Volume

#

R0417

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U. S. Land Office
MAR 20 1916
SALT LAKE CITY, UTAH.

BOOK A-417

E

FIELD NOTES

OF THE SURVEY OF THE

WEST BOUNDARY OF T. 20 S., R. 20 E.,

AND THE

WEST BOUNDARY OF T. 21 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 September 9, *1915*

Survey completed September 17, *1915*

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INDEX DIAGRAM.

Township 20 South, *Range* 20 East

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6 Township 21 South, Range 20 East.

Survey commenced September 9, 1915, and executed with a Buff and Buff transit, No. 8028, equipped with a Smith solar attachment.

For full description and test of instrument on a Polaris meridian, see Page 1 in the notes of the south , east, and north boundaries and the subdivision of T. 20 S., R. 20 E.

A four chain steel tape and clinometer were used in making all measurements, and the tape was frequently tested by comparing it with a standard 1 chain steel tape kept for this purpose only.

The instruments were approved for use on this survey by the Ass't. Supervisor of Surveys for Utah, in assignment Instructions dated May 10, 1915.

From recent tests on Polaris meridian, I am assured that the transit and solar are now in satisfactory adjustment.

September 9: For solar observations this day see line on S. bdy. sec. 31, 4th. St. Par. So., in book referred to above.

From the St. Cor. of Ts. 20 S., Rs. 19 and 20 E., heretofore described, I run

North, on true line, bet. secs. 31 and 36 on W. bdy. of Tp., knowing that the extreme ruggedness and worthlessness of the country on the NW. part of the Tp. will prevent me from making a connection with the cor. of Ts. 19 and 20 S., Rs. 19 and 20 E.

Over rough mountainous land, asc. to top of ridge, through cedar and pinion timber, and scattered undergrowth of buckbrush, shadscale and sparse grass.

4.65 Ridge, 55 ft. above the cor., bears NE. and SW. Desc. along W. slope of ridge.

40.00 On NW. slope of ridge, 790 ft. below top.

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 36¼ | S 31
	1915
	from which
	A cedar, 8 ins. dia., bears S. 4° E., 70 lks. dist., mkd. ¼ S 31 BT
	A cedar, 5 ins. dia., bears N. 12¼° W., 28 lks. dist., mkd. ¼ S 36 BT
	September 9, 1915.
	September 10: At 8h 57m a. m., l. m. t., I set off 39° 02' on the lat. arc; 5° 12' N. on the decl. arc, and determine a meridian with the solar at the ¼ sec. cor. bet. secs. 31 and 36, on W. bdy. of Tp.
	Thence I run
	North, continuing bet. secs. 31 and 36.
44.15	Ravine, 100 ft. below the ¼ sec. cor., drains SW. Asc. over sandstone ledges, bear NE. and SW.
54.30	Spur, 85 ft. above ravine, projects W. Desc.
58.35	Ravine, 165 ft. below spur, drains W. Asc.
63.65	Top of asc., 65 ft. above ravine, slopes W.; desc.
73.18	Canyon, 175 ft. below top of asc., drains SW.; asc. abruptly over sandstone ledges, bear NE. and SW.
80.00	On SE. slope, 100 ft. above the canyon.
	Set an iron post, 3 ft. long, 3 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 cor. of secs. 25, 30, 31 and 36, with brass cap mkd.

T 20 S
R 19 E | R 20 E
S 25 | S 30
S 36 | S 31
1915

Raise a mound of stone, 2½ ft. base, 1½ ft. high, W. of the cor.

No bearing trees within limits.

Chains	
	September 10: At this cor., I set off 5° 09' N. on the decl..arc, and at 11h 57m a. m., l. m. t., observe the sun in the meridian; the resulting lat. is 39° 03'.
	Land, rough mountainous and broken, with dandstone ledges, general drainage SW.
	Soil, light sandy loam, loose sandrock and bare sandstone outcroppings, 4th. rate.
	Timber, scattered cedars and pinion.
	Undergrowth, scattered shadscale, buckbrush and sparse grass.
	North, bet. secs. 25 and 30.
	Over rough mountainous land, asc. abruptly over sandstone ledges, throughscattered cedar and pinion timber, and scattered shadscale, buckbrush and grass undergrowth.
6.25	Top of asc., 220 ft. above cor., slopes E. Desc. over sandstone ledges, bear E. and W.
9.95	Gulch, 80 ft. below top, drains E. Asc. abruptly over ledges, bear E. and W.
32.60	Top of asc., 530 ft. above gulch, slopes E. Desc. slightly.
40.00	In bottom of desc., 95 ft. below top of asc.,
	Set an iron post, 3 ft. long, 1 in. dia., 26 ins. in the ground, for ¼ sec. cor., with brass cap mkd.
	S 25¼ | S 30
	1915
	from which
	A pinion, 6 ins. dia., bears S. 65½° E., 31 lks. dist., mkd. ¼ S 30 BT
	A pinion, 8 ins. dia., bears N. 63° W., 40 lkd. dist., mkd. ¼ S 25 BT.
	September 10, 1915.
	September 27: At 8h 51m a. m., l. m. t., I set off 39°03' on the lat. arc, 1° 21' S. on the decl. arc, and deter-

West Boundary of T. 20 S., R.00 E.,

Chains	
	mine a meridian with the solar at the ¼ sec. cor. bet. secs. 25 and 30.
	Thence I run
	North, continuing bet. secs. 25 and 30.
	Asc. gradually.
70.35	Ridge, 150 ft. above the ¼ sec. cor., bears NE. and SW.
	Desc.
80.00	On NW. slope of ridge, 150 ft. below top.
	Set an iron post, 3 ft. long, 3 ins. dia., 24 ins. in the ground, for cor. of secs. 19, 24, 25 and 30, with brass cap mkd.

T 20 S

R 19 E	R 20 E
S 24	S 19
S 25	S 30

1915

from which

A pinion, 7 ins. dia., bears N. 65° E., 78 lks. dist., mkd. T 20 S R 20 E S 19 BT

A pinion, 8 ins. dia., bears S. 8½° E., 43 lks. dist., mkd. T 20 S R 20 E S 30 BT

A pinion, 6 ins. dia., bears S. 55½° W., 70 lks. dist., mks. T 20 S R 19 E. S 25 BT

A pinion, 12 ins. dia., bears N. 57¾° W., 10 lks. dist., mkd. T 20 S R 19 E S 24 BT

September 27: At this cor., I set off 1° 25' 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'.

Land, S. 33 chs., rough mountainous, and the N. 47 chs. rolling mountainous, general S. drainage.

Soil, light sandy and clay loam and loose sandrock, and sandstone outcroppings, 4th. rate.

Timber, cedars and pinion.

Undergrowth, scattered shadscale, buckbrush and sparse grass.

Chains	
	From the cor. of secs. 19, 24, 25 and 30,
	I run
	North, bet. secs. 19 and 24.
	Over rough mountainous land; desc. through dense cedar and pinion timber, and scattered shadscale and sparse grass undergrowth
5.90	Gulch, 40 ft. below the cor., drains W. Asc.
9.30	Point of spur, 50 ft. above gulch, slopes SW.; desc. abruptly over sandstone ledges, bear NE. and SW.
22.75	Canyon, 510 ft. below top, drains S. 30° W.; asc.
34.27	Top of asc., 125 ft. above canyon, slopes E.; desc.
38.05	Canyon, 55 ft. below top, drains SE.; asc.
40.00	30 ft. above canyon 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 24¼ | S 19

1915

from which,

A cedar, 5 ins. dia., bears S. 16° E., 12 lks. dist., mkd. ¼ S 19 BT

A pinion, 8 ins. dia., bears N. 64° W., 23 lks. dist., mkd. ¼ S 24 BT.

	Asc. over ledges, bear NW. and SE.
49.30	Top of abrupt asc., bears N. and W., 290 ft. above the ¼ sec. cor., thence asc. gradually along the W. slope of mountain.
80.00	On W. slope, 40 ft. above top of abrupt asc.
	Set an iron post, 3 ft. long, 3 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. 13, 18, 19 and 24, with brass cap mkd.

T 20 S

R 19 E	R 20 E
S 13	S 18
S 24	S 19

1915

Chains

from which

A pinion, 6 ins. dia., bears N. 59¾° E., 64 lks. dist., mkd. T 20 S R 20 E S 18 BT

A pinion, 12 ins. dia., bears S. 32° E., 60 lks. dist., mkd. T 20 S R 20 E S 19 BT

A pinion, 6 ins. dia ,bears S. 27° W., 21 lks. dist., mkd. T 20 S R 19 E S 24 BT

A pinion, 10 ins. dia., bears N. 22½° W., 45 lks. dist. mkd. T 20 S R 19 E S 13 BT

Land, Rough mountainous, general drainage S.

Soil, light sandy loam and loose sandrock, and numerous sandstone outcroppings; 4th. rate.

Timber, dense cedars and pinion pine.

Undergrowth, scattered shadscale and sparse grass.

September 27, 1915.

On account of worthless and extremely rough country ahead, I abandon line at this point.

WEST BOUNDARY OF T. 21 S., R. 20 E.

September 17: At 8h 55m a. m., l. m. t., I set off 39°01' on the lat. arc, and 2° 32' N. on the decl. arc, and determine a meridian with the solar at the ¼ sec. cor. bet. secs. 7 and 12, on the W. bdy. of Tp., which is a red sandstone, 8 x 8 x 6 ins. above ground, firmly set, mkd, ¼ on W. face, and witnessed by a mound of stone, 2½ ft. base, 1½ ft. High, W. of cor.

Thence I run

North, bet. secs. 7 and 12.

Over rolling bench land, asc. slightly over boulders, through very scattered greasewood, shadscale and grass.

16.00 Abrupt asc. over series of sandstone ledges, over which it is impossible to chain. To determine dist. to top

Chains

of ledges, I proceed as follows: Not being able to see top of ledges, or to obtain a suitable base at this point, I return to the ¼ sec. cor., from which I set a flag on line on top of ledges, then measure a base line, east, 10.00 chs. dist., (no longer base being possible) to a point from which the flag bears N. 13°54' W. From the flag the E. end of the base line bears S. 13° 54' E. The dist. is therefore

cot 13° 54' x base or 4.0408 x 10.00 = 40.41 chs.

40.00 The point for cor. of secs. 1, 6, 7 and 12 falls on face of ledges, where it would be impossible to set cor., therefore at

40.41 On top of ledges, 825 ft. above the ¼ sec. cor.,

Set an iron post, 3 ft. long, 3 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 the cor. of secs. 1, 6, 7 and 12, with brass cap mkd.

T 21 S
R 19E | R 20 E
S 1 WC S 6

S 12 | S 7
1915

Raise a mound of stone, 2½ ft. base, 1½ ft. high, W. of the cor.

The point for the old. W.C. to cor. of secs. 1, 6, 7 and 12, reported set at 68.50 chs., falls on face of sandstone ledges. I am unable to find same.

Land, rough and broken mountainous, broken by numerous rugged sandstone ledges, facing S.

Soil, light sandy loam and loose sandstone , and sandstone ledges, 4th. rate.

Undergrowth, scattering greasewood, shadscale and sparse grass.

No timber.

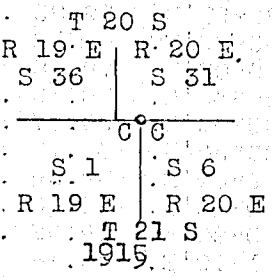
September 17: I am unable to be on a meridian at noon,

Chains	
	and the obs. for lat. is therefore ommitted.
	From the true point for cor. of secs. 1, 6, 7 and 12, on the W. bdy. of Tp.,
	I run
	North, bet. secs. 1 and 6.
	Over rough mountainous land, through very scattered cedar and pinion timber, and shadscale and grass undergrowth.
	The line passes over series of sandstone ledges bearing NW. and SE., along side of mountain, over which it is impossible to chain. To determine dist. across ledges to spur, I proceed as follows: Set a flag on line on spur, then measure a base line, east, 28.16 chs., (no longer base being possible on account of ledges) to a point from which the flag bears N. 32°28' W. From the flag, the E. end of the base line bears S. 32° 28' E. The dist. is therefore
	cot 32° 28' x base, or 1.5717 x 28.16 = 44.26 chs.
	Thence I run south, 4.26 chs., to
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 ¼ | S 6
	1915
	Raise a mound of stone, 2½ ft. base, 2 ft. high, W. of the cor.
	No bearing trees within limits.
	The cor. stands on side of mountain, 150 ft. below the W.C. to secs. 1, 6, 7 and 12:
	Asc. to spur.
44.26	Point of spur, 50 ft. above the ¼ sec. cor:, slopes E. Desc.
48.75	Intersect the 4th. St. Par. S., 6.37 chs. E. of the St.

Chains.

cor. of Ts. 20 S., Rs. 19 and 20 E., heretofore described.

At intersection, set an iron post, 3 ft. long, 3 ins. dia., 24 ins. in the ground, for closing cor. of Ts. 21 S., Rs. 19 and 20 E., with brass cap mkd.



Raise a mound of stone, 2½ ft. base, 2 ft. high, S. of the cor. No bearing trees within limits.

Land, along E. side of mountain, very rough and broken by numerous sandstone ledges.

Soil, light sandy loam, loose sandstone, and sandstone ledges, 4th. rate.

Timber, very scattered cedar and pinion.

Undergrowth, scattered shadscale and sparse grass.

September 17, 1915.

Note: For general description of T. 20 S., R.20 E., see notes of subdivision of T. 20 S., R. 20 E.

Note: For general description of T. 21 S., R. 20 E., see notes of retracement of subdivision of T. 21 S., R. 20 E.

Exteriors of Fracl. T. 20 S., R. 20 E.

Latitudes, departures, and closing errors.

Line designated		True bearing	Distance	Latitudes N.	Latitudes S.	Departures E.	Departures W.
E. bdy.	T.20 S.R.20	E. North	469.54	469.54	.....	.....	.....
N. "	"	West	239.79	.....	.....	.....	239.79
W. bdy.	secs.3&10	S. 0°02'E.	149.40	.....	149.40	09	.....
N. bdy.	sec. 16	S.89°56'W.	80.16	.....	09	.....	80.16
W. bdy.	sec. 16	S. 0°03'E.	80.00	.....	80.00	...07	.....
N. bdy.	sec. 20	S.89°53'W.	81.48	.....	16	.....	81.48
N. bdy.	sec. 19	S.89°58'W.	79.65	.....	05	.....	79.65
W.bdy.T.	20S.R.20 E.	South	240.00	.....	240.00	.....	.....
S. bdy.	sec. 31	East	80.00	.....	.....	80.00	.....
S. bdy.	sec. 32	N.89°58'E.	79.85	05	.....	79.85	.....
E. bdy.	sec. 32	N. 0°02'W.	80.16	80.16	.....	.....	05
E. bdy.	sec. 29	N. 0°02'W.	79.98	79.98	.....	.....	05
N. bdy.	sec. 28	S.89°46'E.	30.19	.....	12	30.19	.....
	"	N.89°02'E.	50.07	84	.....	50.06	.....
N. bdy.	sec. 27	S.89°56'E.	40.78	.....	05	40.78	.....
		N.89°50'E.	39.39	11	.....	39.39	.....
E. bdy.	sec. 27	S. 0°12'W.	80.30	.....	80.30	.....	28
E. bdy.	sec. 34	S. 0°20'E.	39.92	.....	39.92	23	.....
	"	S. 1°19'E.	40.18	.....	40.17	... 02	.....
S. bdy.	35	East.....	80.10	.....	.....	80.10	.....
S. bdy.	sec. 36	East.....	79.85	.....	.....	79.85	.....
Convergency.....		.....	.....	.....	.....	.....	38
	Totals.....			630.68	630.26	481.53	481.84
				630.26			481.53
	Error in lat.....			0.42	Error in dep..		0.31

Latitudes, departures and closing errors.

Exteriors of sec. 6, T.21 S., R. 20 E.

Line designated		True bearing.	Distance	Latitudes N.	Latitudes S.	Departures E.	Departures W.
E. bdy.	sec. 6	N. 0°03'W.	8.82	8.82	.....	.....	01
N. bdy.	sec. 6.....	West.....	79.85	.....	.....	.....	79.85
W. bdy.	sec. 6.....	South.....	48.75	.....	48.75	.....	.....
E. bdy.	sec. 6.....	S.89°52'E.	39.66	.....	09	39.66	.....
S. bdy.	sec. 6.....	S.89°59'E.	40.10	.....	01	40.10	.....
E. bdy.	sec 6.....	N.0°04'W.	40.10	40.10	.....	.....	05
Convergency.....		.....	.....	.....	.....	.....	02
	Totals.....			48.92	48.85	79.76	79.93
				48.85			79.76
	Error in lat.....			0.07	Error in dep..		0.17

Ralph Gurley

U. S. Surveyor.

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BOOK A-417

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 "A" T. 20 S., R. 20 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.

4—2761

FINAL OATH OF UNITED STATES SURVEYOR.

I, ..., U. S. Surveyor, do solemnly swear that, in pursuance of special instructions received from the U. S. Surveyor General for ..... bearing date of the ..... day of ....., 191 , I have well, faithfully, and truly, in my own proper person, and in strict conformity with said instructions, the Manual of Surveying Instructions, and the laws of the United States, surveyed all those parts or portions of .....

For final oath of U. S. Surveyor see book "A" T. 20 S., R. 20 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, August 7, 1916

The foregoing field notes of the survey of the west boundary of T. 20 S., R. 20 E., and the west boundary of T. 21 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 surveys they describe, are hereby approved.

N. O. Thorsen

U. S. Surveyor General.

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

.....

U. S. Surveyor General.

6—2761

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BOOK A-417

E

U. S. Surveyor General's Office
MAR 20 1916
SALT LAKE CITY, UTAH.

FIELD NOTES

RETRACEMENT AND RESURVEY
OF THE ~~SURVEY OF THE~~

SUBDIVISION S OF T. 21 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, *191*4, *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, *191*4

Survey commenced September 18, *191*5

Survey completed September 18, *191*5

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BOOK A-117

INDEX DIAGRAM.

Township 21 South, *Range* 20 East.

6 3	1 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

6—151

Chains	
	Survey commenced September 18, 1915, and executed with a Buff and Buff transit, No. 8028, equipped with a Smith solar attachment.
	For full description and test of instrument on a Polaris meridian, see page 1 in the notes of the survey of the north, east and south boundaries and the subdivisions of T. 20 S., R. 20 E.
	A four chain steel tape and clinometer were used in measuring all distances, and the tape was frequently tested by comparing it with a standard one chain tape kept for this purpose only.
	The instruments were approved for use on this survey, by the Ass't. Supervisor of Surveys for Utah, in Assignment Instructions bearing date of May 10, 1915.
	From recent tests on a Polaris meridian, I am assured that my instrument is now in good adjustment.
	At the closing cor. of secs. 5 and 6, on the N. bdy. of Tp., the 4th. St. Par. S., heretofore described, I set off 39°02' on the lat. arc; 2°08'N. on the decl. arc, and at 8h 24m a. m., l. m. t., determine with the solar a meridian.
	Thence I run
	S. 0°03' E., retracing, bet. secs. 5 and 6.
	Over rough mountainous land, desc. through scattered cedar and pinion timber, and scattered shadscale and grass undergrowth.
5.20	Ravine, 225 ft. below the cor., drains W. asc.
8.82	80 ft. above ravine.
	Intersect the ¼ sec. cor. bet. secs. 5 and 6, which is a sandstone, 8 x 8 x 4 ins. above ground, firmly set, and mkd. and witnessed as described by the surveyor general.
	The true course of this line is therefore S. 0°03' E., and the dist., 8.82 chs.
	From the ¼ sec. cor., I run

Chains

2.0° 03' E., retracing bet. secs. 5 and 6.

10.00 Spur, 240 ft. above ¼ sec. cor., projects W. Desc. abruptly over sandstone ledges, bear E. and W.

21.50 Foot of abrupt desc., 250 ft. below spur, bears NW. and SE. Thence over rolling bench land.

30.40 Rocky gulch, 35 ft. deep, drains SW. Thence continue over rolling bench land.

40.10 Fall 1 lk. W. of the old cor. of secs. 5, 6, 7 and 8, which is a sandstone, 12 x 4 x 4 ins. above ground, firmly set, mkd. with 5 notches on the S. and 5 notches on the E. edge, and witnessed by

A cedar, 12 ins. dia., bearing N. 67¼° E., 150 lks. dist., mkd. T 21 S R 20 E S 5 BT

A cedar, 14 ins. dia., bearing S. 44¾° W., 35 lks. dist., mkd. T 21 S R 20 E S 7 BT

A cedar, 12 ins. dia., bearing N. 62½° W., 36 lks. dist., mkd. T 21 S R 20 E S 6 BT

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

No suitable bearing tree in sec. 8 within limits.

The true course of this half mile is therefore S. 0°04' E., and the dist., 40.10 chs.

September 18: At this cor., I set off 2° 05' 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°01'.

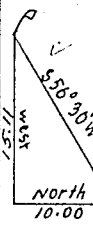
Land, on N. 30 chs. of the line, rough mountainous, broken with sandstone ledges; on the S.10.92 chs. rolling bench land, general drainage to the SW.

Soil, on the N. 30 chs., sandy clay and sandstone outcroppings, 4th. rate; on the S.10.92 chs., light sandy loam, loose sandrock, and sandstone outcroppings, 4th. rate.

Timber, scattered cedars and pinion pine.

Undergrowth, scattered shadscale, sagebrush, and grass.

Chains	
	From the cor. of secs. 5, 6, 7 and 8,
	I run
	West, retracing bet. secs. 6 and 7
	Over rolling bench land, through medium growth of cedars and pinion pine, and undergrowth of shadscale and grass.
7.03	Rim of canyon, bears N. and S., abrupt desc. over sandstone ledges, impracticable to chain. To determine dist. across canyon to west brink, I proceed as follows: Set a flag on line on W. side of canyon, then lay off a base line, north, 10.00 chs. dist., to a point from which the flag on W. side of canyon bears S. 56° 30' W. From the flag, the N. end of the base line bears N. 56° 30' E. Therefore the dist. is
	tan 56° 30' x base or 1.511 x 10.00 = 15.11, which added to 7.03 makes
22.14	West brink of canyon, bears N. and S. Thence over rolling bench land.
39.10	Ravine, 30 ft. deep, drains NE. Asc. gradually along N. side of ravine.
40.10	Fall 1 lk. S. of the old. ¼ sec. cor., which is a sandstone 12 x 8 x 5 ins. above ground, mkd. and witnessed as described by the surveyor general.
	The true course of this half mile is therefore N. 89° 59'W. and the dist., 40.10 chs.
	From the ¼ sec. cor.,
	I run
	West, retracing, bet. secs. 6 and 7.
2.00	Re-cross ravine, drains S. 85° E. Thence asc. over series of sandstone ledges, bear NW. and SE.
31.35	Coal vein, 1 ft. thick, bears NW. and SE.
38.45	Rocky spur, 805 ft. above the ravine, slopes SE.; thence desc. over ledges, bear NW. and SE.
39.66	Intersect the W. bdy. of Tp. 50 lks. S. of the witness cor. to cor. of secs. 1, 6, 7 and 12, heretofore described,



Chains

or 9 lks. S. of the true point for the cor. of secs. 1, 6, 7 and 12.

The true course of the west half mile is therefore N. 89° 52' W., and the dist. 39.66 chs.

Land, on the mile, 22.14 chs. of rolling bench land, and 57.62 chs. of rough mountainous land, broken by sandstone ledges. General drainage, S. on the E. half, and E. on the W. half.

Soil, light sandy loam and loose sandstone, and sandstone outcroppings, 4th. rate.

Undergrowth, scattered shadscale and sparse grass.

September 18, 1915.

GENERAL DESCRIPTION

The land on the surveyed area is generally rough mountainous, and rolling bench land. Numerous sandstone ledges, very rugged, occur on the canyon sides and on the sides of the mountain ridges.

The soil is generally a poor, light sandy loam mixed with loose sandrock, shallow on solid sandstone, and in part bare sandstone outcroppings, 4th. rate. The land is generally too rough for farming purposes.

A scattering growth of shadscale, and sparse grass is found on the surveyed area, affording some grazing on the rolling bench land, but the rough parts are nearly inaccessible for stock.

A light growth of cedar and pinion pine timber occurs on the rougher parts.

A coal vein, 1 ft. thick, was encountered in the SW. part of sec. 6, but there are no indications of mineral.

There is no water in sec. 6, and no settlers.

Ralph Gulley
U. S. Surveyor.

BOOK A-417

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 "A" T. 20 S., R. 20 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.

....

6—2761 *U. S. Surveyor.*

FINAL OATH OF UNITED STATES SURVEYOR.

I, ..., U. S. Surveyor, do solemnly swear that, in pursuance of special instructions received from the U. S. Surveyor General for ..... bearing date of the ..... day of ....., 191 , I have well, faithfully, and truly, in my own proper person, and in strict conformity with said instructions, the Manual of Surveying Instructions, and the laws of the United States, surveyed all those parts or portions of .....

For final oath of U. S. Surveyor see book "A" T. 20 S., R. 20 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, August 7, 1916

The foregoing field notes of the ~~survey of~~ retracement and resurvey of the subdivisions of T. 21 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 ~~surveys they describe~~ retracements and resurveys are hereby approved.

A. 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.

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U. S. Surveyor General.

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BOOK A-417

G.

M.3.B.

FIELD NOTES

OF THE SURVEY OF THE

WEST AND NORTH BOUNDARIES

O F

TOWNSHIP NO.35 SOUTH, RANGE NO.22 EAST,

Of the SALT LAKE BASE AND *Meridian,*

In the State of U T A H

EXECUTED BY

THOMAS C.RATHBONE

In the capacity of U. S. ~~*Surveyor*~~ Transitman, *under instructions dated* May 6, *191*4, *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, *191*4, *pursuant to authority contained in the Act of Congress dated* ....., *191*....

Survey commenced July 8, *1915,*

Survey completed August 18, *1915*

BOOK A-417

INDEX DIAGRAM.

Township ....., *Range* .....

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WEST BOUNDARY TOWNSHIP 35 SOUTH, RANGE 22 EAST.

Survey commenced July 8, 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.

The instrument was approved by the assistant supervisor of surveys for the District of Utah, conditional upon satisfactory field test.

Five-chain tapes, and clinometers reading to 15' of arc were also used.

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:

July 7: At my camp in the north half of sec. 2, T. 36 S., R. 22 E., latitude 37° 43' N.; longitude 109° 30' W., I set off 37° 43' on the lat. arc; 22° 40' N. on the decl. arc; and at 4h p.m. apparent time determine with the solar a meridian, which falls on small spot on ledge three quarters of a mile dist.

July 8: At 12h 33m 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 stake driven in the ground 10 chs. N. of my station.

At 6h a.m. apparent time, I lay off the azimuth of Polaris 1° 27' to the west, and it falls on the spot on the ledge.

At 7h a.m. l.m.t., I set off 37° 43' on the lat. arc; 22° 35' 30" N. on the decl. arc; and the solar observation defines the position of the meridian 30" east of the meridian established by the Polaris observation; there-

fore I conclude that the adjustments of the instrument are satisfactory.

The magnetic bearing of the true meridian at 7h 30m a.m. is N.16° 31'W.; the angle thus determined gives the mag, decl. 16° 31'E.

Note: The results of my retracement of the south and east boundaries of this township practically agree with the notes of said lines furnished me by the surveyor general; the course of the Seventh Standard Parallel being West, and distance 480.00 chs.; and the course of the east boundary being North, and distance 479.84 chs.

July 12, 1915: At 8h a.m., apparent time, I set off 37° 43' on the lat. arc; 22° 06' N. on the decl. arc; and determine a meridian with the solar at the standard cor. of Tp. 35 S., Rs. 21 and 22 E., which is an iron post, 3 ft. long, 3 ins. dia., firmly set, properly marked and witnessed as described by the surveyor general.

Thence

North on a true line bet. secs. 31 and 36,

Over rough mountainous land, ascending draw; through huge boulders; through cedar and piñon pine timber and dense undergrowth of service berry.

19.00 Leave draw, draining from NW. to S.

Thence over land sloping east into Brushy Basin.

40.00 Set an iron post 3 ft. long, 1 in. in dia., 20 ins. in the ground, and 6 ins. in mound of stone 2 ft. base, for ¼ sec. cor., with brass cap marked

¼ S 36 | S 31
1915

from which

A piñon pine, 9 ins. dia. bears S.85° 30'W. 52 lks. dist., marked ¼ S 36 B T

A piñon pine, 12 ins. dia., bears S.35° 30'E. 45 lks. dist., marked ¼ S 31 B T

Corner standa on E. slope, 60 ft. above Tp. cor.

Chains.	
	Underlying rock prevents setting post over 20 ins. in the ground. July 12, 1915.
	July 13, 1915: At 8h a.m. apparent time I set off 37° 44' on the lat. arc; 21° 57' N. on the decl. arc; and determine a meridian with the solar at the ¼ sec. cor. bet. secs. 31 and 36.
	Continue over a series of spurs and draws draining SE.
	Note: Point for sec. cor. will fall on mud slide, where corner cannot be perpetuated; therefore at
79.47	Set a sandstone 16 x 10 x 8 ins., 11 ins. in the ground, for witness corner to cor. of secs. 25, 30, 31, and 36, marked with 5 notches on N. and 1 notch on S. edge, WC on NE. face; from which
	A cedar, 12 ins. dia. bears N. 70° E. 10 lks. dist. mkd. WC T 35 S R 22 E S 31 B T
	A cedar, 12 ins. dia., bears S. 25° 30' E. 19 lks. dist., marked W C T 35 S R 22 E S 31 B T
	A cedar, 12 ins. dia. bears S. 50° W. 38 lks. dist. mkd. W C T 35 S R 21 E S 36 B T
	A pinon pine, 6 ins. dia., bears N. 22° 15' W. 22 lks. dist., marked W C T 35 S R 21 E S 36 B T
	No iron post available for witness corner.
80.00	Point for sec. cor.; no corner set.
	Land, rough mountains with spurs and draws draining SE. into Bushy Basin.
	Soil, stony, with rocky subsoil; 4th rate.
	Timber, cedar and pinon pine.
	Undergrowth, dense service berry, oak, and scattering sagebrush.
	From the true cor. point of secs. 25, 30, 31, and 36, North bet. secs. 25 and 30, Descending over mud slide.
1.80	Gulch drains S. 70° E. 95 ft. below sec. cor. point. Ascend.
17.00	Top of ascent, 110 ft. above gulch, bears E. and W.

Chains.	
	Enter cedars and pinon pine.
36.00	Seep from nearby spring, drains S.50° E.
40.00	Set a limestone 16 x 9 x 5 ins., 11 ins. in the ground, marked ¼ on W. face, for ¼ sec. cor., from which
	A cedar, 9 ins. dia. bears N.77° 30' W. 14 lks. dist. marked ¼ S 25 B T
	A pinon pine, 9 ins. dia. bears N.58° E. 42 lks. dist., marked ¼ S 30 B T
	Corner falls on slope facing east.
	No iron post available.
	July 13: At the noon hour sky overcast, observation for lat. impossible.
41.10	Gulch, drains S.40° E., 50 ft. below ¼ sec. cor.
63.00	Leave cedar and pinon pine timber, bearing E. and W.
	Enter burnt cedars, and dense service berry undergrowth.
80.00	Set a sandstone 18 x 15 x 7 ins., 12 ins. in the ground, for cor. of secs. 19, 24, 25, and 30, marked 4 notches on N. and 2 notches on S. edges; raise a mound of stone 2 ft. base, 1½ ft. high W. of cor.
	No iron post available.
	Corner falls on gentle east slope.
	Land, mountainous, draining E.
	Soil, stony; 4th rate.
	Timber, cedar and pinon pine.
	Undergrowth service berry and sagebrush.
	July 13, 1915.

July 14: At 5h a.m., l.m.t., I set off 37° 45' on the lat. arc; 21° 49' N. on the decl. arc; and determine a meridian with the solar at the cor. of secs. 19, 24, 25, and 30. Thence

North bet. secs. 19 and 24,

Over rolling, mountainous land; ascending east slope; through burnt timber, service berry, oak, and sage-

Chains.	
	brush undergrowth.
22.50	Ridge, 50 ft. above sec. cor., bears N W. and SE.
	Thence over series of spurs and draws draining SE.
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 24 | S 19 1915
	Raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high W. of cor.
	July 14, 1915: At this $\frac{1}{4}$ sec. cor. I set off 21° 47' N. on the decl. arc; and at apparent noon observe the sun on the meridian; the resulting lat. is 37° 45'
	Continue ascent; through heavy oak brush.
52.50	Leave oak brush; enter dense cedars and pinon pine, bearing E. and W.
80.00	Set an iron post 3 ft. long, 3 ins. in dia., 26 ins. in the ground, for cor. of secs. 13, 18, 19, and 24, with brass cap marked
	T 35 S R 21 E | R 22 E S 13 | S 18 S 24 | S 19 1915
	from which
	A pinon pine, 10 ins. dia., bears N. 20° E. 12 lks. dist., marked T 35 S R 22 E S 18 B T
	A pinon pine, 9 ins. dia., bears S. 21° 30' E. 17 lks. dist., marked T 35 S R 22 E S 19 B T
	A pinon pine, 10 ins. dia., bears S. 48° 30' W. 16 lks. dist., marked T 35 S R 21 E S 24 B T
	A cedar, 12 ins. dia., bears N. 63° W. 130 lks. dist., marked T 35 S R 21 E S 13 B T
	Land, mountainous, draining E.
	Soil, rocky; 4th rate.
	Timber, cedar and pinon pine.
	Undergrowth, service berry, oak, and sage brush.
	July 14, 1915.

Chains.	
	August 23, 1915: At 8h a.m. apparent time, I set off 37° 45' on the lat. arc; 11° 43' N. on the decl. arc; and determine a meridian with the solar at the cor. of secs 13, 18, 19, and 24. Thence
	North bet. secs. 13 and 18,
	Over mountainous land; ascending NE. slope; through dense pinon pine timber and scattering undergrowth of sage-brush.
13.80	Canyon, 210 ft. below sec. cor., heads 2.00 chs. E.; drains N. 50° W. Ascend.
25.00	Small spur, projecting W., 33 ft. above canyon. Descend.
28.00	Ravine, course W., 40 ft. below spur. Ascend.
31.00	Spur, projecting west 3.50 chs., 45 ft. above ravine. Descend.
32.28	Gulch, 40 ft. below spur, drains W.
40.00	Set an iron post 3 ft. long, 1 in. in dia., 8 ins. in the ground, and 18 ins. in mound of stone 2 ft. base, for ¼ sec. cor., with brass cap marked ¼ S 13 | S 18 1915 from which A pinon pine, 10 ins. dia., bears N. 33° E. 62 lks. dist., marked ¼ S 18 B T A pinon pine, 9 ins. dia., bears N. 15° W. 48 lks. dist., marked ¼ S 13 B T Underlying rock prevents setting post over 8 ins. in the ground.
	Corner falls on west slope of spur, 115 ft. above gulch.
41.60	Small ravine, course S. 70° W., 20 ft. below ¼ sec. cor. Ascend.
51.50	Spur, 100 ft. above ravine, projects S. 45° W. Descend.
56.49	Gulch, drains W., 50 ft. below spur. Ascend.
58.90	Spur, projects W., 20 ft. above gulch. Descend.
61.50	Gulch, drains S. 50° W., 25 ft. below spur.
	Aug. 23, 1915: At this point I set off 11° 39' N. on the decl. arc; and at apparent noon observe the sun on the

Chains.	
	meridian; the resulting lat. is 37° 46'
70.50	Spur, projects W. 3.00 chs., 35 ft. above gulch. Descend.
72.00	Gulch, 30 ft. below spur, drains S. 60° W. Ascend.
79.30	Spur, 65 ft. above gulch, projects SW. 2.00 chs.
	Point for sec. cor. falls in gulch, where corner cannot be perpetuated; therefore at
79.70	Set an iron post 3 ft. long, 3 ins. in dia., 26 ins. in the ground, for witness cor. to corner of secs. 7, 12, 13, and 18, with brass cap marked

T 35 S
R 21 E | R 22 E
S 12 | S 7
WC
S 13 | S 18
1915

from which

A pinon pine, 8 ins. dia., bears N. 63° E. 38 lks. dist., mkd. WC T 35 S R 22 E S 18 B T

A pinon pine, 10 ins. dia., bears S. 65° 30' E. 23 lks. dist., mkd. WC T 35 S R 22 E S 18 B T

A pinon pine, 12 ins. dia., bears S. 38° W. 27 lks. dist., mkd. WC T 35 S R 21 E S 13 B T

A pinon pine, 10 ins. dia., bears N. 7° 30' W. 27 lks. dist., marked WC T 35 S R 21 E S 13 B T

Corner falls on S. side of gulch 53 ft. below spur.

80.00 Point for cor. of secs. 7, 12, 13, and 18 falls in wash in gulch, 10 ft. below witness cor., course S. 30° W. No corner set.

Land, mountainous.

Soil, rocky and stony; 4th rate.

Timber, cedar and pinon pine.

Undergrowth, sagebrush.

From the true point for cor. of secs. 7, 12, 13, and 18,

North bet. secs. 7 and 12,

Over mountainous land; ascending from gulch; through cedar and pinon pine timber, and scattering oak and

Chains.	
	sagebrush.
11.00	Ridge, bears N.60° W. and S.45° E., 135 ft. above gulch.
	Thence along east slope of ridge turning to NE.
17.30	Ridge, bears NE. and SW.
	Thence along west slope.
33.80	Gully, drains S.70° W., 120 ft. below ridge. Ascend.
38.80	Spur, projects W., 130 ft. above gully.
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 12 | S 7 1915 from which A pinon pine, 9 ins. dia., bears S.73° W. 40 lks. dist., marked ¼ S 12 B T A pinon pine, 7 ins. dia., bears S.60° E. 32 lks. dist., marked ¼ S 7 B T Corner falls on N. slope of spur, 10 ft. below top. August 23, 1915. August 24: At 8h a.m. apparent time I set off 37° 47' on the lat. arc; 11° 22' N. on the decl. arc; and determine a meridian with the solar, at the ¼ sec. cor. bet. secs. 7 and 12.
44.60	Gulch, drains S.15° W. 35 ft. below spur. Ascend.
49.90	Flat top of ridge bearing NE. and SW., 40 ft. above gulch. Descend.
56.30	Gulch, drains S.50° W., 30 ft. below ridge. Ascend.
58.80	Spur, projects W. for 5.00 chs., 15 ft. above gulch.
	Thence descend rapidly; through dense oak and service berry undergrowth.
64.50	Canyon, drains S.70° W., 185 ft. below spur. Ascend.
80.00	Set an iron post 3 ft. long, 3 ins. in dia., 26 ins. in the ground, for cor. of secs. 1, 6, 7, and 12, with brass cap marked T 35 S R 21 E | R 22 E S 1 | S 6 S 12 | S 7 1915

Chains	
	from which
	A pinon pine 5 ins. dia., bears N.38° E. 6 lks. dist., marked T 35 S R 22 E S 6 B T
	A pinon pine, 9 ins. dia., bears S.17° 30'E. 31 lks. dist., marked T 35 S R 22 E S 7 B T
	A pinon pine, 16 ins. dia., bears S.65°W. 27 lks. dist., marked T 35 S R 21 E S 12 B T
	A pinon pine, 10 ins. dia., bears N.32° W. 59 lks. dist., mkd. T 35 S R 21 E S 1 B T
	Corner stands on SE. slope, 145 ft. above canyon.
	Land, mountainous, draining W.
	Soil, rocky and stony; 4th rate.
	Timber, pinon and cedar.
	Undergrowth, oak, service berry and sagebrush.
	North bet. secs. 1 and 6,
	Ascending gradually, over mountainous land; through cedars and pinon pine, and scattering undergrowth of oak, service berry, and sagebrush.
15.00	Ridge, bears S.50° W. and N.50° E., 85 ft. above the sec. cor.
	Aug. 24, 1915: At the noon hour sky overcast; observation for lat. impossible.
18.00	Descend abruptly.
24.30	Canyon, drains S.60° W., 105 ft. below ridge.
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 1 | S 6 1915
	from which
	A pinon pine, 5 ins. dia., bears N.81° 30'E. 27 lks. dist., marked ¼ S 6 B T
	A pinon pine, 16 ins. dia., bears N.72° W. 46 lks. dist., marked ¼ S 1 B T
	Corner falls on S. slope, 105 ft. above canyon.

Chains.

46.00 Flat ridge, 44 ft. above $\frac{1}{4}$ sec. cor., bears N.70° E. and S.70° W.

53.00 Leave timber; enter dense undergrowth of oak and service berry, bearing E. and W.

61.00 Descend abruptly.

78.18 Gulch, drains W., 125 ft. below ridge.

Enter pinon and cedar timber.

79.34 Intersect the N.bdy. of Tp. 14 lks. E. of the temporary cor. of Tps. 34 and 35 S., Rs. 21 and 22 E. set by me in the survey of the N.bdy. of this township, Aug. 18, 1915.

At intersection,

Set an iron post, 3 ft. long, 3 ins. in dia., 24 ins. in the ground, for cor. of Tps. 34 and 35 S., Rs. 21 and 22 E., with brass cap marked

T 34 S
S 36 | S 31
R 21 E ——— R 22 E
S 1 | S 6
T 35 S
1915

from which

A pinon pine, 9 ins. dia., bears N.49° E. 48 lks. dist., marked T 34 S R 22 E S 31 B T

A cedar, 20 ins. dia., bears S.40° E. 32 lks. dist. marked T 35 S R 22 E S 6 B T

A pinon pine, 9 ins. dia., bears S.0° 03' W. 13 lks. dist., marked T 35 S R 21 E S 1 B T

A pinon pine, 10 ins. dia., bears N.41° W. 24 lks. dist., marked T 34 S R 21 E S 36 B T

Corner falls on steep SW. slope, 40 ft. above gulch.

Land, mountainous, draining W.

Soil, stony and rocky; 4th rate.

Timber, cedars and pinon pine.

Undergrowth, scattering service berry, oak, and sage brush.

August 24, 1915.

Chains.	
	August 9, 1915: At 8h a.m. apparent time I set off 37°48' on the lat. arc; 16° 06'N. on the decl. arc; and determine a meridian with the solar at the old cor. of Tps. 34 and 35 S., Rs. 22 and 23 E., which is a sandstone 10 x 8 x 3 ins. above ground, firmly set in a mound of stone marked 6 notches on N., S., E., and W. edges.
	Thence West on a true line bet. secs. 1 and 36,
	Over rough, mountainous mesa land; descending into canyon; through yellow pine and dense oak and service berry brush.
11.30	Canyon, drains S., 185 ft. below Tp. cor.
	Ascend abruptly.
17.00	Broken rim of ledges, bearing N. and S.
17.50	Spur, projects S. for 5.00 chs., 180 ft. above the cor.
18.50	Gulch, 40 ft. below spur, drains S.
21.20	Ledges, bearing N. and S., 50 ft. above gulch.
	Thence over mesa.
31.22	Gulch, 15 ft. below ledges; drains S. 15° E.
40.00	Set an iron post 3 ft. long, 1 in. in dia., 12 ins. in the ground, and 12 ins. in a mound of stone for ¼ sec. cor., with brass cap marked ¼ S 36 / S 1 / 1915 from which A yellow pine, 16 ins. dia., bears S. 46° 15'E. 48 lks. dist., marked ¼ S 1 B T A yellow pine, 30 ins. dia., bears N. 46° 15'W. 87 lks. dist. marked ¼ S 36 B T
	Underlying rock prevents setting post over 12 ins. in the ground.
	Corner stands on steep west side of gulch, 55 ft. above bottom.
42.00	Mesa, bears N. and S., 25 ft. above ¼ sec. cor.
	Thence over mesa.
56.00	Descend.

Chains.	
57.00	Rim of mesa, bearing N.20° E. and S.20° W., 15 ft. below mesa. Thence descend abruptly over ledges and rim rock.
62.00	Leave ledges and pine timber, bearing NE. and SW. Descend abruptly over steep slope; through dense service berry and oak brush, into Recapture Creek.
76.70	Recapture Creek, 6 lks. wide, course S.15° W.; swift current, rocky bottom, good water, 1 in. deep, 570 ft. below rim of mesa. Ascend.
80.00	Set an iron post 3 ft. long, 3 ins. in dia., 26 ins. in the ground, for cor. of secs. 1, 2, 35, and 36, with brass

T 34 S
S 35 | S 36
R 22 E
S 2 | S 1
T 35 S
1915

Raise a mound of stone, 2 ft. base, 1½ ft. high W. of cor. Corner stands on steep slope, SE., into Recapture Creek, 145 ft. above creek.

Land, rough mountainous, mesa and canyons, draining S.

Soil, on flat mesa, red sandy loam; on slopes rocky and stony; 4th rate.

Timber, yellow pine.

Undergrowth, oak, and service berry brush.

August 9, 1915.

Aug. 10, 1915: At 8h a.m. apparent time, I set off 37° 48' on the lat. arc; 15° 48' N. on the decl. arc; and determine a meridian with the solar at the cor. of secs. 1, 2, 35, and 36. Thence

West bet. secs. 2 and 35,

Over mountainous land; ascending rapidly over southeast slope, out of Johnson Canyon; through dense oak and service berry brush.

10.00	Enter yellow pine timber, bearing N. and S.; undergrowth less dense.
17.00	Spur, bearing N.30° E. and S.30° W. Descend.

Chains.	
22.00	Gully, drains S.2° E., 20 ft. below spur. Ascend.
29.00	Top of ascent, 66 ft. above gully.
	Thence along S. slope.
40.00	Set an iron post 3 ft. long, 1 in. in dia., 26 ins. in the ground, for ¼ sec. cor., with brass cap marked
	¼ S 35 / S 2 / 1915
	from which
	A yellow pine, 17 ins. dia., bears S.62° E. 14 lks. dist., marked ¼ S 2 B T
	A yellow pine, 18 ins. dia., bears N.56° W. 80 lks. dist., marked ¼ S 35 B T
	Corner stands on S. slope of spur.
41.50	Descend into gulch.
44.00	Gulch, 50 ft. below ¼ sec. cor., drains S.15° E. Ascend.
52.00	Spur, 30 ft. above gulch, projects S. Descend.
58.00	Gully, 40 ft. below spur, drains S.20° W. Ascend.
68.00	Spur, 45 ft. above gully, projects S.
70.00	Leave yellow pine timber, bearing N. and S. Descend rapidly through dense undergrowth.
80.00	Set an iron post 3 ft. long, 3 ins. in dia., 26 ins. in the ground, for cor. of secs. 2, 3, 34, and 35, with brass cap marked
	T 34 S / S 34 | S 35 / R 22 E / S 3 | S 2. / T 35 S / 1915
	Raise a mound of stone 2 ft. base, 1½ ft. high W. of cor.
	Corner stands on steep W. slope, 346 ft. below spur, in oak brush.
	Land, mountainous, draining S. into Recapture Creek.
	Soil, stony and rocky; 4th rate.
	Timber, yellow pine.
	Undergrowth, oak brush and service berry.
	Aug. 10, 1915: At this cor. I set off 15° 44' N. on the decl.

Chains.	
	and at apparent noon observe the sun on the meridian; the resulting lat. is 37° 48' .
	West between secs. 3 and 34,
	Descending abruptly, over mountainous land; through oak brush.
.75	West Fork of Recapture Creek, 5 lks. wide, 15 ft. below the sec. cor., swift current, rocky bottom, good water 8 ins. deep, course S.15° W. Ascend.
11.50	East edge of bench, bearing S.50° W. and N.50° E., 120 ft. above creek.
18.00	Ascend abruptly. Leave bench bearing N. and S.
21.30	Broken ledges, bearing N. and S.
25.25	Ridge, spur, bearing N. and S., 455 ft. above creek.
27.00	Enter scattering yellow pine. Descend.
34.00	Gulch, drains S., 85 ft. below spur. Ascend.
36.40	Spur, 50 ft. above gulch, projects 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 ¼ S 34 / S 3 / 1915 from which A yellow pine, 24 ins. dia., bears N.45° 30'W. 73 lks. dist., marked ¼ S 34 B T A yellow pine, 20 ins. dia., bears S.32° 30'W. 143 lks. dist., marked ¼ S 3 B T Corner stands on gentle SW. slope, 40 ft. below ridge spur.
50.00	Leave scattering yellow pine and oak brush. Enter denser undergrowth bearing N. and S.
58.00	Small creek, 3 lks. wide, 4 ins. deep, in wash, 90 ft. below ¼ sec. cor. Ascend.
63.00	Ridge, bears N. and S., 50 ft. above creek.
66.78	Shallow gulch draining S.30° E., 60 ft. below ridge.
75.00	Ridge, 100 ft. above gulch, bears N. and S.
78.00	Enter sagebrush bearing N. and S.; leave oak brush.

Chains.

79.35 Creek, 3.1ks.wide, 2 ins.deep, in gully 25 ft.below ridge.

Ascend gradually over S.slope; through sagebrush.

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 34 S
S 33 | S 34
R 22 E
S 4 | S 3
T 35 S
1915

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

Corner stands on sagebrush flat sloping slightly east.

Land, mountainous, draining SE. and S., into Recapture Creek.

Soil, stony, gravelly, black loam, 3d rate.

Timber, yellow pine.

Undergrowth, oak and sagebrush.

August 10, 1915.

August 18, 1915: At 7h a.m.apparent time I set off 37° 48' on the lat.arc; 13° 22'N.on the decl.arc; and determine a meridian with the solar at the cor.of secs. 3,4,33, and 34. Thence

West, bntasecs.4 and 33,

Over rolling, mountainous land, ascending gentle sagebrush slope.

3.00 Enter oak and service berry undergrowth.

11.50 Divide, low point in N.and S.ridge, between Recapture and Johnson canyons, 50 ft.above the cor.

A round knoll, 150 ft.high, bears S.3.00 chs.

Descend toward Johnson Creek.

19.50 Gulch, drains S.20° W., 40 ft.below pass.

23.80 Flat top of ridge, bearing N.and S., 25 ft.above gulch.

27.50 Descend rapidly; through dense service berry and oak undergrowth.

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 33
S 4
1915

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

Corner stands on steep west slope, 170 ft. below ridge.

45.50 Gulch, drains S.30° W., 125 ft. below the ¼ sec. cor.

47.50 South side of spur, 40 ft. above gulch, projects SW.

Descend along S. slope, parallel to north side of top of gulch draining W.

70.50 Johnson Creek, 10 lks. wide, 190 ft. below spur, swift current, rocky bottom, good water 8 ins. deep, course S.10° W. Creek fringed with willows and aspen timber.

Ascend spur; enter scattering pinon and cedar timber, bearing N. and S.

80.00 Set an iron post 3 ft. long, 3 ins. in dia., 26 ins. in the ground, for cor. of secs. 4, 5, 32, and 33, with brass cap marked

T 34 S
S 32 | S 33
R 22 E
S 5 | S 4
T 35 S
1915

from which

A cedar, 7 ins. dia., bears N.58° E. 82 lks. dist., marked T 34 S R 22 E S 33 B T

A cedar, 8 ins. dia., bears S.78° E. 77 lks. dist. marked T 35 S R 22 E S 4 B T

A yellow pine, 26 ins. dia., bears S.88° 30' W. 276 lks. dist., marked T 35 S R 22 E S 5 B T

A cedar, 8 ins. dia., bears N.25° 30' W. 40 lks. dist., marked T 34 S R 22 E S 32 B T

Corner stands on SE. slope of spur, 125 ft. above creek.

Land, mountainous, draining from E. and W. slopes into Johnson Creek

Soil, stony; gravelly black loam on divide; 3d rate.

Chains.	
	Timber, scattering cedar, pinon, and yellow pine. Undergrowth, oak, service berry, some willow and aspen in creek bottom.
	West between secs. 5 and 32,
	Over mountainous land; descending from spur, through scattering pine and cedar timber and dense undergrowth of oak and service berry brush.
9.45	Gulch, drains SE., 70 ft. below spur. Ascend.
19.51	Top of steep ascent, bearing N. and S., 145 ft. above gulch. Enter yellow pines bearing N. and S. Continue gradual ascent.
35.94	Top of gradual ascent, 45 ft. above steep ascent, bearing N. and S. Descend.
38.30	Small creek, 5 lks. wide, 1 in. deep, course SE., 45 ft. below top of 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 ¼ S 32 / S 5 / 1915 from which A yellow pine, 6 ins. dia., bears N. 37° 30' W. 105 lks. dist., marked ¼ S 32 B T A yellow pine, 24 ins. dia., bears S. 35° W. 100 lks. dist., marked ¼ S 5 B T Corner stands on east slope, 20 ft. above creek. Aug. 18, 1915: At this cor. I set off 13° 17' N. on the decl. arc; and at apparent noon, observe the sun on the meridian; the resulting lat. is 37° 48'.
49.51	Yellow pine tree, 24 ins. dia., on line, 70 ft. above ¼ sec. cor. I mark it with 2 notches on E. and W. sides.
57.03	Leave undergrowth of oak and service berry; enter sagebrush, bearing N. and S.
72.83	Top of ascent, flat ridge, bearing N. and S., 110 ft. above ¼ sec. cor.

Chains.	
75.11	Dry wash, course SE., 20 ft. below top.
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 34 S
S 31 | S 32
R 22 E
S 6 | S 5
T 35 S
1915

from which

A yellow pine, 11 ins. dia., bears N. 7° 15' E. 141 lks. dist., marked T 34 S R 22 E S 32 B T

A yellow pine, 22 ins. dia., bears S. 4° 25' E. 316 lks. dist., marked T 35 S R 22 E S 5 B T

A yellow pine, 30 ins. dia., bears S. 43° 75' W. 165 lks. dist. marked T 35 S R 22 E S 6 B T

A yellow pine, 22 ins. dia., bears N. 54° 75' W. 130 lks. dist., marked T 34 S R 22 E S 31 B T

Corner stands on SE. slope, 40 ft. above wash.

Land, rolling mountains, draining S., from E. and W. slopes.

Soil, gravelly, gray loam; rocky subsoil; 3d rate.

Timber, yellow pine.

Undergrowth, oak, service berry and sagebrush.

West, bet. secs. 6 and 31,

Over rolling mountainous land; ascending through undergrowth of sagebrush, and scattering yellow pine timber.

18.50	Enter more dense timber and oak brush bearing N. and S.
22.90	Top of flat spur, 85 ft. above the cor., projects SE. Ascend.
33.58	Ascend more rapidly.
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 6
1915

from which

Chains.	
	A yellow pine, 7 ins. dia., bears N.15° 45'W.25 lks. dist., marked ¼ S 31 B T
	A yellow pine, 28 ins. dia., bears S.34° 25'E. 92 lks. dist., marked ¼ S 6 B T
	Corner stands 160 ft. above sec. cor.
50.00	Top of ascent flat ridge, bearing N. and S., the divide between Johnson Canyon and the big canyon west of the Tp. bdy., 125 ft. above ¼ sec. cor.
59.50	Round knoll, 50 ft. high, south 2.00 chs.
69.35	Leave yellow pine; enter cedar and pinon timber bearing NE. and SW. Descend steep slope to SW.
79.44	Allowing for convergency; set temporary cor. for Tps. 34 and 35 S., Rs. 21 and 22 E.

Note: This corner was afterward made permanent at 79.30 chs., for notes of which see notes of the west boundary of this township.

Land, mountainous, sloping from divide, east and west.

Soil, stony and rocky; some heavy black loam; 3d rate.

Timber, yellow pine, pinon pine, and cedar.

Undergrowth, oak, service berry, and sagebrush.

August 18, 1915.

For general description see notes of the subdivision of T.35 S., R.22 E.

Thos. C. Cathcart

U.S. Transitman.

Latitudes, Departures, and Closing Errors.

Lines Designated	True Bearing	Dist.	Latitudes, N.	Latitudes, S.	Departures. E.	Departures. W.
		chs.	chs.	csh.	chs.	chs.
East Boundary	North	479.84	479.84	.....	.....	.....
North Boundary	West	479.30	.....	.....	.....	479.30
West Boundary	South	479.34	.....	479.34	.....	.....
Seventh St. Par. S.	East	480.00	.....	.....	480.00	.....
Convergency						.56
	T o t a l s		479.84	479.34	480.00	479.86
			479.34		479.86	
Error in lat. and dep.			.50		.14	

Thos. Hatchbone

U.S. Transitman.

4—680

BOOK A-417

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 "H" T.35 S., R.22 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.

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 oath of U.S.Transitman see book "H" T.35 S., R.22 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, Sept.22, 1916.

The foregoing field notes of the survey of the west and north boundaries of Township No.35 South, Range No.22 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.

6—2761

U. S. Surveyor General.

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Page

4—679

BOOK A-417

U. S. LAND OFFICE
SEP 14 1916
SALT LAKE CITY, UTAH.

H.

H.J.B.

FIELD NOTES

OF THE SURVEY OF THE

SUBDIVISION

OF

TOWNSHIP NO. 35 SOUTH, RANGE NO. 22 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 July 15, *1915*

Survey completed August 26, *1915.*

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BOOK A-417

INDEX DIAGRAM.

Township ....., *Range* .....

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31	32	33	34	35	36

6—151

Chains.

Survey commenced July 15, 1915, and executed with a Young & Sons light mountain transit No. 7192, with solar attachment, described in notes of the west bdy. of township, where test of instrument is also recorded, see book "G".

July 15: At 8h a.m. apparent time I set off 37° 43' on the lat. arc; 21° 40' N. on the decl. arc; and determine a meridian with the solar at the standard cor. of secs. 35 and 36, on S. bdy. of Tp., which is an iron post 3 ins. dia., properly marked and witnessed as described by the surveyor general. Thence

N. 0° 01' W. bet. secs. 35 and 36,

Over bottom land in Recapture Canyon; through undergrowth of sagebrush.

3.50 Wire fence bears N. and W., north bdy. of claim of Ancil Redd, of Blanding, Utah.

4.00 Leave sagebrush bearing E. and W.

Enter cedars and pinon pine. Ascend toward rim of butte.

40.00 Point falls on face of rim rock, among huge broken boulders, where corner cannot be perpetuated. Cor. not set.

47.00 West rim of butte bearing N. 10° W. and S. 10° E., 300 ft. above the boundary corner.

47.73 Set an iron post 3 ft. long, 1 in. in dia., 6 ins. in crevice and 20 ins. in mound of stone 3 ft. base, for witness corner to ¼ sec. cor., with brass cap marked

T 35 S | R 22 E
WC ¼
S 35 | S. 36
1915

from which

A pinon pine, 7 ins. dia., bears S. 85° E., 30 lks. dist., marked W C ¼ S 36 B T

No other bearing trees available; raise a mound of stone 2 ft. base, 1½ ft. high W. of cor.

Leave rim rock ledge, and ascend to ridge on top of butte.

65.50 Ridge bearing NW. and SE., 50 ft. above ¼ sec. cor.

SUBDIVISION OF T.35 S., R.22 E.

Chains.	
	Descend to NE.edge of butte.
77.00	Descend abruptly over NE.edge of butte, rim rock , into Bull Dog Canyon.
80.00	Set an iron post, 3 ft.long, 2 ins.in dia., 24 ins.in the ground, for cor.of secs.25,26,35,and 36, with brass cap marked

T 35 S R 22 E
S 26 | S 25
S 35 | S 36
1915

from which

A cedar 10 ins.dia.bears N.21° 30'E.38 lks.dist . marked T 35 S R 22 E S 25 B T

A cedar, 10 ins.dia.bears S.86° 30'E.17 lks.dist. marked T 35 S R 22 E S 36 B T

A cedar, 8 ins.dia., bears S.43° 15'W., 18 lks. dist., marked T 35 S R 22 E S 35 B T

A pinon pine, 9 ins.dia.bears N.89° W. 9 lks. dist., marked T 35 S R 22 E S 26 B T

Corner falls on steep NE.slope from base of butte, 210 ft.below top.

Ruin in cliff bears N.50° W., 7.00 chs.dist.

Land, rocky, stony; 4th rate, except in flat bottom of Recapture Canyon, which is deep red loam;1st rate.

Timber, cedar and pinon pine.

Undergrowth, sagebrush.

July 15: At this cor. I set off 21° 38'N.on the decl. arc; and at apparent noon, observe the sun on the meridian; the resulting lat.is 37° 44' .

	East on a random line bet.secs.25 and 36,
40.00	Set temp.$\frac{1}{4}$ sec.cor.
80.15	Intersect E.bdy.of Tp. 5 lks.N.of the cor.of secs.25,30, 31, and 36, which is an iron post, 3 ins.dia., firmly set and marked and witnessed as described by the surveyor general. Thence

SUBDIVISION OF T.35 S., R.22 E.

Chains.	
	N.89° 58'W.on true line bet.secs.25 and 36,
	Over mountainous land, covered with huge broken boulders; through pinon pine and cedar timber, and undergrowth of service berry and sagebrush.
5.65	Dry gully, draining S.30° W. Ascend.
22.15	Wide spur, projecting S., 80 ft.above gully. Descend.
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 ¼ S 25 / S 36 / 1915
	ffom which
	A pinon pine, 8 ins.dia., bears N.17° W., 33 lks. dist., marked ¼ S 25 B T
	A pinon pine, 15 ins.dia.bears S.2° 15'W. 50 lks. dist., marked ¼ S 36 B T
	Corner falls on W.side of spur, 80 ft.below top. Continue descent.
43.95	Dry creek bottom in Bull Dog Canyon, drains S.30° E.,190 ft.below ¼ sec.cor. Yellow pine timber in creek bottom.
47.15	Dim road, bearing N.30° W. and S.30° E. This road leads to the main road and James Carrol's claim.
78.15	Begin steep ascent, bearing NW. and SE.
80.15	The cor.of secs.25,26,35, and 36, 190 ft.above bottom of Bull Dog Canyon.
	Land, mountainous, draining from east and west slopes into Bull Dog Canyon.
	Soil, generally stony, red loam in canyon bottom;3d rate.
	Timber, cedar and pinon pine.
	Undergrowth, service berry and sagebrush.
	July 15, 1915.

July 19: At 8h a.m.apparent time I set off 37° 44' on the lat.arc; 21° 00'N.on the decl.arc; and determine a meridian with the solar at the cor.of secs.25,26,35,

Chains	
	and 36. Thence
	N.0° 01'W.bet.secs.25 and 26,
	Over mountainous land; descending from base of butte, over SE.slope; through cedar and pinon timber, and undergrowth of service berry brush.
18.30	Enter sagebrush park bearing E.and W.; leave timber.
22.50	Wash, draining S.65° E., 80 ft.below the cor.
	Ascend gradually along east slope over a sort of bench.
23.00	Leave sagebrush park bearing E.and W., about 2 acres; re-enter timber.
40.00	Set an iron post 3 ft.long, 1 in.in dia., 10 ins.in a mound of earth and rocks, and 14 ins.in mound of stone, 2 ft.base, for the ¼ sec.cor., with brass cap marked ¼ S 26 | S 25 1915 from which A pinon pine, 6 ins.dia.bears S.84° 30'W. 40 lks. dist., marked ¼ S 26 B T A cedar 12 ins.dia.bears N.24° E. 22 lks.dist. marked ¼ S 25 B T
	Corner falls on gentle east slope, 50 ft.above draw.
47.00	Enter sagebrush park, extending 4.00 chs.E., and 4.00 chs.W. Leave timber.
52.50	Leave park, bearing E.and W.; re-enter timber.
53.30	Brush fence bearing E.and W.
57.70	Enter sagebrush park bearing E.and W.
	Leave timber.
60.50	Road bearing N.10° W. and S.10° E. to Carrol's place, in open hollow, draining SE., 30 ft.deep.
70.00	Re-enter cedar and pinon pine timber, bearing E.and W.
80.00	Set an iron post 3 ft.long, 2 ins.in dia., 26 ins.in the ground, for cor.of secs.23,24,25, and 26, with brass cap marked T.35 S R 22 E S 23 | S 24 S 26 | S 25 1915

Chains.	
	from which
	A cedar, 9 ins.dia., bears N.22° E. 51 lks.dist. marked T 35 S R 22 E S 24 B T
	A pinon pine, 9 ins.dia., bears S.64°30'E.37 lks. dist., marked T 35 S R 22 E S 25 B T
	A cedar, 8 ins.dia., bears S.77° W. 58 lks.dist. marked T 35 S R 22 E S 26 B T.
	A pinon pine, 6 ins.dia., bears N.72° 50'W.31 lks. dist., marked T 35 S R 22 E S 23 B T.
	Corner falls on gentle E.slope, 30 ft.above hollow.
	July 19: At this cor.I set off 20° 57' 30" N.on the decl. arc; and at apparent noon observe the sun on the meridian; the resulting lat.is 37° 45'.
	Land, rolling bench, draining E.
	Soil, brown, sandy loam, part gravelly, 6 to 12 ins. deep, on rocky subsoil; 2d rate.
	Timber, cedars and pinon pine.
	Undergrowth, service berry and sagebrush.
	S.89° 58'E.on a random line bet.secs.24 and 25,
40.00	Set temp.$\frac{1}{4}$ sec.cor.
80.12	Intersect E.bdy.of Tp. 7 lks.N.of the cor.of secs.19,24, 25, and 30, which is an iron post 3 ins.dia., firmly set and marked and witnessed as described by the surveyor general. Thence
	N.89° 55'W.on a true line bet.secs.24 and 25,
	Descend from mesa.
3.12	Rim rock, 40 ft.high, bearing N.and S. Continue descent, over steep west base of mesa; over large boulders; through cedar and pinon pine timber.
38.12	Gulch, 180 ft.below cor., drains S.50° W.
	Leave cedars and pinon pine.
40.06	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

SUBDIVISION OF T.35 S., R.22 E.

Chains.	
	$\frac{\frac{1}{4}\ S\ 24}{S\ 25}$ 1915
	Raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high N. of cor. Ascend,
44.12	Spur, projects SW. for 4.00 chs. Enter cedars bearing NE. and SW. Descend through dense oak and service berry brush.
47.12	Dry bottom of Bull Dog Creek, 40 lks. wide, course S.40° W., 130 ft. below spur. Ascend.
58.12	Low spur, projecting S. for 3.00 chs., 110 ft. above Bull Dog Creek bottom.
	Descend.
71.12	Gulch, drains S.30° E., 50 ft. below spur.
	Ascend gradually over bench.
80.12	The cor. of secs. 23, 24, 25, and 26, 30 ft. above gulch.
	Land, rolling and mountainous, draining S., from E. and W. slopes, into Bull Dog Canyon.
	Soil west half brown sandy loam, some gravel, 6 to 12 ins. deep, on bed rock; 2d rate; east half rocky; 4th rate.
	Timber cedars and pinon pine.
	Undergrowth service berry and sagebrush.
	July 19, 1915.
	July 28, 1915: At 8h a.m. apparent time, I set off 37°45' on the lat. arc; 19° 11'N. on the decl. arc; and determine a meridian with the solar at the cor. of secs. 23, 24, 25, and 26. Thence
	N.0° 01'W. between sections 23 and 24,
	Over rolling mountainous land; ascending gradually through cedar and pinon timber and undergrowth of service berry and sage brush.
3.80	Top of ascent, 10 ft. above the cor. Descend bearing E. and W.
8.80	Gulch, drains S.30° E., 15 ft. below top. Ascend.

Chains.	
39.00	Top of ascent bearing NW. and SE., 195 ft. above gulch.
	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
	¼ S 23 | S 24 1915
	from which
	A pinon pine, 5 ins. dia., bears N.50° 45'W. 32 lks. dist., marked ¼ S 23 B T
	A pinon pine, 8 ins. dia., bears N.46° E. 51 lks. dist., marked ¼ S 24 B T
	Corner stands on N. slope, 10 ft. below top.
44.98	Gulch, drains S.20° E., 30 ft. below the ¼ sec. cor.
48.44	Top of steep ascent, on W. edge of bench, bears NW. and SE., 66 ft. above gulch.
	Continue ascent, through dense service berry and oak brush.
60.42	Top of main ascent, 45 ft. above top of steep ascent, bearing NE. and SW. Thence along east side of gulch, slope facing west. Descend.
77.37	Gulch, 70 ft. below top of ascent, drains SW.
	Ascend spur.
80.00	Set an iron post, 3 ft. long, 2 ins. in dia., 26 ins. in the ground, for cor. of secs. 13, 14, 23, and 24, with brass cap marked
	T 35 S R 22 E S 14 | S 13 S 23 | S 24 1915
	from which
	A pinon pine, 5 ins. dia., bears N.38° E. 37 lks. dist., marked T 35 S R 22 E S 13 B T
	A pinon pine, 6 ins. dia., bears S.50° E. 11 lks. dist., marked T 35 S R 22 E S 24 B T
	A pinon pine, 10 ins. dia., bears S.30° 45'W. 45 lks. dist., marked T 35 S R 22 E S 23 B T
	A pinon pine, 9 ins. dia., bears N.19° W. 23 lks.

Chains.	
	dist., marked T 35 S R 22 E S 14 B T
	Corner stands on spur, projecting SW. for 2.00 chs., 26 ft. above gulch.
	July 28: At this cor. I set off 19° 08' N. on the decl. arc; and at apparent noon observe the sun on the meridian; the resulting lat. is 37° 45' 30".
	Land, rolling mountains, draining from east and west slopes.
	Soil, gravelly, brown loam, 12 to 15 ins. deep, on stony subsoil; 3d rate.
	Timber, cedar and pinon pine.
	Undergrowth, service berry and scattering sagebrush.
	S. 89° 55' E. on a random line bet. secs. 13 and 24,
40.00	Set temp. ¼ sec. cor.
80.09	Intersect E. bdy. of Tp. 1 lk. N. of the cor. of secs. 13, 18, 19, and 24, which is an iron post 3 ins. dia., firmly set and marked and witnessed as described by the surveyor general. Thence
	N. 89° 55' W. on a true line bet. secs. 13 and 24,
	Over mesa; through sagebrush opening and scattering long leaf yellow pine timber,
1.94	Leave sagebrush opening, bearing NE. and SW.
5.76	Top of mesa, bearing N. and S. Descend over mesa; through dense long leaf yellow pine, bearing N. and S.
10.49	Rim rock, bearing N. and S.
	Descend over rim rock; through yellow pines.
13.[illegible]	Gulch, mouth of canyon, drains S., 180 ft. below top of mesa. Enter scattering cedar and pinon pine timber.
	Spring bears South 4.00 chs.
16.00	Top of ascent. Point of rim rock from mesa, 30 ft. high, bears N. 1.50 chs. Descend abruptly.
34.60	Gulch, draining S. 70 ft. below top of ascent.
	Scattering yellow pine in bottom of gulch. Ascend.

Chains.	
40.04½	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 13 / S 24 / 1915
	from which
	A pinon pine, 10 ins. dia., bears N.38° W., 45 lks. dist., marked ¼ S 13 B T
	A pinon pine, 10 ins. dia., bears S.78° 30'E.53 lks. dist., marked ¼ S 24 B T
	Continue ascent.
44.79	Ridge, bearing N. and S., 25 ft. above the ¼ sec. cor.
	Descend.
48.39	Gulch, drains S.10° E., 30 ft. below ridge. Ascend.
53.09	Enter sagebrush and dense service berry undergrowth, bearing N. and S.; leave pinon and cedar timber.
60.13	Top of ascent, bearing N. and S., 75 ft. above gulch.
	Descend.
77.39	Enter cedar and pinon timber; leave sagebrush and dense service berry undergrowth, bearing N. and S.
78.49	Gulch, draining SW. Ascend.
80.09	The cor. of secs. 13, 14, 23, and 24, 3 ft. above gulch.
	Land, mountainous, draining SW.
	Soil on bench gray brown loam, 2 ins. deep, or more, on rocky subsoil; 2d rate; on slopes rocky, 4th rate.
	Timber, cedar, pinon pine and yellow pine.
	Undergrowth, service berry and sagebrush.
	July 28, 1915.

August 5, 1915: At 8h a.m. apparent time, I set off 37° 45' 30" on the lat. arc; 17° 11' N. on the decl. arc; and determine a meridian with the solar at the cor. of secs. 13, 14, 23, and 24. Thence

N.0° 01' W. between secs. 13 and 14,

Over mountainous land, along top of spur; through pinon

Chains.	
	pine and cedar timber and undergrowth of service berry and oak brush.
24.20	Top of ascent bearing NE. and SE., southwest edge of base of mesa, also east side of canyon, 130 ft. above the cor.
38.00	Canyon bottom, dfains SW. Seep spring in bottom of canyon. Leave pinon pine and cedar; enter yellow pines, scattered along bottom of canyon. East fork of main canyon, 90 ft. below top.
38.50	Seep spring, 10 lks. W. of line, drains SE. Ascend to spur, separating forks of canyon.
40.00	Set an iron post, 3 ft. long, 1 in. in dia., 12 ins. in ground to bed rock, and 12 ins. in mound of stone 2 ft. base, for ¼ sec. cor., with brass cap marked ¼ S 14 | S 13 1915 from which A cedar, 7 ins. dia., bears N.67° 45'W. 42 lks. dist., marked ¼ S 14 B T A yellow pine, 18 ins. dia., bears N.37° E. 30 lks. dist., marked ¼ S 13 B T Corner stands on SE. slope of spur, 25 ft. above canyon.
47.16	Edge of rim rock bearing NE. and SW. End of spur, projects SW. 5.00 chs. Leave yellow pine; enter dense pinon pine timber, and undergrowth of service berry and oak brush. Continue over flat mesa.
55.30	Leave pinon pine and cedars bearing E. and W.; enter scattering yellow pine.
64.30	Re-enter cedar and pinon pine, bearing NE. and SW.; leave yellow pine.
71.40	Leave cedar and pinon pine; enter yellow pine. Descend into west branch of canyon, over NW. slope.
77.40	Rim rock ledge, edge of mesa, bearing NE. and SW. Descend abruptly into canyon.

Chains.	
80.00	Point for sec.cor. falls in wash draining SW., 100 ft. below rim rock, where corner cannot be perpetuated. No corner set.
80.25	Set an iron post, 3 ft. long, 2 ins. in dia., 26 ins. in the ground, for witness corner to corner of secs. 11, 12, 13, and 14, with brass cap marked

T 35 S | R 22 E
S 11 | S 12
——— WC ———
S 14 | S 13
1915

from which

Ledge bears N.4° 30'E. 32 lks. dist. which I mark B O with a cross and S 12 W C

Ledge bears S.56° 30'E. 21 lks. dist., which I mark B O with a cross and S 12 W C

A yellow pine, 18 ins. dia., bears S.10° 15'W. 262 lks. dist., marked W C T 35 S R 22 E S 14 B T

A yellow pine, 18 ins. dia., bears N.77° 45'W. 94 lks. dist., marked W C T 35 S R 22 E S 11 B T

Land, rough mountains and ledges of mesa, draining SW.

Soil, rocky; 4th rate.

Timber, yellow pine, cedar, and pinon pine.

Undergrowth, service berry, oak, and sagebrush.

Aug. 5, 1915: At 11h a.m. rain prevented further work.

Aug. 6, 1915: At 8h a.m. l.m.t., I set off 37° 46' on the lat. arc; 16° 55'E. on the decl. arc; and determine a meridian with the solar at the true cor. point of secs. 11, 12, 13, and 14. Thence

S.89° 55'E. on a random line bet. secs. 12 and 13,

40.00	Set temp. ¼ sec. cor.
80.07	Intersect E. bdy. of Tp. 15 lks. N. of the cor. of secs. 7, 12, 13, and 18, which is an iron post 3 ins. dia., firmly set and marked and witnessed as described by the surveyor general. Thence

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Chains	
	N.39° 49'W. on a true line bet. secs. 12 and 13,
	Over rough mountainous mesa; through yellow pine timber and undergrowth of service berry, oaks and sagebrush.
5.87	Gulch draining S.20° E., 50 ft. below mesa; ascend.
25.07	Top of ledges, on E. side of ravine. Descend.
26.07	Gulch, with rim rock sides, drains S. on west side of ledges. Ascend.
40.03½	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 12 S 13 1915 from which A yellow pine, 30 ins. dia., bears S.62° 30'E. 140 lks. dist., marked ¼ S 13 B T A yellow pine, 24 ins. dia., bears N.38° 30'E. 140 lks. dist., marked ¼ S 12 B T
47.07	Top of steep ascent, 72 ft. above gulch.
	Descend.
52.07	Bottom of dry ravine, draining S.
	Thence ascend over series of ledges bearing N. and S.
57.72	Top of ascent bearing N. and S., 66 ft. above bottom of ravine. Descend.
61.28	Gulch, draining S.20° W., 33 ft. below top of ascent.
66.07	Leave scattering yellow pine, bearing N. and S.; enter cedars and pinon pine.
	Ascend over mesa
74.42	Top of ascent, bearing N. and S.
	Enter scattering pine; leave cedars and pinon pine.
79.92	Top of rim rock ledge.
	Thence over boulders.
	Descend.
79.95	Base of rim rock bearing N. and S., 15 ft. below the top.
80.07	True point for cor. of secs. 11, 12, 13, and 14.
	Land, rough mountainous mesa, cut by rim rock ravines, draining S.

SUBDIVISION OF T.35 S., R.22 E.

Chains.	
	Soil, on slopes rocky; 4th rate, on mesa brown, sandy and gravelly loam, 3d rate, on rock subsoil.
	Timber, yellow pine, cedars, and pinon.
	Undergrowth, service berry, oak, and sagebrush.
	Aug. 6, 1915: At this cor. I set off 16° 52' N. on the decl. arc; and at apparent noon observe the sun on the meridian; the resulting lat. is 37° 46'.
	From the true point for cor. of secs. 11, 12, 13, and 14, N. 0° 01' W. bet. secs. 11 and 12,
	Over mountainous land; ascending from canyon to rim rock ledge; through scattering yellow pine timber, and undergrowth of oak, service berry, and sagebrush.
.25	Intersect witness cor. to cor. of secs. 11, 12, 13, and 14.
.55	Base of rim rock, 15 ft. high. Thence ascend to top of ledges, which break 10 lks. west of line.
4.50	Enter cedars and pinon pine, bearing E. and W.
19.00	Top of ascent, mesa 110 ft. above cor., bears E. and W.
	Descend.
24.70	Gulch, 15 ft. below top of ascent, drains S. 30° W.
40.00	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 ¼ sec. cor., with brass cap marked
	¼ S 11 | S 12 1915
	from which
	A pinon pine, 9 ins. dia., bears S. 42° 30' E. 30 lks. dist., marked ¼ S 12 B T
	A pinon pine, 7 ins. dia., bears N. 30° 15' W. 28 lks. dist., marked ¼ S 11 B T.
	Corner stands on gentle slope facing SW., 90 ft. above gulch.
	Ascend gradually over mesa.
70.63	Yellow pine tree, 17 ins. in dia., on line, marked with 2 notches on N. and S. faces.

SUBDIVISION OF T.35 S., R.22 E.

Chains.
30.00 Set an iron post 3 ft. long, 2 in. in dia., 26 ins. in the ground, for cor. of secs. 1, 2, 11, and 12, with brass cap marked

T 35 S R 22 E
S 2 | S 1
S 11 | S 12
1915

from which

A yellow pine 14 ins. dia., bears N.70° 30'E. 54 lks. dist., marked T 35 S R 22 E S 1 B T

A yellow pine, 30 ins. dia., bears S.4° E. 73 lks. dist., marked T 35 S R 22 E S 12 B T

A yellow pine, 33 ins. dia., bears S.35° 30'W. 219 lks. dist., marked T 35 S R 22 E S 11 B T

A yellow pine, 33 ins. dia., bears N.70° W. 54 lks. dist., marked T 35 S R 22 E S 2 B T

Corner stands on gentle S. slope of mesa, 95 ft. above ¼ sec. cor.

Land, mesa, sloping S., cut by rim rock gulches.

Soil, on mesa, brown, sandy, gravelly loam, 6 to 12 ins. deep to bed rock; 3d rate; on slopes or canyons rocky, 4th rate.

Timber, yellow pine, pinon and cedar.

Undergrowth, oak, service berry, and scattering sage-brush.

August 6, 1915.

August 7, 1915: At 2h p.m. apparent time, I set off 37° 47' on the lat. arc; 16° 34' N. on the decl. arc; and determine a meridian with the solar at the cor. of secs. 1, 2, 11, and 12. Thence

S.89° 49'E. on a random line bet. secs. 1 and 12,

40.00 Set temp. ¼ sec. cor.

30.13 Intersect E. bdy. of Tp. 9 lks. N. of the cor. of secs. 1, 6, 7, and 12, which is an iron post 3 ins. dia., firmly set

Chains.	
	and marked and witnessed as described by the surveyor general.
	Thence
	N.89° 45'W.on a true line bet.secs.1 and 12,
	Over mesa land, sloping S.; through scattering yellow pine timber, and undergrowth of oak, service berry and sagebrush.
8.13	Mesa, bearing N.and S. Descend.
13.03	Ravine, draining S.165 ft.below mesa.
	Ascend. Thence over mesa.
28.23	Top of ascent, 160 ft.above ravine; descend.
33.43	Ravine, draining S., 45 ft.below top of ascent.
	Ascend.
37.13	Ridge, bearing N.and S., 33 ft.above ravine.
40.06½	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 1 S 12 1915 from which A yellow pine, 18 ins.dia., bears N.20° E. 6 lks. dist., marked ¼ S 1 B T A yellow pine, 16 ins.dia., bears S.63° E. 26 lks. dist., marked ¼ S 12 B T
41.98	Ravine, drains S. Ascend.
	Thence over mesa.
60.63	Top of ascent, 80 ft.above ravine.
	Descend.
64.43	Gulch, 45 ft.below mesa, drains S.
	Ascend, over mesa, sloping gently to the south.
80.13	The cor.of secs.1,2,11, and 12.
	Land, mesa, sloping south, cut by rim rock gulches and ravines, draining S.
	Soil, on mesa, red, brown, sandy loam, on rocky subsoil, 6 to 12 ins.deep, 3d rate; in gulches, rocky,4th rate.
	Timber, yellow pine.

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Chains.	Undergrowth, oak, service berry and sagebrush. August 7, 1915:
	August 12, 1915: For solar observation see line bet. secs. 10 and 11.
	N.0° 01'W. bet. secs. 1 and 2, on random line,
40.00	Set temp. $\frac{1}{4}$ sec. cor.
79.51	Intersect N. bdy. of Tp. 7 lks. W. of the cor. of secs. 1, 2, 35, and 36, heretofore described. Thence
	S.0° 02'W. on true line bet. secs. 1 and 2,
	Over mountainous land; gradually descending over scattering yellow pine timber, and undergrowth of oak, service berry, and some sagebrush.
13.61	Recapture Creek, 16 lks. wide, good water, 10 ins. deep, rapid current, over rocky bottom, course SW.
	Enter scattering yellow pine timber.
39.51	Point for $\frac{1}{4}$ sec. cor. falls in seep, 200 ft. above creek. Cor. Not set.
39.86	Set an iron post 3 ft. long, 1 in. in dia., 26 ins. in the ground, for witness cor. to $\frac{1}{4}$ sec. cor., with brass cap marked
	T 35 S R 22 E WC $\frac{1}{4}$ S 2 | S 1 1915
	from which
	A yellow pine, 12 ins. dia., bears N.84° W. 97 lks. dist., marked WC $\frac{1}{4}$ S 2 B T
	A yellow pine, 24 ins. dia., bears N.74° 30'E. 63 lks. dist., marked WC $\frac{1}{4}$ S 1 B T
	This witness cor. is set 35 lks. S.0° 02'W. of true cor. point. Continue descent through oak and service berry brush.
49.81	Gulch, drains W., 15 ft. below point for $\frac{1}{4}$ sec. cor.
	Ascend gradually.
62.51	Top of gradual ascent, flat spur, projecting W., 35 ft.

Chains.	
	above gulch. Descend gradually along east side of Recapture Canyon.
72.01	Foot of descent bearing E.and W., 20 ft.below top.
	Ascend abruptly, over rim rock ledges, bearing N.70° E. and S.70° W.
75.30	Edge of mesa, 115 ft.above foot of descent.
	Descend over mesa, sloping south.
79.51	The cor.of secs.1,2,11, and 12.
	Land, mountainous, with steep slopes into Recapture Canyon.
	Soil, rocky; 4th rate.
	Timber, scattering yellow pine.
	Undergrowth, oak, service berry, and some scattering sagebrush. August 12, 1915.
	July 17,1915:At 8h a.m.apparent time I set off 37° 43'on the lat.arc; 21° 22'N.on the decl.arc; and determine a meridian with the solar at the standard cor.of secs.34 and 35 on S.bdy.of Tp., which is an iron post, 3 ins. in dia., firmly set, and marked and witnessed as described by the surveyor general. Thence
	N.0° 01'W.bet.secs.34 and 35,
	Over mesa, sloping slightly south;through dense cedars and pinon pine timber.
6.30	Ditch 3 lks.wide, 2 ins.deep, course S.50° E.,intakes at main canal about 6.00 chs.NW. Ascend.
13.00	Top of ascent, 40 ft.above the cor. Descend to rim rock edge of mesa, bearing NW. and SE.
21.10	Rim rock ledge, bearing N.56° W. and S.56° E.
	Descend over 20 ft.cliff.
24.00	Foot of steep descent over ledges, 160 ft.below top.
	Continue descent over rough S.side into Johnson'Creek.
	Leave cedars and pinon pine, bearing NW. and SE.;enter dense service berry and oak brush.

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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 34 | S 35 1915 Raise a mound of stone 2 ft. base, 1½ ft. high W. of cor. Corner falls on slope 80 ft. below foot of ledge. Descend over NE. slope.
43.00	Johnson Creek, 50 lks. wide, water in holes, rocky bottom, course S.50° E., 40 ft. below ¼ sec. cor. Ascend.
49.50	Ascend abruptly over N. side of canyon. Enter cedars and pinon bearing NW. and SE.
62.50	Top of ascent. Spur, projects 120 ft. W. Descend.
64.10	Head of gulch, draining N.75° W. 50 ft. below top. Ascend diretly to rim of mesa.
73.00	Top of broken rim rock ledge of mesa bearing NW. and S. 50° E. 114 ft. above gulch. Ascend gradually over mesa.
80.00	Set an iron post 3 ft. long, 2 ins. in dia., 26 ins. in the ground, for cor. of secs. 26, 27, 34, and 35, with brass cap marked T 35 S R 22 E S 27 | S 26 S 34 | S 35 1915 from which A pinon pine, 9 ins. dia., bears N.53° 30'E. 58 lks. dist., marked T 35 S R 22 E S 26 B T A pinon pine, 7 ins. dia., bears S.39° E. 41 lks. dist., marked T 35 S R 22 E S 35 B T A pinon pine, 10 ins. dia., bears S.41° W. 56 lks. dist., marked T 35 S R 22 E S 34 B T A pinon pine, 10 ins. diam., bears N.75° 45'W. 28 lks. dist., marked T 35 S R 22 E S 27 B T Land, rough mountains, rocky, with north and south slopes into Johnson Canyon. Soil, rocky; 4th rate. Timber, cedar and pinon pine. Undergrowth oak and service berry brush. July 17: At this cor. I set off 21° 18'N. on the decl. arc; and at apparent noon observe the sun on the meridian, the resulting lat. is 37° 44'.

SUBDIVISION OFT.35 S., R.22 E.

Chains.	
	East on a random line bet. secs. 26 and 35,
40.00	Set temp. $\frac{1}{4}$ sec. cor.
79.91	Intersect N. and S. line 7 lks. S. of the cor. of secs. 25, 26, 35 and 36. Thence
	S. 89° 57' W. on a true line bet. secs. 26 and 35,
	Ascending abruptly over east edge of butte, over rim rock.
3.41	Top of butte. Thence over top of butte, divide between Bull Dog Canyon and Recapture Creek. Through cedar and pinon pine timber, and undergrowth of service berry.
11.91	Top of rim rock ledge. Descend W. edge of butte, bearing N. 20° W. and S. 20° E.
13.41	Base of rim rock ledge. Descend abruptly.
35.91	Recapture Creek, 10 lks. wide, good water, 1 in. deep, swift surrent, over rocky bottom, course S. 40° E., 255 ft. below top of rim rock. Ascend.
39.95½	Set an iron post 3 ft. long, 1 in. in dia., 10 ins. in ground to bed rock, and 16 ins. in mound of stone 2 ft. base, for $\frac{1}{4}$ sec. cor., with brass cap marked $\frac{\frac{1}{4}\ S\ 26}{S\ 35}$ 1915 from which
	A pinon pine, 10 ins. dia., bears N. 80° 45' E. 32 lks. dist., marked $\frac{1}{4}$ S 26 B T
	A pinon pine, 8 ins. diam., bears S. 15° E. 43 lks. dist., marked $\frac{1}{4}$ S 35 B T
	Corner falls on slope, 70 ft. above creek.
44.91	Begin abrupt ascent bearing NW. and SE.
64.41	Rim rock ledge, 75 ft. high, on E. edge of mesa, bearing N. 35° W. and S 35° E. Thence over mesa.
71.41	W. edge of mesa. Descend.
77.31	Gulch, draining S. 15° W., 50 ft. below mesa. Ascend gradually to
79.91	The cor. of secs. 26, 27, 34, and 35.

Chains. Land, generally rough mountains, draining SE.from slopes of mesa.

Soil, rocky; 4th rate.

Timber, cedar and pinon pine.

Undergrowth service berry brush.

July 17,1915.

July 21,1915: At 8h a.m.apparent time I set off 37° 44' on the lat.arc; 20° 38'N.on the decl.arc; and determine a meridian with the solar at the cor.of secs.26, 27,34, and 35. Thence

N.0° 01'W.bet.secs.26 and 27,

Over mountainous land; ascending over broken east slope of mesa; through pinon and cedar timber, and undergrowth of service berry, oak, and scattering sagebrush.

15.00 Top of ascent bearing E.and W., 40 ft.above mesa.

23.10 Small draw, 20 ft.below top, drains S.60° E.

29.30 Rim rock ledge, NE.edge of mesa. Thence descend abruptly over rim rock, bearing N.33° W. and S.33° E.70 ft.

33.00 Foot of descent bearing same, 228 ft.above top.

39.70 Spur, projecting east 3.00 chs., 50 ft.above foot.

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 27 | S 26
1915

from which

A cedar, 10 ins.dia., bears N.54° 30'E.109 lks. dist., marked ¼ S 26 B T

A cedar 7 ins.dia.bears S.77° W. 60 lks.dist. marked ¼ S 27 B T

Corner stands on N.side of spur, 12 ft.below top.

43.00 Foot of descent, 30 ft.below ¼ sec.cor.

Leave cedar and pinon pine timber, bearing E.and W.; enter sagebrush park.

SUBDIVISIONS T. 35 S. R. 22 E.

Chains	
54.80	Leave park, enter cedar and pinon timber bearing S.70°W. and S.50°E.
62.00	Ridge, spur, bearing NW. and SE. 40 ft. above foot. Descend.
65.40	Gulch draining S.70°E. 35 ft. below ridge. Ascend.
68.45	Spur projecting E. 40 ft. above gulch.
80.00	Set an iron post, 3 ft. long, 2 ins. in dia., 26 ins. in the ground for the cor. of secs. 22, 23, 26 and 27, mkd. on brass cap

T 35 S R 22 E
S 22 | S 23
S 27 | S 26
1915

from which

A pinon, 14 ins. dia.,bears N.55°E.,
23 lks. dist. mkd. T 35 S R 22 E S 23 B T.
A cedar 7 ins. dia.,bears S.60°E.,
9 lks. dist, mkd. T 35 S R 22 E S 26 B T.
A cedar, 13 ins. dia.,bears S.72°30'W.,
241 lks. dist. mkd. T 35 S R 22 E S 27 B T.
A cedar, 12 ins. dia.,bears N.3°W.,
26 lks. dist. mkd. T 35 S R 22 E S 22 B T.

Land, S. half mesa draining SE. red sand loam, 2nd rate, N. half, slope and bench from mesa, draining NE., gravelly, 3rd rate.

Timber, pinon and cedar.

Undergrowth service berry and sage brush.

July 21: At apparent noon I set off 20°35'N. on the decl. arc, and observe the sun on the meridian, the resulting lat. is 37°45'.

N. 89°57'E. on a random line bet. secs. 23 and 26.

40.00	Set temp. ¼ sec. cor.
79.97	Intersect N. and S. line 16 lks. S. of the cor. of secs. 23, 24, 25 and 26.

Thence

S.89°50'W. on a true line bet. secs. 23 and 26.

SUBDIVISIONS T. 35 S. R. 22 E.

Chains	
	Over mountainous land ascending gradually through cedars and pinon pine timber.
4.25	Road bearing N.40°W. and S.40°E. to James Carrol's place. Top of ascent, 30 ft. above road. Descend gradually.
6.00	Leave cedar and pinon pine, enter sagebrush bearing N.80°W. and S.60°E. Good land.
13.00	Wash draining S.50°E. 50 ft. below top.
22.00	Leave sagebrush, enter cedar and pinon pine timber. Ascend.
37.00	Ridge bearing N. and S. 110 ft. above wash, being the divide between Bull Dog and Recapture Canyons.
39.98½	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground for the ¼ sec. cor. of secs. 23 and 26, mkd. on brass cap ¼ S 23 S 26 1915 from which A cedar, 14 ins. dia., bears S.70°30'W., 27 lks. dist. mkd. ¼ S 26 B T. A pinon, 7 ins. dia., bears N.32°45'W., 34 lks. dist. mkd. ¼ S 23 B T. Corner falls on W. slope, 25 ft. below ridge.
49.50	Gulch draining S.45°W. 125 ft. below ridge. Ascend.
63.00	Top of ascent bearing N. and S., flat spur projecting SW. 70 ft. above gulch. Descend.
70.70	Recapture Creek, 10 lks. wide, good water 8 ins. deep, swift current over rocky bottom, course S. 120 ft. below top ascent.
	Ascend abruptly leaving cedar and pinon pine timber bearing N. and S. and entering dense service berry undergrowth.
77.00	Top of steep ascent. Leave dense service berry undergrowth and enter cedar and pinon pine timber, bearing N. and S.

