENT RESURVEY

EAST BOUNDARY OF T. 3 S., R. 4 W.

Chains	
14.00	Top of ascent, bears NE. and SW.
	Thence over rolling mesa.
19.40	Leave mesa, bearing NE. and SW. Descend.
23.00	Foot of mesa, 100 ft. below top, bears NE. and SW.
	Thence over gently rolling bench land.
39.39	Proportionate measurement.
	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap marked
	S 13 / ¼ / S 18
	1914
	and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.
46.20	Foot of ascent, bears E. and W. Ascend 60 ft. to
48.20	Top of ascent and rolling mesa, bears E. and W.
	Thence over mesa top.
53.80	Leave mesa, bears NE. and W. Descend 65 ft. to
57.30	Foot of descent, bears NE. and W.
	Thence over gently rolling land with rocky surface.
72.50	Foot of ascent, bears NW. and SE.
75.50	Spur, 45 ft. above base, projects SE. Descend 30 ft. to
78.78	Proportionate measurement.
	Set an iron post, 3 ft. long, 3 ins. in diam., 10 ins. in the ground and 14 ins. in a mound of stone on solid rock, for cor. of secs. 13, 18, 19 and 24, with brass cap marked
	T 3 S R 4 W / R 3 W S 13 / S 18 S 24 / S 19
	1914
	and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.
	Land, rolling and broken.
	Soil, shallow blue clay, mixed with gravel and loose rocks on clay and rocky subsoil; 4th rate.
	No timber.

DEPENDENT RESURVEY

EAST BOUNDARY OF T. 3 S., R. 4 W.

Chains	
	Undergrowth, sagebrush, shadscale and very scattering grass.
	S.0°09'E., resurveying bet. secs. 19 and 24,
	Over mountainous land, through scattering undergrowth of sagebrush and shadscale and very scattering grass.
1.00	Bottom of ravine, drains N.60°E.
	Ascend over rocky slope.
13.90	Spur, 100 ft. above ravine, projects E. Descend 110 ft. to
21.65	Ravine, drains E. Ascend abruptly 110 ft. to
26.60	Spur, projects E. Descend 80 ft. to
30.25	Ravine, drains E. Ascend 150 ft. to
39.39	Proportionate measurement.
	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap marked S 24 | S 19 ¼ 1914 and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.
42.35	Flat spur, 2 chs. wide, 35 ft. above ¼ sec. cor., projects S.75°E.
44.35	Descend 230 ft. to
57.85	Ravine, drains S.65°E. Ascend 50 ft. to
65.60	Spur, projects E. 6 chs. Descend 30 ft. to
71.10	Ravine, drains E.
78.78	Proportionate measurement, 140 ft. above ravine.
	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 marked T 3 S R 4 W | R 3 W S 24 | S 19 S 25 | S 30 1914 and raise a mound of stone, 2 ft. base, 1½ ft. high,

DEPENDENT RESURVEY

EAST BOUNDARY OF T. 3 S., R. 4 W.

Chains

W. of cor.

Land, mountainous, draining E.

Soil, loose rock and sandy surface on sandy and rocky subsoil; 4th rate.

No timber.

Undergrowth, scattering sagebrush and shadscale and very scattering grass.

May 26: At this cor. I set off 21°05'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°12'.

S.0°09'E., resurveying bet. secs. 25 and 30.

Ascend NE. slope, through undergrowth of sagebrush and shadscale and scattering grass.

.15 Top of Blue Bench, 5 ft. above sec. cor., bears NW. and SE.

Thence over gently rolling bench land.

11.30 Draw, 30 ft. deep, drains E., heads 3 chs. W.

39.39 The ¼ sec. cor. bet. secs. 25 and 30,

Thence

S.0°10'E., with continuous chaining.

59.55 Descend over rocky slope.

78.45 Ravine, 155 ft. below top, drains SE. Ascend.

79.63 Proportionate measurement.

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 marked

T 3 S
R 4 W. | R 3 W
S 25 | S 30
S 36 | S 31

1914

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

Land, gently rolling bench land and mountainous.

Soil, loose rocks and sandy loam on rocky and sandy

Chains	
	subsoil; 4th rate.
	No timber.
	Undergrowth, sagebrush, shadscale and scattering grass.
	S.0°10'E., resurveying bet. secs. 31 and 36,
	Over mountainous land, through scattering undergrowth of sagebrush, shadscale and grass. Ascend.
4.05	Spur, 30 ft. above cor., projects SE. Descend 155 ft. to
18.25	Large wash at foot of mountain, drains SW. Thence over low, rolling foothills.
40.24	Proportionate point for ¼ sec. cor.
	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap marked S 36 ¼ | S 31 1914 and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.
58.61	Enter bottom land, bearing N.75°W. and S.75°E.
59.65	Wagon road, bears N.75°W. and S.75°E.
67.44	Wagon road, Duchesne to Myton, Utah, bears E. and W.
68.66	Canal, 10 lks. wide, drains E.
75.66	Fence, bears E. and W.
	Enter cottonwood timber and dense undergrowth of willow and rose brush and chaparral, bearing E. and W.
	Thence over bottom land of Duchesne river.
79.75	West 91 lks. from my line is an allotment cor., which is a cobblestone 12 x 8 x 6 ins., marked A on one face. No accessories to cor.
80.48	The cor. of Tps. 3 and 4 S., Rs. 3 and 4 W.
	Land, mountainous, rolling foothills and level bottom land.
	Soil: Mountainous portion and foothills, generally loose, rocky and gravelly surface on hard sand and

DEPENDENT RESURVEY

EAST BOUNDARY OF T. 3 S., R. 4 W.

Chains

rock subsoil, 4th rate; bottom land, rich, moist sandy loam on sandy loam subsoil, 1st rate.

Timber, some cottonwood on bottom land.

Undergrowth, sagebrush, shadscale and scattering grass on N. 75.66 chs., and dense willow, rose brush and chaparral on S. 4.82 chs.

May 26, 1914.

RETRACEMENT

SOUTH BOUNDARY OF T. 3 S., R. 4 W.

May 9: At 7h 56m a.m., l.m.t., I set off 40°11' on the lat. arc; 17°15'N. on the decl. arc; and determine a meridian with the solar at the cor. of Tps. 3 and 4 S., Rs. 3 and 4 W.

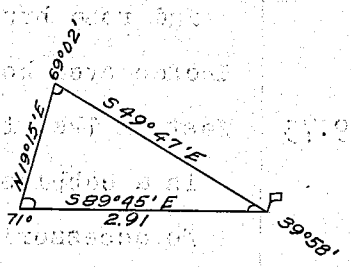
Thence I run

N.89°45'W., retracing bet. secs. 1 and 36, making careful searches at distances recorded in old notes for meander cors., ¼ sec. cors. and sec. cors.

21.56 Left bank of Duchesne river, course SE.

To determine the dist. across river, I set a point on right bank of river and erect a flag at this point; from point on right bank measure a base N.19°15'E., 2 chs. to a point from which the flag bears S.49°47'E.; from flag N. end of base bears N.49°47'W.; therefore the distance is

$$\frac{\sin.\ 69°\ 02'}{\sin.\ 39°\ 58'} \times 2.00$$



Log 2.00 chs. = .301030
Log sin. 69°02' = 9.970249
Colog sin. 39°58' = 0.192234
Log 2.91 chs. = 0.463513

21.56 chs. + 2.91 chs. gives

24.47 To right bank of river.

34.40 Right bank of Duchesne river, course NE.

To determine the dist. across river, I set a flag on left bank, and measure a base N.39°23'E., 2 chs., to a point from which flag bears S.71°23'W.; from flag

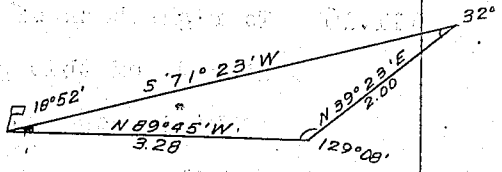
RETRACEMENT

SOUTH BOUNDARY OF T. 3 S., R. 4 W.

Chains

N. end of base bears N.71°23'E.; therefore the dist.is

$$\frac{\text{sin. } 32°00'}{\text{sin. } 18°52'} \times 2.00$$



Log 2.00 chs.	= .301030
Log sin. 32°00'	= 9.724210
Colog sin. 18°52'	= 0.490304
Log 3.28 chs.	= 0.515544

3.28 chs. + 34.40 chs. gives

37.68 To left bank of river.

May 9: At this station I set off 17°18'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°11'.

48.46 Left bank of Duchesne river, course S.60°E.

Line W. of this point follows up river. Being unable to measure base at this point to triangulate, I offset as follows:

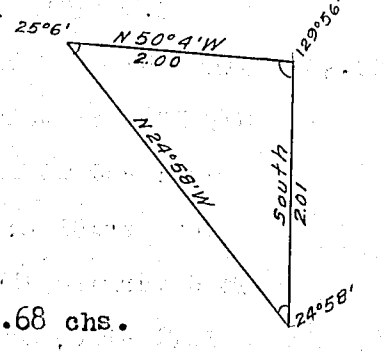
North, 13 chs.; then, on the offset line:

N.89°45'W., 31.54 chs.;

South, 4.67 chs. to left bank of Duchesne river, course SE.

To determine the dist. across river, I set a flag on right bank, and measure a base N.50°04'W., 2 chs., to a point; base subtends an angle of 25°06' to flag; from flag to W. end of base the angle is 24°58'; therefore the distance is

$$\frac{\text{sin. } 25°06'}{\text{sin. } 24°58'} \times 2.00$$



Log 2.00 chs.	= .301030
Log sin. 25°06'	= 9.627570
Colog sin. 24°58'	= 0.374594
Log 2.01 chs.	= 0.303194

2.01 chs. plus 4.67 chs. gives 6.68 chs.

Continue south on offset line to

13.00 chs.

80.00 No trace of old sec. cor.

Cease work. May 9, 1914.

May 11: At 7h 56m a.m., l.m.t., I set off 40°11' on the lat. arc; 17°47'N. on the decl. arc; and determine a meridian with the solar at temp. point 80.00 chs. W. of Tp. cor.

RETRACEMENT

SOUTH BOUNDARY OF T. 3 S., R. 4 W.

Chains

Thence I continue

N.89°45'W., retracing bet. secs. 2 and 35.

111.16 To right bank of Duchesne river, course N.

Line W. of this point follows up river; am unable to obtain base to triangulate, therefore offset as follows:

South, 3.00 chs.; then, on the offset line:

N.89°45'W., 12.79 chs.

North, 3.00 chs. to

123.95 Right bank of Duchesne river, course S.70°E.

Thence

N.89°45'W., on a retracement line.

160.00 May 11: At this station I set off 17°49'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°11'.

280.00 Cease work.

May 11, 1914.

May 12: At 7h 26m a.m., l.m.t., I set off 40°11' on the lat. arc; 18°02'N. on the decl. arc; and determine a meridian with the solar at a point 280.00 chs. W. of the Tp. cor.

Thence I continue

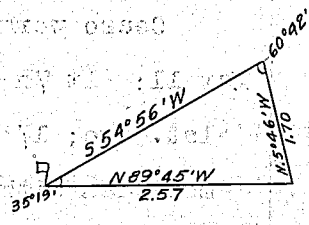
N.89°45'W., retracing along the S. bdy. of the Tp.

402.38 Right bank of Duchesne river, course N.

May 12: At this station I set off 18°05'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°11'.

To determine the distance across river, I set a flag on left side, then measure a base N.5°46'W., 1.70 chs. to a point from which the flag bears S.54°56'W.; from flag N. end of base bears N.54°56'E.; therefore the distance is

$$\frac{\sin.\ 60°42'}{\sin.\ 35°19'} \times 1.70$$



Log 1.70 chs.	= 0.230449
Log sin. 60°42'	= 9.940551
Colog sin. 35°19'	= 0.238001
Log 2.57	= 0.409001

2.57 chs. added to 402.38 chs. gives

RETRACEMENT

SOUTH BOUNDARY OF T. 3 S., R. 4 W.

Chains	
404.95	To left side of Duchesne river.
	Thence
	S.89°45'E. 30 lks. to
404.65	To left bank of Duchesne river, course N.
	Thence
	N.89°45'W.
486.07	Fall 9.34 chs. N. of the cor. of Tps. 3 and 4 S., Rs. 4 and 5 W.
	This falling answers to a correction of 1.56 chs. S. per mile, counting from the SE. cor. of the Tp.
	May 12, 1914.
	Note: In retracing this Tp. bdy. I intersect the right bank of Duchesne river in sec. 35, 111.16 chs. W. of the cor. of Tps. 3 and 4 S., Rs. 3 and 4 W.; this differs 1.16 chs. from the notes of the original surveyor. The river at this point makes a turn and flows directly from the west; the S. bank runs along a rocky bluff, its channel bearing no evidence of having changed. A true resurvey line connecting the two Tp. cors. would fall S. and not cross the river at this place, which would differ materially from the original survey. By moving my retracement line N. 82 lks. from my 111.16-ch. point the line west crosses the river, practically corresponding with the original field notes. In view of these facts I resurvey this bdy. to conform to the location of the original survey, on the following courses and setting cors. at proportionate distances as follows:
	From cor. of Tps. 3 and 4 S., Rs. 3 and 4 W., N.89°21'W. to ¼ sec. cor. bet. secs. 2 and 35; from ¼ sec. cor. bet. secs. 2 and 35, S.88°40'W., to the cor. of Tps. 3 and 4 S., Rs. 4 and 5 W.

June 9: At 7h. 59m a.m., l.m.t., I set off 40°11' on the lat. arc; 22°55'N. on the decl. arc; and determine

Chains

a meridian at the cor. of Tps. 3 and 4 S., Rs. 3 and 4 W.

Thence I run

N.89°21'W., resurveying bet. secs. 1 and 36,

Over nearly level bottom land, through scattering cottonwood timber, and undergrowth of willow, bull berry, rose brush and scattering grass.

21.56 Left bank of Duchesne river, course S.

Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for meander cor. of fracl. secs. 1 and 36, with brass cap marked

T 3 S R 4 W
S 36
MC
S 1
T 4 S R 4 W
1914

from which

A cottonwood 6 ins. diam. bears N.15°45'E., 62 lks. dist., marked T 3 S R 4 W S 36 M C B T.

A cottonwood 6 ins. diam. bears S.9°45'E., 38 lks. dist., marked T 4 S R 4 W S 1 M C B T.

24.47 Right bank of Duchesne river.

Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for meander cor. of fracl. secs. 1 and 36, with brass cap marked

T 3 S R 4 W
S 36
S 1
MC
T 4 S R 4 W
1914

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

Thence through dense undergrowth of willow.

34.40 Right bank of Duchesne river, course NE.

Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for meander cor. of fracl. secs. 1 and 36, with brass cap marked

DEPENDENT RESURVEY

SOUTH BOUNDARY OF T. 3 S., R. 4 W.

Chains	
	T 3 S R 4 W S 36 MC / S 1 T 4 S R 4 W 1914
	from which
	A cottonwood 7 ins. diam. bears N.50°45'E., 39 lks. dist., marked T 3 S R 4 W S 36 M C B T.
	A cottonwood 6 ins. diam. bears S.38°45'E., 92 lks. dist., marked T 4 S R 4 W S 1 M C B T.
37.68	Left bank of Duchesne river.
	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for meander cor. of fracl. secs. 1 and 36, with brass cap marked
	T 3 S R 4 W S 36 S 1 / MC T 4 S R 4 W 1914
	from which
	A cottonwood 6 ins. diam. bears S.66°30'W., 127 lks. dist., marked T 4 S R 4 W S 1 M C B T.
	A cottonwood 6 ins. diam. bears N.38°45'W., 22 lks. dist., marked T 3 S R 4 W S 36 M C B T.
40.38	Proportionate point for ¼ sec. cor.
	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap marked
	S 36 ¼ S 1 1914
	from which
	A cottonwood 6 ins. diam. bears S.73°W., 66 lks. dist., marked ¼ S 1 B T.
	A cottonwood 6 ins. diam. bears N.39°45'W., 37 lks. dist., marked ¼ S 36 B T.
44.46	Old river bank, bears N. and S.

DEPENDENT RESURVEY

SOUTH BOUNDARY OF T. 3 S., R. 4 W.

Chains	
	Leave willow undergrowth; enter dense greasewood.
48.46	Left bank of Duchesne river, course SE.
	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for meander cor. of fracl. secs. 1 and 36, with brass cap marked
	T 3 S R 4 W S 36 MC S 1 T 4 S R 4 W 1914
	Dig a pit, 36 x 36 x 12 ins., 8 ft. E. of post; and raise a mound of earth, 4 ft. base, 2 ft. high, E. of cor.
	Then offset as follows:
	North, 13.00 chs.; then, on offset line:
	N.89°21'W., 31.54 chs.
	South, 13.00 chs.
	S.89°21'E., 7.83 chs. to
72.17	Right bank of Duchesne river, course SE.
	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for meander cor. of fracl. secs. 1 and 36, with brass cap marked
	T 3 S R 4 W S 36 MC S 1 T 4 S R 4 W 1914
	Dig a pit, 36 x 36 x 12 ins., 8 ft. W. of post; and raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor.
77.50	Leave dense willow, enter greasewood, bears N. and S.
80.76	Proportionate point for cor. of secs. 1, 2, 35 and 36.
	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 marked

DEPENDENT RESURVEY

SOUTH BOUNDARY OF T. 3 S., R. 4 W.

Chains	
	T 3 S R 4 W S 35 | S 36 S 2 | S 1 T 4 S R 4 W 1914
	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, bottom lands.
	Soil, rich, moist, sandy loam on sandy loam subsoil; 1st rate.
	Timber, scattering cottonwood.
	Undergrowth, willow, greasewood, bull berry and chaparral.
	June 9: At this cor. I set off 22°55'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°11'.
	June 10: At 7h 59m a.m., l.m.t., I set off 40°11' on the lat. arc; 23°00'N. on the decl. arc; and determine a meridian with the solar at the cor. of secs. 1, 2, 35 and 36.
	Thence
	N.89°21'W., bet. secs. 2 and 35,
	Over nearly level bottom land, through scattering cottonwood timber, and undergrowth of willow, bull berry, rose brush, greasewood and scattering grass.
7.40	Leave undergrowth, enter cultivated land, bearing N. and S.75°E.
23.35	Leave cultivated land, enter undergrowth and scattering timber, bearing N. and S.
30.40	Right bank of Duchesne river, course N. from W.
	Unable to obtain base to triangulate. Offset as follows:
	South, 3.00 chs.
	N.89°21'W., 9.98 chs. to
40.38	Point for ¼ sec. cor. falls in bottom land; unable to reach cor. point.

DEPENDENT RESURVEY

SOUTH BOUNDARY OF T. 3 S., R. 4 W.

Chains

Thence

S.88°40'W., on offset line, with continuous chaining, 12.79 chs.

North, 3.00 chs. to

43.19 Right bank of Duchesne river.

Unable to perpetuate ¼ sec. cor. on safe ground.

Thence

S.88°40'W.

50.00 Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for witness cor. to ¼ sec. cor., with brass cap marked

T 3 S R 4 W
S 35
WC¼
S 2
T 4 S R 4 W
1914

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

Leave bottom land, bearing NW. and SE.

Ascend, through scattering sagebrush, shadscale and grass.

57.50 Top of bench, bears NW. and SE.

Thence over rolling land.

74.25 Small draw, drains N.

80.76 Proportionate point for cor. of secs. 2, 3, 34 and 35.

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 marked

T 3 S R 4 W
S 34 | S 35
S 3 | S 2
T 4 S R 4 W
1914

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

Land, river bottom and rolling bench.

Soil: River bottom, rich, moist, sandy loam on deep sandy loam subsoil; 1st rate; on bench, light sandy loam mixed with gravel on sandy and gravelly subsoil.

Chains	
	2nd rate.
	Timber, scattering cottonwood.
	Undergrowth, willow, bull berry, greasewood, sagebrush, shadscale, rose brush and scattering grass.
	S.88°40'W., bet. secs. 3 and 34,
	Over gently rolling bench land, through scattering undergrowth of sagebrush, shadscale and grass.
14.00	Road, Duchesne to Myton, Utah, bears N.85°W. and S.80°E.
38.50	Same road, bears NE. and SW.
39.70	Descend into small ravine, bearing N. and S.; enter scattering scrub cedar timber.
39.89	Point for ¼ sec. cor. will fall in wash in bottom of ravine.
	Perpetuate cor. on safe ground at this point.
	Set an iron post 3 ft. long, 1 in. in diam., 26 ins. in the ground, for witness cor. to ¼ sec. cor., with brass cap marked
	T 3 S R 4 W S 34 WC ¼ o—— S 3 T 4 S R 4 W 1914
	from which
	A cedar 6 ins. diam. bears S.52°45'W., 95 lks. dist., marked W C ¼ S 3 B T.
	A cedar 5 ins. diam. bears N.50°45'W., 95 lks. dist., marked W C ¼ S 34 B T.
40.39	Bottom of ravine, 20 ft. deep, course N. Point for ¼ sec. cor. in ravine. No cor. set.
	Ascend 20 ft. to
46.00	Top of ascent; thence over rolling land.
56.00	Road, Duchesne to Myton, Utah, bears N.80°W. and S.80°E.
57.00	Ascend rolling hills, bearing N.80°W. and S.80°E.
74.50	Spur, 60 ft. above base, projects N. Descend 40 ft. to
77.40	Ravine, drains N. Ascend 20 ft. to

DEPENDENT RESURVEY

SOUTH BOUNDARY OF T. 3 S., R. 4 W.

Chains

80.78 Proportionate point for cor. of Secs. 3, 4, 33 and 34. 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 marked

T 3 S R 4 W
S 33 | S 34
S 4 | S 3
T 4 S R 4 W
1914

from which

A cedar 8 ins. diam. bears S.82°45'E., 153 lks. dist., marked T 4 S R 4 W S 3 B T.

A cedar 6 ins. diam. bears S.72°30'W., 98 lks. dist., marked T 4 S R 4 W S 4 B T.

No other bearing trees within limits.

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

Land, rolling bench and hills.

Soil, light, dry, warm, sandy loam mixed with gravel on gravelly and sandy subsoil; 2nd rate.

Timber, scattering scrub cedar.

Undergrowth, sagebrush, shadscale and scattering grass.

S.88°40'W., bet. secs. 4 and 33;

Over broken, hilly ground, through scattering scrub cedar timber, and scattering undergrowth of sagebrush, shadscale and grass.

Ascend abruptly 80 ft. to

7.70 Spur, projects N. Descend 90 ft. to

13.50 Ravine, drains N. Ascend 55 ft. to

17.45 Spur, projects N. Descend abruptly 75 ft. to

20.20 Ravine, drains N. Ascend 120 ft. to

28.70 Spur, projects N. Descend 120 ft. to

35.85 Ravine, drains N. Ascend gradually 45 ft. to

40.39 Proportionate point for ¼ sec. cor.

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

Chains	
	in the ground, for ¼ sec. cor., with brass cap marked
	S 33 ¼ S 4 1914
	from which
	A cedar 8 ins. diam. bears S.41°45'E., 20 lks. dist., marked ¼ S 4 B T.
	A cedar 6 ins. diam. bears N.62°W., 9 lks. dist., marked ¼ S 33 B T.
40.70	Top of flat spur, 20 ft. above cor., projects N.
46.95	Descent bears N. and S.
49.40	Ravine, 40 ft. below top, drains N. Ascend 50 ft. to
52.20	Spur, projects N. Descend 85 ft. to
66.70	Foothills, bear N.80°E. and S.80°W.
	Thence over gently rolling bench.
71.85	Road, Duchesne to Myton, Utah, bears N.80°E. and S.80°W.
80.78	Proportionate point for cor. of secs. 4, 5, 32 and 33.
	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 marked
	T 3 S R 4 W S 32 | S 33 S 5 | S 4 T 4 S R 4 W 1914
	from which
	A cedar 6 ins. diam. bears N.67°30'E., 2.74 chs. dist., marked T 3 S R 4 W S 33 B T.
	A cedar 7 ins. diam. bears S.26°15'E., 1.15 chs. dist., marked T 4 S R 4 W S 4 B T.
	A cedar 6 ins. diam. bears S.1°W., 1.51 chs. dist., marked T 4 S R 4 W S 5 B T.
	No tree in sec. 32
	Raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.
	Land, broken hills and gently rolling bench.
	Soil, light, dry, warm, sandy loam mixed with gravel on

Chains	
	gravelly and sandy subsoil; 2nd rate.
	Timber, scattering scrub cedar.
	Undergrowth, scattering sagebrush, shadscale and grass.
	June 10: At this cor. I set off 23°00'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°11'.
	S.88°40'W., bet. secs. 5 and 32,
	Over gently rolling bench, through scattering scrub cedar timber, and undergrowth of sagebrush, shadscale and scattering grass.
5.30	Descend, bearing N. and S.
9.25	Ravine, 45 ft. deep, drains N. Ascend 65 ft. to
12.00	Bench, bears N. and S.
15.00	Descend.
21.00	Foot of descent, bears N. and SW., 55 ft. below top.
	Leave cedars, bearing N. and S.
26.40	Wash, 20 lks. wide, 6 ft. deep, drains S.
31.00	Foot of ascent, bears N. and S.
35.00	Top of ascent, 35 ft. above base, bears N. and S.35°W.
40.39	Proportionate point for ¼ sec. cor.
	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap marked S 32 ¼ S 5 1914
	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.
64.75	Leave bench, bearing N.85°E. and S.85°W.
65.54	Wire fence, bears N.85°E. and S.85°W.
68.00	Foot of descent, bears NE. and SW.
	Enter scattering cottonwood timber, and undergrowth of sagebrush, rabbit brush, willow and scattering grass.
	Thence over bottom land.

Chains	
76.05	Canal, drains N.85°E.
79.29	Right bank of Duchesne river, course N.
80.78	True point for cor. of secs. 5, 6, 31 and 32 falls in river. No cor. set.
	Land, rolling benches and nearly level bottom land.
	Soil, light, dry, fine, warm, sandy loam mixed with gravel on dry, gravelly and sandy subsoil; 2nd rate.
	Timber, scattering cottonwood and scrub cedar.
	Undergrowth, sage, willow, greasewood, and rabbit brush.
	S.88°40'W., bet. secs. 6 and 31.
.78	Left bank of Duchesne river, course N.
1.12	Set an iron post, 3 ft. long, 3 ins. in diam., 24 ins. in the ground, for witness cor. to cor. of secs. 5, 6, 31 and 32, with brass cap marked

T 3 S R 4 W
S 31 | S 32.
WC
S 6 | S 5.
T 4 S R 4 W
1914

from which

A cottonwood 16 ins. diam. bears S.59°W., 111 lks. dist., marked W C T 4 S R 4 W S 6 B T.

A cottonwood 6 ins. diam. bears N.64°15'W., 96 lks. dist., marked W C T 3 S R 4 W S 31 B T.

No other trees available.

Mound of stone impracticable.

Thence over bottom land, through scattering cottonwood timber, and undergrowth of sagebrush, rabbit brush, willow and scattering grass.

16.00	Brush fence, bears NE. and SW.
	Leave brush and timber; enter cultivated land.
28.65	Road, Duchesne to Myton, Utah, bears N. and SW.
40.39	Proportionate point for ¼ sec. cor.
	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap marked

DEPENDENT RESURVEY

SOUTH BOUNDARY OF T. 3 S., R. 4 W.

Chains

S 31
1/2
S 6
1914

from which

A cottonwood 9 ins. diam. bears S.52°15'W., 190 lks. dist., marked 1/2 S 6 B T.

A cottonwood 7 ins. diam. bears N.39°15'W., 47 lks. dist., marked 1/2 S 31 B T.

40.55 Wire fence, bears N. and S. Leave field.

47.00 Telephone line, bears NE. and SW.

49.00 Wire fence, bears NE. and SW. Foot of bench and abrupt ascent.

54.20 Top of ascent and bench, 145 ft. above base, bears NE. and SW. Thence over gently rolling bench, through scattering undergrowth of sage, shadscale and grass.

61.60 Wire fence, bears N. and S. Leave brush and enter alfalfa field, bearing N. and S.

82.29 The cor. of Tps. 3 and 4 S., Rs. 4 and 5 W.

Land, level river bottom and rolling bench.

Soil, light, dry, warm, sandy loam mixed with gravel and some clay on sandy loam and clay subsoil; 2nd rate.

Timber, scattering cottonwood.

Undergrowth, sagebrush, willow, rabbit brush and scattering grass.

June 10, 1914.

DEPENDENT RESURVEY

SUBDIVISION OF T. 3 S., R. 4 W.

May 16: At 7h 56m a.m., l.m.t., I set off 40°14' on the lat. arc; 19°01'N. on the decl. arc; and determine a meridian with the solar at the cor. of secs. 11, 12, 13 and 14, described on page 56 of this survey.

Thence

N.89°45'E., retracing bet. secs. 12 and 13,

Over rolling hills, through undergrowth of scattering

Chains	
	sagebrush, shadscale and grass.
5.00	Base of ridge, bears N. and S. Ascend gradually 50 ft. to
15.00	Top of ridge, bears N. and S. Descend gradually 50 ft. to
29.00	Base of ridge, bears N.30°W. and S.30°E.
	Thence over low hills.
40.17	Fall 9 lks. N. of the ¼ sec. cor., which is a sandstone 18 x 18 x 12 ins. above ground, firmly set, properly marked and witnessed as described by the surveyor general.
	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, alongside of old cor., for ¼ sec. cor., with brass cap marked S 12 / ¼ / S 13 / 1914 and raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor.
	The true bearing of this half mile is therefore N.89°53' E., and the distance 40.17 chs.
	From a point 9 lks. N. of the ¼ sec. cor., I continue N.89°45'E.
65.50	Descend abruptly, bearing N.70°E. and S.70°W.
68.15	Ravine, 390 ft. below ridge, drains N.70°E. Ascend 55 ft. to
71.40	Top of ascent on S. side of ravine. Descend gradually.
80.32	Intersect E. bdy. of Tp., 25 lks. N. of the cor. of secs. 7, 12, 13 and 18, heretofore described.
	The true bearing of this half mile is therefore N.89°59' E., and the distance 40.15 chs.
	Land, rolling hills.
	Soil, light, dry, warm, sandy loam mixed with gravel and loose rocks on gravelly and sandy subsoil; 3rd rate.
	No timber.
	Undergrowth, scattering sage, shadscale and grass.

DEPENDENT RESURVEY

SUBDIVISION OF T. 3 S., R. 4 W.

Chains	
	From the cor. of secs. 11, 12, 13 and 14,
	North, retracing bet. secs. 11 and 12,
	Over rolling hills, through undergrowth of very scattering sagebrush, shadscale and grass.
2.35	Begin gradual ascent.
7.00	Road, Duchesne to Lake Fork, Utah, bears E. and W.
15.00	Ridge, 50 ft. high, bears N.75°E. and S.75°W.
	Descend.
17.00	Ravine, 30 ft. deep, drains N.75°E.
	Ascend gradually.
40.04	Low ridge, 50 ft. high, bears NE. and SW.
	Fall 14 lks. E. of the ¼ sec. cor., which is a sandstone 14 x 12 x 8 ins. above ground, firmly set, properly marked and witnessed as described by the surveyor general.
	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, alongside of old cor., for ¼ sec. cor., with brass cap marked
	S 11 ¼ | S 12
	1914
	and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.
	The true bearing of this half mile is therefore N.0°12' W., and the distance 40.04 chs.
	From a point 14 lks. E. of the ¼ sec. cor., I continue North.
60.00	Leave hills, bearing NW. and E.
	Thence over open flat.
80.06	Fall 11 lks. E. of the cor. of secs. 1, 2, 11 and 12, which is a sandstone 10 x 8 x 6 ins. above ground, firmly set, properly marked and witnessed as described by the surveyor general.
	Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground, alongside of old cor., for cor. of secs. 1, 2, 11 and 12, with brass cap marked

DEPENDENT RESURVEY

SUBDIVISION OF T. 3 S., R. 4 W.

Chains

T 3 S	R 4 W
S 2	S 1
S 11	S 12

1914

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.

The true bearing of this half mile is therefore N.0°03' E., and the distance 40.02 chs.

Land, rolling hills, draining E.

Soil, light, dry, blue clay and sand mixed with loose rocks and gravel on clay and gravelly subsoil; 2nd rate.

No timber.

Undergrowth, scattering sagebrush, shadscale and grass.

May 16: At this cor. I set off 19°03'E. on the decl. arc; and at 11h 56m a.m., l.m.t., observe the sun on the meridian; the resulting lat. is 40°15'.

S.89°45'E., retracing bet. secs. 1 and 12,

Over nearly level land, through undergrowth of shadscale, sagebrush and scattering grass.

14.00 Wash, drains N.; enter rolling hills, bearing N. and S.

39.77 Fall 16 lks. S. of the ¼ sec. cor., which is a sandstone 16 x 10 x 10 ins., above ground, firmly set, properly marked and witnessed as described by the surveyor general.

Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, alongside of old cor., for ¼ sec. cor., with brass cap marked

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

S 12
1914

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

Chains	
	The true bearing of this half mile is therefore S.89°59' E., and the distance 39.77 chs.
	From a point 16 lks. S. of the ¼ sec. cor., I continue S.89°45'E.
	Over low rolling bench land.
79.64	Intersect E. bdy. of Tp., 38 lks. south of the closing cor. of secs. 1 and 12, heretofore described.
	The true bearing of this half mile is therefore N.89°56' E., and the distance 39.87 chs.
	Land, level and low rolling hills.
	Soil, light, dry, blue clay mixed with gravel and rocks on clay and rocky subsoil; 2nd rate.
	No timber.
	Undergrowth, shadscale, sage and scattering grass.
	May 16, 1914.
	May 19: At 7h 56m a.m., l.m.t., I set off 40°15' on the lat. arc; 19°42'N. on the decl. arc; and determine a meridian with the solar at the cor. of secs. 1, 2, 11 and 12.
	Thence
	North, retracing bet. secs. 1 and 2,
	Over nearly level land, through undergrowth of shadscale, sagebrush and scattering grass.
9.40	Road, bears E. and W.
31.50	Foot of ascent, enter hilly land, bears E. and W.
34.00	Spur, 55 ft. above base, projects E. Descend 30 ft. to
38.75	Foot of spur, bears E. and W.
	Descend gradually.
39.87	Fall 13 lks. E. of the ¼ sec. cor., which is a sandstone 16 x 14 x 3 ins. above ground, firmly set, properly marked and witnessed as described by the surveyor general.
	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, alongside of old cor., for ¼ sec. cor.,

DEPENDENT RESURVEY

SUBDIVISION OF T. 3 S., R. 4 W.

Chains	
	with brass cap marked S 2 | S 1 ¼ 1914 and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.
	The true bearing of this half mile is therefore N.0°11' W., and the distance 39.87 chs.
	From a point 13 lks. E. of ¼ sec. cor., I continue North.
43.50	Wash, 50 lks. wide, 10 ft. deep, drains E. Ascend gradually.
57.10	Wash, 30 lks. wide, 6 ft. deep, drains SE.
69.00	Begin ascent, bearing NW. and SE.
78.15	Intersect N. bdy. of Tp., 3 lks. E. of the closing cor. of secs. 1 and 2, heretofore described.
	The true bearing of this half mile is therefore N.0°09' E., and the distance 38.28 chs.
	Land, level and rolling hills, E. exposure.
	Soil, light, dry, blue clay mixed with gravel and loose rocks on clay and rocky subsoil; 3rd rate.
	No timber.
	Undergrowth, shadscale, sagebrush and scattering grass.

May 19: At the cor. of secs. 1, 2, 11 and 12, I set off 19°44' W. on the decl. arc; and at 11h 56m a.m., l.m.t., observe the sun on the meridian; the resulting lat. is 40°15'.

Thence

S.89°56'W., retracing bet. secs. 2 and 11,

	Over nearly level land, through undergrowth of shadscale, sage and scattering grass.
32.00	Enter low rolling hills and scattering scrub cedar timber, bearing N. and S. Ascend gradually 50 ft. to
40.25	Fall 16 lks. S. of the ¼ sec. cor., which is a sandstone

Chains

12 x 10 x 4 ins. above ground, firmly set, properly marked and witnessed as described by the surveyor general.

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

S 2
¼
S 11
1914

No bearing trees available.

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

The true bearing of this half mile is therefore N.89°50' W., and the distance 40.25 chs.

From a point 16 lks. S. of the ¼ sec. cor., I continue S.89°56'W.

65.00 Spur, 105 ft. above ¼ sec. cor., projects N.15°E.

Descend 35 ft. to

68.60 Ravine, drains N.5°E. Ascend 95 ft. to

80.55 Fall 16 lks. S. of the cor. of secs. 2, 3, 10 and 11, which is a limestone 12 x 12 x 4 ins. above ground, firmly set, properly marked and witnessed as described by the surveyor general.

Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground, alongside of old cor., for cor. of secs. 2, 3, 10 and 11, with brass cap marked

T 3 S | R 4 W
S 3 | S 2
S 10 | S 11
1914

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

The true bearing of this half mile is therefore S.89°56' W., and the distance 40.30 chs.

Land, level and rolling hills.

Soil, sandy loam, loose rocks and some dry, blue clay on sandy loam and loose rock subsoil; 2nd rate.

Chains	
	Timber, scattering scrub cedar.
	Undergrowth, shadscale, sagebrush and scattering grass.
	May 19, 1914.
	May 21: For solar observation see line bet. secs. 9 and 10.
	From the cor. of secs. 2, 3, 10 and 11,
	N.0°57'W., retracing bet. secs. 2 and 3,
	Over rolling hills, through scattering scrub cedar timber, and undergrowth of sagebrush, shadscale and scattering grass.
16.18	Road, bears E. and W.
39.95	Fall 8 lks. W. of the ¼ sec. cor., which is a sandstone 20 x 12 x 3 ins. above ground, firmly set, properly marked and witnessed as described by the surveyor general.
	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, alongside of old cor., for ¼ sec. cor., with brass cap marked
	S ¼ 3 | S 2
	1914
	and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.
	The true bearing of this half mile is therefore N.0°50' W., and the distance 39.95 chs.
	From a point 8 lks. W. of the ¼ sec. cor., I continue N.0°57'W.
59.15	Gulch, drains E.
	Ascend gradually along E. side of gulch from N.
77.46	Intersect N. bdy. of Tp., 17 lks. W. of the cor. of secs. 2 and 3, heretofore described.
	The true bearing of this half mile is therefore N.0°49' W., and the distance 37.51 chs.
	Land, rolling hills.
	Soil, light, dry, blue clay mixed with gravel and rocks

Chains	
	on clay and rocky subsoil; 3rd rate.
	Timber, scattering scrub cedar.
	Undergrowth, sagebrush, shadscale and scattering grass.
	May 21, 1914.
	First Meridional Line.
	May 14: At 7h 56m a.m., l.m.t., I set off 40°11' on the lat. arc; 18°32'N. on the decl. arc; and determine a meridian with the solar at the restored cor. of secs. 1, 2, 35 and 36, on the S. bdy. of the Tp., heretofore described.
	Thence
	North, retracing bet. secs. 35 and 36, 25 and 26, 23 and 24, and 13 and 14.
	Unable after diligent search to find any trace of old cors.
	Set temp. cors. at intervals of 40.00 chs.
6.32	Right bank of Duchesne river.
8.33	Left bank of Duchesne river.
	(For triangulation of river see line bet. secs. 1 and 36 S. bdy. this Tp.).
160.00	May 14: At this station I set off 18°34'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°12'.
317.04	Fall 51 lks. E. of the cor. of secs. 11, 12, 13 and 14, which is a sandstone 20 x 9 x 7 ins. above ground, firmly set, properly marked and witnessed as described by the surveyor general.
	Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground, alongside of old cor., for cor. of secs. 11, 12, 13 and 14, with brass cap marked

T 3 S | R 4 W

S 11 | S 12

S 14 | S 13

1914

Chains

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

Note: I return and adjust all temp. cors. on the 1st meridional line to their proportionate meridional positions.

May 14, 1914.

Second Meridional Line.

May 18: At 7h 56m a.m., l.m.t., I set off 40°11' on the lat. arc; 19°28'N. on the decl. arc; and determine a meridian with the solar at the restored cor. of secs. 2, 3, 34 and 35, on the S. bdy. of the Tp., heretofore described.

Thence

North, retracing line bet. secs. 34 and 35, 26 and 27, 22 and 23, 14 and 15, and 10 and 11.

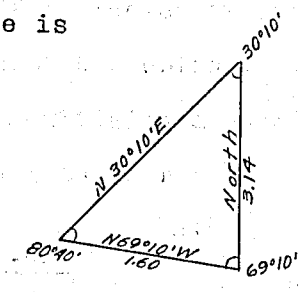
Unable after careful search to find any trace of old cors.

Set temp. cors. at intervals of 40.00 chs.

6.34 Right bank of Duchesne river.

To determine distance across river, set flag on left bank, 48 lks. N. of true point, where I can measure base N.69°10'W., 1.60 chs. to point from which flag bears N.30°10'E.; from flag, W. end of base bears S. 30°10'W.; therefore the distance is

$$\frac{\sin.\ 80°40'}{\sin.\ 30°01'} \times 1.60$$



Log 1.60 chs.	= 0.204120
Log sin. 80°40'	= 9.994212
Colog sin. 30°10'	= 0.298849
Log 3.14 chs.	= 0.497181

3.14 chs. + 6.34 chs. = 9.48 chs.

9.48 chs. - .48 chs. =

9.00 Left bank of river.

160.00 May 18: At this station I set off 19°30'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°12'.

320.00 Cease work.

May 18, 1914.

DEPENDENT RESURVEY

SUBDIVISION OF T. 3 S., R. 4 W.

Chains

May 19: For solar observation see line bet. secs. 1 and 2.

Continue north from 320.00-ch. point.

397.30 Fall 37 lks. E. of the cor. of secs. 2, 3, 10 and 11.

Note: I return and adjust all cors. on the 2nd meridional line to their proportionate meridional positions.

May 18, 1914.

Third Meridional Line.

May 20: At 7h 56m a.m., l.m.t., I set off 40°11' on the lat. arc; 19°54'N. on the decl. arc; and determine a meridian with the solar at the restored cor. of secs. 3, 4, 33 and 34, on the S. bdy. of the Tp., heretofore described.

Thence

North, retracing lines bet. secs. 33 and 34, 27 and 28, 21 and 22, 15 and 16, 9 and 10, and 3 and 4.

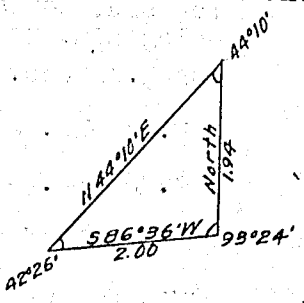
Unable after diligent search to find any trace of old cors.

Set temp. cors. at intervals of 40.00 chs.

25.66 Right bank of Duchesne river.

To determine distance across river, set flag on left side and measure base S.86°36'W., 2.00 chs. dist., to a point from which flag bears N.44°10'E.; from flag W. end of base bears S.44°10'W.; therefore the distance is

$$\frac{\sin.\ 42°26'}{\sin.\ 44°10'} \times 2.00$$



Log 2.00 chs. = 0.301030
Log sin. 42°26' = 9.829131
Colog sin. 44°10' = 0.156924
Log 1.94 chs. = 0.287085

Log 1.94 chs. + 25.66 chs. =

27.60 To flag.

27.66 Left bank of Duchesne river.

160.00 May 20: At this station I set off 19°56'N. on the decl.

DEPENDENT RESURVEY

SUBDIVISION OF T. 3 S., R. 4 W.

Chains	
	arc; and at 11h 56m a.m., l.m.t., observe the sun on the meridian; the resulting lat. is 40°12'.
320.00	Cease work.
	May 20, 1914.
	May 21: At 7h 56m a.m., l.m.t., I set off 40°12' on the lat. arc; 20°07'N. on the decl. arc; and determine a meridian with the solar at 320.00-ch. point.
	Thence continue
	North.
476.32	Intersect N. bdy. of Tp., 1.19 chs. E. of the cor. of secs. 3 and 4, heretofore described.
	May 21: At this cor. I set off 20°08'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°16'.
	Note: I return and adjust all temp. cors. on the 3rd meridional line to their proportionate meridional positions.
	May 21, 1914.

Fourth Meridional Line.

May 22: At 7h 26m a.m., l.m.t., I set off 40°11' on the lat. arc; 20°19'N. on the decl. arc; and determine a meridian with the solar at the restored cor. of secs. 4, 5, 32 and 33, on the S. bdy. of the Tp., heretofore described.

Thence

North, retracing lines bet. secs. 32 and 33, 28 and 29, 20 and 21, 16 and 17, 8 and 9, and 4 and 5.

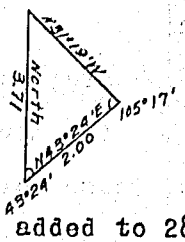
28.44 Right bank of Duchesne river.

To determine distance across river, set flag on N. side, .25 chs. N. of true point; then measure a base N.43°24' E., 2.00 chs., to a point from which flag bears N.31° 19'W.; from flag E. end of base bears S.31°19'E.; therefore the distance is

$$\frac{\text{sin. } 105°17'}{\text{sin. } 31°19'} \times 2.00$$

DEPENDENT RESURVEY

SUBDIVISION OF T. 3 S., R. 4 W.

Chains	
	Log 2.00 chs. = 0.301030 Log sin. 105°17' = 9.984363 Colog sin. 31°19' = 0.284191 Log 3.71 chs. = 0.569584
	
	3.71 chs. - .25 chs. = 3.46 chs., which added to 28.44 chs. gives
31.90	To left bank of Duchesne river.
160.00	May 22: At this station I set off 20°20'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°12'.
320.00	Cease work.
	May 22, 1914.
	May 25: At 7h 57m a.m., l.m.t., I set off 40°12' on the lat. arc; 20°53'N. on the decl. arc; and determine a meridian with the solar at 320.00-ch. point.
	Thence I continue retracing North.
477.85	Fall 1.47 chs. E. of the cor. of secs. 4 and 5, on the N. bdy. of the Tp., heretofore described.
	May 25: At this cor. I set off 20°55'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°16'.
	Note: I return and adjust all temp. cors. on the 4th meridional line to their proportionate meridional positions.
	May 25, 1914.

Fifth Meridional Line.

May 23: At 7h 27m a.m., l.m.t., I set off 40°11' on the lat. arc; 20°31'N. on the decl. arc; and determine a meridian with the solar at the witness cor. to cor. of secs. 5, 6, 31 and 32, on the S. bdy. of the Tp., heretofore described.

Thence

North, retracing bet. secs. 31 and 32, 29 and 30, 19

Chains	
	and 20, 17 and 18, 7 and 8, and 5 and 6, on offset line.
	Unable after careful search to find any trace of old cors.
	Set temp. cors. at intervals of 40.00 chs.
9.60	Offset east 1.12 chs. to true retracement line.
	Thence north.
120.00	May 23: At this station, I set off 20°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°12'.
240.00	Cease work.
	May 23, 1914.
	May 25: For solar observation see retracement of 4th meridional line.
	Thence I continue.
	North, from 240.00-ch. point.
478.80	Intersect N. bdy. of Tp., 1.68 chs. E. of the cor. of secs. 5 and 6, heretofore described.
	Note: I return and adjust all temp. cors. on the 5th meridional line to their proportionate meridional positions.
	May 25, 1914.

First Latitudinal Line.

Note: The ties to temp. cors. are taken to the adjusted positions of temp. cors. on meridional lines.

May 29: At 7h 57m a.m., l.m.t., I set off 40°12' on the lat. arc; 21°34'N. on the decl. arc; and determine a meridian with the solar at the restored cor. of secs. 25, 30, 31 and 36, on the E. bdy. of the Tp., heretofore described.

Thence

S.89°55'W., retracing line bet. secs. 25 and 36.

80.54 Fall 28 lks. N. of the temp. cor. of secs. 25, 26, 35 and

DEPENDENT RESURVEY

SUBDIVISION OF T. 3 S., R. 4 W.

Chains	
	36.
	From point 28 lks. N. of the temp. cor., I continue N.89°54'W., retracing line bet. secs. 26 and 35.
80.66	Fall 63 lks. N. of the temp. cor. of secs. 26, 27, 34 and 35.
	May 29: At this station I set off 21°35'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°12'.
	From a point 63 lks. N. of the temp. cor., I continue N.89°50'W., retracing line bet. secs. 27 and 34.
80.88	Fall 2.96 chs. N. of the temp. cor. of secs. 27, 28, 33 and 34.
	From point 2.96 chs. N. of the temp. cor., I continue N.89°40'W., retracing line bet. secs. 28 and 33.
80.75	Fall 5.04 chs. N. of the temp. cor. of secs. 28, 29, 32 and 33.
	Cease work.
	May 29, 1914.
	June 2: At 7h 28m a.m., l.m.t., I set off 40°12' on the lat. arc; 22°09'N. on the decl. arc; and determine a meridian with the solar at point 5.04 chs. N. of temp. cor. of secs. 28, 29, 32 and 33.
	Thence I continue N.89°58'W., retracing line bet. secs. 29 and 32.
80.79	Fall 6.84 chs. N. of the temp. cor. of secs. 29, 30, 31 and 32.
	From point 6.84 chs. N. of temp. cor., I continue S.89°54'W., retracing line bet. secs. 30 and 31.
81.93	Intersect W. bdy. of Tp., 7.91 chs. N. of the re-established cor. of secs. 25, 30, 31 and 36, heretofore described.
	June 2: At this station I set off 22°10'N. on the decl. arc; and at 11h 58m a.m., l.m.t., observe the sun on the meridian; the resulting lat. is 40°12'.
	June 2, 1914.

DEPENDENT RESURVEY

SUBDIVISION OF T. 3 S., R. 4 W.

Chains	
	Second Latitudinal Line.
	June 1: At 7h 58m a.m., l.m.t., I set off 40°12' on the lat. arc; 22°01'N. on the decl. arc; and determine a meridian with the solar at the restored cor. of secs. 19, 24, 25 and 30, on the E. bdy. of the Tp., heretofore described.
	Note: The ties to temp. cors. are taken to the adjusted positions of temp. cors. on meridional lines.
	Thence
	N.89°53'W., retracing bet. secs. 24 and 25.
80.39	Fall 1.03 chs. N. of the temp. cor. of secs. 23, 24, 25 and 26.
	From point 1.03 chs. N. of temp. cor., I continue S.89°54'W., retracing bet. secs. 23 and 26.
80.59	Fall 82 lks. N. of the temp. cor. of secs. 22, 23, 26 and 27.
	June 1: At this station I set off 22°02'N. on the decl. arc; and at 11h 58m a.m., l.m.t., observe the sun on the meridian; the resulting lat. is 40°12'.
	From a point 82 lks. N. of temp. cor., I continue N.89°54'W., retracing bet. secs. 22 and 27.
80.99	Fall 3.36 chs. N. of the temp. cor. of secs. 21, 22, 27 and 28.
	From point 3.36 chs. N. of temp. cor., I continue N.89°45'W., retracing bet. secs. 21 and 28.
80.77	Fall 5.06 chs. N. of temp. cor. of secs. 20, 21, 28 and 29.
	Cease work.
	June 1, 1914.
	June 2: For solar observation see retracement of 1st latitudinal line.
	From point 5.06 chs. N. of temp. cor., I continue N.89°43'W., retracing line bet. secs. 20 and 29.
80.77	Fall 6.97 chs. N. of the temp. cor. of secs. 19, 20, 29 and 30.

Chains

From point 6.97 chs. N. of temp. cor., I continue S.89°52'W., retracing bet. secs. 19 and 30.

81.47 Intersect W. bdy. of Tp., 7.50 chs. N. of the re-established cor. of secs. 19, 24, 25 and 30, heretofore described.

June 2, 1914.

Third Latitudinal Line.

June 3: At 6h 58m a.m., l.m.t., I set off 40°13' on the lat. arc; 22°17'N. on the decl. arc; and determine a meridian with the solar at the restored cor. of secs. 13, 18, 19 and 24, on the E. bdy. of the Tp., heretofore described.

Thence

S.89°52'W., retracing bet. secs. 13 and 24.

Note: The ties to temp. cors. are taken to adjusted positions of temp. cors. on meridional lines.

80.35 Fall 28 lks. N. of the temp. cor. of secs. 13, 14, 23 and 24.

From point 28 lks. N. of temp. cor., I continue S.89°51'W., retracing bet. secs. 14 and 23.

80.47 Fall 12 lks. S. of the temp. cor. of secs. 14, 15, 22 and 23.

From point 12 lks. S. of the temp. cor., I continue S.89°48'W., retracing bet. secs. 15 and 22.

81.14 Fall 2.15 chs. N. of the temp. cor. of secs. 15, 16, 21 and 22.

June 3: Sky overcast at noon; observation for lat. impossible.

From point 2.15 chs. N. of temp. cor., I continue S.89°48'W., retracing bet. secs. 16 and 21.

80.78 Fall 3.01 chs. N. of the temp. cor. of secs. 16, 17, 20 and 21.

From point 3.01 chs. N. of temp. cor., I continue

Chains	
	S.89°49'W., retracing bet. secs. 17 and 20.
80.74	Fall 4.13 chs. N. of temp. cor. of secs. 17, 18, 19 and 20.
	From point 4.13 chs. N. of temp. cor., I continue S.89°47'W., retracing bet. secs. 18 and 19.
81.20	Intersect W. bdy. of Tp., 4.13 chs. N. of the re-established cor. of secs. 13, 18, 19 and 24, heretofore described.
	June 3, 1914.

Fourth Latitudinal Line.

June 4: At 7h 58m a.m., l.m.t., I set off 40°14' on the lat. arc; 22°24'N. on the decl. arc; and determine a meridian with the solar at the re-established cor. of secs. 11, 12, 13 and 14.

Thence

S.89°52'W., retracing bet. secs. 11 and 14.

Note: The ties to temp. cors. are taken to the adjusted positions of temp. cors. on meridional lines.

80.52	Fall 81 lks. S. of the temp. cor. of secs. 10, 11, 14 and 15.
	From point 81 lks. S. of temp. cor., I continue S.89°49'W., retracing bet. secs. 10 and 15.
81.31	Fall 1.67 chs. N. of the temp. cor. of secs. 9, 10, 15 and 16.
	June 4: At this cor. I set off 22°25'N. on the decl. arc; and at 11h 58m a.m., l.m.t.; observe the sun on the meridian; the resulting lat. is 40°14'
	From point 1.67 chs. N. of cor., I continue N.89°51'W., retracing bet. secs. 9 and 16.
80.88	Fall 2.69 chs. N. of the temp. cor. of secs. 8, 9, 16 and 17.
	From point 2.69 chs. N. of temp. cor., I continue N.89°50'W., retracing bet. secs. 8 and 17.

Chains	
80.86	Fall 4.01 chs. N. of the temp. cor. of secs. 7, 8, 17 and 18.
	From point 4.01 chs. N. of temp. cor., I continue N.89°51'W., retracing bet. secs. 7 and 18.
81.06	Intersect W. bdy. of Tp., 4.17 chs. N. of the re-established cor. of secs. 7, 12, 13 and 18, heretofore described.
	June 4, 1914.

Fifth Latitudinal Line.

June 5: At 7h 58m a.m., l.m.t., I set off 40°15' on the lat. arc; 22°31'N. on the decl. arc; and determine a meridian with the solar at the re-established cor. of secs. 2, 3, 10 and 11.

Thence

N.89°51'W., retracing bet. secs. 3 and 10.

Note: The ties to temp. cors. are taken to the adjusted positions of temp. cors. on meridional lines.

81.38	Fall 2.99 chs. N. of temp. cor. of secs. 3, 4, 9 and 10.
	From point 2.99 chs. N. of temp. cor., I continue S.89°42'W., retracing bet. secs. 4 and 9.
80.83	Fall 3.11 chs. N. of the temp. cor. of secs. 4, 5, 8 and 9.
	June 5: At this station I set off 22°32'N. on the decl. arc; and at 11h 58m a.m., l.m.t., observe the sun on the meridian; the resulting lat. is 40°15'.
	From point 3.11 chs. N. of temp. cor., I continue N.89°58'W., retracing bet. secs. 5 and 8.
80.82	Fall 3.98 chs. N. of temp. cor. of secs. 5, 6, 7 and 8.
	From point 3.98 chs. N. of temp. cor., I continue N.89°54'W., retracing bet. secs. 6 and 7.
80.59	Intersect W. bdy. of Tp., 3.86 chs. N. of the re-established cor. of secs. 1, 6, 7 and 12, heretofore described.
	June 5, 1914.

Chains	
	In the establishment of the true lines of this survey solar observations are not recorded and only the dates of the establishments of the corners appear in the notes.
	June 11:
	From the restored cor. of secs. 1, 2, 35 and 36, on the S. bdy. of the Tp., previously described, I run N.0°12'W., on a true line bet. secs. 35 and 36,
	Over bottom land of Duchesne river, through scattering cottonwood timber, and undergrowth of willow, greasewood, chaparral and grass.
6.32	Right bank of Duchesne river, course SE.
	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for meander cor. of fracl. secs. 35 and 36, with brass cap marked
	T 3 S R 4 W MC S 35 | S 36 1914
	Dig a pit, 36 x 36 x 12 ins., 8 ft. S. of post; and raise a mound of earth, 4 ft. base, 2 ft. high, S. of cor.
8.33	Left bank of Duchesne river.
8.41	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for meander cor. of fracl. secs. 35 and 36, with brass cap marked
	T 3 S | R 4 W S 35 | S 36 MC 1914
	and raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor.
17.05	Canal, 20 lks. wide, course E.
18.95	Leave cottonwood timber and willow undergrowth, enter sagebrush and shadscale, bearing E. and W.
20.15	Wire fence, bears S.73°E. and S.75°W.

Chains

39.63 Proportionate point for ¼ sec. cor.

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

S ¼ 35 | S 36

1914

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.

From this ¼ sec. cor.

The SW. cor. of Hazel Murdock's cabin, 16 x 18 ft., bears N.65°35'E., 1.45 chs. dist.

The SE. cor. of cabin, 14 x 16 ft., bears N.1°55'W., 4.58 chs. dist.

41.10 Telephone line and pole fence, bears E. and W.

Cor. of fence bearing E. and S. bears W. 85 lks. dist.

41.15 Wagon road, Duchesne to Myton, Utah, bears E. and W.

46.10 Foot of ascent and bench, bears E. and N.65°W. Ascend.

48.65 Top of ascent and bench, bears same; thence over gently rolling bench.

79.26 Proportionate point for cor. of secs. 25, 26, 35 and 36.

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 marked

T 3 S | R 4 W
S 26 | S 25

S 35 | S 36

1914

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

From this cor. the NE. cor. of E. E. Wilson's cabin, 12 x 14 ft., bears S.50°30'E.

Parson's cabin, 12 x 14, bears N.89°45'W.

Land, level and rolling bench, S. exposure.

Soil, sandy and clay loam, rather moist, some gravelly and rocky surface on sandy loam subsoil; 1st rate.

Timber, some cottonwood on river bottom.

DEPENDENT RESURVEY

SUBDIVISION OF T. 3 S., R. 4 W.

Chains	
	Undergrowth, sagebrush, shadscale, willow, greasewood and chaparral.
	Considerable grass.
	From restored cor. of secs. 25, 30, 31 and 36, on the E. bdy. of the Tp., heretofore described, I run S.89° 43'W., on a true line bet. secs. 25 and 36,
	Ascending, over rocky, mountainous land, through undergrowth of sagebrush, shadscale and scattering grass.
4.50	Top of bench, 135 ft. above cor.; bears NW. and SE.
	Thence over top of bench.
11.35	Begin descent, bearing NW. and SE.
40.33	Proportionate point for ¼ sec. cor., 255 ft. below top.
	Set an iron post, 3 ft. long, 1 in. in diam., 14 ins. in the ground and 12 ins. in a mound of stone, on solid rock, for ¼ sec. cor., with brass cap marked
	S 25 / ¼ / S 36 / 1914
	and raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor.
	From this ¼ sec. cor. E. E. Wilson's cabin bears S.4°03'E.
56.00	Foot of descent, bears NW. and SE., 30 ft. below ¼ sec. cor.
	Thence over gently rolling bench land.
80.66	The re-established cor. of secs. 25, 26, 35 and 36.
	Land, mountainous and rolling bench land.
	Soil: Mountainous part, loose rock and sandy and clay surface on clay and rocky subsoil, 4th rate; bench land, sandy loam mixed with gravel on surface, on sandy loam subsoil, 1st rate.
	No timber.
	Undergrowth, sagebrush, shadscale and scattering grass.

DEPENDENT RESURVEY

SURDIVISION OF T. 3 S., R. 4 W.

Chains	
	N.0°15'W., on a true line bet. secs. 25 and 26,
	Over gently rolling bench land, through scattering undergrowth of shadscale, sagebrush and grass.
36.60	Foot of ascent, bearing NW. and SE. Ascend 30 ft. to
39.63	The proportionate point for ¼ sec. cor.
	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap marked
	S 26 ¼ | S 25
	1914
	and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.
59.10	Top of Blue Bench, 280 ft. above ¼ sec. cor., bears NW. and SE.
	Thence over gently rolling bench.
79.26	Proportionate point for cor. of secs. 23, 24, 25 and 26.
	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 marked
	T 3 S | R 4 W S 23 | S 24 S 26 | S 25
	1914
	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 this cor. the NW. cor. of J. A. Jolley's cabin, 14 x 16 ft., bears S.87°14'E.
	Land, gently rolling benches and mountainous; S. exposure.
	Soil: Mountainous part, loose rock and blue clay on clay and rock subsoil, 3rd rate; on benches, sandy loam and gravelly surface 10 to 18 ins. deep on hard pan subsoil, 2nd rate.
	No timber.
	Undergrowth, scattering shadscale, sagebrush and grass.

Chains	
	From the restored cor. of secs. 19, 24, 25 and 30, on the E. bdy. of the Tp., heretofore described, I run S.89°23'W., on a true line bet. secs. 24 and 25.
	Ascending NE. slope of Blue Bench, through scattering undergrowth of sagebrush, shadscale and grass.
.70	Top of bench, 10 ft. above cor., bears NW. and SE.
	Thence over rolling top of bench.
40.37	The proportionate point for ¼ sec. cor.
	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap marked
	S 24 / ¼ / S 25 / 1914
	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.
	From this ¼ sec. cor. the SW. cor. of log cabin 14 x 16 ft. bears N.9°05'W., 3.72 chs. dist.
	The NW. cor. of Jolley's house bears S.84°08'W.
80.74	The re-established cor. of secs. 23, 24, 25 and 26.
	Land, rolling bench.
	Soil, light, dry, fine, warm sandy loam mixed with gravel on sandy loam subsoil; 1st rate.
	No timber.
	Undergrowth, scattering sage, shadscale and grass.
	N.0°02'W., bet. secs. 23 and 24,
	Over gently rolling land, through medium sagebrush, shadscale and grass.
39.63	Proportionate point for ¼ sec. cor.
	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap marked
	S 23 / ¼ | S 24 / 1914
	Dig pits, 18 x 18 x 12 ins., N. and S. of post, 3 ft.

Chains

dist.; and raise a mound of earth, 3½ ft. base, 1½ ft. high, W. of cor.

From this ¼ sec. cor. the SE. cor. of cabin 14 x 16 ft. bears N.79°15'W., 1.32 chs. dist.

70.75 Begin descent into ravine, bearing N.75°W. and S.75°E.

72.90 Bottom of ravine, 20 ft. below top, drains S.75°E.

Ascend 50 ft. to

78.50 Top of ascent and N. side of ravine, bearing N.75°W. and S.75°E.

Enter plowed ground, bearing E. and W.

79.26 The proportionate point for cor. of secs. 13, 14, 23 and 24.

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 marked

T 3 S | R 4 W
S 14 | S 13
S 23 | S 24

1914

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

From this sec. cor. SW. cor. of cabin 14 x 28 ft. bears S.61°22'E., 6.32 chs. dist.

The NE. cor. of R. T. Jolley's cabin bears N.86°55'W. 5.56 chs. dist.

Land, gently rolling bench.

Soil, light, dry, fine, warm sandy loam mixed with gravel on sandy loam subsoil; 1st rate.

No timber.

Undergrowth, sagebrush, shadscale and scattering grass.

June 11, 1914.

June 13: From the restored cor. of secs. 13, 18, 19 and 24, on the E. bdy. of the Tp., heretofore described, I run

S.89°40'W., on a true line bet. secs. 13 and 24,

DEPENDENT RESURVEY

SUBDIVISION OF T. 3 S., R. 4 W.

Chains	
	Ascending over hilly land, through medium undergrowth of sagebrush and shadscale and scattering grass.
31.60	Enter bench, 100 ft. above cor., bearing NW. and SE.; thence over gently rolling land.
40.31	Proportionate point for ¼ sec. cor.
	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap marked
	S 13 / ¼ / S 24 / 1914
	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.
61.40	Enter plowed ground, bearing N. and S.
80.62	The cor. of secs. 13, 14, 23 and 24.
	Land, rolling hills and bench.
	Soil, light, dry, fine, warm sandy loam mixed with loose gravel on sandy loam and gravelly subsoil; 2nd rate.
	No timber.
	Undergrowth, sagebrush, shadscale and scattering grass.

N.0°06'E., on a true line bet. secs. 13 and 14,

Over gently rolling bench land, across plowed ground.

13.40	Leave plowed ground, bearing E. and W.
	Enter medium undergrowth of shadscale, sagebrush and scattering grass.
39.63	Proportionate point for ¼ sec. cor.
	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap marked
	S 14 / ¼ | S 13
	1914

Chains	
	and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.
61.70	Begin descent from bench, bearing N.30°W. and S.30°E.
72.00	Foot of descent, 270 ft. below top, bears N.30°W. and S.30°E.
	Thence over rolling hills.
79.26	The re-established cor. of secs. 11, 12, 13 and 14, heretofore described.
	Land, rolling bench and hills.
	Soil: Bench land, sandy loam mixed with fine gravel 10 to 15 ins. deep on hard pan subsoil, 2nd rate; hilly land, blue clay mixed with rocks on clay and rocky subsoil, 3rd rate.
	No timber.
	Undergrowth, shadscale, sagebrush and scattering grass.
	June 13, 1914.
	June 12: From the restored cor. of secs. 2, 3, 34 and 35, on the S. bdy. of the Tp., heretofore described, I run
	N.0°12'W., bet. secs. 34 and 35,
	Over gently rolling bench land, through scattering undergrowth of shadscale, sagebrush and grass.
4.95	Leave bench, descend into river bottom, bearing E. and W.
5.70	Enter bottom land and willow undergrowth and scattering cottonwood timber, bearing E. and W.
6.34	Right bank of Duchesne river, course S.88°30'E.
9.00	Left bank of Duchesne river, course S.80°00'E.

Chains	
	Continue through scattering cottonwood timber and medium undergrowth.
10.10	Settlers ask for the re-establishment of the old meander cor. for fracl. secs. 34 and 35, right bank of Duchesne river, which falls at this point by proportionate measurement. Therefore
	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for re-established meander cor. of fracl. secs. 34 and 35, on right bank of Duchesne river, with brass cap marked RE-EST MC S 34 | S 35 T 3 S R 4 W 1914 and raise a mound of stone, 2 ft. base, 1½ ft. high, S. of cor.
24.62	Leave timber and undergrowth, enter slough, bearing SW. and SE.
25.28	Wire fence, leave slough, bearing E. and W.
	Thence over level bottom land, through undergrowth of greasewood and scattering grass.
31.46	Wire fence, enter alfalfa field, bearing E. and W.
39.73	Proportionate point for ¼ sec. cor.
	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap marked S 34 | S 35 ¼ 1914
	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.
	From ¼ sec. cor. the NE. cor. of W. S. Seaton's cabin, 22 x 26 ft., bears S.28°42'W., 11.05 chs. dist.; SW. cor. of E. C. Abbot's cabin, 16 x 16 ft., bears S.89°38'E. 7.15 chs. dist.
42.22	Wire fence, leave field, bearing N.88°W. and S.88°E.

Chains

Enter undergrowth of greasewood, sagebrush and grass.

57.50 Cor. of fences bearing S.88°E., W. and S. bears W. 32 lks. dist.

57.70 Road, Duchesne to Myton, Utah, bears E. and W.

64.04 Telephone line and foot of ascent, bears S.80°E. and W. Ascend.

66.02 Top of ascent, 50 ft. above base, bears S.80°E. and W. Thence over gently rolling bench, through scattering undergrowth of shadscale, sagebrush and grass.

67.34 Wire fence, bears E. and W.

72.46 Proportionate point for cor. of secs. 26, 27, 34 and 35. 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 marked

T 3 S	R 4 W
S 27	S 26
S 34	S 35

1914

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 cor. SW. cor. of Emil Munz' cabin, 12 x 18 ft., bears N.77°10'W.; SW. cor. of Henry Raymond's cabin, 14 x 16 ft., bears N.76°E.; SW. cor. of George Smith's rock house, 14 x 16 ft., bears N.19°59'E.

Land, river bottom and rolling bench.

Soil, river bottom, rich, moist, sandy clay on sandy subsoil; 1st rate. Soil of bench, light, dry clay and sandy, 10 to 15 ins. deep on hard pan subsoil; 3rd rate.

Timber, some cottonwood on river bottom.

Undergrowth, greasewood, willow, rose, shadscale and scattering grass.

From the restored cor. of secs. 25, 26, 35 and 36,

I run

Chains

S.89°51'W., on a true line bet. secs. 26 and 35,
Over gently rolling bench land, through scattering undergrowth of shadscale, sagebrush and grass.

40.36½ Proportionate point for ¼ sec. cor. falls in center of wash, 10 lks. wide, 3 ft. deep, course SE. No cor. set at this point.

40.65 Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for witness cor. to ¼ sec. cor., with brass cap marked

T 3 S R 4 E
S 26
WC ¼
S 35
1914

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.

From this cor. the SW. cor. of Raymond's cabin bears N.73°50'W.

SW. cor. of Parsons' cabin bears N.89°58'E.

80.73 The re-established cor. of secs. 26, 27, 34 and 35.
Land, gently rolling bench.
Soil, light, dry, warm brown clay mixed with gravel, on clay subsoil; 2nd rate.
No timber.
Undergrowth, scattering shadscale, sagebrush and grass.

N.0°03'E., on a true line bet. secs. 26 and 27,
Over gently rolling bench land, through scattering undergrowth of shadscale, sagebrush and grass.

39.73 Proportionate point for ¼ sec. cor.

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

S 27 | S 26
¼
1914

Dig pits, 18 x 18 x 12 ins., N. and S. of post, 3 ft.

Chains

dist.; and raise a mound of earth, 3½ ft. base, 1½ ft. high, W. of cor.

From ¼ sec. cor. the SW. cor. of Geo. Smith's cabin bears N.64°33'E.

The SE. cor. of Cyrena Young's log cabin, 12 x 14 ft., bears N.11°04'W.

79.46 Proportionate point for cor. of secs. 22, 23, 26 and 27.

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 marked

T 3 S | R 4 W	
S 22	S 23
S 27	S 26

1914

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 cor. Cyrena Young's cabin bears N.48°09'W.

Land, gently rolling bench land.

Soil, light, dry, warm brown clay mixed with gravel on hard pan subsoil; 2nd rate.

No timber.

Undergrowth, scattering shadscale, sagebrush and grass.

From the restored cor. of secs. 23, 24, 25 and 26, I run N.89°57'W., on a true line bet. secs. 23 and 26,

Over gently rolling bench, through medium undergrowth of shadscale, sagebrush and grass.

79.25 Leave bench, bearing NW. and SE.

Descend SW. slope 185 ft. to

80.15 Proportionate point for ¼ sec. cor.

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

S 23
¼
S 26
1914

DEPENDENT RESURVEY

SUBDIVISION OF T. 3 S., R. 4 W.