SUBDIVISION OF T.35 S., R.22 E.

Chains.	
79.97	The cor. of secs. 22, 23, 26, and 27.
	Land, mountainous, draining E. into Bull Dog Canyon, and west into Recapture Canyon, from divide ridge.
	Soil on E. slope good brown loam, 1 ft. or more deep, 2d rate; W. slope stony and rocky, 4th rate.
	Timber, pinon pine and cedars.
	Undergrowth, serwice berry and sagebrush.
	July 21, 1915.
	July 29: At 7h 30m a.m. apparent time I set off 37° 45' on the lat. arc; 18° 57' N. on the decl. arc; and determine a meridian with the solar at the cor. of secs. 22, 23, 26, and 27.
	Thence
	N. 0° 01' W. bet. secs. 22 and 23,
	Ascending gradually through cedar and pinon pine timber.
2.60	Spur, 20 ft. high, projects E., 12 ft. above the cor.
	Leave timber, bearing E. and W.; enter service berry and oak brush undergrowth.
8.00	Gulch draining E., 17 ft. below spur.
	Ascend.
15.00	Top of ascent, spur, projecting E., 48 ft. above gulch.
	Descend.
25.00	Foot of descent, 29 ft. below top, bears E. and W.
	Thence over level land.
31.00	Leave dense service berry and oak brush; enter cedar and pinon pine timber, bearing E. and W.
40.00	Set an iron post, 3 ft. long, 1 in. in dia., 12 ins. in the ground to rock, and 12 ins. in a mound of stone 2 ft. base, for $\frac{1}{4}$ sec. cor., with brass cap marked $\frac{1}{4}$ S 22 | S 23 1915 from which A cedar, 10 ins. dia. bears S. 70° W. 8 lks. dist.

SUBDIVISION OF T.35 S., R.22 E.

Chains.	
	marked ¼ S 22 B T
	A pinon pine, 6 ins. dia. bears S.44° 30'E. 7 lks. dist., marked ¼ S 23 B T
	Corner stands on gentle S. slope, 47 ft. above foot of descent.
41.30	Ridge, bearing E. and W., 7 ft. above ¼ sec. cor.
	Thence descend into Recapture Canyon.
48.27	Foot of steep descent bearing N.40° W. and S.40° E.
	Leave cedar and pinon pine timber, bearing NW. and SE. enter dense service berry and oak brush. Descend.
51.00	Recapture Creek 50 lks. wide, stream 10 lks. wide, 8 ins. deep, draining S.20° E. 60 ft. below ridge. Ascend.
54.25	Spur, projecting W. 1.00 ch., 26 ft. above creek. Descend.
57.73	Re-enter Recapture Creek, 10 lks. wide, course SW.; thence crossing recrossing same.
75.73	Spur, projects E. 3.00 chs., 76 ft. above creek. Descend.
78.50	Recapture Creek, 10 lks. wide, course S.80° E. 66 ft. below spur
80.00	Near creek bottom. Set an iron post, 3 ft. long, 2 ins. in dia., 26 ins. in the ground, for cor. of secs. 14, 15, 22, and 23, with brass cap marked

T 35 S R 22 E
S 15 | S 14
S 22 | S 23
1915

from which

A yellow pine, 30 ins. dia. bears S. 47° E. 48 lks. dist., marked T 35 S R 22 E S 23 B T

A cottonwood, 10 ins. dia. bears S.20° W. 79 lks. dist., marked T 35 S R 22 E S 22 B T

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

Corner stands on flat near creek bottom.

Land, mountainous along canyon bottom, draining S.

Soil, sandy and gravelly with rocky subsoil; 3d rate.

Timber, cedar and pinon pine.

Undergrowth, service berry, oak, and sage brush.

July 29: At this cor. I set off 18° 53' 30" N. on the decl.

SUBDIVISION OF T.35 S., R.22 E.

Chains.	
	arc; and at apparent noon observe the sun on the meridian; the resulting lat. is 37° 46'.
	N.89° 50'E. on a random line bet. secs. 14 and 23,
40.00	Set temp. $\frac{1}{4}$ sec. cor.
79.75	Intersect N. and S. line 28 lks. N. of the cor. of secs. 13, 14, 23, and 24. Thence
	N.89° 58'W. on a true line bet. secs. 14 and 23,
	Descending from small spur; through cedar and pinon timber and undergrowth of oak brush.
7.86	Ravine, course S. Ascend abruptly 120 ft.
9.75	Top of abrupt ascent. Descend along E. bank of gulch.
13.25	Small gulch, drains SE.
23.35	Leave cedar and pinon pine timber, and oak brush undergrowth; enter sagebrush and burnt timber, bearing N. and S.
	Small ridge, bearing N. and S., 26 ft. above gulch.
	Descend gradually.
34.75	Gulch, 33 ft. below ridge, drains south. Ascend gradually.
39.87½	Set an iron post, 3 ft. long, 1 in. in dia., 16 ins. in the ground to rock, and 10 ins. in mound of stone 2 ft. base, for $\frac{1}{4}$ sec. cor., with brass cap marked $\frac{\frac{1}{4}\ S\ 14}{S\ 23}$ 1915
	Raise a mound of stone 2 ft. base, 1½ ft. high N. of cor.
	Corner falls on east slope, 30 ft. above gulch. Ascend.
44.22	Top of flat ridge, divide between Bull Dog and Recapture canyons, 100 ft. above creek.
	Descend gradually; through cedar and pinon pine timber, bearing N. and S.
65.77	Descend rapidly bearing N. and S.
70.46	Gulch, draining NW., 15 ft. below top of abrupt descent. Ascend.
73.75	Top of small spur, 60 ft. above creek, projects S.

SUBDIVISION OF T.35 S., R.22 E.

Chains.	
	Descend gradually to canyon bottom; through oak brush undergrowth and scattering yellow pine timber.
79.75	The cor. of secs. 14, 15, 22, and 23.
	Land, mountainous, bench and ridge, draining E. into Bull Dog and west into Recapture canyon.
	Soil, on flat ridge, good sandy loam, 16 ins. deep to rock; 2d rate.
	Timber, cedar and pinon pine.
	Undergrowth, service berry, oak, and sagebrush.
	July 29, 1915.
	Aug. 11: At 8h a.m. l.m.t., I set off 37° 46' on the lat. arc; 15° 30' N. on the decl. arc; and determine a meridian with the solar at the cor. of secs. 14, 15, 22, and 23.
	Thence
	N. 0° 01' W. bet. secs. 14 and 15,
	Over mountainous land; ascending gradually from Recapture Creek bottom, through oak brush.
1.10	Ascend abruptly from bottom of canyon.
4.00	Spur, projects W. 1.00 ch., 115 lks. above creek. Descend again into Recapture Creek, [illegible]
7.00	Enter Recapture Creek, 10 lks. wide, draining from N. to SW., 70 ft. below spur. Thence ascend up creek bottom, crossing and recrossing same.
20.80	Leave Recapture Creek, course from NW. to S., 20 ft. above point of entering. Ascend over flat spur.
25.00	Spur, projects W. 1.00 ch.
	Descend again into Recapture Creek, [illegible]
37.04	Enter Recapture Creek, 10 lks. wide, course from N. to SW.
	Scattering yellow pine along creek bottom.
39.55	Leave Recapture Creek, 10 lks. wide, draining from NW. to S.
40.00	On bank of Recapture Creek, 10 ft. above bottom,
	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the

SUBDIVISION OF T.35 S., R.22 E.

Chains.

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

¼ S 15 | S 14
1915

from which

A yellow pine, 24 ins.dia., bears N.73° 15'W.85 lks.dist., marked ¼ S 15 B T.

A yellow pine, 8 ins.dia., bears N.77° 45'E.54 lks.dist.marked ¼ S 14 B T

41.00 Spur of bank projecting W.50 lks., 33 ft.above ¼ sec.cor. Descend.

44.19 Recapture Creek, 10 lks.wide, course from NW.to SW., 25 ft.below spur.

47.89 Gulch, drains SW., 15 ft.deep.

52.41 Enter pinon pine and cedars, bearing E.and W.

55.81 Leave pinon pine and cedars, bearing E.and W.; enter oak and service berry brush,and scattering yellow pine timber. Continue along east side of creek.

80.00 Set an iron post 3 ft.long, 2 ins.in dia., 26 ins.in the ground, for cor.of secs.10,11,14, and 15, with brass cap marked

T 35 S R 22 E
S 10 | S 11
S 15 | S 14
1915

from which

A yellow pine, 20 ins.dia., bears N.10° 45'E.82 lks.dist., marked T 35 S R 22 E S 11 B T

A yellow pine, 24 ins.dia., bears N.18° 45'W.81 lks.dist., marked T 35 S R 22 E S 10 B T

A yellow pine, 22 ins.dia., bears S.22° 45'W.80 lks.dist., marked T 35 S R 22 E S 15 B T

A yellow pine, 28 ins.dia., bears S.6° 15'E.195 lks.dist., marked T 35 S R 22 E S 14 B T

Land, canyon bottom along creek, draining S.

Soil, sandy and stony; 4th rate.

Timber, cedar, pinon, and yellow pine.

Undergrowth, service berry and oak brush.

SUBDIVISION OF T.35 S. R.22 E.

Chains.	
	S.89° 58'E.on a random line bet.secs.11 and 14,
40.00	Set temp.¼ sec.cor.
80.01	Intersect N.and S.line 2 lks.N.of the true point for cor. of secs.11,12,13, and 14.
	Thence
	N.89° 57'W.on a true line bet.secs.11 and 14,
	Descending E.side of canyon; through cedar, pinon pine and yellow pine timber.
1.21	Bottom of canyon draining S.10° W.
3.51	Ascend abruptly from canyon, over rim rock ledge bearing N.and S., 120 ft.above bottom. Thence over flat mesa, sloping gently south. Leave yellow pine timber; continue through cedar and pinon pine.
37.81	Top of ledge, bearing N.10° E. and S.10° W. Descend precipitous NE. and SW.slope.
38.34	Base of ledge rim rock.
40.00½	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 11 / S 14 / 1915
	from which
	A yellow pine, 18 ins.dia., bears N.65° E. 192 lks.dist., marked ¼ S 11 B T
	A yellow pine, 24 ins.dia., bears S.28° 45'E. 184 lks.dist., marked ¼ S 14 B T
	Corner falls on slope 160 ft.below top of ledge.
	August 11: At this cor.I set off 15°27'N.on the decl.arc; and at apparent noon observe the sun on the meridian; the resulting lat.is 37° 46'
60.75	Foot of abrupt descent. Leave scattering yellow pine; thence through cedar and pinon pine timber.
64.45	Leave cedar and pinon pine timber bearing N.and S. Continue descent.
67.18	Wash, course SE.

SUBDIVISIONS T. 35 S. R. 22 E.

Chains	
	Descend through oak and sage brush to Recapture Canyon.
80.01	The cor. of secs. 10, 11, 14 and 15.
	Land, mesa and canyon slopes generally draining S.
	Soil, on mesa brown, sandy loam, 2nd rate; on canyon slopes rocky, 4th rate.
	Timber cedar, pinon and yellow pine.
	Undergrowth oak and sage brush.
	From the cor. of secs. 10, 11, 14 and 15
	N.0°01'W. on a true line bet. secs. 10 and 11.
	Over mountainous land in bottom of Recapture Canyon, ascending along east side through undergrowth of oak and sage brush.
15.26	Summit of ascent, flat spur projecting W. 96 ft. above the cor.
	Descend into creek bottom.
20.24	Enter Recapture Creek bottom, 10 lks. wide, 8 ins. deep, course from N. to SW. 50 ft. below top of ascent. Thence up creek.
23.82	Leave creek course from NE. to S. Enter scattering cottonwoods.
36.95	Enter Recapture Creek course S.10°E. from N.
39.25	Leave Recapture Creek, course from NE. to S.
40.00	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground for the ¼ sec. cor. of secs. 10 and 11, mkd. on brass cap

¼ S 10 | S 11
1915

from which

A cottonwood, 8 ins. dia., bears S.23°45'W., 90 lks. dist. mkd. ¼ S 10 B T.

A cottonwood, 22 ins. dia., bears N.84°15'E., 92 lks. dist. mkd. ¼ S 11 B T.

Corner stands on E. slope in creek, about 40 lks. W. of W. bank and 15 ft. above bottom.

August 11, 1915.

SUBDIVISIONS T. 35 S. R. 22 E.

Chains	
	Aug. 12: At 8h a.m. apparent time, I set off 37°46'30" on the lat. arc, 15°12'N. on the decl. arc, and determine a meridian with the solar, at ¼ sec. cor.
	Thence continue through oak brush and dense sagebrush, ascending out of canyon bottom. Leave cottonwoods in bottom.
59.10	Leave dense oak, enter sagebrush park bearing E. and W.
66.56	Re-enter oak brush bearing E. and W.
75.58	Enter scattering cedar, pinon and yellow pine timber.
80.00	Set an iron post, 3 ft. long, 2 ins. in dia., 26 ins. in the ground for the cor. of secs. 2, 3, 10 and 11, mkd. on brass cap

T 35 S R 22 E
S 3 | S 2
S 10 | S 11
1915

from which

A cedar, 8 ins. dia., bears N.66°E., 345 lks. dist. mkd. T 35 S R 22 E S 2 B T.
A cedar, 16 ins. dia., bears S.61°30'E., 132 lks. dist. mkd. T 35 S R 22 E S 11 B T.
A yellow pine, 22 ins. dia., bears S.69°W., 188 lks. dist. mkd. T 35 S R 22 E S 10 B T.
A pinon pine, 6 ins. dia., bears N.63°45'W., 79 lks. dist. mkd. T 35 S R 22 E S 3 B T.

Corner stands on SE. slope, 145 ft. above the ¼ sec. cor.
Land mountainous, along canyon bottom drains S. and SE.
Soil sandy gravelly loam, 3rd rate.
Timber cedar, pinon, yellow pine and cottonwood.
Undergrowth, oak and sagebrush.

	S.89°57'E. on a random line bet. secs. 2 and 11.
40.00	Set temp. ¼ sec. cor.
80.05	Intersect N. and S. line 5 lks. N. of the cor. of secs. 1, 2, 11 and 12.
	Aug. 12: At apparent noon I set off 15°09'N. on the decl. arc, and observe the sun on the meridian, the resulting

SUBDIVISION OF T.35 S., R.22 E.

Chains.	
	lat. is 37° 47'
	Thence
	N.89° 55'W. on a true line bet. secs. 2 and 11,
	Over mesa, sloping gently S.; through dense oak and buck brush and yellow pine timber.
3.25	Ascend.
5.55	Top of ascent bearing N.40° E. and S.40° W.
	Descend abruptly, over ledges and rim rock, bearing NE. and SW.
6.05	Foot of abrupt descent.
40.02½	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 2 / S 11 / 1915
	from which
	A yellow pine, 24 ins. dia., bears N.73° W. 111 lks. dist., marked ¼ S 2 B T
	A yellow pine, 32 ins. dia., bears S.31° 30'W. 32 lks. dist. marked ¼ S 11 B T
	Continue abrupt descent from mesa.
49.66	Recapture Creek, 10 lks. wide, 8 ins. deep, swift current, course SW.; 55 ft. below ¼ sec. cor.
	Leave scattering yellow pine timber, bearing NE. and SW. Ascend.
61.79	Small wash, course S.; ascend more rapidly.
71.67	Top of ascent. Thence over gentle SE. slope; through oak and sagebrush.
80.05	The cor. of secs. 2, 3, 10, and 11.
	Land, mountainous, draining east and west from slopes, into Recapture Canyon.
	Soil, sandy, stony; 4th rate.
	Timber, yellow pine.
	Undergrowth, service berry, oak, and sage brush.
	August 12, 1915.

SUBDIVISION OF T.35 S., R.22 E.

Chains.	
	Aug.16, 1915: For solar observation see line bet.secs. 3 and 10.
	N.0° 01'W.on a random line bet.secs.2 and 3.
40.00	Set temp.¼ sec.cor.
79.50	Intersect N.bdy.of Tp.12 lks.E.of the cor.of secs.2,3, 34. and 35, heretofore described.
	Thence
	S.0° 06'E.on a true line bet.secs.2 and 3,
	Ascending rapidly from west fork of Recapture Canyon; through dense undergrowth of service berry and sage brush.
7.50	Top of steep ascent. Ascend gradually.
15.50	Spur, projecting SW.
	Descend gradually; enter cedars, pinon and yellow pine timber.
39.50	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 3 | S 2 1915
	from which
	A yellow pine, 22 ins.dia., bears N.31° 00'W.101 lks.dist., marked ¼ S 3 B T
	A yellow pine, 30 ins.dia., bears N.48° 30'E. 169 lks.dist., marked ¼ S 2 B T
	Corner falls on slope, 70 ft.below spur.
46.18	Timber becomes more scattering, bears NE. and SW.
	Aug.16,1915: At 11h 30m a.m. cease work on account of rain storm.
	Aug.17: At 8h a.m. apparent time, I set off 37° 47' on the lat.arc; 13° 40'N.on the decl.arc; and determine a meridian with the solar, at last named point.
	Thence continue to
51.13	Leave cedar, pinon pine, and scattering yellow pine timber, bearing NE. and SW.
	Descend.

Chains.	
61.02	Dry gulch, 15 ft. deep, draining SW.
	Continue descent over SW. slope; through scattering oak and sagebrush.
	Aug. 17, 1915: At this point I set off 13° 36' N. on the decl. arc; and at apparent noon observe the sun on the meridian; the resulting lat. is 37° 47'
79.50	The cor. of secs. 2, 3, 10, and 11.
	Land, mountainous, draining into west fork of Recapture Canyon, from steep SE. and NW. slopes.
	Soil, sandy, gravelly, 15 ins. deep to rock; 3d rate.
	Timber, yellow pine, pinon pine, and cedar.
	Undergrowth, service berry, oak and sage brush.
	Aug. 17, 1915.
	July 20, 1915: At 8h a.m. l.m.t., I set off 37° 43' on the lat. arc; 20° 49' N. on the decl. arc; and determine a meridian with the solar at the standard cor. of secs. 33 and 34 on the S. bdy. of Tp., which is an iron post 3 ins. in dia., firmly set and marked and witnessed as described by the surveyor general. Thence
	N. 0° 02' W. bet. secs. 33 and 34,
	Over broken mesa; ascending from west side of gulch; through cedars and pinon pine timber, and undergrowth of scattering sagebrush.
6.50	Leave cedar and pinon timber; enter open sagebrush park.
16.50	Wire fence bearing E. and W.; south boundary of L.H. Redd and Wayne Redd's claim.
21.70	Enter plowed land, bearing E. and W., extending 4.00 chs. E. and 8.00 chs. west.
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 33 | S 34 1915
	Dig pits 18 x 18 x 12 ins. N. and S. of post 3 ft. dist.,;

Subdivision of T.35 S., R.22 E.

Chains.	
	and raise a mound of earth $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high W. of cor. Continue over plowed land.
60.00	Leave plowed land, extending 2.00 chs. E. and 10.00 chs. W.; enter sagebrush.
63.00	Wire fence bearing N.60° 30'W. and S.60° 30'E., being N. bdy. of field. Leave sagebrush; enter cedars and pinon pine timber.
64.20	Road, Blanding to Johnson Canyon, bears N.60° E. and S. 60° W.
67.80	Descend from mesa, bearing NW. and SE., into Johnson Canyon.
69.30	Descend over vertical ledge and rim rock, 100 ft. high, bearing NW. and SE.
69.90	Base of ledges, bearing NW. and SE. Descend rapidly over broken boulders.
71.00	Grayson Irrigation Co. Canal, 10 lks. wide, water 16 ins. deep, flows S.50° E.
73.50	Foot of abrupt descent, 225 ft. below top of mesa. Thence more gradual descent, through oak and service berry undergrowth, and pinon and cedar timber to Johnson Canyon.
80.00	Set an iron post 3 ft. long, 2 ins. in dia., 10 ins. in the ground, to rock, and 14 ins. in mound of stone 2 ft. base, for cor. of secs. 27. 28. 33, and 34, with brass cap marked

T 35 S R 22 E
S 28 | S 27
S 33 | S 34
1915

from which

A cedar, 7 ins. dia. bears N.73° 30'E. 51 lks. dist. marked T 35 S R 22 E S 27 B T

A pinon pine, 9 ins. dia., bears S.24° E. 39 lks. dist., marked T 35 S R 22 E S 34 B T

A pinon pine, 9 ins. dia., bears S.37° 30'W. 82 lks. dist., marked T 35 S R 22 E S 33 B T

A cedar, 8 ins. dia., bears N.12° 15'W. 59 lks. dist., marked T 35 S R 22 E S 28 B T

Corner falls on N. slope, 265 ft. below rim rock, on south

Chains.	
	end of sagebrush opening.
	Land, mesa, and mountains; north 13.00 chs. broken edge of mesa.
	Soil, on mesa, deep, rich, red, sandy loam, 1st rate; on edge of mesa, rocky; 4th rate.
	Timber, cedar and pinon pine.
	Undergrowth, service berry, oak, and sage brush.
	July 20, 1915: At this cor. I set off 20° 47' N. on the decl. arc; and at apparent noon, observe the sun on the meridian; the resulting lat. is 37° 44'.
	East on a random line bet. secs. 27 and 34,
40.00	Set temp. ¼ sec. cor.
79.94	Intersect N. and S. line 3 lks. S. of the cor. of secs. 26, 27, 34, and 35. Thence
	S. 89° 59' W. on a true line bet. secs. 27 and 34,
	Over broken mesa, ascending gradually over SE. slope; through cedar and pinon pine timber, and undergrowth of scattering sagebrush.
3.00	Top of ascent, bearing N. and S. Descend to rim of mesa.
4.20	Broken rim rock, bearing N. 40° W. and S. 40° E.
	Descend abruptly into Johnson Canyon.
12.00	Foot of steep rocky descent, 180 ft. below rim rock; thence across mud slide draining S.
	Leave timber, bearing NW. and SE.
19.00	Leave mud slide and re-enter timber, bearing NW. and SE.
	Ascend.
21.00	Spur, projects S. 20° E. 5.00 chs., 60 ft. above mud slide.
26.00	Descend to gulch.
28.00	Gulch, 95 ft. below spur, drains S. Ascend.
31.00	Spur, projecting S., 80 ft. above gulch. Descend.
38.50	Gulch, drains S.
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

Subdivision of T.35 S., R.22 E

Chains	
	$\frac{1}{4}$ S 27 / S 34 / 1915
	from which
	A pinon pine, 7 ins.dia.bears S.23° 45'E.59 lks. dist., marked $\frac{1}{4}$ S 34 B T
	A cedar 9 ins.dia.bears N.47° E. 60 lks.dist. marked $\frac{1}{4}$ S 27 B T
	Corner falls on east side of bottom of gulch, 90 ft.below spur. Continue descent.
40.30	Gulch, 10 ft.below $\frac{1}{4}$ sec.cor., drains S. Ascend.
41.50	Spur, projecting S.3.00 chs., 30 ft.above gulch. Descend.
47.00	Foot of descent, 60 ft.below spur. Thence over bottom of Johnson Canyon.
51.05	Johnson Creek, course S.20° E., 70 lks.wide, water in holes.Leave cedar and pinon pine timber; and ascend form creek,through dense oak and service berry brush.
62.20	Leave dense oak and service berry brush; enter cedar and pinon pine timber.
79.94	The cor.of secs.27,28,33, and 34,110 ft.above creek.
	Land, rough,mountainous, draining from NE.to SW.,from slopes of canyon, into Johnson Creek.
	Soil, rocky; 4th rate. Timber, cedar and pinon pine.
	Undergrowth, oak and service berry brush, and scattering sagebrush. July 20, 1915.
	July 22, 1915:For solar obsn.see line bet.secs.32 and 33.
	N.0° 02'W.bet.secs.27 and 28,
	Over mountainous land descending to Johnson Creek; over open sagebrush park.
8.00	Leave sagebrush park;enter cedar and pinon pine timber bearing E.and W.
20.00	Enter scattering yellow pine timber and dense oak brush.
23.50	Johnson Creek,30 lks.wide,water in holes only,course S. 50° E.,105 ft.below sec.cor.
35.00	Leave scattering yellow pine timber.
36.50	Window in cliff dweller's ruin in ledge bears N.30°33'E.
40.00	Set an iron post 3 ft.long, 1 in.in dia., 26 ins.in the

Chains	
	for ¼ sec. cor., with brass cap marked
	¼ S 28 | S 27
	1915
	from which
	A cedar, 7 ins. dia., bears S.65°E.,
	22 lks. dist. mkd. ¼ S 27 B T.
	A pinon, 9 ins. dia., bears S.34°15'W.,
	21 lks. dist. mkd. ¼ S 28 B T.
	Corner falls on slope 210 ft. above creek.
	Ascend rapidly over broken boulders to rim of mesa.
	July 22, 1915.
	July 27: At 2h p.m. apparent time, I set off 37°44'30" on the lat. arc, 19°20'N. on the decl. arc, and determine a meridian with the solar
	Thence at
49.26	Same window in ruin bears N.70°20'E.
56.70	Huge boulder 50x20x30 ft. high, east of line 50 lks. Old Aztec ruin on top. Descend.
62.50	Base of ledges and rim rock bearing N.6°W. and S.6°E. Asc.
63.10	Top of ledge, 125 ft. above the ¼ sec. cor. bears SE. and NW. Thence over uneven mesa, through cedar and pinon timber and undergrowth of oak and service berry brush.
80.00	Set an iron post, 3 ft. long, 2 ins. in dia., 8 ins. in earth to rock and 18 ins. in mound of stone 2 ft. base, for the cor. of secs. 21, 22, 27 and 28, mkd. on brass cap
	T 35 S R 22 E S 21 | S 22 S 28 | S 27 1915
	from which
	A pinon, 7 ins. dia., bears N.79°45'E.,
	34 lks. dist, mkd. T 35 S R 22 E S 22 B T.
	A pinon, 9 ins. dia., bears S.66°15'E.,
	24 lks. dist. mkd. T 35 S R 22 E S 27 B T.
	A pinon, 8 ins. dia., bears S.81°W.,
	43 lks. dist. mkd. T 35 S R 22 E S 28 B T.
	A cedar, 7 ins. dia., bears N.32°30'W.,

Chains	
	23 lks. dist. mkd. T 35 S R 22 E S 21 B T.
	Land rough mountains draining S. from steep slopes.
	Soil rocky and stony, 4th rate.
	Timber cedar, pinon and scattering yellow pine.
	Undergrowth oak, service berry and sage brush.
	N.89°59'E. on a random line bet. secs. 22 and 27.
40.00	Set temp. ¼ sec. cor.
79.93	Intersect N. and S. line 9 lks. S. of the cor. of secs. 22, 23, 26 and 27.
	Thence
	S.89°55'W. on a true line bet. secs. 22 and 27.
	Ascending over bench land through cedar and pinon timber and undergrowth of oak, service berry and sage brush.
30.93	Begin abrupt ascent, 75 ft. to
33.33	Edge of mesa, rim rock ledges, bearing N.8°W. and S.30°E.
39.96½	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. of secs. 22 and 27, mkd. on brass cap
	¼ S 22 / S 27 1915
	from which
	A pinon 10 ins. dia., bears N.58°30'E., 61 lks. dist. mkd. ¼ S 22 B T.
	A pinon, 8 ins. dia., bears S.15°15'E., 31 lks. dist. mkd. ¼ S 27 B T.
	Corner falls on slope 33 ft. above edge of mesa.
49.93	Enter sagebrush park bearing N. and S.
51.93	Leave sagebrush park bearing N. and S.
54.95	Ridge bearing N. and S. 60 ft. above ¼ sec. cor.
	Descend to
62.81	Bottom of draw draining S.10°W. Scattering yellow pine timber in bottom; 122 ft. below ridge.
	Thence ascend to mesa.

SUBDIVISIONS T. 35 S. R. 22 E.

Chains	
74.93	Over mesa land, through cedars and pinon timber and undergrowth of oak and service berry brush.
79.93	The cor. of secs. 21, 22, 27 and 28.
	Land broken mesa and canyon with steep slopes SE.
	Soil on mesa gravelly and sandy, 2nd rate; on slopes rocky, 4th rate, except on bench land on E. slope from mesa, which is brown sandy loam, 2nd rate.
	Timber pinon, cedar and scattering yellow pine.
	Undergrowth oak, service berry and sage brush.
	July 27, 1915.
	July 30: For solar observation see line bet. secs. 21 and 28.
	N.0°02'W. on a true line bet. secs. 21 and 22.
	Over broken mesa land, ascending gradually through cedar and pinon timber and undergrowth of oak, scattering sage and service berry brush.
30.00	Top of ascent bearing NE. and SW. 60 ft. above the cor.
	Descend gradually along NW. slope.
40.00	Set an iron post, 3 ft. long, 1 in. in dia., 6 ins. in the ground to solid rock and 20 ins. in mound of stone 3 ft. base, for the ¼ sec. cor. of secs. 21 and 22, mkd. on brass cap ¼ S 21 | S 22 1915 from which A pinon, 15 ins. dia., bears N.37°30'E., 13 lks. dist. mkd. ¼ S 22 B T. A pinon, 9 ins. dia., bears S.71°W., 56 lks. dist. mkd. ¼ S 21 B T.
	Corner falls 1.50 chs. E. of W. rim of mesa.
	July 30: At apparent noon I set off 18°39'N. on the decl. arc, and observe the sun on the meridian, the resulting lat. is 37°45'.
43.60	W. rim of mesa bearing N.20°E. and S.20°W.
	Descend over broken rim rock ledges.

SUBDIVISIONS T. 35 S. R. 22 E.

Chains	
	Timber becomes more dense.
72.50	Canyon, 245 ft. below rim rock, drains S.15°W. Ascend abruptly.
78.10	Spur projecting E. 1 ch. 105 ft. above canyon. Descend.
79.30	Gulch drains S.30°E. 40 ft. below spur.
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 35 S R 22 E
S 16 | S 15
S 21 | S 22
1915

from which

A cedar, 10 ins. dia., bears N.7°E., 56 lks. dist. mkd. T 35 S R 22 E S 15 B T.
A cedar, 8 ins. dia., bears S.84°E., 91 lks. dist. mkd. T 35 S R 22 E S 22 B T.
A cedar, 8 ins. dia., bears S.43°45'W., 49 lks. dist. mkd. T 35 S R 22 E S 21 B T.
A cedar, 7 ins. dia., bears N.33°30'W., 48 lks. dist. mkd. T 35 S R 22 E S 16 B T.

Land broken mesa and rough NW. face of slopes draining SW.

Soil on mesa red loam, shallow, 2nd rate; on slopes rocky 4th rate.

Timber cedar and pinon pine.

Undergrowth oak, scattering sage and service berry brush.

	N.89°55'E. on a random line bet. secs. 15 and 22.
40.00	Set temp. ¼ sec. cor.
79.75	Intersect the cor. of secs. 14, 15, 22 and 23
	Thence
	S.89°55'W. on a true line bet. secs. 15 and 22.
	Over mountainous land, descending over canyon bottom through dense oak and service undergrowth and scattering yellow pine timber to Recapture Creek.
1.00	Recapture Creek, 10 lks. wide, 6 ins. deep, course

SUBDIVISIONS T. 35 S. R. 22 E.

Chains	
	S.10°E, 5 ft. below the cor. Ascend abruptly.
12.55	Spur projects S.45°E. 120 ft. above the cor. Descend.
14.63	Gulch draining S. 40 ft. below spur. Ascend.
22.00	Spur projects S.45°E. 90 ft. above gulch. Descend.
24.78	Gulch draining S.40°E. 25 ft. below spur.
39.87½	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground for the ¼ sec. cor. of secs. 15 and 22, mkd. on brass cap
	¼ S 15 / S 22 / 1915
	from which
	A pinon, 6 ins. dia., bears S.11°45'E., 48 lks. dist. mkd. ¼ S 22 B T.
	No other bearing trees available, raise a mound of stone 2 ft. base, 1½ ft. high N. of cor.
	Corner falls on rock ridge bearing NW. and SE. 155 ft. above gulch.
	Descend abruptly over mud slides.
53.90	Gulch, mud slide, drains SE.
	Ascend to rim of mesa through cedar and pinon timber.
60.05	Rim rock ledge, E. edge of mesa, bears NE. and SW. 180 ft. above gulch. Thence over mesa.
69.40	W. edge of mesa. Descend over rim rock bearing NW. and SW.
74.00	Gulch drains SW. 195 ft. below rim rock. Ascend
78.05	Spur projects SW. 40 ft. above gulch. Descend
79.75	In gulch draining SE. The cor. of secs. 15, 16, 21 and 22.
	Land mountainous, rocky slopes, draining from mesa E. into Recapture and W. into Johnson Canyon.
	Soil rocky and muddy, 4th rate.
	Timber cedar, pinon and scattering yellow pine.
	Undergrowth oak and service berry brush.
	July 30, 1915.

Chains	
	Aug. 13: At 8h a.m. apparent time I set off 37°45' on the lat. arc, 14°54'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'W. on a true line bet. secs. 15 and 16.
	Over rough mountainous land, ascending from gulch through cedar and pinon timber and undergrowth of oak and service berry brush.
6.20	Top of ascent, spur bearing E. and W. 150 ft. above the cor.
	Thence gradually ascend over mesa.
26.50	Descend from mesa bearing NW. and SE. to gulch
28.60	Gulch draining East 25 ft. below top, empties into canyon draining S. at 2 chs. East. Ascend.
33.60	Top of ascent 30 ft. below gulch, bearing NE. and SW. Thence along W. slope of head of canyon, entering yellow pine timber.
40.00	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. of secs. 15 and 16, mkd. on brass cap
	¼ S 16 | S 15 1915
	from which
	A yellow pine, 18 ins. dia., bears S.76°E., 204 lks. dist. mkd. ¼ S 15 B T.
	A cedar, 7 ins. dia., bears N.18°W., 14 lks. dist. mkd. ¼ S 16 B T.
	Continue along head of canyon
57.00	Draw draining S.20°E.
72.00	Leave draw draining from N.20°W. to S.
80.00	Set an iron post, 3 ft. long, 2 ins. in dia., 26 ins. in the ground for the cor. of secs. 9, 10, 15 and 16, mkd. on brass cap
	T 35 S R 22 E S 9 | S 10 S 16 | S 15 1915

SUBDIVISION OF T.35 S., R.22 E.

Chains.	
	from which
	A cedar, 7 ins.dia., bears N.49° E. 39 lks.dist. marked T 35 S R 22 E S 10 B T
	A cedar, 8 ins.dia.bears S.65° E. 21 lks.dist. marked T 35 S R 22 E S 15 B T
	A pinon pine, 6 ins.dia., bears S.39° 30'W. 35 lks.dist., marked T 35 S R 22 E S 16 B T
	A pinon pine, 10 ins.dia., bears N.64° W. 25 lks. dist., marked T 35 S R 22 E S 9 B T
	Corner stands on slope facing S., 190 ft.above the ¼ sec. cor., in cedar and pinon pine timber and scrub oak underbrush.
	Land, mountainous, draining SE.
	Soil, gravelly and stony; 3d rate.
	Timber, cedar, pinon pine and scattering yellow pine.
	Undergrowth oak and service berry brush.
	Aug.13: At this cor.I set off 14° 51'N.on the decl.arc; and at apparent noon observe the sun on the meridian; the resulting lat.is 37° 46'.
	N.89° 55'E.on a random line bet.secs.10 and 15,
40.00	Set temp.¼ sec.cor.
80.10	Intersect N.and S.line 12 lks.N.of the cor.of secs.10,11, 14, and 15. Thence
	West, on a true line bet.secs.10 and 15,
	Descending through cedar and pinon pine timber and undergrowth of oak and service berry brush.
2.97	Recapture Creek, 10 lks.wide, good water, swift current, 10 ins.deep, course S.10° W. Ascend.
17.90	Spur, projecting SE., 115 ft.above creek. Descend.
31.10	Draw, draining S.40° E., 50 ft.below spur. Ascend.
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 ¼ S 10 / S 15 / 1915

SUBDIVISION OF T.35 S., R.22 E.

Chains.	
	from which
	A pinon pine, 8 ins. dia., bears N.4° 30'E. 72 lks. dist., marked ¼ S 10 B T
	A pinon pine, 8 ins. dia. bears S.20° E. 93 lks. dist., marked ¼ S 15 B T
	Continue ascent; leaving pinon pine and cedar timber.
41.15	Spur, projects S.40° W., 80 ft. above draw. Descend.
45.10	Draw, with mud sides, draining S.30° E.; thence over barren mud slide.
47.10	Leave mud slide; ascend through timber.
53.10	Ridge, bearing N.40° W. and S.40° E., 45 ft. above draw. Descend.
56.10	Gulch, draining S.40° E., 33 ft. below ridge. Ascend.
61.10	Begin abrupt ascent, bearing NW. and SE., 240 ft. above gulch.
67.90	Rim rock, broken ledges, east edge of mesa, bearing N. 20° W. and S.20° E. Thence over mesa.
73.10	Rim of mesa, bearing N. and S. Descend.
80.10	The cor. of secs. 9, 10, 15, and 16., 15 ft. below top of ascent.
	Land, mountainous; draining SE., into Recapture Canyon.
	Soil, gravelly and stony, on rocky subsoil; 3d and 4th rates.
	Timber, cedar and pinon pine.
	Undergrowth oak and service berry.
	August 13, 1915.

Aug. 14, 1915: At 7h 30 m. a. m. apparent time, I set off 37° 46' on the lat. arc; 14° 35' 30" N. on the decl. arc; and determine a meridian with the solar at the cor. of secs. 9, 10, 15, and 16. Thence

N.0° 02' W. bet. secs. 9 and 10,

Over mountainous land; ascending gradually through cedar

SUBDIVISIONS T. 35 S. R. 22 E.

Chains	
	and pinon timber and oak, service berry and sage brush undergrowth.
12.00	Leave pinon and cedar timber bearing E. and W.
15.00	Ridge bearing E. and W.
23.80	Draw drains N.50°E. 35 ft. below ridge.
26.40	Re-enter cedar and pinon timber bearing E. and W.
40.00	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground for the ¼ sec. cor. of secs. 9 and 10, mkd. on brass cap ¼ S 9 | S 10 1915 from which A cedar, 10 ins. dia., bears N.57°30'E., 26 lks. dist. mkd. ¼ S 10 B T. A pinon, 9 ins. dia., bears S.45°W., 50 lks. dist. mkd. ¼ S 9 B T. Corner stands on mesa, 40 ft. above draw.
51.00	Descend to ledges, E. rim of mesa, 15 ft. above cor. at point of descent.
52.00	Broken ledges, rim rock, bearing N.10°W. and S.10°E. 13 ft. below descent. Leave timber bearing N. and S. and enter very dense undergrowth.
	Thence along broken rim mesa top.
	Descend.
56.52	Foot of descent on face of ledges, 55 ft. below rim.
	Ascend.
61.15	Top of point of ledges bearing SW. and NE. 55 ft. above descent. Thence continue over steep E. slope. Descend.
64.00	Foot of descent, 42 ft. below top. Ascend.
75.00	Top of mesa, 40 ft. above foot of descent, bearing N.15°E. and S.15°W.
	Thence continue over mesa, entering yellow pine timber on top.
80.00	Set an iron post, 3 ft. long, 2 ins. in dia., 26 ins. in the ground for the cor. of secs. 3, 4, 9 and 10, mkd. on brass cap

SUBDIVISIONS T. 35 S. R. 22 E.

Chains

T 35 S R 22 E

S 4	S 3
S 9	S 10

1915

from which

A pinon, 6 ins. dia., bears N.49°E.,
13 lks. dist. mkd. T 35 S R 22 E S 3 B T.
A pinon, 10 ins. dia., bears S.82°15'E.,
68 lks. dist. mkd. T 35 S R 22 E S 10 B T
A yellow pine, 24 ins. dia., bears S.29°15'W.,
254 lks. dist. mkd. T 35 S R 22 E S 9 B T.
A cedar, 18 ins. dia., bears N.36°W.,
67 lks. dist. mkd. T 35 S R 22 E S 4 B T.

Land mesa and broken rim rock.

Soil gravelly red loam, shallow, 3rd rate.

Timber cedar and pinon.

Undergrowth oak and service berry brush.

Aug. 14: Sky overcast at noon, observation for latitude impossible. Cease work on account of rain.

August 14, 1915.

Aug. 16: At 7h a.m. apparent time, I set off 37°47' on the lat. arc, 14°00'N. on the decl. arc, and determine a meridian with the solar at the cor. of secs. 3, 4, 9 and 10. Thence

East on a random line bet. secs. 3 and 10.

40.00 Set temp. ¼ sec. cor.

80.21 Intersect N. and S. line 3 lks. N. of the cor. of secs. 2, 3, 10 and 11.

Thence

N.89°59'W. on a true line bet. secs. 3 and 10.

Over mountainous land, descending through dense undergrowth of oak, service berry and sage brush to W. fork Recapture Canyon.

12.48 Gulch draining SW. Ascend.

15.00 Small spur projecting S. at point 15 ft. above gulch. Descend.

SUBDIVISION OF T.35 S., R.22 E.

Chains.	
17.48	West fork of creek, 5 lks. wide, 3 ins. deep, good water, course S.5° E., 73 ft. below spur.
18.88	Another fork of creek, 3 lks. wide, 6 ins. deep, course S. 15° E. This creek joins former creek 3.00 chs. SE. Asc.
19.38	Ascend more abruptly; enter scattering yellow pine.
40.10½	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 3 / S 10 / 1915
	from which
	A yellow pine, 26 ins. dia., bears S.23° 30'E. 135 lks. dist., marked ¼ S 10 B T
	No other bearing trees available; raise a mound of stone 2 ft. base, 1½ ft. high N. of cor.
	Corner falls 40 ft. above creek.
	Continue ascent over even land to top of mesa.
66.43	Knoll on line.
76.06	Top of mesa, 425 ft. above ¼ sec. cor., bearing N.10° E. and S.10° W. Thence over mesa.
80.21	The cor. of secs. 3, 4, 9, and 10.
	Land, mountainous, draining SE. into Recapture Creek.
	Soil, gravelly, stony, and shallow; 3d rate.
	Timber, scattering yellow pine.
	Undergrowth oak, service berry brush and sagebrush.
	August 16, 1915.

	Aug. 17, 1915: For solar observation see line bet. secs. 2 and 3.
	N.0° 02'W. on a random line bet. secs. 3 and 4,
40.00	Set temp. ¼ sec. cor.
79.47	Intersect N. bdy. of Tp. 1 lk. E. of the cor. of secs. 3, 4, 33, and and 34, heretofore described. Thence
	S.0° 02'E. on a true line bet. secs. 3 and 4,
	Ascending through scattering yellow pine, cedar and pinon

SUBDIVISION OF T.35 S., R.22 E.

Chains.	
	pine timber, and oak, service berry and sagebrush undergrowth.
14.46	Spur, projecting E.2.00 chs. Descend.
16.23	Gulch, draining E., 6 ft.below spur. Ascend.
21.97	Spur, projecting E.3.00 chs.,66 ft.above gulch. Descend.
25.97	Gulch, draining N.50° E., 15 ft.below spur. Ascend.
38.47	Top of ascent, 50 ft.above gulch.
39.47	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 4 | S 3 1915
	Raise a mound of stone 2 ft.base, 1½ ft.high W.of cor. Descend.
55.47	Draw, draining S.15° E.
64.47	Leave undergrowth; enter timber, bearing E.and W.
79.47	The cor.of secs.3,4,9,and 10, 33 ft.below ¼ sec. cor.
	Land, mountainous, draining E.
	Soil, gravelly and stony, partly mixed with black loam; 3d rate.
	Timber, yellow pine, cedar and pinon pine.
	Undergrowth, oak, service berry and sagebrush.
	August 17, 1915.

July 22, 1915: At 7h a.m.apparent time I set off 37° 43' on the lat.arc; 20° 27'N.on the decl.arc; and determine a meridian with the solar at the standard cor.of secs. 32 and 33, on the S.bdy.of the Tp., which is an iron post 3 ins.dia., firmly set and marked and witnessed as described by the surveyor general. Thence

N.0° 03'W.bet.secs.32 and 33,

Descending over rough mesa; through cedar and pinon timber, and oak, service berry, and scattering sagebrush undergrowth.

3.00	Head of gulch, draining S.70° W.
4.50	Top of ledges bearing E.and W.,20 ft.above gulch. Ascend.

Chains	
14.00	Top of ascent bearing NE. and SW. Thence over uneven mesa.
22.50	Descend to draw, leaving timber.
30.00	Enter scattering cedar and pinon timber.
32.50	Draw draining S.40°E., 32 ft. below top of ascent.
40.00	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground for the ¼ sec. cor. of secs. 32 and 33, mkd. on brass cap ¼ S 32 | S 33 1915 from which A cedar, 8 ins. dia., bears S.30°W., 135 lks. dist. mkd. ¼ S 32 B T. A pinon, 8 ins. dia., bears S.55°30'E., 68 lks. dist. mkd. ¼ S 33 B T.
40.51	Five-wire fence bearing N.64°W. and S.64°E. for 150 ft, thence N. South end of A.A.Porter's improvement. Thence leave timber bearing E. and W. and continue over sage brush undergrowth.
47.50	Enter cedars and pinon timber bearing E. and W.
53.00	Leave cedars and pinon timber bearing E. and W. enter sage brush undergrowth.
64.50	Open draw draining S.45°E.
66.00	Enter cedar and pinon timber bearing E. and W.
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 35 S R 22 E. S 29 | S 28 S 32 S 33. 1915 from which A cedar, 10 ins. dia., bears N.37°E., 35 lks. dist. mkd. T 35 S R 22 E S 28 B T. A cedar, 8 ins. dia., bears S.10°30'E., 37 lks. dist. mkd. T 35 S R 22 E S 33 B T.

SUBDIVISIONS T. 35 S. R. 22 E.

Chains	
	A pinon, 6 ins. dia., bears S.42°W., 35 lks. dist. mkd. T 35 S R 22 E. S 32 B T.
	A cedar, 9 ins. dia., bears N.61°W., 44 lks. dist. mkd. T 35 S R 22 E S 29 B T.
	Land uneven mesa draining S.
	Soil slopes gravelly, 3rd rate; mesa red, sandy loam, 1 ft. or more deep, 2nd rate.
	Timber cedar and pinon.
	Undergrowth oak, service berry and sage brush.
	East on a random line bet. secs. 28 and 33.
40.00	Set temp. ¼ sec. cor.
	July 22: At apparent noon I set off 20°24'N. on the decl. arc, and observe the sun on the meridian, the resulting lat. is 37°44'.
79.94	Intersect the cor. of secs. 27, 28, 33 and 34.
	Thence
	West on a true line bet. secs. 28 and 33.
	Ascending through cedar and pinon timber and sage brush undergrowth.
9.94	Abrupt ascent bearing NW. and SE.
13.44	Grayson Irrigation Co. Canal, 10 lks. wide, water 8 ins. deep, course S.60°E.
	Ascend abruptly.
17.94	100 ft. ledges bearing N.60°W. and S.60°E.
19.94	Leave cedar timber bearing NW. and SE.
[illegible]	Asc., from Johnson Canyon, to mesa.
26.69	Road along fence bearing N.64°W. and S.64°E. Blanding to Johnson Canyon.
26.79	Four-wire fence, N. bdy. Redd's field bearing N.64°W. and S.64°E.
34.06	Gate in fence bears N.18°40'W.
34.81	Four-wire fence, Redd's field bearing N.1°25'W. and S.1°25'E. Thence in lane.
35.54	Five-wire fence bearing N.1°25'W. and S.1°25'E. Leave lane.

SUBDIVISIONS T. 35 S. R. 22 E.

Chains	
39.97	Set an iron post, 3 ft. long, 1 in. in dia.,26 ins. in the ground for the ¼ sec. cor. of secs. 28 and 33, mkd. on brass cap ¼ S 28 / S 33 / 1915 dig pits 18x18x12 ins. E. and W. of post, 3 ft. dist. and raise a mound of stone 2 ft. base, 1½ ft. high N. of cor.
46.16	Gate in fence bears N.74°E.
	Enter timber bearing NW. and SE.
52.44	Leave timber bearing NW. and SE.
61.94	Draw, 35 ft. deep, draining S.
71.94	Enter cedar and pinon timber bearing NW. and SE.
	Thence over mesa sloping S. through cedar and pinon to
79.94	The cor. of secs. 28, 29, 32 and 33.
	Land mesa and steep NE. canyon slopes.
	Soil mesa red, sandy loam 1 ft. or more deep, 2nd rate, on canyon slope rocky, 4th rate.
	Timber cedar and pinon.
	Undergrowth sage brush.
	July 22, 1915.
	July 23: For solar observation see line bet. secs. 31 and 32.
	N.0°03'W. on a true line bet. secs. 28 and 29.
	Over mesa land ascending gradually through cedar and pine timber.
6.00	Top of ascent.
10.00	Draw, 20 ft. below top of ascent, drains S.60°E.
11.20	Newly broken road bearing N.60°W. and S.60°E. to Porter's place.
28.00	Draw draining S.40°E.
40.00	Set an iron post, 3 ft. long, 1 in. in dia.,26 ins. in the ground for the ¼ sec. cor. of secs. 28 and 29, mkd. on brass cap ¼ S 29 | S 28 1915

SUBDIVISIONS T. 35 S. R. 22 E.

Chains	
	from which
	A pinon, 10 ins. dia., bears S.60°30'E., 14 lks. dist. mkd. ¼ S 28 B T.
	A pinon, 10 ins. dia., bears S.61°W., 28 lks. dist. mkd. ¼ S 29 B T.
49.50	Descend to rim of mesa.
51.00	Rim rock ledges, south wall of Johnson Canyon, bearing N.50°W. and S.50°E. Descend.
56.00	Foot of descent. Leave timber bearing NW. and SE. enter dense oak, service berry and sage brush undergrowth. 210 ft. below canyon bench.
67.50	Enter cedar and pinon timber bearing E. and W.
73.40	Leave cedar and pinon timber bearing E. and W.
79.00	Enter scattering cedar and pinon timber.
80.00	Set an iron post, 3 ft. long, 2 ins. in dia., 26 ins. in the ground for the cor. of secs. 20, 21, 28 and 29, mkd. on brass cap

T 35 S R 22 E
S 20 | S 21
S 29 | S 28
1915

from which

A pinon, 9 ins. dia., bears S.51°W., 40 lks. dist. mkd. T 35 S R 22 E S 29 B T.

A pinon, 6 ins. dia., bears N.9°15'W., 93 lks. dist. mkd. T 35 S R 22 E S 20 B T.

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

Land mesa and steep slopes of canyons.

Soil mesa sandy, red loam, 1 ft. or more deep, 2nd rate; on canyon slope rocky 4th rate; on bench in canyon light, brown, sandy, gravelly, and shallow, 3rd rate.

Timber cedar and pinon.

Undergrowth oak, service berry and sage brush.

July 23, 1915.

July 30: At 8h a.m. apparent time, I set off 37°45' on

SUBDIVISIONS T. 35 S. R. 22 E.

Chains	
	the lat. arc, 18°42'N. on the decl. arc, and determine a meridian with the solar at the cor. of secs. 20, 21, 28 and 29.
	Thence
	East on a random line bet. secs. 21 and 28.
40.00	Set temp. ¼ sec. cor.
80.04	Intersect the cor. of secs. 21, 22, 27 and 28.
	Thence
	West on a true line bet. secs. 21 and 28.
	Over mesa through sage brush undergrowth.
2.04	Descend from mesa, bearing NW. and SE; through cedar and pinon pine timber.
4.34	Base of ledges, rim rock, bears N.10°W. and S.10°E. Descend.
25.54	Johnson Creek, 60 lks. wide, rocky bottom, water in holes, draining S.
40.02	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground for the ¼ sec. cor. of secs. 21 and 28, mkd. on brass cap ¼ S 21 S 28 1915 from which A pinon, 6 ins. dia., bears N.28°W., 27 lks. dist. mkd. ¼ S 21 B T. A pinon, 6 ins. dia., bears S.57°W., 47 lks. dist. mkd. ¼ S 28 B T. Corner falls on SE. slope.
41.54	Wash draining S.50°E.
47.34	Canal Grayson Irrigation Co. 10 lks. wide, 10 ins. deep, water 3 ft. per second; course S.10° E.
60.04	Leave sagebrush park, about one acre.
62.04	Leave cedar and pinon timber bearing NW. and SW.
66.04	Road bearing S.40°W. and N.40°E. Blanding to head of Canal. Thence ascend over bench in canyon, through sagebrush undergrowth to
80.04	The cor. of secs. 20, 21, 28 and 29, 40 ft. above wash.

Chains	
	Land mountainous with slopes to S. over bottom of Johnson Canyon, draining from E. to W.
	Soil on bench light, brown, sandy loam, good for cultivation, 2nd rate; on slopes rocky, 4th rate.
	Timber cedar and pinon.
	Undergrowth, sagebrush. July 30, 1915.
	Aug. 2: For solar observation see line bet. secs. 19 and 20.
	N. 0°03'W. on a true line bet. secs. 20 and 21.
	Over bench land sloping E. through sagebrush undergrowth to Johnson Canyon.
10.80	Enter cedar and pinon timber bearing NE. and SW.
34.50	Cedar becomes scattering, enter oak and serviceberry undergrowth bearing NE. and SW.
38.70	Leave timber, enter sagebrush.
40.00	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground for the ¼ sec. cor. of secs. 20 and 21, mkd. on brass cap ¼ S 20 | S 21 1915 from which A cedar, 9 ins. dia., bears N.49°30'W., 38 lks. dist. mkd. ¼ S 20 B T. No other bearing tree available, dig pits 18x18x12 ins. N. and S. of post, and raise a mound of earth, 3½ ft. base, 1½ ft. high W. of cor.
51.30	Enter scattering cedar and pinon timber and oak and service berry undergrowth.
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 35 S R 22 E S 17 | S 16 S 20 | S 21 1915

SUBDIVISIONS T. 35 S. R. 22 E.

Chains	
	from which
	A pinon, 9 ins. dia., bears N.64°45'E., 152 lks. dist. mkd. T 35 S R 22 E S 16 B T.
	A pinon, 8 ins. dia., bears S.56°30'E., 166 lks. dist. mkd. T 35 S R 22 E S 21 B T.
	A pinon, 10 ins. dia., bears S.23°30'W., 109 lks. dist. mkd. T 35 S R 22 E S 20 B T.
	A pinon, 11 ins. dia., bears N.81°15'W., 363 lks. dist. mkd. T 35 S R 22 E S 17 B T.
	Land, bench on W. side of canyon draining E.
	Soil light, brown, sandy loam, 1 ft. or more deep, some gravel, 2nd rate. Good for cultivation.
	Timber cedar and pinon.
	Undergrowth oak, service berry and sage brush.
	East on a random line bet. secs. 16 and 21.
40.00	Set temp. ¼ sec. cor.
79.75	Intersect N. and S. line 8 lks. N. of the cor. of secs. 15, 16, 21 and 22.
	Thence
	N.89°57'W. on a true line bet. secs. 16 and 21.
	Ascending from canyon through sagebrush undergrowth.
6.05	Continue ascent over point of spur to mesa.
8.35	Top of rim rock, edge of mesa bearing NE. and SW. Descend abruptly; through dense cedar and pinon pine.
8.55	Base of rim rock bearing N. and S.
12.85	Descend more rapidly; into Johnson Creek.
33.25	Leave dense cedar and pinon timber bearing N. and S.
39.47½	Quarter section corner will fall on creek bank, therefore at this point I set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground for the witness corner to ¼ sec. cor., with brass cap marked T 35 S R 22 E S 16 —o WC¼ S 21 1915
	from which

Chains

An aspen, 7 ins. dia., bears N.40°W.,
26 lks. dist. mkd. WC ¼ S 16 B.T.
An aspen, 10 ins. dia., bears S.6°45'W.,
44 lks. dist. mkd. WC ¼ S 21 B.T.

35.87½ True point for ¼ sec. cor. falls on N. bank of creek. Cor. not set.

Descend abruptly to

40.35 Johnson Creek bottom, 50 lks. wide, rocky, small trickle of water, course S.. Some aspen timber in creek bottom. Enter cedar timber.

41.50 Grayson Irrigation Co. Canal, 10 lks. wide, 10 ins. deep, flows 3 ft. per second, course S. The intake is about 12 chs. N.

72.75 Leave dense oak and service berry undergrowth. Thence through heavy timber.

76.75 Leave heavy timber.

Thence ascend over E. slope of bench, through sagebrush undergrowth and pinon and cedar timber to

79.75 The cor. of secs. 16, 17, 20 and 21.

Land mountainous with steep E. and W. slopes into Johnson Creek; bench on W. side.

Soil on bench light brown, sandy loam 8 ins. deep, 2nd rate, good for cultivation; on slopes rocky 4th rate.

Timber cedar, pinon and some aspen in creek bottom.

Undergrowth sagebrush.

August 2, 1915.

Aug. 19: At 7h a.m. apparent time, I set off 37°45'30' on the lat. arc, 13°1'30"N. on the decl. arc, and determine a meridian with the solar at the cor. of secs. 16, 17, 20 and 21.

Thence

N.0°03'W. on a true line bet. secs. 16 and 17.

Ascending gradually over bench land, through scattering cedar and pinon timber and sagebrush flats.

6.50 Enter dense cedar and pinon timber bearing E. and W.

SUBDIVISIONS T. 35 S. R. 22 E.

Chains	
10.00	Leave dense cedar and pinon and enter scattering timber, bearing NE. and SW.
	Top of ascent 30 ft. above the cor.
14.48	Gulch drains S.60°E. 48 ft. below the top.
40.00	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground for the ¼ sec. cor. of secs. 16 and 17, mkd. on brass cap
	¼ S 17 | S 16 1915
	from which
	A pinon, 12 ins. dia., bears S.29°E., 132 lks. dist. mkd. ¼ S 16 B T.
	No other bearing tree available, dig pits 18x18x12 ins. N. and S. of post, 3 ft. dist. and raise a mound of earth 3½ ft. base, 1½ ft. high W. of cor.
	Corner falls on slope 20 ft. above gulch.
41.50	Wash course E.
60.08	Gulch draining NE. 23 ft. below the ¼ sec. cor. Ascend.
66.69	Spur projects East 55 ft. above gulch. Enter dense oak brush undergrowth. Descend.
71.67	Wash course E. 25 ft. below spur. Ascend.
74.56	Spur projects SE. 33 ft. above wash. Descend.
78.15	Wash course SE. 15 ft. below spur. Ascend.
80.00	Set an iron post, 3 ft. long, 2 ins. dia., 26 ins. in the ground for the cor. of secs. 8, 9, 16 and 17, mkd. on brass cap
	T 35 S R 22 E S 8 | S 9 S 17 | S 16 1915
	from which
	A pinon, 9 ins. dia., bears N.19°E., 147 lks. dist. mkd. T 35 S R 22 E S 9 B T.
	A cedar, 9 ins. dia., bears N.15°45'W., 110 lks. dist. mkd. T 35 S R 22 E S 8 B T..
	No other bearing trees available, raise a mound of stone 2 ft. base, 1½ ft. high W. of cor.

Chains	
	Corner falls 12 ft. above bottom of wash.
	Aug. 19: At apparent noon I set off 12°58'N. on the decl. arc, and observe the sun on the meridian, the resulting lat. is 37°46'.
	Land uneven bench sloping SE.
	Soil shallow gravelly, sandy light brown, coarse loam, 3rd rate.
	Timber cedar and pinon.
	Undergrowth oak and sagebrush.
	S.89°57'E. on a random line bet. secs. 9 and 16.
40.00	Set temp. ¼ sec. cor.
79.82	Intersect the N. and S. line 16 lks. N. of the cor. of secs. 9, 10, 15 and 16.
	Thence
	N.89°50'W. on a true line bet. secs. 9 and 16.
	Descending through dense timber.
3.72	Draw draining SE.
	Thence ascend to mesa through dense timber and scattering oak and service berry brush.
15.92	Top of rim rock, 15 ft. above draw.
16.62	Rim rock ledges, W. rim of mesa. Descend abruptly.
20.82	Draw draining SW. Ascend.
28.62	Flat top of spur projecting SW. 25 ft. above draw.
39.71	Point for ¼ sec. cor. falls in gully in gulch, therefore I set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground for witness cor. to ¼ sec. cor., mkd. on brass cap T 35 S R 22 E ¼ S 9 S 16 — W C ¼ 1915
	from which
	A cedar, 10 ins. dia., bears N.18°E., 55 lks. dist. mkd. WC ¼ S 9 B T.
	A cedar, 13 ins. dia., bears S.4°45'E., 13 lks. dist. mkd. WC ¼ S 16 B T.

SUBDIVISION OF T.35 S., R.22 E.

Chains.	
39.91	True point for ¼ sec. cor. falls in gulch; cor. not set.
	Ascend.
48.46	Flat ridge bearing N. and S.
54.92	Leave cedar and pinon pine timber; enter dense oak and service berry undergrowth, bearing NW. and SE. Descend abruptly.
59.27	East bank of Johnson Creek.
61.67	West bank of Johnson Creek, average width of stream 10 lks.; good water, 6 ins. deep; rocky bottom, course SE., 267 ft. below top of rim rock.
	Ascend abruptly.
74.72	Leave dense service berry and oak undergrowth; enter cedar and pinon pine, bearing NW. and SE.
76.32	Spur, projects SE.
77.27	Leave timber, bearing NW. and SE. Thence descend over mountainous land; through scattering pinon pine and cedar timber.
79.32	The cor. of secs. 8, 9, 16, and 17, 33 ft. below spur.
	Land mountainous; steep east and west slopes, draining into Johnson Creek.
	Soil, rocky; 4th rate.
	Timber, cedar and pinon pine.
	Undergrowth, service berry, sage, and oak brush.
	August 19, 1915.

	Aug. 20, 1915: For solar observation sde line bet. secs. 17 and 18.
	N. 0° 03' W. bet. secs. 8 and 9,
	Ascending over mountainous land to spur; through service berry and oak brush; and scattering cedar and pinon pine timber.
1.50	Enter more dense timber, bearing NW. and SE.
6.30	Leave timber, bearing NW. and SE.; enter oak and service berry undergrowth.
7.40	Spur, 80 ft. high, projects SE.

Chains.	
15.16	Gulch draining SE., 48 ft. deep. Ascend.
16.84	Enter cedar and pinon pine timber, bearing NW. and SE.
21.12	Spur, 60 ft. high, projects E. Descend.
25.20	Timber becomes scattering.
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 8 | S 9 1915 from which A pinon pine, 7 ins. dia., bears S. 74° W. 25 lks. dist., marked ¼ S 8 B T A pinon pine, 8 ins. dia., bears S. 66° E. 11 lks. dist., marked ¼ S 9 B T Corner falls on NE. slope, 40 ft. below spur. August 20, 1915. Aug. 21, 1915: At this cor. I set off 37° 46' on the lat. arc; 12° 22' N. on the decl. arc; and determine a meridian with the solar.
44.97	Leave timber, bearing NW. and SE.; enter dense oak brush.
54.26	Gulch, 66 ft. below ¼ sec. cor., drains E. Scattering yellow pine up the canyon.
71.17	Enter bottom of Johnson Creek, stream 12 lks. wide, good water 6 ins. deep, 29 ft. below gulch. Thence ascend along N. side of bottom; through aspen timber and dense oak brush.
80.00	Set an iron post 3 ft. long, 2 ins. in dia., 26 ins. in the ground, for cor. of secs. 4, 5, 8, and 9, with brass cap marked T 35 S R 22 E S 5 | S 4 S 8 | S 9 1915 from which An aspen, 6 ins. dia., bears N. 79° 30' W. 80 lks. dist., marked T 35 S R 22 E S 5 B T An aspen, 6 ins. dia., bears S. 65° 15' W. 83 lks. dist., marked T 35 S R 22 E S 8 B T

Chains.	
	No other bearing trees available; raise a mound of stone 2 ft. base, 1½ ft. high W. of cor.
	Land, mountainous, draining E. into Johnson Creek.
	Soil, rocky, sandy, and gravelly; 4th rate.
	Timber, cedar, pinon pine, and scattering yellow pine and aspen.
	Undergrowth, oak, service berry, and sagebrush.
	S. 89° 50' E. on a random line bet. secs. 4 and 9,
40.00	Set temp. ¼ sec. cor.
79.91	Intersect N. and S. line 13 lks. S. of the cor. of secs. 3, 4, 9 and 10.
	Aug. 21, 1915: At this cor. I set off 12° 19' N. on the decl. arc; and at apparent noon observe the sun on the meridian; the resulting lat. is 37° 47'. Thence
	N. 89° 55' W. on a true line bet. secs. 4 and 9,
	Ascending over mesa; through scattering cedar and pinon pine timber and dense undergrowth of service berry.
10.41	Top of rim rock ledge; west rim of mesa.
11.91	Descend abruptly from mesa.
17.81	Bench, bears N. and S.
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 ¼ S 4 S 9 1915 from which A pinon pine, 14 ins. dia., bears N. 52° 15' E. 11 lks. dist., marked ¼ S 4 B T A pinon pine, 5 ins. dia., bears S. 47° 45' E. 31 lks. dist., marked ¼ S 9 B T
	155 ft. below rim rock. Descend.
43.81	Gulch draining S., 40 ft. below ¼ sec. cor. Ascend.
49.14	Ridge, bearing NE. and SW., 37 ft. above gulch; leave cedar and pinon pine, bearing N. and S. Descend.
55.51	Creek, 1 lk. wide, 2 ins. deep, course SW., 63 ft. below

Chains.	
	ridge. Creek bordered with oak brush. Ascend.
71.48	Top of ridge, bearing NE. and SW., 30 ft. above creek. Descend abruptly.
75.71	Foot of abrupt descent, bearing N. and S. Thence through service berry brush.
75.91	Enter dense grove of oak, bearing N. and S.
79.11	Leave dense grove of oak brush, bearing N. and S.
79.51	Johnson Creek, 12 lks. wide, good water, 16 ins. deep, course S. Thence over mountainous land; ascending through aspen timber and scattering oak and service berry brush.
79.91	The cor. of secs. 4, 5, 8, and 9, 3 ft. above creek. Land, mountainous with steep west slopes into Johnson Creek canyon. Soil, on slopes rocky, gravelly, and sandy; 4th rate. On mesa, sandy and shallow; 3d rate. Timber, cedar, pinon pine and aspen. Undergrowth, oak, service berry, and sagebrush.
	N. 0° 03' W. on a random line bet. secs. 4 and 5,
40.00	Set temp. ¼ sec. cor.
79.42	Intersect N. bdy. of Tp. 19 lks. E. of the cor. of secs. 4, 5, 32, and 33, heretofore described. Thence
	S. 0° 11' E. on a true line bet. secs. 4 and 5,
	Descending SW. slope of spur; through scattering yellow pine timber, and sage and service berry undergrowth.
9.27	Gulch, draining SE. Ascend.
12.81	Spur, projecting E., 30 ft. above gulch.
21.34	Leave sage and service berry undergrowth. Descend.
29.42	Dry wash, course SE. Enter cottonwood timber.
	Descend SE. slope to
29.73	Johnson Creek 10 lks. wide, course SW.
	Leave scattering yellow pine timber, bearing E. and W.
39.42	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	
	$\frac{1}{4}$ S 5 | S 4 1915
	from which
	A cottonwood, 10 ins. dia., bears S.55° W.121 lks. dist., marked $\frac{1}{4}$ S 5 B T
	No other bearing trees available; raise a mound of stone 2 ft. base, $1\frac{1}{2}$ ft. high W. of cor.
	Leave scattering yellow pine timber, bearing E. and W. Thence along vreek bottom, crossing and recrossing same; through cottonwood timber.
57.24	Cross Johnson Creek, 10 lks. wide, 8 ins. deep, course SE.
59.84	Recross Johnson Creek, 10 lks. wide, 8 ins. deep, course SW.; through dense willows.
64.34	Recross Johnson Creek, 10 lks. wide, 8 ins. deep, course S. 10° E. Ascend from bottom of creek.
68.77	Top of ascent. Descend.
74.42	Foot of descent; bottom of Johnson Creek; enter sage and service berry undergrowth.
78.42	Leave sage and service berry brush; enter dense oak brush bearing NE. and SW. Ascend west side of bottom of Johnson Creek; through dense oak brush and aspen timber, to
79.42	The cor. of secs. 4, 5, 8, and 9, 71 ft. above $\frac{1}{4}$ sec. cor.
	Land, mountainous, draining along bottom of Johnson Creek.
	Soil, rocky, boulders, and sandy; 4th rate.
	Timber, cedar, pinon pine, aspen, cottonwood, and yellow pine.
	Undergrowth, sage, oak, and service berry brush.
	August 21, 1915.

July 23, 1915: At 8h a.m. apparent time, I set off 37° 43' on the lat. arc; 20° 15' N. on the decl. arc; and determine a meridian with the solar at the standard cor. of secs. 31 and 32, on S. bdy. of Tp., which is an iron post 3 ins. dia., firmly set and marked and witnessed as de-

Chains.	
	scribed by the surveyor general. Thence N.0° 03'W.bet.secs.31 and 32,
	Over mesa land, sloping S.; through dense cedar and pinon timber.
37.00	Edge of mesa; descend to rim rock ledges bearing NE. and SW. Point for $\frac{1}{4}$ sec.cor.falls on ledges; therefore at
37.75	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 35 S R 22 E W C $\frac{1}{4}$ S 31 | S 32 1915
	from which
	A pinon pine, 9 ins.dia., bears S.79° W. 12 lks. dist., marked W C $\frac{1}{4}$ S 31 B T
	A pimon pine, 10 ins.dia., bears S.52° E. 10 lks. dist., marked W C $\frac{1}{4}$ S 32 B T
	Corner falls on edge of mesa.
38.00	Rim rock, 50 ft.high, bearing N.55° E. and S.55° W. Thence precipitous descent over broken ledges and boulders; through service berry undergrowth.
40.00	Point for cor.falls on ledges; impossible to set post; no cor.set.
42.00	Foot of steep descent bearing NE. and SW. Continue rapid descent.
72.00	Gulch, draining S.70° W., 295 ft.below rim rock. Ascend.
76.00	Spur, projecting SW., 50 ft.high.
80.00	Set an iron post 3 ft.long, 2 ins.in dia., 26 ins.in the ground, for cor.of secs.29,30,31, and 32, with brass cap marked
	T 35 S R 22 E S 30 | S 29 S 31 | S 32 1915
	from which
	A pinon pine, 7 ins.dia., bears N.72° 30'E.56 lks. dist., marked T 35 S R 22 E S 29 B T
	A pinon pine, 9 ins.dia.bears S.30° E. 24 lks.dist.

SUBDIVISION OF T.35 S., R 22 E.

Chains.	
	marked T 35 S R 22 E S 32 B T
	A pinon pine, 10 ins. dia., bears S.37° W. 27 lks. dist., marked T 35 S R 22 E S 31 B T
	A pinon pine, 8 ins. dia., bears N.37° 30'W.78 lks. dist., marked T 35 S R 22 E S 30 B T
	Corner falls 60 ft. below spur.
	Land, south half uneven southslopes of mesa; north half rough broken ledges, sloping NW.
	Soil, on mesa, shallow, sandy red loam; 3d rate. On slopes, rocky; 4th rate.
	Timber, cedar and pinon pine.
	Undergrowth, service berry brush.
	East on a random line bet. secs. 29 and 32,
40.00	Set temp. $\frac{1}{4}$ sec. cor.
80.11	Intersect N. and S. line 5 lks. N. of the cor. of secs. 28, 29, 32, and 33. Thence
	N.89° 58'W. on a true line bet. secs. 29 and 32,
	Descending over broken mesa sloping S.; through cedar and pinon timber and sagebrush undergrowth.
3.70	Shallow open draw draining S.15° E.
6.00	Leave live timber; enter burnt timber, bearing N. and S. Ascend.
11.00	Top of ascent; thence over rolling mesa.
18.00	Leave mesa, bearing N. and S.; descend to rock-rimmed canyon
29.20	Bottom of canyon, 120 ft. below top, drains S.; 3.00 chs. north of this point the canyon forks NE. and NW.
35.50	Top of west side of canyon, 125 ft. above bottom. Ascend gradually; through scattering cedar and pinon pine.
40.05½	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 $\frac{\frac{1}{4}\ S\ 29}{S\ 32}$ 1915
	from which

Chains	
	A cedar, 9 ins. dia., bears N.10° 45'W.61 lks. dist., marked ¼ S 29 B T
	A pinon pine, 12 ins. dia., bears S.13° 30'W.36 lks. dist., marked ¼ S 32 B T
	July 23: At this cor. I set off 20° 12'N. on the decl. arc; and at apparent noon observe the sun on the meridian; the resulting lat. is 37° 44'
	Continue over mesa.
60.50	Leave mesa, bearing N.10° E. and S.10° W. Descend abruptly over rim rock ledges; through service berry brush.
62.00	Bottom of ledges. Thence continue rapid descent; through dense pinon pine and cedar timber.
80.11	The cor. of secs. 29, 30, 31, and 32, 310 ft. below rim.
	Land, east 60.50 chs. rough mesa, broken by canyons draining S.; west 19.61 chs. ledgy, with steep NW. slopes.
	Soil, rocky, gravelly; 3d and 4th rates.
	Timber, cedar and pinon pine. Undergrowth service berry.
	July 23, 1915.
	July 24, 1915: At 8h a.m. apparent time, I set off 37° 44' on the lat. arc; 20° 02'N. on the decl. arc; and determine a meridian with the solar at the cor. of secs. 29, 30, 31, and 32. Thence
	West, on a random line, bet. secs. 30 and 31.
40.00	Set temp. ¼ sec. cor.
79.77	Intersect W. bdy. of Tp. 3 lks. S. of the true cor. point for secs. 25, 30, 31, and 36, 53 lks. N. of the witness cor. heretofore described. Thence
	S.89° 59'E. on a true line bet. secs. 30 and 31,
	Descending over mud slide.
9.77	Gulch, draining S.70° E. Ascend, through cedar and pinon pine timber, and undergrowth of service berry and oak brush.
11.70	Top of ascent, 55 ft. above gulch.
39.77	Set an iron post 3 ft. long, 1 in. in dia., 26 ins. in the

Chains.	
	ground for $\frac{1}{4}$ sec. cor., with brass cap marked $\frac{\frac{1}{4}\ S\ 30}{S\ 31}$ 1915
	from which
	A pinon pine, 8 ins. dia. bears N.40° E. 8 lks. dist. marked $\frac{1}{4}$ S 30 B T
	A pinon pine, 10 ins. dia., bears S.13° E. 9 lks. dist., marked $\frac{1}{4}$ S 31 B T
	July 24, 1915: At this cor. I set off 20° 00' N. on the decl. arc; and at apparent noon observe the sun on the meridian; the resulting lat. is 37° 44'.
	Corner stands on slope 110 ft. below top of ascent.
	Descend east slope; over rough broken spurs and gulches draining SE.
53.27	Enter canyon draining S.30° W.
57.77	Bottom of Brushy Basin. Ascend 160 ft. to
61.27	Enter gulch draining N.70° W. Thence cross and recross gulch.
73.77	Leave gulch draining S.65° W. Thence ascend from gulch, over rough mountainous land and broken boulders to
79.77	The cor. of secs. 29, 30, 31, and 32.
	Land, rough, mountainous, with steep E. and W. slopes, draining into Brushy Basin.
	Soil, rocky, stony, and part a hard purple mud; 4th rate.
	Timber, cedar and pinon pine.
	Undergrowth, service berry and oak brush.
	N.0° 03' W. bet. secs. 29 and 30,
	Over rough mountainous land, along east side of Brushy Basin; descending through cedar and pinon pine timber, and undergrowth of service berry and oak brush.
2.65	Gulch, drains S.40° W. Ascend.
8.05	Spur, projecting S.70° W., 3 ft. above gulch. Descend.
10.60	Draw, draining W., 15 ft. below spur. Ascend.

SUBDIVISION OF T.35 S., R.22 E.

Chains	
13.03	13.03 Spur, projects west 3.00 chs., 15 ft.above draw.
17.97	Gulch drains W., 50 ft.below spur. Ascend.
27.34	Spur, projecting 5.00 chs.west, 45 ft.above gulch. Descend.
29.30	Gulch, drains S.75° W., 20 ft.below spur. 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 ¼ S 30 | S 29 1915 from which A pinon pine, 10 ins.dia., bears N.88° E. 40 lks. dist., marked ¼ S 29 B T A pinon pine, 12 ins.dia.bears N.55° 15'W. 33 lks. dist., marked ¼ S 30 B T Corner falls on SW.slope, 60 ft.above gulch. July 31,1915: At 7h.a.m., apparent time, I set off 37° 45' on the lat.arc; 18° 29'N.on the decl.arc; and determine a meridian with the solar at ¼ sec.cor.bet.secs. 29 and 30. July 24, 1915.
57.70	Ridge,bearing west 5.00 chs., 15 ft.above cor. Descend.
62.65	Draw, drains W.25 ft.below ridge. Ascend.
71.45	Spur, projects west 3.00 chs., 15 ft.above draw.
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 35 S R 22 E S 19 | S 20 S 30 | S 29 1915 from which A pinon pine,8 ins.dia., bears N.46° 15'E. 39 lks. dist., marked T 35 S R 22 E S 20 B T A pinon pine, 14 ins.dia., bears S.15° E. 44 lks. dist., marked T 35 S R 22 E S 29 B T A pinon pine, 10 ins.dia., bears S.20° 45'W.79 lks.dist., marked T 35 S R 22 E S 30 B T A cedar, 10 ins.dia.bears N.13° 15'W.104 lks. dist., marked T 35 S R 22 E S 19 B T Land, rough mountains;along E.side of Brushy Basin,

Chains	
	sloping west from high rims.
	Soil rocky, 4th rate.
	Timber cedar and pinon.
	Undergrowth oak and service berry brush.
	S.89°58'E. on a random line bet. secs. 20 and 29.
40.00	Set temp. ¼ sec. cor.
80.05	Intersect the N. and S. line 14 lks. S. of the cor. of secs. 20, 21, 28 and 29.
	Thence
	S.89°56'W. on a true line bet. secs. 20 and 29.
	Over mountainous land, ascending towards high mesa through cedar and pinon timber and oak, service berry and sage brush undergrowth.
2.90	Top of small bench bearing N. and S.
7.00	Ascend from bench.
9.80	Top of second bench bearing N. and S. 45 ft. above
12.90	Base of abrupt ascent bearing N.20°W. and S.20°E.
	Ascend rim rock and broken ledges to top of mesa.
15.50	Top of mesa bearing N. and S. 95 ft. above bench.
	Thence over mesa land.
17.50	NE. edge of grain field 3 chs. S., belonging to A.A. Porter.
23.50	Leave cedar and pinon timber and enter dense service berry, sage and oak brush.
	NW. edge of grain field 1 ch. S.
25.00	Enter sagebrush, leave service berry brush.
34.00	Shallow draw, 20 ft. below top; head of canyon one half mile north.
36.00	Leave sagebrush bearing N. and S., enter oak and service berry brush.
40.02½	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground for the ¼ sec. cor. of secs. 20 and 29, mkd. on brass cap
	¼ S 20 / S 29 1915

SUBDIVISION T. 35 S. R. 22 E.

Chains	
	and raise a mound of stone 2 ft. base, 1½ ft. high N. of cor.
	Corner falls near W. rim of mesa in oak and service berry brush.
44.30	W. edge of mesa. Descend over vertical rim rock ledge bearing N.45°E. and S.45°W. Enter cedar and pinon timber bearing same.
46.50	Leave timber bearing NE. and SW, enter dense service berry and oak brush. Continue descent.
71.00	Enter cedar and pinon timber bearing N. and S.
80.05	The cor. of secs. 19, 20, 29 and 30.
	Corner falls in draw sloping S.80°W.210.ft.below the ¼ sec. cor.
	Land mountainous.
	Soil on mesa good red sand loam, coarse and loose, 2 ft. or more deep, 1st and 2nd rate; on sides of mesa rocky, 4th rate.
	Timber cedar and pinon.
	Undergrowth sage, oak and service berry brush.
	N.89°59'W. on a random line bet. secs. 19 and 30.
40.00	Set temp. ¼ sec. cor.
79.70	Intersect W.bdy.of.Tp. 2 lks. N. of the cor. of secs. 19, 24, 25 and 30, heretofore described.
	Thence
	East on a true line bet. secs. 19 and 30.
	Descending gradually through burnt cedar.
4.20	Begin steep descent 110 ft. to
13.49	Draw draining S.40°E. Ascend.
28.70	Flat spur projecting SE. 70 ft. above draw. Descend.
36.70	Gulch draining S.70°E. 40 ft. below spur.
	Leave burnt cedars bearing N. and S.
	Ascend.
39.70	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground for the ¼ sec. cor. of secs. 19 and 30, mkd. on brass cap

SUBDIVISION T. 35 S. R. 22 E.

Chains	
	$\frac{1}{4}$ S 19 / S 30 1915
	from which
	A pinon, 8 ins. dia., bears N.16°15'E., 30 lks. dist. mkd. $\frac{1}{4}$ S 19 B T.
	A pinon, 8 ins. dia., bears S.52°75'E., 42 lks. dist. mkd. $\frac{1}{4}$ S 30 B T.
	Corner falls on spur projecting S.70°E. 20 ft. above gulch. Descend.
	July 31: At apparent noon I set off 18°25'N. on the decl. arc, and observe the sun on the meridian, the resulting lat. is 37°45'. (At $\frac{1}{4}$ sec. cor.).
42.17	Gulch draining S.70°E. 35 ft. below $\frac{1}{4}$ sec. cor. Ascend.
46.70	Spur projects 3 chs. S. 47 ft. above gulch. Desc. abruptly.
68.70	Foot of steep descent into basin.
71.20	Wash in Brushy Basin bottom draining S. 305 ft. below spur. Ascend.
72.20	Spur projects 2 chs. S. 25 ft. above wash. Descend.
78.20	Gulch draining S.80°W. 24 ft. below spur. Thence ascend from Brushy Basin through dense undergrowth of service and oak brush and cedar and pinon timber to
79.70	The cor. of secs. 19, 20, 29 and 30.
	Land rough mountains with steep E. and W. slopes into Brushy Basin.
	Soil gravelly and rocky, 4th rate.
	Timber cedar and pinon with some burnt timber.
	Undergrowth oak and service berry brush.
	July 31, 1915.
	Aug. 2: At 8h a.m., apparent time, I set off 37°45' on the lat. arc, 17°58'N. on the decl. arc, and determine a meridian with the solar at the cor. of secs. 19, 20,

SUBDIVISION T. 35 S. R. 22 E.

Chains	
	29 and 30.
	Thence
	N.0°03'W. on a true line bet. secs. 19 and 20.
	Over mountainous land, along E. slope of Brushy Basin; descending into gulch through cedar and pinon timber and service berry, oak and sage brush.
2.60	Gulch draining S.50°W. Ascend abruptly.
7.50	Top of steep ascent bearing SW. and NE. 90 ft. above gulch.
18.00	Enter burnt cedar and scattering pinon timber.
40.00	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground for the ¼ sec. cor. of secs. 19 and 20, mkd. on brass cap
	¼ S 19 | S 20 1915
	from which
	A pinon, 14 ins. dia., bears N.72°30'W., 19 lks. dist. mkd. ¼ S 19 B T.
	A pinon, 6 ins. dia., bears N.41°E., 23 lks. dist. mkd. ¼ S 20 B T.
	Corner falls on gentle SW. slope, 205 ft. above steep ascent.
45.00	Leave timber bearing E. and W. Enter sagebrush.
52.00	Enter cedar and pinon timber bearing E. and W.
80.00	Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground for the cor. of secs. 17, 18, 19 and 20, mkd. on brass cap
	T 35 S R 22 E S 18 | S 17 S 19 | S 20 1915
	from which
	A pinon, 7 ins. dia., bears N.31°30'E., 22 lks. dist. mkd. T 35 S R 22 E S 17 B T.
	A cedar, 9 ins. dia., bears S.7°E., 72 lks. dist. mkd. T 35 S R 22 E S 20 B T.
	A cedar, 7 ins. dia., bears S.24°W., 45 lks. dist. mkd. T 35 S R 22 E S 19 B T.
	A cedar, 12 ins. dia., bears N.15°W.,

SUBDIVISION T. 35 S. R. 22 E.

Chains	
	54 lks. dist. mkd. T 35 S R 22 E S 18 B T.
	Corner falls on SE. slope, 196 ft. above the ¼ sec. cor.
	Aug. 2: At apparent noon I set off 17°55'N. on the decl. arc, and observe the sun on the meridian, the resulting lat. is 37°45½'.
	Land mountainous with general drainage S. into Brushy Basin.
	Soil shallow sandy, rocky loam, 3rd and 4th rate, on rock subsoil.
	Timber cedar and pinon.
	Undergrowth oak, service berry and sage brush.
	August 2, 1915.
	Aug. 3: At 8h a.m. apparent time I set off 37°45'30" on the lat. arc, 17°43'N. on the decl. arc, and determine a meridian with the solar at the cor. of secs. 17, 18, 19 and 20.
	Thence
	N.89°56'E. on a random line bet. secs. 17 and 20.
40.00	Set temp. ¼ sec. cor.
79.80	Intersect N. and S. line 7 lks. N. of the cor. of secs. 16, 17, 20 and 21.
	Aug. 3: At 12 M apparent time, I set off 17°40'N. on the decl. arc, and observe the sun on the meridian, the resulting lat. is 37°45'30".
	Thence
	S.89°59'W. on a true line bet. secs. 17 and 20.
	Ascending from bench bearing N. and S. through cedar and pinon timber.
8.80	Ascend abruptly over broken boulders 120 ft. to
27.70	Rim rock ledge, E. edge of mesa, bearing N.5°W. and S.5°E. Ascend.
30.24	Top of mesa, 26 ft. above rim rock.
	Thence over top of narrow neck of mesa.
31.13	Rim rock ledge, 10 ft. high, bears N.15°W. and S.15°E. Descend abruptly from mesa.
34.30	Foot of steep descent. Descend gradually.

SUBDIVISION T. 35 S. R. 22 E.

Chains	
39.90	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground for the ¼ sec. cor. of secs. 17 and 20, mkd. on brass cap ¼ S 17 S 20 1915 from which A cedar, 9 ins. dia., bears N.32°W., 25 lks. dist. mkd. ¼ S 17 B T. A cedar, 16 ins. dia., bears S.31°45'W., 21 lks. dist. mkd. ¼ S 20 B T. Corner falls on slope 90 ft. below rim rock ledge.
41.74	Gulch draining S.20°E. 15 ft. below ¼ sec. cor. Ascend abruptly.
64.80	Top of steep ascent, ridge brs. N. and S. 17 ft. above gulch. Descend.
66.82	Gulch draining S. 45 ft. below top. Ascend.
68.80	Spur projecting S. 25 ft. above gulch. Thence descend over mountainous land sloping S. through cedar and pinon timber and oak and service berry undergrowth to
79.80	The cor. of secs. 17, 18, 19 and 20. Land mountainous with steep slope draining E. and W. from mesa. Soil on slopes rocky, 4th rate; on bench on E. side of mesa red sand, light, 1 ft. deep, 2nd rate. Timber cedar and pinon. Undergrowth oak, service berry and sage brush.
	W. on a random line bet. secs. 18 and 19.
40.00	Set temp. ¼ sec. cor.
79.63	Intersect W. bdy. of Tp. 15 lks. N. of the cor. of secs. 13, 18, 19 and 24, heretofore described. Thence N.89°54'E. on a true line bet. secs. 18 and 19. Ascending gradually through cedar and pinon timber and

SUBDIVISION T. 35 S. R. 22 E.

Chains	
	sagebrush undergrowth.
1.82	Top of ascent.
	Descend gradually over NE. slope.
12.79	Begin steep descent, 50 ft. below top.
34.78	Bottom of Brushy Basin, draining S.20E.E.
39.63	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground for the ¼ sec. cor. of secs. 18 and 19, mkd. on brass cap
	¼ S 18 / S 19 / 1915
	from which
	A pinon, 8 ins. dia., bears N.26°30'W., 28 lks. dist. mkd. ¼ S 18 B T.
	A pinon, 8 ins. dia., bears S.9°E., 30 lks. dist. mkd. ¼ S 19 B T.
	Corner falls on slope 80 ft. above bottom.
	Ascend.
44.00	Ridge bearing N. and S. Descend.
45.09	Gulch draining S. 10 ft. below ridge. Ascend.
51.19	Ridge bearing N. and S. 100 ft. above gulch. Descend.
58.30	Gully draining S. 20 ft. below ridge.
58.63	Leave dense cedar and pinon timber bearing N. and S. Thence through scattering cedar and sagebrush.
70.23	Enter dense cedar and pinon timber.
	Thence over mountainous land, ascending S. slope through cedar and pinon timber and dense service berry and oak brush undergrowth to
79.63	The cor. of secs. 17, 18, 19 and 20.
	Land mountainous with E. and W. slopes into Brushy Basin.
	Soil rocky, sandy and gravelly loam, 4th rate.
	Timber cedar and pinon.
	Undergrowth service berry, oak and sage brush.
	August 3, 1915.

Aug. 20: At 7h a.m. apparent time, I set off 37°45' on

Chains	
	the lat. arc, 12°43'30"W. on the decl. arc, and determine a meridian with the solar at the cor. of secs. 17, 18, 19 and 20.
	Thence
	N.0°03'W. on a true line bet. secs. 17 and 18.
	Ascending to mesa over rough mountainous land through cedar and pinon timber and oak, service berry and sage brush undergrowth.
8.70	West edge of huge boulder on line; ruin on top.
20.00	Base of ascent. Ascend steep slope, 187 ft. above cor.
23.00	Rocky spur projects W. 175 ft. above cor. Descend.
25.00	Gulch draining S.45°W. 27 ft. below spur.
27.30	Huge boulder 50 lks. W. of line; ruin on top. Ascend.
32.00	Top of mesa bearing E. and W. 300 ft. above cor.
	Thence ascend gradually over mesa.
40.00	Set an iron post, 3 ft. long, 1 in. in dia., 10 ins. in earth to rock and 16 ins. in mound of stone 3 ft. base, on mesa, for the ¼ sec. cor. of secs. 17 and 18, mkd. on brass cap
	¼ S 18 | S 17 1915
	from which
	A cedar, 10 ins. dia., bears N.86°E., 17 lks. dist. mkd. ¼ S 17 B T.
	A pinon, 6 ins. dia., bears N.25°E., 27 lks. dist. mkd. ¼ S 18 B T.
45.00	Enter sagebrush park, ½ chs. wide.
60.00	Re-enter cedar and pinon timber and undergrowth.
65.00	Leave sagebrush park bearing NE. and SW.
69.00	Enter cedar and pinon timber and undergrowth.
80.00	Set an iron post, 3 ft. long, 2 ins. in dia., 26 ins. in the ground for the cor. of secs. 7, 8, 17 and 18, mkd. on brass cap
	T 35 S R 22 E S 7 | S 8 S 18 | S 17 1915
	from which

SUBDIVISION T. 35 S. R. 22 E.

Chains	
	A pinon, 5 ins. dia., bears N.43°E., 26 lks. dist. mkd. T 35 S R 22 E S 8 B T.
	A pinon, 6 ins. dia., bears S.40°30'E., 24 lks. dist. mkd. T 35 S R 22 E S 17 B T.
	A pinon, 5 ins. dia., bears S.76°30'W., 21 lks. dist. mkd. T 35 S R 22 E S 18 B T.
	A pinon, 6 ins. dia., bears N.14°W., 26 lks. dist. mkd. T 35 S R 22 E S 7 B T.
	Aug. 20: At apparent noon I set off 12°38'N. on the decl. arc, and observe the sun on the meridian; the resulting lat. is 37°46'.
	Land South 20.00 chs. rocky slope of mesa; north 60.00 chs. mesa, draining S.
	Soil S. and rocky, stony, 4th rate; on mesa light brown sandy loam, loose and shallow, mixed with some gravel, 2nd and 3rd rate.
	Timber cedar and pinon.
	Undergrowth service berry, oak and sage brush.
	N.89°59'E. on a random line bet. secs. 8 and 17.
40.00	Set temp. ¼ sec. cor.
79.75	Intersect the N. and S. line 9 lks. S. of the cor. of secs. 8, 9, 16 and 17.
	Thence
	S.89°55'W. on a true line bet. secs. 8 and 17.
	Descending through cedar and pinon timber and undergrowth of sage, oak and service berry brush.
3.55	Gully draining SE.
	Begin direct ascent from Johnson Canyon.
37.25	Ridge bearing N.40°W. and S.40°E. 127 ft. above gully.
	Descend into basin.
37.75	Foot of descent.
39.87½	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground for the ¼ sec. cor. of secs. 8 and 17, mkd. on brass cap

SUBDIVISION T. 35 S. R. 22 E.

Chains	
	$\frac{1}{4}$ S 8 / S 17 1915
	from which
	A pinon, 10 ins. dia., bears S.82°W., 92 lks. dist. mkd. $\frac{1}{4}$ S 17 B T.
	A cedar, 7 ins. dia., bears N.55°W., 32 lks. dist. mkd. $\frac{1}{4}$ S 8 B T.
	Huge boulder on line mkd. X B O bears N.40°W. 29 lks. dist.
	Corner falls in dead cedars on N. edge of small basin draining SE.
	Thence along N. slope.
42.38	Gulch draining SE. 43 ft. below ridge. Ascend.
	Leave cedar and pinon timber and sage, oak and service berry undergrowth.
47.49	Ridge bearing S.45°E. and NW. 50 ft. above gulch.
	Descend.
49.70	Gulch draining S.40°E.
	Begin abrupt ascent over mud slide 295 ft. to
52.35	Top of abrupt ascent.
	Enter cedar and pinon timber and oak, service berry and sage brush undergrowth.
	Ascend gradually.
58.05	Rim rock ledge, E edge of mesa, bearing N.9°E. and S.9°W.
72.05	Asc. gradually 30 ft. over SW. slope of mesa, through cedar and pinon timber and service berry, oak and sage brush undergrowth to
79.75	The cor. of secs. 7, 8, 17 and 18.
	Land mountainous, mesa and canyon side draining E. into Johnson Creek.
	Soil on mesa shallow light brown sandy loam, 2nd rate; on slopes mud and rocks, 4th rate.
	Timber cedar and pinon.
	Undergrowth oak, service berry and sage brush.
	August 20, 1915.

Chains	
	Aug. 25: At 7h a.m. apparent time, I set off 37°46' on the lat. arc, 11°03'N. on the decl. arc, and determine a meridian with the solar at the cor. of secs. 7, 8, 17 and 18.
	Thence
	S.89°54'W. on a random line bet. secs. 7 and 18.
40.00	Set temp. ¼ sec. cor.
79.56	Intersect W. bdy. of Tp. 10 lks. N. of the true cor. point of secs. 7, 12, 13 and 18, or 40 lks. N. of W.C. heretofore described.
	Thence
	N.89°50'E. on a true line bet. secs. 7 and 18.
	Descending along N. side of small spur, through cedar, pinon and scattering yellow pine timber and service berry undergrowth.
13.56	Gully draining NW.
	Ascend over NW. slope.
21.56	Spur, ridge, bearing N. and S. 15 ft. above gully. Desc.
35.06	Gulch, ravine draining S. head of brushy basin, 150 ft. below spur.
39.56	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground for the ¼ sec. cor. of secs. 7 and 18, mkd. on brass cap

¼ S 7
S 18
1915

from which

A cedar, 7 ins. dia., bears N.64°E., 35 lks. dist. mkd. ¼ S 7 B T.

A yellow pine, 18 ins. dia., bears S.60°15'W., 61 lks. dist. mkd. ¼ S 18 B T.

	Corner falls on SE. slope of ravine, 53 ft. above gulch. Ascend abruptly.
50.01	Leave cedar, pinon and scattering yellow pine and service berry undergrowth bearing NE. and SW.
	Top of abrupt ascent. Ascend gradually.
58.63	Enter grove of pinon and cedar timber bearing N. and S.

Chains	
61.29	Leave grove of pinon and cedar timber bearing N. and S. Enter scattering oak and service berry undergrowth bearing N. and S.
73.49	Begin abrupt ascent, 182 ft. over W. slope of ledge. Enter timber and leave oak brush undergrowth.
78.06	Rim of mesa bearing N. 2°30'E. and S.17°W. Thence ascend over mesa, through cedar and pinon timber and service berry and sage brush undergrowth.
79.56	The cor. of secs. 7, 8, 17 and 18.
	Land mountainous with E. and W. slopes draining SW.
	Soil shallow sandy gravelly rocky loam on rock subsoil, 4th rate.
	Timber cedar, pinon and scattering yellow pine.
	Undergrowth oak, service berry and sage brush.
	N.0°03'W. on a true line bet. secs. 7 and 8.
	Ascend over uneven mesa, through cedar, pinon and scattering yellow pine timber and oak, service berry and sage brush undergrowth.
12.50	Leave mesa, descending to rim bearing N.12°E. and S.12°W. 18 ft. above sec. cor.
16.71	Rim rock bearing NE. and SW. Enter yellow pine timber. Thence along W. slope of mesa, over land sloping W.
40.00	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground for the ¼ sec. cor. of secs. 7 and 8, mkd. on brass cap
	¼ S 7 | S 8
	1915
	from which
	A yellow pine, 30 ins. dia., bears N.21°15'E., 122 lks. dist. mkd. ¼ S 8 B T.
	A yellow pine, 16 ins. dia., bears S.14°30'W., 19 lks. dist. mkd. ¼ S 7 B T.
	Corner stands on W. slope of rim of mesa. 118 ft. below sec. cor.
	Aug. 25: At apparent noon I set off 10°57'30"N. on the

Chains	
	decl. arc, and observe the sun on the meridian, the resulting latitude is 37°46'30".
	Thence continue along W. slope. Ascend.
70.11	Top of ascent, 80 ft. above ¼ sec. cor. Descend.
71.00	Ravine draining SW. into Brushy Basin, 50 ft. below top. Ascend to mesa or ridge.
80.00	Top of ridge, which is a continuation of mesa bearing NW. and SE. 86 ft. above ¼ sec. cor.
	Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground for the cor. of secs. 5, 6, 7 and 8, mkd. on brass cap

T 35 S R 22 E
S 6 | S 5
S 7 | S 8
1915

from which

A pinon, 6 ins. dia., bears N.49°45'E., 51 lks. dist. mkd T 35 S R 22 E S 5 B T.

A yellow pine, 8 ins. dia., bears S.46°15'E., 80 lks. dist. mkd. T 35 S R 22 E S 8 B T.

A cedar, 22 ins. dia., bears S.13°45'W., 107 lks. dist. mkd. T 35 S R 22 E S 7 B T.

A cedar, 9 ins. dia., bears N.36°30'W., 36 lks. dist. mkd. T 35 S R 22 E S 6 B T.

Corner falls on top of ridge; also divide between Brushy Basin and Johnson Canyon.

Land uneven broken mesa rim sloping W.

Soil rocky, shallow, sandy, 4th rate.

Timber cedar, pinon and yellow pine.

Undergrowth oak, service berry and sage brush.

	N.89°55'E. on a random line bet. secs. 5 and 8.
40.00	Set temp. ¼ sec. cor.
79.80	Intersect N. and S. line 12 lks. N. of the cor. of secs. 4, 5, 8 and 9.
	Thence
	West on a true line bet. secs. 5 and 8.

SUBDIVISION T. 35 S. R. 22 E.

Chains	
	Ascending from Johnson Creek through pine timber and dense undergrowth of oak, service berry and sage brush.
4.59	Spur projecting SE. Descend.
6.30	Gulch draining SE. 25 ft. below spur.
	Enter timber bearing N. and S. Oak, service berry and sage brush undergrowth becomes scattering.
	Ascend rapidly from Johnson Creek to
14.78	Spur projecting S. 150 ft. above gulch.
	Descend over flat spur to
31.87	Ravine draining S. Ascend abruptly.
33.61	Top of abrupt ascent.
39.90	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground for the ¼ sec. cor. of secs. 5 and 8, mkd. on brass cap

¼ S 5
S 8
1915

from which

A yellow pine, 8 ins. dia., bears N.65°E., 12 lks. dist. mkd. ¼ S 5 B T.

A yellow pine, 18 ins. dia., bears S.29°15'E., 69 lks. dist. mkd. ¼ S 8 B T.

Corner falls on E. slope 75 ft. above ravine.

Continue ascent.

71.95	Spur projects N. for 5 chs. Descend.
74.85	Ravine draining NE. 7 ft. below spur.
	Thence over mountainous land, ascending NE. slope of divide, through pine timber and oak, service berry and sage brush undergrowth.
79.80	The cor. of secs. 5, 6, 7 and 8.

Land, rolling mountains draining SE. from divide into Johnson Creek.

Soil gravelly, sandy loam, 1 ft. deep, on rock subsoil, 2nd and 3rd rate.

Timber

Undergrowth oak, service berry and sage brush.

August 25, 1915.

SUBDIVISION T. 35 S. R. 22 E.

Chains	
	Aug. 26: At 7h a.m. apparent time, I set off 37°47' on the lat. arc, 10°42'N. on the decl. arc, and determine a meridian with the solar at the cor. of secs. 5, 6, 7 and 8.
	Thence
	S.89°50'W. on a random line bet. secs. 6 and 7.
40.00	Set temp. ¼ sec. cor.
79.48	Intersect W. bdy. of Tp. 15 lks. S. of the cor. of secs. 1, 6, 7 and 12, heretofore described.
	Thence
	N.89°56'E. on a true line bet. secs. 6 and 7.
	Ascending SE. slope through cedar, pinon and yellow pine timber and undergrowth of service berry, oak and sage brush.
16.98	Gully draining SW. Ascend.
19.48	Ridge bearing N. and S., W. side of Brushy Basin, 35 ft. above gully. Descend.
26.28	Gully draining SE. 120 ft. below ridge. Ascend.
32.48	Spur projecting S 3 chs. 40 ft. above gully. Descend.
39.48	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground for the ¼ sec. cor. of secs. 6 and 7, mkd. on brass cap
	¼ S 6 / S 7 1915
	from which
	A yellow pine, 20 ins. dia., bears N.56°30'W., 79 lks. dist. mkd. ¼ S 6 B T.
	A cedar, 7 ins. dia., bears S.5°15'W., 29 lks. dist. mkd. ¼ S 7 B T.
	Corner falls on NE. slope of spur.
	Descend.
41.67	Ravine draining SE. 48 ft. below ¼ sec. cor. Ascend.
56.87	Spur projecting 12 chs. S. 110 ft. above ravine. Descend.
64.55	Ravine draining S. 111 ft. below spur. Ascend.
66.78	Spur projects S. 40 ft. above ravine. Descend.
74.67	Ravine draining SW. 40 ft. below spur.

SUBDIVISION OF 25 S. R. 22 E.

Chains	
	Thence over rough mountainous land, ascending to divide, through cedar, pinon and yellow pine timber and service berry, oak and sage brush undergrowth.
79.48	The cor. of secs. 5, 6, 7 and 8.
	Land mountainous with SW. slope draining generally S.
	Soil coarse, loose, gravelly, sandy loam 2 ft. deep, on rocky subsoil, 3rd rate.
	Timber yellow pine, cedar and pinon.
	Undergrowth oak, service berry and sage brush.
	N.0°03'W. on a random line bet. secs. 5 and 6.
40.00	Set temp. ¼ sec. cor.
79.40	Intersect E. bdy. of Tp. 11 lks. E. of the cor. of secs. 5, 6, 31 and 32, heretofore described.
	Thence
	S.0°08'E. on a true line bet. secs. 5 and 6.
	Descending gradually over even SE. slope through scattering yellow pine timber and sage brush undergrowth.
32.95	Ravine draining SE., 85 ft. below sec. cor. Ascend.
39.40	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground for the ¼ sec. cor. of secs. 5 and 6, mkd. on brass cap ¼ S 6 | S 5 1915 from which A yellow pine, 28 ins. dia., bears S.18°W., 6 lks. dist. mkd. ¼ S 6 B T. A yellow pine, 16 ins. dia., bears S.28°45'E., 35 lks. dist. mkd. ¼ S 5 B T. Corner falls on E. slope of spur. Ascend.
47.52	Spur projects E. 2 chs. 18 ft. above ¼ sec. cor. Descend.
52.91	Ravine drains E. 48 ft. below spur. Ascend.
61.36	Spur projects E. 3 chs. 42 ft. above ravine. Descend.
70.90	Ravine draining E. 36 ft. below spur. Ascend NE. slope of spur.

Chains.	
71.42	Top of ascent. Descend.
74.41	Foot of descent. Thence over mountainous land, ascending to spur of divide projecting E. Thence continue over divide, through yellow pine timber and sagebrush undergrowth to
79.40	The cor. of secs. 5, 6, 7, and 8.

Land, rolling mountains; draining generally east, from smooth slopes, into Johnson Creek.

Soil, stony and rocky in part; sandy loam 1 ft. or more in depth, on rocky subsoil; 3d rate.

Timber, yellow pine.

Undergrowth, sagebrush.

August 26, 1915.

GENERAL DESCRIPTION.

The topography of this township is generally rugged, consisting of fairly level mesas projecting south from the Blue Mountains, which begin about three miles north of this township. The mesas are cut abruptly by four big canyons, and many lesser ravines and gulches.

Bull Dog Canyon heads in the northeastern portion of the township, drains south, and leaves near the southeast corner. No water in the canyon. Recapture Creek, a stream of good water, averaging 10 lks. in width and 6 ins. in depth, heads in the Blue Mountains, and runs through the township with a general course south. Johnson Creek, a stream of good water, averaging 10 lks. in width, and from 6 to 8 ins. in depth, swift current, heads in the Blue Mountains, traverses the township, and empties into Recapture Creek near the south boundary. Practically all of the water of this creek is diverted into the Grayson Irrigation Canal, the intake being in the southern part of section 16. Brushy Basin, dry, drains the western portion of the township. The rims of these canyons are all

abrupt and rocky ledges, difficult in most places to scale.

The canyon sides are rocky and stony, with poor soil. Some soil capable of producing crops occurs on the benches on the west side of Johnson Creek, west side of Recapture Creek, and flat divide between Johnson and Bull Dog canyons in sec. 22. The mesas generally support a shallow, red, sandy loam, which may be farmed in some places. The main mesa, covering portions of sections 28, 29, 32, 33, and 34, is covered with red sandy loam of more depth, and appears to make good dry farming land, from apparent results in secs. 29 and 33.

The south half of the township is generally covered with pinon pine and cedar timber, and some yellow pine, which becomes denser farther north. Aspen and cottonwood grow along the creek bottoms. There is a profuse growth of oak, service berry, and sage brush.

I found no indications of mineral in the township, although it is reported that "colors" have been found in placering Johnson Creek, which drains a portion of Blue Mountains that is mineralized. The uranium strata is too deep under this locality to be profitably worked.

A few cliff dweller ruins were found in the southern portion of the township; generally in the rim rock.

James Carrol, of Blanding, Utah, has from 20 to 25 acres plowed land, good, deep, red soil, in the center of sec. 23; and a road broken from this land down Bull Dog Canyon to main road, Monticello to Blanding. The land is situated on the flat divide between Bull Dog and Johnson canyons. Value of improvements $150.00.

Ancil Redd, of Blanding, Utah, has about one-half mile of fencing in the southeast corner of section 35, and southwest corner of section 36. Value of improvements $70.00.

Lemuel H. Redd and Wayne Redd, of Blanding, Utah,

have, conjointly, about three and one-tenth miles of four-wire fence, enclosing the east half of section 33, and a portion of the west half of section 34, being approximately 329 acres, under fence; and 68 acres of cleared and plowed land planted to grain. Value of improvements $1100.00.

A.A.Porter, of Blanding, Utah, has one and nine-tenths miles of five-wire fencing, and about one-half mile brush fencing, enclosing east two-thirds of sec.29, part of SW¼ Sec.28, part of NW¼ Sec.33, and part of NE¼ Sec.32; approximately 580 acres, of which 18 acres are plowed and under cultivation, seeded to oats. Value of improvements $450.00.

Wm.Johnson, of Blanding, Utah, has about 30 acres, grubbed only, in NW¼ Sec.28. Value of improvements $60.00

Grayson Irrigation Co.Canal, 10 lks.wide, 10 ins. deep normal, about 4¾ miles long, flow 3 ft.per second. Canal in earth, intake about 12 chs.NW.of the ¼ sec.cor. between secs.16 and 21, and leaves township just west of the standard cor.of secs.34 and 35. A fair road and very bad dugway approximately follow canal to its head. Value of canal indeterminate.

The U.S.Forest Service has one-half mile or more of fencing north of the line between secs.13 and 24.Value $45.00.

The Midland Telephone Co. has about 70.00 chs.of telephone line in the eastern part of sec.36.

None of the settlers have homes in this township. A.A.Porter has a small tent by the spring in Sec.29.

Thos.C.Rathbone

U.S.Transitman.

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BOOK A-417

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 all those parts or portions of the west and north boundaries and the subdivision of T. 35 S., R. 22 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.	
Bannum B Packard	July 8, 1915	August 26, 1915	H. Chainman
M. Glenn Harris	July 8, 1915 August 1, 1915	July 31, 1915 August 26, 1915	R. Chainman Axeman
Reuben Sockett	July 8, 1915	August 26, 1915	Cornerman
Timothy Jones	July 8, 1915	August 26, 1915	Flagman
~~Earl Dillenger~~			
Walter C Bailey	July 18, 1915 August 31, 1915	July 31, 1915 August 26, 1915	Axeman R. Chainman

Subscribed and certified to before me on the dates of the final service as shown above.

Thos. C. Rathbone

U. S. Surveyor.

6—2764

FINAL OATH OF UNITED STATES ~~SURVEYOR~~ TRANSITMAN.

I, Thomas C. Rathbone, U. S. ~~Surveyor~~ Transitman, 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 the west and North Boundaries and the Subdivision of T 35 S., R. 22 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
~~U. S. Surveyor.~~
U.S.Transitman

Subscribed by said Thos. C. Rathbone, and sworn to before me this 22d day of May, 1916.

SEAL

N. O. Thorsen
U. S. Surveyor General, Utah.

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,
Salt Lake City, Utah, Sept. 22, 1916.

The foregoing field notes of the survey of the subdivision of Township No. 35 South, Range No. 22 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.

N. O. Thorsen
U. S. Surveyor General.

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

_____
U. S. Surveyor General.

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BOOK A-417

A

FIELD NOTES

OF THE ~~SURVEY OF THE~~

RETRACEMENT AND RESURVEY OF THE SOUTH AND EAST BOUNDARIES AND

SUBDIVISION AND SURVEY OF THE SUBDIVISION OF

T.9 S.,R.4 W.

Of the SALT LAKE BASE AND *Meridian,*

In the State of UTAH

EXECUTED BY

HOWARD W. MILLER

AND

ISAAC HAYES

In the capacity of U. S. Surveyors, under instructions dated June 25 *, 1915,*

issued by the United States Surveyor General to govern surveys included in

Group No. 37 *, which were approved by the Commissioner of the General Land*

Office, July 21 *, 1915*

Survey commenced October 13 *, 1915*

Survey completed December 1 *, 1915*

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BOOK A-417

INDEX DIAGRAM.

Township 9 South, Range 4 West

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chains

Survey commenced October 13,1915 and executed with Young and sons light mountain transits Nos. 8297 and 8582, with Smiths solar attachment. The horizontal limbs are provided with two verniers, placed opposite to each other and reading to single minutes of arc, which is also the least count of the verniers of the latitude and declination arcs.

The instruments were approved for use in this survey by The Assistant Supervisor of Surveys for Utah.

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

(Cloudy skies and late arrivals at camp at night from field work prevent testing instruemnts until October 17)

October 16: At my camp which is situated near the cor. of secs. 25,30,31 and 36 on the W. bdy. of the Tp., in approximate latitude 40°00'N., longitude 112°20'W., I make an hour angle obsn. on Pol. in accordance with instructions in the Manual.

Standard time of observation Oct.16,1915	5h.38m.p.m.
Corrected for long. 112°20'W., subtract	29m.
Correct L.M.T. of obsn. Oct.16.	5h.09m.p.m.
U. C. Polaris Oct. 16,1915	11h.52.8m.p.m.l.m.t.
Corrected for Long.112°20'W., subtract	1.2m.
Correct L.M.T. of U.C.Pol.Oct.16	11h.51.6m.p.m.
Hour angle of Pol. at obsn.	6h.42.6m.
Declination of Polaris October 16	88° 51' 29"
Azimuth of Polaris at obsn.	N.1°27'E.

At time of observation, I deflect an angle of 1° 30' to the west and note a tree about 2 miles north.

The true bearing of the tree is therefore N.0°03'W.

Resurvey of south boundary T.9 S.,R.4 W.

chains

October 16,1915

Transit No.8297

October 17: At 8h. 46m.a.m.l.m.t., I place the instrument in the meridian, set off 40° 00' on the lat. arc; 8° 59' S., on the decl. arc; and determine a meridian with the solar and find that the tree bears N.0°04'W.

With the instrument in the meridian, I set off 9° 03' S. on the decl. arc; and at 11h. 46m.a.m.l.m.t., observe the sun on the meridian; the resulting lat. is 40°00'.

At 2h. 46m.p.m.l.m.t., I set off 40°00' on the lat. arc; 9°05'S., on the decl. arc; and determine a meridian with the solar and find that the tree bears N.0°03'W.

Transit No,8582

October 17: At 8h. 50m.a.m.l.m.t., I place the instrument in the meridian, set off 40°00' on the lat. arc; 8° 59'S., on the decl. arc; and determine a meridian with the solar and find that the tree bears N. 0°03'W.

With the instrument in the meridian, I set off 9°03'S., on the decl. arc; and at 11h. 46m.a.m.l.m.t., observe the sun on the meridian, the resulting lat. is 40°00'.

At 2h.46m.p.m.l.m.t., I set off 40°00' on the lat. arc; 9°05'S., on the decl. arc; and determine a meridian with the solar and find that the tree bears N.0°02'W.

No magnetic declination was taken on account of defective needles.

CHAINS

In the declination arc settings, .85 of the tabulated refraction for computing declinations is used, due to the altitude of the country.

Steel tapes, 5 chs. long were used by both parties in the field, together with clinometers for determining slope angles, and the reduced horizontal distances only appear in the official field notes. The tapes were tested, comparison being made with a standard tape, 1 ch. long, kept and used for that purpose.

October 14: For solar obsn. this date see line bet. secs. 29 and 30, T.9 S.,R.4 W.

I begin at the cor. of secs. 31 and 32 which is a quartzite stone, 4 x 10 x 10 ins. above ground, firmly set, and marked and witnessed as described by the Surveyor General. I reestablish this cor. as follows:

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

T 9 S
S 31 | S 32
R 4 W
S 6 | S 5
T 10 S
1915

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

Thence I run

West, retracing on S. bdy. sec. 31

40.00 After a long and careful search I am unable to find any trace of the old $\frac{1}{4}$ sec. cor.

Set an iron post, 3 ft. long, 1 in. in dia., 16 ins. in

Resurvey south boundary of T.9 S.,R.4 W.

chains	
	the ground and 10 ins. in a mound of stone for ¼ sec. cor., marked on brass cap
	S 31 / ¼
	1915
	raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor.
	Note: On account of underlying rock I am unable to set post more than 16 ins. in the ground.
	Thence
	East, on resurvey line on S. bdy. sec. 31
	Over rough mountainous land through dense undergrowth of short sage brush.
	Descend abruptly over E. slope ridge.
10.00	Base of ridge, 319 ft. below cor., bears N. and S.
	Thence over rolling land through scattering pinon and cedar timber.
31.17	N. 9 lks. from my line is the closing cor. of secs. 5 and 6, T.10 S.,R.4 W. hereinafterdescribed.
40.00	The cor. of secs. 31 and 32.
	Land, mountainous and rolling E. exposure. W.10 chs. mountainous land, E. 30 chs. rolling land.
	Soil, mountainous portion, rocky, of quartz formation mixed with some sandy loam on rocky sub-soil,4th.rate. Soil, rolling land, generally sandy loam mixed with gravel on dry sandy loam sub-soil,2nd. rate.
	Timber, scattering scrub cedar and pinon on E. 30 chs.
	Undergrowth, sage brush and grass, Good grazing.
	October 14,1915.
	Howard W. Miller
	U. S. Surveyor.

Resurvey south boundary of T.9 S.,R.4 W.

CHAINS	
	October 23: At 7h. 15m.a.m.l.m.t., I set off 39° 59' on the lat. arc; 11° 07'S., 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. which is a limestone 8 x 8 x 7 ins. above ground, firmly set, marked with 3 notches on E. and W. edges. No accessories to cor.
	I reestablish cor. as follows:
	Set an iron post, 3 ft. long, 3 ins. in dia., 24 ins. in the ground alongside old cor. for cor. of secs. 33 and 34, with brass cap marked
	T 9 S R 4 W S 33 | S 34 1915
	raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor.
	Thence I run
	East, retracing on S. bdy. sec. 34
40.00	No trace of old ¼ sec. cor. can be found.
80.41	Fall 35 lks. N. of the cor. of secs. 34and 35 which is a quartzite stone, 14 x 10 x 5 ins., firmly set in a mound of stone, marked with 4 notches on W. and 2 notches on E. edge and witnessed by a mound of stone, 2 ft. base, 1½ ft. high, N. of cor.
	The bearing of this mile is S.89°45'E., and the distance is 80.41 chs.
	Thence from cor. of secs. 33 and 34
	S.89°45'E., resurveying ontS. bdy. sec. 34
	Over rolling bench land through dense scrub cedar and pinon timber and undergrowth of sage brush.
37.10	Begindescent into ravine, bears N. and S.
39.46	Old road, bears NE. and SW.
40.21	Proportionate point for ¼ sec. cor.
40.28	Bottom of gully and wash, 20 lks. wide, 3 ft. deep, 37 ft. below top of bench, drains NE. The proportioned point for the ¼ sec. cor. falls in wash and as the old notes state this gully at 39.75 chs. it is evident that the

chains	
	$\frac{1}{4}$ cor. originally stood on the east side of the wash, therefore at
40.53	or 25 lks. east of the exact center of the wash, this distance being in accordance with the old notes, I restore cor. as follows:
	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
	S 34 / $\frac{1}{4}$ / 1915
	raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor.
	Ascend
46.09	Low ridge, 60 ft. above gully, bears NE. and SW.
	Thence over rolling bench.
68.29	Begin descent into large gully.
70.80	N. 01 lks. from my line is the closing cor. of secs. 2 and 3, T.10 S.,R.4 W., which is a limestone, 10 x 8 x 8 ins. above ground, firmly set, marked with 2 grooves on E., 4 grooves on W. and CC on N. face. No accessories to cor.
	Cor falls in bottom of small gully draining NE.
	Gradually ascend.
80.41	The cor. of secs. 34 and 35.
	Knowing from retracements and surveys in T.9 S.,R.4 W. that closing cors. for that Tp. will be necessary upon this bdy., and as T.10 S.,R.4 W. has been subdivided and closing cors. for that Tp. already set on this boundary, the sec. and $\frac{1}{4}$ sec. cors. E. of the $\frac{1}{4}$ sec. cor. on the S. bdy. of sec. 34 will not be common to any secs. and therefore change all cors. to angle point cors.
	I destroy marks on cor. of secs. 34 and 35 and set an iron post, 3 ft. long, 3 ins. in dia., 24 ins. in the ground alongside old cor. for angle point cor., with

chains	
	brass cap marked T 9 S R 4 W ___A P___ T 10 S 1915 raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor.
	Land, rolling bench lands, draining NE.
	Soil, 2nd. rate; light, dry, warm sandy loam mixed with gravel and rocks on sandy and gravelly sub-soil.
	Timber, scattering patches of dense scrub cedar and pinon.
	Undergrowth, sage brush and grass. Good grazing.
	East, on S. bdy. sec. 35
	Over rolling mountainous bench land through cedar and pinon timber and dense undergrowth of sage brush.
2.63	Western Union Telegraph line, bears N.33°15'W. and S.33° 15'E.
3.37	Center SP. LA. and SL. Ry. tracks, bear N.33°15'W. and S.33°15'E.
19.20	Wash, 10 lks. wide, 3 ft. deep, course NE.
25.25	Western Union Telegraph line, bears N.30°W. and S.30°E.
26.05	Center SP.LA.& SL.Ry. branch line , bears N.30°W. and S.30°E.
27.50	Road, bears NW. and SE.
29.50	Old Ry. spur, bears N.11¼°E. and S.11¼°W. A dump, bears NE. of line about 3 chs.
	Ascend abruptly over W. slope.
34.57	White limestone rock quarry, bears N. about 8 chs.
40.12	100 ft. above railroad tracks,
	Fall 8 lks. N. of the ¼ sec. cor. which is a limestone 12 x 8 x 5 ins., lying on the ground, marked ¼ on one face, no accessories to cor.

Resurvey south boundary T.9 S.,R.4 W.

chains	
	Deface stone of marks and set same 8 ins. in the ground.
	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground alongside old cor. for angle point cor., with brass cap marked
	T 9 S R 4 W S 35 AP S 2 T 10 S R 4 W 1915
	raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor.
	The bearing of this ½ mile is S 89°53'E., and the distance is 40.12 chs.
	From cor., I continue
	East
	Leave sage brush, gradually ascend through scattering buck brush and dense cedar and pinon timber.
54.95	Ridge, 62 ft. above angle point cor., bears NW. and SE.
	Descend.
68.95	Wash, 30 lks. wide, 4 ft. deep, course NW.
70.35	Wash, 20 lks. wide, 3 ft. deep, course NW.
73.05	N.94 lks. from line is the closing cor. of secs. 1 and 2, T.10 S.,R.4 W. which is a limestone 22 x 14 x 8 ins. above ground, firmly set, marked with 1 groove on E., 5 grooves on W. and CC on N. face, and witnessed by a mound of stone, 2 ft. base, 1½ ft. high, S. of cor.
	Gradually ascend.
	Leave buck brush, enter dense sage brush, bears N. and S.
76.83	Wash, 20 lks. wide, 3 ft. deep, drains SW.
80.37	Fall 8 lks. S. of the cor. of secs. 35 and 36 which is a limestone 16 x 8 x 8 ins. above ground, firmly set, marked and witnessed as described by the Surveyor General.
	Deface markings on stone.
	Set an iron post, 3 ft. long, 3 ins. in dia., 24 ins. in

CHAINS

the ground alongside old cor. for angle point cor., with brass cap marked

T 9 S R 4 W
A P
T 10 S R 4 W
1915

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

The bearing of this ½ mile is N.89°53'E., and the distance is 40.25 chs.

Land, rolling mountainous with general NW. exposure and drainage.

Soil,3rd. rate; light, sandy loam mixed with gravel and rock on gravelly and rocky sub-soil.

Timber, scrub cedar and pinon.

Undergrowth, sage and buck brush with some grass good for grazing purposes.

East, on S. bdy. sec. 36

Over mountainous land through scattering cedar and pinon timber and dense undergrowth of sage brush.

7.37 Bottom of ravine and wash, 30 lks. wide, 3 ft. deep, course SW. This point is a junction of washes from NE. and SE.

Ascend abruptly over SW. slope.

10.33 Enter dense cedar and pinon timber, bears NW. and SE.

October 23: At this station I set off 11°13'S., on the decl. arc; and at 11h. 45m.a.m.l.m.t., observe the sun on the meridian; the resulting lat. is 39°59'.

20.50 Leave dense timber, bears NW. and SE.

39.96 314 ft. above ravine.

Fall 4 lks. S. of the ¼ sec. cor. which is a broken limestone 14 x 10 x 8 ins., lying on the ground, marked ¼ on one face. No accessories to cor.

Resurvey south boundary T.9 S.,R.4 W.

chains	
	Deface stone of marks and re-set stone 10 ins. in ground.
	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in t the ground alongside old cor. for angle point cor., with brass cap marked
	T 9 S R 4 W S 36 AP S 1 T 10 S R 4 W 1915
	raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor.
	The bearing of this ½ mile is N.89°56'E., and the distance is 39.96 chs.
	From cor., I continue
	East
41.26	Descend gradually along SE. slope into ravine.
44.53	Ravine, 31 ft. below ¼ sec. cor., drains SW.
	Ascend abruptly over NW. slope.
70.80	202 ft. above ravine.
	Fall 6 lks. S. of the closing cor. of Tps. 9 and 10 S., R.4 W., which is a sandstone, 24 x 12 x 10 ins., lying on the ground, marked with 6 notches on 3 cornering edges. No accessories to cor.
	Reset stone 16 ins. in the ground at exact cor. point.
	Set an iron post, 3 ft. long, 3 ins. in dia., 24 ins. in the ground alongside old cor. for closing cor. of Tps. 9 and 10 S.,R.4 W., with brass cap marked
	T 9 S S 36 S 31 R 3 W R 4 W C S 6 C S 1 T 10 S 1915
	raise a mound of stone, 2 ft, base, 1½ ft. high, W. of cor.

Resurvey south boundary of T.9 S.,R.4 W,

chains

The bearing of this ½ mile is N.89°53'E., and the distance is 30.84 chs.

Land, rough mountainous with general W. exposure and drainage.

Soil,4th. rate; gravelly and rocky mixed with some dry clay on gravelly and rocky sub-soil.

Timber, scrub cedar and pinon.

Undergrowth, sage brush with some grass good for grazing purposes.

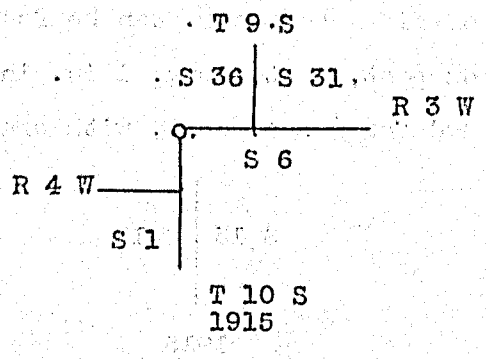
West boundary of T.10 S.,R.3 W.

From closing cor. of Tps. 9 and 10 S.,R.4 W., I run North

4.28 Intersect the old ¼ sec. cor., W. bdy. sec. 6, T.10 S., R.3 W., which is a blue limestone 16 x 10 x 8 ins. lying on the ground, marked ¼ on one face. No accessories to cor.

Reset stone 10 ins. in the ground at old cor. point.

Set an iron post, 3 ft. long, 3 ins. in dia., 24 ins. in the ground alongside old cor. for NW. cor. of T.10 S., R.3 W., with brass cap marked



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

chains

October 23,1915.

October 25: For solar observation see line bet. secs. 23 and 24, T.9 S.,R.4 W.

The cor. of secs. 7,12,13 and 18 on the E. bdy. of the Tp. is a sandstone 24 x 8 x 6 ins. above ground, firmly set, marked with 4 notches on S. and 2 notches on N. edge. No accessories to cor. I reestablish cor. as follows:

Set an iron post, 3 ft. long, 3 ins. in dia., 24 ins. in the ground alongside old cor. for cor. of secs. 7,12, 13 and 18, with brass cap marked

T 9 S	
R 4 W	R 3 W
S 12	S 7
S 13	S 18

1915

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

Thence I run

South, retracing bet. secs. 13 and 18

40.00 No trace of old ¼ sec. cor. can be found.

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 13	S 18

1915

from which

A pinon, 9 ins. diam., bears S.13°W., 26 lks.

Resurvey East boundary of T.9 S.,R.4 W.

chains	
	dist., marked ½ S 13 B T
	No other trees within limits., raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.
	Thence
	North, on resurvey line bet. secs. 13 and 18
	Over rolling mountainous bench land through scrub cedar and pinon timber and dense undergrowth of sage brush.
.32	Wash, 30 lks. wide, 3 ft. deep, course NW.
13.59	Old road, bears NW. and SE.
16.14	Wash, 45 lks. wide, 6 ft. deep, course NW.
33.47	Road, bears NE. and SW.
40.00	The cor. of secs. 7,12,13 and 18
	Land, rolling mountainous bench, general NW. exposure and drain.
	Soil, 3rd. rate; light, dry shallow sandy loam mixed with gravel and rocks on hard, dry sand and rock sub-soil.
	Timber, scrub cedar and pinon.
	Undergrowth, sage brush.
	October 25,1915.

chains

October 26: At 7h. 14m.a.m.l.m.t., I set off 40° 01' on the latitude arc; 12°09' S., on the decl. arc; and determine a meridian with the solar at the cor. of secs. 23,24,25 and 26 which is a limestone, 10 x 5 x 8 ins. above ground, firmly set, marked with 1 notch on E. and 2 notches on S. edge. No accessories to cor.

I reestablish cor. as follows:

Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground alongside old cor. for cor. of secs. 23,24, 25 and 26 with brass cap marked

T 9 S	R 4 W
S 23	S 24
S 26	S 25

1915

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

Thence I run

East, retracing bet. secs. 24 and 25

40.00 No trace of the old ¼ sec. cor. can be found.

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 24
¼
S 25
1915

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

Thence

West, on resurvey line bet. secs. 24 and 25

Gradually descend over rolling mountainous bench land through scrub cedar and pinon timber and dense undergrowth of sage brush.

.52 Wash, 40 lks. wide, 10 ft. deep, course NW.

8.10 Road, bears NW. and SE

40.00 The cor. of secs. 23,24,25 and 26.

chains

Land, rolling mountainous bench, general W. exposure and drainage.

Soil,3rd. rate; shallow sandy loam mixed with gravel and rock on hard, baked sand and rock sub-soil.

Timber, scrub cedar and pinon.

Undergrowth, sage brush and some grass good for grazing.

October 26,1915.

October 25: At 8h. 24m.a.m.l.m.t., I set off 40°01' on the lat. arc; 11°51'S., on the decl. arc; and determine a meridian with the solar at the cor. of secs. 23,24,25 and 26.

Thence I run

North, retracing bet. secs. 23 and 24

40.00 No trace of old ¼ sec. cor. can be found.

80.50 Fall 9 lks. E. of the cor. of secs. 13,14,23 and 24, which is a limestone, 12 x 14 x 6 ins. above ground, firmly set, marked with 1 notch on E. and 3 notches on S. edge. No accessories to cor.

I reestablish cor. as follows:

Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground alongside old cor. for cor. of secs. 13, 14,23 and 24, with brass cap marked

T 9 S	R 4 W
S 14	S 13
S 23	S 24

1915

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

Thence from cor. of secs. 23,24,25 and 26

N.0°04'W., on resurvey line bet. secs. 23 and 24

Over rolling bench land draining W., through scrub cedar

Resurvey of subdivision of T.9 S.,R.4 W.

chains	
	and pinon timber and undergrowth of sagebrush.
33.00	Leave timber, bears NW. and SE.
40.25	Porportionate measurement.
	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 23 ¼ | S 24 1915
	raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.
40.70	New road, bears NE. and SW. Old road, bears N.20°W. and S.20°E. crosses new road at this point.
80.50	The cor. of secs. 13,14,23 and 24.
	Land, rolling bench general W. exposure and drainage.
	Soil, 2nd.rate: Light, dry, sandy loam mixed with gravel and streaked with rocks on hard, dry sandy and gravelly sub-soil.
	Timber, scrub cedar and pinon.
	Undergrowth, sage brush and grass, good for grazing.
	Land suitable for dry farming.
	East, retracing bet. secs. 13 and 24
40.00	No trace of the old ¼ sec. cor. can be found.
	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 13 ¼ S 24 1915
	from which
	A pinon, 24 ins. diam.,bears S.26¼°W., 90 lks. dist., marked ¼ S 24 B T
	A pinon, 10 ins. diam.,bears N.52½°W., 41 lks.

chains	
	dist., marked ¼ S 13 B T
	Thence
	West, resurveying bet. secs. 13 and 24
	Over rolling bench land sloping and draining W., gradually descending through dense scrub cedar and pinon timber and undergrowth of sage brush.
8.36	Road, bears NE. and SW.
12.66	Leave dense timber, bears NE. and SW.
34.50	Wash, 30 lks. wide, 6 ft. deep, course NW.
40.00	The cor. of secs. 13,14,23 and 24.
	Land, rolling bench, general W. exposure and drain.
	Soil,2nd. rate; light, dry, sandy loam mixed with gravel and streaked with rocks on hard, baked sand and gravel sub-soil.
	Timber, scrub cedar and pinon.
	Undergrowth, sage brush and grass. Fair grazing.
	North, bet. secs. 13 and 14
	Over gently rolling land through dense undergrowth of sage brush.
22.40	Wash, 20 lks. wide, 4 ft. deep, course NW.
40.16	Fall 14 lks. E. of the ¼ sec. cor. which is a limestone 16 x 8 x 5 ins., lying on the ground, marked ¼ on one face. No accessories to cor.
	Re-set stone at exact cor. point, 10 ins. in the ground, marked ¼ on W. face and set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground alongside old cor. for reestablished ¼ sec. cor., with brass cap marked

S 14 ¼ | S 13

chains

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

The bearing of this ½ mile is N.0°12'W., and the distance is 40.16 chs.

From point 14 lks. E. of the ¼ sec. cor., I continue North

80.49 Fall 20 lks. E. of the cor. of secs. 11,12,13 and 14 which is a limestone, 6 x 7 x 4 ins. above ground, firmly set, marked with 1 notch on E. and 4 notches on S. edge. No accessories to cor.

Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground alongside old cor. for reestablished cor. of secs. 11,12,13 and 14, with brass cap marked

T 9 S	R 4 W
S 11	S 12
S 14	S 13

1915

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

The bearing of this ½ mile is N.0°05'W. and the distance is 40.33 chs.

Land, rolling bench with general W. esposure and drain.

Soil, 2nd. rate; light, dry, shallow sandy loam mixed with gravel and streaked with rocks on hard, baked sand and gravel sub-soil.

No timber.

Undergrowth, sage brush.

East, retracing bet. secs. 12 and 13

Gradually ascend over rolling bench land sloping and draining nearly W., through dense undergrowth of sage brush.

Resurvey of subdivision of T.9 S.,R.4 W.

chains	
5.00	Enter scattering cedar timber, bears N. and S.
10.00	Enter dense cedar and pinon timber, bears N. and S.
38.30	Wash, 30 lks. wide, 3 ft. deep, course NW.
40.10	Fall 65 lks. S. of the ¼ sec. cor. which is a quartzite stone, 11 x 7 x 4 ins. lying on the ground, marked ¼ on one face. No accessories to cor.
	Reset stone, 6 ins. in the ground at exact cor. point marked ¼ on N. face.
	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground alongside old cor. for reestablished ¼ sec. cor., with brass cap marked
	S 12 / ¼ / S 13 / 1915
	dig pits, 18 x 18 x 12 ins., E. and W. of post, 3 ft. dist., raise a mound of earth, 3½ ft. base, 1½ ft. high, N. of cor.
	The bearing of this ½ mile is N.89°04'E., and the distance is 40.11 chs.
	From point 65 lks. S. of the ¼ sec. cor., I continue East
61.60	Wash, 30 lks. wide, 3 ft. deep, course NW.
80.85	Fall 151 lks. S. of the cor. of secs. 7,12,13 and 18.
	The bearing of this ½ mile is N.88°47'E., and the distance is 40.76 chs.
	Land, rolling mountainous bench land with general NW. exposure and drainage.
	Soil, 3rd. rate; sandy and gravelly mixed with rocks on hard , dry sand and rock sub-soil.
	Timber, cedar and pinon on E. 75.85 chs.
	Undergrowth, sage brush.
	October 25: At this cor. I set off 11° 55'S., on the decl. arc; and at 11h. 44m.a.m.l.m.t., observe the sun on the meridian, the resulting lat. is 40°03'.

Resurvey of subdivision of T.9 S.,R.4 W.

chains

October 25,1915

Isaac Hayes

U. S. Transitman

October 22: At 9h. 15m.a.m.l.m.t., I set off 40°00' on the lat. arc; 10°49'S., on the decl. arc; and determine a meridian with the solar at the ¼ sec. cor. bet. secs. 27 and 34 which is a quartzite stone 6 x 12 x12 ins. above ground, firmly set, marked ¼ on N. face. No accessories to cor.

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

S 27
¼
———
S 34
1915

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

Thence I run

East, retracing bet. secs. 27 and 34

40.00 On steep W. slope of Bolter wash. After a long and careful search, I am unable to find any trace of the cor. of secs. 26,27,34 and 35.

Unable to mark point at this station, therefore at a point 66 lks. W. mark temp. point for cor. of secs. 26,27,34 and 35

October 22: At this cor. I set off 10°51'S., on the decl. arc; and at 11h. 45m.a.m.l.m.t., observe the sun on the meridian; the resulting lat. is 40°00'.

---

chains	
	From temp. point for cor. of secs. 26,27,34 and 35
	I run
	North, retracing bet. secs. 26 and 27
40.88	Fall 54 lks. W. of the ¼ sec. cor. which is a blue limestone, 8 x 8 x 10 ins., lying on the ground, marked ¼ on one face. No accessories to cor.
	I reset stone 5 ins. in the ground, marked ¼ on W. face.
	I return to the temp. cor. of secs. 26,27,34 and 35 and set a point A, 66 lks. E., being 40.00 chs. E. of the ¼ sec. cor. bet. secs. 27 and 34. I also set a point B, 54 lks. E. and 88 lks. N. of the temp. cor., this point being 40.00 chs. S. of the ¼ sec. cor. bet. secs. 26 and 27. From point A, point B. is 88 lks. N. and 12 lks. W.
	October 22,1915
	October 23: At 7h. 15m.a.m.l.m.t., I set off 40°00' on the lat. arc; 11°07'S., on the decl. arc; and determine a meridian with the solar at the temp. cor. of secs. 26,27,34 and 35.
	Thence I run
	South, retracing bet. secs. 34 and 35
39.84	Fall 109 lks. W. of the ¼ sec. cor. which is a blue limestone, 14 x 14 x 5 ins., lying on the ground, marked ¼ on one face. No accessories to cor.
	I reset stone , 10 ins. in the ground, marked ¼ on W. face
	I return to the temp. cor. of secs. 26,27,34 and 35 and set a point C, 109 lks. E. and 16 lks. N., this point being 40.00 chs. N. of the ¼ sec. cor. bet. secs. 34 and 35. From point C, point A is 16 lks. S. and 43 lks. W. From point C. point B. is 72 lks. N. and 55 lks. W.
	From temp. cor. of secs. 26,27,34 and 35
	I run
	East, retracing bet. secs. 26 and 35

Resurvey of subdivision of T.9 S.,R.4 W.

chains

40.00 No trace of the ¼ sec. cor. can be found.

I return to the temp. cor. of secs. 26, 27, 34 and 35 and from points A, B and C restore the sec. cor. by relative weights and find that the restored point falls 35 lks. N. and 10 lks. E. of point A.

The bearing of the N.½ mile bet. secs. 34 and 35 is S.0°28'E. and the distance is 40.19 chs.

The bearing of the E.½ mile bet. secs. 27 and 34 is N.89°30'E. and the distance is 40.10 chs.

The bearing of the S.½ mile bet. secs. 26 and 27 is N.0°19'W., and the distance is 40.53 chs.

The restored cor. point for secs. 26,27,34 and 35 falls on steep E. slope near bottom of Bolter wash where cor. cannot be safley set, therefore at a point 76 lks. S.89°30'W. of true cor. point set cor. as follows:

Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground for witness cor. to secs. 26,27,34 and 35 with brass cap marked

T 9 S	R 4 W
S 27	S 26
WC	
S 34	S 35

1915

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

Thence I run from true cor. point S.0°28'E., on resurvey line bet. secs. 34 and 35 Over broken land on E. side, near bottom of Bolter wash through dense high undergrowth of greasewood, sage and rabbit brush.

6.75 Bottom of Bolter wash , 30 lks. wide in gulch 50 ft. deep, stream in same 2 lks. wide, 1 in. deep, course from SW. to N.10°E. Numerous seaps of alkali water up wash about 5 chs.

chains	
	Thence over nearly level land on E. side of Bolter wash in large wide draw.
31.00	Bolter wash in gulch 30 ft. deep, drains NW.
	Thence on W. side of gulch.
40.19	The ½ sec. cor.
	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 | S 35 1915
	raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.
	Land, nearly level, drains N.
	Soil, 1st. rate; light, warm, dry sandy loam on dry sandy sub-soil.
	No timber.
	Undergrowth, greasewood, sage and rabbit brush.

	From true cor. point of secs. 26,27,34 and 35
	East, resurveying bet. secs. 26 and 35
	In bottom of Bolter wash, through dense undergrowth of greasewood, sage and rabbit brush.
	Descend
15	Bottom of Bolter wash , 30 lks. wide, stream in same 2 lks. wide, 1 in. deep, alkali water, course from S. to NW.
	Ascend.
1.00	East brink of wash, 40 ft. high, bears NW. and S.
	Gradually ascend over gently rolling land in bottom of large draw.
1.60	Road, from Tintic to Rush valley, bears N.10°W. and S.10°E.

Resurvey of subdivision of T.9 S.,R.4 W.

chains	
4.68	Western Union Telegraph line, bears N.16°45'W. and S.14°25'E.
5.54	Center branch line SP.LA.& SL.Ry. tracks, on curve, bears N.16°45'W. and S.14°25'E.
	Leave greasewood and dense brush, also large draw, bears N. and S.
	Ascend W. slope of bench.
8.24	Enter dense pinon and cedar timber, bears N. and S.
11.03	Top of bench, 106 ft. above wash, bears N. and S.
	Thence gradually ascend across bench.
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 26
¼

S 35
1915

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

Trees within limits but all too scrubby for bearing trees.

Land, rolling, general W. exposure, drains N.

Soil, 1st. and 4th. rates; W. 5.54 chs. light, warm sandy loam on sandy sub-soil; E.34.44 chs. gravelly and rocky mixed with some shallow sandy clay on hard, baked clay and rock sub-soil.

Timber, dense scrub pinon and cedar on E.31.76 chs.

Undergrowth, sage , rabbit brush and greasewood.

From true cor. point of secs. 26,27,34 and 35, I run N.0°19'W., on resurvey line bet. secs. 26 and 27

Over broken land on W. side, near bottom of Bolter wash, through dense undergrowth of greasewood, sage and rabbit brush.

chains	
	Gradually descend.
.60	Bottom of Bolter gulch and wash , 30 lks. wide, 5 ft. deep, stream of alkali water in same, 2 lks. wide, 1 in. deep, course NW.
2.00	N. brink of gulch, 40 ft. high, bears NW. and SE.
	Thence over nearly level land in large wide draw.
3.70	Road, Tintic to Rush valley, bears N.25°W. and S.25°E.
9.01	Western Union Telegraph line bears N.39°06'W. and S.36°12' E.
10.47	Center branch line SP.LA.& SL.Ry. tracks, on curve, bears N.39°06'W. and S.36°12'E.
	Leave large draw and greasewood undergrowth, bears NW. and SE.
	Ascend over point of spur.
15.26	Spur, 38 ft. above wash, projects W.
	Descend.
17.23	Draw, 23 ft. below spur, drains W.
	Ascend.
21.34	Spur, 38 ft. above draw, projects W.
	Descend.
33.71	Draw, 50 ft. below spur, drains S.85°W.
	Ascend
37.22	Spur, 20 ft. above draw, projects N.70°W.
	Descend.
40.53	The ¼ sec. cor.
	Set an iron post, 3 ft. long, 1 in. in dia., 36 ins. in the ground alongside old cor. for ¼ sec. cor., with brass cap marked

S 27 | S 26
¼
1915

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

October 23,1915

chains

October 22: For solar observation see E.½ mile bet. secs. 27 and 34.

From ¼ sec. cor.,bet. Secs. 26 and 27, I run North

.25 Small draw, 5 ft. below ¼ sec. cor., drains W.

Gradually ascend.

25.86 Spur, 65 ft. above draw, projects NW.

Gradually descend 30 ft. to

40.18 Fall 7 lks. W. of the cor. of secs. 22,23,26 and 27 which is a blue limestone 8 x 4 x 9 ins. above ground, firmly set, marked with 2 notches on E. and S. edges. No accessories to cor.

Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground alongside old cor. for reestablished cor. of secs. 22,23,26 and 27, with brass cap marked

T 9 S	R 4 W
S 22	S 23
S 27	S 26

1915

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

The bearing of this ½ mile is N.0°06'E., and the distance is 40.18 chs.

Land, low rolling hills, general W. exposure and drain.

Soil, 1st. and 3rd. rates; S. 10.47 chs. light, dry, warm sandy loam on sandy sub-soil; N.69.24 chs., gravelly and rocky mixed with sandy clay on gravelly and hard, dry clay sub-soil.

Timber, a few scattering cedar on mile.

Undergrowth, sage, rabbit brush and some greasewood.

East, bet. secs. 23 and 26

Resurvey of subdivision of T.9 S.,R.4 W.

chains	
	Over rolling bench land draining NW., through scattering scrub cedar and pinon timber and undergrowth of sage brush.
3.37	Ravine, 15 ft. below sec. cor., drains N.15°W.
	Gradually ascend.
15.64	Top of bench, 73 ft. above ravine, bears N. and S.
	Thence gradually ascend across bench.
40.07	Fall 5 lks. S. of the ¼ sec. cor., which is a limestone 7 x 12 x 5 ins. lying on the ground, marked ¼ on one face. No accessories to cor.
	I reset stone, 4 ins. in the ground, marked ¼ on N. face.
	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground alongside old cor. for reestablished ¼ sec. cor., with brass cap marked
	S 23 / ¼ / S 26 / 1915
	raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor.
	The bearing of this ½ mile is N.89°56'E. and the distance is 40.07 chs.
	From point 5 lks. S. of the ¼ sec. cor., I continue East
80.12	Intersect the cor. of secs. 23,24,25 and 26
	The bearing of this ½ mile is S.89°56'E. and the distance is 40.05 chs.
	Land, rolling bench land, general NW. exposure and drain.
	Soil, 3rd. rate; shallow sandy loam mixed with gravel on hard, dry clay , gravel and rock sub-soil.
	Timber, scrub cedar and pinon.
	Undergrowth, sage brush.
	October 22,1915

Resurvey of subdivision of T.9 S.,R.4 W.

chains	
	October 26: At 7h. 44m.a.m.l.m.t., I set off 39° 59' on the lat. arc; 12° 11'S., 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
	North, retracing bet. secs. 33 and 34
40.00	No trace of the ¼ sec. cor. can be found.
80.00	No trace of the cor. of secs. 27,28,33 and 34 can be found. Set temp. point for sec. cor.
	I proceed to restore the cor. of secs. 27,28,33 and 34 as follows:
	From temp. cor. of secs. 27,28,33 and 34, I continue
	North, with continuous chaining making searches at intervals of 40.00 chs. for ¼ sec. and sec. cors.
160.00	October 26: At this station I set off 12° 15½'S., on the decl. arc; and at 11h. 44m.a.m.l.m.t., observe the sun on the meridian; the resulting lat. is 40°01'.
280.00	Cease work.
	October 26,1915.
	Howard D. Miller
	U. S. Surveyor
	October 27: At 7h. 14m.a.m.l.m.t., I set off 40°02' on the lat. arc; 12° 29'S., on the decl. arc; and determine a meridian with the solar.
	Thence I run
	North
320.90	Fall 2.34 chs. E. of the cor. of secs. 9,10,15 and 16 which is a quartzite stone, 6 x 8 x 5 ins. above ground, firmly set, marked with 3 notches on E. and 4 notches on S. edge. No accessories to cor.
	The bearing of the line bet. the cor. of secs. 33 and 34 on the S. bdy. of the Tp. and the cor. of secs. 9,10, 15 and 16 is N.0°25'W., and the distance is 320.90 chs.

Resurvey of subdivision of T.9 S.,R.4 W

chains

I return to the temp. cor. of secs. 27,28,33 and 34 and adjust same to its porportioned meridional distance.

October 27,1915

Isaac Hayes

U. S. transitman.

October 26: For solar obsn. see line bet. secs. 33 and 34

From temp. cor. of secs. 27,28,33 and 34, I run East, retracing bet. secs. 27 and 34

37.24 Fall 46 lks. N. of the ¼ sec. cor.

From temp. cor. of secs. 27,28,33 and 34, I run West, retracing bet. secs. 28 and 33

41.36 Fall 64 lks. N. of the ¼ sec. cor. which is a quartzite stone, 12 x 9 x 4 ins., lying on the ground, marked ¼ on one face. I reset stone 6 ins. in the ground, marked ¼ on N. face.

The bearing of the line bet. the ¼ sec. cor. bet. secs. 27 and 34 and the ¼ sec. cor. bet. secs. 28 and 33 is S.89°52'W. and the distance is 78.60 chs.

I return to the temp. cor. of secs. 27,28,33 and 34 and adjust same to its porportioned latitudinal distance.

October 26,1915.

Howard W. Miller

U. S. Surveyor.

October 27:

From the adjusted position for cor. of secs. 27,28,33 and 34 on the meridional line the adjusted position for cor. on the latitudinal line bears 1.44 chs. W. and 77 lks. S. I restore sec. cor. 1.44 chs. W. of the adjusted position on meridianl line as follows:

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

Resurvey of subdivision of T.9 S.,R.4 W.

chains

brass cap marked

T 9 S	R 4 W
S 28	S 27
S 33	S 34

1915

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

The bearing of the line bet. secs. 33 and 34 is N.1°27'W. and the distance is 80.25 chs.

The bearing of the W.½ mile bet. secs. 27 and 34 is S.89°00'E. and the distance is 39.27 chs.

The bearing of the E.½ mile bet. secs. 28 and 33 is S.88°44'W. and the distance isn39.35 chs.

October 27:

From cor. of secs. 33 and 34 on the S. bdy. of the Tp., heretofore described. N.1°27'W. between secs.33 and 34.

Over rolling bench land draining N., through scattering pinon and cedar timber and dense undergrowth of sage and rabbit brush.

Gradually descend.

40.12½ Porportionate measurement

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 33 ¼	S 34

1915

from which

A cedar,6 ins. diam.,bears N.64°E., 132 lks. dist., marked ¼ S 34 B T

A cedar, 8 ins. diam.,bears N.75°W.,73 lks. dist., marked ¼ S 33 B T

78.50 Wash, 1 ch. wide, 10 ft. deep, course NE.

Resurvey of subdivision of T.9 S.,R.4 W.

chains	
80.25	The cor. of secs. 27,28,33 and 34
	Land, rolling bench, general N. exposure and drain.
	Soil,3rd. rate; shallow sandy loam mixed with gravel and rock on hard, dry gravel , sand and rock sub-soil.
	Timber, scrub cedar and pinon.
	Undergrowth, sage and rabbit brush.
	S. 89° 00'E., bet. secs. 27 and 34
	Over rolling hills draining NE., through dense under-growth of sage and rabbit brush.
.95	Wash, 1 ch. wide, 12 ft. deep, course N.
	Gradually ascend.
8.54	Enter cedar and pinon timber, bears N. and S.
20.64	Western Union Telegraph line, bears N.45°05'W. and S. 48°05'E.
21.78	Center of main line SP.LA.& SL.Ry. tracks, on a curve and in cut 2 chs. wide, 25 ft. deep, bears N.45°05'W. and S.58°05'E.
23.05	Spur, 30 ft. above wash, projects N.20°E.
	Gradually descend.
34.25	Swale, 60 ft. below spur, drains N.5°E.
	Thence over broken ground.
39.27	The ¼ sec. cor. heretofore described.
	Thence
	N.89°30'E., with continuous chaining.
50.51	Leave hills and timber, enter large wide hollow, bears N. and S. Thence over nearly level land.
55.05	Old road, bears NW. and SE. Enter greasewood undergrowth bears NW. and SE.
63.53	Wash, 20 lks. wide, 10 ft. deep, course N.
66.13	Old road, bears N. and S.
68.13	Leave large hollow and greasewood undergrowth, bears N.

chains	
	Ascend W. slope of low spur.
70.40	Spur, 30 ft. above hollow, projects N. Some cedar timber on spur.
	Descend.
72.72	Base of spur and enter large wide draw and dense greasewood and rabbit brush, bears N. and S.
78.61	The witness cor. to secs. 26,27,34 and 35 on W. brink of Bolter wash, bears N.10°W. and S.10°E.
	Descend.
79.37	The true cor. point of secs. 26,27,34 and 35.
	Land, rolling hills and nearly level draws, draining N.
	Soil, 1st. and 3 rd. rates: soil on hills generally a shallow sandy loam mixed with gravel and rocks on hard, baked sand and rock sub-soil. Soil in hollows rich, light, dry sandy loam on dry sandy sub-soil.
	Timber, cedar and pinon, scattering on mile.
	Undergrowth, sage and rabbit brush with dense patches of greasewood.

	From cor. of secs. 27,28,33 and 34, I run S.88°44'W., bet. secs. 28 and 33
	Over rolling hilly land, through scattering cedar and pinon timber and dense undergrowth of sage and rabbit brush.
	Gradually ascend from large hollow over nearly E. slope.
7.57	Ascend more abruptly
13.90	Top of ridge, 118 ft. above sec. cor., bears N.15°E. and S.15°W.
	Thence on nearly level line.
18.70	Descend over W. slope.
39.35	The ¼ sec. cor.
	Land, rolling hills, general N. exposure and drainage.
	Soil, 3rd. rate; light, dry , shallow sandy loam mixed

chains

with gravel and rocks on hard, baked sand and rock sub-soil.

Timber, scrub cedar and pinon.

Undergrowth, sage and rabbit brush.

October 27,1915.

Isaac Hayes

U.S.Transitman.

October 14: For solar observation see line bet. secs. 29 and 30

From the cor. of secs. 31 and 32 on the S. bdy. of the Tp. heretofore described.

Thence I run

North, retracing bet. secs. 31 and 32

40.00 No trace of the ½ sec. cor. can be found.

80.08 Fall 79 lks. E. of the cor. of secs. 29,30,31 and 32 which is a quartzite stone, 8 x 10 x 8 ins. above ground, firmly set, marked with 5 notches on E. and 1 notch on S. edge. No accessories to cor.

Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground alongside old cor. for reestablished cor. of secs. 29,30,31 and 32, with brass cap marked

T 9 S	R 4 W
S 30	S 29
S 31	S 32

1915

from which

A cedar, 24 ins. diam.,bears S.66¾°W., 191 lks. dist., marked T 9 S R 4 W S 31 B T

A forked pinon, 17 ins. diam.,bears N.84¼°W., 240 lks. dist.,marked T 9 S R 4 W S 30 BT

chains	
	No other trees within limits.
	Raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.
	The bearing of this line is N.0°34'W. and the distance is 80.08 chs.
	Thence
	S.0° 34'E., on resurvey line bet. secs. 31 and 32
	Over rolling land draining NE., through scattering pinon and cedar timber and dense undergrowth of sage and rabbit brush.
4.10	Wash, 10 lks. wide, 3 ft. deep, drains NE.
35.80	Leave timber and undergrowth, enter cleared land, bears E. and W.
40.04	Porportionate measurement
	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
	S 31 $\frac{1}{4}$ | S 32
	1915
	raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.
66.60	Leave cleared land, enter dense pinon and cedar timber and undergrowth of sage brush, bears E. and W.
80.08	The cor. of secs. 31 and 32.
	Land, rolling, drains NE.
	Soil, 2nd. rate; light, dry, sandy loam mixed with gravel on dry sand and rock sub-soil.
	Timber, cedar and pinon on 49.28 chs.
	Undergrowth, sage and rabbit brush.

	From cor. of secs. 29,30,31 and 32, I run
	West, retracing bet. secs. 30 and 31

Resurvey of subdivision of T.9 S.,R.4 W.

chains	
40.00	No trace of old ¼ sec. cor. can be found.
	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 30 / ¼ / S 31 / 1915
	from which
	A pinon, 7 ins. diam., bears S.17°W., 115 lks. dist., marked ¼ S 31 B T
	A cedar, 10 ins. diam., bears N.12°W., 44 lks. dist., marked ¼ S 30 B T
	Thence
	East, on resurvey line bet. secs. 30 and 31
	Over rolling hills draining N., through cedar and pinon timber and undergrowth of sage and rabbit brush.
.05	Fence line, bears N. and S.
23.30	From this station, S. end J.S. Sharp's granary bears N.70°32'W.; N. edge of stable bears N.71°44'W., Chimney on cabin, bears N.75°32'W.; Sabies peak, bears S.16°35'W.
40.00	The cor. of secs. 29,30,31 and 32.
	Land, rolling hills, general N. exposure and drain.
	Soil, 2nd. rate; light, dry, shallow sandy loam mixed with gravel on hard, dry sandy and gravelly sub-soil.
	Timber, scrub cedar and pinon.
	Undergrowth, sage and rabbit brush.

October 14: At 7h. 45m.a.m.l.m.t., I set off 40°01' on the lat. arc; 7° 52'S., on the decl. arc; and determine a meridian with the solar at the cor. of secs. 19,20,29 and 30 which is a quartz stone, 8 x 10 x 4 ins. above ground, firmly set, marked with 5 notches on E. and 2 notches on S. edge. No accessories to cor.

Resurvey of subdivision of T.9 S.,R.4 W.

chains	
	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
	T 9 S | R 4 W S 19 | S 20 S 30 | S 29 1915
	raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.
	Thence I run
	South, retracing bet. secs. 29 and 30
40.00	No trace of the old ¼ sec. cor. can be found.
80.48	Fall 16 lks. W. of the cor. of secs. 29, 30,31 and 32.
	The bearing of this mile is N.0°07'W., and the distance is 80.48 chs.
	Thence
	N.0°07'W., on resurvey line bet. secs. 29 and 30
	Over low rolling hills through scattering cedar and pinon timber and undergrowth of sage and rabbit brush.
.08	SW. cor. of wire fence, bears N. and E.
19.56	Road, from Lofgreen, Utah to Sharps ranch, bears N.10°E. and SW.
	Enter dense scrub cedar and pinon timber, bears E. and W.
21.20	Same road, bears NW. and S.5°E.
40.24	Porportionate measurement.
	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 30 | S 29 ¼ 1915
	raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.
	No trees within limits suitable for bearing trees.
49.68	Road, from Lofgreen,Utah to Sharps ranch, bears N.10°E.

chains	
	and S.10°W.
51.38	Same road, bears N. and S.10°E.
	Thence along road.
54.38	Road, turns NW.
57.36	Same road, bears NE. and SW.
58.38	Road, from Lofgreen, Utah to Vernon, Utah bears N.80°E. and S.80°W.
69.62	Leave dense timber, bears NW. and SE.
73.88	Road, bears NW. and SE.
76.80	Small wash, drains NW.
80.48	The cor. of secs. 19,20,29 and 30
	Land, low rolling hills draining N.
	Soil, 3rd. rate; light, shallow sandy loam mixed with gravel and rocks on gravelly and rocky sub-soil.
	Timber, scrub pinon and cedar.
	Undergrowth, sage and rabbit brush.

October 14,1915

Howard W. Miller

U. S. Surveyor

Oct.13: At 1h. 47m.p.m.l.m.t., I set off 40° 01' on the lat. arc; 7° 36'S., on the decl. arc; and determine a meridian with the solar at the cor. of 19, 20, 29 and 30.

Thence I run

West, retracing bet. secs. 19 and 30

40.00 No trace of the old ¼ sec. cor. can be found.

80.35 Intersect W. bdy. of the Tp. 1.20 chs. N. of the old.cor of secs. 19,24,25 and 30 described in book B.

The bearing of this mile is S.89°09'W., and the distance is 80.36 chs.

Thence

Resurvey of subdivision of T.9 S.,R.4 W.

chains	
	N.89°09'E., on resurvey line bet. secs. 19 and 30
	Over rolling hilly land, through dense cedar and pinon timber and undergrowth of sage brush.
9.36	Swale, bears N. and S., drains N.
17.47	Ridge, bears NE. and SW.
	Descend over E. slope.
20.46	Leave dense timber, bears N. and S.
27.68	Base of ridge, bears N. and S. Thence over gently rolling land, through very scattering timber.
40.18	Porportionate measurement
	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in t the ground for ½ sec. cor., with brass cap marked
	S 19 / ¼ / S 30 / 1915
	raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor.
40.36	Wash, 6 ft. wide, 5 ft. deep, course N.
55.25	Enter heavier timber, bears N. and S.
	Gradually ascend over gentle W. slope.
58.36	Thence on near level line.
60.36	Fence line, bears N. and S.
75.36	Road, bears NW. and SE.
77.00	Wash, 5 ft. wide, 3 ft. deep, drains NW.
80.36	The cor. of secs. 19,20,29 and 30
	Land, rolling hills and nearly level, general N. drainage
	Soil; 2nd. rate; light, dry, sandy loam mixed with gravel and rocks on sandy and gravelly sub-soil.
	Timber, scrub cedar and pinon, very dense in patches.
	Undergrowth, sage and rabbit brush.

October 13,1915.

Isaac Hayes

U.S. transitman.

chains	
	October 22: For solar observation see line bet. secs. 27 and 34
	From cor. of secs. 23,24,25 and 26, I run
	South, on temp. line bet. secs. 25 and 26
40.00	Set temp. ¼ sec. cor., Cease work.
	October 22,1915.
	October 23: For solar observation, see line bet. secs. 34 and 35
	From temp. ¼ sec. cor., I continue
	South.
80.00	Set temp. cor. of secs. 25,26,35 and 36
	From temp. cor. of secs. 25,26,35 and 36, I run
	West, on a random line bet. secs. 26 and 35
40.10	Fall 66 lks. N. of the ¼ sec. cor. heretofore described.
	Thence from ¼ sec. cor., I run
	East, on a true line bet. secs. 26 and 35
	Gradually ascend over rolling bench land through dense cedar and pinon timber and undergrowth of sage and rabbit brush.
2.90	Leave dense timber, bears N. and S.
40.10	Set an iron post, 3 ft. long, 2 ins. in dia., 18 ins. in the ground and 6 ins. in a mound of stone for cor. of secs. 25,26,35 and 36, with brass cap marked

T 9 S	R 4 W
S 26	S 25
S 35	S 36

1915

	raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.
	Note: On account of underlying rock I am unable to set post more than 18 ins. in the ground.
	Land, rolling bench, general W. exposure and drain.
	Soil, 3rd. rate: Shallow sandy loam mixed with gravel and rocks on hard, dry sand and rock sub-soil.
	Timber, scrub cedar and pinon.

chains	
	Undergrowth, sage and rabbit brush.
	October 23: Not on line at noon, observations for lat. are impossible.

	North, on true line bet. secs. 25 and 26
	Gradually ascend over rolling bench land through scattering scrub cedar and pinon timber and undergrowth of sage and rabbit brush.
17.68	Wash, 30 lks. wide, 3 ft. deep, course W.
25.58	Enter dense timber, bears E. and W.
40.33	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 26 ¼ | S 25
	1915
	raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.
	Trees are within limits in both secs. but are too scruby for bearing trees.
80.66	The cor. of secs. 23,24,25 and 26
	Land, rolling bench, general W. exposure and drain.
	Soil, 3 rd. rate; light, shallow sandy loam mixed with gravel and rocks, on hard, dry sand and rock sub-soil.
	Timber, scrub cedar and pinon.
	Undergrowth, sage and rabbit brush.

	From the cor. of secs. 25,26,35 and 36, I run
	South, on a random line bet. secs. 35 and 36
40.00	Set temp. ½ sec. cor.
80.08	Intersect S. bdy. of the Tp. 3.13 chs., S.89° 53'W. of the angle point cor. or old cor. of secs. 35 and 36 heretofore described.
	At intersection, Set an iron post, 3 ft. long, 2 ins. in

chains	
	dia., 24 ins. in the ground for closing cor. of secs. 35 and 36, with brass cap marked
	T 9 S S 35 | S 36 R 4 W ——— CC AP S 2 | S 1 T 10 S 1915
	raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor.
	Trees are within limits in both secs. but are too scruby for bearing trees.
	Thence
	North, bet. secs. 35 and 36
	Over broken mountainous land sloping nearly W., through dense scrub cedar and pinon timber and undergrowth of sage and rabbit brush.
	Gradually descend.
15.70	Ravine, 40 ft. deep, drains W.
	Thence over more rolling country, principally bench lands.
32.88	Leave dense timber, bears E. and W.
35.33	Ravine, 30 ft. deep, drains W.
	Ascend 30 ft. to
40.04	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 | S 36 1915
	raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.
	Trees are within limits in both secs. but are too scruby for bearing trees.
41.30	Enter dense scrub cedar timber, bears E. and W.

Subdivision of T.9 S.,R.4 W.

chains	
50.68	Leave dense timber, bears E. and W.
54.05	Wash, 30 lks. wide, 4 ft. deep, course W.
80.08	The cor. of secs. 25,26,35 and 36
	Land, rolling and broken hills and bench land, general W. exposure and drain.
	Soil, 3rd. rate; generally gravelly and rocky mixed with somebrown sandy loam on hard, dry, sandy loam and rock sub-soil.
	Timber, scrub cedar and pinon timber.
	Undergrowth, sage and rabbit brush.
	October 23,1915

	October 25: At 1h. 44m.p.m.l.m.t., I set off 40°00' on the lat. arc; 11° 56'S., on the decl. arc; and determine a meridian with the solar at the cor. of secs. 25,26,35 and 36
	Thence I run
	East, on a random line bet. secs. 25 and 36
40.00	Set temp. ¼ sec. cor.
81.42	Intersect E. bdy. of the Tp. 4 lks. S. of the temp. cor. of secs. 25;30,31 and 36 heretofore described.
	October 25,1915
	October 26: From point 4 lks. S. of the temp. cor. of secs. 25,30, 31 and 36, I sight along my line bet. secs. 25 and 36 and determine a meridian with the instrument.
	Thence I run
	West , 88 lks. a distance of 80.54 chs. from the cor. of secs. 25,26,35 and 36 where I intersect true E. bdy. of the Tp. 4 lks. S. of the cor. of secs. 25 and 36 heretofore described.
	Thence from cor. of secs. 25 and 36
	S.89°58'W., on true line bet. secs. 25 and 36

Subdivision of T.9 S.,R.4 W.

chains	
	Over rough mountainous land through dense cedar and pinon timber and undergrowth of sage brush.
	Descend abruptly over W. face of mountain.
32.84	Leave dense timber, bears N. and S. Thence through very scattering timber and dense undergrowth of sage brush.
37.34	Base of mountain, 1014 ft. below sec. cor., bears N.10°W. and S.10°E.
	Thence gradually descend over rolling bench sloping W.
40.54	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 25 / ¼ / S 36 / 1915
	raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor.
56.19	Wash, 20 lks. wide, 3 ft. deep, course NW.
80.54	The cor. of secs. 25,26,35 and 36.
	Land, E. 37.34 chs. rough broken mountains. W. 43.20 chs. rolling bench. General W. exposure and drainage.
	Soil, 4th. rate; generally rocky of limestone and Quartz formation, mixed with some light, dry, brown sandy loam on rocky and gravelly sub-soil.
	Timber, dense cedar and pinon on E. 32.84 chs., very scattering on W. 47.70 chs.
	Undergrowth, sage brush.
	October 26,1915.
	Howard W. Miller
	U. S. Surveyor.

October 26: For solar observation, see W.½ mile bet. secs. 24 and 25

From ¼ sec. cor., bet. secs. 24 and 25

Subdivision of T.9 S.,R.4 W.

chains	
	East, on a random line bet. secs. 24 and 25.
40.48	Intersect E. bdy. of the Tp. 2.68 chs. S. of the temp. cor. of secs. 24 and 25 heretofore described. Cor. established at this point, for description of same see E. bdy. T.9 S.,R.4 W.
	Thence
	West on true line bet. secs. 24 and 25
	Over rough mountainous land through dense pinon and cedar timber and undergrowth of sage brush.
	Ascend abruptly over rocky NE. slope.
3.11	Spur, 41 ft. ft. above sec. cor., projects NW.
	Descend abruptly over W. slope of mountain.
5.10	Leave dense timber, bears N. and S.
13.78	Base of mountain, 299 ft. below spur, bears N. and S.
	Thence gradually descend over rolling bench sloping W.
40.48	The ¼ sec. cor.
	Land, E. 13.78 chs., rough mountainous, W, 26.70 chs. rolling bench. General W. exposure and drainage.
	Soil, 4th. rate; generally rocky of quartz and limestone formation, mixed with some light brown sandy loam and gravel, on hard, dry, clay and rock sub-soil.
	Timber, dense cedar and pinon on E. 5.10 chs. and scattering on W. 35.38 chs.
	Undergrowth, sage brush.
	October 26: At this station, I set off 12° 15'S., on the decl. arc; and at 11h. 44m.a.m.l.m.t., observe the sun on the meridian; the resulting lat. is 40°01'
	October 26,1915
	October 25: For solar observation see line bet. secs. 23 and 24
	From ¼ sec. cor. bet. secs. 13 and 24,
	East, on a random line bet. secs. 13 and 24
40.54	Intersect E. bdy. of the Tp. 2.04 chs. S. of the temp.

Subdivision of T.9 S.,R.4 W.

chains	
	cor. of secs. 13 and 24 heretofore described. Cor. established at this point, for description of same see E. bdy. T.9 S.,R.4 W.
	Thence
	West, on true line bet. secs. 13 and 24
	Gradually descend over rolling mountainous bench land through dense undergrowth of sage brush.
4.67	Wash, 30 lks. wide, 3 ft. deep, drains NW.
9.83	Wood road, bears N.20°W. and S.20°E.
22.37	Road and enter dense cedar and pinon timber, bears NE. and SW.
40.54	The ¼ sec. cor.
	Land, rolling mountainous bench, general W. exposure and drainage.
	Soil, 3 rd. rate; light, dry, brown sandy loam mixed with blue limestone rocks and shales on hard, dry sandy loam and gravel sub-soil.
	Timber, dense cedar and pinon on W.18.17 chs.
	Undergrowth, sage brush.
	October 25, 1915. Isaac Hayes U.S. Transitman

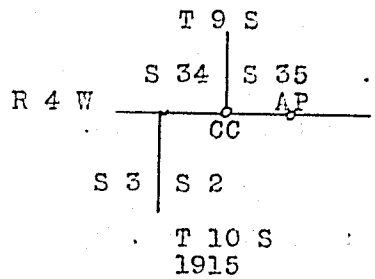
October 23: For solar observation see line bet. secs. 34 and 35

Knowing that a closing cor. will be necessary upon the S. bdy. of the Tp., I run from the ¼ sec. cor. bet. secs. 34 and 35,

	South on a true line bet. secs. 34 and 35
	Over nearly level land, in bottom of large draw, through dense undergrowth of sage, greasewood and rabbit brush.
6.30	Leave draw and dense greasewood and rabbit brush, enter hilly land. Ascend over NE. slope.
7.63	Enter scattering cedar and pinon timber, bears E. and W.
14.46	Spur, 94 ft. above ¼ sec. cor., projects E.
	Descend.

chains	
23.25	Center main line SP.LA.& SL.Ry tracks on a.20 ft. fill, 26 ft. below spur, bears N.12°23'W. and S.12°23'E.
27.86	Telegraph line bears N.12°23'W. and S.12°23'E.
33.48	Hollow, 30 ft. below track, drains NE.
39.90	Intersect S. bdy. of the Tp. 2.62 chs. N.89°45'W. of the angle point cor. or the old cor. of secs. 34 and 35 heretofore described.

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



dig pits, 24 x 18 x 12 ins., crosswise on each line, E. and W. 3 ft. and N. of post, 7 ft. dist., raise a mound of earth, 4 ft. base, 2 ft. high, N. of cor.

Land, rolling hills, draining N.

Soil,3rd. rate; light, dry, sandy loam mixed with gravel and quartz rocks on sandy and gravelly sub-soil.

Timber, some scattering cedar on S. 32.27 chs.

Undergrowth, sage and some greasewood and rabbit brush.

October 23,1915.

October 14: For solar observation, see line bet. secs. 29 and 30.

From the ¼ sec. cor. bet. secs. 30 and 31, I run West, on a random line bet. secs. 30 and 31

40.49	Intersect W. bdy. of the Tp. 45 lks. N. of the temp.cor. of secs. 25,30,31 and 36 heretofore described.

October 14: At this cor. I set off 7°57'S., on the decl. arc; and at 11h. 46m.a.m.l.m.t., observe the sun on the meridian; the resulting lat. is 40°00'.

Subdivision of T.9 S., R.4 W.

chains	
	October 14,1915
	December 1: The temp. cor. of secs. 25,30,31 and 36 is moved 42 lks. N., therefore the line bet. secs. 30 and 31 intersects W. bdy. of the Tp. 3 lks. N. of the cor. of secs. 25,30,31 and 36.
	Thence
	N.89°57'E., on a true line bet. secs. 30 and 31
	Over mountainous land draining N., through scattering cedar and pinon timber and dense undergrowth of sage brush.
	Descend over NE. slope.
15.00	Leave timber, bears N. and S.
16.80	Fence line, bears N. and S.
17.00	Bottom of ravine and enter Sharps cultivated field bears N. and S.
	Thence across bottom of ravine.
20.50	Road and leave cultivated land and ravine, bears N.5°E. and S.5°W.
	Enter hilly land and ascend over W. slope.
22.05	Pipe line from spring about 12 chs. up ravine, bears N.10°E. and S.10°W.
24.00	Enter dense scrub cedar and pinon timber, thence over nearly N. slope.
40.49	The ¼ sec. cor.
	Land, low broken hills with exception of 3.50 chs. in bottom of ravine. General exposure and drainage N.
	Soil; 1st and 4th. rates; level land in ravine soil is rich, moist, sandy loam on deep sandy sub-soil; remainder of half mile soil is generally stony and rocky of quartz formation mixed with some shallow sandy loam on hard, dry sand and gravel sub-soil.
	Timber, scrub cedar and pinon on 31.49 chs.
	Undergrowth, sage brush.
	December 1,1915
	R. Howard Miller
	U. S. Surveyor.

General Description of T.9 S.,R.4 W.

chains

That portion of the township surveyed in this assignment, contains three varieties of land; level, rolling and mountainous. It is situated at the extreme SE. end of Rush valley and has a general N. exposure and drain. The slopes of the rolling or bench lands are very gradual, the mountains rising abruptly from the benches and have steep rocky slopes. The soil of the level land in secs. 26,27,30,31,34 and 35 is a rich brown sandy loam on deep, loose sandy sub-soil and may be classed as first rate. The soil of the rolling land is generally a shallow, brown sandy loam mixed with gravel and rocks, on a hard, baked sandy clay and rock sub-soil. The soil of the mountains is all rocky of limestone and quartz formation.

Scrub cedar and pinon timber is found on the entire township and is used for fence posts and fuel.

The undergrowth is chiefly sage brush and grows abundantly in all parts of the township. With the sage brush, some greasewood and rabbit brush is found.

Bolter spring in sec. 34 and a spring in sec. 31 is the only water in the Tp. The water in Bolter spring contains considerable alkali and is not used for any purpose . The spring in sec. 31 is good, pure water and is used on Sharp's dry farm for culinary purposes only.

J.S. Sharp has a dry farm in secs. 30 and 31, about 100 acres are plowed and seeded to grain. He also has done considerable fencing, built a small house, barn and granary and layed about 20 chs. of pipe from the spring in sec. 31 to his house in sec. 30.

There are no other settlers in the township.

Some prospecting has been done in the mountains in secs. 24,25 and 36 . I am unable to find any indications of mineral.

With the exception of the level lands which are suited for farming the township in general is used for grazing purposes.

Howard W. Miller

U. S. Surveyor.

Isaac Hayes

U.S.Transitman.

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BOOK A-417

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 .....

.....

.....

.....

.....

.....

.....

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, Isaac Hayes, U.S. 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 25th. day of June, 1915, 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 retracement, resurvey and survey of the east and west boundaries, retracement and resurvey of the south boundary and restracement, resurvey and survey of the subdivision of T. 9 S., R. 4 W.

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.

Isaac Hayes
U. S. Transitman ~~U.S. Surveyor.~~

Subscribed by said Isaac Hayes, and sworn to before me this 15th day of May, 1916

Frank D. Broadbent
Clerk of Court

SEAL

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah, June 27, 1916

The foregoing field notes of the ~~survey of~~ retracement, resurvey and survey of the east and west boundaries; retracement and resurvey of the south boundary; retracement, resurvey and survey of subdivision of T. 9 S. R. 4 W.

executed by Howard W. Miller and Isaac Hayes under ~~his~~ their special instructions dated June 25, 1915, having been critically examined, and the necessary corrections and explanations made, the ~~said~~ field notes, and the surveys they describe, are hereby approved.

C. C. Thousen
U. S. Surveyor General.

I certify that the foregoing transcript of the field notes of the above-described surveys in T. 9 S. R. 4 W. S. L. B. & M., Utah, has been correctly copied from the original notes on file in this office.

6--2761

U. S. Surveyor General.

4—680

BOOK A-417

CERTIFICATE OF ASSISTANTS.

We, the undersigned, hereby certify upon honor that we assisted, to the best of our skill and ability, Howard W. Miller, U.S. Surveyor & ~~U.S. Surveyors~~ Isaac Hayes, U.S. Transitman during the periods and in the capacities stated opposite our several signatures, in surveying all those parts or portions of retracement, resurvey and survey of the east and west boundaries; retracement and resurvey of the south boundary; retracement, resurvey and survey of subdivisions of T. 9 S. R. 4 W.

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.	
Carl Ray	Oct. 13, 1915	Dec. 17, 1915	chainman
William Fredrickson	Oct. 13, 1915	Dec. 17, 1915	chainman
Rufus W. Riley	Oct. 13, 1915	Dec. 17, 1915	chainman
Edward Jones	Oct. 13, 1915	Dec. 17, 1915	chainman
[illegible]	Oct. 13, 1915	Dec. 17, 1915	cornerman
Harvey [illegible]	Oct. 13, 1915	Dec. 17, 1915	cornerman
Edward Olsen	Oct. 13, 1915	Dec. 17, 1915	flagman
[illegible]	Oct. 13, 1915	Dec. 17, 1915	flagman

Subscribed and certified to before me on the dates of the final service as shown above.

Howard W. Miller
U. S. Surveyor.

6—2764

FINAL OATH OF UNITED STATES SURVEYOR.

I, Howard W. Miller, 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 27th day of April, 1915, 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 retracement, resurvey and survey of the east and west boundaries; retracement and resurvey of the south boundary; retracement, resurvey and survey of subdivisions in T. 9 S. R. 4 W.

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.

Howard W. Miller
U. S. Surveyor.

Subscribed by said Howard W. Miller, and sworn to before me this 17 day of March, 1916

SEAL

A. C. Thorsen
U. S. Surveyor General
Utah

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah, June 27, 1916

The foregoing field notes of the ~~xxxxxx~~ retracement, resurvey and survey of the east and west boundaries; retracement and resurvey of the south boundary; retracement, resurvey and survey of subdivision of T.9 S.R.4 W.

executed by Howard W. Miller and Isaac Hayes under ~~his~~ their special instructions dated June 25, 1915, having been critically examined, and the necessary corrections and explanations made, the said field notes, and the surveys they describe, are hereby approved.

A. C. Thorsen
U. S. Surveyor General.

I certify that the foregoing transcript of the field notes of the above-described surveys in T.9 S.R. 4 W.S.L.B.& M., Utah, has been correctly copied from the original notes on file in this office.

6—2761

U. S. Surveyor General.

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BOOK A-417 B

FIELD NOTES

OF THE ~~SURVEY OF THE~~

RESURVEY OF THE SOUTH AND EAST BOUNDARIES AND

SUBDIVISION AND SURVEY OF THE SUBDIVISION OF

T.9 S., R.5 W.

Of the SALT LAKE BASE AND *Meridian,*

In the State of UTAH

EXECUTED BY

HOWARD W. MILLER

&

ISAAC HAYES

In the capacity of U. S. Surveyors, under instructions dated June 25, 1915, *issued by the United States Surveyor General to govern surveys included in Group No.* 37, *which were approved by the Commissioner of the General Land Office,* July 21, 1915

Survey commenced October 14, 1915

Survey completed December 2, 1915

6—151

Res. E. + S. Bdys. 10-52-04 [illegible]

E. Bdy. 1-29-31 [illegible] 10-25-07

[illegible] 5-51

BOOK A-417

INDEX DIAGRAM.

Township 9 South, Range 5 West

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7	8	9	10 37	74 11 69	54 12 53 19	6
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19	20	21	34 37 22 31 58	67 23 66	49 & 51 24 48	3
30	29	28 39	30 27 78	59 26 65	46 25 45	2
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Resurvey East boundary of T.9 S.,R.5 W.

chains

Survey commenced October 14,1915 and executed with Young and Sons light mountain transits Nos. 8297 and 8582, with Smith's solar attachment. The horizontal limbs are provided with two verniers, placed opposite to each other and reading to single minutes of arc, which is also the least count of the verniers of the latitude and declination arcs.

The instruments were approved for use in this survey by the Assistant Supervisor of Surveys for Utah.

I know the instruments to be in good adjustment, having tested them on a Polaris meridian at my camp in sec. 10,T.21 S.,R.1 W. October 5 ,1915 . For complete description and his test see subdivision of T.21 S., R.1 W.

Steel tapes, 5 chs. long were used by both parties in the field, together with clinometers for determining slope angles and the reduced horizontal distances only appear in the field notes. The tapes were tested, comparison being made with a standard tape, 1 ch. long, kept and used for that purpose only.

In the decl. arc. settings, .80 of the tabulated refraction for computing declinations is used, due to the altitude of the country.

I begin at the cor. of secs. 19,24,25 and 30 which is a quartzite stone 10 x 8 x 6 ins. above ground, firmly set, marked with 4 notches on N. and 2 notches on S. edge. No accessories to cor.

Set an iron post, 3 ft. long, 3 ins. in dia., 24 ins. in the ground alongside old cor. for reestablished cor.

Resurvey East boundary of T.9 S.,R.5 W.

chains

of secs. 19,24, 25 and 30, with brass cap marked

T 9 S	
R 5 W	R 4 W
S 24	S 19
S 25	S 30

1915

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

Trees are within limits in all secs. but are to scrubby for bearing trees.

October 14: At 8h. 46m.a.m.l.m.t., I set off 40°01' on the lat. arc; 7°53'S. on the decl. arc; and determine a meridian with the solar at the above described cor.

Thence I run

South, retracing bet. secs. 25 and 30

40.00 After careful search, I am unable to find any trace of the old ½ sec. cor.

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 25 ¼	S 30

1915

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

From this cor., Sharp's house bears S.42°30'E.

Thence

North, resurveying bet. secs. 25 and 30

Over nearly level cultivated land.

.10 Road, from Vernon, Utah to Sharp's ranch, bears NW. and SE.

2.40 Leave cultivated land, bears E. and W. Enter dense undergrowth of sage brush and scattering cedar and pinon timber, bears E. and W.

Gradually ascend.

9.39 Enter heavier timber, bears E. and W.

25.60 Road, Lofgreen, Utah to Vernon creek, bears NW. and SE.

chains	
40.00	The cor. of secs. 19,24,25 and 30.
	Land, rolling, general drainage N.
	Soil, S.10 chs., light, dry sandy loam on sandy loam and gravel sub-soil. N.30 chs. light, brown shallow sandy loam mixed with gravel and rocks on gravelly and sandy sub-soil.
	Timber, scrub cedar and pinon on N. 37.60 chs.
	Undergrowth, sage brush.
	October 14,1915.
	October 16: At 7h. 16m.a.m.l.m.t., I set off 40°01' on the lat. arc; 8°35'S., 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, retracing bet. secs. 19 and 24
40.00	No trace of the ¼ sec. cor. can be found.
81.24	Fall 53 lks. E. of the cor. of secs. 13,18,19 and 24 which is a quartzite stone, 12 x 10 x 8 ins., lying on the ground, marked with 3 notches on one and 3 notches on opposite edge. No accessories to cor.
	At exact position of old cor., reset stone 6 ins. in the ground marked with 3 notches on N. and 3 notches on S. edge. Set an iron post, 3 ft. long, 3 ins. in dia., 24 ins. in the ground alongside old cor. for cor. of secs. 13,18,19 and 24, with brass cap marked.

T 9 S
R 5 W | R 4 W
S 13 | S 18
S 24 | S 19
1915

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

The bearing of this line is N.0°22'W. and the distance is 81.24 chs.

Thence from cor. of secs. 13,18,19 and 24

chains	
	S.0°22'E., resurveying bet. secs. 19 and 24
	Gradually ascend over rolling land sloping N., through dense undergrowth of sage brush and scattering scrub cedar and pinon timber.
10.20	Enter heavier timber, bears E. and W.
21.64	Wood road, bears NE. and SW.
40.62	Proportionate measurement
	Set an iron post, 3 ft. long, 1 in. in dia., 14 ins. in the ground and 12 ins. in a mound of stone for ¼ sec. cor., with brass cap marked
	S ¼ 24 | S 19
	1915
	from which
	A cedar, 6 ins. diam., bears S.88½°E., 162 lks. dist., marked ½ S 19 B T
	A cedar, 12 ins. diam., bears S.80½°W., 37 lks. dist., marked ¼ S 24 B T
	Note: On account of underlying rock, I am unable to set post more than 14 ins. in the ground.
40.74	Edge of road from Vernon, Utah to Sharp's ranch, bears NW. and SW.
	The E. end of a fence bearing W. bears W. 25 lks.
81.24	The cor. of secs. 19,24,25 and 30.
	Land, rolling bench, general N. exposure and drainage.
	Soil, 2nd. rate; light, dry, shallow brown loam mixed with gravel and rocks on sandy and gravelly sub-soil.
	Timber, scrub cedar and pinon.
	Undergrowth, sage brush.

	From cor. of secs. 13,18,19 and 24
	North, resurveying bet. secs. 13 and 18
	Over rolling bench land draining N., gradually descending through dense undergrowth of sage brush and scattering scrub cedar and pinon timber.

chains

38.80 Road from Vernon, Utah to Sharp's ranch, bears NE. and SW.

40.33 Fall 28 lks. E. of the ¼ sec. cor., which is a quartzite stone, 10 x 6 x 5 ins., lying on the ground, marked ¼ on one face. No accessories to cor.

At exact position of old cor., reset stone 5 ins. in the ground, marked ¼ on W. face. Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground alongside old cor. for reestablished ¼ sec. cor., with brass cap marked

S 13 ¼ | S 18
1915

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

The bearing of this ½ mile is N.0°24'W. and the distance is 40.33 chs.

From point 28 lks. E. of the ¼ sec. cor., I continue North

80.66 Fall 61 lks. E. of the cor. of secs. 7,12,13 and 18, which is a quartzite stone, 12 x 8 x 3 ins., lying on the ground, marked with 4 notches on one and 2 notches on opposite edge. No accessories to cor.