Chains	
	and raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor.
44.45	Ravine, 50 ft. below ¼ sec. cor., drains S. Ascend 45 ft. to
50.95	Spur, projects S. Descend 130 ft. to
62.05	Foot of descent, bears NW. and SE.
	Thence over gently rolling bench.
77.38	Stream, 2 lks. wide, 1 in. deep, course SE.
80.30	The re-established cor. of secs. 22, 23, 26 and 27.
	Land, gently rolling benches and SW. slope same.
	Soil, clay, sandy loam and loose rocks on clay and sandy loam subsoil; 3rd rate.
	No timber.
	Undergrowth, shadscale, sagebrush and grass.
	N.0°07'W., on a true line bet. secs. 22 and 23,
	Over gently rolling bench, through scattering undergrowth of shadscale, sagebrush and grass.
4.42	Stream, 1 lk. wide, 1 in. deep, course SE.
20.17	Foot of ascent, bears NW. and SE. Ascend.
26.27	Alkali spring, bears N.36°20'W., 4.06 chs. dist.
38.37	Top of Blue Bench, 335 ft. above base, bears NW. and SE.
	Thence over nearly level bench.
39.73	Proportionate point for ¼ sec. cor.
	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap marked
	S 22 ¼ | S 23
	1914
	and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.
58.95	Enter plowed land, bearing E. and W.
66.06	Leave plowed land, bearing E. and W.
78.46	Proportionate point for cor. of secs. 14, 15, 22 and 23 falls in center of canal; therefore I perpetuate cor. at this point.

Chains

Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground, for witness cor. to cor. of secs. 14, 15, 22 and 23, with brass cap marked

T 3 S | R 4 W
S 15 | S 14
WC
S 22 | S 23
1914

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

From this cor. NW. cor. of Al. Jolley's cabin, 14 x 18 ft., bears S.6°E., 61 lks. dist.; SW. cor. of E. Hart's cabin, 10 x 24 ft., bears N.25°30'E., 9.43 chs. dist.; SW. cor. of Grace Hart's cabin, bears N.45°39'E.; SE. cor. of cabin, 14 x 16 ft., bears N.6°19'W.

79.46 Proportionate point for cor. of secs. 14, 15, 22 and 23 falls in canal, bearing N. 60°E. and west. No cor. set.

Land, nearly level bench land.

Soil, sandy loam, mixed with rocks, 10 to 15 ins. deep, on hard pan subsoil; 2nd rate.

No timber.

Undergrowth, scattering shadscale, sagebrush and grass.

June 12, 1914.

June 13: From the re-established cor. of secs. 13, 14, 23 and 24, I run

N.89°46'W., on a true line bet. secs. 14 and 23,

Over gently rolling bench, across plowed ground.

1.00 Leave plowed ground, bearing N. and S.

11.35 Head of ravine, drains SE.

23.70 Enter cultivated ground, bearing N. and S.

40.17½ Proportionate point for ¼ sec. cor.

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

S 14
¼
S 23
1914

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.
	From this cor.
	SW. cor. of cabin bears N.51°50'E., 4.21 chs. dist.
	SW. cor. of Grace Hart's cabin bears N.0°25'W.
	R. Jolley's cabin, 14 x 16 ft., bears S.89°58'W., 20.22 chs. dist.
55.25	Leave cultivated land, bearing N. and S.; thence through sagebrush, shadscale and scattering grass.
80.35	True point for cor. of secs. 14, 15, 22 and 23, which is 1 ch. N. of witness cor.
	Land, gently rolling bench.
	Soil, light, dry, fine, warm sandy loam on sandy loam subsoil; 1st rate.
	No timber.
	Undergrowth, sagebrush, shadscale and grass.

	N.0°10'W., on a true line bet. secs. 14 and 15,
	Over gently rolling bench land, through undergrowth of sagebrush, shadscale and grass.
.50	Road, from Lake Fork to Duchesne, Utah, bears NE. and W.
39.73	Proportionate point for ¼ sec. cor.
	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap marked
	$S\ \frac{15}{4}\ |\ S\ 14$
	1914
	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.
	From ¼ sec. cor. the SE. cor. of cabin, 14 x 16 ft., bears S.65°32'W.
79.46	Proportionate point for cor. of secs. 10, 11, 14 and 15.
	Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins.

Chains

in the ground, for cor. of secs. 10, 11, 14 and 15, with brass cap marked

T 3 S | R 4 W
S 10 | S 11
S 15 | S 14

1914

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.

Soil, light, dry, warm sandy loam, 10 to 15 ins. deep, on hard pan subsoil; 2nd rate.

No timber.

Undergrowth, sagebrush, shadscale and scattering grass.

From this cor. the SW. cor. of lumber cabin bears N.80°25'W.

From the re-established cor. of secs. 11, 12, 13 and 14, I run

N.89°34'W., on a true line bet. secs. 11 and 14,

Over rolling hills, through scattering undergrowth of shadscale, sagebrush and grass.

10.70 Wagon road, from Lake Fork to Duchesne, Utah, bears N. 80°E. and S.60°E.

Ascend abruptly 320 ft. to

40.00 Top of Blue Bench, bears NW. and S.35°E. Enter heavier undergrowth, thence over gently rolling bench.

40.41 Proportionate point for ¼ sec. cor.

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

S 11
¼
S 14
1914

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

DEPENDENT RESURVEY

SUBDIVISION OF T. 3 S., R. 4 W.

Chains	
60.00	Wagon road, bears NW. and SE.
80.82	The re-established cor. of secs. 10, 11, 14 and 15.
	Land, hilly and gently rolling bench.
	Soil: Hilly land, light blue clay mixed with rocks, on hard, dry clay subsoil; 3rd rate. On bench, light, warm sandy loam, 10 to 15 ins. deep, on hard pan and gravel subsoil; 2nd rate.
	No timber.
	Undergrowth, shadscale, sagebrush and scattering grass.
	N.0°10'E., on a true line bet. secs. 10 and 11.
	Ascend gradually over gently rolling bench, through undergrowth of sagebrush, shadscale and scattering grass.
10.90	Road, bears NW. and SE.
36.46	Enter scattering cedar timber, bearing NW. and SE.
39.73	Proportionate point for ¼ sec. cor.
	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap marked
	¼ S 10 | S 11
	1914
	from which
	A cedar 5 ins. diam. bears N.87°05'E., 24 lks. dist., marked ¼ S 11 B T.
	A cedar 6 ins. diam. bears S.71°W., 1.24 chs. dist., marked ¼ S 10 B T.
67.00	Leave bench, bearing N.25°W. and S.25°E.
	Descend over hilly land 150 ft. to
79.46	The re-established cor. of secs. 2, 3, 10 and 11.
	Land, gently rolling bench and hilly.
	Soil: S. 36.46 chs., light, warm sandy loam, 10 to 15 ins. deep, on hard pan and gravel subsoil; 2nd rate. N. 43.00 chs., blue and white clay soil, packed hard on clay and rocky subsoil; 3rd rate.

Chains	
	Timber, scattering cedar.
	Undergrowth, sagebrush, shadscale and scattering grass.
	June 13, 1914.
	June 15: From the restored cor. of secs. 3, 4, 33 and 34, on the S. bdy. of the Tp., heretofore described, I run
	N.0°12'W., on a true line bet. secs. 33 and 34,
	Descending over rolling foothills, through scattering cedar timber, and scattering undergrowth of sagebrush, shadscale and grass.
3.85	Foot of hills, 90 ft. below cor., bears E. and W.
	Descend gradually over gently rolling bench, sloping N. towards Duchesne river.
5.53	Wagon road, Duchesne to Myton, Utah, bears E. and W.
6.33	Leave scattering cedar, bearing E. and W.
14.61	Cabin, 12 x 14 ft., on line.
21.13	Wire fence, bears E. and W.
21.93	Descend abruptly, bearing E. and W.
23.58	Foot of descent, 35 ft. below top.
	Enter scattering cottonwood timber, and undergrowth of greasewood, willow and chaparral, bearing E. and W.; thence over bottom land.
25.66	Right bank of Duchesne river, course E.
27.66	Left bank of river, course E.; enter very dense undergrowth.
	Settlers asking for the re-establishment of old M.C.
34.98	I re-establish the meander corner for right bank of Duchesne river at this point as follows:
	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for meander cor. of fracl. secs. 33 and 34, with brass cap marked

RE-EST

MC

S 33 | S 34

T 3 S | R 4 W

1914

Chains	
	and raise a mound of stone, 2 ft. base, 1½ ft. high, S. of cor.
39.64	Proportionate point for ¼ sec. cor.
	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap marked ¼ S 33 | S 34 1914
	from which
	A cottonwood 7 ins. diam. bears N.37°15'E., 32½ lks. dist., marked ¼ S 34 B T
	A cottonwood 7 ins. diam. bears S.36°30'W., 41½ lks. dist., marked ¼ S 33 B T.
59.85	Leave cottonwood timber and dense undergrowth, thence through scattering sagebrush, shadscale and grass, bearing SE. and E.
62.40	Road, Duchesne to Myton, Utah, bears E. and W.
67.35	Foot of ascent, bears E. and W. Ascend 90 ft. to
70.60	Top of ascent, bears E. and W.
	Thence over gently rolling bench.
75.53	Telephone line, bears E. and W.
79.08	Point for cor. of secs. 27, 28, 33 and 34 falls in center of canal; therefore I perpetuate cor. on safe ground as follows:
	Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground, for witness cor. to cor. of secs. 27, 28, 33 and 34, with brass cap marked T 3 S | R 4 W S 28 | S 27 WC S 33 | S 34 1914
	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.
79.28	True point for cor. of secs. 27, 28, 33 and 34 falls in canal, course N.85°E. No cor. set.

Chains

Land, gently rolling and river bottom.

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

Timber, cottonwood on river bottom.

Undergrowth, willow, greasewood, sagebrush, shadscale, chaparral and grass.

From the re-established cor. of secs. 26, 27, 34 and 35.

I run

S.88°31'W., on a true line bet. secs. 27 and 34.

Over gently rolling bench land, through scattering undergrowth of shadscale, sagebrush and grass.

28.55 Gulch, 20 ft. deep, drains S.

40.37½ Proportionate point for ¼ sec. cor.

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

S 27
¼
S 34
1914

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.

From ¼ sec. cor.

SE. cor. of Will. Lusk's cabin, 14 x 32 ft., bears N.19°57'E., 9.65 chs. dist.

SW. cor. of Emil Munz' cabin bears N.78°04'E.

66.75 Gulch, 25 ft. deep, drains S.

80.75 True point for cor. of secs. 27, 28, 33 and 34.

Land, gently rolling bench, S. exposure.

Soil, light, dry, warm sandy loam, 10 to 15 ins. deep, on hard pan subsoil; 2nd rate.

No timber.

Undergrowth, scattering shadscale, sagebrush and grass.

DEPENDENT RESURVEY

SUBDIVISION OF T. 3 S., R. 4 W.

Chains	
	From the true point for cor. of secs. 27, 28, 33 and 34, I run
	N.0°01'W., on a true line bet. secs. 27 and 28,
	Over gently rolling bench land, through scattering undergrowth of sagebrush, shadscale and grass.
4.55	Enter rolling hills, bearing E. and W.
39.64	Proportionate point for ¼ sec. cor.
	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap marked
	S 28 | S 27
	1914
	and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.
46.55	Descend into ravine, bearing NW. and SE.
51.70	Ravine, 40 ft. below top, drains SE. Ascend 240 ft. to
68.55	Top of Blue Bench, bears NW. and SE.
	Thence over gently rolling bench.
79.28	Proportionate point for cor. of secs. 21, 22, 27 and 28.
	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 marked
	T 3 S | R 4 W S 21 | S 22 S 28 | S 27
	1914
	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 cor. cabin bears N.44°33'W.
	Land, hilly and bench land.
	Soil, clay, sandy loam and loose rocks on hard pan and rock subsoil; 3rd rate.
	No timber.
	Undergrowth, shadscale, sagebrush and grass.

DEPENDENT RESURVEY

SUBDIVISION OF T. 3 S., R. 4 W.

Chains	
	From the re-established cor. of secs. 22, 23, 26 and 27, I run
	S.88°18'W., on a true line bet. secs. 22 and 27,
	Over gently rolling land, through scattering under-growth of sagebrush, shadscale and grass.
27.03	Foot of ascent, leave bench, bearing N. and S.
	Ascend 240.ft. to
40.42	Proportionate point for ¼ sec. cor.
	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap marked
	S 22 / ¼ / S 27 / 1914
	and raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor.
50.18	Top of ascent and bench, 105 ft. above ¼ sec. cor., bears N. and S.
	Thence over gently rolling bench.
80.84	The re-established cor. of secs. 21, 22, 27 and 28.
	Land, rolling benches and hilly.
	Soil, light, dry sandy loam mixed with rocks on sandy and rocky subsoil; 2nd rate.
	No timber.
	Undergrowth, sagebrush, shadscale and scattering grass.

	N.0°01'W., on a true line bet. secs. 21 and 22,
	Over gently rolling bench land, through scattering undergrowth of sagebrush, shadscale and grass.
39.64	Proportionate point for ¼ sec. cor.
	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap marked
	S 21 / ¼ / S 22 / 1914
	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.

DEPENDENT RESURVEY

SUBDIVISION OF T. 3 S., R. 4 W.

Chains	
	high, W. of cor.
	From ¼ sec. cor. the NW. cor. of Frank Mayhew's cabin, 12 x 24 ft., bears S.86°15'E.
59.00	Enter cultivated land, bearing E. and W.
59.25	Cor. of fence, 23 lks. W. of line, bears N. and W.
77.51	Cor. of fence, 23 lks. W. of line, bears S. and W.
79.28	Proportionate point for cor. of secs. 15, 16, 21 and 22.
	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 marked

T 3 S | R 4 W
S 16 | S 15
S 21 | S 22

1914

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 sec. cor.

NE. cor. of Axel Pearson's house, 16 x 24 ft., bears S.46°22'W., 3.41 chs. dist.

NW. cor. of Frank Mark's house, 16 x 26 ft., bears S.38°22'E., 1.45 chs. dist.

NW. cor. of Frank Mayhew's cabin bears S.20°11'E.

Land, gently rolling bench.

Soil, warm, red clay and sandy on sandy and clay subsoil 2nd rate.

No timber.

Undergrowth, scattering sagebrush, shadscale and grass.

June 15, 1914.

June 16, 1914:

From the true point for re-established cor. of secs. 14, 15, 22 and 23, I run

S.88°11'W., on a true line bet. secs. 15 and 22.

Cor. point in canal.

Chains	
	Leave canal, thence over rolling bench land, through undergrowth of sagebrush, shadscale and scattering grass.
	Line parallels road, bearing N.88°11'E. and S.88°11'W.
40.36½	Proportionate point for ¼ sec. cor.
	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap marked S 15 ¼ S 22 1914
	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.
	From ¼ sec. cor. the SW. cor. of cabin, 16 x 16 ft., bears N.67°04'W., 15.20 chs. dist.
77.72	Canal, 20 lks. wide, course SE.
80.73	The re-established cor. of secs. 15, 16, 21 and 22.
	Land, rolling bench.
	Soil, light, dry, warm, sandy loam on sandy loam subsoil; 2nd rate.
	No timber.
	Undergrowth, sagebrush, shadscale and scattering grass.
	N.0°10'W., on a true line bet. secs. 15 and 16,
	Over gently rolling bench land, through scattering undergrowth of sagebrush, shadscale and grass.
1.27	Road, Duchesne to Lake Fork, Utah, bears N.88°11'E. and S.88°11'W.
2.15	Canal, 19 lks. wide, course S.65°E.
39.64	Proportionate point for ¼ sec. cor.
	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap marked S 16 | S 15 ¼ 1914

DEPENDENT RESURVEY

SUBDIVISION OF T. 3 S., R. 4 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.

79.28 Proportionate point for cor. of secs. 9, 10, 15 and 16.

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 marked

T 3 S. | S 9	R 4 W. | S 10
S 16	S 15

1914

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 sec. cor.

SW. cor. of cabin, 12 x 14 ft., bears N.86°40'E., 5.50 chs. dist.

SW. cor. of cabin, 12 x 28 ft., bears N.46°23'E., 6.84 chs. dist.

SE. cor. of cabin, 12 x 16 ft., bears N.12°55'W., 3.98 chs. dist.

Land, gently rolling.

Soil, light, dry, warm, sandy loam, 10 to 15 ins. deep, on hard pan subsoil; 2nd rate.

No timber.

Undergrowth, scattering sagebrush, shadscale and grass.

From the re-established cor. of secs. 10, 11, 14 and 15, I run

S.88°06'W., on a true line bet. secs. 10 and 15,

Over gently rolling bench land, through medium undergrowth of sagebrush and shadscale, and scattering grass.

40.38 Proportionate point for ¼ sec. cor.

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

Chains	
	in the ground, for ¼ sec. cor., with brass cap marked S 10 ¼ S 15 1914
	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.
	From this cor. the SW. cor. of cabin, 12 x 14 ft., bears N.71°47'E.
80.76	The re-established cor. of secs. 9, 10, 15 and 16.
	Land, gently rolling bench.
	Soil, light, dry, warm sandy loam, 10 to 15 ins. deep, on hard, white clay subsoil; 2nd rate.
	No timber.
	Undergrowth, sagebrush, shadscale and scattering grass.
	N.0°08'E., on a true line bet. secs. 9 and 10,
	Over gently rolling bench land, through medium undergrowth of sagebrush, shadscale and scattering grass.
39.64	Proportionate point for ¼ sec. cor.
	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap marked S 9 ¼ | S 10 1914
	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.
	From ¼ sec. cor.
	SE. cor. of cabin, 14 x 16 ft., bears N.15°50'W., 9.30 chs. dist.
	SW. cor. of cabin, 16 x 18 ft., bears N.5°45'E., 9.23 chs. dist.
58.67	Road, bears N.70°W. and S.70°E.
79.28	Proportionate point for cor. of secs. 3, 4, 9 and 10.

INDEPENDENT RESURVEY

SUBDIVISION OF T. 3 S., R. 4 W.

Chains

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 marked

T 3 S | R 4 W
S 4 | S 3

S 9 | S 10

1914

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 this cor. the SW. cor. of cabin, 20 x 34 ft., bears N.12°40'E., 14.39 chs. dist.

Land, gently rolling bench.

Soil, light, dry, warm sandy loam mixed with gravel, 10 to 15 ins. deep, on hard pan subsoil; 2nd rate.

No timber.

Undergrowth, sagebrush, shadscale and scattering grass.

From the re-established cor. of secs. 2, 3, 10 and 11, I run

S.88°02'W., on a true line bet. secs. 3 and 10,

Ascending over hilly land, through scattering cedar timber, and undergrowth of sagebrush, shadscale and scattering grass.

4.64 Top of ascent and edge of bench, 110 ft. above cor., bears NW. and SE.

Leave timber, thence over gently rolling bench, through medium undergrowth.

40.37½ Proportionate point for ¼ sec. cor.

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

S 3
¼

S 10
1914

Dig pits, 18 x 18 x 12 ins., N. and W. of post, 3 ft. dist.; and raise a mound of earth, 3½ ft. base, 1½ ft.

Chains	
	high, N. of cor.
80.75	The re-established cor. of secs. 3, 4, 9 and 10.
	Land, hilly, E. exposure, E. 4.64 chs. W. 76.11 chs. gently rolling bench.
	Soil, sandy red clay, on sandy and clay subsoil; 2nd rate.
	Timber, a few scattering cedars.
	Undergrowth, sagebrush, shadscale and scattering grass.
	N.0°36'W., on a true line bet. secs. 3 and 4,
	Over gently rolling bench land, through undergrowth of sagebrush, shadscale and scattering grass.
10.00	Road, bears E. and W.
39.64	Proportionate point for ¼ sec. cor.
	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap marked
	$\frac{S\ 4}{\frac{1}{4}} \mid S\ 3$
	1914
	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.
	From ¼ sec. cor. the SE. cor. of A. D. Pope's cabin, 12 x 29 ft., bears N.18°20'W., 13.54 chs. dist.
52.90	Enter scattering scrub cedar timber, bearing NW. and SE.
54.65	Leave Blue Bench, bearing NW. and S.75°E.
	Descend gradually over rolling hills.
79.15	Ravine, 85 ft. below bench, drains NE. Ascend 20 ft. to
79.91	The cor. of secs. 3 and 4, on the N. bdy. of the Tp., heretofore described.
	Land, gently rolling bench and rolling hills.
	Soil, red sand, clay and gravel on sandy and gravelly subsoil; 2nd rate.
	Timber, scattering scrub cedar.
	Undergrowth, sagebrush, shadscale and scattering grass.
	June 16, 1914.

Chains	
	June 17, 1914:
	From the re-established cor. of secs. 4, 5, 32 and 33, on the S. bdy. of the Tp., heretofore described, I. run
	N.0°12'W., on a true line bet. secs. 32 and 33,
	Over gently rolling bench land, through scattering scrub cedar timber, and scattering undergrowth of sagebrush, shadscale and grass.
	Descend gradually towards Duchesne river.
1.50	Leave timber, bearing E. and W.
15.34	Wire fence, bears E. and W.
19.50	Wire fence, bears E. and W.
23.25	Descend abruptly.
24.15	Foot of descent, enter alfalfa field, 60 ft. below top, bearing E. and SW.
28.44	Right bank of Duchesne river, course NE. Settlers asking for the re-establishment of old M.C. Point for re-established meander cor. on right bank of river falls in river, due to change in river channel. At this point
	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for witness cor. to re-established meander cor. of fracl. secs. 32 and 33, on right bank of Duchesne river, with brass cap marked
	RE-EST MC S 32 W C S 33 T 3 S R 4 W 1914
	Dig a pit, 36 x 36 x 12 ins., 8 ft. S. of post; and raise a mound of earth, 4 ft. base, 2 ft. high, S. of cor.
29.83	Point for re-established meander cor. of fracl. secs. 32 and 33, right bank of Duchesne river, falls in river. No cor. set.
31.90	Left bank of river.
	Thence over bottom land, through scattering undergrowth

Chains	
	of greasewood, sagebrush and grass.
32.35	Wire fence, bears SW. and NE. 35 lks., thence N.
38.75	Wire fence, bears E. 35 lks., and W.
39.78	Proportionate point for ¼ sec. cor.
	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap marked S ¼ 32 | S 33 1914
	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.
	From ¼ sec. cor.
	NE. cor. of Cowan's cabin, 16 x 26 ft., bears S.23° 33'W., 10.94 chs. dist.
	The cor. of fence bearing N., S. and W. bears S.16° 54'E., 1.08 chs. dist.
40.34	Enter slough, bearing SE. and N.5°W.
44.44	Old left bank of Duchesne river, bears E. and W.
49.04	Leave slough, bearing NE. and S.5°W.
56.89	Wire fence, bears N.1°W. and S.1°E.
59.00	Wire fence bears W. 6 lks. to cor. of fence bearing N. and S. and E.
59.67	From this point the SE. cor. of Chris. Merkley's cabin, 14 x 34 ft., bears N.21°25'W., 1.94 chs. dist.
76.40	Wash, 20 lks. wide, 6 ft. deep, drains SE.
78.40	Cor. of fences bearing E. and S., east 72 lks. dist.
78.95	Telephone line, bears E. and W.
	Cor. of fence bearing W. and S.1°E., west 10 lks. from line.
79.13	Wagon road, Duchesne to Myton, Utah, bears E. and W.
79.51	New canal, course E.
79.56	Proportionate point for cor. of secs. 28, 29, 32 and 33.
	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 marked

Chains

T 3 S	R 4 W
S 29	S 28
S 32	S 33

1914

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

From sec. cor.

Cor. of fences bearing S. and W. bears S.7° 34'W. 69 lks. dist.

Cor. of fences bearing S. and E. bears S.29°54'E., 1.48 chs. dist.

Land, level and gently rolling bench.

Soil, sandy loam on sandy subsoil; 1st rate.

No timber.

Undergrowth, sagebrush, shadscale, greasewood and scattering grass.

From the re-established cor. of secs. 27, 28, 33 and 34, I run

S.88°51'W., on a true line bet. secs. 28 and 33,

Over rolling bench land, through scattering undergrowth of sagebrush, shadscale and grass.

14.45 Gulch, 35 ft. deep, drains S.

24.45 Leave bench, bearing NW. and SE. Descend.

26.00 Base of descent; thence over rolling land.

38.75 Road, bears S.80°E. and S.88°W.

40.36½ Proportionate point for ¼ sec. cor.

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

S 28
¼
S 33
1914

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

From ¼ sec. cor.

NE. cor. of Wimmer's cabin, 14 x 16 ft., bears S.22°

Chains	
	16'E.
	NE. cor. of Thomas' cabin, 16 x 16 ft., bears S.77° 05'W., 18.94 chs. dist.
	Cor. of wire fences bearing S. and W. bears S.19°58'W., 82 lks. dist.
40.65	Wire fence, bears N. and S.
	Thence along gently rolling land sloping S.
80.73	The re-established cor. of secs. 28, 29, 32 and 33.
	Land, rolling, S. exposure.
	Soil, sandy loam and loose rocks on sandy and rocky subsoil; 3rd rate.
	No timber.
	Undergrowth, sagebrush, shadscale and scattering grass.
	N.0°02'W., on a true line bet. secs. 28 and 29,
	Ascending over rolling land, through scattering undergrowth of shadscale, sagebrush and grass.
5.00	Top of ascent, 75 ft. above cor., bears E. and W.
	Thence over rolling foothills.
14.30	Foot of ascent, bearing E. and W. Ascend 300 ft. to
39.78	Proportionate point for ¼ sec. cor.
	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap marked S 29 | ¼ | S 28 1914 and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.
43.60	Top of Blue Bench, 135 ft. above ¼ sec. cor., bears W. and SE.
	Thence over bench.
48.70	Leave bench, bearing NE. and SW.
	Descend 180 ft. to
79.56	Proportionate point for cor. of secs. 20, 21, 28 and 29.
	Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins.

DEPENDENT RESURVEY

SUBDIVISION OF T. 3 S., R. 4 W.

Chains

in the ground, for cor. of secs. 20, 21, 28 and 29, with brass cap marked

T 3 S | R 4 W
S 20 | S 21
S 29 | S 28

1914

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

Land, rolling hills and level bench.

Soil, clay and loose rocks on clay and rocky subsoil; 3rd rate.

No timber.

Undergrowth, sagebrush, shadscale and scattering grass.

From the re-established cor. of secs. 21, 22, 27 and 28, I run

S.89°03'E., on a true line bet. secs. 21 and 28,

Over gently rolling bench, through scattering undergrowth of sagebrush, shadscale and grass.

1.60 Leave bench, bearing N.35°W. and S.35°E.

Descend 35 ft. to

14.40 Ravine, drains S.35°E. Ascend 85 ft. to

21.20 Top of bench, bears N.35°W. and S.35°E. Thence over gently rolling land.

40.36½ Proportionate point for ¼ sec. cor.

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

S 21
¼
S 28
1914

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, E. of cor.

From ¼ sec. cor.

NE. cor. of J. Lewis' cabin, 12 x 12 ft., bears S.72°09'W., 29.56 chs. dist.

SE. cor. of cabin, 14 x 16 ft., bears N.3°08'E.

Chains	
70.90	Leave bench, bearing NE. and SW.; descend abruptly 170 ft. to
80.73	The re-established cor. of secs. 20, 21, 28 and 29.
	Land, gently rolling benches and hilly.
	Soil: Light, warm sandy loam mixed with gravel on benches, and clay mixed with rocks on hilly land; subsoil, hard pan on benches, clay and rocks on hilly land; 3rd rate.
	No timber.
	Undergrowth, scattering sagebrush, shadscale and grass.
	N.0°03'W., on a true line bet. secs. 20 and 21,
	Over hilly land near bottom of ravine, descending through scattering undergrowth of sagebrush, shadscale and grass.
1.00	Ravine, 10 ft. below cor., drains SW.
	Ascend abruptly 160 ft. to
12.70	Top of bench, bears NE. and SW.; thence over top of bench.
39.78	Proportionate point for ¼ sec. cor.
	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap marked
	S 20 | S 21
	¼
	1914
	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.
	From ¼ sec. cor. the NW. cor. of cabin, 14 x 14 ft., bears S.67°02'E., 1.72 chs. dist.
46.40	Leave bench, bearing NE. and SW.
	Descend abruptly 132 ft. to
52.35	Ravine, drains SW. Ascend 55 ft. to
58.40	Top of ascent and W. side of ravine.
	Descend gradually 35 ft. to

Chains	
73.75	Same ravine, drains S.10°E.
	Ascend gradually along E. side of ravine.
74.65	Road, bears E. and W.
79.56	Proportionate point for cor. of secs. 16, 17, 20 and 21.
	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 marked

T 3 S | R 4 W
S 17 | S 16
S 20 | S 21

1914

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

From this cor. cor. of fence bearing N. and W. bears N.61°45'W., 1.34 chs. dist.

Land, rolling benches and hilly.

Soil, light, dry, warm sandy loam and clay mixed with gravel and rocks on hard pan and rocky subsoil; 3rd rate.

No timber.

Undergrowth, scattering sagebrush, shadscale and grass.

June 17, 1914.

June 18:

From the re-established cor. of secs. 15, 16, 21 and 22, I run

S.89°11'W., on a true line bet. secs. 16 and 21,

Over gently rolling bench, through medium undergrowth of sagebrush and shadscale, and scattering grass.

Line follows S. side of road, bearing N.88°E. and S.89° W.

11.56	Leave undergrowth, enter cultivated land, bearing N. and S.
40.36½	Proportionate point for ¼ sec. cor.
	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins.

DEPENDENT RESURVEY

SUBDIVISION OF T. 3 S., R. 4 W.

Chains	
	in the ground, for ¼ sec. cor., with brass cap marked S 16 ¼ S 21 1914
	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.
	From ¼ sec. cor. SE. cor. of cabin bears N.53°35'W., 7.16 chs. dist. Cor. of wire fence bearing N. and W. bears N.53°35'W., 1.06 chs. dist. Cor. of fence bearing S. and E. bears N.84°25'W., 86 lks. dist. SW. cor. of William Sweatman's lumber cabin, 14 x 16 ft., bears N.69°35'E., 6.16 chs. dist. NE. cor. of M. M. Sexton's cabin, 12 x 14 ft., bears S.86°55'W.
41.22	Fence and leave field, bearing N. and S. Undergrowth, medium sagebrush, shadscale and grass.
51.17	Leave undergrowth, enter cultivated land, bearing N. and S.
64.32	Wire fence, bears N. and S.
68.72	Wire fence; leave cultivated land, bearing N. and S. Undergrowth, medium sagebrush, shadscale and scattering grass.
69.60	Road, bears N.85°E. and S.85°W.
77.25	Leave bench, bearing N. and S. Descend 35 ft. to
80.73	The re-established cor. of secs. 16, 17, 20 and 21. Land, gently rolling. Soil, light, dry, fine, warm sandy loam mixed with gravel on sandy loam subsoil; 2nd rate. No timber. Undergrowth, sagebrush, shadscale and scattering grass.

N.0°16'W., on a true line bet. secs. 16 and 17,

Chains	
	Ascending over rolling land, through medium undergrowth of sagebrush and shadscale, and scattering grass.
9.35	Top of ascent and bench, 60 ft. above cor., bears NW. and S.10°E.
	Thence over gently rolling bench land.
39.78	Proportionate point for ¼ sec. cor.
	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap marked S 17 | S 16 ¼ 1914
	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.
	From ¼ sec. cor.
	Cor. of fence bearing N., S. and W. bears N.51°22'W., 1.58 chs. dist.
	SW. cor. of log cabin, 26 x 32 ft., bears N.21°26'E., 3.36 chs. dist.
79.56	Proportionate point for cor. of secs. 8, 9, 16 and 17.
	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 marked T 3 S | R 4 W S 8 | S 9 S 17 | S 16 1914
	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 this cor.
	NE. cor. of fences bearing W. and S. bears N.67°30'W., 1.76 chs. dist.
	SW. cor. of wire fence bearing N. and E. bears N.25° 51'W., 1.69 chs.
	SW. cor. of lumber cabin, 12 x 14 ft., bears N.16°00' E., 2.46 chs. dist.

Chains	
	Land, gently rolling.
	Soil, light, dry, fine, warm sandy loam, 10 to 15 ins. deep, on hard pan subsoil; 2nd rate.
	No timber.
	Undergrowth, sagebrush, shadscale and scattering grass.
	From the re-established cor. of secs. 9, 10, 15 and 16, I run
	S.89°25'W., on a true line bet. secs. 9 and 16,
	Over gently rolling bench, through medium undergrowth of sagebrush and shadscale, and scattering grass.
36.05	Begin gradual descent from bench, bearing N.30°W. and S. 30°E.
40.47	Proportionate point for ¼ sec. cor., 30 ft. below bench.
	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap marked
	S 9 / ¼ / S 16 / 1914
	and raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor.
	From ¼ sec. cor.
	Log cabin 12 x 14 ft. bears N.71°50'W.
	Log cabin 12 x 14 ft. bears N.26°30'W.
50.67	Canal, 20 lks. wide, course SE.
	Thence over nearly level land.
62.67	Canal, course N.80°E.
72.05	Canal, course S.60°E.
80.94	The re-established cor. of secs. 8, 9, 16 and 17.
	Land, gently rolling.
	Soil, light, dry, fine, warm sandy loam, mixed with loose rocks on sandy loam and rocky subsoil; 2nd rate.
	No timber.
	Undergrowth, sagebrush, shadscale and scattering grass.

Chains

N.0°07'W., on a true line bet. secs. 8 and 9,

Over gently rolling bench, through medium undergrowth of sagebrush and shadscale, and scattering grass.

2.66 Canal, 20 lks. wide, course S.70°E.

26.65 Wire fence, bears E. and W.

39.78 Proportionate point for ¼ sec. cor.

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

S 8 | S 9
½

1914

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.

From ¼ sec. cor.

Cabin, 12 x 12 ft., bears S.50°55'W.

Log cabin, 12 x 14 ft., bears N.59°45'E.

79.56 Proportionate point for cor. of secs. 4, 5, 8 and 9.

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 marked

T 3 S | R 4 W
S 5 | S 4

S 8 | S 9

1914

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 this cor.

SE. cor. of cabin, 14 x 18 ft., bears N.84°35'W.

NE. cor. of cabin, 12 x 14 ft., bears S.38°06'W.

NW. cor. of cabin, 14 x 20 ft., bears N.67°03'E.

Land, gently rolling.

Soil, light, dry, fine, warm sandy loam, mixed with gravel on sandy loam subsoil; 2nd rate.

No timber.

Chains	
	Undergrowth, sagebrush, shadscale and scattering grass.
	From the re-established cor. of secs. 3, 4, 9 and 10, I run
	S.89°37'W., on a true line bet. secs. 4 and 9,
	Over gently rolling bench land, through medium undergrowth of sagebrush and shadscale, and scattering grass.
30.42	Road, bears NW. and SE.
40.59	Proportionate point for ¼ sec. cor.
	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap marked
	S ¼ 4 / S 9 / 1914
	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.
59.05	Descent, bears N.30°W. and S.30°E.
61.80	Foot of descent, 30 ft. below top, bears N.30°W. and S.30°E.
81.18	The re-established cor. of secs. 4, 5, 8 and 9.
	Land, gently rolling.
	Soil, light, fine, dry, warm sandy loam mixed with gravel and rocks, 10 to 15 ins. deep, on hard pan subsoil; 3rd rate.
	No timber.
	Undergrowth, sagebrush, shadscale and scattering grass.
	N.0°23'W., on a true line bet. secs. 4 and 5,
	Over gently rolling bench, through medium undergrowth of sagebrush and shadscale, and scattering grass.
9.88	Road, bears E. and W.
26.80	Foot of ascent, bears NW. and SE.

DEPENDENT RESURVEY

SUBDIVISION OF T. 3 S., R. 4 W.

Chains	
33.85	Top of ascent, 40 ft. above base, bears NW. and SE.
39.78	Proportionate point for ¼ sec. cor.
	Set an iron post, 3 ft. long, 1 in. in diam., 12 ins. in the ground and 14 ins. in a mound of stone on solid rock, for ¼ sec. cor., with brass cap marked
	$S\ \frac{5}{4}\ |\ S\ 4$
	1914
	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.
	From ¼ sec. cor.
	SW. cor. of lumber house, 24 x 32 ft., bears N.8°27'E., 5.74 chs. dist.
	Cor. of wire fence bearing E. and N., bears N.60°27'E., 1.87 chs. dist.
	NW. cor. of lumber cabin, 14 x 20 ft., bears S.18° 08'E.
	NW. cor. of lumber cabin bears S.24°E., 9.48 chs. dist..
80.04	The re-established cor. of secs. 4 and 5, on the N. bdy. of the Tp., heretofore described.
	Land, gently rolling.
	Soil, light, dry, warm red sand mixed with rocks, 10 to 15 ins. deep, on sandy and rocky subsoil; 2nd rate.
	No timber.
	Undergrowth, sagebrush, shadscale and scattering grass.
	June 18, 1914.

June 19:

From the witness cor. to the re-established cor. of secs. 5, 6, 31 and 32, on the S. bdy. of the Tp., heretofore described, which is 1.12 chs. S.88°40'W. of the true cor. point, I run

N.0°19'W., on offset line bet. secs. 31 and 32.

Chains	
	True line runs in center of river.
	Over bottom land, through scattering cottonwood timber and dense undergrowth of willow and chaparral.
9.60	Offset N.88°40'E. 1.12 chs. to true line, which point falls on left bank of Duchesne river.
17.00	Brush fence, bears N.60°E. and S.60°W.
	Leave cottonwood timber and willow undergrowth; undergrowth becomes medium rabbit brush and greasewood.
19.60	Wire fence, bears E. and W.
	Enter alfalfa field.
39.25	South fence of lane, bears E. and W.
39.57	North fence of lane, bears E.
	Thence across field.
39.88	Proportionate point for ¼ sec. cor.
	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap marked S 31 / ¼ | S 32 1914
	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.
52.45	Leave field, bearing E. and W.; enter undergrowth of shadscale, sagebrush and scattering grass.
52.90	Fence, bears E. and W.
54.00	Road, from Duchesne to Myton, Utah, bears E. and W.
	Foot of ascent, bears E. and W. Ascend.
55.72	Telephone line, bears N.70°E. and S.70°W.
59.65	Canal, 10 lks. wide, course N.75°E.
62.05	Canal, 6 lks. wide, course N.75°E.
65.35	Enter very scattering cedar timber, bearing E. and W.; thence ascend and descend over broken slopes.
70.76	Proportionate point for cor. of secs. 29, 30, 31 and 32, 200 ft. above base of ascent.
	Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins.

DEPENDENT RESURVEY

SUBDIVISION OF T. 3 S., R. 4 W.

Chains

in the ground, for cor. of secs. 29, 30, 31 and 32, with brass cap marked

T 3 S S 30	R 4 W S 29
S 31	S 32

1914

from which

A cedar 5 ins. diam. bears N.10°55'E., 12 lks. dist., marked T 3 S R 4 W S 29 B T.

A cedar 6 ins. diam. bears S.78°30'E., 35 lks. dist., marked T 3 S R 4 W S 32 B T.

A cedar 6 ins. diam. bears S.21°45'W., 19 lks. dist., marked T 3 S R 4 W S 31 B T.

A cedar 7 ins. diam. bears N.41°30'W., 108 lks. dist., marked T 3 S R 4 W S 30 B T.

Land, river bottom and hilly.

Soil: Bottom land, rich, moist, sandy clay on deep sandy subsoil, 1st rate; hilly land, light, dry, sandy loam mixed with gravel and rocks on sandy and rocky subsoil, 3rd rate.

Timber, some scattering cedar on hilly land and cottonwood on bottom land.

Undergrowth, willow, chaparral, rabbit brush, greasewood, shadscale and sagebrush.

From the re-established cor. of secs. 28, 29, 32 and 33, I run

S.88°44'W., on a true line bet. secs. 29 and 32,

Over broken, rolling land, through undergrowth of sagebrush, shadscale and scattering grass.

10.65 Foot of ascent, bears S.80°W. and N.

Canal, 10 lks. wide, course N.75°E.

Ascend SE. slope.

21.00 Canal, course N.80°E.

29.60 Top of S. edge of bench, bears N. and W., 85 ft. above base.

Chains	
	Thence along S. rim of bench.
35.60	Leave bench, bearing NW. and E.
	Descend SW. slope.
37.75	Canal, course S.75°E.
40.47	Proportionate point for ¼ sec. cor.
	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap marked S 29 ¼ S 32 1914 and raise a mound of stone, 2 ft. base, 1½ ft. high, E. of cor.
45.80	Ravine, 140 ft. below top of bench, drains S. Ascend abruptly; enter scattering cedar timber, bearing N. and SW.
59.90	Canal, course NE.
72.40	Top of steep ascent; ascend more gradually.
80.94	The re-established cor. of secs. 29, 30, 31 and 32, 240 ft. above ravine.
	Land, rolling and hilly, with S. exposure.
	Soil, light, dry, warm, sandy loam and clay mixed with gravel and rocks on hard pan and clay subsoil; 3rd rate.
	Timber, scattering cedar and pinon.
	Undergrowth, sagebrush, shadscale and scattering grass.
	From the re-established cor. of secs. 25, 30, 31 and 36, on the W. bdy. of the Tp., heretofore described, I run N.89°09'E., on a true line bet. secs. 30 and 31,
	Over gently rolling bench land, through medium undergrowth of sagebrush and shadscale, and scattering grass.
19.00	Begin ascent of SW. slope, bearing NW. and SE.
23.00	Top of ascent, 25 ft. above base; thence along S. slope of bench.
37.00	Begin descent through scattering scrub cedar timber.

DEPENDENT RESURVEY

SUBDIVISION OF T. 3 S., R. 4 W.

Chains	
40.24	Wire fence and foot of descent, 40 ft. below top, bear N. and S.
41.49	Proportionate point for ¼ sec. cor.
	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap marked S 30 ¼ S 31 1914
	from which
	A cedar 7 ins. diam. bears S.79°W., 142 lks. dist., marked ¼ S 31 B T.
	A cedar 8 ins. diam. bears N.43°W., 194 lks. dist., marked ¼ S 30 B T.
	From ¼ sec. cor. the SW. cor. of rock house, 14 x 16 ft., bears N.19°42'E., 4.30 chs. dist.
47.85	Wash, 10 lks. wide, 4 ft. deep, in bottom of small hollow, drains SE. Ascend.
48.58	Wire fence, bears N. and S.
51.75	Top of ascent, 55 ft. above hollow, bears N. and S.
	Leave scrub cedar timber; thence over gently rolling bench.
70.50	Enter very scattering cedar timber, bearing NE. and SW.
80.00	Leave bench, bearing NE. and SW.
	Descend gradually.
81.77	The re-established cor. of secs. 29, 30, 31 and 32.
	Land, gently rolling benches and hilly.
	Soil, light, dry, fine, warm, red sandy loam mixed with gravel and rocks on sandy and rocky subsoil; 3rd rate.
	Timber, scattering scrub cedar.
	Undergrowth, medium sagebrush, shadscale and scattering grass.

N.0°07'W., on a true line bet. secs. 29 and 30,

Ascending E. slope, over hilly land, through scattering

Chains	
	scrub cedar timber, and undergrowth of sagebrush, shadscale and scattering grass.
1.60	Top of bench, 10 ft. above cor., bears N.60°E. and S. 60°W.
	Thence over gently rolling bench.
2.55	Leave timber, bearing E. and W.
17.50	Enter scattering timber, bearing NW. and SE.
32.30	Leave bench, bearing NW. and SE.; descend abruptly over NE. slope.
39.30	Bottom of ravine, heads 4 chs. W., 155 ft. below bench, drains E. Ascend 20 ft. to
39.88	Proportionate point for ¼ sec. cor.
	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap marked S 30 | S 29 ¼ 1914 and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.
41.80	Spur, 40 ft. above cor., projects E.
	Descend gradually over rolling hills.
68.00	Road, bears NW. and SE.
69.00	Canyon, 50 ft. below spur, drains SE.
	Ascend gradually along rocky W. slope.
79.76	Proportionate point for cor. of secs. 19, 20, 29 and 30, 65 ft. above bottom of canyon.
	Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in a mound of stone on solid rock, for cor. of secs. 19, 20, 29 and 30, with brass cap marked T 3 S | R 4 W S 19 | S 20 S 30 | S 29 1914 and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.
	Land, mountainous and gently rolling bench.

Chains	
	Soil: Bench land, light, dry, fine, warm sandy loam on sandy loam subsoil; clay and loose rocks and boulders on clay and rocky subsoil, 4th rate, on mountainous part.
	Timber, scattering scrub cedar.
	Undergrowth, sagebrush, shadscale and scattering grass.
	From the re-established cor. of secs. 20, 21, 28 and 29, I run
	S.88°55'W., on a true line bet. secs. 20 and 29,
	Over hilly land draining S., through undergrowth of sagebrush, shadscale and scattering grass.
	Descend 10 ft. to
.45	Ravine, drains SW. Ascend abruptly 80 ft. to
6.20	Spur, projects S. Descend abruptly 100 ft. to
13.40	Ravine, drains S.
	Enter scattering scrub cedar timber, bearing N. and S. Ascend 180 ft. to
22.70	Top of bench; leave timber, bearing N. and S.
	Thence over gently rolling bench.
39.00	Leave bench and enter scattering scrub cedar timber, bearing N. and S.
	Abrupt descent 70 ft. to
40.49½	Proportionate point for ¼ sec. cor.
	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in a mound of stone on solid rock, for ¼ sec. cor., with brass cap marked
	S 20 / ¼ / S 29 / 1914
	and raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor.
45.10	Ravine, 80 ft. below cor., drains S.
	Ascend abruptly 145 ft. to

DEPENDENT RESURVEY

SUBDIVISION OF T. 3 S., R. 4 W.

Chains	
55.30	Enter bench, bearing N. and S.; thence over gently rolling bench.
57.40	Leave cedar timber, bearing N. and S.
76.40	Leave bench, bearing N. and S.; descend abruptly over rocky W. slope 165 ft. to
80.99	The re-established cor. of secs. 19, 20, 29 and 30.
	Land, hilly and gently rolling benches.
	Soil: On benches, light, dry, fine, warm sandy loam mixed with gravel, 10 to 20 ins. deep, on hard pan subsoil, 2nd rate; on hilly land, hard, dry, blue clay and loose rock, 3rd rate.
	Timber, scrub cedar.
	Undergrowth, sagebrush, shadscale and scattering grass.
	From the re-established cor. of secs. 19, 24, 25 and 30, on the W. bdy. of the Tp., heretofore described, I. run N.89°29'E., on a true line bet. secs. 19 and 30,
	Over gently rolling bench land, through undergrowth of sagebrush, shadscale and scattering grass.
.19	Road, from Duchesne to Bonita, Utah, bears N. and S.
.38	Irrigation ditch, 3 lks. wide, course S.
20.35	Cor. of fence, bearing S. and S.89°W.
41.17	Proportionate point for ¼ sec. cor.
	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap marked
	S 19 / ¼ / S 30 / 1914
	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..
44.35	Leave bench, bearing NW. and SE.; descend over hilly land, through scattering scrub cedar timber.
70.25	Road, bears NW. and SE.
71.05	Bottom of canyon, 160 ft. below bench, drains SE.

DEPENDENT RESURVEY

SUBDIVISION OF T. 3 S., R. 4 W.

Chains	
	Leave timber.
	Ascend 60 ft. to
81.42	The re-established cor. of secs. 19, 20, 29 and 30.
	Land, gently rolling bench and hilly.
	Soil: Bench land, light, dry, warm, red sandy loam, mixed with gravel, 10 to 15 ins. deep, on hard pan subsoil, 2nd rate; hilly land, light, dry, blue clay mixed with loose rocks on clay and rocky subsoil, 3rd rate.
	Timber, scrub cedar.
	Undergrowth, sagebrush, shadscale and scattering grass.
	June 19, 1914.
	June 20:
	N.0°08'W., on a true line bet. secs. 19 and 20,
	Abruptly ascending E. side of ravine, through very scattering cedar timber and scattering undergrowth of sagebrush, shadscale and grass.
4.00	Top of ascent, 80 ft. above cor.
	Descend 40 ft. to
10.20	Ravine, drains SW. Ascend abruptly 90 ft. to
14.20	Top of gently rolling bench, bearing E. and W.
	Thence over gently rolling bench.
22.50	Leave timber, bearing E. and W. Undergrowth becomes more dense.
24.90	Leave undergrowth, enter cultivated land, bearing E. and W.
39.88	Proportionate point for ¼ sec. cor.
	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap marked
	S 19 ¼ | S 20
	1914
	and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.

DEPENDENT RESURVEY

SUBDIVISION OF T. 3 S., R. 4 W.

Chains

From ¼ sec. cor.

Herbert Lang's cabin, 14 x 16 ft., bears S.15°28'W., 10.84 chs. dist.

NW. cor. of Wilford Wilson's cabin, 14 x 14 ft., bears S.48°47'E., 17.86 chs. dist.

40.86 Leave cultivated land, bearing E. and W.; thence through sagebrush, shadscale and scattering grass.

79.65 Road, bears E. and W.

79.76 Proportionate point for cor. of secs. 17, 18, 19 and 20.

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 marked

T 3 S | R 4 W	
S 18	S 17
S 19	S 20

1914

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 this cor.

Cor. of fences bearing E. and N. bear N.78°10'E., 49 lks. dist.

End of Wilson's fence bearing W., bears south 50 lks. dist.

SW. cor. of P. Gardner's cabin, 12 x 14 ft., bears N.24°27'E.

SW. cor. of Gus. Anderson's cabin, 14 x 16 ft., bears N.34°50'E.

SW. cor. of lumber cabin, 14 x 16 ft., bears N.40°37'W.

NW. cor. of cabin 10 x 12 ft. bears S.77°45'E.

Land, hilly and gently rolling bench.

Soil: Hilly land, light, dry clay, packed hard and mixed with rocks on clay and rocky subsoil, 4th rate; bench land, light, dry, warm sandy loam mixed with gravel, 10 to 15 ins. deep, on hard pan subsoil,

DEPENDENT RESURVEY

SUBDIVISION OF T. 3 S., R. 4 W.

Chains	
	2nd rate.
	Timber, some scattering scrub cedar.
	Undergrowth, sagebrush, shadscale and scattering grass.
	From the re-established cor. of secs. 16, 17, 20 and 21, I run
	S.89°01'W., on a true line bet. secs. 17 and 20,
	Over hilly land, through undergrowth of sagebrush, shadscale and scattering grass.
.53	Ravine, drains S.10°E.
	Ascend 65 ft. to
6.60	Top of bench, bears N. and S.
	Thence over gently rolling land alongside of road.
40.52½	Proportionate point for ¼ sec. cor.
	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap marked
	S 17 ¼ S 20 1914
	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.
	From ¼ sec. cor.
	SW. cor. of Gus. Anderson's cabin bears N.40°15'W.
	NW. cor. of cabin bears S.82°55'W.
	NW. cor. of Abbot's house, 16 x 34 ft., bears S.60°E., 20.16 chs. dist.
	SE. cor. of Schonian's cabin, 16 x 18 ft., bears N.9°13'E.
81.05	The re-established cor. of secs. 17, 18, 19 and 20.
	Land, hilly and gently rolling bench.
	Soil, light, dry, fine, warm sandy loam mixed with gravel on sandy loam subsoil; 2nd rate.
	No timber.
	Undergrowth, sagebrush, shadscale and scattering grass.

Chains	
	From the re-established cor. of secs. 13, 18, 19 and 24, on the W. bdy. of the Tp., heretofore described, I run N.89°47'E., on a true line bet. secs. 18 and 19, Over gently rolling bench land, through undergrowth of sagebrush, shadscale and scattering grass.
.38	Irrigation ditch, 3 lks. wide, drains S.
17.45	Head of ravine, drains S.
41.00	Proportionate point for ¼ sec. cor. Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap marked S 18 ¼ S 19 1914 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.
	From ¼ sec. cor. Wire fence bearing E. and S. bears S.19°33'E., 53 lks. dist. NW. cor. of J. R. Wilson's cabin, 14 x 18 ft., bears S.79°40'E., 5.11 chs. dist. SW. cor. of cabin, 14 x 16 ft., bears N.32°06'E.
	Thence along road, bearing E. and W.
81.24	The re-established cor. of secs. 17, 18, 19 and 20. Land, gently rolling bench. Soil, light, dry, warm sandy loam on sandy loam subsoil; 1st rate. No timber. Undergrowth, sagebrush, shadscale and scattering grass.

	N.0°12'W., on a true line bet. secs. 17 and 18, Over gently rolling bench land, through undergrowth of sagebrush, shadscale and scattering grass.
39.88	Proportionate point for ¼ sec. cor. Set an iron post, 3 ft. long, 1 in. in diam., 26 ins.

Chains

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

S 18 | S 17
¼

1914

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.

From ¼ sec. cor.

R. Gardner's cabin, 12 x 14 ft., bears N.73°30'E.

Cor. of fence bearing N., S. and E. bears N.86°38'E., 84 lks. dist.

Cor. of fence bearing N. and W. bears N.25°20'W., 18 lks. dist.

72.76 Proportionate point for cor. of secs. 7, 8, 17 and 18.

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 marked

T 3 S. | R 4 W.
S 7	S 8
S 18	S 17

1914

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 this cor.

The SW. cor. of log cabin, 12 x 14 ft., bears N.73° 10'E.

Cor. of wire fence bearing E. and S. bears N.4°E., 46 lks. dist.

SW. cor. of lumber cabin, 8 x 10 ft., bears N.53°15' E., 12.74 chs. dist.

Land, gently rolling bench.

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

No timber.

Undergrowth, sagebrush, shadscale and scattering grass.

DEPENDENT RESURVEY

SUBDIVISION OF T. 3 S., R. 4 W.

Chains

From the re-established cor. of secs. 8, 9, 16 and 17, I run

S.89°13'W., on a true line bet. secs. 8 and 17,

Over gently rolling bench land, through undergrowth of sagebrush, shadscale and scattering grass.

40.51½ Proportionate point for ¼ sec. cor.

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

S 8
¼
S 17
1914

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.

81.03 The re-established cor. of secs. 7, 8, 17 and 18.

Land, gently rolling bench.

Soil, light, dry, warm, red sandy clay on sandy subsoil; 1st rate.

No timber.

Undergrowth, sagebrush, shadscale and scattering grass.

June 20, 1914.

June 22:

From the re-established cor. of secs. 7, 12, 13 and 18, on the W. bdy. of the Tp., heretofore described, I run

S.89°58'E., on a true line bet. secs. 7 and 18,

Over gently rolling bench land, through undergrowth of sagebrush, shadscale and scattering grass.

.10 Road, from Duchesne to Bonita, Utah, bears N. and S.

.39 Irrigation ditch, drains S.

40.76 Proportionate point for ¼ sec. cor.

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

S 7
¼
S 18
1914

Chains	
	Dig pits, 18 x 18 x 12 ins., E. and W. of post, 3 ft. dist.; and raise ammound of earth, 3½ ft. base, 1½ ft. high, N. of cor.
	From ¼ sec. cor.
	Cor. of fence bearing W. bears north, 82 lks. dist.
	NW. cor. of cabin, 12 x 12 ft., bears S.74°15'E., 7.51 chs. dist.
	SW. cor. of cabin, 12 x 14 ft., bears N.80°30'E.
	Log cabin, 12 x 14 ft., bears N.38°42'E.
81.11	The re-established cor. of secs. 7, 8, 17 and 18.
	Land, gently rolling bench.
	Soil, light, sandy loam and red clay mixed with gravel and loose rocks on sandy loam subsoil; 2nd rate.
	No timber.
	Undergrowth, sagebrush, shadscale and scattering grass.
	N.0°06'W., on a true line bet. secs. 7 and 8,
	Over gently rolling bench land, through undergrowth of sagebrush, shadscale and scattering grass.
9.40	Wire fence, bears E. and W.
26.03	Canal, 20 lks. wide, course E.
39.88	Proportionate point for ¼ sec. cor.
	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap marked
	S 7 ¼ | S 8
	1914
	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.
79.76	Proportionate point for cor. of secs. 5, 6, 7 and 8.
	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 marked

DEPENDENT RESURVEY

SUBDIVISION OF T. 3 S., R. 4 W.

Chains

T 3 S. | R 4 W.
S 6 | S 5
S 7 | S 8

1914

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 this cor.

The NW. cor. of cabin, 18 x 20 ft., bears S.54°50'E., 4.59 chs. dist.

Cor. of wire fences bearing E. and S. bears S.85° 10'E., 6.03 chs. dist.

SW. cor. of log cabin, 14 x 17 ft., bears N.70°20'E., 6.03 chs. dist.

Land, gently rolling bench.

Soil, light, dry, warm sandy loam and red clay mixed with gravel on sandy and clay subsoil; 2nd rate.

No timber.

Undergrowth, sagebrush, shadscale and scattering grass.

From the re-established cor. of secs. 4, 5, 8 and 9, I run

S.89°25'W., on a true line bet. secs. 5 and 8,

Over gently rolling land, through undergrowth of sagebrush, shadscale and scattering grass.

40.46½ Proportionate point for ¼ sec. cor.

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

S. 5
¼
S 8
1914

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.

From ¼ sec. cor.

DEPENDENT RESURVEY

SUBDIVISION OF T. 3 S., R. 4 W.

Chains	
	SE. cor. of cabin 14 x 18 ft. bears N.81°05'E.
	NE. cor. of cabin 12 x 14 ft. bears S.80°06'E.
80.93	The re-established cor. of secs. 5, 6, 7 and 8.
	Land, gently rolling bench.
	Soil, light, dry, red sandy clay and gravel on hard clay and gravel subsoil; 2nd rate.
	No timber.
	Undergrowth, sagebrush, shadscale and scattering grass.
	From the re-established cor. of secs. 1, 6, 7 and 12, on the W. bdy. of the Tp., heretofore described, I run S.89°49'E., on a true line bet. secs. 6 and 7,
	Over gently rolling bench land, through undergrowth of sagebrush, shadscale and scattering grass.
40.38½	Proportionate point for ¼ sec. cor.
	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap marked
	S 6 ¼ S 7 1914
	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.
	From ¼ sec. cor.
	SW. cor. of cabin 12 x 22 ft. bears N.10°45'E., 11.30 chs. dist.
	SE. cor. of wire fence bearing N. and W. bears N.36°W., 53 lks. dist.
80.77	The re-established cor. of secs. 5, 6, 7 and 8.
	Land, gently rolling bench.
	Soil, light, dry, fine red sand mixed with gravel on sandy subsoil; 1st rate.
	No timber.
	Undergrowth, sagebrush, shadscale and scattering grass.

Chains	
	N.0°20'W., on a true line bet. secs. 5 and 6,
	Over gently rolling bench land, through undergrowth of sagebrush, shadscale and scattering grass.
5.85	Road, bears E. and W.
23.80	Road, bears NW. and SE.
39.87	Proportionate point for ¼ sec. cor.
	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., with brass cap marked
	S 6 / ¼ / S 5
	1914
	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, ... of cor.
80.00	The re-established cor. of secs. 5 and 6, on the N. bdy. of the Tp., heretofore described.
	Land, gently rolling bench.
	Soil, light, dry, warm red clay and sand mixed with gravel on clay and sandy subsoil; 2nd rate.
	No timber.
	Undergrowth, sagebrush, shadscale and scattering grass.
	June 22, 1914.

MEANDERS, T. 3 S., R. 4 W.

Meanders of the left bank of Duchesne river, up stream.

Survey commenced June 9, 1914. For solar observation see line bet. secs. 1 and 36, on the S. bdy. of this Tp.

From the meander cor. of fracl. secs. 1 and 36, on the S. bdy. of the Tp., heretofore described, I run with meanders in sec. 36.

Through scattering cottonwood timber, and dense undergrowth of willow, rose brush and chaparral.

MEANDERS, T. 3 S., R. 4 W.

N.10°50'E. 4.50 chs.
N.47°30'W. 5.20 "
S.77°30'W. 4.50 "
S.53°W. 11.00 " To meander cor. of fracl. secs. 1 and 36. 37.68 chs. N.89°21'W. of the cor. of Tps. 3 and 4 S., Rs. 3 and 4 W.

Land, level.
Soil, rich sandy loam on sandy loam subsoil; 1st rate.
Timber, scattering cottonwood.
Undergrowth, willow, rose brush and chaparral.

From meander cor. of fracl. secs. 1 and 36, 48.46 chs. N.89°21'W. of the cor. of Tps. 3 and 4 S., Rs. 3 and 4 W., I continue with meanders in sec. 36.
Through scattering cottonwood timber, and undergrowth of willow, greasewood and chaparral.

N.41°00'W. 5.00 chs.
S.88°15'W. 4.70 "
S.73°00'W. 8.90 " At 8.00 chs. undergrowth becomes very dense.
N.88°15'W. 1.70 "
N.38°45'W. 8.10 "
S.67°00'W. 3.20 " Undergrowth less dense.
N.74°45'W. 3.00 " Enter dense undergrowth.
N.61°15'W. 3.70 " To meander cor. of fracl. secs. 35 and 36.

Land, level.
Soil, sandy loam on sandy loam subsoil; 1st rate.
Timber, scattering cottonwood.
Undergrowth, dense greasewood, willow, rose brush and chaparral.

June 9, 1914.

MEANDERS, T. 3 S., R. 4 W.

June 30: At 8h 03m a.m., l.m.t., I set off 40°11' on the lat. arc; 23°13'N. on the decl. arc; and determine a meridian with the solar at the meander cor. of fracl. secs. 35 and 36, on the left bank of Duchesne river.

Thence I run with meanders in sec. 35.

Through scattering cottonwood timber and dense undergrowth of willow, buck and rose brush.

N.58°30'W.	7.30 chs.		
N.36°45'W.	2.00 "		
N.20°45'W.	4.20 "		
N.8° 45'W.	2.00 "		
N.3° 15'E.	3.30 "		
N.24°15'E.	.90 "		
N.32°15'E.	2.90 "	2.00	Leave dense undergrowth, enter medium greasewood and sage.
		2.90	Head gate of canal, drains S.10°E.
N.1° 00'W.	1.80 chs.		
N.47°30'W.	8.00 "		
N.84°00'W.	3.40 "	2.20	Mouth of wash, 20 lks. wide, 12 ft. deep.
S.73°15'W.	3.70 "		
S.35°00'W.	4.70 "		
S.45°30'E.	5.80 "	.50	Enter dense willow undergrowth.
S.17°15'W.	3.20 "		
S.51°45'W.	10.20 "		
S.29°W.	4.60 "		
S.1° 45'W.	4.40 "		June 30: At this station I set off 23°13'N. on the decl. arc; and at 12h 03m p.m., l.m.t., observe the sun on the meridian; the resulting lat. is 40°11'.
S.15°30'W.	1.40 "		
S.26°00'W.	6.80 "		South 1 ch. is E. end of small island.

MEANDERS, T. 3 S., R. 4 W.

N.89°30'W.	6.60 chs.	5.50. South 1 ch. W. end of island.
N.40°30'W.	3.60 "	2.00 Old left bank of river bears N.10°W.
S.86°15'W.	11.70 "	At 4.75 chs. old left bank of river bears N.5°E.
N.57°30'W.	8.00 "	
N.87°30'W.	8.70 "	
N.88°45'W.	6.70 "	
N.80°00'W.	4.79 "	To point on left bank of river, 9.00 chs. N.0°12'W. of the cor. of secs. 2, 3, 34 and 35, on the S. bdy. of the Tp.

Land, level.

Soil, sandy loam on sandy loam subsoil; 1st rate.

Timber, scattering cottonwood.

Undergrowth, willow, greasewood, sagebrush, rose brush and chaparral.

June 30, 1914.

July 1: At 8h 03m a.m., l.m.t., I set off 40°11' on the lat. arc; 23°10'E. on the decl. arc; and determine a meridian with the solar at a point on the left bank of the Duchesne river, 9.00 chs. N.0°12'W. of the cor. of secs. 2, 3, 34 and 35, on the S. bdy. of the Tp.

Thence I run with meanders in sec. 34.

Through scattering cottonwood timber, and dense undergrowth of willow, greasewood, sagebrush, rose brush and chaparral.

N.81°30'W.	4.80 chs.	
N.18°30'W.	2.60 "	
N.16°00'W.	5.20 "	
N.9° 00'W.	5.10 "	Undergrowth less dense.
N.60°30'W.	5.70 "	
S.64°00'W.	8.30 "	
S.42°45'W.	8.80 "	

MEANDERS, T. 3 S., R. 4 W.

S.77°00'W. 4.00 chs.

N.82°00'W. 4.00 " July 1: At this station I set off 23°09'N. on the decl. arc; and at 12h 03m p.m., l.m.t., observe the sun on the meridian; the resulting lat. is 40°11'.

S.77°00'W. 6.00 "

N.80°00'W. 5.00 "

N.46°30'W. 2.60 "

N.79°00'W. 11.80 " 2.10 Enter dense undergrowth.

N.85°00'W. 6.00 "

N.67°00'W. 3.90 "

N.81°00'W. 3.90 "

N.33°00'W. 3.80 "

N.59°00'W. 3.80 "

S.84°30'W. 3.62 " To left bank of river on line bet. secs. 33 and 34.

Land, level.

Soil, rich, moist, sandy loam on loam subsoil; 1st rate.

Timber, scattering cottonwood.

Undergrowth, dense willow, greasewood, bull berry, sagebrush and scattering grass.

July 1, 1914.

July 2: At 8h 04m a.m., l.m.t., I set off 40°11' on the lat. arc; 23°06'N. on the decl. arc; and determine a meridian with the solar at the left bank of Duchesne river on line bet. secs. 33 and 34.

Thence I run with meanders in sec. 33.

Through scattering cottonwood timber, and dense undergrowth of willow, greasewood, bull berry, sagebrush and scattering grass.

S.87°30'W. 4.50 chs.

N.76°00'W. 5.60 "

N.44°45'W. 7.80 "

N.15°45'W. 5.00 "

N.43°30'W. 3.50 "

MEANDERS, T. 3 S., R. 4 W.

N.60°30'W.	1.90	chs.	
N.71°45'W.	1.60	"	
S.77°45'W.	2.70	"	
S.43°30'W.	5.00	"	
S.6° 00'E.	4.90	"	
S.46°45'W.	2.10	"	
S.66°30'W.	6.60	"	
N.60°00'W.	2.20	"	
N.6° 00'W.	3.80	"	
N.17°15'W.	2.90	"	July 2: At this station I set off 23°05'N. on the decl. arc; and at 12h 04m p.m., l.m.t., observe the sun on the meridian; the resulting lat. is 40°11'.
N.47°00'W.	4.70	"	
N.56°W.	2.00	"	
N.73°15'W.	5.90	"	
N.79°30'W.	6.90	"	
N.56°W.	9.40	"	
S.74°30'W.	5.20	"	
S.40°30'W.	5.30	"	
S.21°45'W.	12.50	"	
S.52°14'W.	4.82	"	To left bank of river on line bet. secs. 32 and 33.

Land, level.

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

Timber, scattering cottonwood.

Undergrowth, willow, bull berry, greasewood, sagebrush and scattering grass.

July 2, 1914.

July 3: At 8h 04m a.m., l.m.t., I set off 40°11' on the lat. arc; 23°01'N. on the decl. arc; and determine a meridian with the solar at a point on the line bet. secs. 32 and 33 on the left bank of the Duchesne river. Thence I run with meanders in sec. 32.

MEANDERS, T. 3 S., R. 4 W.

Through scattering cottonwood timber, and dense undergrowth of willow, bull berry, greasewood, sagebrush and scattering grass.

S.49°W.	2.70	chs.	
S.60°30'W.	10.90	"	
S.46°W.	5.80	"	
S.62°45'W.	7.30	"	
N.83°45'W.	2.40	"	
N.48°30'W.	2.60	"	
N.29°W.	4.20	"	
N.54°W.	4.80	"	
S.80°W.	2.00	"	
N.65°15'W.	4.10	"	
S.74°45'W	2.30	"	
S.62°45'W.	4.20	"	
N.74°30'W.	3.50	"	July 3: At this station I set off 23°00'N. on the decl. arc; and at 12h 04m p.m., l.m.t., observe the sun on the meridian; the resulting lat. is 40°11'.
N.13°E.	3.70	"	
N.18°W.	3.00	"	
N.37°45'W.	4.40	"	
N.63°30'W.	2.00	"	
N.88°30'W.	5.60	"	
S.67°45'W.	7.90	"	
S.43°45'W.	6.30	"	
S.9°30' W.	3.70	"	
S.25°15'E.	7.60	"	
S.29°30'W.	2.30	"	
S.64°15'W.	5.60	"	
S.74°W.	4.90	"	
S.30°30'W.	5.64	"	To point on line bet. secs. 31 and 32 on left bank of river, 9.60 chs. N.0°19'W. of the true point for cor. of secs. 5, 6, 31 and 32, on the S. bdy. of the Tp.

MEANDERS, T. 3 S., R. 4 W.

Land, level.
Soil, rich sandy loam on sandy loam subsoil; 1st rate.
Timber, scattering cottonwood.
Undergrowth, dense willow, greasewood, bull berry, sagebrush and scattering grass.

Thence in sec. 31.
Through scattering cottonwood timber, and dense undergrowth of willow, bull berry, greasewood, sagebrush and scattering grass.
S.21°15'W. 3.10 chs.
South 6.78 " To witness cor. of secs. 5, 6, 31 and 32, on the S. bdy. of the Tp., heretofore described.
Land, level.
Soil, rich sandy loam on sandy loam subsoil; 1st rate.
Timber, scattering cottonwood.
Undergrowth, dense willow, greasewood, bull berry, sagebrush and scattering grass.

July 3, 1914.

Meanders of the right bank of Duchesne river, up stream.

June 23: At 8h 31m a.m., l.m.t., I set off 40°11' on the lat. arc; 23°27'N. on the decl. arc; and determine a meridian with the solar at the meander cor. of fracl secs. 1 and 36, on the S. bdy. of the Tp., 24.47 chs. N.89°21'W. of Tp. cor.
Thence I run with meanders in sec. 36.
Through scattering cottonwood timber, and dense undergrowth of buck brush, rose brush and willows.
N.19°45'E. 3.00 chs.
N.62°15'W. 3.10 "
S.81°W. 3.70 "
S.59°W. 3.80 "

S.39°W. 2.06 chs. To meander cor. of fracl. secs. 1 and 36, 34.40 chs. W. of the Tp. cor.

Land, level.

Soil, sandy loam on sandy loam subsoil; 1st rate.

Timber, scattering cottonwood.

Undergrowth, dense buck brush, rose brush and willow.

From meander cor. bet. secs. 1 and 36, 8.59 chs. S.89° 21'E. of the cor. of secs. 1, 2, 35 and 36,

I continue with meanders in sec. 36.

Through scattering cottonwood timber, and dense undergrowth of willow, buck brush and chaparral.

N.83°15'W. 3.70 chs.

N.44°45'W. 1.50 "

N.21°30'W. 2.90 "

N.52°30'W. 3.58 " To meander cor. of fracl. secs. 35 and 36.

Land, level.

Soil, rich sandy loam on sandy loam subsoil; 1st rate.

Timber, scattering cottonwood.

Undergrowth, willow, buck brush and chaparral.

Sky is overcast at noon; observation for lat. impossible.

Rain storm at 2 p.m. prevents further field work this day.

June 23, 1914.

June 24: At 9h 02m a.m., l.m.t., I set off 40°11' on the lat. arc; 23°26'N. on the decl. arc; and determine a meridian with the solar at the meander cor. of fracl. secs. 35 and 36.

Thence I run with meanders in sec. 35.

Through scattering cottonwood timber, and dense undergrowth of willow, buck brush and scattering grass.

MEANDERS, T. 3 S., R. 4 W.

N.67°15'W.	2.10	chs.		
N.80°15'W.	2.70	"	1.00	Leave dense undergrowth; thence through greasewood and sage.
N.44°W.	5.70	"		
N.18°15'W.	3.50	"		
N.16°W.	3.80	"	.60	Enter dense willow undergrowth.
N.2° 15'E.	6.70	"		
N.30°W.	6.90	"		
N.58°45'W.	2.40	"		June 24: At this station I set off 23°26'N. on the decl. arc; and at 12h 02m p.m., l.m.t., observe the sun on the meridian; the resulting lat. is 40°11'.
S.69°45'W.	2.80	"		
S.8°45'E.	2.60	"		
S.34°45'E.	3.20	"		
S.4° 30'W.	4.50	"		
S.51°15'W.	9.20	"		
S.41°30'W.	3.20	"		
S.21°15'W.	4.10	"		
S.0° 15'E.	2.60	"		
S.23°37'W.	7.66	"		To point on left bank of river, 30.40 chs. N.89°21'W. of the cor. of secs. 1, 2, 35 and 36.

Land, level.

Soil, rich, sandy loam on sandy loam subsoil; 1st rate.

Timber, scattering cottonwood.

Undergrowth, willow, greasewood, sagebrush, buck brush, rose brush and scattering grass.

June 24, 1914.

June 25: At 8h 02m a.m., l.m.t., I set off 40°11' on the lat. arc; 23°26'N. on the decl. arc; and determine a meridian with the solar at a point on right bank of river bet. secs. 2 and 35, 43.19 chs. W. of the cor.

MEANDERS, T. 3 S., R. 4 W.

of secs. 1, 2, 35 and 36, on the S. bdy. of the Tp.
Thence I run with meanders in sec. 35.
Through scattering cottonwood timber, and undergrowth of greasewood, sagebrush and scattering grass.

N.86°W.	12.50	chs.	11.00 Enter dense willow, buck brush and chaparral.
N.47°W.	3.80	"	
N.70°W.	3.30	"	
S.89°45'W.	8.20	"	
North	.47	"	
N.88°W.	8.20	"	
N.88°30'W.	2.80	"	To point on line bet. secs. 34 and 35 and right bank of river.

Land, level.
Soil, rich, sandy loam on sandy loam subsoil; 1st rate.
Timber, scattering cottonwood.
Undergrowth, willow, buck brush, chaparral, greasewood, sagebrush and scattering grass.

Thence in sec. 34.
Through scattering cottonwood timber, and undergrowth of willow, buck brush and scattering grass.

S.88°15'W.	3.00	chs.	
N.78°W.	2.80	"	
N.23°15'W.	5.20	"	
N.11°W.	7.50	"	
N.50°15'W.	5.40	"	
S.57½°W.	4.00	"	
S.40°15'W.	5.50	"	
S.53°15'W.	5.00	"	
S.73°W.	6.50	"	June 25: At this station I set off 23°25'N. on the decl. arc; and at 12h 02m p.m., l.m.t., observe the sun on the meridian; the resulting lat. is 40°11'.
N.72°30'W.	3.60	"	
N.87°W.	2.30	"	

MEANDERS, T. 3 S., R. 4 W.

N.89°W.	5.90 chs.			
N.81°45'W.	7.60	"		Line runs along foot of bluff.
N.77°30'W.	10.50	"		
N.80°W.	5.00	"		
N.57°W.	3.10	"	.59	Mouth of wash, 12 lks. wide, 10 ft. deep.
			1.50	Undergrowth becomes greasewood and sage.
N.72°15'W.	5.60	"		Point of bluff bears E.
N.58°W.	6.90	"		
S.86°37'W.	2.00	"	.80	Enter dense willow, buck brush and chaparral. To point on line bet. secs. 33 and 34 and right bank of river.

Land, level.

Soil, sandy loam on sandy subsoil; 1st rate.

Timber, scattering cottonwood.

Undergrowth, willow, buck brush, greasewood, sagebrush, chaparral and scattering grass.

June 25, 1914.

June 26: At 8h 02m a.m., l.m.t., I set off 40°11' on the lat. arc; 23°24'N. on the decl. arc; and determine a meridian with the solar at a point on the right bank of the river, bet. secs. 33 and 34.

Thence I run with meanders in sec. 33.

S.87°W.	4.10 chs.	.78	Wire fence bears S.
N.68°15'W.	2.80	"	
N.70°15'W.	3.20	" 1.50	Wire fence bears S.
N.44°W.	8.40	"	
N.40°15'W.	2.90	"	
N.18°15'W.	4.00	"	
N.51°W.	2.00	"	
N.89°15'W.	2.60	"	

S.54°15'W.	2.90	chs.	
S.1° 15'W.	3.80	"	
S.14°30'E.	2.70	"	
S.37°30'W.	3.70	"	Undergrowth becomes medium sage and greasewood.
S.4°W.	2.50	"	Foot of bluff.
			June 26: At this station I set off 23°23'N. on the decl. arc; and at 12h 02m p.m., l.m.t., observe the sun on the meridian; the resulting lat. is 40°11'.
N.77°45'W.	10.40	"	Leave bluff; enter dense undergrowth.
N.40°30'W.	2.50	"	
N.14°30'W.	6.60	"	
N.60°15'W.	4.10	"	
N.69°45'W.	5.10	"	
N.77°W.	17.50	"	
S.63°15'W.	3.00	"	
S.38°45'W.	3.00	"	
S.19°15'W.	7.70	"	
S.31°45'W.	3.80	"	
S.44°W.	6.83	"	To point on line bet. secs. 32 and 33 on right bank of river.

Land, level.

Soil, sandy loam on sandy loam subsoil; 1st rate.

Timber, scattering cottonwood.

Undergrowth, willow, buck brush, greasewood, sagebrush, chaparral and scattering grass.

June 26, 1914.

June 27: At 8h 03m a.m., l.m.t., I set off 40°11' on the lat. arc; 23°22'N. on the decl. arc; and determine a meridian with the solar at a point on right bank of river bet. secs. 32 and 33.

Thence I run with meanders in sec. 32.

Through scattering cottonwood timber, and undergrowth

of willow, buck brush, greasewood, sagebrush and scattering grass.

S.66°15'W.	4.00 chs.		
S.50°W.	11.20 "		
S.69°30'W.	10.00 "		
N.81°30'W.	4.40 "		
N.36°45'W.	6.70 "		
N.61°30W.	3.90 "		
S.60°45'W.	2.30 "		
S.15°30'W.	3.20 "		Leave dense undergrowth.
S.41°45'W.	2.30 "		
S.59°15'W.	3.70 "		
N.78°W.	5.20 "		
N.64°45'W.	3.60 "		June 27: At this station I set off 23°21'E. on the decl. arc; and at 12h 03m p.m., l.m.t., observe the sun on the meridian; the resulting lat. is 40°11'.
N.12°W.	5.10 "		
N.32°E.	4.00 "		
N.0° 30'E.	4.30 "		
N.37°30'W.	3.30 "		
N.72°30'W.	3.10 "	2.00	Enter dense undergrowth.
S.81°W.	3.40 "		
S.68°W.	4.80 "		
S.53°15'W.	5.10 "		
S.26°W.	2.70 "		
S.4° 15'W.	2.40 "		
S.36°45'E.	2.80 "		Cease work.

June 27, 1914

June 29: At 8h 03m a.m., l.m.t., I set off 40°11' on the lat. arc; 23°17'E. on the decl. arc; and determine a meridian with the solar at point left at close of work June 27.

Thence I continue with meanders.

S.36°15'E.	5.00 chs.	3.00	North point of island

right angles to line.

MEANDERS, T. 3 S., R. 4 W.

S.25°45'E.	3.90 chs.		
S.5° 45'W.	8.00 "	6.50	South point of island
			right angles to line.
S.67°30'W.	2.20 "		
N.80°30'W.	3.60 "		
N.35°45'W.	5.20 "		
N.75°45'W.	2.00 "		
S.75°45'W.	5.70 "		
S.34°W.	4.40 "		
S.2° 15'W.	5.30 "		
S.6°E.	3.22 "		To point on line bet. secs. 5 and
			32 and right bank of river.

Land, level.

Soil, rich sandy loam on sandy loam subsoil; 1st rate.

Timber, scattering cottonwood.

Undergrowth, willow, greasewood, buck, chaparral, sagebrush and scattering grass.

June 29: At this station I set off 23°16'N. on the decl. arc; and at 12h 03m p.m., l.m.t., observe the sun on the meridian; the resulting lat. is 40°11'.

GENERAL DESCRIPTION

The land of this township consists generally of rough mountainous land, bench land and river bottom. The land in the northeast corner, through secs. 1, 2, 11 and 12, the NE. portion of sec. 24 and the N. half of sec. 3, is rough and broken, the soil of which is a blue clay, sandy loam and loose rock, and is covered with a scattering growth of grass, sagebrush, cedars and pinon pine. The slope of a high bench passes through secs. 25, 26, 23, 22 and 27, and the S. portion of sec. 23, sec. 29, the E. portion of sec. 20, through the center of sec. 19; and the E. portion of sec. 31. is rough and broken, being cut by deep ravines.

GENERAL DESCRIPTION, T. 3 S., R. 4 W.

The Duchesne river drains easterly through secs. 32, 33, 34, 35 and 36, the land through these sections being mostly river bottom, the soil of which is a rich sandy loam, most of which is being cultivated, producing abundant crops of alfalfa and grain.

The remaining portion of this township is high bench land, the soil being a rich sandy loam from 6 to 18 ins. deep, on a hard pan of clay and gravel, and will produce crops with irrigation.

The township is generally covered with a medium growth of grass and sagebrush. Scattering cottonwood trees, and dense growths of willows, rose bush and bull berry brush are found along the river bottom.

The township is well watered by the Duchesne river, the water being diverted by canals to irrigate the bench land.

Except a portion of secs. 30, 29, 28, 27, 26, 24, 13, 12, 11, 3, 2 and 1, the land has been settled and is being cleared.

There are no indications of mineral found in this township.

Ralph Gurley

U. S. Surveyor.

BOUNDARIES OF T. 3 S., R. 4 W.

Latitudes, Departures and Closing Errors.

Lines Designated	True Bearing	Dist.	Latitudes		Departures	
			N.	S.	E.	W.
		Chs.	Chs.	Chs.	Chs.	Chs.
W.Bdy.T.3 S.R.4 W.	N.0°05'E.	40.26	40.26	.....	.06	.....
	N.0°06'E.	40.12	40.12	.....	.07	.....
	N.0°07'E.	40.05	40.05	.....	.08	.....
	N.0°04'E.	40.13	40.13	.....	.05	.....
	N.0°02'E.	40.05	40.05	.....	.02	.....
	N.0°04'E.	40.07	40.07	.....	.05	.....
	N.0°01'W.	40.12	40.12	.....	.....	.07
	N.0°10'W.	39.96	39.96	.....	.....	.12
	N.0°03'E.	40.01	40.01	.....	.04	.....
	N.0°17'E.	39.92	39.92	.....	.20	.....
	N.0°04'W.	39.92	39.92	.....	.....	.05
	N.0°05'E.	39.84	39.84	.....	.06	.....
N.Bdy.T.3 S.R.4 W.	N.89°42'E.	40.28	.21	.....	40.28	.....
	S.89°45'E.	89.95	.....	.18	39.95	.....
	N.89°07'E.	40.44	.62	.....	40.44	.....
	N.89°38'E.	40.44	.26	.....	40.44	.....
	N.89°45'E.	40.56	.18	.....	40.56	.....
	N.89°36'E.	40.26	.28	.....	40.26	.....
	N.89°49'E.	39.94	.13	.....	39.94	.....
	N.89°38'E.	40.45	.26	.....	40.45	.....
	N.89°38'E.	40.11	.26	.....	40.11	.....
	N.88°48'E.	40.42	.85	.....	40.41	.....
	N.89°41'E.	40.40	.22	.....	40.40	.....
	N.89°34'E.	40.29	.30	.....	40.29	.....
E.Bdy.T.3 S.R.4 W.	S.0°06'W.	35.98	.....	35.98	.....	.06
	S.0°09'W.	39.12	.....	39.12	.....	.10
	S.0°52'E.	39.44	.....	39.44	.60	.....
	S.0°10'E.	44.19	.....	44.19	.13	.....
	S.0°09'E.	196.95	.....	196.95	.52	.....
	S.0°10'E.	120.72	.....	120.72	.35	.....
S.Bdy.T.3 S.R.4 W.	N.89°21'W.	121.14	1.37	.....	.....	121.14
	S.88°40'W.	365.01	.....	8.49	.....	364.91
Convergency					.61	
	Totals		485.39	485.07	486.37	486.39
Error in lat. and dep.			485.07			486.37
			.32			.02

BOOK A-416

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362 A

DEPARTMENT OF THE INTERIOR

OFFICE OF U. S. SURVEYOR GENERAL

Salt Lake City, Utah.

The resurvey of T. 3 S., R. 4 W., U.S.B.and M., Utah, represented in these field notes, was made for the purpose of restoring to their original positions all missing corners of the original survey.

The boundaries of the lots and sections are, therefore, unchanged, and these lands will continue to be disposed of according to the original plat and field notes, approved May 23, 1883, with the exception of lots 6, 7, and 8 of section 36 in said township.

The resurvey of the meanders of the Duchesne River through sections 32 to 35 inclusive, are, therefore, null and void, so far as determining the boundaries of the lots in these sections, title to same having passed to private parties prior to the approval of said resurvey.

June 26, 1916.

U. S. Surveyor-General.

4—680.

BOOK A-416

CERTIFICATE OF ASSISTANTS.

We, the undersigned, hereby certify upon honor that we assisted, to the best of our skill and ability, Ralph Gentry, U. S. Surveyor, during the periods and in the capacities stated opposite our several signatures, in surveying all those parts or portions of dependent re-survey east and south boundaries and subdivision and survey of meanders Duchesne river T.3 S.,R.4 W.; and retracement of west, north, and fractional east boundaries of T.3 S., R.4 W.

of the Uinta Special Base and Meridian, in the State of Utah 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.	
Sterling Wright	May 1,1914	July 3,1914	chainman
Sidney Reese	"	"	"
Ernest E. Wilson	"	"	cornerman
Nelson A. Miller	"	"	flagman

Subscribed and certified to before me on the dates of the final service as shown above.

Ralph Gentry
U. S. Surveyor.

6—2761

FINAL OATH OF UNITED STATES SURVEYOR.

I, Ralph Gentry, U. S. Surveyor, do solemnly swear that, in pursua
of special instructions received from the U. S. Surveyor General for Utah
bearing date of the 18th. day of April, 1914, I have well, faithfully, and tru
in my own proper person, and in strict conformity with said instructions, the Manual of Survey
Instructions, and the laws of the United States, surveyed all those parts or portions of
dependent re-survey east and south boundaries and subdivision
and survey of meanders Duchesne river T.3 S.,R.4 W. ; and re-
tracement of west, north and fractional east boundaries of T.3 S
R.4 W.
of the Uinta Special
Base and Meridian, in the State of Utah, which are represented
the foregoing field notes as having been executed by me, and under my direction; and I do furtl
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 Utah and in the specific manner described in the field notes, and tl
the foregoing are the original field notes of such survey.

Ralph Gentry
U. S. Surveyor.

Subscribed by said Relph Gentry, and sworn to before me
this 17th day of June, 1916.

SEAL

L. C. Thoresen
U. S. Surveyor General.
for Utah.

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,
Salt Lake City, Utah, June 29, 1916

The foregoing field notes of the ~~xxxxxxx~~ dependent resurvey of the east and
south boundaries and subdivision; survey of meanders of Duchesne
river; and retracement of west, north, and fractional east boundaries
of Township 3 South, Range 4 West, of the Uinta Special Base and
Meridian, Utah

executed by Ralph Gentry
under his special instructions dated April 18, 1914 ~~xxxx~~, having bee
critically examined, and the necessary corrections and explanations made, the said field notes, and th
retracements, resurveys and
surveys they describe, are hereby approved.

L. C. Thoresen
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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Filed Sept. 23, 1915.

BOOK A-416

A

FIELD NOTES

OF THE SURVEY OF THE

WEST AND NORTH BOUNDARIES

OF

TOWNSHIP 38 SOUTH, RANGE 26 EAST

AND THE

WEST AND NORTH BOUNDARIES

OF

TOWNSHIP 37 SOUTH, RANGE 26 EAST

Of the Salt Lake Base and Meridian,

In the State of Utah

EXECUTED BY

THOMAS C. RATHBONE

Transitman

In the capacity of U. S. ~~Surveyor~~, under instructions dated May 6, *1914*, *issued by the United States Surveyor General to govern surveys included in Group No.* 31, *which were approved by the Commissioner of the General Land Office,* May 29, *1914, pursuant to authority contained in the Act of Congress dated* ..... *191*...

Survey commenced May 24, *1915*

Survey completed July 2, *1915*

BOOK A-416

INDEX DIAGRAM.

Township ....., *Range* .....

6	5	4	3	2	1
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19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

6—151

WEST BOUNDARY T.38 S., R.26 E.

Chains.

Survey commenced May 24, 1915, and executed with a Young & Sons light mountain transit No.7192, for description and test of which see notes of the retracement of the Utah-Colorado Boundary line, book "B", this survey.

May 24: At 2h 0 m p.m. apparent time I set off 37° 28' on the lat.arc; 20° 42'N.on the decl.arc; and determine a meridian with the solar at the cor.of Tps.38 and 39 S., Rs.25 and 26 E., which is an iron post 3 in. in dia., extending 12 ins.above ground, firmly set, properly marked and witnessed as described by the surveyor general. Thence I run

North on a true line bet.secs.31 and 36

Descending over mountainous land, over large boulders, through sagebrush undergrowth.

7.70 Wash, drains NW., 40 ft.below cor.; continue descent.

24.00 Wash, drains NW.

32.00 Wash, drains W., 80 ft.below cor.; ascend.

36.70 Top of ascent, 30 ft.above wash.

Thence over level land, bearing E.and W.

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

¼ S 36 | S 31
1915

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

Corner falls on low bench, 30 ft.above wash.

52.00 Low ridge, bearing E.and W., 50 ft.above ¼ sec.cor.

Descend.

65.40 Descend over 10 ft.bank, into Cross Canyon, dry wash in canyon bearing E.and W.

65.70 Cross Canyon wash, drains W., (dry) 70 ft.below ridge.

66.10 North bank of canyon.10 ft.high, bears E.and W.

Thence over level bottom; through greasewood undergrowth.

73.70 Descend over south bank of Squaw Canyon Creek, bank 10 ftl high bearing NE. and SW. No water in creek. Thence into dry wash/

74.40 North bank of Squaw Canyon Creek; ascend over bank 10 ft.

Chains. high bearing NE. and SW.

Confluence of Squaw and Cross creeks about 5.00 chs. SW.

Enter greasewood undergrowth.

78.50 Ascend point of rocky spur;

Leave greasewood bearing NE. and SW.

80.00 Set an iron post 3 ft. long, 3 ins. dia., 12 ins. in the ground, and 12 ins. in mound of stone 2 ft. base, for cor. of secs. 25, 30, 31 and 36, with brass cap marked

T 38 S.
R 25 E. | R 26 E.
S 25 | S 30
S 36 | S 31
1915

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

Underlying rock prevents setting post over 12 ins. in ground.

Corner falls on SE. slope of base of spur, 40 ft. above creek bottom.

Land, mountainous, draining into Squaw and Cross canyons; level land in bottom of canyons.

Soil, rocky, stony; 4th rate.

Timber, scrub cedar. Undergrowth dense greasewood, and sagebrush.

May 24, 1915.

May 25: For solar observation see line bet. secs. 31 and 32.

North bet. secs. 25 and 30,

Over mountainous land; ascending point of SE. slope of spur; surface iron rock.

6.00 Top of ascent, 75 ft. above cor., bears N. and SW.; thence along broken east rim of ridge; over huge boulders.

15.50 Descend abruptly, over broken ledges and rim rock, bear- NW. and SE., toward draw.

34.00 Wash in draw, drains SE., 50 ft. below top.

40.00 Set an iron post 3 ft. long, 1 in. in dia., 12 ins. in the ground, and 12 ins. in mound of stone 2 ft. base, for ¼ sec. cor., with brass cap marked

¼ S 25 | S 30
1915

WEST BOUNDARY OF T.38 S., R.26 E.

Chains.	
	Raise a mound of stone 2 ft. base, 1½ ft. high W. of cor. Underlying rock prevents setting post over 12 ins. in the ground. Corner falls on N. side of draw, 15 ft. above wash. Ascend over huge broken boulders; through scattering cedar timber and sagebrush undergrowth.
54.50	Top of ascent bearing NE. and SW., 50 ft. above cor. Thence over bench land.
61.45	Rock cabin bears N.31° 30'E. Sheep herder's winter cabin.
62.00	Center of sheep corral, 1 ch. wide.
67.50	Rock cabin bears due east.
80.00	Set an iron post 3 ft. long, 3 ins. dia., 26 ins. in the ground for cor. of secs. 19, 24, 25, and 30, with brass cap marked T 38 S R 25 E | R 26 E S 24 | S 19 S 25 | S 30 1915 Raise a mound of stone 2 ft. base, 1½ ft. high W. of cor. Land, rough mountains, with high rocky boulders from rim rock, draining east; on 54.50 chs.; balance bench land. Soil, rocky; 4th rate. Timber, scattering cedar. Undergrowth sagebrush.

North bet. secs. 19 and 24,

Over rough bench land; through scattering cedar timber and sagebrush undergrowth.

27.00	Leave timber and sagebrush, bearing E. and W.; enter small greasewood flat.
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 24 | S 19 1915 Raise a mound of stone 2 ft. base, 1½ ft. high W. of cor. Descend gradually.

May 25, 1915.

June 3: At 8h a.m. apparent time I set off 22° 15'N. on the decl. arc; 37° 30'N. on the lat. arc, and determine a me-

WEST BOUNDARY T.38 S., R.26 E.

Chains.	
	ridian with the solar at $\frac{1}{4}$ sec. cor. bet. secs. 19 and 24.
	Thence I continue north, over greasewood flat; descending gradually.
59.30	Enter bottom of draw wash, draining from N. to SE, 30 ft. below $\frac{1}{4}$ sec. cor. Leave greasewood undergrowth.
67.30	Leave wash, draining from NW. to S. Ascend over rocky SW. slope.
72.00	Ridge bears E. and W., 50 ft. above wash. Descend.
78.00	Dry wash, 60 ft. below ridge, drains W.
80.00	Set an iron post 3 ft. long, 3 ins. in diam., 20 ins. in the ground, and 6 ins. in mound of stone 2 ft. base, for cor. of secs. 13, 18, 19, and 24, with brass cap marked T 38 S. R 25 E | R 26 E S 13 | S 18 S 24 | S 19 1915
	Raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high W. of cor.
	Underlying rock prevents setting post over 20 ins. in the ground.
	Corner falls on N. side of wash, 20 ft. above bottom.
	Land, rough bench, and mountainous draining E., except last 8.00 chs. drains W.
	Soil, rocky and stony; 4th rate.
	Timber, scattering cedar.
	Undergrowth, sagebrush and greasewood.
	North bet. secs. 13 and 18,
	Over rough mountainous land; through scattering sagebrush.
	Descend gradually.
21.00	Dry wash, draining SE., 40 ft. below cor. Ascend rocky S. slope.
40.00	Set an iron post 3 ft. long, 1 in. in dia., 18 ins. in the ground, and 8 ins. in mound of stone 2 ft. base, for $\frac{1}{4}$ sec. cor., with brass cap marked $\frac{1}{4}$ S 13 | S 18 1915

WEST BOUNDARY T.38 S., R.26 E.

Chains.	
	Raise a mound of stone 2 ft.base, 1½ ft.high W.of cor.
	Corner falls on slope 50 ft.above wash.
	Continue ascent.
50.00	Enter scrub cedars and sparse pinon pine, bearing E.and W.
57.00	Base of vertic1 ledge, 50 ft.high, bears E.and W. Ascend ledge; thence over mesa, bearing E.and W.; through dense cedars.
80.00	Set an iron post 3 ft.long, 3 ins.in dia., 26 ins.in the ground, for cor.of secs.7,12,13, and 18, with brass cap marked

T 38 S
R 25 E | R 26 E
S 12 | S 7
S 13 | S 18
1915

from which

A pinon pine, 10 ins.dia. bears N.56° 30'E.42 lks.dist., mkd.T 38 S R 26 E S 7 B T

A cedar, 12 ins.dia., bears E.70° 30'E.87 lks. dist., marked T 38 S R 26 E S 18 B T

A cedar, 12 ins.dia., bears S.38° 15'W. 75 lks. dist., marked T 38 S R 25 E S 13 B T

A cedar, 12 ins.dia.bears N.45° W.34 lks.dist. marked T 38 S R 25 E S 12 B T

Land, rough, mountainous, with general drainage SE., on 57.00 chs.; mesa on north 23.00 chs.

Soil, stony and rocky;4th rate.

Timber, cedar and pinon pine. Undergrowth, sagebrush.

North bet.secs.7 and 12,

Over rocky mesa; through cedar and pinon pine timber; descending gradually.

22.00	Draw, drains west, 20 ft.below sec.cor. Ascend.
25.00	Spur, 20 ft.above draw, projects west 5.00 chs. Descend into canyon.
40.00	Set an iron post 3 ft.long, 1 in.in dia., 26 ins.in the

WEST BOUNDARY T.38 S., R.26 E.

Chains.

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

¼ S 12 | S 7
1915

from which

A cedar, 8 ins.dia., bears S.40° E.33 lks.dist., marked ¼ S 7 B T

A cedar, 6 ins.dia., bears west, 6 lks.dist. marked ¼ S 12 B T

Corner falls on east side of bottom of gulch.

June 3: At apparent noon I set off 22° 16'N.on the decl. arc; and observe the sun on the meridian; the resulting lat.is 37° 31' .(At ¼ sec.cor.bet.secs.7 and 12).

Ascend to point of mesa, over rocky land.

50.00 Point of mesa, bearing N.and NE., 80 ft.above ¼ sec.cor.

Thence along broken rim on W.edge of mesa.

66.00 Descend west face of rim of mesa.

76.00 Ascend to top of rim; along broken west edge of mesa.

80.00 Set an iron post 3 ft.long, 3 ins.in dia., 6 ins.in the ground, and 20 ins.in mound of stone, 3 ft.base, for the cor.of secs.1,6,7, and 12, with brass cap marked

T 38 S
R.25 E | S 26 E
S 1 — S 6
S 12 | S 7
1915

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

Corner falls on W.edge of top of rim, on broken ledges.

Underlying rock prevents setting post over 6 ins.in the ground.

Land,rough,mountainous, and rough broken mesa, with broken ledges and rim rock, sloping west.

Soil, stony and rocky; 4th rate.

Timber, cedars and pinon pine.

Undergrowth, scrub sagebrush.

North bet.secs.1 and 6,

Over rough, mountainous land, along rocky, ledgy west edge

Chains.	
	of ledge rim of mesa; through cedars and scattering pinon pine.
.50	Descend abruptly, over 40 ft. ledge, bearing N.10° E. and S.10° W. Thence continue abrupt descent into canyon.
12.00	Foot of steep descent, bearing NE. and SW. Thence descend gradually
13.50	Enter dry wash in bottom of canyon, draining from N. to SW.; 250 ft. below cor.
28.50	Leave wash and canyon bottom, draining from NW. to S. Ascend abruptly over huge broken boulders and ledges projecting W.
33.00	Top of spur, 180 ft. above wash, projects west 3.00 chs. Descend.
40.00	Set an iron post 3 ft. long, 1 in. in dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., with brass cap marked $\frac{1}{4}$ S 1 | S 6 1915 from which A cedar, 10 ins. dia. bears S.49° E. 19 lks. dist. marked $\frac{1}{4}$ S 6 B T A cedar, 10 ins. dia., bears S.73° W. 20 lks. dist. marked $\frac{1}{4}$ S 1 B T Corner falls on slope facing NW., 20 ft. below top. Descend toward wash.
46.00	Enter wash in canon bottom, drains from N. to SW., 70 ft. below cor.
50.00	Leave wash, drains from NE. to S.
57.40	Same wash drains SE.
60.00	Same wash, drains SW.
80.00	Set an iron post 3 ft. long, 3 ins. in dia., 26 ins. in the ground, for cor. of Tps. 37 and 38 S., Rs. 25 and 26 E., with brass cap marked T 37 S S 36 | S 31 R 25 E —+— R 26 E S 1 | S 6 T. 38 S. 1915

Chains.

from which

A pinon pine, 12 ins.dia., bears N.59° 30'E.80 lks.dist., marked T 37 S R 26 E S 31 B T

A pinon pine, 10 ins.dia.bears S.55° 45'E.57 lks.dist., marked T 38 S R 26 E S 6 B T

A pinon pine, 12 ins.dia., bears S.11° 15'W.81 lks.dist., marked T 38 S R 25 E S 1 B T

A cedar, 8 ins.dia., bears N.28° 15'W. 50 lks. dist., marked T 37 S R 25 E S 36 B T

Corner falls on nearly level land, sloping South into a wide basin.

Land, mountainous, draining S.

Soil, rocky and stony; 3d and 4th rates.

Timber, cedar and pinon pine.

Undergrowth, sagebrush.

June 3, 1915.

NORTH BOUNDARY T.38 S., R.26 E.

June 10, 1915: At 8h a.m.apparent time, I set off 22° 59' N.on the decl.arc; 37° 33'N.on the lat.arc; and determine a meridian with the solar at the cor.of Tps.37 and 38 S., Rs.25 and 26 E. Thence

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

Over rough mountainous land; descending gradually through cedar and scattering pinon timber and scant sagebrush undergrowth.

8.60 Creek, 2 lks.wide, 2 ins.deep, course SW.; disappears 3 or 4.00 chs.S. Ascend.

16.30 Top of ascent, spur , 80 ft.above creek, projects S.3.00 chs. Descend over huge boulders and ledges.

23.00 Head of draw, 50 ft.below spur, drains S.

Ascend to main mesa,bearing N.and S.

32.00 Top of ascent, bearing N and S.80 ft.Above draw.

Thence over level mesa.

Chains.

40.00 Set an iron post 3 ft. long, 1 in. in dia., 12 ins. in the ground, and 14 ins. in mound of stone 2 ft. base, for $\frac{1}{4}$ sec. cor., with brass cap marked

$$\frac{S\ \frac{1}{4}\ 31}{S\ 6}$$
1915

from which

A pinon pine, 8 ins. dia., bears N. 64° W. 59 lks. dist., marked $\frac{1}{4}$ S 31 B T

A cedar, 10 ins. dia., bears S. 46° 45' E. 22 lks. dist., marked $\frac{1}{4}$ S 6 B T

Underlying rock prevents setting post over 12 ins. in the ground.

60.00 Leave mesa, bearing north for 20.00 chs., then east; descend abruptly over broken rim rock and ledges, and huge boulders.

63.00 Foot of steep descent, 120 ft. below top. Thence over broken spur and ledges, projecting S. from rim to the north.

80.00 Set an iron post 3 ft. long, 3 ins. in dia., 26 ins. in the ground, for cor. of secs. 5, 6, 31, and 32, with brass cap marked

T 37 S
S 31 | S 32
R 26 E
S 6 | S 5
T 38 S
1915

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

Corner falls on S. slope, 200 ft. below rim of mesa.

June 10, 1915: At this cor. I set off 22° 59' N. on the decl. arc; and at apparent noon obeerve the sun on the meridian; the resulting lat. is 37° 33' .

Land rough, mountainous, broken ledges and boulders on west 32.00 chs. and east 20.00 chs.; level mesa on 28.00 chs.

Soil, rocky and stony, 4th rate; shallow on mesa.

Timber, cedar and pinon pine.

Chains.	
	.Undergrowth, scant sagebrush.
	East bet.secs.5 and 32,
	Over rough mountainous land; descending over huge broken boulders and rim rock, with series of spurs projecting S.; through cedar and pinon timber and scattering sage-brush.
28.00	Descend abruptly into Squaw Canyon, bearing N.and S.
39.00	Foot of steep descent bearing S.and NE.; thence over bottom of Squaw Canyon.
	Point for $\frac{1}{4}$ sec.cor.will fall in creek; therefore at this point I
	Set an iron post 3 ft.long, 1 in.in dia., 26 ins.in the ground, for witness corner to $\frac{1}{4}$ sec.cor., with brass cap marked T 38 S R 26 E WC $\frac{1}{4}$ S 32 S 5 1915
	Raise a mound of stone 2 ft.base, $1\frac{1}{2}$ ft.high N.of cor.
39.50	Squaw Canyon Creek, 6 lks.wide, 6 ins.deep, drains from NE.to S.; good water, in wash bearing same; 250 ft.below the cor.
40.00	Point for $\frac{1}{4}$ sec.cor.falls in creek; corner not set.
43.50	Enter Squaw Creek, draining from E.to NW.
44.50	Leave Squaw Creek, draining from SE.to W.; intermittent flow of water. Ascend to rocky spur.
50.50	Point of rocky spur, bears 50 lks.S.of line; 50 ft.above creek.
55.20	Descend again into Squaw Creek , over west bank.
56.60	Center of creek, 6 lks.wide, 6 ins.deep, course SW.
58.00	Ascend east bank out of creek; thence ascend broken W. slope over ledges and huge boulders.
62.50	Old ruins, 1.00 ch.north of line. Ascend point of spur.
73.00	Top of steep ascent, 180 ft.above creek; thence over spur, projecting SW.

Chains.

80.00 Set an iron post 3 ft. long, 3 ins. in dia., 6 ins. in the ground to solid rock, and 24 ins. in a mound of stone 3 ft. base, for the cor. of secs. 4, 5, 32, and 33, with brass cap marked

T 37 S
S 32 | S 33
R 26 E ——+——
S 5 | S 4
T 38 S
1915

from which

A cedar, 10 ins. dia., bears N. 75° E. 38 lks. dist. marked T 37 S R 26 E S 33 B T

A cedar, 10 ins. dia., bears S. 9° 15' E. 50 lks. dist. marked T 38 S R 26 E S 4 B T

A pinon pine, 8 ins. dia., bears S. 75° 30' W. 64 lks. dist., marked T 38 S R 26 E S 5 B T

A cedar, 8 ins. dia., bears N. 66° W. 38 lks. dist., marked T 37 S R 26 E S 32 B T

Corner falls on rocky ridge, projecting SW.

Land, mountainous and rocky ledges and boulders.

Soil, rocky, 4th rate.

Timber, cedar and pinon pine.

Undergrowth, scattering scrubby sagebrush.

June 10, 1915.

June 12, 1915: At 8h 0m a.m. apparent time, I set off 23° 08' N. on the decl. arc; 37° 33' on the lat. arc; and determine a meridian with the solar at the cor. of secs. 4, 5, 32, and 33. Thence

East, bet. secs. 4 and 33,

Over rough, mountainous land; ascending gradually along top of rocky spur; through cedar and pinon timber.

20.00 Small wash, drains SW.

Thence over series of spurs and gulches, draining and projecting SW.

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

Chains.

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

$$\frac{S\ \frac{1}{4}\ 33}{S\ \ 4}$$
1915

from which

A cedar, 9 ins. dia., bears N.5° E. 34 lks. dist. marked $\frac{1}{4}$ S 33 B T

A cedar, 8 ins. dia. bears South 70 lks. dist. marked $\frac{1}{4}$ S 4 B T

43.00 Wash, drains SW., 20 ft. deep.

45.90 To determine distance to top of inaccessible ledges, I set a flag on line and measure a base south 20.00 chs. to a point, from which the flag bears N.40° 52'E. From flag the S. end of base bears S.40° 52'W.; therefore the distance is tan. 40° 52' x base, or .86521 x 20.00 equals 17.30, which added to 45.90 chs. makes

63.20 Rim rock, 100 ft. in vertical height, bears N. and S. Ascend gradually to top of mesa.

73.00 Top of mesa, bearing N. and S., 50 ft. above rim. Thence over level mesa.

80.00 Set an iron post 3 ft. long, 3 ins. in dia., 26 ins. in the ground, for cor. of secs. 3, 4, 33, and 34, with brass cap marked

T 37 S
S 33 | S 34
R 26 E
S 4 | S 3
T 38 S
1915

from which

A cedar, 5 ins. dia., bears N.32° E. 44 lks. dist. marked T 37 S R 26 E S 34 B T

A cedar, 6 ins. dia., bears S.80° E. 44 lks. dist. marked T 38 S R 26 E S 3 B T

A cedar, 6 ins. dia. bears S.16° 15'W. 61 lks. dist. marked T 38 S R 26 E S 4 B T

A cedar, 10 ins. dia., bears N.29° W. 98 lks. dist. marked T 37 S R 26 E S 33 B T

Chains.

Land, rough mountains on W.63.20 chs., draining to the west; balance mesa land; level on 7.00 chs.

Soil, on slopes rocky, stony; 4th rate; on mesa, red, sandy loam, from bare to 2 ft.deep, 2d rate .

Timber, dense cedars and scattering pinon pine.

East, bet.secs.3 and 34,

Over level mesa; through cedar and scattering pinon pine timber, and sagebrush undergrowth.

31.00 Enter fire killed cedars, bearing N.and S.

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

$$\frac{S\ \frac{1}{4}\ 34}{S\quad 3}$$
1915

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.

June 12, 1915: At this $\frac{1}{4}$ sec.cor., I set off 23° 08' N. on the declination arc; and at apparent noon observe the sun on the meridian; the resulting lat.is 37° 33' .

Continue over level mesa; through fire killed timber.

60.00 Leave fire killed timber, bearing N.and S.; enter live cedar and pinon pine.

70.00 Set temp. point.

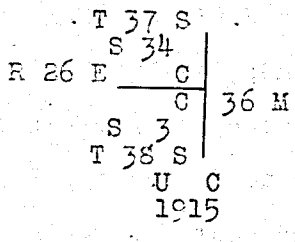
Note: On June 12, after determining the course of line between the 36 and 38 mile corners on the Utah-Colorado Bdy.line, I continue my line, and at

73.66 Intersect Utah-Colorado Boundary line at 2.56 chs.N.1° 04'E.of the 36th mile post.

At intersection, I

Set an iron post 3 ft.long, 3 ins.in dia., 26 ins.in the ground, for closing cor.of Tps.37 and 38 S., R.26 E. with brass cap marked

Chains.



From which

A cedar 8 ins.dia., bears S.48° W. 42 lks.dist.
marked T 38 S R 26 E S 3 B T

A cedar, 10 ins.dia.bears N.41° 30'W.48 lks.dist.
marked T 37 S R 26 E S 34 B T

Land, level top of mesa.

Soil, red, sandy loam, 2 ft.or more deep; 2d rate.

Timber, cedar and scattering pinon pine.

Undergrowth, scrub sagebrush.

June 12, 1915.

For general description see notes of the subdivision of T.38 S., R.26 E.

Thos. L. Rathbone
U.S.Transitman.

WEST BOUNDARY T. 37 S., R. 26 E.

Chains

June 15, 1915: Knowing from recent test that my instrument is in good adjustment, at 7 a.m., app. time, I set off 37°33' on the lat. arc; 23°18'N. on the decl. arc; and determine a meridian with the solar at the cor. of Tps. 37 and 38 S., Rs. 25 and 26 E., described in the W. bdy. of T. 38 S., R. 26 E., this survey.

Thence

North, on a true line, bet. secs. 31 and 36,

Over rolling mountainous land, ascending gradually through cedars and scattering sagebrush out of basin.

12.00 Ascend abruptly over broken ledges bearing N.30°E. and S.30°W.

18.00 Top of abrupt ascent; ascend gradually to top of mesa.

23.00 Top of ascent, 95 ft. above cor., bears E. and W.; thence over rolling mesa.

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

¼ S 36 | S 31

1915

from which

A cedar 8 ins. in diam. bears S.83°W., 50 lks. dist., mkd. ¼ S 36 B T.

A cedar 14 ins. in diam. bears N.20°E., 59 lks. dist., mkd. ¼ S 31 B T.

Continue over mesa, through cedars.

80.00 Set an iron post, 3 ft. long, 3 ins. in diam., 26 ins. in the ground, for cor. of secs. 25, 30, 31 and 36, mkd. on brass cap

T 37 S

S 25 | S 30

S 36 | S 31

R 25 E | R 26 E

1915

from which

A cedar 14 ins. in diam. bears N.41½°E., 78 lks. dist., mkd. T 37 S R 26 E S 30 B T.

WEST BOUNDARY T. 37 S., R. 26 E.

Chains

A cedar 8 ins. in diam. bears S.51½°E., 72 lks. dist., mkd. T 37 S R 26 E S 31 B T.

A cedar 8 ins. in diam. bears S.57½°W., 81 lks. dist., mkd. T 37 S R 25 E S 36 B T.

A cedar 12 ins. in diam. bears N.65°W., 48 lks. dist., mkd. T 37 S R 25 E S 25 B T.

Land, rolling mesa sloping slightly to the S.; S. 23 chs., steep slope to the S.

Soil, on slope, gravelly, 3rd rate; on mesa, red sand 2 ft. deep on bedrock, 2nd rate.

Timber, cedar.

Undergrowth, scattering sagebrush.

From the cor. of secs. 25, 30, 31 and 36, I run N., on a true line bet. secs. 25 and 30,

Over mesa, through cedars and pinon pine, ascending slightly.

19.50 Edge of mesa, bears N.40°E. and S.40°W.

Descend abruptly over rim rock, ledges and huge broken boulders, through scattering timber, into canyon.

29.00 Foot of steep descent; thence over rough bench land and small spurs and gullies draining NW.

33.50 Seepage from spring drains NW.

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

¼ S 25 | S 30

1915

from which

A cedar 14 ins. in diam. bears S.68°W., 48 lks. dist., mkd. ¼ S 25 B T.

A cedar 14 ins. in diam. bears S.48½°E., 22 lks. dist., mkd. ¼ S 30 B T.

Cor. in bottom of small wash draining SW. 220 ft. below rim of mesa.

Ascend.

WEST BOUNDARY T. 37 S., R. 26 E.

Chains	
	June 15, 1915: At this ¼ sec. cor. I set off 23°18'E. on the decl. arc; and at apparent noon observe the sun on the meridian; the resulting lat. is 37°34'.
45.50	Spur, 40 ft. above wash, projects S.50°W. 5 chs.; thence over spurs projecting W. from W. side of mesa rim on E. side of canyon.
77.50	Point of spur, 75 ft. above cor., projects from the east.
	Descend rapidly over rocky N. side of point.
80.00	Set an iron post, 3 ft. long, 3 ins. in diam., 26 ins. in the ground, for cor. of secs. 19, 24, 25 and 30, mkd. on brass cap

T 37 S
S 24 | S 19
S 25 | S 30
R 25 E | R 26 E

1915

from which

A cedar 14 ins. in diam. bears N.31½°E., 24 lks. dist., mkd. T 37 S R 26 E S 19 B T.

A pinon 12 ins. in diam. bears S.80°E., 33 lks. dist., mkd. T 37 S R 26 E S 30 B T.

A cedar 8 ins. in diam. bears S.54°W., 49 lks. dist., mkd. T 37 S R 25 E S 25 B T.

A cedar 10 ins. in diam. bears N.70°W., 14 lks. dist., mkd. T 37 S R 25 E S 24 B T.

Cor. stands in bottom of gulch W. 150 ft. below spur, on steep slope facing W., draining into main canyon.

Land; Mesa, rolling; remainder rocky; NW. slope from mesa, ledgy and rocky.

Soil: Mesa, red sand 2 ft. deep, 2nd rate.

Subsoil on slopes, rocky, 4th rate.

Timber, cedar and pinon pine.

Undergrowth, scattering sagebrush.

WEST BOUNDARY T. 37 S., R. 20 E.

Chains	
	From the cor. of secs. 19, 24, 25 and 30, I run E., on a true line bet. secs. 19 and 24.
	Over rough mountainous land, on E. side of canyon, through cedars and pinon pine.
.25	Gulch, 5 ft. below cor., drains SE.
	Thence ascend to rocky point of spur.
3.50	Rocky W. point of spur projects W. 80 ft. above cor.
	Thence descend into canyon.
7.75	Creek in bottom of canyon, 4 lks. wide, 3 ins. deep, course S.40°W. Water slightly alkaline.
	Ascend out of canyon. (Canyon 80 ft. below spur.)
17.00	Top of steep ascent, ledge of bench bearing NE. and SW., 100 ft. above canyon.
	Thence over bench, through cedars.
26.10	Road, dim new trail, from Bug Springs to Montezuma Creek, bears N.70°E. and S.70°W.
40.00	Set an iron post, 3 ft. long, 1 in. in diam., 10 ins. in earth to bedrock and 16 ins. in a mound of stone 2 ft. base, for ¼ sec. cor., mkd. on brass cap ¼ S 24 | S 19 1915. from which A pinon 8 ins. in diam. bears N.68°W., 38 lks. dist., mkd. ¼ S 24 B.T. A cedar 11 ins. in diam. bears S.20°E., 40 lks. dist., mkd. ¼ S 19 B.T.
55.00	Ascend abruptly.
60.00	Top of broken mesa, bears N.50°E. and S.50°W.; thence continue over broken mesa.
80.00	Set an iron post, 3 ft. long, 3 ins. in diam., 26 ins. in the ground, for cor. of secs. 13, 18, 19 and 24, mkd. on brass cap T 37 S S 13 | S 18 S 24 | S 19 R 25 E | R 26 E 1915

WEST BOUNDARY T. 37 S., R. 26 E.

Chains

from which

A pinon 8 ins. in diam. bears N.68°E., 48 lks. dist., mkd. T 37 S R 26 E S 18 B T.

A pinon 6 ins. in diam. bears S.10°E., 65 lks. dist., mkd. T 37 S R 26 E S 19 B T.

A cedar 12 ins. in diam. bears S.79½°W., 12 lks. dist., mkd. T 37 S R 25 E S 24 B T.

A cedar 8 ins. in diam. bears N.30°W., 57 lks. dist., mkd. T 37 S R 25 E S 13 B T.

Land, rough and mountainous, draining from NW. and SE. slopes into canyon. Slopes, rocky.

Soil, rocky, sandy on mesa, 4th rate.

Timber, cedar and pinon pine.

Undergrowth, scattering sagebrush.

June 15, 1915.

June 21, 1915: At 8 a.m., app. time, I set off 37°35' on the lat. arc; 23°27'N. on the decl. arc; and determine a meridian with the solar at the cor. of secs. 13, 18, 19 and 24.

Thence

N., on a true line bet. secs. 13 and 18,

Over broken mesa, through cedars, pinon pine and sagebrush.

22.00 Descend from mesa, bearing NE. and SW., into shallow canyon.

34.00 Wash in bottom of canyon, 80 ft. below mesa, draining S.25°W.

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

¼ S 13 | S 18

1915

from which

A cedar 8 ins. in diam. bears N.37°W., 37 lks. dist., mkd. ¼ S 13 B T.

WEST BOUNDARY T. 37 S., R. 26 E.

Chains

A pinon 7 ins. in diam. bears N.77½°E., 14 lks. dist., mkd. ½ S 18 B T.

Cor. stands on NW. side of canyon 30 ft. above bottom.

Continue over mesa.

79.00 Descend from mesa, bearing NE. and SW., into canyon.

80.00 Set an iron post, 3 ft. long, 3 ins. in diam., 26 ins. in the ground, for cor. of secs. 7, 12, 13 and 18, mkd. on brass cap.

T 37 S

S 12	S 7
S 13	S 18

R 25 E | R 26 E

1915

from which

A cedar 6 ins. in diam. bears N.29½°E., 13 lks. dist., mkd. T 37 S R 26 E S 7 B T.

A cedar 7 ins. in diam. bears S.38°E., 30 lks. dist., mkd. T 37 S R 26 E S 18 B T.

A cedar 13 ins. in diam. bears S.68½°W., 30 lks. dist., mkd. T 37 S R 25 E S 13 B T.

A cedar 12 ins. in diam. bears N.64½°W., 44 lks. dist., mkd. T 37 S R 25 E S 12 B T.

Cor. stands on slope facing NW. 15 ft. below mesa.

Land, rolling mesa, draining SW.

Soil, red sand, gravelly, base to 2 ft. deep on sandstone, 2nd rate.

Timber, cedar and pinon pine.

Undergrowth, sagebrush.

From the cor. of secs. 7, 12, 13 and 18, I run N., on a true line bet. secs. 7 and 12,

Descending NW. slope from mesa into canyon, through cedars, pinon pine and sagebrush.

16.00 Descend abruptly, bearing NE. and SW.

19.00 Wash in rocky bottom of canyon, draining S.20°W.,

WEST BOUNDARY T. 37 S., R. 26 E.

Chains	
	120 ft. below cor.
	Ascend rocky NW. side of canyon to mesa.
23.25	Top of ascent, bearing NE. and SW., 140 ft. above bottom; thence over mesa.
40.00	Set an iron post, 3 ft. long, 1 in. in diam., 10 ins. in earth to sandstone, and 16 ins. in a mound of stone 2 ft. base, for ¼ sec. cor., mkd. on brass cap ¼ S 12 | S 7 1915 from which A pinon 10 ins. in diam. bears S.37°E., 20 lks. dist., mkd. ¼ S 7 B T. A cedar 14 ins. in diam. bears N.52°W., 37 lks. dist., mkd. ¼ S 12 B T.
	June 21, 1915: At this cor. I set off 23°27'N. on the decl. arc; and at app. noon observe the sun on the meridian; the resulting lat. is 37°37'.
	Continue over mesa.
60.00	Gulch 40 ft. deep, drains W.
80.00	Set an iron post, 3 ft. long, 3 ins. in diam., 26 ins. in the ground, for cor. of secs. 1, 6, 7 and 12, mkd. on brass cap T 37 S S 1 | S 6 S 12 | S 7 R 25 E | R 26 E 1915 from which A pine 14 ins. in diam. bears N.71½°E., 90 lks. dist., mkd. T 37 S R 26 E S 6 B T. A pine 16 ins. in diam. bears S.34½°E., 49 lks. dist., mkd. T 37 S R 26 E S 7 B T. A cedar 7 ins. in diam. bears S.40½°W., 18 lks. dist., mkd. T 37 S R 25 E S 12 B T. A cedar 10 ins. in diam. bears N.50°W., 12 lks. dist., mkd. T 37 S R 25 E S 1 B T.

WEST BOUNDARY T. 37 S., R. 26 E.

Chains	
	Cor. stands on mesa.
	Land, broken mesa, broken by canyons to the SW.
	Soil, on top, red sand, from bare rock to 1 ft. deep, on sandstone, 2nd rate; on slopes, rocky, 4th rate.
	Timber, cedar and pinon pine.
	Undergrowth, scattering sagebrush.
	From the cor. of secs. 1, 6, 7 and 12, I run N., on a true line bet. secs. 1 and 6,
	Over mesa with slight slope to the SW.; through cedar and pinon pine and scattering sagebrush.
15.20	Leave mesa, bearing E. and W.; thence descend abruptly over rocky ledges, rim rock and huge boulders into Monument Canyon.
40.00	Set an iron post, 3 ft. long, 1 in. in diam., 10 ins. in earth to bedrock, 16 ins. in a mound of stone 2 ft. base, for ¼ sec. cor., mkd. on brass cap ¼ S 1 | S 6 1915 from which
	A pinon 9 ins. in diam. bears N.44°E., 47 lks. dist., mkd. ¼ S 6 B T.
	A pinon 13 ins. in diam. bears West, 50 lks. dist., mkd. ¼ S 1 B T.
	Cor. stands on rough, rocky, broken N. slope of mesa rim 250 ft. below top.
	Continue over rough ledgy land through huge boulders.
57.25	Wash in bottom of Monument Canyon, dry, drains S.80°W., 120 ft. below ¼ cor.
	Ascend rocky N. slope over huge boulders.
80.00	Point falls on sandstone in place, 18 x 10 x 6 ins., projecting above ground, which I mark with 6 notches on N., S., E. and W. edges, for cor. of Tps. 36 and 37 S., Rs. 25 and 26 E., from which

WEST BOUNDARY T. 37 S., R. 26 E.

Chains

A pinon 14 ins. in diam. bears N.46½°E., 73 lks. dist., mkd. T 36 S R 26 E S 31 B T.

A pinon 14 ins. in diam. bears S.64½°E., 42 lks. dist., mkd. T 37 S R 26 E S 6 B T.

A pinon 11 ins. in diam. bears S.52°W., 19 lks. dist., mkd. T 37 S R 25 E S 1 B T.

A pinon 8 ins. in diam. bears N.11½°W., 8 lks. dist., mkd. T 36 S R 25 E S 36 B T.

Note: I am unable to pack 3-inch-diam. post to this point on account of inaccessible ledges.

Cor. stands on rocky slope facing S., 100 ft. above bottom of creek.

Land: S. 15 chs., mesa, sandy soil, 2nd rate; N. 65 chs., rocky, ledgy N. and S. slopes of Monument Canyon, rocky soil, 4th rate.

Timber, cedar and pinon pine.

Undergrowth, scattering sagebrush.

June 21, 1915.

NORTH BOUNDARY T. 37 S., R. 26 E.

June 29, 1915: At 7 a.m., l.m.t., I set off 37°38' on the lat. arc; 23°18'N. on the decl. arc; and determine a meridian with the solar at the cor. of Tps. 36 and 37 S., Rs. 25 and 26 E.

Thence

E., on a true line bet. secs. 6 and 31,

Over very rough mountainous land, along N. side of Monument Canyon, over series of spurs and rocky gulches draining S. into canyon, through cedar and pinon pine and scattering sagebrush.

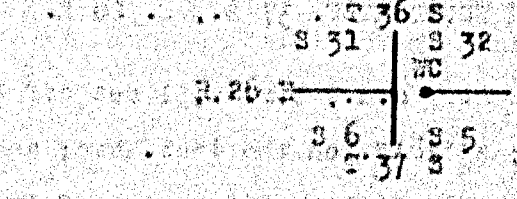
17.00 Gulch, 90 ft. deep, drains S.

33.00 Gulch, 80 ft. deep, drains S.

40.00 Set a sandstone, 16 x 9 x 9 ins., 10 ins. in the ground, for ¼ sec. cor., marked ¼ on N. face,

NORTH BOUNDARY T. 37 S., R. 26 E.

Chains	
	from which
	A cedar 7 ins. in diam. bears N.43°W., 17 lks.
	dist., mkd. ½ S 31 B.C.
	A pine 6 ins. in diam. bears S.2½°E., 57 lks.
	dist., mkd. ½ S 6 B.C.
	Cor. stands on rough rocky slope facing S., covered with huge broken boulders, 60 ft. below Sp. cor.
	Descend to bottom of canyon.
47.70	Enter dry gulch in bottom of canyon, draining from the E. to S.75°W., 70 ft. below ½ cor.
	Thence up gulch.
54.00	Leave gulch, draining from N.79°E. to W.
	Ascend rocky S. side of canyon, over rough broken land facing N.10°E.
78.50	Base of sheer ledges of rimrock.
	Ascend precipitously.
80.00	The point for cor. falls on bare rimrock ledges.
80.43	Set an iron post 3 ft. long, 3 ins. in diam., 26 ins. in the ground, for witness cor. to cor. of secs. 5, 6, 31 and 32, mkd. on brass cap



1915

	from which
	A cedar 16 ins. in diam. bears N.36½°E., 32 lks.
	dist., mkd. W C T 36 S R 26 E S 32 B C.
	A pinon 8 ins. in diam. bears S.74°E., 61 lks.
	dist., mkd. T C T 37 S R 26 E S 5 B C.
	A cedar 10 ins. in diam. bears E.22°E., 72 lks.
	dist., mkd. T C T 37 S R 26 E S 6 B C.
	A pinon 8 ins. in diam. bears E.11½°E., 66 lks.
	dist., mkd. T C T 36 S R 26 E S 31 B C.
	Cor. stands on mtn. of rock, 50 lks. E. of edge of

NORTH BOUNDARY T. 37 S., R. 26 E.

Chains	
	rimrock and ledges which bear N.35°E. and S.35°W., 300 ft. above gulch.
	Land, extremely rough mountainous. NW. and SE. slopes of Monument Canyon, rocks and ledges.
	Soil, rocky, 4th rate.
	Timber, cedar and pinon pine.
	Undergrowth, sagebrush.
	From the true cor. point for secs. 5, 6, 31 and 32, I run
	East, on a true line bet. secs. 5 and 32,
	Over mesa country, ascending from rim to flat top, through cedar and pinon pine and scattering sagebrush; red soil.
.43	Intersect witness cor. to cor. of secs. 5, 6, 31 and 32.
5.00	Top of mesa, 80 ft. above rim, bears NE. and SW.
	Thence over level mesa, draining slightly to the S.
35.00	Enter sagebrush park, bearing N. and S.
37.00	Leave sagebrush park, bearing 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., mkd. on brass cap ¼ S 32 S 5 1915
	from which
	A cedar 7 ins. in diam. bears N.23½°E., 52 lks. dist., mkd. ¼ S 32 B T.
	A cedar 9 ins. in diam. bears S.2°W., 34 lks. dist., mkd. ¼ S 5 B T.
59.30	Road, wagon trail, from Bug Springs to Montezuma Creek, bears N.45°E. and S.45°W.
80.00	Set an iron post, 3 ft. long, 3 ins. in diam., 26 ins. in the ground, for cor. of secs. 4, 5, 32 and 33, mkd. on brass cap

NORTH BOUNDARY T. 37 S., R. 26 E.

Chains

T 36 S

R 26 E — S 32 | S 33 / S 5 | S 4

T 37 S

1915

from which

A pinon 7 ins. in diam. bears N.39½°E., 78 lks. dist., mkd. T 36 S R 26 E S 33 B T.

A cedar 9 ins. in diam. bears S.56½°E., 47 lks. dist., mkd. T 37 S R 26 E S 4 B T.

A cedar 6 ins. in diam. bears S.53¾°W., 21 lks. dist., mkd. T 37 S R 26 E S 5 B T.

A cedar 16 ins. in diam. bears N.53¼°W., 59 lks. dist., mkd. T 36 S R 26 E S 32 B T.

Cor. on mesa.

Land, rolling mesa, sloping slightly to the S.

Soil, red sand, ranging in depth from bare rock to two ft. or more; 2nd rate, on sandstone bedrock.

Timber, cedar and pinon pine.

Undergrowth, scattering sagebrush.

June 29, 1915: At this cor. I set off 23°16'N. on the decl. arc; and at apparent noon observe the sun on the meridian; the resulting lat. is 37°38'.

From the cor. of secs. 4, 5, 32 and 33, I run E., on a true line bet. secs. 4 and 33,

Over mesa, sloping slightly to the S., through cedar and pinon pine and undergrowth of sagebrush.

30.70 Leave mesa, bearing N. and S.

Descend abruptly over rimrock and ledges.

34.70 Gulch, 150 ft. below mesa, drains SE.

39.00 Spur, 75 ft. above gulch, projects S. 5 chs.

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

¼ S 33

S 4

1915

NORTH BOUNDARY T. 37 S., R. 26 E.

Chains

from which

A cedar 13 ins. in diam. bears N.10°30'E., 31 lks. dist., mkd. ½ S 33 B T.

A pinon 9 ins. in diam. bears S.41°30'E., 37 lks. dist., mkd. ½ S 4 B T.

Cor. stands on E. slope of spur, 30 ft. below top.

Descend into canyon.

48.00 Wash in canyon, 120 ft. below top of spur, drains S..

52.00 Spur, 60 ft. high, projects S. 2 chs.

56.70 Gulch, 80 ft. deep, drains S.15°W.

68.00 Ridge, 75 ft. above gulch, bears N.15°E. and S.15°W.

75.50 Gulch, 80 ft. below ridge, drains S.

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, mkd. on brass cap.

T 36 S.
S 33 | S 34
R 26 E
S 4 | S 3
T 37 S.
1915

from which

A pine 5 ins. in diam. bears N.48°E., 34 lks. dist., mkd. T 36 S R 26 E S 34 B T.

A cedar 15 ins. in diam. bears S.32°30'E., 41 lks. dist., mkd. T 37 S R 26 E S 3 B T.

A cedar 10 ins. in diam. bears S.72°30'W., 52 lks. dist., mkd. T 37 S R 26 E S 4 B T.

A cedar 8 ins. in diam. bears N.56°W., 73 lks. dist., mkd. T 36 S R 26 E S 33 B T.

Cor. falls on W. side of spur, 60 ft. above gulch.

Land: W. 30 chs., mesa, sloping slightly to the S.; soil, red sand, ranging from bare to 1 ft. deep on rock; 2nd rate. E. 50 chs., steep E. and W. slopes of rims and spurs; soil on slopes, rocky, 4th rate.

Timber, cedar and pinon pine.

Undergrowth, scattering sagebrush.

NORTH BOUNDARY T. 37 S., R. 26 E.

Chains

From the cor. of secs. 3, 4, 33 and 34, I run East, on a true line bet. secs. 3 and 34, over rough mountainous land, sloping generally SW., ascending through scattering cedars and pinon pine and undergrowth of sagebrush.

.50 Spur, 10 ft. above cor., projects S. 5 chs. Descend.

20.50 Wash, in open valley, 120 ft. below spur, drains S.40°W.

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

¼ S 34
S 3
1915

from which

A pinon 6 ins. in diam. bears N.4°30'W., 26 lks. dist., mkd. ¼ S 34 B T.

A pinon 15 ins. in diam. bears S.44°W., 18 lks. dist., mkd. ¼ S 3 B T.

Cor. stands on slope facing NW., 90 ft. above wash.

June 29, 1915.

July 2, 1915: For solar observation see line between the 41st and 42nd mile cors.

From the ¼ sec. cor. ascend along the S. side of gulch, on rocky slope facing N., breaking from mesa to the S. of line.

66.50 Top of ascent, 120 ft. above ¼ sec. cor.; thence along broken rim of mesa, bearing E. and SW.

70.60 Intersect the Utah-Colorado bdy. at 6.58 chs. N.0°07'E. of the 42nd mile cor., heretofore described.

At intersection

Set an iron post, 3 ft. long, 3 ins. in diam., 24 ins. in the ground, for closing cor. of Tps. 36 and 37 S., R. 26 E., with brass cap mkd.

T 36 S
R 26 E
S 34 C

S 3 C
T 37 S | 42 M

NORTH BOUNDARY T. 37 S., R. 26 E.

Chains

from which

A cedar 17 ins. diam. bears N.41°30'W., 55 lks. dist., marked T 36 S R 26 E S 34 B T.

A pinon 9 ins. diam. bears S.67°45'W., 26 lks. dist., marked T 37 S R 26 E S 3 B T.

Cor. stands on edge of rim of mesa, breaking off to the NW.

Land, rough mountainous, sloping NW.

Soil, rocky, 4th rate.

Timber, cedar and pine.

Undergrowth, sagebrush.

July 2, 1915: At this cor. I set off 23°06'N. on the decl. arc; and at apparent noon observe the sun on the meridian; the resulting lat. is 37°38'.

July 2, 1915.

For general description see notes of the subdivision of T. 37 S., R. 26 E.

Thos. A. Rathbone

U. S. Transitman.

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BOOK A-416

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 certificate of assistants, W. and N. bdrs. of T. 38 S., R. 26 E., see book "B".

For certificate of assistants, W. and N. bdrs. of T. 37 S., R. 26 E., see book "C".

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 pursuan
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 Surveyi
Instructions, and the laws of the United States, surveyed all those parts or portions of _____
_____

For final oath of U. S. Transitman see book "B".

_____ 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 accor
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 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, July 11, 1916

The foregoing field notes of the survey of the west and north boundaries of Township No. 38 South, Range No. 26 East, and the west and north boundaries of Township No. 37 South, Range No. 26 East, of the Salt Lake Base and Meridian, Utah,

executed by Thomas C. Rathbone
under his special instructions dated May 6, 1914, 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.

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Filed Sept. 23, 1915.

4-678

B

BOOK A-416

FIELD NOTES

OF THE SURVEY OF THE

[illegible]

[illegible]

[illegible]

AND

[illegible]

[illegible]

[illegible]

Of the [illegible] *Meridian,*

in the State of [illegible]

EXECUTED BY

[illegible]

In the capacity of U.S. Surveyor [illegible] *under instructions dated* May 6, 1914, *issued by the United States Surveyor General to govern surveys included in Group No.* 32, *which were approved by the Commissioner of the General Land Office,* May 29, 1914, *pursuant to authority contained in the Act of Congress dated* [illegible], 191[illegible]

Survey commenced May 22, 1915

Survey completed June 14, 1915.

BOOK A-416

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RETRACEMENT UTAH-COLORADO BOUNDARY LINE.

Survey commenced May 22, 1915, and executed with a Young & Sons light mountain transit No.7192. The horizontal limb is provided with two double verniers placed opposite to each other reading to single minutes of arc, which is also the least count of the verniers of the latitude and declination arcs. Five-chain tapes and clinometers were used.

The instrument was examined, tested on the true meridian at Salt Lake City, found correct and was approved by the assistant supervisor of surveys for the district of Utah May 7, 1915.

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

May 21: At my camp in the NW.cor.of sec.10,T.39 S.R.26 E. lat.37°27'N.,long.109°07'W.,I set off 37°27' on the lat. arc,20°09'N.on the decl.arc;and at 4h 54m p.m.l.m.t.,determine with the solar a meridian and mark a point thereof on a stake driven in the ground 15 chs.N.of my station.

May 22: At 3h 37m a.m.l.m.t.,I observe Polaris at eastern elongation,in accordance with the Manual of Instructions, and mark the line thus determined by a tack driven in a wooden peg set in the ground 5 chs.N. of my station.

At 6h a.m. I lay off the azimuth of Polaris 1°27' to the left; the meridian thus determined coinoides with the meridian determined with the solar.

At 6h 54m a.m. I set off 37°27' on the lat.arc;20°16'N. on the decl.arc; the solar observation defines the position of the meridian on Polaris stake; therefore I conclude that the adjustments of the instrument are satisfactory.

The magnetic bearing of the true meridian at 7h a.m. is 15°10'W.; the angle thus determined gives the mag. decl. 15°10'E.

RETRACEMENT UTAH-COLORADO BOUNDARY LINE.

Chains	
	Note: My retracement of the south boundary of the township practically agrees with the old survey, with the excepti that the south boundary of sec. 34 is found to be 64.02 chs. instead of the record distance of 63.85 chs. Therefore I assume the old course of East, with the distance corrected to 304.02 chs.
	May 22, 1915: At 7h 54m a.m. l.m.t., I set off 37°27' on the lat. arc; 20°16'N. on the decl. arc; and determine a meridian with the solar at the 29 mile cor. on the Utah-Colorado Bdy., which is a sandstone 5x15x24 ins. above ground; firmly set, marked 29 M U on W. and C 1885 on E. face. Thence I run
	North retracing bet. 29 and 30 mile cor.
	Over rolling sagebrush mesa, through scattering cedars and pinon pine.
16.70	County road, Bluff to Dolores, Colo., bears E. and W.
38.29	Descend over mesa rim bearing E. and W., into canon.
46.00	Canon, 150 ft. deep, drains W.
	Ascend.
61.00	Ridge, 150 ft. above canon, bears E. and W.
78.62	Fall 80 lks. W. of the closing cor. of Tps. 38 and 39 S. R. 26 E., which is an iron post, 3 ft. long, 3 ins. in dia., projecting 12 ins. above ground, firmly set and marked and witnessed as described by the Surveyor General.
80.00	Set temp. point for 30th mile cor.
	May 22, 1915: At this point I set off 20°17'N. on the decl. arc, and at apparent noon observe the sun on the meridian; the resulting lat. is 37°28'N.
	May 28, 1915: I return to the temp. point above described and at a point N. 1°09'E. 79.36 chs. from the 29th mile cor.
	I set a sandstone 14x12x8 ins., 9 ins. in the ground, for the restored 30th mile corner, marked U on W.,

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RETRACEMENT UTAH-COLORADO BOUNDARY LINE.

Chains.	
	C 30 M P on E.face; raise a mound of stone 2 ft.base, 1½ ft.high W.of cor.
	I also moved the closing cor.for Tps.38 and 39 S., R.26 E. 78 lks.east of original position, to the Utah-Colo. Bdy.
	Land, mountainous and rolling sagebrush mesa.
	Soil, rocky, 4th rate.
	Timber scattering cedars and pinon pine.
	Undergrowth, sagebrush.
	May 28, 1915: At 7h 0m a.m.apparent time I set off 37° 28' on the lat.arc; 21° 22'N. on the decl.arc; and determine a meridian with the solar at the temp.30th mile corner. Thence
	North retracing between 30th and 31st mile corners.
	Descending abruptly over rocky mountainous land.
3.50	Foot of steep descent bearing E.and W.,50 ft.below cor.
6.50	wash in canyon, drains S.80° W.,80 ft.below cor.Ascend.
19.50	Top of rim rock bearing E.and W., 340 ft.above cor.
	Thence ascend over rough breaks; through dense cedars.
34.00	Top of ascent, 50 ft.above rim rock, bears E.and W.
37.50	Descend abruptly into box canyon.
42.00	Box canon, 100 ft.below top of ascent, drains S.; heads 4 chs.E. Ascend.
44.00	Begin gradual ascent over rough mesa; through cedar timber.
64.55	Descend abruptly into canon; leave mesa, bearing NE. and SW.
73.00	Creek in canon, 2 lks.wide, 3 ins.deep, alkaline water, flows SW.,240 ft.below mesa. Confluence with wash from the north 4.00 chs.SW.Ascend over rough west slope of canon.
78.68	Fall 320 lks.W.of the 31st mile cor., which is a sandstone 9 x 6 x 8 ins.above ground, firmly set, marked U 31 M on W. and C on E., 1885 on N.face.Built mound

Chains.

of stone around corner. This corner stands on small shelf in ledge, 5 ft.W.of foot of vertical ledge,10 ft.high, bearing NE. and SW.

The course from the 29th to the 31st mile corner is therefore N.1° 09'E., and distance for each mile 79.36 chs.

Land, rough mountains draining SW.

Soil, poor, 4th rate.

Timber, scattering cedars.

Undergrowth, sagebrush in canon bottoms.

May 28,1915: At this cor.I set off 21° 23½'N.on the decl. arc; and at apparent noon observe the sun on the meridian; the resulting lat.is 37° 28½'.

From 31st mile cor. I run N.1° E., following old line, Over rough mountainous land, along E.side of bottom of canyon. Ascending rapidly over rocky ledges.

2.50 Enter bottom of wash, draining S.30° W.

Ascend from rocky bottom.

8.00 Leave bottom, drains NE., to S.

13.50 Ledge, bearing E.and W., 50 ft.above cor. Thence over small mesa, extending from NE.to SW. Enter cedar timber.

30.00 Leave mesa, bearing NE. and SW. Descend into rocky canyon.

From this point old ruins bear N.25° E. Mass of tumbled down stone, remains of several houses, at head of box canyon.Small spring of good water under ledge near ruins.

42.50 Bottom of canyon,200 ft.below mesa,course SW. Ascend.

51.40 Top of ledges, point of mesa, 200 ft.above cor. From this point ruins bear due east. Point is called Ruin Point, and extends west about 4.00 chs.

53.40 Leave mesa, descending,over rim rock bearing NE. and SW., into canyon. Small ruins under rim,on line.

60.74 Fall 19 lks.W.of old monument, which is an old sandstone 8 x 8 x 8 ins.above ground, marked 32M and C on

RETRACEMENT UTAH-COLORADO BOUNDARY LINE.

Chains.	
	E., U on W.face.
64.00	Canyon, 100 ft.below point, course SW. Ascend.
67.00	Spur, 50 ft.above canyon, projects SW.10.00 chs.
79.23	Fall 14 lks.W.of old 32d mile cor., which is a sandstone 20 x 20 x 20 ins.above ground, marked 32 U on W., and C 1885 on E.face. Faint traces of pits.
	Land, mountainous, with rocky ledges, draining SW.
	Soil, rocky, 4th rate.
	Timber, cedars. Undergrowth sagebrush.
	The true course of this line is, therefore N.1° 06'E. and distance 79.23 chs.
	May 28, 1915.

	June 2, 1915: At 8h a.m.apparent time, I set off 22° 07' N.on the decl.arc; 37° 29½' on the lat.arc; and determine a meridian with the solar at the 32d mile cor.
	Thence N.1° E. retracing from 32d to 33d mile cor.
	Over rough mountains; descending over breaks and boulders projects W.; through scrub cedar and sagebrush undergrowth, to Cross Canyon.
32.20	Foot of descent bearing E.and W., 150 ft.below cor.
	Thence over level canyon bottom; through dense greasewood undergrowth. Leave cedar timber.
47.75	Enter wash; thence over gravel in wash descending 3-ft. clay bank bearing NE. and SW.
52.50	Cross Canyon Creek, water seeping through sand, not running, course SW.
62.50	Ascend over bank 5 ft.high, out of wash bearing NE. and SW. Thence over level bottom;through greasewood.
67.50	Leave greasewood undergrowth. Ascend abruptly.
69.50	Top of ascent bearing E.and W., 75 ft.above creek.Desc.
79.79	Fall 5 lks.W.of 33d mile cor., which is a sandstone 15 x 6 x 12 ins.above ground, marked U 33 M on W., C 1885 on E.face; I raise a mound of stone around same.
	Corner stands on S.side of small ledge bearing E.and W.

RETRACEMENT UTAH-COLORADO BOUNDARY LINE.