At exact position of old cor., reset stone 6 ins. in the ground marked with 4 notches on S. and 2 notches on N. edge. Set an iron post, 3 ft. long, 3 ins. in dia., 24 ins. in the ground alongside old cor. for cor. of secs. 7,12,13 and 18, with brass cap marked

T 9 S
R 5 W | R 4 W
S 12 | S 7
S 13 | S 18
1915

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

The bearing of this ½ mile is N.0°28'W. and the distance

chains	
	is 40.33 chs.
	Land, nearly level, slopes and drains N.
	Soil, 2nd. rate; light, dry, brown sandy loam mixed with gravel and rocks on hard, dry sandy and gravelly sub-soil.
	Timber, a few scattering scrub cedar and pinon.
	Undergrowth, sage brush.

	From cor. of secs. 7,12,13 and 18, I run
	North, retracing bet. secs. 7 and 12
40.00	No trace of the old ¼ sec. cor. can be found.
	I continue my line north and at 161.50 chs. fall 1.54 chs. E. of the cor. of Tps. 8 and 9 S.,Rs. 4 and 5 W.
	The bearing of the line bet. secs. 7 and 12 and 1 and 6 is therefore N.0°33'W. and the distance is 161.50 chs.
	I return to the cor. of secs. 7,12,13 and 18 and resurvey the lines as follows:
	N.0°33'W., resurveying bet. secs. 7 and 12
	Gradually descend over gently rolling land sloping and draining N., through dense undergrowth of sage brush.
26.90	Road, Vernon, Utah to Sharp's ranch, bears NW. and SE.
35.00	Wash, 20 lks. wide, 4 ft. deep, drains N.20°E
40.37½	Proportionate measurement
	Set an iron post, 3 ft. long, 1 in in dia., 10 ins. in the ground and 16 ins. in a mound of stone for ¼ sec. cor., with brass cap marked.
	S 12 ¼ | S 7
	1915
	raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.
40.40	Wire fence, bears E. and W.
45.75	Wash, 30 lks. wide, 5 ft. deep, drains NE.
57.90	Wash, 20 lks. wide, 5 ft. deep, drains NE.
62.50	Road, bears NE. and SW.

chains	
72.25	Road, bears NW. and SE.
75.00	Western Union Telegraph line, bears N.19°W. and S.19°E.
76.00	Center SP.LA.& SL.Ry. tracks on a curve bears N.19°W. and S.19°E.
80.75	Proportionate measurement

Set an iron post, 3 ft. long, 3 ins. in dia., 24 ins. in the ground for cor. of secs. 1,6,7 and 12; with brass cap marked

T 9 S
R 5 W | R 4 W
S 1 | S 6
S 12 | S 7
1915

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

Land, nearly level, slopes and drains N.

Soil, 2nd. rate; light, dry brown sandy loam mixed with gravel on hard, dry, sandy and gravelly sub-soil.

No timber.

Undergrowth, sage brush.

October 16: At this sec. cor., I set off 8°41'S., on the decl. arc; and at 11h.46m.a.m.l.m.t., observe the sun on the meridian; the resulting lat. is 40°03'.

N.0°33'W., bet. secs. 1 and 6

Over rolling land draining N., through dense undergrowth of sage brush and shadscale.

34.40	Wash, 25 lks. wide, 6 ft. deep, course NE.
40.37½	Proportionate measurement

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 1 ¼ | S 6
1915

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

Resurvey East boundary of T.9 S.,R.5 W.

chains	
80.75	The cor. of Tps. 8 and 9 S.,Rs. 4 and 5 W., which is a quartz stone, 13 x 8 x 5 ins. above ground, firmly set, marked with 6 notches on N.,S.,E. and W. edges. No accessories to cor. I erect a mound of stone, 2 ft. base, 1½ ft. high, S. of cor.
	Land, rolling, slopes and drains N.
	Soil, 2nd. rate; light, dry, brown sandy loam mixed with gravel on sandy and gravelly sub-soil.
	No timber.
	Undergrowth, sage brush and shadscale.
	October 16,1915.

Resurvey south boundary of T.9 S.,R.5 W.

	October 14: For solar observation see line bet. secs. 25 and 30, E. bdy. T.9 S.,R.5 W.
	From the temp. cor. of T. 9 S., Rs. 4 and 5 W. heretofore described, I run
	West, retracing along the S. bdy. of T.9 S.,R.5 W.
7.93	The cor. of Tps. 9 and 10 S., Rs. 4 and 5 W. which is a quartzite stone, 13 x 8 x 8 ins. above ground, firmly set, and marked and witnessed as described by the Surveyor General.
	October 14: The sky is overcast at noon, observations for lat. are impossible.
48.55	The ¼ sec. cor. bet. secs. 1 and 36.
	As this line is out of limits, I continue my line West
168.84	Cease work.
	October 14,1915
	October 15: At 8h. 46m.a.m.l.m.t., I set off 39°59' on the lat. arc; 8°16'S., on the decl. arc; and determine a meridian with the solar.

chains	
	Thence I continue
	West
262.69	October 15: The sky is overcast at noon, observations for lat. are impossible.
286.89	Fall 42 lks. S. of the ½ sec. cor. bet. secs. 4 and 33.
	This Tp. bdy. has not any subdivisions dependent upon it and a portion of the same is out of limits. Closing cors. will be necessary for T.10 S., R.5 W. and I therefore resurvey this line setting ¼ sec. and sec. cors. for two quarters and secs. only, referring to T.9 S.
	October 15,1915.
	December 1:
	I establish the cor. of T.9 S.,Rs.4 and 5 W., 42 lks. N. of the temp. cor. of T.9 S.,Rs. 4 and 5 W. set 119.73 chs. S. of the ¼ sec. cor. bet. secs. 25 and 30 on the E. bdy. of T.9 S.,R.5 W.(this point being East of the ¼ sec. cor. bet. secs. 4 and 33) as follows:
	Set an iron post, 3 ft. long, 3 ins. in dia., 24 ins. in the ground for cor. of Tps. 9 S.,Rs. 4 and 5 W., with brass cap marked

T 9 S
R 5 W | R 4 W
S 36 | S 31

S 1 | S 6
R 5 W | R 4 W

T 10 S
1915

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

Thence

West, on S. bdy. sec. 36

Over rolling and broken mountainous land draining N., through dense sage and scattering service brush.

Along general N. slope.

14.63 Ravine, drains NE.

Resurvey south boundary of T.9 S., R.5 W.

chains

Gradually ascend over SE. slope.

22.47 Spur, 100 ft. above ravine, projects NW.

Gradually descend over SW. slope.

29.06 Ravine, 102 ft. below spur, drains NW.

Thence along nearly N. slope.

40.00 Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground for ¼ sec. cor., S. bdy. sec. 36, with brass cap marked

S 36
¼
1915

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

48.55 The old ¼ sec. cor. bet. secs. 1 and 36 bears S. 42 lks., I destroy cor.

Enter scattering scrub cedar and pinon timber, bears N. and S.

56.81 Bottom of swale and wash, 30 lks. wide, 6 ft. deep, 91 ft. below ¼ sec. cor., drains NW.

Thence over broken land sloping N.

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, T.9 S., R. 5 W. with brass cap marked

T 9 S
S 35 | S 36
R 5 W
S 2 | S 1
T 10 S
1915

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

Land, rolling and broken mountainous, general N. exposure and drainage.

Soil, 3rd. rate; gravelly and rocky with some shallow brown sandy loam on hard, dry sand and rock sub-soil.

Timber, scattering scrub cedar and pinon.

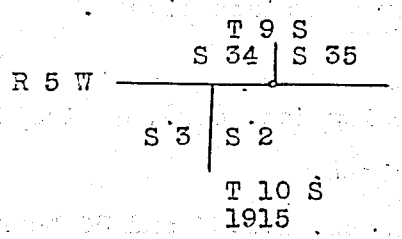
Resurvey south boundary of T.9 S.,R.5 W.

chains	
	Undergrowth, sage and scattering service brush.
	West, on S. bdy. sec. 35
	Over mountainous land drains N., through dense undergrowth of sage and scattering service brush and scattering scrub cedar and pinon timber.
	Descend.
2.95	Ravine, 20 ft. below sec. cor., drains N.
	Ascend over E. slope.
8.77	The old cor. of secs. 1,2,35 and 36 bears S.30 lks., I destroy cor.
17.22	Ridge, 175 ft. above ravine, bears N. and S.
	Thence along brink of N. slope.
40.00	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground for ¼ sec. cor., S. bdy. sec. 35, with brass cap marked S 35 ¼ 1915 raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor.
48.89	The old ¼ sec. cor. bet. secs. 2 and 35 bears S. 21 lks., I destroy cor.
50.50	Begin descent over W. slope.
66.20	Ravine, 120 ft. below ¼ sec. cor., drains SW.
	Gradually ascend.
67.80	Spur, projects SW. Gradually descend.
77.30	Base of descent and enter bottom of Vernon Creek canyon, bears NW. and SE.
77.35	Road, Vernon, Utah To Cherry Creek, bears NW. and SE.
77.95	Vernon Creek, in bottom of canyon, 10 lks. wide, 6 ins. deep, 345 ft. below spur, flows NW.
80.00	Ascend abruptly over E. slope.

chains

86.46 183 ft. above bottom of canyon. Intersect N. and S. line bet. secs. 34 and 35.

Set an iron post, 3 ft. long, 3 ins. in dia., 24 ins. in the ground for cor. of secs. 34 and 35, S. bdy. of T. 9 S.,R.5 W., with brass cap marked



from which

A cedar, 16 ins. diam., bears N.67°E.,73 lks. dist.,marked T 9 S R 5 W S 35 B T

A cedar, 14 ins. diam., bears N.½°W., 9 lks. dist., marked T 9 S R 5 W S 34 B T

Land, mountainous with a general N. exposure and drain.

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

Timber, scattering scrub cedar and pinon.

Undergrowth, sage and service brush.

West, on S. bdy. sec. 34 for distance only.

80.47 Intersect N. and S. line bet. secs. 33 and 34

Thence from cor. of secs. 34 and 35

West, on S. bdy. sec. 34

Over mountainous land through scrub cedar and pinon timber and undergrowth of sage brush. Ascend.

2.38 The old cor.secs. 2,3,34 and 35 bears S.6 lks. Destroy cor.

7.00 Top of ascent, 75 ft. above sec. cor., bears N. and S.

Thence over rolling N. slope.

18.30 Gradually descend over rolling N.W. slope.

29.60 Swale, 105 ft. below top of ascent, drains N. Ascend.

40.23½ Proportionate measurement.

Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground for ¼ sec. cor. S. bdy. sec. 34, with

chains

brass cap marked

S 34
$\frac{1}{4}$
1915

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

Trees are within limits but none are suitable for bearing trees.

42.38 Spur, 50 ft. above swale, projects NE.

Gradually descend.

42.47 The old $\frac{1}{4}$ sec. cor. bet. secs. 3 and 34 bears S. 8 lks. I destroy cor.

60.96 Enter opening in timber, cleared for farming bears N. and S. about 8 chs.

80.47 Intersection with N. and S. line bet. secs. 33 and 34.

Set an iron post, 3 ft. long, 3 ins. in dia., 24 ins. in the ground for cor. of secs. 33 and 34, T.9 S.,R.5 W., with brass cap marked

T 9 S
S 33 | S 34
R 5 W
S 4 | S 3
T 10 S
1915

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

Land, rolling mountainous with general N. exposure and drainage.

Soil, 2nd. rate; light, dry, brown sandy loam mixed with gravel on dry brown sand and gravel sub-soil.

Timber, scrub cedar and pinon.

Undergrowth, sage brush.

West, on S. bdy. sec. 33

Over rolling mountainous land draining N., through opening in timber cleared for farming.

2.16 The old cor. of secs. 3,4,33 and 34 bears S.5 lks. I

chains	
	destroy cor.
7.15	Enter dense scrub cedar and pinon timber and undergrowth of sage and rabbit brush, bears N. and S.
15.76	Enter opening in timber, bears N. and S. about 10 chs.
28.16	Road, bears NE. and SW.
39.96	The ¼ sec. cor. bet. secs. 4 and 33 which is a quartzite stone, 8 x 7 x 5 ins. above ground, firmly set, marked ¼ on N. face, from which
	A cedar, 6 ins. diam.,bears N.82°E., 25 lks. dist., marked ¼ S. 33 B T
	A cedar, 10 ins. diam.,bears S.62°E.,78 lks. dist., marked ¼ S 4 B T
	As this cor. will refer only to sec. 33, I destroy the S. bearing tree and raise a mound of stone, 2 ft. base 1½ ft. high, N. of cor.
	Cor. stands at SE. cor. of wire fence bearing N. and W.
	December 1,1915
	October 15; For solar observation see retracement S. bdy. T.9 S.,R.5 W.
	From the ¼ sec. cor., I continue
	West
79.95	Wash, 30 lks. wide, 6 ft. deep, drains N.
80.09	Fall 8 lks. S. of the cor. of secs. 4,5,32 and 33 which is a sandstone, 12 x 6 x 12 ins. above ground, firmly set, marked with 4 notches on E. and 2 notches on W. edge, from which
	A cedar, 10 ins. diam.,bears S.45°W.,45 lks. dist.,marked T 10 S R 5 W S 5 B T
	A cedar, 18 ins. diam.,bears N.55°W., 115 lks. dist.,marked T 9 S R 5 W S 32 B T
	and witnessed by a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.
	Cor. stands on W. edge of large wash and at the cor. of a fence bearing N. and W.
	Knowing that this cor. will only refer to secs. 32 and

chains

33, T.9 S.,R.5 W., I destroy the SW. bearing tree and reestablish cor. as follows:

Set an iron post, 3 ft. long, 3 ins. in dia., 24 ins. in the ground alongside old cor. for cor. of secs. 32 and 33, T.9 S.,R.5 W., with brass cap marked

T 9 S
S 32 | S 33
R 5 W
S 5 | S 4
T 10 S
1915.

Accessories as noted on previous page.

The bearing of this ½ mile is N.89°53'W. and the distance is 40.13 chs.

Land, rolling mountainous with general N. exposure and drainage.

Soil, 2nd. rate; light, dry, brown sandy loam mixed with gravel on hard, dry brown sand and gravel sub-soil.

Timber, scrub cedar and pinon.

Undergrowth, sage and rabbit brush.

October 15,1915.

Isaac Hayes

U. S. Transitman.

November 2: For solar observation see W. bdy. T.10S., R. 5 W.

From cor. of secs. 32 and 33, I run

West, on S. bdy. sec. 32

Over rolling mountainous land through dense scrub cedar and pinon timber and undergrowth of sage brush.

Along S. side wire fence.

8.25 Leave timber, bears N. and S.

30.24 Descend over W. slope into ravine.

34.23 Bottom of ravine and wash, 5 lks. wide, 1 ft. deep, drains N.

Ascend.

Resurvey south boundary of T.9 S.,R.5 W.

chains

39.29 Stream, 5 lks. wide, 4 ins. deep, drains N.

39.89 Road, bears N. and S. Gate in fence about 5 lks. N.

40.12 Fall 3 lks. N. of the ¼ sec. cor., which is a quartzite stone, 10 x 5 x 8 ins. above ground, firmly set, and marked and witnessed as described by the Surveyor General.

The bearing of this ½ mile is S.89°57'W. and the distance is 40.12 chs.

From point 3 lks. N. of the ¼ sec. cor. I continue West

50.15 Wash, 20 lks. wide, 3 ft. deep, drains N.

77.15 Dutch creek wash in small gully, 25 lks. wide, 2 ft. deep, drains N.

80.22 Fall 17 lks. N. of the cor. of secs. 5,6,31 and 32, which is a quartzite stone, 18 x 3 x 20 ins. above ground, firmly set, and marked and witnessed as described by the Surveyor General. Knowing that this cor. will refer to secs. 31 and 32 , T.9 S.,R.5 W. only, I reestablish cor. as follows:

Set an iron post, 3 ft. long, 3 ins. in dia., 24 ins. in the ground alongside old cor. for cor. of secs. 31 and 32, T.9 S.,R.5 W., with brass cap marked

T 9 S
S 31 | S 32
R 5 W
S 6 | S 5
T 10 S
1915

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

Cor. stands 4 lks. N. of the SW. cor. of a fence bearing N. and E.

The bearing of this ½ mile is S.89°48'W., and the distance is 40.10 chs.

Land, rolling mountainous, general N. exposure and drainage. Land at S. end of Rushvalley.

Soil,3rd. rate; light, shallow brown sandy loam mixed with

Resurvey south boundary of T.9 S.,R.5 W.

chains	
	gravel and rocks, on hard, dry sandy and gravelly sub-soil.
	Timber, scrub cedar and pinon on E. 8.25 chs.
	Undergrowth, sage brush.
	West, on S. bdy. sec. 31
	Over rolling bench land, sloping and draining N., through dense undergrowth of sage brush.
34.77	Stream, 2 lks. wide, 3 ins. deep, diverted from Dutch creek, flows N.
40.17	Fall 5 lks. N. of the ¼ sec. cor., which is a sandstone 10 x 5 x 8 ins. above ground, firmly set, and marked and witnessed as described by the Surveyor General.
	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground alongside old cor. for ¼ sec. cor. S. bdy. sec. 31, T.9 S.,R.5 W., with brass cap marked
	S 31 / ¼ / 1915
	raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor.
	The bearing of this ½ mile is S.89° 56' W., and the distance is 40.17 chs.
	From point 5 lks. N. of the ¼ sec. cor., I continue West
42.49	Ravine, drains N. Leave rolling land, enter mountainous land, bears N. and S. Gradually ascend NE. slope.
55.08	Point falls N. Descend.
59.35	Ravine, 39 ft. below point, drains N.10°E.
	Ascend abruptly.
64.80	Point, 84 ft. above ravine, falls N.
	Descend.
74.90	Ravine, 40 ft. below point, drains N.20°E.
	Ascend 108 ft. to
81.40	Fall 6 lks. S. of the cor. of Tps. 9 and 10 S., Rs. 5

chains

and 6 W., heretofore described.

The bearing of this ½ mile is N.89°51'W., and the distance is 41.23 chs.

Land, rolling bench on E. 42.49 chs. and mountainous on W. 38.91 chs. General N. exposure and drainage.

Soil, 3 rd. rate; light, dry, shallow brown sandy loam mixed with gravel and rocks on hard, dry sandy and gravel sub-soil.

No timber.

Undergrowth, dense sage brush.

November 2,1915.

Howard W. Miller
U. S. Surveyor.

Resurvey of subdivision of T.9 S.,R.5 W.

October 16: For solar observation see line bet. secs. 19 and 24, E. bdy. T.9 S.,R.5 W.

From the cor. of secs. 13,18,19 and 24 on the E. bdy. of the Tp. heretofore described, I run

West, bet. secs. 13 and 24

40.00 No trace of the old ¼ sec. cor. can be found.

Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground for ½ sec. cor., with brass cap marked

S 13
¼
S 24
1915

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

Thence

East, bet. secs. 13 and 24

Over nearly level cultivated land sloping and draining NE.

chains	
15.00	A cabin, bears N. about 10 chs.
16.80	Wash, 10 lks. wide, 5 ft. deep, drains NE. Leave cultivated land, enter dense sage brush undergrowth and scattering scrub cedar timber, bears N. and S.
17.10	Road, Vernon, Utah to Sharp's ranch, bears NE. and SW.
40.00	The cor. of secs. 13,18,19 and 24.
	Land, rolling, general N. exposure and drain.
	Soil, 2nd. rate; light, dry, sandy loam mixed with gravel on hard, dark brown sand and gravel sub-soil.
	Timber, scattering scrub cedar on E. 23.20 chs.
	Undergrowth, dense sage brush on E. 23.20 chs.

	From the cor. of secs. 7,12,13 and 18 on the E. bdy. of the Tp. heretofore described, I run
	West; bet. secs. 12 and 13
	Over gently rolling land sloping and draining N. through dense undergrowth of sage brush.
.92	Enter cultivated land, bears N. and S.
.94	Wash, 15 lks. wide, 3 ft. deep, drains N.
11.40	Wash, 5 lks. wide, 3 ft. deep, drains N.
40.09	Wire fence and leave cultivated land, bears N. and S.
40.30	Old road, bears N. and S.
40.41	Fall 12 lks. N. of the ¼ sec. cor., which is a quartzite stone, 12 x 9 x 5 ins., lying on the ground, marked ¼ on one face. No accessories to cor.
	At exact position of old cor., reset stone 8 ins. in the ground, marked ¼ on N. face.
	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground alongside old cor. for ¼ sec. cor., with brass cap marked
	S 12 ¼ --- S 13 1915
	raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor.

chains	
	The bearing of this ½ mile is S.89°50'W., and the distance is 40.41 chs.
	Land, gently rolling, N. exposure and drainage.
	Soil, 2'nd. rate; light, dry, brown sandy loam on hard dry sand and gravel sub-soil.
	No timber.
	Undergrowth, sage brush.

	From the cor. of secs. 1,6,7 and 12 on the E. bdy. of the Tp., heretofore described, I run
	West, bet. secs. 1 and 12
	Over rolling land sloping and draining N., through dense undergrowth of sage brush.
.58	Center SP.LA.& SL.Ry tracks, bears N. and S.
1.15	Western Union Telegraph line, bears N. and S.
1.25	Wash, 30 lks. wide, 15 ft. deep, course N.
1.60	Road, bears N. and S.
15.90	Road, bears NE. and SW.
19.50	Road, Vernon, Utah to Sharp's ranch, bears NW. and SE.
30.00	Enter scattering scrub cedar timber, bears N. and S.
41.36	Fall 16 lks. S. of the ¼ sec. cor., which is a limestone 18 x 10 x 8 ins., lying on the ground, marked ¼ on one face. No accessories to cor.
	At exact position of old cor., reset stone 12 ins. in the ground, marked ¼ on N. face.
	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground alongside old cor. for ¼ sec. cor., with brass cap marked

S 1
¼

S 12
1915

from which

A cedar, 6 ins. diam., bears South, 40 lks. dist., marked ¼ S 12 B T

chains	
	A cedar, 12 ins. diam., bears N.55½°W., 180 lks. dist., marked ¼ S 1 B·T
	The bearing of this ½ mile is N.89° 46'W., and the distance is 41.36 chs.
	From ¼ sec. cor., I continue
	West.
40.15	No trace of the cor. of secs. 1,2,11 and 12 can be found. Set temp. point "A" for cor. of secs. 1,2,11 and 12.
	From point "A", I run
	West, bet. secs. 2 and 11
39.55	Fall 74 lks. N. of the ¼ sec. cor. bet. secs. 2 and 11
	I return to point "A" and set point "B" 45 lks. E. and 74 lks. S.
	October 16,1915
	Isaac Hayes
	U. S. Transitman.
	October 16: For solar obsn. see line bet. secs. 24 and 25
	From a point 80.00 chs. N. of the cor. of secs. 12 and 13 or 3.48 chs. E. and .93 chs. S. of point "A", I run North, bet. secs. 1 and 2.
40.00	No trace of the ¼ sec. cor., can be found. Set point.
	October 16,1915.
	October 19: At 7h. 45m.a.m.l.m.t., I set off 40° 04' on the lat. arc; 9°42'S., on the decl. arc; and determine a meridian with the solar.
	Thence I continue
	North
81.60	Fall 3.60 chs. E. of the cor. of secs. 1,2,35 and 36 on the N. bdy. of the Tp. which is a limestone, 20 x 9 x 6 ins., lying on the ground, marked with 1 notch on one and 5 notches on opposite edge. No accessories to cor.
	At exact position of old cor., I reset stone 15 ins. in a mound of stone, marked with 1 notch on E. and 5 notches

chains

on W. edge; and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.

I return to point 80.00 chs. N. of the cor. of secs. 12 and 13 and set point "C", 1.04 chs. N. and 3.67 chs. W. From point C, point A is 19 lks. E. and 11 lks. S.; point B is 85 lks. S. and 64 lks. E. I restore the cor. of secs. 1,2,11 and 12, 27 lks. S. and 13 lks. E. of point "A". Knowing that a closing cor. will be necessary bet. secs. 11 and 12, I establish this cor. for secs. 1 and 2 as follows:

Set an iron post, 3 ft. long, 2 ins. in dia., 18 ins. in the ground and 6 ins. in a mound of stone for cor. of secs. 1 and 2, with brass cap marked

T 9 S | R 5 W
S 2 | S 1
S 11 | S 12
1915

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

Note: On account of underlying rock, I am unable to set post more than 18 ins. in the ground.

The bearing of the W.½ mile bet. secs. 1 and 12 is S.89°37'W. and the distance is 40.02 chs.

The bearing of the E.½ mile bet. secs. 2 and 11 is S.89° 19'W. and the distance is 39.68 chs.

The bearing of the line bet. secs. 1 and 2 is N.0°11'W. and the distance is 80.94 chs.

October19:

From ¼ sec. cor. bet. secs. 1 and 12, I run S.89°37'W., on resurvey line bet. secs. 1 and 12

Over rolling land sloping and draining NE., through scrub cedar and pinon timber and undergrowth of sage brush and grass. Gradually ascend.

11.62 Leave timber, bears N. and S.

chains	
40.02	The cor. of secs. 1 and 2.
	Land, rolling, general N. exposure and drainage.
	Soil; 3rd. rate; light, dry, shallow brown loam mixed with gravel on hard, dry, baked sandy clay and gravel sub-soil.
	Timber, scrub cedar and pinon on 22.98 chs.
	Undergrowth, sage brush and grass.
	S.89°19'W., resurveying bet. secs. 2 and 11
	Gradually ascend over rolling land sloping and draining NE., through dense undergrowth of sage brush, shadscale and grass.
28.35	Leave rolling land, enter rough mountainous, bears N. and S.
	Ascend abruptly over rocky E. slope.
39.68	476 ft. above sec. cor. on brow of ridge.
	The ¼ sec. cor., which is a blue limestone, 20 x 12 x 6 ins. above ground, firmly set, marked ¼ on N. face. No accessories to cor.
	Set an iron post, 3 ft. long, 1 in. in dia., 10 ins. in the ground and 16 ins. in a mound of stone for ¼ sec. cor., with brass cap marked S 2 ¼ S 11 1915 raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor.
	Iron post cor. set alongside old stone cor.
	Note: On account of underlying rock, I am unable to set post more than 10 ins. in the ground.
	From ¼ sec. cor., I continue
	West
45.48	Top of ridge and divide between E. and W. Rush valleys, 66 ft. above ¼ sec. cor., bears N.15°E. and S.15°W.
	Descend.

chains	
73.57	Base of mountain, 330 ft. below top of divide, bears NE. and SW.
	Gradually descend.
79.59	Fall 33 lks. S. of the cor. of secs. 2,3,10 and 11, which is a blue limestone, 8 x 6 x 5 ins. above ground, firmly set, marked with 5 notches on S. and 2 notches on E. edge. No accessories to cor.
	Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground alongside old cor. of secs. 2,3,10 and 11, with brass cap marked

T 9 S S 3	R 5 W S 2
S 10	S 11

1915

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

The bearing of this ½ mile is N.89°32'W., and the distance is 39.91 chs.

Land, mountainous and rolling sloping and draining E. and W. from divide at 45.48 chs.

Soil; 3 rd. rate; gravelly and rocky with some light, dry, shallow sandy loam on gravelly and rocky sub-soil.

No timber.

Undergrowth, sage brush, shadscale and grass.

	South, bet. secs. 10 and 11
40.00	No trace of the ¼ sec. cor. can be found.
79.55	Fall 1.50 chs. E. of the cor. of secs.10, 11, 14 and 15 which is a blue limestone, 14 x 7 x 7 ins., lying on the ground, marked with 4 notches on one and 2 notches on cornering edge. No accessories to cor.
	At exact position of cor., reset stone 10 ins. in the ground, marked with 2 notches on E. and 4 notches on W. edge, and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.
	The bearing of this line is [illegible] N.1°05'E. and the

chains	
	distance is 79.56 chs.
	October 19: At this cor. I set off 9°47'S., on the decl. arc; and at 11h. 45m.a.m.l.m.t., observe the sun on the meridian; the resulting lat. is 40°03'.
	Thence
	N.1°05'E., resurveying bet. secs. 10 and 11
	Over rough mountainous land through scattering scrub cedar and pinon timber and undergrowth of sage brush and shadscale.
	Ascend along W. slope near top of spur.
7.06	Spur, 25 ft. above sec. cor., projects W. about 7 chs., thence NW.
	Descend over N. slope.
18.47	Ravine, 90 ft. below spur, drains W. about 5 chs., thence NW.
	Ascend over SW. slope.
28.64	Blue limestone ledge, 5 ft. high, bears N.70°E. and S.70°W.
33.33	Spur, 60 ft. above ravine, projects NW.
	Descend 33 ft. to
39.78	Proportionate measurement
	Set an iron post, 3 ft. long, 1 in. in dia., 10 ins. in the ground and 16 ins. in a mound of stone for ¼ sec. cor., with brass cap marked
	S ¼ 10 | S 11
	1915
	raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.
	Note: On account of underlying rock, I am unable to set post more than 10 ins. in the ground.
50.78	Leave mountainous land, 160 ft. below ¼ sec. cor., bears E. and W. Thence over rolling land in E. edge of W. Rush valley. Gradually descend.
60.36	Wash, 30 lks. wide, 2 ft. deep, 42 ft. below base of mountain, drains NW.

chains	
78.05	Leave scattering timber, bears E. and W.
79.56	The cor. of secs. 2,3,10 and 11

Land, S.50.78 chs. mountainous land, N. 28.78 chs. rolling land. General exposure and drainage W.

Soil, mountainous portion, gravelly and rocky of limestone formation and mixed with some light brown sandy loam on gravelly and rocky sub-soil. Rolling land soil is generally a light, dry, brown sandy clay loam mixed with gravel on sandy and gravelly sub-soil.

Timber, scattering scrub cedar and pinon on S. 78.05 chs.

Undergrowth, sage brush and shadscale.

Some grass, good for grazing purposes.

—

October 19,1915.

Howard W. Miller

U. S. Surveyor.

The cor. of secs. 27,28,33 and 34 is a cobble stone 8 x 8 x 6 ins. lying on the ground, marked with 3 notches on one and 1 notch on cornering edge. No accessories to cor.

At exact position of old cor., reset stone 4 ins. in the ground, marked with 3 notches on E. and 1 notch on S. edge. Set an iron post, 3 ft. long, 2 ins. in dia. 24 ins. in the ground alongside old cor. for cor. of secs. 27,28,33 and 34, with brass cap marked

T 9 S S 28	R 5 W S 27
S 33	S 34

1915

from which

A cedar, 8 ins. diam., bears N.36½°E., 114 lks. dist.,marked T 9 S R 5 W S 27 B T

A cedar, 10 ins. diam.,bears S.42½°E.,119 lks. dist.,marked T 9 S R 5 W S 34 B T

A cedar,12 ins. diam.,bears S.24°W.,78 lks.

chains	
	dist., marked T 9 S R 5 W S 33 B T.
	A cedar, 4 ins. diam.,bears N.89°W., 23 lks.
	dist., marked T 9 S R 5 W S 28 B T
	Cor. stands at the cor. of a fence bearing N., S. and E.
	October 18: At this cor. at 7h. 45m.a.m.l.m.t, I set off 40°00' on the lat. arc; 9° 20'S., on the decl. arc; and determine a meridian with the solar.
	Thence I run
	South, bet. secs. 33 and 34.
	Over rolling mountainous land draining NE., through dense scrub cedar and pinon timber and undergrowth of sage brush. Along fence line, bears N. and S.
16.00	Small draw, drains NE. Leave dense timber, bears NE. and SW., enter land being cleared for farming.
20.06	Cor. of wire fences, bearing N.,S. and W.
40.22	Fall 27 lks. E. of the ½ sec. cor., which is a quartzite stone, broken into pieces, marked ¼ on one small part of stone. No accessories to cor.
	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground alongside old cor., for ¼ sec. cor., with brass cap marked S 33 ¼ | S 34 1915
	raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.
	Cor. stands at the cor. of fence bearing N. and E.
	The bearing of this ½ mile is S.0°23 W. and the distance is 40.22 chs.
	Land, rolling mountainous with general NE. exposure and drainage.
	Soil, 2nd. rate; light, dry, warm brown sandy loam mixed with gravel on loose sandy loam and gravel sub-soil.
	Timber, scrub cedar and pinon.
	Undergrowth, sage brush.

chains	
	From cor. of secs. 27,28,33 and 34, I run-
	East, bet. secs. 27 and 34
	Gradually descend over rolling mountainous land through dense scrub cedar and pinon timber and undergrowth of sage brush. Along wire fence bearing E. and W.
12.90	Timber becomes scattering. Land being cleared for farming.
38.98	Vernon creek, 10 lks. wide, 6 ins. deep, drains NE.
40.12	Fall 4 lks. N. of the ¼ sec. cor. which is a quartz stone, 14 x 6 x 4 ins., lying on the ground, marked ¼ on one face. No accessories to cor.
	At exact position of old cor., reset stone 9 ins. in the ground, marked ¼ on N. face.
	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground alongside old cor. for ¼ sec. cor., with brass cap marked
	S 27 / ¼ / S 34 / 1915
	raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor.
	The bearing of this ½ mile is S.89°56'E. and the distance is 40.12 chs.
	October 18: At this cor. I set off 9° 26'S., on the decl. arc; and at 11h. 45m.a.m.l.m.t., observe the sun on the meridian; the resulting lat. is 40°00'.
	From ¼ sec. cor., I continue
	East
40.82	Wire fence, bears N. and S.
41.44	Road, bears N. and S. Enter cultivated land, bears N. and S.
43.19	Wire fence, bears NW. and SE.
	Leave cultivated land, bears NW. about 3 chs. and SE.
43.44	Road, Vernon, Utah to Cherry creek, bears NW. and SE.

chains	
	Enter cedar and pinon timber and dense sage brush undergrowth, bears N. and S.
	Ascend over SW. slope of low hill.
54.57	Front door on small farm house, bears S.64°30'W. 5 chs.
58.59	Top of ascent, 68 ft. above road.
	Enter dense timber, thence along gradual S. slope.
80.12	No trace of the cor. of secs. 26,27,34 and 35 can be found.
	Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground for cor. of secs. 26,27,34 and 35, with brass cap marked

T 9 S S 27	R 5 W S 26
S 34	S 35

1915

from which

A cedar, 14 ins. diam.,bears S.55°W., 157 lks. dist.,marked T 9 S R 5 W S 34 B T

A cedar, 14 ins. diam.,bears N.52½°W., 183 lks. dist., marked T 9 S R 5 W S 27 B T

No other trees within limits.

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

Land, rolling mountainous slopes and drains NE. into Vernon Creek on W. 38.98 chs. and slopes S. and drains W. into same creek on E. 41.14 chs.

Soil, W.½ mile light, dry, brown sandy loam mixed with gravel on sandy and gravelly sub-soil, 2nd. rate. E. ½ mile generally gravelly and rocky of quartz formation mixed with some shallow sandy loam of good quality on gravelly and sandy sub-soil.

Timber, scrub cedar and pinon.

Undergrowth, sage brush.

October 18,1915.

Isaac Hayes

U. S.Transitman.

Resurvey of subdivision of T.9 S.,R.5 W.

chains	
	October 20: At 7h. 45m.a.m.l.m.t., I set off 40°00' on the lat. arc; 10°04'S., on the decl. arc; and determine a meridian with the solar at the cor. of secs. 27,28,33 and 34
	Thence I run
	North, bet. secs. 27 and 28
40.00	No trace of the old ¼ sec. cor. can be found.
80.98	Fall 1 lk. W. of the cor. of secs. 21, 22,27 and 28, which is a quartzite stone, 8 x 5 x 8 ins. above ground, firmly set, marked with 3 notches on E. and 2 notches on S. edge. No accessories to cor.
	Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground alongside old cor. for cor. of secs. 21,22, 27 and 28, with brass cap marked
	T 9 S | R 5 W S 21 | S 22 S 28 | S 27 1915
	raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.
	The bearing of this line is North and the distance is 80.98 chs.
	Thence
	South, resurveying bet. secs. 27 and 28
	Over level land.
.10	Center of road, bears E. and W.
.34	Wire fence, bears E. and W.
	Enter cultivated land, bears E. and W.
19.88	Cor. of fence, bears S. and E. Leave cultivated land, enter scattering scrub cedar and pinon timber and undergrowth of sage brush.
20.28	Road, bears N.80°W. and S.80°E.
27.38	Enter land cleared for farming , bears E. and W.
40.49	Proportionate measurement

chains	
	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 28 ¼ | S 27 1915
	from which
	A cedar,6 ins. diam.,bears S.87°E., 158 lks. dist., marked ¼ S 27 B T
	A cedar,14 ins. diam.,bears S.72½°W., 330 lks. dist., marked ¼ S 28 B T
48.38	Leave cleared land, bears E. and W.
53.48	Cor. of fences bears E.,N. and S.
64.24	Cor. of fences, bears E.,N. and S.
80.98	The cor. of secs. 27,28,33 and 34
	Land, rolling, general NE. exposure and drain.
	Soil,2nd. rate; light, dry, sandy loam on sandy and gravelly sub-soil.
	Timber, scrub cedar and pinon.
	Undergrowth, sage brush.
	From the cor. of secs. 21,22,27 and 28, I run
	East, bet. secs. 22 and 27
40.00	No trace of the old ¼ sec. cor. can be found.
	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 22 ¼ S 27 1915
	raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor.
	Thence
	West, on true line bet. secs. 22 and 27
	Gradually descend over mountainous land sloping W., through scattering scrub cedar and pinon and undergrowth of sage brush.

chains	
5.00	Enter dense timber, bears N. and S.
17.57	Wire fence, bears N. and S.
19.97	Leave cedar and pinon timber, bears N. and S.
22.25	Base of mountain and enter cultivated land, 128 ft. below $\frac{1}{4}$ sec. cor., bears N. and S.
34.40	Wire fence and leave cultivated land, bears N. and S.
34.80	Road, Vernon, Utah to Cherry creek, bears N. and S.
36.61	Vernon creek, 10 lks. wide, 4 ins. deep, in large wash, flows N.
39.50	Center of road, bears NE. and SW.
40.00	The cor. of secs. 21,22,27 and 28
	Land, E. 22.25 chs. mountainous land, W. exposure and drain. W.17.75 chs. nearly level land.
	Soil, E. 22.25 chs. generally rocky of quartz formation with some shallow sandy loam on gravelly and rocky sub-soil. W. 17.75 chs. light, dry, warm, sandy loam on sandy sub-soil, 1 st. rate.
	Timber, scrub cedar and pinon on E. 19.97 chs.
	Undergrowth, sage brush on E.19.97 chs.

	North, bet. secs. 21 and 22
	Over nearly level valley through undergrowth of sage and rabbit brush.
.25	Intersection of fences, bears E.,W. and N.
	Thence along fence bearing N. and S. Cultivated land E. and dense undergrowth W. of line.
5.62	Intersection of fences, bearing N.,S. and E.
	Leave cultivated land E. of line.
6.30	Vernon, Creek, 10 lks. wide, 4 ins. deep, flows NW.
13.75	At this point, N. and S. fence turns N.15°W.
14.40	Road, Vernon, Utah to Cherry Creek, bears N.15°W. and S.15°E.
	Leave valley, enter rolling hills bears, NW. and SE. Gradually ascend.

chains	
17.54	Road, bears E. and W.
19.60	Frame house, 15 x 20 ft., bears E. about 2 chs.
23.20	Enter scattering scrub cedar and pinon timber and under-growth of sage brush, bears NE. and SW.
33.97	Road, bears E. and W.
40.51	Fall 3 lks. W. of the ¼ sec. cor. which is a blue limestone 7 x 4 x 8 ins. above ground, firmly, set, marked ¼ on W. face. No accessories to cor.
	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground alongside old cor. for ¼ sec. cor., with brass cap marked
	S 21 ¼ | S 22
	1915
	raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.
	The bearing of this ½ mile is N.0°03'E., and the distance is 40.51 chs.
	From ¼ sec. cor., I continue
	North
80.51	No trace of the cor. of secs. 15,16,21 and 22 can be found. Set temp. point "A" for cor. of secs. 15,16,21 and 22
	October 20: At this cor. I set off 10°09'S., on the decl. arc; and at 11h. 45m.a.m.l.m.t., observe the sun on the meridian; the resulting lat. is 40°02'.
	From temp. point "A", I run
	S.89°39'W., bet. secs. 16 and 21
40.02	Fall 29 lks. S. of the ¼ sec. cor. bet. secs. 16 and 21.
	I return to point "A" and set point "B", 29 lks. N. and 6 lks. E.
	From point "A", I run
	North, bet. secs. 15 and 16
40.00	No trace of the ¼ sec. cor. can be found.
80.46	Fall 21 lks. W. of the cor. of secs. 9,10,15 and 16.

Resurvey of subdivision of T.9 S.,R.5 W.

chains	
	I return to point "A" for cor. of secs. 15,16,21 and 22 and set point "C", 46 lks. N. and 21 lks. E. From point "C", point B bears 17 lks. S. and 15 lks. W. I restore the cor. of secs. 15,16,21 and 22, 21½ lks. N. and 7½ lks. E. of point "A"., giving points A and B double weight over point C.
	Set an iron post, 3 ft. long, 2 ins. in dia., 14 ins. in the ground and 10 ins. in a mound of stone for cor. of secs. 15,16,21 and 22, with brass cap marked
	T 9 S | R 5 W S 16 | S 15 S 21 | S 22 1915
	raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.
	Note: On account of underlying rock, I am unable to set post more than 14 ins. in the ground.
	The bearing of the N.½ mile bet. secs. 21 and 22 is N.0°06'E. and the distance is 40.21½ chs.
	The bearing of the line bet. secs. 16 and 21 is S.89°46' W. and the distance is 40.09½ chs.
	The bearing of the line bet. secs. 15 and 16 is N.0° 06' E. and the distance is 80.24½ chs.
	From the ¼ sec. cor., bet. secs. 21 and 22, I run N.0°06'E., resurveying bet. secs. 21 and 22
	Continue over rolling foot hills, through scattering scrub cedar and pinon timber and undergrowth of sage brush.
17.50	Wash, 20 lks. wide, 3 ft. deep, in ravine, drains SW.
	Ascend.
36.14	Spur, 55 ft. above ¼ sec. cor., projects SW.
	Thence over nearly W. slope.
40.21½	The cor. of secs. 15,16,21 and 22
	Land, S. 14.40 chs. of mile gently rolling valley. N.

chains	
	66.325 chs. rolling foot hills, general W. exposure and drainage.
	Soil, S. 14.40 chs. light, warm sandy loam on sandy sub-soil, 1 st. rate. N. 66.325 chs. shallow sandy loam mixed with gravel and quartz rocks on hard, dry sand, gravel and rock sub-soil, 3rd. rate.
	Timber, scrub cedar and pinon on N.57. 52½ chs.
	Undergrowth, sage brush on N.57.52½ chs.
	S.89°46'W., on resurvey line bet. secs. 16 and 21
	Gradually descend over rolling foot hills sloping W., through scattering scrub cedar and pinon timber and undergrowth of sage and rabbit brush.
30.45	Base of hills and enter gently rolling valley, 180 ft. below sec. cor., bears N. and S.
	Leave timber, bears N. and S.
32.85	Road, Vernon, Utah to Cherry Creek, bears N.15°W. and S.15°E.
32.90	Wire fence, bears N. and S. Intersection of fence from the W. bears N.4 lks.
38.10	Vernon Creek, 10 lks. wide, 4 ins. deep, flows N.15°W.
40.09½	The ¼ sec. cor. which is a cobble stone, 15 x 8 x 8 ins., lying on the ground, marked ¼ on one face.
	At exact position of old cor., reset stone 10 ins. in the ground, marked ¼ on N. face.
	Land, E. 30.45 chs. rolling foot hills, general W. exposure and drainage. W. 9.64½ chs. nearly level valley land.
	Soil, E. 30.45 chs. shallow sandy loam mixed with gravel and rocks on gravelly and rocky sub-soil. W. 9.64½ chs. rich sandy loam soil on sandy sub-soil.
	Timber, scattering scrub cedar and pinon on E. 30.45 chs.
	Undergrowth, sage and rabbit brush.
	From cor. of secs. 15,16,21 and 22, I run
	N.0° 06'E., resurveying bet. secs. 15 and 16

Resurvey of subdivision of T.9 S.,R.5 W.

chains	
	Over rolling hills through scattering scrub cedar and pinon timber and undergrowth of sage and rabbit brush.
	Gradually descend along gentle W. slope.
10.80	Ravine, 17 ft. below sec. cor., drains SW.
	Ascend.
21.35	Spur, 106 ft. above ravine, projects SW.
	Descend over NE. slope.
32.76	Mouth of ravine, 72 ft. below spur, drains N.50°W.
	Gradually descend over gentle NW. slope.
40.12	Proportinnate measurement
	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
	S 16 $\frac{1}{4}$ | S 15 1915
	raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.
52.48	Leave hilly land and cedar timber, enter gently rolling valley, bears E. and W.
80.24$\frac{1}{2}$	The cor. of secs. 9,10,15 and 16 which is a quartzite stone, 8 x 8 x 3 ins. above ground, firmly set, marked with 3 notches on E. and 4 notches on S. edge.
	No accessories to cor.
	Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground alongside old cor. for cor. of secs. 9,10, 15 and 16, with brass cap marked
	T 9 S | R 4 W S 9 | S 10 S 16 | S 15 1915
	dig pits, 18 x 18 x 12 ins. in each sec., $5\frac{1}{2}$ ft. dist., raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor.
	Land, S.52.48 chs. rolling hills, general W. exposure and drainage. N. 27.76 chs. gently rolling valley.

chains	
	Soil, S. 52.48 chs. gravelly and rocky of quartz and limestone formation with some light sandy loam on hard, dry sand and rock sub-soil. N. 27.76 chs. gravelly and light brown sandy clay on sandy sub-soil.
	Timber, scrub cedar and pinon on S. 52.48 chs.
	Undergrowth, sage and rabbit brush.
	East, bet. secs. 10 and 15
	Over gently rolling valley land through dense undergrowth of sage and rabbit brush.
35.00	Old road, bears NW. and SE.
40.17	Fall 17 lks. S. of the ¼ sec. cor., which is a blue limestone, 8 x 6 x 4 ins. lying on the ground, marked ¼ on one face. No accessories to cor.
	At exact position of old cor., reset stone 4 ins. in the ground, marked ¼ on N. face.
	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground alongside old cor. for ¼ sec. cor., with brass cap marked
	S 10 / ¼ / S 15 / 1915
	raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor.
	The bearing of this ½ mile is N.89°54'E., and the distance is 40.17 chs.
	October 20,1915
	October 19: For solar obsn. see temp. line bet. secs. 1 and 2
	From the cor. of secs. 10,11,14 and 15, I run
	West, bet. secs. 10 and 15
	Over mountainous land, through scattering scrub cedar and pinon timber and undergrowth of sage and rabbit brush.
	Descend over W. slope.

chains	
9.31	Leave cedar and pinon timber. bears N. and S.
18.90	Base of mountain, 200 ft. below sec. cor., bears N. and S.
	Gradually descend over gently rolling valley.
40.63	Fall 9 lks. N. of the ¼ sec. cor.
	The bearing of this ½ mile is S.89°52'W., and the distance is 40.63 chs.
	Land, E. 18.90 chs. mountainous with W. exposure and drain. W. 61.90 chs. gently rolling valley.
	Soil, E.18.90 chs. rocky of quartz and limestone formation with some shallow sandy loam on gravelly and rocky sub-soil. W. 61.90 chs. light, dry, brown sandy clay on gravelly sub-soil.
	Timber, scrub cedar and pinon on E. 9.31 chs.
	Undergrowth, sage and rabbit brush.
	October 19,1915.
	Howard W. Miller
	U. S. Surveyor
	October 15: For solar observation see page 8 of this survey.
	From the cor. of secs. 32 and 33 on the S. bdy. of the Tp., heretofore described, I run
	North, bet. secs. 32 and 33
40.00	No trace of the old ¼ sec. cor. can be found.
80.06	Fall 53 lks. W. of the cor. of secs. 28,29, 32 and 33.
	The bearing of this line is N.0°23'E. and the distance is 80.06 chs.
	Thence from cor. of secs. 32 and 33 on the S.bdy. of the Tp.
	N.0° 23'E., resurveying bet. secs. 32 and 33
	Gradually descend over rolling land draining N., through dense cedar and pinon timber and undergrowth of sage brush.

Resurvey of subdivision of T.9 S.,R.5 W.

chains	
7.00	Wash, 20 lks. wide, 5 ft. deep, drains N.10°W.
34.70	Leave cedar and pinon timber and enter dense undergrowth of sage and rabbit brush, bears E. and W.
36.70	Road, bears SE. and N.1°W.
40.03	Proportionate measurement 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 32 ¼ | S 33 1915 raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.
59.70	Enter scattering cedar and pinon timber, bears E. and W. Land being cleared for farming.
80.06	The cor. of secs. 28,29,32 and 33 which is a volcanic stone, 12 x 8 x 5 ins. above ground, firmly set, marked with 4 notches on E. and 1 notch on S. edge. No accessories to cor. Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground alongside old cor. for cor. of secs. 28,29, 32 and 33, with brass cap marked T 9 S | R 5 W S 29 | S 28 S 32 | S 33 1915 raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor. Land, rolling, slopes and drains N. Soil, 2nd. rate; light, dry, brown sandy loam mixed with gravel on sandy sub-soil. Timber, scrub cedar and pinon. Undergrowth, sage and rabbit brush.
	East, bet. secs. 28 and 33 Over rolling land draining N. through dense undergrowth of sage brush. Land being cleared for farming.

chains	
.50	SW. cor. of a fence bears N. and E.
14.00	Enter dense cedar and pinon timber and undergrowth of sage brush, bears N. and S.
40.11	Fall 3 lks. N. of the ¼ sec. cor., which is a flint stone, 12 x 7 x 5 ins. lying on the ground, marked ¼ on one face. No accessories to cor.
	At exact position of old cor., reset stone 8 ins. in the ground, marked ¼ on N. face.
	Set an iron post, 3 ft. long, 1 in. in dia., 26. ins. in the ground alongside old cor. for ¼ sec. cor., with brass cap marked
	S 28 / ¼ / S 33 / 1915
	from which
	A cedar, 10 ins. diam.,bears S.55°W., 49 lks. dist.,marked ¼ S 33 B T
	A cedar,8 ins. diam.,bears N.7°W., 64 lks. dist.,marked ¼ S 28 B T
	The bearing of this ½ mile is S.89°57'E., and the distance is 40.11 chs.
	October 15,1915.
	October 18: For solar observation see line bet. secs. 33 and 34
	From ¼ sec. cor., I continue
	East
46.11	Leave timber and undergrowth, enter cultivated land, bears N. and S.
52.60	Leave cultivated land, enter cleared land, bears N. and S.
63.10	Leave cleared land enter dense cedar and pinon timber and undergrowth of sage brush, bears NE. and SW.
79.95	Fall 6 lks. N. of the cor. of secs. 27,28,33 and 34.
	The bearing of this ½ mile is S.89° 55'E. and the distance is 39.84 chs.

chains

Land, rolling, slopes and drains N.

Soil, sandy loam mixed with gravel on dry, brown sandy and gravelly sub-soil.

Timber, cedar and pinon on 48.95 chs.

Undergrowth, sage brush.

October 18,1915.

Isaac Hayes

U. S. Tramsitman.

Subdivision of T.9 S.,R.5 W.

The present conditions of the surveys on the south bdy. of the Tp. are such that a sectional correction line is necessary in the subdivision of this township. Instructions for another method of survey for this Tp. are pending in the U. S. Surveyor General's office and to save time and expense I run temp. lines and set temp. cors. on the first range of secs. as follows:

October 15: At 7h. 16m.a.m.l.m.t., I set off 40°00' on the lat. arc; 8°12'S., on the decl. arc. and determine a meridian with the solar at the temp. cor. of secs. 25 and 36 on the E. bdy. of the Tp.

Thence I run

West, bet. secs. 25 and 36

40.00 Set temp. ¼ cor.

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

October 15: At this cor. I set off 8° 19'S., on the decl. arc; and at 11h. 46m.a.m.l.m.t., observe the sun on the meridian; the resulting lat. is 40°00'.

South, on a random line bet. secs. 35 and 36

40.00 Set temp. ¼ sec. cor., which is later set at 39.90 chs.

chains	
79.80	Intersect S. bdy. of the Tp. 8.78 chs. S.89°50'E. of the old cor. of secs. 1,2,35 and 36
	Set temp. point.
	From temp cor. secs. 25,26,35 and 36,
	North, bet. secs. 25 and 26
40.00	Set temp. ¼ sec. cor.
80.00	Set temp. cor. secs. 23,24,25 and 26
	October 15,1915.
	October 16: At 7h. 16m.a.m.l.m.t., I set off 40°01' on the lat. arc; 8°35'S. on the decl. arc; and determine a meridian with the solar at the cor. of secs. 19,24, 25 and 30 on the E. bdy. of the Tp.heretofore described.
	Thence I run
	N.89°49'W. for signal at the cor. of secs. 23,24,25 and 26.
40.00	Set temp. cor.
79.89	Intersect cor. of secs. 23,24,25 and 26.
	I return and move temp. ¼ sec. cor.5½ lks. E.
	North, bet. secs. 23 and 24.
40.00	Set temp. ¼ sec. cor. E. bdy. sec. 23.
80.00	Set temp. cor. secs. 13, 14, 23 and 24
	From temp cor. secs. 13,14,23 and 24, I run
	East on random line bet. secs. 13 and 24
39.17	Fall 83 lks. S. of the ¼ sec. cor.
	Thence from ¼ sec. cor.
	West
39.17	Set temp. cor. secs. 13 and 24.
	Thence from temp. cor. secs. 13 and 24
	South
.83	The temp. cor. secs. 13,14,23 and 24 changed to cor. secs. 14 and 23

chains	
40.41½	Set temp. ¼ cor. sec. 24.
40.83	The temp. ½ sec. cor. sec. 23
80.83	The cor. secs. 23,24,25 and 26.
	From temp. cor. secs. 13 and 24
	North
39.17	Set temp. ½ sec. cor. E. bdy. sec. 14
40.00	Set temp. ¼ sec. cor. W. bdy. sec. 13.
80.00	Set temp. cor. secs. 12 and 13
	From temp. cor. I run
	East on a random line bet. secs. 12 and 13
37.96	Fall 56 lks. S. of the ¼ sec. cor.
	Thence from the ¼ sec. cor.
	West
37.96	Set temp. cor. secs. 12 and 13
	Thence from temp. cor.
	South
.56	Original cor. secs. 12 and 13. I destroy same.
40.28	Set temp. ¼ sec. cor. W. bdy. sec. 13
41.39	The temp. ¼ sec. cor. E. bdy. sec. 14
80.56	The cor. secs. 13 and 24.
	October 16: At this cor., I set off 8° 40½'S., on the decl. arc; and at 11h. 46m.a.m.l.m.t., observe the sun on the meridian; the resulting lat. is 40° 02'.
	From the cor. of secs. 12 and 13, I run
	North, bet. secs. 11 and 12
40.00	Set temp. ½ sec. cor.
80.00	Set temp. point for closing cor. secs. 11 and 12
	October 16,1915.
	December 1: Upon receipt of the approval of the instructions for the survey of T.9 S.,R.5 W., I adjust the positions of the temp. cors. previously set to conform to the true lines of survey of the township.

chains	
	From the established cor. of secs. 35 and 36 on the S. bdy. of the Tp. heretofore described, I run
	North, bet. secs. 35 and 36
	Over rolling mountainous land draining N., through very scattering scrub cedar and pinon timber and undergrowth of sage and rabbit brush.
	Gradually descend along W. slope of low spur, projecting N.
30.00	Bottom of wide draw, drains N.10°E.
	Thence over rolling land.
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 | S 36 1915 raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.
	Cor. stands on W. side of draw, 200 ft. below sec. cor.
51.00	Wash, in bottom of same draw as at 30.00 chs., 10 lks. wide, 3 ft. deep, drains N.20°W.
	Gradually ascend.
61.40	Leave draw, bears N.20°W. and S.20°E.
	Thence over broken land sloping W.
80.00	Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground for cor. of secs. 25,26,35 and 36, with brass cap marked T 9 S | R 5 W S 26 | S 25 S 35 | S 36 1915 raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.
	Land, rolling mountainous. general NW. exposure and drain.
	Soil, light, dry, warm, shallow sandy loam mixed with

chains	
	gravel and loose quartz rocks on gravel and sandy sub-soil.
	Timber, very scattering scrub cedar and pinon.
	Undergrowth, sage and rabbit brush.
	East, on a random line bet. secs. 25 and 36
40.00	Set temp. ¼ sec. cor.
80.00	Intersect E. bdy. of the Tp. 9 lks. N. of the cor. of secs. 25,30, 31 and 36, heretofore described.
	Thence
	N.89°56'W., on a true line bet. secs. 25 and 36
	Over rolling mountainous land draining N., through scattering scrub cedar and pinon timber and dense undergrowth of sage and rabbit brush.
	Ascend over E. slope of spur.
1.10	Spur, 8 ft. above sec. cor., projects N.
	Descend abruptly
4.87	Ravine, 82 ft. below spur, drains N.20°E.
	Ascend abruptly
11.62	Spur, 154 ft. above ravine, projects N.15°E.
	Descend abruptly
18.38	Ravine, 108 ft. below spur, drains N.20°E.
	Ascend abruptly
23.06	Spur, 108 ft. above ravine, projects N.15°E.
	Descend abruptly
31.14	Ravine, 172 ft. below spur, drains N.15°E.
	Ascend abruptly
37.04	Spur, 122 ft. above ravine, projects N.15°E. Descend.
40.00	On W. slope of spur, 18 ft. below top.
	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 25 / ¼
	S 36 / 1915

Subdivision of T.9 S.,R.5 W.

chains	
	raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor.
43.30	Ravine, 54 ft. below ¼ sec. cor., drains N.15°E. Heads about 10 chs. S. Ascend.
48.81	Spur, 60 ft. above ravine, projects N.25°E.
	Descend.
55.42	Ravine, 72 ft. below spur, drains N.35°E.
	Ascend.
62.70	Ridge, 61 ft. above ravine , bears N.20°E. and S.
	Descend
68.77	Swale, 60 ft. below ridge, drains NW. Gradually ascend.
74.20	Top of spur, 20 ft. above swale, projects N.5°W. about 10 chs.
	Gradually descend 36 ft. to
80.00	The cor. of secs. 25,26,35 and 36
	Land, rolling and broken mountainous with steep slopes into ravines draining N.
	Soil, 3rd. rate; shallow sandy loam mixed with gravel and rocks on hard, dry sand and gravel sub-soil.
	Timber, scattering scrub cedar and pinon.
	Undergrowth, sage and rabbit brush.
	North, bet. secs. 25 and 26.
	Over rolling hilly land, drains N., through scattering scrub cedar and pinon timber and undergrowth of sage and rabbit brush.
	Gradually descend along gentle W. slope.
6.55	Enter cleared land, bears E. and W.
14.40	Leave cleared land , bears E. and W.
25.09	Bottom of wash, 40 lks. wide, 7 ft. deep in bottom of wide draw, 27 ft. below sec. cor., drains NE.
	Thence along W. side of wash near bottom of ravine.
39.25	This point being 40.00 chs. S. of the cor. of secs. 24

chains	
	and 25.
	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground for $\frac{1}{4}$ sec. cor. W. bdy. sec. 25, with brass cap marked
	S 25 $\frac{1}{4}$ 1915
	raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, E. of cor.
40.00	Set an iron post, 3 ft. long, 1 in. in dia., 18 ins. in the ground and 6 ins. in a mound of stone for $\frac{1}{4}$ sec. cor. on the E. bdy. sec. 26, with brass cap marked
	S 26 $\frac{1}{4}$ 1915
	raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.
52.60	Enter cleared land, bears NE. and SW.
56.15	Road and leave cleared land, bears NE. and SW.
56.90	Wash, 6 lks. wide, 2 ft. deep, drains NE.
57.90	Road, bears N.65°E. and S.55°W.
58.70	Leave large draw, bears N.70°E. and S.70°W.
	Ascend over S. slope of spur.
79.25	Top of spur, 160 ft. above draw, projects E.
79.50	House, bears N. 31°15'E.
80.00	Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground for cor. of secs. 23 and 26, with brass cap marked
	T 9 S | R 5 W S 23 S 26 | S 24 S 25 1915
	raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of

chains	
	cor.
	Land, rolling mountainous, drains NE.
	Soil, 2nd. and 3rd. rates; some light, dry, sandy loam mixed with gravel on sandy and gravelly sub-soil but generally is gravelly and stony mixed with a shallow brown sand on hard, dry sand and gravel sub-soil.
	Timber, some scattering scrub cedar and pinon.
	Undergrowth, sage and rabbit brush.

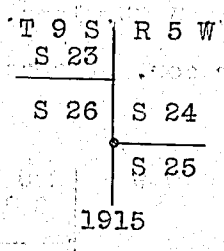
	From cor. of secs. 23 and 26,
	East, on a random line bet. secs. 24 and 25.
40.00	Set temp. ½ sec. cor.
79.89	Intersect E. bdy. of the Tp. 75 lks. N. of the cor. of secs. 19,24,25 and 30, heretofore described.
	Thence from cor. of secs. 19,24,25 and 30
	West, on a true line bet. secs. 24 and 25
	Over rolling hills draining N., through dense scrub cedar and pinon timber and undergrowth of sage and rabbit brush.
4.32	Road, Vernon, Utah to Sharp's ranch, bears N. and S.
15.65	Top of ascent, 8 ft. above sec. cor., bears NE. and SW.
	Gradually descend.
17.79	Fence line bears S. and N.1 chs. to intersection with fence line from the west.
	Leave dense timber, bears N. and S.
22.05	Bottom of swale, 22 ft. below top of ascent, drains N.
	Gradually ascend.
25.90	Road, bears NW. and SE.
31.65	Top of low spur, 35 ft. above swale, projects N.
	Gradually descend over W. slope 18 ft. to
39.94½	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 24
¼

S 25

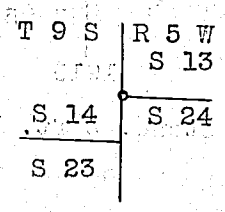
1915

chains	
	raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor.
41.20	Same road as at 25.90 chs., bears N.80°E. and S.80°W.
44.80	Enter large wide draw, bears N.15°E. and SW.
54.90	Wash, 5 lks. wide, 1 ft. deep, 38 ft. below ¼ sec. cor., drains N.20°E.
	Enter cleared land, bears N. and S.
57.52	Road, bears N.20°E. and S.20°W.
58.60	Leave cleared land and draw, bears N. and S. Enter mountainous land; ascend over east slope.
79.89	On top of spur, 285 ft. above draw.
	Intersect N. and S. line 75 lks. S. of the cor. of secs. 23 and 26. Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground for cor. of secs. 24 and 25, with brass cap marked



	raise a mound of stone, 2 ft. base, 1½ ft. high, E. of cor.
	Land, low rolling hills, general N. exposure and drainage.
	Soil, 2nd. and 3rd. rates; some light, dry, brown sandy loam mixed with gravel on sandy sub-soil but generally gravelly and rocky of quartz formation mixed with some shallow brown sandy on gravelly and stony sub-soil.
	Timber, scrub cedar and pinon.
	Undergrowth, sage and rabbit brush.
	From cor. of secs. 24 and 25, I run
	North, on temp. line on W. bdy. sec. 24.
.75	The cor. of secs. 23 and 26.
40.00	Set temp. ¼ sec. cor. for sec. 24
80.00	Set temp. cor. of secs. 13 and 24.

chains	
	From temp. cor. secs. 13 and 24, I run
	East, on a random line bet. secs. 13 and 24
39.17	Fall 1.08 chs. S. of the ½ sec. cor.
	Thence from ½ sec. cor.
	West, on true line bet. secs. 13 and 24
	Gradually ascend over rolling land sloping NE.
	Across cultivated land.
.20	Wire fence and leave cultivated land, bears N. and S.
	Enter dense sage and rabbit brush, bears N. and S.
.30	Old road, bears N. and S.
14.00	Base of mountain and leave rolling land, bears N.15°E. and S.15°W.
	Ascend over E. slope.
26.15	Spur, 110 ft. above base, projects NE.
	Gradually descend over NW. slope 45 ft. to
39.17	Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground for cor. of secs. 13 and 24, with brass cap marked



1915

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

Land, E. 14.00 chs. rolling land, W. 25.17 chs. rolling mountainous or foot hills. General NE. exposure and drainage.

Soil; E.14 chs. 2nd. rate; light, dry, brown sandy loam mixed with gravel on hard, dry sand and gravel sub-soil. W. 25.17 chs. 3rd. rate; generally gravelly and stony with some shallow sandy loam on gravelly and rocky sub-soil.

No timber.

Undergrowth, sage and rabbit brush.

chains

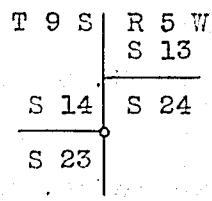
From cor. of secs. 13 and 24,

South, on a true line on W. bdy. sec. 24

Over rolling mountainous land draining NE., through scattering scrub cedar and pinon timber and undergrowth of sage and rabbit brush.

.33 A northing of 80.00 chs. from the cor. of secs. 23 and 26

Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground for cor. of secs. 14 and 23, with brass cap marked



1915

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

Ascend over NW. slope of spur.

11.20 Spur, 130 ft. above sec. cor., projects N.30°E.

Descend over SE. slope.

26.50 Bottom of ravine, 150 ft. below spur, drains N.65°E.

Enter heavier timber, bears NE. and SW.

Ascend abruptly over N. slope.

32.65 Thence over NW. slope.

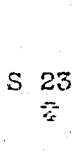
36.05 Point of spur, 180 ft. above ravine, projects N.30°E.

Thence gradually ascend along nearly E. slope.

Leave cedar and pinon timber, bears E. and W.

40.33 A northing of 40.00 chs. from the cor. of secs. 23 and 26

Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground for ¼ sec. cor. E. bdy. sec. 23, with brass cap marked



1915

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

chains	
	cor.
40.54	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground for ¼ sec. cor. W. bdy. sec. 24, with brass cap marked
	S 24 ¼ 1915
	raise a mound of stone, 2 ft. base, 1½ ft. high, E. of cor.
49.20	Top of ascent on E. slope, 35 ft. above ¼ sec. cors.
	Descend into ravine.
59.25	Bottom of ravine, 90 ft. below top of ascent, drains N. 75°E. Ascend.
63.70	Spur, 125 ft. above ravine, projects N.80°E.
	Descend.
73.65	Ravine, 135 ft. below spur, drains N.80°E.
	Ascend 115 ft. to
80.33	The cor. of secs. 23 and 26.
81.08	The cor. of secs. 24 and 25.
	Land, low broken mountains cut by ravines draining E. General E. exposure.
	Soil, 3rd. rate; gravelly and stony of quartz formation, mixed with some light, dry, shallow sandy loam, on gravelly and rocky sub-soil.
	Timber, some scattering scrub cedar and pinon on N. 36.05 chs.
	Undergrowth, sage and rabbit brush.

	From cor. of secs. 13 and 24, I run
	North, on temp. line on W. bdy. sec. 13
40.00	Set temp. ¼ sec. cor.
80.00	Set temp. cor. secs. 12 and 13.
	From temp. cor. secs. 12 and 13, I run
	East, on a random line bet. secs. 12 and 13

chains

37.96 Fail 56 lks. S. of the ½ sec. cor.

Thence from the ½ sec. cor.

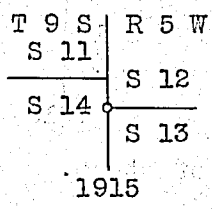
West, on a true line bet. secs. 12 and 13

Grad ually ascend over rolling land sloping NE., through very scattering scrub cedar and pinon timber and undergrowth of sage and rabbit brush.

33.60 Base of hills, bears N. and S.

Ascend 50 ft. to

37.96 Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground for cor. of secs. 12 and 13, with brass cap marked



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

Land, E. 33.60 chs. rolling; W. 4.36 chs. hilly, general E. exposure and drainage.

Soil, 2nd. rate; light, dry, warm ,brown sandy loam mixed with gravel and some rock,on hard, dry, sand and gravel sub-soil.

Timber, very scattering scrub cedar and pinon.

Undergrowth, sage and rabbit brush.

From the cor. of secs. 12 and 13

South, on W. bdy. sec. 13

Gradually descend over rolling hilly land sloping nearly E., through very scattering scrub cedar and pinon timber and undergrowth of sage and rabbit brush.

35.75 Enter wide draw, 45 ft. below sec. cor., bears NE. and SW.

37.60 Wash, 4 lks. wide, 1 ft. deep, drains NE.

40.28 Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in

chains	
	the ground for $\frac{1}{4}$ sec.cor. W. bdy. sec. 13, with brass cap marked
	S 13 $\frac{1}{4}$ / 1915
	raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, E. of cor.
40.89	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground for $\frac{1}{4}$ sec. cor., E. bdy. sec. 14, with brass cap marked
	S 14 $\frac{1}{4}$ / 1915
	raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.
49.20	Wood road, bears N.10°E. and S.10°W.
68.40	Enter heavy timber, bears E. and W.
	Begin ascent over NW. slope.
76.65	Leave timber, bears N.70°E. and S.70°W.
80.56	120 ft. above wash.
	The cor. of secs. 13 and 24.
	Land, rolling hills with general E. exposure and drain.
	Soil; 2nd. and 3rd. rate; some light, dry, brown sandy loam mixed with gravel on hard, dry sand and gravel sub-soil but generally is gravelly and rocky of quartz formation on gravelly and rocky sub-soil.
	Timber, scrub cedar and pinon.
	Undergrowth, sage and rabbit brush.

	From the cor. of secs. 12 and 13
	North, on a random line bet. secs. 11 and 12
40.00	Set temp. $\frac{1}{4}$ sec. cor.
80.67	Intersect E. and W. line, 3.86 chs. N.89° 37'E. of the cor. of secs. 1 and 2.

chains	
	At intersection, Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground for closing cor. of secs. 11 and 12, with brass cap marked
	T 9 S R 5 W S 2 | S 1 CC S 11 | S 12 1915
	raise a mound of stone, 2 ft. base, 1½ ft. high, S. of cor.
	Thence
	South, on a true line on W. bdy. sec. 12
	Gradually ascend over rolling land sloping E., through short undergrowth of sage and rabbit brush.
39.85½	The midway point bet. the closing cor. of secs. 11 and 12 and the closing cor. of secs. 11 and 14.
	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground for ¼ sec. cor., on E. bdy. sec. 11, with brass cap marked
	S 11 ¼ | 1915
	raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.
40.33½	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground for ¼ sec. cor. on W. bdy. sec. 12, with brass cap marked
	| S 12 ¼ 1915
	raise a mound of stone, 2 ft. base, 1½ ft. high, E. of cor.
62.80	Foot of hills, bear NW. and SE.
	Gradually ascend over nearly E. slope.

chains	
79.71	The temp. point for. closing cor. of secs. 11 and 14.
80.67	35 ft. above base of hills.
	The cor. of secs. 12 and 13.
	Land, rolling, general E. exposure and drainage.
	Soil; 3rd. rate: light, dry, brown sandy clay, mixed with gravel and quartz rocks on hard, dry sand and gravel sub-soil.
	No timber.
	Undergrowth, short sage and rabbit brush.
	Considerable grass, good for grazing.
	December 1,1915.
	Howard Miller
	U. S. Surveyor.
	October 18: For solar obsn. see N.½ mile bet. secs. 33 and 34.
	From cor. of secs. 26,27,34 and 35, I run
	South, on a random line bet. secs. 34 and 35
40.00	Set temp. ¼ sec. cor.
79.93	Intersect S. bdy. of the Tp. 2.38 chs. E. of the old cor. of secs. 2,3, 34 and 35. Set temp. cor.
	October 18,1915.
	December 1: From temp. point set 79.93 chs. south of the cor. of secs. 26,27,34 and 35, I run north 6 lks. to
79.87	Intersect true south bdy. of the Tp., Cor. for secs. 34 and 35 established at this point, for description of same see south boundary of T.9 S.,R.5 W.
	Thence
	North, on true line bet. secs. 34 and 35
	Over mountainous land through scrub cedar and pinon timber, and undergrowth of sage and rabbit brush.
	Gradually descend along rocky E. slope.
2.85	Descend abruptly over NE. slope into canyon.

Subdivision of T.9 S.,R.5 W.

chains	
10.05	Base steep descent and enter canyon, bears NW. and SE.
	Gradually descend.
12.85	Vernon Creek, in bottom of canyon, 10 lks. wide, 6 ins. deep, 155 ft. below sec. cor., flows N.20°W.
	Thence in bottom of canyon.
13.65	Same creek, flows N.20°E.
16.15	Same creek, flows NW.
	Gradually ascend from canyon over SW. slope.
20.45	Road, Vernon, Utah to Cherry Creek, bears N.30°W. and S.30°E.
29.31	Spur, 40 ft. above creek, projects SW.
	Descend.
32.55	Ravine, 25 ft. below spur, drains W.
	Ascend 25 ft. to
33.80	Thence over rolling land with general W. exposure.
37.90	Old road, bears NE. and SW.
38.00	A cabin bears S.87°W. about 25 chs. distant.
39.93½	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 | S 35
	1915
	raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.
73.60	Road, Lofgreen, Utah to Vernon Creek, bears N.70°E. and S.70°W.
79.87	The cor. of secs. 26,27,34 and 35
	Land, rolling and broken mountains sloping and draining E. into Vernon Creek on S. 16.15 chs. and broken land draining W. on N. 63.72 chs.
	Soil,3rd. rate; gravelly and stony with some shallow, dry, brown sandy loam on gravelly and sandy sub-soil.
	Timber, scrub cedar and pinon.

chains

Undergrowth, sage and rabbit brush.

December 1,1915.

Isaac Hayes
U.S.Transitman.

October 21: At 7h. 15m.a.m.l.m.t., I set off 40°00' on the lat. arc; 10° 24'S., on the decl. arc; and determine a meridian with the solar at the cor. of secs. 26, 27, 34 and 35.

Thence I run

North, on temp. line bet. secs. 26 and 27.

40.00 Set temp. ¼ sec. cor.

80.00 Set temp. cor. of secs. 22, 23,26 and 27.

From temp. cor., I run

West, on a random line bet. secs. 22 and 27.

39.98 Fall 1.03 chs. S. of the ¼ sec. cor.

Thence from ¼ sec. cor.,

East, on a true line bet. secs. 22 and 27

Over mountainous land through scattering scrub cedar and pinon timber and undergrowth of sage and rabbit brush.

Ascend over W. slope of ridge.

16.55 Top of ridge, 150 ft. above ¼ sec. cor., bears N. and S.

Descend.

27.70 Leave timber and undergrowth, enter cleared land, bears N. and S.

Thence over more rolling country.

36.50 Leave cleared land, enter dense timber and undergrowth; bears N. and S.

39.80 Leave timber, bears N. and S.

39.98 On edge of cultivated field, bears NE. and SW.

Knowing that a closing cor. will be necessary for secs. 23 and 26, I establish cor. for secs. 22 and 27 as follows:

Subdivision of T.9 S.,R.5 W.

chains	
	Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground for cor. of secs. 22 and 27, with brass cap marked
	T 9 S | R 5 W S 22 | S 27 | S 23 S 26 1915
	from which
	A cedar, 5 ins. diam.,bears S.43°W., 81 lks. dist.,marked T 9 S R 5 W S 27 B T
	A cedar, 10 ins. diam.,bears N.53½°W.,103 lks. dist.,marked T 9 S R 5 W S 22 B T
	Land, rolling mountainous with E. and W. exposures from ridge at 16.55 chs.
	Soil; 2nd. and 3rd. rates; generally a light, dry, dark brown sandy loam mixed with gravel on hard. dry, sand and gravel sub-soil. Some patches of gravelly and rocky soil on rocky sub-soil.
	Timber, scrub cedar and pinon.
	Undergrowth, sage and rabbit brush.
	South, on E. bdy. sec. 27
	Gradually ascend over gently rolling cultivated land sloping NE.
11.35	Leave cultivated land, enter scattering scrub cedar and pinon timber and undergrowth of sage and rabbit brush.
	Thence ascend over NE. slope of mountain.
20.55	Spur, 40 ft. above base of mountain, projects E. about 5 chs.
	Gradually descend.
25.75	Ravine, 10 ft. below spur, drains N.60°E.
	Ascend abruptly
37.30	Spur, 120 ft. above ravine, projects E.
	Gradually descend over gentle E. slope.

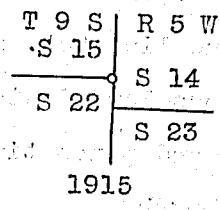
chains	
40.51½	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground for ¼ sec. cor., E. bdy. sec. 27, with brass cap marked
	S ¼ 27
	1915
	raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.
	Note: Trees are within limits but none are suitable for bearing trees.
42.70	Wire fence, bears NE. and SW.
45.30	Head of draw, drains E.
	Ascend
50.27	Wire fence, bears E. and W.
52.95	Top of ridge, 50 ft. above head of draw, bears NW. and SE.
	Enter dense timber and gradually descend over SW. slope of ridge 270 ft. to
81.03	The cor. of secs. 26,27,34 and 35
	Land, N.11.35 chs. gently rolling. S. 69.68 chs. mountainous. N. 52.95 chs. slopes and drains NE., S. 28.08 chs. slopes and drains SW.
	Soil; N. 11.35 chs. 1st. rate; light, warm brown sandy loam on sandy sub-soil. S. 69.68 chs. 4th. rate; gravelly and rocky of quzrtz formation with some light shallow sandy loam on gravelly and rocky sub-soil.
	Timber, scrub cedar and pinon on S. 69.68 chs.
	Undergrowth, sage and rabbit brush on S. 69.68 chs.

	From cor. of secs. 22 and 27, I run
	North on temp. line on E. bdy. sec. 22
40.00	Set temp. ¼ sec. cor.
62.50	October 21: Not on line at noon this date, obsn for lat. impossible.

chains	
80.00	Set temp. cor. secs. 15 and 22.
	From temp. cor. of secs. 15 and 22, I run
	West, on a random line bet. secs. 15 and 22
40.00	Set temp. $\frac{1}{4}$ sec. cor.
79.88	Fall 82 lks. S. of the cor. of secs. 15,16,21 and 22
	Thence from cor. of secs. 15,16,21 and 22
	East, on a true line bet. secs. 15 and 22
	Over mountainous land draining SW., through scattering scrub cedar and pinon timber and undergrowth of sage and rabbit brush.
	Ascend.
4.90	Spur, 30 ft. above sec. cor., projects SW.
	Descend.
7.40	Ravine, 25 ft. below spur, drains S.30°W.
	Ascend.
13.95	Spur, 70 ft. above ravine, projects S.25°W.
	Gradually descend along nearly S. slope.
26.25	Descend SE. slope into ravine.
32.85	Ravine, 35 ft. below spur, drains SW.
	Ascend over NW. slope 65 ft. to
39.94	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
	S 15 / $\frac{1}{4}$ / S 22 / 1915
	raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor.
	Note: No trees available for bearing trees.
	Continue ascent.
57.50	Top of ridge and divide between Rush valley and West Tintic, bears N.10°E. and S.10°W., 220 ft. above $\frac{1}{4}$ sec. cor.
	Descend.
67.45	Ravine, 155 ft. below ridge, drains N.30°E.

Subdivision of T.9 S., R.5 W.

chains	
	Ascend.
78.00	Spur, 70 ft. above ravine, projects NE.
	Descend 9 ft. to
79.88	Set an iron post, 3 ft. long, 2 ins. in dia., 12 ins. in the ground and 12 ins. in a mound of stone for cor. of secs. 15 and 22, with brass cap marked



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

Note: On account of underlying rock, I am unable to set post more than 12 ins. in the ground.

Land, mountainous, drains E. and W. from divide at 57.50 chs.

Soil, 4th. rate; gravelly and rocky of quartz formation, mixed with some shallow sandy loam on gravelly and rocky sub-soil.

Timber, scattering scrub cedar and pinon.

Undergrowth, sage and rabbit brush.

	South, on E. bdy. sec. 22
	Over mountainous land draining E., through scrub cedar and pinon timber and undergrowth of sage brush.
	Gradually ascend along nearly E. slope.
14.60	Head of ravine, 35 ft. above sec. cor., drains E.
	Ascend more rapidly.
18.20	Top of ridge, 40 ft. above head of ravine, bears S.30°E. and W.
	Enter heavier timber and descend over S. slope of ridge.
31.70	Head of ravine, 80 ft. below ridge, drains S.15°W.
	Thence along general W. slope.
40.41	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground for ¼ sec. cor. on E. bdy. sec.22, with

chains	
	brass cap marked
	S 22 $\frac{1}{4}$
	1915
	from which
	A cedar, 8 ins. diam., bears S.44°W., 14 lks. dist., marked $\frac{1}{4}$ S 22 B T
	A cedar, 10 ins. diam., bears N.57°W., 22 lks. dist., marked $\frac{1}{4}$ S 22 B T
	Gradually descend along nearly south slope.
57.90	Leave cedar timber, bears E. and W.
60.30	Base of descent and enter cultivated land, 90 ft. below $\frac{1}{4}$ sec. cor., bears E. and W. Land becomes gently rolling.
63.90	Wash, 12 lks. wide, 2 ft. deep, drains N.70°W.
64.22	Road, bears N.70°W. and S.70°E.
68.90	Leave cultivated land and enter dense scrub cedar and pinon timber and sage brush undergrowth, bears N.70°W. and S.70°E.
79.80	Leave cedar and pinon timber, bears E. and W.
80.82	The cor. of secs. 22 and 27
	Land, N. 60.30 chs. mountainous with NE. exposure from ridge at 18.20 chs. and S. from same ridge on S, 42.10 chs. S. 20.52 chs. of mile gently rolling.
	Soil, N. 60.30 chs. generally gravelly and rocky of limestone and quartz formation with some shallow sandy loam, on gravelly and rocky sub-soil, 4th. rate. S. 20.52 chs. soil is a rich sandy loam on sandy sub-soil 1st. rate.
	Timber, scrub cedar and pinon.
	Undergrowth, sage and rabbit brush.

	From the cor. of secs. 15 and 22, I run
	North, on a random line on E. bdy. sec. 15
40.00	Set temp. $\frac{1}{4}$ sec. cor.

Subdivision of T.9 S.,R.5 W.

chains	
80.33	Intersect E. and W. line 1.13 chs. S.89°52'W. of the cor. of secs. 10,11,14 and 15. At intersection,
	Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground for closing cor. of secs. 14 and 15, with brass cap marked
	T 9 S | R 5 W S 10 | S 11 CC S 15 | S 14 1915
	raise a mound of stone, 2 ft. base, 1½ ft. high, S. of cor.
	Thence
	South, on E. bdy. sec. 15
	Over mountainous land draining NW., through scattering scrub cedar and pinon timber and undergrowth of sage brush.
	Ascend over NW. slope 26 ft. to
3.10	Top of ascent on W. slope of spur and top of limestone ledge, 50 ft. high, bears N.10°E. and S.10°W.
	Descend abruptly over SW. slope.
19.45	Bottom of draw., near mouth of same, 150 ft. below top of ascent, drains N.60°W. Old road, bears NW. and SE.
	Ascend over NW. slope 225 ft. to
40.16½	Set an iron post, 3 ft. long, 1 in. in dia., 12 ins. in the ground and 14 ins. in a mound of stone for ¼ sec. cor. on E. bdy. sec. 15, with brass cap marked
	S 15 ¼ | 1915
	raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.
	Note: On account of underlying rock, I am unable to set post more than 12 ins. in the ground.
	Continue ascent.
42.15	Top of ridge and divide between E. and W. Rush valleys

chains	
	34 ft. above ¼ sec. cor., bears N.60°E. and S.60°W.
	Descend over S. slope.
48.00	Head of ravine, drains S. Thence descend in ravine.
64.95	Ravine turns SE., 150 ft. below top of divide.
	Ascend.
67.95	Spur, 15 ft. above ravine, projects E. about 3 chs.
	Descend.
70.50	Ravine, 15 ft. below spur, drains N.60°E.
	Ascend abruptly.
78.45	Spur, 155 ft. above ravine, projects NE.
	Thence on near level line.
80.33	The cor. of secs. 15 and 22.
	Land, mountainous, NW. exposure and drainage from divide at42.15 chs. on N. 42.15 chs. and General E. exposure and drainage from same divide on S. 37.18 chs.
-	Soil, 4th. rate; gravelly and rocky of limestone and quartz formation mixed with some shallow sandy loam on gravelly and rocky sub-soil.
	Timber, scattering scrub cedar and pinon.
	Undergrowth, sage brush.
	October 21,1915.
	Howard D Miller
	U. S. Surveyor.
	December 2: For solar obsn. see line bet. secs. 14 and 23
	From the cor. of secs. 25,26,35 and 36, I run
	West, on a random line bet. secs. 26 and 35
40.00	Set temp. ½ sec. cor.
86.32	Intersect N. and S. line 30 lks. N. of the cor. of secs. 26,27,34 and 35.
	Thence
	N.89°48'E., on a true line bet. secs. 26 and 35
	Over rolling mountainous land draining W., through scattering scrub cedar and pinon timber and undergrowth of

chains	
	sage brush.
	Gradually ascend.
11.25	Road, bears N.60°E. and SW.
46.32	On gentle N. slope.
	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 26 ¼ ——— S 35 1915
	raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor.
50.60	Low divide between E. and W. Rush valleys, 50 ft. above sec. cor., bears N. and S.
	Gradually descend over NE. slope.
62.35	Small swale, 30 ft. below divide, drains N.10°E.
	Gradually ascend.
65.65	Low spur, 5 ft. above swale, projects N.20°E.
	Gradually descend.
80.35	Leave timber and undergrowth, enter cleared land, bears N. and S.
82.65	Wash, 20 lks. wide, 8 ft. deep, in bottom of wide draw, 40 ft. below spur, drains N.
	Ascend.
85.45	Leave cleared land, enter dense undergrowth, bears N. and S.
86.32	25 ft. above wash. The cor. of secs. 25,26,35 and 36.
	Land, rolling mountainous with general NE. and W. exposures from divide at 50.60 chs.
	Soil, 3rd. rate; gravelly and light, dry, brown sandy loam on hard, dry, brown sand and gravel sub-soil.
	Timber, scattering scrub cedar and pinon.
	Undergrowth, sage brush.
	Knowing that my falling on the line bet. secs. 23 and 26 will be out of limits at the cor. of secs. 22 and 27,

Subdivision of T.9 S.,R.5 W.

chains	
	I run from cor. of secs. 23 and 26, S.89°47'W on a true line bet. secs. 23 and 26
	Over mountainous land through scattering scrub cedar and pinon timber and undergrowth of sage brush.
	Ascend over E. slope.
6.25	Spur, 30 ft. above sec. cor., projects SE.
	Descend over general SW. slope.
13.25	Leave timber, bears N. and S.
24.45	Enter scattering scrub cedar timber, bears N. and S.30°E.
40.00	160 ft. below spur.
	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 23
¼
S 26
1915

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

	Continue very gradual descent.
62.65	Leave timber and undergrowth , enter cultivated land bears NW. and SE.
	Thence over gently rolling land.
66.85	Road, bears NW. and SE.
86.25	Intersect N. and S. line, 72 lks. S. of the cor. of secs. 22 and 27. At intersection,
	Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground for closing cor. of secs. 23 and 26, with brass cap marked

T 9 S | R 5 W
S 22 | S 23
S 27CC | S 26
1915

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

Land, E. 40.00 chs. rolling mountainous sloping E. and W. from high spur at 6.25 chs. W. 46. 25 chs. gently roll-

chains	
	ing, slopes and drains SE.
	Soil, E. 40.00 chs. gravelly and rocky with light, dry sandy clay on gravelly and rocky sub-soil; 3rd. rate. W.46.25 chs. light, dry, warm, brown sandy clay on dry, sandy sub-soil, 2nd. rate.
	Timber, scrub cedar and pinon.
	Undergrowth, sage brush.
	December 2: At this cor. I set off 21° 52'S., on the decl. arc; and at 11h. 50m.a.m.l.m.t., observe the sun on the meridian; the resulting lat. is 40°01'.
	December 2: At 8h. 50m.a.m.l.m.t., I set off 40° 02' on the lat. arc; 21° 50'S., on the decl. arc; and determine a meridian with the solar at the cor. of secs. 14 and 23.
	(Knowing that the falling oftthe line bet. secs. 14 and 23 will be out of limits at the cor. of secs. 15 and 22, and a closing cor. will be necessary) I run
	S.89°47'W., on a true line bet. secs. 14 and 23
	Over mountainous land draining NE., through scrub cedar and pinon timber and undergrowth of sage brush.
	Gradually descend over NW. slope.
19.25	Bottom of ravine, 45 ft. below sec. cor., drains N.60°E.
	Road in bottom of ravine, bears N.60°E. and S.60°W.
	Ascend.
28.05	Ridge, 135 ft. above ravine, bears NE. and SW.
	Descend.
30.75	Rocky gulch, 20 ft. deep, drains N.
	Enter very dense timber, bears N. and S.
	Gradaully ascend over broken N. and NE. slopes.
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 14
¼
———
S 23
1915

Subdivision of T.9 S.,R.5 W.

chains

from which

A cedar, 16 ins. diam., bears S.77°W., 31 lks. dist., marked ½ S 23 B T

A cedar, 12 ins. diam., bears N.5°W., 31 lks. dist., marked ½ S 14 B T

40.70 Leave dense timber, bears N. and S.

86.12 On E. slope 340 ft. above ¼ sec. cor.

Intersect N. and S. line 1.84 chs. S. of the cor. of secs. 15 and 22. At intersection,

Set an iron post, 3 ft. long, 2 ins. in dia., 18 ins. in the ground and 6 ins. in a mound of stone for closing cor. of secs. 14 and 23, with brass cap marked

T 9 S | R 5 W
S 15 | S 14
CC
S 22 | S 23
1915

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

Note: On account of underlying rock, I am unable to set post more than 18 ins. in the ground.

Land, rolling and broken mountainous, slopes and drains NE.

Soil, 4th. rate; rocky of quartz formation with some light clay loam on clay and rock sub-soil.

Timber, scrub cedar and pinon.

Undergrowth, sage brush.

December 2,1915.

Isaac Hayes
U. S. Transitman.

October 19: For solar obsn. see temp. line bet. secs. 1 and 2:

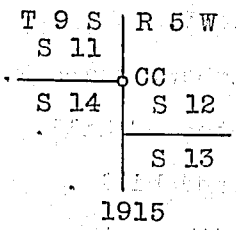
Knowing that a closing cor. will be necessary for secs. 11 and 14 on the W. bdy. sec. 12, I run from the cor. of secs. 10,11,14 and 15

Subdivision of T.9 S.,R.5 W.

chains	
	East, on true line bet. secs. 11 and 14
	Over mountainous land through scattering scrub cedar and pinon timber and dense undergrowth of sage and rabbit brush.
	Ascend over W. slope.
.90	Top of spur, 10 ft. above sec. cor., projects S.10°W.
	Descend.
3.40	Ravine, 60 ft. below spur, drains S. Heads about 6 chs.N.
	Ascend.
17.10	Top of ridge and divide, 175 ft. above ravine, divides E. and W. Rush valleys, bears N.15°E. and S.15°W.
	Descend.
22.40	Ravine, 95 ft. below divide, drains S.15°E.
	Ascend.
29.50	Spur, 35 ft. above ravine, projects S.
	Gradually descend.
40.00	80 ft. below spur, near bottom of ravine.
	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground for ¼ sec. cor., S. bdy. sec.11, with brass cap marked
	S 11 / ¼ / 1915
	raise a mound of stone, 2 ft. base. 1½ ft. high, N. of cor.
	No trees within reasonable distance that are suitable for bearing trees.
40.50	Ravine, drains S.4°W. Gradually ascend over W. slope.
44.95	December 1: October 19,1915
	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in a mound of stone on solid rock for ¼ sec. cor. on N. bdy. sec. 14, with brass cap marked
	S 14 / ¼ / 1915
	raise a mound of stone, 2 ft. base, 1½ ft. high, S. of

Subdivision of T.9 S.,R.5 W.

chains	
	cor.
	No trees within reasonable distance that are suitable for bearing trees.
	December 1,1915.
	October 19:
47.00	Spur, 95 ft. above ravine, projects S.
	Descend.
58.75	Ravine, 195 ft. below spur, drains N.15°E.
	Ascend.
72.85	Ridge, 275 ft. above ravine, bears N.15°E. and S.15°W.
	Descend abruptly, rocky E. slope 315 ft. to
84.95	Set point.
	October 19,1915.
	December 1:
84.95	Intersect N. and S. line 96 lks. N. of the cor. of secs. 12 and 13. At intersection,
	Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground for closing cor. of secs. 11 and 14, with brass cap marked



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

Land, mountainous, sloping and draining E. and W. from divide at 17.10 chs.

Soil, 4th. rate; rocky of quartz and limestone formation mixed with some light, blue clay on gravelly and rocky sub-soil.

Timber, scattering scrub cedar and pinon.

Undergrowth, sage and rabbit brush.

December 1,1915.