Chains.	
	50 ft. below top.
	The true course of this line is, therefore, N.1° 02'E. and distance 79.79 chs.
	Land, mountainous, draining from NW. and SE. into Cross Canyon.
	Soil, rocky; 4th rate.
	Timber, cedar. Undergrowth, sagebrush and greasewood.
	N.1° E. retracing from 33d to 34th mile cor.
	Over rough mountainous land; through cedar timber. Desc.
1.50	Descend abruptly over ledges, bearing NW. and SE.
4.50	Base of ledges, bearing NW. and SE. Thence through greasewood undergrowth in bottom of Cross Canyon.
9.50	Descend over bank 10 ft. high, bearing NW. and SE., into Cross Canyon wash.
11.60	Center of Cross Canyon creak, gravelly bottom, dry, draining SE; 150 ft. below base of ledges.
13.50	Ascend out of wash, over bank 10 ft. high; thence through greasewood undergrowth.
14.00	Base of ledges bearing NW. and SE. Ascend abruptly over ledges.
21.20	Top of ascent, spur projects W. 2.00 chs., 80 ft. above cor.
	Descend abruptly over broken ledges.
22.50	Foot of descent bearing NE. and SW. Thence over Cross Canyon bottom.
26.00	Descend, over bank 10 ft. high, into gravelly wash, in bottom of Cross Canyon, bearing NE. and SW.
26.50	Small creek, 3 lks. wide, 2 ins. deep, rises and sinks; 70 ft. below top of ascent; drains SW. Thence up creek bottom in gravelly wash.
37.00	Leave bottom. Ascend 25 ft. over clay bank bearing NE. and SW. Thence through greasewood.
45.00	Descend 15 ft. bank bearing NE. and SW. Enter wash.
47.00	Leave wash bearing NW. and SE. Ascend over bank 10 ft. high.

RETRACEMENT UTAH-COLORADO BOUNDARY LINE.

Chains.	
50.40	Ascend abruptly over huge boulders; through scattering cedar timber.
68.00	Ascend gradually over breaks projecting E., from high rims W. of line.
80.00	No trace of the 34th mile cor. can be found. Set temp. cor. Later the 34th mile cor., was restored at a point N.1° 12'E. 79.39 chs. from the 33d mile cor., as follows: Set a sandstone 12 x 8 x 8 ins., 8 ins. in the ground for restored 34th mile cor., marked U on W., C on E., 34 M P on S. face; and raise a mound of stone around cor. I destroy temp. cor. Land, rough mountains, draining SE. into Cross Canyon; over ridges and breaks projecting E. and SE., from high mesa west of line. Soil, stony; 4th rate. Timber, cedar. Undergrowth greasewood. June 2: At apparent noon I set off 22° 08'N. on the decl. arc; and observe the sun on the meridian; the resulting lat. is 37° 31' .
	From temp. 34th mile cor., I continue N.1° E., retracing between 34th and 35th miles, Over rough mountainous land, draining E. into Cross Canyon, over huge boulders and series of ravines and ridges; through cedar timber.
78.77	Fall 56 lks. west of the 35th mile cor., which is a sandstone 8 x 8 x 15 ins. above ground, firmly set, marked U 35 M on W., and C 1885 on E. face. I raise a mound of stone around cor. This corner stands on bare knoll, 100 ft. above point for 34th mile cor. The true course of the line between the 33d and 35th mile corners is, therefore, N.1° 12'E. and the distance for each mile is 79.39 chs. Land, rough mountains, covered with huge boulders, and

RETRACEMENT UTAH-COLORADO BOUNDARY LINE.

Chains.	
	series of gulches and ridges, projecting and draining E. into Cross Canyon, from high mesa to west of line.
	Soil, stony and rocky; 4th rate.
	Timber, cedar. Undergrowth, scrub sagebrush.
	N.1° E., retracing from 35th mile cor.
	Ascend over rough mountainous land draining SE.; through cedar timber and sagebrush undergrowth; over broken boulders, to point of mesa projecting E.
26.00	Base of rim rock, 15 ft. below cor.; bears NE. and SW. Asc.
43.00	Spur, projects E. 5.00 chs., 100 ft. above cor. Descend.
50.00	Gulch, 30 ft. below spur, drains SE. Ascend to mesa.
56.00	Top of rim rock bearing NE. and SW., 150 ft. above gulch. Ascend.
73.00	Top of second rim, main mesa, 350 ft. above cor. Thence over mesa; through cedar timber, bearing NE. and SW.
79.25	Fall 27 lks. east of the 36th mile cor., which is a sandstone 30 x 9 x 6 ins., loosely set, marked U 36 M on W. C 1885 on E. face. No accessories. I reset stone 20 ins. in the ground, and built a mound of stone around cor.
	The true course of this line is therefore N.0° 48'E., and distance 79.25 chs.
	Land, rough mountains, with huge boulders and breaks from rim rock to west, draining SE. into Cross Canyon.
	Soil, rocky; 4th rate.
	Timber, cedar. Undergrowth, sagebrush.
	June 2, 1915.
	June 12, 1915: For solar observation see line bet. secs. 4 and 33, notes of N. bdy. of Tp.
	From the 36th mile cor. I run
	N.0° 45'W. on random line,
	Over level mesa; through cedar timber, following old blazing.

RETRACEMENT UTAH-COLORADO BOUNDARY LINE.

Chains.	
73.50	Leave mesa, bearing N.15° E. and S.15° W.; descend over ledges, over broken rim of mesa, very rough NW. slope.
80.00	No trace of the 37th mile cor.
	Point falls on steep ledgy NW. slope of breaks.
	Land S.73.50 chs., level mesa; N.6.50 chs. rough broken rim rock and ledges.
	Soil, on mesa, red sandy loam, 6 ins. or more deep, on solid sandstone; 2d rate.
	Timber, cedar.
	June 12, 1915.

SUBDIVISION T.38 S., R.26 E.

May 25, 1915: At 8h a.m. apparent time I set off 20° 51' N. on the decl. arc; 37° 28' on the lat. arc; and determine a meridian with the solar at the cor. of secs. 5, 6, 31, and 32, on the S. bdy. of Tp., which is an iron post 3 ins. in dia., firmly set, properly marked and witnessed as described by the surveyor general. Thence

N.0° 01'E. on true line bet. secs. 31 and 32,

Over rough mountainous land; descending along spur projecting north; through sagebrush undergrowth.

32.00	Foot of descent bearing NW. and SE. Thence through greasewood undergrowth in bottom of Cross Canyon.
38.40	Descend over bank, 10 ft. high, bearing N.85° W. and S.85° E., into wash in bottom of Cross Canyon.
38.90	Center of Cross Canyon Creek, dry, course N.85° W., 180 ft. below cor.
39.30	Ascend N. side of bank, 10 ft. high, out of wash. Thence over level land; through greasewood undergrowth.
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 31 | S 32 1915 Raise a mound of stone 2 ft. base, 1½ ft. high W. of cor.
49.00	Wash, 20 ft. deep, drains SW., into Cross Canyon.
53.60	Ascend abruptly.

SUBDIVISION OF T. 38 S., R. 26 E.

Chains.	
54.60	Top of flat spur, 20 ft. above wash, projects N., rocky top.
60.00	Set an iron post 3 ft. long, 2 ins. in dia., 12 ins. in the ground, to rock, and 12 ins. in a mound of stone 2 ft. base, for cor. of secs. 29, 30, 31, and 32, with brass cap marked T 38 S R 26 E S 30 | S 29 S 31 | S 32 1915 Raise a mound of stone 2 ft. base, 1½ ft. high W. of cor. Corner falls in saddle on spur. Land, mountainous and rocky, draining into Cross Canyon. Soil, rocky and stony; 4th rate. Timber, none. Undergrowth, sagebrush and greasewood.

West on a random line bet. secs. 30 and 31,

40.00 Set temp. ¼ sec. cor.

May 25: At this cor. I set off 20° 52' N. on the declination arc; and at apparent noon observe the sun on the meridian; the resulting lat. is 37° 25' 30"

79.85 Intersect W. bdy of Tp. 15 Nth. N. of the cor. of secs. 25, 30, 31, and 36, heretofore described. Thence

N. 89° 52' E. on true line bet. secs. 30 and 31,

Over rough mountainous land; descending from point of rocky spur.

1.00 Foot of descent bearing NE. and SW., 20 ft. below cor.

Thence over level bottom of Squaw Canyon; through dense high greasewood undergrowth.

6.00 Descend over bank 10 ft. high to W. bank of Squaw Canyon.

6.40 Center of Squaw Creek, dry, gravelly bed; drains SW.

6.80 Ascend E. side of bank 10 ft. high, bearing NE. and SW.

39.00 Ascend vertical cliff, 30 ft. high, bearing N. and S.

Thence over rocky bench land.

39.92½ Set an iron post 3 ft. long, 1 in. in dia., 12 ins. in the ground to rock; and 12 ins. in mound of stone 2 ft. base, for ¼ sec. cor.; with brass cap marked

SUBDIVISION OF T. 38 S., R. 26 E.

Chains.	
	$\frac{\frac{1}{4}\ S\ 30}{S\ 31}$ 1915
	Raise a mound of stone 2 ft. base, 1½ ft. high N. of cor. Ascend.
40.00	Top of spur projecting S. 28.00 chs., 200 ft. above creek. Thence over rocky ground.
60.00	Rocky wash, 50 ft. below spur, drains SW.
65.00	Enter scattering cedars, bearing N. and S.
70.00	Leave cedars.
79.65	The cor. of secs. 29, 30, 31 and 32.
	Land, mountainous; west half slopes into Squaw Canyon; east half slopes S. into Cross Canyon. Rocky ledges E. ½.
	Soil, rocky and stony; 4th rate; sandy in creek bottom.
	Timber, scattering cedars. Undergrowth greasewood.
	May 25, 1915.
	May 26, 1915: At 8h a. m. apparent time I set off 21° 01' 30" N. on the decl. arc; 37° 28' 30" N. on the lat. arc; and determine a meridian with the solar at the cor. of secs. 29, 30, 31, and 32. Thence
	N. 0° 01' E. between secs. 29 and 30,
	Over rough mountainous land; ascending low bare hill; through scrub sagebrush.
5.50	Top of hill, 20 ft. above cor. Descend over NW. slope of spur of broken rocky land.
20.00	Enter scattering cedars bearing E. and W.
24.00	Extreme SW. point of high mesa bears E. about 15.00 chs., 300 ft. above this point.
39.00	Draw, 50 ft. deep, drains SW.
	Leave cedar timber bearing E. and W.
40.00	Set an iron post 3 ft. long, 1 in. in dia., 14 ins. in the ground, to rock, and 12 ins. in mound of stone 2 ft. base, for ¼ sec. cor., with brass cap marked
	$\frac{\frac{1}{4}\ S\ 30 \mid S\ 29}{1915}$
	Raise a mound of stone 2 ft. base, 1½ ft. high W. of cor.
	Corner stands on N. side of open draw, 10 ft. above bottom.

SUBDIVISION OF T.38 S , R.26 E.

Chains.	
	Ascend to ridge.
43.50	Ridge bearing NE. and SW., 80 ft.above draw; thence through cedars, bearing E.and W., over broken spurs projecting SW.
60.70	Gulch, 60 ft.below ridge, course SW.
	Ascend broken S.slope of spur.
64.00	Spur, 50 ft.above gulch projects W.Leave cedars bearing E.and W.
78.00	Descend over broken ledges bearing NE. and SW.
80.00	Set an iron post 3 ft.long, 2 ins.in dia., 26 ins.in the ground, for cor.of secs.19,20,29, and 30, with brass cap marked

T 38 S R 26 E
S 19 | S 20
S 30 | S 29
1915

Raise a mound of stone 2 ft.base, 1½ ft.high W.of cor.
Corner stands on rocky NW.slope.
May 26,1915: At this cor. I set off 21° 03'N.on the decl. arc; and at apparent noon, observe the sun on the meridian; the resulting lat.is 37° 29½'.
Land, rough mountains, with general drainage to the SW. from ledges and rocky slopes.
Soil, rocky; 4th rate.
Timber, scattering cedars. Undergrowth, scrub sagebrush.

	S.80° 32'W.on random line bet.secs.19 and 30,
40.00	Set temp.¼ sec.cor.
79.89	Intersect W.bdy.of Tp. 16 lks.S.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,
	Over mountainous land; descending from bench land, through scrub sagebrush undergrowth, and cedar timber.
12.00	Descend more rapidly, bearing N.and S.
20.00	Leave cedars, bearing N.and S.
31.50	Gulch, drains S., 60 ft.below sec.cor.

SUBDIVISION OF T.38 S., R.26 E.

Chains.	
39.94½	Set an iron post 3 ft. long, 1 in. in dia., 12 ins. in the ground, to solid rock, and 12 ins. in mound of stone 2 ft. base, for ¼ sec. cor., with brass cap marked ¼ S 19 S 30 1915
	Raise a mound of stone 2 ft. base, 1½ ft. high N. of cor.
	Ascend to spur.
41.00	Top of spur, 30 ft. above gulch, projects S. 3.00 chs.
	Descend into Squaw Canyon Creek.
46.50	Descend over bank 5 ft. high, bearing NE. and SW., into dry wash in Squaw Canyon.
51.00	Ascend over bank 5 ft. high, E. side. Thence continue ascent over rocky ground; through scrubby cedar timber.
70.00	Ascend more rapidly bearing NE. and SW.
79.39	The cor. of secs. 19, 20, 29, and 30.
	Land, rough mountains, draining into Squaw Canyon from E. and W.
	Soil, rocky and stony; 4th rate.
	Timber, scattering cedars.
	Undergrowth, scrub sagebrush. May 26, 1915.

June 4, 1915: At 8h. a.m. apparent time I set off 22° 22' 30" on the decl. arc; 37° 29' 30" on the lat. arc; and determine a meridian with the solar at the cor. of secs. 19, 20, 29, and 30. Thence

N. 0° 01' E. on true line bet. secs. 19 and 20,

Over rough mountainous land; descending over broken boulders and ledges; through scrub cedars and sagebrush.

5.00	Foot of descent bearing NE. and W., 30 ft. below cor.
	Leave cedars, bearing E. and W. Thence over wide open draw.
13.00	Wash in draw, 20 ft. below point of descent, drains W. Asc.
19.00	Spur, projects SW. 15.00 chs., 50 ft. above wash.
	Enter scattering cedars, bearing E. and W.
27.50	Gulch, drains SW., 60 ft. below spur. Ascend to bench.

Chains.

29.00 Top of ascent, 30 ft.above gulch; thence over banch.

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

$\frac{1}{4}$ S 19 | S 20
1915

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

73.00 Gulch, drains S.50° W., 60 ft.below $\frac{1}{4}$ sec.cor.

Thence along W.slope, on east side of canyon bottom.

73.00 Ascend to W.side of round knoll,

80.00 Set an iron post 3 ft.long, 2 ins.in dia., 26 ins.in the ground, for cor.of secs.17, 18, 19, and 20, with brass cap marked

T 38 S | R 26 E
S 18 | S 17
S 19 | S 20
1915

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

Corner falls on W.side of knoll, 80 ft.above gulch.

Land, mountainous, rough and rocky; draining west into Squaw Canyon.

Soil, rocky and stony; 4th rate.

Timber, scattering cedar. Undergrowth, scrub sagebrush.

S.89° 59'W.on random line bet.secs.18 and 19,

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

79.79 Intersect W.bdy.of Tp. 21 lks.N.of the cor.of secs.13, 18, 19, and 24, heretofore described. Thence

N.89° 59'E.on true line bet.secs.18 and 19,

Over rolling mountains; descending gradually through scattering cedar timber, and sagebrush undergrowth.

4.00 Gulch, draining SW., 20 ft.below cor. Ascend.

9.50 Top of ascent, 30 ft.above gulch. Thence over small flat on ridge bearing NE. and SW. Leave cedars, bearing N.and S

16.80 Gulch, 50 ft.below top of ascent, drains S. Ascend.

34.50 Ridge, 80 ft.above gulch, bears N.and S. Descend through cedars bearing N.and S.

SUBDIVISION OF T.38 S., R.26 E.

Chains.	
39.89½	Set an iron post 3 ft. long, 1 in. in dia., 12 ins. in the ground, to rock, and 12 ins. in mound of stone 2 ft. base, for ¼ sec. cor., with brass cap marked ¼ S 18 | S 19 1915
	Raise a mound of stone 2 ft. base, 1½ ft. high N. of cor.
	Corner falls on slope, 20 ft. below ridge.
49.00	Descend abruptly over huge broken boulders.
	Foot of abrupt descent bearing NW. and SE. Thence descend gradually to bottom of Squaw Canyon.
71.00	Squaw Canyon Creek, dry, bottom 1.50 chs. wide, drains S., 130 ft. below ¼ sec. cor.
76.00	Ascend rapidly over rocky S. slope of round knoll.
79.79	The cor. of secs. 17, 18, 19, and 20.
	Land, mountainous, draining into Squaw Canyon.
	Soil, rocky, stony; 4th rate.
	Timber, scattering cedar. Undergrowth, scrub sagebrush.
	June 4: At this cor. I set off 22° 23' E. on the decl. arc; and at apparent noon observe the sun on the meridian; the resulting lat. is 37° 30'

	N. 0° 01' E. between secs. 17 and 18,
	Over rough, mountainous land; descending along W. face of round knoll; through scrub sagebrush undergrowth.
11.50	Gulch, drains NW. 95 ft. below the cor. Ascend.
13.50	Spur, 60 ft. above gulch, projects W. 2.00 chs. Descend.
14.50	Gulch, drains SW., 40 ft. below spur.
17.20	Ascend rocky SE. slope; enter scattering cedars bearing NE. and SW.
33.00	Top of ascent, spur projecting SW. 5.00 chs., 80 ft. above gulch. Thence descend over broken ledges.
36.40	Vertical ledge, 20 ft. high, bears NE. and SW.
36.50	Foot of steep descent bearing NE. and SW. Thence over canyon bottom; through greasewood undergrowth.
	Leave cedars.

SUBDIVISION OF T.38 S., R.26 E.

Chains. 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 18 | S 17 1915
	Raise a mound of stone 2 ft. base, 1½ ft. high W. of cor.
	Corner falls on E. bank of Squaw Canyon Creek.
40.50	Descend over bank 10 ft. high, bearing NE. and SW. into bottom of Squaw Creek, dry, drains SW. Thence up creek between banks.
44.50	Ascend from bottom, over bank 10 ft. high, bearing NW. and SE.
55.80	Descend over bank, 10 ft. high, bearing NE. and SW. into Squaw Canyon.
59.70	Ascend, over bank 10 ft. high, bearing NE. and SW. out of Squaw Canyon.
62.00	Ascend over east slope, over huge boulders.
80.00	Set an iron post 3 ft. long, 2 ins. in dia., 26 ins. in the ground, for cor. of secs. 7, 8, 17, and 18, with brass cap marked T 38 S R 26 E S 7 | S 8 S 18 | S 17 1915
	Raise a mound of stone 2 ft. base, 1½ ft. high W. of cor.
	Land, mountainous along canyon bottom draining SW., crossing and recrossing creek.
	Soil, stony, rocky, and gravelly; 4th rate.
	Timber, scattering cedars. Undergrowth, scrub sagebrush.
	S. 89° 50' W. on random line bet. secs. 7 and 18,
40.00	Set temp. ¼ sec. cor.
79.82	Intersect W. bdy. of Tp. 14 lks. S. of the cor. of secs. 7, 12, 13, and 18, heretofore described. Thence
	N. 89° 56' E. on true line bet. secs. 7 and 18,
	Over broken mesa; through cedar and pinon timber.
30.00	Leave timber, bearing N. and S.
39.91	Set an iron post 3 ft. long, 1 in. in dia., 26 ins. in the

SUBDIVISION OF T.38 S., R.26 E.

Chains.	
	ground for ¼ sec.cor., with brass cap marked ¼ S.7 / S 18 / 1915
	Raise a mound of stone 2 ft.base, 1½ ft.high N.of cor.
48.85	Edge of mesa, bearing N.and S. Thence over rim rock, vertical ledge, 80 ft.high.
49.00	Base of sheer descent. Thence over huge boulders on bench sloping E.; through scattering cedars bearing N. and S.
79.82	The cor.of secs.7,8,17, and 18.
	Land west half mesa, broken; east half, rough, rocky, draining E.into Squaw Creek.
	Soil, stony and rocky on slopes; 4th rate; sandy loam on mesa; 2d rate.
	Timber, cedar and pinon. June 4, 1915.

June 9, 1915: At 8h a.m.apparent time I set off 22° 54' N.on the decl.arc; 37° 31' on the lat.arc; and determine a meridian with the solar at the cor.of secs.7,8, 17, and 18. Thence

N.0° 01'E.on true line bet.secs.7 and 8,

Over rough mountainous land; ascending over SE.slope of bench, out of Squaw Canyon; over huge boulders and through scattering cedar timber.

16.50 Top of ascent, bearing NE. and SW., 70 ft.above cor.

Thence over bench land with huge rocks broken from top of rim.

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
1915

from which

A cedar 12 ins.dia.bears S.59° 30'W.29 lks.dist. marked ¼ S 7 B T

A cedar, 10 ins.dia., bears S.38° 30'E.60 lks.

SUBDIVISION OF T.38 S., R.26 E.

Chains.

dist., marked 1/4 S S B T

Corner falls on E slope of bench.

42.50 Descend from bench; over ledges and huge boulders.

58.00 Head of short ravine, 160 ft. below cor., drains E.

Ascend over rocky slope on bench land.

80.00 Set an iron post 3 ft. long, 2 ins. in dia., 18 ins. in the ground to rock, and 8 ins. in mound of stone 2 ft. base, for cor. of secs. 5, 6, 7, and 8, with brass cap marked

T 38 S R 26 E
S 6 | S 5
S 7 | S 8
1915

from which

A pinon pine, 9 ins. dia. bears N.60° E. 61 lks. dist., marked T 38 S R 26 E S 5 B T

A cedar, 12 ins. dia., bears S.76° E. 142 lks. dist., marked T 38 S R 26 E S 8 B T

A cedar, 12 ins. dia., bears S.84° 30'W. 51 lks. dist., marked T 38 S R 26 E S 7 B T

A cedar, 10 ins. dia., bears N.25° W. 51 lks. dist., marked T 38 S R 26 E S 6 B T

Corner falls on slope, facing SE.

Land, rough mountains, with broken E. slope of rim of bench land, draining into Squaw Canyon.

Soil rocky; 4th rate.

Timber, cedar and pinon. Undergrowth, scattering scrub sagebrush.

June 9: At this cor. I set off 22° 54'W. on the decl. arc; and at apparent noon observe the sun on the meridian; the resulting lat. is 37°32'.

S.89°56'W. on random line bet. secs. 6 and 7,

80.00 Set temp. 1/4 sec. cor.

79.76 Intersect W. bdy. of Tp. 19 lks. N. of the cor. of secs. 1, 6, 7, and 12, heretofore described. Thence

N.89°48'E. on true line bet. secs. 6 and 7

Over rough mountainous land; ascending from corner, over

SUBDIVISIONS T. 38 S. R. 26 E.

Chains	
	bare rocky ledges, to top of mesa; through scrub sagebrush.
1.00	Top of ledges bearing N. and S. 50 ft. above cor.
	Thence over spur of mesa through cedar and pinon timber.
14.00	Descend from mesa into head of draw draining SW.
22.00	Draw, 60 ft. below mesa, drains SW.
	Ascend to top.
29.50	Top of mesa, 60 ft. above draw, bears N. and S.
	Thence over broken mesa.
39.88	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground for the $\frac{1}{4}$ sec. cor., mkd. on brass cap
	$\frac{\frac{1}{4}\ S\ 6}{S\ 7}$
	1915
	from which
	A cedar, 8 ins. dia., bears N.50°W.,
	58 lks. dist. mkd. $\frac{1}{4}$ S 6 B T.
	A cedar, 6 ins. dia., bears S.22°W.,
	32 lks. dist. mkd. $\frac{1}{4}$ S 7 B T.
	Continue over mesa.
62.00	Leave mesa bearing N. and S.
	Descend over rocky ledges.
65.00	Base of steep ascent, 130 ft. below top.
	Descend over rocky bench.
79.76	The cor. of secs. 5, 6, 7 and 8.
	Land mesa top, rough mountains on slopes and breaks
	Soil on slopes rocky and stony 4th rate, on mesa red, sandy loam bare to 2 ft. deep, 2nd rate.
	Timber cedar and pinon.
	Undergrowth scrub sagebrush.
	June 9, 1915.

	June 11, 1915:
	For solar observation see line bet. secs. 8 and 9.
	N.0°01'E. on random line bet. secs. 5 and 6.
40.00	Set temp. $\frac{1}{4}$ sec. cor.
80.02	Fall 23 lks. W. of the cor. of secs. 5, 6, 31 and 32 heretofore described, on N.bdy. of Tp.
	Thence

Chains	
	S.0°11'W. on true line bet. secs. 5 and 6.
	Over rough mountainous land, along broken rocky bench land on E. slope of mesa, through cedar and pinon timbe
22.00	Gulch 100 ft. below cor., drains SE.
	Thence ascend over series of spurs and gulches projecting and draining SW.
40.02	Set an iron post, 3 ft. long, 1 in. in dia.,26 ins. in the ground for the $\frac{1}{4}$ sec. cor. mkd. on brass cap $\frac{1}{4}$ S 6 | S 5 1915 from which A cedar, 10 ins. dia.,bears S.40°E., 78 lks. dist. mkd. $\frac{1}{4}$ S 5 B T. A cedar, 6 ins. dia.,bears S.43°W., 48 lks. dist. mkd. $\frac{1}{4}$ S 6 B T.
	Corner falls on rocky E. slope.
	Thence continue over rough broken land draining E.
77.00	Descend over SE. slope.
80.02	The cor. of secs. 5, 6, 7 and 8.
	Land rough mountains, huge rocks and series of spurs and gulches to the SE. draining into Squaw Canyon.
	Soil rocky and stony, 4th rate.
	Timber cedar and pinon. June 11, 1915.

May 27: At 8h a.m., apparent time I set off 21°12'N. on the decl. arc, 37°28' on the lat. arc, and determine a meridian with the solar at the cor. of secs. 4, 5, 32 and 33, which is a 3 in. iron post, firmly set, properly marked and witnessed as described by the Surveyor General.

Thence, from said cor.of secs.4,5,32,and 33,on S.bdy.Tp. N.0°01'E. on true line bet. secs. 32 and 33.

Over rough mountainous land, descending over hugh boulders on barren rocky slope to S.

12.00 Foot of steep descent bearing NW. and SE.

18.50 Dry wash in canyon bottom, 70 lks. wide, 8 ft. deep,

Chains	
	drains W. 85 ft. below cor.
	Ascend.
20.85	Base of ascent bearing NE. and N.15°W., rocky point.
24.00	Top of ascent, spur, west end extends NE., 75 ft. above wash.
	Enter scrub sagebrush undergrowth.
33.20	Descend abruptly.
35.00	Head of wash draining NW.
40.00	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground for the ¼ sec. cor. mkd., on brass cap ¼ S 32 | S 33 1915 and raise a mound of stone 2 ft. base, 1½ ft. high W. of cor.
	Corner falls on NW. slope of point of spur, 50 ft. below top.
45.50	Base of descent bearing S.80°W. and N.10°E.
	Thence over flat bottom of Cross Canyon, through greasewood undergrowth.
62.00	S. bank Cross Canyon bearing NE. and SW., 15 ft. bank.
	Descend into gravelly dry bottom of Cross Canyon Creek draining SW.
63.50	Leave bottom, ascend 15 ft. bank bearing NE. and SW.
	Thence through greasewood, along E. side of gulch draining S.
80.00	Set an iron post, 3 ft. long, 2 ins. in dia., 26 ins. in the ground for the cor. of secs. 28, 29, 32 and 33, mkd. on brass cap T 38 S R 26 E S 29 | S 28 S 32 | S 33 1915 raise a mound of stone 2 ft. base, 1½ ft. high W. of cor.
	Land rocky, rough, mountainous with general drainage W. from steep slopes.
	Soil rocky and stony 4th rate. No timber.
	Undergrowth greasewood and scattering sagebrush.

Chains	
	West on random line bet. secs. 29 and 32.
40.00	Set temp. $\frac{1}{4}$ sec. cor.
80.06	Intersect N. and S. line at the cor. of secs. 29, 30, 31 and 32.
	Thence
	East on true line bet. secs. 29 and 32.
	Over rough mountainous land with series of broken ledges and spurs projecting S.
8.00	Gulch, 40 ft. below cor., drains S.
26.00	Gulch, 75 ft. deep, drains S.
33.00	Gulch, 50 ft. deep, drains S.
39.00	Gulch 100 ft. deep, drains S.
40.03	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground for the $\frac{1}{4}$ sec. cor. mkd. on brass cap $\frac{1}{4}$ S 29 S 32 1915 and raise a mound of stone 2 ft. base, 1½ ft. high N. of cor.
	Corner falls on E. side of gulch, 80 ft. above bottom.
	Descend rocky breaks from high mesa to N.
78.00	Foot of breaks bearing NE. and SW.
	Thence over bottom land.
79.75	Shallow wash draining S.
80.06	The cor. of secs. 28, 29, 32 and 33.
	May 27: At apparent noon I set off 21°13'N. on the decl. arc, and observe the sun on the meridian; the resulting lat. is 37°28'30".
	Land rough mountains, very rocky series of spurs and ledges breaking to the south from high rim rock to the N. and draining S. into Cross Canyon.
	Soil rocky and stony 4th rate.
	No timber.
	Undergrowth sagebrush.
	N.0°01'E. on true line bet. secs. 28 and 29.

SUBDIVISIONS T. 38 S. R. 26 E.

Chains	
	Over rough mountainous land, ascending through greasewood flat in bottom of Cross Canyon.
2.00	Leave greasewood.
12.00	Enter dry wash draining from N. to SW. Ascend up wash.
14.50	Leave wash draining from NE. to S. Ascend rocky SE. slope over huge boulders and ledges bearing NE. and SW.
40.00	Set an iron post, 3 ft. long, 1 in. dia., 12 ins. in ground, 12 ins. in a mound of stone 2 ft. base, for the ¼ sec. cor. mkd. on brass cap ¼ S 29 | S 28 1915 and raise a mound of stone 2 ft. base, 1½ ft. high W. of cor.
	Corner falls on rocky SE. slope of mesa, 180 ft. above sec. cor. Impossible to set post over 12 ins. in ground.
45.00	Ascend along broken rim rock bearing N. and S., on E. edge of top of mesa, 80 ft. above the ¼ sec. cor.
50.00	Descend from edge of rim into Cove bearing N.10°W. and S. 80°E.
54.00	Wash in cove, 50 ft. below top, drains SE. Ascend over broken ledges bearing NE. and SW.
61.00	Top of broken rim rock bearing NE. and SW., 60 ft. above wash. Thence over broken mesa. Enter cedars bearing NE. and SW.
80.00	Set an iron post, 3 ft. long, 2 ins. in dia., 10 ins. in the ground to rock and 15 ins. in mound of stone 2 ft. base, for the cor. of secs. 20, 21, 28 and 29, mkd. on brass cap T 38 S R 26 E S 20 | S 21 S 29 | S 28 1915 and raise a mound of stone 2 ft. base, 1½ ft. high W. of cor.
	Corner falls in head of shallow draw draining SW., 20 ft. below top of mesa.

Chains	
	Land rough mountains, mostly rocky ledges, with SE. slop of mesa, draining SE. to Cross Canyon.
	Soil rocky and stony 4th rate.
	Timber cedar.
	Undergrowth sagebrush and greasewood.
	West on random line bet. secs. 20 and 29.
40.00	Set temp. ¼ sec. cor.
80.12	Fall 23 lks. N. of the cor. of secs. 19, 20, 29 and 30.
	Thence
	N.89°50'E. on true line bet. secs. 20 and 29.
	Over mountainous land, ascending rough N. slope of spur over boulders through cedar timber and scrub sagebrush undergrowth.
4.50	Head of gulch draining NW. Continue ascent.
14.00	Ascend abruptly from spur to ridge.
15.80	Ridge bearing N. and S., 120 ft. above cor. Descend.
21.80	Draw draining SW. 55 ft. below ridge.
	Ascend bench.
33.00	Top of ascent. Thence over bench leaving cedars bearing N. and S.
35.00	Leave bench; ascend abruptly to top of mesa.
40.06	Set an iron post, 3 ft. long, 1 in. in dia., 10 ins. in the ground and 16 ins. in mound of stone 2 ft. base, for the ¼ sec. cor., mkd. on brass cap ¼ S 20 S 29 1915 raise a mound of stone 2 ft. base, 1½ ft. high N. of cor.
	Corner falls on rocky west slope of breaks of mesa, 160 ft. above draw. Continue ascent.
57.50	Top of rim rock, 130 ft. above ¼ sec. cor. bears N.20°E. and S.20°W.
	Thence over level mesa through cedar timber.
80.12	The cor. of secs. 20, 21, 28 and 29.

Chains	
	Land rough mountains sloping W. from high mesa and south with rocky boulders; level on mesa.
	Soil rocky and stony 4th rate on slopes; red, sandy, shallow loam 2nd rate on mesa.
	Timber cedar.
	Undergrowth sagebrush.
	May 27, 1915.
	June 5: At 8h a.m. apparent time, I set off 22°29'30"N. on the decl. arc, 37°29'30"W. on the lat. arc, and determine a meridian with the solar at the cor. of secs. 20, 21, 28 and 29.
	Thence
	N.0°01'E. on true line bet. secs. 20 and 21.
	Over rolling mesa, ascending out of small draw draining SW., through cedar timber and sagebrush undergrowth.
9.00	Top of ascent, 25 ft. above cor.
	Thence over level mesa.
40.00	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground for the ¼ sec. cor., mkd. on brass cap ¼ S 20 | S 21 1915
	from which
	A cedar, 14 ins. dia., bears N.43°15'W., 88 lks. dist. mkd. ¼ S 20 B T.
	A cedar, 9 ins. dia., bears N.69°30'E., 51 lks. dist. mkd. ¼ S 21 B T.
67.00	Wash, 50 ft. below top, drains SW.
80.00	Set an iron post, 3 ft. long, 2 ins. in dia., 26 ins. in the ground for the cor. of secs. 16, 17, 20 and 21, mkd. on brass cap T 38 S R 26 E S 17 | S 16 S 20 | S 21 1915
	from which
	A cedar, 14 ins. dia., bears N.29°45'W.,

Chains	
	70 lks. dist. mkd. T 38 S R 26 E S 16 B T.
	A cedar, 6 ins. dia., bears S.38°30'E.,
	43 lks. dist. mkd. T 38 S R 26 E S 21 B T.
	A cedar, 6 ins. dia., bears S.56°30'W.,
	40 lks. dist. mkd. T 38 S R 26 E S 20 B T.
	A cedar, 6 ins. dia., bears N.71°30'W.,
	21 lks. dist. mkd. T 38 S R 26 E S 17 B T.
	Corner falls on high mesa.
	Land rolling mesa top with general drainage SW.
	Soil loose red, sandy loam, rocky in places, depth from bare sandstone to 2 ft., 2nd rate.
	Timber cedar.
	Undergrowth scattering scrub sagebrush.
	S.89°50'W. on random line bet. secs. 17 and 20.
40.00	Set temp. $\frac{1}{4}$ sec. cor.
80.04	Fall 5 lks. S. of the cor. of secs. 17, 18, 19 and 20.
	Thence
	N.89°52'E. on true line bet. secs. 17 and 20.
	Over rough mountainous land, ascending over west end of butte or knoll, with rocky boulders, through scrub sagebrush undergrowth.
4.80	Top of knoll, 120 ft. above cor. Knoll is 1.50 chs. wide. Descend abruptly over east face.
13.00	Foot of descent, 130 ft. below top; thence enter and ascend up bottom of draw draining from east to NW.
30.00	Head of draw.
	Ascend abruptly over broken ledges bearing NE. and SW.
35.00	Top of ascent. Thence over bench bearing N. and S.
40.02	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground for the $\frac{1}{4}$ sec. cor., mkd. on brass cap $\frac{\frac{1}{4} \text{ S } 17}{\text{S } 20}$ 1915 raise a mound of stone 2 ft. base, 1½ ft. high N. of cor.

Chains	
	Corner falls on small bench, 80 ft. above foot of knoll.
	Thence ascend over huge broken boulders to rim of mesa.
68.50	Rim rock bearing N. and S.
	Top of mesa, 220 ft. above ¼ sec. cor., with ledges and huge broken rim rock.
	Thence over mesa through cedar timber.
80.04	The cor. of secs. 16, 17, 20 and 21.
	JUNE 5: At this cor. at apparent noon, I set off 22°30'N. on the decl. arc, and observe the sun on the meridian; the resulting lat. is 37°30'.
	Land ', on slopes, rough mountains with rocky huge boulders draining W. into Squaw Canyon; mesa top flat.
	Soil on slopes rocky, 4th rate; on mesa 2nd rate.
	Timber cedar.
	Undergrowth scattering scrub sagebrush.
	N.0°01'E. on true line bet. secs. 16 and 17.
	Over rolling mesa land draining SW., through cedar timber and scrub sagebrush undergrowth. Leave heavy cedars.
29.40	Edge of mesa bearing NE. and SW.
	Descend abruptly over rim rock and ledge, 40 ft. high, with huge boulders.
36.50	Foot of steep rocky descent.
	Thence continue descent over broken spurs bearing NE. and SW. with huge fallen boulders, 250 ft. below rim.
40.00	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground for the ¼ sec. cor., mkd. on brass cap ¼ S 17 | S 16 1915 and raise a mound of stone 2 ft. base, 1½ ft. high W. of cor.
50.00	Spring branch in wash, 2 lks. wide, 2 ins. deep, course NW. Thence over successional gulches.
65.00	Gulch draining SW. 80 ft. below ¼ sec. cor.
	Ascend over rocky rough land to point of mesa.
80.00	Set an iron post, 3 ft. long, 2 ins. in dia., 26 ins. in

Chains	
	the ground for the cor. of secs. 8, 9, 16 and 17, mkd. on brass cap T 38 S R 26 E S 8 | S 9 S 17 | S 16 1915 raise a mound of stone 2 ft. base, 1½ ft. high W. of cor.
	Corner falls on open S. slope, 120 ft. above gulch.
	Land rough mountains on N. 50 chs. draining SW. from rocky ledgy slopes; S. 30 chs. mesa draining SW.
	Soil on slopes rocky stony, 4th rate; on mesa red sandy loam 3 ins. deep to sandstone subsoil, 2nd rate.
	Timber cedar.
	Undergrowth scrub sagebrush.
	S.89°52'W. on random line bet. secs. 8 and 17.
40.00	Set temp. ¼ sec. cor.
80.18	Fall 21 lks. S. of the cor. of secs. 7, 8, 17 and 18.
	Thence
	S.89°59'E. on true line bet. secs. 8 and 17.
	Over rough mountainous land, descending rapidly over rocky SE. slope into Squaw Canyon, through scattering cedar timber.
12.00	Squaw Creek, dry, in gravel wash, 1.00 ch. wide, drains S.15°W., 125 ft. below cor.
	Ascend abruptly over rough rocky ledgy land.
35.00	Top of abrupt ascent. Thence ascend gradually over rough rocky land bearing NE. and SW.
40.09	Set an iron post, 3 ft. long, 1 in. in dia., 10 ins. in the ground to rock and 16 ins. in mound of stone 2 ft. base for the ¼ sec. cor., mkd. on brass cap ¼ S 8 S 17 1915 from which A cedar, 8 ins. dia., bears North, 70 lks. dist. mkd. ¼ S 8 B T.

Chains	
	A cedar, 8 ins. dia., bears S.14°15'E., 49 lks. dist. mkd. ¼ S 17 B T.
	Continue gradual ascent over rough rocky land.
70.00	Leave cedar timber bearing N. and S.
80.18	The cor. of secs. 8, 9, 16 and 17.
	Land very rough mountains with rocky, ledgy slopes bearing E. and W. to Squaw Creek.
	Soil rocky and stony 4th rate.
	Timber cedar.
	Undergrowth scrub sagebrush.
	June 5, 1915.

June 11, 1915:
At 7h a.m. apparent time, I set off 23°04'N. on the decl. arc, 37°31' on the lat. arc, and determine a meridian with the solar at the cor. of secs. 8, 9, 16 and 17.

Thence

N.0°01'E. on true line bet. secs. 8 and 9.

Over rough mountainous land, ascending to high rim over rocky boulders and through scrub sagebrush undergrowth.

2.50	Ascend abruptly to spur.
7.70	Spur, 110 ft. above the cor., projects SW. 5 chs. Descend.
13.00	Gulch draining SW. 50 ft. below spur. Enter cedar timber bearing NE. and SW.
20.00	Abrupt ascent over ledges and huge boulders bearing NE. and SW.
33.00	Top of rim rock ledges bearing NE. and SW., 250 ft. above cor. Thence over mesa through heavy cedar and pinon timber.
40.00	Set an iron post, 3 ft. long, 1 in. in dia., 16 ins. in earth to rock and 10 ins. in mound of stone 2 ft. base, for the ¼ sec. cor., mkd. on brass cap ¼ S 8 | S.9 1915 from which A pinon, 9 ins. dia., bears S.25°E.,

Chains

23 lks. dist. mkd. ¼ S 9 B T.

A pinon, 8 ins. dia., bears N.76°30'W.,

93 lks. dist. mkd. ¼ S 8 B T.

Corner falls on high mesa.

Thence continue over rolling mesa.

53.00 Edge of mesa, bearing NE. and SW.

Descend abruptly over rim rock ledge with huge boulders.

55.00 Descend over vertical ledge, 90 ft. high bearing NE. and SW.

61.50 Foot of steep descent. Thence over broken, rocky land draining NW. Leave cedar and pinon timber.

80.00 275 ft. below rim.

Set an iron post, 3 ft. long, 2 ins. in dia., 26 ins. in the ground for the cor. of secs. 4, 5, 8 and 9, mkd. on brass cap

T 38 S R 26 E
S 5 | S 4
S 8 | S 9
1915

and raise a mound of stone 4 ft. base, 3 ft. high W. of cor.

Corner falls on slope facing NW.

Land rough mountainous, with general drainage W. into Squaw Canyon, and having steep rocky NW. and SE. slopes of ledges; top of mesa rolling.

Soil rocky and stony, 4th rate; on mesa red sand, shallow on sandstone, 2nd rate.

Timber cedar and pinon.

Undergrowth scrub sagebrush

N.89°59'W. on random line bet. secs. 5 and 8.

40.00 Set temp. ¼ sec. cor.

80.10 Fall 7 lks. N. of the cor. of secs. 5, 6, 7 and 8.

JUNE 11: At this cor. I set off 23°04'N. on the decl. arc, and at apparent noon observe the sun on the meridian; the resulting lat. is 37°32'.

Thence

Chains	
	S. 89°56' E. on true line bet. secs. 5 and 8.
	Over rough mountainous land, descending over rough broken E. slope of rim to the west, with huge boulders, through scattering cedar timber and sagebrush. Land drains E.
	Descend into Squaw Canyon bottom.
37.50	Gulch, 160 ft. below cor., drains SE. into Squaw Canyon. Ascend to S. point of spur.
40.05	Set an iron post, 3 ft. long, 1 in. in dia., 10 ins. in earth to rock and 16 ins. in mound of stone 2 ft. base, for the ¼ sec. cor; mkd. on brass cap ¼ S 5 S 8 1915 and raise a mound of stone 2 ft. base, 1½ ft. high N. of cor.
	Corner falls on S. point of spur projecting from the N. 60 ft. above gulch.
	Thence descend into bottom of Squaw Canyon.
42.50	Descend over W. bank 5 ft. into Squaw Canyon Creek with gravel bottom, small disappearing stream of water and changeable, draining SW. 50 ft. below ¼ sec. cor.
47.00	Leave Squaw Creek bottom, ascend 5 ft. bank.
	Thence over rocky ledgy land, ascending east side of canyon.
48.50	Ascend ledge, 20 ft. high, bearing N. and S.
	Thence continue ascent over broken boulders to spur.
56.00	Spur bearing NW., 200 ft. above canyon. Descend.
58.00	Gulch 30 ft. below spur, drains NW. Ascend.
63.00	Spur, 60 ft. above gulch, projects NW. 5 chs. Descend.
67.00	Gulch draining N. 35 ft. below spur.
70.10	The cor. of secs. 4, 5, 8 and 9.
	Land rough and mountainous with rocky ledgy slopes, draining east and west into Squaw Creek.
	Soil rocky 4th rate.
	Timber scattering cedar.
	Undergrowth scrub sagebrush.

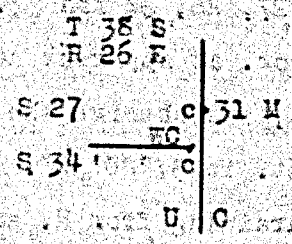
Chains	
	N.0°01'E. on random line bet. secs. 4 and 5.
40.00	Set temp. ¼ sec. cor.
80.12	Intersect N. bdy. of Tp. 7 lks. E. of the cor. of secs. 4, 5, 32 and 33, heretofore described.
	Thence
	S.0°02'E. on true line bet. secs. 4 and 5.
	Over mountainous land, descending from spur over rough rocky boulders and series of washes draining SW., through scattering cedar timber and sagebrush undergrowth.
39.25	Gulch draining S.50°W., 135 ft. below the cor.
40.12	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground for the ¼ sec. cor., mkd. on brass cap ¼ S 5 | S 4 1915 from which A cedar, 14 ins. dia., bears S.63°W., 25 lks. dist. mkd. ¼ S 5 B T. A cedar, 12 ins. dia., bears N.63°30'E., 42 lks. dist. mkd. ¼ S 4 B T.
	Corner falls on NW. slope, 25 ft. above bottom of gulch.
	Thence over rough broken W. edge of bench land, draining W. into Squaw Creek.
57.00	Box Canyon, 1 ch. wide, 65 ft. deep, drains W.
	Continue over series of small gulches and spurs projecting W.
64.00	Ascend over broken boulders.
80.12	The cor. of secs. 4, 5, 8 and 9.
	Land rough mountains with a series of gulches and spurs draining W. to Squaw Canyon.
	Soil rocky 4th rate.
	Timber cedar.
	Undergrowth scrub sagebrush.
	June 11, 1915.

Chains	
	May 29: At 9h a.m. apparent time, I set off 21°32'N. on the decl. arc and 37°28' on the lat. arc, and determine a meridian with the solar at the cor. of secs. 3, 4, 33 and 34, which is a 3 in. iron post, firmly set, properly marked and witnessed as described by the Surveyor General.
	Thence, from said cor. secs. 3, 4, 33, and 34, on S. bdy. of Tp. N. 0°02'E. on true line bet. secs. 33 and 34.
	Over rough mountainous land, descending into canyon over rocky S. side, through scrub sagebrush undergrowth.
13.80	Wash in bottom of canyon drains west, 130 ft. below cor. dry. Thence ascend rocky slope to W. point of mesa, over broken spurs projecting SW. and gulches draining SW. Enter scattering cedar timber.
40.00	Head of gulch draining SW.
	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground for the $\frac{1}{4}$ sec. cor., mkd. on brass cap
	$\frac{1}{4}$ S 33 | S 34
	1915
	from which
	A cedar, 6 ins. dia., bears N. 40°30'E.,
	13 lks. dist. mkd. $\frac{1}{4}$ S 34 B T.
	A cedar, 8 ins. dia., bears. N. 43°W.,
	39 lks. dist. mkd. $\frac{1}{4}$ S 33 B T.
	Corner falls in head of gulch draining SW., 190 ft. above canon bottom.
	Thence ascend abruptly out of wash to point of rim rock projecting W. over rocky ledges.
44.50	Rim rock, 20 ft. high, 110 ft. above the cor., bears NW. and SE.
	Thence over top of mesa which extends west 250 chs.
48.00	N. edge of mesa bearing NE. and SW.
	Descend abruptly over ledges and rim rock, 30 ft. wall. Thence over rough rocky land sloping NW.
50.00	Set an iron post, 3 ft. long, 2 ins. in dia., 26 ins. in the ground for the cor. of secs. 27, 28, 33 and 34, mkd. on brass cap

Chains	
	T 38 S R 26 E S 28 | S 27 S 33 | S 34 1915.
	raise a mound of stone 2 ft. base, 1½ ft. high W. of cor.
	Corner falls on rocky NW. slope, 245 ft. below top of rim
	Land rough mountains draining to NW. and S. from rocky ledgy slopes of point of mesa.
	Soil rocky, 4th rate.
	Timber scattering cedar.
	Undergrowth scrub sagebrush.
	West on random line bet. secs. 28 and 33.
40.00	Set temp. ¼ sec. cor.
79.99	Fall 5 lks. N. of the cor. of secs. 28, 29, 32 and 33.
	Thence
	N.89°58'E. on true line bet. secs. 28 and 33.
	Over rough mountainous land, ascending from gulch over rocks and through scrub sagebrush undergrowth.
11.00	Low spur, 50 ft. above cor. projects S.10 chs.
	Thence descend into bottom of Cross Canyon.
22.00	Center of bottom of Cross Canyon Creek, dry, in gravel wa 150 lks. wide, 15 ft. deep, draining S.20°W. No water. 80 ft. below spur.
25.00	Ascend rapidly rocky slope facing W.
39.99½	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground for the ¼ sec. cor., mkd. on brass cap ¼ S 28 S 33 1915
	raise a mound of stone 2 ft. base, 1½ ft. high N. of cor.
	Corner stands at head of wash draining NW., 80 ft. above canyon.
45.00	Low saddle in ridge bearing N. and SE., 20 ft. above cor.
	Descend to bend in Cross Canyon.

Chains	
63.00	Wash, 70 ft. below ridge, drains NW. into Cross Canyon, confluence 5 chs. NW.
	Thence over smooth bottom land.
77.00	Ascend rough NW. slope.
79.99	The cor. of secs. 27, 28, 32 and 33.
	May 29: At this cor. at apparent noon I set off 21°33'W. on the decl. arc, and observe the sun on the meridian; the resulting lat. is 37°28'30".
	Land mountainous draining from N. and S. slopes into Cross Canyon.
	Soil rocky and stony, 4th rate.
	Timber none. Undergrowth scrub sagebrush.
	East on true line bet. secs. 27 and 34.
	Over rough mountainous land, ascending slope facing NW. over ledges toward high rim of mesa.
40.00	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground for the $\frac{1}{4}$ sec. cor., mkd. on brass cap $\frac{1}{4}$ S 27 S 34 1915 raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high N. of cor.
	Corner falls on steep rocky slope bearing NW., 250 ft. above cor.
45.00	Top of ascent, edge of mesa rim rock bearing NE. and SW. 50 ft. above $\frac{1}{4}$ sec. cor.
	Thence enter cedar timber bearing NE. and SW and proceed over mesa.
57.00	Leave mesa bearing NE. and SW.
	Descend abruptly over 15 ft. rim rock ledge and SE. slope of rough ledge into canyon.
64.00	Canyon, 220 ft. below rim, drains SW.
	Ascend out of canyon to ledges on E. side.
	Point of intersection, Utah Colorado Boundary, falls on face of bare ledge, impossible to set corner. There-

Chains	
	fore at
66.28	Set an iron post, 3 ft. long, 2 ins. in diam., 26 ins. in the ground for the witness cor. to the CC of secs. 27 and 34 on the Utah Colorado Bdy. Line, mkd. on brass cap



1915

	and raise a mound of stone 2 ft. base, 1½ ft. high W. of cor.
	Corner falls on shelf in ledge rock, 70 ft. above canyon bottom.
66.34	Intersect Utah Colorado Boundary Line at 40 lks. S.1° 09'W. of the 31st M P., heretofore described.
	Land rough mountains draining NW. and SE. from point of mesa, and steep rocky and ledgy slopes.
	Soil rocky 4th rate.
	Timber cedar.
	Undergrowth scrub sagebrush.
	May 29, 1915.

	June 1: At 12h 30m p.m. by double back and foresights from meridian determined by solar bet. secs. 33 and 34 on May 29, I run
	N.0°02'E. bet. secs. 27 and 28.
	Over rough mountainous land, descending over NW. slope into Cross Canyon.
2.00	Old ruins 5 chs. W. of line.
9.00	Foot of descent bearing N.10°E. and S.10°W. Thence enter bottom of canyon. Enter greasewoods bearing NE. and SW.
15.00	Old ruins 15 lks. west of line. (Pile of stones)
18.00	Descend over 15 ft. E. bank of wash in Cross Canyon,

Chains	
	bearing NE. and SW.
	Thence over gravel wash in bottom, dry, draining SW.
	65 ft. below the cor.
	Line crosses creek bed at sharp turn from NW. to SW.
20.00	Confluence with gulch from the east.
22.80	Ascend from creek bed over same east bank, 10 ft. high, bearing NW. and SE. Ascend low spur.
34.00	Old ruins, 2.00 chs. E. of line, on spur projecting W.
40.00	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground for the ¼ sec. cor. mkd. on brass cap ¼ S 28 | S 27 1915 raise a mound of stone 2 ft. base, 1½ ft. high W. of cor.
	Corner falls on N. side of slope low spur 20 ft. above creek, projects W.
	Descend into Cross Canyon.
44.50	Center of dry gravel bed of Cross Canyon Creek, 1.00 ch. wide, 10 ft. deep, 20 ft. below ¼ sec. cor.
	Thence over flat bottom lands through greasewood undergrowth.
60.00	Leave greasewood undergrowth bearing E. and W.
71.50	Base of ascent; ascend to spur over broken ledges bearing E. and W.
76.50	Spur, 75 ft. above base, projects E. 5 chs. Descend.
80.00	Set an iron post, 3 ft. long, 2 ins. in dia., 26 ins. in the ground for the cor. of secs. 21, 22, 27 and 28, mkd. on brass cap T 38 S R 26 E S 21 | S 22 S 28 S 27 1915 raise a mound of stone 2 ft. base, 1½ ft. high W. of cor.
	Corner falls on N. slope rocky spur, 20 ft. below spur.
	Land mountainous rocky slopes bearing NW. and SE. in bottom of Cross Canyon.
	Soil sandy and rocky 4th rate.
	No timber. Undergrowth greasewood.

Chains	
	June 19 At 2h p.m. apparent time, I set off 20°00'30"N. on the decl. arc, and 37°29'30" on the lat. arc, and determine a meridian with the solar at the cor. of secs. 21, 22, 27 and 28.
	My back and foresights bear N.0°02'E. and S.0°02'W., which checks the line bet. secs. 27 and 28.
	Thence
	S.89°58'W. on random line bet. secs. 21 and 28.
40.00	Set temp. ¼ sec. cor.
80.07	Fall 23 lks. N. of the cor. of secs. 20, 21, 28 and 29.
	Thence
	N.89°48'E. on true line bet. secs. 21 and 28.
	Over mesa, ascending from draw, through cedar timber.
3.60	E. edge of mesa bearing N. and S.
	Descend abruptly over east rim ledge rock with huge boulders.
23.00	Head of gulch draining SE.
27.20	Gulch draining SW., 280 ft. below rim. Ascend.
32.00	Spur bearing N. and SW., 80 ft., above gulch, S. 10 chs.
	Old ruins, remains of two rooms, walls 8 ft. high, S. of line, 50 lks. to N. edge.
	Descend abruptly from spur.
38.00	Gulch, wash in bottom drains SE, 95 ft. below ridge.
	Ascend rocky E. slope.
40.03½	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground for the ¼ sec. cor. mkd. on brass cap
	¼ S 21 / S 28 / 1915
	raise a mound of stone 2 ft. base, 1½ ft. high N. of cor.
	Corner falls on E. slope of gulch, 60 ft. above bottom.
	Ascend abruptly.
60.00	Top of steep ascent. Thence over rolling mesa bearing NW. and SE.
75.00	Enter scrub cedars bearing N. and S.
78.00	Leave scrub cedars bearing N. and S. Top of flat

Chains	
	spur, 80 ft. above gulch.
80.07	The cor. of secs. 21, 22, 27 and 28.
	Land mountainous with steep rocky slopes bearing E. and S.
	Soil rocky 4th rate.
	Timber cedar.
	Undergrowth sagebrush.
	East bet. secs. 22 and 27.
	Over rough mountainous land, descending from spur over SE. slope covered with large boulders, through scrub sagebrush into Cross Canyon.
6.50	Foot of steep descent bearing SE. and NW.
	Thence into Canyon bottom.
12.00	Enter dense greasewood flat.
18.00	Descend 10 ft. bank of Cross Canyon bearing N. and S.
	Thence over gravel creek bottom, dry.
20.00	Center of creek bed draining S., dry, 80 ft. below cor.
22.00	Ascend 10 ft. bank bearing N. and S. out of creek bottom.
	Thence over greasewood flat.
25.00	Leave flat; ascend gradually to point 30 ft. above creek, at
40.00	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground for the ¼ sec. cor., mkd. on brass cap ¼ S 22 S 27 1915
	Raise a mound of stone 2 ft. base, ½ ft. high N. of cor.
42.50	Base of ascent bearing NE. and SW.
	Ascend abruptly over rough rocky ledges and spurs projecting NW.
67.86	Intersect Utah Colorado Boundary at 36 lks. N. 1°02' E. of the 32nd M C.
	At intersection, set an iron post, 3 ft. long, 2 ins. in dia., 26 ins. in the ground for the CC of secs. 22 and 27 against the Utah Colorado Bdy. Line, mkd. on brass cap

Chains

T 38 S
R 26 E
S 22 | c

S 27 | c | 32 M
U | C
1915

Land rough mountains draining from E. and W. slopes into Cross Canyon.

Soil sandy, dry, rocky, 4th rate.

Timber none.

Undergrowth greasewood and scrub sagebrush.

June 1, 1915.

June 7: At 8h a.m. apparent time, I set off 22°42'N. on the decl. arc, 37°29'30" on the lat. arc, and determin a meridian with the solar at the cor. of secs. 21, 22, 27 and 28.

Thence N.0°02'E. bet. secs. 21 and 22.

Over rough mountainous land, descending from spur over N. slope of rocky rough land.

5.00 Foot of steep descent bearing E. and W.

Head of gulch draining E., 50 ft. below cor.

Thence along rough east slope of N. and S. ridge.

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

¼ S 21 | S 22
1915

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

Corner falls on slope facing east.

Thence ascend to top of ridge.

47.50 Ridge bearing NE. and SW, bare, 60 ft. above ¼ sec. cor.

Thence over rolling land into head of draw.

57.00 Head of draw draining SE., 80 ft. below ridge.

Ascend over rugged rocky S. slope with huge boulders.

60.00 Lone impassable butte on line. To pass butte I

Chains

Offset 6 chs. east; thence on offset line N.0°02'E.

2.00 chs — Vertical wall of butte, about 8 chs. in diameter, 150 ft. high.

8.00 chs — Offset 6 chs. west to line.

72.00 N. edge of butte.

Thence descend over rocky slope, facing east,

80.00 Set an iron post, 3 ft. long, 2 ins. in dia., 26 ins. in the ground for the cor. of secs. 15, 16, 21 and 22, mkd. on brass cap

T 38 S R 26 E
S 16 | S 15
S 21 | S 22
1915

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

Land rough mountains with general drainage east from rocky slopes and ledges.

Soil rocky, 4th rate.

No timber.

Undergrowth scant sagebrush.

S.89°48'W. on random line bet. secs. 16 and 21.

40.00 Set temp. ¼ sec. cor.

79.89 Fall 7 lks. S. of the cor. of secs. 16, 17, 20 and 21.

Thence

N.89°51'E. on true line bet. secs. 16 and 21.

Over rolling mesa land draining S. through heavy cedar and pinon timber.

17.50 E. edge of mesa bearing N.20°E. and S.20°W.

Descend abruptly over rim rock ledges and broken rim of mesa with huge boulders. Leave cedar timber.

19.40 Descend over 75 ft. ledge bearing N.10°E. and S.10°W.

Thence continue abrupt descent over broken boulders.

39.25 Gulch, 210 ft. below rim, drains SE.

Ascend to spur.

39.94½ Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground for the ¼ sec. cor. mkd. on brass cap

Chains	
	¼ S 16 S 21 1915
	raise a mound of stone 2 ft. base, 1½ ft. high N. of cor.
	Corner falls on E. side of gulch, 35 ft. above bottom. Ascend to spur.
44.00	Spur projects SE. 50 ft. above ¼ sec. cor. SE. for 15.00 chs. only.
	Thence over series of gulches and spurs projecting SE.
70.00	Gulch drains SE. 45 ft. below spur. Ascend.
75.00	Ridge 80 ft. above gulch, bears NW. and SE.
79.89	The cor. of secs. 15, 16, 21 and 22.
	JUNE 7: At this cor. at apparent noon, I set off 22° 43'N. on the decl. arc, and observe the sun on the meridian; the resulting lat. is 37°30'.
	Land rough mountains with steep, rocky ledges, spurs and gulches draining SE; rolling land on mesa.
	Soil on mesa red sand on sandstone, 2nd rate; on slopes rocky 4th rate.
	Timber cedar.
	Undergrowth scrub sagebrush.
	East on true line bet. secs. 15 and 22.
	Over rough mountainous land, descending over SE. rocky slope through scrub sagebrush undergrowth.
21.00	Enter scattering cedar timber bearing N. and S.
30.00	Draw drains SE., 101 ft. below cor. Ascend.
32.50	Top of ascent bearing N. and S.
	Thence over bench land.
40.00	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground for the ¼ sec. cor., mkd. on brass cap
	¼ S 15 S 22 1915
	raise a mound of stone 2 ft. base, 1½ ft. high N. of cor.

Chains

Thence continue along rough N. slope.

69.20 Intersect Utah Colorado Boundary Line 52 lks. N.1°12'E. of the 33 MC. At intersection

Set an iron post, 3 ft. long, 2 ins. in dia., 26 ins. in the ground for the CC of secs. 15 and 22, mkd. on brass cap

T 35 S
R 26 E
S 15 C
S 22 C | 33 M
U | C
1915

Land rough mountains over rough slopes draining to SE. and S.

Soil rocky 4th rate.

Timber scattering cedar.

Undergrowth scrub sagebrush.

June 7, 1915.

June 8: At 8h a.m. apparent time, I set off 22°45'W. on the decl. arc and 37°30' on the lat. arc, and determine a meridian with the solar at the cor. of secs. 15, 16, 21 and 22.

Thence

N.0°02'E. on true line bet. secs. 15 and 16.

Over rough mountainous land, ascending along SE. slope over rocks and boulders through scrub sagebrush undergrowth.

39.00 Top of high spur, 165 ft. above cor., projects E. 10 chs. from high mesa.

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

¼ S 16 | S 15
1915

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

Chains	
	Corner falls on NE. slope of top of spur, 20 ft. below top.
	Thence descend over rocky land through scattering cedar timber.
50.00	Foot of steep descent, 90 ft. below ¼ sec. cor.
	Thence ascend along E. side of rim of main mesa, over rough broken land draining E.
80.00	Set an iron post, 3 ft. long, 2 ins. dia., 26 ins. in the ground for the cor. of secs. 9, 10, 15 and 16, mkd on brass cap

T 38 S R 26 E
S 9 | S 10
S 16 | S 15
1915

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

Ruin on top of huge boulder bears N.50°E., 1.05 chs.

Land rough mountains with rocky ledges draining SE. from main mesa to the west,

Soil rocky 4th rate.

Timber scattering cedar.

Undergrowth scrub sagebrush.

	S.89°51'W. on random line bet. secs. 9 and 16.
40.00	Set temp. ¼ sec. cor.
80.04	Fall 14 lks. S. of the cor. of secs. 8, 9, 16 and 17.
	Thence
	N.89°57'E. on true line bet. secs. 9 and 16.
	Over rough mountainous land, descending over rough broken boulders, through scattering cedar timber.
10.00	Gulch, 70 ft. below cor., drains SW.
	Ascend abruptly to top of mesa, over huge broken boulders.
39.00	Top of rim rock and ledges bearing N. and S. 210 ft. above Gulch. Thence over rolling mesa, the divide between Squaw and Cross Canyons, through dense cedar timber.
40.02	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in

SUBDIVISIONS T. 38 S. R. 26 E.

Chains	
	the ground for the ¼ sec. cor. mkd. on brass cap ¼ S 9 S 16 1915 from which A cedar, 8 ins. dia., bears N.75°E., 33 lks. dist. mkd. ¼ S 9 B T. A cedar, 15 ins. dia., bears S.70°W., 48 lks. dist. mkd. ¼ S 16 B T. Thence over rolling mesa.
61.60	Well preserved and defined ruins, several rooms 8 ft. walls standing. Old graves surrounding. S. edge bears N.1.60 chs.
61.65	Descend into ravine over rock ledge bearing NE. and SW.
64.10	Wash in ravine, 80 ft. below mesa, drains SW.
66.60	East edge of ravine, rim rock bearing NE. and SW., 80 ft. above bottom. Continue over mesa, which here is a long spur projecting S. from main mesa.
70.60	Base of steep descent, 220 ft. below rim. Thence over bench.
80.04	The cor. of secs. 9, 10, 15 and 16. June 8: At this cor. at apparent noon, I set off 22°49'N. on the decl. arc and obderve the sun on the meridian; the resulting lat. is 37°31'. Land on mesa level draining S., slight, red, sandy soil on sandstone subsoil, bare to 3 ft. deep, 2nd rate; on slopes rough mountains with huge boulders and ledges, rocky soil, 4th rate. Timber scrub cedar. Undergrowth scattering sagebrush.
	East on true line bet. secs. 10 and 15. Over rough mountainous land with huge boulders 20 ft. or more in diameter, through sagebrush undergrowth and scattering cedar timber. Descend.

Chains	
30.50	Gulch drains SE. 75 ft. below cor.
32.00	Spur, 50 ft. above gulch, projects SE. 5 chs.
	Thence over series of spurs and washes projecting and draining S.
40.00	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground for the ¼ sec. cor. mkd. on brass cap ¼ S 10 S 15 1915 raise a mound of stone 2 ft. base, 1½ ft. high N. of cor.
	Corner falls on SE. slope of small spur.
	Thence descend over rough land draining SE.
70.70	Intersect the Utah Colorado Boundary Line 1.25 chs. N.1°12'E. of the restored point for the 34th M C., heretofore descrmbed.
	Land rough mountains and spurs and gulches draining SE.
	Soil rocky 4th rate.
	Timber scattering cedar.
	Undergrowth scrub sagebrush.

	N.0°02'E. on true line bet. secs. 9 and 10.
	Over rough mountainous land, ascending to rim over large boulders through scattering cedar timber and sagebrush undergrowth.
5.00	Base of abrupt ascent bearing NE. and SW.
	Ascend over huge broken boulders.
11.00	Top of rim rock ledge, 220 ft. above the cor.
	Edge of mesa bearing NE. and SW.
	Thence over rolling mesa through heavy cedar timber.
13.00	About 30 ft. under vertical ledge east of here occurs a coal outcropping in face of ledge, about 6 ft. high with width unknown, of light, grey soft slate.
40.00	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground for the ¼ sec. cor. mkd. on brass cap ¼ S 9 | S 10 1915

Chains

from which

A cedar, 8 ins. dia., bears N.76°E.,
19 lks. dist. mkd. ½ S 10 B T.
A cedar, 10 ins. dia., bears West,
4 lks. dist. mkd. ½ S 9 B T.

Continue over mesa sloping gently S.

75.00 Draw, 6 ft. wide, 2 ft. deep, drains SW.

80.00 Set an iron post, 3 ft. long, 2 ins. dia., 26 ins. in the ground for the cor. of secs. 3, 4, 9 and 10, mkd. on brass cap

T 35 S R 26 E
S 4 | S 3
S 9 | S 10
1915

from which

A cedar, 7 ins. dia., bears N.34°E.,
27 lks. dist. mkd. T 35 S R 26 E S 3 B T.
A cedar, 7 ins. dia., bears S.58°30'E.,
16 lks. dist. mkd. T 35 S R 26 E S 10 B T.
A cedar, 6 ins. dia., bears S.50°W.,
14 lks. dist. mkd. T 35 S R 26 E S 9 B T.
A cedar, 12 ins. dia., bears N.73°W.,
36 lks. dist. mkd. T 35 S R 26 E S 4 B T.

Corner stands on level mesa.

Land south 11 chs. rough ledges sloping to S. stream with huge boulders; N. 69 chs. rolling mesa with slight slope to S.

Soil on slope rocky 4th rate, on mesa red, sandy loam, bare to 3 ft. on sandstone subsoil, 2nd rate.

Timber cedar.

Undergrowth scattering sagebrush.

June 8, 1915.

June 14: At 8h a.m. apparent time, I set off 23°15'N. on the decl. arc, 37°32' on the lat. arc, and determine a meridian with the solar at the cor. of secs. 3, 4, 9 and 10.

Chains	
	Thence
	S.89°57'W. on random line bet. secs. 4 and 9.
40.00	Set temp. ¼ sec. cor.
80.12	Fall 21 lks. N. of the cor. of secs. 4, 5, 8 and 9
	Thence
	N.89°48'E. on true line bet. secs. 4 and 9.
	Over rough mountainous land, ascending series of broken spurs and gulches draining NW., through cedar timber and scattering sagebrush undergrowth. Ascend to high rim of mesa.
37.00	Ascend more abruptly bearing NE. and SW. over huge boulder from broken rim.
40.06	Set an iron post, 3 ft. long, 1 in. in dia., 6 ins. in earth to rock and 18 ins. in mound of stone 2 ft. base for the ¼ sec. cor. mkd. on brass cap ¼ S. 4 S 9 1915 from which A cedar, 6 ins. dia., bears N.10°30'W., 10 lks. dist. mkd. ¼ S 4 B T. A cedar, 14 ins. dia., bears S.20°W., 30 lks. dist. mkd. ¼ S 9 B T.
	Corner falls on steep rocky NW. slope, 190 ft. above cor. Continue abrupt ascent.
40.50	Ascend vertical ledge, 20 ft. high bearing NE. and SW.
47.50	Top of rim rock and ledge bearing NE. and SW., which is edge of mesa, 120 ft. above ¼ sec. cor.
	Thence over mesa through dense cedar timber.
60.20	Tumbled remains of old ruin on line.
62.20	Wash drains SW. 10 ft. deep.
80.12	The cor. of secs. 3, 4, 9 and 10.
	Land level mesa slight slope with steep rocky NW. slope of broken rim.
	Soil on mesa red sand, bare rock to 2 ft. deep, 2nd rate; on slopes rocky 4th rate.
	Timber cedar.

Chains	
	Undergrowth scattering sagebrush.
	East on a true line bet. secs. 3 and 10.
	Over level mesa sloping S. through dense cedar timber and scattering sagebrush.
4.20	Draw 20 ft. deep, drains SW.
10.00	Leave cedar timber, enter fire killed timber bearing N. and S.
20.00	Leave fire killed timber bearing N. and S., enter heavy cedar timber.
39.00	The ¼ cor. will fall on bare rock ledges. At this point I set an iron post 3 ft. long, 1 in. in dia., 10 ins. in earth to rock and 16 ins. in mound of stone 2 ft. base, for WC ¼, mkd. on brass cap T 38 S R 26 E WC ¼ S 3 S 10 1915 from which A cedar, 12 ins. dia., bears N. 46°30' W., 68 lks. dist. mkd. ¼ S 3 BT WC A cedar, 14 ins. dia., bears S. 3°30' W., 79 lks. dist. mkd. ¼ S 10 B T WC Corner falls on E. edge of mesa. June 14: At this point at apparent noon I set off 23°15' N. on the decl. arc, and observe the sun on the meridian; the resulting lat. is 37°32'.
39.50	Leave mesa and heavy cedar timber bearing NE. and SW. Descend abruptly over high ledges and rim rocks with huge broken boulders.
40.00	Point for ¼ cor. falls on impossible ground. Cor. not set.
41.50	Descend over vertical cliff, 50 ft. high, bearing NE. and SW.
50.00	Foot of steep descent bearing NE. and SW. Thence enter cedar timber and sagebrush undergrowth; descending rapidly over huge boulders and rough rocky land.

Chains	
72.20	Intersect Utah Colorado Bouldary Line 1.90 chs. N.0° 48'E. of the 35th M.C. At intersection Set an iron post, 3 ft. long, 2 ins. in dia., 26 ins. in the ground for CC to secs. 3 and 10, mkd. on brass cap T 38 S R 26 E S 3 c | S 10 c | 35 M U S C 1915 from which A cedar, 10 ins. dia., bears N.8°W., 134 lks. dist. mkd. T 38 S R 26 E S 3 BT CC WC A cedar, 10 ins. dia., bears S.22°W., 18 lks. dist. mkd. T 38 S R 26 E S 10 BT CC WC Land, W. half mile on level mesa; E. of ¼ cor. is very rock rough ledge and rim rock sloping SE. Soil on mesa red sand 6 ins. deep on sandstone subsoil, 2nd rate; on slopes rocky 4th rate. Timber cedar. Undergrowth sagebrush.
	N.0°02'E. on random line bet. secs. 3 and 4.
40.00	Set temp. ¼ sec. cor.
79.89	Intersect N. bdy. of Tp. 21 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 rolling mesa sloping gently S. through heavy cedar and pinon timber and scattering sagebrush undergrowth.
25.00	Draw, 10 ft. below cor. drains SW.
39.89	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground for the ¼ sec. cor. mkd. on brass cap ¼ S 4 | S 3 1915 from which

SUBDIVISION OF T.38 S., R.26 E.

Chains.	
	A pinon pine, 6 ins.dia., bears S.44° 30'E.64 lks. dist., marked ½ S 4 B T
	A cedar, 10 ins.dia., bears N.61° E. 38 lks.dist. marked ½ S 3 B T
43.00	Draw, 10 ft.deep, drains SW.
47.50	Wash, 15 ft.deep, drains SW.
50.00	Leave cedar timber; enter fire killed timber, bearing E. and W.
65.00	Leave fire killed timber, bearing E.and W. Enter live cedars.
79.89	The cor.of secs.3,4,9, and 10.
	Land, rolling mesa, sloping slightly SW.
	Soil, red sandy loam, shallow, from bare rock to 2 ft. deep, on solid sandstone; 2d rate.
	Timber, cedar.
	Undergrowth, scattering sagebrush.
	June 14, 1915.

BOUNDARIES OF T.38 S., R.26 E.

Latitudes, Departures, and Closing Errors.

Lines Designated	True Bearing	Dist.	Latitudes		Departures.	
		chs.	N. chs.	S. chs.	E. chs.	W. chs.
South Boundary	West	304.80	.....	.....	.....	304.80
West Boundary	North	480.00	480.00	.....	.....	.....
North Boundary	East	313.66	.....	.....	313.66	.....
From 00 to 36th mile cor.	S.1°04'W.	2.56	.....	2.56	.....	.05
36 to 35 mi.cor.	S.0°45'W.	79.25	.....	79.24	.....	1.11
35 to 33 mi.cor.	S.1°12'W.	158.78	.....	158.74	.....	3.33
33 to 32 mi.cor.	S.1°02'W.	79.79	.....	79.77	.....	1.44
32 to 31 mi.cor.	S.1°06'W.	79.23	.....	79.21	.....	1.53
31 to 30 mi.cor.	S.1° 09'W.	79.36	.....	79.34	.....	1.59
30 to 00, S.bdy.Tp.	S.1°09'W.	.74	.....	.74	.....	.02
Convergency						.36
Totals			480.00	479.60	313.02	313.87
Error in lat and dep.			479.60		313.87	
			.40		.15	

GENERAL DESCRIPTION T.38 S., R.26 E.

The topography of this township is generally typical of mesa formations, the features of which are long flat-topped mesas, breaking off abruptly into deep canyons.

The general drainage is southwest. Squaw Canyon, draining SW., through the western portion; and Cross Canyon draining SW. and W., in the southeastern portion, being the two main canyons traversing the township. A high mesa, from one-half to one and one-half miles wide and five miles long, separates the canyons. Numerous rocky side canyons and gulches lead into the main canyons.

The mesa tops are flat, with top soil of shallow, red, sandyloam, loose and friable; generally only a few inches to two feet deep, underlaid with solid sandstone bed rock. The slopes are, without exception, very rough and rocky, supporting no soil, but having huge boulders, some reaching fifty feet across, strewn thickly over the surface; they having been broken from the rims of the mesas above.

In the upper portion of Squaw Canyon a little water runs intermittently; good for drinking; but probably dries up about the beginning of August. In the north half of the township moist looking places under ledges and near canyon bottoms, may be dug out developing small springs; but water is very scarce in the township.

Scattering growth of cedar timber occurs generally throughout the township; becoming gradually more dense to the north. A scant growth of sagebrush is found in the township; but the grazing is very poor.

Several prehistoric ruins were found in the township the best defined being on line between secs. 9 and 16. Almost every crevice in ledges showed evidence of old buildings.

There are no settlers in the township.

GENERAL DESCRIPTION T. 38 S., R. 26 E.

In section 31 a rude reservoir has been made in the bottom of Cross Canyon, which is about 100 ft. in diameter, used to water stock from catch water. This reservoir dried up in the latter part of June.

In the NW¼ NW¼ of sec. 30 is a rock cabin with corral near by, evidently used by sheep herders in the winter.

There are no other improvements in the township.

Thos. C. Eathbone

U. S. Transitman.

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BOOK A-416

CERTIFICATE OF ASSISTANTS.

We, the undersigned, hereby certify upon honor that we assisted, to the best of our skill and ability, Thomas C. Rathbone, U. S. ~~Surveyor~~ Transitman, during the periods and in the capacities stated opposite our several signatures, in ~~surveying~~ retracing all those parts or portions of the Utah-Colorado Bdy. between the 29th. and 37th. Mile Corners, and surveying all those parts or portions of the west and north boundaries and the subdivision of T. 38 S., R. 26 E.,

of the Salt Lake Base and Meridian, in the State of Utah 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.	
Barnum B. Packard	May 22, 1915	June 14, 1915	H.Chainman
J. Glenn Harris	May 22, 1915	June 14, 1915	R.Chainman
Reuben Lockett	May 22, 1915	June 14, 1915	Flagman
Timothy Jones	May 22, 1915	June 14, 1915	Axeman
Earl Dillenger	May 27, 1915	June 14, 1915	Cornerman

Subscribed and certified to before me on the dates of the final service as shown above.

Thos. C. Rathbone

U. S. ~~Surveyor~~ Transitman

6—2761

FINAL OATH OF UNITED STATES SURVEYOR.

I, Thos. C. Rathbone, Transitman, U. S. ~~Surveyor~~, do solemnly swear that, in pursuan
of special instructions received from the U. S. Surveyor General for Utah
bearing date of the 6th day of May, 1914, I have well, faithfully, and trul
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~~ retraced all those parts or portions of the
Utah-Colorado Bdy. bet. the 29th. and 37th mile cors., and
surveyed the West and North Bdrs. and Subdivision of T. 38 S.,
R. 26 E.,

of the Salt Lake
Base and Meridian, in the State of Utah, 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 accor
ance with the Manual of Surveying Instructions, and the special written instructions of the U. S. Survey
General for Utah and in the specific manner described in the field notes, and th
the foregoing are the original field notes of such survey.

Thos. C. Rathbone,
~~U. S. Surveyor.~~
U.S.Transitme

Subscribed by said Thos. C. Rathbone, and sworn to before me
this 22d day of May, 1916

SEAL

U. S. Surveyor General, Ut

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,
Salt Lake City, Utah, July 11, 1916

The foregoing field notes of the ~~survey of~~ retracement of the Utah-Colorado
boundary between the 29th and 37th mile corners; and survey of the
subdivision of Township No. 38 South, Range No. 26 East, of the
Salt Lake Base and Meridian, Utah,

executed by Thomas C. Rathbone
under his special instructions dated May 6, 1914, having been
critically examined, and the necessary corrections and explanations made, the said field notes, and the
retracements and
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.

6—2761

U. S. Surveyor General.

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Page

4—679 Filed Sept. 23, 1915.

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BOOK A-416

Field Notes

OF THE ~~SURVEY OF THE~~

RETRACEMENT OF THE UTAH-COLORADO BOUNDARY

FROM THE 36TH TO THE 42ND MILE CORNERS

AND

SURVEY OF THE SUBDIVISION

OF

TOWNSHIP 37 SOUTH, RANGE 26 EAST

Of the Salt Lake Base and *Meridian,*

In the State of Utah

EXECUTED BY

THOMAS C. RATHBONE

In the capacity of U. S. ~~*Surveyor*~~ Transitman *under instructions dated* May 6, *1914, issued by the United States Surveyor General to govern surveys included in Group No.* 31, *which were approved by the Commissioner of the General Land Office,* May 29, *1914., pursuant to authority contained in the Act of Congress dated* ....., *191...*

Survey commenced June 16, *1915*

Survey completed July 1, *1915*

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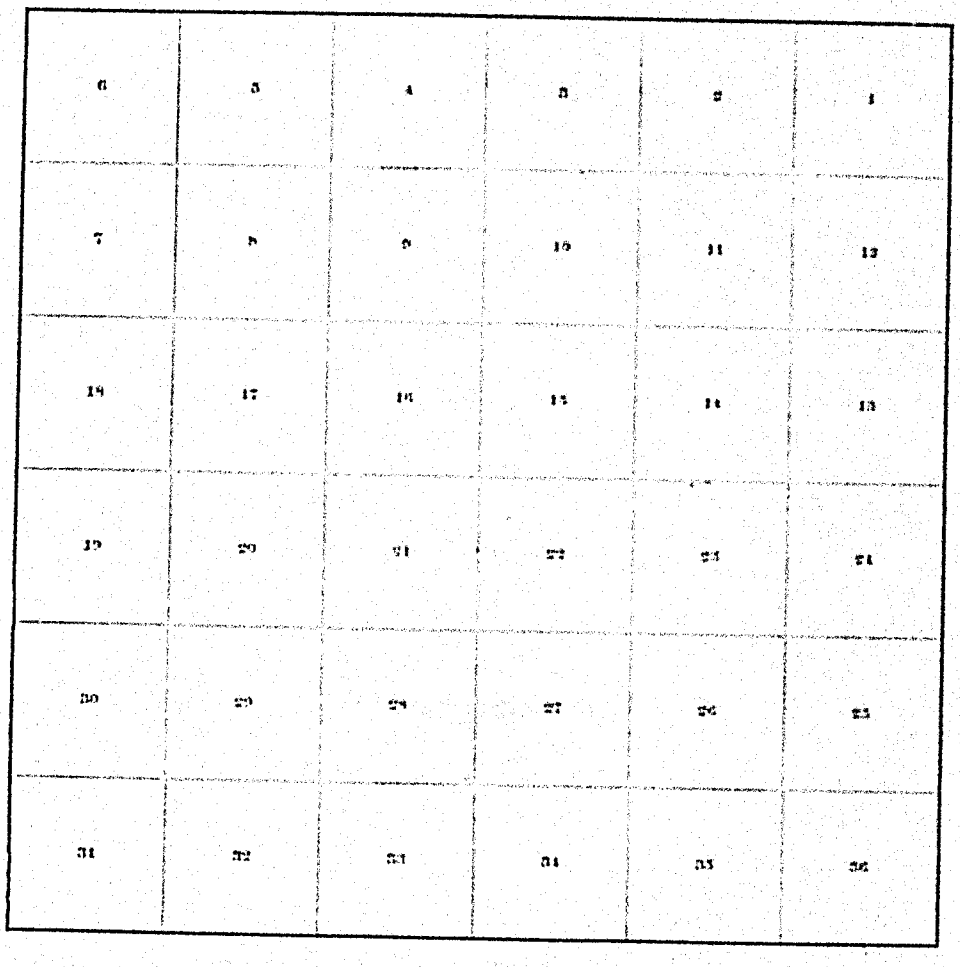
INDEX DIAGRAM.

Township 37 South, *Range* 26 East



6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

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UTAH-COLORADO BOUNDARY

Survey commenced June 12, 1915, and executed with a Young & Sons light mountain transit, No. 7192, with Smith solar attachment. The horizontal limb is provided with two double verniers placed opposite to each other reading to single minutes of arc, which is also the least count of the verniers of the latitude and declination arcs.

Clinometers, reading to ½ degrees, and five-chain steel tapes were used in all measurements.

Instruments were approved May 7, 1915.

G. D. D. Kirkpatrick, Assistant Supervisor of Surveys for the district of Utah.

June 19, 1915: I examine the adjustments of the transit and find the level and collimation in adjustment; then, to test the solar apparatus, by comparing its indications, resulting from solar observations made during a.m. and p.m. hours, with a meridian determined by observations on Polaris, I proceed as follows:

At my camp in the N. half of sec. 21, T. 37 S., R. 26 E. longitude 109°07½'W., latitude 37°35½'N., I set off 23°20'E. on the decl. arc., 37°35½'N. on the lat. arc, and at 5h 00m p.m., l.m.t., determine with the solar a meridian and mark a point thereof, by a tally pin driven in a stump, about 15 chs. N. of my station.

June 19, 1915.

June 20, 1915: At 1h 43½m a.m., l.m.t., I observe Polaris at eastern elongation, in accordance with Manual of Instructions, and mark a point in the line thus determined, by a tally pin driven in the ground, about 15 chs. N. of my station.

At 6 a.m., l.m.t., I lay off the azimuth of Polaris, 1°27' to the west; the meridian thus determined falls directly on the mark determined by the solar.

At 8 a.m., app. time, I set off 37°35½' on the lat. arc; 23°27'E. on the decl. arc; and determine a

meridian with the solar; this meridian falls practically on the meridian established by the Polaris observation.

At app. noon I set off 23°27'N.on the decl. arc, and observe the sun on the meridian; the resulting lat. is 37°35½'; therefore, I conclude that the adjustments of the instrument are satisfactory.

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

June 20, 1915.

37th Mile.

June 12, 1915:

From the 36th mile corner on the Utah-Colorado bdy. line, heretofore described, I run

N.1°00'E., on a retracement line,

Over rolling mesa, following well blazed line, through cedars and scrub sage.

73.50 Leave mesa, bears N.15°E. and S.15°W.

Desc. over ledges and sandstone breaks, sloping NW.

80.00 No trace of the rock in place reported marked for 37th mile cor. Set temp. point.

June 18, 1915: I return to the temp. point above described, and at a point 24 lks. S. and 10 lks. E. I Set a sandstone 12 x 8 x 8 ins., 6 ins. in the ground, mkd. U 37 M P on W. face, and raise a mound of stone, making the mile now read N.1°04'E. 79.76 chs. to 37th mile post.

38th Mile.

June 18, 1915: For solar observation see line bet. secs. 33 and 34.

From the temp. point for the 37th mile cor.,
I continue

N.1°00'E., on a random line,

Over rough mountainous land and sandstone breaks, facing NW.

38.00 Gulch, drains SW.

52.00 Desc. over ledges and spurs, bearing NW. and SE., into canyon.

71.50 Wash in bottom of canyon (dry) S.80°W. 230 ft. below temp. 37th mile cor.

79.52 Fall 19 lks. W. of mound of stone, from which
A. cedar 12 ins. dia. bears S.15°E., 12 lks. dist., mkd. U 38 M on W. and C 1885 on NE.

The true course from the 36th to the 38th M.C. is therefore N.1°04'E., and the miles are 79.76 chs.

39th Mile.

June 24, 1915: At 7 a.m., app. time, I set off 37°34½' on the lat. arc; 23°27'N. on the decl. arc; and determine a meridian with the solar at the 38th mile cor.

Thence

N.1°00'E., on a random retracement line,

Over rough mountainous land, ascending through cedars.

40.00 Thence along slope facing W. on E. side of gulch bearing N. and S.

58.00 Gulch, bears S.15°W.

62.00 Top of rim rock, 100 ft. above gulch; thence over broken mesa.

78.09 Fall 55 lks. E. of the 39th mile post, which is a sandstone 17 x 14 x 12 ins., lying loose on the ground, mkd. U 1885 39 M on one side and C on the other.
No accessories.

The true course of this mile is therefore N.0°36'E.

and the distance 78.09 chs.

40th Mile.

From the 39th mile cor.

North, on a retracement line,

Over broken mesa, ascending through cedars.

5.00 Spur, projects. W.

9.00 Descend over broken spurs projecting W. and huge boulders to canyon bottom.

35.00 Bottom of canyon, 180 ft. below rim; course NW.

48.00 Ascend abruptly over rim rock bearing NW. and SE., thence over broken table land 200 ft. above canyon; ascend.

50.00 June 24, 1915: At this point I set off 23°26'N. on the decl. arc; and, at app. noon, observe the sun on the meridian; the resulting lat. is 37°36'.

71.00 Top of ridge on mesa, bears N.75°E. and S.75°W.

75.50 Edge of mesa, bears N.45°W. and S.45°E.; desc. over rim.

77.90 Fall 165 lks. E. of the 40th mile cor., which is a sandstone 14 x 8 x 5, in a mound of stone, firmly set, mkd. U 40 M on W., 1885 on N., and C on E., with trace of pits.

The true course of this mile is therefore N.1°13'W. and the distance 77.92 chs.

41st Mile.

From the 40th mile cor. I run

North, on a retracement line,

Over rough mountainous land, descending through cedars, over slope NW. into Squaw Canyon. Descend rapidly.

9.00 Ruins on line.

60.00 Squaw Creek, 6 lks. wide, 6 ins. deep, in gravel bottom in gulch, 4 ft. banks, 400 ft. below 40th mile cor.

bearing S.60°W. and N.60°E. Good water, but it disappears and reappears intermittently along the canyon.
Ascend.

74.00 Top of spur 80 ft. high, projects SE. 5 chs.
Descend into gulch.

79.03 Fall 21 lks. E. of the 41st mile cor., which is a cedar tree 10 ins. diam., blazed and mkd. U 41 M C and 85 on one blaze. Mound of stone is 6 ft. east of tree. Cor. stands on S. side of gulch, about 12 ft. above bottom and 50 ft. below top of spur.
The true course of this mile is therefore N.0°09'W. and the distance 79.03 chs.

42nd Mile.

From the 41st mile cor. I run
North, on a retracement line,
Over mountainous land, descending into gulch, through cedar timber.

0.50 Gulch, 12 ft. below cor., drains S.80°E. and runs into Squaw Canyon after 8 chs.
Ascend.

6.00 Top of steep ascent 70 ft. above gulch, bearing E. and W.; thence ascend gradually over rough bench land.

40.00 Cease work for the day.

June 24, 1915.

July 2, 1915: At 7 a.m., app. time, I set off 37°37' on the lat. arc; 23°07'N. on the decl. arc; and determine a meridian with the solar at this ½ sec. cor.
I Continue north on random line.

53.00 Ascend abruptly.

60.50 Base of vertical ledge 90 ft. high, bears N.45°E. and S.45°W.

63.70 Base of second ledge, 40 ft. high, bears same.

65.20 Top of mesa, 550 ft. above Squaw Canyon Creek; thence

over mesa, through cedars. Well blazed line.

81.16 Fall 33 lks. W. of the 42nd mile cor., which is evidenced by a trace of a mound of earth and pits, from which

A cedar tree 10 ins. diam. bears due west, 10 lks. dist., blazed and scribed U C 42 M 85.

I build a mound of stone, 2 ft. base, 1½ ft. high, cone shaped, over the remains of mound.

The course of this mile is therefore N.0°14'E. and the distance 81.16 chs.

From the 43nd mile cor. the 43rd mile cor., a cedar post in a mound of stone in center of chopped line, is visible and bears N.0°07'E.

SUBDIVISION T. 37 S., R. 26 E.

Chains	
	Survey commenced June 16, 1915, and executed with the instrument described in the notes of the survey of the Utah-Colorado boundary line, where test of instrument is also given.
	June 16, 1915: At 7 a.m., apparent time, I set off 37°33' on the lat. arc; 23°21'E. 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
	N.0°01'E., on a true line bet. secs. 31 and 32,
	over rough mountainous land, ascending over broken ledges and boulders, through scattering cedar, sagebrush and pinon pine.
23.20	Vertical ledge, 75 ft. high, bears E.&W.
26.00	Top of mesa; thence enter dense cedars, 180 ft. above cor.
40.00	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., mkd. on brass cap ¼ S 31 | S 32 1915
	from which
	A cedar 10 ins. in diam. bears S.41°E., 66 lks. dist., mkd. ¼ S 32 B T.
	A cedar 7 ins. in diam. bears S.21½°W., 60 lks. dist., mkd. ¼ S 31 B T.
47.00	Leave mesa, bearing N.20°W. and S.20°E.
	Descend over riverock, ledges and boulders.
66.00	Descend vertical ledge, 90 ft. high, bearing NW. and SE.
	Thence along broken E. face of mesa, sloping E.; over small gulches draining E.
80.00	Set an iron post, 3 ft. long, 2 ins. in diam., 26 ins. in the ground, for cor. of secs. 29, 30, 31 and 32, mkd. on brass cap

SUBDIVISION T. 37 S., R. 26 E.

Chains

T 37 S	R 26 E
S 30	S 29
S 31	S 32

1915

from which

A cedar 5 ins. in diam. bears N.44°E., 97 lks., dist., mkd. T 37 S R 26 E S 29 B T.

A cedar 8 ins. in diam. bears S.62°E., 37 lks. dist., mkd. T 37 S R 26 E S 32 B T.

A cedar 12 ins. in diam. bears S.43°W., 63 lks. dist., mkd. T 37 S R 26 E S 31 B T.

A cedar 6 ins. in diam. bears N.42°W., 35 lks. dist., mkd. T 37 S R 26 E S 30 B T.

Cor. falls in head of gulch draining SE., 150 ft. below rim of mesa.

Land, rough mountainous; S. and E. slopes ledgy and rocky.

Soil, rocky, 4th rate.

Timber, cedar and pinon pine.

Undergrowth, scattering sagebrush.

From the cor. of secs. 29, 30, 31 and 32, I run ..W., on a random line bet. secs. 30 and 31.

40.00 Set temp. ¼ sec. cor.

80.22 Fall 28 lks. S. of the cor. of secs. 25, 30, 31 and 36, heretofore described, on W. bdy. of Tp.

Thence

S.89°48'E., on a true line bet. secs. 30 and 31, Over mesa land, through cedar and pinon pine and scattering sagebrush.

20.00 Descend from mesa, bearing NE. and SW., into wide gulch.

31.00 Wash in bottom of wide gulch, 80 ft. deep, draining SW.

38.00 Top of mesa, 80 ft. above bottom of gulch; bears NE. and SW.

Continue over mesa.

SUBDIVISION T. 37 S., R. 26 E.

Chains	
40.11	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in a mound of stone, 3 ft. base, on solid rock, for ¼ sec. cor., mkd. on brass cap ¼ S 30 S 31 1915 I mark a cross (+) at exact cor. point on solid rock under pipe, from which A cedar 14 ins. in diam. bears N.36°W., 25 lks. dist., mkd. ¼ S 30 B T. A cedar 12 ins. in diam. bears S.41°E., 50 lks. dist., mkd. ¼ S. 31 B T.
61.00	Leave mesa, bearing N.20°E. and S.20°W. Descend over ledges and rimrock.
80.22	The cor. of secs. 29, 30, 31 and 32, 200 ft. below rim of mesa. June 16, 1915: At this cor. I set off 23°20'N. on the decl. arc; and at app. noon observe the sun on the meridian; the resulting lat. is 37°34'. Land: Mesa, broken and flat, draining SW.; red sand soil. On slopes, rocky and ledgy, facing E.; soil, rocky, 4th rate. Timber, cedar and pinon. Undergrowth, scattering sagebrush.
	From the cor. of secs. 29, 30, 31 and 32, I run N.0°01'E., bet. secs. 29 and 30. Ascending over rough mountainous land along E. slope of breaks from high mesa, through cedars and scattering pinon pine, over series of spurs and gulches, draining E. from rocky E. slope of breaks.
40.00	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., mkd. on brass cap ¼ S 30 | S 29 1915 from which

SUBDIVISION T. 37 S., R. 26 E.

Chains

A cedar 6 ins. in diam. bears N.34½°E., 70 lks. dist., mkd. ½ S 29 B T.

A cedar 12 ins. in diam. bears N.16½°W., 20 lks. dist., mkd. ½ S 30 B T.

Cor. on W. side of gulch draining SE.

Ascend from gulch.

59.00 Ascend abruptly toward rim of mesa, bearing N.60°E. and S.60°W., over ledges.

63.50 Top of abrupt ascent.

Thence over broken bench land.

80.00 Set an iron post, 3 ft. long, 2 ins. in diam., 26 ins. in the ground, for cor. of secs. 19, 20, 29 and 30; mkd. on brass cap

T 37 S	R 26 E
S 19	S 20
S 30	S 29

1915

from which

A cedar 6 ins. in diam. bears N.42°E., 56 lks. dist., mkd. T 37 S R 26 E S 20 B T.

A cedar 8 ins. in diam. bears S.39°E., 63 lks. dist., mkd. T 37 S R 26 E S 29 B T.

A cedar 9 ins. in diam. bears S.19½°W., 34 lks. dist., mkd. T 37 S R 26 E S 30 B T.

A cedar 7 ins. in diam. bears N.67½°W., 13 lks. dist., mkd. T 37 S R 26 E S 19 B T.

Land, rough mountainous; rocky ledges on E. side of breaks from mesa.

Soil, rocky, 4th rate.

Timber, cedar and pinon pine.

Undergrowth, scattering sagebrush.

N.89°48'W., on a random line bet. secs. 19 and 30.

40.00 Set temp. ¼ sec. cor.

80.01 Fall 30 lks. N. of the cor. of secs. 19, 24, 25 and 30,

SUBDIVISION T. 37 S., R. 26 E.

Chains	
	heretofore described, on W. bdy. of Tp.
	Thence
	N.89°59'E., on a true line bet. secs. 19 and 30,
	Over rough mountainous land, ascending abruptly up gulch out of main canyon, over ledges to mesa, through cedar and pinon pine.
20.00	Rim of mesa 200 ft. above cor. bears N.15°E. and S.15°W. One ch. south mesa rim bends due west 10 chs., thence S.30°W.
28.50	Indian burial place 1 ch. N.
40.00½	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., mkd. on brass cap.
	¼ S 19
	S 30
	1915
	from which
	A cedar 9 ins. in diam. bears N.42°E., 42 lks. dist., mkd. ¼ S 19 B T.
	A cedar 7 ins. in diam. bears S.26½°E., 27 lks. dist., mkd. ¼ S 30 B T.
	Continue over mesa.
77.50	Leave mesa, bearing N.20°E. and S.20°W.
	Descend over rimrock ledges.
80.01	The cor. of secs. 19, 20, 29 and 30, 180 ft. below rim of mesa.
	Land: On mesa, level; on slopes, ledgy and rocky.
	Soil: On mesa, red sand, shallow, 2nd rate; on E. slope, rocky, 4th rate.
	Timber, cedar and pinon pine.
	Undergrowth, sagebrush.
	June 16, 1915.

June 22, 1915: At 7 a.m app. time, I set off 37°35' on the lat. arc; 23°28'N. on the decl. arc; and de-

Chains	
	termine a meridian with the solar at the cor. of secs. 19, 20, 29 and 30.
	Thence
	N.0°01'E., bet. secs. 19 and 20,
	Over rough mountainous land, along E. slope of mesa rim, over boulders, through cedars, pinon pine and sagebrush.
	Ascend to mesa rim.
8.00	Top of ascent, 80 ft. above cor.
	Thence along broken east rim of mesa.
30.00	Descend along broken rim of mesa.
40.00	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., mkd. on brass cap ¼ S 19 | S 20 1915 from which A pinon 15 ins. in diam. bears N.4°E., 6 lks. dist., mkd. ¼ S 19 B T. A pinon 10 ins. in diam. bears S.36°W., 29 lks. dist., mkd. ¼ S 20 B T. Cor. stands on SW. end of a vertical ledge bearing NE. and SW., which is the head of a deep gulch draining SE. from ledge.
44.00	Draw, drains SE. over ledge.
	Ascend gradually over mesa.
80.00.	Set an iron post, 3 ft. long, 2 ins. in diam., 26 ins. in the ground, for cor. of secs. 17, 18, 19 and 20, mkd. on brass cap T 37 S | R 26 E S 18 | S 17 S 19 | S 20 1915 from which A cedar 14 ins. in diam. bears N.21°E., 28 lks. dist., mkd. T. 37 S R 26 E S. 17 B T. A cedar 10 ins. in diam. bears S.77°E., 41 lks.

SUBDIVISION T. 37 S., R. 26 E.

Chains	
	dist., mkd. T 37 S.R 26.E S 20 B T.
	A cedar 10 ins. in diam. bears S.31½°W., 37 lks. dist., mkd. T 37 S R 26 E S 19 B T.
	A cedar 12 ins. in diam. bears N.37°W., 43 lks. dist., mkd. T 37 S R 26 E S 18 B T.
	Land: S. half of mile, rocky and mountainous, sloping E.; N. half of mile, mesa.
	Soil: S. half mile, rocky, 4th rate; N. half mile, red sand, shallow, 2nd rate.
	Timber, Cedar and pinon pine.
	Undergrowth, sagebrush.
	S.89°59'W., on a random line bet. secs. 18 and 19.
40.00	Set temp. ¼ sec. cor.
80.15	Fall 14 lks. N. of the cor. of secs. 13, 18, 19 and 24, heretofore described, on W. bdy. of Tp.
	Thence
	N.89°53'E., on a true line bet. secs. 18 and 19,
	Over mesa land, through cedars and pinon pine.
8.00	Descend into draw.
15.00	Gulch in draw, draining S., 70 ft. below mesa.
	Ascend along SW. slope of broken mesa.
	June 22, 1915: At this point I set off 23°27'N. on the decl. arc; and at app. noon observe the sun on the meridian; the resulting lat. is 37°35'.
40.07½	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., mkd. on brass cap.
	¼ S 18
	S 19
	1915
	from which
	A cedar 10 ins. in diam. bears N.25°W., 10 lks. dist., mkd. ¼ S 18 B T.
	A cedar 10 ins. in diam. bears S.9½°W., 42 lks. dist., mkd. ¼ S 19 B T.
	Descend.

SUBDIVISION T. 37 S., R. 26 E.

Chains	
49.00	Draw, draining S.45°W., 50 ft. below ¼ cor.
51.00	Road, wagon trail, bears S.80°W. and N.80°E.
53.50	Gulch, 50 ft. below cor., drains S.80°W.
	Ascend to rim of mesa.
75.00	Broken rim of mesa, bears NE. and SW.; thence over level land.
80.15	The cor. of secs. 17, 18, 19 and 20.
	Land, broken mesa, draining SW.
	Soil, red sandy, shallow, on sandrock, 2nd rate.
	Timber, cedar and pinon pine.
	Undergrowth, sagebrush.
	N.0°01'E., bet. secs. 17 and 18,
	Over rolling mesa, descending to draw, through cedars, pinon pine and scattering sagebrush.
4.50	Gulch, 20 ft. below cor., drains W.
40.00	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., mkd. on brass cap ¼ S 18 | S 17. 1915. from which A cedar 8 ins. in diam. bears S.61°E., 29 lks. dist., mkd. ¼ S 17 B T. A cedar 8 ins. in diam. bears S.40½°W., 22 lks. dist., mkd. ¼ S 18 B T.
62.00	Road, wagon trail, bears N.30°E. and S.30°W.
80.00	Set an iron post, 3 ft. long, 2 ins. in diam., 12 ins. in the ground to rock and 12 ins. in a mound of stone 2 ft. base, for cor. of secs. 7, 8, 17 and 18, mkd. on brass cap T 37 S | R 26 E S 7 | S 8 S 18 | S 17 1915 from which

SUBDIVISION T. 37 S., R. 26 E.

Chains	
	A cedar 6 ins. in diam. bears N.69°E., 19 lks. dist., mkd. T 37 S R 26 E S 8 B T.
	A cedar 6 ins. in diam. bears S.45°E., 14 lks. dist., mkd. T 37 S R 26 E S 17 B T.
	A cedar 8 ins. in diam. bears S.19½°W., 25 lks. dist., mkd. T 37 S R 26 E S 18 B T.
	A cedar 7 ins. in diam. bears N.24°W., 42 lks. dist., mkd. T 37 S R 26 E S 7 B T.
	Land, uneven mesa.
	Soil, red sand, 2nd rate.
	Timber, cedar and scattering pinon pine.
	Undergrowth, scattering sagebrush.
	June 22, 1915.
	June 26, 1915: At 7 a.m. app. time I set off 37°36' on the lat. arc; 23°25'W. on the decl. arc; and determine a meridian with the solar at the cor. of secs. 7, 8, 17 and 18.
	Thence
	S.89°53'W., on a random line bet. secs. 7 and 18.
40.00	Set temp. ¼ sec. cor.
79.92	Fall 21 lks. S. of the cor. of secs. 7, 12, 13 and 18, heretofore described, on W. bdy. of Tp.
	Thence
	S.89°58'E., on a true line bet. secs. 7 and 18,
	Over mesa, ascending from cor. to mesa through cedars.
1.00	Mesa top, 10 ft. above cor., bears NE. and SW.
	Thence over level land.
39.96	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., mkd. on brass cap
	¼ S 7
	S 18
	1915
	from which

SUBDIVISION T. 37 S., R. 26 E.

Chains	
	A cedar 8 ins. in diam. bears N.23°W., 50 lks. dist., mkd. ¼ S 7 B T.
	A cedar 10 ins. in diam. bears S.2°W., 75 lks. dist., mkd. ¼ S 18 B T.
52.00	Descend from mesa into ravine.
59.50	Wash, in bottom of ravine, course S., 110 ft. deep. Ascend to mesa.
77.00	Mesa top, 100 ft. above ravine.
79.92	The cor. of secs. 7, 8, 17 and 18.
	Land, uneven mesa with gradual slope to the S.
	Soil, red sand, 2nd rate.
	Timber, cedar and scattering pinon pine.
	Undergrowth, sagebrush.

N.0°01'E., bet. secs. 7 and 8,

Over uneven mesa, sloping S., through cedars, scattering pinon pine and scattering sagebrush.

26.00	Gulch, 40 ft. below cor., drains W.
40.00	Set an iron post, 3 ft. long, 1 in. in diam., 8 ins. in earth to bedrock and 16 ins. in a mound of stone 2 ft. base, for ¼ sec. cor, mkd. on brass cap ¼ S 7 | S 8 1915 from which
	A pinon 6 ins. in diam. bears S.5½°E., 21 lks. dist., mkd. ¼ S 8 B T.
	A pinon 9 ins. in diam. bears West, 5 lks. dist., mkd. ¼ S 7 B T.
	June 26, 1915: At this cor. I set off 23°23'N. on the decl. arc; and at app. noon observe the sun on the meridian; the resulting lat. is 37°37'.
80.00	Set an iron post, 3 ft. long, 2 ins. in diam., 26 ins. in the ground, for cor. of secs. 5, 6, 7 and 8, mkd. on brass cap

SUBDIVISION T. 37 S., R. 26 E.

Chains

T 37 S | R 26 E
S 6 | S 5
S 7 | S 8

1915

from which

A cedar 14 ins. in diam. bears N.32½°E., 21 lks. dist., mkd. T 37 S R 26 E S 5 B T.

A pinon 9 ins. in diam. bears S.63°E., 56 lks. dist., mkd. T 37 S R 26 E S 8 B T.

A pinon 7 ins. in diam. bears S.15½°W., 57 lks. dist., mkd. T 37 S R 26 E S 7 B T.

A cedar 6 ins. in diam. bears N.48°W., 59 lks. dist., mkd. T 37 S R 26 E S 6 B T.

Land, mesa with gradual slope to the SW.

Soil, shallow red sand on rock, 2nd rate.

Timber, cedar and pinon pine.

Undergrowth, scattering sagebrush.

N.89°58'W., on a random line bet. secs. 6 and 7.

40.00 Set temp. ¼ sec. cor.

80.17 Fall 14 lks. S. of the cor. of secs. 1, 6, 7 and 12, heretofore described, on W. bdy. of Tp.

Thence

S.89°52'E., on a true line bet. secs. 6 and 7,

Over mesa land, gradually sloping to the S., through dense cedars, pinon pine and scattering sagebrush.

33.30 Old ruins on line.

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

¼ S 6
S 7

1915

from which

A cedar 12 ins. in diam. bears N.53½°W., 27 lks. dist., mkd. ¼ S 6 B T.

Chains

A cedar 10 ins. in diam. bears S.52½°E., 14 lks. dist., mkd. ¼ S 7 B T.

72.00 Gulch, 40 ft. below cor., drains SW.

80.17 The cor. of secs. 5, 6, 7 and 8.

Land, mesa, sloping slightly to the S.

Soil, shallow red sand.

Timber, heavy cedars and pinon pine.

Undergrowth, scattering sagebrush.

June 26, 1915.

June 30, 1915: For solar observation see line bet. secs. 8 and 9.

N.0°01'E., on a random line bet. secs. 5 and 6.

40.00 Set temp. ¼ sec. cor.

80.14 Fall 12 lks. E. of the true point for cor. of secs. 5, 6, 31 and 32, heretofore described on N.bdy. of Tp.

Thence

S.0°04'E., on a true line bet. secs. 5 and 6,

Over mountainous land, ascending abruptly from rimrock to top of mesa, through cedars, pinon pine and scattering sagebrush.

5.00 Top of mesa, bears NE. and SW.

Thence descend very gradually, through dense timber, on mesa.

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

¼ S 6 | S 5

1915

from which

A pinon 9 ins. in diam. bears N.26°E., 53 lks. dist., mkd. ¼ S 5 B T.

A cedar 14 ins. in diam. bears S.22°W., 17 lks. dist., mkd. ¼ S 6 B T.

Cor. stands in head of draw draining S.25°W., 20 ft. deep.

SUBDIVISION T. 37 S., R. 26 E.

Chains	
0	Continue over mesa.
80.14	The cor. of secs. 5, 6, 7 and 8.
	Land, mesa with gradual slope to the SW.
	Soil, shallow red sand.
	Timber, cedar and pinon pine.
	Undergrowth, scattering sagebrush.
	June 30, 1915.

June 17, 1915: At 8 a.m., app. time, I set off 37°33' on the lat. arc; 23°23'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

N.0°01'E., bet. secs. 32 and 33,

Over mountainous land, descending into side of canyon, through scattering cedar and sagebrush.

4.30	Descend abruptly.
8.00	Bottom of canyon, 70 ft. below cor., drains S.50°W.
	Ascend.
12.00	Ascend abruptly over huge boulders.
17.00	Top of abrupt ascent; thence ascend less abruptly.
29.00	Spur, 90 ft. above cor., projects W. 5 chs.
	Descend abruptly into Squaw Canyon.
40.00	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., mkd. on brass cap

¼ S 32 | S 33

1915

from which

A cedar 12 ins. in diam. bears East, 56 lks. dist., mkd. ¼ S 33 B T.

A cedar 9 ins. in diam. bears S.6°W., 21 lks. dist., mkd. ¼ S 32 B T.

Cor. stands on slope facing N. on S. bank of Squaw Canyon, 110 ft. below spur.

SUBDIVISION T. 37 S., R. 26 E.

Chains	
40.30	Enter gravel wash in bottom of Squaw Canyon, creek 6 lks. wide, 6 ins. deep, course from N. to W.; then follow up creek bottom.
51.80	Leave creek bottom, course from NW. to S.
58.50	Spur, 50 ft. above creek, projects W. 2 chs. Descend again to
64.00	Squaw Canyon Creek, now dry-wash, 50 lks. wide, drains S.60°W.
	Ascend abruptly.
68.00	Top of ascent, flat spur 50 ft. above cor., projects E. 5 chs.
80.00	Set an iron post, 3 ft. long, 2 ins. in diam., on ledge rock, for cor. of secs. 28, 29, 32 and 33, mkd. on brass cap

T 37 S | R 26 E	
S 29	S 28
S 32	S 33

1915

I mark ledge with a cross (x) under pipe, and build a mound of stone, 3 ft. base, 2½ ft. high, around pipe, from which

A cedar 10 ins. in diam. bears N.45°E., 25 lks. dist., mkd. T 37 S R 26 E S 28 B T.

A cedar 8 ins. in diam. bears S.55½°E., 30 lks. dist., mkd. T 37 S R 26 E S 33 B T.

A cedar 12 ins. in diam. bears S.72½°W., 61 lks. dist., mkd. T 37 S R 26 E S 32 B T.

A cedar 7 ins. in diam. bears N.56½°W., 13 lks. dist., mkd. T 37 S R 26 E S 29 B T.

Cor. stands on NE. slope of spur from ridge to W.

Land, mountainous, rocky NW. and SE. slopes to Squaw Canyon.

Soil, rocky, 4th rate.

Timber, scattering cedar.

Undergrowth, scattering sagebrush.

SUBDIVISION T. 37 S., R. 26 E.

Chains	
	West, on a random line bet. secs. 29 and 32.
40.00	Set temp. ¼ sec. cor.
80.11	Fall 5 lks. N. of the cor. of secs. 29, 30, 31 and 32.
	Thence
	N.89°58'E., on a true line bet. secs. 29 and 32,
	Over rough mountainous land, descending rapidly over rocky E. slope, through boulders, scattering cedars and sagebrush.
27.00	Side Canyon, 170 ft. below cor., drains SE.
	Thence ascend to ridge.
40.05½	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., mkd. on brass cap
	¼ S 29 / S 32 / 1915
	from which
	A cedar 6 ins. diam. bears S.28°45'E., 19 lks. dist., marked ¼ S 32 B T.
	A cedar 9 ins. diam. bears N.81°30'W., 15 lks. dist., marked ¼ S 29 B T.
	Cor. stands on slope facing W., 80 ft. above canyon.
	June 17, 1915: At this cor. I set off 23°23'E. on the decl. arc; and at apparent noon observe the sun on the meridian; the resulting lat. is 37°34'.
51.60	Ridge, 50 ft. above cor., bears N. and S.
	Descend over rough, rocky slope to Squaw Canyon.
80.11	The cor. of secs. 28, 29, 32 and 33, 115 ft. below ridge.
	Land, rough and mountainous with steep E. and W. slopes into canyons draining S.
	Soil, rocky, 4th rate.
	Timber, cedar.
	Undergrowth, scattering sagebrush.
	N.0°01'E., bet. secs. 28 and 29,
	Over rough mountainous land, ascending over broken ridges and gulches coming east from ridge to west.
16.00	Top of ascent, 80 ft. above cor.; spur projects N. 6 chs.

SUBDIVISION T. 37 S., R. 26 E.

Chains

Thence over rocky NE. slope.

33.00 Wash in bottom of canyon, 50 lks. wide, 120 ft. below ridge, course S.65°E.

Ascend abruptly over ledges bearing NW. and SE.

40.00 Set an iron post, 3 ft. long, 1 in. in diam., 8 ins. in earth to bed rock and 16 ins. in a mound of stone 2 ft. base, for ¼ sec. cor., mkd. on brass cap

¼ S 29 | S 28

1915

from which

A cedar 9 ins. diam. bears N.33°E., 36 lks. dist., mkd. ¼ S 28 B T.

A cedar 10 ins. diam. bears N.53°W., 15 lks. dist., mkd. ¼ S 29 B T.

Cor. stands on rocky slope facing SW., 80 ft. above canyon.

Continue ascent to point of mesa.

64.50 Ascend abruptly over ledges to S. point of mesa.

78.50 Top of ascent, bearing NW. and NE., 165 ft. above ¼ sec. cor. Thence over mesa.

80.00 Set an iron post, 3 ft. long, 2 ins. in diam., 26 ins. in the ground, for cor. of secs. 20, 21, 28 and 29, mkd. on brass cap

T 37 S | R 26 E
S 20 | S 21
S 29 | S 28

1915

from which

A cedar 10 ins. in diam. bears N.22°45'E., 48 lks. dist., mkd. T 37 S R 26 E S 21 B T.

A cedar 9 ins. in diam. bears S.52°45'E., 67 lks. dist., mkd. T 37 S R 26 E S 28 B T.

A cedar 12 ins. in diam. bears S.21°15'W., 27 lks. dist., mkd. T 37 S R 26 E S 29 B T.

A cedar 8 ins. in diam. bears N.40°30'W., 32 lks. dist., mkd. T 37 S R 26 E S 20 B T.

Cor. stands on high S. point of mesa.

SUBDIVISION T. 37 S., R. 26 E.

Chains	
	Land, mountainous NE. and SW. rocky slopes.
	Soil, rocky, 4th rate.
	Timber, cedar.
	Undergrowth, scattering sagebrush.
	June 17, 1915.
	June 19, 1915: For solar observation see line bet. secs. 27 and 28.
	S.89°58'W., on a random line bet. secs. 20 and 29.
40.00	Set temp. ¼ sec. cor.
79.79	Intersect N. and S. line 30 lks. S. of the cor. of secs. 19, 20, 29 and 30.
	Thence
	S.89°49'E., on a true line bet. secs. 20 and 29,
	Over rough mountainous land, descending from steep E. slope of mesa, through cedars and pinon pine and scattering sagebrush.
11.50	Descend abruptly.
16.50	Wash in bottom of canyon, 190 ft. below cor., drains S.
	Ascend abruptly to spur of mesa.
34.00	Top of spur of mesa, 210 ft. above canyon, projects S. 10 chs.
	Descend abruptly.
39.89½	Set an iron post, 3 ft. long, 1 in. in diam., 6 ins. in the ground and 20 ins. in a mound of stone 3 ft. base, for ¼ sec. cor., mkd. on brass cap
	¼ S 20
	S 29
	1915
	from which
	A pinon 9 ins. in diam. bears N.32°E., 76 lks. dist., mkd. ¼ S 20 B T.
	A pinon 10 ins. in diam. bears S.24°E., 71 lks. dist., mkd. ¼ S 29 B T.

SUBDIVISION T. 37 S., R. 26 E.

Chains	
	Cor. falls on steep rocky slope facing E., 90 ft. below point of spur.
	June 19, 1915: At this cor. I set off 23°26'N. on the decl. arc; and at app. noon observe the sun on the meridian; the resulting lat. is 37°35'.
	Continue rocky descent.
60.50	Bottom of canyon, 110 ft. below ¼ cor., course S.15°E.
	Ascend abruptly to another spur of mesa, over broken boulders and ledges.
77.50	Top of mesa, bears NW. and SE., 200 ft. above canyon.
	Thence over mesa point.
79.79	The cor. of secs. 20, 21, 28 and 29.
	Land, rough and mountainous; steep ledges on E. and W. slopes from N. and S. spurs of main mesa.
	Soil, rocky, 4th rate.
	Timber, cedar and pinon pine.
	Undergrowth, scattering sagebrush.
	June 23, 1915: At 7 a.m., app. time, I set off 37°35' on the lat. arc; 23°28'N. on the decl. arc; and determine a meridian with the solar at the cor. of secs. 20, 21, 28 and 29.
	Thence
	N.0°01'E., bet. secs. 20 and 21,
	Over broken mesa, ascending gradually through cedars and pinon pine and scattering sagebrush.
40.00	Set an iron post, 3 ft. long, 1 in. in diam., 10 ins. in the ground to bedrock and 16 ins. in a mound of stone 2 ft. base, for ¼ sec. cor., mkd. on brass cap
	¼ S 20 | S 21
	1915.
	from which
	A pinon 6 ins. in diam. bears N.53°E., 35 lks. dist., mkd. ¼ S 21 B T.

SUBDIVISION T. 37 S., R. 26 E.

Chains

A cedar 12 ins. in diam. bears S.83½°W., 19 lks. dist., mkd. ¼ S 20 B T.

44.00 Leave mesa, bearing N.48°W. and S.48°E.

Descend abruptly over rim to rocky slope facing NE.

54.00 Foot of steep descent, bearing NW. and SE.

Thence descend over rough broken spurs and gulches draining E.

80.00 Set an iron post, 3 ft. long, 2 ins. in diam., 26 ins. in the ground, for cor. of secs. 16, 17, 20 and 21, mkd. on brass cap,

T 37 S S 17	R 26 E S 16
S 20	S 21

1915

from which

A cedar 16 ins. in diam. bears N.73½°E., 28 lks. dist., mkd. T 37 S R 26 E S 16 B T.

A pinon 12 ins. in diam. bears S.70°E., 58 lks. dist., mkd. T 37 S R 26 E S 21 B T.

A cedar 14 ins. in diam. bears S.32½°W., 40 lks. dist., mkd. T 37 S R 26 E S 20 B T.

A cedar 15 ins. in diam. bears N.27°W., 41 lks. dist., mkd. T 37 S R 26 E S 17 B T.

Cor. stands on steep rocky E. slope, 220 ft. below rim.

Land: S. ½ of mesa slopes S.; N. ½ steep NE. and E. rocky slopes from rim.

Soil, on mesa, shallow red sand, 2nd rate; on slopes, rocky, 4th rate.

Timber, cedar and pinon pine.

Undergrowth, scattering sagebrush.

N.89°49'W., on a random line bet. secs. 17 and 20

40.00 Set temp. ¼ sec. cor.

80.12 Intersect N. and S. line 26 lks. N. of the cor. of secs. 17, 18, 19 and 20.

Thence

SUBDIVISION T. 37 S., R. 26 E.

Chains	
	East on a true line bet. secs. 17 and 20,
	Over mesa, sloping gradually to the S., through cedars and pinon pine and scattering scrub sagebrush.
11.00	Leave mesa, bearing N. and SE.
	Descend over rocky slope into canyon.
24.00	Bottom of canyon, 150 ft. below mesa, course S.60°E.
	Ascend abruptly.
36.00	Edge of mesa, bearing NW. and SE., 150 ft. above canyon.
	Thence over point or spur of mesa, projecting S. 15 chs.
40.06	Set an iron post 3 ft. long, 1 in. in diam., 6 ins. in earth to solid rock and 20 ins. in a mound of stone 2½ ft. base, for ¼ sec. cor., mkd. on brass cap ¼ S 17 S 20 1915 from which A pinon 6 ins. in diam. bears N.13°W., 88 lks. dist., mkd. ¼ S 17 B T. A pinon 13 ins. in diam. bears S.48°W., 31 lks. dist., mkd. ¼ S 20 B T.
44.00	Leave mesa, bearing N. and S.; descend abruptly over rocky E. slope into canyon.
57.00	Bottom of canyon, 170 ft. below rim, course S.
	Ascend abruptly rocky slope.
66.00	Top of ascent, rim of mesa, bears N. and S., 170 ft. above canyon; thence across narrow neck of spur of main mesa, projecting S. 1 mile.
70.00	Leave mesa, bearing N. and S.
	Descend abruptly over rimrock and ledges to cor.
80.12	The cor. of secs. 16, 17, 20 and 21, 110 ft. below rim.
	June 23, 1915: At this cor. I set off 23°27'N. on the decl. arc; and at app. noon observe the sun on the meridian; the resulting lat. is 37°35'.
	Land, very rough mountainous E. and W. rocky ledgy slopes from long N. and S. spurs of main mesa.

SUBDIVISION T. 37 S., R. 26 E.

Chains	
	Soil, rocky, 4th rate.
	Timber, cedar and pinon pine.
	Undergrowth, scattering sagebrush.
	N.0°01'E., bet. secs. 16 and 17,
	Over rough mountainous land, ascending rapidly, over steep rocky slope facing SE., to mesa rim, through cedars, pinon pine and scrub sagebrush.
4.00	Base of abrupt ascent.
	Thence over a series of spurs and gulches draining to the east.
8.00	Spur, 60 ft. above cor., projects E. 10 chs.
14.50	Gulch, 75 ft. deep, drains SE.
	Thence ascend directly to rim of mesa.
25.50	Top of rimrock, bears N.60°W. and S.60°E., 120 ft. above gulch.
	Thence over mesa.
40.00	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., mkd. on brass cap ¼ S 17 | S 16 1915 from which A pinon 9 ins. in diam. bears N.37°E., 24 lks. dist., mkd. ¼ S 16 B T. A cedar 10 ins. in diam. bears S.72½°W., 30 lks. dist., mkd. ¼ S 17 B T.
70.00	Descend from mesa.
72.00	Gulch, 80 ft. deep, drains S.70°E.
80.00	Set an iron post, 3 ft. long, 2 ins. in diam., 26 ins. in the ground, for cor. of secs. 8, 9, 16 and 17, mkd. on brass cap T 37 S | R 26 E S 8 | S 9 S 17 | S 16 1915

SUBDIVISION T. 37 S., R. 26 E.

Chains	
	from which
	A pinon 9 ins. in diam. bears N.74°E., 8 lks. dist., mkd. T 37 S R 26 E S 9 B T.
	A cedar 14 ins. in diam. bears S.68°E., 13 lks. dist., mkd. T 37 S R 26 E S 16 B T.
	A pinon 8 ins. in diam. bears S.37°W., 22 lks. dist., mkd. T 37 S R 26 E S 17 B T.
	A pinon 6 ins. in diam. bears N.31°W., 85 lks. dist., mkd. T 37 S R 26 E S 8 B T.
	Cor. stands on N. slope, 40 ft. above gulch, on S. side of point of mesa.
	Land: S. 25 chs., rough, ledgy and rocky, sloping to the SE.; N. 55 chs., mesa, draining slightly to the SE.
	Soil: On S. 25 chs., rocky, 4th rate; on N. 55 chs., shallow red mesa soil.
	Timber, pinon pine and cedars.
	Undergrowth, scattering sagebrush.
	West, on a random line bet. secs. 8 and 17.
40.00	Set temp. ¼ sec. cor.
	June 23, 1915.
	June 26, 1915: For solar observation see line bet. secs. 7 and 18.
	From the temp. ¼ sec. cor., I continue W., on a random line.
80.18	Intersect N. aand S. line 7 lks. N. of the cor. of secs. 7, 8, 17 and 18.
	Thence
	N.89°57'E., on a true line bet. secs. 8 and 17,
	Over mesa draining slightly to theSW., through cedars, pinon pine and sagebrush.
8.10	Wagon trail, bears N.20°E. and S.20°W.
40.09	Point for ¼ cor. falls in wash, 10 ft. deep, 10 lks. wide, draining S.30°W.

SUBDIVISION T. 37 S., R. 26 E.

Chains	
40.65	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for witness cor. to ¼ sec. cor., mkd. on brass cap T 37 S R 26 E ¼ S 8 ——— ° WC ¼ S 17 1915. from which A cedar 7 ins. in diam. bears N.51°E., 15 lks. dist., mkd. W C ¼ S 8 B T. A cedar 10 ins. in diam. bears S.17°W., 16 lks. dist., mkd. W C ¼ S 17 B T. Cor. stands 56 lks. E. of true point.
68.00	Leave mesa; descend into head of gulch, bearing N. and S.
73.00	Descend over 5-ft. ledge, bearing N. and S.
80.18	The cor. of secs. 8, 9, 16 and 17, 80 ft. below mesa. Land, broken mesa, draining S. generally. Soil, shallow red sandy loam, 2nd rate. Timber, cedar and pinon pine. Undergrowth, scattering sagebrush.

June 30, 1915: At 8 a.m., app. time, I set off 37°36' on the lat. arc; 23°14'N. on the decl. arc; and determine a meridian with the solar at the cor. of secs. 8, 9, 16 and 17.

Thence

N.0°01'E., bet. secs. 8 and 9,

Over mountainous land, ascending from gulch draining SE., through cedars, pinon pine and sagebrush.

10.00	Spur of mesa, 80 ft. above cor., projects S.80°E., 15 chs. Descend over ledges.
39.10	Gulch, 115 ft. deep, drains N.45°E.
40.00	Set an iron post, 3 ft. long, 1 in. in diam., 12 ins. in earth to rock and 12 ins. in a mound of stone

SUBDIVISION T. 37 S., R. 26 E.

Chains

2 ft. base, for ¼ sec. cor., mkd. on brass cap

¼ S 8 | S 9

1915

from which

A cedar 13 ins. in diam. bears S.75°E., 20 lks. dist., mkd. ¼ S 9 B T.

A cedar 8 ins. in diam. bears N.57½°W., 18 lks. dist., mkd. ¼ S 8 B T.

Cor. stands on N. side of bottom of gulch, 20 ft. above bottom.

Ascend.

48.00 Spur, 70 ft. above cor., projects E. 5 chs.

57.00 Gulch, 80 ft. below top of spur, drains S.60°E.

Thence ascend over rough rocky land to point of mesa.

80.00 Set an iron post, 3 ft. long, 2 ins. in diam., 26 ins. in the ground, for cor. of secs. 4, 5, 8 and 9, mkd. on brass cap

T 37 S | R 26 E
S 5 | S 4
S 8 | S 9

1915

from which

A cedar 14 ins. in diam. bears N.13¾°E., 68 lks. dist., mkd. T 37 S R 26 E S 4 B T.

A pinon 8 ins. in diam. bears S.26°E., 32 lks. dist., mkd. T 37 S R 26 E S 9 B T.

A cedar 9 ins. in diam. bears S.54½°W., 40 lks. dist., mkd. T 37 S R 26 E S 8 B T.

A cedar 10 ins. in diam. bears N.62½°W., 46 lks. dist., mkd. T 37 S R 26 E S 5 B T.

Cor. stands on small flat on S. side of S. point of mesa north of cor., 110 ft. above gulch.

Land, rough, mountainous, rocky, ledgy N. and S. slopes.

Soil, rocky, 4th rate.

Timber, cedar and pinon pine.

Undergrowth, scattering sagebrush.

SUBDIVISION T. 37 S., R. 26 E.

Chains

S.89°57'W., on a random line bet. secs. 5 and 8.

40.00 Set temp. ¼ sec. cor.

80.09 Intersect N. and S. line 14 lks. S. of the cor. of secs. 5, 6, 7 and 8.

Thence

S.89°57'E., on a true line bet. secs. 5 and 8, Over mesa sloping slightly to the S., through cedars and pinon pine and scattering sagebrush.

16.00 Wash, 10 ft. deep, drains S.30°W.

28.00 Wagon trail, bears N.10°E. and S.10°W.

29.00 Leave mesa, bearing N.40°W. and S.40°E.

Descend abruptly into head of canyon.

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

¼ S 5
S 8
1915

from which

A cedar 14 ins. in diam. bears N.60½°W., 25 lks. dist., mkd. ¼ S 5 B T.

A cedar 6 ins. in diam. bears S.68½°W., 15 lks. dist., mkd. ¼ S 8 B T.

Cor. stands on slope facing E., 90 ft. below rim of mesa.

June 30, 1915: At this cor. I set off 23°13'N. on the decl. arc; and at app. noon observe the sun on the meridian; the resulting lat. is 37°37'.

55.50 Wash, in head of canyon, drains S.50°E., 60 ft. below ¼ cor.

Ascend along bench of mesa.

66.00 Descend abruptly over ledge 50 ft. high, bearing N.75°E. and S.75°W.; thence descend over huge boulders.

80.09 The cor. of secs. 4, 5, 8 and 9, 80 ft. below ¼ cor.

Land: W. 29 chs., mesa, sloping slightly to the S.; E. 51 chs., rough S. and E. slopes in head of canyon.

Soil: On mesa, shallow red sand; on slopes, rocky 4th

SUBDIVISION T. 37 S., R. 26 E.

Chains	
	rate.
	Timber, pinon pine and cedar.
	Undergrowth, scattering sagebrush.

July 1, 1915: For solar observation see line bet. secs. 4 and 9.

N.0°01'E., on a random line bet. secs. 4 and 5.

40.00 Set temp. ¼ sec. cor.

80.11 Intersect N. bdy. of Tp. 9 lks. E. of the cor. of secs. 4, 5, 32 and 33, heretofore described.

Thence

S.0°03'E., on a true line bet. secs. 4 and 5.

Over mesa, sloping slightly to the S., through pinon pine and cedars and scattering undergrowth of sagebrush.

38.00 Descend from broken mesa over slope facing SW.; edge of mesa bears NW. and SE.

40.11 Set an iron post, 3 ft. long, 1 in. in diam., 12 ins. in earth to bedrock and 12 ins. in a mound of stone 2 ft. base, for ¼ sec. cor., mkd. on brass cap

¼ S 5 | S 4

1915

from which

A pine 7 ins. in diam. bears S.52°E., 44 lks. dist., mkd. ¼ S 4 B T.

A pine 10 ins. in diam. bears E.84½°W., 43 lks. dist., mkd. ¼ S 5 B T.

Cor. stands on slope facing SW., 60 ft. below mesa.

Descend rapidly into canyon.

60.00 Bottom of canyon, wash, dry, drains S.70°E., 120 ft. below ¼ cor.

Ascend rapidly to point of spur of mesa projecting E.

67.50 Top of rocky spur, 150 ft. above canyon, projects E. 10 chs.

SUBDIVISION T. 37 S., R. 26 E.

Chains	
	Descend over ledges.
77.00	Base of steep descent; thence descend gradually over slope facing W.
80.11	The cor. of secs. 4, 5, 8 and 9.
	Land: N. half, mesa, sloping gradually to the S.; S. half, rocky, mountainous land, sloping to the E.
	Soil: N. half, mesa, red sand, shallow, 2nd rate; S. half, rocky, 4th rate.
	Timber, cedar and pinon pine.
	Undergrowth, scattering sagebrush.
	July 1, 1915: At this cor. I set off 23°10'N. on the decl. arc; and at app. noon observe the sun on the meridian; the resulting lat. is 37°37'.

June 18, 1915: At 7 a.m., app. time, I set off 37°33' on the lat. arc; 23°24'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

N.0°02'E., bet. secs. 33 and 34,

Over rolling mesa, ascending gradually through cedars and sagebrush.

13.50	Old ruins 20 lks. west of line.
24.00	Leave mesa, bearing NW. and SE.
	Descend abruptly over rimrock and ledges.
29.00	Foot of ledges, bearing NW. and SE.
	Continue descent over rocky land and huge broken off boulders.
40.00	Set an iron post, 3 ft. long, 1 in. in diam., 10 ins. in earth to rock and 16 ins. in a mound of stone 2 ft. base, for ¼ sec. cor., mkd. on brass cap

¼ S 33 | S 34

1915

from which

SUBDIVISION T. 37 S., R. 26 E.

Chains	
-	A cedar 8 ins. in diam, bears E., 63 lks. dist., mkd. ¼ S 34 B T.
	A cedar 10 ins. in diam. bears N.10°W., 8 lks. dist., mkd. ¼ S 33 B. T.
	Cor. stands on rocky slope facing N., 200 ft. below rim of mesa.
	Continue descent.
60.00	Descend abruptly into canyon, bearing E. and W.
63.10	Canyon, wash in bottom, 50 lks. wide, 10 ft. deep, 120 ft. below ¼ cor., drains W.
	Ascend.
69.00	Top of ascent, bearing E. and W., 80 ft. above bottom of canyon; thence over rolling land.
80.00	Set an iron post, 3 ft. long, 2 ins. in diam., 26 ins. in the ground, for cor. of secs. 27, 28, 33 and 34, mkd. on brass cap

T 37 S | R 26 E
S 28 | S 27
S 33 | S 34

1915

from which

A cedar 12 ins. in diam. bears N.60°E., 2 lks. dist., mkd. T 37 S R 26 E S 27 B T.

A cedar 14 ins. in diam. bears S.65°E., 68 lks. dist., mkd. T 37 S R 26 E S 34 B T.

A cedar 10 ins. in diam. bears S.59°W., 88 lks. dist., mkd. T 37 S R 26 E S 33 B T.

A cedar 8 ins. in diam. bears N.53½°W., 61 lks. dist., mkd. T 37 S R 26 E S 28 B T.

Cor. stands on flat in small cove opening to the S.

Land, mesa and rough, ledgy N. and S. slopes, draining W.

Soil: On mesa, regular mesa red sand; on slopes, rocky, stony, 4th rate.

Timber, cedar.

SUBDIVISION T. 37 S., R. 26 E.

Chains	
	Undergrowth, scattering sagebrush.
	West, on a random line bet. secs. 28 and 33.
40.00	Set temp. ¼ sec. cor.
80.02	Intersect N. and S. line 7 lks. N. of the cor. of secs. 28, 29, 32 and 33.
	Thence
	N.89°57'E., on a true line bet. secs. 28 and 33,
	Over rough mountainous land, descending abruptly over N. and S. ledges into Squaw Creek, through scattering cedars and sagebrush.
1.50	Foot of steep descent, bearing N. and S.; thence over canyon bottom.
3.20	Enter wash in Squaw Creek, draining SW., water intermittent. Thence follow up wash, over gravel bottom, 60 ft. below sec. cor.
7.00	Leave wash in Squaw Canyon, draining NW.
	Ascend.
12.00	Spur, 40 ft. above canyon, projects S.40°E., 1 chain. Line over point of spur.
13.20	Squaw Canyon, wash 1 ch. wide, drains SW., 40 ft. below spur.
	Ascend.
17.00	Ascend abruptly ledges 60 ft. high, bearing N. and S., through scattering pinon pine.
20.00	Top of first ascent; thence over bench, bearing N. and S.
25.00	Leave bench, bearing N. and S.
	Ascend abruptly over huge boulders.
40.01	Set an iron post, 3 ft. long, 1 in. in diam., 10 ins. in earth to rock and 16 ins. in a mound of stone 2 ft. base, for ¼ sec. cor., mkd. on brass cap
	¼ S 28
	S 33.
	1915

SUBDIVISION T. 37 S., R. 26 E.

from which

A pinon 8 ins. in diam. bears S.10°E., 26 lks. dist., mkd. ¼ S 33 B T.

A cedar 10 ins. in diam. bears N.45½°E., 41 lks. dist., mkd. ¼ S 28 B T.

Cor. stands on rocky slope, 150 ft. above creek.

62.00 Top of ascent, spur projecting SE., 75 ft. above ¼ cor.

Thence descend into cove.

80.02 The cor. of secs. 27, 28, 33 and 34, 60 ft. below spur.

Land, rough and mountainous, draining from E. and W. rocky slopes into Squaw Canyon.

Soil, rocky, 4th rate.

Timber, cedar and scattering pinon pine.

Undergrowth, sagebrush.

June 18, 1915: At this cor. I set off 23°24'E. on the decl. arc; and at app. noon observe the sun on the meridian; the resulting lat. is 37°34'.

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

Over mountainous land, ascending from cove to spur, through dense cedars and scattering sagebrush.

14.00 Spur, 60 ft. above cor., projects S. 2 chs.

Descend over broken boulders to canyon.

34.50 Canyon, 140 ft. below spur, course S.35°W. (dry).

Ascend abruptly.

40.00 Set an iron post, 3 ft. long, 1 in. in diam., 12 ins. in earth to rock and 12 ins. in a mound of stone 2 ft. base, for ¼ sec. cor., mkd. on brass cap

¼ S 27

S 34

1915

from which

A cedar 13 ins. in diam. bears N.10½°W., 38 lks. dist., mkd. ¼ S 27 B T.

A cedar 11 ins. in diam. bears S.15½°W., 28 lks.

SUBDIVISION T. 37 S., R. 26 E.

Chains	
	dist., mkd. ¼ S 34 B T.
	Cor. stands on rocky slope facing NW., 80 ft. above canyon.
	Continue abrupt ascent.
72.00	Ascend over broken ledges, bearing N. and S.; leave timber.
75.26	Intersect Utah-Colorado bdy. at 2.94 chs. N.1°04'E. of the restored point for the 37th mile cor., heretofore described. At intersection
	Set an iron post, 3 ft. long, 2 ins. in diam., 26 ins. in the ground, for closing cor. of secs. 27 and 34, mkd. on brass cap

T 37 S
R 26 E
S 27 C
S 34 C | 37 M
U C
1915

	and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.
	Cor. stands on rocky, ledgy, broken edge of mesa, facing NW., 190 ft. above ¼ sec. cor.
	Land, rough and mountainous; drains from rocky NW. and SE. slopes into canyon draining SW.
	Soil, rocky, 4th rate.
	Timber, cedar. Undergrowth, sagebrush.
	June 18, 1915.

	June 19, 1915: At 7 a.m., apparent time, I set off 37° 34' on the lat. arc; 23°26'N. on the decl. arc; and determine a meridian with the solar at the cor. of secs. 27, 28, 33 and 34.
	Thence
	N.0°02'E., bet. secs. 27 and 28,
	Over mountainous land, ascending from cone, through cedar and scattering sagebrush.
10.00	Top of steep ascent, bearing SW. and SE.; thence ascend along top of spurs projecting from S. point of high butte.

SUBDIVISION T. 37 S., R. 26 E.

Chains	
40.00	Point for ¼ sec. cor. falls in ledges, 180 ft. above sec. cor.; unable to perpetuate cor.
	Ascend abruptly over ledges and huge boulders to S. point of high butte.
42.00	Top of sheer ledges, bearing E. and W., 120 ft. above point for ¼ sec. cor.; thence over flat top of butte.
42.80	Set an iron post, 3 ft. long, 1 in. in diam., 8 ins. in earth to bedrock and 16 ins. in a mound of stone 2 ft. base, for witness cor. to ¼ sec. cor., mkd. on brass cap

T 37 S R 26 E
W C ¼
S 28 | S 27
1915

from which

A cedar 12 ins. in diam. bears N.49°E., 43 lks. dist., mkd. W C ¼ S 27 B T.

A cedar 6 ins. diam. bears N.49°30'W., 45 lks. dist., mkd. W C ¼ S 28 B T.

Ruins on top of pinnacle of ledge, bears W. 4.50 chs.

Continue over top of butte.

60.50	To sheer ledge, bears N.75°E. and S.75°W., on W. face of butte. Thence offset around ledge as follows: East, 5.00 chs.; then on offset line: N.0°02'E., 78.20 chs. (counted from the sec. cor.); then West, 5.00 chs., to true line, to sheer ledge of rim rock, bearing N.20°W. and S.20°E., facing SW., thence continue on true line over flat top of butte to
80.00	Set an iron post, 3 ft. long, 2 ins. in diam., 10 ins. in earth to bed rock and 16 ins. in a mound of stone 2 ft. base, for cor. of secs. 21, 22, 27 and 28, mkd. on brass cap

T 37 S | R 26 E
S 21 | S 22
S 28 | S 27
1915

SUBDIVISION T. 37 S., R. 26 E.

Chains

from which

A pinon 6 ins. in diam. bears N.48°E., 81 lks. dist., mkd. T 37 S R 26 E S 22 B T.

A pinon 10 ins. in diam. bears S.79°E., 24 lks. dist., mkd. T 37 S R 26 E S 27 B T.

A cedar 8 ins. in diam. bears S.77½°W., 17 lks. dist., mkd. T 37 S R 26 E S 28 B T.

A pinon 10 ins. in diam. bears N.42¼°W., 85 lks. dist., mkd. T 37 S R 26 E S 21 B T.

Land: Rough and mountainous. S. half, rocky ledges, draining S.; N. half, part ledges and part mesa.

Soil, rocky, 4th rate.

Timber, cedar and pinon pine.

Undergrowth, scattering sagebrush.

S.89°57'W., on a random line bet. secs. 21 and 28.

40.00 Set temp. ¼ sec. cor.

79.98 Intersect N. and S. line 28 lks. N. of the cor. of secs. 20, 21, 28 and 29.

Thence

N.89°45'E., on a true line bet. secs. 21 and 28,

Over level mesa, through cedars and scattering sagebrush.

3.00 Leave mesa, bearing N. and S.; descend abruptly over rimrock ledges and boulders into Squaw Canyon.

7.70 Foot of abrupt descent, bearing N. and S.; descend less abruptly.

33.70 Squaw canyon bottom, creek 10 lks. wide, 6 ins. deep, course S.15°W.; water sinks and reappears, in bottom of grand wash 2 chs. wide, 225 ft. below mesa.

Ascend abruptly to butte.

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

¼ S 21

S 28

1915

SUBDIVISION T. 37 S., R. 26 E.

Chains	
	from which
	A cedar 10 ins. in diam. bears North, 48 lks. dist., mkd. ¼ S 21 B T.
	A cedar 12 ins. in diam. bears S.10°W., 64 lks. dist., mkd. ¼ S 28 B T.
	Cor. on steep, rocky W. slope, 90 ft. above canyon.
	Continue rocky ascent.
47.00	Top of steep ascent; thence gradually over bench, bearing N. and S.
67.00	Leave bench, bearing N. and S.; ascend abruptly over broken boulders to butte.
77.70	Top of ascent, rim of butte, bearing N. and S., 150 ft. above ¼ cor.
	Thence over flat top of butte.
79.98	The cor. of secs. 21, 22, 27 and 28.
	Land, rough mountainous, steep E. and W. rocky slopes into Squaw Canyon.
	Soil, rocky, 4th rate.
	Timber, cedar and scattering pinon pine.
	Undergrowth, scattering sagebrush.
	June 19, 1915.

June 25, 1915: At 7 a.m., app. time, I set off 37°35' on the lat. arc; 23°26'N. on the decl. arc; and determine a meridian with the solar at the cor. of secs. 21, 22, 27 and 28.

Thence

East, on a true line bet. secs. 22 and 27,

Over flat top of butte, or small isolated mesa, through cedars and scattering sagebrush.