Howard Miller

Subdivision of T.9 S.,R.5 W.

chains	
	U. S. Surveyor
	October 18: For solar obsn. see N.½ of this mile.
	From the ¼ sec. cor. bet. secs. 33 and 34, I run
	South on temp. line.
38.86	Set temp. point on old S. bdy. tp. which is 2.16 chs.
	S.89°57'E. of the old cor. of secs. 3,4,33 and 34.
	October 18,1915.
	December 1:
39.81	Intersection with the S. bdy. of the Tp. Cor for secs.
	33 and 34 established at this point.
	Thence
	North, bet. secs. 33 and 34
	Gradually ascend over rolling land, cleared for farming.
12.65	Base of hill and road, bears N.60°E. and SW.
	Ascend more rapidly.
22.30	Leave cleared land and enter dense cedar and pinon timber
	and sage brush undergrowth. Soil becomes very rocky.
24.70	Top of hill, 65 ft. above sec. cor., bears E. and W.
	Gradually descend.
28.35	Leave dense timber, bears E. and W.
39.81	125 ft. below top of hill. The ¼ sec. cor.
	Land, rolling and hilly.
	Soil, 2nd. and 4th. rates; generally sandy and gravelly
	on dry sand sub-soil. Some parts very rocky of limestone
	and quartz formation.
	Timber, scrub cedar and pinon.
	Undergrowth, sage brush.
	December 1,1915.
	Isaac Hayes
	U. S. Transitman.

General Description.

That portion of the township surveyed under this assignment lies on the E. and W. slopes of a low mountain ridge bearing N. and S. and divides E. and W. Rush valleys. At the base of the ridge and in the large draws or basins in the mountain, considerable farming is being done, the land in these places is usually gently rolling. The soil of the gently rolling or farming land is a light, dry, brown sandy loam mixed with gravel and packed hard, on dry, sandy and gravelly subsoil while that of the mountainous part is usually rocky of limestone and quartz formation mixed with some dry clay and sand on rocky sub-soil. The general drainage of the country is north into main Rush valley.

A considerable amount of scrub cedar and pinon timber is found on the Tp. The undergrowth is chiefly sage and rabbit brush.

Vernon Creek, the only water in the township, runs through secs. 27,34 and 35 in a northwesterly direction. Some of the water in this creek is diverted and used for irrigation purposes in this township.

I find no indications of mineral in this township.

C.S. Sharp has a dry farm in secs. 12,13 and 24. About 250 acres have been fenced, plowed and seeded to grain. He has also built a small cabin in sec. 13.

Benion Bros. dry farm is situated in secs. 22,23,26 and 27. They have done some fencing, plowed about 100 acres and seeded to grain. They have also built a small house in sec. 26 which cannot be seen from line.

Several small farms are situated along Vernon Creek in secs. 22,27 and 34. Claimants names unknown. Water is used on these farms from Vernon Creek for irrigation.

Outside of the farming land, this township is used for grazing purposes.

General Description,

Howard W. Miller
U. S. Surveyor.

Isaac Hayes
U. S. Transitman.

BOOK A-417

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 .....

.....

.....

.....

.....

.....

.....

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

BOOK A-417

FINAL OATH OF UNITED STATES SURVEYOR.

I, Isaac Hayes, U.S. 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 25th. day of June, 1915, 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 resurvey of the south and east boundaries and subdivision and survey of the subdivision of T.9 S., R.5 W.

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.

Isaac Hayes
U. S. Transitman ~~U.S. Surveyor~~

Subscribed by said Isaac Hayes, and sworn to before me this 15 day of May, 1916

Frank Beardsley
Clerk of Court

SEAL

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,
Salt Lake City, Utah, June 27, 1916

The foregoing field notes of the resurvey of south and east boundaries and subdivision and survey of the subdivision of T. 9 S. R. 5 W. S.L.B.& M., Utah,

executed by Howard W. Miller and Isaac Hayes, under ~~his~~ their special instructions dated June 25, 1915, having been critically examined, and the necessary corrections and explanations made, the said field notes, and the surveys they describe, are hereby approved.

M. A. Thoresen
U. S. Surveyor General.

I certify that the foregoing transcript of the field notes of the above-described surveys in T.9 S.R. 5 W. S.L.B.& M., Utah, has been correctly copied from the original notes on file in this office.

6—2761

U. S. Surveyor General.

4—680

BOOK A.417

CERTIFICATE OF ASSISTANTS.

We, the undersigned, hereby certify upon honor that we assisted, to the best of our skill and ability, Howard W. Miller, U.S. Surveyor & ~~U.S. Surveyor~~ Isaac Hayes, U.S. Transitman, during the periods and in the capacities stated opposite our several signatures, in surveying all those parts or portions of resurvey of the south and east boundaries and subdivision and survey of the subdivision of T.9 S., R.5 W.

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.	
Robert W. Riley	October 14, 1915	December 2, 1915	chainman
Edward Jones	"	"	"
William Fredrickson	"	"	"
Carl Ray	"	"	"
Edward Ellis	"	"	flagman
Leslie H. Young	"	October 21, 1915	"
Harvey Hoff	"	December 2, 1915	cornerman
James Tygerson	"	"	"

Subscribed and certified to before me on the dates of the final service as shown above.

Howard W. Miller.
U. S. Surveyor.

6—2761

BOOK A-417

FINAL OATH OF UNITED STATES SURVEYOR.

I, Howard W. Miller, 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 25th. day of June, 1915, 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 resurvey of the south and east boundaries and subdivision and survey of the subdivision of T.9 S., R.5 W.

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.

Howard W. Miller
U. S. Surveyor.

Subscribed by said Howard W. Miller, and sworn to before me this 14th day of February, 1916

SEAL

M. C. Thorsen
U. S. Surveyor General

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah, June 27, 1916

The foregoing field notes of the re survey of south and east boundaries and subdivision and survey of the subdivision of T.9 S. R.5 W. S.L.B.& M., Utah,

executed by Howard W. Miller and Isaac Hayes, under ~~his~~ their special instructions dated June 25, 1916, having been critically examined, and the necessary corrections and explanations made, the said field notes, and the surveys they describe, are hereby approved.

M. C. Thorsen
U. S. Surveyor General.

I certify that the foregoing transcript of the field notes of the above-described surveys in T.9 S. R. 5 W. S.L.B.& M.Utah, has been correctly copied from the original notes on file in this office.

U. S. Surveyor General.

6—2761

4—679

BOOK A-417 C

FIELD NOTES

OF THE SURVEY OF THE

SOUTH AND EAST BOUNDARIES OF T.9 S.,R.4 W.; EAST BOUNDARY OF T.9 S.,R.5 W. AND EAST BOUNDARY OF T.8 S.,R.7 W.

Of the SALT LAKE BASE AND *Meridian,*

In the State of UTAH

EXECUTED BY

Howard W. Miller

&

Isaac Hayes

In the capacity of U. S. Surveyors, under instructions dated June 25, *1915, issued by the United States Surveyor General to govern surveys included in Group No.* 37, *which were approved by the Commissioner of the General Land Office,* July 21, *1915*

Survey commenced October 14, *1915*

Survey completed December 1, *1915*

6—151

BOOK A-417

INDEX DIAGRAM.

Township 9 South, Range 4 West

6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13 3
19	20	21	22	23	24 3 4
30	29	28	27	26	25 3 5
31 1	32	33	34	35	36 2 7

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4—679

BOOK A-417

FIELD NOTES

OF THE SURVEY OF THE

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Of the ..... *Meridian,*

In the State of .....

EXECUTED BY

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

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

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

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BOOK A-417

INDEX DIAGRAM.

Township 9 South, Range 5 West

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

12

10

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BOOK A-417

FIELD NOTES

OF THE SURVEY OF THE

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Of the ..... *Meridian,*

In the State of .....

EXECUTED BY

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

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

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

BOOK A-417

INDEX DIAGRAM.

Township 8 South, Range 7 West

6	5	4	3	2	1	21
7	8	9	10	11	12	
18	17	16	15	14	13	
19	20	21	22	23	24	14
30	29	28	27	26	25	17
31	32	33	34	35	36	19

South boundary of T.9 S.,R.4 W.

chains	
	Survey commenced October 14,1915 and executed with Young and sons light mountain transits Nos. 8297 and 8582. For approval of instruments and complete description and test of same see subdivision of T.9 S.,R.4 W.
	Steel tapes, 5 chs. long were used by both parties in the field, together with climometers for determining slope angles, and the reduced horizontal distances only appear in the official field notes.
	October 14: For solar observation this date see line bet. secs. 29 and 30, T. 9 S.,R.4 W.
	I begin at the ¾ sec. cor. on the S. bdy. of sec. 31 heretofore described.
	Thence I run
	West, on a random line on the S. bdy. sec. 31
41.39	Set temp. point.
	October 14,1915.
	December 1:
	Intersect N. and S. line 14 lks. N. of the cor. of Tps. 9 S.,Rs. 4 and 5 W. heretofore described.
	Thence
	N.89°48'E., on true line on S. bdy. sec. 31
	Over mountainous land through scattering scrub cedar timber and dense undergrowth of sage brush.
	Ascend.
10.20	Spur, 50 ft. above Tp. cor., projects N.
	Descend.
21.20	Bottom of ravine and wash, 10 lks. wide, 1 ft. deep, 110 ft. below spur, drains N.15°E.
	Ascend abruptly.
31.70	Enter broken quartzite ledges, bears N. and S.
36.40	Top of sharp rocky ridge and leave ledges and timber,

South boundary of T.9 S.,R.4 W.

chains	
	378 ft. above ravine, bears N. and S.
	Descend abruptly over rocky E. slope.
41.39	146 ft. below ridge on E. slope.
	The ¼ sec. cor.
	Land, rough broken mountains with steep E. and W. slopes of ridges into ravines draining N.
	Soil, 4th. rate; generally rocky surface mixed with some gravel and sandy clay on hard, dry clay and rock subsoil.
	Timber, scrub cedar timber.
	Undergrowth, sage brush.
	December 11, 1915.
	Howard W. Keller
	U. S. Surveyor.

East boundary of T.9 S.,R.4 W.

	October 23: For solar observation this date see line bet. secs. 3 and 34, S. bdy. of T.9 S.,R.4 W.
	From the NW. cor. of T.10 S.,R.3 W. heretofore described, I run
	East
7.22	Set temp. cor. for T.9 S.,Rs. 3 and 4 W.
	Thence from temp. cor., I run
	North, on a random line on E. bdy. T.9 S.,R.4 W., setting temp. ½ sec. and sec. cors. at intervals of 40.00 chs.
75.72	A northing of 80.00 chs. from the closing cor. of Tps. 9 and 10 S.,R.4 W. Set temp. cor.
	October 23, 1915.
	October 25: For solar observation see line bet. secs. 23 and 24, T.9 S.,R.4 W.
	From the ¼ sec. cor., bet. secs. 13 and 18 heretofore

East boundary of T.9 S.,R.4 W.

chains	
	described.
	Thence I run
	South on random line setting temp. ¼ sec. and sec. cors. at intervals of 40.00 chs.
40.00	Set temp. cor. secs. 13 and 24. Cease work.
	October 25,1915.
	October 26: For solar observation see line bet. secs. 24 and 25, T.9 S.,R.4 W.
	From temp. cor. of secs. 13 and 24, I continue
	South
42.04	Intersection with E. and W. line bet. secs. 13 and 24
122.68	Intersection with E. and W. line bet. secs. 24 and 25
203.26	Fall 88 lks. W. of the temp. cor. of secs. 25 and 36, set 80.00 chs. N. of the closing cor. of Tps.9 and 10 S., R.4 W.
	October 26,1915.

October 25:

From ¼ sec. cor. bet. secs. 13 and 18, I run

South, on true line on E. bdy. sec. 13

Over rolling bench land, through dense cedar and pinon timber and undergrowth of sage brush. Gradually ascend.

2.98	Wood road, bears NE. and SW.
12.83	Leave dense timber, bears E. and W.
17.23	Wood, road, bears NE. and SW.
42.04	Intersection with line bet. secs. 13 and 24

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

T 9 S
R 4 W | R 3 W
S 13
S 24
1915

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

East boundary of T.9 S.,R.4 W.

chains	
	Land, rolling bench, general W. exposure and drain.
	Soil, 3rd. rate; light, dry, shallow brown loam mixed with gravel and rocks on hard, dry clay and rock sub-soil.
	Timber, cedar and pinon.
	Undergrowth, sage brush.
	October 25,1915.
	October 26:
	South, on E. bdy. sec. 24
	Over rolling bench land at base of mountain, through dense undergrowth of sage brush. Gradually ascend.
16.76	Center of series of small washes in mouth of canyon, drains NW.
23.00	Leave bench land, enter rough mountains, bears NE. and SW. Gradually ascend along nearly W. slope.
35.46	Gully, 173 ft. above sec. cor., drains N.20°W.
	Ascend abruptly over rough rocky NW. slope , blue limestone surface and slide rock streaked with white quartz.
40.25	Enter scattering scrub cedar timber, bears E. and W.
40.32	Set an iron post, 3 ft. long, 1 in. in dia., 8 ins. in the ground and 18 ins. in a mound of stone for ¼ sec. cor., with brass cap marked
	S 24 ¼ | 1915
	raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.
	Note: On account of underlying rock, I am unable to set post more than 8 ins. in the ground.
48.20	Sharp rocky spur, 301 ft. above gully, projects W.
	Descend along rough, broken W. slope of mountain.
56.75	Ravine, 100 ft. below spur, drains W.
	Enter dense cedar and pinon timber. Ascend abruptly over

East boundary of T. 9 S., R. 4 W.

chains	
	NW. slope.
61.00	Spur, 110 ft. above ravine, projects W.
	Descend along SW. slope.
68.67	Descend abruptly.
75.52	Canyon, 228 ft. below spur, course from NE. to W.
	Leave dense timber, ascend abruptly over NE. slope.
80.64	Intersection with line bet. secs. 24 and 25, 150 ft. above canyon.
	Set an iron post, 3 ft. long, 3 ins. in dia., 24 ins. in a mound of stone for cor. of secs. 24 and 25, with brass cap marked

T 9 S
R 4 W | R 3 W
S 24
S 25
1915

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

Note: On account of underlying rock I am unable to set post in the ground.

Land, rolling and rough mountainous with general W. exposure and drain.

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

Timber, cedar and some pinon on S.40.39 chs.

Undergrowth, sage brush.

South, on E. bdy. sec. 25

Over rough mountainous land draining W., through scattering cedar timber and dense undergrowth of sage brush.

Ascend abruptly nearly N. slope over loose limestone and quartz rocks.

8.62	Spur, 157 ft. above sec. cor., projects NW.
	Descend abruptly over SW. slope.
10.50	Limestone ledge, 20 ft. high, bears NE. and SW.
16.60	Bottom of canyon, 203 ft. below spur, drains W.

East boundary of T.9 S.,R.4 W.

chains	
	Ascend abruptly over N. slope.
20.00	Enter dense cedar and pinon timber, bears E. and W.
24.47	Spur, 262 ft. above canyon, projects W.
	Gradaually descend over SW. slope.
40.29	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 25¼ | 1915
	raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.
	Trees are within limits in both secs. but are too scruby for bearing trees.
42.38	Bottom of canyon, 274 ft. below spur, drains NW.
	Wood road in canyon, bears NW. and SE.
42.90	Wash in canyon, drains N.60°W.
	Ascend abruptly over N. slope.
53.80	Spur, 470 ft. above canyon, projects NW.
	Descend abruptly.
63.00	Ravine, 145 ft. below spur, drains NW.
	Ascend abruptly 525 ft. to
80.58	On steep W. slope of mountain.
	Set an iron post, 3 ft. long, 3 ins. in dia., 18 ins. in the ground and 6 ins. in a mound of stone for cor. of secs. 25 and 36, with brass cap marked
	T 9 S R 4 W | R 3 W S 25 S 36 | 1915
	from which
	A mohogany, 6 ins. diam.,bears S.14°W.,23 lks. dist., marked T 9 S R 4 W S 36 B T
	A cedar, 22 ins. diam.,bears N.50°W., 27 lks. dist.,marked T 9 S R 4 W S 25 B T
	Note: On account of underlying rock, I am unable to set

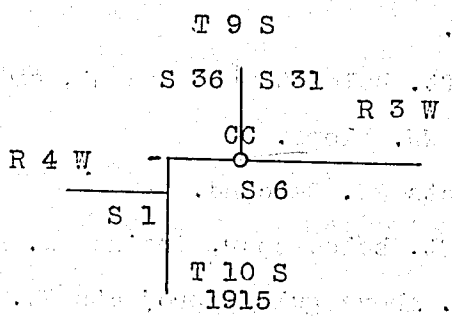
East boundary of T.9 S.,R.4 W.

chains	
	post more than 18 ins. in the ground.
	Land, rough broken mountains with steep N. and S. slopes of spurs into ravines draining W.
	Soil, 4th. rate; rocky of limestone and quartz formation on gravelly and rocky sub-soil.
	Timber, cedar and pinon.
	Undergrowth, sage brush.
	South, on E. bdy. sec. 36
	Over rough mountainous land through dense cedar and pinon and scattering mohogany timber and undergrowth of sage brush.
	Gradually ascend along steep W. slope of mountain.
5.73	Point or top of ascent on W. slope. Descend abruptly over SW. slope.
14.52	Gully, 252 ft. below top of ascent, drains SW.
	Ascend over NW. slope.
18.83	Spur, projects SW. Descend.
24.10	Gully, 147 ft. below spur, drains SW. Ascend over NW. slope.
27.78	Spur, 12 ft. above gully, projects SW. Descend.
34.63	Gully, 144 ft. below spur, drains SW. Ascend.
38.21	Ridge and leave dense cedar and pinon timber, bears NE. and SW. 43 ft. above gully.
	Descend 14 ft. to
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 | 1915
	raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.
	Continue steep descent.
47.65	Bottom of ravine and wash, 10 lks. wide, 4 ft. deep, 202 ft. below ¼ sec. cor., drains SW.

East boundary of T.9 S., R.4 W.

chains	
	Ascend abruptly.
52.93	Spur, 58 ft. above ravine, projects W.
	Descend abruptly over SW. slope.
63.52	Bottom of ravine and wash, 20 lks. wide, 4 ft. deep, 172 ft. below spur, drains NW.
	Ascend abruptly
67.26	Top of ascent, 106 ft. above ravine.
	Thence gradually descend over SW. slope.
69.01	Wood road, bears N.60°W. and S.60°E.
75.72	Intersect N. bdy. of T.10 S., R.3 W., 6.34 chs. E. of the NW. cor. of T.10 S., R.3 W. heretofore described.

Set an iron post, 3 ft. long, 3 ins. in dia., 24 ins. in the ground for closing cor. of T.9 S., Rs. 3 and 4 W., with brass cap marked



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

Land, rough and broken mountains with general W. exposure and drainage.

Soil, 4th. rate; gravelly and rocky of limestone and quartz formation mixed with some light, dry, brown sandy loam on gravelly and rocky sub-soil.

Timber, cedar, pinon and some mohogany.

Undergrowth, sage brush.

October 26, 1915

Isaac Hayes.

U. S. Transitman.

Boundaries of T.9 S., R.4 W.

Latitudes, departures and closing errors.

Lines designated	True bearing	Distances	Latitudes N.	Latitudes S.	Departures E.	Departures W.
S.bdy.T9SR4W	S.89°45'E.	80.41		.35	80.41	
"	S.89°53'E.	40.12		.08	40.12	
"	N.89°53'E.	40.25	.08		40.25	
"	N.89°56'E.	39.96	.04		39.96	
"	N.89°53'E.	30.84	.06		30.84	
W.bdy.T10SR3W	North	4.28	4.28			
N.bdy.T10SR3W	East	6.34			6.34	
E.bdy.T9SR4W	North	318.98	318.98			
N.bdy. sec.13	S.88°47'W.	40.76		.86		40.75
"	S.89°04'W.	40.11		.65		40.10
W.bdy. sec.13	S.0°05'E.	40.33		40.33	.06	
"	S.0°12'E.	40.16		40.16	.14	
W.bdy. sec.24	S.0°04'E.	80.50		80.50	.09	
N.bdy.sec.26	N.89°56'W.	40.05	.05			40.05
"	S.89°56'W.	40.07		.05		40.07
W.bdy.sec.26	S.0°06'W.	40.18		40.18		.07
"	S.0°19'E.	40.53		40.53	.22	
N.bdy. sec.34	S.89°30'W.	40.10		.35		40.10
"	N.89°00'W.	39.27	.68			39.26
W.bdy. sec.34	S.1°27'E.	80.25		80.23	2.02	
Convergency						.12
			324.17	324.27	240.45	240.52
				324.17		
Error in latitude				.10		240.45
Error in departure						.07

Lines designated	True bearing	Distances	Latitudes N.	Latitudes S.	Departures E.	Departures W.
S.bdy.T9SR4W	N.89°48'E.	41.39	.14		41.39	
"	East	40.00			40.00	
E.bdy. sec.31	N.0°34'W.	80.08	80.08			.79
E.bdy. sec.30	N.0°07'W	80.48	80.48			.16
N.bdy. sec.30	S.89°09'W.	80.36		1.19		80.35
W.bdy.T9SR4W	South	159.31		159.31		
Convergency						.03
			160.70	160.50	81.39	81.33
			160.50			
Error in latitude			.20			
Error in departure					81.33	
					.06	

chains

For general description see subdivision of T.9 S.,R.4 W.

For final oath of Surveyor, Transitman and assistants see subdivision of T.9 S.,R.5 W.

U. S. Surveyor.

Isaac Hayes
U. S. Transitman.

EAST BOUNDARY OF T.9 S., R.5 W.

October 14: For solar obsn. see N. ½ mile bet. secs. 25 and 30, E. bdy. T.9 S.,R.5 W.

From the established ¼ sec. cor. bet. secs. 25 and 30, E. bdy. T.9 S.,R.5 W., I run

South, on a random line on E. bdy. T.9 S.,R.5 W. setting temp. ¼ sec. and sec. cors. at intervals of 40.00 chs. and at 119.73 chs. fall 7.93 chs. E. of the old cor. of Tps. 9 and 10 S.,Rs. 4 and 5 W. heretofore described. Set temp. cor.

October 14,1915.

December 1: The cor. of T.9 S.,Rs. 4 and 5 W. is established 42 lks. N. of the temp. cor. For description of same see S. bdy. of T.9 S.,R.5 W.

Thence I run

North, bet. secs. 31 and 36 from established Tp. cor.

Gradually descend over mountainous land draining NE. and sloping nearly N., through dense undergrowth of sage brush and very scattering scrub cedar and pinon timber.

18.40 Ravine, 180 ft. below Tp. cor., drains NE.

Gradually ascend over gentle SE. slope.

29.65 Enter heavier timber, bears E. and W.

30.35 Top of ridge, 50 ft. above ravine, bears NE. and SW.

East boundary of T.9 S., R.5 W.

chains	
	Low saddle in ridge bears E. about 5 chs.
	Descend over N. slope, 135 ft. to
40.00	Set an iron post, 3 ft. long, 1 in. in dia., 12 ins. in the ground and 14 ins. in a mound of stone for ¼ sec. cor., with brass cap marked S ¼ 36 | S 31 1915 raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.
	Note: On account of underlying rock, I am unable to set post more than 12 ins. in the ground.
	No suitable trees within reasonable distances available for bearing trees.
	Continue descent over N. slope.
48.05	Bottom of ravine 75 ft. below ¼ sec. cor., drains NE.
	Timber becomes more scattering, bears NE. and SW.
	Gradually ascend over SE. slope of ridge.
63.10	Top of ridge, 125 ft. above ravine, bears NE. and SW.
	Descend abruptly over NW. slope.
68.35	Ravine, 130 ft. below ridge, drains NE.
	Thence along nearly E. slope, gradually descending.
80.00	Set an iron post, 3 ft. long, 3 ins. in dia., 18 ins. in the ground and 6 ins. in a mound of stone on solid rock for cor. of secs. 25,30,31 and 36, with brass cap marked T 9 S R 5 W | R 4 W S 25 | S 30 S 36 | S 31 1915 raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.
	No trees within reasonable distances, suitable for bearing trees.
	Land, mountainous, drains NE.

East boundary of T.9 S.,R.5 W.

chains	
	Soil, 4th. rate; gravelly and rocky of quartz formation with some shallow sandy loam on gravel and rock sub-soil.
	Timber, scrub cedar and pinon.
	Undergrowth, sage brush.
	North, bet. secs. 25 and 30
	Over rolling mountainous land through very scattering scrub cedar and pinon timber and dense undergrowth of sage brush.
	Gradually descend along E. slope of spur.
.26	From this station chimney on Sharp's house bears N.73° 35'E.; N. end of stable bears N. 68° 24'E.; S. end of granary bears N.66°31'E.
1.00	Point of spur, falls NE.
	Descend over NW. slope of spur.
9.50	Mouth of ravine, 165 ft. below spur, drains NE.
	Thence along nearly E. slope.
22.50	Begin descent over gentle NE. slope.
31.10	Base of mountain, 55 ft. below point of descent, bears NW. and SE. Leave timber and undergrowth, thence gradually descend over cultivated land.
39.31	The ¼ sec. cor.
	Land, mountainous and rolling, general NE. exposure and drainage. S. 31.10 chs. mountainous N. 8.21 chs. rolling.
	Soil, S. 31.10 chs. rocky of quartz formation with some shallow sandy loam on gravel and rock sub-soil. N. 8.21 chs. rich sandy loam and gravelly soil on dry sand sub-soil.
	Timber, scattering scrub cedar and pinon on S. 31.10 chs.
	Undergrowth, sage brush on S. 31.10 chs.
	December 1,1915.
	Isaac Hayes
	U.S.Transitman.

Boundaries of T.9 S.,R.5 W.

Latitudes, departures and closing errors.

Lines designated	True bearing.	Distances	Latitudes N.	Latitudes S.	Departures E.	Departures W.
E.bdy.T9SR5W.						
E.bdy.sec.36	North	80.00	80.00			
E.bdy.sec.25	North	79.31	79.31			
E,bdy.sec.24	N.0°22'W.	81.24	81.24			.52
E.bdy.sec.13	N.0°24'W.	40.33	40.33			.28
E.bdy.sec.13	N.0°28'W.	40.33	40.33			.33
E.bdy.sec.12	N.0°33'W.	80.75	80.75			.77
N.bdy.sec.12	N.89°46'W.	41.36	.16			41.36
"	S.89°37'W.	40.02		.27		40.02
N.bdy.sec.11	S.89°19'W.	39.68		.48		39.68
"	N.89°32'W.	39.91	.33			39.91
W.bdy.sec.11	S.1°05'W.	79.56		79.55		1.50
N.bdy.sec.15	S.89°52'W.	40.63		.09		40.63
"	S.89°54'W.	40.17		.07		40.17
W.bdy.sec.15	S.0°06'W.	80.24		80.24		.14
W.bdy.sec.22	S.0°06'W.	40.20		40.20		.07
"	S.0°03'W.	40.51		40.51		.04
W.bdy.sec.27	South	80.98		80.98		
N.bdy.sec.33	N.89°55'W.	39.84	.06			39.84
"	N.89°57'W.	40.11	.04			40.11
W.bdy.sec.33	S.0°23'W.	80.06		80.06		.54
S.bdy.T9SR5W						
S.bdy.sec.33	S.89°53'E.	40.13		.08	40.13	
"	East	39.96			39.96	
S.bdy.sec.34	East	80.47			80.47	
S.bdy.sec.35	East	86.46			86.46	
S.bdy.sec.36	East	80.00			80.00	
Convergency						.26
	Totals		402.55	402.53	327.02	326.17

Error in latitude -- 402.53 - 402.53 = .02

Error in departure ---- 327.02 - 326.17 = .85

For general description see subdivision of T.9 S.,R.5 W.

For final oath of Surveyor and Transitman and certificate of assistants see subdivision of T.9 S.,R.4 W.

Howard W. Miller
U. S. Surveyor

Isaac Hayes
U.S.Transitman.

East Boundary of T.8 S.,R.7 W.

chains	
	Survey commenced November 23,1915 and executed with Young and Sons light mountain transits Nos. 8297 and 8582, with Smiths solar attachment.
	For description of instruments and approval of same see subdivision of T.8 S.,R.6 W. The instruments were tested on a meridian determined by observations made on Polaris, November 25 and found to be in adjustment. For record of this test, see subdivision of T.8 S.,R.6 W.
	In the decl. arc settings, .85 of the tabulated refractions for computing declinations is used, due to the altitude of the country.
	I begin at the cor. of secs. 13,18,19 and 24 heretofore described.
	November 23: At 7h. a.m. apparent time, the sky is overcast, I determine a meridian with the instrument by sighting along my line bet. secs. 13 and 18.
	Thence I run
	South, on a random line , setting temp. ¼ sec. and sec. cors. at intervals of 40.00 chs.
160.00	November 23: The sky is overcast at noon, observations for latitude are impossible.
239.62	Intersect E. and W. line 5.12 chs. S.88° 41'E., of the described in S. bdy. T. 8 S. R. 6 W. cor. of T.9 S., Rs. 6 and 7 W./ Set temp. point for closing cor. of T.8 S., Rs. 6 and 7 W.
	November 23,1915
	November 27:Having closed the lines of survey of the E. ½ miles bet. secs. 24 and 25 and 25 and 36, T.8 S.,R.7 W. upon this boundary and finding that they do not close within limits at the adjusted positions for cors. on the boundary, two sets of cors. will therefore be

East boundary of T.8 S., R.7 W.

chains	
	necessary, one for R.6 W. and the other for R.7 W. I establish the true line of survey of this Tp. bdy. as follows:
	November 27:
	From the cor. of secs. 13,18,19 and 24, I run
	South, on W. bdy. sec. 19, T.8 S.,R.6 W.
	Over mountainous land draining N., through dense undergrowth of sage and rabbit brush.
	Ascend over N. slope of ridge spur.
11.25	Enter scattering service brush, bears E. and W.
13.30	Enter scattering cedar and pinon timber, bears E. and W.
23.10	Top of high ridge spur, 475 ft. above sec. cor., projects NW.
	Enter dense cedar and pinon timber, bears NW. and SE.
	Gradually descend.
26.50	Head of ravine, 20 ft. below spur, drains W. Ascend.
30.80	Spur, 25 ft. above ravine, projects N.80°W.
30.85	Top of blue limestone ledge, 10 ft. high and leave dense timber, bears E. and W.
	Descend abruptly.
33.60	Top of limestone ledge, bears E. and W.
34.90	Top of limestone ledge, 30 ft. high, bears N.85°W. and S.85°E.
37.35	Head of ravine, 180 ft. below spur, drains N.85°W.
	Ascend
39.62	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground for ¾ sec. cor., W. bdy. sec. 19, T.8 S., R.6 W., with brass cap marked
	S 19¼ / 1915
	raise a mound of stone, 2 ft. base, 1½ ft. high, E. of cor.
	No trees within limits suitable for bearing trees.

~~East boundary of T.8 S., R.7 W.~~

chains	
40.23½	The midway point between the intersection of the line bet. secs. 24 and 25 on this bdy. and the cor. of secs. 13,18,19 and 24.
	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground for ¼ sec. cor., E. bdy. sec. 24, T.8 S., R.7 W., with brass cap marked
	S 24¼ | 1915
	raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.
	No suitable trees within limits.
41.15	Spur, 90 ft. above ravine, projects S.85°W. Descend.
46.75	Ravine, 110 ft. below spur, drains S.80°W. Ascend.
51.05	Spur, 75 ft. above ravine, projects W. Descend.
55.35	Head of ravine, 50 ft. below spur, drains N.85°W. Ascend abruptly.
57.70	Top of spur, 55 ft. above head of ravine, projects W. Descend.
64.65	Ravine, 170 ft. below spur, drains W. Ascend.
67.70	Spur, 40 ft. above ravine, projects N.85°W. Descend.
74.68	Ravine, 95 ft. below spur, drains N.80°W. Ascend abruptly.
79.62	On steep NE. slope.
	Set an iron post, 3 ft. long, 3 ins. in dia., 24 ins. in the ground for cor. of secs. 19 and 30, W. bdy. T.8 S., R.6 W., with brass cap marked
	T 8 S R 7 W | R 6 W S 19 S 24 — S 30 S 25 1915
	raise a mound of stone, 2 ft. base, 1½ ft. high, E. of cor.
	No suitable trees within limits.
	Land, mountainous drains W. and lies on the W. slope, near

chains

top of divide between Rush and Skull valleys. Numerous spurs with steep slopes project from divide and are cut by ravines draining W.

Soil; 4th. rate; stony and rocky of limestone and quartz formation with some dry brown clay, on dry clay and rock sub-soil.

Timber, scrub cedar and pinon.

Undergrowth, service, sage and rabbit brush.

Considerable grass, good for grazing.

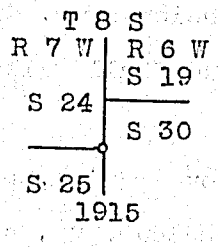
South, on W. bdy. sec. 30, T. 8 S., R.6 W.

Over mountainous land draining W., through very scattering scrub cedar and pinon timber and undergrowth of sage, rabbit and service brush.

Ascend over NE. slope.

.85 Intersection of the line bet. secs. 24 and 25, T.8 S.,R. 7 W.

Set an iron post, 3 ft. long, 3 ins. in dia., 24 ins. in the ground for cor. of secs. 24 and 25, E. bdy. T.8 S., R.7 W., with brass cap marked



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

No suitable trees within limits.

3.90 Top of spur, 60 ft. above sec. cor. and 190 ft. above ravine, projects W. Descend.

19.25 Ravine, 180 ft. below spur, drains W. Ascend.

28.50 Enter heavier scrub timber, bears E. and W.

40.00 On N. slope 170 ft. above ravine.

Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground for ¼ sec. cor., W. bdy. sec. 30, T.8 S.,

chains	
	R.6 W., with brass cap marked S 30¼ 1915 raise a mound of stone, 2 ft. base, 1½ ft. high, E. of cor.
	No suitable trees within limits.
40.98	The midway point of the intersection of the lines bet. secs. 24 and 25 and 25 and 36, T.8 S., R.7 W., with this bdy.
	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground for ¼ sec. cor., E. bdy. sec. 25, T.8 S., R.7 W., with brass cap marked S 25¼ 1915 raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.
	No suitable trees within limits.
43.55	Spur, 60 ft. above ¼ sec. cor., projects N.60°W.
	Descend.
49.90	Ravine, 100 ft. below spur, drains W. Top of divide between Rush and Skull valleys, bears E. about 20 chs.
	Ascend.
71.15	Spur, 245 ft. above ravine, projects W. Descend.
77.40	Ravine, 105 ft. below spur, course from NE. to W.
	Ascend.
79.40	Spur, 40 ft. above ravine, projects S.80°W.
	Gradually descend.
80.00	Set an iron post, 3 ft. long, 3 ins. in dia., 24 ins. in the ground for cor. of secs. 30 and 31, W. bdy. T.8 S., R.6 W., with brass cap marked T 8 S R 7 W | R 6 W S 25 | S 30 S 36 | S 31 1915

East boundary of T.8 S., R.7 W.

chains

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

No trees within limits.

Land, rough mountainous, lies on W. slope, near top of divide between Rush and Skull valleys. Numerous spurs, with steep slopes project in a westerly direction from the divide and are cut by deep ravines draining W.

Soil, 4th. rate; gravelly and rocky of limestone and quartz formation with some dry brown clay on hard, dry clay and rock sub-soil.

Timber, scattering scrub cedar and pinon.

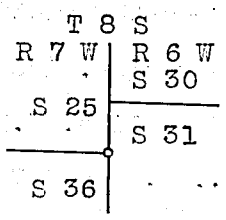
Undergrowth, sage, service and rabbit brush. Some grass, good for grazing purposes.

South, on W. bdy. sec. 31, T.8 S.,R.6 W.

Over mountainous land, gradually descending over S. slope through very scattering scrub cedar and pinon timber and undergrowth of sage, rabbit and service brush.

1.11 Intersection with the line bet. secs. 25 and 36, T.8 S., R.7 W.

Set an iron post, 3 ft. long, 3 ins. in dia., 24 ins. in the ground for cor. of secs. 25 and 36, E. bdy. of T.8 S.,R.7 W., with brass cap marked



1915

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

No trees within limits.

8.65 Descend abruptly.

14.90 Ravine, 155 ft. below sec. cor., drains W. Ascend.

32.45 Spur, 280 ft. above ravine, projects N.85°W.

Gradually descend over nearly W. slope of divide bet. Rush and Skull valleys, 50 ft. to

East boundary of T.8 S.,R.7 W.

chains	
40.00	Set an iron post, 3 ft. long, 1 in. in dia., 10 ins. in the ground on solid rock and 16 ins. in a mound of stone for ¼ sec. cor., W. bdy. sec. 31, T.8 S.,R.6 W., with brass cap marked S 31¼ 1915 raise a mound of stone, 2 ft. base, 1½ ft. high, E. of cor.
	Continue gradual descent over rocky W. slope.
40.55½	The midway point between the cor. of secs. 25 and 36 and the point for closing cor. of T.8 S.,Rs. 6 and 7 W.
	Set an iron post, 3 ft. long, 1 in. in dia., 10 ins. in the ground on solid rock and 16 ins. in a mound of stone for ¼ sec. cor. on the E. bdy. sec. 36, T.8 S., R.7 W., with brass cap marked S 36¼ 1915 raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.
45.60	Ravine, 5 ft. below ¼ sec. cor., drains NW. Ascend.
51.20	Spur, 100 ft. above ravine, projects N.60°W.
	Descend 150 ft. to
69.65	Ravine, course from the south to NW.
	Thence ascend in ravine, 120 ft. to
80.00	Intersect E. and W. line, 5.12 chs. S.88°41'E., of the cor. of T.9 S.,Rs. 6 and 7 W. heretofore described.
	Set an iron post, 3 ft. long, 3 ins. in dia., 24 ins. in the ground for closing cor. of T.8 S., Rs. 6 and 7 W., with brass cap marked T 8 S S 36 | S 31 R 7 W — CC — R 6 W S 1 | S 6 T 9 S 1915 raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor.

East boundary of T.8 S.,R.7 W.

chains

Land, broken mountainous, lies on W. slope of divide bet. Rush and Skull valleys. Spurs project in westerly direction from divide and are cut by deep ravines draining W.

Soil, 4th. rate; rocky and stony of limestone and quartz formation with some brown clay on hard, dry clay and rock sub-soil.

Timber, very scattering scrub cedar and pinon.

Undergrowth, sage, service and rabbit brush. Considerable grass, good for grazing.

November 27,1915.

Howard W. Miller

U. S. Surveyor.

November 27: For solar obsn. see line bet. secs. 6 and 7, subdivision of T.8 S.,R.6 W.

From the cor. of secs. 1 and 12, on the E. bdy. of T. 8 S., R.7 W., heretofore described, I run

North, on true line on E. bdy. sec.1, knowing that a closing cor. will be necessary upon the N. bdy. of the Tp.

Over rolling mountainous land, drains W., near base of high mountain; through dense undergrowth of sage brush and scattering scrub cedar and pinon timber.

40.00 Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground for ¼ sec. cor., on the E. bdy. sec. 1, T.8 S.,R.7 W., with brass cap marked

S ¼ 1 | 1915

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

41.00 Wash, in large gully, 12 lks. wide, 2 ft. deep, drains S.20°W.

East boundary of T.8 S.,R.7 W.

chains

58.40 Wash, at N. edge of small gully, 20 lks. wide, 4 ft. deep, drains S.20°W.

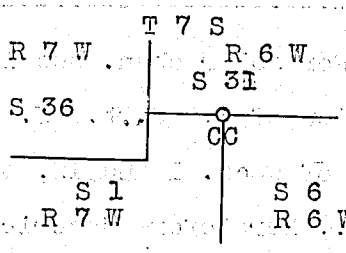
70.00 Wash, at N. edge of small gully, 20 lks. wide, 4 ft. deep, drains SW.

79.00 Wash, in large gulch at mouth of canyon, wash 20 lks. wide, 7 ft. deep, drains W. about 6 chs., thence SW. A rocky gorge empties in wash about 1 ch. W.

Ascend.

83.02 Intersect E. and W. line, 6.75 chs. S.89° 58'E., of the SW. cor. of T.7 S.,R.6 W. heretofore described.

Set an iron post, 3 ft. long, 3 ins. in dia., 24 ins. in a mound of stone on solid rock for closing cor. of T.8 S., Rs. 6 and 7 W., with brass cap marked



T 8 S
1915

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

Land, rolling mountainous near base of mountain, slopes and drains W.

Soil, 3rd. rate; sandy loam, gravelly and rocky of blue limestone formation on a brown clay and rock sub-soil.

Timber, very scattering scrub cedar and pinon.

Undergrowth, sage brush. Considerable grass, good for grazing purposes.

November 27,1915.

Isaac Hayes
U.S.Transitman.

Boundaries of T.8 S.,R.7 W.

Latitudes, departures and closing errors.

Lines designated	True bearings	Distances	Latitudes N.	Latitudes S.	Departures E.	Departures W.
S.bdy.T8SR7W						
S.bdy.sec.35	N.89°38'E.	75.83	.49	.....	75.83	.....
S.bdy. sec.36	East	40.00	.....	.....	40.00	.....
S.bdy.sec.36	S.89°40'E.	39.56	.....	.23	39.56	.....
S.bdy.sec.36	S.88°41'E.	5.12	.....	.12	5.12	.....
E.bdy.T8SR7W	North	239.62	239.62	.....	.....	.....
N.bdy.sec.24	N.89°56'W	39.97	.05	.....	.....	39.97
N.bdy.sec.24	N.89°59'W	40.59	.01	.....	.....	40.59
W.bdy.sec.24	S.0°13'W.	40.35	.....	40.35	.....	.15
W.bdy.sec.24	S.0°18'W.	40.17	.....	40.17	.....	.21
W.bdy.sec.25	S.0°19'W.	79.38	.....	79.38	.....	.44
N.bdy.sec.35	S.89°23'W.	40.23	.....	.43	.....	40.23
N.bdy.dec.35	N.89°53'W.	39.54	.08	.....	.....	39.54
W.bdy.dec.35	S.2°22'E.	41.56	.....	41.53	1.72	.....
W.bdy.sec.35	S.1°43'W.	38.17	.....	38.15	.....	1.14
Convergency			.....	.....	.....	.07
			240.25	240.36	162.23	162.34
				240.25		
Error in latitude				.11		162.23
Error in departure						.11

See no
and. s
S.bdy.
R.7 W.

Lines designated	True bearings	Distances	Latitudes N.	Latitudes S.	Departures E.	Departures W
S.bdy.sec.1	S.89°15'E.	41.33	.....	.54	41.33	.....
S.bdy.sec.1	S.89°55'E.	40.62	.....	.06	40.62	.....
E.bdy.sec.1	North	83.02	83.02	.....	.....	.....
N.bdy.sec.1	N.89°58'W.	6.75	.....	.....	.....	6.75
E.bdy.sec.36, T.7 S.,R.7 W.	South	1.81	.....	1.81	.....	.....
N.bdy.sec.1	West	36.26	.....	.....	.....	36.26
N.bdy.sec.1	N.89°53'W.	40.08	.08	.....	.....	40.08
W.bdy.sec.1	S.0°47'E.	80.62	.....	80.62	1.10	.....
Convergency			.....	.....	.....	.02
			83.10	83.03	83.05	83.11
			83.03			
Error in latitude-----			.07			83.05
Error in departure----------						.06

For general description see subdivision of T.8 S.,R.7 W.

For final oath of surveyor and certificate of assistants see subdivision of T.8 S.,R.7 W.

Howard W. Miller

U. S. Surveyor

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Page

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BOOK A-417

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 "A" T. 9 S. R. 5 E. W. and book "F" T. 8 S. R. 7 E. W. 7

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.

6—776

U. S. Surveyor.

FINAL OATH OF UNITED STATES SURVEYOR.

I, ..., U. S. Surveyor, do solemnly swear that, in pursuance of special instructions received from the U. S. Surveyor General for ..... bearing date of the ..... day of ....., 191 , I have well, faithfully, and truly, in my own proper person, and in strict conformity with said instructions, the Manual of Surveying Instructions, and the laws of the United States, surveyed all those parts or portions of .....

For final oath of U. S. Surveyor see book "A" T. 9 S. R. 5 W. and book "F" T. 8 S. R. 7 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 27, 1916

The foregoing field notes of the survey of south and east boundaries T. 9 S. R. 4 W. east boundary T. 9 S. R. 5 W. and east boundary T. 8 S. R. 7 W. S. L. B. & M. Utah

executed by Howard W. Miller and Isaac Hayes under ~~his~~ their special instructions dated June 25, 1915, having been critically examined, and the necessary corrections and explanations made, the said field notes, and the surveys they describe, are hereby approved.

A. O. Thorsen
U. S. Surveyor General.

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

.....
U. S. Surveyor General.

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BOOK A-417 D

FIELD NOTES

OF THE ~~SURVEY OF THE~~

RESURVEY OF THE WEST BOUNDARY AND

RETRACEMENT, RESURVEY AND SURVEY OF THE SUBDIVISION OF

T. 10 S., R. 4 W.

Of the SALT LAKE BASE AND *Meridian,*

In the State of Utah

EXECUTED BY

ISAAC HAYES

In the capacity of U. S. ~~*Surveyor*~~ Transitman, *under instructions dated* June 25, *1915,*

issued by the United States Surveyor General to govern surveys included in

Group No. 37, *which were approved by the Commissioner of the General Land*

Office, July 21, *1915*

Survey commenced October 19, *1915*

Survey completed December 2, *1915*

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BOOK A-417

INDEX DIAGRAM.

Township 10 South, Range 4 West

1 6 16	11 5	4	3	2	1
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18 13	7 17	16	15	14	13
19 3	5 20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

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Resurvey West boundary of T.10 S.,R.4 W.

chains

Survey commenced October 19,1915 and executed with Young and sons light mountain transit No.8582, with Smiths solar attachment. The horizontal limb is provided with two verniers, placed opposite to each other and 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 the Assistant Supervisor of Surveys for Utah.

I know the instrument to be in good adjustment, having tested it on a Polaris meridian at my camp in sec. 31, T.9 S.,R.4 W. October 17,1915. For record of this test, see subdivision of T.9 S.,R.4 W.

Measurements were made with a steel tape, 5 chs. long together with a clinometer for determining slope angles and the reduced horizontal distances only appear in the field notes. The tape was tested, comparison being made with a standard tape, 1 ch. long, kept and used for that purpose.

In the decl. arc. settings, .80 of the tabulated refraction for computing decls. is used, due to the altitude of the country.

I begin at the cor. of secs. 1,6,7 and 12 which is a quartzite stone, 12 x 12 x 6 ins. above ground, firmly set, and marked and witnessed as described by the Surveyor General.

October 21: At 7h. 15m.a.m.l.m.t, I set off 39°59' on the lat. arc; 10°24'S., on the decl. arc, and determine a meridian with the solar at this cor.

Thence I run

North, bet. secs. 1 and 6

Over rough mountainous land draining N., through dense

chains

undergrowth of sage brush.

Descend abruptly over N. face of mountain.

10.60 Descend more gradually.

25.44 Descend abruptly.

34.40 The old cor. Tps. 9 and 10 S., Rs. 4 and 5 W., bears W. 8 lks. I destroy cor.

Set point.

October 21,1915.

December 1: By a sight along my line bet. secs. 1 and 6 I determine a meridian with the instrument.

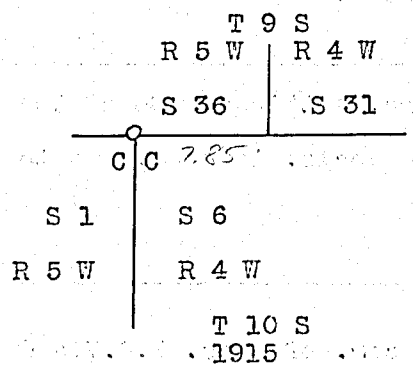
Thence I continue

North.

34.82 On N. slope, 460 ft. below sec. cor.

Intersect E. and W. line, 7.85 chs. W. of the cor. of T.9 S., Rs. 4 and 5 W. heretofore described.

Set an iron post, 3 ft. long, 3 ins. in dia., 24 ins. in the ground for closing cor. of T.10 S., Rs. 4 and 5 W., with brass cap marked



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

Land, rough mountainous, general N. exposure and drain.

Soil, 3rd. rate, shallow sandy loam mixed with gravel and quartz rock on gravelly and rocky sub-soil.

No timber.

Undergrowth, sage brush.

December 1,1915.

CHAINS	
	October 21: For solar observation see line bet. secs. 1 and 6, W. bdy. of this Tp.
	The cor. of secs. 19,20,29 and 30 is the center of an old dilapidated mound of stone, a marked stone cannot be found. A fence line leads S. from this cor. and as topography of the old surveys agree with this position I recognize same to be the old cor. point.
	I reestablished cor. as follows: At exact position of old mound, 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

T 10 S S 19	R 4 W S 20
S 30	S 29

1915

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

Thence I run

S.89°51'W., retracing bet. secs. 19 and 30

40.00 No trace of the old ¼ sec. cor. can be found.

81.52 Fall 49 lks. S. of the cor. of secs.19,24,25 and 30 on the W. bdy. of the Tp. which is a quartzite stone, 10 x 8 x 18 ins. above ground, firmly set, and marked and witnessed as described by the Surveyor General.

The bearing of this line is S.89°48'E., and the distance is 81.52 chs.

Thence

S.89°48'E., resurveying bet. secs. 19 and 30

Over rough mountainous land draining SW., through dense sage and scattering service brush and scattering cedar timber.

.05 Ravine, drains SW.

Ascend abruptly over steep rocky slope.

11.09 Spur, 254 ft. above ravine, projects SW.

Thence along rough, rocky S. slope.

Retracement and resurvey of subdivision of T.10 S.,R.4 W.

chains	
16.11	Ravine, drains SW.
	Ascend abruptly NW. slope over slide rock.
29.88	Top of high ridge, 408 ft. above ravine, bears N. and S.
	Descend abruptly over SE. slope.
36.67	Small gully, 181 ft. below ridge, drains S.30°E.
	Gradually ascend.
40.95	Top of ascent, bears N. and S.
	Descend.
40.96	Proportionate measurement
	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in a mound of stone for ¼ sec. cor., with brass cap marked
	S 19 / ¼ / S 30 / 1915
	raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor.
	Note: On account of underlying rock, I am unable to set post in the ground.
52.18	Swale, 171 ft. below top of ascent, drains SE.
	Gradually ascend.
57.16	Spur, 29 ft. above swale, projects S.
	Descend.
72.69	Bottom of ravine and stream, 2 lks. wide, 1 in. deep, 241 ft. below spur, drains S.20°E.
	Ascend
78.10	Spur, 112 ft.above stream, projects S.
	Descend 37 ft. to
81.52	The cor. of secs. 19,20,29 and 30
	Land, rough broken mountains draining SE. and SW. from high ridge at 29.88 chs.
	Soil,4th. rate; generally rocky of limestone and quartz formation and mixed with some loose shales and fine sand on gravelly and rocky sub-soil.

chains

Timber, a few scattering cedar.

Undergrowth, sage and scattering service.

October 21: At this cor. I set off 10°30'S., on the decl. arc; and at 11h. 45m.a.m.l.m.t.observe the sun on the meridian; the resulting lat. is 39°56'.

North, retracing bet. secs. 19 and 20

40.00 No trace of the ½ sec. cor. can be found.

79.80 Fall 65 lks. E. of the cor. of secs. 17,18,19 and 20 which is a limestone surface rock, 30 x 30 x 10 ins. above ground, firmly set, and marked and witnessed as described by the Surveyor General.

Set an iron post, 3 ft. long, 2 ins. in dia., 12 ins. in the ground and 12 ins. in a mound of stone alongside old cor. for cor. of secs. 17,18,19 and 20, with brass cap marked

T 10 S S 18	R 4 W S 17
S 19	S 20

1915

raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor. Bearing trees same as original record.

Note: On account of underlying rock, I am unable to set post more than 12 ins. in the ground.

The bearing of this line is N.0°28'W. and the distance is 79.80 chs.

Thence

S.0°28'E., resurveying bet. secs. 19 and 20

Over rough mountainous land draining NE., through scattering cedar and mohogany timber and dense undergrowth of sage brush and scattering buck brush.

Ascend abruptly over rocky NE. slope.

6.20 Sharp rocky ridge, 149 ft. above sec. cor., bears N.20°W.

chains	
	and S.20°E.
	Enter dense timber and descend over rocky SW. slope.
30.67	Leave timber, bears E. and W.
32.67	Ravine, 483 ft. below ridge, drains E.
	Ascend abruptly over N. slope.
38.56	Top of ascent, 240 ft. above ravine, bears E. and W.
	Gradually descend over SE. slope.
39.90	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in a mound of stone on solid rock for ¼ sec. cor., with brass cap marked
	S 19 ¼ | S 20 1915
	raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.
49.40	Swale, 86 ft. below ¼ sec. cor., drains E.
	Gradually ascend over gentle NE. slope.
61.00	Low ridge, bears NW. and SE.
71.55	Bottom of ravine and wash, 10 lks. wide, 3 ft. deep, 75 ft. below ridge, drains SE. about 8 chs., thence S.
	Gradually ascend.
76.51	Top of ascent, 15 ft. above wash. Gradually descend over SE. slope.
79.80	The cor. of secs. 19,20,29 and 30
	Land, rough mountainous general E. exposure and drainage.
	Soil,4th. rate; generally gravelly and rocky mixed with some light shallow sandy loam on gravelly and rocky sub-soil.
	Timber, cedar and mohogany on N. 30.67 chs.
	Undergrowth, sage and buck brush.
	October 21,1915.

October 19: For solar observation see line bet. secs. 5 and 6

From the cor. of secs. 17,18,19 and 20

North, retracing bet. secs. 17 and 18

chains	
40.00	No trace of old ¼ sec. cor. can be found.
80.00	No trace of the cor. of secs. 7,8,17 and 18 can be found.
	Set temp. point No.1 for sec. cor.
	From temp. point No. 1, I run
	S.89°49'E., retracing bet. secs. 8 and 17
39.71	Fall 54 lks. N. of the ¼ sec. cor. bet. secs. 8 and 17
	I return to temp. point No.1 for cor. of secs. 7,8,17 and 18 and set point No.2, 54 lks. S. and 14 lks. W.
	From temp. point No.1, I run
	North, retracing bet. secs. 7 and 8
40.00	No trace of the ¼ sec. cor. can be found.
80.08	Fall 74 lks. E. of the cor. of secs. 5,6,7 and 8.
	I return to temp. point No.1 for cor. of secs. 7,8,17 and 18 and set point No. 3, 74 lks. W. and 8 lks. N.
	From point No.3, point No.2 bears 62 lks. S. and 60 lks. E.
	From point No. 1, I restore the cor. of secs. 7,8,17 and 18, 22 lks. S. and 27 lks. W. as follows:
	Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground for cor. of secs. 7,8,17 and 18, with brass cap marked

T 10 S	R 4 W
S 7.	S 8
S 18	S 17

1915

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

The bearing of the line bet. secs. 17 and 18 is N.0°12'W. and the distance is 79.78 chs.

The bearing of the line bet. secs. 8 and 17 is S.89°22'E. and the distance is 39.98 chs.

The bearing of the line bet. secs. 7 and 8 is N.0°20'W. and the distance is 80.30 chs.

From the cor. of secs. 17,18,19 and 20, I run

chains	
	N.0°12'W., resurveying bet. secs. 17 and 18
	Over rough mountainous land draining E., through cedar, pinon and mohogany timber and undergrowth of sage, choke cherry and chaparral brush.
	Gradually descend along nearly E. slope.
9.33	Descend abruptly over NE. slope.
11.33	Leave mohogany timber, bears E. and W.
28.90	Bottom of ravine, drains NE. 460 ft. below sec. cor.
	Leave dense undergrowth, enter dense timber, bears NE. and SW.
	Gradually ascend over SE. slope.
39.89	Proportionate measurement.
	Set an iron post, 3 ft. long, 1 in. in dia., 6 ins. in the ground and 20 ins. in a mound of stone for $\frac{1}{4}$ sec. cor., with brass cap marked
	S $\frac{1}{4}$ 18 | S 17
	1915
	raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.
	Note: On account of underlying rock, I am unable to set post more than 6 ins. in the ground.
40.10	Spur, 130 ft. above ravine, projects NE.
	Gradually descend over NW. slope.
52.08	Descend abruptly over N. slope.
59.21	Ravine, 433 ft. below spur, drains E.
	Ascend abruptly.
69.25	Spur, 170 ft. above ravine, projects NE.
	Leave dense timber and descend abruptly over NW. slope.
79.78	300 ft. below top of spur.
	The cor. of secs. 7,8,17 and 18
	Land, rough, broken mountains with steep slopes of ridges and spurs into ravines draining E.
	Soil,4th. rate; generally rocky of quartz and limestone formation mixed with some shallow loam on gravelly and

chains	
	rocky sub-soil.
	Timber, cedar, pinon and some mohogany.
	Undergrowth, sage, buck brush and chaparral.
	October 19: At this sec. cor., I set off 9°48'S., on the decl. arc; and at 11h. 45m.a.m.l.m.t., observe the sun on the meridian, the resulting lat. is 39° 58'.
	S.89°22'E., resurveying bet. secs. 8 and 17
	Over mountainous land draining NE., through scattering pinon timber and dense undergrowth of sage brush.
	Gradually ascend along steep NW. slope.
4.55	Enter dense cedar and pinon timber, bears N. and S.
6.45	Top of ascent, 47 ft. above sec. cor., bears N. and S.
	Leave dense timber, bears N. and S. Gradually descend over NE. slope.
18.25	Swale, 117 ft. below top of ascent drains NE. into ravine.
	Gradually ascend.
32.25	Ridge, 18 ft. above swale, bears NE. and SW.
	Gradually descend.
39.98	69 ft. below ridge.
	The ¼ sec. cor. which is a limestone 10 x 8 x 5 ins. above ground, firmly set, marked ¼ on N. face. No accessories to cor. I erect a mound of stone, 2 ft. base. 1½ ft. high, N. of cor.
	Land, rolling mountainous, general NE. exposure and drain.
	Soil, 3rd. rate; gravelly and rocky of limestone formation and mixed with considerable light, dry, brown sandy loam on gravelly and rocky sub-soil.
	Timber, scattering cedar and pinon.
	Undergrowth, sage brush.
	N.0°20'W., resurveying bet. secs. 7 and 8
	Over rolling mountainous land through dense undergrowth of sage and scattering service brush.
	Gradually descend.

chains	
2.01	Bottom of ravine, 68 ft. below sec. cor., drains NE.
	Scattering patches of maple bear with ravine
	Enter scattering pinon and cedar timber and dense undergrowth of service brush.
	Ascend abruptly.
3.75	Ascend more gradually.
11.69	Point of spur, 31 ft. above ravine, falls NE. Leave dense service brush and scattering pinon timber, enter scattering choke cherry undergrowth, bears E. and W.
	Gradually descend over point of spur.
13.56	Ravine, drains NE.
	Gradually ascend over SE. slope.
18.08	Spur, 52 ft. above ravine, projects NE. Leave choke cherry undergrowth, bears E. and W.
	Descend.
28.40	Swale, 106 ft. below spur, drains NE.
	Ascend.
33.40	Top of ascent on N. side of swale, thence descend over rolling mountainous land sloping generally to the NE.
40.15	Proportionate measurement
	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 7 ¼ | S 8 1915
	raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.
80.30	260 ft. below ¼ sec. cor.
	The cor. of secs.5,6,7 and 8 which is a limestone 14 x 8 x 8 ins., lying on the ground , marked with 5 notches on one and 5 notches on cornering edge. No accessories to cor.
	At exact position of old cor. reset stone 10 ins. in the ground, marked with 5 notches on E. and 5 notches on S. edge. Set an iron post, 3 ft. long, 2 ins. in dia.,

chains

24 ins. in the ground alongside old cor. for. cor. of secs. 5,6,7 and 8, with brass cap marked

T 10 S S 6	R 4 W S 5
S 7	S 8

1915

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

Cor. stands on N. side of swale draining NE.

Land, rolling mountainous with general NE. exposure and drain.

Soil, 2 nd. rate; shallow, light brown sandy loam mixed with gravel on hard, dry sandy and gravelly sub-soil.

Timber, scattering cedar and pinon.

Undergrowth, sage, service, choke cherry and some maple.

Considerable grass, good for grazing.

October 19: The closing cor. of secs. 5 and 6, T.10 S., R.4 W. is a quartzite stone, 8 x 8 x 7 ins. above ground, firmly set, marked with 5 notches on E. and 1 notch. on W. edge. No accessories to cor.

Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground, alongside old cor. for closing cor. of secs. 5 and 6, with brass cap marked

T 9 S
S 31 | S 32
CC | R 4 W
S 6 | S 5
T 10 S
1915

from which

A cedar, 10 ins. diam., bears S.88°W., 7 lks. dist., marked T 10 S R 4 W S 6 B T

No tree within limits in sec. 5

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

At 7h. 15m.a.m.l.m.t., I set off 39°59' on the lat. arc;

chains	
	9° 41'S., on the decl. arc; and determine a meridian with the solar at the above described cor.
	Thence I run
	South, retracing bet. secs. 5 and 6
	Gradually ascend over rolling mountainous land sloping and draining NE., through scattering cedar timber and dense undergrowth of sage brush.
.09	Intersection with E. and W. line bet. secs. 6 and 31
34.80	Fall 25 lks. E. of the cor. of secs. 5,6,7 and 8.
	The bearing of this line is S.0° 25'W. and the distance is 34.80 chs.
	Land, low rolling foot hills, general NE. exposure and drainage.
	Soil,2nd. rate; light, dry shallow sandy loam mixed with gravel on dry, brown sand and gravel sub-soil.
	Timber, scattering scrub cedar.
	Undergrowth, dense sage brush.
	Considerable grass, good for grazing purposes.

Subdivision of T.10 S., R.4 W.

chains	
	October 19:
	From the cor. of secs. 17,18,19 and 20, I run
	S.89°51'W., on a random line bet. secs. 18 and 19
40.00	Set temp. ¼ sec. cor.
	Ceasecwork.
	October 19,1915.
	October 20: At 8h. 45m.a.m.l.m.t., I set off 39° 57' on the lat. arc; 10°05½'S., on the decl. arc; and determine a meridian with the solar at the temp. ¼ sec. cor.
	Thence I continue
	S.89°51'W.
80.67	Intersect W. bdy. of the Tp. 45 lks. S. of the cor. of secs. 13,18,19 and 24 which is a lava rock, 14 x 8 x 7 ins., firmly set in a mound of stone, marked and witnessed as described by the Surveyor General.
	Thence
	S.89°50'E. on a true line bet. secs. 18 and 19
	Over rough, rocky mountainous land through scattering cedar timber and undergrowth of sage brush.
	Ascend abruptly over NW. slope.
11.20	Spur, 260 ft. above sec. cor., projects SW.
	Leave cedar timber, bears N. and S.
	Gradually descend over SE. slope.
14.68	Thence over low saddle.
21.28	Enter aspen timber and choke cherry and chaparral undergrowth, bears NW. and SE.
22.28	Leave aspen timber, bears NW. and SE.
23.58	Small ravine, drains NW. Leave dense undergrowth of chaparral, bears NW. and SE.
	Ascend over NW. slope.
29.68	Spur, 106 ft. above ravine, projects NW.
	Gradually ascend.
33.93	Enter dense young aspen timber and undergrowth of chaparral bears NW. and SE.

chains	
36.12	Small ravine, 56 ft. above spur, drains NW. Leave aspen timber and undergrowth of choke cherry and chaparral bears NW. and SE.
	Ascend 80 ft. to
40.67	Set an iron post, 3 ft. long, 1 in. in dia., 12 ins. in the ground and 14 ins. in a mound of stone for $\frac{1}{4}$ sec. cor., with brass cap marked S 18 $\frac{1}{4}$ S 19 1915 raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor.
	Note: On account of underlying rock, I am unable to set post more than 12 ins. in the ground.
	Continue ascent.
50.24	Top of high rocky ridge, 118 ft. above $\frac{1}{4}$ sec. cor., bears N. and S.
	Descend abruptly over NE. slope.
61.42	Ravine, 174 ft. below ridge, drains SE.
	Enter dense cedar and mohogany timber, bears N. and S.
	Ascend abruptly.
69.54	Ascend more gradually over rocky SW. slope.
76.90	Ridge, 134 ft. above ravine, bears NW. and SE.
	Leave dense timber, bears N. and S.
	Descend abruptly over E. slope of ridge.
80.67	103 ft. below ridge.
	The cor. of secs. 17,18,19 and 20
	Land, rough broken mountains, with general E. and W. exposures from high ridge at 50.24 chs.
	Soil, 4th. rate; gravelly and rocky of limestone and quartz formation on rocky sub-soil.
	Timber, cedar and pinon with patches of mohogany and young aspen.
	Undergrowth, sage, and patches of choke cherry and

chains	
	chaparral.
	Some grass, good for grazing purposes.

	From cor. of secs. 7,8,17 and 18, I run
	N.89°50'W., on a random line bet. secs. 7 and 18
40.00	Set temp. ¼ sec. cor.
	October 20: At this cor. I set off 10°08½'S., on the decl. arc, and at 11h. 45m.a.m.l.m.t., observe the sun on the meridian; the resulting lat. is 39°58'.
80.35	Intersect W. bdy. of the Tp. 9 lks. S. of the cor. of secs. 7,12,13 and 18 which is a quartzite stone 18 x 10 x 8 ins., above ground, firmly set, and marked and witnessed as described by the Surveyor General.
	Thence
	S.89°46'E., on a true line bet. secs. 7 and 18
	Over rough mountainous land drawing W., through scattering cedar, pinon and mohogany timber and undergrowth of sage and buck brush.
	Ascend over W. face of high mountain ridge.
15.35	Top of high ridge, 269 ft. above sec. cor., bears N.30° E. and S.30°W. At this point a spur projects SW. from ridge.
	Descend.
40.35	498 ft. below top of ridge.
	Set an iron post, 3 ft. long, 1 in. in dia., 18 ins. in the ground and 8 ins. in a mound of stone for ¼ sec. cor., with brass cap marked
	S 7 / ¼ / S 18 / 1915
	raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor.
	Note: On account of underlying rock, I am unable to set post more than 18 ins. in the ground.

Subdivision of T.10 S.,R.4 W.

chains	
	Continue descent.
45.35	Ravine, 130 ft. below ¼ sec. cor., drains NE.
	Ascend
55.60	Spur, 60 ft. above ravine, projects NE.
	Descend.
64.05	Enter heavier timber, bears N. and S.
69.45	Mouth of ravine, 370 ft. below spur, drains NE. Leave mohogany timber and buck brush, bears N. and S.
	Ascend 60 ft. to
73.19	Spur, projects NE. Descend.along SE. slope.
77.20	Ravine, 43 ft. below spur, drains NE. Leave dense timber, bears N. and S.
	Gradually ascend over NW. slope 27 ft. to
80.35	The cor. of secs. 7,8,17 and 18.
	Land, rough, broken mountains draining E. and W. from high ridge at 15.35 chs. General E. and W. exposures from same ridge.
	Soil; 4th. rate; generally rocky of blue limestone and quartz formation on rocky sub-soil.
	Timber, cedar, pinon and some mohogany.
	Undergrowth, sage and buck brush.

	From the cor. of secs. 5,6,7 and 8, I run
	N.89°46'W., on a random line bet. secs. 6 and 7
40.00	Set temp. ¼ sec. cor.
79.90	Intersect W. bdy. of the Tp. 47 lks. N. of the cor. of secs. 1,6,7 and 12 heretofore described.
	Thence
	N.89°54'E., on a true line bet. secs. 6 and 7
	Over rough mountainous land draining N., through scattering cedar and pinon timber and dense sage and scattering service brush.
	Descend abruptly over NE. slope.
6.64	Swale, 73 ft. below sec. cor., drains N.

Chains	
	Gradually ascend over NW. slope.
11.60	Spur, 41 ft. above swale, projects NE.
	Gradually descend over NE. slope.
21.00	Descend abruptly.
25.63	Ravine, 95 ft. below spur, drains NE.
	Ascend over NW. slope.
32.04	Enter dense cedar and pinon timber and large quartz boulders, bears NW. and SE.
38.24	Top of steep ascent and leave quartz boulders, bears E. and W.
	Gradually ascend over W. slope.
39.90	On top of ridge, 327 ft. above ravine, bears N. and S.
	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in a mound of stone on solid rock for ¼ sec. cor., with brass cap marked
	S 6 / ¼ / S 7 / 1915
	raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor.
	Trees are within limits in both secs. but are too scruby for bearing trees.
	Descend abruptly over steep E. slope of mountain.
41.40	Leave dense timber, bears N. and S.
66.13	Base of mountain, 610 ft. below ridge, bears N. and S.
	Thence gradually descend over gently rolling bench land sloping NE.
79.90	The cor. of secs. 5,6,7 and 8
	Land, rough mountainous and gently rolling bench. W.66.13 chs. rough mountainous, general exposure and drainage to the N. E. 13.77 chs. gently rolling bench at base of mountain, slopes and drains NE.
	Soil of mountainous part generally rocky of quartz formation with some shallow sandy loam on gravelly

and rocky sub-soil. Soil ofbench land is a light, dry warm sandy loam mixed with gravel on a dry brown sand and gravel sub-soil.

Timber, cedar and pinon.

Undergrowth, sage and scattering service brush.

Considerable grass, good for grazing purposes.

October 20,1915.

GENERAL DESCRIPTION

The portion of this township surveyed under this assignment with the exception of a small strip of land in the eastern portion of secs. 6 and 7 is rough and mountainous and lies on the east and west slopes of a high ridge or range of mountains which run through the township in a northerly and southerly direction the highest part being Sabies peak which is situated in sec. 7. The soil of the mountains is generally rocky of blue limestone and brown quartz formation. With this rock is a small quantity of disintegrated shales and some light, brown sandy loam. The sub-soil is rocky. The soil of the gently rolling land in secs. 6 and 7 is a light shallow sandy loam, mixed with gravel and some loose rocks on a hard, sandy and gravelly sub-soil.

Scrub cedar, pinon and mohogany timber is found on the entire township and on the highest parts some aspen grows. The undergrowth is chiefly sage brush although considerable service, choke cherry and buck brush is found.

Several small seaps of water are found in the heads of the ravines but do not develope into streams.

Some prospecting has beem done in the mountains but I find no indications of mineral.

General Description.

There are no settlers in the township.

Boundaries of T.10 S.,R.4 W.

Lines designated	True bearing	Dist-ances	Latitudes N.	Latitudes S.	Departures E.	Departures W.
S.bdy.sec.19	S.89°48'E.	81.52		.28	81.52	
E.bdy.sec.19	N.0°28'W.	79.80	79.80			.65
E.bdy.sec.18	N.0°12'W.	79.78	79.78			.28
E.bdy. sec.7	N.0°20'W.	80.30	80.30			.47
E.bdy. sec.6	N.0°25'E.	34.80	34.80		.25	
N.bdy.T10SR4W	West	31.17				31.17
"	S.89°48'W	41.39		.14		41.39
"	West	7.85				7.85
W.bdy.T10SR4W	South	274.82		274.82		
Convergency						.07
			274.68	275.24	81.77	81.88
				274.68		
	Error in latitude			.56		81.77
	Error in departure					.11

Isaac Hayes

U. S. Transitman.

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BOOK A-417

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 resurvey of the west boundary and retracement, resurvey and survey of the vision subdivision of T. 10 S., R. 4 W.

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.	
Carl Ray	Oct. 19, 1915	Dec. 2, 1915	chainman
William Fredricksen	"	"	"
Leslie A. King	"	"	flagman
Harvey Fox	"	"	cornerman

Subscribed and certified to before me on the dates of the final service as shown above.

Howard W. Miller
U. S. Surveyor.

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FINAL OATH OF UNITED STATES SURVEYOR.

I, Isaac Hayes, U.S. 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 25th day of June, 1915, 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 resurvey of the west boundary, retracement, resurvey and survey of the subdivision of T.10 S., R.4 W.

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.

Isaac Hayes
U. S. Transitman ~~U.S. Surveyor~~

Subscribed by said Isaac Hayes, and sworn to before me this 15 day of May, 1916

Fred Broadbent
Clerk of Court

SEAL

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah, June 27, 1916

The foregoing field notes of the re survey of west boundary, retracement, resurvey and survey of subdivision T. 10 S. R. 4 W. S.L.B.& M., Utah,

executed by Howard W. Miller and Isaac Hayes under ~~his~~ their special instructions dated June 25, 1915, having been critically examined, and the necessary corrections and explanations made, the said field notes, and the surveys they describe, are hereby approved.

M. O. Thorsen
U. S. Surveyor General.

I certify that the foregoing transcript of the field notes of the above-described surveys in T.10 S.R 4 W.S.L.B.& M., Utah, has been correctly copied from the original notes on file in this office.

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U. S. Surveyor General.

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BOOK A-417 E

U. S. Surveyor General's Office
FEB 7 1916
SALT LAKE CITY, UTAH.

FIELD NOTES

OF THE ~~SURVEY OF THE~~

RETRACEMENT AND RESURVEY 2ND. STANDARD PARALLEL SOUTHTHROUGH R.5 W.

RETRACEMENT AND RESURVEY OF THE 1ST.GUIDE MERIDIAN WEST THROUGH T.10 S.

RETRACEMENT,RESURVEY AND SURVEY OF SUBDIVISION OF T.10 S.,R.5 W.

Of the SALT LAKE BASE AND *Meridian,*

In the State of UTAH

EXECUTED BY

HOWARD W. MILLER

&

ISAAC HAYES

In the capacity of U. S. Surveyors, under instructions dated June 25, 1915, *issued by the United States Surveyor General to govern surveys included in Group No.* 37, *which were approved by the Commissioner of the General Land Office,* July 21, 1915

Survey commenced October 29, 1915

Survey completed December 2, 1915

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BOOK A-417

INDEX DIAGRAM.

Township 10 South, Range 5 West

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Retracement and resurvey 2nd. Standard Parallel South, R.5 W.

chains

Survey commenced October 29,1915 and executed with Young and Sons light mountain transits Nos. 8297 and 8582, with Smith's solar attachments. The horizontal limbs are provided with two double verniers, placed opposite to each other and reading to single minutes of arc; which is also the least count of the verniers of the latitude and declination arcs.

The instruments were approved for use in this survey by the Assistant Supervisor of Surveys for Utah.

I examine the adjustments of the transits and correct the level and collimation errors, then, to test the solar appartus by comparing their 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:

(An observation was made Oct.29., but the instruemnt was moved and no record of observation was kept.)

October 30: At my camp which is situated near the ¼ sec. cor. bet. secs. 16 and 21 in approximate latitude 39°57' N.; longitude 112°25'W., I observe Polaris as follows:

At 5h.24m. by my watch which is 30 minutes fast of l.m.t., I observe Polaris in accordance with insrtuctions in the Manual and note than an angle to a tree at time of observation is 56° 24' to the east.

Standard time of obsn. Oct.30 --------	5h. 24m. p. m.
Reduced to L.M.T.,long. 112°25'W.------	30m.
Correct L.M.T. of obsn. Oct.30 --------	4h. 54m.p.m.
U.C.Pol. Oct. 30 ----------	10h.57.8m.p.m.
Corrected for long. 112° 25'W.---------	1.2m.
Correct L.M.T.U.C.Pol. Oct.30----------	10h.56.6m.p.m.
Time from obsn. to U.C. ----------	6h. 02.6m.
Hour angle of Pol. at obsn.----------	6h. 02.6m.
Declination of star October 30 --------	88° 51' 34".
Azimuth of Pol. at obsn. ----------	1° 29'E.

1° 29' added to 56° 24' = 57° 53' or N.57° 53'E. = the true bearing of the tree.

Retracement and resurvey 2nd. Standard Parallel South, R.5 W.

chains	
	October 30,1915.
	October 31: At 8h. a.m.l.m.t., I lay off the azimuth of Polaris 57° 53' to the north from the tree, transit the telescope and note a point on line to the south.
	Test of transit No.8297
	At 8h. 14m.a.m.l.m.t., with the instrument set in the meridian; I set off 39° 57' on the lat. arc; 13° 52'S., on the decl. arc; and determine a meridian with the solar. This meridian falls 1' to the right of the Polaris Mer. With the instrument in the meridian, I set off 13° 56' S., on the decl. arc; and at 11h. 44m.a.m.l.m.t., obs. the sun on the meridian; the resulting lat. is 39° 57'. At 2h. 44m.p.m.l.m.t., I set off 39° 57' on the lat. arc; 13° 58'S., on the decl. arc; and determine a meridian with the solar. This meridian falls on the Polaris meridian and I therefore conclude that the adjustments of the instrument are satisfactory.
	Test of transit No. 8582
	At 8h. 14m.a.m.l.m.t., with the instrument set in the meridian; I set off 39° 57' on the lat. arc; 13° 52'S., on the decl. arc; and determine a meridian with the solar. This meridian falls 2' to the right of the Pol. meridian. With the instrument in the meridian, I set off 13° 56'S., on the decl. arc; and at 11h. 44m.a.m.l.m.t., obs. the sun on the meridian; the resulting lat. is 39° 57'. At 2h. 44m.p.m.l.m.t., I set off 39° 57' on the lat. arc;

Retracement and resurvey 2nd. Standard Parallel South, R.5 W.

chains

13° 58'S., on the decl. arc; and determine a meridian with the solar. This meridian falls 2' to the right of the Polaris meridian.

This instrument reads consistently 2' to the right of the Polaris meridian both a.m. and p.m., I therefore adjust same to agree with the meridian.

On account of defective needles no magnetic decl. was taken.

October 31,1915

In the decl. arc settings, .85 of the tabulated refraction for computing declinations is used, due to the altitude of the country.

Steel tapes, 5 chs. long were used by both parties in the field, together with clinometers for determining slope angles and the reduced horizontal distances only appear in the field notes. The tapes were tested, comparison being made with a standard tape, 1 ch. long, kept and used for that purpose only.

October 29: I begin at the cor. of secs. 33 and 34 on the S. bdy. of T.10 S.,R.5 W., which is a 3' in. iron post, 12 ins. above ground, firmly set, marked on brass cap

Retracement and resurvey 2nd. Standard Parallel South, R.5 W.

chains	
	T 10 S R 5 W S 33 | S 34 1913
	and witnessed by a mound of stone, 2 ft. base, 1½ ft. high, N. of cor.
	October 29: For solar obsn. this date see line bet. secs. 27 and 28, T.10 S., R.5 W.
	Thence I run
	S.89°40'W., retracing on S. bdy. sec. 33
	Over mountainous land, through dense undergrowth of sage brush.
	Gradually descend.
2.10	Small swale, drains SE.
	Ascend.
2.98	The closing cor. of secs. 3 and 4, T.11 S., R.5 W., which is an iron post, 2 ins. in dia., 12 ins. above ground, firmly set, and marked and witnessed as described by the Surveyor General.
31.65	Ridge, 130 ft. above sec. cor., bears NE. and SW.
	Gradually descend along rocky NW. slope.
40.18	Fall 11 lks. N. of the standard ¼ sec. cor. which is an iron post, 1 in. in dia., set 24 ins. in a mound of stone, marked on brass cap
	SC ¼ S 33 1913
	and witnessed by a mound of stone, 2 ft. base, 1½ ft. high, N. of cor.
	The true bearing of this ½ mile is S.89°30'W., and the distance is 40.18 chs.
	From point 11 lks. N. of the ¼ cor., I continue
	S.89°40'W.
45.33	Ravine, 80 ft. below ¼ sec. cor., course SW.
	Ascend abruptly SE. slope over series of broken quartzite ledges bearing NE. and SW.

Retracement and resurvey 2nd. Standard Parallel South, R.5 W.

chains	
47.00	Enter dense cedar and pinon timber, bears N. and S.
57.70	Spur, 100 ft. above ravine, projects S.20°W.
	Graually descend SW. slope over quartzite boulders.
60.57	Ravine, 30 ft. below spur, course SW.
	Ascend abruptly
63.68	Spur, 60 ft. above ravine, projects SW.
	Leave dense timber, gradually descend over SW. slope.
73.43	Descend over NW. slope.
79.29	Ravine, 175 ft. below spur, course SW.
	Thence ascend over low point of spur.
80.25	Fall 10 lks. N. of the Standard cor. of secs. 32 and 33 which is a quartzite stone, 12 x 8 x 5 ins., set in a mound of stone, marked with 4 grooves on E., 2 grooves on W. and SC on N. face, and witnessed by a mound of stone, 2 ft. base, 1½ ft. high, N. of cor.
	The true bearing of this ½ mile is S.89°41'W. and the distance is 40.07 chs.
	Land, rolling and rough mountainous, drains S.
	Soil, 4th. rate; generally rocky of quartz and volcanic formation mixed with some sandy loam on gravelly and rock sub-spil.
	Timber, cedar and pinon on W. 33.25 chs.
	Undergrowth, sage brush. Some grazing.
	October 29: At this cor. I set off 13°16'S., on the decl. arc; and at 11h.44m.a.m.l.m.t., observe the sun on the meridian; the resulting lat. is 39°54'.

	From standard cor. of secs. 32 and 33, I run S.89°50'W., retracing on S. bdy. sec. 32
	Over rough mountainous land draining SW., through dense undergrowth of sage brush.
2.94	Fall 5 lks. S. of the closing cor. of secs. 4 and 5,

chains	
	T.11 S.,R.5 W., which is an iron post, 2 ins. in dia., firmly set in a mound of stone, marked and witnessed as described by the Surveyor General.
8.74	Descend short SW. slope into Cow creek.
10.42	Bottom of ravine and Cow Creek, 10 lks. wide, 3 ins. deep, good water, course S. Dense aspen timber and choke cherry undergrowth bears with creek.
	Ascend abruptly NE. slope.
29.30	Thence over SE. slope.
39.24	High ridge spur, 645 ft. above Cow Creek, projects S.
	Descend over rocky SW. slope.
39.98	Fall 24 lks. S. of the Standard ¼ sec. cor. which is a stationary volcanic rock, 36 x 36 x 24 ins., marked and witnessed as described by the Surveyor General.
	The true bearing of this ½ mile is N.89°49'W., and the distance is 39.98 chs.
	October 29,1915
	October 30: For solar observation see line bet. secs. 32 and 33, subdivision of T.10 S.,R.5 W.
	From Standard ¼ sec. cor., I run S.89°50'W.
5.75	Ravine, 25 ft. below ¼ sec. cor., course S.30°E.
	Ascend over SE. slope.
7.35	Broken quartz ledge, 15 ft. high, bears NE. and S.
14.00	Ridge, 130 ft. above ravine, bears N. and SW.
	Descend abruptly NW. slope.
34.70	N. slope of saddle in ridge, 285 ft. below ridge.
	Ascend.
40.50	60 ft. above saddle.
	Fall 8 lks. N. of the standard cor. of secs. 31 and 32 which is a quartzite stone, 12 x 12 x 6 ins. firmly set in a mound of stone, marked with 5 grooves on E. and 1 groove on W., and SC. on N. face and witnessed by a mound of stone, 2 ft. base, 1½ ft. high, N. of

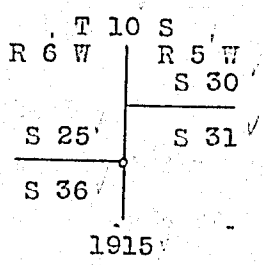
chains	
	cor.
	The true bearing of this ½ mile is S.89°43'W., and the distance is 40.50 chs.
	Land, rough broken mountains draining SW.
	Soil,4th. rate; generally rocky of quartzite formation and mixed with some disintegrated shales on gravelly and rocky sub-soil.
	Timber, a few scattering cedar and pinon on both sides of line with some aspen in bottom of Cow canyon.
	Undergrowth, sage brush; some choke cherry in bottom of Cow canyon.
	Some grass, good for grazing purposes.
	October 30: At this cor. I set off 13° 36'S. on the decl. arc; and at 11h.44m.a.m.l.m.t., obs. the sun on the meridian; the resulting lat. is 39°54'.
	S.89° 32'W., retracing on the S. bdy. of sec. 31
	Over rough mountainous land draining SW., through dense undergrowth of sage brush.
	Ascend.
.50	Spur, projects N.80°W.
	Thence along SW. and SE. slopes of spur.
2.62	Fall 13 lks. S. of the closing cor. of secs. 5 and 6 T.11 S.,R.5 W., which is an iron post, 2 ins. in dia., 12 ins. above ground, firmly set, marked and witnessed as described by the Surveyor General.
12.28	Thence along rough rocky S. slope of spur.
18.18	Point of spur, 185 ft. below top, projects SW.
	Descend abruplty nearly W. slope.
39.82	Fall 50 lks. S. of the standard ¼ sec. cor., which is a volcanic rock, 10 x 8 x 8 ins. above ground, firmly set, marked ¼ S C on N. face. No accessories to cor.

chains	
	I raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor.
	The true bearing of this ½ mile is N.89°45'W., and the distance is 39.82 chs.
	From the ¼ sec. cor., I run
	S.89°32'W. with continuous chaining.
41.91	Bottom of Pole canyon and creek, 3 lks. wide, 3 ins. deep, good water, 550 ft. below spur, course S.35°W. Dense willow and wild rose brush along creek.
43.26	Old road, bears NE. and SW.
	Ascend abruptly over SE. slope.
46.48	Enter scattering cedar timber, bears N. and S.
70.75	Ridge, 265 ft. above canyon, bears N.30°E. and S.30°W.
	Descend.
78.25	Ravine, 180 ft. below ridge, course SW. 1.50 chs. thence W.
	Ascend over SE. slope.
79.94	Fall 19 lks. S. of the cor. of Tps. 10 and 11 S.,Rs. 5 and 6 W., which is a black volcanic rock, 14 x 8 x 8 ins. above ground, firmly set, marked with 6 notches on N., S.,E. and W. edges and witnessed by a mound of stone, 2 ft. base, 1½ ft. high, S. of cor.
	The true bearing of this ½ mile is S.89° 48'W., and the distance is 40.12 chs.
	Land, rough broken mountains with general SW. exposure and drainage.
	Soil,4th. rate; generally rocky of volcanic formation with some gravel and sandy loam on hard, sandy and rocky sub-soil.
	Timber, some cedar.
	Undergrowth, sage brush, some willow and rose brush in bottom of Pole canyon.
	Considerable grass, good for grazing purposes.

chains	
	October 30,1915.
	From the cor. of Tps. 10 and 11 S.,Rs. 5 and 6 W.,I run North, bet. secs. 31 and 36 on retracement line.
	Over rough mountainous land, through dense undergrowth of sage brush and scattering cedar timber.
	Ascend abruptly S. slope.
7.35	Enter dense cedar timber, thence along SW. slope.
27.66	Leave dense cedar timber, 400 ft. above sec. cor., bears E. and W.
	Thence along rocky west slope over large boulders.
40.17	Fall 7 lks. W. of the ¼ sec. cor. which is a quartzite stone, 16 x 12 x 6 ins. set in a mound of stone, marked ¼ on W. face and witnessed by a mound of stone, 2 ft. base, 1½ ft. high W. of cor.
	Set an iron post, 3 ft. long, 1 in. in dia., 12 ins. in the ground and 14 ins. in a mound of stone alongside old cor. for re-estbalished ¼ sec. cor., with brass cap marked
	S 36 ¼ | S 31 1915
	The true bearing of this ½ mile is N.0°06'E. and the distance is 40.17 chs.
	From ¼ sec. cor., I continue North
54.15	Sharp rocky ridge, 160 ft. above ¼ sec. cor., bears E. and W.
54.30	Set point and cease work.
	October 30,1915
	November 1: For solar obsn. see line bet. secs. 30 and 31, T.10 S.,R.5 W.
	From 54.30 chs. point I continue North
	Gradually descend over broken rocky W. slope.

Resurvey 1st. Guide Meridian West, through T.10 S.

chains	
63.30	Descend abruptly over NW. slope , broken quartzite ledges and boulders.
69.25	Leave ledges and boulders, bear E. and W.
77.40	Bottom of canyon and stream, 3 lks. wide, 2 ins. deep, 285 ft. below spur, course SW.
	Ascend abruptly SE. slope 65 ft. to
80.15	Fall 5 lks. W. of the cor. of secs. 25,30,31 and 36 which is a quartzite stone 14 x 8 x 6 ins. above ground, firmly set, marked with 1 notch on S. and 5 notches on N. edge and witnessed by a mound of stone 2 ft. base, 1½ ft. high, W. of cor.
	Knowing that a closing cor. will be necessary for secs. 30 and 31, T.10 S.,R.5 W., I reestablish this cor. for. secs. 25 and 36 , E. bdy. T.10 S.,R.6 W., as follows:
	Set an iron post, 3 ft. long, 3 ins. in dia., 12 ins. in the ground and 12 ins. in a mound of stone alongside old cor. for cor. of secs. 25 and 36, E. bdy. T.10 S., R.6 W., with brass cap marked



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

I destroy old bearing trees at cor. referring To R.5 W.

Note: On account of underlying rock, I am unable to set post more than 12 ins. in the ground.

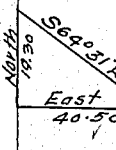
The true bearing of this ½ mile is N.0°04'E., and the distance is 39.98 chs.

Land, rough broken mountains draining SW.

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

Resurvey 1st. Guide Meridian West, through T.10 S.

chains	
	Timber, scattering scrub cedar and pinon.
	Undergrowth, sage brush.
	N.0°15'E., retracing bet. secs. 25 and 30
.70	The line running N., passes over series of ledges and a very steep slope of ridge which cannot be accurately chained, I therefore triangulate as follows:
	From this point the ¼ sec. cor., bet. secs. 30 and 31 bears East, 40.50 chs. distant. I set a flag on line north near top of ridge. From the flag on top of ridge the ¼ sec. cor. bet. secs. 30 and 31 bears S.64°31'E., therefore cotan. 64° 31' x base or .47662 x 40.50 chs = 19.30 chs. which added to .70 chs. gives
20.00	To point of triangulation near top of ridge.
	I offset 8 lks. E. to be on true retracement line
	Novemebr 1: At this station I set off 14°15'S., on the decl. arc; and at 11h. 44m.a.m.l.m.t., observe the sun on the meridian, the resulting lat. is 39°55'
39.70	I find the ¼ sec. cor., 17 lks. W. and at 80.06 chs. find the cor. of secs. 19,24,25 and 30, 63 lks. W., I therefore continue my line North
131.87	Cease work.
	November 1,1915
	Nov. 2: At 7h. 44m.a.m.l.m.t., I set off 39°56' on the lat. arc; 14°30'S., on the decl. arc; and determine a meridian with the solar.
	Thence I continue
	N.0°15'E.
280.00	Nov. 2: The sky is overcast at noon, observations for lat. are impossible.
357.43	Fall 52 lks. E. of the cor. of Tps. 9 and 10 S., Rs. 5 and 6 W., and as T.10 S., Rs. 5 and 6 W. have not been subdivided north of the cor. of secs. 25,30,31



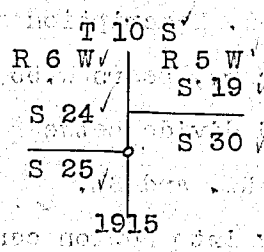
Resurvey 1st. Guide Meridian West, through T.10 S.

chains	
	and 36, I resurvey the range line between them as follows:
	Knowing that closing cors. will be necessary upon this boundary for R.5 W., I set ¼ sec. and sec. cors. for two quarters and secs. only, referring to R.6 W.
	Only 1 set of chainmen is employed in this resurvey, all slope distances and angles are double checked.
	November 2,1915.
	November 4: At 8h. 00m.a.m.l.m.t., from the cor. of secs. 25 and 36, I sight along my line bet. secs. 25 and 30 which bears N.0°15'E., and deflect and angle of 05' to the west
	Thence I run
	N.0°10'E., on E. bdy. sec. 25
	Over rough broken mountainous land through scattering cedar and mohogany timber and undergrowth of sage brush.
.70	Point of triangulation.
	Thence up steep slope of ridge over series of ledges.
20.00	Point of triangulation near top of ridge.
	Gradually ascend.
22.16	Top of sharp rocky ridge, 655 ft. above sec. cor., bears NE. and SW.
	Descend abruptly rough, rocky NW. slope over large quartzite boulders and series of small broken ledges.
39.70	The old ¼ sec. cor., bears W. 11 lks. I destroy cor.
40.00	On steep NW. slope 405 ft. below top of ridge.
	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 25
¼

1915

chains	
	raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.
43.08	Canyon; 60 ft. below ¼ sec. cor.; drains S.65°W.
	Ascend abruptly over rough, rocky SE. slope.
52.50	Top of ascent on E. side of spur, 265 ft. above canyon.
	Descend.
58.80	Ravine, drains SE. Leave cedar and mohogany timber, bears NW. and SE.
	Ascend abruptly over nearly S. slope.
80.00	500 ft. above ravine.
	Set an iron post, 3 ft. long, 3 ins. in dia., 10 ins. in the ground and 14 ins. in a mound of stone for cor. of secs. 24 and 25, with brass cap marked



	raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.
	Note: On account of underlying rock I am unable to set post more than 10 ins. in the ground.
	Land, rough broken mountains draining SW.
	Soil, 4th. rate; rocky of quartzite formation on rocky sub-soil.
	Timber, scattering cedar and mohogany on S.58.80 chs.
	Undergrowth, scattering sage brush and some grass.

	N.0°10'E., on E. bdy. of sec. 24
	Over rough broken mountainous land through undergrowth of sage brush. Gradually ascend.
.06	Old sec. cor. bears W. 51 lks., I destroy cor.
.50	Top of rocky ridge, bears E. and W.
	Gradually descend over NW. slope.

Resurvey 1st. Guide Meridian West, through T.10 S.

chains	
19.07	Ravine, 200 ft. below ridge, course SW.
	Thence over broken W. face of mountain.
40.00	Set an iron post, 3 ft. long, 1 in. in dia., 10 ins. in the ground and 16 ins. in a mound of stone for ¼ sec. cor., with brass cap marked
	S ¼ 24 | 1915
	raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.
Note	Note: On account of underlying rock, I am unable to set post more than 10 ins. in the ground.
	From this cor., U.S.L.M.No.2, Columbia Mining District, bears N.20°14'W. Description and markings as recorded.
40.22	The old ¼ sec. cor., bears W.55 lks., I destroy cor.
55.17	Top of ridge and divide between Rush valley and West Tintic, bears NW. and SE.
	Descend abruptly into Benion canyon over NW. slope and on E. side of ravine draining N.
63.15	Thence over nearly W. slope near top of spur projecting N.
77.00	Point of spur, descend abruptly over N. slope.
80.00	On steep N. slope, 380 ft. below top of divide.
	Set an iron post, 3 ft. long, 3 ins. in dia., 24 ins. in a mound of stone for cor. of secs. 13 and 24, with brass cap marked
	T 10 S R 6 W | R 5 W S 18 S 13 | S 19 S 24 1915
	raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.

Resurvey 1st. Guide Meridian West, through T.10 S.

chains	
	Note: On account of underlying rock I am unable to set post in the ground.
	No trace of the old sec. cor. can be found.
	From this cor., U.S.L.M.No.2 Columbia Mining District, bears N. 35° 21'W.
	Land, rough broken mountainous land drains SW. from high divide on S. 55.17 chs. and N. into Benion canyon on N.24.83 chs.
	Soil, gravelly and light shallow clay mixed with quartzite rock on hard clay, gravel and rocky sub-soil, 4th, rate.
	No timber.
	Undergrowth, sage brush.
	Some grass, good for grazing purposes.

	N.0°10'E., on E. bdy. sec. 13
	Over rough mountainous land draining E., through undergrowth of sage and scattering service brush. Some aspen timber E. of line.
	Descend abruptly rocky N. slope into Benion canyon.
6.70	Base of steep descent and road from Vernon, Utah to Mine, bears E. and W.
	Thence in bottom of canyon.
7.76	Bottom of canyon, 200 ft. below sec. cor., course E.
	Ascend abruptly S. slope.
16.83	Enter aspen thicket, bears E. and W. Extends E. about 5 and W. about 3 chs.
17.52	Leave thicket, bears E. and W.
25.40	Spur, 335 ft. above canyon, projects SE.
	Descend abruptly NE. slope.
31.35	Ravine, 60 ft. below spur, course SE.
	Ascend abruptly.
36.60	Spur, 90 ft. above ravine, projects SE.

Resurvey 1st. Guide Meridian West, through T.10 S.

chains	
	Descend.
40.00	On N. slope, 70 ft. below top of spur.
	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 13 ¼ | 1915
	raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.
40.50	The old ¼ sec. cor. on line, I destroy same.
47.65	Ravine, 165 ft. below spur, course SE.
	Ascend abruptly.
59.70	Divide between Dutch and Benion canyons, 280 ft. above ravine, bears E. and W.
	Descend abruptly N. slope ridge.
67.35	Enter dense choke cherry undergrowth, bears E. and W.
79.40	Leave dense choke cherry undergrowth, bears E. and W.
80.00	On gentle NW. slope near bottom of ravine, 485 ft. below top of divide.
	Set an iron post, 3 ft. long, 3 ins. in dia., 24 ins. in the ground for cor. of secs. 12 and 13, with brass cap marked
	T 10 S R 6 W | R 5 W S 7 S 12 | S 18 S 13 | 1915
	raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.
	Land, rough mountainous with steep slopes of ridges into ravines draining E. and NE.
	Soil, 4th. rate; gravelly and rocky mixed with some sandy loam on gravelly and rocky sub-soil.
	Timber, some aspen.

chains	
	Undergrowth, sage, scattering service and dense patches of choke cherry.
	Some grass, good for grazing purposes.
	N.0°10'E., on E. bdy. sec. 12
	Over mountainous land through dense undergrowth of sage and scattering service brush. Some aspen timber W. of line.
	Gradually descend.
.80	Ravine, 20 ft. below sec. cor., course NE.
	Ascend.
.90	Enter dense choke cherry undergrowth, bears NE. and SW.
4.10	Leave dense choke cherry undergrowth, bears NE. and SW.
7.30	Low spur, projects NE.
	Gradually descend.
10.65	Ravine, course NE.
	Ascend abruptly
18.80	Spur, 15 ft. above sec. cor., projects NE.
	Descend abruptly NW. slope into S. fork Dutch creek.
23.65	Enter dense undergrowth of willows and scattering aspen timber, bears NE. and SW.
26.50	Bottom of ravine and S. fork of Dutch creek, 5 lks. wide 4 ins. deep, course NE., 165 ft. below top of spur.
	Gradually ascend.
26.56	Leave willows and aspen timber, bears NE. and SW. Thence through dense sage brush and scattering patches of service.
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 12
¼

1915

chains	
	raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.
44.00	Low point and divide between N. and S. forks Dutch creeks, bears E. and W.
	Descend.
54.45	Bottom of ravine and N. fork Dutch creek, 2 lks. wide, 1 in. deep, 110 ft. below spur, course E.
	Ascend abruptly.
71.50	Spur, 225 ft. above creek, projects E.
	Descend.
76.30	Ravine, 25 ft. below spur, heads about 10 chs. W., drains E.
	Ascend SE. slope 36 ft. to
80.00	Set an iron post, 3 ft. long, 3 ins. in dia., 12 ins. in the ground and 12 ins. in a mound of stone for cor. of secs. 1 and 12, with brass cap marked

T 10 S.
R 6 W | R 5 W
S 6
S 1 | S 7
S 12
1915

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

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

Land, mountainous with N. and S. slopes of ridges and spurs into ravines draining NE.

Soil, 3rd. rate; gravelly and rocky mixed, with considerable light, dry sandy loam on gravelly and rocky sub-soil.

Timber, some aspen.

Undergrowth, sage, service, willows and grass.

Some grass, good for grazing purposes.

N.0°10'E., on E. bdy. sec. 1

Resurvey 1st. Guide Meridian West, through T.10 S.

chains	
	Over mountainous land, through scattering short undergrowth of sage brush.
	Ascend over SE. slope.
4.30	Spur, 25 ft. above sec. cor., projects NE.
	Descend over NW. slope.
13.10	Thence over nearly N. slope.
31.20	Ravine, 450 ft. below spur, course NE.
	Ascend SE. slope 45 ft. to
37.43	The cor. of Tps. 9 and 10 S., Rs. 5 and 6 W., which is a quartzite stone, 8 x 10 x 4 ins. above ground, firmly set, marked with 6 notches on N.,E.,S. and W. edges, 9 S on NE., 5 W on SE., 10 S. on SW. and 6 W on NW. face, and witnessed by a mound of stone, 2 ft. base, 1½ ft. high, S. of cor.
	The SE. cor. of fence bears W. 28 lks.
	Land, rough mountainous land with steep slopes of spurs and ridges into ravines draining NE.
	Soil,4th. rate, gravelly and rocky of quartz formation on gravelly and rocky sub-soil.
	No timber.
	Undergrowth, scattering short shadscale.
	Some grass, good for grazing purposes.

November 4,1915.

Isaac Hayes

U. S. Transitman.

chains	
	December 2: At 8h. 49m.a.m.l.m.t., I set off 39°58' on the lat. arc; 21°50'S., on the decl. arc; and determine a meridian with the solar at the cor. of secs 1,6,7 and 12 on the E. bdy. of the Tp. heretofore described.
	Thence I run
	S.89°47'W., retracing bet. secs. 1 and 12
	Over rough mountainous land through dense undergrowth of sage brush.
	Gradually ascend along N. slope of mountain.
7.44	Point, 60 ft. above sec. cor., falls N.
8.60	Begin abrupt descent over W. slope.
11.29	Enter dense cedar timber, bear N. and S.
12.00	Enter pinon timber, bears N. and S.
21.43	Leave cedar and pinon timber, bears NE. and SW.
31.37	Ravine, 490 ft. below point, drains NW.
	Thence across wide open ravine.
39.79	Fall 49 lks. S. of the ¼ sec. cor. which is a quartzite stone 8 x 12 x 6 ins. above ground, firmly set, marked ¼ on N. face and witnessed by a mound of stone, 2 ft. base, 1½ ft. high, N. of cor.
	The bearing of this ½ mile is N.89°31'W., and the distance is 39.79 chs.
	From point 49 lks. S. of the ¼ sec. cor., I continue S.89°47'W.
44.78	Sharp rocky point projects N. about 4.50 chs.
54.54	Old road, bears NE. and SW.
	Thence over gentle SE. slope.
60.15	Enter dense cedar timber, bears N. and S.
	Thence over gentle S. slope.
70.00	Leave dense timber, bears N. and S.
80.23	Fall 57 lks. S. of the cor. of secs. 1,2,11 and 12 which is a quartzite stone 8 x 6 x 6 ins. above ground, firmly set, marked with 5 notches on S. and 1 notch

chains

on E. edge, and witnessed by a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.

The bearing of this ½ mile is S.89°54'W., and the distance is 40.44 chs.

Land, rough mountainous, N. exposure and drainage on E. 7.44 chs. and general W. exposure with W. and SW. drainage on W.72.79 chs.

Soil, 3rd. rate; light, moist sandy loam mixed with gravel and rock on sandy and rocky sub-soil.

Timber, scattering patches of cedar and pinon.

Undergrowth, sage and scattering patches of service brush.

December 2: The sky is overcast at noon, observations for lat. are impossible.

Oct.29: At 7h. 44m.a.m.l.m.t., I set off 39°56' on the lat. arc; 13°10'S., on the decl. arc; and determine a meridian with the solar at the cor. of secs. 21,22, 27 and 28 which is a quartzite stone 8 x 12 x 14 ins. above ground, firmly set, marked erroneously with 3 notches on S. and 2 notches on E. edge, and witnessed by a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.

I remark stone with 3 notches on E. and 2 notches on S. edge and set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground alongside old cor. for reestablished cor. of secs. 21,22,27 and 28, with brass cap marked

T 10 S S 21	R 5 W S 22
S 28	S 27

1915

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

chains	
	cor.
	Thence I run
	S.0°02'E., bet. secs. 27 and 28
	Over rough mountainous land draining N., through dense undergrowth of sage and scattering patches of service brush.
	Ascend abruptly over NW. slope of mountain.
12.28	Top of divide between Little and Horse valleys 250 ft. above sec. cor., bears NE. and SW.
	From this station U.S.L.M.No.1 Blue Bell Mining District, bears S.60°50'W. Markings and description as recorded.
	Ascend across head of ravine, draining SE.
28.25	Spur, 60 ft. above divide, projects E.
	Gradually descend over SE. slope.
40.30	Fall 5 lks. W. of the ¼ sec. cor. which is a sandstone 11 x 8 x 6 ins. above ground, firmly set, marked ¼ on W. face and witnessed by a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.
	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground alongside old cor. for reestablished ¼ sec. cor., with brass cap marked S 28 ¼ | S 27 1915 raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.
	The bearing of this ½ mile is S.0° 06'E., and the distance is 40.30 chs.
	From point 5 lks. W. of the ¼ sec. cor. I continue S.0°02'E.
45.66	Ravine, 165 ft. below spur, course SE.
	Thence over rolling E. slope near base of high ridge.
80.47	Fall 4 lks. W. of the cor. of secs. 27,28,33 and 34 which is a quartzite stone 14 x 6 x 5 ins. above ground, firmly set, marked with 3 notches on E. and 1 notch on

chains

S. edge and witnessed by a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.

Set an iron post, 3 ft. long, 2 ins. in dia., 14 ins. in the ground and 10 ins. in a mound of stone alongside old cor. for reestablished cor. of secs. 27,28,33 and 34 with brass cap marked

T 10 S	R 5 W
S 28	S 27
S 33	S 34

1915

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

Note: On account of underlying rock, I am unable to set post more than 14 ins. in the ground.

Cor. stands on nearly E. slope 105 ft. above ravine.

The bearing of this $\frac{1}{2}$ mile is S.0°01'E. and the distance is 40.17 chs.

Land, rough mountains with N. exposure and drainage from divide on N. 12.88 chs. and SE. exposure and drainage on S. 68.19 chs.

Soil,4th. rate; generally rocky of quartzite and lava rock with some gravel mixed with light , dry sandy loam on hard, dry sand and rock sub-soil.

No timber.

Undergrowth, sage and scattering service brush.

Some grass, good for grazing purposes.

S.0°02'E., bet. secs. 33 and 34

Gradually descend over rolling mountainous land draining SE., through dense undergrowth of short sage brush.

34.37 Bottom of swale and wash, 10 lks. wide, 4 ft. deep, 180 ft. below sec. cor., course SE.

Gradually ascend short N. slope.

Retracement and resurvey of subdivision of T.10 S.,R.5 W.

chains	
40.14	Fall 2 lks. E. of the ¼ sec. cor. which is a quartzite stone, 11 x 9 x 4 ins. above ground, firmly set, marked ¼ on W. face and witnessed by a mound of stone 2 ft. base, 1½ ft. high, W. of cor.
	Set an iron post, 3 ft. long, 1 in. in dia., 16 ins. in the ground and 10 ins. in a mound of stone alongside old cor. for reestablished ¼ sec. cor., with brass cap marked
	S 33 ¼ | S 34 1915
	raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.
	Note: ON account of underlying rock I am unable to set post more than 16 ins. in the ground.
	The bearing of this ½ mile is South, and the distance is 40.14 chs.
	From point 2 lks. E. of the ¼ sec. cor., I continue S.0°02'E.
64.76	Bottom of small ravine and wash, 30 lks. wide, 5 ft. deep, course S.30°E.
80.10	Fall 4 lks. E. of the cor. of secs. 33 and 34 on the S. bdy. of the Tp. heretofore described.
	The bearing of this ½ mile is South and the distance is 39.96 chs.
	Land, rolling mountainous, SE. exposure and drains S.
	Soil,3rd. rate; light, dry sandy loam mixed with gravel and rock on sandy and rocky sub-soil.
	No timber.
	Undergrowth, short sage brush.
	Some grass, good for grazing purposes.
	October 29,1915

Retracement and resurvey of subdivision of T.10 S., R.5 W.

chains	
	Isaac Hayes U. S. Transitman.
	October 29: At 7h. 00m.a.m.l.m.t., in shade of mountain unable to take solar observation.
	From the cor. of secs. 21,22,27 and 28, I run N.0°02'W., bet. secs. 21 and 22
	Over mountainous land through dense undergrowth of sage brush and scattering patches of service brush.
	Descend abruptly over NW. slope.
11.67	Ravine, 200 ft. below sec. cor., course NE.
	Ascend.
23.77	Spur, 100 ft. above ravine, projects N.10°E.
	Oct.29: At this point I set off 39°56' on the lat. arc; 13° 10' S. on the decl. arc, and at 7h.30m.a.m.l.m.t., determine a meridian with the solar and find that my line bears S.0°02'E. Continue along top of spur.
28.66	Spur, turns NE.
	Descend over NW. slope.
39.97	Intersect the ¼ sec. cor. which is a quartzite stone, 8 x 8 x 8 ins. above ground, firmly set, marked ¼ on W. face, and witnessed by a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.
	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground alongside old cor. for reestablished ¼ sec. cor., with brass cap marked S 21 ¼ | S 22 1915 raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.
	The bearing of this ½ mile is N.0°02'W., and the distance

chains	
	is 39.97 chs.
	From this ¼ sec. cor. chimney on house at mine bears S.62°40'W.
	From ¼ sec. cor. I continue N.0°02'W.
43.05	Enter wide ravine, 185 ft. below spur, course from SW. to N.
	Thence along W. side near bottom of ravine.
59.51	Ravine, turns NW.
	Ascend SW. slope of rocky point.
62.57	Top of quartz ledge on spur, 20 ft. high, 30 ft. above ravine, projects N.70°W. about 3 chs.
63.00	A tunnel projecting SE. bears W. about 2 chs.
	Chimney on house at Utah Collision mine bears N.23° 47'W.
	Location monument on North Star Mining claim bears S.53° 14'W.
	Chimney on house at mine bears S.51°40'W.
	U. S. L. M. No.1, Blue Bell Mining District bears S.23° 03'W. approximately
67.28	Road, from Vernon, Utah to Mine, bears NE. and SW.
73.82	Same ravine as at 59.51 chs., stream in same, 2 lks. wide 1 in. deep, 125 ft. below spur, course N.5°E.
	Thence on W. side of ravine.
79.76	Fall 9 lks. W. of the cor. of secs. 15,16,21 and 22 which is a quartzite stone, 8 x 6 x 8 ins. above ground, firmly set, marked with 3 notches on E. and S. edges, 10 S on NE. and 5 W. on SW. face and witnessed by a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.
	Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground alongside old cor. for reestablished cor. of secs. 15,16,21 and 22, with brass cap marked

T 10 S	R 5 W
S 16	S 15
S 21	S 22

1915

chains	
	raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.
	The bearing of this ½ mile is N.0°06'E. and the distance is 39.79 chs.
	From this cor. U. S. L. M. No.1 Blue Bell Mining District bears S.19°51'W. approximately.
	Chimney on house at Utah Coalition mine bears S.6°02'W.
	Land, mountainous, general N. exposure and drain.
	Soil, 4th. rate; rocky of quartz formation with considerable light brown sandy loam mixed with gravel on hard sandy and rocky sub-soil.
	No timber.
	Undergrowth, dense sage and scattering patches of service brush.
	N.0°02'W., bet. secs. 15 and 16
	Over rolling hilly ground through dense undergrowth of sage and scattering service brush.
	Gradually ascend.
6.05	Low spur, 20 ft. above sec. cor., projects NE.
	Descend.
9.05	Bottom of ravine and stream, 3 lks. wide, 2 ins. deep, 65 ft. below spur, course N.70°E.
	Ascend abruptly.
18.30	Top of ascent on E. slope of spur, 150 ft. above stream.
	Thence along rolling E. slope.
40.08	Fall 4 lks. W. of the ¼ sec. cor. which is a quartzite stone, 5 x 12 x 8 ins. above ground, firmly set, marked ¼ on W. face and witnessed by a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.
	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground alongside old cor. for reestablished ¼ sec. cor. with brass cap marked

chains	
	S 16 $\frac{1}{4}$ | S 15
	1915
	raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.
	The bearing of this $\frac{1}{2}$ mile is N.0°02'E., and the distance is 40.08 chs.
	From point 4 lks. W. of $\frac{1}{4}$ sec. cor., I continue N.0°02'W.
40.25	Enter cleard land, bears E. and W.
71.57	Wash, 20 lks. wide, 4 ft. deep, course E.
77.78	Road, bears E. and W.
79.30	Wash, 20 lks. wide, 3 ft. deep, course S.85°E. also leave cleared land and base of mountain, bears S.80°E. and N.80°W.
	Ascend.
80.20	Fall 9 lks. W. of the cor. of secs. 9,10,15 and 16, which is a quartzite stone, 6 x 6 x 8 ins. above ground firmly set, marked with 3 notches on E. and 4 notches on S. edge and witnessed by a mound of stone 2 ft. base $1\frac{1}{2}$ ft. high, W. of cor.
	Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground alongside old cor. for reestablished cor. of secs. 9,10,15 and 16, with brass cap marked
	T 10 S | R 5 W S 9 | S 10 S 16 | S 15 1915
	raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.
	The bearing of this $\frac{1}{2}$ mile is N.0°02'E. and the distance is 40.12 chs.
	Land, low rolling hills draining E.
	Soil, 2nd. rate; light, dry, sandy loam mixed with gravel and streaked with rock on sandy and gravelly sub-soil.
	No timber.

chains

Undergrowth, dense sage and scattering service brush.
Some grass good for grazing purposes.

N.0°02'W., bet. secs. 9 and 10
Over mountainous land through undergrowth of sage and scattering service brush.
Ascend over S. slope of ridge.

37.85 Top of ridge and divide between Rush and Little valleys 310 ft. above sec. cor., bears N.70°E. and S.70°W.
Gradually descend.

40.16 Intersect the ¼ sec. cor. which is a quartzite stone, 6 x 12 x 10 ins. above ground, firmly set, marked ¼ on W. face and witnessed by a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.

Knowing that this cor. will not refer to two secs. I reestablish same for ¼ sec. cor. on W. bdy. sec.10 as follows:

Set an iron post, 3 ft. long, 1 in. in dia., 15 ins. in the ground and 11 ins. in a mound of stone alongside old cor. for ¼ sec. cor. on the W. bdy. sec. 10, with brass cap marked

S 10
¼

1915

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

Note: On account of underlying rock I am unable to set post more than 15 ins. in the ground.

The bearing of this ½ mile is N.0°02'W. and the distance is 40.16 chs.

From ¼ sec. cor., I run

N.0°02'W.

chains	
	Descend over N. slope of divide.
68.65	Ravine, 530 ft. below ½ sec. cor., course N.70°E.
	Enter scattering cedar timber, bears N.70°E. and S.70°W.
	Ascend.
79.95	Ridge, 105 ft. above ravine, bears NE. and SW.
	Thence along W. slope near top of ridge.
80.27	Fall 3 lks. E. of the cor. of secs. 3,4,9 and 10 which is a quartzite stone, 12 x 10 x 16 ins. above ground, firmly set, marked with 3 notches on E. and 5 notches on S. edge and witnessed as described by the Surveyor General.
	The bearing of this ½ mile is N.0°04'W. and the distance is 40.11 chs.
	Land, mountains draining SE. from divide on S. 37.85 chs. and NE. on N.42.42 chs.
	Soil, 4th. rate; stony and rocky of quartz formation on rocky sub-soil.
	Timber, cedar on N.11.62 chs.
	Undergrowth, sage and scattering service brush.
	Some grass, good for grazing purposes.
	October 29: At this sec. cor. I set off 13° 16'S., on the decl. arc; and at 11h. 44m.a.m.l.m.t., observe the sun on the meridian, the resulting lat. is 40°00'.
	October 29,1915

December 2: For solar observation see line bet. secs. 1 and 12

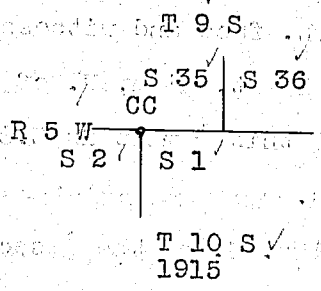
From the cor. of secs. 2,3,10 and 11 which is a quartz stone, 12 x 8 x 5 ins. above ground, firmly set, marked with 2 notches on E. and 5 notches on S. edge and witnessed by a mound of stone 2 ft. base, 1½ ft. high W. of cor.

Retracement and resurvey of subdivision of T.10 S.,R.5 W.

chains	
	I run
	S.89°35'W., retracing bet. secs. 3 and 10
	Over mountainous land through dense undergrowth of sage brush and scattering cedar timber.
10.15	Ridge, 135 ft. above sec. cor., bears N. and S.
	Descend.
16.65	Head of swale, 20 ft. below ridge, drains N.
	Thence over broken land.
40.20	Fall 3 lks. S. of the ¼ sec. cor. which is a quartzite stone, 12 x 6 x 10 ins. above ground, firmly set, marked ¼ on N. face and witnessed by a mound of stone 2 ft. base, 1½ ft. high, N. of cor.
	The bearing of this ½ mile is S.89° 38'W. and the distance is 40.20 chs.
	From point 3 lks. S. of the ¼ sec. cor., I continue S.89°35'W
43.80	Gradually descend over NW. slope.
65.91	Mouth of ravine, 180 ft. below sec. cor., course NE.
	Enter scattering cedar and pinon timber, bears NE. and SW.
	Ascend abruptly.
79.25	Ridge, 180 ft. above ravine, bears NE. and SW.
	Gradually descend.
80.47	Fall 13 lks. S. of the cor. of secs. 3,4,9 and 10.
	The bearing of this ½ mile is S.89° 44'W. and the distance is 40.27 chs.
	Land, mountainous with steep slopes of ridges into ravines draining N.
	Soil, rocky of quartz formation with some sandy loam and gravel on hard sandy and rock sub-soil.
	Timber, scattering cedar pinon on W, 14.56 chs.
	Undergrowth, sage brush.
	December 2,1915.

Subdivision of T.10 S.,R.5 W.

chains	
	December 2: For solar observation see line bet. secs. 1 and 12:
	From the cor. of secs. 1,2,11 and 12 , I run
	N.0°01'W., on a random line bet. secs. 1 and 2
34.60	Intersect N. bdy. of the Tp. 8.18 chs. west of the cor. of secs. 35 and 36 heretofore described. At intersection
	Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground for closing cor. of secs. 1 and 2, with brass cap marked



	raise a mound of stone, 2 ft. base, 1½ ft. high, S. of cor.
	Thence I run
	S.0°01'E., on a true line bet. secs. 1 and 2
	Over mountainous land through dense undergrowth of sage and rabbit brush, and scattering cedar timber.
	Gradually ascend along E. slope.
10.30	Swale or head of ravine, 50 ft. above sec. cor., drains NE.
	Ascend abruptly N. slope.
16.90	Ridge, 140 ft. above swale, bears E. and W. A low saddle about 8 chs. W.
	Descend over gentle S. slope.
34.60	160 ft. below top of ridge.
	The cor. of secs. 1,2,11 and 12.
	Land, mountainous with N. and S. slopes from ridge at 16.90 chs.
	Soil, 4th. rate, rocky of quartz formation on sandy and rocky sub-soil.

Subdivision of T.10 S.,R.5 W.

chains	
	Timber, scattering cedar.
	Undergrowth, sage brush and rabbit brush.

	From the cor. of secs. 2,3,10 and 11, I run
	N.0°01'W., on a random line bet. secs. 2 and 3
34.90	Intersect N. bdy. of the Tp. 2.09 chs. west of the cor. of secs. 34 and 35 heretofore described.At intersection
	Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground for closing cor. of secs. 2 and 3, with brass cap marked

T 9 S
S 34 | S 35
CC — R 5 W
S 3 | S 2
T 10 S
1915

from which

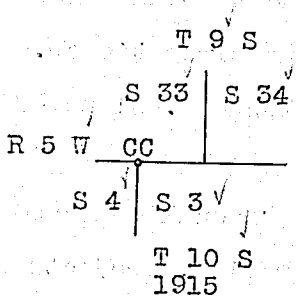
A cedar,16 ins. diam., bears S.3°E., 67 lks. dist., marked T 10 S R 5 W S 2 B T

A cedar, 20 ins. diam.,bears S.56°W.,23 lks. dist., marked T 10 S R 5 W S 3 B T

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

	Thence
	S.0°01'E., on a true line bet. secs. 2 and 3
	Over mountainous land through dense undergrowth sage brush and cedar and pinon timber.
	Gradually descend along SE. slope of mountain.
14.40	Ravine, drains NE.
	Leave dense timber, gradually ascend over NE. slope.
19.70	Spur, 70 ft. above ravine, projects E.
	Thence over broken land.
34.90	The cor. of secs. 2,3,10 and 11
	Land, mountainous with general E. exposure, drains N.

chains	
	Soil,4th. rate; rocky and hard, dry clay on rocky sub-soil.
	Timber, cedar and pinon.
	Undergrowth, sage brush.
	Knowing that a closing cor. will be necessary upon the N. bdy. of the Tp., I run from the cor. of secs. 3,4, 9 and 10
	N.0°02'W., on a true line bet. secs. 3 and 4
	Over mountainous land through dense cedar and pinon timber and undergrowth of sage brush.
	Gradually descend along nearly W. slope of ridge.
7.74	Chimney on cabin bears N. 72°50'W.
9.50	Spur, 45 ft. below ridge, projects NW.
	Descend over N. slope.
9.75	Leave timber, bears NW. and SE.
26.10	Base of ridge and enter large hollow, bears E. and W., hollow drains NW.
	Thence over rolling ground.
35.49	Intersect the N. bdy. of the Tp. 1.94 chs. west of the cor. of secs. 33 and 34 heretofore described.
	At intersection, set an iron post, 3 ft. long, 2 ins. in dia., 12 ins. in the ground and 12 ins. in a mound of stone for closing cor. of secs. 3 and 4 with brass cap marked



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

Subdivision of T.10 S., R.5 W.

chains	
	Land, S. 26.10 chs., mountainous land general NW. exposure and drainage. N. 9.39 chs. rolling land.
	Soil, mountainous land, rocky of quartz formation on rocky sub-soil, 4th. rate. Soil, rolling land, light, dry sandy loam mixed with gravel on sandy and gravelly sub-soil.
	Timber, cedar and pinon on S.9.75 chs.
	Undergrowth, sage brush.
	December 2,1915.

	October 30: At 7h. 14m.a.m.l.m.t., I set off 39°55' on the lat. arc; 13°30'S., 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 sectional correction line bet. secs. 28 and 33
	Over mountainous land through undergrowth of sage brush and grass.
	Gradually ascend over SE. slope of rocky spur.
7.50	Top of point, 85 ft. above sec. cor., falls S.30°E.
	Descend.
15.65	Ravine, 30 ft. below point, drains S.15°E.
	Ascend
26.60	Point, 115 ft. above ravine, falls SE.
	Descend.
38.55	Ravine, 50 ft. below point, course S. 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
	S 28 / ¼
	S 33
	1915

Subdivision of T.10 S.,R.5 W.

chains	
	raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor.
45.40	Top of low spur, 25 ft. above ¼ sec. cor., projects S.
	Descend.
59.00	Ravine, 15 ft. below spur, course SE.
	Enter dense choke cherry undergrowth, bears N. and S.
	Ascend abruptly.
66.88	Leave choke cherry undergrowth, bears NW. and SE.
78.20	Ridge, 392 ft. above ravine, bears N.20°W. and SE.
	Gradually descend on top of ridge.
80.00	Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground for cor. of secs. 28,29,32 and 33, with brass cap marked

T 10 S	R 5 W
S 29	S 28
S 32	S 33

1915

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

Land, rough mountainous , general S. exposure and drain.

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

No timber.

Undergrowth, sage , choke cherry and grass.

Howard W. Miller

U. S. Surveyor.

Oct.29: For solar observation see line bet. secs. 27 and 28

From the cor. of secs. 32 and 33 on the S. bdy. of the Tp. heretofore described.

N.0°09'E., on a temporary line bet. secs. 32 and 33

40.00 Set temp. ¼ sec. cor.

Subdivision of T.10 S.,R.5 W.

chains	
80.00	Set temp. cor. secs. 28,29,32 and 33
	October 29,1915
	October 30: At 8h. 14m.a.m.l.m.t., I set off 39°55' on the lat. arc; 13° 33'S., on the decl. arc; and determine a meridian with the solar at the temp. cor. of secs. 28,29,32 and 33.
	Thence I run
	N.0°09'E.
80.55	Intersect the cor. of secs. 28,29,32 and 33
	Thence
	S.0°09'W., on a true line bet. secs. 32 and 33
	Over mountainous land through dense undergrowth of sage brush.
	Gradually ascend along W. slope of high ridge.
3.27	Spur, projects SW.
	Descend over SW. slope.
21.55	Swale, 290 ft. below spur, drains W.
	Gradually ascend NW. slope.
27.55	Top ascent on West slope, gradually descend over SW. slope.
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 32 ¼ | S 33
	1915
	raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.
57.75	Begin steep descent over rough, rocky SE. slope.
63.07	Quartz ledge, 50 ft. high, bears NE. and SW
69.15	Base of steep descent, bears NE. and SW.
	Gradually descend.
75.23	Wash, 15 lks. wide, 4 ft. deep, course S.15°E.

Subdivision of T.10 S.,R.5 W.

chains	
	Thence over nearly E. slope.
80.55	760 ft. below ¼ sec. cor.
	The cor. of secs. 32 and 33 on the S. bdy. of the tp.
	Land, rough, broken mountains with general SW. exposure and drainage.
	Soil, 4th, rate, rocky and loose shale mixed with some hard clay on rocky sub-soil.
	No timber.
	Undergrowth, sage brush.
	Some grass, good for grazing.

October 30, 1915.

Isaac Hayes

U. S. Transitman.

	October 30: For solar observation see line between secs. 28 and 33
	From cor. of secs. 28,29,32 and 33
	N.0°03'W., bet. secs. 28 and 29
	Over rough mountainous land through dense undergrowth of sage brush, grass and scattering service brush.
	Along W. slope near top of high ridge.
5.00	Top of ridge, level with sec. cor., bears NE. and SE.
	Descend.
12.23	Head of ravine, 112 ft. below sec. cor., course W.
	Ascend.
20.20	Spur, 20 ft. above head of ravine, projects W.
	Descend abruptly.
32.60	Bottom of Pole canyon, 203 ft. below spur ,, drains SW.
	Ascend abruptly SW. slope of spur over broken quartz

Subdivision of T.10 S., R.5 W.

chains	
	ledges.
40.00	On SW. slope, 126 ft. above bottom of canyon.
	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in a mound of stone on solid rock for $\frac{1}{4}$ sec. cor., with brass cap marked
	S 29 $\frac{1}{4}$ | S 28
	1915
	raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.
57.28	Top of high ridge, 302 ft. above $\frac{1}{4}$ sec. cor., bears E. and NW.
	From this station U. S. L. M. No. 1, Blue Bell Mining District bears S.71°26'E. approximately.
	S. end of house bears N.29° 40'E.
	Descend along steep E. slope of rocky ridge.
78.76	Bottom of swale, 224 ft. below ridge, drains E.
	Ascend SE. slope.
80.00	On SE. slope 18 ft. above swale.
	Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground for cor. of secs. 20,21,28 and 29, with brass cap marked
	T 10 S | R 5 W S 20 | S 21 S 29 | S 28
	1915
	raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.
	From this cor., U. S. L. M. No. 1 Blue Bell Mining District bears S.46°50'E.
	Chimney on house at mine bears S.42°40'W.
	Land, rough broken mountains with steep slopes of ridges into canyons draining SW. on S. 57.28 chs. and NE. on N. 22.72 chs.

chains	
	Soil,4th. rate, rocky of quartz formation mixed with stiff blue clay on clay and rock sub-soil.
	No timber.
	Undergrowth, sage brush, grass and scattering service brush.
	October 30,1915.

	November 1: For solar observation see line bet. secs. 29 and 30
	East, on a random line bet. secs. 21 and 28
40.00	Set temp. ¼ sec. cor.
79.96	Intersect N. and S, line 39 lks. S. of the cor. of secs. 21,22,27 and 28
	Thence
	S.89°43'W., on a true line bet. secs. 21 and 28
	Over rough mountainous land through dense undergrowth of sage and scattering service brush.
	Descend abruptly over NW. slope.
8.40	Ravine, 112 ft. below sec. cor., course NE.
	Ascend abruptly.
21.35	U. S. L. M. No.1 Blue Bell Mining district bears S.30°16'W.
21.79	Top of ridge, 302 ft. above ravine, bears NE. and S.30°W.
	Gradually descend over broken N. slope.
32.56	Ravine, 86 ft. below ridge, drains N.
	Ascend.
36.90	Spur, 102 ft. above ravine, projects N.
	Descend.
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

chains	
	S 21 / 4
	S 28 / 1915
	raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor.
43.00	Ravine, 146 ft. below spur, drains NE.
	Ascend abruptly.
52.44	Spur, 256 ft. above ravine, projects N.10°E.
	Descend over NW. slope.
57.96	S. edge of small aspen thicket.
63.75	Ravine, 170 ft. below spur, course N.25°E.
	Ascend SE. slope 398 ft. to
79.96	The cor. of secs. 20.21,28 and 29
	Land, rough mountains with steep slopes of ridges and spurs into ravines draining N.
	Soil,4th. rate; generally rocky mixed with loose shales and some clay on gravelly and rocky sub-soil.
	Timber, some aspen N. of line.
	Undergrowth, dense sage and scattering patches of service brush.
	November 1,1915.
	October 30: For solar observation see line bet. secs. 28 and 33
	N.0°03'W., bet. secs. 20 and 21
	Over rough mountainous land through dense undergrowth of sage and scattering patches of service brush.
	Ascend over SE. slope of spur.
4.33	Spur, 51 ft. above sec. cor., projects N.85°E.
	Descend over NE. slope.
15.80	Head of ravine, 224 ft. below spur, drains E.

chains	
	Ascend over SE. slope.
23.14	Spur, 6 ft. above ravine, projects NE.
	October 30: At this station I set off 13°36'S., on the decl. arc; and at 11h. 44m.a.m.l.m.t., observe the sun on the meridian; the resulting lat. is 39°56'.
	Descend abruptly.
33.19	Enter aspen thicket, bears E. and W.
33.39	Ravine, 224 ft. below spur, drains N.80°E.
	Ascend.
33.58	Leave aspen thicket, bears E. and W.
40.00	Spur, 20 ft. above ravine, projects N.10°E.
	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 20 ¼ | S 21
	1915
	raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.
	Descend abruptly over NW. slope.
50.82	Ravine, 258 ft. below spur, drains E.
	Ascend abruptly over S. slope.
62.80	Spur, 262 ft. above ravine, projects S.80°E.
	Descend 70 ft. to
68.78	Ravine, drains E.
	Ascend.
77.64	Spur, 114 ft. above ravine, projects E.
	Gradually descend.
80.00	On N. slope 22 ft. below top of spur.
	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

Subdivision of T.10 S.,R.5 W.

chains	
	T 10 S | R 5 W S 17 | S 16 S 20 | S 21 1915
	raise a mound of stone, 5 ft. base, 4 ft. high, W. of cor.
	Land, rough mountains with steep N. and S. slopes of ridges and spurs into ravines draining E.
	Soil,4th. rate; generally rocky and mixed with loose shales and dry sandy clay on gravelly and rocky sub-soil.
	Timber, scattering patches of aspen on both sides of line.
	Undergrowth, dense sage and scattering service brush.
	Some grass, good for grazing purposes.
	N.89°43'E. on a random line bet. secs. 16 and 21
40.00	Set temp. ¼ sec. cor.
80.05	Intersect N. and S. line 11 lks. N. of the cor. of secs. 15,16,21 and 22
	Thence
	S.89°48'W., on a true line bet. secs. 16 and 21
	Over rolling mountainous land through dense undergrowth of sage and scattering service brush.
	Ascend E. slope of spur.
4.12	Spur, 35 ft. above sec. cor., projects NE.
	Descend over NW. slope.
12.09	Bottom of ravine and stream, 3 lks. wide, 2 ins. deep, 68 ft. below spur, drains NE. Dense aspen timber along stream in ravine.
	Gradually ascend over gentle SE. slope through very dense sage and scattering service brush.
40.02½	On SE. slope 228 ft. above ravine
	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
	S 16 / ¼ / S 21 / 1915
	raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor.
	From this ¼ sec. cor., house bears S.28°46'E. Property of North Star Mine.
	U.S.L.M.No. 1, Blue Bell Mining District, bears S.1°01'W. approximately.
	Continue gradual ascent.
45.05	Flat top ridge, 16 ft. above ¼ sec. cor., bears NE. and SW. Ridge widens about 10 chs. NE.
	Gradually descend.
50.83	Head of small ravine, 18 ft. below ridge, drains NE.
	Leave dense undergrowth, ascend over E. slope.
73.35	Spur, 332 ft. above ravine, projects N.80°E.
	Thence over nearly level land on top of spur.
80.05	The cor. of secs. 16,17,20 and 21
	Land, mountainous, general E. exposure and drainage.
	Soil,3rd. rate; generally rocky of quartz formation and mixed with some light brown sandy loam and gravel on gravelly and rocky sub-soil.
	No timber, except some aspen on creek bottom.
	Undergrowth, dense sage and scattering patches of service brush.
	Some grass, good for grazing purposes.

	N.0°03'W., bet. secs. 16 and 17
	Over mountainous land draining E., through undergrowth of sage brush, grass and scattering service brush.
	Descend over NW. slope.
6.33	Enter choke cherry undergrowth, bears E. and W.
9.30	Ravine, 180 ft. below spur, course E.

Subdivision of T.10 S.,R.5 W.

chains	
	Ascend
10.21	Leave choke cherryundergrowth, bears E. and W.
17.18	Top of spur, 80 ft. above ravine, projects E.
	Descend 30 ft. to
19.23	Swale, drains E.
	Ascend
24.11	Top of ridge and divide between Rush and Little valleys 5 ft. above swale, bears NE. and SW.
	Cease work.
	October 30,1915
	November 3: 7 a.m., the sky is overcast, observations on the sun are impossible. By a backsight along my line bet. secs. 16 and 17 and 20 and 21 I determine a meridian with the instrument.
	Thence I continue
	N.0°03'W.
	Descend abruptly over NW. slope.
36.04	Small swale, drains N.10°W.
	Thence over nearly W. slope.
38.89	Descend abruptly N. slope.
40.00	On N. slope 310 ft. below top of divide.
	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 17 ¼ | S 16
	1915
	raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.
41.96	Ravine, 35 ft. below ¼ sec. cor., course NE.
	Ascend abruptly over SE. slope.
42.70	Irrigation ditch and stream in same, 1 lks. wide, 1 in. deep, course NE.
48.94	Spur, 90 ft. above ravine, projects NE.

chains	
	Gradually descend over NE. slope
56.23	Thence over nearly N. slope.
80.00	On gentle N. slope, 200 ft. below top of spur.
	Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground for cor. of secs. 8,9,16 and 17, with brass cap marked

T 10 S	R 5 W
S 8	S 9
S 17	S 16

1915

	raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.
	Land, mountainous drains N.
	Soil, 3rd. rate, generally rocky of quartz formation with dry, brown sandy loam on gravelly and sandy loam sub-soil.
	No timber.
	Undergrowth, sage, choke cherry and scattering patches of service brush.
	Some grass, good for grazing purposes.

	N.89° 48'E., on a random line bet. secs. 9 and 16
40.00	Set temp. ¼ sec. cor.
80.19	Intersect N. and S. line 19 lks. S. of the cor. of secs. 9,10,15 and 16
	Thence
	S.89°40'W., on a true line bet. secs. 9 and 16
	Gradually ascend over rolling land sloping SE., through dense undergrowth of sage brush.
5.05	Enter cleared land, bears N. and S.
12.17	Wash, 12 lks. wide, 1 ft. deep, course SE.

Subdivision of T.10 S.,R.5 W.

chains	
13.90	Road, bears N.80°W. and SE.
19.30	Road, bears N.85°E. and S.80°W.
20.01	Enter cultivated land, bears N. and S.
33.18	Leave cultivated land, bears N. and S.
39.17	Leave cleared land, enter dense sage brush, bears N. and S.
40.09½	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 9 ¼ S 16 1915. raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor.
42.90	Top of ridge and divide between Rush and Little valleys, bears N. and S. Enter rolling mountainous land, descend.
50.09	Gully, 56 ft. below ridge, course N. for about 3 chs., thence W. Ascend.
52.95	Spur, 32 ft. above gully, projects N. about 3 chs. Thence descend over broken ground.
70.00	Road, bears N.50°W. and S.50°E.
71.22	Bottom of large ravine and wash, 30 lks. wide, 3 ft. deep, 96 ft. below spur, course N. Ascend.
80.19	The cor. of secs. 8,9,16 and 17 Land, rolling hills, drains E. on E. 42.90 chs. and W. on West 37.29 chs. Soil, stony and gravelly with light, dry brown sandy loam on gravelly and sandy loam sub-soil; 2nd. rate. No timber. Undergrowth, sage brush and grass. Fair grazing.

chains	
	N.0°03'W., bet. secs. 8 and 9
	Over mountainous land draining NW., through dense undergrowth of sage brush.
	Gradually descend.
5.06	Road, bears E. and W.
6.05	Ravine, 35 ft. below sec. cor., drains NW.
	Ascend abruptly over S. slope of ridge.
19,35	Ridge, 225 ft. above ravine bears E. and about 3 chs. W.
	Descend abruptly over NE. slope.
24.23	Thence over NW. slope.
38.99	Leave mountainous land, bears NE. and SW. Thence over rolling broken land sloping W.
40.00	246 ft. below top of ridge.
	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 8 ¼ | S 9 1915
	raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.
80.00	Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground for cor. of secs. 4,5,8 and 9, with brass cap marked
	T 10 S | R 5 W S 5 | S 4 S 8 | S 9 1915
	raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.
	Land, mountainous and rolling general drainage NW.
	S. 38.99 chs. mountainous land with steep slopes of ridge, N. 41.01 chs. rolling land.

Subdivision of T.10 S.,R.5 W.

chains

Soil, 2nd. rate; gravelly and light, dry sandy loam on gravelly and rocky sub-soil.

No timber.

Undergrowth, sage brush.

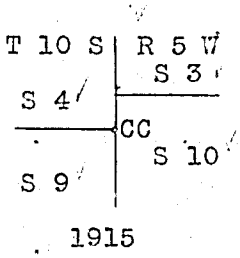
Some grass, good for grazing purposes.

N.89°40'E., on a random line bet. secs. 4 and 9

40.00 Set temp. ¼ sec. cor.

80.14 Intersect N. and S. line 49 lks. S.0°04'E. of the cor. of secs. 3,4,9 and 10

At intersection, set an iron post, 3 ft. long, 2 ins. in dia., 12 ins. in the ground and 12 ins. in a mound of stone for closing cor. of secs. 4 and 9, with brass cap marked



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

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

Thence

S.89°40'W., on a true line bet. secs. 4 and 9

Over mountainous land through scattering cedar timber and dense undergrowth of sage brush.

Descend abruptly over NW. slope of ridge.

11.90 Ravine, 166 ft. below cor., drains N.

Ascend abruptly

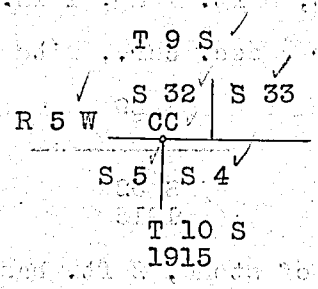
27.58 Top of steep ascent, thence over nearly N. slope.

From this station chimney on Enoch Pearson's house bears N.43°18'W.

Subdivision of T.10 S.,R.5 W.

chains	
31.29	Spur, 246 ft. above ravine, projects NW.
	Descend abruptly over SW. slope.
32.48	Leave cedar timber, bears N. and S.
40.07	On SW. slope 137 ft. below spur.
	Set an iron post, 3 ft. long, 1 in. in dia., 18 ins. in the ground and 8 ins. in a mound of stone for ¼ sec. cor., with brass cap marked
	S 4 / ¼ / S 9 / 1915
	raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor.
	Note: On account of underlying rock I am unable to set post more than 18 ins. in the ground.
	November 3: Not on line at noon, observations for lat. are impossible.
	Continue steep descent.
53.27	Enter cleared land, bears N. and S.
61.10	Bottom of large wide draw and wash, 10 lks. wide, 4 ft. deep, 298 ft. below ¼ sec. cor., courseN.
	Gradually ascend.
61.20	Leave cleared land, enter dense sage brush, bears N. and S.
73.18	Low rolling ridge, 12 ft. above draw, bears N. and S.
	Gradually descend W. slope 35 ft. to
80.14	The cor. of secs. 4,5,8 and 9.
	Land, rough and rolling mountainous with steep E. and W. slopes of spurs into ravines and draws draining N.
	Soil, 3rd. rate; gravelly and rocky of quartzite formation with some patches of good, rich sandy loam on gravelly and rocky sub-soil.
	Timber; cedar on E. 32.48 chs.
	Undergrowth, sage brush.
	Some grass, good for grazing purposes.

chains	
	Knowing that closing cors. are necessary upon the N. bdy. of the Tp., I run
	N.0°03'W., on a true line bet. secs. 4 and 5
	Gradually descend over rolling mountainous land through dense undergrowth of sage brush and scattering cedar timber.
18.03	Wash, 15 lks. wide, 2 ft. deep, course NE.
31.15	Enter dense cedar timber, bears E. and W.
36.29	Intersect N. bdy. of the Tp. 2.26 chs. S.89°57'W., of the cor. of secs. 32 and 33 heretofore described
	At intersection, Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground for closing cor. of secs. 4 and 5, with brass cap marked



from which,

A cedar, 10 ins. diam., bears S.11°E., 184 lks. dist., marked T 10 S R 5 W S 4 B T

A cedar, 10 ins. diam., bears S 24°W., 97 lks. dist., marked T 10 S R 5 W S 5 B T

Land, rolling mountainous with general N. exposure.

Soil, 2nd. rate; rich brown loam and mixed with gravel very dry and packed hard on sandy and gravelly sub-soil.

Timber, cedar.

Undergrowth, sage brush.

Some grass, good for grazing purposes.

November 3,1915.

chains	
	Howard W. Miller U. S. Surveyor.
	October 30: For solar observation see line bet. secs. 32 and 33
	From the cor. of secs. 28,29,32 and 33, I run West, on sectional correction line bet. secs. 29 and 32
	Over rough mountainous land draining SW., through dense undergrowth of sage and scattering service brush
	Gradually descend over NW. slope of ridge.
15.40	Point, falls NW., thence descend over SW. slope.
30.00	Enter dense undergrowth of service brush, bears NW. and SE.
40.00	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground for ½ sec. cor., with brass cap marked S 29 ½ S 32 1915 raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor.
40.40	Bottom of Pole canyon and stream, 3 lks. wide, 1 in. deep, 430 ft. below sec. cor., course S.75°W.
	Thence over gentle SE. slope in bottom of canyon.
41.62	Leave dense service brush, bears NE. and SW.
56.59	Begin abrupt ascent from canyon over rough, rocky SE. slope.
67.52	Quartzite ledge, 25 ft. high, bears NE. and SW.
68.53	Sharp rocky spur, 262 ft. above stream, projects S.
	Descend abruptly rough ledgy W. slope. Scattering mohogany timber bears with spur.
71.84	Ravine, 128 ft. below spur, course SE.
	Ascend abruptly SE. slope.
80.00	On steep SE. slope 159 ft. above ravine.

chains

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

T 10 S	R 5 W
S 30	S 29
S 31	S 32

1915

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

Land, rough broken mountains with steep slopes draining N. and S. into Pole canyon.

Soil, 4th. rate; gravelly and rocky of quartzite and volcanic formation mixed with some hard, dry, packed clay on rocky sub-soil.

Timber, some scattering mohogany.

Undergrowth, sage and service brush.

Some grass, good for grazing purposes.

Knowing that the line bet. secs. 31 and 32 will not close within limits on the S. bdy. of the Tp.,I run S.0°03'E., on a true line bet. secs. 31 and 32

Over rough mountainous land draining SW., through dense undergrowth of sage brush.

Descend abruptly over SE. slope mountain.

8.98 Ravine, 289 ft. below cor., drains SE.

Thence over rough, rocky E. slope.

15.38 Point falls E. Descend abruptly SE. slope.

31.62 Bottom of Pole canyon and stream, 3 lks. wide, 3 ins. deep, 346 ft. below point, course SW.

Dense aspen timber and service brush bear with stream.

Ascend abruplty NW. slope.

40.00 On steep NW. slope 110 ft. above canyon

Set an iron post, 3 ft. long, 1 in. in dia., 6 ins. in the ground and 20 ins. in a mound of stone for ¼ sec.

chains	
	cor., with brass cap marked
	S 31 $\frac{1}{4}$ | S 32
	1915
	raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.
	Note: On account of underlying rock I am unable to set post more than 6 ins. in the ground.
41.95	Spur, 30 ft. above $\frac{1}{4}$ sec. cor., projects SW.
	Descend abruptly over SW. slope.
48.00	Bottom of ravine and stream, 2 lks. wide, 1 in. deep, 109 ft. below spur, course W. about 5 chs., thence SW. Dense cottonwood timber and service brush along stream.
	Ascend abruptly over rough NW. slope.
55.00	Spur, 142 ft. above ravine, projects SW.
	Descend over SW. slope.
59.34	Ravine, 88 ft. below spur, drains N.80°W.
	Ascend abruptly over NW. slope.
65.00	Spur, 128 ft. above ravine, projects N.80°W.
	Gradually descend over SW. slope.
72.13	Head of ravine, drains NW.
	Ascend abruptly over NE. slope.
80.99	Intersect S. bdy. of the Tp. 86 lks. N.89°43' E. of the Standard cor. of secs. 31 and 32 heretofore described.
	At intersection, set an iron post, 3 ft. long, 2 ins. in dia., 12 ins. in the ground and 12 ins. in a mound of stone for closing cor. of secs. 31 and 32 , with brass cap marked
	T 10 S
	S 31 | S 32
	AP 86 CC R 5 W
	S 6 | S 5
	T 11 S
	1915

Subdivision of T.10 S.,R.5 W.

chains

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

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

As a closing cor. has been set upon this bdy. for secs. 5 and 6, T.11 S.,R.5 W., the old cor. of secs. 31 and 32 does not refer to any sec., I therefore deface same of its marks and leave stone standing as an angle point cor.

Land, rough broken mountains with general SW. exposure and drainage.

Soil, 4th. rate; generally rocky and mixed with some hard, dry clay on rocky and gravelly sub-soil.

Timber, some aspen and cottonwood in bottom of ravines.

Undergrowth, dense sage brush on mile with some service brush in bottoms of ravines.

Considerable grass, good for grazing purposes.

October 30,1915

November 1: At 7h.44m.a.m.l.m.t., I set off 39°55' on the lat. arc; 14°11'S., on the decl. arc; and determine a meridian with the solar at the cor. of secs. 29,30,31 and 32.

Knowing from previous retracements that this line will not intersect W. bdy. of the Tp. within limits at the cor. of secs. 25,30,31 and 36 and that a closing cor. will be necessary, I run

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

Over rough mountainous land draining SW., through dense undergrowth of sage brush.

Gradaully ascend over SE. slope.

15.50 Thence over series of quartzite ledges bears N. and S.

Subdivision of T.10 S.,R.5 W.

chains	
22.90	Top of rocky ridge, 579 ft. above sec. cor., bears N.30°E. and S.30°W.
	Descend abruptly over rough NW. slope.
40.00	On steep NW. slope 398 ft. below ridge
	Set an iron post, 3 ft. long, 1 in. in dia., 18 ins. in the ground and 8 ins. in a mound of stone for ¼ sec. cor., with brass cap marked
	S 30 / ¼ / S 31 / 1915
	raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor.
	Note: On account of underlying rock I am unable to set post more than 18 ins. in the ground.
	Continue descent along N. slope of mountain.
55.40	Enter dense young aspen thicket, bears N.30°W. and S.30°E.
56.40	Rock slide in center of aspen thicket, about 75 lks. wide.
57.40	Leave aspen thicket, bears N.30°W. and S.30°E.
65.42	Ascend abruptly over sharp ledgy point of spur.
68.12	Point of spur, 433 ft. below ¼ sec. cor., falls N.
	Descend abruptly over broken NW. slope.
76.52	Bottom of canyon and stream, 3 lks. wide, 2 ins. deep, 375 ft. below spur, course SW.
	Dense oak and willow brush and some aspen timber in bottom of canyon and bear with stream.
	Enter scattering cedar timber, bears NW. and SE.
	Ascend.
80.00	Set point.
	November 1,1915.
	November 4: By a backsight along my line bet. secs 30 and 31
	Thence I continue west from 80.00 chs. point.
80.50	Intersect W. bdy. of the Tp. 70 lks. N.0°10'E. of the cor. of secs. 25 and 36 heretofore described
	At intersection, Set an iron post, 3 ft. long, 2 ins. in

chains

dia., 20 ins. in the ground to solid rock and surrounded by a mound of stone for closing cor. of secs. 30 and 31, with brass cap marked

T 10 S
R 6 W | R 5 W
S 30
CC
S 25 | S 31
S 36
1915

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

Land, rough broken mountains with steep SE. and NW. slopes of ridges into canyons draining SW.

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

Timber, some aspen on 2 chs. Scattering cedar and pinon on W. 3.98 chs.

Undergrowth, sage brush,

Some grass, good for grazing.

November 4, 1915.

Isaac Hayes

U. S. Transitman.

November 1: At 7h. 44m. a.m.l.m.t., I set off 39°55' on the lat. arc; 14°11'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 rough mountainous land draining SW., through dense undergrowth of sage and scattering service brush.

Ascend abruptly over SE. slope of ridge.

Subdivision of T.10 S., R.5 W.

chains	
8.26	Rocky point, 178 ft. above sec. cor., falls SE.
	Gradually descend along nearly E. slope.
16.59	Gully, 16 ft. below point, course SE.
	Ascend abruptly S. slope.
22.64	Enter dense choke cherry undergrowth, bears E. and W.
24.59	Leave dense choke cherry undergrowth, bears E. and W.
26.58	Top of high rocky ridge, 256 ft. above gully, bears E. and W.
	Gradually descend over nearly W. slope of high ridge.
40.00	On W. slope of ridge, 170 ft. below top.
	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 30 ¼ | S 29
	1915
	raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.
49.94	Base of descent in head of ravine, 70 ft. below ¼ sec. cor., drains W. A low saddle in ridge bears E. about 4 chs.
	Ascend over SE. slope of ridge.
60.46	Enter scattering mohogany timber on rocky point of ridge, bears E. and W.
61.75	Top of rocky point on ridge, 82 ft. above head of ravine, bears N.20°W. and S.20°E. Leave mohogany timber, bears E. and W.
	Descend over E. slope
71.49	Swale, 40 ft. below top of ridge, course E.
	Ascend.
72.60	Point falls, S.80°E. Descend.
78.48	Swale, 46 ft. below point, drains S.75°E.
	Ascend onto main top of ridge.
80.00	On SE. slope near top of ridge.

Subdivision of T.10 S.,R.5 W.

chains

Set an iron post, 3 ft. long, 2 ins. in dia., 12 ins. in the ground and 12 ins. in a mound of stone for cor. of secs. 19,20,29 and 30, with brass cap marked

T 10 S	R 5 W
S 19	S 20
S 30	S 29

1915

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

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

Land, rough mountainous with steep slopes of ridges into canyons draining NE. and SW.

Soil,4th. rate; rocky of quartz formation with some shallow sandy loam on clay and rocky sub-soil.

No timber.

Undergrowth, sage brush with some choke cherry and mohogany.

Considerable grass, good for grazing purposes.

November 1: At this sec. cor., I set off 14° 15½'S., on the decl. arc; and at 11h. 44m.a.m.l.m.t., observe the sun on the meridian; the resulting lat. is 39° 56'.

East, on a random line bet. secs. 20 and 29

40.00 Set temp. ½ sec. cor.

79.96 Intersect N. and S. line 16 lks. S. of the cor. of secs. 20,21,28 and 29

Thence

S.89°53'W., on a true line bet. secs. 20 and 29

Over rough mountainous land through dense undergrowth of sage and scattering service brush.

Ascend abruptly over SE. slope of ridge.

5.49 Top of ridge spur, 145 ft. above sec. cor., bears NE.

Subdivision of T.10 S.,R.5 W.

chains	
	and SW.
	Descend over nearly N. slope across head of ravine.
14.35	Top of spur, 54 ft. below ridge, projects N.60°W.
	Descend abruptly over W. slope.
31.72	Enter dense choke cherry undergrowth, bears E. and W.
35.33	Bottom of ravine and wash, 20 lks. wide, 10 ft. deep, 494 ft. below spur, course NW. Leave choke cherry undergrowth, bears NW, and SE.
	Ascend.
39.98	On E. slope of spur, 106 ft. above ravine.
	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 20 / ¼ / S 29 / 1915 raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor.
41.14	Spur, 18 ft. above ¼ sec. cor., projects N.10°E.
	Descend over NW. slope.
46.96	Enter aspen thicket with dense choke cherry undergrowth bears N. and S.
49.19	Bottom of canyon and stream, 2 lks. wide, 1 in. deep, 152 ft. below spur, course N.30°E.
	Leave aspen timber and choke cherry undergrowth, bears N.30°E. and S.30°W.
	Ascend abruptly
63.86	Spur, 326 ft. above canyon, projects SE.
	Thence gradually ascend along nearly S. slope.
70.23	Small gully, 68 ft. above spur, drains SE.
	Ascend abruptly over E. slope, 232 ft. to
79.96	The cor. of secs. 19,20,29 and 30.
	Land, rough mountainous with steep slopesof ridges and spurs into ravines draining NE.
	Soil, 4th. rate; rocky and disintegrated shales of

Subdivision of T.10 S.,R.5 W.

chains	
	quartzite formation on gravelly and rocky sub-soil.
	Timber, some aspen in bottom of canyon.
	Undergrowth, sage brush and scattering patches of service and choke cherry.
	Considerable grass, good for grazing purposes.
	Knowing that closing cors. will be necessary upon the W. bdy. of the Tp., I run
	West, on a true line bet. secs. 19 and 30
	Over rough mountainous land, through dense undergrowth of sage brush and scattering patches of service berry.
	Ascend over E. slope of ridge.
2.27	Ridge, 18 ft. above sec. cor., bears N.30°E. and S.30°W.
	Descend over W. slope,
16.12	Ravine, 208 ft. below ridge, drains S.10°W.
	Gradually ascend.
34.80	Top of low ridge, 94 ft. above ravine, bears N. and S.
	Thence over rolling SW. slope gradually descending.
40.00	26 ft. below ridge on SW. slope.
	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in a mound of stone for $\frac{1}{4}$ sec. cor., with brass cap marked
	S 19 / $\frac{1}{4}$ / S 30 / 1915
	raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor.
	Note: On account of underlying rock, I am unable to set post in the ground.
55.56	Ravine, 170 ft. below $\frac{1}{4}$ sec. cor., drains S.
	Ascend abruptly over rocky E. slope.
73.71	Top of high ridge, 458 ft. above ravine, bears NE. and SW.
	Descend over W. slope.

Subdivision of T.10 S.,R.5 W.

chains

80.00 Set temp. point.

November 1,1915

November 4: By a backsight along my line bet. secs. 19 and 30, I continue

West

80.24 Intersect W. bdy. of the Tp. 62 lks. N.0°10'E., of the cor. of secs. 24 and 25, heretofore described.

At intersection, Set an iron post, 3 ft. long, 2 ins. in dia14 ins. in the ground and 10 ins. in a mound of stone for closing cor. of secs. 19 and 30, with brass cap marked

T 10 S.
R 6 W | R 5 W
S 19
CC
S 24 | S 30
S 25
1915

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

Note: On account of underlying rock I am unable to set post more than 14 ins. in the ground.

Cor. stands on W. slope of ridge, 96 ft. below top.

Land, mountainous with E. and W. slopes of ridges into ravinesdraining SW.

Soil, 4th. rate; rocky and loose shale rock mixed with brown clay on rocky and stony sub-soil.

No timber.

Undergrowth, sage and scattering service brush.

Some grass, good for grazing purposes.

November 4,1915

Howard D. Miller

U. S. Surveyor.

Subdivision of T.10 S.,R.5 W.

CHAINS	
	November 2: At 8h. 14m.a.m.l.m.t., I set off 39°56' on the lat. arc; 14°31'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, through dense undergrowth of sage and scattering service brush.
	Gradually ascend along E. slope of ridge.
2.50	Top of ridge and divide, bears NW. and SW., spur from ridge, projects E. at this point.
	Gradually descend over NW. slope.
15.48	Head of ravine, 150 ft. below top of ridge, drains NE.
	Ascend abruptly over SE. slope.
29.08	Top of divide between Rush and Boulder valleys, 292 ft. above head of ravine, bears NE. and W.
	Descend abruptly.
40.00	On steep slope, 360 ft. below divide.
	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 19 ½ | S 20
	1915
	raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.
	From this cor. a high peak on divide bears E. about 15 chs.
	Continue steep descent.
44.94	Head of ravine, 160 ft. below ¼ sec. cor., drains NW.
	Thence over broken W. slope of mountain on E. side of ravine. Gradually descend.
63.82	Spur, 332 ft. below ravine, projects NW.
	Descend abruptly.
67.22	Mouth of ravine, 95 ft. below spur, drains NW.

Subdivision of T.10 S., R.5 W.

chains

Gradually ascend along broken W. slope.

80.00 70 ft. above ravine on W. slope.

Set an iron post, 3 ft. long, 2 ins. in dia., 12 ins. in the ground and 12 ins. in a mound of stone for cor. of secs. 17,18,19 and 20, with brass cap marked

T 10 S	R 5 W
S 18	S 17
S 19	S 20

1915

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

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

Land, rough mountainous with general NE. exposure and drainage.

Soil, 4th. rate; rocky of quartz formation and mixed with gravel and loose shales and brown clay on gravelly and rocky sub-soil.

No timber.

Undergrowth, sage and scattering service brush.

Some grass, good for grazing purposes.

N.89°53'E., on a random line bet. secs. 17 and 20

40.00 Set temp. ¼ sec. cor.

80.20 Intersect N. and S. line 5 lks. N. of the cor. of secs. 16,17,20 and 21

Thence

S.89°55'W., on a true line bet. secs. 17 and 20

Over rough mountainous land draining NE., through undergrowth of sage and scattering service brush.

Gradually ascend over NE. slope of ridge spur.

20.52 Ridge, 167 ft. above sec. cor., bears NE. and SW. Divide between Rush and Little Valleys.

Subdivision of T.10 S., R.5 W.

chains	
	Descend abruptly over W. slope.
28.85	Head of ravine, 130 ft. below ridge, drains N.
	Ascend abruptly 47 ft. to
30.36	Ridge, bears N. and S.
	Descend abruptly 170 ft. to
40.10	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground for ½ sec. cor., with brass cap marked S 17 ¼ S 20 1915 raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor.
	Continue to descend.
41.88	Bottom of large ravine, 20 ft. below ½ sec. cor., drains NE. Dense deer and service brush in ravine.
	Ascend abruptly
49.32	Spur, 132 ft. above ravine, projects NE
	Descend abruptly over NW. slope.
54.37	Ravine, 100 ft. below spur, drains N. for about 5 chs. thence NE.
	Ascend abruptly over E. slope.
67.06	Ridge, 289 ft. above ravine, bears N. and S.
	Descend abruptly rough, rocky W. slope, 341 ft. to
80.20	The cor. of secs. 17,18,19 and 20.
	Land, rough broken mountains with steep E. and W. slopes of ridges into ravines draining N. and NE.
	Soil, 4th. rate; rocky of quartzite formation and mixed with gravel and some hard, dry brown clay on gravelly and rocky sub-soil.
	No timber.
	Undergrowth, sage and scattering service brush. Some deer brush found in bottoms of ravines.
	Considerable grass good for grazing purposes.

Subdivision of T.10 S.,R.5 W.

CHAINS	
	Knowing that closing cors. will be necessary upon the W. bdy. of the Tp., I run
	West, on a true line bet. secs. 18 and 19
	Over rough mountainous land through undergrowth of sage scattering service and deer brush.
	Descend abruptly over W. slope.
3.91	Ravine, 121 ft. below sec. cor., stream in same 2 lks. wide, 1 in. deep, course N.
	Ascend abruptly over rough, rocky E. slope.
17.40	Spur, 337 ft. above ravine, projects NE.
	Descend
20.00	Head of ravine, 18 ft. below spur, drains NE.
	Ascend abruptly over NE. slope.
27.90	Rocky point of spur, 152 ft. above ravine, falls NW.
	Descend abruptly over rough, rocky NW. slope over broken quartzite ledges, bears NE. and SW.
40.00	Point for cor. falls in scattering grove of young aspen timber and dense service brush, 353 ft. below spur.
	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 18 / ¼ / S 19 / 1915
	raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor.
	Note: No suitable trees available for bearing trees.
	November 2: The sky is overcast at noon, observations for latitude are impossible.
	Gradually descend through young aspen timber and dense undergrowth
40.60	Small stream, 1 lk. wide, ½ in. deep, course N.
41.80	Leave aspen timber, bears N. and S.
45.87	Small ravine and stream, 1 lk. wide, ½ in. deep, 45 ft. below ¼ sec. cor., drains N.

Subdivision of T.10 S., R.5 W.

chains	
	Ascend.
48.70	Spur, 24 ft. above ¼ sec. cor., projects N.
	Gradually descend over NW. slope.
49.50	Enter dense scrub aspen timber and exceptionally dense service brush, bears N. and S.
57.56	Road in Benion canyon, from Vernon, Utah to mine, bears NE. and SW.
57.96	Bottom of Benion canyon and stream, 3 lks. wide, 2 ins. deep,, 50 ft. below spur, course NE.
58.46	Leave aspen timber and dense service brush, bears NE. and SW.
	Ascend abruptly over broken quartzite ledges.
64.00	Thence over rough, rocky S. slope on N. side of canyon.
67.20	Point of spur, 110 ft. above canyon, falls S.
	Descend abruptly into canyon.
68.54	Bottom of canyon and dry wash, 27 ft. below point, course SE. Water heads in canyon about 1 ch. down wash.
	Gradually ascend.
69.55	Same road, bears NW. and SE.
	Ascend abruptly over rough, rocky NE. slope of canyon.
79.00	Set.point.

November 2,1915.

November 4: By a backsight along my line bet. secs. 18 and 19, I continue

West

79.88 Intersect W. bdy. of the tp. 84 lks. N.0°10'E. of the cor. of secs. 13 and 24, heretofore described

At intersection, Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in a mound of stone and earth for closing cor. of secs. 18 and 19, with brass cap marked

T 10 S

R 6 W	R 5 W
	S 18
CC	
S 13	S 19
S 24	

1915

chains	
	raise a mound of stone, 2 ft. base, 1½ ft. high, E. of cor.
	Note: On account of underlying rock I am unable to set post in the ground.
	Land, rough, broken mountains with steep slopesof ridges and spurs into ravinesdraining NE. and N.
	Soil, 4th. rate; rocky of quartzite formation and mixed with loose shale rock and brown clay on hard clay and rock sub-soil.
	Timber, scattering patchesof aspen.
	Undergrowth, dense sage, service and deer brush. Some grass, good for grazing purposes.
	November 4,1915.
	November 3: At 7h. 44m.a.m.l.m.t., I set off 39°57' on the lat. arc; 14°49'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 undergrowth of sage and scattering service brush.
	Gradually ascend along W. slope of mountain.
4.50	Top of ascent, descend abruptly over NW. slope into ravine.
8.19	Ravine, 63 ft. below sec. cor., course SW.
	Ascend abruptly over SW. slope.
14.62	Spur, 72 ft. above ravine, projects W.
	Descend abruptly over NW. slope.
20.68	Ravine, 131 ft. below spur, course NW.
	Ascend abruptly over rough, rocky SW. slope.
24.22	Volcanic, ledge, 15 ft. high, bears E. and W.

Subdivision of T.10 S., R.5 W.

chains	
	Enter dense cedar timber, bears E. and W.
29.86	Spur, 171 ft. above ravine, projects W. Leave cedar timber, bears NE. and SW.
	Descend abruptly along rocky NW. slope.
40.00	232 ft. below spur,
	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 18 ½ | S 17 1915
	raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.
	Continue descent
47.62	Enter dense willow undergrowth, bears E. and W.
54.51	Leave dense willows, enter dense aspen timber and service brush, bears NE. and SW.
57.83	Bottom of Benion canyon and stream, 4 lks. wide, 3 ins. deep, 294 ft. below ¼ sec. cor., course NE.
	Ascend SE. slope.
58.83	Leave aspen timber and dense service brush, bears NE. and SW.
62.54	Thence gradually ascend over rolling bench land.
71.14	Road from Vernon, Utah to mine, bears NE. and SW.
80.00	41 ft. above canyon,
	Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground for cor. of secs. 7,8,17 and 18, with brass cap marked
	T 10 S | R 5 W 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 with general E. and W. slopes of ridges

chains	
	into canyon draining N.
	Soil, 4th. rate; rocky and gravelly mixed with some light , dry sandy loam on gravelly and rocky sub-soil.
	Timber, some aspen in bottom of canyon.
	Undergrowth, sage, service and deer brush. Considerable grass, good for grazing purposes.
	N.89°55'E., on a random line bet. secs. 8 and 17
40.00	Set temp. ¼ sec. cor.
80.09	Intersect N. and S. line, 5 lks. N. of the cor. of secs. 8,9,16 and 17
	Thence
	S.89°57'W., on a true line bet. secs. 8 and 17
	Gradually ascend over rolling mountainous land through dense undergrowth of sage and scattering service brush.
22.73	Spur, 126 ft. above sec. cor., projects N.
	Gradually descend over NW. slope.
40.04½	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 8 / ¼ / S 17 / 1915 raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor.
40.97	Swale, 97 ft. below spur, drains N.
	Ascend 43 ft. to
44.77	Spur, projects NE.
	Descend over broken NW. slope.
57.39	Enter aspen timber and dense service brush, bears NE. and SW.
58.70	Benion Cr. in ravine, 4 lks. wide, 4 ins. deep, 88 ft.

Subdivision of T.10 S., R.5 W.

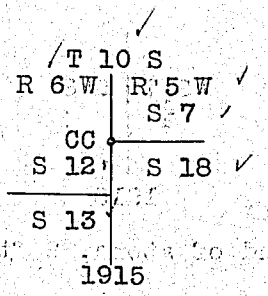
chains	
	below spur, course NE.
	Ascend.
61.67	Leave aspen timber and dense service brush, bears NE. & SW.
67.85	Road, Vernon, Utah to mine, bears N.30°E. and S.30°W.
	Gradually ascend over E. slope 123 ft. to
80.09	The cor. of secs. 7,8,17 and 18.
	Land, rolling and broken mountains with general N. exposure and drainage.
	Soil, 3rd. rate, sandy and gravelly and mixed with considerable quartzite rocks on hard gravel and rocky sub-soil.
	Timber, some aspen on creek bottom.
	Undergrowth, sage and scattering service. Considerable grass, good for grazing purposes.

	Knowing that closing cors. are necessary upon the W. bdy. of the Tp., I run
	West, on a true line bet. secs. 7 and 18
	Over mountainous land through dense undergrowth of sage and scattering service brush.
	Gradually ascend over nearly E. slope.
19.39	Spur, 167 ft. above sec. cor., projects NE.
	Descend abruptly over NW. slope.
26.00	Bottom of ravine and stream, 2 lks. wide, 2 ins. deep, 113 ft. below sec. cor., course NE. Dense aspen timber and service brush bear with stream.
	Ascend abruptly SE. slope.
33.97	Ridge, 45 ft. above ravine, bears NE. and SW.
	Gradually descend.
38.97	Bottom of gully and wash, 15 lks. wide, 5 ft. deep, course NE.
	Gradually ascend SE. slope.

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 7 ¼ S 18 1915 raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor.
46.43	Spur, 96 ft. above ¼ sec. cor., projects NE.
	Gradually descend.
49.53	Ravine, drains NE.
	Ascend abruptly over SE. slope.
54.32	Thence continue ascent over NE. slope.
69.10	Head of ravine, 220 ft. above last ravine, drains NE.
	Continue ascent.
73.60	Top of ridge, 94 ft. above ravine, bears N. and S.
	Descend abruptly over NW. slope.
77.90	Enter dense service and choke cherry undergrowth, bears N. and S.
79.00	Set point.
	November 3: At this station, I set off 14°54'S., on the decl. arc; and at 11h.44m.a.m.l.m.t., observe the sun on the meridian; the resulting lat. is 39°57½'.
	Nov.3,1915.
	Nov.4: By a backsight along my line bet. secs. 7 and 18, I continue.
	West.
79.69	140 ft. below top of ridge.
	Intersect W. bdy. of the Tp. 98 lks. N.0°10'E., of the cor. of secs. 12 and 13 heretofore described.
	At intersection, Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground for closing cor. of secs. 7 and 18, with brass cap marked

Subdivision of T.10 S., R.5 W.

chains



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

Land, broken mountains with a general NE. exposure and drainage.

Soil, 3rd. rate; sandy and gravelly mixed with rock on gravelly and rocky sub-soil.

No timber.

Undergrowth, sage, service and choke cherry brush.

Considerable grass, good for grazing purposes.

November 4,1915

Isaac Hayes

U. S. Transitman

November 4 : 7:30 a.m., the sky is overcast. By a backsight along the line bet. secs. 17 and 18, I determine a meridian with the instrument.

Thence I run

N. 0°03' W., bet. secs. 7 and 8

Over mountainous land through dense undengrowth of sage and scattering service brush.

Ascend over broken SE. slope.

21.00 Spur, 190 ft. above sec. cor., projects NE.

Descend over nearly N. slope 295 ft. to

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

Subdivision of T.10 S., R.5 W.

chains

S 7 | S 8
$\frac{1}{4}$

1915

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

49.13 Small ravine, 15 ft. below $\frac{1}{4}$ sec. cor., drains NW.

Thence gradually descend over rolling W. slope.

59.31 Ravine, 240 ft. below $\frac{1}{4}$ sec. cor., drains N.30°E.

Ascend abruptly.

69.60 Ridge, 60 ft. above ravine, bears NE. and SW.

Descend gradually over NE. slope, 70 ft. to

80.00 Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground for cor. of secs. 5,6,7 and 8, with brass cap marked

T 10 S | R 5 W
S 6 | S 5
S 7 | S 8

1915

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

Land, high rolling mountains near S. end of Rush valley, general NE. exposure and drainage.

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

No timber.

Undergrowth, sage and scattering patches of service brush.

Considerable grass, good for grazing purposes.

November 3: For observation for this date see line bet. secs. 16 and 17.

From the cor. of secs. 4,5,8 and 9, I run S.89°57'W., on a temporary line bet.secs. 5 and 8

Subdivision of T.10 S., R.5 W.

chains	
40.00	Set temp. ¼ sec. cor.
80.00	Set point.
	November 3, 1915.
	November 4: From temp. point 80.00 chs. W. of cor. of secs. 4,5,8 and 9, I continue S.89°57'W.
80.06	Intersect N. and S. line 9 lks. S. of the cor. of secs. 5,6,7 and 8. The bearing of this mile is N.89°59'W. and the distance is 80.06 chs., Thence from cor. of secs. 4,5,8 and 9 N.89°59'W., on a true line bet. secs. 5 and 8
	Over rolling mountainous land facing and draining N., through dense undergrowth of sage brush and a few scattering young cedar trees.
9.89	Wash, 10 lks. wide , 2 ft. deep, course NE.
31.68	Wash in bottom of ravine, 5 lks. wide, 3 ft. deep, course N.
37.63	Stream, diverted from ravine at 31.68 chs., 4 lks. wide, 3½ ins. deep, course N.
38.08	Wagon road, Vernon, Utah to mine, bears N. and S.
40.03	Set an iron post, 3 ft. long, 1 in. in dia., 12 ins. in the ground and 14 ins. in a mound of stone for ½ sec. cor., with brass cap marked S 5 / ¼ / S 8 / 1915 raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor.
	Note: On account of underlying rock, I am unable to set post more than 12 ins. in the ground.
62.08	Bottom of ravine and wash, 15 lks. wide, 2½ ft. deep, course NE.
	Ascend over SE. slope.
70.20	Low ridge, 100 ft. above ravine, bears NE. and SW.

Subdivision of T.10 S.,R.5 W.

chains	
	Thence over nearly N. slope.
77.10	Ascend over NE. slope 35 ft. to
80.06	The cor. of secs. 5,6,7 and 8
	Land, rolling mountainous general N. exposure and drainage being situated at the S. end of Rush valley.
	Soil,3rd. rate; shallow sandy loam mixed with gravel and rocks on hard, dry sand and rock sub-soil.
	Timber, some scattering young cedar.
	Undergrowth, sage brush. Considerable grass, good for garzing purposes.
	Knowing that closing cors. are necessary upon the W. bdy. of the Tp., I run
	West, on a true line bet. secs. 6 and 7
	Over rolling mountainous land draining N., at S. end of Rush valley, through dense undergrowth of sage brush.
	Ascend over NE. slope 60 ft. to
6.42	Spur, projects N.
	Gradually descend over NW. slope
26.82	South fork of Dutch creek wash, 20 lks. wide, 5 ft. deep, course NE.
34.30	North fork of Dutch creek wash, 20 lks. wide, 5 ft. deep, course NE.
	Ascend onto low bench.
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 S 6 / $\frac{1}{4}$ / S 7 / 1915 raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor.
44.44	Stream, 2 lks. wide, 3 to 4 ins. deep, water diverted

chains

from N. and S. forks of Dutch creeks, course NE.

62.00 Ravine and wash, 15 lks. wide, 4 ft. deep, course NE.

Ascend over SE. slope ridge.

79.26 On SE. slope 580 ft. above N. fork Dutch creek wash,

Intersect W. bdy. of the Tp., 90 lks. N.0°10'E., off the cor. of secs. 1 and 12 heretofore described

At intersection, Set an iron post, 3 ft. long, 2 ins. in dia., 6 ins. in the ground and 18 ins. in a mound of stone for closing cor. of secs. 6 and 7, with brass cap marked

T 10 S
R 6 W | R 5 W
S 6
CC
S 1 | S 7
S 12
1915

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

Note: On account of underlying rock I am unable to set post more than 6 ins. in the ground.

Land, rolling benches and mountainous with genarl N. exposure and drainage.

Soil, 3rd. rate; light, dry sahllow sandy loam mixed with gravel and rocks on sandy loam and rocky sub-soil.

No timber.

Undergrowth, sage brush. Some grass, good for grazing purposes.

Knowing that closing cors are necessary upon the N. bdy. of the Tp., I run

N.0°03'W., on a true line bet. secs. 5 and 6

Over rolling mountainous bench land at S. end of Rush valley, through dense undergrowth of sage brush.

Gradually descend over nearly N. slope.

Subdivision of T.10 S., R.5 W.

chains	
28.44	Dutch creek wash, 30 lks. wide, 2 ft. deep, course NE.
36.22	Intersect N. bdy. of the Tp. 2.20 chs. S.89°56'W., of the cor. of secs. 31 and 32, heretofore described
	At intersection, Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground for closing cor. of secs. 5 and 6, with brass cap marked

T 9 S

S 31 | S 32

R 5 W CC

S 6 | S 5

T 10 S

1915

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

Land, rolling mountainous with general N. exposure and drain.

Soil, 3 rd. rate; light, dry, sandy loam mixed with gravel and rocks on sandy, gravelly and rocky sub-soil.

No timber.

Undergrowth, sage brush with some grass, good for grazing purposes.

November 4: Survey completed before noon, observation for latitude not taken.

November 4, 1915.

Howard W. Miller

U. S. Surveyor.

Boundaries of T.10 S.,R.5 W.

Latitudes, departures and closing errors.

Lines designated	True bearings	Distances	Latitudes N	Latitudes S.	Departures E	Departures W
W.bdy.T10SR5W.	S.0°10'W.	357.43		357.43		1.03
"	S.0°04'W.	39.98		39.98		.05
"	S.0°06'W.	40.17		40.17		.07
S.bdy.T10SR5W	N.89°48'E.	40.12	.14		40.12	
"	S.89°45'E.	39.82		.17	39.82	
"	N.89°43'E.	40.50	.20		40.50	
"	S.89°49'E.	39.98		.13	39.98	
"	N.89°41'E.	40.07	.22		40.07	
"	N.89°30'E.	40.18	.35		40.18	
Bet.secs.33&34	North	80.10	80.10			
Bet.secs.27&28	N.0°01'W.	40.17	40.17			.01
"	N.0°06'W.	40.30	40.30			.07
Bet.secs 21&22	N.0°02'W.	39.97	39.97			.02
"	N.0°06'E.	39.79	39.79		.07	
Bet.secs.15&16	N.0°02'E.	40.08	40.08		.02	
"	N.0°02'E.	40.12	40.12		.02	
Bet.secs.9&10	N.0°02'W	40.16	40.16			.02
"	N.0°04'W	40.11	40.11			.05
Bet.secs.3&10	N.89°44'E.	40.27	.19		40.27	
"	N.89°38'E.	40.20	.26		40.20	
Bet.secs. 2&11	N.89°43'E.	80.20	.40		80.20	
Bet. secs 1&12	N.89°54'E.	40.44	.07		40.44	
"	S.89°31'E.	39.79		.34	39.79	
E,bdy.T10SR5W	North	34.82	34.82			
N.bdy.T10SR5W	West	279.04				279.04
"	N.89°53'W.	40.13	.08			40.13
"	S. 89°57'W.	40.12		.04		40.12
"	S.89°48'W.	40.10		.14		40.10
"	S.89°56'W.	40.17		.05		40.17
"	N.89°51'W.	41.23	.11			41.23
Convergency						.35
			437.64	438.45	481.68	482.46
				437.64		
	Error in latitude	-------		.81		481.68
		Error in departure-----				.78

General Description

This township with the exception of small parcels of gently rolling land in secs. 2,3,4,5,6,8,9 and 16 is rough and mountainous being situated in the south end of Rush valley, the highest portion or water shed which divides Rush valley to the north and a large desert to the south extends through secs. 28,29,30 and 31 in an easterly and westerly direction. From this divide other high ridge spurs project in northern and southern directions the largest of which runs through secs. 9,16,17 and 20 and divides Rush valley proper and Little valley. The general drainage is north and south from this divide and the country has a north and south exposure. The soil of the mountainous portion is generally rocky of quartz and volcanic formation, with this rock is some light, dry, brown and blue clay; the sub-soil is rocky. The soil of the rolling and gently rolling lands which are situated in large ravines and wide draws is light, brown, dry sandy loam mixed with gravel on hard, dry sand and gravel sub-soil. These lands are suitable for dryfarming.

Some scattering scrub cedar and pinon timber is found on the entire township. Dense groves of aspen are found on the highest portions and in the bottoms of large ravines and on creeks.

Sage brush and scattering patches of service and deer brush are found on the entire township and in the ravines dense choke cherry is found.

There are several streams of good water which supplies water for the township and is now used for irrigation purposes in Rush valley to the north.

Considerable prospecting has been done in the township mines being situated in secs. 21,28 and 29. Indications of silver and lead are visible in the mine workings and other indications of mineral are found in the mountains.

General Description.

Enoch Pearson's homestead is situated in fractional sec. 4. He has built a small cabin and has about 30 acres under cultivation.

About 80 acres in the NE.$\frac{1}{4}$ of sec. 16 and 40 acres in the SE.$\frac{1}{4}$ of sec. 9 have been cleared and the land is ready for cultivation. Claimants name unknown.

There are no other settlers in this township.

Howard W. Miller

U. S. Surveyor

Isaac Hayes

U. S. Transitman.

Volume
#
R0417

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4—680

BOOK A-417

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 _____

_____

_____

_____

_____

_____

_____

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—2704

FINAL OATH OF UNITED STATES SURVEYOR.

I, Isaac Hayes, U.S.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 25th day of June, 1915, 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 retracement of the south boundary; retracement and resurvey of the west boundary; retracement, resurvey and survey of the subdivision of T.10 S.,R.5 W.

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.

Isaac Hayes
U. S. Transitman ~~U.S.Surveyor~~.

Subscribed by said Isaac Hayes, and sworn to before me this 15th day of May, 1916

Truman S. Broadbent
Clerk of Court

SEAL

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake city, Utah, June 27, 1916

The foregoing field notes of the ~~xxxxxxx~~ retracement and resurvey 2nd Standard Parallel S. through R. 5 W.,retracement and resurvey of 1st Guide Merid W. through T. 10 S., retracement, resurvey and survey of subdivision of T. 10 S. R. 5 W. S.L.B.& M.,Utah,

executed by Howard W. Miller and Isaac Hayes under ~~his~~ their special instructions dated June 25, 1915, having been critically examined, and the necessary corrections and explanations made, the said field notes, and the surveys they describe, are hereby approved.

A. C. Thoresen
U. S. Surveyor General.

I certify that the foregoing transcript of the field notes of the above-described surveys in T.10 S. R.5 W.S.L.B.& M.,Utah, has been correctly copied from the original notes on file in this office.

6—2761

U. S. Surveyor General.

4—680

BOOK A-417

CERTIFICATE OF ASSISTANTS.

We, the undersigned, hereby certify upon honor that we assisted, to the best of our skill and ability, Howard W. Miller, U.S. Surveyor & Isaac Hayes, U.S. transitman ~~U.S. Surveyor~~, during the periods and in the capacities stated opposite our several signatures, in surveying all those parts or portions of retracement, of the south boundary; retracement, and resurvey of the west boundary; retracement resurvey and survey of subdivision in T. 10 S. R. 5 W. o

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.	
Rufus W. Riley	October 29, 1915	Dec. 2, 1915	chainman
Carl Ray	"	"	"
William Fredricksen	"	"	"
Edward Jones	"	"	"
Edward Oliver	"	"	flagman
Lalatie H. Perry	"	"	"
James Tyrrison	"	"	cornerman
Harry Fox	"	"	"

Subscribed and certified to before me on the dates of the final service as shown above.

Howard W. Miller,
U. S. Surveyor.

6—2764

FINAL OATH OF UNITED STATES SURVEYOR.

I, Howard W. Miller, 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 [illegible] day of April, 1915, I have well, faithfully, and truly in my own proper person, and in strict conformity with said instructions, the Manual of Surveyin Instructions, and the laws of the United States, surveyed all those parts or portions of retracement of the south boundary; retracement, and resurvey of the west boundary; retracement resurvey and survey of subdivision in T. 10 S. R. 5 W.

of the Salt Lake Base and Meridian, in the State of Utah, which are represented i the foregoing field notes as having been executed by me, and under my direction; and I do furthe solemnly swear that all the corners of said survey have been established and perpetuated in strict accord ance with the Manual of Surveying Instructions, and the special written instructions of the U. S. Surveyo General for Utah and in the specific manner described in the field notes, and tha the foregoing are the original field notes of such survey.

Howard W. Miller
U. S. Surveyor.

Subscribed by said Howard W. Miller, and sworn to before me this 4th day of February, 1916

SEAL

N. C. Thorsen
U. S. Surveyor General

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah, June 27, 1916

The foregoing field notes of the ~~xxxxxxx~~ retracement and resurvey 2nd Standard Parallel S. through R. 5 W., retracement and resurvey of 1st Guide Mer W., through T. 10 S., retracement, resurvey and survey of subdivision T. 10 S. R. 5 W., S.L.B.& M., Utah,

executed by Howard W. Miller and Isaac Hayes, under ~~his~~ their special instructions dated June 25, 1915, having been critically examined, and the necessary corrections and explanations made, the said field notes, and the surveys they describe, are hereby approved.

N. C. Thorsen
U. S. Surveyor General.

I certify that the foregoing transcript of the field notes of the above-described surveys in T. 10 S. R. 5 W., S.L.B.& M. Utah, has been correctly copied from the original notes on file in this office.

U. S. Surveyor General.

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4—070

F
BOOK A-417

FIELD NOTES

OF THE ~~SURVEY OF THE~~

RETRACEMENT AND RESURVEY OF THE SOUTH AND WEST BOUNDARIES AND SUBDIVISION; RETRACEMENT OF THE NORTH BOUNDARY AND SURVEY OF THE SUBDIVISION OF T.8 S., R.6 W.

Of the SALT LAKE BASE AND *Meridian,*

In the State of UTAH

EXECUTED BY

Howard W. Miller

&

Isaac Hayes

In the capacity of U. S. Surveyors, under instructions dated June 25 *, 1915,*

issued by the United States Surveyor General to govern surveys included in

Group No. 37 *, which were approved by the Commissioner of the General Land*

Office, July 21 *, 1915*

Survey commenced November 6 *, 1915*

Survey completed November 30 *, 1915*

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BOOK A-417

INDEX DIAGRAM.

Township 8 South, Range 6 West

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

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Retracement and resurvey south boundary of T.8 S.,R.6 W.

chains

Survey commenced November 6,1915 and executed with Young and sons light mountain transits Nos. 8297 and 8582, with Smiths solar attachment. The horizontal limbs are provided with two double verniers, placed opposite to each other and reading to single minutes of arc, which is also the least count of the verniers of the latitude and declination arcs.

The instruments were approved for use in this survey by The Assistant Supervisor of Surveys for Utah.

I examine the adjustments of the transits and find no errors.

Work was abandoned on this township Nov. 9; the sky being overcast on the nights of Nov. 6,7 and 8 prevented observations on Pol. Work was resumed again Nov.22 but cloudy skies prevented testing the solar apparatus until Nov. 25 at which time I test the instruments as follows:

November 25: At my camp which is situated in sec. 13, T.8 S.,R.7 W., near the cor. of secs. 13,18,19 and 24 on the E. bdy. of the Tp., approximate lat. 40°07'N., longitude 112° 34'W., at 9h. a.m. apparent time, I set off 40°07' on the lat. arc; 20°36'S., on the decl. arc; and determine a meridian with the solar of transit No. 8297 and note that a limb on a tree about 25 chs. dist. bears north.

With transit No.8582 set about 10 ft. south of transit No. 8297, at 9h.05m.a.m. apparent time I set off 40°07' on the lat. arc; 20°36'S., on the decl. arc; and determine a meridian with the solar and find that the limb on the tree bears N.0°01'W.

With both instruments in the meridian determined with transit No,8297, I set off 20°38'S., on the decl. arcs; and at apparent noon obs. the sun on the meridian, the resulting lat. by both transits is 40°07'.

chains

At 2p.m. apparent time I set off 40°07' on the lat. arc; 20°39'S., on the decl. arc; and determine a meridian with transit No. 8297. This mer. coincides with the a.m. meridian.

At 2h.05m.p.m. apparent time I set off 40°07' on the lat. arc; 20°39'S., on the decl. arc; and determine a mer. with transit No.8582 and find that the tree bears North.

At 5h. 03m.p.m. by my watch which is 30 minutes fast of l.m.t., I make an hour angle obsn. on Pol. as follows:

Watch time of obsn.	5h.03m.p.m.
Reduced to L.M.T. long.112°34'W., subtract	30m.
Correct L.M.T.of obsn. Nov.25	4h.33m.p.m.
U.C.Pol. Nov.25,1915	9h. 15.4m.p.m.l.
Corrected for long. 112° 34'W. subtract	1.2m.
Correct L.M.T. of obsn. Nov. 25	9h. 14.2m.
Time until U.U.Pol. Nov. 25,1915	4h. 41.2m.
Hour angle of Pol. at obsn.	4h. 41.2m.

Declination of star Nov.25,1915 = 88°51' 43.2"

Azimuth of Pol. at obsn. = N.1°25'E,

At time of obsn. the angle from the star to the limb on tree is 1° 26' to the W., therefore the tree bears N.0°01'W.