31.00	Leave butte, bearing N.30°W. and S.30°E.; descend abruptly over rimrock ledges and boulders.
40.00	Set an iron post, 3 ft. long, 1 in. in diam., 10 ins. in earth to rock and 16 ins. in a mound of stone 2 ft. base, for ¼ sec. cor., mkd. on brass cap

SUBDIVISION T. 37 S., R. 26 E.

Chains

¼ S 22
S 27
1915

from which

A pinon 7 ins. in diam. bears N.76°W., 15 lks. dist., mkd. ¼ S 22 B T.

A cedar 10 ins. in diam. bears S.23½°W., 81 lks. dist., mkd. ¼ S 27 B T.

Cor. stands on rocky E. slope, 175 ft. below butte.

47.10 Base of steep descent, bearing N. and S.; thence over rough spurs and gulches, draining SE.

62.00 Gulch, 80 ft. below ¼ cor., drains S.

76.85 Intersect Utah-Colorado bdy. 3.22 chs. N.0°36'E. of the 38th mile cor., heretofore described.

At intersection

Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground, for closing cor. of secs. 22 and 27, mkd. on brass cap

T 37 S
R 26 E
S 22 C
S 27 C | 38 M
U C
1915

from which

A cedar 7 ins. in diam. bears N.14½°W., 22 lks. dist., marked T 37 S R 26 E S 22 B T.

A cedar 9 ins. in diam. bears S.31½°W., 20 lks. dist., marked T 37 S R 26 E S 27 B T.

Land: Rough and mountainous; E. 50 chs., broken ridges and spurs, sloping SE.; W. 30 chs., flat top of butte.

Soil, rocky, 4th rate.

Timber, cedar and scattering pinon pine.

Undergrowth, sagebrush.

Chains	
	N.0°02'E., bet. secs. 21 and 22,
	Over flat top of butte, through cedars and scattering pinon pine and sagebrush.
6.00	Leave flat top of butte, bearing N.80°W. and S.80°E.; descend abruptly over rimrock, ledges and broken boulders, into deep gulch.
38.75	Gulch, 210 ft. below butte, drains W.
40.00	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., mkd. on brass cap ¼ S 21 | S 22 1915 from which A cedar 16 ins. in diam. bears S.57°E., 35 lks. dist., mkd. ¼ S 22 B T. A cedar 14 ins. in diam. bears West, 71 lks. dist., mkd. ¼ S 21 B T. Cor. stands on steep slope facing S. (N. side of gulch) 45 ft. above bottom.
	Ascend.
68.00	Spur, 70 ft. above ¼ cor., projects W. 5 chs.
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, mkd. on brass cap T 37 S | R 26 E S 16 | S 15 S 21 | S 22 1915 from which A pinon 6 ins. in diam. bears N.69½°E., 47 lks. dist., mkd. T 37 S R 26 E S 15 B T. A pinon 12 ins. in diam. bears S.65½°E., 57 lks. dist., mkd. T 37 S R 26 E S 22 B T. A pinon 14 ins. in diam. bears S.42½°W., 90 lks. dist., mkd. T 37 S R 26 E S 21 B T. A pinon 10 ins. in diam. bears N.32°W., 49 lks. dist., mkd. T 37 S R 26 E S 16 B T.

SUBDIVISION T. 37 S., R. 26 E.

Chains

Cor. stands on slope facing NW., 90 ft. below spur.
Land, mountainous, steep N. and S. slopes, draining W.
Soil, rocky, 4th rate.
Timber, cedar and pinon pine.
Undergrowth, scattering sagebrush.
June 25, 1915: At this cor. I set off 23°26'N. on the decl. arc; and at app. noon observe the sun on the meridian; the resulting lat. is 37°35'.

S.89°45'W., on a random line bet. secs. 16 and 21.

40.00 Set temp. ¼ sec. cor.

79.84 Intersect N. and S. line 9 lks. S. of the cor. of secs. 16, 17, 20 and 21.

Thence

N.89°49'E., on a true line bet. secs. 16 and 21,

Over mountainous land, descending over broken, rough bench land sloping east from mesa, through cedars and scattering pinon pine and sagebrush.

6.00 Small gulch, 20 ft. deep, drains SE.

Descend.

30.00 Descend more abruptly.

39.92 Set an iron post, 3 ft. long, 1 in. in diam., 18 ins. in the ground to rock and 8 ins. in a mound of stone 2 ft. base, for ¼ sec. cor., mkd. on brass cap

¼ S 16
S 21
1915

from which

A cedar 12 ins. in diam. bears N.38°E., 19 lks. dist., mkd. ¼ S 16 B T.

A cedar 10 ins. in diam. bears S.22½°W., 11 lks. dist., mkd. ¼ S 21 B T.

Cor. stands on stony E. slope, 80 ft. below sec. cor.

44.00 Descend abruptly into a circular cove, bearing N. and S.; thence leave cedars, bearing N. and S., enter

SUBDIVISION S. 37 S., R. 26 E.

Chains	
	dense sagebrush in cove 12 chs. diameter.
48.00	Prehisteric pile of ruins on top of a butte or knoll, 50 ft. high, 100 ft. diameter, standing alone in center of the cove, bears S. 2.00 chs.
50.00	Leave cove and dense sagebrush, enter cedars, bearing N. and S.
	Ascend small spur.
55.00	Spur, 80 ft. above cove, projects S. 2 chs.
	Descend into Squaw Canyon.
61.00	Squaw Canyon Creek, 6 lks. wide, 4 ins. deep, sinks and rises, course S., 90 ft. below spur.
	Ascend abruptly over rocky ledges on E. side of canyon.
66.00	Top of abrupt ascent, bears NE. and SW.; thence over broken slope, facing NW.
79.84	The cor. of secs. 15, 16, 21 and 22.
	Land, mountainous, steep E. and W. slopes of Squaw Canyon.
	Soil, rocky, 4th rate, except in cove, 2nd rate.
	Timber, cedar and scattering pinon pine.
	Undergrowth, sagebrush.

East, on a true line bet. secs. 15 and 22,

Over mountainous land, ascending along E. slope of ridge through cedars, pinon pine and scattering sagebrush.

40.00 Set an iron post, 3 ft. long, 1 in. in diam., 18 ins. in the ground to rock and 8 ins. in a mound of stone 2 ft. base, for ¼ sec. cor., mkd. on brass cap

¼ S 15

S 22

1915

from which

A pinon 12 ins. in diam. bears N.61°W., 38 lks. dist., mkd. ¼ S 15 B T.

A pinon 7 ins. in diam. bears S.2½°E., 58 lks. dist., mkd. ¼ S 22 B T.

SUBDIVISION T. 37 S., R. 26 E.

Chains

Cor. stands on slope facing NW., 65 ft. above sec. cor.

67.50 Ridge, 105 ft. above ¼ cor., bears N. and S., breaks into S. and SW. ridges.

72.00 Head of hollow, 80 ft. below ridge, course S.

77.61 Intersect Utah-Colorado bdy. 5.13 chs. N.1°13'W. of the 39th mile cor., heretofore described.

At intersection

Set an iron post, 3 ft. long, 2 ins. in diam., 26 ins. in the ground, for closing cor. of secs. 15 and 22, mkd. on brass cap

T 37 S
R 26 E
S 15 C
S 22 C | 39 M
U C
1915

from which

A cedar 12 ins. in diam. bears N.28½°W., 5 lks. dist., marked T 37 S R 26 E S 15 B T.

A cedar 10 ins. in diam. bears S.26°W., 23 lks. dist., marked T 37 S R 26 E S 22 B T.

Cor. stands on slight W. slope, 40 ft. above hollow.

Land, mountainous NW. slope from ridge.

Soil, rocky, 4th rate.

Timber, cedar and pinon pine.

Undergrowth, scattering sagebrush.

June 25, 1915.

June 28, 1915: At 7 a.m., l.m.t., I set off 37°35' on the lat. arc; 23°20'N. on the decl. arc; and determine a meridian with the solar at the cor. of secs. 15, 16, 21 and 22.

Thence

N.0°02'E., bet. secs. 15 and 16,

Over mountainous land, descending from ridge over NW. slope, through cedars and scattering pinon pine and scattering sagebrush, to Squaw Creek.

SUBDIVISION T. 37 S., R. 26 E.

Chains

19.00 Foot of descent, bearing NE. and SW.; thence over bottom of Squaw Canyon.

21.00 Enter wash in Squaw Canyon, draining NE. and SW.

22.10 Squaw Creek, 3 lks. wide, 3 ins. deep, course S.15°W.; good water; sinks and raises; in gravel bottom, 110 ft. below cor.

23.00 Leave creek bottom; ascend abruptly towards rocky south point of mesa.

34.00 Top of abrupt ascent, bears NW. and NE.

Thence over broken bench land.

40.00 Set an iron post, 3 ft. long, 1 in. in diam., 16 ins. in earth and 10 ins. in a mound of stone 2 ft. base, for ¼ sec. cor., mkd. on brass cap

¼ S 16 | S 15

1915

from which

A cedar 11 ins. in diam. bears S.64°E., 47 lks. dist., mkd. ¼ S 15 B T.

A pinon 8 ins. in diam. bears S.18½°W., 39 lks. dist., mkd. ¼ S 16 B T.

Cor. stands on broken bench land, 120 ft. above creek bottom.

Continue over bench.

52.00 Leave bench land, bearing NW. and SE.

Ascend to point of mesa over slope facing SW.

62.00 Ascend along steeper SW. slope from point.

80.00 Set an iron post, 3 ft. long, 2 ins. in diam., 26 ins. in the ground, for cor. of secs. 9, 10, 15 and 16, mkd. on brass cap

T 37 S | R 26 E
S 9 | S 10

S 16 | S 15

1915

from which

A pinon 9 ins. in diam. bears N.45°E., 78 lks. dist., mkd. T 37 S R 26 E S 10 B T.

SUBDIVISION T. 37 S., R. 26 E.

Chains

A pinon 9 ins. in diam. bears S.33°E., 6 lks. dist., mkd. T 37 S R 26 E S 15 B T.

A pinon 11 ins. in diam. bears S.53°30'W., 68 lks. dist., mkd. T 37 S R 26 E S 16 B T.

A pinon 8 ins. in diam. bears N.14°30'W., 85 lks. dist., mkd. T 37 S R 26 E S 9 B T.

Cor. stands on steep SW. face of point of spur of mesa, 125 ft. above ¼ sec. cor.

Land, mountainous, steep SW. and NW. slopes from spurs, draining into Squaw Canyon.

Soil, rocky, 4th rate.

Timber, cedar and pinon pine.

Undergrowth, scattering sagebrush.

S.89°49'W., on a random line bet. secs. 9 and 16.

40.00 Set temp. ¼ sec. cor.

79.91 Intersect N. and S. line 5 lks. N. of the cor. of secs. 8, 9, 16 and 17.

Thence

N.89°47'E., on a true line bet. secs. 9 and 16,

Over mountainous land, ascending from head of gulch to ridge of mesa, through cedars, pinon pine and scattering sagebrush.

10.00 Top of ascent, 40 ft. above cor., bears NW. and SE.

Descend.

17.50 Descend abruptly from point of mesa, bearing N. and S.

31.00 Gulch, 140 ft. below mesa, drains N.10°E.

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

¼ S 9

S 16

1915

from which

A pinon 10 ins. in diam. bears N.14°30'E., 29 lks. dist., mkd. ¼ S 9 B T.

A pinon 12 ins. in diam. bears S.23°15'W., 57 lks. dist., mkd. ¼ S 16 B T.

SUBDIVISION T. 37 S., R. 26 E.

Chains	
	Cor. stands on NW. slope, 60 ft. above gulch.
42.50	Spur, projects N., 20 ft. above ¼ sec. cor.
	Descend into canyon bottom.
52.00	Canyon bottom, dry, 90 ft. below spur, course S.20°W.
	Ascend abruptly towards high spur of mesa.
79.91	The cor. of secs. 9, 10, 15 and 16, 170 ft. above canyon
	Land, rough mountainous, draining from steep E. and W. slopes into canyon.
	Soil, rocky, 4th rate.
	Timber, cedar and pinon pine.
	Undergrowth, scattering sagebrush.
	June 28, 1915: At this cor. I set off 23°19' N. on the decl. arc; and at apparent noon observe the sun on the meridian; the resulting lat. is 37°36'.

	East, on a true line bet. secs. 10 and 15,
	Over rough mountainous land, ascending abruptly over N. and S. ledges to high spur of mesa, projecting S.
2.20	Top of broken rim rock, bears N.10°W. and S.10°E.
2.40	Top of neck or spur of mesa, projecting S.10°E., terminating abruptly about 2 chs. S.
4.00	Leave top, bearing N. and S.
	Descend abruptly over broken rim rock and ledges; abrupt slope to E., to Squaw Canyon. Cedars become scattered.
16.00	Descend abruptly over 75 ft. ledge, bearing N.15°E. and S.15°W.
39.00	Bottom of steep descent, bearing NE. and SW.; enter bottom of Squaw Canyon.
39.35	The ¼ sec. cor. will fall in Squaw Creek.
	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for witness cor. to ¼ sec. cor., mkd. on brass cap

T 37 S R 26 E
¼ S 10
———— WC ¼
S 15
1915

SUBDIVISION T. 37 S., R. 26 E.

Chains

No bearing trees available.

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

Cor. stands in bottom of canyon 225 ft. below rim of mesa.

40.00 Point for ¼ sec. cor.; enter Squaw Creek, course from E. to S. 80 W., 6 lks. wide, 3 ins. deep, sinks.

42.50 Leave Squaw Creek, course from NE. to W.

Ascend abruptly over steep NW. slope of Squaw Canyon, over huge boulders. Enter more dense cedars.

48.00 Top of abrupt ascent, bears NE. and SW.; thence over broken bench land, ascending.

76.04 Intersect Utah-Colorado bdy. 7.08 chs. N.0°09'W. of the 40th mile cor., heretofore described.

At intersection

Set an iron post, 3 ft. long, 2 ins. in diam., 24 ins. in the ground, for closing cor. of secs. 10 and 15, mkd. on brass cap

T 37 S
R 26 E
S 10 C
S 15 C | 40 M
U C
1915

from which

A cedar 16 ins. in diam. bears N.3½°W., 30 lks. dist., marked T 37 S R 26 E S 10 B T.

A pinon 9 ins. in diam. bears S.30½°W., 41 lks. dist., marked T 37 S R 26 E S 15 B T.

Land, rough, mountainous, steep SE. and NW. slopes into Squaw Canyon.

Soil, rocky, 4th rate.

Timber, cedar and scattering pinon pine.

Undergrowth, scattering sagebrush.

N.0°02'E., bet. secs. 9 and 10,

Over rough mountainous land, ascending along steep, rocky W. slope of spur of mesa, through scattering

Chains	
	cedar and pinon pine and scattering sagebrush.
13.00	Top of ascent, 60 ft. above cor.; thence descend along W. slope.
32.50	Gulch, 80 ft. below top of ascent, drains W.
	Ascend small spur.
40.00	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., mkd. on brass cap ¼ S 9 | S 10 1915 from which A pinon 9 ins. in diam. bears S.69°E., 77 lks. dist., mkd. ¼ S 10 B T. A pinon 11 ins. in diam. bears N.23°W., 71 lks. dist., mkd. ¼ S 9 B T.
	Cor. stands on spur, projecting W. 15 chs., 60 ft. above gulch.
	Descend.
47.00	Gulch, 70 ft. below spur, drains W.
	Ascend toward mesa, along steep W. slope, over series of small spurs projecting W.
80.00	Set an iron post, 3 ft. long, 2 ins. in diam., 26 ins. in the ground, for cor. of secs. 3, 4, 9 and 10, mkd. on brass cap T 37 S | R 26 E S 4 | S 3 S 9 | S 10 1915 from which A cedar 10 ins. in diam. bears N.57°E., 31 lks. dist., mkd. T 37 S R 26 E S 3 B T. A pinon 12 ins. in diam. bears S.52½°E., 42 lks. dist., mkd. T 37 S R 26 E S 10 B T. A cedar 18 ins. in diam. bears S.41°W., 44 lks. dist., mkd. T 37 S R 26 E S 9 B T. A cedar 14 ins. in diam. bears N.18°W., 30 lks. dist., mkd. T 37 S R 26 E S 4 B T.

SUBDIVISION T. 37 S., R. 26 E.

Chains	
	Cor. stands on slope facing W., 75 ft. above gulch.
	Land, rough and mountainous, along steep W. slope of mesa.
	Soil, rocky, 4th rate.
	Timber, cedar and pinon pine.
	Undergrowth, scattering sagebrush.
	June 28, 1915.
	July 1, 1915: At 7 a.m., app. time, I set off 37°37' on the lat. arc; 23°11'N. on the decl. arc; and determine a meridian with the solar at the cor. of secs. 3, 4, 9 and 10.
	Thence
	S.89°47'W., on a random line bet. secs. 4 and 9.
40.00	Set temp. ¼ sec. cor.
79.75	Intersect N. and S. line 19 lks. S. of the cor. of secs. 4, 5, 8 and 9.
	Thence
	N.89°55'E., on a true line bet. secs. 4 and 9,
	Over rough mountainous land, descending into canyon, through cedars, pinon pine and scattering sagebrush.
9.50	Bottom of canyon (dry), 125 ft. below cor., drains S. Ascend to mesa.
28.00	Top of ascent, bearing NW. and SE., 170 ft. above canyon. Thence over mesa land.
39.87½	Point falls on cedar tree 7 ins. diam., which I mark ¼ S.4 on N. and ¼ S 9 on S. face, for ¼ sec. cor., from which
	A cedar 15 ins. in diam. bears N.11°E., 33 lks. dist., mkd. ¼ S 4 B T.
	A cedar 8 ins. in diam. bears S.5°W., 45 lks. dist., mkd. ¼ S 9 B T.
	Continue over table land.
56.00	Leave mesa land, bearing N.80°W. and S.60°E. Descend over rim of mesa and broken boulders, over E. slope.

SUBDIVISION T. 37 S., R. 26 E.

Chains	
76.00	Bottom of canyon, 235 ft. below mesa, drains S.
	Ascend steep slope of mesa.
79.75	The cor. of secs. 3, 4, 9 and 10, 80 ft. above canyon.
	Land, mesa, with steep E. and W. slopes; general drainage, SE.
	Soil, rocky, sandy, 4th rate.
	Timber, cedar and pinon pine.
	Undergrowth, scattering sagebrush.

East, on a true line bet. secs. 3 and 10,

Over rough mountainous land, ascending abruptly steep W. side of mesa, over huge boulders and broken rimrock, through cedars, pinon pine and scattering sagebrush.

4.50	Top of broken ascent, bearing N. and S., 110 ft. above cor.
	Thence over mesa.
25.00	Leave mesa land, bearing N.10°E. and S.10°W.
	Descend over broken E. edge of mesa.
40.00	Set an iron post, 3 ft. long, 1 in. in diam., 26 ins. in the ground, for ¼ sec. cor., mkd. on brass cap

¼ S 3
S 10
1915

from which

A cedar 7 ins. in diam. bears N.54°W., 13 lks. dist., mkd. ¼ S 3 B T.

A cedar 9 ins. in diam. bears S.30½°W., 24 lks. dist., mkd. ¼ S 10 B T.

Cor. stands on slope facing E., 100 ft. below mesa.

42.00	Swale, 20 ft. below cor., drains N.
49.00	Spur, 60 ft. above swale, projects N.60°E. 15 chs.
63.75	Gulch, 85 ft. below spur, drains S.30°E., thence E.
	Ascend to bench land.
76.00	Intersect Utah-Colorado bdy. 7.90 chs. N.0°14'E. of the

SUBDIVISION T. 37 S., R. 26 E.

Chains

41st mile cor., heretofore described.

At intersection

Set an iron post, 3 ft. long, 2 ins. in diam., 26 ins. in the ground, for closing cor. of secs. 3 and 10, mkd. on brass cap

T 37 S
R 26 E
S 3 C
S 10 C

41 M

U C.
1915

from which

A cedar 12 ins. in diam. bears N.29°W., 32 lks. dist., marked T 37 S R 26 E S 3 B T.

A cedar 10 ins. in diam. bears S.32°W., 47 lks. dist., marked T 37 S R 26 E S 10 B T.

Cor. stands on bench land, 75 ft. above gulch.

Land, broken mesa and broken E. and W. slopes.

Soil, rocky, 4th rate.

Timber, cedar and pinon pine.

Undergrowth, scattering sagebrush.

N.0°02'E., on a random line bet. secs. 3 and 4.

40.00 Set temp. ¼ sec. cor.

79.82 Intersect N. bdy. of Tp. 26 lks. E. of the cor. of sections 3, 4, 33 and 34, heretofore described.

Thence

S.0°09'E. on a true line bet. secs. 3 and 4,

Over broken mesa, descending through cedars, pinon pine and scattering sagebrush, along E. side of gulch.

10.20 Gulch, 50 ft. below cor., drains SE.

21.00 Ridge, 30 ft. above gulch, bears NW. and SE.

32.00 Gulch, 110 ft. below ridge, drains SW.

37.00 Spur, 80 ft. above gulch, projects SW. 3 chs.

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

SUBDIVISION T. 37 S., R. 26 E.

Chains	
	¼ S 4 | S 3 1915
	from which
	A cedar 9 ins. in diam. bears S.88°E., 42 lks. dist., mkd. ¼ S 3 B T.
	A pinon 8 ins. in diam. bears S.19½°W., 42 lks. dist., mkd. ¼ S 4 B T.
	Cor. stands on slope facing SW., 10 ft. below spur.
	Descend into gulch.
42.50	Gulch, 70 ft. below cor., drains from N.20°W. to S.10°W. Line hits bend in gulch.
	Ascend.
55.20	Huge boulder 150' x 30' x 10' on line.
	Ascend over rocky NW. slope, over huge broken boulders, along the W. edge of broken rim of mesa.
60.00	Broken rim rock spur, 150 ft. above gulch, projects W. 2 chs.
	Descend along extremely broken rocky rim of mesa.
70.00	Descend abruptly; leave rim, bearing N. and SE.
75.00	Gulch, 150 ft. below rim, drains S.80°W.; thence along steep W. slope.
	Ascend.
79.82	The cor. of secs. 3, 4, 9 and 10.
	Land, extremely rough and rocky; huge boulders, etc., on W. edge of mesa.
	Soil, rocky, 4th rate.
	Timber, cedar and pinon pine.
	Undergrowth, scattering sagebrush.
	July 1, 1915.

BOUNDARIES OF T. 37 S., R. 26 E.

Latitudes, Departures and Closing Errors.

Lines Designated	True Bearing	Dist.	Latitudes		Departures	
			N.	S.	E.	W.
		Chs.	Chs.	Chs.	Chs.	Chs.
C.C. of secs. 3 & 34 to 38th mile cor.	N.1°04'E.	156.96	156.93		2.92	
38th to 39th mile cor.	N.0°36'E.	78.09	78.09		.82	
39th to 40th mile cor.	N.1°13'W.	77.92	77.90			1.65
40th to 41st mile cor.	N.0°09'W.	79.03	79.03			.21
41st to 42nd mile cor.	N.0°14'E.	81.16	81.16		.33	
42nd mile cor. to C.C. of secs. 3 & 34	N.0°07'E.	6.58	6.58		.01	
N. Bdy.	West	316.60				316.60
W. Bdy.	South	480.00		480.00		
S. Bdy.	East	313.66			313.66	
Convergency						.37
Totals			479.69	480.00	317.74	318.83
				479.69		317.74
Error in lat. and dep.				.31		1.09

GENERAL DESCRIPTION T. 37 S., R. 26 E.

The topography of this township conforms to the mesa-canyon country which is typical of this section of the country. A main mesa runs through the western half of the township with a slight slope to the south. The edges of the mesa, and all mesa formation in the township, are abrupt rimrock, with ledges from 25 to 100 ft. perpendicular height. The steep slopes are strewn with high boulders broken off from the rims, some reaching a length of 100 ft. or more. The sandstone strata is uniform, with slight dip to the south. Squaw Canyon, the main canyon, traverses the township in a general SW. direction; its bottom is about 500 ft. below the mesa top. Monument Canyon cuts in on the extreme NW. cor.

At this time of year (June-July) a little water flows on the gravel bottom of Squaw Canyon, sinks and rises every hundred yards or so, and sinks very low toward evening. A few seep springs occur in the ledges along the canyon bottom which can be developed apparently to last the year around.

The township is generally covered with a fairly dense growth of cedar and pinon timber, cedar predominating. Sagebrush is scattering and scrubby.

The soil on the flat mesa top is of a red sandy loam, loose, coarse, dry, and generally shallow, on solid bedrock. The soil on all slopes from the mesa is rocky, stony, sandy, 4th rate.

There are no settlers in the township. The only improvement is a road, and that but a wagon trail, in the NW. part, following a general NE. and SW. course, from Bug Springs, Colo., and thence to the road from Dolores to Monticello, going NE., and leads SW. toward the Montezuma Creek valley; exact termination unknown.

There are several prehistoric ruins scattered over the township; some are remains of masonry in cavities in

cliffs, some unapproachable by ordinary means, and some on piles of stones on mesa tops, overgrown with sage, with evidence of kiva-pits.

No indication of mineral in the township.

Thos. C. Cathcart
U. S. Transitman.

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Page

4—680

BOOK A-416

CERTIFICATE OF ASSISTANTS.

We, the undersigned, hereby certify upon honor that we assisted, to the best of our skill and ability, Thomas C. Rathbone, U. S. ~~Surveyor~~ Transitman, during the periods and in the capacities stated opposite our several signatures, in ~~surveying~~ retracing all those parts or portions of the Utah-Colorado Boundary between the 36th. and 42nd. Mile Cors., and in surveying all those parts or portions of the west and north bdrs. and subdivision of T. 37 S., R. 26 E.,

of the Salt Lake Base and Meridian, in the State of Utah 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.	
Barnum B. Packard	June 15, 1915	July 2, 1915	H. Chainman
M. Glenn Harris	June 15, 1915	July 2, 1915	R. Chainman
Reuben Beckett	June 15, 1915	July 2, 1915	Flagman
Timothy Jones	June 15, 1915	July 2, 1915	Axeman
Earl Dillenger	June 15, 1915	July 2, 1915	Cornerman

Subscribed and certified to before me on the dates of the final service as shown above.

Thos. C. Rathbone

~~U. S. Surveyor~~ U. S. Transitman

6—2764

FINAL OATH OF UNITED STATES SURVEYOR.

I, Thomas C. Rathbone, Transitman U. S. ~~Surveyor~~, do solemnly swear that, in pursuance of special instructions received from the U. S. Surveyor General for Utah bearing date of the 6th. day of May, 1914, 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~~ retraced all those parts or portions of the Utah Colorado Boundary bet. the 36th. and 42nd. Mile Cors., and surveyed all those parts or portions of the West and North Bdrs. and Subdivisi of T. 37 S., R. 26 E.,

of the Salt Lake Base and Meridian, in the State of Utah, 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 Utah and in the specific manner described in the field notes, and that the foregoing are the original field notes of such survey.

Thos C Rathbone
~~Surveyor~~
U.S. Transitman

Subscribed by said Thos. C. Rathbone, and sworn to before me this 22d day of May, 1916.

SEAL

U. S. Surveyor General, Utah

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah, July 11, 1916

The foregoing field notes of the ~~survey or~~ retracement of the Utah-Colorado boundary between the 36th and 42nd mile corners; and survey of the subdivision of Township No. 37 South, Range No. 26 East, of the Salt Lake Base and Meridian, Utah,

executed by Thomas C. Rathbone under his special instructions dated May 6, 1914, having been critically examined, and the necessary corrections and explanations made, the said field notes, and the retracements and 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.

6—2761

U. S. Surveyor General.

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U. S. Surveyor General's Office
MAR 20 1916
SALT LAKE CITY, UTAH.

BOOK A-416 D

FIELD NOTES

OF THE
RETRACEMENT, RESURVEY AND
~~OF THE~~ SURVEY OF THE

FOURTH STANDARD PARALLEL SOUTH THROUGH RANGE 20 EAST, AND THE

RESURVEY OF THE

GREEN RIVER GUIDE MERIDIAN THROUGH TOWNSHIP 20 SOUTH, AND THE

NORTH BOUNDARY OF T. 20 S., R. 20 E.,

AND THE

RETRACEMENT AND SURVEY

OF THE SUBDIVISIONS OF

T. 20 S., R. 20 E.

Of the SALT LAKE BASE AND *Meridian,*

In the State of UTAH

EXECUTED BY

RALPH GENTRY,

In the capacity of U. S. Surveyor, under instructions dated May 6, 1914,
issued by the United States Surveyor General to govern surveys included in
Group No. 31, *which were approved by the Commissioner of the General Land*
Office, May 29, 1914

Survey commenced July 9, 1915

Survey completed October 2, 1915

6—151

BOOK A-416

INDEX DIAGRAM.

Township 20 South, *Range* 20 East, S. L. B. & M.

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Retracement and Resurvey of the

Fourth Standard Parallel South, through Range 20 East.

Chains

Survey commenced July 16, 1915, and executed with a Buff and Buff transit, No. 8028, with a Smith solar attachment. The horizontal limb is provided with two double verniers, placed opposite to each other, reading to single minutes of arc, which is also the least count of the verniers of the latitude and declination arcs.

The instrument was approved by the Ass't. Supervisor of Surveys for Utah, in Assignment Instructions dated May 10, 1915.

A steel tape, 4 chains long, was used in all field work, together with clinometers for determining slope angles. The tape was tested frequently during the season, comparison being made with a standard steel tape, 1 chain long, kept for this purpose.

July 9, 1915: I examine the adjustments of the transit and solar attechment, and correct the levels of the transit and the errors of the vernier of the latitude arc of the solar attachment, then to test the solar attachment, by comparing its indications resulting from solar observations made during the a.m. and p.m. hours, with a meridian determined by observations on Polaris, I proceed as follows:

At my camp, which is situated in the NW. cor. of sec. 27, T.20 S.,R.20 E., in latitude 39°04'N., longitude 109° 43'W., I set off 39°04' on the lat. arc; 22°26'N. on the decl. arc, and at 4h 35m p.m., l.m.t., determine with the solar a meridian, and mark a point thereof, on a stake set firmly in the ground, 5 chs. N. of my station.

July 9, 1915.

July 10: At 0h 25m 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 deter-

Chains

mined, on a stake driven in the ground, 5 chs. N. of my station.

At 7h a.m., l.m.t., I lay off the azimuth of Polaris, 1°29', to the west, and mark the meridian thus determined on the stake set on July 9th on which the meridian coincides with the meridian determined with the solar.

At 7h 35m a.m., l.m.t., I set off 39°04' on the lat. arc; 22°21'N. on the decl. arc, and determine a meridian with the solar, which coincides with the meridian established by the Polaris observation.

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

The magnetic bearing of the true meridian at 7h 45m a.m.. is N.16°00'W.; the angle thus determined gives the mag. decl. 16°00'E.

July 16: At 8h 51m a.m., l.m.t., I set off 39°02' on the lat. arc; 21°30'N. on the decl. arc, and determine a meridian at the St. cor. of secs. 34 and 35, on the S. bdy. of the Tp., which is a red sandstone, 14 x 10 x 4 ins. above ground, firmly set, mkd. SC on the N. face, 2 notches on the E. and 4 notches on the W. edge, and witnessed by a mound of stone, 2 ft. base, 1½ ft. high, N. of the cor.

Thence I run

East, retracing along the S. bdy. sec. 35.

40.00 After diligent search, I am unable to find any trace of the old St. ¼ sec. cor.

47.00 At this point, I set off 21°28'N. on the decl. arc, and at 12h 06m p.m., l.m.t., observe the sun on the meridian; the resulting lat. is 39°02'

Chains
80.10 Intersect the St. cor. of secs. 35 and 36, which is a sandstone, 12 x 12 x 3 ins. loosely set in a mound of stones, poorly mkd. with SC on the N. face, and 1 notch on the E. and 5 notches on the W. edges, and witnessed by a mound of stone, 2 ft. base, 1½ ft. high, N. of the cor. This cor. being in bad condition, I re-establish it at same point, as follows:

Set an iron post, 3 ft. long, 3 ins. dia., on solid bed rock, 24 ins. in a mound of stone, 4 ft. base, 2 ft. high, for standard cor. of secs. 35 and 36, alongside of old stone, with brass cap mkd.

T 20 S	R 20 E
S 35	S 36

1915

and rebuild mound of stone, 2 ft. base, 1½ ft. high, N. of the cor.

The true course of this mile is therefore east, and the dist., 80.10 chs.

July 16, 1915.

July 20: For solar observation this day, see line on S. bdy. sec. 36.

Note: Two sets of chainmen not being available for the resurvey of this St. Par., I cause all distances to be double measured, and all clinometer angles to be double read, and the mean of these values only appear in the notes of the resurvey and survey of the 4th. St. Par. S.

From the re-established St. cor. of secs. 35 and 36, on S. bdy.,

West, on true line, along S. bdy. sec. 35.

Over rough mountainous, broken land, desc. from sandstone ledges, through very scattered cedar and pinon timber, and scattered shadscale and grass undergrowth.

Chains	
4.00	Ravine, 50 ft. below the cor., drains S. Asc.
16.00	Point of Spur, 200 ft. above ravine, projects S. Desc.
26.00	Gulch, 135 ft. below spur, drains S. Asc. over sandstone ledges, bear N. and S.
33.00	Spur, 300 ft. above gulch, projects S. Desc.
40.05	Proportionate measurement.
	Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for St. $\frac{1}{4}$ sec. cor., with brass cap, marked
	$\frac{1}{4}$ S 35 / 1915
	and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N. of the cor.
	No bearing trees within limits.
	Cor. stands on steep rocky W. slope, 275 ft. below spur.
50.00	Bottom of canyon, 50 ft. below the St. $\frac{1}{4}$ sec. cor., drains S. Asc. gradually.
74.00	Base of sandstone ledges, bear N.70°E. and S., thence asc. over series of sandstone ledges, bear same.
80.10	The St. cor. of secs. 34 and 35, 500 ft. above the bottom of canyon.
	Land, rough mountainous, broken by numerous sandstone outcroppings and ledges, general drainage south.
	Soil, light sandy loam and sandrock, 4th. rate.
	Timber, very scattered cedar and pinons.
	Undergrowth, scattered grass and shadscale.
	July 20, 1915.

July 19: At 9h 06m a.m., l.m.t., I set off 39°02' on the lat. arc; 20°59'N. on the decl. arc, and determine a meridian with the solar at the St. cor. of secs. 35 and 36, on the S. bdy.

Chains	
	Thence I run
	East, retracing along the S. bdy. sec. 36.
40.00	After diligent search, I am unable to find any trace of the old St. ¼ sec. cor. Set temp. point.
	July 19: At this point, I set off 20°58'N. on the decl. arc, and at 12h 06m p.m., l.m.t., observe the sun on the meridian; the resulting lat. is 39°02'.
79.85	Intersect the St. Cor. of Ts. 20 S., Rs. 20 and 21 E., which is a sandstone, 10 x 5 x 18 ins. above ground, firmly set, marked with SC and 6 grooves on N. face, and 6 grooves on the E. and W. faces, and witnessed by a mound of stone, 2½ ft. base, 1½ ft. high, N. of the Cor. I re-establish cor. at same point, as follows:
	Set an iron post, 3 ft. long, 3 ins. dia., 24 ins. in the ground alongside old stone, for re-established St. cor. of Ts. 20 S., Rs. 20 and 21 E., with brass cap mkd.

T 20 S
R 20 E | R 21 E
S 36 | S 31

1915

	and rebuild more solidly the mound of stone, 2½ ft. base, 1½ ft. high, N. of the cor.
	No suitable B.Ts. within limits.
	The true course of this mile is therefore east, and the dist., 79.85 chs.
	July 19, 1915.
	July 20: At 8h 30m a.m.,l.m.t., I set off 39°02' on the lat. arc, 20°19'N. on the decl. arc, and determine a meridian with the solar at the St. cor. of Ts. 20 S., Rs. 20 and 21 E. Thence,
	West, on true line, resurveying along S. side sec. 36.
	Over mountainous land, very rough, and broken by sandstone ledges, asc. to spur, through very scattered cedar and pinion timber, and light shadscale and grass undergrowth.

Chains	
8.20	Spur, 105 ft. below the cor., projects SE. Desc.
25.80	Ravine, 65 ft. below spur, drains S. Asc.
28.80	Spur, 160 ft. above ravine, projects S. Desc.
39.92½	Proportionate measurement.
	Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for restored St. ¼ sec. cor., with brass cap marked
	S 36 / ¼ / 1915
	and raise a mound of stone, 2 ft. base, 1½ ft. high, N. of the cor.
	Cor. stands on W. slope, 125 ft. below spur.
42.50	Ravine, 100 ft. below the ¼ sec. cor., drains S. Asc. over sandstone ledges, bear N. and S.
55.00	Point of spur, 180 ft. above ravine, slopes S. Desc.
61.40	Bottom of desc., gulch, 155 ft. below point of spur, drains SW. Asc.
70.20	Spur, 70 ft. above gulch, projects S.70°W. Desc.
79.85	The re-established St. cor. of secs. 35 and 36, 310 ft. below spur.
	July 20: It is impracticable to be on a meridian at apparent noon; no lat. obs. taken.
	Land, mountainous, very rough and broken by sandstone ledges, general drainage S.
	Soil, light sandy loam, loose rock and sandstone ledge outcroppings, 4th. rate.
	Timber, very scattered cedars and pinion pine.
	Undergrowth, light shadscale and grass.
	July 20, 1915.

Sept. 8; At 8h 13m a.m., l.m.t., I set off 39°02' on the lat. arc; 5°59'N. on the decl. arc, and determine a meri-

Chains	
	dian with the solar at the St. Cor. of secs. 32 and 33, on the S. bdy. of the Tp., which is a sandstone, 20 x 10 x 3 ins. firmly set in a mound of stone, mkd. SC on the north face, 4 grooves on the E. and 2 grooves on the W. face, witnessed by a mound of stone, 2 ft. base, 1½ ft. high, N. of the cor.
	Thence I run
	West, retracing, along S. bdy. sec. 32.
	Over rough mountainous land, desc. through scattering cedar and pinion timber, and shadscale and grass undergrowth.
3.50	Ravine, 45 ft. below sec. cor., drains S. Asc.
6.35	Spur, 50 ft. above ravine, slopes S. Desc.
13.00	Ravine, 70 ft. below spur, drains S. Asc.
18.02	Spur, 100 ft. above ravine, projects S. Desc.
27.60	Ravine, 80 ft. below spur, drains S.30°E. Asc.
32.40	Spur, 135 ft. above ravine, slopes S. Desc.
36.00	Ravine, 70 ft. below spur, drains S. Asc.
38.21	Vein of coal, 3 ft. thick, bears N., 1 ch. dist.
39.83	Fall 2 lks. N. of the old St. ¼ sec. cor., which is a sandstone, 14 x 8 x 4 ins. above ground, firmly set, mkd. SC ¼ on N. face, and witnessed by a mound of stone, 2 ft. base, 2 ft. high, N. of the cor.
	The true course of this half mile is therefore S.89°58'W., and the dist. 39.83 chs.
	From the St. ¼ sec. cor., I continue
	West, retracing along S. bdy. sec. 32
5.20	Spur, 170 ft. above the ¼ sec. cor., projects S. Desc. over sandstone ledges, bear N. and S.
19.30	Ravine, 500 ft. below spur, drains SW. Asc.
28.60	Spur, 170 ft. above ravine, slopes S. Desc.
33.80	Fall 2 lks. N. of the closing cor. of secs. 5 and 6, T.21 S., R.20 E., which is a sandstone, 12 x 12 x 4 ins. above ground, firmly set, mkd. CC on S. face, 1 notch on the W. and 5 notches on the E. face, and witnessed

Chains	
	by a mound of stone, 2 ft. base, 2 ft. high, S. of the cor.
40.02	Fall 2 lks. N. of the old. St. cor. of secs. 31 and 32, which is a sandstone, 10 x 10 x 6 ins. above ground, firmly set, and mkd. with S C on the N. face, and 5 notches on the E. and 1 notch on the W. face, and witnessed by a mound of stone, 2 ft. base, 1½ ft. high, N. of the cor.
	The true course of this half mile is therefore S.89°58'W., and the dist., 40.02 chs.
	Sept. 8: At this cor., I set off 5°54'N. on the decl. arc, and at 11h 58m a.m.,l.m.t., observe the sun on the meridian; the resulting lat. is 39°02'.
	Land, mountainous, rough and broken, along S. side of mountain, general drainage, S.
	Soil, light sandy loam, loose sandstone, and sandstone outcropping, 4th. rate.
	Timber, very scattered cedars and pinion.
	Undergrowth, light shadscale and grass.

	From the St. cor. of secs. 31 and 32, on S. bdy. of Tp., I run
	West, retracing, along S. bdy. sec. 31.
30.50	After diligent search, I am unable to find any trace of the St. ¼ sec. cor. purported to have been set here.
	Thence, from the St. cor. of secs. 31 and 32, I run
	West, resurveying, along S. bdy. sec. 31.
	Over rough mountainous land, draining S., through very scattered cedar and pinion timber, and shadscale and grass undergrowth.
.40	Foot of nearly vertical ledge, bears N. and S. Asc.
.60	Top of ledge, bears N. and S., 45 ft. high. Desc.
10.25	Ravine, 265 ft. below ledge, drains S.30°W. Asc. over sandstone ledges, bear NW. and SW.

Resurvey and Survey of the

Fourth Standard Parallel South, through Range 20 East.

Chains.

14.90 Point of rocky spur, 230 ft. above the ravine, projects S. Desc. into canyon, over ledges.

25.95 Canyon, 250 ft. below point of spur, drains S. Asc.

30.50 End of resurvey. The old line was abandoned at this point.

Thence I run

West, on true line, continuing along S. bdy. sec. 31.

40.00 Spur, 350 ft. above the canyon, projects SE. Also, a coal vein bears N.55°W., 85 lks. dist.

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

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

1915

from which

A cedar, 10 ins. dia., bears N.38°W., 25 lks. dist., mkd. $\frac{1}{4}$ S 31 BT

No other bearing trees available.

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

Sept. 8, 1915.

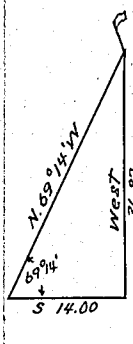
Sept. 9: At 8h 28m a.m., l.mt., I set off 39°02' on the lat. arc; 5°36'N. on the decl. arc, and determine a meridian with the solar at the St. $\frac{1}{4}$ sec. cor. on the S. bdy. sec. 31.

Thence I run

West, continuing along S. bdy. sec. 31, desc. along SW. face of spur.

44.13 Bottom of desc., bears NW. and SE., 45 ft. below the $\frac{1}{4}$ sec. cor. Ledges ahead, over which it is impracticable to chain. To determine dist. to top of ridge, I proceed as follows: Set a flag on line on top of ridge, then measure a base line, south, 14.00 chs., to a point from which the flag on ridge bears N.69°14'W. From the flag, the S. end of the base line bears S.69°14'E.

Therefore the dist. is



Chains

tan 69°14' x base 2.63714 x 14.00 = 36.92 chs., which added to 44.13 chs. makes 81.05 chs. Thence I run east 1.05 chs., to

80.00 Set an iron post, 3 ft. long, 3 ins. dia., 24 ins. in the ground, for St. cor. of Ts. 20 S., Rs. 19 and 20 E., with brass cap mkd.

T 20 S
R 19 E | R 20 E
S 36 | S 31

1915

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

Sept. 9: At this cor., I set off 5°32'N. on the decl. arc, and at 11h 58m a.m., observe the sun on the meridian; the resulting lat. is 39°02'.

Cor. stands on ridge, 900 ft. above the triangulation point.

Land, mountainous, very rough and broken by sandstone ledges.

Soil, light sandy loam, loose sandstone, and sandstone ledges, 4th. rate.

Timber, a few scattered cedars and pinion pine.

Undergrowth, shadscale and sparse grass.

Sept. 9, 1915.

Resurvey of the Green River Guide Meridian through Tps. 20 S., bet. Rs. 20 and 21 E.

July 21: At 8h 36m a.m., l.m.t., I set off 39°02' on the lat. arc; 20°37'N. on the decl. arc, and determine a meridian with the solar at the St. cor. of Ts. 20 S., Rs. 20 and 21 E. Thence I run north on blank line bet. secs. 31 and 36, and at 40.00 chs. the old ¼ sec. cor. bears S.71°45'W., 68 lks. dist. Note: The extreme

Chains

roughness and great difficulty in extending surveys in this Tp. make impracticable any deviation from the cardinal in this line in the extension of subdivisions; and, as there are no subdivisions dependent on this line, I resurvey same as follows:

Note: Two sets of chainmen not being available for this survey, I cause all measurements to be double checked, and all clinometer angles to be double read, and the mean of the reduced horizontal distances only, appear in the notes of the resurvey of this G.M.

From the St. cor. of Ts. 20 S.,Rs. 20 and 21 E., I run North, bet. secs. 31 and 36 on resurvey line,

Over rough mountainous land, desc. through scattered cedar and pinion timber, and shadscale and sparse grass.

3.59 Ravine, 70 ft. below cor., drains S.60°E. Asc.

10.04 Spur, 190 ft. above ravine, projects E. Desc.

15.30 Ravine, 160 ft. below spur, drains N.60°E. Asc.

22.40 Top of asc., 180 ft. above ravine, bears NE. and SW., sloping E., thence on level line.

37.00 Leave top, bears E. and W., desc.

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

S 36 | S 31
¼ |
1915

from which

A cedar, 12 ins. dia., bears S.45½°E., 28 lks. dist., mkd. ¼ S 31 BT

A cedar, 6 ins. dia., bears N.87¼°W., 100 lks. dist., mkd. ¼ S 36 BT

July 21: At this cor., I set off 20°35½'N. on the decl. arc, and at 12h 06m p.m.,l.m.t., observe the sun on the meridian; the resulting lat. is 39°02'.

From this cor. the old. ¼ sec. cor., a sandstone, bears S.71°45'W., 68 lks. dist. I destroy all traces of the

chains	
	old.cor.
	My. cor. stands on N. slope, 105 ft. below top of asc.
45.45	Ravine, 235 ft. below the ¼ sec. cor., drains N.70°E. Asc.
52.40	Top of asc., spur, 160 ft. above ravine, slopes E. Desc.
57.20	Bottom of canyon, 200 ft. below spur, drainss SE. Asc.
61.95	Spur, 50 ft. above bottom, slopes W. Desc.
68.32	Re-cross bottom of same canyon, 25 ft. below spur, drains S.10°W. Thence along canyon bottom.
74.25	Leave bottom, drains from NW.; asc. over series of sandstone ledges, bear same.
78.00	Coal vein, at foot of ledge, 3 ft. thick, bears NE. and SW.
80.00	Set an iron post, 3 ft. long, 3 ins. dia., 24 ins. in the ground, for cor. of secs. 25, 30, 31 and 36, with brass cap mkd.

T 20 S
R 20 E | R 21 E
S 25 | S 30
S 31 | S 36

1915

and raise a mound of stone, 3 ft. base, 2 ft. high, W. of the cor.

No suitable bearing trees within limits.

Cor. stands on SE. slope, 140 ft. above canyon.

From this cor., the old. sec. cor., bears S.64°22'W., 145 lks. dist., I destroy all traces of the old cor.

Land, rough mountainous, draining S. and SE.

Soil, light sandy loam, loose sandrock, and sandstone, 4th. rate.

Timber, scattering cedars and pinion pine.

Undergrowth, shadscale and light grass.

July 21, 1915

July 22: At 8h 36m a.m.,l.m.t., I set off 39°03' on the

Chains	
	lat. arc; 20°26'N. on the decl. arc, and determine a meridian with the solar at the cor. of secs. 25, 30, 31 and 36.
	Thence I run
	North, resurveying bet. secs. 25 and 30.
	Over rough mountainous land, asc. over series of ledges, through scattered cedar and pinion timber, and shadscale and light grass undergrowth.
.50	Coal vein, 2 ft. thick, bears N.60°E. and S.60°W., at foot of ledge 15 ft. high.
6.90	Top of asc., 255 ft. above cor., slopes west; desc.
15.80	Ravine, 90 ft. below top, drains S.75°W. Asc. over ledges.
25.80	Top of asc., 210 ft. above ravine, slopes W. desc. over ledges.
29.90	Ravine, 200 ft. below top of asc., drains S.70°W. Asc. over ledges.
36.60	Top of asc., 260 ft. above ravine, slopes SW. Desc.
40.00	Set an iron post, 3 ft. long, 1 in. dia., 16 ins. in the ground to solid sandstone, and 10 ins. in a mound of stone, 3 ft. base, for ¼ sec. cor., with brass cap mkd.

S 25 | ¼ | S 30

1915

from which

A cedar, 6 ins. dia., bears S.80°W., 26 lks. dist., mkd. ¼ S 25 BT

A sandstone ledge, mkd. + BO bears east, 2 lks. dist.

Cor. stands 40 ft. below top of asc.

From this cor., the old ¼ sec. cor. bears S.73°50'W., 202 lks. dist. I destroy all traces of the old cor.

July 22: At the ¼ sec. cor., I set off 20°24'N. on the decl. arc, and at 12h 06m p.m., l.mt., observe the sun on the meridian; the resulting lat., is 39°04'.

44.00 Ravine, 35 ft. below the ¼ sec. cor., drains S.10°W. Asc. over series of ledges, bear NE. and SW.

60.20 Point of spur, 585 ft. above the ravine, projects W. Desc.

71.40 Ravine, 225 ft. below the point of spur, drains SW. Asc. over series of ledges, bear NE. and SW.

80.00 Top of asc., 235 ft. above the ravine, on W. slope of mountain,

Set an iron post, 3 ft. long, 3 ins. dia., 26 ins. in the ground, for cor. of secs. 19, 24, 25 and 30, with brass cap mkd.

T 20 S
R 20 E | R 21 E
S 24 | S 19
S 25 | S 30

1915

from which

A pinion, 10 ins. dia., bears N.34½°E., 10 lks. dist., mkd. T 20 S R 21 E S 19 BT

A pinion, 7 ins. dia., bears S.15½°E., 26 lks. dist., mkd. T 20 S R 21 E S 30 BT

A cedar, 4 ins. dia., bears S.29¼°W., 58 lks. dist., mkd. T 20 S R 20 E S 25 BT

A pinion, 12 ins. dia., bears N.53¼°W., 16 lks. dist., mkd. T 20 S R 20 E S 24 BT

From this cor., the old cor. of secs. 24, 19, 25 and 30, bears S.53°W., 330 lks. dist. I destroy all traces of the old cor.

Land, very rough and broken mountainous, general drainage SW.

Soil, light sandy loam, loose sand rock, and sandstone ledges, 4th. rate.

Timber, medium growth of cedars and pinion.

Undergrowth, sparse grass and shadscale.

July 22, 1915.

Resurvey of the Green River Guide Meridian, through T.20 S.

Chains.

July 23: At 8h 51m a.m., l.m.t., I set off 39°04' on the lat. arc; 20°14'N. on the decl. arc, and determine a meridian with the solar at the cor. of secs. 19, 24, 25 and 30.

Thence I run

North, resurveying, bet. secs. 19 and 24.

Over rough mountainous land, desc. along W. slope of mountain, throughcedars and pinion timber, and scattered undergrowth of sarvice, buck brush, and sparse grass.

7.95 Bottom of desc., bears E. and W., 50 ft. below cor. Asc.

25.85 Top of mountain, 155 ft. above foot of desc. bears E. and W. Desc., and enter long leaf pine timber, bears E. and W.

40.00 On N. slope, 550 ft. below top of mountain.

Set an iron post, 3 ft. long, 1 in. dia., 12 ins. in the ground to bedrock, and 14 ins. in a mound of stone 3 ft. base, for ¼ sec. cor., with brass cap mkd.

S 24 | ¼ | S 19

1915

from which

A pine, 6 ins. dia., bears S.52½°E., 21 lks. dist., mkd. ¼ S 19 BT

A pine, 6 ins. dia., bears N.74°W., 11 lks. dist., mkd. ¼ S 24 BT

July 23: At this ¼ sec. cor., I set off 20°12'N. on the decl. arc, and at 12h 06m p.m., l.m.t., ovserve the sun on the meridian; the resulting lat. is 39°04'.

I am unable to find any trace of the old ¼ sec. cor.

48.40 Bottom of canyon, 355 ft. below ¼ sec. cor., drains S.75°E., asc. Also, leave long leaf pine and continue through scattered cedar and pinon timber, bears N.75°W. and S.75°E.

63.07 Top of ledgy spur, 585 ft. above canyon, projects 3 chs. SE. Desc. over series of sandstone ledges, bear NW.

Chains	
	and SE.
80.00	Set an iron post, 3 ft. long, 3 ins. dia., 8 ins. in the ground, to solid bed rock, and 16 ins. in a mound of stone, 4 ft. base, 16 ins. high, for the cor. of secs. 13, 18, 19 and 24, with brass cap mkd.

T 20 S
R 20 E | R 21 E
S 13 | S 18
S 24 | S 19
1915

from which

A pinion, 8 ins. dia., bears N.43°30'E., 35 lks. dist., mkd. T 20 S R 21 E S 13 BT

A cedar, 10 ins. dia., bears S.35½°E., 30 lks. dist., mkd. T 20 S R 21 E S 19 BT

A pine, 10 ins. dia., bears S.2½°W., 71 lks. dist., mkd. T 20 S R 20 E S 24 BT

A pine, 14 ins. dia., bears N.6°W., 43 lks. dist., mkd. T 20 S R 20 E S 13 BT

I am unable to find any trace of the old cor. of secs. 13, 18, 19 and 24.

Cor. stands 350 ft. below spur, on NE. slope.

Land mountainous, very rough and broken by sandstone ledges.

Soil, light sandy loam, loose sandrock, and sandstone ledges, 4th. rate.

Timber, medium growth of cedars and pinions, and some scattered long leaf pine on N. slopes of mountain.

Undergrowth, scattered sarvice, buck brush, and sparse grass.

July 23, 1915.

July 24: At 8h 36m a.m., l.m.t., I set off 39°05' on the lat. arc; 20°02'N. on the decl. arc, and determine a meridian with the solar at the cor. of secs. 13, 18; 19 and 24.

Chains	
	Thence I run
	North, resurveying, bet. secs. 13 and 18.
	Over rough mountainous land, desc. over sandstone ledges, through scattered cedars and pinion and long leaf pine timber, and sparse grass undergrowth.
4.50	Bottom of canyon, 80 ft. below cor., drains S.15°E. Asc. over series of very rough and broken sandstone ledges, bear NW. and SE.
40.00	On SW. slope, 640 ft. above the canyon bottom.
	Set an iron post, 3 ft. long, 1 in. dia., 12 ins. in the ground to bed rock, and 12 ins. in a mound of stone, 3 ft. base, 1 ft. high, for ¼ sec. cor., with brass cap mkd.
	S 13 ¼ | S 18
	1915
	from which
	A cedar, 10 ins. dia., bears S.84½°E., 26 lks. dist., mkd. ¼ S 18 BT
	A pinion, 10 ins. dia., bears N.74¾°W., 43 lks. dist., mkd. ¼ S 13 BT
	I can find no trace of the old ¼ sec. cor.
	July 24: At this ¼ sec. cor., I set off 20°00'N. on the decl. arc, and at 12h 06m p.m., l.m.t., observe the sun on the meridian; the resulting lat. is 39°06'.
45.00	Point of spur, 55 ft. above the ¼ sec. cor., slopes SW. Desc.
55.25	Ravine, 40 ft. below point of spur, drains SW. Asc. over series of ledges, bear NE. and SW.
59.42	Point of spur, 125 ft. above ravine, slopes SW. Desc.
71.55	Ravine, heads 3 chs. NE., 75 ft. below spur, drains SW. Asc.
75.15	Point of spur, 60 ft. above ravine, slopes SW. Desc.
80.00	On NW. slope, 35 ft. below spur.
	Set an iron post, 3 ft. long, 3 ins. dia., 24 ins. in the

Chains.

ground, for cor. of secs. 7, 12, 13 and 18, with brass cap mkd.

T 20 S
R 20 E | R 21 E
S 12 | S 7
S 13 | S 18
1915

from which

A pinion, 8 ins. dia., bears N.77¼°E., 31 lks. dist., mkd. T 20 S R 21 E S 7 BT

A pinion, 8 ins. dia., bears S.68¾°E., 37 lks. dist., mkd. T 20 S R 21 E S 18 BT

A pinion, 14 ins. dia., bears S.46¾°W., 88 lks. dist. mkd. T 20 S R 20 E S 13 BT

A pinion, 12 ins. dia., bears N.64°W., 66 lks. dist., Mkd. T 20 S R 20 E S 12 BT

I am unable to find the old cor. of secs. 7, 12, 13 and 18.

Land, mountainous, very rough and broken draining E. and S.

Soil, light sandy loam, loose sandrock, and sandstone outcrops, bare, 4th. rate.

Timber, mediun growth of cedars and pinion pine, and scattered long leaf pine.

Undergrowth, scattered buckbrush and sparse grass.

July 24, 1915.

July 26: At 9h 06m a.m., l.m.t., I set off 39°06' on the lat. arc; 19°36'N. on the decl. arc, nand determine a meridian with the solar at the cor. of secs. 7, 12, 13 and 18.

Thence I run

North, on resurvey line, bet. secs. 7 and 12.

Over rough mountainous land, desc. through cedars and pinion timber, and scattered grass and buckbrush undergrowth.

1.50 Ravine, 20 ft. below the sec. cor., drains SW. Asc.

5.00 Top of asc, 15 ft. above the ravine, slopes S.60°W. Desc.

Resurvey of the Green River Guide Meridian, through T.20 S.

Chains

17.75 Ravine, 50 ft. below top, drains SW. Thence asc. over sandstone ledges, bear NE. and SW.

34.00 Ridge, 180 ft. above ravine, bears NW. and S.70°E. Desc.

40.00 On N. slope, 200 ft. below ridge.

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

S 12 | S 7
¼
1915

from which

A cedar, 10 ins. dia., bears N.89½°E., 22 lks. dist., mkd. ¼ S 7 BT

A pinion, 8 ins. dia., bears N.53½°W., 17 lks. dist., mkd. ¼ S 12 BT

I find no trace of the old ¼ sec. cor.

JUly 26: The sky is overcast at noon; lat. obs. impossible. Rain storm at 1h p.m. prevents further work.

July 26, 1915.

August 7: At 9h 06m a.m., l.m.t., I set off 39°06' on the lat. arc, 16°38'N. on the decl. arc, and determine a meridian with the solar at the ¼ sec. cor. bet. secs. 7 and 12

Thence I continue,

North, resurveying bet. secs. 7 and 12

52.18 Ravine, 260 ft. below the ¼ sec. cor., drains E. Asc.

59.20 Top of asc,, 130 ft. above ravine, slopes E. Desc.

62.70 Ravine, 170 ft. below top of asc., drains E. Asc.

69.70 Top of asc., spur, 140 ft. above ravine, projects E., thence over nearly level line.

80.00 Set an iron post, 3 ins. dia., 26 ins. in the ground, for cor. of secs. 1, 6, 7 and 12, with brass cap mkd.

T 20 S
R 20 E | R 21 E
S 1 | S 6
S 12 | S 7
1915

Chains	
	from which
	A cedar, 14 ins. dia., bears N.52½°E., 65 lks. dist., mkd. T.20 S.R.21 E.,S 6 BT
	A cedar, 12 ins. dia., bears S.30½°E., 55 lks. dist., mkd. T 20 S R 21 E S 7 BT
	A pinion, 8 ins. dia., bears S.36½°W., 78 lks. dist., mkd. T 20 S R 20 E S 12 BT
	A pinion, 8 ins. dia., bears N.76½°W., 53 lks. dist., mkd. T 20 S R 20 E S 1 BT
	I can find no trace of the old cor. of secs. 1, 6, 7 and 12.
	August 7: Rain storm at noon prevents lat. obs., also prevents further work this day.
	Land, mountainous, rough and broken, draining S. and E.
	Soil, light sandy loam, loose rock and sandstone ledges, 4th. rate.
	Timber, medium growth of cedar and pinion pine, and scattered long leaf pine.
	Undergrowth, scattered buckbrush and sparse grass.
	August 7, 1915.
	August 9, 1915: At 8h 05m a.m., l.m.t., I set off 39°07' on the lat. arc, 16°05'N. on the decl. arc, and determine a meridian with the solar at the cor. of secs. 1, 6, 7 and 12.
	Thence I run
	North, resurveying bet. secs. 1 and 6
	Over rough mountainous land, asc. through dense cedars and pinion pine, scattered long leaf pine,
2.70	Top of asc., 8 ft. above the sec. cor., bears E. and W. Enter dense sarvice and buck brush, and scattered timber, bears E. and W., thence desc. abruptly.
21.00	Bottom of canyon, 875 ft. below top of asc., drains NE. Leave sarviee and buck brush, and enter sage brush, bears E. and W. Asc.

Chains

34.00 Top of asc., 70 ft. above bottom, slopes E. Desc.

40.00 Bottom of canyon, 55 ft. below top, drains S.20°E. The point for cor. falls in water course, where it would be impossible to perpetuate the cor. Therefore at

40.50 Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for witness cor. to ¼ sec. cor., with brass cap mkd.

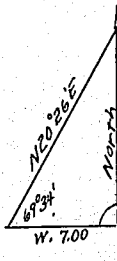
T 20 S
R 20 E | R 21 E
S 1 | S 6
¼
WC
1915

and raise a mound of stone, 3 ft. base, 2 ft. high, W. of the cor.

August 9: At this cor., I set off 16°02'N. on the decl. arc, and at 12h 05m p.m., l.m.t., observe the sun on the meridian; the resulting lat. is 39°07'.

I am unable to find any trace of the old ¼ sec. cor.

From the ¼ sec. cor., the line asc. abruptly over series of sandstone ledges, to ridge, over which it is impracticable to chain. To determine dist. to top of ledges, I proceed as follows: I set a flag on line on top of ledges, then measure a base line, west, 7.00 chs., dist., to a point from which the flag on top of ledges bears N.20°26'E.; from the flag on top of ledges, the W. end of the base line bears S.20°26'W.; therefore the dist. is



tan 69°34' x base, or 2.684 x 7.00 = 18.79 chs., which added to 40.50 makes

59.29 Top of ledges, 650 ft. above the WC. to ¼ sec. cor., bear E. and W. Asc. to main top.

63.10 Top of asc., ridge, bears E. and W., slopes W., 60 ft. above the ledges.

69.54 30 ft. below ridge.

Intersect E. and W. line 7.85 chs. E. of the old. cor. of Ts. 19 and 20 S., Rs. 20 and 21 E., which is a sandstone,

Resurvey of the Green River Guide Meridian, through T.20 S.

Chains

12 x 8 x 6 ins. above ground, firmly set, and marked and witnessed as described by the surveyor general.

At intersection, set an iron post, 3 ft. long, 3 ins. dia., 26 ins. in the ground, for closing cor. of Ts. 20 S., Rs. 20 and 21 E., with brass cap mkd.

T 19 S
R 20 E | R 21 E
S 36 | S 31
C | C
S 1 | S 6
R 20 E R 21 E
T 20 S
1915

from which

A pinion pine, 8 ins. dia., bears S.3°15'E., 116 lks. dist., mkd. T 20 S R 21 E S 6 BT

A pinion, 6 ins. dia., bears S.13°W., 109 lks. dist., mkd. T 20 S R 20 E S 1 BT

I destroy all marks of the old cor. of Ts. 19 and 20 S., Rs. 20 and 21 E., that pertain to Ts. 20 S., Rs. 20 and 21 E.

Land, mountainous, rough and broken by sandstone ledges.

Soil, light sandloam, loose sand rock, and sandstone ledges, 4th. rate.

Timber, cedars, pinion pine, and scattered long leaf pine.

Undergrowth, dense buck brush, sarvice and sage brush, and sparse grass.

August 9, 1915.

Retracement and resurvey of the North Bdy. of T.20 S.R.20 E.

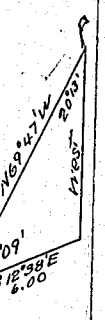
August 10: At 8h 05m a.m., l.m.t., I set off 39°07' on the lat. arc¦ 15°48'N. on the decl. arc, and determine a meridian with the solar at the cor. of Ts. 19 S., Rs. 20 and 21 E.,

Thence I run

Chains	
	West, retracing bet. secs. 1 and 36
40.00	No trace of the old ¼ sec. cor: can be found, after diligent search: Set temp. ¼ sec. cor.
	August 10: At this point, I set off 15°44'N. on the decl. arc, and at 12h 05m p.m.,l.m.t., observe the sun on the meridian; the resulting lat. is 39°07'.
80.00	After diligent search, I am unable to find any trace of the old cor. of secs. 1; 2, 35 and 36. Set temp. point for cor. of secs. 35 and 36.
	August 10, 1915
	August 11: At 8h35m a.m.,l.m.t., I set off 39°07' on the lat. arc; 15°30°N. on the decl. arc, and determine a meridian with the solar at the temp. point for cor. of secs. 35 and 36. Thence I continue
	West, retracing along S. bdy. sec. 35
40.00	I am unable to find any trace of the old ¼ sec. cor. Set temp. ¼ sec. cor.
	August 11. Impracticable to be on a meridian at noon; no lat. obs. taken.
	August 11, 1915.
	August 30: At 8h 46m a.m., l.m.t., set off 39°07' on the lat. arc; 9°15'N. on the decl. arc, and determine a meridian with the solar at the temp. ¼ sec. cor. pn S. bdy. sec. 35. Thence I run, with continuous measurement,
	West, retracing along S. bdy. sec. 35.
74.00	August 30: At this point, I set off 9°12'N. on the decl. arc, and at 12h 01m p.m.,l.m.t., observe the sun on the meridian; the resulting lat. is 39°07'.
80.00	After diligent search, I am unable to find any trace of the old cor. of secs. 2, 3, 34 and 35. Set temp. point for cor. of secs. 34 and 35.
	From the temp. point for cor. of secs. 34 and 35, I run West, retracing along S. bdy. sec. 34.
	Cease work for the day at 20.00 ch. point.
	August 30, 1915.

Retracement and Resurvey of the North Bdy. of T.20 S.,R.20 E.

Chains	
	August 31: At 8h 16m a.m.,l.m.t., I set off 39°07' on the lat. arc; 8°55'N. on the decl. arc, and determine a meridian with the solar at the 20.00 ch. point W. of the temp. point for cor. of secs. 34 and 35.
	Thence I run, with continuous measurement, West, retracing along S. bdy. sec. 34.
40.00	Set temp. ¼ sec. cor. The old W.C. to ¼ sec. cor. is returned as set at 49.80 chs., on top of ridge. There is a high ridge ahead, a series of ledges on E. side make chaining impracticable. To determine dist. to top of ridge, I return to 38.19 ch. point, then set a flag on line on top of ridge, then measure a base line, S.12°38'E., 6.00 chs. dist., to a point from which the flag on ridge bears N.69°47'W. From the flag on ridge, the S. end of the base line bears S.69°47'E. I compute the dist. as follows:



$$\text{dist.} = \frac{\sin 57°09'}{\sin 20°13'} \times \text{base, or } \frac{0.84009}{0.34557} \times 6.00 =$$

14.59 chs., which added to 38.19 makes 52.78 chs., the top of ridge. I search the top of this ridge carefully a considerable dist. north and south, for the old W.C. ¼ sec. cor. reported set at 49.80 chs. on top of ridge, but after long search, I fail to find the old cor.

August 31: At the 52.86 ch. point, I set off 8°51'N. on the decl. arc, and at 12h 01m p.m., l.m.t., observe the sun on the meridian; the resulting lat. is 39°07'.

80.00 After diligent search, I am unable to find any trace of the the old cor. of secs. 3, 4, 33 and 34, Set temp. point. for. cor. of secs. 33 and 34.

Note; From this cor. the line takes over impassible ledges and extremely rough and inaccessible country. I therefore abandom the retracement at this cor., and establish the retracement line as the true line.

August 31, 1915.

Chains.

October 2: At 8h 50m a.m., l.m.t., I set off 39°07' on the lat. arc, 3°18'S. on the decl. arc, and determine a meridian with the solar at the corner of T.19 S., Rs. 20 and 21 E.,

Thence,

West, resurveying along S. bdy. sec. 36

Over mountainous land, desc. through dense cedar and pinion timber, and scattered buckbrush and grass undergrowth.

2.65 Ravine, 85 ft. below the cor., drains S. Asc.

6.30 Top of asc., 115 ft. above the ravine, slopes S. desc.

10.65 Ravine, 80 ft. below top of asc. drains S.15°E. Asc.

13.50 Top of asc., 85 ft. above ravine, slopes S. Desc.

17.60 Ravine, 125 ft. below top of asc., drains S.15°E. Asc.

23.50 Spur, 275 ft. above ravine, projects S. Desc.

32.40 Ravine, 185 ft. below spur, drains S.30°E. Asc.

35.10 Point of spur, 130 ft. above ravine, slopes S.30°E. Desc.

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

S 36

1915

from which

A sandstone ledge, 10 ft. high, mkd. + BO, bears north, 4 lks. dist.

No bearing trees available.

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

44.00 Canyon, 120 ft. below ¼ sec. cor., drains S.75°E. Asc.

60.20 Top of asc., 215 ft. above canyon, slopes N. Enter dense buck brush, timber becomes scattered, bears NE. and ST. Desc.

63.40 Ravine, 100 ft. below top of asc., drains N. Asc.

66.14 Top of asc., 105 ft. above ravine, slopes N. Desc.

72.02 Intersect the temp. point for closing cor. of secs. 1 and 2, the closing cor. is set at same point; for descrip-

chains

tion, see line bet. secs. 1 and 2.

79.75 Set an iron post, 3 ft. long, 3 ins. dia., 24 ins. in the ground, for witness cor. to cor. of secs. 35 and 36, with brass cap mkd.

T 19 S R 20 E

S 35 | W S 36

C

1915

from which

A spruce, 8 ins. dia., bears N.11°E., 42 lks. dist., mkd. W C T 19 S R 20 E S 36 BT

A spruce, 10 ins. dia., bears N.29°W., 31 lks. dist., mkd. W C T 19 S R 20 E S 35 BT

80.00 The point for cor. of secs. 35 and 36, falls in bottom of canyon, where it would be washed out.

The canyon is 80 ft. below top of asc., drains N.

Land, mountainous, rough and broken, along side of canyon,

Soil, light sandy loam, loose sandrock, and outcropping of sandstone ledges, 4th. rate.

Timber, cedars and pinion, and some scattered spuuce around the witness cor.

Undergrowth, scattering buck brush and grass on E. 60 chs., and dense buckbrush on W.20 chs.

From the true point for the cor. of secs. 35 and 36, West, resurveying along S. bdy. sec. 35.

Over rough mountainous ledges, asc. through scattered cedar and pinion timber, and undergrowth of mahogany and buck brush.

31.50 Top of mountain, 925 ft. above cor., bears N.15°W. and S.15°E. Desc. gradually, and enter scattered oak brush, bears N. and S.

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

Chains	
	S 35 ¼ 1915
	from which
	A pinion, 6 ins. dia., bears north, 5 lks. dist., mkd. ¼ S 35 BT
	A cedar, 7 ins. dia., bears N.69¼°E., 23 lks. dist., mkd. ¼ S 35 BT
	October 2: Not able to be on a meridian at noon, no obs. for lat. taken.
45.85	Ravine, 150 ft. below the ¼ sec. cor., drains S. Asc.
51.25	Spur, 100 ft. above ravine, projects S. desc.
56.65	Canyon, 120 ft. below spur, drains S.15°E. Enter oak thicket, bears N. and S., leave timber, bears same.
61.80	Leave oak thicket, bears. N. and S., and enter timber, bears same.
72.10	Intersect the temp. point for closing cor. of secs. 2 and 3. The closing cor. is set at same point this day. For description of the C.C., see line bet. secs. 2 and 3.
74.00	Top of mountain, 530 ft. above the canyon, bears N. and S. Desc. over series of sandstone ledges, bear N. and S.
80.00	Set an iron post, 3 ft. long, 3 ins. dia., 16 ins. in the ground, to solid rock, and 8 ins. in a mound of stone, 3 ft. base, 8 ins. high, for cor. of secs. 34 and 35, with brass cap mkd.
	T 19 S | R 20 E S 34 | S 35
	1915
	from which
	A spruce, 16 ins. dia., bears N.5½°E., 35 lks. dist., mkd. T.19 S R 20 E S 35 BT
	A pinion pine, 10 ins. dia., bears N.36½°W., 12 lks. dist., mkd. T 19 S R 20 E S 34 BT
	Cor. stands on steep west slope, 265 ft. below top of

Resurvey of the South Bdy. of T.19 S.? R.20 E.