The instruments do not vary more than 1' from the true mer.; I therefore conclude that the adjustments are satisfactory.

The magnetic decl. was not taken on account of defective needles.

In the decl. arc settings, .85 of the tabulated refractions is used in computing decls., due to the altitude of the country.

Measurements.

Steel tapes, 5 chs. long were used by both parties in the field, together with clinometers for determing slope angles, and the reduced horizontal distances only appear in the offical field notes.

---

chains	
	I begin at the ¼ sec. cor. bet. secs. 4 and 33 on the S. bdy. of the Tp. which is a cobble stone, 3 x 6 x 8 ins. above ground, firmly set, marked ¼ on N. face. No accessories to cor.
	Nov.6: At this cor. I set off 40°04' on the lat. arc; 15° 47'S., on the decl. arc; and at 9h. 30m. a.m. apparent time determine a meridian with the solar. Thence I run
	West, retracing bet. secs. 4 and 33.
	Gradually ascend over gently rolling land sloping E., through dense undergrowth of sage brush.
8.30	Old road, bears NW. and SE.
10.30	Wash, 6 lks. wide, 2 ft. deep, drains NE.
13.55	Wood road, bears N.80°E. and S.80°W.
38.35	Wash, 6 lks. wide, 2 ft. deep, drains N.30°E.
40.28	Fall 7 lks. S. of the cor. of secs. 4,5,32 and 33, which is a cobble stone, 2 x 8 x 10 ins. firmly set in a mound of stone, marked and witnessed as described by the Surveyor General.
	The bearing of this ½ mile is N.89°54'W. and the distance is 40.28 chs.
	Land, gently rolling, slopes and drains E.
	Soil, 3rd. rate; shallow sandy loam mixed with gravel on gravelly and stony sub-soil.
	No timber.
	Undergrowth, sage brush,

	West, retracing bet. secs. 5 and 32.
	Gradually ascend over rolling land sloping NE., through dense undergrowth of sage and rabbit brush.
2.10	Leave dense undergrowth, enter dense scrub cedar and pinon timber, bears N. and S.
23.80	Leave dense timber, enter dense undergrowth, bears N. and S.

chains	
39.55	Leave dense undergrowth, enter dense scrub timber, bears N.20°E. and S.20°W.
40.08	Fall 21 lks. S. of the ¼ sec. cor., which is a blue limestone, 16 x 10 x 5 ins., lying on the ground, marked ¼ on one face. No accessories to cor.
	At exact position of old cor. I reset stone, 10 ins. in the ground, marked ¼ on N. face and raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor.
	No trees within limits, suitable for bearing trees.
	The bearing of this ½ mile is N.89°42'W. and the distance is 40.08 chs.
	From point 21 lks. S. of the ¼ sec. cor., I continue West.
64.80	Leave dense timber, enter scattering timber and dense undergrowth, bears N. and S.
65.70	Wash, 4 lks. wide, 1½ ft. deep, drains N.25°E.
75.95	Wash, 10 lks. wide, 3 ft. deep, in shallow ravine, drains N.30°E.
79.91	Fall 22½ lks. N. of the cor. of secs. 5,6,31 and 32, which is a blue limestone, 12 x 12 x 5 ins., lying on the ground, marked with 5 notches on one and 1 notch on opposite edge. No accessories to cor.
	At exact position of old cor., I reset stone 8 ins. in the ground, marked with 5 notches on E. and 1 notch on W. edge. Set an iron post, 3 ft. long, 3 ins. in dia., 24 ins. in the ground alongside old cor. for cor. of secs. 5,6,31 and 32, with brass cap marked

T 8 S
S 31 | S 32
R 6 W
S 6 | S 5
T 9 S
1915

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

No trees within limits suitable for bearing trees.

The bearing of this ½ mile is S.89°23'W., and the distance is 39.83 chs.

chains	
	November 6: The sky is overcast at noon, observations for lat. are impossible.
	Land, rolling, general N. exposure and drainage.
	Soil; 4th rate: stony and gravelly with light blue clay soil on gravelly and stony sub-soil.
	Timber, scrub cedar and pinon.
	Undergrowth, sage and rabbit brush.
	November 6,1915.

	November 8: At 8h a.m. apparent time, I set off 40° 04' on the lat. arc; 16° 20½'S., on the decl. arc; and determine a meridian with the solar at the cor. of secs. 5,6,31 and 32.
	Thence I run
	West, retracing bet. secs. 6 and 31
	Over rolling land in extreme W. edge of Rush valley, asc. gradually through dense undergrowth of sage and rabbit brush and scattering scrub cedar and pinon timber.
4.00	Base of mountain, bears N. and S.
	Asc. over nearly E. slope.
27.70	Enter dense service and oak brush, bears NW. and SE.
36.30	Spur, 335 ft. above sec. cor., projects S.75°E.
	Leave dense undergrowth and enter heavier timber, bears NW. and SE.
	Gradually descend along nearly S. slope of spur.
39.69	Fall 10 lks. N. of the ¼ sec. cor., which is a blue limestone 12 x 9 x 6 ins. lying on the ground, marked ¼ on one face and witnessed as described by the Surveyor General.
	At exact position of old cor., I reset stone 8 ins. in the ground, marked ½ on N. face; and raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor.
	The bearing of this ½ mile is S.89° 51'W., and the distance is 39.69 chs.

Retracement and resurvey south boundary of T.8 S., R.6 W.

chains	
	From point 10 lks. N. of the ½ sec. cor., I continue West
	Continue along nearly S. slope.
44.80	Ravine, 10 ft. below ½ sec. cor., drains S.75°E.
	Ascend abruptly over NE. slope.
67.10	Top of ridge and divide between Rush and Skull valleys, 485 ft. above ravine, bears NE. and SW.
	Descend.
74.45	Ravine, 85 ft. below divide, drains N. Head of ravine and low saddle in ridge bears S. about 5 chs.
	Ascend abruptly over E. slope 70 ft. to
79.27	On top of low spur, projects N.
	Fall 81 lks. S. of the cor. of Tps. 8 and 9 S., Rs. 6 and 7W. which is a broken limestone 16 x 14 x 7 ins. lying on the ground, marked with 6 notches on 4 cornering edges. No accessories.

November 8, 1915

November 23: Knowing that the old Tp. cor. will refer only to T. 9 S., Rs. 6 and 7 W., I reestablish same as follows: At exact position of old cor.,

Set an iron post, 3 ft. long, 3 ins. in dia., 24 ins. in the ground, with old stone cor. buried alongside, for cor. of T.9 S., Rs. 6 and 7 W., with brass cap marked

T 8 S
S 36 | S 31
R 7 W | R 6 W
S 1 | S 6
T 9 S
1915

from which

A pinon, 8 ins. diam., bears S.5¾°E., 176 lks. dist., marked T 9 S R 6 W S 6 B T.

A cedar, 24 ins. diam., bears S.27½°W., 88 lks. dist., marked T 9 S R 7 W S 1 B T.

The bearing of this ½ mile is N.88° 41'W., and the distance is 39.59 chs.

chains

Land, mountainous, slopes and drains NE. and NW. from divide at 67.10 chs.

Soil, 4th. rate; gravelly and rocky of quartz formation with some shallow sandy loam on gravelly and rocky sub-soil.

Timber, scattering scrub cedar and pinon.

Undergrowth, sage, rabbit, service and oak brush.

Some grazing.

November 23,1915.

Resurvey west boundary of T.8 S.,R.6 W.

November 22: For solar obsn. see temp. line of N.½ mile bet. secs. 25 and 26, T.8 S.,R.7 W.

The cor. of secs.13,18,19 and 24 on the W. bdy. of the Tp. is a blue limestone, 15 x 10 x 8 ins., lying on the ground, marked with 3 notches on one and 3 notches on opposite edge. No accessories to cor.

At exact position of old cor., I reset stone 10 ins. in the ground, marked with 3 notches on N. and 3 notches on S. edge.

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

T 8 S

R 7 W	R 6 W
S 13	S 18
S 24	S 19

1915

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

Thence I run

North, retracing bet. secs. 13 and 18

40.00 No trace of the old ¼ sec. cor. can be found, I therefore continue my line N., and at 158.43 chs. fall 4.68 chs.

chains	
	W. of the cor. of secs. 1,6,7 and 12.
	The bearing of the line bet. secs. 13 and 18 and 7 and 12 is therefore N.1° 42'E. and the distance is 158.50 chs. and as T.8 S.,R.7 W. has been subdivided I resurvey these lines as follows:
	November 22,1915.
	Nov.29:
	From the cor. of secs. 13,18,19 and 24
	N.1°42'E., resurveying bet. secs. 13 and 18
	Over mountainous land draining W., through scattering scrub cedar and pinon timber and undergrowth of sage and rabbit brush.
	Descend over N. slope of ridge.
8.75	Fence line, bears N.15°E. and S.15°W.
11.45	Fence, bears E. and W.
20.10	Bottom of ravine, wash in same, 15 lks. wide, 6 ft. deep, 245 ft. below sec. cor., drains W.
	Ascend over S. slope.
22.20	Wagon road, Vernon to Deep Creek, Utah which was originally the Old Overland Stage Road, bears E. and W.
37.70	Top of ascent, near top of high point on ridge, 255 ft. above wash, bears NW. and E.
	Descend over N. slope 38 ft. to
39.625	Proportionate measurement
	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground for ¼ sec. cor., E. bdy. sec. 13, T.8 S., R.7 W., with brass cap marked S 13¼ 1915 raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.
49.60	Ravine, 85 ft. below ¼ sec. cor., drains W.
	Ascend.
53.80	Spur, 40 ft. above ravine, projects W.
	Descend.

chains

57.60 Ravine, 50 ft. below spur, drains S.80°W.

Ascend.

62.10 Old fence line on top of spur, 70 ft. above ravine, bears N.60°E. and S.60°W. Spur, projects S.85°W. Enter heavier timber, bears N.60°E. and S.60°W. Descend.

65.05 Ravine, 35 ft. below spur, drains N.75°W.

Ascend.

74.10 Top of spur, 45 ft. above ravine, projects W.

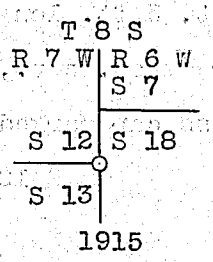
Descend.

78.30 Ravine, 50 ft. below spur, drains N.60°W. A seep of alkali water heads at this point.

Gradually ascend over low point.

79.25 Proportionate measurement

Set an iron post, 3 ft. long, 3 ins. in dia., 24 ins. in the ground for cor. of secs. 12 and 13 on the E. bdy. of T.8 S.,R.7 W., with brass cap marked



from which

A cedar, 12 ins. diam.,bears N.72¾°W., 33 lks. dist.,marked T 8 S R 7 W S 12 B T

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

Land, mountainous, steep slopes of spurs into ravines draining W.

Soil, 4th. rate: gravelly and rocky of limestone and quartz formation, with some light, dry, shallow sandy loam, on gravelly and rocky sub-soil.

Timber, scrub cedar and pinon.

Undergrowth, sage and rabbit brush. Some grazing.

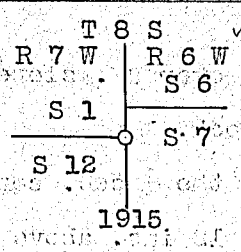
N.1°42'E., resurveying bet. secs. 7 and 12

Over mountainous land draining W., near base of high

chains	
	rocky ridge, through scrub cedar and pinon timber and undergrowth of sage, rabbit brush and grass.
	Ascend over S. slope of rocky spur.
5.80	Top of spur, 65 ft. above sec. cor., projects W.
	Descend over broken NW. slope.
15.80	Ravine, 45ft. below spur, drains N.80° W.
	Ascend.
22.20	Spur, 70 ft. above ravine, projects W.
	Descend.
25.90	Ravine, 55 ft. below spur, drains W.
	Ascend.
29.65	Spur, 90 ft. above ravine, projects W.
	Descend
38.70	Ravine, 75 ft. below spur, drains W.
	Thence gradually ascend along broken rocky W. slope.
39.625	Proportionate measurement
	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground for ¼ sec. cor., E. bdy. sec. 12, T.8 S.,R. 7 W., with brass cap marked S 12¼ 1915 raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.
	No trees within limits suitable for bearing trees.
47.30	Low spur, 25 ft. above ravine, projects W.
	Gradually descend over broken NW. slope
79.25	The cor. of secs. 1,6,7 and 12 which is a blue limestone 10 x 12 x 10 ins. above ground, firmly set, properly marked. No accessories to cor.
	Set an iron post, 3 ft. long, 3 ins. in dia., 24 ins. in the ground alongside old cor. for cor. of secs. 1 and 12, E. bdy. T.8 S.,R.7 W., with brass cap marked

Resurvey west boundary of T.8 S.,R.6 W.

chains



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

Land, broken mountainous at base of high rocky ridge. W. exposure and drainage.

Soil, 4th.rate; rocky of blue limestone formation with some shallow sandy loam and gravel on rocky sub-soil.

Timber, scattering scrub cedar and pinon.

Undergrowth, sage, rabbit brush and grass.

November 29,1915.

Howard W. Meier
U.S.Surveyor

Retracement north boundary of T.8 S.,R.6 W.

November 26: For solar observation see line bet. secs. 7 and 8.

From the cor. of secs. 4,5,32 and 33 on the N. bdy. of the Tp. which is a sandstone 5 x 4 x 12 ins. above ground, firmly set, and marked and witnessed as described by the Surveyor General, I run

West, retracing bet. secs. 5 and 32

Over mountainous land through scattering scrub cedar and pinon timber and undergrowth of sage brush.

Descend.

4.85 Wash, 15 lks. wide, 2 ft. deep, drains S.

Thence over broken ground.

14.30 Wash in large canyon, 40 lks. wide, 2½ ft. deep, drains N.80°E.

Gradually ascend along rocky N. slope.

15.75 Wood road, bears N.80°E. and S.80°W.

39.10 Top of ascent, 230 ft. above canyon, bears N. and S.

chains	
	Gradually descend over NW. slope; considerable blue limestone surface rock.
39.98	Fall 6 lks. S. of the ¼ sec. cor., which is a blue limestone 16 x 12 x 12 ins. above ground, firmly set, and marked and witnessed as described by the Surveyor General.
	The bearing of this ½ mile is N.89°55'W. and the distance is 39.98 chs.
	From point 6 lks. S. of the ¼ sec. cor., I continue West.
48.85	Descend abruptly over NW. slope.
51.85	Bottom of ravine, 90 ft. below ¼ sec. cor., drains NE.
	Ascend abruptly over E. slope.
74.45	Limestone ledge, 15 ft. high, bears NE. and SW.
	Thence gradually ascend over gentle N. slope.
79.43	650 ft. above ravine.
	Fall 7 lks. S. of the cor. of secs. 5,6,31 and 32 which is a blue limestone, 3 x 8 x 8 ins. above ground, firmly set, and marked and witnessed as described by the Surveyor General.
	The bearing of this ½ mile is N.89°59'W. and the distance is 39.45 chs.
	Land, rough broken mountains general E. exposure and drainage.
	Soil, 4th. rate; very rocky of blue limestone formation on hard clay and rock sub-soil.
	Timber, scattering scrub cedar and pinon.
	Undergrowth, sage brush.
	Some grazing.
	November 26, 1915.

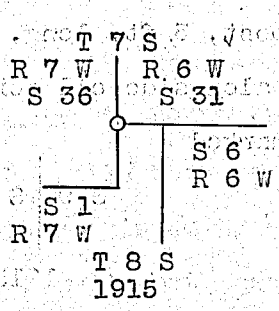
Nov. 27: For solar obsn. see line bet. secs. 6 and 7.

From cor. of secs. 5,6,31 and 32, I run

West, retracing bet. secs. 6 and 31

Over rough mountainous land through scrub cedar timber

chains	
	and undergrowth of sage brush.
	Gradually ascend along nearly N. slope.
1.50	Leave dense and enter scattering cedar timber, bears N. and S.
10.00	Top of ridge and divide between Rush and Skull valleys, 65 ft. above sec. cor., bears N. and SE.
	Descend over broken rocky N. and NW. slopes of mountain.
33.00	Ravine, 470 ft. below divide, drains N.15°W.
	Continue descent.
39.47	Fall 14 lks. S. of the ¼ sec. cor. which is a blue limestone 12 x 5 x 5 ins. above ground, firmly set, and marked and witnessed as described by the Surveyor General.
	The bearing of this ½ mile is N.89°48'W., and the distance is 39.47 chs.
	From point, 14 lks. S. of the ¼ sec. cor., I continue West.
68.90	Wash, in mouth of canyon, 490 ft. below ¼ sec. cor., drains SW.
	Thence over broken land.
72.90	Rocky gorge, 2 chs. wide, 40 ft. deep, course S.
77.54	Fall 16½ lks. S. of the cor. of T.7 and 8 S., R.6 W., which is a blue limestone, 6 x 3 x 7 ins. above ground, firmly set, and marked and witnessed as described by the Surveyor General. Knowing that this cor. will refer only to T.7 S.,R.6 W., I reestablish same as follows:
	Set an iron post, 3 ft. long, 3 ins. in dia., 24 ins. in the ground alongside old cor. for SW. cor. of T.7 S., R.6 W., with brass cap marked



chains

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

The bearing of this ½ mile is N.89°58'W., and the distance is 38.07 chs.

Land, high broken mountains general E. and W. exposure and drainage from divide at 10.00 chs.

Soil; rocky of limestone formation with some clay loam on gravelly and rocky sub-soil.

Timber, scrub cedar and pinon.

Undergrowth, sage brush.

November 27,1915

Retracement and resurvey of subdivision of T.8 S.,R.6 W.

November 6: For solar obsn. see line bet. secs. 17 and 20.

From the cor. of secs. 9,10,15 and 16, which is a blue limestone, 8 x 5 x 4 ins. above ground, firmly set, properly marked and witnessed as described by the Surveyor General, I run

North, retracing bet. secs. 9 and 10

Over nearly level land sloping and draining E., through dense undergrowth of sage and rabbit brush.

13.50 Thence along E. edge of cultivated field, bears W. and N.

22.70 Wash, 10 lks. wide, 3 ft. deep, drains SE.

40.24 Fall 5 lks. E. of the ¼ sec. cor., which is a blue limestone, 8 x 8 x 6 ins. above ground, firmly set, marked ¼ on W. face. No accessories to cor.

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

S 9 ¼ | S 10

1915

chains	
	raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.
	The bearing of this $\frac{1}{2}$ mile is N.0°04'W., and the distance is 40.24 chs.
	From $\frac{1}{4}$ sec. cor., I run
	North.
40.00	No trace of the cor. of secs. 3,4,9 and 10 can be found.
	I continue my line north with continuous chaining.
120.88	Fall 17.1 lks. E. of the cor. of secs. 3,4,33 and 34 on the N. bdy. of the Tp. described on page 17.
	I return and adjust all cors. to their proper proportionate meridional positions.
	From adjusted position for cor. secs. 3,4,9 and 10 on meridional line, I run
	West, retracing bet. secs. 4 and 9
40.19	Fall 7 lks. S. of the $\frac{1}{4}$ sec. cor.
	November 6,1915.
	November 23: For solar obsn. see N.$\frac{1}{2}$ mile bet. secs. 8 and 9.
	From adjusted position for cor. of secs. 3,4,9 and 10 on meridional line, I run
	East, retracing bet. secs. 3 and 10
40.25	Fall 14 lks. S. of the $\frac{1}{4}$ sec. cor.
	I return and adjust temp. cor. of secs. 3,4,9 and 10 to its proper proportionate latitudinal position.
	From the proportioned point on meridional line the cor. of secs. 3,4,9 and 10 is restored 3 lks. E., and from point on latitudinal line cor. is restored 10 lks. S. For description of cor. see N.$\frac{1}{2}$ mile bet. secs. 9 and 10.
	The bearing of the N.$\frac{1}{2}$ mile bet. secs. 9 and 10 is N.0° 02'W. and the distance is 40.25 chs.
	The bearing of the W.$\frac{1}{2}$ mile bet. secs. 3 and 10 is N.89° 48'E., and the distance is 40.22 chs.
	The bearing of the E.$\frac{1}{2}$ mile bet. secs. 4 and 9 is N.89° 54'W. and the distance is 40.22 chs.

chains	
	The bearing of the line bet. secs. 3 and 4 is N.0° 06'W., and the distance is 80.63 chs.

	From ¼ sec. cor. bet. secs. 9 and 10, I run N.0°02'W., resurveying bet. secs. 9 and 10.
	Over gently rolling land sloping and draining E., through undergrowth of sage and rabbit brush. Cultivated land W. of line.
21.30	Wash, 30 lks. wide, 3 ft. deep, drains S.30°E.
40.25	In edge of cultivated field, bears E. and W.
	Set a blue limestone, 14 x 12 x 5 ins., 9 ins. in the ground for cor. of secs. 3,4,9 and 10, marked with 3 notches on E. and 5 notches on S. edge; raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.
	Note: It is impracticable to set iron posts at all cors. in this township as none are available.
	Land, gently rolling, slopes and drains E.
	Soil, 2nd. rate; light, dry, sandy loam mixed with gravel and rock on hard dry clay sub-soil.
	No timber.
	Undergrowth, sage and rabbit brush.

	N.89°48'E., resurveying bet. secs. 3 and 10.
	Over gently rolling land sloping E., gradually descending along S. edge of cultivated field and N. edge of dense sage brush.
34.30	Enter cultivated land, bears N. and S.
40.05	Road, bears N. and S.
40.22	Cor of a wire fence, fences bear S. and E. This point is recognized by settlers owning the adjacent land to be the point for the ¼ sec. cor.
	Land, gently rolling, slopes and drains E.
	Soil, 2nd. rate; light, brown clay loam, mixed with gravel on clay and gravel sub-soil.
	No timber.
	Undergrowth, sage brush.

chains	
	From cor. of secs. 3,4,9 and 10, I run
	N.0°06'W., resurveying bet. secs. 3 and 4
	Over gently rolling land sloping and draining E., across cultivated field.
6.40	Leave cultivated field, enter land cleared for plowing, bears E. and W.
8.80	Leave cleared land, enter dense sage brush undergrowth, bears E. and W.
35.70	Leave valley, enter rolling mountainous land and scrub cedar and pinon timber, bears NE. and SW
40.25	Proportionate measurement
	Set an iron post, 3 ft. long, 1 in. in dia., 16 ins. in the ground on solid rock and 10 ins. in a mound of stone for ¼ sec. cor., with brass cap marked
	S ¼ | S 3 1915
	raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.
	No trees within limits, suitable for bearing trees.
64.75	Wire fence, bears NE. and SW.
80.63	The cor. of secs. 3,4,33 and 34 on the N. bdy. of the Tp. which is a blue limestone, 11 x 8 x 6 ins. above ground, firmly set, marked and witnessed as described by the U. S. Surveyor General.
	Cor stands 55 ft. above the ¼ sec. cor.
	Land, S. 35.70 chs. gently rolling; N.44.93 chs. rolling mountainous, general E. exposure and drainage.
	Soil, 3rd. rate; light, shallow sandy loam, mixed with gravel and rock on hard, dry sand and gravel sub-soil.
	Timber, scrub cedar and pinon on N. 44.93 chs.
	Undergrowth, sage brush.
	Some grass, good for grazing.
	From cor. of secs. 3,4,9 and 10, I run

chains	
	N.89° 54'W., resurveying bet. secs. 4 and 9
	Gradually ascend over gently rolling cultivated land sloping and draining E.
5.00	Leave cultivated land, bears N. and S.
	Thence along S. edge of cultivated field bearing E. and W. in N. edge of dense sage brush.
20.00	Leave cultivated land, bears N. and E.
	Enter dense sage brush, bears N. and S.
40.22	Wire fence, bears N. and S.
	The ¼ sec. cor., which is a blue limestone, 5 x 8 x 6 ins. above ground, firmly set, marked ¼ on N. face. No accessories to cor.
	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground alongside old cor. for ¼ sec. cor., with brass cap marked
	S 4 / ¼ / S 9 / 1915
	raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor.
	For description of land, soil etc., see W.½ of this mile.
	November 23,1915.
	Isaac Hayes
	U. S. Transitman.

	November 6: For solar obsn. see W.½ mile bet. secs. 4 and 33, S. bdy. of this Tp.
	From the cor. of secs. 4,5,32 and 33 on the S. bdy. of the Tp., I run
	North, retracing bet. secs. 32 and 33
	Gradually descend over rolling land sloping and draining N., through dense undergrowth of sage and rabbit brush.
40.24	Fall 3½ lks. W. of the ¼ sec. cor. which is a cobble

chains

stone, 10 x 6 x 3 ins., lying on the ground, marked ¼ on one face. No accessories to cor.

I reset stone, 5 ins. in the ground at exact position of old cor., marked ¼ on W. face. Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground alongside old cor. for ¼ sec. cor., with brass cap marked

S 32 | S 33
¼

1915

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

The bearing of this ½ mile is N.0°03'E., and the distance is 40.24 chs.

From point 3½ lks. W. of the ¼ sec. cor., I continue North.

63.65 Wash, 10 lks. wide, 2 ft. deep, drains NE.

80.22 Fall 7 lks. W. of the cor. of secs. 28, 29, 32 and 33, which is a flint rock, 14 x 8 x 4 ins., lying on the ground, marked with 4 notches on one and 1 notch on cornering edge. No accessories to cor.

At exact position of old cor., I reset stone 9 ins. in the ground, marked with 4 notches on E. and 1 notch on S. edge; raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.

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

Land, gently rolling, slopes and drains NE.

Soil, 2nd. rate; shallow sandy loam mixed with fine gravel on sandy and gravelly sub-soil.

No timber.

Undergrowth, sage and rabbit brush.

From cor. secs. 28,29,32 and 33, I run

North, bet. secs. 28 and 29

chains	
	Over gently rolling valley, through dense undergrowth of sage and rabbit brush.
3.46	Wood road, bears NE. and SW.
40.48	Fall 43 lks. W. of the ¼ sec. cor., which is a cobble stone, 4 x 5 x 8 ins., lying on the ground, marked ¼ on one face, no accessories to cor.
	At exact position of old cor., I reset stone, 4 ins. in the ground, marked ¼ on W. face.
	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground alongside old cor. for ¼ sec. cor., with brass cap marked
	S 29 ¼ | S 28 1915
	dig pits, 18 x 18 x 12 ins., N. and S. of post, 3 ft. dist., raise a mound of earth, 3½ ft. base, 1½ ft. high, W. of cor.
	The bearing of this ½ mile is N.0°37'E., and the distance is 40.48 chs.
	Storm of rain at 3:30 p.m. this day prevents further field work.
	November 6, 1915.
	Howard W. Miller U. S. Surveyor.
	November 8: For solar obsn. see line bet. secs. 31 and 32.
	From ¼ sec. cor., I continue North
60.38	SW. cor. of wire fence and cultivated field, bears N. and E.
74.10	Enter scattering scrub cedar timber, bears E. and W.
80.39	Intersect the cor. of secs. 20,21,28 and 29 which is a blue limestone, 5 x 4 x 3 ins. above ground, firmly set, marked with 4 notches on E. and 2 notches on S. edge. No accessories to cor.

chains

I erect and make accessories to cor. as follows:

A cedar, 12 ins. diam., bears S.78°W., 105 lks. dist.,marked T 8 S R 6 W.S 29 B T

No other suitable trees within limits; 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 bearing of this ½ mile is north and the distance is 39.91 chs.

The NW. cor. of cultivated field and wire fence bearing E. and S. bears E. 50 lks.

Land, gently rolling, general E. exposure and drainage.

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

Timber, scrub cedar and pinon on N. 6.30 chs.

Undergrowth, dense sage and rabbit brush.

November 8,1915.

Isaac Hayes
U. S. Transitman.

November 30:

From cor. of secs. 20,21,28 and 29, I run

North, retracing bet. secs. 20 and 21

40.00 No trace of the ½ sec. cor., can be found.

79.29 Fall 65 lks. W. of the cor. of secs. 16,17,20 and 21 which is a blue limestone, 12 x 6 x 6 ins., lying on the ground, marked with 4 notches on one and 3 notches on cornering edge. No accessories to cor.

At exact position of old cor., I reset stone 8 ins. in the ground , marked with 4 notches on E. and 3 notches on S. edge; raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.

The bearing of this line is S.0°28'W., and the distance is 79.29 chs.

chains	
	At this cor., at 9h. a.m. apparent time, I set off 40°07' on the lat. arc; 21° 31'S., on the decl. arc; and determine a meridian with the solar.
	Thence
	S.0°28'W.; resurveying bet. secs. 20 and 21
	Over rolling land sloping and draining E., along fence line bears N. and S., through dense undergrowth of sage and rabbit brush.
39.64½	Proportionate measurement
	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 20 ¼ | S 21
	1915
	raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.
57.80	Road, from Vernon, Utah to Deep Creek, Nevada, bears NW. and SE. The SW. cor. of field which bears N. and E., bears E. about 25 lks.
	Enter scattering scrub cedar and pinon timber, bears NW. and SE.
79.29	The cor. of secs. 20,21,28 and 29.
	Land, rolling, slopes and drains E.
	Soil, 2nd. rate; light, shallow sandy loam mixed with gravel and rocks on sandy and gravelly sub-soil.
	Timber, a few scattering scrub cedar and pinon on S. 20.49 chs.
	Undergrowth, dense sage and rabbit brush.
	November 30,1915
	Howard W. Miller
	U. S. Surveyor.
	November 6: For solar obsn. see E. ½ mile bet. secs. 17 and 20.
	From cor. of secs. 16,17,20 and 21, I run

chains	
	North, bet. secs. 16 and 17
	Over rolling land sloping and draining E., through dense undergrowth of sage and rabbit brush.
11.30	Wash, 30 lks. wide, 7 ft. deep, drains NE.
13.90	Old Emigrant and Overland Stage road, bears NE. and SW.
14.15	SE. cor. of N. and W. fence lines.
	Thence along W. side of fence in cultivated land.
40.03	Fall 13 lks. W. of the ¼ sec. cor., which is a blue limestone, 8 x 8 x 4 ins. above ground, firmly set, marked ¼ on W. face. No accessories to cor.
	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground alongside old cor. for ½ sec. cor., with brass cap marked S 17/4 | S 16 1915 raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.
	The bearing of this ½ mile is N.0°11'E., and the distance is 40.03 chs.
	From point 13 lks. W. of the ½ sec. cor., I continue North
	Continue along fence line and in cultivated field.
49.93	Cor of fence and leave cultivated land, bears W. and S.
	Thence along E. edge of land cleared for plowing.
62.50	Leave cleared land and enter dage brush undergrowth, bears S. and N.70°W.
62.75	Top of large pile of rock, 50 x 50 ft.
63.00	Enter E. edge of land cleared for farming, bears N. and SW.
80.02	NE. cor. of cleared land, bears S. and W.
	Fall 33 lks. W. of the cor. of secs. 8,9,16 and 17, which is a limestone, 11 x 10 x 8 ins. above ground, firmly set, marked with 4 notches on E. and S. edges. No accessories to cor.; raise a mound of stone, 2 ft.

chains

base, 1½ ft. high, W. of cor.

The bearing of this ½ mile is N.0°17'E., and the distance is 39.99 chs.

Land, rolling, slopes and drains E.

Soil, 2nd. rate; sandy loam and gravelly with some loose rocks on surface on gravelly and sandy sub-soil.

No timber.

Undergrowth, sage and rabbit brush.

From cor. of secs. 8,9,16 and 17, I run

East, bet. secs. 9 and 16

Gradually descend over rolling land sloping E., through dense undergrowth of sage brush and very scattering scrub cedar timber.

39.75 Fall 12½ lks. S. of the ¼ sec. cor., which is a blue limestone 10 x 8 x 8 ins., lying on the ground, marked ¼ on one face. No accessories to cor.

At exact position of old cor., I reset stone 6 ins. in the ground, marked ¼ on N. face.

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

S 9
¼
S 16
1915

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

The bearing of this ½ mile is N.89°49'E., and the distance is 39.75 chs.

Note: Cor. stands 5 lks. S. of the cor. of fence lines bearing N. and E.

Thence from point 12½ lks. S. of cor., I continue

East.

Along S. side of wire fence.

79.77 Fall 12½ lks. S. of the cor. of secs. 9,10,15 and 16.

The bearing of this ½ mile is East and the distance is

chains	
	40.02 chs.
	Land, rolling, slopes and drains E.
	Soil, light, sandy loam mixed with gravel and rock on hard, clay and rock sub-soil; 2 nd. rate.
	Timber, very scattering cedar.
	Undergrowth, sage brush.
	November 6: The sky is overcast at noon, observations for lat. are impossible.
	November 6,1915.

	November 8: For solar obsn. see line bet. secs. 31 and 32.
	From cor. of secs. 28,29,32 and 33, I run
	West, bet. secs. 29 and 32
	Over gently rolling land sloping NE., through dense undergrowth of sage brush.
9.85	Wood road, bears NE. and SW.
18.00	Wash, 5 lks. wide, 2 ft. deep, drains NE.
40.00	No trace of the old ¼ sec. cor. can be found.
	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 29 ½ / S 32 1915
	from which
	A cedar, 18 ins. diam., bears S.6°E., 115 lks. dist., marked ¼ S 32 B T
	A cedar, 4 ins. diam., bears N.83½°W., 342 lks. dist., marked ¼ S 29 B T
	Land, gently rolling, slopes and drains NE.
	Soil, 2nd. rate; light, dry, sandy loam mixed with gravel on sandy and gravelly sub-soil.
	No timber.
	Undergrowth, sage brush.

	From cor. of secs. 20,21,28 and 29, I run
	West, bet. secs. 20 and 29

chains	
	Gradually ascend over rolling land sloping SE., near base of mountain through cedar and pinon timber and undergrowth of sage brush.
26.80	Wash, in small gully, 5 lks. wide, 1½ ft. deep, drains NE.
35.50	Timber becomes very scattering, bears N. and S.
40.00	No trace of the old ¼ sec. cor. can be found.
	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 20 / ¼
	S 29 / 1915
	dig pits, 18 x 18 x 12 ins., E. and W. of post, 3 ft. dist.; raise a mound of earth, 3½ ft. base, 1½ ft. high, N. of cor.
	Land, rolling, general E. exposure and drainage.
	Soil, 3rd. rate; shallow sandy loam mixed with gravel and rocks on sandy and rocky sub-soil.
	Timber, scrub cedar and pinon.
	Undergrowth, sage brush.
	November 8,1915.

	November 6: At 8h. a.m. apparent time, I set off 40°07' on the lat. arc; 15° 44½'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
	West, bet. secs. 17 and 20
	Gradually ascend over rolling land sloping E., through dense undergrowth of sage brush.
25.45	Wash, 30 lks. wide, 8 ft. deep, drains NE.
29.95	Old Emigrant and Overland stage road, bears NE. and SW.
40.01	On E. slope 102 ft. above sec. cor.
	Fall 7 lks. N. of the ½ sec. cor., which is a blue limestone, 8 x 8 x 4 ins. above ground, firmly set, marked ¼ on N. face. No accessories to cor.
	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in

chains

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

S 17
¼
S 20
1915

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

The bearing of this ½ mile is S.89°54'W., and the distance is 40.01 chs.

Land, rolling, slopes and drains E.

Soil, 2 nd. rate; shallow sandy and gravelly loam, packed hard on hard, dry sand and gravel sub-soil.

No timber.

Undergrowth, sage brush.

November 22: For solar obsn. see line bet. secs. 19 and 20

From the cor. of secs. 8,9,16 and 17, I run

West, retracing bet. secs. 8 and 17

40.34 Fall 10 lks. S. of the ½ sec. cor., which is a blue limestone, 8 x 8 x 6 ins. above ground, firmly set, marked ½ on N. face. No accessories to cor.

Knowing that a ¼ sec. cor. will be necessary for sec.8 and that this cor. will refer to sec. 17 only, I reestablish same as follows:

Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground alongside old cor. for ½ sec. cor., N. bdy. sec. 17, with brass cap marked

S 17
¼
1915

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

The bearing of this ½ mile is S.89°51'E., and the distance is 40.34 chs.

Retracement and resurvey of subdivision of T.8 S.,R.6 W.

chains

Thence from ¼ sec. cor.

S.89°51'E., resurveying bet. secs. 8 and 17

Gradually descend over rolling land sloping E., through dense undergrowth of sage brush and scattering scrub cedar timber

.34 A westing of 40.00 chs. from the cor. of secs. 8,9,16 and 17

Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground for ¼ sec. cor., S. bdy. sec. 8, with brass cap marked

S 8
¼
1915

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

18.55 NW. cor. of land cleared for farming, bears S. and E.

23.95 Wash, in large gully, 15 lks. wide, 1½ ft. deep, drains SE.

40.34 100 ft. below ¼ sec. cors., at NE. cor. of land cleared for farming. The cor. of secs. 8,9,16 and 17

Land, rolling, general E. exposure and drainage.

Soil, 2nd. rate; shallow sandy loam mixed with gravel and streaked with rock on hard, dry sand and rock subsoil.

Timber, a few scattering scrub cedar.

Undergrowth, sage brush.

Subdivision of T.8 S.,R.6 W.

November 22:

From the cor. of secs. 8,9,16 and 17, I run North, on temp. line bet. secs. 8 and 9.

40.00 Set temp. ¼ sec. cor.

Cease work.

November 22,1915.

November 23: At 8h. a.m. apparent time, I set off 40°08' on the lat. arc; 20°09'S., on the decl. arc; and deter-

chains	
	mine a meridian with the solar
	Thence I run
	North
80.00	Set temp. cor. for secs. 4,5,8 and 9
	From Temp. cor. of secs. 4,5,8 and 9, I run
	East, on a random line bet. secs. 4 and 9
39.49	Fall 62 lks. S. of the ¼ sec. cor.
	I return to the temp. cor. of secs. 4,5,8 and 9 and set temp. cor. of secs. 4 and 9, 62 lks. N.
	Thence from cor. of secs. 8,9,16 and 17, I run
	North, on a true line bet. secs. 8 and 9
	Over gently rolling land draining E., through dense under-growth of sage brush.
	Gradually ascend to base of mountain.
16.20	Road, bears E. and W.
20.00	Base of mountain, bears E. and W. Gradually ascend over S. slope.
24.00	Enter dense scrub cedar pinon timber, bears E. and W.
34.90	Small ravine, 112 ft. above sec. cor., drains SE.
	Enter very dense scrub cedar timber and ascend abruptly over rocky SW. slope 110 ft. to
40.00	Set an iron post, 3 ft. long, 1 in. in dia., 6 ins. in the ground to solid rock and 20 ins. in a mound of stone for ¼ sec. cor., E. bdy. sec. 8, with brass cap marked

S 8
¼
1915

from which

A cedar, 16 ins. diam., bears West, 1 lks. dist., marked ¼ S 8 B T.

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

40.31	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in a mound of stone on solid rock for ¼ sec. cor., W. bdy. sec. 9, with brass cap marked

chains	
	S 9 $\frac{1}{4}$ 1915
	raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, E. of cor.
	No suitable trees within limits suitable for bearing trees
	Continue over rocky slope through dense timber and over series of small blue limestone ledges, bears N.20°W. and S.20°E.
46.00	Enter dense sage brush undergrowth, bears E. and W.
50.30	Ridge, 230 ft. above $\frac{1}{4}$ sec. cor., bears NW. and SE.
	Leave dense timber, bears with ridge, thence along nearly E. slope.
55.30	Enter dense timber, bears NW. and SE. Gradually descend over NE. slope.
59.00	Descend abruptly over rocky NE. slope into canyon.
67.05	Canyon, 230 ft. below ridge, drains S.20°E.
	Ascend abruptly over SE. slope over series of small blue limestone ledges.
78.65	Spur, 280 ft. above canyon, projects N.20°E.
	Descend abruptly over N. slope 25 ft. to
80.00	Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground for cor. of secs. 5 and 8, with brass cap marked

T 8 S | R 6 W
S 4
S 5 | S 9
S 8
1915

from which

A cedar, 16 ins. diam., bears S.$64\frac{1}{2}$°W., 13 lks. dist., marked T 8 S R 6 W S 8 B T

A cedar, 8 ins. diam., bears N.58°W., 23 lks. dist., marked T 8 S R 6 W S 5 B T

Land, S. 20 chs., gently rolling valley; N.60.00 chs. rough; mountainous. S. 50 chs. general SE. exposure and

chains	
	and drainage. N. 30 chs. NE. exposure and drainage.
	Soil, 4th. rate; light, brown sandy loam mixed with gravel and very rocky on gravelly and rocky sub-soil.
	Timber, dense scrub cedar on N. 56.00 chs. Some pinon with cedar timber.
	Undergrowth, sage brush. Some scattering patches of service and buck brush on both sides of line.

	North, on a random line bet. secs. 4 and 5
.62	The temp. cor. of secs. 4 and 9.
40.00	Set temp. ¼ sec. cor., E. bdy. sec. 5
81.12	Intersect N. bdy. of the Tp. 45 lks. E. of the cor. of secs. 4,5,32 and 33 heretofore described.
	Thence
	S.0°19'E., on true line bet. secs. 4 and 5
	Gradually descend over mountainous land in mouth of canyon through scattering scrub cedar timber and undergrowth of sage brush.
11.75	Bottom of canyon and wash, 50 lks. wide, 2½ ft. deep, 70 ft. below sec. cor., drains SE.
	Gradually ascend.
13.25	Wood road, bears NW. and SE.
15.35	Leave canyon, bears NW. and SE. Ascend abruptly over NE. slope.
23.25	Spur, 70 ft. above canyon, projects SE.
	Descend abruptly SE. slope over low end of spur.
30.57	Base of descent and leave cedar timber, thence across wide open draw, bears NE. and SW.
40.50	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground for ¼ sec. cor. on W. bdy. sec. 4, with brass cap marked
	S 4 ¼ 1915
	raise a mound of stone, 2 ft. base, 1½ ft. high, E. of cor.

Subdivision of T.8 S., R.6 E.

chains

41.12 Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground for ¼ sec. cor. on E. bdy. sec.5, with brass cap marked

S 5
¼

1915

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

48.55 Wash, 1 ch. wide, 4 ft. deep, drains SE.

57.25 Wash, 60 lks. wide, 7 ft. deep, drains SE.

66.15 Leave draw and enter scrub cedar timber, bears E. and W. Ascend abruptly over NW. slope.

75.05 Continue ascent over nearly N. slope.

80.50 The temp. cor. of secs. 4 and 9, 230 ft. above draw.

81.12 The cor. of secs. 5 and 8

Land, rough mountainous, general SE. exposure and drainage

Soil; 4th. rate: Light, sandy loam mixed with gravel and rock, on a hard clay and rock sub-soil.

Timber, scrub cedar.

Undergrowth, sage brush.

November 23: the sky is overcast at noon. observations for lat. are impossible.

From the ¼ sec. cor., bet. secs. 4 and 9, I run West, on a true line bet. secs. 4 and 9

Ascend over rolling land draining SE., through dense undergrowth of sage brush.

2.45 Wash, in gully, 20 lks. wide, 3 ft. deep, drains SE.

15.85 Leave valley, enter mountainous land, bears NW. and SE. Ascend abruptly rocky NE. slope.

20.75 Enter scrub cedar timber, bears NW. and SE.

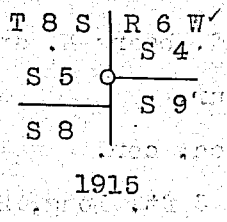
37.30 Top of steep ascent, 380 ft. above base of mountain, thence over steep N. slope.

39.49 Intersect N. and S. line, 62 lks. N.0°19'W., of the cor. of secs. 5 and 8.

Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in

chains

the ground for cor. of secs. 4 and 9, with brass cap marked



from which

A cedar, 24 ins. diam., bears S.68½°E.,59 lks. dist.,marked T 8 S R 6 W S 9 B T

A cedar, 5 ins. diam.,bears N.41½°E., 51 lks. dist., marked T 8 S R 6 W S 4 B T

Land, E. 56.07 chs., rolling valley, W.23.64 chs. rough broken mountains. General E. exposure and drainage.

Soil, 4th. rate; light, clay loam mixed with gravel and rocks on gravelly and rocky sub-soil.

Timber, scrub cedar.

Undergrowth, sage brush.

November 23,1915.

November 8: At 9h. 10m.a.m.apparent time, I set off 40° 04' on the lat. arc; 16° 22'S., 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 desc.

Thence I run

North, on temp. line bet. secs. 31 and 32

40.00 Set temp. ¼ sec. cor.

80.00 Set temp. cor. of secs. 29,30,31 and 32.

From temp. cor. of secs. 29,30,31 and 32, I run

East, on a random line bet. secs. 29 and 32

39.79 Fall 43 lks. S. of the ¼ sec. cor.

Thence from ¼ sec. cor. bet. secs. 29 and 32, I run

West, on true line bet. secs. 29 and 32

Gradually ascend over rolling land sloping and draining NE., through scattering scrub cedar and pinon timber and undergrowth of sage brush.

chains	
3.40	Enter dense cedar timber, bears N. and S.
25.50	Leave dense, enter scattering timber, bears N. and S.
35.90	Leave rolling land, bears N. and S. Ascend abruptly over SE. slope of spur.
39.79	320 ft. above ¼ sec. cor.
	Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in a mound of stone on solid rock for cor. of secs. 29,30, 31 and 32, with brass cap marked

T 8 S	R 6 W
S 30	S 29
S 31	S 32

1915

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

Trees are within limits in all secs. but none are suitable for bearing trees.

Land, E. 35.90 chs. rolling, W. 4.29 chs. mountainous. General NE. exposure and drainage.

Soil; E. 35.90 chs. generally a light, sandy loam mixed with gravel on sandy and gravelly sub-soil. W. 4.29 chs. soil is rocky of limestone formation on gravelly and rocky sub-soil.

Timber, scrub cedar and pinon, very dense in places.

Undergrowth, sage brush.

Fair grazing.

South, on true line bet. secs. 31 and 32

Over rolling mountainous land draining NE., through scattering scrub cedar timber and undergrowth of sage brush. Gradually descend over SE. slope of spur.

1.80	Small gully, drains NE.
	Ascend abruptly over N. slope.
5.80	Spur, 95 ft. above gully, projects E. Enter dense scrub cedar timber, bears E. and W.
7.20	Gradually descend over SE. slope.
16.05	Wash, in gully, 40 lks. wide, 7 ft. deep, 100 ft. below

chains	
	spur, drains E. Thence over rolling land sloping E.
28.95	Leave dense timber, thence through scattering timber, bears E. and W.
40.21½	Set an iron post, 3 ft. long, 1 in. in dia., 18 ins. in the ground and 8 ins. in a mound of stone for ¼ sec. cor., with brass cap marked
	S 31 ¼ | S 32
	1915
	raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.
	Note: On account of underlying rock, I am unable to set post more than 18 ins. in the ground.
	No trees within reasonable distance, suitable for bearing trees.
78.45	Gully, 40 lks. wide, 6 ft. deep, drains NE.
80.43	The cor. of secs. 5,6,31 and 32.
	Land, rolling mountainous, general E. exposure, drains NE.
	Soil, 4th. rate; sandy and gravelly mixed with rock on hard, clay and rock sub-soil.
	Timber, scrub cedar.
	Undergrowth, sage brush.
	November 8,1915
	Isaac Hayes
	U. S. Transitman.

	November 27: for solar obsn. see E.½ mile bet. secs. 25 and 36, T.8 S.,R.7 W.
	From cor. of secs. 29,30,31 and 32, I run
	West, on a random line bet. secs. 30 and 31
40.00	Set temp. ¼ sec. cor.
74.00	Intersect W. bdy. of the Tp. 15 lks. S. of the cor. of secs. 30 and 31, heretofore described.
	Thence

chains	
	S.89°53'E., on true line bet. secs. 30 and 31
	Over mountainous land draining W., through scattering pinon, cedar and mohogany timber and undergrowth of scattering sage, service and rabbit brush.
	Gradually ascend along top of spur, projecting SW.
4.95	Top of ascent on spur, thence across head of ravine.
9.95	Head of ravine, drains SW.
	Ascend abruptly.
13.50	Top of ridge and divide between Rush and Skull valleys, 90 ft. above sec. cor., bears N. and S.
	Descend abruptly.
22.85	Ravine, 175 ft. below divide, drains NE.
	Thence along nearly N. slope, gradually descending.
34.00	On steep N. slope, 25 ft. below ravine.
	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 30 / ¼ / S 31 / 1915 raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor.
	No trees within limits for bearing trees.
40.95	Top of rocky spur, 30 ft. below ¼ sec. cor., projects N. 60°E. Enter dense pinon and cedar timber, bears NW. and SE. Descend along SE. slope of spur.
	Not on line at noon, observations for lat. are impossible.
48.25	Top of same spur, projects from NW. to N.80°E.
	Descend over series of small limestone ledges.
55.40	Leave dense timber, bears NE. and SW.
62.25	Top of same spur, 290 ft. below top at 40.95 chs., projects SE.
	Descend.
74.00	The cor. of secs. 29,30,31 and 32.
	Land, rough mountainous with E. and W. exposures from divide at 13.50 chs.

chains	
	Soil, 4th. rate; gravelly and rocky of limestone and quartz formation, mixed with some light, brown clay on gravel and rock sub-soil.
	Timber, cedar, pinon and some mohogany.
	Undergrowth, sage, scattering service and rabbit brush.
	November 27,1915
	Howard W. Miller
	U. S. Surveyor.

	November 8: For solar obsn. see line bet. secs. 31 and 32
	From cor. of secs. 29,30,31 and 32, I run
	North, on temp. line bet. secs. 29 and 30.
40.00	Set temp. ¼ sec. cor.
80.00	Set temp. cor. of secs. 19,20,29 and 30
	From temp. cor. of secs. 19,20,29 and 30, I run
	East, on a random line bet. secs. 20 and 29
40.30	Fall 28 lks. S. of the ¼ sec. cor.
	Thence from cor. of secs. 29,30,31 and 32, I run
	North, on true line bet. secs. 29 and 30
	Over rolling mountainous land draining E., through scattering scrub cedar and pinon timber and undergrowth of sage brush.
	Gradually descend.
.50	November 8: At this station, I set off 16° 25'S., on the decl. arc; and at apparent noon, obs. the sun on the meridian; the resulting lat. is 40°05'.
7.15	Swale, 55 ft. below sec. cor., drains E.
	Ascend.
13.45	Knoll, 35 ft. above swale, bears E. and W.
	Gradually descend.
34.00	Wash, in small gully, 7 lks. wide, 2 ft. deep, drains NE.
40.14	Swale, drains E. and opening in timber.
	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	
	S 30 ¼ | S 29 1915
	raise a mound of stone, 2ft. base, 1½ ft. high, W. of cor.
	Gradually ascend.
47.50	Spur, 40 ft. above ¼ sec. cor., projects E.
	Thence on near level line.
59.50	Ascend abruptly over SW. slope over blue limestone boulder and surface rock.
69.25	Ridge, 190 ft. above base of steep ascent, bears N.30°W. and S.30°E.
	Descend abruptly over broken NE. slope.
80.28	118 ft. below ridge, near bottom of ravine.
	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
	T 8 S | R 6 W S 19 | S 20 S 30 | S 29 1915
	raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.
	Land, rolling mountainous, general E. exposure and drainage. Land lies in W. edge of Rush valley.
	Soil, 4th. rate; shallow sandy loam mixed with gravel and rocks on hard, dry, clay and rock sub-soil.
	Timber, scattering scrub cedar.
	Undergrowth, sage brush.

	East, bet. secs. 20 and 29
	Over rolling mountainous land draining E., through dense undergrowth of sage brush and scattering young cedar timber.
	Descend.

chains	
2.00	Wash, in bottom of ravine, 30 lks. wide, 2 ft. deep, f drains SE.
	Thence along gentle SE. slope at base of hills.
40.30	The ¼ sec. cor.
	Land, rolling mountainous, general E. exposure and drainage.
	Soil; 3rd. rate; shallow sandy loam mixed with gravel and some rock on sandy and rocky sub-soil.
	Timber, scattering young cedar timber.
	Undergrowth, sage brush.
	November 8,1915.
	Isaac Hayes
	U. S. Transitman.

	November 27: For solar obsn. see E.½ mile bet. secs. 25 and 36, T.8 S.,R.7 W.
	From cor. of secs. 19,20,29 and 30, I run
	N.89°53'W., on a random line bet. secs. 19 and 30
40.00	Set temp. ¼ sec. cor.
74.15	Intersect W. bdy. of the Tp. 39 lks. N. of the cor. of secs. 19 and 30 heretofore described.
	Thence
	N.89°49'E., on true line bet. secs. 19 and 30
	Over mountainous land draining W., through undergrowth of sage, scattering service and rabbit brush and grass.
	Ascend over N. and NW. slopes on S. side of large ravine, near top of ridge spur.
21.60	Top of ridge and divide between Rush and Skull valleys, 250 ft. above sec. cor., bears NE. and SW.
	Descend abruptly over NE. slope, 220 ft. to
34.15	In head of ravine, drains NE.
	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground for ¼ sec. cor., with brass cap marked

Subdivision of T.8 S.,R.6 W.

chains	
	S 19 / ½ / S 30 / 1915
	raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor.
	Gradually ascend along nearly N. slope.
36.80	Spur, 3 ft. above ¼ sec. cor., projects N.30°E.
	Descend over steep N. and NW. slopes 490 ft. to
74.15	The cor. of secs. 19,20,29 and 30
	Land, rough mountainous with steep slopes. E. and W. exposure and drainage from divide at 21.60 chs.
	Soil, 4th. rate; gravelly and rocky of quartz and limestone formation with some shallow sand on gravelly and rocky sub-soil.
	Timber, some scrub cedar, pinon and mohogany on both sides of line.
	Undergrowth, sage, scattering service and rabbit brush and grass. Good grazing.
	November 27,1915.
	Howard W. Miller
	U. S. Surveyor.

	November 22: At 8h. a.m. apparent time, I set off 40° 06' on the lat. arc; 19° 55'S., on the decl. arc; and determine a meridian at the cor. of secs. 19,20,29 and 30.
	Thence I run
	North, on a temp. line bet. secs. 19 and 20
40.00	Set temp. ¼ sec. cor.
80.00	Set temp. cor. of secs. 17,18,19 and 20
	From temp. cor. of secs. 17,18,19 and 20, I run
	East, on a random line bet. secs. 17 and 20
40.83	Fall 48 lks. N. of the ¼ sec. cor.
	Thence from cor. of secs. 19,20,29 and 30, I run
	North, on true line bet. secs. 19 and 20

chains	
	Over mountainous land draining E., through dense under-growth of sage brush and scattering scrub cedar and pinon timber.
	Gradually descend.
1.95	Wash, in bottom of ravine, 30 lks. wide, 2 ft. deep, drains SE. Gradually ascend over broken S. slope of ridge.
10.15	Small draw, 70 ft. above sec. cor., drains SW.
13.45	Enter heavier timber and ascend more abruptly over SW. slope of ridge.
24.65	Ridge, 320 ft. above draw, bears N.30°W. and S.30°E.
	Gradually descend along broken NE. slope.
32.55	Enter very dense timber and begin abrupt descent over NE. slope.
39.76	On nearly N. slope, 95 ft. below top of ridge
	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground for ¼ sec. cor., with brass cap marked
	B 19 ¼ | S 20 1915
	from which
	A cedar, 12 ins. diam., bears N.56°E., 14 lks. dist., marked ¼ S 20 B T
	A cedar, 14 ins. diam., bears N.3¾°W., 47½ lks. dist., marked ¼ S 19 B T
54.80	Leave dense, enter scattering timber, bears E. and W.
65.95	Bottom of large wash and draw from Lookout Pass, wash 15 lks. wide, 3 ft. deep, 230 ft. below ¼ sec. cor., drains E.
	Gradually ascend over S. slope.
66.15	Road, Vernon, Utah to Deep Creek, Nevada, bears E. and W.
68.70	Begin abrupt ascent over S. slope over series of small limestone ledges and boulders.
79.52	270 ft. above draw.
	Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in a mound of stone on solid rock for cor. of secs. 17,18,

chains	
	19 and 20, with brass cap marked T 8 S | R 6 W S 18 | S 17 S 19 | S 20 1915
	raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.
	Land, rough mountainous with steep N. and S. slopes of ridges into draws and ravines draining E.
	Soil; 4th. rate; gravelly and rocky of blue limestone formation, mixed with some shallow sandy loam on hard dry, clay and rock sub-soil.
	Timber, scrub cedar and pinon.
	Undergrowth, sage brush.

	East, on true line bet. secs. 17 and 20
	Over mountainous land draining SE., through dense undergrowth of sage brush and scattering scrub cedar timber.
	Descend abruptly over rocky SE. slope.
14.05	Base of steep descent, descend more gradually.
24.05	Leave mountainous land and timber, enter rolling valley, bears N. and S. Descend gradually over nearly E. slope.
40.83	The ¼ sec. cor.
	Land, W. 24.05 chs. mountainous, E. 16.76 chs. rolling valley. General E. exposure and drainage.
	Soil, 4th. rate; gravelly and rocky of blue limestone formation, mixed with some shallow sandy loam on sub-soil of clay and rock, very dry and packed hard.
	Timber, scrub cedar on W. 24.05 chs.
	Undergrowth, sage brush.
	November 22,1915.

	November 28: At 8h. 15m.a.m. apparent time, I set off 40°07' on the lat. arc; 21° 07' 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

chains	
	S.89°49'W., on a random line bet. secs. 18 and 19
40.00	Set temp. ¼ sec. cor.
74.01	Intersect W. bdy. of the Tp. 30½ lks. S. of the cor. of secs. 13,18,19 and 24, heretofore described
	Thence
	S.89°57'E., on true line bet. secs. 18 and 19
	Over mountainous land draining NW., through dense undergrowth of sage brush.
6.20	Small ravine, drains N.20°W.
	Thence over series of small ridges and gullies.
16.65	Top of ridge and divide between Rush and Skull valleys, point on Lookout Pass, bears N.20°E. and S.
	Descend over NE. slope.
34.01	100 ft. below divide.
	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 18 / ¼ / S 19 / 1915
	raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor.
35.10	Wash, in draw from Lookout Pass, 15 lks. wide, 3 ft. deep, drains SE.
38.40	Road, Vernon, Utah to Deep Creek, Nevada, bears NW. and SE.
	Thence over rough, broken land on N. side of draw.
50.70	Small gully, drains S. 75 lks., thence SE.
	Enter scattering scrub cedar timber, bears N. and S.
	Ascend abruptly over SW. slope.
59.15	Thence along small broken blue limestone ledges, bearing E. and W.
61.35	Enter dense scrub cedar timber, bears N. and S.
74.01	150 ft. above draw. The cor. of secs. 17,18,19 and 20
	Land, mountainous, general W. and SE. exposures and drainage from divide at 16.65 chs.

chains	
	Soil, 3rd. rate; gravelly , rocky and some clay loam on dry clay and rocky sub-soil.
	Timber, scrub cedar and pinon on E. 23.31 chs.
	Undergrowth, sage brush.
	November 28,1915.

	North, on temp. line bet. secs. 17 and 18
40.00	Set temp. ¼ sec. cor.
80.00	Set temp. cor. of secs. 7,8,17 and 18.
	From temp. cor. of secs. 7,8,17 and 18, I run
	East, on a random line bet. secs. 8 and 17
40.68	Fall 14 lks. S. of the ¼ sec. cor. N.bdy. sec.17
	Thence from cor. of secs. 17,18,19 and 20, I run
	North, on true line bet. secs. 17 and 18
	Over rough mountainous land draining E., through undergrowth of sage brush and scrub cedar timber.
	Ascend abruptly SE. slope.
9.00	Spur, 160 ft. above sec. cor., projects E.
	Descend abruptly over NE. slope.
12.10	Ravine, 50 ft. below spur, drains S.30°E.
	Ascend abruptly over SE. slope.
18.45	Spur, 45 ft. above ravine, projects E.
	Thence over series of small ridges and gullys draining E.
40.00	On gradual E. slope in dense scrub cedar timber.
	Set an iron post, 3 ft. long, 1 in. in dia., 18 ins. in the ground on solid rock and 8 ins. in a mound of stone for ¼ sec. cor., with brass cap marked
	S 18 ¼ | S 17
	1915
	raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.
	Trees are within limits in both secs. but none are suitable for bearing trees.
	November 22: At this cor. I set off 20° 01'S., on the

chains	
	decl. arc; and at apparent noon obs, the sun on the meridian; the resulting lat. is 40°07'
80.00	Set an iron post, 3 ft. long, 2 ins. in dia., 18 ins. in the ground on solid rock and 6 ins. in a mound of stone for cor. of secs. 7,8,17 and 18, with brass cap marked

T 8 S	R 6 W
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, general E. exposure and drainage.

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

Timber, scrub cedar.

Undergrowth, sage brush. Some scattering service brush on both sides of line.

N.89°48'E., on a true line bet. secs. 8 and 17

Over rolling mountainous land draining SE., through dense undergrowth of sage brush and scattering scrub cedar timber.

Gradually descend over E. slope.

21.65 Bottom of ravine and wash, 40 lks. wide, 5 ft. deep, 220 ft. below sec. cor., drains SE.

Gradually descend.

40.68 The ¼ sec. cor. N.bdy. sec.17

Land, rolling mountainous, general SE. exposure and drainage.

Soil, 3rd. rate; gravelly and rocky of limestone formation and mixed with some shallow sandy loam on gravelly and rocky sub-soil.

Timber, scrub cedar.

Undergrowth, sage brush.

November 22,1915

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chains	
	November 28: For solar obsn. see line bet. secs. 18 and 19
	Knowing that a closing cor. will be necessary upon the W. bdy. of the Tp., I run from the cor. of secs. 7,8, 17 and 18, N.89°57'W.
	on true line bet. secs. 7 and 18
	Over rough mountainous land draining E., through dense scrub cedar timber and undergrowth of sage brush
	Ascend abruptly, nearly E. slope.
16.05	Thence over nearly S. slope.
	November 28: At this station I set off 21° 13'S., on the decl. arc; and at apparent noon obs. the sun on the meridian; the resulting lat. is 40°07'.
23.75	Thence over nearly E. slope.
35.75	Top of high ridge and divide between Rush and Skull valleys, 975 ft. above sec. cor., bears N. and S.
	Leave dense timber, bears N. and S.
	Descend W. slope of ridge over series of small limestone ledges and through very scattering cedar timber.
40.00	On W. slope, 145 ft. below top of divide.
	Set an iron post, 3 ft. long, 1 in. in dia., 6 ins. in the ground on solid rock and 20 ins. in a mound of stone for ¼ sec. cor., with brass cap marked
	S 7 / ¼ / S 18 / 1915
	raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor.
	No trees within limits.
	Continue descent.
67.45	Gully, 760 ft. below ¼ sec. cor., drains N.60°W.
	Descend more gradual.
71.80	Intersect W. bdy. of the Tp. 78 chs. N.1°42'E., of the cor. of secs. 12 and 13, heretofore described.
	At intersection, Set a blue limestone , 24 x 11 x 7 ins.,

chains	
	18 ins. in the ground for closing cor. of secs. 7 and 18, marked with 2 grooves on N., 4 grooves on S. and CC on E. face; raise a mound of stone, 2 ft. base, 1½ ft. high, E. of cor.
	Trees are within limits, but none are suitable for bearing trees.
	Land, rough mountains, steep slopes from divide at 35.75 chs., draining E. into Rush valley and W. into Skull valley.
	Soil, 4th. rate; rocky of limestone formation mixed with some light brown clay on gravelly and rocky sub-soil.
	Timber, scrub cedar.
	Undergrowth, sage brush.
	November 28,1915.

	November 26: At 8h. a.m. apparent time, I set off 40° 07' on the lat. arc; 20°45'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
	North, bet. secs. 7 and 8
	Over rolling mountainous land draining E., through scrub cedar timber and undergrowth of sage brush.
	On near level line along gentle E. slope near base of mountain.
21.10	Draw, drains SE.
	Ascend abruptly over SW. slope.
30.80	Ridge, 180 ft. above draw, bears NW. and SE. Enter dense timber, bears NW. and SE.
	Gradually descend over rocky NE. slope.
40.00	On NE. slope, 65 ft. below ridge.
	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	
	S 7 ¼ | S 8
	1915
	raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.
	No suitable trees within limits.
49.65	Head of ravine, 45 ft. below ¼ sec. cor., drains SE.
	Thence over rolling SE. exposure.
52.00	Leave dense timber, bears E. and W.
65.20	Small draw, 40 lks. wide, 5 ft. deep, drains SE.
	Gradually ascend over SW. slope.
80.00	In dense sage brush, 195 ft. above draw.
	Set a limestone, 20 x 10 x 10 ins., 15 ins. in the ground for cor. of secs. 5,6,7 and 8, marked with 5 notches on E. and 5 notches on S. edge; raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.
	No trees within reasonable distance suitable for bearing trees.
	Land, mountainous, E. and SE. exposures, drains SE.
	Soil, 3rd. rate; light, shallow sandy loam mixed with gravel and limestone rock on hard, clay and rock sub-soil.
	Timber, scrub cedar.
	Undergrowth, sage brush.

	East, on a random line bet. secs. 5 and 8
40.00	Set temp. ¼ sec. cor.
80.83	Intersect N. and S. line 2 lks. S. of the cor. of secs. 5 and 8
	Thence
	S.89°59'W., on a true line bet. secs. 5 and 8
	Over rough mountainous land through scrub cedar and pinon timber and undergrowth of sage brush.
	Gradually descend along N. slope of mountain.
8.65	Solid limestone rim, bears NE. and SW.
	Descend abruptly over rocky NW. slope into ravine.

chains	
17.75	Wash, in ravine, 30 lks. wide, 5 ft. deep, 130 ft. below rim, drains NE.
	Ascend abruptly over NE. slope.
38.00	Top ascent, 435 ft. above ravine. Thence over nearly N. slope.
40.00	Set an iron post, 3 ft. long, 1 in. in dia., 6 ins. in the ground on solid rock and 20 ins. in a mound of stone for $\frac{1}{4}$ sec. cor., with brass cap marked
	$\frac{S\ 5}{\frac{1}{4}}$ / S 8 / 1915
	from which
	A cedar, 6 ins. diam., bears S.30$\frac{3}{4}$°E., 33 lks. dist., marked $\frac{1}{4}$ S 8 B T.
	A cedar, 8 ins. diam., bears N.15$\frac{1}{4}$°W., 36 lks. dist., marked $\frac{1}{4}$ S 5 B T.
48.75	Leave dense timber, bears N. and S.
	Descend over NW. slope.
50.40	Descend abruptly over W. slope.
63.70	Head of ravine, 254 ft. below $\frac{1}{4}$ sec. cor., heads NW., drains S. Leave timber, bears N. and S.
	Ascend NE. slope.
68.65	Thence over land sloping SE.
80.83	110 ft. above ravine. The cor. of secs. 5,6,7 and 8.
	Land, mountainous with steep slopes of ridges into ravines draining SE.
	Soil, 4th. rate; very rocky of limestone formation, mixed with some light sandy loam and gravel on gravelly and rocky sub-soil.
	Timber, scrub cedar and pinon.
	Undergrowth, sage brush.
	November 26, 1915.

November 27: At 8h. 30m.a.m. apparent time, I set off 40°08' on the lat. arc; 20° 58'S., on the decl. arc;

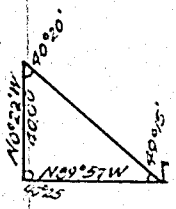
chains	
	and determine a meridian with the solar at the cor. of secs. 5,6,7 and 8.
	Knowing that a closing cor. will be necessary upon the W. bdy. of the Tp., I run
	N.89°57'W., on a true line bet. secs. 6 and 7.
	Over rough mountainous land draining SE., through dense undergrowth of sage brush and scattering young cedar timber.
	Ascend abruptly over rocky SE. slope.
6.75	Enter dense cedar and pinon timber, bears N. and S.
	Thence along very rocky S. slope on N. side of ravine.
11.70	Cross ravine, drains SE.
	Thence ascend abruptly over NE. slope, timber very large and dense.
21.65	Thence over series of limestone ledges, 25 to 35 ft. high, bears NE. and SW.
23.10	Top of second large ledge, thence ascend more gradually over smaller ledges.
39.10	Top of high mountain ridge and ledgy rim, divide between Rush and Skull valleys, 840 ft. above sec. cor., bears N.20°E. and S.20°W.
	Descend over W. slope of mountain over blue limestone ledges, 10 to 50 ft. high, bears N.20°E. and S.20°W.
40.00.	Point falls on top of ledge, 40 ft. below top of ridge.
	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in a mound of stone on solid rock for ¼ sec. cor., with brass cap marked
	S 6 / ¼ / S 7 / 1915
	raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor.
	No suitable trees within limits.
	November 27: At this cor., I set off 21° 01'S., on the decl. arc; and at apparent noon obs. the sun on the

chains

meridian; the resulting lat. is 40°08'.

From this ¼ sec. cor., the line west passes over series of perpendicular limestone ledges and cannot be accurately chained; I therefore triangulate as follows:

Set a point on line at base of mountain and erect a flag at this point. From point at base of mountain turn an angle of 90° 25' to the N. from flag set at the ¼ sec. cor. and measure a base line N.0°22'W., 40.00 chs. From N. end of base the angle to the flag is 40° 20'.



Log. 40.00 chs. =	1.602060
Log sin 40° 20' =	9.811061+~~10~~
Colog sin 49°15' =	0.120580
Log 34.17 chs. =	11.533701-10

40.00 chs. added to 34.17 chs. gives 74.17 chs. to point of triangulation. I now measure S.89°57'E., 4.68 chs. to

69.49 Intersect W. bdy. of the Tp. 1.60 chs. N. of the cor. of secs. 1 and 12 heretofore described.

Set a blue limestone, 18 x 11 x 5 ins., 12 ins. in the ground for closing cor. of secs. 6 and 7, marked with 1 groove on N., 5 grooves on S. and CC on E. face; raise a mound of stone, 2 ft. base, 1½ ft. high, E. of cor.

Land, rough mountains, slopes and drains E. and W. from high ridge divide at 39.10 chs.

Soil, 4th. rate; light, brown clay and very rocky and surface rock of blue limestone formation on rocky subsoil.

Timber, scrub cedar and pinon.

Undergrowth, sage brush. Some grass, good for grazing.

November 27,1915.

November 26: For solar obsn. see line bet. secs. 7 and 8

Knowing that a closing cor. will be necessary upon the N. bdy. of the Tp., I run from cor. of secs. 5,6,7 and 8, North, on a true line bet. secs. 5 and 6

Over rough mountainous land draining SE., through dense

chains	
	undergrowth of sage brush and scattering young cedar timber.
	Gradually ascend over SE. slope.
26.35	Spur, 130 ft. above sec. cor., projects E.
	Descend abruptly over NE. slope.
33.40	Ravine, 120 ft. below spur, drains E.
	Gradually ascend
37.35	Point of spur, between two ravines, falls E.
	Gradually descend.
38.75	Ravine, drains E. about 2 chs., thence SE.
	Ascend abruptly over S. slope.
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 6 ¼ | S 5
	1915
	raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.
	No suitable trees within limits.
	November 26: The sky is overcast at noon, observations for lat. are impossible.
	Ascend abruptly over steep slope of mountain over series of limestone ledges.
69.25	Top of high ridge and divide between Rush and Skull valleys, 610 ft. above ¼ sec. cor., bears NE. and SW.
	Gradually descend over N. slope 85 ft. to
81.39	Intersect N. bdy. of the Tp. 1.00 ch.N.89°48'W.of cor.of secs. 5,6,31 and 32 . Set temp. point.
	November 26,1915
	November 27:
81.39	Intersect N. bdy. of the Tp. 1.00 ch. N.89°48'W. of the cor. of secs. 5,6,31 and 32,heretofore desc.At intersection Set a blue limestone, 24 x 12 x 10 ins., 18 ins. in the ground for closing cor. of secs. 5 and 6, marked with 5 grooves on E., 1 groove on W. and CC on S. face; raise

chains

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

No suitable trees within limits.

Note: I destroy all marks on bearing trees at old cor. pertaining to T.8 S.

Land, rough mountainous sloping and draining SE. from high ridge divide on S. 69.25 chs. and NW. on N. 12.15 chs.

Soil, 4 th. rate; rocky of limestone formation with some light shallow sandy loam on hard, clay and rock sub-soil.

Timber, scrub cedar.

Undergrowth, sage brush.

November 27,1915.

Isaac Hayes
U. S. Transitman.

Boundaries of T.8 S., R.6 W.

Latitudes, departures and closing errors.

LINES designated	True bearing	Dist-ances	Latitudes N	Latitudes S	Departures E	Departures W
E. bdy. sec. 32	N.0°03'E.	40.24	40.24		.04	
"	N.0°03'E.	39.98	39.98		.03	
E.bdy.sec.29	N.0°37'E.	40.48	40.48		.43	
"	North	39.91	39.91			
E,bdy.sec.20	N.0°28'E.	79.29	79.29		.65	
E.bdy.sec.17	N.0°11'E.	40.03	40.03		.13	
"	N.0°17'E.	39.99	39.99		.20	
S.bdy.sec.9	N.89°49'E.	39.75		.13	39.75	
"	East	40.02			40.02	
E.bdy.sec.9	N.0°04'W.	40.24	40.24			.05
"	N.0°02'W.	40.25	40.25			.02
E.bdy. sec.4	N.0°06'W.	80.63	80.63			.14
N.bdy.T8SR6W N. bdy.sec.4	West	80.00				80.00
N.bdy.sec.5	N.89°55'W.	39.98	.06			39.98
"	N.89°59'W.	39.45	.01			39.45
N.bdy.sec.6	N.89°48'W.	39.47	.14			39.47
"	N.89°58'W.	31.32	.02			31.32
W.bdy.T8SR6W W.bdy.sec.6	South	83.02		83.02		
W.bdy.secs.7 & 18	S.1°42'W	158.50		158.43		4.70
W.bdy.secs.19, 30 & 31	South	239.62		239.62		
S.bdy.T8SR6W S.bdy.sec.31	S.88°41'E.	34.47		.79	34.46	
"	N.89°51'E.	39.69	.10		39.69	
S.bdy.sec.32	N.89°23'E.	39.83	.43		39.83	
"	S.89°42'E.	40.08		.21	40.08	
Convergency						.23
			481.93	482.07	235.31	235.36
				481.93		
Error in latitude				.14		235.31
Error in departure						.05

General Description

With the exception of gently rolling land in the south halves of secs. 4 and 8 and the east halves of secs. 9,17,20,29 and 32, this township is mountainous, lying on the E. and W. slopes of a rough range of mountains dividing Rush valley to the east and Skull valley to the west. The summit this mountain passes through the west range of secs. in a north and south direction and its slopes are sharp, breaking off abruptly to the E. and W. and are cut by ravines. The soil is a light brown, shallow sandy loam mixed with disintegrated shales and heavily strewn with blue limestone rock. The sub-soil is a hard, dry clay, packed hard and mixed with rock; bed rock in the highest part of the township is very close to the surface and in many places is exposed. The soil of the gently rolling land is generally a gravelly surface mixed with a rich brown sandy loam on hard, dry dandy and gravelly sub-soil. This soil is very fertile and produces abundant crops without irrigation.

A scrub growth of cedar and pinon timber is found on the mountains and occasionally small patches grow in the foot hills. Sage brush grows abundantly on the entire township and especially so on the gently rolling land. On the mountains considerable bunch grass grows, and is good for grazing purposes.

There is no water in the township.

I find no indications of mineral in the township.

Considerable dry farming is done on the previously surveyed portion of the township adjacent to the new work, and has proved to be profitable. About 1000 acres of land in this survey is suited for dry farming.

There are no settlers in this township.

Howard Miller
U. S. Surveyor

Chas. L. Hayes
U.S. Transitman.

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Page

4—680

BOOK A-417

CERTIFICATE OF ASSISTANTS.

We, the undersigned, hereby certify upon honor that we assisted, to the best of our skill and ability, Isaac Hayes, U.S. Transitman, Howard W. Miller, U.S. Surveyor ~~& U.S. Surveyor~~, during the periods and in the capacities stated opposite our several signatures, in surveying all those parts or portions of retracement and resurvey of the south and west boundaries and subdivision, retracement of the north boundary and survey of the subdivision of T.8 S., R.6 W

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.	
Carl Ray	Nov. 6, 1915	Nov. 30, 1915	chainman
William Fredricksen	"	"	"
Rutan W Riley	"	"	"
Edward Jones	"	"	"
Edward Oliver	"	"	flagman
Leslie H. King	"	"	"
James Tyrrell	"	"	cornerman
Harvey Fox	"	"	"

Subscribed and certified to before me on the dates of the final service as shown above.

Howard W. Miller

U. S. Surveyor.

6—2764

FINAL OATH OF UNITED STATES SURVEYOR.

I, Howard W. Miller, 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 25th day of June, 191 5, 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 retracement and resurvey of the south and west boundaries, and subdivision, retracement of the north boundary and survey of the Subdivision of T. 8 S., R. 6 W.

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.

Howard W. Miller.
U. S. Surveyor.

Subscribed by said Howard W. Miller, and sworn to before me this 29th day of February, 1916.

SEAL

N. C. Thoresen
U. S. Surveyor General

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah, June 27, 1916

The foregoing field notes of the ~~xxxxxxx~~ retracement and resurvey of south and west boundaries and subdivision, retracement of the north boundary and survey of the subdivision of T. 8 S. R. 6 W. S.L.B.& M., Utah,

executed by Howard W. Miller, and Isaac Hayes, under ~~his~~ their special instructions dated June 25, 1915, having been critically examined, and the necessary corrections and explanations made, the ~~said~~ field notes, and the surveys they describe, are hereby approved.

N. C. Thoresen
U. S. Surveyor General.

I certify that the foregoing transcript of the field notes of the above-described surveys in T. 8 S. R. 6 W. S.L.B.& M., Utah., has been correctly copied from the original notes on file in this office.

U. S. Surveyor General.

C—2761

BOOK A-417

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 .....

.....

.....

.....

.....

.....

.....

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, Isaac Hayes, U.S. 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 25th. day of June, 1915, 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 retracement and resurvey of the south and west boundaries and subdivision; retracement of the north boundary and survey of the subdivision of T.8 S., R.6 W.

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.

Isaac Hayes
U.S. Transitman ~~U.S. Surveyor~~.

Subscribed by said Isaac Hayes, and sworn to before me this 15th day of May, 1916

Fred D. Broadbent
Clerk of Court

SEAL

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah, June 27, 1916

The foregoing field notes of the ~~xxxxxx~~ retracement and resurvey of south and west boundaries and subdivision, retracement of the north boundary and survey of the subdivision of T. 8 S. R. 6 W., S.L.B.& M., Utah,

executed by Howard W. Miller and Isaac Hayes, under ~~his~~ their special instructions dated June 25, 1915, having been critically examined, and the necessary corrections and explanations made, the said field notes, and the 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 T. 8 S. R. 6 W. S.L.B.& M., Utah, 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

U. S. Surveyor General's Office
JAN 13 1916
SALT LAKE CITY, UTAH.

BOOK H A-417

FIELD NOTES

Re
OF THE SURVEY OF THE

Second Standard Parallel South, thrpugh Range 7 west,

resurvey of the west boundary and survey of the subdivision of

T.11 S., R.7 W.

Of the Salt Lake Base and *Meridian,*

In the State of Utah

EXECUTED BY

Howard W. Miller

&

Isaac Hayes

In the capacity of U. S. Surveyors, under instructions dated June 25, 1915, *issued by the United States Surveyor General to govern surveys included in Group No.* 37, *which were approved by the Commissioner of the General Land Office,* July 21, 1915.

Survey commenced November 9, 1915

Survey completed November 19, 1915

6—151

,111.24 Acres

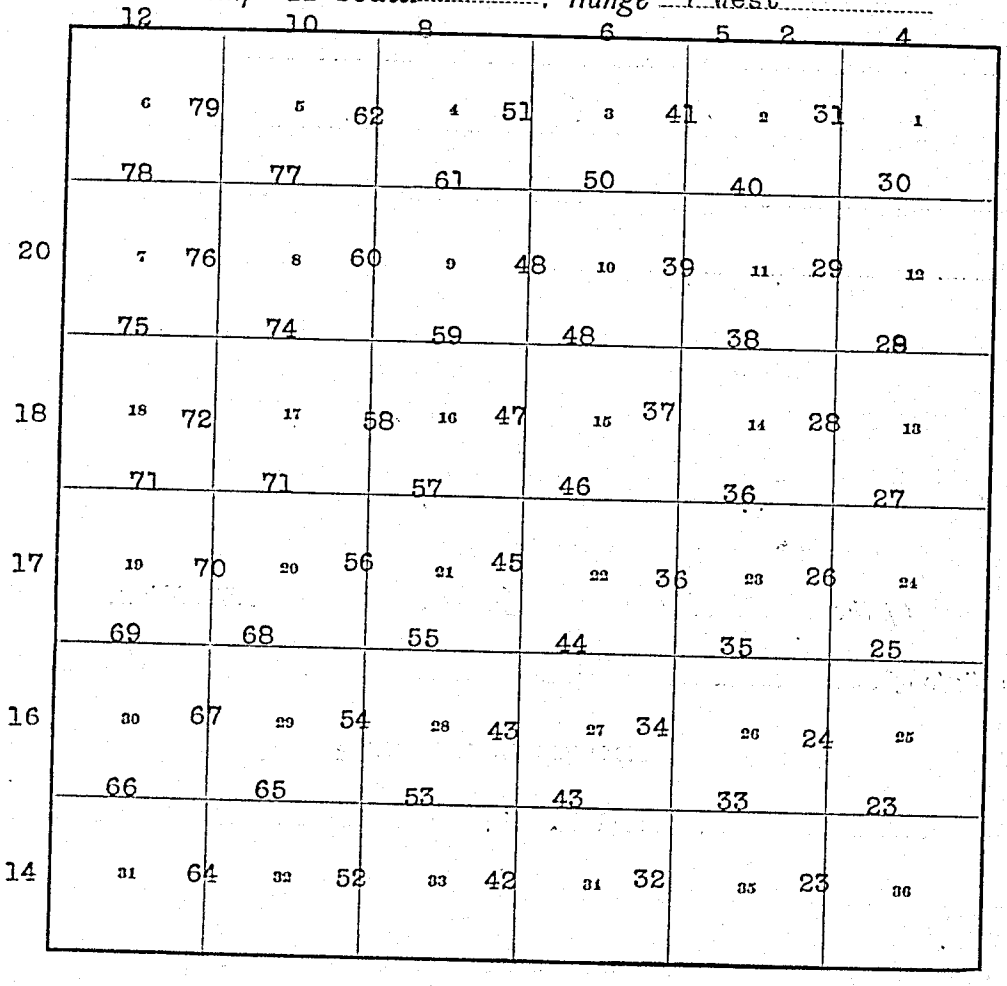
60-06-08 - 64.64 Closing

Res. 2nd Par. South 60-10

BOOK A-417

INDEX DIAGRAM.

Township 11 south, *Range* 7 west



C—151

Resurvey Second Standard Parallel South, through Range 7 West

chains

Survey commenced November 9, 1915 and executed with Young and Sons light mountain transits Nos. 8297 and 8582, with Smith's solar attachment. The horizontal limbs are provided with two double verniers, placed opposite to each other and reading to single minutes of arc, which is also the least count of the verniers of the latitude and declination arcs.

The instruments were approved for use in this survey by the Assistant Supervisor of Surveys for Utah.

I examine the adjustments of the transits and correct the level and collimation errors; then, to test the solar apparatus, by comparing their 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:

(Cloudy skies make stellar observations impossible until Nov.13.)

Nov.13: At my camp which is situated near the ¼ sec. cor. on the S. bdy. sec. 35; approximate latitude 39° 54' N., longitude 112° 35' W.; I set off 39° 54' on the lat. arc; 17° 51' S., on the decl. arc; and, at 3h. 44m. p.m. l.m.t., determine with the solar a meridian and note that a tree about 4 miles distant bears North. At 5h. 02m. p.m. by my watch, which is 30 minutes fast of lm.t., I make an hour angle observation on Polaris and note that an angle from the tree to the star at time of observation is 1° 28' to the east.

Standard time of obsn. Nov.13 -------	5h. 02m.p.m.
Corrected for long. 112°35'W., subtract	30m.
Correct l.m.t. of obsn. ----------	4h. 32m.p.m.
L.M.T.U.C.Pol. Nov. 13 ------	10h.02.7m.p.m.
Corrected for long.112°35'W., sub.	1.1m.
Correct.l.m.t. of U.C. ----------	10h.01.6m.pm.
Hour angle of Pol. at obsn. ----------	5h.29.6m.

Resurvey Second Standard Parallel South, through Range 7 We

chains

Decl. star Nov.13 ---------- 88° 51' 39.3"

Azimuth of Star at obsn. ---------- 1° 28' E.

The tree therefore bears North.

Nov. 13, 1915.

Transit No.8297

Nov.14: At 8h.30m.am.lmt. I set off 39° 54' on the lat. arc; 18° 02' S., on the decl. arc; and determine a meridian with the solar and find that the tree bears N.0° 01' E.

At 2h.30m.p.m.l.m.t., I set off 39° 54' on the lat. arc; and 18° 06' S. on the decl. arc; and determine a meridian with the solar and find that the tree bears North.

I conclude that the adjustments of this instrument are satisfactory.

Transit No.8582.

Nov.14: At 8h.35m.a.m.l.m.t., I set off 39° 54' on the lat. arc; 18° 02' S., on the decl. arc; and determine a meridian with the solar and find that the tree bears N.0° 02' E.

At 3p.m.l.m.t., I set off 39° 54' on the lat. arc; 18° 06' S. on the decl. arc; and determine a meridian with the solar and find that the tree bears North.

I conclude that the adjustments of this instrument are satisfactory.

No magnetic decl. was taken on account of defective needles.

Steel tapes, 5 chs. long were used by both parties in the field, together with clinometers for determining

chains	
	slope angles and the reduced horizontal distances only appear in the official field notes. The tapes were tested, comparison being made with a standard tape, 1 ch. long, kept and used for that purpose only.
	--
	Nov.10,1915
	I begin at the standard ¼ sec. cor. on the S. bdy. sec. 35, which is a quartzite stone 3 x 10 x 8 ins. above ground, firmly set, marked ¼ on N. face. No accessories to cor. I re-establish cor. as follows:
	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground alongside old cor., marked
	S 35 ¼
	1915
	raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor.
	At this cor. I set off 39°54' on the lat. arc; 16°54'S. on the decl. arc, and at 7h. 30m.a.m.l.m.t., determine with the solar a meridian.
	Thence I run
	East, retracing on S. bdy. sec. 35
	Over rolling land through dense undergrowth of sage brush and shadscale.
1.10	Meadow wash, 10 lks. wide, 4 ft. deep, stream in same 1 lk. wide, 2 ins. deep, course S.
3.85	Wash, 10 lks. wide , 4 ft. deep, course S.
12.93	Road, Eureka, Utah to Erickson's ranch, bears NW. and SE.
40.03	Fall 5 lks. N. of the standard cor. of secs. 35 and 36 which is a quartzite stone 5 x 14 x 14 ins. above ground, firmly set, marked with 5 grooves on E. face and 1 groove on W. face. No accessories to cor.
	Nov.19: Set an iron post, 3 ft. long, 3 ins. in dia., 24 ins. in the ground alongside old cor. for re-establish-

chains	
	ed standard cor. of secs. 35 and 36, with brass cap marked T 10 S R 7 W S 35 | S 36 1915 raise a mound of stone, 2 ft. base 1½ ft. high, N. of cor.
	The true bearing of this ½ mile is S.89°56'E., and the distance is 40.03 chs.
	Land, rolling, S. exposure.
	Soil, rich brown clay and sandy loam mixed with gravel on hard dry brown clayand gravel sub-soil; 2 nd. rate.
	No timber.
	Undergrowth, sage brush and shadscale.
	From a point 5 lks. N. of standard cor. of secs. 35 and 36,
	East retracing on S. bdy. sec. 36
	Over rolling land thru dense undergrowth of sage brush and shadscale and scattered scrub cedar timber.
18.80	Wash, 1 ch. wide, 10 ft. deep, course S.35°W.
39.75	Fall 10 lks. N. of the standard ¼ sec. cor. which is a conglomerate quartz stone , 4 x 10 x 15 ins., lying on the ground, marked ¼ on upper face. No accessories to cor.
	Reset stone 10 ins. in the ground with ¼ on N. face.
	Set an iron post 3 ft. long, 1 in. in dia., 26 ins. in the ground alongside old cor. for re-established standard ¼ sec. cor., marked S 36¼ 1915 raise a mound of stone, 2 ft. base , 1½ ft. high, N. of cor.

chains	
	The true bearing of this ½ mile is N.89°56' W. and the distance is 39.75 chs.
	From point 10 lks. N. of the ¼ sec. cor., I continue East.
40.50	Fall 20 lks. N. of the cor. of Tps. 10 and 11 S., Rs. 6 and 7 W., which is a conglomerate quartz stone, 8 x 12 x 12 ins. above ground; firmly set, and marked and witnessed as described by the Surveyor General.
	The true bearing of this ½ mile is N.89° 51'W., and the distance is 40.50 chs.
	Land, rolling, drains SW.
	Soil, gravelly, and light brown clay on dry brown clay and stony sub-soil; 2 nd. rate.
	Timber, scrub cedar.
	Undergrowth, sage brush and shadscale.
	Some grass, good for grazing purposes.
	For lat. obsn. this date see W. bdy. T.11 S., R.6 W.
	November 10,1915.
	Howard W. Keller
	U. S. Surveyor.

	November 10: At 7h.35m. am. l.m.t., I set off 39°54' on the lat. arc; 16° 54'S., on the decl. arc; and determine a meridian with the solar at the standard ¼ sec. cor. S. bdy. sec. 35 heretofore described.
	Thence I run
	West, retracing on S. bdy. sec. 35
	Over rolling land draining and sloping S., through dense undergrowth of sage brush and shadscale.
2.80	Old road, bears NE. and SW.
9.40	Wash, 30 lks. wide, 5 ft. deep, course SE.
15.00	Enter scattering cedar timber, brs. N. and S.

Resurvey Second Standard Parallel South, through Range 7 Wes

chains	
17.50	Wash, 20 lks. wide, 3 ft. deep, course S.30°E.
35.00	Enter dense cedar timber, bears NE. and SW.
40.20	Fall 5 lks. S. of the standard cor. of secs. 34 and 35 which is a quartzite stone, 11 x 8 x 8 ins. above ground, firmly set, marked with 2 notches on E. and 4 notches on W. edge. No accessories to cor.
	Nov.19: Set aniiron post, 3 ft. long, 3 ins. in dia., 24 ins. in the ground alomgside old cor. for reestablished standard cor. of secs. 34 and 35, with brass cap marked
	T 10 S | R 7 W S 34 | S 35 1915
	raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor.
	The true bearing of this ½ mile is N.89°56'W., and the distance is 40.20 chs.
	Land, low rolling foothills, SE. exposure; drs. S.
	Soil, 2nd. rate; light brown clay loam mixed with gravel on hard clay sub-soil;
	Timber, cedar.
	Undergrowth, dense sage brush and shadscale.
	From point 5 lks. S. standard cor. secs. 34 and 35, West, retracing on S. bdy. sec. 34
	Gradually ascend over rolling mountainous land through scrub cedar timber and dense undergrowth sage brush and shadscale.
25.25	Swale, drains SE., bears NW. and SE.
40.10	55 ft. above sec. cor.
	Intersect standard ¼ sec. cor., which is a quartzite stone 14 x 10 x 8 ins., lying on the ground, marked ¼ on one face., witnessed as described by the Surveyor

chains	
	General.
	I reset stone 10 ins. in the ground with ¼ facing N.
	Nov.19: Set an iron post, 3 ft. long, 1 in. in dia.,
	24 ins. in the ground alongside old cor. for re-established standard ¼ sec. cor., with brass cap marked
	S 34 ¼ / 1915
	raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor.
	The true bearing of this ½ mile is S.89°56'W., and the distance is 40.10 chs.
	From ¼ sec. cor., I continue
	West
46.00	Small swale, drains SE.
	Asc.
70.60	Point of spur, 210 ft. above ¼ cor., falls NE.
	Gradually descend over NW. slope.
76.60	Draw, 25 ft. below spur, course NE.
	Gradually asc. along N. side of same draw
80.62	Fall 54 lks. S. of the standard cor. of secs. 33 and 34 which is a conglomerate quartz stone, 16 x 12 x 10 ins, above ground, firmly set, marked with three grooves on E. and 3 grooves on W. face. No accessories to cor.
	Nov. 19: Set an iron post, 3 ft. long, 3 ins. in dia., 12 ins. in the ground and 12 ins. in mound of stone alongside old cor. for re-established standard cor. of secs. 33 and 34, with brass cap marked
	T 10 S | R 7 W / S 33 | S 34 / 1915
	raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor.

chains	
	Note: On account of underlying rock I am unable to set post more than 12 ins. in the ground.
	The true bearing of this ½ mile is N.89°14'W. and the dstance is 40.52 chs.
	Land, rolling mountainous with easterly exposure and drains S.
	Soil; 3rd. rate; sandy and gravelly loam mixed with quartz rock on hard, dry clay and rock sub-soil.
	Timber, scrub cedar.
	Undergrowth, sage brush and shadscale.