Chains	
	mountain.
	Land, mountainous, very rough and broken, by samdstone ledges.
	Soil, light sandy loam, loose sandrock, and sandstone ledges, 4th. rate.
	Timber, scattering cedars, pinion and spruce.
	Undergrowth, scattering buck brush, mahogany, and oak brush along top of mountain.
	From the cor. of secs. 34 and 35,
	West, resurveying along S. bdy. sec. 34 on N. bdy. of Tp.
	Over rough mountainous land, desc. abruptly over sandstone ledges, bear N. and S.; through cedars and pinion and scattered spruce timber, and scattering mahogany, buck-brush and sparse grass undergrowth.
13.59	Canyon, 575 ft. below the cor., drains S.15°W. Asc. over sandstone ledges, bear N. and S.
21.90	Spur, 300 ft. above canyon, projects S. Desc. over ledges.
26.80	Ravine, 215 ft. below spur, drains S. Asc.
31.52	Point of spur, 70 ft. above ravine, slopes S. Desc. over ledges.
39.05	Canyon, 180 ft. below spur, drains S.30°E. Asc.
40.00	Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for restored ¼ sec. cor., with brass cap mkd.

S 34 ✓
¼

1915

from which

A cedar, 14 ins. dia., bears N.50°E., 10 lks. dist., mkd. ¼ S 34 BT

A cedar, 6 ins. dia., bears N.72½°W., 63 lks. dist., mkd. ¼ S 34 BT

Thence asc. abruptly over series of sandstone ledges,

Resurvey of the S. Bdy. of T.19 S.,R.20 E.

Chains

bear N. and S., almost impassible.

52.86 Top of ridge, 500 ft. above the ¼ sec. cor., bears N. and S. Desc. over series of sandstone ledges, bear same.

68.20 Bottom of canyon, 515 ft. below spur, drains S. Asc. over sandstone ledges, bear N. and S.

71.00 Top of asc., 65 ft. above canyon bottom, slopes S. Desc.

71.94 The closing cor. of secs. 3 and 4 is set at this point. For description, see line. bet. secs. 3 and 4.

73.00 Ravine, 45 ft. below top of asc., drains SE. Asc. over series of sandstone ledges, bear NW. and SE.

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

T 19 S	R 20 E
S 33	S 34

1915

from which

A spruce, 16 ins. dia., bears N.60¼°E., 12 lks. dist., mkd. T 19 S R 20 E S 34 BT

A mahogany, 5 ins. dia., bears N.53¾°W., 36 lks. dist., mkd. T 19 S R 20 E S 33 BT

Cor. stands on NE. slope, 185 ft. above the ravine.

Land, mountainous, very rough and broken by sandstone ledges, drainage S.

Soil, light sandy loam, loose sandrock, and sandstone ledges, 4 th. rate.

Timber, scattering cedars, pinion pine and spruce,

Undergrowth, scattered mahogany, buck brush and sparse grass.

October 2, 1915.

Impassible and unsurveyable ledges on the line west, I abandon resurvey at this cor.

Retracement of Subdivisions in T.20 S.,R.20 E.

Retracement of Subdivisions in T.20 S.,R.20 E.

Chains	
	July 10: At 8h 05m am. l.m.t., I set off 39°04' on the lat. arc, 22°21'N. on the decl. arc, and determine a meridian with the solar at the old cor. of secs. 21, 22, 27 and 28, which is a sandstone, 10 x 7 x 6 ins. above ground, firmly set, and mkd. and witnessed as described by the surveyor general.
	Note: This cor. is later changed to the cor. of secs. 27 and 28 only.
	Thence I run
	S.89°57'E., retracing, bet. secs. 22 and 27.
	Over rough mountainous land, desc. through scattered cedars and pinion timber, and shadscale and grass undergrowth.
1.19	Point for the CC of secs. 21 and 22 later set at this point. See line bet. secs. 21 and 22 for description.
10.00	Wash, 60 lks. wide, 6 ft. deep, in bottom of Thompson Canyon, E. fork, 145 ft. below sec. cor., course SW. Asc. abruptly over sandstone ledges.
10.35	A spring of clear water, 10 lks. N. of line.
19.00	Point of spur, 165 ft. above canyon, slopes SW. Desc.
23.75	Bottom of canyon, 125 ft. below point of spur, drains SW. Asc. over series of very rough sandstone ledges, bear NE. and SW.
40.78	Fall 1 lk. N. of the old ¼ sec. cor., which is a sandstone, 8 x 6 x 6 ins. above ground, firmly set, mkd. and witnessed as described by the surveyor general.
	Cor. stands on slope of spur, 450 ft. above bottom of canyon.
	July 10: At this cor. I set off 22°19'N. on the decl. arc; and at 12h 05m p.m.,l.m.t., observe the sun on the meridian; the resulting lat. is 39°04'.
	The true course of this half mile is therefore S.89°56'E., and the dist., 40.78 chs.
	Note: This ¼ sec. cor. is later changed to refer to sec. 27 only.
	From the ¼ sec. cor., I continue

Retracement of Subdivisions of T.20 S., R.20 E.

Chains	
	S.89°57'E., retracing, bet. secs. 22 and 27.
5.00	Top of spur, 190 ft. above the ¼ sec. cor., projects SW., desc. slightly.
12.00	Bottom of desc., 50 ft. below point of spur, drains S. Asc. over ledges.
26.00	Point of spur, 200 ft. above bottom of desc., slopes S. Desc. Timber becomes dense, bears N. and S.
33.00	Ravine, 110 ft. below point of spur, drs. S.30°W. Asc.
39.39	Fall 15 lks. S. of the old cor. of secs. 22, 23, 26 and 27, which is a sandstone, 12 x 12 x 7 ins. above ground, firmly set, and mkd. and witnessed as described by the surveyor gemeral.
	Note: This cor. is later changed. to the cor. of sec. 27 only.
	The true course of this half mile is therefore N.89°50'E., and the dist., 39.39 chs.
	Land, very rough and mountainous, broken by sandstone ledges, general drainage to the S.
	Soil, light sandy loam, loose sandrock, and sandstone ledges, 4th. rate.
	Timber, cedar and pinion
	Undergrowth, scattered shadscale and grass.
	July 10, 1915.

July 12: At 8h 35m a.m.,l.m.t., I set off 39°04' on the latl. arc, 22°05'N. on the decl. arc, and determine a meridian with the solar at the old cor. of secs. 22, 23, 26 and 27.

Thence I run

S.0°01'E., retracing bet. secs. 26 and 27.

Over rough mountainous land, asc. through dense cedar and pinion timber, and shadscale and grass undergrowth.

6.00	Top of asc., 55 ft. above the cor,, slopes W., desc.
9.00	Head of ravine, 30 ft. deep, drains W. Asc.

Chains

13.00 Spur, 100 ft above draw, projects W., desc. Timber becames scattered, bears E. and W.

32.75 Bottom of canyon, 750 ft. below spur, drains W. Asc. over series of very rugged ledges, bear E. and W., and enter medium buck brush undergrowth, brs. same.

39.94 275 ft. above the canyon.

Fall 15 lks. E. of the old ¼ sec. cor., which is a sandstone, 8 x 8 x 6 ins. above ground, firmly set, and mkd. and witnessed as described by the surveyor general.

July 12: At this cor. I set off 22°04'N. on the decl. arc, and at 12h 05m p.m.,l.m.t., observe the sun on the meridian; the resulting lat. is 39°04'.

The true course of this half mile is therefore S.0°12'W., and the dist., 39.94 chs.

From the ¼ sec. cor., I run

S.0°01'E., retracing bet. secs. 26 and 27.

21.75 Spur, 500 ft. above the ¼ sec. cor., projects W. Desc.

35.00 Ravine, 340 ft. below spur, drains W. Asc.

40.36 120 ft. above the ravine.

Fall 15 lks. E. of the old cor. of secs. 27, 26, 35 and 34 which is a sandstone, 11 x 6 x 6 ins. above ground, firmly set, and mkd. and witnessed as described by the surveyor general.

The true course of this half mile is therefore S.0°12'W., and the dist., 40.36 chs.

Land on the mile, mountainous, very rough and broken, general W. drainage.

Soil, light sandy loam, loose sand rock, and sandstone 4 th. rate.

Timber, cedar and pinion.

Undergrowth, scattered shadscale, grass and buckbrush.

July 12, 1915.

Chains	
	July 13: At 8h 35m a.m., l.m.t., I set off 39°03' on the lat. arc; 21°57'N. on the decl. arc, and determine a meridian with the solar at the old cor. of secs. 26, 27, 34 and 35.
	Thence I run
	S.0°01'E., retracing bet. secs. 34 and 35.
	Over very rough mountainous land, asc. over ledges, bear E. and W., through scattered cedar and pinion timber, and scattered shadscale undergrowth.
5.50	Point of spur, 200 ft. above sec. cor., projects W. Desc.
26.40	Gulch, 300 ft. below spur, drains W. asc.
39.92	100 ft. above gulch,
	Fall 22 lks. W. of the old ¼ sec. cor., which is a sandstone, 14 x 10 x 8 ins. above ground, firmly set and mkd. and witnessed as described by the surveyor general.
	July 13: At this cor. I set off 21°55'N. on the decl. arc, and at 12h 05m p.m.,l.m.t., observe the sun on the meridian; the resulting lat. is 39°03'.
	The true course of this half mile is therefore S.0°20'E., and the dist., 39.92 chs.
	From the ¼ sec. cor., I continue
	S.0°01'E., retracing, bet. secs. 34 and 35.
.50	Top of asc., 25 ft. above the ¼ sec. cor., slopes W. Desc. slightly along side of spur, over ledges.
20.50	Spur, 50 ft. below top of asc., projects SW. Thence desc. over ledges.
40.17	270 ft. below top of spur, under pink ledges.
	Intersect E. and W. line 91 lks. W. of the St. cor. of secs. 34 and 35, heretofore described.
	The true course of this half mile is therefore S.1°19'E., and the dist., 40.18 chs.
	Land on the mile, very rough mountainous, broken by numerous sandstone ledges, general drainage S.
	Soil, light sandy loam, loose sand rock and bare ledges, 4th. rate.

Chains	
	Undergrowth, scattered shadscale and grass.
	Timber, scattered cedar and pinion.
	July 13, 1915.
	July 14: At 8h 06m a.m., l.m.t. I set off 39°04' on the lat. arc, 21°48½'N. on the decl. arc, and determine a meridian with the solar at the old cor. of secs. 21, 22, 27 and 28, heretofore described.
	Thence I run
	West, retracing, bet. secs. 21 and 28.
	Over very rough mountainous land, asc. over series of sandstone ledges, bear N. and S., through scattering cedar and pinion timber, and scattered shadscale and grass undergrowth.
25.50	Top of ridge, 900 ft. above cor., bears N. and S. Desc. over series of ledges, bear N. and S.
40.00	July 14: At this point, I set off 21°47'N. on the decl. arc, and at 12h 06m p.m.,l.m.t., observe the sun on the meridian; the resulting lat. is 39°04'.
49.50	Ravine, 900 ft. below ridge, drains NW. Asc.
50.06	25 ft. above the bottom.
	Fall 85 lks. N. of the old W.C. ¼ sec.,cor., which is a sandstone, 12 x 6 x 6 ins. above ground, firmly set, and mkd. and witnessed as described by the surveyor general.
	Note: This cor. is later changed to refer to sec. 28 only.
	The true course of this line is therefore S.89°02'W., and the true dist., 50.07 chs.
	From the WC. ¼ sec. cor., I run
	West, retracing bet. secs. 21 and 28
12.00	Point of spur, slopes NW. Desc. abruptly over ledges. bear NW. and SE.
19.00	Enter Thompsons Canyon, 200 ft. below point of spur, bears N.20°W. and S.20°E. Leave timber, enter medium growth of sage brush, bears N. and S., thence over

Chains	
	nearly level land in bottom of canyon.
29.40	Creek, 10 lks. wide, 1 in. deep, clear water, in bottom of wash, 1 ch. wide, 15 ft. deep, course S.
30.19	Fall 12 lks. S. of the old cor. of secs. 20, 21, 28 and 29, which is a sandstone, 10 x 10 x 6 ins. above ground, firmly set, and mkd. and witnessed as described by the surveyor general.

The true course of this line is therefore N.89°46'W., and the dist., 30.19 chs.

Land on the mile, very rough mountainous, broken by sandstone ledges, general S. drainage.

Soil, light sandy loam and loose sandrock, 4th. rate.

Undergrowth, scattered shadscale and grass on E.69.00 chs., and sagebrush on W.11.26 chs.

Timber, scattered cedars and pinion on E.69.00 chs.

July 14, 1915.

July 15: At 8h 36m a.m.,l.m.t., I set off 39°04' on the lat. arc, 21°39'N. on the decl. arc, and determine a meridian with the solar at the old cor. of s ecs. 20, 21, 28 and 29. (Note: This cor. is later changed to the cor. of secs. 28 and 29 only.)

Thence I run

S.0°03'E., retracing, bet. secs. 28 and 29

Over nearly level land, along bottom of Thompsons Canyon, through medium growth of sage and scattered grass.

11.15	Wash, 1 ch. wide, 30 ft. deep. Stream of water in bottom, clear, 10 lks. wide, 1 in. deep, course SE.
13.35	Re-cross wash, course SE.
25.50	Foot of spur, bears E. and W., thence asc., and enter scattering cedar and pinion timber, bears E. and W.
29.00	Top of spur, 50 ft. above the bottom, projects E. Desc.
33.50	Ravine, 40 ft. below spur, drains S.60°E. Asc.
37.50	Point of spur, 75 ft. above ravine, slopes S.75°E. Desc.

Chains	
39.76	30 ft. below tpp of spur.
	Fall 1½ lks. E. of the old ¼ sec. cor., which is a sand stone, 12 x 10 x 8 ins. above ground, mkd. and witnessed as described by the surveyor general.
	The true course of this half mile is therefore S.0°02'E., and the dist., 39.76 chs.
	From the ¼ sec. cor., I run
	S.0°03'E., retracing bet. secs. 28 and 29.
4.50	Foot of spur, 50 ft. below the ¼ sec. cor., bears NW. and SE. Leave timber, bears NE. and SW. Thence along W. side of Thompsons Canyon.
16.00	Foot of spur, bears NW. and SE. Asc.
22.00	Point of spur, 150 ft. above bottom, projects E. De sc.
27.40	Ravine, 125 ft. below spur, drains E. Asc.
40.22	Fall 1½ lks. E. of the old cor. of secs. 28, 29, 32 and 33, which is a sandstone, 16,x 8 x 4 ins. above ground, firmly set, and mkd. and witnessed as described by the surveyor general.
	The true course of this half mile is therefore S.0°02'E., and the dist., 40.22 chs.
	July 15: At this cor., I set off 21°38'N. on the decl. arc, and at 12h 06m p.m.,l.m.t., observe the sun in the meridian; the resulting lat. is 39°03'.
	Land on the mile, rough mountainous, along the W. slope of Thompsons Canyon, which drains S.
	Soil, light sandy loam, and loose sandrock, 4th. rate.
	Timber, scattered cedars and pinion along the slope of the mountain.
	Undergrowth, scattered shadscale and grass on timbered part; medium sagebrush on canyon bottom.
	From the old. cor. of secs. 28, 29, 32 and 33,
	I run
	S.0°03'E., retracing, bet. secs. 33 and 32

Chains	
	S.0°03'E., retracing, bet. secs. 32 and 33.
	Over rough mountainous land, asc. through very scattered cedar and pinion timber, and shadscale and sparse grass undergrowth.
3.50	Point of spur, 60 ft. above the cor., projects E. Desc. over series of sandstone ledges, bear E. and W.
24.00	Ravine, 175 ft. below spur, drains E. Asc. over ledges.
36.25	Spur. 200 ft. above ravine, projects E. Desc. slightly.
40.04	10 ft. below spur.
	Fall 1½ lks. E. of the old ¼ sec. cor., which is a sandstone, 12 x 10 x 8 ins. above ground, firmly set, and mkd. and witnessed as described by the surveyor general.
	The true course of this half mile is therefore S.0°02'E., and the dist., 40.04 chs.
	From the ¼ sec. cor.,
	I run
	S.0°03'E., retracing bet. secs. 32 and 33
3.75	To the bottom of desc., hollow, 15 ft. below the ¼ sec. cor., drains E. Asc.
8.00	Spur, 40 ft. above the hollow, projects E. Desc. over series of ledges, bear E. and W.
22.00	Gulch, 300 ft. below spur, drains E. Asc. over ledges, bear E. and W.
34.00	Spur, 300 ft above gulch, projects E. Desc.
40.12	Intersect the 4th. St. Par. S. at 1½ lks. E. of the St. cor. of secs. 32 and 33, hereroforе described.
	The true course of this half mile is therefore S.0°02'E., and the dist., 40.12 chs.
	Land, on the mile, very rough mountainous, broken by sandstone ledges, on E. side of ridge, general drainage E.
	Soil, light sandy loam and loose sandrock, 4th. rate.
	Timber, scattered cedars and pinion pines.
	Undergrowth, scattered shadscale and grass.
	July 15, 1915.

Chains	
	July 27: At 9h 06m a.m.,l.m.t., I set off 39°02' on the dlat. arc, 19°23'N. on the decl.arc, and determine a meridian with the solar at the re-established St. cor. of secs. 35 and 36, heretofore described.
	Thence I run N.0°01'W., bet. secs. 35 and 36
	Over mountainous land, asc. over series of sandstone ledges, bear E.,and W., through scattered cedar and pinion timber, and shadscale and grass undergrowth.
3.90	Top of asc., 65 ft. above the cor., slopes W. Desc.
7.00	Ravine, 90 ft. below top of asc., drains S.15°W. Thence along W. side of bottom of ravine.
9.30	Asc. over series of ledges, bear SE. and NW.
18.95	Point of spur, 220 ft. above ravine, slopes W. Desc.
29.00	Ravine, 70 ft. below point of spur, course SW. Coal outcroppings in bottom of ravine bear NE. and SW. Asc. over series of ledges, bear NE. and SW.
36.25	Point of spur, 180 ft. above ravine, slopes E. Desc.
39.86	Ravine, 20 ft. below spur, drains SE. Asc.
40.00	Set an iron post, 3 ft. long, 1 in. dia., 12 ins. in the ground, to solid rock, and 12 ins. in a mound of stone, 3 ft. base, 1 ft. high, for ¼ sec. cor., with brass cap mkd.

S 35 | ¼ | S 36

1915

from which

A cedar, 14 ins. dia., bears N.33°15'E., 18 lks. dist., mkd. ¼ S 36 BT

A pinion, 7 ins. dia., bears S.26°15'W., 67 lks. dist., mkd. ¼ S 35 BT

July 27: At this cor., I set off 19°21'N. on the decl. arc, and at 12h 06m p.m.,l.m.t., observe the sun on the meridian; the resulting lat. is 39°02'.

Thence asc. over series of ledges, bear NW. and SE.

Subdivision of T.20 S.,R.20 E.

Chains	
68.65	Ridge, 825 ft. above the ¼ sec. cor., bears N.60°W. and S.60°E. Desc. abruptly over steep side of ridge, and enter scattered spruce timber, bears E. and W.
80.00	260 ft. below ridge, on NE. slope.

Set an iron post, 3 ft. long, 2 ins. dia., 24 ins. in the ground, for cor. of secs. 25, 26, 35 and 36, with brass cap mkd.

T 20 S S 26	R 20 E S 25
S 35	S 36

1915

from which

A pinion, 8 ins. dia., bears N.49½°E., 53 lks. dist., mkd. T 20 S R 20 E S 25 BT

A pinion, 10 ins. dia., bears S.21½°E., 33 lks. dist., mkd. T 20 S R 20 E S 36 BT

A pinion, 8 ins. dia., bears S.63½°W., 12 lks. dist., mkd T 20 S R 20 E S 35 BT

A pinion, 10 ins. dia., bears N.31°W., 32 lks. dist., mkd. T 20 S R 20 E S 26 BT

Land, mountainous, very rough and broken, by numerous sandstone ledges; S.69 chs. drains S. and the N.11 chs. drains NE.

Soil, light sandy loam, loose sandrock, and sandstone ledges, 4th. rate.

Timber, scattered cedars and pinion pine, and scattered spruce on the N. 11 chs.

Undergrowth, scattered shadscale and grass.

July 27, 1915.

July 28: At 9h .06m a.m.,l.m.t., I set off 39°03' on the lat. arc; 19°09'N. on the decl. arc, and determine a meridian with the solar at the cor. of secs. 25, 26, 35 and 36.

Subdivision of T.20 S.,R.20 E.

Chains	
	Thence I run
	East, on random line, bet. secs. 25 and 36
40.00	Set temp. ¼ sec. cor.
	July 28: At this point I set off 19°08'N. on the decl. arc, and at 12h 06m p.m.,l.m.t., observe the sun on the meridian; the resulting lat. is 39°03'.
79.96	Intersect the E. bdy. of Tp. 4 lks. S. of the cor. of secs. 25, 30, 31 and 36, heretofore described.
	Thence,
	S.89°58'W., on true line, bet. secs. 25 and 36.
	Over rough mountainous land, asc. through scattered cedar and pinion timber, and scattered buck, sarvice, shadscale and grass undergrowth.
2.00	Top of asc., 60 ft. above cor., slopes S. Desc.
7.50	Vein of coal, 4 ft. thick, at foot of ledge 30 ft. high, bears N.60°W. and S.60°E.
12.00	Bottom of canyon, 140 ft. below top of asc., drains SE. Asc.
15.75	Coal vein, 2 ft. thick, bears N. and S.20°E.
34.85	Top of asc., 310 ft. above canyon, slopes N. Desc.
39.98	Set an iron post, 3 ft. long, 1 in. dia., 12 ins. in the ground to bed rock, and 12 ins. in a mound of stone, 3 ft. base, 1 ft. high, for ¼ sec. cor., with brass cap mkd.

S 25
¼
S 36
1915

from which

A pinion, 6 ins. dia., bears N.77°E., 42 lks. dist., mkd. ¼ S 25 BT

A pinion, 7 ins. dia., bears S.29°W., 27 lks. dist., mkd. ¼ S 36 BT

Cor. stands 50 ft. below top of asc.

41.50	Ravine, 25 ft. below ¼ sec. cor., drains NE. Asc.

Chains	
54.50	Point of spur, 550 ft. above ravine, slopes NE. Desc. Also, enter spruce timber, bears N. and S.
57.50	Foot of desc., bears N. and S., thence asc. gradually.
65.00	Foot of steep desc., bears NE. and SW., thence asc. abruptly to point of spur.
74.50	Point of spur, 225 ft. above foot of first asc., slopes NE. Desc.
79.96	The cor. of secs. 25, 26, 35 and 36, 135 ft. below point of spur.
	Land, mountainous, rough and broken with sandstone ledges, general slope to the E.
	Soil, light sandy loam, loose sandrock, and sandstone ledges, 4th. rate.
	Timber, cedars and pinion, and scattered spruce.
	Undergrowth, scattered sarvice, shadscale and grass.
	July 28, 1915.

August 16: At 9h 04m a.m.,l.m.t., I set off 39°03' on the lat. arc, 13°58'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

West, on random line, bet. secs. 26 and 35

40.00 Set temp ¼ sec. cor.

August 16: At this point I set off 13°55'N. on the decl. arc, and at 12h 04m p.m.,l.m.t., observe the sun on the meridian; the resulting lat. is 39°03'.

81.24 Intersect N. and S. line 22 lks. S. of the cor. of secs. 26, 27, 34 and 35, heretofore described.

Thence,

S.89°50'E., on true line, bet. secs. 26 and 35.

Over rough mountainous land, asc. abruptly over sandstone ledges, bear N. and S., through scattered cedar and pin-

Subdivision of T.20 S.,R.20 E.

Chains	
	ion and spruce timber, and scattered sarvice undergrowth. and medium mahogany brush.
11.00	Ridge, 430 ft. above the cor., bears N. and S. Desc. abruptly over ledges, bear N. and S.
41.24	Set an iron post, 3 ft. long, 1 in. dia., 12 ins. in the ground, on solid rock, and 14 ins. in a mound of stone, 4 ft. base, 14 ins. high, for $\frac{1}{4}$ sec. cor., with brass cap mkd.
	S 26 $\frac{1}{4}$ / S 35 / 1915
	and raise a mound of stone, $2\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, N. of the cor.
	No bearing trees within limits.
	Cor. stands on steep W. slope, 790 ft. below ridge.
42.20	Canyon, 10 ft. below $\frac{1}{4}$ sec. cor., drains S.20°W. Asc. abruptly over ledges, bear NW. and SE.
62.00	Ridge, 760 ft. above canyon, bears N.20°W. and S.20°E. Desc. over ledges, bear same.
77.50	Ravine, 390 ft. below ridge, drains N.20°E. Asc.
81.24	The cor. of secs. 25, 26, 35 and 36., 105 ft. above ravine.
	Land, rough mountainous, E.19.24 chs. drains NE., W.62 chs. drains S.
	Soil, light sandy loam, loose sandrock, and sandstone outcrops and ledges, 4th. rate.
	Timber, scattered cedars, pinion, and some spruce.
	Undergrowth, scattered sarvice and mahogany.
	August 16, 1915.

July 29: At 9h 06m a.m.,l.m.t., I set off 39°03' on the lat. arc; 18°56'N. on the decl. arc, and determine a meridian with the solar at the cor. of secs. 25, 26,

Subdivision of T.20 S.,R.20 E.

Chains	
	35 and 36.
	Thence I run
	N.0°01'W., bet. secs. 25 and 26.
	Over rough mountainous land, desc. over NW. slope, through cedars, pinion pine and scattered spruce timber, and sarvice, buck brush and grass undergrowth.
18.90	Ravine, 450 ft. below sec. cor., drains N.60°E. Asc. over sandstone ledges, bear NE. and SW.
32.35	Point of spur, 300 ft. above ravine, slopes E. Desc. over ledges.
40.00	Set an iron post, 3 ft. long, 1 in. dia., 16 ins. in the ground, and 10 ins. in a mound of stone, 3 ft. base, 10 ins. high, for ¼ sec. cor., with brass cap mkd.
	S 26 | S 25
	¼ |
	1915
	from which
	A cedar, 6 ins. dia., bears N.46°E., 12 lks. dist., mkd. ¼ S 25 BT
	A cedar, 9 ins. dia., bears S.57°W., 56 lks. dist., mkd. ¼ S 26 BT
	Cor. stands on NE. slope,,250 ft. below point of spur.
	July 29: At the ¼ sec. cor., I set off 18°54'N. on the decl. arc, and at 12h 06m p.m.,l.m.t., Observe the sun on the meridian; the resulting lat. is 39°04'.
45.50	Canyon, 75 ft. below ¼ sec. cor., drains S.30°E. Asc. over series of sandstone ledges, bear E. and W.
68.00	Top of asc., 660 ft. above the canyon, slopes SW. Desc.
73.35	Ravine, 75 ft. below top of asc., drains SW. Asc. over ledges.
80.00	145 ft. above bottom of ravine.
	Set an iron post, 3 ft. long, 2 ins. dia., 12 ins. in the ground to bed rock, and 12 ins. in a mound of stone, 4 ft. base, 1 ft. high, for cor. of secs. 23, 24, 25 and 26, with brass cap mkd.

Subdivision of T.20 S.,R.20 E.

Chains	
	T 20 S R 20 E S 23 | S 24 S 26 | S 25 1915
	from which
	A pinion, 6 ins. dia., bears N.4¾°E., 34 lks. dist., mkd. T 20 S R 20 E S 24 BT
	A pinion, 14 ins. dia., bears S.32¼°E., 20 lks. dist., mkd. T 20 S R 20 E S 25 BT
	A pinion, 6 ins. dia., bears S.51½°W., 29 lks. dist., mkd. T 20 S R 20 E S 26 BT
	A pinion, 10 ins. dia., bears N.77¼°W., 35 lks. dist., mkd. T 20 S R 20 E S 23 BT
	Lamd, rough mountainous, broken by numerous sandstone ledges, general drainage to the S. and SE.
	Soil, light sandy loam, loose sandstone, and sandstone ledges, 4th. rate.
	Timber, cedars, pinion pine, and spruce.
	Undergrowth, scattered sarvice, buck brush and grass.
	July 29, 1915.

	July 30: At 8h 51m a.m.,l.m.t., I set off 39°04' on the lat. arc; 18° 41½'N. on the decl. arc, and determine a meridian with the solar at the cor. of secs. 23, 24, 25 and 26.
	Thence I run
	N.89°58'E., on random line, bet. secs. 24 and 25.
40.00	Set temp. ¼ sec. cor.
	July 30: At this point, I set off 18°39½'N. on the decl. arc, and at 12h 06m p.m.,l.m.t., observe the sun on the meridian; the resulting lat. is 39°04'.
79.84	Intersect the E. bdy. of Tp. 10 lks. S. of the cor. of secs. 19, 24, 25 and 30., heretofore described.
	Thence,

Chains	
	S.89°54'W., on true line, bet. secs. 24 and 25.
	Over rough mountainous land, desc. through cedar, pinion and seattered spruce timber, and sparse grass undergrowth
7.50	Ravine, 240 ft. below cor., drains S. Asc. over ledges, bear N. and S.
18.70	Point of spur, 265 ft. above ravine, slopes S. Desc. over ledges.
39.92	465 ft. below spur.
	Set an iron post, 3 ft. long, 1 in. dia., 16 ins. in the ground, to solid rock, and 8 ins. in a mound of stone, 4 ft. base, 8 ins. high, for $\frac{1}{4}$ sec. cor., with brass cap mkd.
	S 24 $\frac{1}{4}$ S 25 1915
	from which
	A cedar, 14 ins dia., bears N., 3 lks. dist., mkd. $\frac{1}{4}$ S 24 BT
	A cedar. 14 ins. dia., bears S.25°W., 24 lks. dist., mkd. $\frac{1}{4}$ S 25 BT
41.70	Canyon, 34 ft. below $\frac{1}{4}$ sec. cor., drains S.30°E. Asc. over series of ledges, bear NW. and SE.
61.00	Ridge, 600 ft. above canyon, bears N.15°W. and S.15°E. Desc. over ledges.
73.50	Ravine, 185 ft. below ridge, drains SW. Asc. over ledges.
79.84	65 ft. above ravine.
	The cor. of secs. 23, 24, 25 and 26.
	Land, rough mountainous, very rough and broken, drainage south.
	Soil, light sandy loam, loose sandrock and ledges, 4th. rate.
	Timber, cedars, pinion pine, and scattered spruce.
	Undergrowth, sparse grass.

Chains	
	July 30, 1915.
	August 17: At 8h 49m a.m.,l.m.t., I set off 39°04' on the lat. arc; 13°39'N. on the decl. arc, and determine a meridian with the solar at the cor. of secs. 23, 24, 25 and 26.
	Thence I run,
	West, on true line, knowing I will not close within limits, bet. secs. 23 and 26
	Over rough mountainous land, over top of point of spur, through dense cedar and pinion and scattered spruce timber, and scattered sarvice and mahogany undergrowth.
1.70	Desc. abruptly over sandstone ledges, bear N. and S.
16.75	Canyon, 550 ft. below spur, drains S. Asc. abruptly over ledges, bear N. and S.
23.00	Point of spur, 275 ft. above canyon, slopes S. Desc. over sandstone ledges, bear N. and S.
33.50	Ravine, 160 ft. below spur, drains S.75°E. Asc. abruptly.
40.00	150 ft. above bottom of ravine.
	Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for ¼ sec. cor., with brass cap mkd.
	S 23 ¼ / S 26 / 1915
	from which
	A pinion, 10 ins. dia., bears N.62½°E., 25 lks. dist., mkd. ¼ S 23 BT
	A pinion, 10 ins. dia., bears S.45½°W., 52 lks. dist., mkd. ¼ S 26 BT.
	August 17: At this ¼ sec. cor., I set off 13°36'N. on the decl. arc, and at 12h 04m p.m.,l.m.t., observe the sun on the meridian; the resulting lat. is 39°04'.
69.93	Ridge, 190 ft. above cor., bears N. and S.30°E. Desc.

Chains

80.00 125 ft. below ridge.

Set an iron post, 3 ft. long, 2 ins. dia., on solid sandstone ledge, in a mound of stone 6 ft. base, 2 ft. high, for cor. of secs. 22 and 23, with brass cap mkd.

T 20 S | R 20 E
S 22 | S 23

1915

from which

A pinion, 6 ins. dia., bears N.55½°E., 37 lks. dist., mkd. T 20 S R 20 E S 23 BT

A pinion, 5 ins. dia., bears N.81°W., 28 lks. dist., mkd. T 20 S R 20 E S 22 BT

81.11 Intersect the E. bdy. sec. 27 at 60 lks. S.0°12'W. of the cor. of secs. 22, 23, 26 and 27, heretofore described.

I destroy all marks of the old cor. that pertain to secs. 22, 23, and 26, and at my intersection,

Set an iron post, 3 ft. long, 2 ins. dia., 24 ins. in the ground, for closing cor. of secs. 22 and 26, with brass cap mkd.

T 20 S | R 20 E
S 22 | S 23
C
C
S 27 | S 26

1915

from which

A pinion, 7 ins. dia., bears N.30°E., 36 lks. dist., mkd. T 20 S R 20 E S 22 BT

A pinion, 7 ins. dia., bears S.11¾°E., 32 lks. dist., mkd. T 20 S R 20 E S 26 BT

Land, rough mountainous, broken, E.69.93 chs. drains SE. and W. 11.18 chs. drains W.

Soil, light sandy loam, loose sandrock, and sandstone ledges, 4th. rate.

Timber, cedars and pinion, and scattering spruce.

Chains	
	Undergrowth, scattered sarvice and mahogany.
	August 17, 1915.
	July 31: At 8h 51m a.m.,l.m.t., I set off 39°04' on the lat. arc; 18°27'N. on the decl. arc, and determine a meridian with the solar at the cor. of secs. 23 and 24.
	Thence I run
	N.0°01'W., bet. secs. 23 and 24.
	Over rough mountainous land, asc. gradually through cedar and pinion and scattered spruce timber, and scattered buck and sarvice undergrowth.
5.05	Spur, 35 ft. above the cor. projects S.80°W. Desc. abruptly over series of sandstone ledges, bear NE. and SW.
19.15	Gulch, 175 ft. below spur, drains SW. Asc. over ledges.
29.00	Spur, 265 ft. above gulch, slopes SW.
39.80	The true point for ¼ sec. cor. will fall on edge of sandstone ledge, where it would be impracticable to set it.
	Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for witness cor. to ¼ sec. cor., with brass cap mkd.

T 20 S | R 20 E

W C ¼

S 23 | S 24

1915

from which

A pinion, 10 ins. dia., bears N.39°E., 28 lks. dist., mkd. T 20 S R 20 E¼S 24 BT WC

A spruce, 12 ins. dia., bears N.50°W., 5 lks. dist., mkd. W C T 20 S R 20 E¼S 23 BT

	Cor. stands 110 ft. below spur.
40.00	Point for ¼ sec. cor. falls on edge of sandstone ledge.
44.75	Ravine, 100 ft. below the cor., drains SW. Asc. over

Chains

sandstone ledges, bear NE. and SW.

56.10 Spur, 290 ft. above ravine, projects S.60°W.

July 31: At this point I set off 18°25'N. on the decl. a arc, and at 12h 06m p.m.,l.m.t., observe the sun on the meridian; the resulting lat., is 39°05'.

Desc. over ledges, bear NE. and SW.

58.80 Ravine, 45 ft. below spur, drains SW. Asc.

61.40 Ridge, 35 ft. above ravine, bears NW. and SE., Desc. abruptly over ledges, bear NW. and SE.

80.00 125 ft. below top of ridge.

Set an iron post, 3 ft. long, 2 ins. dia., 24 ins. in the ground, for cor. of secs. 13, 14, 23 and 24, with brass cap mkd.

T 20 S	R 20 E
S 14	S 13
S 23	S 24

1915

from which

A pinion, 8 ins. dia., bears N.27½°E., 11 lks. dist., mkd. T 20 S R 20 E S 13 BT

A pinion, 7 ins. dia., bears S.8°E., 49 lks. dist., mkd. T 20 S R 20 E S 24 BT

A cedar, 14 ins. dia., bears S,20½°W., 40 lks. dist., mkd. T 20 S R 20 E S 23 BT

A pinion, 7 ins. dia., bears N.43°W., 74 lks. dist., mkd. T 20 S R 20 E S 14 BT

Land, rough mountainous, broken by sandstone ledges.

Soil, light sandy loam, loose sandrock, and sandstone ledges. 4th. rate.

Timber, cedar and pinion, and scattered spruce.

Undergrowth, scattered buck and mahogany.

July 31, 1915.

August.2: At 8h 36m a.m:,l.m.t., I set off 39°05' on the

Chains	
	lat. arc, 17°58'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°54'E., on random line, bet. secs. 13 and 24.
40.00	Set temp. ¼ sec. cor.
	August. 2: At this point, I set off 17°55'N. on the decl. arc, and at 12h 06m p.m., l.m.t., Observe the sun on the meridian; the resulting lat. is 39°05'
79.80	Intersect the E. bdy. of Tp. at 9½ lks. S. of the cor. of secs. 13, 18, 19 and 24, heretofore described.
	Thence,
	S.89°50'W,, on true line, bet. secs. 13 and 24.
	Over mountainous land, asc. abruptly over sandstone ledges, bear NW. and SE., through cedar and pinion timber, and scattered spruce timber, and scattered buck and sarvice undergrowth.
11.00	Spur, 480 ft. above the cor., projects SE. Desc. over ledges, bear NW. and SE.
29.00	Canyon, 590 ft. below spur, drains SE. Asc.
32.00	Point of spur, 55 ft. above canyon, slopes SE. Desc. slightly along S. slope.
34.70	Ravine, 25 ft. below point of spur, drains S 75°E. Thence along S. side of bottom of ravine, asc. gradually.
39.90	Set an iron post, 3 ft. long, 1 in. dia., 24 ins. in the ground, for ¼ sec. cor., with brass cap mkd.

S 13
¼
S 24
1915

from which

A pinion, 10 ins. dia., bears N.8°E., 65 lks. dist., mkd. ¼ S 13 BT

A pinion, 10 ins. dia., bears S.70°E., 40 lks. dist., mkd. ¼ S 24 BT

Chains	
	Cor. stands on S. side of bottom of ravine, 75 ft. above crossing.
54.70	Same ravine, 190 ft. above ¼ sec. cor., drains from the SW. to N.80°E. Thence asc. abruptly over series of sandstone ledges, bear NE. and SW.
79.80	The cor. of secs. 13, 14, 23 and 24, 515 ft. above ravine.
	Land, very rough mountainous, broken by sandstone ledges, general drainage SE.
	Soil, light sandy loam, loose sandrock and ledges, 4th. rate.
	Timber, dense cedar and pinions, and scattered spruce.
	Undergrowth scattered buck and sarvice brush.
	August 2, 1915.

August 4: At 8h 36m a.m.,l.m.t., I set off 39°05' on the lat. arc, 17°27'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 rough mountainous land, asc. through dense cedar and pinion and scattered spruce timber, and sarvice and buck brush undergrowth.

2.45	Spur, 20 ft. above the cor. projects E., Desc. over ledges.
17.75	Ravine, 320 ft. below spur, drains S.70°E. Asc. over ledges., bear NW. and SE.
23.65	Point of ledge, 170 ft. above ravine, bears W. and NW. Desc.
29.45	Bottom of desc., 80 ft. below point of spur, bears E. and W. Asc.
33.25	Point of ledge, 80 ft. above the bottom, bears SW. and NW. Desc. over ledges, bear NW.
40.0	[illegible]

Chains

40.00 100 ft. below point of ledge.

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

S ¼ 14 | S 13

1915

from which

A pinion, 14 ins. dia., bears N.22½°E., 12 lks. dist., mkd. ¼ S 13 BT

A pinion, 8 ins. dia., bears N.66°W., 24 lks. dist., mkd. ¼ S 14 BT.

August 4: At this point I set off 17°24'N. on the decl. arc, and at 12h 06m p.m.,l.m.t., observe the sun on the meridian; the resulting lat. is 39°05'

56.00 Leave timber, bears NW. and SE., and enter sage and oak brush, bears same.

59.80 Bottom of canyon, 275 ft. below the ¼ sec. cor., drains SE. Asc. over sandstone ledges, bear NW. and SE.

65.43 Enter cedar and pinion timber, bears NW. and SE, and leave sage and oak brush, bears same.

80.00 190 ft. above bottom of canyon.

Set an iron post, 3 ft. long, 2 ins. dia., on solid rock in a mound of stone, 4 ft. base, 24 ins. high, for the cor. of secs. 11, 12, 13 and 14, with brass cap mkd.

T 20 S | R 20 E
S 11 | S 12
S 14 | S 13

1915

from which

A cedar, 6 ins. dia., bears N.27½°E., 74 lks. dist., mkd. T 20 S R 20 E S 12 BT

A pinion, 8 ins. dia., bears S.26½°E., 61 lks. dist., mkd. T 20 S R 20 E S 13 BT

A pinion, 10 ins. dia., bears S.83°W., 34 lks. dist., mkd. T 20 S R 20 E S 14 BT

Chains

A cedar, 6 ins. dia., bears N.66½°W., 41 lks. dist., mkd. T 20 S R 20 E S 11 BT

Land, rough mountainous, broken with sandstone ledges, general drainage SE.

Soil, light sandy loam, loose sandrock, and sandstone ledges, 4th. rate.

Timber, cedar, pinion and scattering spruce.

Undergrowth, scattered sarvice and buckbrush, and part sage and oak brush.

August 4, 1915.

August 5: At 8h 51m a.m.,l.m.t., I set off 39°06' on the lat.arc, 17°10'N. on the decl.arc, and determine a meridian with the solar at the cor. of secs. 11, 12, 13 and 14.

Thence I run

N.89°50'E., on random line, bet. secs. 12 and 13.

40.00 Set temp. ¼ sec. cor.

August 5: At this point, I set off 17°08'N. on the decl. arc, and at 12h 06m p.m., observe the sun on the meridian; the resulting lat. is 39°06'.

79.95 Intersect E. bdy. of Tp. 18 lks. N. 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, desc. over sandstone ledges, bear NE. and SW., through cedar and pinion timber and scattered sarvice and buck brush.

20.00 Canyon, 265 ft. below cor., drains S. Asc. over sandstone ledges.

31.85 Ridge, 405 ft. above canyon, bears N.30°W. and S.30°E. Desc. over ledges, bear NW. and SE.

39.97½ On W. slope, 180 ft. below ridge.

Set an iron post, 3 ft. long, 1 in. dia., 12 ins. in the

Chains	
	ground, to bed rock, and 12 ins. in a mound of stone, 3 ft. base, 1 ft. high, for ¼ sec. cor., with brass cap mkd.
	S 12 / ¼ / S 13 / 1915
	from which
	A pinion, 7 ins. dia., bears N.35°W., 18 lks. dist., mkd. ¼ S 12 BT
	A cedar, 8 ins. dia., bears S.49½°W., 13 lks. dist., mkd. ¼ S 13 BT
47.30	Ravine, 200 ft. below ¼ sec. cor., drains SW. Asc.
50.70	Point of spur, 75 ft. above ravine, slopes S. Desc. over ledges.
55.40	Canyon, 130 ft. below point of spur, drains S. 15°E. Asc. over sandstone ledges.
70.00	Ridge, 395 ft. above canyon, bears N.10°W. and S.10°E. Desc. over ledges, bear NW. and SE.
79.95	The cor. of secs. 11, 12, 13 and 14., 260 ft. below ridge.
	Land, rough mountainous, broken with sandstone ledges, general drainage S.
	Soil, light sandy loam, loose sandrock, and sandstone ledges, 4th. rate.
	Timber, cedars and pinion pine.
	Undergrowth, scattered buck and sarvice brush.
	August 5, 1915.

August 6: At 8h 51m a.m., l.m.t., I set off 39°06' on the lat. arc, 16°55'N. on the decl. arc, and determine a meridian with the solar at the cor of secs. 11, 12, 13 and 14.

Thence I run

Subdivision of T.20 S.,R.20 E.

Chains

N.0°01'W., bet. secs. 11 and 12.

Over rough mountainous land, asc. through cedars, pinion, timber, and scattered buck and sarvice brush undergrowth.

32.55 Ridge, 405 ft. above the sec. cor., bears N.30°W. and S.30°E. Desc. along E. slope of ridge.

40.00 On East slope, 40 ft. below top.

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

S 11 | S 12
¼
1915

from which

A cedar, 8 ins. dia., bears S.44°E., 16 lks. dist., mkd. ¼ S 12 BT

A pinion, 8 ins. dia., bears N.50½°W., 43 lks. dist., mkd. ¼ S 11 BT:

August 6: At this cor., I set off 16°53'N. on the decl. arc, and at 12h 06m p.m.,l.m.t., observe the sun on the meridian; the resulting lat. is 39°06'.

71.75 Canyon, 195 ft. below the ¼ sec. cor., drains S.15°E. Asc.

76.40 Top of asc., 130 ft. above the canyon, slopes W. Desc,

78.10 Enter heavy oak brush, bears E. and W.

80.00 30 ft. below top.

Set an iron post, 3 ft. long, 2 ins. dia., 24 ins. in the ground, for cor. of secs. 1, 2, 11 and 12, with brass cap mkd.

T 20 S R 20 E
S 2 | S 1
S 11 | S 12
1915

from which

A cedar, 6 ins. dia., bears N.43¼°E., 95 lks. dist., mkd. T 20 S R 20 E S 1 BT

A pinion, 6 ins. dia., bears S.42¼°E., 120 lks.

Chains

dist., mkd. T 20 S R 20 E S 12 BT

A cedar, 2 ins. dia., bears S.88°W., 56 lks. dist., mkd. T 20 S R 20 E S 11 BT

A cedar, 3 ins. dia., bears N.57°30'W., 19 lks. dist., mkd. T 20 S R 20 E S 2 BT

Land, rough mountainous, broken with sandstone ledges, general drainage S.

Soil, light sandy loam, loose sandrock, and numerous sandstone outcrops, 4th. rate.

Timber, cedars, pinion pine, and scattered spruce.

Undergrowth, buck and sarvice brush, and heavy oak brush on N. 2 chs.

August 6, 1915.

August 12: At 8h 35m a.m.,l.m.t., I set off 39°07' on the lat. arc, 15°12'N. on the decl. arc, and determine a meridian with the solar at the cor. of secs. 1, 2, 11 and 12.

Thence I run.

N.89°58'E. on random line, bet. secs. 1 and 12.

21.41 Ridge, thence desc. over ledges, over which it is impracticable to chain. Therefore to determine dist. to bottom of ledges, I set a flag on line, at bottom, and it being impossible to lay off a base on the ridge, I proceed to flag at bottom, whence I lay off a base, N.21° 49'E., 10.70 chs. dist., to a point from which the flag on ridge bears S.51°46'W., the dist. is therefore

$$\frac{\sin 29°57'}{\sin 38°12'} \times \text{base, or } \frac{0.49924}{0.61841} \times 10.70 = 8.64 \text{ chs.},$$

which added to 21.41 is

30.05 Triangulation point at bottom.

40.00 Set temp. ¼ sec. cor.

August 12: At this point, I set off 15°09'N. on the decl. arc, and at 12h 05m p.m.,l.m.t., observe the sun on the

Chains	
	meridian; the resulting lat. is 39°07'.
43.93	Abrupt desc. over rocky ravine, over which it is impossible to chain. Therefore to determine dist. across, I proceed as follows: Set a flag on line on E. side of ravine, and, there being no place on either side to measure a base line, I return to the N. end of the base line which is N.21°49'E., 10.70 chs. dist., from the triangulation point at 30.05 chs., from which point the flag on the E. side of ravine bears S.76°16'E. From this flag, the N. end of the base line bears N.76°16'W. Therefore the dist. is

$$\frac{\sin 98°05'}{\sin 13°46'} \times \text{base} = \frac{0.99006}{0.23797} \times 10.70 = 44.52 \text{ chs.},$$

	which added to 30.05 chs. is
74.57	Triangulation point on E. side of ravine.
80.06	Intersect E. bdy. of Tp. 14 lks. S. of the cor. of secs. 1, 6, 7 and 12, heretofore described.
	Thence,
	S89°52'W., on true line, bet. secs. 1 and 12.
	Over rough mountainous land, on mountain top, desc. through cedar and pinion timber, and scattered buck brush, mahogany and grass undergrowth.
5.49	Desc. abruptly over series of sandstone ledges, bear NE. and SW. Triangulation point, on E. side of ravine.
36.13	West side of ravine, bears NE. and SW. Desc.
40.03	50 ft. below W. side of ravine.
	Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for ¼ sec. cor., with brass cap mkd.

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

S 12

1915

from which

A pine, 10 ins. dia., bears N.45°W., 32 lks. dist., mkd. ¼ S 1 BT

Subdivision of T.20 S.,R.20 E

Chains	
	A pine, 14 ins. dia., bears S.59°W., 42 lks. dist., mkd. $\frac{1}{4}$ S 12 BT.
42.60	Bottom of desc., 40 ft. below $\frac{1}{4}$ sec. cor., drains N., Thence asc. along side of mountain.
50.01	Triangulation point. Thence asc. abruptly over extremely rugged sandstone ledges, bear NW. and SE.
58.65	Triangulation point, on top of ridge 460 ft. above bottom, bears NW. and SE. Thence desc. over series of ledges, bear NW. and SE.
79.00	Leave dense cedar, pinion and scattered spruce timber, bears NW. and SE., and enter oakbrush undergrowth, bears same.
80.06	The cor. of secs. 1, 2, 11 and 12, 540 ft. below top of ridge.
	Land, very rough mountainous, along rough and broken ridge, numerous rugged sandstone outcrops.
	Soil, light sandy loam, loose sandrock, and sandstone outcrops, 4th. rate.
	Timber, cedars, pinion pine, and scattered spruce.
	Undergrowth, buck brush, mahogany, sparse grass, and oak brush on W. 1.06 chs.
	August 12, 1915.

August 13: At 8h 35m a.m., l.m.t., I set off 39°07' on the lat. arc; 14°54'N. on the decl. arc, and determine a meridian with the solar at the cor. of secs. 1, 2, 11 and 12.

Thence I run

N.0°01'W., on true line, bet. secs. 1 and 2, knowing the line will not close within limits.

Over rough mountainous land, desc. through scattered cedar and pinion and long leaf pine timber, and dense oak brush undergrowth.

7.97	Bottom of canyon, 10 ft below the cor., drains S.30°W.

Chains	
	Leave oak brush, bears NE. and SW., and enter scattered mahogany and buck brush, bears same, and asc.
23.00	Top of asc,, 165 ft. above the canyon, slopes E. Desc.
25.10	Ravine, 20 ft. below top, drains SE. Asc.
40.00	295 ft. above the ravine, on SW. slope.
	Set an iron post, 3 ft. long, 1 in. dia., 12 ins. in the ground to bedrock, and 12 ins. in a mound of stone, 3 ft. base, 1 ft. high, for ¼ sec. cor., with brass cap mkd.

S 2 | S 1
¼
1915

from which

A pinion, 6 ins. dia., bears S.79½°E., 15 lks. dist., mkd. ¼ S 1 BT

A pinion, 8 ins. dia., bears S.88°W., 5 lks. dist., mkd. ¼ S 2 BT

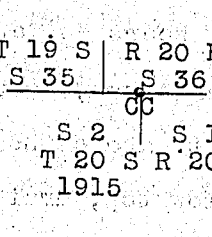
August 13: At this cor., I set off 14°51'N. on the decl. arc, and at 12h 05m p.m.,l.m.t., observe the sun on the meridian; the resulting lat. is 39°07'.

41.40	Top of ridge, 10 ft. above the cor., bears N.75°W. and S.75°E. Desc. abruptly over sandstone ledges, bears NW. and SE
69.58	910 ft. below top of ridge.
	Intersect my E. and W. line at 7.98 chs. E. of my temp. cor. of secs. 1, 2, 35 and 36, on N. bdy. Set temp. closing cor. of secs. 1 and 2.

August 13, 1915.

October 2: At the temp. closing cor. of secs. 1 and 2, I set an iron post, 3 ft. long, 2 ins. dia., 6 ins. in the ground to solid rock, and 18 ins. in a mound of stone, 4 ft. base, 1½ ft. high, for closing cor. of secs. 1 and 2, with brass cap mkd.

Chains	



from which

A spruce, 18 ins. dia., bears S.89¼°W., 27 lks. dist., mkd. T 20 S R 20 E S 2 BT

A cedar, 10 ins. dia., bears S.85°E., 50 lks. dist., mkd. T 20 S R 20 E S 1 BT

Land, rough mountainous, general drainage S. on S. 40 chs., and NE. on N. 29.58 chs.

Soil, light sandy loam and loose rock; numerous outcropping sandstone ledges.

Timber, medium growth cedar and pinion timber, scattered long leaf pine and spruce.

Undergrowth dense oak brush on S.7.98 chs., scattered mahogany and buck brush on remainder.

August 18: At 8h 34m a.m.,l.m.t., I set off 39°04' on the lat. arc; 13°20'N. on the decl. arc, and determine a meridian with the solar at the cor. of secs. 22 and 23. Thence I run

N.0°01'W., bet. secs. 22 and 23.

Over rough mountainous land, desc. through dense pinion and cedar timber, and scattering undergrowth of buck brush and mahogany.

2.25 Ravine, 25 ft. below cor., drains W. Asc. over ledges, bear E. and W.

18.36 Spur, 215 ft. above ravine, projects W. Desc. abruptly over sandstone ledges, bear E. and W.

32.25 Gulch, 450 ft. below spur, drains W.; asc. abruptly over ledges, bear E. and W.

40.00 On south slope, 215 ft. above gulch:

Chains

Set an iron post, 3 ft. long, 1 in. dia., 6 ins. in the ground to solid rock, and 20 ins. in a mound of stone, 4 ft. base, 20 ins. high, for ¼ sec. cor., with brass cap mkd.

S 22 | S 23
¼
1915

from which

A pinion, 4 ins. dia., bears S.68°E., 10 lks. dist., mkd. ¼ S 23 BT

A pinion, 6 ins. dia., bears S.75°W., 19 lks. dist., mkd. ¼ S 22 BT

August 18: At this cor., I set off 13°17'N. on the decl. arc, and at 12h 04m p.m.,l.m.t., observe the sun on the meridian; the resulting lat. is 39°04'.

50.75 Spur, 220 ft. above the ¼ sec. cor., projects W. Desc.

66.25 Ravine, 130 ft. below spur, drains SW. Asc. over ledges, bear E. and W.

80.00 On SW. slope, 90 ft. above ravine,

Set an iron post, 3 ft. long, 2 ins. dia., 24 ins. in the ground, for cor. of secs. 14, 15, 22 and 23, with brass cap mkd.

T 20 S | R 20 E
S 15 | S 14
S 22 | S 23
1915

from which

A pinion, 6 ins. dia., bears N.47½°E., 25 lks. dist., mkd. T 20 S R 20 E S 14 BT

A pinion, 10 ins. dia., bears S.29°E., 66 lks. dist., mkd. T 20 S R 20 E S 23 BT

A cedar, 10 ins. dia., bears S.18°W., 40 lks. dist., mkd. T 20 S R 20 E S 22 BT

A cedar, 14 ins. dia., bears N.44¼°W., 20 lks. dist., mkd. T 20 S R 20 E S 15 BT

Chains	
	Land, rough mountainous, broken with sandstone ledges, general drainage west.
	Soil, light sandy loam and loose rock, sandstone outcroppings, 4th. rate.
	Timber, dense cedars and pinion, and scattered spruce.
	Undergrowth, scattered buck and sarvice brush.
	August 18, 1915.
	August 19: At 8h 34m a.m.,l.m.t., I set off 39°05' on the latl. arc, 13°01'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
	East, on random line, bet. secs. 14 and 23.
40.00	Set temp. $\frac{1}{4}$ sec. cor.
	August.19: At this point, I set off 12°58'N. on the decl. arc, and at 12h 04m p.m.,l.m.t., observe the sun on the meridian; the resulting lat. is 39°05'.
79.89	Intersect N. and S. line 13 lks. N. of the cor. of secs 13, 14, 23 and 24.
	Thence,
	N.89°54'W., on true line, bet. secs. 14 and 23.
	Over mountainous land, asc. to ridge through dense cedar and pinion timber, scattered spruce, and undergrowth of scattered sarvice, buck brush and grass.
4.00	Ridge, 85 ft. above the cor., bears NW. and SE. Desc.
17.85	Ravine, 200 ft. below ridge, drains S.20°E. Asc. over sandstone ledges, bear NW. and SE.
33.30	Ridge, 295 ft. above ravine, bears N. and S. Desc. over sandstone ledges, bear N. and S.
39.94½	Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., with brass cap mkd.

S 14
$\frac{1}{4}$
S 23
1915

Chains	
	from which
	A pinion, 6 ins. dia., bears N.73¾°E., 8 lks. dist., mkd. ¼ S 14 BT
	A cedar,,20 ins. dia., bears S.50½°E., 3 lks. dist., mkd. ¼ S 23 BT
	Cor. stands on W. slope, 165 ft. below ridge.
52.10	Ravine, 260 ft. below cor., drains S. Asc.
57.50	Point of rock spur, 160 ft. above ravine, slopes S., 4 chs. Dist. Desc. over ledges, bear N. and S.
63.30	Ravine, 55 ft. above spur, drains S.75°E. Asc. over ledges.
76.35	Ridge, 295 ft. above ravine, bears N.10°W. and S.10°E. Desc. over ledges, bear same.
79.89	On SW. slope, 90 ft. below ridge.
	The cor. of secs. 14, 15, 22 and 23.
	Land, rough mountainous, broken by sandstone ledges, general drainage S.
	Soil, light sandy loam and loose sandrock, and sandstone ledge outcrops, 4th. rate.
	Timber, dense cedar and pinion, and scattered spruce.
	Undergrowth, scattered sarvice and buck brush.
	August 19, 1915.

August 20: At 8h 33m a.m.,l.m.t., I set off 39°05' on the lat. arc, 12°42'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°01'W., bet. secs. 14 and 15.

Over rough mountainous land, asc. gradually through dense pinion and cedar timber, scattered spruce timber, and undergrowth of buck, sarvice and scattered mahogany.

10.00	Ridge, 60 ft. above the sec. cor., bears N.10°W. and

Chains	
	S.10°E. Thence along E. slope of ridge, asc. slightly.
40.00	On east slope of top of ridge, 130 ft. above point where ridge crosses line.
	Set an iron post, 3 ft. long, 1 in. dia., 18 ins. in the ground to solid rock, and 8 ins. in a mound of stone, 3 ft. base, 8 ins. high, for ¼ sec. cor., with brass cap mkd.
	S 15 ¼ | S 14 1915
	from which
	A pinion, 8 ins. dia., bears N.9¼°E., 33 lks. dist., mkd. ¼ S 14 BT
	A pinion, 8 ins. dia., bears N.67¾°W., 31 lks. dist., mkd. ¼ S 15 BT
	August 20: At this cor. I set off 12°39'N. on the decl. arc, and at 12h 03m p.m.,l.m.t., observe the sun on the meridian; the resulting lat. is 39°05'.
50.40	Ridge, 50 ft. above the ¼ sec. cor., bears N.70°E. and S.5°W. Desc.
61.80	Ravine, 335 ft. below ridge, drains W. Asc. over sandstone ledges, bear E. and W.
75.60	Spur, 145 ft. above ravine, projects W. Timber becomes scattered, and enter oak brush undergrowth, bears E. and W. Desc.
80.00	On N. slope, 160 ft. below spur.
	Set an iron post, 3 ft. long, 2 ins. dia., 24 ins. in the ground, for cor. of secs. 10, 11, 14 and 15, with brass cap mkd.
	T 20 S | R 20 E S 10 | S 11 S 15 | S 14 1915
	and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of the cor.
	No bearing trees within limits.

Subdivision of T.20 S.,R.20 E.

Chains

Land, rough mountainous, broken by sandstone ledges, general drainage, east and west from high ridge.

Soil, light sandy loam and loose sandrock, numerous outcroppingd of sandstone ledges, 4th. rate.

Timber, cedars, pinion pine and spruce, very scattered on the N. 5 chs.

Undergrowth, scattered sarvice and buckbrush on S. 75 chs., and dense oak brush on N. 5 chs.,

August 20, 1915.

August 21: At 8h 48m a.m.,l.m.t., I set off 39°06' on the lat. arc, 12°21'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

S.89°54'E., on random line, bet. secs. 11 and 14.

Impassible ledges ahead, on W. side of ridge. To determine dist. to top, I proceed as follows: Set a flag on line on top of ridge, then measure a base line, from the sec. cor., N.0°06'E., 7.00 chs. dist., to a point from which the flag on ridge bears S.74°26'E.(Note: No longer base possible.) From the flag on the ridge, the N. end of the base line bears N.74°26'W. Therefore the dist. is

tan 74°32' x base, or 3.614 x 7.00 = 25.30 chs. to

25.30 To triangulation point on top of ridge.

40.00 Set temp. ¼ sec. cor.

August 21: At this point, I set off 12°19'N. on the decl. arc, and at 12h 03m p.m.,l.m.t., observe the sun on the meridian; the resulting lat. is 39°06'.

48.50 Abrupt desc. over ledges impracticable to chain. Therefore to determine the dist., I proceed as follows: Set a flag on line, also on N. and S. line 14 lks. N. of the cor. of secs. 11, 12, 13 and 14, and leave a flag at

Chains	
	the 48.50 ch. point, no suitable base at this point. Thence I proceed to flag on line, and lay off a base line, S.0°06'W., 20.00 chs. dist., to a point from which the flag on ledges bears N.57°21'W. The dist. is therefore
	tan 57°27' x base or 1.5666 x 20.00 = 31.33,
	which added to 48.50 makes
79.83	Intersect N. and S. line, 14 lks. N. of the cor. of secs. 11, 12, 13 and 14.
	Thence,
	N.89°48'W., on true line, bet. secs. 11 and 14.
	Over rough mountainous land, very rugged and broken with sandstone ledges, desc. through cedar and pinion and scattered long leaf yellow pine timber, and buck brush and sparse grass undergrowth.
6.50	Canyon, 185 ft. below the cor., drains S. Thence asc. over rugged ledges, bear NE. and SW.
32.00	Point of spur, 725 ft. above canyon, slopes N.60°E. Asc. gradually along N. side of spur.
39.91½	On N. side of spur,
	Set an iron post, 3 ft. long, 1 in. dia., on solid rock, 26 ins. in a mound of stone, 4 ft. base, 26 ins. high, for ¼ sec. cor., with brass cap mkd.
	S 11 / ¼
	S 14
	1915
	from which
	A pinion, 5 ins. dia., bears N.2°W., 21 lks. dist., mkd. ¼ S 11 BT
	A spruce, 12 ins. dia., bears S.17½°E., 22 lks. dist., mkd. ¼ S 14 BT
54.70	Top of ridge, 130 ft. above the ¼ sec. cor., bears N. and S. Thence desc. abruptly over very rugged sandstone

Chains	
	ledges, bearing NE. and SW.
69.80	Leave cedar and pinion and spruce timber, bears NW. and SE., and enter oak brush, bears same.
79.83	575 ft. below top of ridge.
	The cor. of secs. 10, 11, 14 and 15.
	Land, mountainous, very rugged and broken by sandstone ledges, draining E. and W. from high ridge.
	Soil, light sandy loam and loose sandrock, and sandstone ledges, 4th. rate.
	Timber, cedars, pinion pine, and scattered long leaf pine.
	Undergrowth, oak brush on W.10.03 chs., and scattered buck brush and grass on E. 70 chs.
	August 21, 1915.

August 27: At 9h 02m a.m.,l.m.t., I set off 39°06' on the lat. arc, 10° 19'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°01'W. bet. secs. 10 and 11.

Over mountainous land, desc. through scattered oak brush thickets, and grass.

7.00	Enter buck brush, and scattered cedar and pinion timber, bears E. and W.
18.75	Ravine, 285 ft. below cor., drains W. leave dense undergrowth, timber becomes dense, bears E. and W. Asc.
28.55	Top of asc., 140 ft. above ravine, slopes W. Desc.
36.00	Bottom of canyon, 40 ft. below top, drains S.30°W. Asc.
40.00	On SE. slope, 40 ft. above bottom.
	Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for ¼ sec. cor., with brass cap mkd.

S 10 | S 11

¼

1915

Subdivision of T.20 S.,R.20 E.

Chains

from which

A pinion, 4 ins. dia., bears S.61½°E., 15 lks. dist. mkd. ¼ S 11 BT

A cedar, 10 ins. dia., bears N.27¾°W., 7 lks. dist., mkd. ¼ S 10 BT

August 27: At this cor., I set off 10°16'N. on the decl. arc, and at 12h 02m p.m., l.m.t., observe the sun on the meridian; the resulting lat. is 39°06'.

Thence asc. over very rugged ledges, bear NE. and SW.

55.65 Point of spur, 470 ft. above the ¼ sec. cor., slopes S.30°W. Thence along side of spur, over sandstone ledges impracticable to chain. To determine the dist. to top of ledges on side of ridge, I proceed as follows; I set a flag on top of ledges on line, and there being no suitable place for a base line at this point, I leave a flag at point, thence proceed to flag on top of ledges, from which I lay off a base line, S.36°05'E., 6.00 chs. dist., to a point from which the flag bears S.20° 03'W.; the dist. is therefore

N ↑

S.36°05'E. 6.00 123°52

S.20°03'W.

$$\frac{\sin 123°52'}{\sin 20°\ 04'} \times \text{base, or } \frac{0.83034}{0.34311} \times 6.00 = 14.52 \text{ chs.}$$

which added to 55.65 makes

70.17 Top of ledges on side of ridge, 80 ft. above the spur. Thence on nearly level line, along side of ridge, through dense timber.

80.00 Set an iron post, 3 ft. long, 2 ins. dia., 24 ins. in the ground, for cor. of secs. 2, 3, 10 and 11, with brass cap mkd.

T 20 S | R 20 E
S 3 | S 2
S 10 | S 11

1915

from which

A pinion, 5 ins. dia., bears N.21¼°E., 49 lks. dist., mkd. T 20 S R 20 E S 2 BT

Chains	
	A pinion, 6 ins. dia., bears S.72°30'E., 41 lks. dist., mkd. T 20 S R 20 E S 11 BT
	A pinion, 6 ins. dia., bears S.44½°W., 16 lks. dist., mkd. T 20 S R20 E S 10 BT
	A cedar, 8 ins. dia., bears N.81½°W., 39 lks. dist., mkd. T 20 S R 20 E S 3 BT
	Land, rough mountainous, very rugged and broken by sandstone ledges, drainage S
	Soil, light sandy loam, and loose sandrock, and sandstone outcroppings, 4th. rate.
	Timber, cedars, pinion and scattered long leaf pine.
	Undergrowth, oak, buck brush and grass.
	August 27, 1915.

August 28: At 8h 16m a.m.,l.m.t., I set off 39°07' on the lat. arc, and 9°59'N. on the decl. arc, and determine a meridian with the solar at the cor. of secs. 2, 3, 10 and 11.

Thence I run

S.89°48'E., on random line, bet. secs. 2 and 11.

40.00 Set temp. ¼ sec. cor.

August 28: At this point, I set off 9°55'N. on the decl. arc, and at 12h 01m p.m.,l.m.t., observe the sun on the meridian; the resulting lat. is 39°07'.

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

Thence,

N.89°53'W., on true line, bet. secs. 2 and 11

Over rough mountainous land, desc. into canyon bottom, through cedar and pinion and scattered spruce timber, and dense oakbrush undergrowth.

2.50 Bottom of canyon, 60 ft. below the cor., drains S. Asc.

3.50 Leave oakbrush undergrowth, bears N. and S., and enter dense cedar and pinion timber, bears same.

Chains	
12.00	Top of asc., 195 ft. above bottom of canyon, slopes S. Desc.
15.00	Ravine, 60 ft. below top of asc. drains SE. Asc. over series of ledges, bear NW. and SE.
23.75	Ridge, 345 ft. above ravine, bears N.30°W. and S.30°E. Thence along level line.
26.25	Head of ravine, drains S., thence asc.
30.00	Spur, 100 ft. above head of ravine, projects S. Desc. over series of ledges, bear N. and S.
39.39	On W. slope, 210 ft. below spur.
	Set an iron post, 3 ft. long, 1 in. dia., 12 ins. in the ground, to solid rock, and 14 ins. in a mound of stone, 4 ft. base, 14 ins. high, for ¼ sec. cor., with brass cap mkd.
	S ¼ 2
	S 11
	1915
	from which
	A pinion, 10 ins. dia., bears north, 5 lks. dist., mkd. ¼ S 2 BT
	A pinion, 10 ins. dia., bears S.45°W., 57 lks. dist., mkd. ¼ S 11 BT.
52.60	Enter oak thicket, bears N. and S.
55.50	Leave oak thicket, bears N. and S. Also, bottom of canyon, 400 ft. below the ¼ sec. cor., drains S. Asc.
64.00	Top of asc., 145 ft. above canyon, slopes S.30°E. Desc. over ledges, bear NW. and SE.
66.70	Ravine, 60 ft. below top of asc., drains SE. Asc. over ledges.
79.00	Top of ridge, 395 ft. above ravine, bears N. and S. Desc.
79.78	On W. side of top of ridge, 20 ft. below top.
	The cor. of secs. 2, 3, 10 and 11.
	Land, rough mountainous, very rough and rugged, general drainage S.

Chains

Soil, light sandy loam, loose sandstone, and sandstone ledges, 4th rate.

Timber, cedars, pinion and scattered spruce.

Undergrowth, oak and buck brush.

August 28, 1915.

Sept. 1: At 8h 15m a.m., l.m.t., I set off 39°07' on the lat. arc; 8°33'N. on the decl. arc, and determine a meridian with the solar at the cor. of secs. 2, 3, 10 and 11. Thence I run

N.0°01'W., on true line, bet. secs. 2, and 3.

Over rough mountainous land, desc. through dense cedar and pinion and scattered spruce timber, and scattered buck brush and mahogany undergrowth,

4.00 Ridge, 15 ft. below the cor., bears N.15°W. and S.15°E. Thence asc. over E. slope of butte, over ledges.

15.00 Top of asc., on E. slope of butte, 200 ft. above the sec. cor., slopes E. Top of butte bears W., 1 ch. Desc.

20.75 Bottom of desc., 200 ft. below top of asc., drains E. Asc.

33.50 Top of asc., 50 ft. high, slopes E. Desc.

39.50 Head of ravine, 80 ft. below top of asc., drains E. Asc.

40.00 On N. side of ravine, 9 ft. above the bottom.

Set an iron post, 3 ft. long, 1 in. dia., 12 ins. in the ground to solid rock, and 14 ins. in a mound of stone, 3 ft. base, for ¼ sec. cor., with brass cap mkd.

S 3 | S 2

¼

1915

from which

A pinion, 8 ins. dia., bears S.66½°E., 26 lks. dist., mkd. ¼ S 2 BT

A pinion, 7 ins. dia., bears S.88½°W., 38 lks. dist., mkd. ¼ S 3 BT

Thence asc. over sandstone ledges, bear NE. and SW.

September 1: At the ¼ sec. cor., I set off 8°29' N. on the decl. arc, and at 12h 00m noon, observe the sun on the meridian; the resulting lat. is 39°07'.

Subdivision of T. 20 S., R.20 E.

Chains	
55.65	Ridge, 300 ft. above the ¼ sec. cor., bears NE. and SW. Thence along W. side of ridge.
62.00	Recross ridge, bears N. 30°W. and S. 30° E. Thence desc. along E. side of ridge.
69.51	On E. slope of ridge, 100 ft. below the top.

Intersect E. and W. retracement line 7.90 chs. E. of the temp. point for cor. of secs. 34 and 35, on N. bdy.

Set temp. point for closing cor. of secs. 2 and 3.

September 1, 1915.

October 2: At the temp.point for closing cor. of secs. 2 and 3, set an iron post, 3 ft. long, 2 ins. dia., 12 ins. in the ground to bed rock, and 12 ins. in a mound of stone, 4 ft. base, 1 ft. high, for closing cor. of secs. 2 and 3, with brass cap mkd.

T 19 S R 20 E
S 34 | S 35
C C
S 3. | S 2
T 20 S R 20 E

1915

from which

A pinion, 10 ins. dia., bears S.45°E., 23 lks. dist., mkd. T 20 S R 20 E S 2 BT

A pinion, 14 ins. dia., bears S. 31½°W., 80 lks. dist., mkd. T 20 S R 20 E S 3 BT

Land, rough mountainous,along ridge, general E. slope.

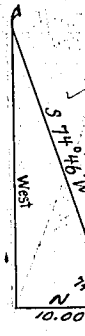
Soil, light sandy loam, loose sandstone, and sandstone outcrops; 4th. rate.

Timber, cedar, pinion and scattered spruce.

Undergrowth, scattered buck brush, mahogany, and grass.

August 23: At 8h 33m a.m.,l.m.t., I set off 39°05' on the lat. arc; 11°42'N. on the decl. arc, and determine a meridian with the solar at the cor. of secs. 14, 15, 22 and 23.

Chains	
	Thence I run
	West, bet. secs. 15 and 22, om secl. corr. line.
	Through dense cedar and pinion and scattered spruce timber, and scattering undergrowth of buck and oak and scattered mahogany.
2.00	Desc. abruptly over sandstone ledges, bear N. and S., over which it is impracticable to chain. To determine dist. to ridge across ravine, I proceed as follows: From the cor. of secs. 14, 15, 22 and 23, I set a flag on line west, on the ridge, thence lay off a base line, north, 10.00 chs. dist., to a point from which the flag on ridge bears S.74°46'W.; from this flag, the north end of the base line bears N.74°46'E., therefore the dist. is
	tan 74°46' x base, or 3.67217 x 10 = 36.72 chs.
15.00	Ravine, 350 ft. below the sec. cor., drains S. Asc. over ledges.
36.72	Triangulation point, on ridge, 400 ft. above ravine, bears N. and S. Desc. over rough mountainous W. side.
40.00	On W. slope, 75 ft. below the top.
	Set an iron post, 3 ft. long, 1 in. dia., 4 ins. in the ground, to solid rock, and 22 ins. in a mound of stone, 6 ft. base, 22 ins. high, for ¼ sec. cor., with brass cap mkd.
	S 15 / ¼
	S 22
	1915
	from which
	A spruce, 16 ins. dia., bears N.14¼°W., 28 lks. dist., mkd. ¼ S 15 BT
	A pinion, 10 ins. dia., bears S.41¾°W., 20 lks. dist., mkd. ¼ S 22 BT
	August 23: At this cor., I set off 11°38'N. on the decl.



Chains	
	arc, and at 12h 03m p.m.,l.m.t., observe the sun on the meridian; the resulting lat. is 39°05'.
	Thence desc. abruptly over sandstone ledges, bear N. and S.
46.20	160 ft. below the ¼ sec. cor., a rim of ledges bears N. and S., over which it is impracticable to chain. Therefor to determine dist. across, I set a flag on line in bottom of canyon below, and it being impracticable to lay off a base at this point, I leave a flag, and proceed to flag in bottom of canyon, from which I lay off a base, south, 8.00 chs. to a point from which the flag on top bears N.72°25'E. Therefore the dist. is
	tan 72°25' x base or 3.155 x 8.00 = 25.24 chs.,
	which added to 46.20 makes
71.44	Bottom of canyon, 790 ft. below rim of ledges., drains S. Thence asc. abruptly over sand stone ledges, over which it is impracticable to chain. Therefore to determine dist. to top of ledges, I proceed as follows: I set a flag on line on top of ledges, then measure a base, N., 4.00 chs., to a point from which the flag on top of ledges bears S.62°28'W.; from the flag on top of ledges the N. end of the base line bears N.62°28'E. Therefore the dist. is
	tan 62°28' x base, or 1.918 x 4.00 = 7,67 chs.
	also, 7.67 ± 71.44 is
79.11	Top of ledges, bear N. and S., 300 ft. above canyon. Asc. abruptly.
80.00	On E. slope, 325 ft. above bottom of canyon.
	Set an iron post, 3 ft. long, 2 ins. dia., 6 ins. in the ground, to solid rock, and 18 ins. in a mound of stone, 4 ft. base, 18 ins. high, for cor. of secs. 15, 16, 21 and 22, with brass cap mkd.

Chains

T 20 S | R 20 E	
S 16	S 15
S 21	S 22.

1915

from which

A pinion, 6 ins. dia., bears N.19½°E., 85 lks. dist., mkd. T 20 S R 20 E S 15 BT

A pinion, 8 ins. dia., bears S.18¼°E., 128 lks. dist., mkd. T 20 S R 20 E S 22 BT

A cedar, 10 ins. dia., bears S.46¼°W., 26 lks. dist., mkd. T 20 S R 20 E S 21 BT

A pinion, 6 ins. dia., bears N.41¾°W., 53 lks. dist., mkd. T 20 S R 20 E S 16 BT

Land, very rough mountainous, numerous sandstone ledges, general drainage S.

Soil, light sandy loam and loose sandrock, and sandstone ledges, 4th. rate.

Timber, dense cedar and pinion, and scattered spruce.

Undergrowth, scattered buck and mahogany brush.

August 23, 1915.

August 24: At 8h 17m a.m.,l.m.t., I set off 39°05' on the lat. arc; 11°22'N. on the decl. arc, and determine a meridian with the solar at the cor. of secs. 15, 16, 21 ans 22.

Thence I run

S.0°02'E. on true line, bet. secs. 21 and 22.

Over very rough mountainous land, desc. along E. slope of ridge, through dense cedar and pinion timber, and scattering buck brush undergrowth.

3.50 Desc. abruptly over ledges, bear NE. and SW., over which it is impracticable to chain. Therefore to determine dist. across ledges, I proceed as follows: From the cor. of secs. 15, 16, 21 and 22, I set a flag on line south,

Chans

West 33.80 N 51°43'E

thence proceed to flag, from which the triangulation point on the line bet. secs. 15 and 22, set at 46.20 chs. W. of the cor. of secs. 14, 15, 22 and 23, bears N.51° 43'E. The dist. is therefore

cot 51°43' x base = 0.78928 x 33.80, =

26.68 I offset 1½ lks. E. to true line. Point falls on side of mountain, 210 ft. below the cor. Desc.

34.00 Ravine, 390 ft. below the sec. cor., drains E. Asc.

40.00 On S. side of ravine, 40 ft. above bottom.

Set an iron post, 3 ft. long, 1 in. dia., 20 ins. in the ground, to solid rock, and 6 ins. in a mound of stone 2 ft. base, ½ ft. high, for ¼ sec. cor., with brass cap mkd.

S 21 | ¼ | S 22

1915

from which

A pinion, 6 ins. dia., bears S.66°E., 52 lks. dist., mkd. ¼ S 22 BT

A pinion, 5 ins. dia., bears N.5½°W., 46 lks. dist., mkd. ¼ S 21 BT.

August 24: At this cor. I set off 11°18'N. on the decl. arc, and at 12h 03m p.m.,l.m.t., observe the sun on the meridian; the resulting lat. is 39°05'.

44.00 Spur, 10 ft. above the ¼ sec. cor., projects E. Desc. over ledges, bear E. and W.

54.00 Bottom of canyon, 125 ft. below spur, drains S. Thence along bottom of canyon, through sage brush, bears E. and W.

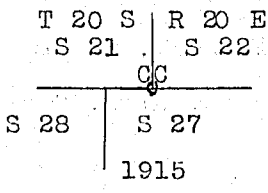
69.65 Leave bottom of canyon and sage, bears N.30°W. and S.30°E., draining SE., asc.

79.49 Intersect N. bdy. sec. 27 at 1.19 chs. S.89°56'E. of the cor. of secs. 21, 22, 27 and 28, heretofore described.

I destroy all mks. of this cor. pertaining to secs. 21 and 22, and at my intersection, set an iron post, 3 ft. long,

Chains

2 ins. dia., 26 ins. in the ground for closing cor. of secs. 21 and 22, with brass cap mkd.



from which

A cedar, 6 ins. dia., bears N.36¼°E., 81 lks. dist., mkd. T 20 S R 20 E S 22 BT

A cedar, 5 ins. dia., bears N.39½°W., 35 lks. dist., mkd. T 20 S R 20 E S 21 BT

I destroy all marks of the old ¼ sec. cor. bet. secs. 22 and 27, that pertain to sec. 22.

Land, mountainous, rough and broken by sandstone ledges, general E. and S. drainage.

Soil, light sandy loam, and loose sandrock, and sandstone outcroppings, 4th. rate.

Timber, cedars and pinion pine..

Undergrowth, scattered buck brush and grass, with sage brush along the canyon bottom.

August 24, 1915.

August 25: At 8h 17m a.m.,l.m.t., I set off 39°05' on the lat. arc; 11°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.0°02'W., bet. secs. 15 and 16.

Over mountainous land, very rough and broken, desc. through cedar and pinion and scattered long leaf pine,timber, and scattered sarvice, buck brush and grass undergrowth.

11.00 Ravine, 280 ft. below the cor., drains E. Asc.

29.50 Top of asc., 300 ft. above ravine, slopes E. Desc.

Chains

36.75 Ravine, 230 ft. below top of asc., drains E. Asc.

40.00 On N. side of ravine, 100 ft. above the bottom.
Set an iron post, 3 ft. long, 1 in. dia., 8 ins. in the ground to solid rock, and 18 ins. in a mound of stone, 4 ft. base, 1½ ft. high, for ¼ sec. cor., with brass cap mkd.

S $\frac{16}{\frac{1}{4}}$ | S 15

1915

from which

A cedar, 6 ins. dia., bears N.56°E., 13 lks. dist., mkd. ¼ S 15 BT

A cedar, 14 ins. dia., bears S.7½°W., 33 lks. dist., mkd. ¼ S 16 BT

August 25: At this cor., I set off 10°58'N. on the decl. arc, and at 12h 03m p.m.,l.m.t., observe the sun on the meridiam; the resulting lat. is 39°06'

Asc. from this cor. over a series of sandstone ledges, bearing E. and W., over which it would be impracticable to chain. To determine the dist. to the top of ledges, I proceed as follows: Set a flag on line on top of the ledges, then, from the ¼ sec. cor., measure a base line, N.89°58'E., 6.00 chs. dist., to a point, from which the flag bears N.24°55'W; from the flag, the E. end of the base line bears S.24°55'E. The dist. is therefore

tan 65°07'x base, or 2.156 x 6.00 = 12.94 chs.,

which added to 40.00 makes

52.94 Top of ledges, 380 ft. above the ¼ sec. cor.,bears NE. and SW. Asc. to top of spur.

58.50 Spur, 50 ft. above top of ledges, projects E. Desc.

65.80 Head of ravine, 45 ft. below spur, drains SE.

72.75 Spur, 40 ft. above ravine, slopes SE.,desc. along E. side of mountain.

80.00 On NE. slope, 100 ft. below spur.
Set an iron post, 3 ft. long, 2 ins. dia., 26 ins. in

Subdivision of T.20 S.,R.20 E.

Chains

the ground, for cor. of secs. 9, 10, 15 and 16, with brass cap mkd.

T 20 S | R 20 E	
S 9	S 10
S 16	S 15

1915

from which

A pinion, 4 ins. dia., bears N.45°E., 21 lks. dist., mkd T 20 S R 20 E S 10 BT

A pinion, 12 ins. dia., bears S.56°E., 4 lks. dist. mkd. T 20 S R 20 E S 15 BT

A pinion, 6 ins. dia., bears S.85°30'W., 15 lks. dist., mkd. T 20 S R 20 E S 16 BT

A pinion, 6 ins. dia., bears N.54°W., 83 lks. dist., mkd. T 20 S R 20 E S 9 BT

Land, along E. side of high mountain ridge, very rough and broken by numerous sandstone ledges.

Soil, light sandy loam, loose rock, and sandstone ledges, 4th. rate.

Timber, cedars, pinion, and long leaf pine.

Undergrowth, scattering buck brush and grass.

August 25, 1915.

August 26: At 8h 47m a.m., l.m.t., I set off 39°06' on the lat. arc, 10°40'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 random line, bet. secs. 10 and 15.

32.34 To foot of impassable ledge. Then offset as follows:

South, 90 lks., then, on the offset line:

East, 33.74 chs.(counted from the sec. cor) then

North, 90 lks., to the random line, on which at

40.00 Set temp. ¼ sec. cor.

August 26: At this point, I set off10°37'N. on the decl.

Chains

arc, and at 12h 02m p.m., l.m.t., observe the sun on the meridian; the resulting lat. is 39°06'.

79.92 Intersect N. and S. line 9 lks. N. of the cor. of secs. 10, 11, 14 and 15.

Thence,

N.89°56'W., on true line, bet. secs. 10 and 15.

Over rough mountainous land, desc. over series of sandstone ledges, bear NE. and SW., through dense oak brush.

2.50 Leave oakbrush, bears N. and S., and enter cedar, pinion and scattered spruce timber, and scattered sarvice and buck brush, bears same.

36.00 Ravine, 710 ft. below the cor., drains S.30°W. Asc,

39.96. Set an iron post, 3 ft. long, 1 in. dia., 8 ins. in the ground to solid rock, and 18 ins. in a mound of stone, 4 ft. base, 1½ ft. high, for ¼ sec. cor., with brass cap mkd.

$\frac{1}{4}$ S 10

S 15

1915

from which

A cedar, 5 ins. dia., bears N.89°W., 21 lks. dist., mkd. ¼ S 10 BT

A pinion, 12 ins. dia., bears S.33°E., 18 lks. dist., mkd. ¼ S 15 BT

Cor. stands on E. slope of spur, 70 ft. above ravine.

Thence asc. to ledges on E. side of spur.

46.18 Foot of impassable ledge. Thence offset south, 90 lks., thence run on offset line, N.89°56'W., along S. side of ledge.

47.58 Offset north, 90 lks. to true line. Point of spur, at foot of ledge, 240 ft. above ¼ sec. cor. Desc. over series of ledges, bear N. and S.

60.40 Bottom of canyon, 350 ft. below point of spur, drains S.10°E. Asc.

Chains	
79.92	600 ft. above the canyon.
	The cor. of secs. 9, 10, 15 and 16.
	Land, mountainous, very rough and broken,,general drainage. S.
	Soil, light sandy loam,and loose sandrock, sandstone ledges, 4th. rate.
	Timber, cedars, pinion, and scattered spruce.
	Undergrowth, scattered buck and sarvice brush, oak brush on E. 2.50 chs.; sparse grass.
	August 26, 1915.

September 2: At 9h 15m a.m., l.m.t., I set off 39°06' on the lat. arc, 8°10'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 rough mountainous land, desc. through cedars, pinion pine and scattered spruce timber, and undergrowth of scattered buck and mahogany brush, and sparse grass.

24.50 Rim of ledge, 140 ft. below the sec. cor., bear NW. and SE., The point for ¼ sec. cor. will fall on ledges, on which it would be impossible to perpetuate the cor.

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

T 20 S | R 20 E

W C

S 9 ¼ | S 10

1915

from which

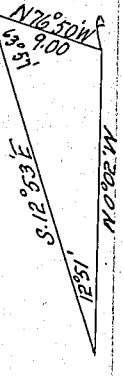
A pinion, 7 ins. dia., bears S.38½°E., 20 lks. dist., mkd. T 20 S R 20 E W C ¼ S 10 BT

Chains

A pinion, 7 ins. dia., bears S.20¾°W., 31 lks. dist., mkd W C T 20 S R 20 E ¼ S 9 BT.

Sept. 2: At this cor., I set off 8°07'N. on the decl. arc, and at 12h 00m l.m.t., observe the sun on the meridian; the resulting lat. is 39°06'.

Thence desc. along ledges, bear NW. and SE., over which it is impracticable to chain. To determine the dist. across ledges to spur, I proceed as follows: There being no suitable place for a base line, at this point, I leave a flag, then set a flag on line on top of spur, thence proceed to flag, from which I lay off a base line, N.76°50'W., 9.00 chs. dist., (no longer base being possible) to a point from which the flag bears S.12° 53'E. The dist. is therefore

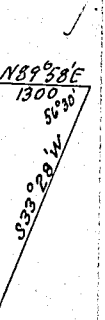


$\frac{\sin 63°57'}{\sin 12°51'}$ x base, or $\frac{0.89841}{0.22240}$ x 9.00 = 36.36 chs., which addad to 24.50 makes 60.86 chs.

30.00 Bottom of canyon, 220 ft. below the W.C. ¼ sec. cor., drains S.60°E. Asc. over ledges, bear NE. and SW.

60.86 Triangulation point, on rocky Spur, 790 ft. above the canyon, projects S.75°E.

Thence desc . abruptly along E. side of ridge, over ledges, bear NW. and SE., over which it is impracticable to chain. To determine dist. to top of ledges on side of ridge, I proceed as follows: There being no place to obtain a base at this point where flag would be visible, I leave a flag, thence set a flag on top of ledges, thence proceed to this flag, from which I lay off a base line, N.89°58'E., 13.00 chs. dist., to a point, from which the flag bears S.33°28'W., The dist. is therefore



tan 56°30' x base, or 1.5108 x 13.00 = 19.64, which added to 60.86 makes

80.50 The point for sec. cor. falls on steep ledges where it would be impossible to perpetuate the cor.

Set an iron post, 3 ft. long, 2 ins. dia., 6 ins. in the ground to solid rock, and 18 ins. in a mound of stone, 4 ft. base, 1½ ft. high, for witness cor. to cor. of secs. 3, 4, 9 and 10, with brass cap mkd.

T 20 S | R 20 E
S 4 W | C S 3

S 9 | S 10

1915

from which

A pinion, 9 ins. dia., bears N.40½°E., 33 lks. dist., mkd. W C T 20 S R 20 E S 3 BT

A pinion, 7 ins. dia., bears N.23¼°W., 43 lks. dist., mkd. W C T 20 S R 20 E S 4 BT.

No other suitable bearing trees within limits.

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

Cor. stands on top of ledges, bear N.5°E. and S.5°W., 20 ft. below spur.

Land, mountainous, along E. side of high rocky ridge, very rough and broken by sandstone ledges, general drainage E.

Soil, light sandy loam, and loose sandrock, and sandstone ledges, 4th. rate.

Timber, cedars, pinion, and scattered spruce.

Undergrowth, scattering mahogany, buck brush and sparse grass.

September 2, 1915.

September 5: At 8h 14m a.m., l.m.t., I set off 39°07' on the lat. arc, 7°06'N. on the decl. arc, and determine a meridian with the solar at the W.C. to cor. of secs. 3, 4, 9 and 10.

Thence I run

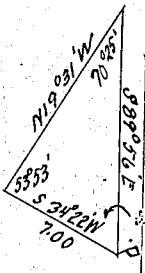
Subdivision of T.20 S.,R.20 E.

Chains

S.89°56'E. on offset line on random line, bet. secs. 3 and 10.

3.25 Offset 50 lks. S.0°02'E. to random line. Thence S.89°56'E. on random line.

31.11 Top of ledge, desc. abruptly over ledges over which it is impossible to chain. To determine dist. across ledges to bottom of canyon, I proceed as follows: Set a flag on line in bottom of canyon, and there being no place on top to obtain a base line, I proceed to bottom of canyon, to flag, from which I lay off a base, S.34°22'W., 7.00 chs. dist., (longer base impossible on account of ledges) to a point from which the flag on top of ledges bears N.19°31'W. The dist. is therefore



$$\frac{\sin 53°53'}{\sin 70°25'} \times \text{base or } \frac{.80782}{.94215} \times 7.00 = 6.00 \text{ chs.},$$

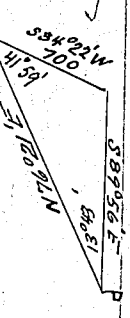
which added to 31.11 makes

37.11 To point in bottom of canyon.

38.86 Set temp. W.C.$\frac{1}{4}$ sec. cor.

September 5: At this point I set off 7°02'N. on the decl. arc, and at 11h 59m a.m.,l.m.t., observe the sun on the meridian; the resulting lat. is 39°07'.

Thence abrupt asc. over ledges impracticable to chain. To determine dist. to top of ledges and ridge, I proceed as follows: Not being able to see on top from this point, I return to the triangulation point at 37.11 chs., from which I set a flag on top of ridge, then measure a base line, S.34°22'W., 7.00 chs. dist., (a longer base is impossible on account of ledges) to a point from which the flag on top of ridge bears N.76° 21'E. From the flag, the S. end of the base line bears S.76°21'W. The dist. is therefore



$$\frac{\sin 41°59'}{\sin 13°43'} \times \text{base or } \frac{0.66891}{0.23712} \times 7.00 = 19.75 \text{ chs.},$$

which added to 37.11 makes

56.86 To point on top of ridge.

Chains	
79.98	Intersect N. and S. line 12 lks. S. of the cor. of secs. 2, 3, 10 and 11.
	Thence
	S.89°59'W., on true line, bet. secs. 3 and 10.
	Over rough mountainous land, desc. over sandstone ledges, through cedar, pinion and scattered spruce timber, and scattered buck brush, mahogany and grass undergrowth.
15.25	Gulch, 185 ft. below cor., drains S. Asc.along S. side of butte.
23.12	Top of ridge, 20 ft. above gulch, bears N. and S. Thence desc. abruptly over series of sandstone ledges, bear N. and S.
39.99	Point for ¼ sec. cor. falls on face of ledges, where it would be impossible to perpetuate cor.
41.12	At foot of ledges, bear NE. and SW., 875 ft. below ridge. Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for witness cor. to ¼ sec. cor., with brass cap mkd.
	T 20 S R 20 E S 3 W ¼ C S 10 1915
	from which
	A cedar, 10 ins. dia., bears N.70½°W., 4 lks. dist., mkd. W.C T 20 S R 20 E ¼ S 3 BT
	A ledge, mkd. + B O bears S,36°30'E., 3 lks. dist.
	Thence desc. to bottom of canyon, enter oak thicket, bears N. and S.
42.87	Bottom of canyon, 25 ft. below WC. ¼ sec. cor., drains S.30°W. Leame oak thicket, bears N. and S., thence asc. abruptly over series of sandstone ledges, bear NE. and SW.
48.88	Top of ledges, bear NE. and SW., thence asc. to top of asc.
66.70	Top of asc., 425 ft. above canyon, slopes SE. Desc.

Chains

73.00 Ravine, 70 ft. below top of asc., drains SE. Asc. abruptly over series of ledges, bear NE. and SW.

76.73 Offset 50 lks. N.0°02'W, around face of ledge, thence S.89°59'W on offset line through sec. 3.;

79.98 The Witness cor. to cor. of secs. 3, 4, 9 and 10., 225 ft. above ravine.

Land, very rugged and mountainous, broken by sandstone ledges, general drainage S.

Soil, light sandy loam and loose sandrock, and bare ledges, 4th. rate.

Timber, cedars, pinion, and scattered spruce.

Undergrowth, scattered buck brush, mahogany and grass, and oak brush in the canyon bottom.

September 5, 1915.

September 6: At 7h 59m a.m., l.m.t., I set off 39°07' on the lat. arc; 6°44'N. on the decl. arc, and determine a meridian with the solar at the cor. of secs. 3, 4, 9 and 10, 50 lks. S. of the W.C.

Thence I run

N.0°02'W., on true line, bet. secs. 3 and 4.

Over rough mountainous land, asc. through cedar, pinion and scattering spruce timber, and buck brush, mahogany and sparse grass undergrowth.

14.50 Top of ridge, 200 ft. above the W.C., bears NE. and SW. Thence asc. slightly along W. side of peak on ridge.

17.40 Top of asc., 5 ft. above top of ridge on line, slopes W. Desc. along side of ridge.

27.10 Ridge, 100 ft. below top of asc., bears NW. and S.10°E.

38.50 Ravine, 325 ft. below ridge, drains S.70°E. Asc.

40.00 On N. side of ravine, 20 ft. above bottom.

Set an iron post, 3 ft. long, 1 in. dia., 12 ins. in the ground to solid rock, and 14 ins. in a mound of stone, 3 ft. base, 14 ins. high, for ¼ sec. cor., with brass

Chains.

cap mkd.

S 4 | S 3
1/4
1915

from which

A cedar, 10 ins. dia., bears N.48½°E., 17 lks. dist., mkd. ¼ S 3 BT

A pinion, 10 ins. dia., bears N.65°W., 27 lks. dist., mkd. ¼ S 4 BT

September 6: At this cor., I set off 6°39'N. on the decl. arc, and at 11h 59m a.m.,l.m.t., observe the sun on the meridian; the resulting lat. is 39°07'.

42.60 Point of spur, 90.ft. above the ¼ sec. cor., slopes E. Desc. over ledges, bear E. and W.

47.15 Ravine, 225 ft. below point of spur, drains E. Asc.

50.15 Point of spur, 130 ft. above ravine, slopes E. Desc.

52.75 Ravine, 90 ft. below point of spur, drains E. Asc.

62.40 Top of asc., 135 ft. above ravine, slopes E. Desc.

67.00 Ravine, 100 ft. below top of asc., drains SE. Asc.

69.70 Intersect E. and W. line 8.06 chs. E. of the temp. cor. of secs. 33 and 34 on N. bdy. of Tp. Set temp. closing cor. of secs. 3 and 4.

September 6,1915.

October 2: At the temp. closing cor. of secs. 3 and 4, I set an iron post, 3 ft. long, 2 ins. dia., on sandstone outcropping, 24 ins. in a mound of stone, 4 ft. base, 2 ft. high, for closing cor. of secs. 3 and 4, with brass cap mkd.

T 19 S | R 20 E
S 33 | S 34

C C
S 4 | S 3
T 20 S | R 20 E

1915

from which

A spruce, 7 ins. dia., bears S,32½°E., 26 lks.

Chans

dist,mkd. T 20 S R 20 E S 3 BT

A spruce, 8 ins. dia., bears S.37°W., 36 lks. dist., mkd. T 20 S R 20 E S 4 BT

Land, mountainous, very rough and broken by numerous sandstone ledges, along E. side of ridge, drains E.

Soil, light sandy loam and loose sandrock, with sandstone ledges, 4th. rate.

Timber, cedars, pinion and scattered spruce.

Undergrowth, scattered buck brush, mahogany and grass.

September 15; At 8h 41m a.m.l.m.t., I set off 39°05' on the latl.arc; 3°18'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

West, on secl. corr. line, bet. secs. 16 and 21.

Over mountainous land, asc. through cedar, pinion and scattered spruce timber, and scattering buck brush, mahogany and grass undergrowth.

23.00 Ridge, 590 ft. above the cor., bears N.30°E. and S.30°W. Desc.

38.85 On top of ledge, 390 ft. below top of ridge. The point for ¼ sec. cor. will fall on face of ledge, where it is impossible to set cor.

Set an iron post, 3 ft. long, 1 in. dia., 12 ins. in the ground, to solid rock, and 14 ins. in a mound of stone, 3 ft. base, 14 ins. high, for witness cor. to ¼ sec. cor. with brass cap mkd.

T20 S R 20 E
S 16
c W ¼
C
S 21

1915

from which

A pinion, 10 ins. dia., bears N.52°E., 69 lks. dist.,

Subdivision of T.20 S., R.20 E.

Chains	
	mkd. W C T 20 S R 20 E¼S 16 BT
	A pinion, 9 ins. dia., bears S. 41°E., 12 lks. dist., mkd. W.C T 20 S R 20 E ¼ S 21 BT
	September 15 At this cor., I set off 3°15'N. on the decl. arc, and at 11h 56m a.m.,l.m.t., observe the sun on the meridian; the resulting lat. is 39°05'.
39.35	Point of ledges, bears S. and NE. Desc. abruptly over ledge. Leave a flag for triangulation.
40.00	Point for ¼ sec. cor. falls on face of ledge.
	Thence over ledges, over which it is impracticable to chain. To determine dist. to bottom of canyon, I proceed as follows: I set a flag on line in bottom of canyon; there being no place at this point available for a base line, I proceed to flag in bottom of canyon, from which I measure a base line, N.10°14'E, 10 chs. dist., to a point from which the flag on point of ledges bears S.61°41'E. The dist. is therefore
	$\frac{\sin 71°55'}{\sin 28°19'}$ x base, or $\frac{0.95061}{0.47434}$ x 10.00 = 20.04
	which added to 39.35 makes 59.39 chs.
59.39	Point, in canyon. Desc.
61.25	Bottom of canyon, 730 ft. below W.C. ¼ sec. cor., drains S.20°W. Asc. over series of sandstone ledges, bear N. and S.
80.00	On E. slope of ridge, 525 ft. above the canyon.
	Set an iron post, 3 ft. long, 2 ins. dia., 12 ins. in the ground, to solid rock, and 12 ins. in a mound of stone, 4 ft. base, 1 ft. high, for cor. of secs. 16,17, 20 and 21, with brass cap mkd.

T 20 S | R 20 E
S 17 | S 16
S 20 | S 21
1915

from which

A pinion, 5 ins. dia., bears S.41°W., 43 lks. dist., mkd. T 20 S R 20 E S 20 BT

Subdivision of T.20 S.,R.20 E.

Chains

A pinion, 7 ins. dia., bears N.2°W., 11 lks. dist., mkd. T.20 S R 20 E S 17 BT

No other trees available. Raise a mound of stone, 3 ft. base, 2 ft. high, W. of the cor.

Land, mountainous, very rough and broken by sandstone ledges,

Soil, light sandy loam and loose sandrock, sandstone outcrops, 4th. rate.

Timber, cedars, pinion and scattered spruce.

Undergrowth, buck brush, mahogany and sparse grass.

September 15, 1915.

September 16: At 8h 25m a.m.,l.m.t., I set off 39°05' on the lat. arc, 2°56'N. on the decl. arc, and determine a meridian with the solar at the cor. of secs. 16, 17, 20 and 21.

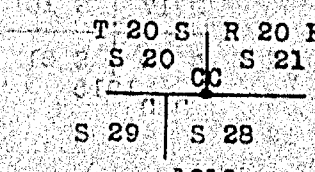
Thence I run

S.0°03'E., on random line, bet. secs. 20 and 21.

40.00 Set temp. ¼ sec. cor.

September 16: At this point, I set off 2°52'N. on the decl. arc, and at 11h 55m a.m.,l.m.t., observe the sun on the meridian; the resulting lat. is 39°04'.

80.06 Intersect E. and W. line 159 lks. E. of the cor. of secs. 20, 21, 28 and 29, heretofore described. I destroy all mks. on the old. cor. that pertain to secs. 20 and 21 and at my intersection, set an iron post, 3 ft. long, 2 ins. dia., 24 ins. in the ground, for closing cor. of secs. 20 and 21, with brass cap mkd.



and raise a mound of stone, 2½ ft. base, 2 ft. high, N. of the cor.

Subdivision of T.20 S.,R.20 E.

Chains	
	Thence,
	N.0°03'W., on true line, bet. secs. 20 and 21
	Over canyon bottom in Thompsons Canyon, through sage and greasewood and grass.
4.90	Creek; 6 lks. wide, 2 ins. deep, course S.10°W., clear water, in wash, 1 ch. wide, 15 ft. deep
5. 50	Wash, 50 lks. wide, 15 ft. deep, course SE.
9.85	Leave Thompsons Canyon, bears NW. and SE.
23.25	Top of asc., 150 ft. above canyon, slopes E. Desc.
28.35	Foot of desc., enter canyon bottom, bears NW. and SE.
32.15	Creek, 6 lks. wide, 2 ins. deep, course SE., clear water, in wash, 1 ch. wide, 4 ft. deep.
36.15	Leave canyon bottom, bears NW. and E., asc. to ledges, leave sage brush and greasewood, and enter cedar, pinion pine timber, and scattered buckbrush undergrowth.
40.03	Set an iron post, 3 ft. long, 1 in. dia., 18 ins. in the ground, to solid rock, and 8 ins. in a mound of stone, 3 ft. base, 8 ins. high, for ¼ sec. cor., with brass cap mkd.
	S 20 ¼ | S 21
	1915
	Raise a mound of stone, 2½ ft. base, 2 ft. high, W. of cor.
	No suitable bearing trees available.
	Cor. stands on S. slope, 70 ft. above the canyon bottom.
	Thence asc. abruptly over series of sandstone ledges, bear NE. and SW.
40.25	Top of a ledge, 60 ft. high, bears NW. and SE. Continue obrupt asc. over ledges.
80.06	The cor. of secs. 16, 17, 20 and 21, 700 ft. above the ¼ sec. cor.
	Land, rough mountainous, on N. half, along E. side of spur very rough and broken by sandstone ledges. On S. half mile, along bottom and side of Thompsons Canyon, cut by washes, drainage S.

Subdivision of T.20 S., R.20 E.

Chains

Soil, on the mountain sides, light sandy loam and loose sandrock, and sandstone ledges, 4th. rate, soil in canyon bottom, rich sandy loam, on clay subsoil, 2nd. rate.

Timber, cedars and pinion on the mountain sides.

Undergrowth, buck brush on slopes of mountains, and sage and greasewood on canyon bottom, with sparse grass.

September 16, 1915.

September 22: At 8h 53m a.m., l.m.t., I set off 39°05' on the lat. arc; 0°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 very rough mountainous land, asc. abruptly over sandstone ledges, through cedar and pinion timber, and scattering mahogany, greasewood and grass undergrowth.

1.20 Top of ledge, 70 ft. above the sec. cor., bears N.30°E., and S.30°W. Asc. to top of ridge.

29.20 Cross top of ridge, 250 ft. above sec. cor., bears N.15°E. and S.30°W. Asc. gradually along W. side of ridge.

37.90 Recross top of ridge, 20 ft. above first crossing, bears NW. and S.20°E. Desc. along E. side.

40.00 On E. side, 55 ft. below top of ridge.

Set an iron post, 3 ft. long, 1 in. dia., 8 ins. in the ground, to solid rock, and 18 ins. in a mound of stone, 3 ft. base, 1½ ft. high, for ¼ sec. cor., with brass cap mkd.

S 17 | S 16

1915

from which

A cedar, 4 ins. dia., bears N.57½°E., 5 lks. dist., mkd. ¼ S 16 BT.

Subdivision of T.20 S.,R.20 E.

Chains	
	A pinion, 4 ins. dia., bears S.33¾°W., 22 lks. dist., mkd. ¼ S 17 BT
	September 22: At this cor. I set off 0°32'N. on the decl. arc, and at 11h 53m a.m.,l.m.t., observe the sun on the meridian; the resulting lat. is 39°05'.
47.70	Ravine, 135 ft. below the ¼ sec. cor., drains S.70°E. Asc.
59.20	Spur, 115 ft. above ravine, projects SE. Desc.
62.60	Ravine, 50 ft. below spur, drains SE. (Cease work for the day)
	September 22, 1915.
	September 23: At 8h 08m a.m.,l.m.t., set off 39°06' on the lat. arc, 0°13'N. on the decl. arc, and determine a meridian with the solar at the 62.60 ch. point.
	Thence I run
	N.0°03'W., bet. secs. 16 and 17,
	Asc. to ledges.
66.70	Asc. abruptly over ledges, bear E. and W.
70.10	Top of ledge, 125 ft. high, 170 ft. above ravine, bears E. and W. Asc.
71.50	Top of asc. 30 ft. above ledge, slopes E. Thence along side of ledges, along nearly level line.
80.00	Set an iron post, 3 ft. long, 2 ins. dia., 18 ins. in the ground, to solid rock, and 18 ins. in a mound of stone, 4 ft. base, 1½ ft. high, for cor. of secs. 8, 9, 16 and 17, with brass cap mkd.

T 20 S | R 20 E
S 8 | S 9
S 17 | S 16
1915

from which

A pinion, 9 ins. dia., bears N.29½°E., 61 lks. dist., mkd. T 20 S R 20 E S 9 BT

A pinion, 6 ins. dia., bears S.70½°E., 17 lks. dist., mkd. T 20 S R 20 E S 16 BT

A pinion, 8 ins. dia., bears S.57¼°W., 27 lks. dist.,

Chains

mkd. T 20 S R 20 E S 17 BT

A mahogany 3 ins. dia., bears N.16¾°W., 40 lks. dist., mkd. T 20 S R 20 E S 8 BT

Land, along E. side of ridge, very rough and mountainous broken by numerous sandstone ledges.

Soil, light sandy loam and loose sandstone, and sandstone ledges, 4th. rate.

Timber, cedar and pinion.

Undergrowth, scattered mahogany, greasewood and grass.

From the cor. of secs. 8, 9, 16 and 17,

I run

East, on random line, bet. secs. 9 and 16.

September 23: Not able to be on a meridian at apparent noon; lat. obs. omitted.

1.00 Abrupt desc. over series of sandstone ledges, over which it is impracticable to chain. To determine dist., to bottom of canyon, I proceed as follows: Set a flag on line in bottom of canyon, then, there being no suitable place to measure a base line from this point, I leave a flag, and proceed to flag in bottom of canyon, from which I measure a base line, south, 13.00 chs. dist., to a point from which the flag on top of ledges bears N.64°41'W. the dist. is therefore

tan 64°41' x base, or 2.1139 x 13.00 = 27.48, which, added to 1.00 makes

28.48 Point in bottom of canyon.

29.57 Set temp. W.C.¼ sec. cor., as the true point will fall on face of ledges.

Thence asc. abruptly over series of sandstone ledges, over which it is impracticable to chain. To determine dist. to top of ledges, I proceed as follows: Not being able to see top of ledges from this point, I return to the

Subdivision of T.20 S.,R.20 E.

Chains	
28.48	ch28.48 chain point, from which I set a flag on line, on top of ledges, then measure a base line, south, 18.00 chs. dist., to a point from which the flag on top of ledges bears N.63°57'E. From the flag the south end of the base line bears S.63°57'W. The dist. is therefore tan 63°57' x base, or 2.0458 x 18.00 = 36.82 chs., which added to 28.48 makes
65.30	Point on top of ledges.
80.16	Intersect N. and S. line 10 lks. S. of the cor. of secs. 9, 10, 15 and 16.
	Thence,
	S.89°56'W., on true line, bet. secs. 9 and 16.
	Over rough mountainous land, asc. to top of main ridge through cedar, pinion and scattering spruce timber, and scattered mahogany, grease wood and grass undergrowth.
111.757	Top of main ridge of mountain, 300 ft. above the cor,, bears N. and S. Desc.
14.86	Point on top of ledges. Thence Desc. abruptly over series of sandstone ledges, bear N. and S.
40.08	The point for ¼ sec. cor., falls on face of sandstone ledges, where it would be impossible to perpetuate the cor.
50.59	At foot of sandstone ledges, 1070 ft. below top of mountain, bears N. and S.
	Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for witness cor. to ¼ sec. cor., with brass cap mkd.

T 20 S R 20 E

S 9 ¼ W C

S 16

1915

from which

A pinion, 4 ins. dia., bears N.13°E., 16 lks. dist., mkd. W C T 20 S R 20 E ¼ S 9 BT

A pinion, 5 ins. dia., bears S.67¾°W., 38 lks. dist.,

Subdivision of T.20 S., R.20 E

Chans

mkd. W C T 20 S R 20 E ¼ S 16 BT

Thence desc. to bottom of canyon.

51.68 Bottom of canyon, 30 ft. below the WC. ¼ sec. cor., drains south. Commence abrupt asc. over sandstone ledges, bear N. and S.

79.00 Top of ledges, bear N. and S., 825 ft. above the canyon bottom. Asc.

80.16 The cor. of secs. 8, 9, 16 and 17, 20 ft. above the top of ledges.

Land, very rough mountainous, rugged and broken by sandstone ledges, general drainage S.

Soil, light sandy loam with loose sandrock, sandstone outcroppings, 4th. rate.

Timber, cedar, pinion and scattered spruce.

Undergrowth, mahogany, greasewood and sparse grass.

September 23, 1915.

Note; The country north from the cor. of secs. 8, 9, 16 and 17 is broken by series of ledges on sides of high ridges, impossible to survey. The land is rough and broken and of no value. I abandon line at this point.

September 11,: At 8h 27m a.m.,l.m.t., I set off 39°02' on the lat. arc; 4°50'N. on the decl. arc, and determine a meridian with the solar at the St. Cor. of secs. 31 and 32, on the south bdy. of Tp., heretofore described.

Thence I run

N.0°03'W., bet. secs. 31 and 32

Over rough mountainous land, asc. abruptly over series of sandstone ledges, through scattering cedars, pinion pine timber, and scattered shadscale and grass undergrowth.

.60 Top of ledge, 55 ft. high, bears E. and W. Asc.

4.50 Point of spur, 90 ft. above the St. cor., slopes W. Desc.

Subdivision of T. 20 S., R. 20 E.

Chains.	
16.75	Ravine, 210 ft. below point of spur, drains W. Asc. over series of sandstone ledges, bear E. and W.
26.46	Coal outcroppings, 3 ft. thick, at foot of ledge, 20 ft. high, bears NE. and SW.
40.00	540 ft. above ravine, on rough slope of mountain, facing south.
	Set an iron post, 3 ft. long; 1 in. dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., with brass cap mkd.
	S 31 $\frac{1}{4}$ 1915 | S 32
	from which
	A cedar, 8 ins. dia., bears S.41°E., 25 lks. dist., mkd. $\frac{1}{4}$ S 32 BT
	A cedar, 5 ins. dia., bears S. 50° W., 41 lks. dist., mkd. $\frac{1}{4}$ S 31 BT
	September 11: At this cor., I set off 4°46'W. om the decl. arc, and at 11h 57m a.m.l.m.t., observe the sun on the meridian; the resulting lat. is 39°02'.
	Asc. abruptly over sandstone ledges, bear E. and W.
53.55	Top of asc., on slope of spur, 435 ft. above the $\frac{1}{4}$ sec. cor., slopes E. Desc. slightly.
56.75	Head of ravine, 15 ft. below top of asc., drains SE., asc. over sandstone ledges, bear NW. and SE.
66.00	Top of mountain, 230 ft. above head of ravine, bears W. and N., thence along top of mountain, enter more dense timber, bears E. and W.
78.00	Desc. into ravine, from top of mountain, bears NW. and SE.
80.00	On NE. slope, 20 ft. below top of mountain.
	Set an iron post, 3 ft. long, 2 ins. dia., 24 ins. in the ground, for. cor. of secs. 29, 30, 31 and 32, with brass cap mkd.
	T 20 S | R 20 E S 30 | S 29 S 31 | S 32 1915

Subdivision of T. 20 S., R. 20 E.

Chains

from which

A pinion, 5 ins. dia., bears N. 46½° E., 48 lks. dist., mkd. T 20 S R 20 E S 29 BT

A pinion, 9 ins. dia., bears S. 57½° E., 30 lks. dist., mkd. T 20 S R 20 E S 32 BT

A pinion, 7 ins. dia., bears S. 68½° W., 13 lks. dist., mkd. T 20 S R 20 E S 31 BT

A pinion, 10 ins. dia., bears N. 56° W., 34 lks. dist., mkd. T 20 S R 20 E S 30 BT

Land, S. 53 chs., rough and broken mountainous; N.27 chs., rolling mountainous, general drainage S.

Soil, light sandy loam on clay and loose rock, and sand stone outcroppings; 4th. rate.

Timber, scattered cedar and pinion timber on the S. 53 chs., and dense on the N. 27 chs.

Undergrowth, scattered shadscale and grass.

September 11, 1915.

September 13: At 8h 26m a.m., l. m. t., I set off 39°03' on the lat. arc; 4°05' N. on the decl. arc, and determine a meridian at the cor. of secs. 29, 30, 31 and 32.

Thence I run

N.89°58'E., on random line, bet. secs. 29 and 32.

27.35 Abrupt desc. over ledges over which it is impracticable to chain. To determine dist. to spur, across ledges, I proceed as follows: Set a flag on line on top of spur, then lay off a base line, N. 0° 02' W., 4.00 chs. dist., (Note.- A longer base is impossible on account of ledges) to a point from which the flag on spur bears S. 78° 08' E., from the flag the N. end of the base line bears N. 78° 08' W. The dist. is therefore

tan 78°08' x base, or 4.745 x 4.00 = 18.98 chs., which added to 27.35 chs. makes 46.33 chs. Thence I run S. 89° 58' W., 6.33 chs., to

Subdivision of T. 20 S., R. 20 E.

Chains	
40.00	Set temp. $\frac{1}{4}$ sec. cor.
	Sept. 13: At this point, I set off 4° 01' N. on the decl. arc; and at 11h 56m a. m., l. m. t., observe the sun on the meridian; the resulting lat. is 39° 03'.
79.79	Intersect N. and S. line 5 lks. S. of the cor. of secs. 28, 29, 32 and 33.
	Thence,
	S. 89° 56' W., on true line, bet. secs. 29 and 32.
	Over rough mountainous land, asc. through scattered cedar and pinion timber, and scattered shadscale and grass undergrowth.
5.50	Top of asc., 65 ft. above the cor., slopes N. Desc. gradually, and enter dense cedar and pinion timber, bears N. and S.
14.00	Bottom of desc., ravine, 55 ft. below top of asc., drains N. Asc. along side of spur, over series of ledges, bear NW. and SE.
33.46	Top of spur, 610 ft. above ravine, projects S. 75° E. Desc. timber becomes scattered, bears NW. and SE.
39.89½	At bottom of desc., 90 ft. below spur, drains SE.
	Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for $\frac{1}{4}$ sec. cor., with brass cap mkd.

$$\frac{S\ 29}{\frac{1}{4}}$$

S 32

1915

from which a

A cedar, 12 ins. dia., bears N. 89¾° E., 44 lks. dist., mkd. $\frac{1}{4}$ S 29 BT

A cedar, 6 ins. dia., bears S. 54¼° W., 47 lks. dist., mkd. $\frac{1}{4}$ S 32 BT

	Asc. abruptly over series of sandstone ledges, bear NW. and SE.
52.44	Top of ledges, bear N. and S., 115 ft. above $\frac{1}{4}$ sec. cor. Asc. gradually to top of mountain.

Chains	
68.00	Top of mountain, 150 ft. above top of ledges, bears N. and S. Desc. Timber becomes dense, bears N. and S.
76.75	Ravine, 40 ft. below top of mountain, drains S. 10° E. Asc.
79.79	The cor. of secs. 29, 30, 31 and 32, 40 ft. above ravine. Land, W. 27 chs., mountainous, drains S.; E. 52.29 chs. rough mountainous, broken by sandstone ledges, drainage E. Soil, light sandy loam and loose sandrock; numerous sandstone outcrops, 4th. rate. Timber, cedars and pinion, part scattered and part dense. Undergrowth, scattered shadscale and grass.

September 13, 1915.

September 14: At 8h 26m a. m., l. m. t., I set off 39°03' on the lat. arc; 3° 42' N. on the decl. arc, and determine a meridian with the solar at the cor. of secs. 29, 30, 31 and 32.

Thence I run West, on random line, bet. secs. 30 and 31

40.00 Set temp. ¼ sec. cor.

September 14: At this point, I set off 3° 38' N. on the decl. arc, and at 11h 56m a.m., l. m. t., observe the sun on the meridian; the resulting lat. is 39° 03'.

44.91 Abrupt desc. over ledges, over which it is impracticable to chain. To determine dist., across, I proceed as follows: Set a flag on line, and on N. and S. line 12 lks. S. of the cor. of secs. 25, 30, 31 and 36, on the W. bdy., heretofore described, and, there being no suitable place at this point for a base, I proceed to the flag, on the W. bdy., and leave a flag at this point. From the flag on the bdy., I measure a base, north, 32.70 chs. dist., to a point from which the flag on top of ledges bears S. 46° 59' E. From the flag the N. end of base line bears N. 46° 59' W. Therefore the dist. is

orth
2.70
46°59'
59'E

Subdivision of T. 20 S., R. 20 E.

Chains	
	tan 46° 59' x base or 1.07174 x 32.70 = 35.05 chs., which added to 44.91 makes 79.96 chs.
79.96	Intersect W. bdy. of Tp. 12 lks. S. of the cor. of secs. 25, 30, 31 and 36, heretofore described.
	Thence,
	S. 89° 55' E., on true line, bet. secs. 30 and 31.
	Over rough mountainous land, desc. through scattered cedar and pinion timber, and scattered shadscale and grass undergrowth.
2.20	Canyon, 95 ft. below cor., drains S. 30° W. Asc. over series of sandstone ledges, bear NE. and SW.
35.05	Top of ledges, 525 ft. above canyon, bear NE. and SW. Continue asc. to top of ridge. Timber becomes dense, bears NE. and SW.
39.96	Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for ¼ sec. cor., with brass cap mkd.
	S 30 ¼ S 31 1915
	from which
	A pinion, 10 ins. dia., bears N. 65° W., 6 lks. dist., mkd. ¼ S 30 BT
	A cedar, 8 ins. dia., bears S. 28½° W., 23 lks. dist., mkd. ¼ S 31 BT
	Cor. stands on NW. slope, 50 ft. above top of ledges.
47.50	Ridge, 160 ft. above the ¼ sec. cor., bears NE. and SW. Desc.
53.20	Ravine, 105 ft. below ridge, drains S. 10° W. Asc.
60.00	Top of asc., 150 ft. above ravine, bears N. and S. Thence over rolling top of mountain.
78.35	Leave rolling top of mountain, bears NW. and SE., and desc.
79.96	The cor. of secs. 29, 30, 31 and 32.
	Land, E. 44.91 chs. mountainous, part rolling, W. 35.05 chs., rough mountainous, rough and broken with sandstone led-

Subdivision of T. 20 S., R. 20 E.

Chains

ges, general south drainage.

Soil, light sandy loam on loose sandrock and clay, and numerous sandstone outcroppings; 4th. rate.

Timber, Dense cedars and pinions on E.44.91chs.,and scattering on the W. 35.05 chs.

Undergrowth, scattered shadscale and grass.

September 14, 1915.

September 20: At 8h 24m a. m., l. m. t., I set off 39°03' on the lat. arc, 1°23' N. on the decl. arc, and determine a meridian with the solar at the cor. of secs. 29, 30, 31 and 32.

Thence I run

N. 0° 03' W., bet. secs. 29 and 30.

Over rolling mountain top, desc. slightly through dense cedar and pinion timber, and scattered shadscale and grass undergrowth.

2.10 Head of ravine, 15 ft. below the cor., drains SE. Asc.

6.60 Top of mountain, 30 ft. above head of ravine, bears E. and W. Desc. gradually.

14.20 Ravine, 75 ft. below top of mountain, drains N. 75° E. Asc.

19.95 Spur, 35 ft. above ravine, projects N. 75° E. Desc. along NE. slope of mountain.

40.00 On E. slope of mountain, 280 ft. below spur.

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

S 30 | $\frac{1}{4}$ | S 29

1915

from which

A pinion, 12 ins. dia., bears S. 86° E., 23 lks. dist., Mkd. $\frac{1}{4}$ S 29 BT

A pinion, 7 ins. dia., bears S. 63½° W., 34 lks. dist., mkd. $\frac{1}{4}$ S 30 BT

Subdivision of T. 20 S. R. 20 E.

Chains

September 20: At this cor., I set off 1°19'N. on the decl. arc, and at 11h 54m a.m., l.m.t., observe the sun on the meridian; the resulting lat. is 39°03'.

76.80 Bottom of canyon, 535 ft. below the $\frac{1}{4}$ sec. cor., drains S.30°E. Ascend along E. side of canyon.

80.00 On East side of canyon, 70 ft. above bottom.

Set an iron post, 3 ft. long, 2 ins. in dia., 8 ins. in the ground to solid rock, and 16 ins. in a mound of stone, 3 ft. base, 16 ins. high, for cor. of secs. 19, 20, 29 and 30, with brass cap mkd.

T 20 S R 20 E
S 19 | S 20
S 30 | S 29
1915

from which

A pinon, 8 ins. dia., bears N.16½°E.,
32 lks. dist. mkd. T 20 S R 20 E S 20 B T.

A pinon, 6 ins. dia., bears S.13°W.,
27 lks. dist., mkd. T 20 S R 20 E S 30 B T.

A cedar, 10 ins. dia., bears S.13½°E.,
16 lks. dist. mkd. T 20 S R 20 E S 29 B T.

A pinon, 8 ins. dia., bears N.19½°W.,
52 lks. dist. mkd. T 20 S R 20 E S 19 B T.

Land rolling mountainous and mountainous, general drainage E.

Soil light sandy loam and loose sandstone, and sandstone ledges, 4th rate.

Timber dense cedars and pinon.

Undergrowth scattering shadscale and grass.

September 20, 1915.

September 21: At 8h 23m a.m., l.m.t., I set off 39°04' on the lat. arc, 1°00'N. on the decl. arc, and determine a meridian with the solar at the cor. of secs. 19, 20, 29 and 30.

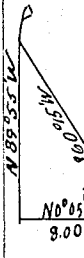
Thence I run

Subdivision of T. 20 S. R. 20 E.

Chains	
	N.89°56'E., on random line, bet. secs. 20 and 29.
40.00	Set temp. ¼ sec. cor.
	September 21: At this point I set off 0°55'N. on the decl. arc, and at 11h 53m a.m., l.m.t., observe the sun on the meridian; the resulting lat. is 39°04'.
79.88	Intersect N. and S. line, 7 lks. N. of the cor. of secs. 28 and 29.
	Thence
	S.89°59'W. on true line bet. secs. 20 and 29.
	Over mountainous land, asc. through cedar and pinon timber and scattered shadscale and grass undergrowth.
25.60	Commence abrupt asc. over ledges, bear N. and S.
39.94	On SE. slope of spur, 720 ft. above the cor.
	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground for ¼ sec. cor., with brass cap mkd.
	S ¼ 20 S 29 1915
	from which
	A cedar, 5 ins. dia., bears N.55¼°E.,
	78 lks. dist. mkd. ¼ S 20 B T.
	A cedar, 8 ins. dia., bears S.13½°E.,
	24 lks. dist. mkd. ¼ S 29 B T.
	NOTE: This cor. as referring to sec. 20 will be regarded as a WC, situated 1.53 chs. S.89°59'W. of true point for cor.
41.70	Top of asc. at point of ledges, bear NW. and NE., slopes S., 35 ft. above the ¼ sec. cor. Desc.
56.00	Bottom of desc., 330 ft. below top of asc., drains S. Asc.
60.60	Top of asc., 100 ft. above bottom of desc., slopes S. Desc.
65.00	Bottom of desc., wash, 100 ft. below top of asc., drains S.10°E. Asc.
69.45	Top of asc., 165 ft. above bottom, slopes S. Desc.
	Timber becomes more dense, bears N. and S.

Chains	
79.88	The cor. of secs. 19, 20, 29 and 30.
	Land, rough mountainous, general drainage SE.
	Soil, light sandy loam, loose sandstone, and sandstone outcroppings; 4th. rate.
	Timber, cedar and pinion, dense on W. 10.43chs. and scattered on the remainder.
	Undergrowth, scattering shadscale and sparse grass.
	September 21, 1915.

	September 28: At 8 h 21m a. m., l. m. t., I set off 39°04' on the lat. arc; 1°44' S. on the decl. arc, and determine a meridiam 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.
	Over series of sandstone ledges, over which it is impracticable to chain. To determine dist. to top of ledges, I proceed as follows: set a flag on line on top of ledges, then, from the cor., measure a base line, N. 0° 05' E., 8.00 chs. dist., to a point from which the flag on ridge bears S. 60°15' W. From the flag on ledges, the N. end of the base line bears N. 60°15' E. The dist. is therefore
	tan 60° 10' x base, or 1.74375 x 8.00 = 13.95
13.95	Point on top of ledges.
40.00	Set temp. ¼ sec. cor.
	September 28: At this point, I set off 1° 48' S. on the decl. arc, and at 11h 51m a. m., l. m. t., observe the sun on the meridian; the resulting lat. is 39° 04'.
79.73	Intersect the W. bdy. of Tp. 3 lks. N. of the cor. of secs. 19, 24, 25 and 30, heretofore described.
	Thence,
	S. 89°56' E., on true line, bet. secs. 19 and 30.
	Over rough mountainous land, asc. to top of mountain,



Chans

through cedar and pinion timber, and shadscale and grass undergrowth.

13.65 Top of mountain, 145 ft. above the cor., bears N. 30° E., and S. 30° W. Desc.

24.50 Ravine, 75 ft. below top of mountain, drains S. Asc.

29.75 Top of asc., 80 ft. above ravine, slopes S. 30° W. Desc.

34.90 Ravine, 30 ft. below top of asc., drains SW. Asc.

39.73 On west slope, 65 ft. above ravine.

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

S 19
¼
S 30
1915

from which

A cedar, 10 ins. dia., bears N. 38¾° E., 19 lks. dist., mkd. ¼ S. 19 BT

A cedar, 10 ins. dia., bears S. 42° E., 5 lks. dist., mkd. ¼ S 30 BT

42.30 Top of mountain, 55 ft. above the ¼ sec. cor., bears N. and S. Desc. gradually over top of mountain.

66.00 Commence abrupt desc. over ledges, bear N. and S.

79.00 Ravine, 500 ft. below top of ledges, drains S. 10° E. Asc.

79.73 The cor. of secs. 19, 20, 29 and 30, 35 ft. above the ravine.

Land, mountainous, general drainage east 36.43 chs. is SE., and on the west 43.30 chs., S.

Soil, light sandy loam and loose sandrock, with numerous outcroppings of sandstone ledges; 4th. rate.

Timber, dense cedars and pinion.

Undergrowth, scattered shadscale and grass.

September 28, 1915.

Subdivision of T. 20 S., R.20 E.

Chains	
	September 29: At 8h 21m a.m., l.m.t., I set off 39° 04' on the lat. arc; 2° 07' S. 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°03' W., bet. secs. 19 and 20.
	Over rough mountainous land, desc. slightly through cedars and pinion timber, and undergrowth of scattered buck-brush, greasewood and grass.
4.00	Bottom of desc., 30 ft. below the cor., drains SW. Asc.
22.15	Top of abrupt asc. and ledge, 90 ft. high, bears E. and W. Asc. gradually
32.00	Top of main mountain, 510 ft. above the sec. cor., bears E. and W., Desc. gradually.
40.00	On N. slope, 100 ft. below top.
	Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for ¼ sec. cor., with brass cap mkd.
	S 19 ¼ | S 20
	1915
	from which
	A pinion, 7 ins. dia., bears S. 78° E., 38 lks. dist., mkd. ¼ S 20 BT
	A pinion, 5 ins. dia., bears N. 19¼°W., 20 lks. dist., mkd. ¼ S 19 BT
	September 29: At this cor., I set off 2° 11' S. on the decl. arc, and at 11h 51m a. m., l. m. t., observe the sun on the meridian; the resulting lat. is 39° 04'.
50.30	Canyon, 300 ft. below ¼ sec. cor., drains E. Asc. over series of sandstone ledges, bear E. and W.
60.10	Top of mountain, 320 ft. above canyon, bears E. and W.
	Thence over rolling mountain top,
68.80	Leave rolling mountain top, bears E. and W., desc.
76.33	Ravine, 130 ft. below top, drains E. Asc.
80.00	On N. side of ravine, 60 ft. above the bottom.
	Note: The length of the line between secs.17 and 20 being

Subdivision of T.20 S., R.20 E.

Chains out of limits in distance, I set cor. for two secs. only:
Set an iron post, 3 ft long, 2 ins. dia., 6 ins. in the ground, and 18 ins. in a mound of stone, 5 ft. base, 1½ ft. high, for cor. of secs. 19 and 20, with brass cap mkd.

T 20 S R 20 E

S 19 | S 20

1915

from which

A pinion, 6 ins. dia., bears S.68¾° E., 46 lks. dist., mkd. T 20 S R 20 E S 20 BT

A pinion, 8 ins. dia., bears S. 46¼° W., 46 lks. dist., mkd. T 20 S R 20 E S 19 BT

Land, rough mountainous, general drainage E.

Soil, light sandy loam, on loose sand rock, and sandstone outcroppings, 4th. rate.

Timber, cedar and pinion.

Undergrowth, scattered shadscale, buck brush and grass.

September 29, 1915.

September 30: At 8h 20m a. m., l. m. t., I set off 39°05' on the lat. arc, 2° 31' S. on the decl. arc, and determine a meridian with the solar at the cor. of secs. 19 and 20.

Thence I run

N.89° 59' E., on random line, bet. secs. 17 and 20.

1.59 Set temp. cor. of secs. 17 and 18.

40.00 Set temp. ¼ sec. cor. for sec. 20.

41.59 Set temp. ¼ sec. cor. for sec. 17.

September 30: At this point, I set off 2° 35' S. on the decl. arc, and at 11h 50m a. m., l. m. t., observe the sun on the meridian; the resulting lat. is 39° 05'.

52.70 Abrupt ledges ahead, over which it is impracticable to

Chains	
	chain. To determine dist. to top of ledges, I proceed as follows: Set a flag on line on top of ledges, then measure a base line, S. 19°47' E., 10.00 chs. dist., to a point from which the flag on top of ledges bears N. 63°22' E. From this flag, the S. end of the base line bears S. 63°22' W. The dist. is therefore $\frac{\sin 83°09'}{\sin 26°37'}$ x base or $\frac{0.9928}{0.4480}$ x 10.00 = 22.16, which added to 52.70 makes
74.86	Point on top of ledges.
81.48	Intersect N. and S. line 16 lks. S. of thecor. of secs. 16, 17, 20 and 21.
	Thence,
	S. 89°53' W., on true line, bet. secs. 17 and 20.
	Over rough mountainous land, asc. abruptly over sandstone ledges, bear N. and S., through medium growth of cedar and pinion timber, and scattered shadscale and grass undergrowth.
3.25	Top of spur, 175 ft. above the cor., projects S. Desc.
6.62	Desc. abruptly over series of snadstone ledges, bear N. and S.
21.50	Foot of abrupt desc. over ledges, bears N. 10° W. and S. 10° E., thence desc. to bottom of Thompsons Canyon, also leave shadscale and grass undergrowth, bears same, and enter oak and sagebrush, bears N. and S.
25.00	Bottom of Thompsons canyon, 600 ft. below spur, creek, 3 lks. wide, 2 ins. deep, course S. 10° E., clear water, in wash, 1 ch. wide, 15 ft. deep. Asc.
25.40	From this point, a spring of clear water bears N. 25°45' W., 7.90 chs. dist., course SE.
28.80	Leave sage and oak brush undergrowth, bears N. and S., and enter shadscale and grass, bears same. Asc. from canyon bottom, bears NW. and SE.
40.00	On NE. slope, 360 ft. above the canyon bottom.
	Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the

Chains	
	ground, for ¼ sec. cor. on S. bdy. sec. 17, with brass cap mkd.
	S 17 ¼ ✓
	1915
	from which
	A pinion, 6 ins. dia., bears N. 3½° E., 57 lks. dist., mkd. ¼ S 17 BT ✓
	No other bearing tree available.
	Raise a mound of stone, 3 ft. base, 2 ft. high, N. of the cor.
41.48	On NE. slope, 70 ft. above the ¼ sec. cor. for sec. 17. Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for ¼ sec. cor. on N. bdy. sec. 20, with brass cap mkd.
	¼ ✓
	S 20
	1915
	from which
	A pinion, 4 ins. dia., bears S. 20° W., 32 lks. dist., mkd. ¼ S 20 BT ✓
	A pinion, 6 ins. dia., bears S. 34½° E., 34 lks. dist. mkd. ¼ S 20 BT ✓
48.20	Ridge, 300 ft. above the ¼ sec. cor. for sec. 20, bears N.10° W. and S. 10° E. Desc. over series of ledges, bear same.
52.70	Ravine, 85 ft. below spur, drains SW. Desc. over series of ledges, bear NE. and SW.
57.40	Spur, 80 ft. above ravine, projects about 2 chs. S. Desc. over series of ledges, bears N. and S.
70.70	Canyon, 350 ft. below spur, drains S. 10° E. Desc. abruptly over series of sandstone ledges, bear NW. and SE.
79.70	Top of abrupt asc. over ledges, bear N. and S., thence asc. gradually.

Subdivision of T. 20 S., R. 20 E.

Chains.

80.00 On S. slope, 340 ft. above the canyon.

Set an iron post, 3 ft. long, 2 ins. dia., 6 ins. in the ground, to solid rock, and 18 ins. in a mound of stone, 5 ft. base, 1½ ft. high, for cor. of secs. 17 and 18, with brass cap mkd.

T 20 S	R 20 E
S 18	S 17

1915

from which

A pinion, 6 ins. dia., bears N. 20½° E., 72 lks. dist., mkd. T 20 S R 20 E S 17 BT

A pinion, 8 ins. dia., bears N. 30° W., 36 lks. dist., mkd. T 20 S R 20 E S 18 BT.

Thence S. 89°53' W. bet. secs. 18 and 20.

81.48 The cor. of secs. 19 and 20.

Land, rough mountainous, general drainage S.

Soil, light sandy loam and loose sandrock, and numerous outcroppings of sandstone ledges, 4th. rate.

Timber, cedar and pinion, medium growth.

Undergrowth, sage and oakbrush in bottom of Thompsons canyon, and shadscale and grass on the remainder.

September 30,1915

October 1: At 8h 20m a. m., l. m. t., I set off 39°05' on the lat. arc; 2° 54' S. on the decl. arc, and determine a meridian with the solar at the cor. of secs. 19 and 20.

Thence I run

N. 89°56' W., on random line, bet. secs. 18 and 19.

38.52 Set temp. ¼ sec. cor. for sec. 18.

40.00 Set temp. ¼ sec. cor. for sec. 19.

October 1: At this point, I set off 2° 58' S. on the decl. arc, and at 11h 50m a. m., l. m. t., observe the

Chains

sun on the meridian; the resulting lat. is 39° 05'.

79.65 Intersect. W. bdy. of Tp. 14 lks. N. of the cor. of secs. 13, 18, 19 and 24, heretofore described.

Thence,

N. 89°58'E., on true line, bet. secs. 18 and 19.

Over mountainous land, asc. gradually to ridge, through cedar and pinion timber, and scattered shadscale and grass undergrowth.

9.40 Ridge, 80 ft. above the sec. cor., bears N. and S. Desc.

17.50 Ravine, 140 ft. below ridge, drains S. Asc.

28.15 Top of asc., 230 ft. above ravine, slopes S. Desc. slightly.

33.00 Bottom of desc., ravine, 20 ft. below top of asc,, drains S. Asc.

38.00 Ridge, 95 ft. above bottom of desc., bears N. and S. Desc.

39.65 On E. slope, 60 ft. below the ridge.

Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for ¼ sec. cor., on N. bdy. sec. 19, with brass cap mkd.

¼

S 19

1915

from which

A cedar, 4 ins. dia., bears S. 28¼° E., 39 lks. dist., mkd. ¼ S 19 BT

A pinion, 6 ins. dia., bears S. 61½° W., 26 lks. dist., mkd. ¼ S 19 BT

41.13 On E. slope, 40 ft. below the ¼ sec. cor. for sec. 19, 40.00 chs. S. 89°58' W. of the cor. of secs. 17 and 18.

Set an iron post, 3 ft. long, 1 in. dia., 16 ins. in the ground, to solid rock, and 10 ins. in a mound of stone, 3 ft. base, 10 ins. high, for ¼ sec. cor. on S. bdy. sec. 18, with brass cap mkd.

Subdivision of T. 20 S., R.20 E.

Chains	
	S 18 ¼
	1915
	from which
	A pinion, 5 ins. dia., bears N. 55¼°E., 33 lks. dist., mkd. ¼ S 18 BT
	A pinion, 12 ins. dia., bears N. 1° E., 32 lks. dist., mkd. ¼ S 18 BT
57.20	Ravine, 155 ft. below the ¼ sec. cor. for sec. 18, drains S. 30° E. Asc. gradually.
67.20	Top of asc., 60 ft. above ravine, slopes S. Desc. gradually.
77.00	Ravine, 60 ft. below top of asc. drains S. 75° E. Asc. slightly.
79.65	The cor. of secs. 19 and 20, 25 ft. above ravine.
	Land, mountainous, general drainage E. on the E. 41.65 chs., and S. on the W. 38 chs.
	Soil, light sandy loam and loose sandrock, and numerous sandstone outcroppings and ledges, 4th. rate.
	Timber, dense cedar and pinion.
	Undergrowth, scattered shadscale and grass.
	October 1, 1915.

The land to the north of secs. 17 and 18 is extremely rugged and of no value, and precipituus sandstone ledges make country practicablly unsurveyable. I abandon the survey at this point.

Ralph Linley

U. S. Surveyor.

General Description

T.20 S., R. 20 E.

This township is generally rough mountainous land, consisting of high ridges and deep canyons, and broken by numerous sandstone ledges. The general drainage is to the south. The land is too broken and rough to be of any value for agricultural purposes. The bottoms and sides of the main canyons afford good grazing, but the ridges are impassible for stock.

The soil is generally a poor sandy loam mixed with loose sandrock, part bare ledges, and is generally covered with a scattering growth of shadscale and grass, and a medium growth of scrub cedars and pinion pine. Through the north part of the Tp. a scattered growth of spruce is found.

There is a stream of clear water about 10 lks. wide, 4 ins. deep, flowing through secs. 17, 20, 28 and 29. In sec. 28 the D. and R. G. Ry. Co. pipes water to Thompsons, Utah. There is a spring of clear water in sec. 22, and the coal mining camp of **Neslen** obtains water from this spring.

The coal mining camp of **Neslen** is located in the NW. cor. of sec. 27; there are about 300 men employed in the mines, and about 500 tons of coal per day are shipped from this camp.

There are numerous outcroppings of coal veins from 2 to 5 ft. thick occuring in secs. 31, 32, 35, 25 and 36. There are no indications of mineral in the Tp.

Ralph Gentry

U. S. Surveyor.

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BOOK A-416

CERTIFICATE OF ASSISTANTS.

We, the undersigned, hereby certify upon honor that we assisted, to the best of our skill and ability, Ralph Gentry, U. S. Surveyor, during the periods and in the capacities stated opposite our several signatures, in surveying all those parts or portions of the retracement and restoration resurvey of the fourth standard parallel south, through R.20 E.; the resurvey of the Green River Guide Meridian, through T.20 S.; the resurvey of a portion of the N.bdy.; the survey of the W. bdy.; and the retracement and survey of the subdivision of T.20 S., R. 20 E.; and retracement, resurvey, and survey of a portion of the W.bdy and subdivision of T.21 S., R.20 E.

of the Salt Lake Base and Meridian, in the State of Utah

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.	
Sterling Wright	July 9-1915	October 3-1915	Chainman
Sidney Reese	July 9-1915	October 3-1915	R. Chainman
Reuben Walker	July 9-1915	August 29-1915	Cornerman
D N W Shuler Jr.	July 9-1915	July 16-1915	Flagman
Lynn Taylor	July 17-1915	October 3-1915	Flagman
Lee Moore	August 30-1915	October 3-1915	Cornerman

Subscribed and certified to before me on the dates of the final service as shown above.

Ralph Gentry
U. S. Surveyor.

6—2761

BOOK A-416

FINAL OATH OF UNITED STATES SURVEYOR.

I, Ralph Gentry, U. S. Surveyor, do solemnly swear that, in pursuance of special instructions received from the U. S. Surveyor General for Utah bearing date of the 6th day of May, 1914, 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 Retracements restoration resurvey 4th Standard Parallel South through R.20E.; resurvey of the Green River Guide Mer. through T.20S.; resurvey of portion of the N. bdy. survey of W. bdy and retaacement and survey of the subs. of T.20S R.20E., and resurvey, retracement and survey of a portion of the W. bdy and subs. of T.21S., R.20E. of the Salt Lake Base and Meridian, in the State of Utah, 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 Utah, and in the specific manner described in the field notes, and that the foregoing are the original field notes of such survey.

Ralph Gentry
U. S. Surveyor.

Subscribed by said Ralph Gentry, and sworn to before me this 20th day of June, 1916

SEAL

M. O. Thoresen
U.S. Surveyor-General for Utah

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah, August 7, 1916

The foregoing field notes of the ~~survey~~ retracement, resurvey, and survey of the Fourth Standard Parallel South through Range 20 East, and the resurvey of the Green River Guide Meridian through Township 20 South, and the north boundary of T. 20 S., R. 20 E., and the retracement and survey of the subdivisions of T. 20 S., R. 20 E., of the Salt Lake Base and Meridian, Utah,

executed by Ralph Gentry

under his special instructions dated May 6, 1914, 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.

M. O. Thoresen
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.

6—2761

U. S. Surveyor General.