	From point 54 lks. S. of standard cor. of secs. 33 and 34, I run
	West, retracing S. bdy. sec. 33
39.56	Fall 69 lks. S. of the standard ¼ sec. cor. which is a quartzite stone, 20 x 10 x 8 ins. lying on the ground, marked ¼ on one face. No accessories to cor.
	Nov. 10: The sky is overcast at noon, observations for lat. are impossible.
	From point 69 lks. S. of ¼ sec. cor., I continue West
78.55	Fall 113 lks. S. of the standard cor. of secs. 32 and 33 which is a quartzite stone 20 x 11 x 8 ins. above ground, firmly set, marked with 4 notches on E. and 2 notches on W. edge. No accessories to cor.
	This mile of survey is out of limits, also the remainder of the Standard Parallel through range 7 west as I have found from further retracements made November 11. There are no subdivisions dependent upon this line west of the cor. of secs. 33 and 34 and I begin at said cor. and resurvey this line west.
	Only one set of chainmen is employed in this resurvey

Resurvey Second Standard Parallel South, through Range 7 West

chains	
	all slope angles and distances being double checked.
	November 10,1915.
	Nov.16: From standard cor. secs. 33 and 34 West, resurveying S. bdy. sec. 33
	Gradually ascend along N. side of draw over rough mountainous land through cedar timber and dense undergrowth of sage brush.
15.68	Ridge, 175 ft. above sec. cor., bears NE. and S.
	Gradually descend over NW. slope over series small ridges and draws.
28.97	Base descent, 25 ft. below ridge. Gradually ascend over NE. slope.
37.50	Ridge, 110 ft. above base descent, bears NW. and SE.
	Descend abruptly into head of ravine.
39.56	The old ¼ sec. cor. bears N. 15 lks. I destroy cor.
40.00	Set an iron post, 3 ft. long, 1 in. in dia., 24 ins. in the ground for standard ¼ sec. cor., with brass cap marked
	S 33 ¼
	1915
	raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor.
41.65	Head of ravine, 35 ft. below ridge, course NW.
	Ascend abruptly very rocky NE. slope.
54.18	Sharp rocky ridge, 345 ft. above ravine, bears N.20°W. and S.20°E.
	Descend abruptly NW. slope over series broken quartzite ledges bearing NW. and SE.
61.38	Ravine, 220 ft. below ridge, course SW. Thence along rocky SE. slope of mountain over quartzite slide rock and boulders.

chains	
67.10	Decsend gradually over SW. slope.
69.68	Begin abrupt descent
78.55	The old cor. secs. 32 and 33 bears N. 58 lks. I destroy this cor.
80.00	275 ft. below top ascent.

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

T 10 S R 7 W
S 32 | S 33
1915

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

Land, rough broken mountains, NE. exposure and drain on E. 54.18 chs. and SW. exposure and drain on W. 25.82 chs.

Soil, 4th. rate, very rocky of quartz formation mixed with clay and gravel on hard packed clay and rocky sub-soil;

Timber, cedar.

Undergrowth, sage brush. Some grass, good for grazing.

November 16,1915.

Nov.18:

West, resurveying on S. bdy. sec.32

Over mountainous land through scattering cedar timber and dense undergrowth of sage brush.

chains	
	Gradually descend over SW. slope of spur.
4.92	Road, bears N.20°E. and S.20°W.
6.21	Bottom of canyon and Judd creek, 3 lks. wide, 4 ins. deep good water, 95 ft. below sec. cor., course S.20°E.
7.06	Old road, bears N.20°E. and S.20°W.

Resurvey Second Standard Rarallel South, through Range 7 West

chains	
	Begin ascent over SE. slope over quartzite slide rock and boulders. Timber becomes dense.
17.35	Spur, 125 ft. above canyon, projects SE. Thence over broken SE. exposure.
35.00	Begin abrupt ascent over E. slope of mountain.
38.59	The old standard ¼ sec. cor. bears N. 97 lks. I destroy cor.
40.00	135 ft. above top of spur
	Set an iron post, 3 ft. long, 1 in. in dia., 18 ins. in the ground and 6 ins. in a mound of stone for standard ¼ sec. cor., with brass cap marked
	S 32¼ / 1915
	raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor.
	Note: On account of underlying rock I am unable to set post more than 18 ins. in the ground.
49.92	Sharp rocky ridge, 354 ft. above ¼ sec. cor., bears N.20°E. and S.20°W. Leave dense timber, bears N. and S. Desc. abruptly over broken NW. slope.
57.09	Ravine, 132 ft. below ridge, drains N.30°E.
	Thence over series small ravines and spurs.
67.55	Spur, 135 ft. above ravine, projects NE. Desc.
70.65	Large draw, drs. NE.
	Ascend abruptly over rocky SE. slope of mountain.
80.00	190 ft. above draw. Find no trace of old standard cor. of secs. 31 amd 32.
	Set an iron post, 3 ft. long, 3 ins. in dia., 18 ins. in the ground and 6 ins. in a mound of stone for standard cor. of secs. 31 and 32, with brass cap marked
	T 10 S R 7 W / S 31 | S 32 / 1915

chains

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

Note: On account of natural obstacles, I am unable to set post more than 18 ins. in the ground.

Land, rough broken mountains, SE. exposure and drainage.

Soil, 4th. rate, very rocky of quartzite formation on rocky sub-soil.

Timber, cedar.

Undergrowth, sage brush.

West, resurveying on S. bdy. sec. 31

Over rough mountainous land draining NE., through dense undergrowth of sage brush and scattering cedar timber.

Gradually ascend along N. side of large draw.

7.80 Ravine, 180 ft. above sec. cor., course SE.

Ascend abruptly rough broken NE. slope over series broken quartzite ledges.

19.06 Ridge, 460 ft. above ravine, bears N. and S.

Enter dense cedar timber. Gradually descend over NW. slope.

28.76 Sharp rocky spur, 75 ft. below ridge, projects N.

Desc. abruptly over rocky SW. slope over broken quartzite ledges and slide rock.

40.00 165 ft. below spur. No trace of old ¼ cor. can be found.

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

S 31¼

1915

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

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

Resurvey Second Standard Parallel South, through Range 7 West

chains	
63.05	Base of descent and canyon, 575 ft. below ¼ cor. sec. bears N. and S. Thence across canyon.
64.15	Wash in canyon, 15 lks. wide, 4 ft. deep, course S.30°W. Gradually ascend.
69.80	Leave dense timber, enter more scattering, bears N. and S.
76.97	The old standard cor. of Tps.10 S.,Rs. 7 and 8 W., bears N. 91 lks. I destroy cor.
80.00	Set an iron post, 3 ft. long, 3 ins. in dia., 18 ins. in the ground and 6 ins. in a mound of stone for cor. of T.10 S., Rs. 7 and 8 W., with brass cap marked T 10 S / R 8 W S 36 | R 7 W S 31 / 1915 raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor.

Note: On account of underlying rock I am unable to set post more than 18 ins. in the ground.

Land, rough mountainous with steep rocky slopes of ridges into ravines draining NE. and S.

Soil, 4th. rate; very rocky of quartzite formation on hard clay and gravel sub-soil;

Timber, cedar.

Undergrowth, sage brush.

November 18, 1915.

Isaac Hayes

U.S. Transitman

Resurvey West boundary of T.11 S.,R.7 W.

chains	
	Nov.12: For solar observation see line bet. secs. 1 and 36, S. bdy. T.11 S.,R.7 W.
	The cor. of Tps. 11 and 12 S.,Rs. 7 and 8 W. is a green limestone 5 x 10 x 10 ins. above ground, firmly set marked and witnessed as described by the Surveyor General.
	Knowing that a closing cor. will be necessary for Tps. 11 and 12 S.,R.7 W. I re-establish this cor. for Tps. 11 and 12 S.,R.8 W. as follows:
	Destroy notches on E. side of stone.
	Set an iron post, 3 ft. long, 3 ins. in dia., 24 ins. in the ground alongside old cor. for cor. of Tps. 11 and 12 S.,R.8 W., with brass cap marked
	T 11 S S 31 S 36 R 7 W R 8 W S 6 S 1 T.12 S 1915
	raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.
	Thence I run
	North, retracing E. bdy sec.36, T.11 S.,R.8 W.
	Over gently rolling land in wide draw draining SW., through dense undergrowth of sage brush and shadscale.
	Gradually descend.
20.21	Wash, 15 lks. wide, 3 ft. deep, course SW.
	Gradually ascend.
29.76	Leave draw, bears NE. and SW. Thence over nearly level land.
40.11	Fall 8 lks. W. of the ¼ sec. cor., which is a green limestone 2 x 6 x 8 ins., lying on the ground, marked ¼ on one face. No accessories to cor.
	Nov.16: Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground alongside old cor. for

Resurvey west boundary of T.11 S.,R.7 W.

chains

re-ostablished ¼ sec. cor. E. bdy. sec.36, T.11 S.,R. 8 W., with brass cap marked

S36¼ | 1915

raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor. Note: Old cor.buried alongside iron post.

The true bearing this ½ mile is N.0°07'E. and the distance is 40.11 chs.

Novemebr 12,1915

Nov.16: For solar obsn. see line bet. secs. 31 and 32 subdivision of T.11 S.,R.7 W.

From ¼ sec. cor., I continue

North

1.90 Road, bears NW. and SE.

32.00 Judd creek wash, 8 lks. wide, 4 ft. deep, course SW.

40.25 Fall 4 lks. W. of the cor. of secs. 25,30,31 and 36, which is a gray granite stone, 6 x 6 x 8 ins., lying on the ground, marked with 1 notch on one and 5 notches on opposite edge. No accessories to cor.

I re-set stone 4 ins. in the ground with 1 notch on S. and 5 notches on N. edge.

Knowing that closing cors.for R.7 W. will be necessary upon this boundary, I re-establish all cors. for two secs. and quarters only, referring to T.11 S.,R.8 W.

Set an iron post, 3 ft. long, 3 ins. in dia. 24 ins. in the ground alongside old cor. for re-established cor. of secs. 25 and 36, E. bdy. T.11 S.,R.8 W., with brass cap marked

T 11 S

R 8 W | R 7 W

S 25 | S 30

S 36 | S 31

1915

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

chains	
	of cor.
	The true bearing of this ½ mile is N.0°04'E., and the distance is 40.25 chs.
	Land gently rolling, draining SW.
	Soil, sandy and gravelly brown clay on hard, dry clay and gravel sub-soil; 2nd. rate.
	No timber.
	Undergrowth, sage brush and shadscale.
	From cor. secs. 25 and 36, E. bdy. T.11 S.,R.8 W., I run North, retracing E. bdy. sec. 25
	Over rolling land draining SW., through dense undergrowth of sage brush and shadscale.
8.85	Road, bears NE. and SW.
16.80	Wash, 10 lks. wide, 2 ft. deep, course S.60°W.
18.90	Wash, 10 lks. wide, 1 ft. deep, course S.60°W.
40.22	Fall 23 lks. W. of the ¼ sec. cor. which is a brown granite stone, 8 x 8 x 6 ins. above ground, firmly set, marked ¼ on W. face. No accessories to cor.
	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground for ¼ sec. cor. E. bdy. sec. 25, T.11 S., R.8 W., with brass cap marked
	S 25 ¼ | 1915
	raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor. I bury old cor. alongside iron post.
	The true bearing of this ½ mile is N.0°20'E., and the distance is 40.22 chs.
	From point 23 lks. W. of ¼ sec. cor., I continue North
40.19	Fall 13 lks. W. of the cor. of secs. 19,24,25 and 30, which is a quartzite stone 6 x 8 x 10 ins. above

chains

ground, firmly set, marked with 4 notches on N. and 2 notches on S. edge. No accessories to cor.

Set an iron post, 3 ft. long, 3 ins. in dia., 24 ins. in the ground alongside old cor. for cor. of secs. 24 and 25, E. bdy. T.11 S.,R.8 W., with brass cap marked

T 11 S
R 8 W | R 7 W
S 24 | S 19
S 30
S 25
1915

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

The true bearing of this ½ mile is N.0°09'W., and the distance is 40.19 chs.

Land, gently rolling valley, SW. exposure.

Soil, 3rd. rate: sandy and gravelly clay loam on hard, dry clay and quartzite rock sub-soil.

No timber.

Undergrowth, sage brush and shadscale.

From point 13 lks. W. of the cor. of secs. 24 and 25, North, retracing E. bdy. sec. 24, T.11 S.,R.8 W.

Graduallyascend over rolling land draining SW., through dense undergrow th of sage brush and shadscale.

31.20 Gravelly and rocky bed of wash, 50 lks. wide, drains SW.

40.28 Fall 16 lks. W. of the ¼ sec. cor., which is a Quartzite stone, 8 x 10 x 6 ins. above ground, firmly set, marked ¼ on W. face. No accessories to cor.

Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in the ground, alongside old cor. for ¼ cor. E. bdy. sec. 24, T.11 S.,R.8 W., with brass cap marked

S 24½
1915

Resurvey west boundary of T.11 S.,R.7 W.

chains

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

The true bearing of this ½ mile is N.0°03'E. and the distance is 40.28 chs.

From point 16 lks. W. of the ¼ sec. cor., I continue North

8.03 Wash, 12 lks. wide, 2 ft. deep, course SW.

40.20 Fall 10 lks. W. of the cor. of secs. 13,18,19 and 24 which is a gray granite stone, 10 x 8 x 7 ins. above ground, firmly set, marked with 3 notches on N. and 3 notches on S. edge. No accessories to cor.

Set an iron post, 3 ft. long, 3 ins. in dia., 24 ins. in the ground alongside old cor. for cor. of secs. 13 and 24, E. bdy. T.11 S.,R.8 W., with brass cap marked

T 11 S
R 8 W | R 7 W
S 18
S 13 | S 19
S 24
1915

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

The true bearing of this ½ mile is N.0°05'W., and the distance is 40.20 chs.

Land, rolling, general SW. drainage.

Soil, 3rd. rate; stony and gravelly mixed with some brown clay on hard, dry brown clay and quartzite rock sub-soil;

No timber.

Undergrowth, sage brush and shadscale.

From point 10 lks. W. of cor. secs. 13 and 24, I run North, retracing on E. bdy. sec. 13, T.11 S.,R.8 W.

Gradually ascend over gently rolling land sloping S.,

Resurvey west boundary of T.11 S.,R.7 W.

chains	
	through dense undergrowth of sage brush and shadscale.
30.54	Road, bears N.70°E. and S.70°W.
40.05	Fall 15 lks. W. of the ¼ sec. cor., which is a quartzite stone, 8 x 10 x 12 ins. above ground, firmly set, marked ¼ on W. face. No accessories to cor.
	Set an iron post, 3 ft. long, 1 in. in dia., 20 ins. in the ground and 6 ins. in mound of stone alongside old cor. for ¼ sec. cor. E. bdy. sec. 13, T.11 S.,R.8 W., with brass cap marked
	S 13¼ | 1915
	raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.
	Note: On account of underlying rock I am unable to set post more than 20 ins. in the ground.
	The true bearing of this ½ mile is N.0°04'E. and the distance is 40.05 chs.
	November 16,1915.
	November 18: For solar observation see line bet. secs. 8 and 17, subdivision of T.11 S.,R.7 W.
	From ¼ sec. cor. on the E. bdy. sec. 13, T.11 S.,R.8 W., I run
	North
27,55	Wash, 15 lks. wide, 6 ft. deep, course SW.
31.96	Road and base of bench, bears E. and W. Asc.
33.57	Top steep ascent and bench, 33 ft. above road, bears E. and W. Gradually descend.
34.96	Wash, 8 lks. wide, 2 ft. deep, in small gully, 10 ft. below top ascent, course S.30°E.
	Thence on E. side of wash near bottom of gully.
37.57	Same wash, course S.25°W. Asc. on W. side of gully
39.93	Intersect the cor. of secs. 7,12,13 and 18 which is a granite stone 14 x 9 x 6 ins. above ground, firmly set,

chains

marked with 4 notches on S. and 2 notches on N. edge.
No accessories to cor.

Set an iron post, 3 ft. long, 3 ins. in dia., 18 ins. in the ground and 6 ins. in a mound of stone for cor. of secs. 12 and 13 on the E. bdy. of T.11 S.,R.8 W., with brass cap marked

T 11 S
R 8 W | R 7 W
S 7
S 12 | S 18
S 13
1915

raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor. Note; Old cor. buried alongside post.

Note: On account of underlying rock I am unable to set post more than 18 ins. in the ground.

The true bearing of this ½ mile is North and the distance is 39.93 chs.

Land, rolling, S. exposure.

Soil, 3rd. rate; gravelly and light brown clay mixed with considerable quartzite rock on gravelly and rocky sub-soil.

No timber.

Undergrowth, sage brush and shadscale.

From cor. secs. 12 and 13, I run

North, retracing E. bdy. sec. 12, T.11 S.,R.8 W.

Over rolling bench land sloping S. through dense undergrowth of sage brush and shadscale.

Gradually ascend along W. side of small gully.

16.05 Leave gully, 75 ft. above sec. cor., bears N.30°E. and S.30°W. Continue gradual ascent.

39.75 172 ft. above sec. cor.

Fall 9 lks. W. of the ¼ sec. cor. which is a granite stone 10 x 10 x 16 ins. above ground, firmly set,

chains

marked ¼ on W. face. No accessories to cor.

Set an iron post, 3 ft. long, 1 in. in dia., 10 ins. in the ground and 16 ins . in a mound of stone alongside old cor. for ¼ sec. cor. on E. bdy. sec. 12, T.11 S., R. 8 W., with brass cap marked

S 12¼ | 1915

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

Note: On account of underlying rock I am unable to set post more than 10 ins. in the ground.

The true bearing of this ½ mile is N.0°08'E. and the distance is 39.75 chs.

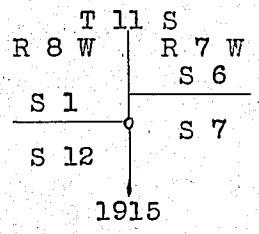
From ¼ sec. cor., I run

North

39.35 Old wood road, bears NE. and SW.

40.00 On brink of gully, bears NE. and SW. No trace of old sec. cor. can be found.

Set an iron post, 3 ft. long, 3 ins. in dia., 14 ins. in the ground and 10 ins. in a mound of stone for cor. of secs. 1 and 12 on the E. bdy. T.11 S.,R.8 W., with brass cap marked



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

Note: On account of natural obstacles I am unable to set post more than 14 ins. in the ground.

Land, rolling bench, S. exposure.

Soil, 3rd. rate; gravelly and rocky mixed with some,

Resurvey west boundary of T.11 S.,R.7 W.

chains

light brown sandy clay on hard dry clay and rock sub-soil.

No timber.

Undergrowth, short sage brush and shadscale.

November 18,1915.

chains

November 13: At 8h.30m.a.m.l.m.t., I set off 39°49' on the lat. arc; 17° 46'S. on the decl. arc; and determine a meridian with the solar at the cor. of secs. 1,2,35 and 36 on the S. bdy. of the tp. heretofore described.

Thence I run

N.0°01'W., bet. secs. 35 and 36.

Over nearly level land through dense undergrowth of shadscale.

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	S 36

1915

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

80.00 Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground for cor. of secs. 25,26,35 and 36, with brass cap marked

T 11 S S 26	R 7 W S 25
S 35	S 36

1915

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

Land, nearly level valley.

Soil, 2nd. rate; light sandy loam on a loose, dry sandy clay sub-soil.

No timber.

Undergrowth, shadscale.

East, on a random line bet. secs. 25 and 36

chains	
40.00	Set temp. ¼ sec. cor.
79.86	Intersect E. bdy. of the tp. 5 lks. N. of the cor. of secs. 25,30,31 and 36 heretofore described.
	Thence
	N.89°58'W., on a true line bet. secs. 25 and 36
	Over nearly level land through dense undergrowth of sage brush.
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
	S 25 ¼ | S 36 1915
	dig pits, 18 x 18 x 12 ins., E. and W. of post, 3 ft. dist., raise a mound of earth, 3½ ft. base, 1½ ft. high, N. of cor.
79.86	The cor. of secs. 25,26,35 and 36.
	Land, nearly level.
	Soil, light sandy loam on a sandy clay sub-soil; 2nd. rate.
	No timber.
	Undergrowth, shadscale.
	N.0°01'W., bet. secs. 25 and 26.
	Over nearly level land through dense undergrowth of shadscale.
18.30	Wash, 25 lks. wide, 5 ft. deep, course W. for 5 chs. thence S.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
	S 26 ¼ | S 25 1915

Subdivision of T.11 S.,R.7 W.

chains	
	dig pits, 18 x 18 x 12 ins., N. and S. of post, 3 ft. dist., raise a mound of earth, 3½ ft. base, 1½ ft. high, W. of cor.
62.50	Wash, 25 lks. wide, 6 ft. deep, course SW.
80.00	Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground for cor. of secs. 23,24,25 and 26, with brass cap marked

T 11 S	R 7 W
S 23	S 24
S 26	S 25

1915

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

Land, level valley.

Soil, 2nd. rate; light, dry sandy loam on dry clay subsoil. Contains some alkali.

No timber.

Undergrowth, shadscale.

Land suitable for dry farming or grazing.

S.89°58'E., on a random line bet. secs. 24 and 25

40.00	Set temp. ¼ sec. cor.
79.83	Intersect E. bdy. of the tp. 17 lks. S. of the cor. of secs. 24 and 25, heretofore described.

Thence

S.89°55'W., on a true line bet. secs. 24 and 25

Over nearly level land, through dense undergrowth of shadscale

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

S 24
¼

S 25
1915

chains

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

Nov.13: At this cor. I set off 17°49'S., on the decl. arc; and at 11h.44m.am.l.m.t., observe the sun on the meridian, the resulting lat. is 39°51'

64.33 Wash, 25 lks. wide, 6 ft. deep, course SW.

78.03 Road, bears NW. and SE.

79.83 The cor. of secs. 23,24,25 and 26

Land, nearly level valley.

Soil; 2nd. rate; light, dry sandy clay loam contains some alkali on deep, dry brown clay sub-soil.

No timber.

Undergrowth, shadscale.

N.0°01'W., bet. secs. 23 and 24

Over nearly level land through dense undergrowth of shadscale.

1.33 Road, bears 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

S 23 ¼	S 24

1915

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

80.00 Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground for cor. of secs. 13,14,23 and 24, with brass cap marked

T 11 S	R 7 W
S 14	S 13
S 23	S 24

1915

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

Subdivision of T.11 S.,R.7 W.

chains	
	Land, nearly level.
	Soil, 2nd. rate; light, dry sandy clay , contains some alkali on sandy clay sub-soil.
	No timber.
	Undergrowth, shadscale.
	N.89°55'E., on a random line bet. secs. 13 and 24
40.00	Set temp. ¼ sec. cor.
79.77	Intersect E. bdy. of the tp. 17 lks. N. of the cor. of secs. 13 and 24 heretofore described.
	Thence
	N.89°58'W., on a true line bet. secs. 13 and 24
	Over rolling land, gentle SW. exposure, through dense undergrowth of shadscale.
13.27	Wash, 10 lks. wide, 3 ft. deep, course SW. Thence over nearly level land.
24.87	Wash, 20 lks. wide, 5 ft. deep, course SW.
39.885	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 13 / ¼ / S 24 / 1915
	dig pits, 18 x 18 x 12 ins., E. and W. of post, 3 ft. dist., raise a mound of earth 3½ ft. base, 1½ ft. high N. of cor.
79.77	The cor. of secs. 13,14,23 and 24
	Land, rolling on the eastern portion and nearly level in the west.
	Soil, 2nd. rate; light, dry , brown sandy clay mixed with gravel and containign some alkali on hard , dry brown clay sub-soil.
	No timber.
	Undergrowth, shadscale.

chains	
	N.0°01'W., bet. secs. 13 and 14
	Over nearly level land through dense undergrowth of shadscale.
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 14	S 13
¼	

1915

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

80.00	Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground for cor. of secs. 11,12,13 and 14, with brass cap marked

T 11 S	R 7 W
S 11	S 12
S 14	S 13

1915

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

Land, level.

Soil, 2nd. rate; light, dry, sandy clay mixed with gravel and containing some alkali on hard, dry, red clay sub-soil.

No timber.

Undergrowth, shadscale.

S.89°58'E., on a random line bet. secs. 12 and 13

40.00	Set temp. ¼ sec. cor.
79.72	Intersect E. bdy. of the tp. 10 lks. S. of the cor. of secs. 12 and 13, heretofore described.

Thence

chains

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

Over nearly level land through dense undergrowth of shadscale.

2.82 Wash, 20 lks. wide, 4 ft. deep, course S.30°W.

39.86 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 12
¼
S 13
1915

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

55.12 Wash, 7 lks. wide, 2 ft. deep, course S.30°W.

79.72 The cor. of secs. 11,12,13 and 14.

Land, nearly level, drains SW.

Soil,2 nd. rate; light, dry, brown sandy clay mixed with gravel. on hard, dry red clay sub-soil.

No timber.

Undergrowth, shadscale.

November 13,1915.

Isaac Hayes

U. S. Transitman.

Nov.15: For solar obsn. see line bet. secs. 33 and 34

N.0°01'W., bet. secs. 11 and 12

Over gently rolling valley land draining SW., through dense undergrowth of sage brush and shadscale.

36.70 Road, bears N.20°E. and S.20°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

S 11 | S 12
¼
1915

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

chains	
	of cor.
68.40	Road, bears N.87°E. and S.87°W.
76.60	Wash, 5 lks. wide, 1 ft. deep, course N.70°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

T 11 S	R 7 W
S 2	S 1
S 11	S 12

1915

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

Land, gently rolling.

Soil, 3 rd. rate; stony and brown clay loam mixed with gravel on hard dry clay and gravel sub-soil.

No timber.

Undergrowth, sage brush and shadscale.

November 15,1915

Nov. 17: For solar obsn. see line bet. secs. 19 and 30 subdivision of T.11 S.,R.6 W.

N.89°58'E., on a random line bet. secs. 1 and 12

40.00	Set temp. ¼ sec. cor.
79.70	Intersect E. bdy. of the tp. at the cor. of secs. 1 and 12 heretofore described.

Thence

S.89°58'W., on true line bet. secs. 1 and 12

Over hilly land, through sage brush and shadscale undergrowth.

Asc. NE. slope of lone rocky hill.

15.09	Top of ascent on S. slope of hill, 205 ft. above. sec. cor. Gradually descend.
23.25	Gully, 90 ft. below top of ascent, drains S.10°W. Asc.

Subdivision of T.11 S.,R.7 W.

chains	
32.76	Point of hill, 32 ft. above gully, falls S.10°W. Desc.
39.85	55 ft. below point.
	Set an iron post, 3 ft. long, 1 in. in dia., 10 ins. in the ground and 16 ins. in a mound of stone for ¼ sec. cor., with brass cap marked
	S 1 / ¼
	S 12 / 1915
	raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor.
	Note: On account of natural obstacles, I am unable to set post more than 10 ins. in the ground.
47.28	Base of hill, 88 ft. below ¼ sec. cor., bears N. and S.
	Thence over gently rolling land.
50.67	Road from Erickson's ranch to Eureka, Utah, bears N.15°W. and S.15°E.
62.68	Road, bears N.10°E. and S.10°W.
79.70	The cor. of secs. 1,2,11 and 12
	Land, hilly and rolling, general S. exposure.
	Soil, 3rd. and 4th. rates; Hilly land very rocky of volcanic formation, sub-soil, rocks. Rolling land, light, fine gravel mixed with some brown clay and rocks on hard, dry clay and rocky sub-soil;
	No timber.
	Undergrowth, sage brush and shadscale.
	November 17,1915.
	Nov.19: At 8 a.m. in shade of hill, solar obsn. impossible.
	By a backsight along my line bet. secs. 11 and 12 I determine a meridian with the transit and run
	N.0°01'W., on true line bet. secs. 1 and 2
	Over rolling land draining SW., through dense undergrowth of sage brush and shadscale.
40.00	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

S 2 ¼ | S 1

1915

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

49.10 Road, from Erickson's ranch to Eureka, Utah, bears N.10°W. and S.10°E.

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

81.83 Intersect N. bdy. of the tp. 66 lks. S.89°56'E. of the standard cor. of secs. 35 and 36,heretofore described.

At intersection, Set a quartzite stone, 16 x 10 x 8 ins. 10 ins. in the ground for closing cor. of secs. 1 and 2 marked with 1 groove on E., 5 groves on W. and CC on S. face; raise a mound of stone, 2 ft. base, 1½ ft. high, S. of cor.

Land, rolling, drains SW.

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

No timber.

Undergrowth, sage brush and shadscale.

November 19,1915.

November 13: At 9h. 30m. a.m.l.m.t., I set off 39°49' on the lat. arc; 17° 47'S., on the decl. arc; and determine a meridian with the solar at the cor. of secs. 2,3,34 and 35 on the S. bdy. of the tp. heretofore described.

Thence I run

N.0°01'W., bet. secs. 34 and 35

Over nearly level land draining SW., through dense undergrowth of sage brush and shadscale.

40.00 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

S 34 ¼ | S 35

1915

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

40.07 Road, bears NE. and SW.

40.78 Wash, 20 lks. wide, 3 ft. deep, course S.80°W.

80.00 Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground for cor. of secs. 26,27,34 and 35, with brass cap marked

T 11 S | R 7 W
S 27 | S 26
S 34 | S 35

1915

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

Land, nearly level.

Soil, 2nd. rate; light, brown sandy clay, mixed with gravel on hard, dry clay and sandy sub-soil.

No timber.

Undergrowth, sage brush and shadscale.

East, on a random line bet. secs. 26 and 35

40.00 Set temp. ¼ sec. cor.

80.02 Intersect N. and S. line 9 lks. S. of the cor. of secs. 25,26,35 and 36.

Thence

S.89°56'W., on a true line bet. secs. 26 and 35

Over nearly level land, through dense undergrowth of sage brush and shadscale.

30.97 Wash, 15 lks. wide, 5 ft. deep, course SW.

40.01 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 S 26 $\frac{1}{4}$ S 35 1915
	dig pits, 18 x 18 x 12 ins., E. and W. of post, 3 ft. dist., raise a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, N. of cor.
47.95	Wash, 20 lks. wide, 5 ft. deep, course SW.
50.72	Wash, 10 lks. wide, 3 ft. deep, course S.3°W.
72.97	Road, bears N.15°E. and S.15°W.
80.02	The cor. of secs. 26,27,34 and 35.
	Land, nearly level.
	Soil, 2 nd. rate; light brown, dry clay mixed with gravel; sub-soil hard dry clay mixed with gravel.
	No timber.
	Undergrowth, sage brush and shadscale.
	N.0° 01'W., bet. secs. 26 and 27
	Over gently rolling land draining SW., through dense undergrowth of sage brush and shadscale.
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 S 27 | S 26 $\frac{1}{4}$ 1915
	raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.
80.00	Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground for cor. of secs. 22,23,26 and 27, with brass cap marked T 11 S | R 7 W S 22 | S 23 S 27 | S 26 1915

chains	
	raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.
	Land, gently rolling draining SW.
	Soil, 2 nd. rate; light brown clay mixed with gravel on deep sandy clay sub-soil.
	No timber.
	Undergrowth, sage brush and shadscale.
	N.89° 56'E., on a random line bet. secs. 23 and 26
40.00	Set temp. ¼ sec. cor.
80.01	Intersect N. and S. line 2 lks. N. of the cor. of secs. 23,24,25 and 26.
	Thence
	S.89°57'W., on true line bet. secs. 23 and 26
	Over rolling land draining SW., through dense undergrowth of sage brush and shadscale.
3.81	Wash, 4 lks. wide, 1 ft. deep, course S.
39.30	Wash, 8 lks. wide, 1 ft. deep, course S.30°W.
40.00½	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 23 / ¼ / S 26 / 1915
	raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor.
	November 13: At this ¼ sec. cor., I set off 17° 49'S., on the decl. arc; and at 11h. 44m.a.m.l.m.t., observe the sun on the meridian; the resulting lat. is 39° 50'
56.03	Road, bears N.25°E. and S.25°W.
80.01	The cor. of secs. 22,23,26 and 27
	Land, rolling , drains SW.
	Soil, 2nd. rate; light, dry, sandy clay mixed with gravel on hard, sandy and gravelly sub-soil.
	No timber

Subdivision of T.11 S.,R.7 W.

chains	
	Undergrowth, sage brush and shadscale.
	N.0°01'W., bet. secs. 22 and 23
	Over rolling land draining SW., through dense undergrowth of sage brush and shadscale.
38.95	Road, bears 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 S 22 ¼ | S 23 1915 raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.
63.70	Road, bears NW. and SE
80.00	Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground for cor. of secs. 14,15,22 and 23, with brass cap marked T 11 S | R 7 W S 15 | S 14 S 22 | S 23 1915 raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.
	Land, rolling, drains SW.
	Soil, 2nd. rate; light brown sandy clay mixed with gravel on hard, dry clay and gravel sub-soil;
	No timber.
	Undergrowth, sage brush and shadscale.
	N.89°57'E., on a random line bet. secs. 14 and 23
40.00	Set temp. ¼ sec. cor.
80.02	Intersect N. and S. line at the cor. of secs. 13,14, 23 and 24.

Subdivision of T.11 S.,R.7 W.

chains	
	Thence
	S.89°57'W., on a true line bet. secs. 14 and 23
	Over rolling land draining SW., through dense undergrowth of sage brush and shadscale.
20.22	Wash, 4 lks. wide, 2 ft. deep, course S.30°W.
39.13	Road, bears N.15°E. and S.15°W.
40.01	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 14 ¼ ——— S 23 1915 dig pits, 18 x 18 x 12 ins., E. and W. of post, 3 ft. dist., raise a mound of earth, 3½ ft. base, 1½ ft. high, N. of cor.
80.02	The cor. of secs. 14,15,22 and 23.
	Land, rolling, drains SW.
	Soil, light, brown clay mixed with gravel on hard, dry clay and gravel sub-soil; 2nd. rate.
	No timber.
	Undergrow th, sage brush and shadscale.
	———
	N.0°01'W., bet. secs. 14 and 15.
	Over rolling land draining SW., through dense undergrowth of sage brush and shadscale.
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 15 | S 14 ¼ | 1915 raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.
	A wash, 30 lks. wide, 5 ft. deep, draining SW., bears W. about 1½ chs.

chains	
53.55	Same wash, 30 lks. wide, 5 ft. deep, course S.60°W.
80.00	Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground for cor. of secs. 10,11,14 and 15, with brass cap marked

T 11 S.	R 7 W
S 10	S 11
S 15	S 14

1915

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

Land, rolling, drains SW.

Soil, 2nd. rate; light, dry, brown sandy clay mixed with gravel on hard, dry clay and gravel sub-soil. Some quartz and limestone rock on surface.

No timber.

Undergrowth, sage brush and shadscale.

November 13,1915.

November 15: For solar observation see line bet. secs. 33 and 34

N.89°57'E., on a random line bet. secs. 11 and 14.

40.00	Set temp. ¼ sec. cor.
80.01	Intersect N. and S. line 7 lks. S. of the cor. of secs. 11,12,13 and 14.

Thence

S.89°54'W., on a true line bet. secs. 11 and 14.

Over rolling land draining SW., through dense undergrowth of sage brush and shadscale.

20.01	Road, bears N.15°E. and S.15°W.
40.00½	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 11
¼

S 14
1915

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

chains	
	cor.
49.25	Wash, 25 lks. wide, 4 ft. deep, course S.60°W.
64.25	Wash, 30 lks. wide, 2 ft. deep, course S.15°W.
76.81	Wash, 6 lks. wide, 2 ft. deep, course S.
80.01	The cor. of secs. 10,11,14 and 15
	Land, rolling, drains SW.
	Soil, 2nd. rate, light, dry, brown clay mixed with gravel and quartz rocks on hard, dry, gravelly and clay sub-soil.
	No timber.
	Undergrowth, sage brush and shadscale.
	November 15,1915.

Nov.18: For solar observation see line bet. secs. 8 and 17.

N.0°01'W., bet. secs. 10 and 11

Over rolling land draining SW. through dense undergrowth of sage brush and shadscale.

18.36 Wash, 5 lks. wide, 2 ft. deep, course S.30°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

S 10 | S 11
¼
1915

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

63.15 Road, bears N.80°E. and S.80°W.

80.00 Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground for cor. of secs. 2,3,10 and 11, with brass cap marked

T 11 S | R 7 W
S 3 | S 2
S 10 | S 11
1915

chains	
	raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.
	Land, rolling, drains SW.
	Soil,3rd. rate; light, dry, brown clay, mixed with gravel and straked with rocks on hard gravel sub-soil.
	No timber.
	Undergrowth, sage brush and shadscale.
	N.89°54'E., on a random line bet. secs. 2 and 11
40.00	Set temp. ¼ sec. cor.
79.94	Intersect N. and S. line 2 lks. N. of the cor. of secs. 1,2,11 and 12.
	Thence
	S.89°55'W., on a true line bet. secs. 2 and 11
	Over rolling land draining SW., through dense undergrowth of sage brush and shadscale.
34.84	Wash, 20 lks. wide, 4 ft. deep, course S.50°W.
38.54	Wash, 20 lks. wide, 4 ft. deep, course S.25°W.
39.97	Set an iron post, 3 ft. long, 1 in. in dia.,14 ins. in the ground and 12 ins. in a mound of stone for ¼ sec. cor., with brass cap marked
	S 2 / ¼ / S 11 / 1915
	raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor.
	Note: On account of underlying rock, I am unable to set post more that 14 ins. in the ground.
59.06	Road, bears N.70°E. and S.70°W.
79.94	The cor. of secs. 2,3,10 and 11
	Land, gently rolling, cut by washes draining S.
	Soil, 3 rd. rate; hard, dry brown clay mixed with gravel and straked with rocks on dry brown clay and stony sub-soil.

Subdivision of T.11 S., R.7 W.

chains	
	No timber.
	Undergrowth, sage brush and shadscale.
	November 18,1915.
	Nov.19: By a backsight along my line bet. secs. 10 and 11 I determine a meridian with the instrument and run N.0°01'W., on a true line bet. secs. 2 and 3
	Gradually ascend over rolling land draining SW., through dense undergrowth of sage brush and shadscale.
30.00	Enter scrub cedar timber, bears E. and W.
31.30	Road, bears 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
	S 3 ¼ | S 2 1915
	from which
	A cedar, 20 ins. diam., bears S.44¼°E., 35 lks. dist., marked ¼ S 2 B T
	A cedar, 12 ins. diam., bears S.61½°W., 42 lks. dist., marked ¼ S 3 B T
81.98	Intersect N. bdy. of the tp. 1.00 ch. S.89°56'E. of the standard cor. of secs. 34 and 35 heretofore described.
	At intersection, Set a quartzite stone, 16 x 12 x 5 ins., 10 ins. in the ground for closing cor. of secs. 2 and 3, marked with 2 grooves on E., 4 grooves on W. and CC on S. face, raise a mound of stone, 2 ft. base, 1½ ft. high, S. of cor.
	Land, rolling, drains SW.
	Soil,3rd. rate; sandy and clay loam mixed with gravel and streaked with rocks on hard brown clay and gravel sub-soil.
	Timber, cedar on N.50.68 chs.

chains	
	Undergrowth, sage brush and shadscale.
	November 19,1915.
	Nov.15: At 8h. 15m.a.m.l.m.t., I set off 39°49' on the lat. arc; 18°17'S., on the decl. arc; and determine a meridian with the solar at the cor. of secs. 3,4, 33 and 34 on the S. bdy. of the tp. heretofore described..
	Thence I run
	N.0°02'W., bet. secs. 33 and 34
	Over nearly level land draining SW., through dense undergrowth of sage brush and shadscale.
9.75	Wash, 10 lks. wide, 2 ft. deep, course S.70°W.
40.00L	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 33 | S 34 1915 raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.
66.80	Enter greasewood, about 2½ ft. high, bears NE. and SW.
68.40	Wash, 6 lks. wide, 2½ ft. deep, drains SW.
69.10	Wash, 10 lks. wide, 3 ft. deep, course SW.
76.70	Leave greasewood, bears 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. 27,28,33 and 34, with brass cap marked T 11 S | R 7 W S 28 | S 27 S 33 | S 34 1915 raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.
	Land, nearly level.
	Soil,2nd. rate; light, dry, brown clay mixed with gravel on hard, dry clay sub-soil;
	No timber.

Subdivision of T.11 S.,R.7 W.

chains	
	Undergrowth, sage brush and shadscale. Greasewood undergrowth on 9.90 chs.
	East, on a random line bet. secs. 27 and 34
40.00	Set temp. ¼ sec. cor.
80.00	Intersect N. and S. line at the cor. of secs. 26,27,34 and 35
	Thence
	West, on a true line bet. secs. 27 and 34
	Over nearly level land draining SW., through undergrowth of sage brush and shadscale.
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 27 / ¼ / S 34 / 1915
	dig pits, 18 x 18 x 12 ins., E. and W. of post, 3 ft. dist., raise a mound of earth, 3½ ft. base, 1½ ft. high N. of cor.
68.00	Enter greasewood undergrowth, bears NE. and SW.
68.05	Wash, 40 lks. wide, 3 ft. deep, course SW.
71.43	Wash, 8 lks. wide, 2 ft. deep, course SW.
77.75	Wash, 10 lks. wide, 3 ft. deep, course SW.
78.70	Leave greasewood undergrowth, bears NE. and SW.
80.00	The cor. of secs. 27,28,33 and 34
	Land, nearly level, drains SW.
	Soil, 2nd. rate; light, dry sandy clay mixed with gravel on hard, dry brown clay and gravel sub-soil.
	No timber.
	Undergrowth, sage brush, shadscale and some greasewood.
	N.0°02'W., bet. secs. 27 and 28
	Over nearly level land draining SW., through dense undergrowth of sage brush and shadscale.

chains	
13.65	Wash, 10 lks. wide, 5 ft. deep, course 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 28	S 27
¼	

1915

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

71.10	Wash, 50 lks. wide, 1 ft. deep, course SW.
78.55	Same wash, 10 lks. wide, 3 ft. deep, course SE.
80.00	Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground for cor. of secs. 21,22,27 and 28, with brass cap marked

T 11 S S 21	R 7 W S 22
S 28	S 27

1915

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

Land, nearly level, drains SW.

Soil, 2nd. rate; light, dry sandy clay mixed with gravel on hard, dry clay and stony sub-soil.

No timber.

Undergrowth, sage brush and shadscale.

East, on a random line bet. secs. 22 and 27

40.00	Set temp. ¼ sec. cor.
79.99	Intersect N. and S. line 3 lks. S. of the cor. of secs. 22,23,26 and 27.

Thence

S.89°59'W., on a true line bet. secs. 22 and 27.

Over nearly level land draining SW., through dense undergrowth of sage brush and shadscale.

39.99½	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in

Subdivision of T.11 S.,R.7 W.

chains	
	the ground for ¼ sec. cor., with brass cap marked S 22 ¼ S 27 1915
	raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor.
54.45	Wash, 10 lks. wide, 3 ft. deep, course S.
79.99	The cor. of secs. 21,22,27 and 28
	Land, nearly level, drains SW.
	Soil,2nd. rate; light, dry, brown clay mixed with gravel on clay and gravel sub-soil.
	No timber.
	Undergrowth, sage brush and shadscale.
	N.0°02'W., bet. secs. 21 and 22
	Over rolling land draining SW., through undergrowth of sage brush and shadscale.
14.10	Wash, 10 lks. wide, 2 ft. deep, course SW.
19.30	Same wash, 10 lks. wide, 2 ft. deep, course S.30°E.
22.55	Same wash, 10 lks. wide, 2 ft. deep, course 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 21 ¼ | S 22 1915
	raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.
73.54	Road, bears N.85°W. and S.85°E.
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

Subdivision of T.11 S., R.7 W.

chains	
	T 11 S | R 7 W S 16 | S 15 S 21 | S 22 1915
	raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.
	Land, rolling, drains SW.
	Soil, 2nd. rate; light, dry, sandy clay mixed with gravel and streaked with rock on hard dry brown clay and gravel sub-soil.
	No timber.
	Undergrowth, sage brush and shadscale.
	Nov.15: At this cor. I set off 18° 21'S., on the decl. arc; and at 11h.45m.a.m.l.m.t., obs. the sun on the mer.; the resulting lat. is 39°51'.
	N.89°59'E., on a random line bet. secs. 15 and 22
40.00	Set temp. ¼ sec. cor.
80.01	Intersect N. and S. line 3 lks. N. of the cor. of secs. 14,15,22 and 23
	Thence
	West, on a true line bet. secs. 15 and 22
	Over gently rolling land draining SW., through dense undergrowth of sage brush and shadscale.
20.63	Road, bears NW. and SE.
25.20	Wash, 30 lks. wide, 3 ft. deep, course S.10°W.
40.00½	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 15 ¼ S 22 1915
	raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor.
65.90	Wash, 10 lks. wide, 3 ft. deep, course SW.
80.01	The cor. of secs. 15,16,21 and 22
	Land, rolling, gentle S. exposure and drainage.

chains

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

No timber.

Undergrowth, sage brush and shadscale.

N.0°02'W., bet. secs. 15 and 16

Over rolling land draining SW., through dense undergrowth of sage brush and shadscale.

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 16 ¼	S 15

1915

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

47.20 Wash, 8 lks. wide, 2 ft. deep, course S.30°E.

47.93 Road, bears N.30°W. and S.30°E.

80.00 Set an iron post, 3 ft. long, 2 ins. in dia., 18 ins. in the ground and 6 ins. in a mound of stone for. cor. of secs. 9,10,15 and 16, with brass cap marked

T 11 S S 9	R 7 W S 10
S 16	S 15

1915

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

Note: On account of underlying rock, I am unable to set post more than 18 ins. in the ground.

Land, rolling, S. exposure and drainage.

Soil, 3rd. rate; light brown clay mixed with gravel and streaked with rocks on hard, dry clay, gravel and rocky sub-soil.

No timber.

Undergrowth, sage brush and shadscale.

Subdivision of T.11 S.,R.7 W.

chains

East, on a random line bet. secs. 10 and 15

40.00 Set temp. ¼ sec. cor.

79.86 Intersect N. and S. line at the cor. of secs. 10,11,14 and 15.

Thence

West, on a true line bet. secs. 10 and 15

Over rolling land draining SW., through dense undergrowth of sage brush and shadscale.

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

S 10
¼

S 15
1915

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

56.06 Road, bears N. and S.

69.03 Wash, 30 lks. wide, 3 ft. deep, course S.10°W.

79.86 The cor. of secs. 9,10,15 and 16.

Land, rolling, S. exposure and drainage.

Soil, 2nd. rate; light brown sandy clay mixed with gravel and streaked with rock on hard, dry clay and gravel sub-soil.

No timber.

Undergrowth, sage brush and shadscale.

November 15,1915.

Howard W. Miller

U. S. Surveyor.

Nov.15: For solar obsn. see line bet. secs. 32 and 33

N.0°02'W., bet. secs. 9 and 10

Gradually ascend over rolling land sloping S., through dense undergrowth of shadscale.

.76 Road, bears NE. and SW.

Subdivision of T.11 S., R.7 W.

chains	
40.00	Set an iron post, 3 ft. long, 1 in. in dia., 12 ins. in the ground and 12 ins. in a mound of stone for ¼ sec. cor., with brass cap marked S 9 ¼ | S 10 1915 raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor. Note: On account of underlying rock, I am unable to set post more than 12 ins. in the ground.
43.30	Wash, 40 lks. wide, 3 ft. deep, course S.30°E. Land becomes rolling mountainous, begin steeper ascent.
65.65	Begin steep ascent over SW. slope of mountain, bears NW. and SE. A tunnel bears NW. about 10 chs.
75.33	Ridge, 280 ft. above ¼ sec. cor., bears NW. and SE. Gradually descend.
78.63	Small ravine, drains SE. Asc. abruptly over rocky S. slope.
80.00	On S. slope 40 ft. above ravine. Set an iron post, 3 ft. long, 2 ins. in dia., 16 ins. in the ground and 8 ins. in a mound of stone for cor. of secs. 3,4,9 and 10, with brass cap marked T 11 S | R 7 W S 4 | S 3 S 9 | S 10 1915 raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor. Note: On account of underlying rock, I am unable to set post more than 16 ins. in the ground. Land, rolling on S. 43.30 chs. and mounatinous on N. 36.70 chs. General S. exposure and drainage. Soil, 3rd. and 4th. rates; generally rocky of quartz formation mixed with some light dry sandy clay on

chains	
	gravelly and rocky sub-soil.
	No timber.
	Undergrowth, sage brush and shadscale.
	November 15,1915

	Nov. 16: For solar obsn. see line bet. secs. 8 and 9
	East, on a random line bet. secs. 3 and 10
40.00	Set temp. ¼ sec. cor.
80.00	The line bet. secs. 10 and 11 has not been run and the cor. of secs. 2,3,10 and 11 is not set. Set point.
	Nov.16; 1915.
	Nov.18: From my 80.00 ch. point set Nov.16 the cor. of secs. 2,3,10 and 11 bears W. 16 lks. and N.3 lks.
	The dist. of the line bet. secs. 3 and 10 is 79.84 chs. and the bearing is S.89°59'W.
	Thence from cor. secs. 2,3,10 and 11
	S.89°59'W., on a true line bet. secs. 3 and 10
	Gradually ascend over rolling foot hills through dense undergrowth of sage brush and shadscale.
24.68	Road, bears NE. and SW.
34.85	Low point of spur, falls SE.
	Gradually descend over gentle SW. slope.
39.92	Set an iron post, 3 ft. long, 1 in. in dia., 18 ins. in the ground and 6 ins. in a mound of stone for ¼ sec. cor., with brass cap marked
	S 3 / ¼

	S 10 / 1915
	raise a mound of stone, 2 ft. base, 1½ft. high, N. of cor.
	Note: On account of underlying rock, I am unable to set post more than 18 ins. in the ground.
50.28	Mouth of ravine, drs. SE.

Subdivision of T.11 S.,R.7 W.

chains	
	Asc. abruptly over rocky NE. slope through scattering scrub cedar timber.
67.75	Spur, 285 ft. above ravine, projects SE.
	Leave timber, descend over broken conglomerate quartz ledges on SW. slope of spur.
72.43	Leave ledges, bears NW. and SE.
79.84	125 ft. below spur.
	The cor. of secs. 3,4,9 and 10.
	Land, rolling and rough mountainous with general S. exposure.
	Soil,4th. rate; generally rocky of quartzite formation mixed with some hard, dry clay and loose shales on rocky sub-soil.
	Timber, a few scrub cedar.
	Undergrowth, sage,shadscale and some dry grass.
	Nov.18,1915.

	Nov.15: For solar obsn. see line bet. secs. 32 and 33
	N.0°02'W., on a true line bet. secs. 3 and 4
	Over rough mountainous land draining S., through dense undergrowth sage, shadscale and dry grass.
	Asc. abruptly over rocky S. slope.
10.80	Spur, 280 ft. above sec. cor.,projects SE.
	Leave shadscale undergrowth and enter scattering cedar timber, bears NW. and SE. Desc. abruptly over rocky NE. slope.
19.33	Ravine, 100 ft. below spur, drains NE. about 5 chs., thenceSE. Ascend.
25.69	Sharp rocky spur, 185 ft. above ravine, projects SE.
	Gradually descend.
28.99	Descend abruptly over NE. slope.
40.00	On slope of gully, 70 ft. below top of spur.
	Set an iron post, 3 ft. long, 1 in in. dia., 20 ins. in the ground, and 6 ins. in a mound of stone for ¼ sec. cor., with brass cap marked

Subdivision of T.11 S.,R.7 W.

chains	S 4 $\frac{1}{4}$ | S 3
	1915
	raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.
	Note: On account of underlying rock I am unable to set post more than 20 ins. in the ground.
43.00	Small gully, wash in same 30 lks. wide, 4 ft. deep, course SE.
	Asc. abruptly over rocky SW. slope.
54.34	Thence over broken volcanic ledges and slide rock bearing NW. and SE.
57.44	Sharp rocky ridge,340 ft. above $\frac{1}{4}$ sec. cor.,bears NW. and SE.
	Gradually desc.over broken NE. slope through dense cedar timber.
82.24	165 ft. below ridge.
	Intersect N. bdy. of the tp. 1.86 chs. S.89°14'E. of the Standard cor. of secs. 33 and 34 heretofore described.
	At intersection, set a quartzite stone, 20 x 16 x 10 ins. 15 ins. in the ground for closing cor of secs. 3 and 4, marked 3 grooves on E., 3 grooves on W. and CC on S. face, raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, S. of cor.
	Land, rolling and broken mountains cut with sharp quartz ridges draining E.
	Soil, 4th. rate; generally rocky of quartzite formation mixed with some brown clay on rocky sub-soil.
	Timber, cedar, very dense on N. slopes.
	Undergrowth , sage brush, grass and shadscale.
	November 15,1915
	Nov.15: At 7h.45m.a.m.l.m.t., I set off 39°49' on the

Subdivision of T.11 S.,R.7 W.

chains

lat. arc; 18° 17'S., on the decl. arc; and determine a meridian with the solar at the cor. of secs. 4,5, 32 and 33 on the S. bdy. of the tp. heretofore described

Thence I run

N.0°03'W., bet. secs. 32 and 33

Over nearly level land through dense undergrowth of shadscale.

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 32 ¼	S 33

1915

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

47.80 Wash, 15 lks. wide, 4 ft. deep, course S.20°W.

59.80 Wash, 15 lks. wide, 2½ ft. deep, course S.15°W. for 1½ chs., thence SW.

80.00 Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground for cor. of secs. 28,29,32 and 33, with brass cap marked

T 11 S S 29	R 7 W S 28
S 32	S 33

1915

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

Land, nearly level, drains SW.

Soil,2nd. rate; light, clay loam on hard , dry, brown clay sub-soil.

No timber.

Undergrowth, shadscale and some white sage.

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

Subdivision of T.11 S.,R.7 W.

chains	
40.00	Set temp. ¼ sec. cor.
79.98	Intersect N. and S. line 5 lks. S. of the cor. of secs. 27,28,33 and 34
	Thence
	S.89°58'W., on a true line bet. secs. 28 and 33
	Over nearly level land through shadscale and white sage brush undergrowth.
18.48	Wash, 4 lks. wide, 2 ft. deep, course SW.
39.99	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 28 / ¼ / S 33 / 1915
	dig pits, 18 x 18 x 12 ins., E. and W. of post, 3 ft. dist., raise a mound of earth, 3½ ft. base, 1½ ft. high, N. of cor.
56.98	Wash, 10 lks. wide, 2 ft. deep, course S.20°W.
79.98	The cor. of secs. 28,29,32 and 33
	Land, nearly level, drains SW.
	Soil, 2nd. rate; light, dry clay loam mixed with gravel on hard clay sub-soil;
	No timber.
	Undergrowth, shadscale and white sage.
	N.0°03'W., bet. secs. 28 and 29
	Over nearly level land, through dense undergrowth of sage brush.
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 29 ¼ | S 28 / 1915
	dig pits, 18 x 18 x 12 ins., N. and S. of post, 3 ft. dist., raise a mound of earth, 3½ ft. base, 1½ ft.

chains

high, W. of cor.

80.00 Set an iron post, 3 ft. long, 2 ins. in dia., 16 ins. in the ground and 8 ins. in a mound of stone for cor. of secs. 20,21,28 and 29, with brass cap marked

T 11 S	R 7 W
S 20	S 21
S 29	S 28

1915

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

Note: On account of underlying rock, I am unable to set post more than 16 ins. in the ground.

Land, nearly level, drains SW.

Soil, 2 nd. rate; ligh brown clay and sand, on hard dry clay and gravel sub-soil.

No timber.

Undergrowth, sage brush and shadscale.

N.89°58'E., on a random line bet. secs. 21 and 28

40.00 Set temp. ¼ sec. cor.

80.00 Intersect N. and S. line, 3 lks. N. of the cor. of secs. 21,22,27 and 28.

Thence

S.89°59'W., on a true line bet. secs. 21 and 28

Over gently rolling land draining SW., through dense short undergrowth of sage brush and shadscale.

.60 Wash, in small gully, 10 lks. wide, 2 ft. deep, course S.30°E.

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

S 21
¼

S 28
1915

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

chains	
	cor.
80.00	The cor. of secs. 20,21,28 and 29.
	Land, gently rolling, drains SW.
	Soil, 2nd. rate; light dry brown clay mixed with gravel on hard, dry clay sub-soil.
	No timber.
	Undergrowth, sage brush and shadscale.

	N.0°03'W., bet. secs. 20 and 21.
	Over nearly level land through dense shadscale undergrowth.
40.00	Set an iron post, 3 ft. long, 1 in. in dia., 16 ins. in the ground and 10 ins. in a mound of stone for $\frac{1}{4}$ sec. cor., with brass cap marked
	S $\frac{1}{4}$ 20 | S 21 1915
	dig pits, 18 x 18 x 12 ins., N. and S. of post, 3 ft. dist., raise a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, W. of cor.
	Note: On account of underlying rock I am unable to set post more than 16 ins. in the ground.
80.00	Set an iron post, 3 ft. long, 2 ins. in dia., 20 ins. in the ground and 6 ins. in a mound of stone for cor. of secs. 16,17,20 and 21, with brass cap marked
	T 11 S | R 7 W .S 17 | .S 16 S 20 | S 21 1915
	raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.
	Note: On account of underlying rock I am unable to set post more than 20 ins. in the ground.
	Land, nearly level.
	Soil, 2nd. rate; light dry sandy loam on hard clay and

chains	
	gravel sub-soil.
	No timber.
	Undergrowth, shadscale.

	N.89°59'E., on a random line bet. secs. 16 and 21
40.00	Set temp. ¼ sec. cor.
80.02	Intersect N. and S. line 2 lks. S. of the cor. of secs. 15,16,21 and 22.
	Thence
	S.89°58'W., on a true line bet. secs. 16 and 21
	Over nearly level land through dense undergrowth of shadscale.
30.82	Road, bears N.80°W. and S.80°E.
40.01	Set an iron post, 3 ft. long, 1 in. in dia., 16 ins. in the ground and 10 ins. in a mound of stone for ¼ sec. cor., with brass cap marked
	S 16 / ¼
	S 21 / 1915
	raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor.
	Note: On account of underlying rock I am unable to set post more than 16 ins. in the ground.
	Nov.15: At this cor. I set off 18° 21'S., on the decl. arc; and at 11h.45m.a.m.l.m.t., observe the sun on the meridian; the resulting lat. is 39° 52'.
80.02	The cor. of secs. 16,17,20 and 21.
	Land, nearly level, drains SW.
	Soil, 2nd. rate; light, dry sandy loam mixed with gravel on hard clay and rock sub-soil.
	No timber.
	Undergrowth, shadscale.

Subdivision of T.11 S.,R.7 W.

chains	
	N.0°03'W., bet. secs. 16 and 17.
	Gradually ascend over nearly level land through dense undergrowth of shadscale.
17.90	Road, bears N.80°W. and S.80°E.
37.75	Road, bears N.70°E. and S.70°W.
40.00	Set an iron post; 3 ft. long, 1 in. in dia., 12 ins. in the ground and 14 ins. in a mound of stone for $\frac{1}{4}$ sec. cor., with brass cap marked
	S $\frac{1}{4}$ 17 | S 16 1915
	raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.
	Note: On account of underlying rock I am unable to set post more than 12 ins. in the ground.
48.30	Road, bears NE, and SW.
57.40	Judd creek wash, 20 lks. wide, 3 ft. deep, in large swale, course SW.
65.90	Cross same wash, course SE.
76.00	On east side of wash. The point for. cor. of secs. 8,9, 16 and 17 will fall in center of Judd creek wash, therefore at this point,
	Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground for witness cor. to secs. 8,9,16 and 17, with brass cap marked
	T. 11 S | R 7 W S 8 | S 9 WC S 17 | S. 16 1915
	raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.
78.00	Enter wash, course S.20°W.
80.00	Point for. cor. secs. 8,9,16 and 17 in wash. Set temp. point.
	Land, gently rolling, S. exposure and drainage

Subdivision of T.11 S.,R.7 W.

chains	
	Soil, 3rd. rate; rocky and light, dry sandy loam mixed with limestone rocks on hard clay and rock sub-soil.
	No timber.
	Undergrowth, shadscale.
	N.89°58'E., on a random line bet. secs. 9 and 16.
40.00	Set temp. ¼ sec. cor.
80.01	Intersect N. and S. line 7 lks. S. of the cor. of secs. 9, 10, 15 and 16
	Thence
	S.89°55'W., on a true line bet. secs. 9 and 16
	Gradually ascend over rolling foot hills sloping SE. through short undergrowth of sage brush.
.90	Road, bears NE. and SW.
31.90	Enter mountainous land, bears NE. and SW.
	Ascend over S. point of mountain.
40.00½	Set an iron post, 3 ft. long, 1 in. in dia., 6 ins. in the ground and 20 ins. in a mound of stone for ¼ sec. cor., with brass cap marked
	S 9 / ¼
	S 16 / 1915
	raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor.
	Note: On account of underlying rock, I am unable to set post more than 6 ins. in the ground.
	Cor stands on point of S. slope of mountain.
	Gradually descend over SW. slope
64.32	Road at base of mountain , bears N.15°W. and S.15°E., 85 ft. below ¼ sec. cor.
	Thence over nearly level land.
72.19	Road, bears N. 15°E. and S.15°W.
78.17	Edge of swale, bears N. and S.
	Desc. 30 ft. to

Subdivision of T.11 S.,R.7 W.

chains	
80.01	The true cor. point of secs. 8,9,16 and 17 in bottom of Judd creek wash.
	Land, rolling foot hills and mountains at S. end of range of mountains.
	Soil,4th. rate; limestone and quartz rocks with some hard , dry clay on rocky and gravelly sub-soil.
	No timber.
	Undergrowth, shadscale.
	November 15,1915.
	November 16: At 8h.15m.a.m.l.m.t., I set off 39°52' on the lat. arc; 18° 32'S. on the decl. arc; and determine a meridian with the solar at the true cor. point of secs. 8,9,16 and 17
	Thence I run
	N.0°03'W., bet. secs. 8 and 9
	In bottom of Judd creek wash.
8.00	Leave wash , turns to the NW.
	Thence over rolling mountainous land , gradually ascending through dense shadscale and rabbit brush.
35.57	Wash in large gully, 15 lks. wide, 2 ft. deep, course SW.
40.00	At base of west slope of Judd creek gulch.
	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 8 ¼ | S 9 1915
	raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.
40.80	Judd creek wash, in gulch, 20 lks. wide, 4 ft. deep, course SW. Thence in bottom of gulch, on E.side wash.
53.16	Leave gulch, bears NW. and S.
59.11	Road across gulch, bears NE. and SW.

Subdivision of T.11 S., R.7 W.

chains	
80.00	Set an iron post, 3 ft. long, 2 ins. in dia., 12 ins. in the ground and 12 ins. in a mound of stone for cor. of secs. 4,5,8 and 9, with brass cap marked

T 11 S	R 7 W
S 5	S 4
S 8	S 9

1915

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

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

Land, rolling mountainous, S. exposure and drain.

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

No timber.

Undergrowth, shadscale, rabbit brush and some sage.

Nov.16: The sky is overcast at noon, observations for lat. are impossible.

N.89°55'E., on a random line bet. secs. 4 and 9

40.00 Set temp. ¼ sec. cor.

80.06 Intersect N. and S. line 5 lks. N. of the cor. of secs. 3,4,9 and 10

Thence

S.89°57'W., on a true line bet. secs. 4 and 9

Over rough mounatinous land through dense undergrowth of sage brush and shadscale.

Desc. over rocky SW. slope.

2.96 Ravine, 50 ft. below sec. cor., course SE.

Asc. abruptly over NE. slope.

7.94 Spur, 100 ft. above ravine, projects SE.

Desc. abruptly over NW. slope.

16.22 Base of steep descent and enter large ravine, bears NW. and SE. Gradually descend.

33.91 Large ravine, 175 ft. below spur, drains S.

Asc. abruptly over E. slope of mountain

Subdivision of T.11 S.,R.7 W.

chains	
40.03	90 ft. above ravine.
	Set an iron post, 3 ft. long, 1 in. in dia., 22 ins. in the ground and 4 ins. in a mound of stone on solid rock for ¼ sec. cor., with brass cap marked
	S 4 / ¼ ——— S 9 / 1915
	raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor.
	Continue steep ascent and enter broken conglomerate ledges, bears N. and S.
47.32	Top sharp rocky ridge, 260 ft. above ¼ sec. cor., bears N. and S.
47.36	From this station, R.C. Strang's house bears N.24°30'W.; NE. cor. of plowed field, bears N.30°W.; SE. cor. of fence bears N.65°W.; NE. cor. of fence bears N.0°45'W.
	Leave ledges, desc. over NW. slope ridge.
52.49	Desc. abruptly over W. slope.
64.06	Base of mountain, bears N. and S. Thence over broken land in mouth of canyon.
68.16	Road, bears N.5°W. and S.5°E.
80.06	380 ft. below top of ridge.
	The cor. of secs. 4,5,8 and 9
	From this cor., the SE. cor. of fence bears N.60°E.
	Land, rolling and rough mountainous with steep slopes of ridges draining into ravines draining SW.
	Soil, 4th. rate; very rocky, quartzite formation mixed with some clay on rocky and gravelly sub-soil.
	No timber.
	Undergrowth, sage brush and shadscale.

N.0°03'W., on a true line bet. secs. 4 and 5

Over rolling mountainous land in bottom of large canyon

Subdivision of T.11 S.,R.7 W.

chains	
	through short undergrowth of shadscale and sage brush.
14.50	Descend abruptly into gulch,
8.66	Judd creek wash in gulch, 20 lks. wide, 3 ft. deep, course SW.
9.73	SW. cor. of wire fence, bears E. 20 lks.
16.18	Road, bears N.30°E. and S.30°W.
21.35	Same road, bears N.30°W. and S.30°E.
23.85	Center of A.L.Strang's chicken coop, bears W. 30 lks.
26.65	SE. cor. of A.L.Strang's cabin on line. Sheds and stack yards bear E. about 5 chs.
32.13	Wire fence, bears NW. and SE.
36.28	Wash, 30 lks. wide, 3 ft. deep, course 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
	S 5 ¼ | S 4 1915
	raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.
	R.C.Strang's house bears N.60°30'E.
	NE. cor. of plowed field, bears S.46°30'E. The NE. cor. of fence bears N.46°30'E., 44.00 chs. approximately. Asc.
44.66	Low point of spur, 40 ft. above ¼ sec. cor., falls SE.
	Gradually descend into mouth of canyon.
55.65	Judd creek, 10 lks. wide, 3 ins. deep, course S.10°E.
	Enter cultivated land, bears N.10°W. and S.10°E.
59.35	Leave cultivated land, bears N.10°W. and S.10°E.
60.65	Wire fence, bears NW. and SE. Enter scattering cedar timber, bears with fence. Asc. gradually over SW. slope of mountain.
78.34	Spur, 180 ft. above Judd creek, projects SW.
	Desc. short NW. slope
80.70	Mouth of ravine, 20 ft. below spur, drains SW.
	Ascend over SW. slope.

Subdivision of T.11 S.,R.7 W.

chains

82.02 Intersect N. bdy. of the tp. 1.88 chs. East of the standard cor. of secs. 32 and 33, heretofore described.

At intersection, set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground for closing cor. of secs. 4 and 5 , with brass cap marked

T 10 S

S 32 | S 33

CC R 7 W

S 5 | S 4

T 11 S

1915

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

Land, rolling mountainous , general S. exposure and drain.

Soil, 4th. rate; very rocky and gravelly mixed with some light clay on hard clay and rocky sub-soil.

Timber, some scrub cedar.

Undergrowth, sage brush and shadscale.

Some parts of land, especially in ravines is suitable for farming.

November 16,1915.

Chas. Hayes

U.S.Transitman.

Nov.16: At 8h.45m.a.m.l.m.t., I set off 39°49' on the lat. arc; 18°33½'S., on the decl. arc; and determine a meridian with the solar at the cor. of secs. 5,6, 31 and 32 on the S. bdy. of the tp. heretofore described.

Thence I run

N.0°03'W., bet. secs. 31 and 32

Over nearly level land draining SW., through dense undergrowth of sage brush and shadscale.

Subdivision of T.11 S.,R.7 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 31 ¼ | S 32 1915 dig pits, 18 x 18 x 12 ins., N. and S. of post, 3 ft. dist., raise a mound of earth, 3½ ft. base, 1½ ft. high, W. of cor.
80.00	Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground for cor. of secs. 29,30,31 and 32, with brass cap marked T 11 S.,R 7 W S 30 | S 29 S 31 | S 32 1915 dig pits, 18 x 18 x 12 ins., in each sec., 5½ ft. dist., raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor.
	Land, nearly level, drains SW.
	Soil, 2nd. rate; light, dry, warm sandy clay on light dry brown clay sub-soil.
	No timber.
	Undergrowth, sage brush and shadscale.
	East, on a random line bet. secs. 29 and 32
40.00	Set temp. ¼ sec. cor.
80.02	Intersect N. and S. line 2 lks. S. of the cor. of secs. 28,29,32 and 33
	Thence S.89°59'W., on a true line bet. secs. 29 and 32 Over nearly level land draining SW., through short undergrowth of sage brush and shadscale.
31.03	Wash, 10 lks. wide, 1 ft. deep, course S.5°W.
40.01	Set an iron post, 3 ft. long, 1 in. in dia., 26 ins. in

Subdivision of T.11 S.,R.7 W.

chains	
	the ground for ¼ sec. cor., with brass cap marked
	S 29 ¼ ——— S 32 1915
	dig pits, 18 x 18 x 12 ins., E. and W. of post, 3 ft. dist., raise a mound of earth, 3½ ft. base, 1½ ft. high, N. of cor.
80.02	The cor. of secs. 29,30,31 and 32.
	Land, nearly level, drains SW.
	Soil,2nd. rate; light, dry, sandy clay on clay sub-soil.
	No timber.
	Undergrowth, sage brush and shadscale.
	Nov.16: Blizzard and snow storm prevents field work from 10 a.m. until 1 p.m.
	———
	Knowing that closing corners will be necessary upon the W. bdy. of the tp. I run
	West, on true line bet. secs. 30 and 31
	Over rolling land draining S., through sage brush and shadscale undergrowth.
3.70	Wash, 8 lks. wide, 1 ft. deep, course SW.
36.93	Wash, 10 lks. wide, 2 ft. deep, course 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 30 ¼ ——— S 31 1915
	dig pits, 18 x 18 x 12 ins., E. and W. of post, 3 ft. dist., raise a mound of earth, 3½ ft. base, 1½ ft. high, N. of cor.
66.06	Judd creek wash, 4 lks. wide, 2 ft. deep, course S.35°W.
	Some greasewood scattered along wash.
76.16	Road, bears NE. and SW.

Subdivision of T.11 S.,R.7 W.

chains	
79.63	Intersect W. bdy. of the tp. 11.94 chs. N.0°20'E., of the cor. of secs. 25 and 36 heretofore described.
	At intersection, Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground for closing cor. of secs. 30 and 31, with brass cap marked

T 11 S
R 8 W | R 7 W
S 30
S 25CC
S 31
S 36
1915

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

Land, rolling, drains SW.

Soil, 2nd rate; sandy clay loam mixed with gravel on sandy and gravelly sub-soil.

No timber.

Undergrowth, sage brush and shadscale.

November 16,1915.

Howard W. Miller

U. S. Surveyor.

November 17: At 8h. 15m. a.m.l.m.t., I set off 39° 50' on the lat. arc; 18° 47'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 nearly level land through dense undergrowth of shadscale.

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 30 | S 29
¼
1915

Subdivision of T.11 S.,R.7 W.

chains	
	raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.
69.65	Judd creek wash, 15 lks. wide, 3 ft. deep, course SW.
70.75	Road, bears 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. 19,20,29 and 30, with brass cap marked

T 11 S	R 7 W
S 19	S 20
S 30	S 29

1915

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

Land, nearly level, gentle S. exposure and drain.

Soil, 2nd. rate; light, dry sandy loam mixed with gravel on hard clay and rocky sub-soil.

No timber.

Undergrowth, shadscale.

N.89°59'E., on a random line bet. secs. 20 and 29

40.00	Set temp. ¼ sec. cor.
79.95	Intersect N. and S. line 2 lks. N. of the cor. of secs. 20,21,28 and 29

Thence

West, on a true line bet. secs. 20 and 29

Over nearly level land, through dense undergrowth of shadscale.

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

S 20
¼

S 29
1915

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

Subdivision of T.11 S.,R.7 W.

chains	
76.15	Judd creek wash, 12 lks. wide, 3 ft. deep, course SW.
78.05	Road, bears NE. and SW.
79.95	The cor. of secs. 19,20,29 and 30
	Land, nearly level, drains SW.
	Soil,2nd. rate; light, dry, sandy loam mixed with gravel on hard, dry clay and rocky sub-soil.
	No timber.
	Undergrowth, shadscale.
	West, on true line bet. secs. 19 and 30
	Over nearly level land through dense undergrowth of shadscale.
5.25	Wash, 10 lks. wide, $1\frac{1}{2}$ ft. deep, course 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

S 19
$\frac{1}{4}$

S 30
1915

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

79.60	Intersect W. bdy. of the tp. 11.55 chs., N.0°03'E., of the cor. of secs. 24 and 25 heretofore described.
	At intersection, Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground for closing cor. of secs. 19 and 30, with brass cap marked

T 11 S
S 19
S 24CC — R 7 W
R 8 W — S 30
S 25
1915

dig pits, 24 x 18 x 12 ins., crosswise on each line, N. and S. 3 ft. and E. of post 7 ft. dist., raise a mound of earth, 4 ft. base, 2 ft. high, E. of cor.

Land, nearly level, drains SW.

chains	
	Soil, 2nd. rate; light, dry sandy loam mixed with gravel on hard, dry brown clay and rock sub-soil.
	No timber.
	Undergrowth, shadscale.
	N.0°03'W., bet. secs. 19 and 20
	Gradually ascend over nearly level land through dense undergrowth of shadscale.
3.80	Wash, 20 lks. wide, 1½ ft. deep, course 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
	B 19 ¼ | S 20 1915
	raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.
	November 17: At this cor. I set off 18° 51'S., on the decl. arc; and at 11h. 45m.a.m.l.m.t., observe the sun on the meridian; the resulting lat. is 39° 51'
80.00	Set an iron post, 3 ft. long, 2 ins. in dia., 18 ins. in a mound of stone and 6 ins. in the ground on solid rock for cor. of secs. 17,18,19 and 20, with brass cap marked
	T 11 S | R 7 W S 18 | S 17 S 19 | S 20 1915
	raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.
	Land, nearly level, S. exposure and drainage.
	Soil, 3rd. rate; light, dry, sandy loam, surface strewn with considerable quartzite boulders on hard, baked clay and rock sub-soil.
	No timber.

Subdivision of T.11 S.,R.7 W.

chains	
	Undergrowth, shadscale.
	East, on a random line bet. secs. 17 and 20.
40.00	Set temp. ¼ sec. cor.
79.98	Intersect N. and S. line 5 lks. S. of the cor. of secs. 16,17,20 and 21.
	Thence
	S.89°58'W., on a true line bet. secs. 17 and 20
	Over nearly level land through dense undergrowth of shadscale.
23.78	Judd creek wash, 40 lks. wide, 7 ft. deep, course S.30°W.
30.28	Road, bears NE. and SW.
39.99	Set an iron post, 3 ft. long, 1 in. in dia., 13 ins. in the ground and 13 ins. in a mound of stone for ¼ sec. cor., with brass cap marked S ¼ 17 ——— S 20 1915 raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor.
	Note: On account of underlying rock I am unable to set post more than 13 ins. in the ground.
79.98	The cor. of secs. 17,18,19 and 20
	Land, nearly level, S. exposure and drainage.
	Soil,3rd. rate; light, dry sandy loam mixed with gravel and quartzite rocks on hard clay and rocky sub-soil.
	No timber.
	Undergrowth, shadscale.
	West, on true line bet. secs. 18 and 19
	Over gently rolling land through dense undergrowth of shadscale.
10.00	Wash, 25 lks. wide, 3 ft. deep, course SW.

Subdivision of T.11 S.,R.7 W.

chains	
25.00	Wash, 15 lks. wide, 2 ft. deep, course SW.
40.00	Set an iron post, 3 ft. long, 1 in. in dia., 13 ins. in the ground and 13 ins. in a mound of stone for $\frac{1}{4}$ sec. cor., with brass cap marked S 18 $\frac{1}{4}$ S 19 1915 raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ft. high, N. of cor. Note: On account of underlying rock I am unable to set post more than 13 ins. in the ground.
79.59	Intersect W. bdy. of the tp. 10.98 chs., N.0°04'E., of the cor. of secs. 13 and 24, heretofore described. Set an iron post, 3 ft. long, 2 ins. in dia., 14 ins. in the ground and 10 ins. in a mound of stone for closing cor. of secs. 18 and 19, with brass cap marked T 11 S S 18 S 13 CC R 7 W R 8 W. S 19 S 24 1915 raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, E. of cor. Note: On account of underlying rock I am unable to set post more than 14 ins. in the ground. Land, gently rolling, S. exposure and drainage. Soil, 3rd. rate: sandy loam and gravel, very shallow surface covered with considerable quartzite rocks on hard, dry baked clay and gravel sub-soil. No timber. Undergrowth, shadscale.

N.0°03'W., bet. secs. 17 and 18

Gradually ascend over rolling land through dense under-

Subdivision of T.11 S.,R.7 W.

chains	
	growth of shadscale.
8.40	Road, bears NW. and SE.
11.90	Wash, at N. edge of large hollow, 15 lks. wide, 2 ft. deep, course W. 1 ch., thence 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 18 ¼ | S 17 1915 dig pits, 18 x 18 x 12 ins., N. and S. of post, 3 ft. dist., raise a mound of earth, 3½ ft. base, 1½ ft. high, W. of cor.
46.60	Road, bears NW. and SE.
63.25	Old road, bears NW. and SE.
72.30	Old road, bears 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. 7,8,17 and 18, with brass cap marked T 11 S | R 7 W S 7 | S 8 S 18 | S 17 1915 raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.

Land, rolling, S. exposure and drain.

Soil,3rd. rate; light, dry sandy loam mixed with gravel and strewn with quartzite rocks on hard, dry clay and rocky sub-soil.

No timber.

Undergrowth, shadscale.

November 17,1915.

Isaac Hayes.

U. S. Transitman.

Subdivision of T.11 S., R.7 W.

chains	
	Nov.18: At 7h. 45m.a.m.l.m.t., I set off 39°52' on the lat. arc; 19°01'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
	N.89°58'E., on a random line bet. secs. 8 and 17
40.00	Set temp. ¼ sec. cor.
79.90	Intersect N. and S. line 22 lks. N. of the true cor. point of secs. 8,9,16 and 17.
	Thence
	N.89°53'W., on a true line bet. secs. 8 and 17
	Ascend from bottom of Judd creek wash.
.38	West brink of wash 10 ft. above cor. point. Thence across large swale, through dense undergrowth of shadscale.
6.38	W. brink of swale, 20 ft. above cor. point, bears N. and S.
	Thence over rolling land sloping S.
28.58	Road, bears N.15°E. and S.15°W.
39.95	Set an iron post, 3 ft. long, 1 in. in dia., 18 ins. in the ground and 8 ins. in a mound of stone for ¼ sec. cor. with brass cap marked
	S 8 / ¼
	S 17 / 1915
	raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor.
	Note: On account of underlying rock I am unable to set post more than 18 ins. in the ground.
59.30	Wash, 10 lks. wide, 2 ft. deep, course S.10°W.
63.17	Road, bears NE. and S.65°W.
74.85	Wash, 10 lks. wide, 2 ft. deep, course S.10°E.
79.90.	The cor. of secs. 7,8,17 and 18.
	Land, rolling, S. exposure and drain.

Subdivision of T.11 S.,R.7 W.

chains.	
	Soil, 3rd. rate; light, brown clay mixed with gravel and rocks on hard, dry clay and rock sub-soil.
	No timber.
	Undergrowth, sage brush and shadscale.
	West, on true line bet. secs. 7 and 18
	Over rolling land, through dense sage and shadscale.
9.76	Wash, 10 lks. wide, 2 ft. deep, course SE.
28.80	Wash, 12 lks. wide, 3 ft. deep, course S.
35.30	Wash, 12 lks. wide, 1 ft. deep, course 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 S 7 / ¼ ——— S 18 / 1915 raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor.
50.00	Wash, 15 lks. wide, 1 ft. deep, course S.
55.80	Wash, 12 lks. wide, 3 ft. deep, course S.
70.75	Wash, 20 lks. wide, 3 ft. deep, course S.10°E.
78.71	Wash in bottom of small gully, 8 lks. wide, 2 ft. deep, course S.20°W.
79.45	Intersect W. bdy. of the tp. 11.07 chs., N.0°08'E. of the cor. of secs. 12 and 13, heretofore described.
	At intersection, Set a quartzite stone, 18 x 14 x 5 ins., 12 ins. in the ground for closing cor. of secs. 7 and 18 marked with 2 notches on N., 4 notches on S. and CC on E. face, raise a mound of stone, 2 ft. base, 1½ ft. high, E. of cor.
	Land, rolling broken bench, S. exposure.
	Soil, 4th. rate; brown clay mixed with gravel and rocks on hard, baked clay and rock sub-soil.
	No timber.
	Undergrowth, sage brush and shadscale.

chains	
	November 18,1915.
	Howard W. Meier.
	U. S. Surveyor.

November 18: At 8h.15m.a.m.l.m.t., I set off 39°52' on the lat. arc; 19°02'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

N.0°03'W., bet. secs. 7 and 8

Gradually ascend over rolling bench land sloping S., through dense undergrowth of shadscale.

1.40 Road, bears E. and W.

29.80 Base of mountain, bears E. and W.

Ascend.

38.07 Point of spur, 330 ft. above sec. cor., falls SE.

Descend over NE. slope

40.00 Set an iron post, 3 ft. long, 1 in. in dia., 20 ins. in the ground and 6 ins. in a mound of stone on solid rock for ½ sec. cor., with brass cap marked

S 7 ¼ | S 8

1915

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

42.20 Small ravine, drains SE.

Ascend abruptly over SE. slope.

49.50 Slope changes to very rocky SW.

73.15 Top sharp rocky ridge, 752 ft. above ¼ sec. cor., bears NW. and SE.

Desc. abruptly over rocky NE. slope.

Subdivision of T.11 S.,R.7 W.

chains	
80.00	260 ft. below ridge on steep N. slope.
	Set an iron post, 3 ft. long, 2 ins. in dia., 24 ins. in the ground for cor. of secs. 5,6,7 and 8 , with brass cap marked
	T 11 S | R 7 W S 6 | S 5 S 7 | S 8 1915
	raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.
	Land, rolling bench and rough mountainous with general S. exposure, being situated at the S. end of a range of mountains.
	Soil, 4th. rate; generally rocky of quartz formation on hard, dry baked clay and rock sub-soil.
	No timber.
	Undergrowth, sage brush and shadscale.
	S.89°53'E., on a random line bet. secs. 5 and 8
40.00	Set temp. ¼ sec. cor.
79.90	Intersect N. and S. line at the cor. of secs. 4,5,8 and 9
	Thence
	N.89°53'W., on a true line bet. secs. 5 and 8
	Over low rolling hills draining S., across bottom of large canyon, through dense undergrowth of sage brush and shadscale.
4.60	Judd creek wash in small gulch, 25 lks. wide, 3 ft. deep, course S.30°W.
11.70	Road, bears N.20°E. and S.20°W.
30.65	Wash, 10 lks. wide, 2 ft. deep, course South.
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
	S 5 ¼ S 8 1915

chains	
	raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor.
45.10	Wash; 20 lks. wide; 2 ft. deep, at mouth of canyon drains SE.
	Enter scattering cedar timber, asc. abruptly over broken E. slope rough mountainous land.
73.58	Top of steep ascent, asc, more gradually.
74.70	Top of sharp rocky spur, 307 ft. above wash, projects N.
	Desc. abruptly over NW. slope.
79.90	110 ft. below spur.
	The cor. of secs. 5,6,7 and 8
	Land, rolling hills and rough broken mountains draining S.
	Soil, 4th. rate; generally rocky of quartz formation mixed with some light brown clay and loose shales on hard, dry clay and rock sub-soil.
	Timber, a few scrub cedar.
	Undergrowth, sage and shadscale brush.
	November 18: At this cor. I set off 19°06'S., on the decl. arc; and at 11h.45m.a.m.l.m.t., obs. the sun on the meridian, the resulting lat. is 39°53'.
	West, on true line bet. secs. 6 and 7
	Over rough mountainous land through dense sage and shadscale brush .
	Gradually ascend over NE. slope, considerable loose quartzite slide rock.
8.76	Top of ridge, 180 ft. above sec. cor., bears N. 30°W. and S.30°E.
	Enter a few scattering scrub cedar trees, desc. abruptly rough, rocky W. slope of mountain.
24.57	Leave rough mountainous land, thence over low rolling hills.
40.00	455 ft. below ridge.

Subdivision of T.11 S.,R.7 W.

chains	
	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 S 6 / $\frac{1}{4}$ / S 7 / 1915 raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor.
47.10	Bottom of small gully, wash in same 10 lks. wide, $1\frac{1}{2}$ ft. deep, course S.
65.50	Mouth of canyon and wash, 50 lks. wide, 4 ft. deep, course S.
77.27	Bottom of large gully and wash, 20 lks. wide, $1\frac{1}{2}$ ft. deep, course SW.
79.53	Intersect W. bdy. of the tp. 11.55 chs. north of the cor. of secs. 1 and 12 heretofore described.
	At intersection, Set a quartzite stone, 22 x 10 x 10 ins. 15 ins. in the ground for closing cor. of secs. 6 and 7 , marked with 1 groove on N., 5 grooves on S. and CC on E. face, raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, E. of cor.
	Land, rough broken mountains and low rolling hills, general S. exposure and drainage.
	Soil,4th. rate; some light brown sandy clay mixed with gravel but generally rocky of volcanic and quartz formation on hard, dry clay and rock sub-soil.
	Timber, some scattering cedar.
	Undergrowth, sage and shadscale brush.
	N.0°03'W., on true line bet. secs. 5 and 6
	Over rough mountainous land through scattering cedar timber and undergrowth of shadscale and sage brush.
	Descend abruptly over N. slope of mountain over quartzite slide rock.

Subdivision of T.11 S., R.7 W.

chains	
12.50	Ravine, 180 ft. below sec. cor., course S.30°E. Ascend abruptly over SW. slope.
18.55	Sharp rocky spur, 145 ft. above ravine, projects S.15°W. Thence along nearly W. slope of spur, gradually ascending.
39.96	Top of ascent on W. slope of spur. Gradually descend.
40.00	Set an iron post, 3 ft. long, 1 in. in dia., 10 ins. in the ground and 16 ins. in a mound of stone for ¼ sec. cor., with brass cap marked S ¼ 6 | S 5 1915 raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.
	Note: On account of underlying rock I am unable to set post more than 10 ins. in the ground.
46.00	Ravine, 10 ft. below ¼ sec. cor., course S.10°W. Ascend abruptly.
54.46	Sharp rocky pinnacle, 167 ft. above ravine. Gradually descend.
55.45	Ravine drains E. Ascend abruptly over S. slope, cedar timber becomes more dense.
65.20	Spur, 210 ft. above ravine, projects SE. Descend very gradually.
70.10	Head of ravine, drains SE. Ascend.
73.35	Ridge, 80 ft. above spur, bears E. and W. Descend abruptly NE. slope.
80.74	Ravine 185 ft. below ridge, drains E. 2 chs., thence NE. Ascend.
81.81	Intersect N. bdy. of the tp. 2.15 chs. E. of the Standard cor. of secs. 31 and 32 heretofore described. At intersection, Set a black lava rock 24 x 12 x 12 ins., 18 ins. in the ground for closing cor. of secs. 5 and 6, marked with 5 grooves on E., 1 groove on W. and CC on S. face, raise a mound of stone , 2 ft. base, 1½ ft.

Subdivision of T.11 S., R.7 W.

chains

high, S. of cor.

Land, rough broken mountains with steep slopes of ridges and spurs into ravines draining S.

Soil; 4th. rate; some dry sandy clay mixed with lava and quartzite rock on a hard clay and rock sub-soil.

Timber, scattering patches of scrub cedar.

Undergrowth, shadscale and sage brush.

November 18,1915.

Isaac Hayes

U. S. Transitman.

General Description

This township contains two distinct varieties of land; gently rolling and mountainous. All of the land with the exception of portions of secs. 4,5,6, 7,8,9 the W.½ pf sec.3 and the S.½ sec. 1 constitutes the gently rolling or desert land which is practically level in the southern portion of the township and becomes more rolling as they approach the mountains. This land has a gentle S. exposure and is cut by numerous small washes draining SW. The soil is a light, dry, fine, brown clay mixed with some gravel and the surface is occasionally scattered with loose quartzite and limestone rocks. The sub-soil is usually a hard, baked brown clay containing some alkali and mixed with considerable gravel. These lands are suitable for farming if water could be obtained. Approaching the mountains the soil becomes more coarse and is packed very hard.

The mountainous part of the tp. is very rough, cut by

General Description

many ravines and with sharp ridges and spurs whose slopes are heavily strewn with rocks and boulders of quartzite and volcanic rock. This soil may be classed as 4th. rate.

Some cedar timber is found on the mountainous part, the north slopes usually being covered very thickly.

Shadscale undergrowth predominates on the desert while in the mountains more sage brush can be found.

A small spring is situated in the NW. ¼ sec. 10, the water containing considerable alkali. Judd creek flows in a southerly direction through secs. 4 and 5, the water being used for irrigation purposes.

A.L.Strang and R.C.Strang are located in secs. 4 and 5, each having a cabin in sec. 4. They have constructed about two miles of ditch, built about 1 mile of fence and have constructed sheds, corrals, chicken coops and a blacksmith shop. About 35 acres are under cultivation, some of the land is set to orchard.

There are no other settlers in the township.

Considerable prospecting has been done in the mountains and there are indications of mineral.

Thelands in the township at this time are principaly used for winter grazing of sheep.

Isaac Hayes
U. S. Transitman

Howard Miller
U. S. Surveyor.

Note: Stone cors. were set in some instances because it was impracticable to obtain posts without delaying the survey.

Howard Miller
U. S. Surveyor.

BOOK A-417

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 .....

.....

.....

.....

.....

.....

.....

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, Howard W. Miller, 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 25th. day of June, 1915, 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 resurvey of the Second Standard Parallel South, through Range 7 west resurvey of the west boundary and survey of the subdivision of T.11 S., R.7 W.

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.

Howard W. Miller
U. S. Surveyor.

Subscribed by said Howard W. Miller, and sworn to before me this 13 day of January, 1916

I. C. Thoresen
U. S. Surveyor General

SEAL

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah, June 27, 1916

The foregoing field notes of the survey of Second Standard Parallel South, through Range 7 West; resurvey West Boundary and survey Subdivisions T.11 S. R. 7 W. S.L.B. & M., Utah

executed by Howard W. Miller and Isaac Hayes under ~~his~~ their special instructions dated June 25, 1915, having been critically examined, and the necessary corrections and explanations made, the ~~said~~ field notes, and the surveys they describe, are hereby approved.

I. C. Thoresen
U. S. Surveyor General.

I certify that the foregoing transcript of the field notes of the above-described surveys in T.11 S.R. 7 W.S.L.B.& M.Utah, has been correctly copied from the original notes on file in this office.

6—2761

U. S. Surveyor General.

4—680

BOOK A-417

CERTIFICATE OF ASSISTANTS.

We, the undersigned, hereby certify upon honor that we assisted, to the best of our skill and ability, Isaac Hayes, U.S. Transitman Howard W. Miller, U.S. Surveyor &, ~~U.S. Surveyor~~, during the periods and in the capacities stated opposite our several signatures, in surveying all those parts or portions of resurvey of the Second Standard Parallel South, through Range 7 west, resurvey of the west boundary and survey of the subdivision of T.11 S., R.7 W.

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.	
Carl Ray	Nov. 10, 1915	Nov. 19, 1915	chainman
William Fredricksen	"	"	"
Rufus W. Riley	"	"	"
Edward Jones	"	"	"
Edward Oliver	"	"	flagman
Lolie H. Tying	"	"	"
James Tyger[illegible]	"	"	cornerman
Harvey Fox	"	"	"

Subscribed and certified to before me on the dates of the final service as shown above.

Howard W. Miller.
U. S. Surveyor.

6—2764

FINAL OATH OF UNITED STATES SURVEYOR.

I, Isaac Hayes, U.S. Transitman ~~xxxxxxxxx~~, do solemnly swear that, in pursuance of special instructions received from the U. S. Surveyor General for Utah bearing date of the 25th day of June, 1915, 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 resurvey of the Second Standard Parallel South, through Range 7 West resurvey of the west boundary and survey of the subdivision of T.11 S., R.7 W. 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.

Isaac Hayes
U.S. Transitman ~~xxxxxxxxx~~

Subscribed by said Isaac Hayes, and sworn to before me this 12 day of January, 1916,

SEAL

E. J. Palfreyman clerk,
By Effie Evans
Deputy

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,
Salt Lake City, Utah, June 27, 1916

The foregoing field notes of the resurvey of Second Standard Parallel South, through Range 7 West; resurvey West Boundary and survey Subdivisions T.11 S. R. 7 W., S.L.B.& M., Utah executed by their Howard W. Miller and Isaac Hayes under his special instructions dated June 25, 1915, having been critically examined, and the necessary corrections and explanations made, the said field notes, and the surveys they describe, are hereby approved.

A. O. Thoresen
U. S. Surveyor General.

I certify that the foregoing transcript of the field notes of the above-described surveys in T.11 S.R. 7 W.S.L.B.& M. Utah, has been correctly copied from the original notes on file in this office.

6—2761

U. S. Surveyor General.